FCC Test Report (WLAN 2.4GHz)

Report No.:	RF161129C10
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 30044
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan
Test Location:	No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, TAIWAN (R.O.C.)

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Release Control Record

Issue No.	Description	Date Issued
RF161129C10	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 C (Section 15.247) 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 RF EMI characteristics under the conditions specified in this report.

Prepared by : _____ , **Date:** Mar. 29, 2017

Polly Chien / Specialist

Approved by : _____ , **Date:** Mar. 29, 2017

Ken Liu / Senior Manager

2 Summary of Test Results

Applied Standard: 47 CFR FCC Part 15 Subpart C					
Section	**Ref. Std. Clause**	**Description**	**Measured**	**Limit**	**Result**
3.9	15.203	Antenna Requirements	-	-	PASS
4.1	15.207	AC Power Conducted Emissions	Margin is -15.00dB at 0.15782MHz.	15.207	PASS
4.2	15.247(b)(3)	Maximum Conducted Output Power	Power [dBm]: 11b: 23.94 dBm 11g: 22.96 dBm 11n(20M): 27.39 dBm 11n(40M): 22.76 dBm	30 dBm	PASS
4.3	15.247(e)	Power Spectral Density	PSD [dBm]: 11b: -8.14 dBm/3kHz 11g: -9.81 dBm/3kHz 11n(20M): -5.51 dBm/3kHz 11n(40M): -10.60 dBm/3kHz	8dBm/3kHz	PASS
4.4	15.247(a)(2)	6dB Spectrum Bandwidth	Bandwidth [MHz]: 11b: 9.06 MHz 11g: 16.40 MHz 11n(20M): 17.58 MHz 11n(40M): 35.36 MHz	≥500kHz	PASS
4.5	-	Occupied Bandwidth	Bandwidth [MHz]: 11b: 11.91 MHz 11g: 17.04 MHz 11n(20M): 18.10 MHz 11n(40M): 36.90 MHz	-	-
4.6	15.247(d)	Radiated Emissions	Margin is -2.0dB at 44.87MHz	-	PASS
4.7	15.247(a)(2)	Band Edge Emissions	Margin is -1.4dB at 2483.50MHz.	-	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) (±)
Conducted Emissions at mains ports	150kHz ~ 30MHz	2.44 dB
Radiated Emissions up to 1 GHz	30MHz ~ 1GHz	3.59 dB
Radiated Emissions above 1 GHz	1GHz ~ 6GHz	3.60 dB
	6GHz ~ 18GHz	2.29 dB
	18GHz ~ 40GHz	2.29 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 Basic Description of Equipment Under Test (WLAN 2.4GHz)

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	2400~2483.5MHz		■	IEEE 802.11b: 23.94 dBm
			■	IEEE 802.11g: 22.96 dBm
			■	IEEE 802.11n (20MHz): 27.39 dBm
			■	IEEE 802.11n (40MHz): 22.76 dBm
Product Type	For IEEE 802.11b: WLAN(1TX, 3RX) For IEEE 802.11g: WLAN(1TX, 3RX) For IEEE 802.11n: WLAN(1, 2, 3TX, 3RX)			
Nominal Bandwidth	20MHz / 40MHz			
Modulation	802.11b: DSSS (DBPSK, DQPSK, CCK) 802.11g: OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11n: OFDM (BPSK / QPSK / 16QAM / 64QAM) See the below table			
Data Rate (Mbps)	802.11b mode :DSSS (1/2/5.5/11) 802.11g mode :OFDM (6/9/12/18/24/36/48/54) 802.11n(20MHz) mode(MCS0~MCS23); 802.11n(40MHz) mode(MCS0~MCS23) See the below table			
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			

IEEE Std. 802.11n modulation and data rate information							
MCS Index	Spatial Streams	Modulation Type	Coding Rate	Data Rate (Mbit/s)			
				20 MHz channel		40 MHz channel	
				800ns GI	400ns GI	800ns GI	400ns GI
0	1	BPSK	1/2	6.5	7.2	13.5	15
1		QPSK	1/2	13	14.4	27	30
2		QPSK	3/4	19.5	21.7	40.5	45
3		16-QAM	1/2	26	28.9	54	60
4		16-QAM	3/4	39	43.3	81	90
5		64-QAM	2/3	52	57.8	108	120
6		64-QAM	3/4	58.5	65	121.5	135
7		64-QAM	5/6	65	72.2	135	150
8	2	BPSK	1/2	13	14.4	27	30
9		QPSK	1/2	26	28.9	54	60
10		QPSK	3/4	39	43.3	81	90
11		16-QAM	1/2	52	57.8	108	120
12		16-QAM	3/4	78	86.7	162	180
13		64-QAM	2/3	104	115.6	216	240
14		64-QAM	3/4	117	130	243	270
15		64-QAM	5/6	130	144.4	270	300
16	3	BPSK	1/2	19.5	21.7	40.5	45
17		QPSK	1/2	39	43.3	81	90
18		QPSK	3/4	58.5	65	121.5	135
19		16-QAM	1/2	78	86.7	162	180
20		16-QAM	3/4	117	130	243	270
21		64-QAM	2/3	156	173.3	324	360
22		64-QAM	3/4	175.5	195	364.5	405
23		64-QAM	5/6	195	216.7	405	450
Note: GI means guard interval.							

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 C (15.247)

KDB 558074 D01 DTS Meas Guidance v04, 04/05/2017

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

ANSI C63.10-2013

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

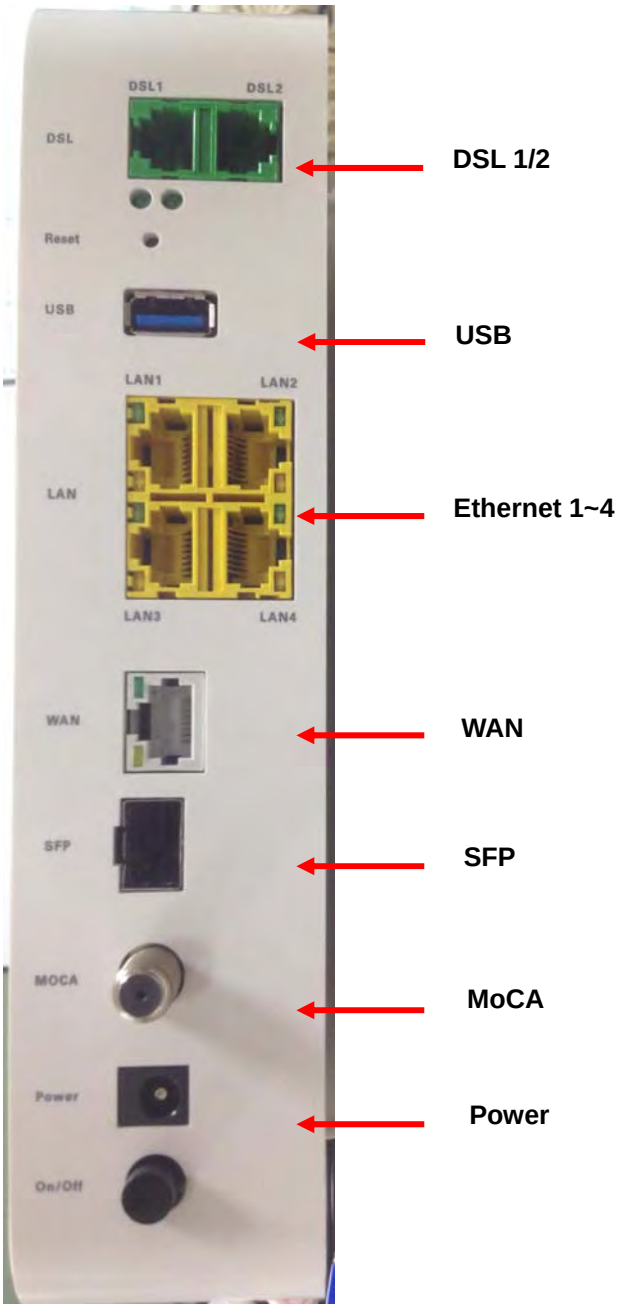
Note: The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.

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

Transmit Operating Mode							Transmit Muitiple Antennas					
■	Operating mode 1 (single antenna)						■	1TX				
■	Operating mode 2 (muitiple antenna, no beam forming)						■	2TX	■	3TX	□	4TX
■	Operating mode 3 (muitiple antenna, with beam forming)						□	2TX	□	3TX	□	4TX
■	802.11b	Operating mode	■	1TX	□	2TX	□	3TX	□	Cyclic shift		
■	802.11g	Operating mode	■	1TX	□	2TX	□	3TX	□	Cyclic shift		
■	802.11n(20MHz)	Operating mode	■	1TX	■	2TX	■	3TX	□	Cyclic shift		
■	802.11n(40MHz)	Operating mode	■	1TX	■	2TX	■	3TX	□	Cyclic shift		

Note:
For IEEE802.11b, 1Mbps~11Mbps: 1TX
For IEEE802.11g, 6Mbps~54Mbps: 1TX
For IEEE802.11n 20MHz/40MHz, MCS0~MCS7: 1 Stream 1TX; MCS8~MCS15: 2 Stream 2TX; MCS16~MCS23: 3 Stream 3TX

3.9 Antenna Requirements

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

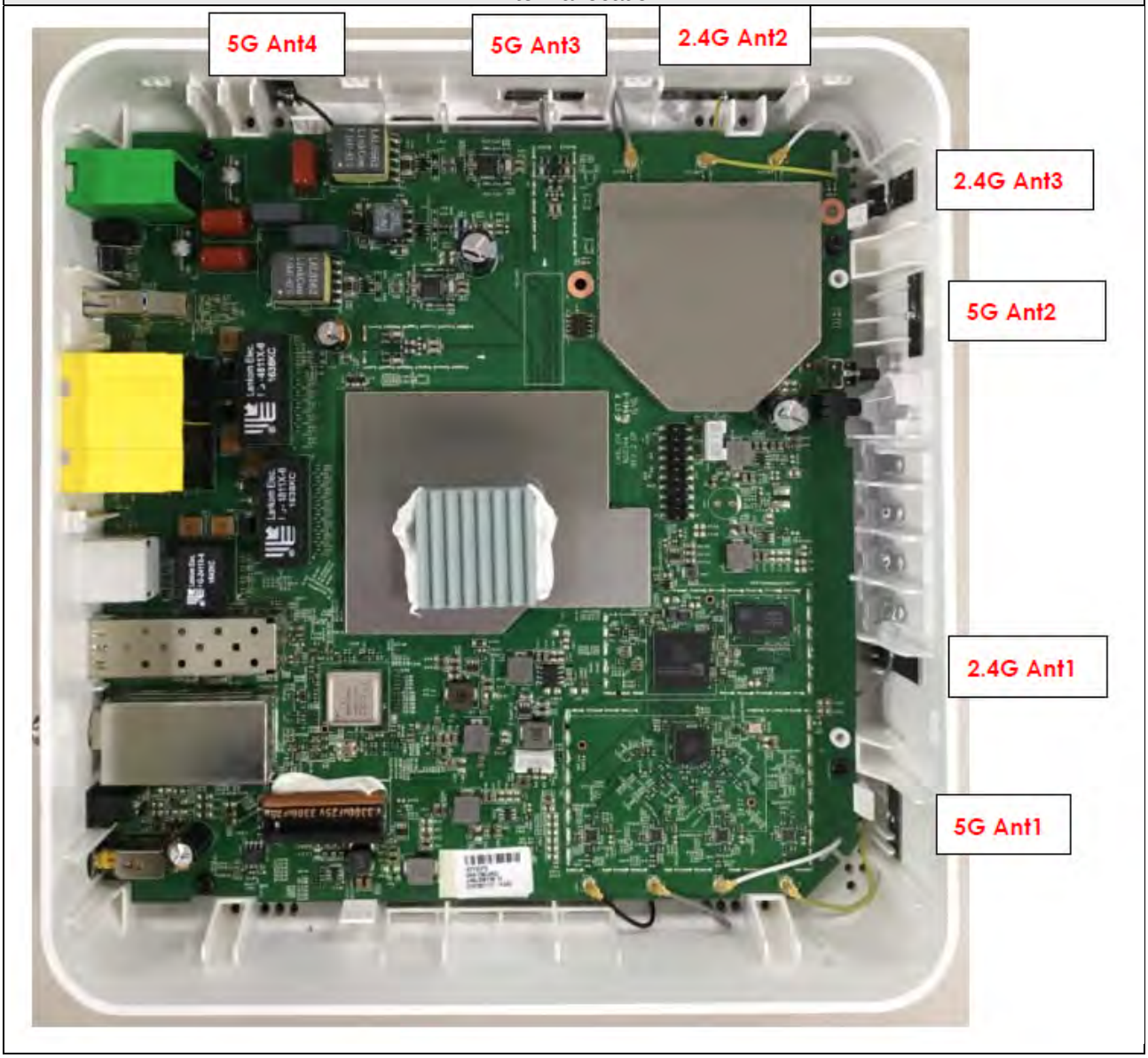
3.10 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector
1	WHAYU	C107-511315-A	PCB	I-Pex
2	WHAYU	C107-511314-A	PCB	I-Pex
3	WHAYU	C107-511316-A	PCB	I-Pex

Antenna & Bandwidth for 2400~2483.5MHz

Antenna	1st (TX)		2nd (TX)		3rd (TX)	
Bandwidth Mode	20 MHz	40 MHz	20 MHz	40 MHz	20 MHz	40 MHz
802.11b	V	X	X	X	X	X
802.11g	V	X	X	X	X	X
802.11n	V	V	V	V	V	V

Antenna location



For 2400~2483.5MHz

Frequency	Antenna Gain (dBi)					
	Ant. 1 (WJ1)		Ant. 2 (WJ2)		Ant. 3 (WJ3)	
	20 MHz	40 MHz	20 MHz	40 MHz	20 MHz	40 MHz
2412MHz	2.11	-	2.81	-	3.37	-
2422MHz	-	2.08	-	2.94	-	3.30
2437MHz	2.23	2.23	2.73	2.73	3.16	3.16
2452MHz	-	2.58	-	3.12	-	3.29
2462MHz	2.93	-	3.30	-	2.98	-

Frequency	Maximum Gain (dBi) for SDM mode			
	SDM mode (2 Stream 2 TX) for Power & PSD Gain (KDB 662911 Option 2)		SDM mode (3 Stream 3 TX) for Power & PSD Gain (KDB 662911 Option 2)	
	20 MHz	40 MHz	20 MHz	40 MHz
2412MHz	1.88	-	1.86	-
2422MHz	-	1.86	-	1.74
2437MHz	1.39	1.39	1.38	1.38
2452MHz	-	1.41	-	1.65
2462MHz	1.79	-	1.90	-

Note:

1. Antenna Gain refer to “DWA1230 antenna table_V1.08.xlsx” files
2. Maximum Uncorrelated Directional Gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}]$ dBi
3. Maximum Uncorrelated Directional Gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \ldots + 10^{GN/10}) / N_{ANT}]$ dBi

3.11 Table for Carrier Frequency

Eleven channels are provided for 802.11b, 802.11g, 802.11n (20MHz):

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
2400MHz ~ 2483.5 MHz	1	2412 MHz	7	2442MHz
	2	2417MHz	8	2447MHz
	3	2422MHz	9	2452MHz
	4	2427MHz	10	2457MHz
	5	2432MHz	11	2462MHz
	6	2437MHz		

Seven channels are provided for 802.11n (40MHz):

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
2400MHz ~ 2483.5 MHz	3	2422 MHz	7	2442MHz
	4	2427MHz	8	2447MHz
	5	2432MHz	9	2452MHz
	6	2437MHz		

3.12 Table for Test Modes

Investigation has been done on all the possible configurations for searching the worst cases. The following table is a list of the test modes shown in this test report.

Test Items	Mode	Note	Channel	Data Rate	Antenna
AC Power Line Conducted Emissions	802.11n(20MHz)	OFDM/BPSK	6	-	1+2+3
Maximum Average Output Power	802.11b	DSSS/DBPSK	1/6/11	1 Mbps	1
	802.11g	OFDM/BPSK	1/6/11	6 Mbps	1
	802.11n(20MHz)		1/6/11	MCS0	1
				MCS8 2S2T SDM	1+3
				MCS16 3S3T SDM	1+2+3
	802.11n(40MHz)		3/6/9	MCS0	1
				MCS8 2S2T SDM	1+3
				MCS16 3S3T SDM	1+2+3
Power Spectral Density	802.11b	DSSS/DBPSK	1/6/11	1 Mbps	1
	802.11g	OFDM/BPSK	1/6/11	6 Mbps	1
	802.11n(20MHz)		1/6/11	MCS0	1
				MCS8 2S2T SDM	1+3
				MCS16 3S3T SDM	1+2+3
	802.11n(40MHz)		3/6/9	MCS0	1
				MCS8 2S2T SDM	1+3
				MCS16 3S3T SDM	1+2+3
6dB Spectrum Bandwidth	802.11b	DSSS/DBPSK	1/6/11	1 Mbps	1
	802.11g	OFDM/BPSK	1/6/11	6 Mbps	1
	802.11n(20MHz)		1/6/11	MCS0	1
				MCS8 2S2T SDM	1+3
				MCS16 3S3T SDM	1+2+3
	802.11n(40MHz)		3/6/9	MCS0	1
				MCS8 2S2T SDM	1+3
				MCS16 3S3T SDM	1+2+3
Band Edge Emissions (Radiated)	802.11b	DSSS/DBPSK	1/6/11	1 Mbps	1
	802.11n(20MHz)	OFDM/BPSK	1/6/11	MCS0	1
				MCS8 2S2T SDM	1+3
				MCS16 3S3T SDM	1+2+3
	802.11n(40MHz)		3/6/9	MCS0	1
				MCS8 2S2T SDM	1+3
				MCS16 3S3T SDM	1+2+3
Radiated Emissions Above 1GHz(Radiated)	802.11b	DSSS/DBPSK	1/6/11	1 Mbps	1
	802.11n(20MHz)	OFDM/BPSK	1/6/11	MCS0	1
				MCS8 2S2T SDM	1+3
				MCS16 3S3T SDM	1+2+3
	802.11n(40MHz)		3/6/9	MCS0	1
				MCS8 2S2T SDM	1+3
				MCS16 3S3T SDM	1+2+3
Radiated Emissions Below 1GHz(Radiated)	802.11n(20MHz)	OFDM/BPSK	6	-	1+2+3

Note:

1. The device with multiple operating mode, measurements on the middle channel were tested to determine the worst case mode. (Each modulation family were tested in band edge, spurious emission and in band PSD after investigate worst case mode)
2. Base on txcore command, the 11b/g default mode is 1S1T SISO Ant1, the 802.11n 20MHz/40MHz default mode are 1S1T SISO Ant1, 2S2T SDM Ant1+3, 3S3T SDM.
   wl -i wl0 txcore
   txcore enabled bitmap (Nsts {4..1}) 0x00 0x07 0x05 0x01
   txcore mask OFDM 0x01 CCK 0x01
3. Base on same power setting with 802.11n mode, the 802.11g 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	16.4.7346-3110000-20161121223653-5f8b7460b37a17de7749af5a4f388095eea8e3c0				
Worst Modulation Mode	**Number of Transmit Chains (NTX)**	**Frequency (MHz)**	**Maximum Output Power (dBm)**	**Power Setting**	**Data Rate / MCS**
802.11b, Ant. 1	1Stream 1TX	2412	23.85	23.5	1Mbps
802.11b, Ant. 1	1Stream 1TX	2437	23.94	23.5	1Mbps
802.11b, Ant. 1	1Stream 1TX	2462	22.14	22	1Mbps
802.11g, Ant. 1	1Stream 1TX	2412	18.42	18.25	6Mbps
802.11g, Ant. 1	1Stream 1TX	2437	22.96	23.25	6Mbps
802.11g, Ant. 1	1Stream 1TX	2462	18.98	19	6Mbps
802.11n 20MHz, Ant. 1	1Stream 1TX	2412	18.25	18.25	MCS0
802.11n 20MHz, Ant. 1	1Stream 1TX	2437	22.95	23.25	MCS0
802.11n 20MHz, Ant. 1	1Stream 1TX	2462	18.93	19	MCS0
802.11n 20MHz, Ant. 1+2 (SDM)	2Stream 2TX	2412	21.18	18.25	MCS8
802.11n 20MHz, Ant. 1+2 (SDM)	2Stream 2TX	2437	25.79	23.25	MCS8
802.11n 20MHz, Ant. 1+2 (SDM)	2Stream 2TX	2462	20.72	17.75	MCS8
802.11n 20MHz, Ant. 1+2+3 (SDM)	3Stream 3TX	2412	20.45	15.75	MCS16
802.11n 20MHz, Ant. 1+2+3 (SDM)	3Stream 3TX	2437	27.39	23.25	MCS16
802.11n 20MHz, Ant. 1+2+3 (SDM)	3Stream 3TX	2462	20.96	16.5	MCS16
802.11n 40MHz, Ant. 1	1Stream 1TX	2422	17.27	16.75	MCS0
802.11n 40MHz, Ant. 1	1Stream 1TX	2437	22.10	21.75	MCS0
802.11n 40MHz, Ant. 1	1Stream 1TX	2437	17.34	16.75	MCS0
802.11n 40MHz, Ant. 1+2 (SDM)	2Stream 2TX	2422	17.98	14.5	MCS8
802.11n 40MHz, Ant. 1+2 (SDM)	2Stream 2TX	2437	22.23	19	MCS8
802.11n 40MHz, Ant. 1+2 (SDM)	2Stream 2TX	2452	18.49	14.75	MCS8
802.11n 40MHz, Ant. 1+2+3 (SDM)	3Stream 3TX	2422	18.73	13.25	MCS16
802.11n 40MHz, Ant. 1+2+3 (SDM)	3Stream 3TX	2437	22.76	18	MCS16
802.11n 40MHz, Ant. 1+2+3 (SDM)	3Stream 3TX	2452	18.69	13.25	MCS16

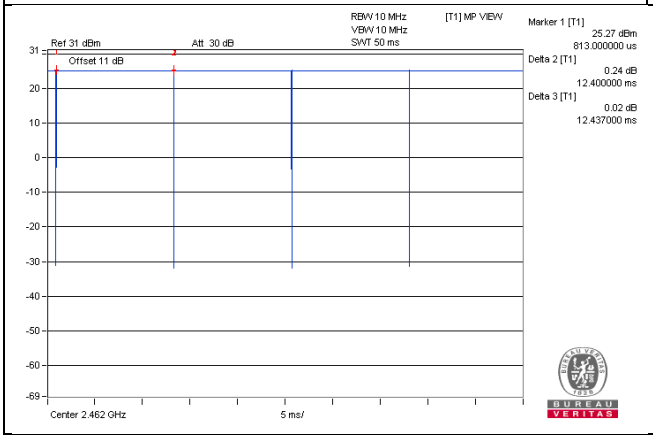
Investigation has been done on all the possible configurations for searching the worst cases. The following table is a list of the test modes shown in this test report.

3.14 On Time and Duty Cycle

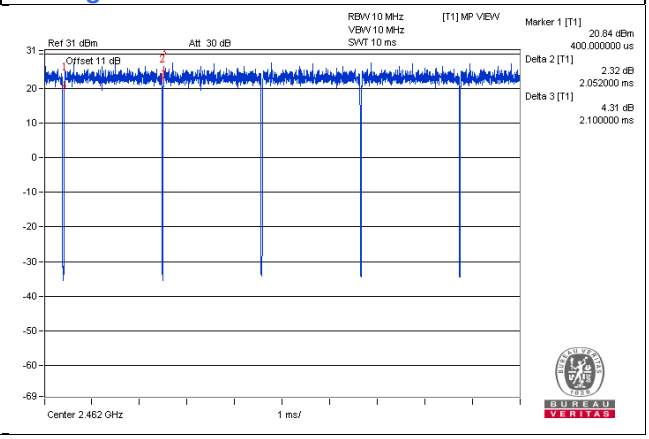
Mode	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)
802.11b 1Tx Chain1	12.400	12.437	99.7	-	-
802.11g 1Tx Chain1	2.052	2.100	97.7	0.10	1
802.11n (20MHz) 1Tx Chain1	1.913	1.963	97.5	0.11	1
802.11n (20MHz) 2Tx SDM	0.983	1.012	97.1	0.13	3
802.11n (20MHz) 3Tx SDM	0.675	0.711	94.9	0.23	3
802.11n (40MHz) 1Tx Chain1	0.943	0.974	96.8	0.14	3
802.11n (40MHz) 2Tx SDM	0.491	0.526	93.3	0.30	3
802.11n (40MHz) 3Tx SDM	0.349	0.384	90.9	0.42	3

Note: Power measurement using sweep trigger and gating of the power meter, duty factor is not required.

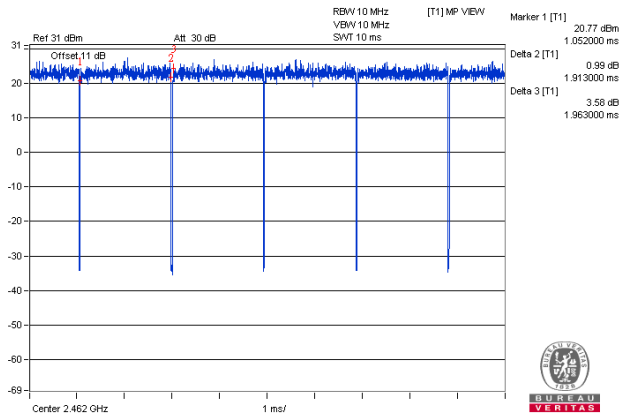
802.11b 1Tx Chain1



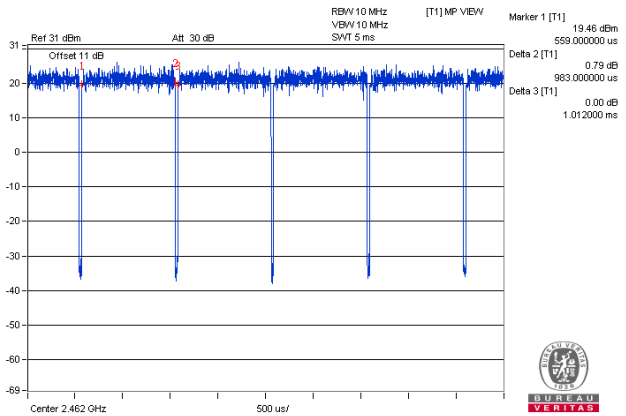
802.11g 1Tx Chain1



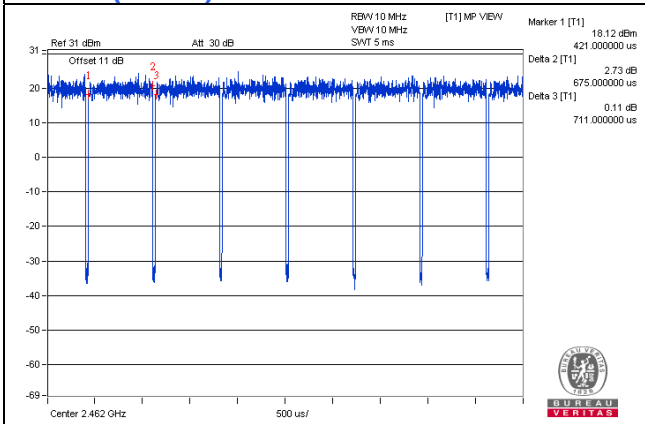
802.11n (20MHz) 1Tx Chain1



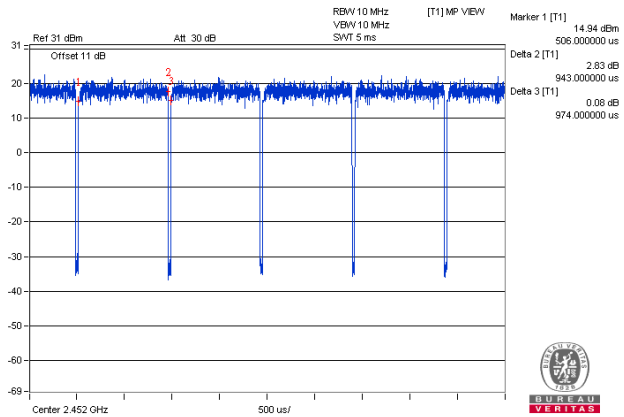
802.11n (20MHz) 2Tx SDM



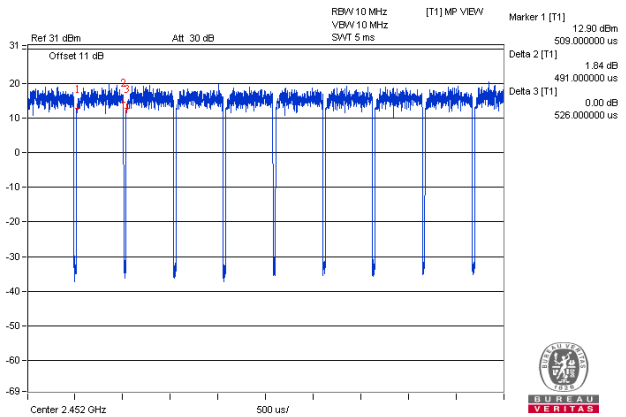
802.11n (20MHz) 3Tx SDM



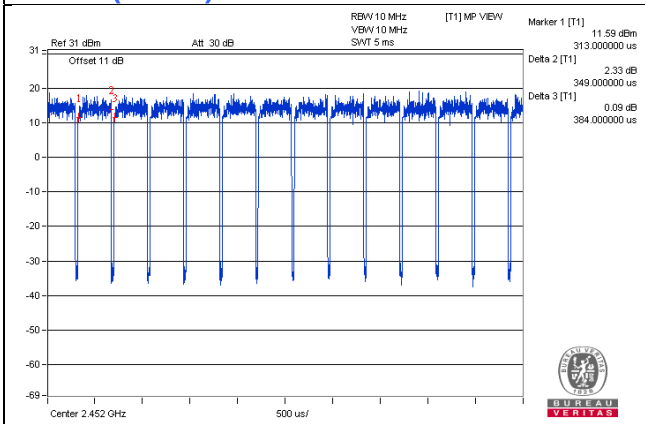
802.11n (40MHz) 1Tx Chain1



802.11n (40MHz) 2Tx SDM



802.11n (40MHz) 3Tx SDM



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.

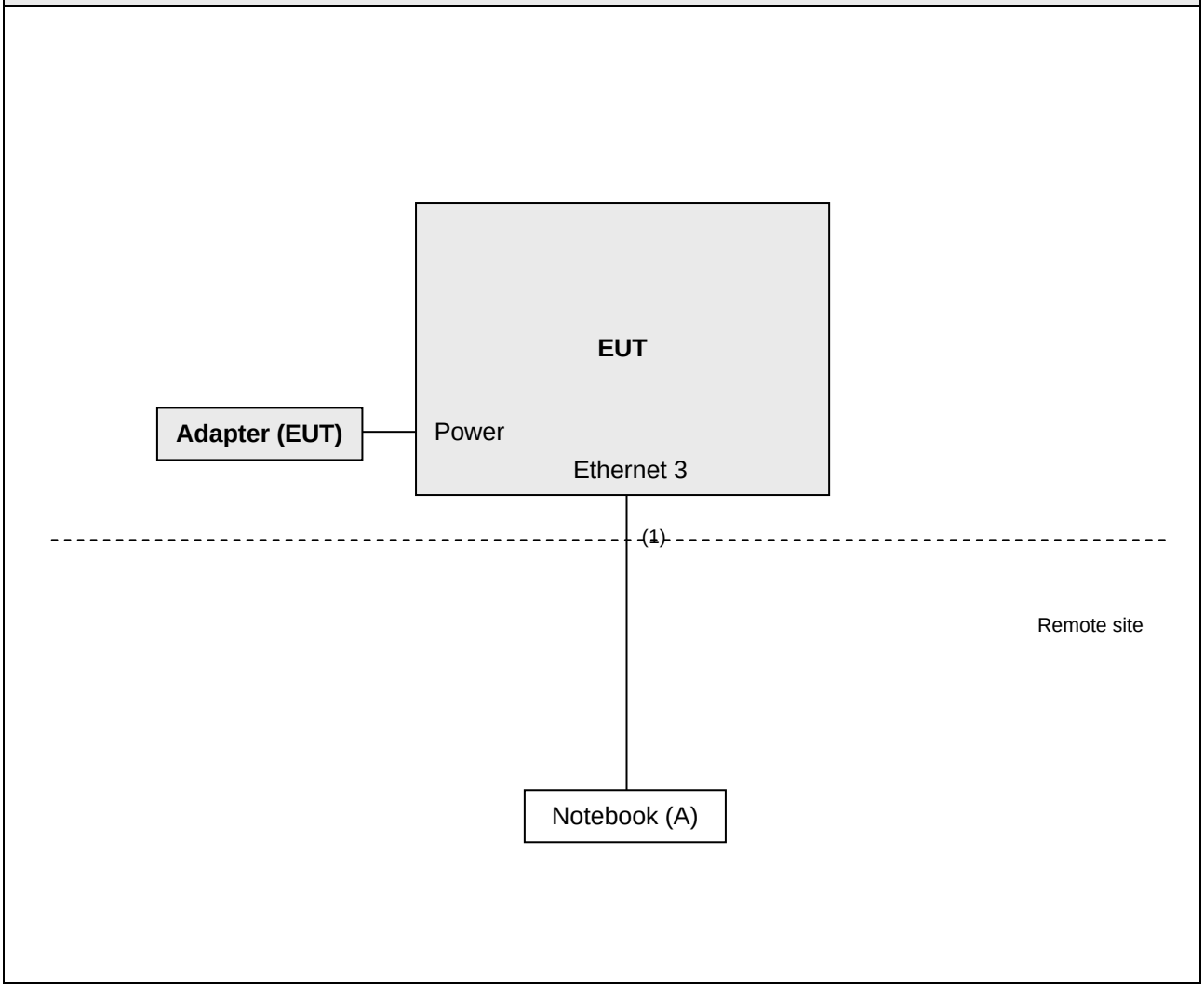
ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Notebook	DELL	D531	CN-0XM006-48643-81U-2973	FCC DoC Approved	Provided by Lab

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

EUT Diagram



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

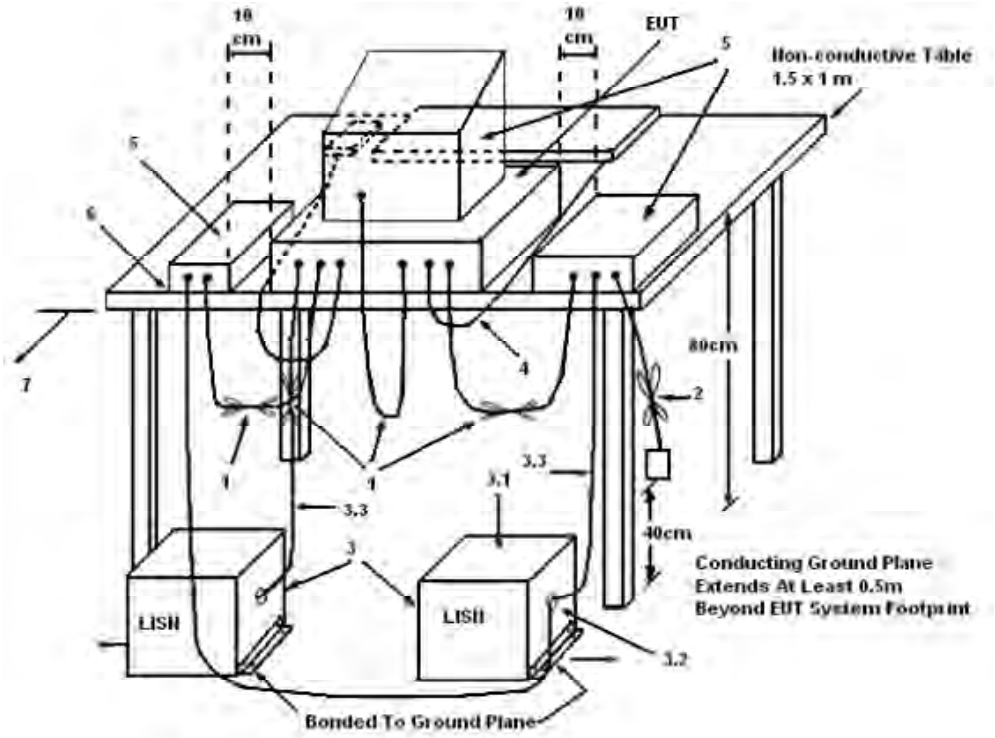
Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

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

Test Setup



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.

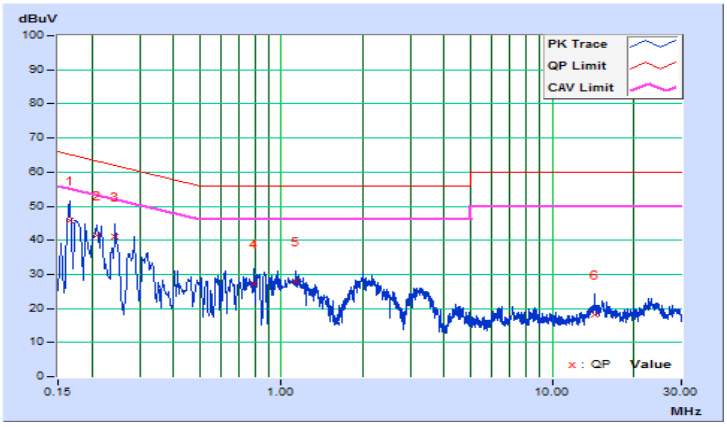
4.1.7 Test Results of AC Power Conducted Emissions

Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	25℃, 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	0.16526	10.12	35.59	20.37	45.71	30.49	65.20	55.20	-19.49	-24.71
2	0.20865	10.14	31.41	18.24	41.55	28.38	63.26	53.26	-21.71	-24.88
3	0.24384	10.15	30.99	24.89	41.14	35.04	61.96	51.96	-20.82	-16.92
4	0.79124	10.18	17.20	9.69	27.38	19.87	56.00	46.00	-28.62	-26.13
5	1.13532	10.19	17.64	7.55	27.83	17.74	56.00	46.00	-28.17	-28.26
6	14.31593	11.02	7.30	2.73	18.32	13.75	60.00	50.00	-41.68	-36.25

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

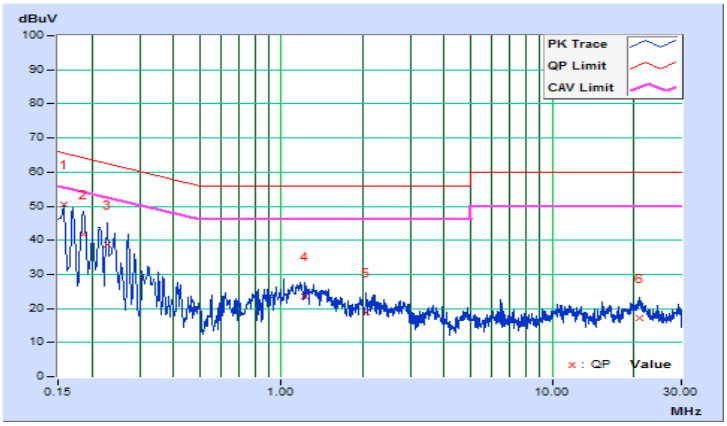


Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	25℃, 75%RH
Tested by	Tank Wu		

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	0.15782	10.13	40.45	25.47	50.58	35.60	65.58	55.58	-15.00	-19.98
2	0.18519	10.14	31.58	15.60	41.72	25.74	64.25	54.25	-22.53	-28.51
3	0.22820	10.15	28.73	15.55	38.88	25.70	62.51	52.51	-23.63	-26.81
4	1.21352	10.20	13.35	5.27	23.55	15.47	56.00	46.00	-32.45	-30.53
5	2.05026	10.26	8.68	0.93	18.94	11.19	56.00	46.00	-37.06	-34.81
6	21.04113	11.63	5.70	-0.46	17.33	11.17	60.00	50.00	-42.67	-38.83

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 Maximum Conducted Output Power Measurement

4.2.1 Limit

For systems using digital modulation in the 2400–2483.5 MHz bands: 1 Watt (30dBm).The limited has to be reduced by the amount in dB that the gain of the antenna exceed 6dBi. For of point-to-point operation, the limit has to be reduced by 1dB for every 3dB that the directional gain of the antenna exceeds 6dBi.

4.2.2 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
Power Measurement	Auto
Rise Time	8ns
Sensor Model	MA2411B

4.2.3 Test Procedures

1 Test was performed in accordance with Measurement of Digital Transmission Systems Operating under KDB558074 D01 DTS Meas Guidance v03r05, in section “Maximum conducted output power Method AVGPM-G”, 04/08/2016

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.

4.2.4 Test Setup Layout

Setup


4.2.5 Test Deviation

There are no deviations with the original standard.

4.2.6 EUT Operating Conditions

The EUT was programmed to be in continuously transmitting mode.

4.2.7 Test Results of Maximum Conducted Output Power

Temperature	25°C	Humidity	60%
Test Engineer	Bayu Chen		

FOR AVERAGE POWER

802.11b 1Tx Chain1

Channel	Frequency (MHz)	Conducted Power (dBm)	Directional Gain (dBi)	Max. Limit (dBm)	Result
1	2412	23.85	2.11	30	PASS
6	2437	23.94	2.23	30	PASS
11	2462	22.14	2.93	30	PASS

802.11g 1Tx Chain1

Channel	Frequency (MHz)	Conducted Power (dBm)	Directional Gain (dBi)	Max. Limit (dBm)	Result
1	2412	18.42	2.11	30	PASS
6	2437	22.96	2.23	30	PASS
11	2462	18.98	2.93	30	PASS

802.11n (20MHz) 1Tx Chain1

Channel	Frequency (MHz)	Conducted Power (dBm)	Directional Gain (dBi)	Max. Limit (dBm)	Result
1	2412	18.25	2.11	30	PASS
6	2437	22.95	2.23	30	PASS
11	2462	18.93	2.93	30	PASS

802.11n (20MHz) 2Tx SDM

Channel	Frequency (MHz)	Conducted Power (dBm)			Directional Gain (dBi)	Max. Limit (dBm)	Result
		Chain 1	Chain 3	Total			
1	2412	18.19	18.14	21.18	1.88	30	PASS
6	2437	22.82	22.74	25.79	1.39	30	PASS
11	2462	17.71	17.7	20.72	1.79	30	PASS

Note:
1. Total Conducted Power = Conducted Power [TX 1(unit in W) + TX 2(unit in W)](unit in dBm)
2. Directional Gain <6dBi, so the limit doesn't reduce.

802.11n (20MHz) 3Tx SDM

Channel	Frequency (MHz)	Conducted Power (dBm)				Directional Gain (dBi)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3	Total			
1	2412	15.85	15.66	15.52	20.45	1.86	30	PASS
6	2437	22.84	22.41	22.59	27.39	1.38	30	PASS
11	2462	16.28	16.17	16.11	20.96	1.90	30	PASS

Note:
1. Total Conducted Power = Conducted Power [TX 1(unit in W) + TX 2(unit in W) + TX 3 (unit in W)](unit in dBm)
2. Directional Gain <6dBi, so the limit doesn't reduce.

802.11n (40MHz) 1Tx Chain1

Channel	Frequency (MHz)	Conducted Power (dBm)	Directional Gain (dBi)	Max. Limit (dBm)	Result
3	2422	17.27	2.08	30	PASS
6	2437	22.10	2.23	30	PASS
9	2452	17.34	2.58	30	PASS

802.11n (40MHz) 2Tx SDM

Channel	Frequency (MHz)	Conducted Power (dBm)			Directional Gain (dBi)	Max. Limit (dBm)	Result
		Chain 1	Chain 3	Total			
3	2422	15	14.93	17.98	1.86	30	PASS
6	2437	19.32	19.11	22.23	1.39	30	PASS
9	2452	15.49	15.46	18.49	1.41	30	PASS

Note:
1. Total Conducted Power = Conducted Power [TX 1(unit in W) + TX 2(unit in W)](unit in dBm)
2. Directional Gain <6dBi, so the limit doesn't reduce.

802.11n (40MHz) 3Tx SDM

Channel	Frequency (MHz)	Conducted Power (dBm)				Directional Gain (dBi)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3	Total			
3	2422	14.07	13.71	14.1	18.73	1.74	30	PASS
6	2437	18	18.09	17.88	22.76	1.38	30	PASS
9	2452	14.09	13.85	13.82	18.69	1.65	30	PASS

Note:
1. Total Conducted Power = Conducted Power [TX 1(unit in W) + TX 2(unit in W) + TX 3 (unit in W)](unit in dBm)
2. Directional Gain <6dBi, so the limit doesn't reduce.

4.3 Power Spectral Density Measurement

4.3.1 Limit

For digitally modulated systems, the conductive measured power spectral density(PSD) shall not be greater than 8 dBm in any 3 kHz bandwidth during any time interval of continuous transmission.

4.3.2 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
Attenuation	Auto
Span Frequency	Set the span to 1.5 times the DTS channel bandwidth.
RBW	Set the RBW ≥ 3 kHz
VBW	Set the VBW ≥ 3 x RBW
Detector	RMS
Trace	Average sweep count 100
Sweep Time	Auto couple

4.3.3 Test Procedures

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 KDB558074 D01 DTS Meas Guidance v03r05, in section “Maximum power spectral density level in the fundamental emissions Method AVGPSD-1”, 04/08/2016.

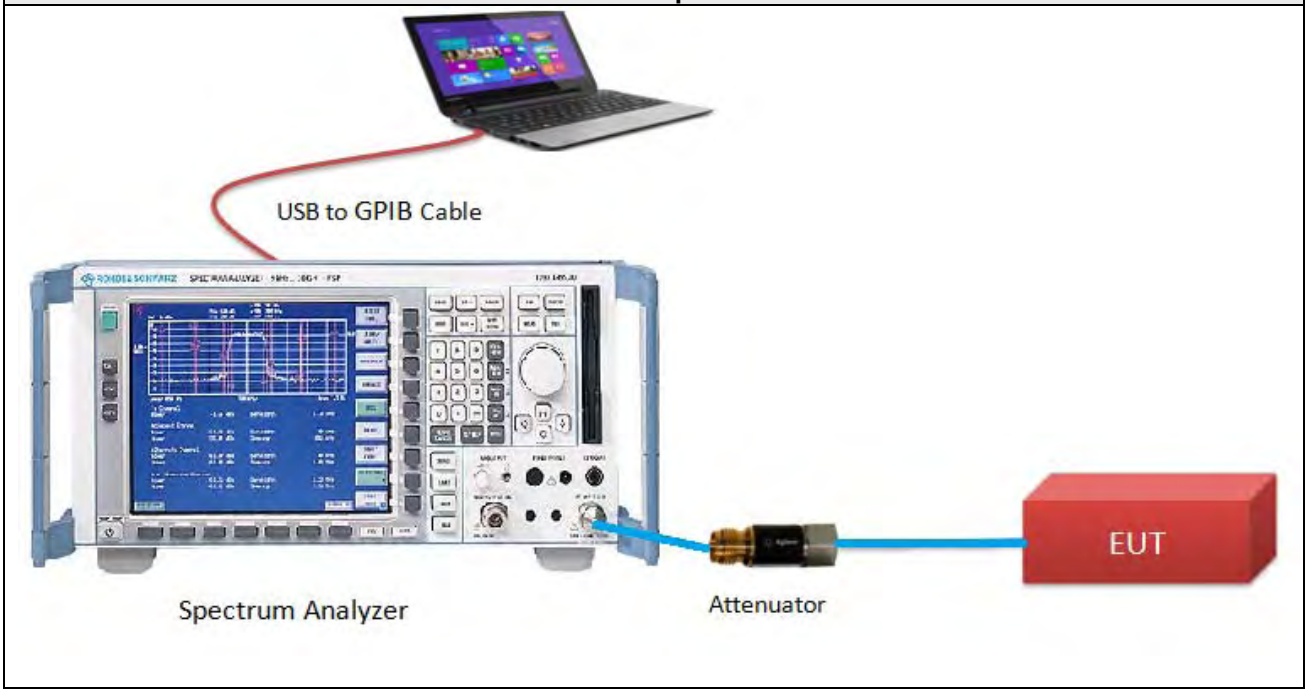
3 Multiple antenna systems was performed in accordance KDB 662911 D01 v02r01 in-Band Power Spectral Density (PSD) Measurements (a) Measure and sum the spectra across the outputs (bin-by-bin summing).

4 This procedure may be used when the maximum (average) conducted output power was used to demonstrate compliance to the output power limit. The EUT must be configured to transmit continuously (duty cycle ≥ 98%) to ensure that measurements are made only when the EUT is transmitting at its maximum power control level (no transmitter off time is to be considered).

5 Ensure that the number of measurement points in the sweep ≥ 2 x span/RBW (use of a greater number of measurement points than this minimum requirement is recommended).

6 When measuring first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and so on up to the Nth output to obtain the value for the first frequency bin of the summed spectrum. The summed spectrum value for each of the other frequency bins is computed in the same way.

4.3.4 Test Setup Layout

Setup


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 Power Spectral Density

Temperature	24°C	**Humidity**	64%
Test Engineer	Bayu Chen		

802.11b 1Tx Chain1

Channel	Freq. (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Pass /Fail
1	2412	-8.14	8	Pass
6	2437	-8.63	8	Pass
11	2462	-10.15	8	Pass

802.11g 1Tx Chain1

Channel	Freq. (MHz)	PSD W/O Duty Factor (dBm/3kHz)	Duty Factor (dB)	Total PSD With Duty Factor (dBm/3kHz)	Limit (dBm/3kHz)	Pass/Fail
1	2412	-14.55	0.10	-14.45	8	Pass
6	2437	-9.91	0.10	-9.81	8	Pass
11	2462	-13.75	0.10	-13.65	8	Pass

802.11n (20MHz) 1Tx Chain1

Channel	Freq. (MHz)	PSD W/O Duty Factor (dBm/3kHz)	Duty Factor (dB)	Total PSD With Duty Factor (dBm/3kHz)	Limit (dBm/3kHz)	Pass/Fail
1	2412	-16.86	0.11	-16.75	8	Pass
6	2437	-12.12	0.11	-12.01	8	Pass
11	2462	-16.18	0.11	-16.07	8	Pass

802.11n (20MHz) 2Tx SDM

TX chain	Chan.	Freq. (MHz)	PSD (dBm/3kHz)	10 log (N=2) dB	Duty Factor (dB)	Directional Gain (dBi)	Total PSD with Duty Factor (dBm/3kHz)	Limit (dBm/10kHz)	Pass / Fail
0	1	2412	-15.55	3.01	0.13	1.88	-12.41	8	Pass
	6	2437	-11.00	3.01	0.13	1.39	-7.86	8	Pass
	11	2462	-15.90	3.01	0.13	1.79	-12.76	8	Pass
1	1	2412	-15.56	3.01	0.13	1.88	-12.42	8	Pass
	6	2437	-10.48	3.01	0.13	1.39	-7.34	8	Pass
	11	2462	-16.32	3.01	0.13	1.79	-13.18	8	Pass

NOTE:

1. Method 1 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. Directional Gain <6dBi, so the limit doesn't reduce.
3. Refer to section 3.14 for duty cycle spectrum plot.

802.11n (20MHz) 3Tx SDM

TX chain	Chan.	Freq. (MHz)	PSD (dBm/3kHz)	10 log (N=3) dB	Duty Factor (dB)	Directional Gain (dBi)	Total PSD with Duty Factor (dBm/3kHz)	Limit (dBm/10kHz)	Pass / Fail
0	1	2412	-15.92	4.77	0.23	1.86	-10.92	8	Pass
	6	2437	-10.59	4.77	0.23	1.38	-5.59	8	Pass
	11	2462	-17.10	4.77	0.23	1.90	-12.10	8	Pass
1	1	2412	-17.58	4.77	0.23	1.86	-12.58	8	Pass
	6	2437	-10.67	4.77	0.23	1.38	-5.67	8	Pass
	11	2462	-17.36	4.77	0.23	1.90	-12.36	8	Pass
2	1	2412	-17.87	4.77	0.23	1.86	-12.87	8	Pass
	6	2437	-10.51	4.77	0.23	1.38	-5.51	8	Pass
	11	2462	-16.87	4.77	0.23	1.90	-11.87	8	Pass

NOTE:

1. Method 1 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. Directional Gain <6dBi, so the limit doesn't reduce.
3. Refer to section 3.14 for duty cycle spectrum plot.

802.11n (40MHz) 1Tx Chain1

Channel	Freq. (MHz)	PSD W/O Duty Factor (dBm/3kHz)	Duty Factor (dB)	Total PSD With Duty Factor (dBm/3kHz)	Limit (dBm/3kHz)	Pass/Fail
3	2422	-19.13	0.14	-18.99	8	Pass
6	2437	-14.12	0.14	-13.98	8	Pass
9	2452	-19.21	0.14	-19.07	8	Pass

802.11n (40MHz) 2Tx SDM

TX chain	Chan.	Freq. (MHz)	PSD (dBm/3kHz)	10 log (N=2) dB	Duty Factor (dB)	Directional Gain (dBi)	Total PSD with Duty Factor (dBm/3kHz)	Limit (dBm/10kHz)	Pass / Fail
0	3	2422	-19.77	3.01	0.30	1.86	-16.46	8	Pass
	6	2437	-15.86	3.01	0.30	1.39	-12.55	8	Pass
	9	2452	-19.53	3.01	0.30	1.41	-16.22	8	Pass
1	3	2422	-20.42	3.01	0.30	1.86	-17.11	8	Pass
	6	2437	-15.83	3.01	0.30	1.39	-12.52	8	Pass
	9	2452	-18.88	3.01	0.30	1.41	-15.57	8	Pass

NOTE:

1. Method 1 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. Directional Gain <6dBi, so the limit doesn't reduce.
3. Refer to section 3.14 for duty cycle spectrum plot.

