FCC Test Report

FCC ID	:	**I88WAC6103D-IA**
Equipment	:	**802.11 ac Unified Pro Access Point** **(Please refer to section 1.1.1 for more details)**
Model No.	:	**WAC6103D-I** **(Please refer to section 1.1.1 for more details)**
Brand Name	:	**ZYXEL**
Applicant	:	**Zyxel Communications Corporation**
Address	:	**No.2 Industry East RD. IX, Hsinchu Science Park, Hsinchu 30075, Taiwan, R.O.C**
Standard	:	**47 CFR FCC Part 15.247**
Received Date	:	**Jul. 4, 2019**
Tested Date	:	**Oct. 24, 2019 ~ Mar. 30, 2020**

We, International Certification Corp., would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It may be duplicated completely for legal use with the approval of the applicant. It shall not be reproduced except in full without the written approval of our laboratory.

Reviewed by: **Approved by:**

Along Chen / Assistant Manager **Gary Chang / Manager**

Testing Laboratory 2732

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Release Record

Report No.	Version	Description	Issued Date
FR563002-11AC	Rev. 01	Initial issue	Jun. 08, 2020

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 14.672MHz 43.94 (Margin -6.06dB) - AV	Pass
15.247(d) 15.209	Radiated Emissions	[dBuV/m at 3m]: 30.88MHz 38.78 (Margin -1.22dB) – QP	Pass
15.247(b)(3)	Maximum Output Power	Max Power [dBm]: 27.02	Pass
15.247(a)(2)	6dB Bandwidth	Meet the requirement of limit	Pass
15.247(e)	Power Spectral Density	Meet the requirement of limit	Pass
15.203	Antenna Requirement	Meet the requirement of limit	Pass

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

1 General Description

1.1 Information

1.1.1 Product Details

The following models are provided to this EUT.

Brand Name	Model Name	Product Name	Description
ZYXEL	WAC6103D-I	802.11 ac Unified Pro Access Point	For marketing purpose
	NAP203	802.11ac Dual-Radio Nebula Cloud Managed Access Point	
	NWA1123-AC PRO	802.11ac Dual-Radio Dual-Mount PoE Access Point	

1.1.2 Specification of the Equipment under Test (EUT)

RF General Information					
Frequency Range (MHz)	**IEEE Std. 802.11**	**Ch. Freq. (MHz)**	**Channel Number**	**Transmit Chains (N_{TX})**	**Data Rate / MCS**
2400-2483.5	b	2412-2462	1-11 [11]	3	1-11 Mbps
2400-2483.5	g	2412-2462	1-11 [11]	3	6-54 Mbps
2400-2483.5	n (HT20)	2412-2462	1-11 [11]	3	MCS 0-23
2400-2483.5	n (HT40)	2422-2452	3-9 [7]	3	MCS 0-23
Note 1: RF output power specifies that Maximum Peak Conducted Output Power. Note 2: 802.11b uses a combination of DSSS-DBPSK, DQPSK, CCK modulation. Note 3: 802.11g/n uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.					

1.1.3 Antenna Details

Brand / Model	Ant. No.	Type	Connector	Frequencies (MHz) / Antenna Gain (dBi)			Remark
				2400~2483.5	5150~5250	5725~5850	
SINBON / 2.4G & 5G Metal & PCB Antenna	1	PIFA	UFL	3.28	---	---	Ceiling mounted: Antenna 1 / 2 / 3 Wall mounted: Antenna 1 / 2 / 4
	2	PIFA	UFL	3.37	---	---	
	3	PIFA	UFL	3.15	---	---	
	4	Dipole	UFL	4.33	---	---	
	5	LOOP	UFL	---	4.38	4.23	Ceiling mounted: Antenna 5 / 6 / 7 Wall mounted: Antenna 5 / 6 / 8
	6	LOOP	UFL	---	4.31	4.22	
	7	LOOP	UFL	---	4.38	4.36	
	8	Dipole	UFL	---	5.12	5.20	

Note:
1. The device has a hardware control switch to change operating mode as Ceiling or Wall mounted mode. The difference between both operating modes is only transmission antennas combination.
2. The antenna set includes 8 antennas as above table.

1.1.4 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	48Vdc from PoE

1.1.5 Accessories (For Model: NWA1123-AC PRO only)

Accessories		
No.	**Equipment**	**Description**
1	POE	Brand: SHENZHEN TOPOW ELECTRONICS CO., LTD. Model: TPT24S48A Power Rating: I/P: 100-240Vac, 50/60Hz, 0.5A MAX O/P: 48Vdc, 500mA Power line: AC power cord, 1.75m, non- shielded, w/o core
2	RJ45 cable	Brand: Nien-Yi Model: NYS2676 Power line:1.45m, non-shielded, w/o core

The above POE and RJ45 cable are not bundled in market for model WAC6103D-I and NAP203.

1.1.6 Channel List

Frequency band (MHz)		2400~2483.5	
802.11 b / g / n HT20		802.11n HT40	
Channel	Frequency(MHz)	Channel	Frequency(MHz)
1	2412	3	2422
2	2417	4	2427
3	2422	5	2432
4	2427	6	2437
5	2432	7	2442
6	2437	8	2447
7	2442	9	2452
8	2447	---	---
9	2452	---	---
10	2457	---	---
11	2462	---	---

1.1.7 Test Tool and Duty Cycle

Test Tool	ART2-GUI, Version: 2.3		
Duty Cycle and Duty Factor	Mode	Duty Cycle (%)	Duty Factor (dB)
	11b	100.00%	0.00
	11g	98.25%	0.08
	HT20	98.13%	0.08
	HT40	96.85%	0.14

1.1.8 Power Index of Test Tool

Modulation Mode	Test Frequency (MHz)	Power Index
11b	2412	18.5
11b	2437	23.5
11b	2462	18.5
11g	2412	12
11g	2437	22
11g	2462	13.5
HT20	2412	11.5
HT20	2437	21
HT20	2462	13
HT40	2422	7.5
HT40	2437	12
HT40	2452	10

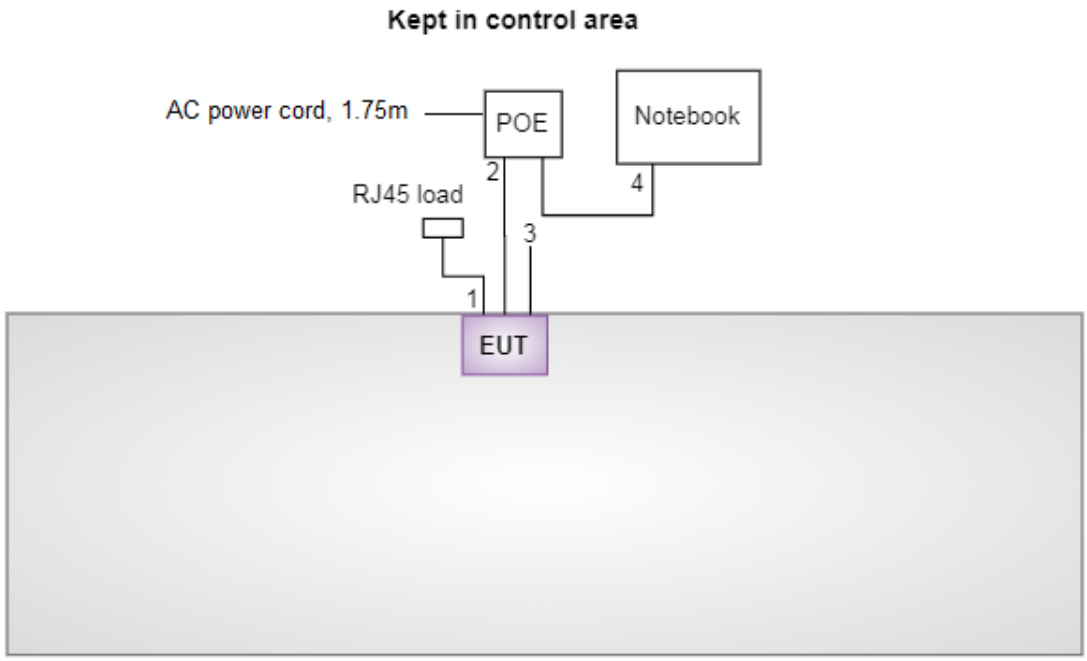
1.2 Local Support Equipment List

Support Equipment List (Model: WAC6103D-I, NAP203)					
No.	**Equipment**	**Brand**	**Model**	**FCC ID**	**Remarks**
1	Notebook	DELL	Latitude E6440	DoC	---

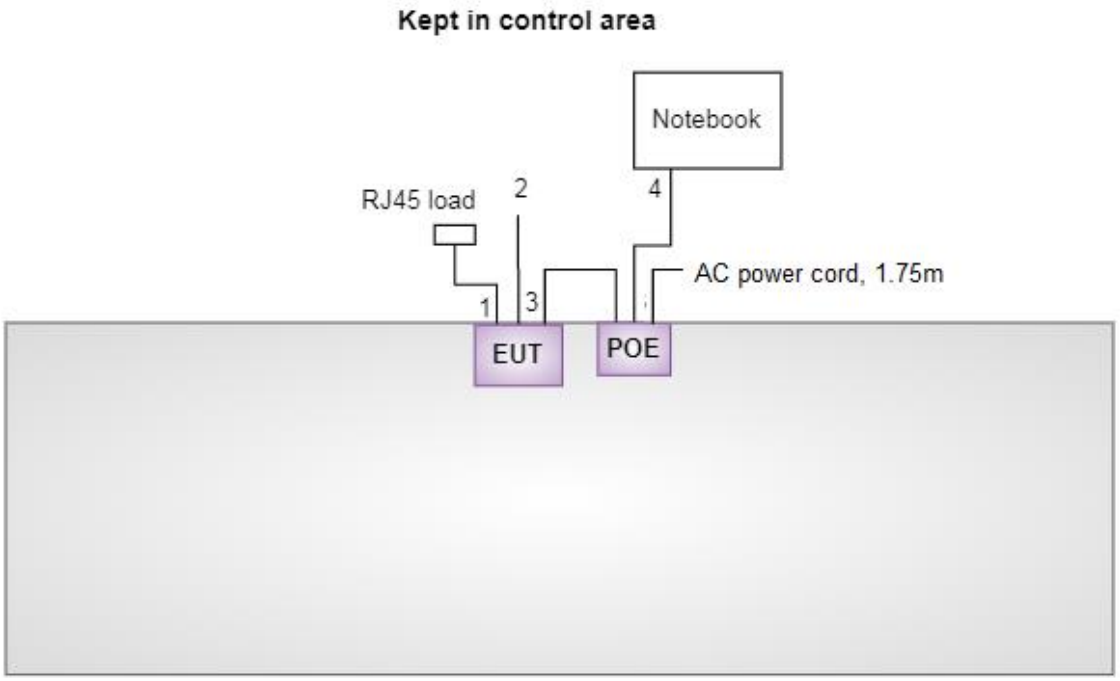
Support Equipment List (Model: NWA1123-AC PRO)					
No.	**Equipment**	**Brand**	**Model**	**FCC ID**	**Remarks**
1	Notebook	DELL	Latitude E6440	DoC	---
2	POE	SHENZHEN TOPOW ELECTRONICS CO., LTD.	TPT24S48A	---	Provided by applicant.

1.3 Test Setup Chart

Test Setup Diagram (Model: WAC6103D-I, NAP203)



No.	Signal cable / Length (m)
1	RJ45, 1m non-shielded.
2	RJ45, 10m non-shielded.
3	Console cable, 1m non-shielded.
4	RJ45, 1m non-shielded.

Test Setup Diagram (Model: NWA1123-AC PRO)	
	
No.	**Signal cable / Length (m)**
1	RJ45, 1m non-shielded.
2	Console cable, 1m non-shielded.
3	RJ45, 1.4m non-shielded.
4	RJ45, 10m non-shielded.

1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Tested Date	Nov. 01, 2019				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Receiver	R&S	ESR3	101657	Jan. 08, 2019	Jan. 07, 2020
LISN	R&S	ENV216	101579	Mar. 08, 2019	Mar. 07, 2020
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Oct. 22, 2019	Oct. 21, 2020
Measurement Software	AUDIX	e3	6.120210k	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Tested Date	Mar. 30, 2020				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Receiver	R&S	ESR3	101657	Feb. 14, 2020	Feb. 13, 2021
LISN	R&S	ENV216	101579	Mar. 12, 2020	Mar. 11, 2021
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Oct. 22, 2019	Oct. 21, 2020
Measurement Software	AUDIX	e3	6.120210k	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission				
Test Site	966 chamber1 / (03CH01-WS)				
Tested Date	Oct. 24, 2019				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101498	Dec. 27, 2018	Dec. 26, 2019
Receiver	R&S	ESR3	101658	Dec. 11, 2018	Dec. 10, 2019
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Jul. 12, 2019	Jul. 11, 2020
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1096	Dec. 18, 2018	Dec. 17, 2019
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Nov. 15, 2018	Nov. 14, 2019
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 09, 2018	Nov. 08, 2019
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 07, 2019	Oct. 06, 2020
Preamplifier	EMC	EMC02325	980225	Jul. 09, 2019	Jul. 08, 2020
Preamplifier	Agilent	83017A	MY39501308	Oct. 08, 2019	Oct. 07, 2020
Preamplifier	EMC	EMC184045B	980192	Aug. 01, 2019	Jul. 31, 2020
RF Cable	EMC	EMC104-SM-SM-8000	181106	Oct. 07, 2019	Oct. 06, 2020
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16019/4	Oct. 07, 2019	Oct. 06, 2020
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16014/4	Oct. 07, 2019	Oct. 06, 2020
LF cable 1M	EMC	EMCCFD400-NM-NM-1000	160502	Oct. 07, 2019	Oct. 06, 2020
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-001	Oct. 07, 2019	Oct. 06, 2020
LF cable 10M	Woken	CFD400NL-LW	CFD400NL-002	Oct. 07, 2019	Oct. 06, 2020
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Tested Date	Nov. 04, 2019				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101063	Apr. 17, 2019	Apr. 16, 2020
Power Meter	Anritsu	ML2495A	1241002	Oct. 23, 2019	Oct. 22, 2020
Power Sensor	Anritsu	MA2411B	1207366	Oct. 23, 2019	Oct. 22, 2020
DC POWER SOURCE	GW INSTEK	GPC-6030D	GES855395	Oct. 29, 2019	Oct. 28, 2020
Measurement Software	Sporton	Sporton_1	1.3.30	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission				
Test Site	966 chamber1 / (03CH01-WS)				
Tested Date	Mar. 20, 2020				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101498	Dec. 17, 2019	Dec. 16, 2020
Receiver	R&S	ESR3	101657	Feb. 14, 2020	Feb. 13, 2021
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Jul. 12, 2019	Jul. 11, 2020
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1096	Dec. 12, 2019	Dec. 11, 2020
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Nov. 15, 2019	Nov. 14, 2020
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 13, 2019	Nov. 12, 2020
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 07, 2019	Oct. 06, 2020
Preamplifier	EMC	EMC02325	980225	Jul. 09, 2019	Jul. 08, 2020
Preamplifier	Agilent	83017A	MY39501308	Oct. 08, 2019	Oct. 07, 2020
Preamplifier	EMC	EMC184045B	980192	Aug. 01, 2019	Jul. 31, 2020
RF Cable	EMC	EMC104-SM-SM-8000	181106	Oct. 07, 2019	Oct. 06, 2020
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16019/4	Oct. 07, 2019	Oct. 06, 2020
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16014/4	Oct. 07, 2019	Oct. 06, 2020
LF cable 1M	EMC	EMCCFD400-NM-NM-1000	160502	Oct. 07, 2019	Oct. 06, 2020
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-001	Oct. 07, 2019	Oct. 06, 2020
LF cable 10M	Woken	CFD400NL-LW	CFD400NL-002	Oct. 07, 2019	Oct. 06, 2020
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

1.5 Test Standards

According to the specification of EUT, the EUT must comply with following standards and KDB documents.

47 CFR FCC Part 15.247
ANSI C63.10-2013
FCC KDB 558074 D01 15.247 Meas Guidance v05r02
FCC KDB 662911 D01 Multiple Transmitter Output v02r01

1.6 Deviation from Test Standard and Measurement Procedure

None

1.7 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)).

Measurement Uncertainty	
Parameters	**Uncertainty**
Bandwidth	±34.130 Hz
Conducted power	±0.808 dB
Power density	±0.583 dB
Conducted emission	±2.715 dB
AC conducted emission	±2.92 dB
Radiated emission ≤ 1GHz	±3.41 dB
Radiated emission > 1GHz	±4.59 dB

2 Test Configuration

2.1 Testing Condition

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	22°C / 63% 20°C / 63%	AKun Chung Alex Tsai
Radiated Emissions	03CH01-WS	25°C / 62-65% 23°C / 68%	Akun Chung Roger Lu
RF Conducted	TH01-WS	21°C / 64%	Brad Wu

- FCC Designation No.: TW2732
- FCC site registration No.: 181692
- ISED#: 10807A
- CAB identifier: TW2732

2.2 The Worst Test Modes and Channel Details

Test item	Modulation Mode	Test Frequency (MHz)	Data Rate	Test Configuration
Conducted Emissions	11b	2437	1 Mbps	2, 4
Radiated Emissions ≤1GHz	11b	2437	1 Mbps	1, 2, 3, 4
Radiated Emissions >1GHz	11b 11g HT20 HT40	2412 / 2437 / 2462 2412 / 2437 / 2462 2412 / 2437 / 2462 2422 / 2437 / 2452	1 Mbps 6 Mbps MCS 0 MCS 0	1, 2
Maximum Output Power 6dB bandwidth Power spectral density	11b 11g HT20 HT40	2412 / 2437 / 2462 2412 / 2437 / 2462 2412 / 2437 / 2462 2422 / 2437 / 2452	1 Mbps 6 Mbps MCS 0 MCS 0	2

NOTE:

1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **Y-plane** and **Z-plane** results were found as the worst case and were shown in this report as below test configuration.
2. The device was designed to be ceiling mounted or wall mounted with different group of antenna. Each group of antenna was selected to perform radiated emission test as below test configuration.
3. Test Configurations are listed as below:
   1) Configuration 1: Model WAC6103D-I, NAP203: Ceiling mounted, Z-plane.
   2) Configuration 2: Model WAC6103D-I, NAP203: Wall mounted, Y-plane
   3) Configuration 3: Model NWA1123-AC PRO: Ceiling mounted, Z-plane.
   4) Configuration 4: Model NWA1123-AC PRO: Wall mounted, Y-plane

3 Transmitter Test Results

3.1 Conducted Emissions

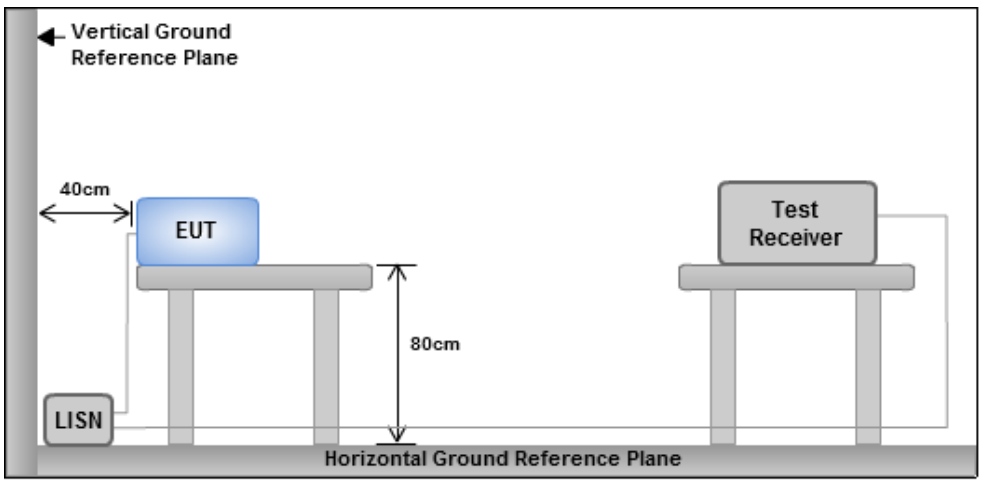
3.1.1 Limit of Conducted Emissions

Conducted Emissions Limit		
Frequency Emission (MHz)	**Quasi-Peak**	**Average**
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50
Note 1: * Decreases with the logarithm of the frequency.		

3.1.2 Test Procedures

1. The device is placed on a test table, raised 80 cm above the reference ground plane. The vertical conducting plane is located 40 cm to the rear of the device.
2. The device is connected to line impedance stabilization network (LISN) and other accessories are connected to other LISN. Measured levels of AC power line conducted emission are across the 50 Ω LISN port.
3. AC conducted emission measurements is made over frequency range from 150 kHz to 30 MHz.
4. This measurement was performed with AC 120V / 60Hz.

3.1.3 Test Setup



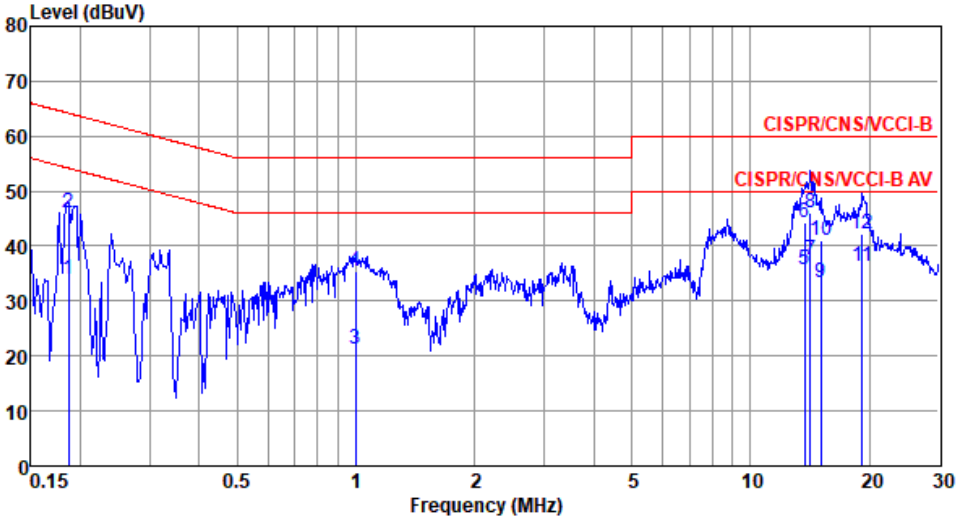
Note: 1. Support units were connected to second LISN.

2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

Configuration 2: Model WAC6103D-I, NAP203: Wall mounted, Y-plane

3.1.4 Test Result of Conducted Emissions

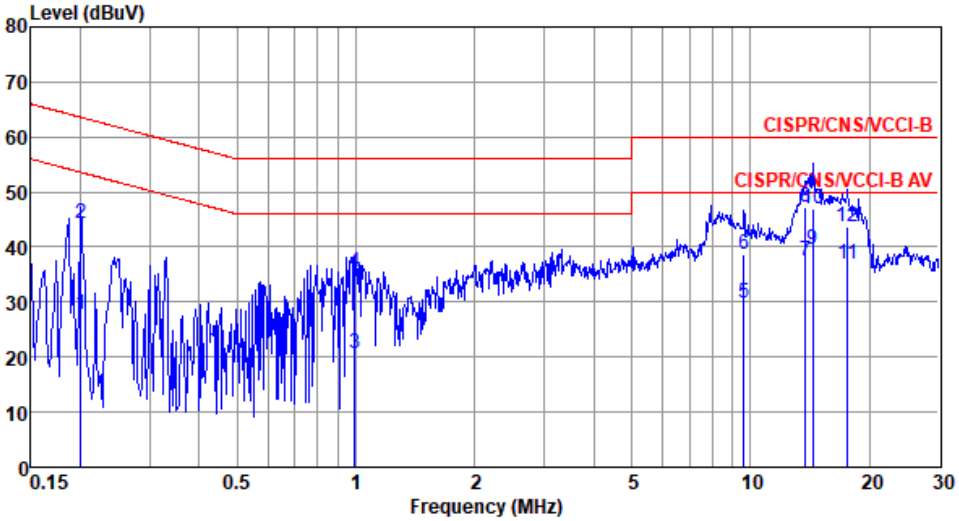
Modulation	11g	Test Freq. (MHz)	2437
Power Phase	Line		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.186	33.99	54.20	-20.21	24.39	9.54	0.06	Average
2	0.186	46.15	64.20	-18.05	36.55	9.54	0.06	QP
3	1.000	21.18	46.00	-24.82	11.46	9.60	0.12	Average
4	1.000	35.54	56.00	-20.46	25.82	9.60	0.12	QP
5	13.695	35.59	50.00	-14.41	25.39	9.65	0.55	Average
6	13.695	44.20	60.00	-15.80	34.00	9.65	0.55	QP
7*	14.213	37.52	50.00	-12.48	27.29	9.66	0.57	Average
8	14.213	46.00	60.00	-14.00	35.77	9.66	0.57	QP
9	15.066	33.42	50.00	-16.58	23.16	9.66	0.60	Average
10	15.066	41.07	60.00	-18.93	30.81	9.66	0.60	QP
11	19.224	36.32	50.00	-13.68	26.01	9.66	0.65	Average
12	19.224	42.15	60.00	-17.85	31.84	9.66	0.65	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB).
2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

Modulation	11g	Test Freq. (MHz)	2437
Power Phase	Neutral		



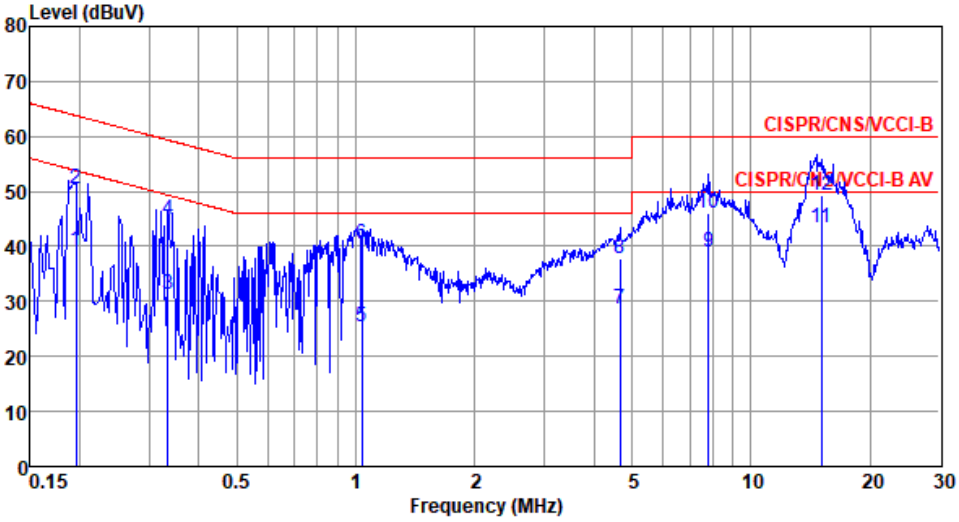
	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.201	27.72	53.58	-25.86	18.08	9.58	0.06	Average
2	0.201	44.29	63.58	-19.29	34.65	9.58	0.06	QP
3	0.994	20.55	46.00	-25.45	10.79	9.64	0.12	Average
4	0.994	35.34	56.00	-20.66	25.58	9.64	0.12	QP
5	9.603	29.88	50.00	-20.12	19.78	9.71	0.39	Average
6	9.603	38.72	60.00	-21.28	28.62	9.71	0.39	QP
7	13.768	37.43	50.00	-12.57	27.12	9.76	0.55	Average
8	13.768	47.10	60.00	-12.90	36.79	9.76	0.55	QP
9*	14.364	39.42	50.00	-10.58	29.09	9.76	0.57	Average
10	14.364	46.88	60.00	-13.12	36.55	9.76	0.57	QP
11	17.661	36.79	50.00	-13.21	26.37	9.79	0.63	Average
12	17.661	43.71	60.00	-16.29	33.29	9.79	0.63	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB).
2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

Configuration 4: Model NWA1123-AC PRO: Wall mounted, Y-plane

3.1.5 Test Result of Conducted Emissions

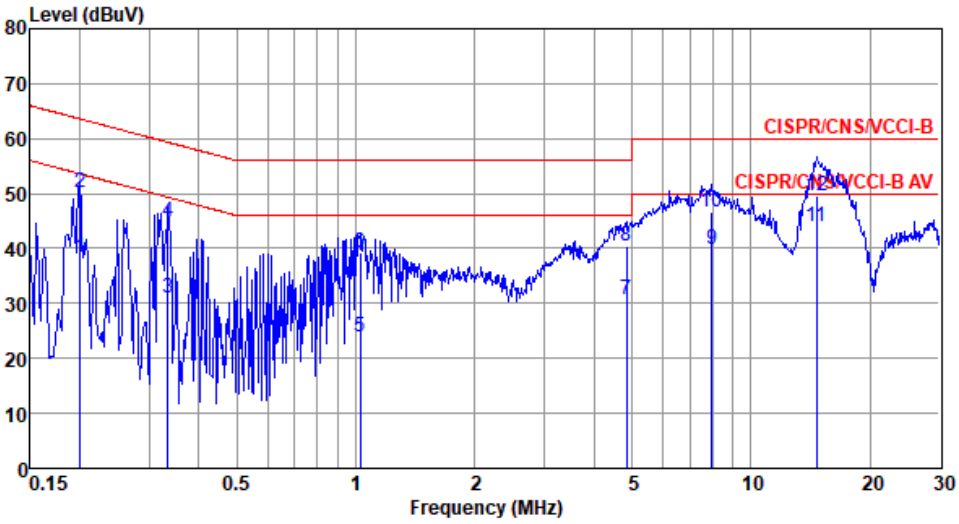
Modulation	11g	Test Freq. (MHz)	2437
Power Phase	Line		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.195	39.26	53.80	-14.54	29.57	9.63	0.06	Average
2	0.195	50.53	63.80	-13.27	40.84	9.63	0.06	QP
3	0.334	31.32	49.35	-18.03	21.62	9.63	0.07	Average
4	0.334	44.96	59.35	-14.39	35.26	9.63	0.07	QP
5	1.037	25.50	46.00	-20.50	15.75	9.63	0.12	Average
6	1.037	40.42	56.00	-15.58	30.67	9.63	0.12	QP
7	4.672	28.63	46.00	-17.37	18.66	9.66	0.31	Average
8	4.672	37.84	56.00	-18.16	27.87	9.66	0.31	QP
9	7.810	38.91	50.00	-11.09	28.87	9.68	0.36	Average
10	7.810	45.95	60.00	-14.05	35.91	9.68	0.36	QP
11*	15.066	43.54	50.00	-6.46	33.23	9.71	0.60	Average
12	15.066	49.27	60.00	-10.73	38.96	9.71	0.60	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB).
2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

Modulation	11g	Test Freq. (MHz)	2437
Power Phase	Neutral		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.201	38.32	53.58	-15.26	28.61	9.65	0.06	Average
2	0.201	50.30	63.58	-13.28	40.59	9.65	0.06	QP
3	0.334	31.12	49.35	-18.23	21.40	9.65	0.07	Average
4	0.334	44.81	59.35	-14.54	35.09	9.65	0.07	QP
5	1.027	23.94	46.00	-22.06	14.17	9.65	0.12	Average
6	1.027	39.24	56.00	-16.76	29.47	9.65	0.12	QP
7	4.848	30.65	46.00	-15.35	20.66	9.68	0.31	Average
8	4.848	40.41	56.00	-15.59	30.42	9.68	0.31	QP
9	7.977	39.97	50.00	-10.03	29.88	9.72	0.37	Average
10	7.977	46.58	60.00	-13.42	36.49	9.72	0.37	QP
11*	14.672	43.94	50.00	-6.06	33.56	9.79	0.59	Average
12	14.672	49.59	60.00	-10.41	39.21	9.79	0.59	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB).
2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

3.2 6dB and Occupied Bandwidth

3.2.1 Limit of 6dB Bandwidth

The minimum 6dB bandwidth shall be at least 500 kHz.

3.2.2 Test Procedures

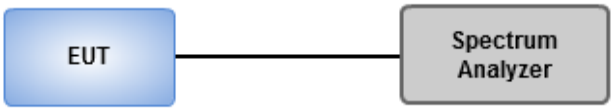
6dB Bandwidth

1. Set resolution bandwidth (RBW) = 100 kHz, Video bandwidth = 300 kHz.
2. Detector = Peak, Trace mode = max hold.
3. Sweep = auto couple, Allow the trace to stabilize.
4. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower) that are attenuated by 6dB relative to the maximum level measured in the fundamental emission.

Occupied Bandwidth

1. Set resolution bandwidth (RBW) = 1% ~ 5 % of OBW, Video bandwidth = 3 x RBW
2. Detector = Sample, Trace mode = max hold.
3 Sweep = auto couple, Allow the trace to stabilize.
4. Use the OBW measurement function of spectrum analyzer to measure the occupied bandwidth.

