

FCC RF Test Report (WLAN 5GHz)

Report No.: RF170724C44-1

FCC ID: RSE-589VACV2HP

Equipment Name: Technicolor xDSL Gateway

Trade Name: technicolor

Model Number: TG589vac v2 HP

Gateway code: DSLWBA589HP

Received Date: Jul. 26, 2017

Test Date: Aug. 17 ~ Sep. 02, 2017

Issued Date: Oct. 12, 2017

Applicant: Technicolor Delivery Technologies Belgium

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Release Control Record

Issue No.	Description	Date Issued
RF170724C44-1	Original release.	Oct. 12, 2017

1 Certificate of Conformity

Equipment Name: Technicolor xDSL Gateway

Trade Name: technicolor

Test Model: TG589vac v2 HP

Gateway code: DSLWBA589HP

Sample Status: Product Unit

Applicant: Technicolor Delivery Technologies Belgium

Test Date: Aug. 17 ~ Sep. 02, 2017

Standards: 47 CFR FCC Part 15, Subpart E (Section 15.407)
ANSI C63.10: 2013

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by : Polly Chien , **Date:** Oct. 12, 2017
Polly Chien / Specialist

Approved by : Ken Liu , **Date:** Oct. 12, 2017
Ken Liu / Senior Manager

2 Summary of Test Results

Applied Standard: 47 CFR FCC Part 15 Subpart E					
Report Clause	Ref. Std. Clause	Description	Measured	Limit	Result
3.9	15.203	Antenna Requirements	-	-	PASS
4.1	15.407(b)(6)	AC Power Conducted Emissions	Margin is -18.14dB at 2.21484MHz.	-	PASS
4.2	-	99% Occupied Bandwidth & 26dB Bandwidth	99% Occupied Bandwidth [MHz]: 5150-5250MHz: 11a: 17.16 11ac(20M): 18.24 11ac(40M): 37.08 11ac(80M): 76.08 5725-5850MHz: 11a: 17.04 11ac(20M): 18.26 11ac(40M): 37.08 11ac(80M): 76.08 26dB Bandwidth [MHz]: 5150-5250MHz: 11a: 27.29 11ac(20M): 32.97 11ac(40M): 62.65 11ac(80M): 83.41	-	-
4.3	15.407(e)	6dB bandwidth for U-NII-3	Minimum Bandwidth [MHz]: 5725-5850MHz: 11a: 16.35 11ac(20M): 17.61 11ac(40M): 36.00 11ac(80M): 75.50	≥500kHz	PASS

Applied Standard: 47 CFR FCC Part 15 Subpart E					
Report Clause	Ref. Std. Clause	Description	Measured	Limit	Result
4.4	15.407 (a)(1/2/3)	Maximum Conducted Output Power	5150-5250MHz: 11a: 1S3T CDD: 25.15 dBm 11ac (20M): 3S3T SDM: 24.67 dBm 1S3T TxBF: 24.72 dBm 2S3T TxBF: 24.62 dBm 11ac (40M): 3S3T SDM: 24.08 dBm 1S3T TxBF: 24.20 dBm 2S3T TxBF: 24.00 dBm 11ac (80M): 3S3T SDM: 17.30 dBm 1S3T TxBF: 17.31 dBm 2S3T TxBF: 18.93 dBm 5725-5850MHz: 11a: 1S3T CDD: 23.83 dBm 11ac (20M): 3S3T SDM: 25.20 dBm 1S3T TxBF: 23.67 dBm 2S3T TxBF: 25.06 dBm 11ac (40M): 3S3T SDM: 23.12 dBm 1S3T TxBF: 23.02 dBm 2S3T TxBF: 22.82 dBm 11ac (80M): 3S3T SDM: 22.96 dBm 1S3T TxBF: 22.77 dBm 2S3T TxBF: 22.63 dBm	Power [dBm] 5150-5250MHz:30 5725-5850MHz:30	PASS

Applied Standard: 47 CFR FCC Part 15 Subpart E

Report Clause	Ref. Std. Clause	Description	Measured	Limit	Result
4.5	15.407 (a)(1/2/3)	Power Spectral Density	5150-5250MHz: [dBm/MHz] 11a: 1S3T CDD: 12.20 11ac (20M): 3S3T SDM: 11.95 1S3T TxBF: 12.28 2S3T TxBF: 11.78 11ac (40M): 3S3T SDM: 8.76 1S3T TxBF: 8.85 2S3T TxBF: 8.91 11ac (80M): 3S3T SDM: -0.74 1S3T TxBF: -0.88 2S3T TxBF: 1.11 5725-5850MHz: [dBm/500kHz] 11a: 1S3T CDD: 2.50 11ac (20M): 3S3T SDM: 4.09 1S3T TxBF: 3.53 2S3T TxBF: 4.53 11ac (40M): 3S3T SDM: -0.87 1S3T TxBF: -0.25 2S3T TxBF: -0.24 11ac (80M): 3S3T SDM: -4.22 1S3T TxBF: -3.66 2S3T TxBF: -3.13	5150-5250MHz: 17 [dBm/MHz] 5725-5850MHz: 30 [dBm/500kHz]	PASS
4.6	15.407 (b)(1/2/3/4/6)	Radiated Emissions	Margin is -3.4dB at 30.08MHz.	-	PASS
		Band Edge	Margin is -0.1dB at 5408.00MHz	-	PASS
4.7	15.407(g)	Frequency Stability	-	Signal shall remain in-band	PASS

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Frequency	Expanded Uncertainty (k=2) ($\pm$)
Conducted Emissions at mains ports	150kHz ~ 30MHz	2.44 dB
Radiated Emissions up to 1 GHz	30MHz ~ 1GHz	3.59 dB
Radiated Emissions above 1 GHz	1GHz ~ 6GHz	3.60 dB
	6GHz ~ 18GHz	2.29 dB
	18GHz ~ 40GHz	2.29 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 Basic Description of Equipment Under Test (WLAN 5GHz)

Items	Description			
Equipment Name	Technicolor xDSL Gateway			
Trade Name	technicolor			
Model Number	TG589vac v2 HP			
Gateway code	DSLWBA589HP			
FCC ID	RSE-589VACV2HP			
Power Type	From power adapter			
Antenna	Refer section 3.10			
EUT Stage	☒	Product Unit	☐	Pre-Sample
Operating Band and Conducted Output Power	U-NII-1 5150~5250MHz		☒	IEEE 802.11a: 1S3T CDD Mode: 25.15 dBm
			☒	IEEE 802.11ac (20MHz): 3S3T SDM Mode: 24.67 dBm 1S3T TxBF Mode: 24.72 dBm 2S3T TxBF Mode: 24.62 dBm
			☒	IEEE 802.11ac (40MHz): 3S3T SDM Mode: 24.08 dBm 1S3T TxBF Mode: 24.20 dBm 2S3T TxBF Mode: 24.00 dBm
			☒	IEEE 802.11ac (80MHz): 3S3T SDM Mode: 17.30 dBm 1S3T TxBF Mode: 17.31 dBm 2S3T TxBF Mode: 18.93 dBm
	U-NII-2A 5250~5350MHz		☐	IEEE 802.11a
			☐	IEEE 802.11ac (20MHz)
			☐	IEEE 802.11ac (40MHz):
			☐	IEEE 802.11ac (80MHz):
	U-NII-2C 5470~ 5725 MHz		☐	IEEE 802.11a
			☐	IEEE 802.11ac (20MHz)
			☐	IEEE 802.11ac (40MHz):
			☐	IEEE 802.11ac (80MHz):
	U-NII-3 5725~ 5850 MHz		☒	IEEE 802.11a: 1S3T CDD Mode: 23.83 dBm
			☒	IEEE 802.11ac (20MHz): 3S3T SDM Mode: 25.20 dBm 1S3T TxBF Mode: 23.67 dBm 2S3T TxBF Mode: 25.06 dBm
			☒	IEEE 802.11ac (40MHz): 3S3T SDM Mode: 23.12 dBm 1S3T TxBF Mode: 23.02 dBm 2S3T TxBF Mode: 22.82 dBm
			☒	IEEE 802.11ac (80MHz): 3S3T SDM Mode: 22.96 dBm 1S3T TxBF Mode: 22.77 dBm 2S3T TxBF Mode: 22.63 dBm

Product Type	For IEEE 802.11a: WLAN(3TX, 3RX) For IEEE 802.11n: WLAN(3TX, 3RX) For IEEE 802.11ac: WLAN (3TX, 3RX)			
Nominal Bandwidth	20MHz / 40MHz / 80MHz			
Modulation	802.11a: OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11n: (BPSK / QPSK / 16QAM / 64QAM) See the below table 802.11ac: (BPSK / QPSK / 16QAM / 64QAM/ 256QAM) See the below table			
Data Rate (Mbps)	11a mode : OFDM (6/9/12/18/24/36/48/54) 11n(20MHz) mode : MCS0~MCS23 11n(40MHz) mode : MCS0~MCS23 11ac(20MHz) mode : MCS0~MCS9 for NSS1~NSS3 See the below table 11ac(40MHz) mode : MCS0~MCS9 for NSS1~NSS3 See the below table 11ac(80MHz) mode : MCS0~MCS9 for NSS1~NSS3 See the below table			
TPC Function	☐	With TPC	☒	Without TPC
Beam forming Function	☒	With Beam forming	☐	Without Beam forming
DFS Function	☐	5250~5350MHz		
	☐	5470~5725MHz		
	☐	5600~5650MHz		
Off Channel CAC Feature Implemented	☒	No		
Ad-hoc/Hotspot Mode	☒	No Ad-hoc/Hotspot operation in 5150 - 5350 MHz and 5470 - 5725 MHz.		
User Access Restrictions	☒	DFS controls (hardware or software) related to radar detection are NOT accessible to the user.		
I/O Ports	DSL Port x 1 LAN Port x 4 WAN Port x 1 USB 2.0 Port x 1			
Hardware Version	Beta			
Software Version	17.3.0098-0900000-20170726032535-47e971d32715b4e9ffb1a4eb97c8bf01874d3e19			

802.11n Data Rate spec

Standard	INDEX	Data Rate (Mbps)		Standard	INDEX	Data Rate (Mbps)	
		LGI (800ns)	SGI (400ns)			LGI (800ns)	SGI (400ns)
11n 20MHz Nss=1	MCS0	6.5	7.2	11n 40MHz Nss=1	MCS0	13.5	15
	MCS1	13	14.4		MCS1	27	30
	MCS2	19.5	21.7		MCS2	40.5	45
	MCS3	26	28.9		MCS3	54	60
	MCS4	39	43.3		MCS4	81	90
	MCS5	52	57.8		MCS5	108	120
	MCS6	58.5	65		MCS6	121.5	135
	MCS7	65	72.2		MCS7	135	150
11n 20MHz Nss=2	MCS8	13	14.4	11n 40MHz Nss=2	MCS8	27	30
	MCS9	26	28.9		MCS9	54	60
	MCS10	39	43.3		MCS10	81	90
	MCS11	52	57.8		MCS11	108	120
	MCS12	78	86.7		MCS12	162	180
	MCS13	104	115.6		MCS13	216	240
	MCS14	117	130		MCS14	243	270
	MCS15	130	144.4		MCS15	270	300
11n 20MHz Nss=3	MCS16	19.5	21.7	11n 40MHz Nss=3	MCS16	40.5	45
	MCS17	39	43.3		MCS17	81	90
	MCS18	58.5	65		MCS18	121.5	135
	MCS19	78	86.7		MCS19	162	180
	MCS20	117	130		MCS20	243	270
	MCS21	156	173.3		MCS21	324	360
	MCS22	175.5	195		MCS22	364.5	405
	MCS23	195	216.7		MCS23	405	450

802.11ac Data Rate spec

Standard	INDEX	Data Rate (Mbps)		Standard	INDEX	Data Rate (Mbps)		Standard	INDEX	Data Rate (Mbps)	
		LGI (800ns)	SGI (400ns)			LGI (800ns)	SGI (400ns)			LGI (800ns)	SGI (400ns)
11ac 20MHz NSS = 1	MCS0	6.5	7.2	11ac 40MHz NSS = 1	MCS0	13.5	15.0	11ac 80MHz NSS = 1	MCS0	29.3	32.5
	MCS1	13.0	14.4		MCS1	27	30.0		MCS1	58.5	65.0
	MCS2	19.5	21.7		MCS2	40.5	45.0		MCS2	87.8	97.5
	MCS3	26	28.9		MCS3	54	60.0		MCS3	117.0	130.0
	MCS4	39	43.3		MCS4	81	90.0		MCS4	175.5	195.0
	MCS5	52	57.8		MCS5	108	120.0		MCS5	234.0	260.0
	MCS6	58.5	65		MCS6	121.5	135.0		MCS6	263.3	292.5
	MCS7	65	72.2		MCS7	135.0	150.0		MCS7	292.5	325.0
	MCS8	78	86.7		MCS8	162.0	180.0		MCS8	351.0	390.0
	MCS9	Note	Note		MCS9	180.0	200.0		MCS9	390.0	433.3

NOTE: MCS 9 is invalid due to mod(NCBPS/NES, DR) not being equal to 0.

Standard	INDEX	Data Rate (Mbps)		Standard	INDEX	Data Rate (Mbps)		Standard	INDEX	Data Rate (Mbps)	
		LGI (800ns)	SGI (400ns)			LGI (800ns)	SGI (400ns)			LGI (800ns)	SGI (400ns)
11ac 20MHz NSS = 2	MCS0	13.0	14.4	11ac 40MHz NSS = 2	MCS0	27.0	30.0	11ac 80MHz NSS = 2	MCS0	58.5	65.0
	MCS1	26.0	28.9		MCS1	54.0	60.0		MCS1	117.0	130.0
	MCS2	39.0	43.3		MCS2	81.0	90.0		MCS2	175.5	195.0
	MCS3	52.0	57.8		MCS3	108.0	120.0		MCS3	234.0	260.0
	MCS4	78.0	86.7		MCS4	162.0	180.0		MCS4	351.0	390.0
	MCS5	104.0	115.6		MCS5	216.0	240.0		MCS5	468.0	520.0
	MCS6	117.0	130.0		MCS6	243.0	270.0		MCS6	526.5	585.0
	MCS7	130.0	144.4		MCS7	270.0	300.0		MCS7	585.0	650.0
	MCS8	156.0	173.3		MCS8	324.0	360.0		MCS8	702.0	780.0
	MCS9	13.0	14.4		MCS9	360.0	400.0		MCS9	780.0	866.7

Standard	INDEX	Data Rate (Mbps)		Standard	INDEX	Data Rate (Mbps)		Standard	INDEX	Data Rate (Mbps)	
		LGI (800ns)	SGI (400ns)			LGI (800ns)	SGI (400ns)			LGI (800ns)	SGI (400ns)
11ac 20MHz NSS = 3	MCS0	19.5	21.7	11ac 40MHz NSS = 3	MCS0	40.5	45.0	11ac 80MHz NSS = 3	MCS0	87.8	97.5
	MCS1	39.0	43.3		MCS1	81.0	90.0		MCS1	175.5	195.0
	MCS2	58.5	65.0		MCS2	121.5	135.0		MCS2	263.3	292.5
	MCS3	78.0	86.7		MCS3	162.0	180.0		MCS3	351.0	390.0
	MCS4	117.0	130		MCS4	243.0	270.0		MCS4	526.5	585.0
	MCS5	156.0	173.3		MCS5	324.0	360.0		MCS5	702.0	780.0
	MCS6	175.5	195.0		MCS6	364.5	405.0		MCS6	Note	Note
	MCS7	195.0	216.7		MCS7	405.0	450.0		MCS7	877.5	975.0
	MCS8	234.0	260.0		MCS8	486.0	540.0		MCS8	1053.0	1170.0
	MCS9	260.0	228.9		MCS9	540.0	600.0		MCS9	1170.0	1300.0

NOTE: MCS 6 is invalid due to mod(NCBPS/NES, DR) not being equal to 0.

3.2 Accessories

Power supply:

Brand	HONOR
Model	ADS-30FT-12 12027EPCU
P/N	DSL37756990
Input Power	100-240Vac, 50/60Hz, 0.7A
Output Power	12Vdc, 2.25A
Power Line	1.5m power cable without core attached on adapter

3.3 Feature of Equipment Under Test

Please refer to user manual.

3.4 Information Provided by the Manufacturer

Interface Availability

Interface Model	DC Power	ADSL: (ADSL2+) VDSL2 17a: (B8-8, B7-9)	Ethernet LAN 1000Mbps	Ethernet WAN 1000Mbps	USB 2.0	WLAN IEEE 802.11n (2.4GHz)	WLAN IEEE 802.11ac (5GHz)
TG589vac v2 HP	12Vdc, 2.25A	●Annex A	●(4 port)	●(1 port)	●(1 port)	●	●

●: Equipped

○: Not Equipped

3.5 General Description of Applied Standards

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart E (15.407)

KDB 789033 D02 General UNII Test Procedure New Rules v01r04, 05/02/2017

KDB 662911 D01 Multiple Transmitter Output v02r01, 10/31/2013

KDB 644545 D03 Guidance for 802 11ac New Rules v01, 08/14/2014

ANSI C63.10-2013

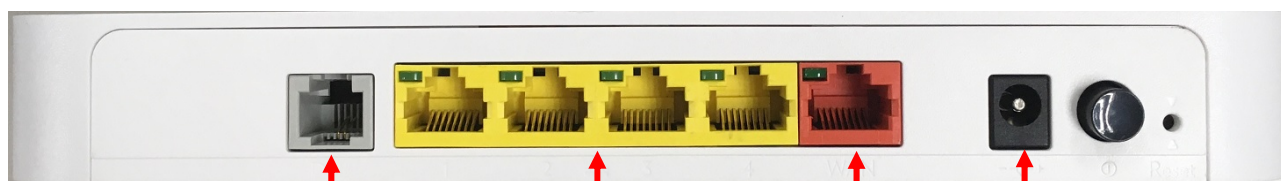
All test items have been performed and recorded as per the above standards.

3.6 Cabling Attached to the Equipment

Cable and Interconnection

Interface	Cable type	Cable length delivered with the modem	"Real life" Cable length that can be attached to this type of interface	Cable length to be used for testing	Internal/ external connection
DSL	UTP Cat 3	2 meter flat cable	> 10 meter	10 meter	External
ETH1, WAN	UTP Cat 5	2 meter	> 10 meter	Two 10 meter cables;	Internal
USB 2.0	STP	NA	NA	NA	Internal
AC power	UTP	1.5 meter	>10 meter	1.5 meter	External

3.7 Panel Drawing



DSL

Ethernet 1~4

WAN

Power



USB 2.0

3.8 Transmit Operating Mode

For 5150~5250MHz & 5725~5850MHz

Transmit Operating Mode							Transmit Multiple Antennas					
☐	Operating mode 1 (single antenna)						☐	1TX				
☒	Operating mode 2 (multiple antenna, no beam forming)						☐	2TX	☒	3TX	☐	4TX
☒	Operating mode 3 (multiple antenna, with beam forming)						☐	2TX	☒	3TX	☐	4TX
☒	802.11a	Operating mode	☐	1T	☐	2T	☒	3TX	☐	4TX		
☒	802.11n (20MHz)	Operating mode	☐	1T	☐	2T	☒	3TX	☐	4TX		
☒	802.11n (40MHz)	Operating mode	☐	1T	☐	2T	☒	3TX	☐	4TX		
☒	802.11ac (20MHz)	Operating mode	☐	1T	☐	2T	☒	3TX	☐	4TX		
☒	802.11ac (40MHz)	Operating mode	☐	1T	☐	2T	☒	3TX	☐	4TX		
☒	802.11ac (80MHz)	Operating mode	☐	1T	☐	2T	☒	3TX	☐	4TX		

Note:

For IEEE802.11a, 6Mbps~54Mbps: 1 Stream 3TX

For IEEE802.11n 20MHz/40MHz, MCS0~MCS7: 1 Stream 3TX; MCS8~MCS15: 2 Stream 3TX;

MCS16~MCS23: 3 Stream 3TX

For IEEE802.11ac 20MHz, Nss1MCS0~Nss1MCS8: 1 Stream 3TX; Nss2MCS0~Nss2MCS9: 2 Stream 3TX.

Nss3MCS0~Nss3MCS9: 3 Stream 3TX

For IEEE802.11ac 40MHz/80MHz, Nss1MCS0~Nss1MCS9: 1 Stream 3TX; Nss2MCS0~Nss2MCS9: 2 Stream 3TX; Nss3MCS0~Nss3MCS9: 3 Stream 3TX

3.9 Antenna Requirements

Except for special regulations, the Low-power Radio-frequency Devices must not be equipped with any jacket for installing an antenna with extension cable. An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited. Further, this requirement does not apply to intentional radiators that must be professionally installed.

3.10 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector
1	WHA YU	C107-511288-A	PCB Antenna	I-Pex
2	WHA YU	C107-511323-A	PCB Antenna	I-Pex
3	WHA YU	C107-511324-A	PCB Antenna	I-Pex

Antenna & Bandwidth

Antenna	1st (TX)			2nd (TX)			3rd (TX)		
Bandwidth Mode	20 MHz	40 MHz	80 MHz	20 MHz	40 MHz	80 MHz	20 MHz	40 MHz	80 MHz
802.11a	V	X	X	V	X	X	V	X	X
802.11n	V	V	X	V	V	X	V	V	X
802.11ac	V	V	V	V	V	V	V	V	V

Frequency	Maximum Gain (dBi) for CDD mode					
	CDD mode (1 Stream 3 TX) for Power Gain			CDD mode (1 Stream 3 TX) for PSD Gain		
	20 MHz	40 MHz	80MHz	20 MHz	40 MHz	80MHz
5180MHz	4.15	-	-	6.51	-	-
5190MHz	-	4.08	-	-	6.13	-
5200MHz	4.31	-	-	6.33	-	-
5210MHz	-	-	4.28	-	-	7.02
5230MHz	-	4.35	-	-	7.13	-
5240MHz	4.06	-	-	6.28	-	-
5260MHz	4.15	-	-	6.54	-	-
5270MHz	-	4.26	-	-	6.38	-
5290MHz	-	-	4.22	-	-	6.92
5300MHz	4.40	-	-	6.64	-	-
5310MHz	-	4.22	-	-	6.57	-
5320MHz	4.30	-	-	6.45	-	-
5500MHz	4.23	-	-	6.73	-	-
5510MHz	-	4.28	-	-	6.97	-
5530MHz	-	-	3.95	-	-	7.07
5550MHz	-	4.06	-	-	7.25	-
5580MHz	3.96	-	-	6.87	-	-
5670MHz	-	4.38	-	-	6.50	-
5700MHz	4.20	-	-	7.30	-	-
5745MHz	4.19	-	-	7.03	-	-
5755MHz	-	3.78	-	-	7.17	-
5775MHz	-	-	4.16	-	-	7.26
5785MHz	4.39	-	-	7.53	-	-
5795MHz	-	4.25	-	-	7.64	-
5825MHz	4.12	-	-	7.07	-	-

Note:

1. "TG589vac v2 HP_FCC General antenna table_20160112.xls" files
2. Maximum Correlated Directional Gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / N_{ANT}]$ dBi
3. Maximum Uncorrelated Directional Gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10}) / N_{ANT}]$ dBi

Frequency	Maximum Gain (dBi) for SDM mode					
	SDM mode (3 Stream 3 TX) for Power Gain			SDM mode (3 Stream 3 TX) for PSD Gain		
	20 MHz	40 MHz	80MHz	20 MHz	40 MHz	80MHz
5180MHz	1.77	-	-	1.77	-	-
5190MHz	-	1.75	-	-	1.75	-
5200MHz	1.94	-	-	1.94	-	-
5210MHz	-	-	2.36	-	-	2.36
5230MHz	-	2.48	-	-	2.48	-
5240MHz	1.56	-	-	1.56	-	-
5260MHz	1.95	-	-	1.95	-	-
5270MHz	-	1.64	-	-	1.64	-
5290MHz	-	-	2.34	-	-	2.34
5300MHz	2.10	-	-	2.10	-	-
5310MHz	-	1.92	-	-	1.92	-
5320MHz	1.91	-	-	1.91	-	-
5500MHz	2.00	-	-	2.00	-	-
5510MHz	-	2.28	-	-	2.28	-
5530MHz	-	-	2.33	-	-	2.33
5550MHz	-	2.49	-	-	2.49	-
5580MHz	2.14	-	-	2.14	-	-
5670MHz	-	1.74	-	-	1.74	-
5700MHz	2.57	-	-	2.57	-	-
5745MHz	2.40	-	-	2.40	-	-
5755MHz	-	2.43	-	-	2.43	-
5775MHz	-	-	2.53	-	-	2.53
5785MHz	2.80	-	-	2.80	-	-
5795MHz	-	2.94	-	-	2.94	-
5825MHz	2.31	-	-	2.31	-	-

Note:

1. "TG589vac v2 HP_FCC General antenna table_20160112.xls" files
2. Maximum Correlated Directional Gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / N_{ANT}]$ dBi
3. Maximum Uncorrelated Directional Gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10}) / N_{ANT}]$ dBi

Frequency	Maximum Gain (dBi) for TXBF mode					
	TXBF mode (1 Stream 3 TX) for Power Gain			TXBF mode (1 Stream 3 TX) for PSD Gain		
	20 MHz	40 MHz	80MHz	20 MHz	40 MHz	80MHz
5180MHz	6.51	-	-	6.51	-	-
5190MHz	-	6.13	-	-	6.13	-
5200MHz	6.33	-	-	6.33	-	-
5210MHz	-	-	7.02	-	-	7.02
5230MHz	-	7.13	-	-	7.13	-
5240MHz	6.28	-	-	6.28	-	-
5260MHz	6.54	-	-	6.54	-	-
5270MHz	-	6.38	-	-	6.38	-
5290MHz	-	-	6.92	-	-	6.92
5300MHz	6.64	-	-	6.64	-	-
5310MHz	-	6.57	-	-	6.57	-
5320MHz	6.45	-	-	6.45	-	-
5500MHz	6.73	-	-	6.73	-	-
5510MHz	-	6.97	-	-	6.97	-
5530MHz	-	-	7.07	-	-	7.07
5550MHz	-	7.25	-	-	7.25	-
5580MHz	6.87	-	-	6.87	-	-
5670MHz	-	6.50	-	-	6.50	-
5700MHz	7.30	-	-	7.30	-	-
5745MHz	7.03	-	-	7.03	-	-
5755MHz	-	7.17	-	-	7.17	-
5775MHz	-	-	7.26	-	-	7.26
5785MHz	7.53	-	-	7.53	-	-
5795MHz	-	7.64	-	-	7.64	-
5825MHz	7.07	-	-	7.07	-	-

Note:

1. "TG589vac v2 HP_FCC General antenna table_20160112.xls" files
2. Maximum Correlated Directional Gain = $10 \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N_{ANT}]$ dBi
3. Maximum Uncorrelated Directional Gain = $10 \log[(10^{G_1/10} + 10^{G_2/10} + \dots + 10^{G_N/10}) / N_{ANT}]$ dBi

Frequency	Maximum Gain (dBi) for TXBF mode					
	TXBF mode (2 Stream 3 TX) for Power Gain			TXBF mode (2 Stream 3 TX) for PSD Gain		
	20 MHz	40 MHz	80MHz	20 MHz	40 MHz	80MHz
5180MHz	4.62	-	-	4.62	-	-
5190MHz	-	4.58	-	-	4.58	-
5200MHz	4.80	-	-	4.80	-	-
5210MHz	-	-	4.92	-	-	4.92
5230MHz	-	5.07	-	-	5.07	-
5240MHz	4.34	-	-	4.34	-	-
5260MHz	4.59	-	-	4.59	-	-
5270MHz	-	4.50	-	-	4.50	-
5290MHz	-	-	5.00	-	-	5.00
5300MHz	5.01	-	-	5.01	-	-
5310MHz	-	4.84	-	-	4.84	-
5320MHz	4.60	-	-	4.60	-	-
5500MHz	4.38	-	-	4.38	-	-
5510MHz	-	4.95	-	-	4.95	-
5530MHz	-	-	4.69	-	-	4.69
5550MHz	-	4.77	-	-	4.77	-
5580MHz	4.52	-	-	4.52	-	-
5670MHz	-	4.38	-	-	4.38	-
5700MHz	5.01	-	-	5.01	-	-
5745MHz	4.98	-	-	4.98	-	-
5755MHz	-	4.88	-	-	4.88	-
5775MHz	-	-	5.02	-	-	5.02
5785MHz	5.24	-	-	5.24	-	-
5795MHz	-	5.42	-	-	5.42	-
5825MHz	4.75	-	-	4.75	-	-

Note:

1. "TG589vac v2 HP_FCC General antenna table_20160112.xls" files
2. Maximum Correlated Directional Gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / N_{ANT}]$ dBi
3. Maximum Uncorrelated Directional Gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10}) / N_{ANT}]$ dBi

3.11 Table for Carrier Frequency

9 channels are provided for 802.11a/ 802.11n (20MHz) / 802.11ac (20MHz):

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5150~5250 MHz	36	5180 MHz	44	5220 MHz
	40	5200 MHz	48	5240 MHz
5725~5850 MHz	149	5745 MHz	161	5805 MHz
	153	5765 MHz	165	5825 MHz
	157	5785 MHz	-	-

4 channels are provided for 802.11n (40MHz) / 802.11ac (40MHz):

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5150~5250 MHz	38	5190 MHz	46	5230 MHz
5725~5850 MHz	151	5755 MHz	159	5795 MHz

2 channels are provided for 802.11ac (80MHz):

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5150~5250 MHz	42	5210 MHz	-	-
5725~5850 MHz	155	5775 MHz	-	-

3.12 Table for Test Modes

Test Items	Mode	Note	Channel	Data Rate	Antenna
AC Power Conducted Emissions	11ac(40MHz)	OFDM/BPSK	46	-	1+2+3
Occupied Bandwidth & 26dB Bandwidth	11a	OFDM/BPSK	36/40/48	6Mbps (CDD)	1+2+3
	11ac(20MHz)		36/40/48	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(40MHz)		38/46	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(80MHz)		42	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
6dB bandwidth (for U-NII-3)	11a	OFDM/BPSK	149/157/165	6Mbps (CDD)	1+2+3
	11ac(20MHz)		149/157/165	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(40MHz)		151/159	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(80MHz)		155	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3

Test Items	Mode	Note	Channel	Data Rate	Antenna
Maximum Conducted Output Power (Average)	11a	OFDM/BPSK	36/40/48 149/157/165	6Mbps (CDD)	1+2+3
	11ac(20MHz)		36/40/48 149/157/165	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(40MHz)		38/46 151/159	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(80MHz)		42/155	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
Power Spectral Density	11a	OFDM/BPSK	36/40/48 149/157/165	6Mbps (CDD)	1+2+3
	11ac(20MHz)		36/40/48 149/157/165	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(40MHz)		38/46 151/159	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(80MHz)		42/155	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3

Test Items	Mode	Note	Channel	Data Rate	Antenna
Unwanted Emission in the restricted bands Above 1GHz (Radiated)	11ac(20MHz)	OFDM/BPSK	36/40/48 149/157/165	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(40MHz)		38/46 151/159	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(80MHz)		42/155	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
Unwanted Emission out of the restricted bands Above 1GHz (Radiated)	11ac(20MHz)	OFDM/BPSK	36/40/48 149/157/165	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(40MHz)		38/46 151/159	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
	11ac(80MHz)		42/155	Nss3 MCS0 (3S3T SDM)	1+2+3
				Nss1 MCS0 (1S3T TxBF)	1+2+3
				Nss2 MCS0 (2S3T TxBF)	1+2+3
Radiated Emissions Below 1GHz(Radiated)	11ac(40MHz)	OFDM/BPSK	46	-	1+2+3
Frequency Stability	20MHz	Un-modulation	36/40/48 149/157/165	-	1, 2, 3
	40MHz		38/46 151/159	-	1, 2, 3
	80MHz		42/155	-	1, 2, 3

Note:

1. The device with multiple operating mode, measurements on the middle channel were tested to determine the worst case mode. (Each modulation family were tested in band edge, spurious emission and in band PSD after investigate worst case mode)
2. Base on txcore command, the 11a default mode is 1S3T CDD, the 802.11ac 20MHz/40MHz/80MHz default mode are 1S3T TxBF, 2S3T TxBF, 3S3T SDM; the CDD mode covered by the TxBF mode with the same setting.
wl -i wl1 txcore
txcore enabled bitmap (Nsts {4..1}) 0x00 0x07 0x07 0x07
txcore mask OFDM 0x07 CCK 0x07

All test modes are tested in accordance to txcore
3. Base on same power setting with 802.11ac mode, the 802.11a mode were only tested the “Maximum Conducted Output Power”, “Power Spectral Density” and “Bandwidth”.
4. Radiated emission test, the EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on X-plane.

3.13 Parameters of Test Software Setting

During testing, Channel & Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

The Power Setting Parameter					
Test Software Version	17.3.0098-0900000-20170726032535-47e971d32715b4e9ffb1a4eb97c8bf01874d3e19				
Worst Modulation Mode	Number of Transmit Chains (NTX)	Frequency (MHz)	Maximum Output Power(dBm)	Power Setting	Data Rate / MCS
802.11a (CDD)	1 stream 3TX	5180	25.15	Default(20)	6Mbps
802.11a (CDD)	1 stream 3TX	5200	20.53	Default(15.5)	6Mbps
802.11a (CDD)	1 stream 3TX	5240	24.96	Default(20)	6Mbps
802.11a (CDD)	1 stream 3TX	5745	22.87	Default(18)	6Mbps
802.11a (CDD)	1 stream 3TX	5785	23.83	Default(19)	6Mbps
802.11a (CDD)	1 stream 3TX	5825	22.49	Default(17.5)	6Mbps
802.11ac 20MHz (SDM)	3 stream 3TX	5180	23.17	Default(18.5)	Nss3MCS0 (19.5)
802.11ac 20MHz (SDM)	3 stream 3TX	5200	24.67	Default(20)	Nss3MCS0 (19.5)
802.11ac 20MHz (SDM)	3 stream 3TX	5240	24.66	Default(20)	Nss3MCS0 (19.5)
802.11ac 20MHz (SDM)	3 stream 3TX	5745	25.20	Default(20.5)	Nss3MCS0 (19.5)
802.11ac 20MHz (SDM)	3 stream 3TX	5785	25.17	Default(20.5)	Nss3MCS0 (19.5)
802.11ac 20MHz (SDM)	3 stream 3TX	5825	25.19	Default(20.5)	Nss3MCS0 (19.5)
802.11ac 20MHz (TxBF)	1 stream 3TX	5180	24.72	Default(20)	Nss1MCS0 (6.5)
802.11ac 20MHz (TxBF)	1 stream 3TX	5200	20.38	Default(15.5)	Nss1MCS0 (6.5)
802.11ac 20MHz (TxBF)	1 stream 3TX	5240	24.67	Default(20)	Nss1MCS0 (6.5)
802.11ac 20MHz (TxBF)	1 stream 3TX	5745	22.72	Default(18)	Nss1MCS0 (6.5)
802.11ac 20MHz (TxBF)	1 stream 3TX	5785	23.67	Default(19)	Nss1MCS0 (6.5)
802.11ac 20MHz (TxBF)	1 stream 3TX	5825	22.25	Default(17.5)	Nss1MCS0 (6.5)
802.11ac 20MHz (TxBF)	2 stream 3TX	5180	24.62	Default(20)	Nss2MCS0 (13)
802.11ac 20MHz (TxBF)	2 stream 3TX	5200	21.66	Default(17)	Nss2MCS0 (13)
802.11ac 20MHz (TxBF)	2 stream 3TX	5240	22.55	Default(18)	Nss2MCS0 (13)
802.11ac 20MHz (TxBF)	2 stream 3TX	5745	25.06	Default(20.5)	Nss2MCS0 (13)
802.11ac 20MHz (TxBF)	2 stream 3TX	5785	24.01	Default(19.5)	Nss2MCS0 (13)
802.11ac 20MHz (TxBF)	2 stream 3TX	5825	24.05	Default(19.5)	Nss2MCS0 (13)
802.11ac 40MHz (SDM)	3 stream 3TX	5190	18.98	Default(15)	Nss3MCS0 (40.5)
802.11ac 40MHz (SDM)	3 stream 3TX	5230	24.08	Default(20.5)	Nss3MCS0 (40.5)
802.11ac 40MHz (SDM)	3 stream 3TX	5755	23.12	Default(19.5)	Nss3MCS0 (40.5)
802.11ac 40MHz (SDM)	3 stream 3TX	5795	23.11	Default(19.5)	Nss3MCS0 (40.5)
802.11ac 40MHz (TxBF)	1 stream 3TX	5190	20.00	Default(16)	Nss1MCS0 (13.5)
802.11ac 40MHz (TxBF)	1 stream 3TX	5230	24.20	Default(20.5)	Nss1MCS0 (13.5)
802.11ac 40MHz (TxBF)	1 stream 3TX	5755	23.00	Default(19.5)	Nss1MCS0 (13.5)
802.11ac 40MHz (TxBF)	1 stream 3TX	5795	23.02	Default(19.5)	Nss1MCS0 (13.5)
802.11ac 40MHz (TxBF)	2 stream 3TX	5190	19.35	Default(15.5)	Nss2MCS0 (27)
802.11ac 40MHz (TxBF)	2 stream 3TX	5230	24.00	Default(20.5)	Nss2MCS0 (27)
802.11ac 40MHz (TxBF)	2 stream 3TX	5755	22.79	Default(19.5)	Nss2MCS0 (27)
802.11ac 40MHz (TxBF)	2 stream 3TX	5795	22.82	Default(19.5)	Nss2MCS0 (27)

Worst Modulation Mode	Number of Transmit Chains (NTX)	Frequency (MHz)	Maximum Output Power(dBm)	Power Setting	Data Rate / MCS
802.11ac 80MHz (SDM)	3 stream 3TX	5210	17.30	Default(13)	Nss3MCS0 (87.8)
802.11ac 80MHz (SDM)	3 stream 3TX	5775	22.96	Default(19)	Nss3MCS0 (87.8)
802.11ac 80MHz (TxBF)	1 stream 3TX	5210	17.31	Default(13)	Nss1MCS0 (29.3)
802.11ac 80MHz (TxBF)	1 stream 3TX	5775	22.77	Default(19)	Nss1MCS0 (29.3)
802.11ac 80MHz (TxBF)	2 stream 3TX	5210	18.93	Default(15)	Nss2MCS0 (58.5)
802.11ac 80MHz (TxBF)	2 stream 3TX	5775	22.63	Default(19)	Nss2MCS0 (58.5)

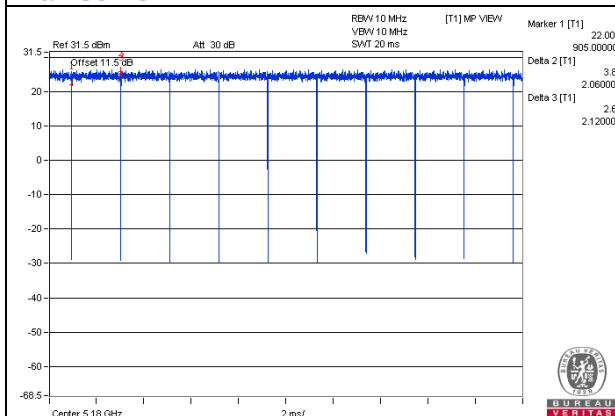
3.14 On Time and Duty Cycle

Mode	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)
11a 1S4T CDD	2.060	2.120	97.2	0.12	1
11ac (20MHz) 3S3T SDM	0.683	0.703	97.2	0.13	3
11ac (20MHz) 1S3T TxBF	1.925	1.945	99.0	-	-
11ac (20MHz) 2S3T TxBF	0.986	1.006	98.01	-	-
11ac (40MHz) 3S3T SDM	0.355	0.375	94.7	0.24	3
11ac (40MHz) 1S3T TxBF	0.947	0.968	97.8	0.10	3
11ac (40MHz) 2S3T TxBF	0.497	0.518	95.9	0.18	3
11ac (80MHz) 3S3T SDM	0.191	0.218	87.6	0.57	10
11ac (80MHz) 1S3T TxBF	0.458	0.489	93.7	0.28	3
11ac (80MHz) 2S3T TxBF	0.255	0.276	92.4	0.34	10

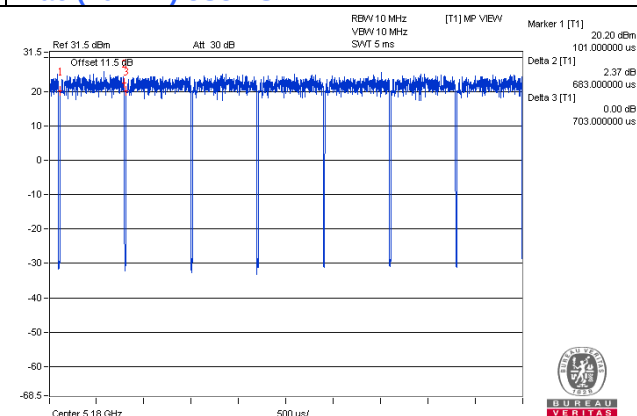
Note:

1. Power measurement using sweep trigger and gating of the power meter, duty factor is not required.
2. Duty cycle > 98%, duty factor is not required.

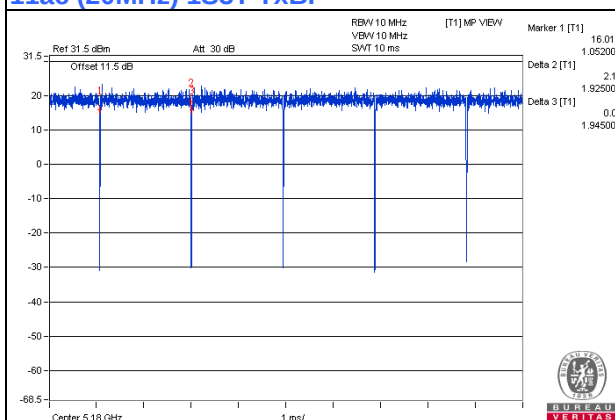
11a 1S3T CDD



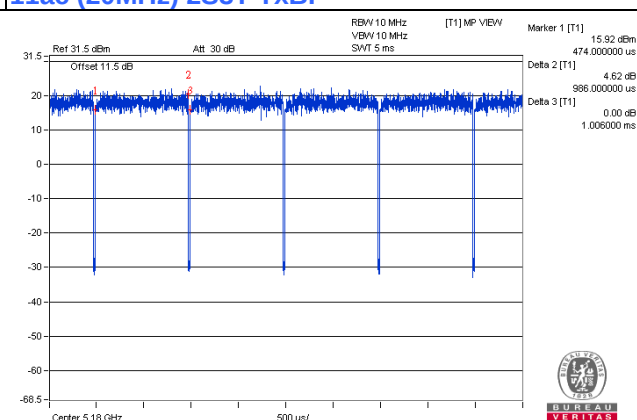
11ac (20MHz) 3S3T SDM



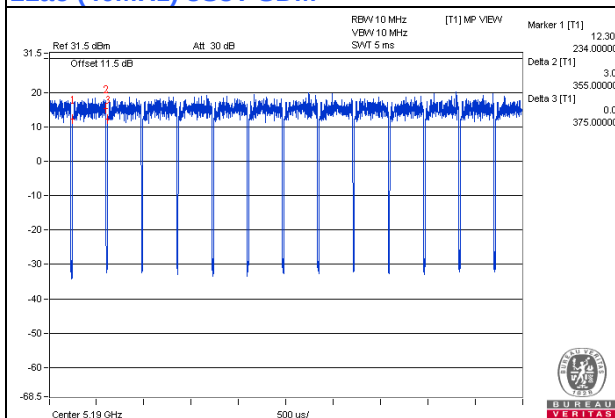
11ac (20MHz) 1S3T TxBF



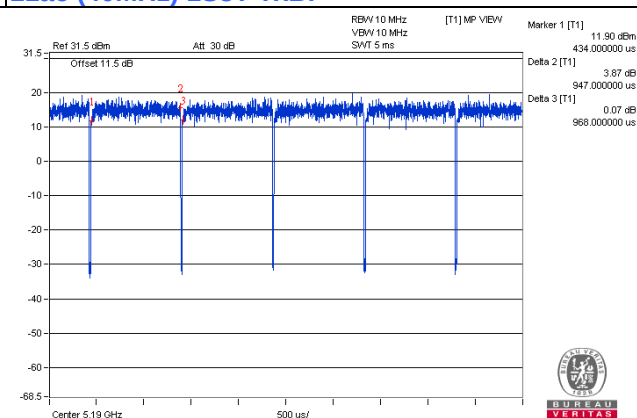
11ac (20MHz) 2S3T TxBF



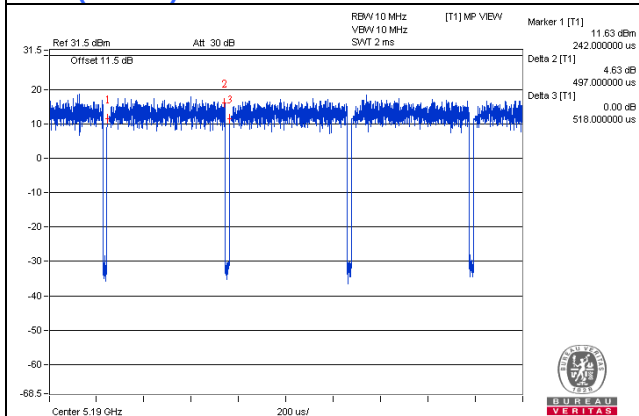
11ac (40MHz) 3S3T SDM



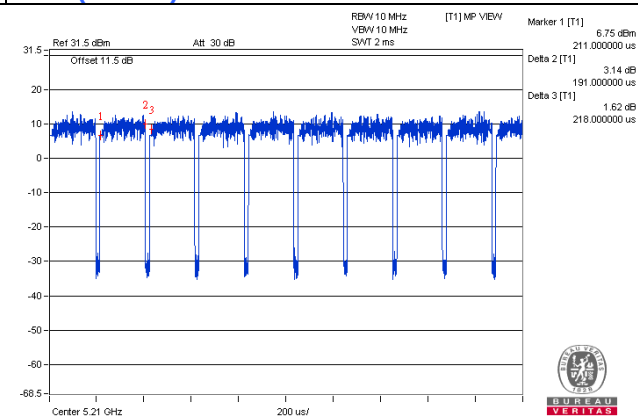
11ac (40MHz) 1S3T TxBF



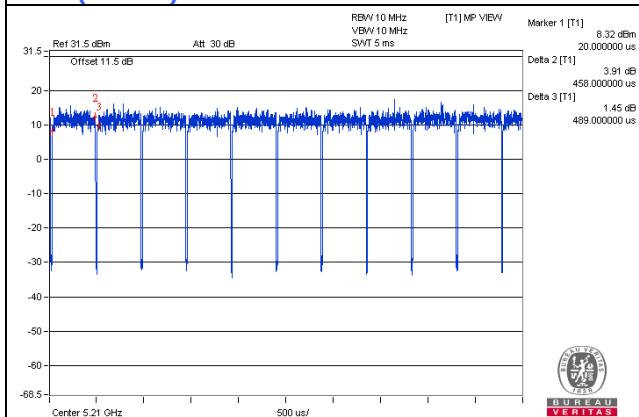
11ac (40MHz) 2S3T TxBF



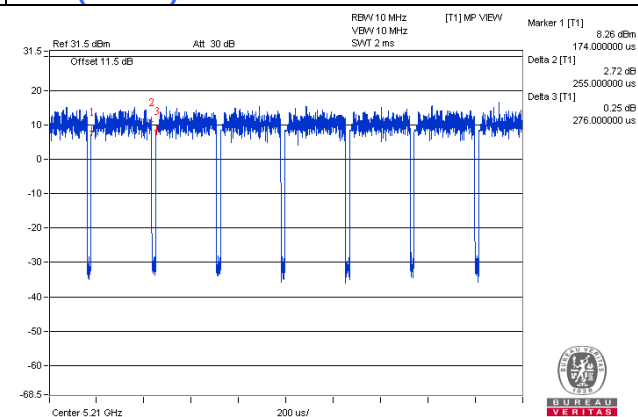
11ac (80MHz) 3S3T SDM



11ac (80MHz) 1S3T TxBF



11ac (80MHz) 2S3T TxBF



3.15 Testing Location Information

Test Site Location					
Address	No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, TAIWAN (R.O.C.)				
TEL	886-3-3183232				
FAX	886-3-3270892				
Test Site No.	Site Category	Location	FCC Reg. No.	IC Reg. No.	VCCI Reg. No
Conduction 2	Conduction	Hwa Ya	-	-	C-2047
Chamber 4	966 Chamber	Hwa Ya	215374	7450F-9	-
Oven	Oven	Hwa Ya	-	-	-

3.16 EUT Diagram and Support Equipment

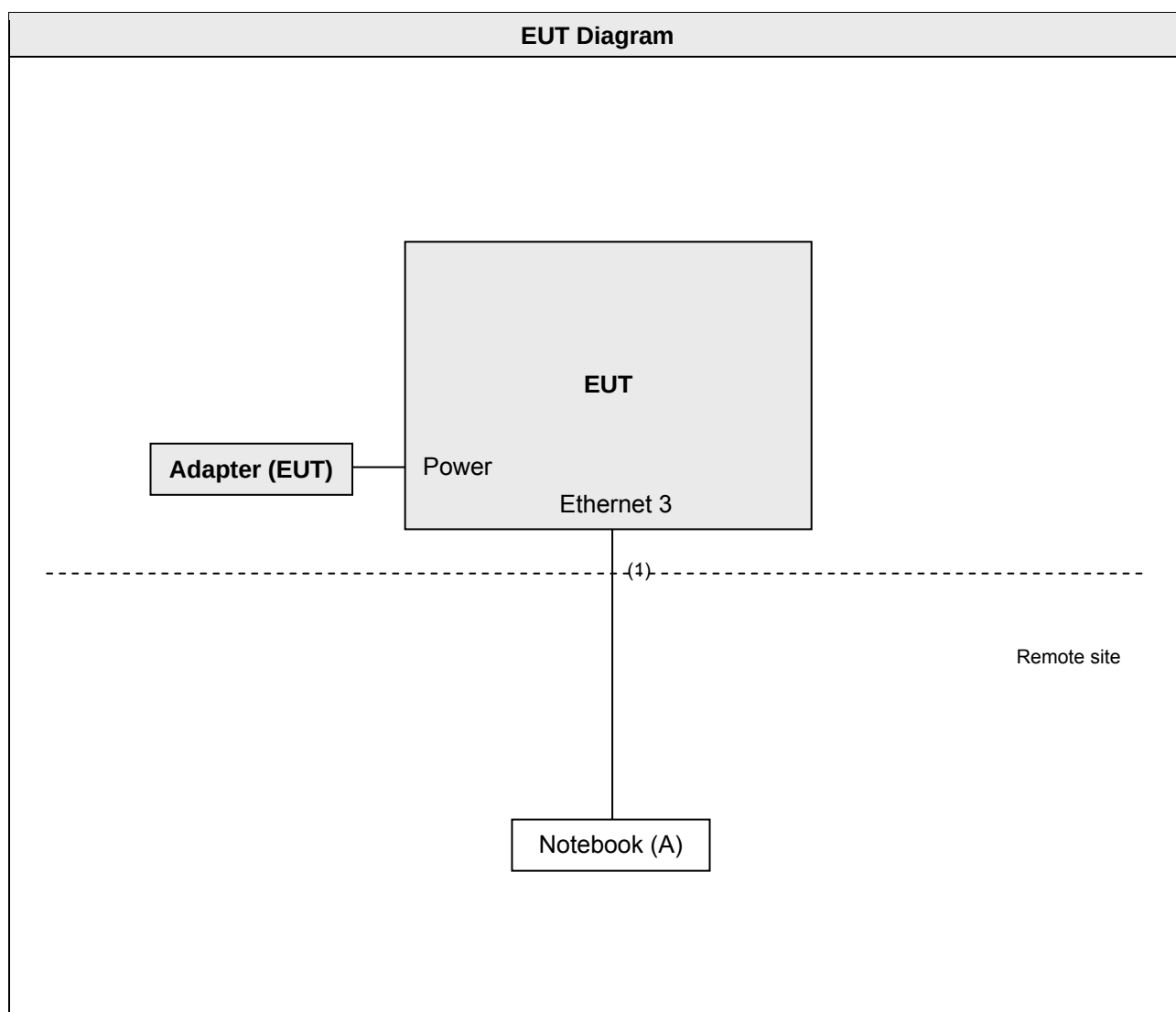
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Notebook	DELL	D531	CN-0XM006-4864 3-81U-2973	FCC DoC Approved	Provided by Lab

Note:

1. All power cords of the above support units are non-shielded (1.8m).
2. Item A acted as a communication partner to transfer data.

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	RJ45 cable	1	1.8	N	0	Provided by Lab



4 Test Types and Results

3.5 AC Power Conducted Emissions Measurement

3.5.1 Limit

For this product which is designed to be connected to the AC power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed below limits table.

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30.0	60	50

3.5.2 Measuring Instruments and Setting

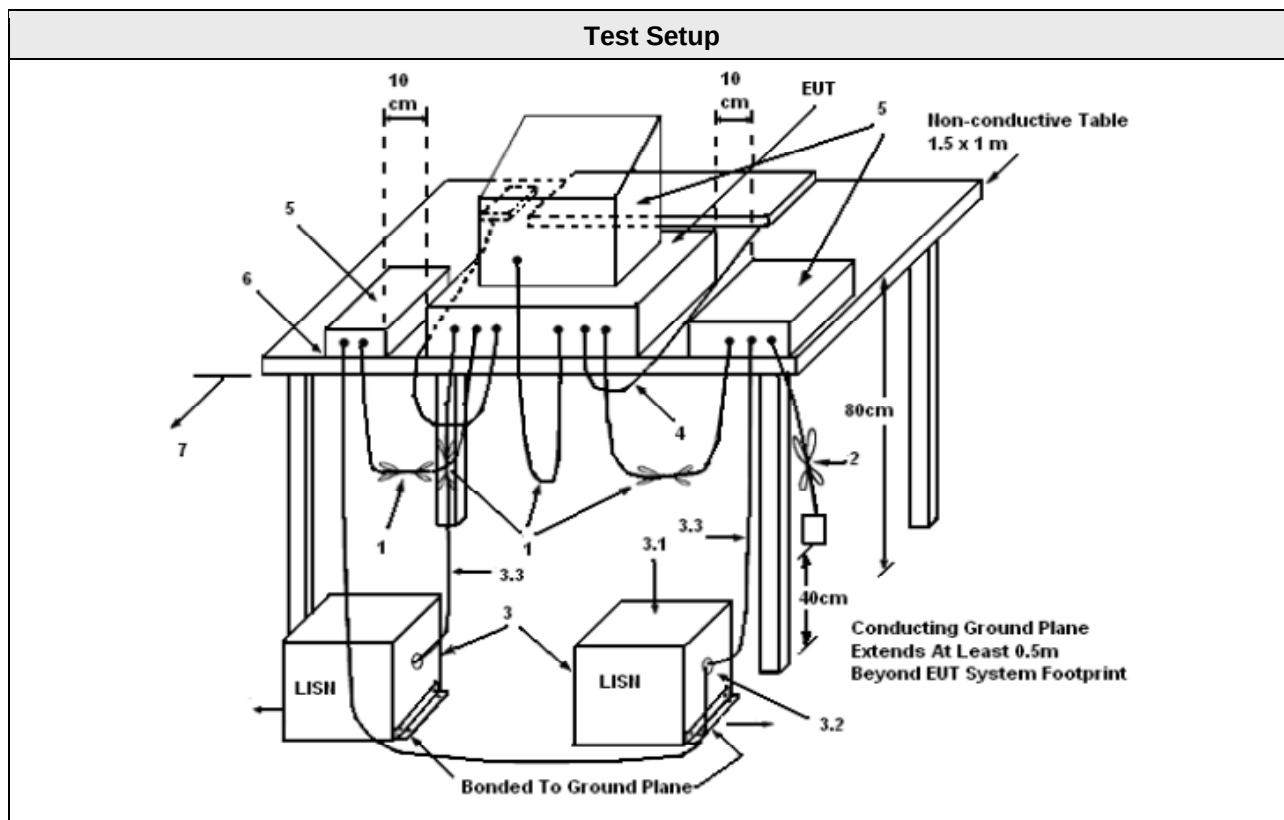
Please refer to section 5 of equipments list in this report. The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

3.5.3 Test Procedures

1. Configure the EUT according to ANSI C63.10. The EUT or host of EUT has to be placed 0.4 meter far from the conducting wall of the shielding room and at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT or host of EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connected to the other LISNs. The LISN should provide 50uH/50ohms coupling impedance.
4. The frequency range from 150 kHz to 30 MHz was searched.
5. Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. The measurement has to be done between each power line and ground at the power terminal.

3.5.4 Test Setup Layout



1. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
2. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
3. EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in 50 Ω . LISN can be placed on top of, or immediately beneath, reference ground plane.
4. All other equipment powered from additional LISN(s).
5. Multiple outlet strip can be used for multiple power cords of non-EUT equipment.
6. LISN at least 80 cm from nearest part of EUT chassis.
7. Cables of hand-operated devices, such as keyboards, mice, etc., shall be placed as for normal use.
8. Non-EUT components of EUT system being tested.
9. Rear of EUT, including peripherals, shall all be aligned and flush with rear of tabletop.
10. Rear of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground plane.

3.5.5 Test Deviation

There are no deviations with the original standard.

3.5.6 EUT Operating during Test

The EUT was placed on the test table and programmed in normal function.

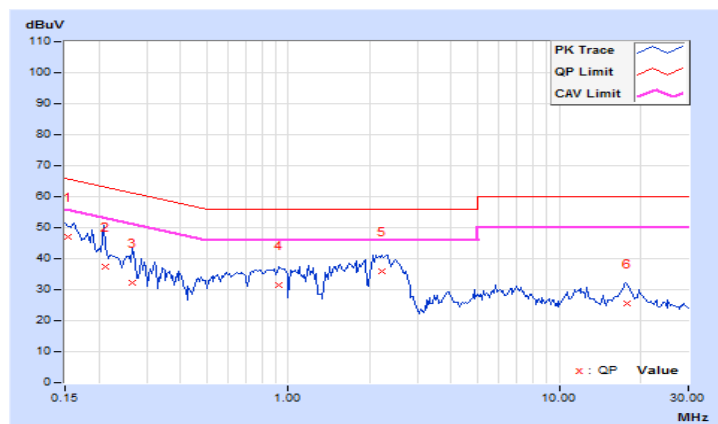
3.5.7 Test Results of AC Power Conducted Emissions

Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	25°C, 75%RH
Tested by	Chris Lin		

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	9.99	37.02	22.15	47.01	32.14	65.79	55.79	-18.78	-23.65
2	0.21250	10.02	27.29	11.77	37.31	21.79	63.11	53.11	-25.80	-31.32
3	0.26719	10.02	22.07	12.76	32.09	22.78	61.20	51.20	-29.11	-28.42
4	0.91953	10.07	21.39	12.59	31.46	22.66	56.00	46.00	-24.54	-23.34
5	2.21484	10.12	25.78	17.74	35.90	27.86	56.00	46.00	-20.10	-18.14
6	17.91797	10.41	15.07	10.09	25.48	20.50	60.00	50.00	-34.52	-29.50

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

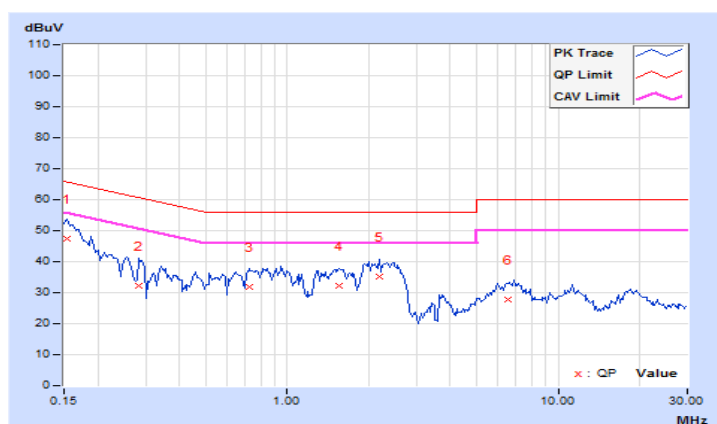


Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	25°C, 75%RH
Tested by	Chris Lin		

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBUV)		Emission Level (dBUV)		Limit (dBUV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	10.02	37.29	22.31	47.31	32.33	65.79	55.79	-18.48	-23.46
2	0.28281	9.97	22.08	17.12	32.05	27.09	60.73	50.73	-28.68	-23.64
3	0.72422	10.05	21.82	13.95	31.87	24.00	56.00	46.00	-24.13	-22.00
4	1.55078	10.07	22.27	14.80	32.34	24.87	56.00	46.00	-23.66	-21.13
5	2.18750	10.06	25.23	17.09	35.29	27.15	56.00	46.00	-20.71	-18.85
6	6.53516	10.19	17.52	11.36	27.71	21.55	60.00	50.00	-32.29	-28.45

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



3.6 Occupied Bandwidth and 26dB Bandwidth Measurement

3.6.1 Measuring Instruments and Setting

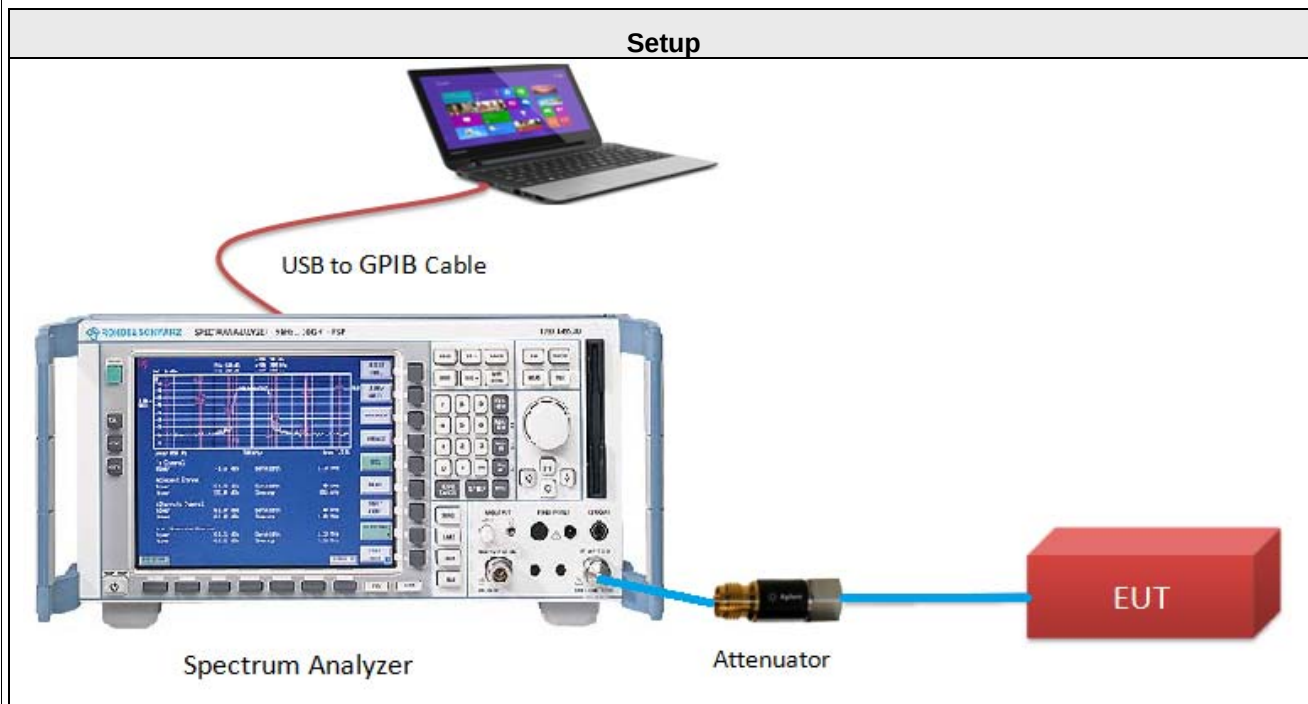
The following table is the setting of the Spectrum Analyzer.

99% Occupied Bandwidth	
Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	1.5 times to 5.0 times the OBW
RBW	1% to 5% of the anticipated emission bandwidth
VBW	$\geq 3 \times \text{RBW}$
Detector	Peak
Trace	Max hold
Sweep Time	Auto
26dB Bandwidth	
Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	> 26dB Bandwidth
RBW	Approximately 1% of the emission bandwidth.
VBW	> RBW
Detector	Peak
Trace	Max hold
Sweep Time	Auto

3.6.2 Test Procedure

- 1 The transmitter output (antenna port) was connected to the spectrum analyzer.
- 2 Test was performed in accordance with Measurement of Digital Transmission Systems Operating under 789033 D02 General UNII Test Procedures New Rules v01r04, in section "Emission bandwidth (C)(1)" & "99 Percent Occupied Bandwidth"(D). 05/02/2017.
- 3 When measuring Emission bandwidth with multiple antenna systems, add every result of the values by mathematic formula.

3.6.3 Test Setup Layout



3.6.4 Test Deviation

There are no deviations with the original standard.

3.6.5 EUT Operating Conditions

The EUT was programmed to be in continuously transmitting mode.

3.6.6 Test Results

Temperature	25°C	Humidity	60%
Test Engineer	Leo Tsai		

11a 1S4T CDD

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
36	5180	26.79	24.82	26.86
40	5200	20.62	20.39	20.39
48	5240	25.88	26.14	27.29

11ac (20MHz) 3S3T SDM

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
36	5180	21.15	20.89	26.05
40	5200	29.68	25.10	32.52
48	5240	29.38	28.04	29.54

11ac (20MHz) 1S3T TxBF

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
36	5180	28.78	26.21	32.04
40	5200	20.87	20.58	20.76
48	5240	32.97	27.58	28.96

11ac (20MHz) 2S3T TxBF

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
36	5180	25.87	24.98	26.74
40	5200	20.81	20.61	20.66
48	5240	20.70	20.81	20.66

11ac (40MHz) 3S3T SDM

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
38	5190	41.28	41.16	40.80
46	5230	62.65	55.10	62.62

11ac (40MHz) 1S3T TxBF

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
38	5190	40.88	40.80	40.65
46	5230	58.67	50.16	58.43

11ac (40MHz) 2S3T TxBF

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
38	5190	40.92	40.82	41.13
46	5230	61.04	59.62	60.54

11ac (80MHz) 3S3T SDM

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
42	5210	83.22	82.89	82.60

11ac (80MHz) 1S3T TxBF

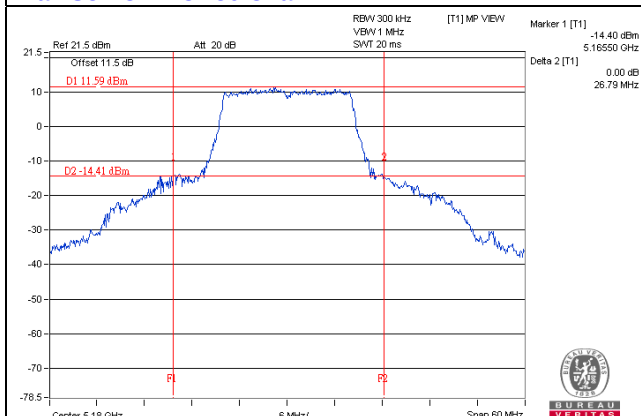
CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
42	5210	82.72	82.33	82.82

11ac (80MHz) 2S3T TxBF

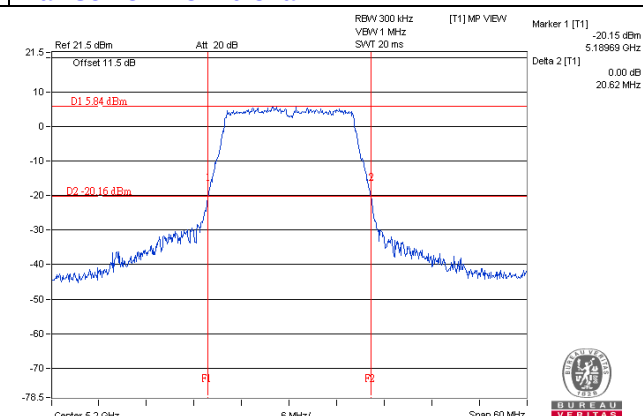
CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
42	5210	82.82	82.88	82.93

26dB BANDWIDTH SPECTRUM PLOT

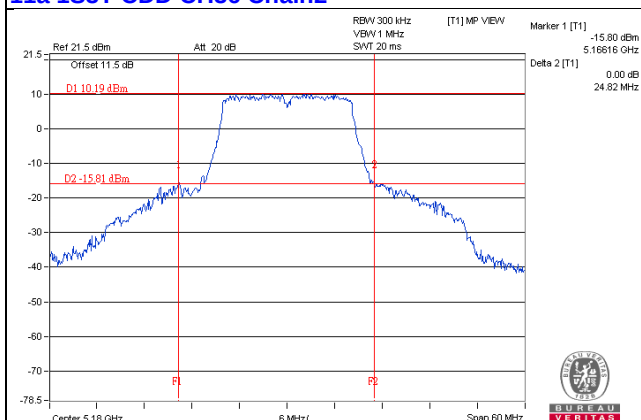
11a 1S3T CDD CH36 Chain1



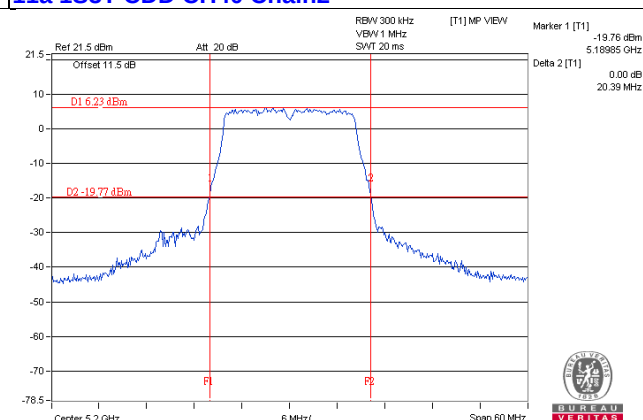
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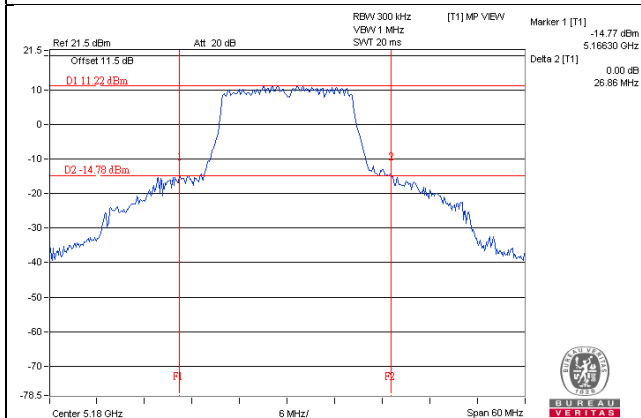
11a 1S3T CDD CH36 Chain2



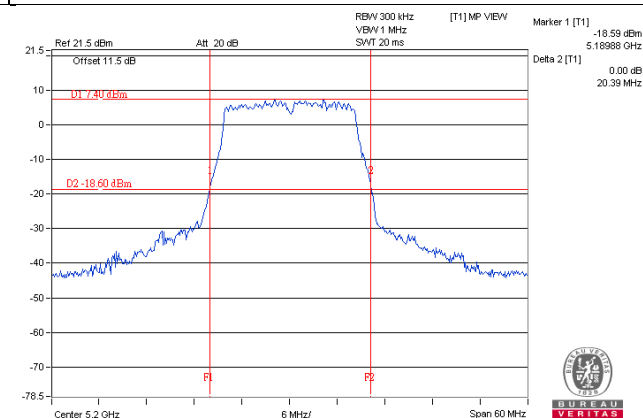
11a 1S3T CDD CH40 Chain2



11a 1S3T CDD CH36 Chain3

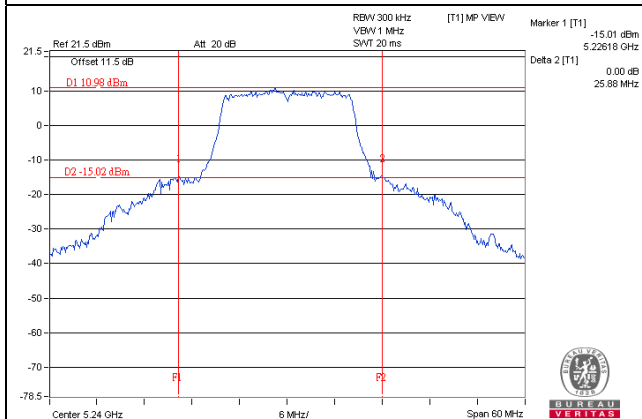


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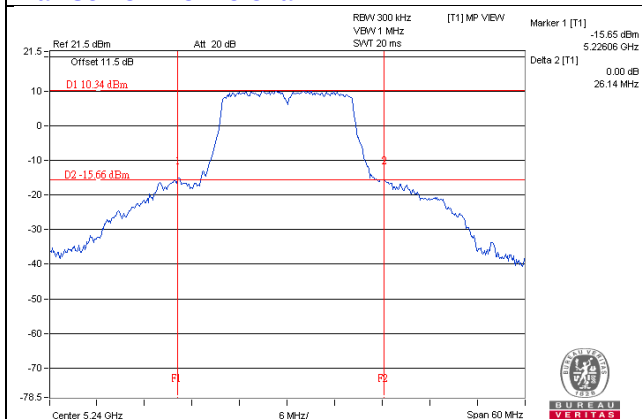


