FCC RADIO TEST REPORT

Applicant	:	LITE-ON Technology Corp.
Address	:	Bldg. C, 90, Chien 1 Rd., Chung-Ho, New Taipei City, 23585, Taiwan
Equipment	:	Access Point
Model No.	:	WP8722, WP8722-BT
Trade Name	:	LITE-ON
FCC ID	:	PPQ-WP8722

I HEREBY CERTIFY THAT :

The sample was received on Dec. 27, 2019 and the testing was completed on Mar. 10, 2020 at Cerpass Technology Corp. The test result refers exclusively to the test presented test model / sample. Without written approval of Cerpass Technology Corp., the test report shall not be reproduced except in full.

Approved by:

Mark Liao / Supervisor

Laboratory Accreditation:

Cerpass Technology Corporation Test Laboratory

CONTENTS

History of this test report

Report No.	Issue Date	Description
TEFE1912251	Mar. 18, 2020	Original

1. Summary of Test Procedure and Test Results

1.1. Applicable Standards

ANSI C63.10:2013

FCC Rules and Regulations Part 15 Subpart E §15.407

KDB789033

FCC Rule	Description of Test	Result
15.203	Antenna Requirement	PASS
15.207(a)	AC Power Line Conducted Emission	PASS
15.407(b) 15.209	Radiated Spurious Emission	PASS
15.407(a)	26 dB & Occupied Bandwidth	PASS
15.407	6 dB Bandwidth	PASS
15.407 (a) & (a)(3)	Average Power	PASS
15.407(a)	Power Spectral Density	PASS
15.407(g)	Frequency Stability	PASS
2.1091	Radio Frequency Exposure	PASS

*The lab has lowered the uncertainty risk of test equipment, environment, and staff technicians according to ISO-IEC17025. Therefore we define test result as compliant when it complies with the standard without further evaluation of test result uncertainty.

*This EUT has been also tested and compiled with the requirement of FCC Part 15, Subpart B, recorded in a separate test report(TEFD1912251).

2. Test Configuration of Equipment under Test

2.1. Feature of Equipment under Test

Frequency Range	802.11b/g/n: 2400-2483.5MHz 802.11a/n/ac: 5150-5250MHz, 5725-5850MHz
Modulation Type	802.11b: CCK, DQPSK, DBPSK 802.11g/n/a: BPSK, QPSK, 16QAM, 64QAM 802.11ac: BPSK, QPSK, 16QAM, 64QAM, 256QAM
Modulation Technology	DSSS, OFDM
Data Rate	802.11b: 1, 2, 5.5, 11Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11n: MCS0 – MCS15, HT20/40 802.11a: 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11ac: MCS0 – MCS9, VHT20/40/80
Antenna Type	PIFA Antenna
Antenna Gain	2400-2483.5MHz: ANT A: 4.6dBi, ANT B: 4.5dBi 5150-5250MHz: ANT A: 5.1dBi, ANT B: 5.3dBi 5725-5850MHz: ANT A: 5.1dBi, ANT B: 5.3dBi

Note: For more details, please refer to the User's manual of the EUT.

Difference description

Model No.	Remark
WP8722	Market segmentation.
WP8722-BT	

Antenna list:

Antenna Number	Brand Name	Model Name	Ant. Type	Connector	Support	Max Peak Gain	Antenna Gain includes Cable loss
2G1	Walsin	RFMTA340705IMAB901	Dipole	U.FL	WIFI	2.4G: 4.6dBi	Yes
2G2	Walsin	RFMTA340716IMAB901	Dipole	U.FL	WIFI	2.4G: 4.5dBi	Yes
5G1	Walsin	RFMTA400817IM5B901	Dipole	U.FL	WIFI	5G: 5.1dBi	Yes
5G2	Walsin	RFMTA400808IM5B901	Dipole	U.FL	WIFI	5G: 5.3dBi	Yes
2G1	LYNwave	ALX20M-052AA0-00	Dipole	U.FL	WIFI	2.4G: 4.6dBi	Yes
2G2	LYNwave	ALX20M-052AA0-01	Dipole	U.FL	WIFI	2.4G: 4.5dBi	Yes
5G1	LYNwave	ALX20M-092AA0-00	Dipole	U.FL	WIFI	5G: 5.1dBi	Yes
5G2	LYNwave	ALX20M-092AA0-01	Dipole	U.FL	WIFI	5G: 5.3dBi	Yes

2.2. Carrier Frequency of Channels

Band: 5150MHz-5250MHz

802.11a, 802.11n HT20, 802.11ac VHT20

Channel	Frequency(MHz)	Channel	Frequency(MHz)
***36**	**5180**	44	5220
***40**	5200	***48**	**5240**

802.11n HT40, 802.11ac VHT40

Channel	Frequency(MHz)	Channel	Frequency(MHz)
***38**	**5190**	***46**	**5230**

802.11ac VHT80

Channel	Frequency(MHz)
***42**	**5210**

Band: 5725MHz -5850MHz

802.11a, 802.11n HT20, 802.11ac VHT20

Channel	Frequency(MHz)	Channel	Frequency(MHz)
***149**	**5745**	161	5805
153	5765	***165**	**5825**
***157**	**5785**		

802.11n HT40, 802.11ac VHT40

Channel	Frequency(MHz)	Channel	Frequency(MHz)
***151**	**5755**	***159**	**5795**

802.11ac VHT80

Channel	Frequency(MHz)
***155**	**5775**

Note: Channels remarked * are selected to perform test.

2.3. Test Mode and Test Software

a. During testing, the interface cables and equipment positions were varied according to ANSI C63.10.
b. The complete test system included remote workstation and EUT for RF test. The remote workstation included Notebook.
c. An executive program, " QRCT ver. 3.0.276.0" under Windows OS system was executed to transmit and receive data via WLAN.
d. The following test modes were performed for the test:

Conducted Emissions from the AC mains power ports	
Test Mode	Operating Description
1	802.11a (6Mbps) , Power from Adapter
2	802.11ac VHT20 (6.5Mbps) , Power from Adapter
3	802.11ac VHT40 (13.5Mbps) , Power from Adapter
4	802.11ac VHT80 (29.3Mbps) , Power from Adapter
5	802.11a (6Mbps) , Power from PoE
6	802.11ac VHT20 (6.5Mbps) , Power from PoE
7	802.11ac VHT40 (13.5Mbps) , Power from PoE
8	802.11ac VHT80 (29.3Mbps) , Power from PoE
caused "Test Mode 3, 7" generated the worst case, it was reported as the final data.	
Radiation Emissions (30MHz ~ 1GHz)	
Test Mode	Operating Description
1	802.11a (6Mbps) , Power from Adapter
2	802.11ac VHT20 (6.5Mbps) , Power from Adapter
3	802.11ac VHT40 (13.5Mbps) , Power from Adapter
4	802.11ac VHT80 (29.3Mbps) , Power from Adapter
5	802.11a (6Mbps) , Power from PoE
6	802.11ac VHT20 (6.5Mbps) , Power from PoE
7	802.11ac VHT40 (13.5Mbps) , Power from PoE
8	802.11ac VHT80 (29.3Mbps) , Power from PoE
caused "Test Mode 3, 7" generated the worst case, it was reported as the final data.	
Radiation Emissions (1GHz ~ 40GHz)	
Test Mode	Operating Description
1	802.11a (6Mbps)
2	802.11ac VHT20 (6.5Mbps)
3	802.11ac VHT40 (13.5Mbps)
4	802.11ac VHT80 (29.3Mbps)
caused "Test Mode 1~4" generated the worst case, they were reported as the final data.	

2.4. Description of Test System

RF Conducted				
Equipment	Brand	Model	Length/Type	Power cord/Length/Type
Notebook	ASUS	P2430U	N/A	Adapter / 1.8m / NS
Adapter	APD	WB-12G12FU	1.5m / NS	N/A
RJ45 Cable	N/A	N/A	1.2m / NS	N/A
Radiated Emissions				
Equipment	Brand	Model	Length/Type	Power cord/Length/Type
Notebook	ASUS	P2430U	N/A	Adapter / 1.8m / NS
Adapter	APD	WB-12G12FU	1.5m / NS	N/A
POE	Bluewave	JS-100GT	N/A	N/A
RJ45 Cable	N/A	N/A	15m / NS	N/A
AC Power Line Conducted Emission				
Equipment	Brand	Model	Length/Type	Power cord/Length/Type
Notebook	ASUS	P2430U	N/A	Adapter / 1.8m / NS
Adapter	APD	WB-12G12FU	1.5m / NS	N/A
POE	Bluewave	JS-100GT	N/A	N/A
RJ45 Cable	N/A	N/A	1.2m / NS	N/A
RJ45 Cable	N/A	N/A	1.2m / NS	N/A

2.5. General Information of Test

Test Site	**Cerpass Technology Corporation Test Laboratory** Address: No.10, Ln. 2, Lianfu St., Luzhu Dist., Taoyuan City 33848, Taiwan (R.O.C.) Tel:+886-3-3226-888 Fax:+886-3-3226-881	
	FCC	TW1439, TW1079
	IC	4934E-1, 4934E-2
	VCCI	T-2205 for Telecommunication test C-4663 for Conducted emission test R-4218 for Radiated emission test G-10812, G-10813 for radiated disturbance above 1GHz
Frequency Range Investigated:	Conducted: from 150kHz to 30 MHz Radiation: from 30 MHz to 40,000MHz	
Test Distance:	The test distance of radiated emission from antenna to EUT is 3 M.	

Test Item	Test Site	Finish Date	Environmental Conditions	Tested By
RF Conducted	RFCON01-NK	2020/03/09	22℃ / 63%	Nick Guan
Radiated Emissions	3M02-NK	2020/03/10	24℃ / 56%	Vic Yeh
AC Power Line Conducted Emission	CON01-NK	2020/02/29	22℃ / 49%	Leon Huang

2.6. Measurement Uncertainty

Measurement Item	Uncertainty
AC Power Line Conduction(150K~30MHz)	±1.60dB
Radiated Spurious Emission(9KHz~30MHz)	±3.405dB
Radiated Spurious Emission(30MHz~1GHz)	±5.326dB
Radiated Spurious Emission(1GHz~40GHz)	±5.011dB
6dB Bandwidth	±4.407%
26dB Bandwidth	±4.459%
Occupied Bandwidth	±4.403%
Peak Output Power(Conducted Power Meter)	±1.31dB
Power Spectral Density	±2.106dB
Duty Cycle	±0.17%
Frequency Stability	±156.543Hz

3. Test Equipment and Ancillaries Used for Tests

Test Item	Radiated Emissions				
Test Site	Semi Anechoic Room(3M02-NK)				
Instrument	**Manufacturer**	**Model No**	**Serial No**	**Calibration Date**	**Valid Date**
Bilog Antenna	Schwarzbeck	VULB9168	275	2019/09/24	2020/09/23
Bilog Antenna	Schwarzbeck	VULB9168	369	2019/03/29	2020/03/28
Active Loop Antenna	EMCO	6507	40855	2019/05/24	2020/05/23
Horn Antenna	EMCO	3115	31589	2019/04/01	2020/03/31
Horn Anrenna	EMCO	3116	31974	2019/09/17	2020/09/16
EMI Receiver	ROHDE & SCHWARZ	ESCI	101423	2019/05/14	2020/05/13
Spectrum Analyzer	ROHDE & SCHWARZ	FSP 40	100219	2019/07/22	2020/07/21
Spectrum Analyzer	ROHDE & SCHWARZ	FSV 40-N	102151	2019/08/02	2020/08/01
Preamplifier	EM Electronics corp.	EM330	60660	2019/03/11	2020/03/10
Preamplifier	EMC INSTRUMENTS	EMC051845SE	980333	2019/09/20	2020/09/19
Preamplifier	Agilent	8449B	3008A01954	2019/03/11	2020/03/10
Preamplifier	EMC INSTRUMENTS	EMC184045	980065	2019/11/07	2020/11/06
Bluetooth Tester	ROHDE & SCHWARZ	CBT	101133	2019/04/07	2020/04/06
Cable-3in1(30M-1G)	HARBOUR INDUSTRIES	LL142	CCE1315	2019/04/09	2020/04/08
Cable-3in1(30M-1G)	HARBOUR INDUSTRIES	LL142	CCE1316	2019/09/20	2020/09/19
Cable-0.5m(1G-40G)	HUBER SUHNER	SUCOFLEX 100	805443/4	2019/05/20	2020/05/19
Cable-3m(1G-40G)	HUBER SUHNER	SUCOFLEX 100	805796/4	2019/05/20	2020/05/19
Cable-8m(1G-40G)	HUBER SUHNER	SUCOFLEX 100	805795/4	2019/05/20	2020/05/19
E3	AUDIX	v8.2014-8-6	RK-000529	NA	NA

Test Item	RF Conducted				
Test Site	RFCON01-NK				
Instrument	**Manufacturer**	**Model No**	**Serial No**	**Calibration Date**	**Valid Date**
Spectrum Analyzer	ROHDE & SCHWARZ	FSP 40	100219	2019/07/22	2020/07/21
Spectrum Analyzer	ROHDE & SCHWARZ	FSV 40-N	102151	2019/08/02	2020/08/01
Bluetooth Tester	ROHDE & SCHWARZ	CBT	101133	2019/04/07	2020/04/06
Attenuator	KEYSIGHT	8491B	MY39250703	2019/09/12	2020/09/11
TEMP & HUMI CHAMBER	T-MACHINE	TMJ-9712	T-12-040111	2019/08/28	2020/08/27
Power Meter	Anritsu	ML2495A	1224005	2019/04/11	2020/04/10
Power Sensor	Anritsu	MA2411B	1207295	2019/04/09	2020/04/08

Test Item	AC Power Line Conducted Emission				
Test Site	CON01-NK				
Instrument	**Manufacturer**	**Model No**	**Serial No**	**Calibration Date**	**Valid Date**
EMI Receiver	ROHDE & SCHWARZ	ESCI	100821	2019/09/16	2020/09/15
Line Impedance Stabilization Network	Schwarzbeck	NSLK 8127	8127-568	2019/03/15	2020/03/14
Pulse Limiter	ROHDE & SCHWARZ	ESH3-Z2	101934	2019/03/12	2020/03/11
Cable-6m(9k~300M)	NA	EMC5D-BM-BM-6	130606	2019/03/14	2020/03/13
E3	AUDIX	v8.2014-8-6	RK-000531	NA	NA

4. Antenna Requirements

4.1. Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And according to FCC 47 CFR Section 15.407 (a), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

4.2. Antenna Construction and Directional Gain

Antenna Type	PIFA Antenna
Antenna Gain	2.4GHz: ANT A: 4.6 dBi ; ANT B: 4.5 dBi 5150MHz-5250MHz: ANT A: 5.1 dBi ; ANT B: .5.3 dBi 5725MHz-5850MHz: ANT A: 5.1 dBi ; ANT B: 5.3 dBi

2412-2462MHz
For Power directional gain= G_{ant}= 4.6 dBi For PSD directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2 / N_{ANT}$] = 7.56 (dBi)
5150MHz -5250MHz
For Power directional gain= G_{ant}= 5.3 dBi For PSD directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2 / N_{ANT}$] = 8.21 (dBi)
5725MHz -5850MHz
For Power directional gain= G_{ant}= 5.3 dBi For PSD directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2 / N_{ANT}$] = 8.21 (dBi)

5. Test of AC Power Line Conducted Emission

5.1. Test Limit

Conducted Emissions were measured from 150 kHz to 30 MHz with a bandwidth of 9 KHz, according to the methods defined in ANSI C63.4-2014. The EUT was placed on a nonmetallic stand in a shielded room 0.8 meters above the ground plane. The interface cables and equipment positioning were varied within limits of reasonable applications to determine the position produced maximum conducted emissions.

