

FCC RF Test Report (WLAN 5GHz)

Report No.: RF161129C10-1

FCC ID: G95-DWA1230

Equipment Name: Wireless .11ac Smart Ultra Broadband Gateway

Trade Name: technicolor

Model Number: DWA1230

Product Code: DSLYBA123GP, DSLYBA123WA

Received Date: Nov. 29, 2016

Test Date: Feb. 03 ~ Mar. 01, 2017

Issued Date: Mar. 29, 2017

Applicant: Technicolor Connected Home USA LLC

Address: 5030 Sugarloaf Parkway Building Lawrenceville Georgia United States
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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

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Release Control Record

Issue No.	Description	Date Issued
RF161129C10-1	Original release.	Mar. 29, 2017

1 Certificate of Conformity

Equipment Name: Wireless .11ac Smart Ultra Broadband Gateway

Trade Name: technicolor

Test Model: DWA1230

Product Code: DSLYBA123GP, DSLYBA123WA

Sample Status: Product Unit

Applicant: Technicolor Connected Home USA LLC

Test Date: Feb. 03 ~ Mar. 01, 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:** Mar. 29, 2017
Polly Chien / Specialist

Approved by : Ken Liu, **Date:** Mar. 29, 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 -14.87dB at 0.15391MHz.	-	PASS
4.2	-	99% Occupied Bandwidth & 26dB Bandwidth	99% Occupied Bandwidth [MHz]: For CDD Mode: 11a: 18.36 11ac(20M): 19.44 11ac(40M): 37.80 11ac(80M): 76.32 For TxBF Mode: 11ac(20M): 19.56 11ac(40M): 37.92 11ac(80M): 76.34 26dB Bandwidth [MHz]: For CDD Mode: 11a: 25.40 11ac(20M): 26.63 11ac(40M): 69.62 11ac(80M): 84.36 For TxBF Mode: 11ac(20M): 27.83 11ac(40M): 61.80 11ac(80M): 86.03	-	-
4.3	15.407(e)	6dB bandwidth for U-NII-3	Minimum Bandwidth [MHz]: For CDD Mode: 11a: 16.39 11ac(20M): 17.65 11ac(40M): 36.40 11ac(80M): 75.48 For TxBF Mode: 11ac(20M): 17.63 11ac(40M): 36.42 11ac(80M): 75.47	≥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	For CDD Mode: 5150-5250MHz Power [dBm]: 11a: 26.16 dBm 11ac(20M): 26.43 dBm 11ac(40M): 26.71 dBm 11ac(80M): 22.88 dBm 5725-5850MHz Power [dBm]: 11a: 25.91 dBm 11ac(20M): 26.05 dBm 11ac(40M): 26.58 dBm 11ac(80M): 26.08 dBm For TxBF Mode: 5150-5250MHz Power [dBm]: 11ac(20M): 26.69 dBm 11ac(40M): 26.66 dBm 11ac(80M): 22.86 dBm 5725-5850MHz Power [dBm]: 11ac(20M): 26.05 dBm 11ac(40M): 26.71 dBm 11ac(80M): 26.10 dBm	Power [dBm] 5150-5250MHz:30 5725-5850MHz:30	PASS
4.5	15.407 (a)(1/2/3)	Power Spectral Density	For CDD Mode: 5150-5250MHz [dBm/MHz]: 11a: 13.83 11ac(20M): 13.19 11ac(40M): 13.83 11ac(80M): 4.71 5725-5850MHz [dBm/500kHz]: 11a: 8.08 11ac(20M): 7.64 11ac(40M): 4.68 11ac(80M): 1.43 For TxBF Mode: 5150-5250MHz [dBm/MHz]: 11ac(20M): 13.47 11ac(40M): 10.64 11ac(80M): 5.92 5725-5850MHz [dBm/500kHz]: 11ac(20M): 7.60 11ac(40M): 4.34 11ac(80M): 1.45	5150-5250MHz: 17 [dBm/MHz] 5725-5850MHz: 30 [dBm/500kHz]	PASS

Applied Standard: 47 CFR FCC Part 15 Subpart E					
Report Clause	Ref. Std. Clause	Description	Measured	Limit	Result
4.6	15.407 (b)(1/2/3/4/6)	Radiated Emissions	Margin is -2.1dB at 63.05MHz.	-	PASS
		Band Edge	Margin is -0.2dB at 5150.00MHz	-	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	3.63 dB
Radiated Emissions above 1 GHz	1GHz ~ 6GHz	3.64 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	Wireless .11ac Smart Ultra Broadband Gateway			
Trade Name	technicolor			
Model Number	DWA1230			
Product Code	DSLYBA123GP, DSLYBA123WA			
FCC ID	G95-DWA1230			
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: CDD Mode: 26.16 dBm
			☒	IEEE 802.11ac (20MHz): CDD Mode: 26.43 dBm TxBF Mode: 26.69 dBm
			☒	IEEE 802.11ac (40MHz): CDD Mode: 26.71 dBm TxBF Mode: 26.66 dBm
			☒	IEEE 802.11ac (80MHz): CDD Mode: 22.88 dBm TxBF Mode: 22.86 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: CDD Mode: 25.91 dBm
			☒	IEEE 802.11ac (20MHz): CDD Mode: 26.05 dBm TxBF Mode: 26.05 dBm
			☒	IEEE 802.11ac (40MHz): CDD Mode: 26.58 dBm TxBF Mode: 26.71 dBm
			☒	IEEE 802.11ac (80MHz): CDD Mode: 26.08 dBm TxBF Mode: 26.10 dBm

Product Type	For IEEE 802.11a: WLAN(4TX, 4RX) For IEEE 802.11n: WLAN(4TX, 4RX) For IEEE 802.11ac: WLAN (4TX, 4RX)			
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~MCS15 11n(40MHz) mode : MCS0~MCS15 11ac(20MHz) mode : MCS0~MCS9 for NSS1~NSS4 See the below table 11ac(40MHz) mode : MCS0~MCS9 for NSS1~NSS4 See the below table 11ac(80MHz) mode : MCS0~MCS9 for NSS1~NSS4 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	LAN Port x 4 USB Port x 1 DSL Port x 2 MoCA Port x 1(Coaxial type) SFP Port x 1			
Hardware Version	LAB2c			
Software Version	16.4.7346-3110000-20161121223653-5f8b7460b37a17de7749af5a4f388095eea8e3c0			

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
11n 20MHz Nss=4	MCS24	26	28.9	11n 40MHz Nss=4	MCS24	54	60
	MCS25	52	57.8		MCS25	108	120
	MCS26	78	86.7		MCS26	162	180
	MCS27	104	115.6		MCS27	216	240
	MCS28	156	173.3		MCS28	324	360
	MCS29	208	231.1		MCS29	432	480
	MCS30	234	260		MCS30	486	540
	MCS31	260	288.9		MCS31	540	600

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	190.0
	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.

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 = 4	MCS0	26.0	28.9	11ac 40MHz NSS = 4	MCS0	54.0	60.0	11ac 80MHz NSS = 4	MCS0	117.0	130.0
	MCS1	52.0	57.8		MCS1	108.0	120.0		MCS1	234.0	260.0
	MCS2	78.0	86.7		MCS2	162.0	180.0		MCS2	351.0	390.0
	MCS3	104.0	115.6		MCS3	216.0	240.0		MCS3	468.0	520.0
	MCS4	156.0	173.3		MCS4	324.0	360.0		MCS4	702.0	780.0
	MCS5	208.0	231.1		MCS5	432.0	480.0		MCS5	936.0	1040.0
	MCS6	234.0	260.0		MCS6	486.0	540.0		MCS6	1053.0	1170.0
	MCS7	260.0	288.9		MCS7	540.0	600.0		MCS7	1170.0	1300.0
	MCS8	312.0	346.7		MCS8	648.0	720.0		MCS8	1404.0	1560.0
	MCS9	Note	Note		MCS9	720.0	800.0		MCS9	1560.0	1733.3

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

3.2 Accessories

Power supply:

Brand	AcBel
Model	WAC011
P/N	DSL37541960
Input Power	100-240Vac, 50/60Hz, 1A
Output Power	12Vdc, 2.8A
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: (US0 EU-32)	MOCA	Ethernet LAN 1000Mbps	Ethernet WAN 1000Mbps	USB 3. 0	WLAN IEEE 802.11n (2.4GHz)	WLAN IEEE 802.11ac (5GHz)	SFP
DWA1230	12Vdc, 2.8A	●Annex A	●(1 port)	●(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.

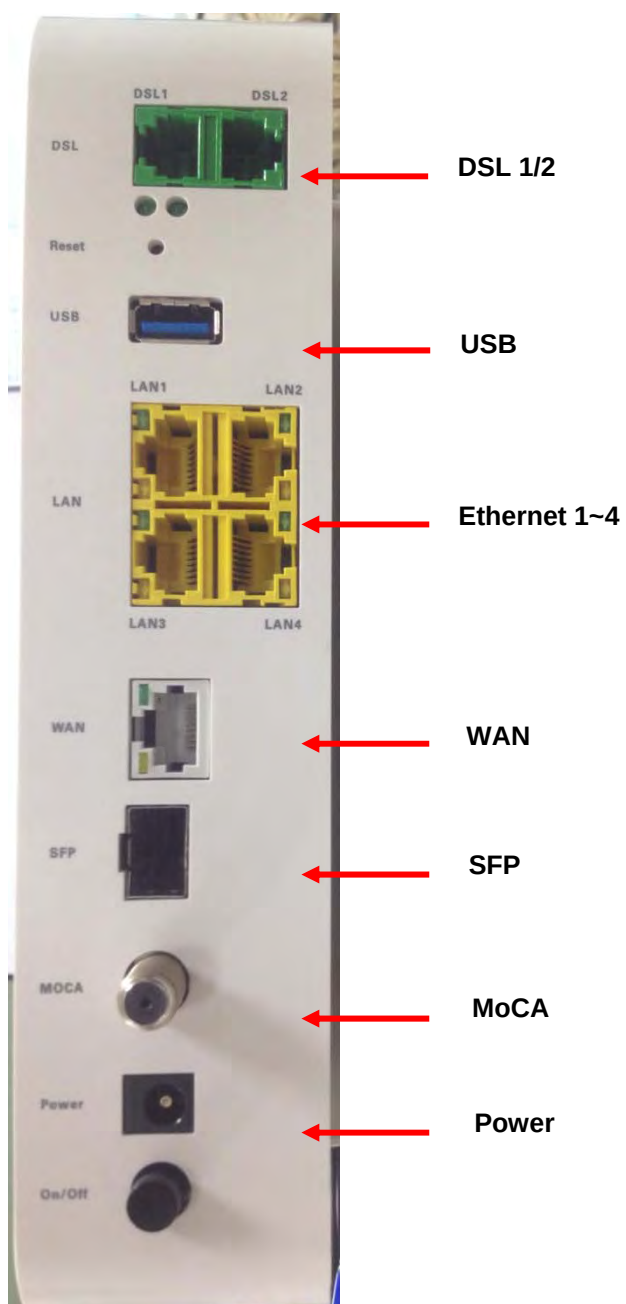
Note: The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.

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
DSL1/2	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
MOCA	Coaxial	2 meter	> 10 meter	10 meter	External
USB	STP	NA	NA	NA	Internal
SFP (Fiber module)	Fiber	2 meter	> 10 meter	10 meter	External
AC power	UTP	1.5 meter	>10 meter	1.5 meter	External

3.7 Panel Drawing



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 4TX

For IEEE802.11n 20MHz/40MHz, MCS0~MCS7: 1 Stream 4TX; MCS8~MCS15: 2 Stream 4TX;

MCS16~MCS23: 3 Stream 4TX; MCS24~MCS31: 4 Stream 4TX

For IEEE802.11ac 20MHz, Nss1MCS0~Nss1MCS8: 1 Stream 4TX; Nss2MCS0~Nss2MCS9: 2 Stream 4TX.

Nss3MCS0~Nss3MCS9: 3 Stream 4TX; Nss4MCS0~Nss4MCS8: 4 Stream 4TX

For IEEE802.11ac 40MHz/80MHz, Nss1MCS0~Nss1MCS9: 1 Stream 4TX; Nss2MCS0~Nss2MCS9: 2 Stream 4TX; Nss3MCS0~Nss3MCS9: 3 Stream 4TX; Nss4MCS0~Nss4MCS9: 4 Stream 4TX

3.9 Antenna Requirements

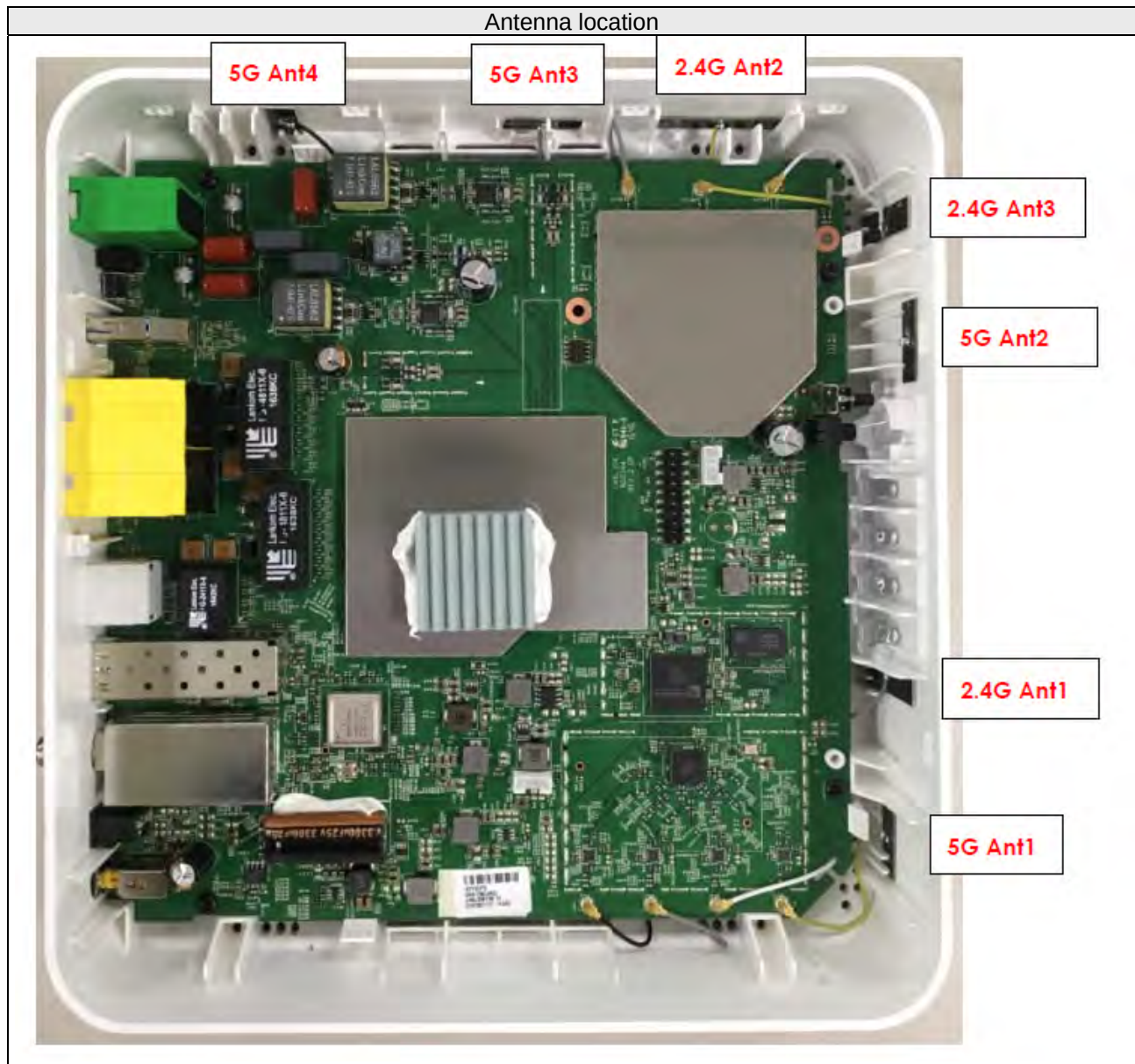
Except for special regulations, the Low-power Radio-frequency Devices must not be equipped with any jacket for installing an antenna with extension cable. An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. 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	WHAYU	C107-511313-A	PCB	I-Pex
2	WHAYU	C107-511312-A	PCB	I-Pex
3	WHAYU	C107-511311-A	PCB	I-Pex
4	WHAYU	C107-511310-A	PCB	I-Pex

Antenna & Bandwidth

Antenna	1st (TX)			2nd (TX)			3rd (TX)			4th (TX)		
Bandwidth Mode	20 MHz	40 MHz	80 MHz	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	V	X	X
802.11n	V	V	X	V	V	X	V	V	X	V	V	X
802.11ac	V	V	V	V	V	V	V	V	V	V	V	V



Frequency	Maximum Gain (dBi) for CDD mode					
	CDD mode (1 Stream 4 TX) for Power Gain			CDD mode (1 Stream 4 TX) for PSD Gain		
	20 MHz	40 MHz	80MHz	20 MHz	40 MHz	80MHz
5180MHz	3.27			6.89		
5190MHz		3.37			6.99	
5200MHz	3.34			6.94		
5210MHz			3.47			6.73
5230MHz		3.09			6.25	
5240MHz	3.07			6.38		
5260MHz	3.21			6.44		
5270MHz		4.14			6.61	
5290MHz			3.52			6.65
5300MHz	3.64			6.44		
5310MHz		3.94			6.48	
5320MHz	3.48			6.28		
5500MHz	2.98			6.13		
5510MHz		3.35			6.29	
5530MHz			3.71			6.71
5550MHz		3.43			6.33	
5580MHz	3.62			6.56		
5610MHz			3.50			6.13
5620MHz	4.02			6.63		
5630MHz		3.87			6.09	
5670MHz		3.37			6.06	
5690MHz			4.21			6.58
5700MHz	3.41			6.29		
5710MHz		3.85			6.18	
5720MHz	4.01			6.25		
5745MHz	4.02			6.31		
5755MHz		4.96			7.08	
5775MHz			4.34			6.49
5785MHz	3.64			5.92		
5795MHz		3.47			5.89	
5825MHz	3.90			6.22		

Note:

1. Antenna Gain refer to "DWA1230 antenna table_V1.08.xlsx" 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 4 TX) for Power Gain			TXBF mode (1 Stream 4 TX) for PSD Gain		
	20 MHz	40 MHz	80MHz	20 MHz	40 MHz	80MHz
5180MHz	6.89			6.89		
5190MHz		6.99			6.99	
5200MHz	6.94			6.94		
5210MHz			6.73			6.73
5230MHz		6.25			6.25	
5240MHz	6.38			6.38		
5260MHz	6.44			6.44		
5270MHz		6.61			6.61	
5290MHz			6.65			6.65
5300MHz	6.44			6.44		
5310MHz		6.48			6.48	
5320MHz	6.28			6.28		
5500MHz	6.13			6.13		
5510MHz		6.29			6.29	
5530MHz			6.71			6.71
5550MHz		6.33			6.33	
5580MHz	6.56			6.56		
5610MHz			6.13			6.13
5620MHz	6.63			6.63		
5630MHz		6.09			6.09	
5670MHz		6.06			6.06	
5690MHz			6.58			6.58
5700MHz	6.29			6.29		
5710MHz		6.18			6.18	
5720MHz	6.25			6.25		
5745MHz	6.31			6.31		
5755MHz		7.08			7.08	
5775MHz			6.49			6.49
5785MHz	5.92			5.92		
5795MHz		5.89			5.89	
5825MHz	6.22			6.22		

Note:

1. Antenna Gain refer to "DWA1230 antenna table_V1.08.xlsx" 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	151	-	1+2+3+4
Occupied Bandwidth & 26dB Bandwidth	11a	OFDM/BPSK	36/40/48	6Mbps (CDD)	1+2+3+4
	11ac(20MHz)		36/40/48	Nss1 MCS0 (CDD)	1+2+3+4
				Nss1 MCS0 (TxBF)	1+2+3+4
	11ac(40MHz)		38/46	Nss1 MCS0 (CDD)	1+2+3+4
				Nss1 MCS0 (TxBF)	1+2+3+4
	11ac(80MHz)		42	Nss1 MCS0 (CDD)	1+2+3+4
				Nss1 MCS0 (TxBF)	1+2+3+4
6dB bandwidth (for U-NII-3)	11a	OFDM/BPSK	149/157/165	6Mbps (CDD)	1+2+3+4
	11ac(20MHz)		149/157/165	Nss1 MCS0 (CDD)	1+2+3+4
				Nss1 MCS0 (TxBF)	1+2+3+4
	11ac(40MHz)		151/159	Nss1 MCS0 (CDD)	1+2+3+4
				Nss1 MCS0 (TxBF)	1+2+3+4
	11ac(80MHz)		155	Nss1 MCS0 (CDD)	1+2+3+4
				Nss1 MCS0 (TxBF)	1+2+3+4
Maximum Conducted Output Power (Average)	11a	OFDM/BPSK	36/40/48 149/157/165	6Mbps (CDD)	1+2+3+4
	11ac(20MHz)		36/40/48 149/157/165	Nss1 MCS0 (CDD)	1+2+3+4
				Nss1 MCS0 (TxBF)	1+2+3+4
	11ac(40MHz)		38/46 151/159	Nss1 MCS0 (CDD)	1+2+3+4
				Nss1 MCS0 (TxBF)	1+2+3+4
	11ac(80MHz)		42 155	Nss1 MCS0 (CDD)	1+2+3+4
				Nss1 MCS0 (TxBF)	1+2+3+4
Power Spectral Density	11a	OFDM/BPSK	36/40/48 149/157/165	6Mbps (CDD)	1+2+3+4
	11ac(20MHz)		36/40/48 149/157/165	Nss1 MCS0 (CDD)	1+2+3+4
				Nss1 MCS0 (TxBF)	1+2+3+4
	11ac(40MHz)		38/46 151/159	Nss1 MCS0 (CDD)	1+2+3+4
				Nss1 MCS0 (TxBF)	1+2+3+4
	11ac(80MHz)		42 155	Nss1 MCS0 (CDD)	1+2+3+4
				Nss1 MCS0 (TxBF)	1+2+3+4
Unwanted Emission in the restricted bands Above 1GHz (Radiated)	11ac(20MHz)	OFDM/BPSK	36/40/48 149/157/165	Nss1 MCS0 (CDD)	1+2+3+4
				Nss1 MCS0 (TxBF)	1+2+3+4
	11ac(40MHz)		38/46 151/159	Nss1 MCS0 (CDD)	1+2+3+4
				Nss1 MCS0 (TxBF)	1+2+3+4
	11ac(80MHz)		42 155	Nss1 MCS0 (CDD)	1+2+3+4
				Nss1 MCS0 (TxBF)	1+2+3+4

Test Items	Mode	Note	Channel	Data Rate	Antenna
Unwanted Emission out of the restricted bands Above 1GHz (Radiated)	11ac(20MHz)	OFDM/BPSK	36/40/48 149/157/165	Nss1 MCS0 (CDD)	1+2+3+4
				Nss1 MCS0 (TxBF)	1+2+3+4
	11ac(40MHz)		38/46 151/159	Nss1 MCS0 (CDD)	1+2+3+4
				Nss1 MCS0 (TxBF)	1+2+3+4
	11ac(80MHz)		42 155	Nss1 MCS0 (CDD)	1+2+3+4
				Nss1 MCS0 (TxBF)	1+2+3+4
Radiated Emissions Below 1GHz(Radiated)	11ac(40MHz)	OFDM/BPSK	151	-	1+2+3+4
Frequency Stability	20MHz	Un-modulation	36/40/48 149/157/165	-	1, 2, 3, 4
	40MHz		38/46 151/159	-	1, 2, 3, 4
	80MHz		42 155	-	1, 2, 3, 4

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 same power setting, the 802.11ac 2S4T CDD, 3S4T CDD, 4S4T SDM modes covered by 802.11ac 1S4T CDD mode; the 802.11ac 2S4T TxBF, 3S4T TxBF modes covered by 802.11ac 1S4T TxBF mode
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".

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	16.4.7346-3110000-20161121223653-5f8b7460b37a17de7749af5a4f388095ee a8e3c0				
Worst Modulation Mode	Number of Transmit Chains (NTX)	Frequency (MHz)	Maximum Output Power(dBm)	Power Setting	Data Rate / MCS
802.11a (CDD)	1 stream 4TX	5180	26.05	21	6Mbps
802.11a (CDD)	1 stream 4TX	5200	25.96	21	6Mbps
802.11a (CDD)	1 stream 4TX	5240	26.16	21	6Mbps
802.11a (CDD)	1 stream 4TX	5745	25.91	21	6Mbps
802.11a (CDD)	1 stream 4TX	5785	25.76	21	6Mbps
802.11a (CDD)	1 stream 4TX	5825	25.59	21	6Mbps
802.11ac 20MHz (CDD)	1 stream 4TX	5180	26.43	21	Nss1MCS0 (6.5)
802.11ac 20MHz (CDD)	1 stream 4TX	5200	26.28	21	Nss1MCS0 (6.5)
802.11ac 20MHz (CDD)	1 stream 4TX	5240	26.29	21	Nss1MCS0 (6.5)
802.11ac 20MHz (CDD)	1 stream 4TX	5745	26.05	21	Nss1MCS0 (6.5)
802.11ac 20MHz (CDD)	1 stream 4TX	5785	25.90	21	Nss1MCS0 (6.5)
802.11ac 20MHz (CDD)	1 stream 4TX	5825	25.72	21	Nss1MCS0 (6.5)
802.11ac 20MHz (TxBF)	1 stream 4TX	5180	26.69	20	Nss1MCS0 (6.5)
802.11ac 20MHz (TxBF)	1 stream 4TX	5200	26.36	21	Nss1MCS0 (6.5)
802.11ac 20MHz (TxBF)	1 stream 4TX	5240	26.29	21	Nss1MCS0 (6.5)
802.11ac 20MHz (TxBF)	1 stream 4TX	5745	25.93	21	Nss1MCS0 (6.5)
802.11ac 20MHz (TxBF)	1 stream 4TX	5785	25.79	21	Nss1MCS0 (6.5)
802.11ac 20MHz (TxBF)	1 stream 4TX	5825	26.05	21	Nss1MCS0 (6.5)
802.11ac 40MHz (CDD)	1 stream 4TX	5190	23.20	17	Nss1MCS0 (13.5)
802.11ac 40MHz (CDD)	1 stream 4TX	5230	26.71	21	Nss1MCS0 (13.5)
802.11ac 40MHz (CDD)	1 stream 4TX	5755	26.58	21	Nss1MCS0 (13.5)
802.11ac 40MHz (CDD)	1 stream 4TX	5795	26.44	21	Nss1MCS0 (13.5)
802.11ac 40MHz (TxBF)	1 stream 4TX	5190	22.13	16	Nss1MCS0 (13.5)
802.11ac 40MHz (TxBF)	1 stream 4TX	5230	26.66	21	Nss1MCS0 (13.5)
802.11ac 40MHz (TxBF)	1 stream 4TX	5755	26.71	21	Nss1MCS0 (13.5)
802.11ac 40MHz (TxBF)	1 stream 4TX	5795	26.54	21	Nss1MCS0 (13.5)
802.11ac 80MHz (CDD)	1 stream 4TX	5210	22.88	17	Nss1MCS0 (29.3)
802.11ac 80MHz (CDD)	1 stream 4TX	5775	26.08	21	Nss1MCS0 (29.3)
802.11ac 80MHz (TxBF)	1 stream 4TX	5210	22.86	18	Nss1MCS0 (29.3)
802.11ac 80MHz (TxBF)	1 stream 4TX	5775	26.10	21	Nss1MCS0 (29.3)

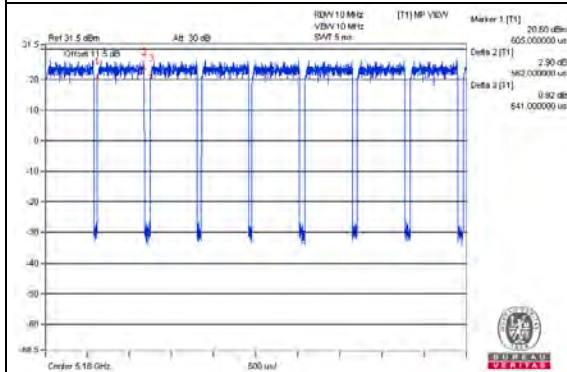
3.14 On Time and Duty Cycle

Mode	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)
11a 1S4T CDD	0.562	0.641	87.7	0.57	3
11ac (20MHz) 1S4T CDD	4.960	5.030	98.6	-	-
11ac (20MHz) 1S4T TxBF	4.960	5.032	98.6	-	-
11ac (40MHz) 1S4T CDD	2.412	2.465	97.8	0.09	1
11ac (40MHz) 1S4T TxBF	2.417	2.467	98.0	-	-
11ac (80MHz) 1S4T CDD	1.135	1.209	93.9	0.27	3
11ac (80MHz) 1S4T TxBF	1.134	1.207	93.9	0.27	3

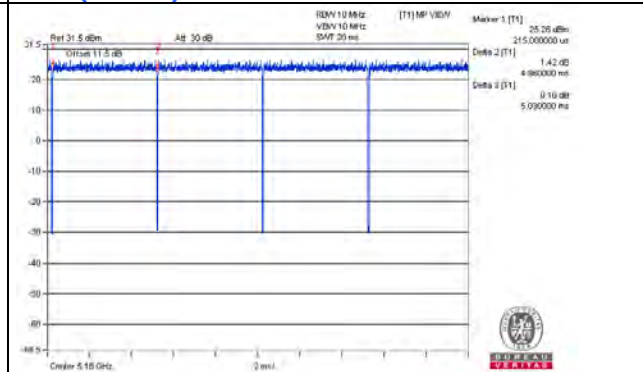
Note:

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.

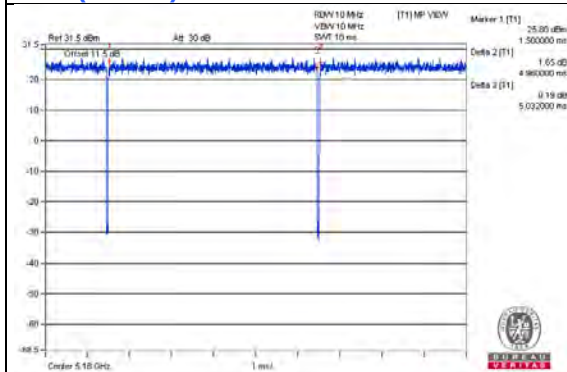
11a 1S4T CDD



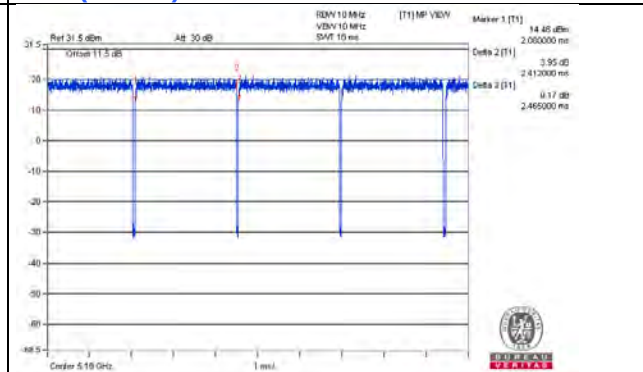
11ac (20MHz) 1S4T CDD



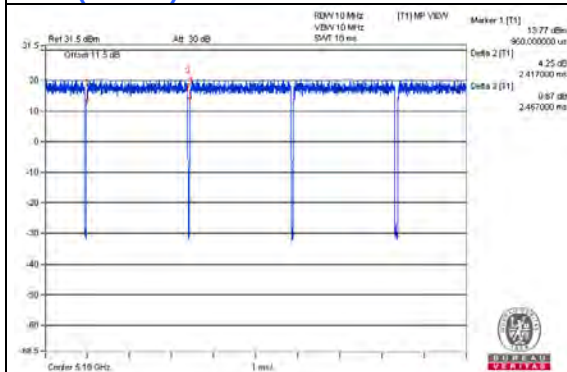
11ac (20MHz) 1S4T TxBF



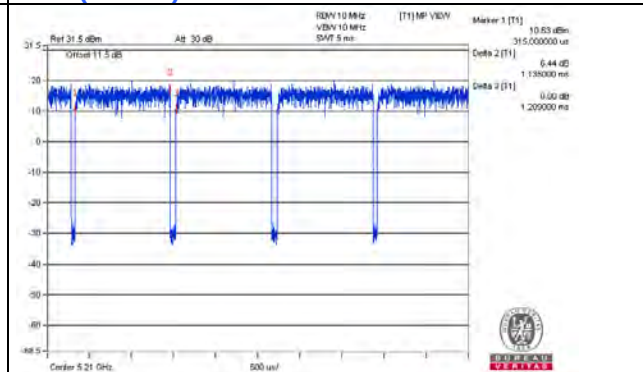
11ac (40MHz) 1S4T CDD



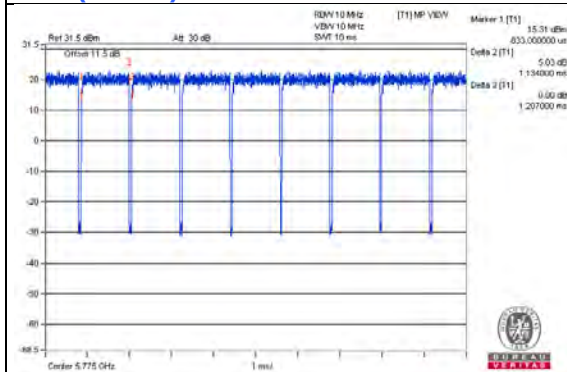
11ac (40MHz) 1S4T TxBF



11ac (80MHz) 1S4T CDD



11ac (80MHz) 1S4T 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 1	Conduction	Hwa Ya	-	-	C-2040
Chamber 4	966 Chamber	Hwa Ya	215374	7450F-9	-
Oven	Oven	Hwa Ya	-	-	-

3.16 EUT Diagram and Support Equipment

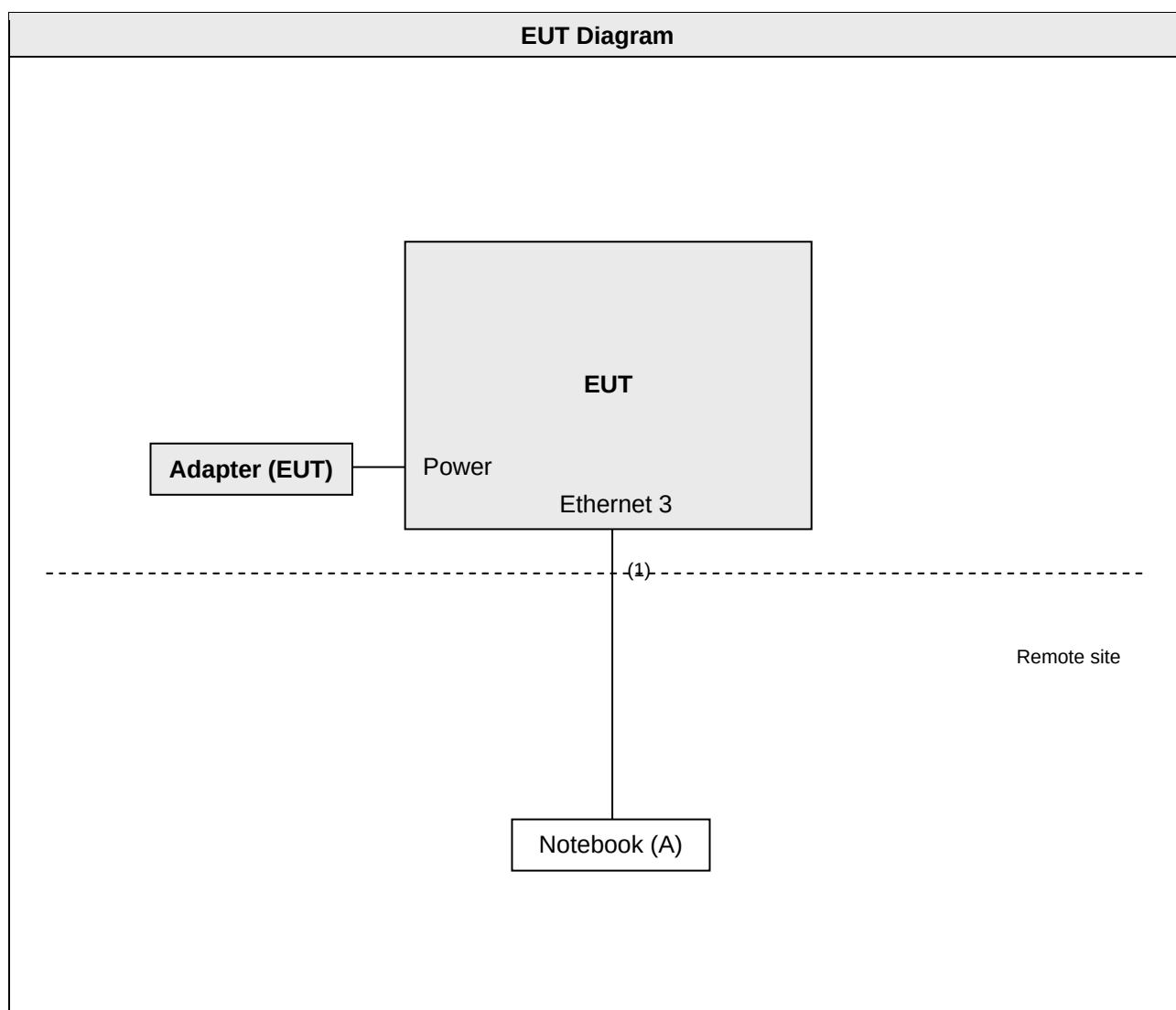
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

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

4.1 AC Power Conducted Emissions Measurement

4.1.1 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

4.1.2 Measuring Instruments and Setting

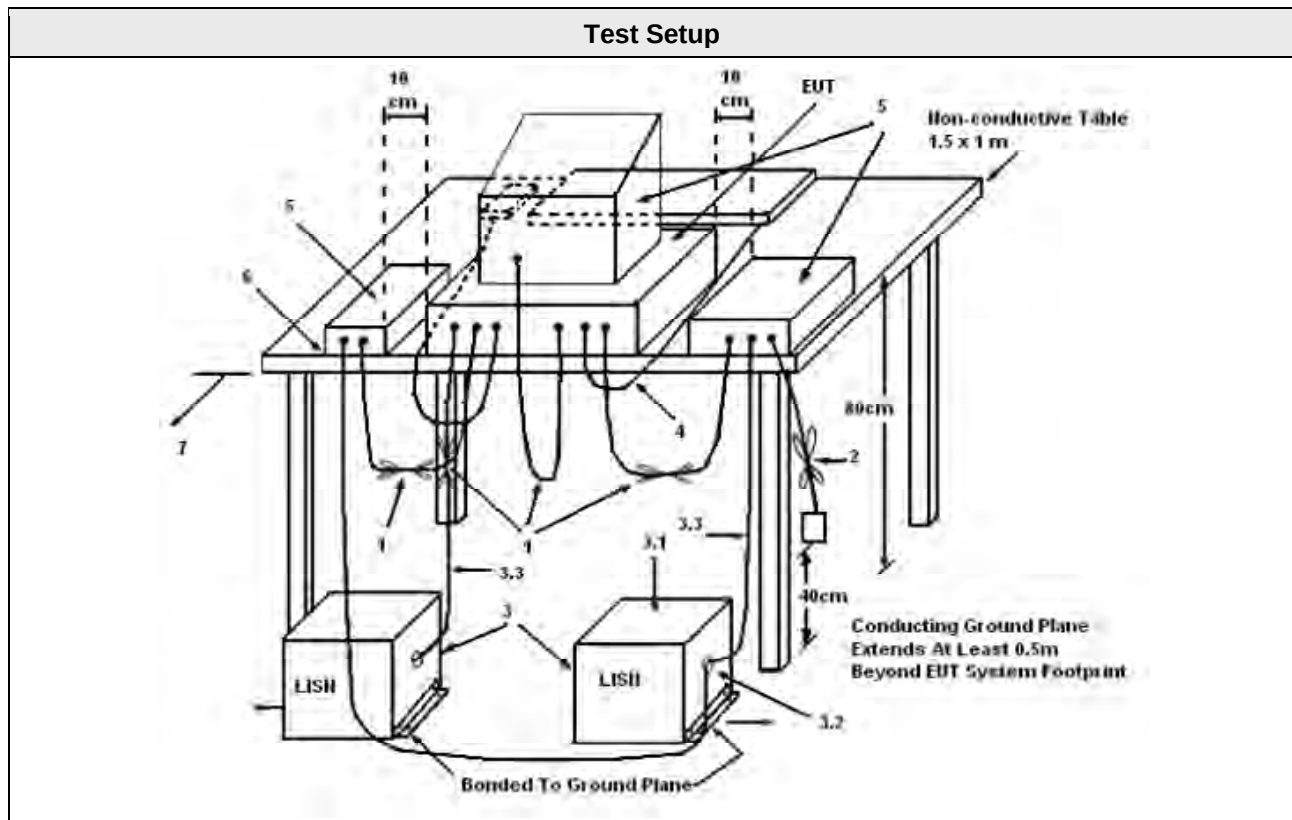
Please refer to section 5 of equipments list in this report. The following table is the setting of the receiver

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

4.1.3 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.

4.1.4 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.

4.1.5 Test Deviation

There are no deviations with the original standard.

4.1.6 EUT Operating during Test

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

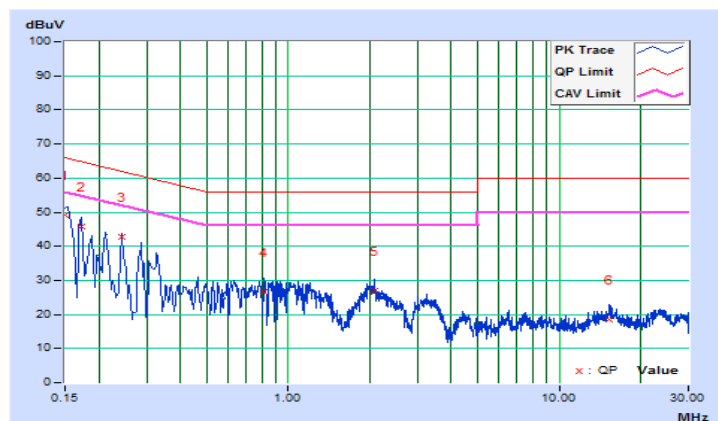
4.1.7 Test Results of AC Power Conducted Emissions

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	Tank Wu		

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	0.15000	10.11	39.03	24.70	49.14	34.81	66.00	56.00	-16.86	-21.19
2	0.17283	10.13	35.60	20.38	45.73	30.51	64.82	54.82	-19.09	-24.31
3	0.24384	10.15	32.64	25.59	42.79	35.74	61.96	51.96	-19.17	-16.22
4	0.81079	10.18	16.41	7.84	26.59	18.02	56.00	46.00	-29.41	-27.98
5	2.07372	10.25	16.85	8.20	27.10	18.45	56.00	46.00	-28.90	-27.55
6	15.35990	11.09	7.57	2.94	18.66	14.03	60.00	50.00	-41.34	-35.97

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

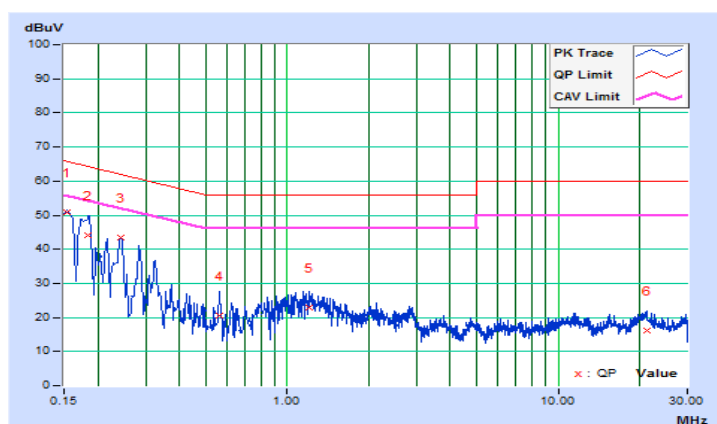


Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	25°C, 75%RH
Tested by	Tank Wu		

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	10.13	40.79	26.90	50.92	37.03	65.79	55.79	-14.87	-18.76
2	0.18460	10.14	34.13	18.63	44.27	28.77	64.28	54.28	-20.01	-25.51
3	0.24279	10.16	33.17	23.46	43.33	33.62	62.00	52.00	-18.67	-18.38
4	0.56446	10.18	10.51	0.91	20.69	11.09	56.00	46.00	-35.31	-34.91
5	1.20961	10.20	12.64	5.17	22.84	15.37	56.00	46.00	-33.16	-30.63
6	21.17798	11.64	4.64	-0.64	16.28	11.00	60.00	50.00	-43.72	-39.00

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



4.2 Occupied Bandwidth and 26dB Bandwidth Measurement

4.2.1 Measuring Instruments and Setting

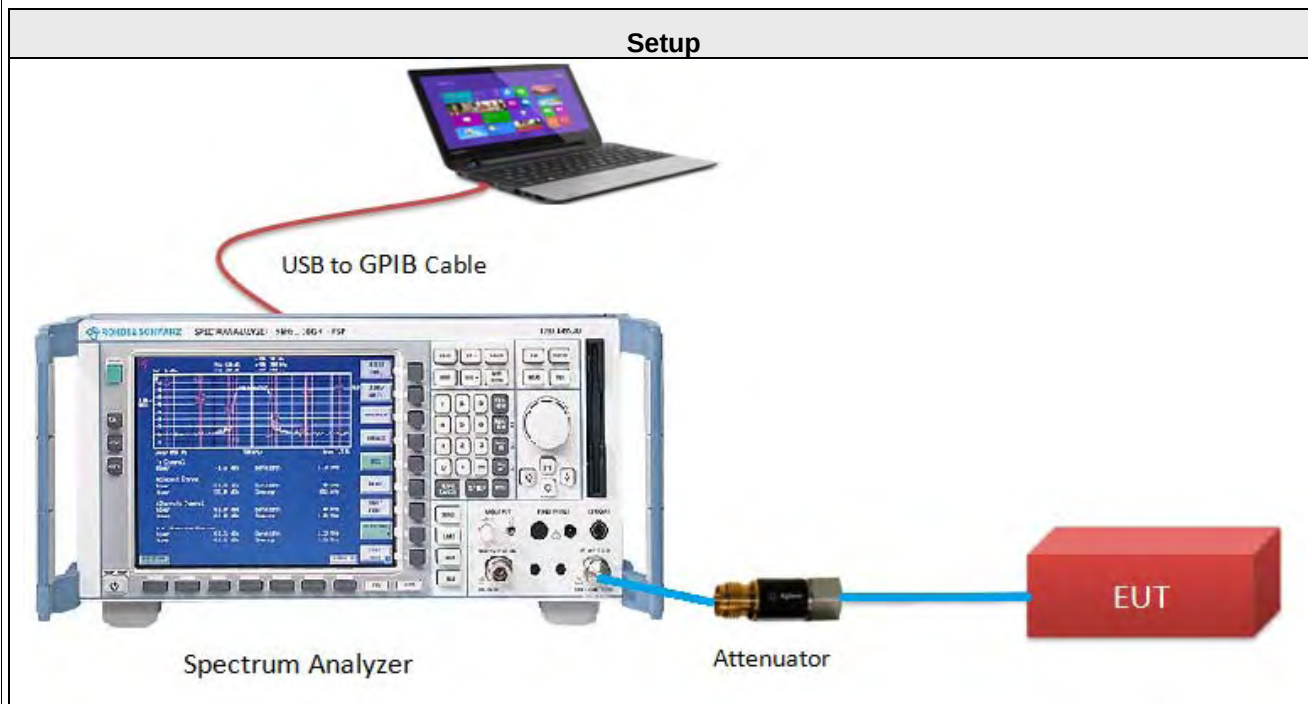
The following table is the setting of the Spectrum Analyzer.

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

4.2.2 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 v01r03, in section "Emission bandwidth (C)(1)" & "99 Percent Occupied Bandwidth"(D). 08/22/2016.
- 3 When measuring Emission bandwidth with multiple antenna systems, add every result of the values by mathematic formula.

4.2.3 Test Setup Layout



4.2.4 Test Deviation

There are no deviations with the original standard.

4.2.5 EUT Operating Conditions

The EUT was programmed to be in continuously transmitting mode.

4.2.6 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	CHAIN 4
36	5180	25.21	25.32	23.15	24.87
40	5200	25.40	25.32	24.76	25.12
48	5240	25.28	25.22	23.96	25.38

11ac (20MHz) 1S4T CDD

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)			
		CHAIN 1	CHAIN 2	CHAIN 3	CHAIN 4
36	5180	25.55	26.31	24.47	25.91
40	5200	25.39	26.21	24.40	26.63
48	5240	26.12	26.23	24.94	26.63

11ac (20MHz) 1S4T TxBF

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)			
		CHAIN 1	CHAIN 2	CHAIN 3	CHAIN 4
36	5180	25.40	26.06	24.39	26.46
40	5200	25.37	26.04	24.51	26.65
48	5240	25.88	26.28	24.47	27.83

11ac (40MHz) 1S4T CDD

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)			
		CHAIN 1	CHAIN 2	CHAIN 3	CHAIN 4
38	5190	44.97	44.56	44.22	44.44
46	5230	69.62	61.74	55.98	59.27

11ac (40MHz) 1S4T TxBF

CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)			
		CHAIN 1	CHAIN 2	CHAIN 3	CHAIN 4
38	5190	44.85	44.22	44.34	43.93
46	5230	61.80	60.88	55.75	59.65

11ac (80MHz) 1S4T CDD

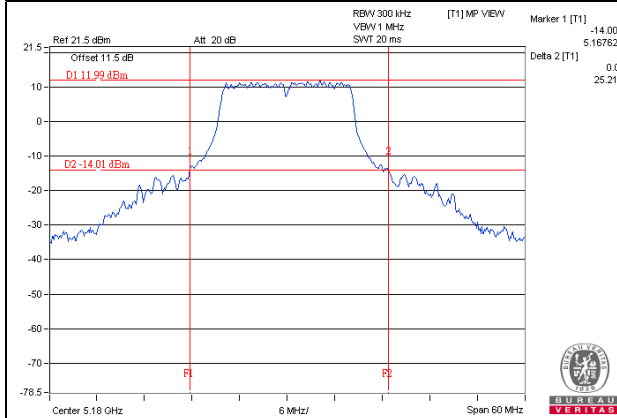
CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)			
		CHAIN 1	CHAIN 2	CHAIN 3	CHAIN 4
42	5210	84.36	83.85	83.78	83.05

11ac (80MHz) 1S4T TxBF

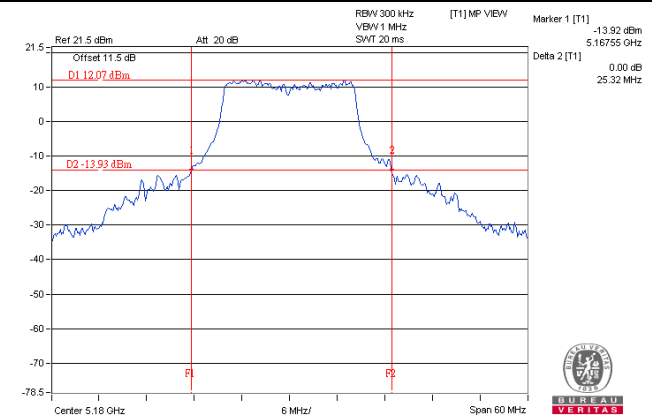
CHANNEL	FREQUENCY (MHz)	26dB Bandwidth (MHz)			
		CHAIN 1	CHAIN 2	CHAIN 3	CHAIN 4
42	5210	86.03	85.54	85.61	83.67

26dB BANDWIDTH SPECTRUM PLOT

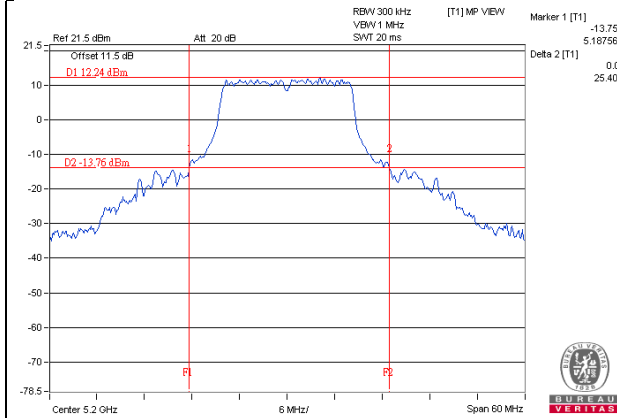
11a 1S4T CDD CH36 Chain1



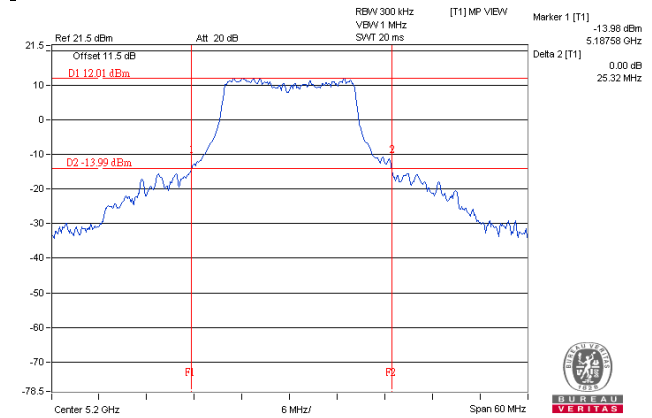
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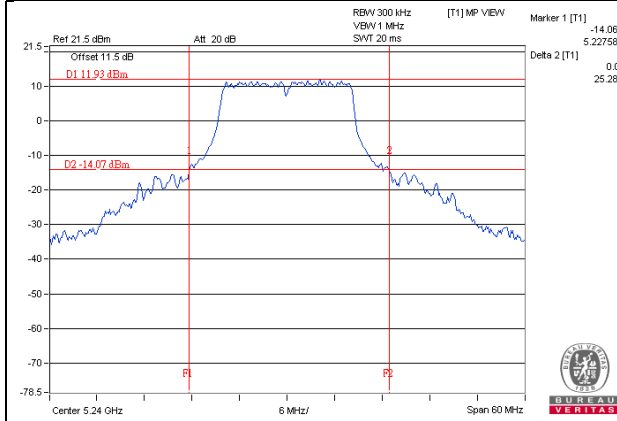
11a 1S4T CDD CH40 Chain1



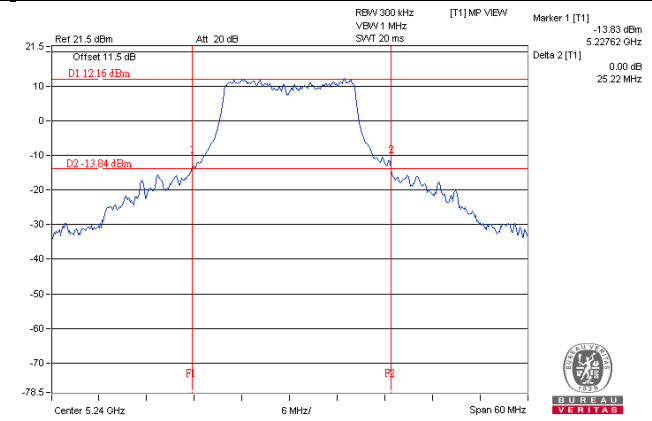
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11a 1S4T CDD CH48 Chain1

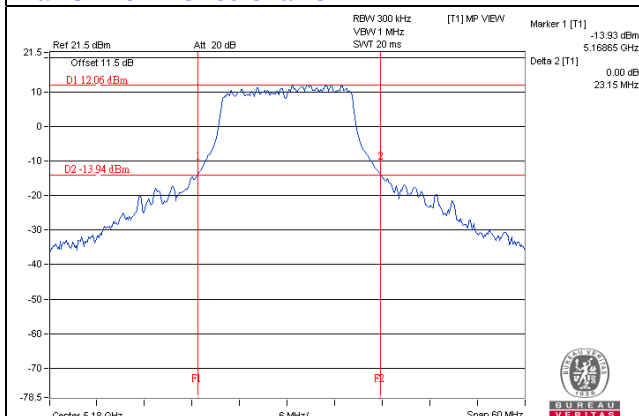


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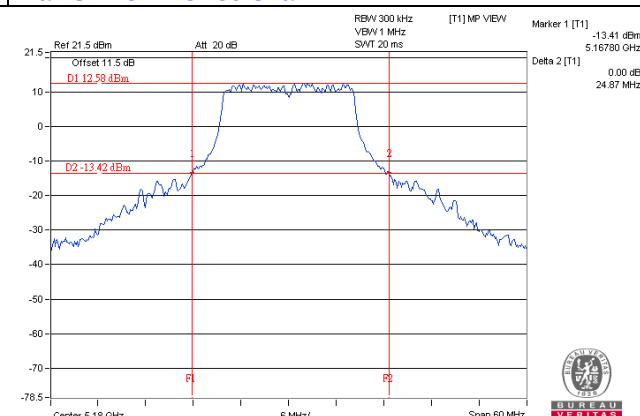


26dB BANDWIDTH SPECTRUM PLOT

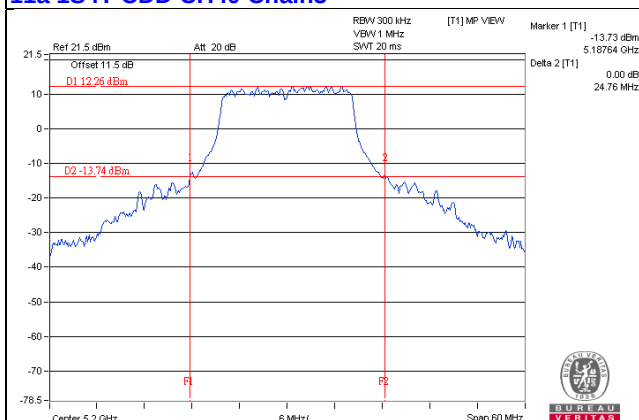
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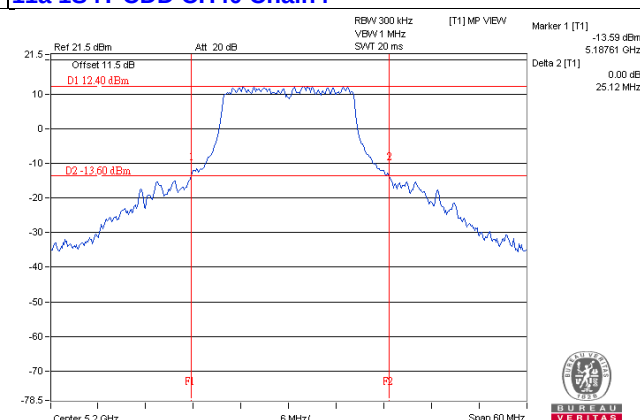
11a 1S4T CDD CH36 Chain4



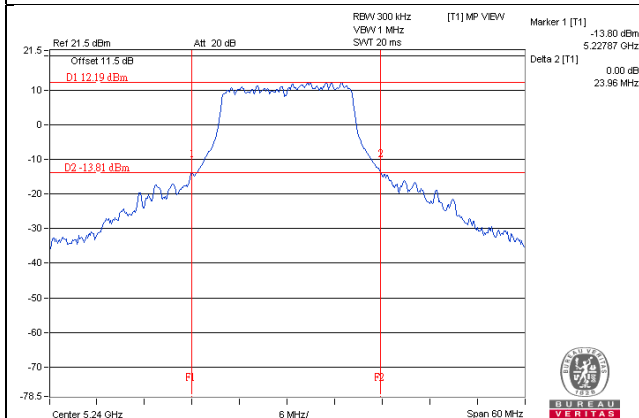
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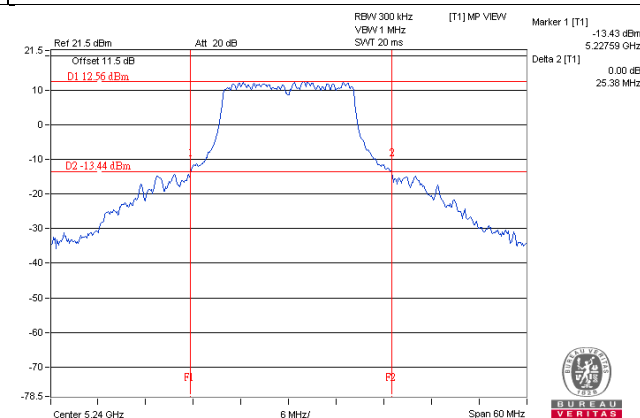
11a 1S4T CDD CH40 Chain4



11a 1S4T CDD CH48 Chain3

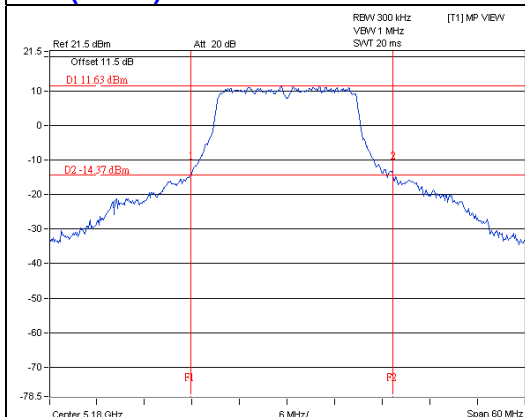


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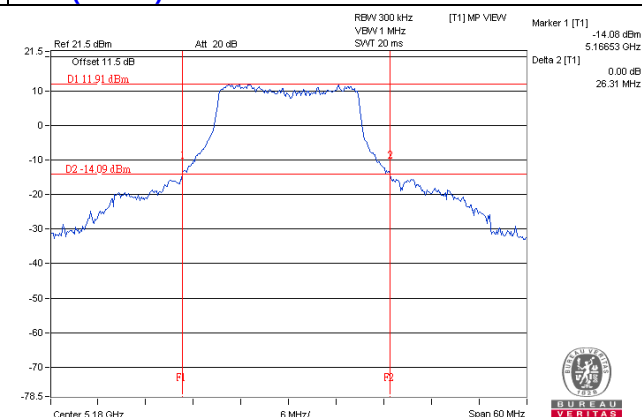


26dB BANDWIDTH SPECTRUM PLOT

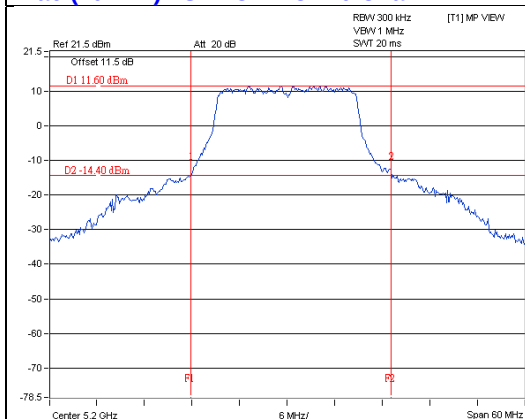
11ac (20MHz) 1S4T CDD CH36 Chain1



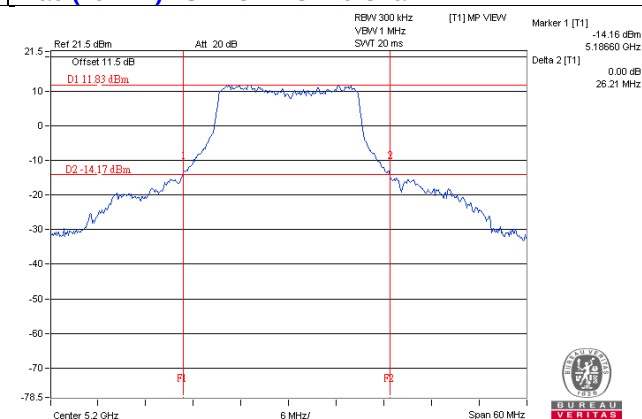
11ac (20MHz) 1S4T CDD CH36 Chain2



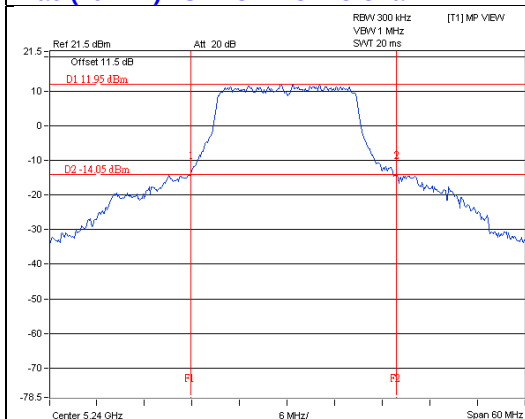
11ac (20MHz) 1S4T CDD CH40 Chain1



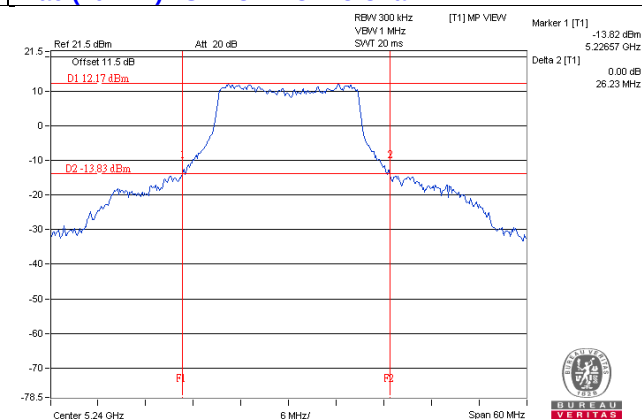
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11ac (20MHz) 1S4T CDD CH48 Chain1