26dB BANDWIDTH SPECTRUM PLOT

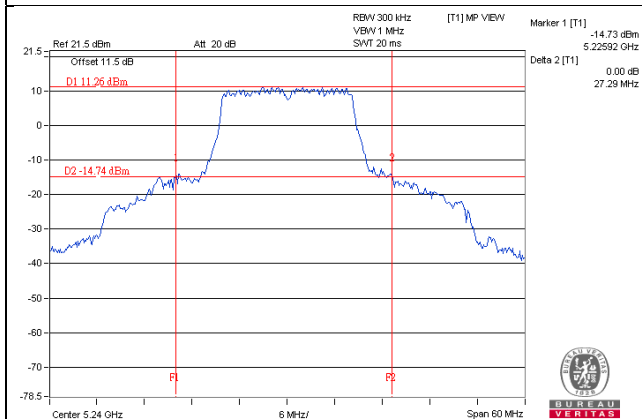
11a 1S3T CDD CH48 Chain1



11a 1S3T CDD CH48 Chain2

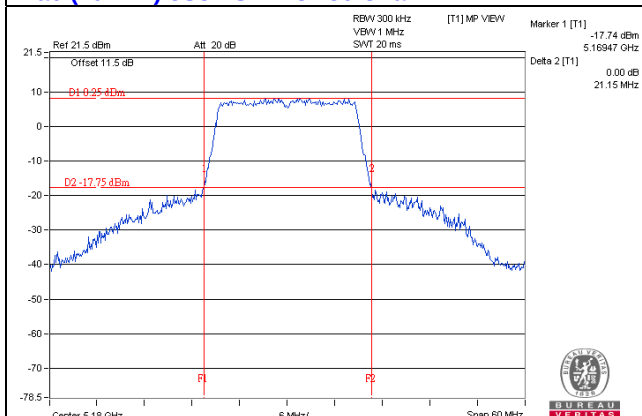


11a 1S3T CDD CH48 Chain3

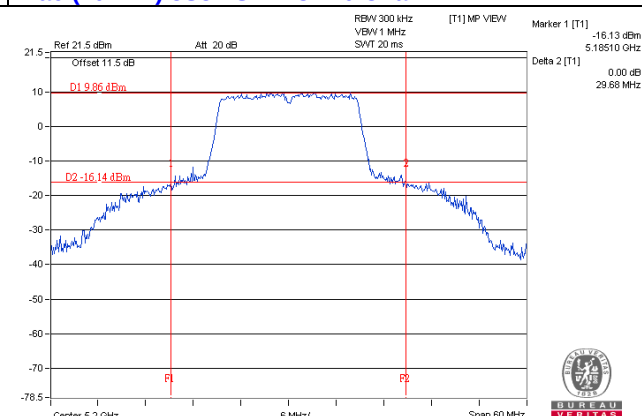


26dB BANDWIDTH SPECTRUM PLOT

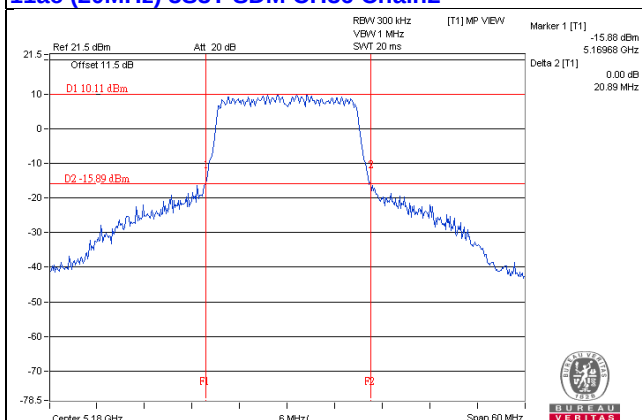
11ac (20MHz) 3S3T SDM CH36 Chain1



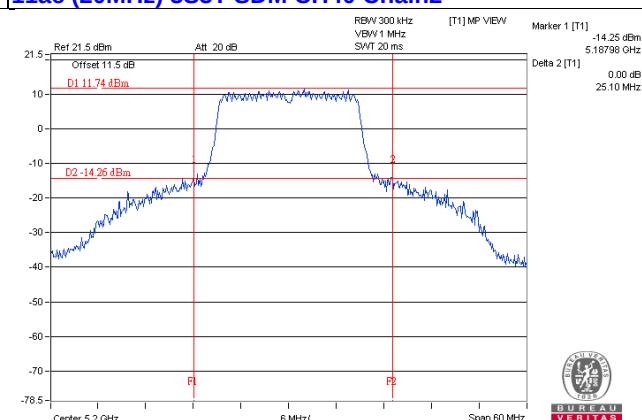
11ac (20MHz) 3S3T SDM CH40 Chain1



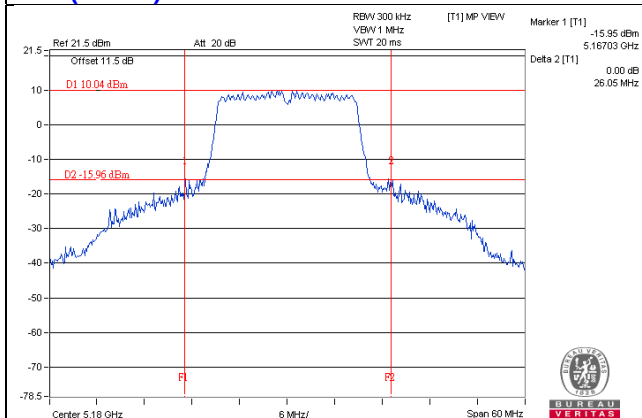
11ac (20MHz) 3S3T SDM CH36 Chain2



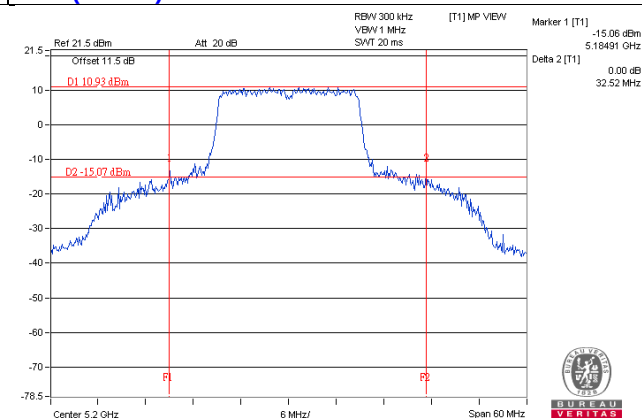
11ac (20MHz) 3S3T SDM CH40 Chain2



11ac (20MHz) 3S3T SDM CH36 Chain3

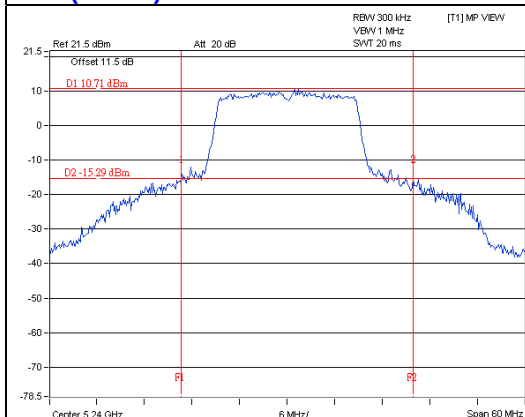


11ac (20MHz) 3S3T SDM CH40 Chain3

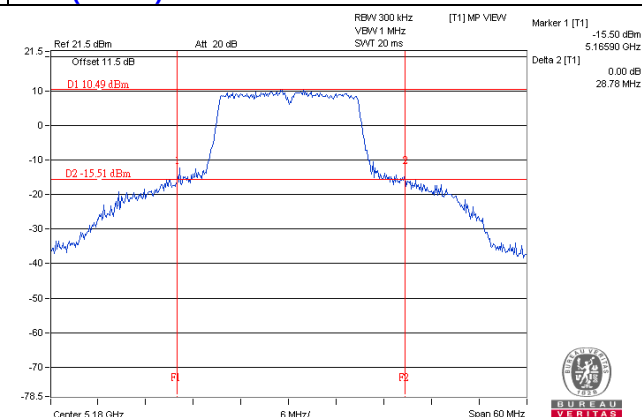


26dB BANDWIDTH SPECTRUM PLOT

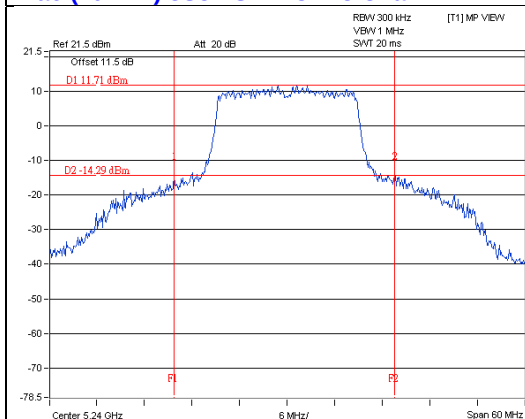
11ac (20MHz) 3S3T SDM CH48 Chain1



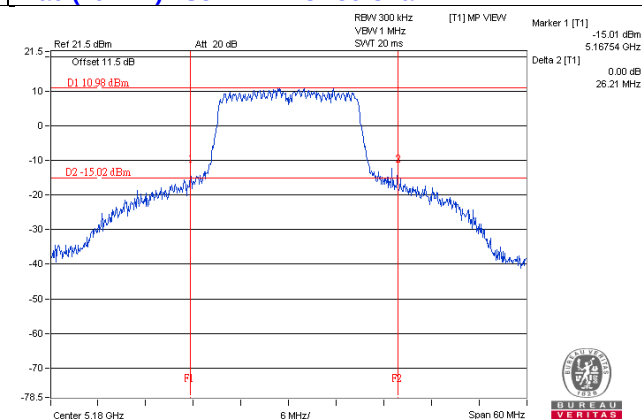
11ac (20MHz) 1S3T TxBF CH36 Chain1



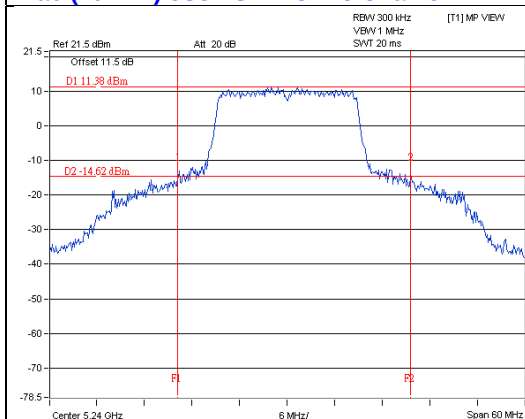
11ac (20MHz) 3S3T SDM CH48 Chain2



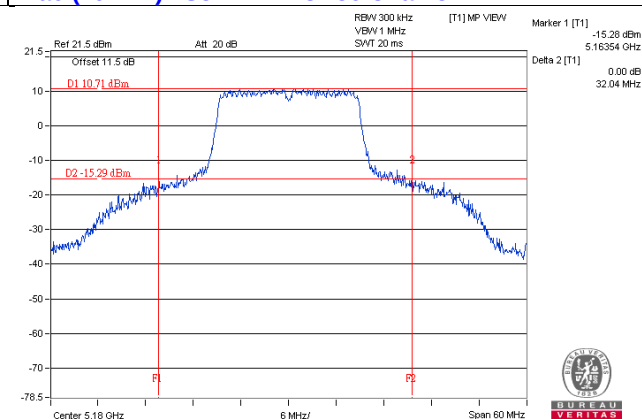
11ac (20MHz) 1S3T TxBF CH36 Chain2



11ac (20MHz) 3S3T SDM CH48 Chain3

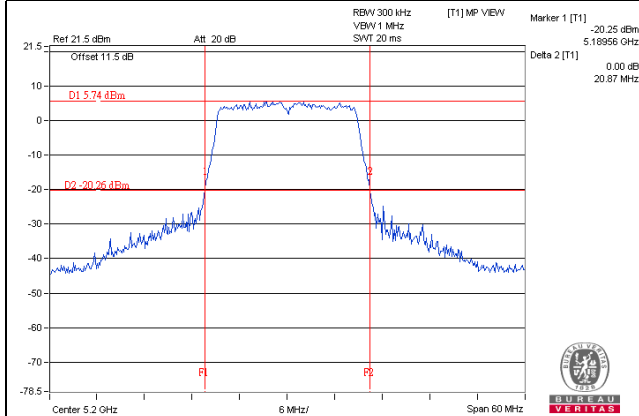


11ac (20MHz) 1S3T TxBF CH36 Chain3

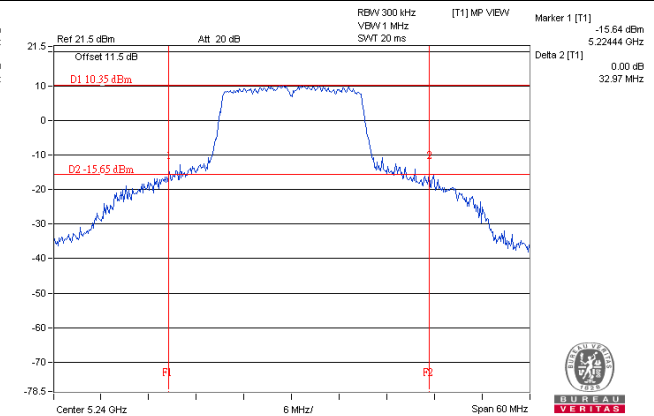


26dB BANDWIDTH SPECTRUM PLOT

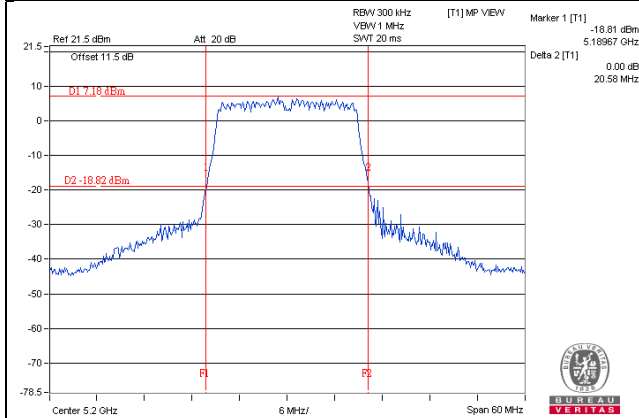
11ac (20MHz) 1S3T TxBF CH40 Chain1



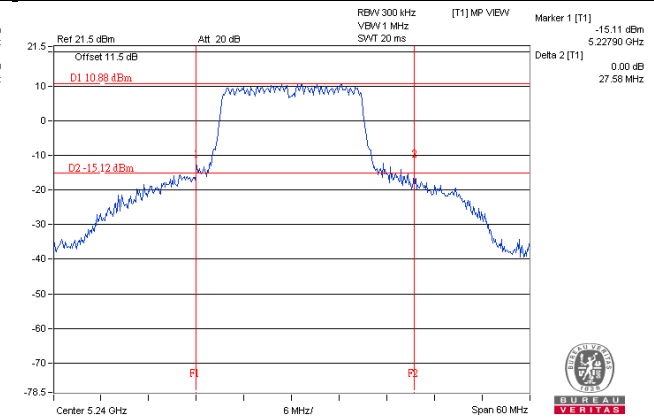
11ac (20MHz) 1S3T TxBF CH48 Chain1



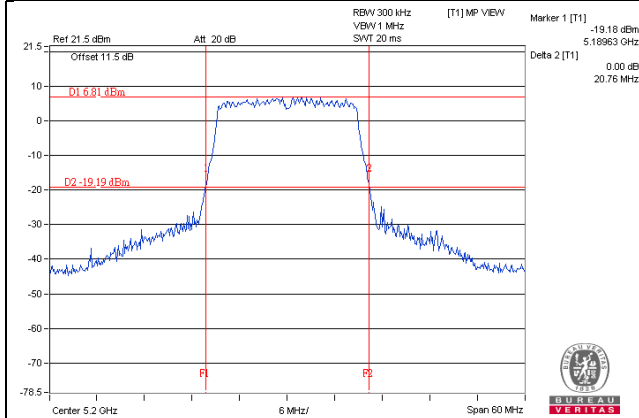
11ac (20MHz) 1S3T TxBF CH40 Chain2



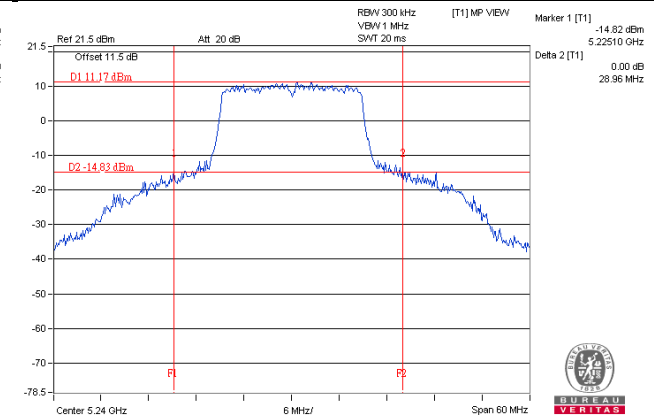
11ac (20MHz) 1S3T TxBF CH48 Chain2



11ac (20MHz) 1S3T TxBF CH40 Chain3

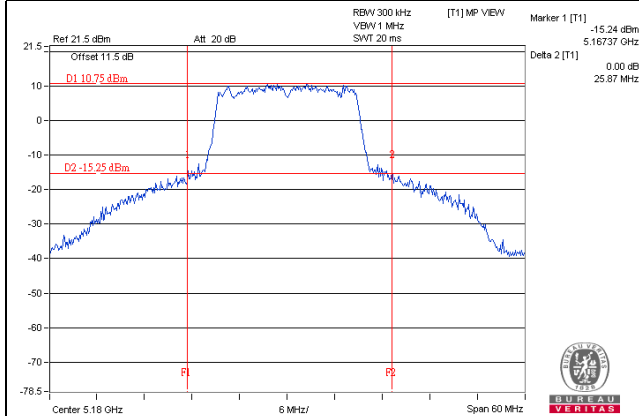


11ac (20MHz) 1S3T TxBF CH48 Chain3

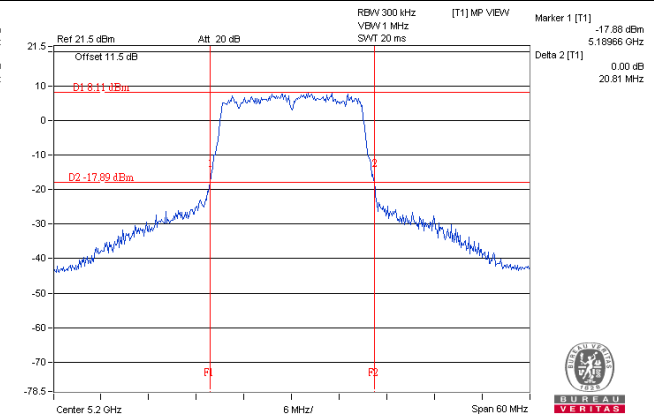


26dB BANDWIDTH SPECTRUM PLOT

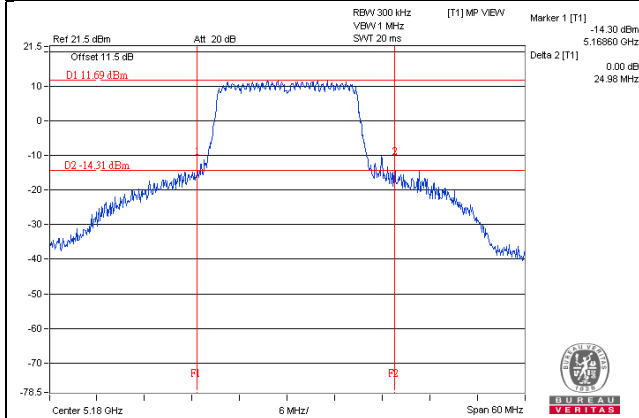
11ac (20MHz) 2S3T TxBF CH36 Chain1



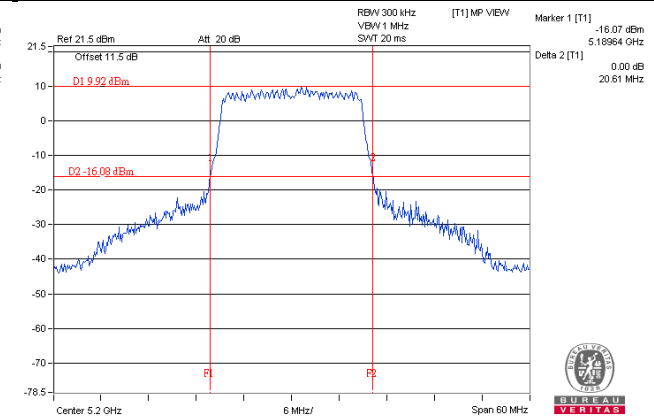
11ac (20MHz) 2S3T TxBF CH40 Chain1



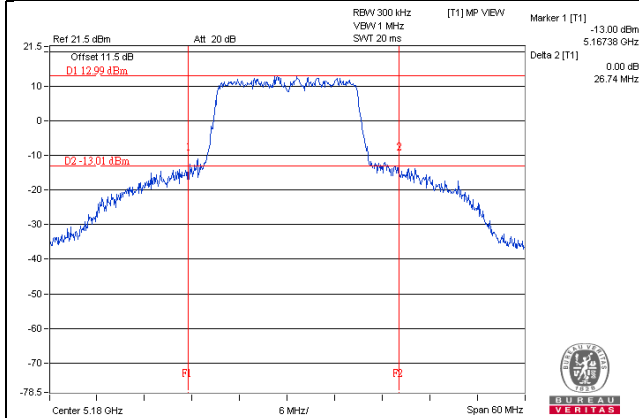
11ac (20MHz) 2S3T TxBF CH36 Chain2



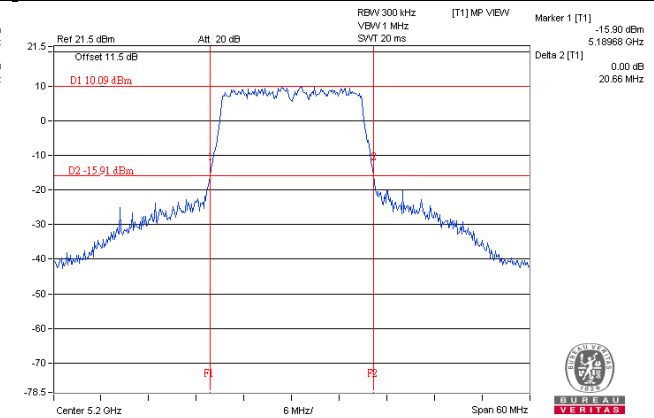
11ac (20MHz) 2S3T TxBF CH40 Chain2



11ac (20MHz) 2S3T TxBF CH36 Chain3

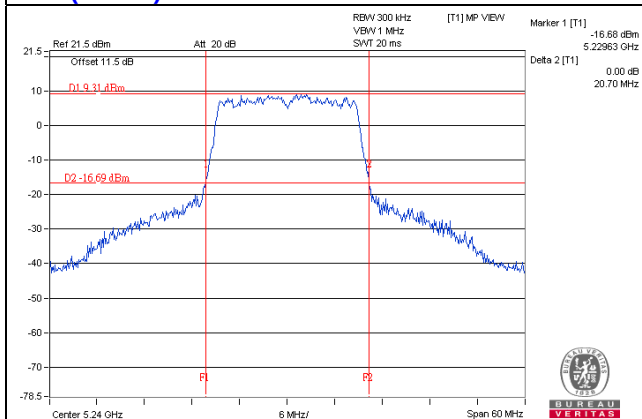


11ac (20MHz) 2S3T TxBF CH40 Chain3

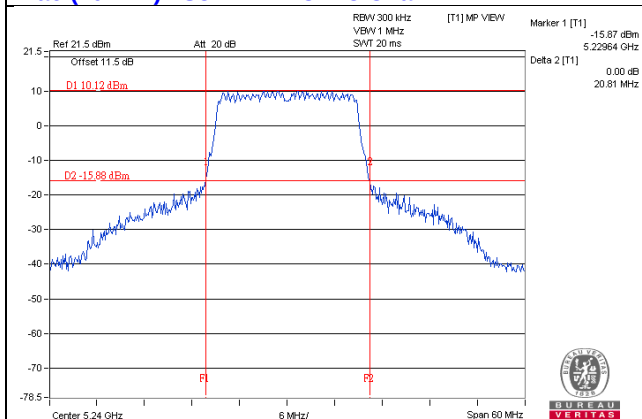


26dB BANDWIDTH SPECTRUM PLOT

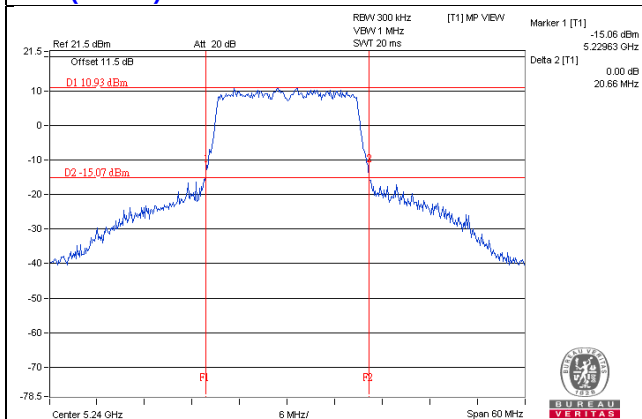
11ac (20MHz) 2S3T TxBF CH48 Chain1



11ac (20MHz) 2S3T TxBF CH48 Chain2

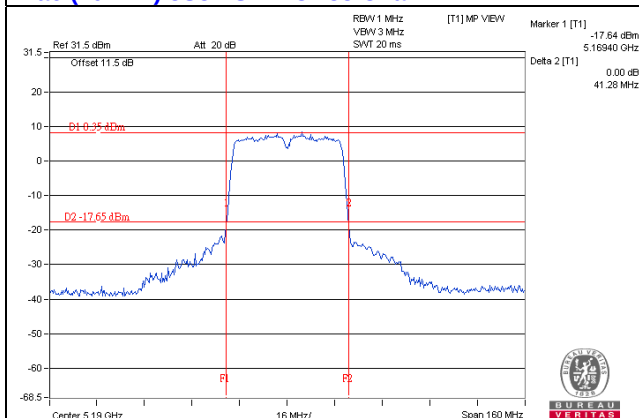


11ac (20MHz) 2S3T TxBF CH48 Chain3

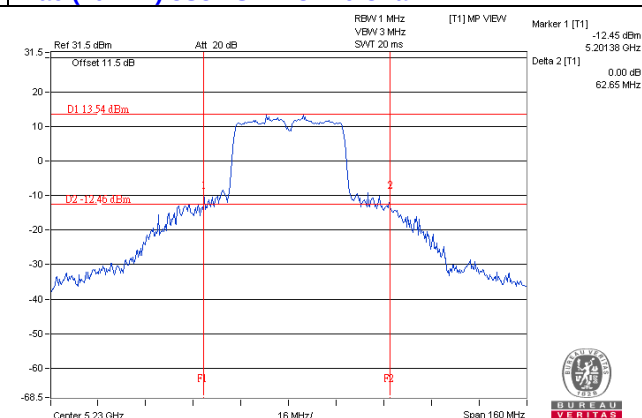


26dB BANDWIDTH SPECTRUM PLOT

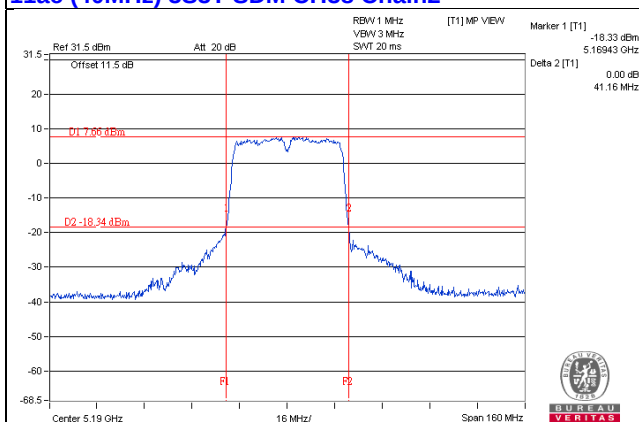
11ac (40MHz) 3S3T SDM CH38 Chain1



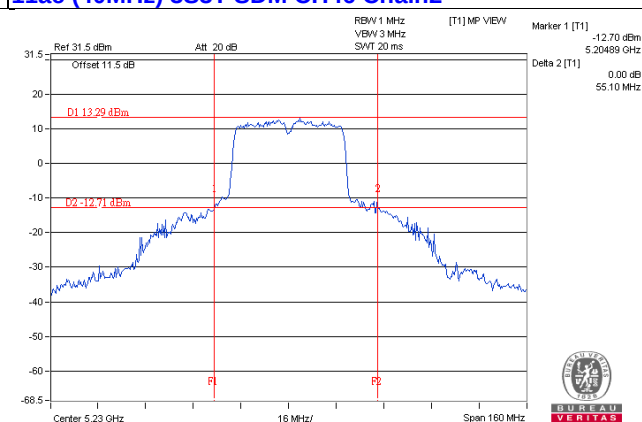
11ac (40MHz) 3S3T SDM CH46 Chain1



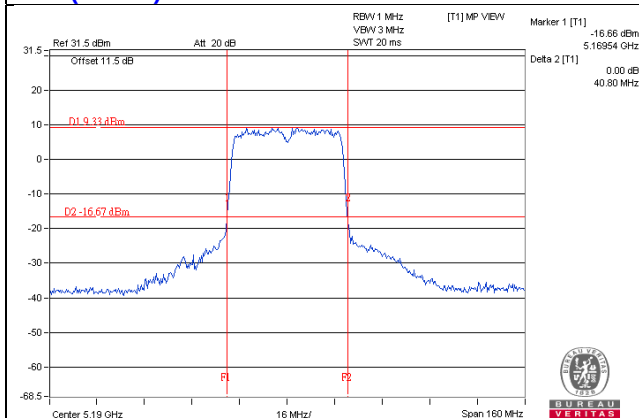
11ac (40MHz) 3S3T SDM CH38 Chain2



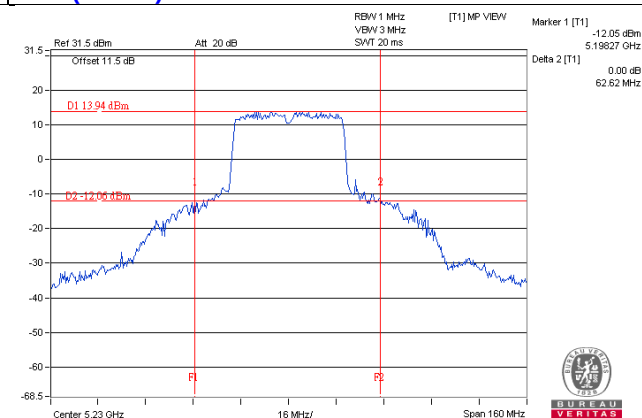
11ac (40MHz) 3S3T SDM CH46 Chain2



11ac (40MHz) 3S3T SDM CH38 Chain3

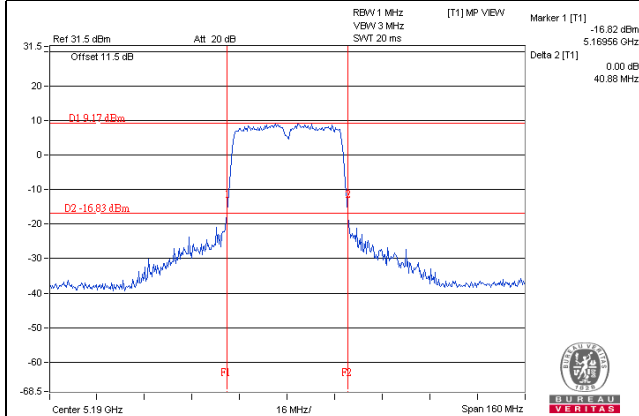


11ac (40MHz) 3S3T SDM CH46 Chain3

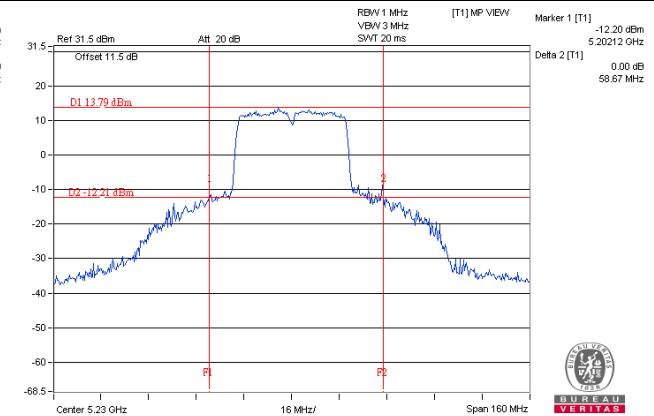


26dB BANDWIDTH SPECTRUM PLOT

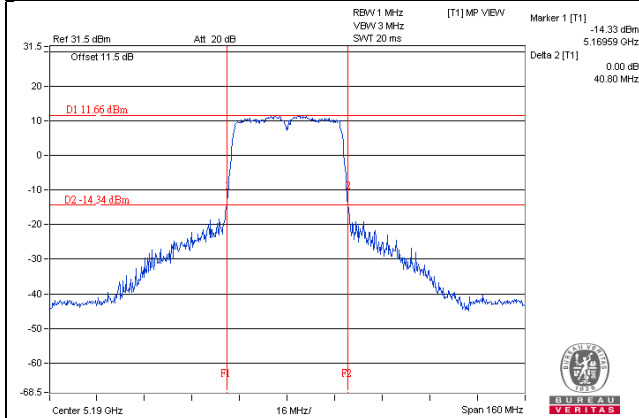
11ac (40MHz) 1S3T TxBF CH38 Chain1



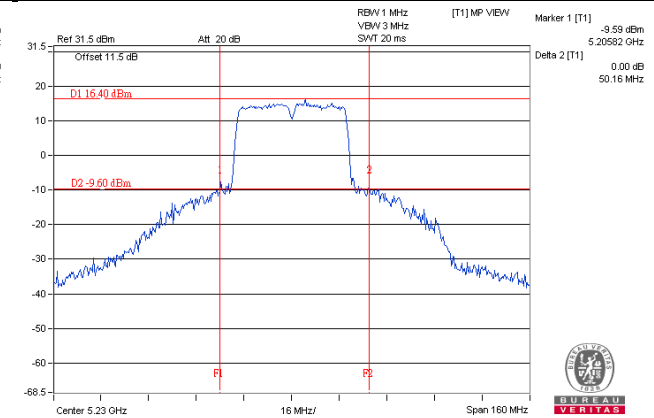
11ac (40MHz) 1S3T TxBF CH46 Chain1



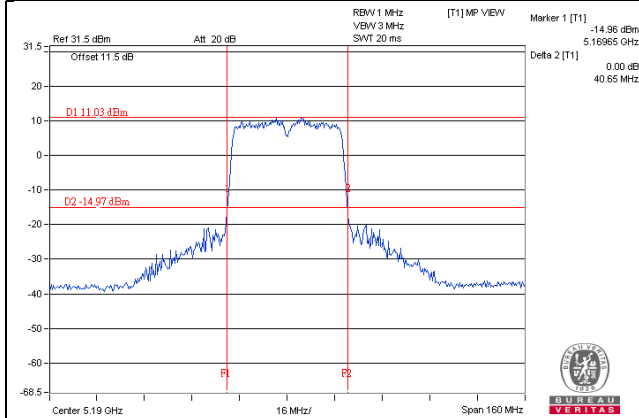
11ac (40MHz) 1S3T TxBF CH38 Chain2



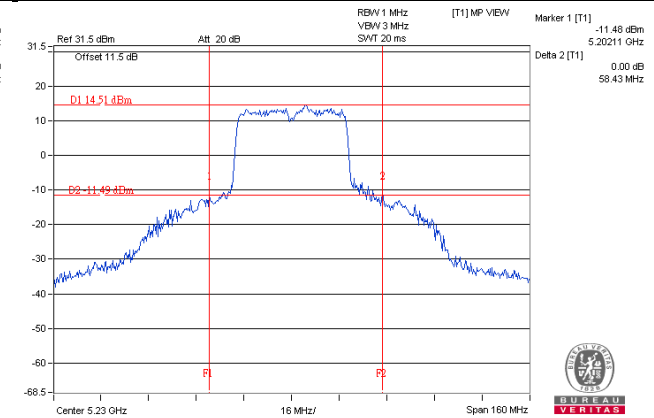
11ac (40MHz) 1S3T TxBF CH46 Chain2



11ac (40MHz) 1S3T TxBF CH38 Chain3

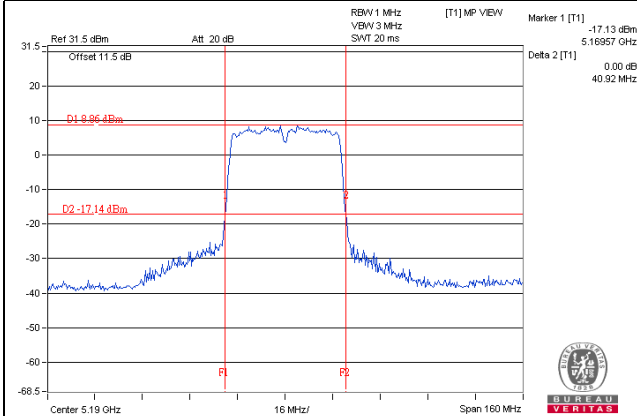


11ac (40MHz) 1S3T TxBF CH46 Chain3

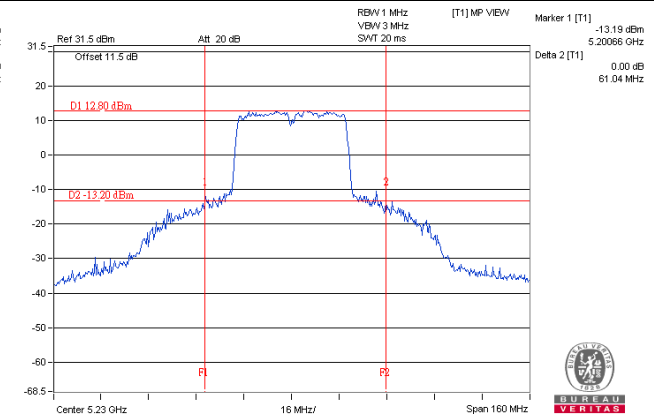


26dB BANDWIDTH SPECTRUM PLOT

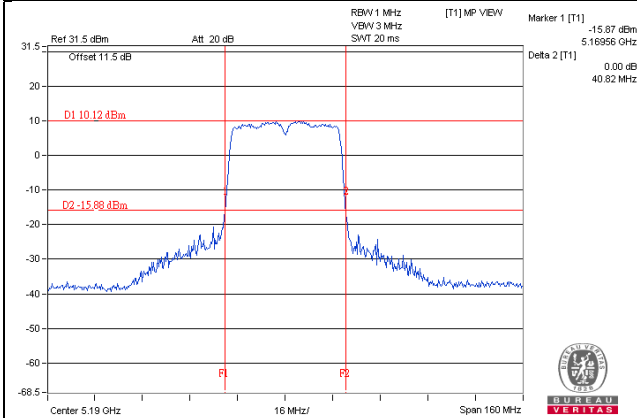
11ac (40MHz) 2S3T TxBF CH38 Chain1



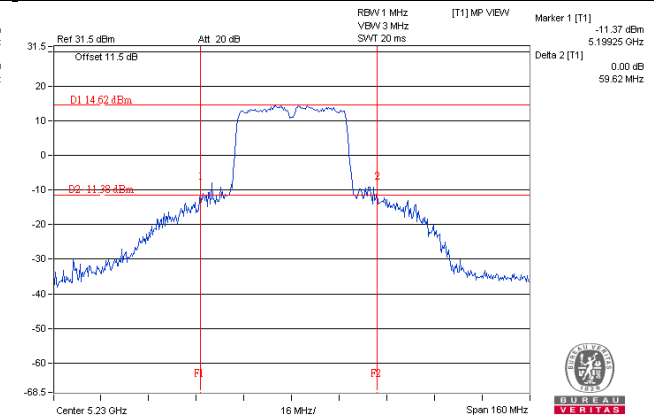
11ac (40MHz) 2S3T TxBF CH46 Chain1



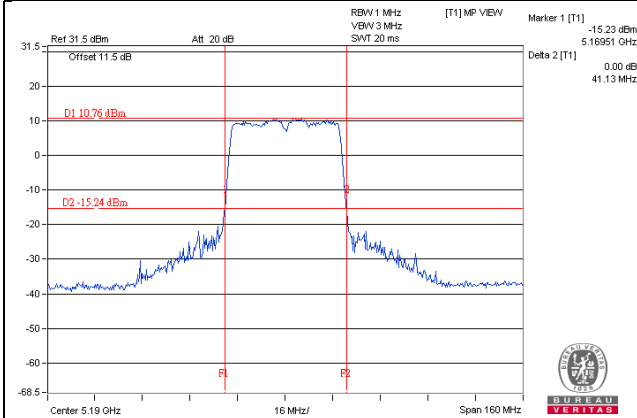
11ac (40MHz) 2S3T TxBF CH38 Chain2



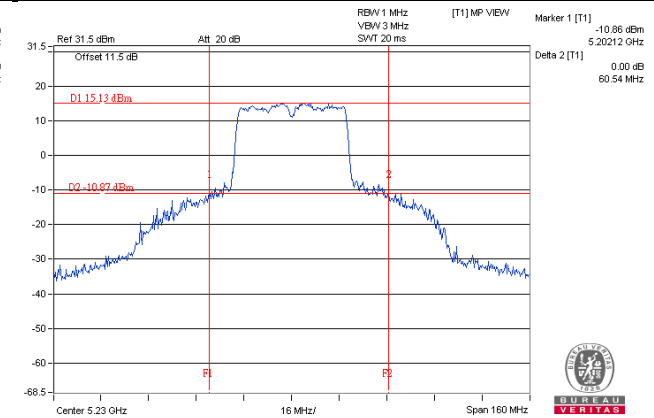
11ac (40MHz) 2S3T TxBF CH46 Chain2



11ac (40MHz) 2S3T TxBF CH38 Chain3

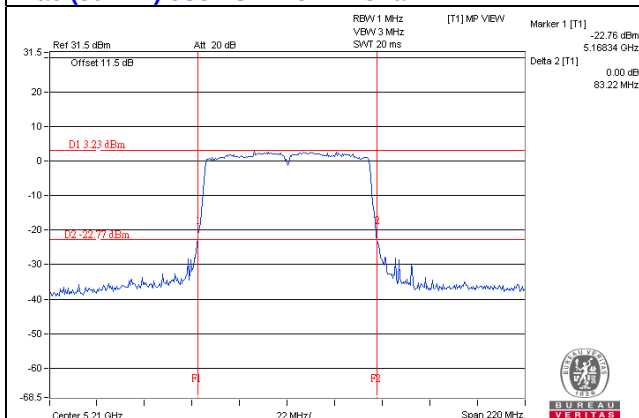


11ac (40MHz) 2S3T TxBF CH46 Chain3

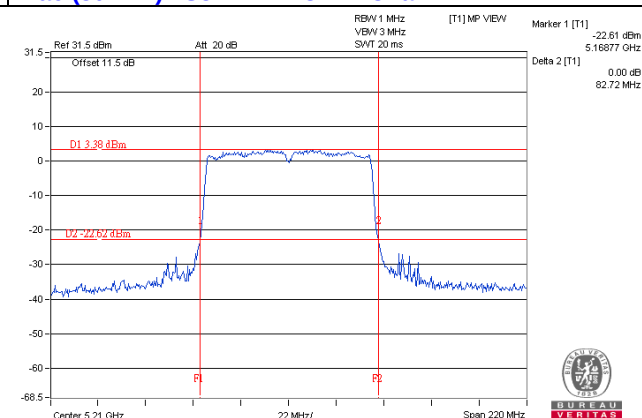


26dB BANDWIDTH SPECTRUM PLOT

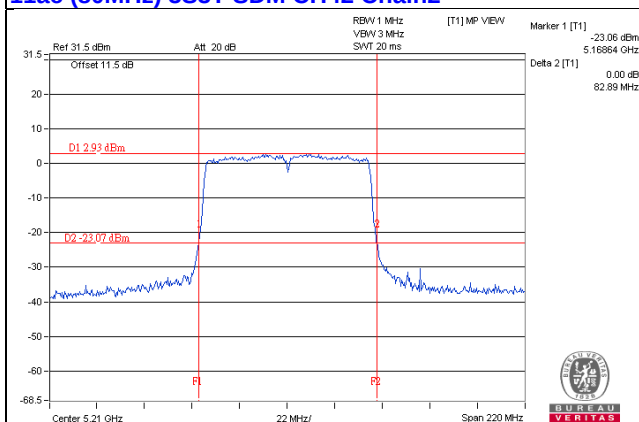
11ac (80MHz) 3S3T SDM CH42 Chain1



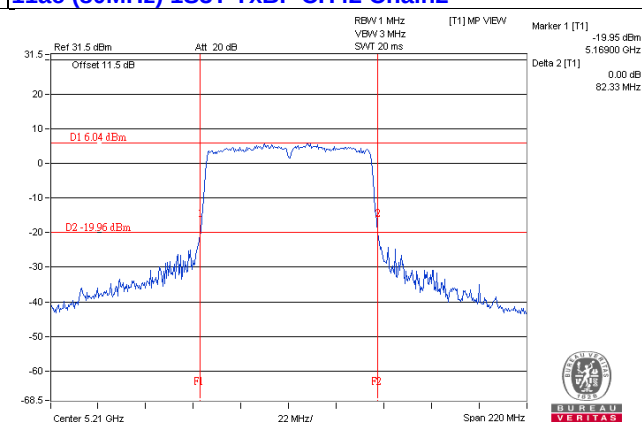
11ac (80MHz) 1S3T TxBF CH42 Chain1



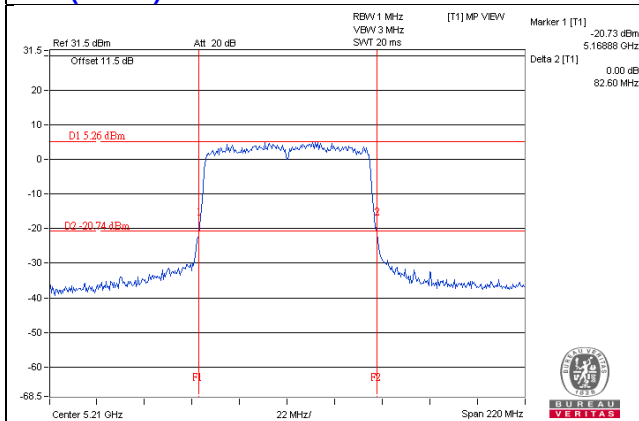
11ac (80MHz) 3S3T SDM CH42 Chain2



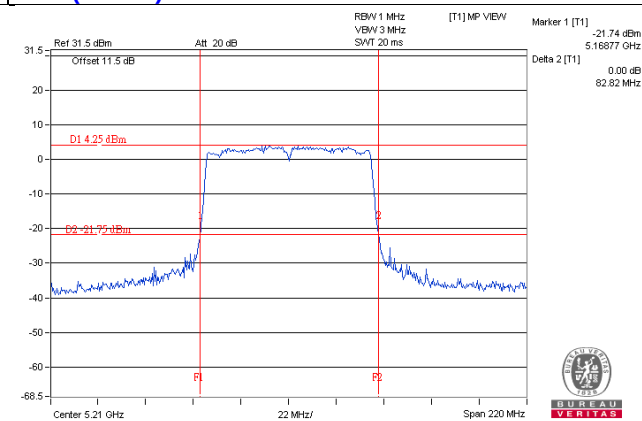
11ac (80MHz) 1S3T TxBF CH42 Chain2



11ac (80MHz) 3S3T SDM CH42 Chain3

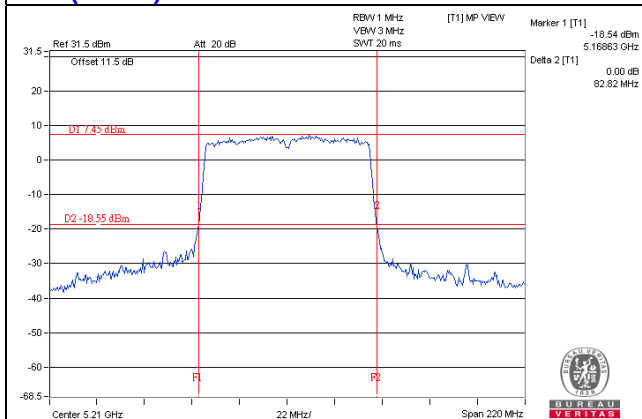


11ac (80MHz) 1S3T TxBF CH42 Chain3

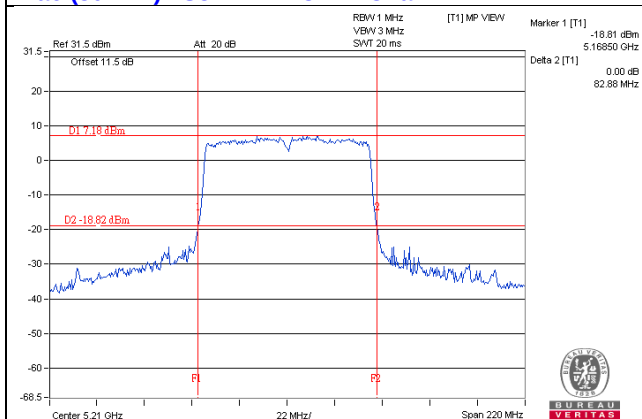


26dB BANDWIDTH SPECTRUM PLOT

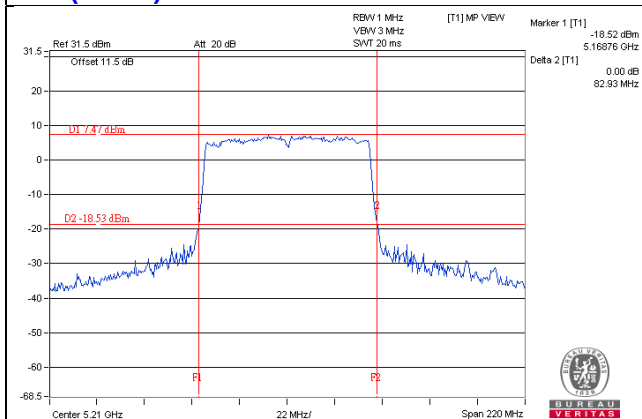
11ac (80MHz) 2S3T TxBF CH42 Chain1



11ac (80MHz) 2S3T TxBF CH42 Chain2



11ac (80MHz) 2S3T TxBF CH42 Chain3



11a 1S3T CDD

CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
36	5180	17.13	16.95	17.04
40	5200	16.86	16.80	16.80
48	5240	17.04	17.04	17.16
149	5745	16.86	16.78	16.86
157	5785	17.04	16.86	16.86
165	5825	16.92	16.78	16.86

11ac (20MHz) 3S3T SDM

CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
36	5180	18.00	17.88	17.88
40	5200	18.12	18.00	18.12
48	5240	18.12	18.00	18.00
149	5745	18.24	18.12	18.24
157	5785	18.24	18.12	18.12
165	5825	18.24	18.24	18.12

11ac (20MHz) 1S3T TxBF

CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
36	5180	18.24	18.00	18.00
40	5200	17.88	17.88	17.88
48	5240	18.24	18.00	18.00
149	5745	17.92	17.92	17.92
157	5785	18.12	17.92	18.08
165	5825	17.88	17.83	17.83

11ac (20MHz) 2S3T TxBF

CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
36	5180	18.24	18.00	18.00
40	5200	17.88	17.88	17.88
48	5240	17.88	17.76	18.00
149	5745	18.08	18.00	18.26
157	5785	18.00	17.92	18.08
165	5825	18.00	17.92	18.17

11ac (40MHz) 3S3T SDM

CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
38	5190	36.60	36.78	36.60
46	5230	36.96	37.08	36.96
151	5755	36.96	36.96	37.08
159	5795	36.96	36.96	36.96

11ac (40MHz) 1S3T TxBF

CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
38	5190	36.48	36.61	36.60
46	5230	36.72	36.84	36.96
151	5755	36.72	36.84	36.84
159	5795	36.72	36.72	36.84

11ac (40MHz) 2S3T TxBF

CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
38	5190	36.48	36.48	36.72
46	5230	36.96	36.84	36.84
151	5755	36.72	36.84	36.72
159	5795	36.72	36.72	36.72

11ac (80MHz) 3S3T SDM

CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
42	5210	75.84	76.08	75.84
155	5775	76.08	76.08	76.08

11ac (80MHz) 1S3T TxBF

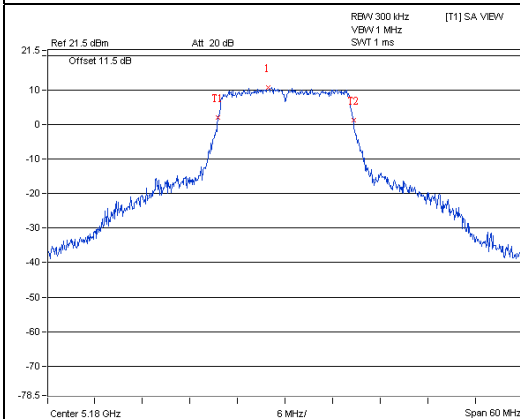
CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
42	5210	75.84	75.84	75.84
155	5775	75.84	76.08	75.84

11ac (80MHz) 2S3T TxBF

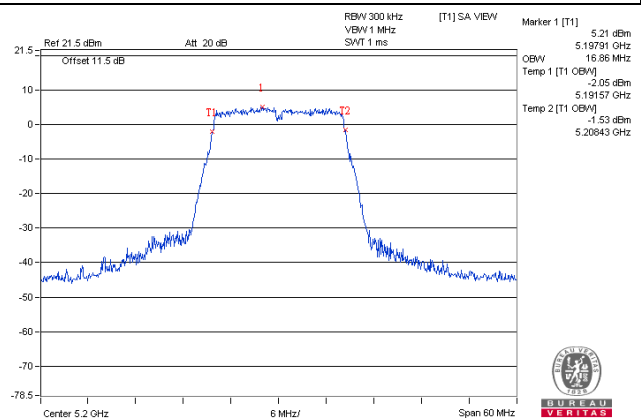
CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
42	5210	75.84	75.84	75.84
155	5775	76.08	76.08	75.84