3.2.3 Test Setup



3.2.4 Test Result of 6dB and Occupied Bandwidth

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_3TX	7.609M	12.156M	12M2G1D	6.522M	11.36M
802.11g_Nss1,(6Mbps)_3TX	16.522M	17.294M	17M3D1D	16.304M	16.498M
802.11n HT20_Nss1,(MCS0)_3TX	17.609M	18.162M	18M2D1D	16.957M	17.656M
802.11n HT40_Nss1,(MCS0)_3TX	36.232M	36.758M	36M8D1D	34.783M	36.324M

Max-N dB = Maximum 6dB down bandwidth; **Max-OBW** = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;

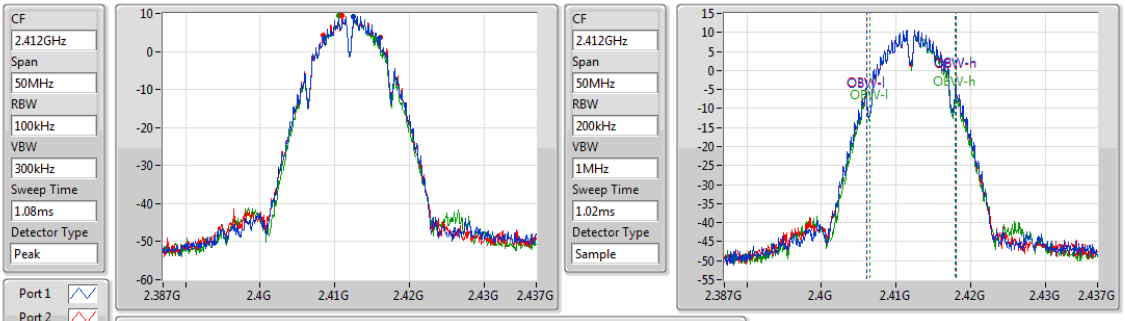
Result

Mode	Result	Limit (Hz)	Port 1 -N dB (Hz)	Port 1-OBW (Hz)	Port 2 -N dB (Hz)	Port 2-OBW (Hz)	Port 3 -N dB (Hz)	Port 3 -OBW (Hz)
802.11b_Nss1, (1Mbps)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	7.464M	11.867M	7.609M	11.867M	6.957M	11.36M
2437MHz	Pass	500k	7.101M	12.156M	7.101M	12.084M	6.594M	12.084M
2462MHz	Pass	500k	6.594M	11.65M	6.522M	11.577M	7.101M	11.867M
802.11g_Nss1, (6Mbps)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	16.377M	16.715M	16.377M	16.715M	16.377M	16.498M
2437MHz	Pass	500k	16.522M	17.294M	16.449M	17.077M	16.449M	17.004M
2462MHz	Pass	500k	16.304M	16.57M	16.377M	16.57M	16.377M	16.643M
802.11n HT20_Nss1, (MCS0)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	17.319M	17.873M	17.609M	17.873M	16.957M	17.656M
2437MHz	Pass	500k	17.174M	18.162M	17.609M	18.09M	17.536M	18.09M
2462MHz	Pass	500k	17.174M	17.8M	17.536M	17.728M	17.609M	17.8M
802.11n HT40_Nss1, (MCS0)_3TX	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	34.783M	36.324M	35.362M	36.324M	35.797M	36.469M
2437MHz	Pass	500k	35.797M	36.758M	35.507M	36.614M	36.232M	36.469M
2452MHz	Pass	500k	35.507M	36.614M	35.797M	36.324M	35.797M	36.469M

Port X-N dB = Port **X** 6dB down bandwidth; **Port X-OBW** = Port **X** 99% occupied bandwidth;

802.11b_Nss1,(1Mbps)_3TX **EBW**

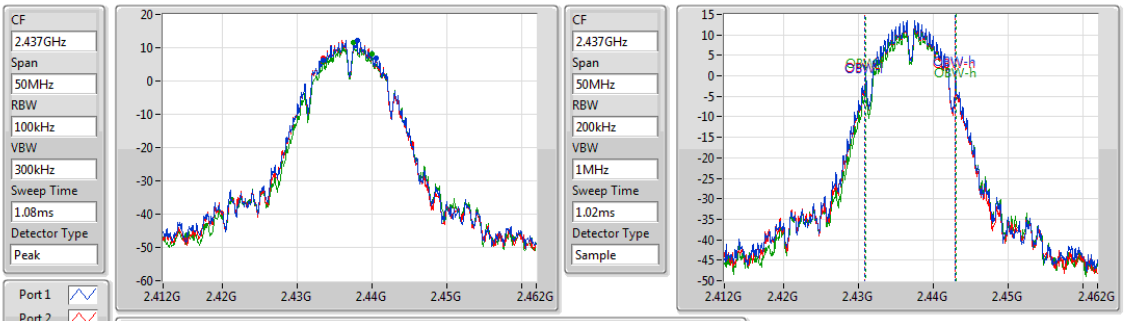
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.464M	2.408522G	2.415986G	11.867M	2.406139G	2.418006G	500k	1
7.609M	2.408449G	2.416058G	11.867M	2.406139G	2.418006G	500k	2
6.957M	2.408522G	2.415478G	11.36M	2.406501G	2.417861G	500k	3

802.11b_Nss1,(1Mbps)_3TX **EBW**

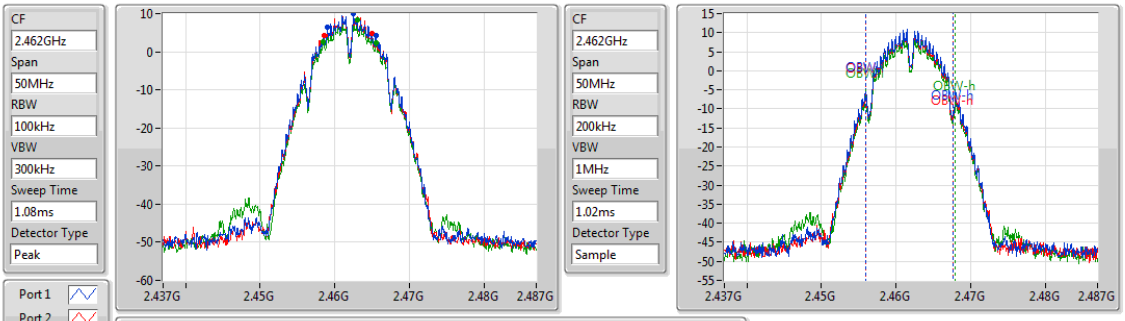
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.101M	2.433449G	2.440551G	12.156M	2.430777G	2.442933G	500k	1
7.101M	2.433449G	2.440551G	12.084M	2.430849G	2.442933G	500k	2
6.594M	2.433449G	2.440043G	12.084M	2.430994G	2.443078G	500k	3

802.11b_Nss1,(1Mbps)_3TX **EBW**

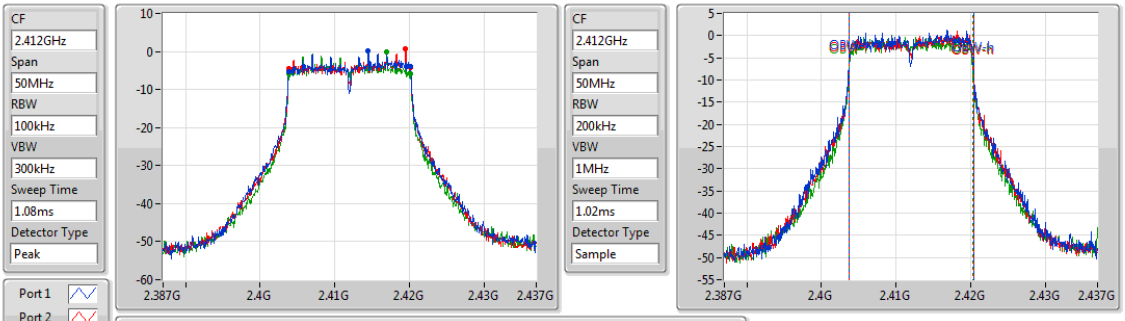
2462MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
6.594M	2.458957G	2.465551G	11.65M	2.455994G	2.467644G	500k	1
6.522M	2.458522G	2.465043G	11.577M	2.455994G	2.467572G	500k	2
7.101M	2.458449G	2.465551G	11.867M	2.455994G	2.467861G	500k	3

802.11g_Nss1,(6Mbps)_3TX **EBW**

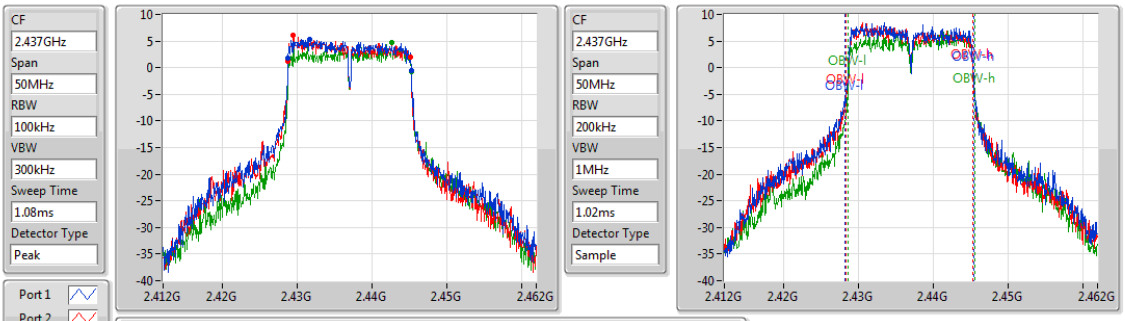
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.377M	2.403812G	2.420188G	16.715M	2.403679G	2.420394G	500k	1
16.377M	2.403812G	2.420188G	16.715M	2.403679G	2.420394G	500k	2
16.377M	2.403812G	2.420188G	16.498M	2.403751G	2.420249G	500k	3

802.11g_Nss1,(6Mbps)_3TX **EBW**

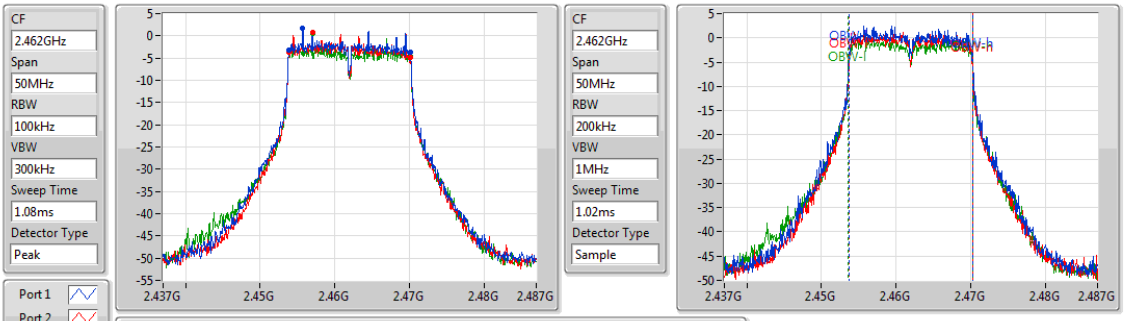
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.522M	2.428739G	2.445261G	17.294M	2.4281G	2.445394G	500k	1
16.449M	2.428739G	2.445188G	17.077M	2.428245G	2.445321G	500k	2
16.449M	2.428812G	2.445261G	17.004M	2.428606G	2.445611G	500k	3

802.11g_Nss1,(6Mbps)_3TX **EBW**

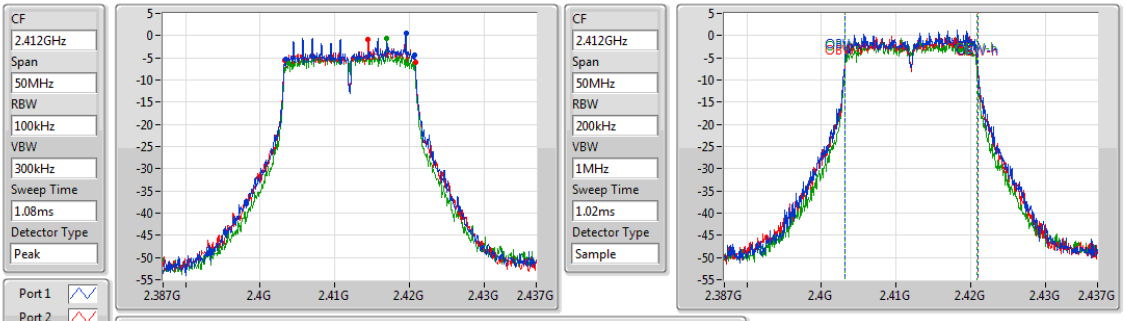
2462MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.304M	2.453812G	2.470116G	16.57M	2.453679G	2.470249G	500k	1
16.377M	2.453812G	2.470188G	16.57M	2.453679G	2.470249G	500k	2
16.377M	2.453812G	2.470188G	16.643M	2.453606G	2.470249G	500k	3

802.11n HT20_Nss1,(MCS0)_3TX EBW

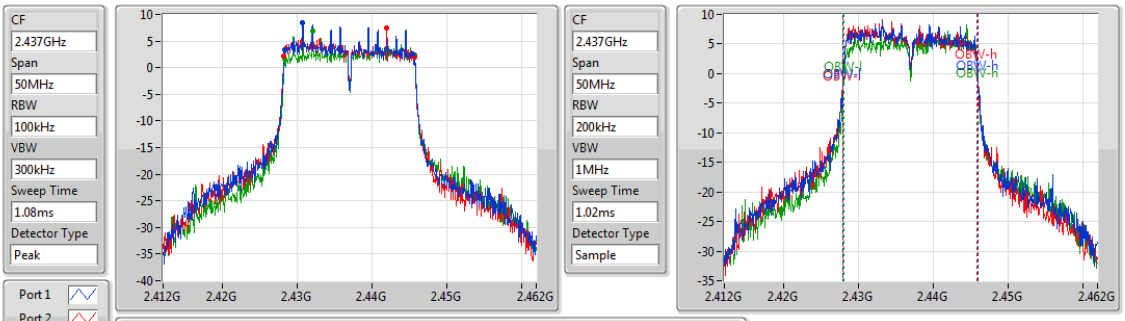
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.319M	2.403449G	2.420768G	17.873M	2.4031G	2.420973G	500k	1
17.609M	2.403232G	2.420841G	17.873M	2.4031G	2.420973G	500k	2
16.957M	2.403812G	2.420768G	17.656M	2.403172G	2.420828G	500k	3

802.11n HT20_Nss1,(MCS0)_3TX EBW

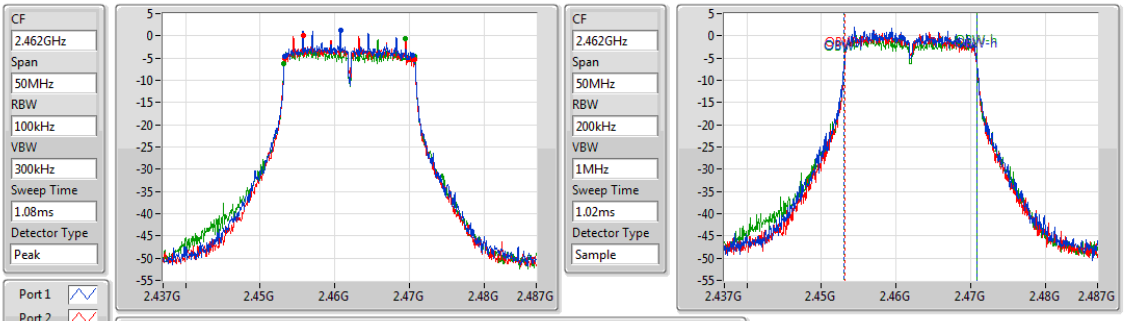
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.174M	2.428232G	2.445406G	18.162M	2.42781G	2.445973G	500k	1
17.609M	2.428159G	2.445768G	18.09M	2.42781G	2.4459G	500k	2
17.536M	2.428232G	2.445768G	18.09M	2.427955G	2.446045G	500k	3

802.11n HT20_Nss1,(MCS0)_3TX EBW

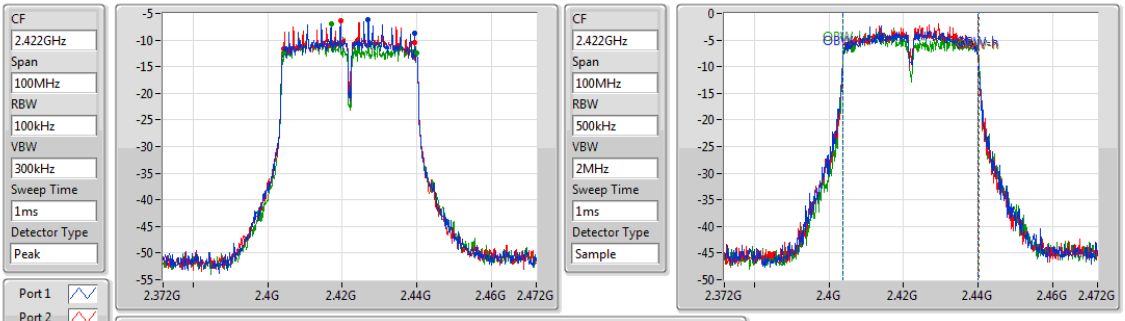
2462MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.174M	2.453232G	2.470406G	17.8M	2.453027G	2.470828G	500k	1
17.536M	2.453232G	2.470768G	17.728M	2.4531G	2.470828G	500k	2
17.609M	2.453159G	2.470768G	17.8M	2.453027G	2.470828G	500k	3

802.11n HT40_Nss1,(MCS0)_3TX **EBW**

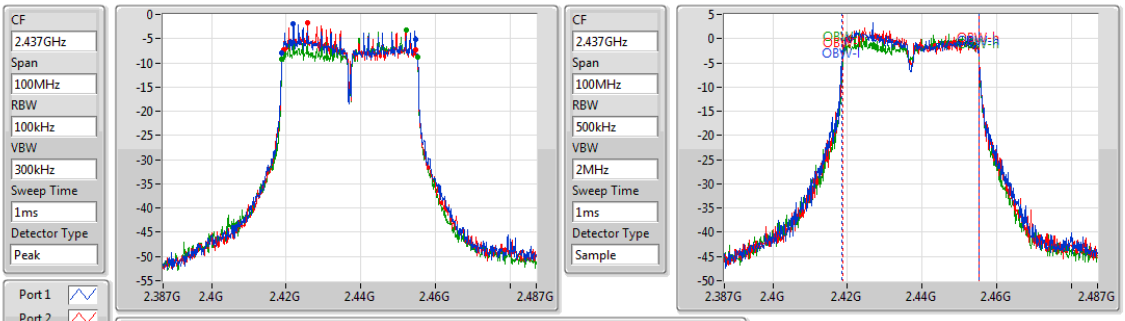
2422MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
34.783M	2.404754G	2.439536G	36.324M	2.403766G	2.44009G	500k	1
35.362M	2.404174G	2.439536G	36.324M	2.403766G	2.44009G	500k	2
35.797M	2.404174G	2.439971G	36.469M	2.403766G	2.440234G	500k	3

802.11n HT40_Nss1,(MCS0)_3TX **EBW**

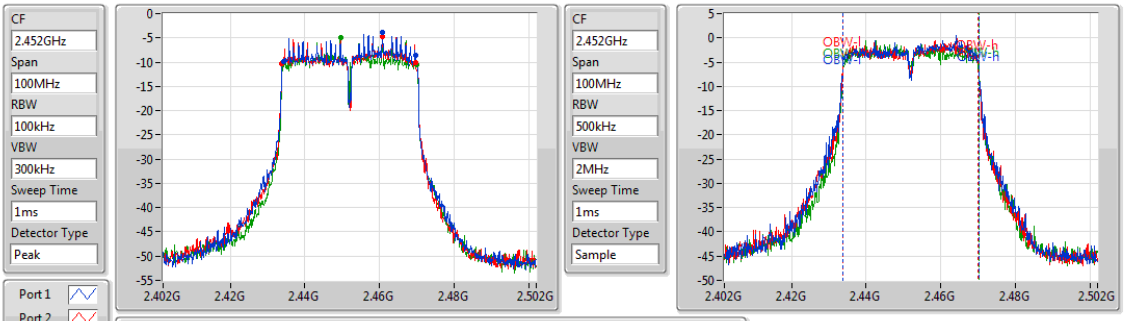
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.797M	2.418884G	2.454681G	36.758M	2.418476G	2.455234G	500k	1
35.507M	2.419174G	2.454681G	36.614M	2.418621G	2.455234G	500k	2
36.232M	2.418884G	2.455116G	36.469M	2.418766G	2.455234G	500k	3

802.11n HT40_Nss1,(MCS0)_3TX **EBW**

2452MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.507M	2.434174G	2.469681G	36.614M	2.433621G	2.470234G	500k	1
35.797M	2.433884G	2.469681G	36.324M	2.433766G	2.47009G	500k	2
35.797M	2.434174G	2.469971G	36.469M	2.433766G	2.470234G	500k	3

3.3 RF Output Power

3.3.1 Limit of RF Output Power

Conducted power shall not exceed 1Watt.

Antenna gain <= 6dBi, no any corresponding reduction is in output power limit.

3.3.2 Test Procedures

A broadband RF power meter is used for output power measurement. The video bandwidth of power meter is greater than DTS bandwidth of EUT. If duty cycle of test signal is not 100 %, trigger and gating function of power meter will be enabled to capture transmission burst for measuring output power.

3.3.3 Test Setup

3.3.4 Test Result of Maximum Output Power

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_3TX	27.02	0.50350
802.11g_Nss1,(6Mbps)_3TX	26.00	0.39811
802.11n HT20_Nss1,(MCS0)_3TX	25.38	0.34514
802.11n HT40_Nss1,(MCS0)_3TX	17.85	0.06095

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11b_Nss1, (1Mbps)_3TX	-	-	-	-	-	-	-	-	-
2412MHz	Pass	4.33	19.29	19.16	18.96	23.91	30.00	28.24	36.00
2437MHz	Pass	4.33	22.63	22.51	21.54	**27.02**	30.00	31.35	36.00
2462MHz	Pass	4.33	19.48	19.06	18.16	23.71	30.00	28.04	36.00
802.11g_Nss1, (6Mbps)_3TX	-	-	-	-	-	-	-	-	-
2412MHz	Pass	4.33	13.38	13.08	12.66	17.82	30.00	22.15	36.00
2437MHz	Pass	4.33	21.33	21.64	20.65	26.00	30.00	30.33	36.00
2462MHz	Pass	4.33	14.59	14.41	13.89	19.08	30.00	23.41	36.00
802.11n HT20_Nss1, (MCS0)_3TX	-	-	-	-	-	-	-	-	-
2412MHz	Pass	4.33	12.71	12.83	12.03	17.31	30.00	21.64	36.00
2437MHz	Pass	4.33	20.91	20.92	19.93	25.38	30.00	29.71	36.00
2462MHz	Pass	4.33	14.08	13.65	13.28	18.45	30.00	22.78	36.00
802.11n HT40_Nss1, (MCS0)_3TX	-	-	-	-	-	-	-	-	-
2422MHz	Pass	4.33	8.98	9.29	8.11	13.59	30.00	17.92	36.00
2437MHz	Pass	4.33	13.23	13.31	12.68	17.85	30.00	22.18	36.00
2452MHz	Pass	4.33	11.06	10.98	10.21	15.54	30.00	19.87	36.00

DG = Directional Gain; **Port X** = Port X output power

3.4 Power Spectral Density

3.4.1 Limit of Power Spectral Density

Power spectral density shall not be greater than 8 dBm in any 3 kHz band.

3.4.2 Test Procedures

Average PSD, duty cycle ≥ 98%

1. Set the RBW = 30 kHz, VBW = 100 kHz.
2. Detector = RMS, Sweep time = auto couple.
3. Sweep time = auto couple.
4. Employ trace averaging (RMS) mode over a minimum of 100 traces.
5. Use the peak marker function to determine the maximum amplitude level.

Average PSD, duty cycle < 98%

1 Set the RBW = 30 kHz, VBW = 100 kHz. Detector = RMS.

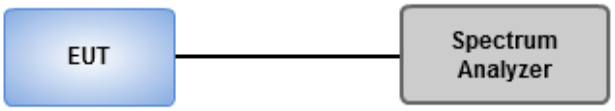
2 Set the sweep time to: ≥ 10 (number of measurement points in sweep) x (total on/off period of the transmitted signal).

3 Perform the measurement over a single sweep.

4 Use the peak marker function to determine the maximum amplitude level.

5 Add 10 log (1/x), where x is the duty cycle.

3.4.3 Test Setup



3.4.4 Test Result of Power Spectral Density

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_3TX	4.30
802.11g_Nss1,(6Mbps)_3TX	-1.40
802.11n HT20_Nss1,(MCS0)_3TX	-1.09
802.11n HT40_Nss1,(MCS0)_3TX	-11.35

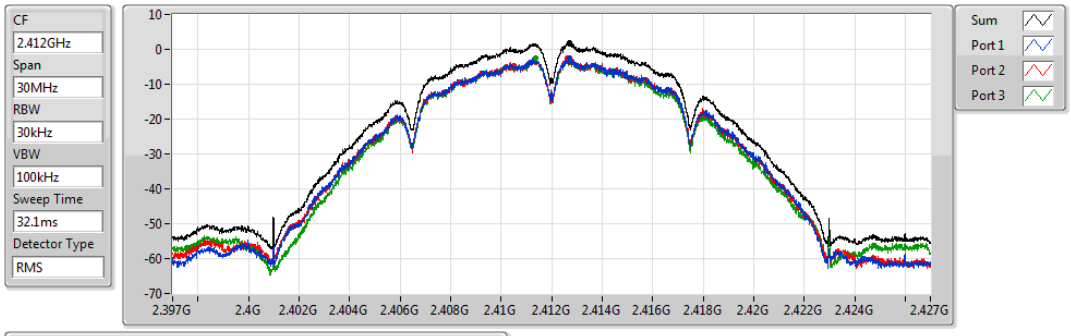
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1, (1Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	8.44	-2.42	-2.50	-2.49	1.74	5.56
2437MHz	Pass	8.44	-0.14	0.32	-0.95	4.30	5.56
2462MHz	Pass	8.44	-2.61	-3.02	-4.03	1.27	5.56
802.11g_Nss1, (6Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	8.44	-12.26	-12.30	-13.55	-8.42	5.56
2437MHz	Pass	8.44	-5.24	-5.16	-6.63	-1.40	5.56
2462MHz	Pass	8.44	-10.79	-11.02	-12.56	-7.12	5.56
802.11n HT20_Nss1, (MCS0)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	8.44	-13.26	-12.82	-14.28	-8.98	5.56
2437MHz	Pass	8.44	-4.90	-4.65	-6.25	-1.09	5.56
2462MHz	Pass	8.44	-11.57	-12.31	-12.72	-8.01	5.56
802.11n HT40_Nss1, (MCS0)_3TX	-	-	-	-	-	-	-
2422MHz	Pass	8.44	-20.25	-20.18	-20.82	-15.93	5.56
2437MHz	Pass	8.44	-15.45	-15.06	-14.76	-11.35	5.56
2452MHz	Pass	8.44	-18.05	-17.96	-19.30	-13.68	5.56

DG = Directional Gain=10 * log((10$^{3.28/20}$+10$^{3.37/20}$+10$^{4.33/20}$)^2/3)= 8.44 dBi > 6 dBi, PD limit shall be reduced to 8 dBm – (8.44 dBi – 6 dBi) = 5.56 dBm
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11b_Nss1,(1Mbps)_3TX **PSD**

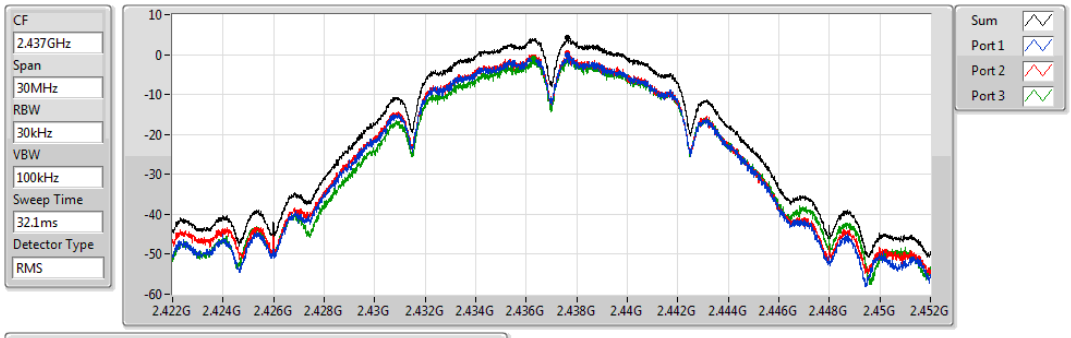
2412MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.74	1.74	-2.42	-2.50	-2.49

802.11b_Nss1,(1Mbps)_3TX **PSD**

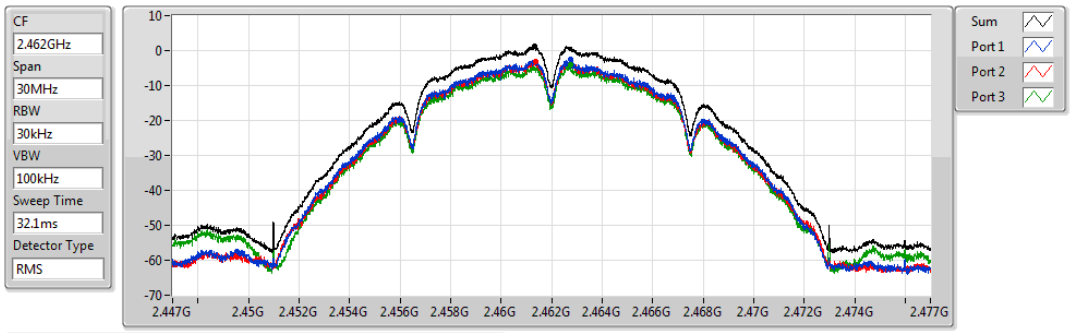
2437MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.30	4.30	-0.14	0.32	-0.95

802.11b_Nss1,(1Mbps)_3TX **PSD**

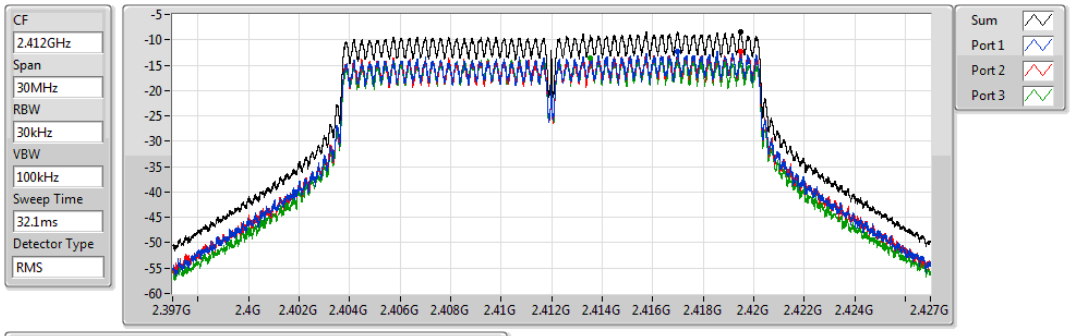
2462MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.27	1.27	-2.61	-3.02	-4.03

802.11g_Nss1,(6Mbps)_3TX **PSD**

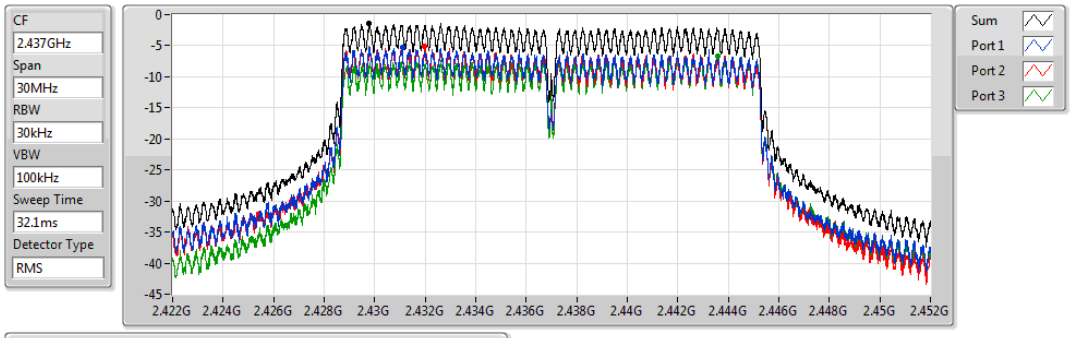
2412MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.42	-8.42	-12.26	-12.30	-13.55

802.11g_Nss1,(6Mbps)_3TX **PSD**

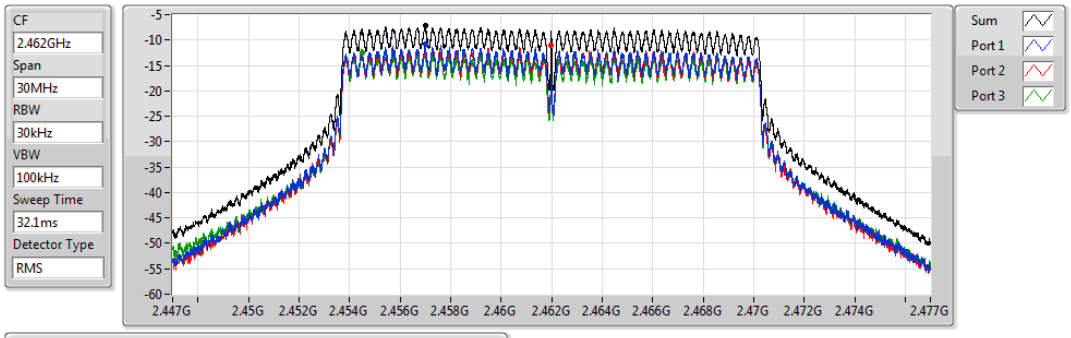
2437MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.40	-1.40	-5.24	-5.16	-6.63

802.11g_Nss1,(6Mbps)_3TX **PSD**

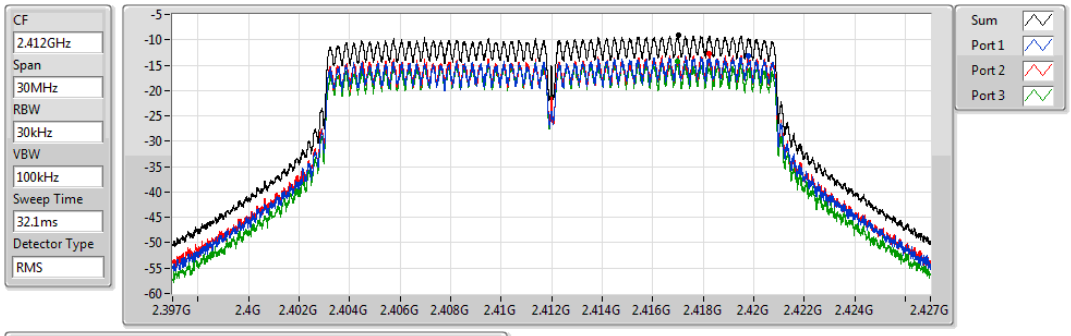
2462MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.12	-7.12	-10.79	-11.02	-12.56

802.11n HT20_Nss1,(MCS0)_3TX PSD

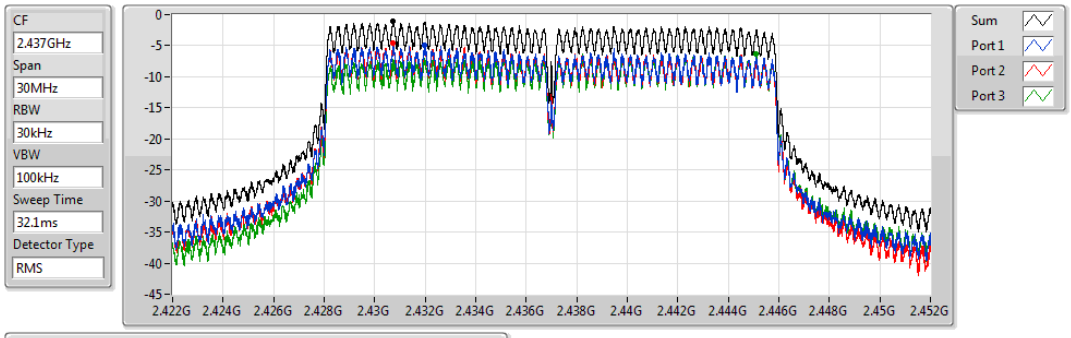
2412MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.98	-8.98	-13.26	-12.82	-14.28

802.11n HT20_Nss1,(MCS0)_3TX PSD

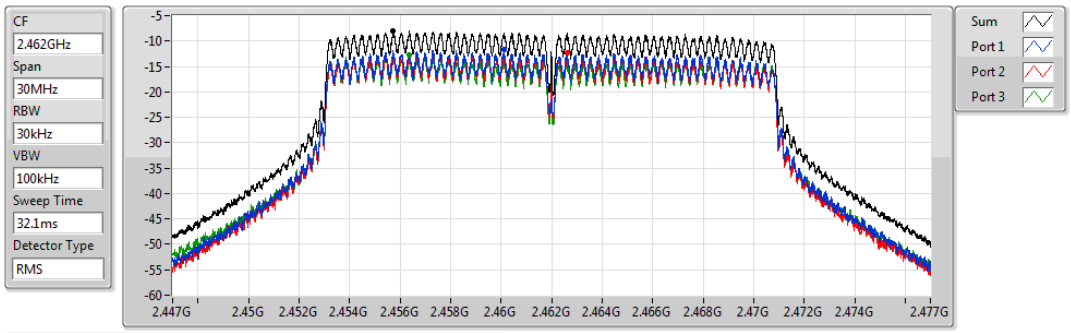
2437MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.09	-1.09	-4.90	-4.65	-6.25

802.11n HT20_Nss1,(MCS0)_3TX PSD

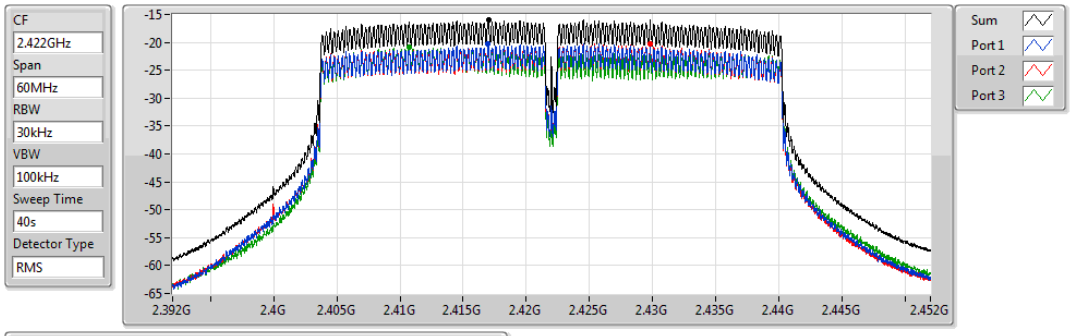
2462MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.01	-8.01	-11.57	-12.31	-12.72

802.11n HT40_Nss1,(MCS0)_3TX **PSD**

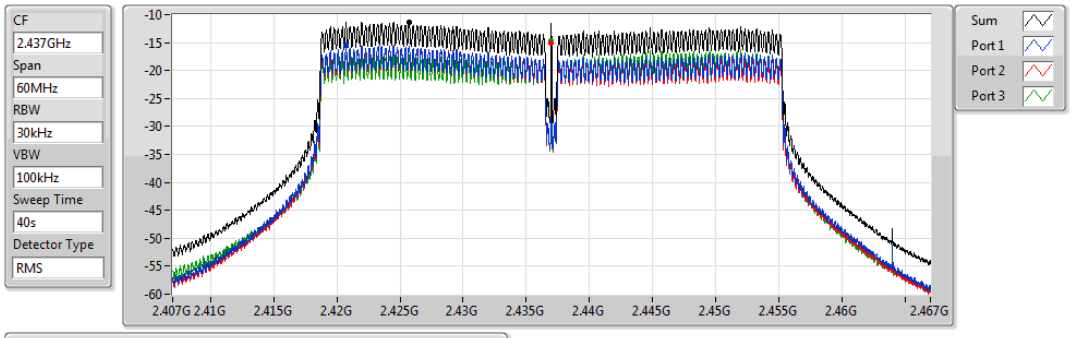
2422MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-15.93	-15.93	-20.25	-20.18	-20.82

802.11n HT40_Nss1,(MCS0)_3TX **PSD**

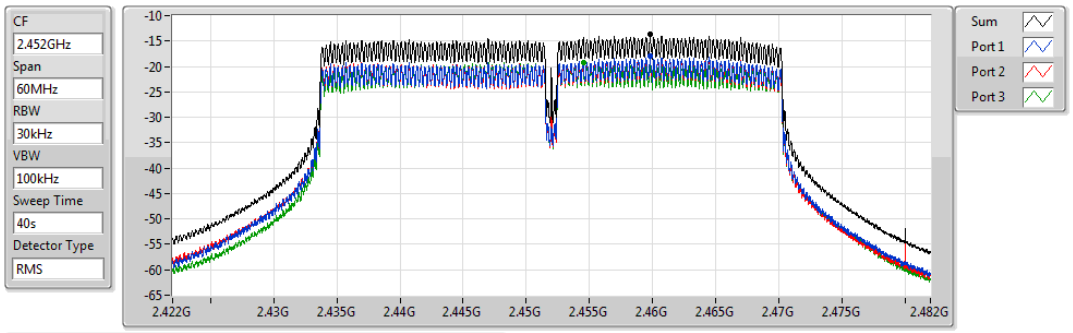
2437MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-11.35	-11.35	-15.45	-15.06	-14.76

802.11n HT40_Nss1,(MCS0)_3TX **PSD**

2452MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-13.68	-13.68	-18.05	-17.96	-19.30

3.5 Unwanted Emissions into Restricted Frequency Bands

3.5.1 Limit of Unwanted Emissions into Restricted Frequency Bands

Restricted Band Emissions Limit			
Frequency Range (MHz)	**Field Strength (uV/m)**	**Field Strength (dBuV/m)**	**Measure Distance (m)**
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1:
Qusai-Peak value is measured for frequency below 1GHz except for 9–90 kHz, 110–490 kHz frequency band. Peak and average value are measured for frequency above 1GHz. The limit on average radio frequency emission is as above table. The limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit
Note 2:
Measurements may be performed at a distance other than what is specified provided. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor as below, Frequency at or above 30 MHz: 20 dB/decade Frequency below 30 MHz: 40 dB/decade.