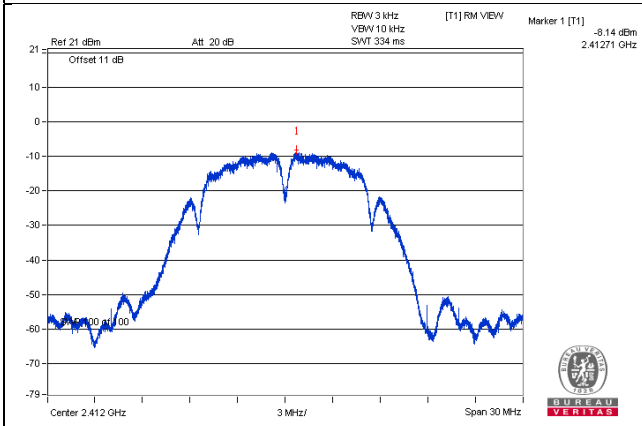
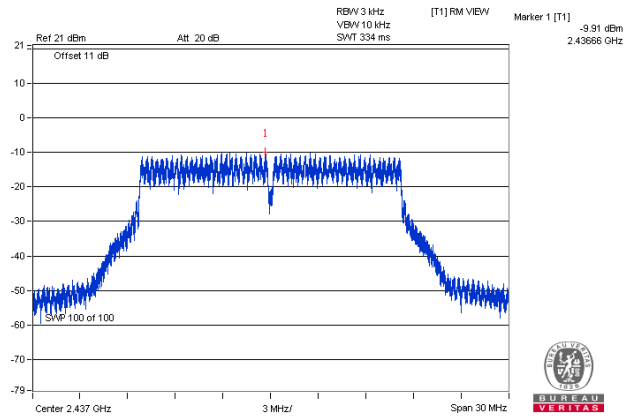
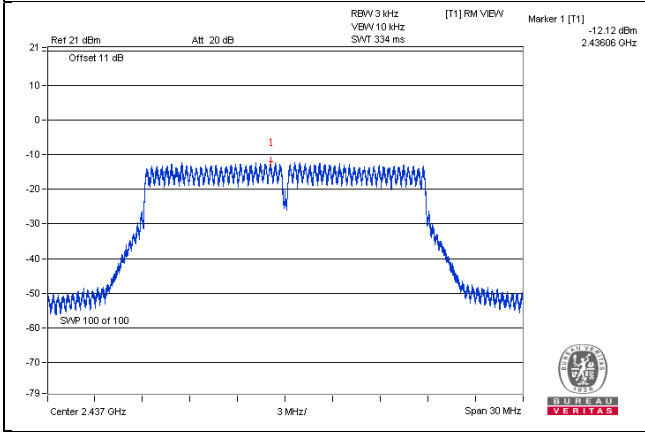
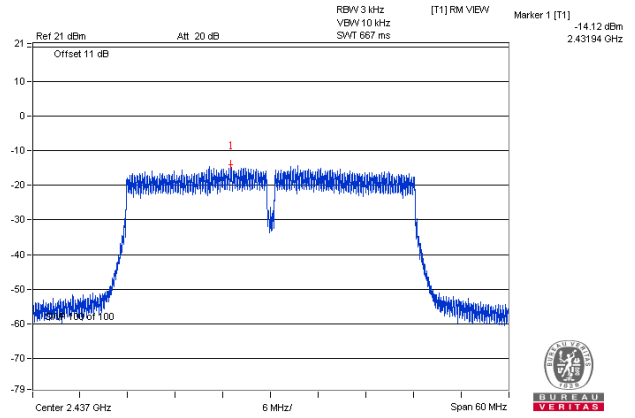
802.11n (40MHz) 3Tx SDM

TX chain	Chan.	Freq. (MHz)	PSD (dBm/3kHz)	10 log (N=3) dB	Duty Factor (dB)	Directional Gain (dBi)	Total PSD with Duty Factor (dBm/3kHz)	Limit (dBm/10kHz)	Pass / Fail
0	1	2412	-20.37	4.77	0.42	1.74	-15.18	8	Pass
	6	2437	-15.79	4.77	0.42	1.38	-10.60	8	Pass
	11	2462	-20.51	4.77	0.42	1.65	-15.32	8	Pass
1	1	2412	-20.58	4.77	0.42	1.74	-15.39	8	Pass
	6	2437	-16.50	4.77	0.42	1.38	-11.31	8	Pass
	11	2462	-20.48	4.77	0.42	1.65	-15.29	8	Pass
2	1	2412	-20.84	4.77	0.42	1.74	-15.65	8	Pass
	6	2437	-16.25	4.77	0.42	1.38	-11.06	8	Pass
	11	2462	-19.35	4.77	0.42	1.65	-14.16	8	Pass

NOTE:

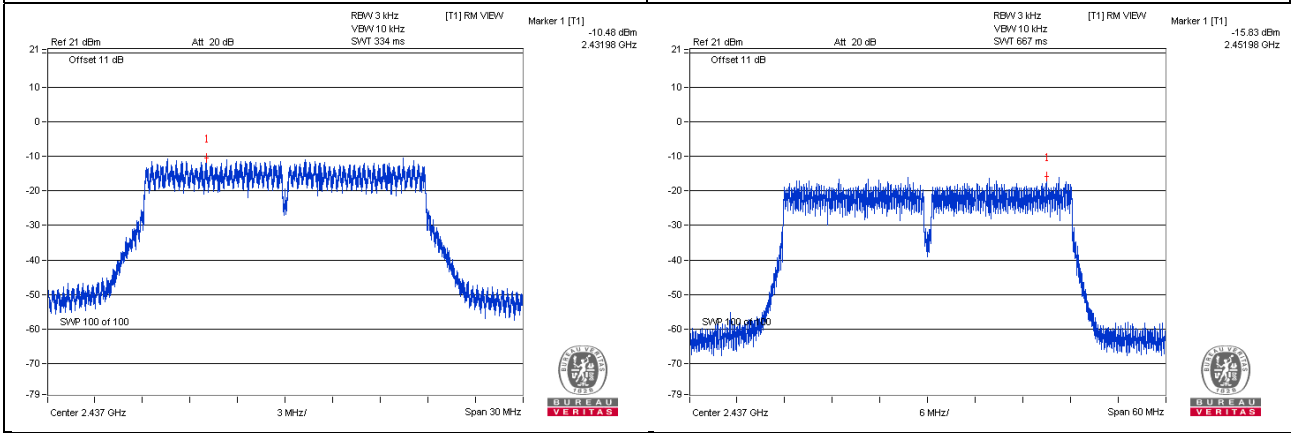
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional Gain <6dBi, so the limit doesn't reduce.
3. Refer to section 3.14 for duty cycle spectrum plot.

1TX:

Spectrum Plot of Worst Value	
802.11b 1Tx Chain1 2412 MHz	**802.11g 1Tx Chain1 2437 MHz**
	
802.11n (20MHz) 1Tx Chain1 2437 MHz	**802.11n (40MHz) 1Tx Chain1 2437 MHz**
	

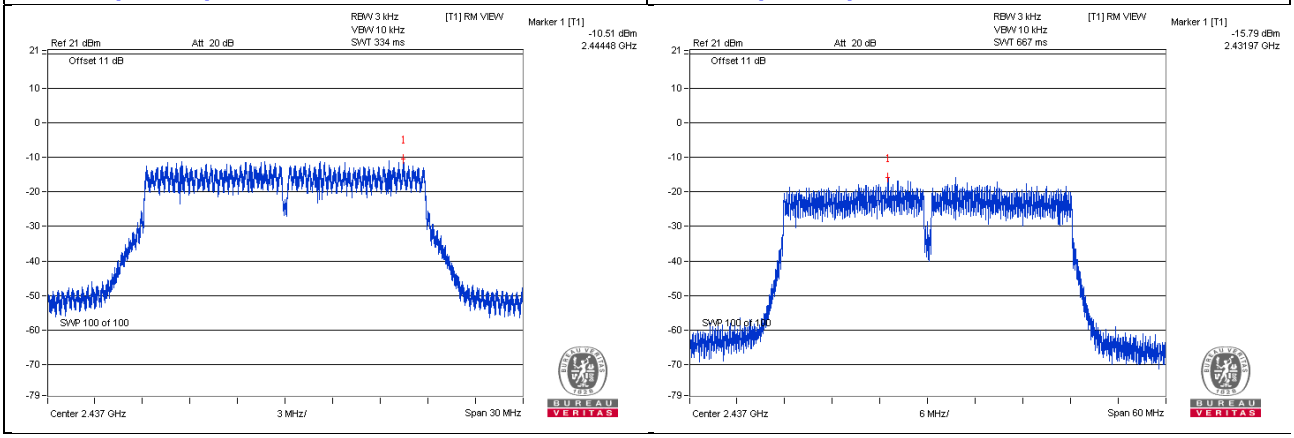
2TX:

Spectrum Plot of Worst Value	
802.11n (20MHz) 2Tx Chain1 2437 MHz	**802.11n (40MHz) 2Tx Chain1 2437 MHz**



3TX:

Spectrum Plot of Worst Value	
802.11n (20MHz) 3Tx Chain2 2437 MHz	**802.11n (40MHz) 3Tx Chain0 2437 MHz**



4.4 6dB Bandwidth Measurement

4.4.1 Limit

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

4.4.2 Measuring Instruments and Setting

The following table is the setting of the Spectrum Analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	> 6dB Bandwidth
RBW	100 kHz.
VBW	≥ 3 x RBW
Detector	Peak
Trace	Max Hold
Sweep Time	Auto couple

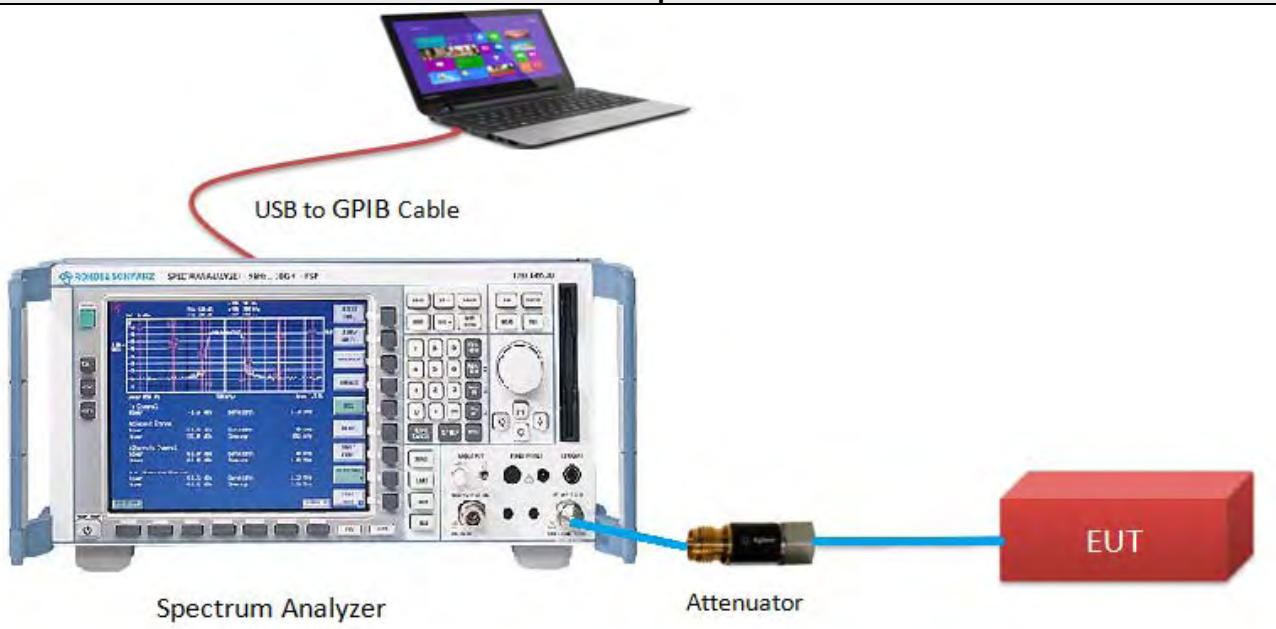
4.4.3 Test Procedures

1 The transmitter output (antenna port) was connected to the spectrum analyzer in peak hold mode.

2 For each RF output channel investigated, the spectrum analyzer center frequency was set to the channel carrier frequency. A peak reading was taken; two markers were set 6 dB below the maximum level on the right and the left side of the emissions.

3 The 6dB bandwidth is the frequency difference between the two markers.

4.4.4 Test Setup Layout

Setup


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 6dB Bandwidth

Temperature	25°C	Humidity	60%
Test Engineer	Bayu Chen		

802.11b 1Tx Chain1

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	9.09	0.5	PASS
6	2437	9.11	0.5	PASS
11	2462	9.06	0.5	PASS

802.11g 1Tx Chain1

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	16.40	0.5	PASS
6	2437	16.40	0.5	PASS
11	2462	16.42	0.5	PASS

802.11n (20MHz) 1Tx Chain1

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	17.64	0.5	PASS
6	2437	17.61	0.5	PASS
11	2462	17.65	0.5	PASS

802.11n (20MHz) 2Tx SDM

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)		MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 1	CHAIN 3		
1	2412	17.61	17.63	0.5	PASS
6	2437	17.59	17.66	0.5	PASS
11	2462	17.63	17.62	0.5	PASS

802.11n (20MHz) 2Tx SDM

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 1	CHAIN 2	CHAIN 3		
1	2412	17.61	17.63	17.62	0.5	PASS
6	2437	17.58	17.67	17.65	0.5	PASS
11	2462	17.61	17.64	17.61	0.5	PASS

802.11n (40MHz) 1Tx Chain1

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
3	2422	36.15	0.5	PASS
6	2437	35.88	0.5	PASS
9	2452	36.42	0.5	PASS

802.11n (40MHz) 2Tx SDM

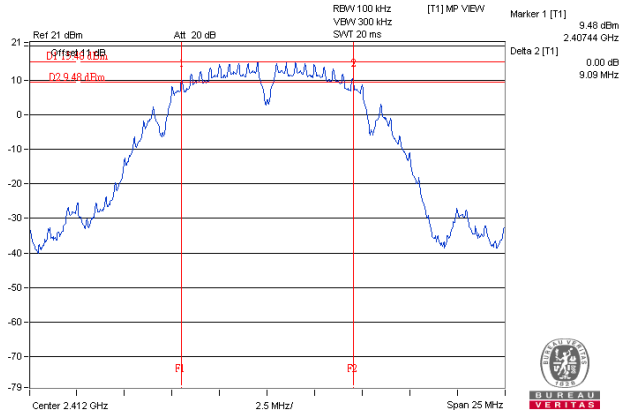
CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)		MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 1	CHAIN 3		
3	2422	36.13	35.36	0.5	PASS
6	2437	35.99	36.50	0.5	PASS
9	2452	36.44	35.87	0.5	PASS

802.11n (40MHz) 3Tx SDM

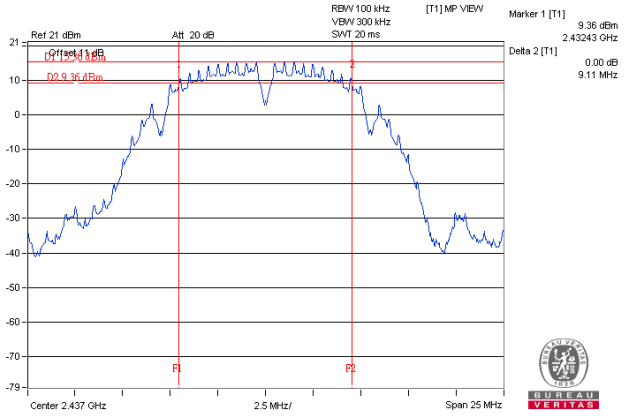
CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 1	CHAIN 2	CHAIN 3		
3	2422	36.42	35.91	35.51	0.5	PASS
6	2437	36.10	36.48	36.49	0.5	PASS
9	2452	36.45	35.86	35.86	0.5	PASS

SPECTRUM PLOT

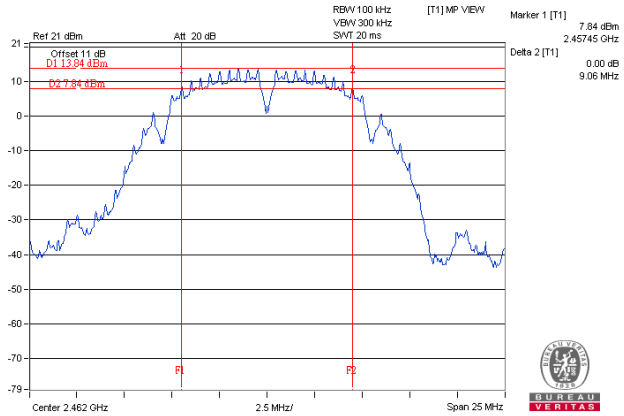
802.11b 1Tx Chain1 CH1



802.11b 1Tx Chain1 CH6

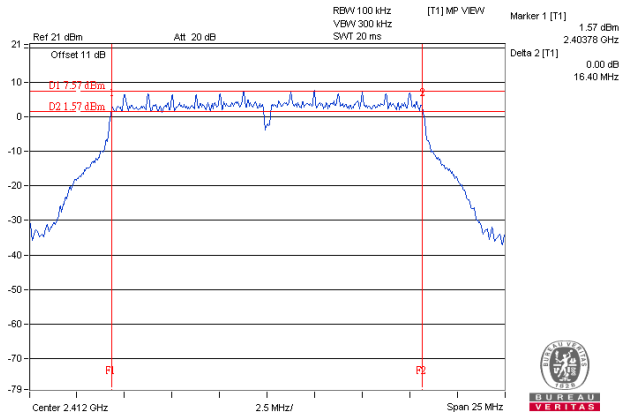


802.11b 1Tx Chain1 CH11



SPECTRUM PLOT

802.11g 1Tx Chain1 CH1



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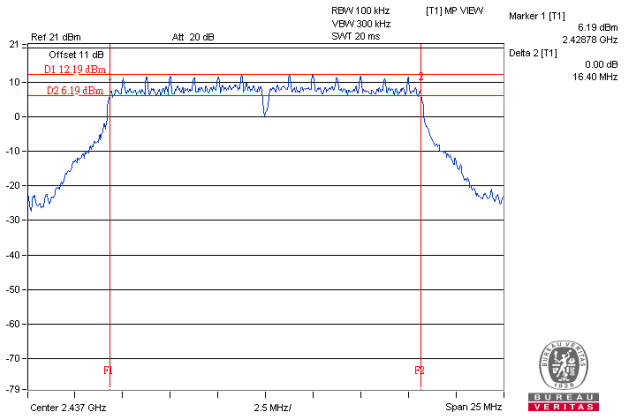
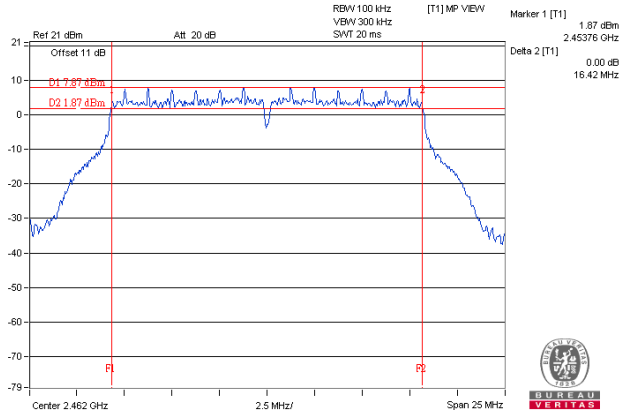
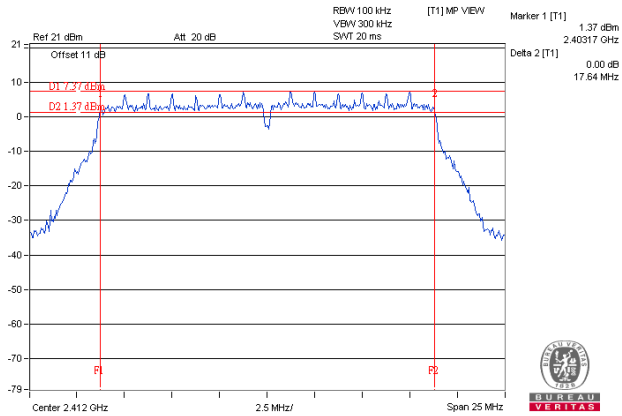


802.11g 1Tx Chain1 CH11

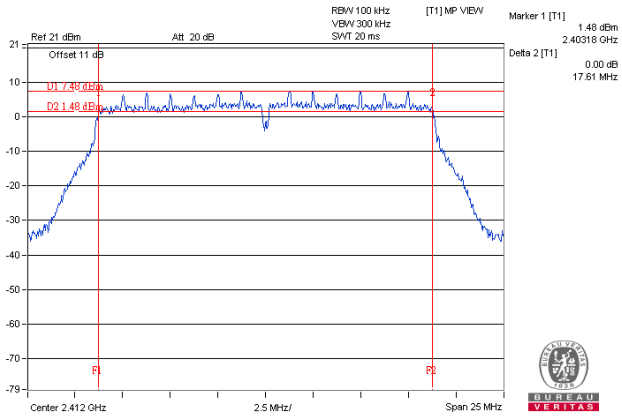


SPECTRUM PLOT

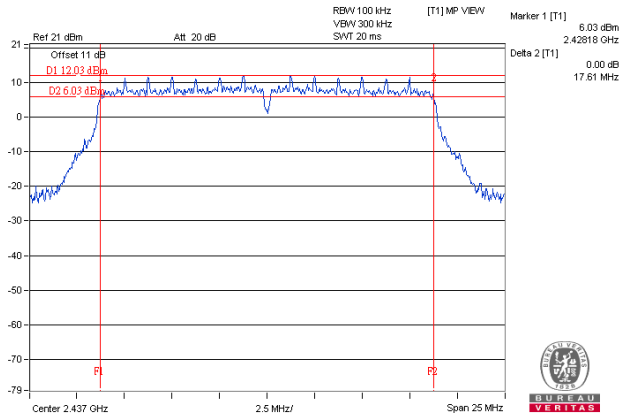
802.11n (20MHz) 1Tx Chain1 CH1



802.11n (20MHz) 2Tx SDM mode Chain1 CH1



802.11n (20MHz) 1Tx Chain1 CH6



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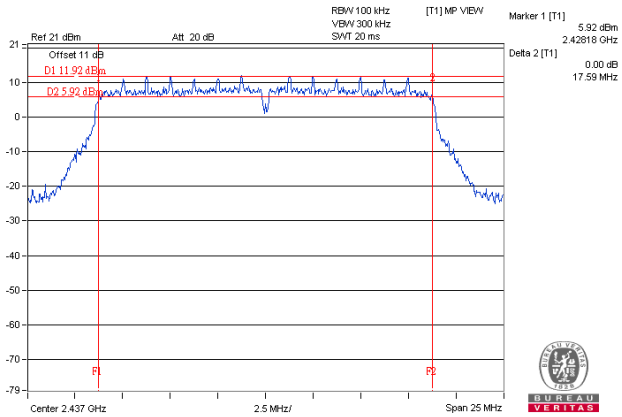
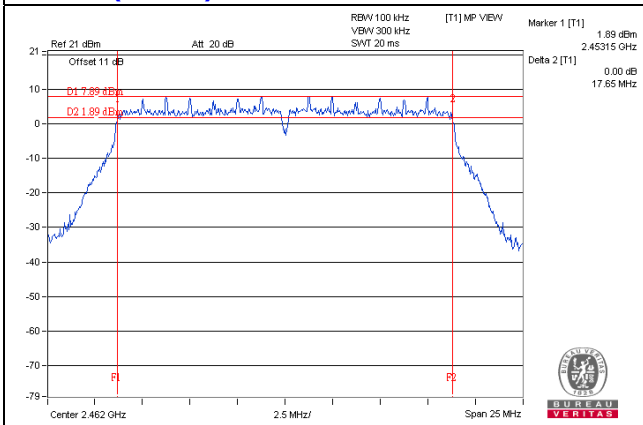
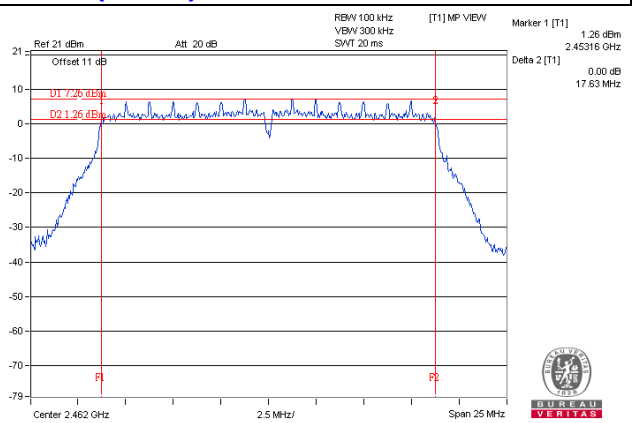


802.11n (20MHz) 1Tx Chain1 CH11

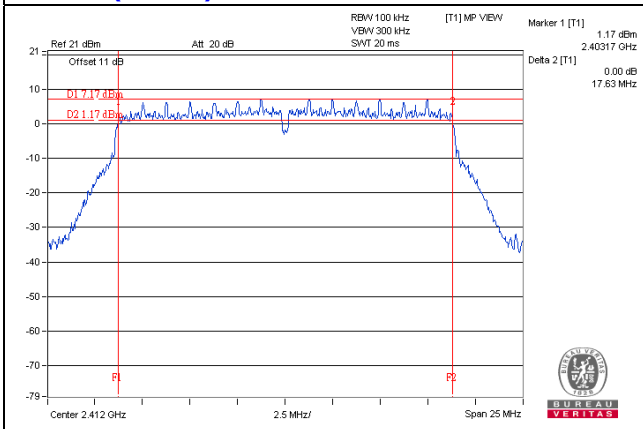


802.11n (20MHz) 2Tx SDM mode Chain1 CH11

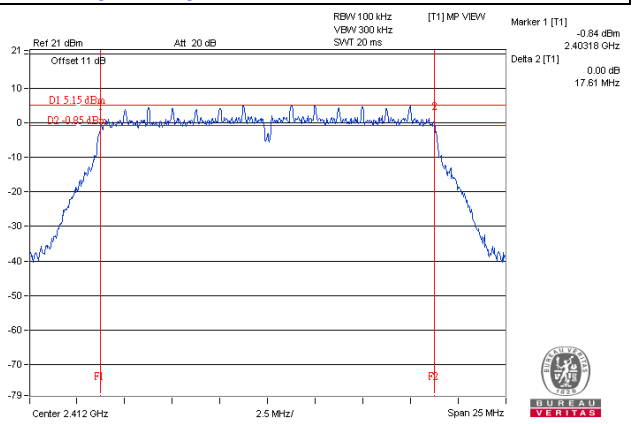


SPECTRUM PLOT

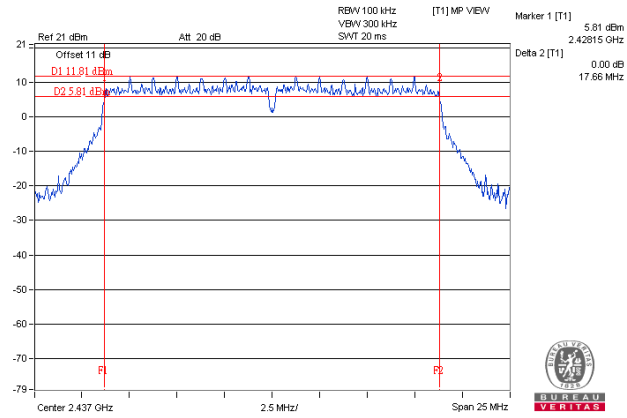
802.11n (20MHz) 2Tx SDM mode Chain3 CH1



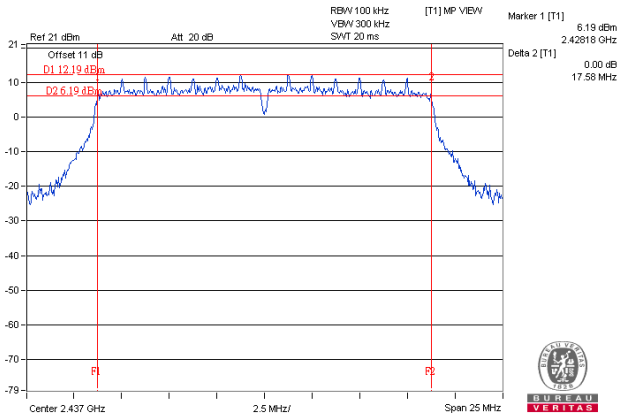
802.11n (20MHz) 3Tx SDM mode Chain1 CH1



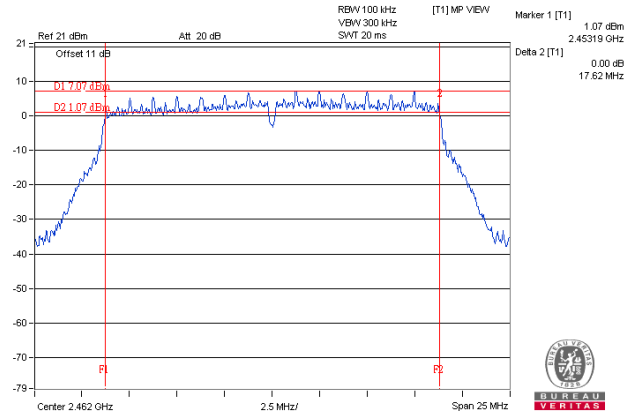
802.11n (20MHz) 2Tx SDM mode Chain3 CH6



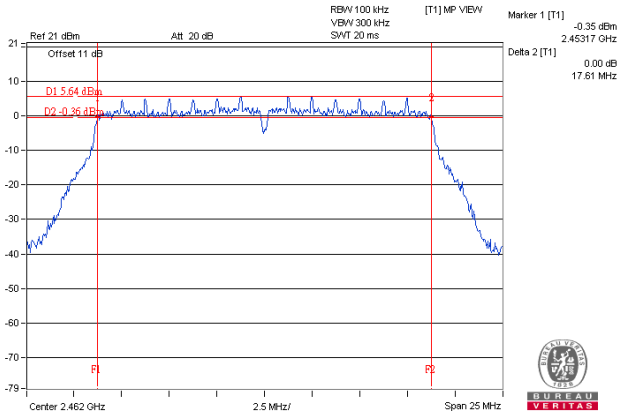
802.11n (20MHz) 3Tx SDM mode Chain1 CH6



802.11n (20MHz) 2Tx SDM mode Chain3 CH11

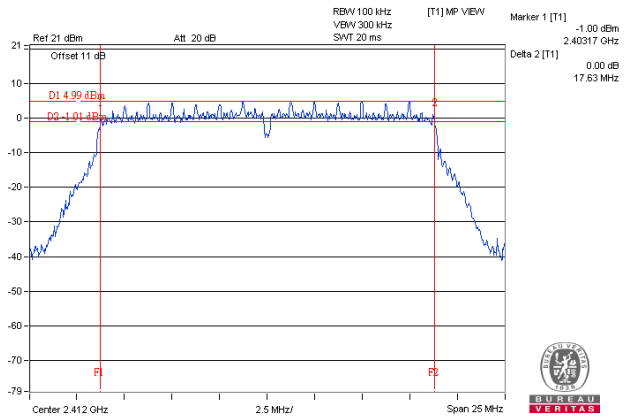


802.11n (20MHz) 3Tx SDM mode Chain1 CH11

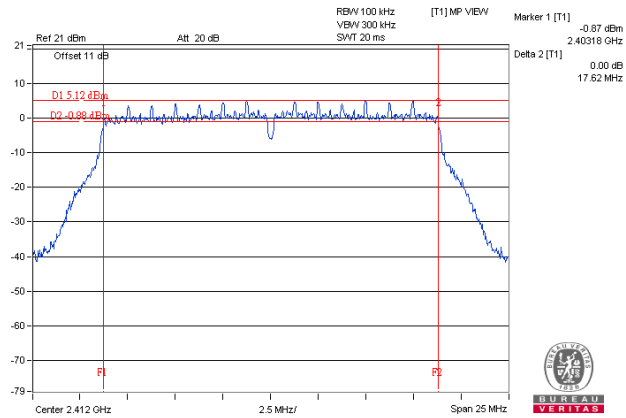


SPECTRUM PLOT

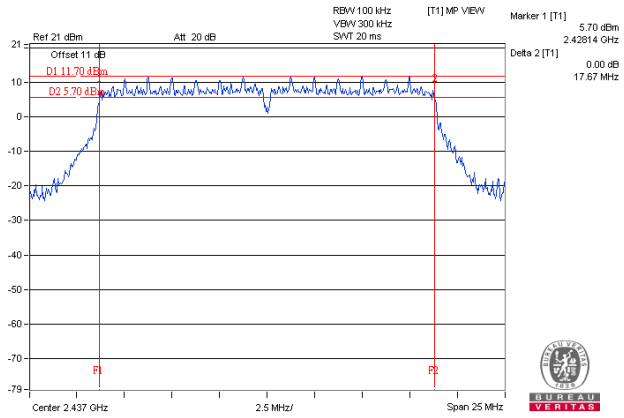
802.11n (20MHz) 3Tx SDM mode Chain2 CH1



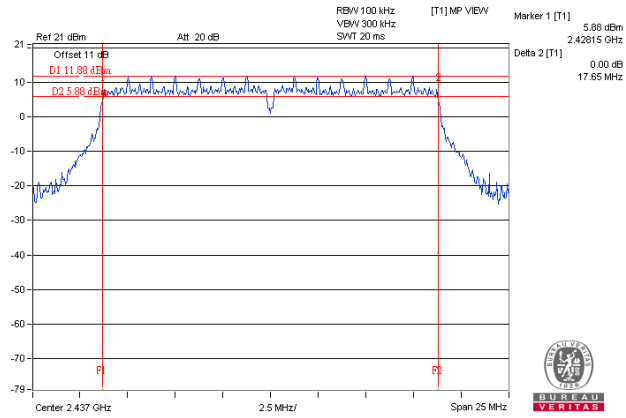
802.11n (20MHz) 3Tx SDM mode Chain3 CH1



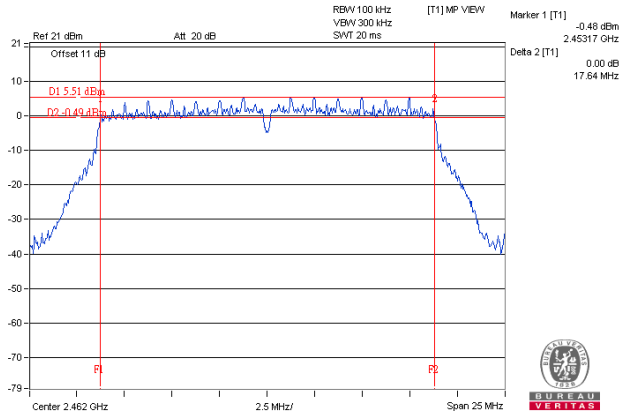
802.11n (20MHz) 3Tx SDM mode Chain2 CH6



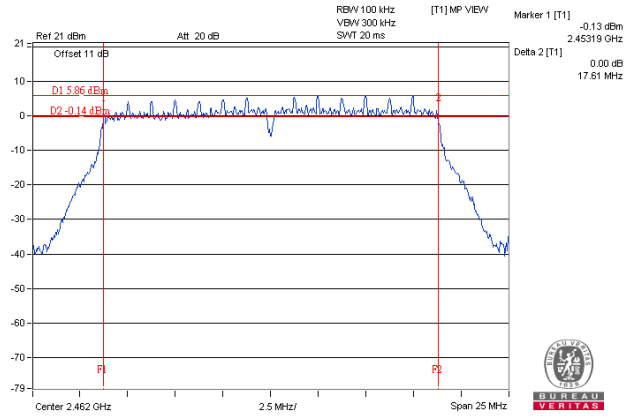
802.11n (20MHz) 3Tx SDM mode Chain3 CH6



802.11n (20MHz) 3Tx SDM mode Chain2 CH11

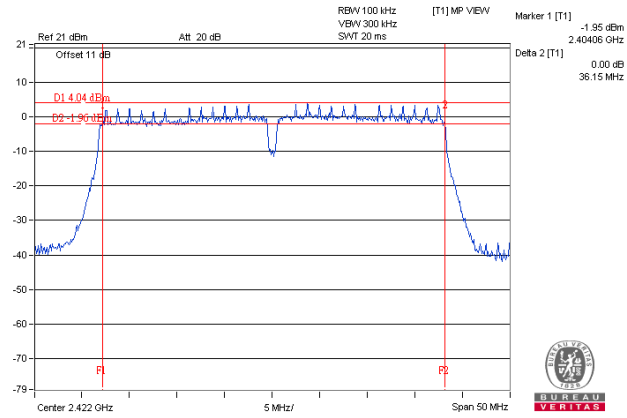


802.11n (20MHz) 3Tx SDM mode Chain3 CH11

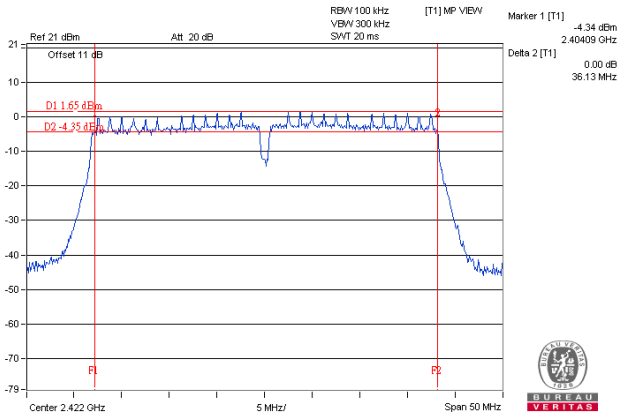


SPECTRUM PLOT

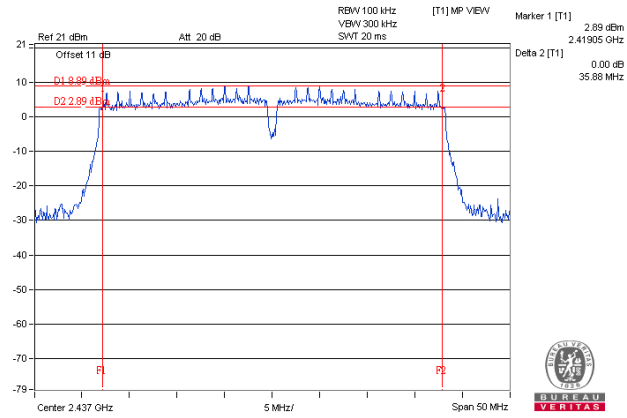
802.11n (40MHz) 1Tx Chain1 CH3



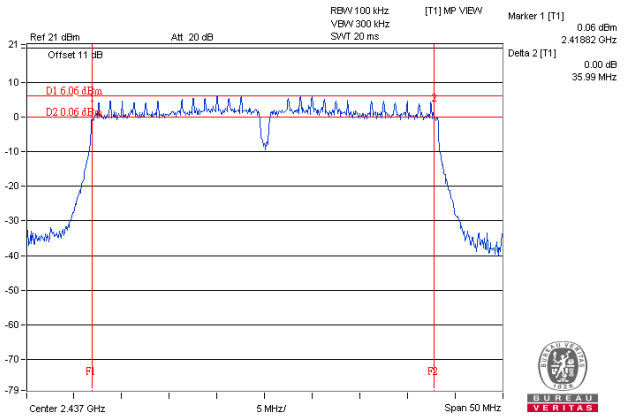
802.11n (40MHz) 2Tx SDM mode Chain1 CH3



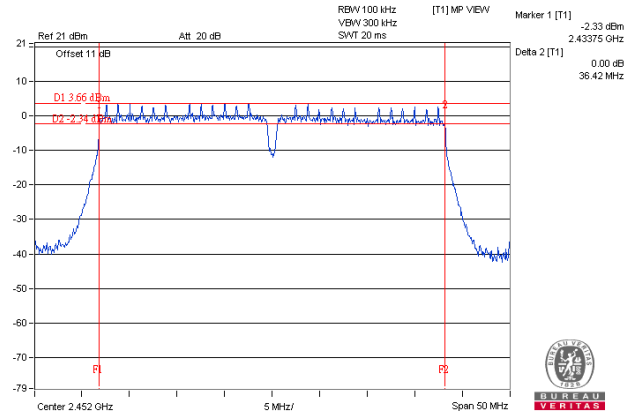
802.11n (40MHz) 1Tx Chain1 CH6



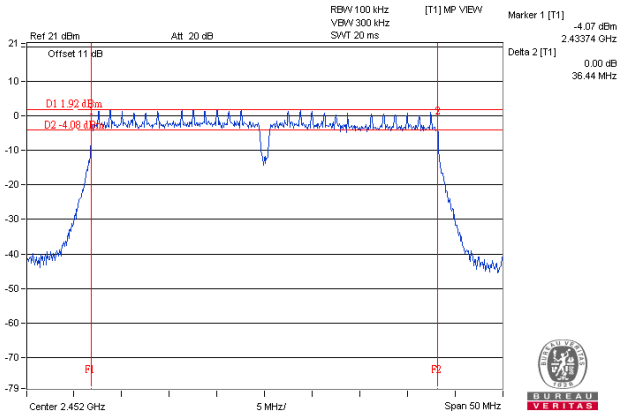
802.11n (40MHz) 2Tx SDM mode Chain1 CH6



802.11n (40MHz) 1Tx Chain1 CH9

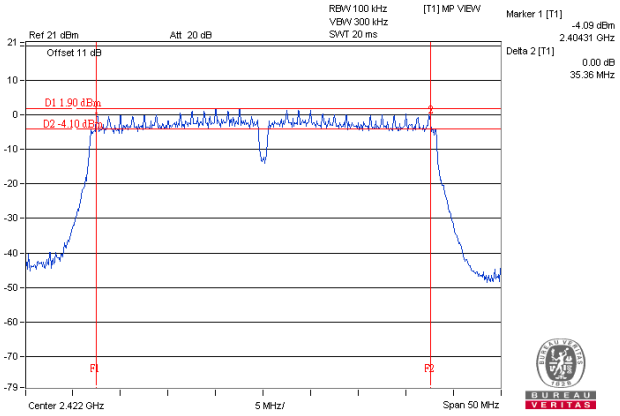


802.11n (40MHz) 2Tx SDM mode Chain1 CH9

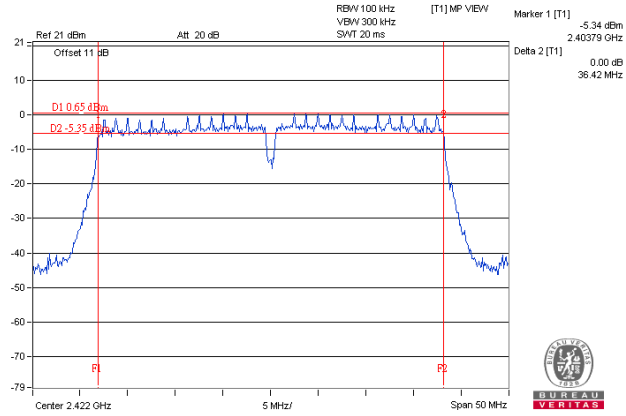


SPECTRUM PLOT

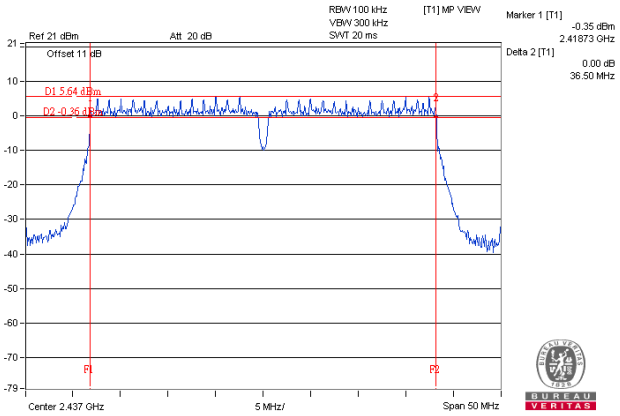
802.11n (40MHz) 2Tx SDM mode Chain3 CH3



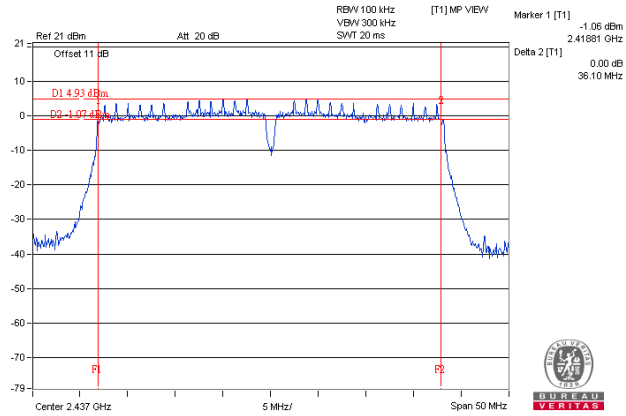
802.11n (40MHz) 3Tx SDM mode Chain1 CH3



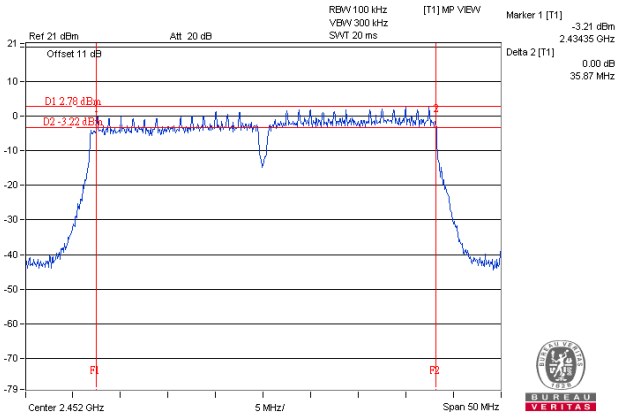
802.11n (40MHz) 2Tx SDM mode Chain3 CH6



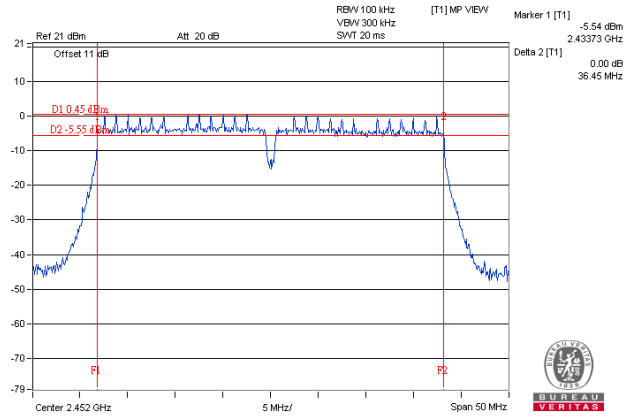
802.11n (40MHz) 3Tx SDM mode Chain1 CH6



802.11n (40MHz) 2Tx SDM mode Chain3 CH9

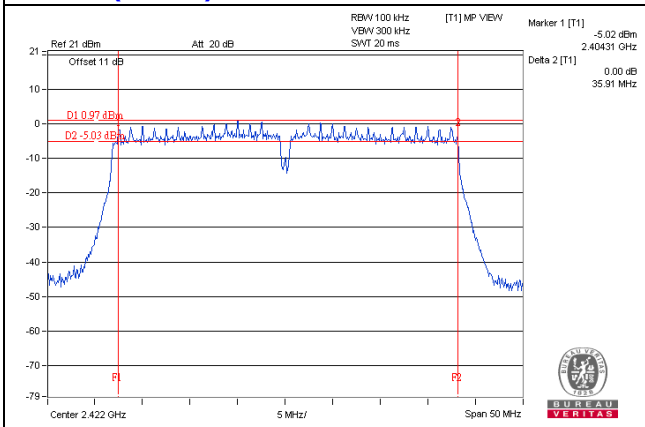


802.11n (40MHz) 3Tx SDM mode Chain1 CH9

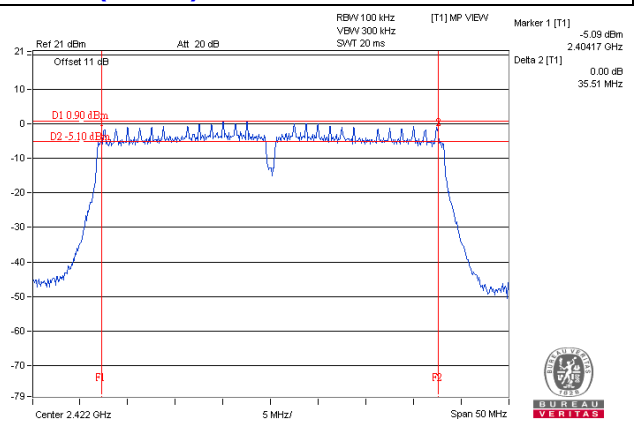


SPECTRUM PLOT

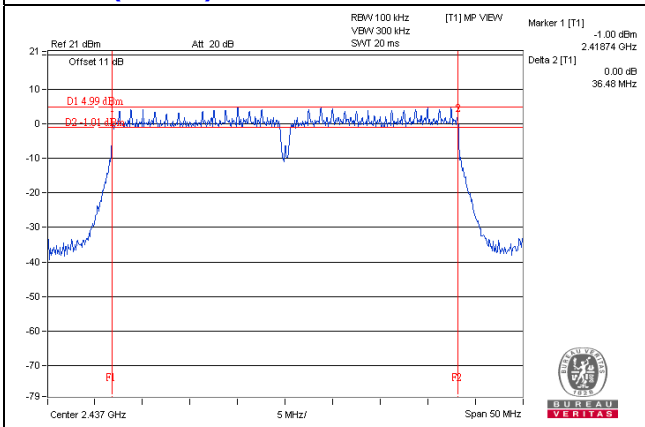
802.11n (40MHz) 3Tx SDM mode Chain2 CH3



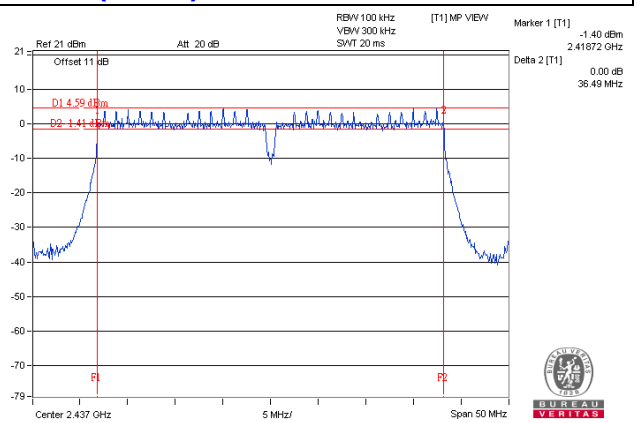
802.11n (40MHz) 3Tx SDM mode Chain3 CH3



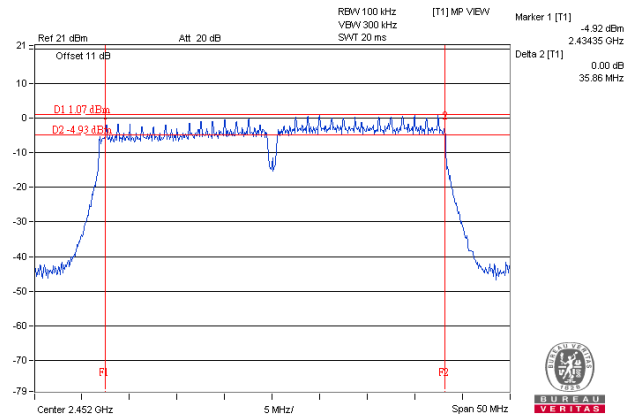
802.11n (40MHz) 3Tx SDM mode Chain2 CH6



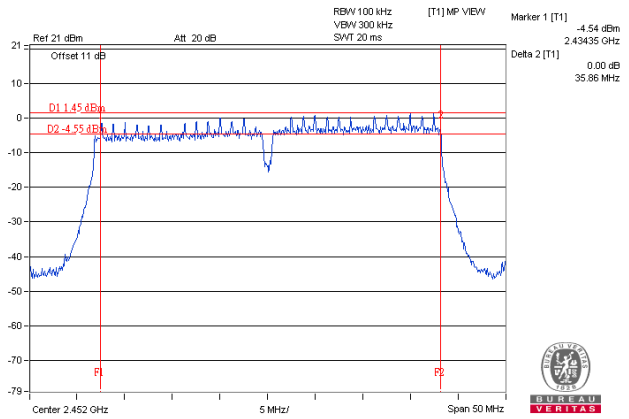
802.11n (40MHz) 3Tx SDM mode Chain3 CH6



802.11n (40MHz) 3Tx SDM mode Chain2 CH9



802.11n (40MHz) 3Tx SDM mode Chain3 CH9



4.5 Occupied Bandwidth Measurement

4.5.1 Measuring Instruments and Setting

The following table is the setting of the Spectrum Analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
RBW	1% to 5% of the anticipated emission bandwidth
VBW	≥ 3 x RBW
Detector	Peak
Trace	Max Hold
Sweep Time	Auto couple

4.5.2 Test Procedure

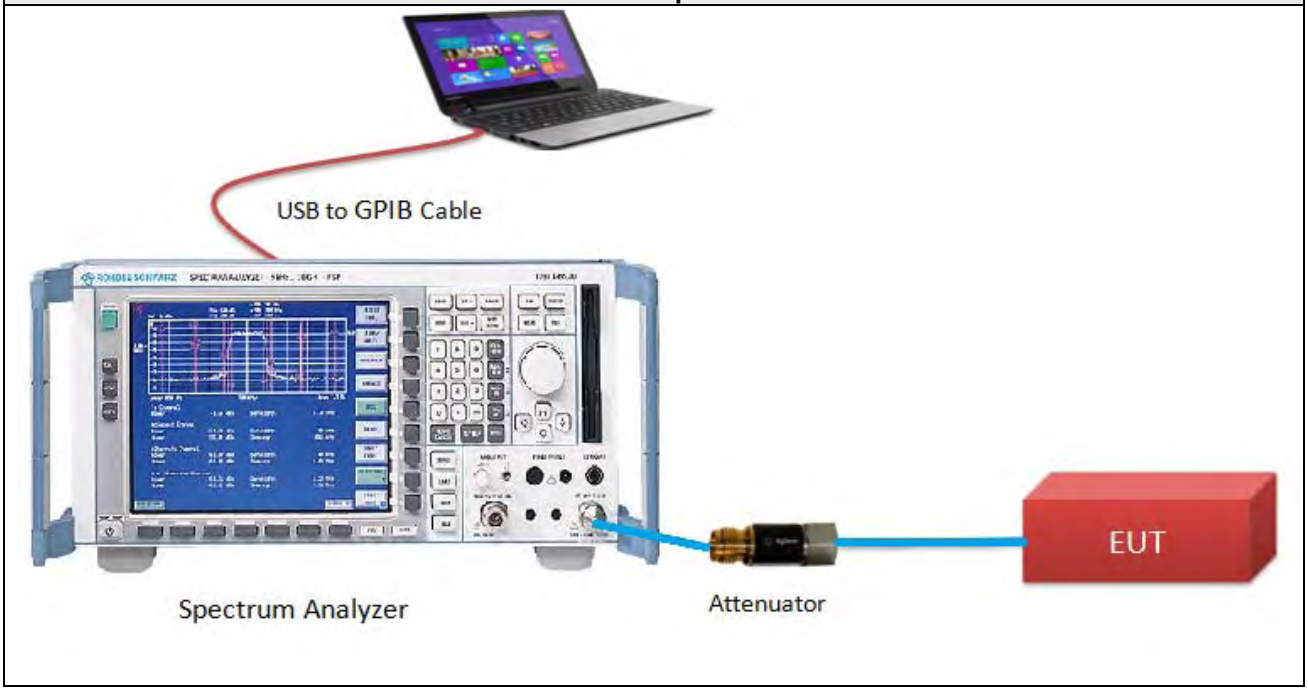
1 The transmitter output (antenna port) was connected to the spectrum analyzer in peak, Max hold mode.

2 For each RF output channel investigated, the spectrum analyzer center frequency was set to the channel carrier frequency. The bandwidth of the fundamental frequency was measured by spectrum analyzer with resolution bandwidth in the range of 1% to 5% of the anticipated emission bandwidth, and a video bandwidth at least 3x the resolution bandwidth and set the detector to peak.

3 The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5 %of the total mean power of a given emission.

4.5.3 Test Setup Layout

Setup



4.5.4 Test Deviation

There are no deviations with the original standard.

4.5.5 EUT Operating Conditions

The EUT was programmed to be in continuously transmitting mode.