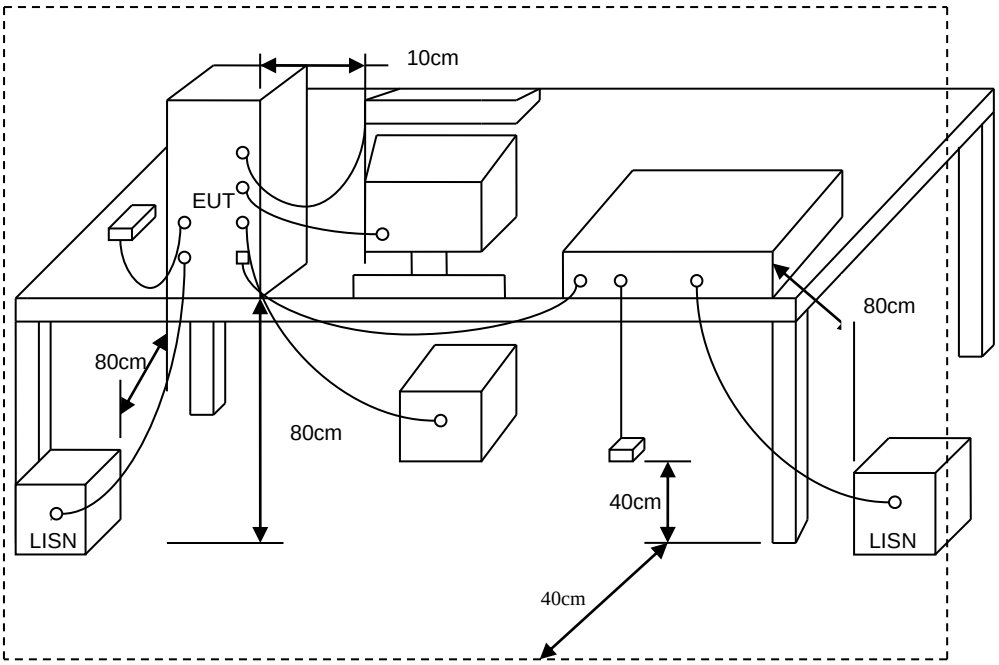
Frequency (MHz)	Quasi Peak (dBμV)	Average (dBμV)
0.15 – 0.5	66-56*	56-46*
0.5 – 5.0	56	46
5.0 – 30.0	60	50

*Decreases with the logarithm of the frequency.

5.2. Test Procedures

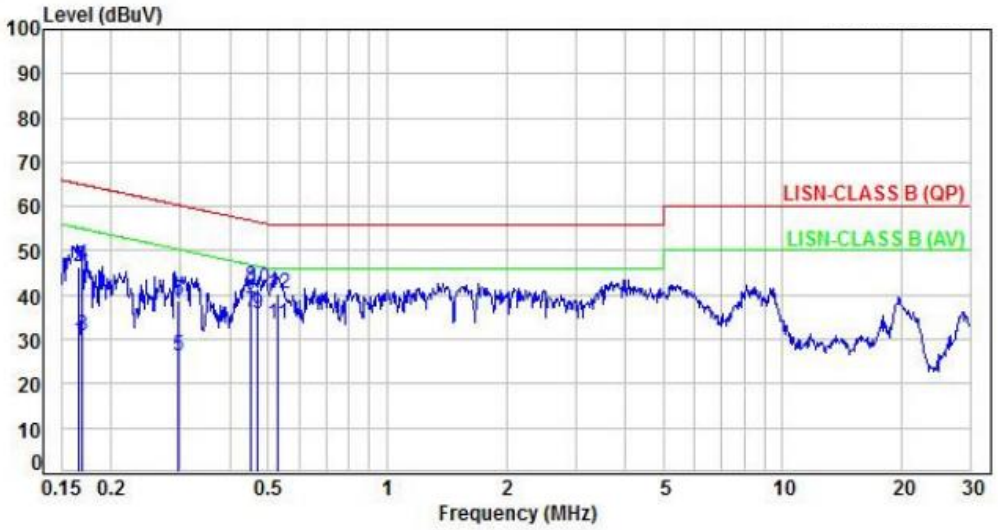
a. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
b. Connect EUT to the power mains through a line impedance stabilization network (LISN).
c. All the support units are connecting to the other LISN.
d. The LISN provides 50 ohm coupling impedance for the measuring instrument.
e. The FCC states that a 50 ohm, 50 micro-Henry LISN should be used.
f. Both sides of AC line were checked for maximum conducted interference.
g. The frequency range from 150 kHz to 30 MHz was searched.
h. Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

5.3. Typical Test Setup



5.4. Test Result and Data

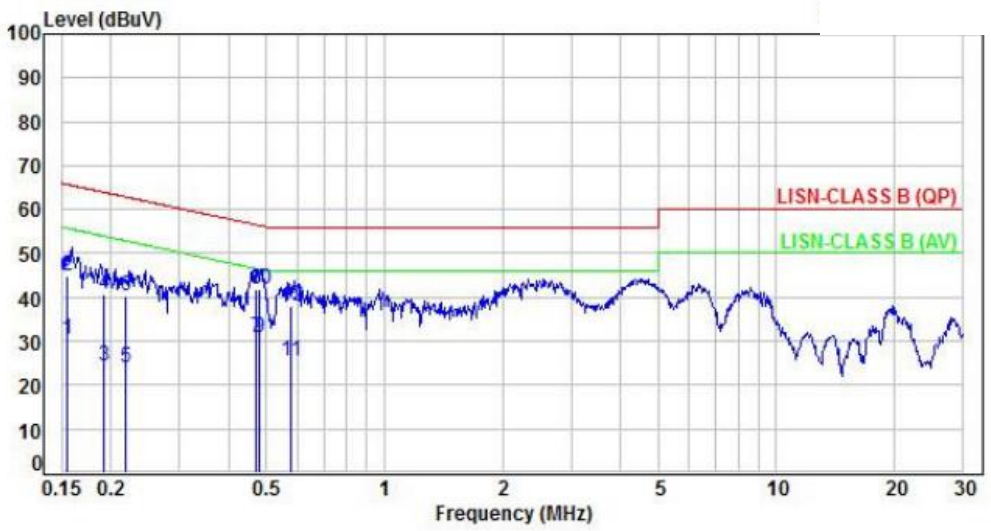
Power	:	AC 120V / 60Hz	Pol/Phase	:	LINE
Test Mode	:	Mode 3, CH46		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.17	9.92	19.77	29.69	55.14	-25.45	Average	P
2	0.17	9.92	36.45	46.37	65.14	-18.77	QP	P
3	0.17	9.92	20.70	30.62	54.99	-24.37	Average	P
4	0.17	9.92	36.82	46.74	64.99	-18.25	QP	P
5	0.29	9.93	16.14	26.07	50.38	-24.31	Average	P
6	0.29	9.93	28.73	38.66	60.38	-21.72	QP	P
7	0.45	9.94	26.10	36.04	46.85	-10.81	Average	P
8	0.45	9.94	31.84	41.78	56.85	-15.07	QP	P
9	0.47	9.94	25.87	35.81	46.52	-10.71	Average	P
10	0.47	9.94	31.40	41.34	56.52	-15.18	QP	P
11	0.53	9.95	23.64	33.59	46.00	-12.41	Average	P
12	0.53	9.95	30.37	40.32	56.00	-15.68	QP	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=(LISN or ISN or Current Probe)Factor + Cable Loss

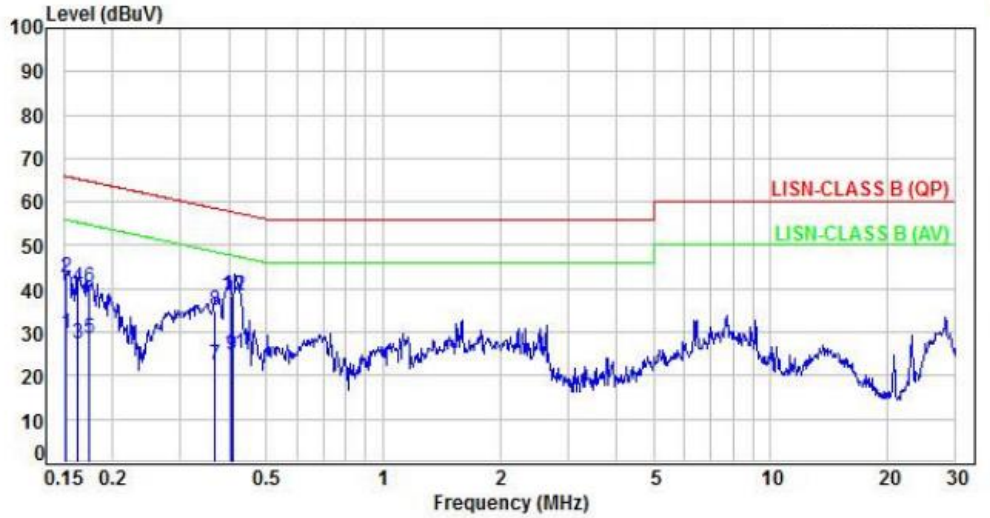
Power	:	AC 120V / 60Hz	Pol/Phase	:	NEUTRAL
Test Mode	:	Mode 3, CH46		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.15	9.95	20.59	30.54	55.75	-25.21	Average	P
2	0.15	9.95	35.08	45.03	65.75	-20.72	QP	P
3	0.19	9.95	14.54	24.49	53.94	-29.45	Average	P
4	0.19	9.95	30.92	40.87	63.94	-23.07	QP	P
5	0.22	9.95	14.15	24.10	52.88	-28.78	Average	P
6	0.22	9.95	30.21	40.16	62.88	-22.72	QP	P
7	0.47	9.96	20.82	30.78	46.48	-15.70	Average	P
8	0.47	9.96	31.86	41.82	56.48	-14.66	QP	P
9	0.48	9.96	20.75	30.71	46.39	-15.68	Average	P
10	0.48	9.96	31.76	41.72	56.39	-14.67	QP	P
11	0.58	9.96	15.62	25.58	46.00	-20.42	Average	P
12	0.58	9.96	28.20	38.16	56.00	-17.84	QP	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=(LISN or ISN or Current Probe)Factor + Cable Loss

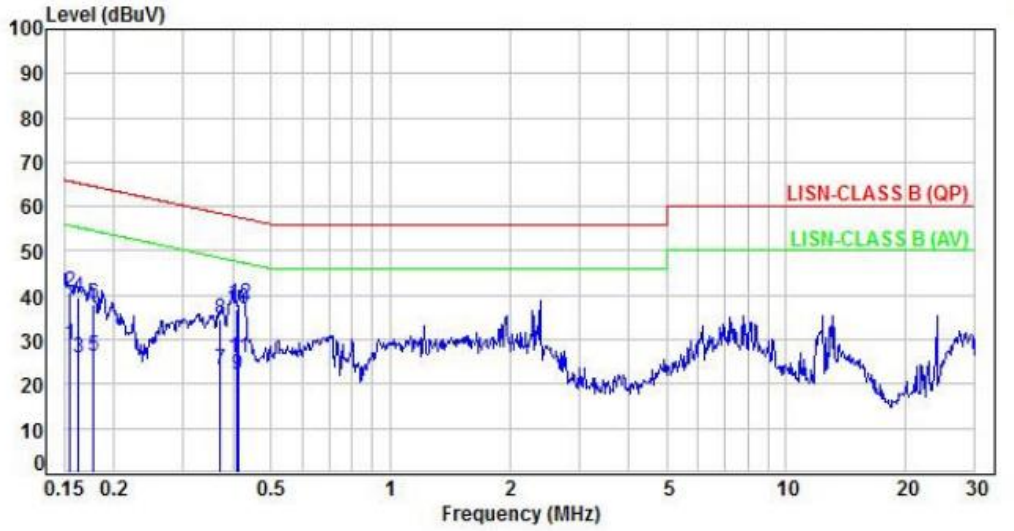
Power	:	AC 120V / 60Hz	Pol/Phase	:	LINE
Test Mode	:	Mode 7, CH46		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.15	9.92	19.81	29.73	55.94	-26.21	Average	P
2	0.15	9.92	32.69	42.61	65.94	-23.33	QP	P
3	0.16	9.92	17.43	27.35	55.29	-27.94	Average	P
4	0.16	9.92	30.44	40.36	65.29	-24.93	QP	P
5	0.17	9.92	18.65	28.57	54.72	-26.15	Average	P
6	0.17	9.92	30.39	40.31	64.72	-24.41	QP	P
7	0.37	9.94	12.45	22.39	48.55	-26.16	Average	P
8	0.37	9.94	25.05	34.99	58.55	-23.56	QP	P
9	0.41	9.94	14.84	24.78	47.72	-22.94	Average	P
10	0.41	9.94	28.50	38.44	57.72	-19.28	QP	P
11	0.41	9.94	15.26	25.20	47.63	-22.43	Average	P
12	0.41	9.94	28.47	38.41	57.63	-19.22	QP	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=(LISN or ISN or Current Probe)Factor + Cable Loss

Power	:	AC 120V / 60Hz	Pol/Phase	:	NEUTRAL
Test Mode	:	Mode 7, CH46		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.15	9.95	19.13	29.08	55.74	-26.66	Average	P
2	0.15	9.95	30.86	40.81	65.74	-24.93	QP	P
3	0.16	9.95	15.98	25.93	55.34	-29.41	Average	P
4	0.16	9.95	29.49	39.44	65.34	-25.90	QP	P
5	0.18	9.95	16.45	26.40	54.58	-28.18	Average	P
6	0.18	9.95	28.15	38.10	64.58	-26.48	QP	P
7	0.37	9.96	13.42	23.38	48.49	-25.11	Average	P
8	0.37	9.96	24.78	34.74	58.49	-23.75	QP	P
9	0.41	9.96	11.95	21.91	47.68	-25.77	Average	P
10	0.41	9.96	26.99	36.95	57.68	-20.73	QP	P
11	0.41	9.96	16.04	26.00	47.57	-21.57	Average	P
12	0.41	9.96	28.24	38.20	57.57	-19.37	QP	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=(LISN or ISN or Current Probe)Factor + Cable Loss

6. Test of Spurious Emission (Radiated)

6.1. Test Limit

Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(4) For transmitters operating in the 5.725-5.85 GHz band:
All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27dBm/MHz at the band edge.

(5) The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.

(6) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in §15.207.

(7) The provisions of §15.205 apply to intentional radiators operating under this section.

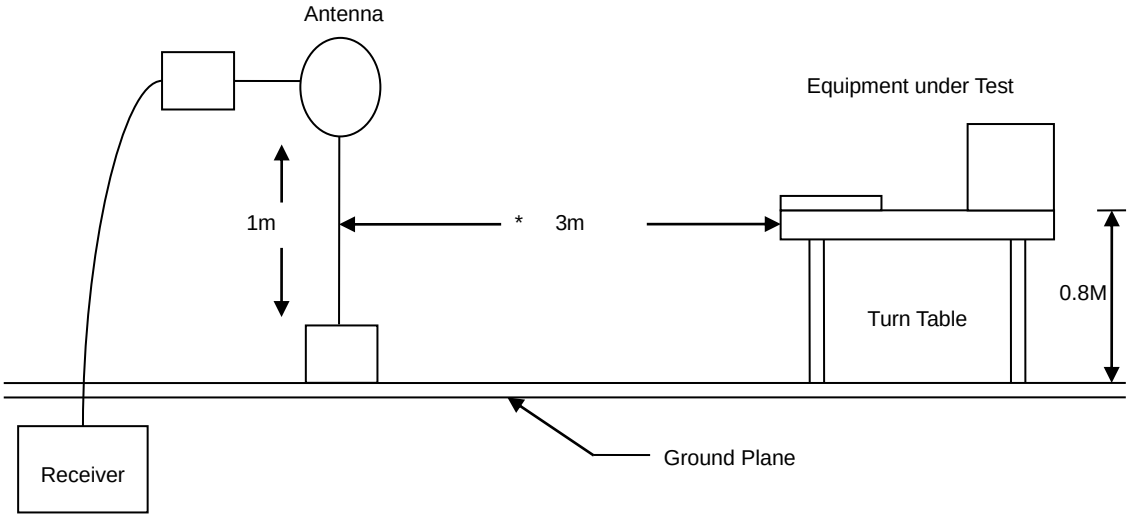
(8) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the upper and lower frequency band edges as the design of the equipment permits.