99% OCCUPIED BANDWIDTH SPECTRUM PLOT

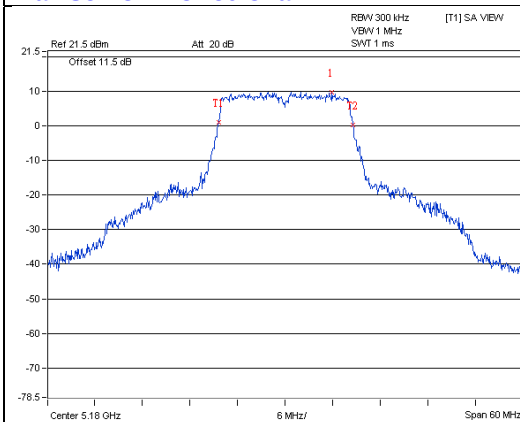
11a 1S3T CDD CH36 Chain1



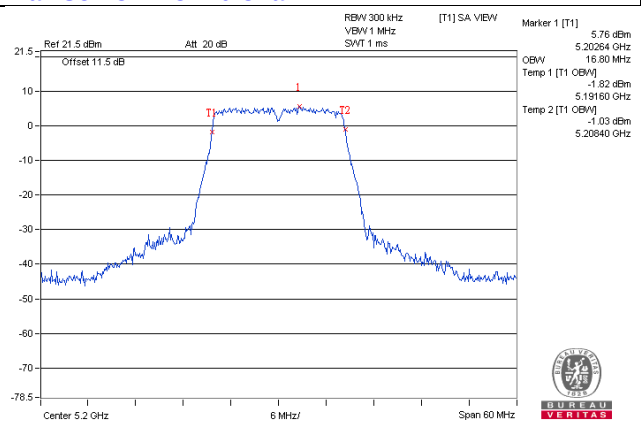
11a 1S3T CDD CH40 Chain1



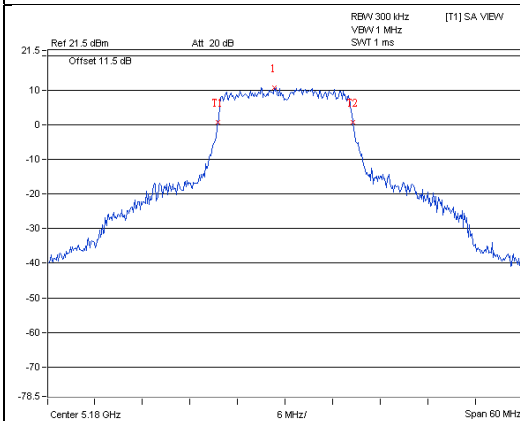
11a 1S3T CDD CH36 Chain2



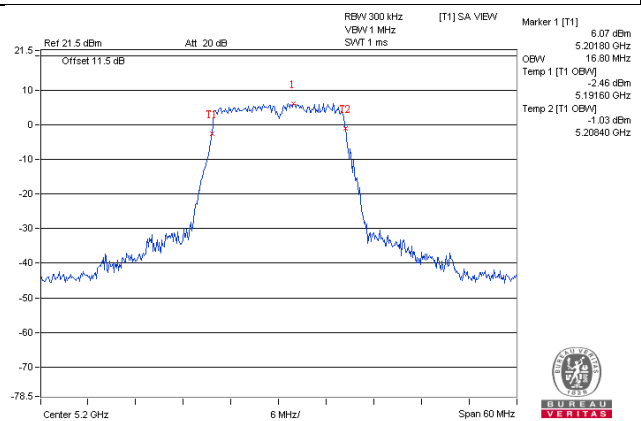
11a 1S3T CDD CH40 Chain2



11a 1S3T CDD CH36 Chain3

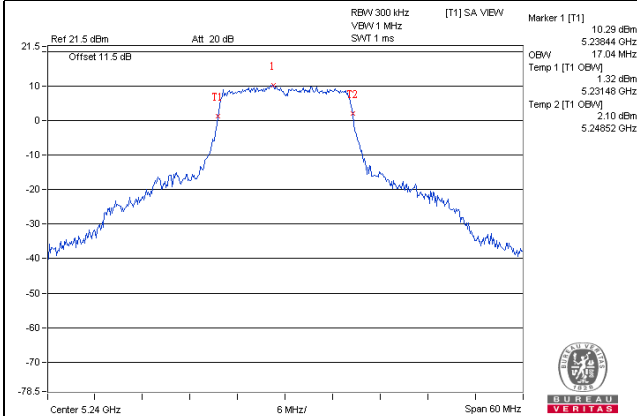


11a 1S3T CDD CH40 Chain3

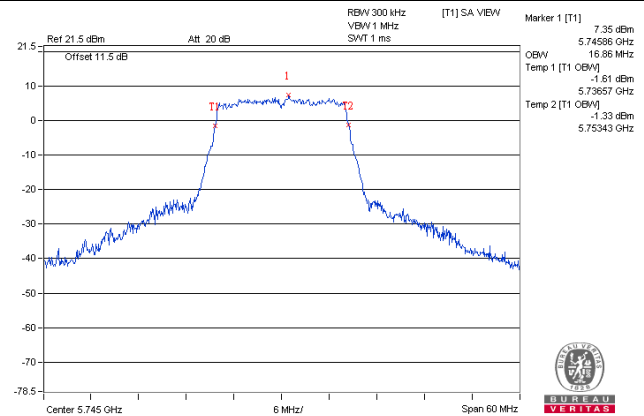


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

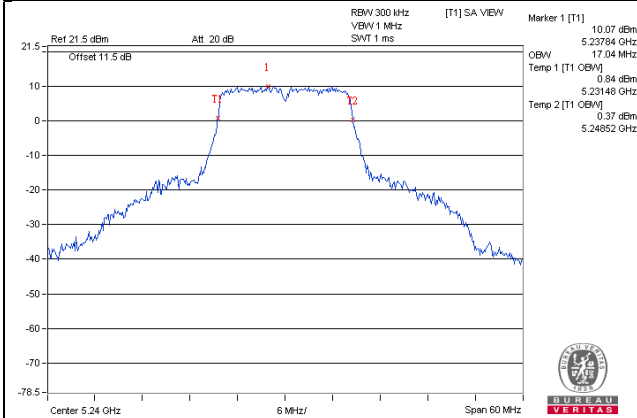
11a 1S3T CDD CH48 Chain1



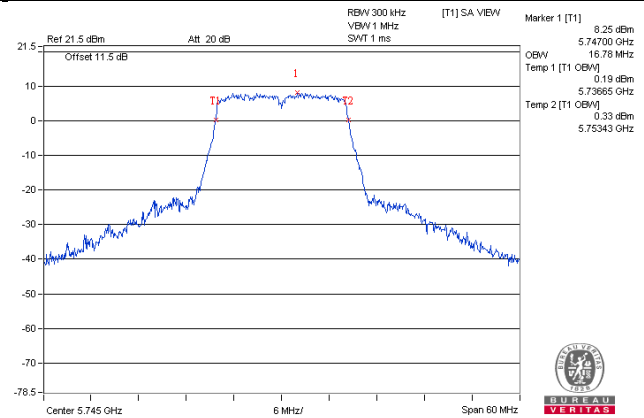
11a 1S3T CDD CH149 Chain1



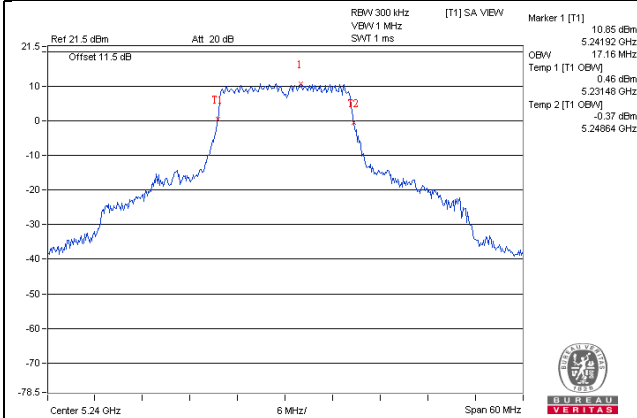
11a 1S3T CDD CH48 Chain2



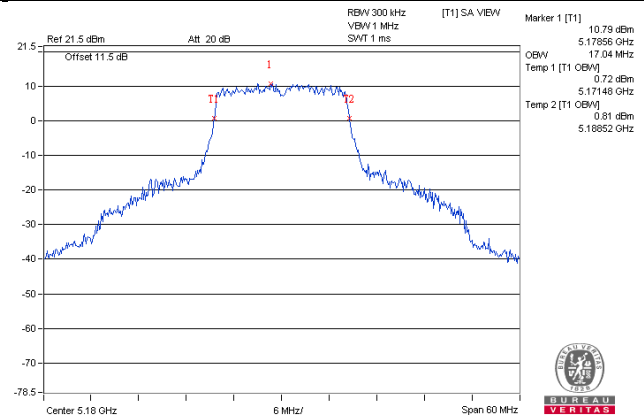
11a 1S3T CDD CH149 Chain2



11a 1S3T CDD CH48 Chain3

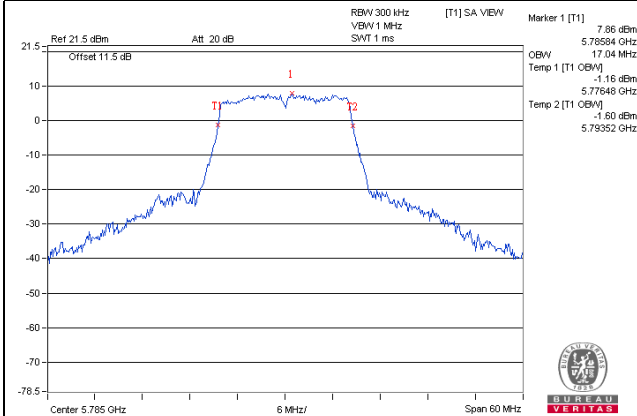


11a 1S3T CDD CH149 Chain3

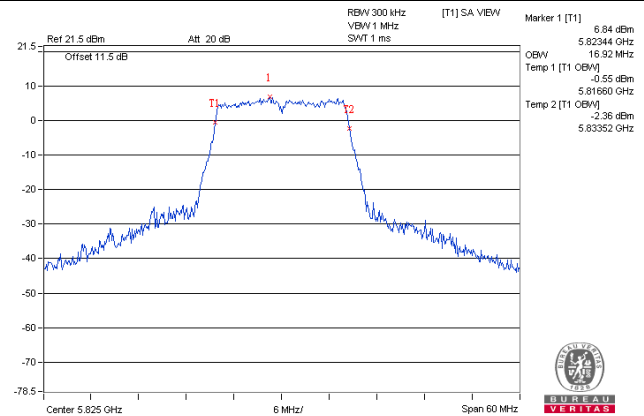


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

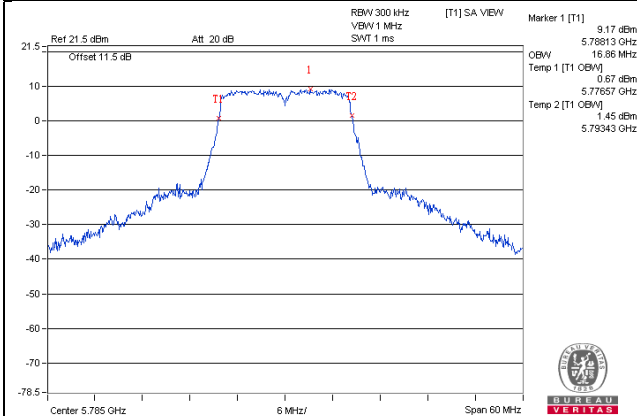
11a 1S3T CDD CH157 Chain1



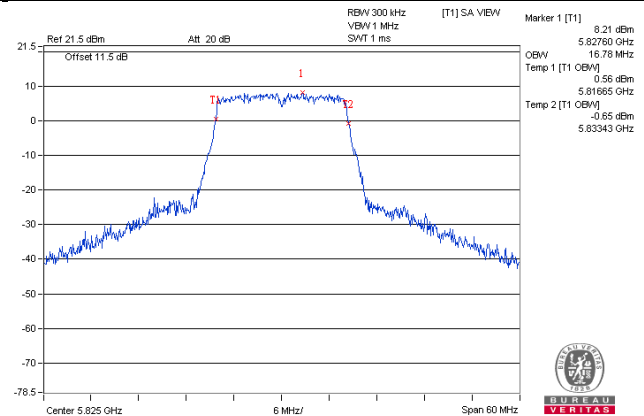
11a 1S3T CDD CH165 Chain1



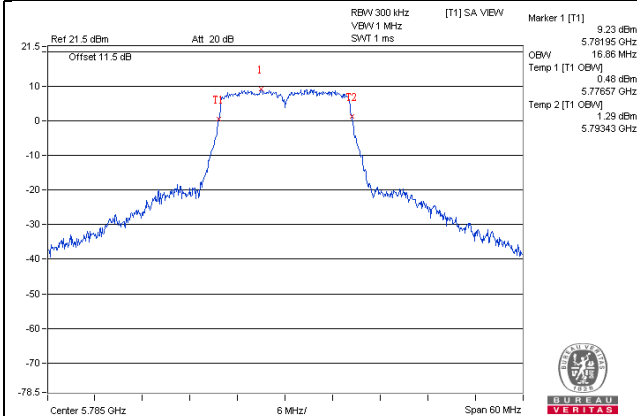
11a 1S3T CDD CH157 Chain2



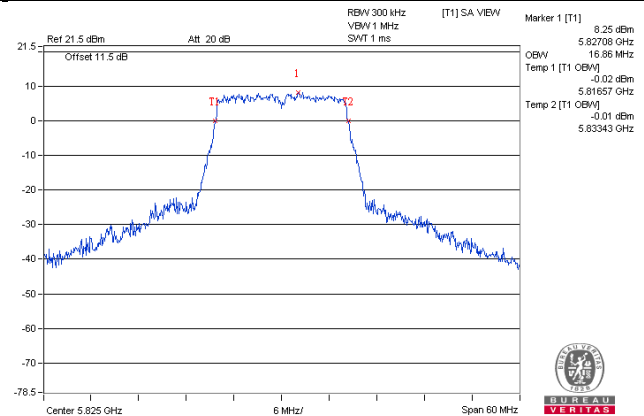
11a 1S3T CDD CH165 Chain2



11a 1S3T CDD CH157 Chain3

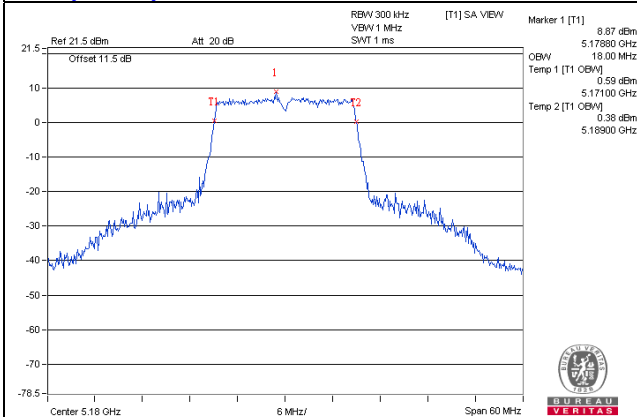


11a 1S3T CDD CH165 Chain3

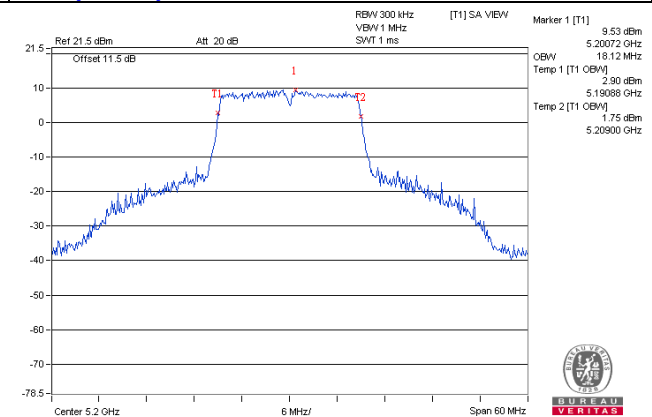


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

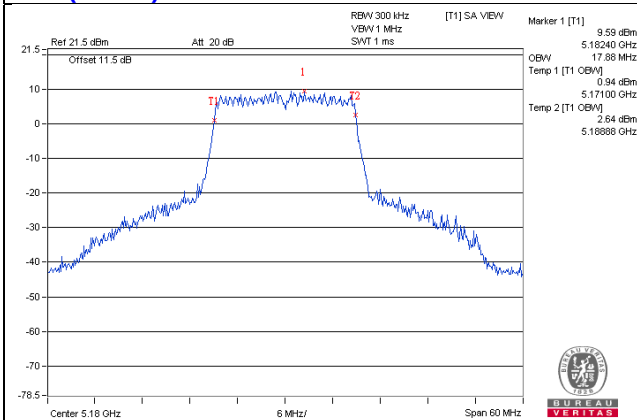
11ac (20MHz) 3S3T SDM CH36 Chain1



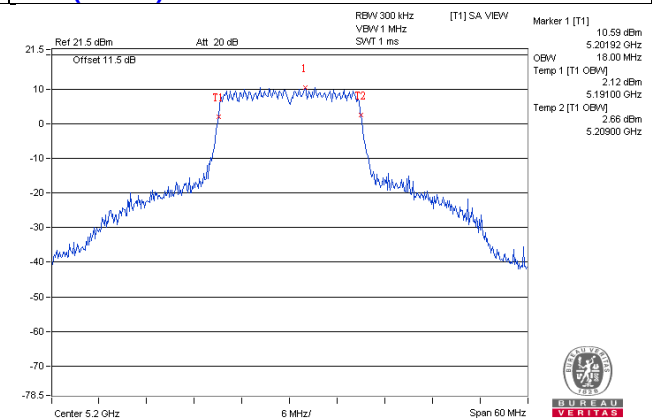
11ac (20MHz) 3S3T SDM CH40 Chain1



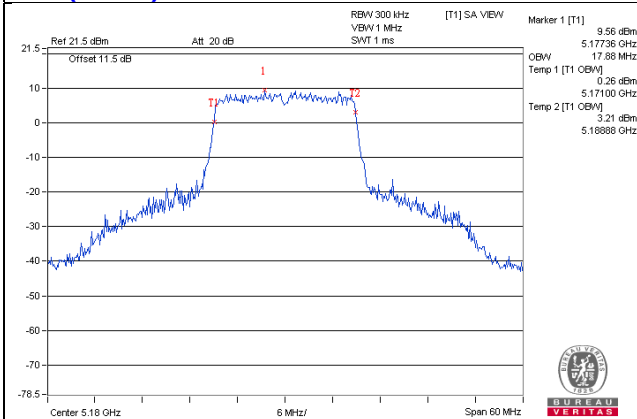
11ac (20MHz) 3S3T SDM CH36 Chain2



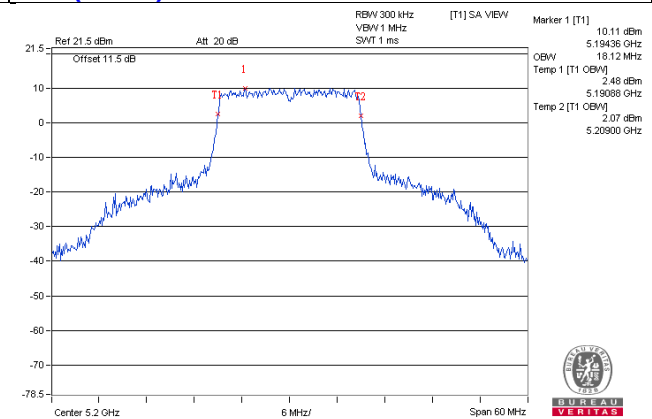
11ac (20MHz) 3S3T SDM CH40 Chain2



11ac (20MHz) 3S3T SDM CH36 Chain3

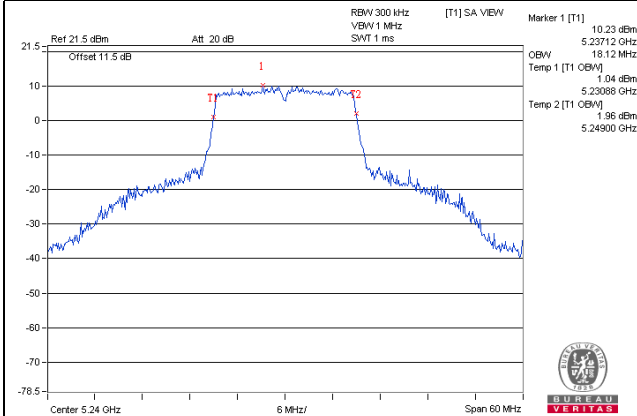


11ac (20MHz) 3S3T SDM CH40 Chain3

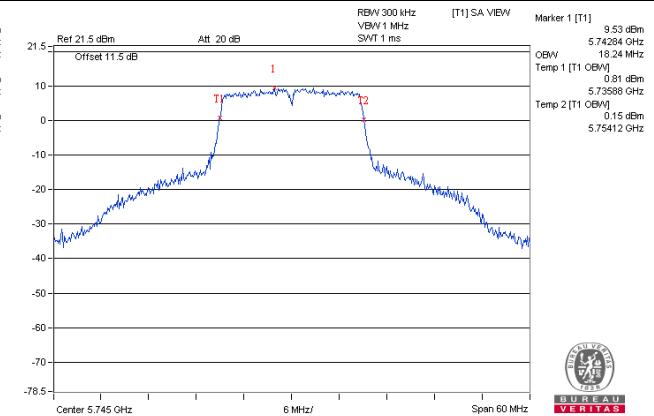


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

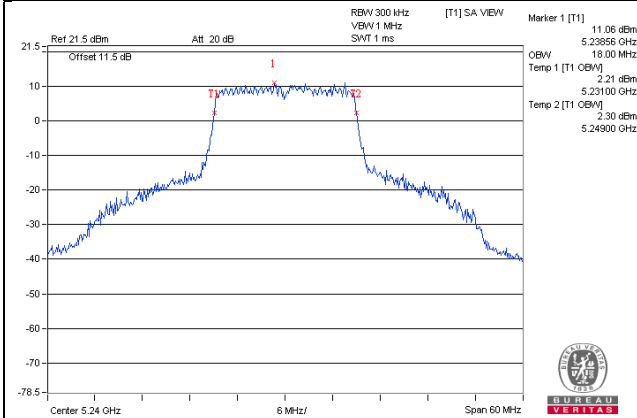
11ac (20MHz) 3S3T SDM CH48 Chain1



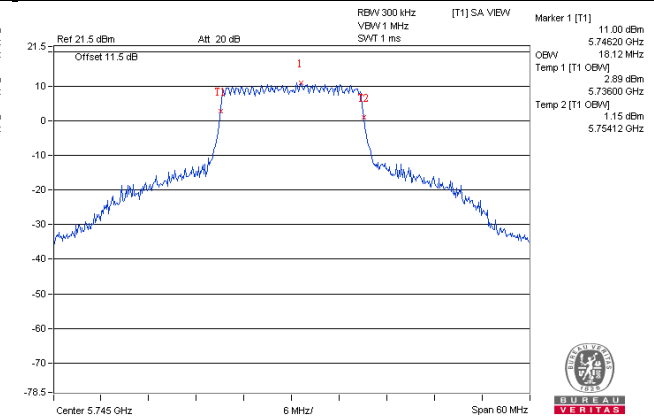
11ac (20MHz) 3S3T SDM CH149 Chain1



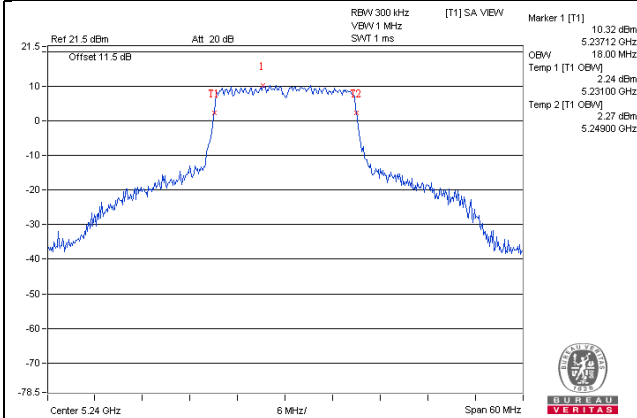
11ac (20MHz) 3S3T SDM CH48 Chain2



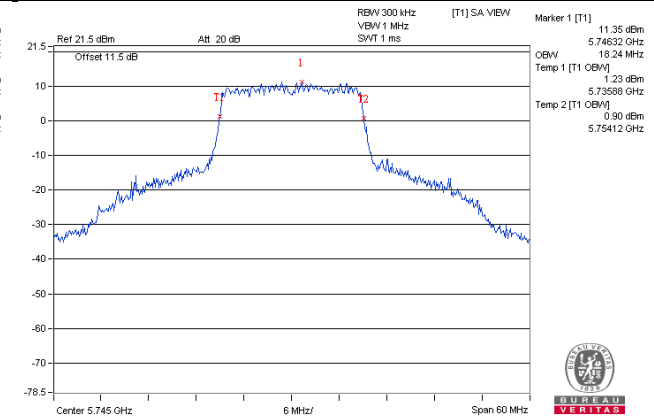
11ac (20MHz) 3S3T SDM CH149 Chain2



11ac (20MHz) 3S3T SDM CH48 Chain3

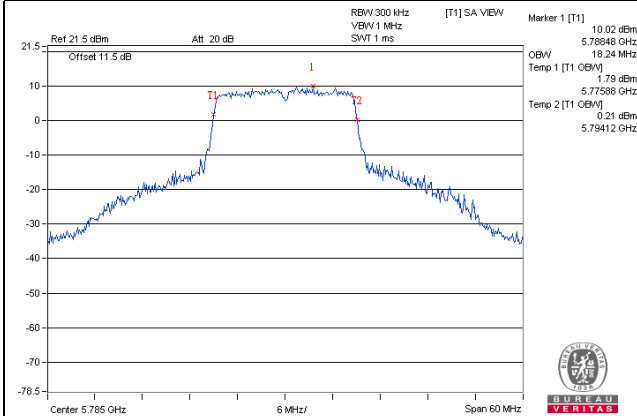


11ac (20MHz) 3S3T SDM CH149 Chain3

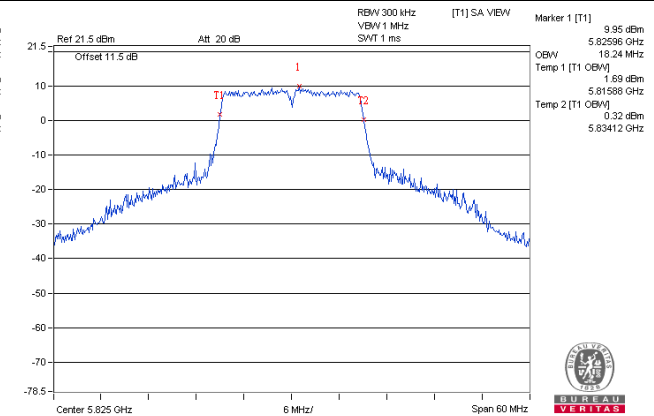


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

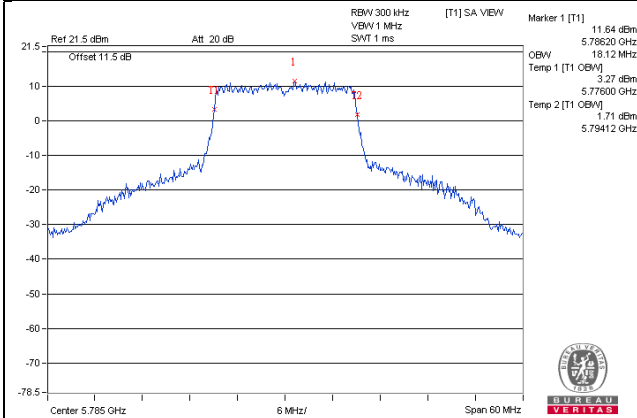
11ac (20MHz) 3S3T SDM CH157 Chain1



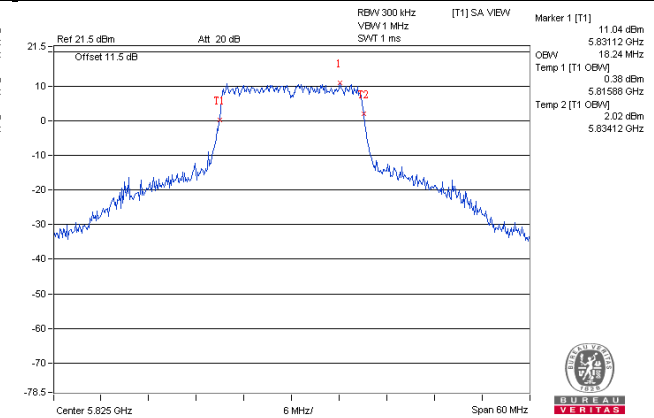
11ac (20MHz) 3S3T SDM CH165 Chain1



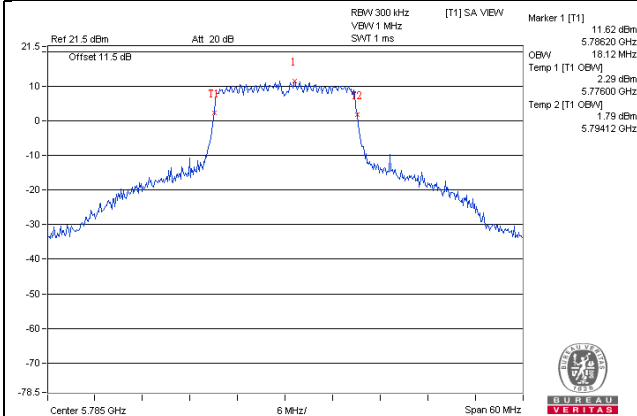
11ac (20MHz) 3S3T SDM CH157 Chain2



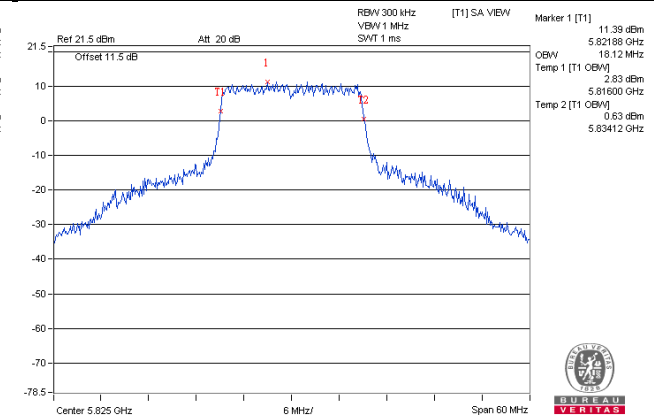
11ac (20MHz) 3S3T SDM CH165 Chain2



11ac (20MHz) 3S3T SDM CH157 Chain3

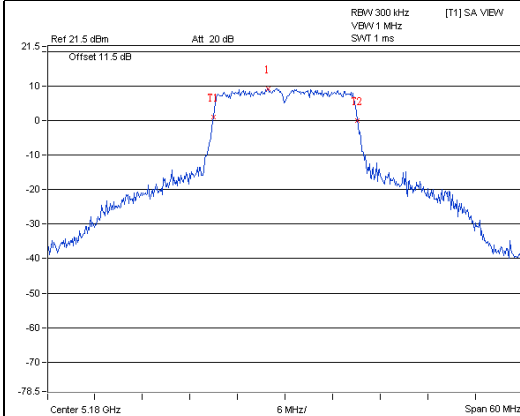


11ac (20MHz) 3S3T SDM CH165 Chain3

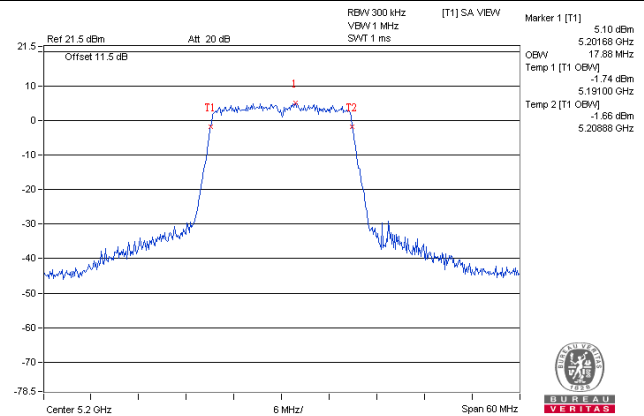


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

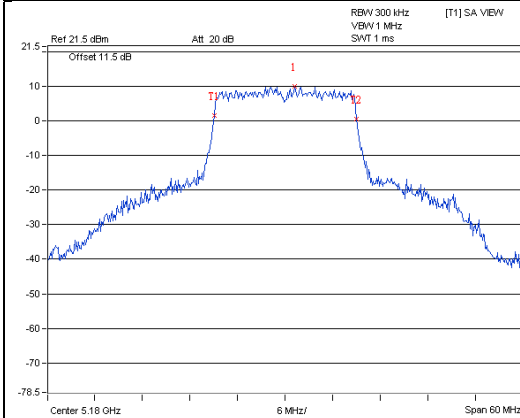
11ac (20MHz) 1S3T TxBF CH36 Chain1



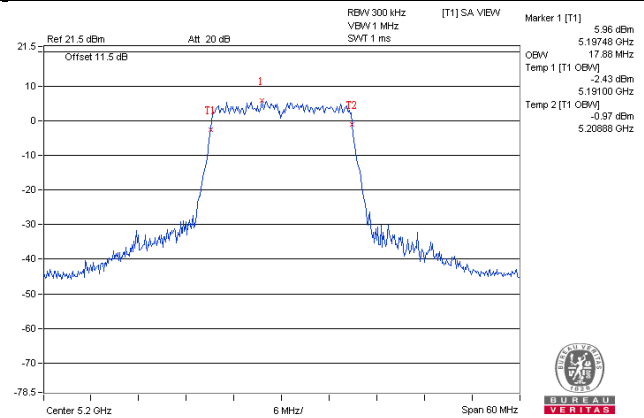
11ac (20MHz) 1S3T TxBF CH40 Chain1



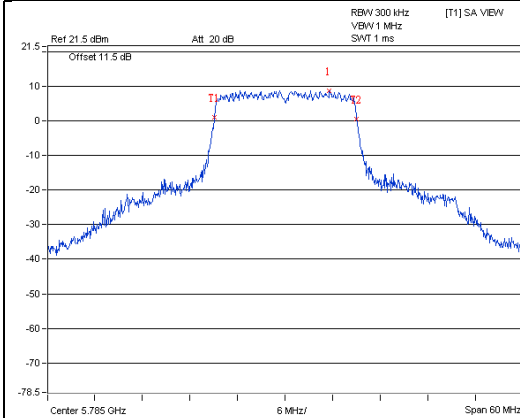
11ac (20MHz) 1S3T TxBF CH36 Chain2



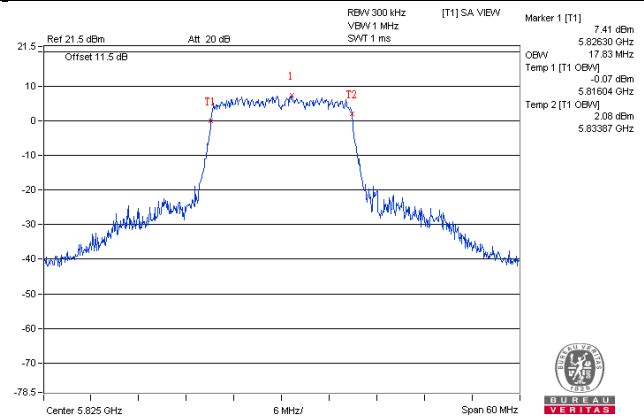
11ac (20MHz) 1S3T TxBF CH40 Chain2



11ac (20MHz) 1S3T TxBF CH36 Chain3

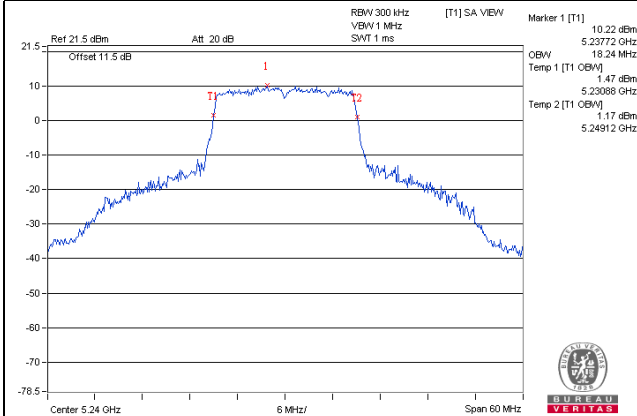


11ac (20MHz) 1S3T TxBF CH40 Chain3

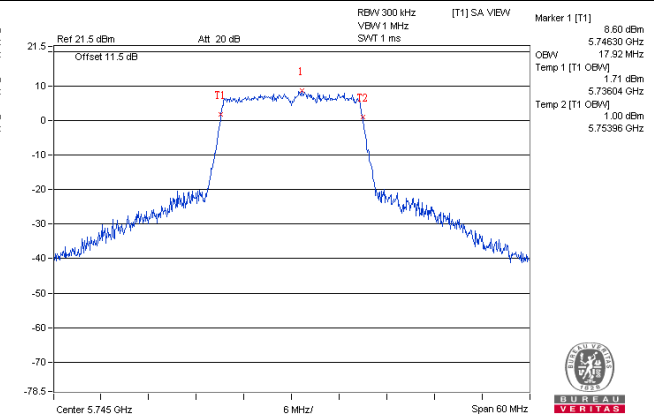


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

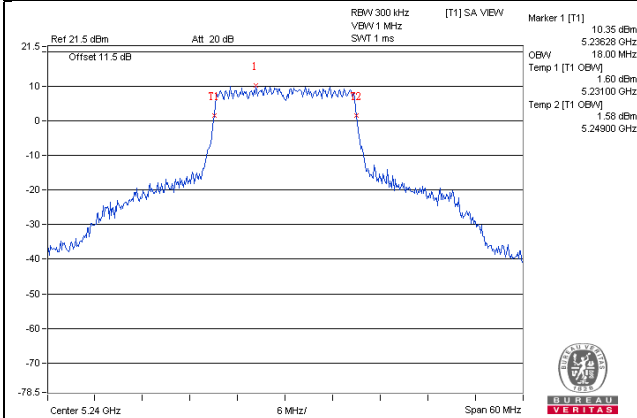
11ac (20MHz) 1S3T TxBF CH48 Chain1



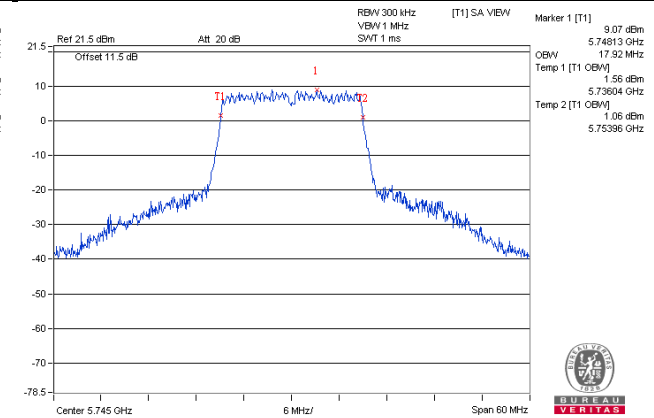
11ac (20MHz) 1S3T TxBF CH149 Chain1



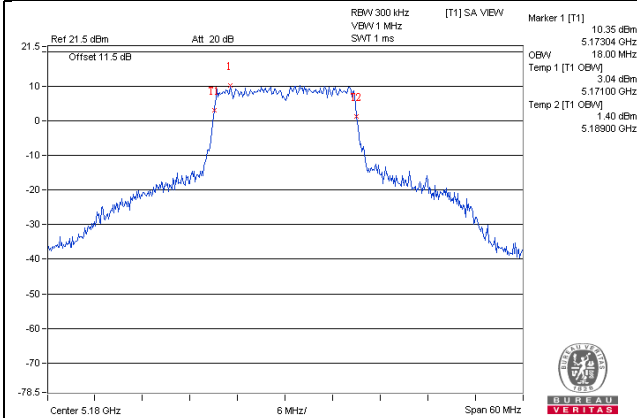
11ac (20MHz) 1S3T TxBF CH48 Chain2



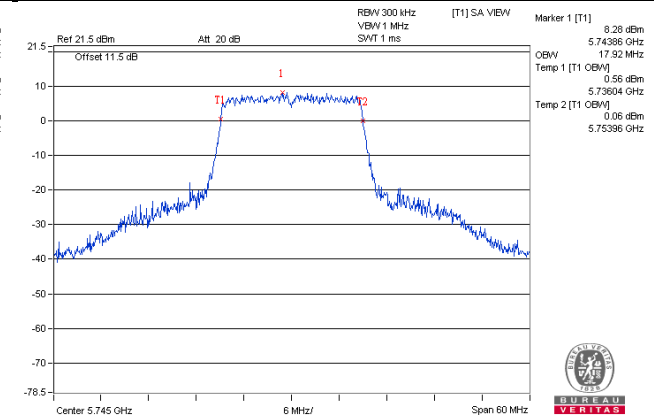
11ac (20MHz) 1S3T TxBF CH149 Chain2



11ac (20MHz) 1S3T TxBF CH48 Chain3

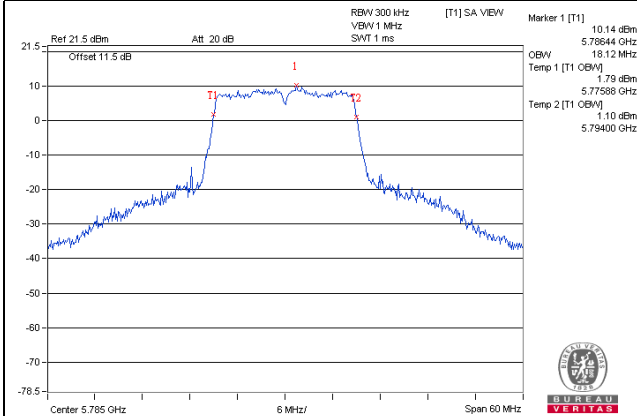


11ac (20MHz) 1S3T TxBF CH149 Chain3

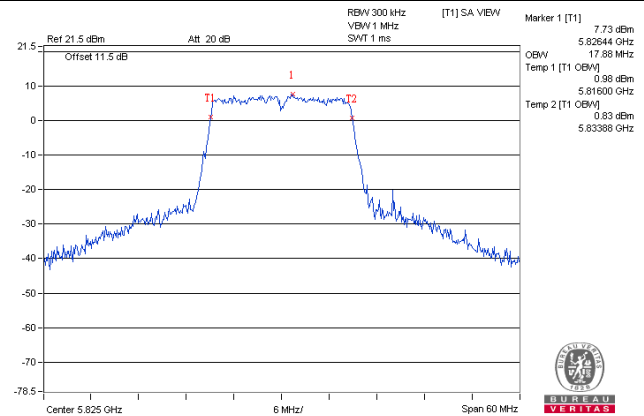


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

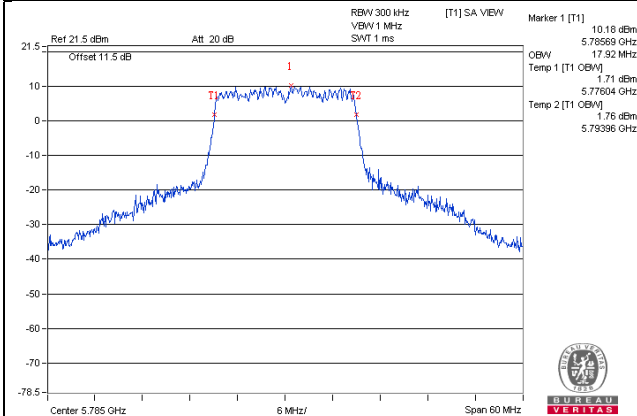
11ac (20MHz) 1S3T TxBF CH157 Chain1



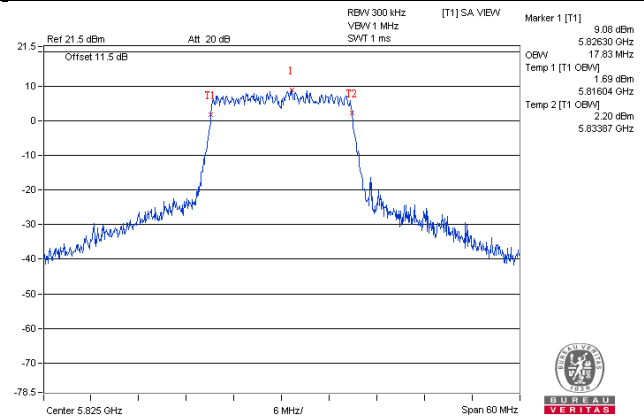
11ac (20MHz) 1S3T TxBF CH165 Chain1



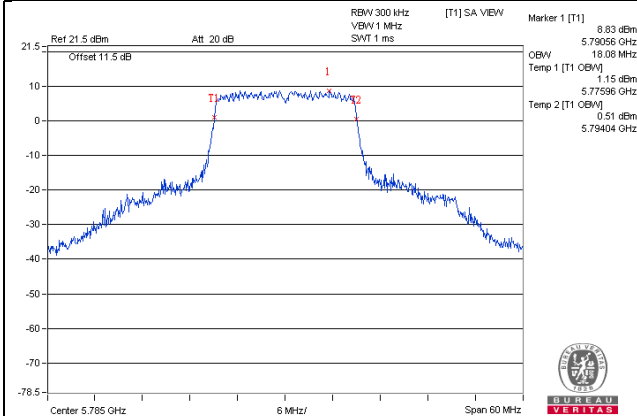
11ac (20MHz) 1S3T TxBF CH157 Chain2



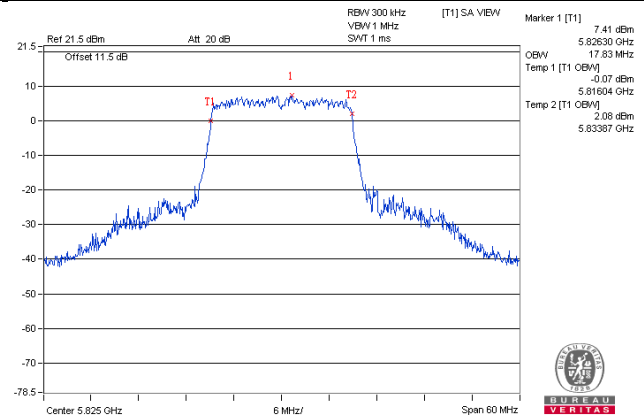
11ac (20MHz) 1S3T TxBF CH165 Chain2



11ac (20MHz) 1S3T TxBF CH157 Chain3

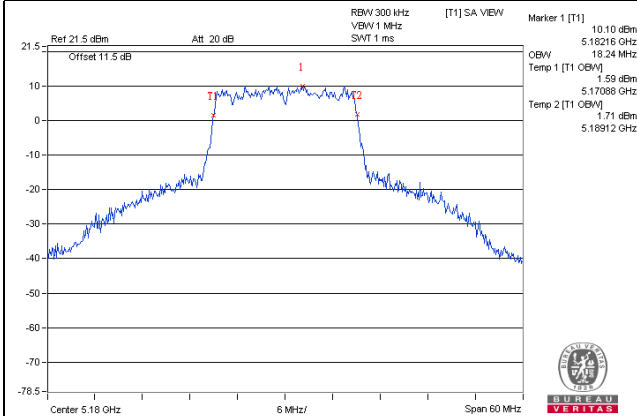


11ac (20MHz) 1S3T TxBF CH165 Chain3

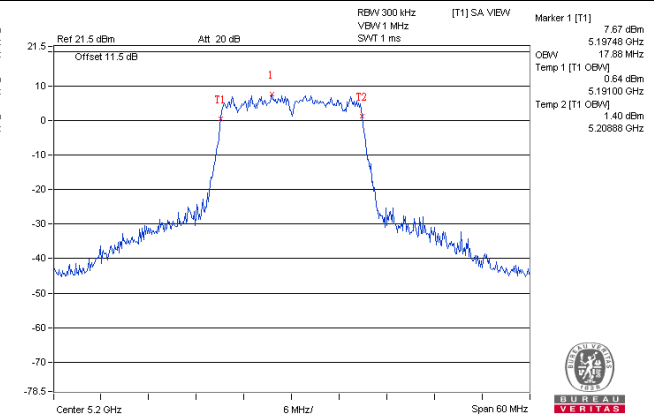


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

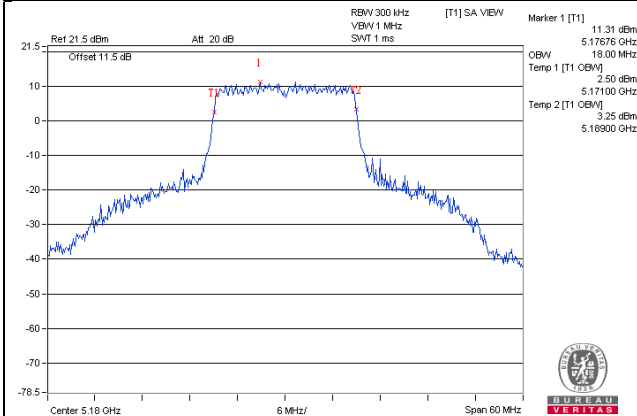
11ac (20MHz) 2S3T TxBF CH36 Chain1



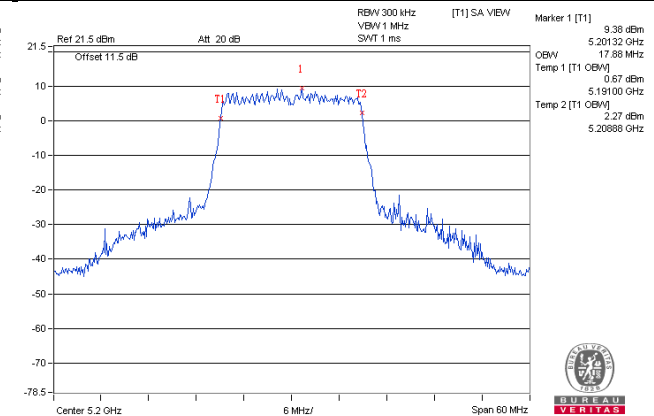
11ac (20MHz) 2S3T TxBF CH40 Chain1



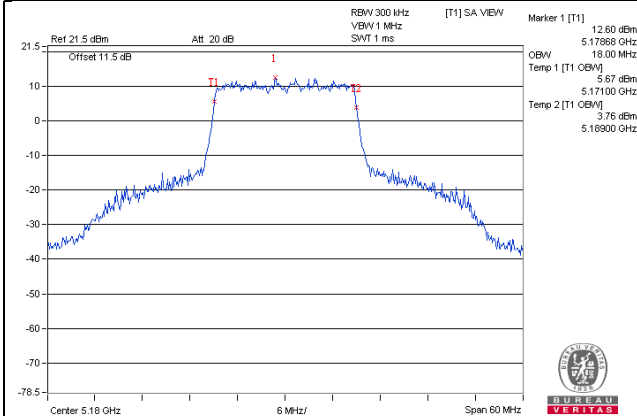
11ac (20MHz) 2S3T TxBF CH36 Chain2



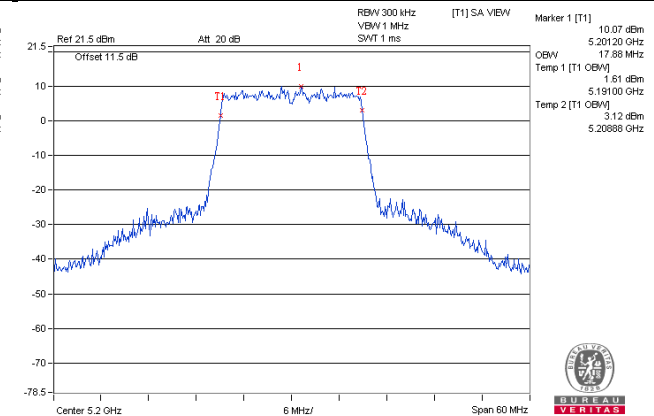
11ac (20MHz) 2S3T TxBF CH40 Chain2



11ac (20MHz) 2S3T TxBF CH36 Chain3

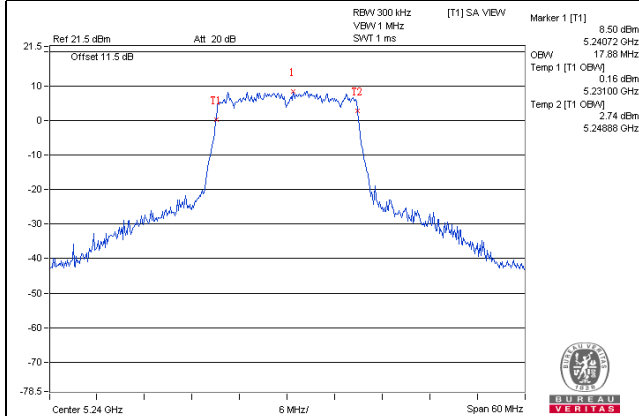


11ac (20MHz) 2S3T TxBF CH40 Chain3

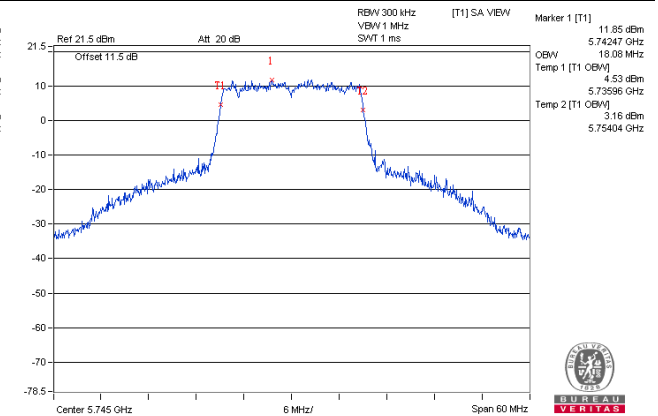


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

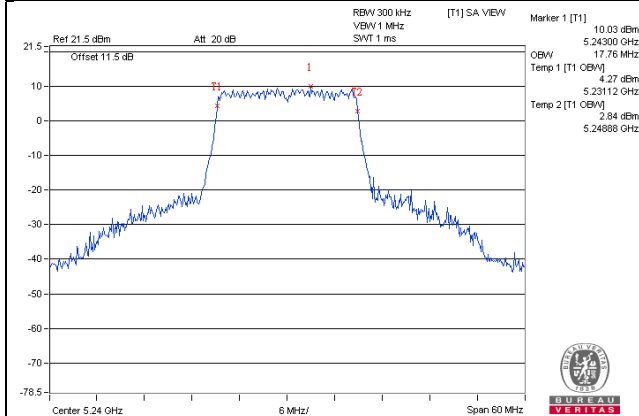
11ac (20MHz) 2S3T TxBF CH48 Chain1



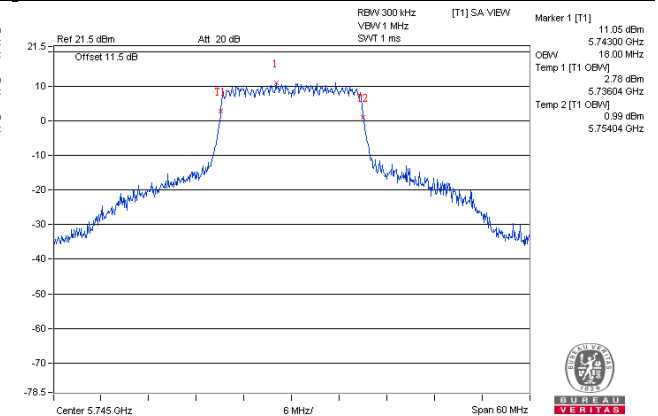
11ac (20MHz) 2S3T TxBF CH149 Chain1



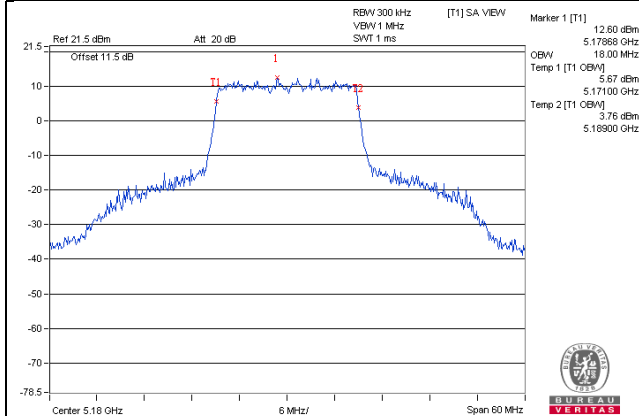
11ac (20MHz) 2S3T TxBF CH48 Chain2



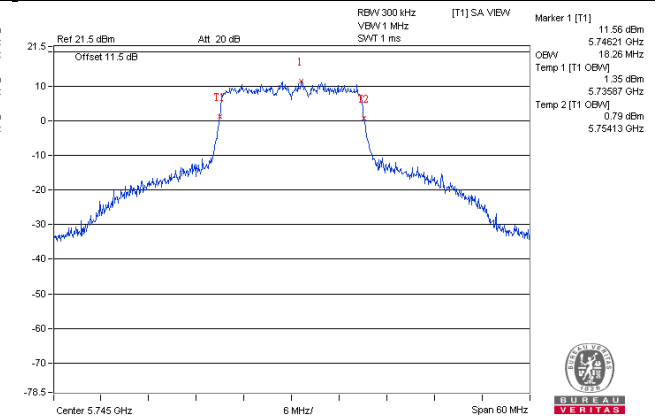
11ac (20MHz) 2S3T TxBF CH149 Chain2



11ac (20MHz) 2S3T TxBF CH48 Chain3

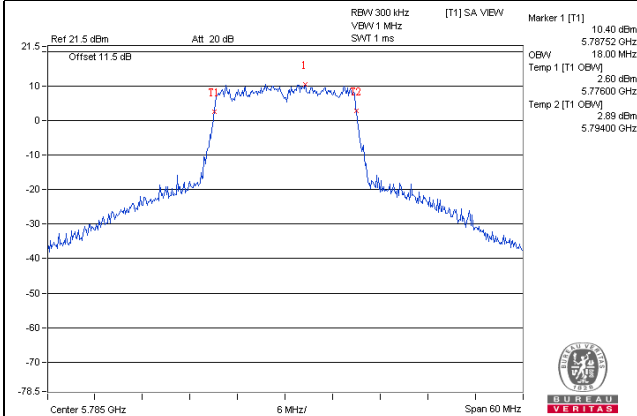


11ac (20MHz) 2S3T TxBF CH149 Chain3

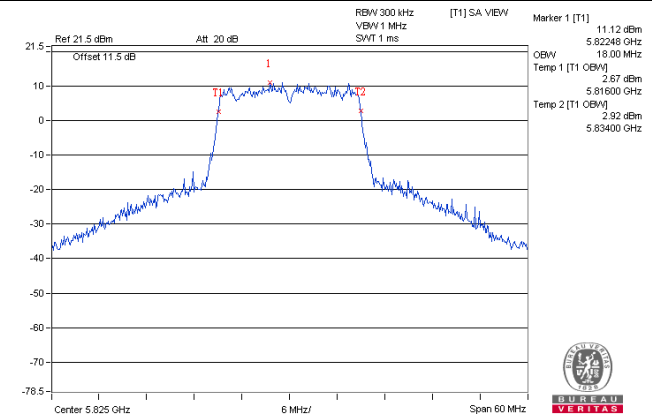


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

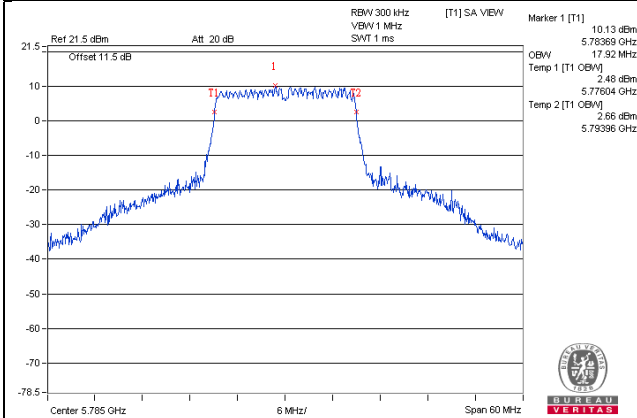
11ac (20MHz) 2S3T TxBF CH157 Chain1



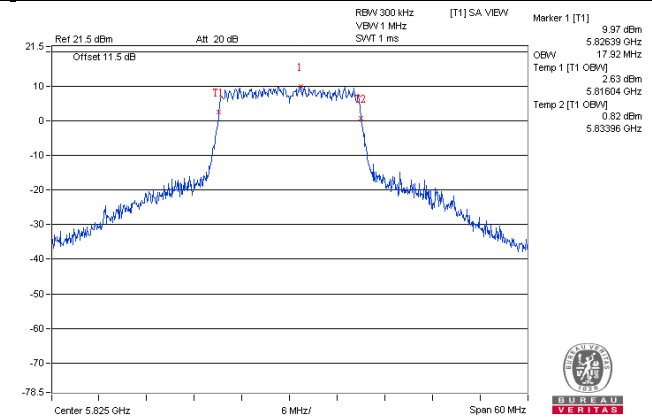
11ac (20MHz) 2S3T TxBF CH165 Chain1



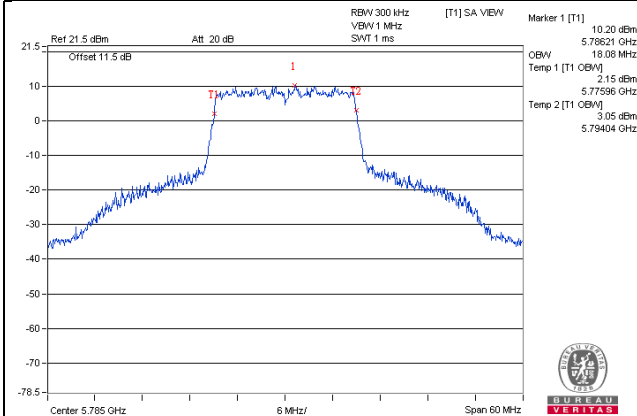
11ac (20MHz) 2S3T TxBF CH157 Chain2



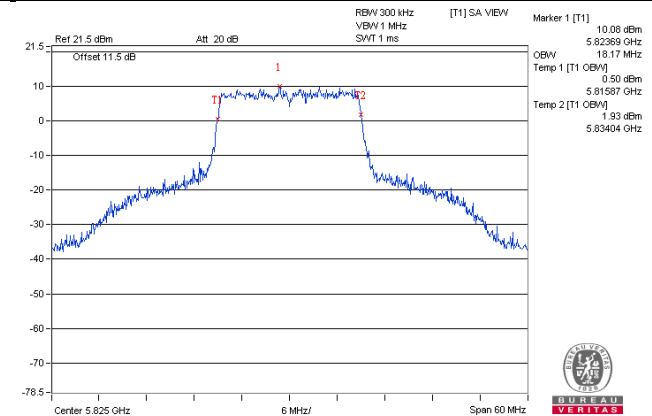
11ac (20MHz) 2S3T TxBF CH165 Chain2



11ac (20MHz) 2S3T TxBF CH157 Chain3

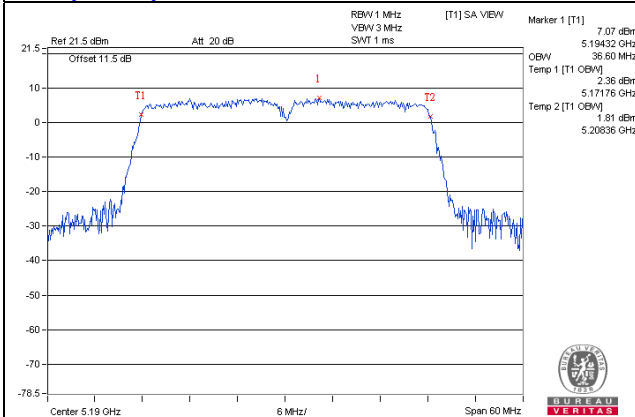


11ac (20MHz) 2S3T TxBF CH165 Chain3

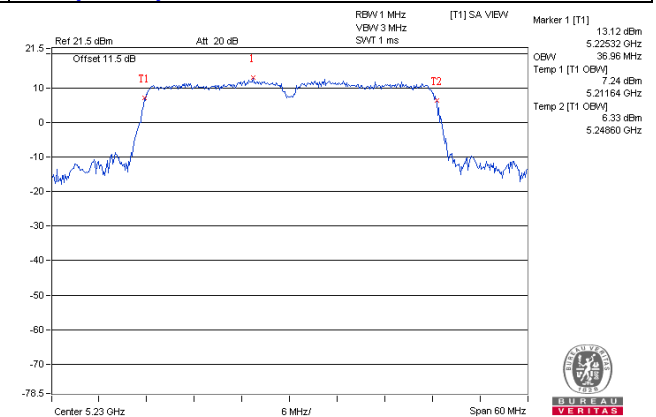


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

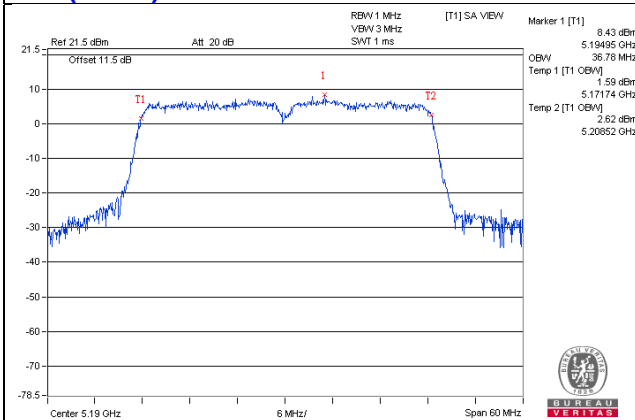
11ac (40MHz) 3S3T SDM CH38 Chain1



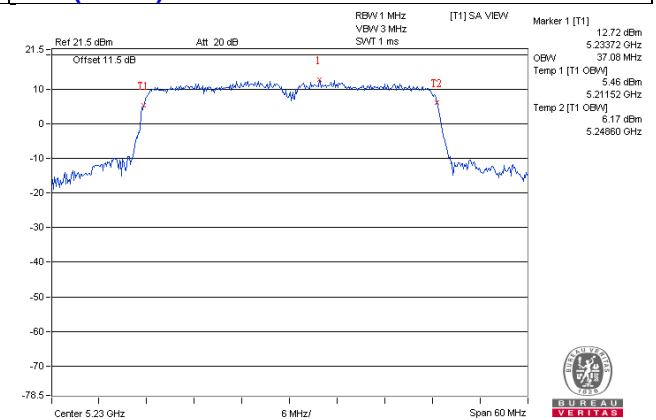
11ac (40MHz) 3S3T SDM CH46 Chain1



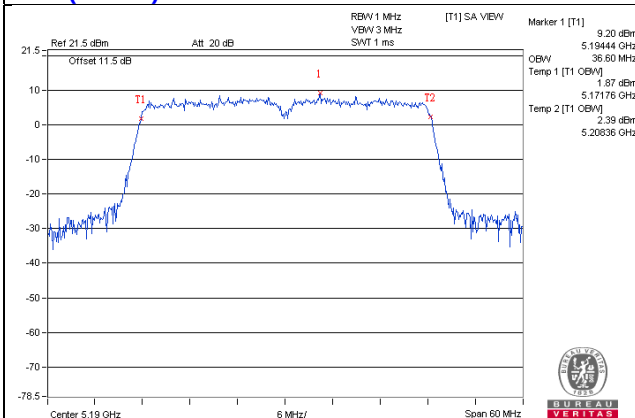
11ac (40MHz) 3S3T SDM CH38 Chain2



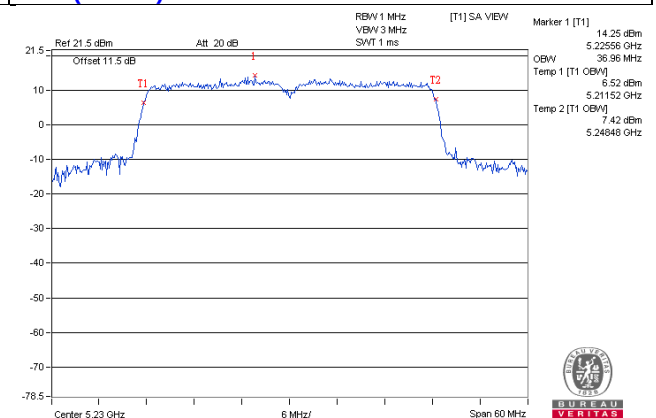
11ac (40MHz) 3S3T SDM CH46 Chain2



11ac (40MHz) 3S3T SDM CH38 Chain3

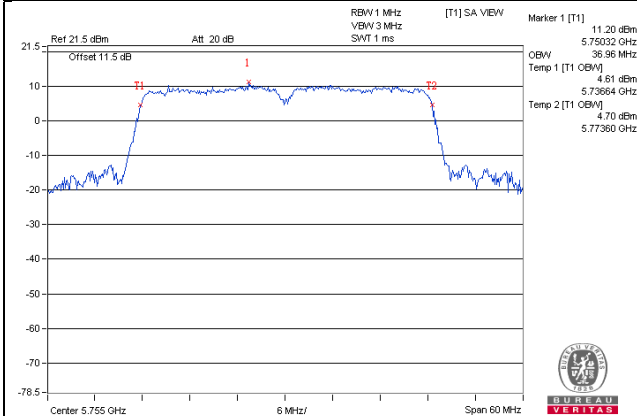


11ac (40MHz) 3S3T SDM CH46 Chain3

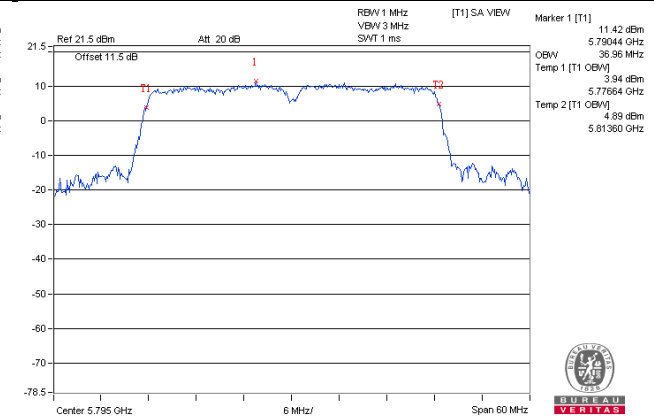


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

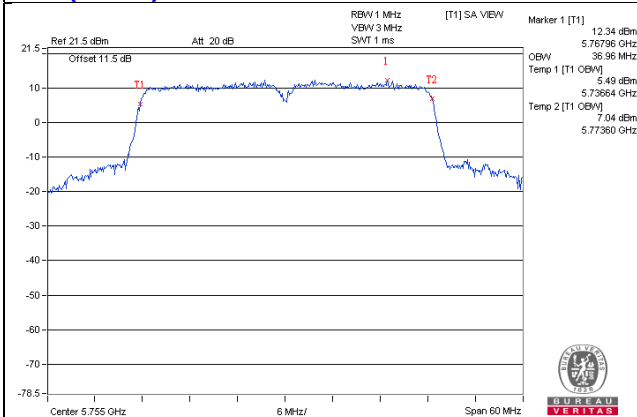
11ac (40MHz) 3S3T SDM CH151 Chain1



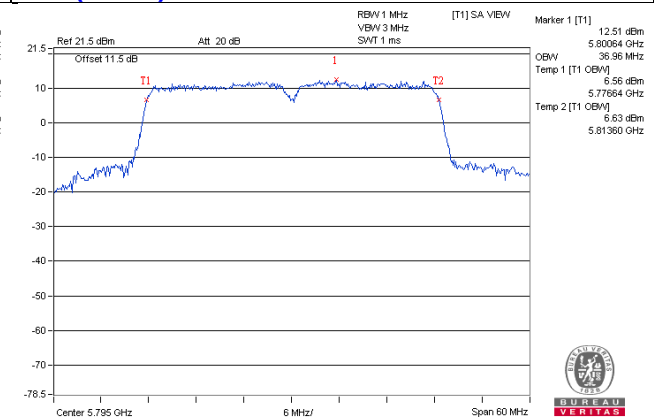
11ac (40MHz) 3S3T SDM CH159 Chain1



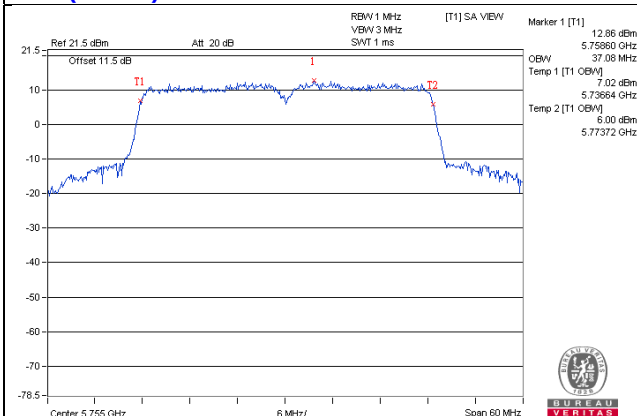
11ac (40MHz) 3S3T SDM CH151 Chain2



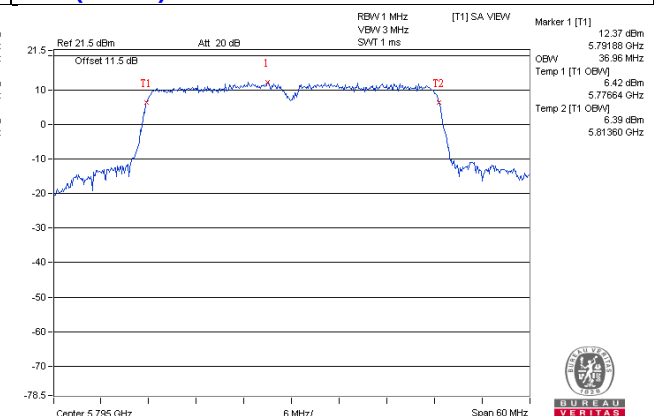
11ac (40MHz) 3S3T SDM CH159 Chain2



11ac (40MHz) 3S3T SDM CH151 Chain3

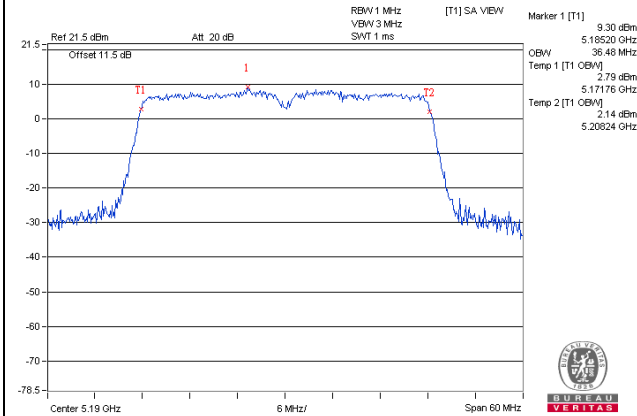


11ac (40MHz) 3S3T SDM CH159 Chain3

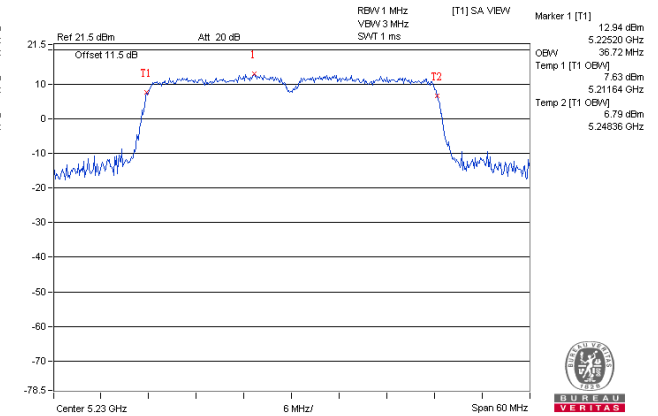


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

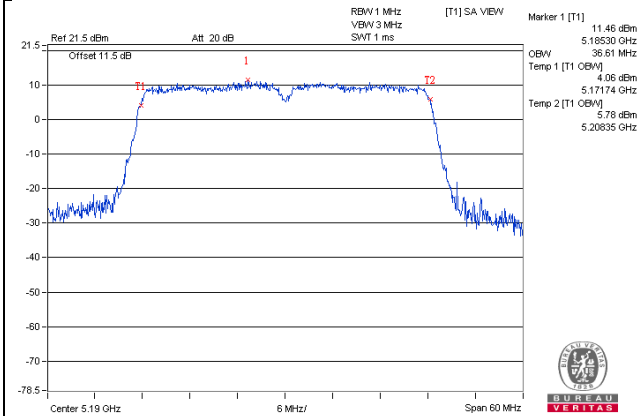
11ac (40MHz) 1S3T TxBF CH38 Chain1



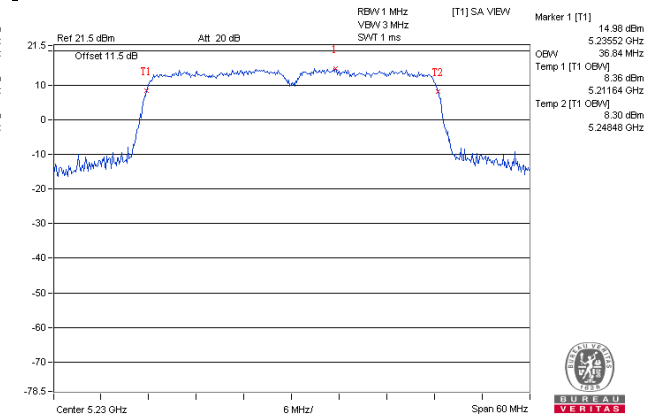
11ac (40MHz) 1S3T TxBF CH46 Chain1



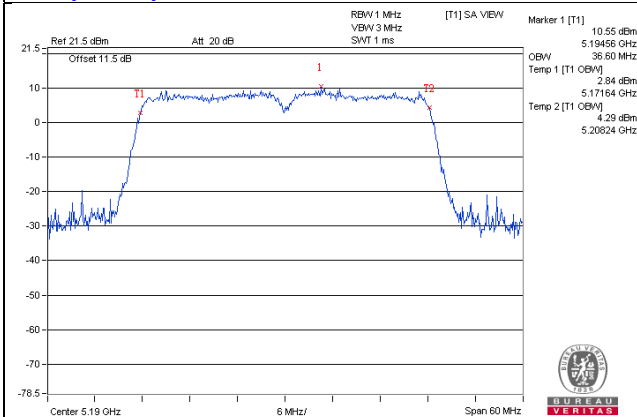
11ac (40MHz) 1S3T TxBF CH38 Chain2



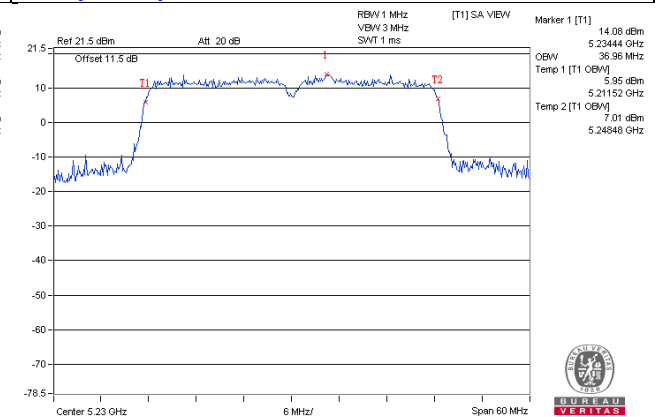
11ac (40MHz) 1S3T TxBF CH46 Chain2



11ac (40MHz) 1S3T TxBF CH38 Chain3

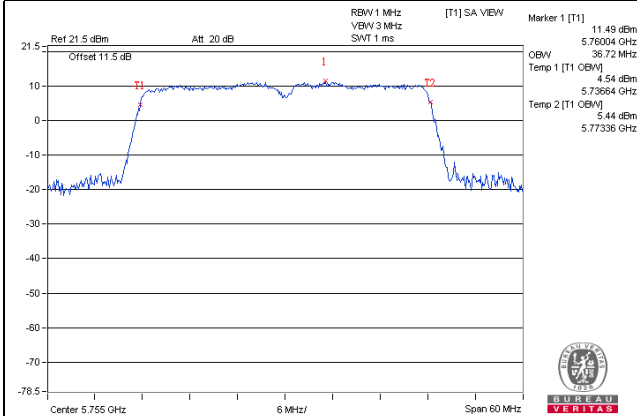


11ac (40MHz) 1S3T TxBF CH46 Chain3

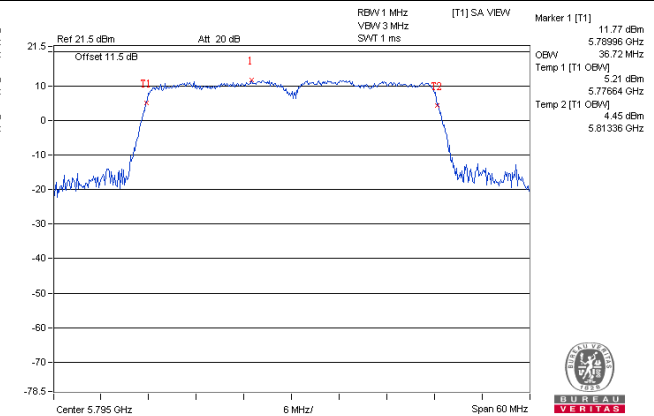


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

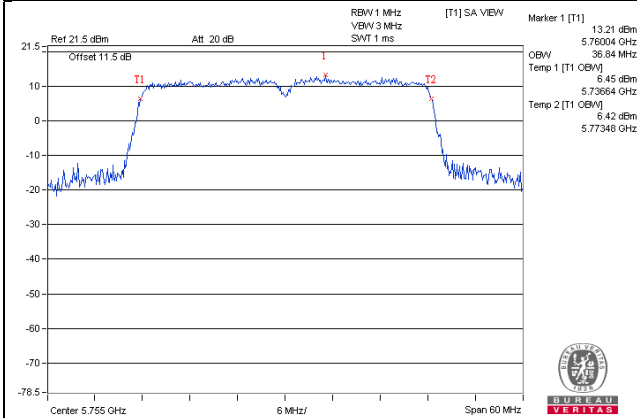
11ac (40MHz) 1S3T TxBF CH151 Chain1



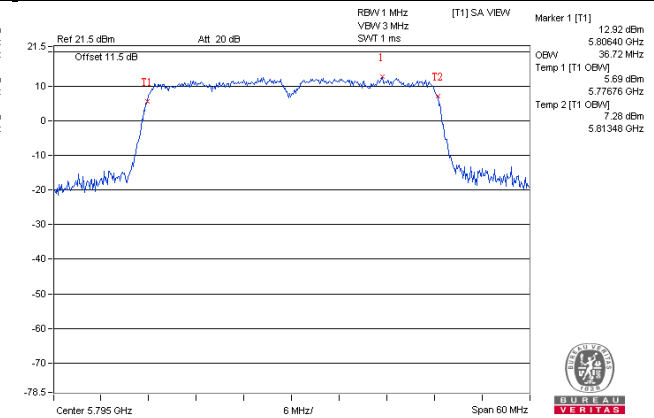
11ac (40MHz) 1S3T TxBF CH159 Chain1



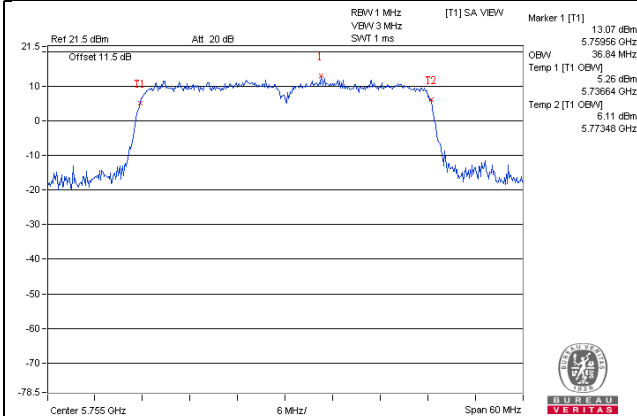
11ac (40MHz) 1S3T TxBF CH151 Chain2



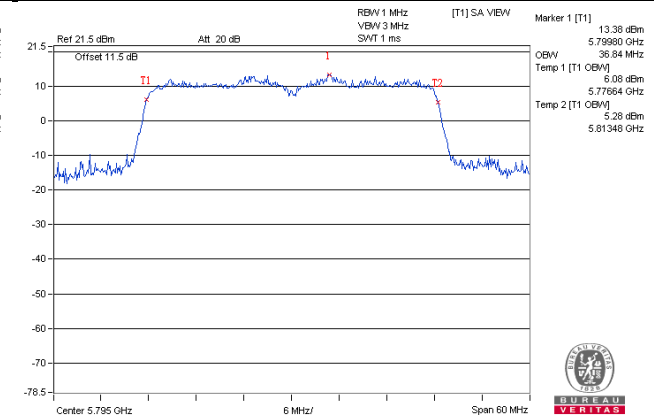
11ac (40MHz) 1S3T TxBF CH159 Chain2



11ac (40MHz) 1S3T TxBF CH151 Chain3

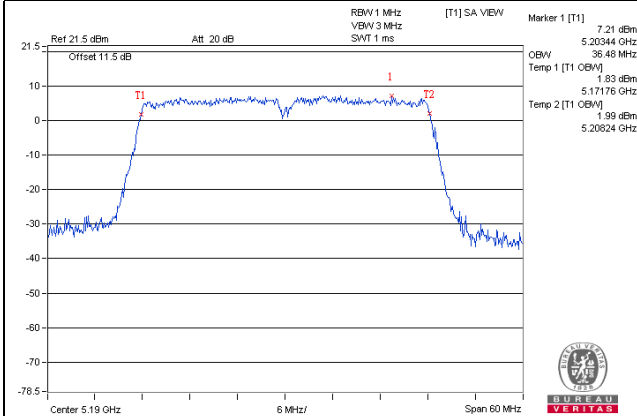


11ac (40MHz) 1S3T TxBF CH159 Chain3

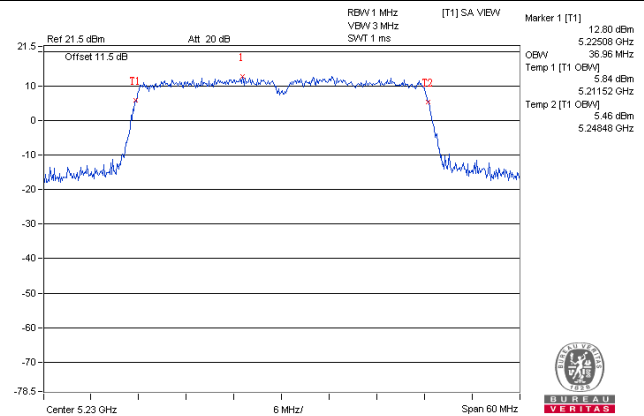


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

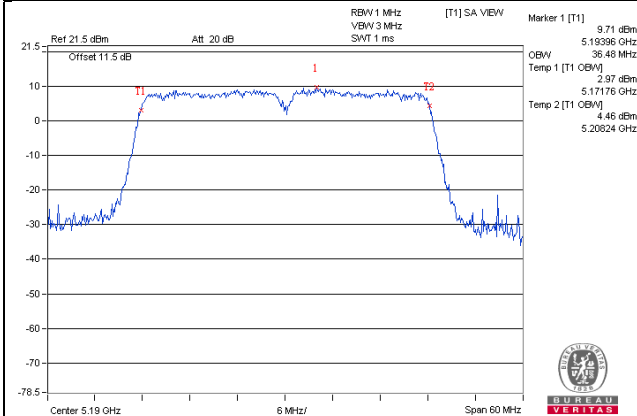
11ac (40MHz) 2S3T TxBF CH38 Chain1



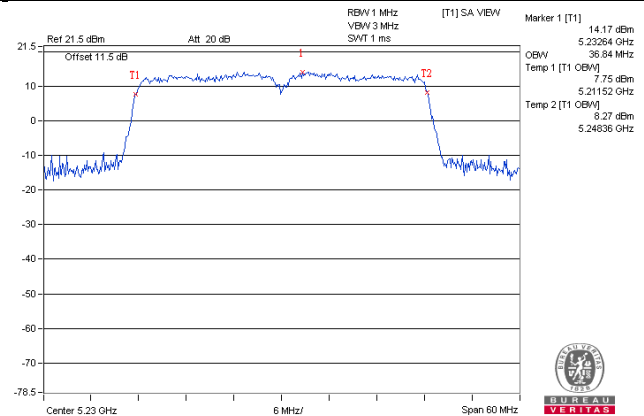
11ac (40MHz) 2S3T TxBF CH46 Chain1



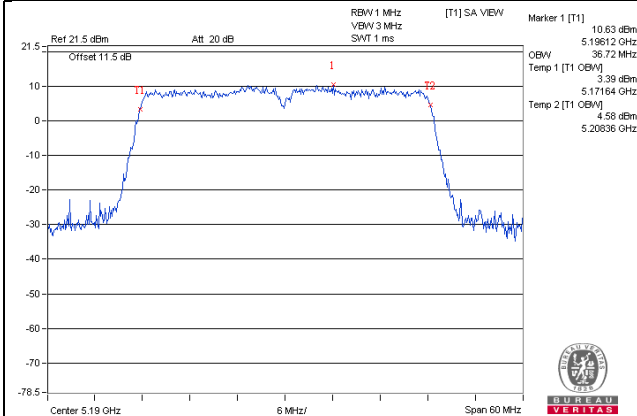
11ac (40MHz) 2S3T TxBF CH38 Chain2



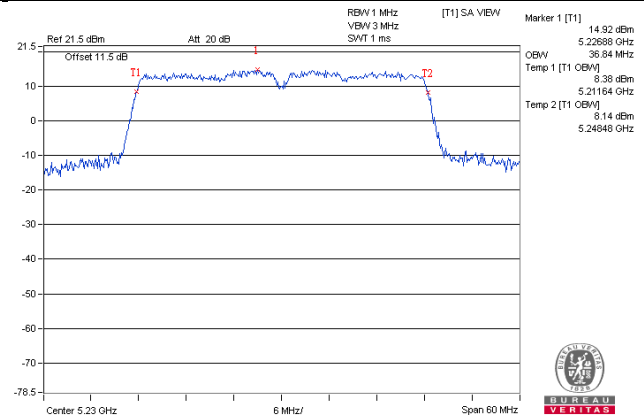
11ac (40MHz) 2S3T TxBF CH46 Chain2



11ac (40MHz) 2S3T TxBF CH38 Chain3

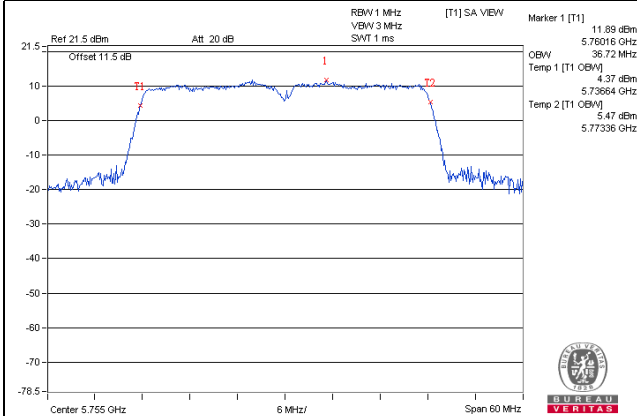


11ac (40MHz) 2S3T TxBF CH46 Chain3

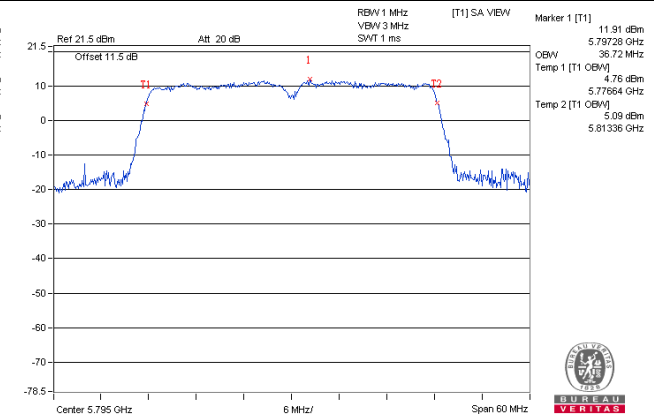


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

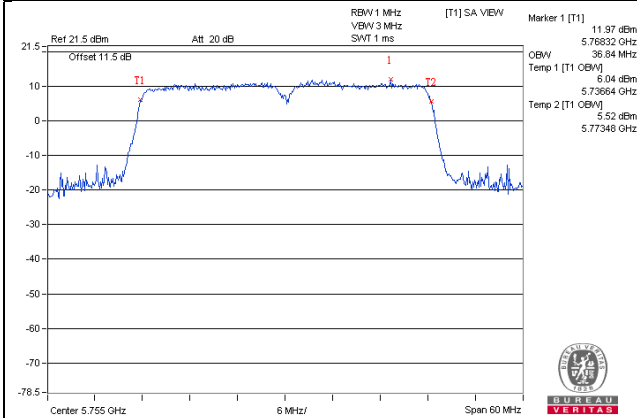
11ac (40MHz) 2S3T TxBF CH151 Chain1



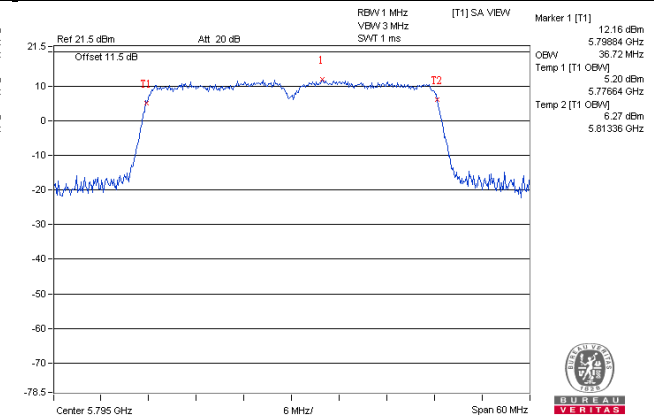
11ac (40MHz) 2S3T TxBF CH159 Chain1



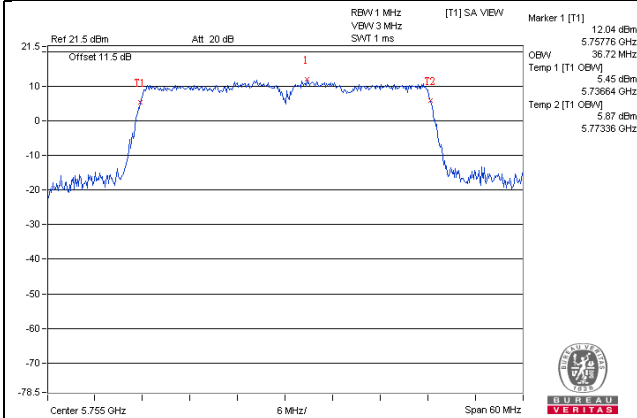
11ac (40MHz) 2S3T TxBF CH151 Chain2



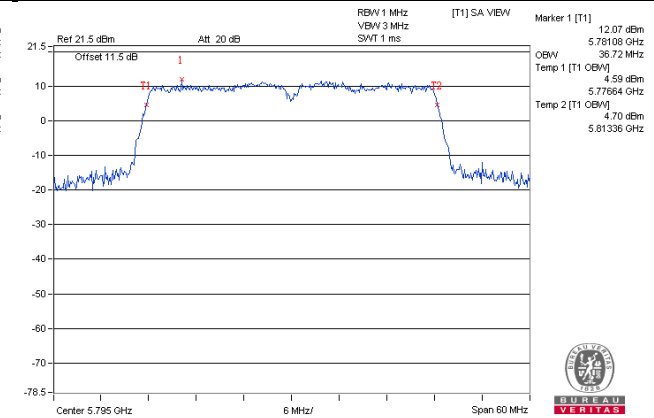
11ac (40MHz) 2S3T TxBF CH159 Chain2



11ac (40MHz) 2S3T TxBF CH151 Chain3

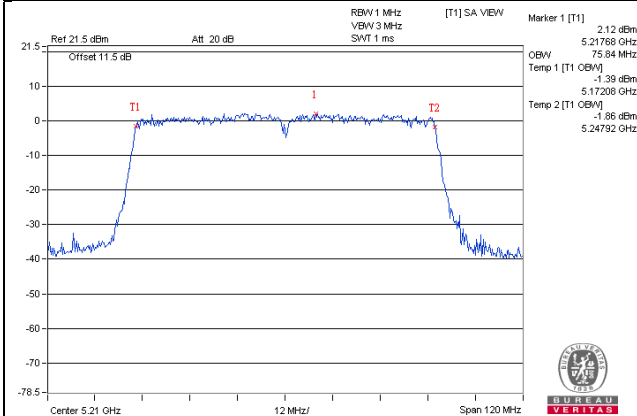


11ac (40MHz) 2S3T TxBF CH159 Chain3

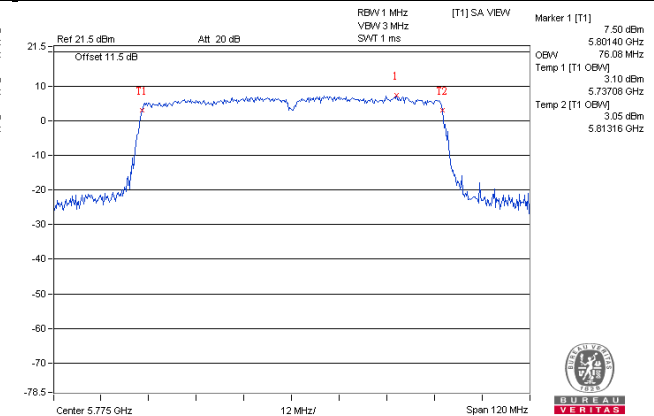


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

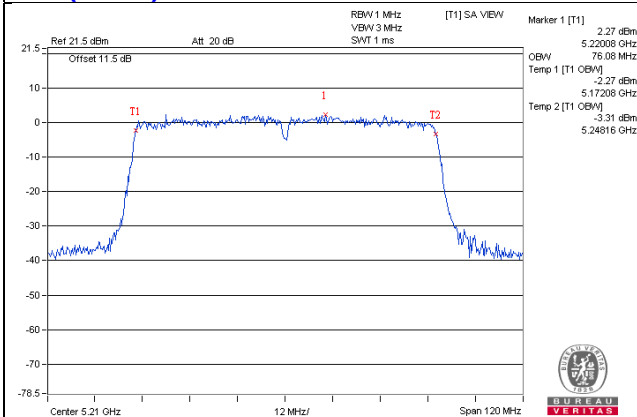
11ac (80MHz) 3S3T SDM CH42 Chain1



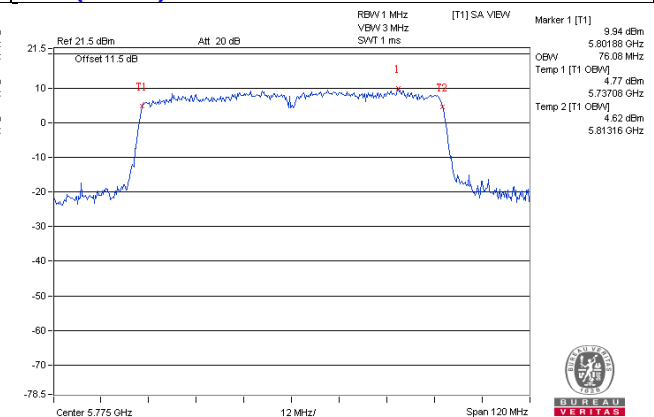
11ac (80MHz) 3S3T SDM CH155 Chain1



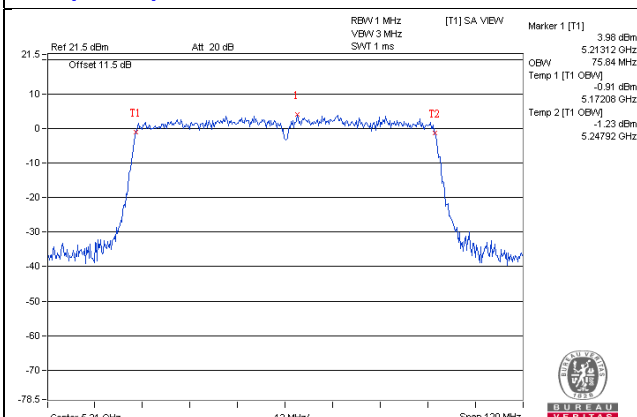
11ac (80MHz) 3S3T SDM CH42 Chain2



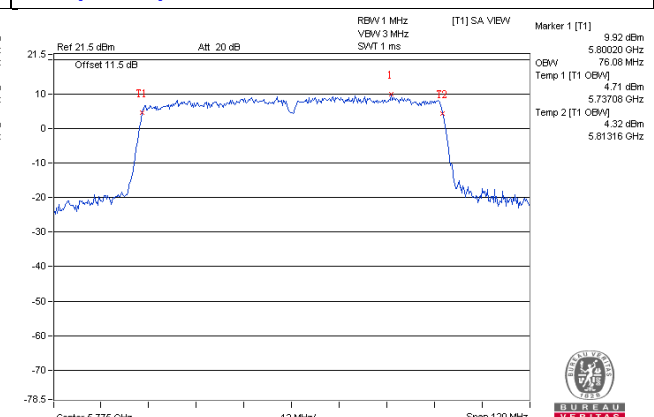
11ac (80MHz) 3S3T SDM CH155 Chain2



11ac (80MHz) 3S3T SDM CH42 Chain3

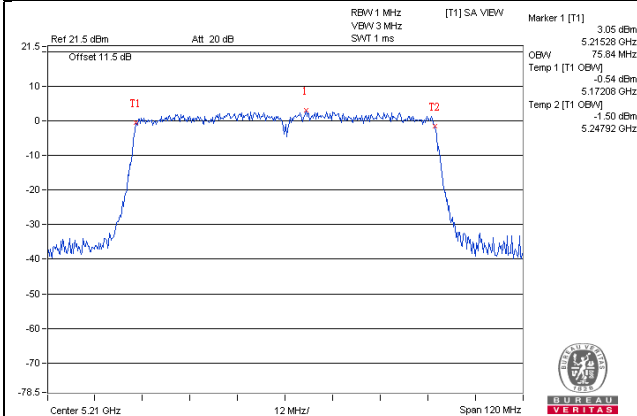


11ac (80MHz) 3S3T SDM CH155 Chain3

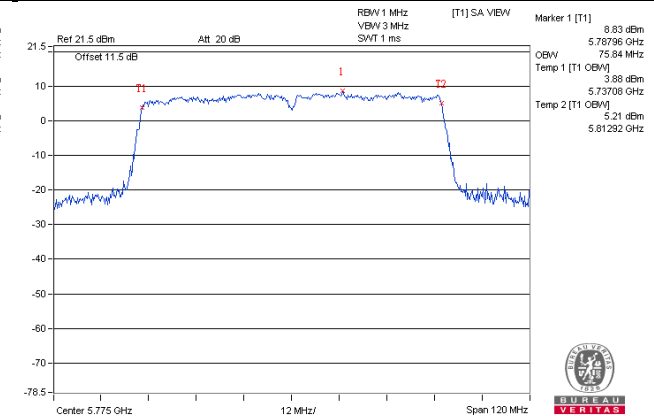


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

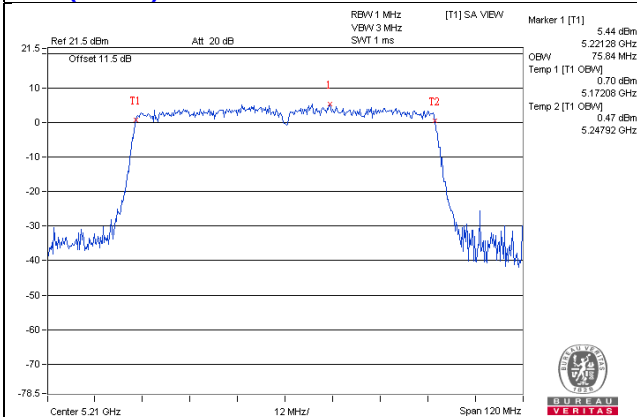
11ac (80MHz) 1S3T TxBF CH42 Chain1



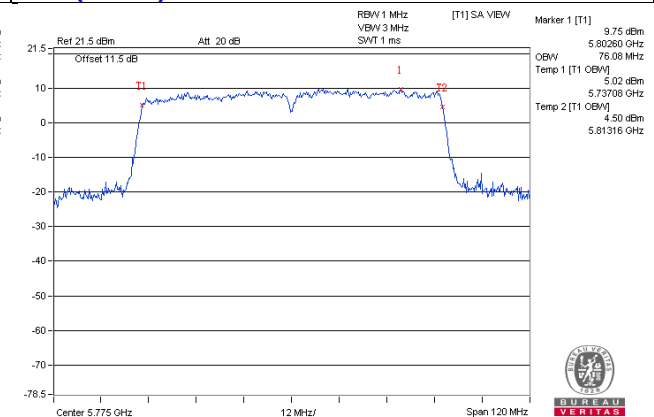
11ac (80MHz) 1S3T TxBF CH155 Chain1



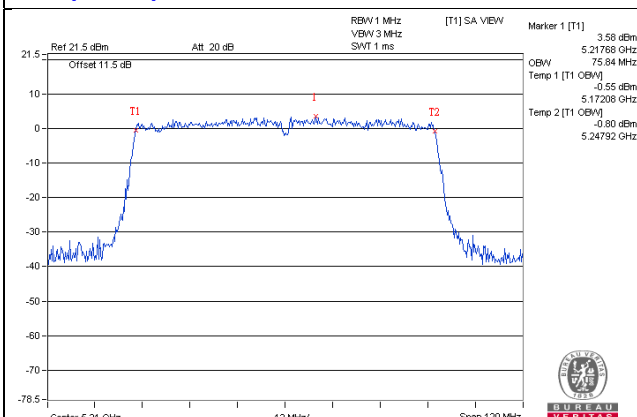
11ac (80MHz) 1S3T TxBF CH42 Chain2



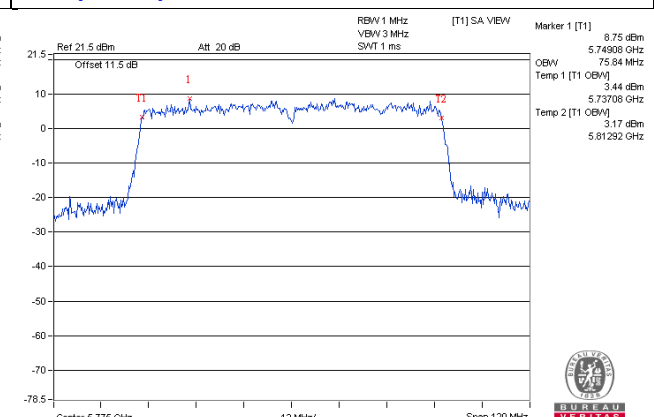
11ac (80MHz) 1S3T TxBF CH155 Chain2



11ac (80MHz) 1S3T TxBF CH42 Chain3

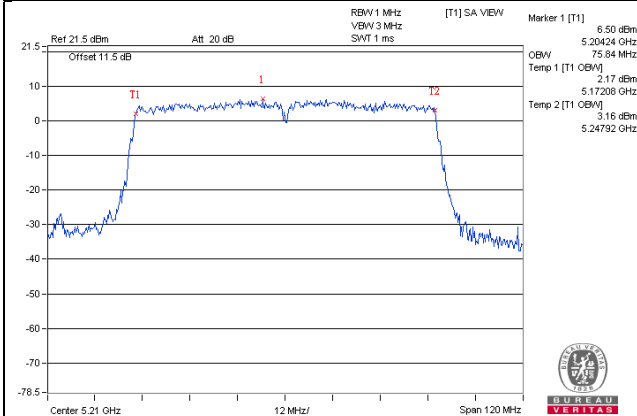


11ac (80MHz) 1S3T TxBF CH155 Chain3

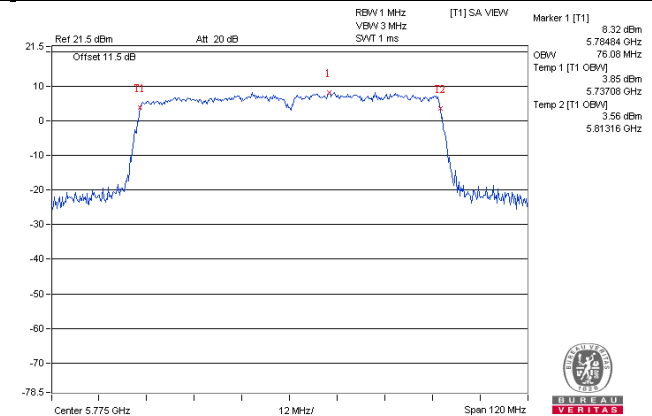


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

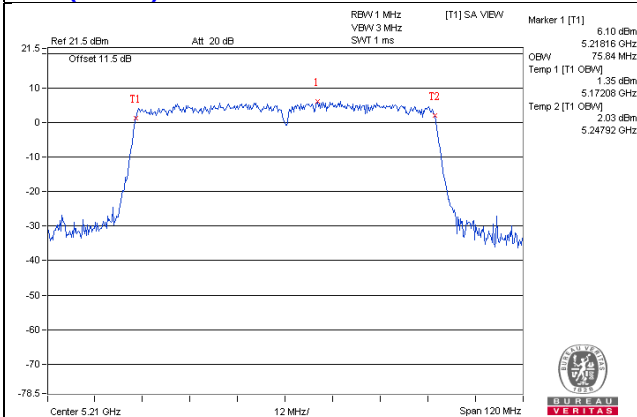
11ac (80MHz) 2S3T TxBF CH42 Chain1



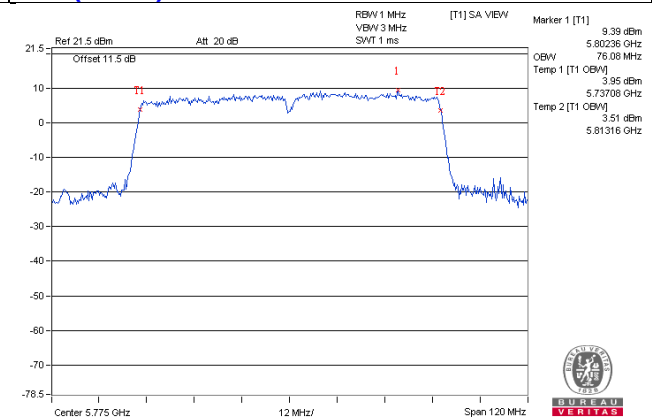
11ac (80MHz) 2S3T TxBF CH155 Chain1



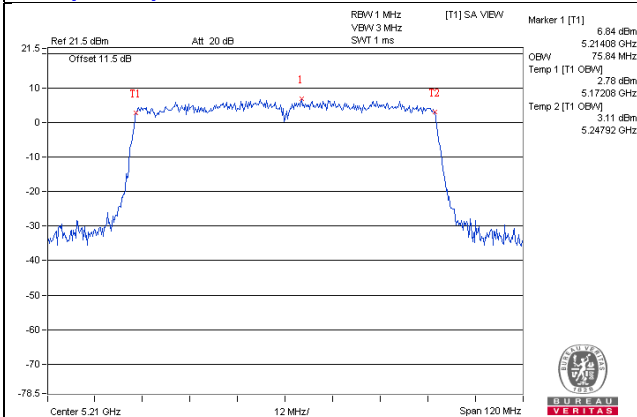
11ac (80MHz) 2S3T TxBF CH42 Chain2



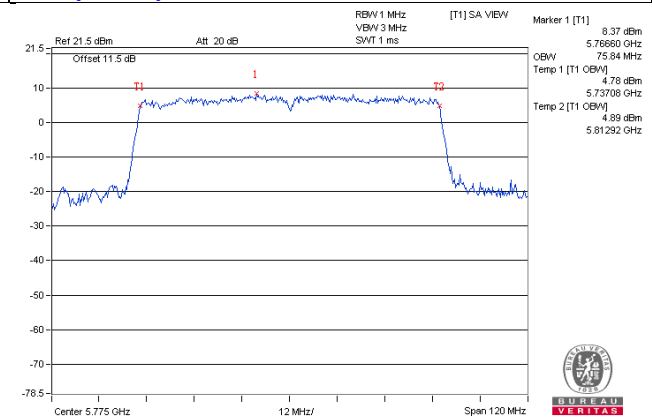
11ac (80MHz) 2S3T TxBF CH155 Chain2



11ac (80MHz) 2S3T TxBF CH42 Chain3



11ac (80MHz) 2S3T TxBF CH155 Chain3



3.7 6dB Bandwidth Measurement

3.7.1 Limit

For digital modulation systems, the minimum 6dB bandwidth shall be at least 500 kHz

3.7.2 Measuring Instruments and Setting

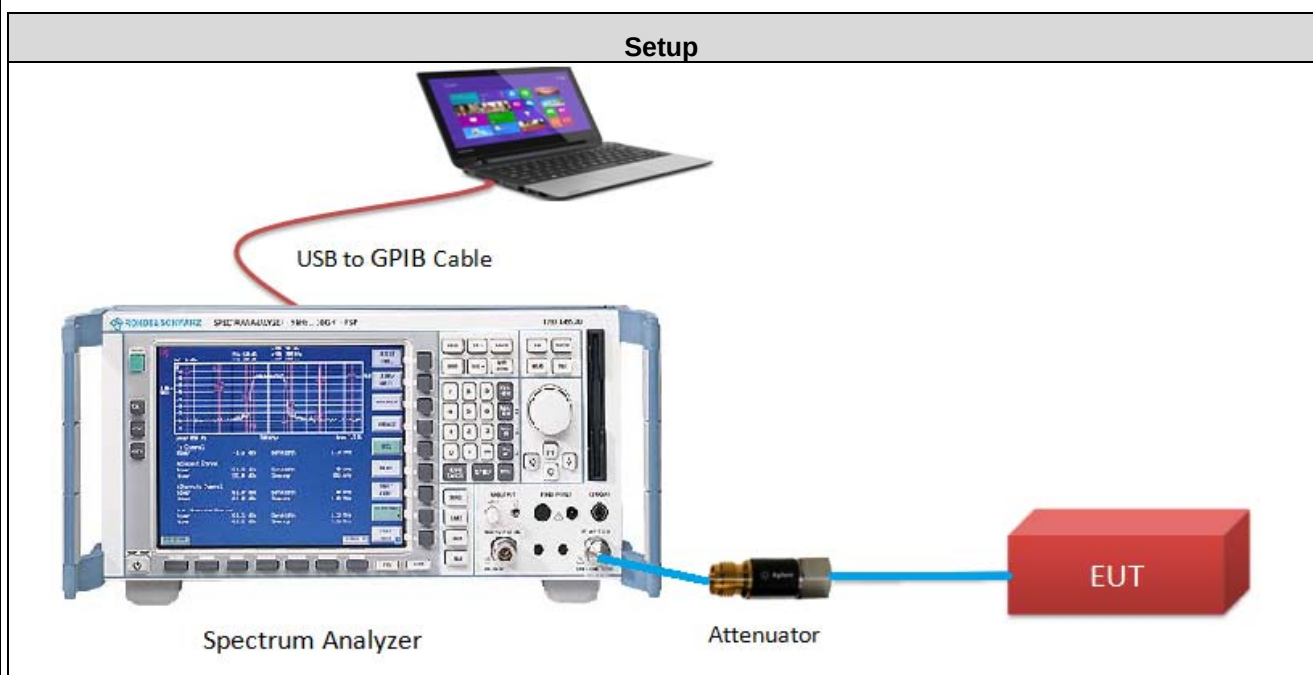
The following table is the setting of the Spectrum Analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	> 6dB Bandwidth
RBW	100KHz
VBW	$\geq 3 \times \text{RBW}$
Detector	Peak
Trace	Max Hold
Sweep Time	Auto couple

3.7.3 Test Procedures

- 1 The transmitter output (antenna port) was connected to the spectrum analyzer in peak hold mode.
- 2 Test was performed in accordance with Measurement of Digital Transmission Systems Operating under 789033 D02 General UNII Test Procedures New Rules v01r04, in section "Emission bandwidth (C)(2)", 05/02/2017
- 3 Measured the spectrum width with power higher than 6dB account by this measurement.