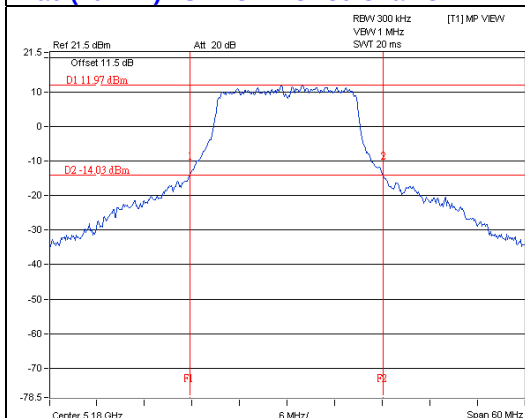


11ac (20MHz) 1S4T CDD CH48 Chain2

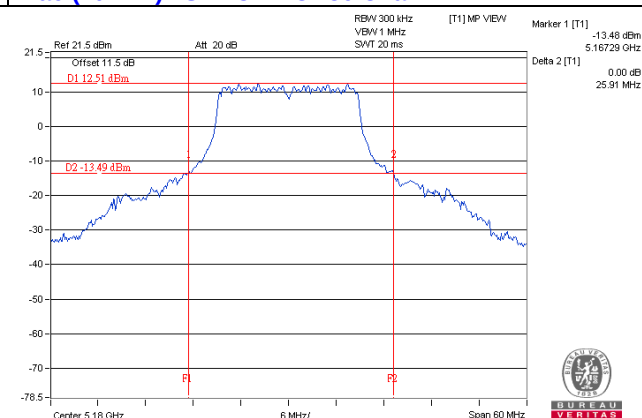


26dB BANDWIDTH SPECTRUM PLOT

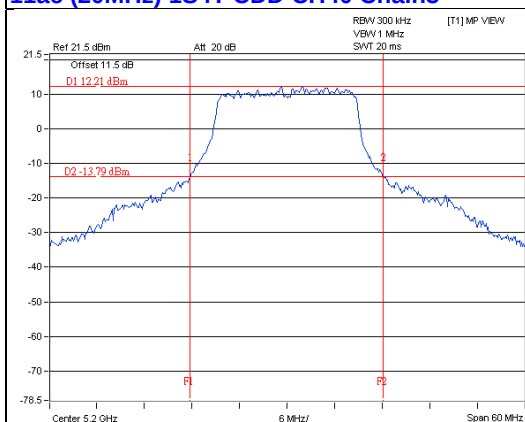
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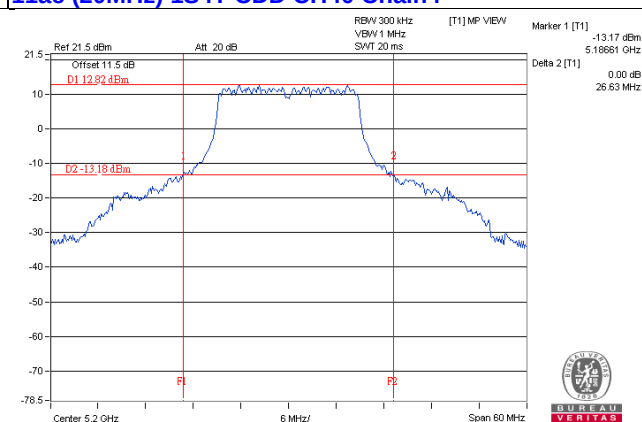
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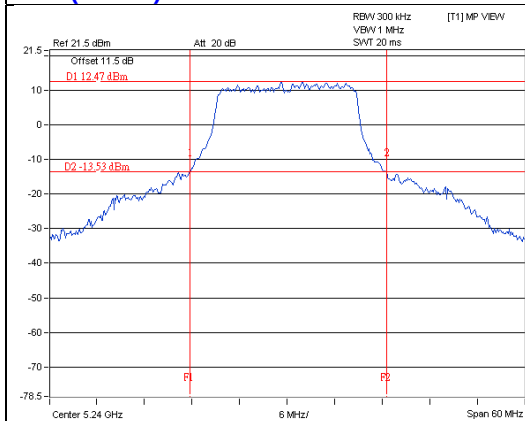
11ac (20MHz) 1S4T CDD CH40 Chain3



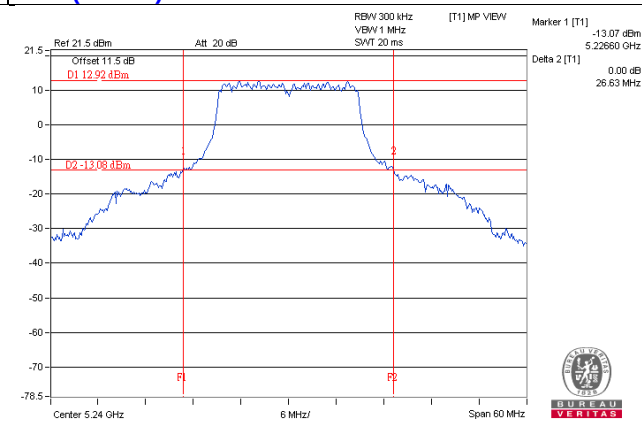
11ac (20MHz) 1S4T CDD CH40 Chain4



11ac (20MHz) 1S4T CDD CH48 Chain3

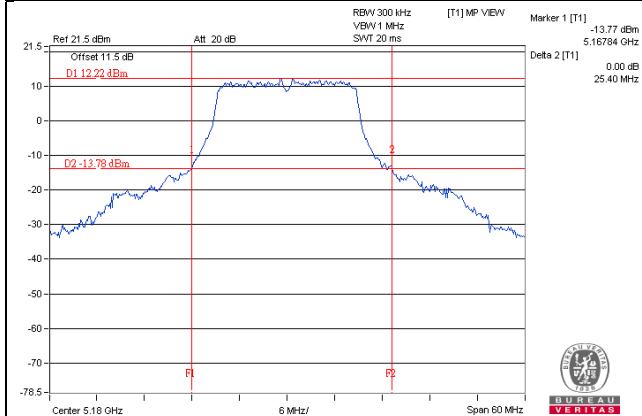


11ac (20MHz) 1S4T CDD CH48 Chain4

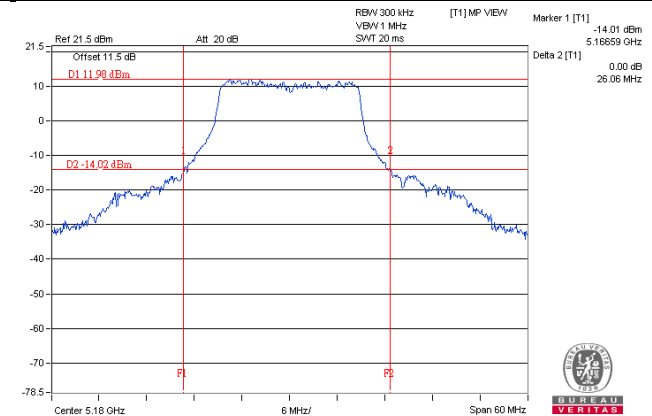


26dB BANDWIDTH SPECTRUM PLOT

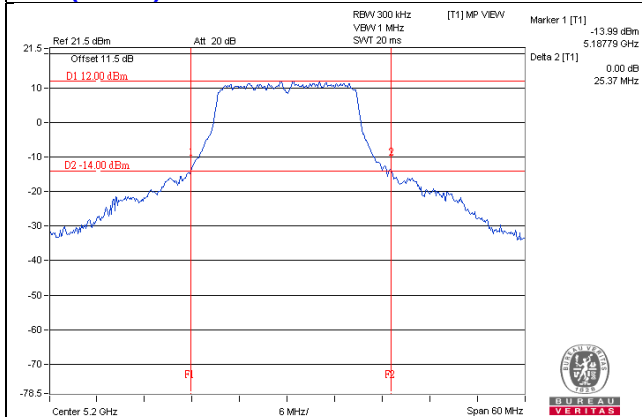
11ac (20MHz) 1S4T TXBF CH36 Chain1



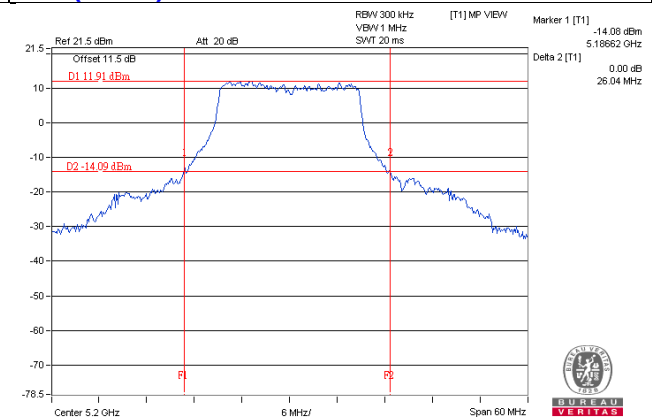
11ac (20MHz) 1S4T TXBF CH36 Chain2



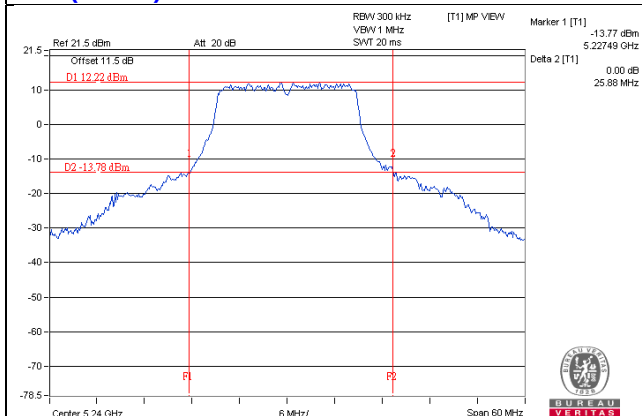
11ac (20MHz) 1S4T TXBF CH40 Chain1



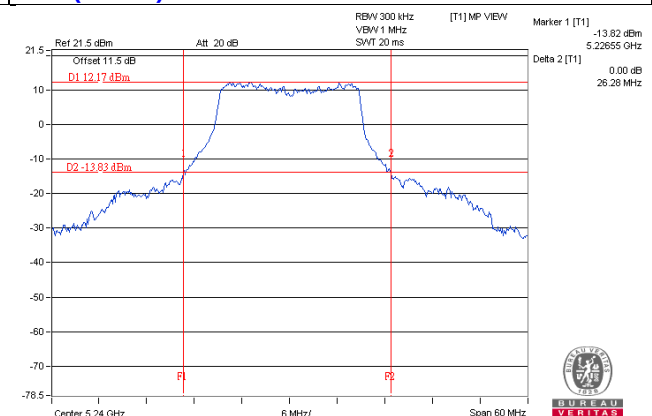
11ac (20MHz) 1S4T TXBF CH40 Chain2



11ac (20MHz) 1S4T TXBF CH48 Chain1

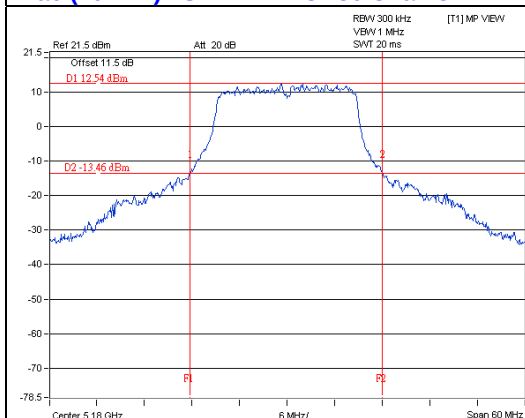


11ac (20MHz) 1S4T TXBF CH48 Chain2

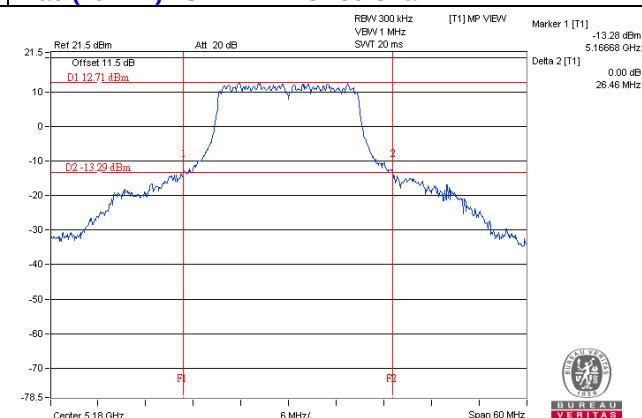


26dB BANDWIDTH SPECTRUM PLOT

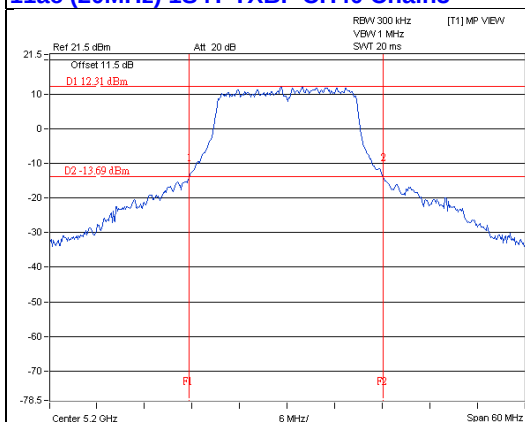
11ac (20MHz) 1S4T TXBF CH36 Chain3



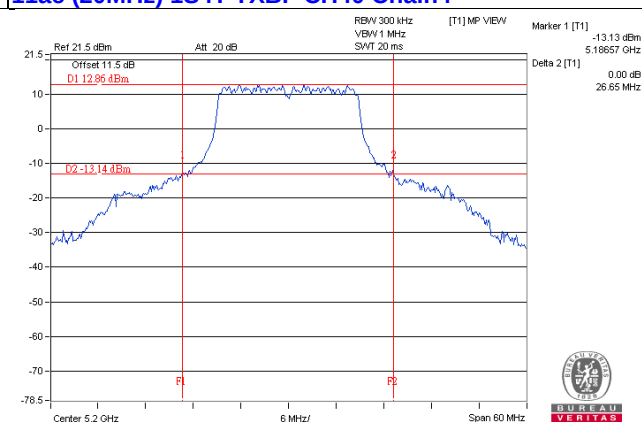
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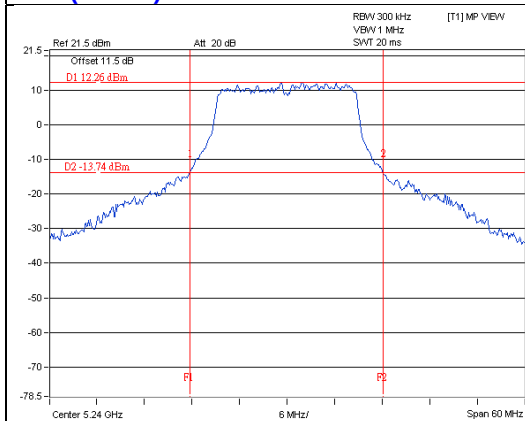
11ac (20MHz) 1S4T TXBF CH40 Chain3



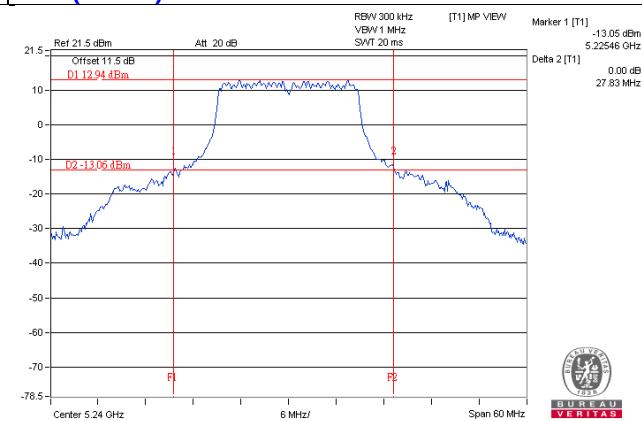
11ac (20MHz) 1S4T TXBF CH40 Chain4



11ac (20MHz) 1S4T TXBF CH48 Chain3

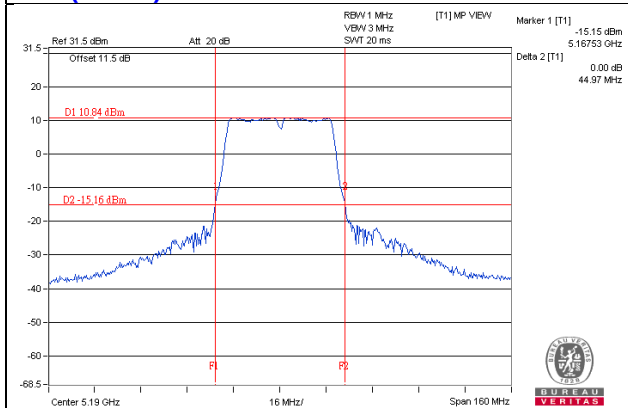


11ac (20MHz) 1S4T TXBF CH48 Chain4

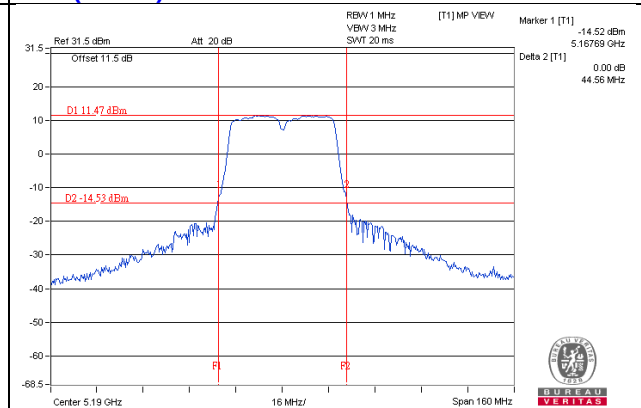


26dB BANDWIDTH SPECTRUM PLOT

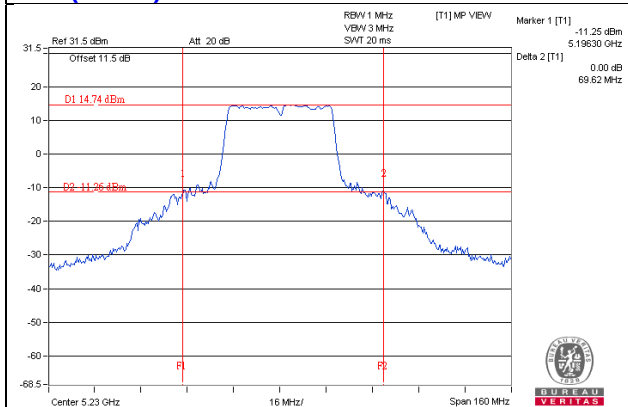
11ac (40MHz) 1S4T CDD CH38 Chain1



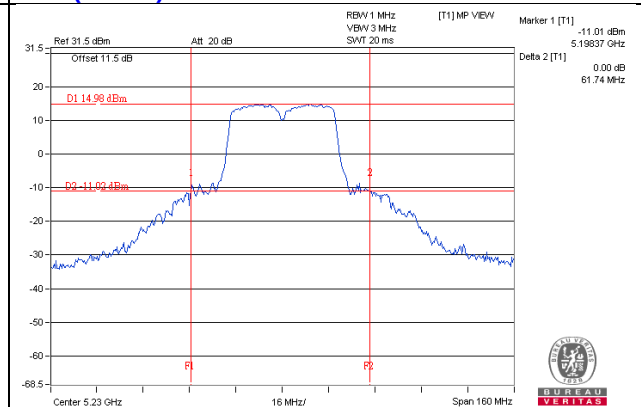
11ac (40MHz) 1S4T CDD CH38 Chain2



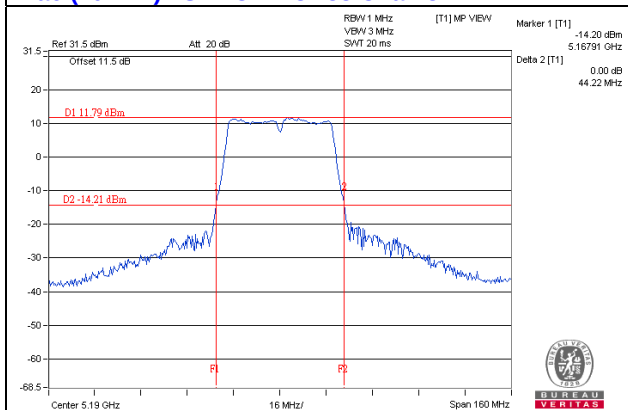
11ac (40MHz) 1S4T CDD CH46 Chain1



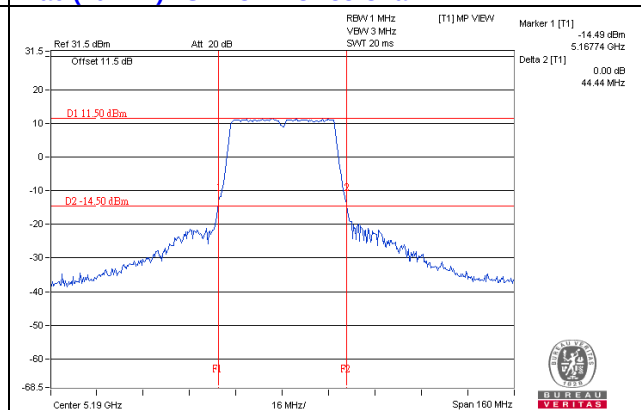
11ac (40MHz) 1S4T CDD CH46 Chain2



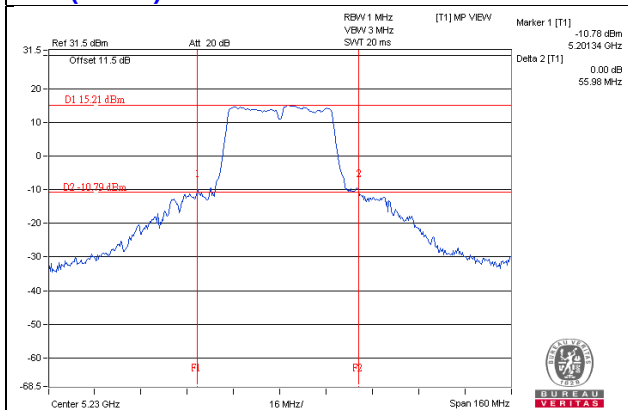
11ac (40MHz) 1S4T CDD CH38 Chain3



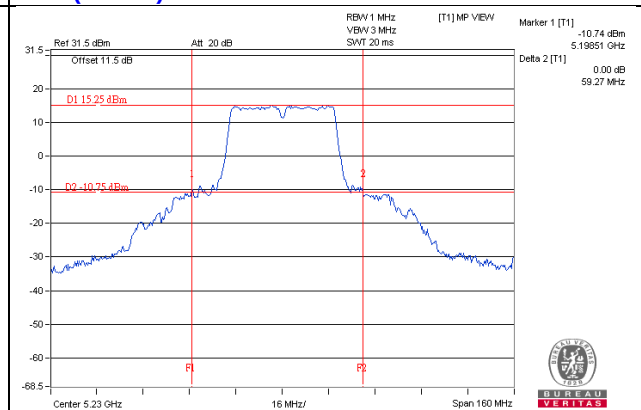
11ac (40MHz) 1S4T CDD CH38 Chain4



11ac (40MHz) 1S4T CDD CH46 Chain3

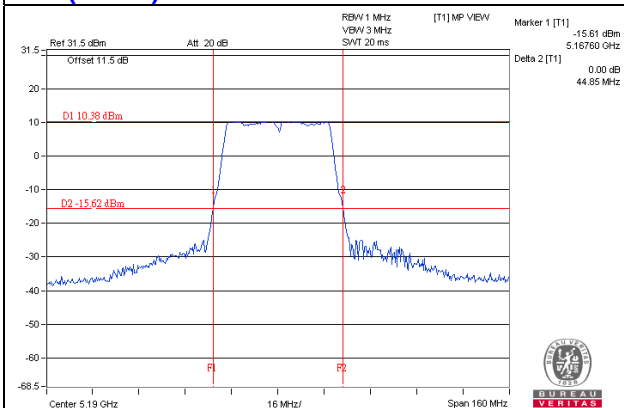


11ac (40MHz) 1S4T CDD CH46 Chain4

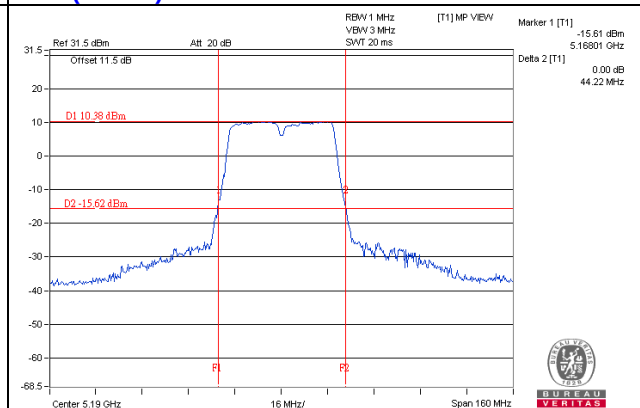


26dB BANDWIDTH SPECTRUM PLOT

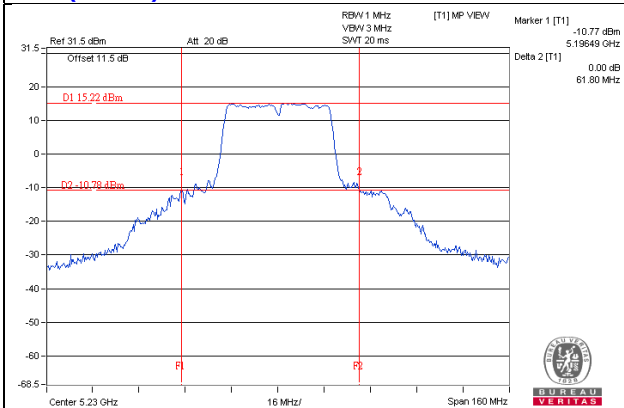
11ac (40MHz) 1S4T TXBF CH38 Chain1



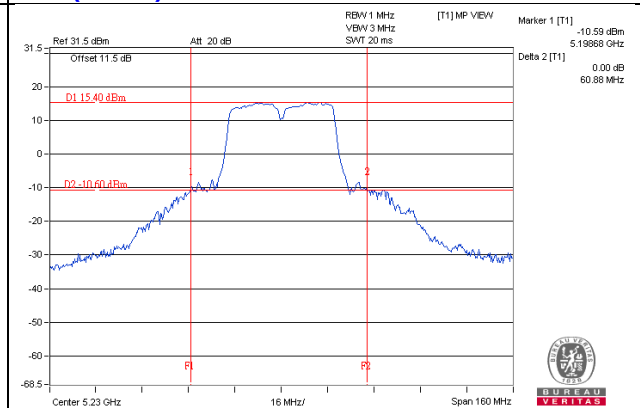
11ac (40MHz) 1S4T TXBF CH38 Chain2



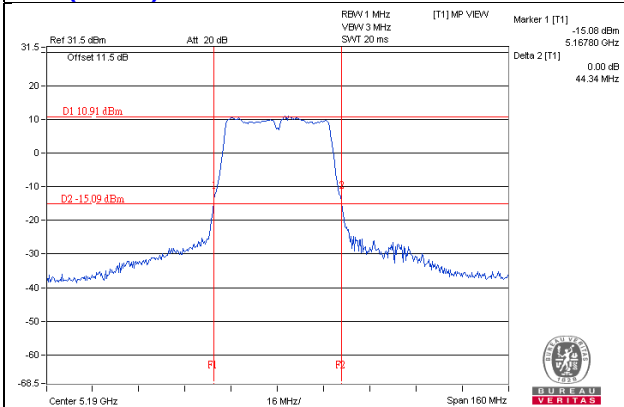
11ac (40MHz) 1S4T TXBF CH46 Chain1



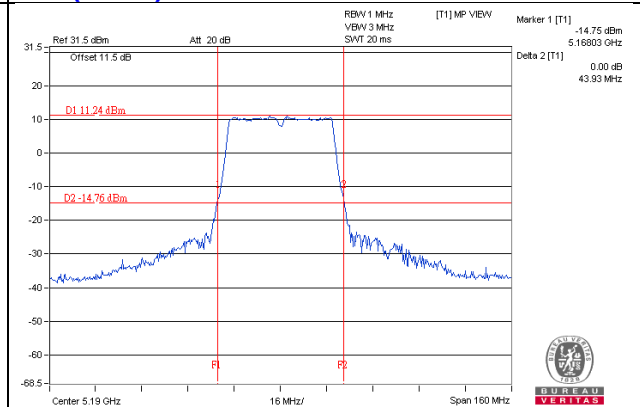
11ac (40MHz) 1S4T TXBF CH46 Chain2



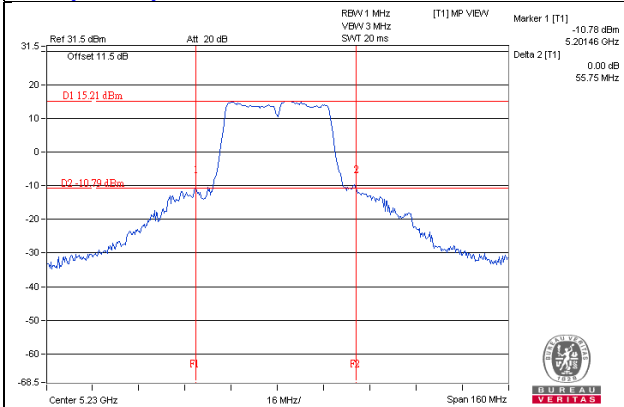
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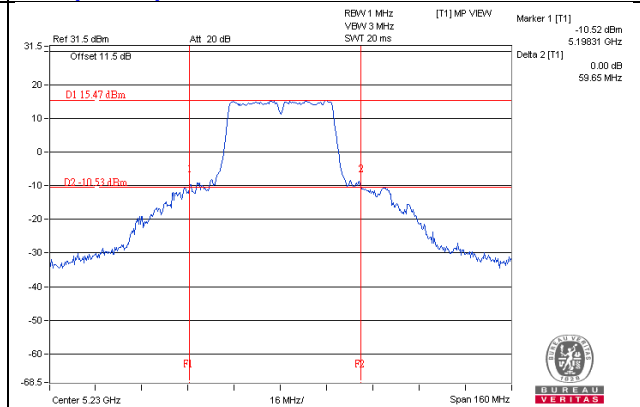
11ac (40MHz) 1S4T TXBF CH38 Chain4



11ac (40MHz) 1S4T TXBF CH46 Chain3

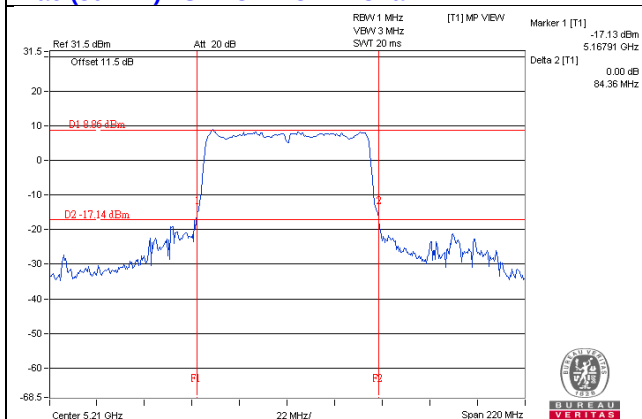


11ac (40MHz) 1S4T TXBF CH46 Chain4

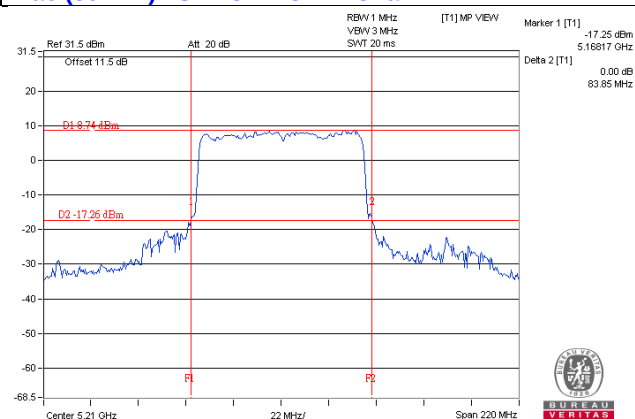


26dB BANDWIDTH SPECTRUM PLOT

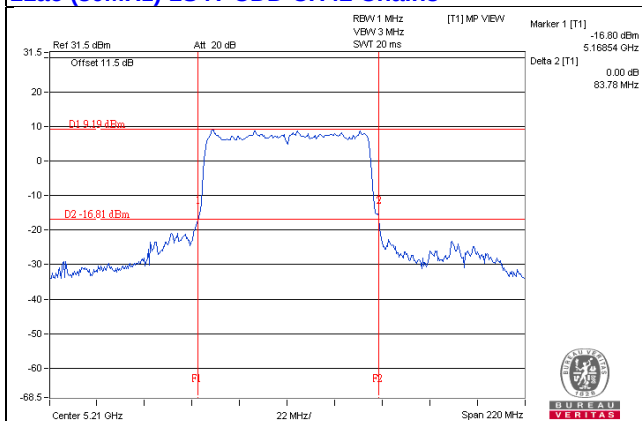
11ac (80MHz) 1S4T CDD CH42 Chain1



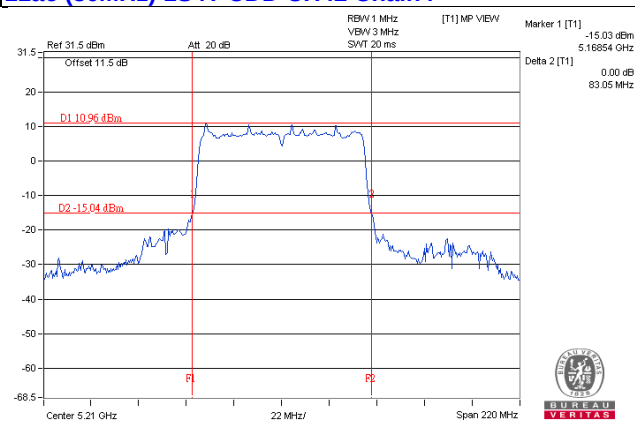
11ac (80MHz) 1S4T CDD CH42 Chain2



11ac (80MHz) 1S4T CDD CH42 Chain3

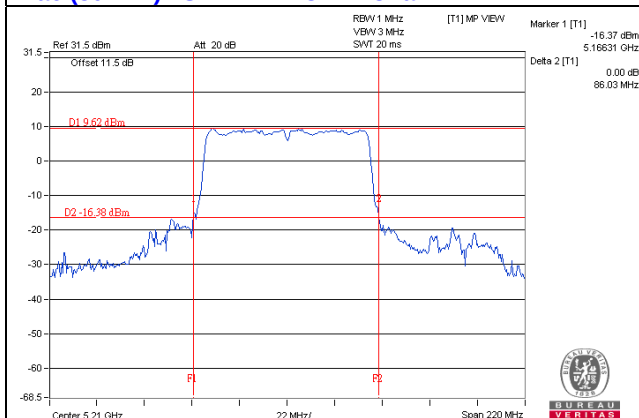


11ac (80MHz) 1S4T CDD CH42 Chain4

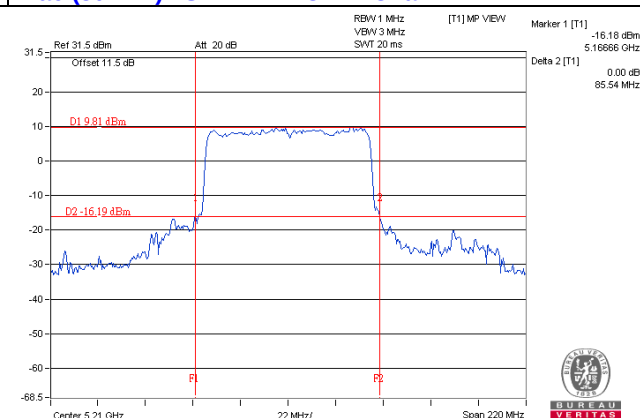


26dB BANDWIDTH SPECTRUM PLOT

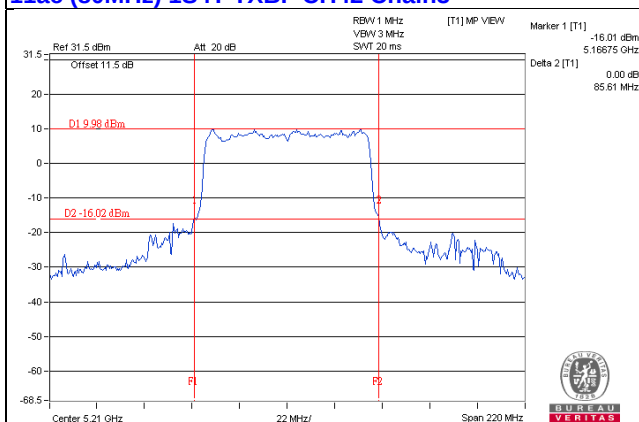
11ac (80MHz) 1S4T TXBF CH42 Chain1



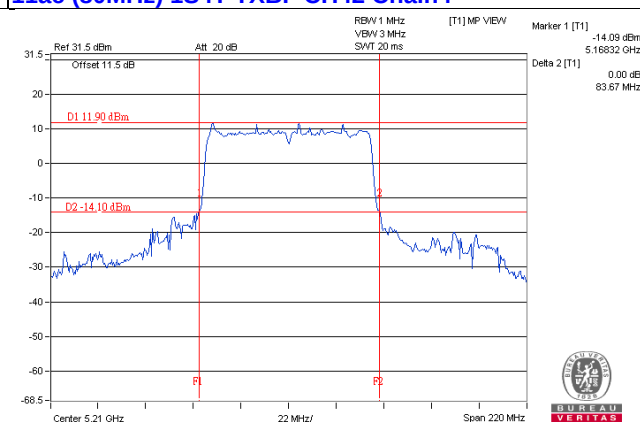
11ac (80MHz) 1S4T TXBF CH42 Chain2



11ac (80MHz) 1S4T TXBF CH42 Chain3



11ac (80MHz) 1S4T TXBF CH42 Chain4



11a 1S4T CDD

CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)			
		CHAIN 1	CHAIN 2	CHAIN 3	CHAIN 4
36	5180	17.04	17.28	17.04	17.04
40	5200	17.04	17.28	17.04	17.04
48	5240	17.04	17.28	17.04	17.16
149	5745	17.30	18.08	17.39	17.56
157	5785	17.40	18.36	17.52	17.52
165	5825	17.40	18.24	17.28	17.40

11ac (20MHz) 1S4T CDD

CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)			
		CHAIN 1	CHAIN 2	CHAIN 3	CHAIN 4
36	5180	18.36	18.48	18.24	18.12
40	5200	18.36	18.48	18.12	18.12
48	5240	18.36	18.60	18.24	18.12
149	5745	19.08	19.08	18.48	18.48
157	5785	19.20	19.44	18.48	18.60
165	5825	18.72	19.32	18.48	18.48

11ac (20MHz) 1S4T TxBF

CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)			
		CHAIN 1	CHAIN 2	CHAIN 3	CHAIN 4
36	5180	18.24	18.36	18.12	18.12
40	5200	18.36	18.36	18.24	18.24
48	5240	18.36	18.48	18.24	18.12
149	5745	18.95	19.13	18.43	18.60
157	5785	18.96	19.32	18.60	18.60
165	5825	18.72	19.56	18.72	18.84

11ac (40MHz) 1S4T CDD

CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)			
		CHAIN 1	CHAIN 2	CHAIN 3	CHAIN 4
38	5190	37.20	36.84	37.08	36.84
46	5230	37.44	36.96	37.32	37.20
151	5755	37.80	37.68	37.68	37.56
159	5795	37.80	38.16	37.68	37.44

11ac (40MHz) 1S4T TxBF

CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)			
		CHAIN 1	CHAIN 2	CHAIN 3	CHAIN 4
38	5190	37.08	36.96	37.08	36.72
46	5230	37.32	36.96	37.2	37.08
151	5755	37.65	37.80	37.44	37.44
159	5795	37.80	37.92	37.68	37.44

11ac (80MHz) 1S4T CDD

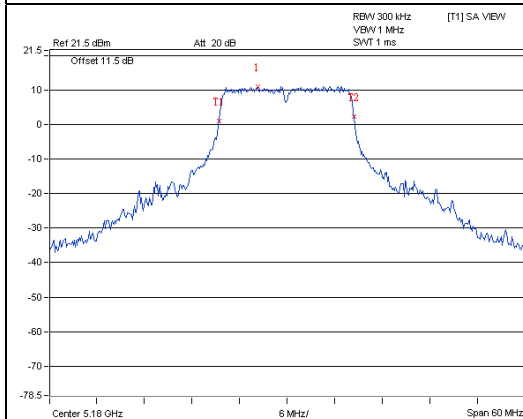
CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)			
		CHAIN 1	CHAIN 2	CHAIN 3	CHAIN 4
42	5210	75.60	75.36	75.60	75.60
155	5775	76.32	76.32	76.08	76.32

11ac (80MHz) 1S4T TxBF

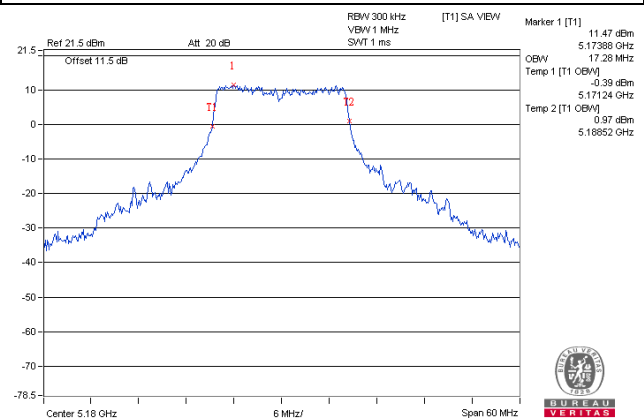
CHANNEL	FREQUENCY (MHz)	99% Occupied Bandwidth (MHz)			
		CHAIN 1	CHAIN 2	CHAIN 3	CHAIN 4
42	5210	75.60	75.12	75.6	75.84
155	5775	76.34	76.08	76.08	76.32