4.5.6 Test Results of Occupied Bandwidth

Temperature	25°C	Humidity	60%
Test Engineer	Bayu Chen		

802.11b 1Tx Chain1

CHANNEL	FREQUENCY (MHz)	OCCUPIED BANDWIDTH (MHz)
1	2412	11.91
6	2437	11.80
11	2462	11.80

802.11g 1Tx Chain1

CHANNEL	FREQUENCY (MHz)	OCCUPIED BANDWIDTH (MHz)
1	2412	17.04
6	2437	16.90
11	2462	16.90

802.11n (20MHz) 1Tx Chain1

CHANNEL	FREQUENCY (MHz)	OCCUPIED BANDWIDTH (MHz)
1	2412	18.00
6	2437	18.10
11	2462	18.10

802.11n (20MHz) 2Tx SDM

CHANNEL	FREQUENCY (MHz)	OCCUPIED BANDWIDTH (MHz)	
		CHAIN 1	CHAIN 3
1	2412	18.08	17.91
6	2437	18.00	17.90
11	2462	17.90	17.80

802.11n (20MHz) 3Tx SDM

CHANNEL	FREQUENCY (MHz)	OCCUPIED BANDWIDTH (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
1	2412	18.08	17.82	17.82
6	2437	18.00	18.00	18.00
11	2462	18.00	17.90	17.90

802.11n (40MHz) 1Tx Chain1

CHANNEL	FREQUENCY (MHz)	OCCUPIED BANDWIDTH (MHz)
3	2422	36.84
6	2437	36.80
9	2452	36.80

802.11n (40MHz) 2Tx SDM

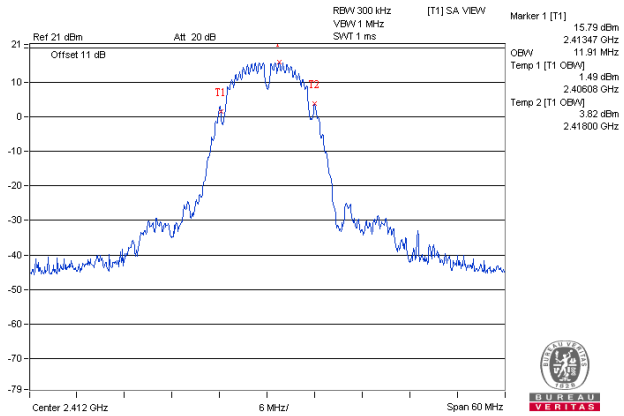
CHANNEL	FREQUENCY (MHz)	OCCUPIED BANDWIDTH (MHz)	
		CHAIN 1	CHAIN 3
3	2422	36.72	36.48
6	2437	36.70	36.90
9	2452	36.80	36.70

802.11n (40MHz) 2Tx SDM

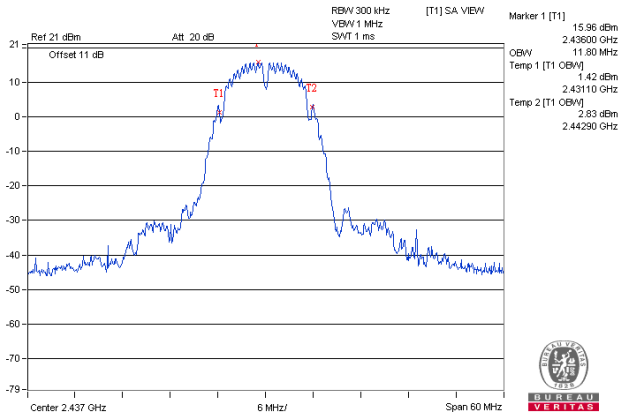
CHANNEL	FREQUENCY (MHz)	OCCUPIED BANDWIDTH (MHz)		
		CHAIN 1	CHAIN 2	CHAIN 3
3	2422	36.72	36.60	36.48
6	2437	36.70	37.00	36.90
9	2452	36.90	36.70	36.80

SPECTRUM PLOT

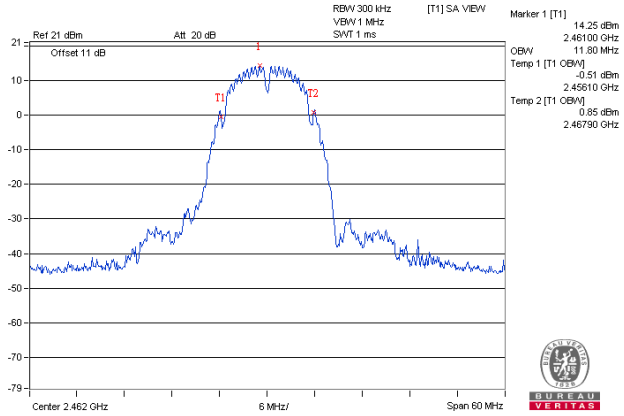
802.11b 1Tx Chain1 CH1



802.11b 1Tx Chain1 CH6

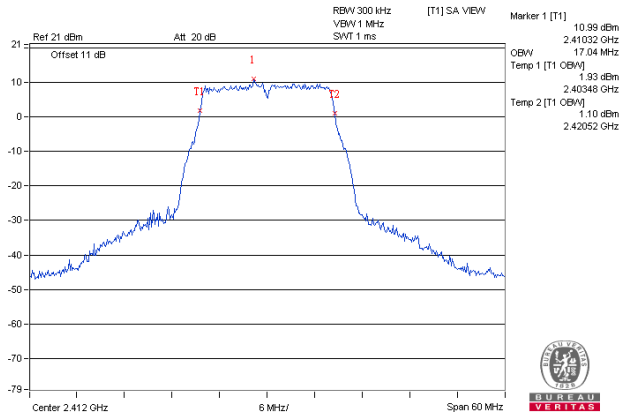


802.11b 1Tx Chain1 CH11



SPECTRUM PLOT

802.11g 1Tx Chain1 CH1



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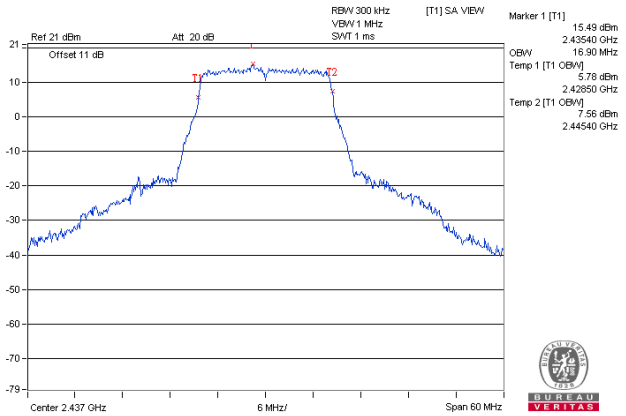

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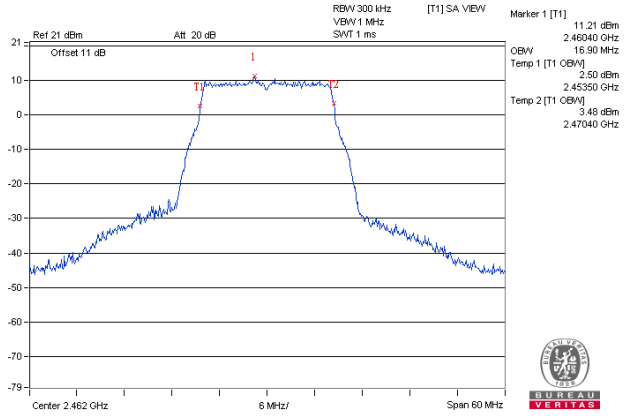
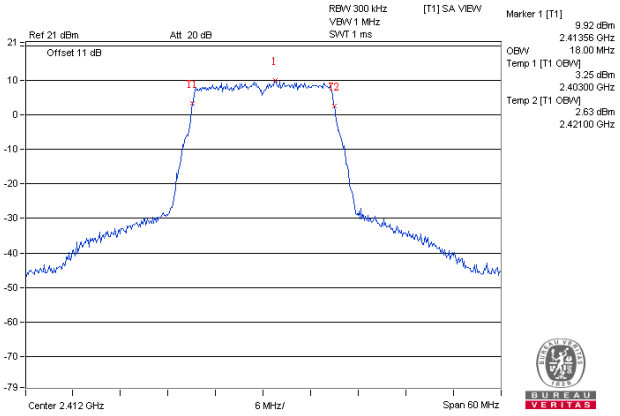


SPECTRUM PLOT

802.11n (20MHz) 1Tx Chain1 CH1



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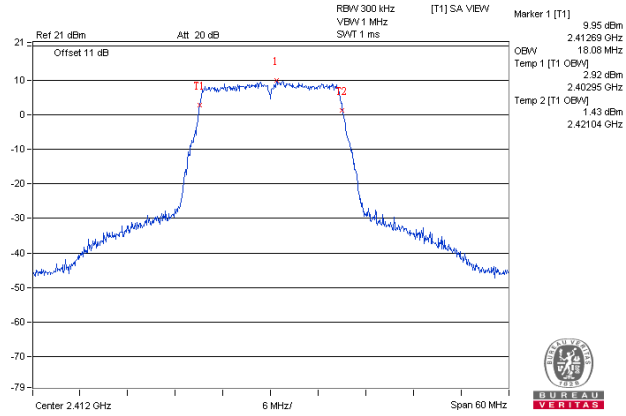
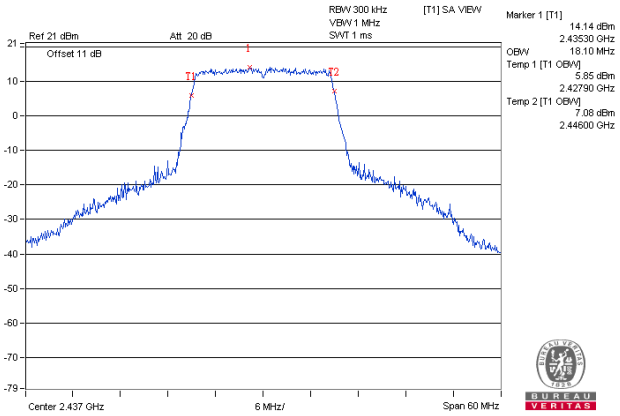
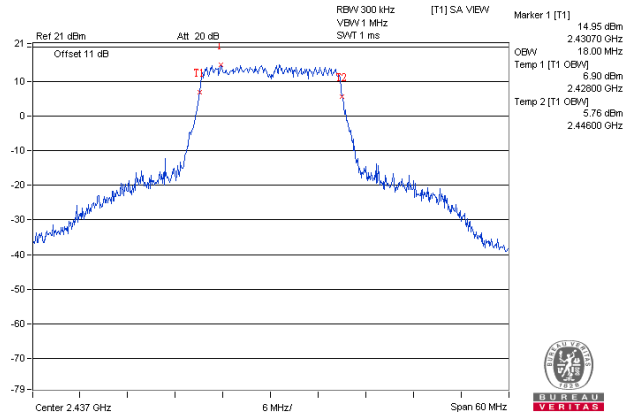


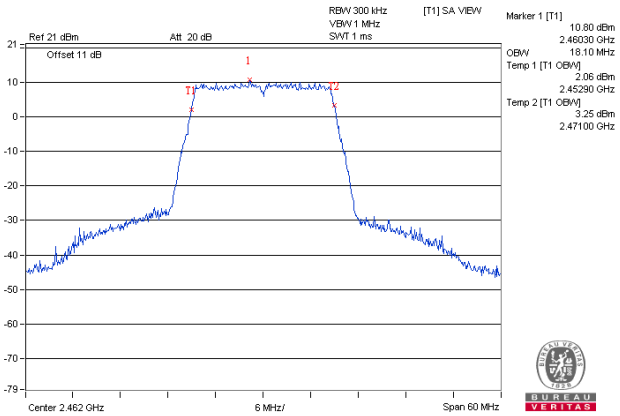
802.11n (20MHz) 1Tx Chain1 CH6



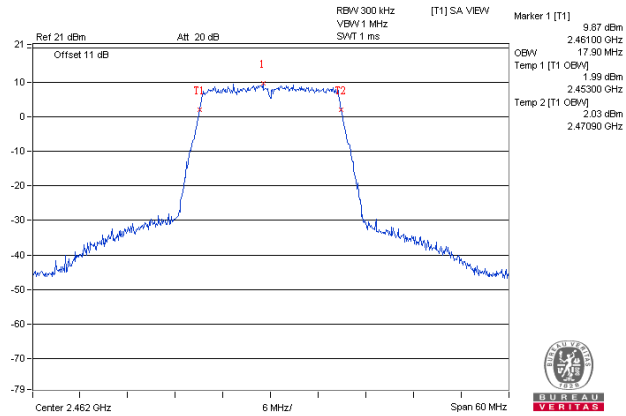
802.11n (20MHz) 2Tx SDM mode Chain1 CH6



802.11n (20MHz) 1Tx Chain1 CH11

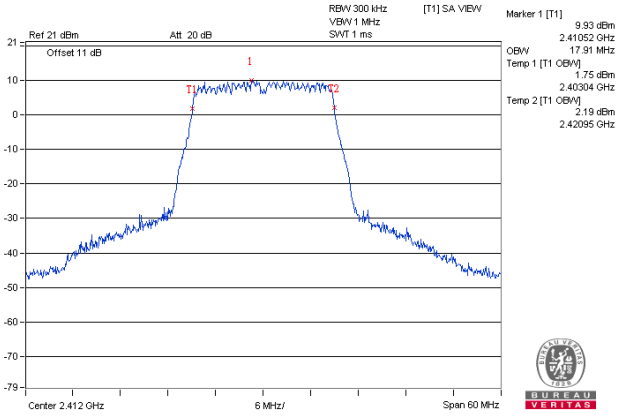


802.11n (20MHz) 2Tx SDM mode Chain1 CH11

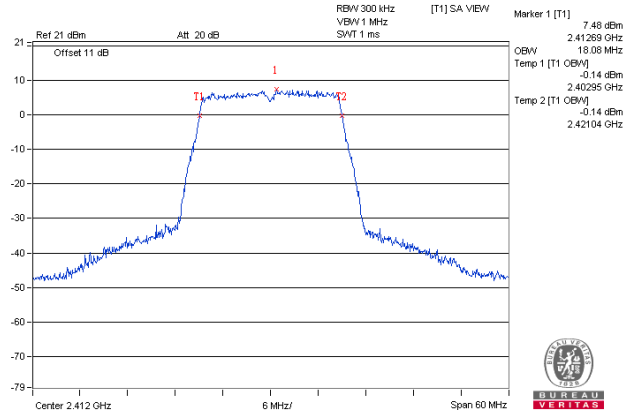


SPECTRUM PLOT

802.11n (20MHz) 2Tx SDM mode Chain3 CH1



802.11n (20MHz) 3Tx SDM mode Chain1 CH1



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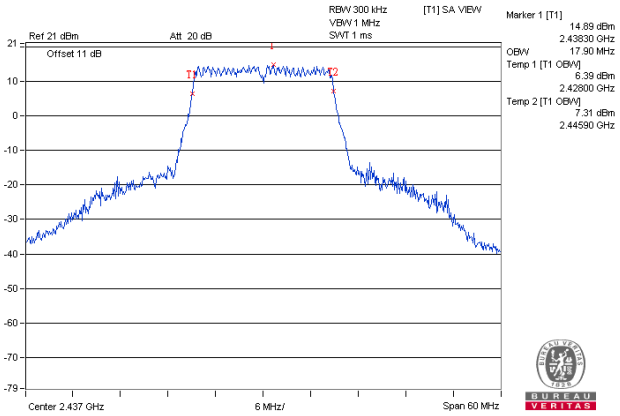
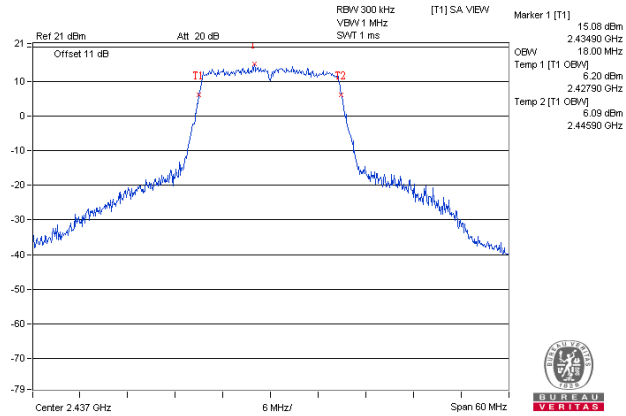


802.11n (20MHz) 3Tx SDM mode Chain1 CH6



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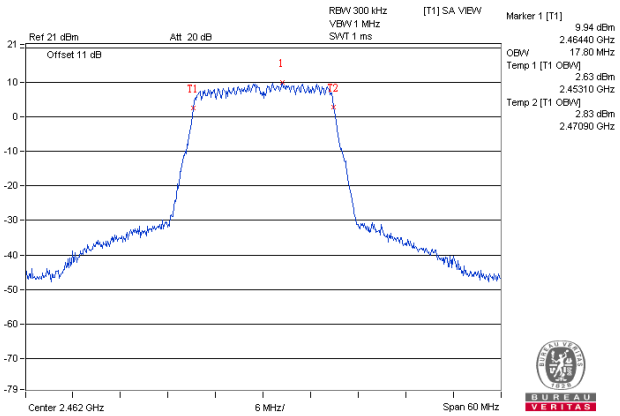
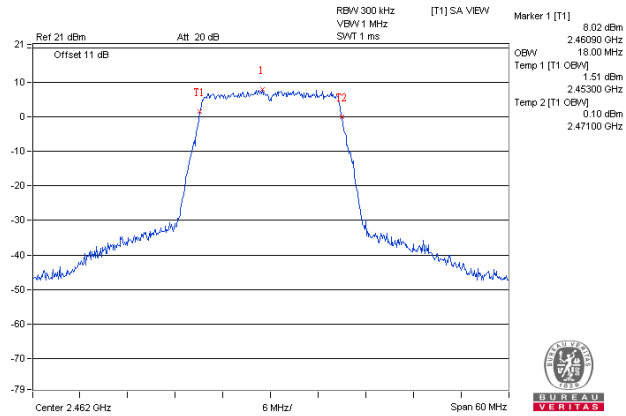
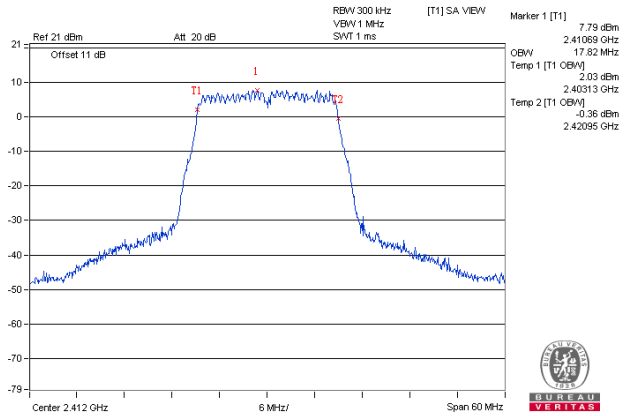


802.11n (20MHz) 3Tx SDM mode Chain1 CH11

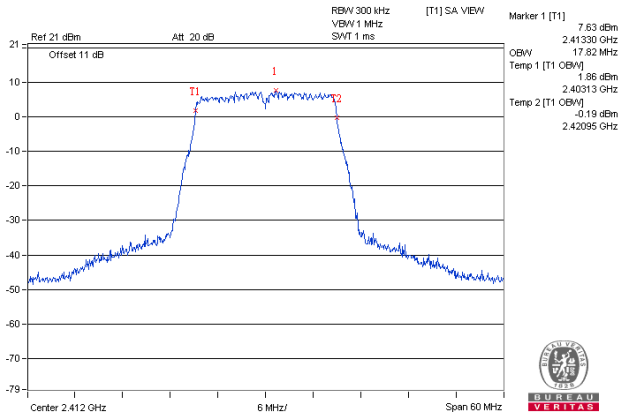


SPECTRUM PLOT

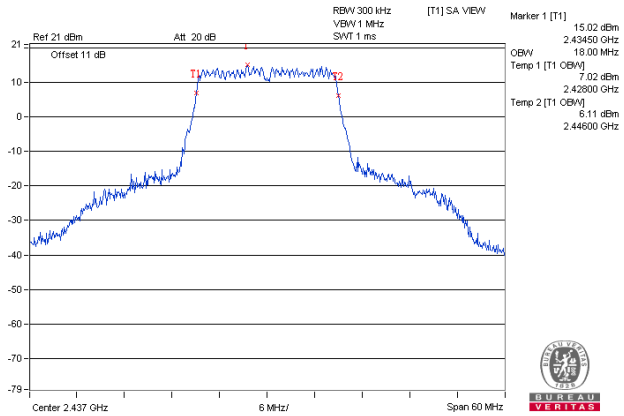
802.11n (20MHz) 3Tx SDM mode Chain2 CH1



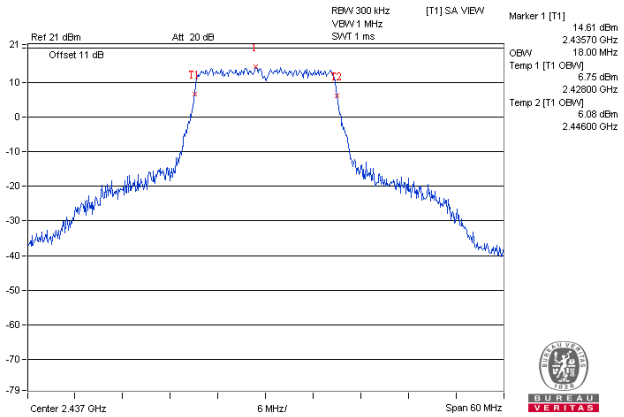
802.11n (20MHz) 3Tx SDM mode Chain3 CH1



802.11n (20MHz) 3Tx SDM mode Chain2 CH6



802.11n (20MHz) 3Tx SDM mode Chain3 CH6



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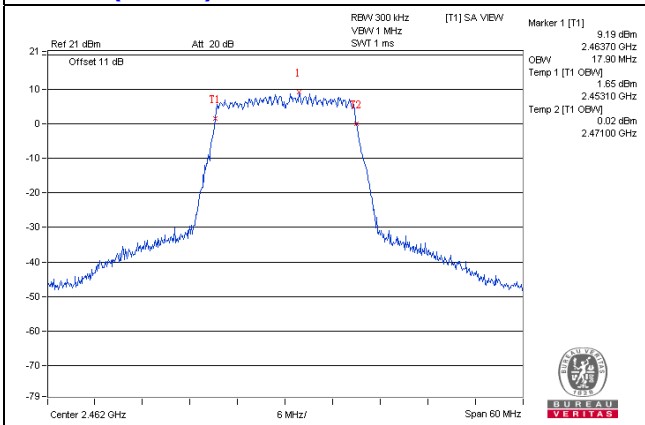
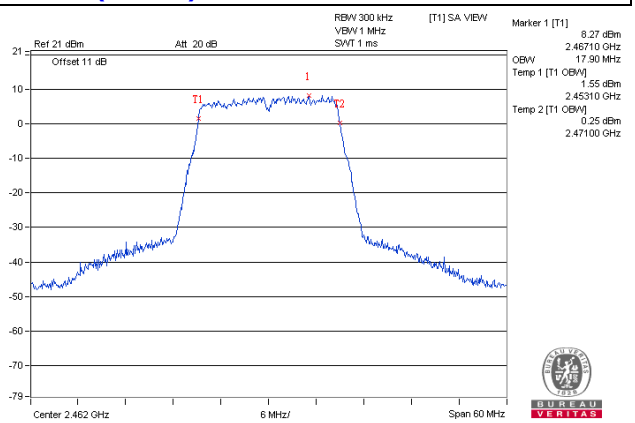
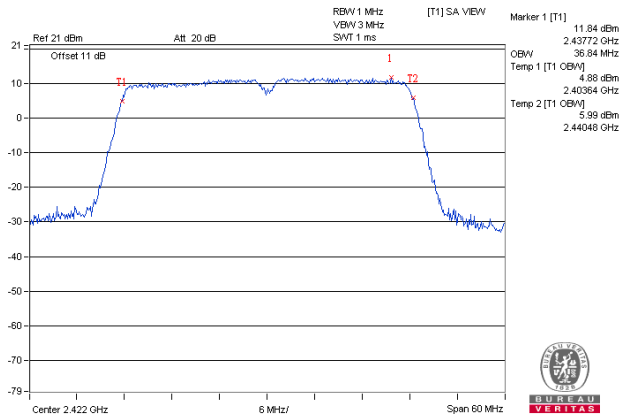


802.11n (20MHz) 3Tx SDM mode Chain3 CH11

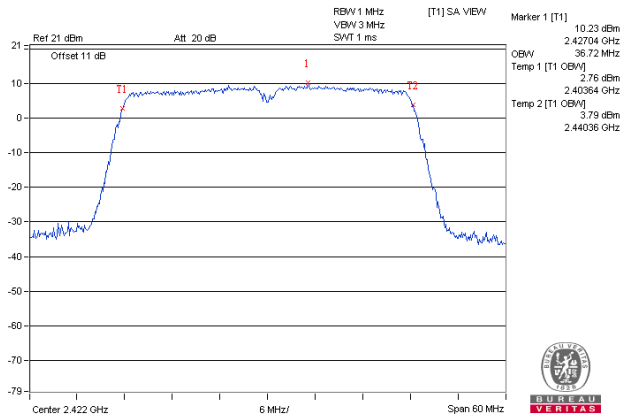


SPECTRUM PLOT

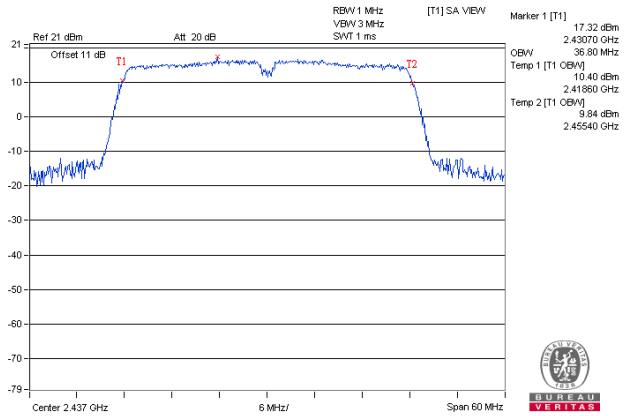
802.11n (40MHz) 1Tx Chain1 CH3



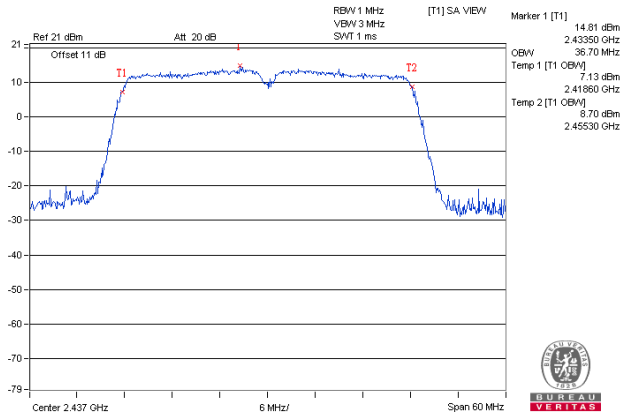
802.11n (40MHz) 2Tx SDM mode Chain1 CH3



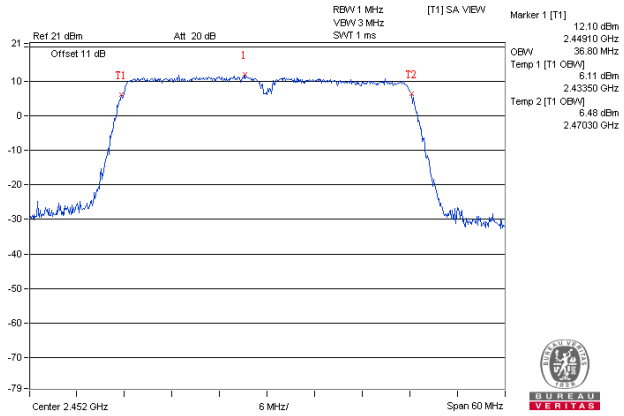
802.11n (40MHz) 1Tx Chain1 CH6



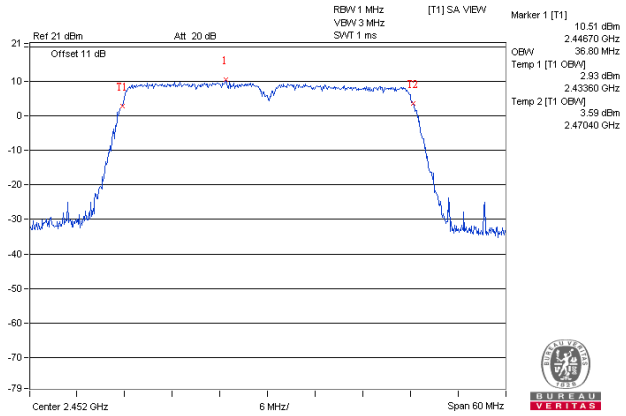
802.11n (40MHz) 2Tx SDM mode Chain1 CH6



802.11n (40MHz) 1Tx Chain1 CH9

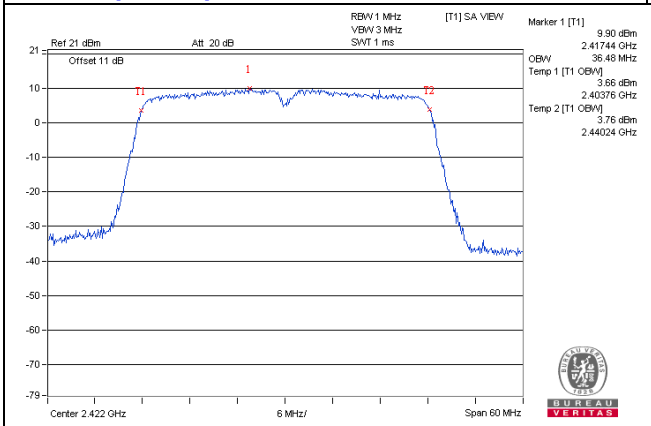


802.11n (40MHz) 2Tx SDM mode Chain1 CH9

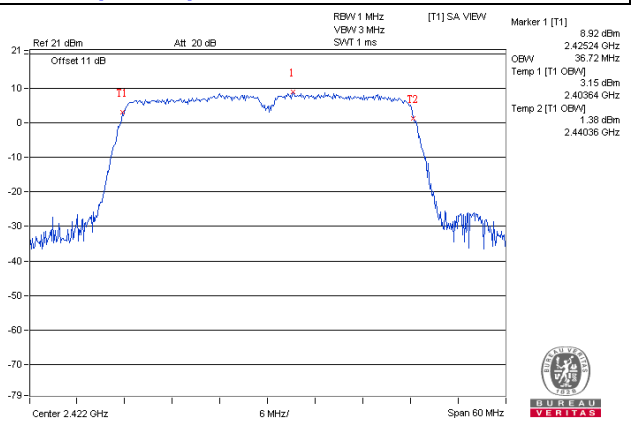


SPECTRUM PLOT

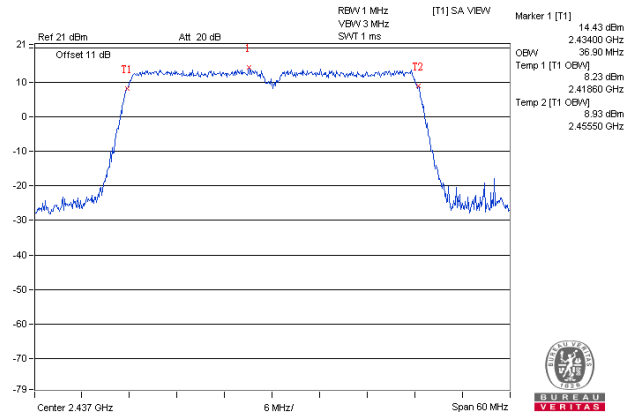
802.11n (40MHz) 2Tx SDM mode Chain3 CH3



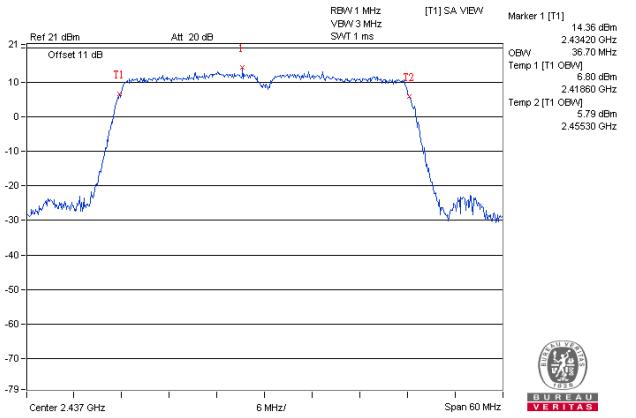
802.11n (40MHz) 3Tx SDM mode Chain1 CH3



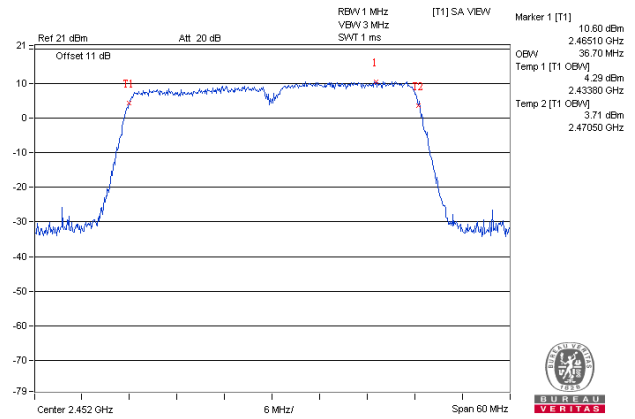
802.11n (40MHz) 2Tx SDM mode Chain3 CH6



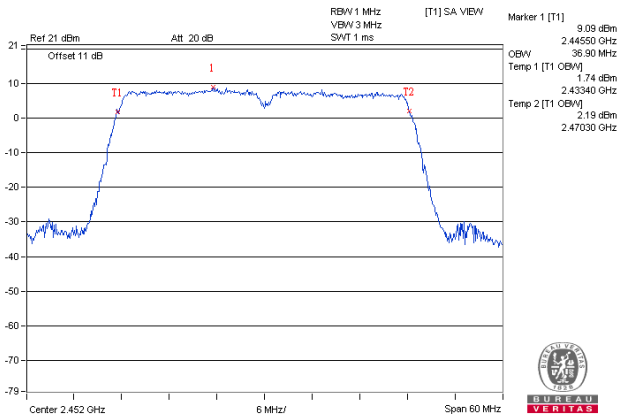
802.11n (40MHz) 3Tx SDM mode Chain1 CH6



802.11n (40MHz) 2Tx SDM mode Chain3 CH9

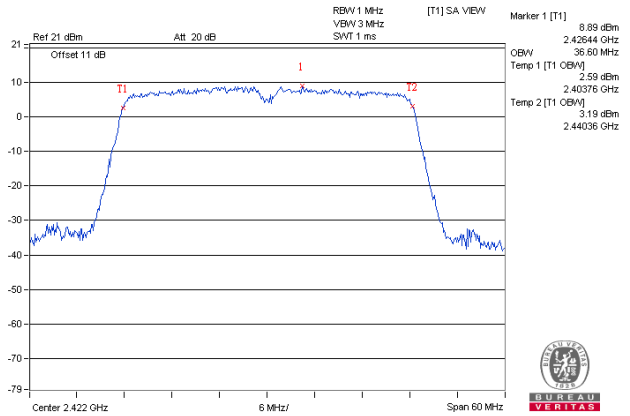


802.11n (40MHz) 3Tx SDM mode Chain1 CH9

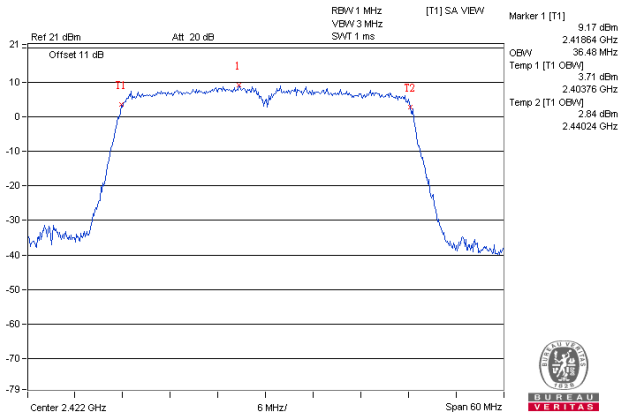


SPECTRUM PLOT

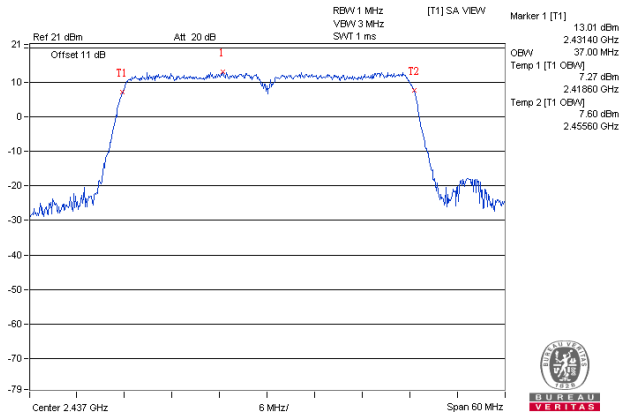
802.11n (40MHz) 3Tx SDM mode Chain2 CH3



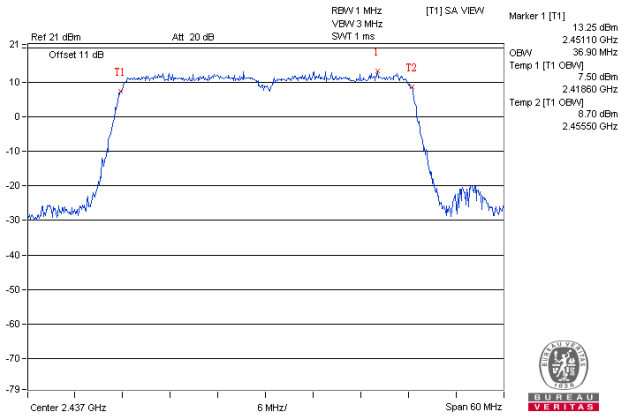
802.11n (40MHz) 3Tx SDM mode Chain3 CH3



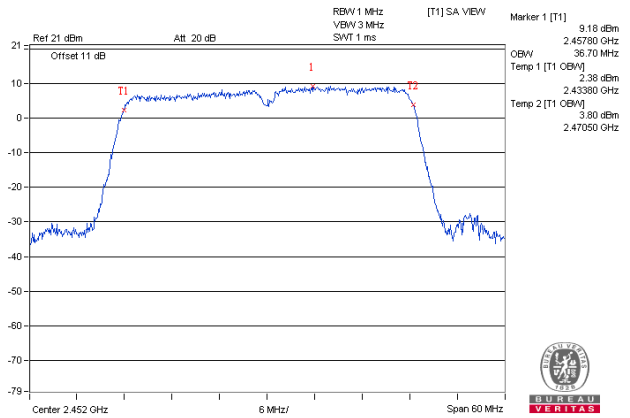
802.11n (40MHz) 3Tx SDM mode Chain2 CH6



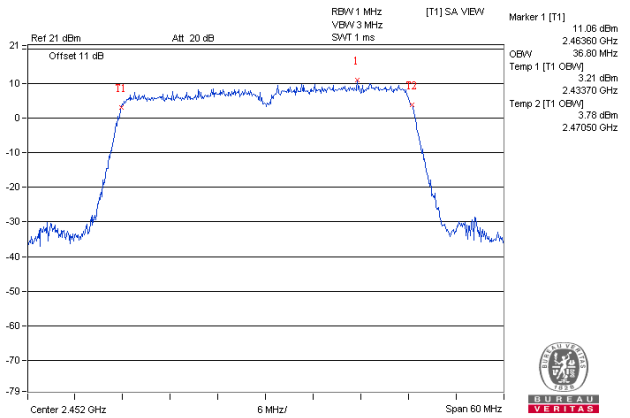
802.11n (40MHz) 3Tx SDM mode Chain3 CH6



802.11n (40MHz) 3Tx SDM mode Chain2 CH9



802.11n (40MHz) 3Tx SDM mode Chain3 CH9



4.6 Radiated Emissions Measurement

4.6.1 Limit

30dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emissions fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequency Range (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

4.6.2 Measuring Instruments and Setting

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

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RBW / VBW (Emissions in restricted band)	1MHz / 3MHz for Peak, 1 MHz / 1/T for Average
RBW / VBW (Emissions in non-restricted band)	100kHz / 300kHz for peak

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~1000MHz / RBW 120kHz for QP

4.6.3 Test Procedure

1 Configure the EUT according to ANSI C63.10. The EUT was placed on the top of a rotating table 0.8 meters (for below 1GHz) / 1.5 meters (for above 1GHz) above the 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 ≥ 98%, 1MHz RBW and VBW is ≥ 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.

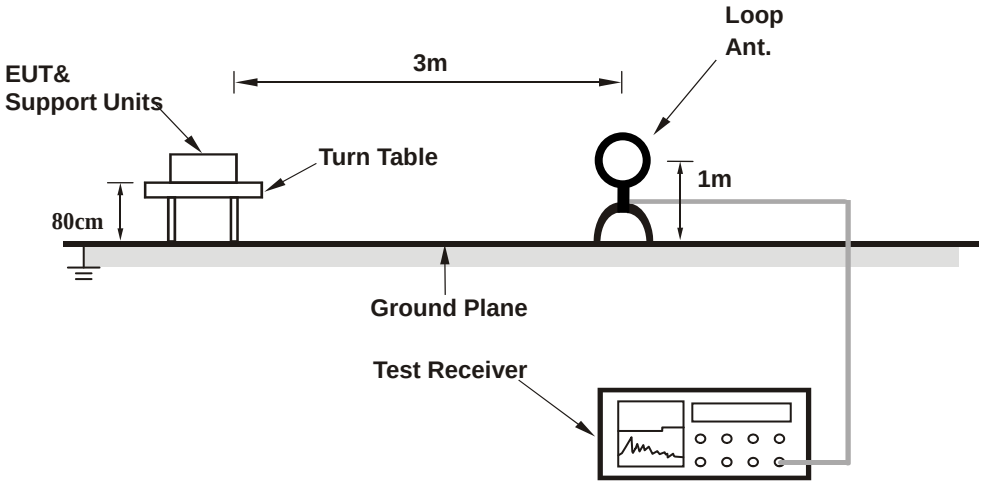
9 For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also PASS with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in 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.

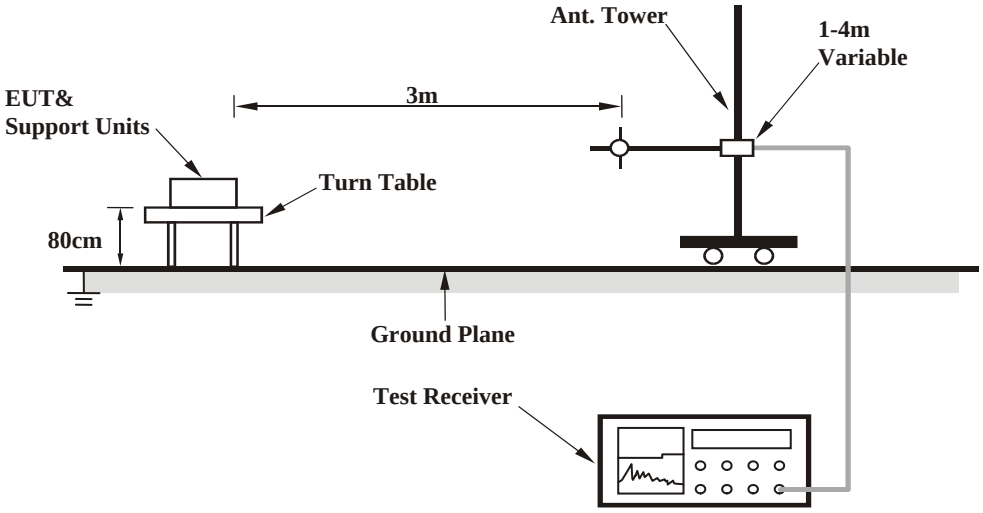
4.6.4 Test Setup Layout

Setup

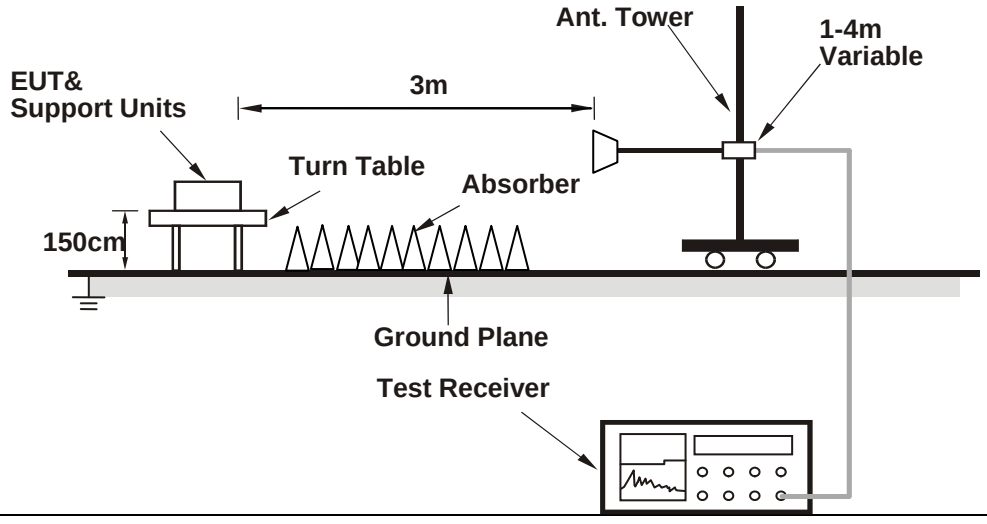
For Radiated Emissions below 1GHz (9kHz~30MHz)



For Radiated Emissions below 1GHz (30MHz~1GHz)



For Radiated Emissions above 1GHz



4.6.5 Test Deviation

There are no deviations with the original standard.

4.6.6 EUT Operating Conditions

The EUT was programmed to be in continuously transmitting mode.

4.6.7 Test Results of Radiated Emissions

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

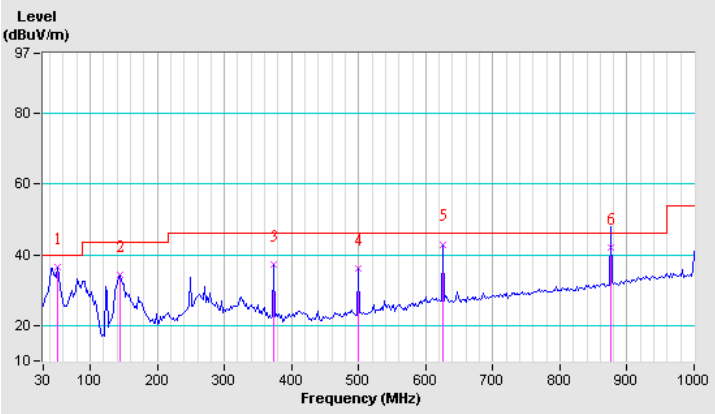
802.11n (20MHz)

CHANNEL	TX Channel 6	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	51.38	36.4 QP	40.0	-3.6	2.00 H	292	50.30	-13.90
2	144.69	34.2 QP	43.5	-9.3	1.24 H	268	47.70	-13.50
3	374.07	37.3 QP	46.0	-8.7	2.00 H	247	46.70	-9.40
4	500.42	36.1 QP	46.0	-9.9	1.50 H	276	42.60	-6.50
5	624.83	43.0 QP	46.0	-3.0	1.24 H	228	46.10	-3.10
6	875.59	42.1 QP	46.0	-3.9	1.50 H	262	39.90	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

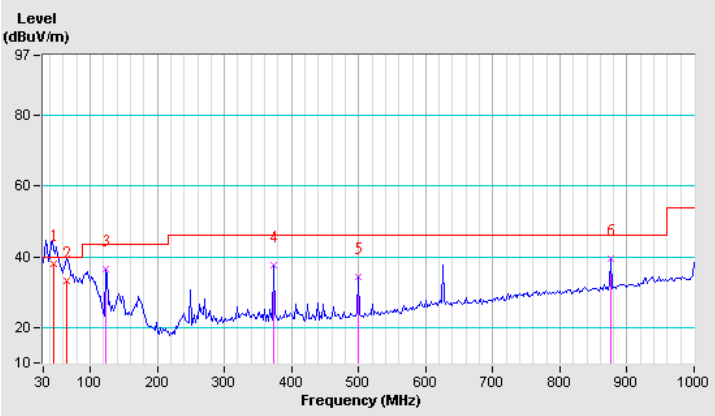


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

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	**44.87**	**38.0 QP**	**40.0**	**-2.0**	**1.00 V**	**15**	**52.30**	**-14.30**
2	65.58	33.4 QP	40.0	-6.6	1.00 V	180	48.70	-15.30
3	123.31	36.6 QP	43.5	-6.9	1.00 V	15	52.10	-15.50
4	374.07	37.5 QP	46.0	-8.5	1.50 V	318	46.90	-9.40
5	500.42	34.5 QP	46.0	-11.5	1.00 V	231	41.00	-6.50
6	875.59	39.5 QP	46.0	-6.5	1.00 V	199	37.30	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



Radiated Emission Range 1GHz~10th Harmonic

1TX

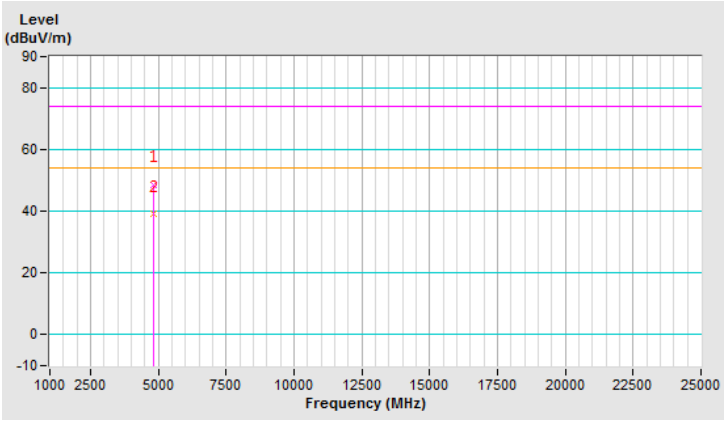
802.11b

CHANNEL	TX Channel 1	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4824.00	48.7 PK	74.0	-25.3	1.75 H	1	46.90	1.80
2	4824.00	39.1 AV	54.0	-14.9	1.75 H	1	37.30	1.80

REMARKS:

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

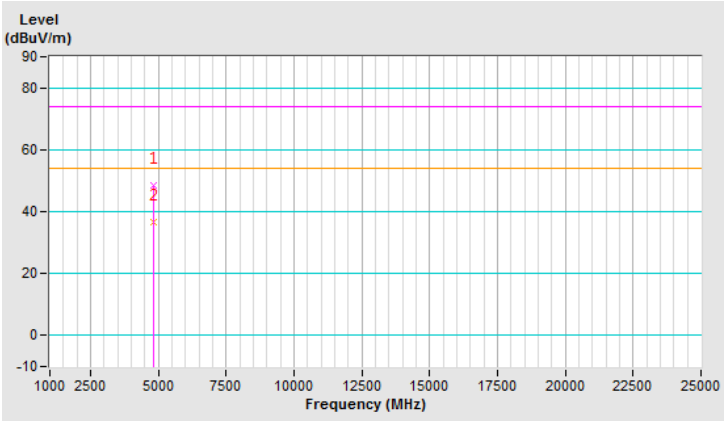


CHANNEL	TX Channel 1	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4824.00	48.3 PK	74.0	-25.7	1.66 V	273	46.50	1.80
2	4824.00	36.4 AV	54.0	-17.6	1.66 V	273	34.60	1.80

REMARKS:

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

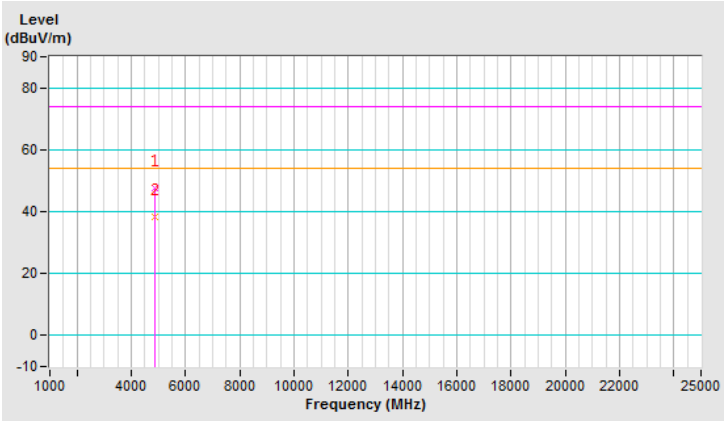


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4874.00	47.5 PK	74.0	-26.5	2.32 H	183	45.70	1.80
2	4874.00	38.5 AV	54.0	-15.5	2.32 H	183	36.70	1.80

REMARKS:

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

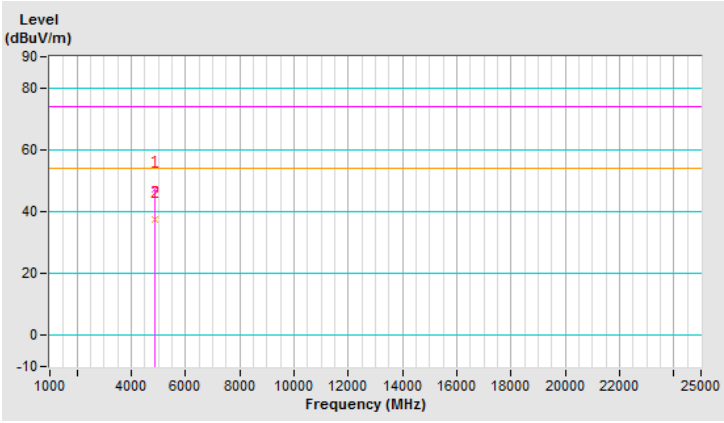


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4874.00	47.0 PK	74.0	-27.0	1.52 V	182	45.20	1.80
2	4874.00	37.6 AV	54.0	-16.4	1.52 V	182	35.80	1.80

REMARKS:

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

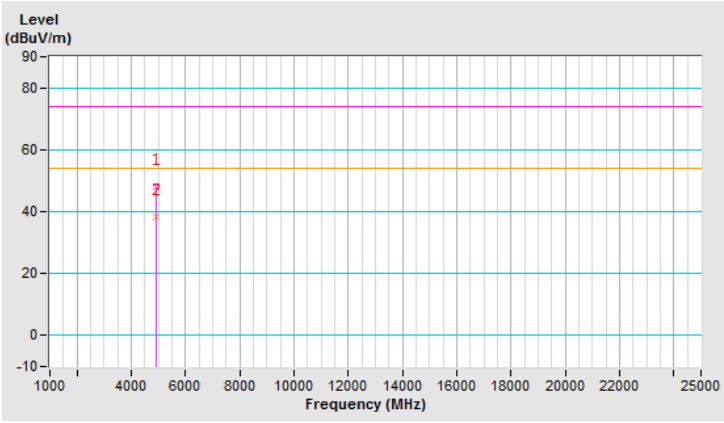


CHANNEL	TX Channel 11	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4924.00	47.9 PK	74.0	-26.1	1.76 H	7	46.10	1.80
2	4924.00	38.2 AV	54.0	-15.8	1.76 H	7	36.40	1.80

REMARKS:

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

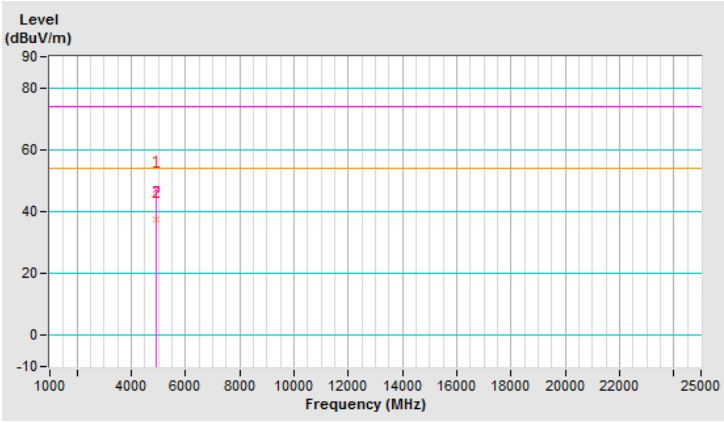


CHANNEL	TX Channel 11	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4924.00	47.2 PK	74.0	-26.8	1.26 V	26	45.40	1.80
2	4924.00	37.3 AV	54.0	-16.7	1.26 V	26	35.50	1.80

REMARKS:

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



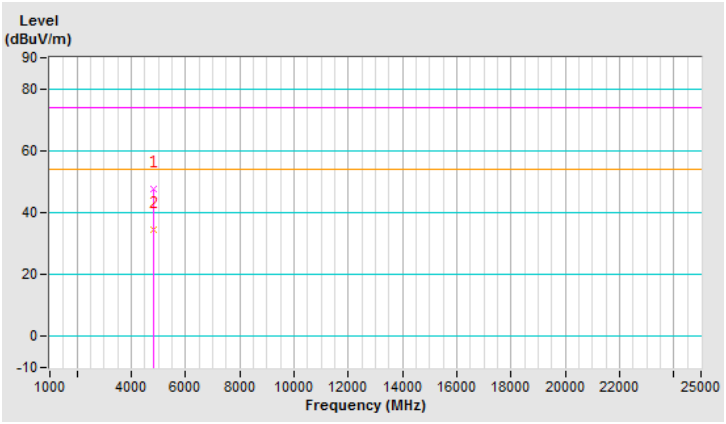
802.11n (20MHz)

CHANNEL	TX Channel 1	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4824.00	47.7 PK	74.0	-26.3	1.55 H	161	45.90	1.80
2	4824.00	34.4 AV	54.0	-19.6	1.55 H	161	32.60	1.80

REMARKS:

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

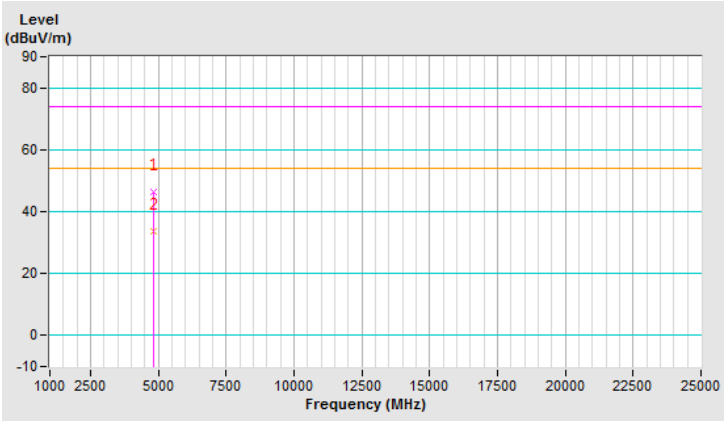


CHANNEL	TX Channel 1	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4824.00	46.4 PK	74.0	-27.6	1.72 V	55	44.60	1.80
2	4824.00	33.7 AV	54.0	-20.3	1.72 V	55	31.90	1.80

REMARKS:

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

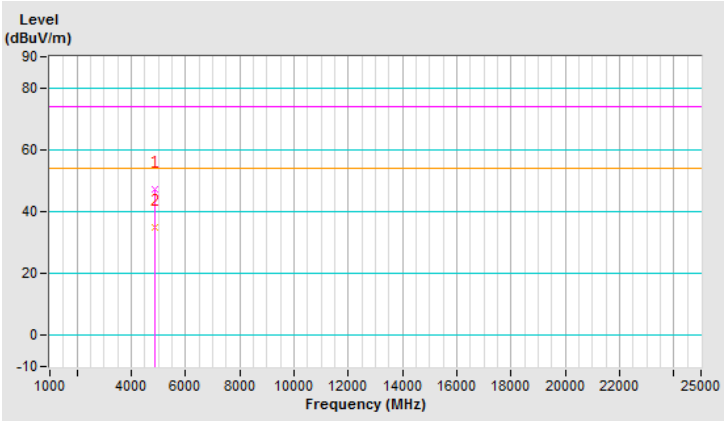


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4874.00	47.2 PK	74.0	-26.8	1.32 H	52	45.40	1.80
2	4874.00	35.1 AV	54.0	-18.9	1.32 H	52	33.30	1.80