3.7.4 Test Setup Layout



3.7.5 Test Deviation

There are no deviations with the original standard.

3.7.6 EUT Operating Conditions

The EUT was programmed to be in continuously transmitting mode.

3.7.7 Test Results of 6dB Bandwidth

Temperature	20°C	Humidity	62%
Test Engineer	Leo Tsai		

11a 1S3T CDD

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 1	CHAIN 2	CHAIN 3		
149	5745	16.35	16.38	16.40	0.5	PASS
157	5785	16.41	16.37	16.37	0.5	PASS
165	5825	16.41	16.40	16.41	0.5	PASS

11ac (20MHz) 3S3T SDM

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 1	CHAIN 2	CHAIN 3		
149	5745	17.61	17.66	17.65	0.5	PASS
157	5785	17.63	17.64	17.65	0.5	PASS
165	5825	17.62	17.67	17.68	0.5	PASS

11ac (20MHz) 1S3T TxBF

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 1	CHAIN 2	CHAIN 3		
149	5745	17.61	17.65	17.64	0.5	PASS
157	5785	17.64	17.63	17.62	0.5	PASS
165	5825	17.63	17.65	17.62	0.5	PASS

11ac (20MHz) 2S3T TxBF

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 1	CHAIN 2	CHAIN 3		
149	5745	17.72	17.63	17.65	0.5	PASS
157	5785	17.70	17.64	17.69	0.5	PASS
165	5825	17.71	17.64	17.72	0.5	PASS

11ac (40MHz) 3S3T SDM

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 1	CHAIN 2	CHAIN 3		
151	5755	36.43	36.44	36.18	0.5	PASS
159	5795	36.44	36.45	36.46	0.5	PASS

11ac (40MHz) 1S3T TxBF

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 1	CHAIN 2	CHAIN 3		
151	5755	36.00	36.35	36.20	0.5	PASS
159	5795	36.41	36.35	36.09	0.5	PASS

11ac (40MHz) 2S3T TxBF

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 1	CHAIN 2	CHAIN 3		
151	5755	36.27	36.45	36.44	0.5	PASS
159	5795	36.42	36.12	36.42	0.5	PASS

11ac (80MHz) 3S3T SDM

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 1	CHAIN 2	CHAIN 3		
155	5775	75.96	75.98	75.98	0.5	PASS

11ac (80MHz) 1S3T TxBF

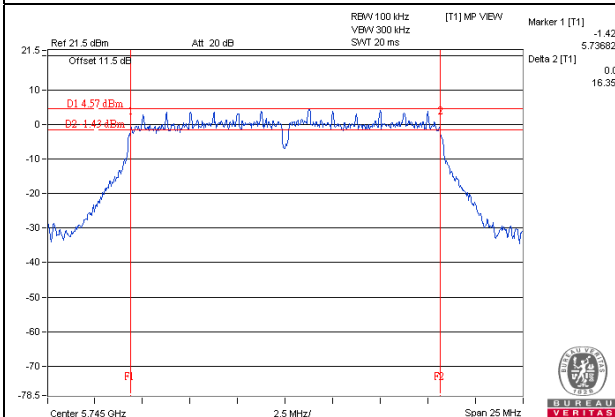
CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 1	CHAIN 2	CHAIN 3		
155	5775	75.92	75.93	75.50	0.5	PASS

11ac (80MHz) 2S3T TxBF

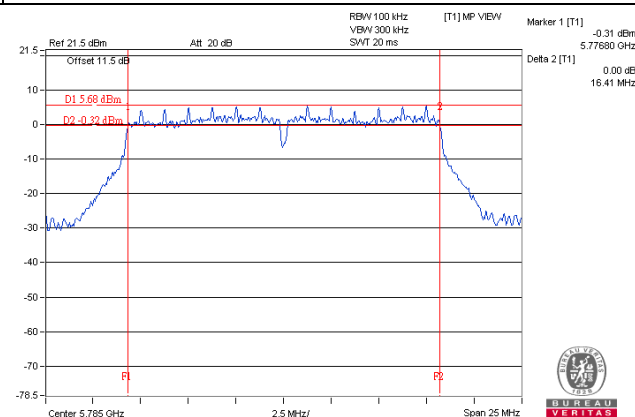
CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 1	CHAIN 2	CHAIN 3		
155	5775	75.89	75.67	75.91	0.5	PASS

6dB BANDWIDTH SPECTRUM PLOT

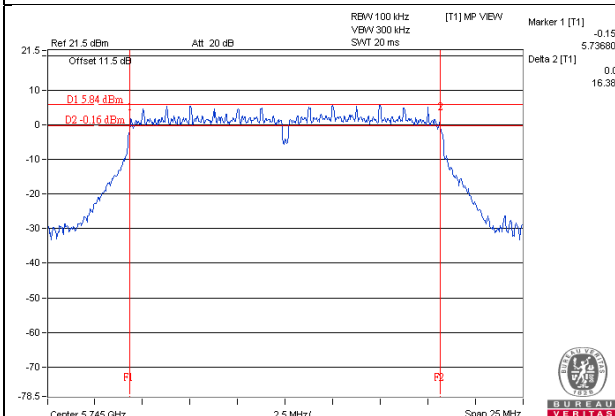
11a 1S3T CDD CH149 Chain1



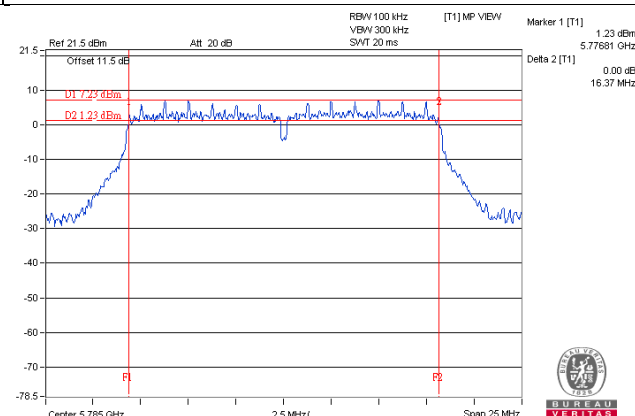
11a 1S3T CDD CH157 Chain1



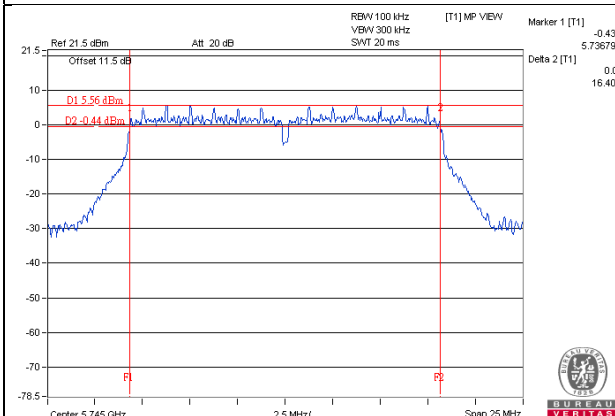
11a 1S3T CDD CH149 Chain2



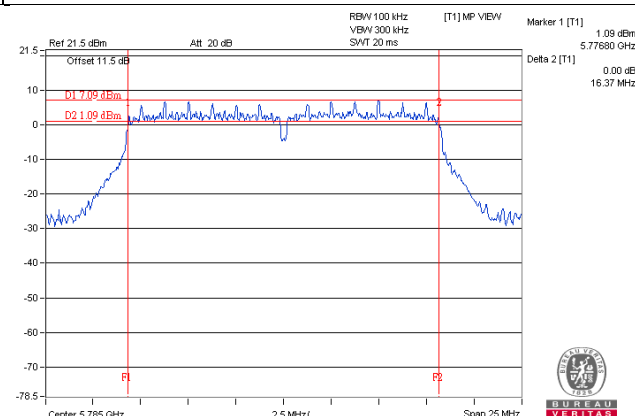
11a 1S3T CDD CH157 Chain2



11a 1S3T CDD CH149 Chain3

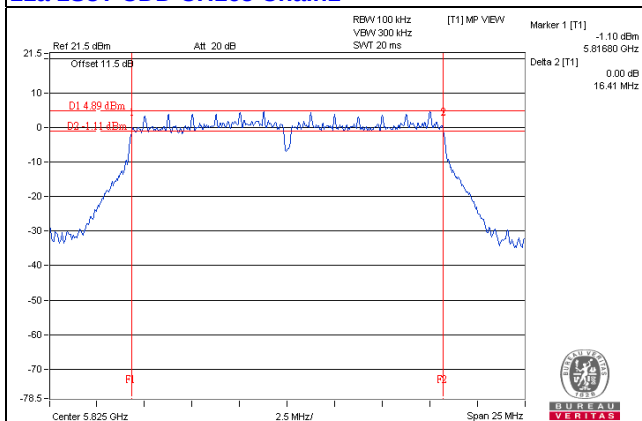


11a 1S3T CDD CH157 Chain3

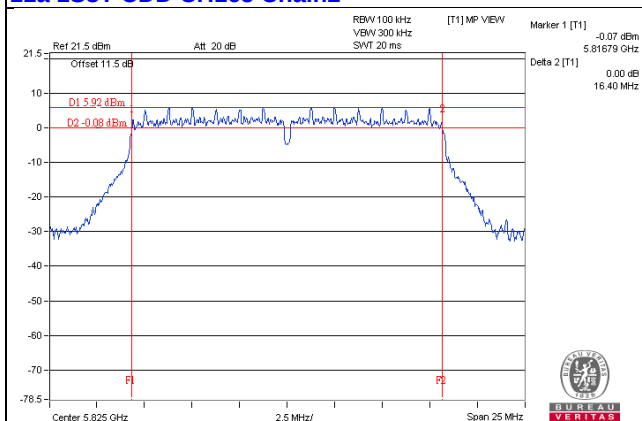


6dB BANDWIDTH SPECTRUM PLOT

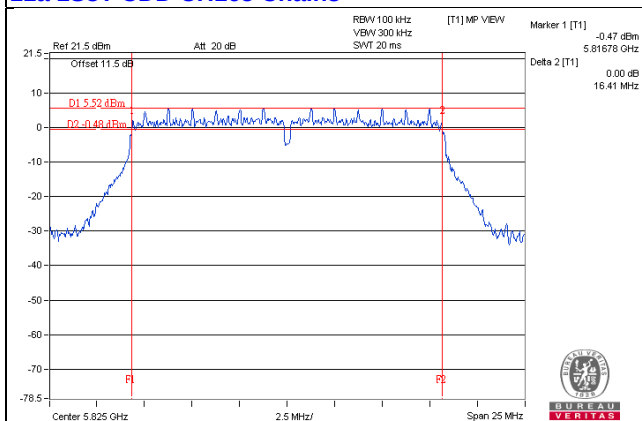
11a 1S3T CDD CH165 Chain1



11a 1S3T CDD CH165 Chain2

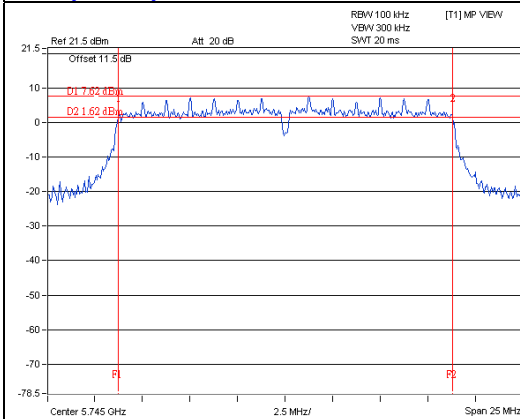


11a 1S3T CDD CH165 Chain3

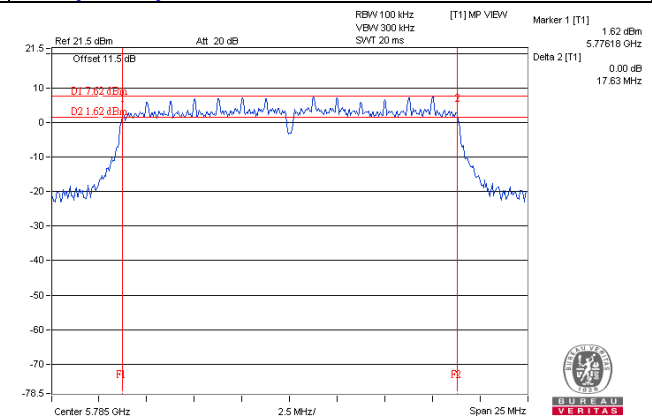


6dB BANDWIDTH SPECTRUM PLOT

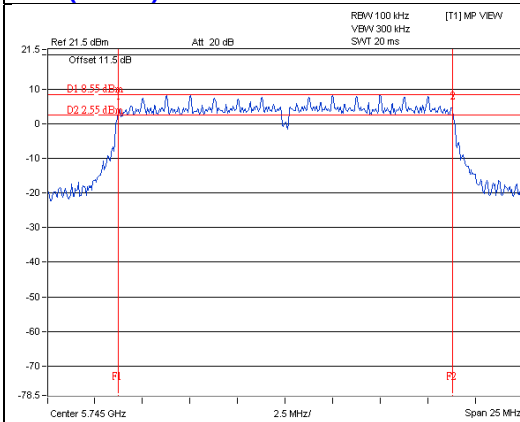
11ac (20MHz) 3S3T SDM CH149 Chain1



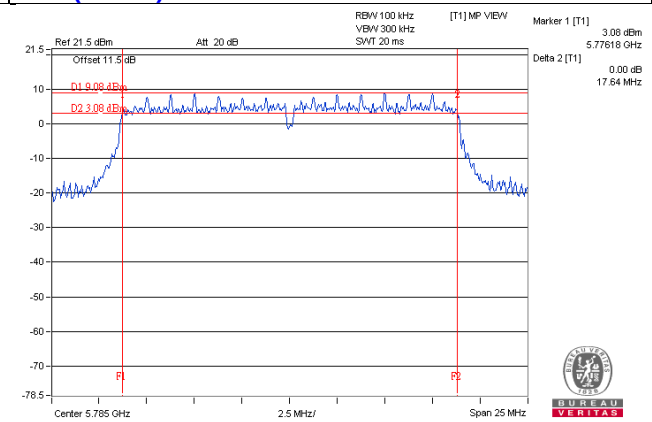
11ac (20MHz) 3S3T SDM CH157 Chain1



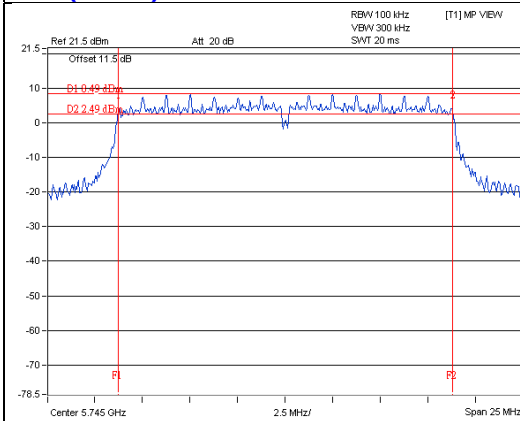
11ac (20MHz) 3S3T SDM CH149 Chain2



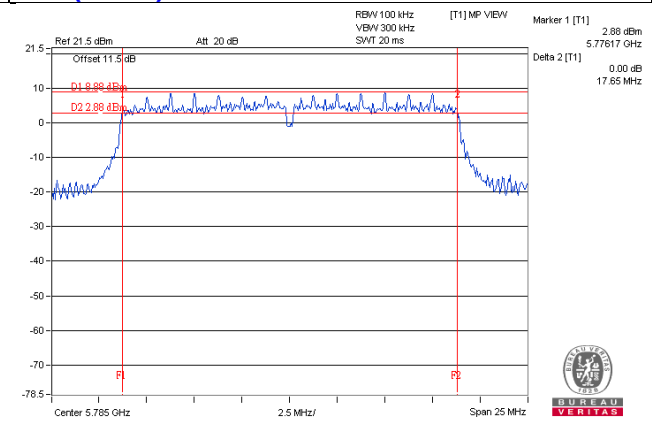
11ac (20MHz) 3S3T SDM CH157 Chain2



11ac (20MHz) 3S3T SDM CH149 Chain3

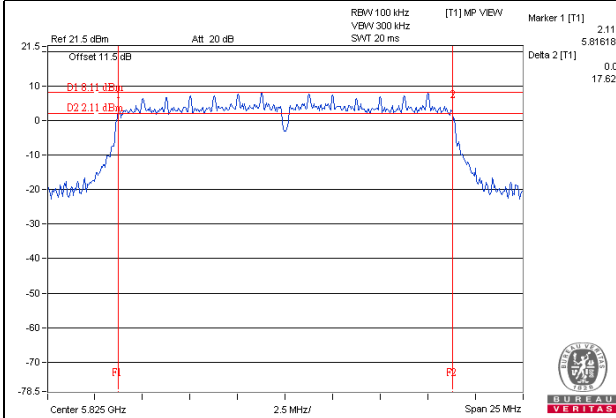


11ac (20MHz) 3S3T SDM CH157 Chain3

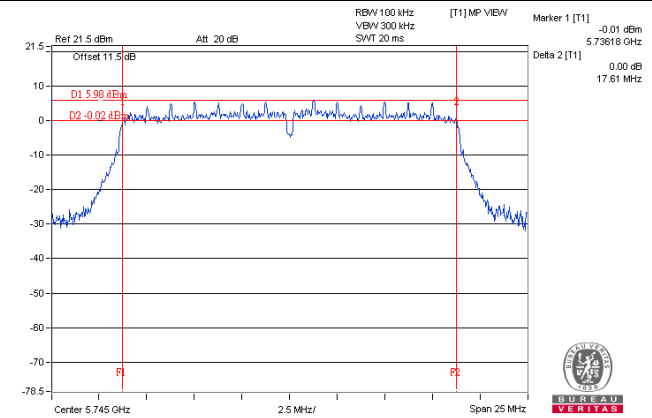


6dB BANDWIDTH SPECTRUM PLOT

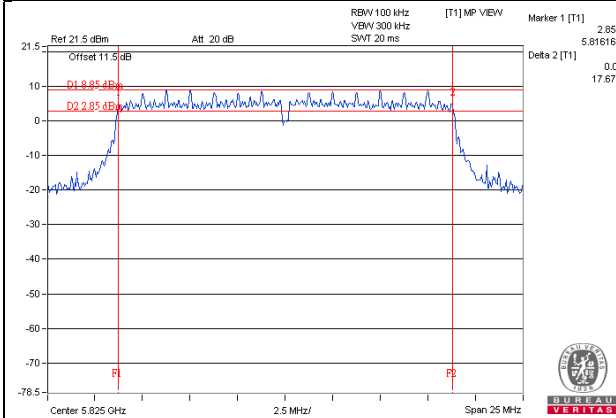
11ac (20MHz) 3S3T SDM CH165 Chain1



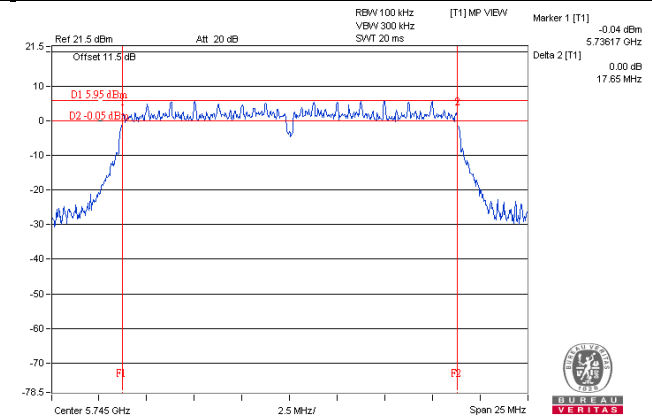
11ac (20MHz) 1S3T TxBF CH149 Chain1



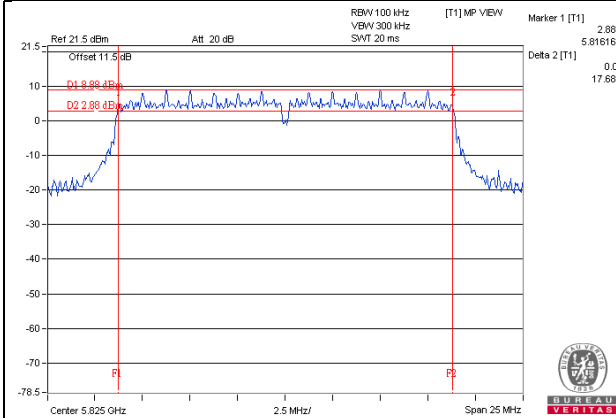
11ac (20MHz) 3S3T SDM CH165 Chain2



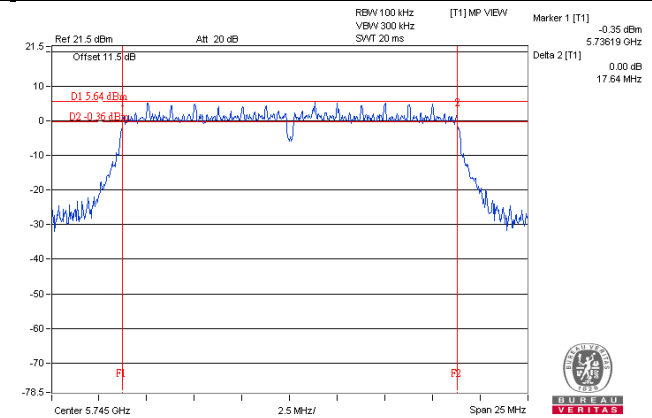
11ac (20MHz) 1S3T TxBF CH149 Chain2



11ac (20MHz) 3S3T SDM CH165 Chain3

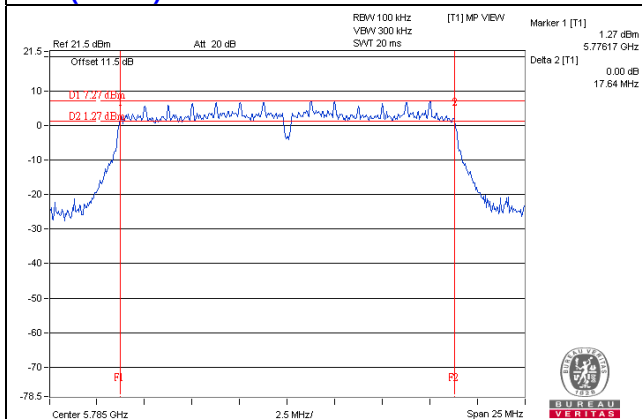


11ac (20MHz) 1S3T TxBF CH149 Chain3

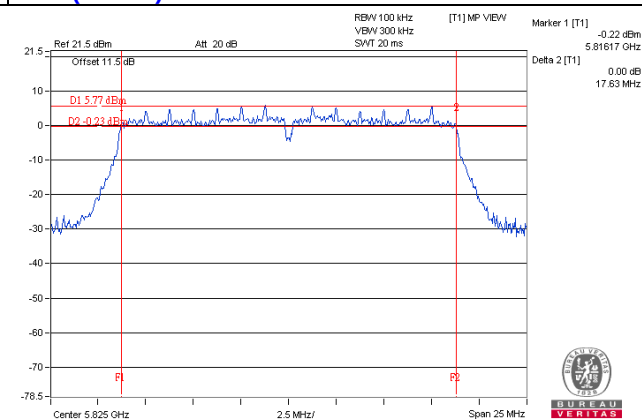


6dB BANDWIDTH SPECTRUM PLOT

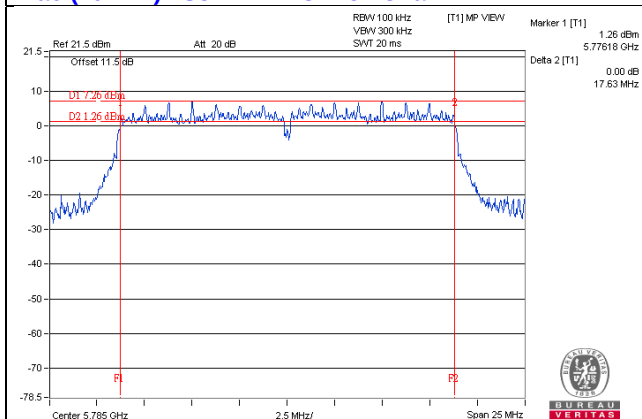
11ac (20MHz) 1S3T TxBF CH157 Chain1



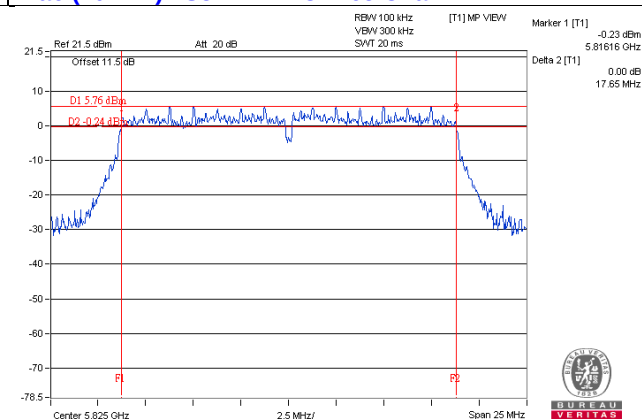
11ac (20MHz) 1S3T TxBF CH165 Chain1



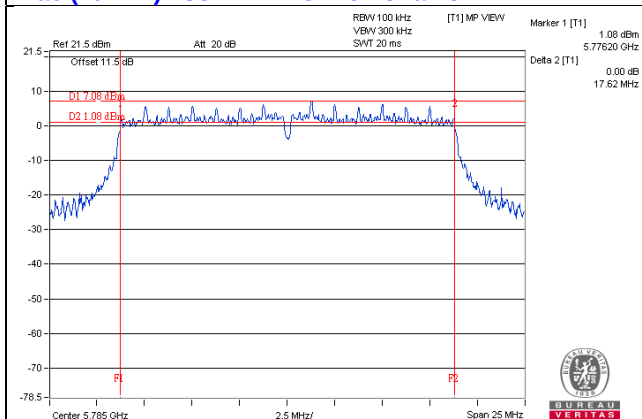
11ac (20MHz) 1S3T TxBF CH157 Chain2



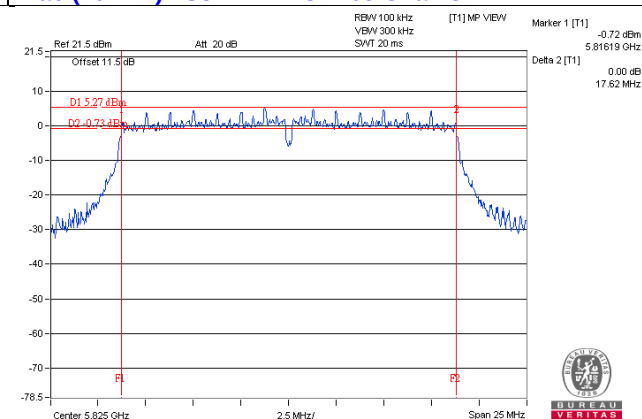
11ac (20MHz) 1S3T TxBF CH165 Chain2



11ac (20MHz) 1S3T TxBF CH157 Chain3

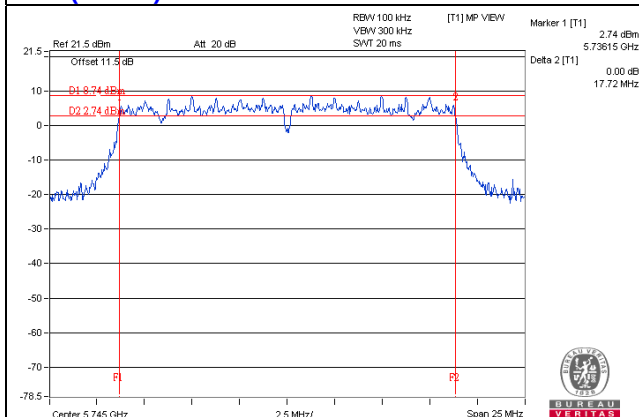


11ac (20MHz) 1S3T TxBF CH165 Chain3

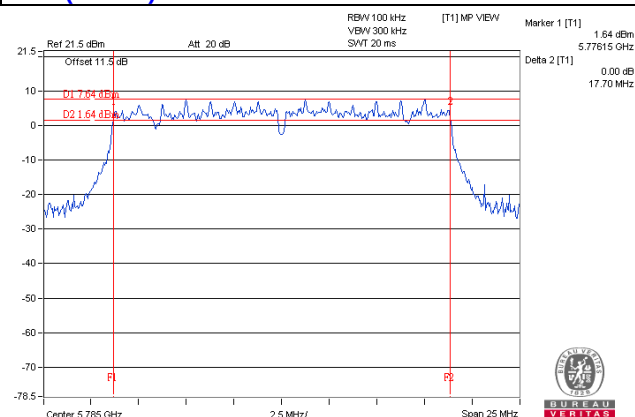


6dB BANDWIDTH SPECTRUM PLOT

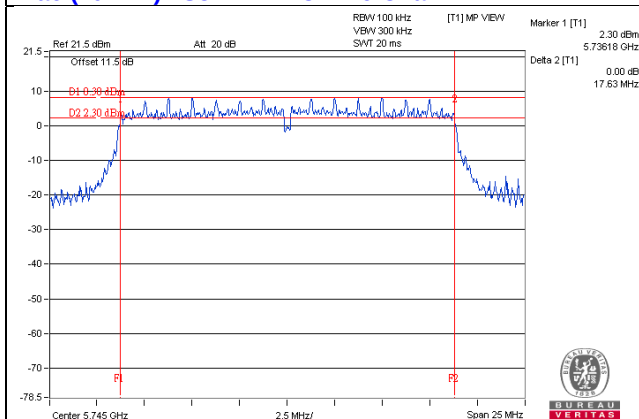
11ac (20MHz) 2S3T TxBF CH149 Chain1



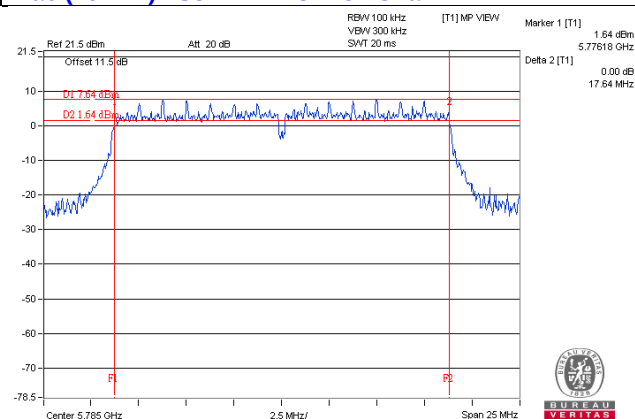
11ac (20MHz) 2S3T TxBF CH157 Chain1



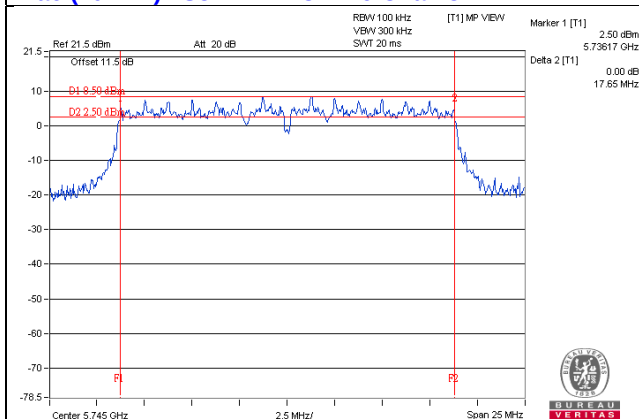
11ac (20MHz) 2S3T TxBF CH149 Chain2



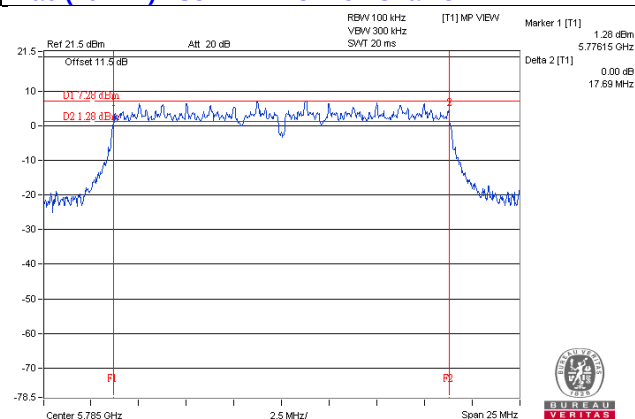
11ac (20MHz) 2S3T TxBF CH157 Chain2



11ac (20MHz) 2S3T TxBF CH149 Chain3

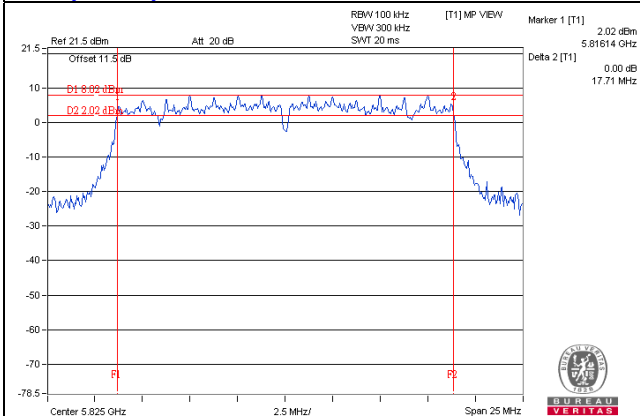


11ac (20MHz) 2S3T TxBF CH157 Chain3

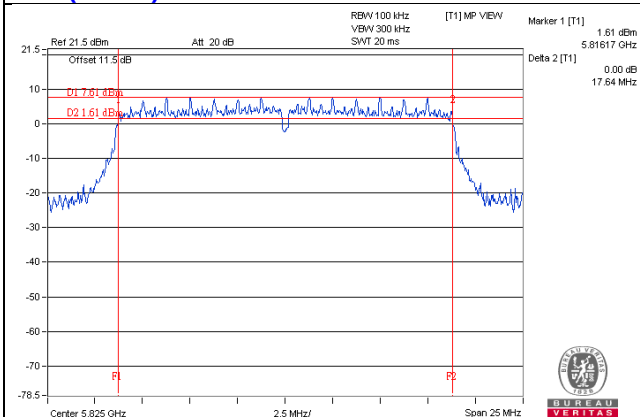


6dB BANDWIDTH SPECTRUM PLOT

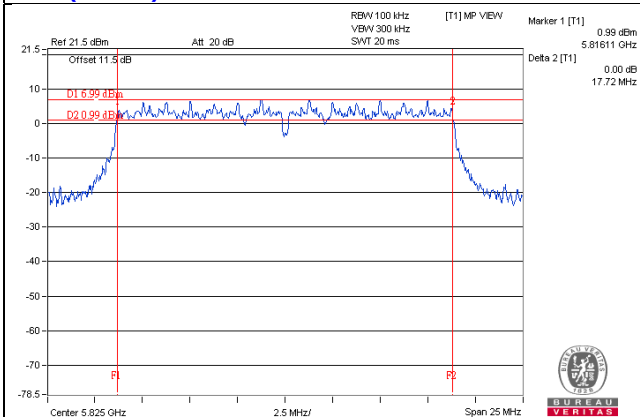
11ac (20MHz) 2S3T TxBF CH165 Chain1



11ac (20MHz) 2S3T TxBF CH165 Chain2

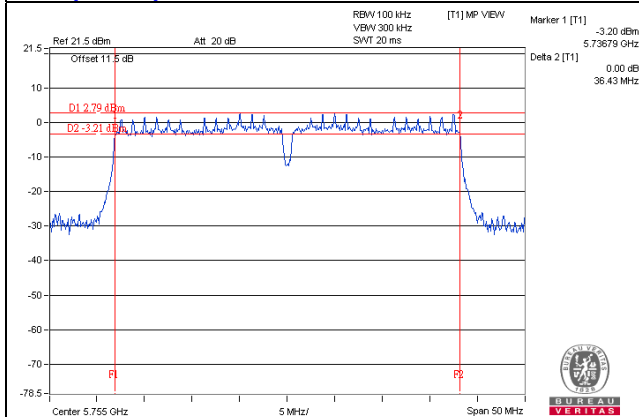


11ac (20MHz) 2S3T TxBF CH165 Chain3

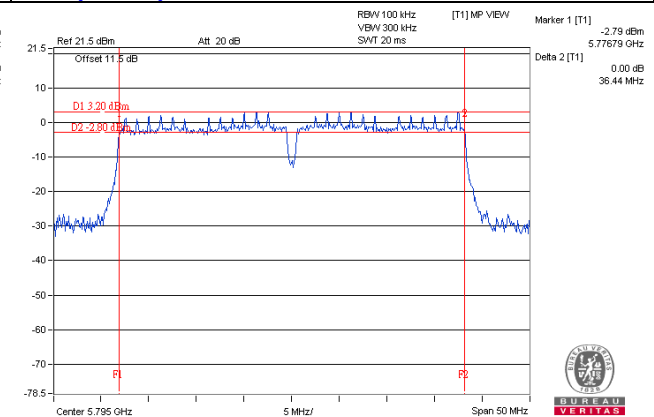


6dB BANDWIDTH SPECTRUM PLOT

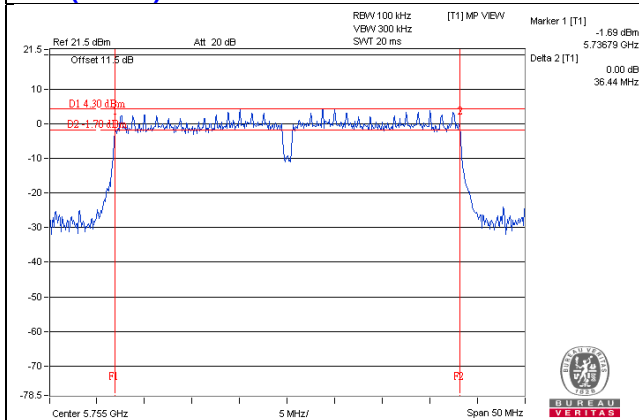
11ac (40MHz) 3S3T SDM CH151 Chain1



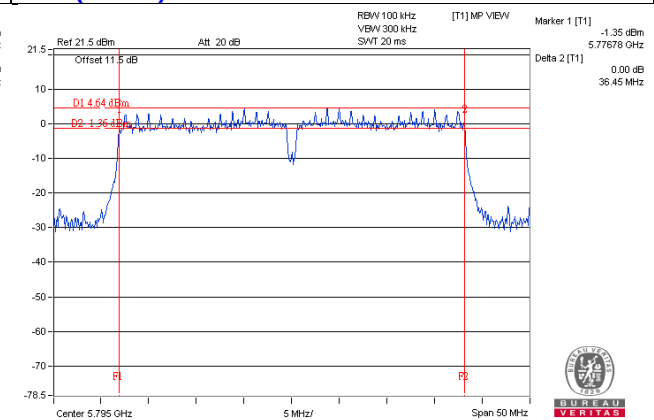
11ac (40MHz) 3S3T SDM CH159 Chain1



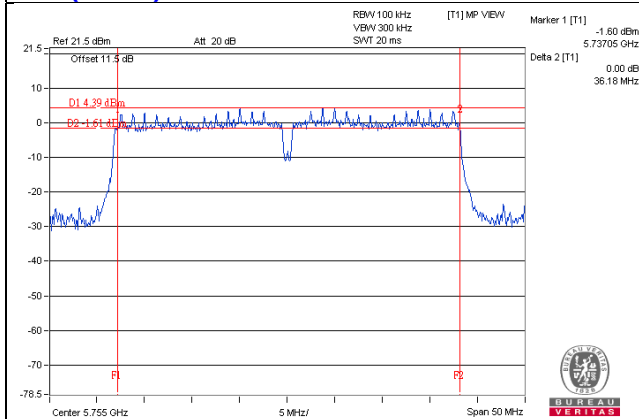
11ac (40MHz) 3S3T SDM CH151 Chain2



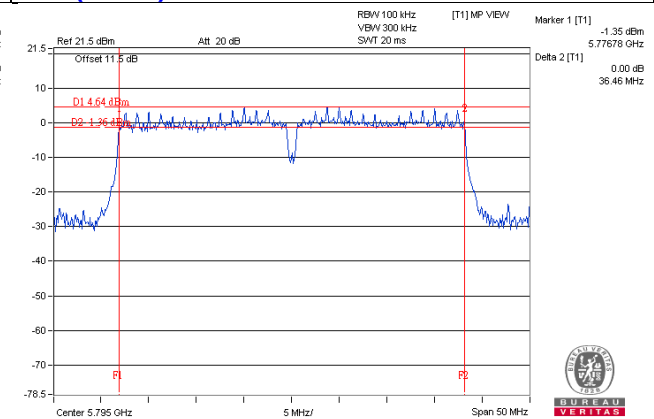
11ac (40MHz) 3S3T SDM CH159 Chain2



11ac (40MHz) 3S3T SDM CH151 Chain3

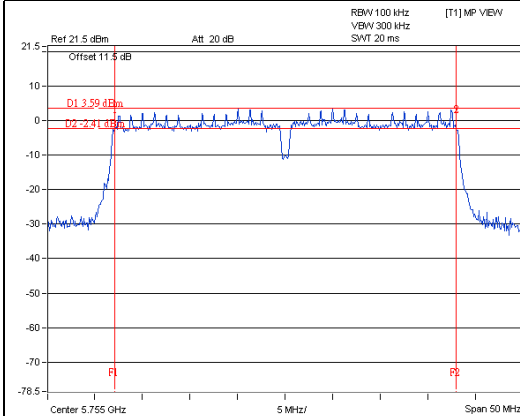


11ac (40MHz) 3S3T SDM CH159 Chain3

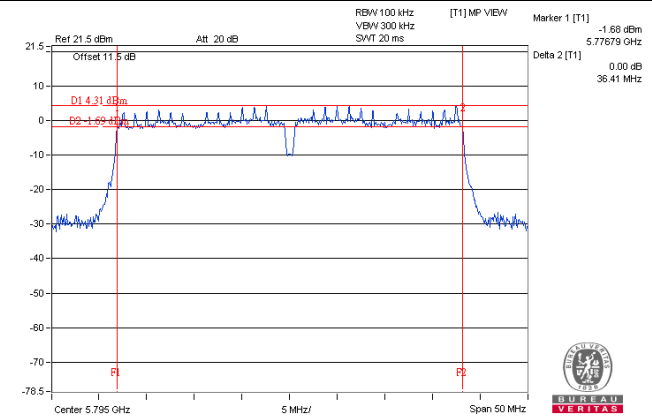


6dB BANDWIDTH SPECTRUM PLOT

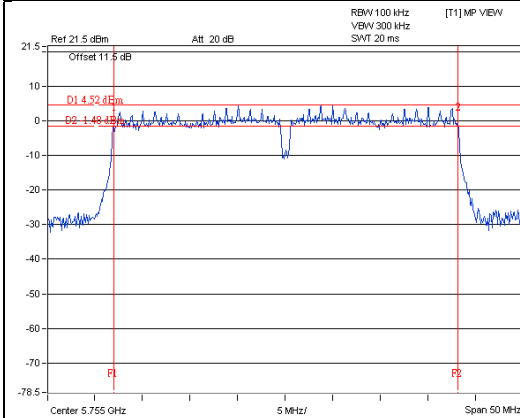
11ac (40MHz) 1S3T TxBF CH151 Chain1



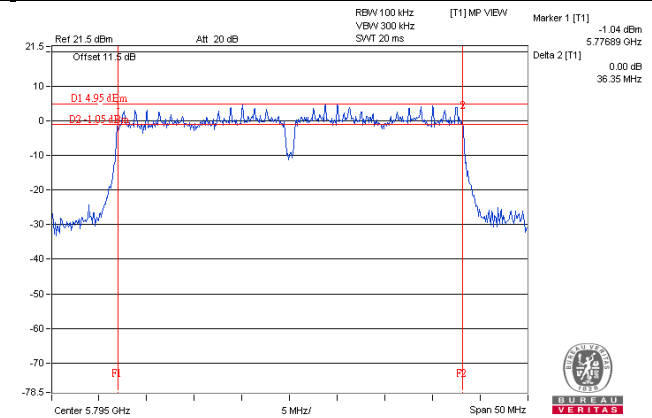
11ac (40MHz) 1S3T TxBF CH159 Chain1



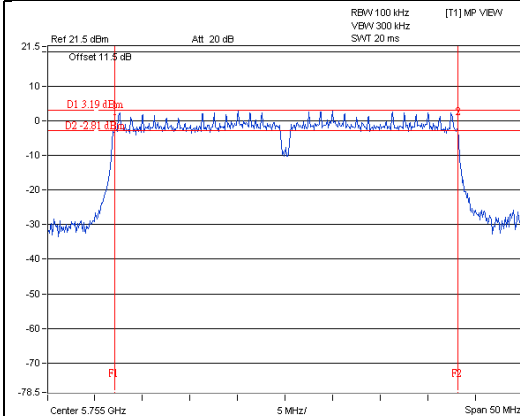
11ac (40MHz) 1S3T TxBF CH151 Chain2



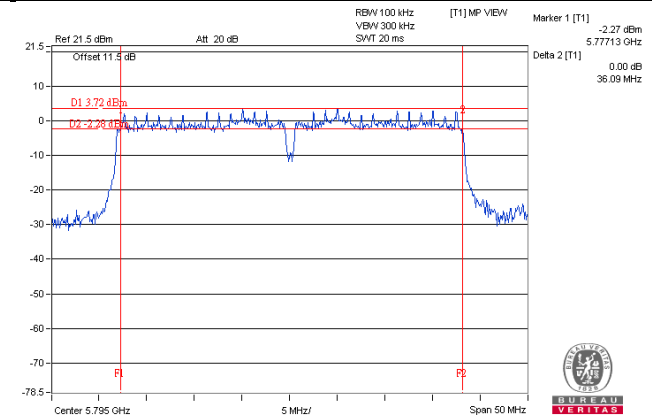
11ac (40MHz) 1S3T TxBF CH159 Chain2



11ac (40MHz) 1S3T TxBF CH151 Chain3

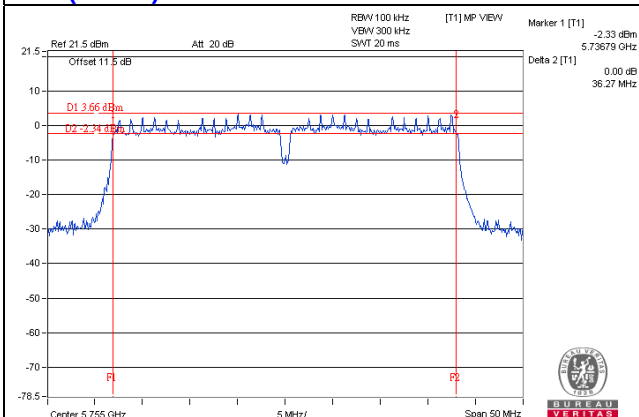


11ac (40MHz) 1S3T TxBF CH159 Chain3

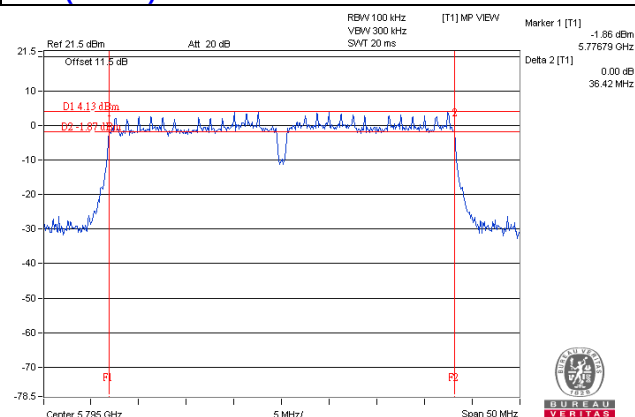


6dB BANDWIDTH SPECTRUM PLOT

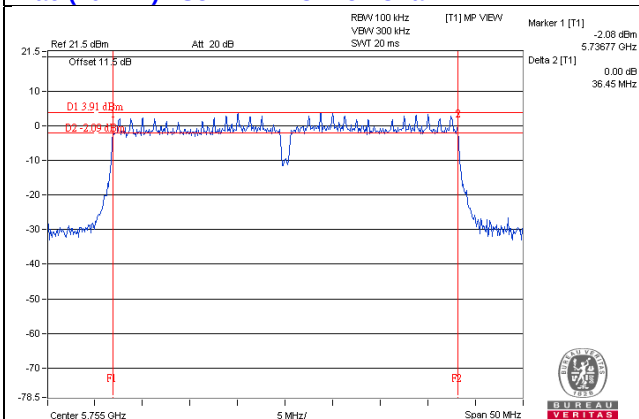
11ac (40MHz) 2S3T TxBF CH151 Chain1



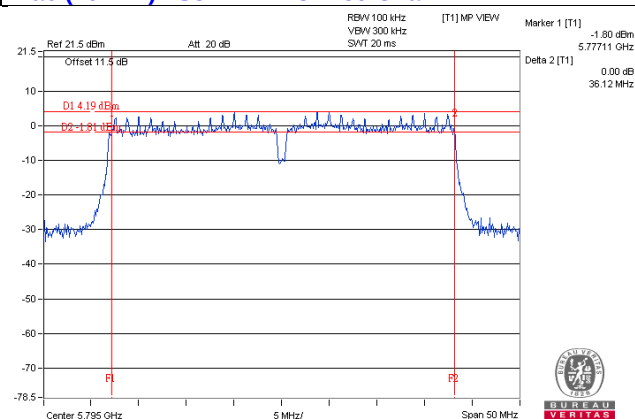
11ac (40MHz) 2S3T TxBF CH159 Chain1



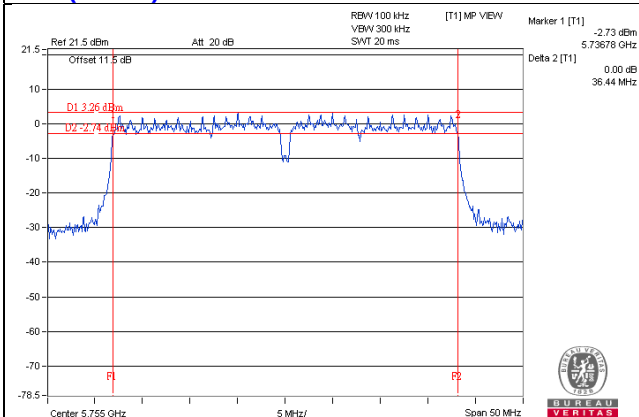
11ac (40MHz) 2S3T TxBF CH151 Chain2



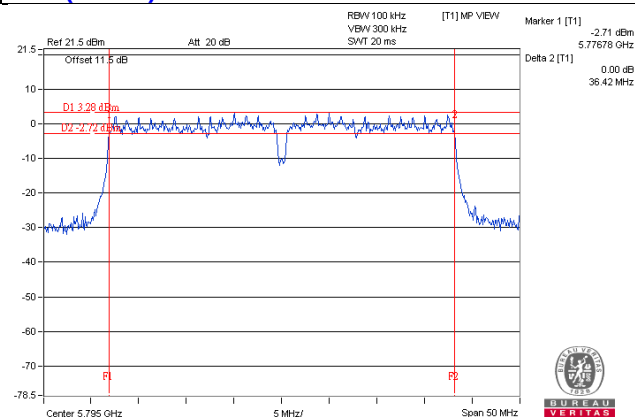
11ac (40MHz) 2S3T TxBF CH159 Chain2



11ac (40MHz) 2S3T TxBF CH151 Chain3

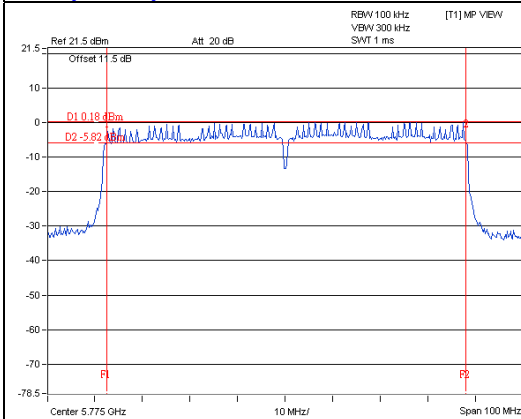


11ac (40MHz) 2S3T TxBF CH159 Chain3

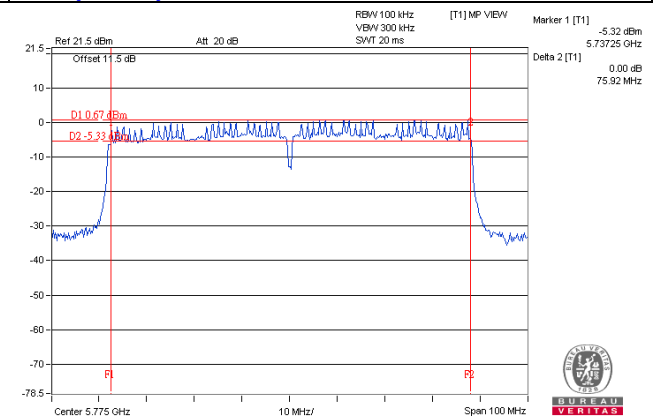


6dB BANDWIDTH SPECTRUM PLOT

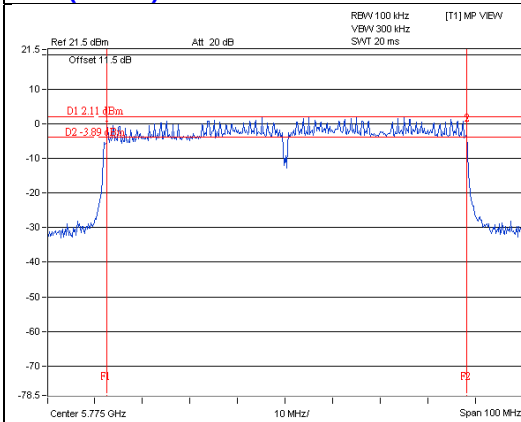
11ac (80MHz) 3S3T SDM CH155 Chain1



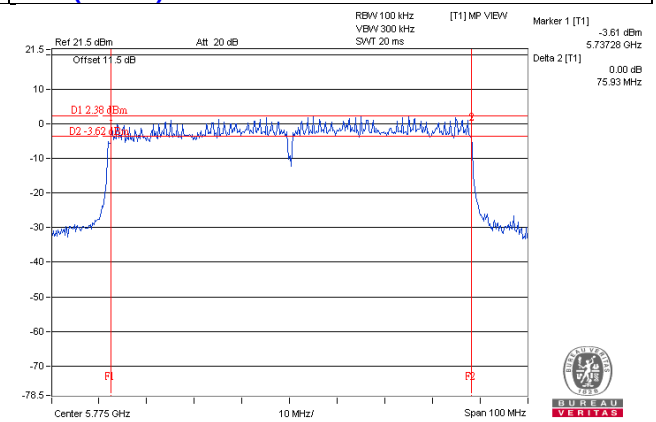
11ac (80MHz) 1S3T TxBF CH155 Chain1



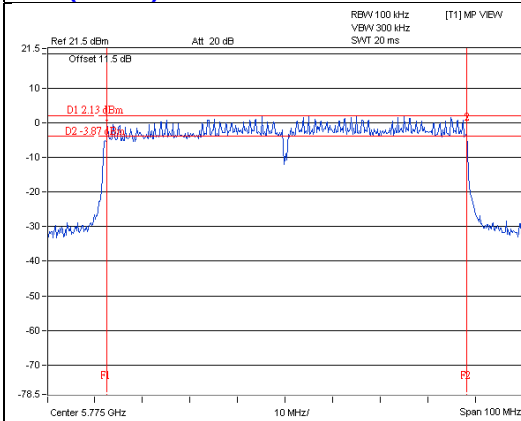
11ac (80MHz) 3S3T SDM CH155 Chain2



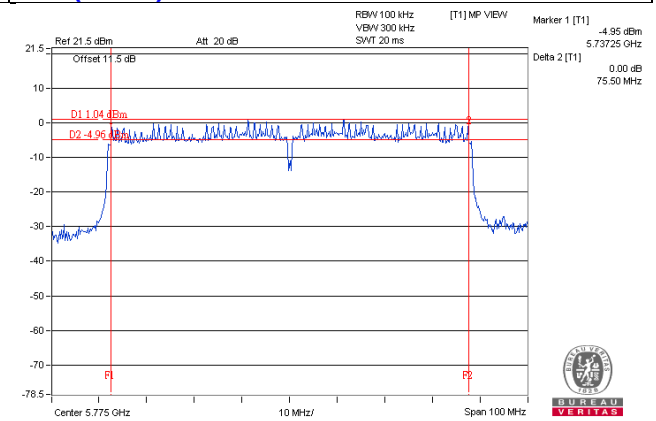
11ac (80MHz) 1S3T TxBF CH155 Chain2



11ac (80MHz) 3S3T SDM CH155 Chain3

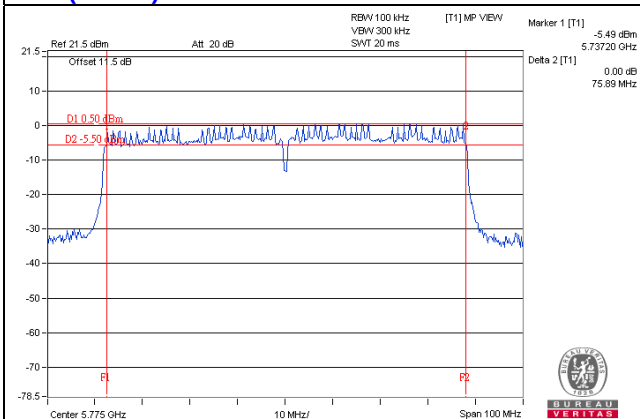


11ac (80MHz) 1S3T TxBF CH155 Chain3

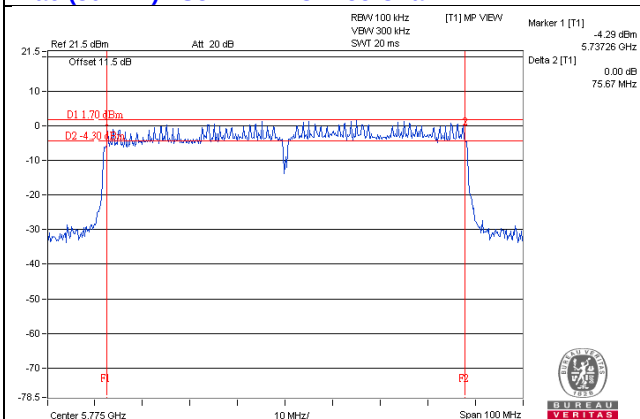


6dB BANDWIDTH SPECTRUM PLOT

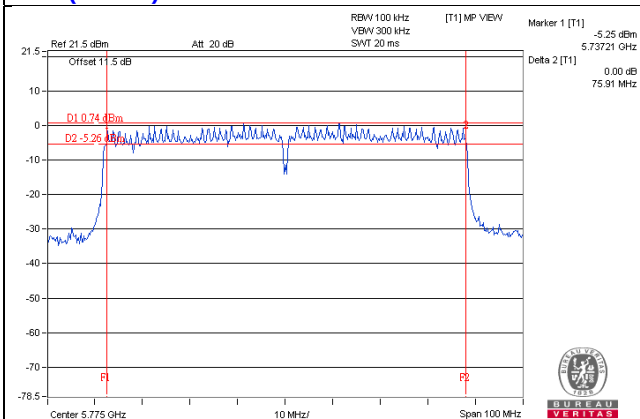
11ac (80MHz) 2S3T TxBF CH155 Chain1



11ac (80MHz) 2S3T TxBF CH155 Chain2



11ac (80MHz) 2S3T TxBF CH155 Chain3



3.8 Maximum Conducted Output Power Measurement

3.8.1 Limit

Operation Band	EUT Category		Limit
U-NII-1		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p $\leq$ 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
		Fixed point-to-point Access Point	1 Watt (30 dBm)
	√	Indoor Access Point	1 Watt (30 dBm)
		Mobile and Portable client device	250mW (24 dBm)
U-NII-2A			250mW (24 dBm) or 11 dBm+10 log B*
U-NII-2C			250mW (24 dBm) or 11 dBm+10 log B*
U-NII-3	√		1 Watt (30 dBm)

*B is the 26 dB emission bandwidth in megahertz

Per KDB 662911 Method of conducted output power measurement on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;

Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT} ;

Array Gain = $5 \log(N_{ANT}/N_{SS})$ dB or 3 dB, whichever is less for 20-MHz channel widths with $N_{ANT} \geq 5$.

For power measurements on all other devices: Array Gain = $10 \log(N_{ANT}/N_{SS})$ dB.

3.8.2 Measuring Instruments and Setting

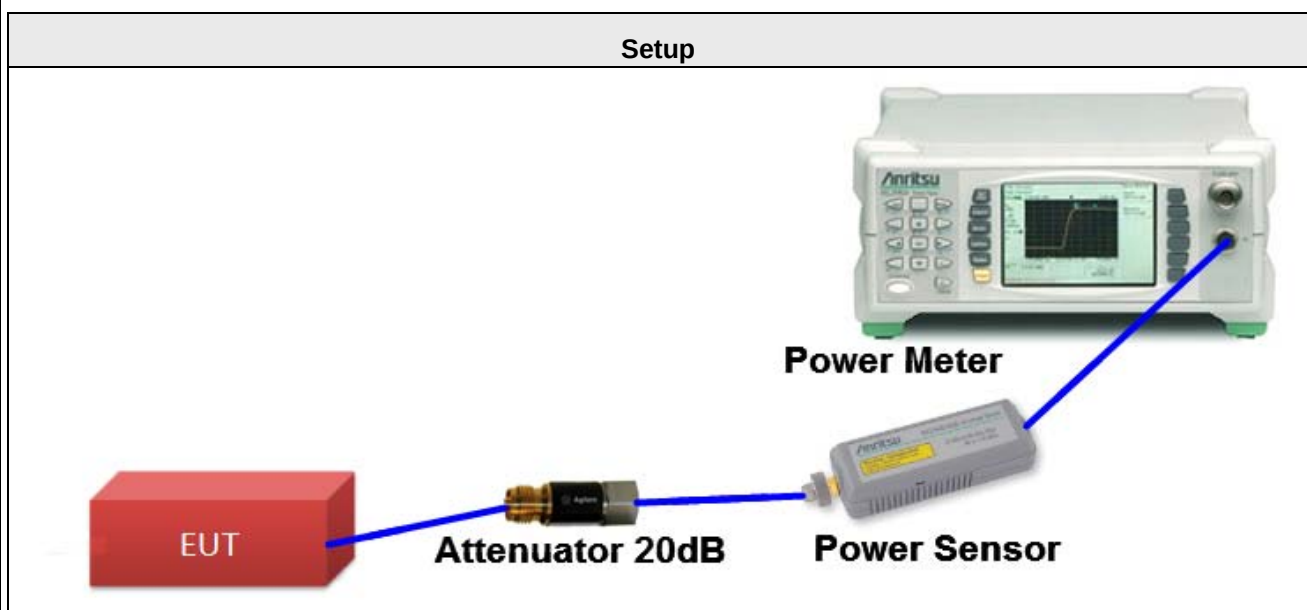
Please refer to section 5 of equipments list in this report. The following table is the setting of the power meter.

Power Meter Parameter	Setting
Filter No.	Auto
Measurement time	8ns
Power Sensor	MA2411B

3.8.3 Test Procedures

- 1 Test was performed in accordance with Measurement of Digital Transmission Systems Operating under 789033 D02 General UNII Test Procedures New Rules v01r04, in section “Maximum conducted output power Method (3)”, 05/02/2017
- 2 The average power sensor was used on the output port of the EUT. A power meter was used to read the response of the average power sensor and enable the trigger function to get the all on time transmission. Record the average power level.
- 3 When measuring maximum conducted output power with multiple antenna systems, add every result of the values by mathematic formula.

3.8.4 Test Setup Layout



3.8.5 Test Deviation

There are no deviations with the original standard.

3.8.6 EUT Operating Conditions

The EUT was programmed to be in continuously transmitting mode.

3.8.7 Test Results of Maximum Conducted Output Power

Temperature	25°C	Humidity	60%
Test Engineer	Leo Tsai		

11a 1S3T CDD

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3				
36	5180 MHz	20.55	20.44	20.12	25.15	4.15	30.00	PASS
40	5200 MHz	15.96	15.75	15.56	20.53	4.31	30.00	PASS
48	5240 MHz	20.16	20.38	20.02	24.96	4.06	30.00	PASS
149	5745 MHz	17.52	18.82	17.85	22.87	4.19	30.00	PASS
157	5785 MHz	18.71	19.66	18.73	23.83	4.39	30.00	PASS
165	5825 MHz	17.28	18.42	17.35	22.49	4.12	30.00	PASS

11ac (20MHz) 3S3T SDM

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3				
36	5180 MHz	18.35	18.71	18.13	23.17	1.77	30.00	PASS
40	5200 MHz	19.73	20.05	19.92	24.67	1.94	30.00	PASS
48	5240 MHz	19.71	20.14	19.80	24.66	1.56	30.00	PASS
149	5745 MHz	20.12	20.96	20.16	25.20	2.40	30.00	PASS
157	5785 MHz	19.96	21.03	20.12	25.17	2.80	30.00	PASS
165	5825 MHz	20.12	21.02	20.06	25.19	2.31	30.00	PASS

11ac (20MHz) 1S3T TxBF

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3				
36	5180 MHz	20.12	20.08	19.62	24.72	6.51	29.49	PASS
40	5200 MHz	15.74	15.61	15.48	20.38	6.33	29.67	PASS
48	5240 MHz	19.92	20.06	19.72	24.67	6.28	29.72	PASS
149	5745 MHz	17.64	17.97	18.23	22.72	7.03	28.97	PASS
157	5785 MHz	18.73	18.95	19.01	23.67	7.53	28.47	PASS
165	5825 MHz	17.21	17.47	17.75	22.25	7.07	28.93	PASS

Note: 1. For 5180MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 6.51\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30-(6.51-6) = 29.49\text{dBm}$.

2. For 5200MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 6.33\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30-(6.33-6) = 29.67\text{dBm}$.

3. For 5240MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 6.28\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30-(6.28-6) = 29.72\text{dBm}$.

4. For 5745MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 7.03\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30-(7.03-6) = 28.97\text{dBm}$.

5. For 5785MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 7.53\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30-(7.53-6) = 28.47\text{dBm}$.

6. For 5825MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 7.07\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30-(7.07-6) = 28.93\text{dBm}$.

11ac (20MHz) 2S3T TxBF

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3				
36	5180 MHz	20.02	19.92	19.58	24.62	4.62	30.00	PASS
40	5200 MHz	17.21	16.73	16.72	21.66	4.80	30.00	PASS
48	5240 MHz	18.02	17.71	17.58	22.55	4.34	30.00	PASS
149	5745 MHz	20.26	20.32	20.28	25.06	4.98	30.00	PASS
157	5785 MHz	19.06	19.38	19.28	24.01	5.24	30.00	PASS
165	5825 MHz	19.05	19.48	19.31	24.05	4.75	30.00	PASS

11ac (40MHz) 3S3T SDM

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3				
38	5190 MHz	13.94	14.72	13.92	18.98	1.75	30.00	PASS
46	5230 MHz	19.04	19.62	19.26	24.08	2.48	30.00	PASS
151	5755 MHz	18.01	18.96	18.02	23.12	2.43	30.00	PASS
159	5795 MHz	18.02	18.88	18.06	23.11	2.94	30.00	PASS

11ac (40MHz) 1S3T TxBF

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3				
38	5190 MHz	15.48	15.02	15.18	20.00	6.13	29.87	PASS
46	5230 MHz	19.58	19.54	19.16	24.20	7.13	28.87	PASS
151	5755 MHz	18.02	18.48	18.18	23.00	7.17	28.83	PASS
159	5795 MHz	18.04	18.52	18.16	23.02	7.64	28.36	PASS

- Note: 1. For 5190MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 6.13\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (6.13 - 6) = 29.87\text{dBm}$.
2. For 5230MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 7.13\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (7.13 - 6) = 28.87\text{dBm}$.
4. For 5755MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 7.17\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (7.17 - 6) = 28.83\text{dBm}$.
5. For 5795MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 7.64\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (7.64 - 6) = 28.36\text{dBm}$.

11ac (40MHz) 2S3T TxBF

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3				
38	5190 MHz	14.92	14.48	14.31	19.35	4.58	30.00	PASS
46	5230 MHz	19.52	19.01	19.13	24.00	5.07	30.00	PASS
151	5755 MHz	18.02	18.04	18.01	22.79	4.88	30.00	PASS
159	5795 MHz	18.02	18.11	18.01	22.82	5.42	30.00	PASS

11ac (80MHz) 3S3T SDM

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3				
42	5210	12.24	12.94	12.38	17.30	2.36	30.00	PASS
155	5775	17.62	19.06	17.72	22.96	2.53	30.00	PASS

11ac (80MHz) 1S3T TxBF

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3				
42	5210	12.76	12.38	12.48	17.31	7.02	28.98	PASS
155	5775	17.76	18.42	17.78	22.77	7.26	28.74	PASS

Note: 1. For 5210MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 7.02\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30-(7.02-6) = 28.98\text{dBm}$.
2. For 5775MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 7.26\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30-(7.26-6) = 28.74\text{dBm}$.