99% OCCUPIED BANDWIDTH SPECTRUM PLOT

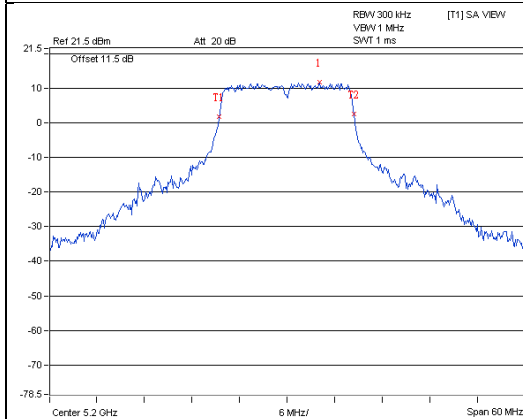
11a 1S4T CDD CH36 Chain1



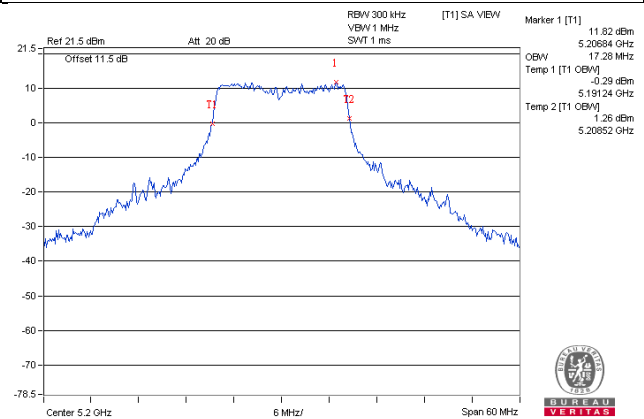
11a 1S4T CDD CH36 Chain2



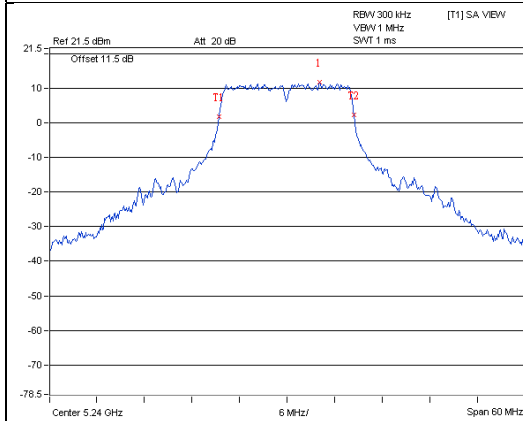
11a 1S4T CDD CH40 Chain1



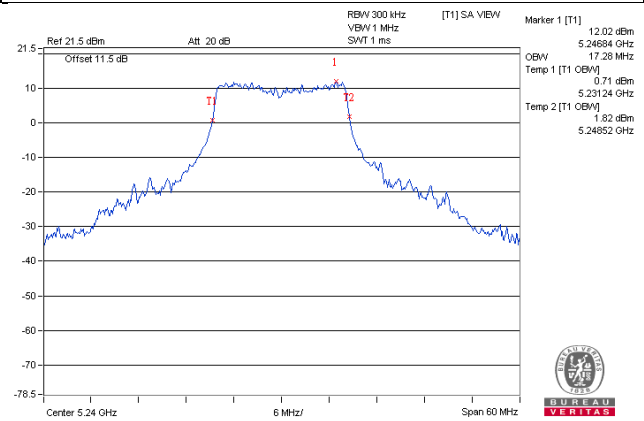
11a 1S4T CDD CH40 Chain2



11a 1S4T CDD CH48 Chain1

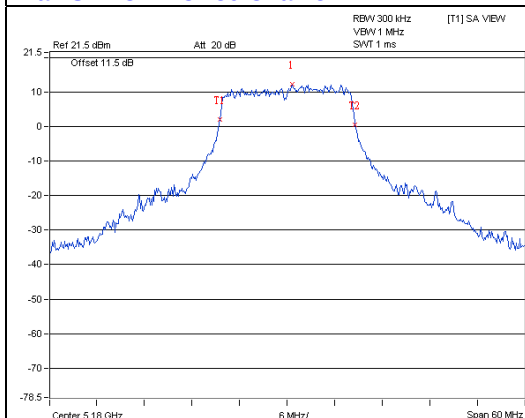


11a 1S4T CDD CH48 Chain2

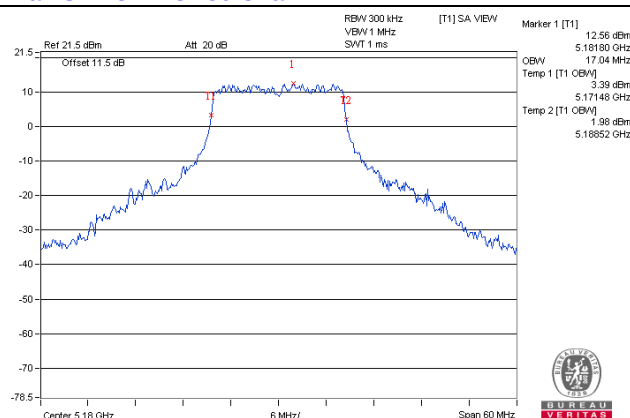


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

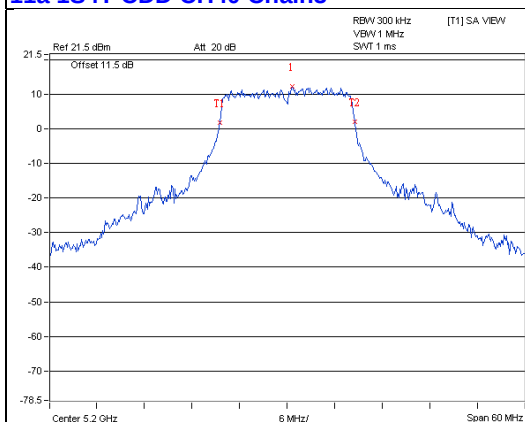
11a 1S4T CDD CH36 Chain3



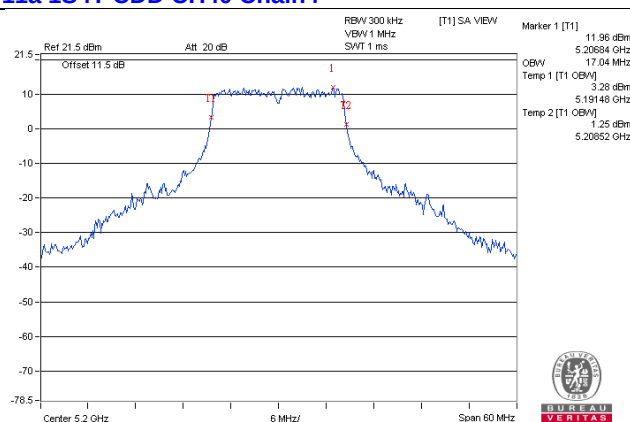
11a 1S4T CDD CH36 Chain4



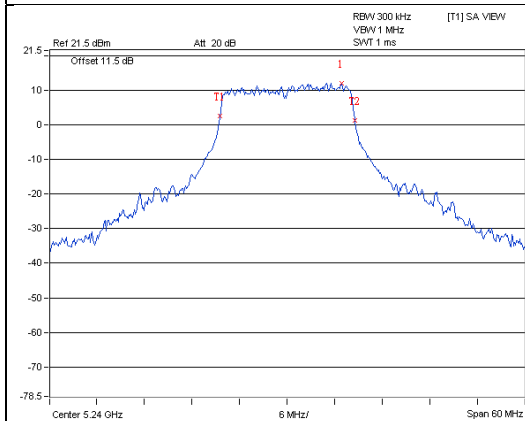
11a 1S4T CDD CH40 Chain3



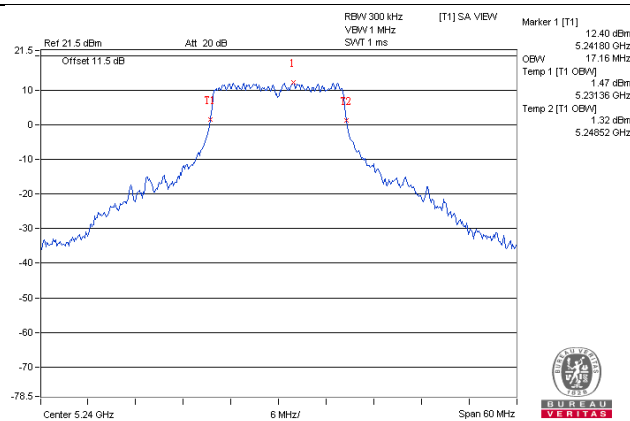
11a 1S4T CDD CH40 Chain4



11a 1S4T CDD CH48 Chain3

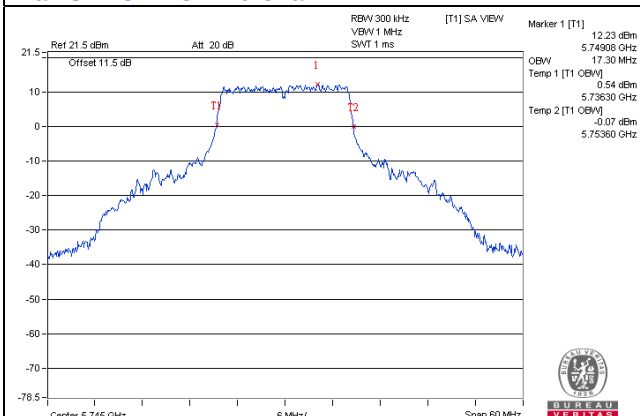


11a 1S4T CDD CH48 Chain4

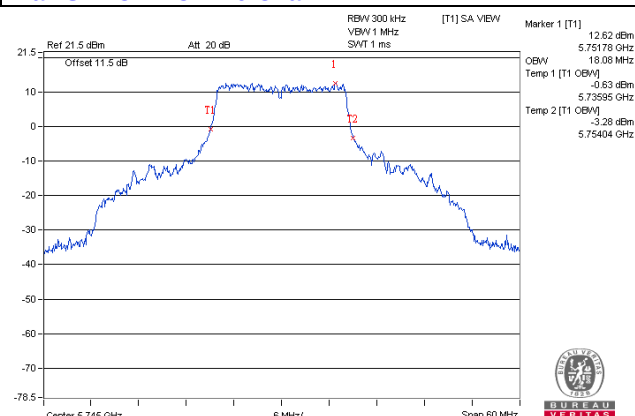


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

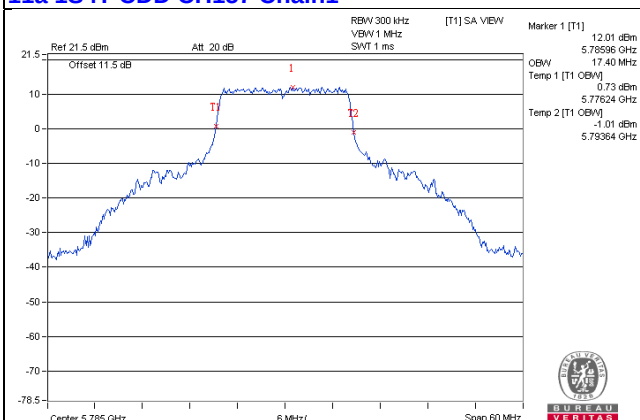
11a 1S4T CDD CH149 Chain1



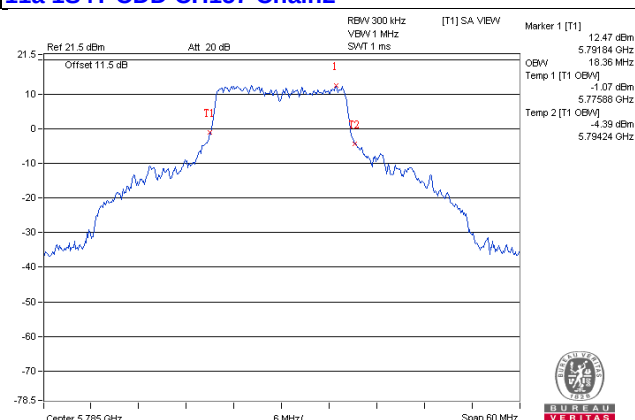
11a 1S4T CDD CH149 Chain2



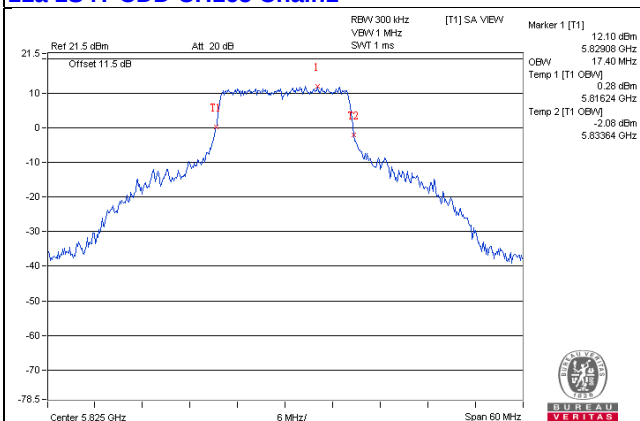
11a 1S4T CDD CH157 Chain1



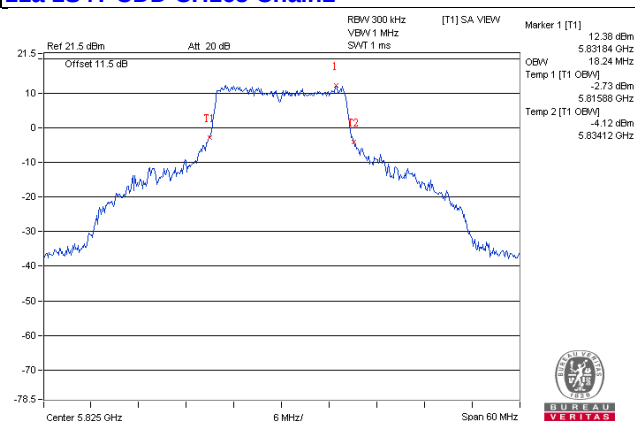
11a 1S4T CDD CH157 Chain2



11a 1S4T CDD CH165 Chain1

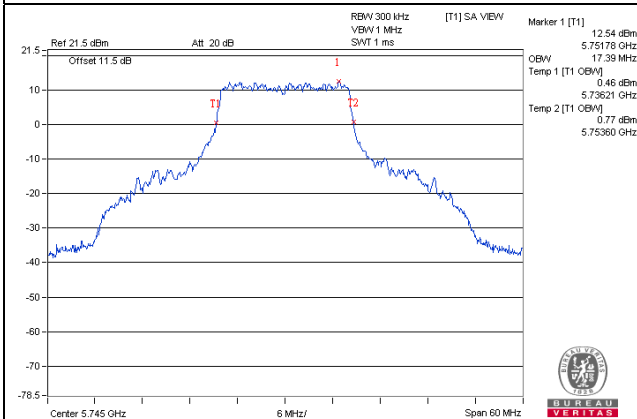


11a 1S4T CDD CH165 Chain2

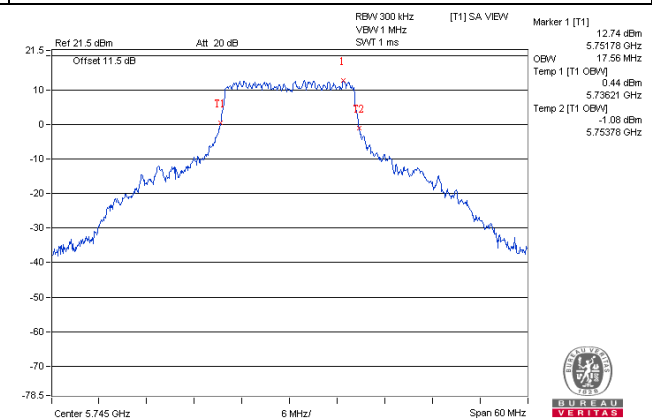


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

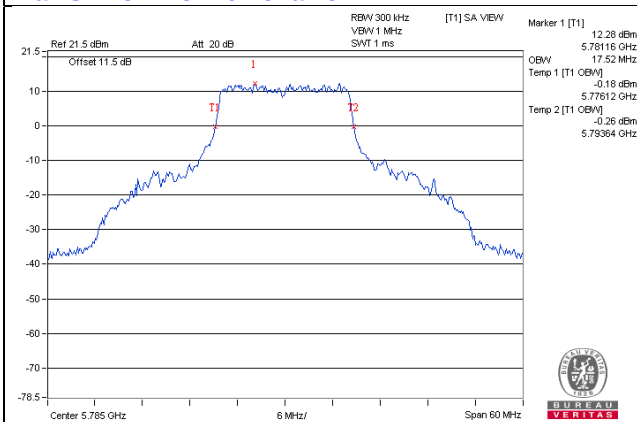
11a 1S4T CDD CH149 Chain3



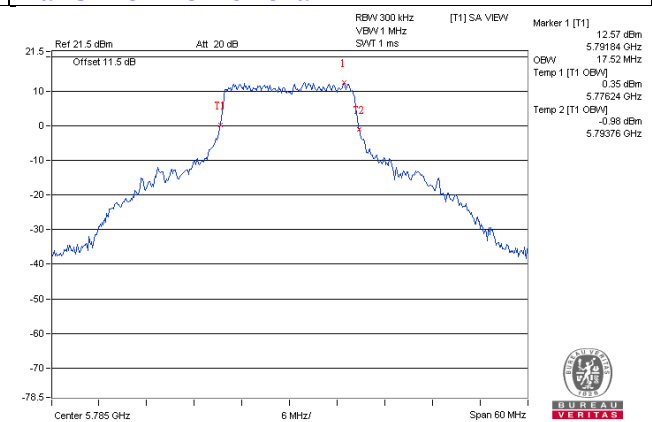
11a 1S4T CDD CH149 Chain4



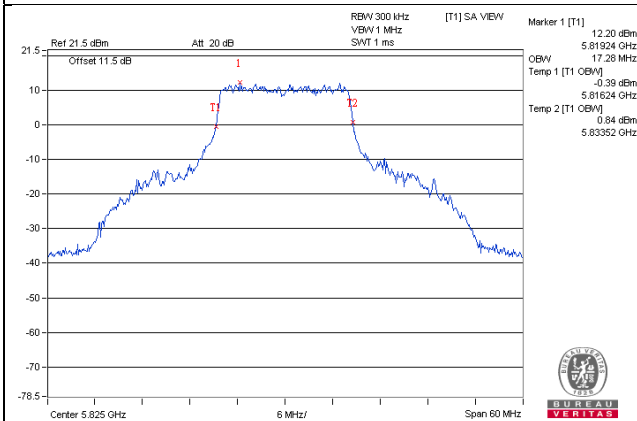
11a 1S4T CDD CH157 Chain3



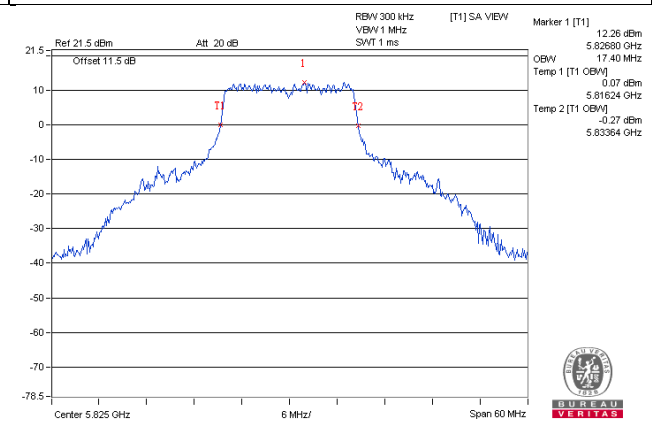
11a 1S4T CDD CH157 Chain4



11a 1S4T CDD CH165 Chain3

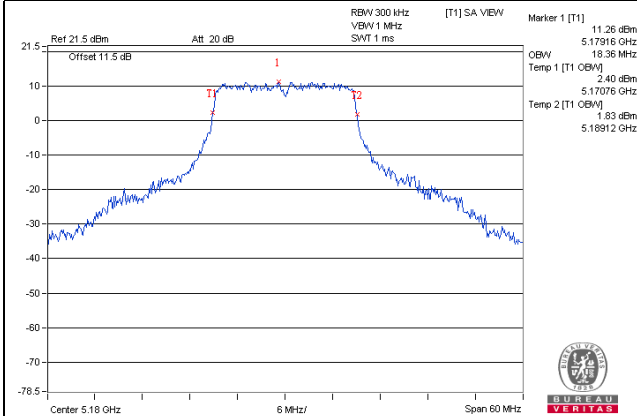


11a 1S4T CDD CH165 Chain4

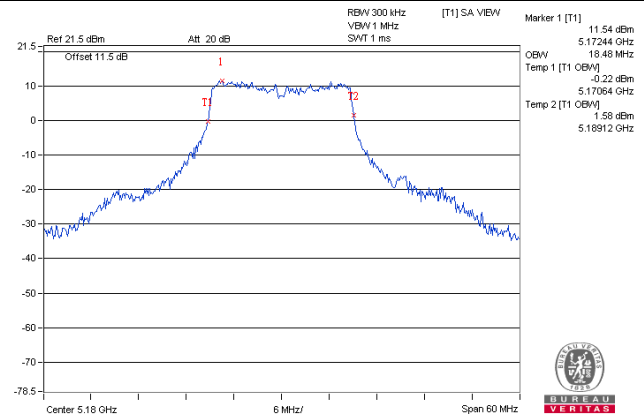


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

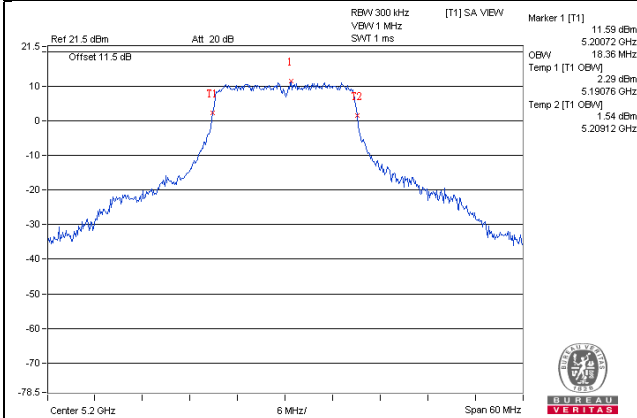
11ac (20MHz) 1S4T CDD CH36 Chain1



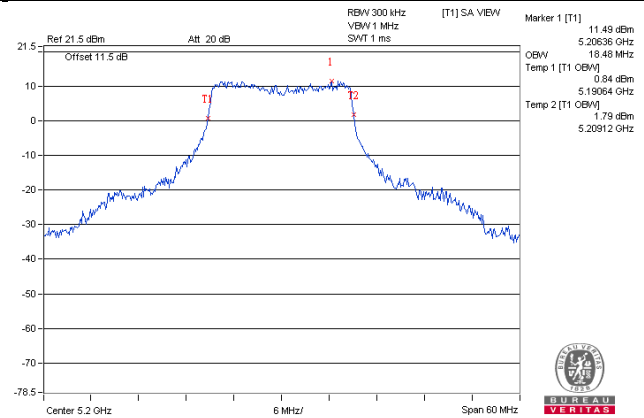
11ac (20MHz) 1S4T CDD CH36 Chain2



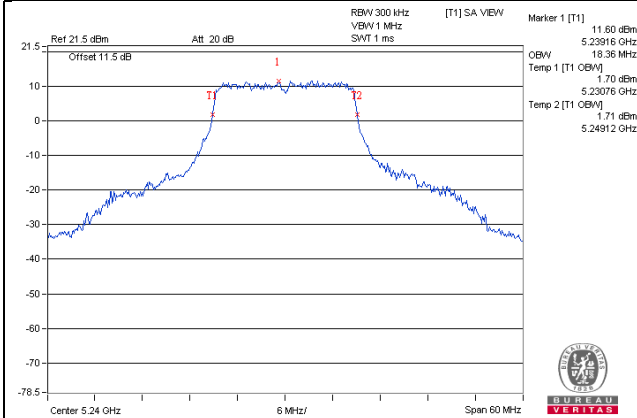
11ac (20MHz) 1S4T CDD CH40 Chain1



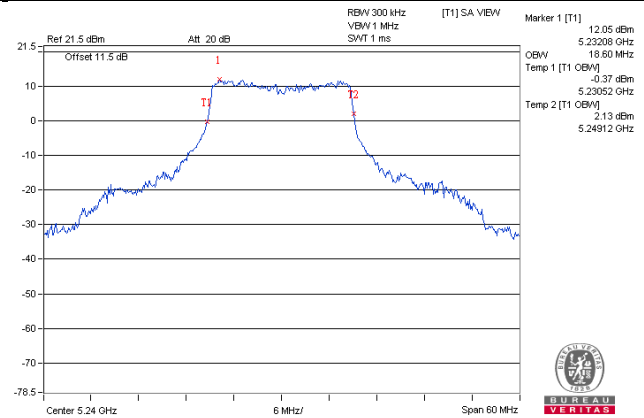
11ac (20MHz) 1S4T CDD CH40 Chain2



11ac (20MHz) 1S4T CDD CH48 Chain1

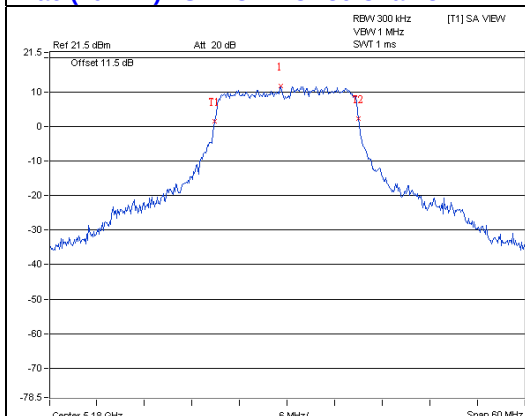


11ac (20MHz) 1S4T CDD CH48 Chain2

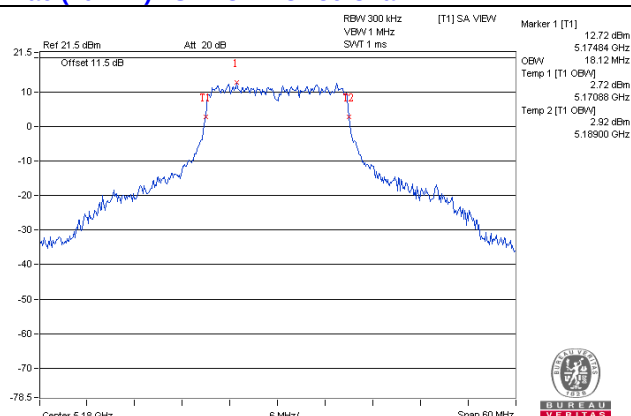


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

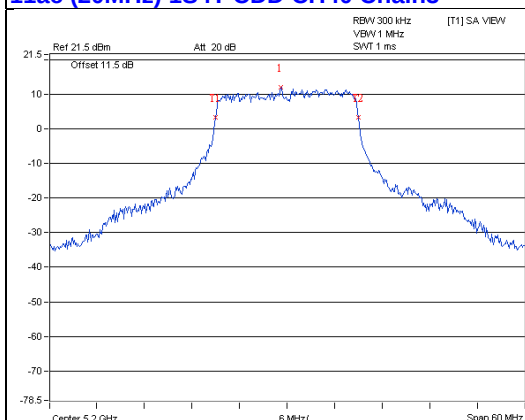
11ac (20MHz) 1S4T CDD CH36 Chain3



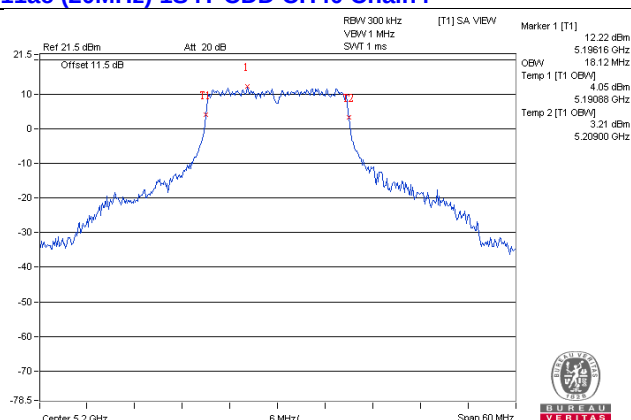
11ac (20MHz) 1S4T CDD CH36 Chain4



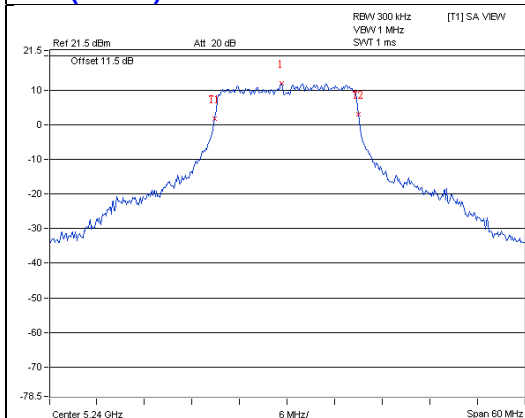
11ac (20MHz) 1S4T CDD CH40 Chain3



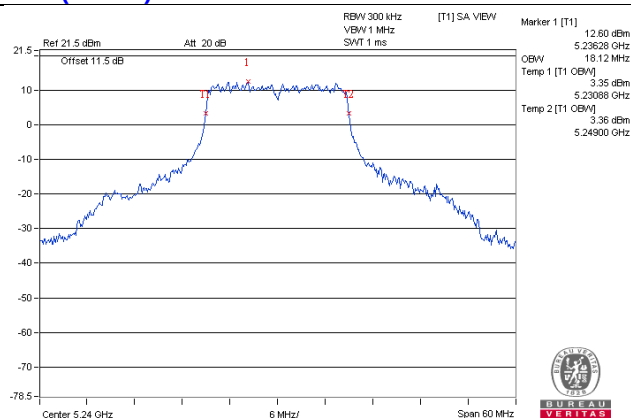
11ac (20MHz) 1S4T CDD CH40 Chain4



11ac (20MHz) 1S4T CDD CH48 Chain3

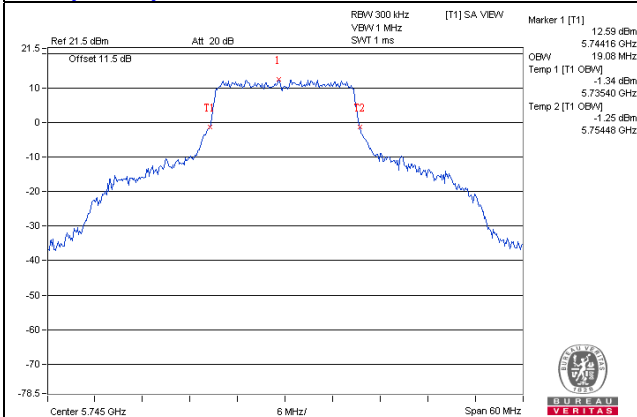


11ac (20MHz) 1S4T CDD CH48 Chain4

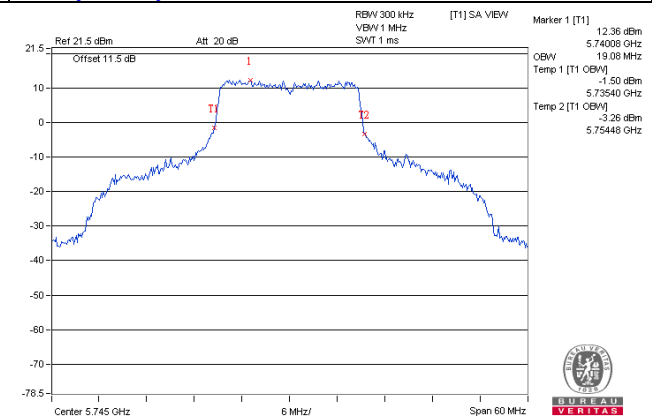


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

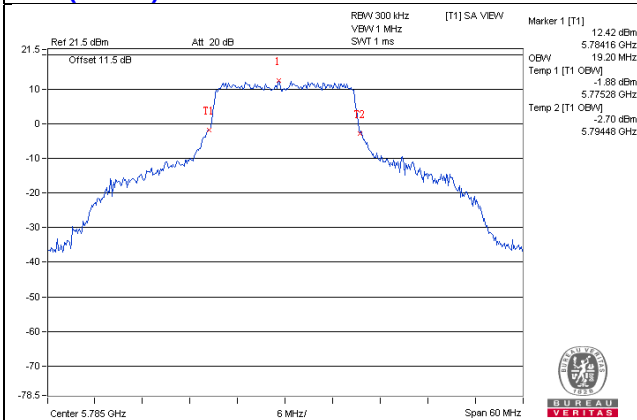
11ac (20MHz) 1S4T CDD CH149 Chain1



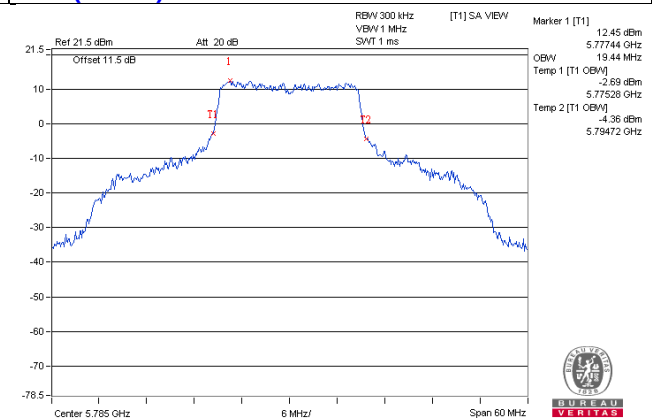
11ac (20MHz) 1S4T CDD CH149 Chain2



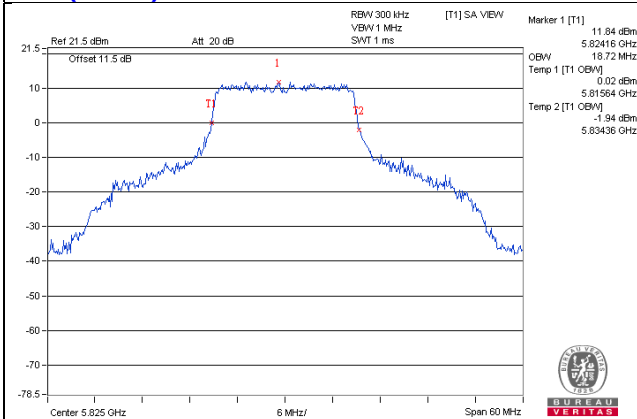
11ac (20MHz) 1S4T CDD CH157 Chain1



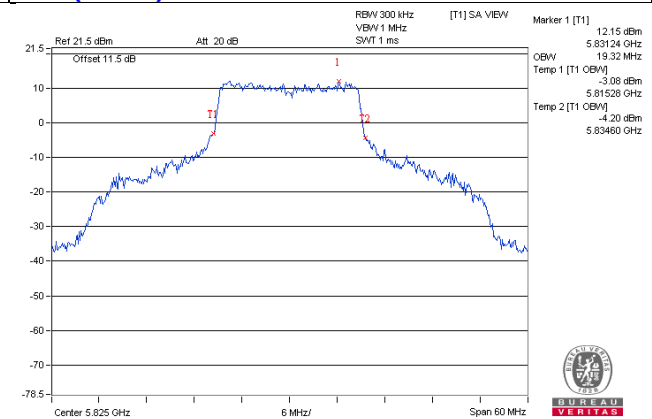
11ac (20MHz) 1S4T CDD CH157 Chain2



11ac (20MHz) 1S4T CDD CH165 Chain1

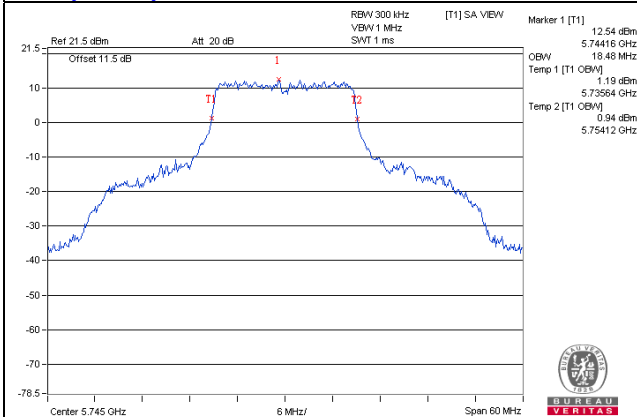


11ac (20MHz) 1S4T CDD CH165 Chain2

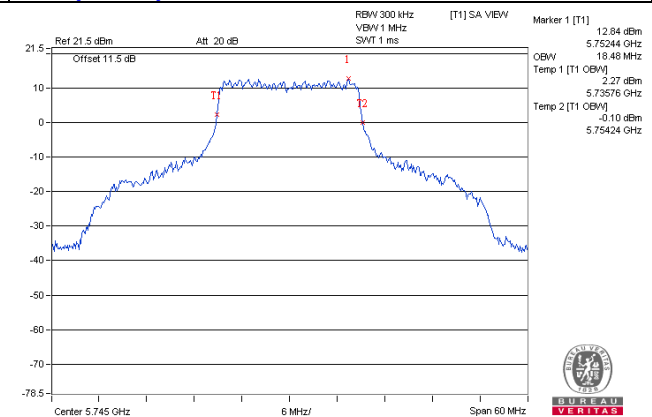


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

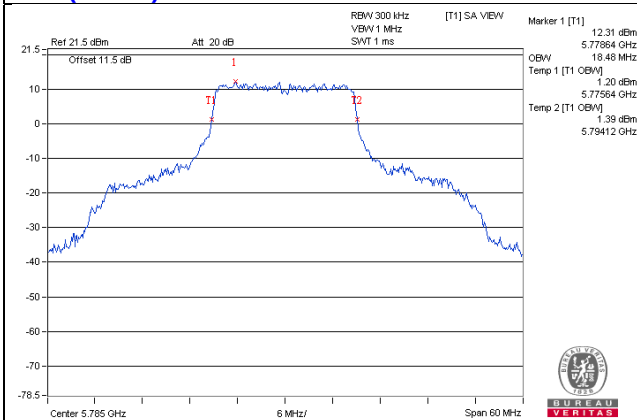
11ac (20MHz) 1S4T CDD CH149 Chain3



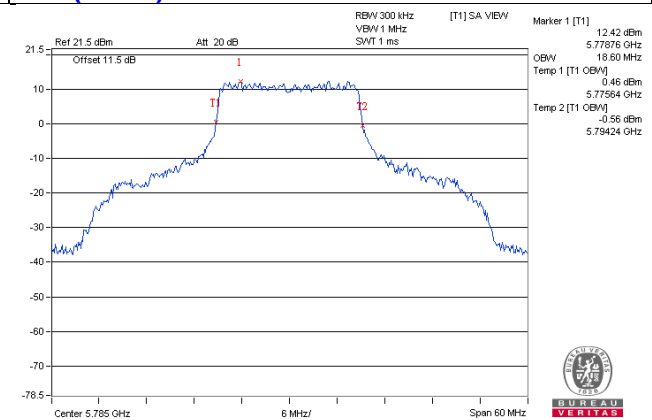
11ac (20MHz) 1S4T CDD CH149 Chain4



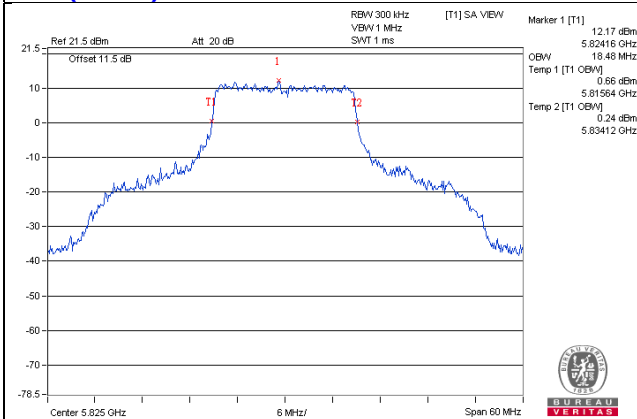
11ac (20MHz) 1S4T CDD CH157 Chain3



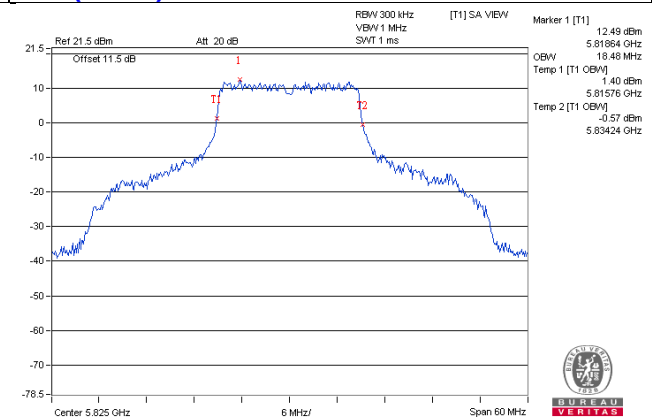
11ac (20MHz) 1S4T CDD CH157 Chain4



11ac (20MHz) 1S4T CDD CH165 Chain3

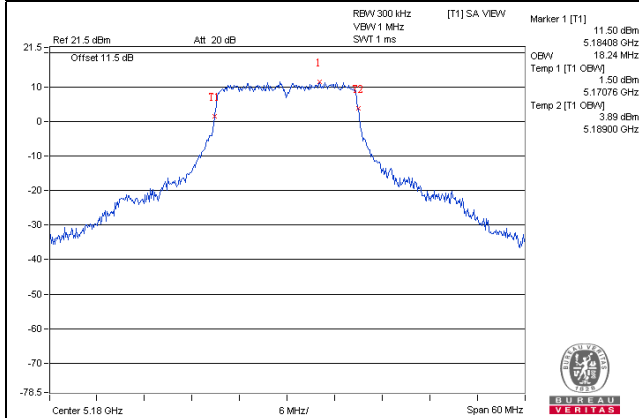


11ac (20MHz) 1S4T CDD CH165 Chain4

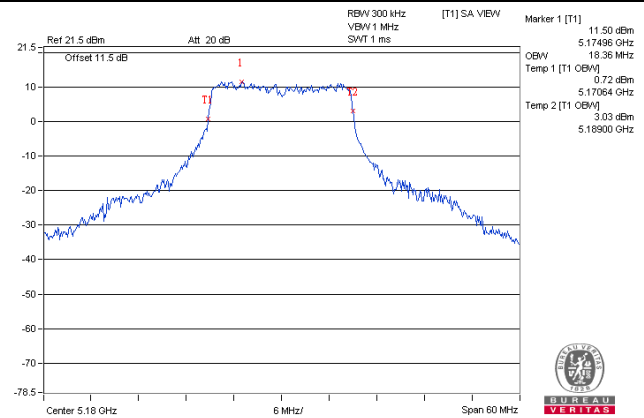


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

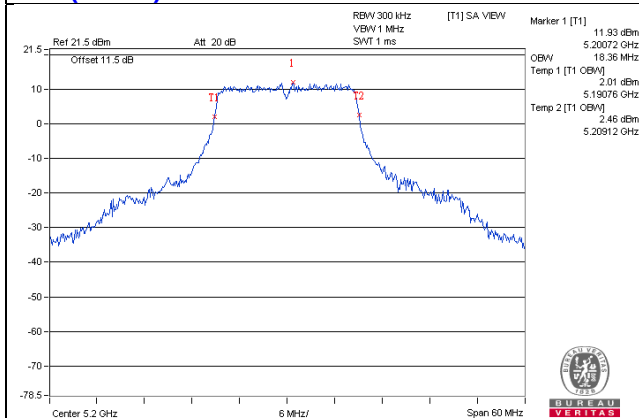
11ac (20MHz) 1S4T TXBF CH36 Chain1



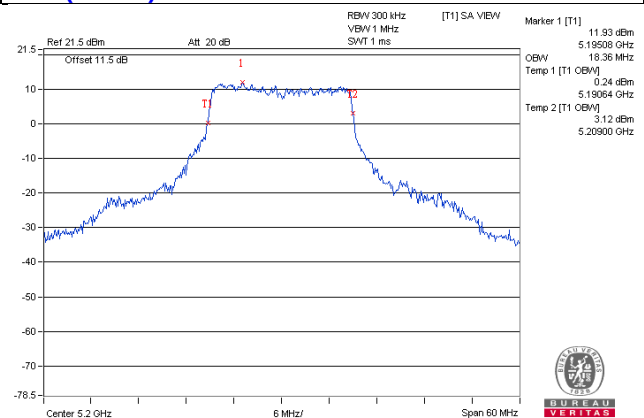
11ac (20MHz) 1S4T TXBF CH36 Chain2



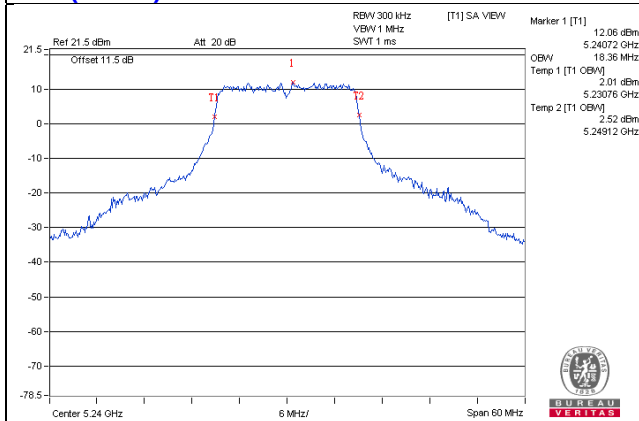
11ac (20MHz) 1S4T TXBF CH40 Chain1



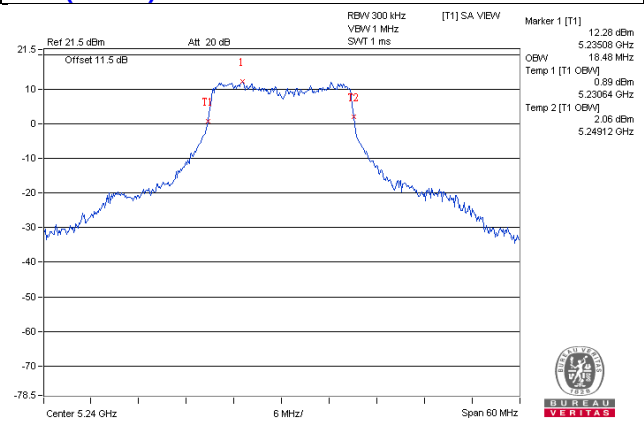
11ac (20MHz) 1S4T TXBF CH40 Chain2



11ac (20MHz) 1S4T TXBF CH48 Chain1

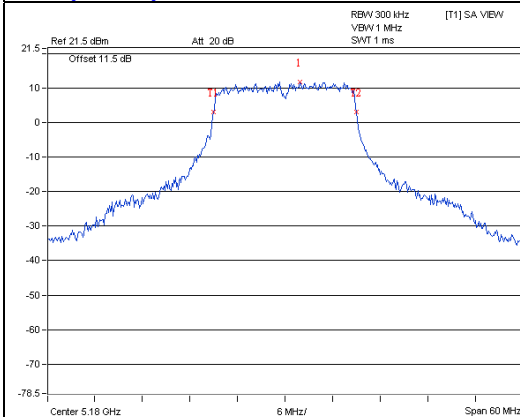


11ac (20MHz) 1S4T TXBF CH48 Chain2

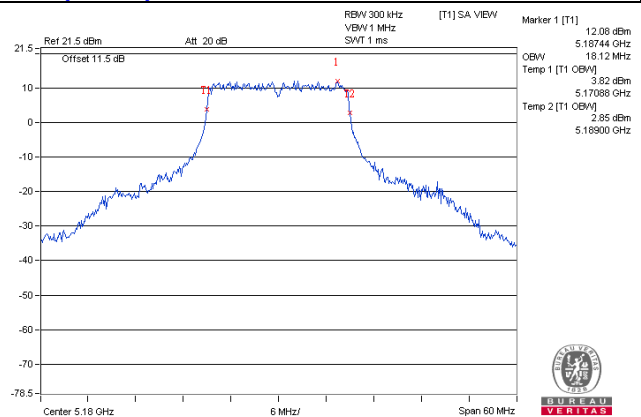


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

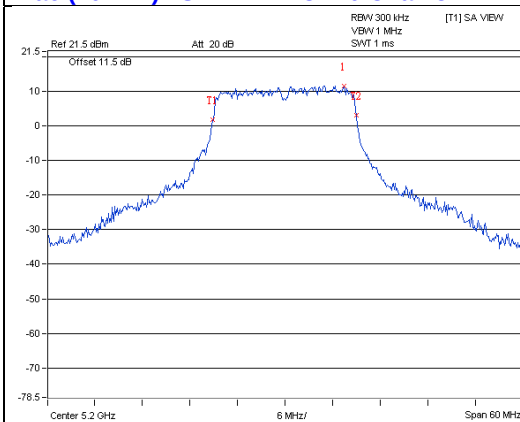
11ac (20MHz) 1S4T TXBF CH36 Chain3



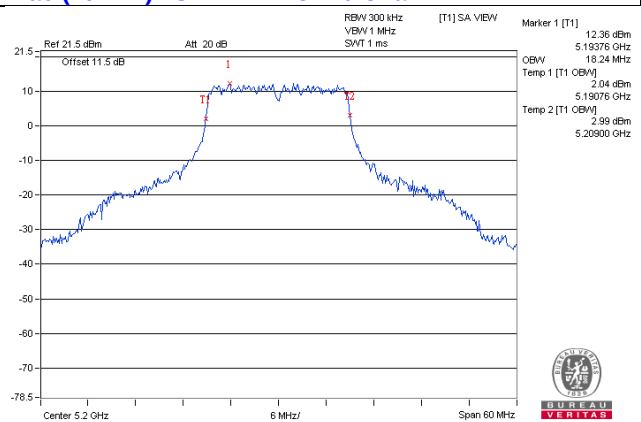
11ac (20MHz) 1S4T TXBF CH36 Chain4



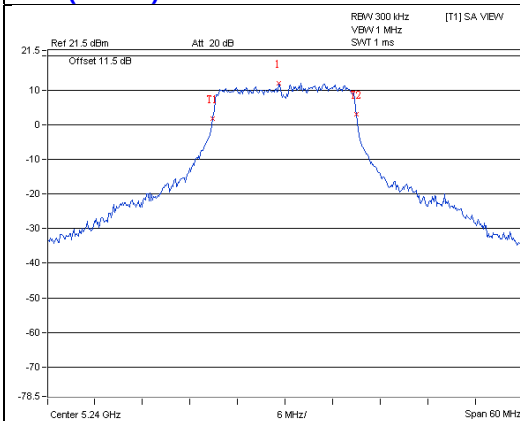
11ac (20MHz) 1S4T TXBF CH40 Chain3



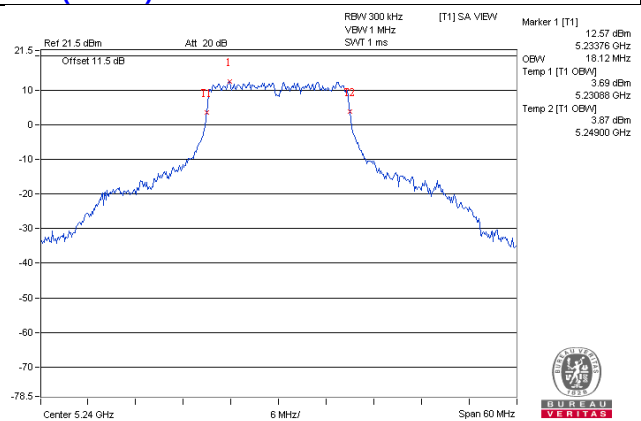
11ac (20MHz) 1S4T TXBF CH40 Chain4



11ac (20MHz) 1S4T TXBF CH48 Chain3

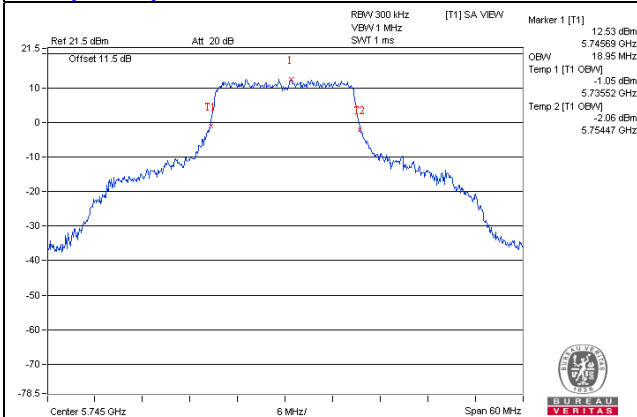


11ac (20MHz) 1S4T TXBF CH48 Chain4

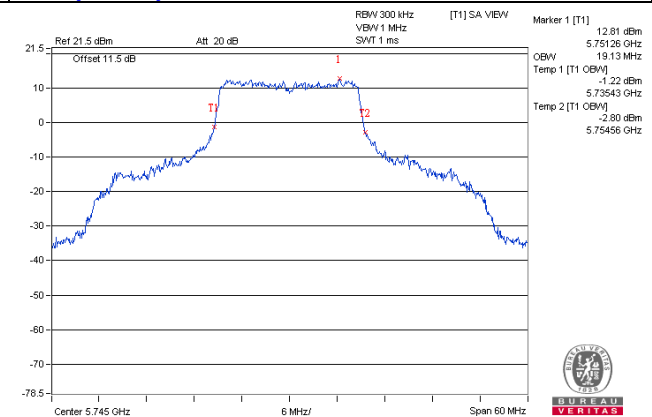


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

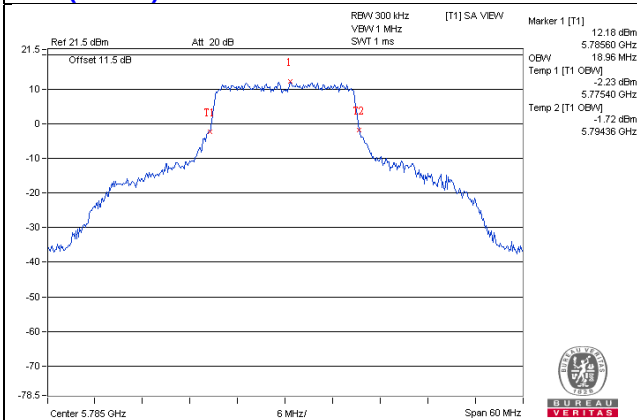
11ac (20MHz) 1S4T TXBF CH149 Chain1



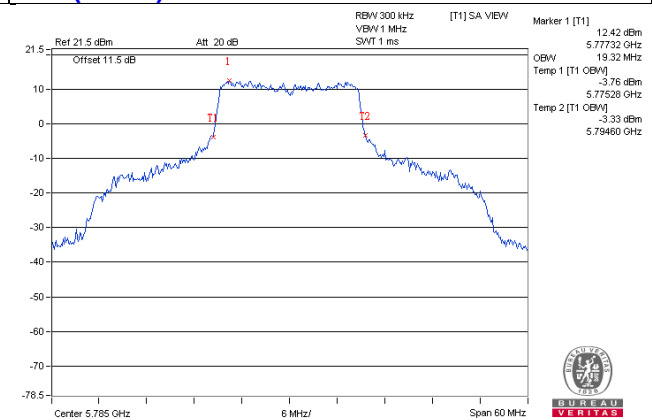
11ac (20MHz) 1S4T TXBF CH149 Chain2



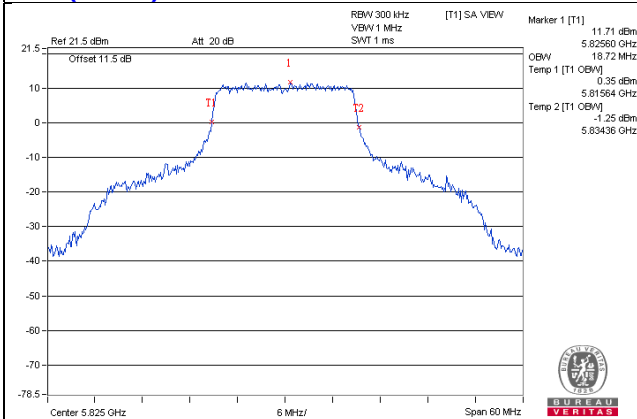
11ac (20MHz) 1S4T TXBF CH157 Chain1



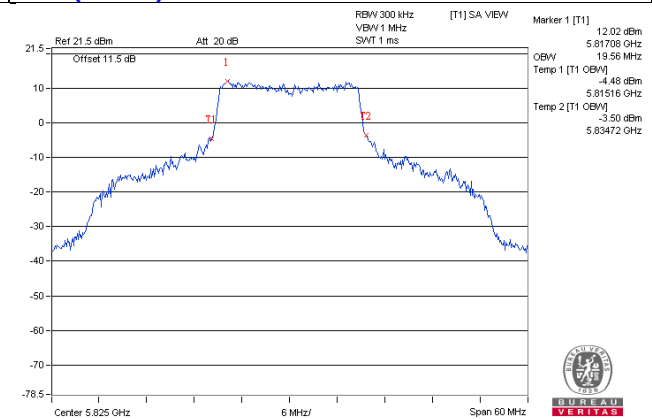
11ac (20MHz) 1S4T TXBF CH157 Chain2



11ac (20MHz) 1S4T TXBF CH165 Chain1

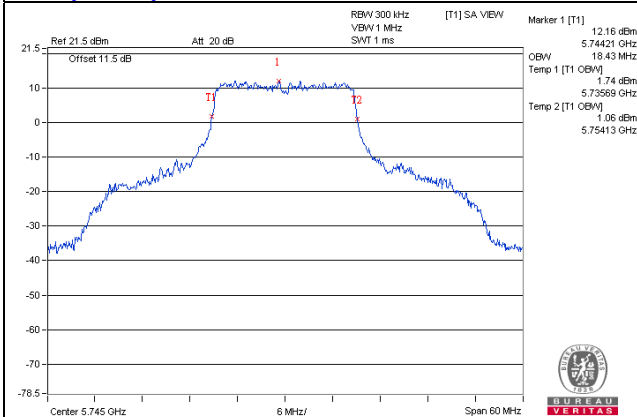


11ac (20MHz) 1S4T TXBF CH165 Chain2

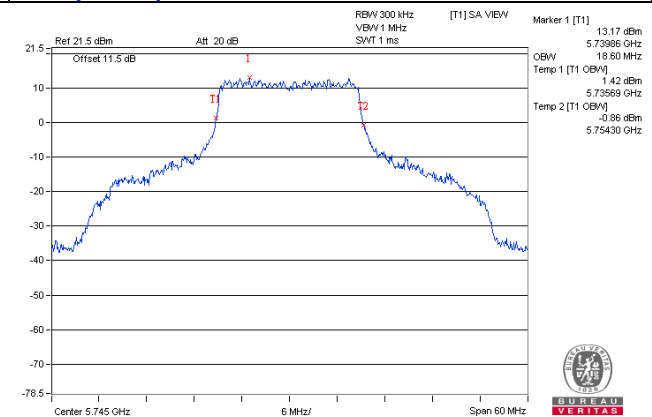


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

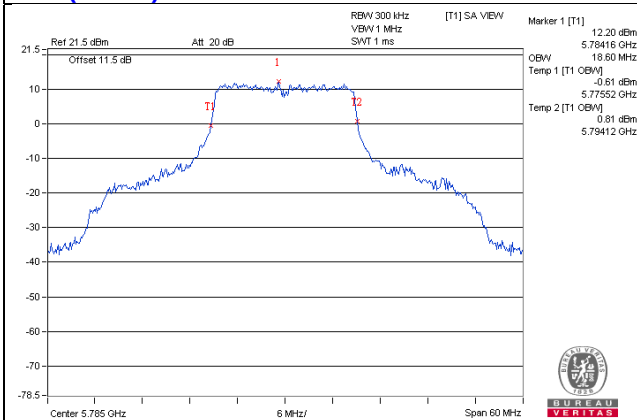
11ac (20MHz) 1S4T TXBF CH149 Chain3



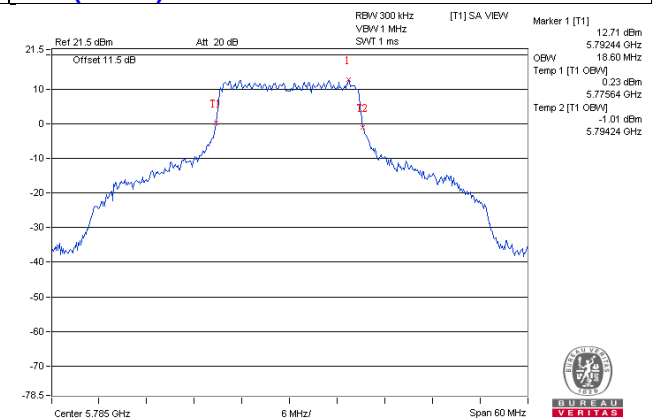
11ac (20MHz) 1S4T TXBF CH149 Chain4



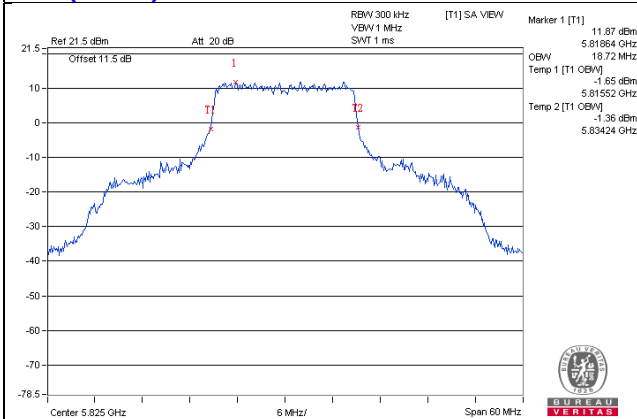
11ac (20MHz) 1S4T TXBF CH157 Chain3



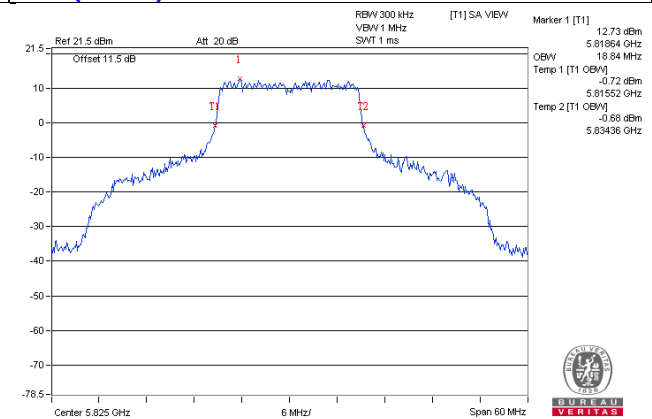
11ac (20MHz) 1S4T TXBF CH157 Chain4



11ac (20MHz) 1S4T TXBF CH165 Chain3

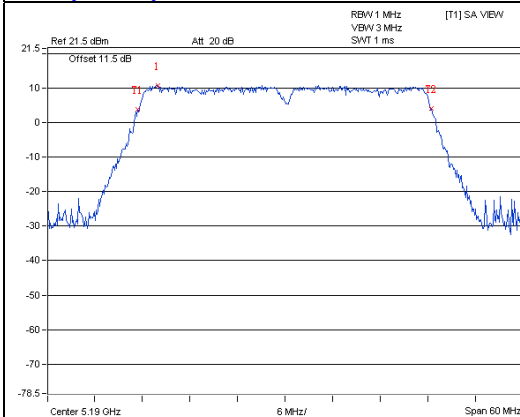


11ac (20MHz) 1S4T TXBF CH165 Chain4

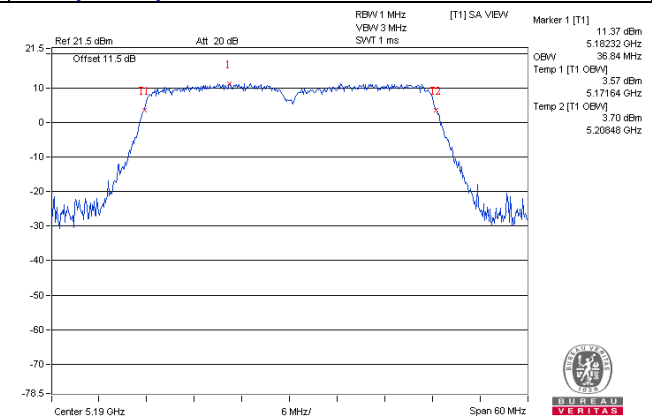


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

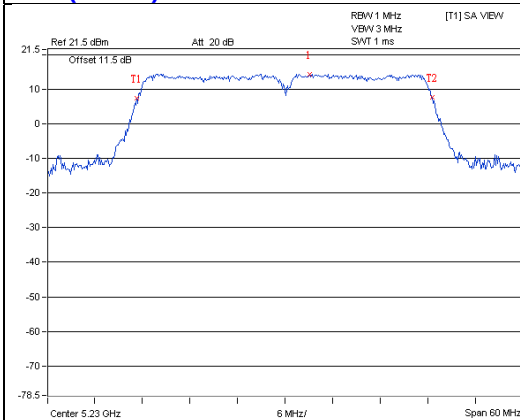
11ac (40MHz) 1S4T CDD CH38 Chain1



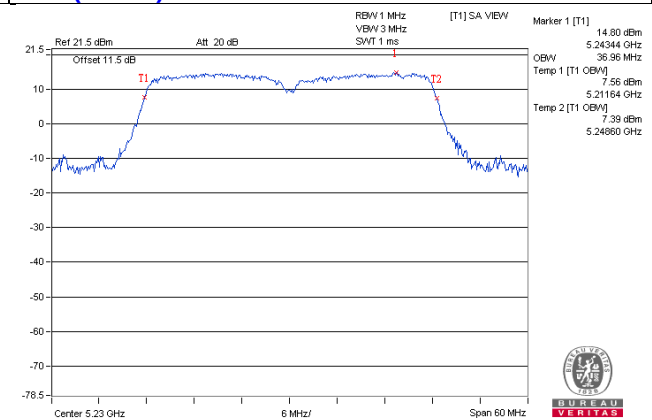
11ac (40MHz) 1S4T CDD CH38 Chain2



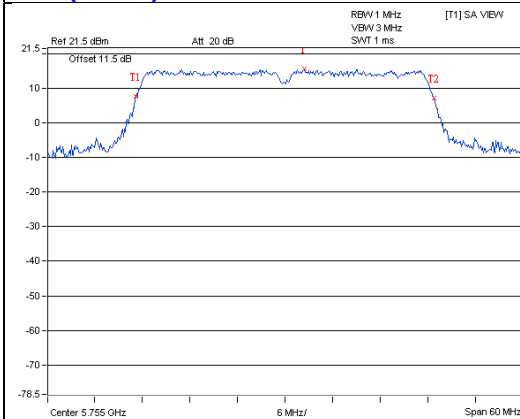
11ac (40MHz) 1S4T CDD CH46 Chain1



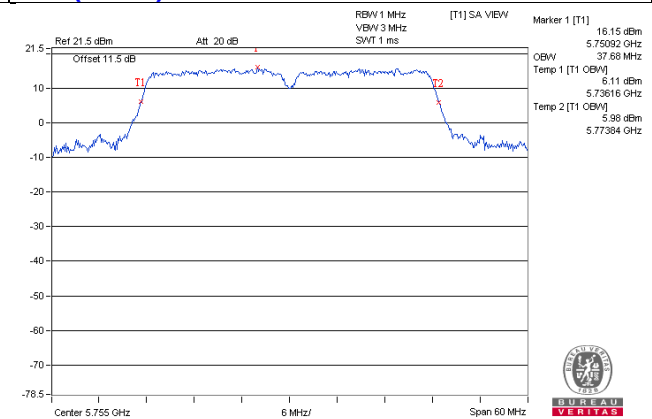
11ac (40MHz) 1S4T CDD CH46 Chain2



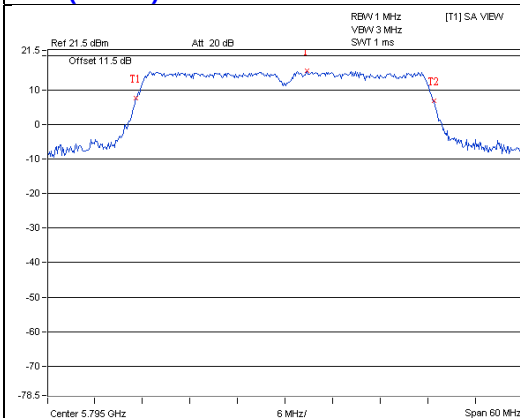
11ac (40MHz) 1S4T CDD CH151 Chain1



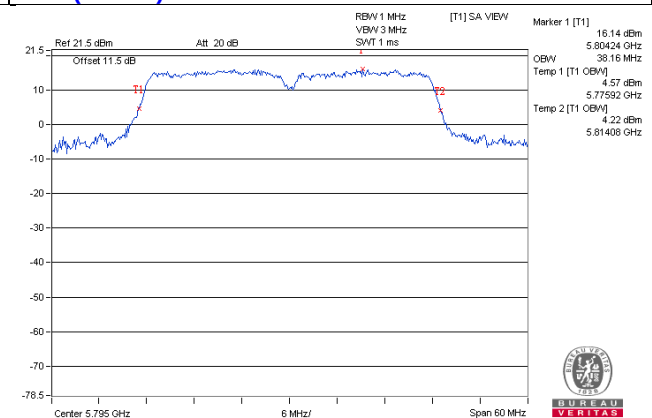
11ac (40MHz) 1S4T CDD CH151 Chain2



11ac (40MHz) 1S4T CDD CH159 Chain1

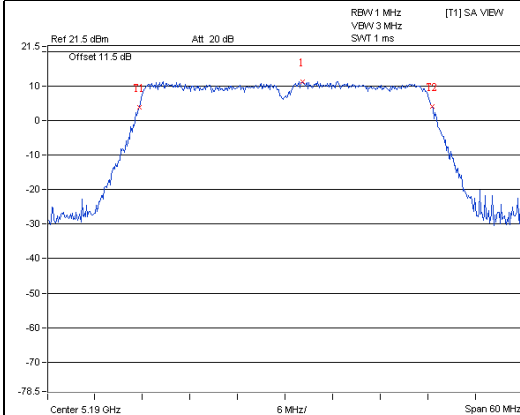


11ac (40MHz) 1S4T CDD CH159 Chain2

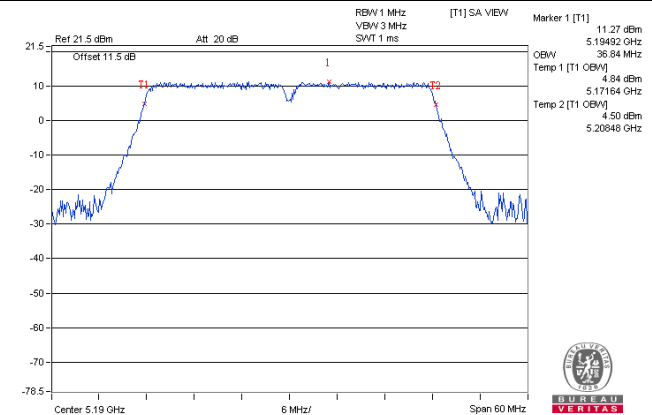


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

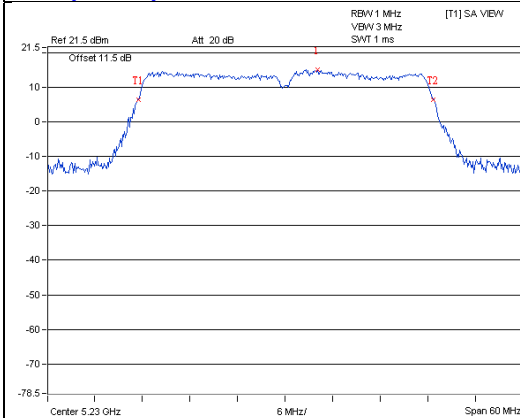
11ac (40MHz) 1S4T CDD CH38 Chain3



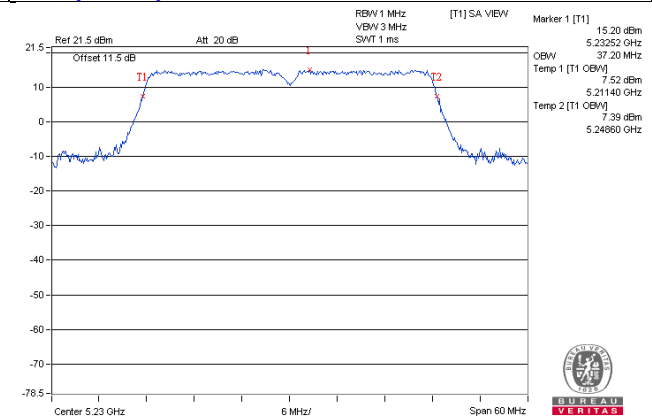
11ac (40MHz) 1S4T CDD CH38 Chain4



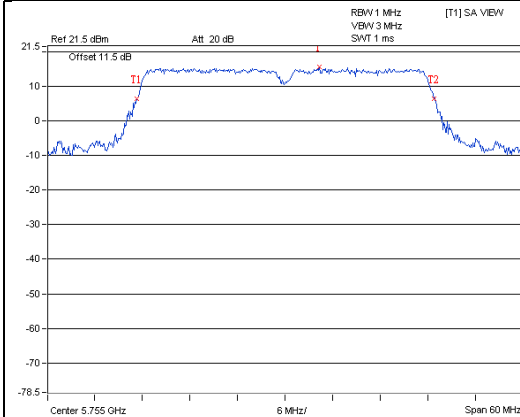
11ac (40MHz) 1S4T CDD CH46 Chain3



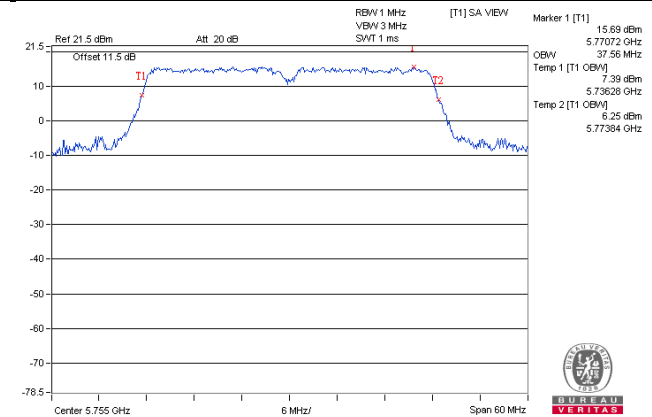
11ac (40MHz) 1S4T CDD CH46 Chain4



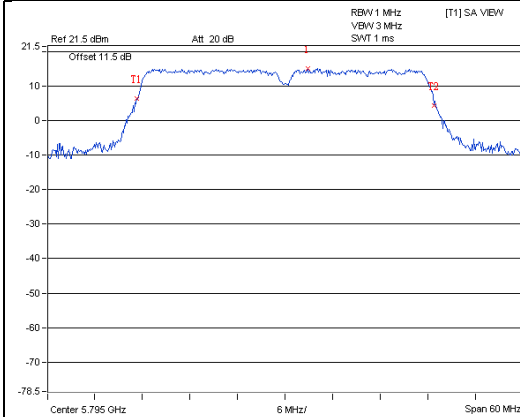
11ac (40MHz) 1S4T CDD CH151 Chain3



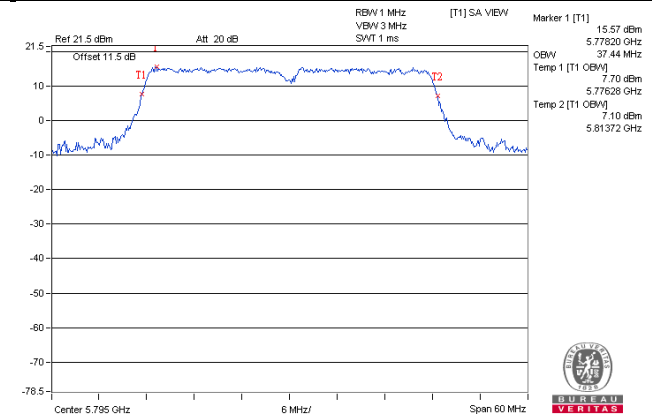
11ac (40MHz) 1S4T CDD CH151 Chain4



11ac (40MHz) 1S4T CDD CH159 Chain3

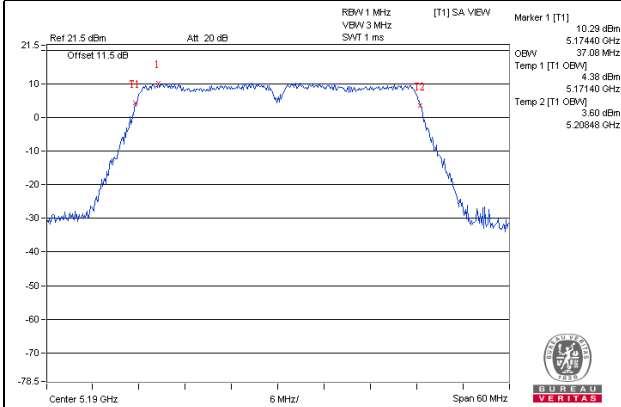


11ac (40MHz) 1S4T CDD CH159 Chain4

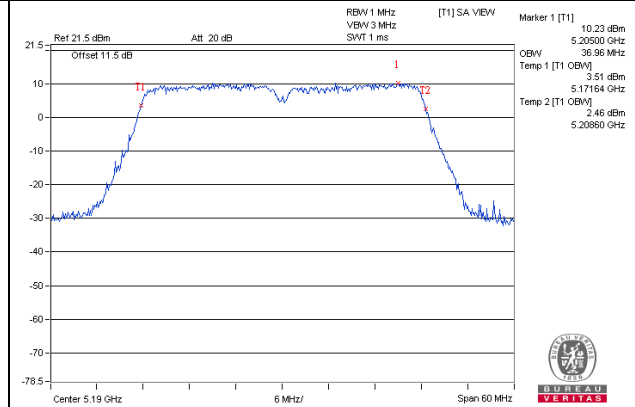


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

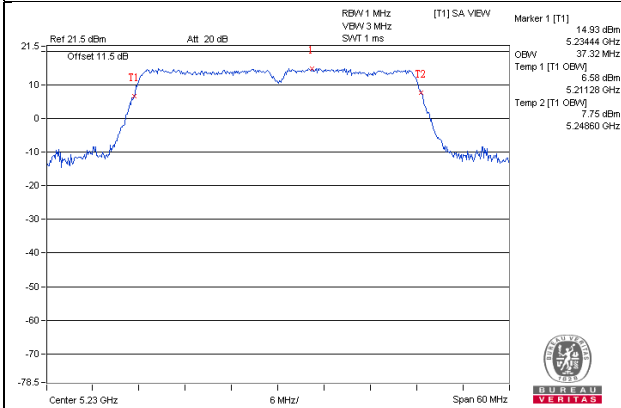
11ac (40MHz) 1S4T TXBF CH38 Chain1



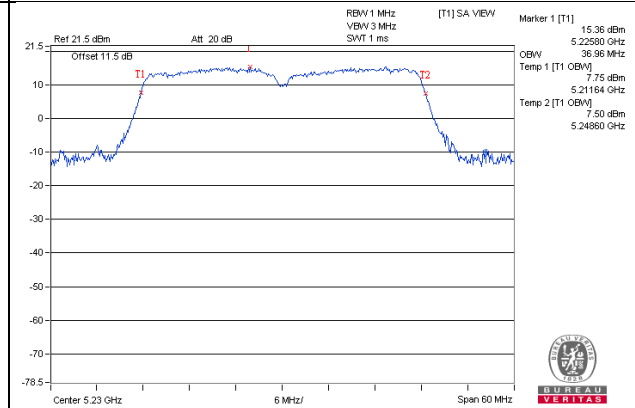
11ac (40MHz) 1S4T TXBF CH38 Chain2



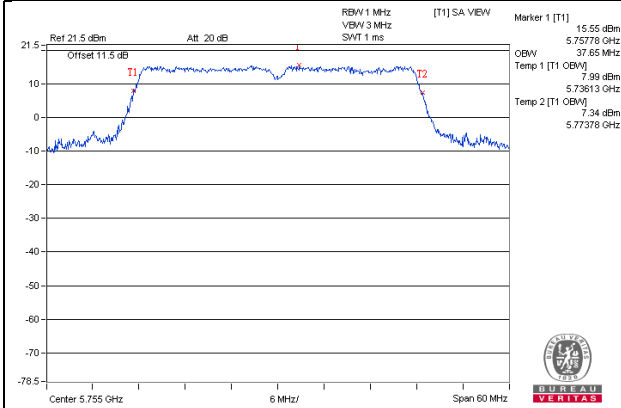
11ac (40MHz) 1S4T TXBF CH46 Chain1



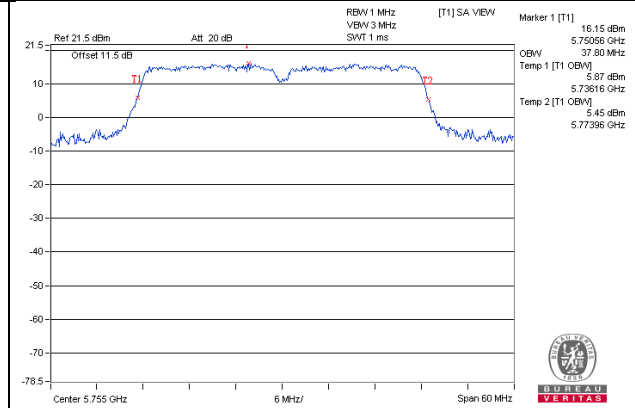
11ac (40MHz) 1S4T TXBF CH46 Chain2



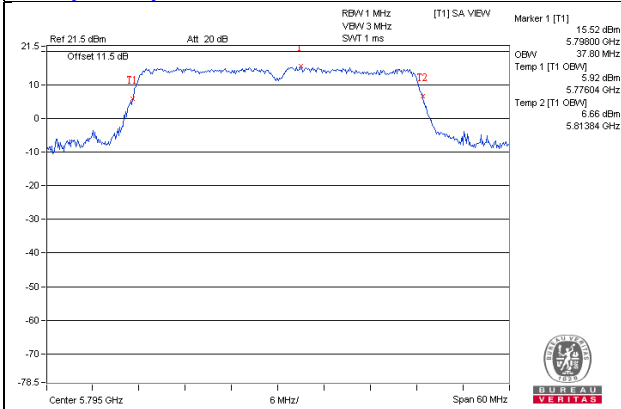
11ac (40MHz) 1S4T TXBF CH151 Chain1



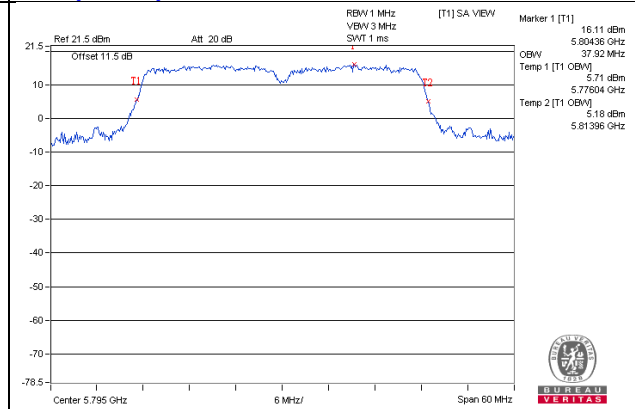
11ac (40MHz) 1S4T TXBF CH151 Chain2



11ac (40MHz) 1S4T TXBF CH159 Chain1

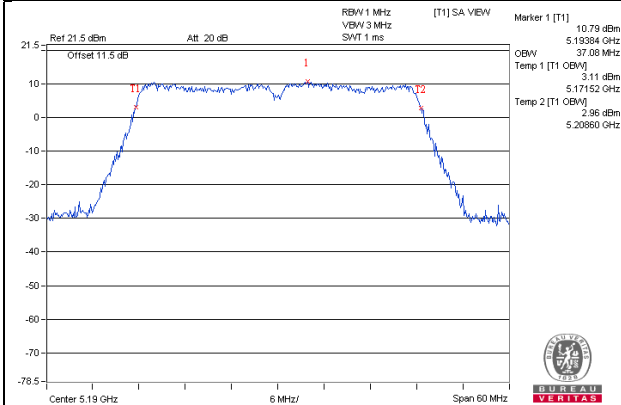


11ac (40MHz) 1S4T TXBF CH159 Chain2

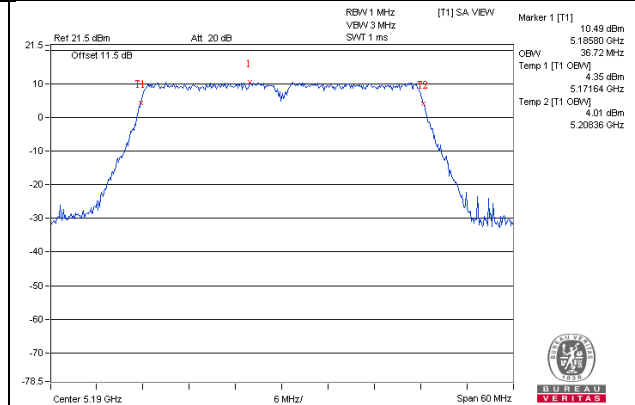


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