REMARKS:

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

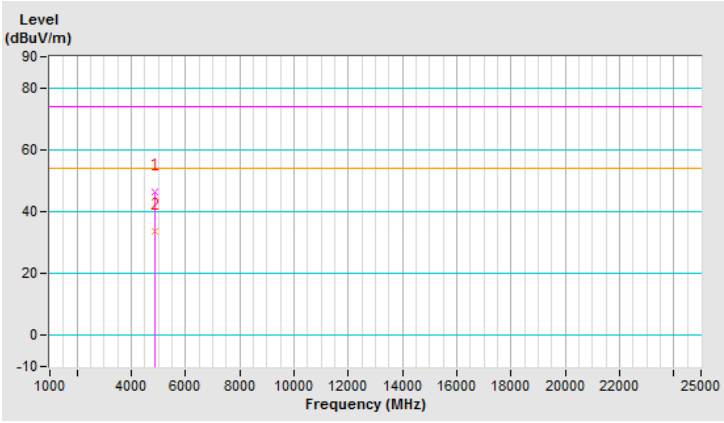


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4874.00	46.4 PK	74.0	-27.6	1.26 V	269	44.60	1.80
2	4874.00	33.6 AV	54.0	-20.4	1.26 V	269	31.80	1.80

REMARKS:

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

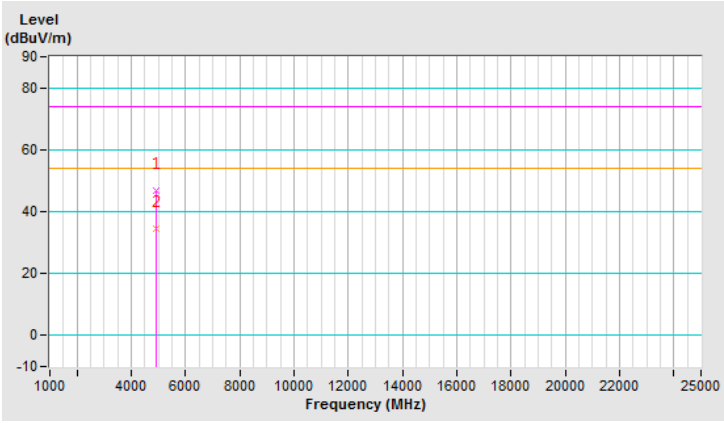


CHANNEL	TX Channel 11	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4924.00	46.7 PK	74.0	-27.3	1.87 H	88	44.90	1.80
2	4924.00	34.5 AV	54.0	-19.5	1.87 H	88	32.70	1.80

REMARKS:

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

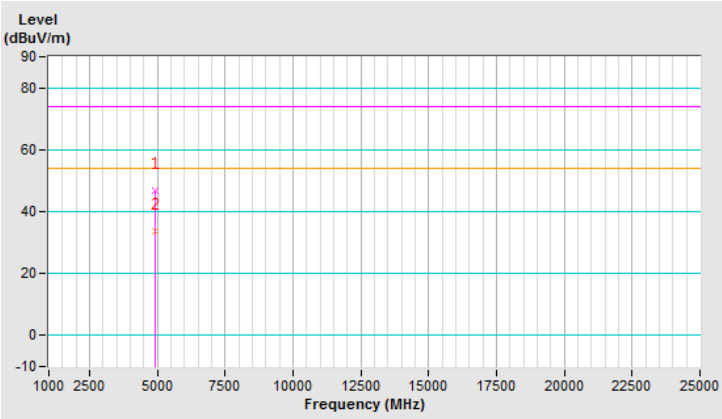


CHANNEL	TX Channel 11	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4924.00	46.7 PK	74.0	-27.3	1.89 V	222	44.90	1.80
2	4924.00	33.7 AV	54.0	-20.3	1.89 V	222	31.90	1.80

REMARKS:

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



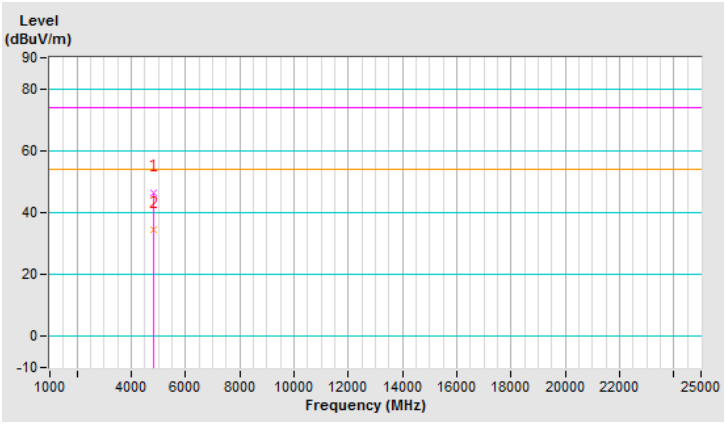
802.11n (40MHz)

CHANNEL	TX Channel 3	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4844.00	46.4 PK	74.0	-27.6	1.92 H	347	44.60	1.80
2	4844.00	34.4 AV	54.0	-19.6	1.92 H	347	32.60	1.80

REMARKS:

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

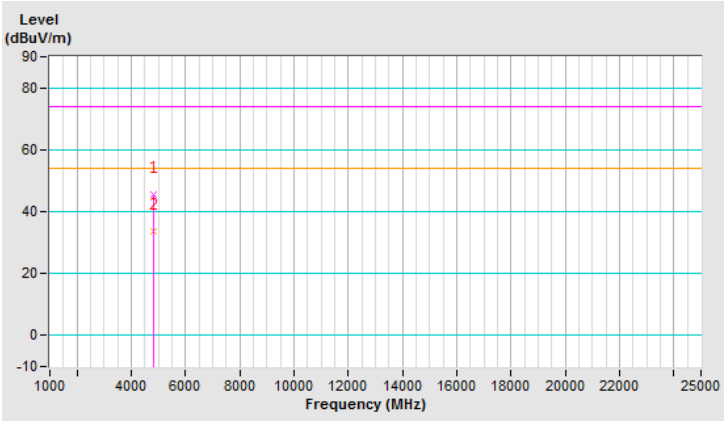


CHANNEL	TX Channel 3	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4844.00	45.6 PK	74.0	-28.4	1.68 V	221	43.80	1.80
2	4844.00	33.7 AV	54.0	-20.3	1.68 V	221	31.90	1.80

REMARKS:

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

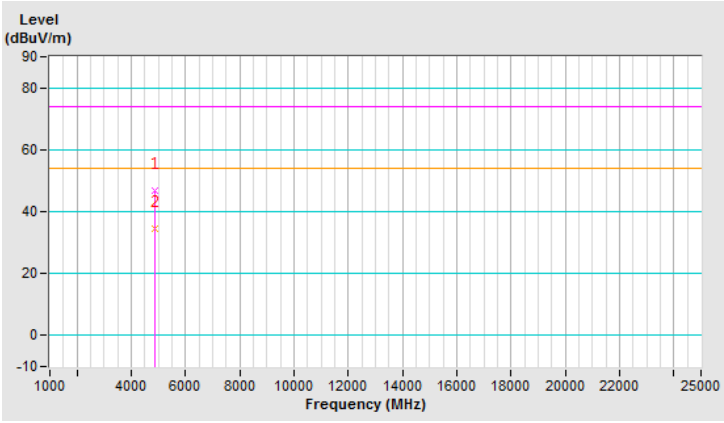


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4874.00	46.7 PK	74.0	-27.3	1.12 H	191	44.90	1.80
2	4874.00	34.4 AV	54.0	-19.6	1.12 H	191	32.60	1.80

REMARKS:

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

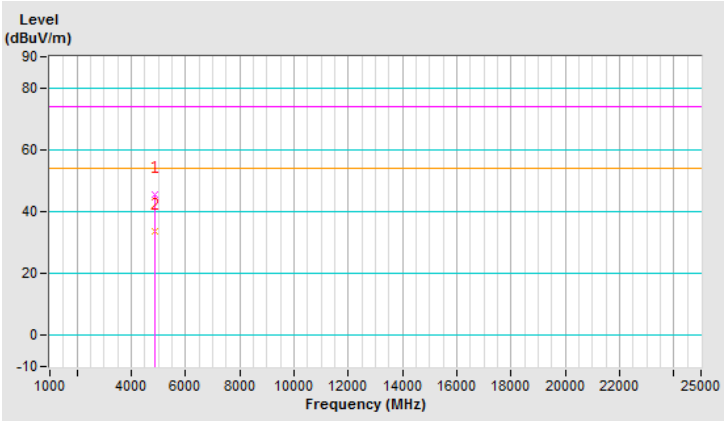


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4874.00	45.6 PK	74.0	-28.4	1.59 V	231	43.80	1.80
2	4874.00	33.5 AV	54.0	-20.5	1.59 V	231	31.70	1.80

REMARKS:

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

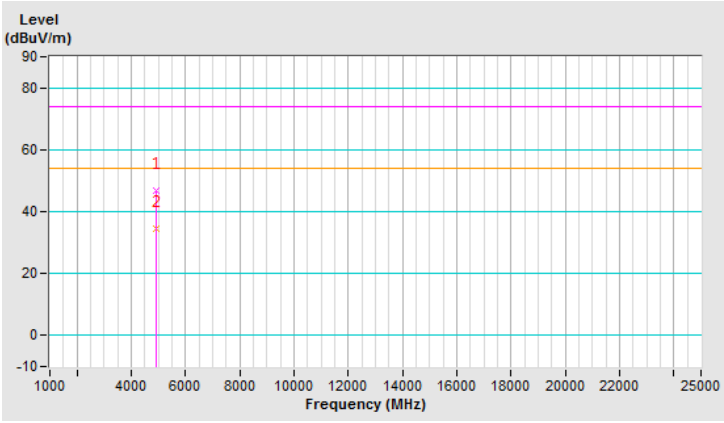


CHANNEL	TX Channel 9	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4904.00	46.7 PK	74.0	-27.3	1.58 H	283	44.90	1.80
2	4904.00	34.4 AV	54.0	-19.6	1.58 H	283	32.60	1.80

REMARKS:

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

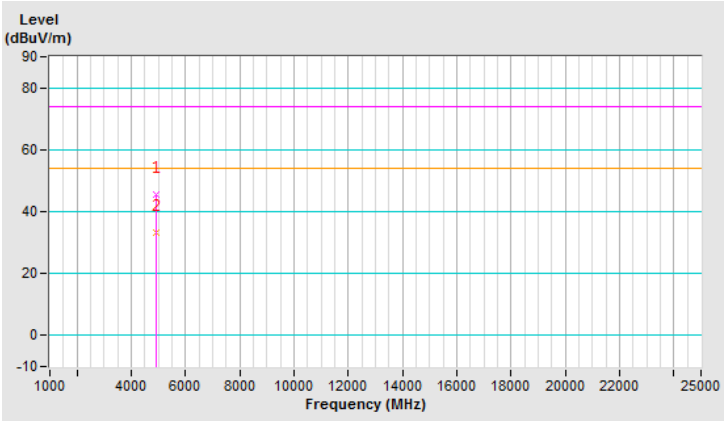


CHANNEL	TX Channel 9	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4904.00	45.6 PK	74.0	-28.4	1.87 V	221	43.80	1.80
2	4904.00	33.4 AV	54.0	-20.6	1.87 V	221	31.60	1.80

REMARKS:

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



2TX

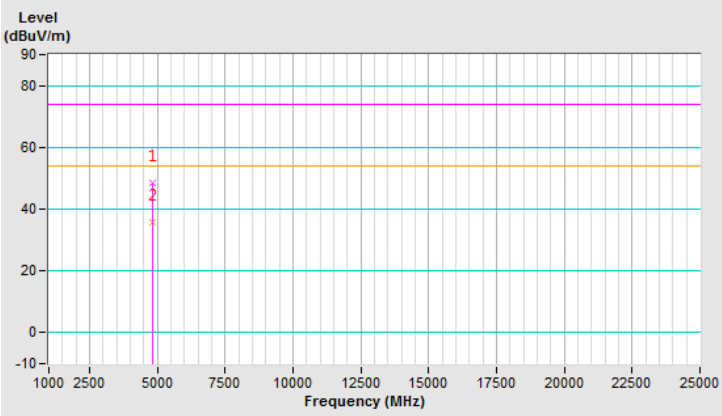
802.11n (20MHz)

CHANNEL	TX Channel 1	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4824.00	48.5 PK	74.0	-25.5	1.88 H	222	45.20	3.30
2	4824.00	35.6 AV	54.0	-18.4	1.88 H	222	32.30	3.30

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

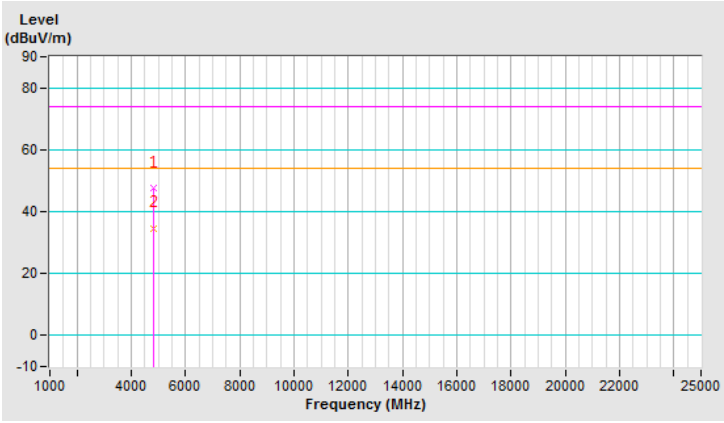


CHANNEL	TX Channel 1	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4824.00	47.4 PK	74.0	-26.6	1.86 V	283	44.10	3.30
2	4824.00	34.6 AV	54.0	-19.4	1.86 V	283	31.30	3.30

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

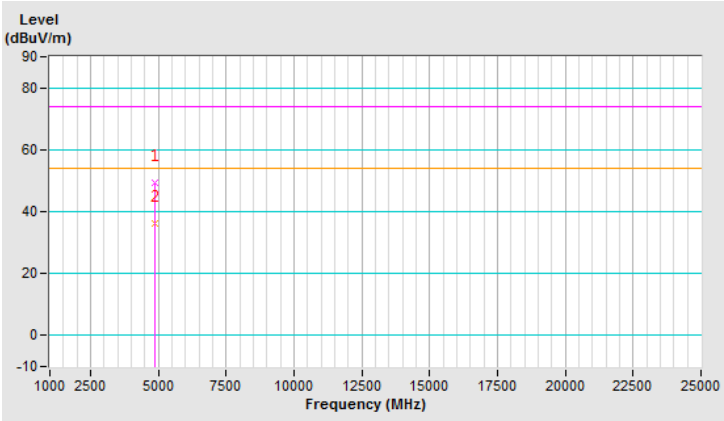


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4874.00	49.5 PK	74.0	-24.5	1.42 H	69	47.70	1.80
2	4874.00	36.3 AV	54.0	-17.7	1.42 H	69	34.50	1.80

REMARKS:

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

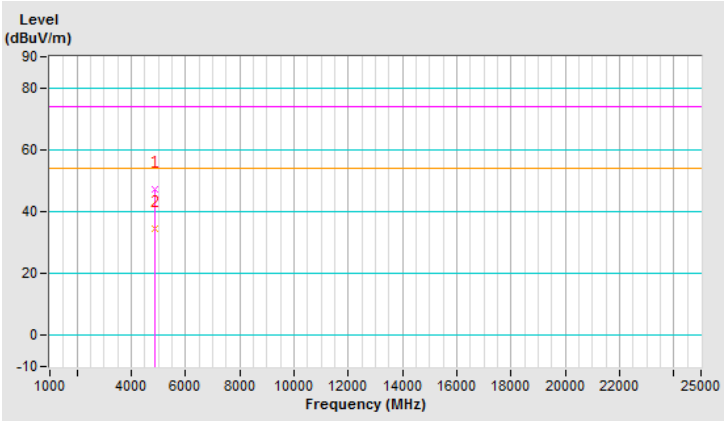


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4874.00	47.1 PK	74.0	-26.9	1.87 V	122	43.80	3.30
2	4874.00	34.6 AV	54.0	-19.4	1.87 V	122	31.30	3.30

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

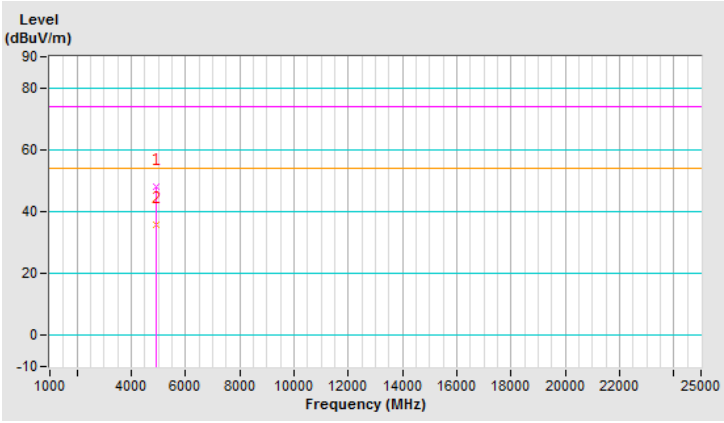


CHANNEL	TX Channel 11	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4924.00	48.0 PK	74.0	-26.0	1.89 H	126	44.70	3.30
2	4924.00	35.9 AV	54.0	-18.1	1.89 H	126	32.60	3.30

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

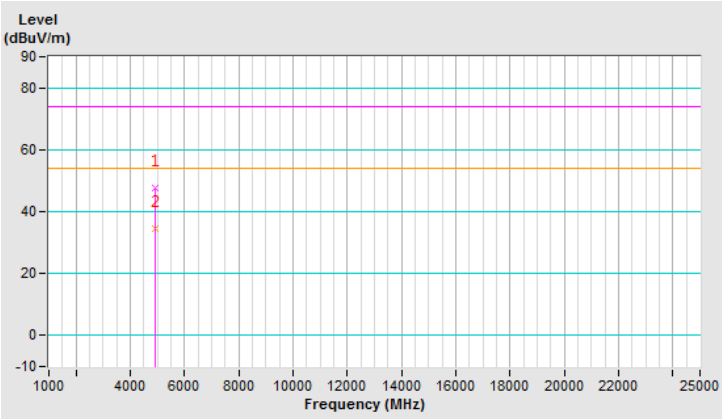


CHANNEL	TX Channel 11	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4924.00	47.5 PK	74.0	-26.5	2.09 V	241	44.20	3.30
2	4924.00	34.5 AV	54.0	-19.5	2.09 V	241	31.20	3.30

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



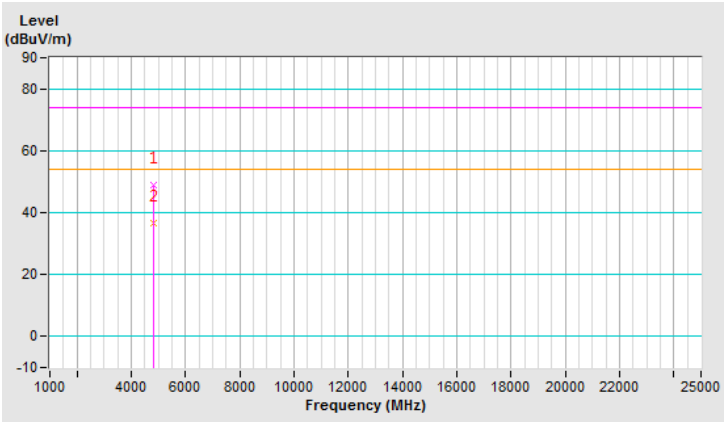
802.11n (40MHz)

CHANNEL	TX Channel 3	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4844.00	49.0 PK	74.0	-25.0	1.58 H	296	45.80	3.20
2	4844.00	36.4 AV	54.0	-17.6	1.58 H	296	33.20	3.20

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

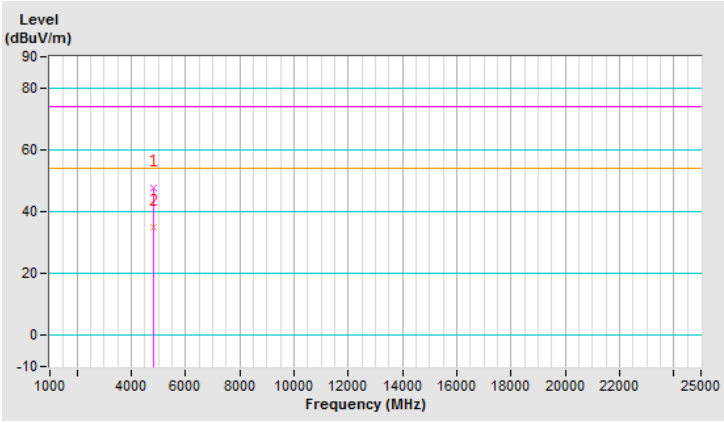


CHANNEL	TX Channel 3	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4844.00	47.7 PK	74.0	-26.3	1.92 V	335	44.50	3.20
2	4844.00	35.0 AV	54.0	-19.0	1.92 V	335	31.80	3.20

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

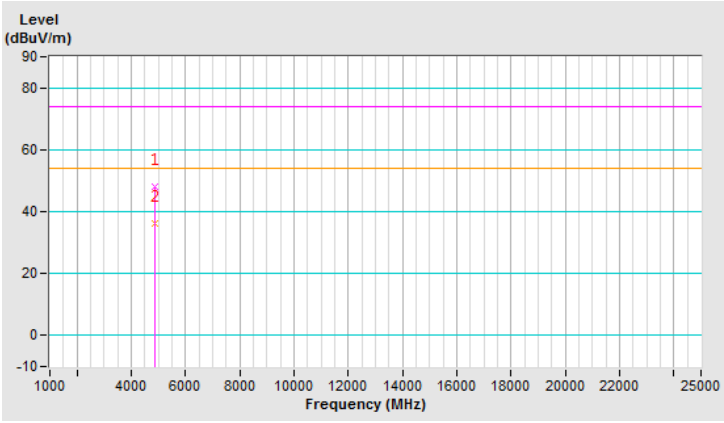


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4874.00	48.2 PK	74.0	-25.8	2.38 H	189	44.90	3.30
2	4874.00	36.0 AV	54.0	-18.0	2.38 H	189	32.70	3.30

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

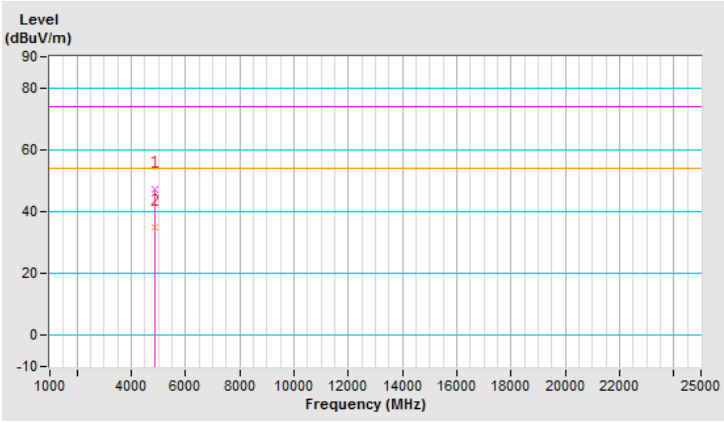


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4874.00	47.4 PK	74.0	-26.6	1.52 V	293	44.10	3.30
2	4874.00	35.0 AV	54.0	-19.0	1.52 V	293	31.70	3.30

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

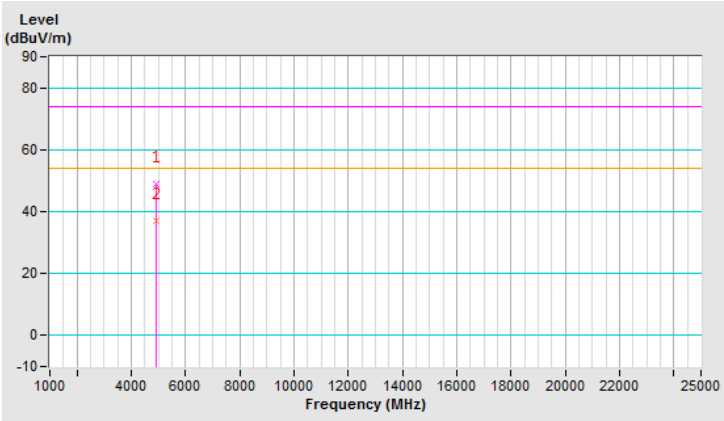


CHANNEL	TX Channel 9	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4904.00	49.0 PK	74.0	-25.0	1.78 H	269	45.70	3.30
2	4904.00	37.1 AV	54.0	-16.9	1.78 H	269	33.80	3.30

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

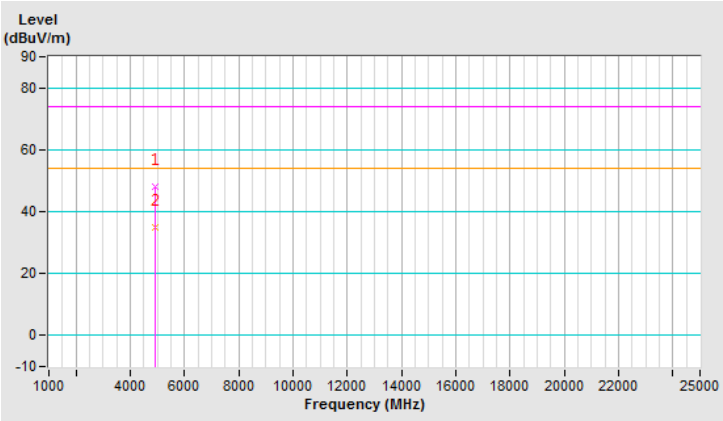


CHANNEL	TX Channel 9	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4904.00	48.0 PK	74.0	-26.0	1.88 V	226	44.70	3.30
2	4904.00	35.0 AV	54.0	-19.0	1.88 V	226	31.70	3.30

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



3TX

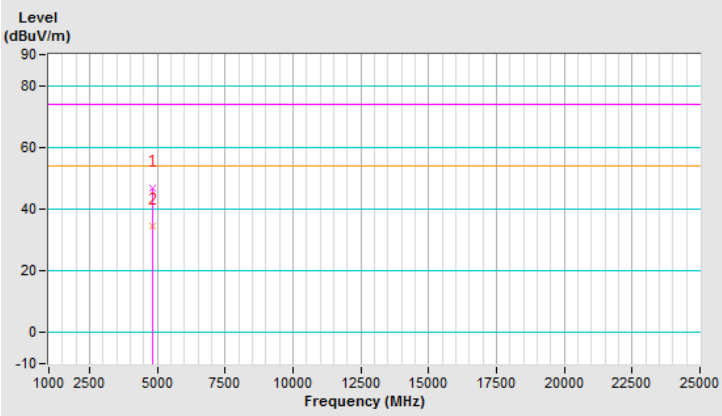
802.11n (20MHz)

CHANNEL	TX Channel 1	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4824.00	46.6 PK	74.0	-27.4	1.87 H	307	44.80	1.80
2	4824.00	34.3 AV	54.0	-19.7	1.87 H	307	32.50	1.80

REMARKS:

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

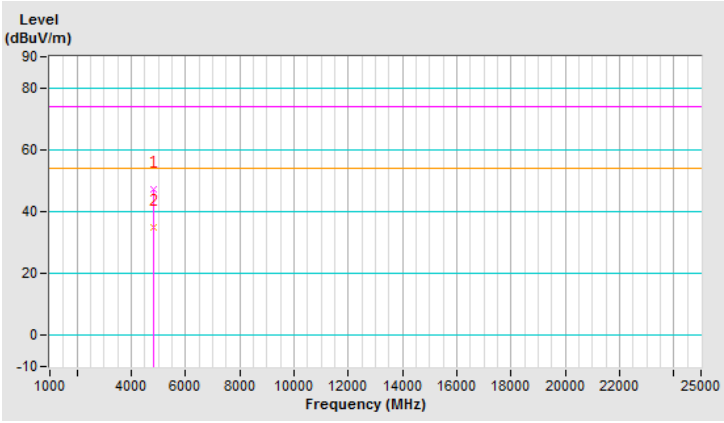


CHANNEL	TX Channel 1	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4824.00	47.0 PK	74.0	-27.0	1.79 V	251	43.70	3.30
2	4824.00	35.0 AV	54.0	-19.0	1.79 V	251	31.70	3.30

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

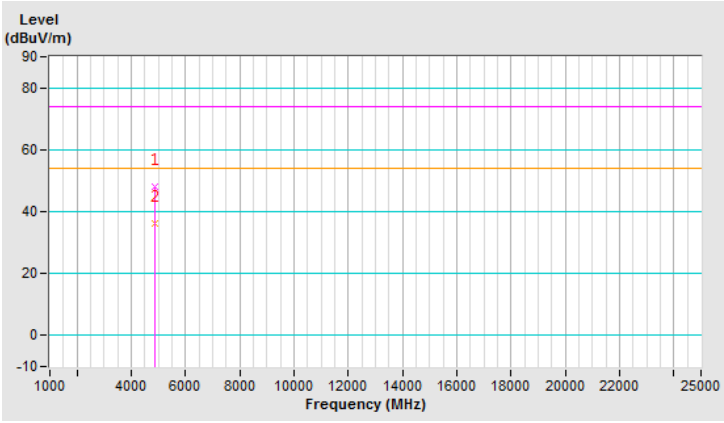


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4874.00	48.0 PK	74.0	-26.0	1.73 H	118	44.70	3.30
2	4874.00	36.1 AV	54.0	-17.9	1.73 H	118	32.80	3.30

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

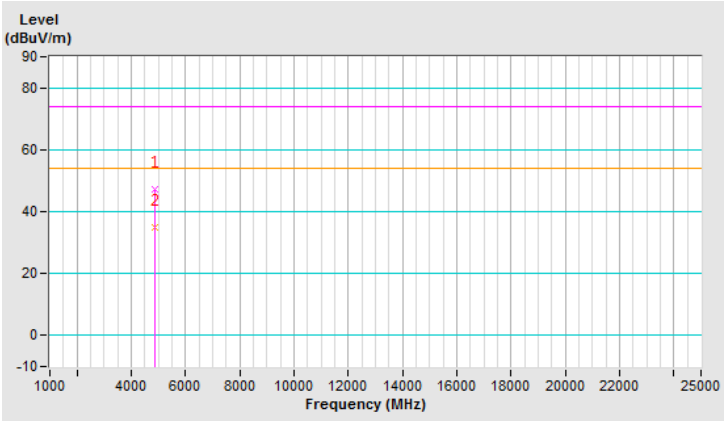


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4874.00	47.2 PK	74.0	-26.8	1.73 V	258	43.90	3.30
2	4874.00	35.0 AV	54.0	-19.0	1.73 V	258	31.70	3.30

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

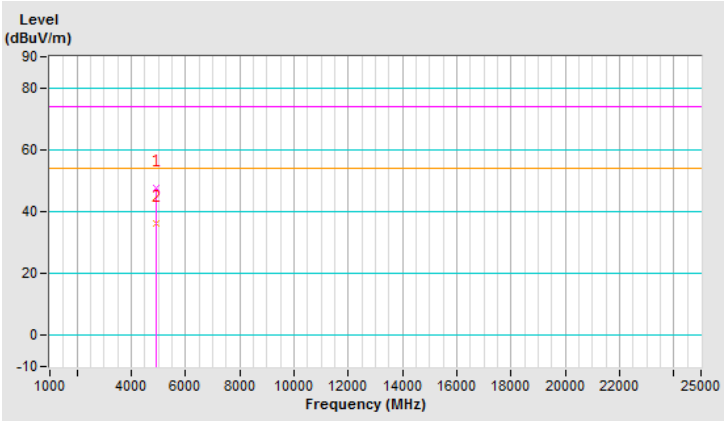


CHANNEL	TX Channel 11	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4924.00	47.6 PK	74.0	-26.4	1.82 H	239	44.30	3.30
2	4924.00	36.0 AV	54.0	-18.0	1.82 H	239	32.70	3.30

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

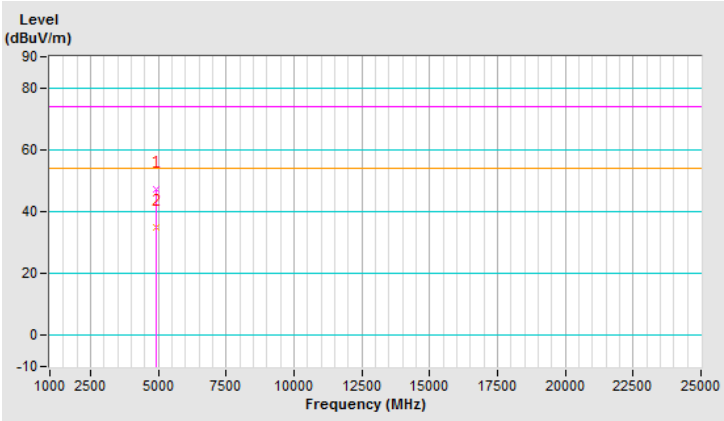


CHANNEL	TX Channel 11	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4924.00	47.2 PK	74.0	-26.8	1.71 V	135	43.90	3.30
2	4924.00	35.0 AV	54.0	-19.0	1.71 V	135	31.70	3.30

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



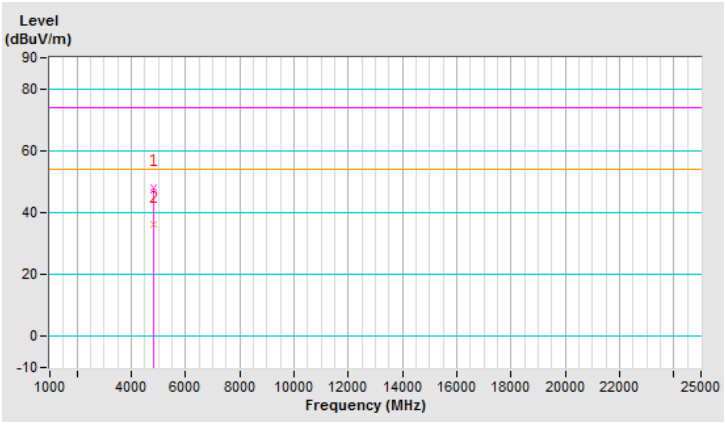
802.11n (40MHz)

CHANNEL	TX Channel 3	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4844.00	48.0 PK	74.0	-26.0	1.73 H	224	44.80	3.20
2	4844.00	36.1 AV	54.0	-17.9	1.73 H	224	32.90	3.20

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

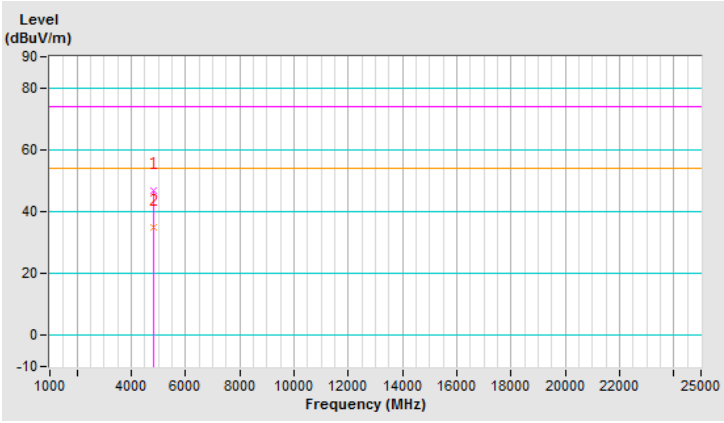


CHANNEL	TX Channel 3	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4844.00	46.8 PK	74.0	-27.2	1.58 V	256	43.60	3.20
2	4844.00	34.9 AV	54.0	-19.1	1.58 V	256	31.70	3.20

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

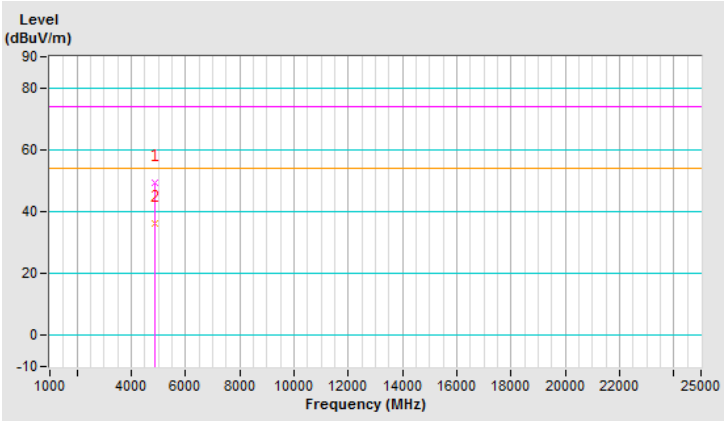


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4874.00	49.2 PK	74.0	-24.8	2.55 H	216	45.90	3.30
2	4874.00	36.3 AV	54.0	-17.7	2.55 H	216	33.00	3.30

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

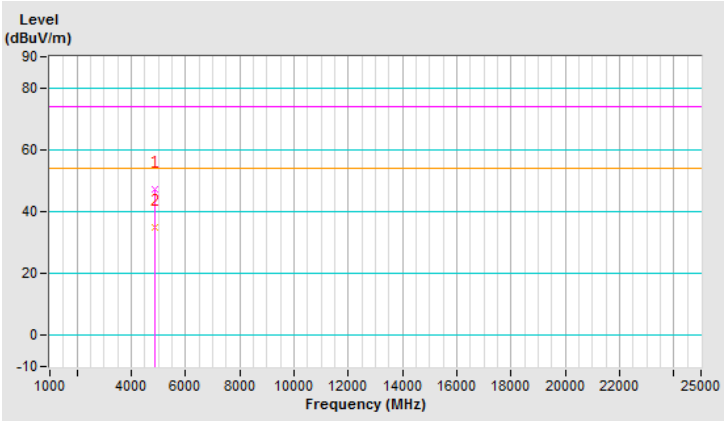


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4874.00	47.1 PK	74.0	-26.9	1.88 V	295	43.80	3.30
2	4874.00	35.1 AV	54.0	-18.9	1.88 V	295	31.80	3.30

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

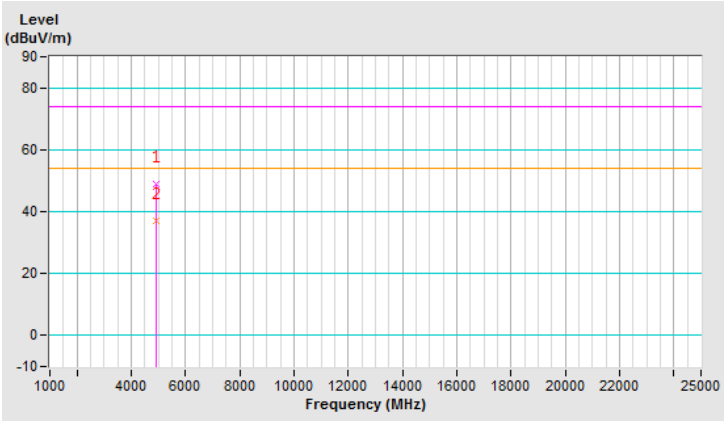


CHANNEL	TX Channel 9	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4904.00	49.0 PK	74.0	-25.0	1.89 H	288	45.70	3.30
2	4904.00	37.0 AV	54.0	-17.0	1.89 H	288	33.70	3.30

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

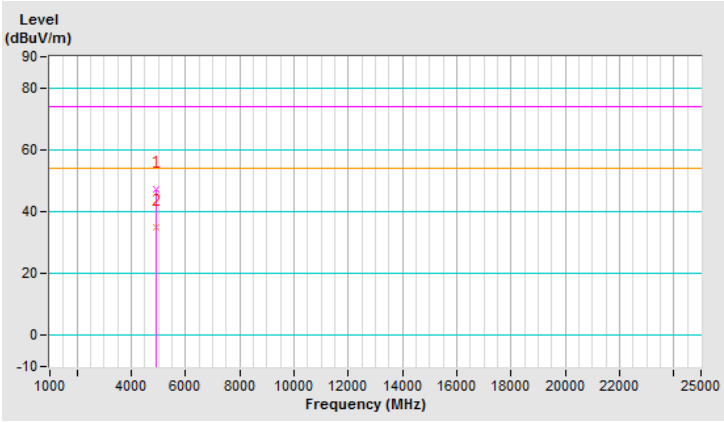


CHANNEL	TX Channel 9	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	4904.00	47.1 PK	74.0	-26.9	2.05 V	192	43.80	3.30
2	4904.00	35.1 AV	54.0	-18.9	2.05 V	192	31.80	3.30

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



4.7 Band Edge and Fundamental Emissions Measurement

4.7.1 Limit

30dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emissions fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed

Frequency range (MHz)	Field Strength (mV/meter)	Measurement Distance (m)
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

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 spectrum analyzer and receiver.

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RBW / VBW (Emissions in restricted band)	1MHz / 3MHz for Peak, 1 MHz / 1/T for Average
RBW / VBW (Emissions in non-restricted band)	100kHz / 300kHz for peak

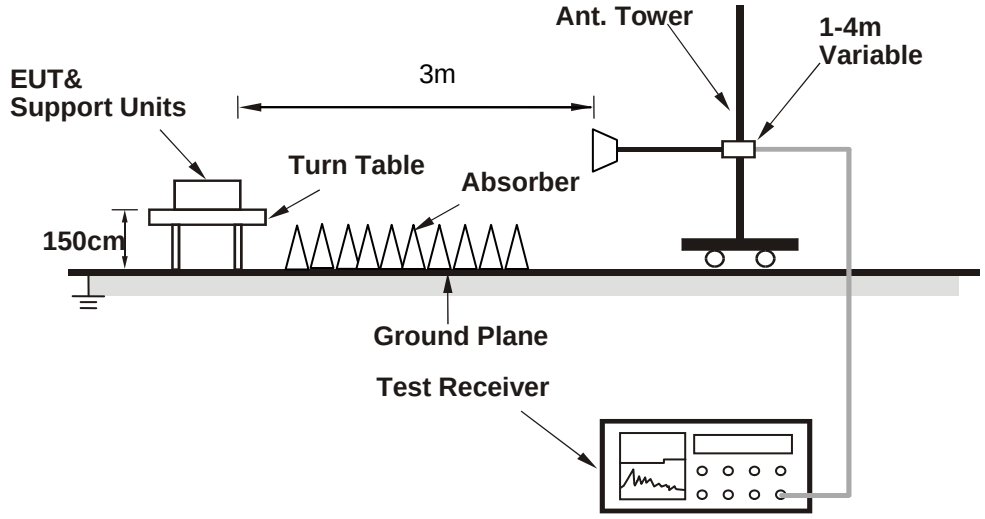
4.7.3 Test Procedure

1 The test procedure is the same as section 4.6.3; only the frequency range investigated is 2310MHz to 2500MHz

2 Test for Emissions in non-restricted band was performed in accordance with KDB 558074 D01 v03r05 for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247 section 11 Unwanted Emissions into Non-Restricted Frequency Bands Measurement Procedure.

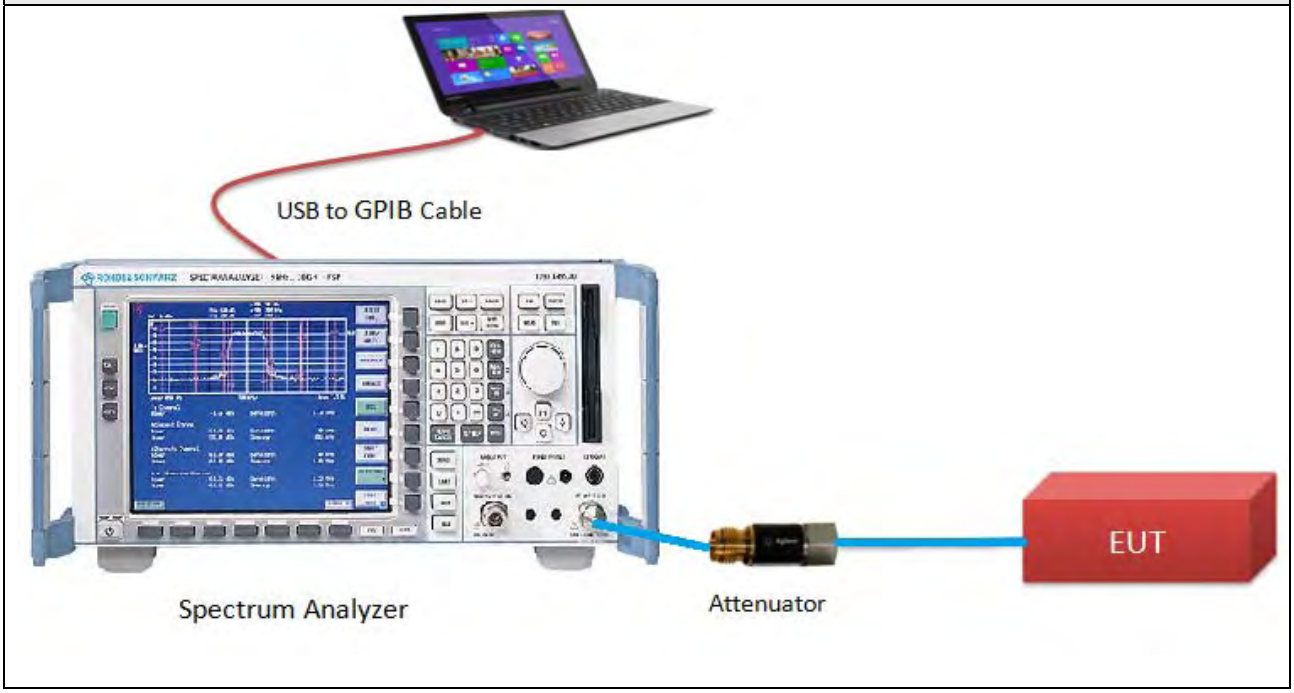
4.7.4 Test Setup Layout

Setup in restricted band



For Radiated Emissions above 1GHz

Setup in non-restricted band



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 transmitting mode.

4.7.7 Test Results of Band Edge and Fundamental Emissions

Temperature	25°C	**Humidity**	69%
Test Engineer	Bond Tseng		

1TX

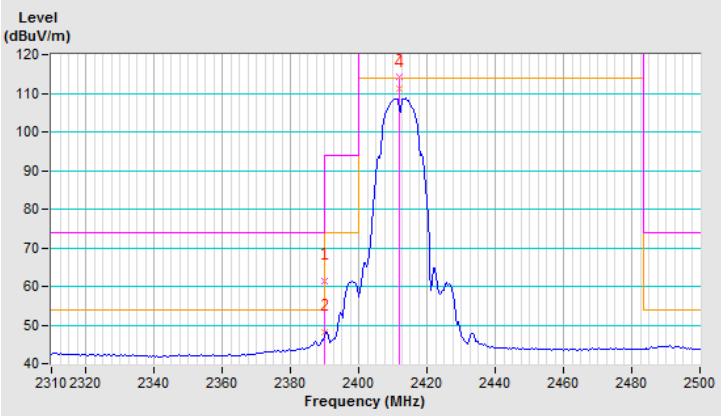
802.11b

CHANNEL	TX Channel 1	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	2390.00	61.3 PK	74.0	-12.7	2.51 H	350	29.10	32.20
2	2390.00	48.0 AV	54.0	-6.0	2.51 H	350	15.80	32.20
3	*2412.00	114.2 PK			2.51 H	350	81.90	32.30
4	*2412.00	111.1 AV			2.51 H	350	78.80	32.30

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.

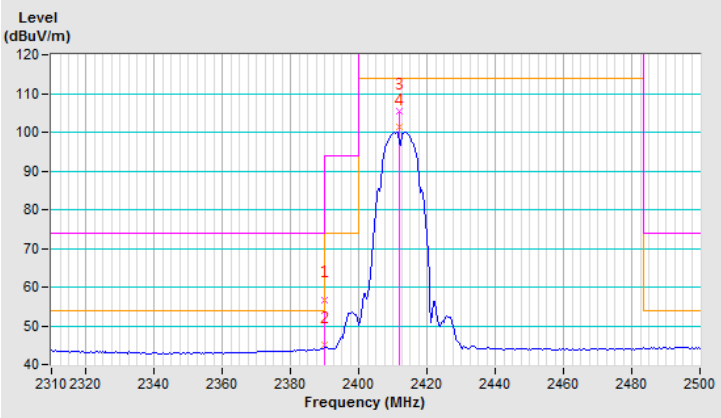


CHANNEL	TX Channel 1	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	2390.00	56.8 PK	74.0	-17.2	1.34 V	8	24.60	32.20
2	2390.00	45.2 AV	54.0	-8.8	1.34 V	8	13.00	32.20
3	*2412.00	105.4 PK			1.34 V	8	73.10	32.30
4	*2412.00	101.5 AV			1.34 V	8	69.20	32.30

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.

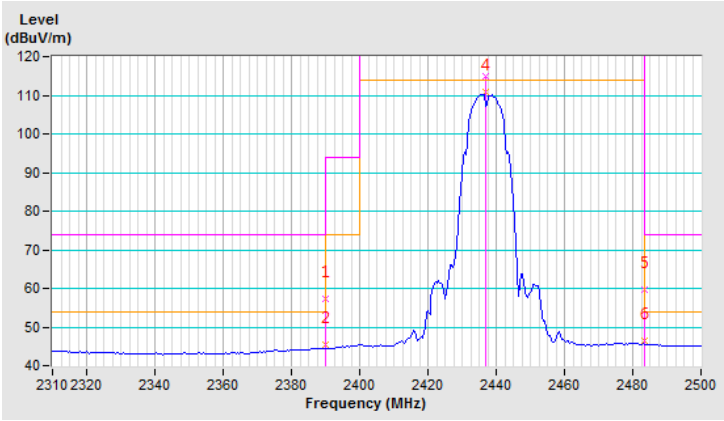


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	2390.00	57.4 PK	74.0	-16.6	3.96 H	196	25.20	32.20
2	2390.00	45.4 AV	54.0	-8.6	3.96 H	196	13.20	32.20
3	*2437.00	114.8 PK			3.96 H	196	82.40	32.40
4	*2437.00	110.9 AV			3.96 H	196	78.50	32.40
5	2483.50	59.6 PK	74.0	-14.4	3.96 H	196	26.90	32.70
6	2483.50	46.4 AV	54.0	-7.6	3.96 H	196	13.70	32.70

REMARKS:

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

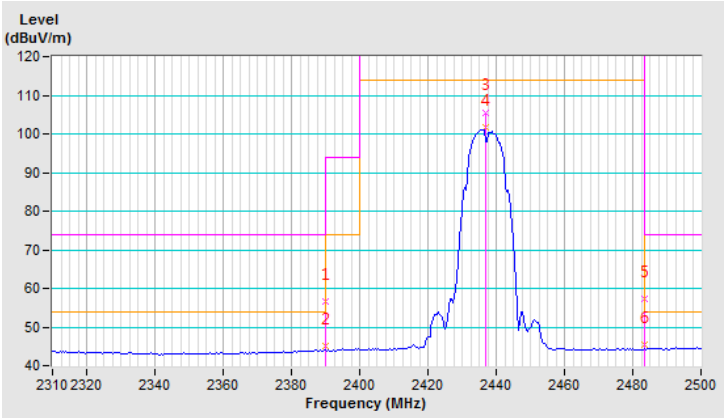


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	2390.00	56.6 PK	74.0	-17.4	1.04 V	20	24.40	32.20
2	2390.00	45.1 AV	54.0	-8.9	1.04 V	20	12.90	32.20
3	*2437.00	105.6 PK			1.04 V	20	73.20	32.40
4	*2437.00	101.8 AV			1.04 V	20	69.40	32.40
5	2483.50	57.4 PK	74.0	-16.6	1.04 V	20	24.70	32.70
6	2483.50	45.4 AV	54.0	-8.6	1.04 V	20	12.70	32.70

REMARKS:

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

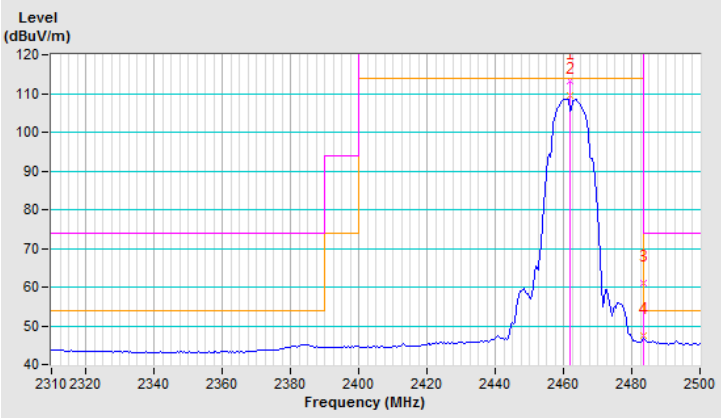


CHANNEL	TX Channel 11	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	*2462.00	113.3 PK			2.92 H	9	80.70	32.60
2	*2462.00	109.4 AV			2.92 H	9	76.80	32.60
3	2483.50	61.1 PK	74.0	-12.9	2.92 H	9	28.40	32.70
4	2483.50	47.4 AV	54.0	-6.6	2.92 H	9	14.70	32.70

REMARKS:

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

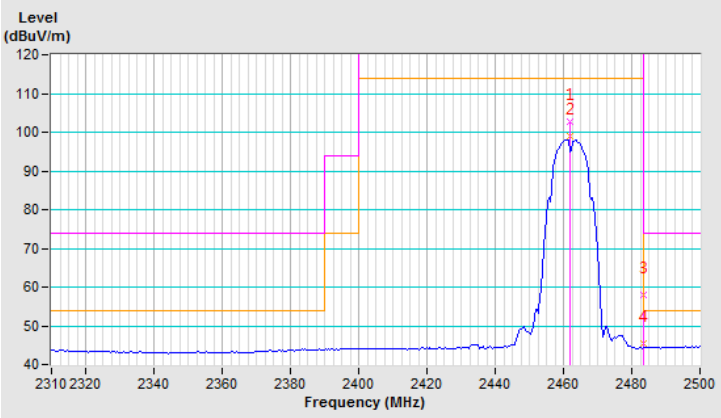


CHANNEL	TX Channel 11	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	*2462.00	102.6 PK			1.22 V	24	70.00	32.60
2	*2462.00	98.9 AV			1.22 V	24	66.30	32.60
3	2483.50	58.0 PK	74.0	-16.0	1.22 V	24	25.30	32.70
4	2483.50	45.4 AV	54.0	-8.6	1.22 V	24	12.70	32.70

REMARKS:

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



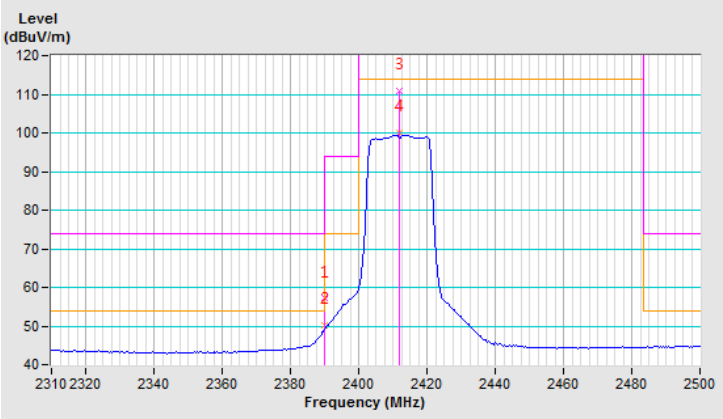
802.11n (20MHz)

CHANNEL	TX Channel 1	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	2390.00	57.1 PK	74.0	-16.9	2.47 H	350	24.90	32.20
2	2390.00	50.1 AV	54.0	-3.9	2.47 H	350	17.90	32.20
3	*2412.00	110.8 PK			2.47 H	350	78.50	32.30
4	*2412.00	99.9 AV			2.47 H	350	67.60	32.30

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.

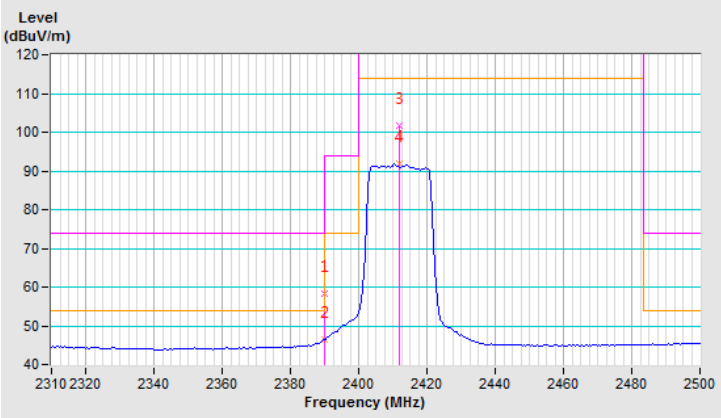


CHANNEL	TX Channel 1	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	2390.00	58.2 PK	74.0	-15.8	1.34 V	2	26.00	32.20
2	2390.00	46.4 AV	54.0	-7.6	1.34 V	2	14.20	32.20
3	*2412.00	101.7 PK			1.34 V	2	69.40	32.30
4	*2412.00	91.7 AV			1.34 V	2	59.40	32.30

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.