6.2. Test Procedures

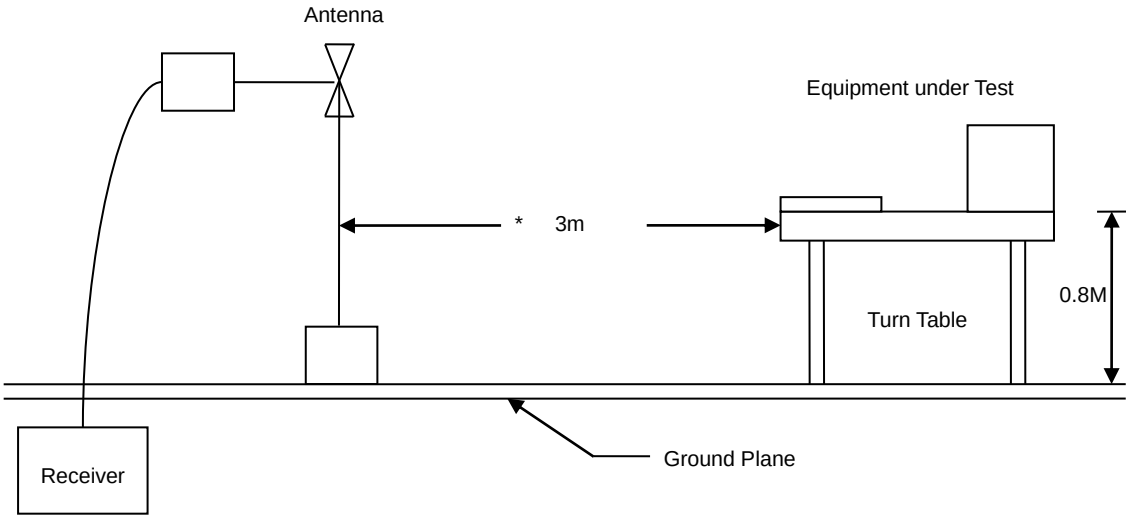
a. The EUT was placed on a rotatable table top 0.8 meter above ground.
b. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
c. The table was rotated 360 degrees to determine the position of the highest radiation.
d. The antenna is a broadband antenna and its height is varied between one meter and four meters above ground to find the maximum value of the field strength both horizontal polarization and vertical polarization of the antenna are set to make the measurement.
e. For each suspected emission the EUT was arranged to its worst case and then tune the antenna tower (from 1 M to 4 M) and turn table (from 0 degree to 360 degrees) to find the maximum reading.
f. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function and specified bandwidth with Maximum Hold Mode.
g. If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method and reported.
h. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
i. “Cone of radiation” has been considered to be 3dB bandwidth of the measurement antenna.

6.3. Typical Test Setup

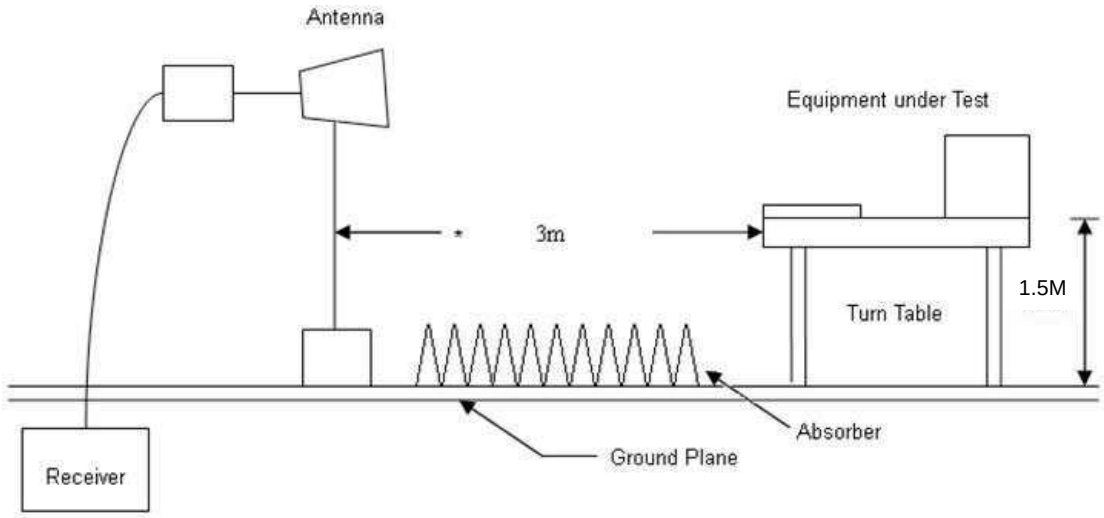
Below 30MHz test setup



30MHz- 1GHz Test Setup



Above 1GHz Test Setup

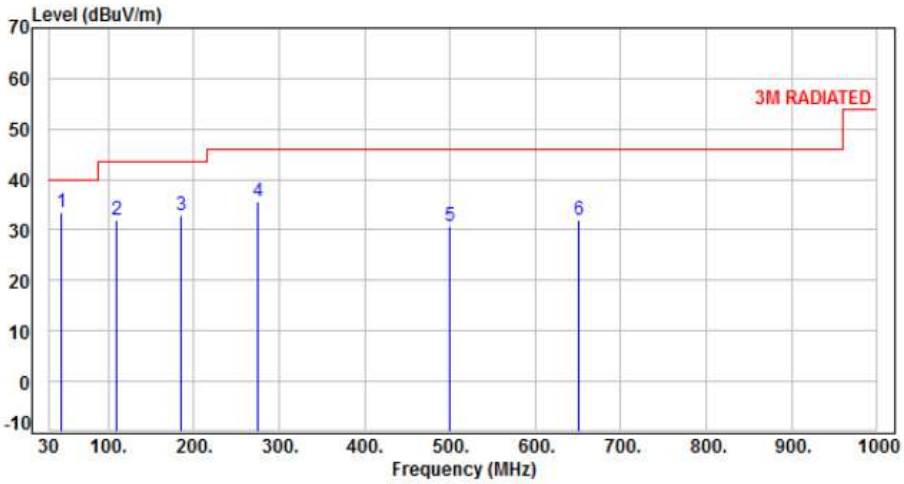


6.4. Test Result and Data (9kHz ~ 30MHz)

The 9kHz - 30MHz spurious emission is under limit 20dB more.

6.5. Test Result and Data (30MHz ~ 1GHz)

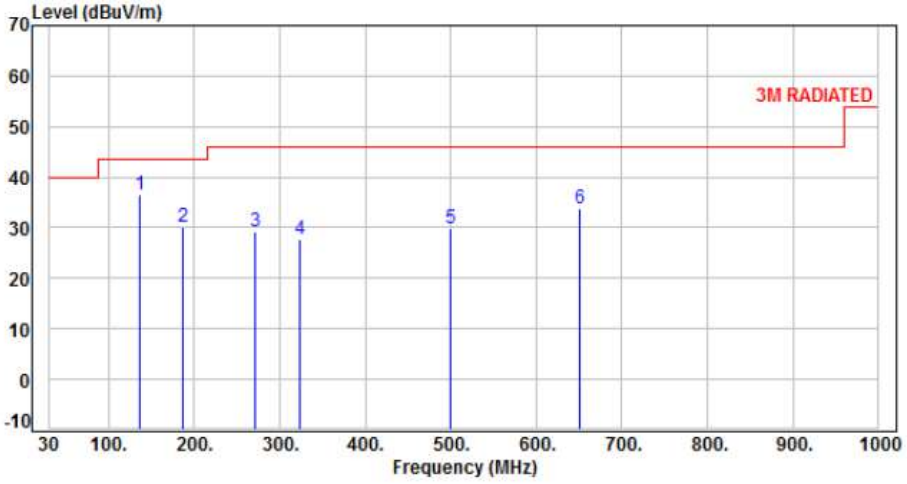
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 3, CH46		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	45.55	-9.33	42.83	33.50	40.00	-6.50	Peak	100	0	P
2	109.32	-12.52	44.59	32.07	43.50	-11.43	Peak	100	0	P
3	185.92	-11.29	44.08	32.79	43.50	-10.71	Peak	100	0	P
4	274.13	-9.22	44.99	35.77	46.00	-10.23	Peak	100	0	P
5	499.82	-3.58	34.45	30.87	46.00	-15.13	Peak	100	0	P
6	650.70	-0.63	32.66	32.03	46.00	-13.97	Peak	100	0	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

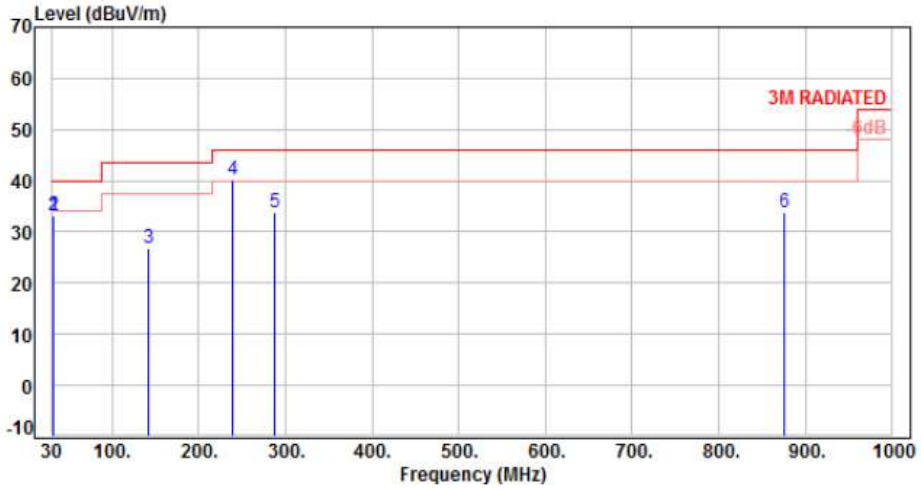
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 3, CH46		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	136.14	-10.16	46.55	36.39	43.50	-7.11	Peak	100	0	P
2	187.23	-11.39	41.68	30.29	43.50	-13.21	Peak	100	0	P
3	272.19	-9.32	38.45	29.13	46.00	-16.87	Peak	100	0	P
4	324.13	-7.66	35.42	27.76	46.00	-18.24	Peak	100	0	P
5	499.76	-3.58	33.57	29.99	46.00	-16.01	Peak	100	0	P
6	650.32	-0.63	34.51	33.88	46.00	-12.12	Peak	100	0	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

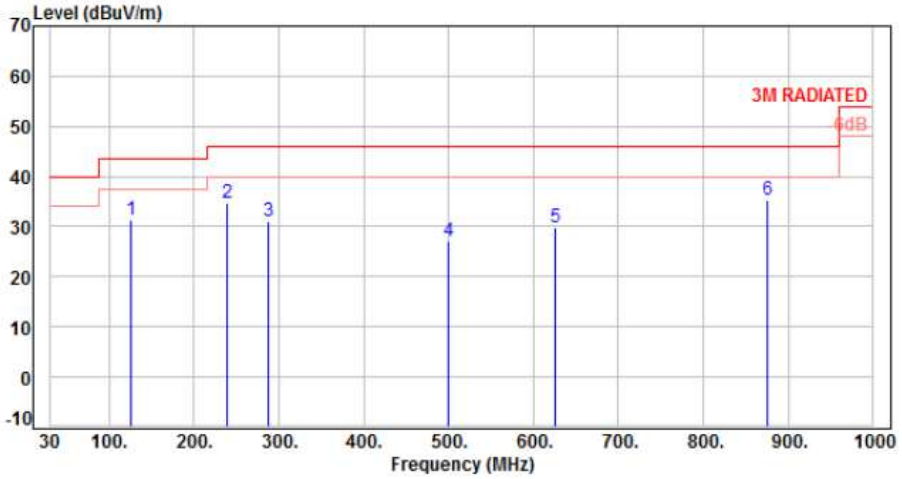
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 7, CH46		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	31.94	-10.25	43.43	33.18	40.00	-6.82	Peak	100	0	P
2	31.94	-10.25	43.43	33.18	40.00	-6.82	Peak	100	0	P
3	142.52	-9.67	36.54	26.87	43.50	-16.63	Peak	100	0	P
4	239.52	-10.60	50.67	40.07	46.00	-5.93	Peak	100	0	P
5	288.02	-8.86	42.57	33.71	46.00	-12.29	Peak	100	0	P
6	875.84	2.97	30.79	33.76	46.00	-12.24	Peak	100	0	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 7, CH46		:	

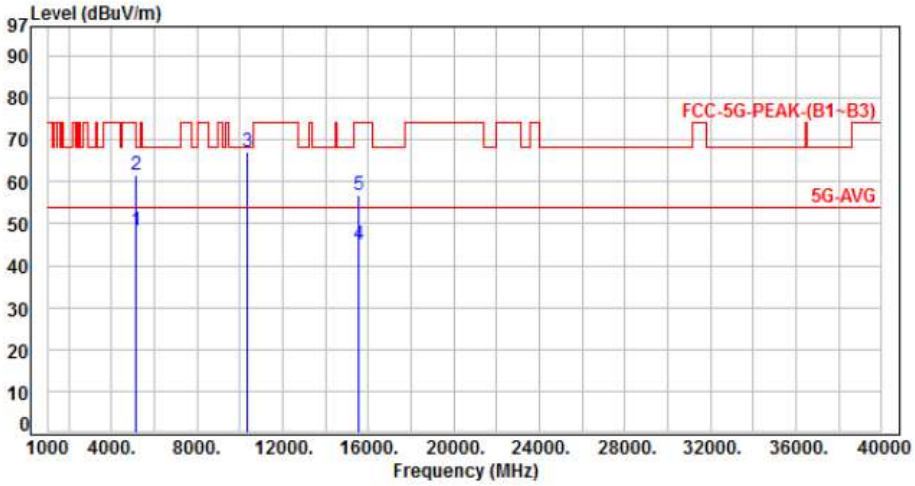


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	125.06	-11.31	42.53	31.22	43.50	-12.28	Peak	100	0	P
2	239.52	-10.60	45.33	34.73	46.00	-11.27	Peak	100	0	P
3	288.02	-8.86	39.81	30.95	46.00	-15.05	Peak	100	0	P
4	499.48	-3.59	30.77	27.18	46.00	-18.82	Peak	100	0	P
5	625.58	-0.71	30.46	29.75	46.00	-16.25	Peak	100	0	P
6	875.84	2.97	32.33	35.30	46.00	-10.70	Peak	100	0	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

6.6. Test Result and Data (1GHz ~ 40GHz)

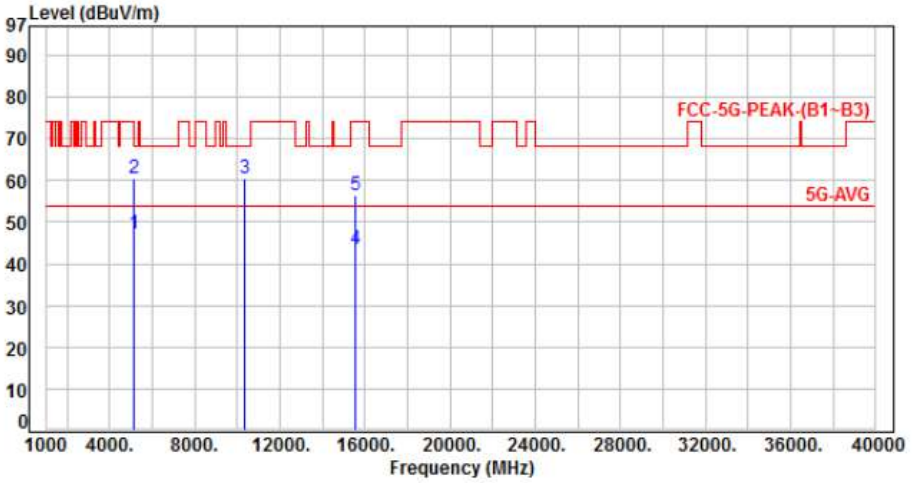
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 1, Band 1, CH36		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.73	43.64	48.37	54.00	-5.63	Average	280	140	P
2	5150.00	4.73	56.75	61.48	74.00	-12.52	Peak	280	140	P
3	10360.00	11.43	55.59	67.02	68.20	-1.18	Peak	347	218	P
4	15540.00	14.27	30.71	44.98	54.00	-9.02	Average	100	107	P
5	15540.00	14.27	42.41	56.68	74.00	-17.32	Peak	100	107	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

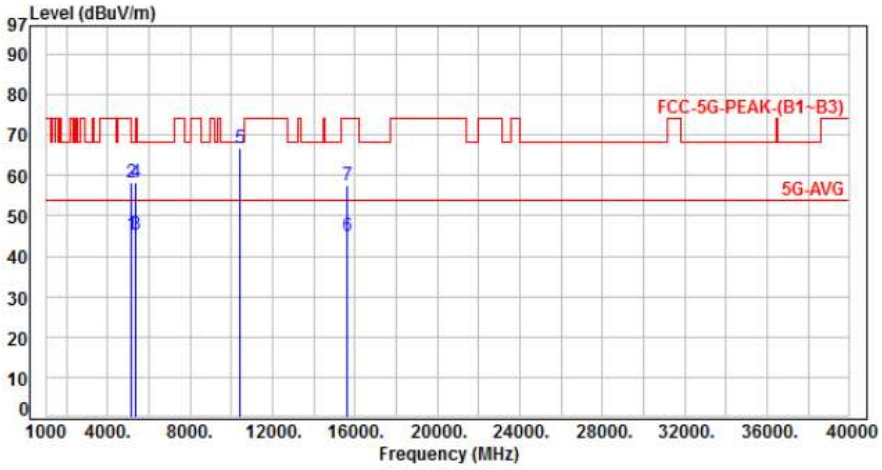
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 1, Band 1, CH36		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.73	42.34	47.07	54.00	-6.93	Average	280	0	P
2	5150.00	4.73	55.60	60.33	74.00	-13.67	Peak	280	0	P
3	10360.00	11.43	49.10	60.53	68.20	-7.67	Peak	100	190	P
4	15540.00	14.27	29.19	43.46	54.00	-10.54	Average	100	166	P
5	15540.00	14.27	42.03	56.30	74.00	-17.70	Peak	100	166	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