11ac (80MHz) 2S3T TxBF

Channel	Frequency	Conducted Power (dBm)			Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3				
42	5210	14.52	13.96	13.98	18.93	4.92	30.00	PASS
155	5775	17.65	18.18	17.72	22.63	5.02	30.00	PASS

3.9 Power Spectral Density Measurement

3.9.1 Limit

Operation Band	EUT Category		Limit
U-NII-1		Outdoor Access Point	17dBm/ MHz
		Fixed point-to-point Access Point	
	√	Indoor Access Point	
		Mobile and Portable client device	11dBm/ MHz
U-NII-2A			11dBm/ MHz
U-NII-2C			11dBm/ MHz
U-NII-3	√		30dBm/ 500kHz (27.78 dBm/300kHz)

Note: $23.01\text{dBm}/100\text{kHz} = 30\text{dBm}/500\text{kHz} - 10\log\left(\frac{500\text{kHz}}{100\text{kHz}}\right)$

3.9.2 Measuring Instruments and Setting

Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

Spectrum Parameter Setting	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RBW	1 MHz
VBW	≥ 3 MHz
Detector	RMS
Trace	Average
Sweep Time	Auto, trigger set to "free run"
Trace average	100 times

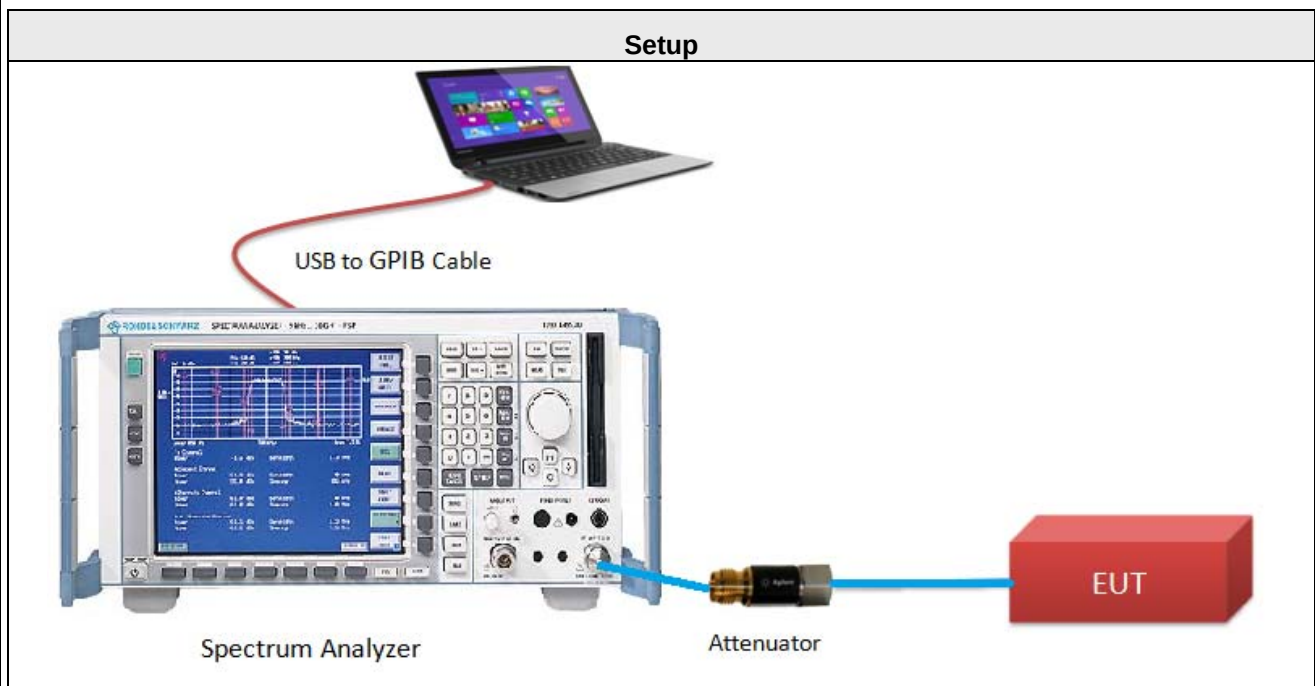
For U-NII-3 band:

Spectrum Parameter Setting	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RBW	300kHz
VBW	≥ 3 RBW
Detector	RMS
Trace	Average
Sweep Time	Auto, trigger set to "free run"
Trace average	100 times

3.9.3 Test Procedure

- 1 The transmitter output (antenna port) was connected RF switch to the spectrum analyzer.
- 2 For U-NII-1, U-NII-2A & U-NII-2C Bands, PSD Measure was performed in accordance with 789033 D02 General UNII Test Procedures New Rules v01r04, in section "Maximum conducted output power (E)(2)(d) Method SA-2", 05/02/2017.
- 3 For U-NII-3 Band, PSD Measure was performed in accordance with 789033 D02 General UNII Test Procedures New Rules v01r04, in section "Maximum Power Spectral Density (F)(5)", 05/02/2017
- 4 Multiple antenna systems was performed in accordance 662911 D01 Multiple Transmitter Output v02r01 in-Band Power Spectral Density (PSD) Measurements (a) Measure and sum the spectra across the outputs (bin-by-bin summing).
- 5 When measuring first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3 and so on up to the Nth output to obtain the value for the first
- 6 Frequency bin of the summed spectrum. The summed spectrum value for each of the other frequency bins is computed in the same way.

3.9.4 Test Setup Layout



3.9.5 Test Deviation

There are no deviations with the original standard.

3.9.6 EUT Operating Conditions

The EUT was programmed to be in continuously transmitting mode.

3.9.7 Test Results

Temperature	25°C	Humidity	60%
Test Engineer	Leo Tsai		

11a 1S3T CDD

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Duty Factor (dB)	Total PSD with duty factor (dBm/MHz)	Directional Gain(dBi)	MAX. Limit (dBm/MHz)	Result
36	5180	11.96	0.12	12.08	6.51	16.49	Pass
40	5200	7.60	0.12	7.72	6.33	16.67	Pass
48	5240	12.08	0.12	12.20	6.28	16.72	Pass

- Note:
1. Total PSD (dBm/MHz) = PSD(dBm/MHz) + Duty Factor (dB)
 2. For 5180MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 6.51\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $17-(6.51-6) = 16.49\text{dBm}$.
 3. For 5200MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 6.33\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $17-(6.33-6) = 16.67\text{dBm}$.
 4. For 5240MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 6.28\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $17-(6.28-6) = 16.72\text{dBm}$.

Chan.	Chan. Freq. (MHz)	Total PSD (dBm/300kHz)	Duty Factor (dB)	Total PSD with Duty Factor (dBm/300kHz)	Total PSD with Duty Factor (dBm/500kHz)	Directional Gain(dBi)	MAX. Limit (dBm/500kHz)	Result
149	5745	-0.85	0.12	-0.73	1.49	7.03	28.97	Pass
157	5785	0.16	0.12	0.28	2.50	7.53	28.47	Pass
165	5825	-0.84	0.12	-0.72	1.50	7.07	28.93	Pass

- Note:
1. Total PSD (dBm/500kHz) = PSD(dBm/300kHz) + 2.22dB+ Duty Factor (dB)
 2. For 5745MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 7.03\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $30-(7.03-6) = 28.97\text{dBm}$.
 3. For 5785MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 7.53\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $30-(7.53-6) = 28.47\text{dBm}$.
 4. For 5825MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 7.07\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $30-(7.07-6) = 28.93\text{dBm}$.

11ac (20MHz) 3S3T SDM

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Duty Factor (dB)	Total PSD with duty factor (dBm/MHz)	Directional Gain(dBi)	MAX. Limit (dBm/MHz)	Result
36	5180	10.16	0.13	10.29	1.77	17.00	Pass
40	5200	11.65	0.13	11.78	1.94	17.00	Pass
48	5240	11.82	0.13	11.95	1.56	17.00	Pass

- Note:
1. Total PSD (dBm/MHz) = PSD(dBm/MHz) + Duty Factor (dB)
 2. For 5180MHz: Directional gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10})/3] = 1.77\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.
 3. For 5200MHz: Directional gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10})/3] = 1.94\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.
 4. For 5240MHz: Directional gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10})/3] = 1.56\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.

Chan.	Chan. Freq. (MHz)	Total PSD (dBm/300kHz)	Duty Factor (dB)	Total PSD with Duty Factor (dBm/300kHz)	Total PSD with Duty Factor (dBm/500kHz)	Directional Gain(dBi)	MAX. Limit (dBm/500kHz)	Result
149	5745	1.48	0.13	1.61	3.83	2.40	30.00	Pass
157	5785	1.56	0.13	1.69	3.91	2.80	30.00	Pass
165	5825	1.74	0.13	1.87	4.09	2.31	30.00	Pass

- Note:
1. Total PSD (dBm/500kHz) = PSD(dBm/300kHz) + 2.22dB+ Duty Factor (dB)
 2. For 5745MHz: Directional gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10})/3] = 2.40\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.
 3. For 5785MHz: Directional gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10})/3] = 2.80\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.
 4. For 5825MHz: Directional gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10})/3] = 2.31\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.

11ac (20MHz) 1S3T TxBF

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Duty Factor (dB)	Total PSD with duty factor (dBm/MHz)	Directional Gain(dBi)	MAX. Limit (dBm/MHz)	Result
36	5180	12.28	0.00	12.28	6.51	16.49	Pass
40	5200	7.50	0.00	7.50	6.33	16.67	Pass
48	5240	11.91	0.00	11.91	6.28	16.72	Pass

- Note: 1. Total PSD (dBm/MHz) = PSD(dBm/MHz) + Duty Factor (dB).
2. For 5180MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 6.51\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $17-(6.51-6) = 16.49\text{dBm}$.
3. For 5200MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 6.33\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $17-(6.33-6) = 16.67\text{dBm}$.
4. For 5240MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 6.28\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $17-(6.28-6) = 16.72\text{dBm}$.

Chan.	Chan. Freq. (MHz)	Total PSD (dBm/300kHz)	Duty Factor (dB)	Total PSD with Duty Factor (dBm/300kHz)	Total PSD with Duty Factor (dBm/500kHz)	Directional Gain(dBi)	MAX. Limit (dBm/500kHz)	Result
149	5745	0.31	0.00	2.53	2.53	7.03	28.97	Pass
157	5785	1.31	0.00	3.53	3.53	7.53	28.47	Pass
165	5825	-0.20	0.00	2.02	2.02	7.07	28.93	Pass

- Note: 1. Total PSD (dBm/500kHz) = PSD(dBm/300kHz) + 2.22dB+ Duty Factor (dB).
2. For 5745MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 7.03\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $30-(7.03-6) = 28.97\text{dBm}$.
3. For 5785MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 7.53\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $30-(7.53-6) = 28.47\text{dBm}$.
4. For 5825MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 7.07\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $30-(7.07-6) = 28.93\text{dBm}$.

11ac (20MHz) 2S3T TxBF

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Duty Factor (dB)	Total PSD with duty factor (dBm/MHz)	Directional Gain(dBi)	MAX. Limit (dBm/MHz)	Result
36	5180	11.78	0.00	11.78	4.62	17.00	Pass
40	5200	8.80	0.00	8.80	4.80	17.00	Pass
48	5240	11.22	0.00	11.22	4.34	17.00	Pass

- Note:
1. Total PSD (dBm/MHz) = PSD(dBm/MHz) + Duty Factor (dB).
 2. For 5180MHz: Directional gain = 4.62dBi < 6dBi, so the power density limit shall not be reduced.
 3. For 5200MHz: Directional gain = 4.80dBi < 6dBi, so the power density limit shall not be reduced.
 4. For 5240MHz: Directional gain = 4.34dBi < 6dBi, so the power density limit shall not be reduced.

Chan.	Chan. Freq. (MHz)	Total PSD (dBm/300kHz)	Duty Factor (dB)	Total PSD with Duty Factor (dBm/300kHz)	Total PSD with Duty Factor (dBm/500kHz)	Directional Gain(dBi)	MAX. Limit (dBm/500kHz)	Result
149	5745	2.31	0.00	4.53	4.53	4.98	30.00	Pass
157	5785	1.33	0.00	3.55	3.55	5.24	30.00	Pass
165	5825	1.63	0.00	3.85	3.85	4.75	30.00	Pass

- Note:
1. Total PSD (dBm/500kHz) = PSD(dBm/300kHz) + 2.22dB+ Duty Factor (dB).
 2. For 5745MHz: Directional gain = 4.98dBi < 6dBi, so the power density limit shall not be reduced.
 3. For 5785MHz: Directional gain = 5.24dBi < 6dBi, so the power density limit shall not be reduced.
 4. For 5825MHz: Directional gain = 4.75dBi < 6dBi, so the power density limit shall not be reduced.

11ac (40MHz) 3S3T SDM

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Duty Factor (dB)	Total PSD with duty factor (dBm/MHz)	Directional Gain(dBi)	MAX. Limit (dBm/MHz)	Result
38	5190	3.37	0.24	3.61	1.75	17.00	Pass
46	5230	8.52	0.24	8.76	2.48	17.00	Pass

- Note:
1. Total PSD (dBm/MHz) = PSD(dBm/MHz) + Duty Factor (dB)
 2. For 5190MHz: Directional gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10})/3] = 1.75\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.
 3. For 5230MHz: Directional gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10})/3] = 2.48\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.

Chan.	Chan. Freq. (MHz)	Total PSD (dBm/300kHz)	Duty Factor (dB)	Total PSD with Duty Factor (dBm/300kHz)	Total PSD with Duty Factor (dBm/500kHz)	Directional Gain(dBi)	MAX. Limit (dBm/500kHz)	Result
151	5755	-3.65	0.24	-3.41	-1.19	2.43	30.00	Pass
159	5795	-3.33	0.24	-3.09	-0.87	2.94	30.00	Pass

- Note:
1. Total PSD (dBm/500kHz) = PSD(dBm/300kHz) + 2.22dB+ Duty Factor (dB)
 2. For 5755MHz: Directional gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10})/3] = 2.43\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.
 3. For 5795MHz: Directional gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10})/3] = 2.94\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.

11ac (40MHz) 1S3T TxBF

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Duty Factor (dB)	Total PSD with duty factor (dBm/MHz)	Directional Gain(dBi)	MAX. Limit (dBm/MHz)	Result
38	5190	4.64	0.10	4.74	6.13	16.87	Pass
46	5230	8.75	0.10	8.85	7.13	15.87	Pass

Note: 1. Total PSD (dBm/MHz) = PSD(dBm/MHz) + Duty Factor (dB)

2. For 5190MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 6.13\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $17-(6.13-6) = 16.87\text{dBm}$.

3. For 5230MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 7.13\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $17-(7.13-6) = 15.87\text{dBm}$.

Chan.	Chan. Freq. (MHz)	Total PSD (dBm/300kHz)	Duty Factor (dB)	Total PSD with Duty Factor (dBm/300kHz)	Total PSD with Duty Factor (dBm/500kHz)	Directional Gain(dBi)	MAX. Limit (dBm/500kHz)	Result
151	5755	-2.96	0.10	-2.86	-0.64	7.17	28.83	Pass
159	5795	-2.57	0.10	-2.47	-0.25	7.64	28.36	Pass

Note: 1. Total PSD (dBm/500kHz) = PSD(dBm/300kHz) + 2.22dB+ Duty Factor (dB)

2. For 5755MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 7.17\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $30-(7.17-6) = 28.83\text{dBm}$.

3. For 5795MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 7.64\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $30-(7.64-6) = 28.36\text{dBm}$.

11ac (40MHz) 2S3T TxBF

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Duty Factor (dB)	Total PSD with duty factor (dBm/MHz)	Directional Gain(dBi)	MAX. Limit (dBm/MHz)	Result
38	5190	4.06	0.18	4.24	4.58	17.00	Pass
46	5230	8.73	0.18	8.91	5.07	17.00	Pass

- Note:
1. Total PSD (dBm/MHz) = PSD(dBm/MHz) + Duty Factor (dB)
 2. For 5190MHz: Directional gain = 4.58dBi < 6dBi, so the power density limit shall not be reduced.
 3. For 5230MHz: Directional gain = 5.07dBi < 6dBi, so the power density limit shall not be reduced.

Chan.	Chan. Freq. (MHz)	Total PSD (dBm/300kHz)	Duty Factor (dB)	Total PSD with Duty Factor (dBm/300kHz)	Total PSD with Duty Factor (dBm/500kHz)	Directional Gain(dBi)	MAX. Limit (dBm/500kHz)	Result
151	5755	-2.93	0.18	-2.75	-0.53	4.88	30.00	Pass
159	5795	-2.64	0.18	-2.46	-0.24	5.42	30.00	Pass

- Note:
1. Total PSD (dBm/500kHz) = PSD(dBm/300kHz) + 2.22dB+ Duty Factor (dB)
 2. For 5755MHz: Directional gain = 4.88dBi < 6dBi, so the power density limit shall not be reduced.
 3. For 5795MHz: Directional gain = 5.42dBi < 6dBi, so the power density limit shall not be reduced.

11ac (80MHz) 3S3T SDM

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Duty Factor (dB)	Total PSD with duty factor (dBm/MHz)	Directional Gain(dBi)	MAX. Limit (dBm/MHz)	Result
42	5210	-1.31	0.57	-0.74	2.36	17.00	Pass

- Note:
1. Total PSD (dBm/MHz) = PSD(dBm/MHz) + Duty Factor (dB)
 2. For 5210MHz: Directional gain = $10 \log[(10^{G^1/10} + 10^{G^2/10} + \dots + 10^{G^N/10})/3] = 2.36\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.

Chan.	Chan. Freq. (MHz)	Total PSD (dBm/300kHz)	Duty Factor (dB)	Total PSD with Duty Factor (dBm/300kHz)	Total PSD with Duty Factor (dBm/500kHz)	Directional Gain(dBi)	MAX. Limit (dBm/500kHz)	Result
155	5775	-7.01	0.57	-6.44	-4.22	2.53	30.00	Pass

- Note:
1. Total PSD (dBm/500kHz) = PSD(dBm/300kHz) + 2.22dB+ Duty Factor (dB)
 2. For 5775MHz: Directional gain = $10 \log[(10^{G^1/10} + 10^{G^2/10} + \dots + 10^{G^N/10})/3] = 2.53\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.

11ac (80MHz) 1S3T TxBF

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Duty Factor (dB)	Total PSD with duty factor (dBm/MHz)	Directional Gain(dBi)	MAX. Limit (dBm/MHz)	Result
42	5210	-1.16	0.28	-0.88	7.02	15.98	Pass

- Note:
1. Total PSD (dBm/MHz) = PSD(dBm/MHz) + Duty Factor (dB)
 2. For 5210MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 7.02\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $17-(7.02-6) = 15.98\text{dBm}$.

Chan.	Chan. Freq. (MHz)	Total PSD (dBm/ 300kHz)	Duty Factor (dB)	Total PSD with Duty Factor (dBm/300kHz)	Total PSD with Duty Factor (dBm/500kHz)	Directional Gain(dBi)	MAX. Limit (dBm/500kHz)	Result
155	5775	-6.16	0.28	-5.88	-3.66	7.26	28.74	Pass

- Note:
1. Total PSD (dBm/500kHz) = PSD(dBm/300kHz) + 2.22dB+ Duty Factor (dB)
 2. For 5775MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 7.26\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $30-(7.26-6) = 28.74\text{dBm}$.

11ac (80MHz) 2S3T TxBF

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Duty Factor (dB)	Total PSD with duty factor (dBm/MHz)	Directional Gain(dBi)	MAX. Limit (dBm/MHz)	Result
42	5210	0.77	0.34	1.11	4.92	17.00	Pass

Note: 1. Total PSD (dBm/MHz) = PSD(dBm/MHz) + Duty Factor (dB)

2. For 5210MHz: Directional gain = 4.92dBi < 6dBi, so the power density limit shall not be reduced.

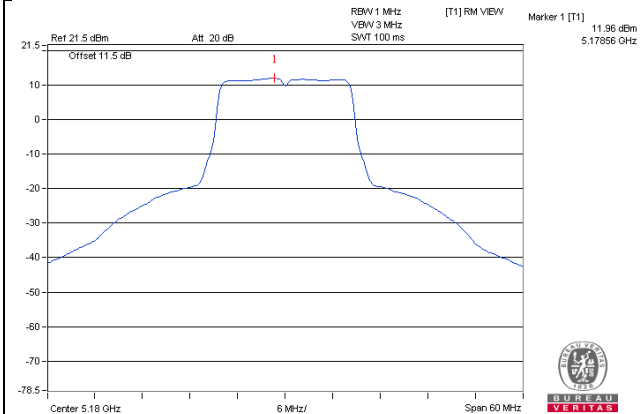
Chan.	Chan. Freq. (MHz)	Total PSD (dBm/ 300kHz)	Duty Factor (dB)	Total PSD with Duty Factor (dBm/300kHz)	Total PSD with Duty Factor (dBm/500kHz)	Directional Gain(dBi)	MAX. Limit (dBm/500kHz)	Result
155	5775	-5.69	0.34	-5.35	-3.13	5.02	30.00	Pass

Note: 1. Total PSD (dBm/500kHz) = PSD(dBm/300kHz) + 2.22dB+ Duty Factor (dB)

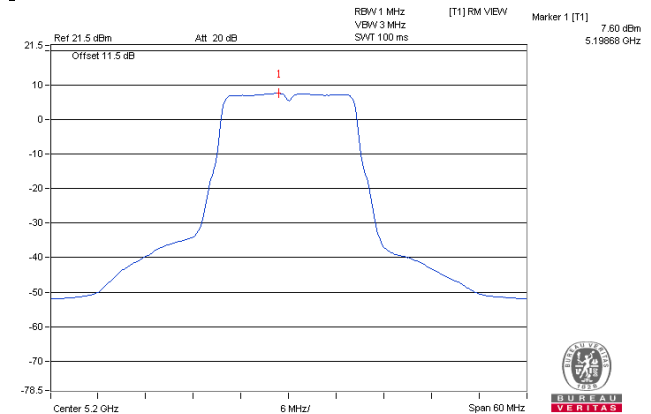
2. For 5775MHz: Directional gain = 5.02dBi < 6dBi, so the power density limit shall not be reduced.

PSD SPECTRUM PLOT

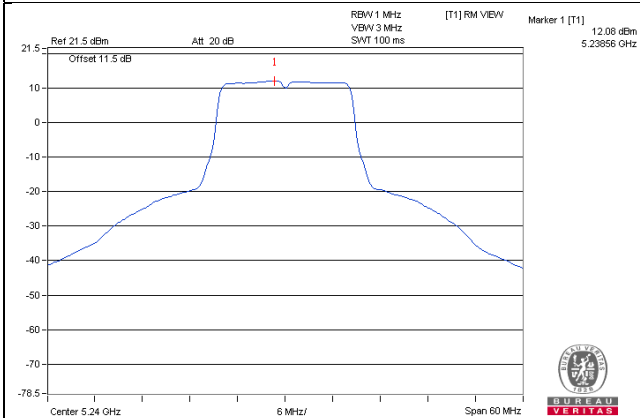
11a 1S3T CDD CH36



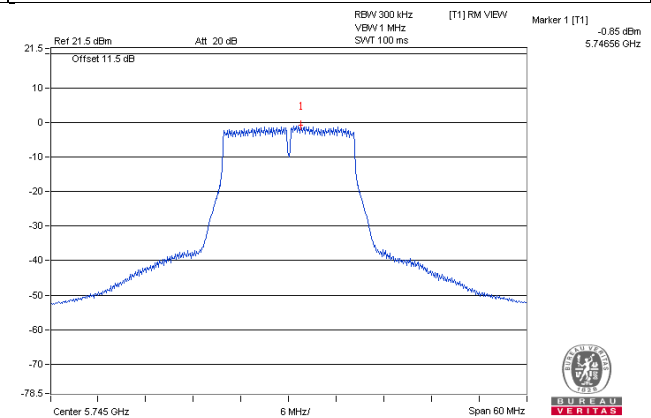
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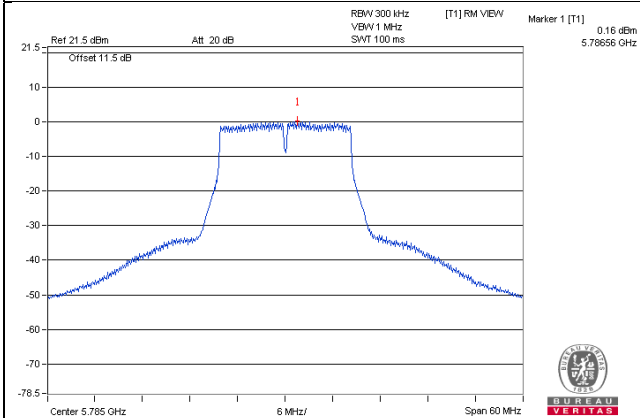
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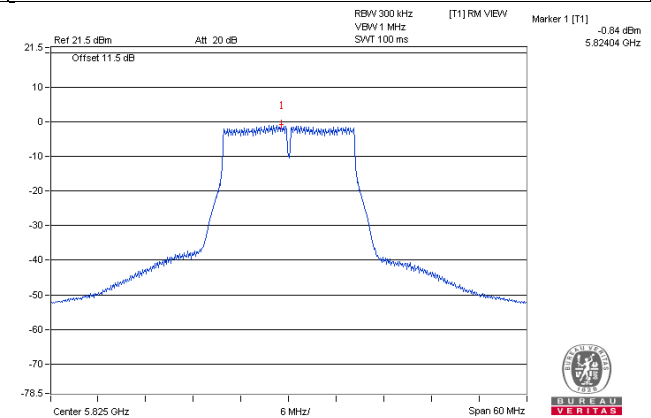
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11a 1S3T CDD CH157

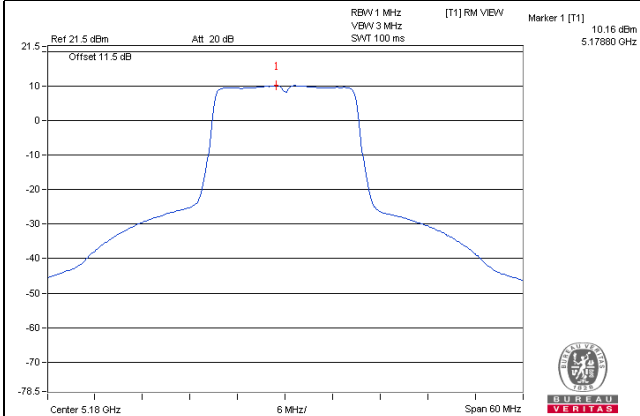


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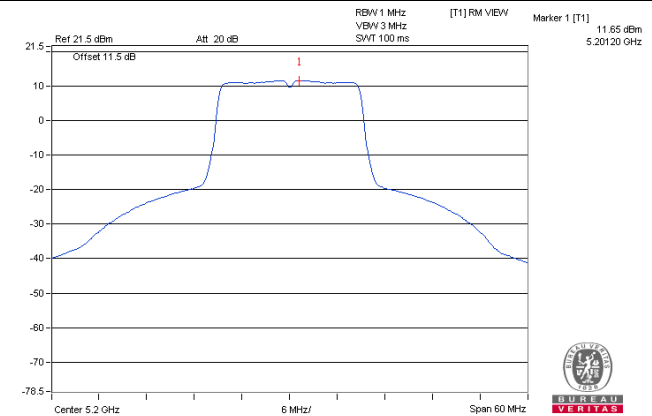


PSD SPECTRUM PLOT

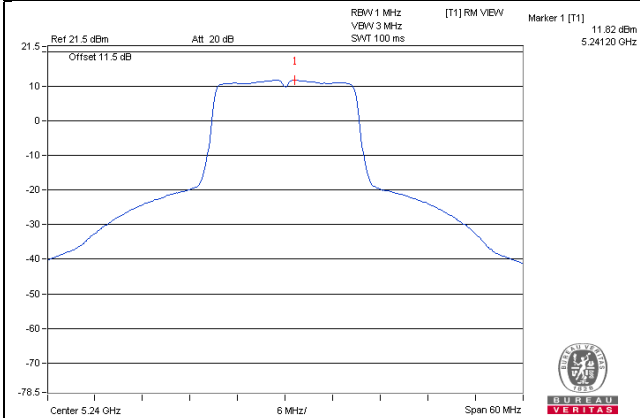
11ac (20MHz) 3S3T SDM CH36



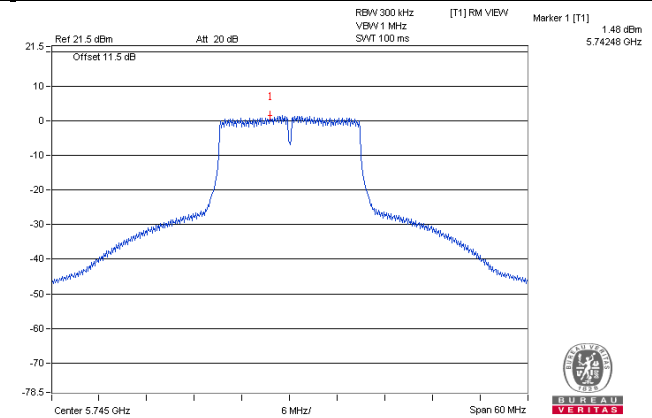
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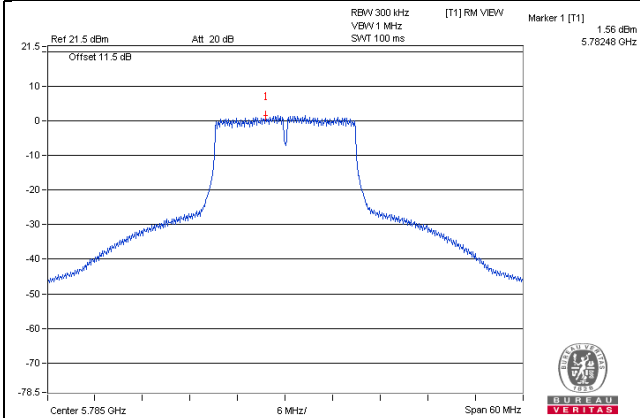
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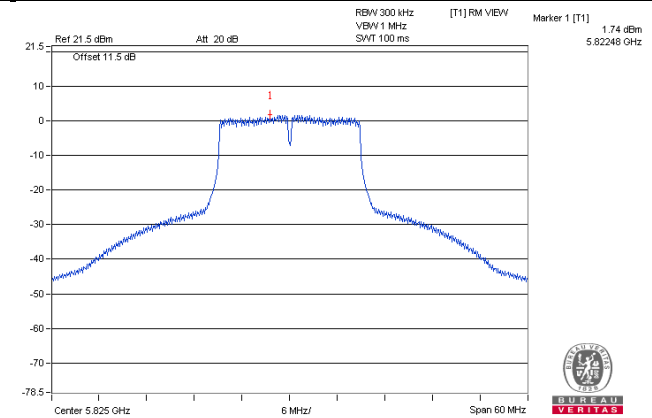
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11ac (20MHz) 3S3T SDM CH157

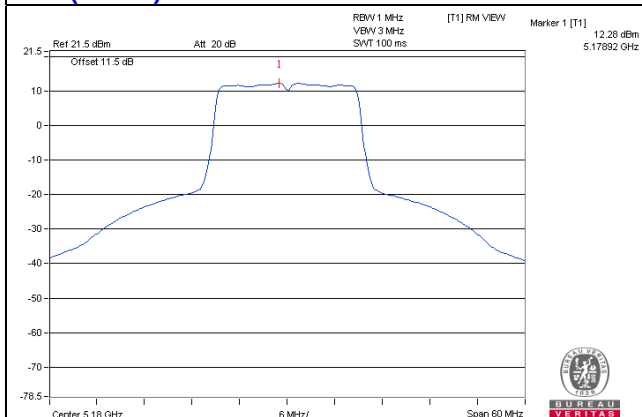


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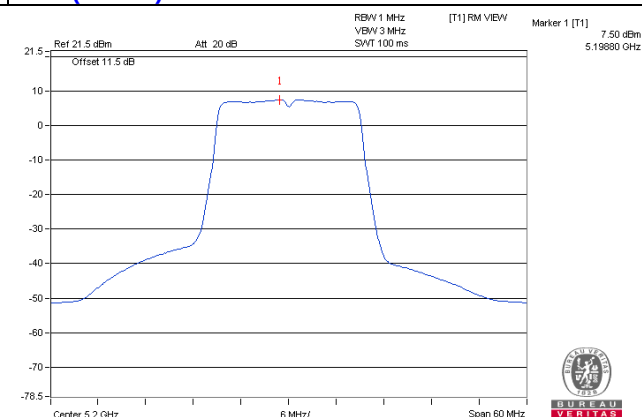


PSD SPECTRUM PLOT

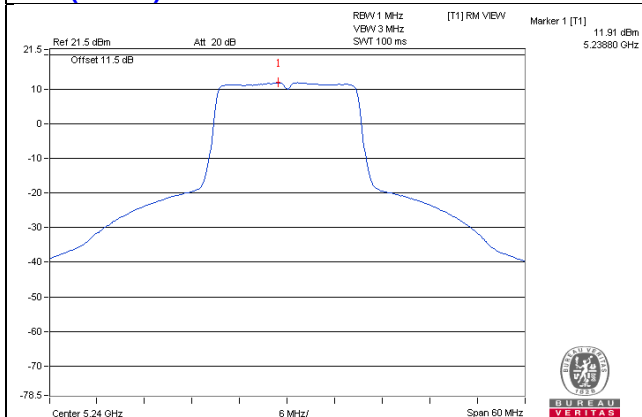
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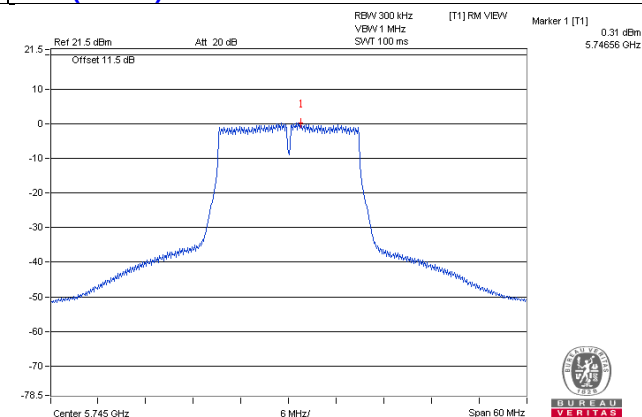
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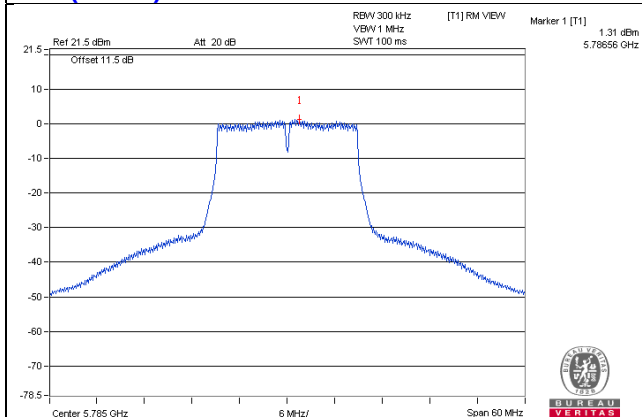
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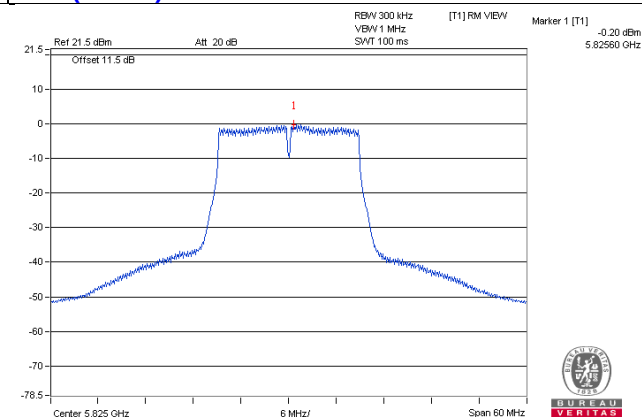
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11ac (20MHz) 1S3T TXBF CH157

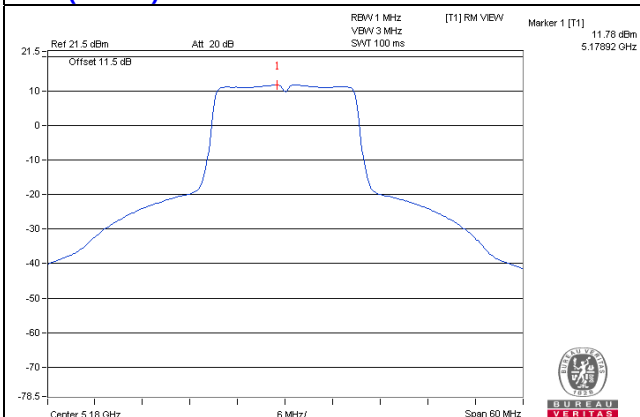


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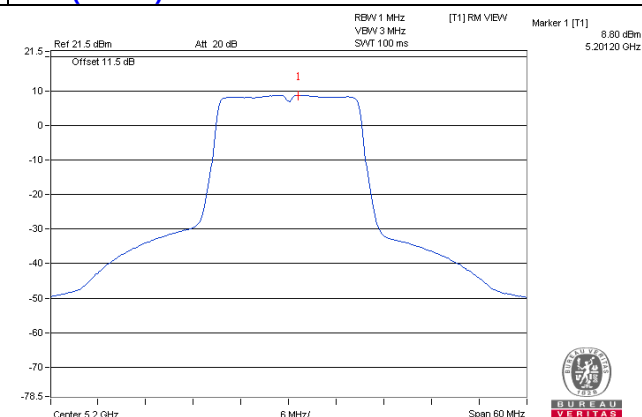


PSD SPECTRUM PLOT

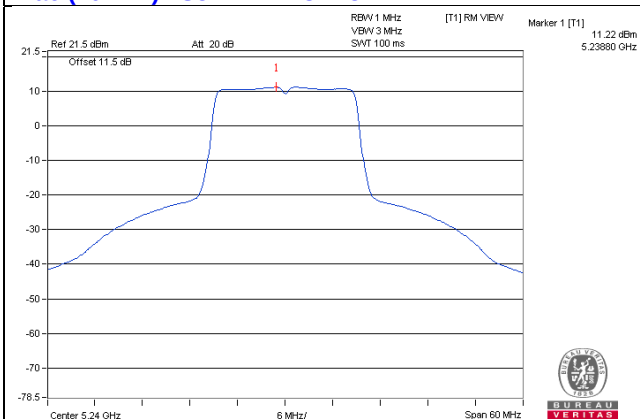
11ac (20MHz) 2S3T TXBF CH36



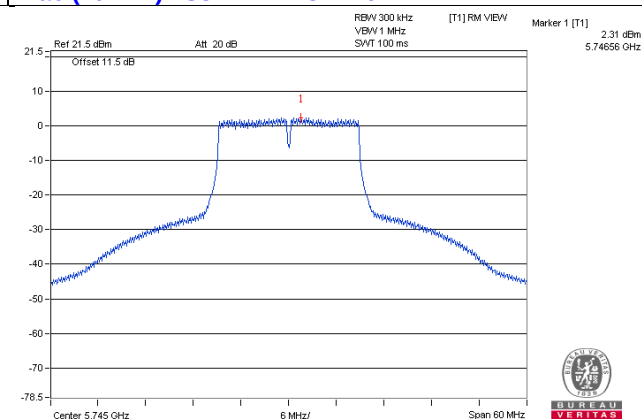
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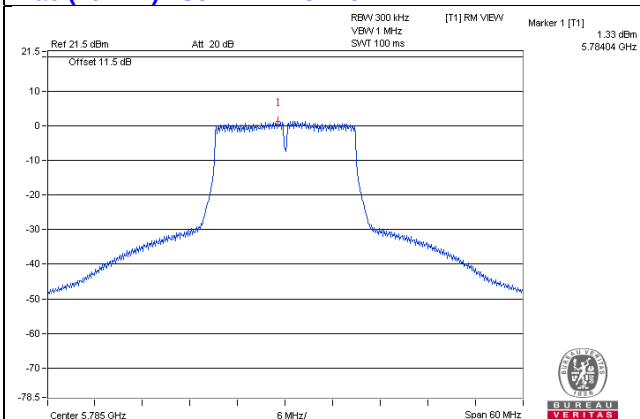
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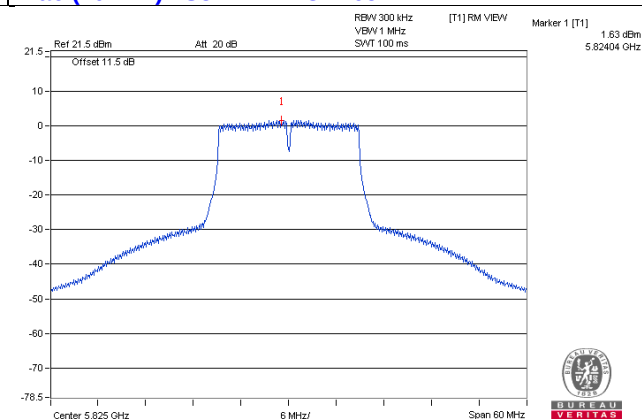
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11ac (20MHz) 2S3T TXBF CH157

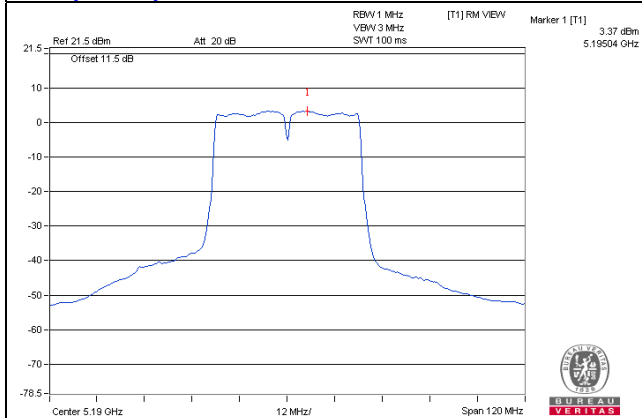


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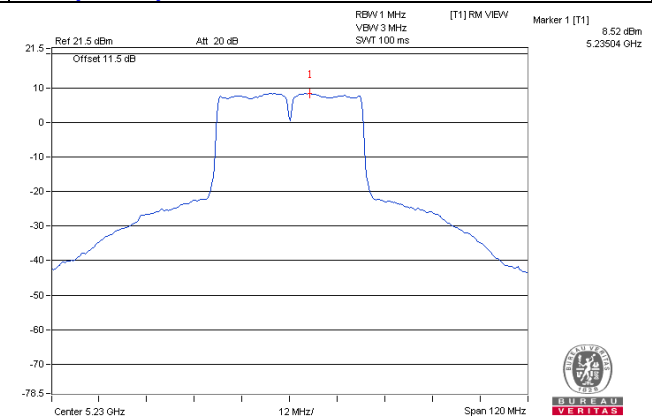


PSD SPECTRUM PLOT

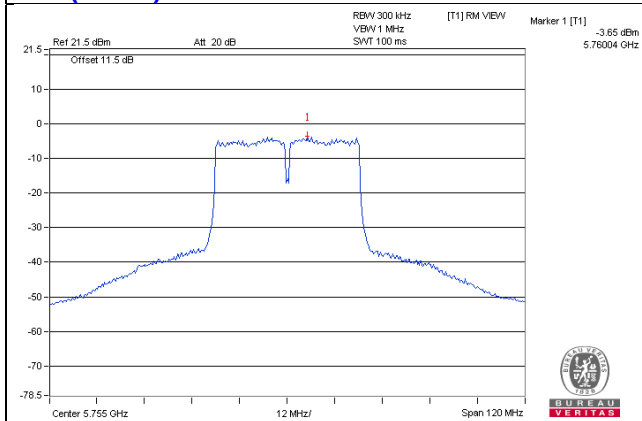
11ac (40MHz) 3S3T SDM CH38



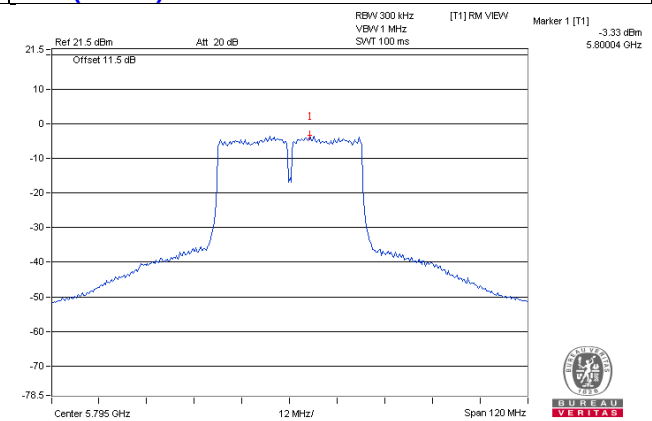
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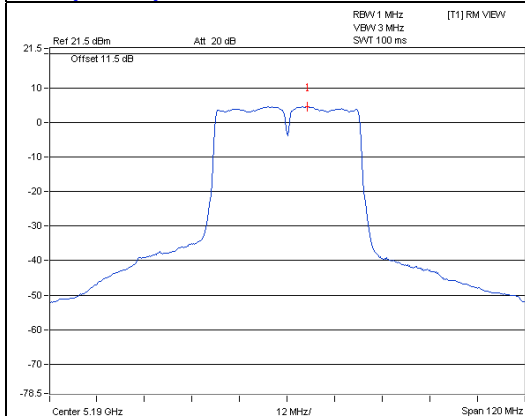


11ac (40MHz) 3S3T SDM CH159

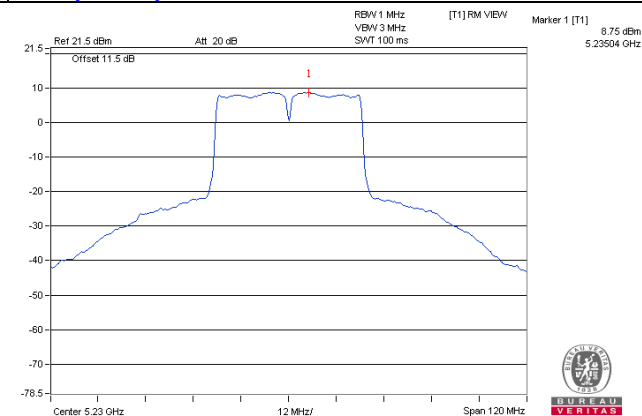


PSD SPECTRUM PLOT

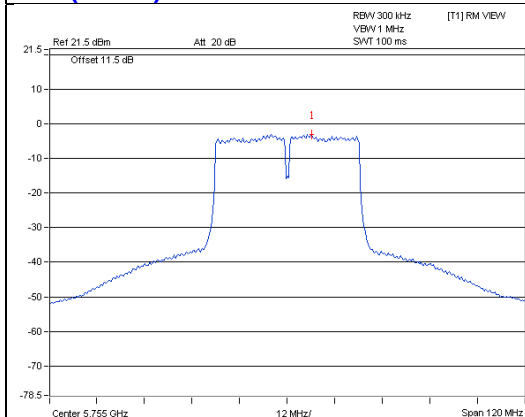
11ac (40MHz) 1S3T TXBF CH38



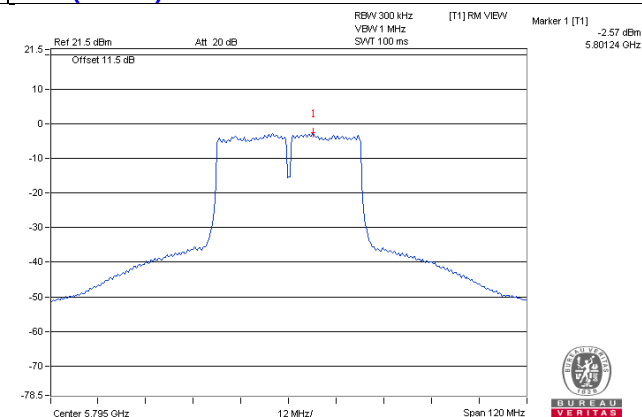
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11ac (40MHz) 1S3T TXBF CH151

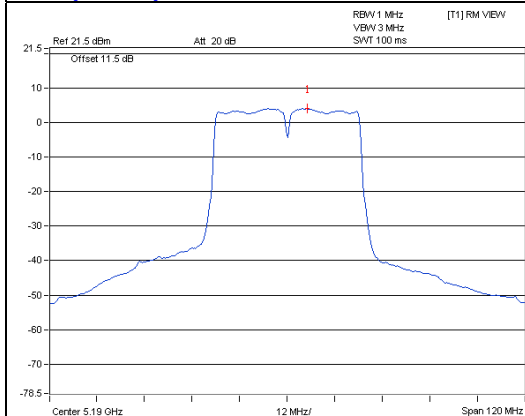


11ac (40MHz) 1S3T TXBF CH159

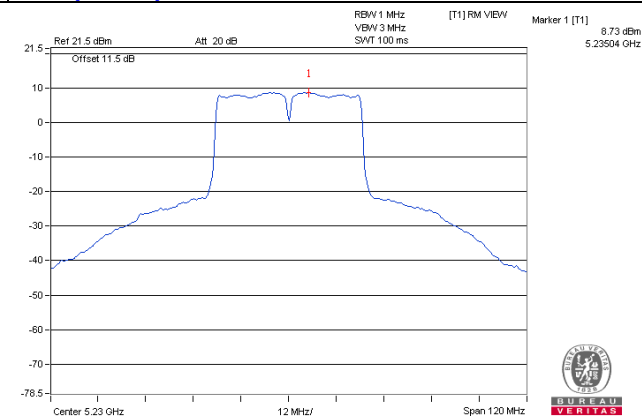


PSD SPECTRUM PLOT

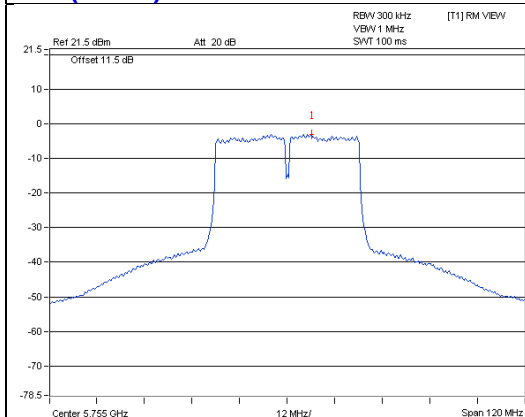
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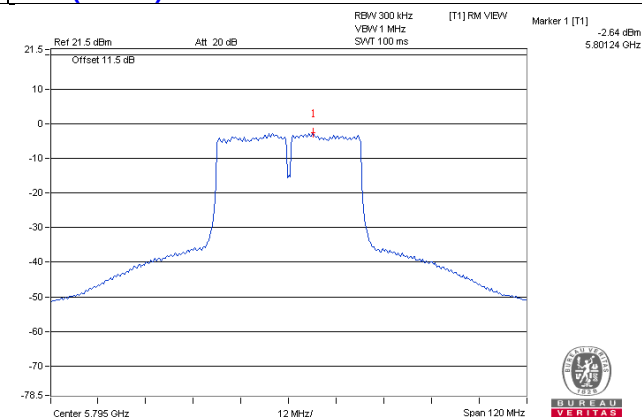
11ac (40MHz) 2S3T TXBF CH46



11ac (40MHz) 2S3T TXBF CH151

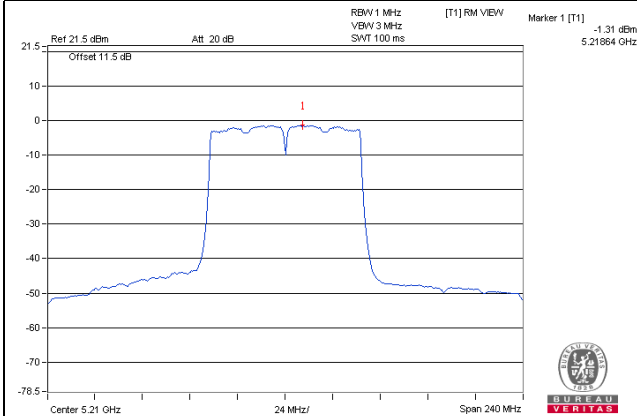


11ac (40MHz) 2S3T TXBF CH159

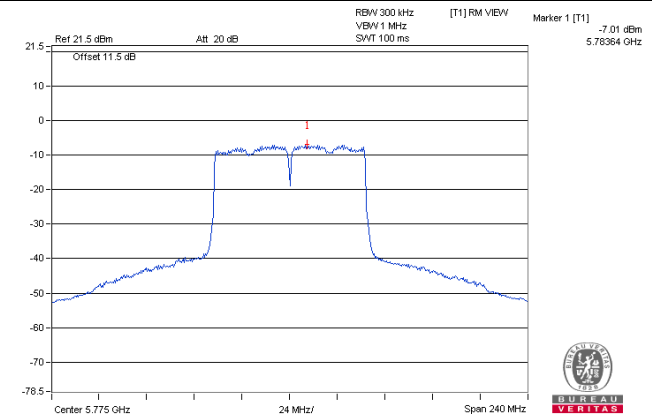


PSD SPECTRUM PLOT

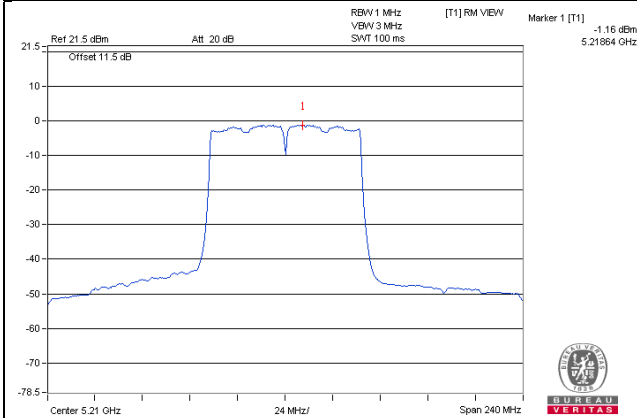
11ac (80MHz) 3S3T SDM CH42



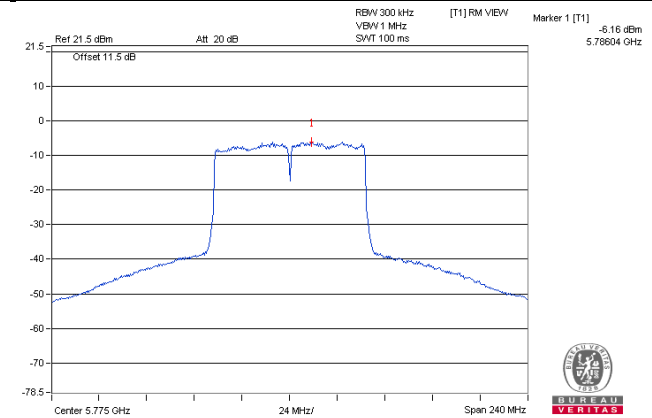
11ac (80MHz) 3S3T SDM CH155



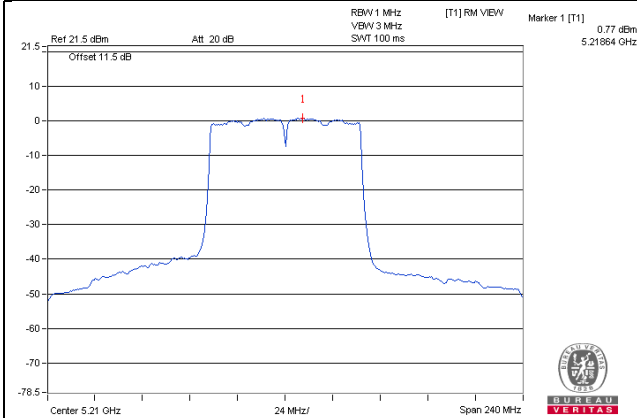
11ac (80MHz) 1S3T TXBF CH42



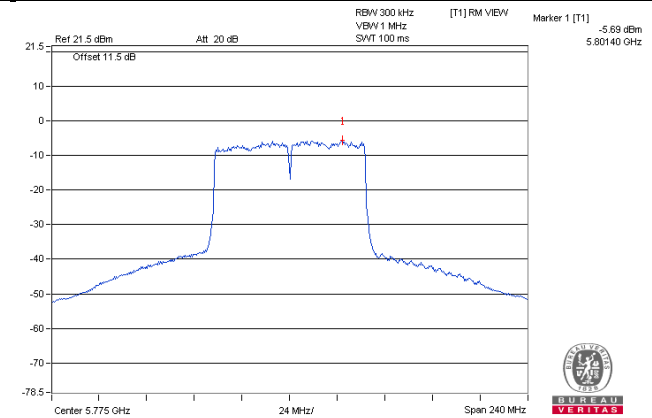
11ac (80MHz) 1S3T TXBF CH155



11ac (80MHz) 2S3T TXBF CH42



11ac (80MHz) 2S3T TXBF CH155



3.10 Radiated Emission and Bandedge Measurement

3.10.1 Limits of Unwanted emissions in the restricted bands

Radiated emissions which fall within the restricted band specified on 15.205(a) must comply with the radiated emission limits specified as below table:

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

3.10.2 Limits of Unwanted emissions out of the restricted bands

Applicable To		Limit	
789033 D02 General UNII Test Procedure New Rules v01r04		Field Strength at 3m	
		PK:74 (dBμV/m)	AV:54 (dBμV/m)
Frequency Band	Applicable To	EIRP Limit	Equivalent Field Strength at 3m
5150~5250 MHz	15.407(b)(1)	PK:-27 (dBm/MHz)	PK:68.2(dBμV/m)
5250~5350 MHz	15.407(b)(2)		
5470~5725 MHz	15.407(b)(3)		
5725~5850 MHz	☒ 15.407(b)(4)(i)	PK:-27 (dBm/MHz) ^{*1} PK:10 (dBm/MHz) ^{*2} PK:15.6 (dBm/MHz) ^{*3} PK:27 (dBm/MHz) ^{*4}	PK: 68.2(dBμV/m) ^{*1} PK:105.2 (dBμV/m) ^{*2} PK: 110.8(dBμV/m) ^{*3} PK:122.2 (dBμV/m) ^{*4}
	☐ 15.407(b)(4)(ii)	Emission limits in section 15.247(d)	
^{*1} beyond 75 MHz or more above of the band edge. ^{*3} below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.		^{*2} below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above. ^{*4} from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.	

The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

$$E = \frac{1000000\sqrt{30P}}{3} \text{ } \mu\text{V/m, where P is the eirp (Watts).}$$

3.10.3 Measuring Instruments and Setting

Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer and receiver.

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1GHz
Stop Frequency	10th Carrier Harmonic
RBW / VBW (Emission in restricted band)	1MHz / 3MHz for Peak, Duty cycle $\geq 98\%$ 1MHz / 10Hz for Average Duty cycle $< 98\%$ 1MHz / (1/T) for Average, where T is pulse time.
RBW / VBW (Emission in non-restricted band)	1MHz / 3MHz for Peak
Detector	Peak
Trace mode	Max Hold.

Note : According to KDB 789033 D02 v01 r04 G. 6. d) Method VB.

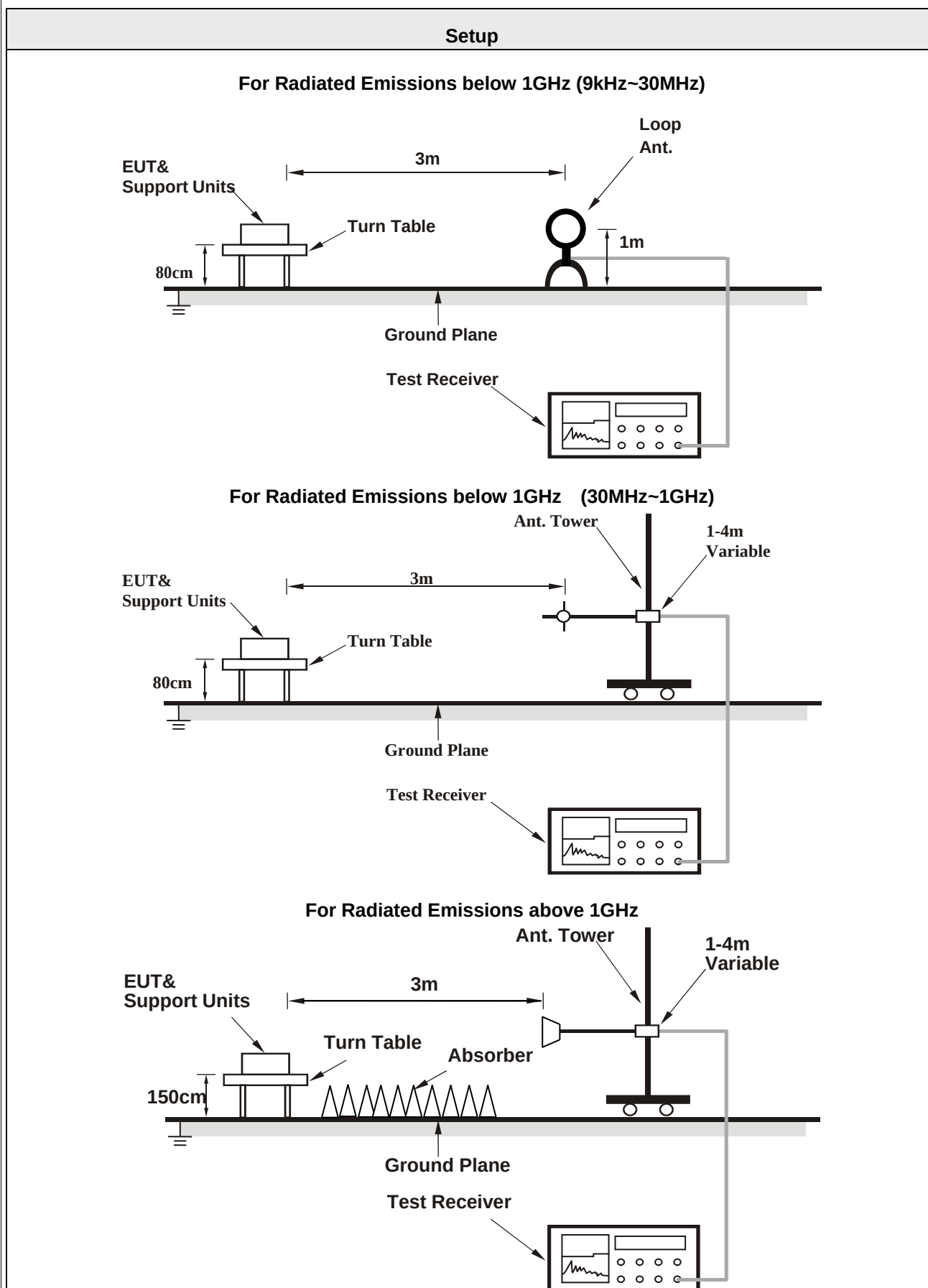
- As an alternative, the analyzer may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some analyzers require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to "Voltage" regardless of the display mode.

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RBW 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RBW 9kHz for QP
Start ~ Stop Frequency	30MHz~1GHz / RBW 120kHz for QP

3.10.4 Test Procedures

- 1 Configure the EUT according to ANSI C63.10. The EUT was placed on the top of the turntable 0.8 meters (for below 1GHz) / 1.5 meters (for above 1GHz) meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
- 2 Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
- 3 The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
- 4 For each suspected emissions, the antenna tower was scan (from 1 m to 4 m) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
- 5 Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode
- 6 For emissions above 1GHz, use 1MHz VBW and 3MHz RBW for peak reading. Then 1MHz RBW and 10Hz VBW for average reading in spectrum analyzer for Duty $\geq 98\%$, 1MHz RBW and VBW is $\geq 1/T$ for average reading in spectrum analyzer for Duty $< 98\%$.
- 7 When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value.
- 8 If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
- 9 For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
- 10 As the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High – Low scan is not required in this case.

3.10.5 Test Setup Layout



3.10.6 Test Deviation

There are no deviations with the original standard.

3.10.7 EUT Operating Conditions

The EUT was programmed to be in continuously transmitting mode.

3.10.8 Test Results of Radiated Emissions and Bandedge

Temperature	25°C	Humidity	65%
Test Engineer	Chris Lin		

Radiated Emissions Range 9kHz~30MHz

The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.

Radiated Emissions Range 30MHz~1GHz

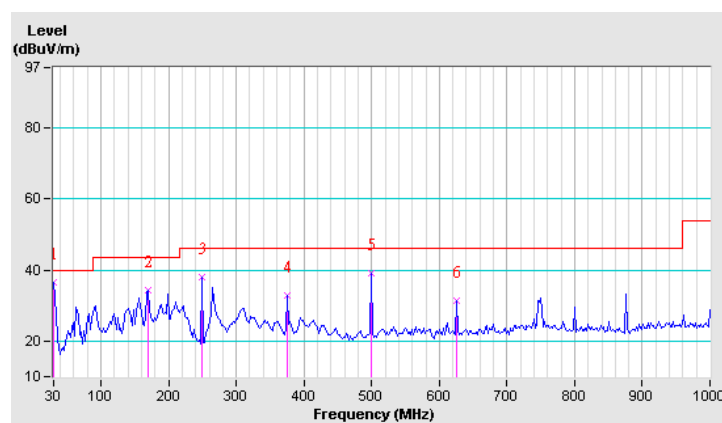
802.11ac (40MHz)

CHANNEL	TX Channel 46	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	30.08	36.6 QP	40.0	-3.4	1.99 H	8	52.10	-15.50
2	169.68	34.2 QP	43.5	-9.3	1.49 H	274	48.10	-13.90
3	249.22	38.1 QP	46.0	-7.9	1.00 H	112	52.40	-14.30
4	375.32	32.7 QP	46.0	-13.3	1.00 H	177	44.00	-11.30
5	499.48	39.2 QP	46.0	-6.8	1.49 H	147	48.60	-9.40
6	625.58	31.5 QP	46.0	-14.5	1.49 H	69	38.50	-7.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

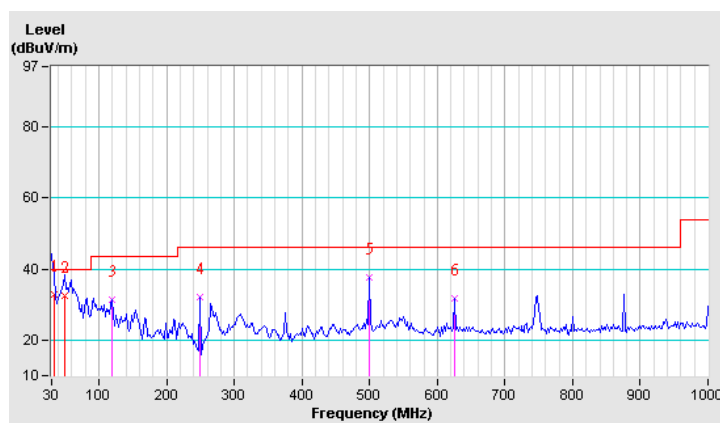


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	34.49	32.9 QP	40.0	-7.1	1.51 V	10	48.00	-15.10
2	48.58	32.5 QP	40.0	-7.5	1.00 V	129	46.20	-13.70
3	119.24	31.3 QP	43.5	-12.2	1.00 V	16	47.00	-15.70
4	249.22	32.0 QP	46.0	-14.0	1.00 V	293	46.30	-14.30
5	499.48	37.8 QP	46.0	-8.2	1.00 V	186	47.20	-9.40
6	625.58	31.9 QP	46.0	-14.1	1.51 V	196	38.90	-7.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value



Radiated Emission Range 1GHz~10th Harmonic

SDM Mode

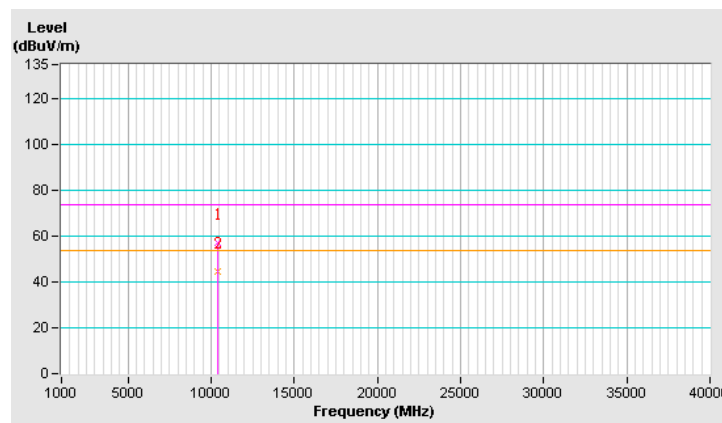
802.11ac (20MHz) 3S3T SDM Nss3 MCS0

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10360.00	57.2 PK	74.0	-16.8	1.26 H	58	41.70	15.50
2	#10360.00	44.4 AV	54.0	-9.6	1.26 H	58	28.90	15.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

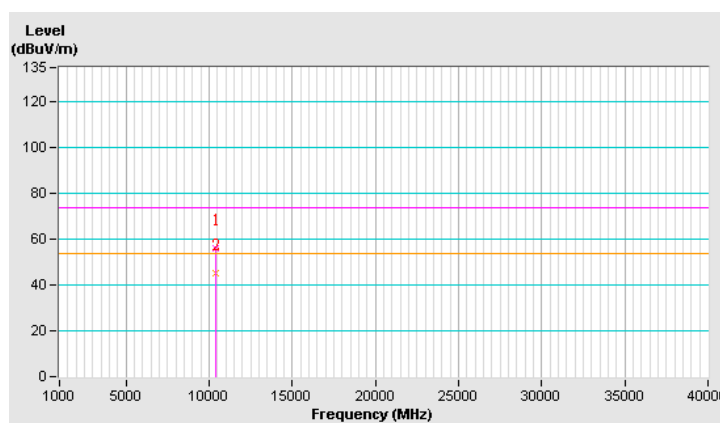


CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10360.00	56.3 PK	74.0	-17.7	2.36 V	124	40.80	15.50
2	#10360.00	45.1 AV	54.0	-8.9	2.36 V	124	29.60	15.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

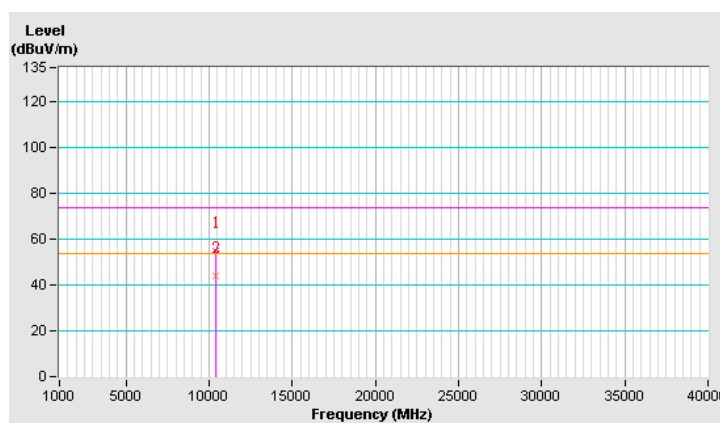


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10400.00	54.7 PK	74.0	-19.3	3.52 H	45	39.20	15.50
2	#10400.00	43.8 AV	54.0	-10.2	3.52 H	45	28.30	15.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

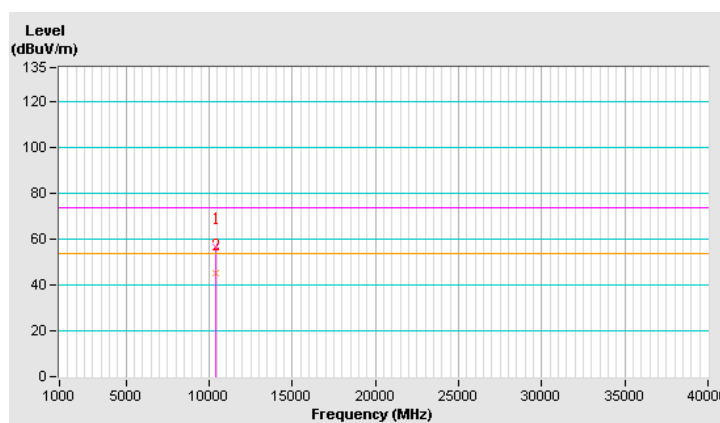


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10400.00	56.6 PK	74.0	-17.4	2.54 V	36	41.10	15.50
2	#10400.00	45.0 AV	54.0	-9.0	2.54 V	36	29.50	15.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

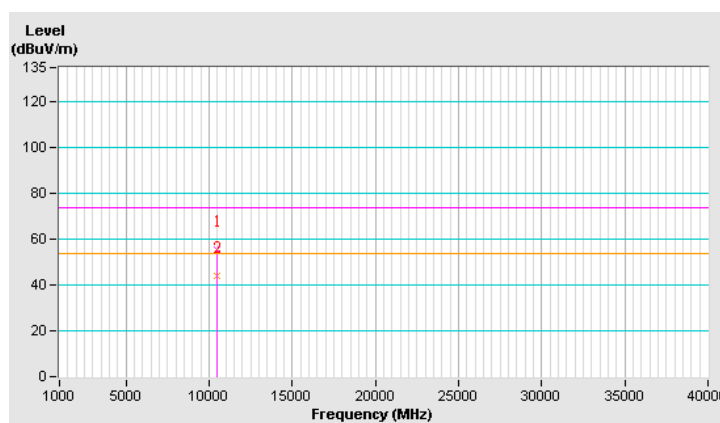


CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10480.00	55.7 PK	74.0	-18.3	2.15 H	98	40.60	15.10
2	#10480.00	44.2 AV	54.0	-9.8	2.15 H	98	29.10	15.10

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

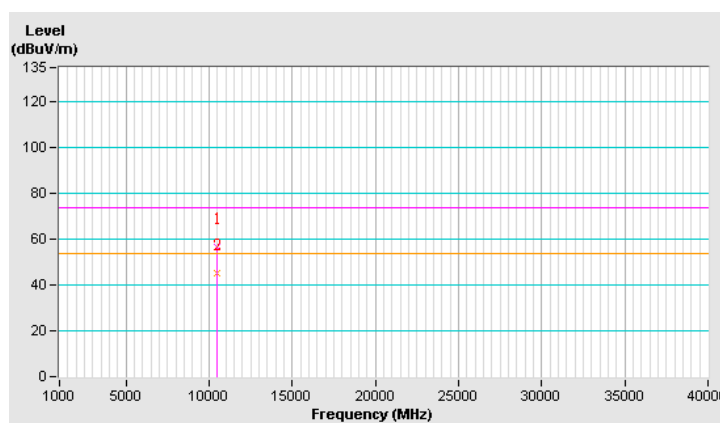


CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10480.00	56.6 PK	74.0	-17.4	2.34 V	58	41.50	15.10
2	#10480.00	45.0 AV	54.0	-9.0	2.34 V	58	29.90	15.10

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

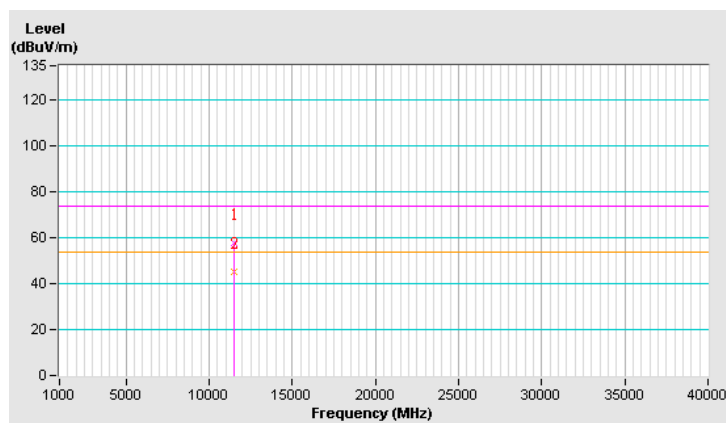


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11490.00	57.5 PK	74.0	-16.5	1.52 H	64	41.50	16.00
2	11490.00	45.4 AV	54.0	-8.6	1.52 H	64	29.40	16.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

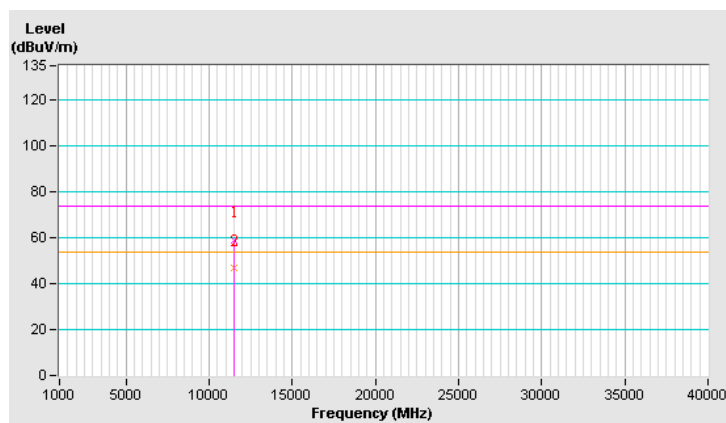


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11490.00	59.0 PK	74.0	-15.0	1.17 V	154	43.00	16.00
2	11490.00	46.6 AV	54.0	-7.4	1.17 V	154	30.60	16.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

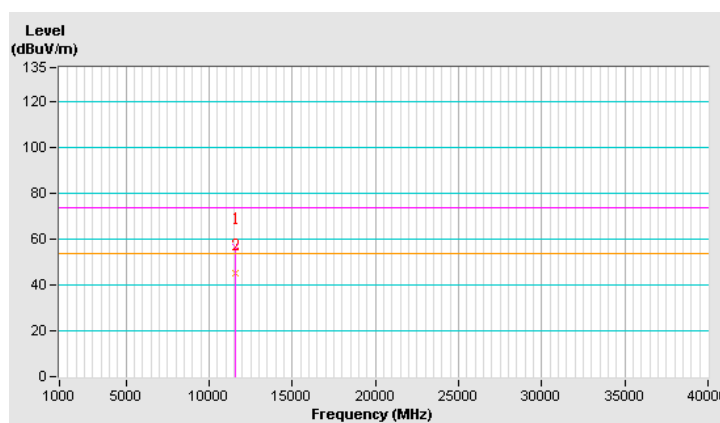


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11570.00	56.8 PK	74.0	-17.2	1.35 H	62	41.10	15.70
2	11570.00	45.1 AV	54.0	-8.9	1.35 H	62	29.40	15.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

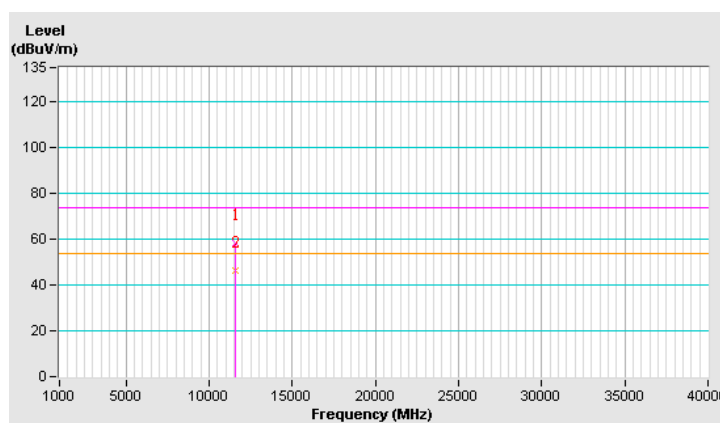


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11570.00	58.3 PK	74.0	-15.7	1.07 V	64	42.60	15.70
2	11570.00	46.1 AV	54.0	-7.9	1.07 V	64	30.40	15.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

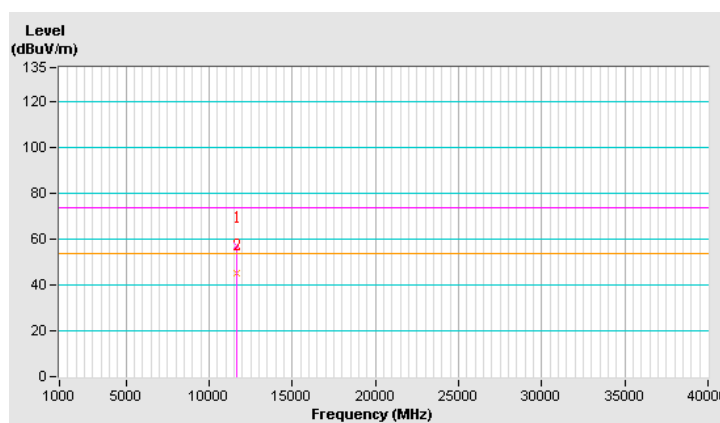


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11650.00	57.1 PK	74.0	-16.9	1.36 H	208	41.50	15.60
2	11650.00	45.0 AV	54.0	-9.0	1.36 H	208	29.40	15.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