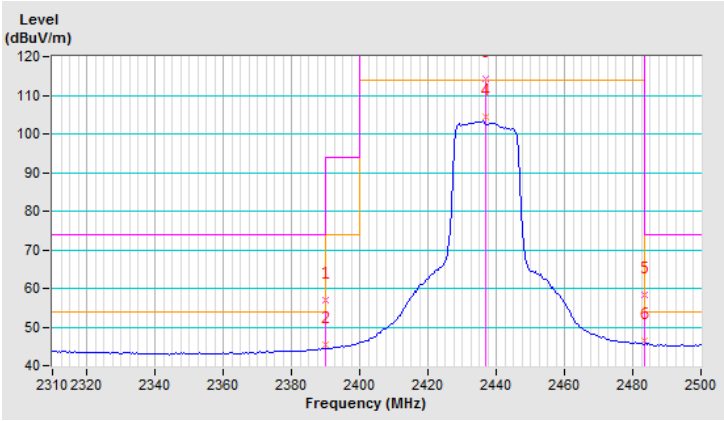


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	2390.00	57.1 PK	74.0	-16.9	3.59 H	33	24.90	32.20
2	2390.00	45.3 AV	54.0	-8.7	3.59 H	33	13.10	32.20
3	*2437.00	114.3 PK			3.59 H	33	81.90	32.40
4	*2437.00	104.4 AV			3.59 H	33	72.00	32.40
5	2483.50	58.3 PK	74.0	-15.7	3.59 H	33	25.60	32.70
6	2483.50	46.5 AV	54.0	-7.5	3.59 H	33	13.80	32.70

REMARKS:

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

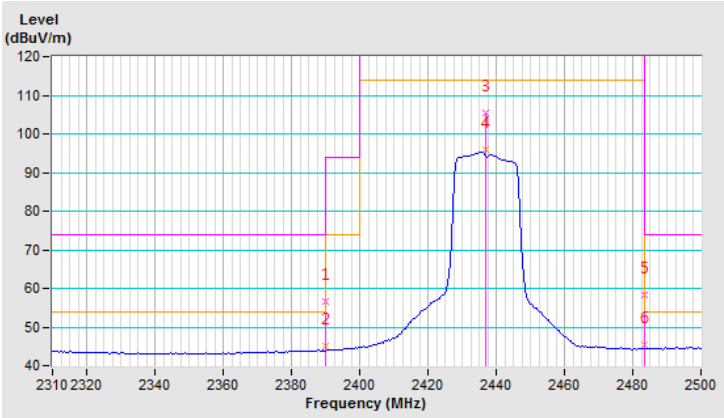


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	2390.00	56.7 PK	74.0	-17.3	1.06 V	20	24.50	32.20
2	2390.00	45.2 AV	54.0	-8.8	1.06 V	20	13.00	32.20
3	*2437.00	105.5 PK			1.06 V	20	73.10	32.40
4	*2437.00	96.0 AV			1.06 V	20	63.60	32.40
5	2483.50	58.2 PK	74.0	-15.8	1.06 V	20	25.50	32.70
6	2483.50	45.5 AV	54.0	-8.5	1.06 V	20	12.80	32.70

REMARKS:

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

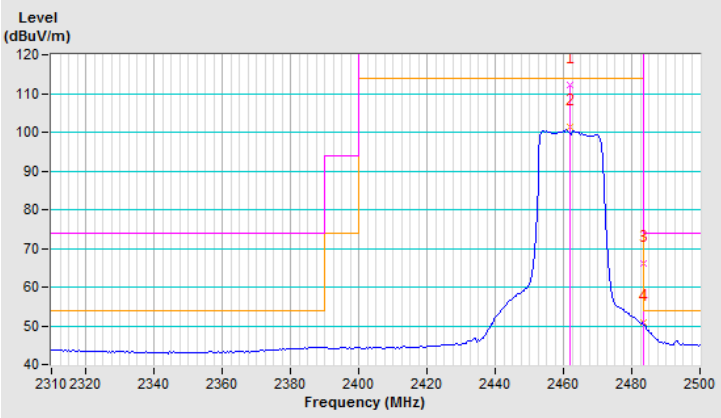


CHANNEL	TX Channel 11	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	*2462.00	112.1 PK			2.90 H	8	79.50	32.60
2	*2462.00	101.4 AV			2.90 H	8	68.80	32.60
3	2483.50	66.0 PK	74.0	-8.0	2.90 H	8	33.30	32.70
4	2483.50	50.9 AV	54.0	-3.1	2.90 H	8	18.20	32.70

REMARKS:

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

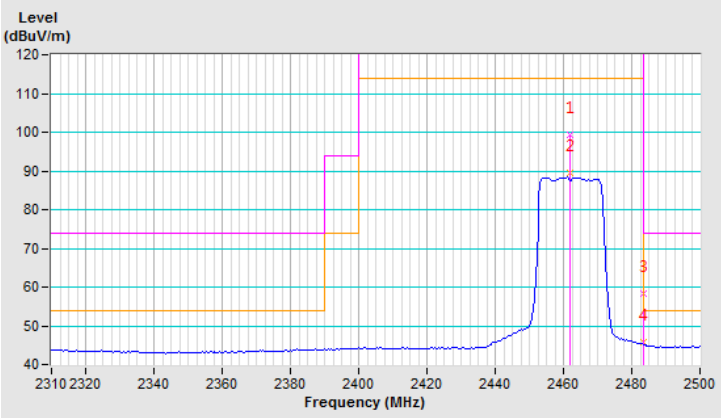


CHANNEL	TX Channel 11	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	*2462.00	99.3 PK			1.27 V	4	66.70	32.60
2	*2462.00	89.5 AV			1.27 V	4	56.90	32.60
3	2483.50	58.2 PK	74.0	-15.8	1.27 V	4	25.50	32.70
4	2483.50	45.9 AV	54.0	-8.1	1.27 V	4	13.20	32.70

REMARKS:

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



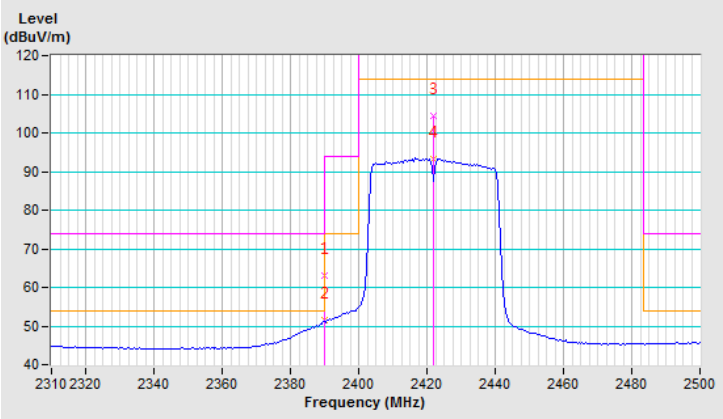
802.11n (40MHz)

CHANNEL	TX Channel 3	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	2390.00	63.2 PK	74.0	-10.8	1.84 H	348	31.00	32.20
2	2390.00	51.5 AV	54.0	-2.5	1.84 H	348	19.30	32.20
3	*2422.00	104.3 PK			1.84 H	348	71.90	32.40
4	*2422.00	93.3 AV			1.84 H	348	60.90	32.40

REMARKS:

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

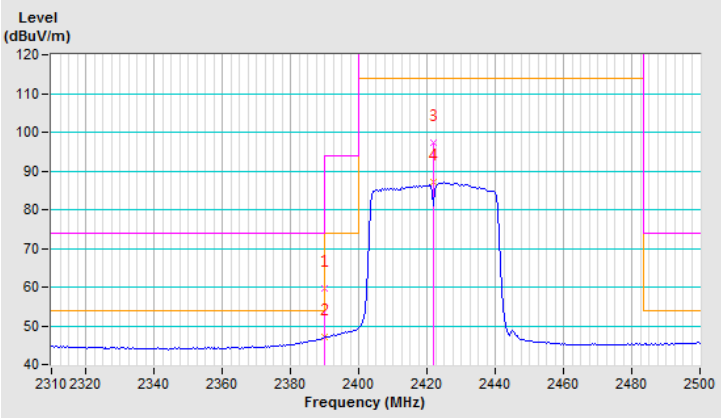


CHANNEL	TX Channel 3	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	2390.00	59.6 PK	74.0	-14.4	1.18 V	1	27.40	32.20
2	2390.00	47.0 AV	54.0	-7.0	1.18 V	1	14.80	32.20
3	*2422.00	97.2 PK			1.18 V	1	64.80	32.40
4	*2422.00	87.1 AV			1.18 V	1	54.70	32.40

REMARKS:

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

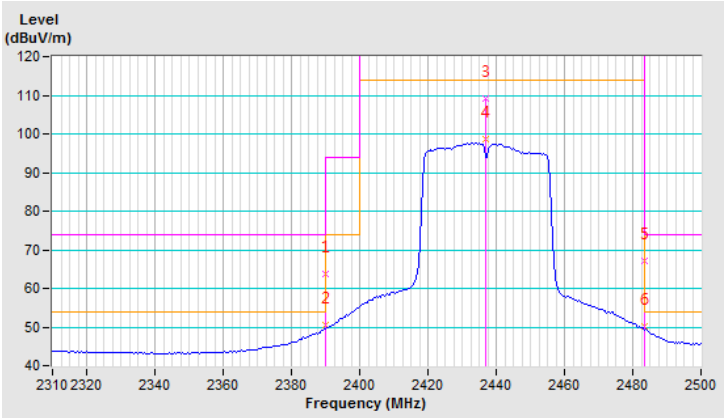


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	2390.00	63.8 PK	74.0	-10.2	1.53 H	198	31.60	32.20
2	2390.00	50.4 AV	54.0	-3.6	1.53 H	198	18.20	32.20
3	*2437.00	109.0 PK			1.53 H	198	76.60	32.40
4	*2437.00	98.8 AV			1.53 H	198	66.40	32.40
5	2483.50	67.0 PK	74.0	-7.0	1.53 H	198	34.30	32.70
6	2483.50	50.2 AV	54.0	-3.8	1.53 H	198	17.50	32.70

REMARKS:

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

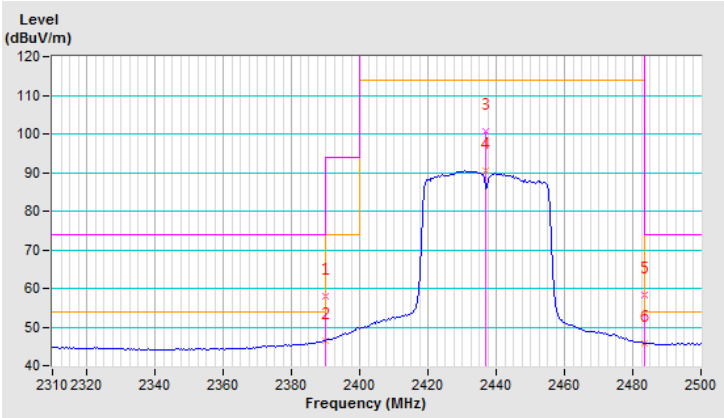


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	2390.00	57.9 PK	74.0	-16.1	1.27 V	20	25.70	32.20
2	2390.00	46.4 AV	54.0	-7.6	1.27 V	20	14.20	32.20
3	*2437.00	100.8 PK			1.27 V	20	68.40	32.40
4	*2437.00	90.5 AV			1.27 V	20	58.10	32.40
5	2483.50	58.2 PK	74.0	-15.8	1.27 V	20	25.50	32.70
6	2483.50	45.7 AV	54.0	-8.3	1.27 V	20	13.00	32.70

REMARKS:

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

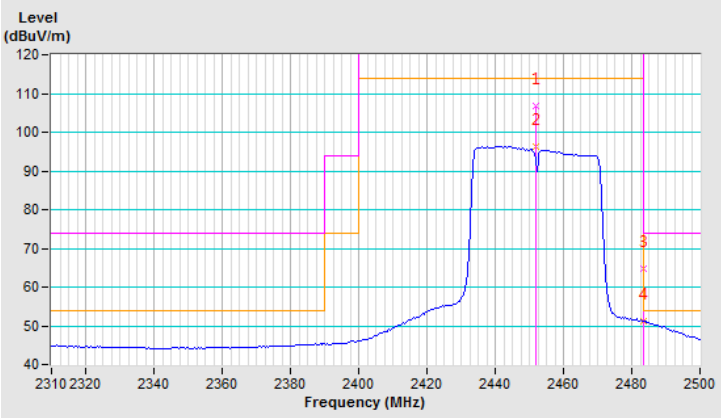


CHANNEL	TX Channel 9	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	*2452.00	106.7 PK			3.91 H	204	74.10	32.60
2	*2452.00	96.3 AV			3.91 H	204	63.70	32.60
3	2483.50	64.9 PK	74.0	-9.1	3.91 H	204	32.20	32.70
4	2483.50	51.1 AV	54.0	-2.9	3.91 H	204	18.40	32.70

REMARKS:

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

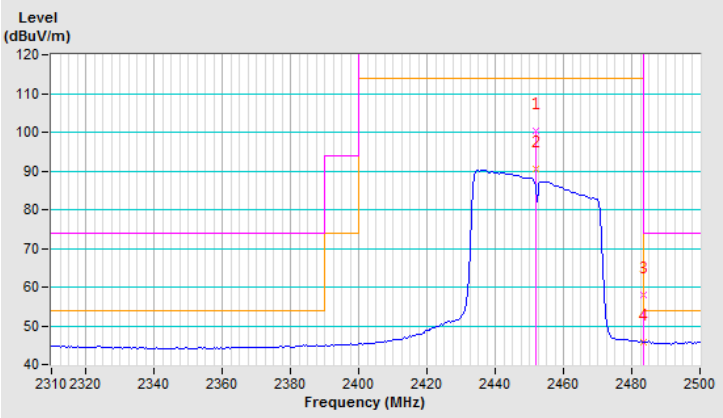


CHANNEL	TX Channel 9	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	*2452.00	100.4 PK			3.68 V	101	67.80	32.60
2	*2452.00	90.4 AV			3.68 V	101	57.80	32.60
3	2483.50	57.8 PK	74.0	-16.2	3.68 V	101	25.10	32.70
4	2483.50	45.7 AV	54.0	-8.3	3.68 V	101	13.00	32.70

REMARKS:

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



2TX

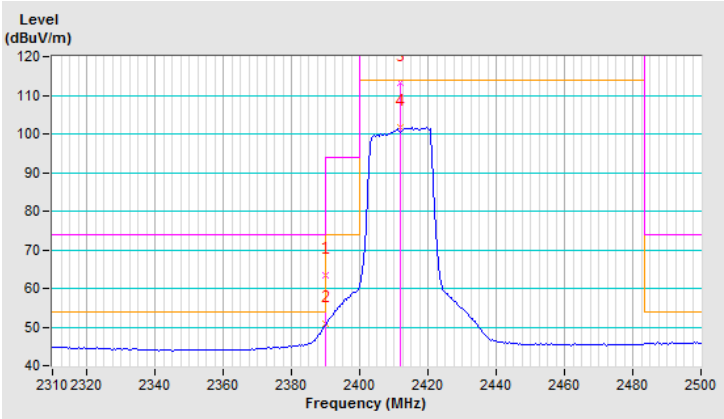
802.11n (20MHz)

CHANNEL	TX Channel 1	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	2390.00	63.3 PK	74.0	-10.7	3.55 H	198	31.10	32.20
2	2390.00	50.7 AV	54.0	-3.3	3.55 H	198	18.50	32.20
3	*2412.00	113.3 PK			3.55 H	198	81.00	32.30
4	*2412.00	101.6 AV			3.55 H	198	69.30	32.30

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.

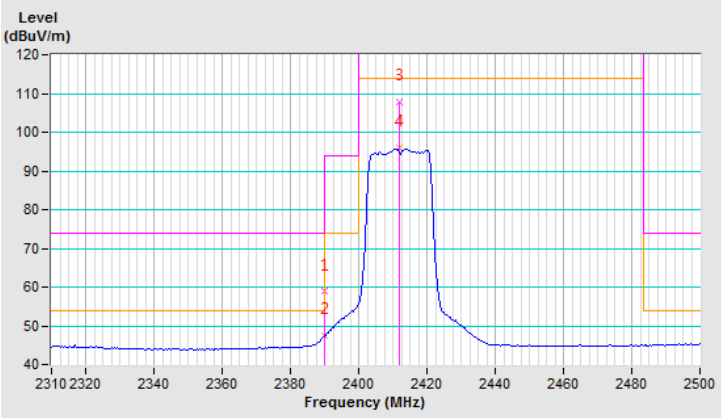


CHANNEL	TX Channel 1	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	2390.00	58.8 PK	74.0	-15.2	3.71 V	103	26.60	32.20
2	2390.00	47.3 AV	54.0	-6.7	3.71 V	103	15.10	32.20
3	*2412.00	107.9 PK			3.71 V	103	75.60	32.30
4	*2412.00	95.8 AV			3.71 V	103	63.50	32.30

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.

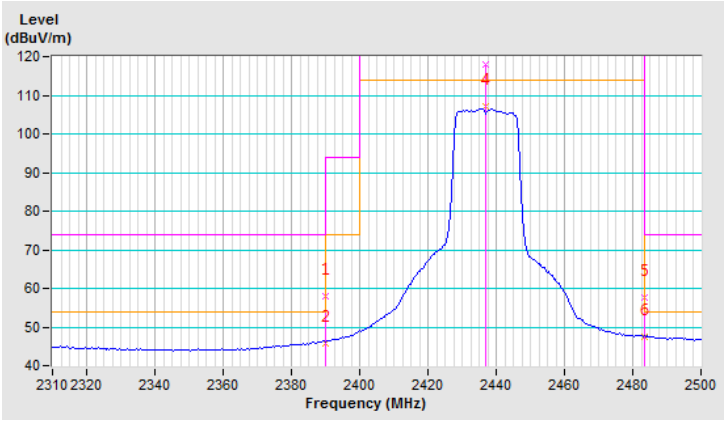


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	2390.00	57.8 PK	74.0	-16.2	3.94 H	199	25.60	32.20
2	2390.00	45.9 AV	54.0	-8.1	3.94 H	199	13.70	32.20
3	*2437.00	118.1 PK			3.94 H	199	85.70	32.40
4	*2437.00	107.0 AV			3.94 H	199	74.60	32.40
5	2483.50	57.6 PK	74.0	-16.4	3.94 H	199	24.90	32.70
6	2483.50	47.6 AV	54.0	-6.4	3.94 H	199	14.90	32.70

REMARKS:

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

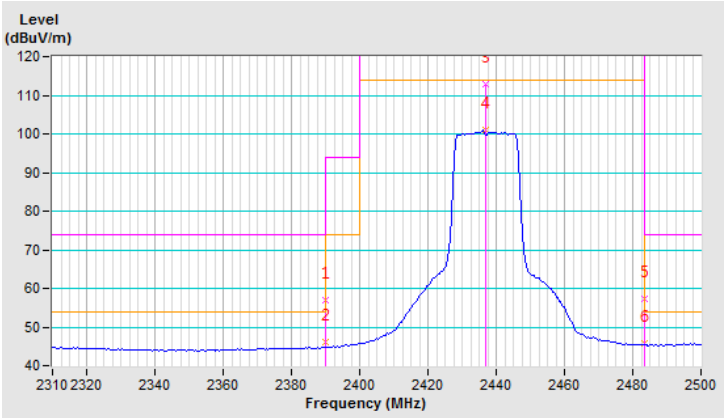


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	2390.00	56.9 PK	74.0	-17.1	3.67 V	123	24.70	32.20
2	2390.00	46.0 AV	54.0	-8.0	3.67 V	123	13.80	32.20
3	*2437.00	112.8 PK			3.67 V	123	80.40	32.40
4	*2437.00	101.1 AV			3.67 V	123	68.70	32.40
5	2483.50	57.4 PK	74.0	-16.6	3.67 V	123	24.70	32.70
6	2483.50	45.8 AV	54.0	-8.2	3.67 V	123	13.10	32.70

REMARKS:

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

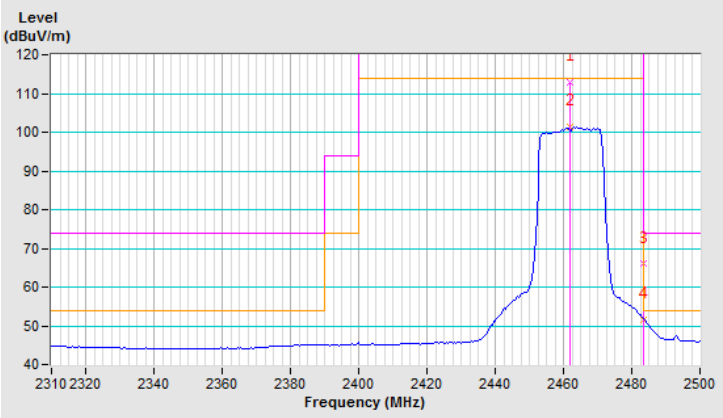


CHANNEL	TX Channel 11	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	*2462.00	112.8 PK			3.47 H	189	80.20	32.60
2	*2462.00	101.5 AV			3.47 H	189	68.90	32.60
3	2483.50	65.9 PK	74.0	-8.1	3.47 H	189	33.20	32.70
4	2483.50	51.6 AV	54.0	-2.4	3.47 H	189	18.90	32.70

REMARKS:

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

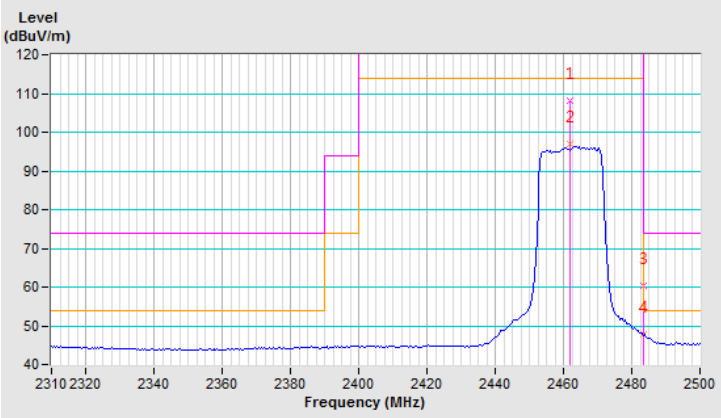


CHANNEL	TX Channel 11	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	*2462.00	108.0 PK			3.60 V	120	75.40	32.60
2	*2462.00	96.9 AV			3.60 V	120	64.30	32.60
3	2483.50	60.4 PK	74.0	-13.6	3.60 V	120	27.70	32.70
4	2483.50	47.9 AV	54.0	-6.1	3.60 V	120	15.20	32.70

REMARKS:

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



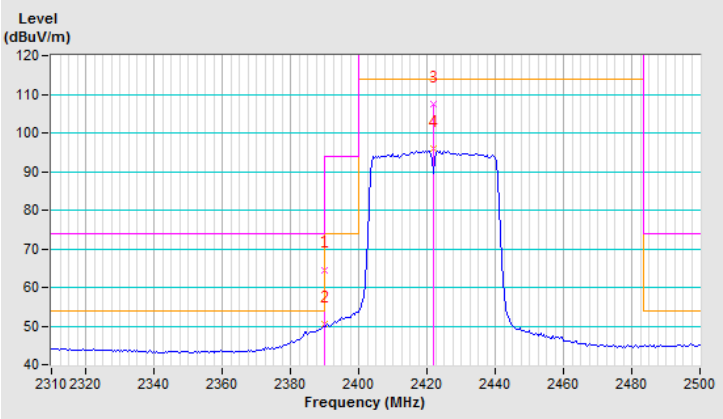
802.11n (40MHz)

CHANNEL	TX Channel 3	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	2390.00	64.6 PK	74.0	-9.4	4.00 H	201	32.40	32.20
2	2390.00	50.4 AV	54.0	-3.6	4.00 H	201	18.20	32.20
3	*2422.00	107.4 PK			4.00 H	201	75.00	32.40
4	*2422.00	95.8 AV			4.00 H	201	63.40	32.40

REMARKS:

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

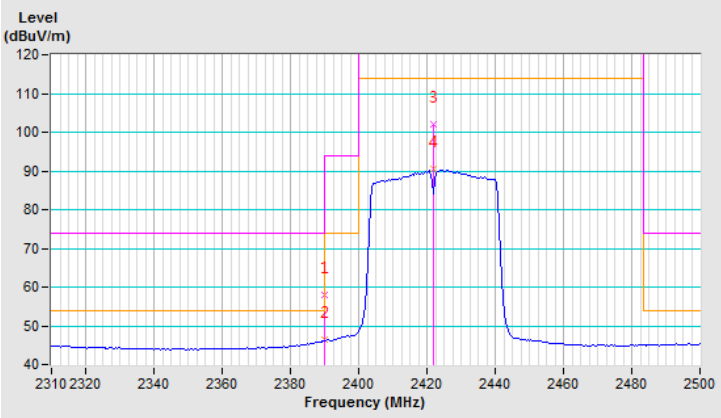


CHANNEL	TX Channel 3	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	2390.00	58.1 PK	74.0	-15.9	3.72 V	121	25.90	32.20
2	2390.00	46.3 AV	54.0	-7.7	3.72 V	121	14.10	32.20
3	*2422.00	101.9 PK			3.72 V	121	69.50	32.40
4	*2422.00	90.6 AV			3.72 V	121	58.20	32.40

REMARKS:

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

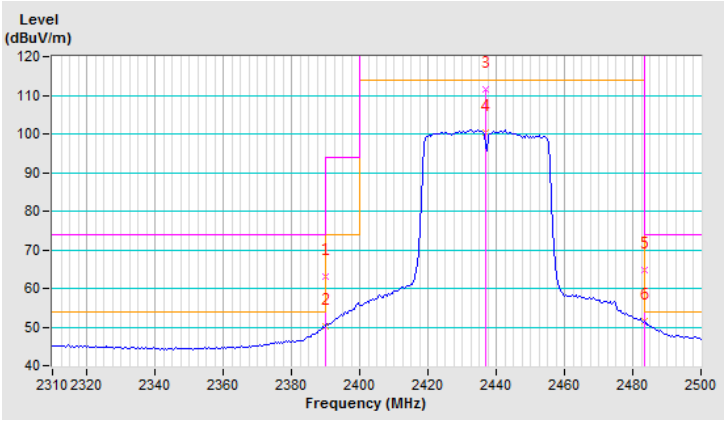


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	2390.00	63.1 PK	74.0	-10.9	3.87 H	200	30.90	32.20
2	2390.00	50.2 AV	54.0	-3.8	3.87 H	200	18.00	32.20
3	*2437.00	111.6 PK			3.87 H	200	79.20	32.40
4	*2437.00	100.3 AV			3.87 H	200	67.90	32.40
5	2483.50	64.7 PK	74.0	-9.3	3.87 H	200	32.00	32.70
6	2483.50	51.4 AV	54.0	-2.6	3.87 H	200	18.70	32.70

REMARKS:

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

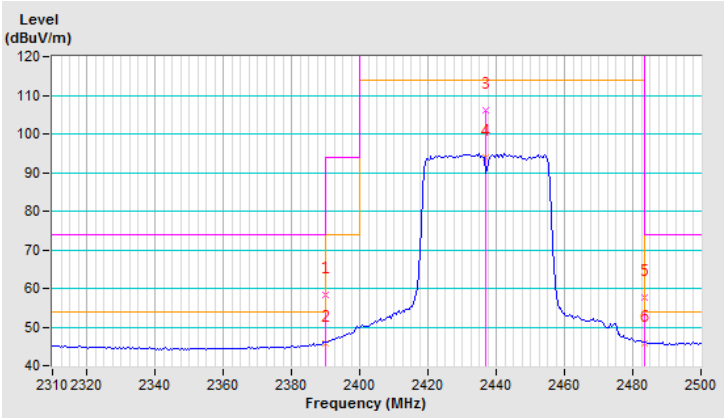


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	2390.00	58.3 PK	74.0	-15.7	3.70 V	120	26.10	32.20
2	2390.00	45.8 AV	54.0	-8.2	3.70 V	120	13.60	32.20
3	*2437.00	106.2 PK			3.70 V	120	73.80	32.40
4	*2437.00	94.0 AV			3.70 V	120	61.60	32.40
5	2483.50	57.7 PK	74.0	-16.3	3.70 V	120	25.00	32.70
6	2483.50	45.8 AV	54.0	-8.2	3.70 V	120	13.10	32.70

REMARKS:

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

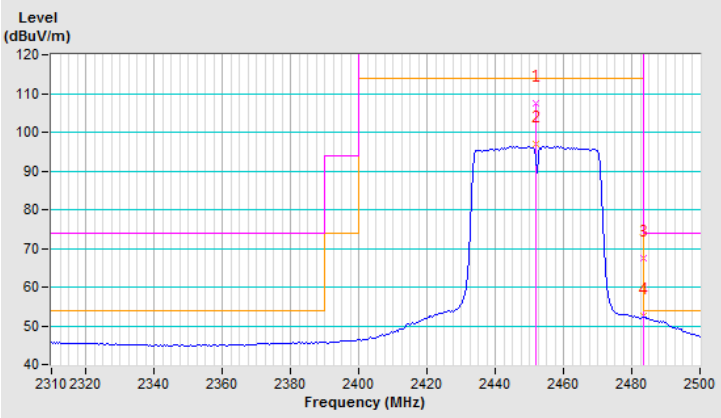


CHANNEL	TX Channel 9	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	*2452.00	107.5 PK			3.18 H	209	74.90	32.60
2	*2452.00	97.1 AV			3.18 H	209	64.50	32.60
3	2483.50	67.4 PK	74.0	-6.6	3.18 H	209	34.70	32.70
4	**2483.50**	**52.6 AV**	**54.0**	**-1.4**	**3.18 H**	**209**	**19.90**	**32.70**

REMARKS:

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

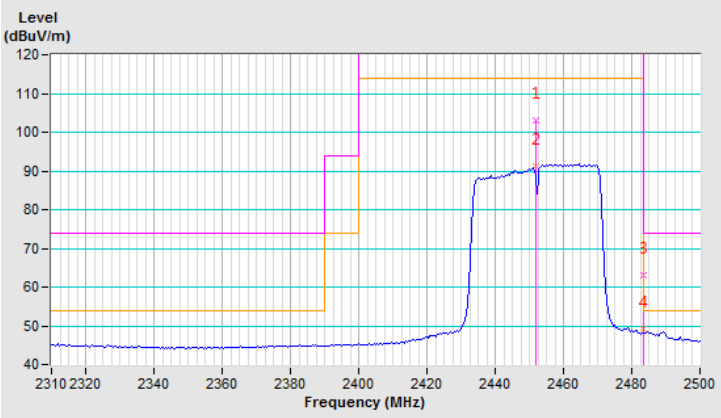


CHANNEL	TX Channel 9	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	*2452.00	102.9 PK			3.61 V	121	70.30	32.60
2	*2452.00	91.2 AV			3.61 V	121	58.60	32.60
3	2483.50	62.9 PK	74.0	-11.1	3.61 V	121	30.20	32.70
4	2483.50	49.2 AV	54.0	-4.8	3.61 V	121	16.50	32.70

REMARKS:

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



3TX

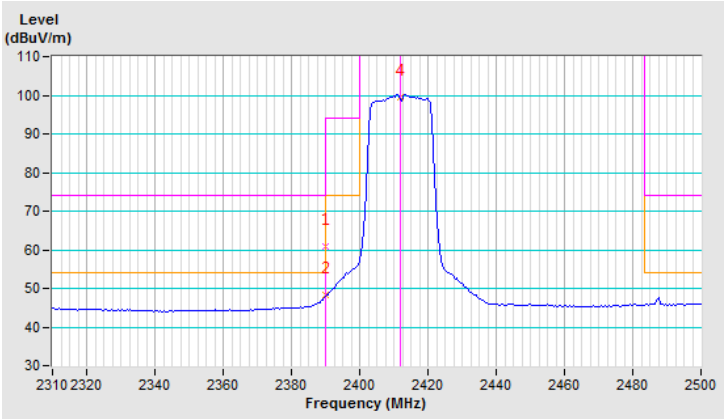
802.11n (20MHz)

CHANNEL	TX Channel 1	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	2390.00	60.7 PK	74.0	-13.3	3.67 H	23	28.50	32.20
2	2390.00	48.2 AV	54.0	-5.8	3.67 H	23	16.00	32.20
3	*2412.00	111.4 PK			3.67 H	23	79.10	32.30
4	*2412.00	99.4 AV			3.67 H	23	67.10	32.30

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.

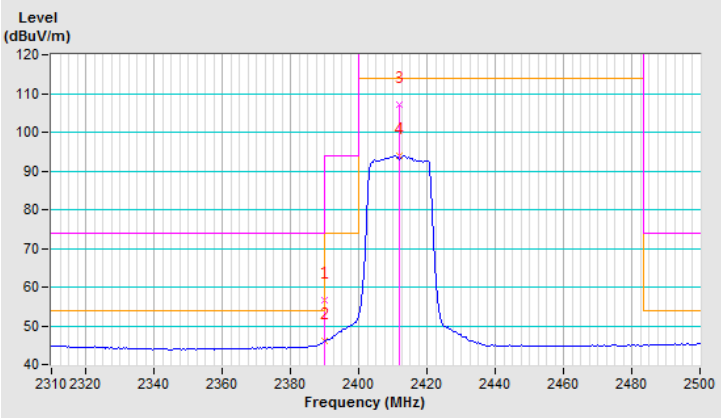


CHANNEL	TX Channel 1	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	2390.00	56.5 PK	74.0	-17.5	3.05 V	112	24.30	32.20
2	2390.00	46.0 AV	54.0	-8.0	3.05 V	112	13.80	32.20
3	*2412.00	107.1 PK			3.05 V	112	74.80	32.30
4	*2412.00	94.0 AV			3.05 V	112	61.70	32.30

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.

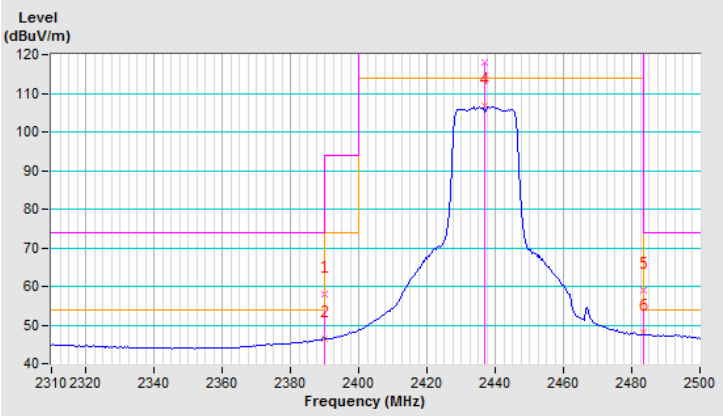


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	2390.00	57.9 PK	74.0	-16.1	3.91 H	200	25.70	32.20
2	2390.00	46.4 AV	54.0	-7.6	3.91 H	200	14.20	32.20
3	*2437.00	118.1 PK			3.91 H	200	85.70	32.40
4	*2437.00	106.8 AV			3.91 H	200	74.40	32.40
5	2483.50	59.0 PK	74.0	-15.0	3.91 H	200	26.30	32.70
6	2483.50	48.0 AV	54.0	-6.0	3.91 H	200	15.30	32.70

REMARKS:

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

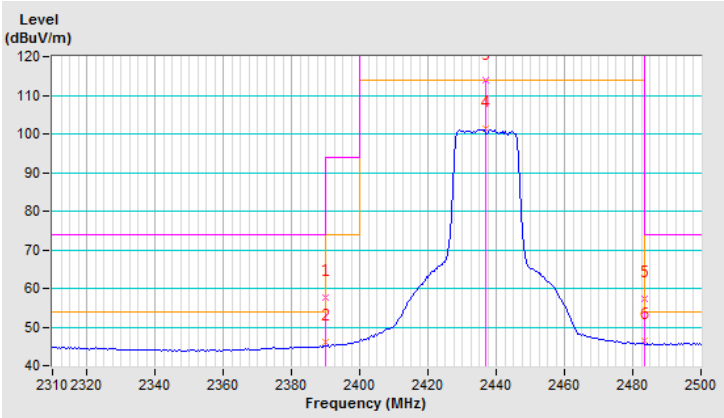


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	2390.00	57.6 PK	74.0	-16.4	3.67 V	124	25.40	32.20
2	2390.00	46.0 AV	54.0	-8.0	3.67 V	124	13.80	32.20
3	*2437.00	113.7 PK			3.67 V	124	81.30	32.40
4	*2437.00	101.4 AV			3.67 V	124	69.00	32.40
5	2483.50	57.4 PK	74.0	-16.6	3.67 V	124	24.70	32.70
6	2483.50	46.4 AV	54.0	-7.6	3.67 V	124	13.70	32.70

REMARKS:

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

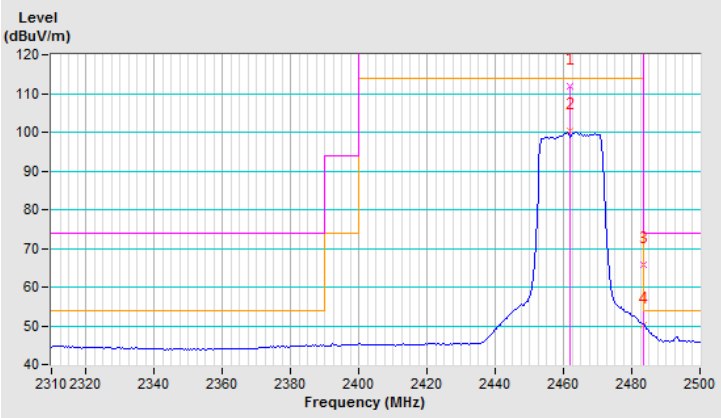


CHANNEL	TX Channel 11	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	*2462.00	111.9 PK			3.11 H	210	79.30	32.60
2	*2462.00	100.4 AV			3.11 H	210	67.80	32.60
3	2483.50	65.8 PK	74.0	-8.2	3.11 H	210	33.10	32.70
4	2483.50	50.1 AV	54.0	-3.9	3.11 H	210	17.40	32.70

REMARKS:

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

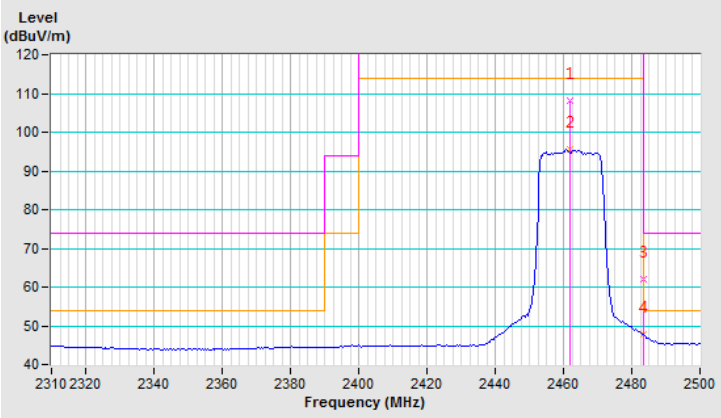


CHANNEL	TX Channel 11	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	*2462.00	108.0 PK			3.58 V	123	75.40	32.60
2	*2462.00	95.6 AV			3.58 V	123	63.00	32.60
3	2483.50	62.0 PK	74.0	-12.0	3.58 V	123	29.30	32.70
4	2483.50	47.9 AV	54.0	-6.1	3.58 V	123	15.20	32.70

REMARKS:

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



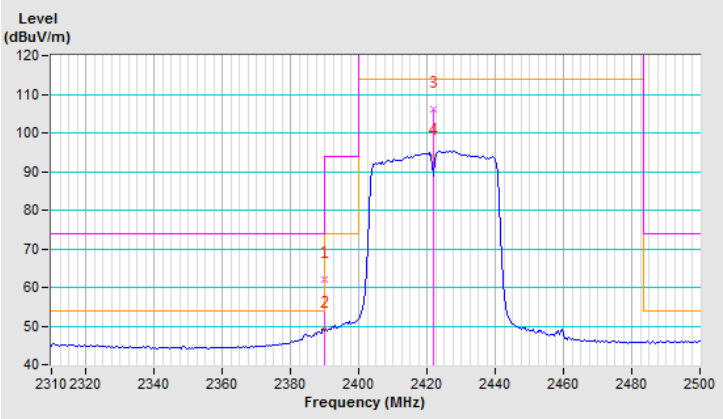
802.11n (40MHz)

CHANNEL	TX Channel 3	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	2390.00	62.0 PK	74.0	-12.0	3.82 H	203	29.80	32.20
2	2390.00	49.3 AV	54.0	-4.7	3.82 H	203	17.10	32.20
3	*2422.00	106.2 PK			3.82 H	203	73.80	32.40
4	*2422.00	94.0 AV			3.82 H	203	61.60	32.40

REMARKS:

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

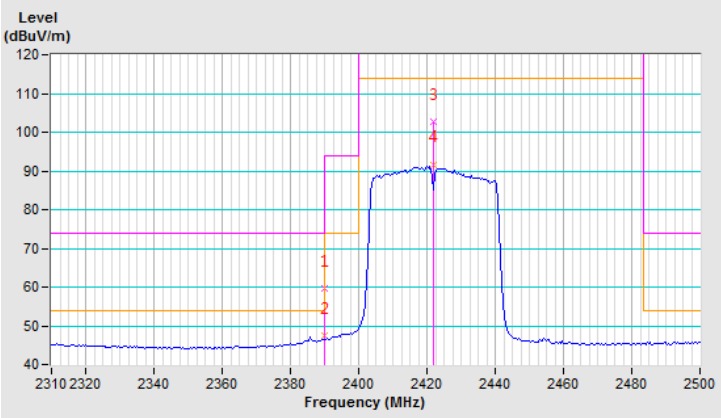


CHANNEL	TX Channel 3	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	2390.00	59.8 PK	74.0	-14.2	3.38 V	119	27.60	32.20
2	2390.00	47.4 AV	54.0	-6.6	3.38 V	119	15.20	32.20
3	*2422.00	102.8 PK			3.38 V	119	70.40	32.40
4	*2422.00	91.7 AV			3.38 V	119	59.30	32.40

REMARKS:

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

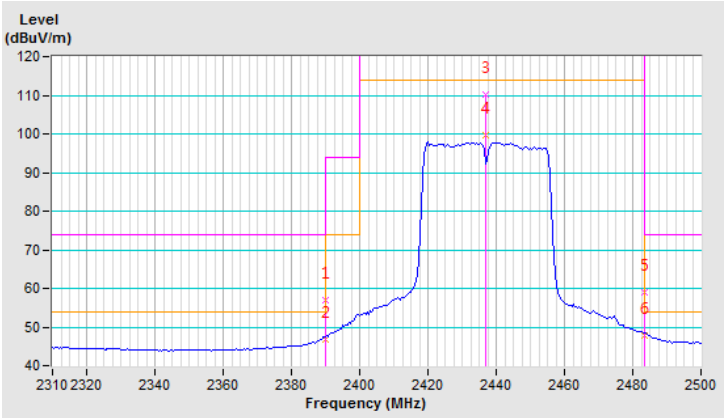


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	2390.00	57.0 PK	74.0	-17.0	3.21 H	193	24.80	32.20
2	2390.00	46.9 AV	54.0	-7.1	3.21 H	193	14.70	32.20
3	*2437.00	110.1 PK			3.21 H	193	77.70	32.40
4	*2437.00	99.8 AV			3.21 H	193	67.40	32.40
5	2483.50	59.0 PK	74.0	-15.0	3.21 H	193	26.30	32.70
6	2483.50	47.8 AV	54.0	-6.2	3.21 H	193	15.10	32.70

REMARKS:

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

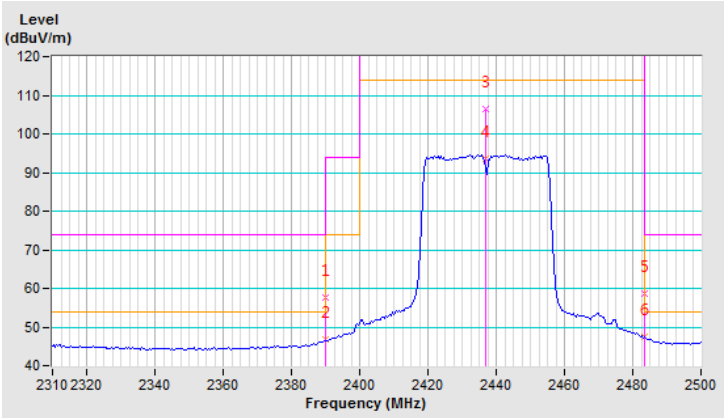


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	2390.00	57.6 PK	74.0	-16.4	3.65 V	124	25.40	32.20
2	2390.00	46.7 AV	54.0	-7.3	3.65 V	124	14.50	32.20
3	*2437.00	106.5 PK			3.65 V	124	74.10	32.40
4	*2437.00	93.5 AV			3.65 V	124	61.10	32.40
5	2483.50	58.5 PK	74.0	-15.5	3.65 V	124	25.80	32.70
6	2483.50	47.4 AV	54.0	-6.6	3.65 V	124	14.70	32.70

REMARKS:

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

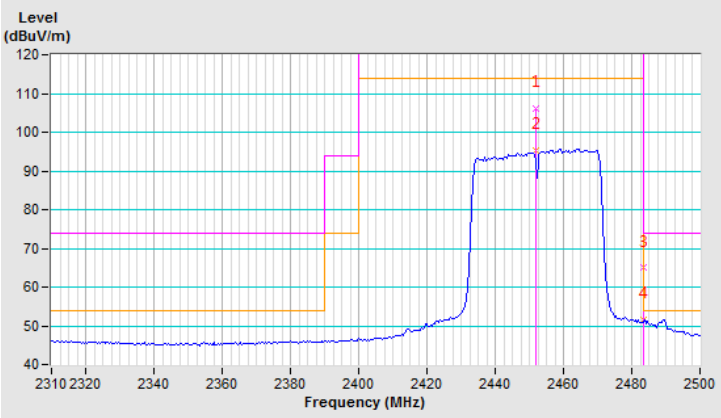


CHANNEL	TX Channel 9	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	*2452.00	106.0 PK			3.46 H	195	73.40	32.60
2	*2452.00	95.2 AV			3.46 H	195	62.60	32.60
3	2483.50	64.9 PK	74.0	-9.1	3.46 H	195	32.20	32.70
4	2483.50	51.4 AV	54.0	-2.6	3.46 H	195	18.70	32.70

REMARKS:

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

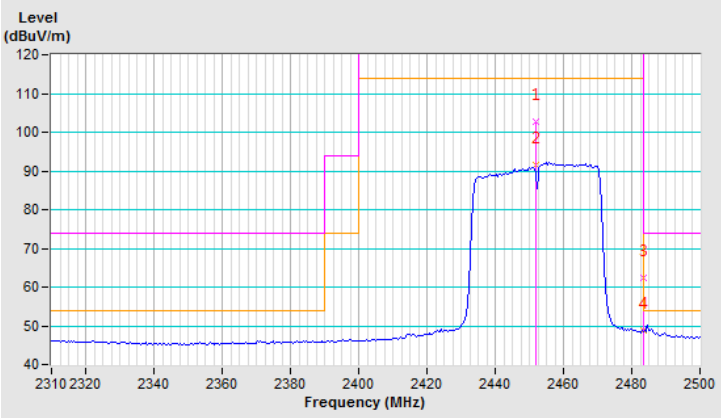


CHANNEL	TX Channel 9	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	*2452.00	102.7 PK			3.61 V	119	70.10	32.60
2	*2452.00	91.4 AV			3.61 V	119	58.80	32.60
3	2483.50	62.5 PK	74.0	-11.5	3.61 V	119	29.80	32.70
4	2483.50	48.9 AV	54.0	-5.1	3.61 V	119	16.20	32.70

REMARKS:

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

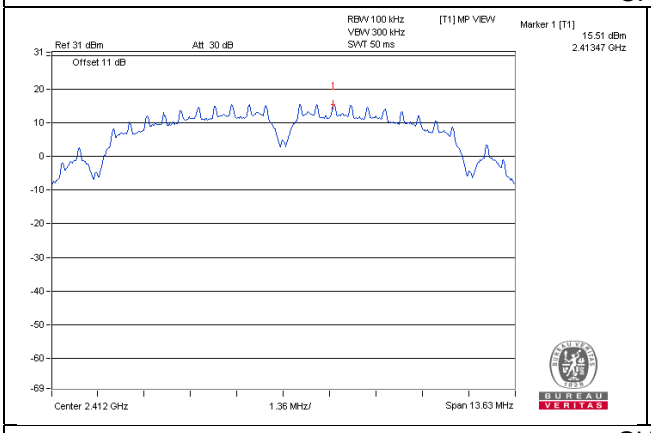


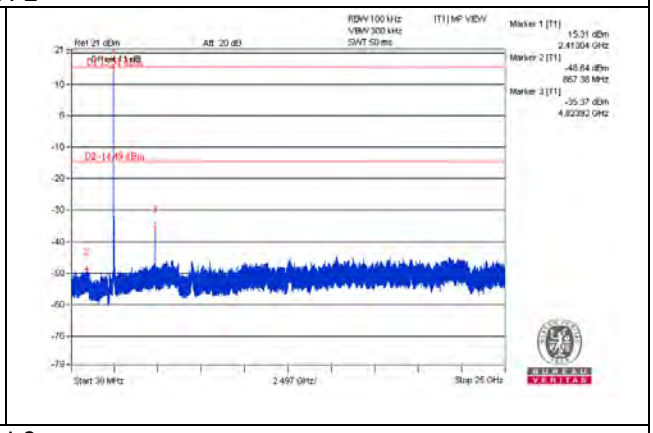
4.7.8 Test Results of Band Edge and Emissions not in Restricted Bands

Below 30dB of the highest emissions level of operating band (in 100kHz Resolution Bandwidth).