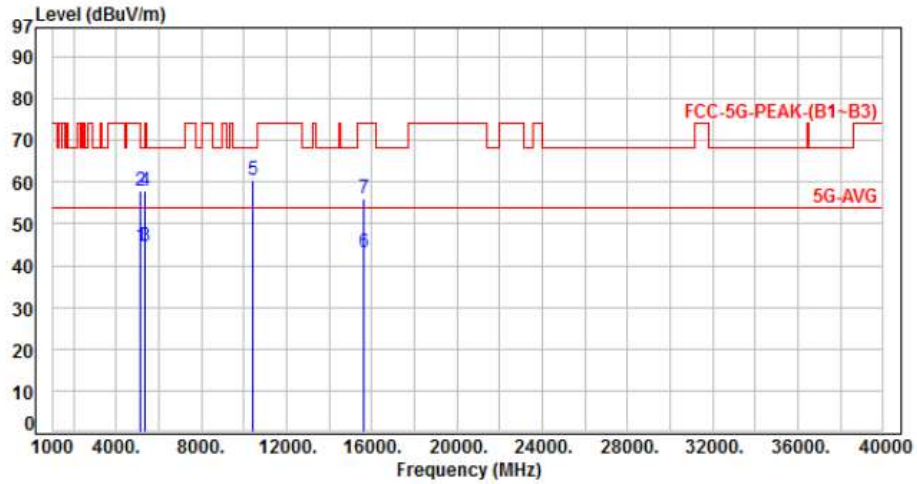
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 1, Band 1, CH40		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.73	40.55	45.28	54.00	-8.72	Average	100	140	P
2	5150.00	4.73	53.58	58.31	74.00	-15.69	Peak	100	140	P
3	5350.00	5.07	40.26	45.33	54.00	-8.67	Average	100	140	P
4	5350.00	5.07	53.34	58.41	74.00	-15.59	Peak	100	140	P
5	10400.00	11.45	55.45	66.90	68.20	-1.30	Peak	335	217	P
6	15600.00	13.88	31.21	45.09	54.00	-8.91	Average	100	121	P
7	15600.00	13.88	43.51	57.39	74.00	-16.61	Peak	100	121	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

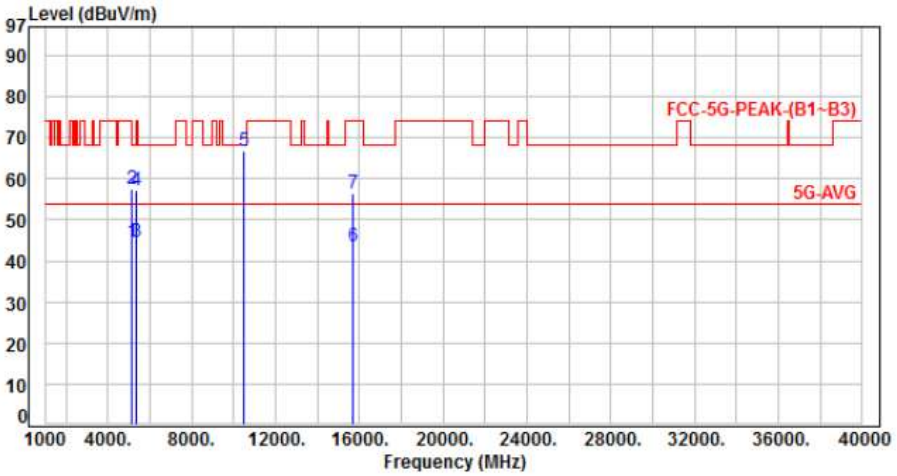
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 1, Band 1, CH40		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.73	39.99	44.72	54.00	-9.28	Average	280	0	P
2	5150.00	4.73	53.06	57.79	74.00	-16.21	Peak	280	0	P
3	5350.00	5.07	39.62	44.69	54.00	-9.31	Average	280	0	P
4	5350.00	5.07	52.76	57.83	74.00	-16.17	Peak	280	0	P
5	10400.00	11.45	49.12	60.57	68.20	-7.63	Peak	100	200	P
6	15600.00	13.88	29.15	43.03	54.00	-10.97	Average	100	115	P
7	15600.00	13.88	42.06	55.94	74.00	-18.06	Peak	100	115	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

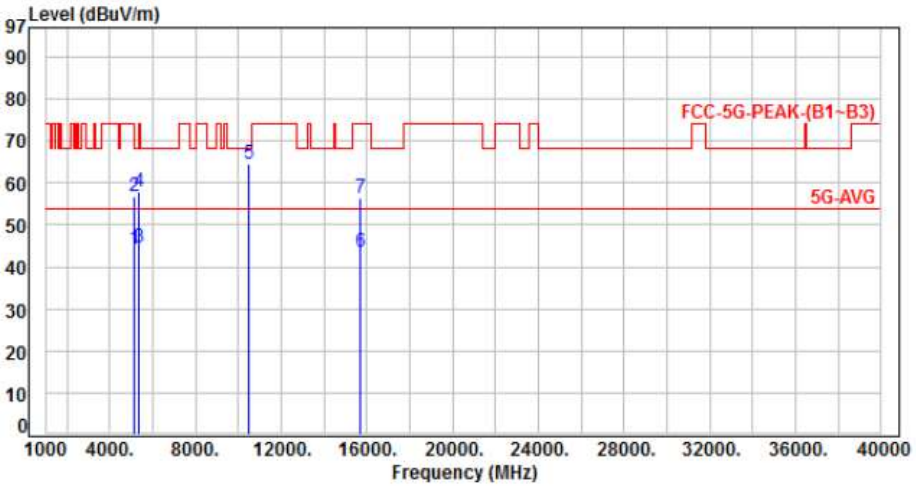
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 1, Band 1, CH48		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.73	39.77	44.50	54.00	-9.50	Average	100	0	P
2	5150.00	4.73	52.70	57.43	74.00	-16.57	Peak	100	0	P
3	5350.00	5.07	39.60	44.67	54.00	-9.33	Average	100	0	P
4	5350.00	5.07	52.17	57.24	74.00	-16.76	Peak	100	0	P
5	10480.00	11.65	55.28	66.93	68.20	-1.27	Peak	225	219	P
6	15720.00	13.60	30.06	43.66	54.00	-10.34	Average	100	106	P
7	15720.00	13.60	42.88	56.48	74.00	-17.52	Peak	100	106	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

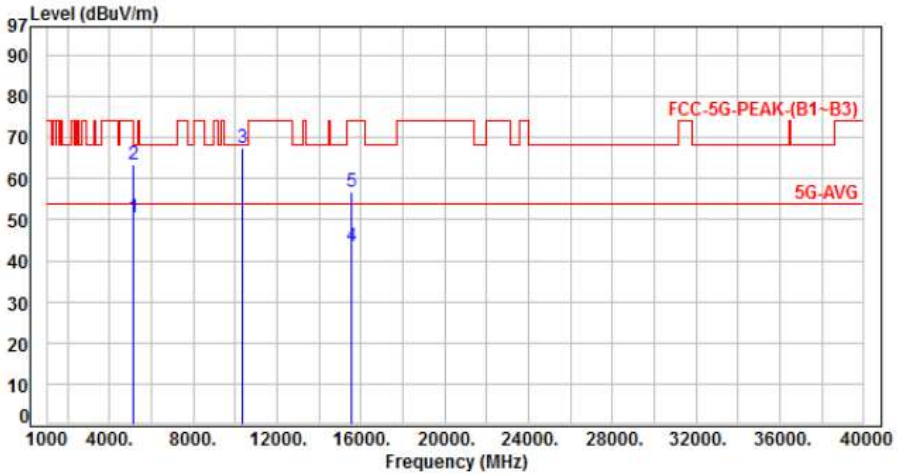
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 1, Band 1, CH48		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.73	39.58	44.31	54.00	-9.69	Average	100	0	P
2	5150.00	4.73	51.94	56.67	74.00	-17.33	Peak	100	0	P
3	5350.00	5.07	39.52	44.59	54.00	-9.41	Average	100	0	P
4	5350.00	5.07	52.99	58.06	74.00	-15.94	Peak	100	0	P
5	10480.00	11.65	52.80	64.45	68.20	-3.75	Peak	285	191	P
6	15720.00	13.60	29.74	43.34	54.00	-10.66	Average	100	187	P
7	15720.00	13.60	42.87	56.47	74.00	-17.53	Peak	100	187	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

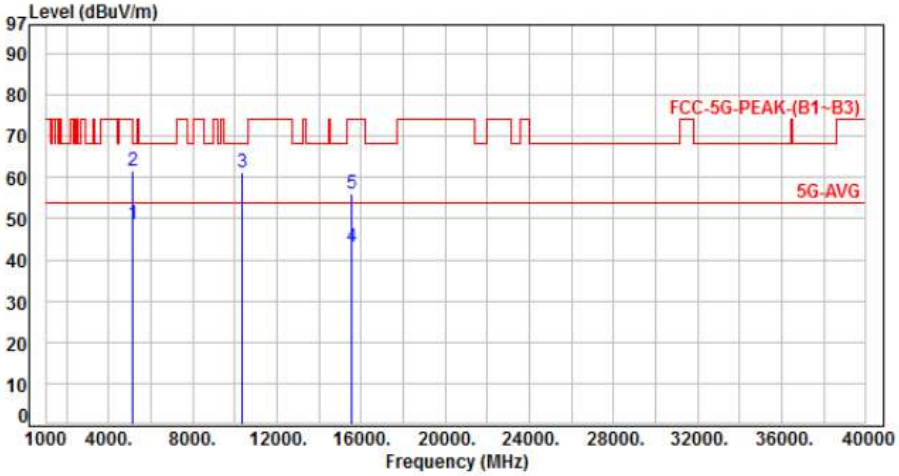
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 2, Band 1, CH36		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.73	45.95	50.68	54.00	-3.32	Average	280	140	P
2	5150.00	4.73	58.75	63.48	74.00	-10.52	Peak	280	140	P
3	10360.00	11.43	55.95	67.38	68.20	-0.82	Peak	100	217	P
4	15540.00	14.27	29.32	43.59	54.00	-10.41	Average	100	134	P
5	15540.00	14.27	42.35	56.62	74.00	-17.38	Peak	100	134	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

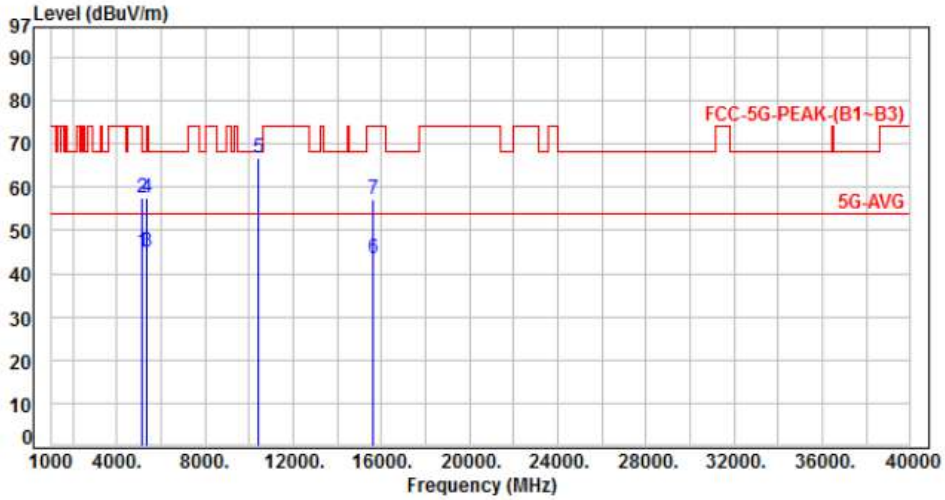
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 2, Band 1, CH36		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.73	44.02	48.75	54.00	-5.25	Average	280	0	P
2	5150.00	4.73	56.93	61.66	74.00	-12.34	Peak	280	0	P
3	10360.00	11.43	49.74	61.17	68.20	-7.03	Peak	100	195	P
4	15540.00	14.27	28.94	43.21	54.00	-10.79	Average	100	193	P
5	15540.00	14.27	41.79	56.06	74.00	-17.94	Peak	100	193	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

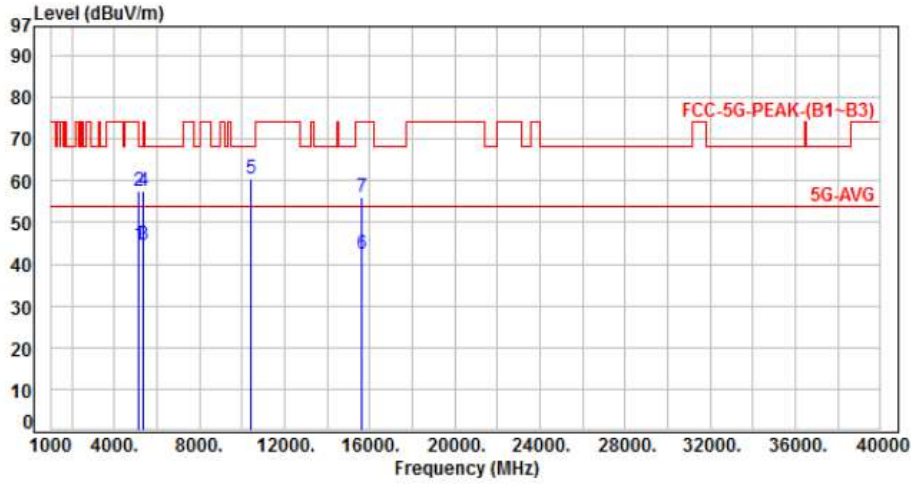
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 2, Band 1, CH40		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.73	40.14	44.87	54.00	-9.13	Average	280	140	P
2	5150.00	4.73	52.97	57.70	74.00	-16.30	Peak	280	140	P
3	5350.00	5.07	39.88	44.95	54.00	-9.05	Average	280	140	P
4	5350.00	5.07	52.54	57.61	74.00	-16.39	Peak	280	140	P
5	10400.00	11.45	55.43	66.88	68.20	-1.32	Peak	100	219	P
6	15600.00	13.88	29.57	43.45	54.00	-10.55	Average	100	111	P
7	15600.00	13.88	43.11	56.99	74.00	-17.01	Peak	100	111	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

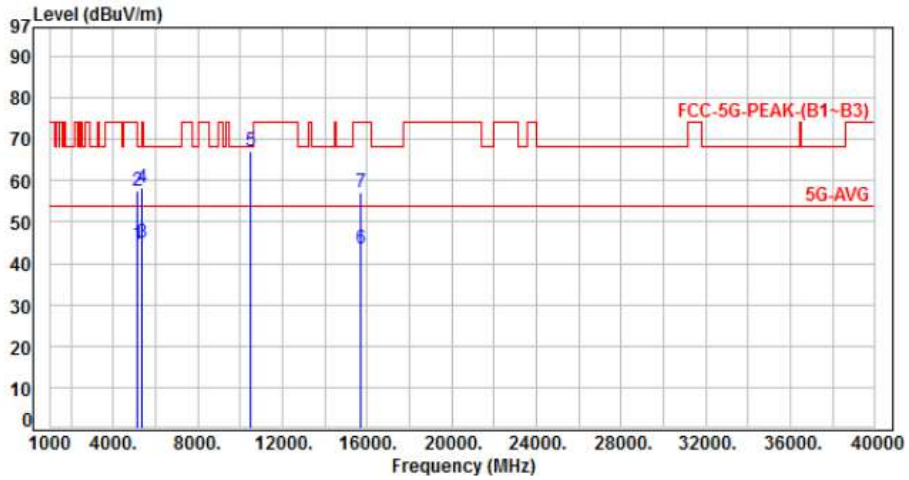
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 2, Band 1, CH40		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.73	39.82	44.55	54.00	-9.45	Average	280	0	P
2	5150.00	4.73	52.94	57.67	74.00	-16.33	Peak	280	0	P
3	5350.00	5.07	39.61	44.68	54.00	-9.32	Average	280	0	P
4	5350.00	5.07	52.51	57.58	74.00	-16.42	Peak	280	0	P
5	10400.00	11.45	48.97	60.42	68.20	-7.78	Peak	100	190	P
6	15600.00	13.88	28.71	42.59	54.00	-11.41	Average	100	125	P
7	15600.00	13.88	42.25	56.13	74.00	-17.87	Peak	100	125	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