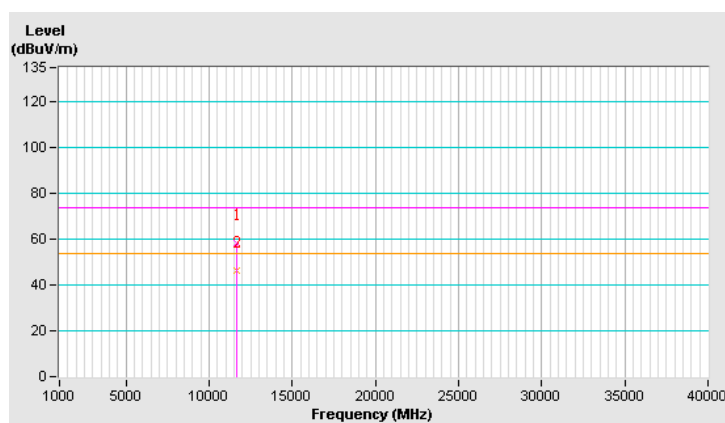


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11650.00	58.5 PK	74.0	-15.5	1.38 V	54	42.90	15.60
2	11650.00	46.4 AV	54.0	-7.6	1.38 V	54	30.80	15.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value



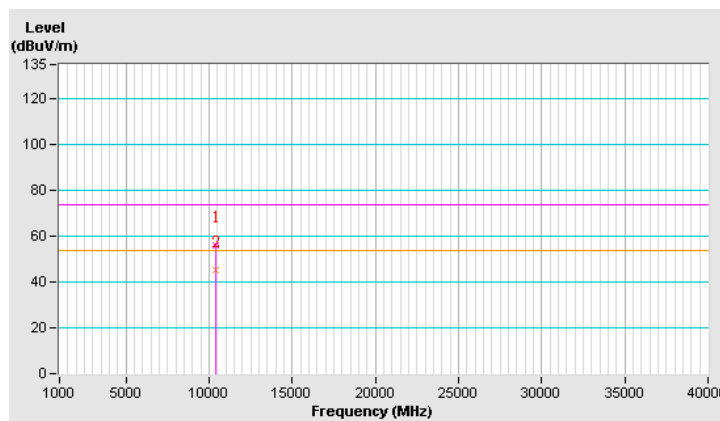
802.11ac (40MHz) 3S3T SDM Nss3 MCS0

CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10380.00	56.1 PK	74.0	-17.9	1.55 H	227	40.50	15.60
2	#10380.00	45.2 AV	54.0	-8.8	1.55 H	227	29.60	15.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

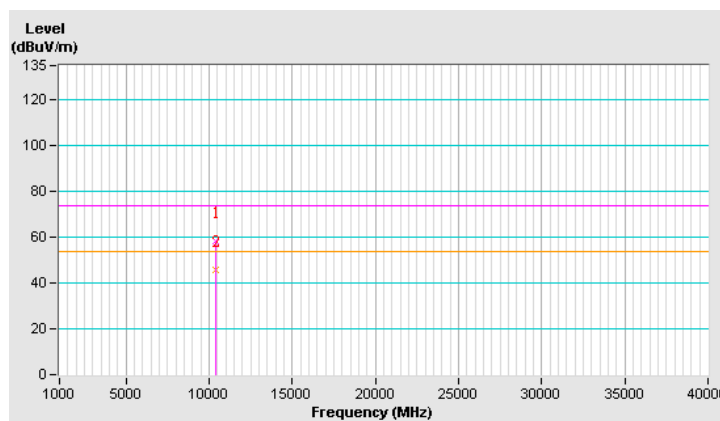


CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10380.00	58.2 PK	74.0	-15.8	1.05 V	97	42.60	15.60
2	#10380.00	46.0 AV	54.0	-8.0	1.05 V	97	30.40	15.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

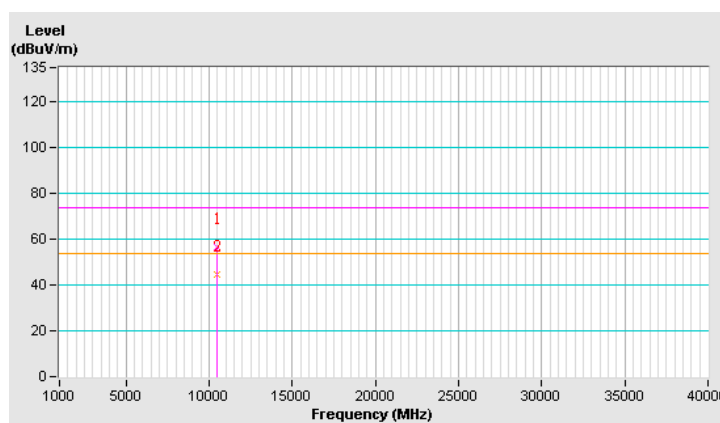


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10460.00	56.4 PK	74.0	-17.6	1.55 H	227	41.20	15.20
2	#10460.00	44.6 AV	54.0	-9.4	1.55 H	227	29.40	15.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

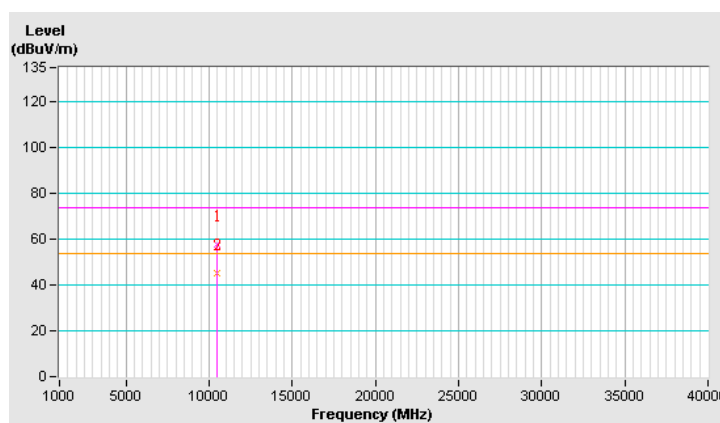


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10460.00	57.8 PK	74.0	-16.2	1.55 V	221	42.60	15.20
2	#10460.00	45.4 AV	54.0	-8.6	1.55 V	221	30.20	15.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

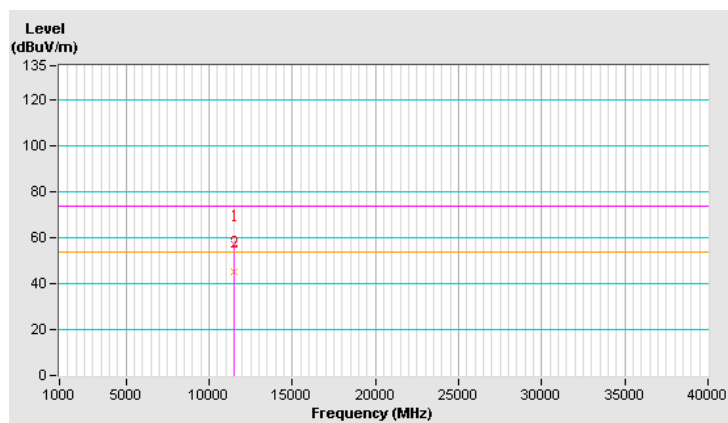


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11510.00	57.4 PK	74.0	-16.6	1.08 H	64	41.50	15.90
2	11510.00	45.5 AV	54.0	-8.5	1.08 H	64	29.60	15.90

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

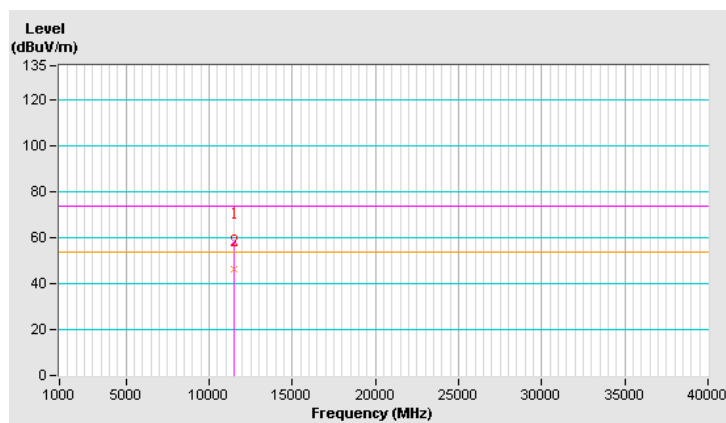


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11510.00	58.5 PK	74.0	-15.5	2.21 V	48	42.60	15.90
2	11510.00	46.1 AV	54.0	-7.9	2.21 V	48	30.20	15.90

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

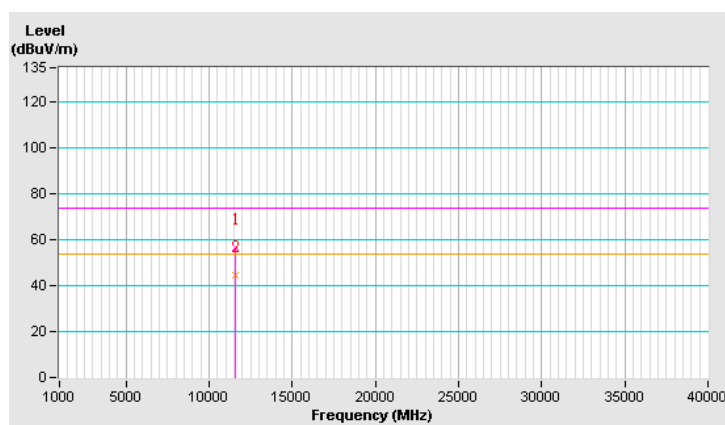


CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11590.00	56.5 PK	74.0	-17.5	1.06 H	35	41.00	15.50
2	11590.00	44.8 AV	54.0	-9.2	1.06 H	35	29.30	15.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

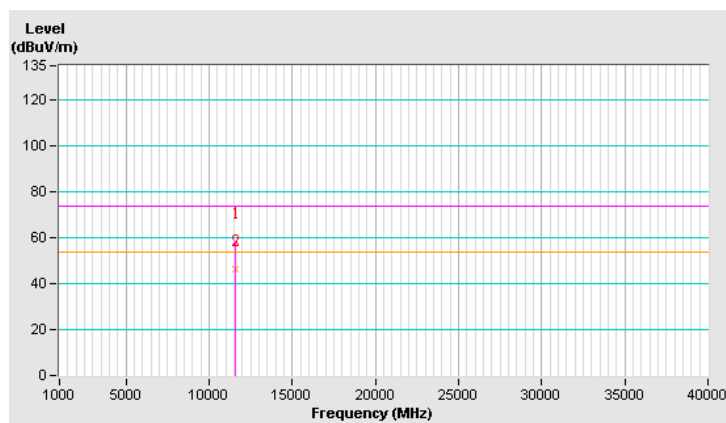


CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11590.00	58.4 PK	74.0	-15.6	1.63 V	314	42.90	15.50
2	11590.00	46.1 AV	54.0	-7.9	1.63 V	314	30.60	15.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value



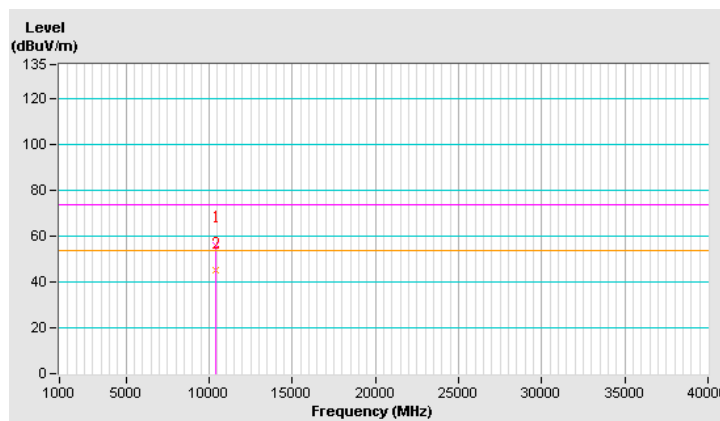
802.11ac (80MHz) 3S3T SDM Nss3 MCS0

CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10420.00	55.8 PK	74.0	-18.2	1.20 H	147	40.50	15.30
2	#10420.00	44.9 AV	54.0	-9.1	1.20 H	147	29.60	15.30

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

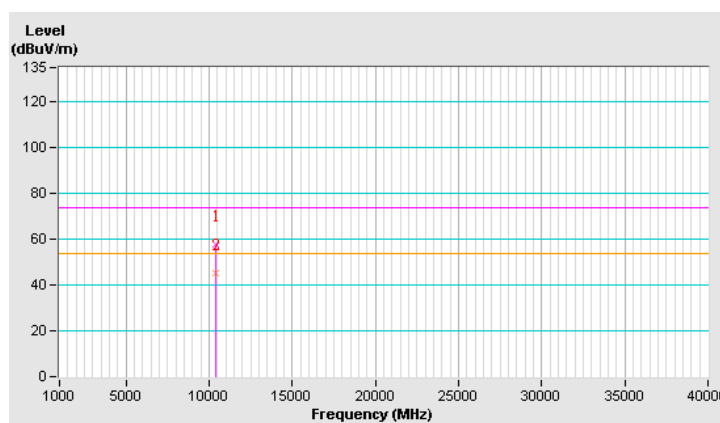


CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10420.00	57.8 PK	74.0	-16.2	1.08 V	321	42.50	15.30
2	#10420.00	45.4 AV	54.0	-8.6	1.08 V	321	30.10	15.30

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

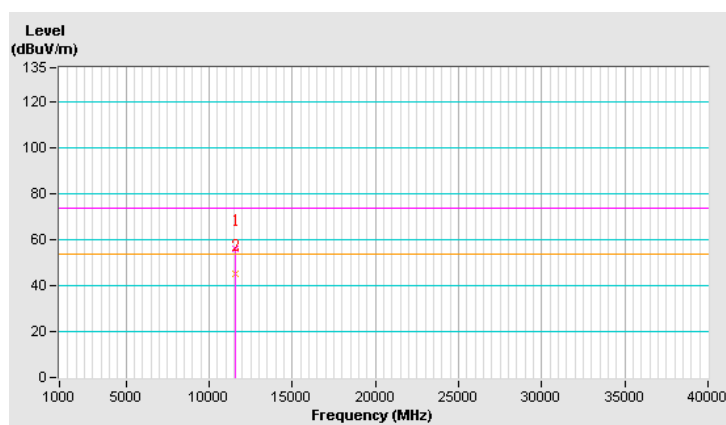


CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11550.00	56.3 PK	74.0	-17.7	1.06 H	38	40.50	15.80
2	11550.00	45.4 AV	54.0	-8.6	1.06 H	38	29.60	15.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

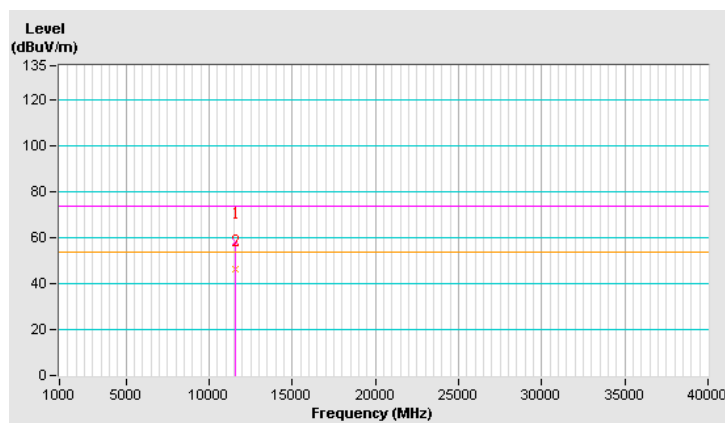


CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11550.00	58.4 PK	74.0	-15.6	1.58 V	79	42.60	15.80
2	11550.00	46.4 AV	54.0	-7.6	1.58 V	79	30.60	15.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value



1S3T TxBF Mode

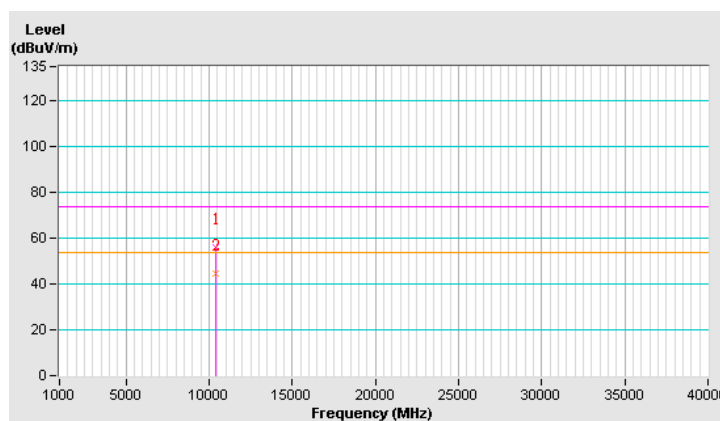
802.11ac (20MHz) 1S3T TxBF Nss1 MCS0

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10360.00	55.8 PK	74.0	-18.2	3.25 H	126	40.30	15.50
2	#10360.00	44.8 AV	54.0	-9.2	3.25 H	126	29.30	15.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

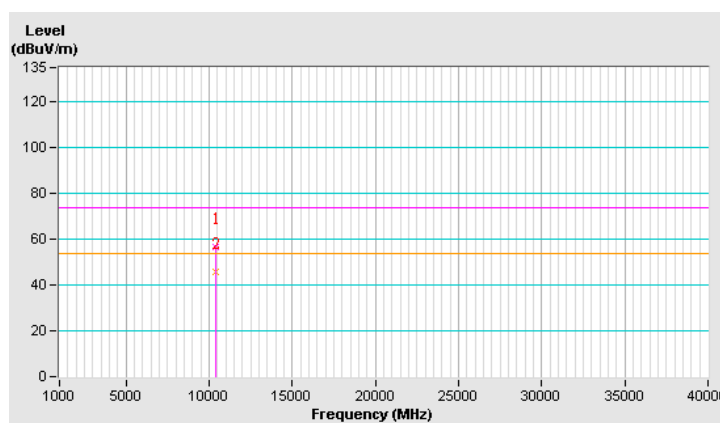


CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10360.00	56.7 PK	74.0	-17.3	2.15 V	124	41.20	15.50
2	#10360.00	45.6 AV	54.0	-8.4	2.15 V	124	30.10	15.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

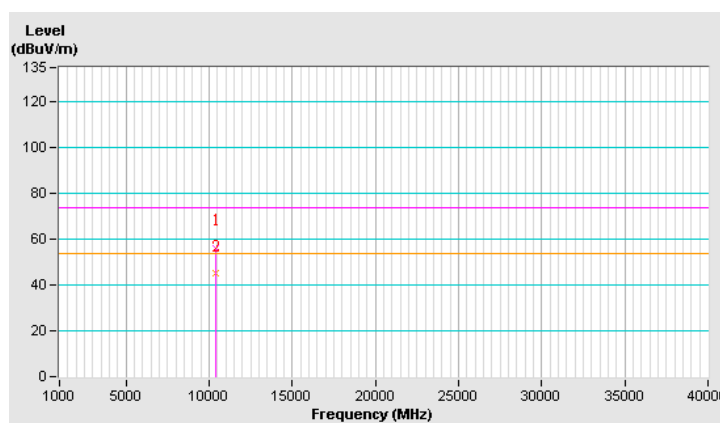


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10400.00	56.0 PK	74.0	-18.0	1.55 H	87	40.50	15.50
2	#10400.00	44.9 AV	54.0	-9.1	1.55 H	87	29.40	15.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

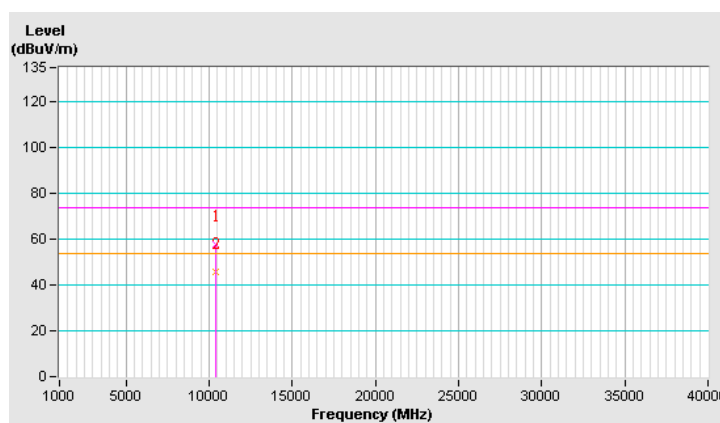


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10400.00	57.9 PK	74.0	-16.1	1.45 V	69	42.40	15.50
2	#10400.00	45.9 AV	54.0	-8.1	1.45 V	69	30.40	15.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

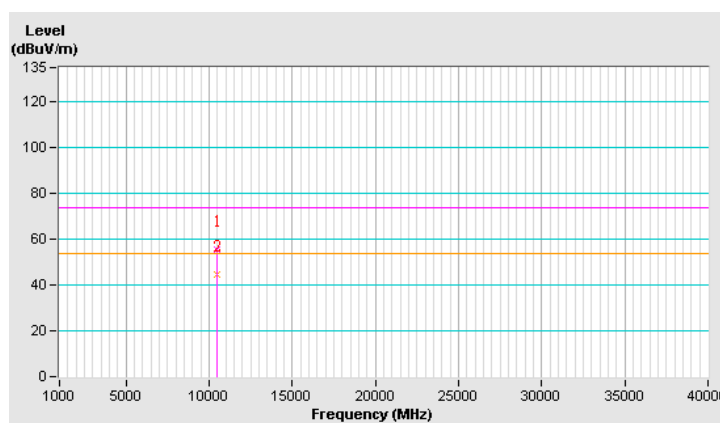


CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10480.00	55.6 PK	74.0	-18.4	2.68 H	142	40.50	15.10
2	#10480.00	44.6 AV	54.0	-9.4	2.68 H	142	29.50	15.10

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

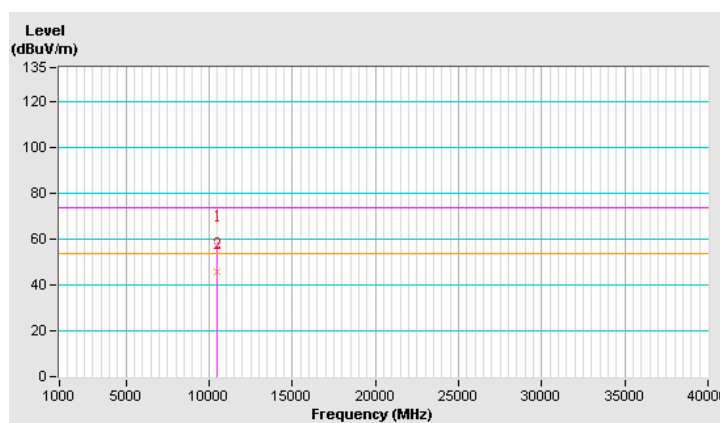


CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10480.00	57.5 PK	74.0	-16.5	2.54 V	178	42.40	15.10
2	#10480.00	46.0 AV	54.0	-8.0	2.54 V	178	30.90	15.10

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

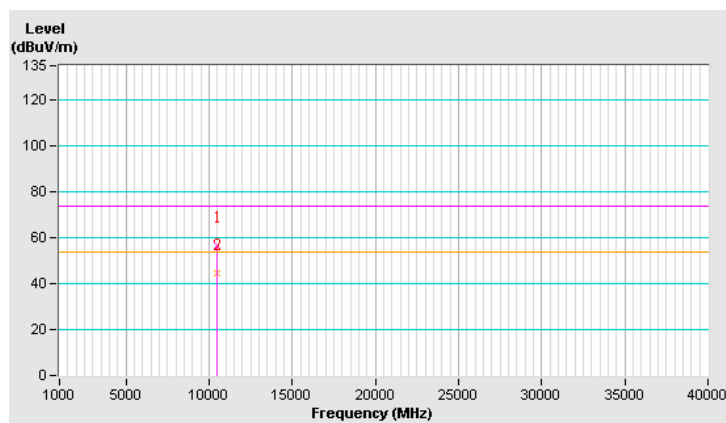


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10490.00	56.4 PK	74.0	-17.6	2.13 H	145	41.40	15.00
2	#10490.00	44.4 AV	54.0	-9.6	2.13 H	145	29.40	15.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

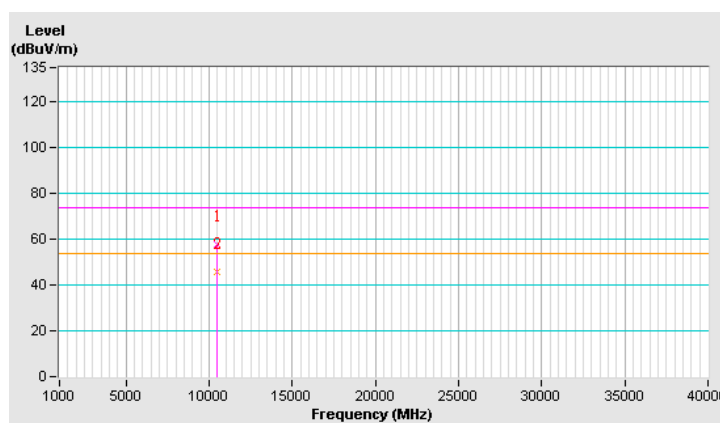


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10490.00	57.6 PK	74.0	-16.4	1.72 V	212	42.60	15.00
2	#10490.00	45.6 AV	54.0	-8.4	1.72 V	212	30.60	15.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

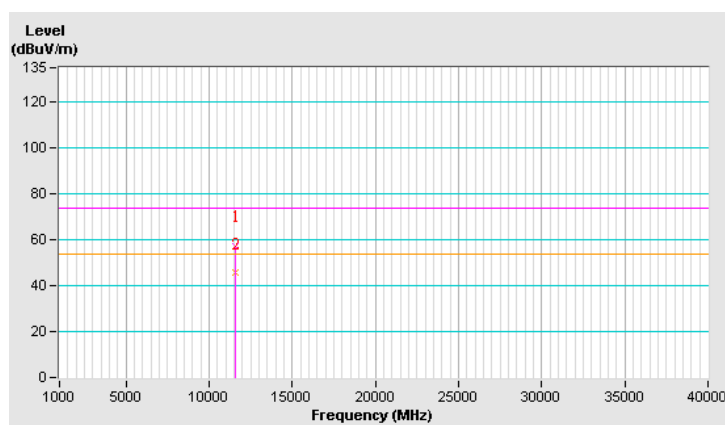


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11570.00	57.5 PK	74.0	-16.5	3.54 H	124	41.80	15.70
2	11570.00	45.6 AV	54.0	-8.4	3.54 H	124	29.90	15.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

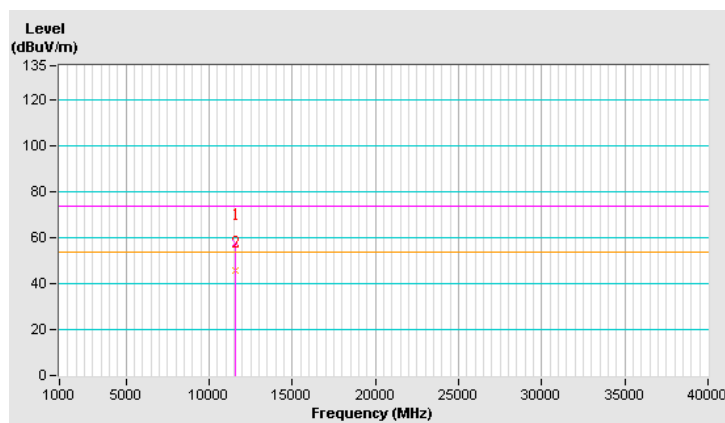


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11570.00	58.0 PK	74.0	-16.0	2.58 V	167	42.30	15.70
2	11570.00	46.0 AV	54.0	-8.0	2.58 V	167	30.30	15.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

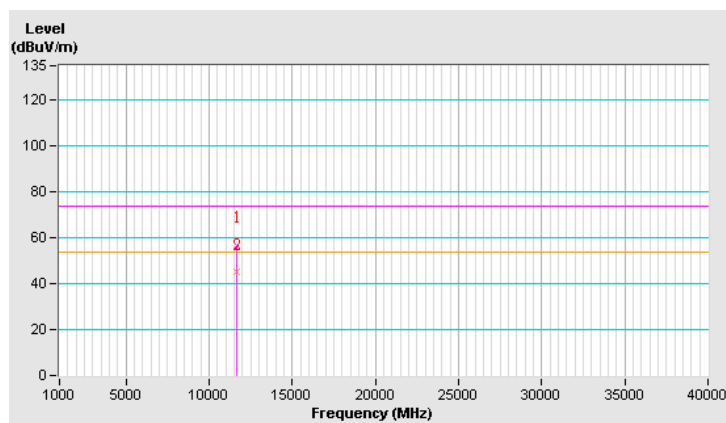


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11650.00	56.7 PK	74.0	-17.3	2.94 H	219	41.10	15.60
2	11650.00	44.9 AV	54.0	-9.1	2.94 H	219	29.30	15.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

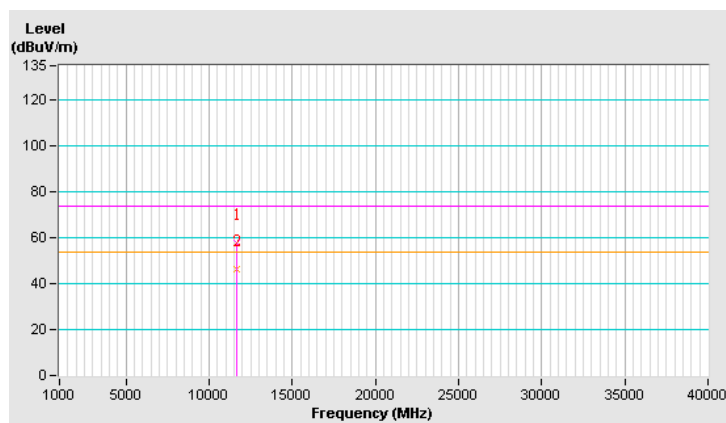


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11650.00	58.0 PK	74.0	-16.0	2.69 V	58	42.40	15.60
2	11650.00	46.5 AV	54.0	-7.5	2.69 V	58	30.90	15.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value



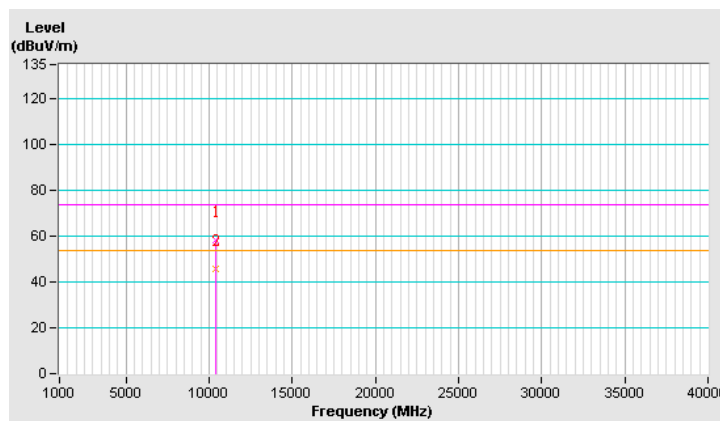
802.11ac (40MHz) 1S3T TxBF Nss1 MCS0

CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10380.00	58.5 PK	74.0	-15.5	2.35 H	132	42.90	15.60
2	#10380.00	45.5 AV	54.0	-8.5	2.35 H	132	29.90	15.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

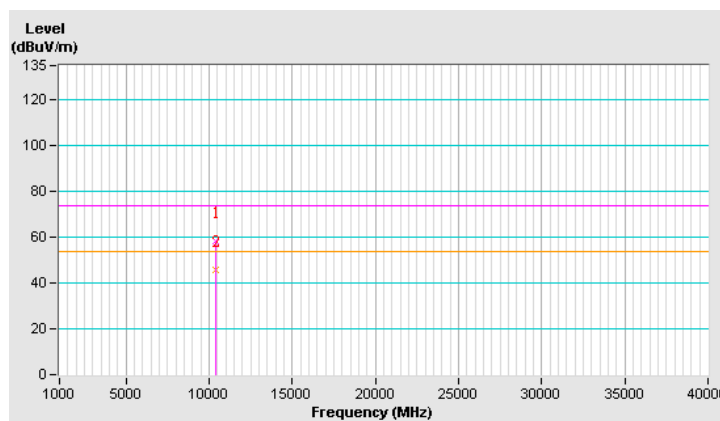


CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10380.00	58.6 PK	74.0	-15.4	2.53 V	117	43.00	15.60
2	#10380.00	46.0 AV	54.0	-8.0	2.53 V	117	30.40	15.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

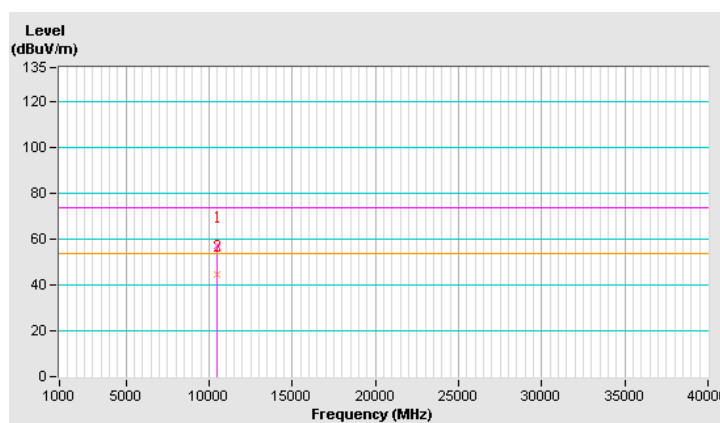


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10460.00	57.4 PK	74.0	-16.6	2.38 H	127	42.20	15.20
2	#10460.00	44.8 AV	54.0	-9.2	2.38 H	127	29.60	15.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

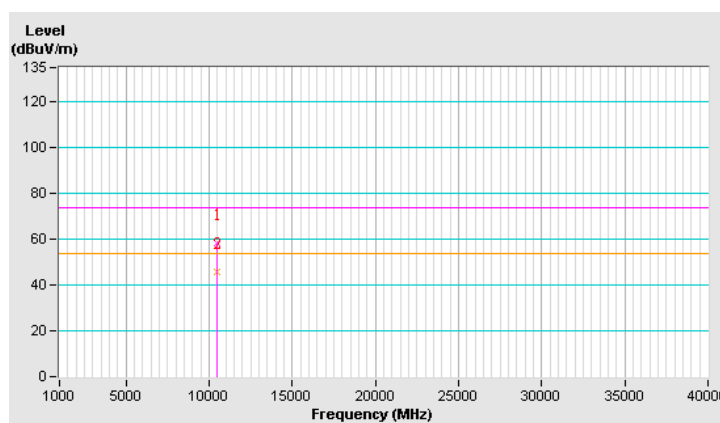


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10460.00	58.4 PK	74.0	-15.6	2.54 V	78	43.20	15.20
2	#10460.00	45.7 AV	54.0	-8.3	2.54 V	78	30.50	15.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

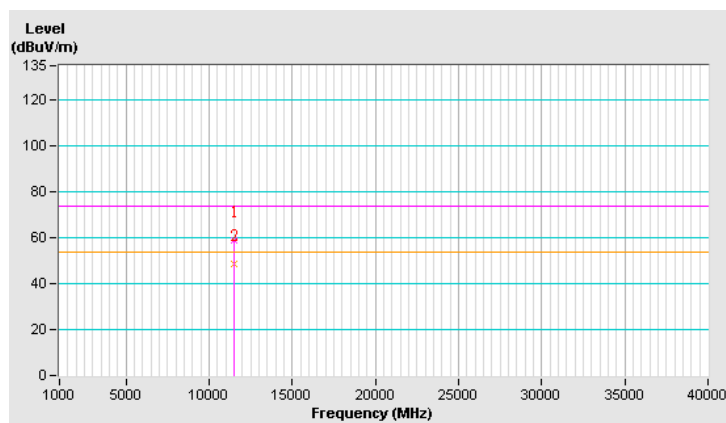


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11510.00	59.0 PK	74.0	-15.0	3.51 H	129	43.10	15.90
2	11510.00	48.4 AV	54.0	-5.6	3.51 H	129	32.50	15.90

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

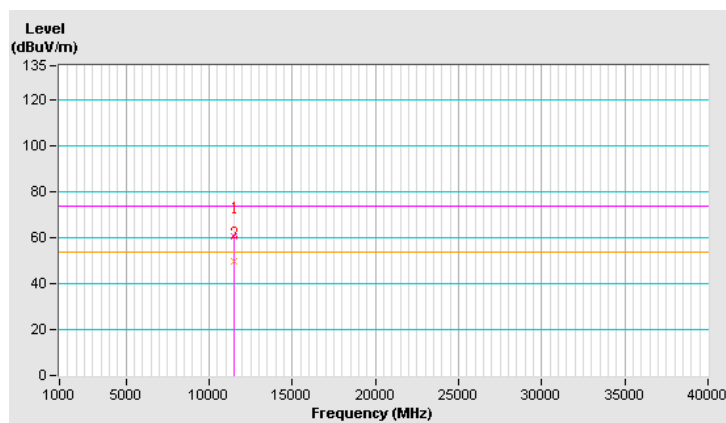


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11510.00	60.8 PK	74.0	-13.2	1.25 V	215	44.90	15.90
2	11510.00	49.8 AV	54.0	-4.2	1.25 V	215	33.90	15.90

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

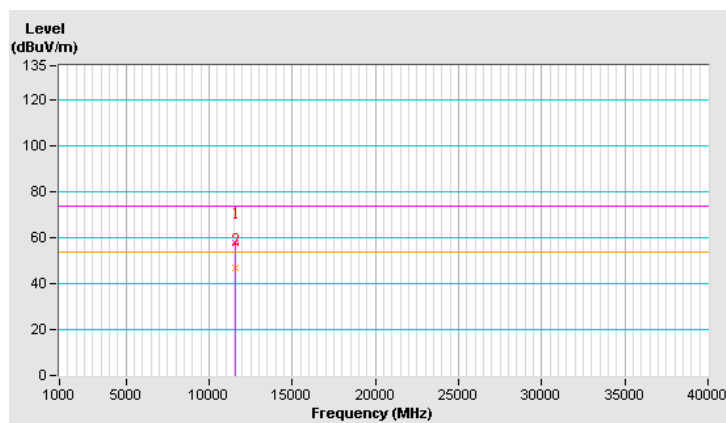


CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11590.00	58.1 PK	74.0	-15.9	2.98 H	127	42.60	15.50
2	11590.00	47.0 AV	54.0	-7.0	2.98 H	127	31.50	15.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

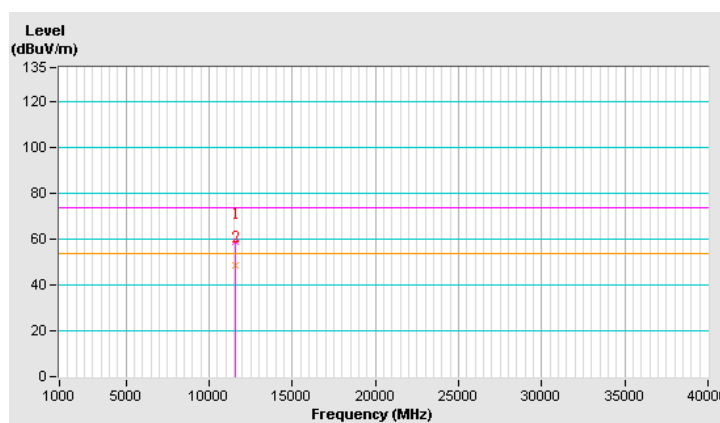


CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11590.00	58.7 PK	74.0	-15.3	2.87 V	124	43.20	15.50
2	11590.00	48.4 AV	54.0	-5.6	2.87 V	124	32.90	15.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.



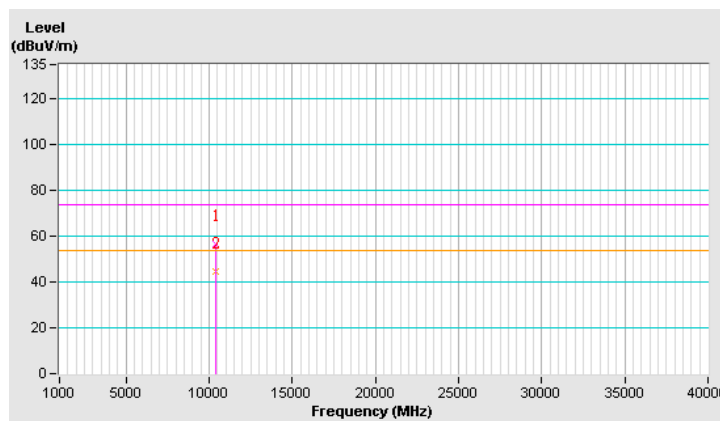
802.11ac (80MHz) 1S3T TxBF Nss1 MCS0

CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10420.00	56.4 PK	74.0	-17.6	3.32 H	163	41.10	15.30
2	#10420.00	44.7 AV	54.0	-9.3	3.32 H	163	29.40	15.30

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

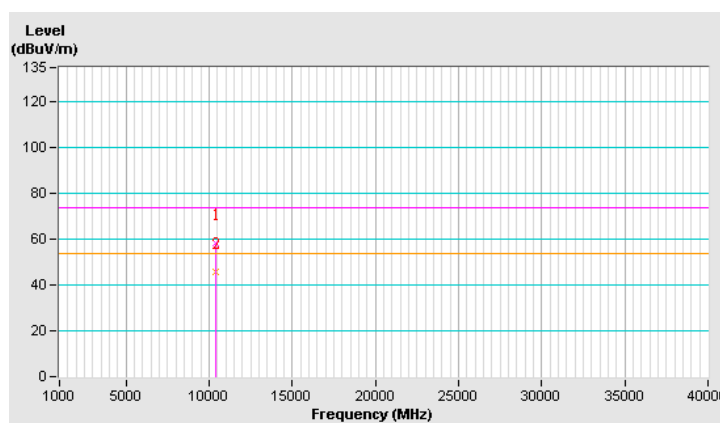


CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10420.00	58.5 PK	74.0	-15.5	3.25 V	219	43.20	15.30
2	#10420.00	45.8 AV	54.0	-8.2	3.25 V	219	30.50	15.30

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

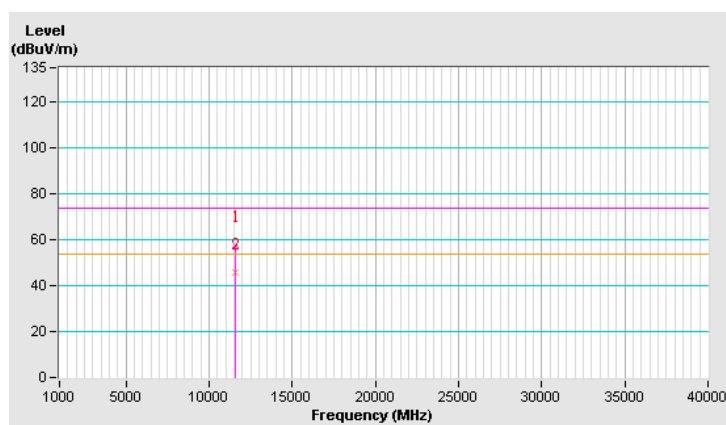


CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11550.00	57.7 PK	74.0	-16.3	2.67 H	145	41.90	15.80
2	11550.00	45.9 AV	54.0	-8.1	2.67 H	145	30.10	15.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

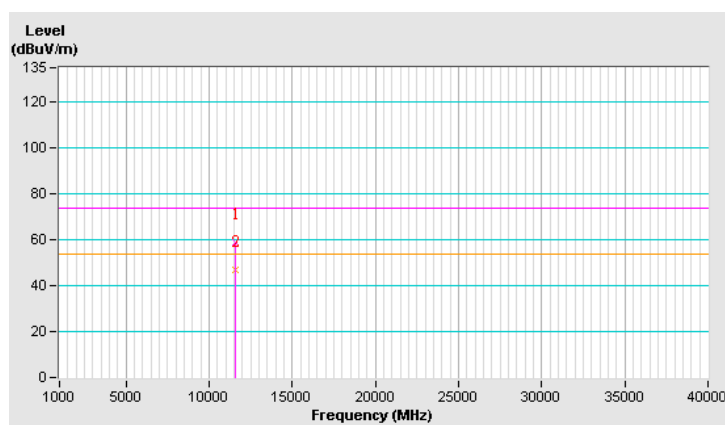


CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11550.00	59.0 PK	74.0	-15.0	2.59 V	124	43.20	15.80
2	11550.00	47.0 AV	54.0	-7.0	2.59 V	124	31.20	15.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value



2S3T TxBF Mode

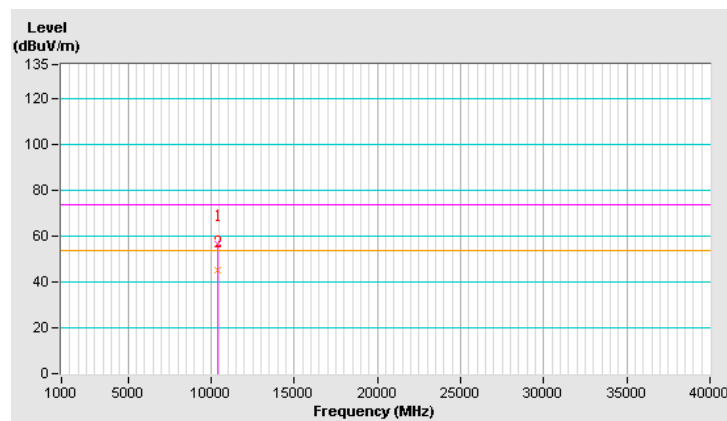
802.11ac (20MHz) 2S3T TxBF Nss2 MCS0

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10360.00	56.9 PK	74.0	-17.1	2.56 H	147	41.40	15.50
2	#10360.00	45.4 AV	54.0	-8.6	2.56 H	147	29.90	15.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

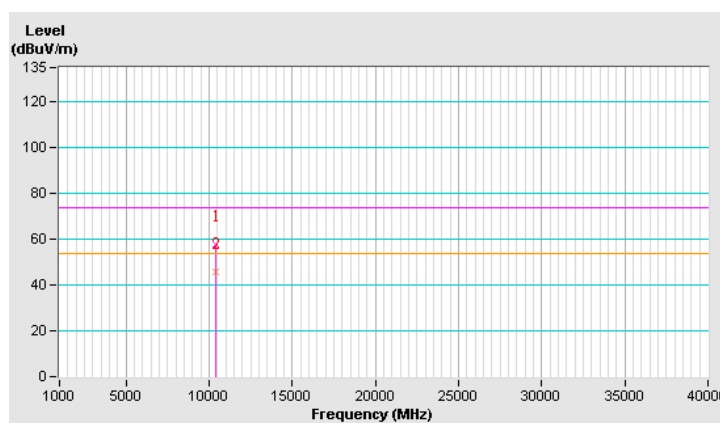


CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10360.00	57.7 PK	74.0	-16.3	1.85 V	215	42.20	15.50
2	#10360.00	45.9 AV	54.0	-8.1	1.85 V	215	30.40	15.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

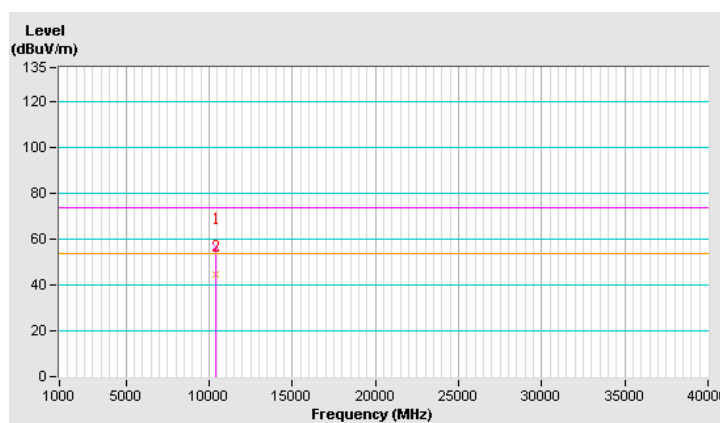


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10400.00	56.4 PK	74.0	-17.6	2.87 H	124	40.90	15.50
2	#10400.00	44.7 AV	54.0	-9.3	2.87 H	124	29.20	15.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

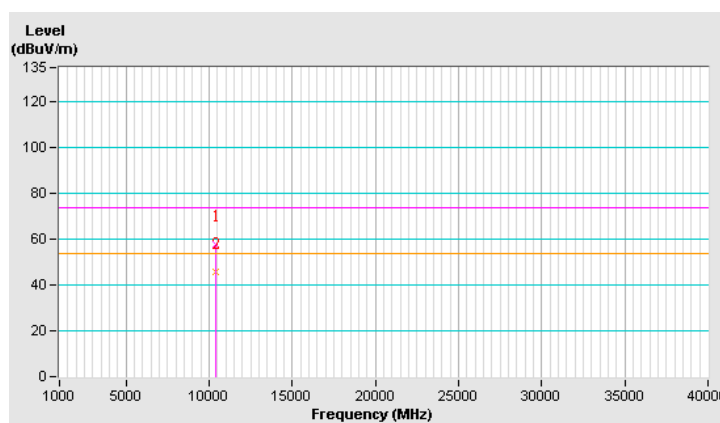


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10400.00	57.7 PK	74.0	-16.3	2.67 V	124	42.20	15.50
2	#10400.00	45.7 AV	54.0	-8.3	2.67 V	124	30.20	15.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

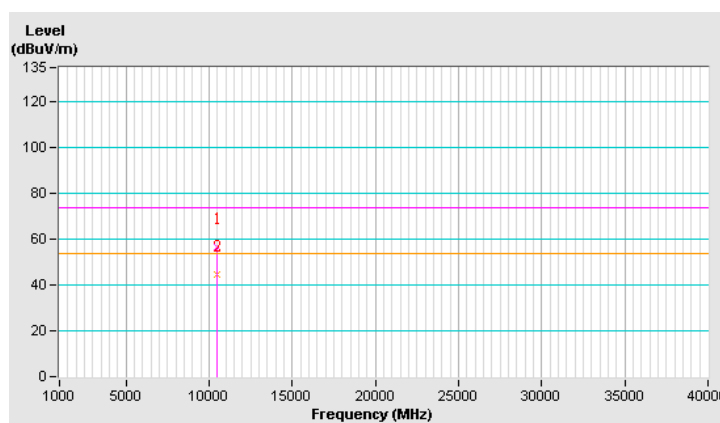


CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10480.00	56.7 PK	74.0	-17.3	3.26 H	138	41.60	15.10
2	#10480.00	44.9 AV	54.0	-9.1	3.26 H	138	29.80	15.10

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

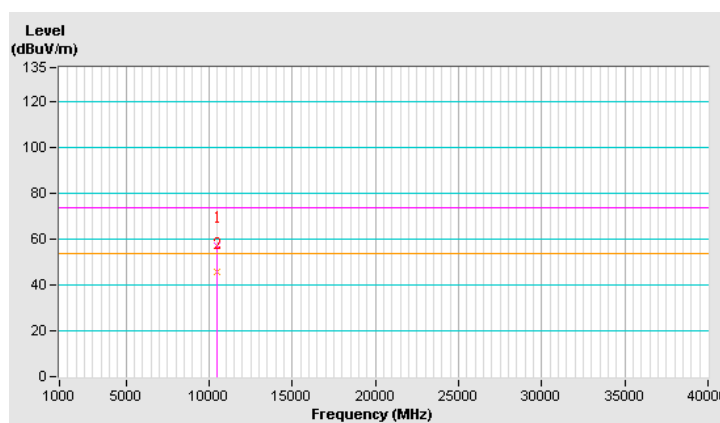


CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10480.00	57.4 PK	74.0	-16.6	2.67 V	123	42.30	15.10
2	#10480.00	46.0 AV	54.0	-8.0	2.67 V	123	30.90	15.10

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

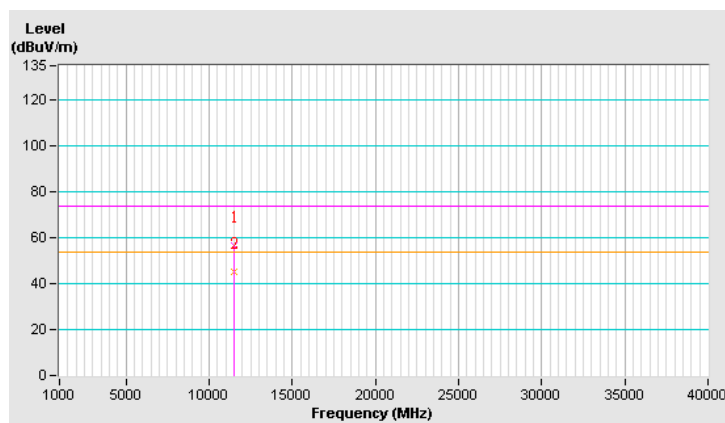


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11490.00	56.9 PK	74.0	-17.1	3.27 H	216	40.90	16.00
2	11490.00	45.4 AV	54.0	-8.6	3.27 H	216	29.40	16.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

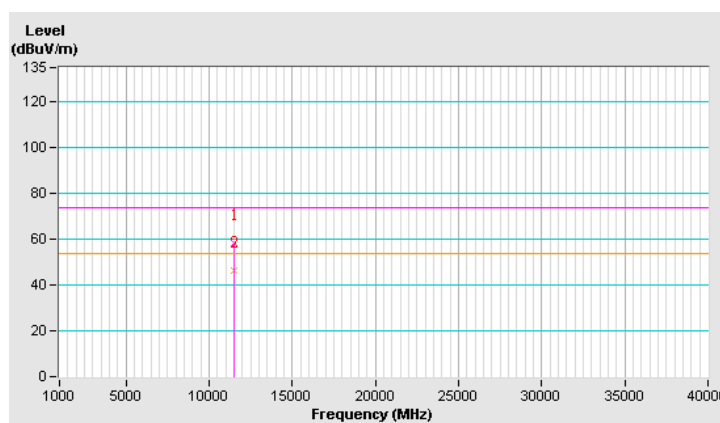


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11490.00	58.4 PK	74.0	-15.6	2.67 V	127	42.40	16.00
2	11490.00	46.6 AV	54.0	-7.4	2.67 V	127	30.60	16.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

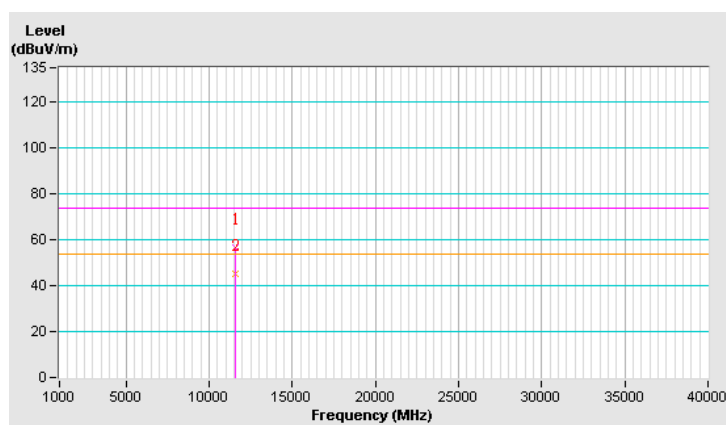


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11570.00	56.7 PK	74.0	-17.3	3.64 H	215	41.00	15.70
2	11570.00	45.3 AV	54.0	-8.7	3.64 H	215	29.60	15.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

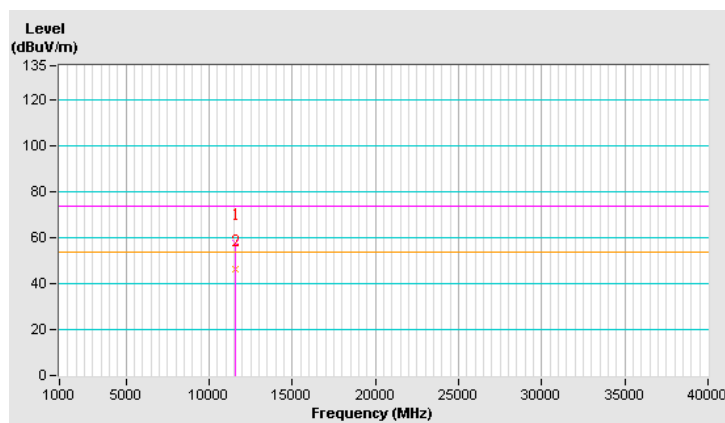


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11570.00	58.0 PK	74.0	-16.0	2.89 V	117	42.30	15.70
2	11570.00	46.5 AV	54.0	-7.5	2.89 V	117	30.80	15.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

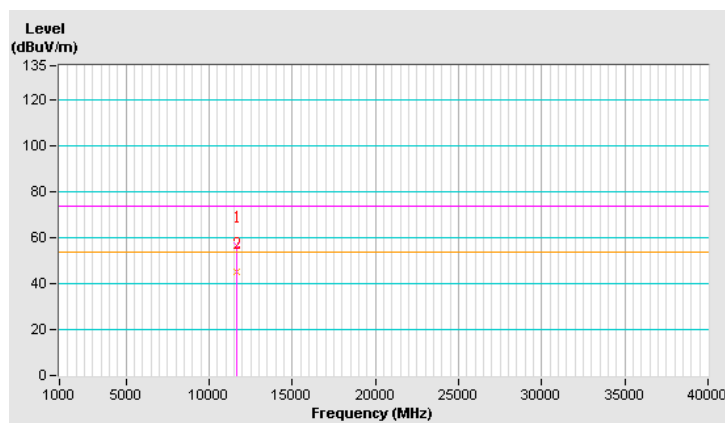


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11650.00	56.8 PK	74.0	-17.2	3.64 H	119	41.20	15.60
2	11650.00	45.3 AV	54.0	-8.7	3.64 H	119	29.70	15.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

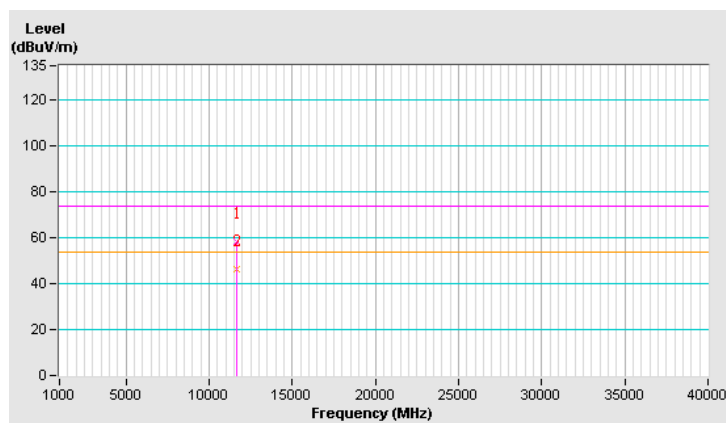


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11650.00	58.2 PK	74.0	-15.8	2.91 V	243	42.60	15.60
2	11650.00	46.5 AV	54.0	-7.5	2.91 V	243	30.90	15.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value



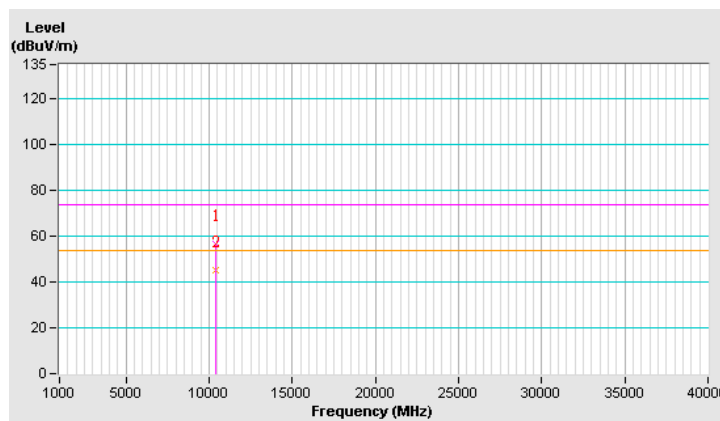
802.11ac (40MHz) 2S3T TxBF Nss2 MCS0

CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10380.00	56.8 PK	74.0	-17.2	1.28 H	198	41.20	15.60
2	#10380.00	45.4 AV	54.0	-8.6	1.28 H	198	29.80	15.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

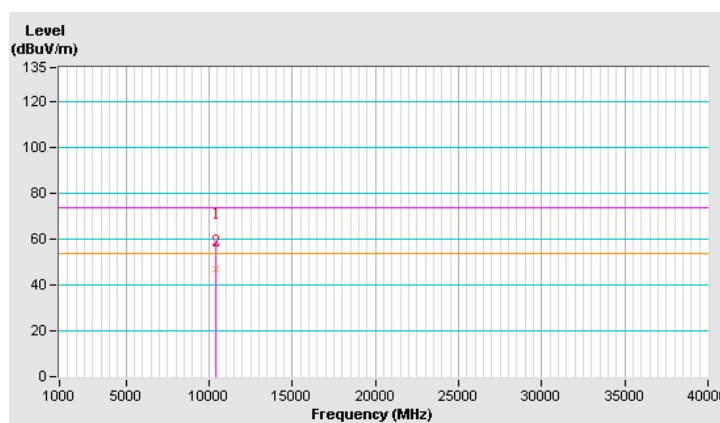


CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10380.00	58.8 PK	74.0	-15.2	2.98 V	213	43.20	15.60
2	#10380.00	46.7 AV	54.0	-7.3	2.98 V	213	31.10	15.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

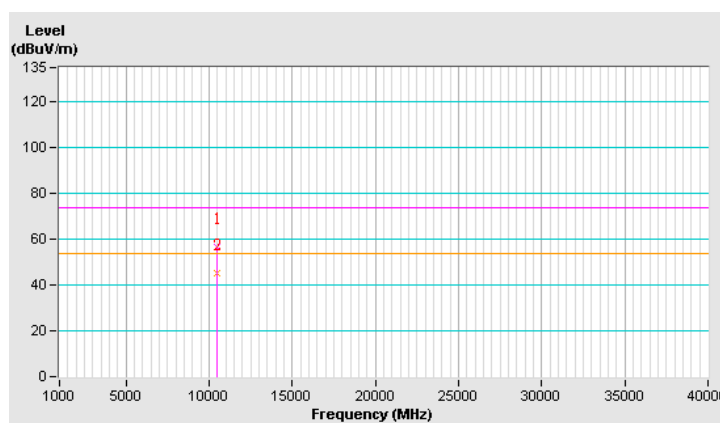


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10460.00	56.4 PK	74.0	-17.6	3.34 H	127	41.20	15.20
2	#10460.00	45.1 AV	54.0	-8.9	3.34 H	127	29.90	15.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

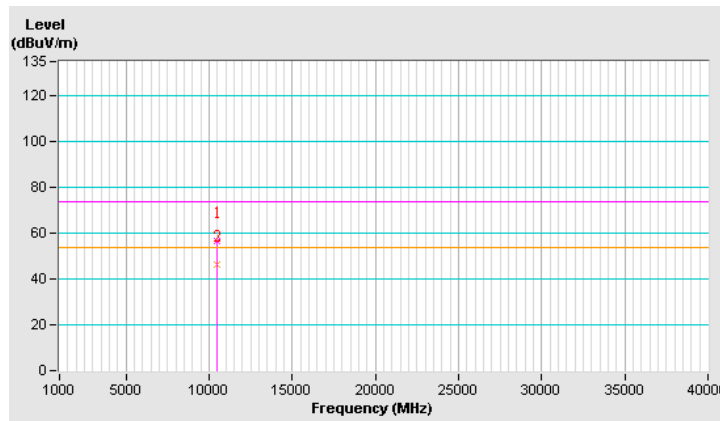


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10460.00	56.6 PK	74.0	-17.4	3.29 V	274	41.40	15.20
2	#10460.00	46.1 AV	54.0	-7.9	3.29 V	274	30.90	15.20

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

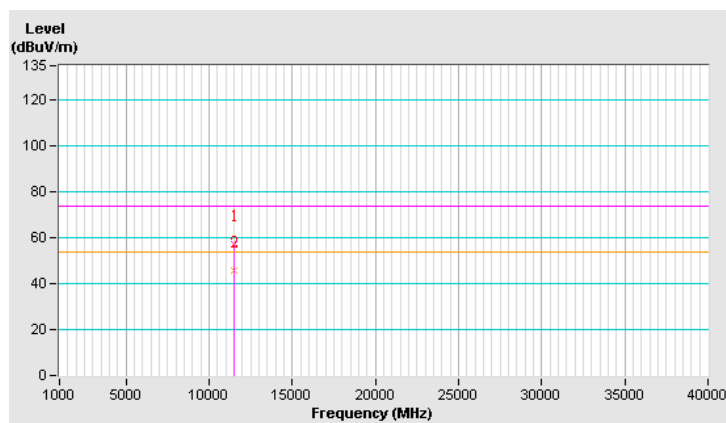


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11510.00	57.2 PK	74.0	-16.8	3.46 H	226	41.30	15.90
2	11510.00	45.6 AV	54.0	-8.4	3.46 H	226	29.70	15.90

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

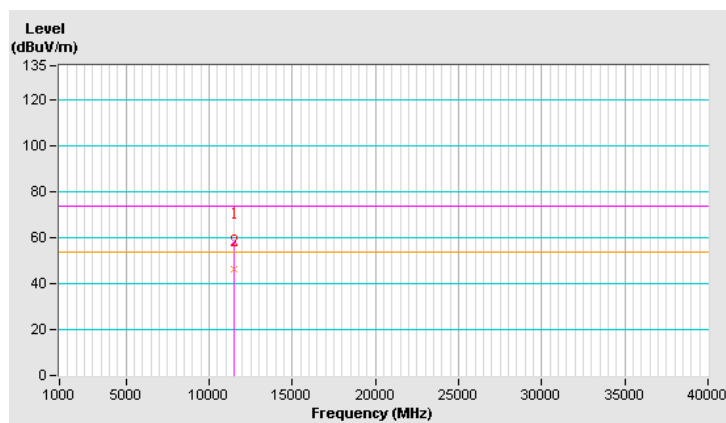


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11510.00	58.2 PK	74.0	-15.8	2.73 V	186	42.30	15.90
2	11510.00	46.5 AV	54.0	-7.5	2.73 V	186	30.60	15.90

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

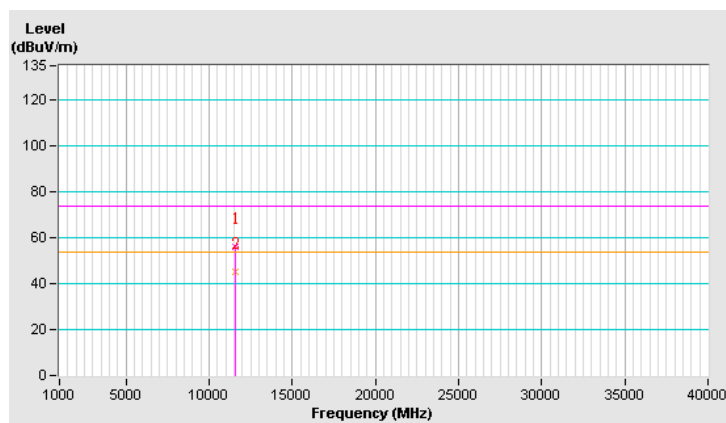


CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11590.00	56.2 PK	74.0	-17.8	3.18 H	185	40.70	15.50
2	11590.00	45.4 AV	54.0	-8.6	3.18 H	185	29.90	15.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

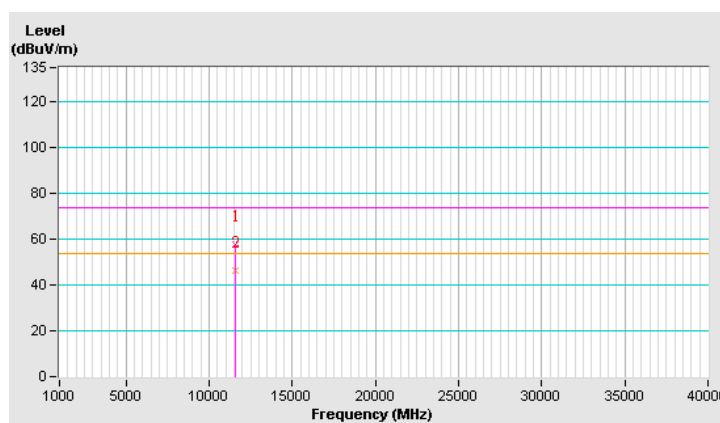


CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11590.00	58.0 PK	74.0	-16.0	3.18 V	241	42.50	15.50
2	11590.00	46.1 AV	54.0	-7.9	3.18 V	241	30.60	15.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.