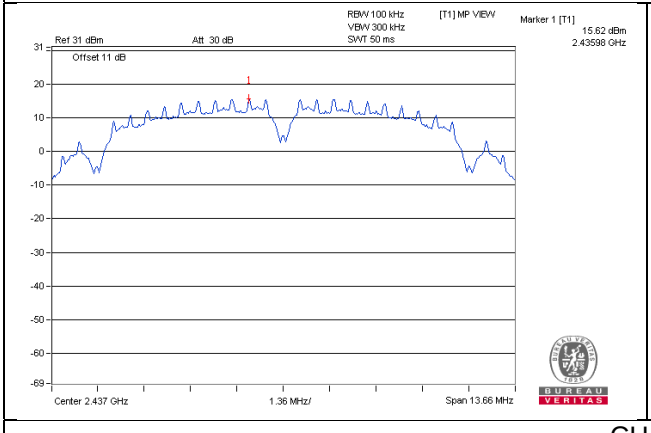
802.11b

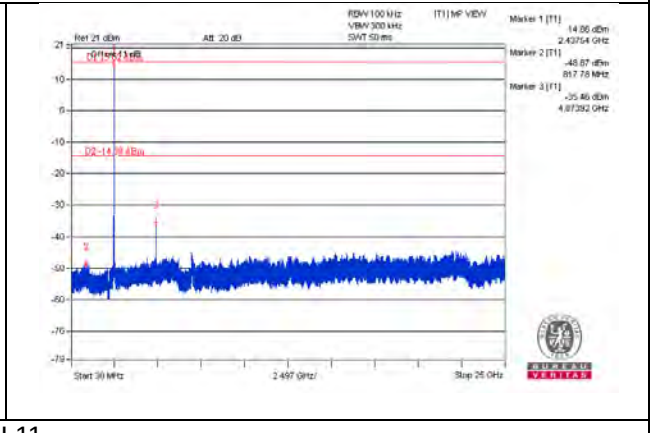
CH 1



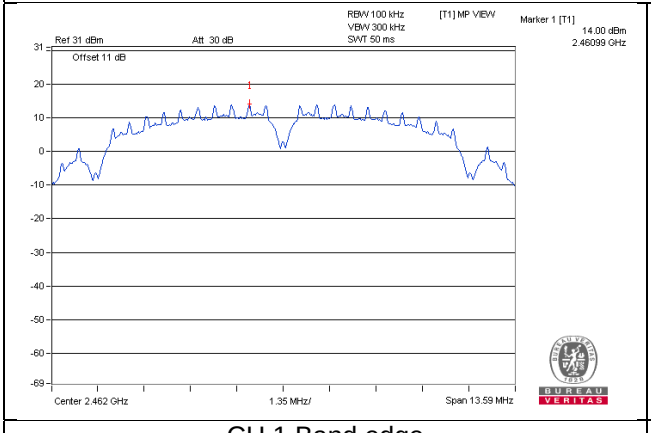


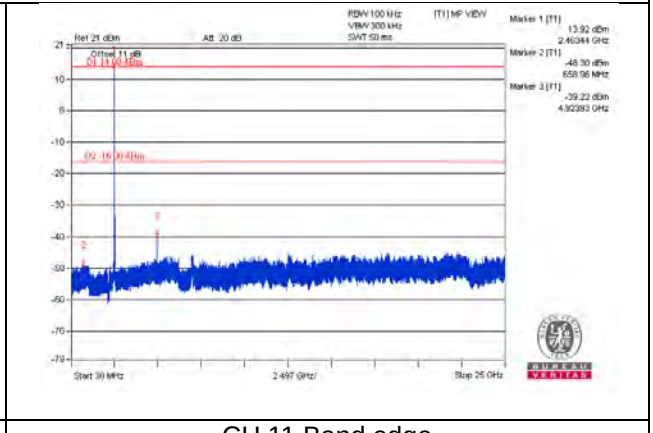
CH 6



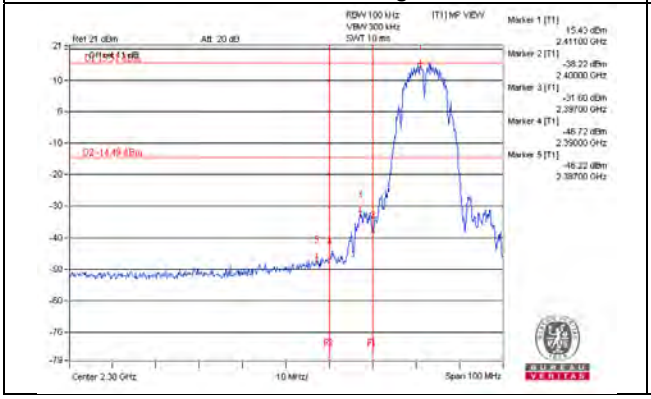


CH 11

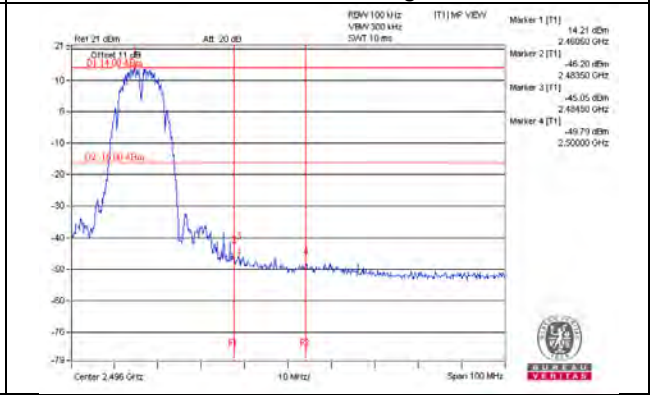




CH 1 Band edge

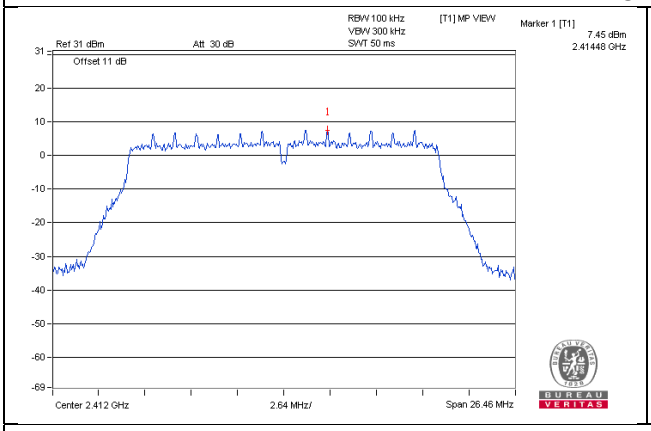


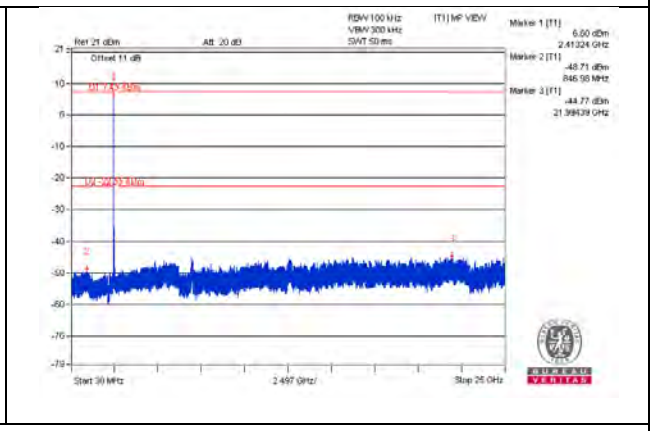
CH 11 Band edge



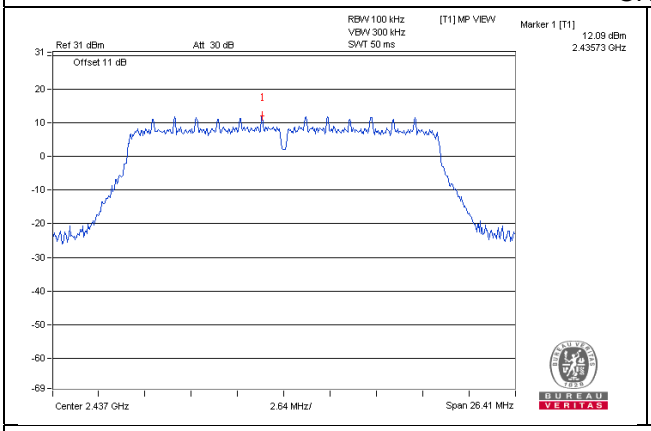
802.11n (20MHz) – 1TX:

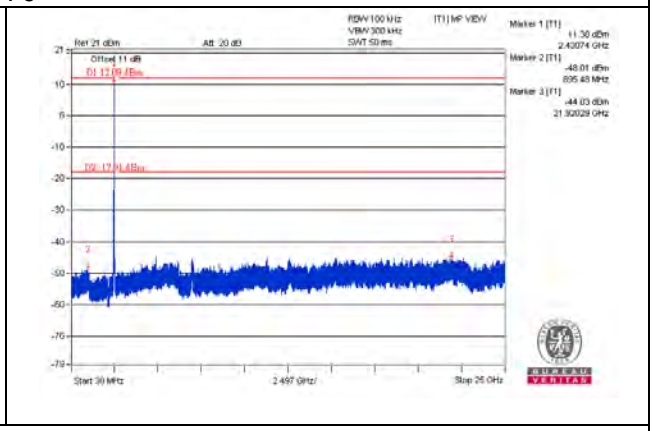
CH 1



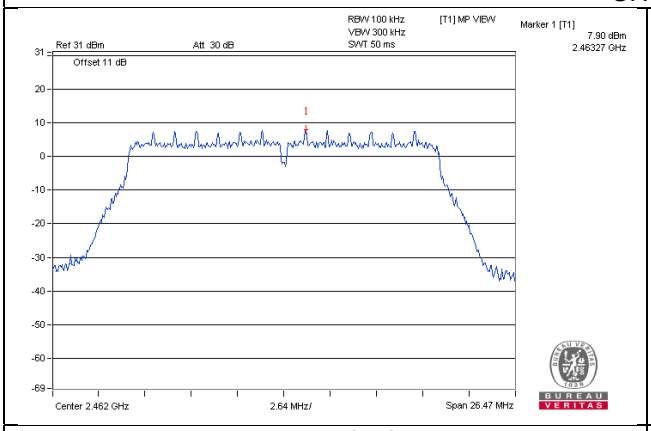


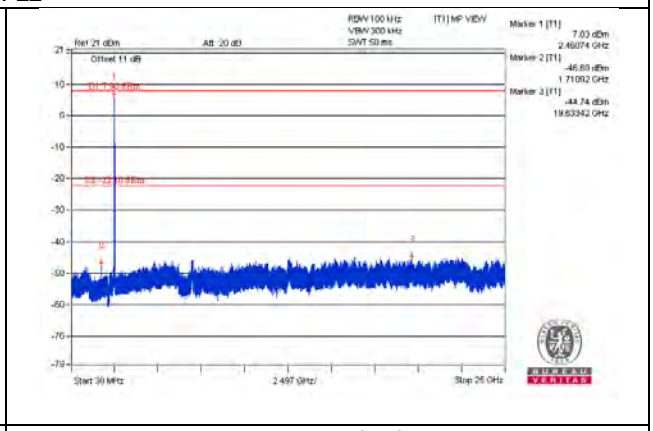
CH 6



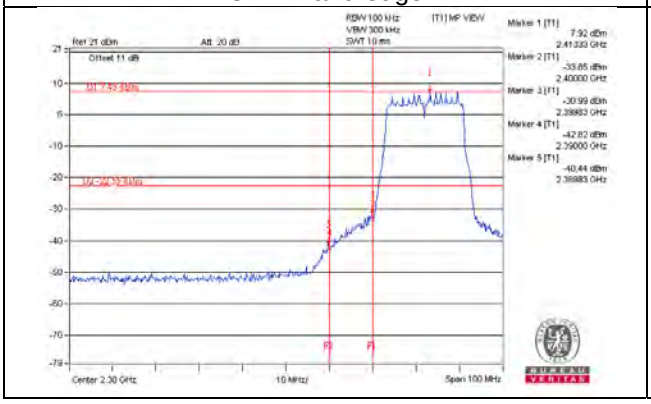


CH 11

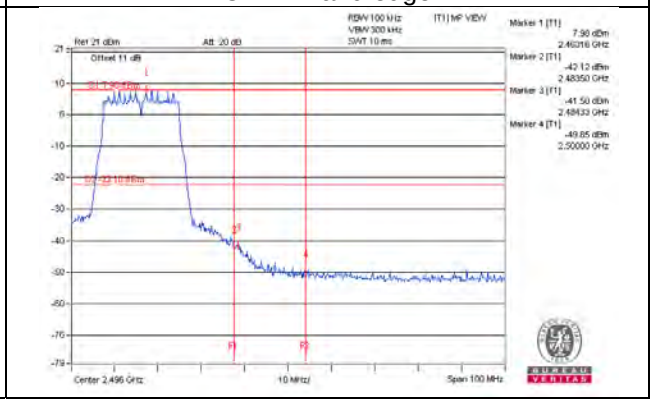




CH 1 Band edge

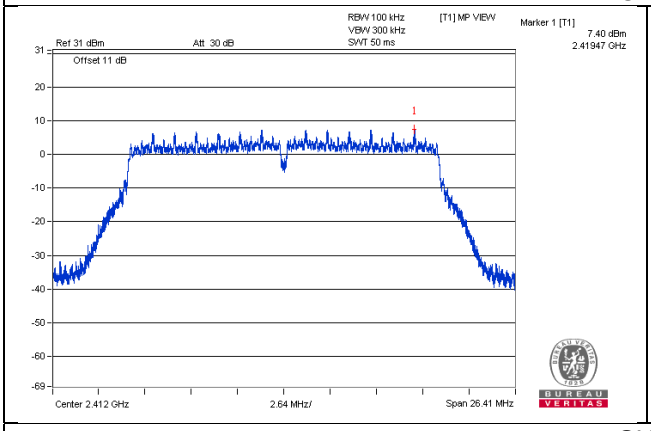


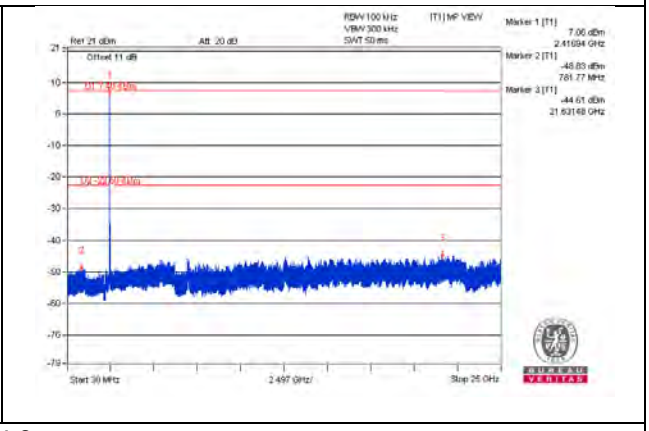
CH 11 Band edge



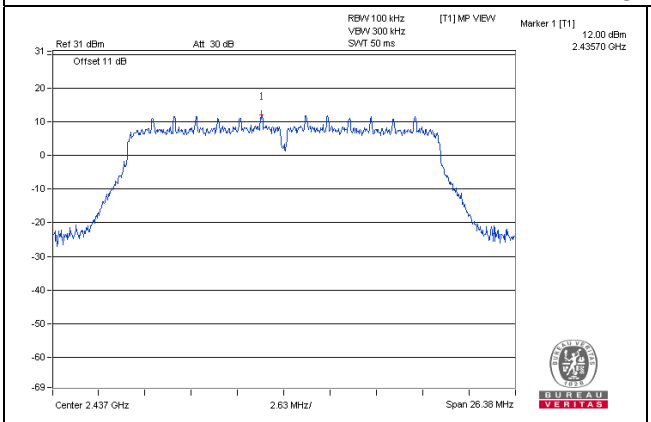
802.11n (20MHz) – 2TX:
Chain 1

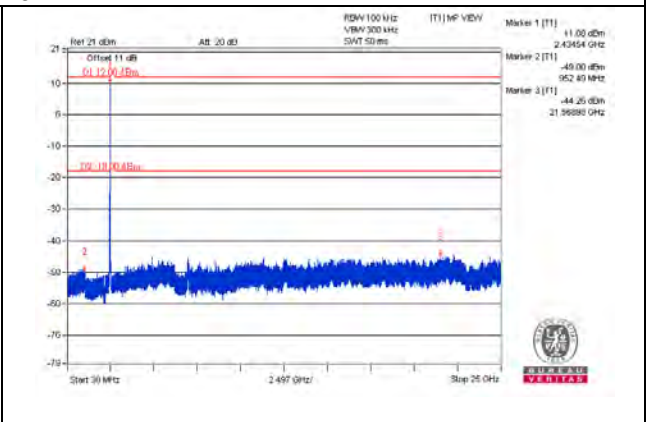
CH 1



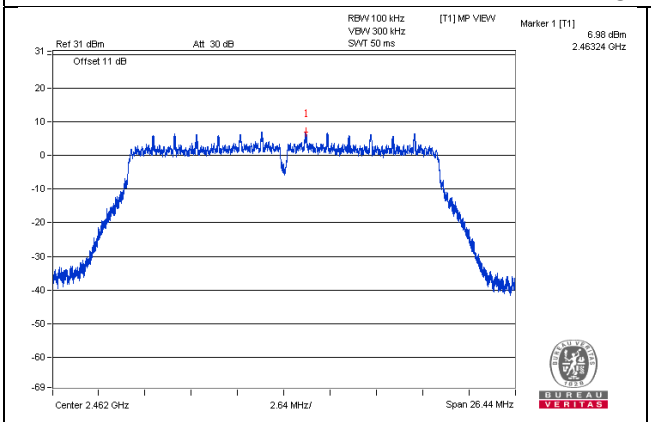


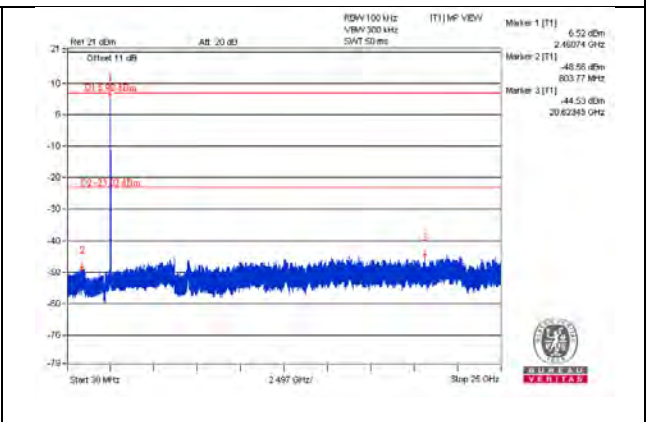
CH 6



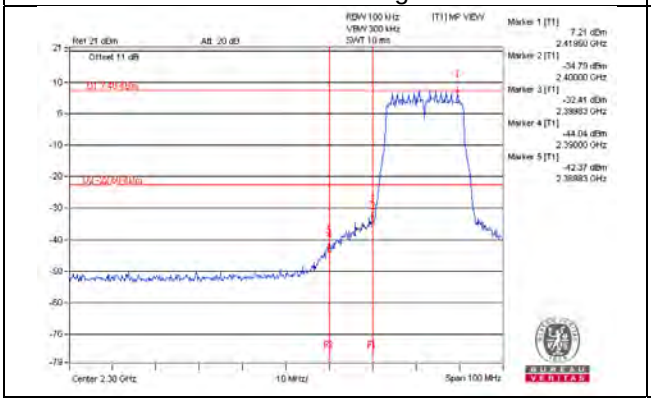


CH 11

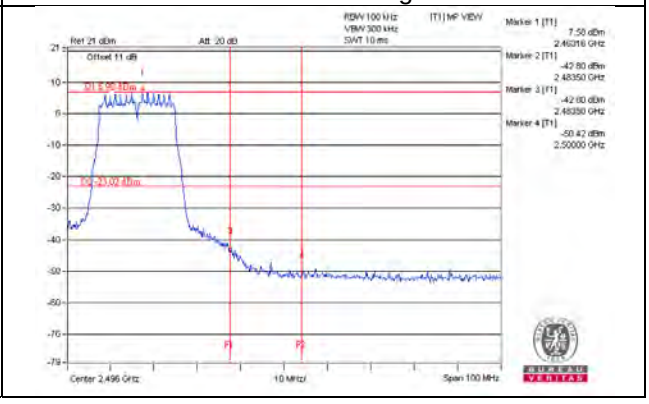




CH 1 Band edge

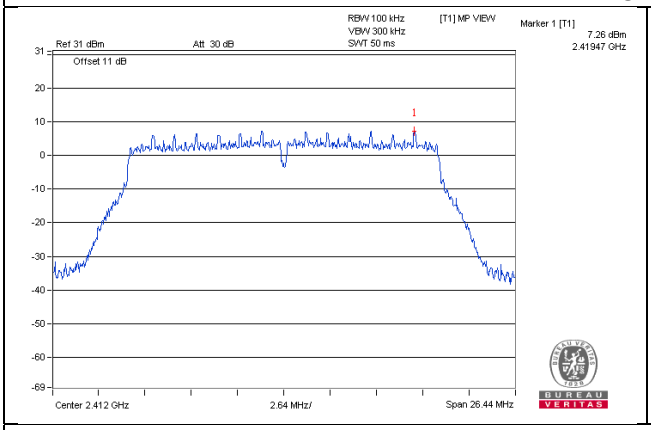


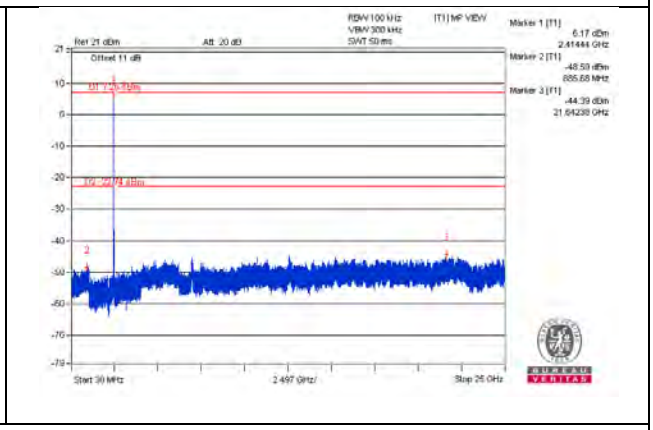
CH 11 Band edge



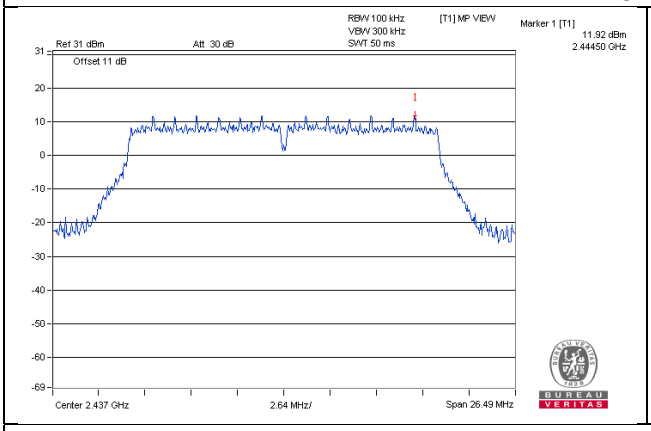
Chain 3

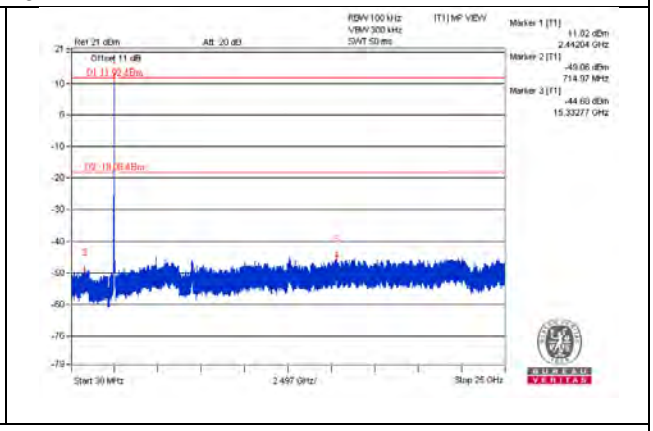
CH 1



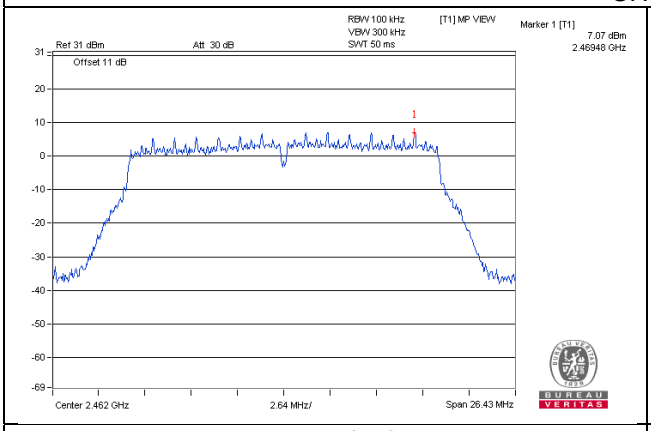


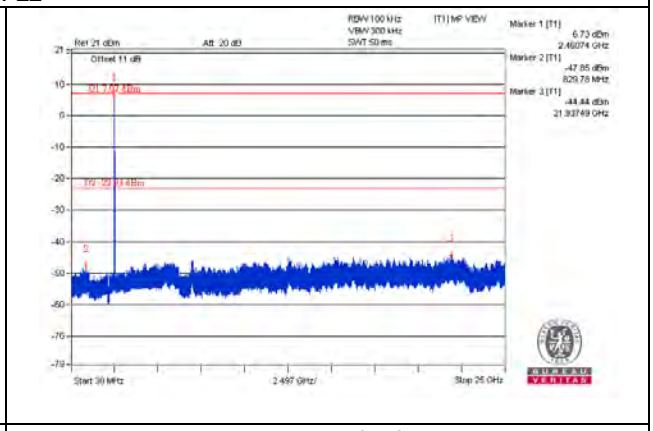
CH 6



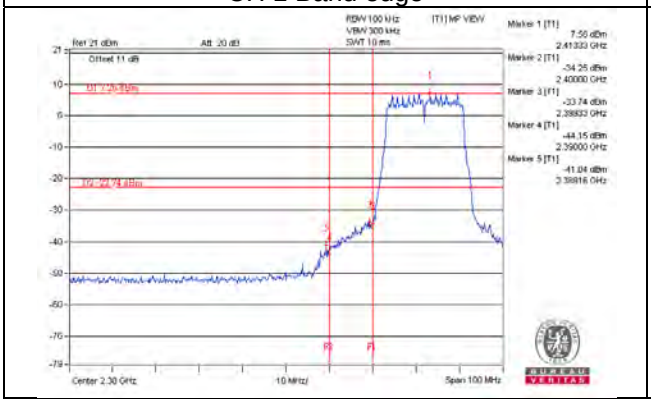


CH 11

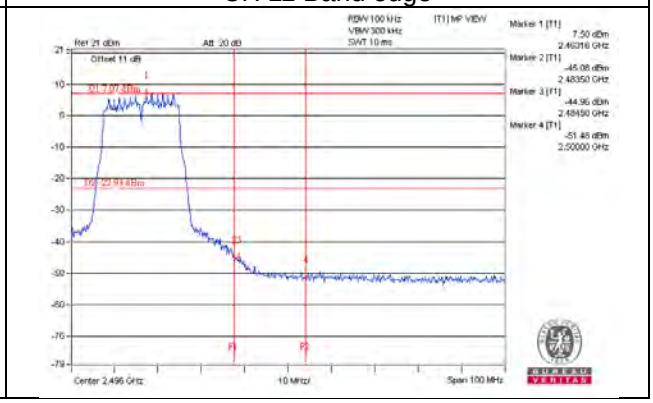




CH 1 Band edge

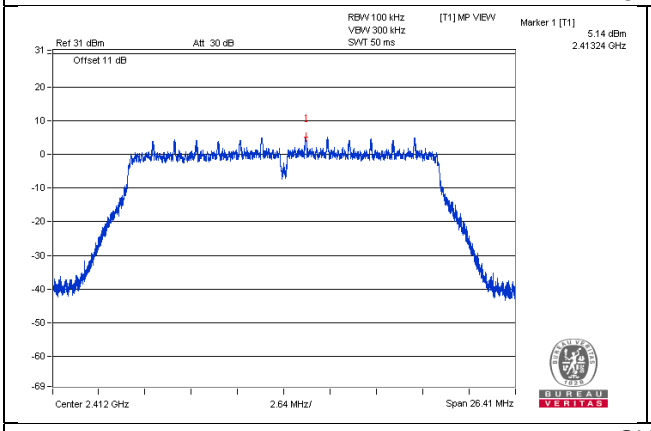


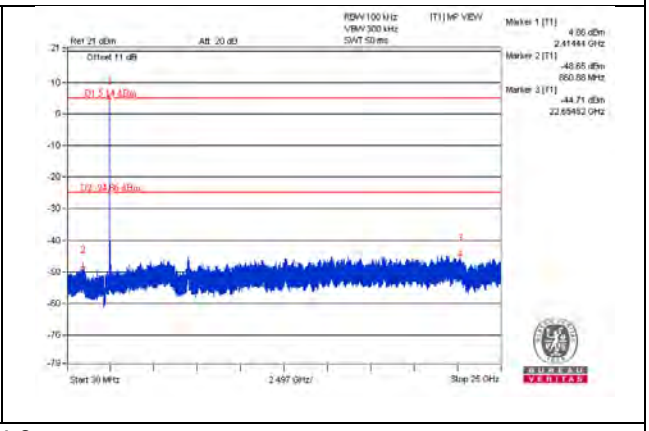
CH 11 Band edge



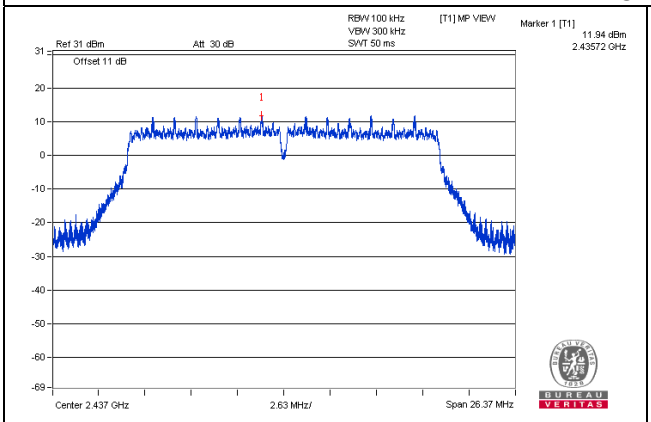
802.11n (20MHz) – 3TX:
Chain 1

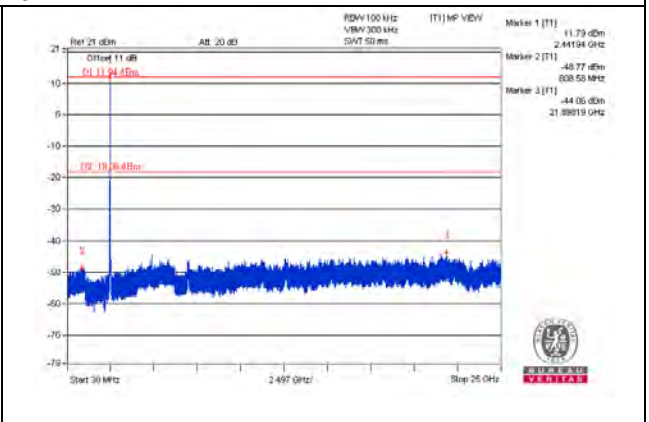
CH 1



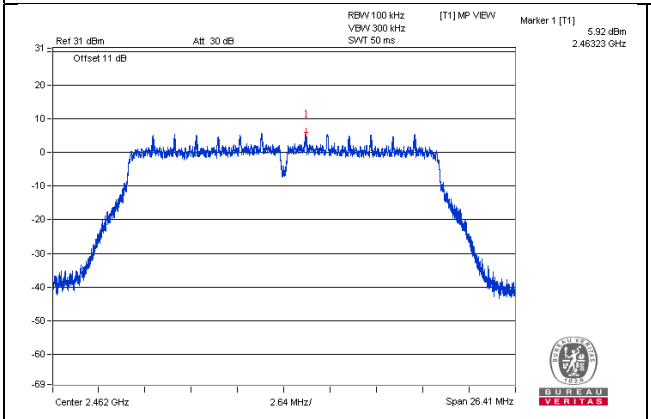


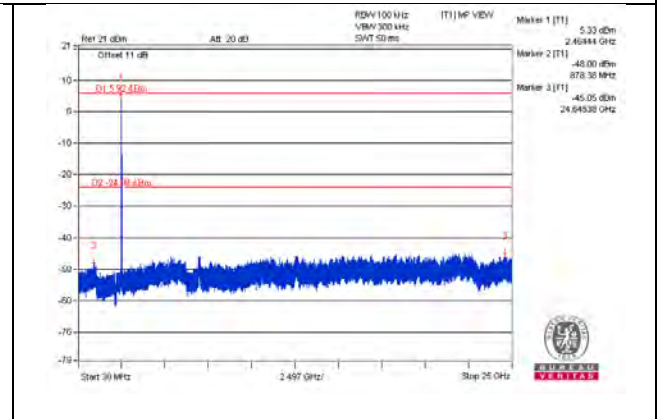
CH 6



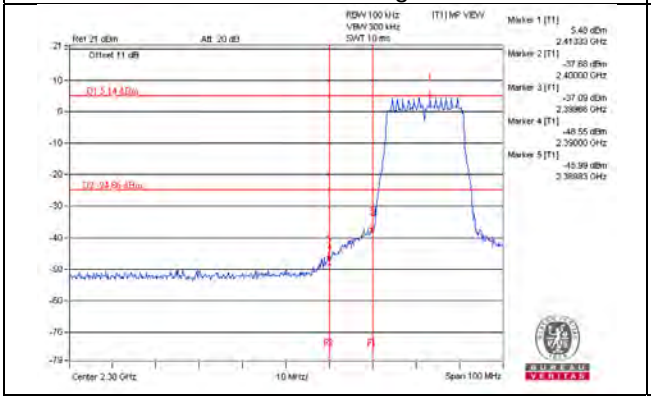


CH 11

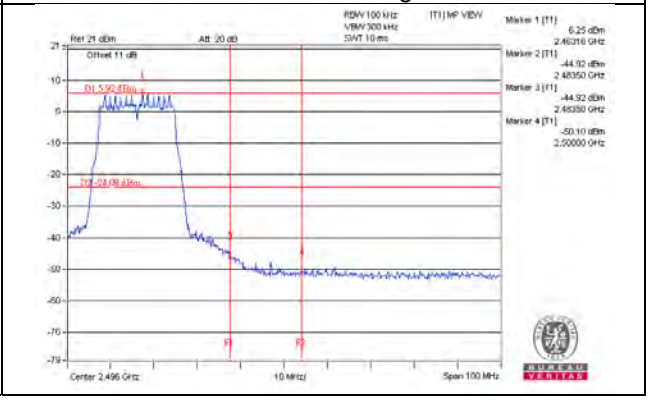




CH 1 Band edge

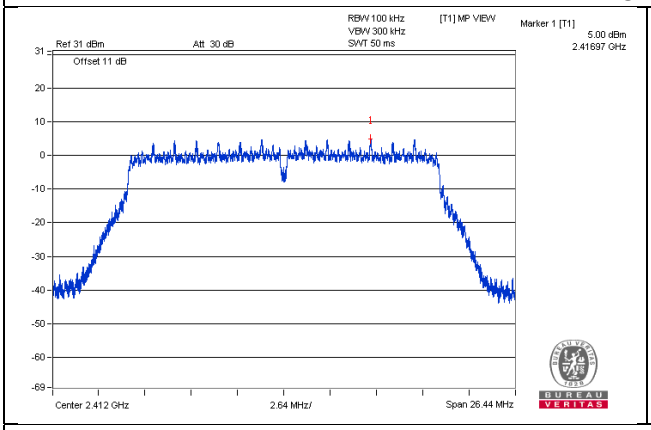


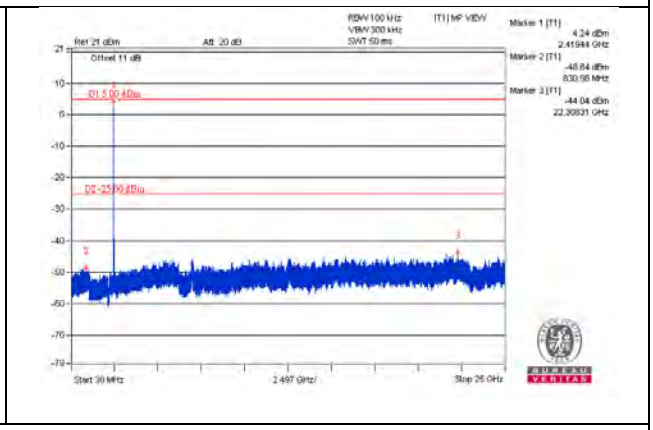
CH 11 Band edge



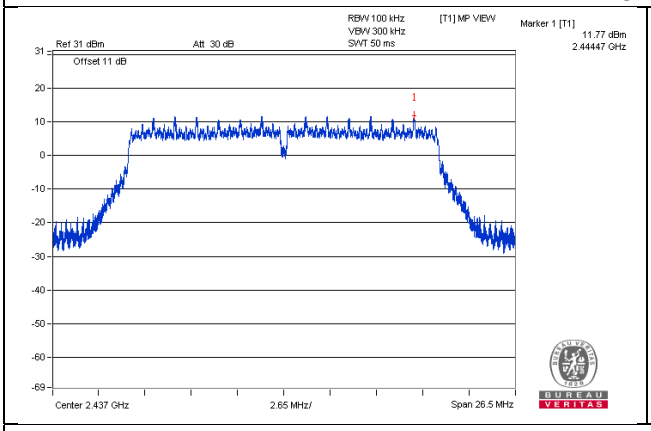
Chain 2

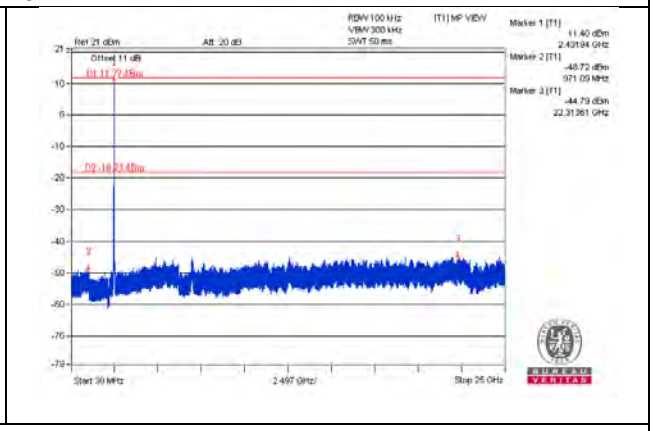
CH 1



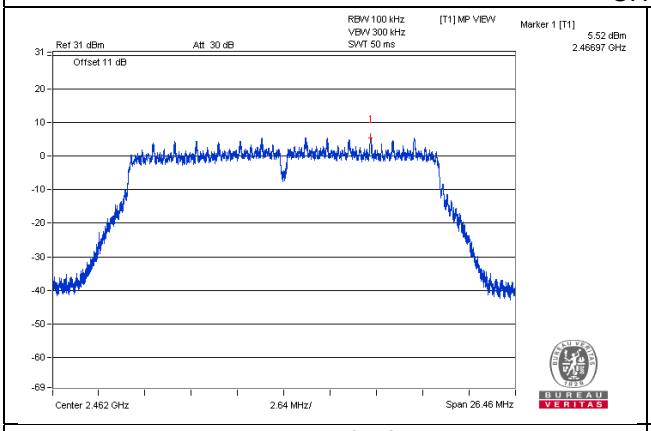


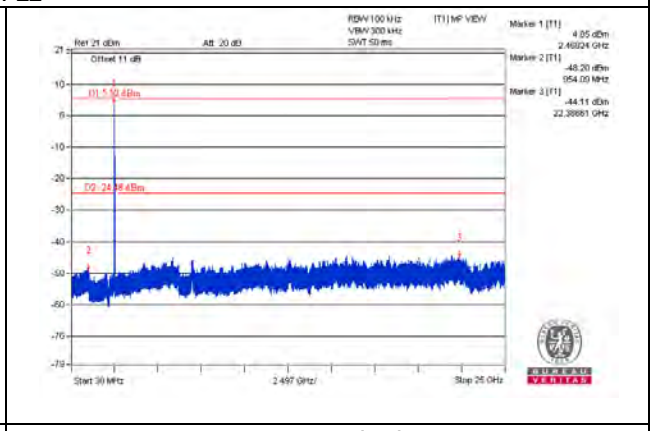
CH 6



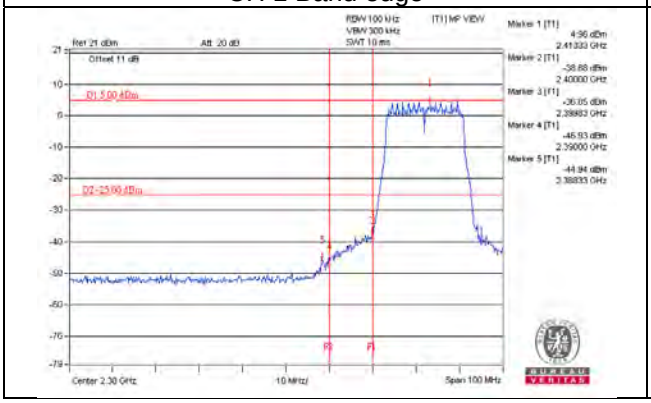


CH 11

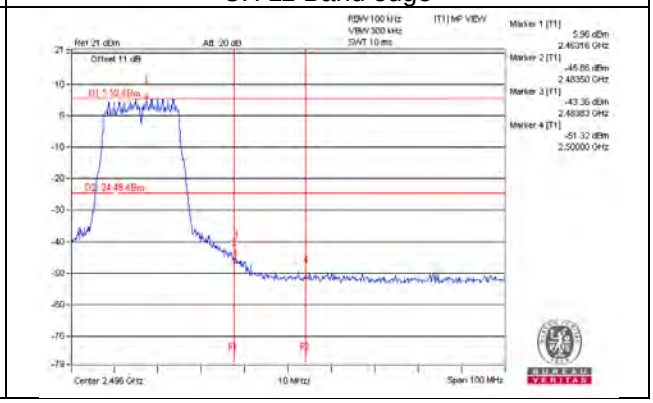




CH 1 Band edge

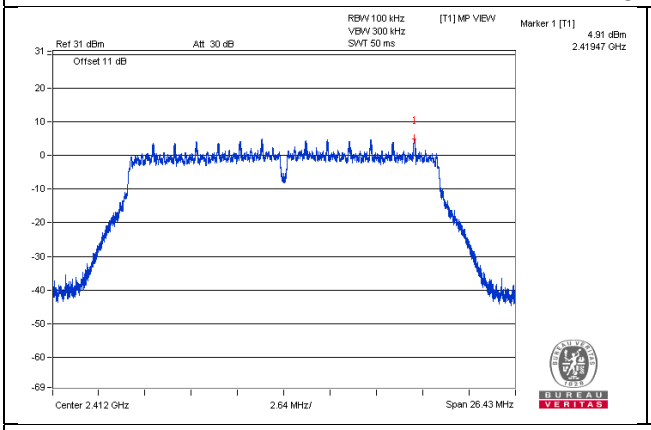


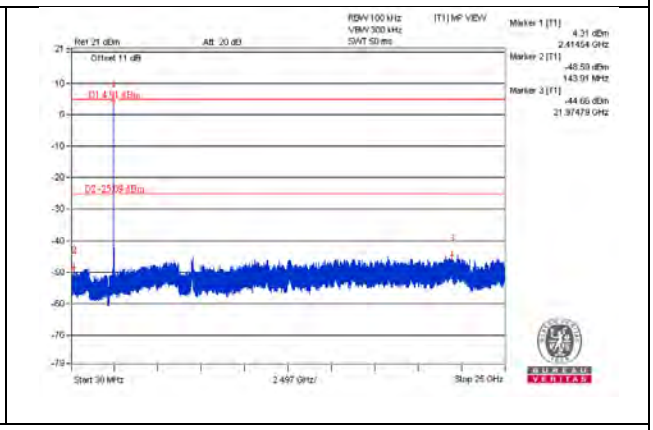
CH 11 Band edge



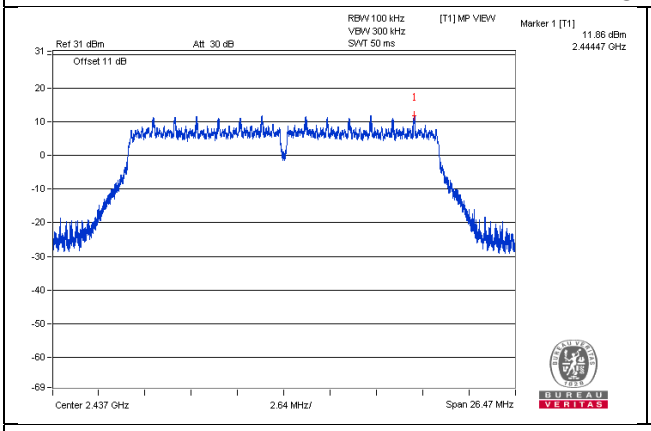
Chain 3

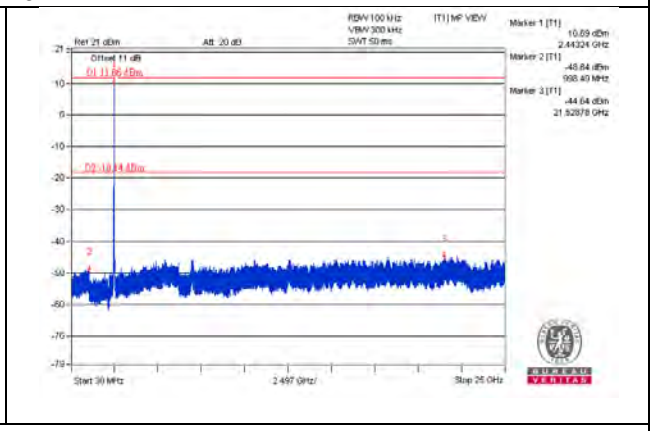
CH 1



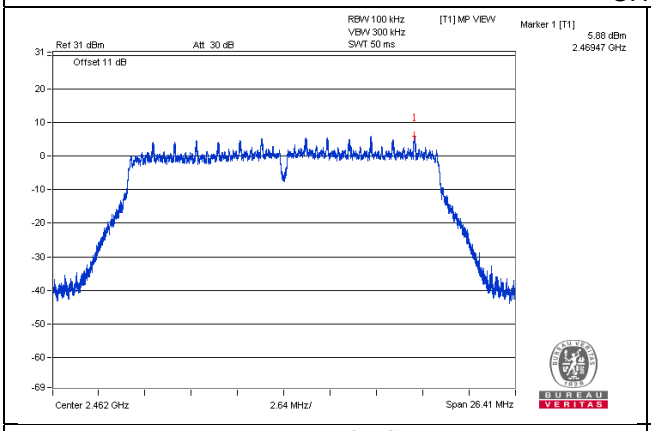


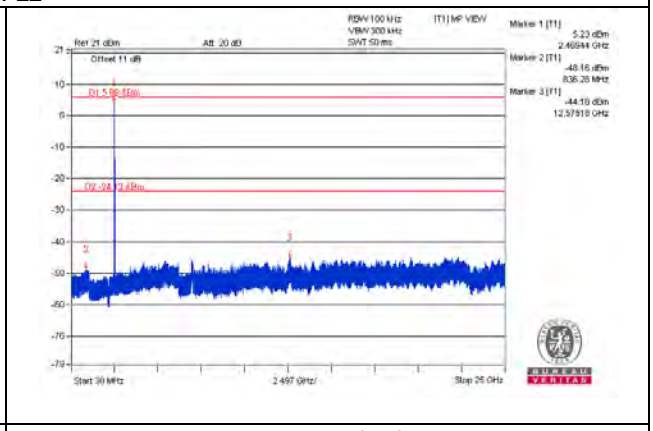
CH 6



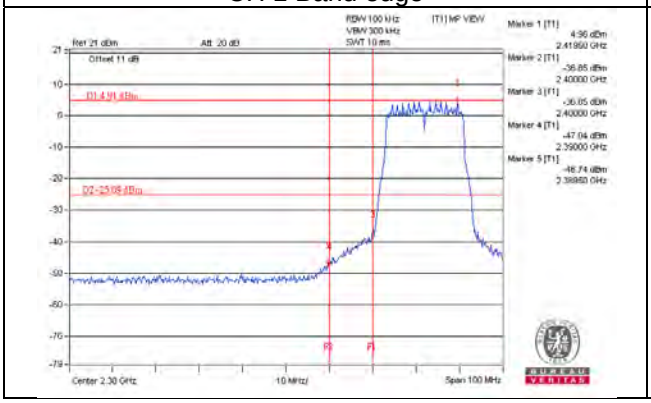


CH 11

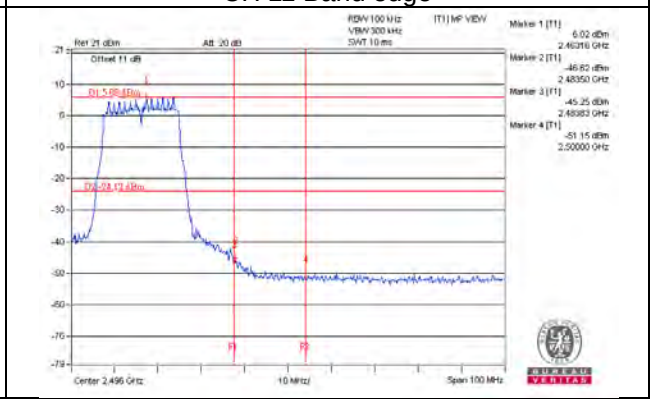




CH 1 Band edge

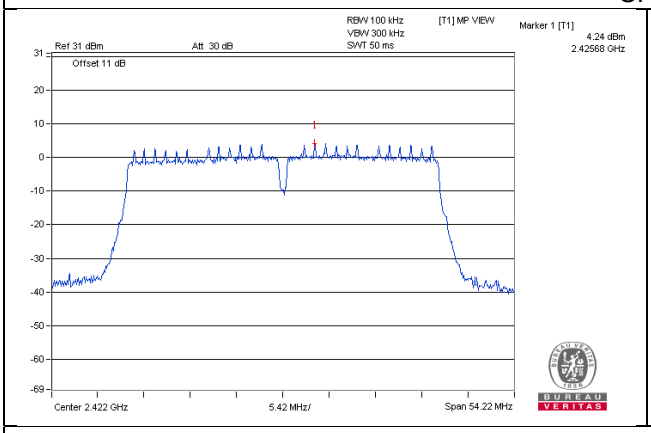


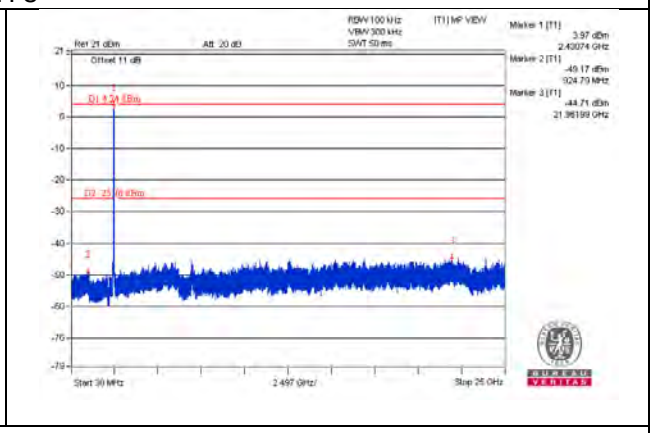
CH 11 Band edge



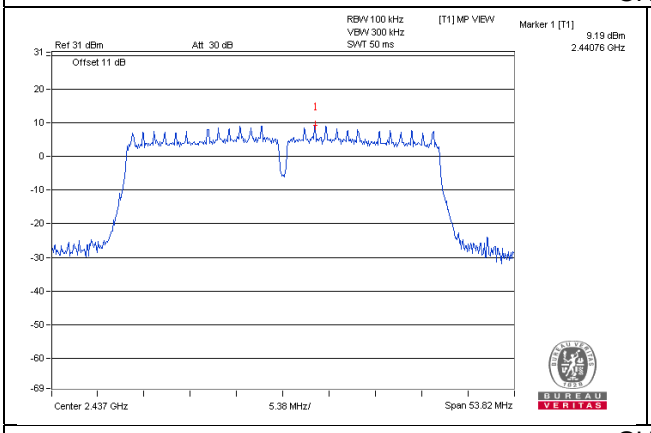
802.11n (40MHz) – 1TX:

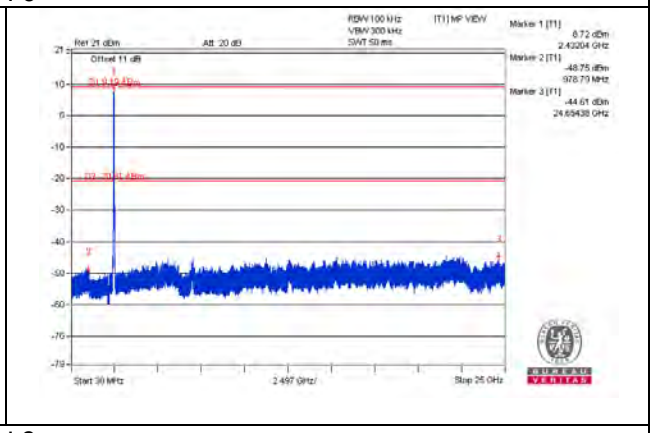
CH 3



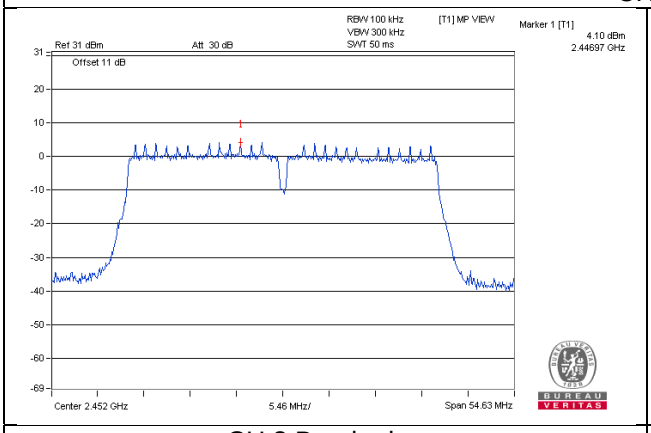


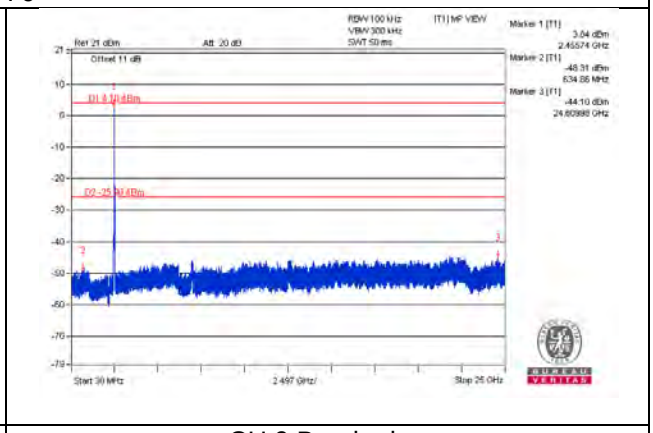
CH 6



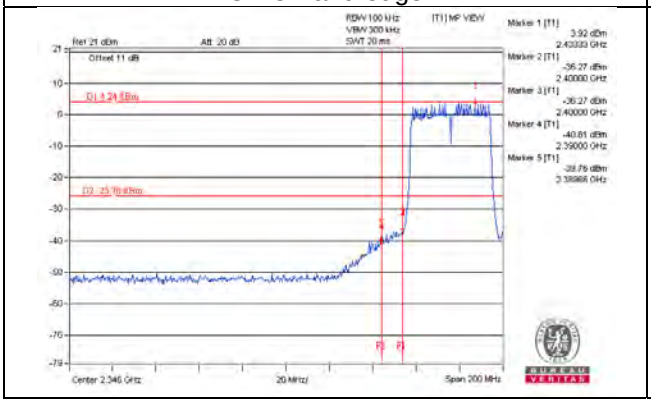


CH 9

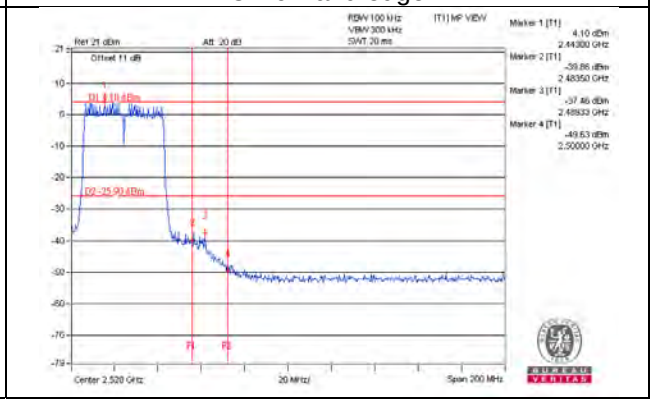




CH 3 Band edge

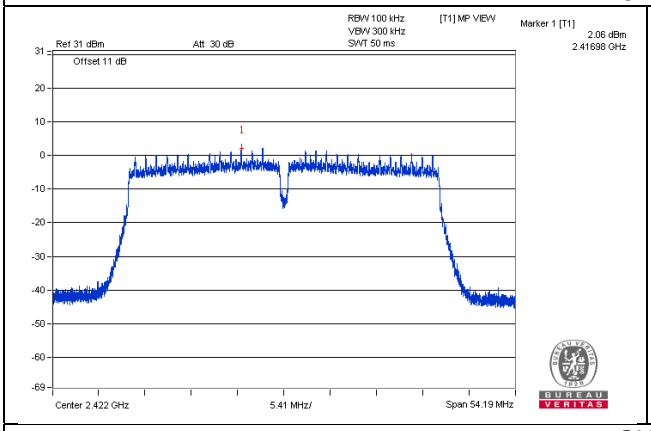


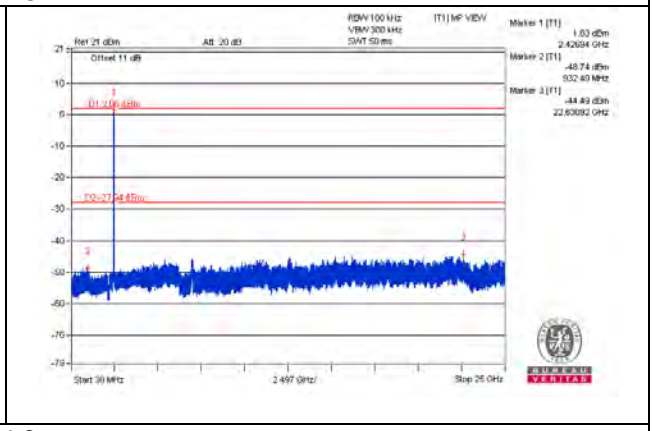
CH 9 Band edge



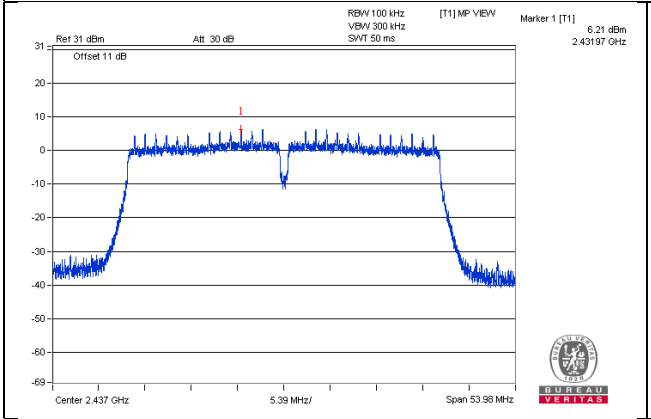
802.11n (40MHz) – 2TX:
Chain 1

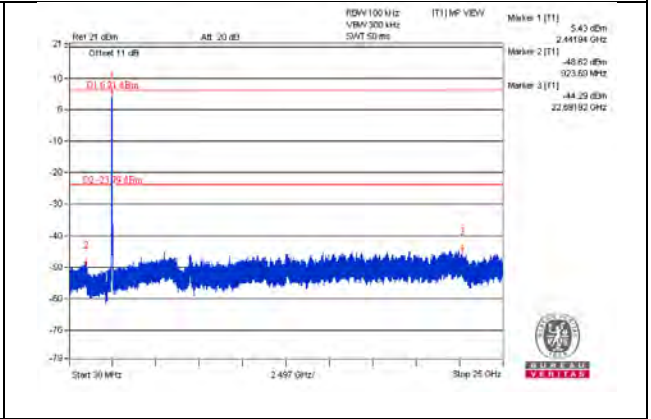
CH 3



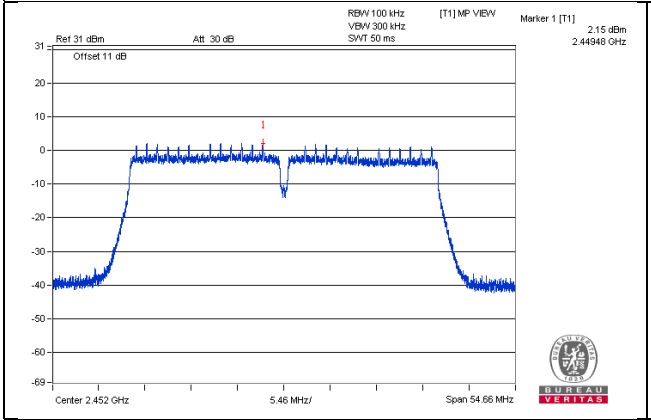


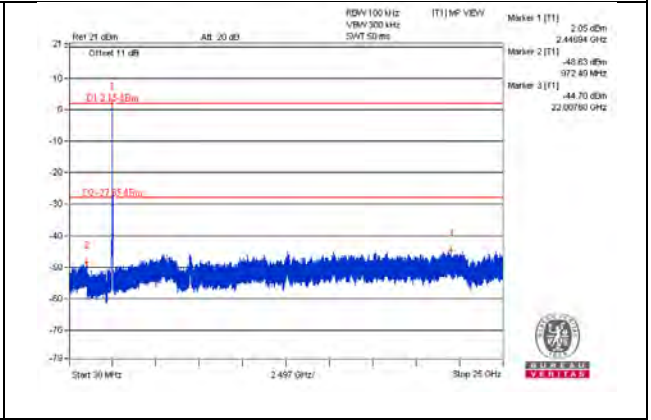
CH 6



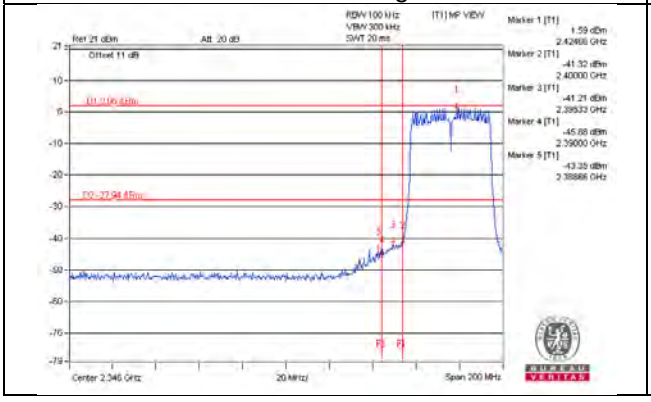


CH 9

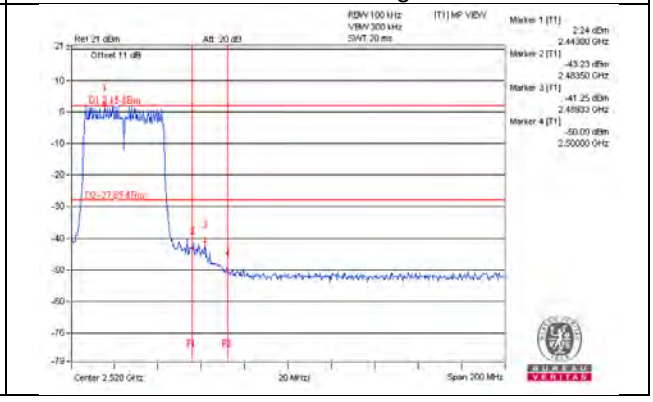




CH 3 Band edge

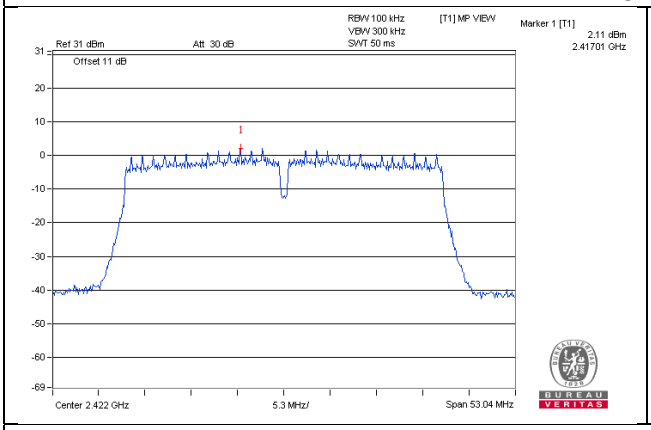


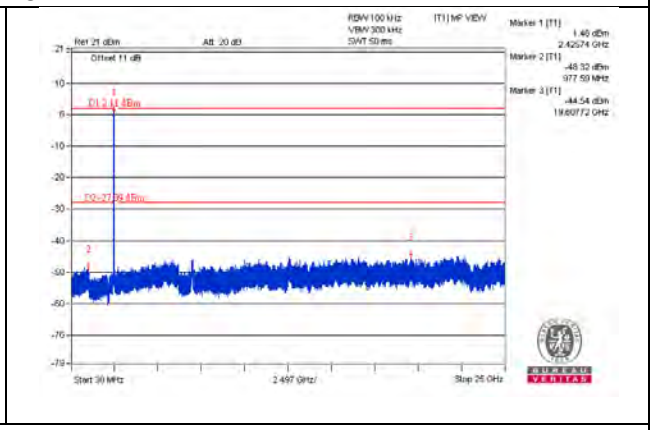
CH 9 Band edge



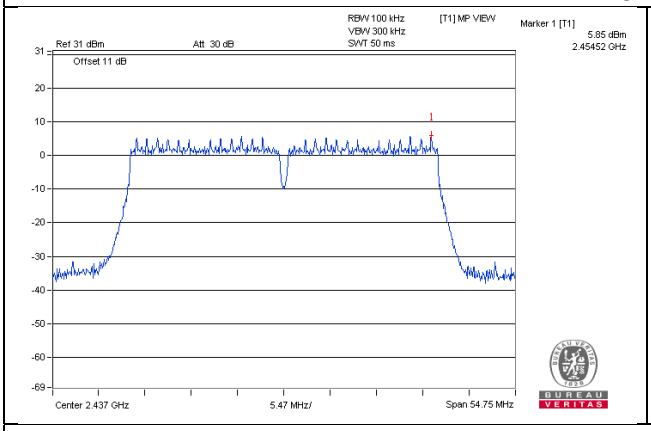
Chain 3

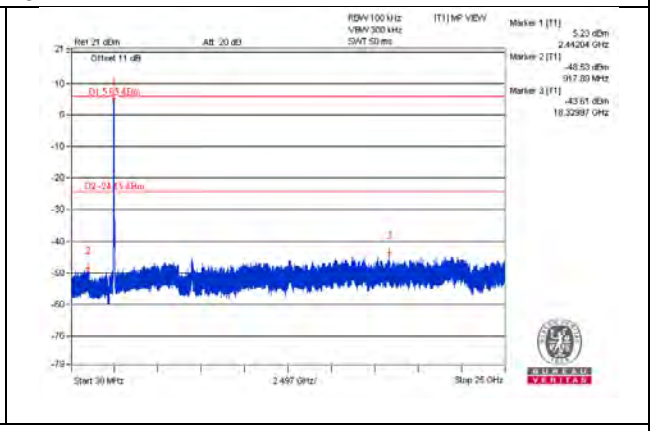
CH 3



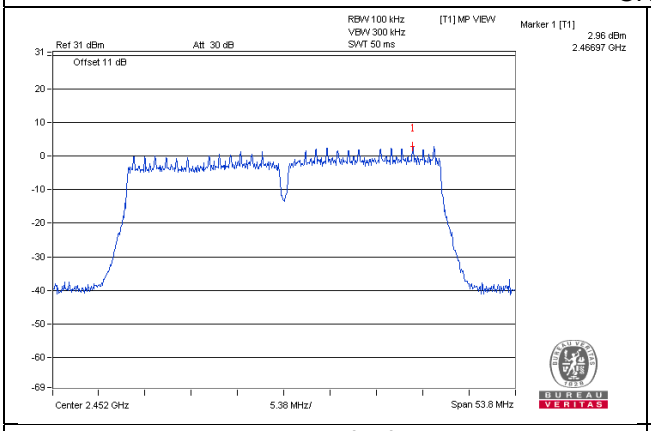


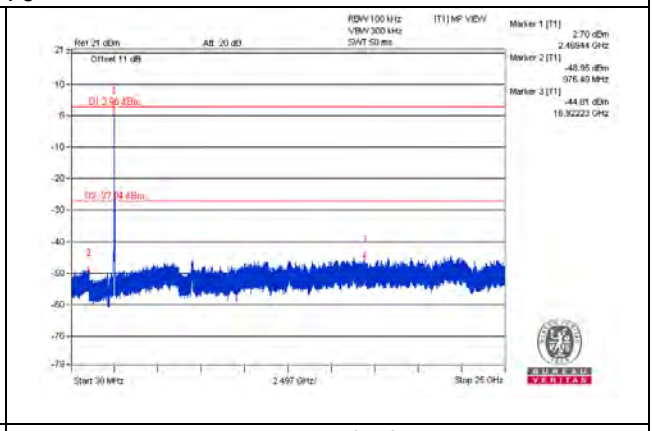
CH 6



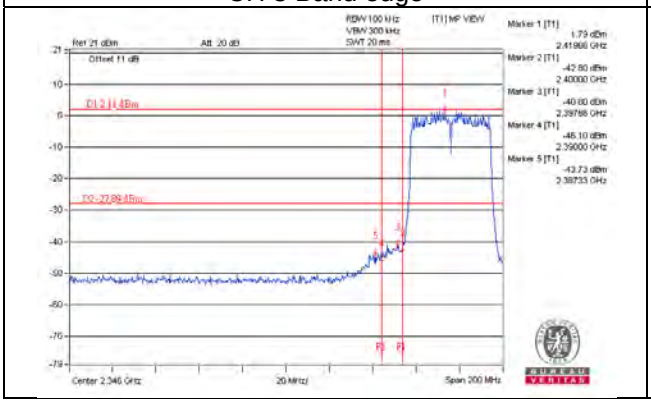


CH 9

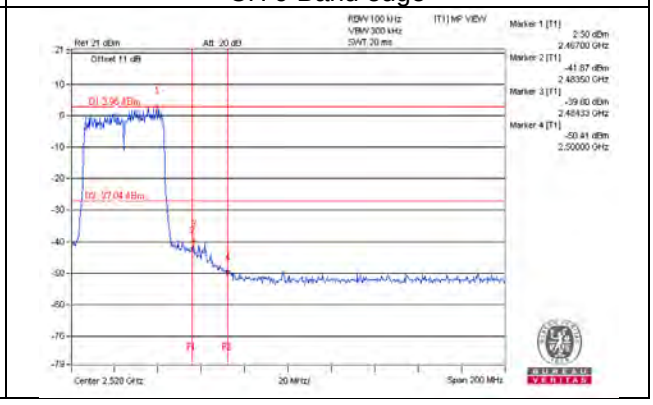




CH 3 Band edge

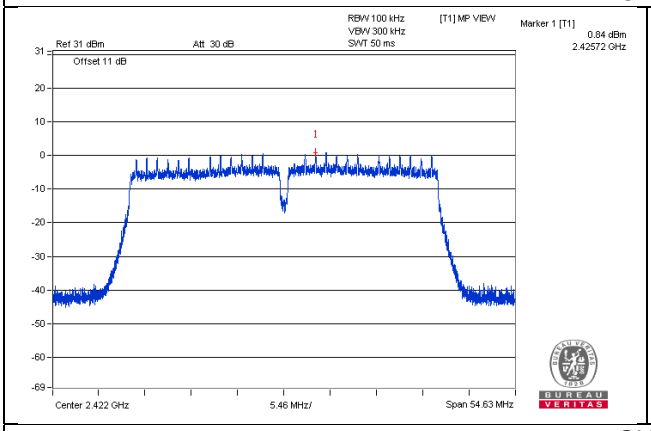


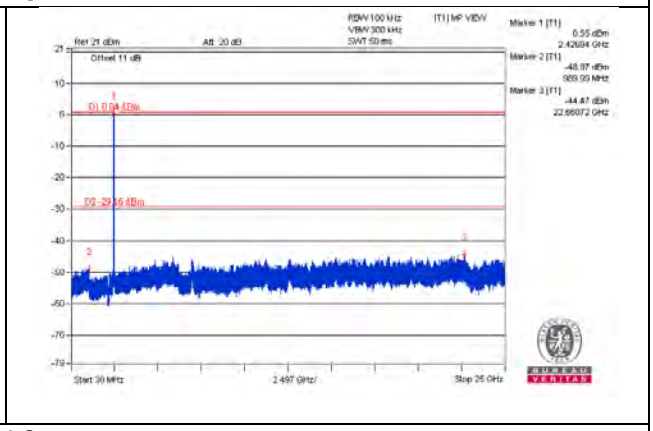
CH 9 Band edge



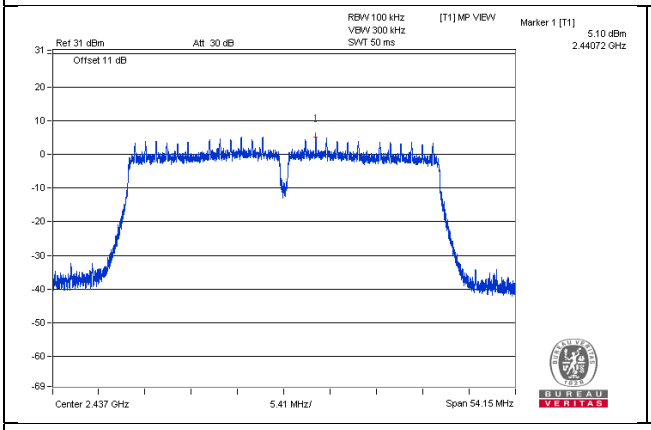
802.11n (40MHz) – 3TX:
Chain 1

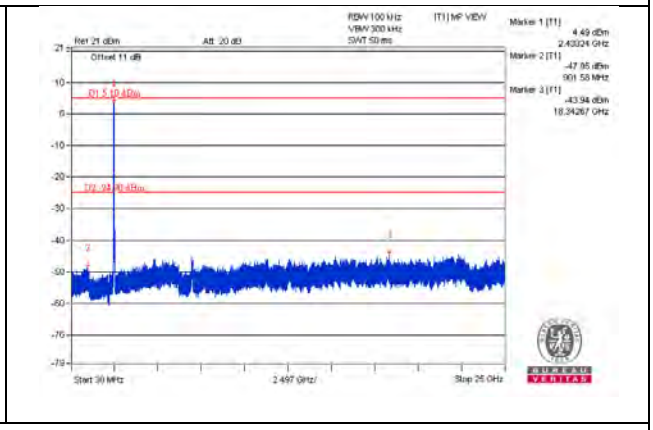
CH 3



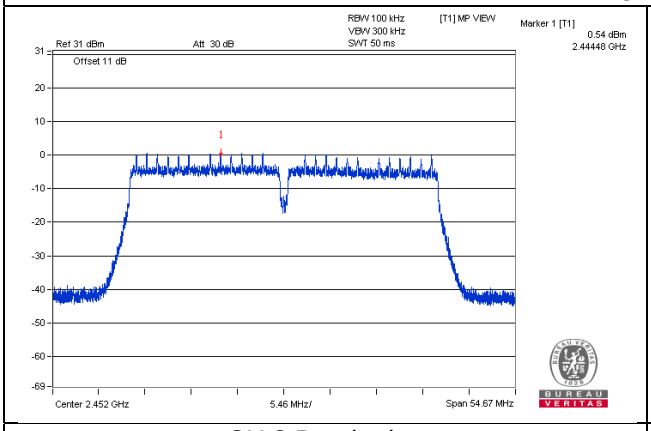


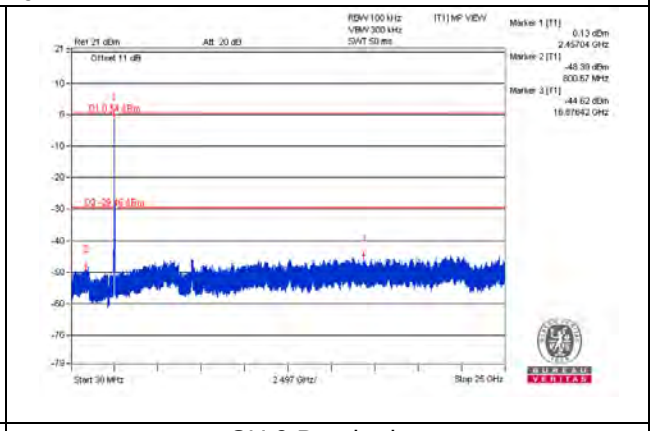
CH 6



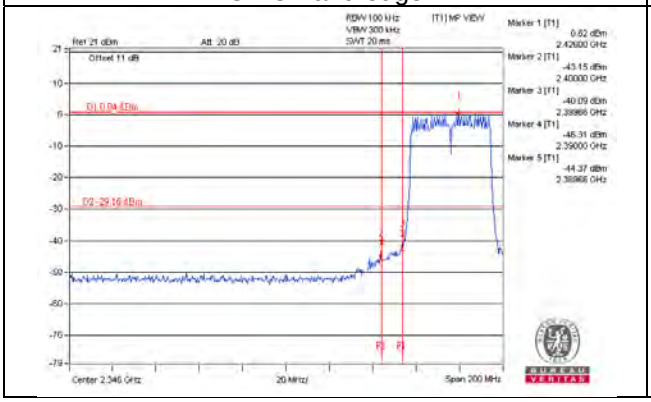


CH 9

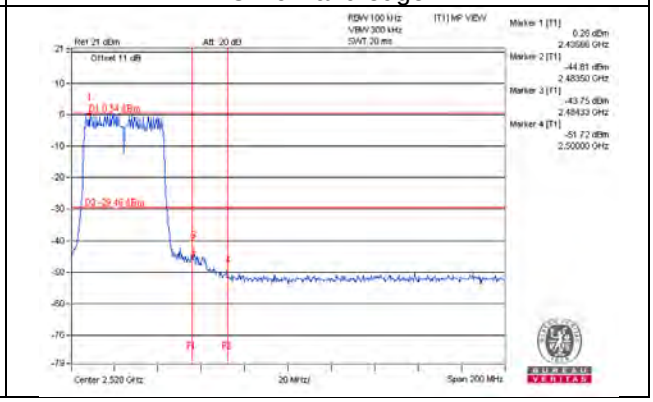




CH 3 Band edge

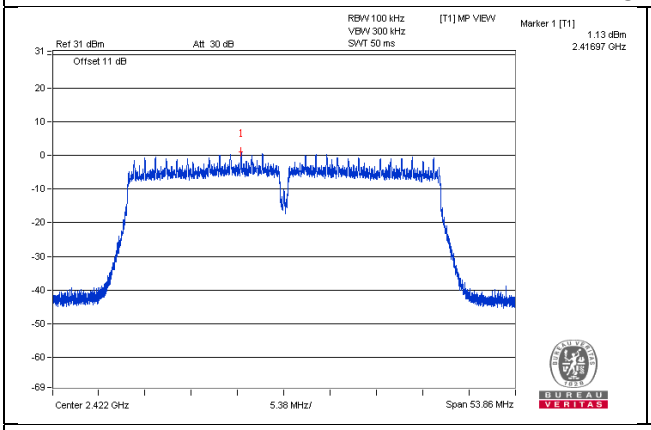


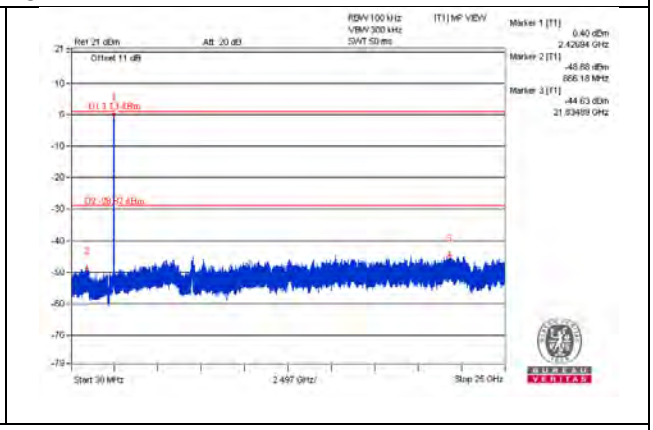
CH 9 Band edge



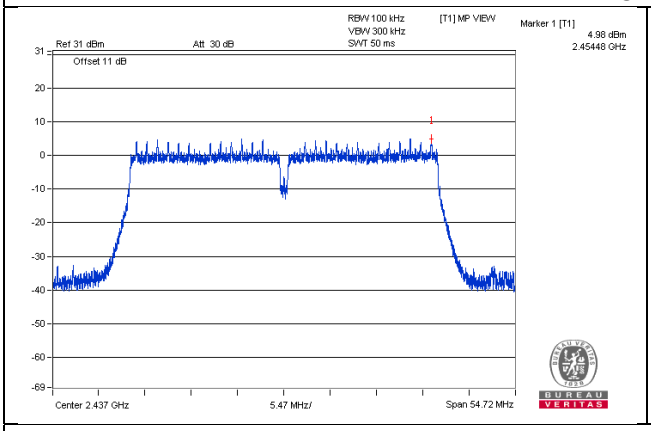
Chain 2

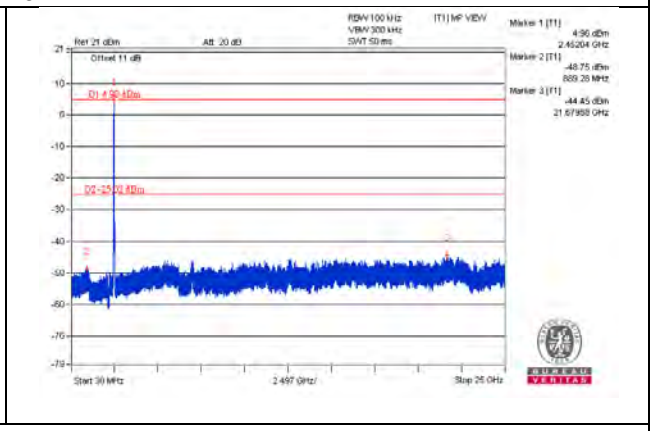
CH 3



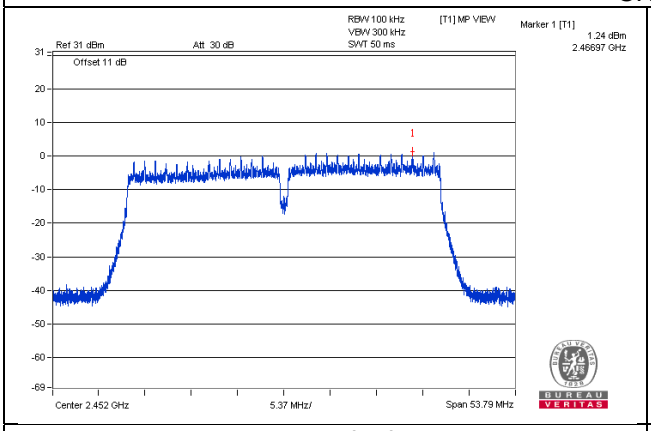


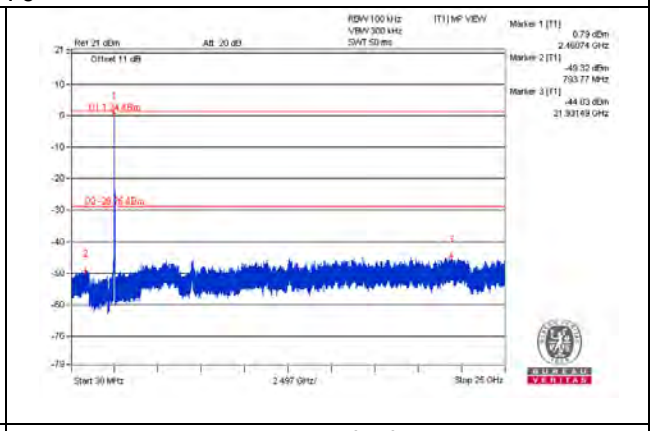
CH 6



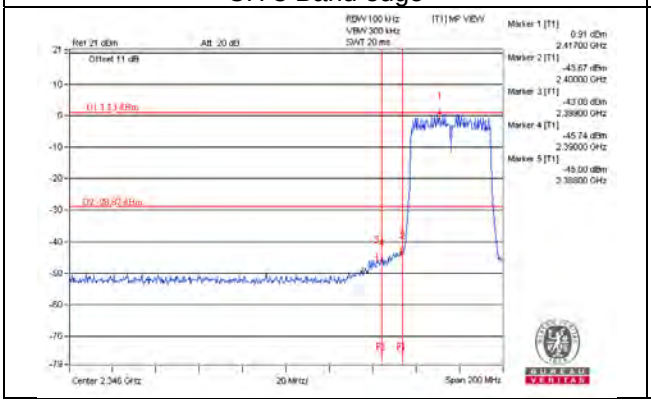


CH 9

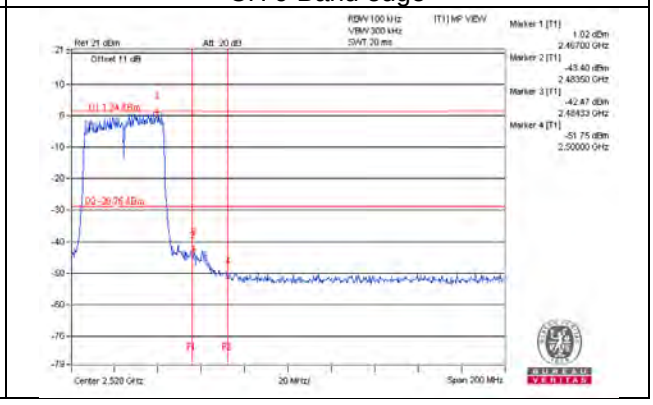




CH 3 Band edge

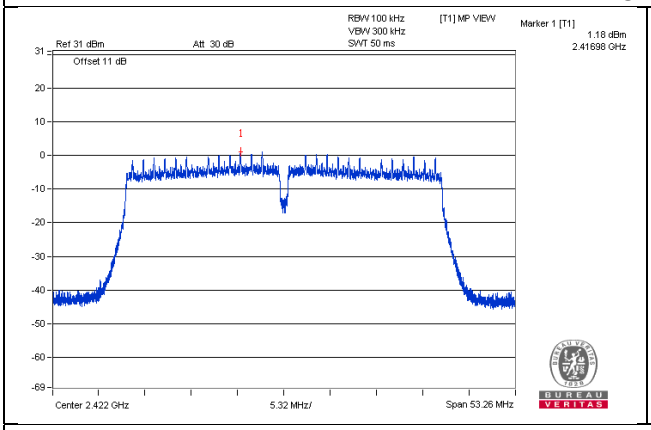


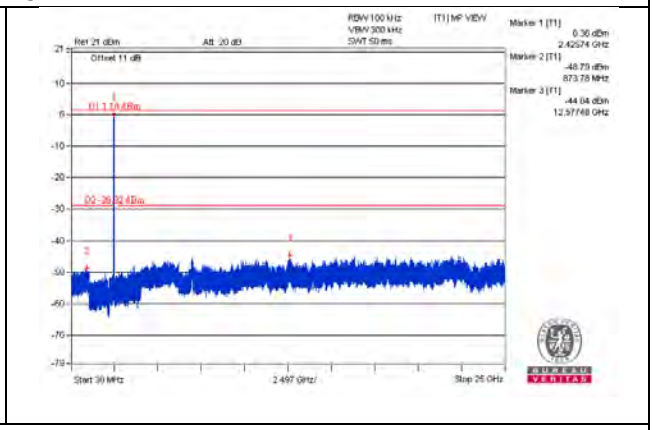
CH 9 Band edge



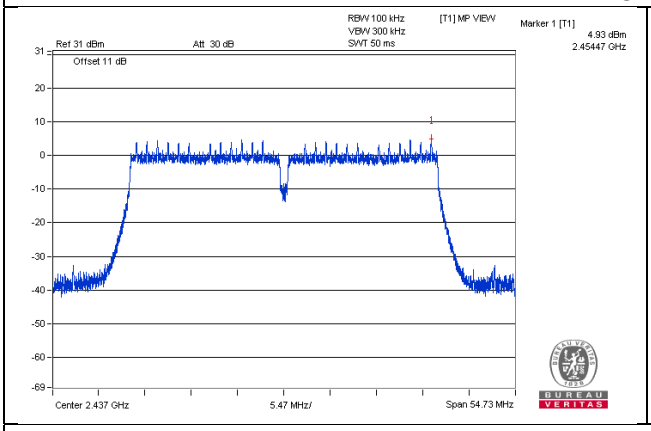
Chain 3

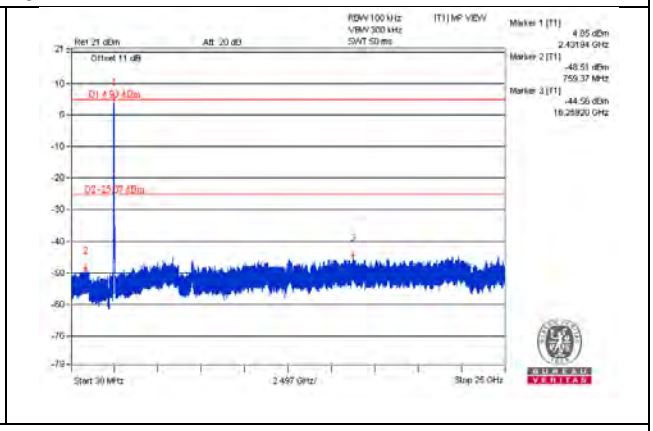
CH 3



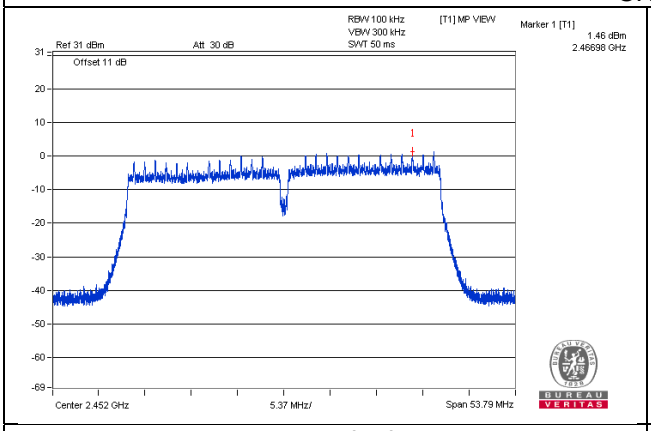


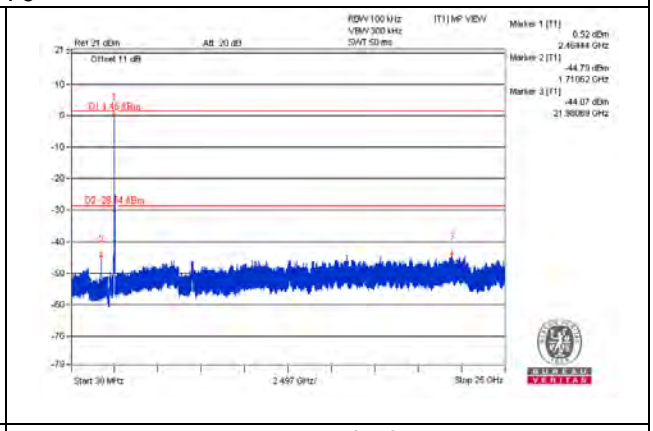
CH 6



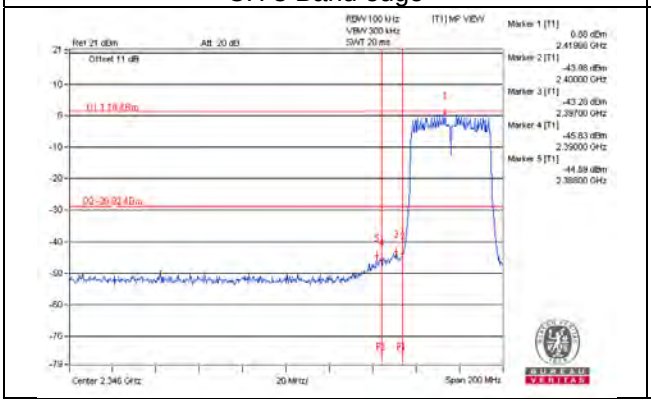


CH 9

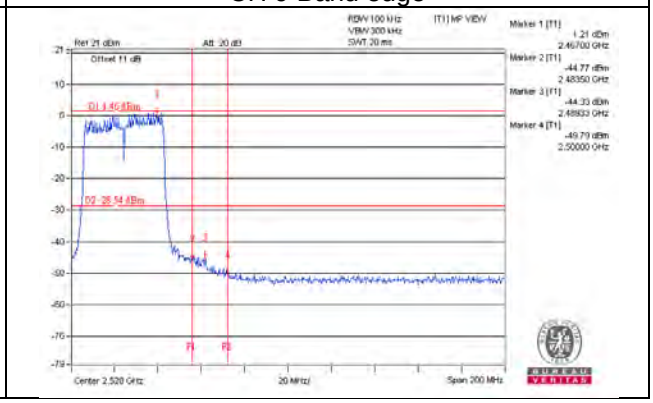




CH 3 Band edge



CH 9 Band edge



4.8 List of 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.

Appendix A. List of test command

```
 BusyBox v1.23.2 (2017-04-24 21:56:36 UTC) built-in shell (ash)

  _______                     ________        __
 |       |.-----.-----.-----.|  |  |  |.----.|  |_
 |   -   ||  _  |  -__|     ||  |  |  ||   _||   _|
 |_______||   __|_____|__|__||________||__|  |____|
  ________     __   __        __
 |_      _|.-----.-----.|   |--.-----.|__|.----.-----.|   |.-----.----.
   |    |  |  -__|   __||       |     ||  ||   __|   _  ||  ||  _  |    _|
   |____|  |_____|_____||__|__|__|__||__||_____|______||__||_____|__|
                N E X T   G E N E R A T I O N   G A T E W A Y
 ---------------------------------------------------------------
  NG GATEWAY SIGNATURE DRINK
 ---------------------------------------------------------------
  * 1 oz Vodka          Pour all ingredients into mixing
  * 1 oz Triple Sec     tin with ice, strain into glass.
  * 1 oz Orange juice
 ---------------------------------------------------------------

 Product: vbnt-m
 Release: Mint (17.2)
 Version: 17.2.0122-1770000-20170424222339-eae8bcbc942043d031a784982206145b2b28d343


  Demo build, unofficial Technicolor SW, not suitable for deployment!


 Hash config:      eae8bcbc942043d031a784982206145b2b28d343
 Hash openwrt:     8402e8cc80fa5485f491223daeeea15a574b599c
 Hash kernel:      a003e07de67f8851ad6c6d0bf366e779f3d3eec9
 Hash packages:    b4496bc3951a5dcfda11461c3750265a1b10826a
 Hash technicolor: f4113313e6b62867872b431a91f183a78294459a
 Hash routing:     04c6697034fc47fdc757bc7897ffb76f8501d138
 Hash lte:         48f959e1854b70c92fb492a3a84da8648d6274c9
 Hash custo:       69c18b09ccd3efe34c9780aeed25957795cd3819
 Hash mindspeed:   cd5df6841bf54c8c1d7e716ce22d0afa2fef66e5

 Bootloader: 16.38.1033-0000000-20160922132632-a09a1887a162da40abded48a89058b1332fc389e
 ==========================================================================
 root@OpenWrt:~# uci show wireless |grep country
 wireless.radio_2G.country='US'
 wireless.radio_5G.country='US'
 ==========================================================================
 root@OpenWrt:~# wl -i wl0 txcore
 txcore enabled bitmap (Nsts {4..1}) 0x00 0x07 0x05 0x01
 txcore mask OFDM 0x01   CCK 0x01
 ==========================================================================
 root@OpenWrt:~# wl -i wl0 ver
 7.14 RC89.14
 wl0: Apr 14 2017 12:57:25 version 7.14.89.14 (r) FWID 01-ee6f4c2a
 GIT_f274aed1a556bd0d16de73285be7ad94a5747670(7.14.89.14.cpe4.16L03.0-kdb)
 ==========================================================================
 root@OpenWrt:~# wireless_caldata.sh -c dump radio_id=0
 ERIP Data:
 00->0F: FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF
 10->1F: FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF
 20->2F: FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF
 30->3F: FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF
 40->4F: FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF
 50->5F: FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF
 60->6F: FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF
 70->7F: FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF
```

80->8F: FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF
90->9F: FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF
A0->AF: FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF
B0->BF: FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF
C0->CF: FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF
D0->DF: FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF
E0->EF: FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF
F0->FF: FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF

Locked: no
==
root@OpenWrt:~# wl -i wl0 nvram_dump
aa2g=7
aa5g=7
aga0=67
aga1=0
aga2=0
devid=0x43bb
ccode=
agbg0=3
agbg1=194
agbg2=0
sar2g=255
sar5g=255
subvid=0x14e4
regrev=0
pa2ga0=0xff2d,0x1c28,0xfc99
pa5ga0=0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff
pa2ga1=0xff31,0x1bec,0xfca4
pa5ga1=0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff
pa2ga2=0xff29,0x1bcd,0xfc9d
pa5ga2=0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff
wlunit=0
sromrev=11
macaddr=10:13:31:15:CB:FF
txchain=7
rxchain=7
femctrl=3
rpcal2g=57845
boardrev=0x1102
boardnum=0
pdgain2g=21
pdgain5g=14
xtalfreq=65535
maxp2ga0=109
maxp5ga0=255,255,255,255
maxp2ga1=109
maxp5ga1=255,255,255,255
maxp2ga2=109
maxp5ga2=255,255,255,255
watchdog=70000
boardrev=0x10
boardtype=0x6f7
antswitch=0
epagain2g=0
papdcap2g=0
epagain5g=0
papdcap5g=0
measpower=0x7f
tempcorrx=0x3f

pa2gccka0=0xff31,0x1bec,0xfca4
rpcal5gb0=0
rpcal5gb1=0
rpcal5gb2=0
rpcal5gb3=0
boardflags=0x1000
tempthresh=255
tempoffset=255
measpower1=0x7f
measpower2=0x7f
pa5gbw40a0=0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff
pa5gbw80a0=0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff
mcslr5glpo=0
mcslr5gmpo=0
mcslr5ghpo=0
txidxcap2g=0
txidxcap5g=0
boardflags2=0x100002
boardflags3=0x4000005
gainctrlsph=0
tssifloor2g=0x3ff
tssifloor5g=0x3ff,0x3ff,0x3ff,0x3ff
cckbw202gpo=4113
mcsbw202gpo=2289386837
mcsbw402gpo=3379909973
rawtempsense=0x1ff
pa5gbw4080a1=0xffff,0xffff,0x0,0x0,0xff6d,0xff29,0x1bcd,0xfc9d,0xffff,0xb3bc,0xffff,0xffff
temps_period=15
subband5gver=0x4
paparambwver=0
pa5gbw4080a0=0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff,0xffff
mcsbw205glpo=0
mcsbw405glpo=0
mcsbw805glpo=0
mcsbw205gmpo=0
mcsbw405gmpo=0
mcsbw805gmpo=0
mcsbw205ghpo=0
mcsbw405ghpo=0
mcsbw805ghpo=0
sb20in40hrpo=0
sb20in40lrpo=0
noiselvl2ga0=31
noiselvl2ga1=31
noiselvl2ga2=31
noiselvl5ga0=31,31,31,31
noiselvl5ga1=31,31,31,31
noiselvl5ga2=31,31,31,31
pdoffset40ma0=0
pdoffset40ma1=0
pdoffset40ma2=0
pdoffset80ma0=0
pdoffset80ma1=0
pdoffset80ma2=0
cckbw20ul2gpo=4113
eu_edthresh2g=255
eu_edthresh5g=255
rxgainerr2ga0=63
rxgainerr2ga1=31
rxgainerr2ga2=31

rxgainerr5ga0=63,63,63,63
rxgainerr5ga1=31,31,31,31
rxgainerr5ga2=31,31,31,31
tssiposslope2g=1
tworangetssi2g=0
tssiposslope5g=1
tworangetssi5g=0
ofdmlrbw202gpo=85
dot11agduphrpo=0
dot11agduplrpo=0
pdoffsetcckma0=0
pdoffsetcckma1=0
pdoffsetcckma2=0
tempsense_slope=0xff
pdoffset2g40ma0=15
pdoffset2g40ma1=15
pdoffset2g40ma2=15
tempsense_option=0x3
phycal_tempdelta=255
temps_hysteresis=15
pdoffset2g40mvalid=1
dot11agofdmhrbw202gpo=34405
sb20in80and160hr5glpo=0
sb40and80hr5glpo=0
sb20in80and160hr5gmpo=0
sb40and80hr5gmpo=0
sb20in80and160hr5ghpo=0
sb40and80hr5ghpo=0
sb20in80and160lr5glpo=0
sb40and80lr5glpo=0
sb20in80and160lr5gmpo=0
sb40and80lr5gmpo=0
sb20in80and160lr5ghpo=0
sb40and80lr5ghpo=0
rxgains5gmelnagaina0=7
rxgains5gmtrisoa0=15
rxgains5gmtrelnabypa0=1
rxgains5ghelnagaina0=7
rxgains5ghtrisoa0=15
rxgains5ghtrelnabypa0=1
rxgains2gelnagaina0=4
rxgains2gtrisoa0=7
rxgains2gtrelnabypa0=1
rxgains5gelnagaina0=3
rxgains5gtrisoa0=6
rxgains5gtrelnabypa0=1
rxgains5gmelnagaina1=7
rxgains5gmtrisoa1=15
rxgains5gmtrelnabypa1=1
rxgains5ghelnagaina1=7
rxgains5ghtrisoa1=15
rxgains5ghtrelnabypa1=1
rxgains2gelnagaina1=4
rxgains2gtrisoa1=7
rxgains2gtrelnabypa1=1
rxgains5gelnagaina1=3
rxgains5gtrisoa1=6
rxgains5gtrelnabypa1=1
rxgains5gmelnagaina2=7
rxgains5gmtrisoa2=15

rxgains5gmtrelnabypa2=1
rxgains5ghelnagaina2=7
rxgains5ghtrisoa2=15
rxgains5ghtrelnabypa2=1
rxgains2gelnagaina2=4
rxgains2gtrisoa2=7
rxgains2gtrelnabypa2=1
rxgains5gelnagaina2=3
rxgains5gtrisoa2=6
rxgains5gtrelnabypa2=1
==========

==========
======= SDM 802.11n 20MHz CH1 ========
==========
Power Control: On, HW
Current Channel: 1
BSS Channel: (null)
BSS Local Max: 30.0 dBm
BSS Local Constraint: 0.0 dB
Channel Width: 20MHz
User Target: 31.75 dBm
SROM Antgain 2G: 3.0 dB / 0.0 dB
SROM Antgain 5G: 0.0 dB / 0.0 dB
SAR: -
Open loop: Off
Current rate: [MCS16] ht mcs 16 Tx Exp 0 BW 20

Power Adjust: abs 0.0 dB (disabled)

NOTE: Regulatory Limits, board limits and target power are for core 0
Use "wl curpower_display_core" to select another one
NOTE: Regulatory limit is conducted -> Antenna gain is ignored

Regulatory Limits:

Rate	Chains	20MHz
DSSS	1	25.00
OFDM	1	19.75
MCS0_7	1	19.75
VHT8_9SS1	1	19.75
DSSS_MULTI1	2	-
OFDM_CDD1	2	19.75
MCS0_7_CDD1	2	19.75
VHT8_9SS1_CDD1	2	19.75
MCS0_7_STBC	2	19.75
VHT8_9SS1_STBC	2	19.75
MCS8_15	2	19.75
VHT8_9SS2	2	19.75
DSSS_MULTI2	3	-
OFDM_CDD2	3	17.25
MCS0_7_CDD2	3	17.25
VHT8_9SS1_CDD2	3	17.25
MCS0_7_STBC_SPEXP1	3	17.25
VHT8_9SS1_STBC_SPEXP1	3	17.25
MCS8_15_SPEXP1	3	17.25
VHT8_9SS2_SPEXP1	3	17.25
MCS16_23	3	17.25
VHT8_9SS3	3	17.25
OFDM_TXBF1	2	-
MCS0_7_TXBF1	2	-

VHT8_9SS1_TXBF1	2	-
MCS8_15_TXBF0	2	-
OFDM_TXBF2	3	-
MCS0_7_TXBF2	3	-
VHT8_9SS1_TXBF2	3	-
MCS8_15_TXBF1	3	-
VHT8_9SS2_TXBF1	3	-
MCS16_23_TXBF0	3	-

Core Index: 0
Board Limits:

Rate	Chains	20MHz
DSSS1	1	26.75
DSSS2	1	26.75
DSSS5	1	27.25
DSSS11	1	26.75
OFDM6	1	24.75
OFDM9	1	24.75
OFDM12	1	24.75
OFDM18	1	24.75
OFDM24	1	24.75
OFDM36	1	24.25
OFDM48	1	24.25
OFDM54	1	23.25
MCS0	1	24.75
MCS1	1	24.75
MCS2	1	24.75
MCS3	1	24.75
MCS4	1	24.75
MCS5	1	25.25
MCS6	1	24.75
MCS7	1	23.75
VHT8_9SS1	1	23.25
DSSS1_MULTI1	2	26.75
DSSS2_MULTI1	2	26.75
DSSS5_MULTI1	2	27.25
DSSS11_MULTI1	2	26.75
OFDM6_CDD1	2	24.75
OFDM9_CDD1	2	24.75
OFDM12_CDD1	2	24.75
OFDM18_CDD1	2	24.75
OFDM24_CDD1	2	24.75
OFDM36_CDD1	2	24.25
OFDM48_CDD1	2	24.25
OFDM54_CDD1	2	23.25
MCS0_CDD1	2	24.75
MCS1_CDD1	2	24.75
MCS2_CDD1	2	24.75
MCS3_CDD1	2	24.75
MCS4_CDD1	2	24.75
MCS5_CDD1	2	25.25
MCS6_CDD1	2	24.75
MCS7_CDD1	2	23.75
VHT8_9SS1_CDD1	2	23.25
MCS0_STBC	2	24.75
MCS1_STBC	2	24.75
MCS2_STBC	2	24.75
MCS3_STBC	2	24.75
MCS4_STBC	2	24.75
MCS5_STBC	2	25.25

MCS6_STBC	2	24.75
MCS7_STBC	2	23.75
VHT8_9SS1_STBC	2	23.25
MCS8	2	24.75
MCS9	2	24.75
MCS10	2	24.75
MCS11	2	24.75
MCS12	2	24.75
MCS13	2	25.25
MCS14	2	24.75
MCS15	2	23.75
VHT8_9SS2	2	23.25
DSSS1_MULTI2	3	26.75
DSSS2_MULTI2	3	26.75
DSSS5_MULTI2	3	27.25
DSSS11_MULTI2	3	26.75
OFDM6_CDD2	3	24.75
OFDM9_CDD2	3	24.75
OFDM12_CDD2	3	24.75
OFDM18_CDD2	3	24.75
OFDM24_CDD2	3	24.75
OFDM36_CDD2	3	24.25
OFDM48_CDD2	3	24.25
OFDM54_CDD2	3	23.25
MCS0_CDD2	3	24.75
MCS1_CDD2	3	24.75
MCS2_CDD2	3	24.75
MCS3_CDD2	3	24.75
MCS4_CDD2	3	24.75
MCS5_CDD2	3	25.25
MCS6_CDD2	3	24.75
MCS7_CDD2	3	23.75
VHT8_9SS1_CDD2	3	23.25
MCS0_STBC_SPEXP1	3	24.75
MCS1_STBC_SPEXP1	3	24.75
MCS2_STBC_SPEXP1	3	24.75
MCS3_STBC_SPEXP1	3	24.75
MCS4_STBC_SPEXP1	3	24.75
MCS5_STBC_SPEXP1	3	25.25
MCS6_STBC_SPEXP1	3	24.75
MCS7_STBC_SPEXP1	3	23.75
VHT8_9SS1_STBC_SPEXP1	3	23.25
MCS8_SPEXP1	3	24.75
MCS9_SPEXP1	3	24.75
MCS10_SPEXP1	3	24.75
MCS11_SPEXP1	3	24.75
MCS12_SPEXP1	3	24.75
MCS13_SPEXP1	3	25.25
MCS14_SPEXP1	3	24.75
MCS15_SPEXP1	3	23.75
VHT8_9SS2_SPEXP1	3	23.25
MCS16	3	24.75
MCS17	3	24.75
MCS18	3	24.75
MCS19	3	24.75
MCS20	3	24.75
MCS21	3	25.25
MCS22	3	24.75
MCS23	3	23.75
VHT8_9SS3	3	23.25

OFDM6_TXBF1	2	24.75
OFDM9_TXBF1	2	24.75
OFDM12_TXBF1	2	24.75
OFDM18_TXBF1	2	24.75
OFDM24_TXBF1	2	24.75
OFDM36_TXBF1	2	24.25
OFDM48_TXBF1	2	24.25
OFDM54_TXBF1	2	23.25
MCS0_TXBF1	2	24.75
MCS1_TXBF1	2	24.75
MCS2_TXBF1	2	24.75
MCS3_TXBF1	2	24.75
MCS4_TXBF1	2	24.75
MCS5_TXBF1	2	25.25
MCS6_TXBF1	2	24.75
MCS7_TXBF1	2	23.75
VHT8_9SS1_TXBF1	2	23.25
MCS8_TXBF0	2	24.75
MCS9_TXBF0	2	24.75
MCS10_TXBF0	2	24.75
MCS11_TXBF0	2	24.75
MCS12_TXBF0	2	24.75
MCS13_TXBF0	2	25.25
MCS14_TXBF0	2	24.75
MCS15_TXBF0	2	23.75
OFDM6_TXBF2	3	24.75
OFDM9_TXBF2	3	24.75
OFDM12_TXBF2	3	24.75
OFDM18_TXBF2	3	24.75
OFDM24_TXBF2	3	24.75
OFDM36_TXBF2	3	24.25
OFDM48_TXBF2	3	24.25
OFDM54_TXBF2	3	23.25
MCS0_TXBF2	3	24.75
MCS1_TXBF2	3	24.75
MCS2_TXBF2	3	24.75
MCS3_TXBF2	3	24.75
MCS4_TXBF2	3	24.75
MCS5_TXBF2	3	25.25
MCS6_TXBF2	3	24.75
MCS7_TXBF2	3	23.75
VHT8_9SS1_TXBF2	3	23.25
MCS8_TXBF1	3	24.75
MCS9_TXBF1	3	24.75
MCS10_TXBF1	3	24.75
MCS11_TXBF1	3	24.75
MCS12_TXBF1	3	24.75
MCS13_TXBF1	3	25.25
MCS14_TXBF1	3	24.75
MCS15_TXBF1	3	23.75
VHT8_9SS2_TXBF1	3	23.25
MCS16_TXBF0	3	24.75
MCS17_TXBF0	3	24.75
MCS18_TXBF0	3	24.75
MCS19_TXBF0	3	24.75
MCS20_TXBF0	3	24.75
MCS21_TXBF0	3	25.25
MCS22_TXBF0	3	24.75
MCS23_TXBF0	3	23.75

Power Targets:

Rate	Chains	20MHz
DSSS	1	23.50
OFDM	1	18.25
MCS0_7	1	18.25
VHT8_9SS1	1	18.25
DSSS_MULTI1	2	-
OFDM_CDD1	2	18.25
MCS0_7_CDD1	2	18.25
VHT8_9SS1_CDD1	2	18.25
MCS0_7_STBC	2	18.25
VHT8_9SS1_STBC	2	18.25
MCS8_15	2	18.25
VHT8_9SS2	2	18.25
DSSS_MULTI2	3	-
OFDM_CDD2	3	15.75
MCS0_7_CDD2	3	15.75
VHT8_9SS1_CDD2	3	15.75
MCS0_7_STBC_SPEXP1	3	15.75
VHT8_9SS1_STBC_SPEXP1	3	15.75
MCS8_15_SPEXP1	3	15.75
VHT8_9SS2_SPEXP1	3	15.75
MCS16_23	3	15.75
VHT8_9SS3	3	15.75
OFDM_TXBF1	2	-
MCS0_7_TXBF1	2	-
VHT8_9SS1_TXBF1	2	-
MCS8_15_TXBF0	2	-
OFDM_TXBF2	3	-
MCS0_7_TXBF2	3	-
VHT8_9SS1_TXBF2	3	-
MCS8_15_TXBF1	3	-
VHT8_9SS2_TXBF1	3	-
MCS16_23_TXBF0	3	-

Maximum Power Target among all rates: 23.50 23.50 23.50
Last est. power : 16.00 16.00 16.00
Power Target for the current rate : 16.00 16.00 16.00
Last adjusted est. power : 23.50 23.50 23.50

==========
======= SDM 802.11n 20MHz CH6 ========
==========
Power Control: On, HW
Current Channel: 6
BSS Channel: (null)
BSS Local Max: 30.0 dBm
BSS Local Constraint: 0.0 dB
Channel Width: 20MHz
User Target: 31.75 dBm
SROM Antgain 2G: 3.0 dB / 0.0 dB
SROM Antgain 5G: 0.0 dB / 0.0 dB
SAR: -
Open loop: Off
Current rate: [MCS16] ht mcs 16 Tx Exp 0 BW 20

Power Adjust: abs 0.0 dB (disabled)

NOTE: Regulatory Limits, board limits and target power are for core 0

Use "wl curpower_display_core" to select another one
NOTE: Regulatory limit is conducted -> Antenna gain is ignored

Regulatory Limits:

Rate	Chains	20MHz
DSSS	1	25.00
OFDM	1	27.00
MCS0_7	1	27.00
VHT8_9SS1	1	27.00
DSSS_MULTI1	2	-
OFDM_CDD1	2	27.00
MCS0_7_CDD1	2	27.00
VHT8_9SS1_CDD1	2	27.00
MCS0_7_STBC	2	27.00
VHT8_9SS1_STBC	2	27.00
MCS8_15	2	27.00
VHT8_9SS2	2	27.00
DSSS_MULTI2	3	-
OFDM_CDD2	3	24.75
MCS0_7_CDD2	3	24.75
VHT8_9SS1_CDD2	3	24.75
MCS0_7_STBC_SPEXP1	3	24.75
VHT8_9SS1_STBC_SPEXP1	3	24.75
MCS8_15_SPEXP1	3	24.75
VHT8_9SS2_SPEXP1	3	24.75
MCS16_23	3	24.75
VHT8_9SS3	3	24.75
OFDM_TXBF1	2	-
MCS0_7_TXBF1	2	-
VHT8_9SS1_TXBF1	2	-
MCS8_15_TXBF0	2	-
OFDM_TXBF2	3	-
MCS0_7_TXBF2	3	-
VHT8_9SS1_TXBF2	3	-
MCS8_15_TXBF1	3	-
VHT8_9SS2_TXBF1	3	-
MCS16_23_TXBF0	3	-

Core Index: 0
Board Limits:

Rate	Chains	20MHz
DSSS1	1	26.75
DSSS2	1	26.75
DSSS5	1	27.25
DSSS11	1	26.75
OFDM6	1	24.75
OFDM9	1	24.75
OFDM12	1	24.75
OFDM18	1	24.75
OFDM24	1	24.75
OFDM36	1	24.25
OFDM48	1	24.25
OFDM54	1	23.25
MCS0	1	24.75
MCS1	1	24.75
MCS2	1	24.75
MCS3	1	24.75
MCS4	1	24.75
MCS5	1	25.25
MCS6	1	24.75

MCS7	1	23.75
VHT8_9SS1	1	23.25
DSSS1_MULTI1	2	26.75
DSSS2_MULTI1	2	26.75
DSSS5_MULTI1	2	27.25
DSSS11_MULTI1	2	26.75
OFDM6_CDD1	2	24.75
OFDM9_CDD1	2	24.75
OFDM12_CDD1	2	24.75
OFDM18_CDD1	2	24.75
OFDM24_CDD1	2	24.75
OFDM36_CDD1	2	24.25
OFDM48_CDD1	2	24.25
OFDM54_CDD1	2	23.25
MCS0_CDD1	2	24.75
MCS1_CDD1	2	24.75
MCS2_CDD1	2	24.75
MCS3_CDD1	2	24.75
MCS4_CDD1	2	24.75
MCS5_CDD1	2	25.25
MCS6_CDD1	2	24.75
MCS7_CDD1	2	23.75
VHT8_9SS1_CDD1	2	23.25
MCS0_STBC	2	24.75
MCS1_STBC	2	24.75
MCS2_STBC	2	24.75
MCS3_STBC	2	24.75
MCS4_STBC	2	24.75
MCS5_STBC	2	25.25
MCS6_STBC	2	24.75
MCS7_STBC	2	23.75
VHT8_9SS1_STBC	2	23.25
MCS8	2	24.75
MCS9	2	24.75
MCS10	2	24.75
MCS11	2	24.75
MCS12	2	24.75
MCS13	2	25.25
MCS14	2	24.75
MCS15	2	23.75
VHT8_9SS2	2	23.25
DSSS1_MULTI2	3	26.75
DSSS2_MULTI2	3	26.75
DSSS5_MULTI2	3	27.25
DSSS11_MULTI2	3	26.75
OFDM6_CDD2	3	24.75
OFDM9_CDD2	3	24.75
OFDM12_CDD2	3	24.75
OFDM18_CDD2	3	24.75
OFDM24_CDD2	3	24.75
OFDM36_CDD2	3	24.25
OFDM48_CDD2	3	24.25
OFDM54_CDD2	3	23.25
MCS0_CDD2	3	24.75
MCS1_CDD2	3	24.75
MCS2_CDD2	3	24.75
MCS3_CDD2	3	24.75
MCS4_CDD2	3	24.75
MCS5_CDD2	3	25.25
MCS6_CDD2	3	24.75