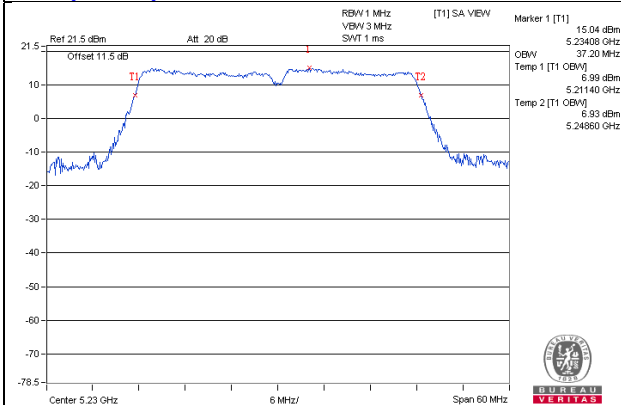
11ac (40MHz) 1S4T TXBF CH38 Chain3



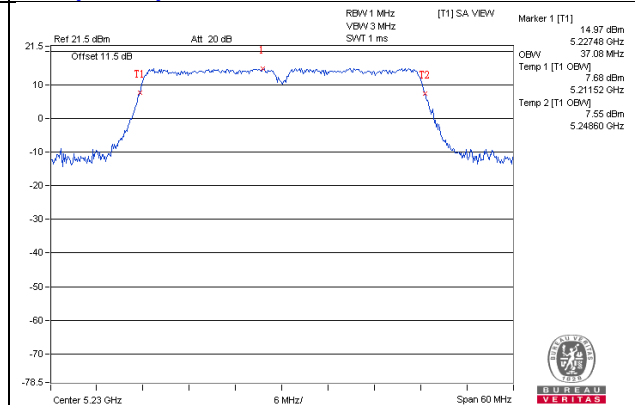
11ac (40MHz) 1S4T TXBF CH38 Chain4



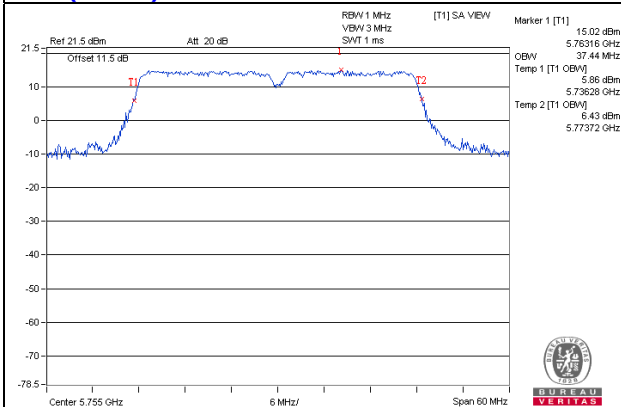
11ac (40MHz) 1S4T TXBF CH46 Chain3



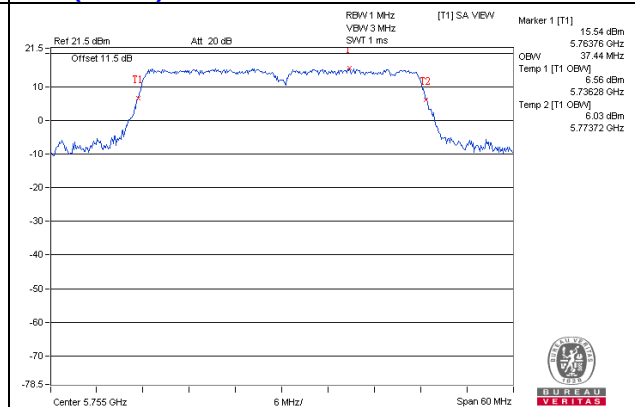
11ac (40MHz) 1S4T TXBF CH46 Chain4



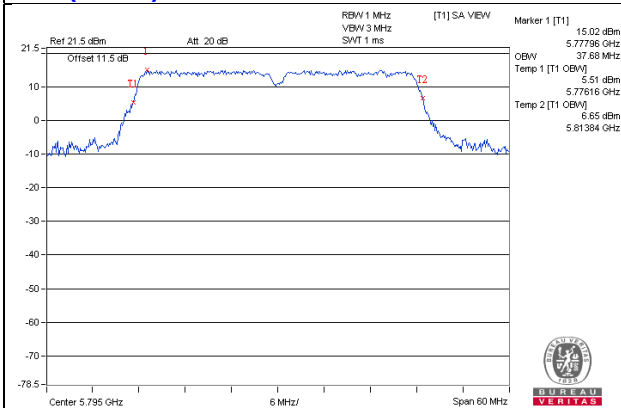
11ac (40MHz) 1S4T TXBF CH151 Chain3



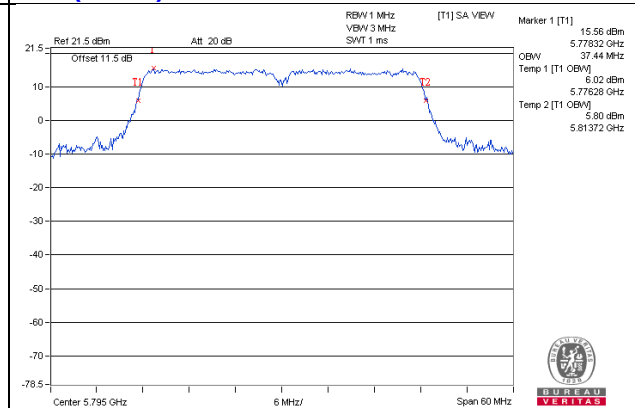
11ac (40MHz) 1S4T TXBF CH151 Chain4



11ac (40MHz) 1S4T TXBF CH159 Chain3

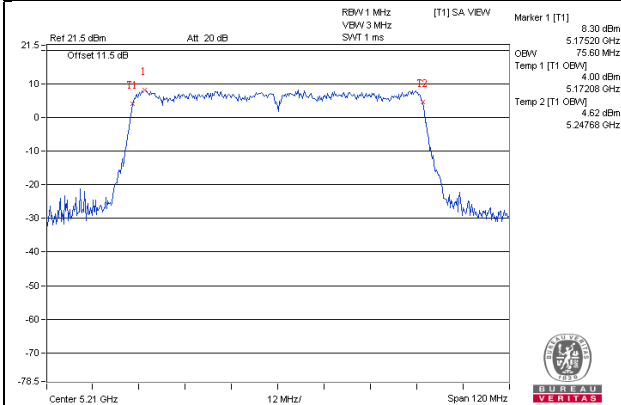


11ac (40MHz) 1S4T TXBF CH159 Chain4

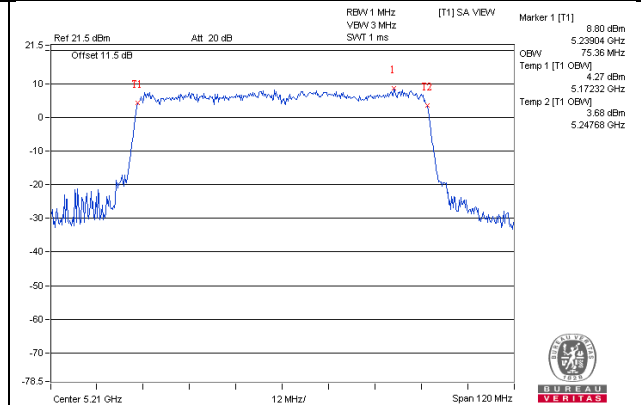


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

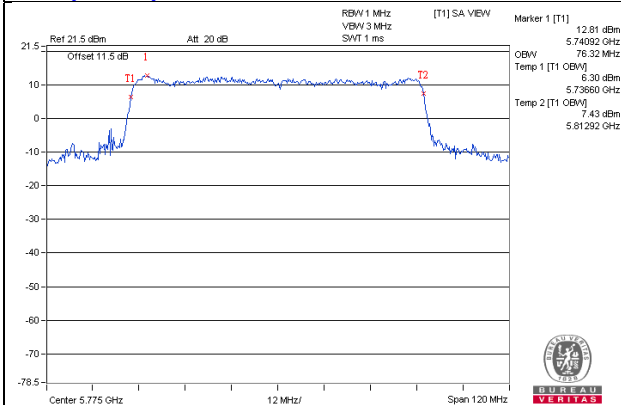
11ac (80MHz) 1S4T CDD CH42 Chain1



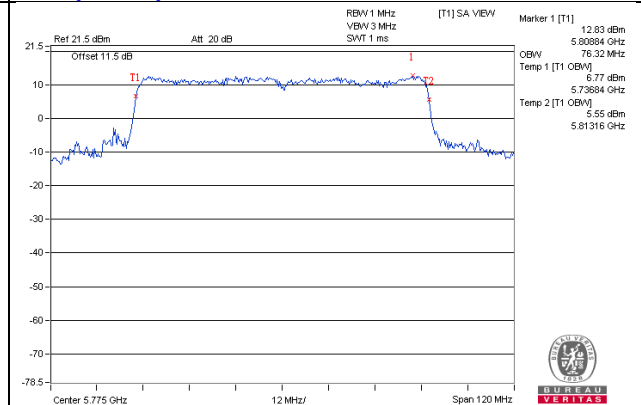
11ac (80MHz) 1S4T CDD CH42 Chain2



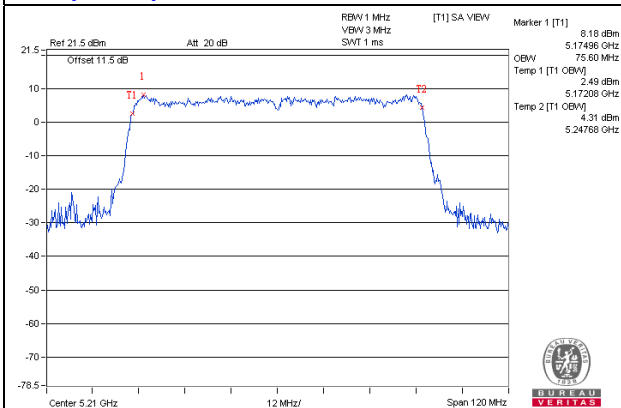
11ac (80MHz) 1S4T CDD CH155 Chain1



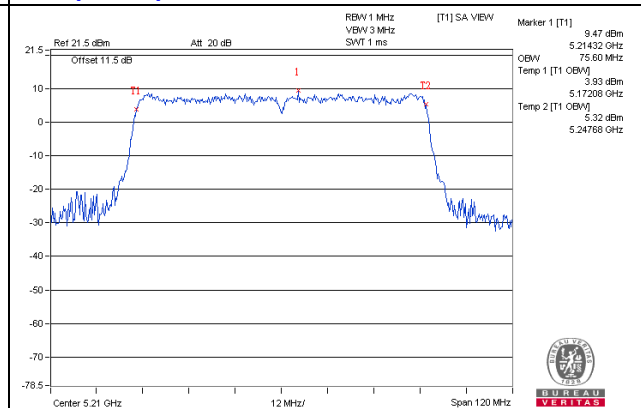
11ac (80MHz) 1S4T CDD CH155 Chain2



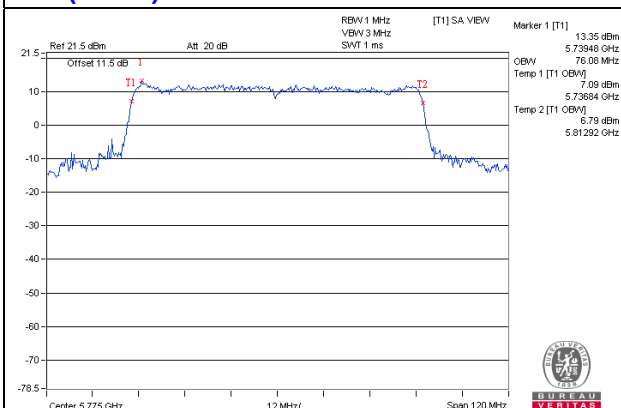
11ac (80MHz) 1S4T CDD CH42 Chain3



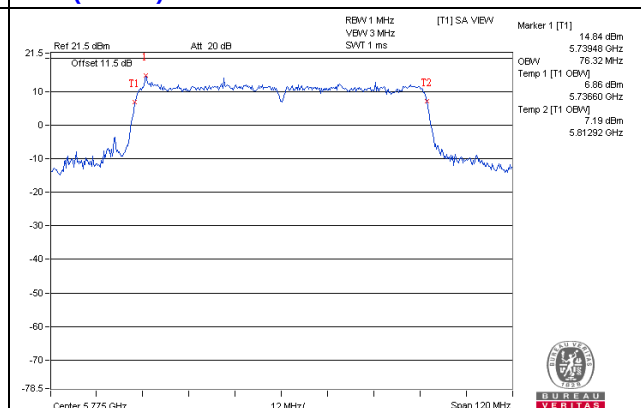
11ac (80MHz) 1S4T CDD CH42 Chain4



11ac (80MHz) 1S4T CDD CH155 Chain3

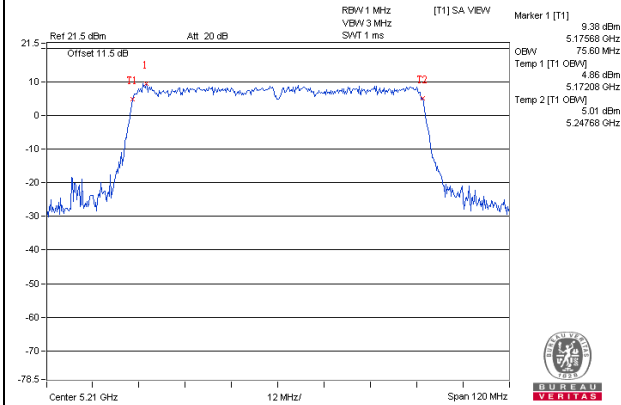


11ac (80MHz) 1S4T CDD CH155 Chain4

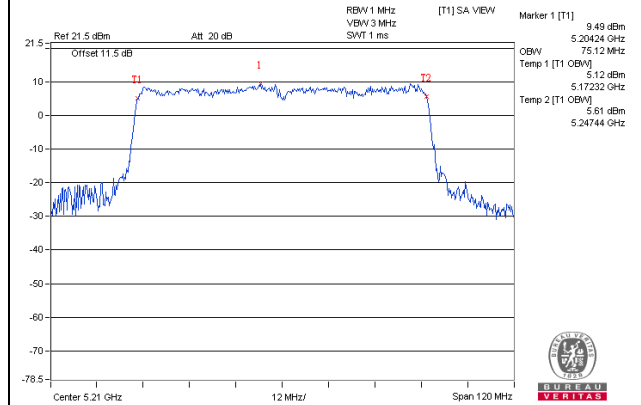


99% OCCUPIED BANDWIDTH SPECTRUM PLOT

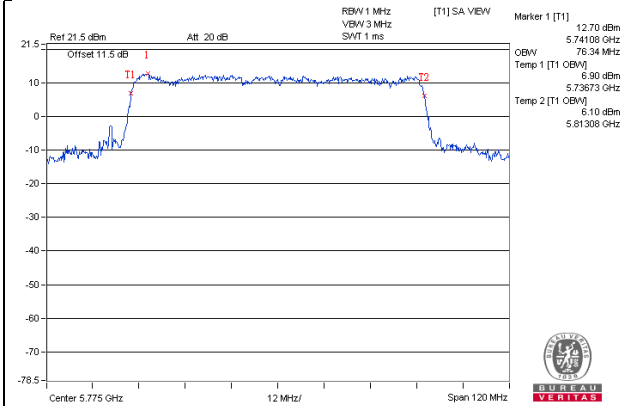
11ac (80MHz) 1S4T TXBF CH42 Chain1



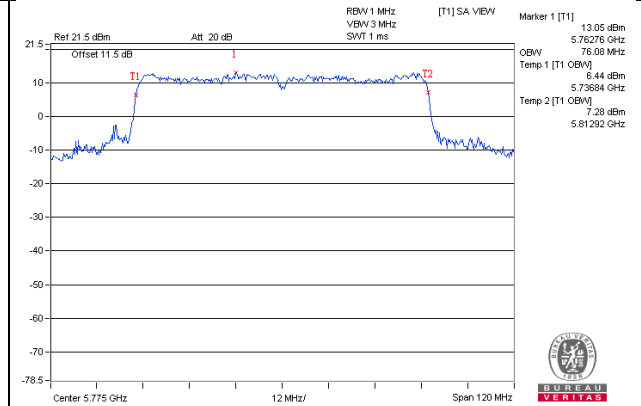
11ac (80MHz) 1S4T TXBF CH42 Chain2



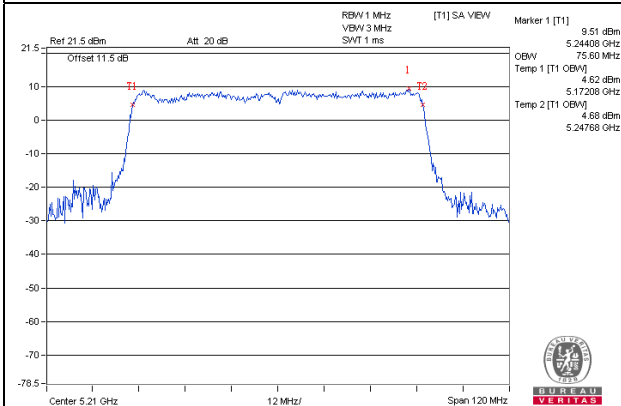
11ac (80MHz) 1S4T TXBF CH155 Chain1



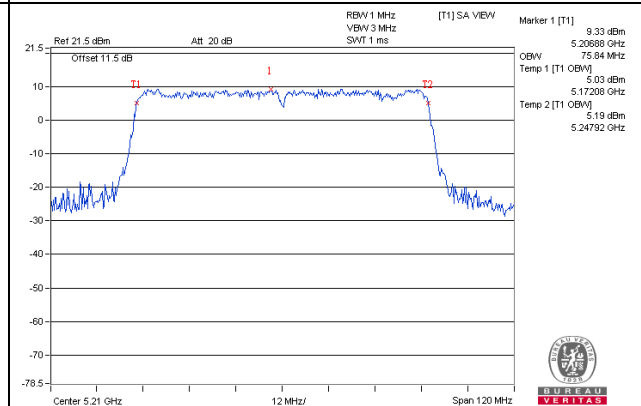
11ac (80MHz) 1S4T TXBF CH155 Chain2



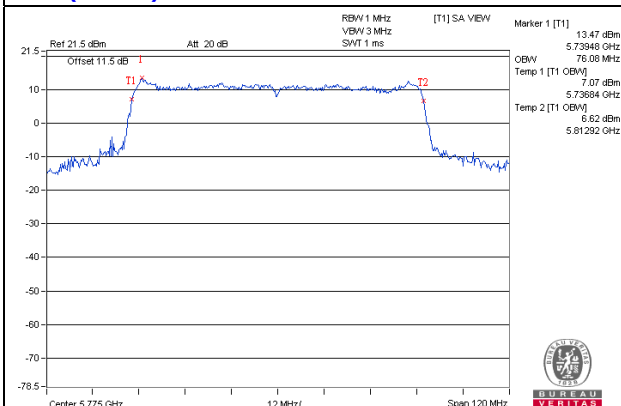
11ac (80MHz) 1S4T TXBF CH42 Chain3



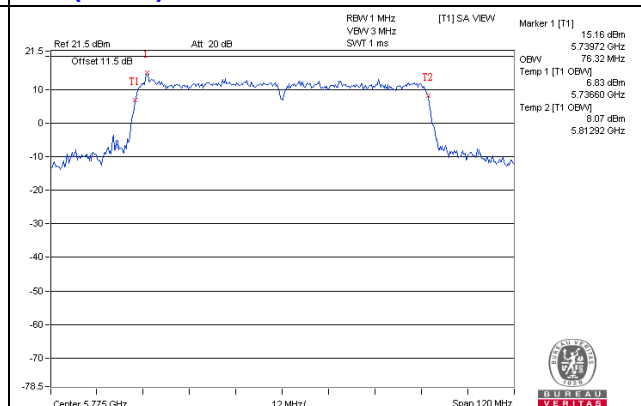
11ac (80MHz) 1S4T TXBF CH42 Chain4



11ac (80MHz) 1S4T TXBF CH155 Chain3



11ac (80MHz) 1S4T TXBF CH155 Chain4



4.3 6dB Bandwidth Measurement

4.3.1 Limit

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

4.3.2 Measuring Instruments and Setting

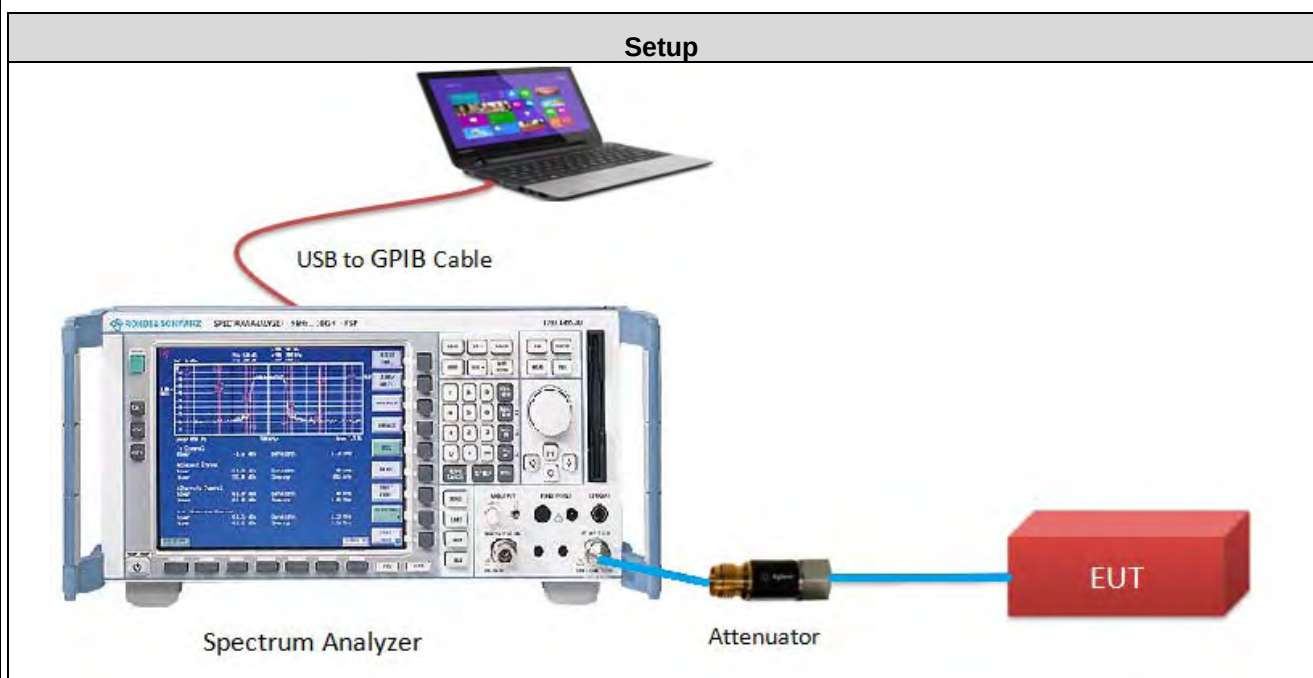
The following table is the setting of the Spectrum Analyzer.

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

4.3.3 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 v01r03, in section "Emission bandwidth (C)(2)", 08/22/2016
- 3 Measured the spectrum width with power higher than 6dB account by this measurement.

4.3.4 Test Setup Layout



4.3.5 Test Deviation

There are no deviations with the original standard.

4.3.6 EUT Operating Conditions

The EUT was programmed to be in continuously transmitting mode.

4.3.7 Test Results of 6dB Bandwidth

Temperature	20°C	Humidity	62%
Test Engineer	Leo Tsai		

11a 1S4T CDD

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)				MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 1	CHAIN 2	CHAIN 3	CHAIN 4		
149	5745	16.39	16.40	16.41	16.41	0.5	PASS
157	5785	16.42	16.44	16.43	16.43	0.5	PASS
165	5825	16.43	16.45	16.44	16.44	0.5	PASS

11ac (20MHz) 1S4T CDD

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)				MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 1	CHAIN 2	CHAIN 3	CHAIN 4		
149	5745	17.65	17.68	17.66	17.68	0.5	PASS
157	5785	17.65	17.66	17.68	17.68	0.5	PASS
165	5825	17.66	17.68	17.67	17.68	0.5	PASS

11ac (20MHz) 1S4T TxBF

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)				MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 1	CHAIN 2	CHAIN 3	CHAIN 4		
149	5745	17.63	17.66	17.65	17.65	0.5	PASS
157	5785	17.64	17.68	17.67	17.68	0.5	PASS
165	5825	17.65	17.69	17.67	17.67	0.5	PASS

11ac (40MHz) 1S4T CDD

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)				MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 1	CHAIN 2	CHAIN 3	CHAIN 4		
151	5755	36.48	36.42	36.44	36.40	0.5	PASS
159	5795	36.47	36.46	36.48	36.45	0.5	PASS

11ac (40MHz) 1S4T TxBF

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)				MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 1	CHAIN 2	CHAIN 3	CHAIN 4		
151	5755	36.44	36.43	36.42	36.43	0.5	PASS
159	5795	36.49	36.43	36.43	36.43	0.5	PASS

11ac (80MHz) 1S4T CDD

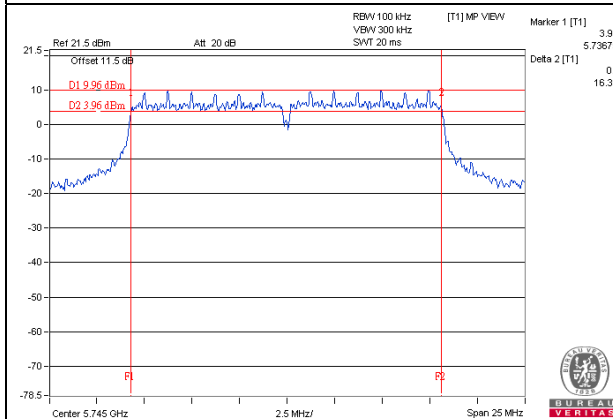
CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)				MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 1	CHAIN 2	CHAIN 3	CHAIN 4		
155	5775	75.51	75.48	75.50	75.48	0.5	PASS

11ac (80MHz) 1S4T TxBF

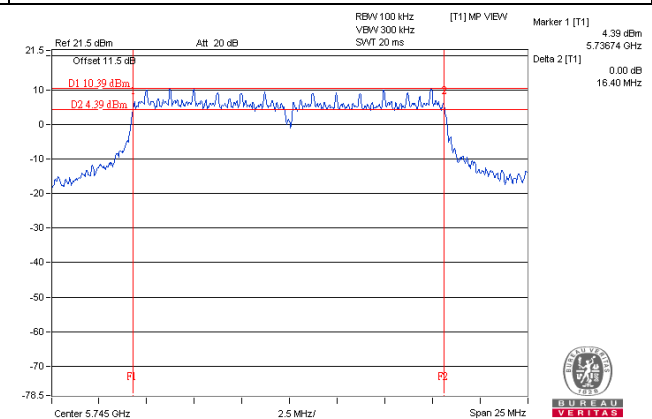
CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)				MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 1	CHAIN 2	CHAIN 3	CHAIN 4		
155	5775	75.48	75.48	75.50	75.47	0.5	PASS

6dB BANDWIDTH SPECTRUM PLOT

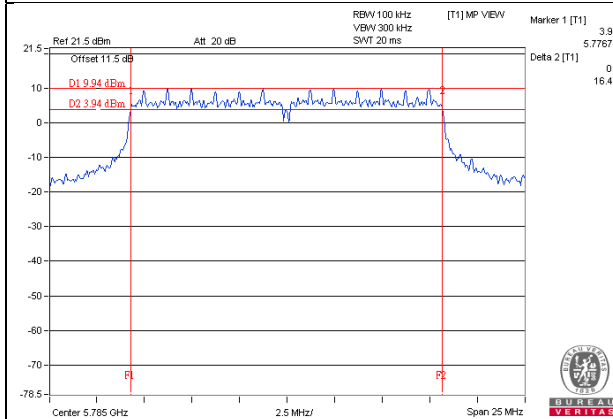
11a 1S4T CDD CH149 Chain1



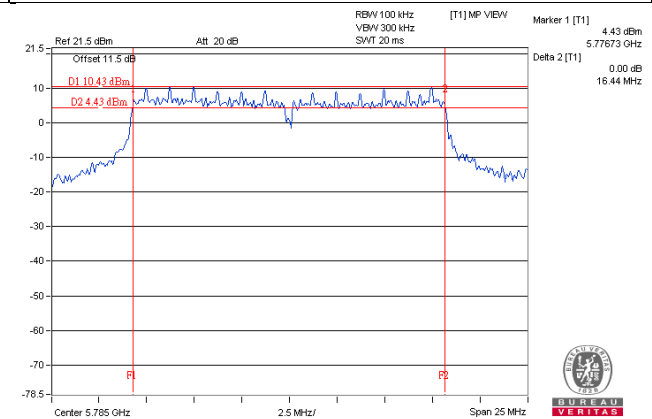
11a 1S4T CDD CH149 Chain2



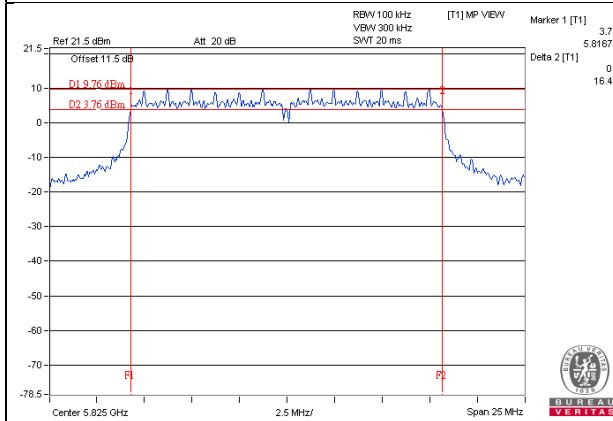
11a 1S4T CDD CH157 Chain1



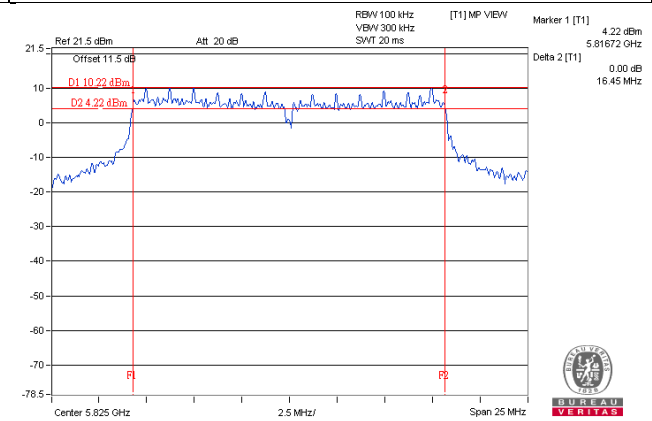
11a 1S4T CDD CH157 Chain2



11a 1S4T CDD CH165 Chain1

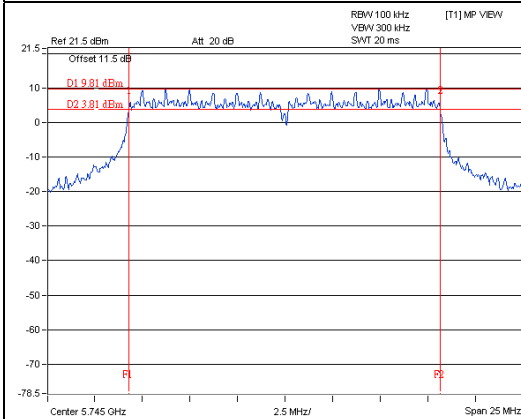


11a 1S4T CDD CH165 Chain2

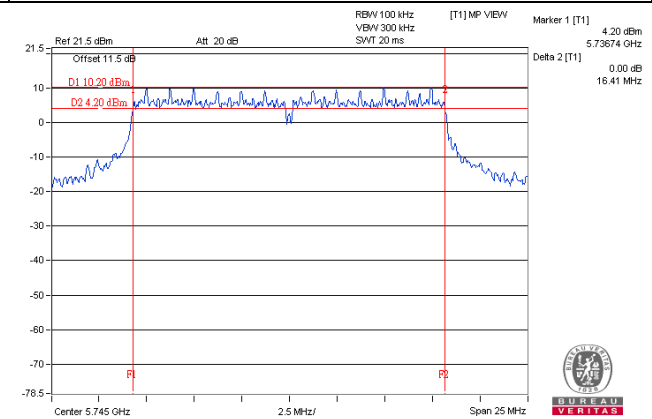


6dB BANDWIDTH SPECTRUM PLOT

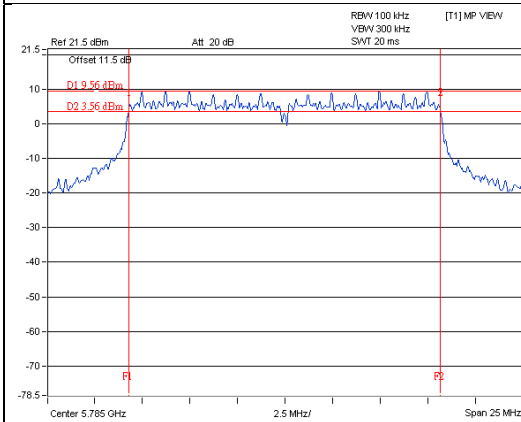
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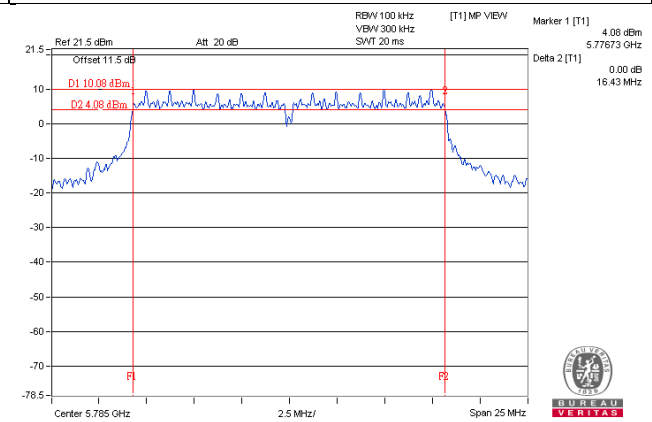
11a 1S4T CDD CH149 Chain4



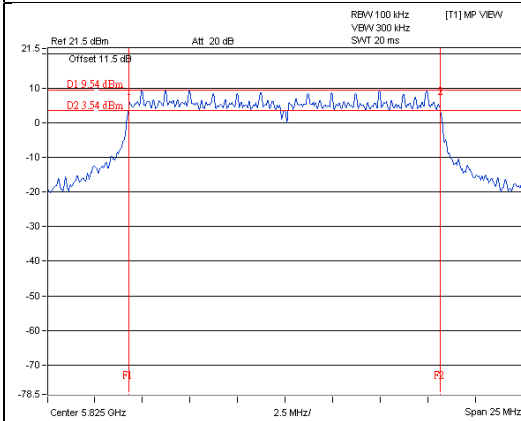
11a 1S4T CDD CH157 Chain3



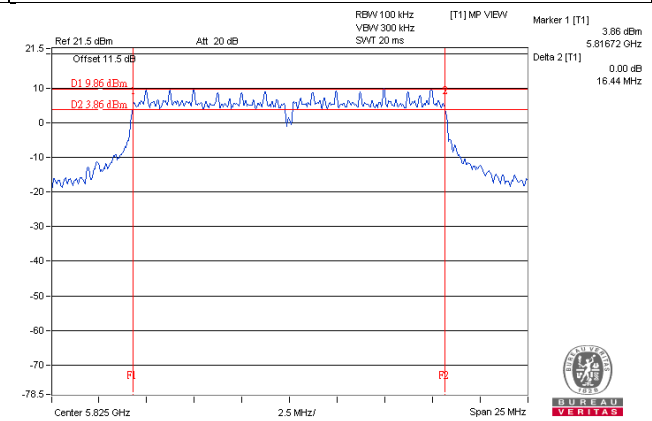
11a 1S4T CDD CH157 Chain4



11a 1S4T CDD CH165 Chain3

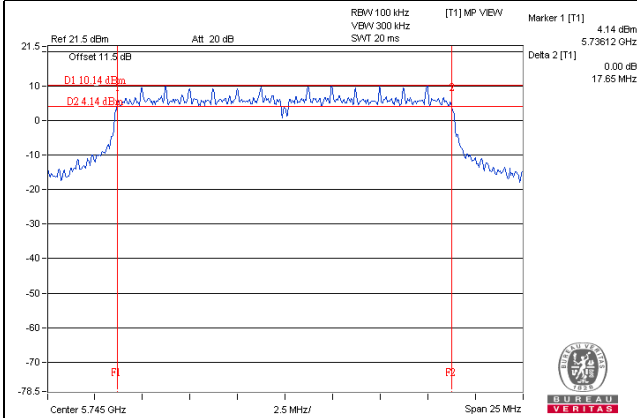


11a 1S4T CDD CH165 Chain4

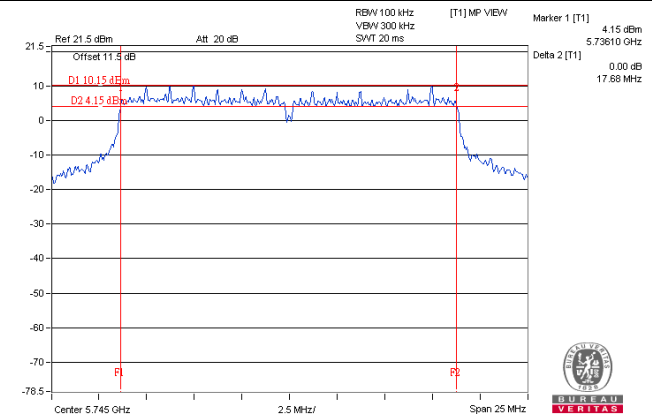


6dB BANDWIDTH SPECTRUM PLOT

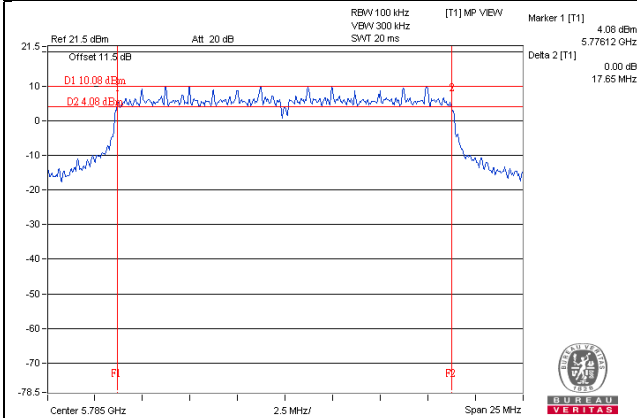
11ac (20MHz) 1S4T CDD CH149 Chain1



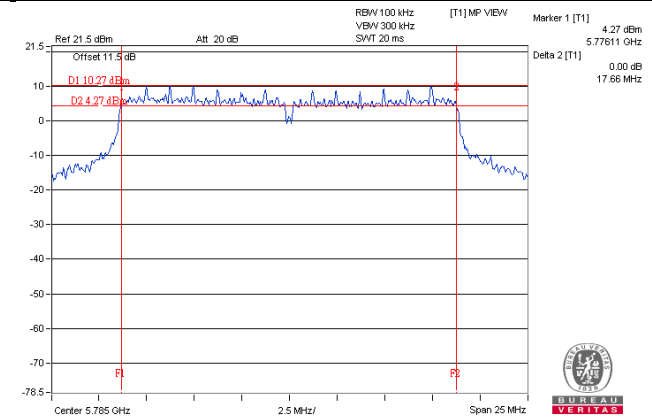
11ac (20MHz) 1S4T CDD CH149 Chain2



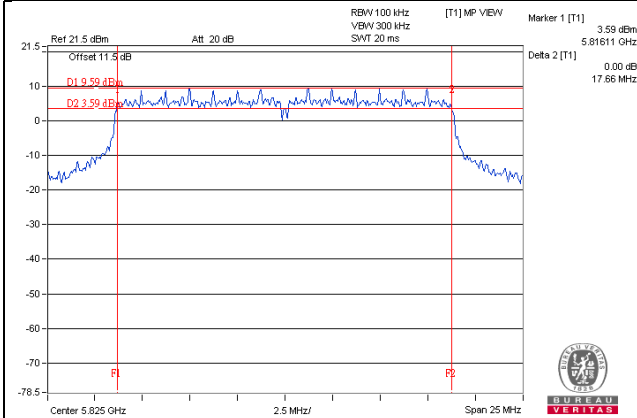
11ac (20MHz) 1S4T CDD CH157 Chain1



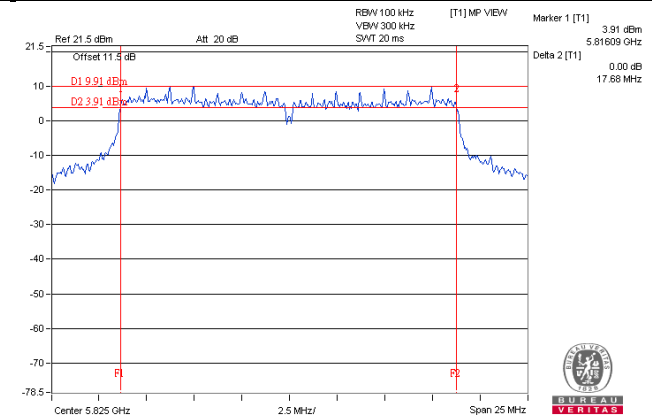
11ac (20MHz) 1S4T CDD CH157 Chain2



11ac (20MHz) 1S4T CDD CH165 Chain1

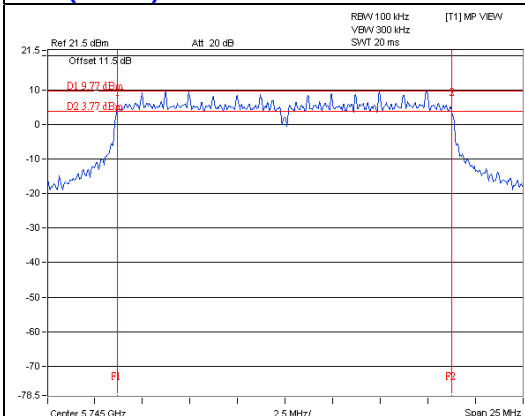


11ac (20MHz) 1S4T CDD CH165 Chain2

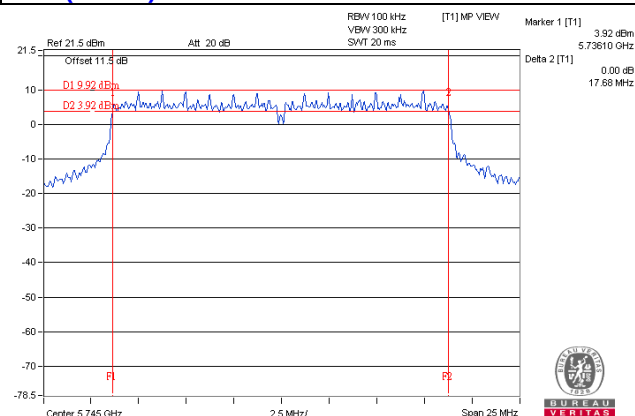


6dB BANDWIDTH SPECTRUM PLOT

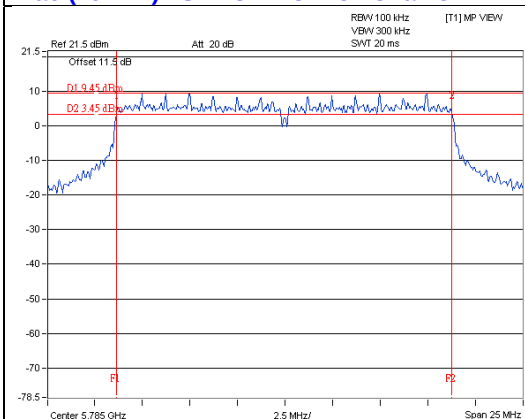
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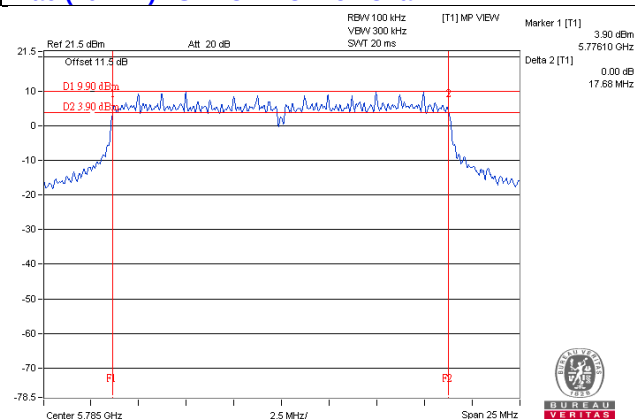
11ac (20MHz) 1S4T CDD CH149 Chain4



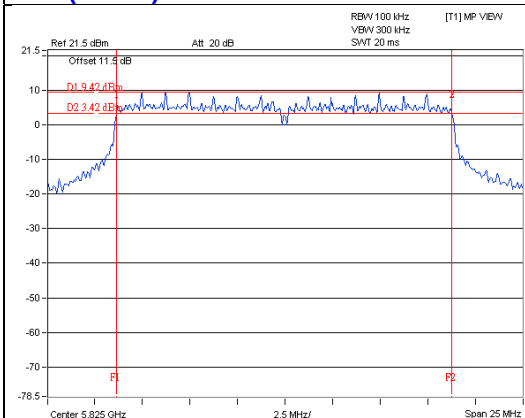
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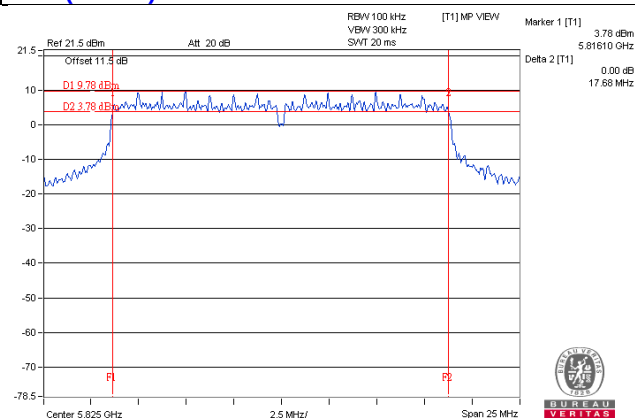
11ac (20MHz) 1S4T CDD CH157 Chain4



11ac (20MHz) 1S4T CDD CH165 Chain3

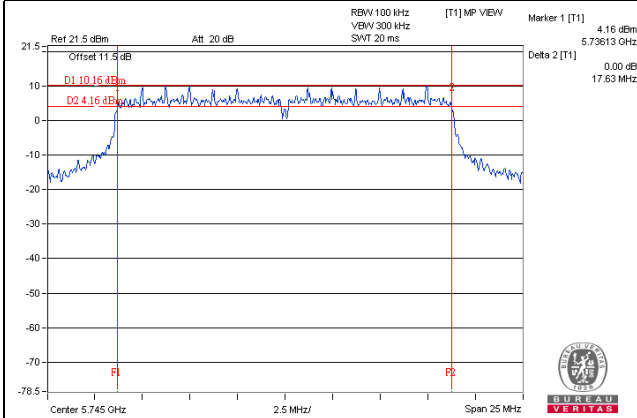


11ac (20MHz) 1S4T CDD CH165 Chain4

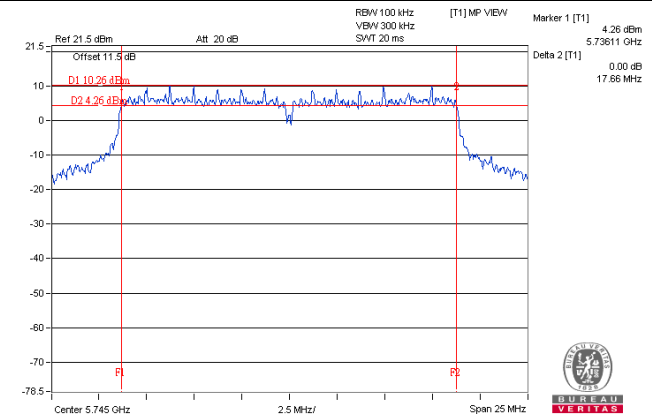


6dB BANDWIDTH SPECTRUM PLOT

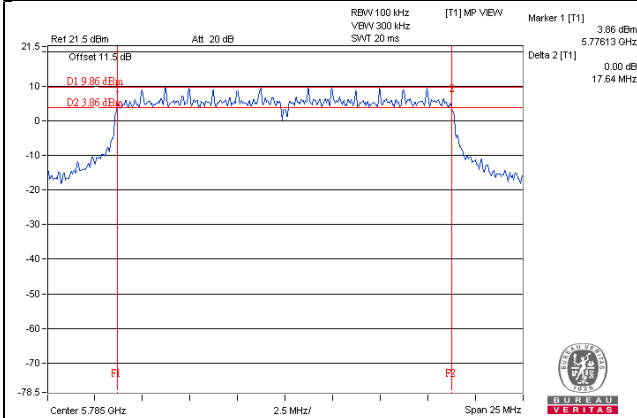
11ac (20MHz) 1S4T TXBF CH149 Chain1



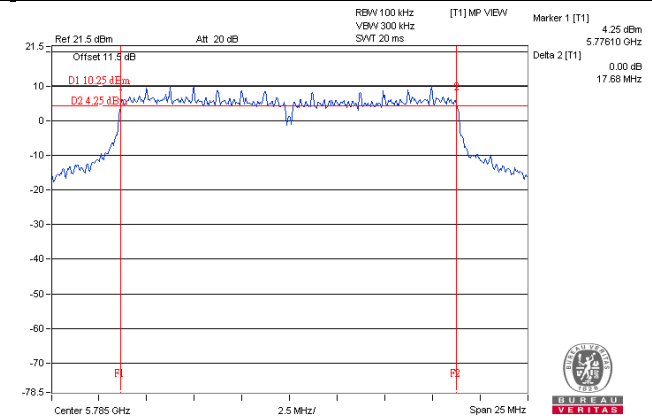
11ac (20MHz) 1S4T TXBF CH149 Chain2



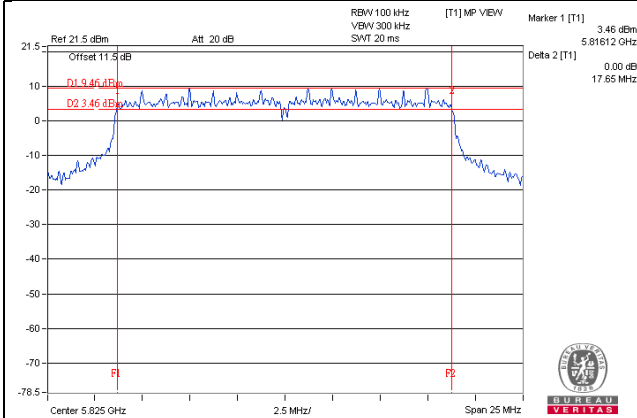
11ac (20MHz) 1S4T TXBF CH157 Chain1



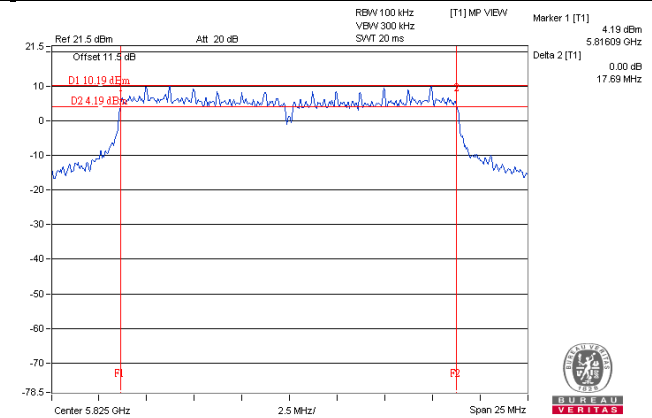
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11ac (20MHz) 1S4T TXBF CH165 Chain1

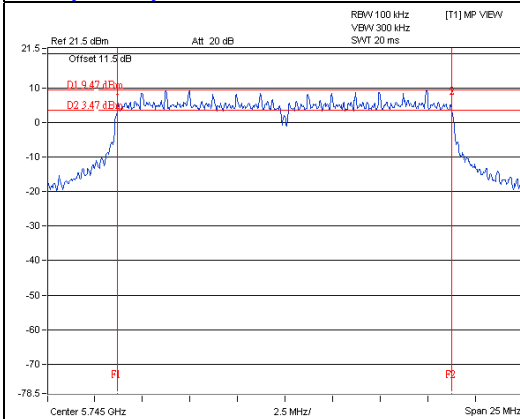


11ac (20MHz) 1S4T TXBF CH165 Chain2

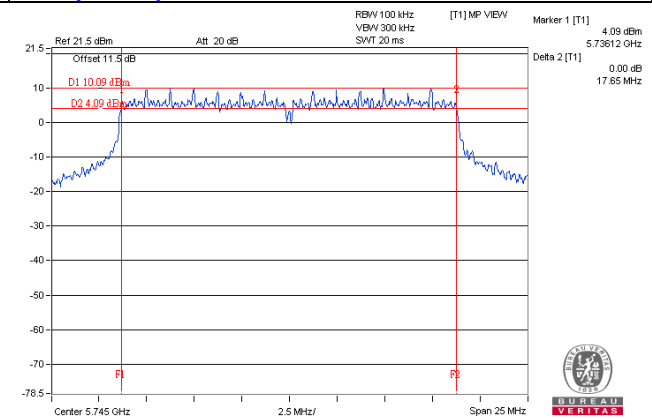


6dB BANDWIDTH SPECTRUM PLOT

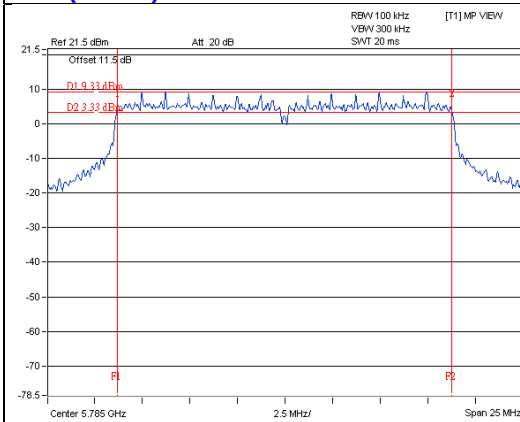
11ac (20MHz) 1S4T TXBF CH149 Chain3



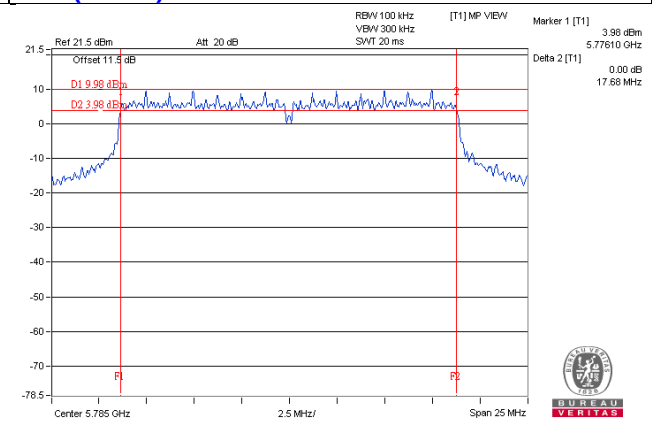
11ac (20MHz) 1S4T TXBF CH149 Chain4



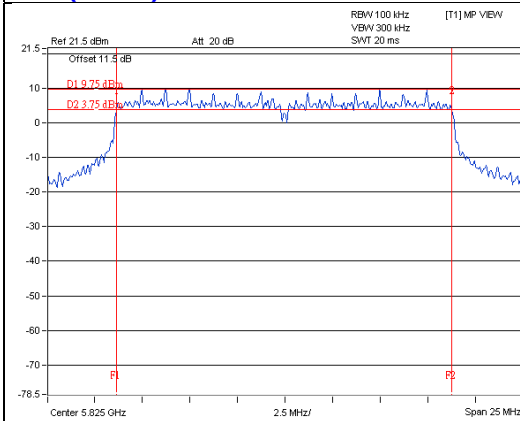
11ac (20MHz) 1S4T TXBF CH157 Chain3



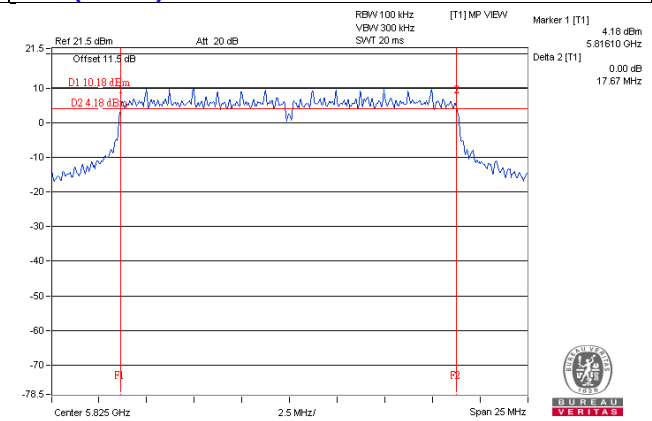
11ac (20MHz) 1S4T TXBF CH157 Chain4



11ac (20MHz) 1S4T TXBF CH165 Chain3

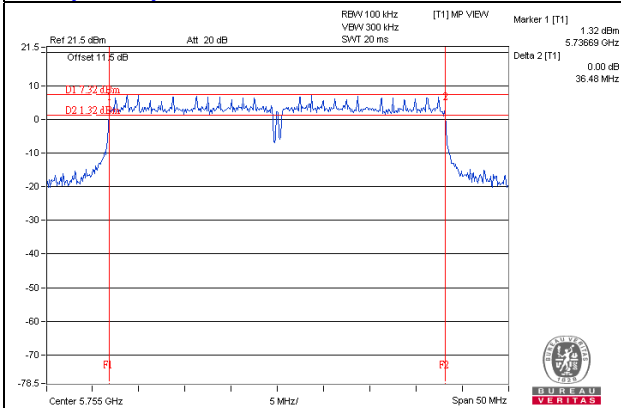


11ac (20MHz) 1S4T TXBF CH165 Chain4

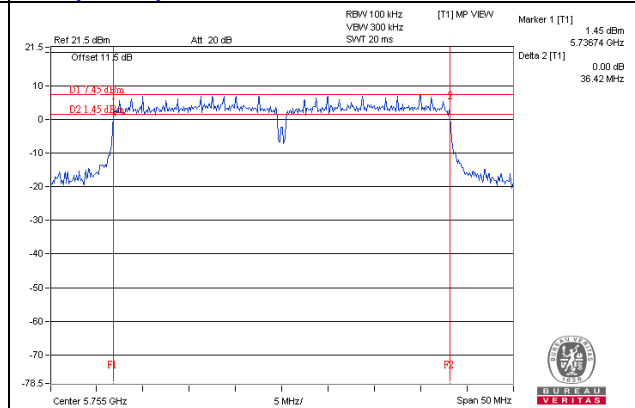


6dB BANDWIDTH SPECTRUM PLOT

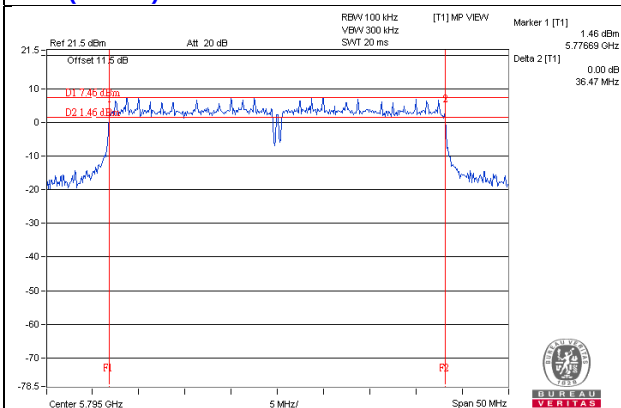
11ac (40MHz) 1S4T CDD CH151 Chain1



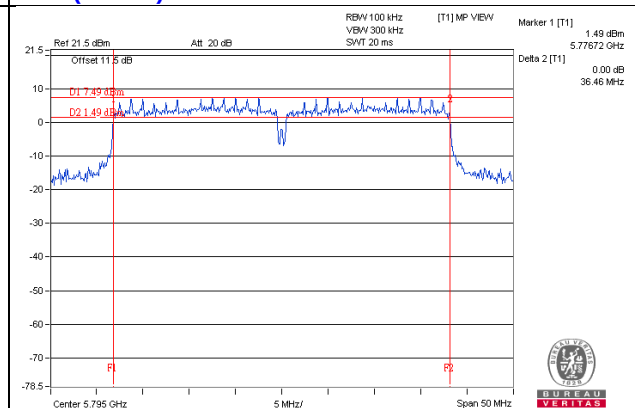
11ac (40MHz) 1S4T CDD CH151 Chain2



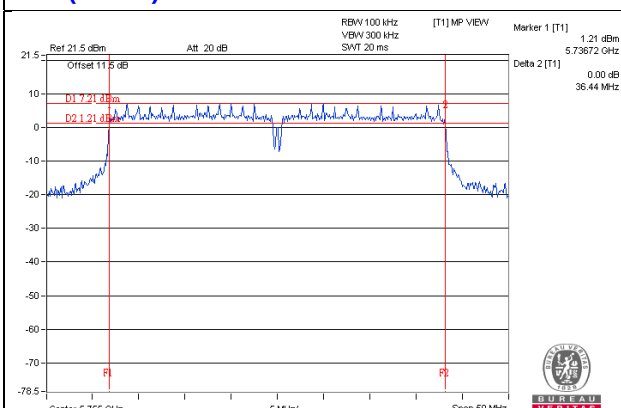
11ac (40MHz) 1S4T CDD CH159 Chain1



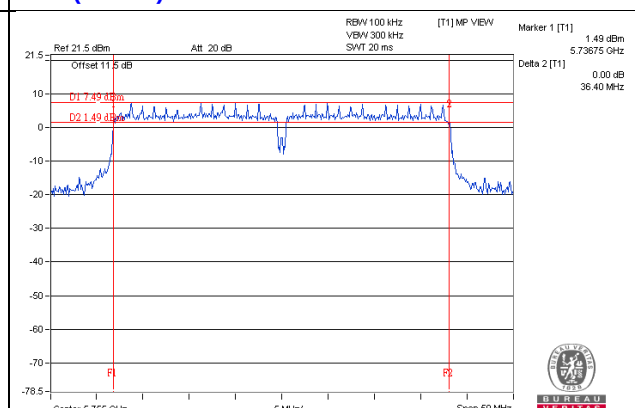
11ac (40MHz) 1S4T CDD CH159 Chain2



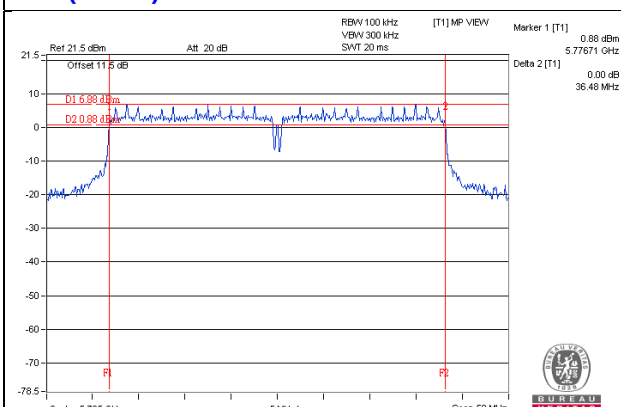
11ac (40MHz) 1S4T CDD CH151 Chain3



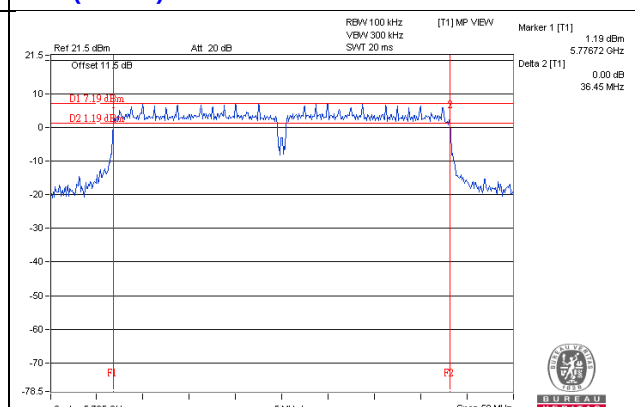
11ac (40MHz) 1S4T CDD CH151 Chain4



11ac (40MHz) 1S4T CDD CH159 Chain3

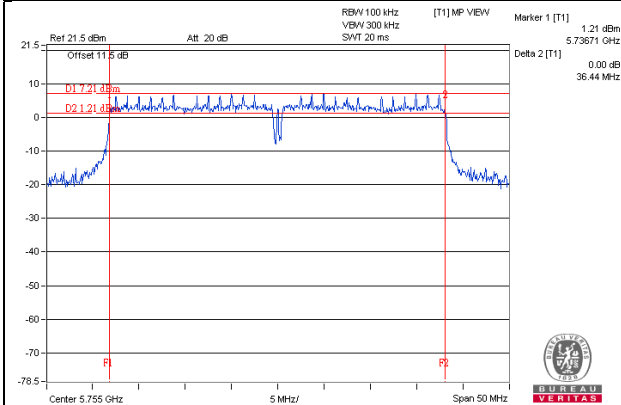


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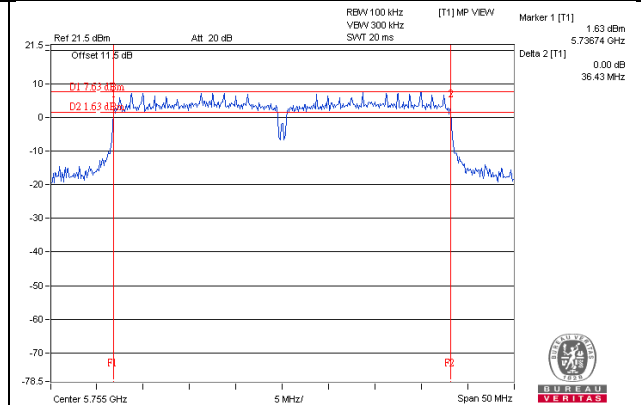