3.5.2 Test Procedures

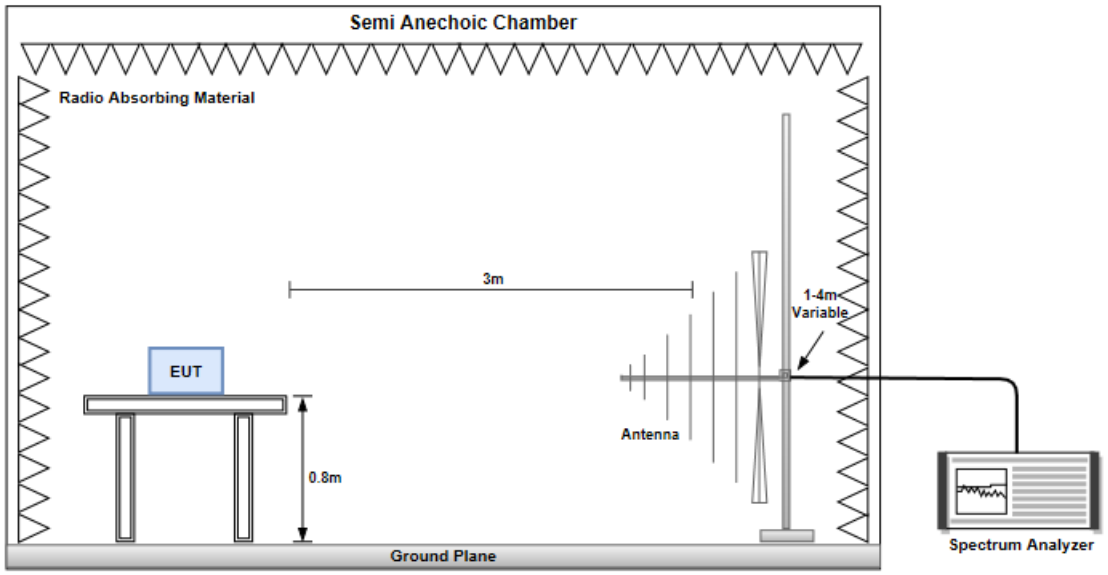
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission frequency. The EUT is placed at test table. For emissions testing at or below 1 GHz, the table height is 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height is 1.5 m
2. Measurement is made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna is varied in height (1m ~ 4m) above the reference ground plane to obtain the maximum signal strength. Distance between EUT and antenna is 3 m.
3. This investigation is performed with the EUT rotated 360°, the antenna height scanned between 1 m and 4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations.

Note:

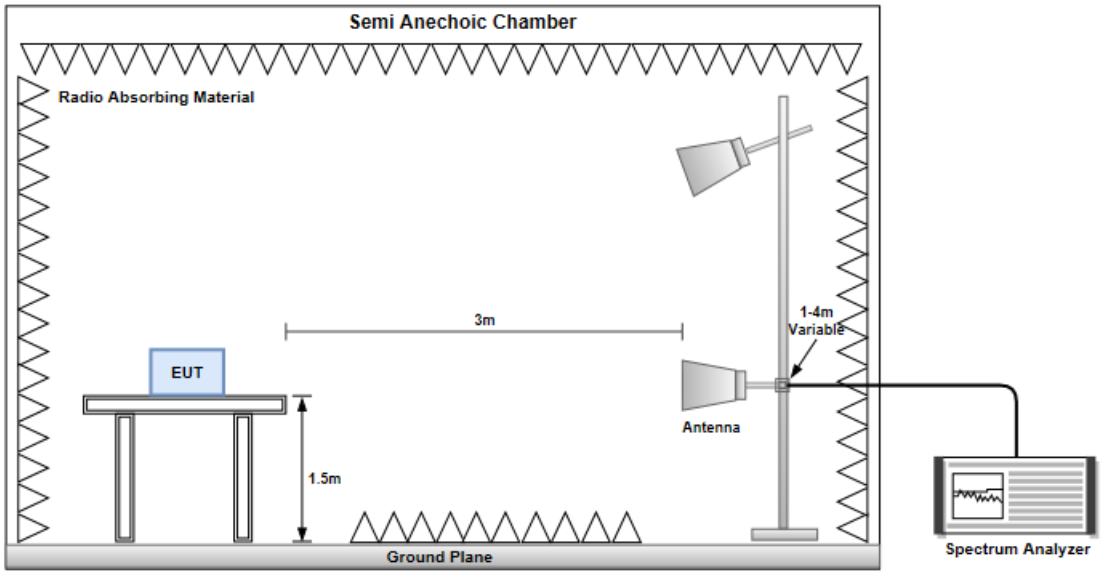
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above 1GHz.

3.5.3 Test Setup

Radiated Emissions below 1 GHz



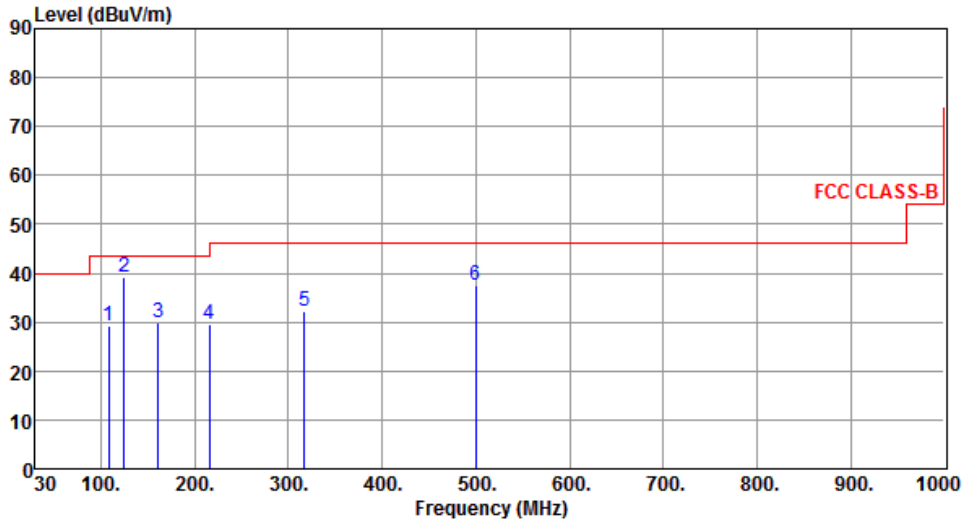
Radiated Emissions above 1 GHz



Configuration 1: Model WAC6103D-I, NAP203: Ceiling mounted, Z-plane. &
Configuration 3: Model NWA1123-AC PRO: Ceiling mounted, Z-plane.

3.5.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

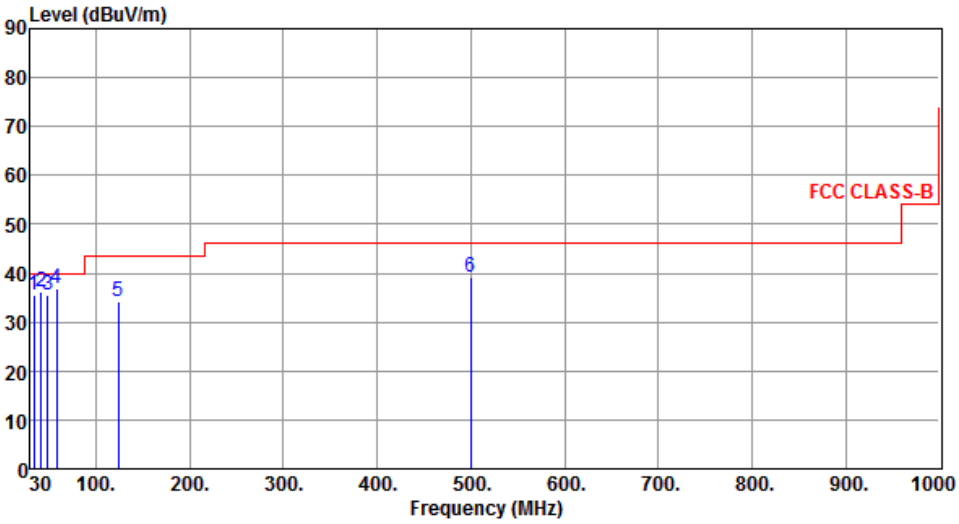
Modulation	11b	**Test Freq. (MHz)**	2437
Polarization	Horizontal	**Test Configuration**	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	108.61	29.21	43.50	-14.29	40.89	-11.68	Peak	---	---
2	124.81	39.31	43.50	-4.19	49.51	-10.20	QP	161	109
3	160.89	29.87	43.50	-13.63	38.30	-8.43	Peak	---	---
4	215.31	29.42	43.50	-14.08	41.46	-12.04	Peak	---	---
5	317.12	32.13	46.00	-13.87	39.60	-7.47	Peak	---	---
6	499.48	37.65	46.00	-8.35	40.78	-3.13	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

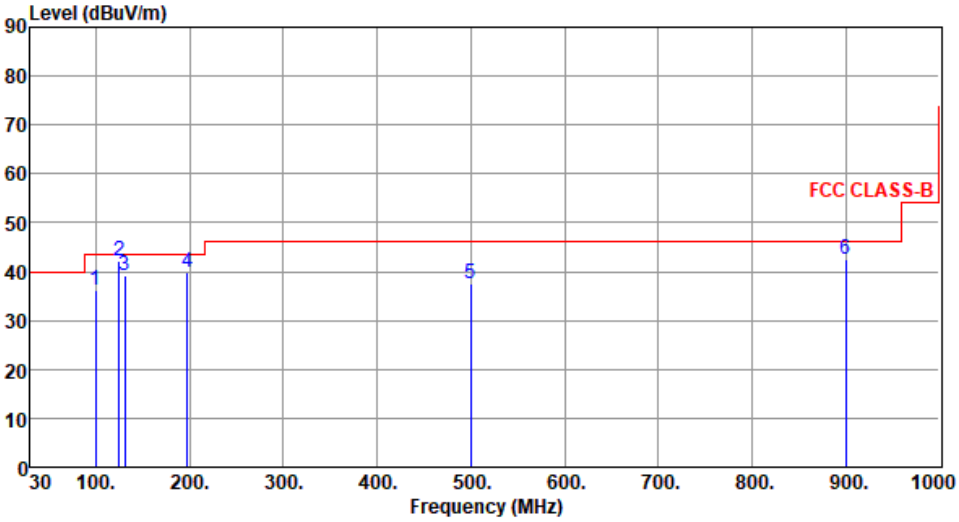
Modulation	11b	Test Freq. (MHz)	2437
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	33.68	35.68	40.00	-4.32	45.19	-9.51	QP	100	165
2	41.66	36.31	40.00	-3.69	44.71	-8.40	QP	100	155
3	48.31	35.46	40.00	-4.54	43.83	-8.37	QP	100	285
4	58.26	36.81	40.00	-3.19	45.74	-8.93	Peak	---	---
5	124.12	34.35	43.50	-9.15	44.62	-10.27	Peak	---	---
6	499.51	39.31	46.00	-6.69	42.44	-3.13	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

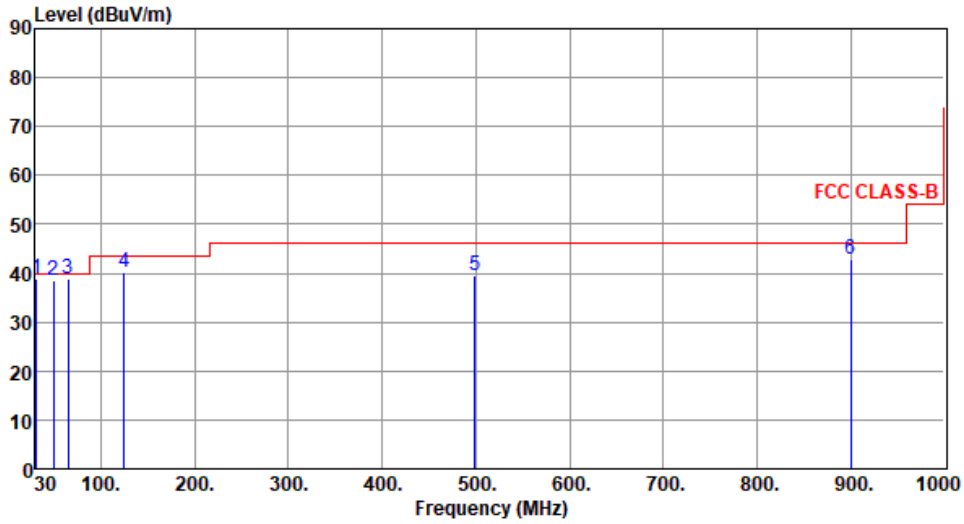
Modulation	11b	Test Freq. (MHz)	2437
Polarization	Horizontal	Test Configuration	3



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	99.98	36.35	43.50	-7.15	49.37	-13.02	Peak	---	---
2	125.00	42.11	43.50	-1.39	52.29	-10.18	QP	130	100
3	130.52	39.20	43.50	-4.30	48.82	-9.62	Peak	---	---
4	197.25	39.99	43.50	-3.51	51.81	-11.82	QP	100	165
5	499.58	37.56	46.00	-8.44	40.69	-3.13	Peak	---	---
6	900.11	42.42	46.00	-3.58	38.34	4.08	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

Modulation	11b	Test Freq. (MHz)	2437
Polarization	Vertical	Test Configuration	3

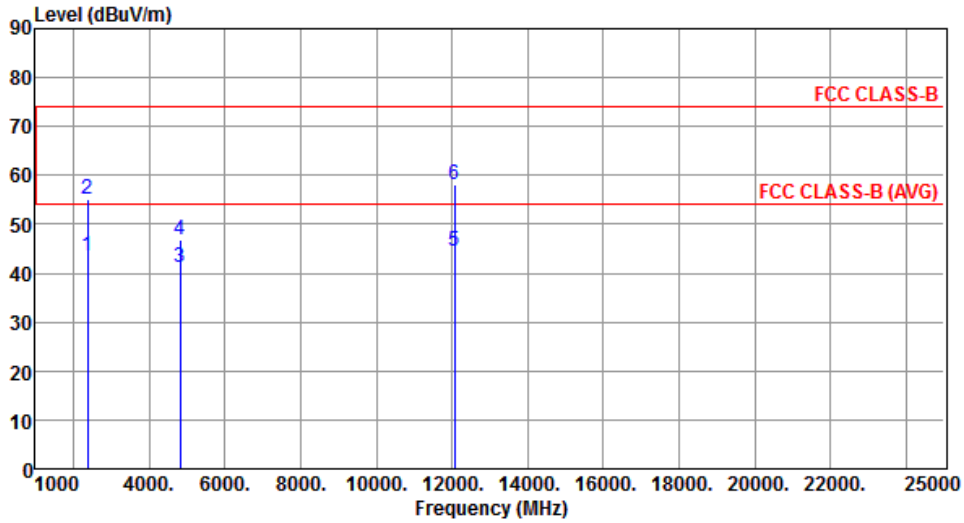


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	30.88	38.78	40.00	-1.22	48.39	-9.61	QP	100	160
2	49.55	38.65	40.00	-1.35	47.00	-8.35	QP	100	188
3	64.58	38.77	40.00	-1.23	48.22	-9.45	QP	100	202
4	124.88	40.15	43.50	-3.35	50.34	-10.19	Peak	---	---
5	499.25	39.65	46.00	-6.35	42.78	-3.13	Peak	---	---
6	900.11	42.87	46.00	-3.13	38.79	4.08	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

3.5.5 Transmitter Radiated Unwanted Emissions (Above 1GHz) for 11b

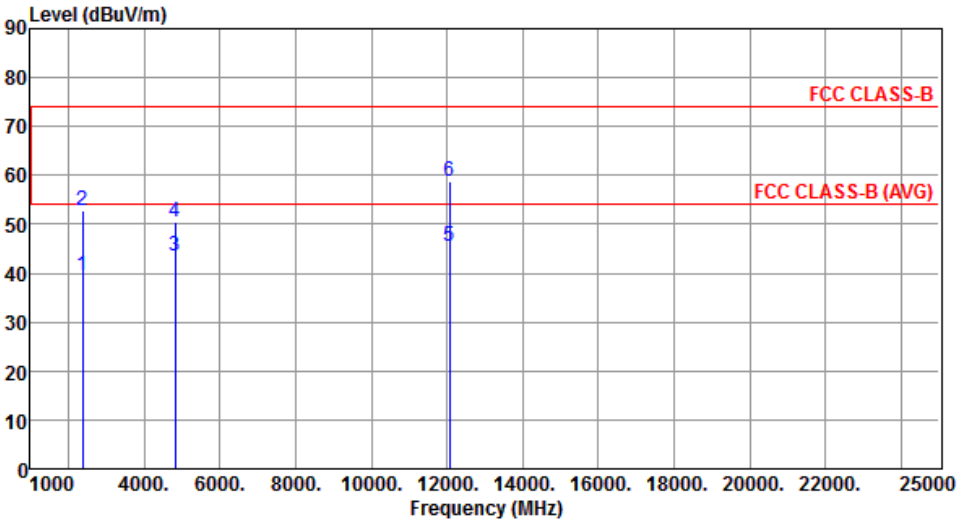
Modulation	11b	Test Freq. (MHz)	2412
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	43.57	54.00	-10.43	46.39	-2.82	Average	100	311
2	2390.00	55.29	74.00	-18.71	58.11	-2.82	Peak	100	311
3	4824.00	41.09	54.00	-12.91	37.54	3.55	Average	100	170
4	4824.00	46.75	74.00	-27.25	43.20	3.55	Peak	100	170
5	12060.00	44.41	54.00	-9.59	30.58	13.83	Average	100	133
6	12060.00	58.15	74.00	-15.85	44.32	13.83	Peak	100	133

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

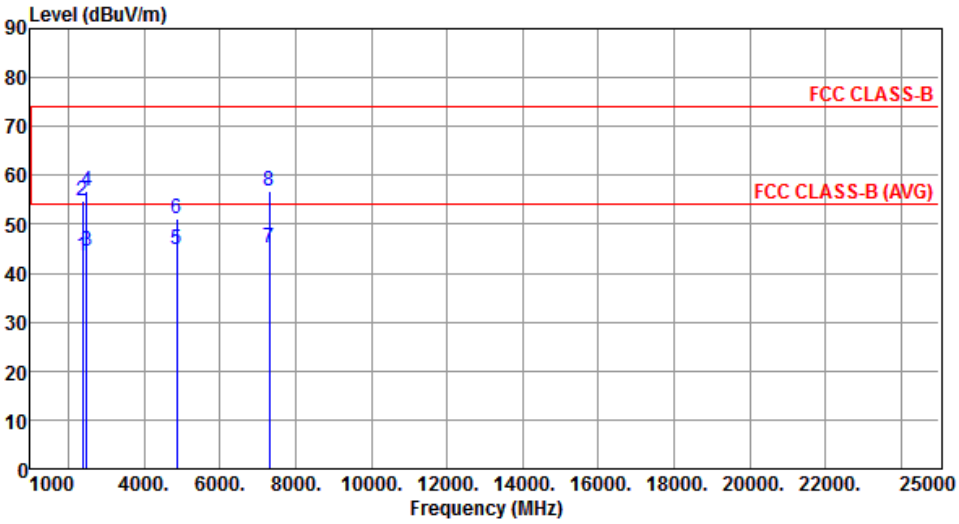
Modulation	11b	Test Freq. (MHz)	2412
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	39.49	54.00	-14.51	42.31	-2.82	Average	144	330
2	2390.00	52.66	74.00	-21.34	55.48	-2.82	Peak	144	330
3	4824.00	43.49	54.00	-10.51	39.94	3.55	Average	104	67
4	4824.00	50.44	74.00	-23.56	46.89	3.55	Peak	104	67
5	12060.00	45.59	54.00	-8.41	31.76	13.83	Average	100	30
6	12060.00	58.92	74.00	-15.08	45.09	13.83	Peak	100	30

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

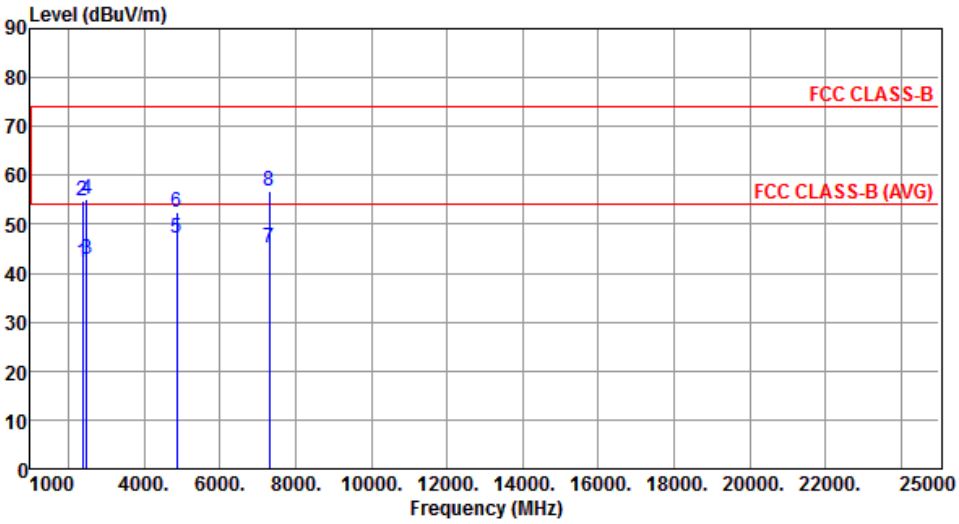
Modulation	11b	Test Freq. (MHz)	2437
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	43.42	54.00	-10.58	46.24	-2.82	Average	100	316
2	2390.00	54.88	74.00	-19.12	57.70	-2.82	Peak	100	316
3	2483.50	44.62	54.00	-9.38	47.58	-2.96	Average	100	316
4	2483.50	56.77	74.00	-17.23	59.73	-2.96	Peak	100	316
5	4874.00	44.84	54.00	-9.16	41.25	3.59	Average	100	176
6	4874.00	50.99	74.00	-23.01	47.40	3.59	Peak	100	176
7	7311.00	45.22	54.00	-8.78	36.03	9.19	Average	131	86
8	7311.00	56.87	74.00	-17.13	47.68	9.19	Peak	131	86

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

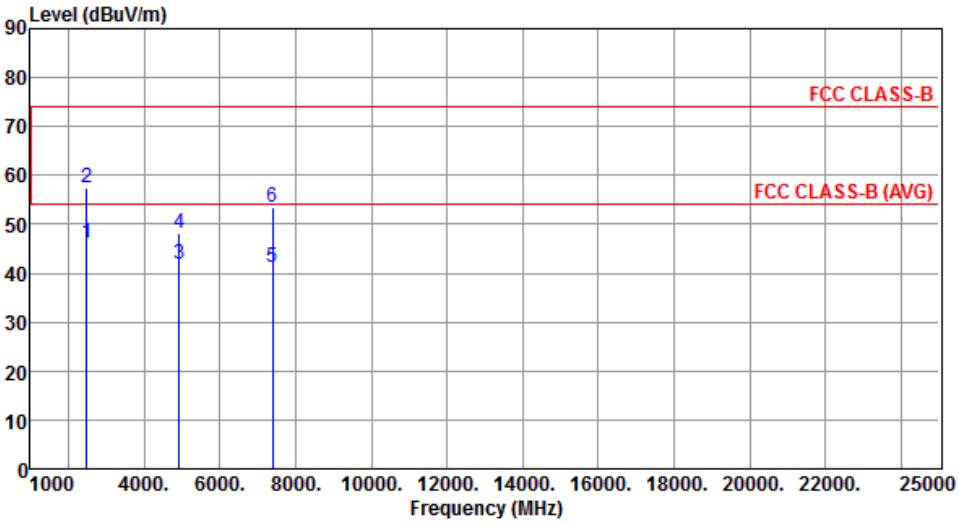
Modulation	11b	Test Freq. (MHz)	2437
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	42.18	54.00	-11.82	45.00	-2.82	Average	144	338
2	2390.00	54.65	74.00	-19.35	57.47	-2.82	Peak	144	338
3	2483.50	42.83	54.00	-11.17	45.79	-2.96	Average	144	338
4	2483.50	55.02	74.00	-18.98	57.98	-2.96	Peak	144	338
5	4874.00	47.13	54.00	-6.87	43.54	3.59	Average	100	72
6	4874.00	52.42	74.00	-21.58	48.83	3.59	Peak	100	72
7	7311.00	45.21	54.00	-8.79	36.02	9.19	Average	129	181
8	7311.00	56.71	74.00	-17.29	47.52	9.19	Peak	129	181

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

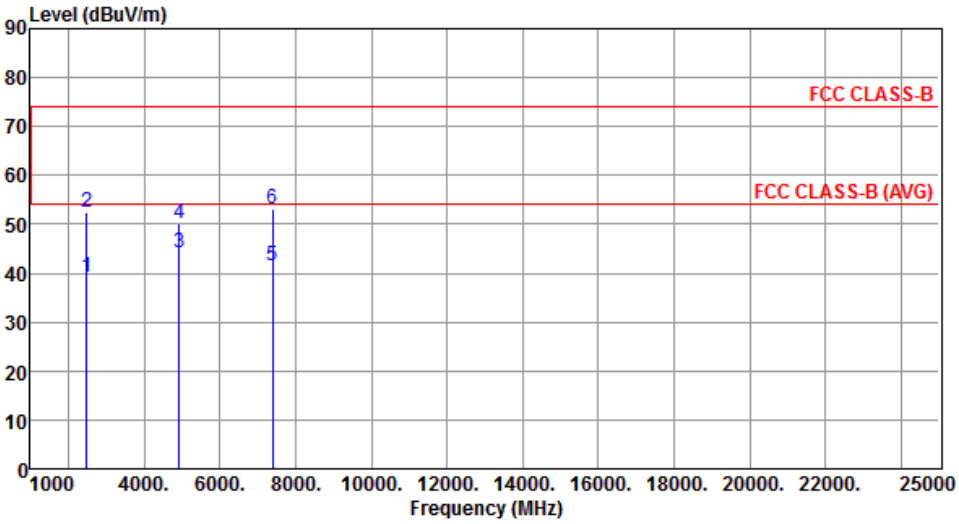
Modulation	11b	Test Freq. (MHz)	2462
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2483.50	46.04	54.00	-7.96	49.00	-2.96	Average	100	315
2	2483.50	57.36	74.00	-16.64	60.32	-2.96	Peak	100	315
3	4924.00	41.97	54.00	-12.03	38.28	3.69	Average	100	173
4	4924.00	48.00	74.00	-26.00	44.31	3.69	Peak	100	173
5	7386.00	41.23	54.00	-12.77	32.30	8.93	Average	100	77
6	7386.00	53.45	74.00	-20.55	44.52	8.93	Peak	100	77

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	11b	Test Freq. (MHz)	2462
Polarization	Vertical	Test Configuration	1

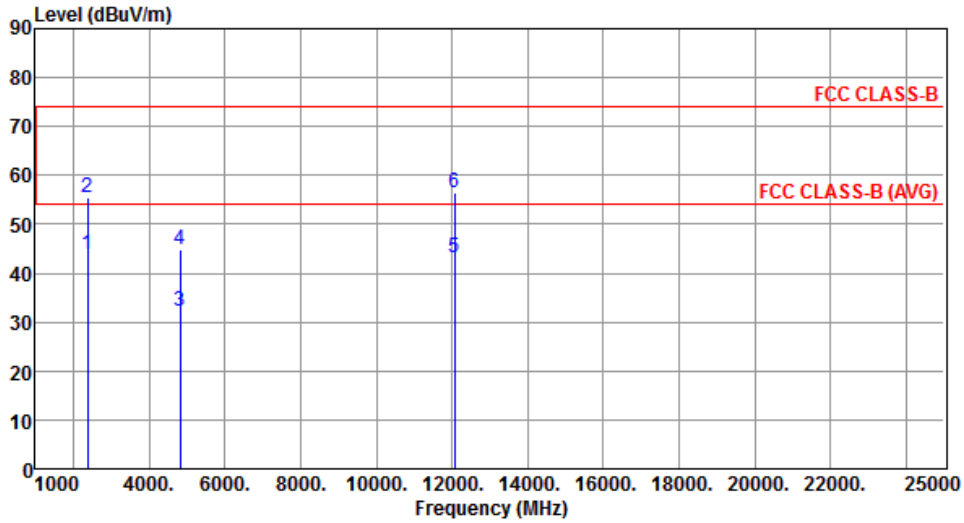


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2483.50	39.35	54.00	-14.65	42.31	-2.96	Average	140	335
2	2483.50	52.40	74.00	-21.60	55.36	-2.96	Peak	140	335
3	4924.00	44.21	54.00	-9.79	40.52	3.69	Average	100	73
4	4924.00	50.09	74.00	-23.91	46.40	3.69	Peak	100	73
5	7386.00	41.39	54.00	-12.61	32.46	8.93	Average	100	80
6	7386.00	53.29	74.00	-20.71	44.36	8.93	Peak	100	80

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

3.5.6 Transmitter Radiated Unwanted Emissions (Above 1GHz) for 11g

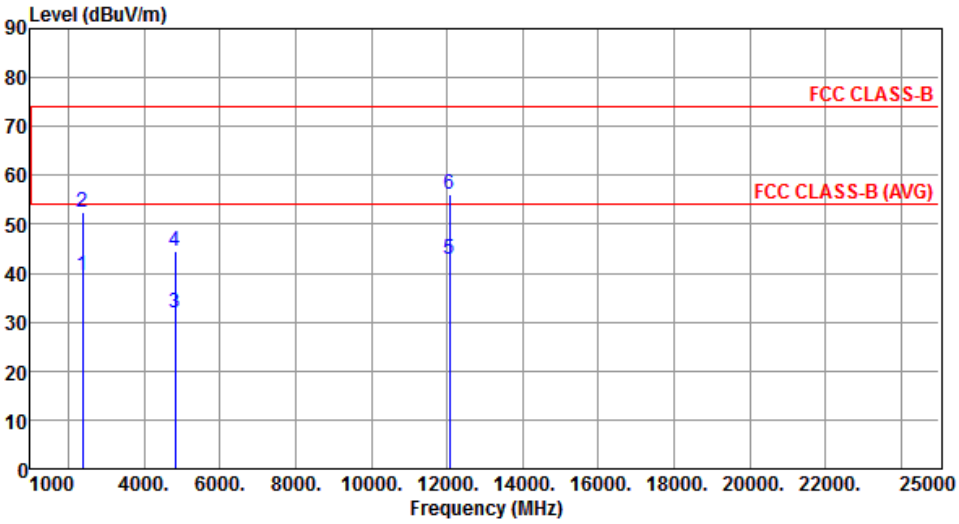
Modulation	11g	Test Freq. (MHz)	2412
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	43.67	54.00	-10.33	46.49	-2.82	Average	100	314
2	2390.00	55.45	74.00	-18.55	58.27	-2.82	Peak	100	314
3	4824.00	32.10	54.00	-21.90	28.55	3.55	Average	100	135
4	4824.00	44.87	74.00	-29.13	41.32	3.55	Peak	100	135
5	12060.00	43.14	54.00	-10.86	29.31	13.83	Average	100	216
6	12060.00	56.38	74.00	-17.62	42.55	13.83	Peak	100	216

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

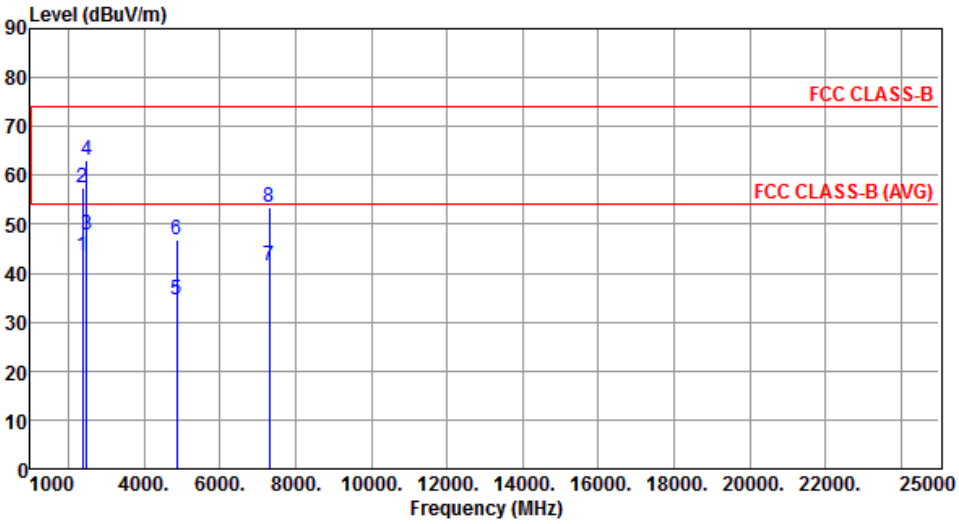
Modulation	11g	Test Freq. (MHz)	2412
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	39.43	54.00	-14.57	42.25	-2.82	Average	142	328
2	2390.00	52.53	74.00	-21.47	55.35	-2.82	Peak	142	328
3	4824.00	31.98	54.00	-22.02	28.43	3.55	Average	100	131
4	4824.00	44.59	74.00	-29.41	41.04	3.55	Peak	100	131
5	12060.00	42.88	54.00	-11.12	29.05	13.83	Average	100	205
6	12060.00	55.96	74.00	-18.04	42.13	13.83	Peak	100	205

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

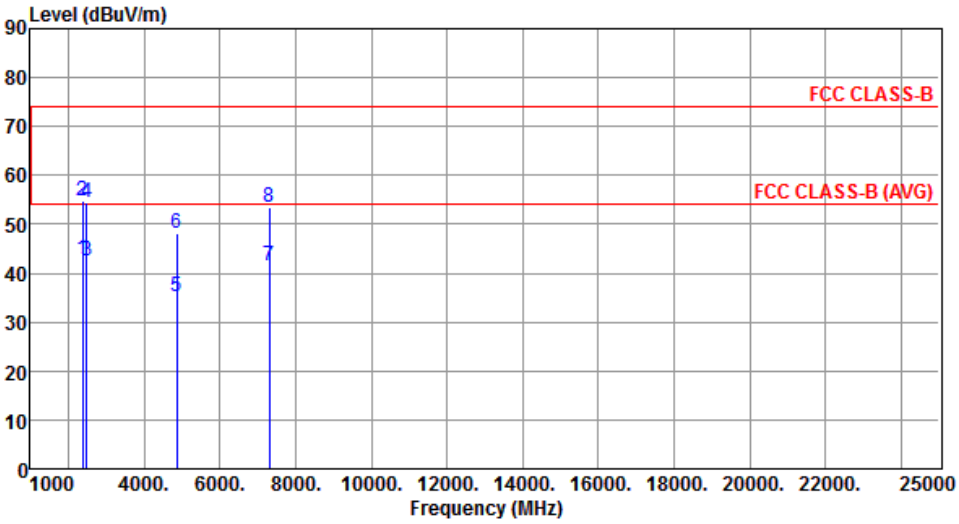
Modulation	11g	Test Freq. (MHz)	2437
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	43.62	54.00	-10.38	46.44	-2.82	Average	105	323
2	2390.00	57.48	74.00	-16.52	60.30	-2.82	Peak	105	323
3	2483.50	47.70	54.00	-6.30	50.66	-2.96	Average	105	323
4	2483.50	62.97	74.00	-11.03	65.93	-2.96	Peak	105	323
5	4874.00	34.55	54.00	-19.45	30.96	3.59	Average	100	30
6	4874.00	46.96	74.00	-27.04	43.37	3.59	Peak	100	30
7	7311.00	41.36	54.00	-12.64	32.17	9.19	Average	100	90
8	7311.00	53.59	74.00	-20.41	44.40	9.19	Peak	100	90

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

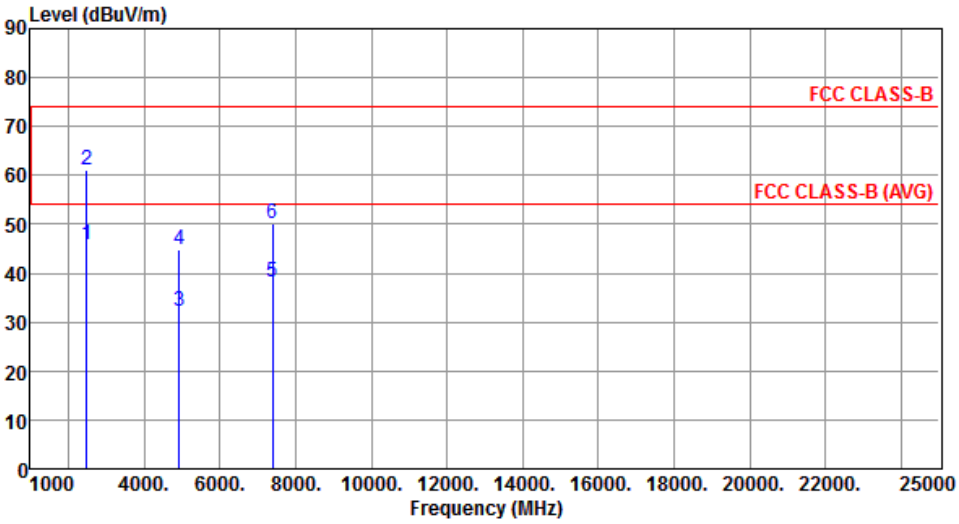
Modulation	11g	Test Freq. (MHz)	2437
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	42.69	54.00	-11.31	45.51	-2.82	Average	135	335
2	2390.00	54.73	74.00	-19.27	57.55	-2.82	Peak	135	335
3	2483.50	42.41	54.00	-11.59	45.37	-2.96	Average	135	335
4	2483.50	54.58	74.00	-19.42	57.54	-2.96	Peak	135	335
5	4874.00	35.26	54.00	-18.74	31.67	3.59	Average	100	64
6	4874.00	48.13	74.00	-25.87	44.54	3.59	Peak	100	64
7	7311.00	41.52	54.00	-12.48	32.33	9.19	Average	100	180
8	7311.00	53.46	74.00	-20.54	44.27	9.19	Peak	100	180