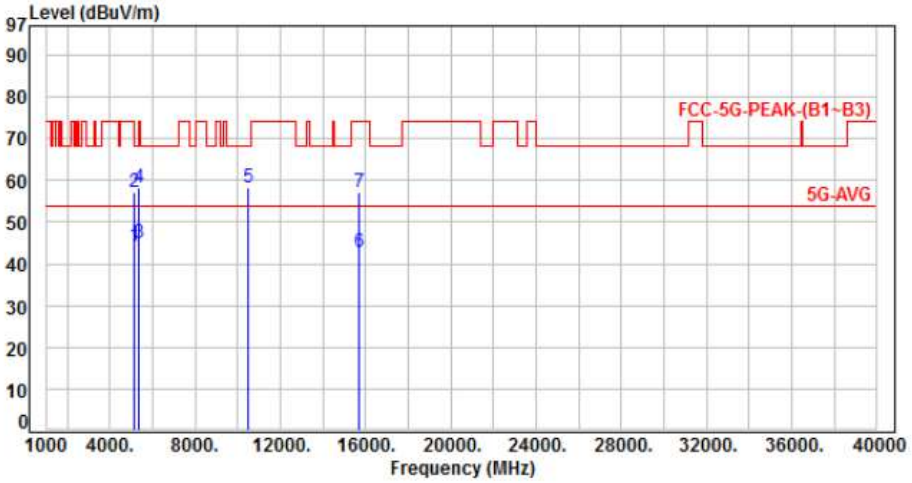
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 2, Band 1, CH48		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.73	39.76	44.49	54.00	-9.51	Average	100	140	P
2	5150.00	4.73	52.83	57.56	74.00	-16.44	Peak	100	140	P
3	5350.00	5.07	39.92	44.99	54.00	-9.01	Average	100	140	P
4	5350.00	5.07	53.08	58.15	74.00	-15.85	Peak	100	140	P
5	10480.00	11.65	55.54	67.19	68.20	-1.01	Peak	225	220	P
6	15720.00	13.60	30.10	43.70	54.00	-10.30	Average	100	174	P
7	15720.00	13.60	43.74	57.34	74.00	-16.66	Peak	100	174	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

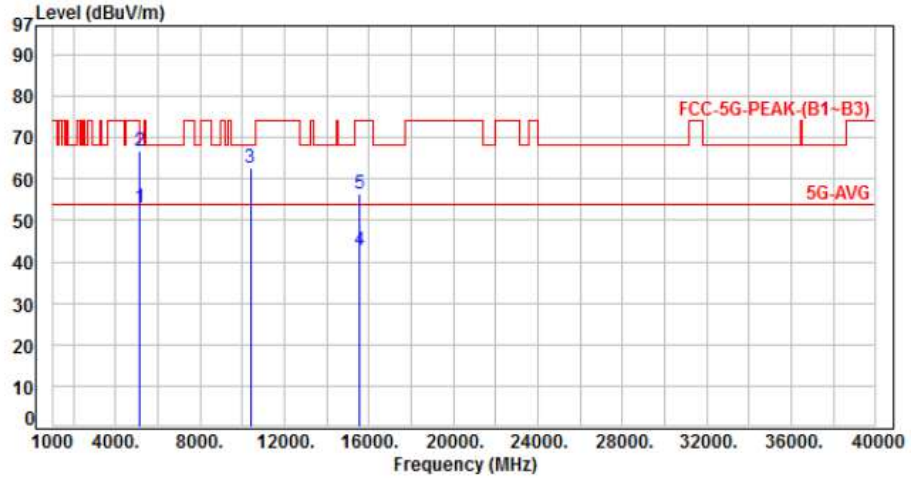
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 2, Band 1, CH48		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.73	39.66	44.39	54.00	-9.61	Average	280	0	P
2	5150.00	4.73	52.35	57.08	74.00	-16.92	Peak	280	0	P
3	5350.00	5.07	39.97	45.04	54.00	-8.96	Average	280	0	P
4	5350.00	5.07	53.03	58.10	74.00	-15.90	Peak	280	0	P
5	10480.00	11.65	46.74	58.39	68.20	-9.81	Peak	100	195	P
6	15720.00	13.60	29.35	42.95	54.00	-11.05	Average	100	134	P
7	15720.00	13.60	43.65	57.25	74.00	-16.75	Peak	100	134	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

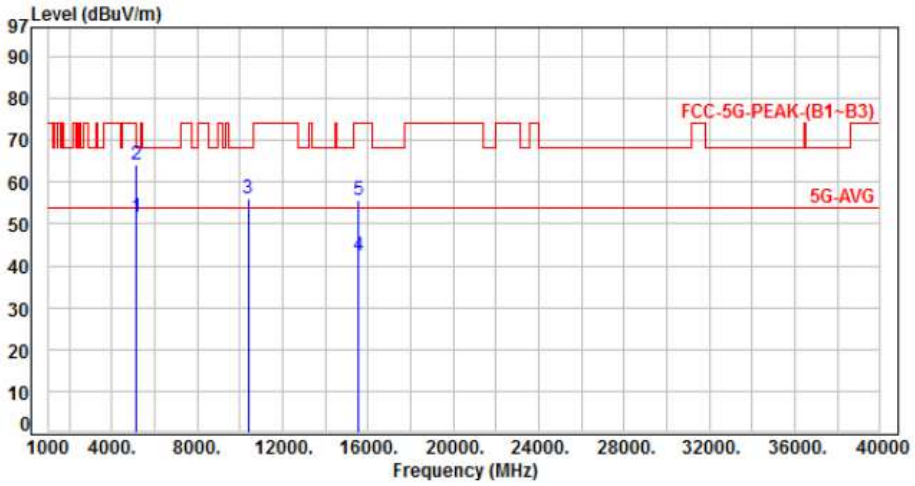
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 3, Band 1, CH38		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.73	48.51	53.24	54.00	-0.76	Average	100	140	P
2	5150.00	4.73	61.87	66.60	74.00	-7.40	Peak	100	140	P
3	10380.00	11.44	51.32	62.76	68.20	-5.44	Peak	225	208	P
4	15570.00	14.07	28.77	42.84	54.00	-11.16	Average	100	143	P
5	15570.00	14.07	42.44	56.51	74.00	-17.49	Peak	100	143	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

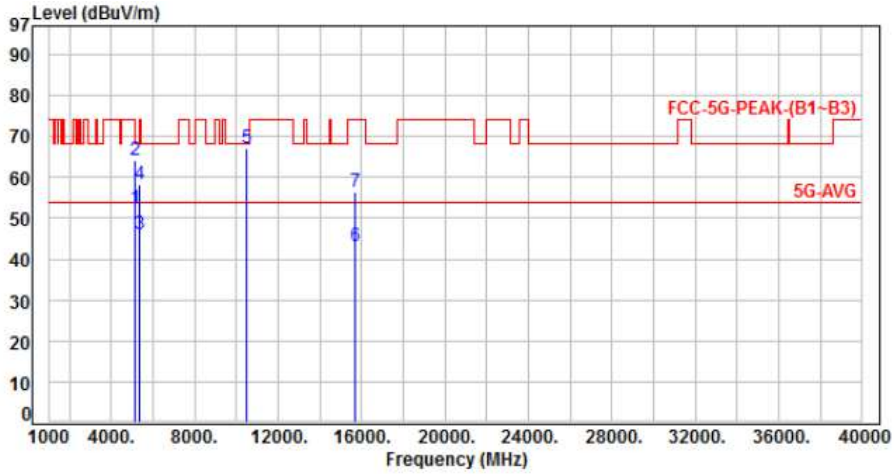
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 3, Band 1, CH38		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.73	46.78	51.51	54.00	-2.49	Average	385	340	P
2	5150.00	4.73	59.52	64.25	74.00	-9.75	Peak	385	340	P
3	10380.00	11.44	44.65	56.09	68.20	-12.11	Peak	100	205	P
4	15570.00	14.07	28.38	42.45	54.00	-11.55	Average	100	168	P
5	15570.00	14.07	41.69	55.76	74.00	-18.24	Peak	100	168	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

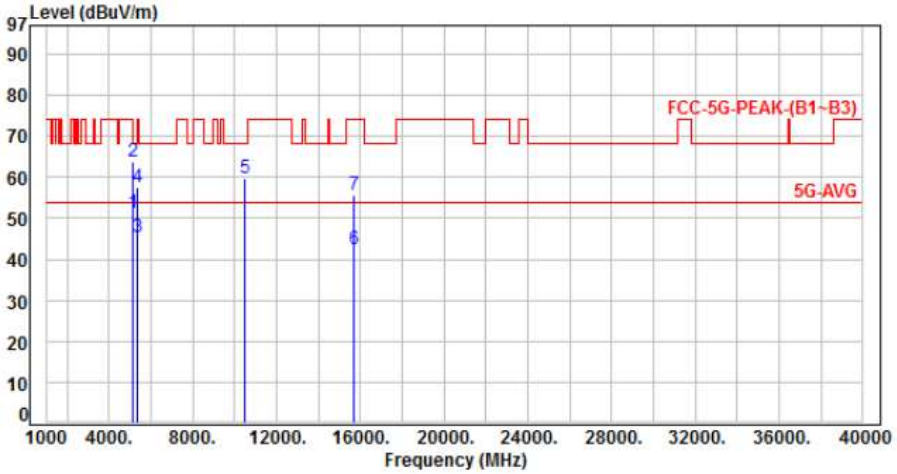
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 3, Band 1, CH46		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.73	47.57	52.30	54.00	-1.70	Average	100	140	P
2	5150.00	4.73	59.37	64.10	74.00	-9.90	Peak	100	140	P
3	5350.00	5.07	41.05	46.12	54.00	-7.88	Average	100	140	P
4	5350.00	5.07	53.11	58.18	74.00	-15.82	Peak	100	140	P
5	10460.00	11.60	55.36	66.96	68.20	-1.24	Peak	215	220	P
6	15690.00	13.64	29.47	43.11	54.00	-10.89	Average	100	147	P
7	15690.00	13.64	42.82	56.46	74.00	-17.54	Peak	100	147	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

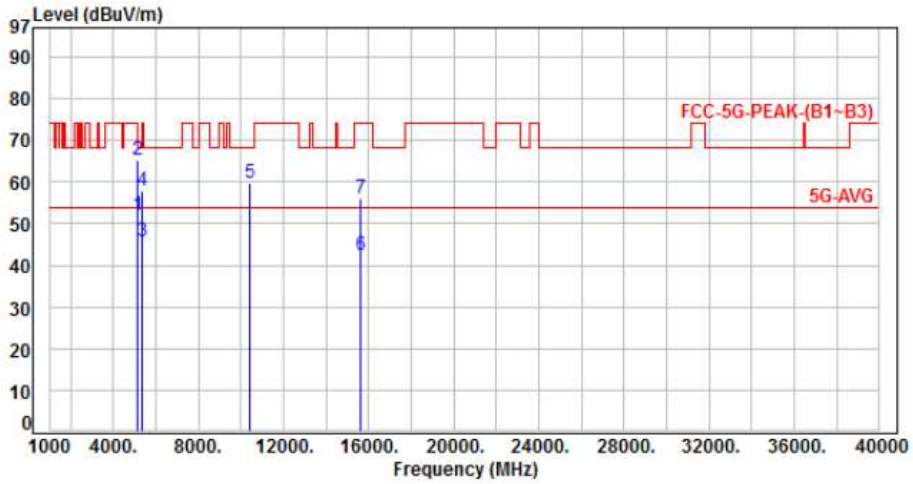
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 3, Band 1, CH46		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.73	46.63	51.36	54.00	-2.64	Average	325	0	P
2	5150.00	4.73	58.96	63.69	74.00	-10.31	Peak	325	0	P
3	5350.00	5.07	40.29	45.36	54.00	-8.64	Average	325	0	P
4	5350.00	5.07	52.51	57.58	74.00	-16.42	Peak	325	0	P
5	10460.00	11.60	48.05	59.65	68.20	-8.55	Peak	300	145	P
6	15690.00	13.64	28.73	42.37	54.00	-11.63	Average	100	109	P
7	15690.00	13.64	42.09	55.73	74.00	-18.27	Peak	100	109	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

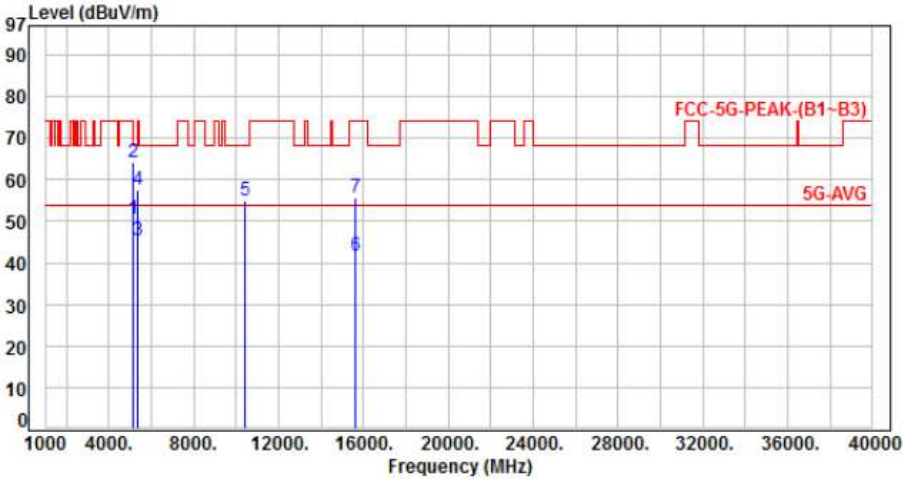
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 4, Band 1, CH42		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.73	47.34	52.07	54.00	-1.93	Average	100	135	P
2	5150.00	4.73	60.43	65.16	74.00	-8.84	Peak	100	135	P
3	5350.00	5.07	40.52	45.59	54.00	-8.41	Average	100	135	P
4	5350.00	5.07	52.76	57.83	74.00	-16.17	Peak	100	135	P
5	10420.00	11.49	48.13	59.62	68.20	-8.58	Peak	215	218	P
6	15630.00	13.80	28.56	42.36	54.00	-11.64	Average	100	129	P
7	15630.00	13.80	42.29	56.09	74.00	-17.91	Peak	100	129	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

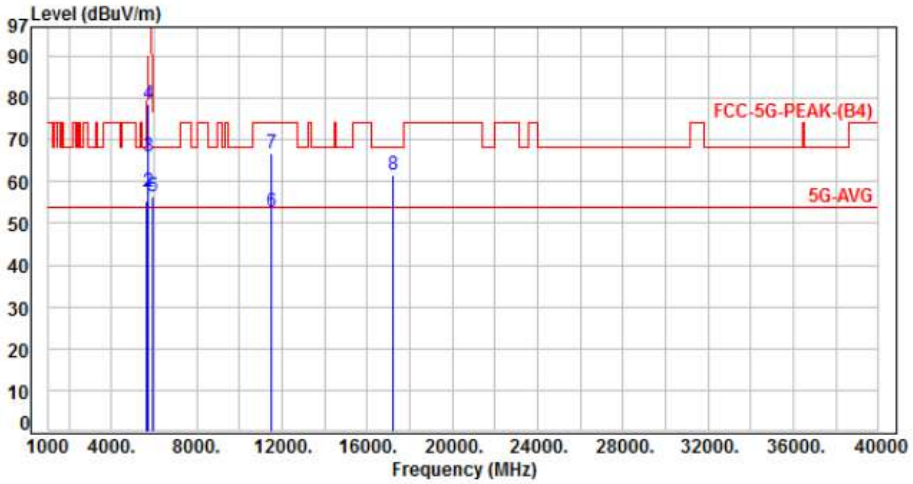
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 4, Band 1, CH42		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.73	45.82	50.55	54.00	-3.45	Average	344	0	P
2	5150.00	4.73	59.33	64.06	74.00	-9.94	Peak	344	0	P
3	5350.00	5.07	40.26	45.33	54.00	-8.67	Average	344	0	P
4	5350.00	5.07	52.57	57.64	74.00	-16.36	Peak	344	0	P
5	10420.00	11.49	43.37	54.86	68.20	-13.34	Peak	100	190	P
6	15630.00	13.80	28.02	41.82	54.00	-12.18	Average	100	187	P
7	15630.00	13.80	41.87	55.67	74.00	-18.33	Peak	100	187	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