MCS7_CDD2	3	23.75
VHT8_9SS1_CDD2	3	23.25
MCS0_STBC_SPEXP1	3	24.75
MCS1_STBC_SPEXP1	3	24.75
MCS2_STBC_SPEXP1	3	24.75
MCS3_STBC_SPEXP1	3	24.75
MCS4_STBC_SPEXP1	3	24.75
MCS5_STBC_SPEXP1	3	25.25
MCS6_STBC_SPEXP1	3	24.75
MCS7_STBC_SPEXP1	3	23.75
VHT8_9SS1_STBC_SPEXP1	3	23.25
MCS8_SPEXP1	3	24.75
MCS9_SPEXP1	3	24.75
MCS10_SPEXP1	3	24.75
MCS11_SPEXP1	3	24.75
MCS12_SPEXP1	3	24.75
MCS13_SPEXP1	3	25.25
MCS14_SPEXP1	3	24.75
MCS15_SPEXP1	3	23.75
VHT8_9SS2_SPEXP1	3	23.25
MCS16	3	24.75
MCS17	3	24.75
MCS18	3	24.75
MCS19	3	24.75
MCS20	3	24.75
MCS21	3	25.25
MCS22	3	24.75
MCS23	3	23.75
VHT8_9SS3	3	23.25
OFDM6_TXBF1	2	24.75
OFDM9_TXBF1	2	24.75
OFDM12_TXBF1	2	24.75
OFDM18_TXBF1	2	24.75
OFDM24_TXBF1	2	24.75
OFDM36_TXBF1	2	24.25
OFDM48_TXBF1	2	24.25
OFDM54_TXBF1	2	23.25
MCS0_TXBF1	2	24.75
MCS1_TXBF1	2	24.75
MCS2_TXBF1	2	24.75
MCS3_TXBF1	2	24.75
MCS4_TXBF1	2	24.75
MCS5_TXBF1	2	25.25
MCS6_TXBF1	2	24.75
MCS7_TXBF1	2	23.75
VHT8_9SS1_TXBF1	2	23.25
MCS8_TXBF0	2	24.75
MCS9_TXBF0	2	24.75
MCS10_TXBF0	2	24.75
MCS11_TXBF0	2	24.75
MCS12_TXBF0	2	24.75
MCS13_TXBF0	2	25.25
MCS14_TXBF0	2	24.75
MCS15_TXBF0	2	23.75
OFDM6_TXBF2	3	24.75
OFDM9_TXBF2	3	24.75
OFDM12_TXBF2	3	24.75
OFDM18_TXBF2	3	24.75
OFDM24_TXBF2	3	24.75
OFDM36_TXBF2	3	24.25

OFDM48_TXBF2	3	24.25
OFDM54_TXBF2	3	23.25
MCS0_TXBF2	3	24.75
MCS1_TXBF2	3	24.75
MCS2_TXBF2	3	24.75
MCS3_TXBF2	3	24.75
MCS4_TXBF2	3	24.75
MCS5_TXBF2	3	25.25
MCS6_TXBF2	3	24.75
MCS7_TXBF2	3	23.75
VHT8_9SS1_TXBF2	3	23.25
MCS8_TXBF1	3	24.75
MCS9_TXBF1	3	24.75
MCS10_TXBF1	3	24.75
MCS11_TXBF1	3	24.75
MCS12_TXBF1	3	24.75
MCS13_TXBF1	3	25.25
MCS14_TXBF1	3	24.75
MCS15_TXBF1	3	23.75
VHT8_9SS2_TXBF1	3	23.25
MCS16_TXBF0	3	24.75
MCS17_TXBF0	3	24.75
MCS18_TXBF0	3	24.75
MCS19_TXBF0	3	24.75
MCS20_TXBF0	3	24.75
MCS21_TXBF0	3	25.25
MCS22_TXBF0	3	24.75
MCS23_TXBF0	3	23.75

Power Targets:

Rate	Chains	20MHz
DSSS	1	23.50
OFDM6	1	23.25
OFDM9	1	23.25
OFDM12	1	23.25
OFDM18	1	23.25
OFDM24	1	23.25
OFDM36	1	22.75
OFDM48	1	22.75
OFDM54	1	21.75
MCS0	1	23.25
MCS1	1	23.25
MCS2	1	23.25
MCS3	1	23.25
MCS4	1	23.25
MCS5	1	23.75
MCS6	1	23.25
MCS7	1	22.25
VHT8_9SS1	1	21.75
DSSS_MULTI1	2	-
OFDM6_CDD1	2	23.25
OFDM9_CDD1	2	23.25
OFDM12_CDD1	2	23.25
OFDM18_CDD1	2	23.25
OFDM24_CDD1	2	23.25
OFDM36_CDD1	2	22.75
OFDM48_CDD1	2	22.75
OFDM54_CDD1	2	21.75
MCS0_CDD1	2	23.25
MCS1_CDD1	2	23.25

MCS2_CDD1	2	23.25
MCS3_CDD1	2	23.25
MCS4_CDD1	2	23.25
MCS5_CDD1	2	23.75
MCS6_CDD1	2	23.25
MCS7_CDD1	2	22.25
VHT8_9SS1_CDD1	2	21.75
MCS0_STBC	2	23.25
MCS1_STBC	2	23.25
MCS2_STBC	2	23.25
MCS3_STBC	2	23.25
MCS4_STBC	2	23.25
MCS5_STBC	2	23.75
MCS6_STBC	2	23.25
MCS7_STBC	2	22.25
VHT8_9SS1_STBC	2	21.75
MCS8	2	23.25
MCS9	2	23.25
MCS10	2	23.25
MCS11	2	23.25
MCS12	2	23.25
MCS13	2	23.75
MCS14	2	23.25
MCS15	2	22.25
VHT8_9SS2	2	21.75
DSSS_MULTI2	3	-
OFDM6_CDD2	3	23.25
OFDM9_CDD2	3	23.25
OFDM12_CDD2	3	23.25
OFDM18_CDD2	3	23.25
OFDM24_CDD2	3	23.25
OFDM36_CDD2	3	22.75
OFDM48_CDD2	3	22.75
OFDM54_CDD2	3	21.75
MCS0_CDD2	3	23.25
MCS1_CDD2	3	23.25
MCS2_CDD2	3	23.25
MCS3_CDD2	3	23.25
MCS4_CDD2	3	23.25
MCS5_CDD2	3	23.25
MCS6_CDD2	3	23.25
MCS7_CDD2	3	22.25
VHT8_9SS1_CDD2	3	21.75
MCS0_STBC_SPEXP1	3	23.25
MCS1_STBC_SPEXP1	3	23.25
MCS2_STBC_SPEXP1	3	23.25
MCS3_STBC_SPEXP1	3	23.25
MCS4_STBC_SPEXP1	3	23.25
MCS5_STBC_SPEXP1	3	23.25
MCS6_STBC_SPEXP1	3	23.25
MCS7_STBC_SPEXP1	3	22.25
VHT8_9SS1_STBC_SPEXP1	3	21.75
MCS8_SPEXP1	3	23.25
MCS9_SPEXP1	3	23.25
MCS10_SPEXP1	3	23.25
MCS11_SPEXP1	3	23.25
MCS12_SPEXP1	3	23.25
MCS13_SPEXP1	3	23.25
MCS14_SPEXP1	3	23.25
MCS15_SPEXP1	3	22.25

VHT8_9SS2_SPEXP1 3 21.75
MCS16 3 23.25
MCS17 3 23.25
MCS18 3 23.25
MCS19 3 23.25
MCS20 3 23.25
MCS21 3 23.25
MCS22 3 23.25
MCS23 3 22.25
VHT8_9SS3 3 21.75
OFDM_TXBF1 2 -
MCS0_7_TXBF1 2 -
VHT8_9SS1_TXBF1 2 -
MCS8_15_TXBF0 2 -
OFDM_TXBF2 3 -
MCS0_7_TXBF2 3 -
VHT8_9SS1_TXBF2 3 -
MCS8_15_TXBF1 3 -
VHT8_9SS2_TXBF1 3 -
MCS16_23_TXBF0 3 -

Maximum Power Target among all rates: 23.75 23.75 23.75
Last est. power : 23.25 23.25 23.25
Power Target for the current rate : 23.25 23.25 23.25
Last adjusted est. power : 23.75 23.75 23.75

==========
======= SDM 802.11n 20MHz CH11 =======
==========
Power Control: On, HW
Current Channel: 11
BSS Channel: (null)
BSS Local Max: 30.0 dBm
BSS Local Constraint: 0.0 dB
Channel Width: 20MHz
User Target: 31.75 dBm
SROM Antgain 2G: 3.0 dB / 0.0 dB
SROM Antgain 5G: 0.0 dB / 0.0 dB
SAR: -
Open loop: Off
Current rate: [MCS16] ht mcs 16 Tx Exp 0 BW 20

Power Adjust: abs 0.0 dB (disabled)

NOTE: Regulatory Limits, board limits and target power are for core 0
Use "wl curpower_display_core" to select another one
NOTE: Regulatory limit is conducted -> Antenna gain is ignored

Regulatory Limits:
Rate Chains 20MHz
DSSS 1 23.50
OFDM 1 20.50
MCS0_7 1 20.50
VHT8_9SS1 1 20.50
DSSS_MULTI1 2 -
OFDM_CDD1 2 19.25
MCS0_7_CDD1 2 19.25
VHT8_9SS1_CDD1 2 19.25
MCS0_7_STBC 2 19.25

VHT8_9SS1_STBC	2	19.25
MCS8_15	2	19.25
VHT8_9SS2	2	19.25
DSSS_MULTI2	3	-
OFDM_CDD2	3	18.00
MCS0_7_CDD2	3	18.00
VHT8_9SS1_CDD2	3	18.00
MCS0_7_STBC_SPEXP1	3	18.00
VHT8_9SS1_STBC_SPEXP1	3	18.00
MCS8_15_SPEXP1	3	18.00
VHT8_9SS2_SPEXP1	3	18.00
MCS16_23	3	18.00
VHT8_9SS3	3	18.00
OFDM_TXBF1	2	-
MCS0_7_TXBF1	2	-
VHT8_9SS1_TXBF1	2	-
MCS8_15_TXBF0	2	-
OFDM_TXBF2	3	-
MCS0_7_TXBF2	3	-
VHT8_9SS1_TXBF2	3	-
MCS8_15_TXBF1	3	-
VHT8_9SS2_TXBF1	3	-
MCS16_23_TXBF0	3	-

Core Index: 0

Board Limits:

Rate	Chains	20MHz
DSSS1	1	26.75
DSSS2	1	26.75
DSSS5	1	27.25
DSSS11	1	26.75
OFDM6	1	24.75
OFDM9	1	24.75
OFDM12	1	24.75
OFDM18	1	24.75
OFDM24	1	24.75
OFDM36	1	24.25
OFDM48	1	24.25
OFDM54	1	23.25
MCS0	1	24.75
MCS1	1	24.75
MCS2	1	24.75
MCS3	1	24.75
MCS4	1	24.75
MCS5	1	25.25
MCS6	1	24.75
MCS7	1	23.75
VHT8_9SS1	1	23.25
DSSS1_MULTI1	2	26.75
DSSS2_MULTI1	2	26.75
DSSS5_MULTI1	2	27.25
DSSS11_MULTI1	2	26.75
OFDM6_CDD1	2	24.75
OFDM9_CDD1	2	24.75
OFDM12_CDD1	2	24.75
OFDM18_CDD1	2	24.75
OFDM24_CDD1	2	24.75
OFDM36_CDD1	2	24.25
OFDM48_CDD1	2	24.25
OFDM54_CDD1	2	23.25

MCS0_CDD1	2	24.75
MCS1_CDD1	2	24.75
MCS2_CDD1	2	24.75
MCS3_CDD1	2	24.75
MCS4_CDD1	2	24.75
MCS5_CDD1	2	25.25
MCS6_CDD1	2	24.75
MCS7_CDD1	2	23.75
VHT8_9SS1_CDD1	2	23.25
MCS0_STBC	2	24.75
MCS1_STBC	2	24.75
MCS2_STBC	2	24.75
MCS3_STBC	2	24.75
MCS4_STBC	2	24.75
MCS5_STBC	2	25.25
MCS6_STBC	2	24.75
MCS7_STBC	2	23.75
VHT8_9SS1_STBC	2	23.25
MCS8	2	24.75
MCS9	2	24.75
MCS10	2	24.75
MCS11	2	24.75
MCS12	2	24.75
MCS13	2	25.25
MCS14	2	24.75
MCS15	2	23.75
VHT8_9SS2	2	23.25
DSSS1_MULTI2	3	26.75
DSSS2_MULTI2	3	26.75
DSSS5_MULTI2	3	27.25
DSSS11_MULTI2	3	26.75
OFDM6_CDD2	3	24.75
OFDM9_CDD2	3	24.75
OFDM12_CDD2	3	24.75
OFDM18_CDD2	3	24.75
OFDM24_CDD2	3	24.75
OFDM36_CDD2	3	24.25
OFDM48_CDD2	3	24.25
OFDM54_CDD2	3	23.25
MCS0_CDD2	3	24.75
MCS1_CDD2	3	24.75
MCS2_CDD2	3	24.75
MCS3_CDD2	3	24.75
MCS4_CDD2	3	24.75
MCS5_CDD2	3	25.25
MCS6_CDD2	3	24.75
MCS7_CDD2	3	23.75
VHT8_9SS1_CDD2	3	23.25
MCS0_STBC_SPEXP1	3	24.75
MCS1_STBC_SPEXP1	3	24.75
MCS2_STBC_SPEXP1	3	24.75
MCS3_STBC_SPEXP1	3	24.75
MCS4_STBC_SPEXP1	3	24.75
MCS5_STBC_SPEXP1	3	25.25
MCS6_STBC_SPEXP1	3	24.75
MCS7_STBC_SPEXP1	3	23.75
VHT8_9SS1_STBC_SPEXP1	3	23.25
MCS8_SPEXP1	3	24.75
MCS9_SPEXP1	3	24.75
MCS10_SPEXP1	3	24.75

MCS11_SPEXP1	3	24.75
MCS12_SPEXP1	3	24.75
MCS13_SPEXP1	3	25.25
MCS14_SPEXP1	3	24.75
MCS15_SPEXP1	3	23.75
VHT8_9SS2_SPEXP1	3	23.25
MCS16	3	24.75
MCS17	3	24.75
MCS18	3	24.75
MCS19	3	24.75
MCS20	3	24.75
MCS21	3	25.25
MCS22	3	24.75
MCS23	3	23.75
VHT8_9SS3	3	23.25
OFDM6_TXBF1	2	24.75
OFDM9_TXBF1	2	24.75
OFDM12_TXBF1	2	24.75
OFDM18_TXBF1	2	24.75
OFDM24_TXBF1	2	24.75
OFDM36_TXBF1	2	24.25
OFDM48_TXBF1	2	24.25
OFDM54_TXBF1	2	23.25
MCS0_TXBF1	2	24.75
MCS1_TXBF1	2	24.75
MCS2_TXBF1	2	24.75
MCS3_TXBF1	2	24.75
MCS4_TXBF1	2	24.75
MCS5_TXBF1	2	25.25
MCS6_TXBF1	2	24.75
MCS7_TXBF1	2	23.75
VHT8_9SS1_TXBF1	2	23.25
MCS8_TXBF0	2	24.75
MCS9_TXBF0	2	24.75
MCS10_TXBF0	2	24.75
MCS11_TXBF0	2	24.75
MCS12_TXBF0	2	24.75
MCS13_TXBF0	2	25.25
MCS14_TXBF0	2	24.75
MCS15_TXBF0	2	23.75
OFDM6_TXBF2	3	24.75
OFDM9_TXBF2	3	24.75
OFDM12_TXBF2	3	24.75
OFDM18_TXBF2	3	24.75
OFDM24_TXBF2	3	24.75
OFDM36_TXBF2	3	24.25
OFDM48_TXBF2	3	24.25
OFDM54_TXBF2	3	23.25
MCS0_TXBF2	3	24.75
MCS1_TXBF2	3	24.75
MCS2_TXBF2	3	24.75
MCS3_TXBF2	3	24.75
MCS4_TXBF2	3	24.75
MCS5_TXBF2	3	25.25
MCS6_TXBF2	3	24.75
MCS7_TXBF2	3	23.75
VHT8_9SS1_TXBF2	3	23.25
MCS8_TXBF1	3	24.75
MCS9_TXBF1	3	24.75
MCS10_TXBF1	3	24.75

MCS11_TXBF1	3	24.75
MCS12_TXBF1	3	24.75
MCS13_TXBF1	3	25.25
MCS14_TXBF1	3	24.75
MCS15_TXBF1	3	23.75
VHT8_9SS2_TXBF1	3	23.25
MCS16_TXBF0	3	24.75
MCS17_TXBF0	3	24.75
MCS18_TXBF0	3	24.75
MCS19_TXBF0	3	24.75
MCS20_TXBF0	3	24.75
MCS21_TXBF0	3	25.25
MCS22_TXBF0	3	24.75
MCS23_TXBF0	3	23.75

Power Targets:

Rate	Chains	20MHz
DSSS	1	22.00
OFDM	1	19.00
MCS0_7	1	19.00
VHT8_9SS1	1	19.00
DSSS_MULTI1	2	-
OFDM_CDD1	2	17.75
MCS0_7_CDD1	2	17.75
VHT8_9SS1_CDD1	2	17.75
MCS0_7_STBC	2	17.75
VHT8_9SS1_STBC	2	17.75
MCS8_15	2	17.75
VHT8_9SS2	2	17.75
DSSS_MULTI2	3	-
OFDM_CDD2	3	16.50
MCS0_7_CDD2	3	16.50
VHT8_9SS1_CDD2	3	16.50
MCS0_7_STBC_SPEXP1	3	16.50
VHT8_9SS1_STBC_SPEXP1	3	16.50
MCS8_15_SPEXP1	3	16.50
VHT8_9SS2_SPEXP1	3	16.50
MCS16_23	3	16.50
VHT8_9SS3	3	16.50
OFDM_TXBF1	2	-
MCS0_7_TXBF1	2	-
VHT8_9SS1_TXBF1	2	-
MCS8_15_TXBF0	2	-
OFDM_TXBF2	3	-
MCS0_7_TXBF2	3	-
VHT8_9SS1_TXBF2	3	-
MCS8_15_TXBF1	3	-
VHT8_9SS2_TXBF1	3	-
MCS16_23_TXBF0	3	-

Maximum Power Target among all rates: 22.00 22.00 22.00
Last est. power : 16.25 16.50 16.25
Power Target for the current rate : 16.50 16.50 16.50
Last adjusted est. power : 21.75 22.00 21.75

==========
======= SDM 802.11n 40MHz CH3 ========
==========
Power Control: On, HW

Current Channel: 1l
BSS Channel: (null)
BSS Local Max: 30.0 dBm
BSS Local Constraint: 0.0 dB
Channel Width: 40MHz
User Target: 31.75 dBm
SROM Antgain 2G: 3.0 dB / 0.0 dB
SROM Antgain 5G: 0.0 dB / 0.0 dB
SAR: -
Open loop: Off
Current rate: [MCS16] ht mcs 16 Tx Exp 0 BW 40

Power Adjust: abs 0.0 dB (disabled)

NOTE: Regulatory Limits, board limits and target power are for core 0
Use "wl curpower_display_core" to select another one
NOTE: Regulatory limit is conducted -> Antenna gain is ignored

Regulatory Limits:

Rate	Chains	20in40	40MHz
DSSS	1	25.00	25.00
OFDM	1	18.25	18.25
MCS0_7	1	18.25	18.25
VHT8_9SS1	1	18.25	18.25
DSSS_MULTI1	2	-	-
OFDM_CDD1	2	16.00	16.00
MCS0_7_CDD1	2	16.00	16.00
VHT8_9SS1_CDD1	2	16.00	16.00
MCS0_7_STBC	2	16.00	16.00
VHT8_9SS1_STBC	2	16.00	16.00
MCS8_15	2	16.00	16.00
VHT8_9SS2	2	16.00	16.00
DSSS_MULTI2	3	-	-
OFDM_CDD2	3	14.75	14.75
MCS0_7_CDD2	3	14.75	14.75
VHT8_9SS1_CDD2	3	14.75	14.75
MCS0_7_STBC_SPEXP1	3	14.75	14.75
VHT8_9SS1_STBC_SPEXP1	3	14.75	14.75
MCS8_15_SPEXP1	3	14.75	14.75
VHT8_9SS2_SPEXP1	3	14.75	14.75
MCS16_23	3	14.75	14.75
VHT8_9SS3	3	14.75	14.75
OFDM_TXBF1	2	-	-
MCS0_7_TXBF1	2	-	-
VHT8_9SS1_TXBF1	2	-	-
MCS8_15_TXBF0	2	-	-
OFDM_TXBF2	3	-	-
MCS0_7_TXBF2	3	-	-
VHT8_9SS1_TXBF2	3	-	-
MCS8_15_TXBF1	3	-	-
VHT8_9SS2_TXBF1	3	-	-
MCS16_23_TXBF0	3	-	-

Core Index: 0
Board Limits:

Rate	Chains	20in40	40MHz
DSSS1	1	26.75	26.75
DSSS2	1	26.75	26.75
DSSS5	1	27.25	27.25
DSSS11	1	26.75	26.75

OFDM6	1	24.75	24.75
OFDM9	1	24.75	24.75
OFDM12	1	24.75	24.75
OFDM18	1	24.75	24.75
OFDM24	1	24.75	24.75
OFDM36	1	24.25	24.75
OFDM48	1	24.25	24.75
OFDM54	1	23.25	24.75
MCS0	1	24.75	24.75
MCS1	1	24.75	24.75
MCS2	1	24.75	24.75
MCS3	1	24.75	24.75
MCS4	1	24.75	24.75
MCS5	1	25.25	24.75
MCS6	1	24.75	24.75
MCS7	1	23.75	23.75
VHT8SS1	1	23.25	22.75
VHT9SS1	1	23.25	21.25
DSSS1_MULTI1	2	26.75	26.75
DSSS2_MULTI1	2	26.75	26.75
DSSS5_MULTI1	2	27.25	27.25
DSSS11_MULTI1	2	26.75	26.75
OFDM6_CDD1	2	24.75	24.75
OFDM9_CDD1	2	24.75	24.75
OFDM12_CDD1	2	24.75	24.75
OFDM18_CDD1	2	24.75	24.75
OFDM24_CDD1	2	24.75	24.75
OFDM36_CDD1	2	24.25	24.75
OFDM48_CDD1	2	24.25	24.75
OFDM54_CDD1	2	23.25	24.75
MCS0_CDD1	2	24.75	24.75
MCS1_CDD1	2	24.75	24.75
MCS2_CDD1	2	24.75	24.75
MCS3_CDD1	2	24.75	24.75
MCS4_CDD1	2	24.75	24.75
MCS5_CDD1	2	25.25	24.75
MCS6_CDD1	2	24.75	24.75
MCS7_CDD1	2	23.75	23.75
VHT8SS1_CDD1	2	23.25	22.75
VHT9SS1_CDD1	2	23.25	21.25
MCS0_STBC	2	24.75	24.75
MCS1_STBC	2	24.75	24.75
MCS2_STBC	2	24.75	24.75
MCS3_STBC	2	24.75	24.75
MCS4_STBC	2	24.75	24.75
MCS5_STBC	2	25.25	24.75
MCS6_STBC	2	24.75	24.75
MCS7_STBC	2	23.75	23.75
VHT8SS1_STBC	2	23.25	22.75
VHT9SS1_STBC	2	23.25	21.25
MCS8	2	24.75	24.75
MCS9	2	24.75	24.75
MCS10	2	24.75	24.75
MCS11	2	24.75	24.75
MCS12	2	24.75	24.75
MCS13	2	25.25	24.75
MCS14	2	24.75	24.75
MCS15	2	23.75	23.75
VHT8SS2	2	23.25	22.75
VHT9SS2	2	23.25	21.25

DSSS1_MULTI2	3	26.75	26.75
DSSS2_MULTI2	3	26.75	26.75
DSSS5_MULTI2	3	27.25	27.25
DSSS11_MULTI2	3	26.75	26.75
OFDM6_CDD2	3	24.75	24.75
OFDM9_CDD2	3	24.75	24.75
OFDM12_CDD2	3	24.75	24.75
OFDM18_CDD2	3	24.75	24.75
OFDM24_CDD2	3	24.75	24.75
OFDM36_CDD2	3	24.25	24.75
OFDM48_CDD2	3	24.25	24.75
OFDM54_CDD2	3	23.25	24.75
MCS0_CDD2	3	24.75	24.75
MCS1_CDD2	3	24.75	24.75
MCS2_CDD2	3	24.75	24.75
MCS3_CDD2	3	24.75	24.75
MCS4_CDD2	3	24.75	24.75
MCS5_CDD2	3	25.25	24.75
MCS6_CDD2	3	24.75	24.75
MCS7_CDD2	3	23.75	23.75
VHT8SS1_CDD2	3	23.25	22.75
VHT9SS1_CDD2	3	23.25	21.25
MCS0_STBC_SPEXP1	3	24.75	24.75
MCS1_STBC_SPEXP1	3	24.75	24.75
MCS2_STBC_SPEXP1	3	24.75	24.75
MCS3_STBC_SPEXP1	3	24.75	24.75
MCS4_STBC_SPEXP1	3	24.75	24.75
MCS5_STBC_SPEXP1	3	25.25	24.75
MCS6_STBC_SPEXP1	3	24.75	24.75
MCS7_STBC_SPEXP1	3	23.75	23.75
VHT8SS1_STBC_SPEXP1	3	23.25	22.75
VHT9SS1_STBC_SPEXP1	3	23.25	21.25
MCS8_SPEXP1	3	24.75	24.75
MCS9_SPEXP1	3	24.75	24.75
MCS10_SPEXP1	3	24.75	24.75
MCS11_SPEXP1	3	24.75	24.75
MCS12_SPEXP1	3	24.75	24.75
MCS13_SPEXP1	3	25.25	24.75
MCS14_SPEXP1	3	24.75	24.75
MCS15_SPEXP1	3	23.75	23.75
VHT8SS2_SPEXP1	3	23.25	22.75
VHT9SS2_SPEXP1	3	23.25	21.25
MCS16	3	24.75	24.75
MCS17	3	24.75	24.75
MCS18	3	24.75	24.75
MCS19	3	24.75	24.75
MCS20	3	24.75	24.75
MCS21	3	25.25	24.75
MCS22	3	24.75	24.75
MCS23	3	23.75	23.75
VHT8SS3	3	23.25	22.75
VHT9SS3	3	23.25	21.25
OFDM6_TXBF1	2	24.75	24.75
OFDM9_TXBF1	2	24.75	24.75
OFDM12_TXBF1	2	24.75	24.75
OFDM18_TXBF1	2	24.75	24.75
OFDM24_TXBF1	2	24.75	24.75
OFDM36_TXBF1	2	24.25	24.75
OFDM48_TXBF1	2	24.25	24.75
OFDM54_TXBF1	2	23.25	24.75

MCS0_TXBF1	2	24.75	24.75
MCS1_TXBF1	2	24.75	24.75
MCS2_TXBF1	2	24.75	24.75
MCS3_TXBF1	2	24.75	24.75
MCS4_TXBF1	2	24.75	24.75
MCS5_TXBF1	2	25.25	24.75
MCS6_TXBF1	2	24.75	24.75
MCS7_TXBF1	2	23.75	23.75
VHT8SS1_TXBF1	2	23.25	22.75
VHT9SS1_TXBF1	2	23.25	21.25
MCS8_TXBF0	2	24.75	24.75
MCS9_TXBF0	2	24.75	24.75
MCS10_TXBF0	2	24.75	24.75
MCS11_TXBF0	2	24.75	24.75
MCS12_TXBF0	2	24.75	24.75
MCS13_TXBF0	2	25.25	24.75
MCS14_TXBF0	2	24.75	24.75
MCS15_TXBF0	2	23.75	23.75
OFDM6_TXBF2	3	24.75	24.75
OFDM9_TXBF2	3	24.75	24.75
OFDM12_TXBF2	3	24.75	24.75
OFDM18_TXBF2	3	24.75	24.75
OFDM24_TXBF2	3	24.75	24.75
OFDM36_TXBF2	3	24.25	24.75
OFDM48_TXBF2	3	24.25	24.75
OFDM54_TXBF2	3	23.25	24.75
MCS0_TXBF2	3	24.75	24.75
MCS1_TXBF2	3	24.75	24.75
MCS2_TXBF2	3	24.75	24.75
MCS3_TXBF2	3	24.75	24.75
MCS4_TXBF2	3	24.75	24.75
MCS5_TXBF2	3	25.25	24.75
MCS6_TXBF2	3	24.75	24.75
MCS7_TXBF2	3	23.75	23.75
VHT8SS1_TXBF2	3	23.25	22.75
VHT9SS1_TXBF2	3	23.25	21.25
MCS8_TXBF1	3	24.75	24.75
MCS9_TXBF1	3	24.75	24.75
MCS10_TXBF1	3	24.75	24.75
MCS11_TXBF1	3	24.75	24.75
MCS12_TXBF1	3	24.75	24.75
MCS13_TXBF1	3	25.25	24.75
MCS14_TXBF1	3	24.75	24.75
MCS15_TXBF1	3	23.75	23.75
VHT8SS2_TXBF1	3	23.25	22.75
VHT9SS2_TXBF1	3	23.25	21.25
MCS16_TXBF0	3	24.75	24.75
MCS17_TXBF0	3	24.75	24.75
MCS18_TXBF0	3	24.75	24.75
MCS19_TXBF0	3	24.75	24.75
MCS20_TXBF0	3	24.75	24.75
MCS21_TXBF0	3	25.25	24.75
MCS22_TXBF0	3	24.75	24.75
MCS23_TXBF0	3	23.75	23.75

Power Targets:

Rate	Chains	20in40	40MHz
DSSS	1	23.50	23.50
OFDM	1	16.75	16.75
MCS0_7	1	16.75	16.75

VHT8_9SS1	1	16.75	16.75
DSSS_MULTI1	2	-	-
OFDM_CDD1	2	14.50	14.50
MCS0_7_CDD1	2	14.50	14.50
VHT8_9SS1_CDD1	2	14.50	14.50
MCS0_7_STBC	2	14.50	14.50
VHT8_9SS1_STBC	2	14.50	14.50
MCS8_15	2	14.50	14.50
VHT8_9SS2	2	14.50	14.50
DSSS_MULTI2	3	-	-
OFDM_CDD2	3	13.25	13.25
MCS0_7_CDD2	3	13.25	13.25
VHT8_9SS1_CDD2	3	13.25	13.25
MCS0_7_STBC_SPEXP1	3	13.25	13.25
VHT8_9SS1_STBC_SPEXP1	3	13.25	13.25
MCS8_15_SPEXP1	3	13.25	13.25
VHT8_9SS2_SPEXP1	3	13.25	13.25
MCS16_23	3	13.25	13.25
VHT8_9SS3	3	13.25	13.25
OFDM_TXBF1	2	-	-
MCS0_7_TXBF1	2	-	-
VHT8_9SS1_TXBF1	2	-	-
MCS8_15_TXBF0	2	-	-
OFDM_TXBF2	3	-	-
MCS0_7_TXBF2	3	-	-
VHT8_9SS1_TXBF2	3	-	-
MCS8_15_TXBF1	3	-	-
VHT8_9SS2_TXBF1	3	-	-
MCS16_23_TXBF0	3	-	-

Maximum Power Target among all rates: 23.50 23.50 23.50
Last est. power : 13.50 13.50 13.50
Power Target for the current rate : 13.50 13.50 13.50
Last adjusted est. power : 23.50 23.50 23.50

==========
======= SDM 802.11n 40MHz CH6 ========
==========
Power Control: On, HW
Current Channel: 4l
BSS Channel: (null)
BSS Local Max: 30.0 dBm
BSS Local Constraint: 0.0 dB
Channel Width: 40MHz
User Target: 31.75 dBm
SROM Antgain 2G: 3.0 dB / 0.0 dB
SROM Antgain 5G: 0.0 dB / 0.0 dB
SAR: -
Open loop: Off
Current rate: [MCS16] ht mcs 16 Tx Exp 0 BW 40

Power Adjust: abs 0.0 dB (disabled)

NOTE: Regulatory Limits, board limits and target power are for core 0
Use "wl curpower_display_core" to select another one
NOTE: Regulatory limit is conducted -> Antenna gain is ignored

Regulatory Limits:
Rate Chains 20in40 40MHz

DSSS	1	25.00	25.00
OFDM	1	23.25	23.25
MCS0_7	1	23.25	23.25
VHT8_9SS1	1	23.25	23.25
DSSS_MULTI1	2	-	-
OFDM_CDD1	2	20.50	20.50
MCS0_7_CDD1	2	20.50	20.50
VHT8_9SS1_CDD1	2	20.50	20.50
MCS0_7_STBC	2	20.50	20.50
VHT8_9SS1_STBC	2	20.50	20.50
MCS8_15	2	20.50	20.50
VHT8_9SS2	2	20.50	20.50
DSSS_MULTI2	3	-	-
OFDM_CDD2	3	19.50	19.50
MCS0_7_CDD2	3	19.50	19.50
VHT8_9SS1_CDD2	3	19.50	19.50
MCS0_7_STBC_SPEXP1	3	19.50	19.50
VHT8_9SS1_STBC_SPEXP1	3	19.50	19.50
MCS8_15_SPEXP1	3	19.50	19.50
VHT8_9SS2_SPEXP1	3	19.50	19.50
MCS16_23	3	19.50	19.50
VHT8_9SS3	3	19.50	19.50
OFDM_TXBF1	2	-	-
MCS0_7_TXBF1	2	-	-
VHT8_9SS1_TXBF1	2	-	-
MCS8_15_TXBF0	2	-	-
OFDM_TXBF2	3	-	-
MCS0_7_TXBF2	3	-	-
VHT8_9SS1_TXBF2	3	-	-
MCS8_15_TXBF1	3	-	-
VHT8_9SS2_TXBF1	3	-	-
MCS16_23_TXBF0	3	-	-

Core Index: 0
Board Limits:

Rate	Chains	20in40	40MHz
DSSS1	1	26.75	26.75
DSSS2	1	26.75	26.75
DSSS5	1	27.25	27.25
DSSS11	1	26.75	26.75
OFDM6	1	24.75	24.75
OFDM9	1	24.75	24.75
OFDM12	1	24.75	24.75
OFDM18	1	24.75	24.75
OFDM24	1	24.75	24.75
OFDM36	1	24.25	24.75
OFDM48	1	24.25	24.75
OFDM54	1	23.25	24.75
MCS0	1	24.75	24.75
MCS1	1	24.75	24.75
MCS2	1	24.75	24.75
MCS3	1	24.75	24.75
MCS4	1	24.75	24.75
MCS5	1	25.25	24.75
MCS6	1	24.75	24.75
MCS7	1	23.75	23.75
VHT8SS1	1	23.25	22.75
VHT9SS1	1	23.25	21.25
DSSS1_MULTI1	2	26.75	26.75
DSSS2_MULTI1	2	26.75	26.75

DSSS5_MULTI1	2	27.25	27.25
DSSS11_MULTI1	2	26.75	26.75
OFDM6_CDD1	2	24.75	24.75
OFDM9_CDD1	2	24.75	24.75
OFDM12_CDD1	2	24.75	24.75
OFDM18_CDD1	2	24.75	24.75
OFDM24_CDD1	2	24.75	24.75
OFDM36_CDD1	2	24.25	24.75
OFDM48_CDD1	2	24.25	24.75
OFDM54_CDD1	2	23.25	24.75
MCS0_CDD1	2	24.75	24.75
MCS1_CDD1	2	24.75	24.75
MCS2_CDD1	2	24.75	24.75
MCS3_CDD1	2	24.75	24.75
MCS4_CDD1	2	24.75	24.75
MCS5_CDD1	2	25.25	24.75
MCS6_CDD1	2	24.75	24.75
MCS7_CDD1	2	23.75	23.75
VHT8SS1_CDD1	2	23.25	22.75
VHT9SS1_CDD1	2	23.25	21.25
MCS0_STBC	2	24.75	24.75
MCS1_STBC	2	24.75	24.75
MCS2_STBC	2	24.75	24.75
MCS3_STBC	2	24.75	24.75
MCS4_STBC	2	24.75	24.75
MCS5_STBC	2	25.25	24.75
MCS6_STBC	2	24.75	24.75
MCS7_STBC	2	23.75	23.75
VHT8SS1_STBC	2	23.25	22.75
VHT9SS1_STBC	2	23.25	21.25
MCS8	2	24.75	24.75
MCS9	2	24.75	24.75
MCS10	2	24.75	24.75
MCS11	2	24.75	24.75
MCS12	2	24.75	24.75
MCS13	2	25.25	24.75
MCS14	2	24.75	24.75
MCS15	2	23.75	23.75
VHT8SS2	2	23.25	22.75
VHT9SS2	2	23.25	21.25
DSSS1_MULTI2	3	26.75	26.75
DSSS2_MULTI2	3	26.75	26.75
DSSS5_MULTI2	3	27.25	27.25
DSSS11_MULTI2	3	26.75	26.75
OFDM6_CDD2	3	24.75	24.75
OFDM9_CDD2	3	24.75	24.75
OFDM12_CDD2	3	24.75	24.75
OFDM18_CDD2	3	24.75	24.75
OFDM24_CDD2	3	24.75	24.75
OFDM36_CDD2	3	24.25	24.75
OFDM48_CDD2	3	24.25	24.75
OFDM54_CDD2	3	23.25	24.75
MCS0_CDD2	3	24.75	24.75
MCS1_CDD2	3	24.75	24.75
MCS2_CDD2	3	24.75	24.75
MCS3_CDD2	3	24.75	24.75
MCS4_CDD2	3	24.75	24.75
MCS5_CDD2	3	25.25	24.75
MCS6_CDD2	3	24.75	24.75
MCS7_CDD2	3	23.75	23.75

VHT8SS1_CDD2	3	23.25	22.75
VHT9SS1_CDD2	3	23.25	21.25
MCS0_STBC_SPEXP1	3	24.75	24.75
MCS1_STBC_SPEXP1	3	24.75	24.75
MCS2_STBC_SPEXP1	3	24.75	24.75
MCS3_STBC_SPEXP1	3	24.75	24.75
MCS4_STBC_SPEXP1	3	24.75	24.75
MCS5_STBC_SPEXP1	3	25.25	24.75
MCS6_STBC_SPEXP1	3	24.75	24.75
MCS7_STBC_SPEXP1	3	23.75	23.75
VHT8SS1_STBC_SPEXP1	3	23.25	22.75
VHT9SS1_STBC_SPEXP1	3	23.25	21.25
MCS8_SPEXP1	3	24.75	24.75
MCS9_SPEXP1	3	24.75	24.75
MCS10_SPEXP1	3	24.75	24.75
MCS11_SPEXP1	3	24.75	24.75
MCS12_SPEXP1	3	24.75	24.75
MCS13_SPEXP1	3	25.25	24.75
MCS14_SPEXP1	3	24.75	24.75
MCS15_SPEXP1	3	23.75	23.75
VHT8SS2_SPEXP1	3	23.25	22.75
VHT9SS2_SPEXP1	3	23.25	21.25
MCS16	3	24.75	24.75
MCS17	3	24.75	24.75
MCS18	3	24.75	24.75
MCS19	3	24.75	24.75
MCS20	3	24.75	24.75
MCS21	3	25.25	24.75
MCS22	3	24.75	24.75
MCS23	3	23.75	23.75
VHT8SS3	3	23.25	22.75
VHT9SS3	3	23.25	21.25
OFDM6_TXBF1	2	24.75	24.75
OFDM9_TXBF1	2	24.75	24.75
OFDM12_TXBF1	2	24.75	24.75
OFDM18_TXBF1	2	24.75	24.75
OFDM24_TXBF1	2	24.75	24.75
OFDM36_TXBF1	2	24.25	24.75
OFDM48_TXBF1	2	24.25	24.75
OFDM54_TXBF1	2	23.25	24.75
MCS0_TXBF1	2	24.75	24.75
MCS1_TXBF1	2	24.75	24.75
MCS2_TXBF1	2	24.75	24.75
MCS3_TXBF1	2	24.75	24.75
MCS4_TXBF1	2	24.75	24.75
MCS5_TXBF1	2	25.25	24.75
MCS6_TXBF1	2	24.75	24.75
MCS7_TXBF1	2	23.75	23.75
VHT8SS1_TXBF1	2	23.25	22.75
VHT9SS1_TXBF1	2	23.25	21.25
MCS8_TXBF0	2	24.75	24.75
MCS9_TXBF0	2	24.75	24.75
MCS10_TXBF0	2	24.75	24.75
MCS11_TXBF0	2	24.75	24.75
MCS12_TXBF0	2	24.75	24.75
MCS13_TXBF0	2	25.25	24.75
MCS14_TXBF0	2	24.75	24.75
MCS15_TXBF0	2	23.75	23.75
OFDM6_TXBF2	3	24.75	24.75
OFDM9_TXBF2	3	24.75	24.75

OFDM12_TXBF2	3	24.75	24.75
OFDM18_TXBF2	3	24.75	24.75
OFDM24_TXBF2	3	24.75	24.75
OFDM36_TXBF2	3	24.25	24.75
OFDM48_TXBF2	3	24.25	24.75
OFDM54_TXBF2	3	23.25	24.75
MCS0_TXBF2	3	24.75	24.75
MCS1_TXBF2	3	24.75	24.75
MCS2_TXBF2	3	24.75	24.75
MCS3_TXBF2	3	24.75	24.75
MCS4_TXBF2	3	24.75	24.75
MCS5_TXBF2	3	25.25	24.75
MCS6_TXBF2	3	24.75	24.75
MCS7_TXBF2	3	23.75	23.75
VHT8SS1_TXBF2	3	23.25	22.75
VHT9SS1_TXBF2	3	23.25	21.25
MCS8_TXBF1	3	24.75	24.75
MCS9_TXBF1	3	24.75	24.75
MCS10_TXBF1	3	24.75	24.75
MCS11_TXBF1	3	24.75	24.75
MCS12_TXBF1	3	24.75	24.75
MCS13_TXBF1	3	25.25	24.75
MCS14_TXBF1	3	24.75	24.75
MCS15_TXBF1	3	23.75	23.75
VHT8SS2_TXBF1	3	23.25	22.75
VHT9SS2_TXBF1	3	23.25	21.25
MCS16_TXBF0	3	24.75	24.75
MCS17_TXBF0	3	24.75	24.75
MCS18_TXBF0	3	24.75	24.75
MCS19_TXBF0	3	24.75	24.75
MCS20_TXBF0	3	24.75	24.75
MCS21_TXBF0	3	25.25	24.75
MCS22_TXBF0	3	24.75	24.75
MCS23_TXBF0	3	23.75	23.75

Power Targets:

Rate	Chains	20in40	40MHz
DSSS	1	23.50	23.50
OFDM	1	21.75	21.75
MCS0_7	1	21.75	21.75
VHT8SS1	1	21.75	21.25
VHT9SS1	1	21.75	19.75
DSSS_MULTI1	2	-	-
OFDM_CDD1	2	19.00	19.00
MCS0_7_CDD1	2	19.00	19.00
VHT8_9SS1_CDD1	2	19.00	19.00
MCS0_7_STBC	2	19.00	19.00
VHT8_9SS1_STBC	2	19.00	19.00
MCS8_15	2	19.00	19.00
VHT8_9SS2	2	19.00	19.00
DSSS_MULTI2	3	-	-
OFDM_CDD2	3	18.00	18.00
MCS0_7_CDD2	3	18.00	18.00
VHT8_9SS1_CDD2	3	18.00	18.00
MCS0_7_STBC_SPEXP1	3	18.00	18.00
VHT8_9SS1_STBC_SPEXP1	3	18.00	18.00
MCS8_15_SPEXP1	3	18.00	18.00
VHT8_9SS2_SPEXP1	3	18.00	18.00
MCS16_23	3	18.00	18.00
VHT8_9SS3	3	18.00	18.00

OFDM_TXBF1	2	-	-
MCS0_7_TXBF1	2	-	-
VHT8_9SS1_TXBF1	2	-	-
MCS8_15_TXBF0	2	-	-
OFDM_TXBF2	3	-	-
MCS0_7_TXBF2	3	-	-
VHT8_9SS1_TXBF2	3	-	-
MCS8_15_TXBF1	3	-	-
VHT8_9SS2_TXBF1	3	-	-
MCS16_23_TXBF0	3	-	-

Maximum Power Target among all rates: 23.50 23.50 23.50
Last est. power : 18.00 18.00 18.00
Power Target for the current rate : 18.00 18.00 18.00
Last adjusted est. power : 23.50 23.50 23.50

==========
======= SDM 802.11n 40MHz CH9 ========
==========
Power Control: On, HW
Current Channel: 7l
BSS Channel: (null)
BSS Local Max: 30.0 dBm
BSS Local Constraint: 0.0 dB
Channel Width: 40MHz
User Target: 31.75 dBm
SROM Antgain 2G: 3.0 dB / 0.0 dB
SROM Antgain 5G: 0.0 dB / 0.0 dB
SAR: -
Open loop: Off
Current rate: [MCS16] ht mcs 16 Tx Exp 0 BW 40

Power Adjust: abs 0.0 dB (disabled)

NOTE: Regulatory Limits, board limits and target power are for core 0
Use "wl curpower_display_core" to select another one
NOTE: Regulatory limit is conducted -> Antenna gain is ignored

Regulatory Limits:

Rate	Chains	20in40	40MHz
DSSS	1	25.00	25.00
OFDM	1	18.25	18.25
MCS0_7	1	18.25	18.25
VHT8_9SS1	1	18.25	18.25
DSSS_MULTI1	2	-	-
OFDM_CDD1	2	16.25	16.25
MCS0_7_CDD1	2	16.25	16.25
VHT8_9SS1_CDD1	2	16.25	16.25
MCS0_7_STBC	2	16.25	16.25
VHT8_9SS1_STBC	2	16.25	16.25
MCS8_15	2	16.25	16.25
VHT8_9SS2	2	16.25	16.25
DSSS_MULTI2	3	-	-
OFDM_CDD2	3	14.75	14.75
MCS0_7_CDD2	3	14.75	14.75
VHT8_9SS1_CDD2	3	14.75	14.75
MCS0_7_STBC_SPEXP1	3	14.75	14.75
VHT8_9SS1_STBC_SPEXP1	3	14.75	14.75
MCS8_15_SPEXP1	3	14.75	14.75

VHT8_9SS2_SPEXP1	3	14.75	14.75
MCS16_23	3	14.75	14.75
VHT8_9SS3	3	14.75	14.75
OFDM_TXBF1	2	-	-
MCS0_7_TXBF1	2	-	-
VHT8_9SS1_TXBF1	2	-	-
MCS8_15_TXBF0	2	-	-
OFDM_TXBF2	3	-	-
MCS0_7_TXBF2	3	-	-
VHT8_9SS1_TXBF2	3	-	-
MCS8_15_TXBF1	3	-	-
VHT8_9SS2_TXBF1	3	-	-
MCS16_23_TXBF0	3	-	-

Core Index: 0

Board Limits:

Rate	Chains	20in40	40MHz
DSSS1	1	26.75	26.75
DSSS2	1	26.75	26.75
DSSS5	1	27.25	27.25
DSSS11	1	26.75	26.75
OFDM6	1	24.75	24.75
OFDM9	1	24.75	24.75
OFDM12	1	24.75	24.75
OFDM18	1	24.75	24.75
OFDM24	1	24.75	24.75
OFDM36	1	24.25	24.75
OFDM48	1	24.25	24.75
OFDM54	1	23.25	24.75
MCS0	1	24.75	24.75
MCS1	1	24.75	24.75
MCS2	1	24.75	24.75
MCS3	1	24.75	24.75
MCS4	1	24.75	24.75
MCS5	1	25.25	24.75
MCS6	1	24.75	24.75
MCS7	1	23.75	23.75
VHT8SS1	1	23.25	22.75
VHT9SS1	1	23.25	21.25
DSSS1_MULTI1	2	26.75	26.75
DSSS2_MULTI1	2	26.75	26.75
DSSS5_MULTI1	2	27.25	27.25
DSSS11_MULTI1	2	26.75	26.75
OFDM6_CDD1	2	24.75	24.75
OFDM9_CDD1	2	24.75	24.75
OFDM12_CDD1	2	24.75	24.75
OFDM18_CDD1	2	24.75	24.75
OFDM24_CDD1	2	24.75	24.75
OFDM36_CDD1	2	24.25	24.75
OFDM48_CDD1	2	24.25	24.75
OFDM54_CDD1	2	23.25	24.75
MCS0_CDD1	2	24.75	24.75
MCS1_CDD1	2	24.75	24.75
MCS2_CDD1	2	24.75	24.75
MCS3_CDD1	2	24.75	24.75
MCS4_CDD1	2	24.75	24.75
MCS5_CDD1	2	25.25	24.75
MCS6_CDD1	2	24.75	24.75
MCS7_CDD1	2	23.75	23.75
VHT8SS1_CDD1	2	23.25	22.75

VHT9SS1_CDD1	2	23.25	21.25
MCS0_STBC	2	24.75	24.75
MCS1_STBC	2	24.75	24.75
MCS2_STBC	2	24.75	24.75
MCS3_STBC	2	24.75	24.75
MCS4_STBC	2	24.75	24.75
MCS5_STBC	2	25.25	24.75
MCS6_STBC	2	24.75	24.75
MCS7_STBC	2	23.75	23.75
VHT8SS1_STBC	2	23.25	22.75
VHT9SS1_STBC	2	23.25	21.25
MCS8	2	24.75	24.75
MCS9	2	24.75	24.75
MCS10	2	24.75	24.75
MCS11	2	24.75	24.75
MCS12	2	24.75	24.75
MCS13	2	25.25	24.75
MCS14	2	24.75	24.75
MCS15	2	23.75	23.75
VHT8SS2	2	23.25	22.75
VHT9SS2	2	23.25	21.25
DSSS1_MULTI2	3	26.75	26.75
DSSS2_MULTI2	3	26.75	26.75
DSSS5_MULTI2	3	27.25	27.25
DSSS11_MULTI2	3	26.75	26.75
OFDM6_CDD2	3	24.75	24.75
OFDM9_CDD2	3	24.75	24.75
OFDM12_CDD2	3	24.75	24.75
OFDM18_CDD2	3	24.75	24.75
OFDM24_CDD2	3	24.75	24.75
OFDM36_CDD2	3	24.25	24.75
OFDM48_CDD2	3	24.25	24.75
OFDM54_CDD2	3	23.25	24.75
MCS0_CDD2	3	24.75	24.75
MCS1_CDD2	3	24.75	24.75
MCS2_CDD2	3	24.75	24.75
MCS3_CDD2	3	24.75	24.75
MCS4_CDD2	3	24.75	24.75
MCS5_CDD2	3	25.25	24.75
MCS6_CDD2	3	24.75	24.75
MCS7_CDD2	3	23.75	23.75
VHT8SS1_CDD2	3	23.25	22.75
VHT9SS1_CDD2	3	23.25	21.25
MCS0_STBC_SPEXP1	3	24.75	24.75
MCS1_STBC_SPEXP1	3	24.75	24.75
MCS2_STBC_SPEXP1	3	24.75	24.75
MCS3_STBC_SPEXP1	3	24.75	24.75
MCS4_STBC_SPEXP1	3	24.75	24.75
MCS5_STBC_SPEXP1	3	25.25	24.75
MCS6_STBC_SPEXP1	3	24.75	24.75
MCS7_STBC_SPEXP1	3	23.75	23.75
VHT8SS1_STBC_SPEXP1	3	23.25	22.75
VHT9SS1_STBC_SPEXP1	3	23.25	21.25
MCS8_SPEXP1	3	24.75	24.75
MCS9_SPEXP1	3	24.75	24.75
MCS10_SPEXP1	3	24.75	24.75
MCS11_SPEXP1	3	24.75	24.75
MCS12_SPEXP1	3	24.75	24.75
MCS13_SPEXP1	3	25.25	24.75
MCS14_SPEXP1	3	24.75	24.75

MCS15_SPEXP1	3	23.75	23.75
VHT8SS2_SPEXP1	3	23.25	22.75
VHT9SS2_SPEXP1	3	23.25	21.25
MCS16	3	24.75	24.75
MCS17	3	24.75	24.75
MCS18	3	24.75	24.75
MCS19	3	24.75	24.75
MCS20	3	24.75	24.75
MCS21	3	25.25	24.75
MCS22	3	24.75	24.75
MCS23	3	23.75	23.75
VHT8SS3	3	23.25	22.75
VHT9SS3	3	23.25	21.25
OFDM6_TXBF1	2	24.75	24.75
OFDM9_TXBF1	2	24.75	24.75
OFDM12_TXBF1	2	24.75	24.75
OFDM18_TXBF1	2	24.75	24.75
OFDM24_TXBF1	2	24.75	24.75
OFDM36_TXBF1	2	24.25	24.75
OFDM48_TXBF1	2	24.25	24.75
OFDM54_TXBF1	2	23.25	24.75
MCS0_TXBF1	2	24.75	24.75
MCS1_TXBF1	2	24.75	24.75
MCS2_TXBF1	2	24.75	24.75
MCS3_TXBF1	2	24.75	24.75
MCS4_TXBF1	2	24.75	24.75
MCS5_TXBF1	2	25.25	24.75
MCS6_TXBF1	2	24.75	24.75
MCS7_TXBF1	2	23.75	23.75
VHT8SS1_TXBF1	2	23.25	22.75
VHT9SS1_TXBF1	2	23.25	21.25
MCS8_TXBF0	2	24.75	24.75
MCS9_TXBF0	2	24.75	24.75
MCS10_TXBF0	2	24.75	24.75
MCS11_TXBF0	2	24.75	24.75
MCS12_TXBF0	2	24.75	24.75
MCS13_TXBF0	2	25.25	24.75
MCS14_TXBF0	2	24.75	24.75
MCS15_TXBF0	2	23.75	23.75
OFDM6_TXBF2	3	24.75	24.75
OFDM9_TXBF2	3	24.75	24.75
OFDM12_TXBF2	3	24.75	24.75
OFDM18_TXBF2	3	24.75	24.75
OFDM24_TXBF2	3	24.75	24.75
OFDM36_TXBF2	3	24.25	24.75
OFDM48_TXBF2	3	24.25	24.75
OFDM54_TXBF2	3	23.25	24.75
MCS0_TXBF2	3	24.75	24.75
MCS1_TXBF2	3	24.75	24.75
MCS2_TXBF2	3	24.75	24.75
MCS3_TXBF2	3	24.75	24.75
MCS4_TXBF2	3	24.75	24.75
MCS5_TXBF2	3	25.25	24.75
MCS6_TXBF2	3	24.75	24.75
MCS7_TXBF2	3	23.75	23.75
VHT8SS1_TXBF2	3	23.25	22.75
VHT9SS1_TXBF2	3	23.25	21.25
MCS8_TXBF1	3	24.75	24.75
MCS9_TXBF1	3	24.75	24.75
MCS10_TXBF1	3	24.75	24.75

MCS11_TXBF1	3	24.75	24.75
MCS12_TXBF1	3	24.75	24.75
MCS13_TXBF1	3	25.25	24.75
MCS14_TXBF1	3	24.75	24.75
MCS15_TXBF1	3	23.75	23.75
VHT8SS2_TXBF1	3	23.25	22.75
VHT9SS2_TXBF1	3	23.25	21.25
MCS16_TXBF0	3	24.75	24.75
MCS17_TXBF0	3	24.75	24.75
MCS18_TXBF0	3	24.75	24.75
MCS19_TXBF0	3	24.75	24.75
MCS20_TXBF0	3	24.75	24.75
MCS21_TXBF0	3	25.25	24.75
MCS22_TXBF0	3	24.75	24.75
MCS23_TXBF0	3	23.75	23.75

Power Targets:

Rate	Chains	20in40	40MHz
DSSS	1	23.50	23.50
OFDM	1	16.75	16.75
MCS0_7	1	16.75	16.75
VHT8_9SS1	1	16.75	16.75
DSSS_MULTI1	2	-	-
OFDM_CDD1	2	14.75	14.75
MCS0_7_CDD1	2	14.75	14.75
VHT8_9SS1_CDD1	2	14.75	14.75
MCS0_7_STBC	2	14.75	14.75
VHT8_9SS1_STBC	2	14.75	14.75
MCS8_15	2	14.75	14.75
VHT8_9SS2	2	14.75	14.75
DSSS_MULTI2	3	-	-
OFDM_CDD2	3	13.25	13.25
MCS0_7_CDD2	3	13.25	13.25
VHT8_9SS1_CDD2	3	13.25	13.25
MCS0_7_STBC_SPEXP1	3	13.25	13.25
VHT8_9SS1_STBC_SPEXP1	3	13.25	13.25
MCS8_15_SPEXP1	3	13.25	13.25
VHT8_9SS2_SPEXP1	3	13.25	13.25
MCS16_23	3	13.25	13.25
VHT8_9SS3	3	13.25	13.25
OFDM_TXBF1	2	-	-
MCS0_7_TXBF1	2	-	-
VHT8_9SS1_TXBF1	2	-	-
MCS8_15_TXBF0	2	-	-
OFDM_TXBF2	3	-	-
MCS0_7_TXBF2	3	-	-
VHT8_9SS1_TXBF2	3	-	-
MCS8_15_TXBF1	3	-	-
VHT8_9SS2_TXBF1	3	-	-
MCS16_23_TXBF0	3	-	-

Maximum Power Target among all rates: 23.50 23.50 23.50
Last est. power : 13.50 13.75 13.50
Power Target for the current rate : 13.50 13.50 13.50
Last adjusted est. power : 23.50 23.75 23.50
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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:

Linko EMC/RF Lab
Tel: 886-2-26052180
Fax: 886-2-26051924

Hsin Chu EMC/RF/Telecom Lab
Tel: 886-3-6668565
Fax: 886-3-6668323

Hwa Ya EMC/RF/Safety
Tel: 886-3-3183232
Fax: 886-3-3270892

Email: service.adt@tw.bureauveritas.com
Web Site: www.bureauveritas-adt.com

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

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