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

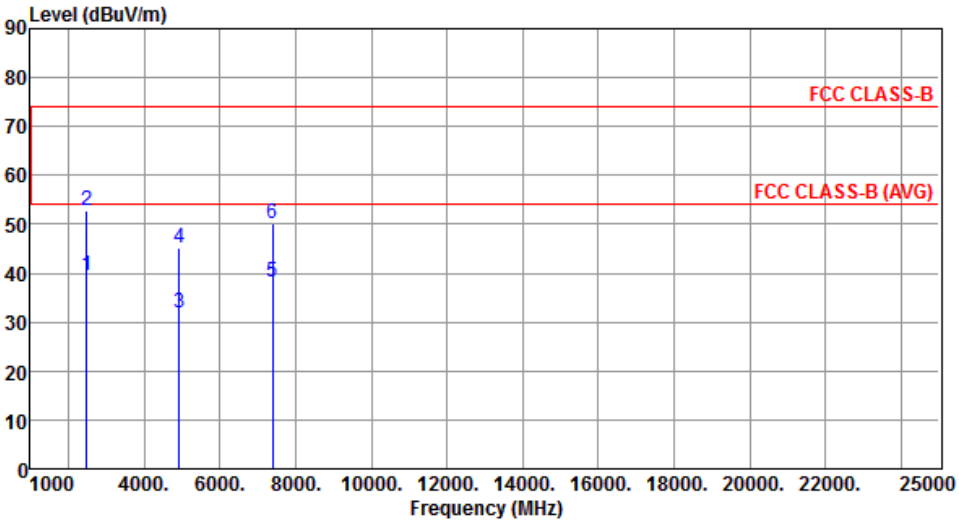
Modulation	11g	Test Freq. (MHz)	2462
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2483.50	45.86	54.00	-8.14	48.82	-2.96	Average	100	316
2	2483.50	60.95	74.00	-13.05	63.91	-2.96	Peak	100	316
3	4924.00	32.25	54.00	-21.75	28.56	3.69	Average	100	155
4	4924.00	45.00	74.00	-29.00	41.31	3.69	Peak	100	155
5	7386.00	38.17	54.00	-15.83	29.24	8.93	Average	100	53
6	7386.00	50.28	74.00	-23.72	41.35	8.93	Peak	100	53

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	11g	Test Freq. (MHz)	2462
Polarization	Vertical	Test Configuration	1

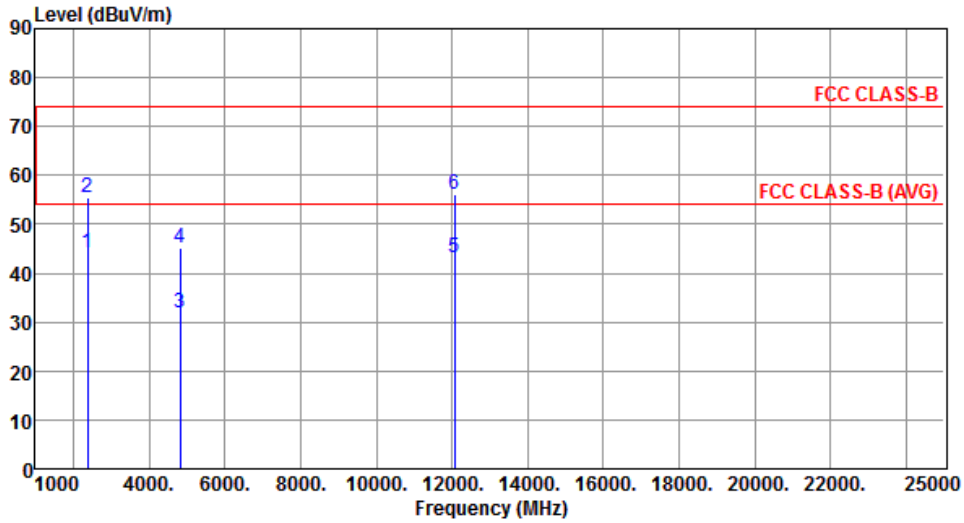


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2483.50	39.58	54.00	-14.42	42.54	-2.96	Average	140	340
2	2483.50	52.76	74.00	-21.24	55.72	-2.96	Peak	140	340
3	4924.00	31.82	54.00	-22.18	28.13	3.69	Average	100	131
4	4924.00	45.25	74.00	-28.75	41.56	3.69	Peak	100	131
5	7386.00	38.28	54.00	-15.72	29.35	8.93	Average	100	46
6	7386.00	50.14	74.00	-23.86	41.21	8.93	Peak	100	46

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

3.5.7 Transmitter Radiated Unwanted Emissions (Above 1GHz) for HT20

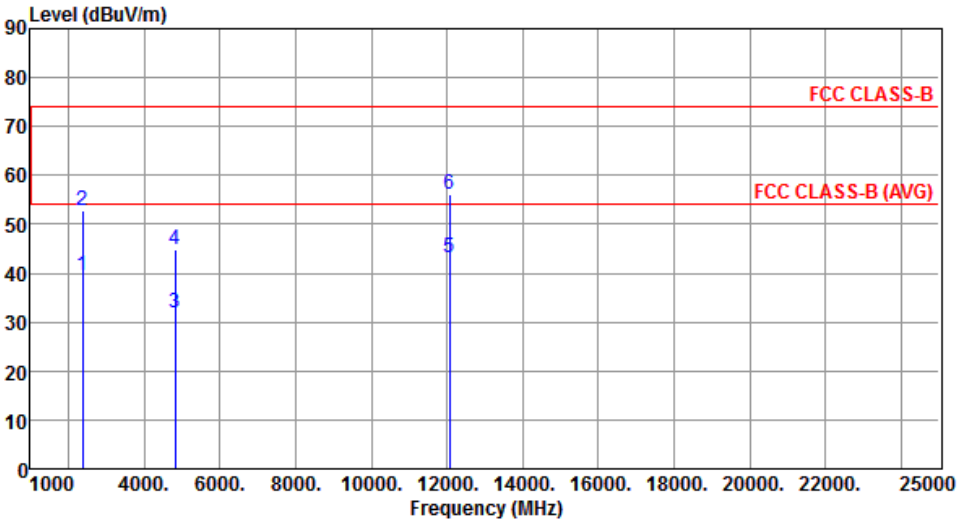
Modulation	HT20	Test Freq. (MHz)	2412
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	44.03	54.00	-9.97	46.85	-2.82	Average	100	322
2	2390.00	55.49	74.00	-18.51	58.31	-2.82	Peak	100	322
3	4824.00	31.91	54.00	-22.09	28.36	3.55	Average	100	256
4	4824.00	45.07	74.00	-28.93	41.52	3.55	Peak	100	256
5	12060.00	43.29	54.00	-10.71	29.46	13.83	Average	100	131
6	12060.00	56.18	74.00	-17.82	42.35	13.83	Peak	100	131

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

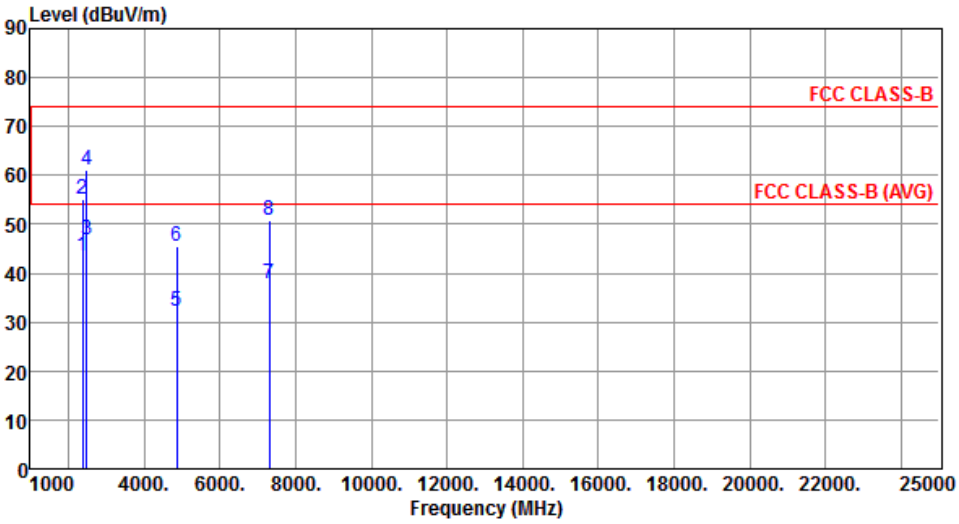
Modulation	HT20	**Test Freq. (MHz)**	2412
Polarization	Vertical	**Test Configuration**	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	39.49	54.00	-14.51	42.31	-2.82	Average	140	335
2	2390.00	52.66	74.00	-21.34	55.48	-2.82	Peak	140	335
3	4824.00	31.88	54.00	-22.12	28.33	3.55	Average	100	135
4	4824.00	44.76	74.00	-29.24	41.21	3.55	Peak	100	135
5	12060.00	43.05	54.00	-10.95	29.22	13.83	Average	100	212
6	12060.00	56.27	74.00	-17.73	42.44	13.83	Peak	100	212

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

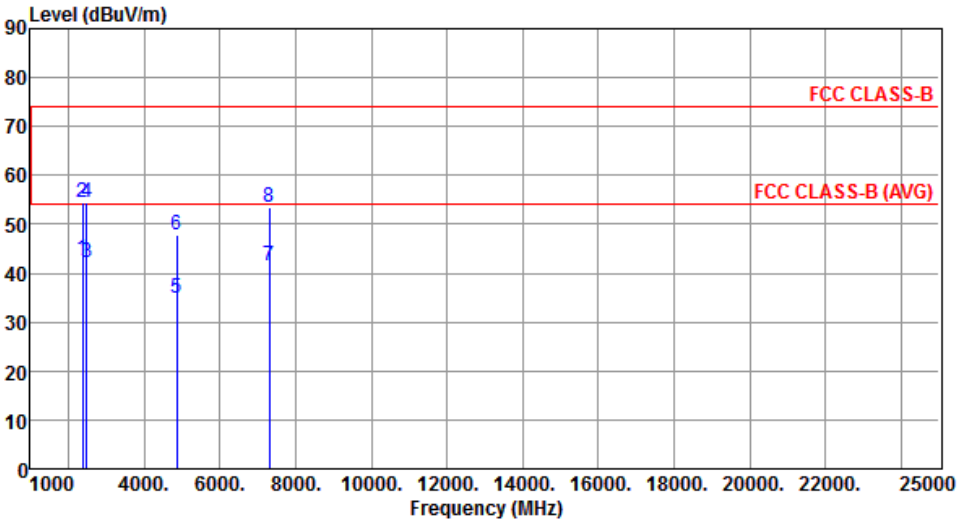
Modulation	HT20	Test Freq. (MHz)	2437
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	43.51	54.00	-10.49	46.33	-2.82	Average	100	318
2	2390.00	55.00	74.00	-19.00	57.82	-2.82	Peak	100	318
3	2483.50	46.67	54.00	-7.33	49.63	-2.96	Average	100	318
4	2483.50	61.03	74.00	-12.97	63.99	-2.96	Peak	100	318
5	4874.00	32.14	54.00	-21.86	28.55	3.59	Average	100	126
6	4874.00	45.51	74.00	-28.49	41.92	3.59	Peak	100	126
7	7311.00	37.73	54.00	-16.27	28.54	9.19	Average	100	193
8	7311.00	50.65	74.00	-23.35	41.46	9.19	Peak	100	193

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

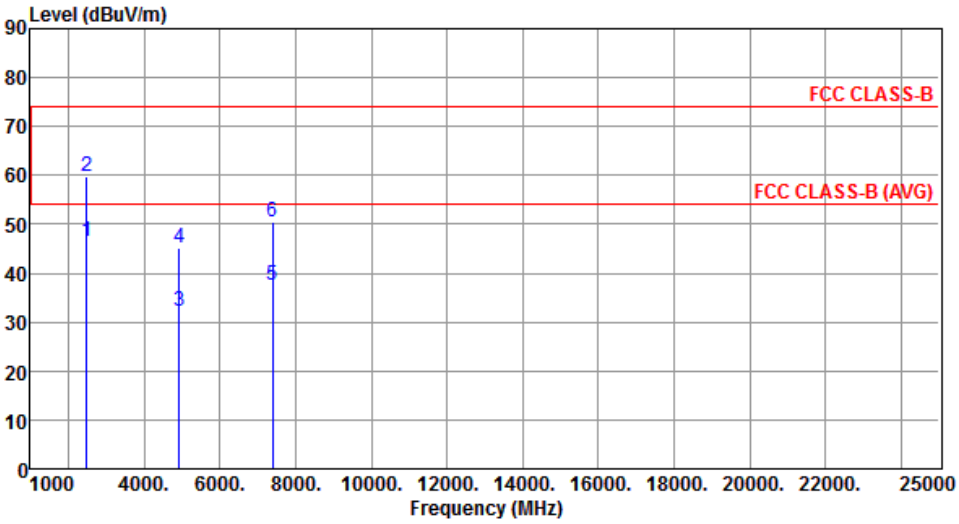
Modulation	HT20	Test Freq. (MHz)	2437
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	42.79	54.00	-11.21	45.61	-2.82	Average	136	339
2	2390.00	54.46	74.00	-19.54	57.28	-2.82	Peak	136	339
3	2483.50	42.31	54.00	-11.69	45.27	-2.96	Average	136	339
4	2483.50	54.39	74.00	-19.61	57.35	-2.96	Peak	136	339
5	4874.00	34.94	54.00	-19.06	31.35	3.59	Average	100	62
6	4874.00	47.95	74.00	-26.05	44.36	3.59	Peak	100	62
7	7311.00	41.61	54.00	-12.39	32.42	9.19	Average	100	178
8	7311.00	53.54	74.00	-20.46	44.35	9.19	Peak	100	178

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

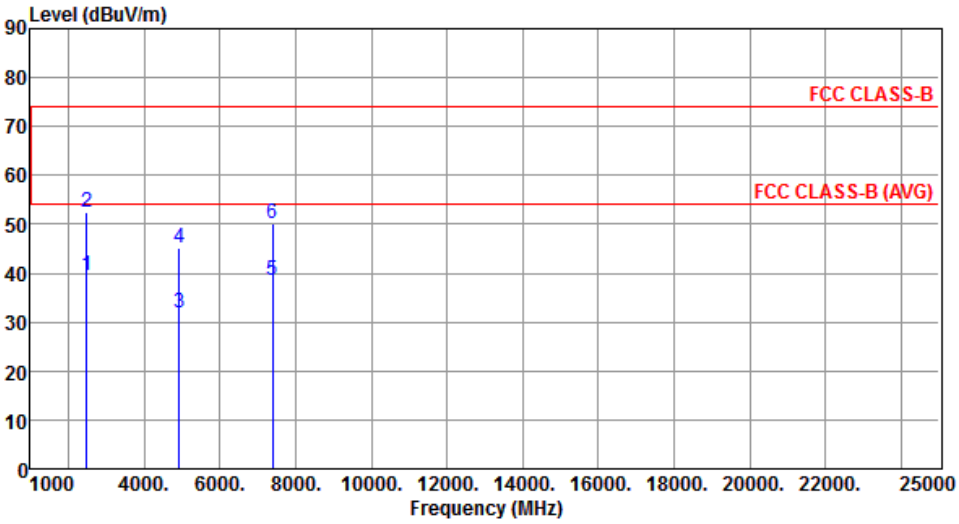
Modulation	HT20	**Test Freq. (MHz)**	2462
Polarization	Horizontal	**Test Configuration**	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2483.50	46.47	54.00	-7.53	49.43	-2.96	Average	100	304
2	2483.50	59.93	74.00	-14.07	62.89	-2.96	Peak	100	304
3	4924.00	32.34	54.00	-21.66	28.65	3.69	Average	100	222
4	4924.00	45.22	74.00	-28.78	41.53	3.69	Peak	100	222
5	7386.00	37.46	54.00	-16.54	28.53	8.93	Average	100	121
6	7386.00	50.49	74.00	-23.51	41.56	8.93	Peak	100	121

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	HT20	**Test Freq. (MHz)**	2462
Polarization	Vertical	**Test Configuration**	1

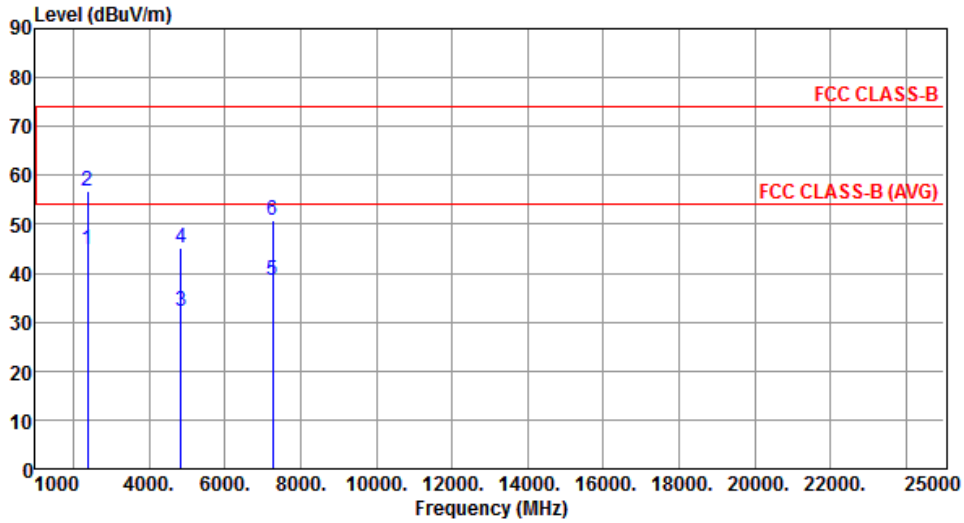


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2483.50	39.39	54.00	-14.61	42.35	-2.96	Average	140	333
2	2483.50	52.39	74.00	-21.61	55.35	-2.96	Peak	140	333
3	4924.00	31.95	54.00	-22.05	28.26	3.69	Average	100	130
4	4924.00	45.31	74.00	-28.69	41.62	3.69	Peak	100	130
5	7386.00	38.43	54.00	-15.57	29.50	8.93	Average	100	43
6	7386.00	50.28	74.00	-23.72	41.35	8.93	Peak	100	43

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

3.5.8 Transmitter Radiated Unwanted Emissions (Above 1GHz) for HT40

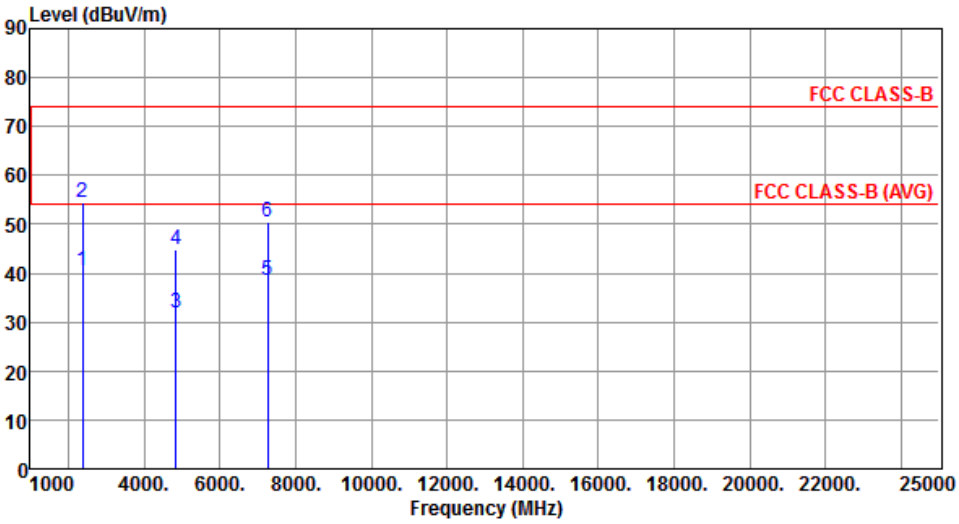
Modulation	HT40	Test Freq. (MHz)	2422
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	44.69	54.00	-9.31	47.51	-2.82	Average	100	318
2	2390.00	56.77	74.00	-17.23	59.59	-2.82	Peak	100	318
3	4844.00	32.18	54.00	-21.82	28.62	3.56	Average	100	222
4	4844.00	45.09	74.00	-28.91	41.53	3.56	Peak	100	222
5	7266.00	38.58	54.00	-15.42	29.35	9.23	Average	100	256
6	7266.00	50.75	74.00	-23.25	41.52	9.23	Peak	100	256

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

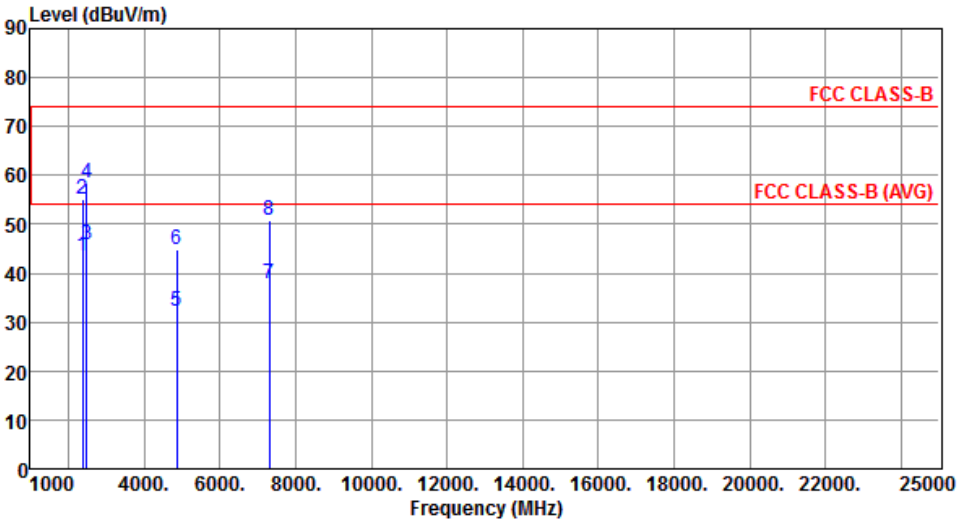
Modulation	HT40	Test Freq. (MHz)	2422
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	40.39	54.00	-13.61	43.21	-2.82	Average	140	335
2	2390.00	54.50	74.00	-19.50	57.32	-2.82	Peak	140	335
3	4844.00	31.99	54.00	-22.01	28.43	3.56	Average	100	168
4	4844.00	44.99	74.00	-29.01	41.43	3.56	Peak	100	168
5	7266.00	38.69	54.00	-15.31	29.46	9.23	Average	100	186
6	7266.00	50.51	74.00	-23.49	41.28	9.23	Peak	100	186

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

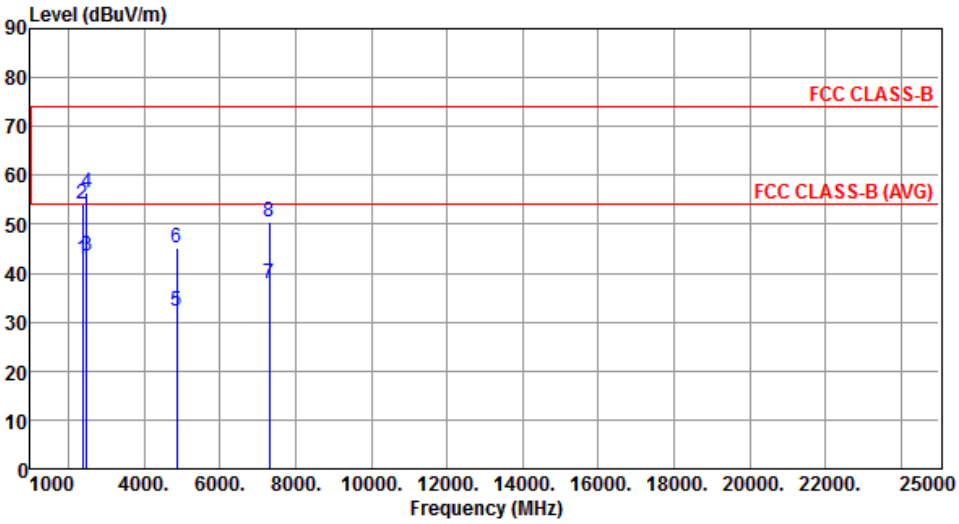
Modulation	HT40	Test Freq. (MHz)	2437
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	43.62	54.00	-10.38	46.44	-2.82	Average	100	322
2	2390.00	55.26	74.00	-18.74	58.08	-2.82	Peak	100	322
3	2483.50	45.97	54.00	-8.03	48.93	-2.96	Average	100	322
4	2483.50	58.42	74.00	-15.58	61.38	-2.96	Peak	100	322
5	4874.00	32.24	54.00	-21.76	28.65	3.59	Average	100	313
6	4874.00	44.87	74.00	-29.13	41.28	3.59	Peak	100	313
7	7311.00	37.85	54.00	-16.15	28.66	9.19	Average	100	246
8	7311.00	50.71	74.00	-23.29	41.52	9.19	Peak	100	246

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

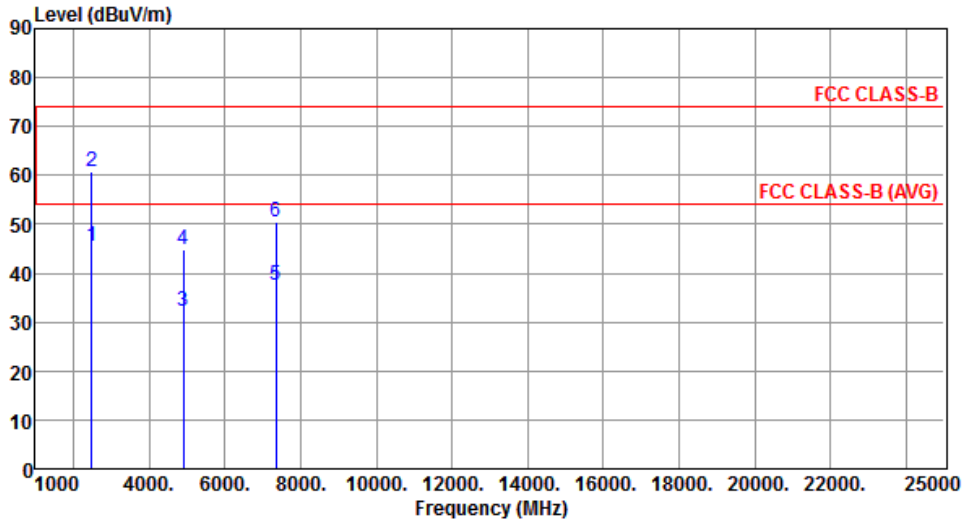
Modulation	HT40	Test Freq. (MHz)	2437
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	42.69	54.00	-11.31	45.51	-2.82	Average	101	9
2	2390.00	53.97	74.00	-20.03	56.79	-2.82	Peak	101	9
3	2483.50	43.66	54.00	-10.34	46.62	-2.96	Average	101	9
4	2483.50	56.60	74.00	-17.40	59.56	-2.96	Peak	101	9
5	4874.00	32.05	54.00	-21.95	28.46	3.59	Average	100	216
6	4874.00	45.12	74.00	-28.88	41.53	3.59	Peak	100	216
7	7311.00	37.81	54.00	-16.19	28.62	9.19	Average	100	156
8	7311.00	50.49	74.00	-23.51	41.30	9.19	Peak	100	156

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

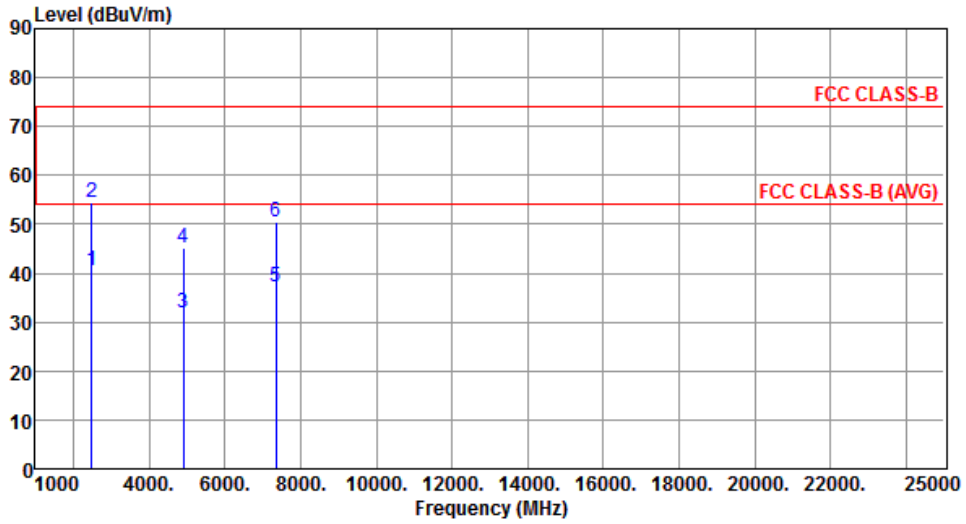
Modulation	HT40	**Test Freq. (MHz)**	2452
Polarization	Horizontal	**Test Configuration**	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2483.50	45.62	54.00	-8.38	48.58	-2.96	Average	100	317
2	2483.50	60.71	74.00	-13.29	63.67	-2.96	Peak	100	317
3	4904.00	32.18	54.00	-21.82	28.55	3.63	Average	100	243
4	4904.00	44.98	74.00	-29.02	41.35	3.63	Peak	100	243
5	7356.00	37.40	54.00	-16.60	28.34	9.06	Average	100	163
6	7356.00	50.61	74.00	-23.39	41.55	9.06	Peak	100	163

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	HT40	**Test Freq. (MHz)**	2452
Polarization	Vertical	**Test Configuration**	1



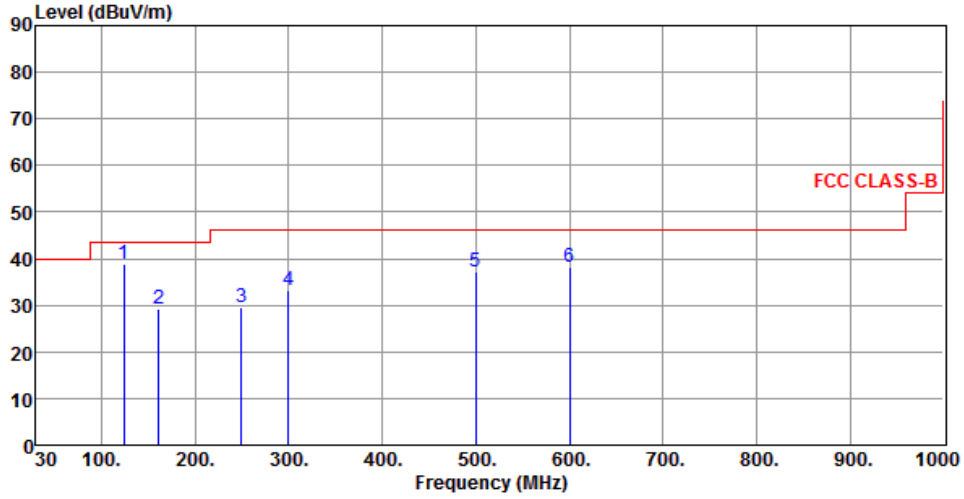
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2483.50	40.55	54.00	-13.45	43.51	-2.96	Average	133	325
2	2483.50	54.58	74.00	-19.42	57.54	-2.96	Peak	133	325
3	4904.00	31.97	54.00	-22.03	28.34	3.63	Average	100	153
4	4904.00	45.07	74.00	-28.93	41.44	3.63	Peak	100	153
5	7356.00	37.27	54.00	-16.73	28.21	9.06	Average	100	162
6	7356.00	50.42	74.00	-23.58	41.36	9.06	Peak	100	162

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Configuration 2: Model WAC6103D-I, NAP203: Wall mounted, Y-plane & Configuration 4: Model NWA1123-AC PRO: Wall mounted, Y-plane

3.5.9 Transmitter Radiated Unwanted Emissions (Below 1GHz)

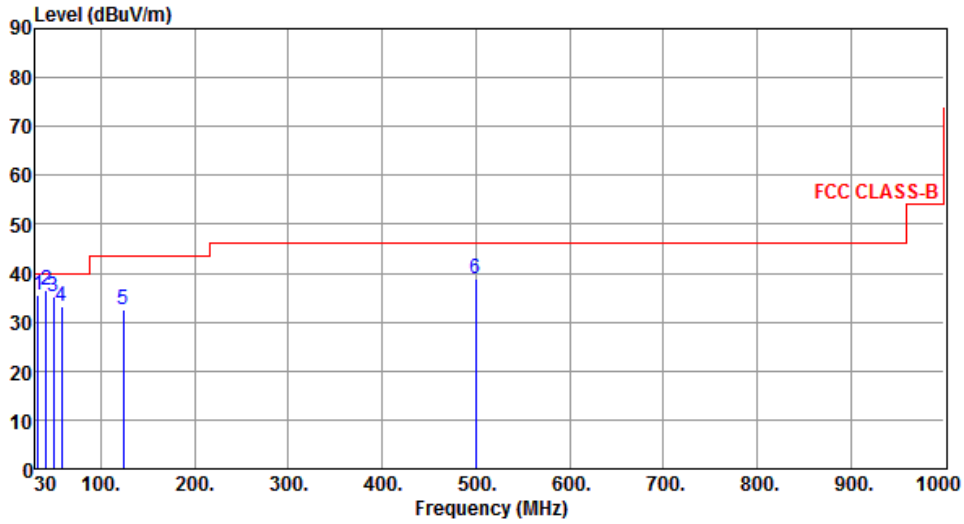
Modulation	11b	**Test Freq. (MHz)**	2437
Polarization	Horizontal	**Test Configuration**	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	124.21	38.81	43.50	-4.69	49.07	-10.26	QP	149	118
2	160.81	29.15	43.50	-14.35	37.58	-8.43	Peak	---	---
3	249.31	29.48	46.00	-16.52	39.44	-9.96	Peak	---	---
4	299.51	33.21	46.00	-12.79	41.31	-8.10	Peak	---	---
5	499.45	37.18	46.00	-8.82	40.31	-3.13	Peak	---	---
6	600.36	38.29	46.00	-7.71	39.25	-0.96	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

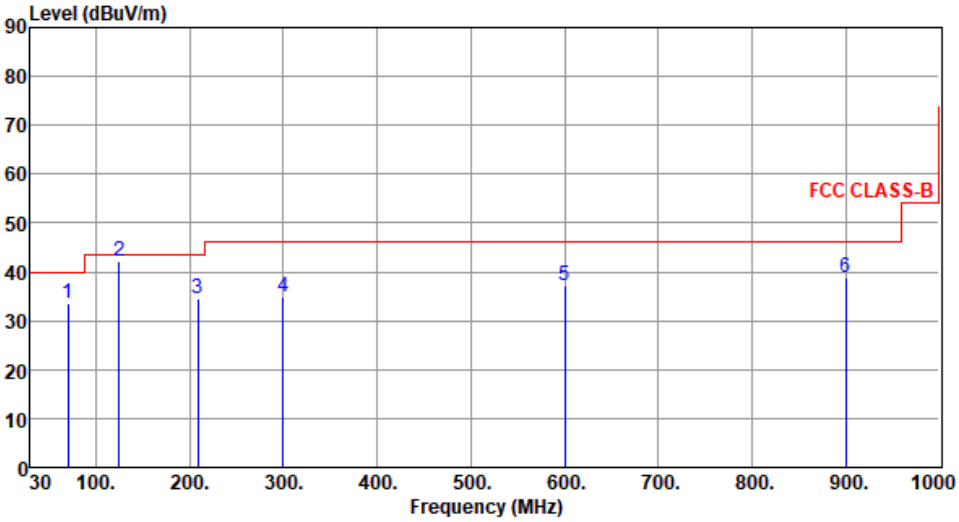
Modulation	11b	Test Freq. (MHz)	2437
Polarization	Vertical	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	32.71	35.66	40.00	-4.34	45.13	-9.47	QP	100	174
2	41.61	36.42	40.00	-3.58	44.83	-8.41	QP	100	156
3	49.21	35.16	40.00	-4.84	43.47	-8.31	QP	100	277
4	58.13	33.18	40.00	-6.82	42.09	-8.91	Peak	---	---
5	124.15	32.48	43.50	-11.02	42.75	-10.27	Peak	---	---
6	499.50	38.87	46.00	-7.13	42.00	-3.13	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

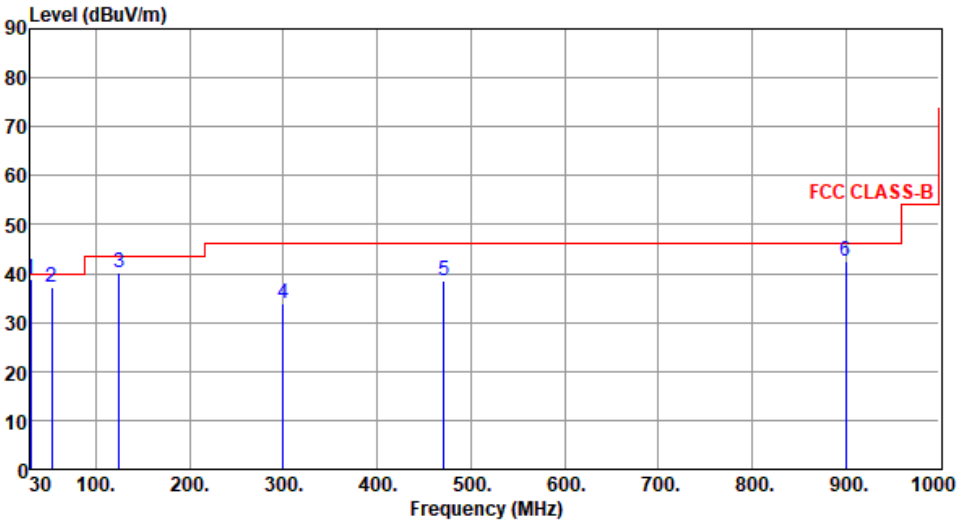
Modulation	11b	Test Freq. (MHz)	2437
Polarization	Horizontal	Test Configuration	4