6dB BANDWIDTH SPECTRUM PLOT

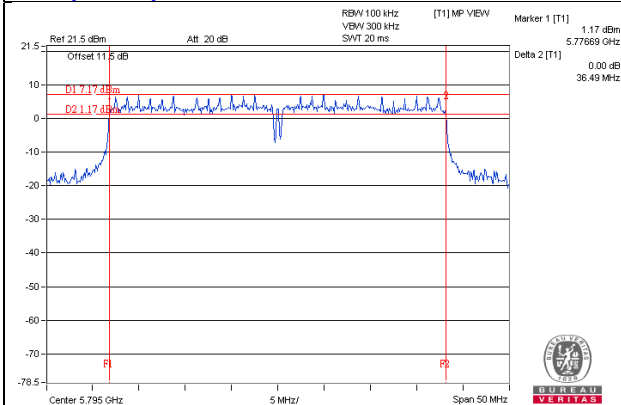
11ac (40MHz) 1S4T TXBF CH151 Chain1



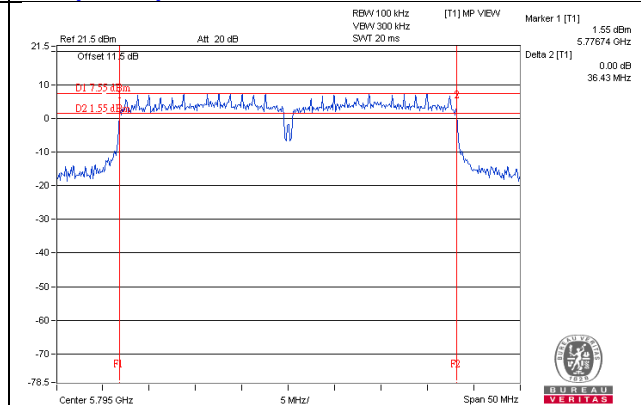
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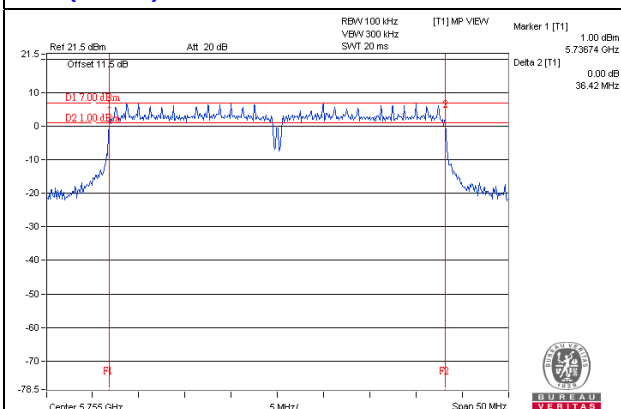
11ac (40MHz) 1S4T TXBF CH159 Chain1



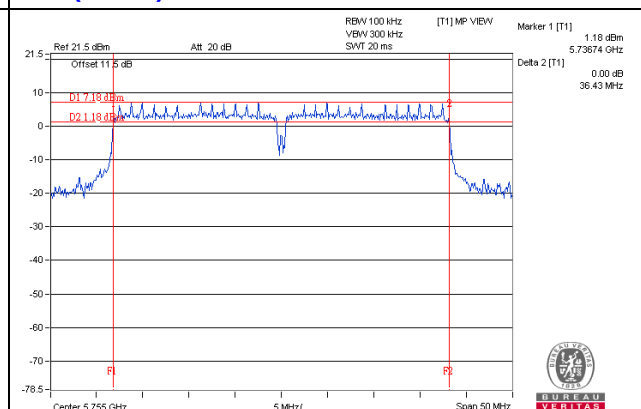
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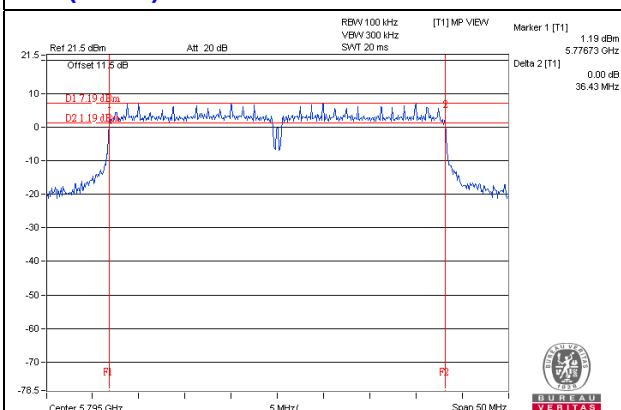
11ac (40MHz) 1S4T TXBF CH151 Chain3



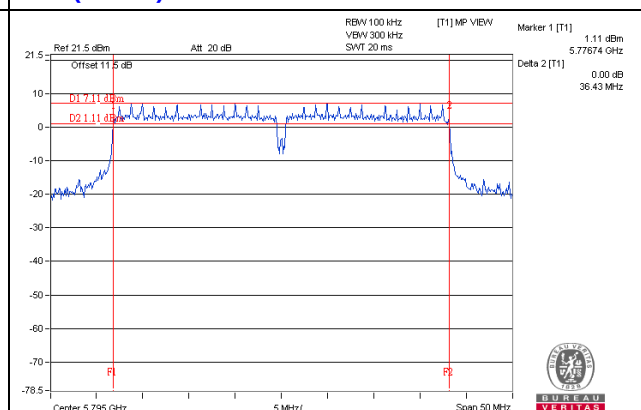
11ac (40MHz) 1S4T TXBF CH151 Chain4



11ac (40MHz) 1S4T TXBF CH159 Chain3

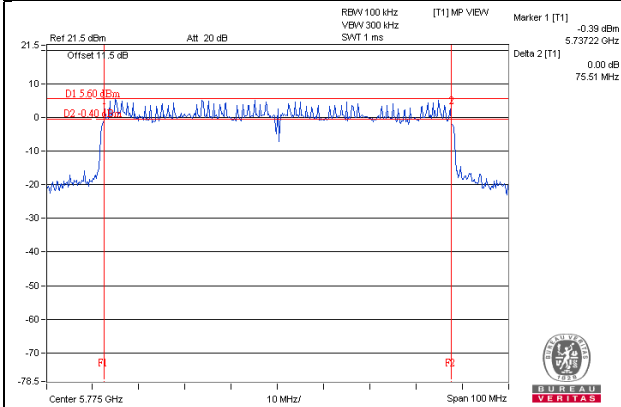


11ac (40MHz) 1S4T TXBF CH159 Chain4

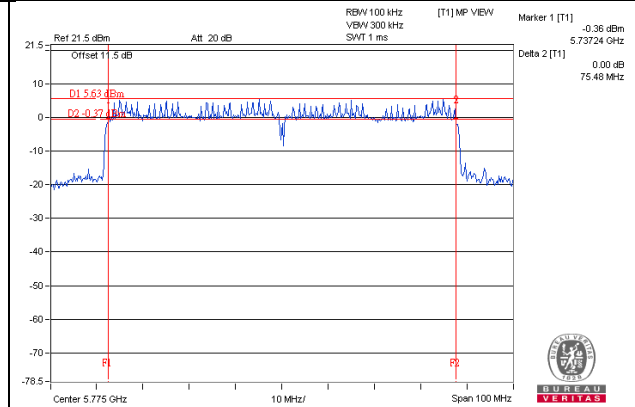


6dB BANDWIDTH SPECTRUM PLOT

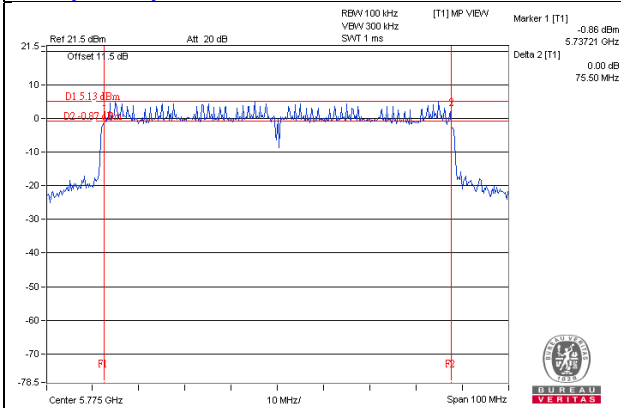
11ac (80MHz) 1S4T CDD CH155 Chain1



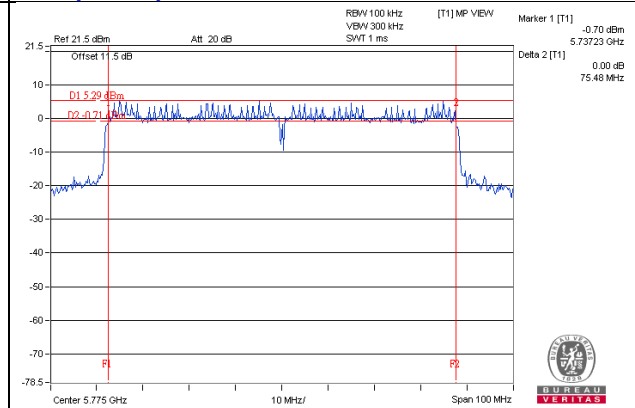
11ac (80MHz) 1S4T CDD CH155 Chain2



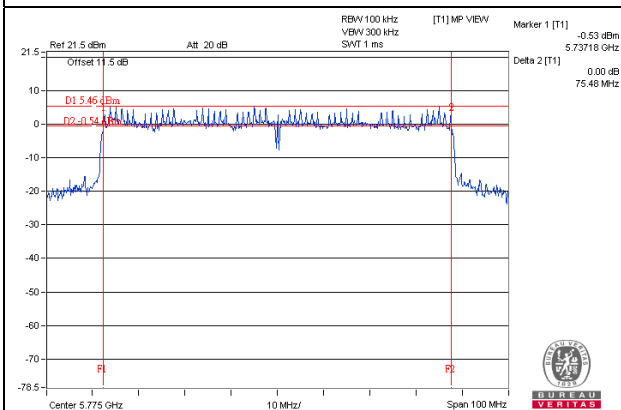
11ac (80MHz) 1S4T CDD CH155 Chain3



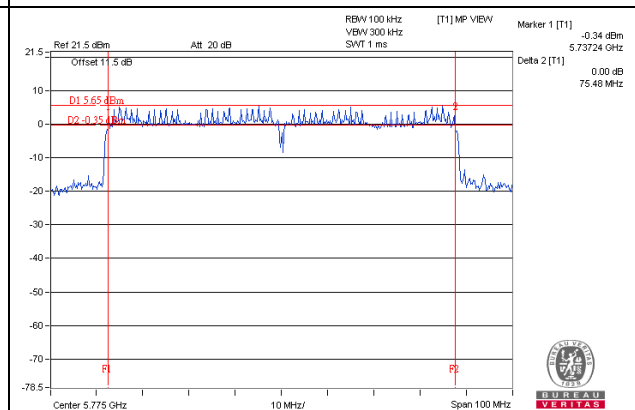
11ac (80MHz) 1S4T CDD CH155 Chain4



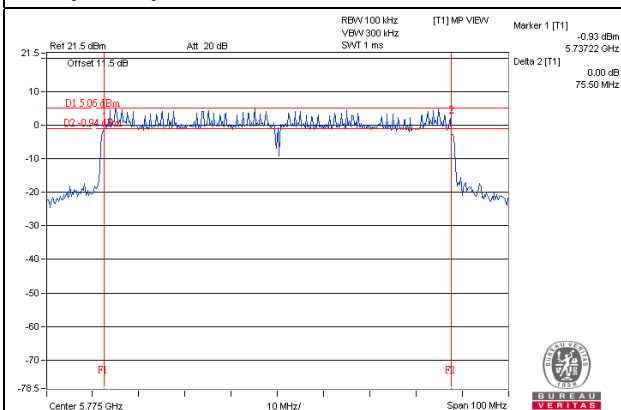
11ac (80MHz) 1S4T TXBF CH155 Chain1



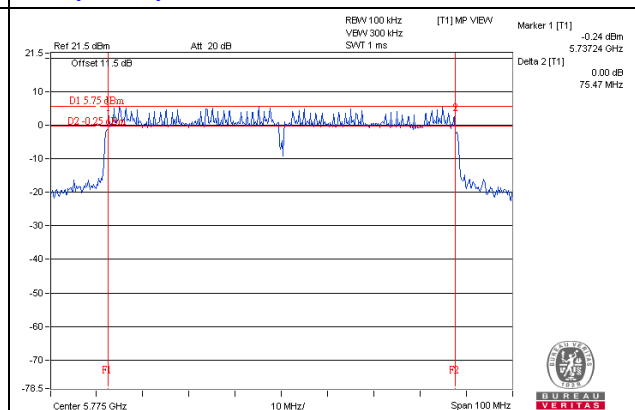
11ac (80MHz) 1S4T TXBF CH155 Chain2



11ac (80MHz) 1S4T TXBF CH155 Chain3



11ac (80MHz) 1S4T TXBF CH155 Chain4



4.4 Maximum Conducted Output Power Measurement

4.4.1 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.

4.4.2 Measuring Instruments and Setting

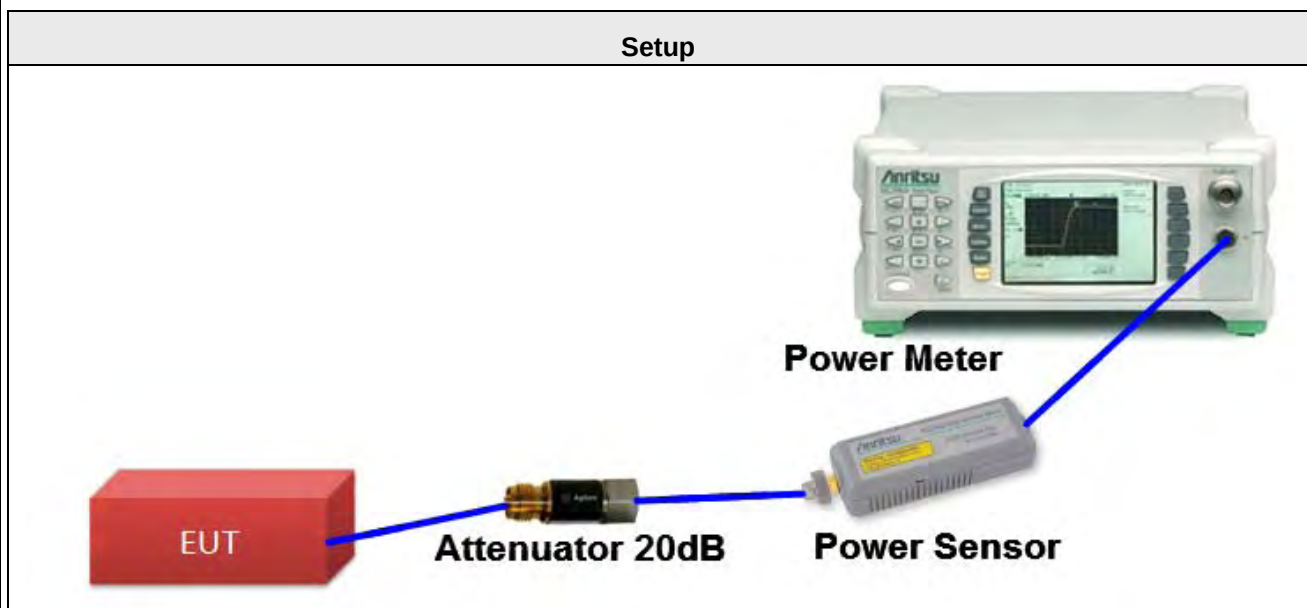
Please refer to section 5 of equipments list in this report. The following table is the setting of the power meter.

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

4.4.3 Test Procedures

- 1 Test was performed in accordance with Measurement of Digital Transmission Systems Operating under 789033 D02 General UNII Test Procedures New Rules v01r03, in section "Maximum conducted output power Method (3)", 08/22/2016
- 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.

4.4.4 Test Setup Layout



4.4.5 Test Deviation

There are no deviations with the original standard.

4.4.6 EUT Operating Conditions

The EUT was programmed to be in continuously transmitting mode.

4.4.7 Test Results of Maximum Conducted Output Power

Temperature	25°C	Humidity	60%
Test Engineer	Leo Tsai		

11a 1S4T CDD

Channel	Frequency	Conducted Power (dBm)				Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3	Chain4				
36	5180 MHz	20.17	19.96	19.92	20.07	26.05	3.27	30.00	PASS
40	5200 MHz	20.01	19.78	19.86	20.11	25.96	3.34	30.00	PASS
48	5240 MHz	20.22	20.07	20.03	20.25	26.16	3.07	30.00	PASS
149	5745 MHz	19.85	19.97	19.67	20.04	25.91	4.02	30.00	PASS
157	5785 MHz	19.93	19.70	19.65	19.68	25.76	3.64	30.00	PASS
165	5825 MHz	19.70	19.65	19.28	19.62	25.59	3.90	30.00	PASS

11ac (20MHz) 1S4T CDD

Channel	Frequency	Conducted Power (dBm)				Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3	Chain4				
36	5180 MHz	20.32	20.16	20.41	20.71	26.43	3.27	30.00	PASS
40	5200 MHz	20.25	20.15	20.08	20.53	26.28	3.34	30.00	PASS
48	5240 MHz	20.24	20.12	20.01	20.66	26.29	3.07	30.00	PASS
149	5745 MHz	19.89	20.19	19.82	20.19	26.05	4.02	30.00	PASS
157	5785 MHz	19.75	19.82	19.75	20.17	25.90	3.64	30.00	PASS
165	5825 MHz	19.72	19.75	19.37	19.94	25.72	3.90	30.00	PASS

11ac (20MHz) 1S4T TxBF

Channel	Frequency	Conducted Power (dBm)				Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3	Chain4				
36	5180 MHz	20.86	20.36	20.59	20.83	26.69	6.89	29.11	PASS
40	5200 MHz	20.36	20.00	20.31	20.67	26.36	6.94	29.06	PASS
48	5240 MHz	20.24	20.12	20.01	20.66	26.29	6.38	29.62	PASS
149	5745 MHz	19.76	20.11	19.71	20.03	25.93	6.31	29.69	PASS
157	5785 MHz	19.38	19.74	19.53	20.36	25.79	5.92	30.00	PASS
165	5825 MHz	20.35	19.80	19.77	20.16	26.05	6.22	29.78	PASS

- Note: 1. For 5180MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 6.89\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (6.89 - 6) = 29.11\text{dBm}$.
2. For 5200MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 6.94\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (6.94 - 6) = 29.06\text{dBm}$.
3. For 5240MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 6.38\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (6.38 - 6) = 29.62\text{dBm}$.
4. For 5745MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 6.31\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (6.31 - 6) = 29.69\text{dBm}$.
5. For 5785MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 5.92\text{dBi} < 6\text{dBi}$, so the power limit shall not be reduced.
6. For 5825MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 6.22\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (6.22 - 6) = 29.78\text{dBm}$.

11ac (40MHz) 1S4T CDD

Channel	Frequency	Conducted Power (dBm)				Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3	Chain4				
38	5190 MHz	17.13	16.93	16.97	17.66	23.20	3.37	30.00	PASS
46	5230 MHz	20.74	20.65	20.44	20.91	26.71	3.09	30.00	PASS
151	5755 MHz	20.47	20.58	20.48	20.72	26.58	4.96	30.00	PASS
159	5795 MHz	20.11	20.81	20.23	20.49	26.44	3.47	30.00	PASS

11ac (40MHz) 1S4T TxBF

Channel	Frequency	Conducted Power (dBm)				Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3	Chain4				
38	5190 MHz	15.87	16.00	16.17	16.38	22.13	6.99	29.01	PASS
46	5230 MHz	20.38	20.46	20.58	21.10	26.66	6.25	29.75	PASS
151	5755 MHz	20.83	20.76	20.57	20.61	26.71	7.08	28.92	PASS
159	5795 MHz	20.34	20.71	20.43	20.57	26.54	5.89	30.00	PASS

- Note: 1. For 5190MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 6.99\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (6.99 - 6) = 29.01\text{dBm}$.
2. For 5230MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 6.25\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (6.25 - 6) = 29.75\text{dBm}$.
4. For 5755MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 7.08\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (7.08 - 6) = 28.92\text{dBm}$.
5. For 5795MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 5.89\text{dBi} < 6\text{dBi}$, so the power limit shall not be reduced.

11ac (80MHz) 1S4T CDD

Channel	Frequency	Conducted Power (dBm)				Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3	Chain4				
42	5210	16.92	16.67	16.72	17.1	22.88	3.47	30.00	PASS
155	5775	19.99	20.33	19.84	20.05	26.08	4.34	30.00	PASS

11ac (80MHz) 1S4T TxBF

Channel	Frequency	Conducted Power (dBm)				Total Conducted Power (dBm)	Directional Gain(dBi)	MAX. Limit (dBm)	Result
		Chain1	Chain2	Chain3	Chain4				
42	5210	17.01	16.53	16.84	16.97	22.86	6.73	29.27	PASS
155	5775	20.13	20.21	20.08	19.88	26.10	6.49	29.51	PASS

Note: 1. For 5210MHz: Directional gain = $10 \log[(10^{G^1/20} + 10^{G^2/20} + \dots + 10^{G^N/20})^2/4] = 6.73\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (6.73 - 6) = 29.27\text{dBm}$.

2. For 5775MHz: Directional gain = $10 \log[(10^{G^1/20} + 10^{G^2/20} + \dots + 10^{G^N/20})^2/4] = 6.49\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (6.49 - 6) = 29.51\text{dBm}$.

4.5 Power Spectral Density Measurement

4.5.1 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: $22.78\text{dBm}/300\text{kHz} = 30\text{dBm}/500\text{kHz} - 10\log\left(\frac{500\text{kHz}}{300\text{kHz}}\right)$

4.5.2 Measuring Instruments and Setting

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

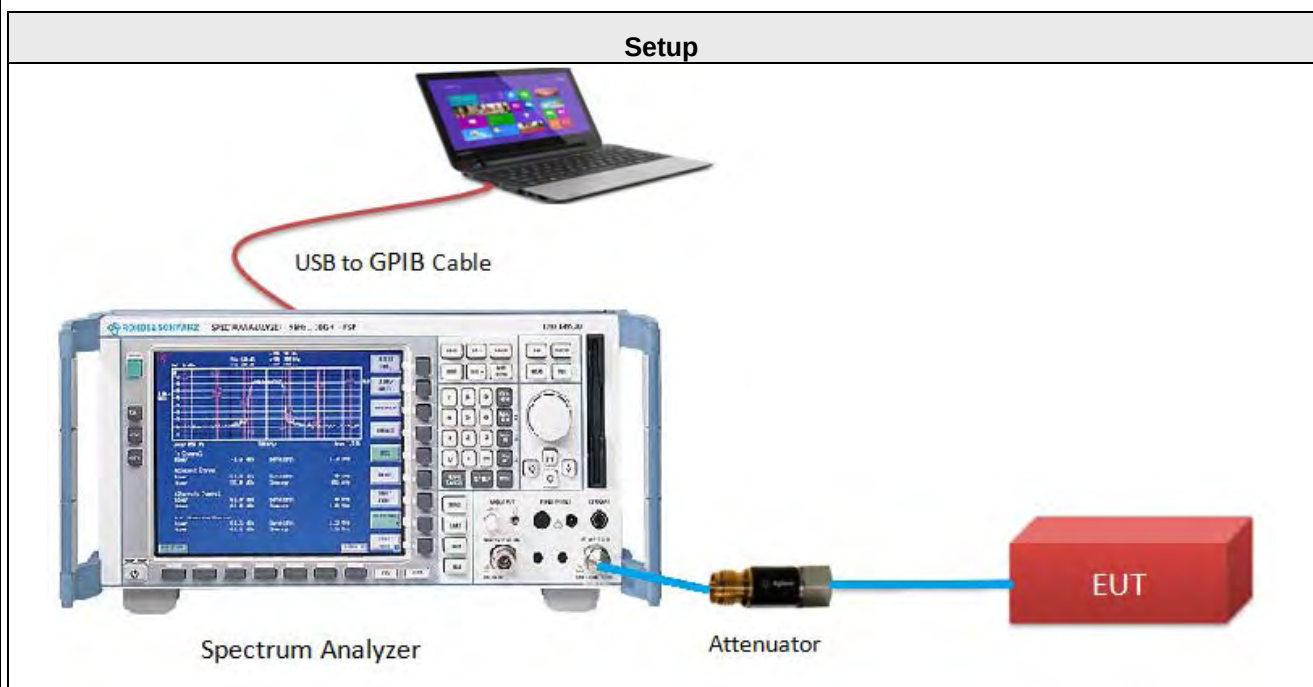
For U-NII-3 band:

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

4.5.3 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 v01r03, in section "Maximum conducted output power (E)(2)(d) Method SA-2", 08/22/2016.
- 3 For U-NII-3 Band, PSD Measure was performed in accordance with 789033 D02 General UNII Test Procedures New Rules v01r03, in section "Maximum Power Spectral Density (F)(5)", 08/22/2016
- 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 frequency bin of the summed spectrum.
- 6 The summed spectrum value for each of the other frequency bins is computed in the same way.

4.5.4 Test Setup Layout



4.5.5 Test Deviation

There are no deviations with the original standard.

4.5.6 EUT Operating Conditions

The EUT was programmed to be in continuously transmitting mode.

4.5.7 Test Results

Temperature	25°C	Humidity	60%
Test Engineer	Leo Tsai		

CDD

For U-NII-1 Band

11a 1S4T CDD

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD With Duty Factor (dBm/MHz)	Directional Gain(dBi)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3					
36	5180	7.55	6.85	7.08	7.46	0.57	13.83	6.89	16.11	Pass
40	5200	7.60	6.48	7.12	7.33	0.57	13.74	6.94	16.06	Pass
48	5240	7.39	7.02	6.68	7.08	0.57	13.64	6.38	16.62	Pass

- Note: 1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. For 5180MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 6.89\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $17-(6.89-6) = 16.11\text{dBm}$.
3. For 5200MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 6.94\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $17-(6.94-6) = 16.06\text{dBm}$.
4. For 5240MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 6.38\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $17-(6.38-6) = 16.62\text{dBm}$.
- 5 Refer to section 3.14 for duty cycle spectrum plot.

11ac (20MHz) 1S4T CDD

Chan.	Freq. (MHz)	PSD (dBm/MHz)				Total PSD (dBm/MHz)	Directional Gain(dBi)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
36	5180	7.81	6.42	7.03	7.29	13.19	6.89	16.11	Pass
40	5200	7.47	7.12	6.69	7.24	13.16	6.94	16.06	Pass
48	5240	7.57	6.99	6.66	7.08	13.11	6.38	16.62	Pass

- Note: 1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. For 5180MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 6.89\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $17-(6.89-6) = 16.11\text{dBm}$.
3. For 5200MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 6.94\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $17-(6.94-6) = 16.06\text{dBm}$.
4. For 5240MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 6.38\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $17-(6.38-6) = 16.62\text{dBm}$.

11ac (40MHz) 1S4T CDD

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD With Duty Factor (dBm/MHz)	Directional Gain(dBi)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3					
38	5190	1.15	0.55	0.54	0.50	0.09	13.83	6.81	16.01	Pass
46	5230	4.90	3.78	3.90	4.56	0.09	13.74	10.43	16.75	Pass

- Note: 1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. For 5190MHz: Directional gain = $10 \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2/4] = 6.99\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $17-(6.99-6) = 16.01\text{dBm}$.
3. For 5230MHz: Directional gain = $10 \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2/4] = 6.25\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $17-(6.25-6) = 16.75\text{dBm}$.
4. Refer to section 3.14 for duty cycle spectrum plot.

11ac (80MHz) 1S4T CDD

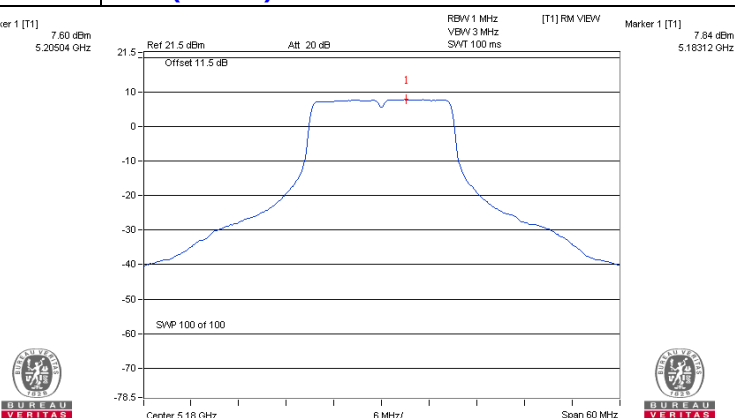
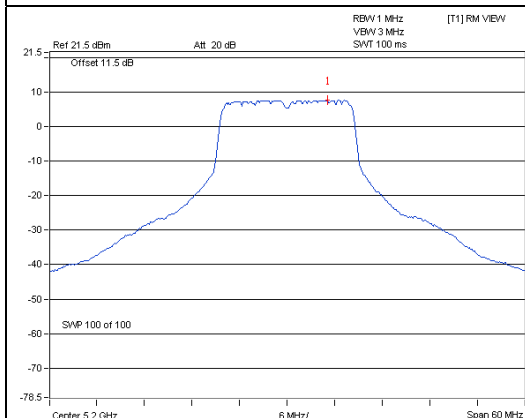
Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD With Duty Factor (dBm/MHz)	Directional Gain(dBi)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3					
42	5210	-1.67	-1.10	-1.86	-1.73	0.27	4.71	16.27	16.01	Pass

- Note: 1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. For 5210MHz: Directional gain = $10 \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2/4] = 6.73\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $17-(6.73-6) = 16.27\text{dBm}$.
3. Refer to section 3.14 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

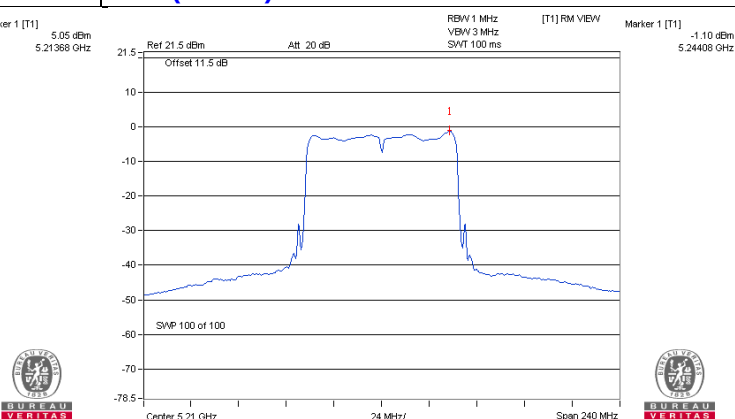
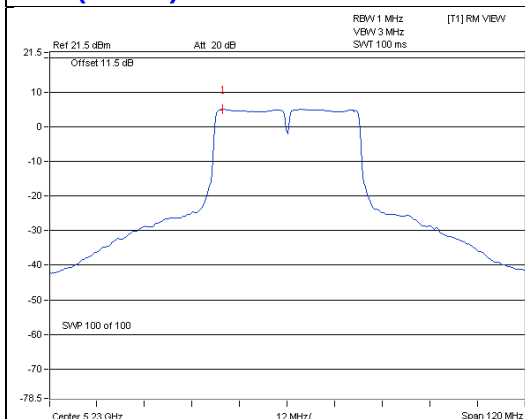
802.11a 4Tx Chain0 5200 MHz

11ac (20MHz) 4Tx Chain0 5180 MHz



11ac (40MHz) 4Tx Chain0 5230 MHz

11ac (80MHz) 4Tx Chain1 5210 MHz



For U-NII-3 Band

11a 1S4T CDD

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)								Duty Factor (dB)	Total PSD With Duty Factor (dBm/ 500kHz)	Directional Gain(dBi)	Max. Limit (dBm/ MHz)	Pass / Fail
		(dBm/300kHz)				(dBm/500kHz)								
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3					
149	5745	-0.29	-0.62	-1.15	-0.96	1.93	1.60	1.07	1.26	0.57	8.07	6.31	29.69	Pass
157	5785	-0.43	-0.58	-1.02	-0.90	1.79	1.64	1.20	1.32	0.57	8.08	5.92	30.00	Pass
165	5825	-0.78	0.00	-1.31	-1.34	1.44	2.22	0.91	0.88	0.57	7.99	6.22	29.78	Pass

- Note: 1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. For 5745MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 6.31\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $30-(6.31-6) = 29.69\text{dBm}$.
3. For 5785MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 5.92\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.
4. For 5825MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 6.22\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $30-(6.22-6) = 29.78\text{dBm}$.
- 5 Refer to section 3.14 for duty cycle spectrum plot.

11ac (20MHz) 1S4T CDD

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)								Total PSD (dBm/ 500kHz)	Directional Gain(dBi)	Max. Limit (dBm/ MHz)	Pass / Fail
		(dBm/300kHz)				(dBm/500kHz)							
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3				
149	5745	-0.24	-0.52	-1.08	-0.75	1.98	1.70	1.14	1.47	7.60	6.31	29.69	Pass
157	5785	-0.55	-0.25	-0.95	-0.69	1.67	1.97	1.27	1.53	7.64	5.92	30.00	Pass
165	5825	-0.48	0.01	-1.11	-0.97	1.74	2.23	1.11	1.25	7.62	6.22	29.78	Pass

- Note: 1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. For 5745MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 6.31\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $30-(6.31-6) = 29.69\text{dBm}$.
3. For 5785MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 5.92\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.
4. For 5825MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 6.22\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $30-(6.22-6) = 29.78\text{dBm}$.

11ac (40MHz) 1S4T CDD

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)								Duty Factor (dB)	Total PSD With Duty Factor (dB/ 500kHz)	Directional Gain(dBi)	Max. Limit (dB/ MHz)	Pass / Fail
		(dBm/300kHz)				(dBm/500kHz)								
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3					
151	5755	-3.49	-3.84	-4.50	-4.06	-1.27	-1.62	-2.28	-1.27	0.09	4.38	7.08	28.92	Pass
159	5795	-3.45	-3.12	-4.25	-3.90	-1.23	-0.90	-2.03	-1.23	0.09	4.68	5.89	30.00	Pass

- Note: 1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. For 5755MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 7.08\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $30-(7.08-6) = 28.92\text{dBm}$.
3. For 5795MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 5.89\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.
4. Refer to section 3.14 for duty cycle spectrum plot.

11ac (80MHz) 1S4T CDD

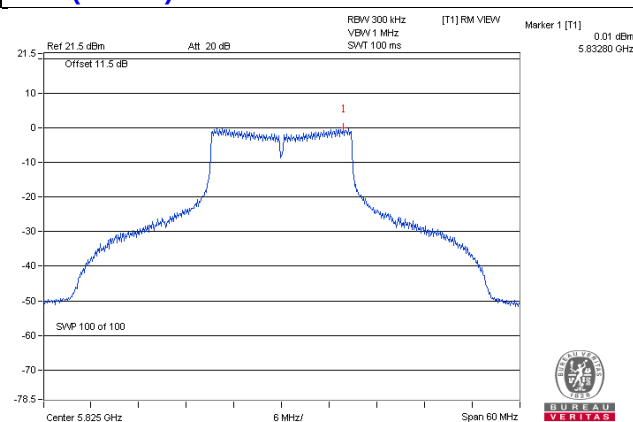
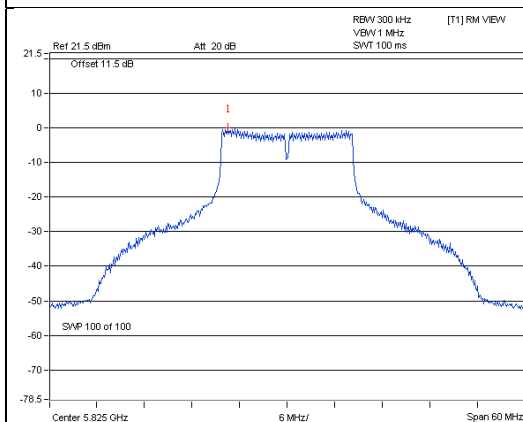
Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)								Duty Factor (dB)	Total PSD With Duty Factor (dB/ 500kHz)	Directional Gain(dBi)	Max. Limit (dBm/ MHz)	Pass / Fail
		(dBm/300kHz)				(dBm/500kHz)								
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3					
155	5775	-6.86	-6.69	-7.64	-7.19	-4.64	-4.47	-5.42	-4.97	0.27	1.43	6.49	29.51	Pass

- Note: 1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. For 5775MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 6.49\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $30-(6.49-6) = 29.51\text{dBm}$.
3. Refer to section 3.14 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

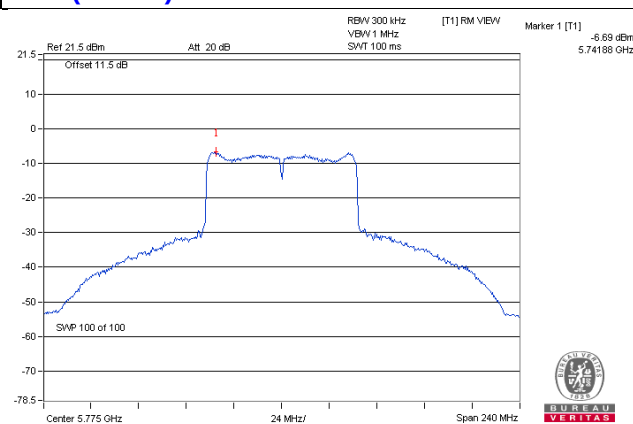
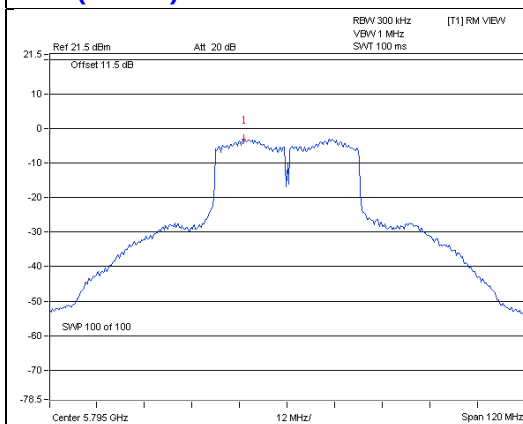
802.11a 1S4T CDD Chain1 5825 MHz

11ac (20MHz) 1S4T CDD Chain1 5825 MHz



11ac (40MHz) 1S4T CDD Chain1 5795 MHz

11ac (80MHz) 1S4T CDD Chain1 5775 MHz



Beamforming

For U-NII-1 Band

11ac (20MHz) 1S4T TxBF

Chan.	Freq. (MHz)	PSD (dBm/MHz)				Total PSD (dBm/MHz)	Directional Gain(dBi)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
36	5180	7.95	6.53	7.14	7.79	13.41	6.89	16.11	Pass
40	5200	7.81	7.27	7.03	7.22	13.36	6.94	16.06	Pass
48	5240	7.91	7.41	7.30	7.12	13.47	6.38	16.62	Pass

- Note: 1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. For 5180MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 6.89\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $17-(6.89-6) = 16.11\text{dBm}$.
3. For 5200MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 6.94\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $17-(6.94-6) = 16.06\text{dBm}$.
4. For 5240MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 6.38\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $17-(6.38-6) = 16.62\text{dBm}$.

11ac (40MHz) 1S4T TxBF

Chan.	Freq. (MHz)	PSD (dBm/MHz)				Total PSD (dBm/MHz)	Directional Gain(dBi)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
38	5190	0.79	-0.59	-0.01	0.18	6.14	6.99	16.01	Pass
46	5230	4.69	4.84	4.15	4.78	10.64	6.25	16.75	Pass

- Note: 1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. For 5190MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 6.99\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $17-(6.99-6) = 16.01\text{dBm}$.
3. For 5230MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 6.25\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $17-(6.25-6) = 16.75\text{dBm}$.

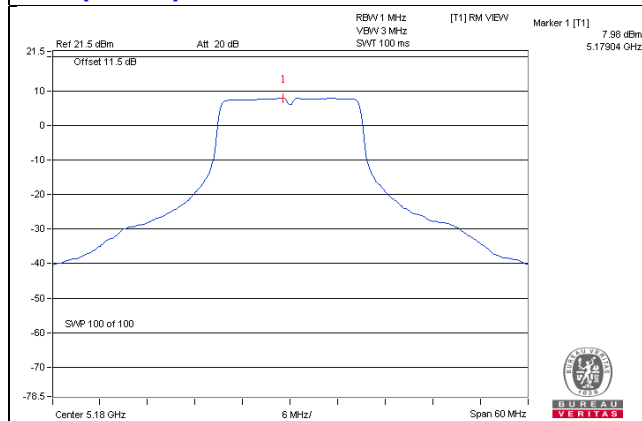
11ac (80MHz) 1S4T TxBF

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD With Duty Factor (dBm/MHz)	Directional Gain(dBi)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3					
42	5210	-0.36	-0.41	-0.72	-0.36	0.27	5.92	6.73	16.27	Pass

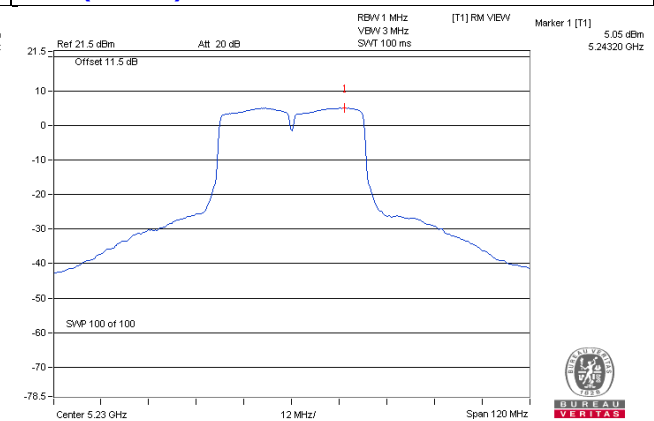
- Note: 1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. For 5210MHz: Directional gain = $10 \log[(10G_1/20 + 10G_2/20 + \dots + 10G_N/20)^{2/4}] = 6.73\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $17-(6.73-6) = 16.27\text{dBm}$.
3. Refer to section 3.14 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

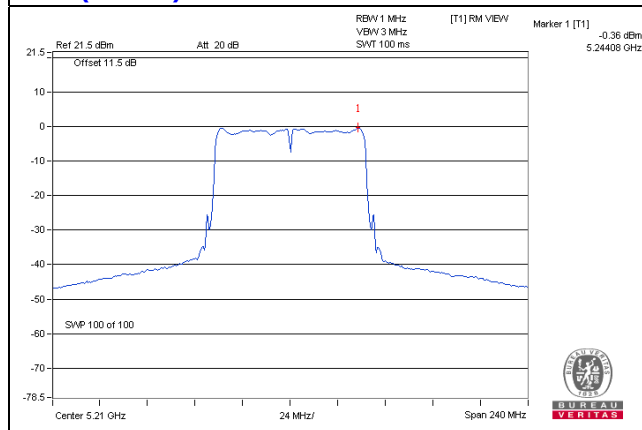
11ac (20MHz) 1S4T TxBF Chain0 5180 MHz



11ac (40MHz) 1S4T TxBF Chain1 5230 MHz



11ac (80MHz) 1S4T TxBF Chain0 5210 MHz



For U-NII-3 Band

11ac (20MHz) 1S4T xBF

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)								Total PSD (dBm/ 500kHz)	Directional Gain(dBi)	Max. Limit (dBm/ MHz)	Pass / Fail
		(dBm/300kHz)				(dBm/500kHz)							
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3				
149	5745	-0.35	-0.35	-1.09	-0.81	1.87	1.87	1.13	1.41	7.60	6.31	29.69	Pass
157	5785	-0.48	-0.23	-1.02	-0.88	1.74	1.99	1.20	1.34	7.60	5.92	30.00	Pass
165	5825	-0.47	-0.14	-1.16	-0.99	1.75	2.08	1.06	1.23	7.57	6.22	29.78	Pass

- Note: 1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. For 5745MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 6.31\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $30-(6.31-6) = 29.69\text{dBm}$.
3. For 5785MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 5.92\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.
4. For 5825MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 6.22\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $30-(6.22-6) = 29.78\text{dBm}$.

11ac (40MHz) 1S4T xBF

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)								Total PSD (dBm/ 500kHz)	Directional Gain(dBi)	Max. Limit (dBm/ MHz)	Pass / Fail
		(dBm/300kHz)				(dBm/500kHz)							
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3				
151	5755	-3.53	-3.89	-4.49	-3.97	-1.31	-1.67	-2.27	-1.75	4.28	7.08	28.92	Pass
159	5795	-3.44	-3.68	-4.49	-4.07	-1.22	-1.46	-2.27	-1.85	4.34	5.89	30.00	Pass

- Note: 1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. For 5755MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 7.08\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $30-(7.08-6) = 28.92\text{dBm}$.
3. For 5795MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 5.89\text{dBi} < 6\text{dBi}$, so the power density limit shall not be reduced.

11ac (80MHz) 1S4T xBF

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)								Duty Factor (dB)	Total PSD With Duty Factor (dBm/ 500kHz)	Directional Gain(dBi)	Max. Limit (dBm/ MHz)	Pass / Fail
		(dBm/300kHz)				(dBm/500kHz)								
		Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3					
155	5775	-6.90	-6.60	-7.76	-7.09	-4.68	-4.38	-5.54	-4.87	0.27	1.45	6.49	29.51	Pass

- Note: 1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. For 5775MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 6.49\text{dBi} > 6\text{dBi}$, therefore the limit shall be reduced to $30-(6.49-6) = 29.51\text{dBm}$.
3. Refer to section 3.14 for duty cycle spectrum plot.



4.6 Radiated Emission and Bandedge Measurement

4.6.1 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

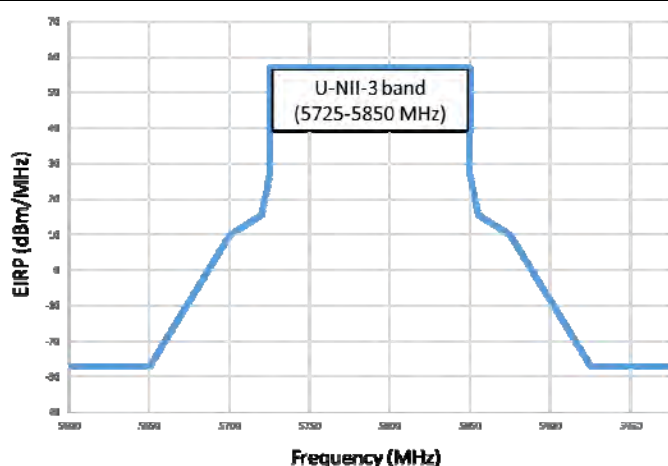
NOTE:

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.

4.6.2 Limits of Unwanted emissions out of the restricted bands

Applicable To		Limit	
789033 D02 General UNII Test Procedure		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.
^{*2} below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above.
^{*3} below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 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.



15.407 new rule(FCC16-24)	
Frequency	Limit(dBm/MHz)
5460	-27
5650	-27
5700	10
5720	15.6
5725	27
5725	N/A
5850	27
5855	15.6
5875	10
5925	-27
7250	-27

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

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

4.6.3 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 r03 G. 6. d) Method VB.

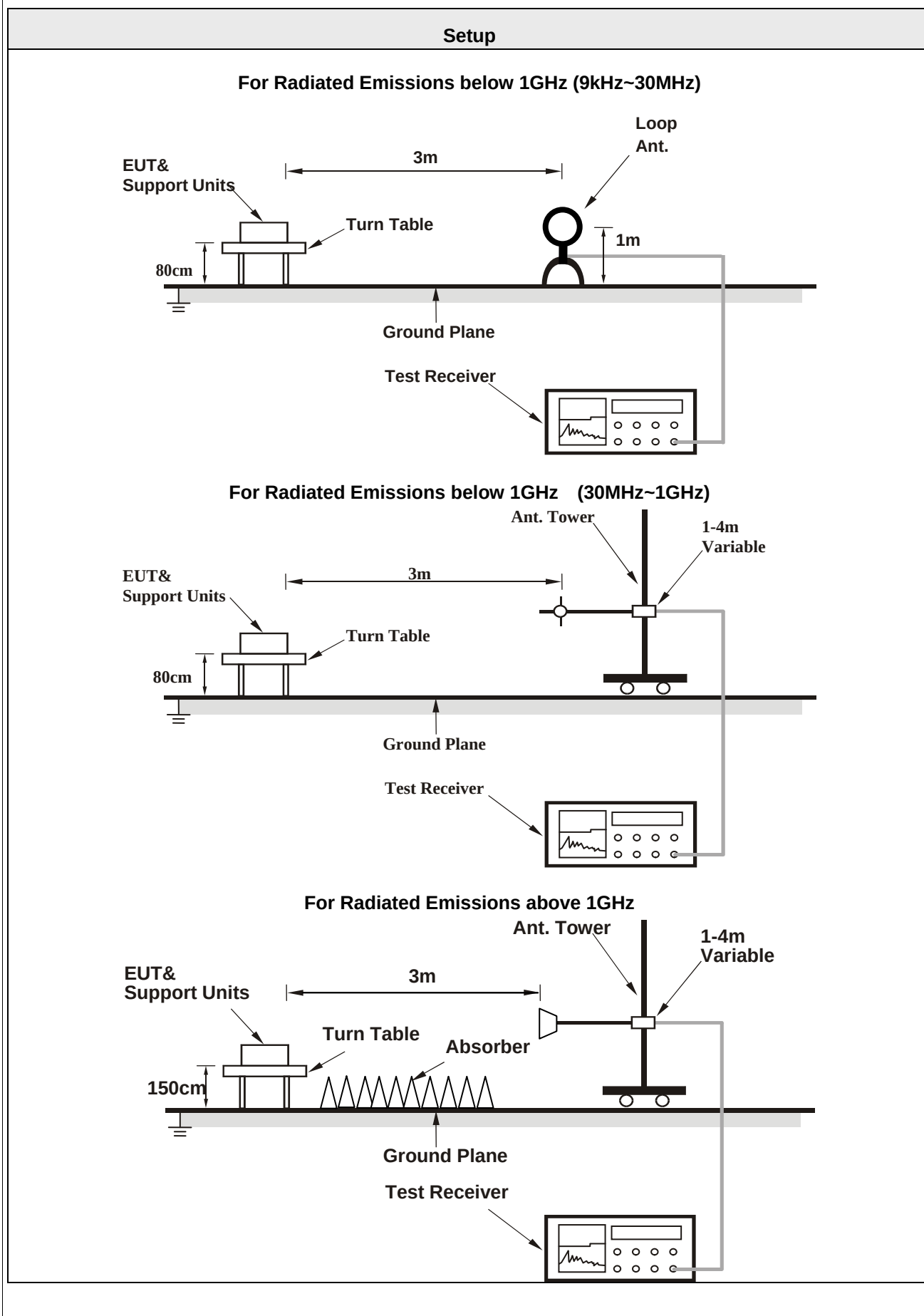
- As an alternative, the analyzer may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some analyzers require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set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

4.6.4 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.

4.6.5 Test Setup Layout



4.6.6 Test Deviation

There are no deviations with the original standard.

4.6.7 EUT Operating Conditions

The EUT was programmed to be in continuously transmitting mode.

4.6.8 Test Results of Radiated Emissions and Bandedge

Temperature	25°C	Humidity	69%
Test Engineer	Bond Tseng		

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

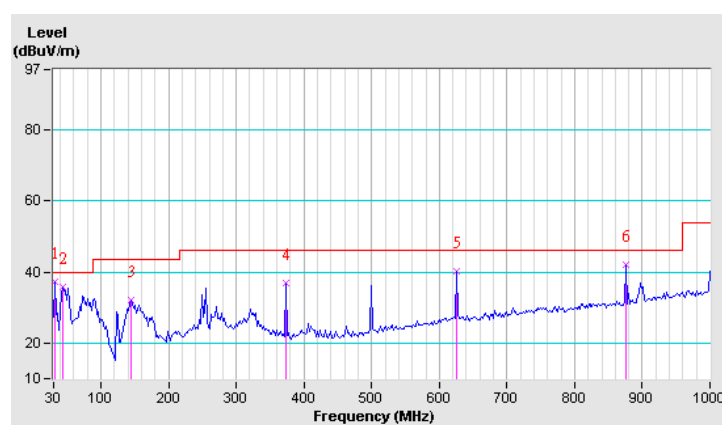
802.11ac (40MHz)

CHANNEL	TX Channel 151	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	31.94	37.2 QP	40.0	-2.8	2.00 H	15	53.20	-16.00
2	43.61	35.8 QP	40.0	-4.2	2.00 H	294	50.20	-14.40
3	144.69	32.0 QP	43.5	-11.5	2.00 H	279	45.50	-13.50
4	374.07	37.0 QP	46.0	-9.0	1.00 H	83	46.40	-9.40
5	624.83	40.1 QP	46.0	-5.9	1.24 H	235	43.20	-3.10
6	875.59	42.2 QP	46.0	-3.8	1.50 H	274	40.00	2.20

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

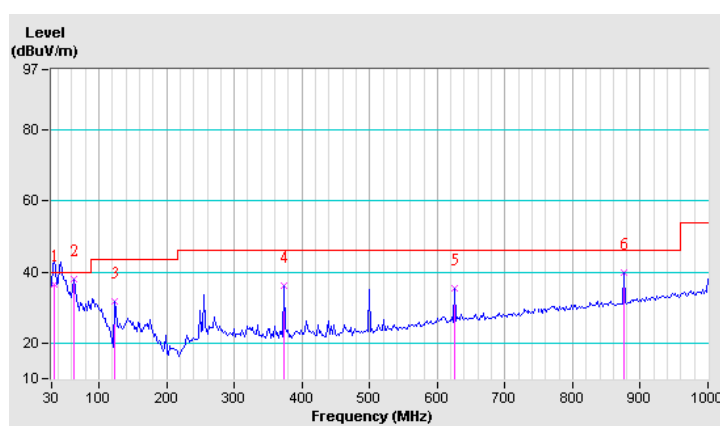


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

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	33.89	36.6 QP	40.0	-3.4	1.01 V	212	52.10	-15.50
2	63.05	37.9 QP	40.0	-2.1	1.26 V	183	52.70	-14.80
3	123.31	31.7 QP	43.5	-11.8	1.01 V	20	47.20	-15.50
4	374.07	36.2 QP	46.0	-9.8	1.26 V	334	45.60	-9.40
5	624.83	35.4 QP	46.0	-10.6	1.01 V	280	38.50	-3.10
6	875.59	39.9 QP	46.0	-6.1	1.01 V	188	37.70	2.20

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



Radiated Emission Range 1GHz~10th Harmonic

CDD Mode

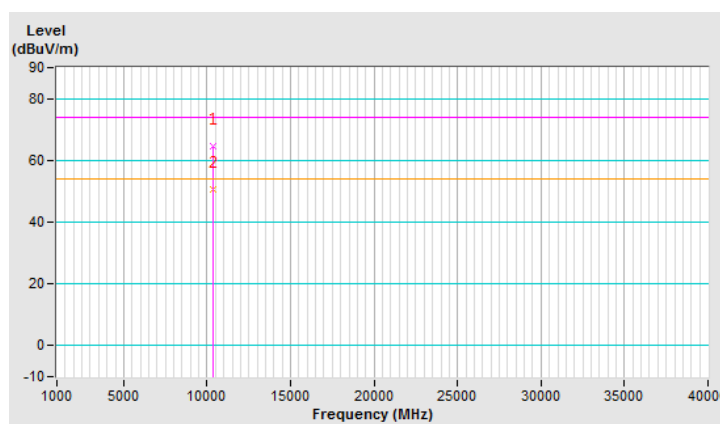
802.11ac (20MHz) 1S4T CDD MCS0

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	64.4 PK	74.0	-9.6	2.48 H	290	50.30	14.10
2	#10360.00	50.7 AV	54.0	-3.3	2.48 H	290	36.60	14.10

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.

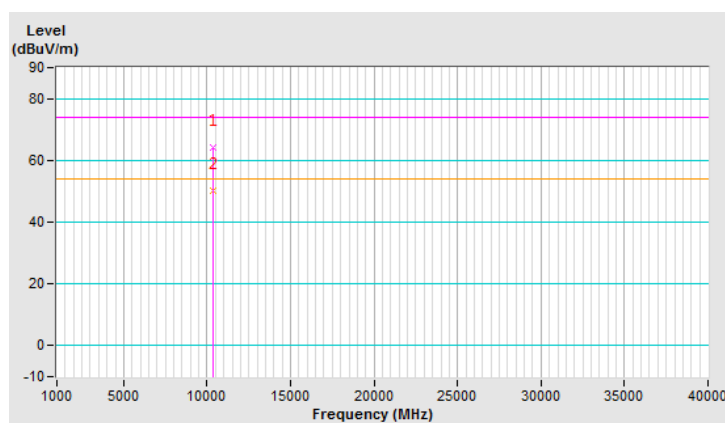


CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	64.3 PK	74.0	-9.7	1.69 V	292	50.20	14.10
2	#10360.00	50.2 AV	54.0	-3.8	1.69 V	292	36.10	14.10

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.

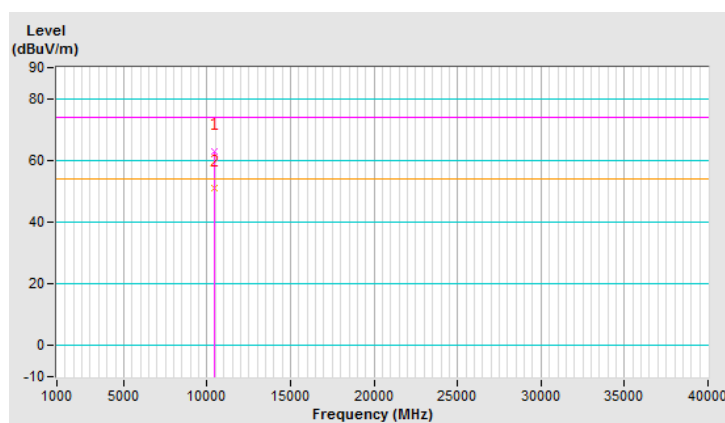


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	62.9 PK	74.0	-11.1	1.83 H	235	48.50	14.40
2	#10400.00	51.1 AV	54.0	-2.9	1.83 H	235	36.70	14.40

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. " # ": The radiated frequency is out of the restricted band.

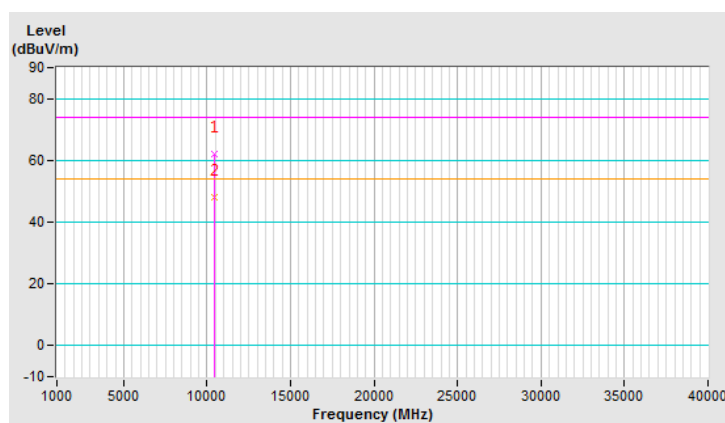


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	61.9 PK	74.0	-12.1	1.82 V	66	47.50	14.40
2	#10400.00	48.2 AV	54.0	-5.8	1.82 V	66	33.80	14.40

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. " # ": The radiated frequency is out of the restricted band.

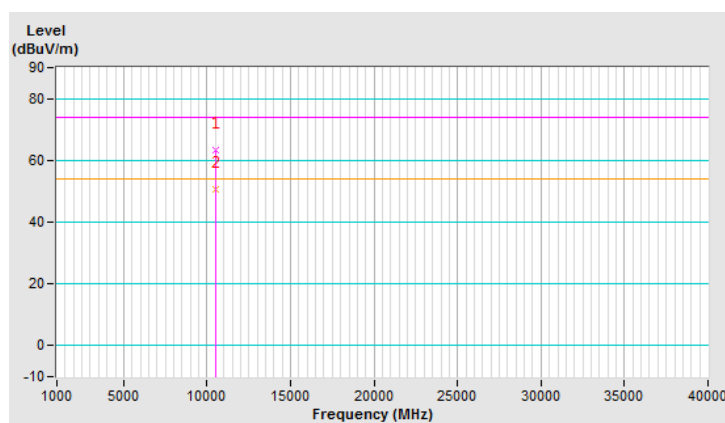


CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	63.4 PK	74.0	-10.6	2.51 H	177	49.30	14.10
2	#10480.00	50.8 AV	54.0	-3.2	2.51 H	177	36.70	14.10

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.

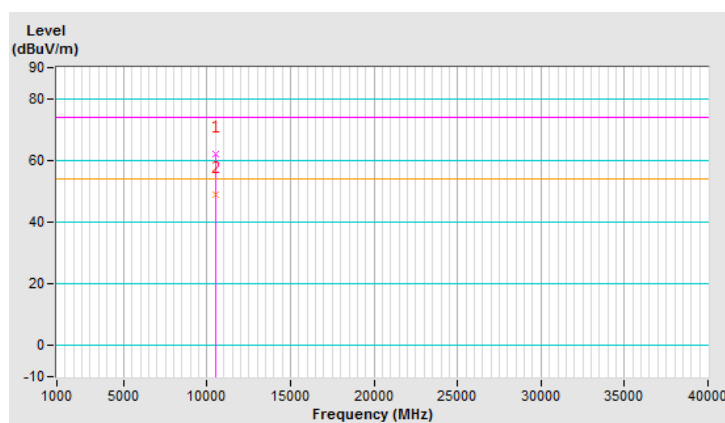


CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	61.9 PK	74.0	-12.1	1.57 V	263	47.80	14.10
2	#10480.00	48.8 AV	54.0	-5.2	1.57 V	263	34.70	14.10

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.