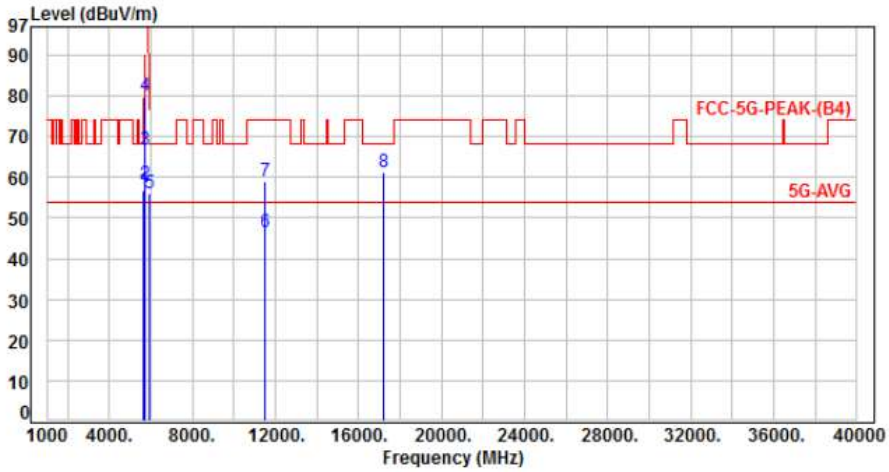
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 1, Band 4, CH149		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	5.25	50.10	55.35	68.20	-12.85	Peak	233	233	P
2	5700.00	5.18	52.51	57.69	105.20	-47.51	Peak	233	233	P
3	5720.00	5.19	60.91	66.10	110.80	-44.70	Peak	233	233	P
4	5725.00	5.19	73.54	78.73	122.20	-43.47	Peak	233	233	P
5	5925.00	5.60	50.71	56.31	68.20	-11.89	Peak	233	233	P
6	11490.00	13.16	39.69	52.85	54.00	-1.15	Average	215	228	P
7	11490.00	13.16	53.43	66.59	74.00	-7.41	Peak	215	228	P
8	17235.00	19.21	42.22	61.43	68.20	-6.77	Peak	100	105	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

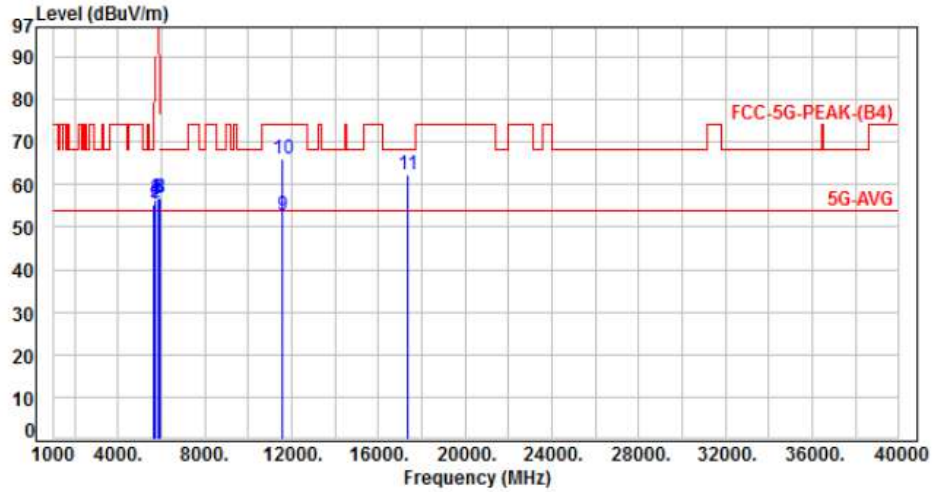
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 1, Band 4, CH149		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	5.25	51.48	56.73	68.20	-11.47	Peak	267	296	P
2	5700.00	5.18	53.08	58.26	105.20	-46.94	Peak	267	296	P
3	5720.00	5.19	61.57	66.76	110.80	-44.04	Peak	267	296	P
4	5725.00	5.19	74.68	79.87	122.20	-42.33	Peak	267	296	P
5	5925.00	5.60	50.36	55.96	68.20	-12.24	Peak	267	296	P
6	11490.00	13.16	33.29	46.45	54.00	-7.55	Average	100	195	P
7	11490.00	13.16	45.72	58.88	74.00	-15.12	Peak	100	195	P
8	17235.00	19.21	42.03	61.24	68.20	-6.96	Peak	100	226	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

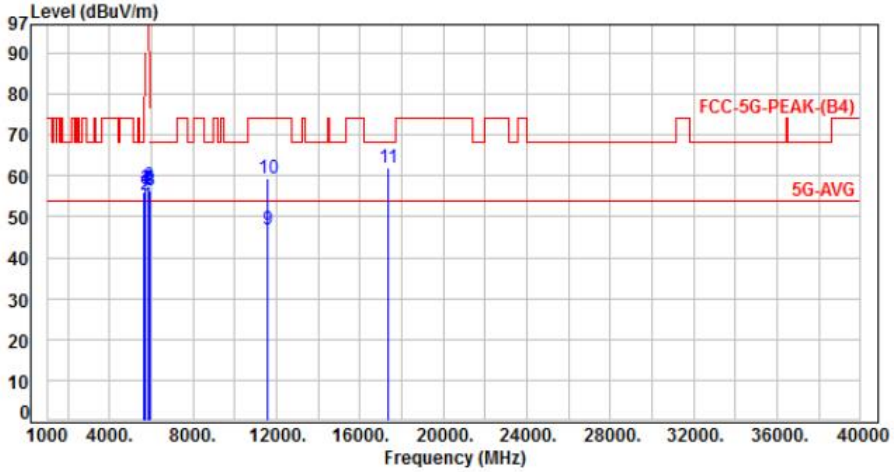
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 1, Band 4, CH157		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	5.25	50.12	55.37	68.20	-12.83	Peak	231	233	P
2	5700.00	5.18	50.69	55.87	105.20	-49.33	Peak	231	233	P
3	5720.00	5.19	51.15	56.34	110.80	-54.46	Peak	231	233	P
4	5725.00	5.19	51.34	56.53	122.20	-65.67	Peak	231	233	P
5	5850.00	5.37	51.51	56.88	122.20	-65.32	Peak	231	233	P
6	5855.00	5.39	51.48	56.87	110.80	-53.93	Peak	231	233	P
7	5875.00	5.47	51.41	56.88	105.20	-48.32	Peak	231	233	P
8	5925.00	5.60	51.11	56.71	68.20	-11.49	Peak	231	233	P
9	11570.00	13.44	39.28	52.72	54.00	-1.28	Average	196	229	P
10	11570.00	13.44	52.59	66.03	74.00	-7.97	Peak	196	229	P
11	17355.00	19.83	42.36	62.19	68.20	-6.01	Peak	100	111	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

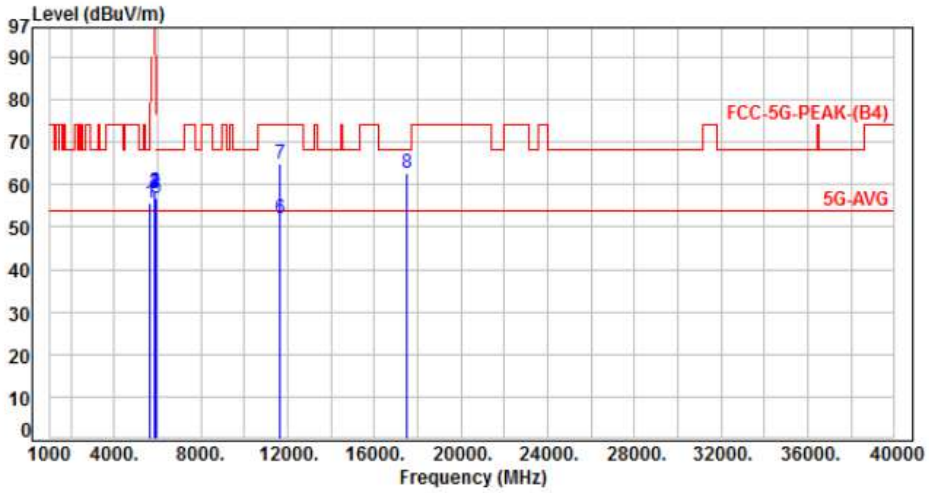
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 1, Band 4, CH157		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	5.25	50.67	55.92	68.20	-12.28	Peak	273	236	P
2	5700.00	5.18	50.32	55.50	105.20	-49.70	Peak	273	236	P
3	5720.00	5.19	51.67	56.86	110.80	-53.94	Peak	273	236	P
4	5725.00	5.19	51.43	56.62	122.20	-65.58	Peak	273	236	P
5	5850.00	5.37	51.52	56.89	122.20	-65.31	Peak	273	236	P
6	5855.00	5.39	52.12	57.51	110.80	-53.29	Peak	273	236	P
7	5875.00	5.47	51.22	56.69	105.20	-48.51	Peak	273	236	P
8	5925.00	5.60	50.90	56.50	68.20	-11.70	Peak	273	236	P
9	11570.00	13.44	33.46	46.90	54.00	-7.10	Average	100	192	P
10	11570.00	13.44	45.86	59.30	74.00	-14.70	Peak	100	192	P
11	17355.00	19.83	42.27	62.10	68.20	-6.10	Peak	100	224	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

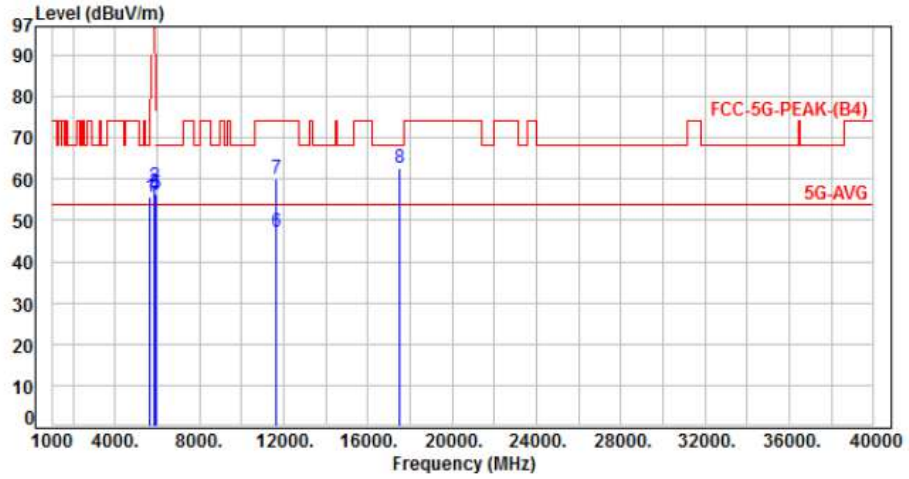
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 1, Band 4, CH165		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	5.25	50.28	55.53	68.20	-12.67	Peak	230	235	P
2	5850.00	5.37	52.77	58.14	122.20	-64.06	Peak	230	235	P
3	5855.00	5.39	52.51	57.90	110.80	-52.90	Peak	230	235	P
4	5875.00	5.47	52.90	58.37	105.20	-46.83	Peak	230	235	P
5	5925.00	5.60	51.23	56.83	68.20	-11.37	Peak	230	235	P
6	11650.00	13.60	38.22	51.82	54.00	-2.18	Average	208	230	P
7	11650.00	13.60	51.46	65.06	74.00	-8.94	Peak	208	230	P
8	17475.00	20.67	42.21	62.88	68.20	-5.32	Peak	100	103	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

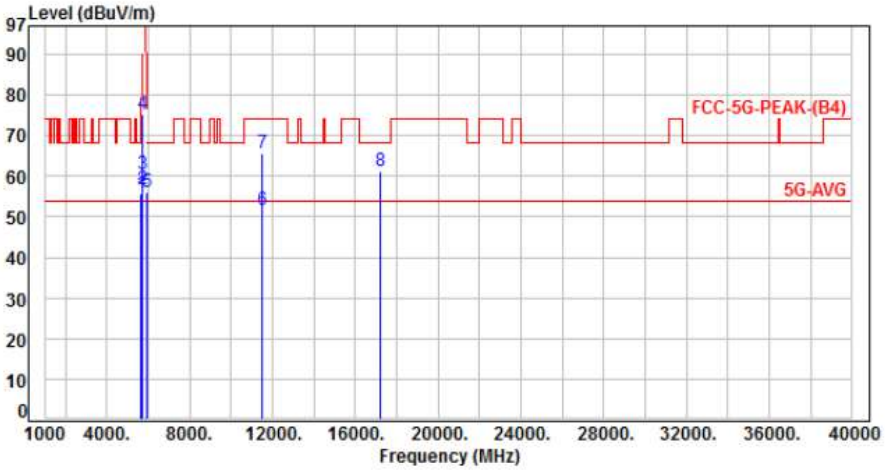
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 1, Band 4, CH165		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	5.25	50.35	55.60	68.20	-12.60	Peak	272	298	P
2	5850.00	5.37	53.01	58.38	122.20	-63.82	Peak	272	298	P
3	5855.00	5.39	51.56	56.95	110.80	-53.85	Peak	272	298	P
4	5875.00	5.47	50.65	56.12	105.20	-49.08	Peak	272	298	P
5	5925.00	5.60	50.79	56.39	68.20	-11.81	Peak	272	298	P
6	11650.00	13.60	33.48	47.08	54.00	-6.92	Average	100	197	P
7	11650.00	13.60	46.38	59.98	74.00	-14.02	Peak	100	197	P
8	17475.00	20.67	41.88	62.55	68.20	-5.65	Peak	100	223	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

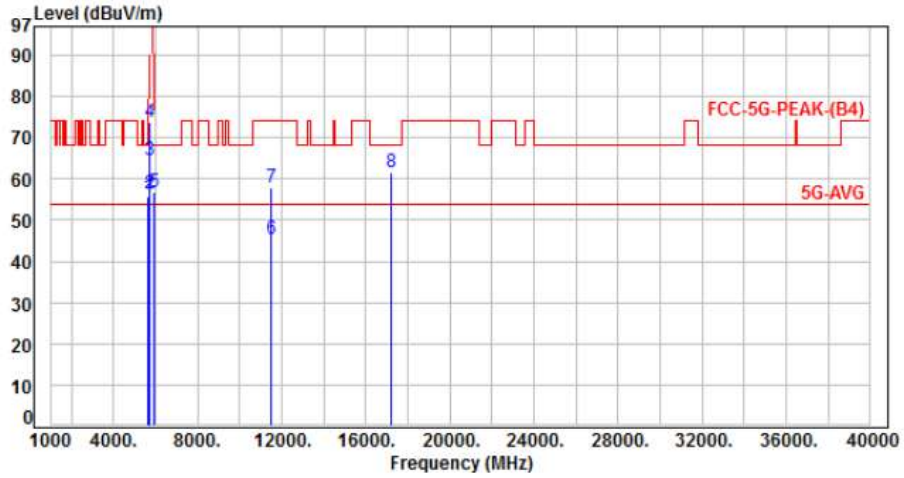
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 2, Band 4, CH149		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	5.25	50.50	55.75	68.20	-12.45	Peak	245	242	P
2	5700.00	5.18	51.65	56.83	105.20	-48.37	Peak	245	242	P
3	5720.00	5.19	55.15	60.34	110.80	-50.46	Peak	245	242	P
4	5725.00	5.19	70.12	75.31	122.20	-46.89	Peak	245	242	P
5	5925.00	5.60	50.48	56.08	68.20	-12.12	Peak	245	242	P
6	11490.00	13.16	38.63	51.79	54.00	-2.21	Average	217	232	P
7	11490.00	13.16	52.41	65.57	74.00	-8.43	Peak	217	232	P
8	17235.00	19.21	42.14	61.35	68.20	-6.85	Peak	100	108	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

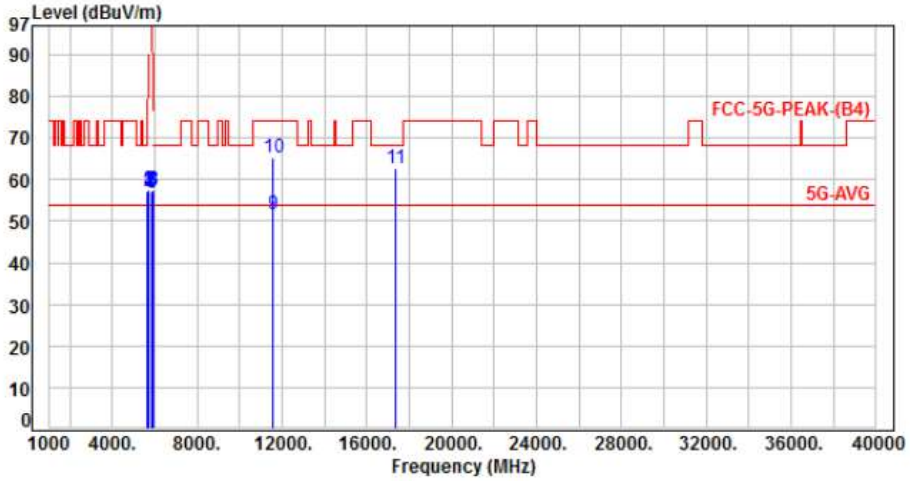
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 2, Band 4, CH149		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	5.25	50.33	55.58	68.20	-12.62	Peak	265	298	P
2	5700.00	5.18	51.33	56.51	105.20	-48.69	Peak	265	298	P
3	5720.00	5.19	59.44	64.63	110.80	-46.17	Peak	265	298	P
4	5725.00	5.19	68.42	73.61	122.20	-48.59	Peak	265	298	P
5	5925.00	5.60	51.24	56.84	68.20	-11.36	Peak	265	298	P
6	11490.00	13.16	32.35	45.51	54.00	-8.49	Average	100	195	P
7	11490.00	13.16	44.91	58.07	74.00	-15.93	Peak	100	195	P
8	17235.00	19.21	42.35	61.56	68.20	-6.64	Peak	100	234	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