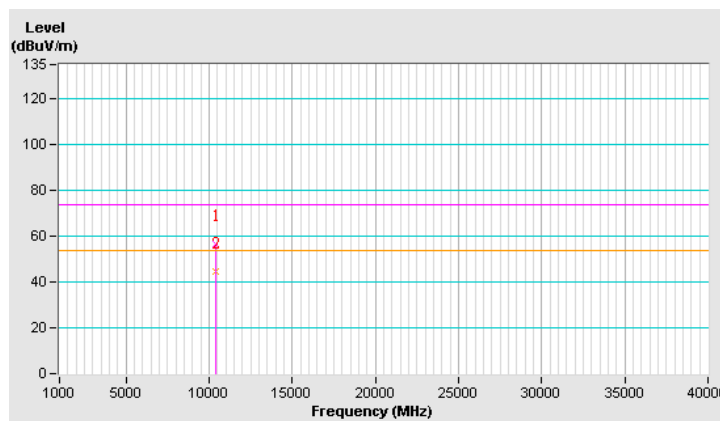
802.11ac (80MHz) 2S3T TxBF Nss2 MCS0

CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10420.00	56.4 PK	74.0	-17.6	2.52 H	231	41.10	15.30
2	#10420.00	44.9 AV	54.0	-9.1	2.52 H	231	29.60	15.30

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

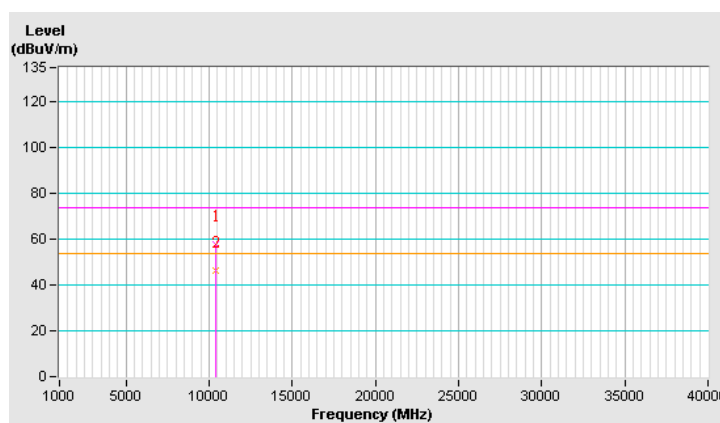


CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10420.00	57.9 PK	74.0	-16.1	2.67 V	213	42.60	15.30
2	#10420.00	46.2 AV	54.0	-7.8	2.67 V	213	30.90	15.30

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

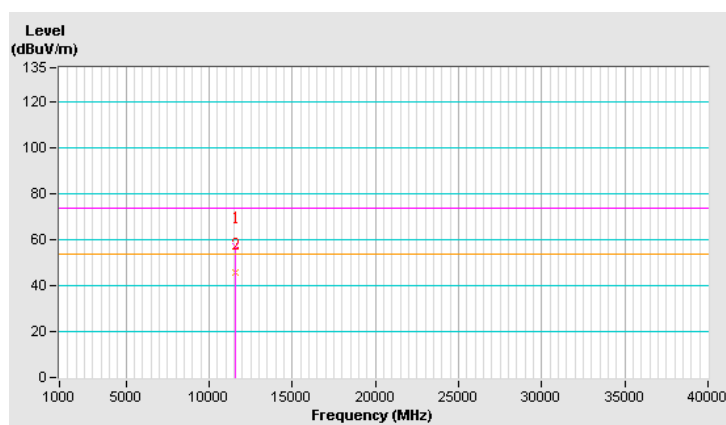


CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11550.00	57.1 PK	74.0	-16.9	3.24 H	127	41.30	15.80
2	11550.00	45.5 AV	54.0	-8.5	3.24 H	127	29.70	15.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

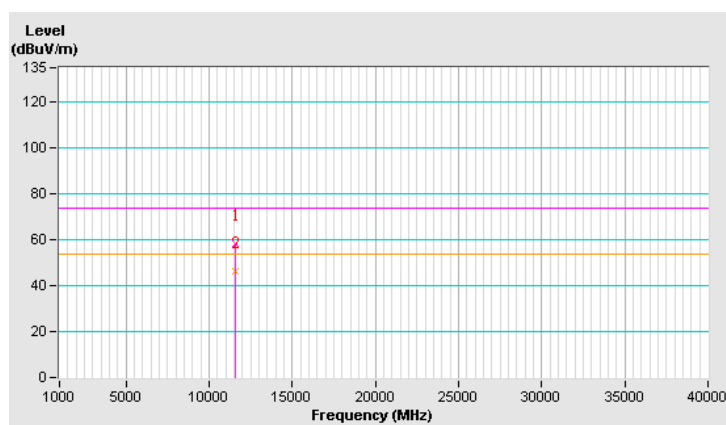


CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11550.00	58.2 PK	74.0	-15.8	2.93 V	271	42.40	15.80
2	11550.00	46.6 AV	54.0	-7.4	2.93 V	271	30.80	15.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value



Radiated Band Edge and Fundamental Emissions

SDM Mode

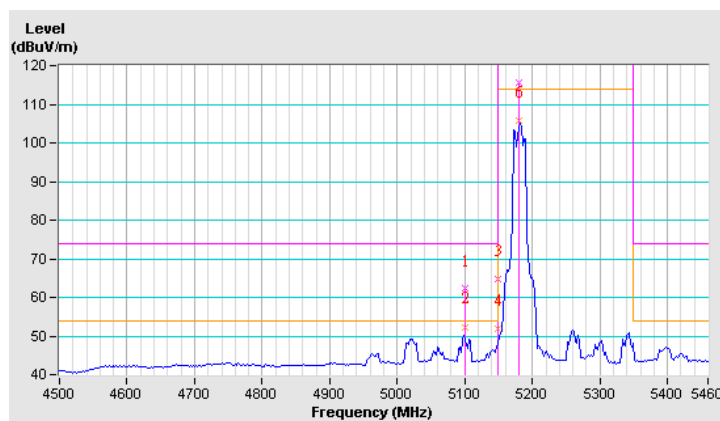
802.11ac (20MHz) 3S3T SDM Nss3 MCS0

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5100.00	62.2 PK	74.0	-11.8	3.09 H	360	58.40	3.80
2	5100.00	52.4 AV	54.0	-1.6	3.09 H	360	48.60	3.80
3	5150.00	64.8 PK	74.0	-9.2	3.09 H	360	60.90	3.90
4	5150.00	51.8 AV	54.0	-2.2	3.09 H	360	47.90	3.90
5	*5180.00	115.5 PK			3.09 H	360	74.80	40.70
6	*5180.00	105.9 AV			3.09 H	360	65.20	40.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

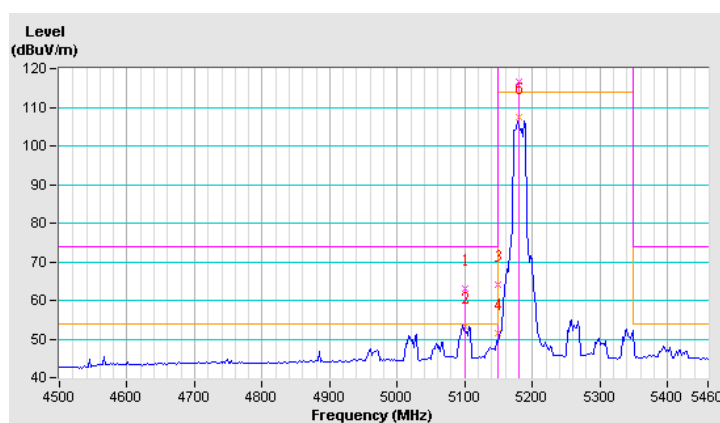


CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5100.00	63.1 PK	74.0	-10.9	3.00 V	6	59.30	3.80
2	5100.00	53.2 AV	54.0	-0.8	3.00 V	6	49.40	3.80
3	5150.00	64.2 PK	74.0	-9.8	3.00 V	6	60.30	3.90
4	5150.00	51.4 AV	54.0	-2.6	3.00 V	6	47.50	3.90
5	*5180.00	116.5 PK			3.00 V	6	75.80	40.70
6	*5180.00	107.3 AV			3.00 V	6	66.60	40.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

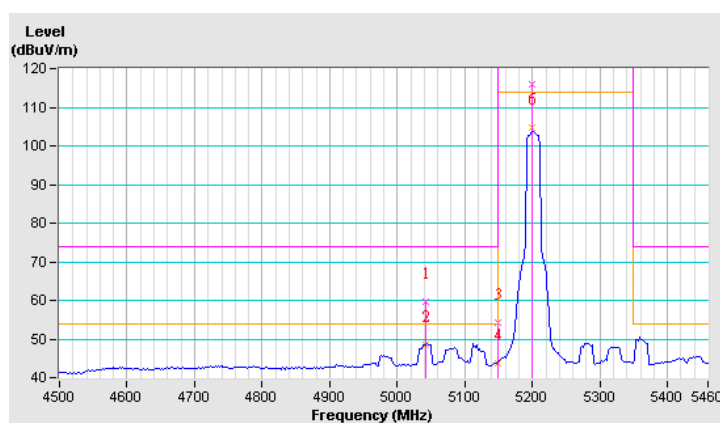


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5042.00	59.8 PK	74.0	-14.2	3.78 H	8	56.10	3.70
2	5042.00	48.6 AV	54.0	-5.4	3.78 H	8	44.90	3.70
3	5150.00	54.3 PK	74.0	-19.7	3.78 H	8	50.40	3.90
4	5150.00	43.7 AV	54.0	-10.3	3.78 H	8	39.80	3.90
5	*5200.00	116.0 PK			3.78 H	8	75.20	40.80
6	*5200.00	104.8 AV			3.78 H	8	64.00	40.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

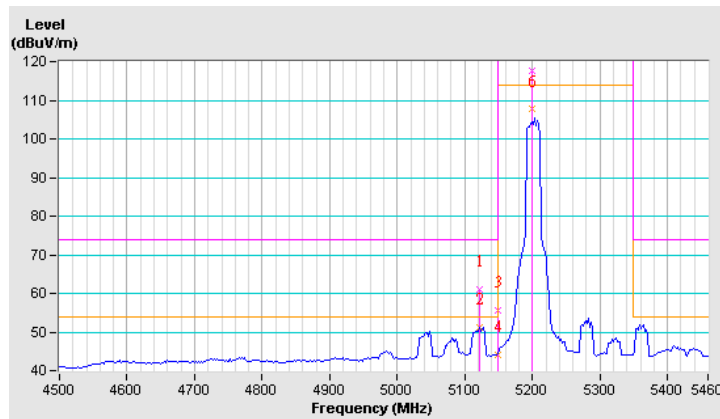


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5122.00	61.1 PK	74.0	-12.9	3.01 V	7	57.30	3.80
2	5122.00	51.2 AV	54.0	-2.8	3.01 V	7	47.40	3.80
3	5150.00	55.6 PK	74.0	-18.4	3.01 V	7	51.70	3.90
4	5150.00	44.2 AV	54.0	-9.8	3.01 V	7	40.30	3.90
5	*5200.00	117.7 PK			3.01 V	7	76.90	40.80
6	*5200.00	107.6 AV			3.01 V	7	66.80	40.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

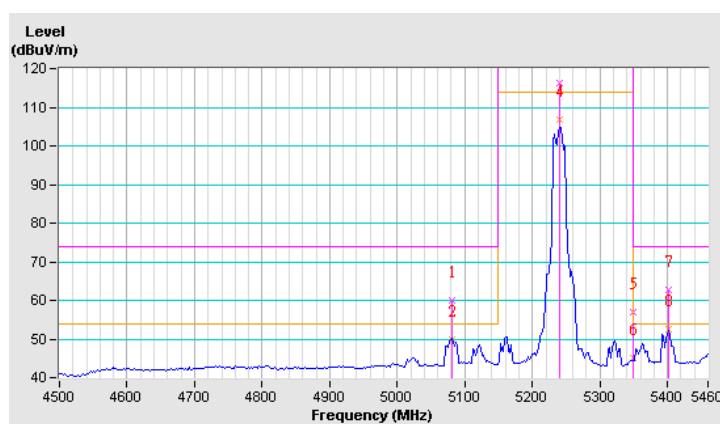


CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5081.00	60.1 PK	74.0	-13.9	3.33 H	2	56.30	3.80
2	5081.00	49.8 AV	54.0	-4.2	3.33 H	2	46.00	3.80
3	*5240.00	116.2 PK			3.33 H	2	75.40	40.80
4	*5240.00	106.8 AV			3.33 H	2	66.00	40.80
5	5350.00	56.9 PK	74.0	-17.1	3.33 H	2	52.50	4.40
6	5350.00	45.0 AV	54.0	-9.0	3.33 H	2	40.60	4.40
7	5401.00	62.6 PK	74.0	-11.4	3.33 H	2	58.10	4.50
8	5401.00	52.5 AV	54.0	-1.5	3.33 H	2	48.00	4.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

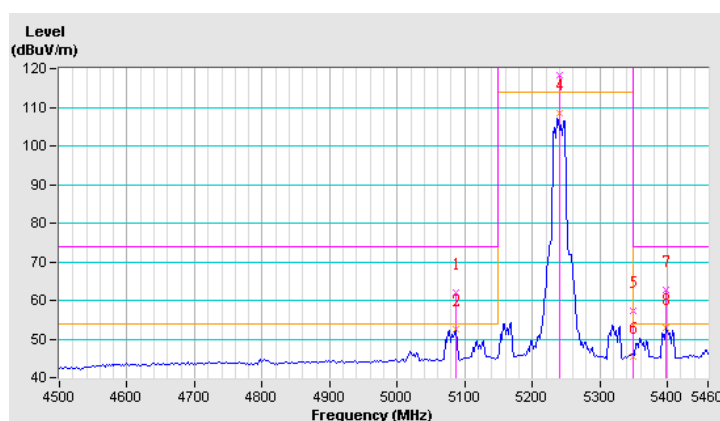


CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5087.00	62.2 PK	74.0	-11.8	3.02 V	5	58.40	3.80
2	5087.00	52.4 AV	54.0	-1.6	3.02 V	5	48.60	3.80
3	*5240.00	118.2 PK			3.02 V	5	77.40	40.80
4	*5240.00	108.5 AV			3.02 V	5	67.70	40.80
5	5350.00	57.2 PK	74.0	-16.8	3.02 V	5	52.80	4.40
6	5350.00	45.4 AV	54.0	-8.6	3.02 V	5	41.00	4.40
7	5398.00	62.7 PK	74.0	-11.3	3.02 V	5	58.20	4.50
8	5398.00	52.9 AV	54.0	-1.1	3.02 V	5	48.40	4.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

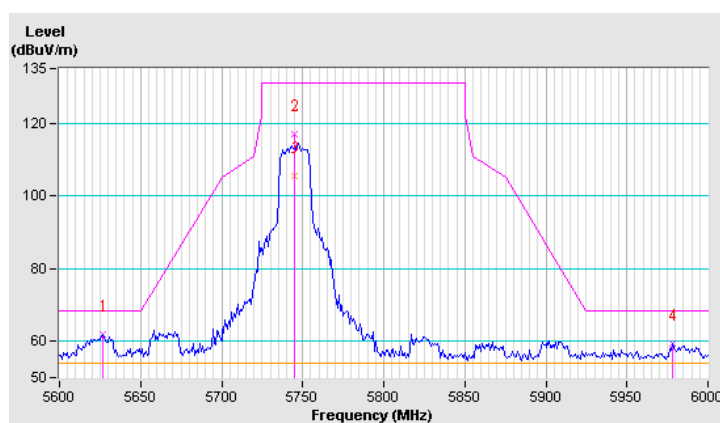


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5626.40	61.8 PK	68.2	-6.4	1.08 H	3	57.10	4.70
2	*5745.00	116.9 PK			1.08 H	3	75.40	41.50
3	*5745.00	105.6 AV			1.08 H	3	64.10	41.50
4	#5978.40	59.5 PK	68.2	-8.7	1.08 H	3	54.70	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

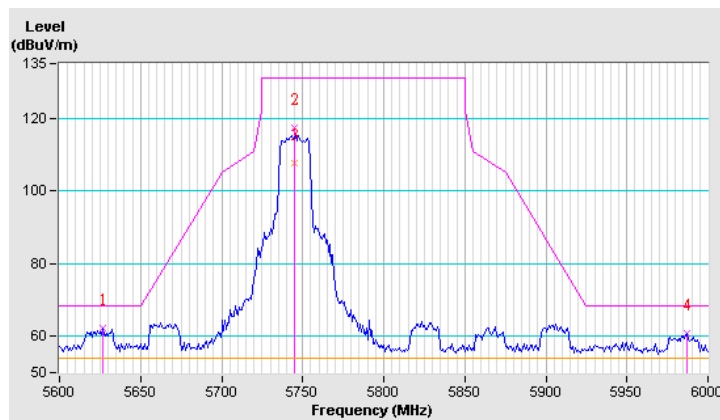


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5626.40	62.2 PK	68.2	-6.0	1.80 V	170	57.50	4.70
2	*5745.00	117.5 PK			1.80 V	170	76.00	41.50
3	*5745.00	107.8 AV			1.80 V	170	66.30	41.50
4	#5987.20	60.8 PK	68.2	-7.4	1.80 V	170	56.00	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

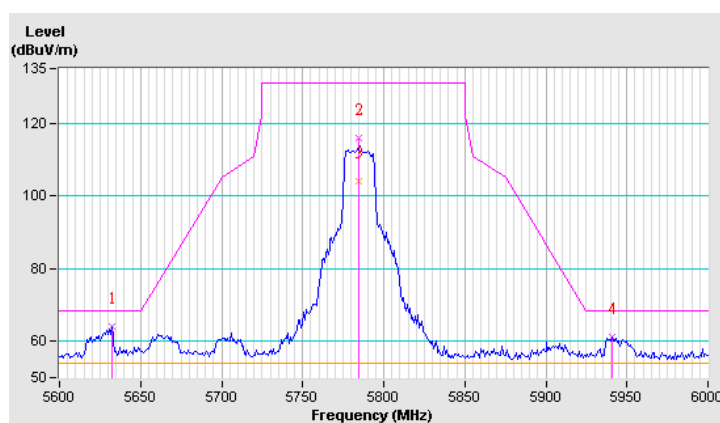


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5632.00	63.9 PK	68.2	-4.3	3.35 H	5	59.20	4.70
2	*5785.00	116.0 PK			3.35 H	5	74.50	41.50
3	*5785.00	104.2 AV			3.35 H	5	62.70	41.50
4	#5940.80	61.0 PK	68.2	-7.2	3.35 H	5	56.20	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

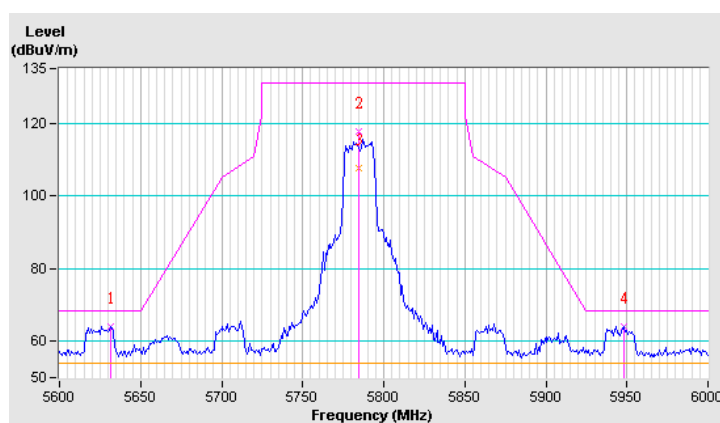


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5631.20	64.1 PK	68.2	-4.1	1.82 V	189	59.40	4.70
2	*5785.00	117.7 PK			1.82 V	189	76.20	41.50
3	*5785.00	107.6 AV			1.82 V	189	66.10	41.50
4	#5948.00	64.1 PK	68.2	-4.1	1.82 V	189	59.30	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

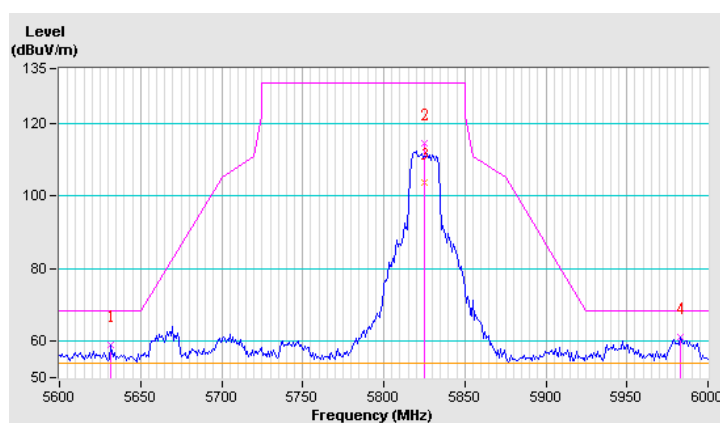


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5631.20	59.1 PK	68.2	-9.1	3.47 H	6	54.40	4.70
2	*5825.00	114.4 PK			3.47 H	6	72.80	41.60
3	*5825.00	103.5 AV			3.47 H	6	61.90	41.60
4	#5983.20	61.2 PK	68.2	-7.0	3.47 H	6	56.40	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

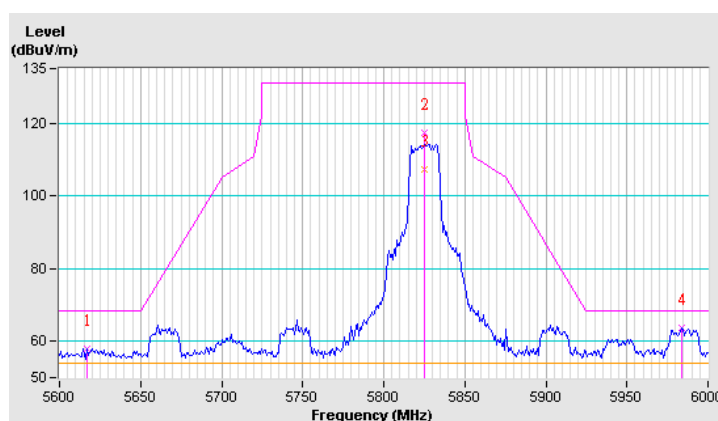


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5616.80	58.0 PK	68.2	-10.2	1.76 V	190	53.20	4.80
2	*5825.00	117.3 PK			1.76 V	190	75.70	41.60
3	*5825.00	107.3 AV			1.76 V	190	65.70	41.60
4	#5984.00	63.6 PK	68.2	-4.6	1.76 V	190	58.80	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



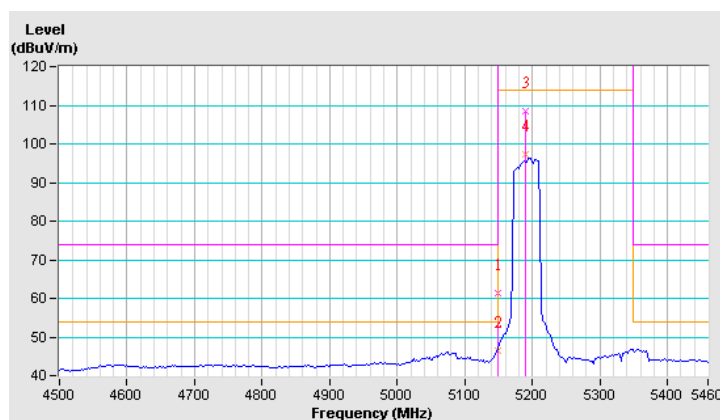
802.11ac (40MHz) 3S3T SDM Nss3 MCS0

CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	61.3 PK	74.0	-12.7	3.22 H	3	57.40	3.90
2	5150.00	46.6 AV	54.0	-7.4	3.22 H	3	42.70	3.90
3	*5190.00	108.6 PK			3.22 H	3	67.80	40.80
4	*5190.00	97.2 AV			3.22 H	3	56.40	40.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

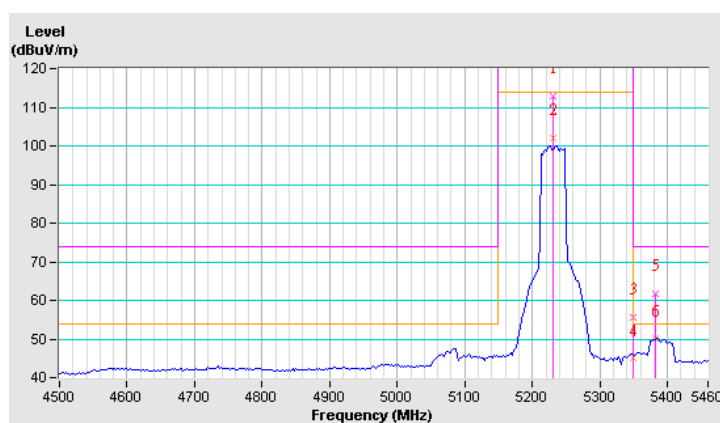


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5230.00	113.0 PK			3.02 H	0	72.20	40.80
2	*5230.00	101.9 AV			3.02 H	0	61.10	40.80
3	5350.00	55.7 PK	74.0	-18.3	3.02 H	0	51.30	4.40
4	5350.00	44.9 AV	54.0	-9.1	3.02 H	0	40.50	4.40
5	5382.00	61.7 PK	74.0	-12.3	3.02 H	0	57.30	4.40
6	5382.00	50.0 AV	54.0	-4.0	3.02 H	0	45.60	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

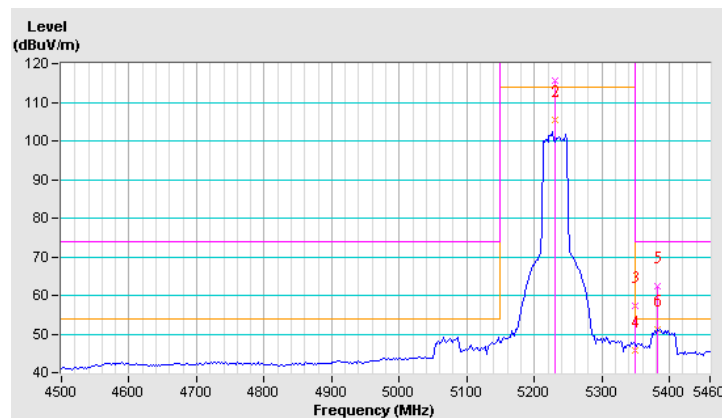


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5230.00	115.6 PK			1.02 V	180	74.80	40.80
2	*5230.00	105.4 AV			1.02 V	180	64.60	40.80
3	5350.00	57.4 PK	74.0	-16.6	1.02 V	180	53.00	4.40
4	5350.00	45.7 AV	54.0	-8.3	1.02 V	180	41.30	4.40
5	5382.00	62.5 PK	74.0	-11.5	1.02 V	180	58.10	4.40
6	5382.00	51.3 AV	54.0	-2.7	1.02 V	180	46.90	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

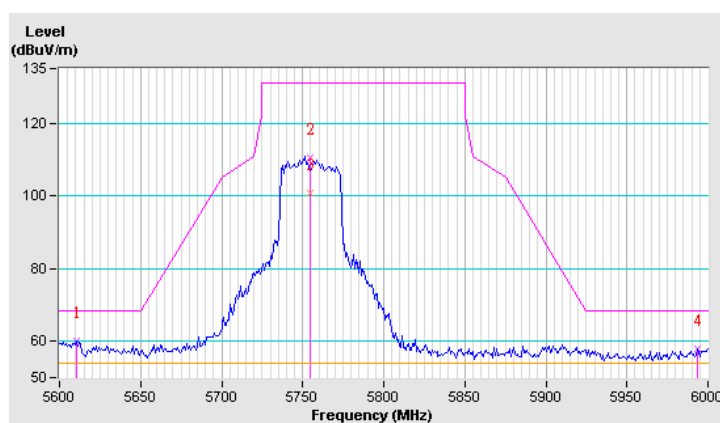


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5610.40	60.0 PK	68.2	-8.2	3.40 H	3	55.20	4.80
2	*5755.00	110.6 PK			3.40 H	3	69.10	41.50
3	*5755.00	100.7 AV			3.40 H	3	59.20	41.50
4	#5993.60	58.0 PK	68.2	-10.2	3.40 H	3	53.20	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

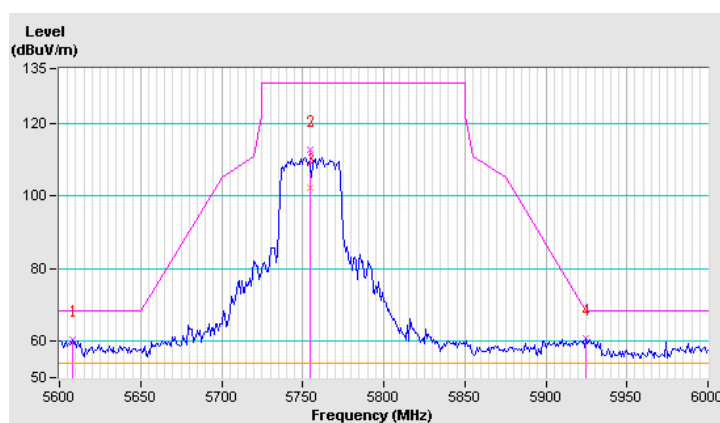


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5608.00	60.4 PK	68.2	-7.8	1.97 V	190	55.60	4.80
2	*5755.00	112.6 PK			1.97 V	190	71.10	41.50
3	*5755.00	102.1 AV			1.97 V	190	60.60	41.50
4	#5924.80	60.7 PK	68.3	-7.6	1.97 V	190	55.90	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

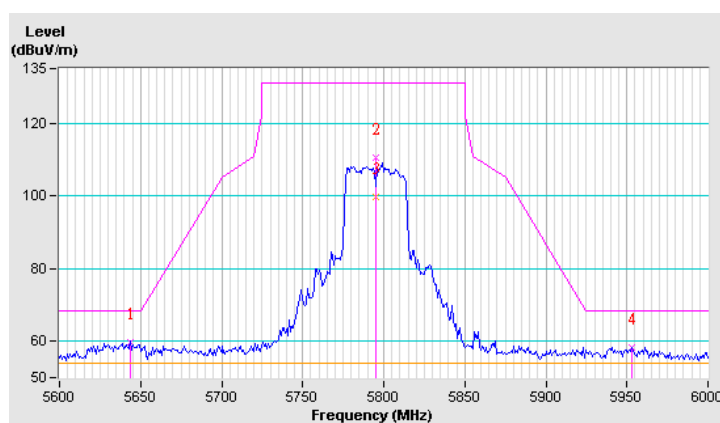


CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5644.00	59.9 PK	68.2	-8.3	3.52 H	16	55.20	4.70
2	*5795.00	110.6 PK			3.52 H	16	69.10	41.50
3	*5795.00	99.8 AV			3.52 H	16	58.30	41.50
4	#5952.80	58.4 PK	68.2	-9.8	3.52 H	16	53.60	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

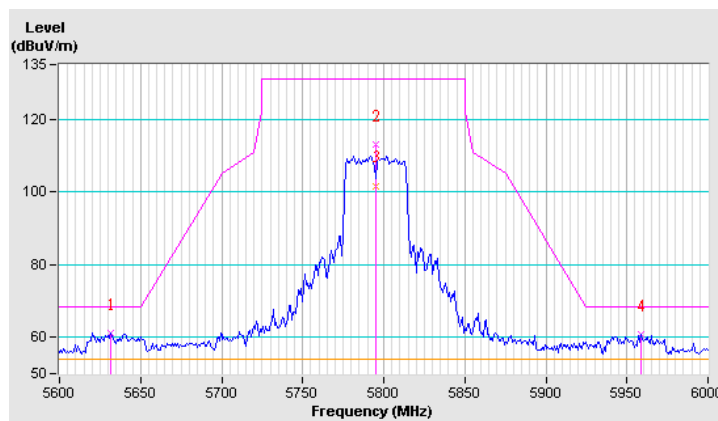


CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5631.20	61.3 PK	68.2	-6.9	2.04 V	173	56.60	4.70
2	*5795.00	113.2 PK			2.04 V	173	71.70	41.50
3	*5795.00	101.7 AV			2.04 V	173	60.20	41.50
4	#5958.40	60.9 PK	68.2	-7.3	2.04 V	173	56.10	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



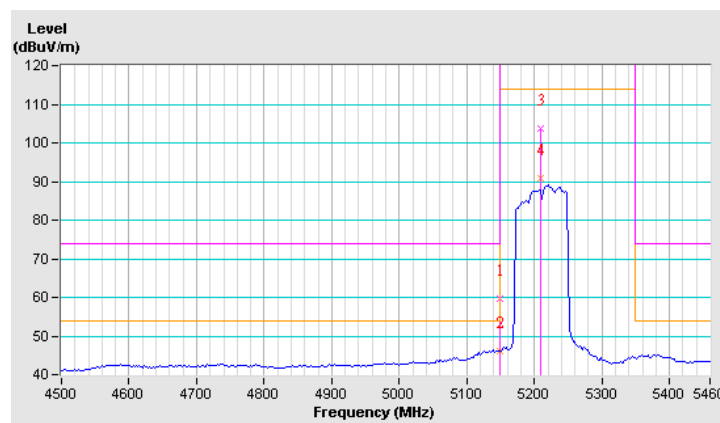
802.11ac (80MHz) 3S3T SDM Nss3 MCS0

CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	59.8 PK	74.0	-14.2	3.20 H	360	55.90	3.90
2	5150.00	46.1 AV	54.0	-7.9	3.20 H	360	42.20	3.90
3	*5210.00	103.6 PK			3.20 H	360	62.80	40.80
4	*5210.00	91.0 AV			3.20 H	360	50.20	40.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

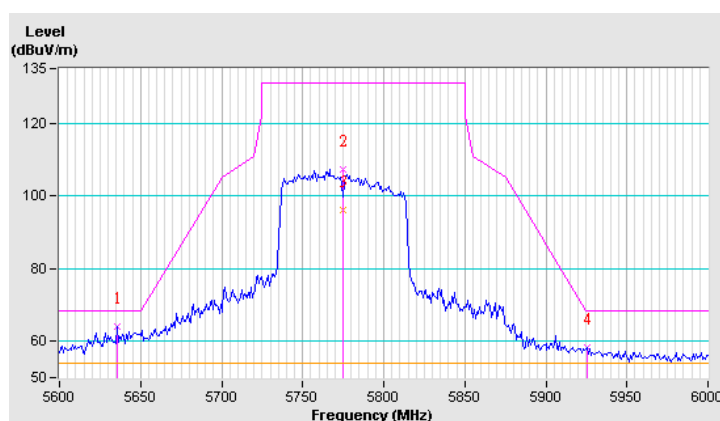


CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5636.00	63.9 PK	68.2	-4.3	3.38 H	2	59.20	4.70
2	*5775.00	107.2 PK			3.38 H	2	65.70	41.50
3	*5775.00	96.2 AV			3.38 H	2	54.70	41.50
4	#5925.60	58.2 PK	68.2	-10.0	3.38 H	2	53.40	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

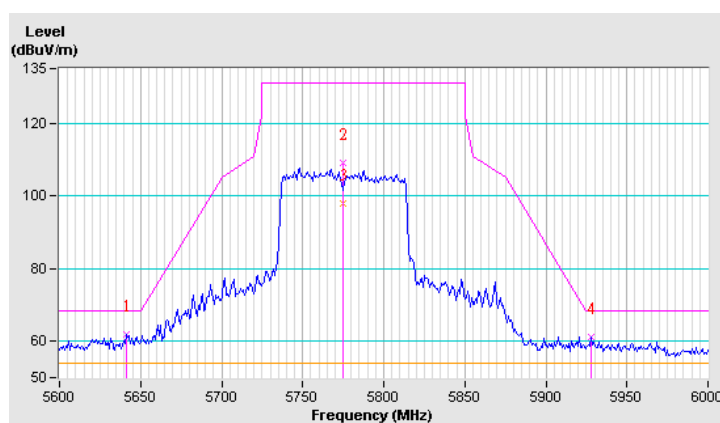


CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5641.60	62.0 PK	68.2	-6.2	2.15 V	187	57.30	4.70
2	*5775.00	109.1 PK			2.15 V	187	67.60	41.50
3	*5775.00	97.8 AV			2.15 V	187	56.30	41.50
4	#5928.00	61.3 PK	68.2	-6.9	2.15 V	187	56.50	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



1S3T TxBF Mode

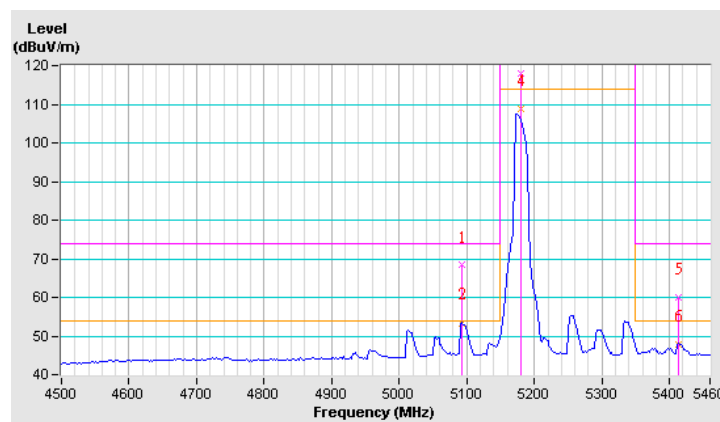
802.11ac (20MHz) 1S3T TxBF Nss1 MCS0

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5093.00	68.3 PK	74.0	-5.7	2.87 H	35	64.50	3.80
2	5093.00	53.4 AV	54.0	-0.6	2.87 H	35	49.60	3.80
3	*5180.00	117.8 PK			2.87 H	35	77.10	40.70
4	*5180.00	108.9 AV			2.87 H	35	68.20	40.70
5	5413.00	59.9 PK	74.0	-14.1	2.87 H	35	55.40	4.50
6	5413.00	47.9 AV	54.0	-6.1	2.87 H	35	43.40	4.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

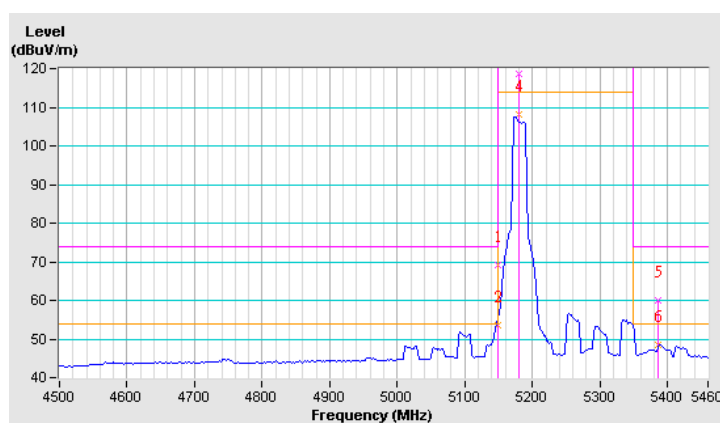


CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	69.0 PK	74.0	-5.0	1.44 V	166	65.10	3.90
2	5150.00	53.6 AV	54.0	-0.4	1.44 V	166	49.70	3.90
3	*5180.00	118.7 PK			1.44 V	166	78.00	40.70
4	*5180.00	108.2 AV			1.44 V	166	67.50	40.70
5	5387.00	60.1 PK	74.0	-13.9	1.44 V	166	55.70	4.40
6	5387.00	48.4 AV	54.0	-5.6	1.44 V	166	44.00	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

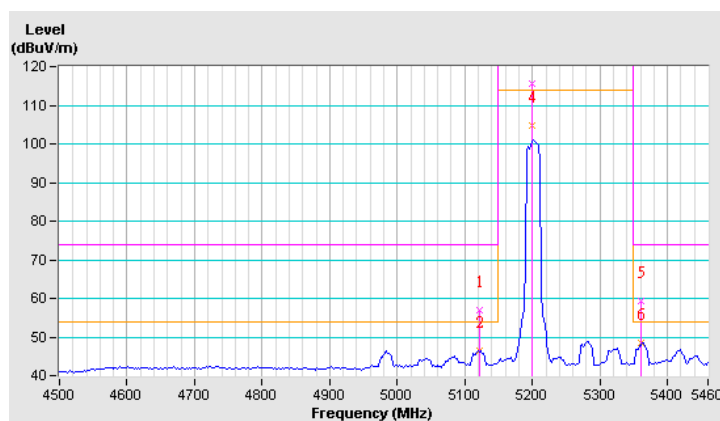


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5122.00	56.9 PK	74.0	-17.1	1.01 H	359	53.10	3.80
2	5122.00	46.4 AV	54.0	-7.6	1.01 H	359	42.60	3.80
3	*5200.00	115.7 PK			1.01 H	359	74.90	40.80
4	*5200.00	104.9 AV			1.01 H	359	64.10	40.80
5	5361.00	59.3 PK	74.0	-14.7	1.01 H	359	54.90	4.40
6	5361.00	48.5 AV	54.0	-5.5	1.01 H	359	44.10	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

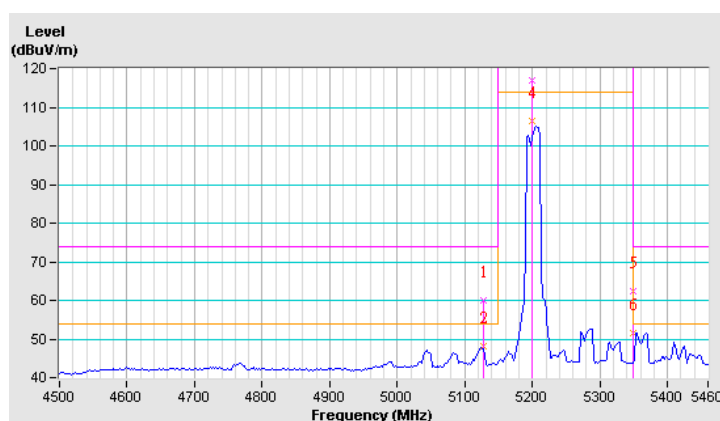


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5127.00	60.1 PK	74.0	-13.9	2.32 V	172	56.30	3.80
2	5127.00	48.0 AV	54.0	-6.0	2.32 V	172	44.20	3.80
3	*5200.00	116.8 PK			2.32 V	172	76.00	40.80
4	*5200.00	106.3 AV			2.32 V	172	65.50	40.80
5	5350.00	62.4 PK	74.0	-11.6	2.32 V	172	58.00	4.40
6	5350.00	51.5 AV	54.0	-2.5	2.32 V	172	47.10	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

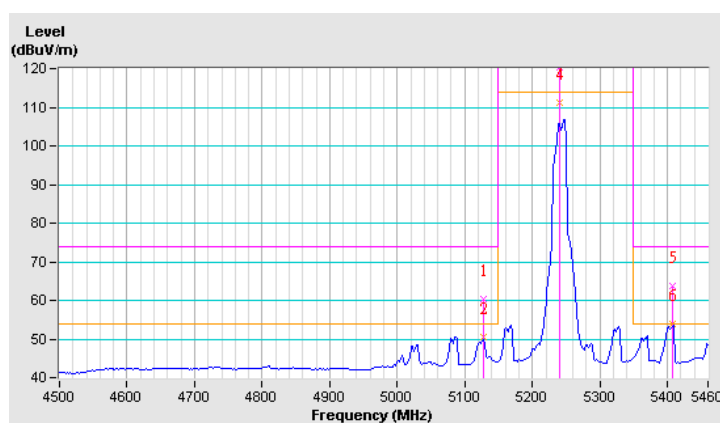


CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5128.00	60.4 PK	74.0	-13.6	2.93 H	8	56.60	3.80
2	5128.00	50.5 AV	54.0	-3.5	2.93 H	8	46.70	3.80
3	*5240.00	120.5 PK			2.93 H	8	79.70	40.80
4	*5240.00	111.1 AV			2.93 H	8	70.30	40.80
5	5408.00	63.6 PK	74.0	-10.4	2.93 H	8	59.10	4.50
6	5408.00	53.9 AV	54.0	-0.1	2.93 H	8	49.40	4.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

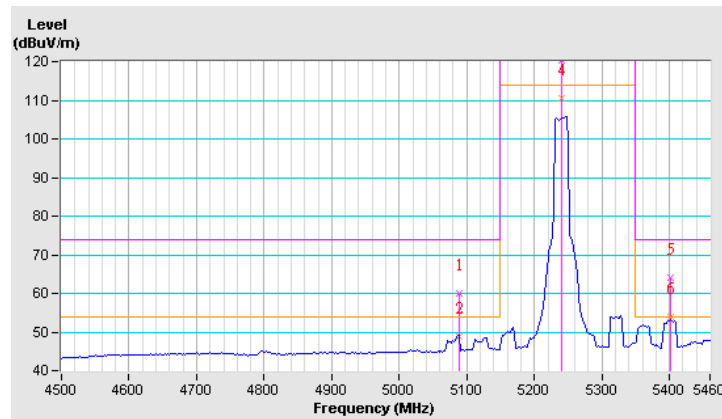


CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5088.00	59.9 PK	74.0	-14.1	2.58 V	169	56.10	3.80
2	5088.00	48.7 AV	54.0	-5.3	2.58 V	169	44.90	3.80
3	*5240.00	120.4 PK			2.63 V	175	79.60	40.80
4	*5240.00	110.6 AV			2.63 V	175	69.80	40.80
5	5401.00	64.1 PK	74.0	-9.9	2.58 V	169	59.60	4.50
6	5401.00	53.8 AV	54.0	-0.2	2.58 V	169	49.30	4.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

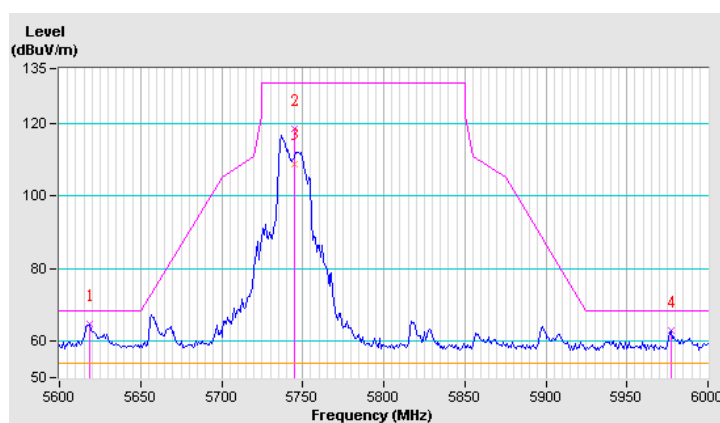


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5618.40	64.8 PK	68.2	-3.4	1.44 H	345	60.00	4.80
2	*5745.00	118.6 PK			1.44 H	345	77.10	41.50
3	*5745.00	108.9 AV			1.44 H	345	67.40	41.50
4	#5977.60	62.8 PK	68.2	-5.4	1.44 H	345	58.00	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

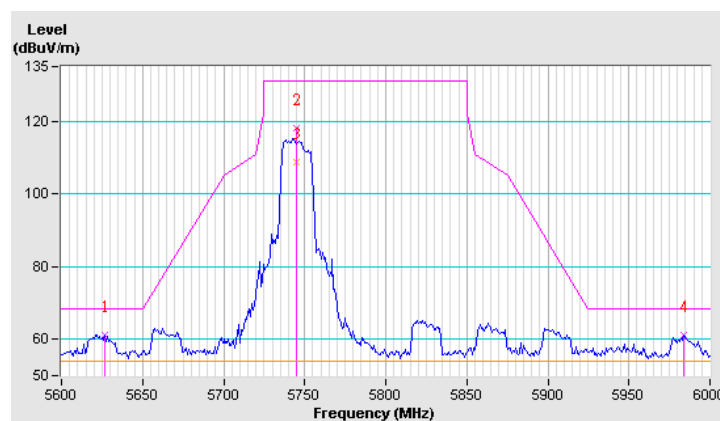


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5626.40	61.2 PK	68.2	-7.0	1.24 V	189	56.50	4.70
2	*5745.00	118.2 PK			1.24 V	189	76.70	41.50
3	*5745.00	108.7 AV			1.24 V	189	67.20	41.50
4	#5984.00	61.0 PK	68.2	-7.2	1.24 V	189	56.20	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

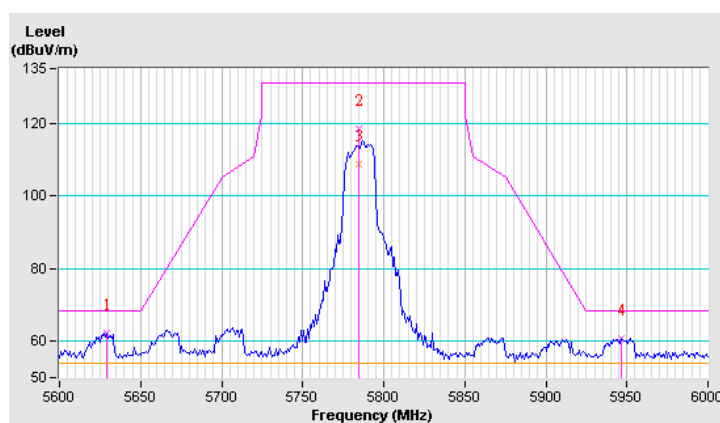


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5628.80	62.2 PK	68.2	-6.0	3.66 H	20	57.50	4.70
2	*5785.00	118.4 PK			3.66 H	20	76.90	41.50
3	*5785.00	108.6 AV			3.66 H	20	67.10	41.50
4	#5946.40	60.8 PK	68.2	-7.4	3.66 H	20	56.00	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

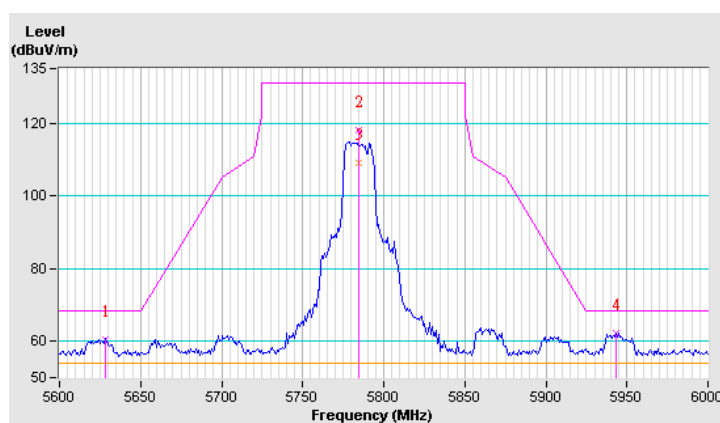


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5628.00	60.6 PK	68.2	-7.6	3.38 V	285	55.90	4.70
2	*5785.00	118.1 PK			3.38 V	285	76.60	41.50
3	*5785.00	108.9 AV			3.38 V	285	67.40	41.50
4	#5943.20	62.3 PK	68.2	-5.9	3.38 V	285	57.50	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

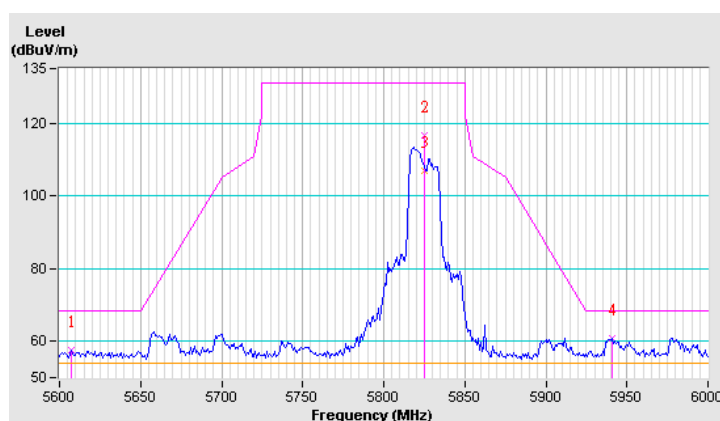


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5607.20	57.4 PK	68.2	-10.8	3.49 H	3	52.60	4.80
2	*5825.00	116.7 PK			3.49 H	3	75.10	41.60
3	*5825.00	107.0 AV			3.49 H	3	65.40	41.60
4	#5940.80	60.9 PK	68.2	-7.3	3.49 H	3	56.10	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

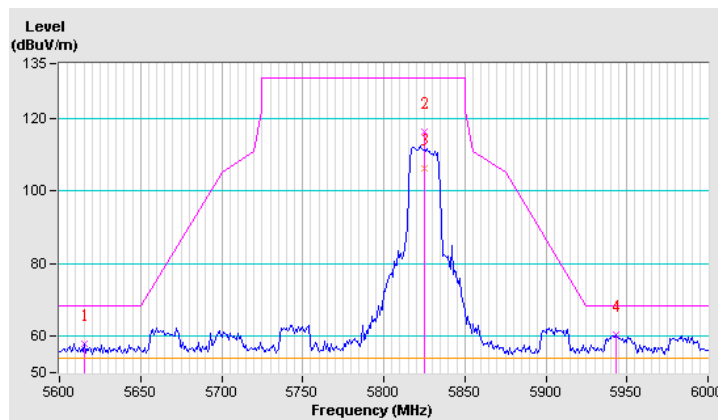


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5615.20	58.1 PK	68.2	-10.1	3.06 V	359	53.30	4.80
2	*5825.00	116.2 PK			3.06 V	359	74.60	41.60
3	*5825.00	106.3 AV			3.06 V	359	64.70	41.60
4	#5943.20	60.3 PK	68.2	-7.9	3.06 V	359	55.50	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



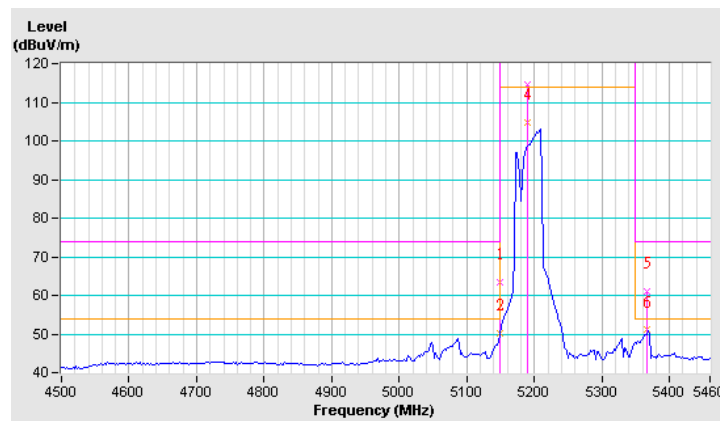
802.11ac (40MHz) 1S3T TxBF Nss1 MCS0

CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	63.5 PK	74.0	-10.5	2.88 H	3	59.60	3.90
2	5150.00	50.2 AV	54.0	-3.8	2.88 H	3	46.30	3.90
3	*5190.00	114.6 PK			2.88 H	3	73.80	40.80
4	*5190.00	104.9 AV			2.88 H	3	64.10	40.80
5	5367.00	61.1 PK	74.0	-12.9	2.88 H	3	56.70	4.40
6	5367.00	51.0 AV	54.0	-3.0	2.88 H	3	46.60	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

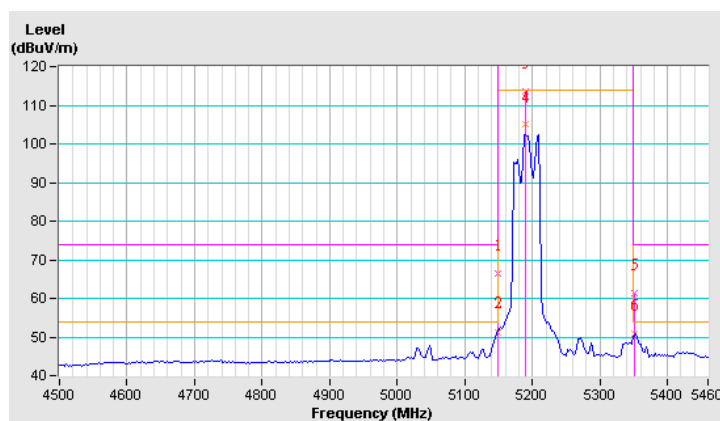


CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	66.4 PK	74.0	-7.6	1.75 V	191	62.50	3.90
2	5150.00	51.4 AV	54.0	-2.6	1.75 V	191	47.50	3.90
3	*5190.00	113.6 PK			1.75 V	191	72.80	40.80
4	*5190.00	104.9 AV			1.75 V	191	64.10	40.80
5	5352.00	61.4 PK	74.0	-12.6	1.75 V	191	57.00	4.40
6	5352.00	50.8 AV	54.0	-3.2	1.75 V	191	46.40	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

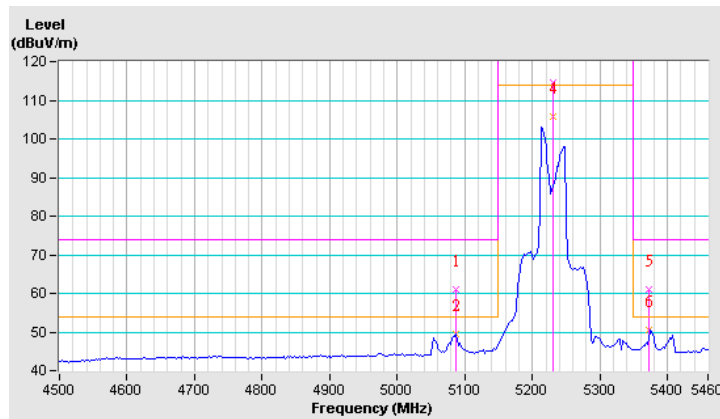


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5087.00	60.9 PK	74.0	-13.1	3.59 H	5	57.10	3.80
2	5087.00	49.6 AV	54.0	-4.4	3.59 H	5	45.80	3.80
3	*5230.00	114.4 PK			3.59 H	5	73.60	40.80
4	*5230.00	105.9 AV			3.59 H	5	65.10	40.80
5	5372.00	61.0 PK	74.0	-13.0	3.59 H	5	56.60	4.40
6	5372.00	50.5 AV	54.0	-3.5	3.59 H	5	46.10	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

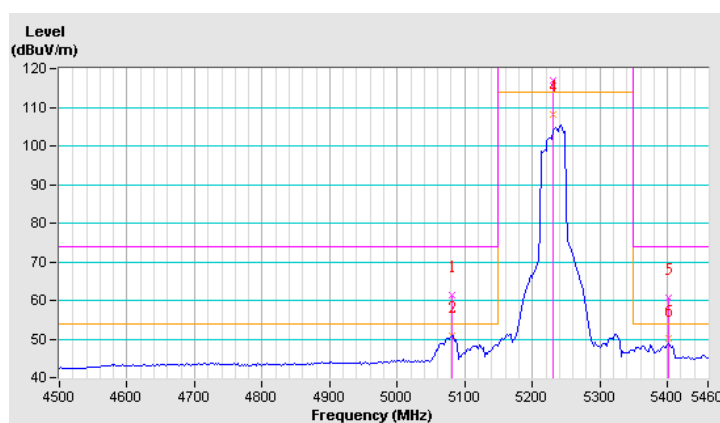


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5082.00	61.3 PK	74.0	-12.7	2.08 V	179	57.50	3.80
2	5082.00	50.9 AV	54.0	-3.1	2.08 V	179	47.10	3.80
3	*5230.00	117.1 PK			2.08 V	179	76.30	40.80
4	*5230.00	108.2 AV			2.08 V	179	67.40	40.80
5	5402.00	60.7 PK	74.0	-13.3	2.08 V	179	56.20	4.50
6	5402.00	50.0 AV	54.0	-4.0	2.08 V	179	45.50	4.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

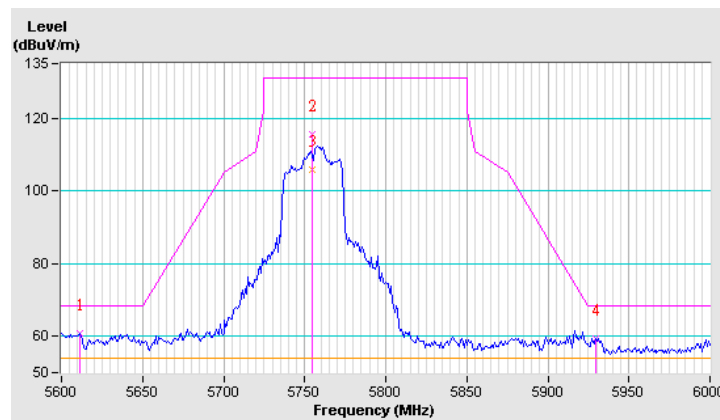


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5611.20	60.9 PK	68.2	-7.3	3.21 H	11	56.10	4.80
2	*5755.00	115.6 PK			3.21 H	11	74.10	41.50
3	*5755.00	105.8 AV			3.21 H	11	64.30	41.50
4	#5929.60	59.5 PK	68.2	-8.7	3.21 H	11	54.70	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

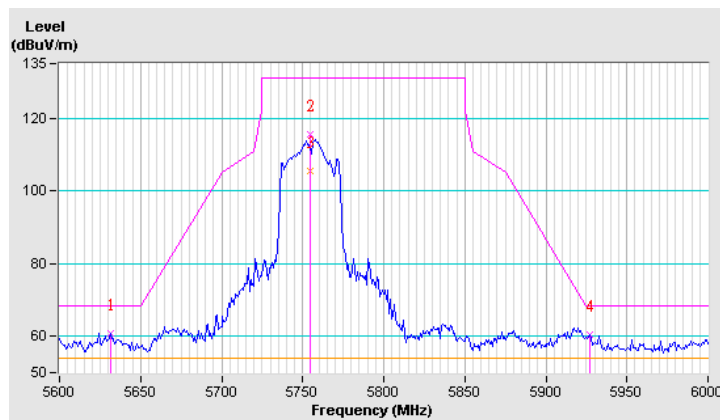


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5631.20	60.7 PK	68.2	-7.5	1.61 V	192	56.00	4.70
2	*5755.00	115.7 PK			1.61 V	192	74.20	41.50
3	*5755.00	105.6 AV			1.61 V	192	64.10	41.50
4	#5927.20	60.3 PK	68.2	-7.9	1.61 V	192	55.50	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

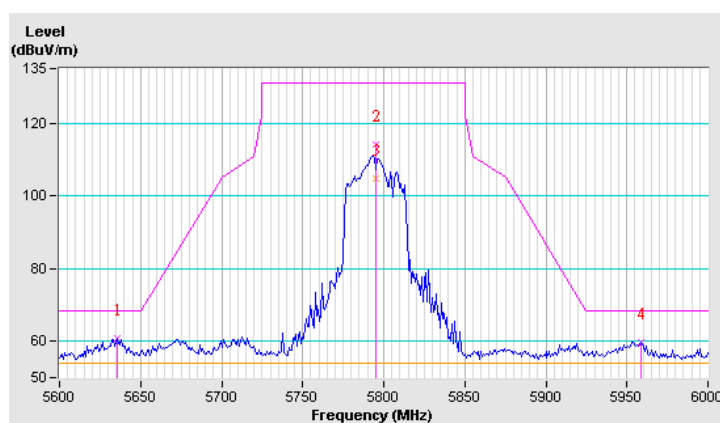


CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5636.00	60.8 PK	68.2	-7.4	3.34 H	13	56.10	4.70
2	*5795.00	114.0 PK			3.34 H	13	72.50	41.50
3	*5795.00	104.8 AV			3.34 H	13	63.30	41.50
4	#5958.40	59.8 PK	68.2	-8.4	3.34 H	13	55.00	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

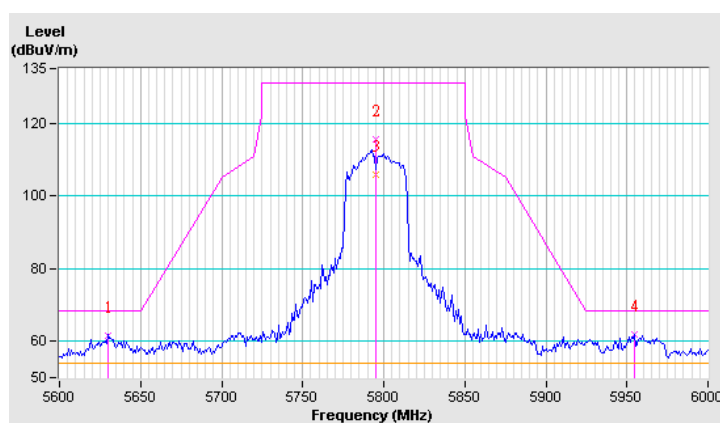


CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5629.60	61.7 PK	68.2	-6.5	1.51 V	193	57.00	4.70
2	*5795.00	115.6 PK			1.51 V	193	74.10	41.50
3	*5795.00	105.8 AV			1.51 V	193	64.30	41.50
4	#5954.40	61.8 PK	68.2	-6.4	1.51 V	193	57.00	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



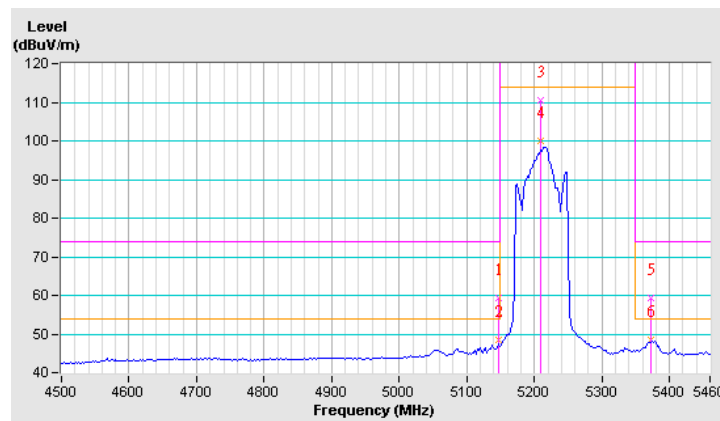
802.11ac (80MHz) 1S3T TxBF Nss1 MCS0

CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5147.00	59.3 PK	74.0	-14.7	2.89 H	3	55.40	3.90
2	5147.00	48.4 AV	54.0	-5.6	2.89 H	3	44.50	3.90
3	*5210.00	110.4 PK			2.89 H	3	69.60	40.80
4	*5210.00	100.1 AV			2.89 H	3	59.30	40.80
5	5373.00	59.4 PK	74.0	-14.6	2.89 H	3	55.00	4.40
6	5373.00	48.5 AV	54.0	-5.5	2.89 H	3	44.10	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

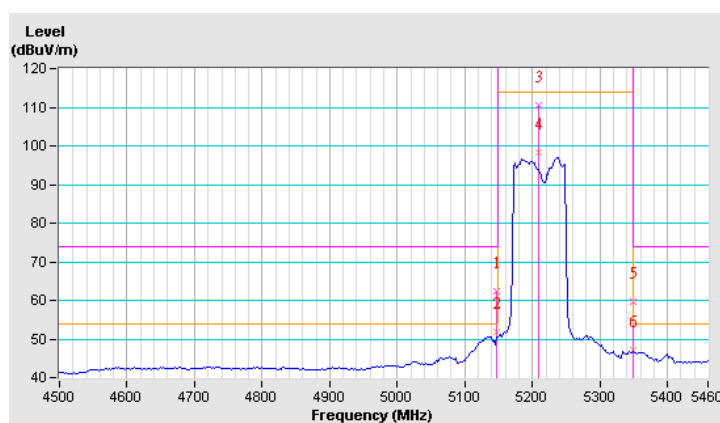


CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5147.00	62.5 PK	74.0	-11.5	2.07 V	177	58.60	3.90
2	5147.00	51.7 AV	54.0	-2.3	2.07 V	177	47.80	3.90
3	*5210.00	110.4 PK			2.07 V	177	69.60	40.80
4	*5210.00	98.3 AV			2.07 V	177	57.50	40.80
5	5350.00	59.7 PK	74.0	-14.3	2.07 V	177	55.30	4.40
6	5350.00	47.2 AV	54.0	-6.8	2.07 V	177	42.80	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

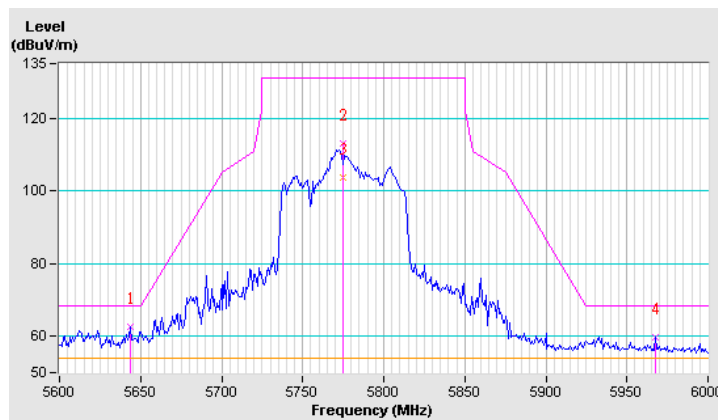


CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5644.00	62.6 PK	68.2	-5.6	1.49 H	10	57.90	4.70
2	*5775.00	113.1 PK			1.49 H	10	71.60	41.50
3	*5775.00	103.8 AV			1.49 H	10	62.30	41.50
4	#5968.00	59.6 PK	68.2	-8.6	1.49 H	10	54.80	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

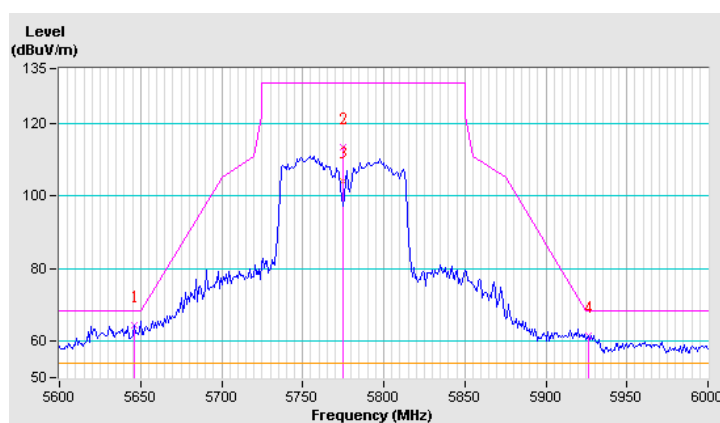


CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5646.40	64.5 PK	68.2	-3.7	1.51 V	188	59.80	4.70
2	*5775.00	113.5 PK			1.51 V	188	72.00	41.50
3	*5775.00	103.9 AV			1.51 V	188	62.40	41.50
4	#5926.40	61.6 PK	68.2	-6.6	1.51 V	188	56.80	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



2S3T TxBF Mode

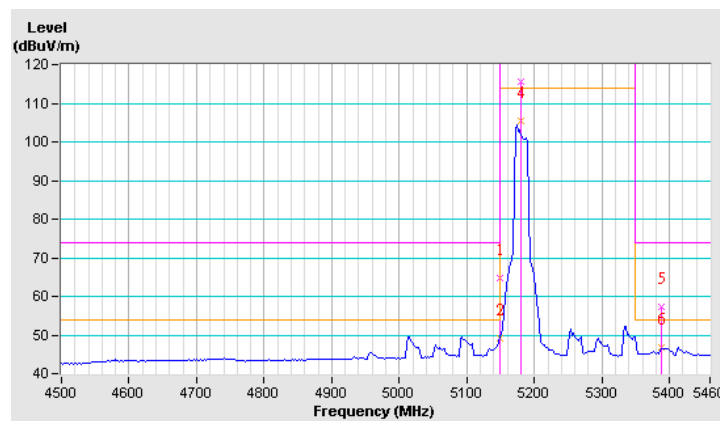
802.11ac (20MHz) 2S3T TxBF Nss2 MCS0

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	64.9 PK	74.0	-9.1	1.71 H	3	61.00	3.90
2	5150.00	49.2 AV	54.0	-4.8	1.71 H	3	45.30	3.90
3	*5180.00	115.5 PK			1.71 H	3	74.80	40.70
4	*5180.00	105.5 AV			1.71 H	3	64.80	40.70
5	5389.00	57.2 PK	74.0	-16.8	1.71 H	3	52.80	4.40
6	5389.00	46.7 AV	54.0	-7.3	1.71 H	3	42.30	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

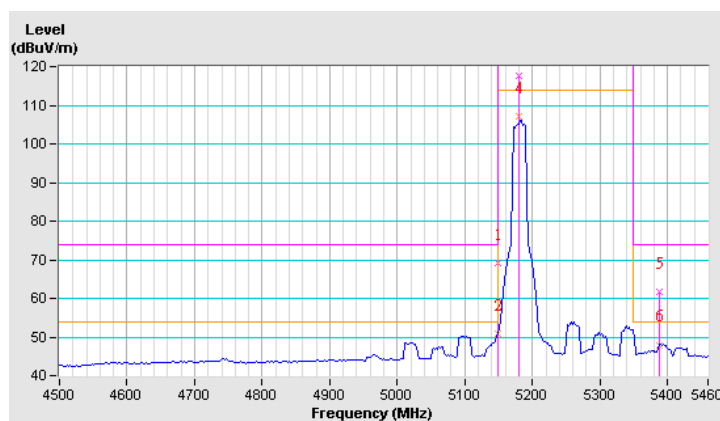


CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	69.2 PK	74.0	-4.8	1.92 V	172	65.30	3.90
2	5150.00	50.9 AV	54.0	-3.1	1.92 V	172	47.00	3.90
3	*5180.00	117.6 PK			1.92 V	172	76.90	40.70
4	*5180.00	107.2 AV			1.92 V	172	66.50	40.70
5	5389.00	61.7 PK	74.0	-12.3	1.92 V	172	57.30	4.40
6	5389.00	48.0 AV	54.0	-6.0	1.92 V	172	43.60	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

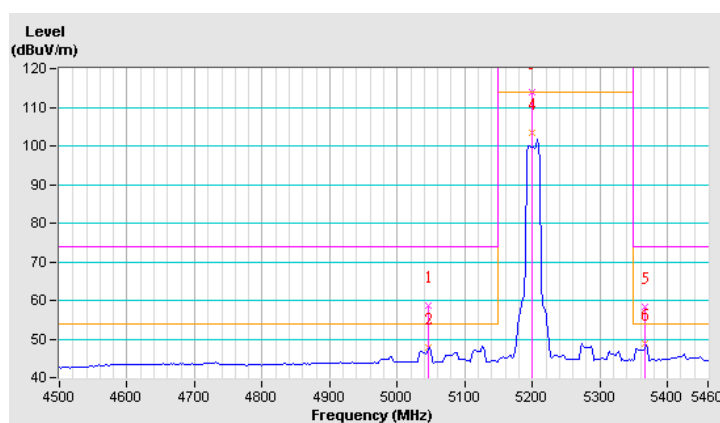


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5046.00	58.6 PK	74.0	-15.4	1.52 H	36	54.90	3.70
2	5046.00	47.8 AV	54.0	-6.2	1.52 H	36	44.10	3.70
3	*5200.00	114.0 PK			1.52 H	36	73.20	40.80
4	*5200.00	103.5 AV			1.52 H	36	62.70	40.80
5	5366.00	58.4 PK	74.0	-15.6	1.52 H	36	54.00	4.40
6	5366.00	48.7 AV	54.0	-5.3	1.52 H	36	44.30	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

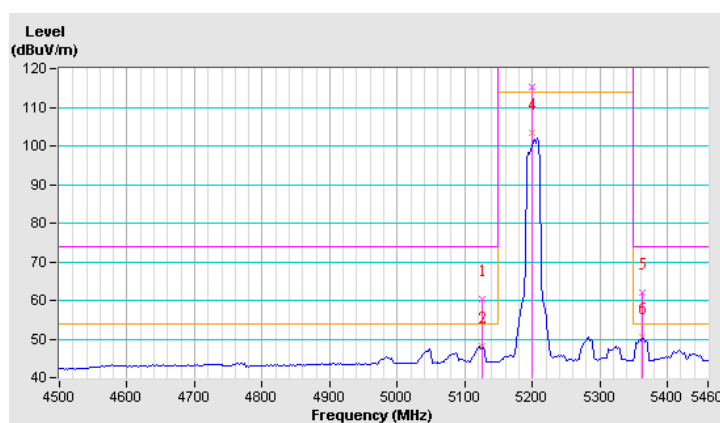


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5126.00	60.4 PK	74.0	-13.6	1.54 V	186	56.60	3.80
2	5126.00	48.1 AV	54.0	-5.9	1.54 V	186	44.30	3.80
3	*5200.00	115.2 PK			1.54 V	186	74.40	40.80
4	*5200.00	103.4 AV			1.54 V	186	62.60	40.80
5	5362.00	62.0 PK	74.0	-12.0	1.54 V	186	57.60	4.40
6	5362.00	50.6 AV	54.0	-3.4	1.54 V	186	46.20	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

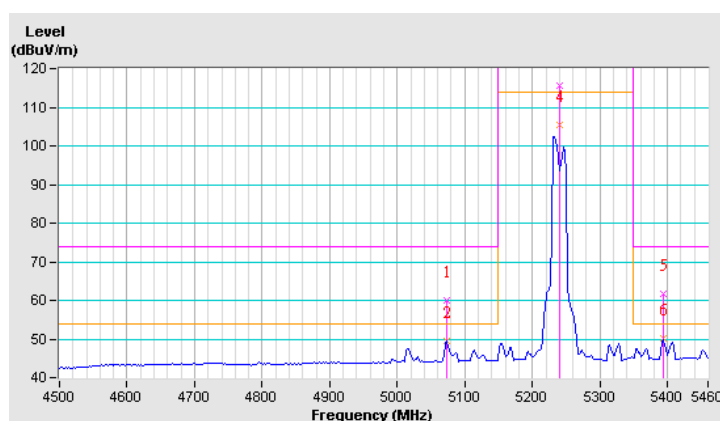


CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5073.00	60.0 PK	74.0	-14.0	1.72 H	16	56.20	3.80
2	5073.00	49.4 AV	54.0	-4.6	1.72 H	16	45.60	3.80
3	*5240.00	115.6 PK			1.72 H	16	74.80	40.80
4	*5240.00	105.5 AV			1.72 H	16	64.70	40.80
5	5393.00	61.8 PK	74.0	-12.2	1.72 H	16	57.40	4.40
6	5393.00	50.1 AV	54.0	-3.9	1.72 H	16	45.70	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

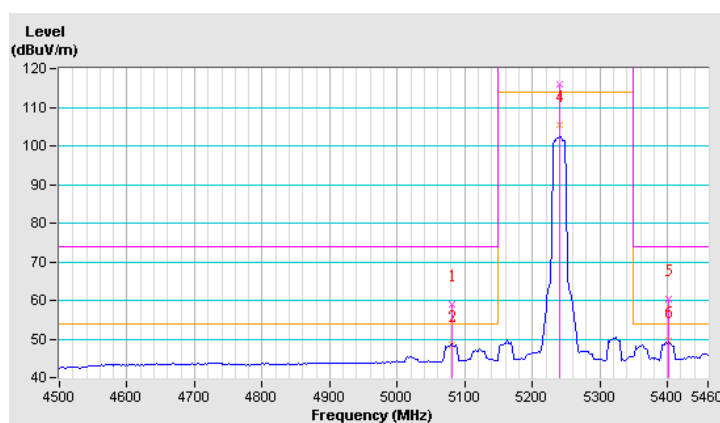


CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5082.00	59.1 PK	74.0	-14.9	1.45 V	324	55.30	3.80
2	5082.00	48.6 AV	54.0	-5.4	1.45 V	324	44.80	3.80
3	*5240.00	115.9 PK			1.45 V	324	75.10	40.80
4	*5240.00	105.3 AV			1.45 V	324	64.50	40.80
5	5402.00	60.5 PK	74.0	-13.5	1.45 V	324	56.00	4.50
6	5402.00	49.6 AV	54.0	-4.4	1.45 V	324	45.10	4.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

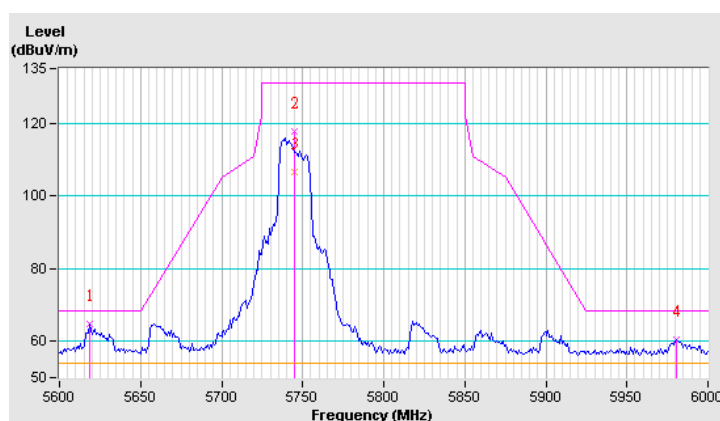


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5618.40	64.9 PK	68.2	-3.3	1.29 H	13	60.10	4.80
2	*5745.00	117.8 PK			1.29 H	13	76.30	41.50
3	*5745.00	106.5 AV			1.29 H	13	65.00	41.50
4	#5980.80	60.4 PK	68.2	-7.8	1.29 H	13	55.60	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

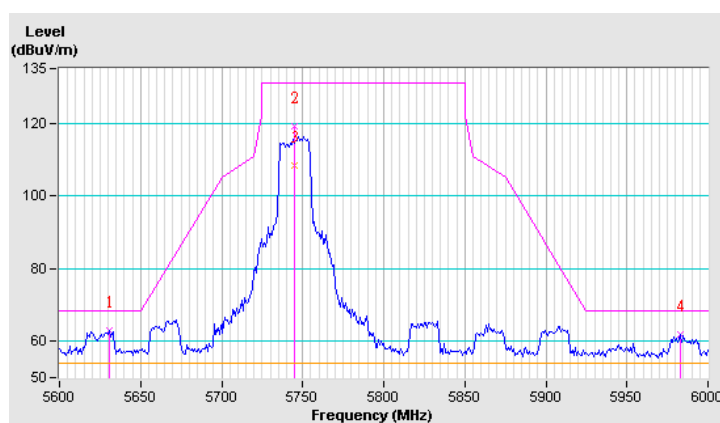


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5630.40	62.9 PK	68.2	-5.3	1.71 V	193	58.20	4.70
2	*5745.00	119.0 PK			1.71 V	193	77.50	41.50
3	*5745.00	108.3 AV			1.71 V	193	66.80	41.50
4	#5983.20	61.8 PK	68.2	-6.4	1.71 V	193	57.00	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

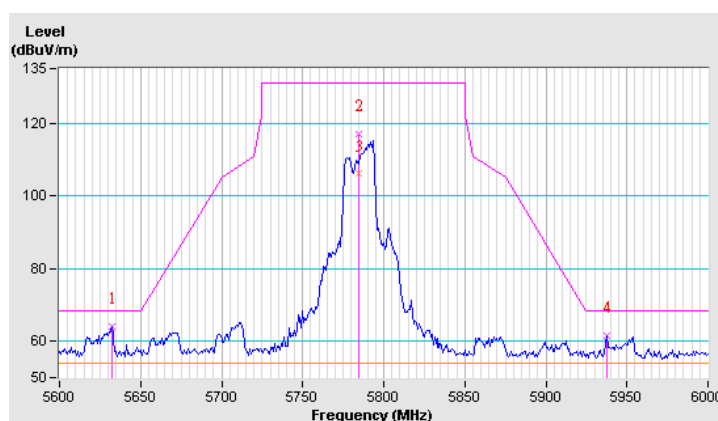


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5632.00	63.9 PK	68.2	-4.3	1.50 H	15	59.20	4.70
2	*5785.00	117.0 PK			1.50 H	15	75.50	41.50
3	*5785.00	106.0 AV			1.50 H	15	64.50	41.50
4	#5937.60	61.6 PK	68.2	-6.6	1.50 H	15	56.80	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

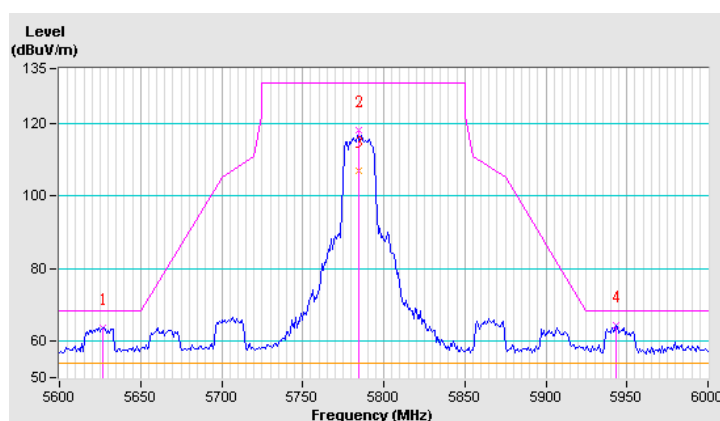


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5626.40	63.6 PK	68.2	-4.6	1.43 V	191	58.90	4.70
2	*5785.00	118.2 PK			1.43 V	191	76.70	41.50
3	*5785.00	107.0 AV			1.43 V	191	65.50	41.50
4	#5943.20	64.5 PK	68.2	-3.7	1.43 V	191	59.70	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

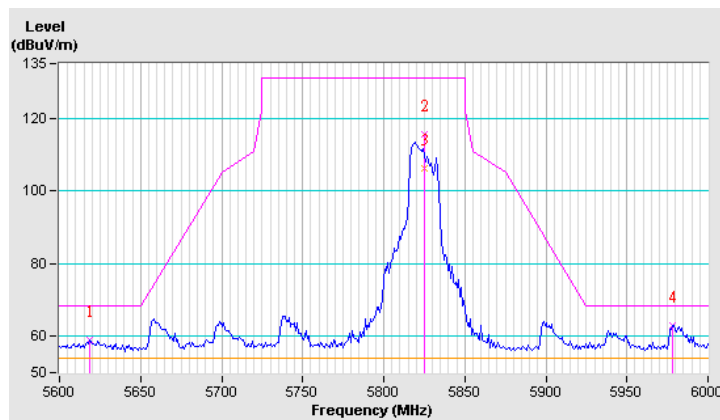


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5618.40	59.0 PK	68.2	-9.2	1.37 H	10	54.20	4.80
2	*5825.00	115.7 PK			1.37 H	10	74.10	41.60
3	*5825.00	106.1 AV			1.37 H	10	64.50	41.60
4	#5978.40	63.0 PK	68.2	-5.2	1.37 H	10	58.20	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

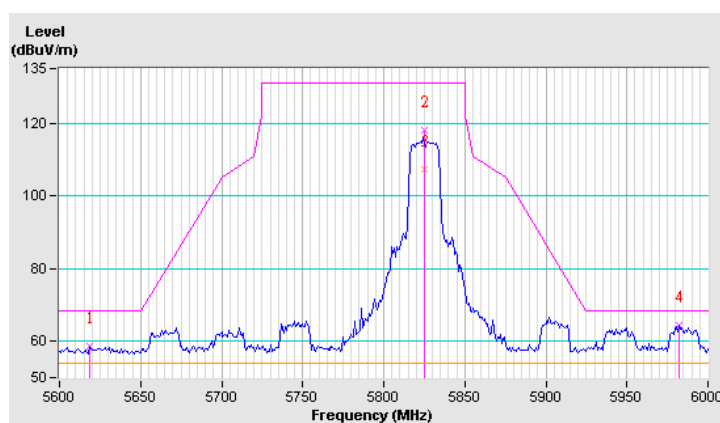


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5618.40	58.6 PK	68.2	-9.6	1.36 V	190	53.80	4.80
2	*5825.00	117.9 PK			1.36 V	190	76.30	41.60
3	*5825.00	107.2 AV			1.36 V	190	65.60	41.60
4	#5982.40	64.4 PK	68.2	-3.8	1.36 V	190	59.60	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



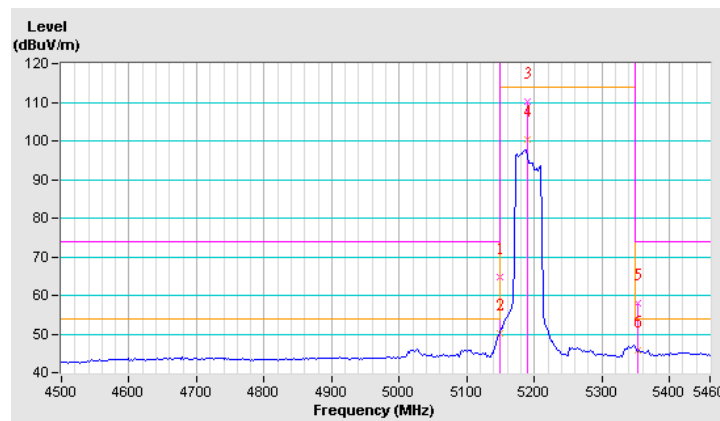
802.11ac (40MHz) 2S3T TxBF Nss2 MCS0

CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	64.9 PK	74.0	-9.1	1.27 H	3	61.00	3.90
2	5150.00	50.1 AV	54.0	-3.9	1.27 H	3	46.20	3.90
3	*5190.00	110.1 PK			1.27 H	3	69.30	40.80
4	*5190.00	100.2 AV			1.27 H	3	59.40	40.80
5	5353.00	57.9 PK	74.0	-16.1	1.27 H	3	53.50	4.40
6	5353.00	45.7 AV	54.0	-8.3	1.27 H	3	41.30	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