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	69.88	33.44	40.00	-6.56	44.07	-10.63	Peak	---	---
2	124.58	42.05	43.50	-1.45	52.27	-10.22	QP	150	132
3	208.44	34.60	43.50	-8.90	46.67	-12.07	Peak	---	---
4	299.58	34.89	46.00	-11.11	42.99	-8.10	Peak	---	---
5	600.42	37.11	46.00	-8.89	38.07	-0.96	Peak	---	---
6	900.25	38.85	46.00	-7.15	34.77	4.08	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

Modulation	11b	Test Freq. (MHz)	2437
Polarization	Vertical	Test Configuration	4

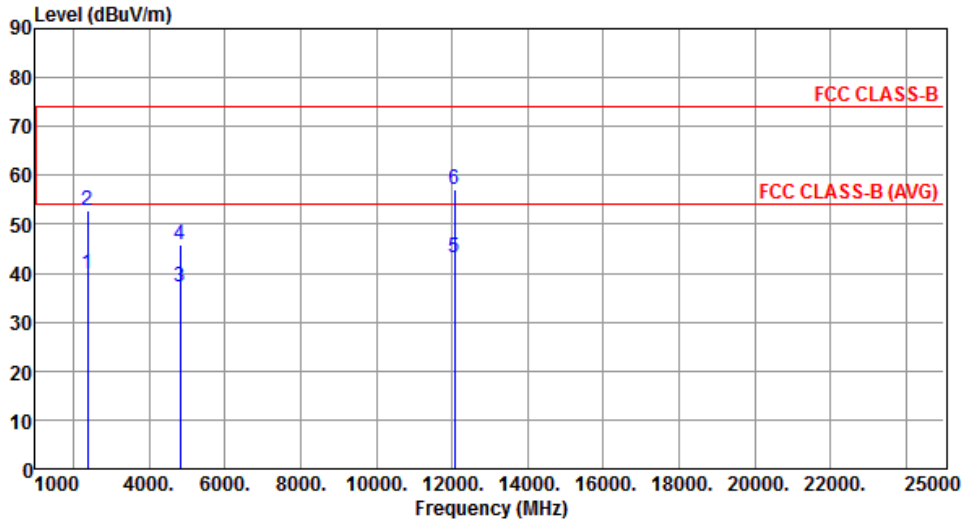


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	30.11	38.77	40.00	-1.23	48.47	-9.70	QP	100	169
2	53.22	37.25	40.00	-2.75	45.66	-8.41	QP	100	175
3	124.55	40.14	43.50	-3.36	50.37	-10.23	QP	100	187
4	299.54	34.02	46.00	-11.98	42.12	-8.10	Peak	---	---
5	471.55	38.66	46.00	-7.34	42.29	-3.63	QP	100	142
6	900.23	42.46	46.00	-3.54	38.38	4.08	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

3.5.10 Transmitter Radiated Unwanted Emissions (Above 1GHz) for 11b

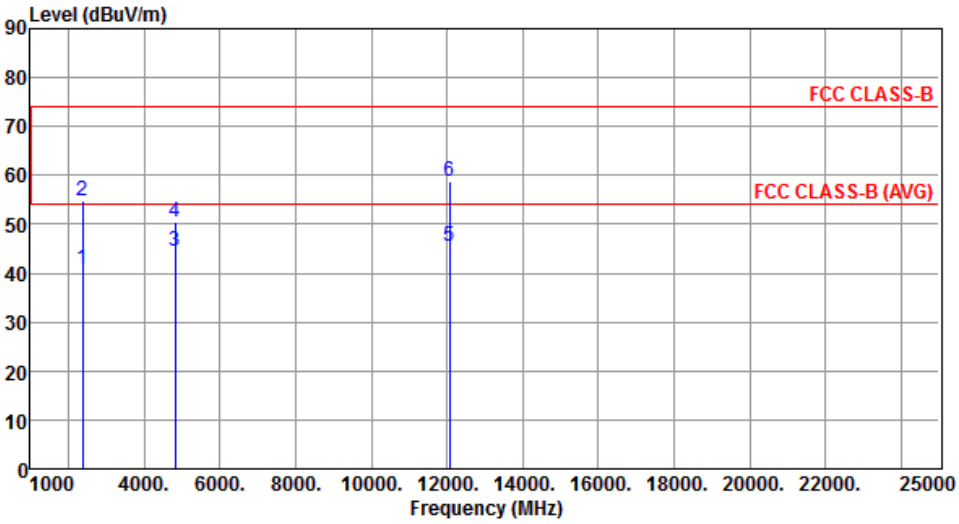
Modulation	11b	Test Freq. (MHz)	2412
Polarization	Horizontal	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	39.71	54.00	-14.29	42.53	-2.82	Average	100	291
2	2390.00	52.71	74.00	-21.29	55.53	-2.82	Peak	100	291
3	4824.00	37.07	54.00	-16.93	33.52	3.55	Average	100	75
4	4824.00	45.75	74.00	-28.25	42.20	3.55	Peak	100	75
5	12060.00	43.04	54.00	-10.96	29.21	13.83	Average	100	211
6	12060.00	57.14	74.00	-16.86	43.31	13.83	Peak	100	211

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

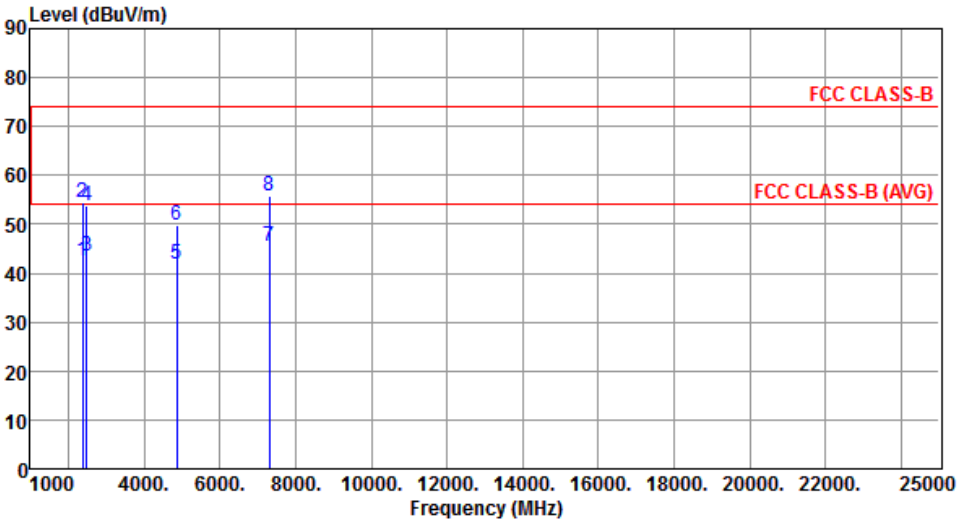
Modulation	11b	Test Freq. (MHz)	2412
Polarization	Vertical	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	40.82	54.00	-13.18	43.64	-2.82	Average	117	20
2	2390.00	54.65	74.00	-19.35	57.47	-2.82	Peak	117	20
3	4824.00	44.35	54.00	-9.65	40.80	3.55	Average	243	203
4	4824.00	50.60	74.00	-23.40	47.05	3.55	Peak	243	203
5	12060.00	45.50	54.00	-8.50	31.67	13.83	Average	100	30
6	12060.00	58.94	74.00	-15.06	45.11	13.83	Peak	100	30

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

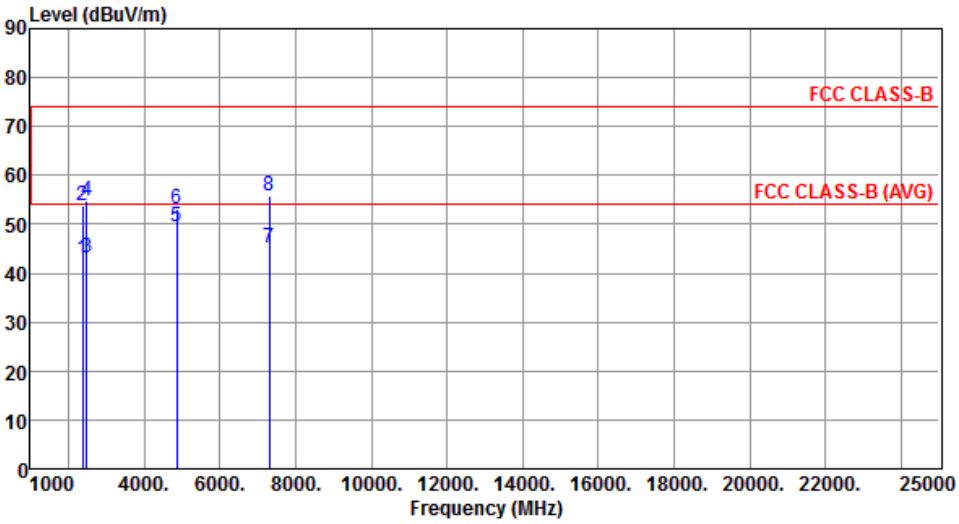
Modulation	11b	Test Freq. (MHz)	2437
Polarization	Horizontal	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	42.64	54.00	-11.36	45.46	-2.82	Average	100	294
2	2390.00	54.52	74.00	-19.48	57.34	-2.82	Peak	100	294
3	2483.50	43.64	54.00	-10.36	46.60	-2.96	Average	100	294
4	2483.50	53.85	74.00	-20.15	56.81	-2.96	Peak	100	294
5	4874.00	41.78	54.00	-12.22	38.19	3.59	Average	118	70
6	4874.00	49.84	74.00	-24.16	46.25	3.59	Peak	118	70
7	7311.00	45.37	54.00	-8.63	36.18	9.19	Average	100	229
8	7311.00	55.66	74.00	-18.34	46.47	9.19	Peak	100	229

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

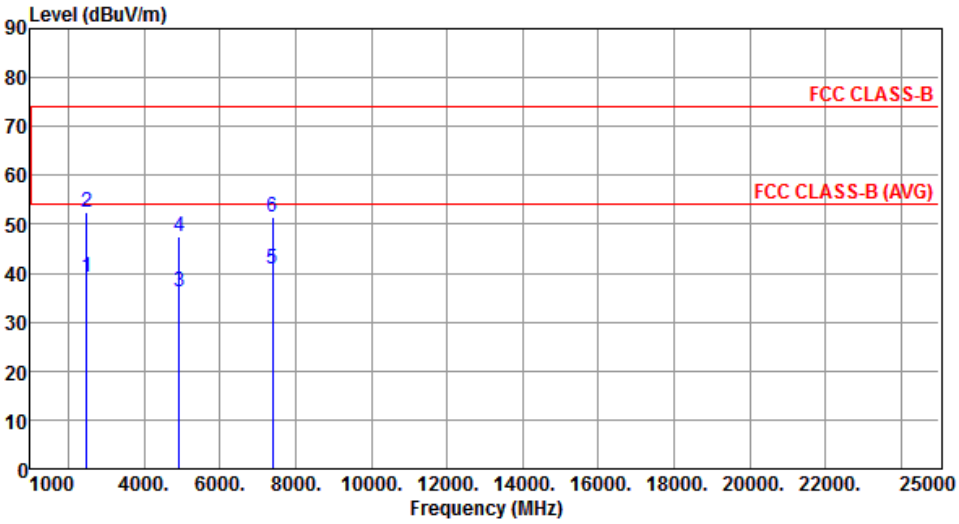
Modulation	11b	Test Freq. (MHz)	2437
Polarization	Vertical	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	42.70	54.00	-11.30	45.52	-2.82	Average	101	22
2	2390.00	53.92	74.00	-20.08	56.74	-2.82	Peak	101	22
3	2483.50	43.28	54.00	-10.72	46.24	-2.96	Average	101	22
4	2483.50	54.95	74.00	-19.05	57.91	-2.96	Peak	101	22
5	4874.00	49.34	54.00	-4.66	45.75	3.59	Average	219	207
6	4874.00	53.07	74.00	-20.93	49.48	3.59	Peak	219	207
7	7311.00	45.21	54.00	-8.79	36.02	9.19	Average	135	356
8	7311.00	55.77	74.00	-18.23	46.58	9.19	Peak	135	356

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

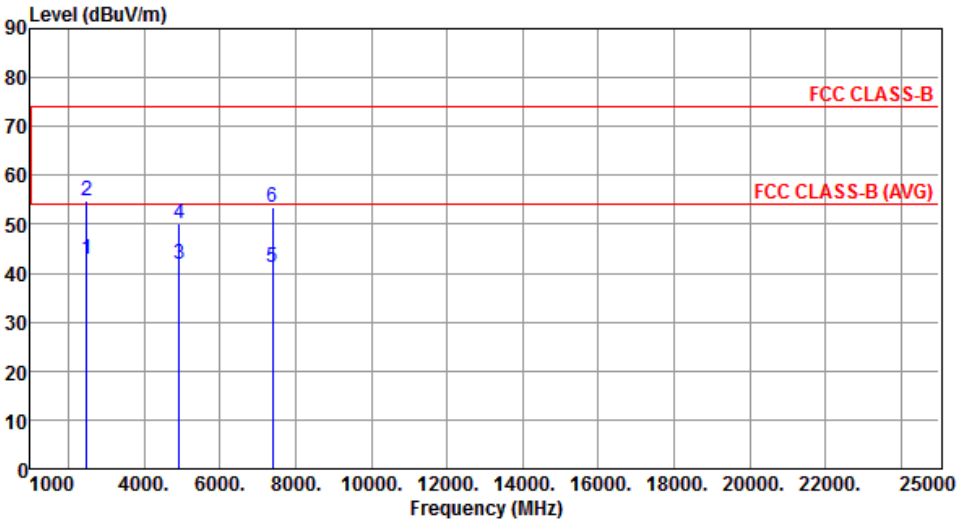
Modulation	11b	**Test Freq. (MHz)**	2462
Polarization	Horizontal	**Test Configuration**	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2483.50	39.24	54.00	-14.76	42.20	-2.96	Average	100	296
2	2483.50	52.56	74.00	-21.44	55.52	-2.96	Peak	100	296
3	4924.00	36.21	54.00	-17.79	32.52	3.69	Average	100	81
4	4924.00	47.62	74.00	-26.38	43.93	3.69	Peak	100	81
5	7386.00	40.97	54.00	-13.03	32.04	8.93	Average	100	216
6	7386.00	51.47	74.00	-22.53	42.54	8.93	Peak	100	216

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	11b	**Test Freq. (MHz)**	2462
Polarization	Vertical	**Test Configuration**	2

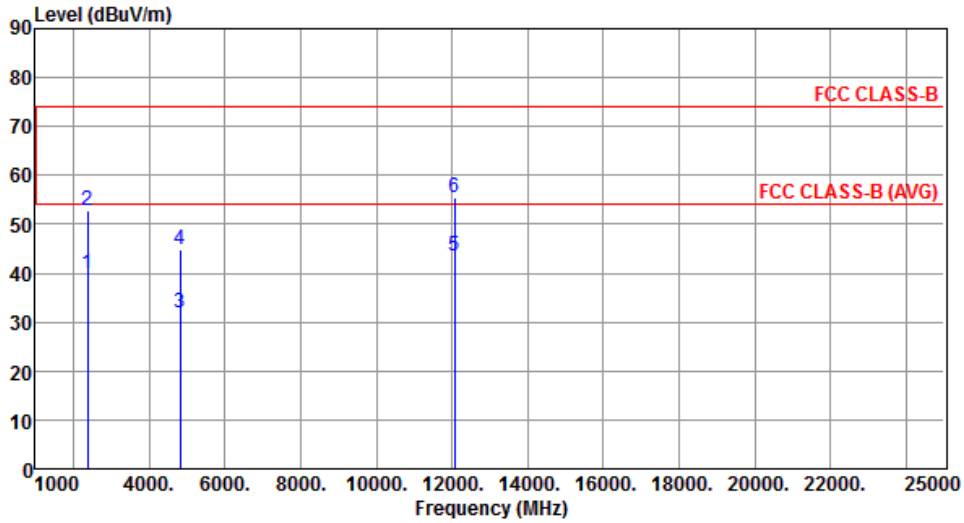


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2483.50	42.94	54.00	-11.06	45.90	-2.96	Average	100	27
2	2483.50	54.96	74.00	-19.04	57.92	-2.96	Peak	100	27
3	4924.00	41.96	54.00	-12.04	38.27	3.69	Average	238	211
4	4924.00	50.16	74.00	-23.84	46.47	3.69	Peak	238	211
5	7386.00	41.06	54.00	-12.94	32.13	8.93	Average	100	350
6	7386.00	53.33	74.00	-20.67	44.40	8.93	Peak	100	350

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

3.5.11 Transmitter Radiated Unwanted Emissions (Above 1GHz) for 11g

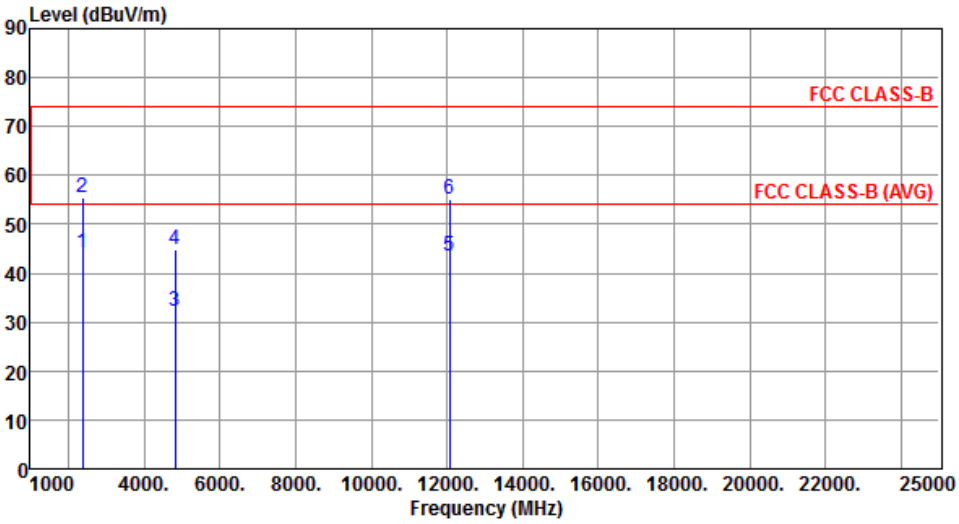
Modulation	11g	Test Freq. (MHz)	2412
Polarization	Horizontal	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	39.74	54.00	-14.26	42.56	-2.82	Average	100	291
2	2390.00	52.90	74.00	-21.10	55.72	-2.82	Peak	100	291
3	4824.00	31.80	54.00	-22.20	28.25	3.55	Average	100	63
4	4824.00	44.96	74.00	-29.04	41.41	3.55	Peak	100	63
5	12060.00	43.39	54.00	-10.61	29.56	13.83	Average	100	187
6	12060.00	55.56	74.00	-18.44	41.73	13.83	Peak	100	187

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

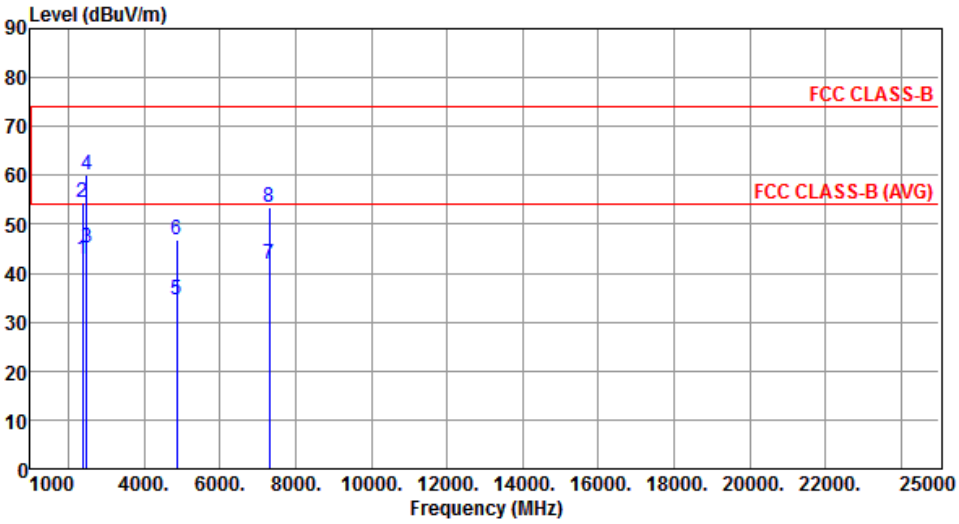
Modulation	11g	Test Freq. (MHz)	2412
Polarization	Vertical	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	44.05	54.00	-9.95	46.87	-2.82	Average	100	13
2	2390.00	55.52	74.00	-18.48	58.34	-2.82	Peak	100	13
3	4824.00	32.10	54.00	-21.90	28.55	3.55	Average	100	73
4	4824.00	44.87	74.00	-29.13	41.32	3.55	Peak	100	73
5	12060.00	43.48	54.00	-10.52	29.65	13.83	Average	100	138
6	12060.00	55.26	74.00	-18.74	41.43	13.83	Peak	100	138

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

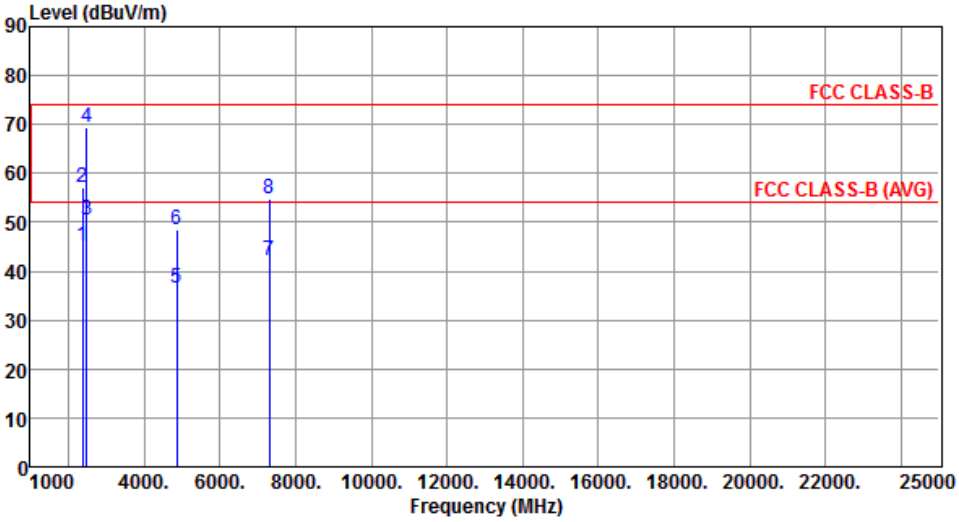
Modulation	11g	Test Freq. (MHz)	2437
Polarization	Horizontal	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	42.74	54.00	-11.26	45.56	-2.82	Average	100	291
2	2390.00	54.54	74.00	-19.46	57.36	-2.82	Peak	100	291
3	2483.50	45.28	54.00	-8.72	48.24	-2.96	Average	100	291
4	2483.50	60.00	74.00	-14.00	62.96	-2.96	Peak	100	291
5	4874.00	34.69	54.00	-19.31	31.10	3.59	Average	100	50
6	4874.00	46.97	74.00	-27.03	43.38	3.59	Peak	100	50
7	7311.00	41.77	54.00	-12.23	32.58	9.19	Average	100	230
8	7311.00	53.59	74.00	-20.41	44.40	9.19	Peak	100	230

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

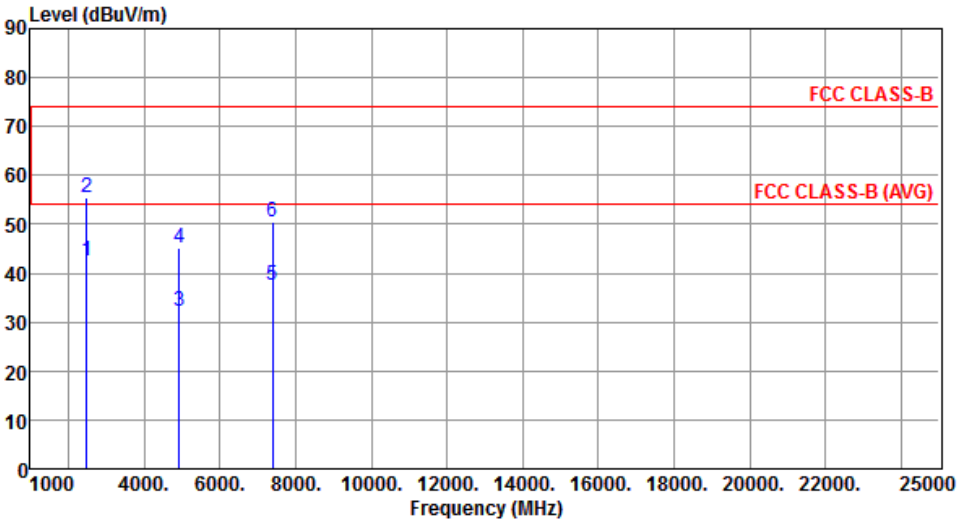
Modulation	11g	**Test Freq. (MHz)**	2437
Polarization	Vertical	**Test Configuration**	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	45.13	54.00	-8.87	47.95	-2.82	Average	101	25
2	2390.00	57.03	74.00	-16.97	59.85	-2.82	Peak	101	25
3	2483.50	50.55	54.00	-3.45	53.51	-2.96	Average	101	25
4	2483.50	69.57	74.00	-4.43	72.53	-2.96	Peak	101	25
5	4874.00	36.58	54.00	-17.42	32.99	3.59	Average	155	186
6	4874.00	48.37	74.00	-25.63	44.78	3.59	Peak	155	186
7	7311.00	42.03	54.00	-11.97	32.84	9.19	Average	100	359
8	7311.00	54.68	74.00	-19.32	45.49	9.19	Peak	100	359

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

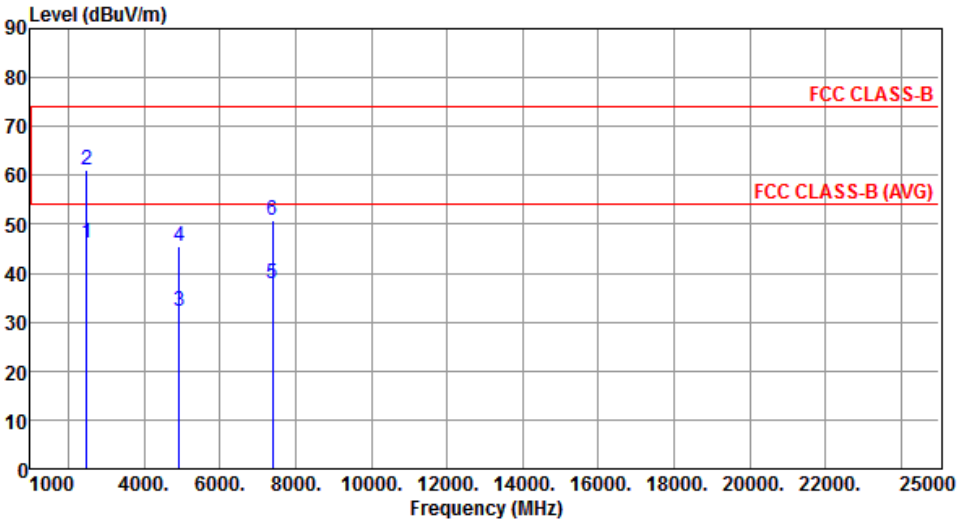
Modulation	11g	**Test Freq. (MHz)**	2462
Polarization	Horizontal	**Test Configuration**	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2483.50	42.59	54.00	-11.41	45.55	-2.96	Average	100	276
2	2483.50	55.56	74.00	-18.44	58.52	-2.96	Peak	100	276
3	4924.00	32.23	54.00	-21.77	28.54	3.69	Average	100	130
4	4924.00	45.01	74.00	-28.99	41.32	3.69	Peak	100	130
5	7386.00	37.67	54.00	-16.33	28.74	8.93	Average	100	164
6	7386.00	50.57	74.00	-23.43	41.64	8.93	Peak	100	164

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	11g	**Test Freq. (MHz)**	2462
Polarization	Vertical	**Test Configuration**	2

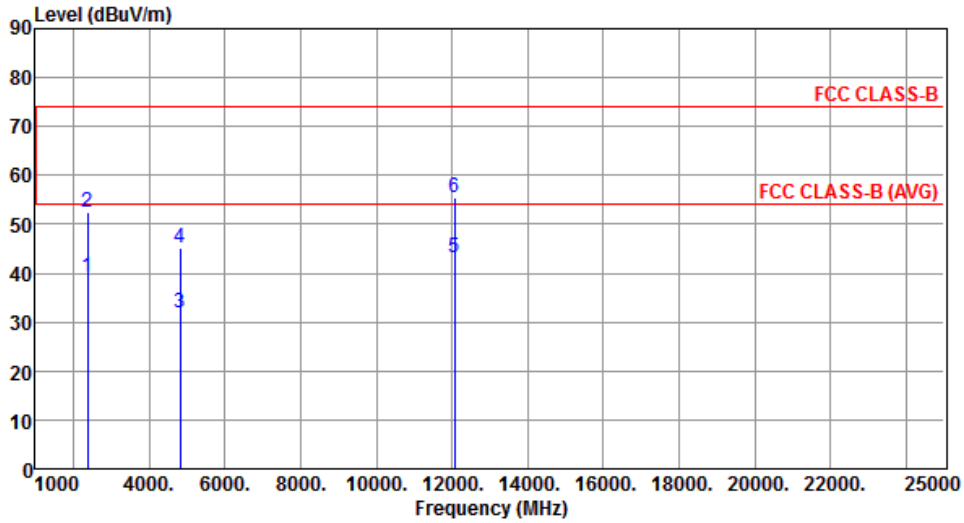


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2483.50	46.32	54.00	-7.68	49.28	-2.96	Average	100	15
2	2483.50	60.97	74.00	-13.03	63.93	-2.96	Peak	100	15
3	4924.00	32.30	54.00	-21.70	28.61	3.69	Average	100	132
4	4924.00	45.42	74.00	-28.58	41.73	3.69	Peak	100	132
5	7386.00	37.85	54.00	-16.15	28.92	8.93	Average	100	231
6	7386.00	50.67	74.00	-23.33	41.74	8.93	Peak	100	231

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

3.5.12 Transmitter Radiated Unwanted Emissions (Above 1GHz) for HT20

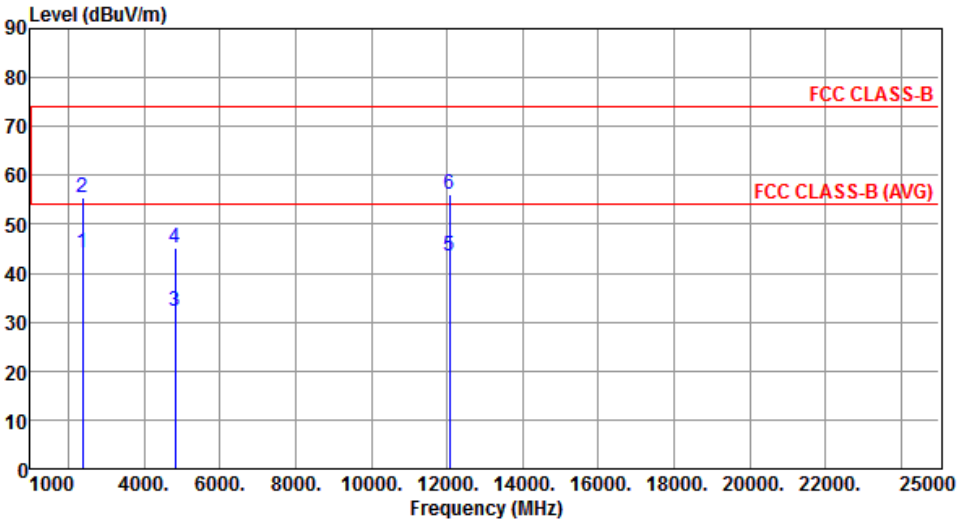
Modulation	HT20	Test Freq. (MHz)	2412
Polarization	Horizontal	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	39.18	54.00	-14.82	42.00	-2.82	Average	100	295
2	2390.00	52.61	74.00	-21.39	55.43	-2.82	Peak	100	295
3	4824.00	31.95	54.00	-22.05	28.40	3.55	Average	100	68
4	4824.00	45.05	74.00	-28.95	41.50	3.55	Peak	100	68
5	12060.00	43.16	54.00	-10.84	29.33	13.83	Average	100	181
6	12060.00	55.36	74.00	-18.64	41.53	13.83	Peak	100	181

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

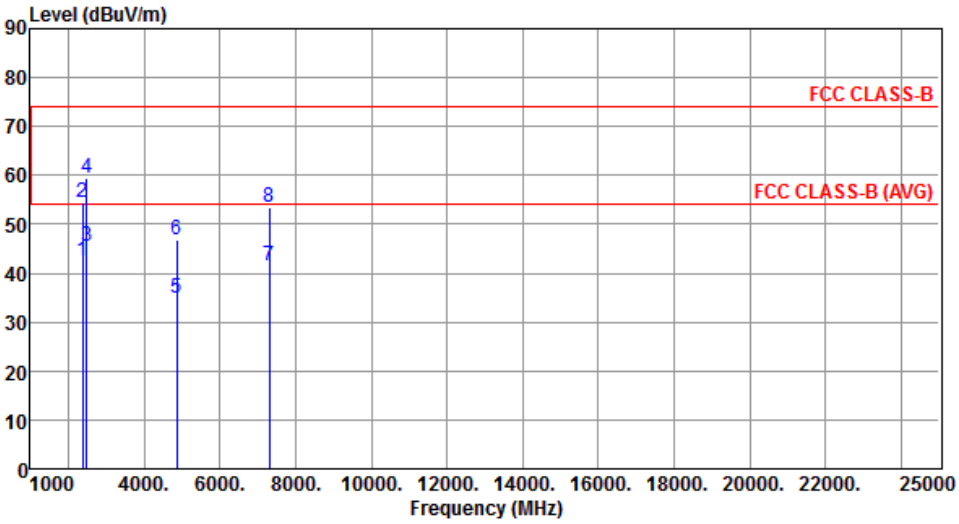
Modulation	HT20	Test Freq. (MHz)	2412
Polarization	Vertical	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	44.27	54.00	-9.73	47.09	-2.82	Average	102	16
2	2390.00	55.56	74.00	-18.44	58.38	-2.82	Peak	102	16
3	4824.00	32.16	54.00	-21.84	28.61	3.55	Average	100	144
4	4824.00	45.08	74.00	-28.92	41.53	3.55	Peak	100	144
5	12060.00	43.50	54.00	-10.50	29.67	13.83	Average	100	155
6	12060.00	56.05	74.00	-17.95	42.22	13.83	Peak	100	155

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

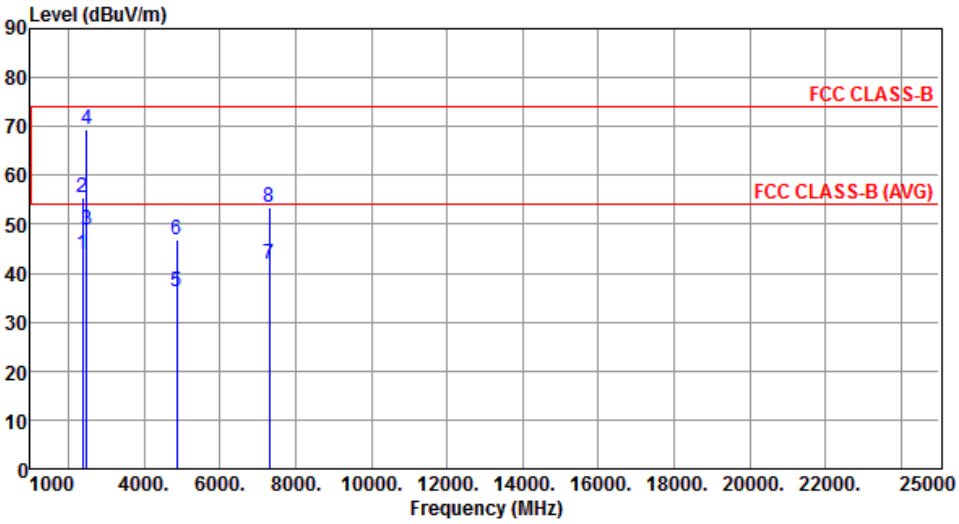
Modulation	HT20	Test Freq. (MHz)	2437
Polarization	Horizontal	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	42.49	54.00	-11.51	45.31	-2.82	Average	100	288
2	2390.00	54.43	74.00	-19.57	57.25	-2.82	Peak	100	288
3	2483.50	45.39	54.00	-8.61	48.35	-2.96	Average	100	288
4	2483.50	59.46	74.00	-14.54	62.42	-2.96	Peak	100	288
5	4874.00	34.94	54.00	-19.06	31.35	3.59	Average	100	322
6	4874.00	46.84	74.00	-27.16	43.25	3.59	Peak	100	322
7	7311.00	41.59	54.00	-12.41	32.40	9.19	Average	100	235
8	7311.00	53.34	74.00	-20.66	44.15	9.19	Peak	100	235