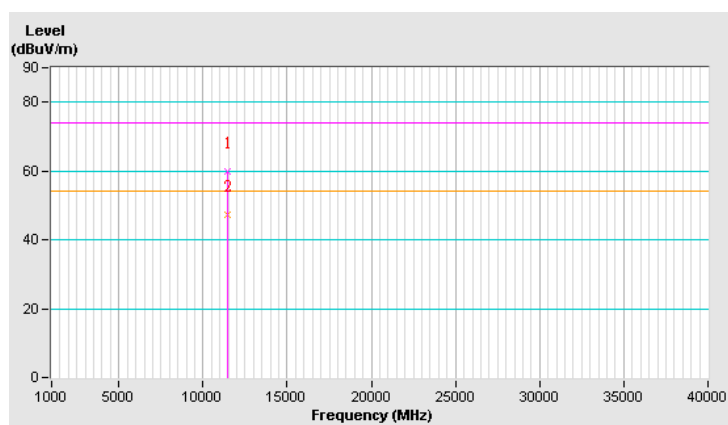


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	60.0 PK	74.0	-14.0	1.56 H	19	45.30	14.70
2	11490.00	47.1 AV	54.0	-6.9	1.56 H	19	32.40	14.70

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

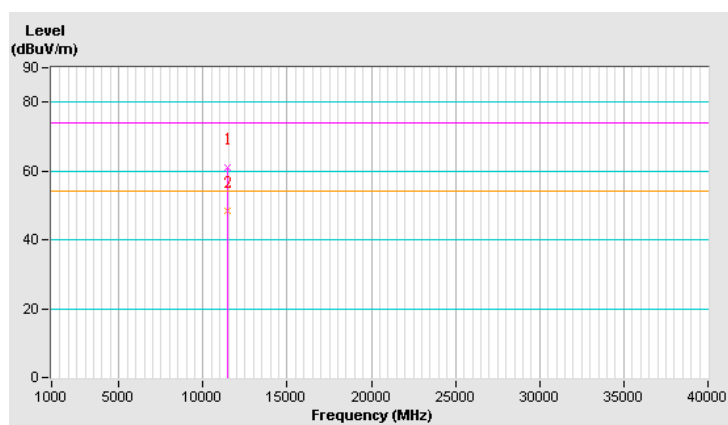


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	60.9 PK	74.0	-13.1	1.47 V	236	46.20	14.70
2	11490.00	48.3 AV	54.0	-5.7	1.47 V	236	33.60	14.70

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

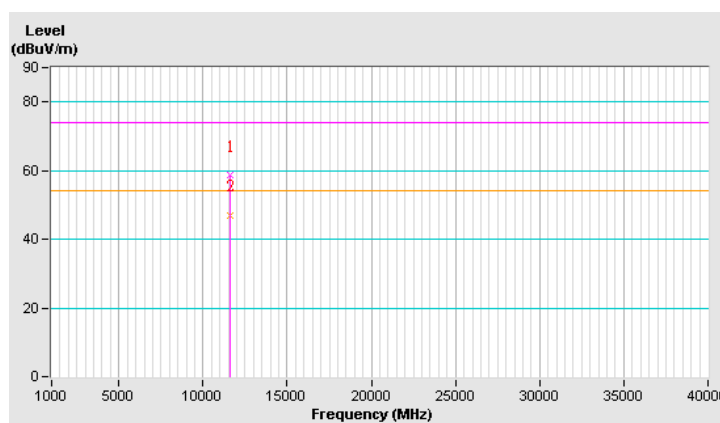


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: 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	58.9 PK	74.0	-15.1	1.56 H	26	44.30	14.60
2	11570.00	47.1 AV	54.0	-6.9	1.56 H	26	32.50	14.60

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.

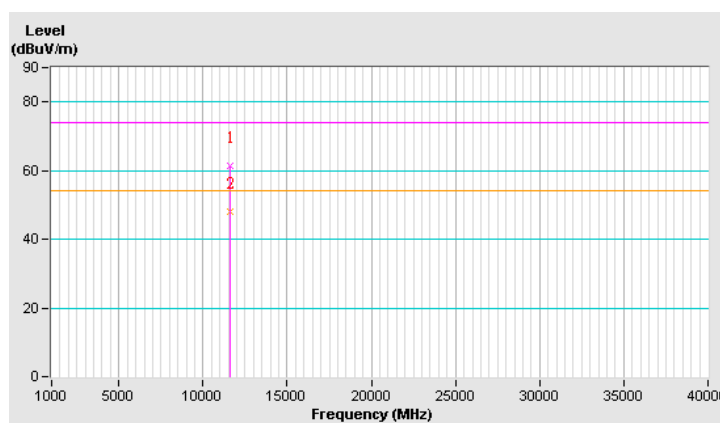


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	61.3 PK	74.0	-12.7	1.15 V	51	46.70	14.60
2	11570.00	48.0 AV	54.0	-6.0	1.15 V	51	33.40	14.60

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.

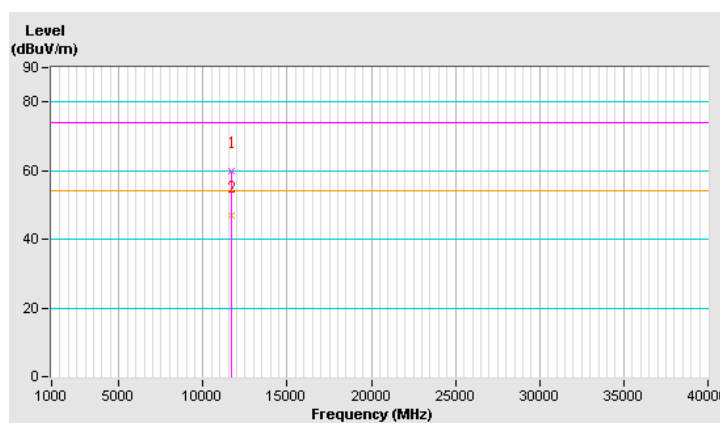


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: 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	59.7 PK	74.0	-14.3	1.56 H	26	45.10	14.60
2	11650.00	47.0 AV	54.0	-7.0	1.56 H	26	32.40	14.60

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.

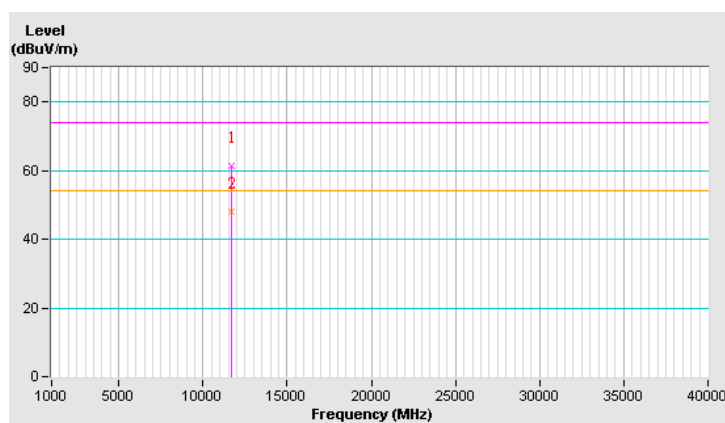


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	61.3 PK	74.0	-12.7	1.52 V	24	46.70	14.60
2	11650.00	48.0 AV	54.0	-6.0	1.52 V	24	33.40	14.60

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



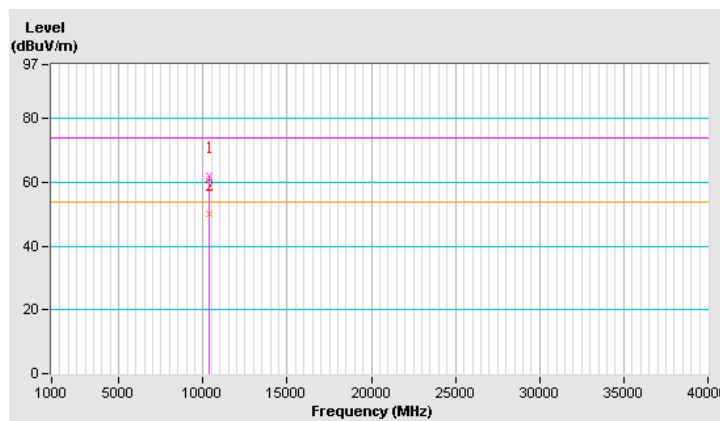
802.11ac (40MHz) 1S4T CDD MCS0

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	61.9 PK	74.0	-12.1	1.72 H	38	47.50	14.40
2	#10380.00	50.1 AV	54.0	-3.9	1.72 H	38	35.70	14.40

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. " # ": The radiated frequency is out of the restricted band.

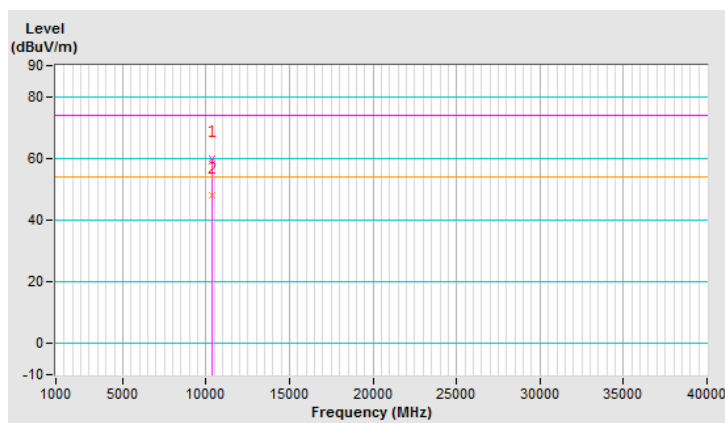


CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	60.0 PK	74.0	-14.0	1.84 V	153	45.60	14.40
2	#10380.00	48.2 AV	54.0	-5.8	1.84 V	153	33.80	14.40

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. " # ": The radiated frequency is out of the restricted band.

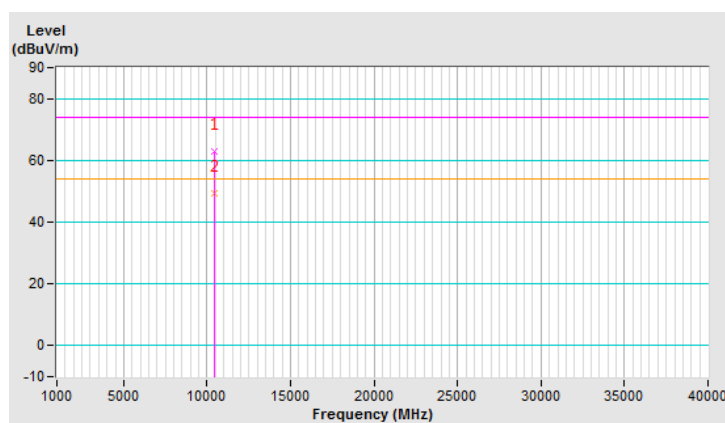


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	62.7 PK	74.0	-11.3	1.98 H	287	48.60	14.10
2	#10460.00	49.2 AV	54.0	-4.8	1.98 H	287	35.10	14.10

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.

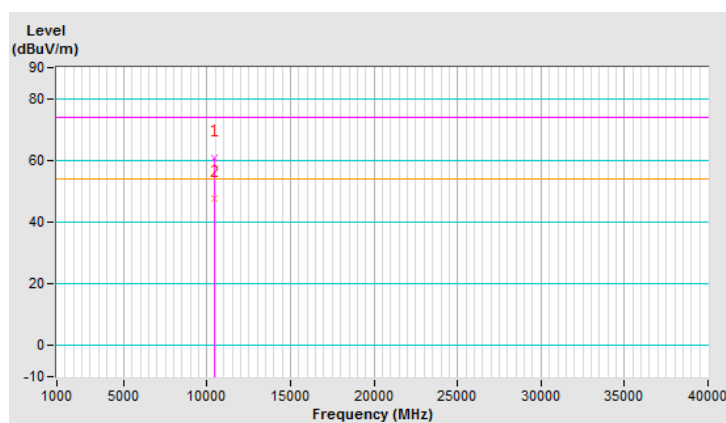


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	60.8 PK	74.0	-13.2	1.99 V	252	46.70	14.10
2	#10460.00	47.8 AV	54.0	-6.2	1.99 V	252	33.70	14.10

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.

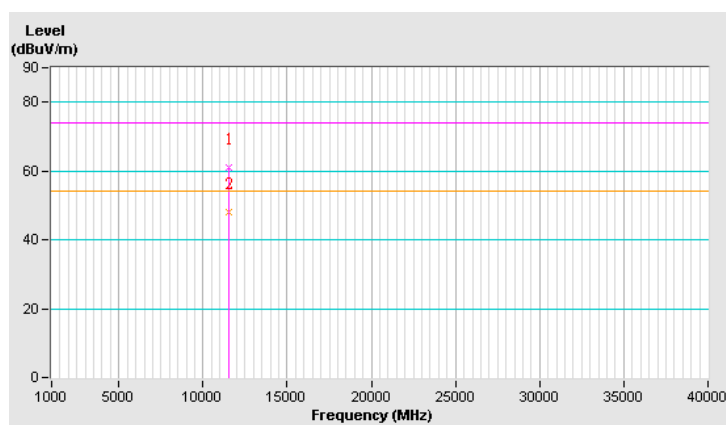


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	61.0 PK	74.0	-13.0	1.71 H	54	46.30	14.70
2	11510.00	48.1 AV	54.0	-5.9	1.71 H	54	33.40	14.70

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

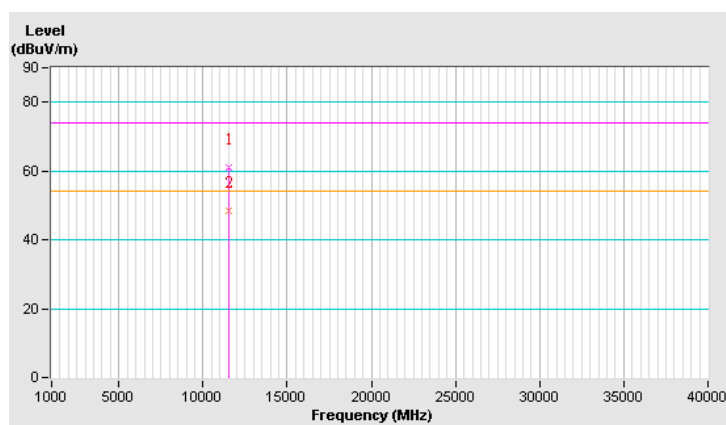


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	61.0 PK	74.0	-13.0	1.44 V	26	46.30	14.70
2	11510.00	48.4 AV	54.0	-5.6	1.44 V	26	33.70	14.70

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

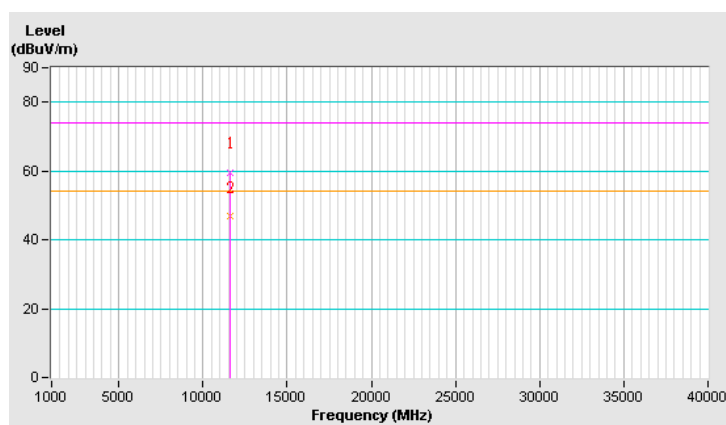


CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	59.7 PK	74.0	-14.3	1.65 H	254	45.20	14.50
2	11590.00	46.9 AV	54.0	-7.1	1.65 H	254	32.40	14.50

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

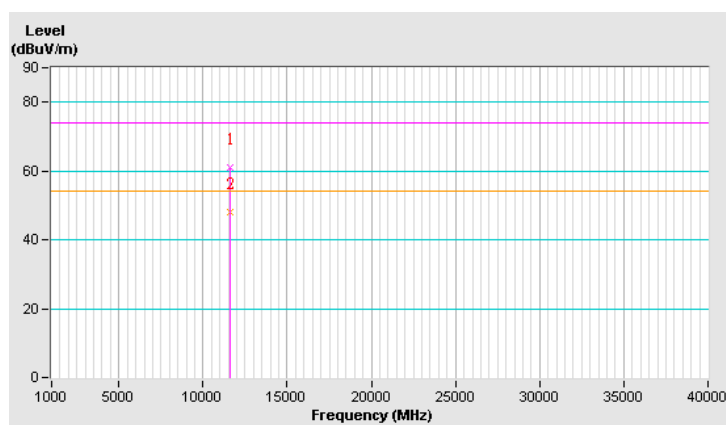


CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	61.2 PK	74.0	-12.8	1.52 V	266	46.70	14.50
2	11590.00	48.2 AV	54.0	-5.8	1.52 V	266	33.70	14.50

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



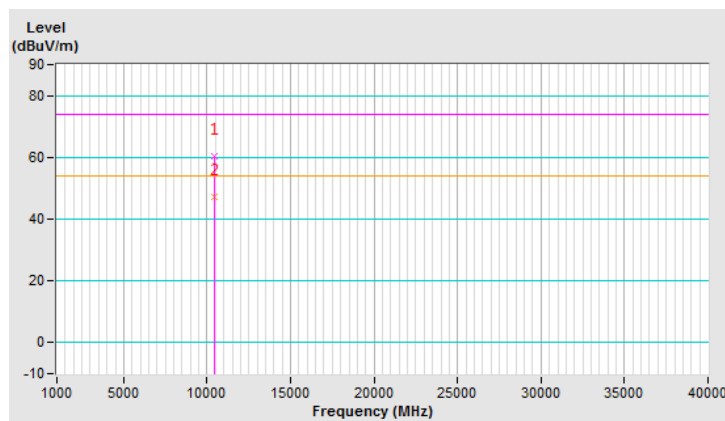
802.11ac (80MHz) 1S4T CDD MCS0

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	60.5 PK	74.0	-13.5	1.85 H	165	46.30	14.20
2	#10420.00	47.3 AV	54.0	-6.7	1.85 H	165	33.10	14.20

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.

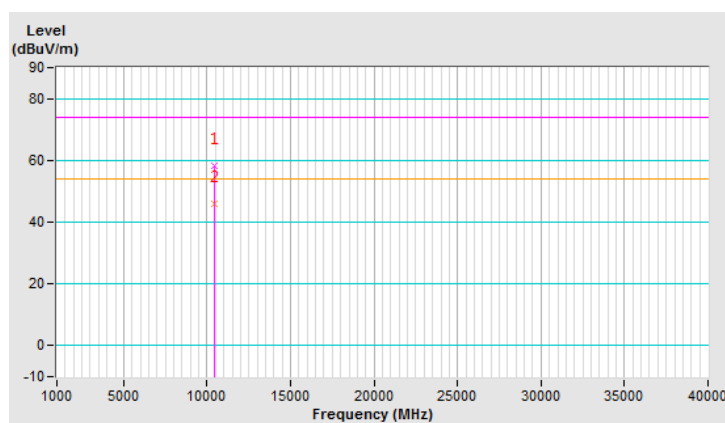


CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	58.3 PK	74.0	-15.7	1.53 V	77	44.10	14.20
2	#10420.00	46.0 AV	54.0	-8.0	1.53 V	77	31.80	14.20

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.

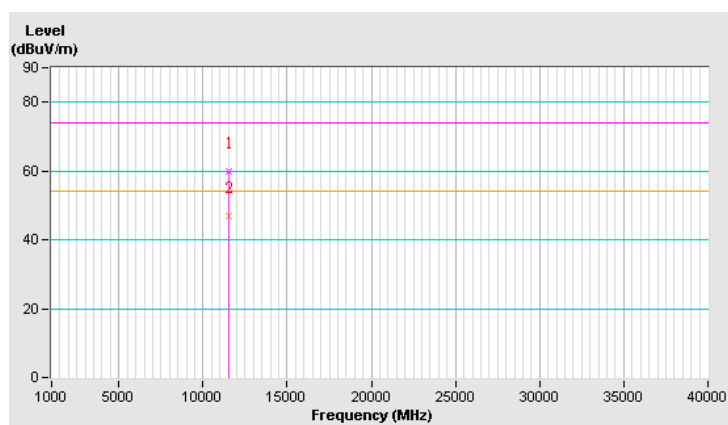


CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	59.7 PK	74.0	-14.3	1.56 H	266	45.10	14.60
2	11550.00	47.0 AV	54.0	-7.0	1.56 H	266	32.40	14.60

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

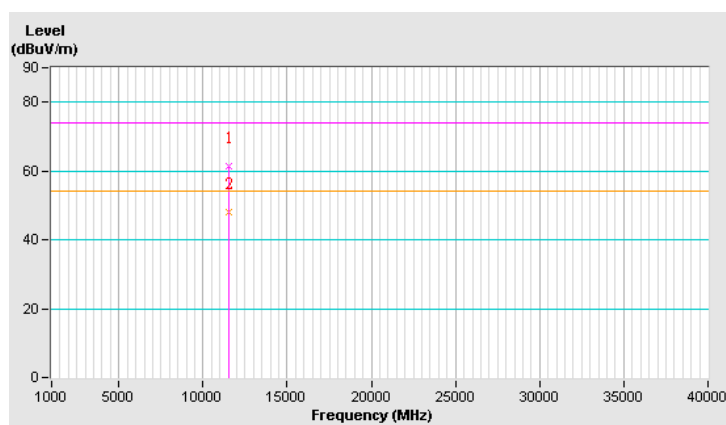


CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	61.3 PK	74.0	-12.7	1.44 V	33	46.70	14.60
2	11550.00	48.0 AV	54.0	-6.0	1.44 V	33	33.40	14.60

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



TxBF Mode

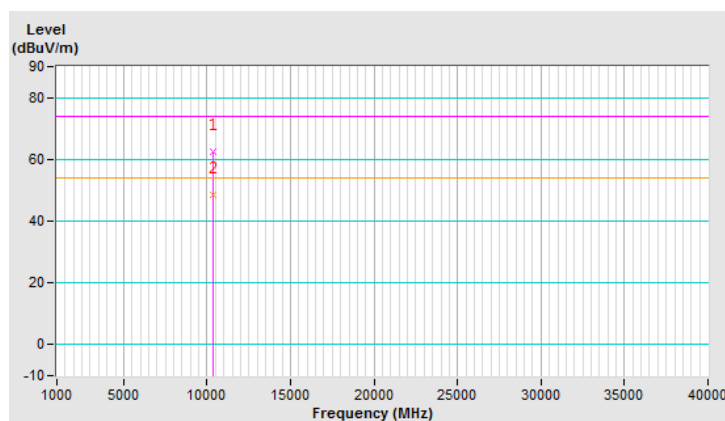
802.11ac (20MHz) 1S4T TxBF MCS0

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	62.3 PK	74.0	-11.7	1.49 H	204	48.20	14.10
2	#10360.00	48.4 AV	54.0	-5.6	1.49 H	204	34.30	14.10

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.

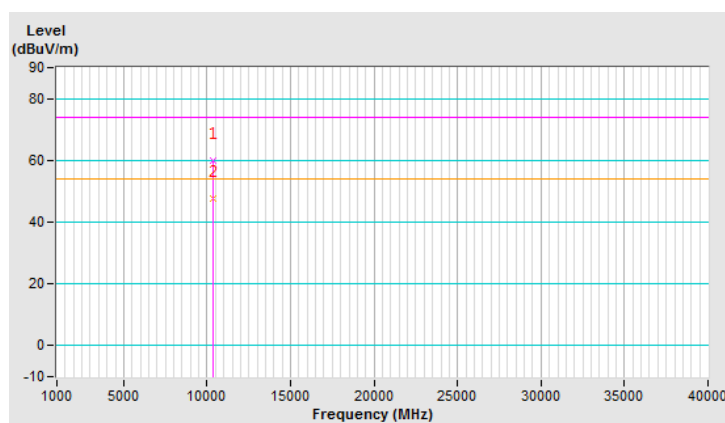


CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	59.8 PK	74.0	-14.2	1.56 V	87	45.70	14.10
2	#10360.00	47.5 AV	54.0	-6.5	1.56 V	87	33.40	14.10

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.

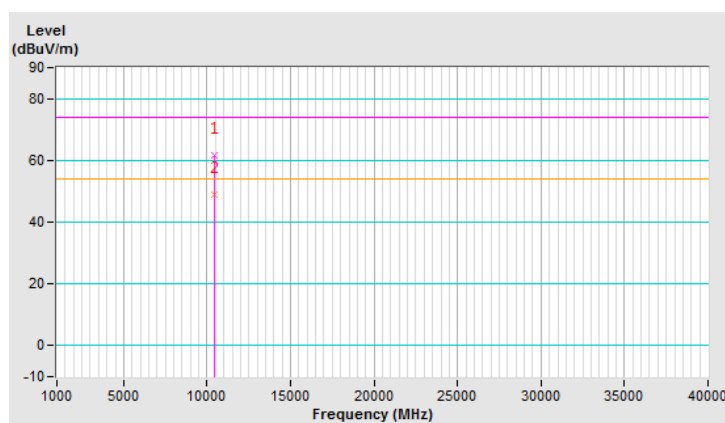


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	61.4 PK	74.0	-12.6	1.44 H	256	47.00	14.40
2	#10400.00	48.8 AV	54.0	-5.2	1.44 H	256	34.40	14.40

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. " # ": The radiated frequency is out of the restricted band.

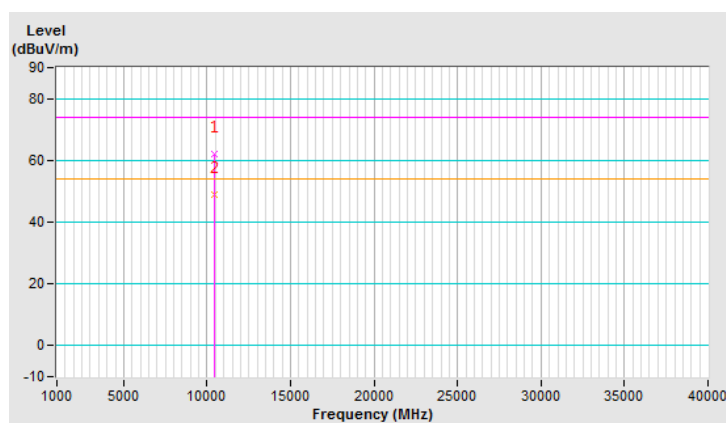


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	61.9 PK	74.0	-12.1	1.23 V	15	47.50	14.40
2	#10400.00	49.1 AV	54.0	-4.9	1.23 V	15	34.70	14.40

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. " # ": The radiated frequency is out of the restricted band.

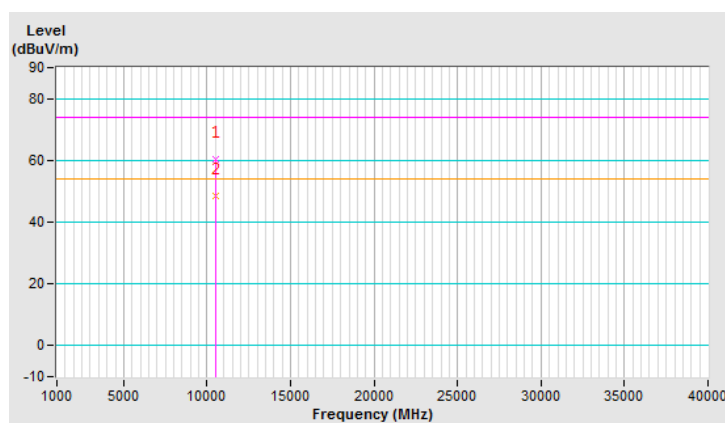


CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	60.5 PK	74.0	-13.5	1.73 H	55	46.40	14.10
2	#10480.00	48.6 AV	54.0	-5.4	1.73 H	55	34.50	14.10

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.

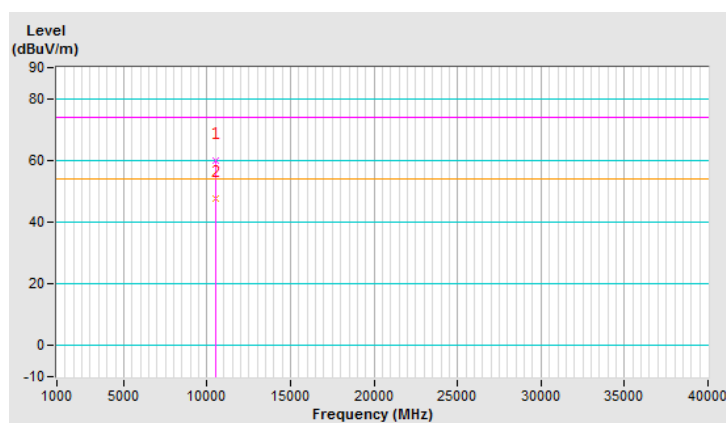


CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	60.0 PK	74.0	-14.0	1.88 V	240	45.90	14.10
2	#10480.00	47.5 AV	54.0	-6.5	1.88 V	240	33.40	14.10

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.

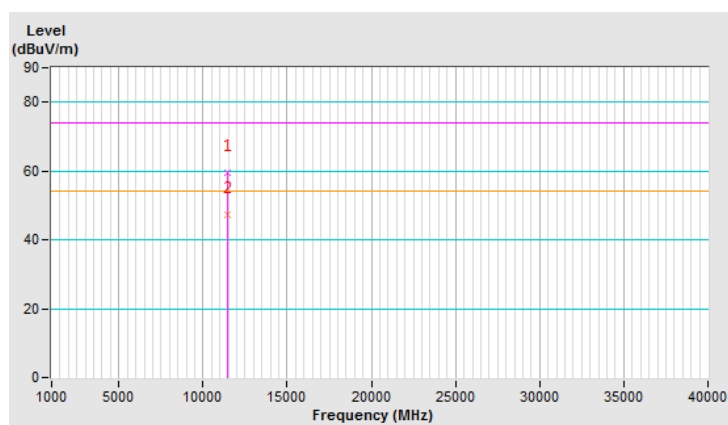


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	59.4 PK	74.0	-14.6	1.85 H	122	44.70	14.70
2	11490.00	47.2 AV	54.0	-6.8	1.85 H	122	32.50	14.70

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

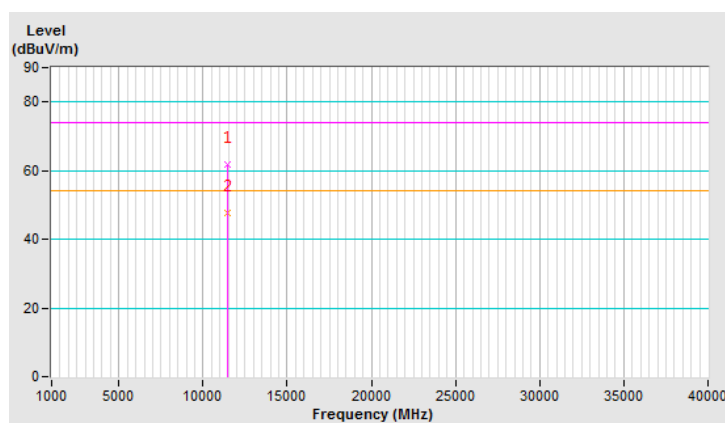


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	61.8 PK	74.0	-12.2	1.22 V	54	47.10	14.70
2	11490.00	47.5 AV	54.0	-6.5	1.22 V	54	32.80	14.70

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.

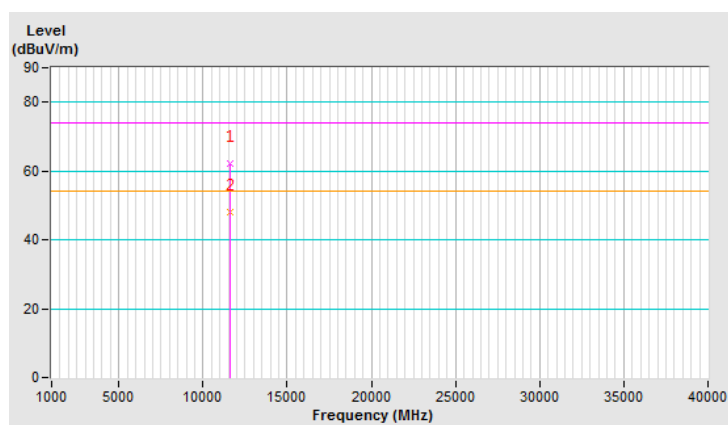


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: 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	62.2 PK	74.0	-11.8	1.33 H	155	47.60	14.60
2	11570.00	48.1 AV	54.0	-5.9	1.33 H	155	33.50	14.60

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

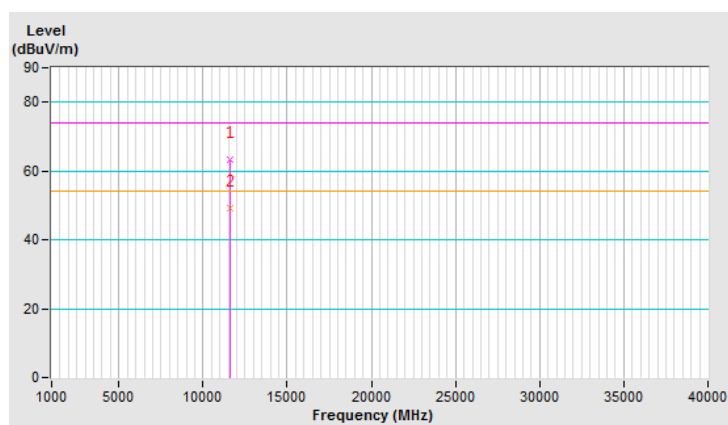


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	63.3 PK	74.0	-10.7	1.52 V	106	48.70	14.60
2	11570.00	49.2 AV	54.0	-4.8	1.52 V	106	34.60	14.60

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

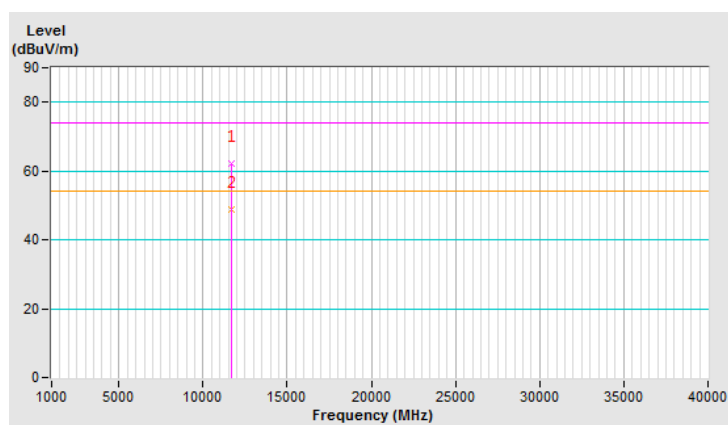


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: 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	62.1 PK	74.0	-11.9	2.43 H	265	47.50	14.60
2	11650.00	48.9 AV	54.0	-5.1	2.43 H	265	34.30	14.60

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

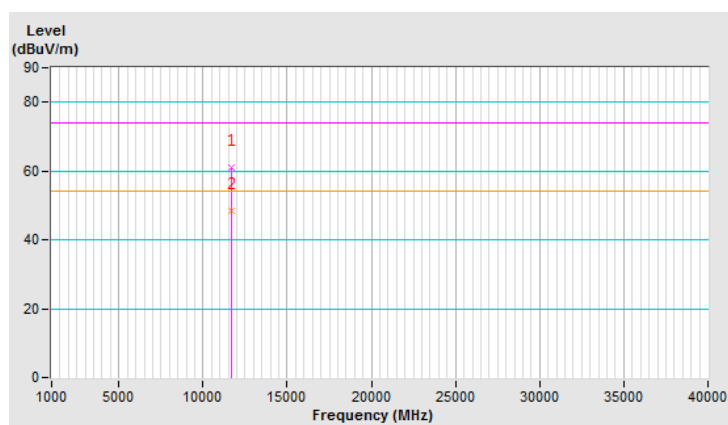


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	60.9 PK	74.0	-13.1	1.83 V	66	46.30	14.60
2	11650.00	48.5 AV	54.0	-5.5	1.83 V	66	33.90	14.60

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



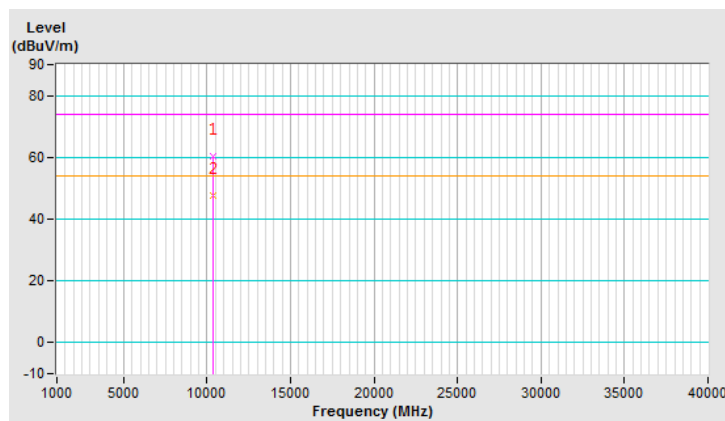
802.11ac (40MHz) 1S4T TxBF MCS0

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	60.3 PK	74.0	-13.7	1.42 H	155	45.90	14.40
2	#10380.00	47.8 AV	54.0	-6.2	1.42 H	155	33.40	14.40

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. " # ": The radiated frequency is out of the restricted band.

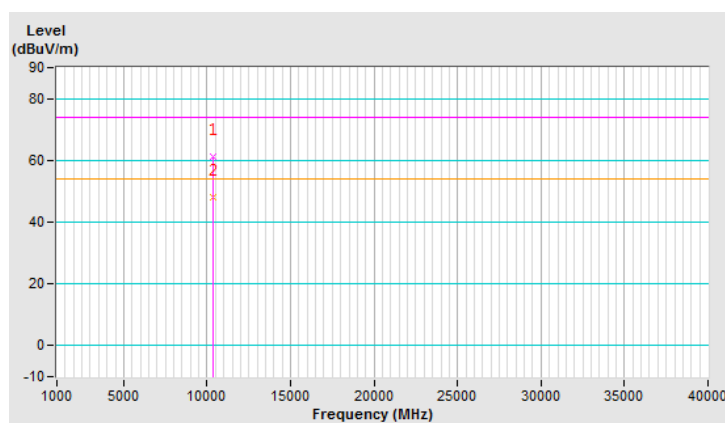


CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	61.2 PK	74.0	-12.8	2.69 V	294	46.80	14.40
2	#10380.00	48.1 AV	54.0	-5.9	2.69 V	294	33.70	14.40

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. " # ": The radiated frequency is out of the restricted band.

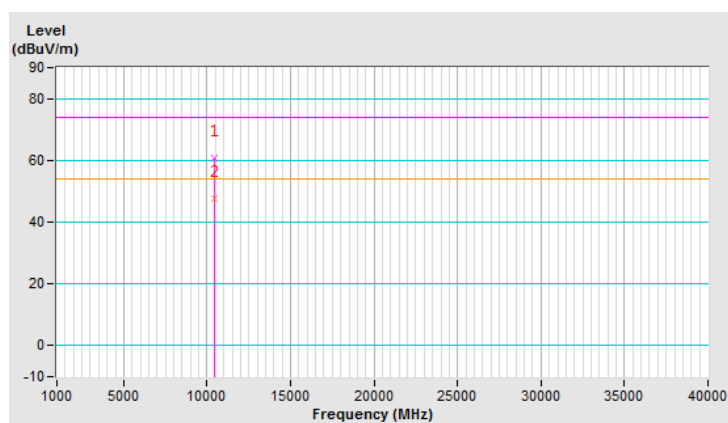


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	60.8 PK	74.0	-13.2	1.25 H	33	46.70	14.10
2	#10460.00	47.6 AV	54.0	-6.4	1.25 H	33	33.50	14.10

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.

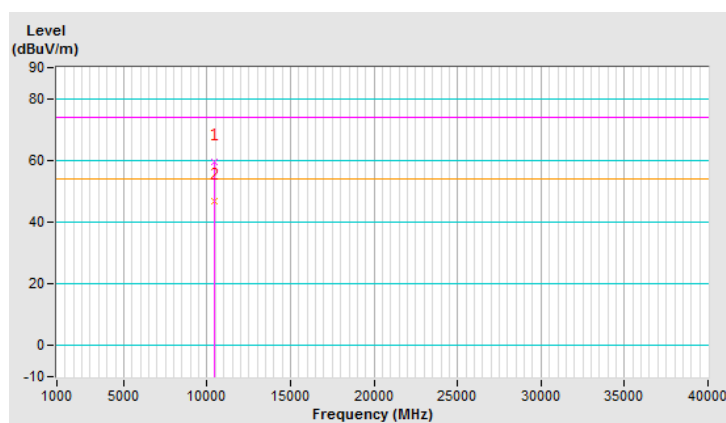


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	59.4 PK	74.0	-14.6	1.58 V	224	45.30	14.10
2	#10460.00	46.6 AV	54.0	-7.4	1.58 V	224	32.50	14.10

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.

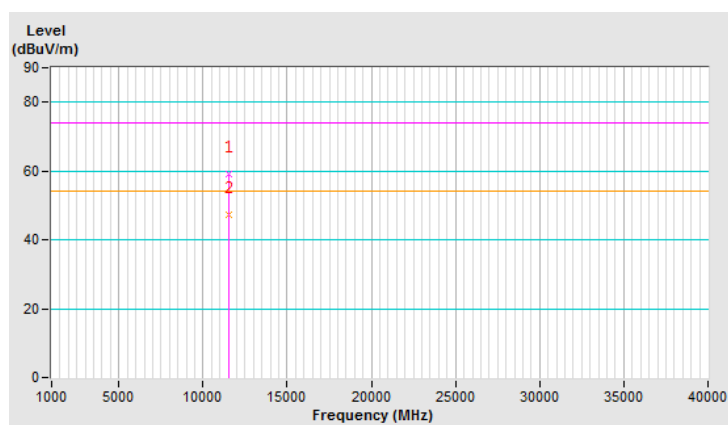


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	59.3 PK	74.0	-14.7	2.21 H	23	44.60	14.70
2	11510.00	47.2 AV	54.0	-6.8	2.21 H	23	32.50	14.70

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

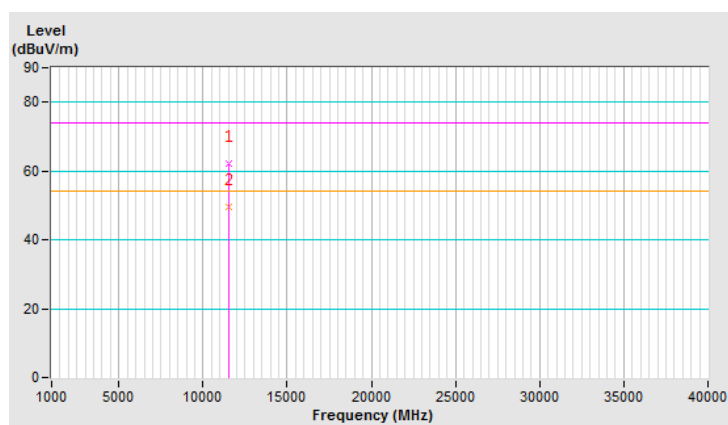


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	62.1 PK	74.0	-11.9	1.23 V	55	47.40	14.70
2	11510.00	49.5 AV	54.0	-4.5	1.23 V	55	34.80	14.70

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

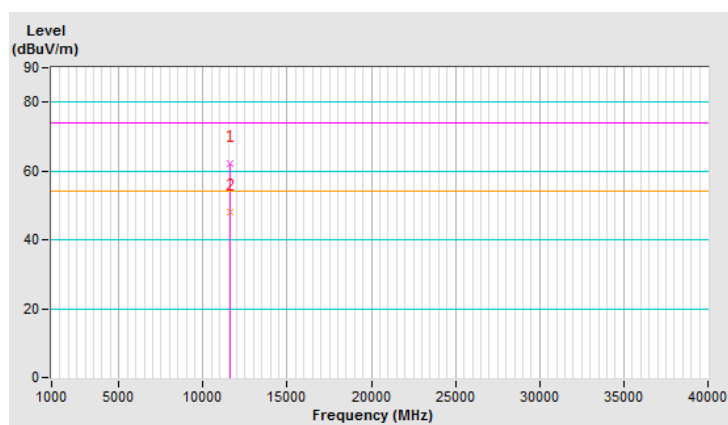


CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	62.1 PK	74.0	-11.9	1.69 H	212	47.60	14.50
2	11590.00	47.9 AV	54.0	-6.1	1.69 H	212	33.40	14.50

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

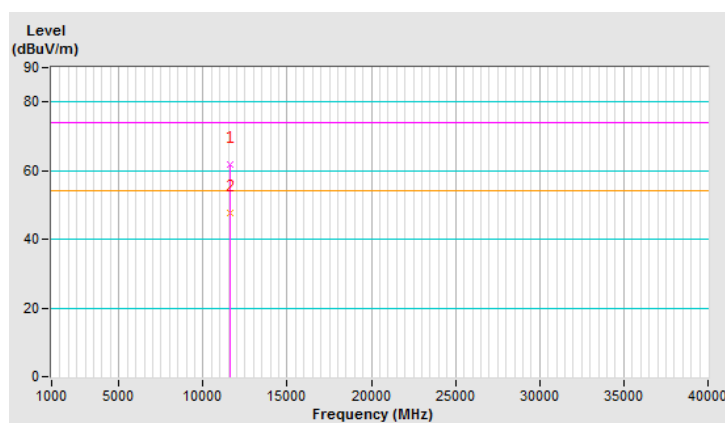


CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	61.7 PK	74.0	-12.3	1.55 V	266	47.20	14.50
2	11590.00	47.5 AV	54.0	-6.5	1.55 V	266	33.00	14.50

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.



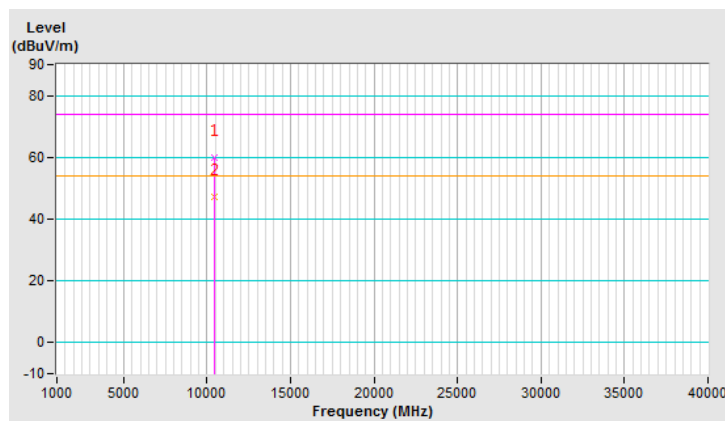
802.11ac (80MHz) 1S4T TxBF MCS0

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	59.9 PK	74.0	-14.1	1.58 H	66	45.70	14.20
2	#10420.00	47.2 AV	54.0	-6.8	1.58 H	66	33.00	14.20

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.

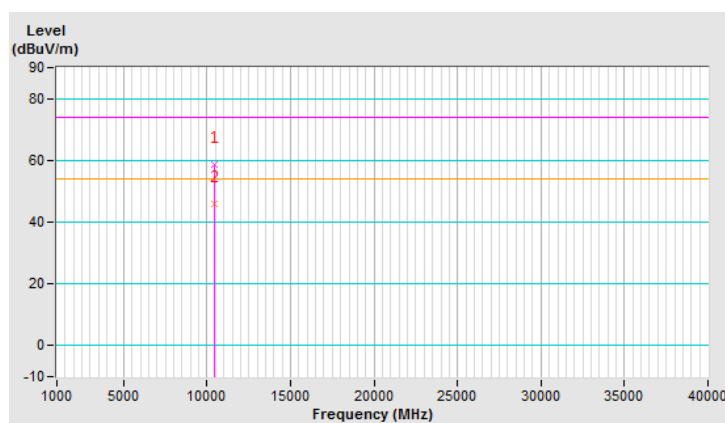


CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	1.88 V	331	44.30	14.20
2	#10420.00	46.0 AV	54.0	-8.0	1.88 V	331	31.80	14.20

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.

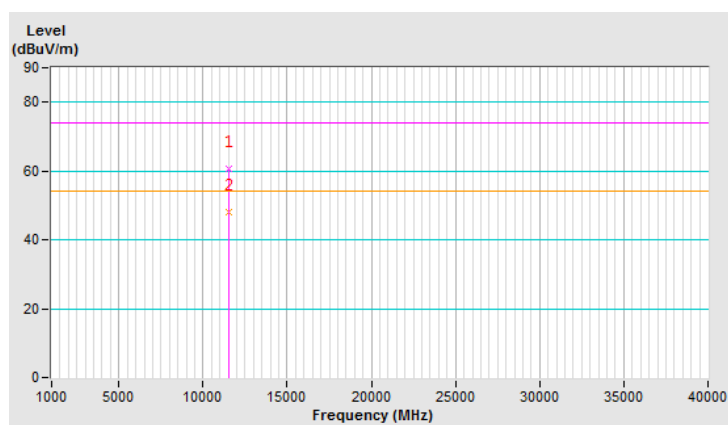


CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	60.7 PK	74.0	-13.3	1.33 H	47	46.10	14.60
2	11550.00	48.1 AV	54.0	-5.9	1.33 H	47	33.50	14.60

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

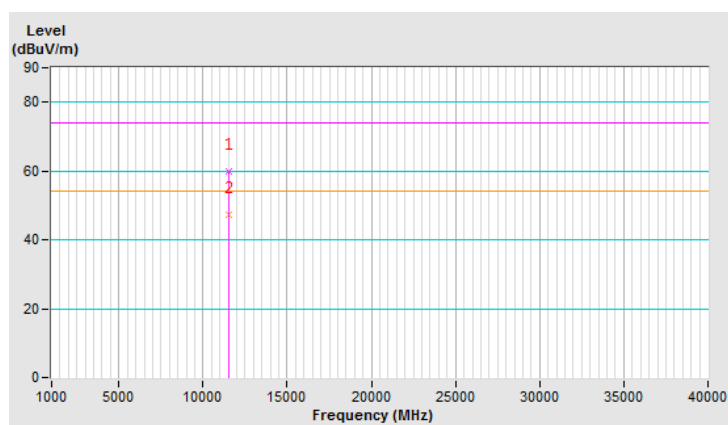


CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	59.9 PK	74.0	-14.1	1.73 V	64	45.30	14.60
2	11550.00	47.3 AV	54.0	-6.7	1.73 V	64	32.70	14.60

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



Radiated Band Edge and Fundamental Emissions

CDD Mode

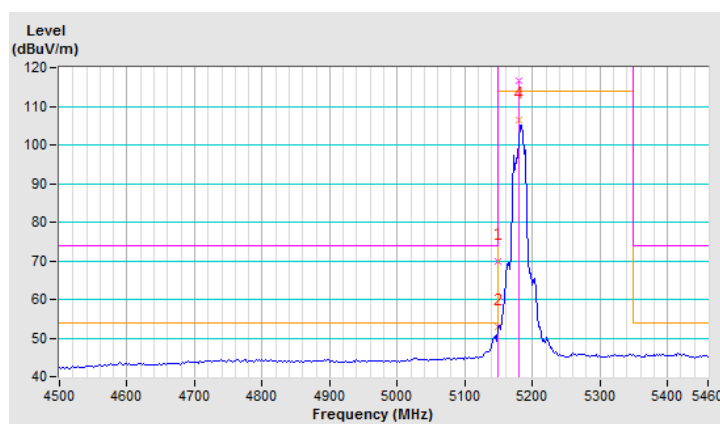
802.11ac (20MHz) 1S4T CDD Nss1 MCS0

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	5150.00	69.8 PK	74.0	-4.2	1.46 H	189	68.10	1.70
2	5150.00	52.8 AV	54.0	-1.2	1.46 H	189	51.10	1.70
3	*5180.00	116.8 PK			1.46 H	189	77.90	38.90
4	*5180.00	106.6 AV			1.46 H	189	67.70	38.90

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
5. " * ": Fundamental frequency.

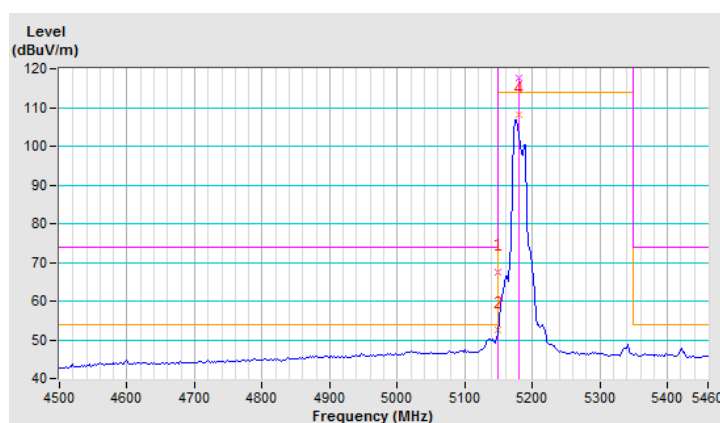


CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	67.4 PK	74.0	-6.6	1.40 V	70	65.70	1.70
2	5150.00	52.4 AV	54.0	-1.6	1.40 V	70	50.70	1.70
3	*5180.00	117.8 PK			1.40 V	70	78.90	38.90
4	*5180.00	108.1 AV			1.40 V	70	69.20	38.90

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
5. " * ": Fundamental frequency.

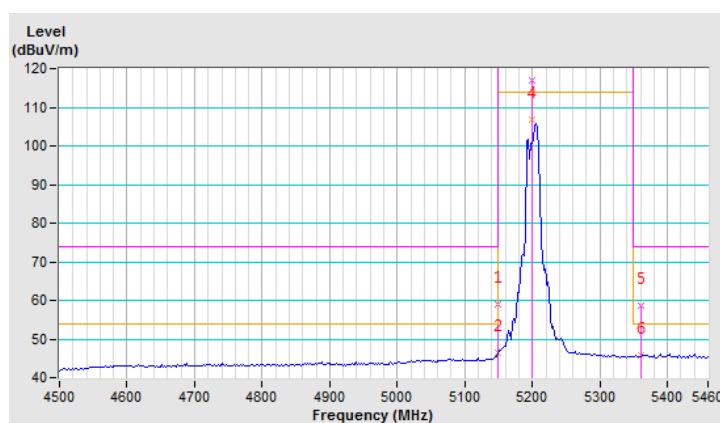


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	5150.00	59.0 PK	74.0	-15.0	1.31 H	185	57.30	1.70
2	5150.00	46.5 AV	54.0	-7.5	1.31 H	185	44.80	1.70
3	*5200.00	117.0 PK			1.31 H	185	78.00	39.00
4	*5200.00	106.9 AV			1.31 H	185	67.90	39.00
5	5360.00	58.6 PK	74.0	-15.4	1.31 H	185	56.40	2.20
6	5360.00	45.8 AV	54.0	-8.2	1.31 H	185	43.60	2.20

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. " * ": Fundamental frequency.

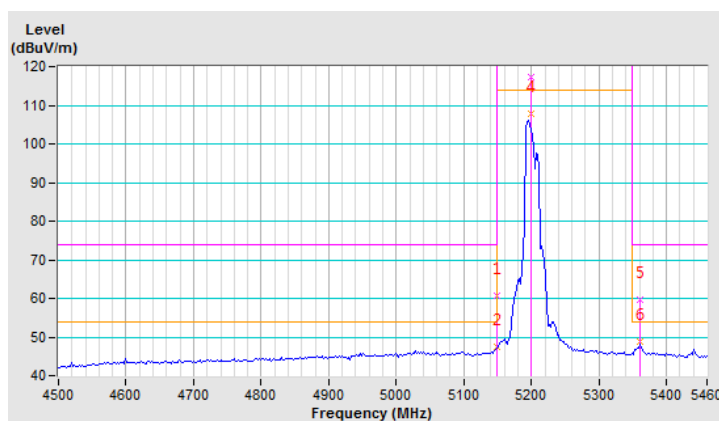


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	5150.00	60.6 PK	74.0	-13.4	1.42 V	73	58.90	1.70
2	5150.00	47.3 AV	54.0	-6.7	1.42 V	73	45.60	1.70
3	*5200.00	117.2 PK			1.42 V	73	78.20	39.00
4	*5200.00	107.8 AV			1.42 V	73	68.80	39.00
5	5360.00	59.6 PK	74.0	-14.4	1.42 V	73	57.40	2.20
6	5360.00	48.9 AV	54.0	-5.1	1.42 V	73	46.70	2.20

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. " * ": Fundamental frequency.

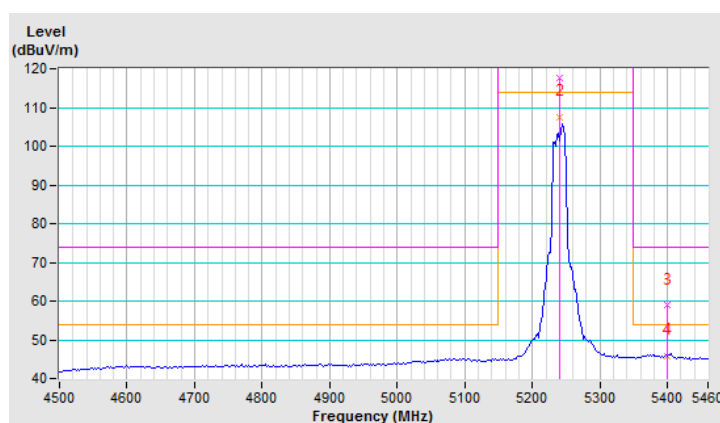


CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	*5240.00	117.7 PK			2.01 H	189	78.70	39.00
2	*5240.00	107.3 AV			2.01 H	189	68.30	39.00
3	5400.00	58.8 PK	74.0	-15.2	2.01 H	189	56.50	2.30
4	5400.00	45.9 AV	54.0	-8.1	2.01 H	189	43.60	2.30

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. " * ": Fundamental frequency.

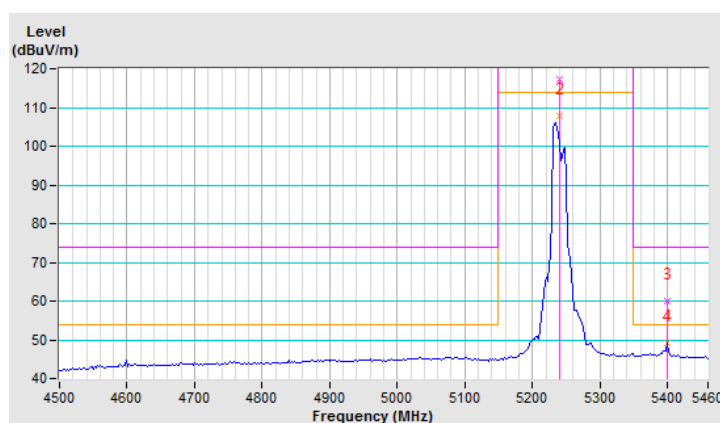


CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	*5240.00	117.2 PK			1.56 V	74	78.20	39.00
2	*5240.00	107.9 AV			1.56 V	74	68.90	39.00
3	5400.00	60.1 PK	74.0	-13.9	1.56 V	74	57.80	2.30
4	5400.00	49.1 AV	54.0	-4.9	1.56 V	74	46.80	2.30

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. " * ": Fundamental frequency.

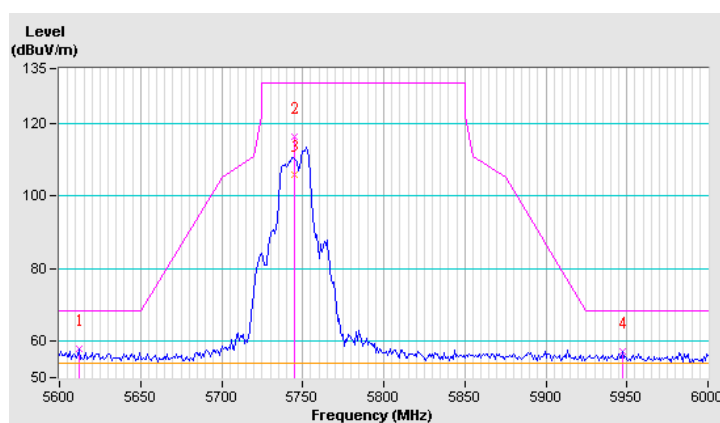


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5612.00	58.0 PK	68.2	-10.2	1.47 H	7	55.30	2.70
2	*5745.00	116.2 PK			1.47 H	7	76.30	39.90
3	*5745.00	105.7 AV			1.47 H	7	65.80	39.90
4	#5947.20	57.3 PK	68.2	-10.9	1.47 H	7	54.30	3.00

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. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

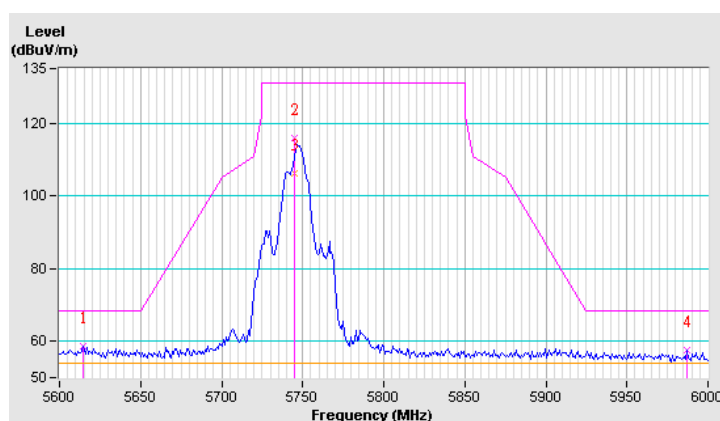


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5614.40	58.6 PK	68.2	-9.6	1.38 V	13	55.90	2.70
2	*5745.00	115.8 PK			1.38 V	13	75.90	39.90
3	*5745.00	106.1 AV			1.38 V	13	66.20	39.90
4	#5987.20	57.5 PK	68.2	-10.7	1.38 V	13	54.50	3.00

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. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

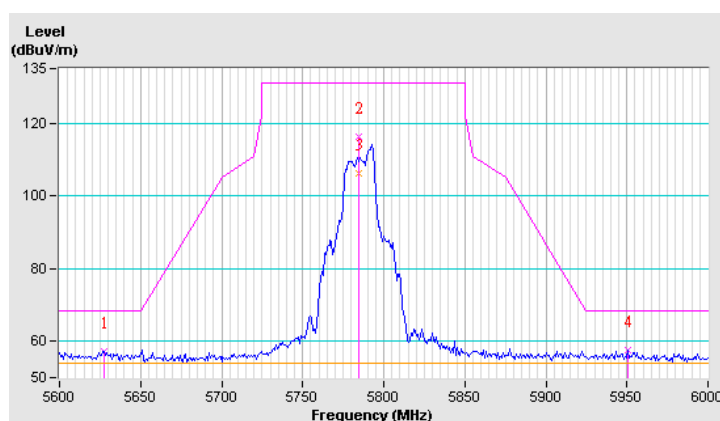


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5627.20	57.1 PK	68.2	-11.1	1.39 H	5	54.40	2.70
2	*5785.00	116.4 PK			1.39 H	5	76.50	39.90
3	*5785.00	106.1 AV			1.39 H	5	66.20	39.90
4	#5950.40	57.5 PK	68.2	-10.7	1.39 H	5	54.50	3.00

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. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

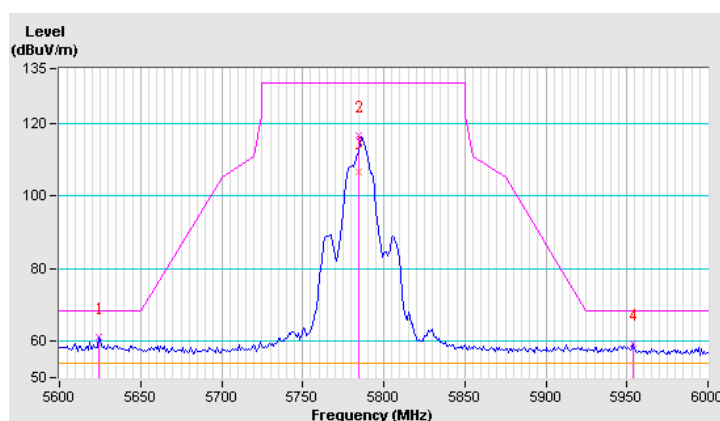


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5624.00	61.2 PK	68.2	-7.0	1.48 V	24	58.50	2.70
2	*5785.00	116.7 PK			1.48 V	24	76.80	39.90
3	*5785.00	106.6 AV			1.48 V	24	66.70	39.90
4	#5953.60	59.3 PK	68.2	-8.9	1.48 V	24	56.30	3.00

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. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

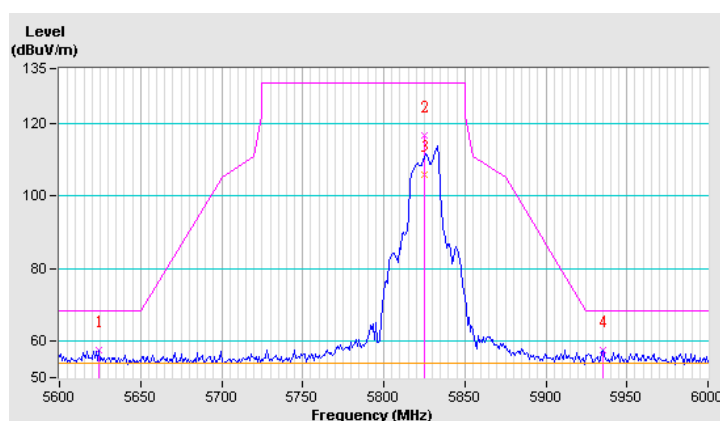


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5624.00	57.6 PK	68.2	-10.6	1.42 H	7	54.90	2.70
2	*5825.00	116.8 PK			1.42 H	7	76.80	40.00
3	*5825.00	106.0 AV			1.42 H	7	66.00	40.00
4	#5935.20	57.4 PK	68.2	-10.8	1.42 H	7	54.40	3.00

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. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

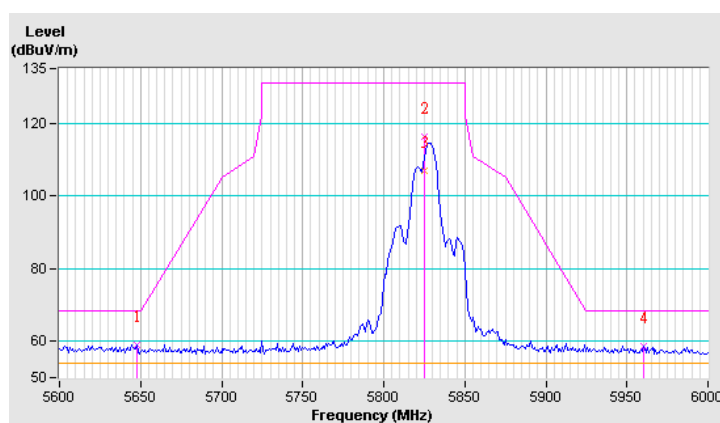


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5648.00	59.1 PK	68.2	-9.1	1.48 V	9	56.50	2.60
2	*5825.00	116.4 PK			1.48 V	9	76.40	40.00
3	*5825.00	106.9 AV			1.48 V	9	66.90	40.00
4	#5960.00	58.5 PK	68.2	-9.7	1.48 V	9	55.50	3.00

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. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



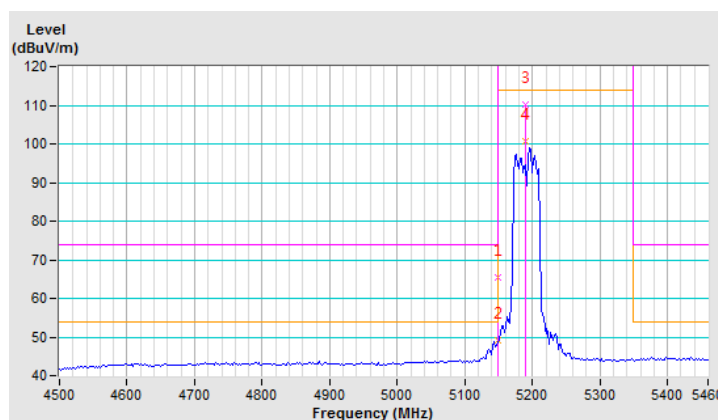
802.11ac (40MHz) 1S4T CDD Nss1 MCS0

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	65.3 PK	74.0	-8.7	1.21 H	185	63.60	1.70
2	5150.00	49.2 AV	54.0	-4.8	1.21 H	185	47.50	1.70
3	*5190.00	110.1 PK			1.21 H	185	71.10	39.00
4	*5190.00	100.8 AV			1.21 H	185	61.80	39.00

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. " * ": Fundamental frequency.