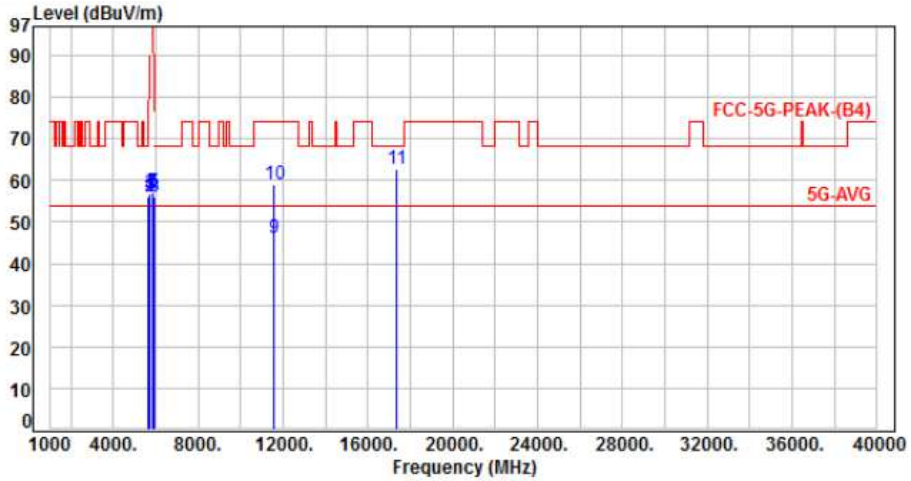
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 2, Band 4, CH157		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	5.25	51.98	57.23	68.20	-10.97	Peak	287	237	P
2	5700.00	5.18	51.84	57.02	105.20	-48.18	Peak	287	237	P
3	5720.00	5.19	52.25	57.44	110.80	-53.36	Peak	287	237	P
4	5725.00	5.19	51.98	57.17	122.20	-65.03	Peak	287	237	P
5	5850.00	5.37	51.56	56.93	122.20	-65.27	Peak	287	237	P
6	5855.00	5.39	51.80	57.19	110.80	-53.61	Peak	287	237	P
7	5875.00	5.47	51.67	57.14	105.20	-48.06	Peak	287	237	P
8	5925.00	5.60	51.89	57.49	68.20	-10.71	Peak	287	237	P
9	11570.00	13.44	38.33	51.77	54.00	-2.23	Average	199	229	P
10	11570.00	13.44	51.88	65.32	74.00	-8.68	Peak	199	229	P
11	17355.00	19.83	42.82	62.65	68.20	-5.55	Peak	100	122	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

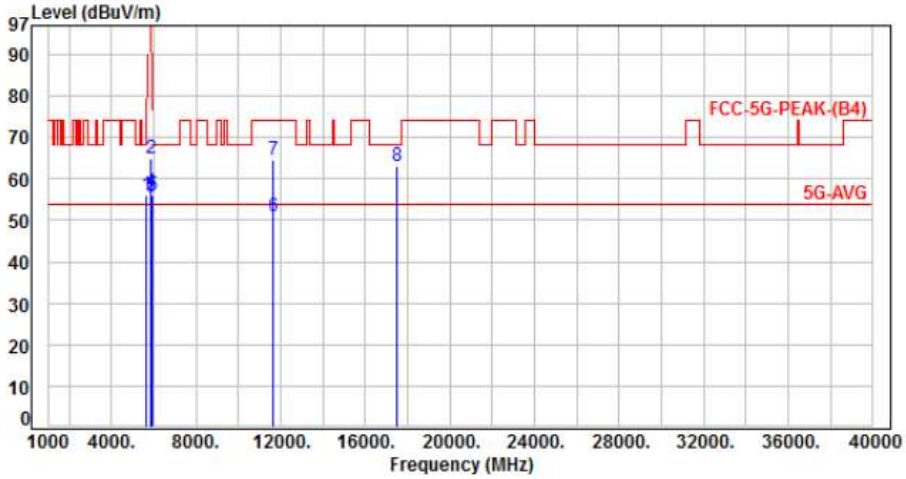
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 2, Band 4, CH157		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	5.25	50.64	55.89	68.20	-12.31	Peak	277	297	P
2	5700.00	5.18	50.88	56.06	105.20	-49.14	Peak	277	297	P
3	5720.00	5.19	51.57	56.76	110.80	-54.04	Peak	277	297	P
4	5725.00	5.19	51.23	56.42	122.20	-65.78	Peak	277	297	P
5	5850.00	5.37	51.41	56.78	122.20	-65.42	Peak	277	297	P
6	5855.00	5.39	51.63	57.02	110.80	-53.78	Peak	277	297	P
7	5875.00	5.47	51.54	57.01	105.20	-48.19	Peak	277	297	P
8	5925.00	5.60	50.38	55.98	68.20	-12.22	Peak	277	297	P
9	11570.00	13.44	32.49	45.93	54.00	-8.07	Average	100	193	P
10	11570.00	13.44	45.52	58.96	74.00	-15.04	Peak	100	193	P
11	17355.00	19.83	42.75	62.58	68.20	-5.62	Peak	100	220	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

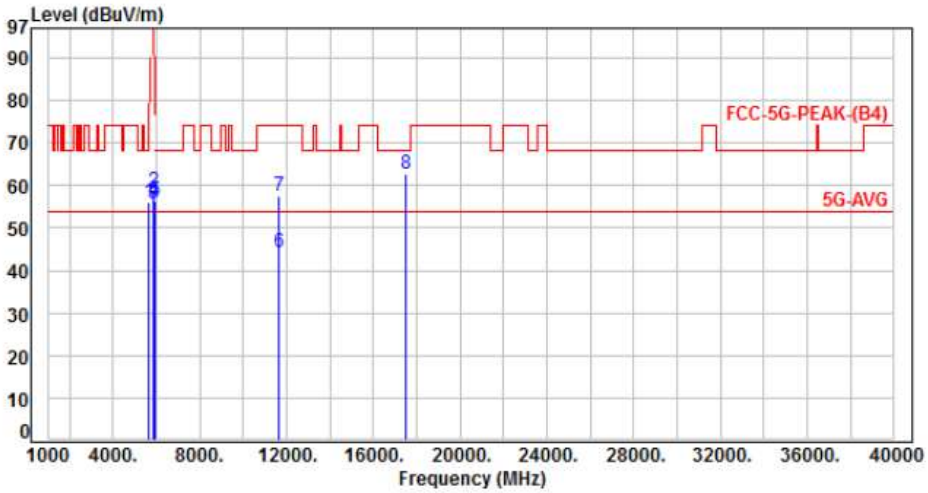
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 2, Band 4, CH165		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	5.25	50.98	56.23	68.20	-11.97	Peak	246	234	P
2	5850.00	5.37	59.54	64.91	122.20	-57.29	Peak	246	234	P
3	5855.00	5.39	50.32	55.71	110.80	-55.09	Peak	246	234	P
4	5875.00	5.47	51.32	56.79	105.20	-48.41	Peak	246	234	P
5	5925.00	5.60	50.51	56.11	68.20	-12.09	Peak	246	234	P
6	11650.00	13.60	37.12	50.72	54.00	-3.28	Average	206	235	P
7	11650.00	13.60	50.94	64.54	74.00	-9.46	Peak	206	235	P
8	17475.00	20.67	42.55	63.22	68.20	-4.98	Peak	100	108	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

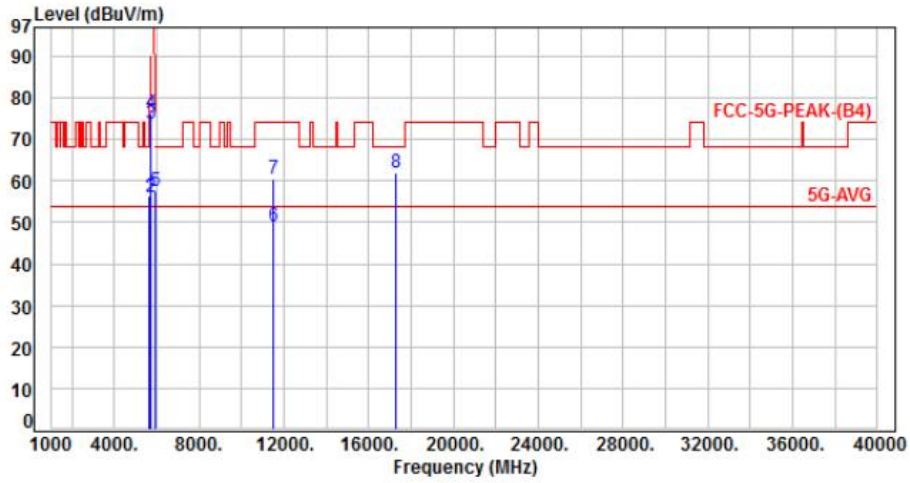
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 2, Band 4, CH165		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	5.25	50.63	55.88	68.20	-12.32	Peak	272	294	P
2	5850.00	5.37	53.36	58.73	122.20	-63.47	Peak	272	294	P
3	5855.00	5.39	50.13	55.52	110.80	-55.28	Peak	272	294	P
4	5875.00	5.47	50.86	56.33	105.20	-48.87	Peak	272	294	P
5	5925.00	5.60	50.81	56.41	68.20	-11.79	Peak	272	294	P
6	11650.00	13.60	30.53	44.13	54.00	-9.87	Average	100	196	P
7	11650.00	13.60	43.92	57.52	74.00	-16.48	Peak	100	196	P
8	17475.00	20.67	41.95	62.62	68.20	-5.58	Peak	100	224	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

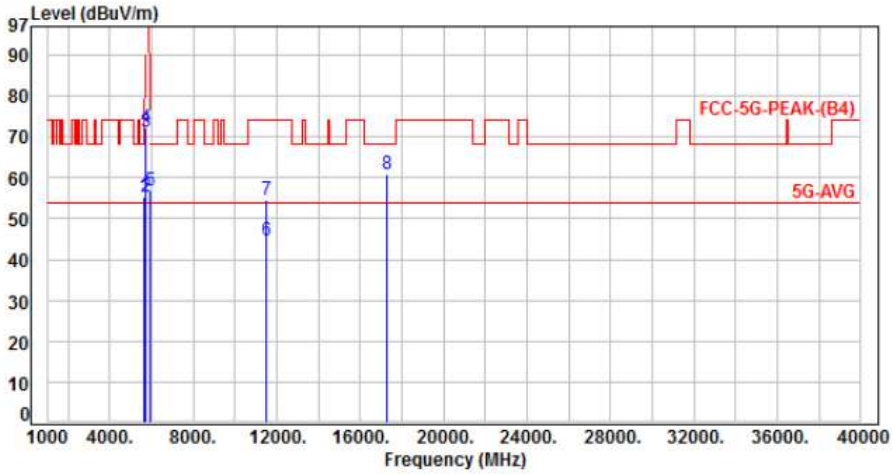
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 3, Band 4, CH151		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	5.25	51.20	56.45	68.20	-11.75	Peak	278	181	P
2	5700.00	5.18	50.89	56.07	105.20	-49.13	Peak	278	181	P
3	5720.00	5.19	68.52	73.71	110.80	-37.09	Peak	278	181	P
4	5725.00	5.19	71.33	76.52	122.20	-45.68	Peak	278	181	P
5	5925.00	5.60	51.86	57.46	68.20	-10.74	Peak	278	181	P
6	11510.00	13.20	35.88	49.08	54.00	-4.92	Average	221	232	P
7	11510.00	13.20	47.47	60.67	74.00	-13.33	Peak	221	232	P
8	17265.00	19.34	42.45	61.79	68.20	-6.41	Peak	100	121	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

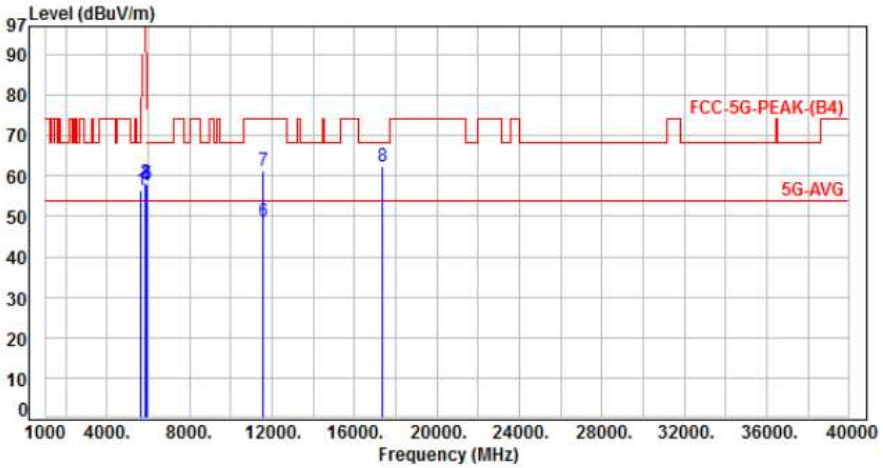
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 3, Band 4, CH151		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	5.25	49.98	55.23	68.20	-12.97	Peak	265	298	P
2	5700.00	5.18	50.32	55.50	105.20	-49.70	Peak	265	298	P
3	5720.00	5.19	65.92	71.11	110.80	-39.69	Peak	265	298	P
4	5725.00	5.19	67.24	72.43	122.20	-49.77	Peak	265	298	P
5	5925.00	5.60	51.13	56.73	68.20	-11.47	Peak	265	298	P
6	11510.00	13.20	31.30	44.50	54.00	-9.50	Average	100	193	P
7	11510.00	13.20	41.27	54.47	74.00	-19.53	Peak	100	193	P
8	17265.00	19.34	41.56	60.90	68.20	-7.30	Peak	100	231	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

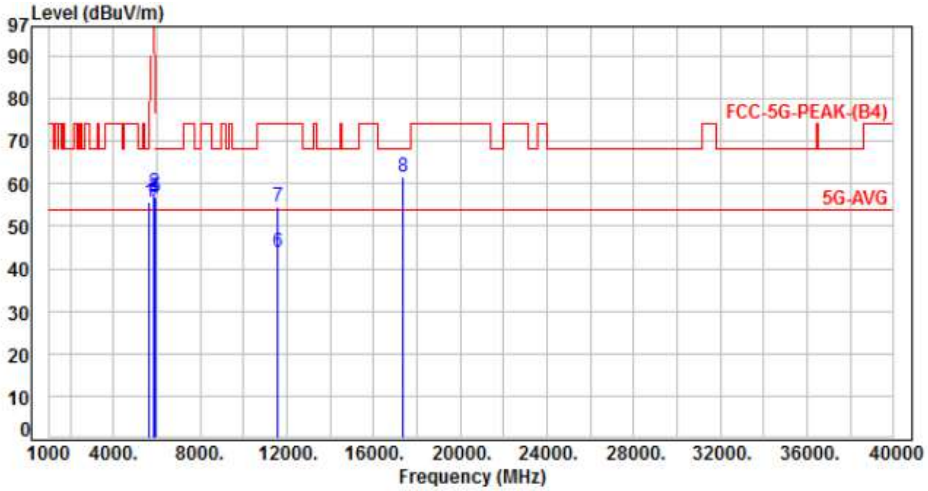
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 3, Band 4, CH159		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	5.25	51.25	56.50	68.20	-11.70	Peak	257	234	P
2	5850.00	5.37	52.97	58.34	122.20	-63.86	Peak	257	234	P
3	5855.00	5.39	53.05	58.44	110.80	-52.36	Peak	257	234	P
4	5875.00	5.47	52.12	57.59	105.20	-47.61	Peak	257	234	P
5	5925.00	5.60	52.13	57.73	68.20	-10.47	Peak	257	234	P
6	11590.00	13.52	35.33	48.85	54.00	-5.15	Average	213	230	P
7	11590.00	13.52	47.75	61.27	74.00	-12.73	Peak	213	230	P
8	17385.00	20.03	42.36	62.39	68.20	-5.81	Peak	100	112	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