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

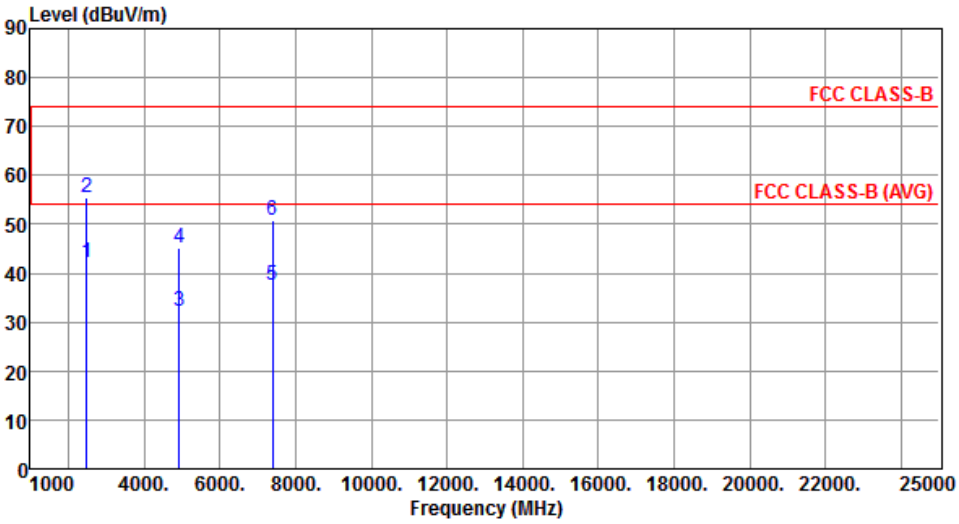
Modulation	HT20	**Test Freq. (MHz)**	2437
Polarization	Vertical	**Test Configuration**	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	43.69	54.00	-10.31	46.51	-2.82	Average	100	27
2	2390.00	55.56	74.00	-18.44	58.38	-2.82	Peak	100	27
3	2483.50	48.74	54.00	-5.26	51.70	-2.96	Average	100	27
4	2483.50	69.53	74.00	-4.47	72.49	-2.96	Peak	100	27
5	4874.00	36.12	54.00	-17.88	32.53	3.59	Average	155	181
6	4874.00	46.84	74.00	-27.16	43.25	3.59	Peak	155	181
7	7311.00	41.73	54.00	-12.27	32.54	9.19	Average	100	216
8	7311.00	53.34	74.00	-20.66	44.15	9.19	Peak	100	216

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

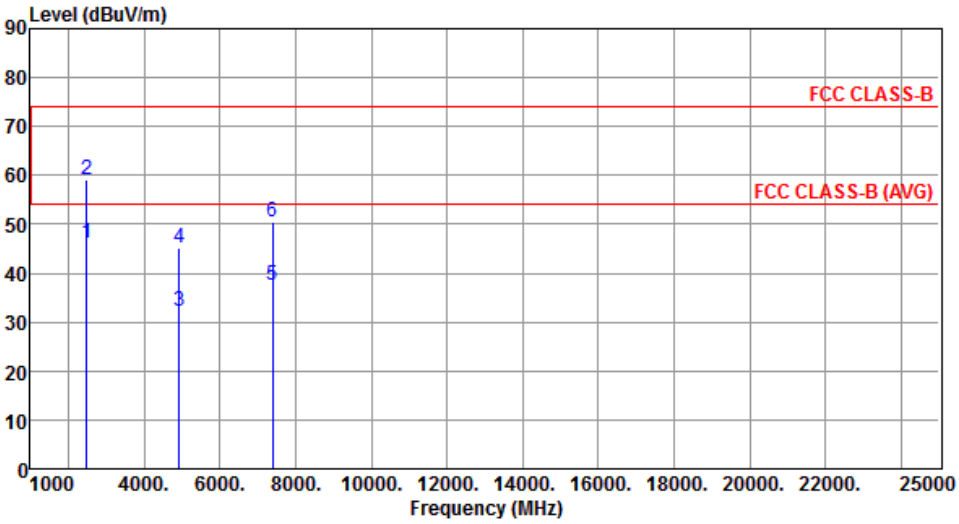
Modulation	HT20	Test Freq. (MHz)	2462
Polarization	Horizontal	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2483.50	42.28	54.00	-11.72	45.24	-2.96	Average	100	272
2	2483.50	55.39	74.00	-18.61	58.35	-2.96	Peak	100	272
3	4924.00	32.13	54.00	-21.87	28.44	3.69	Average	100	128
4	4924.00	45.13	74.00	-28.87	41.44	3.69	Peak	100	128
5	7386.00	37.63	54.00	-16.37	28.70	8.93	Average	100	163
6	7386.00	50.85	74.00	-23.15	41.92	8.93	Peak	100	163

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	HT20	Test Freq. (MHz)	2462
Polarization	Vertical	Test Configuration	2

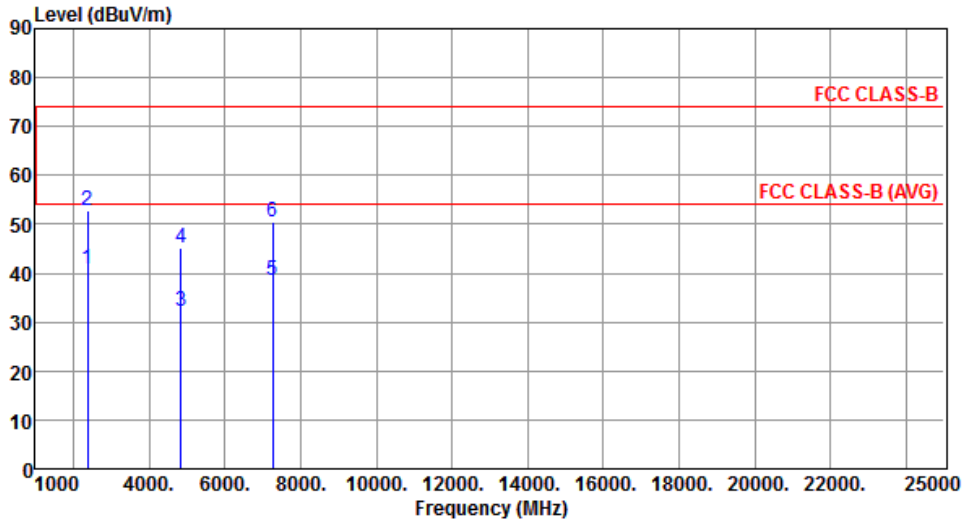


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2483.50	46.30	54.00	-7.70	49.26	-2.96	Average	102	3
2	2483.50	59.11	74.00	-14.89	62.07	-2.96	Peak	102	3
3	4924.00	32.20	54.00	-21.80	28.51	3.69	Average	100	116
4	4924.00	45.06	74.00	-28.94	41.37	3.69	Peak	100	116
5	7386.00	37.55	54.00	-16.45	28.62	8.93	Average	100	122
6	7386.00	50.64	74.00	-23.36	41.71	8.93	Peak	100	122

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

3.5.13 Transmitter Radiated Unwanted Emissions (Above 1GHz) for HT40

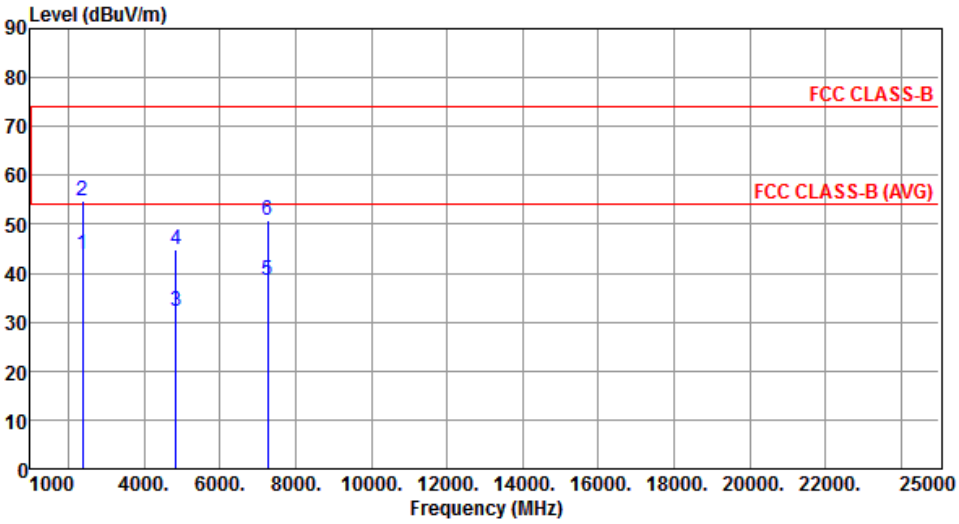
Modulation	HT40	Test Freq. (MHz)	2422
Polarization	Horizontal	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	40.70	54.00	-13.30	43.52	-2.82	Average	100	288
2	2390.00	52.90	74.00	-21.10	55.72	-2.82	Peak	100	288
3	4844.00	32.07	54.00	-21.93	28.51	3.56	Average	100	102
4	4844.00	45.00	74.00	-29.00	41.44	3.56	Peak	100	102
5	7266.00	38.39	54.00	-15.61	29.16	9.23	Average	100	308
6	7266.00	50.54	74.00	-23.46	41.31	9.23	Peak	100	308

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

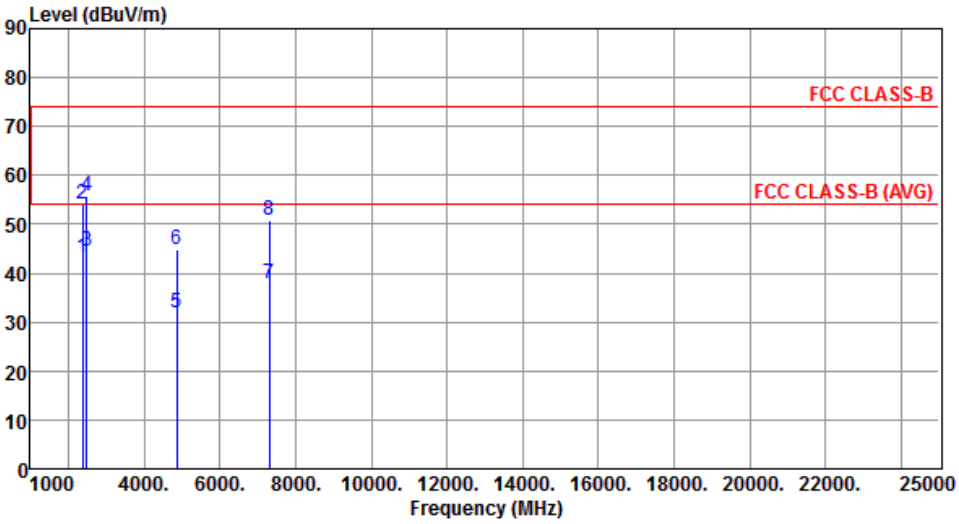
Modulation	HT40	Test Freq. (MHz)	2422
Polarization	Vertical	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	43.87	54.00	-10.13	46.69	-2.82	Average	104	10
2	2390.00	54.69	74.00	-19.31	57.51	-2.82	Peak	104	10
3	4844.00	32.12	54.00	-21.88	28.56	3.56	Average	100	131
4	4844.00	44.87	74.00	-29.13	41.31	3.56	Peak	100	131
5	7266.00	38.48	54.00	-15.52	29.25	9.23	Average	100	312
6	7266.00	50.79	74.00	-23.21	41.56	9.23	Peak	100	312

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

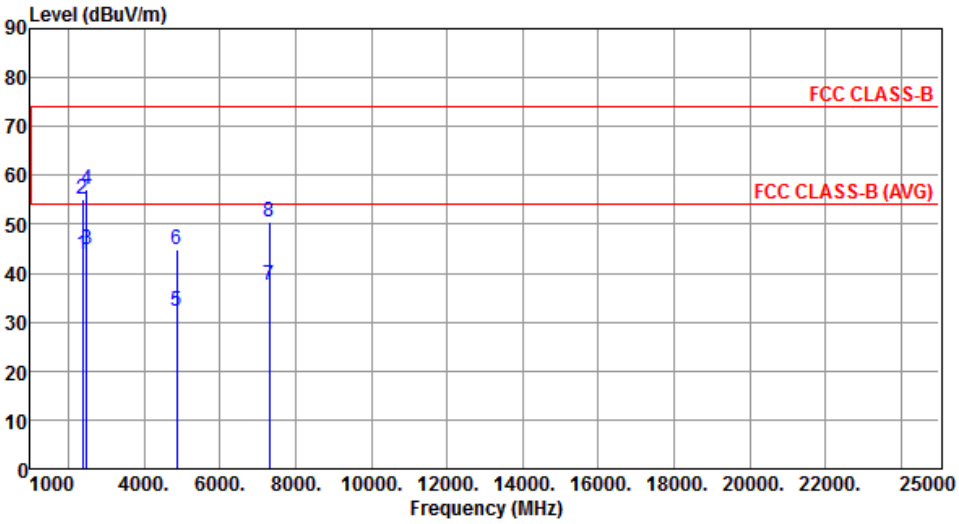
Modulation	HT40	**Test Freq. (MHz)**	2437
Polarization	Horizontal	**Test Configuration**	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	43.09	54.00	-10.91	45.91	-2.82	Average	118	312
2	2390.00	54.22	74.00	-19.78	57.04	-2.82	Peak	118	312
3	2483.50	44.48	54.00	-9.52	47.44	-2.96	Average	118	312
4	2483.50	55.93	74.00	-18.07	58.89	-2.96	Peak	118	312
5	4874.00	31.94	54.00	-22.06	28.35	3.59	Average	100	165
6	4874.00	44.90	74.00	-29.10	41.31	3.59	Peak	100	165
7	7311.00	37.73	54.00	-16.27	28.54	9.19	Average	100	131
8	7311.00	50.65	74.00	-23.35	41.46	9.19	Peak	100	131

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

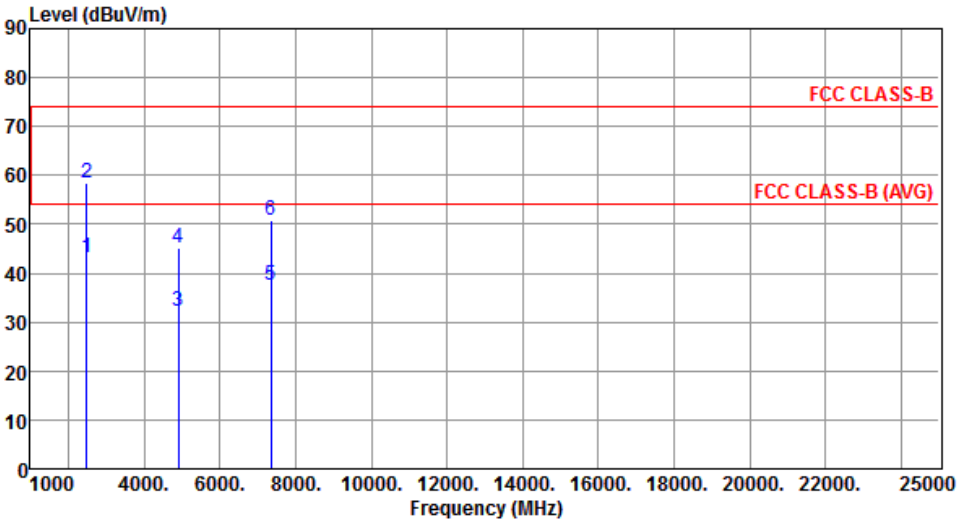
Modulation	HT40	**Test Freq. (MHz)**	2437
Polarization	Vertical	**Test Configuration**	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	43.78	54.00	-10.22	46.60	-2.82	Average	161	20
2	2390.00	54.96	74.00	-19.04	57.78	-2.82	Peak	161	20
3	2483.50	44.93	54.00	-9.07	47.89	-2.96	Average	161	20
4	2483.50	57.18	74.00	-16.82	60.14	-2.96	Peak	161	20
5	4874.00	32.22	54.00	-21.78	28.63	3.59	Average	100	144
6	4874.00	44.91	74.00	-29.09	41.32	3.59	Peak	100	144
7	7311.00	37.49	54.00	-16.51	28.30	9.19	Average	100	125
8	7311.00	50.61	74.00	-23.39	41.42	9.19	Peak	100	125

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

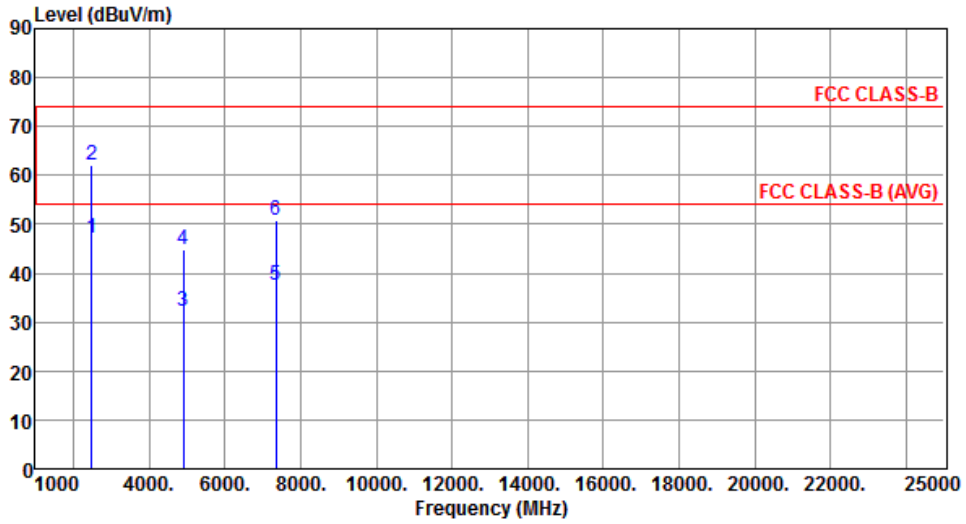
Modulation	HT40	**Test Freq. (MHz)**	2452
Polarization	Horizontal	**Test Configuration**	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2483.50	43.25	54.00	-10.75	46.21	-2.96	Average	100	289
2	2483.50	58.29	74.00	-15.71	61.25	-2.96	Peak	100	289
3	4904.00	32.21	54.00	-21.79	28.58	3.63	Average	100	132
4	4904.00	45.16	74.00	-28.84	41.53	3.63	Peak	100	132
5	7356.00	37.50	54.00	-16.50	28.44	9.06	Average	100	86
6	7356.00	50.83	74.00	-23.17	41.77	9.06	Peak	100	86

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	HT40	**Test Freq. (MHz)**	2452
Polarization	Vertical	**Test Configuration**	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2483.50	47.23	54.00	-6.77	50.19	-2.96	Average	104	29
2	2483.50	62.11	74.00	-11.89	65.07	-2.96	Peak	104	29
3	4904.00	32.09	54.00	-21.91	28.46	3.63	Average	100	135
4	4904.00	44.95	74.00	-29.05	41.32	3.63	Peak	100	135
5	7356.00	37.67	54.00	-16.33	28.61	9.06	Average	100	212
6	7356.00	50.91	74.00	-23.09	41.85	9.06	Peak	100	212

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

3.6 Emissions in Non-Restricted Frequency Bands

3.6.1 Emissions in Non-Restricted Frequency Bands Limit

Peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum in-band peak PSD level in 100 kHz.

3.6.2 Test Procedures

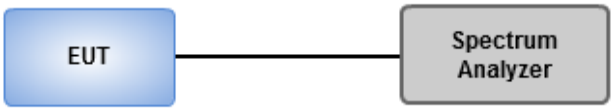
Reference level measurement

1. Set RBW=100kHz, VBW = 300kHz , Detector = Peak, Sweep time = Auto
2. Trace = max hold , Allow Trace to fully stabilize
3. Use the peak marker function to determine the maximum PSD level

Emission level measurement

1. Set RBW=100kHz, VBW = 300kHz , Detector = Peak, Sweep time = Auto
2. Trace = max hold , Allow Trace to fully stabilize
3. Scan Frequency range is up to 25GHz
4. Use the peak marker function to determine the maximum amplitude level

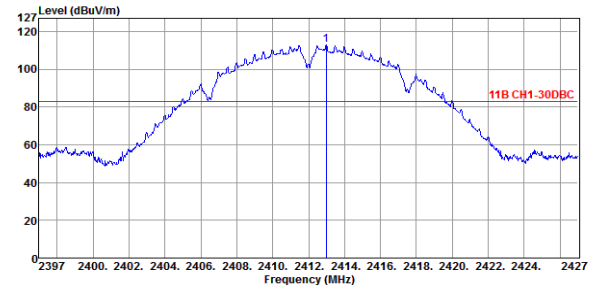
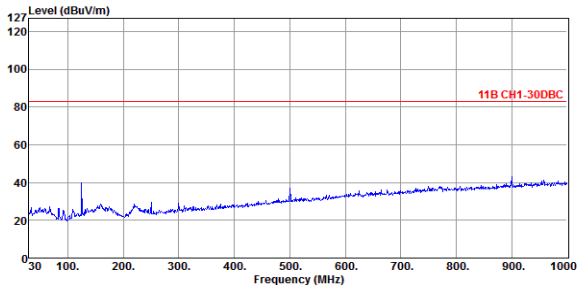
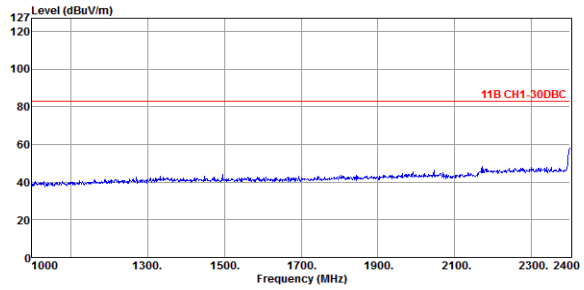
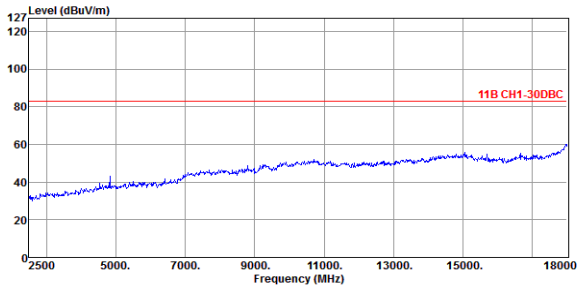
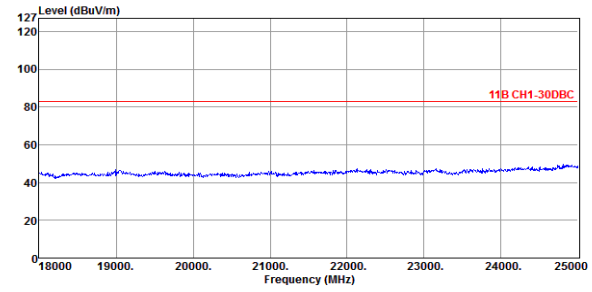
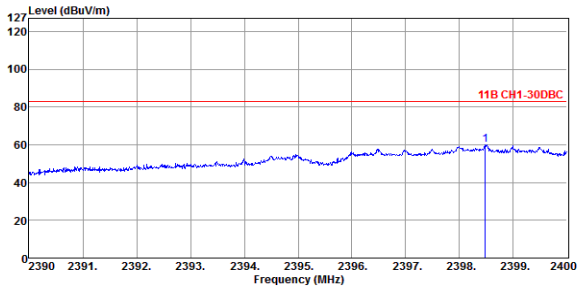
3.6.3 Test Setup

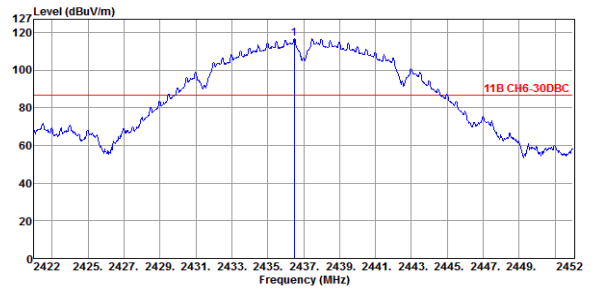
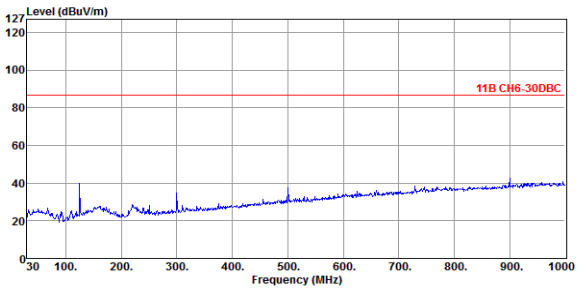
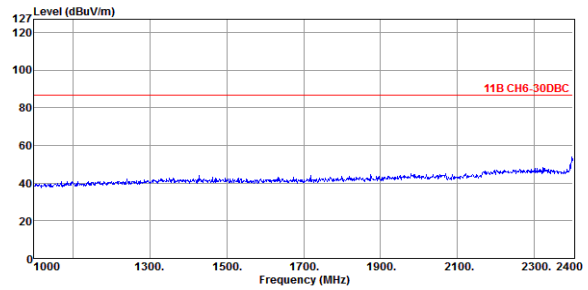
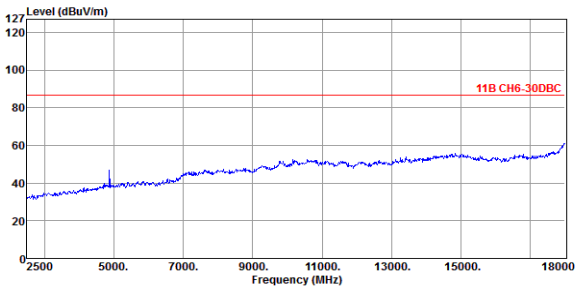
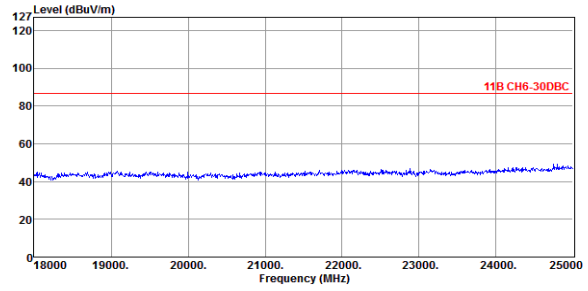
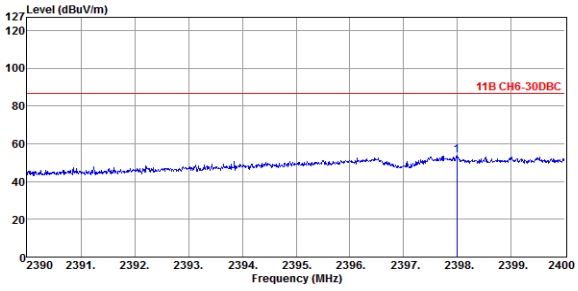


3.6.4 Unwanted Emissions into Non-Restricted Frequency Bands

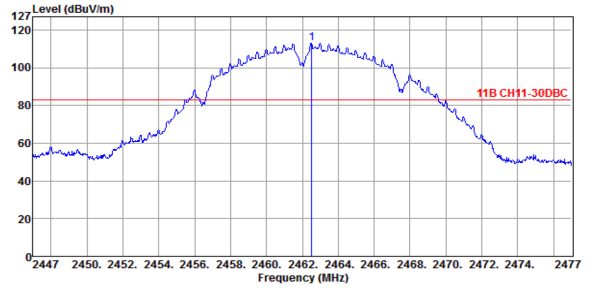
Configuration 1: Model WAC6103D-I, NAP203: Ceiling mounted, Z-plane.

802.11b

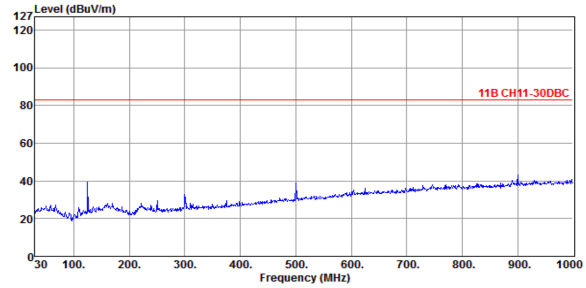
Reference Level	Tx 2412MHz / 30MHz~25GHz (down 30dBc)
 Freq. / Emission level / Limit / Margin / SA reading / Factor / Remark / ANT High / Turn Table MHz / dBuV/m / dBuV/m / dB / dBuV / dB / / cm / deg 1 * 2412.99 112.80 82.80 30.00 115.66 -2.86 Peak --- ---	
	
	 Freq. / Emission level / Limit / Margin / SA reading / Factor / Remark / ANT High / Turn Table MHz / dBuV/m / dBuV/m / dB / dBuV / dB / / cm / deg 1 2398.48 60.09 82.80 -22.71 62.92 -2.83 Peak --- ---

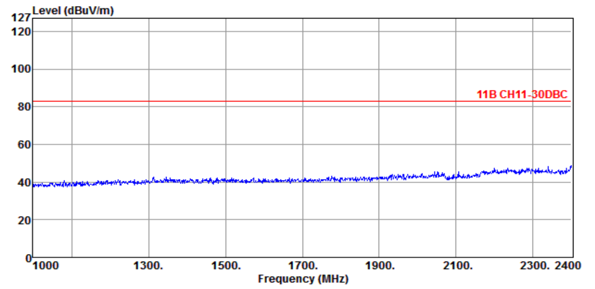
Reference Level	Tx 2437MHz / 30MHz~25GHz (down 30dBc)
 Freq. / Emission level / Limit / Margin / SA reading / Factor / Remark / ANT High / Turn Table MHz / dBuV/m / dBuV/m / dB / dBuV / dB / / cm / deg 1 * 2436.49 116.76 86.76 30.00 119.62 -2.86 Peak --- ---	
	
	 Freq. / Emission level / Limit / Margin / SA reading / Factor / Remark / ANT High / Turn Table MHz / dBuV/m / dBuV/m / dB / dBuV / dB / / cm / deg 1 2397.99 53.75 86.76 -33.01 56.59 -2.84 Peak --- ---

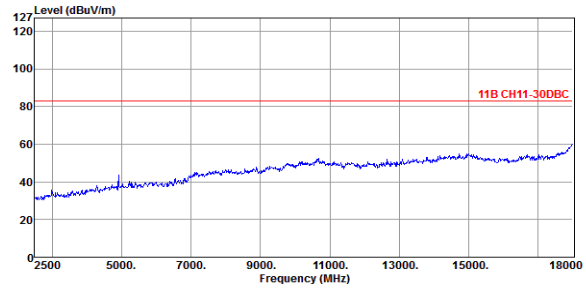
Reference Level	Tx 2462MHz / 30MHz~25GHz (down 30dBc)

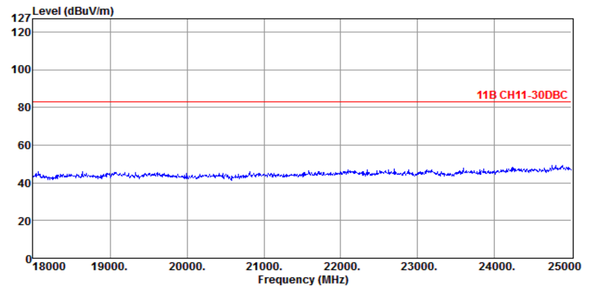


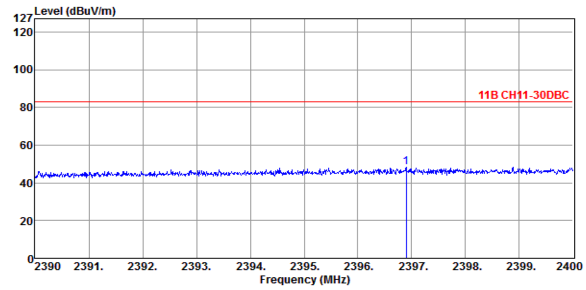
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1 *	2462.51	113.17	83.17	30.00	116.08	-2.91	Peak	---	---







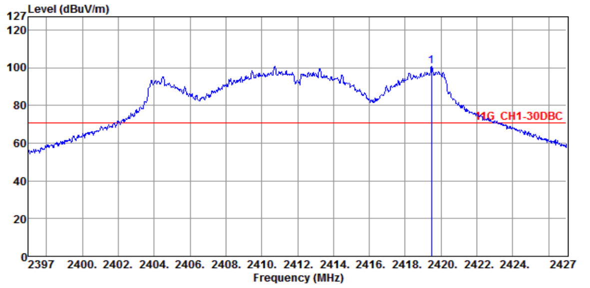




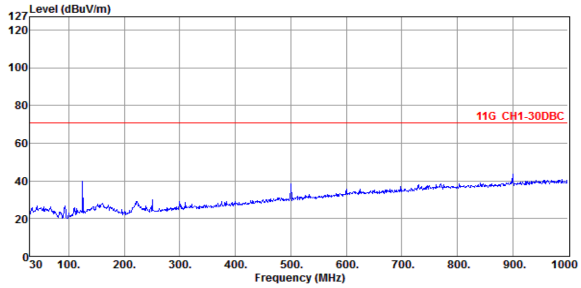
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2396.90	48.20	83.17	-34.97	51.04	-2.84	Peak	---	---

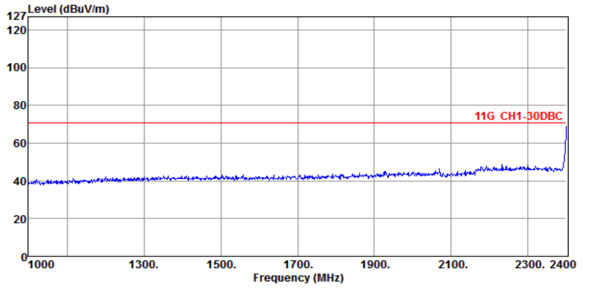
802.11g

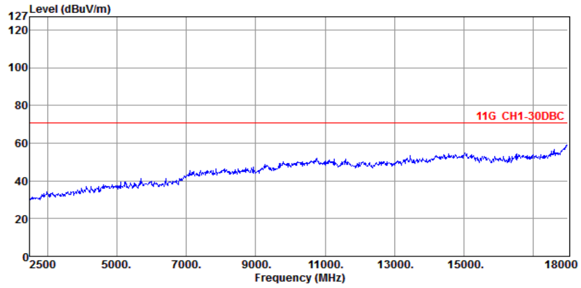
Reference Level	Tx 2412MHz / 30MHz~25GHz (down 30dBc)

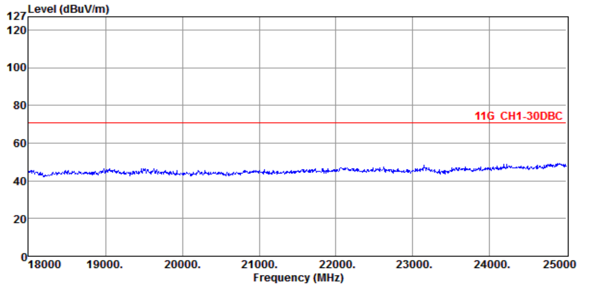


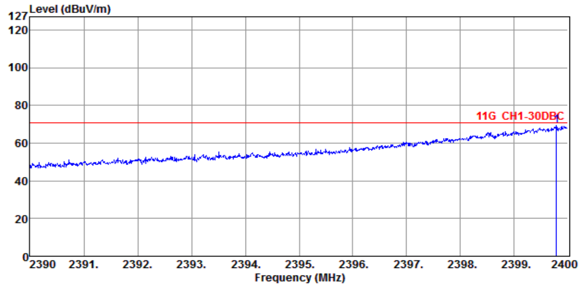
		Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	*	2419.47	100.68	70.68	30.00	103.54	-2.86	Peak	---	---





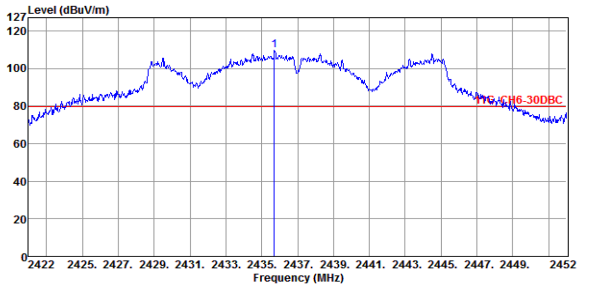




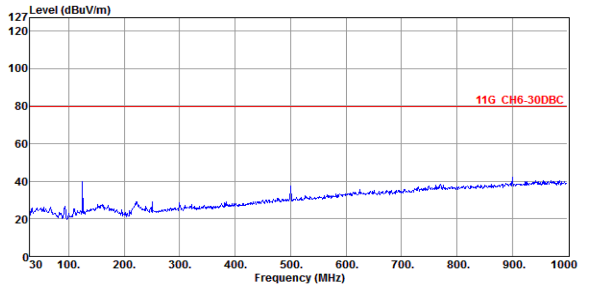


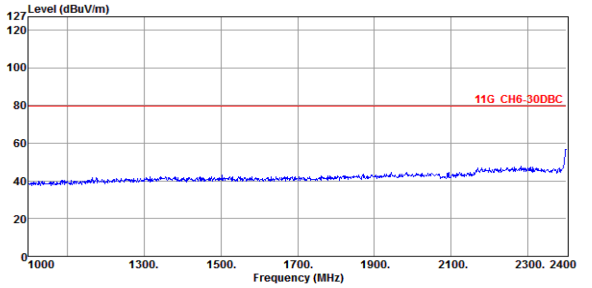
	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	2399.78	69.46	70.68	-1.22	72.30	-2.84	Peak	---	---

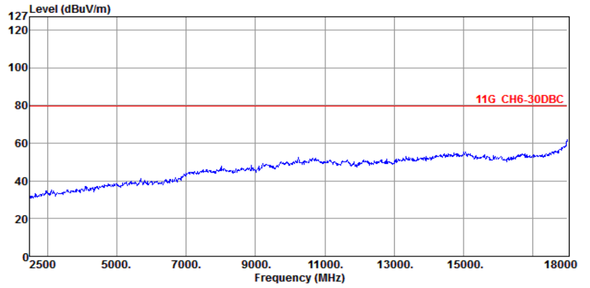
Reference Level	Tx 2437MHz / 30MHz~25GHz (down 30dBc)