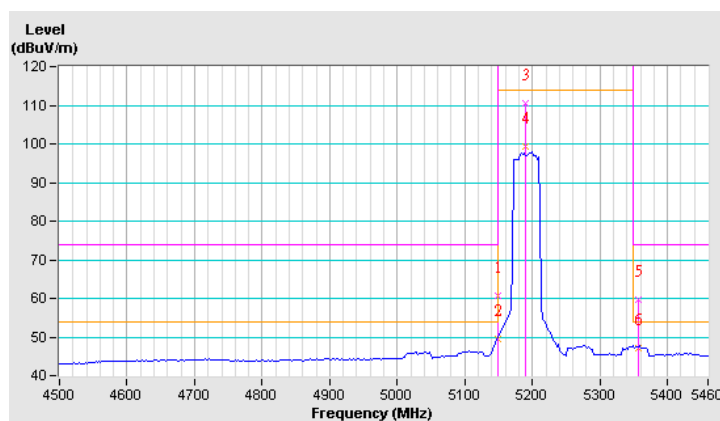


CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	60.8 PK	74.0	-13.2	1.28 V	198	56.90	3.90
2	5150.00	49.5 AV	54.0	-4.5	1.28 V	198	45.60	3.90
3	*5190.00	110.5 PK			1.28 V	198	69.70	40.80
4	*5190.00	99.2 AV			1.28 V	198	58.40	40.80
5	5357.00	59.6 PK	74.0	-14.4	1.28 V	198	55.20	4.40
6	5357.00	47.1 AV	54.0	-6.9	1.28 V	198	42.70	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

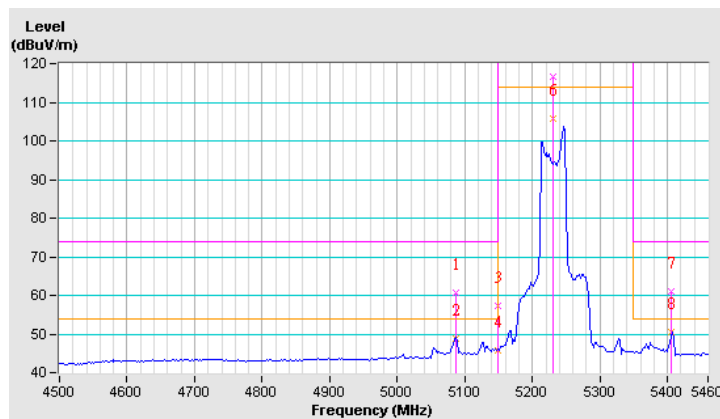


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5087.00	60.7 PK	74.0	-13.3	1.18 H	19	56.90	3.80
2	5087.00	48.9 AV	54.0	-5.1	1.18 H	19	45.10	3.80
3	5150.00	57.3 PK	74.0	-16.7	1.18 H	19	53.40	3.90
4	5150.00	45.6 AV	54.0	-8.4	1.18 H	19	41.70	3.90
5	*5230.00	116.7 PK			1.18 H	19	75.90	40.80
6	*5230.00	105.9 AV			1.18 H	19	65.10	40.80
7	5406.00	61.1 PK	74.0	-12.9	1.18 H	19	56.60	4.50
8	5406.00	50.6 AV	54.0	-3.4	1.18 H	19	46.10	4.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

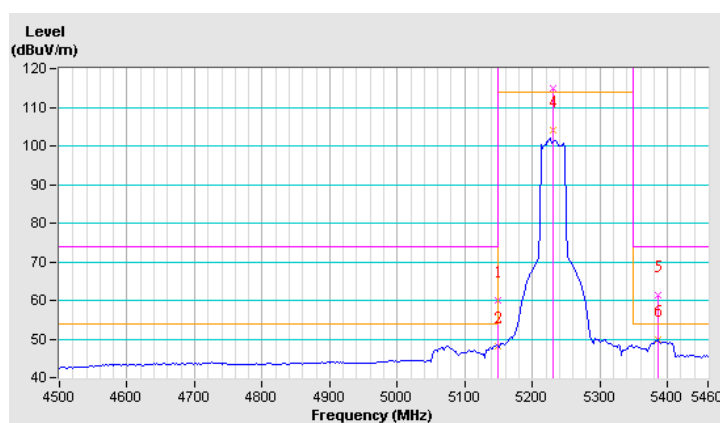


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	60.1 PK	74.0	-13.9	1.52 V	196	56.20	3.90
2	5150.00	48.2 AV	54.0	-5.8	1.52 V	196	44.30	3.90
3	*5230.00	115.1 PK			1.52 V	196	74.30	40.80
4	*5230.00	104.2 AV			1.52 V	196	63.40	40.80
5	5386.00	61.4 PK	74.0	-12.6	1.52 V	196	57.00	4.40
6	5386.00	49.7 AV	54.0	-4.3	1.52 V	196	45.30	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

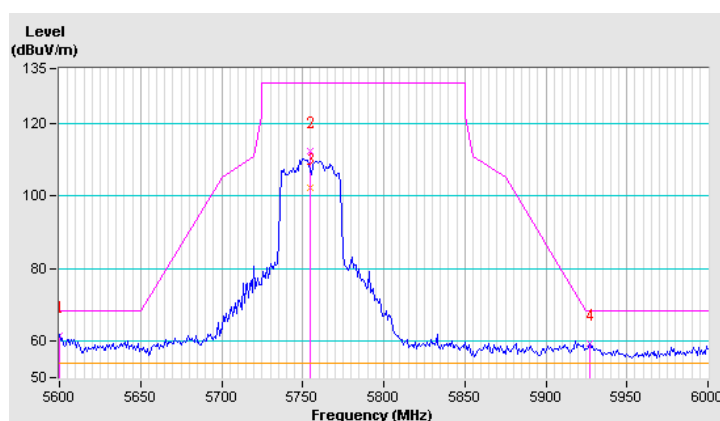


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5600.00	61.7 PK	68.2	-6.5	1.17 H	13	56.90	4.80
2	*5755.00	112.4 PK			1.17 H	13	70.90	41.50
3	*5755.00	102.3 AV			1.17 H	13	60.80	41.50
4	#5927.20	59.5 PK	68.2	-8.7	1.17 H	13	54.70	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

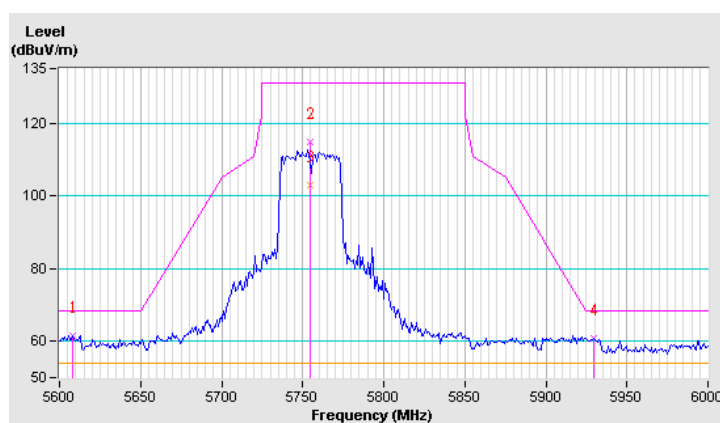


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5608.00	61.6 PK	68.2	-6.6	1.14 V	191	56.80	4.80
2	*5755.00	114.9 PK			1.14 V	191	73.40	41.50
3	*5755.00	102.8 AV			1.14 V	191	61.30	41.50
4	#5929.60	60.7 PK	68.2	-7.5	1.14 V	191	55.90	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

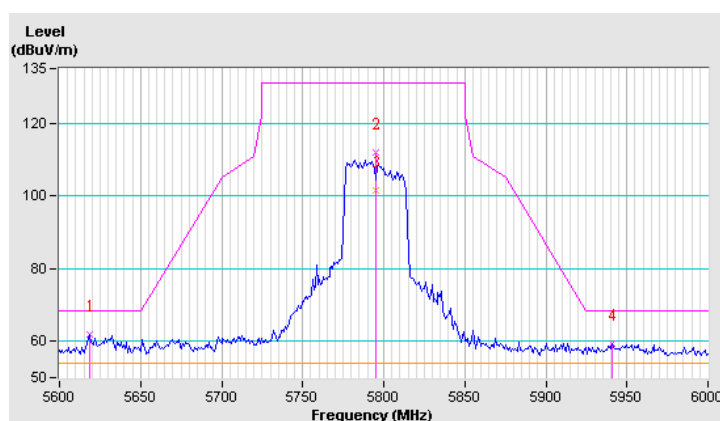


CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5618.40	62.0 PK	68.2	-6.2	1.47 H	12	57.20	4.80
2	*5795.00	111.9 PK			1.47 H	12	70.40	41.50
3	*5795.00	101.4 AV			1.47 H	12	59.90	41.50
4	#5940.80	59.4 PK	68.2	-8.8	1.47 H	12	54.60	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

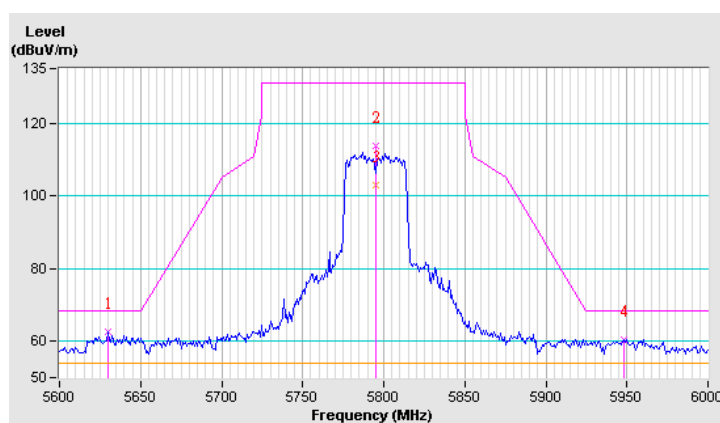


CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5629.60	62.5 PK	68.2	-5.7	1.40 V	191	57.80	4.70
2	*5795.00	113.6 PK			1.40 V	191	72.10	41.50
3	*5795.00	102.8 AV			1.40 V	191	61.30	41.50
4	#5948.00	60.5 PK	68.2	-7.7	1.40 V	191	55.70	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



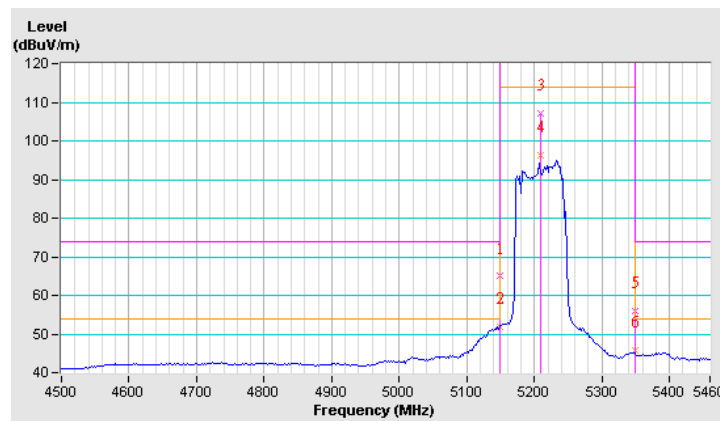
802.11ac (80MHz) 2S3T TxBF Nss2 MCS0

CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	64.9 PK	74.0	-9.1	3.03 H	6	61.00	3.90
2	5150.00	51.8 AV	54.0	-2.2	3.03 H	6	47.90	3.90
3	*5210.00	107.1 PK			3.03 H	6	66.30	40.80
4	*5210.00	96.2 AV			3.03 H	6	55.40	40.80
5	5350.00	56.0 PK	74.0	-18.0	3.03 H	6	51.60	4.40
6	5350.00	45.6 AV	54.0	-8.4	3.03 H	6	41.20	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

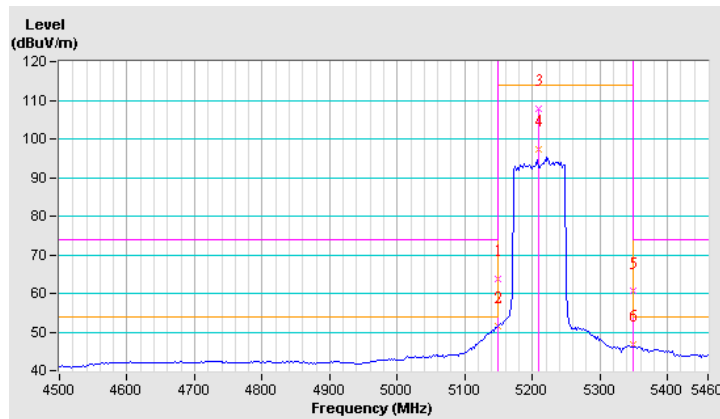


CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	63.6 PK	74.0	-10.4	1.54 V	175	59.70	3.90
2	5150.00	51.4 AV	54.0	-2.6	1.54 V	175	47.50	3.90
3	*5210.00	107.9 PK			1.54 V	175	67.10	40.80
4	*5210.00	97.2 AV			1.54 V	175	56.40	40.80
5	5350.00	60.5 PK	74.0	-13.5	1.54 V	175	56.10	4.40
6	5350.00	46.9 AV	54.0	-7.1	1.54 V	175	42.50	4.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

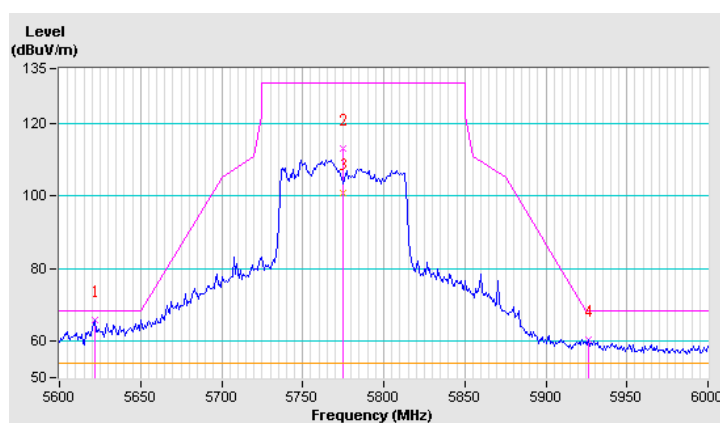


CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5621.60	65.8 PK	68.2	-2.4	1.30 H	16	61.00	4.80
2	*5775.00	113.0 PK			1.30 H	16	71.50	41.50
3	*5775.00	100.7 AV			1.30 H	16	59.20	41.50
4	#5926.40	60.3 PK	68.2	-7.9	1.30 H	16	55.50	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

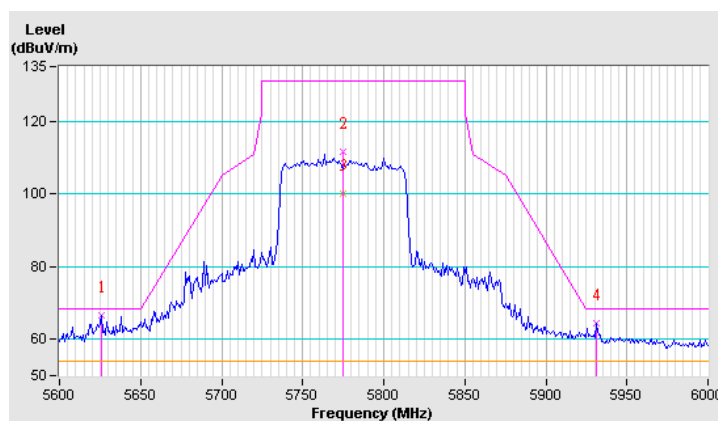


CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5625.60	66.6 PK	68.2	-1.6	1.75 V	184	61.90	4.70
2	*5775.00	111.7 PK			1.75 V	184	70.20	41.50
3	*5775.00	100.2 AV			1.75 V	184	58.70	41.50
4	#5931.20	64.4 PK	68.2	-3.8	1.75 V	184	59.60	4.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



3.11 Frequency Stability Measurement

3.11.1 Limit

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emissions is maintained within the band of operation under all conditions of normal operation as specified in the user's manual or $\pm 20\text{ppm}$ (IEEE 802.11n specification).

3.11.2 Measuring Instruments and Setting

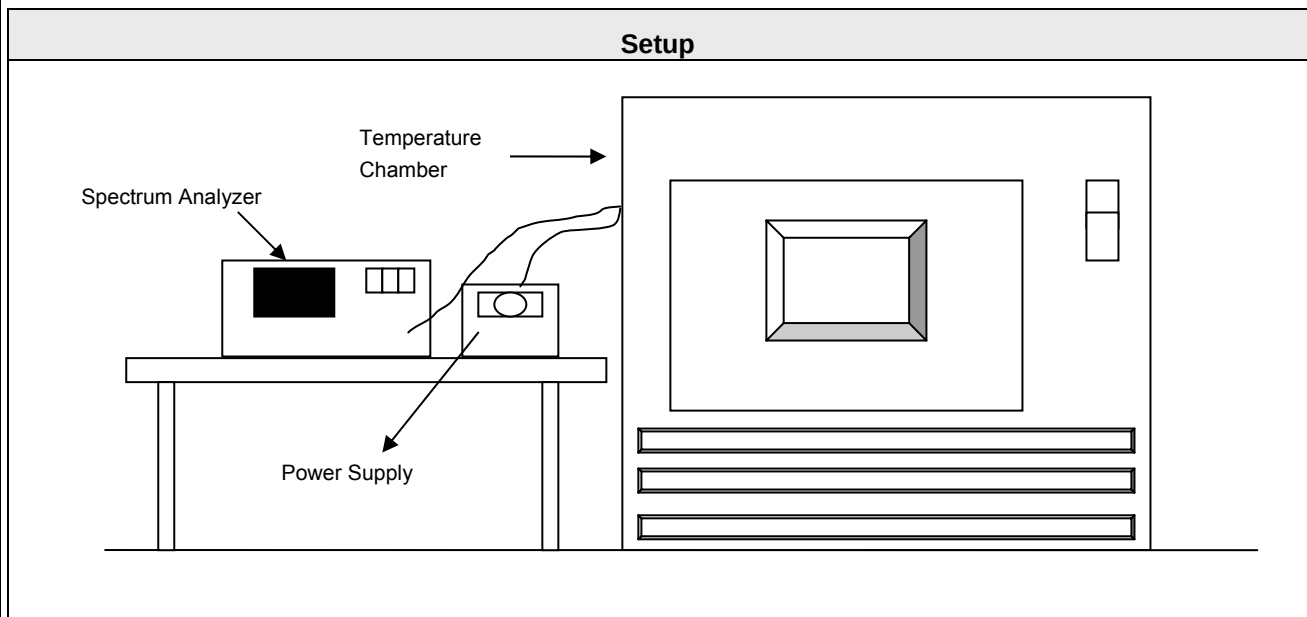
Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer and receiver.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Entire absence of modulation emissions bandwidth
RB	10 kHz
VB	10 kHz
Sweep Time	Auto

3.11.3 Test Procedure

- 1 The EUT was placed inside the environmental test chamber and powered by nominal DC voltage.
- 2 The EUT was programmed to be in continuously un-modulation transmitting mode.
- 3 Set the spectrum analyzer span to view the entire un-modulation emissions bandwidth.
- 4 Turn the EUT on and couple its output to a spectrum analyzer.
- 5 Turn the EUT off and set the chamber to the highest temperature specified.
- 6 Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes.
- 7 Extreme temperature rule is $-30^{\circ}\text{C} \sim 50^{\circ}\text{C}$.
- 8 Repeat step 4 and 5 with the temperature chamber set to the lowest temperature.
- 9 The test chamber was allowed to stabilize at $+20^{\circ}\text{C}$ for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

3.11.4 Test Setup Layout



3.11.5 Test Deviation

There are no deviations with the original standard.

3.11.6 EUT Operating Conditions

The EUT was programmed to be in continuously un-modulation transmitting mode.

3.11.7 Test Results

Temperature	25°C	Humidity	60%
Test Engineer	Leo Tsai		

11ac (20MHz)

Frequency Stability Versus Temp.									
Operating Frequency: 5180 MHz Chain1									
TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5179.9773	PASS	5179.9781	PASS	5179.9778	PASS	5179.9811	PASS
40	120	5180.0063	PASS	5180.0055	PASS	5180.0059	PASS	5180.0055	PASS
30	120	5180.0193	PASS	5180.0167	PASS	5180.0211	PASS	5180.0191	PASS
20	120	5180.0081	PASS	5180.0098	PASS	5180.006	PASS	5180.0104	PASS
10	120	5179.9825	PASS	5179.9839	PASS	5179.9846	PASS	5179.9814	PASS
0	120	5180.005	PASS	5180.0012	PASS	5180.0023	PASS	5180.0038	PASS
-10	120	5179.9911	PASS	5179.9877	PASS	5179.9913	PASS	5179.9904	PASS
-20	120	5180.0196	PASS	5180.0207	PASS	5180.0224	PASS	5180.0206	PASS
-30	120	5179.9781	PASS	5179.9803	PASS	5179.9784	PASS	5179.9782	PASS
Max. Deviation (ppm)		-4.382239	PASS	-4.227799	PASS	4.324324	PASS	-4.208494	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5180 MHz Chain1									
TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5180.0086	PASS	5180.01	PASS	5180.005	PASS	5180.0106	PASS
	120	5180.0081	PASS	5180.0098	PASS	5180.006	PASS	5180.0104	PASS
	102	5180.0091	PASS	5180.0099	PASS	5180.0069	PASS	5180.0097	PASS
Max. Deviation (ppm)		1.756757	PASS	1.930502	PASS	1.332046	PASS	2.046332	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5180 MHz Chain2

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5180.0137	PASS	5180.0138	PASS	5180.0143	PASS	5180.0139	PASS
40	120	5179.9768	PASS	5179.9764	PASS	5179.9742	PASS	5179.9751	PASS
30	120	5179.996	PASS	5179.9915	PASS	5179.995	PASS	5179.9943	PASS
20	120	5180.0044	PASS	5180.0041	PASS	5180.0051	PASS	5180.0043	PASS
10	120	5179.9817	PASS	5179.9781	PASS	5179.9824	PASS	5179.9775	PASS
0	120	5179.9814	PASS	5179.9831	PASS	5179.9819	PASS	5179.9837	PASS
-10	120	5180.0106	PASS	5180.0092	PASS	5180.0108	PASS	5180.0097	PASS
-20	120	5179.9887	PASS	5179.9862	PASS	5179.987	PASS	5179.9867	PASS
-30	120	5180.0181	PASS	5180.0209	PASS	5180.0212	PASS	5180.0183	PASS
Max. Deviation (ppm)		-4.478764	PASS	-4.555985	PASS	-4.980695	PASS	-4.806950	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5180 MHz Chain2

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5180.0035	PASS	5180.0051	PASS	5180.0042	PASS	5180.004	PASS
	120	5180.0044	PASS	5180.0041	PASS	5180.0051	PASS	5180.0043	PASS
	102	5180.0036	PASS	5180.0051	PASS	5180.0061	PASS	5180.0042	PASS
Max. Deviation (ppm)		0.849421	PASS	0.984556	PASS	1.177606	PASS	0.830116	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5180 MHz Chain3

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5180.0195	PASS	5180.0226	PASS	5180.0227	PASS	5180.02	PASS
40	120	5179.9996	PASS	5180.0031	PASS	5180.0032	PASS	5180.003	PASS
30	120	5179.9849	PASS	5179.9854	PASS	5179.9886	PASS	5179.9875	PASS
20	120	5179.9833	PASS	5179.9808	PASS	5179.9784	PASS	5179.9826	PASS
10	120	5179.9783	PASS	5179.9756	PASS	5179.9778	PASS	5179.9779	PASS
0	120	5180.016	PASS	5180.0172	PASS	5180.0146	PASS	5180.0148	PASS
-10	120	5180.0153	PASS	5180.0164	PASS	5180.0192	PASS	5180.0159	PASS
-20	120	5180.0212	PASS	5180.0208	PASS	5180.023	PASS	5180.0225	PASS
-30	120	5179.9786	PASS	5179.9822	PASS	5179.9774	PASS	5179.9784	PASS
Max. Deviation (ppm)		-4.189189	PASS	-4.710425	PASS	4.440154	PASS	4.343629	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5180 MHz Chain3

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5179.9835	PASS	5179.9813	PASS	5179.979	PASS	5179.9822	PASS
	120	5179.9833	PASS	5179.9808	PASS	5179.9784	PASS	5179.9826	PASS
	102	5179.9828	PASS	5179.9812	PASS	5179.9774	PASS	5179.9828	PASS
Max. Deviation (ppm)		-3.320463	PASS	-3.706564	PASS	-4.362934	PASS	-3.436293	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5200 MHz Chain1

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5199.9889	PASS	5199.9932	PASS	5199.9893	PASS	5199.9896	PASS
40	120	5200.018	PASS	5200.0183	PASS	5200.0207	PASS	5200.0205	PASS
30	120	5199.9928	PASS	5199.9901	PASS	5199.9918	PASS	5199.9928	PASS
20	120	5199.998	PASS	5199.9995	PASS	5199.9976	PASS	5199.9988	PASS
10	120	5200.0037	PASS	5199.9994	PASS	5200.0027	PASS	5200.0005	PASS
0	120	5199.9953	PASS	5199.9929	PASS	5199.9941	PASS	5199.9942	PASS
-10	120	5200.0241	PASS	5200.0214	PASS	5200.024	PASS	5200.0238	PASS
-20	120	5199.9758	PASS	5199.9786	PASS	5199.9744	PASS	5199.978	PASS
-30	120	5200.0174	PASS	5200.0168	PASS	5200.0139	PASS	5200.0152	PASS
Max. Deviation (ppm)		-4.653846	PASS	4.115385	PASS	-4.923077	PASS	4.576923	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5200 MHz Chain1

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5199.9972	PASS	5199.9996	PASS	5199.9976	PASS	5199.9988	PASS
	120	5199.998	PASS	5199.9995	PASS	5199.9976	PASS	5199.9988	PASS
	102	5199.9983	PASS	5199.9988	PASS	5199.9979	PASS	5199.9997	PASS
Max. Deviation (ppm)		-0.538462	PASS	-0.230769	PASS	-0.461538	PASS	-0.230769	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5200 MHz Chain2

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5200.026	PASS	5200.0217	PASS	5200.0253	PASS	5200.0266	PASS
40	120	5199.9987	PASS	5199.995	PASS	5199.9963	PASS	5199.997	PASS
30	120	5200.0214	PASS	5200.02	PASS	5200.0204	PASS	5200.0223	PASS
20	120	5200.0036	PASS	5200.0039	PASS	5200.0031	PASS	5200.0037	PASS
10	120	5200.0205	PASS	5200.022	PASS	5200.0211	PASS	5200.0234	PASS
0	120	5200.0217	PASS	5200.0239	PASS	5200.0242	PASS	5200.0243	PASS
-10	120	5200.0049	PASS	5200.0058	PASS	5200.0058	PASS	5200.0057	PASS
-20	120	5199.9884	PASS	5199.9877	PASS	5199.9859	PASS	5199.9852	PASS
-30	120	5199.9871	PASS	5199.9902	PASS	5199.9892	PASS	5199.9875	PASS
Max. Deviation (ppm)		5.000000	PASS	4.596154	PASS	4.865385	PASS	5.115385	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5200 MHz Chain2

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5200.0045	PASS	5200.0032	PASS	5200.0021	PASS	5200.0043	PASS
	120	5200.0036	PASS	5200.0039	PASS	5200.0031	PASS	5200.0037	PASS
	102	5200.0032	PASS	5200.0039	PASS	5200.0022	PASS	5200.003	PASS
Max. Deviation (ppm)		0.865385	PASS	0.750000	PASS	0.596154	PASS	0.826923	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5200 MHz Chain3

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5200.0207	PASS	5200.0178	PASS	5200.0196	PASS	5200.0206	PASS
40	120	5200.0111	PASS	5200.0111	PASS	5200.0137	PASS	5200.0159	PASS
30	120	5200.01	PASS	5200.011	PASS	5200.0104	PASS	5200.0089	PASS
20	120	5199.9817	PASS	5199.9846	PASS	5199.9842	PASS	5199.9811	PASS
10	120	5200.0102	PASS	5200.0074	PASS	5200.0084	PASS	5200.0074	PASS
0	120	5199.9788	PASS	5199.9743	PASS	5199.9738	PASS	5199.9784	PASS
-10	120	5199.9837	PASS	5199.9832	PASS	5199.9838	PASS	5199.9829	PASS
-20	120	5199.9775	PASS	5199.9772	PASS	5199.9777	PASS	5199.9819	PASS
-30	120	5200.0001	PASS	5199.9992	PASS	5199.9998	PASS	5199.9997	PASS
Max. Deviation (ppm)		-4.326923	PASS	-4.942308	PASS	-5.038462	PASS	-4.153846	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5200 MHz Chain3

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5199.9821	PASS	5199.9849	PASS	5199.9846	PASS	5199.9809	PASS
	120	5199.9817	PASS	5199.9846	PASS	5199.9842	PASS	5199.9811	PASS
	102	5199.982	PASS	5199.9842	PASS	5199.9833	PASS	5199.9805	PASS
Max. Deviation (ppm)		-3.519231	PASS	-3.038462	PASS	-3.211538	PASS	-3.750000	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5240 MHz Chain1

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5239.9812	PASS	5239.9809	PASS	5239.9841	PASS	5239.9842	PASS
40	120	5240.0093	PASS	5240.0094	PASS	5240.0069	PASS	5240.0076	PASS
30	120	5240.0033	PASS	5240.0048	PASS	5240.0061	PASS	5240.004	PASS
20	120	5239.9928	PASS	5239.9968	PASS	5239.9959	PASS	5239.9961	PASS
10	120	5239.9863	PASS	5239.9853	PASS	5239.9856	PASS	5239.9886	PASS
0	120	5239.9849	PASS	5239.9822	PASS	5239.9817	PASS	5239.9849	PASS
-10	120	5240.0163	PASS	5240.0132	PASS	5240.016	PASS	5240.0155	PASS
-20	120	5239.9843	PASS	5239.9822	PASS	5239.9839	PASS	5239.9867	PASS
-30	120	5240.0213	PASS	5240.0252	PASS	5240.023	PASS	5240.0227	PASS
Max. Deviation (ppm)		4.064885	PASS	4.809160	PASS	4.389313	PASS	4.332061	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5240 MHz Chain1

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5239.9935	PASS	5239.9968	PASS	5239.9957	PASS	5239.9951	PASS
	120	5239.9928	PASS	5239.9968	PASS	5239.9959	PASS	5239.9961	PASS
	102	5239.9929	PASS	5239.9972	PASS	5239.9949	PASS	5239.9958	PASS
Max. Deviation (ppm)		-1.374046	PASS	-0.610687	PASS	-0.973282	PASS	-0.935115	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5240 MHz Chain2

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5239.9902	PASS	5239.9897	PASS	5239.9909	PASS	5239.9903	PASS
40	120	5239.9792	PASS	5239.9836	PASS	5239.9811	PASS	5239.9809	PASS
30	120	5240.0167	PASS	5240.0185	PASS	5240.0142	PASS	5240.0186	PASS
20	120	5239.9977	PASS	5239.995	PASS	5239.9974	PASS	5239.9974	PASS
10	120	5239.9805	PASS	5239.9766	PASS	5239.9793	PASS	5239.9789	PASS
0	120	5239.9786	PASS	5239.9789	PASS	5239.978	PASS	5239.9744	PASS
-10	120	5240.0059	PASS	5240.0073	PASS	5240.0044	PASS	5240.0036	PASS
-20	120	5239.9901	PASS	5239.986	PASS	5239.9881	PASS	5239.9867	PASS
-30	120	5240.0181	PASS	5240.0143	PASS	5240.018	PASS	5240.0165	PASS
Max. Deviation (ppm)		-4.083969	PASS	-4.465649	PASS	-4.198473	PASS	-4.885496	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5240 MHz Chain2

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5239.9983	PASS	5239.9954	PASS	5239.9984	PASS	5239.9979	PASS
	120	5239.9977	PASS	5239.995	PASS	5239.9974	PASS	5239.9974	PASS
	102	5239.9985	PASS	5239.9946	PASS	5239.997	PASS	5239.9972	PASS
Max. Deviation (ppm)		-0.438931	PASS	-1.030534	PASS	-0.572519	PASS	-0.534351	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5240 MHz Chain3

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5239.9991	PASS	5240.0023	PASS	5239.9994	PASS	5240.0011	PASS
40	120	5239.9981	PASS	5239.9968	PASS	5239.9966	PASS	5239.997	PASS
30	120	5240.0043	PASS	5240.0024	PASS	5240.0029	PASS	5240.0011	PASS
20	120	5239.9965	PASS	5239.9964	PASS	5239.9963	PASS	5239.9933	PASS
10	120	5239.9786	PASS	5239.979	PASS	5239.9757	PASS	5239.9782	PASS
0	120	5239.9726	PASS	5239.9729	PASS	5239.9718	PASS	5239.9742	PASS
-10	120	5240.0066	PASS	5240.0103	PASS	5240.0068	PASS	5240.0103	PASS
-20	120	5239.9741	PASS	5239.9743	PASS	5239.9777	PASS	5239.9775	PASS
-30	120	5240.0078	PASS	5240.0055	PASS	5240.0048	PASS	5240.0056	PASS
Max. Deviation (ppm)		-5.229008	PASS	-5.171756	PASS	-5.381679	PASS	-4.923664	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5240 MHz Chain3

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5239.9957	PASS	5239.9955	PASS	5239.9965	PASS	5239.9943	PASS
	120	5239.9965	PASS	5239.9964	PASS	5239.9963	PASS	5239.9933	PASS
	102	5239.9957	PASS	5239.997	PASS	5239.9959	PASS	5239.9943	PASS
Max. Deviation (ppm)		-0.820611	PASS	-0.858779	PASS	-0.782443	PASS	-1.278626	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5745 MHz Chain1

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5745.021	PASS	5745.0199	PASS	5745.0208	PASS	5745.0175	PASS
40	120	5744.9739	PASS	5744.9727	PASS	5744.9765	PASS	5744.9756	PASS
30	120	5744.9734	PASS	5744.9729	PASS	5744.9745	PASS	5744.9762	PASS
20	120	5744.9781	PASS	5744.983	PASS	5744.9809	PASS	5744.9804	PASS
10	120	5745.0226	PASS	5745.0241	PASS	5745.0263	PASS	5745.0268	PASS
0	120	5745.0162	PASS	5745.0143	PASS	5745.0168	PASS	5745.0184	PASS
-10	120	5744.9915	PASS	5744.991	PASS	5744.9952	PASS	5744.9932	PASS
-20	120	5744.997	PASS	5744.9949	PASS	5744.9947	PASS	5744.9943	PASS
-30	120	5745.0221	PASS	5745.0251	PASS	5745.0224	PASS	5745.0267	PASS
Max. Deviation (ppm)		-4.630113	PASS	-4.751958	PASS	4.577894	PASS	4.664926	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5745 MHz Chain1

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5744.9784	PASS	5744.9834	PASS	5744.9802	PASS	5744.9812	PASS
	120	5744.9781	PASS	5744.983	PASS	5744.9809	PASS	5744.9804	PASS
	102	5744.9789	PASS	5744.9828	PASS	5744.9801	PASS	5744.981	PASS
Max. Deviation (ppm)		-3.812010	PASS	-2.993908	PASS	-3.463882	PASS	-3.411662	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5745 MHz Chain2

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5745.0133	PASS	5745.0097	PASS	5745.011	PASS	5745.0098	PASS
40	120	5744.9801	PASS	5744.9803	PASS	5744.9811	PASS	5744.9849	PASS
30	120	5744.9997	PASS	5744.9974	PASS	5744.9961	PASS	5744.9953	PASS
20	120	5744.9765	PASS	5744.9765	PASS	5744.9746	PASS	5744.9753	PASS
10	120	5744.9944	PASS	5744.9918	PASS	5744.9918	PASS	5744.9948	PASS
0	120	5744.9835	PASS	5744.9793	PASS	5744.9844	PASS	5744.9839	PASS
-10	120	5744.9852	PASS	5744.9858	PASS	5744.9859	PASS	5744.9847	PASS
-20	120	5745.0223	PASS	5745.02	PASS	5745.0223	PASS	5745.0246	PASS
-30	120	5744.9814	PASS	5744.9832	PASS	5744.9855	PASS	5744.9811	PASS
Max. Deviation (ppm)		-4.090513	PASS	-4.090513	PASS	-4.421236	PASS	-4.299391	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5745 MHz Chain2

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5744.9769	PASS	5744.976	PASS	5744.9743	PASS	5744.9748	PASS
	120	5744.9765	PASS	5744.9765	PASS	5744.9746	PASS	5744.9753	PASS
	102	5744.9768	PASS	5744.976	PASS	5744.9754	PASS	5744.9756	PASS
Max. Deviation (ppm)		-4.090513	PASS	-4.177546	PASS	-4.473455	PASS	-4.386423	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5745 MHz Chain3

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5744.9794	PASS	5744.9793	PASS	5744.9779	PASS	5744.978	PASS
40	120	5745.0255	PASS	5745.0251	PASS	5745.0247	PASS	5745.0232	PASS
30	120	5744.9928	PASS	5744.9916	PASS	5744.9927	PASS	5744.9908	PASS
20	120	5744.9973	PASS	5744.9983	PASS	5745	PASS	5744.999	PASS
10	120	5744.978	PASS	5744.9783	PASS	5744.9812	PASS	5744.9808	PASS
0	120	5744.9961	PASS	5744.9939	PASS	5744.9955	PASS	5744.9923	PASS
-10	120	5744.9728	PASS	5744.9736	PASS	5744.9733	PASS	5744.9736	PASS
-20	120	5745.0135	PASS	5745.0152	PASS	5745.0167	PASS	5745.0167	PASS
-30	120	5745.0076	PASS	5745.0063	PASS	5745.0087	PASS	5745.009	PASS
Max. Deviation (ppm)		-4.734552	PASS	-4.595300	PASS	-4.647520	PASS	-4.595300	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5745 MHz Chain3

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5744.9969	PASS	5744.9989	PASS	5745.0011	PASS	5744.9983	PASS
	120	5744.9973	PASS	5744.9983	PASS	5745	PASS	5744.999	PASS
	102	5744.9973	PASS	5744.9972	PASS	5745.0007	PASS	5744.9995	PASS
Max. Deviation (ppm)		-0.539600	PASS	-0.487380	PASS	0.191471	PASS	-0.295909	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5785 MHz Chain1

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5785.0084	PASS	5785.0081	PASS	5785.0034	PASS	5785.0054	PASS
40	120	5785.0201	PASS	5785.0186	PASS	5785.0213	PASS	5785.0201	PASS
30	120	5785.0168	PASS	5785.0182	PASS	5785.0174	PASS	5785.0183	PASS
20	120	5785.0119	PASS	5785.0093	PASS	5785.012	PASS	5785.0123	PASS
10	120	5784.9757	PASS	5784.9761	PASS	5784.9778	PASS	5784.9755	PASS
0	120	5784.9958	PASS	5784.994	PASS	5784.9988	PASS	5784.9989	PASS
-10	120	5785.0174	PASS	5785.0174	PASS	5785.0161	PASS	5785.0144	PASS
-20	120	5785.0237	PASS	5785.0256	PASS	5785.0276	PASS	5785.0253	PASS
-30	120	5785.0224	PASS	5785.0215	PASS	5785.0209	PASS	5785.0206	PASS
Max. Deviation (ppm)		-4.200519	PASS	4.425238	PASS	4.770959	PASS	4.373379	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5785 MHz Chain1

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5785.0127	PASS	5785.0096	PASS	5785.0121	PASS	5785.0133	PASS
	120	5785.0119	PASS	5785.0093	PASS	5785.012	PASS	5785.0123	PASS
	102	5785.0127	PASS	5785.0097	PASS	5785.0123	PASS	5785.0114	PASS
Max. Deviation (ppm)		2.195333	PASS	1.676750	PASS	2.126188	PASS	2.299049	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5785 MHz Chain2

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5785.0093	PASS	5785.0073	PASS	5785.0044	PASS	5785.0094	PASS
40	120	5784.9796	PASS	5784.9806	PASS	5784.9813	PASS	5784.9788	PASS
30	120	5784.9766	PASS	5784.9758	PASS	5784.972	PASS	5784.9736	PASS
20	120	5784.9791	PASS	5784.9791	PASS	5784.9741	PASS	5784.9774	PASS
10	120	5785.0119	PASS	5785.0145	PASS	5785.0141	PASS	5785.0147	PASS
0	120	5785.0142	PASS	5785.0154	PASS	5785.015	PASS	5785.0183	PASS
-10	120	5784.9782	PASS	5784.9793	PASS	5784.9774	PASS	5784.9796	PASS
-20	120	5785.0051	PASS	5785.0012	PASS	5785.0036	PASS	5785.0037	PASS
-30	120	5785.0029	PASS	5785.005	PASS	5785.003	PASS	5785.0058	PASS
Max. Deviation (ppm)		-4.044944	PASS	-4.183232	PASS	-4.840104	PASS	-4.563526	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5785 MHz Chain2

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5784.9795	PASS	5784.9784	PASS	5784.9752	PASS	5784.9782	PASS
	120	5784.9791	PASS	5784.9791	PASS	5784.9741	PASS	5784.9774	PASS
	102	5784.9783	PASS	5784.9782	PASS	5784.9747	PASS	5784.9766	PASS
Max. Deviation (ppm)		-3.751080	PASS	-3.768366	PASS	-4.477096	PASS	-4.044944	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5785 MHz Chain3

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5785.006	PASS	5785.0041	PASS	5785.0035	PASS	5785.0055	PASS
40	120	5784.9991	PASS	5784.9982	PASS	5785.0001	PASS	5784.9966	PASS
30	120	5785.0259	PASS	5785.0227	PASS	5785.0238	PASS	5785.0241	PASS
20	120	5785.0266	PASS	5785.0261	PASS	5785.0266	PASS	5785.0243	PASS
10	120	5785.0217	PASS	5785.0171	PASS	5785.0171	PASS	5785.0216	PASS
0	120	5784.9785	PASS	5784.9835	PASS	5784.9781	PASS	5784.982	PASS
-10	120	5784.9853	PASS	5784.986	PASS	5784.9875	PASS	5784.9847	PASS
-20	120	5784.9939	PASS	5784.9892	PASS	5784.9942	PASS	5784.9913	PASS
-30	120	5784.9949	PASS	5784.9931	PASS	5784.9916	PASS	5784.9923	PASS
Max. Deviation (ppm)		4.598099	PASS	4.511668	PASS	4.598099	PASS	4.200519	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5785 MHz Chain3

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5785.0275	PASS	5785.0257	PASS	5785.0261	PASS	5785.024	PASS
	120	5785.0266	PASS	5785.0261	PASS	5785.0266	PASS	5785.0243	PASS
	102	5785.0265	PASS	5785.0268	PASS	5785.0261	PASS	5785.024	PASS
Max. Deviation (ppm)		4.753673	PASS	4.632671	PASS	4.598099	PASS	4.200519	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5825 MHz Chain1

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5824.9861	PASS	5824.9846	PASS	5824.9888	PASS	5824.9842	PASS
40	120	5825.0126	PASS	5825.0112	PASS	5825.0158	PASS	5825.0146	PASS
30	120	5824.9994	PASS	5824.9983	PASS	5824.9996	PASS	5824.9946	PASS
20	120	5824.9812	PASS	5824.9795	PASS	5824.9826	PASS	5824.9792	PASS
10	120	5824.9856	PASS	5824.9844	PASS	5824.982	PASS	5824.9849	PASS
0	120	5825.0192	PASS	5825.0179	PASS	5825.0153	PASS	5825.0161	PASS
-10	120	5824.9853	PASS	5824.9848	PASS	5824.9818	PASS	5824.9849	PASS
-20	120	5824.9756	PASS	5824.9735	PASS	5824.9719	PASS	5824.9767	PASS
-30	120	5825.0061	PASS	5825.0065	PASS	5825.0074	PASS	5825.006	PASS
Max. Deviation (ppm)		-4.188841	PASS	-4.549356	PASS	-4.824034	PASS	-4.000000	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5825 MHz Chain1

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5824.9823	PASS	5824.9793	PASS	5824.9825	PASS	5824.9794	PASS
	120	5824.9812	PASS	5824.9795	PASS	5824.9826	PASS	5824.9792	PASS
	102	5824.9801	PASS	5824.9802	PASS	5824.9829	PASS	5824.9794	PASS
Max. Deviation (ppm)		-3.416309	PASS	-3.553648	PASS	-3.004292	PASS	-3.570815	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5825 MHz Chain2

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5825.0184	PASS	5825.0178	PASS	5825.0205	PASS	5825.017	PASS
40	120	5825.0182	PASS	5825.0188	PASS	5825.0185	PASS	5825.0231	PASS
30	120	5824.9982	PASS	5825.0016	PASS	5825.003	PASS	5825.0031	PASS
20	120	5825.0091	PASS	5825.0041	PASS	5825.0073	PASS	5825.0095	PASS
10	120	5825.0208	PASS	5825.023	PASS	5825.0228	PASS	5825.0233	PASS
0	120	5825.0179	PASS	5825.0152	PASS	5825.0154	PASS	5825.0174	PASS
-10	120	5825.0244	PASS	5825.0276	PASS	5825.0243	PASS	5825.025	PASS
-20	120	5825.0191	PASS	5825.017	PASS	5825.0155	PASS	5825.0194	PASS
-30	120	5824.9999	PASS	5824.9961	PASS	5824.9989	PASS	5824.9994	PASS
Max. Deviation (ppm)		4.188841	PASS	4.738197	PASS	4.171674	PASS	4.291845	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5825 MHz Chain2

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5825.0087	PASS	5825.0038	PASS	5825.0075	PASS	5825.0084	PASS
	120	5825.0091	PASS	5825.0041	PASS	5825.0073	PASS	5825.0095	PASS
	102	5825.009	PASS	5825.0048	PASS	5825.0082	PASS	5825.0097	PASS
Max. Deviation (ppm)		1.562232	PASS	0.824034	PASS	1.407725	PASS	1.665236	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5825 MHz Chain3

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5824.997	PASS	5824.9968	PASS	5824.9944	PASS	5824.9938	PASS
40	120	5825.0287	PASS	5825.0272	PASS	5825.0291	PASS	5825.028	PASS
30	120	5824.9974	PASS	5824.9973	PASS	5825.0015	PASS	5824.9986	PASS
20	120	5825.0108	PASS	5825.0139	PASS	5825.0115	PASS	5825.0147	PASS
10	120	5824.9921	PASS	5824.9913	PASS	5824.9891	PASS	5824.9869	PASS
0	120	5824.9784	PASS	5824.978	PASS	5824.9806	PASS	5824.9822	PASS
-10	120	5825.0264	PASS	5825.0266	PASS	5825.0286	PASS	5825.0305	PASS
-20	120	5825.0127	PASS	5825.0112	PASS	5825.0134	PASS	5825.0128	PASS
-30	120	5825.0137	PASS	5825.016	PASS	5825.0164	PASS	5825.0115	PASS
Max. Deviation (ppm)		4.927039	PASS	4.669528	PASS	4.995708	PASS	5.236052	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5825 MHz Chain3

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5825.0118	PASS	5825.0145	PASS	5825.0125	PASS	5825.0156	PASS
	120	5825.0108	PASS	5825.0139	PASS	5825.0115	PASS	5825.0147	PASS
	102	5825.0102	PASS	5825.0129	PASS	5825.0117	PASS	5825.0142	PASS
Max. Deviation (ppm)		2.025751	PASS	2.489270	PASS	2.145923	PASS	2.678112	PASS
IEEE Limit (ppm)		±20ppm							

11ac (40MHz)

Frequency Stability Versus Temp.									
Operating Frequency: 5190 MHz Chain1									
TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5190.0159	PASS	5190.0178	PASS	5190.0163	PASS	5190.0179	PASS
40	120	5190.0053	PASS	5190.0033	PASS	5190.0043	PASS	5190.0067	PASS
30	120	5190.0095	PASS	5190.007	PASS	5190.0053	PASS	5190.0093	PASS
20	120	5190.022	PASS	5190.0183	PASS	5190.0197	PASS	5190.0223	PASS
10	120	5189.9896	PASS	5189.99	PASS	5189.9874	PASS	5189.9883	PASS
0	120	5190.0213	PASS	5190.0213	PASS	5190.0222	PASS	5190.023	PASS
-10	120	5190.0033	PASS	5190.0037	PASS	5190.0025	PASS	5190.0027	PASS
-20	120	5190.024	PASS	5190.0254	PASS	5190.026	PASS	5190.024	PASS
-30	120	5190.0154	PASS	5190.0142	PASS	5190.0146	PASS	5190.0122	PASS
Max. Deviation (ppm)		4.624277	PASS	4.894027	PASS	5.009634	PASS	4.624277	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5190 MHz Chain1									
TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5190.0219	PASS	5190.0189	PASS	5190.0202	PASS	5190.0229	PASS
	120	5190.022	PASS	5190.0183	PASS	5190.0197	PASS	5190.0223	PASS
	102	5190.0213	PASS	5190.0187	PASS	5190.0207	PASS	5190.0223	PASS
Max. Deviation (ppm)		4.238921	PASS	3.641618	PASS	3.988439	PASS	4.412331	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5190 MHz Chain2

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5190.0008	PASS	5190.003	PASS	5190.0043	PASS	5190.0051	PASS
40	120	5189.9954	PASS	5189.9959	PASS	5189.9977	PASS	5189.9964	PASS
30	120	5190.0134	PASS	5190.017	PASS	5190.0127	PASS	5190.0159	PASS
20	120	5190.0052	PASS	5190.0068	PASS	5190.0051	PASS	5190.0065	PASS
10	120	5189.9899	PASS	5189.9885	PASS	5189.9866	PASS	5189.987	PASS
0	120	5190.0253	PASS	5190.0272	PASS	5190.0274	PASS	5190.023	PASS
-10	120	5190.0164	PASS	5190.0146	PASS	5190.015	PASS	5190.0177	PASS
-20	120	5189.9778	PASS	5189.9771	PASS	5189.9797	PASS	5189.9813	PASS
-30	120	5190.0191	PASS	5190.0213	PASS	5190.0173	PASS	5190.0184	PASS
Max. Deviation (ppm)		4.874759	PASS	5.240848	PASS	5.279383	PASS	4.431599	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5190 MHz Chain2

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5190.0055	PASS	5190.0064	PASS	5190.0061	PASS	5190.0069	PASS
	120	5190.0052	PASS	5190.0068	PASS	5190.0051	PASS	5190.0065	PASS
	102	5190.0046	PASS	5190.0064	PASS	5190.0055	PASS	5190.0069	PASS
Max. Deviation (ppm)		1.059730	PASS	1.310212	PASS	1.175337	PASS	1.329480	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5190 MHz Chain3

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5189.9801	PASS	5189.9814	PASS	5189.9826	PASS	5189.9829	PASS
40	120	5189.978	PASS	5189.9777	PASS	5189.9773	PASS	5189.977	PASS
30	120	5190.0112	PASS	5190.0099	PASS	5190.0073	PASS	5190.0099	PASS
20	120	5189.9953	PASS	5189.9943	PASS	5189.9975	PASS	5189.9946	PASS
10	120	5190.008	PASS	5190.0067	PASS	5190.0053	PASS	5190.0083	PASS
0	120	5190.0124	PASS	5190.0129	PASS	5190.0117	PASS	5190.0094	PASS
-10	120	5189.9762	PASS	5189.9783	PASS	5189.981	PASS	5189.9785	PASS
-20	120	5189.9898	PASS	5189.9899	PASS	5189.9908	PASS	5189.9867	PASS
-30	120	5190.0221	PASS	5190.0211	PASS	5190.0224	PASS	5190.0223	PASS
Max. Deviation (ppm)		-4.585742	PASS	-4.296724	PASS	-4.373796	PASS	-4.431599	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5190 MHz Chain3

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5189.9953	PASS	5189.9945	PASS	5189.9983	PASS	5189.9943	PASS
	120	5189.9953	PASS	5189.9943	PASS	5189.9975	PASS	5189.9946	PASS
	102	5189.996	PASS	5189.9941	PASS	5189.9969	PASS	5189.9939	PASS
Max. Deviation (ppm)		-0.905588	PASS	-1.136802	PASS	-0.597303	PASS	-1.175337	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5230 MHz Chain1

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5229.9877	PASS	5229.9872	PASS	5229.9878	PASS	5229.9855	PASS
40	120	5230.0025	PASS	5230.0039	PASS	5230.0014	PASS	5230.0018	PASS
30	120	5229.9818	PASS	5229.9803	PASS	5229.9832	PASS	5229.9842	PASS
20	120	5230.0184	PASS	5230.0197	PASS	5230.0184	PASS	5230.0214	PASS
10	120	5229.9823	PASS	5229.9821	PASS	5229.9814	PASS	5229.984	PASS
0	120	5230.0049	PASS	5230.0075	PASS	5230.0038	PASS	5230.0064	PASS
-10	120	5229.9749	PASS	5229.9769	PASS	5229.9786	PASS	5229.9763	PASS
-20	120	5229.9906	PASS	5229.9912	PASS	5229.9931	PASS	5229.9924	PASS
-30	120	5230.0157	PASS	5230.0129	PASS	5230.0151	PASS	5230.0135	PASS
Max. Deviation (ppm)		-4.799235	PASS	-4.416826	PASS	-4.091778	PASS	-4.531549	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5230 MHz Chain1

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5230.0174	PASS	5230.0205	PASS	5230.0179	PASS	5230.0215	PASS
	120	5230.0184	PASS	5230.0197	PASS	5230.0184	PASS	5230.0214	PASS
	102	5230.0175	PASS	5230.0189	PASS	5230.0177	PASS	5230.0217	PASS
Max. Deviation (ppm)		3.518164	PASS	3.919694	PASS	3.518164	PASS	4.149140	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5230 MHz Chain2

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5229.9952	PASS	5229.993	PASS	5229.9942	PASS	5229.9942	PASS
40	120	5229.9923	PASS	5229.9943	PASS	5229.9934	PASS	5229.9909	PASS
30	120	5230.0166	PASS	5230.0141	PASS	5230.0164	PASS	5230.0153	PASS
20	120	5229.9733	PASS	5229.9749	PASS	5229.9751	PASS	5229.9773	PASS
10	120	5230.0094	PASS	5230.008	PASS	5230.0111	PASS	5230.0083	PASS
0	120	5230.0182	PASS	5230.0226	PASS	5230.0191	PASS	5230.0215	PASS
-10	120	5229.9892	PASS	5229.9905	PASS	5229.9882	PASS	5229.9908	PASS
-20	120	5229.9756	PASS	5229.9786	PASS	5229.9759	PASS	5229.9778	PASS
-30	120	5230.0089	PASS	5230.0071	PASS	5230.0087	PASS	5230.0081	PASS
Max. Deviation (ppm)		-5.105163	PASS	-4.799235	PASS	-4.760994	PASS	-4.340344	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5230 MHz Chain2

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5229.9726	PASS	5229.9742	PASS	5229.9758	PASS	5229.9765	PASS
	120	5229.9733	PASS	5229.9749	PASS	5229.9751	PASS	5229.9773	PASS
	102	5229.9738	PASS	5229.9743	PASS	5229.9743	PASS	5229.9765	PASS
Max. Deviation (ppm)		-5.239006	PASS	-4.933078	PASS	-4.913958	PASS	-4.493308	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5230 MHz Chain3

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5229.9946	PASS	5229.9944	PASS	5229.992	PASS	5229.9926	PASS
40	120	5230.0244	PASS	5230.021	PASS	5230.0225	PASS	5230.0195	PASS
30	120	5229.9916	PASS	5229.9922	PASS	5229.9936	PASS	5229.9924	PASS
20	120	5230.0229	PASS	5230.0229	PASS	5230.0248	PASS	5230.0226	PASS
10	120	5229.9951	PASS	5229.9941	PASS	5229.9904	PASS	5229.9946	PASS
0	120	5230.0048	PASS	5230.0014	PASS	5230.0016	PASS	5230.0055	PASS
-10	120	5230.0024	PASS	5229.9999	PASS	5230.004	PASS	5230.0038	PASS
-20	120	5230.011	PASS	5230.0142	PASS	5230.0117	PASS	5230.0124	PASS
-30	120	5229.9736	PASS	5229.9721	PASS	5229.9758	PASS	5229.9725	PASS
Max. Deviation (ppm)		-5.047801	PASS	-5.334608	PASS	4.741874	PASS	-5.258126	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5230 MHz Chain3

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5230.0236	PASS	5230.022	PASS	5230.0257	PASS	5230.0226	PASS
	120	5230.0229	PASS	5230.0229	PASS	5230.0248	PASS	5230.0226	PASS
	102	5230.0231	PASS	5230.022	PASS	5230.0245	PASS	5230.0232	PASS
Max. Deviation (ppm)		4.512428	PASS	4.378585	PASS	4.913958	PASS	4.435946	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5755 MHz Chain1

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5755.021	PASS	5755.021	PASS	5755.0211	PASS	5755.0228	PASS
40	120	5754.9985	PASS	5755	PASS	5755.0005	PASS	5754.9995	PASS
30	120	5755.0245	PASS	5755.0221	PASS	5755.0221	PASS	5755.0263	PASS
20	120	5755.014	PASS	5755.0137	PASS	5755.0103	PASS	5755.0115	PASS
10	120	5755.0224	PASS	5755.019	PASS	5755.0199	PASS	5755.0189	PASS
0	120	5754.9988	PASS	5754.9984	PASS	5754.9983	PASS	5754.9951	PASS
-10	120	5755.0152	PASS	5755.0176	PASS	5755.015	PASS	5755.0201	PASS
-20	120	5755.0227	PASS	5755.024	PASS	5755.0224	PASS	5755.0214	PASS
-30	120	5755.0017	PASS	5754.9973	PASS	5755.0024	PASS	5755.0024	PASS
Max. Deviation (ppm)		4.257168	PASS	4.170287	PASS	3.892268	PASS	4.569939	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5755 MHz Chain1

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5755.0145	PASS	5755.013	PASS	5755.0098	PASS	5755.011	PASS
	120	5755.014	PASS	5755.0137	PASS	5755.0103	PASS	5755.0115	PASS
	102	5755.013	PASS	5755.0141	PASS	5755.0092	PASS	5755.0112	PASS
Max. Deviation (ppm)		2.519548	PASS	2.450043	PASS	1.789748	PASS	1.998262	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5755 MHz Chain2

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5754.9857	PASS	5754.9818	PASS	5754.9825	PASS	5754.9828	PASS
40	120	5755.0246	PASS	5755.0239	PASS	5755.0255	PASS	5755.0217	PASS
30	120	5755.0106	PASS	5755.0081	PASS	5755.0092	PASS	5755.0092	PASS
20	120	5755.0267	PASS	5755.03	PASS	5755.0299	PASS	5755.0257	PASS
10	120	5754.9924	PASS	5754.9926	PASS	5754.9905	PASS	5754.9938	PASS
0	120	5754.9922	PASS	5754.9883	PASS	5754.9916	PASS	5754.9893	PASS
-10	120	5755.0173	PASS	5755.0164	PASS	5755.0197	PASS	5755.0145	PASS
-20	120	5755.0192	PASS	5755.0152	PASS	5755.0178	PASS	5755.0173	PASS
-30	120	5755.011	PASS	5755.0108	PASS	5755.0074	PASS	5755.0108	PASS
Max. Deviation (ppm)		4.639444	PASS	5.212858	PASS	5.195482	PASS	4.465682	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5755 MHz Chain2

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5755.027	PASS	5755.0291	PASS	5755.0308	PASS	5755.0246	PASS
	120	5755.0267	PASS	5755.03	PASS	5755.0299	PASS	5755.0257	PASS
	102	5755.0275	PASS	5755.0299	PASS	5755.0291	PASS	5755.0247	PASS
Max. Deviation (ppm)		4.778454	PASS	5.212858	PASS	5.351868	PASS	4.465682	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5755 MHz Chain3

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5754.9806	PASS	5754.9833	PASS	5754.9819	PASS	5754.9798	PASS
40	120	5754.9791	PASS	5754.9797	PASS	5754.9827	PASS	5754.9804	PASS
30	120	5755.0295	PASS	5755.0273	PASS	5755.0253	PASS	5755.0284	PASS
20	120	5755.0127	PASS	5755.0099	PASS	5755.0124	PASS	5755.0127	PASS
10	120	5755.029	PASS	5755.0258	PASS	5755.0267	PASS	5755.0298	PASS
0	120	5755.0225	PASS	5755.0207	PASS	5755.0199	PASS	5755.0218	PASS
-10	120	5754.9764	PASS	5754.9791	PASS	5754.9768	PASS	5754.9779	PASS
-20	120	5754.9838	PASS	5754.9826	PASS	5754.9793	PASS	5754.9824	PASS
-30	120	5755.0251	PASS	5755.0252	PASS	5755.0228	PASS	5755.0217	PASS
Max. Deviation (ppm)		5.125977	PASS	4.743701	PASS	4.639444	PASS	5.178106	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5755 MHz Chain3

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5755.0132	PASS	5755.01	PASS	5755.0127	PASS	5755.0125	PASS
	120	5755.0127	PASS	5755.0099	PASS	5755.0124	PASS	5755.0127	PASS
	102	5755.0138	PASS	5755.0089	PASS	5755.0128	PASS	5755.0136	PASS
Max. Deviation (ppm)		2.397915	PASS	1.737619	PASS	2.224153	PASS	2.363162	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5795 MHz Chain1

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5794.9801	PASS	5794.9782	PASS	5794.9768	PASS	5794.9769	PASS
40	120	5794.9929	PASS	5794.9884	PASS	5794.989	PASS	5794.9909	PASS
30	120	5795.0165	PASS	5795.0194	PASS	5795.0147	PASS	5795.0178	PASS
20	120	5794.979	PASS	5794.9812	PASS	5794.9824	PASS	5794.9814	PASS
10	120	5795.0026	PASS	5795.0014	PASS	5795.0052	PASS	5795.0033	PASS
0	120	5794.9909	PASS	5794.9876	PASS	5794.9912	PASS	5794.9876	PASS
-10	120	5794.999	PASS	5794.9993	PASS	5795.0023	PASS	5795.0001	PASS
-20	120	5795.0078	PASS	5795.0058	PASS	5795.0066	PASS	5795.0109	PASS
-30	120	5794.9746	PASS	5794.9708	PASS	5794.9729	PASS	5794.9693	PASS
Max. Deviation (ppm)		-4.383089	PASS	-5.038827	PASS	-4.676445	PASS	-5.297670	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5795 MHz Chain1

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5794.9786	PASS	5794.9813	PASS	5794.9824	PASS	5794.9805	PASS
	120	5794.979	PASS	5794.9812	PASS	5794.9824	PASS	5794.9814	PASS
	102	5794.9801	PASS	5794.9804	PASS	5794.9817	PASS	5794.9821	PASS
Max. Deviation (ppm)		-3.692839	PASS	-3.382226	PASS	-3.157895	PASS	-3.364970	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5795 MHz Chain2

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5795.0201	PASS	5795.0225	PASS	5795.0228	PASS	5795.018	PASS
40	120	5794.9735	PASS	5794.9721	PASS	5794.9712	PASS	5794.9742	PASS
30	120	5795.0008	PASS	5795.0029	PASS	5795.0007	PASS	5795.0048	PASS
20	120	5795.0264	PASS	5795.023	PASS	5795.023	PASS	5795.0246	PASS
10	120	5794.9767	PASS	5794.9764	PASS	5794.9783	PASS	5794.9765	PASS
0	120	5795.0187	PASS	5795.0177	PASS	5795.0199	PASS	5795.0179	PASS
-10	120	5794.9926	PASS	5794.9975	PASS	5794.9937	PASS	5794.9935	PASS
-20	120	5794.9889	PASS	5794.992	PASS	5794.9881	PASS	5794.9885	PASS
-30	120	5794.9721	PASS	5794.973	PASS	5794.9752	PASS	5794.9721	PASS
Max. Deviation (ppm)		-4.814495	PASS	-4.814495	PASS	-4.969802	PASS	-4.814495	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5795 MHz Chain2

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5795.0264	PASS	5795.0236	PASS	5795.0225	PASS	5795.0237	PASS
	120	5795.0264	PASS	5795.023	PASS	5795.023	PASS	5795.0246	PASS
	102	5795.0274	PASS	5795.0223	PASS	5795.0232	PASS	5795.0245	PASS
Max. Deviation (ppm)		4.728214	PASS	4.072476	PASS	4.003451	PASS	4.245039	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5795 MHz Chain3

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5795.0102	PASS	5795.0093	PASS	5795.0132	PASS	5795.0135	PASS
40	120	5795.0006	PASS	5795.0004	PASS	5795.002	PASS	5794.9991	PASS
30	120	5794.9798	PASS	5794.9796	PASS	5794.9762	PASS	5794.9758	PASS
20	120	5794.9925	PASS	5794.9918	PASS	5794.9915	PASS	5794.9901	PASS
10	120	5795.0123	PASS	5795.0122	PASS	5795.0104	PASS	5795.0091	PASS
0	120	5794.9927	PASS	5794.9918	PASS	5794.9931	PASS	5794.993	PASS
-10	120	5794.9924	PASS	5794.9886	PASS	5794.9885	PASS	5794.9899	PASS
-20	120	5794.9904	PASS	5794.9894	PASS	5794.9943	PASS	5794.9938	PASS
-30	120	5794.9846	PASS	5794.9858	PASS	5794.9893	PASS	5794.9851	PASS
Max. Deviation (ppm)		-3.485764	PASS	-3.520276	PASS	-4.106989	PASS	-4.176014	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5795 MHz Chain3

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5794.9934	PASS	5794.9928	PASS	5794.9903	PASS	5794.9907	PASS
	120	5794.9925	PASS	5794.9918	PASS	5794.9915	PASS	5794.9901	PASS
	102	5794.9931	PASS	5794.9929	PASS	5794.9915	PASS	5794.99	PASS
Max. Deviation (ppm)		-1.294219	PASS	-1.415013	PASS	-1.673857	PASS	-1.725626	PASS
IEEE Limit (ppm)		±20ppm							

11ac (80MHz)

Frequency Stability Versus Temp.									
Operating Frequency: 5210 MHz Chain1									
TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5210.0241	PASS	5210.0266	PASS	5210.0246	PASS	5210.0282	PASS
40	120	5209.9813	PASS	5209.9832	PASS	5209.9856	PASS	5209.9852	PASS
30	120	5209.9901	PASS	5209.9924	PASS	5209.9923	PASS	5209.989	PASS
20	120	5210.0077	PASS	5210.0038	PASS	5210.0071	PASS	5210.0042	PASS
10	120	5209.9991	PASS	5209.9982	PASS	5210.0011	PASS	5210.0004	PASS
0	120	5210.0026	PASS	5209.9992	PASS	5210.0034	PASS	5209.9983	PASS
-10	120	5210.0135	PASS	5210.0171	PASS	5210.0131	PASS	5210.0162	PASS
-20	120	5209.9943	PASS	5209.9981	PASS	5209.9948	PASS	5209.9984	PASS
-30	120	5209.976	PASS	5209.9773	PASS	5209.9772	PASS	5209.975	PASS
Max. Deviation (ppm)		4.625720	PASS	5.105566	PASS	4.721689	PASS	5.412668	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage									
Operating Frequency: 5210 MHz Chain1									
TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5210.0083	PASS	5210.0044	PASS	5210.0077	PASS	5210.0043	PASS
	120	5210.0077	PASS	5210.0038	PASS	5210.0071	PASS	5210.0042	PASS
	102	5210.0071	PASS	5210.0048	PASS	5210.0071	PASS	5210.0039	PASS
Max. Deviation (ppm)		1.593090	PASS	0.921305	PASS	1.477927	PASS	0.825336	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5210 MHz Chain2

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5209.9939	PASS	5209.9907	PASS	5209.9923	PASS	5209.9917	PASS
40	120	5210.0057	PASS	5210.0052	PASS	5210.0052	PASS	5210.0064	PASS
30	120	5209.9778	PASS	5209.9809	PASS	5209.9775	PASS	5209.9791	PASS
20	120	5209.9962	PASS	5209.9985	PASS	5209.9963	PASS	5209.9992	PASS
10	120	5210.0033	PASS	5210.0067	PASS	5210.0027	PASS	5210.0075	PASS
0	120	5210.0102	PASS	5210.0109	PASS	5210.0113	PASS	5210.0102	PASS
-10	120	5210.0229	PASS	5210.0231	PASS	5210.022	PASS	5210.0253	PASS
-20	120	5210.0198	PASS	5210.0197	PASS	5210.0218	PASS	5210.0205	PASS
-30	120	5210.0122	PASS	5210.0096	PASS	5210.0079	PASS	5210.0109	PASS
Max. Deviation (ppm)		4.395393	PASS	4.433781	PASS	-4.318618	PASS	4.856046	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5210 MHz Chain2

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5209.9965	PASS	5209.9991	PASS	5209.9973	PASS	5209.9984	PASS
	120	5209.9962	PASS	5209.9985	PASS	5209.9963	PASS	5209.9992	PASS
	102	5209.9958	PASS	5209.9982	PASS	5209.9973	PASS	5209.9986	PASS
Max. Deviation (ppm)		-0.806142	PASS	-0.345489	PASS	-0.710173	PASS	-0.307102	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5210 MHz Chain3

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5210.018	PASS	5210.0198	PASS	5210.0191	PASS	5210.0194	PASS
40	120	5210.0216	PASS	5210.0258	PASS	5210.0227	PASS	5210.0227	PASS
30	120	5210.0144	PASS	5210.013	PASS	5210.015	PASS	5210.0102	PASS
20	120	5209.9886	PASS	5209.986	PASS	5209.9903	PASS	5209.9891	PASS
10	120	5210.0236	PASS	5210.0244	PASS	5210.0237	PASS	5210.0283	PASS
0	120	5210.0061	PASS	5210.0039	PASS	5210.0071	PASS	5210.0062	PASS
-10	120	5209.9796	PASS	5209.9776	PASS	5209.9813	PASS	5209.9769	PASS
-20	120	5210.0245	PASS	5210.0257	PASS	5210.0245	PASS	5210.0223	PASS
-30	120	5209.9806	PASS	5209.9832	PASS	5209.9824	PASS	5209.9816	PASS
Max. Deviation (ppm)		4.702495	PASS	4.952015	PASS	4.702495	PASS	5.431862	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5210 MHz Chain3

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5209.988	PASS	5209.9856	PASS	5209.9913	PASS	5209.9891	PASS
	120	5209.9886	PASS	5209.986	PASS	5209.9903	PASS	5209.9891	PASS
	102	5209.9896	PASS	5209.9852	PASS	5209.99	PASS	5209.9896	PASS
Max. Deviation (ppm)		-2.303263	PASS	-2.840691	PASS	-1.919386	PASS	-2.092131	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5775 MHz Chain1

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5775.0255	PASS	5775.0277	PASS	5775.0256	PASS	5775.0258	PASS
40	120	5774.9794	PASS	5774.9771	PASS	5774.977	PASS	5774.9771	PASS
30	120	5774.9703	PASS	5774.9745	PASS	5774.9712	PASS	5774.9743	PASS
20	120	5775.0029	PASS	5775.0039	PASS	5775.0049	PASS	5775.0065	PASS
10	120	5775.027	PASS	5775.0275	PASS	5775.028	PASS	5775.0275	PASS
0	120	5775.0219	PASS	5775.0212	PASS	5775.0218	PASS	5775.0215	PASS
-10	120	5775.0019	PASS	5775.0036	PASS	5775.0022	PASS	5775.0052	PASS
-20	120	5775.0143	PASS	5775.0132	PASS	5775.0118	PASS	5775.0119	PASS
-30	120	5774.9833	PASS	5774.9852	PASS	5774.9852	PASS	5774.9867	PASS
Max. Deviation (ppm)		-5.142857	PASS	4.796537	PASS	-4.987013	PASS	4.761905	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5775 MHz Chain1

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5775.003	PASS	5775.003	PASS	5775.0042	PASS	5775.0073	PASS
	120	5775.0029	PASS	5775.0039	PASS	5775.0049	PASS	5775.0065	PASS
	102	5775.0039	PASS	5775.0048	PASS	5775.0058	PASS	5775.0074	PASS
Max. Deviation (ppm)		0.675325	PASS	0.831169	PASS	1.004329	PASS	1.281385	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5775 MHz Chain2

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5774.9776	PASS	5774.976	PASS	5774.9763	PASS	5774.9802	PASS
40	120	5775.0276	PASS	5775.0263	PASS	5775.0276	PASS	5775.0243	PASS
30	120	5774.9946	PASS	5774.9949	PASS	5774.9983	PASS	5774.9978	PASS
20	120	5774.984	PASS	5774.9816	PASS	5774.9817	PASS	5774.9804	PASS
10	120	5775.0147	PASS	5775.0154	PASS	5775.0171	PASS	5775.0145	PASS
0	120	5774.9755	PASS	5774.9749	PASS	5774.9759	PASS	5774.9792	PASS
-10	120	5775.0223	PASS	5775.0262	PASS	5775.022	PASS	5775.023	PASS
-20	120	5775.0233	PASS	5775.0245	PASS	5775.0222	PASS	5775.0203	PASS
-30	120	5774.9887	PASS	5774.9857	PASS	5774.9874	PASS	5774.989	PASS
Max. Deviation (ppm)		4.779221	PASS	4.554113	PASS	4.779221	PASS	4.207792	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5775 MHz Chain2

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5774.9833	PASS	5774.9825	PASS	5774.9825	PASS	5774.9808	PASS
	120	5774.984	PASS	5774.9816	PASS	5774.9817	PASS	5774.9804	PASS
	102	5774.9846	PASS	5774.9818	PASS	5774.9806	PASS	5774.9801	PASS
Max. Deviation (ppm)		-2.891775	PASS	-3.186147	PASS	-3.359307	PASS	-3.445887	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5775 MHz Chain3

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
50	120	5775.008	PASS	5775.0091	PASS	5775.0091	PASS	5775.0119	PASS
40	120	5774.9885	PASS	5774.9864	PASS	5774.99	PASS	5774.9897	PASS
30	120	5774.9743	PASS	5774.9696	PASS	5774.9717	PASS	5774.9709	PASS
20	120	5775.0146	PASS	5775.0119	PASS	5775.0116	PASS	5775.0144	PASS
10	120	5774.9832	PASS	5774.9829	PASS	5774.9829	PASS	5774.9868	PASS
0	120	5774.9826	PASS	5774.9872	PASS	5774.9873	PASS	5774.9828	PASS
-10	120	5774.9851	PASS	5774.9891	PASS	5774.9894	PASS	5774.9848	PASS
-20	120	5774.9853	PASS	5774.987	PASS	5774.9904	PASS	5774.9892	PASS
-30	120	5775.0234	PASS	5775.0262	PASS	5775.0247	PASS	5775.0215	PASS
Max. Deviation (ppm)		-4.450216	PASS	-5.264069	PASS	-4.900433	PASS	-5.038961	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5775 MHz Chain3

TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail	Measured Frequency (MHz)	Pass/ Fail
20	138	5775.0137	PASS	5775.0125	PASS	5775.012	PASS	5775.0143	PASS
	120	5775.0146	PASS	5775.0119	PASS	5775.0116	PASS	5775.0144	PASS
	102	5775.0146	PASS	5775.0125	PASS	5775.0125	PASS	5775.0143	PASS
Max. Deviation (ppm)		2.528139	PASS	2.164502	PASS	2.164502	PASS	2.493506	PASS
IEEE Limit (ppm)		±20ppm							

4 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESCS 30	100288	Aug. 17, 2017	Aug. 16, 2018
RF signal cable (with 10dB PAD) Woken	5D-FB	Cable-cond2-01	Dec. 22, 2016	Dec. 21, 2017
LISN ROHDE & SCHWARZ (EUT)	ESH2-Z5	100100	Jan. 17, 2017	Jan. 16, 2018
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100312	Aug. 02, 2017	Aug. 01, 2018
Software ADT	BV ADT_Cond_ V7.3.7.3	NA	NA	NA

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 2. The test was performed in HwaYa Shielded Room 2.
 3. The VCCI Site Registration No. is C-2047.

Tested date: Aug. 17 ~ Sep. 02, 2017

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver KEYSIGHT	N9038A	MY55420137	Mar. 27, 2017	Mar. 26, 2018
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100269	May. 11, 2017	May. 10, 2018
BILOG Antenna SCHWARZBECK	VULB9168	9168-148	Dec. 28, 2016	Dec. 27, 2017
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-1169	Dec. 27, 2016	Dec. 26, 2017
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Dec. 14, 2016	Dec. 13, 2017
Loop Antenna EMCI	EM-6879	269	Aug. 10, 2017	Aug. 09, 2018
Preamplifier Agilent	8449B	3008A01638	Feb. 22, 2017	Feb. 21, 2018
Preamplifier Agilent	8447D	2944A10638	Aug. 08, 2017	Aug. 07, 2018
RF signal cable HUBER+SUHNER	SUCOFLEX 104	CABLE-CH9-02 (248780+MY13377)	Aug. 08, 2017	Aug. 07, 2018
RF signal cable HUBER+SUHNER	SUCOFLEX 104	CABLE-CH9-(250795/4)	Aug. 08, 2017	Aug. 07, 2018
RF signal cable Woken	8D-FB	Cable-CH9-01	Aug. 01, 2017	Jul. 31, 2018
Software BV ADT	ADT_Radiated_ V7.6.15.9.4	NA	NA	NA
Antenna Tower EMCO	2070/2080	512.835.4684	NA	NA
Turn Table EMCO	2087-2.03	NA	NA	NA
Antenna Tower & Turn BV ADT	AT100	AT93021705	NA	NA
Turn Table BV ADT	TT100	TT93021705	NA	NA
Turn Table Controller BV ADT	SC100	SC93021705	NA	NA

- Note:
1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 2. The test was performed in HwaYa Chamber 9.
 3. The horn antenna and preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
 4. The FCC Designation Number is TW0003. The number will be varied with the Lab location and scope as attached.
 5. The IC Site Registration No. is IC 7450F-9.

Tested date: Aug. 23, 2017

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
High Speed Peak Power Meter	ML2495A	0824012	Aug. 18, 2017	Aug. 17, 2018
Power Sensor	MA2411B	0738171	Aug. 18, 2017	Aug. 17, 2018

- Note:
1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 2. The test was performed in HwaYa Chamber 9.
 3. The horn antenna and preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
 4. The FCC Designation Number is TW0003. The number will be varied with the Lab location and scope as attached.
 5. The IC Site Registration No. is IC 7450F-9.

Appendix - Information on the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are FCC recognized accredited test firms and accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

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Email: service.adt@tw.bureauveritas.com

Web Site: www.bureauveritas-adt.com

The address and road map of all our labs can be found in our web site also.

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