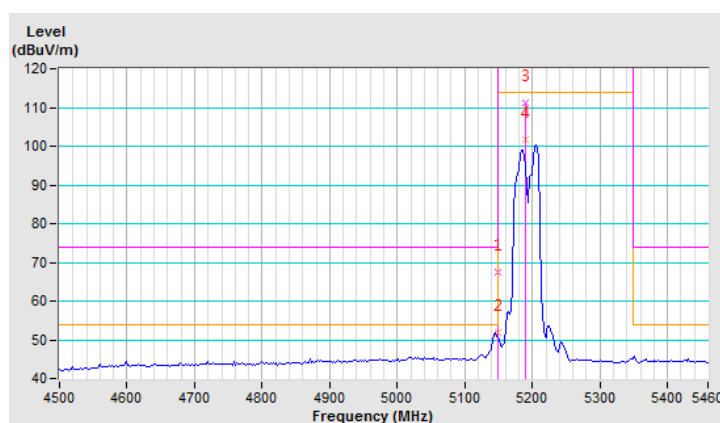


CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	67.5 PK	74.0	-6.5	1.50 V	72	65.80	1.70
2	5150.00	51.8 AV	54.0	-2.2	1.50 V	72	50.10	1.70
3	*5190.00	111.2 PK			1.50 V	72	72.20	39.00
4	*5190.00	101.8 AV			1.50 V	72	62.80	39.00

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. " * ": Fundamental frequency.

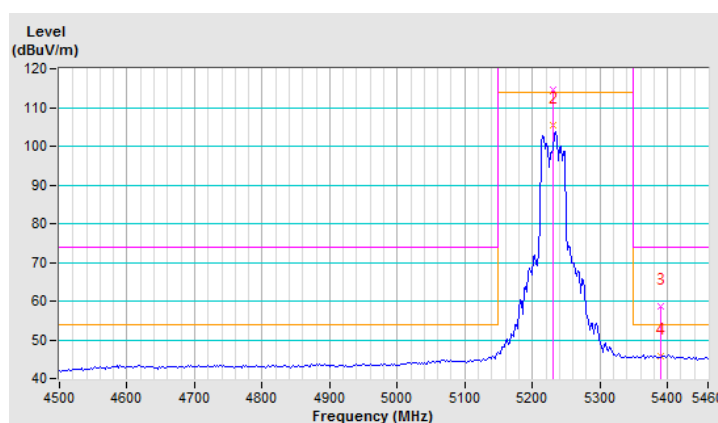


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	114.6 PK			1.26 H	187	75.60	39.00
2	*5230.00	105.4 AV			1.26 H	187	66.40	39.00
3	5390.00	58.6 PK	74.0	-15.4	1.26 H	187	56.40	2.20
4	5390.00	45.8 AV	54.0	-8.2	1.26 H	187	43.60	2.20

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. " * ": Fundamental frequency.

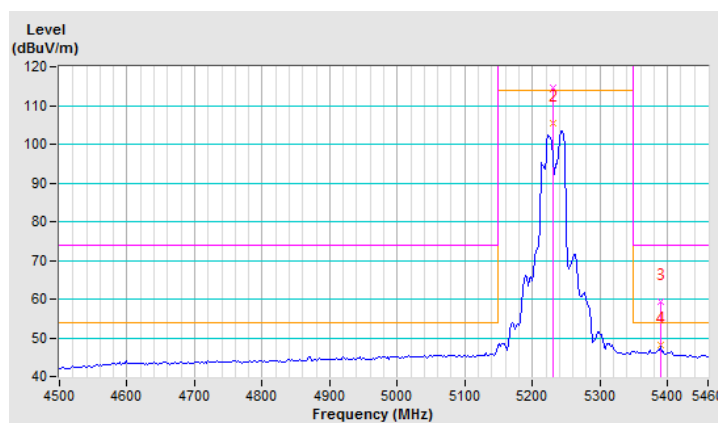


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	114.7 PK			1.49 V	75	75.70	39.00
2	*5230.00	105.5 AV			1.49 V	75	66.50	39.00
3	5390.00	59.2 PK	74.0	-14.8	1.49 V	75	57.00	2.20
4	5390.00	48.0 AV	54.0	-6.0	1.49 V	75	45.80	2.20

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. " * ": Fundamental frequency.

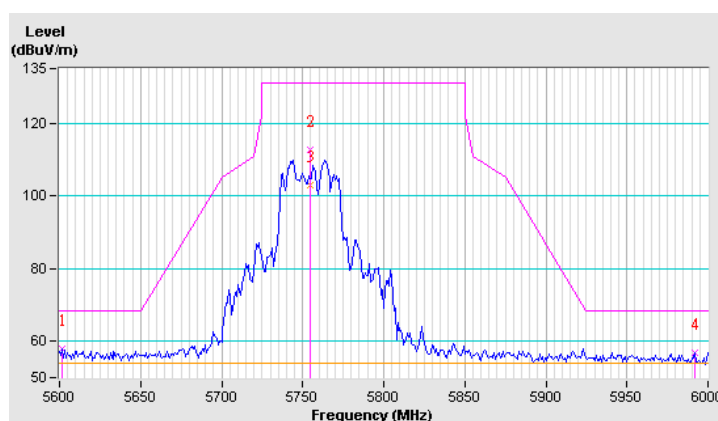


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5601.60	57.8 PK	68.2	-10.4	1.24 H	8	55.10	2.70
2	*5755.00	112.5 PK			1.24 H	8	72.60	39.90
3	*5755.00	102.9 AV			1.24 H	8	63.00	39.90
4	#5992.00	57.0 PK	68.2	-11.2	1.24 H	8	54.00	3.00

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. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

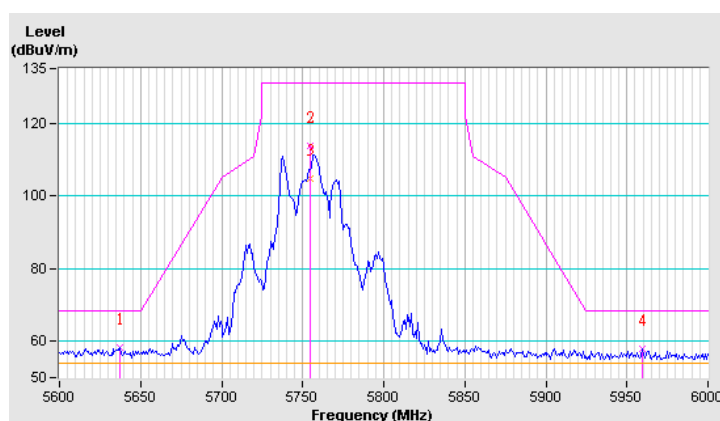


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5637.60	58.3 PK	68.2	-9.9	1.47 V	20	55.70	2.60
2	*5755.00	113.7 PK			1.47 V	20	73.80	39.90
3	*5755.00	104.6 AV			1.47 V	20	64.70	39.90
4	#5959.20	57.9 PK	68.2	-10.3	1.47 V	20	54.90	3.00

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. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

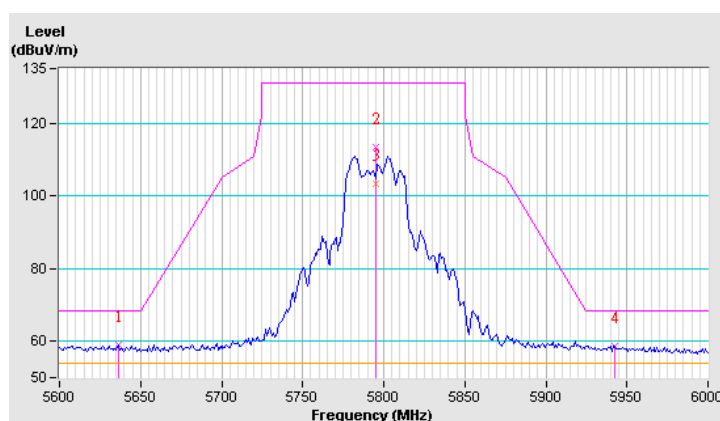


CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5636.80	58.9 PK	68.2	-9.3	1.40 H	7	56.30	2.60
2	*5795.00	113.3 PK			1.40 H	7	73.40	39.90
3	*5795.00	103.3 AV			1.40 H	7	63.40	39.90
4	#5942.40	58.7 PK	68.2	-9.5	1.40 H	7	55.70	3.00

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. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

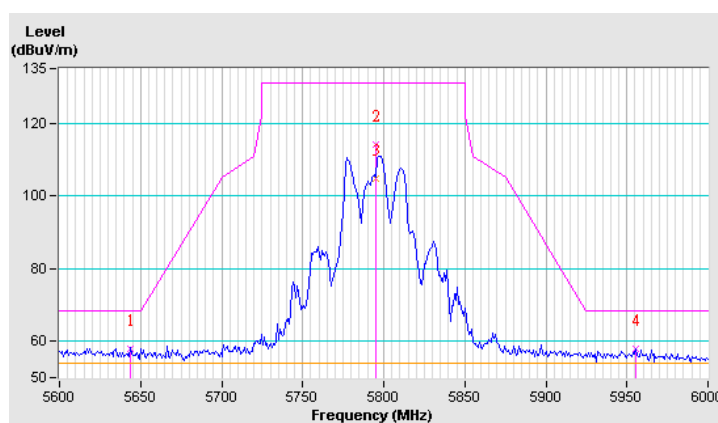


CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5644.00	58.1 PK	68.2	-10.1	1.50 V	13	55.50	2.60
2	*5795.00	114.1 PK			1.50 V	13	74.20	39.90
3	*5795.00	104.7 AV			1.50 V	13	64.80	39.90
4	#5955.20	57.9 PK	68.2	-10.3	1.50 V	13	54.90	3.00

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. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



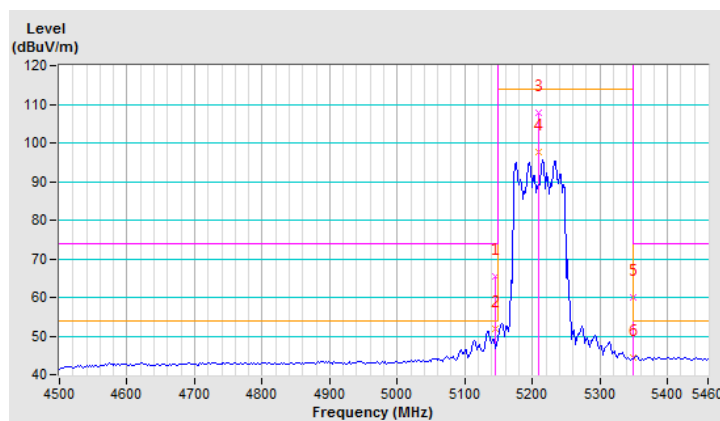
802.11ac (80MHz) 1S4T CDD Nss1 MCS0

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	5145.00	65.5 PK	74.0	-8.5	1.32 H	191	63.80	1.70
2	5145.00	51.7 AV	54.0	-2.3	1.32 H	191	50.00	1.70
3	*5210.00	107.9 PK			1.32 H	191	68.90	39.00
4	*5210.00	97.7 AV			1.32 H	191	58.70	39.00
5	5350.00	59.9 PK	74.0	-14.1	1.32 H	191	57.70	2.20
6	5350.00	44.3 AV	54.0	-9.7	1.32 H	191	42.10	2.20

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. " * ": Fundamental frequency.

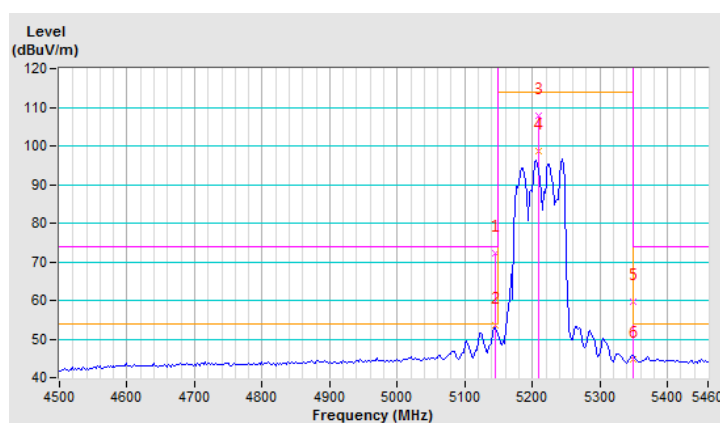


CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	5145.00	72.1 PK	74.0	-1.9	1.48 V	72	70.40	1.70
2	5145.00	53.5 AV	54.0	-0.5	1.48 V	72	51.80	1.70
3	*5210.00	107.8 PK			1.48 V	72	68.80	39.00
4	*5210.00	98.7 AV			1.48 V	72	59.70	39.00
5	5350.00	59.5 PK	74.0	-14.5	1.48 V	72	57.30	2.20
6	5350.00	44.8 AV	54.0	-9.2	1.48 V	72	42.60	2.20

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. " * ": Fundamental frequency.

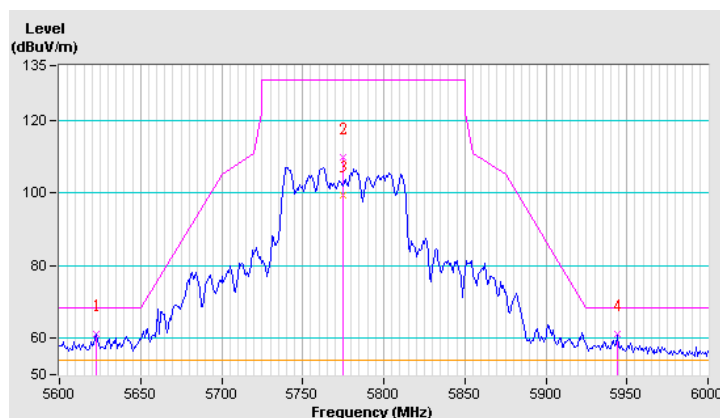


CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5622.40	61.3 PK	68.2	-6.9	1.42 H	6	58.60	2.70
2	*5775.00	109.8 PK			1.42 H	6	69.90	39.90
3	*5775.00	99.3 AV			1.42 H	6	59.40	39.90
4	#5944.00	61.0 PK	68.2	-7.2	1.42 H	6	58.00	3.00

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. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

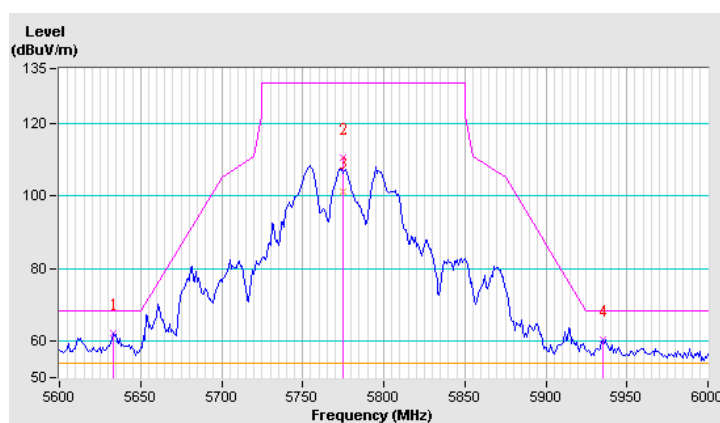


CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5633.60	62.1 PK	68.2	-6.1	1.43 V	102	59.50	2.60
2	*5775.00	110.5 PK			1.43 V	102	70.60	39.90
3	*5775.00	101.1 AV			1.43 V	102	61.20	39.90
4	#5935.20	60.4 PK	68.2	-7.8	1.43 V	102	57.40	3.00

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. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



TxBF Mode

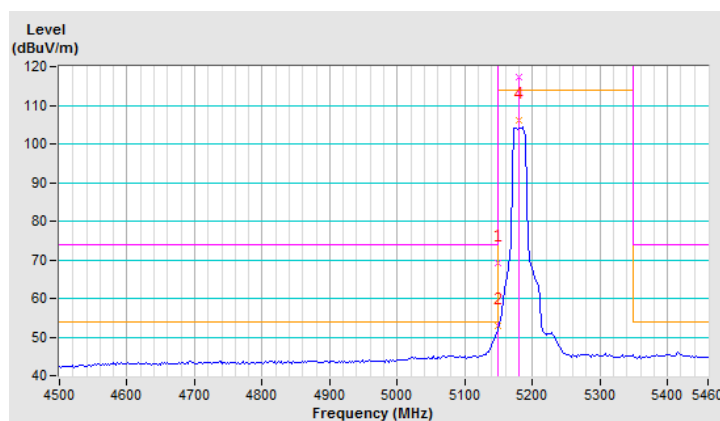
802.11ac (20MHz) 1S4T TxBF Nss1 MCS0

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	5150.00	69.1 PK	74.0	-4.9	2.14 H	194	67.40	1.70
2	5150.00	53.0 AV	54.0	-1.0	2.14 H	194	51.30	1.70
3	*5180.00	117.4 PK			2.14 H	194	78.50	38.90
4	*5180.00	106.0 AV			2.14 H	194	67.10	38.90

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
5. " * ": Fundamental frequency.

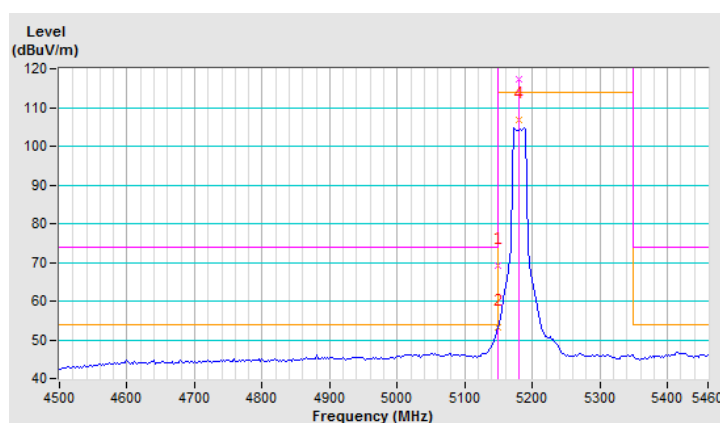


CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	2.60 V	285	67.50	1.70
2	5150.00	53.3 AV	54.0	-0.7	2.60 V	285	51.60	1.70
3	*5180.00	117.4 PK			2.60 V	285	78.50	38.90
4	*5180.00	106.8 AV			2.60 V	285	67.90	38.90

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
5. " * ": Fundamental frequency.

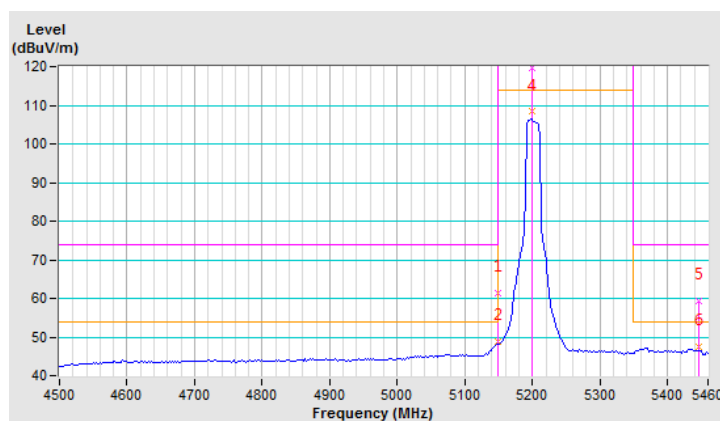


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	5150.00	61.3 PK	74.0	-12.7	1.42 H	189	59.60	1.70
2	5150.00	48.7 AV	54.0	-5.3	1.42 H	189	47.00	1.70
3	*5200.00	119.6 PK			1.42 H	189	80.60	39.00
4	*5200.00	108.3 AV			1.42 H	189	69.30	39.00
5	5446.50	59.4 PK	74.0	-14.6	1.42 H	189	57.10	2.30
6	5446.50	47.5 AV	54.0	-6.5	1.42 H	189	45.20	2.30

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. " * ": Fundamental frequency.

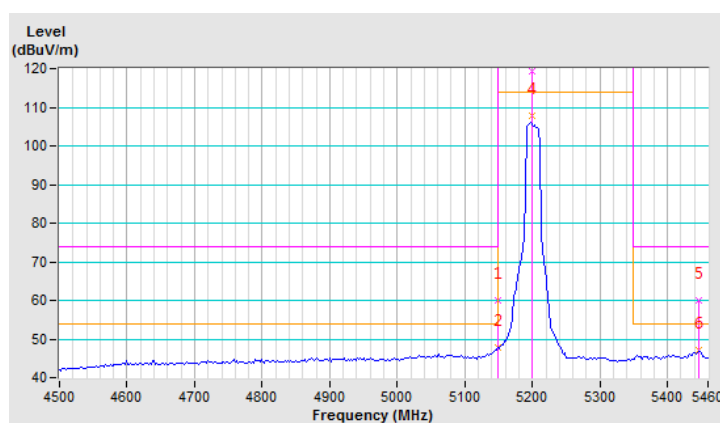


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	5150.00	59.9 PK	74.0	-14.1	2.72 V	285	58.20	1.70
2	5150.00	47.8 AV	54.0	-6.2	2.72 V	285	46.10	1.70
3	*5200.00	119.2 PK			2.72 V	285	80.20	39.00
4	*5200.00	107.9 AV			2.72 V	285	68.90	39.00
5	5446.50	59.9 PK	74.0	-14.1	2.72 V	285	57.60	2.30
6	5446.50	47.2 AV	54.0	-6.8	2.72 V	285	44.90	2.30

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. " * ": Fundamental frequency.

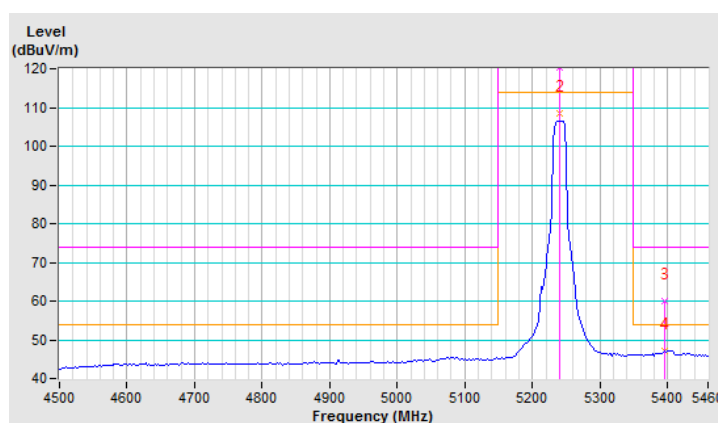


CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	*5240.00	120.2 PK			1.41 H	196	81.20	39.00
2	*5240.00	108.4 AV			1.41 H	196	69.40	39.00
3	5396.00	60.1 PK	74.0	-13.9	1.41 H	196	57.90	2.20
4	5396.00	47.2 AV	54.0	-6.8	1.41 H	196	45.00	2.20

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. " * ": Fundamental frequency.

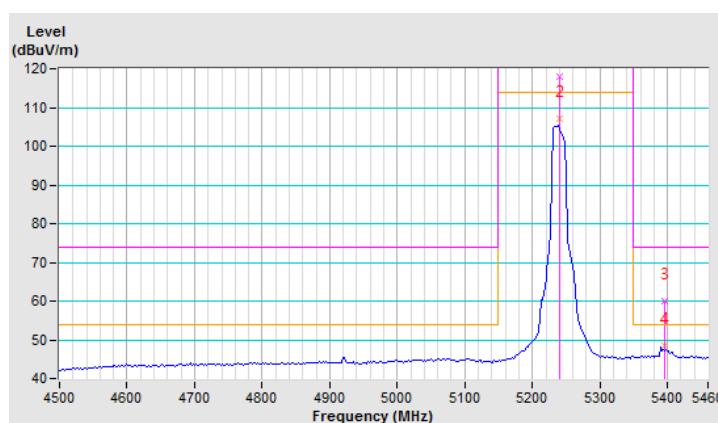


CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	*5240.00	118.1 PK			1.35 V	107	79.10	39.00
2	*5240.00	107.1 AV			1.35 V	107	68.10	39.00
3	5396.00	60.0 PK	74.0	-14.0	1.35 V	107	57.80	2.20
4	5396.00	48.5 AV	54.0	-5.5	1.35 V	107	46.30	2.20

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. " * ": Fundamental frequency.

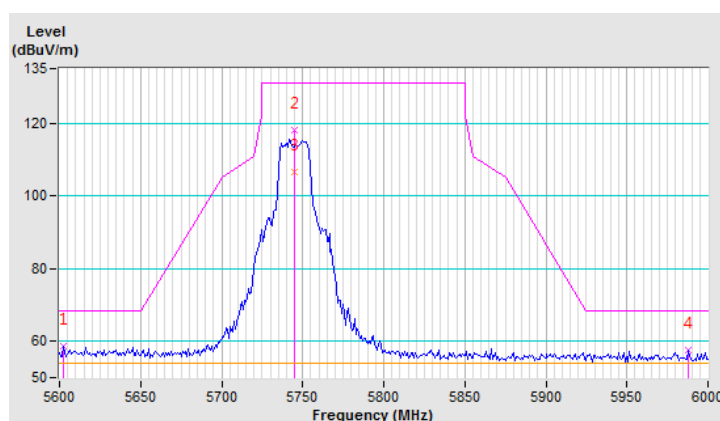


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5602.40	58.6 PK	68.2	-9.6	2.03 H	185	55.90	2.70
2	*5745.00	118.1 PK			2.03 H	185	78.20	39.90
3	*5745.00	106.7 AV			2.03 H	185	66.80	39.90
4	#5988.00	57.5 PK	68.2	-10.7	2.03 H	185	54.50	3.00

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. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

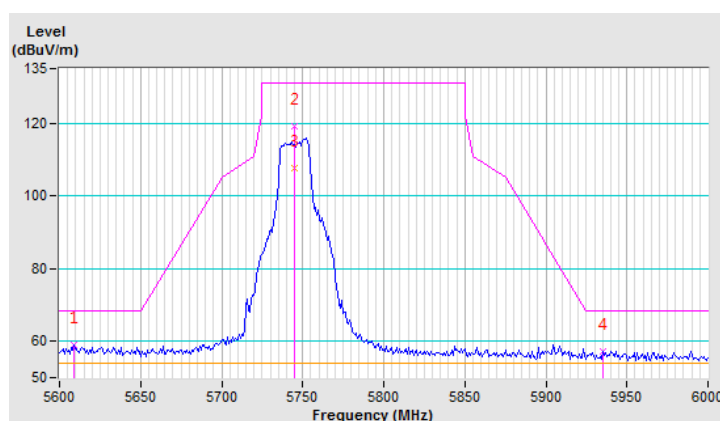


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5608.80	59.0 PK	68.2	-9.2	1.54 V	354	56.30	2.70
2	*5745.00	119.1 PK			1.54 V	354	79.20	39.90
3	*5745.00	107.6 AV			1.54 V	354	67.70	39.90
4	#5935.20	57.2 PK	68.2	-11.0	1.54 V	354	54.20	3.00

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. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

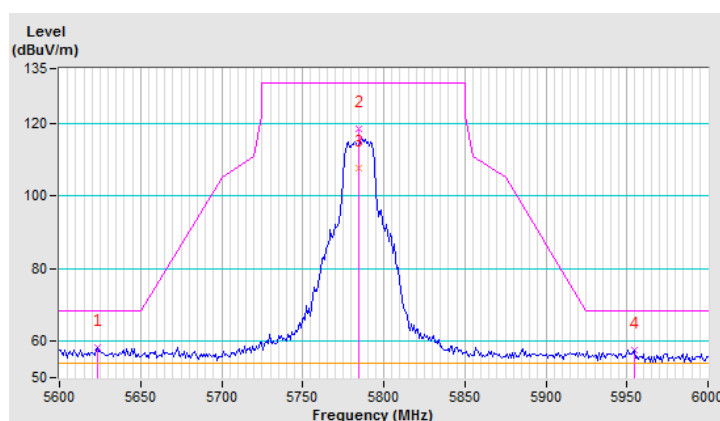


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5623.20	58.2 PK	68.2	-10.0	1.82 H	180	55.50	2.70
2	*5785.00	118.6 PK			1.82 H	180	78.70	39.90
3	*5785.00	107.6 AV			1.82 H	180	67.70	39.90
4	#5954.40	57.5 PK	68.2	-10.7	1.82 H	180	54.50	3.00

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. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

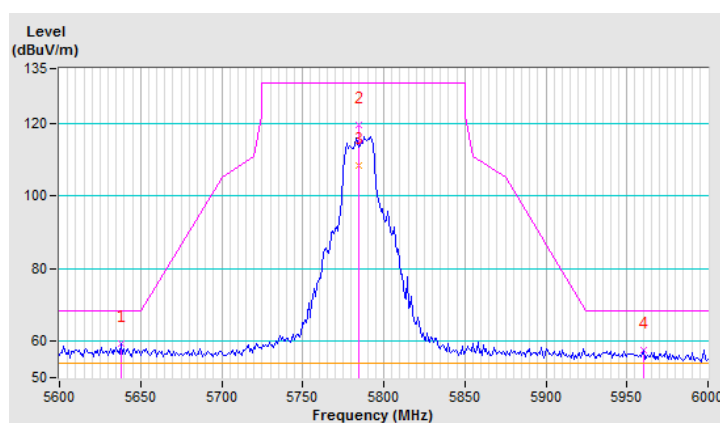


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5638.40	59.5 PK	68.2	-8.7	2.69 V	278	56.90	2.60
2	*5785.00	119.6 PK			2.69 V	278	79.70	39.90
3	*5785.00	108.2 AV			2.69 V	278	68.30	39.90
4	#5960.00	57.7 PK	68.2	-10.5	2.69 V	278	54.70	3.00

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. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

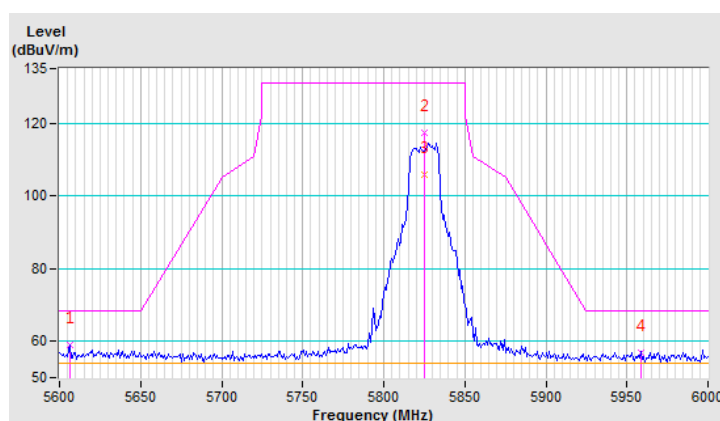


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5606.40	58.9 PK	68.2	-9.3	1.53 H	188	56.20	2.70
2	*5825.00	117.2 PK			1.53 H	188	77.20	40.00
3	*5825.00	105.8 AV			1.53 H	188	65.80	40.00
4	#5958.40	57.0 PK	68.2	-11.2	1.53 H	188	54.00	3.00

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. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

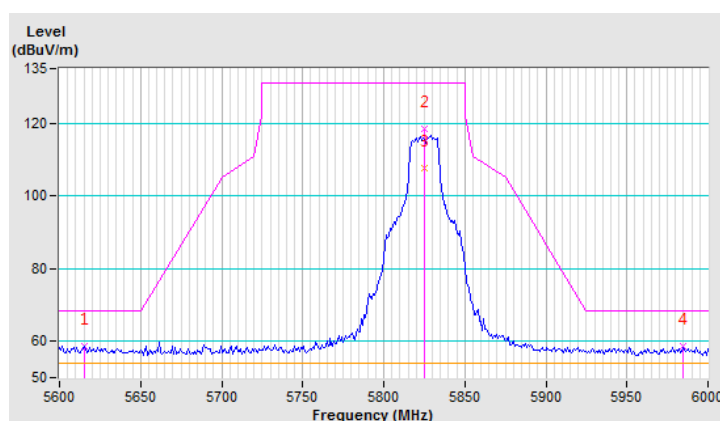


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	58.7 PK	68.2	-9.5	2.84 V	268	56.00	2.70
2	*5825.00	118.4 PK			2.84 V	268	78.40	40.00
3	*5825.00	107.7 AV			2.84 V	268	67.70	40.00
4	#5984.80	58.5 PK	68.2	-9.7	2.84 V	268	55.50	3.00

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. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



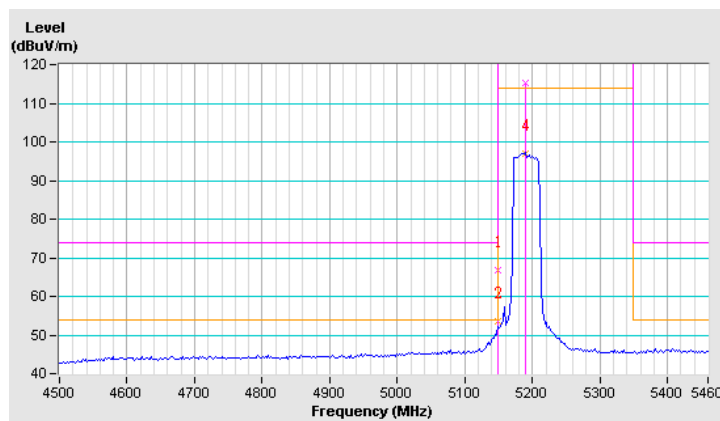
802.11ac (40MHz) 1S4T TxBF Nss1 MCS0

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	66.9 PK	74.0	-7.1	1.50 H	208	65.20	1.70
2	5150.00	53.6 AV	54.0	-0.4	1.50 H	208	51.90	1.70
3	*5190.00	115.3 PK			1.50 H	208	76.30	39.00
4	*5190.00	96.9 AV			1.50 H	208	57.90	39.00

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. " * ": Fundamental frequency.

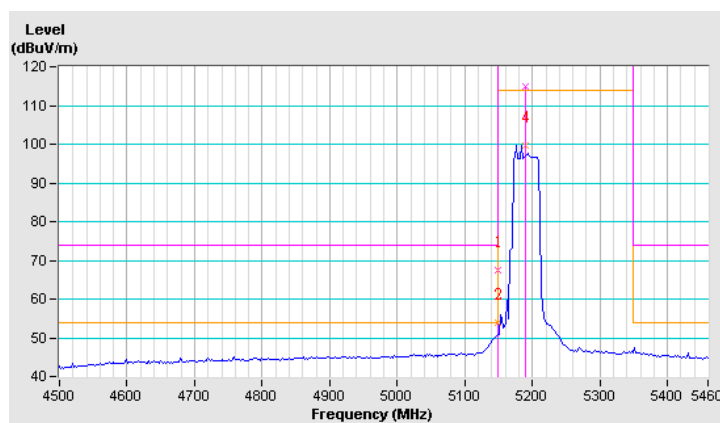


CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	67.6 PK	74.0	-6.4	2.96 V	57	65.90	1.70
2	5150.00	53.8 AV	54.0	-0.2	2.96 V	57	52.10	1.70
3	*5190.00	114.9 PK			2.96 V	57	75.90	39.00
4	*5190.00	99.8 AV			2.96 V	57	60.80	39.00

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. " * ": Fundamental frequency.

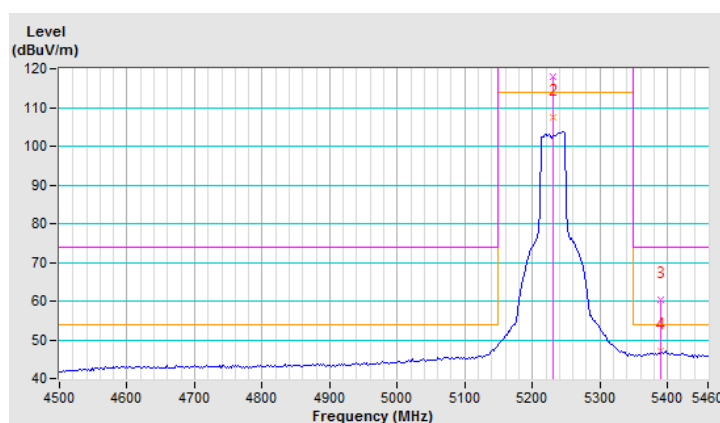


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	117.8 PK			2.25 H	190	78.80	39.00
2	*5230.00	107.5 AV			2.25 H	190	68.50	39.00
3	5390.00	60.3 PK	74.0	-13.7	2.25 H	190	58.10	2.20
4	5390.00	47.2 AV	54.0	-6.8	2.25 H	190	45.00	2.20

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. " * ": Fundamental frequency.

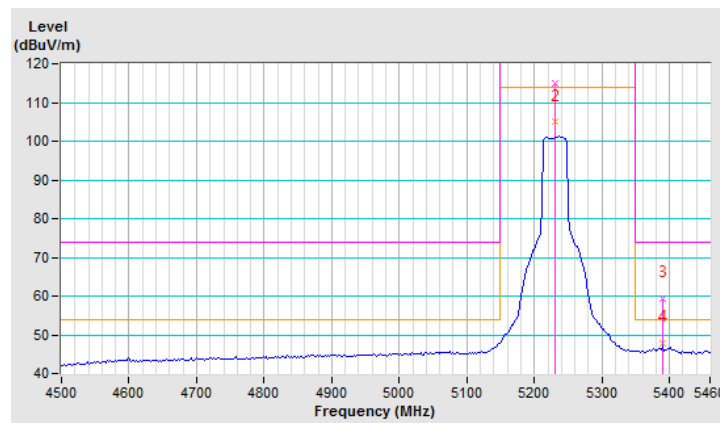


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	114.9 PK			1.39 V	37	75.90	39.00
2	*5230.00	104.9 AV			1.39 V	37	65.90	39.00
3	5390.00	59.3 PK	74.0	-14.7	1.39 V	37	57.10	2.20
4	5390.00	47.7 AV	54.0	-6.3	1.39 V	37	45.50	2.20

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. " * ": Fundamental frequency.

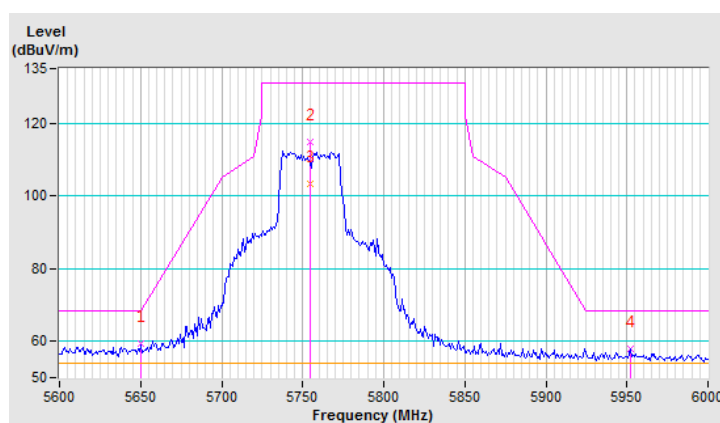


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5650.40	59.2 PK	68.5	-9.3	2.19 H	188	56.60	2.60
2	*5755.00	114.8 PK			2.19 H	188	74.90	39.90
3	*5755.00	103.3 AV			2.19 H	188	63.40	39.90
4	#5952.00	57.8 PK	68.2	-10.4	2.19 H	188	54.80	3.00

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. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

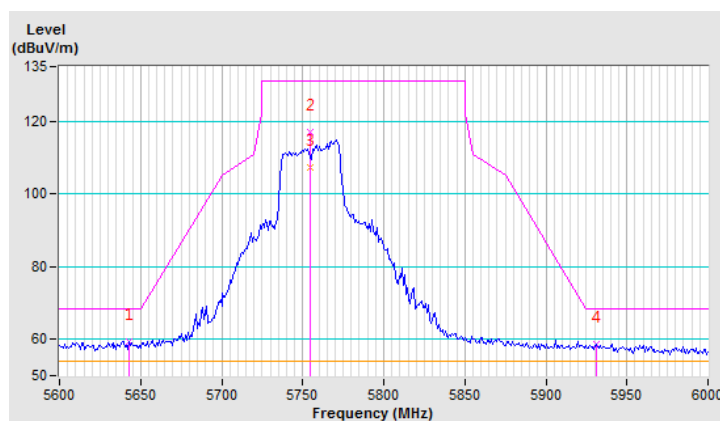


CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5643.20	59.5 PK	68.2	-8.7	1.48 V	78	56.90	2.60
2	*5755.00	116.9 PK			1.48 V	78	77.00	39.90
3	*5755.00	107.2 AV			1.48 V	78	67.30	39.90
4	#5931.20	58.6 PK	68.2	-9.6	1.48 V	78	55.60	3.00

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. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

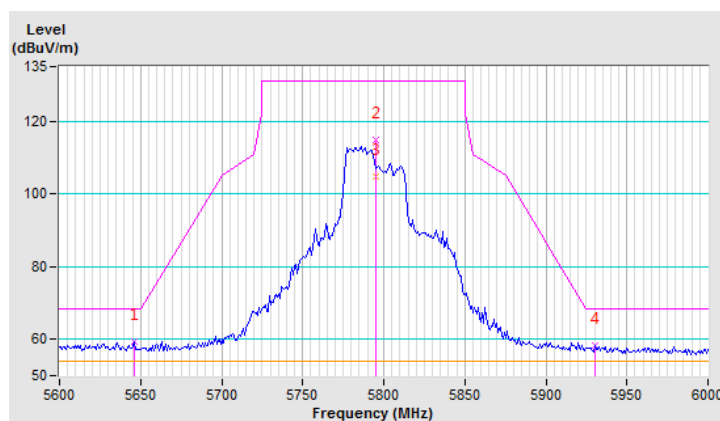


CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5646.40	59.4 PK	68.2	-8.8	1.65 H	188	56.80	2.60
2	*5795.00	115.0 PK			1.65 H	188	75.10	39.90
3	*5795.00	104.6 AV			1.65 H	188	64.70	39.90
4	#5930.40	58.3 PK	68.2	-9.9	1.65 H	188	55.30	3.00

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. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

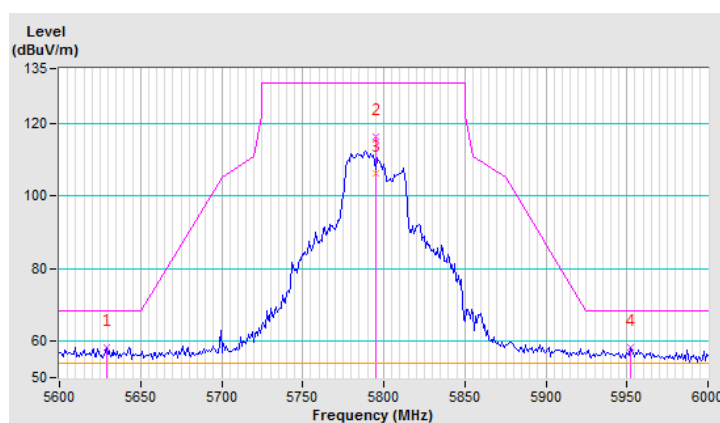


CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5628.80	58.2 PK	68.2	-10.0	2.75 V	49	55.50	2.70
2	*5795.00	116.1 PK			2.75 V	49	76.20	39.90
3	*5795.00	106.2 AV			2.75 V	49	66.30	39.90
4	#5952.00	58.3 PK	68.2	-9.9	2.75 V	49	55.30	3.00

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. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



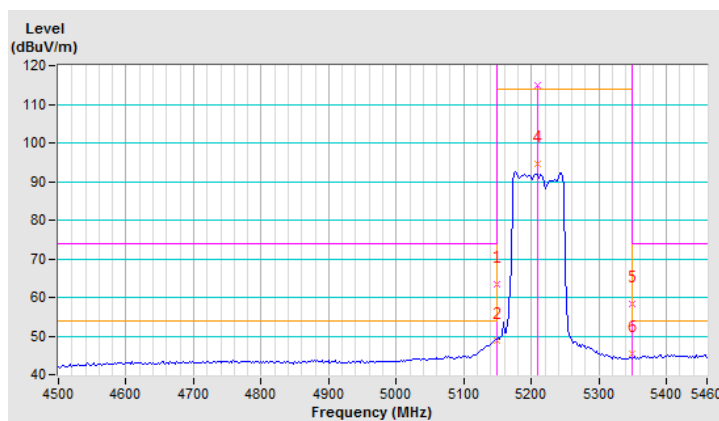
802.11ac (80MHz) 1S4T TxBF Nss1 MCS0

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	5150.00	63.4 PK	74.0	-10.6	2.11 H	192	61.70	1.70
2	5150.00	48.7 AV	54.0	-5.3	2.11 H	192	47.00	1.70
3	*5210.00	114.8 PK			2.11 H	192	75.80	39.00
4	*5210.00	94.5 AV			2.11 H	192	55.50	39.00
5	5350.00	58.4 PK	74.0	-15.6	2.11 H	192	56.20	2.20
6	5350.00	45.3 AV	54.0	-8.7	2.11 H	192	43.10	2.20

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. " * ": Fundamental frequency.

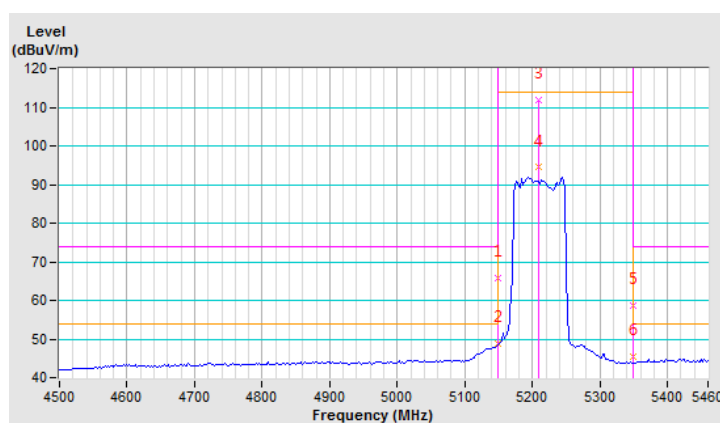


CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	65.8 PK	74.0	-8.2	2.73 V	25	64.10	1.70
2	5150.00	48.9 AV	54.0	-5.1	2.73 V	25	47.20	1.70
3	*5210.00	111.9 PK			2.73 V	25	72.90	39.00
4	*5210.00	94.4 AV			2.73 V	25	55.40	39.00
5	5350.00	58.7 PK	74.0	-15.3	2.73 V	25	56.50	2.20
6	5350.00	45.3 AV	54.0	-8.7	2.73 V	25	43.10	2.20

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. " * ": Fundamental frequency.

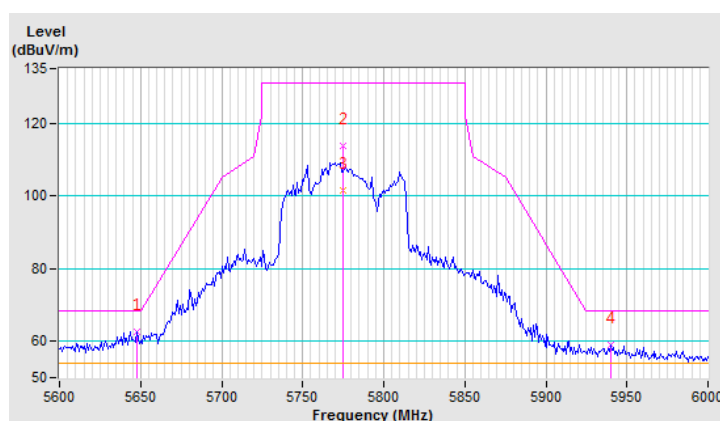


CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5648.00	62.6 PK	68.2	-5.6	1.45 H	186	60.00	2.60
2	*5775.00	113.7 PK			1.45 H	186	73.80	39.90
3	*5775.00	101.5 AV			1.45 H	186	61.60	39.90
4	#5940.00	59.1 PK	68.2	-9.1	1.45 H	186	56.10	3.00

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. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

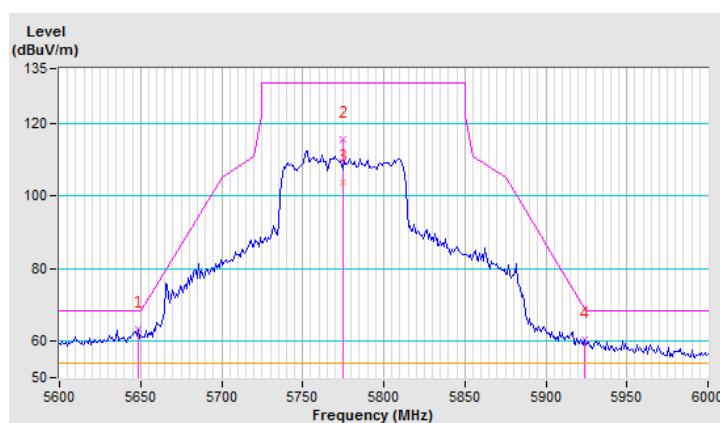


CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5648.80	63.3 PK	68.2	-4.9	1.48 V	276	60.70	2.60
2	*5775.00	115.6 PK			1.48 V	246	75.70	39.90
3	*5775.00	103.8 AV			1.48 V	246	63.90	39.90
4	#5924.00	60.4 PK	68.9	-8.5	1.48 V	276	57.40	3.00

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. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



4.7 Frequency Stability Measurement

4.7.1 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).

4.7.2 Measuring Instruments and Setting

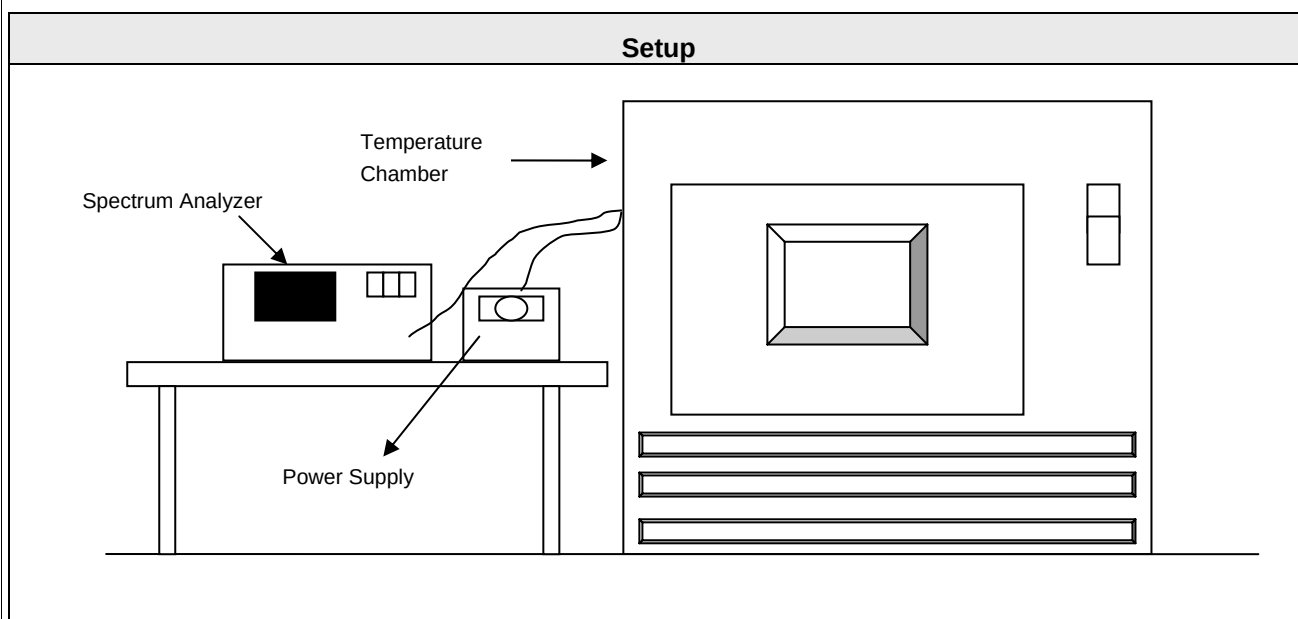
Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer and receiver.

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

4.7.3 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.

4.7.4 Test Setup Layout



4.7.5 Test Deviation

There are no deviations with the original standard.