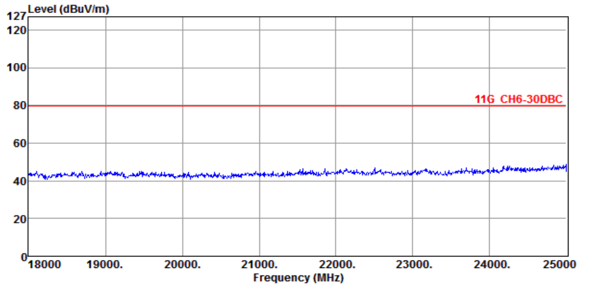


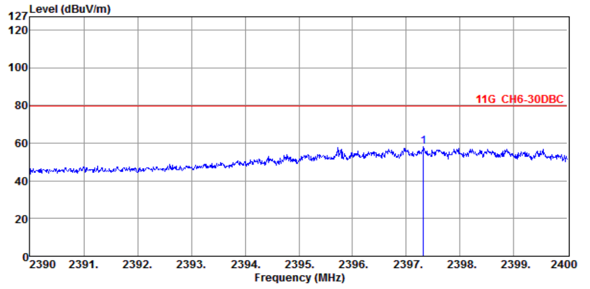
		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	2435.71	109.85	79.85	30.00	112.72	-2.87	Peak	---	---





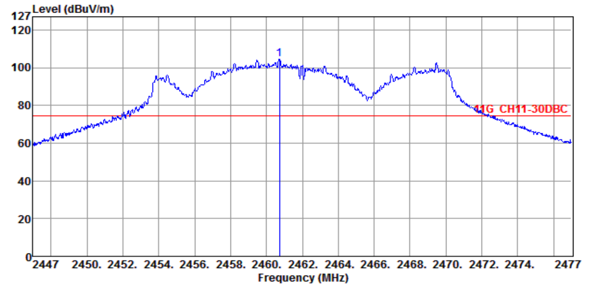




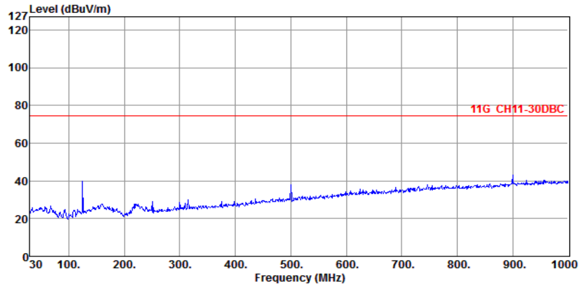


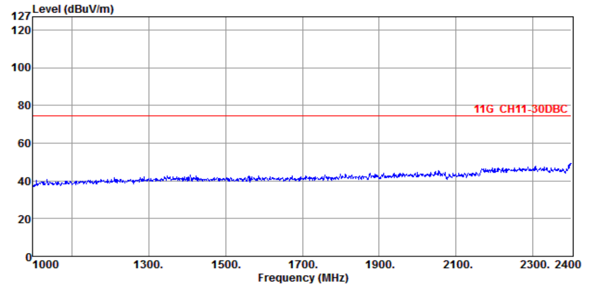
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2397.32	57.91	79.85	-21.94	60.75	-2.84	Peak	---	---

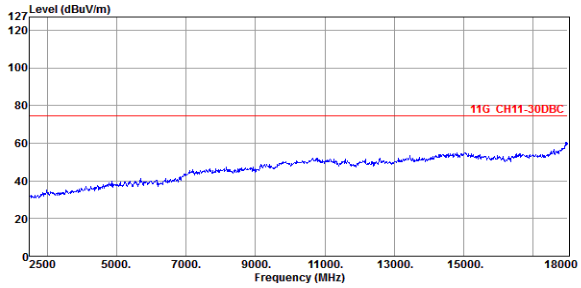
Reference Level	Tx 2462MHz / 30MHz~25GHz (down 30dBc)

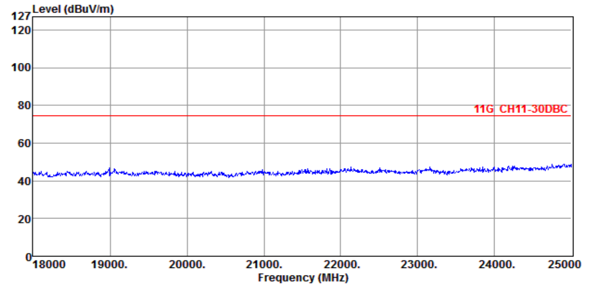


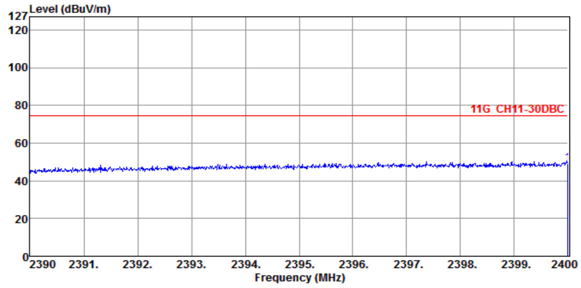
		Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	*	2460.74	104.56	74.56	30.00	107.47	-2.91	Peak	---	---







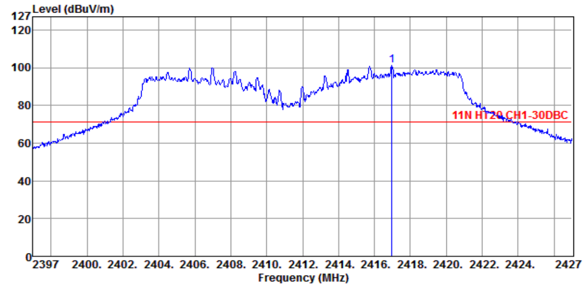




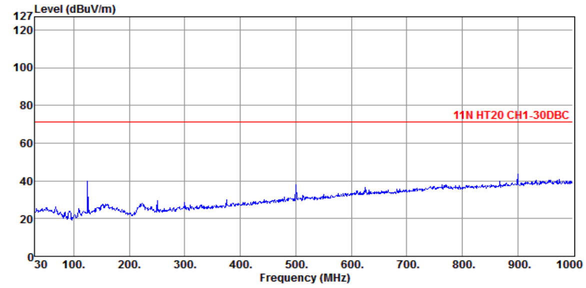
	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	2400.00	49.34	74.56	-25.22	52.18	-2.84	Peak	---	---

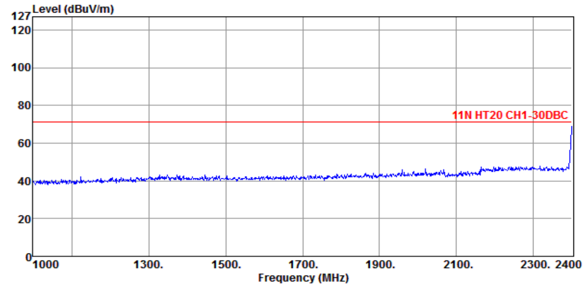
HT20

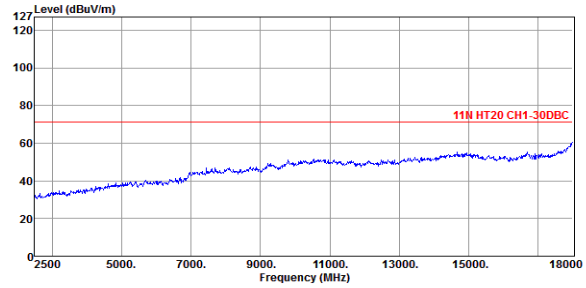
Reference Level	Tx 2412MHz / 30MHz~25GHz (down 30dBc)

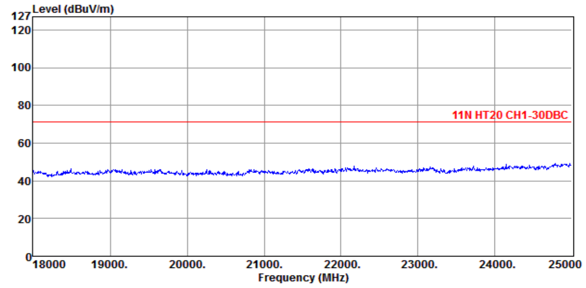


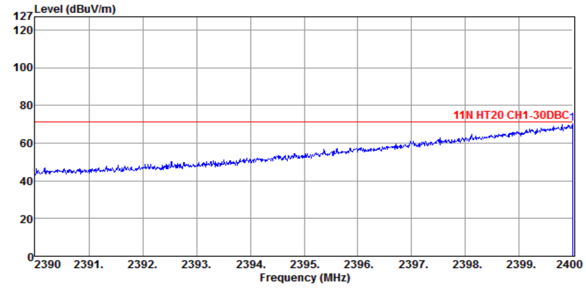
		Freq. (MHz)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	SA reading (dBuV)	Factor (dB)	Remark	ANT High (cm)	Turn Table (deg)
1	*	2416.98	101.28	71.28	30.00	104.13	-2.85	Peak	---	---



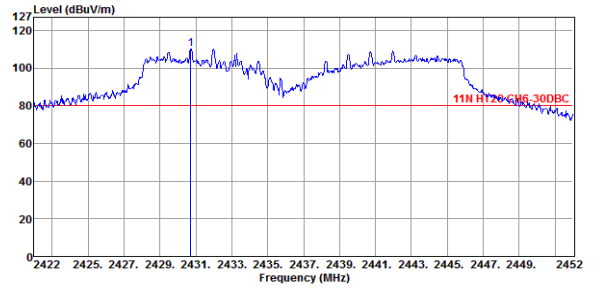
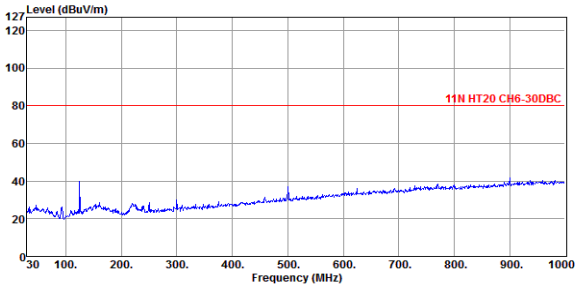
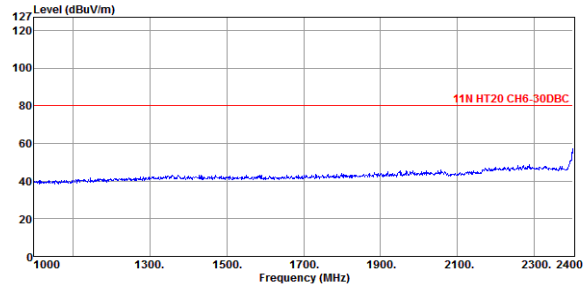
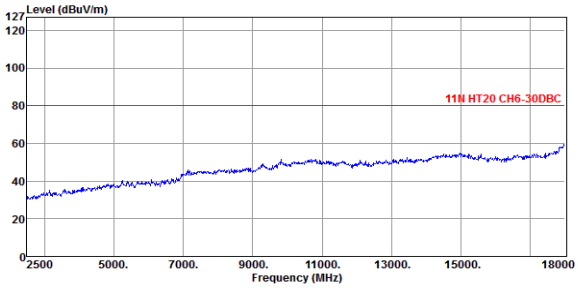
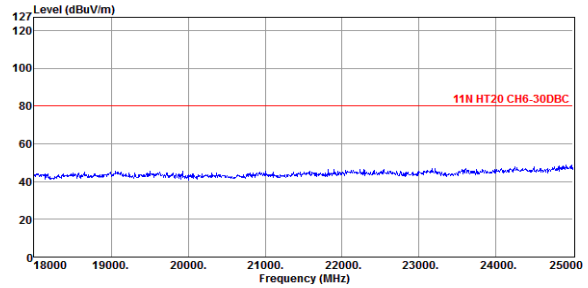
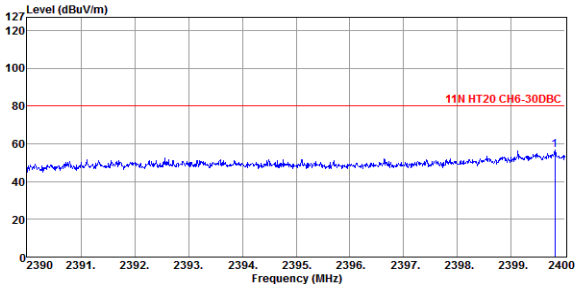




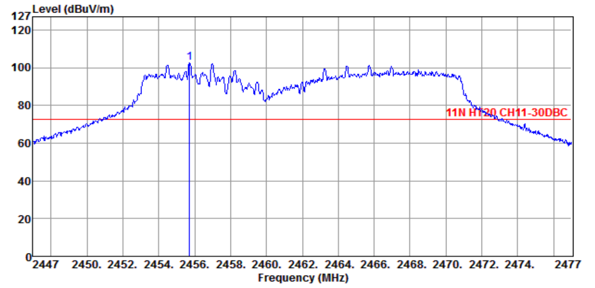




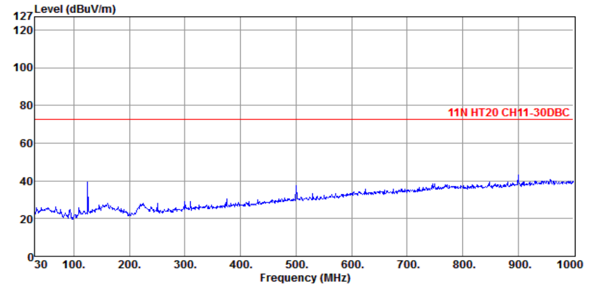
	Freq. (MHz)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	SA reading (dBuV)	Factor (dB)	Remark	ANT High (cm)	Turn Table (deg)
1	2399.99	70.15	71.28	-1.13	72.99	-2.84	Peak	---	---

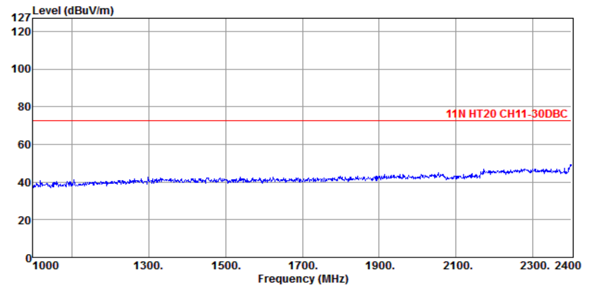
Reference Level	Tx 2437MHz / 30MHz~25GHz (down 30dBc)
 Freq. / Emission level / Limit / Margin / SA reading / Factor / Remark / ANT High / Turn Table MHz / dBuV/m / dBuV/m / dB / dBuV / dB / / cm / deg 1 * 2430.73 110.26 80.26 30.00 113.12 -2.86 Peak --- ---	
	
	 Freq. / Emission level / Limit / Margin / SA reading / Factor / Remark / ANT High / Turn Table MHz / dBuV/m / dBuV/m / dB / dBuV / dB / / cm / deg 1 2399.81 56.80 80.26 -23.46 59.64 -2.84 Peak --- ---

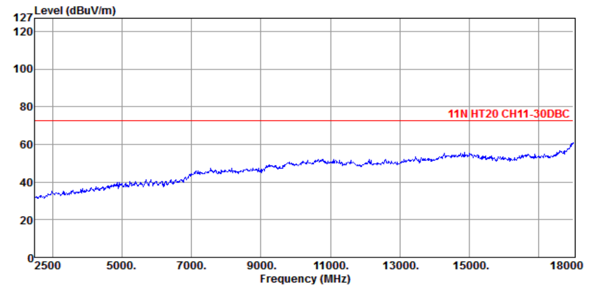
Reference Level	Tx 2462MHz / 30MHz~25GHz (down 30dBc)

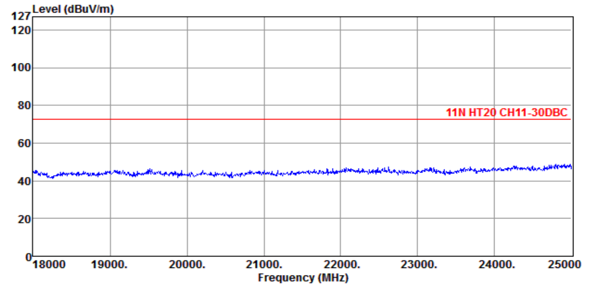


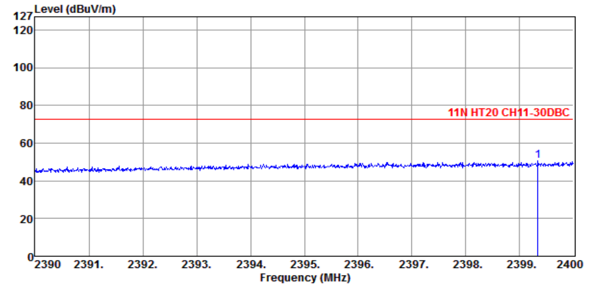
		Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	*	2455.73	102.64	72.64	30.00	105.53	-2.89	Peak	---	---







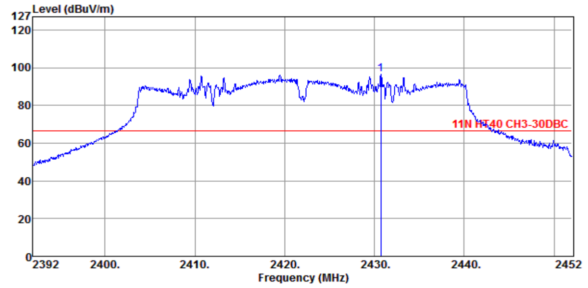




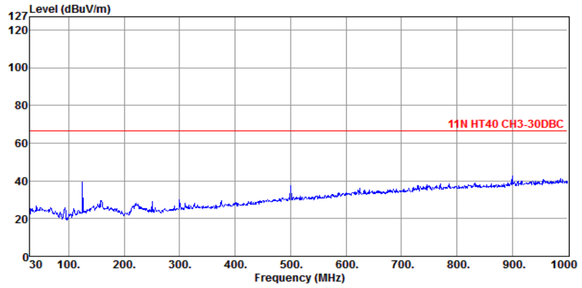
	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	2399.34	50.40	72.64	-22.24	53.24	-2.84	Peak	---	---

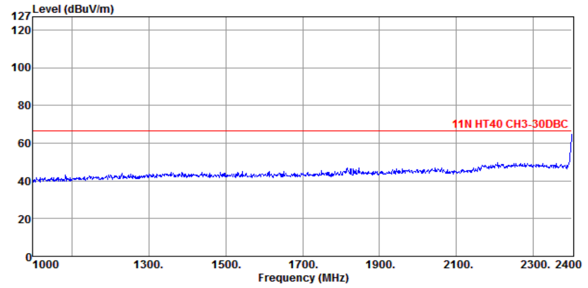
HT40

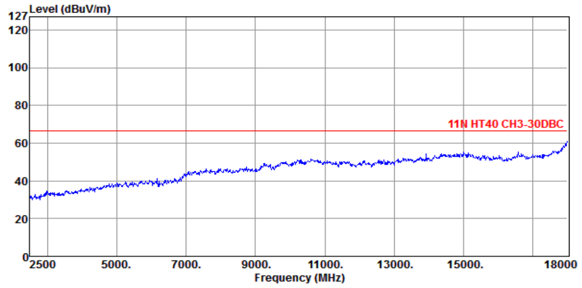
Reference Level	Tx 2422MHz / 30MHz~25GHz (down 30dBc)

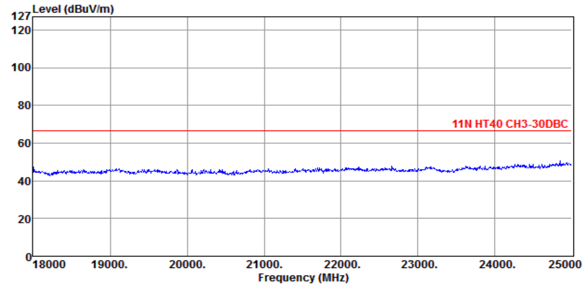


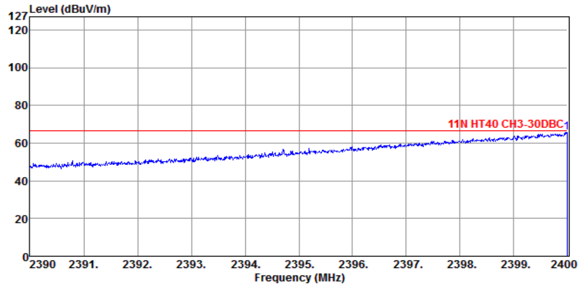
		Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	*	2430.70	96.73	66.73	30.00	99.59	-2.86	Peak	---	---





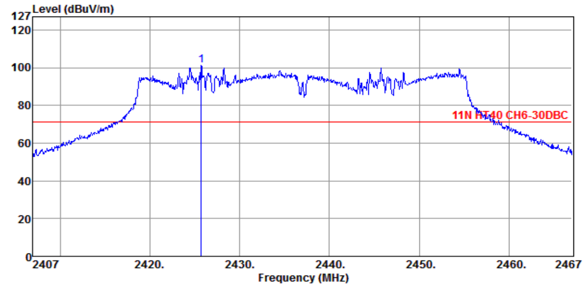




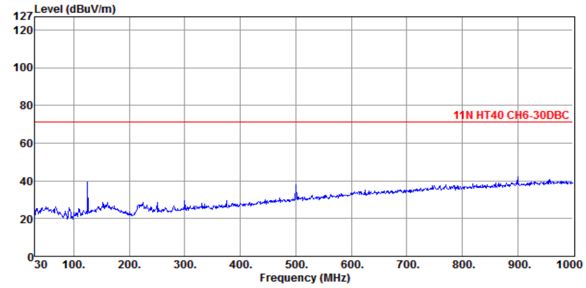


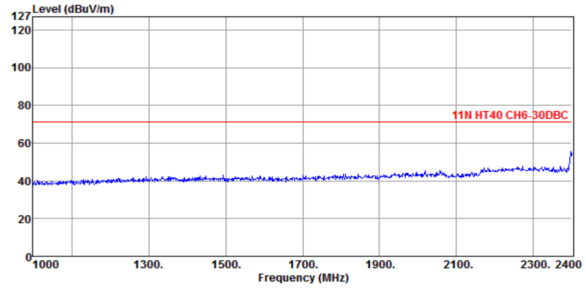
	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	2399.99	65.67	66.73	-1.06	68.51	-2.84	Peak	---	---

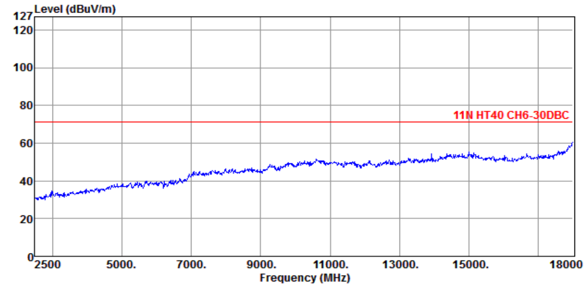
Reference Level	Tx 2437MHz / 30MHz~25GHz (down 30dBc)

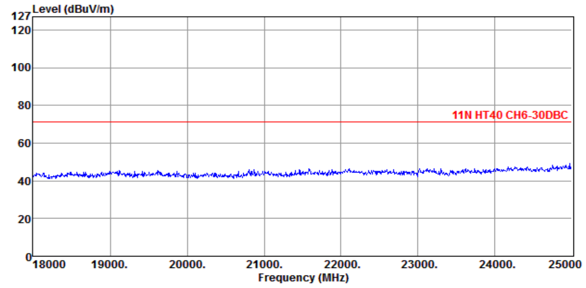


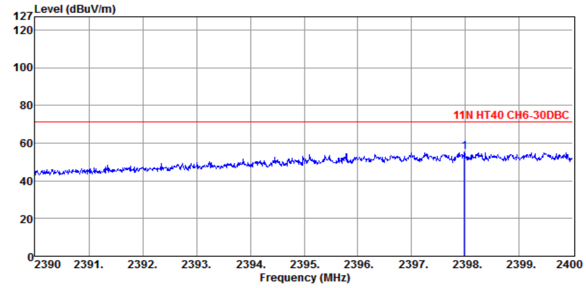
		Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	*	2425.72	101.36	71.36	30.00	104.22	-2.86	Peak	---	---



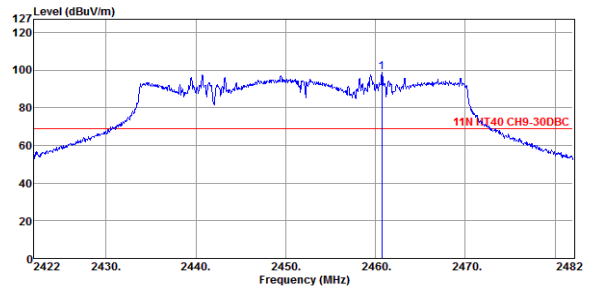
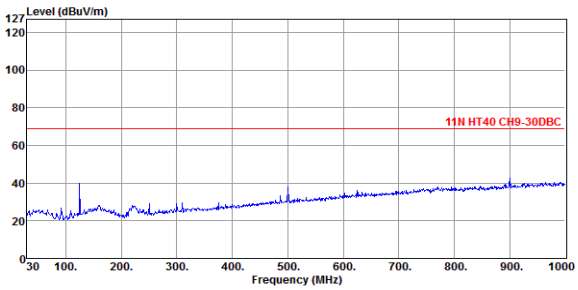
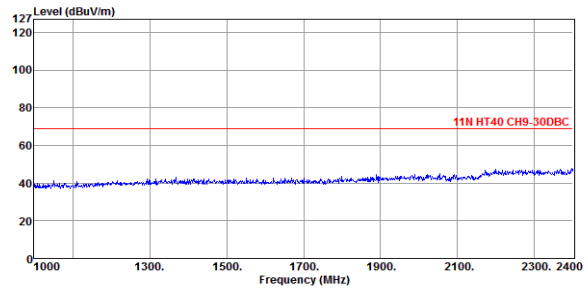
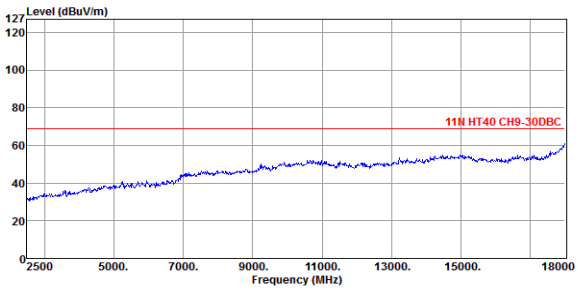
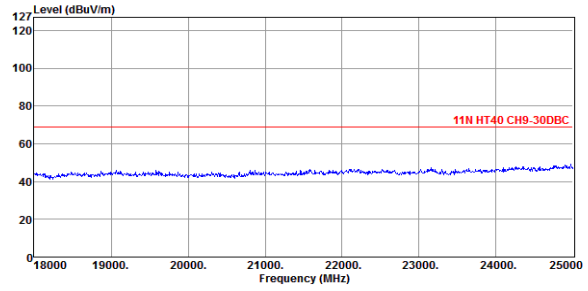
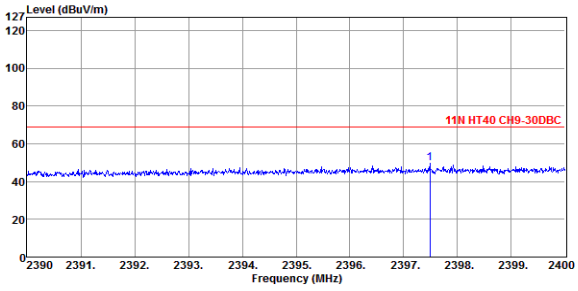








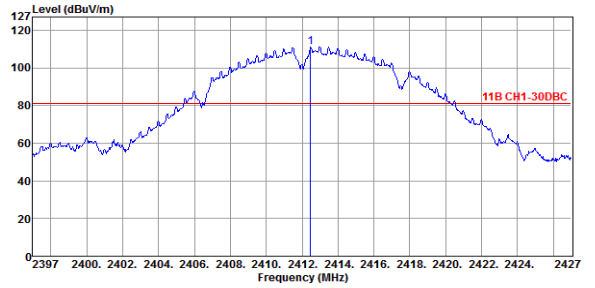
	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	2397.98	55.08	71.36	-16.28	57.92	-2.84	Peak	---	---

Reference Level	Tx 2452MHz / 30MHz~25GHz (down 30dBc)
 Freq. / Emission level / Limit / Margin / SA reading / Factor / Remark / ANT High / Turn Table MHz / dBuV/m / dBuV/m / dB / dBuV / dB / / cm / deg 1 * 2460.70 98.70 68.70 30.00 101.61 -2.91 Peak --- ---	
	
	 Freq. / Emission level / Limit / Margin / SA reading / Factor / Remark / ANT High / Turn Table MHz / dBuV/m / dBuV/m / dB / dBuV / dB / / cm / deg 1 2397.49 49.52 68.70 -19.18 52.36 -2.84 Peak --- ---

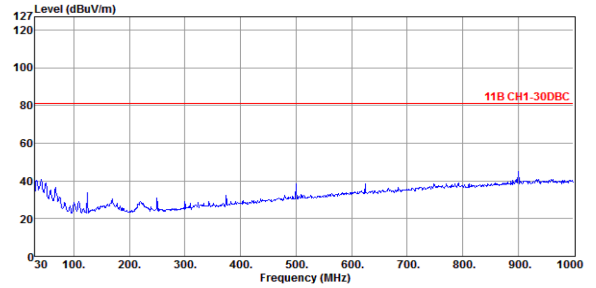
Configuration 2: Model WAC6103D-I, NAP203: Wall mounted, Y-plane

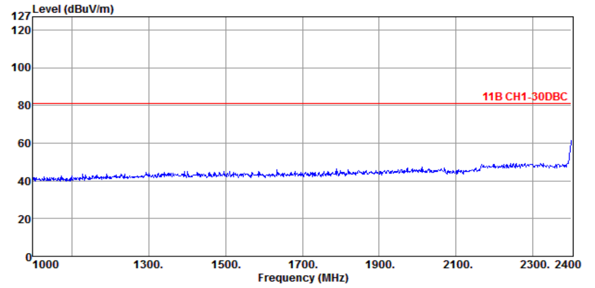
802.11b

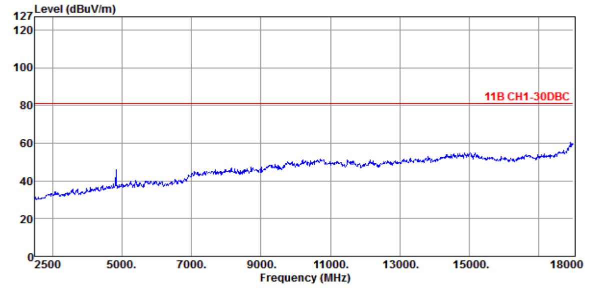
Reference Level	Tx 2412MHz / 30MHz~25GHz (down 30dBc)

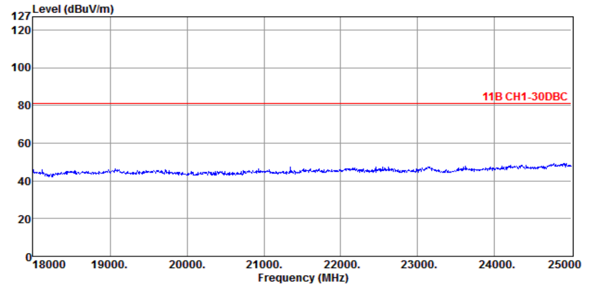


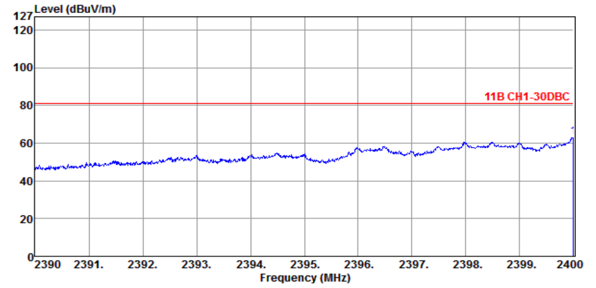
	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1 *	2412.48	111.27	81.27	30.00	114.12	-2.85	Peak	---	---



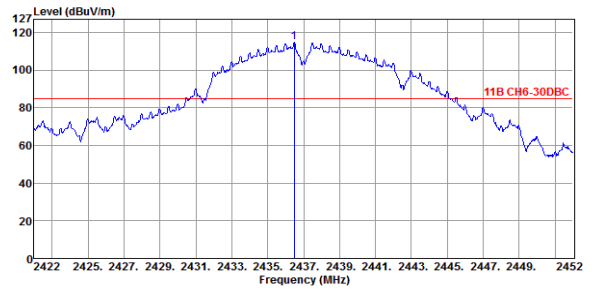
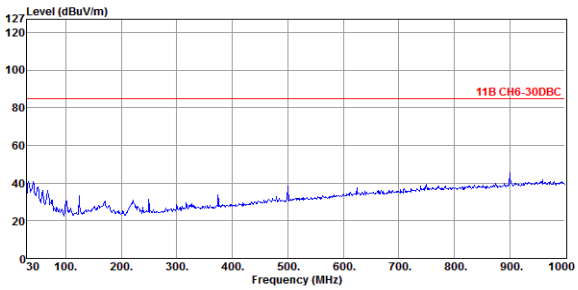
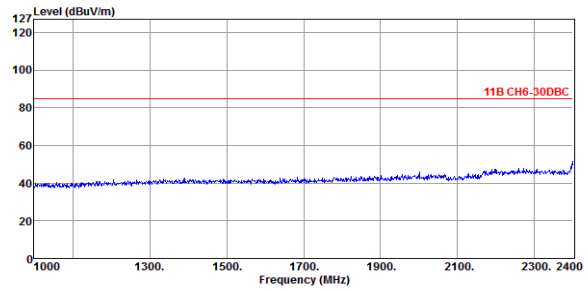
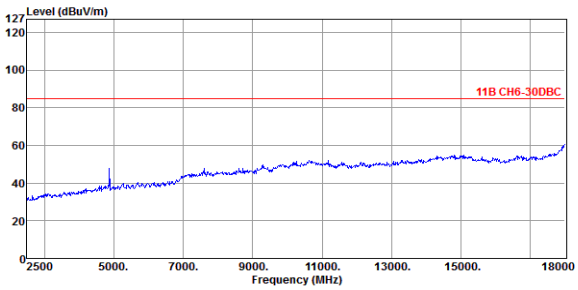
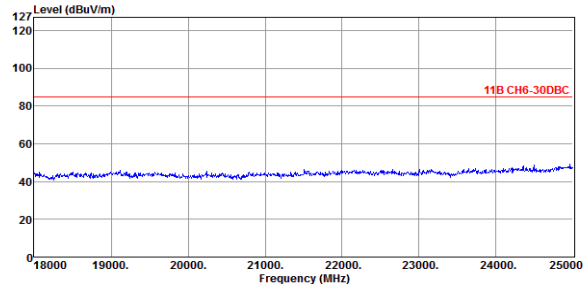
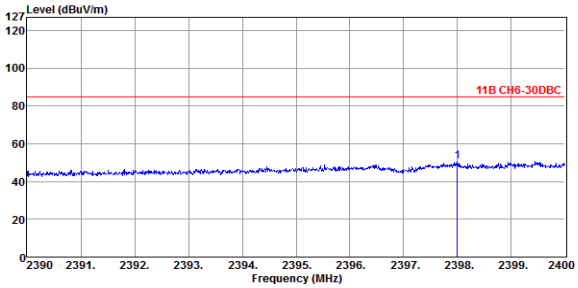




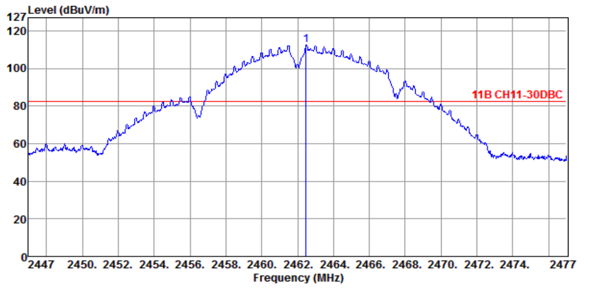




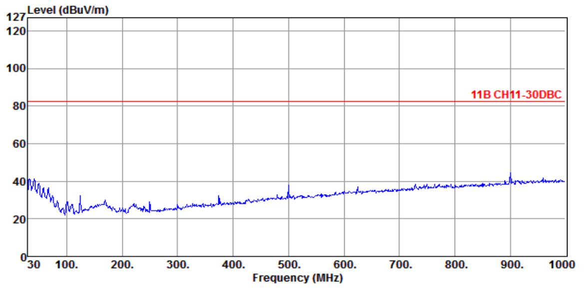
	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	2400.00	63.11	81.27	-18.16	65.95	-2.84	Peak	---	---

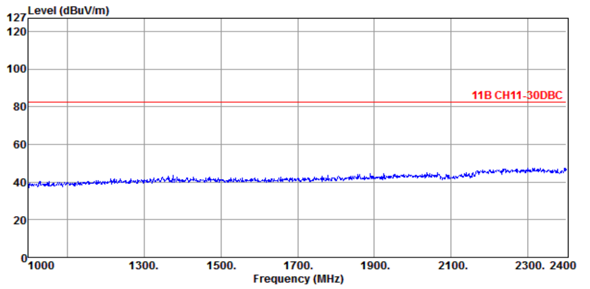
Reference Level	Tx 2437MHz / 30MHz~25GHz (down 30dBc)
 Freq. / Emission level / Limit / Margin / SA reading / Factor / Remark / ANT High / Turn Table MHz / dBuV/m / dBuV/m / dB / dBuV / dB / / cm / deg 1 * 2436.49 114.62 84.62 30.00 117.48 -2.86 Peak --- ---	
	
	 Freq. / Emission level / Limit / Margin / SA reading / Factor / Remark / ANT High / Turn Table MHz / dBuV/m / dBuV/m / dB / dBuV / dB / / cm / deg 1 2398.00 50.62 84.62 -34.00 53.46 -2.84 Peak --- ---

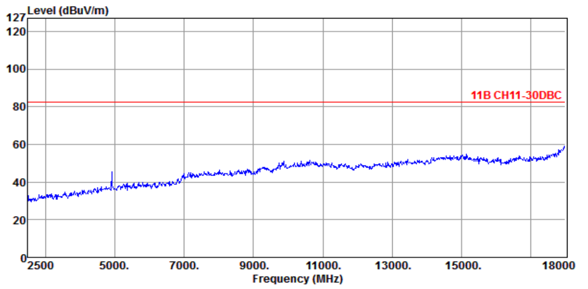
Reference Level	Tx 2462MHz / 30MHz~25GHz (down 30dBc)

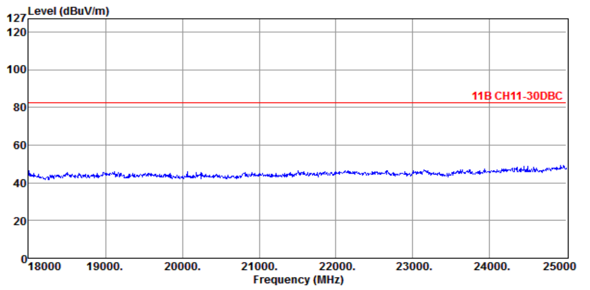


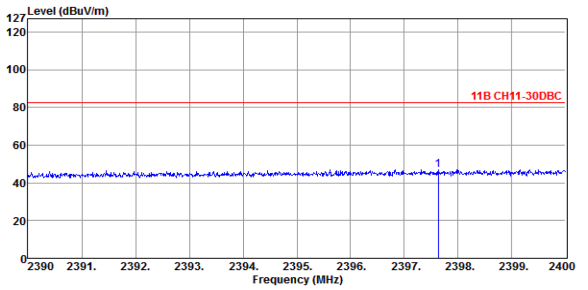
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1 *	2462.48	112.45	82.45	30.00	115.36	-2.91	Peak	---	---







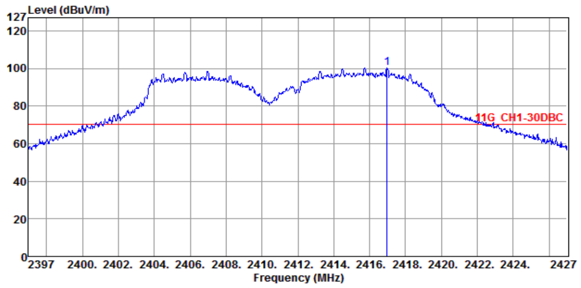




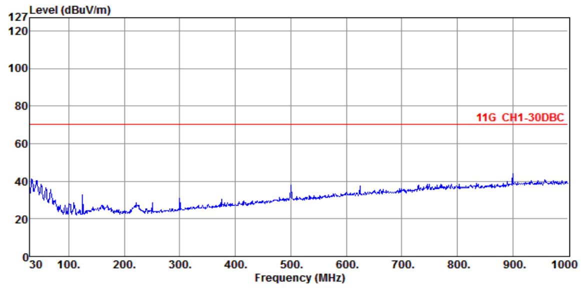
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2397.63	46.97	82.45	-35.48	49.81	-2.84	Peak	---	---

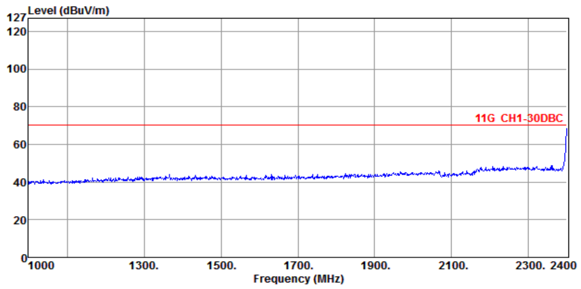
802.11g

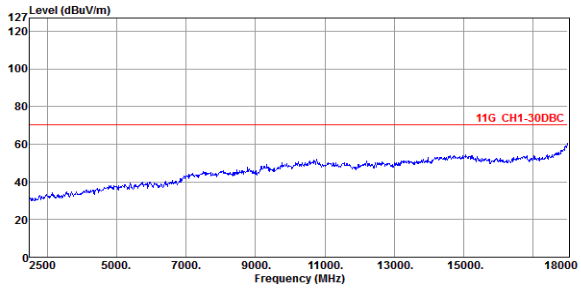
Reference Level	Tx 2412MHz / 30MHz~25GHz (down 30dBc)

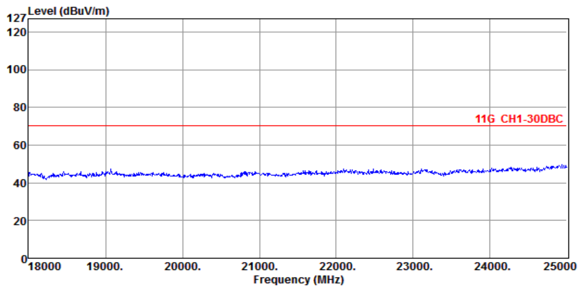


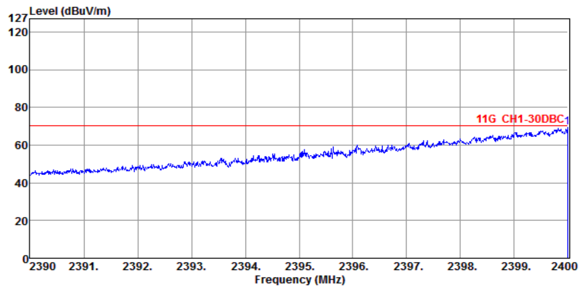
	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1 *	2416.98	100.44	70.44	30.00	103.29	-2.85	Peak	---	---



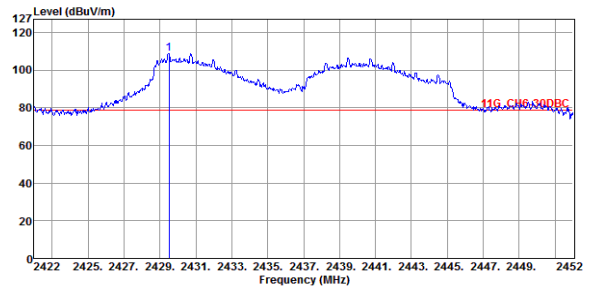
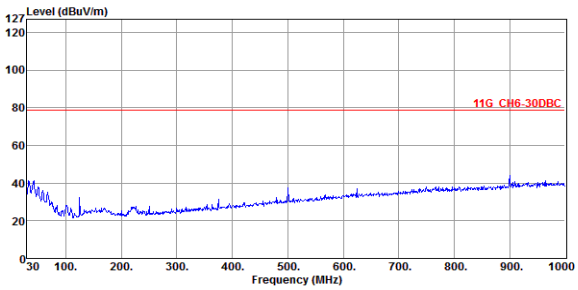
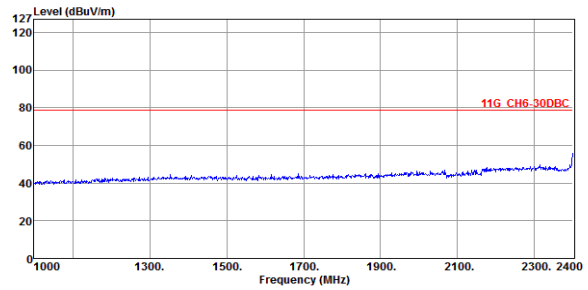
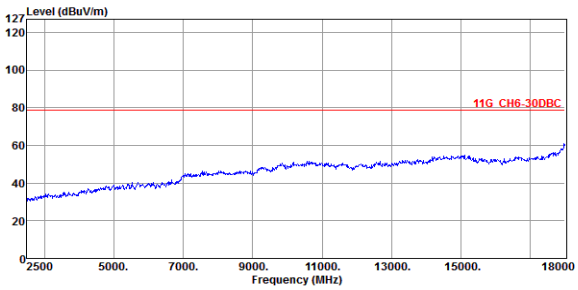
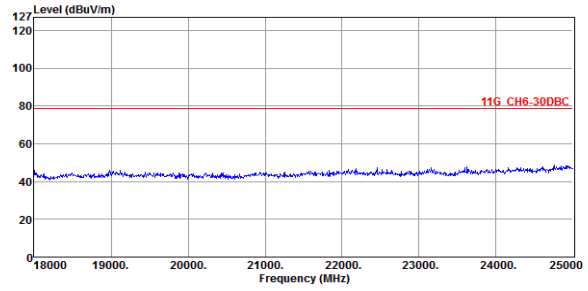
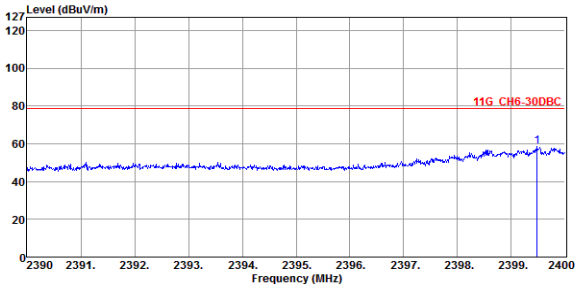




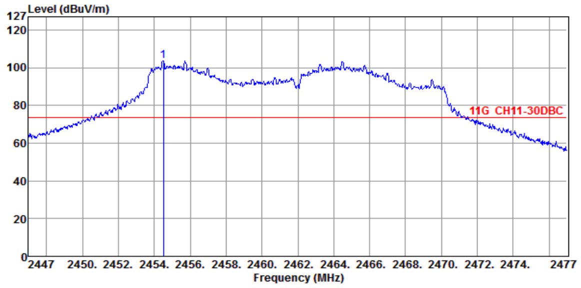




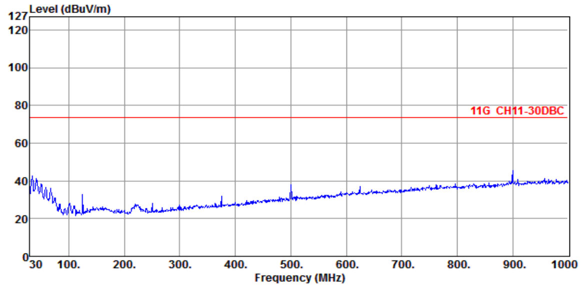
	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	2399.99	69.14	70.44	-1.30	71.98	-2.84	Peak	---	---

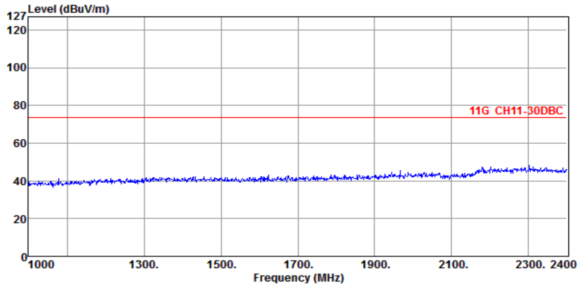
Reference Level	Tx 2437MHz / 30MHz~25GHz (down 30dBc)
 Freq. / Emission level / Limit / Margin / SA reading / Factor / Remark / ANT High / Turn Table MHz / dBuV/m / dBuV/m / dB / dBuV / dB / / cm / deg 1 * 2429.50 108.78 78.78 30.00 111.65 -2.87 Peak --- ---	
	
	 Freq. / Emission level / Limit / Margin / SA reading / Factor / Remark / ANT High / Turn Table MHz / dBuV/m / dBuV/m / dB / dBuV / dB / / cm / deg 1 2399.48 58.45 78.78 -20.33 61.29 -2.84 Peak --- ---

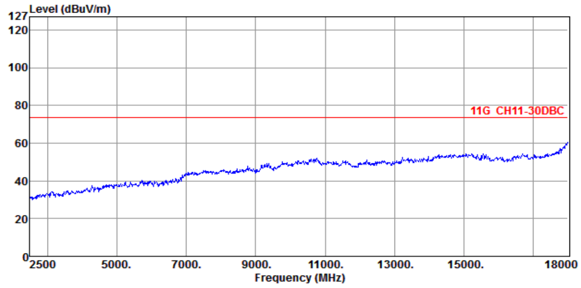
Reference Level	Tx 2462MHz / 30MHz~25GHz (down 30dBc)

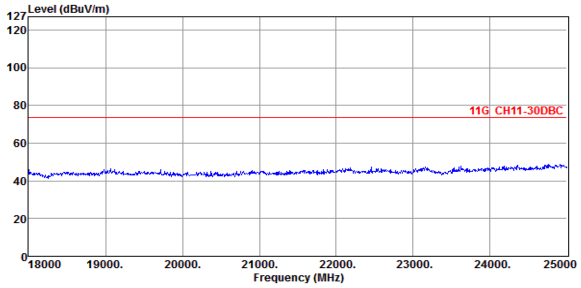


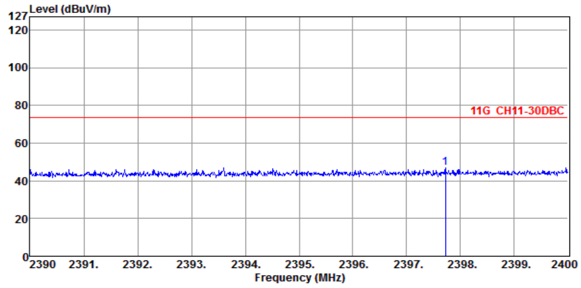
		Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	*	2454.50	103.48	73.48	30.00	106.37	-2.89	Peak	---	---





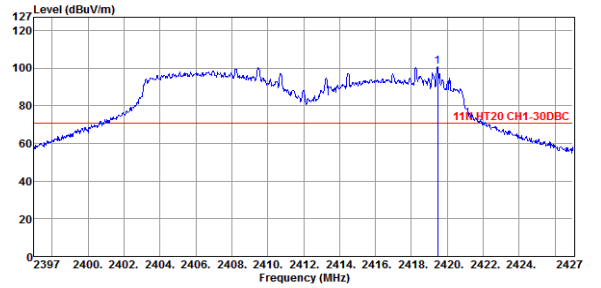
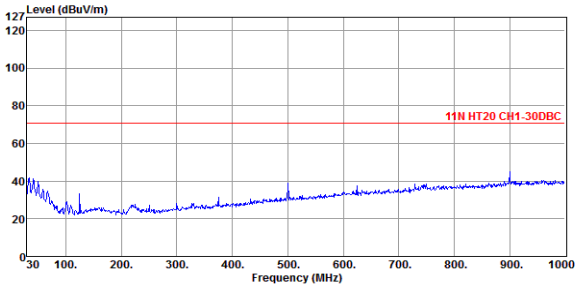
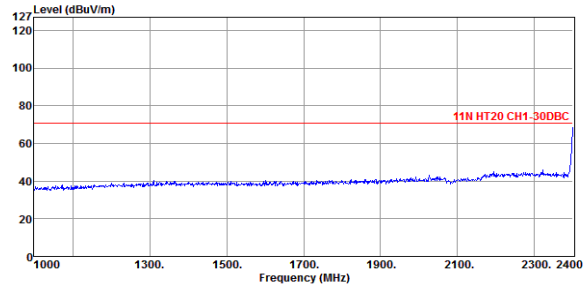
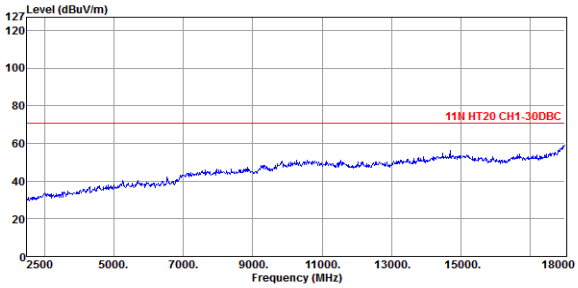
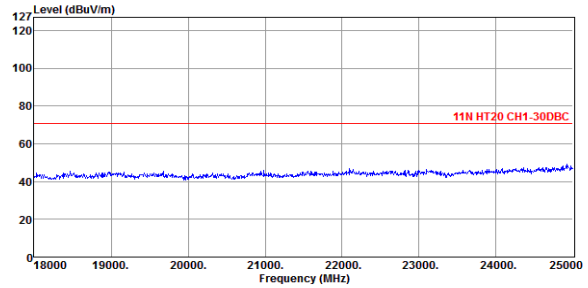
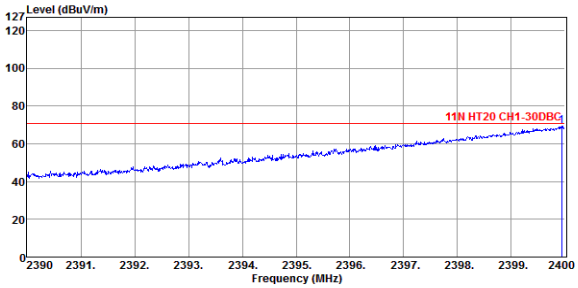






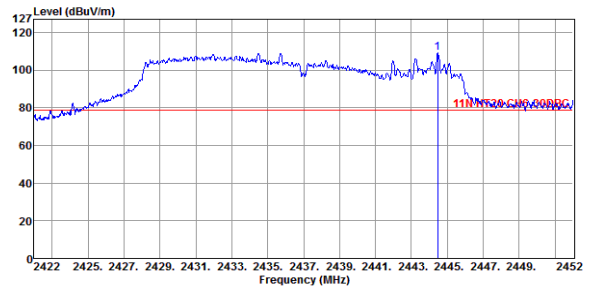
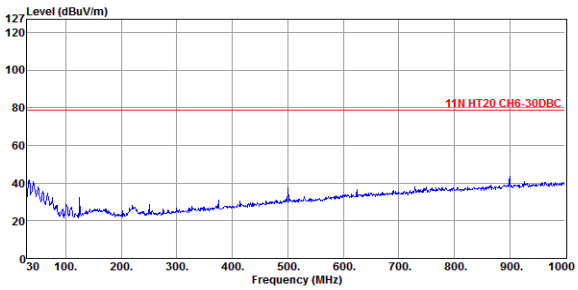
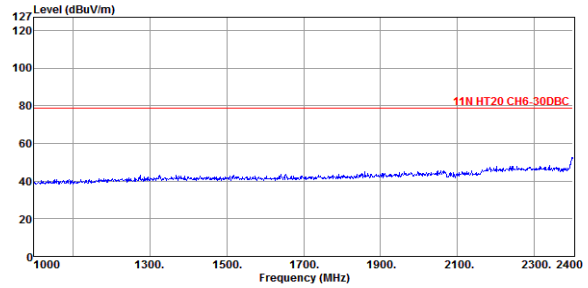
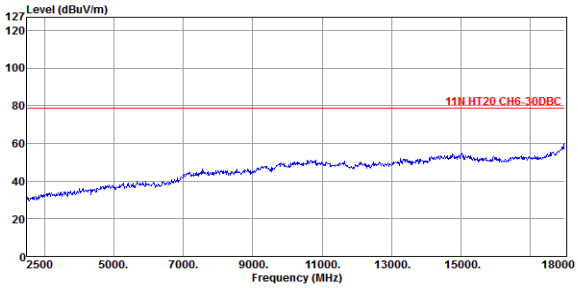
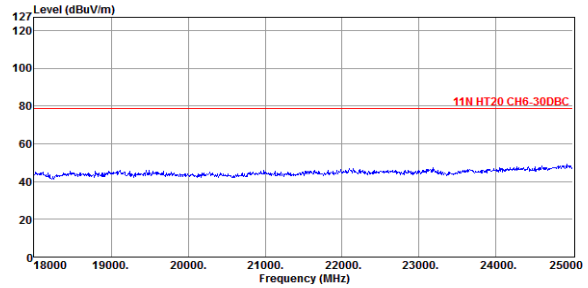
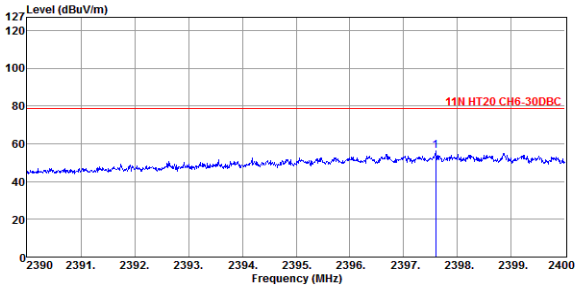
	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	2397.72	47.07	73.48	-26.41	49.91	-2.84	Peak	---	---

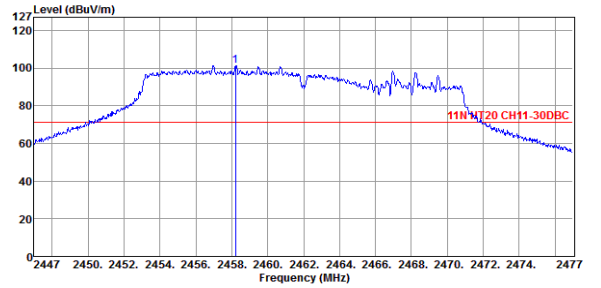
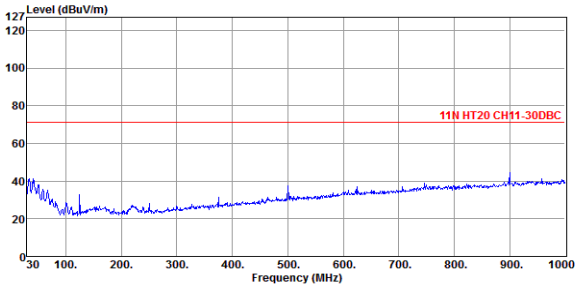
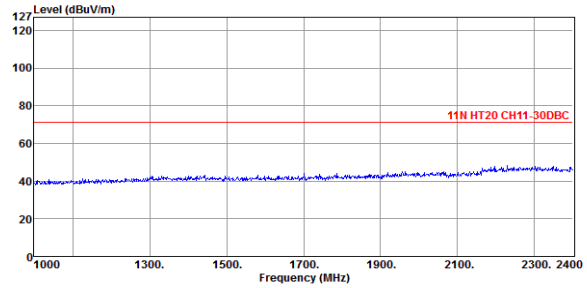
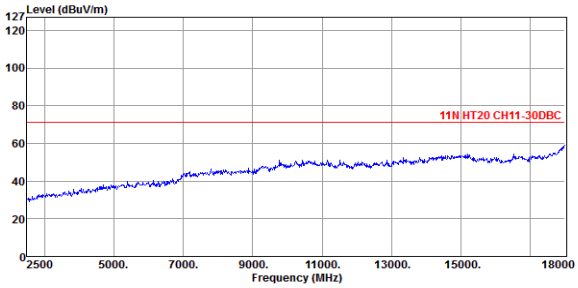
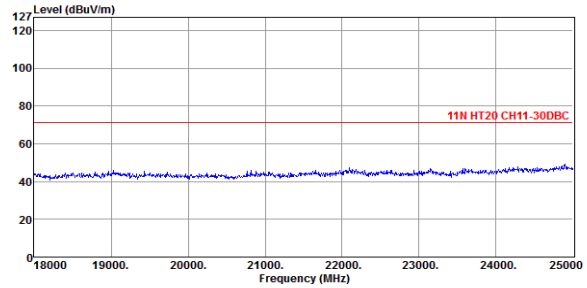
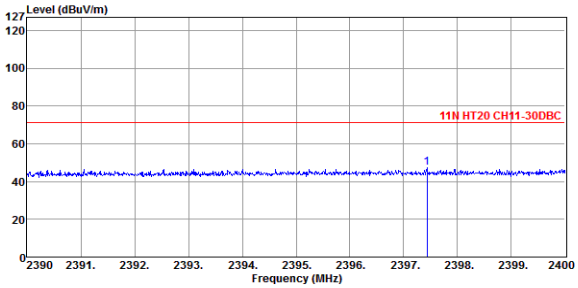
HT20

Reference Level	Tx 2412MHz / 30MHz~25GHz (down 30dBc)
	
	
	

		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	2419.47	100.68	70.68	30.00	103.54	-2.86	Peak	---	---

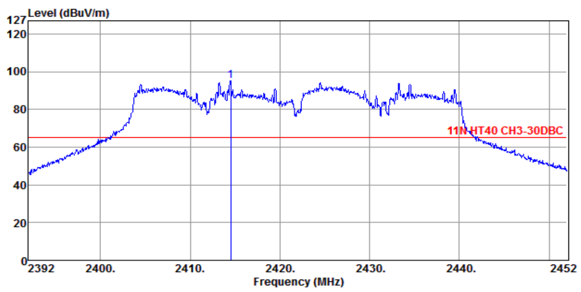
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2399.93	69.54	70.68	-1.14	72.38	-2.84	Peak	---	---

Reference Level	Tx 2437MHz / 30MHz~25GHz (down 30dBc)
 Freq. / Emission level / Limit / Margin / SA reading / Factor / Remark / ANT High / Turn Table MHz / dBuV/m / dBuV/m / dB / dBuV / dB / / cm / deg 1 * 2444.47 108.96 78.96 30.00 111.84 -2.88 Peak --- ---	
	
	 Freq. / Emission level / Limit / Margin / SA reading / Factor / Remark / ANT High / Turn Table MHz / dBuV/m / dBuV/m / dB / dBuV / dB / / cm / deg 1 2397.59 56.05 78.96 -22.91 58.89 -2.84 Peak --- ---

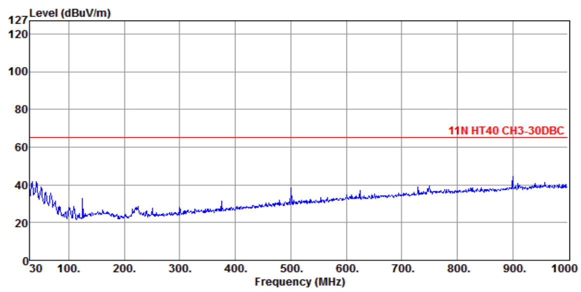
Reference Level	Tx 2462MHz / 30MHz~25GHz (down 30dBc)
 Freq. / Emission level / Limit / Margin / SA reading / Factor / Remark / ANT High / Turn Table MHz / dBuV/m / dBuV/m / dB / dBuV / dB / / cm / deg 1 * 2458.22 101.36 71.36 30.00 104.26 -2.90 Peak --- ---	
	
	 Freq. / Emission level / Limit / Margin / SA reading / Factor / Remark / ANT High / Turn Table MHz / dBuV/m / dBuV/m / dB / dBuV / dB / / cm / deg 1 2397.43 47.33 71.36 -24.03 50.17 -2.84 Peak --- ---

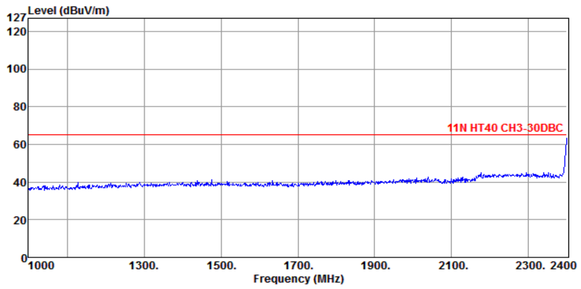
HT40

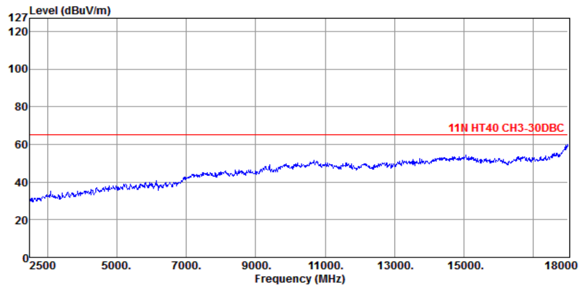
Reference Level	Tx 2422MHz / 30MHz~25GHz (down 30dBc)

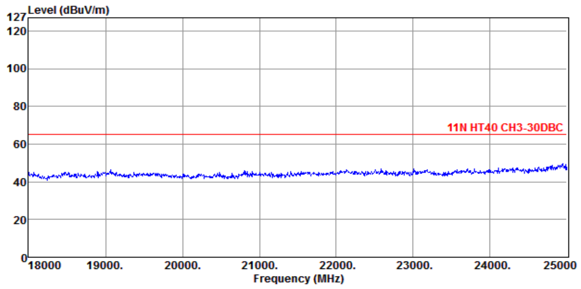


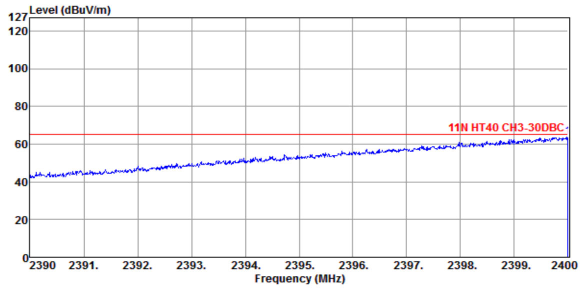
		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	2414.50	95.02	65.02	30.00	97.87	-2.85	Peak	---	---





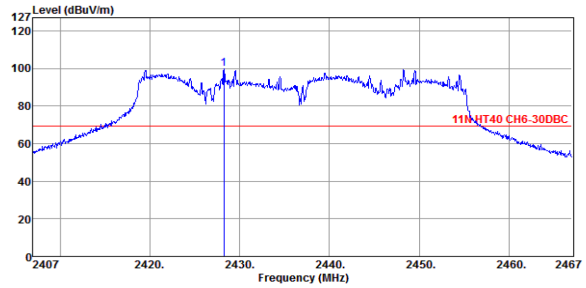




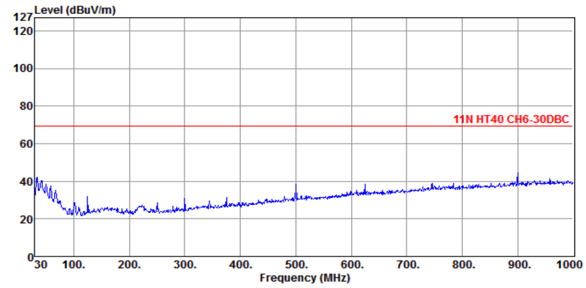


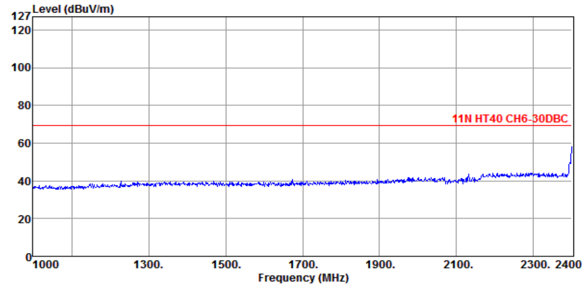
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2400.00	63.94	65.02	-1.08	66.78	-2.84	Peak	---	---

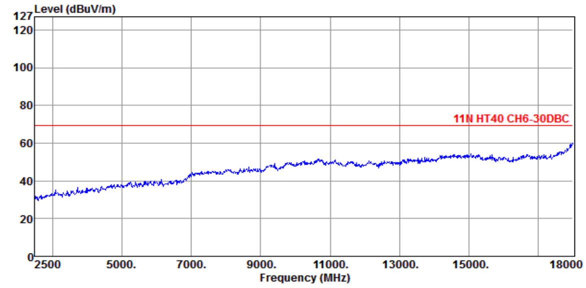
Reference Level	Tx 2437MHz / 30MHz~25GHz (down 30dBc)

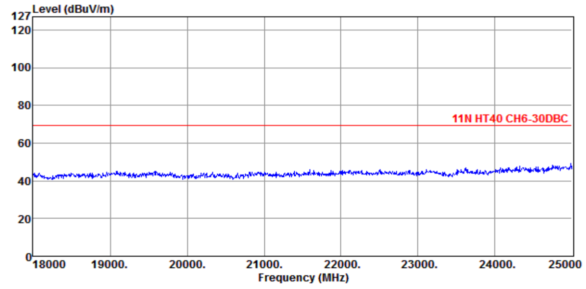


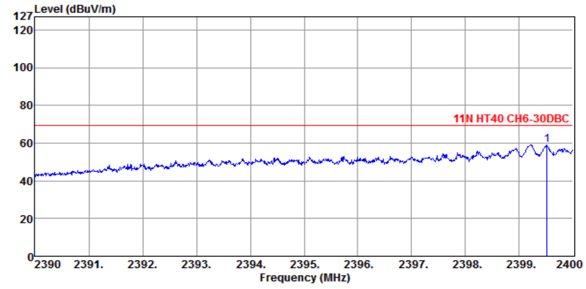
	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1 *	2428.24	99.59	69.59	30.00	102.46	-2.87	Peak	---	---



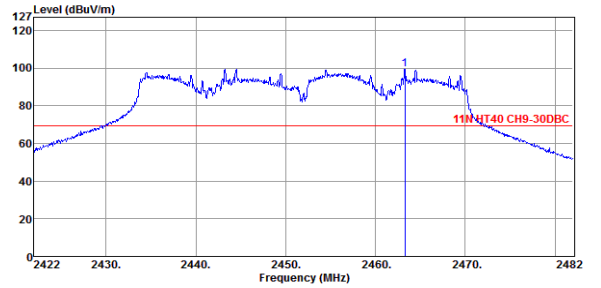
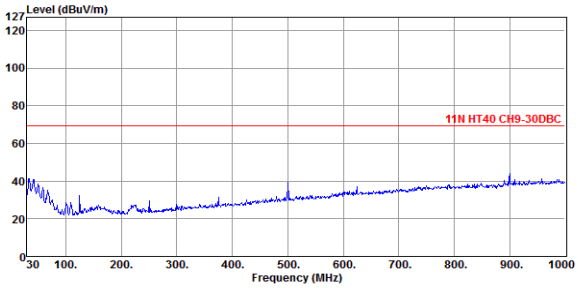
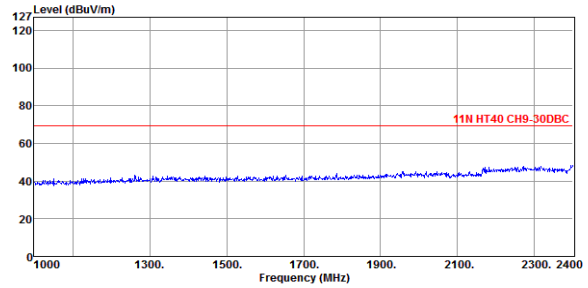
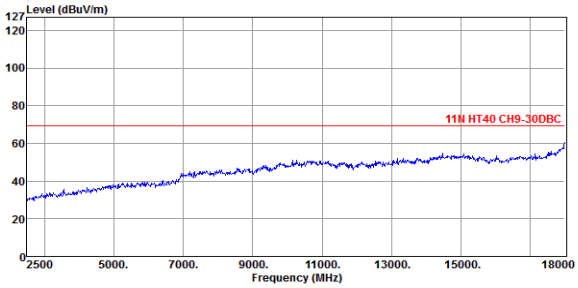
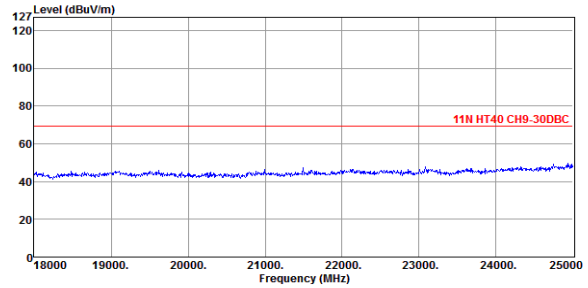
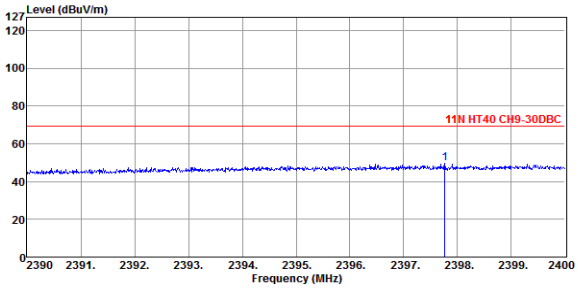








	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	2399.51	58.94	69.59	-10.65	61.78	-2.84	Peak	---	---

Reference Level	Tx 2452MHz / 30MHz~25GHz (down 30dBc)
 Freq. / Emission level / Limit / Margin / SA reading / Factor / Remark / ANT High / Turn Table MHz / dBuV/m / dBuV/m / dB / dBuV / dB / / cm / deg 1 * 2463.28 99.38 69.38 30.00 102.29 -2.91 Peak --- ---	
	
	 Freq. / Emission level / Limit / Margin / SA reading / Factor / Remark / ANT High / Turn Table MHz / dBuV/m / dBuV/m / dB / dBuV / dB / / cm / deg 1 2397.76 49.52 69.38 -19.86 52.36 -2.84 Peak --- ---

4 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corp (EMC and Wireless Communication Laboratory), it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan District. Location map can be found on our website http://www.icertifi.com.tw.

Linkou	**Kwei Shan**	**Kwei Shan Site II**
Tel: 886-2-2601-1640	Tel: 886-3-271-8666	Tel: 886-3-271-8640
No. 30-2, Ding Fwu Tsuen, Lin Kou District, New Taipei City, Taiwan, R.O.C.	No. 3-1, Lane 6, Wen San 3rd St., Kwei Shan District, Tao Yuan City 333, Taiwan, R.O.C.	No. 14-1, Lane 19, Wen San 3rd St., Kwei Shan District, Tao Yuan City 333, Taiwan, R.O.C.

If you have any suggestion, please feel free to contact us as below information.

Tel: 886-3-271-8666
Fax: 886-3-318-0155
Email: ICC_Service@icertifi.com.tw

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