4.7.6 EUT Operating Conditions

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

4.7.7 Test Results

Temperature	25°C	Humidity	60%
Test Engineer	Leo Tsai		

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	5179.9769	PASS	5179.9799	PASS	5179.9796	PASS	5179.9788	PASS
40	120	5180.0138	PASS	5180.012	PASS	5180.0114	PASS	5180.0151	PASS
30	120	5180.0143	PASS	5180.018	PASS	5180.015	PASS	5180.0159	PASS
20	120	5179.9853	PASS	5179.9865	PASS	5179.9856	PASS	5179.9826	PASS
10	120	5180.012	PASS	5180.0127	PASS	5180.0116	PASS	5180.0101	PASS
0	120	5180.0265	PASS	5180.0266	PASS	5180.0225	PASS	5180.0253	PASS
-10	120	5180.007	PASS	5180.0112	PASS	5180.0089	PASS	5180.0064	PASS
-20	120	5179.9942	PASS	5179.9952	PASS	5179.9931	PASS	5179.9937	PASS
-30	120	5180.0226	PASS	5180.0204	PASS	5180.0228	PASS	5180.0214	PASS
Max. Deviation (ppm)		5.1	PASS	5.1	PASS	4.4	PASS	4.9	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	5179.9863	PASS	5179.9863	PASS	5179.9848	PASS	5179.9821	PASS
	120	5179.9853	PASS	5179.9865	PASS	5179.9856	PASS	5179.9826	PASS
	102	5179.9853	PASS	5179.9872	PASS	5179.9864	PASS	5179.9833	PASS
Max. Deviation (ppm)		2.8	PASS	2.6	PASS	2.9	PASS	-3.5	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	5179.9953	PASS	5179.9928	PASS	5179.9969	PASS	5179.993	PASS
40	120	5179.9965	PASS	5179.9964	PASS	5179.9956	PASS	5179.9958	PASS
30	120	5179.9754	PASS	5179.9763	PASS	5179.9726	PASS	5179.9727	PASS
20	120	5180.0203	PASS	5180.0184	PASS	5180.0188	PASS	5180.0206	PASS
10	120	5180.0099	PASS	5180.013	PASS	5180.0084	PASS	5180.0117	PASS
0	120	5180.0152	PASS	5180.0107	PASS	5180.0148	PASS	5180.0146	PASS
-10	120	5180.025	PASS	5180.0237	PASS	5180.0234	PASS	5180.0277	PASS
-20	120	5179.98	PASS	5179.9762	PASS	5179.9803	PASS	5179.9763	PASS
-30	120	5179.99	PASS	5179.991	PASS	5179.9874	PASS	5179.9885	PASS
Max. Deviation (ppm)		4.8	PASS	4.6	PASS	4.5	PASS	5.3	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	5180.0199	PASS	5180.0188	PASS	5180.0189	PASS	5180.0198	PASS
	120	5180.0203	PASS	5180.0184	PASS	5180.0188	PASS	5180.0206	PASS
	102	5180.0196	PASS	5180.0177	PASS	5180.0186	PASS	5180.021	PASS
Max. Deviation (ppm)		3.9	PASS	3.6	PASS	3.6	PASS	4.0	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	5180.0159	PASS	5180.018	PASS	5180.017	PASS	5180.0177	PASS
40	120	5180.0103	PASS	5180.0067	PASS	5180.0108	PASS	5180.0075	PASS
30	120	5179.9789	PASS	5179.9808	PASS	5179.98	PASS	5179.9839	PASS
20	120	5179.9877	PASS	5179.9861	PASS	5179.9879	PASS	5179.9892	PASS
10	120	5180.0197	PASS	5180.022	PASS	5180.0234	PASS	5180.024	PASS
0	120	5180.0091	PASS	5180.0098	PASS	5180.0135	PASS	5180.0103	PASS
-10	120	5180.009	PASS	5180.0092	PASS	5180.0106	PASS	5180.0117	PASS
-20	120	5180.0034	PASS	5180.001	PASS	5180.0033	PASS	5180.0029	PASS
-30	120	5180.0001	PASS	5179.9997	PASS	5179.9987	PASS	5180.0018	PASS
Max. Deviation (ppm)		-4.1	PASS	4.2	PASS	4.5	PASS	4.6	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	5179.9867	PASS	5179.986	PASS	5179.9882	PASS	5179.989	PASS
	120	5179.9877	PASS	5179.9861	PASS	5179.9879	PASS	5179.9892	PASS
	102	5179.9872	PASS	5179.9868	PASS	5179.9884	PASS	5179.9884	PASS
Max. Deviation (ppm)		-2.6	PASS	-2.7	PASS	-2.3	PASS	-2.2	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5180 MHz Chain4

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	5179.9959	PASS	5179.9965	PASS	5179.9985	PASS	5179.9943	PASS
40	120	5180.0041	PASS	5180.0045	PASS	5180.0056	PASS	5180.005	PASS
30	120	5180.0245	PASS	5180.0223	PASS	5180.0222	PASS	5180.0226	PASS
20	120	5180.008	PASS	5180.0087	PASS	5180.0074	PASS	5180.0063	PASS
10	120	5179.9897	PASS	5179.9889	PASS	5179.9878	PASS	5179.9895	PASS
0	120	5180.0138	PASS	5180.0128	PASS	5180.0152	PASS	5180.0146	PASS
-10	120	5179.9901	PASS	5179.9889	PASS	5179.9881	PASS	5179.9895	PASS
-20	120	5179.9744	PASS	5179.9788	PASS	5179.975	PASS	5179.976	PASS
-30	120	5179.9997	PASS	5180.0021	PASS	5180.0018	PASS	5180.0013	PASS
Max. Deviation (ppm)		4.7	PASS	4.3	PASS	4.8	PASS	-4.6	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5180 MHz Chain4

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	5180.0083	PASS	5180.0087	PASS	5180.0071	PASS	5180.006	PASS
	120	5180.008	PASS	5180.0087	PASS	5180.0074	PASS	5180.0063	PASS
	102	5180.007	PASS	5180.0095	PASS	5180.0068	PASS	5180.0058	PASS
Max. Deviation (ppm)		1.6	PASS	1.8	PASS	1.4	PASS	1.2	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	5199.9791	PASS	5199.9779	PASS	5199.9754	PASS	5199.9763	PASS
40	120	5199.9752	PASS	5199.9764	PASS	5199.9751	PASS	5199.9793	PASS
30	120	5199.9755	PASS	5199.9754	PASS	5199.9785	PASS	5199.9754	PASS
20	120	5199.9919	PASS	5199.9934	PASS	5199.9942	PASS	5199.9965	PASS
10	120	5199.9772	PASS	5199.9758	PASS	5199.9741	PASS	5199.9773	PASS
0	120	5199.9952	PASS	5199.9978	PASS	5199.9965	PASS	5199.9988	PASS
-10	120	5199.9869	PASS	5199.9864	PASS	5199.9885	PASS	5199.9896	PASS
-20	120	5200.0234	PASS	5200.0206	PASS	5200.0238	PASS	5200.024	PASS
-30	120	5199.9844	PASS	5199.9823	PASS	5199.9843	PASS	5199.9815	PASS
Max. Deviation (ppm)		-4.8	PASS	-4.7	PASS	-5.0	PASS	-4.7	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	5199.9916	PASS	5199.993	PASS	5199.9941	PASS	5199.9973	PASS
	120	5199.9919	PASS	5199.9934	PASS	5199.9942	PASS	5199.9965	PASS
	102	5199.9921	PASS	5199.9926	PASS	5199.9951	PASS	5199.9958	PASS
Max. Deviation (ppm)		-1.6	PASS	-1.4	PASS	-1.1	PASS	-0.8	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	5199.9859	PASS	5199.984	PASS	5199.9828	PASS	5199.9837	PASS
40	120	5200.0183	PASS	5200.0201	PASS	5200.0197	PASS	5200.0196	PASS
30	120	5199.9864	PASS	5199.9838	PASS	5199.9831	PASS	5199.9843	PASS
20	120	5199.9865	PASS	5199.9842	PASS	5199.9825	PASS	5199.9828	PASS
10	120	5199.9885	PASS	5199.9929	PASS	5199.9902	PASS	5199.99	PASS
0	120	5200.0226	PASS	5200.0227	PASS	5200.0219	PASS	5200.0192	PASS
-10	120	5200.0147	PASS	5200.0129	PASS	5200.0152	PASS	5200.0115	PASS
-20	120	5199.9953	PASS	5199.9981	PASS	5199.9976	PASS	5199.997	PASS
-30	120	5199.9927	PASS	5199.9934	PASS	5199.9925	PASS	5199.9941	PASS
Max. Deviation (ppm)		4.3	PASS	4.4	PASS	-4.2	PASS	3.7	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	5199.9858	PASS	5199.9837	PASS	5199.9822	PASS	5199.9838	PASS
	120	5199.9865	PASS	5199.9842	PASS	5199.9825	PASS	5199.9828	PASS
	102	5199.9866	PASS	5199.9833	PASS	5199.9818	PASS	5199.9828	PASS
Max. Deviation (ppm)		-2.7	PASS	-3.2	PASS	-3.5	PASS	-3.3	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	5199.9907	PASS	5199.9896	PASS	5199.9907	PASS	5199.9877	PASS
40	120	5200.0017	PASS	5200.0036	PASS	5200.0008	PASS	5200.0007	PASS
30	120	5199.979	PASS	5199.9829	PASS	5199.9787	PASS	5199.9801	PASS
20	120	5200.0029	PASS	5200.0024	PASS	5199.9991	PASS	5199.9998	PASS
10	120	5200.0189	PASS	5200.0177	PASS	5200.0198	PASS	5200.0157	PASS
0	120	5199.99	PASS	5199.9863	PASS	5199.9852	PASS	5199.9884	PASS
-10	120	5199.976	PASS	5199.9749	PASS	5199.9751	PASS	5199.9742	PASS
-20	120	5199.9984	PASS	5199.9965	PASS	5199.9961	PASS	5199.9966	PASS
-30	120	5200.0226	PASS	5200.0236	PASS	5200.0214	PASS	5200.0239	PASS
Max. Deviation (ppm)		-4.6	PASS	-4.8	PASS	-4.8	PASS	-5.0	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	5200.003	PASS	5200.0031	PASS	5199.9995	PASS	5200	PASS
	120	5200.0029	PASS	5200.0024	PASS	5199.9991	PASS	5199.9998	PASS
	102	5200.0029	PASS	5200.0031	PASS	5199.9994	PASS	5200.0007	PASS
Max. Deviation (ppm)		0.6	PASS	0.6	PASS	-0.2	PASS	0.1	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5200 MHz Chain4

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	5200.0195	PASS	5200.0217	PASS	5200.0171	PASS	5200.0196	PASS
40	120	5200.0168	PASS	5200.016	PASS	5200.0155	PASS	5200.016	PASS
30	120	5199.9793	PASS	5199.9758	PASS	5199.9778	PASS	5199.9793	PASS
20	120	5199.9845	PASS	5199.9843	PASS	5199.98	PASS	5199.98	PASS
10	120	5199.9949	PASS	5199.9994	PASS	5199.9993	PASS	5199.9956	PASS
0	120	5200.012	PASS	5200.011	PASS	5200.0154	PASS	5200.0147	PASS
-10	120	5199.9926	PASS	5199.9905	PASS	5199.9898	PASS	5199.989	PASS
-20	120	5199.9743	PASS	5199.9778	PASS	5199.9764	PASS	5199.9776	PASS
-30	120	5200.0171	PASS	5200.0182	PASS	5200.0199	PASS	5200.0198	PASS
Max. Deviation (ppm)		-4.9	PASS	-4.7	PASS	-4.5	PASS	-4.3	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5200 MHz Chain4

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	5199.9841	PASS	5199.9838	PASS	5199.9808	PASS	5199.9806	PASS
	120	5199.9845	PASS	5199.9843	PASS	5199.98	PASS	5199.98	PASS
	102	5199.9851	PASS	5199.9852	PASS	5199.9799	PASS	5199.9804	PASS
Max. Deviation (ppm)		-3.1	PASS	-3.1	PASS	-3.9	PASS	-3.8	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	5239.9975	PASS	5239.9985	PASS	5239.9978	PASS	5239.995	PASS
40	120	5239.9839	PASS	5239.9873	PASS	5239.9866	PASS	5239.9849	PASS
30	120	5239.9986	PASS	5239.9943	PASS	5239.9967	PASS	5239.9942	PASS
20	120	5240.0213	PASS	5240.0234	PASS	5240.0225	PASS	5240.0204	PASS
10	120	5240.0154	PASS	5240.0163	PASS	5240.0132	PASS	5240.0154	PASS
0	120	5240.0189	PASS	5240.0195	PASS	5240.0182	PASS	5240.0187	PASS
-10	120	5239.9765	PASS	5239.9793	PASS	5239.9792	PASS	5239.9755	PASS
-20	120	5240.0088	PASS	5240.011	PASS	5240.0121	PASS	5240.0125	PASS
-30	120	5239.9777	PASS	5239.9759	PASS	5239.9761	PASS	5239.9778	PASS
Max. Deviation (ppm)		-4.5	PASS	4.5	PASS	-4.6	PASS	-4.7	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	5240.0205	PASS	5240.0234	PASS	5240.0227	PASS	5240.021	PASS
	120	5240.0213	PASS	5240.0234	PASS	5240.0225	PASS	5240.0204	PASS
	102	5240.0212	PASS	5240.0239	PASS	5240.022	PASS	5240.0195	PASS
Max. Deviation (ppm)		4.1	PASS	4.6	PASS	4.3	PASS	4.0	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	5239.9745	PASS	5239.9736	PASS	5239.9736	PASS	5239.9749	PASS
40	120	5239.9798	PASS	5239.9774	PASS	5239.9816	PASS	5239.9779	PASS
30	120	5240.0022	PASS	5240.0028	PASS	5240.0005	PASS	5239.9996	PASS
20	120	5240.0069	PASS	5240.0086	PASS	5240.0065	PASS	5240.0112	PASS
10	120	5240.0148	PASS	5240.0155	PASS	5240.0135	PASS	5240.0174	PASS
0	120	5240.0138	PASS	5240.0151	PASS	5240.0153	PASS	5240.0172	PASS
-10	120	5240.0039	PASS	5240.002	PASS	5240.0041	PASS	5239.9993	PASS
-20	120	5240.0012	PASS	5239.9996	PASS	5240.0005	PASS	5240.0014	PASS
-30	120	5240.0187	PASS	5240.0161	PASS	5240.0186	PASS	5240.0146	PASS
Max. Deviation (ppm)		-4.9	PASS	-5.0	PASS	-5.0	PASS	-4.8	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	5240.0062	PASS	5240.009	PASS	5240.0055	PASS	5240.0118	PASS
	120	5240.0069	PASS	5240.0086	PASS	5240.0065	PASS	5240.0112	PASS
	102	5240.007	PASS	5240.0095	PASS	5240.0063	PASS	5240.0121	PASS
Max. Deviation (ppm)		1.3	PASS	1.7	PASS	1.2	PASS	2.3	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	5240.0211	PASS	5240.023	PASS	5240.0195	PASS	5240.0225	PASS
40	120	5239.9983	PASS	5239.9977	PASS	5240.0014	PASS	5240.0013	PASS
30	120	5239.9764	PASS	5239.9798	PASS	5239.9777	PASS	5239.978	PASS
20	120	5239.9858	PASS	5239.9875	PASS	5239.9839	PASS	5239.9837	PASS
10	120	5239.9976	PASS	5239.9994	PASS	5239.9988	PASS	5240.0017	PASS
0	120	5240.0131	PASS	5240.0143	PASS	5240.0136	PASS	5240.0129	PASS
-10	120	5239.9792	PASS	5239.979	PASS	5239.9781	PASS	5239.9766	PASS
-20	120	5239.9847	PASS	5239.9887	PASS	5239.9847	PASS	5239.9865	PASS
-30	120	5239.9841	PASS	5239.9833	PASS	5239.9798	PASS	5239.9817	PASS
Max. Deviation (ppm)		-4.5	PASS	-4.0	PASS	-4.3	PASS	4.3	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	5239.9856	PASS	5239.9874	PASS	5239.9843	PASS	5239.9841	PASS
	120	5239.9858	PASS	5239.9875	PASS	5239.9839	PASS	5239.9837	PASS
	102	5239.9858	PASS	5239.988	PASS	5239.9844	PASS	5239.9839	PASS
Max. Deviation (ppm)		-2.7	PASS	-2.4	PASS	-3.1	PASS	-3.1	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5240 MHz Chain4

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	5240.0095	PASS	5240.0079	PASS	5240.0094	PASS	5240.0082	PASS
40	120	5240.0246	PASS	5240.0242	PASS	5240.0242	PASS	5240.0219	PASS
30	120	5239.9891	PASS	5239.9903	PASS	5239.9909	PASS	5239.9883	PASS
20	120	5240.0152	PASS	5240.0154	PASS	5240.0144	PASS	5240.0152	PASS
10	120	5239.9897	PASS	5239.9889	PASS	5239.9909	PASS	5239.9901	PASS
0	120	5240.0116	PASS	5240.0121	PASS	5240.0116	PASS	5240.0096	PASS
-10	120	5240.0081	PASS	5240.0082	PASS	5240.009	PASS	5240.0097	PASS
-20	120	5240.0082	PASS	5240.0047	PASS	5240.0079	PASS	5240.0068	PASS
-30	120	5239.9851	PASS	5239.9839	PASS	5239.9868	PASS	5239.9836	PASS
Max. Deviation (ppm)		4.7	PASS	4.6	PASS	4.6	PASS	4.2	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5240 MHz Chain4

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	5240.0159	PASS	5240.0145	PASS	5240.0139	PASS	5240.0144	PASS
	120	5240.0152	PASS	5240.0154	PASS	5240.0144	PASS	5240.0152	PASS
	102	5240.0148	PASS	5240.0161	PASS	5240.0134	PASS	5240.015	PASS
Max. Deviation (ppm)		3.0	PASS	3.1	PASS	2.7	PASS	2.9	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	5744.9848	PASS	5744.9814	PASS	5744.9824	PASS	5744.9819	PASS
40	120	5744.9799	PASS	5744.9807	PASS	5744.9816	PASS	5744.9795	PASS
30	120	5744.9703	PASS	5744.9726	PASS	5744.9733	PASS	5744.9723	PASS
20	120	5745.0275	PASS	5745.0285	PASS	5745.0272	PASS	5745.0291	PASS
10	120	5745.0024	PASS	5745.0029	PASS	5745.0069	PASS	5745.0053	PASS
0	120	5744.9726	PASS	5744.9719	PASS	5744.9741	PASS	5744.973	PASS
-10	120	5745.0091	PASS	5745.0052	PASS	5745.0097	PASS	5745.0073	PASS
-20	120	5744.9981	PASS	5744.9972	PASS	5744.9995	PASS	5744.9963	PASS
-30	120	5745.0051	PASS	5745.004	PASS	5745.0012	PASS	5745.0033	PASS
Max. Deviation (ppm)		4.8	PASS	-4.9	PASS	4.7	PASS	5.1	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	5745.0283	PASS	5745.0281	PASS	5745.0267	PASS	5745.0299	PASS
	120	5745.0275	PASS	5745.0285	PASS	5745.0272	PASS	5745.0291	PASS
	102	5745.028	PASS	5745.0284	PASS	5745.0265	PASS	5745.0289	PASS
Max. Deviation (ppm)		4.9	PASS	5.0	PASS	4.7	PASS	5.1	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	5744.98	PASS	5744.9802	PASS	5744.9793	PASS	5744.9767	PASS
40	120	5744.9973	PASS	5744.9937	PASS	5744.9923	PASS	5744.9944	PASS
30	120	5745.0237	PASS	5745.0258	PASS	5745.0253	PASS	5745.0231	PASS
20	120	5744.9742	PASS	5744.9723	PASS	5744.9766	PASS	5744.9717	PASS
10	120	5744.9902	PASS	5744.9919	PASS	5744.9892	PASS	5744.9899	PASS
0	120	5744.9777	PASS	5744.9748	PASS	5744.9726	PASS	5744.9731	PASS
-10	120	5745.0012	PASS	5745.0044	PASS	5745.002	PASS	5745.0017	PASS
-20	120	5744.9788	PASS	5744.9742	PASS	5744.9768	PASS	5744.9778	PASS
-30	120	5745.0043	PASS	5745.0027	PASS	5745.004	PASS	5745.0049	PASS
Max. Deviation (ppm)		-4.5	PASS	4.5	PASS	-4.8	PASS	-4.9	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	5744.9747	PASS	5744.9712	PASS	5744.9767	PASS	5744.9706	PASS
	120	5744.9742	PASS	5744.9723	PASS	5744.9766	PASS	5744.9717	PASS
	102	5744.9753	PASS	5744.9722	PASS	5744.9768	PASS	5744.9706	PASS
Max. Deviation (ppm)		-4.5	PASS	-5.0	PASS	-4.1	PASS	-5.1	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	5744.9785	PASS	5744.9811	PASS	5744.979	PASS	5744.9807	PASS
40	120	5744.9995	PASS	5744.996	PASS	5745	PASS	5744.9982	PASS
30	120	5745.0121	PASS	5745.0121	PASS	5745.0132	PASS	5745.0106	PASS
20	120	5744.9766	PASS	5744.9734	PASS	5744.9769	PASS	5744.9725	PASS
10	120	5744.9938	PASS	5744.9921	PASS	5744.9918	PASS	5744.9931	PASS
0	120	5745.0159	PASS	5745.0188	PASS	5745.0197	PASS	5745.0192	PASS
-10	120	5744.9944	PASS	5744.9952	PASS	5744.9973	PASS	5744.9985	PASS
-20	120	5744.9867	PASS	5744.9842	PASS	5744.9859	PASS	5744.9869	PASS
-30	120	5744.9875	PASS	5744.9869	PASS	5744.9908	PASS	5744.9908	PASS
Max. Deviation (ppm)		-4.1	PASS	-4.6	PASS	-4.0	PASS	-4.8	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	5744.9761	PASS	5744.9729	PASS	5744.9758	PASS	5744.9715	PASS
	120	5744.9766	PASS	5744.9734	PASS	5744.9769	PASS	5744.9725	PASS
	102	5744.9757	PASS	5744.9725	PASS	5744.9775	PASS	5744.973	PASS
Max. Deviation (ppm)		-4.2	PASS	-4.8	PASS	-4.2	PASS	-5.0	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5745 MHz Chain4

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	5744.9798	PASS	5744.9839	PASS	5744.984	PASS	5744.9837	PASS
40	120	5745.0081	PASS	5745.0073	PASS	5745.0068	PASS	5745.0038	PASS
30	120	5745.0287	PASS	5745.0278	PASS	5745.0296	PASS	5745.0263	PASS
20	120	5744.9847	PASS	5744.9823	PASS	5744.9832	PASS	5744.9836	PASS
10	120	5744.9754	PASS	5744.9797	PASS	5744.9755	PASS	5744.9762	PASS
0	120	5745.0127	PASS	5745.0138	PASS	5745.0129	PASS	5745.0127	PASS
-10	120	5745.0204	PASS	5745.0184	PASS	5745.0183	PASS	5745.0194	PASS
-20	120	5745.0236	PASS	5745.0222	PASS	5745.0206	PASS	5745.0203	PASS
-30	120	5744.9924	PASS	5744.9923	PASS	5744.991	PASS	5744.9908	PASS
Max. Deviation (ppm)		-4.3	PASS	4.8	PASS	-4.3	PASS	-4.1	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5745 MHz Chain4

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	5744.985	PASS	5744.9816	PASS	5744.9832	PASS	5744.9847	PASS
	120	5744.9847	PASS	5744.9823	PASS	5744.9832	PASS	5744.9836	PASS
	102	5744.9836	PASS	5744.9815	PASS	5744.9834	PASS	5744.9831	PASS
Max. Deviation (ppm)		-2.9	PASS	-3.2	PASS	-2.9	PASS	-2.9	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	5784.9996	PASS	5785.0023	PASS	5785.0012	PASS	5784.9988	PASS
40	120	5784.9804	PASS	5784.9815	PASS	5784.9809	PASS	5784.9804	PASS
30	120	5785.0238	PASS	5785.0215	PASS	5785.0204	PASS	5785.0254	PASS
20	120	5785.0263	PASS	5785.0288	PASS	5785.0241	PASS	5785.0262	PASS
10	120	5784.9908	PASS	5784.9901	PASS	5784.989	PASS	5784.9885	PASS
0	120	5784.9987	PASS	5785.0015	PASS	5785.0022	PASS	5785.0012	PASS
-10	120	5785.0278	PASS	5785.0259	PASS	5785.0237	PASS	5785.0266	PASS
-20	120	5785.0005	PASS	5784.9981	PASS	5785.0014	PASS	5785.0004	PASS
-30	120	5784.9775	PASS	5784.9751	PASS	5784.9754	PASS	5784.9755	PASS
Max. Deviation (ppm)		-4.8	PASS	5.0	PASS	-4.3	PASS	4.6	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	5785.0267	PASS	5785.0282	PASS	5785.0247	PASS	5785.0267	PASS
	120	5785.0263	PASS	5785.0288	PASS	5785.0241	PASS	5785.0262	PASS
	102	5785.026	PASS	5785.0289	PASS	5785.023	PASS	5785.0268	PASS
Max. Deviation (ppm)		-4.6	PASS	5.0	PASS	4.3	PASS	4.6	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	5784.9763	PASS	5784.9774	PASS	5784.9748	PASS	5784.9745	PASS
40	120	5785.009	PASS	5785.0091	PASS	5785.0101	PASS	5785.01	PASS
30	120	5784.9849	PASS	5784.9855	PASS	5784.9842	PASS	5784.9836	PASS
20	120	5784.9902	PASS	5784.9948	PASS	5784.9915	PASS	5784.9913	PASS
10	120	5785.0011	PASS	5785.0009	PASS	5785.0034	PASS	5785.0016	PASS
0	120	5785.0011	PASS	5785.0021	PASS	5785.005	PASS	5785.003	PASS
-10	120	5784.9956	PASS	5784.9967	PASS	5784.9959	PASS	5784.9934	PASS
-20	120	5785.0141	PASS	5785.0131	PASS	5785.0134	PASS	5785.0132	PASS
-30	120	5784.9941	PASS	5784.996	PASS	5784.9945	PASS	5784.9973	PASS
Max. Deviation (ppm)		-4.1	PASS	-3.9	PASS	-4.4	PASS	-4.4	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	5784.9898	PASS	5784.9957	PASS	5784.9925	PASS	5784.9904	PASS
	120	5784.9902	PASS	5784.9948	PASS	5784.9915	PASS	5784.9913	PASS
	102	5784.9912	PASS	5784.9954	PASS	5784.992	PASS	5784.9915	PASS
Max. Deviation (ppm)		-1.8	PASS	-0.9	PASS	-1.5	PASS	-1.7	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	5784.9795	PASS	5784.9808	PASS	5784.9827	PASS	5784.984	PASS
40	120	5785.0266	PASS	5785.0232	PASS	5785.0282	PASS	5785.0258	PASS
30	120	5785.016	PASS	5785.0154	PASS	5785.0166	PASS	5785.0136	PASS
20	120	5784.9861	PASS	5784.9887	PASS	5784.9864	PASS	5784.9877	PASS
10	120	5785.0132	PASS	5785.0136	PASS	5785.0159	PASS	5785.0116	PASS
0	120	5785.007	PASS	5785.0032	PASS	5785.0029	PASS	5785.0065	PASS
-10	120	5784.9767	PASS	5784.978	PASS	5784.979	PASS	5784.9764	PASS
-20	120	5784.9914	PASS	5784.9931	PASS	5784.9906	PASS	5784.9897	PASS
-30	120	5784.9877	PASS	5784.9876	PASS	5784.989	PASS	5784.988	PASS
Max. Deviation (ppm)		4.6	PASS	4.0	PASS	-4.9	PASS	4.5	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	5784.9861	PASS	5784.9878	PASS	5784.9868	PASS	5784.9875	PASS
	120	5784.9861	PASS	5784.9887	PASS	5784.9864	PASS	5784.9877	PASS
	102	5784.9861	PASS	5784.9894	PASS	5784.9874	PASS	5784.9871	PASS
Max. Deviation (ppm)		-2.4	PASS	-2.1	PASS	-2.3	PASS	-2.2	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5785 MHz Chain4

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	5785.0306	PASS	5785.0304	PASS	5785.0258	PASS	5785.0291	PASS
40	120	5784.9725	PASS	5784.9741	PASS	5784.9745	PASS	5784.9728	PASS
30	120	5784.9992	PASS	5784.9984	PASS	5784.9986	PASS	5784.9984	PASS
20	120	5784.9963	PASS	5785.0009	PASS	5784.9997	PASS	5784.9959	PASS
10	120	5784.9927	PASS	5784.9945	PASS	5784.998	PASS	5784.998	PASS
0	120	5784.9855	PASS	5784.9871	PASS	5784.9838	PASS	5784.9875	PASS
-10	120	5785.0181	PASS	5785.0195	PASS	5785.0222	PASS	5785.0219	PASS
-20	120	5784.9798	PASS	5784.9777	PASS	5784.9759	PASS	5784.9776	PASS
-30	120	5785.0305	PASS	5785.031	PASS	5785.0272	PASS	5785.0302	PASS
Max. Deviation (ppm)		5.3	PASS	5.3	PASS	4.7	PASS	5.0	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5785 MHz Chain4

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	5784.9957	PASS	5785	PASS	5784.9989	PASS	5784.9953	PASS
	120	5784.9963	PASS	5785.0009	PASS	5784.9997	PASS	5784.9959	PASS
	102	5784.9966	PASS	5785.0002	PASS	5785.0001	PASS	5784.9958	PASS
Max. Deviation (ppm)		-0.7	PASS	0.2	PASS	-0.2	PASS	-0.8	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	5825.0133	PASS	5825.0115	PASS	5825.0144	PASS	5825.011	PASS
40	120	5824.9748	PASS	5824.9739	PASS	5824.9731	PASS	5824.9735	PASS
30	120	5825.0084	PASS	5825.0071	PASS	5825.0074	PASS	5825.0069	PASS
20	120	5824.9767	PASS	5824.9737	PASS	5824.9785	PASS	5824.974	PASS
10	120	5825.0285	PASS	5825.0296	PASS	5825.0278	PASS	5825.0272	PASS
0	120	5825.0141	PASS	5825.0161	PASS	5825.0162	PASS	5825.015	PASS
-10	120	5825.0049	PASS	5825.0094	PASS	5825.0053	PASS	5825.0077	PASS
-20	120	5824.9733	PASS	5824.97	PASS	5824.9733	PASS	5824.9737	PASS
-30	120	5824.9771	PASS	5824.9786	PASS	5824.9728	PASS	5824.9743	PASS
Max. Deviation (ppm)		4.9	PASS	-5.2	PASS	4.8	PASS	4.7	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	5824.9769	PASS	5824.9745	PASS	5824.9793	PASS	5824.975	PASS
	120	5824.9767	PASS	5824.9737	PASS	5824.9785	PASS	5824.974	PASS
	102	5824.977	PASS	5824.9745	PASS	5824.9795	PASS	5824.9751	PASS
Max. Deviation (ppm)		-4.0	PASS	-4.5	PASS	-3.7	PASS	-4.5	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	5825.0186	PASS	5825.0205	PASS	5825.0186	PASS	5825.0185	PASS
40	120	5824.9935	PASS	5824.9934	PASS	5824.9892	PASS	5824.9925	PASS
30	120	5824.9884	PASS	5824.9918	PASS	5824.9868	PASS	5824.989	PASS
20	120	5824.9982	PASS	5825.0003	PASS	5824.9963	PASS	5824.9994	PASS
10	120	5825.0054	PASS	5825.0081	PASS	5825.0076	PASS	5825.009	PASS
0	120	5825.0031	PASS	5825.0049	PASS	5825.0015	PASS	5825.0009	PASS
-10	120	5824.9995	PASS	5824.9986	PASS	5824.9959	PASS	5824.9993	PASS
-20	120	5825.027	PASS	5825.0275	PASS	5825.0276	PASS	5825.0263	PASS
-30	120	5825.0167	PASS	5825.019	PASS	5825.0179	PASS	5825.0153	PASS
Max. Deviation (ppm)		4.6	PASS	4.7	PASS	4.7	PASS	4.5	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	5824.9985	PASS	5825.0005	PASS	5824.9965	PASS	5825.0003	PASS
	120	5824.9982	PASS	5825.0003	PASS	5824.9963	PASS	5824.9994	PASS
	102	5824.9988	PASS	5824.9999	PASS	5824.9966	PASS	5824.9983	PASS
Max. Deviation (ppm)		-0.3	PASS	0.1	PASS	-0.6	PASS	-0.3	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	5825.0096	PASS	5825.0072	PASS	5825.0092	PASS	5825.0084	PASS
40	120	5825.0195	PASS	5825.0204	PASS	5825.0159	PASS	5825.0198	PASS
30	120	5824.9922	PASS	5824.9915	PASS	5824.9879	PASS	5824.9908	PASS
20	120	5824.9817	PASS	5824.9797	PASS	5824.9815	PASS	5824.9821	PASS
10	120	5824.9856	PASS	5824.9879	PASS	5824.9868	PASS	5824.9858	PASS
0	120	5825.0197	PASS	5825.0167	PASS	5825.0223	PASS	5825.0178	PASS
-10	120	5825.0263	PASS	5825.0298	PASS	5825.0266	PASS	5825.0307	PASS
-20	120	5825.0093	PASS	5825.0112	PASS	5825.0112	PASS	5825.0105	PASS
-30	120	5825.0089	PASS	5825.0065	PASS	5825.0061	PASS	5825.0082	PASS
Max. Deviation (ppm)		4.5	PASS	5.1	PASS	4.6	PASS	5.3	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	5824.9816	PASS	5824.9786	PASS	5824.9806	PASS	5824.9831	PASS
	120	5824.9817	PASS	5824.9797	PASS	5824.9815	PASS	5824.9821	PASS
	102	5824.9808	PASS	5824.9805	PASS	5824.9823	PASS	5824.9811	PASS
Max. Deviation (ppm)		-3.3	PASS	-3.7	PASS	-3.3	PASS	-3.2	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5825 MHz Chain4

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	5824.9923	PASS	5824.9946	PASS	5824.9904	PASS	5824.992	PASS
40	120	5824.9704	PASS	5824.9744	PASS	5824.9731	PASS	5824.9724	PASS
30	120	5824.9874	PASS	5824.9855	PASS	5824.9835	PASS	5824.9827	PASS
20	120	5824.9747	PASS	5824.9758	PASS	5824.9743	PASS	5824.9746	PASS
10	120	5825.0154	PASS	5825.0166	PASS	5825.0176	PASS	5825.0154	PASS
0	120	5825.0262	PASS	5825.0238	PASS	5825.0271	PASS	5825.0271	PASS
-10	120	5825.0101	PASS	5825.011	PASS	5825.0112	PASS	5825.0134	PASS
-20	120	5824.9832	PASS	5824.9814	PASS	5824.9856	PASS	5824.9832	PASS
-30	120	5825.0242	PASS	5825.0205	PASS	5825.0226	PASS	5825.0227	PASS
Max. Deviation (ppm)		-5.1	PASS	--4.4	PASS	4.7	PASS	4.7	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5825 MHz Chain4

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	5824.9754	PASS	5824.9766	PASS	5824.9743	PASS	5824.974	PASS
	120	5824.9747	PASS	5824.9758	PASS	5824.9743	PASS	5824.9746	PASS
	102	5824.9737	PASS	5824.9748	PASS	5824.9746	PASS	5824.975	PASS
Max. Deviation (ppm)		-4.5	PASS	--4.3	PASS	-4.4	PASS	-4.5	PASS
IEEE Limit (ppm)		±20ppm							

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	5189.9885	PASS	5189.9878	PASS	5189.9886	PASS	5189.9879	PASS
40	120	5190.0221	PASS	5190.0247	PASS	5190.0246	PASS	5190.0224	PASS
30	120	5189.9896	PASS	5189.9879	PASS	5189.9864	PASS	5189.9912	PASS
20	120	5189.9984	PASS	5189.999	PASS	5189.9979	PASS	5189.996	PASS
10	120	5189.9764	PASS	5189.9783	PASS	5189.9796	PASS	5189.9791	PASS
0	120	5190.0226	PASS	5190.0235	PASS	5190.0202	PASS	5190.0211	PASS
-10	120	5189.9911	PASS	5189.9924	PASS	5189.9892	PASS	5189.9925	PASS
-20	120	5190.0199	PASS	5190.0194	PASS	5190.0199	PASS	5190.0185	PASS
-30	120	5189.9977	PASS	5189.9976	PASS	5189.9996	PASS	5189.9976	PASS
Max. Deviation (ppm)		-4.5	PASS	4.8	PASS	4.7	PASS	4.3	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	5189.9993	PASS	5189.9997	PASS	5189.9971	PASS	5189.9966	PASS
	120	5189.9984	PASS	5189.999	PASS	5189.9979	PASS	5189.996	PASS
	102	5189.9991	PASS	5189.9991	PASS	5189.9982	PASS	5189.9966	PASS
Max. Deviation (ppm)		-0.3	PASS	-0.2	PASS	-0.6	PASS	-0.8	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	5189.9793	PASS	5189.9757	PASS	5189.9749	PASS	5189.9753	PASS
40	120	5189.9805	PASS	5189.9816	PASS	5189.9804	PASS	5189.9785	PASS
30	120	5189.975	PASS	5189.9753	PASS	5189.9761	PASS	5189.9762	PASS
20	120	5189.9734	PASS	5189.9759	PASS	5189.9727	PASS	5189.9732	PASS
10	120	5189.9846	PASS	5189.987	PASS	5189.9864	PASS	5189.9842	PASS
0	120	5189.9801	PASS	5189.9828	PASS	5189.9832	PASS	5189.9834	PASS
-10	120	5190.0007	PASS	5190.003	PASS	5189.9989	PASS	5189.9997	PASS
-20	120	5189.9812	PASS	5189.9831	PASS	5189.9832	PASS	5189.9847	PASS
-30	120	5190.0121	PASS	5190.0131	PASS	5190.0111	PASS	5190.0142	PASS
Max. Deviation (ppm)		-5.1	PASS	-4.8	PASS	-5.3	PASS	-5.2	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	5189.9744	PASS	5189.9762	PASS	5189.9718	PASS	5189.9726	PASS
	120	5189.9734	PASS	5189.9759	PASS	5189.9727	PASS	5189.9732	PASS
	102	5189.9733	PASS	5189.9754	PASS	5189.972	PASS	5189.974	PASS
Max. Deviation (ppm)		-5.1	PASS	-4.7	PASS	-5.4	PASS	-5.3	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	5189.9751	PASS	5189.9784	PASS	5189.9783	PASS	5189.9764	PASS
40	120	5189.9796	PASS	5189.9828	PASS	5189.9798	PASS	5189.9817	PASS
30	120	5189.9869	PASS	5189.9847	PASS	5189.9864	PASS	5189.9839	PASS
20	120	5189.9811	PASS	5189.9818	PASS	5189.9815	PASS	5189.9821	PASS
10	120	5189.9983	PASS	5190.0015	PASS	5190.0019	PASS	5189.9976	PASS
0	120	5190.0129	PASS	5190.0168	PASS	5190.0158	PASS	5190.0148	PASS
-10	120	5189.9804	PASS	5189.9777	PASS	5189.9786	PASS	5189.9796	PASS
-20	120	5190.0107	PASS	5190.01	PASS	5190.0086	PASS	5190.0073	PASS
-30	120	5189.9845	PASS	5189.9871	PASS	5189.9857	PASS	5189.987	PASS
Max. Deviation (ppm)		-4.8	PASS	-4.3	PASS	-4.2	PASS	-4.5	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	5189.9804	PASS	5189.9808	PASS	5189.9825	PASS	5189.9825	PASS
	120	5189.9811	PASS	5189.9818	PASS	5189.9815	PASS	5189.9821	PASS
	102	5189.9821	PASS	5189.9821	PASS	5189.9822	PASS	5189.9814	PASS
Max. Deviation (ppm)		-3.8	PASS	-3.7	PASS	-3.6	PASS	-3.6	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5190 MHz Chain4

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	5190.0266	PASS	5190.0273	PASS	5190.0243	PASS	5190.0224	PASS
40	120	5189.9751	PASS	5189.9759	PASS	5189.9759	PASS	5189.9779	PASS
30	120	5189.9962	PASS	5189.9988	PASS	5189.9965	PASS	5189.9971	PASS
20	120	5190.0077	PASS	5190.0096	PASS	5190.0107	PASS	5190.0088	PASS
10	120	5189.9947	PASS	5189.9957	PASS	5189.9937	PASS	5189.9936	PASS
0	120	5190.0069	PASS	5190.0067	PASS	5190.0038	PASS	5190.0054	PASS
-10	120	5189.9942	PASS	5189.9938	PASS	5189.9955	PASS	5189.9987	PASS
-20	120	5190.0042	PASS	5190.0046	PASS	5190.0006	PASS	5190.0012	PASS
-30	120	5190.0255	PASS	5190.0274	PASS	5190.0238	PASS	5190.0253	PASS
Max. Deviation (ppm)		5.1	PASS	5.3	PASS	4.7	PASS	4.9	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5190 MHz Chain4

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	5190.0082	PASS	5190.0093	PASS	5190.0107	PASS	5190.009	PASS
	120	5190.0077	PASS	5190.0096	PASS	5190.0107	PASS	5190.0088	PASS
	102	5190.0086	PASS	5190.0096	PASS	5190.01	PASS	5190.0091	PASS
Max. Deviation (ppm)		1.7	PASS	1.8	PASS	2.1	PASS	1.8	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	5229.9863	PASS	5229.987	PASS	5229.9863	PASS	5229.9875	PASS
40	120	5230.0004	PASS	5230.0013	PASS	5230	PASS	5229.9993	PASS
30	120	5230.0137	PASS	5230.0149	PASS	5230.0176	PASS	5230.0126	PASS
20	120	5230.0062	PASS	5230.0095	PASS	5230.0093	PASS	5230.0097	PASS
10	120	5229.9978	PASS	5230	PASS	5229.9962	PASS	5229.998	PASS
0	120	5230.0195	PASS	5230.0222	PASS	5230.0215	PASS	5230.0221	PASS
-10	120	5230.0001	PASS	5230.0028	PASS	5230.0011	PASS	5230.0044	PASS
-20	120	5229.9956	PASS	5229.9974	PASS	5229.995	PASS	5229.9951	PASS
-30	120	5229.9811	PASS	5229.9798	PASS	5229.983	PASS	5229.9839	PASS
Max. Deviation (ppm)		3.7	PASS	4.2	PASS	4.1	PASS	4.2	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	5230.006	PASS	5230.0085	PASS	5230.0093	PASS	5230.0087	PASS
	120	5230.0062	PASS	5230.0095	PASS	5230.0093	PASS	5230.0097	PASS
	102	5230.0054	PASS	5230.0086	PASS	5230.0094	PASS	5230.0097	PASS
Max. Deviation (ppm)		1.2	PASS	1.8	PASS	1.8	PASS	1.9	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	5230.0115	PASS	5230.0121	PASS	5230.0122	PASS	5230.011	PASS
40	120	5230.0115	PASS	5230.014	PASS	5230.0142	PASS	5230.0123	PASS
30	120	5230.0024	PASS	5230.0014	PASS	5230.0008	PASS	5229.9996	PASS
20	120	5229.9977	PASS	5229.9974	PASS	5229.9986	PASS	5229.9974	PASS
10	120	5230.0026	PASS	5230.0028	PASS	5230.0053	PASS	5230.0043	PASS
0	120	5229.9979	PASS	5229.9953	PASS	5229.9991	PASS	5229.9951	PASS
-10	120	5230.005	PASS	5230.0067	PASS	5230.0052	PASS	5230.0067	PASS
-20	120	5229.9952	PASS	5229.9926	PASS	5229.994	PASS	5229.9971	PASS
-30	120	5230.0218	PASS	5230.0184	PASS	5230.018	PASS	5230.0191	PASS
Max. Deviation (ppm)		4.2	PASS	3.5	PASS	2.7	PASS	3.7	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	5229.9984	PASS	5229.9971	PASS	5229.9993	PASS	5229.9965	PASS
	120	5229.9977	PASS	5229.9974	PASS	5229.9986	PASS	5229.9974	PASS
	102	5229.9979	PASS	5229.9966	PASS	5229.998	PASS	5229.9972	PASS
Max. Deviation (ppm)		-0.4	PASS	-0.7	PASS	-0.4	PASS	-0.7	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	5229.9963	PASS	5229.9989	PASS	5229.9953	PASS	5229.9997	PASS
40	120	5230.0011	PASS	5229.9977	PASS	5230.0008	PASS	5229.9996	PASS
30	120	5229.9892	PASS	5229.9887	PASS	5229.9911	PASS	5229.9899	PASS
20	120	5229.9991	PASS	5230.0013	PASS	5229.9999	PASS	5230.0034	PASS
10	120	5230.0027	PASS	5229.9993	PASS	5230.0012	PASS	5230.0007	PASS
0	120	5229.9853	PASS	5229.9858	PASS	5229.987	PASS	5229.9876	PASS
-10	120	5230.0176	PASS	5230.0207	PASS	5230.0178	PASS	5230.0218	PASS
-20	120	5229.9828	PASS	5229.9842	PASS	5229.9829	PASS	5229.9833	PASS
-30	120	5229.9979	PASS	5230.0018	PASS	5230.0009	PASS	5229.9988	PASS
Max. Deviation (ppm)		3.4	PASS	4.0	PASS	3.4	PASS	4.2	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	5229.9992	PASS	5230.0018	PASS	5229.9994	PASS	5230.0038	PASS
	120	5229.9991	PASS	5230.0013	PASS	5229.9999	PASS	5230.0034	PASS
	102	5229.9994	PASS	5230.0015	PASS	5229.9991	PASS	5230.004	PASS
Max. Deviation (ppm)		-0.2	PASS	0.3	PASS	-0.2	PASS	0.8	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5230 MHz Chain4

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	5229.9793	PASS	5229.9772	PASS	5229.9778	PASS	5229.9808	PASS
40	120	5229.9806	PASS	5229.9854	PASS	5229.9821	PASS	5229.9849	PASS
30	120	5230.0052	PASS	5230.0014	PASS	5230.0016	PASS	5230.0045	PASS
20	120	5230.003	PASS	5230.0015	PASS	5229.9995	PASS	5230.0011	PASS
10	120	5230.0094	PASS	5230.0102	PASS	5230.0101	PASS	5230.0118	PASS
0	120	5230.0074	PASS	5230.008	PASS	5230.0087	PASS	5230.0088	PASS
-10	120	5230.0154	PASS	5230.0121	PASS	5230.0128	PASS	5230.0131	PASS
-20	120	5229.9922	PASS	5229.9918	PASS	5229.9899	PASS	5229.9913	PASS
-30	120	5229.977	PASS	5229.9764	PASS	5229.9753	PASS	5229.9755	PASS
Max. Deviation (ppm)		-4.4	PASS	-4.5	PASS	-4.7	PASS	-4.7	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5230 MHz Chain4

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	5230.0026	PASS	5230.0008	PASS	5229.9999	PASS	5230.001	PASS
	120	5230.003	PASS	5230.0015	PASS	5229.9995	PASS	5230.0011	PASS
	102	5230.0025	PASS	5230.0021	PASS	5230.0001	PASS	5230.001	PASS
Max. Deviation (ppm)		0.6	PASS	0.4	PASS	-0.1	PASS	0.2	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	5755.0051	PASS	5755.0041	PASS	5755.0068	PASS	5755.0048	PASS
40	120	5754.9823	PASS	5754.9802	PASS	5754.9801	PASS	5754.984	PASS
30	120	5754.999	PASS	5754.9973	PASS	5754.9966	PASS	5754.9953	PASS
20	120	5754.9952	PASS	5754.9965	PASS	5754.9968	PASS	5754.9983	PASS
10	120	5755.0142	PASS	5755.0183	PASS	5755.0142	PASS	5755.019	PASS
0	120	5754.9981	PASS	5754.9974	PASS	5754.9943	PASS	5754.9974	PASS
-10	120	5755.017	PASS	5755.0143	PASS	5755.0181	PASS	5755.0166	PASS
-20	120	5755.0194	PASS	5755.0188	PASS	5755.0152	PASS	5755.0176	PASS
-30	120	5755.0011	PASS	5754.9997	PASS	5755.0003	PASS	5754.9975	PASS
Max. Deviation (ppm)		3.4	PASS	3.3	PASS	-3.5	PASS	3.1	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	5754.9945	PASS	5754.9957	PASS	5754.9973	PASS	5754.9986	PASS
	120	5754.9952	PASS	5754.9965	PASS	5754.9968	PASS	5754.9983	PASS
	102	5754.9954	PASS	5754.9955	PASS	5754.9958	PASS	5754.9976	PASS
Max. Deviation (ppm)		-1.0	PASS	-0.8	PASS	-0.7	PASS	-0.4	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	5754.9929	PASS	5754.9915	PASS	5754.9902	PASS	5754.9918	PASS
40	120	5754.9749	PASS	5754.9742	PASS	5754.9747	PASS	5754.9718	PASS
30	120	5755.0062	PASS	5755.005	PASS	5755.0027	PASS	5755.0055	PASS
20	120	5755.0068	PASS	5755.0072	PASS	5755.0083	PASS	5755.0066	PASS
10	120	5754.9801	PASS	5754.9825	PASS	5754.9787	PASS	5754.9782	PASS
0	120	5754.999	PASS	5754.998	PASS	5754.9959	PASS	5754.9939	PASS
-10	120	5755.0068	PASS	5755.0072	PASS	5755.0082	PASS	5755.0057	PASS
-20	120	5754.9705	PASS	5754.9708	PASS	5754.9703	PASS	5754.9732	PASS
-30	120	5755.0247	PASS	5755.0276	PASS	5755.0276	PASS	5755.0277	PASS
Max. Deviation (ppm)		-4.4	PASS	-5.1	PASS	-5.2	PASS	-4.8	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	5755.007	PASS	5755.0074	PASS	5755.0087	PASS	5755.0071	PASS
	120	5755.0068	PASS	5755.0072	PASS	5755.0083	PASS	5755.0066	PASS
	102	5755.0069	PASS	5755.0072	PASS	5755.0086	PASS	5755.0057	PASS
Max. Deviation (ppm)		1.2	PASS	1.3	PASS	1.5	PASS	1.2	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	5754.9905	PASS	5754.9924	PASS	5754.9907	PASS	5754.9931	PASS
40	120	5755.0176	PASS	5755.0204	PASS	5755.0159	PASS	5755.0175	PASS
30	120	5755.0261	PASS	5755.0251	PASS	5755.0231	PASS	5755.0277	PASS
20	120	5755.0137	PASS	5755.0156	PASS	5755.0146	PASS	5755.0173	PASS
10	120	5754.988	PASS	5754.9891	PASS	5754.9874	PASS	5754.9859	PASS
0	120	5754.9938	PASS	5754.9948	PASS	5754.9924	PASS	5754.9923	PASS
-10	120	5754.9754	PASS	5754.9742	PASS	5754.9751	PASS	5754.9752	PASS
-20	120	5754.9941	PASS	5754.9966	PASS	5754.9919	PASS	5754.9942	PASS
-30	120	5754.9785	PASS	5754.9794	PASS	5754.9781	PASS	5754.9759	PASS
Max. Deviation (ppm)		4.5	PASS	-4.5	PASS	4.0	PASS	4.8	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	5755.0135	PASS	5755.0156	PASS	5755.0149	PASS	5755.017	PASS
	120	5755.0137	PASS	5755.0156	PASS	5755.0146	PASS	5755.0173	PASS
	102	5755.0141	PASS	5755.0167	PASS	5755.0149	PASS	5755.0177	PASS
Max. Deviation (ppm)		2.5	PASS	2.9	PASS	2.6	PASS	3.1	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5755 MHz Chain4

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	5754.9878	PASS	5754.9851	PASS	5754.9866	PASS	5754.9828	PASS
40	120	5755.0038	PASS	5755.0037	PASS	5754.9998	PASS	5755.0004	PASS
30	120	5755.0158	PASS	5755.0195	PASS	5755.0157	PASS	5755.0178	PASS
20	120	5755.0115	PASS	5755.0102	PASS	5755.0109	PASS	5755.0093	PASS
10	120	5755.0052	PASS	5755.0049	PASS	5755.0022	PASS	5755.0073	PASS
0	120	5755.0139	PASS	5755.018	PASS	5755.0155	PASS	5755.0164	PASS
-10	120	5755.0113	PASS	5755.0151	PASS	5755.0135	PASS	5755.013	PASS
-20	120	5755.0131	PASS	5755.0178	PASS	5755.0159	PASS	5755.0161	PASS
-30	120	5755.0248	PASS	5755.0221	PASS	5755.0266	PASS	5755.0223	PASS
Max. Deviation (ppm)		4.3	PASS	3.8	PASS	4.6	PASS	3.9	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5755 MHz Chain4

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	5755.0116	PASS	5755.0105	PASS	5755.0112	PASS	5755.0093	PASS
	120	5755.0115	PASS	5755.0102	PASS	5755.0109	PASS	5755.0093	PASS
	102	5755.0122	PASS	5755.0108	PASS	5755.0111	PASS	5755.0104	PASS
Max. Deviation (ppm)		2.1	PASS	1.9	PASS	1.9	PASS	1.8	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	5794.9817	PASS	5794.9819	PASS	5794.9776	PASS	5794.977	PASS
40	120	5794.9889	PASS	5794.9901	PASS	5794.991	PASS	5794.9858	PASS
30	120	5794.9854	PASS	5794.9833	PASS	5794.9883	PASS	5794.9841	PASS
20	120	5794.9816	PASS	5794.983	PASS	5794.9843	PASS	5794.9839	PASS
10	120	5795.0175	PASS	5795.0183	PASS	5795.0153	PASS	5795.0186	PASS
0	120	5794.9725	PASS	5794.9712	PASS	5794.9706	PASS	5794.9745	PASS
-10	120	5794.9738	PASS	5794.971	PASS	5794.9691	PASS	5794.9726	PASS
-20	120	5794.9966	PASS	5794.9998	PASS	5794.9996	PASS	5794.9978	PASS
-30	120	5794.9779	PASS	5794.9794	PASS	5794.9797	PASS	5794.9793	PASS
Max. Deviation (ppm)		-4.7	PASS	-5.0	PASS	-5.3	PASS	-4.7	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	5794.9823	PASS	5794.9824	PASS	5794.9839	PASS	5794.983	PASS
	120	5794.9816	PASS	5794.983	PASS	5794.9843	PASS	5794.9839	PASS
	102	5794.9808	PASS	5794.982	PASS	5794.9845	PASS	5794.9832	PASS
Max. Deviation (ppm)		-3.3	PASS	-3.1	PASS	-2.8	PASS	-2.9	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	5795.0056	PASS	5795.0059	PASS	5795.0073	PASS	5795.0057	PASS
40	120	5795.0148	PASS	5795.0165	PASS	5795.0149	PASS	5795.0202	PASS
30	120	5794.9773	PASS	5794.9773	PASS	5794.9735	PASS	5794.9743	PASS
20	120	5795.0093	PASS	5795.0127	PASS	5795.0098	PASS	5795.0109	PASS
10	120	5794.9996	PASS	5795.0022	PASS	5795.0001	PASS	5795.0051	PASS
0	120	5795.0239	PASS	5795.0249	PASS	5795.0221	PASS	5795.0241	PASS
-10	120	5794.9748	PASS	5794.9791	PASS	5794.9763	PASS	5794.9783	PASS
-20	120	5794.9947	PASS	5794.995	PASS	5794.9938	PASS	5794.9951	PASS
-30	120	5795.0023	PASS	5795.0029	PASS	5795.0006	PASS	5795.0011	PASS
Max. Deviation (ppm)		4.1	PASS	4.3	PASS	-4.6	PASS	-4.4	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	5795.0097	PASS	5795.0121	PASS	5795.0092	PASS	5795.0101	PASS
	120	5795.0093	PASS	5795.0127	PASS	5795.0098	PASS	5795.0109	PASS
	102	5795.0082	PASS	5795.0125	PASS	5795.0087	PASS	5795.0103	PASS
Max. Deviation (ppm)		1.7	PASS	2.2	PASS	1.7	PASS	1.9	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	5795.0052	PASS	5795.0056	PASS	5795.0041	PASS	5795.0084	PASS
40	120	5795.0028	PASS	5795.004	PASS	5795.007	PASS	5795.0074	PASS
30	120	5795.0229	PASS	5795.0238	PASS	5795.0259	PASS	5795.0235	PASS
20	120	5795.0136	PASS	5795.017	PASS	5795.0171	PASS	5795.0119	PASS
10	120	5795.0287	PASS	5795.0267	PASS	5795.0294	PASS	5795.0289	PASS
0	120	5795.0186	PASS	5795.0186	PASS	5795.0214	PASS	5795.0214	PASS
-10	120	5795.0046	PASS	5795.0057	PASS	5795.0038	PASS	5795.0062	PASS
-20	120	5795.0209	PASS	5795.0197	PASS	5795.0201	PASS	5795.0197	PASS
-30	120	5795.0056	PASS	5795.0067	PASS	5795.0059	PASS	5795.0048	PASS
Max. Deviation (ppm)		5.0	PASS	4.6	PASS	4.5	PASS	5.0	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	5795.0139	PASS	5795.0174	PASS	5795.0176	PASS	5795.0128	PASS
	120	5795.0136	PASS	5795.017	PASS	5795.0171	PASS	5795.0119	PASS
	102	5795.0136	PASS	5795.0171	PASS	5795.0161	PASS	5795.0116	PASS
Max. Deviation (ppm)		2.4	PASS	3.0	PASS	3.0	PASS	2.2	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5795 MHz Chain4

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	5794.9786	PASS	5794.9807	PASS	5794.9792	PASS	5794.9789	PASS
40	120	5794.9859	PASS	5794.9816	PASS	5794.9847	PASS	5794.9814	PASS
30	120	5795.0218	PASS	5795.0231	PASS	5795.0264	PASS	5795.0245	PASS
20	120	5795.0186	PASS	5795.0168	PASS	5795.0192	PASS	5795.0184	PASS
10	120	5794.99	PASS	5794.9899	PASS	5794.9868	PASS	5794.9872	PASS
0	120	5794.997	PASS	5794.9981	PASS	5794.9987	PASS	5794.9963	PASS
-10	120	5794.9756	PASS	5794.9773	PASS	5794.9763	PASS	5794.9741	PASS
-20	120	5794.9861	PASS	5794.9822	PASS	5794.983	PASS	5794.9811	PASS
-30	120	5795.0061	PASS	5795.003	PASS	5795.0028	PASS	5795.0012	PASS
Max. Deviation (ppm)		-4.2	PASS	4.0	PASS	4.6	PASS	-4.5	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5795 MHz Chain4

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	5795.0175	PASS	5795.0175	PASS	5795.0195	PASS	5795.0177	PASS
	120	5795.0186	PASS	5795.0168	PASS	5795.0192	PASS	5795.0184	PASS
	102	5795.0186	PASS	5795.0168	PASS	5795.0198	PASS	5795.0175	PASS
Max. Deviation (ppm)		3.2	PASS	3.0	PASS	3.4	PASS	3.2	PASS
IEEE Limit (ppm)		±20ppm							

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	5210.0123	PASS	5210.0091	PASS	5210.0092	PASS	5210.0101	PASS
40	120	5209.9862	PASS	5209.9856	PASS	5209.9892	PASS	5209.9882	PASS
30	120	5210.0109	PASS	5210.0154	PASS	5210.0128	PASS	5210.0151	PASS
20	120	5209.9838	PASS	5209.9821	PASS	5209.982	PASS	5209.9843	PASS
10	120	5209.9763	PASS	5209.9767	PASS	5209.9792	PASS	5209.9798	PASS
0	120	5210.0179	PASS	5210.0167	PASS	5210.019	PASS	5210.0209	PASS
-10	120	5209.9765	PASS	5209.9753	PASS	5209.9764	PASS	5209.9765	PASS
-20	120	5209.9767	PASS	5209.9772	PASS	5209.9792	PASS	5209.9754	PASS
-30	120	5210.0217	PASS	5210.0243	PASS	5210.0201	PASS	5210.0203	PASS
Max. Deviation (ppm)		-4.5	PASS	-4.7	PASS	-4.5	PASS	-4.7	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	5209.9828	PASS	5209.9812	PASS	5209.9814	PASS	5209.9835	PASS
	120	5209.9838	PASS	5209.9821	PASS	5209.982	PASS	5209.9843	PASS
	102	5209.9838	PASS	5209.9811	PASS	5209.9826	PASS	5209.984	PASS
Max. Deviation (ppm)		-3.3	PASS	-3.6	PASS	-3.6	PASS	-3.2	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	5209.9835	PASS	5209.9847	PASS	5209.9839	PASS	5209.9865	PASS
40	120	5210.0218	PASS	5210.021	PASS	5210.0248	PASS	5210.025	PASS
30	120	5209.9902	PASS	5209.9928	PASS	5209.9925	PASS	5209.9924	PASS
20	120	5210.0169	PASS	5210.0186	PASS	5210.0183	PASS	5210.018	PASS
10	120	5210.0154	PASS	5210.0156	PASS	5210.0153	PASS	5210.0184	PASS
0	120	5210.0123	PASS	5210.0118	PASS	5210.0112	PASS	5210.0133	PASS
-10	120	5209.9929	PASS	5209.9956	PASS	5209.9973	PASS	5209.9952	PASS
-20	120	5210.0048	PASS	5210.0035	PASS	5210	PASS	5210.004	PASS
-30	120	5210.0173	PASS	5210.0169	PASS	5210.0182	PASS	5210.0171	PASS
Max. Deviation (ppm)		4.2	PASS	4.0	PASS	4.8	PASS	4.8	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	5210.0168	PASS	5210.0192	PASS	5210.0182	PASS	5210.0177	PASS
	120	5210.0169	PASS	5210.0186	PASS	5210.0183	PASS	5210.018	PASS
	102	5210.0168	PASS	5210.018	PASS	5210.0188	PASS	5210.0181	PASS
Max. Deviation (ppm)		3.2	PASS	3.7	PASS	3.6	PASS	3.5	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	5209.9769	PASS	5209.9807	PASS	5209.9768	PASS	5209.9795	PASS
40	120	5209.9816	PASS	5209.9828	PASS	5209.9813	PASS	5209.9842	PASS
30	120	5209.9806	PASS	5209.9802	PASS	5209.981	PASS	5209.9812	PASS
20	120	5210.009	PASS	5210.0063	PASS	5210.0068	PASS	5210.0091	PASS
10	120	5209.9876	PASS	5209.9831	PASS	5209.9864	PASS	5209.985	PASS
0	120	5209.9888	PASS	5209.9887	PASS	5209.9882	PASS	5209.987	PASS
-10	120	5210.0034	PASS	5210.0015	PASS	5210.0035	PASS	5210.0042	PASS
-20	120	5209.9797	PASS	5209.9771	PASS	5209.981	PASS	5209.9783	PASS
-30	120	5210.0016	PASS	5210.0007	PASS	5210.0034	PASS	5210.0042	PASS
Max. Deviation (ppm)		-4.4	PASS	-4.4	PASS	-4.5	PASS	-4.2	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	5210.0085	PASS	5210.0055	PASS	5210.0064	PASS	5210.0098	PASS
	120	5210.009	PASS	5210.0063	PASS	5210.0068	PASS	5210.0091	PASS
	102	5210.01	PASS	5210.0062	PASS	5210.0064	PASS	5210.0091	PASS
Max. Deviation (ppm)		1.9	PASS	1.2	PASS	1.3	PASS	1.9	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5210 MHz Chain4

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	5209.9836	PASS	5209.9871	PASS	5209.9869	PASS	5209.9861	PASS
40	120	5210.0081	PASS	5210.0063	PASS	5210.0061	PASS	5210.0077	PASS
30	120	5209.9884	PASS	5209.9895	PASS	5209.9883	PASS	5209.9865	PASS
20	120	5210.0122	PASS	5210.0103	PASS	5210.0112	PASS	5210.0095	PASS
10	120	5210.0283	PASS	5210.0273	PASS	5210.0277	PASS	5210.0271	PASS
0	120	5210.0068	PASS	5210.008	PASS	5210.0059	PASS	5210.0069	PASS
-10	120	5210.0256	PASS	5210.0257	PASS	5210.0246	PASS	5210.0265	PASS
-20	120	5209.9765	PASS	5209.9742	PASS	5209.9746	PASS	5209.9744	PASS
-30	120	5210.0041	PASS	5210.0009	PASS	5210.0026	PASS	5210.004	PASS
Max. Deviation (ppm)		5.4	PASS	-5.0	PASS	-4.9	PASS	5.1	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5210 MHz Chain4

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	5210.0117	PASS	5210.0109	PASS	5210.0121	PASS	5210.0088	PASS
	120	5210.0122	PASS	5210.0103	PASS	5210.0112	PASS	5210.0095	PASS
	102	5210.013	PASS	5210.01	PASS	5210.0108	PASS	5210.0092	PASS
Max. Deviation (ppm)		2.5	PASS	2.1	PASS	2.3	PASS	1.8	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	5775.0079	PASS	5775.01	PASS	5775.0093	PASS	5775.01	PASS
40	120	5775.0223	PASS	5775.0235	PASS	5775.0251	PASS	5775.0215	PASS
30	120	5775.0138	PASS	5775.014	PASS	5775.0098	PASS	5775.0109	PASS
20	120	5774.9809	PASS	5774.981	PASS	5774.981	PASS	5774.9765	PASS
10	120	5774.9937	PASS	5774.9961	PASS	5774.9976	PASS	5774.9937	PASS
0	120	5775.0167	PASS	5775.02	PASS	5775.0175	PASS	5775.0192	PASS
-10	120	5774.9786	PASS	5774.9786	PASS	5774.9775	PASS	5774.9736	PASS
-20	120	5774.9868	PASS	5774.9866	PASS	5774.9855	PASS	5774.9842	PASS
-30	120	5775.0193	PASS	5775.0216	PASS	5775.0174	PASS	5775.0195	PASS
Max. Deviation (ppm)		3.9	PASS	4.1	PASS	4.3	PASS	-4.6	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	5774.9813	PASS	5774.9813	PASS	5774.9811	PASS	5774.9768	PASS
	120	5774.9809	PASS	5774.981	PASS	5774.981	PASS	5774.9765	PASS
	102	5774.98	PASS	5774.9806	PASS	5774.9821	PASS	5774.9764	PASS
Max. Deviation (ppm)		-3.5	PASS	-3.4	PASS	-3.3	PASS	-4.1	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	5775.0084	PASS	5775.0068	PASS	5775.0081	PASS	5775.0069	PASS
40	120	5774.9962	PASS	5774.998	PASS	5774.996	PASS	5774.9967	PASS
30	120	5775.0251	PASS	5775.0282	PASS	5775.0266	PASS	5775.0266	PASS
20	120	5775.0042	PASS	5775.0035	PASS	5775.0012	PASS	5775.0004	PASS
10	120	5774.9939	PASS	5774.9912	PASS	5774.9933	PASS	5774.9917	PASS
0	120	5775.0137	PASS	5775.0118	PASS	5775.0118	PASS	5775.0171	PASS
-10	120	5775.0101	PASS	5775.0076	PASS	5775.0077	PASS	5775.0071	PASS
-20	120	5774.9834	PASS	5774.9845	PASS	5774.9865	PASS	5774.9843	PASS
-30	120	5774.9787	PASS	5774.9809	PASS	5774.9797	PASS	5774.9826	PASS
Max. Deviation (ppm)		4.3	PASS	4.9	PASS	4.6	PASS	4.6	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	5775.0043	PASS	5775.0038	PASS	5775.0002	PASS	5775.0015	PASS
	120	5775.0042	PASS	5775.0035	PASS	5775.0012	PASS	5775.0004	PASS
	102	5775.0045	PASS	5775.0036	PASS	5775.0019	PASS	5775.0015	PASS
Max. Deviation (ppm)		0.8	PASS	0.7	PASS	0.3	PASS	0.3	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	5774.998	PASS	5774.9982	PASS	5775.0009	PASS	5774.998	PASS
40	120	5774.9709	PASS	5774.9724	PASS	5774.9738	PASS	5774.9743	PASS
30	120	5774.98	PASS	5774.9773	PASS	5774.9797	PASS	5774.979	PASS
20	120	5775.0262	PASS	5775.0285	PASS	5775.0285	PASS	5775.0276	PASS
10	120	5775.0261	PASS	5775.0255	PASS	5775.0282	PASS	5775.0271	PASS
0	120	5775.0042	PASS	5775.0008	PASS	5775.0019	PASS	5775.0022	PASS
-10	120	5775.0003	PASS	5775.0014	PASS	5775.0008	PASS	5775.0016	PASS
-20	120	5775.0277	PASS	5775.0261	PASS	5775.0245	PASS	5775.0283	PASS
-30	120	5774.9833	PASS	5774.9838	PASS	5774.9832	PASS	5774.981	PASS
Max. Deviation (ppm)		-5.0	PASS	4.9	PASS	4.9	PASS	4.8	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	5775.0263	PASS	5775.0296	PASS	5775.0289	PASS	5775.0267	PASS
	120	5775.0262	PASS	5775.0285	PASS	5775.0285	PASS	5775.0276	PASS
	102	5775.0264	PASS	5775.0276	PASS	5775.0279	PASS	5775.0275	PASS
Max. Deviation (ppm)		4.6	PASS	5.1	PASS	5.0	PASS	4.8	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Temp.

Operating Frequency: 5775 MHz Chain4

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	5774.977	PASS	5774.9746	PASS	5774.9757	PASS	5774.9778	PASS
40	120	5775.0094	PASS	5775.0072	PASS	5775.0087	PASS	5775.0076	PASS
30	120	5774.9867	PASS	5774.9827	PASS	5774.9822	PASS	5774.9817	PASS
20	120	5775.0117	PASS	5775.013	PASS	5775.0135	PASS	5775.0128	PASS
10	120	5775.0249	PASS	5775.0235	PASS	5775.0245	PASS	5775.023	PASS
0	120	5775.0268	PASS	5775.0265	PASS	5775.0246	PASS	5775.0269	PASS
-10	120	5774.9967	PASS	5774.9969	PASS	5774.9918	PASS	5774.9921	PASS
-20	120	5774.9777	PASS	5774.9809	PASS	5774.9793	PASS	5774.9792	PASS
-30	120	5775.0239	PASS	5775.0245	PASS	5775.0251	PASS	5775.0256	PASS
Max. Deviation (ppm)		4.6	PASS	4.6	PASS	4.3	PASS	4.7	PASS
IEEE Limit (ppm)		±20ppm							

Frequency Stability Versus Voltage

Operating Frequency: 5775 MHz Chain4

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	5775.0128	PASS	5775.0121	PASS	5775.0131	PASS	5775.012	PASS
	120	5775.0117	PASS	5775.013	PASS	5775.0135	PASS	5775.0128	PASS
	102	5775.0111	PASS	5775.0139	PASS	5775.0144	PASS	5775.0126	PASS
Max. Deviation (ppm)		2.2	PASS	2.4	PASS	2.5	PASS	2.2	PASS
IEEE Limit (ppm)		±20ppm							

5 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESCI	100424	Oct. 24, 2016	Oct. 23, 2017
RF signal cable (with 10dB PAD) Woken	5D-FB	Cable-cond1-01	Dec. 22, 2016	Dec. 21, 2017
LISN ROHDE & SCHWARZ (EUT)	ESH3-Z5	835239/001	Feb. 26, 2016	Feb. 25, 2017
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Jul. 28, 2016	Jul. 27, 2017
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 1.
 3. The VCCI Site Registration No. is C-2040.

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver KEYSIGHT	N9038A	MY55420137	Feb. 06, 2016	Feb. 05, 2017
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100269	Apr. 19, 2016	Apr. 18, 2017
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	EM-6879	269	Aug. 11, 2016	Aug. 10, 2017
Preamplifier Agilent	8449B	3008A01638	Feb. 26, 2016	Feb. 25, 2017
Preamplifier Agilent	8447D	2944A10638	Aug. 09, 2016	Aug. 08, 2017
RF signal cable HUBER+SUHNER+	SUCOFLEX 104	CABLE-CH9-02 (248780+MY13377)	Feb. 02, 2017	Feb. 01, 2018
RF signal cable HUBER+SUHNER	SUCOFLEX 104	CABLE-CH9-03 (274092)	Aug. 09, 2016	Aug. 08, 2017
RF signal cable Woken	8D-FB	Cable-CH9-01	Aug. 09, 2016	Aug. 08, 2017
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
High Speed Peak Power Meter	ML2495A	0824012	Aug. 11, 2016	Aug. 10, 2017
Power Sensor	MA2411B	0738171	Aug. 11, 2016	Aug. 10, 2017

- 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 Site Registration No. is 215374.
5. The IC Site Registration No. is IC 7450F-9.

40	18	16	21
40	18	16	21
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165	-1	-1	21

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165      -1      -1      21
165      -1      -1      21
165      -1      -1      21
165      -1      -1      21
165      -1      -1      21
165      -1      -1      21
165      -1      -1      21

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=====
40MHz power table
=====

```

```

{Administrator}>call_qcsapi set_bw wifi0 40
radar start with regulatory us
complete
{Administrator}>show_tx_power_table
Regulatory Region: us

```

Channel	TX Power		
	80M	40M	20M
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36	17	17	21
36	17	17	21
36	17	17	21
36	18	16	20
36	18	16	20
36	18	16	20
36	18	16	20
40	17	17	21
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161	21	21	21

=====

80MHz power table

=====

```
{Administrator}=>call_qcsapi set_bw wifi0 80
radar start with regulatory us
complete
{Administrator}=>show_tx_power_table
Regulatory Region: us
```

Channel	TX Power		
	80M	40M	20M
36	17	17	21
36	17	17	21
36	17	17	21
36	17	17	21
36	18	16	20
36	18	16	20
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Appendix B. 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 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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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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