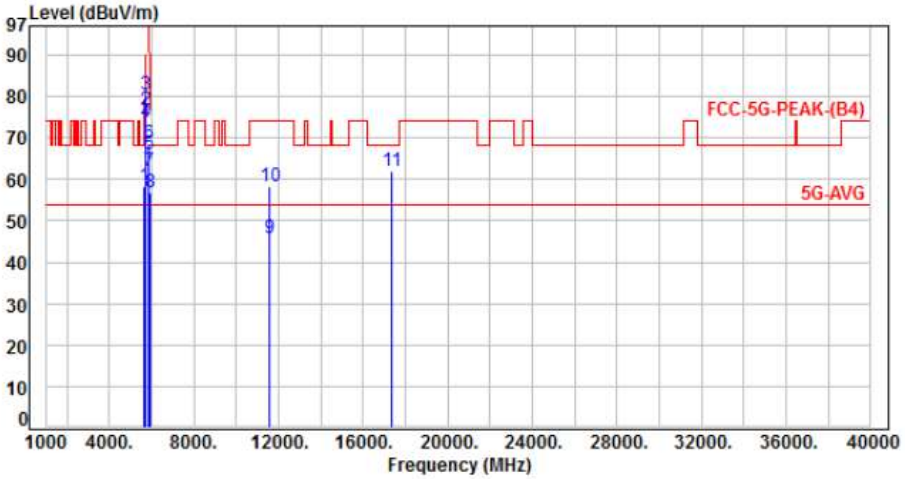
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 3, Band 4, CH159		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	5.25	50.58	55.83	68.20	-12.37	Peak	277	298	P
2	5850.00	5.37	52.47	57.84	122.20	-64.36	Peak	277	298	P
3	5855.00	5.39	51.49	56.88	110.80	-53.92	Peak	277	298	P
4	5875.00	5.47	50.94	56.41	105.20	-48.79	Peak	277	298	P
5	5925.00	5.60	51.09	56.69	68.20	-11.51	Peak	277	298	P
6	11590.00	13.52	30.53	44.05	54.00	-9.95	Average	100	194	P
7	11590.00	13.52	41.05	54.57	74.00	-19.43	Peak	100	194	P
8	17385.00	20.03	41.55	61.58	68.20	-6.62	Peak	100	235	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

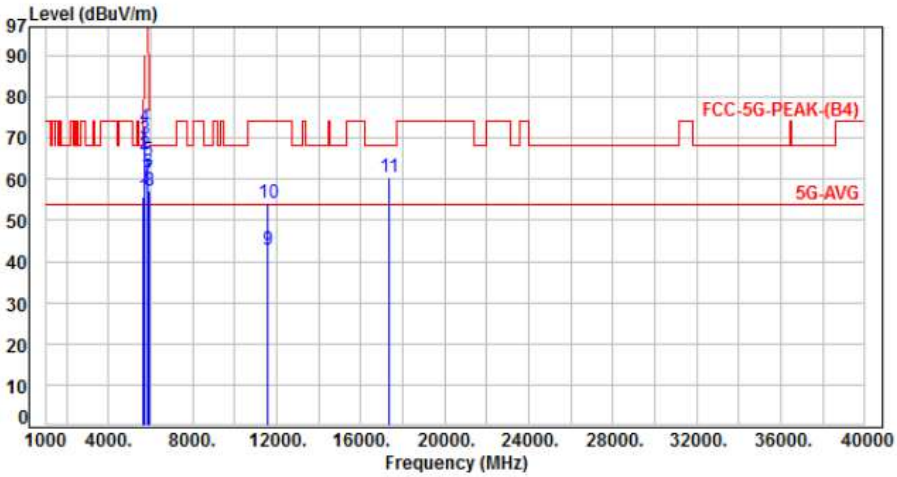
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 4, Band 4, CH155		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	5.25	52.87	58.12	68.20	-10.08	Peak	280	233	P
2	5700.00	5.18	71.62	76.80	105.20	-28.40	Peak	280	233	P
3	5720.00	5.19	75.21	80.40	110.80	-30.40	Peak	280	233	P
4	5725.00	5.19	68.65	73.84	122.20	-48.36	Peak	280	233	P
5	5850.00	5.37	60.52	65.89	122.20	-56.31	Peak	280	233	P
6	5855.00	5.39	63.11	68.50	110.80	-42.30	Peak	280	233	P
7	5875.00	5.47	56.32	61.79	105.20	-43.41	Peak	280	233	P
8	5925.00	5.60	51.33	56.93	68.20	-11.27	Peak	280	233	P
9	11550.00	13.36	32.47	45.83	54.00	-8.17	Average	208	232	P
10	11550.00	13.36	44.77	58.13	74.00	-15.87	Peak	208	232	P
11	17325.00	19.64	42.37	62.01	68.20	-6.19	Peak	100	118	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 4, Band 4, CH155		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	5.25	50.45	55.70	68.20	-12.50	Peak	290	291	P
2	5700.00	5.18	60.98	66.16	105.20	-39.04	Peak	290	291	P
3	5720.00	5.19	64.50	69.69	110.80	-41.11	Peak	290	291	P
4	5725.00	5.19	67.61	72.80	122.20	-49.40	Peak	290	291	P
5	5850.00	5.37	59.35	64.72	122.20	-57.48	Peak	290	291	P
6	5855.00	5.39	56.35	61.74	110.80	-49.06	Peak	290	291	P
7	5875.00	5.47	54.72	60.19	105.20	-45.01	Peak	290	291	P
8	5925.00	5.60	51.53	57.13	68.20	-11.07	Peak	290	291	P
9	11550.00	13.36	29.33	42.69	54.00	-11.31	Average	100	185	P
10	11550.00	13.36	40.80	54.16	74.00	-19.84	Peak	100	185	P
11	17325.00	19.64	40.67	60.31	68.20	-7.89	Peak	100	240	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

6.7. Restricted Bands of Operation

Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.09000 – 0.11000	16.42000 – 16.42300	399.9 – 410.0	4.500 – 5.150
0.49500 – 0.505**	16.69475 – 16.69525	608.0 – 614.0	5.350 – 5.460
2.17350 – 2.19050	16.80425 – 16.80475	960.0 – 1240.0	7.250 – 7.750
4.12500 – 4.12800	25.50000 – 25.67000	1300.0 – 1427.0	8.025 – 8.500
4.17725 – 4.17775	37.50000 – 38.25000	1435.0 – 1626.5	9.000 – 9.200
4.20725 – 4.20775	73.00000 – 74.60000	1645.5 – 1646.5	9.300 – 9.500
6.21500 – 6.21800	74.80000 – 75.20000	1660.0 – 1710.0	10.600 – 12.700
6.26775 – 6.26825	108.00000 – 121.94000	1718.8 – 1722.2	13.250 – 13.400
6.31175 – 6.31225	123.00000 – 138.00000	2200.0 – 2300.0	14.470 – 14.500
8.29100 – 8.29400	149.90000 – 150.05000	2310.0 – 2390.0	15.350 – 16.200
8.36200 – 8.36600	156.52475 – 156.52525	2483.5 – 2500.0	17.700 – 21.400
8.37625 – 8.38675	156.70000 – 156.90000	2655.0 – 2900.0	22.010 – 23.120
8.41425 – 8.41475	162.01250 – 167.17000	3260.0 – 3267.0	23.600 – 24.000
12.29000 – 12.29300	167.72000 – 173.20000	3332.0 – 3339.0	31.200 – 31.800
12.51975 – 12.52025	240.00000 – 285.00000	3345.8 – 3358.0	36.430 – 36.500
12.57675 – 12.57725	322.00000 – 335.40000	3600.0 – 4400.0	Above 38.6
13.36000 – 13.41000			

**: Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz

7. On Time, Duty Cycle and Measurement methods

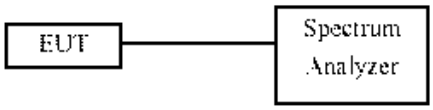
7.1. Test Limit

None; for reporting purposes only.

7.2. Test Procedure

KDB 789033 Zero-Span Spectrum Analyzer Method.

7.3. Test Setup Layout



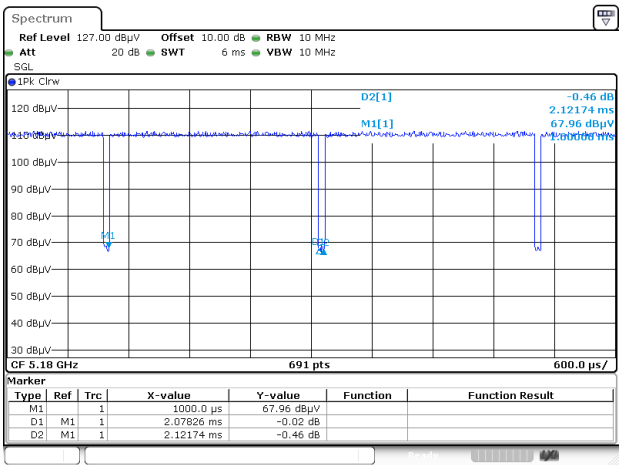
7.4. Test Result and Data

Modulation Type	On Time (ms)	Period Time (ms)	Duty Cycle (%)
802.11a,6M	2.08	2.12	97.95%
802.11ac VHT20	5.06	5.09	99.49%
802.11ac VHT40	2.47	2.51	98.27%
802.11ac VHT80	1.17	1.22	95.91%

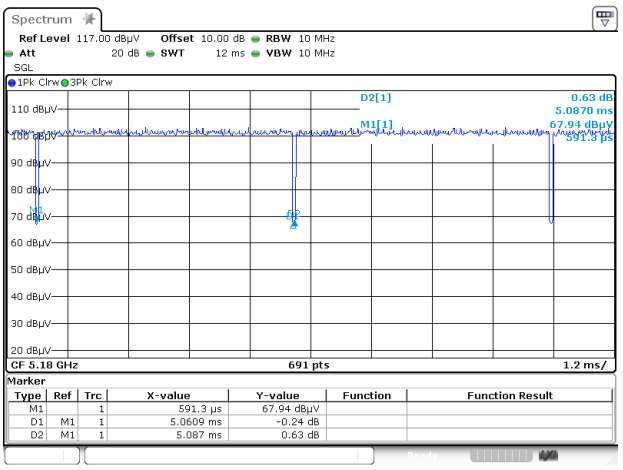
7.5. Measurement Methods

26 dB and 6dB Emission BW	KDB 789033 D02 v02r01, Section C
99% Occupied BW	KDB 789033 D02 v02r01, Section D
Conducted Output Power	KDB 789033 D02 v02r01, Section E.2.d and E.3.b (Method PM-G)
Power Spectral Density	KDB 789033 D02 v02r01, Section F
Unwanted emissions in restricted bands	KDB 789033 D02 v02r01, Sections G and H
Unwanted emissions in non-restricted bands	KDB 789033 D02 v02r01, Sections G and H

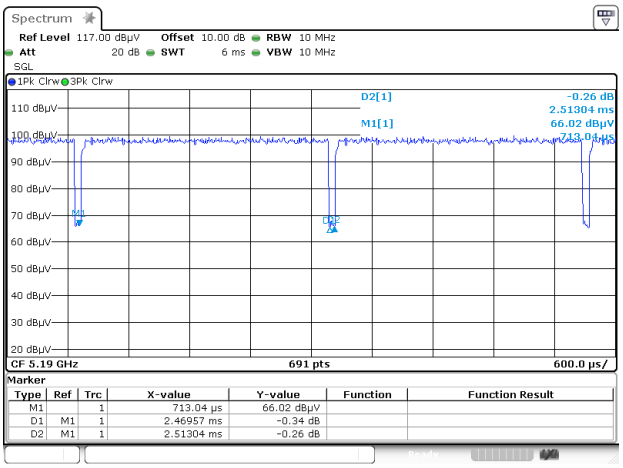
Modulation Type: 802.11a (6Mbps)



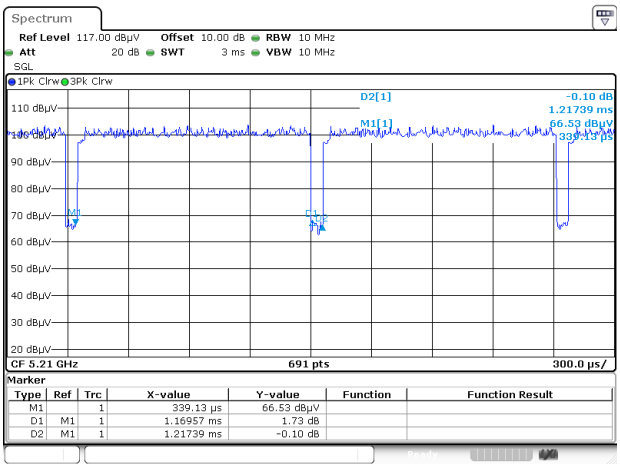
Modulation Type: 802.11ac VHT20 (6.5Mbps)



Modulation Type: 802.11ac VHT40 (13.5Mbps)



Modulation Type: 802.11ac VHT80 (29.3Mbps)



8. 6dB Bandwidth & 99% Occupied Bandwidth

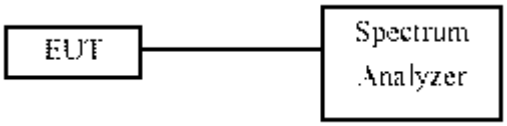
8.1. Test Limit

FCC §15.407
The minimum 6 dB bandwidth shall be at least 500 kHz.

8.2. Test Procedure

Reference to 789033 D02 General UNII Test Procedures New Rules v01: The transmitter output is connected to a spectrum analyzer with the RBW set to100KHz, the VBW >= 3 x RBW, peak detector and max hold.

8.3. Test Setup Layout



8.4. Test Result and Data (6dB Bandwidth)

In the 5.8G Band

Modulation Type	Channel	Frequency (MHz)	6dB Bandwidth(MHz)		Minimum Limit (MHz)
			ANT A	ANT B	
11a	149	5745	16.00	16.35	0.50
11a	157	5785	16.25	16.35	0.50
11a	165	5825	16.25	16.30	0.50
11ac VHT20	149	5745	17.60	17.55	0.50
11ac VHT20	157	5785	17.55	17.10	0.50
11ac VHT20	165	5825	17.55	17.55	0.50
11ac VHT40	151	5755	35.10	32.50	0.50
11ac VHT40	159	5795	35.00	35.10	0.50
11ac VHT80	155	5775	75.52	73.28	0.50

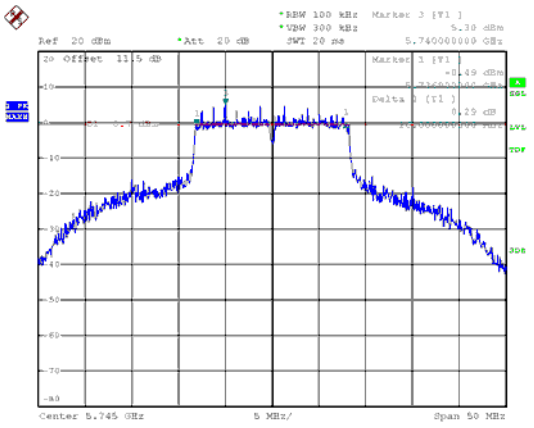
8.5. Test Result and Data (99% Occupied Bandwidth)

In the 5.8G Band

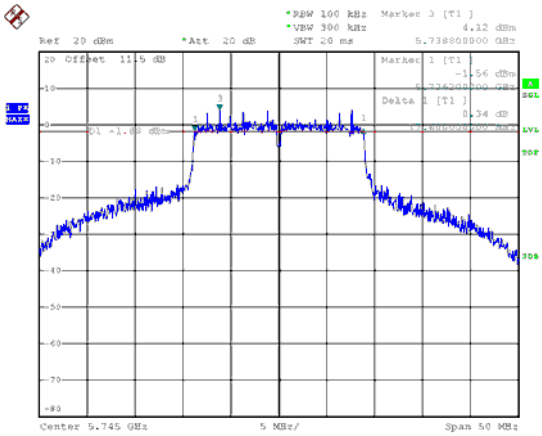
Modulation Type	Channel	Frequency (MHz)	99% Bandwidth(MHz)	
			ANT A	ANT B
11a	149	5745	19.85	20.85
11a	157	5785	17.60	18.45
11a	165	5825	17.55	18.25
11ac VHT20	149	5745	19.15	20.05
11ac VHT20	157	5785	18.15	18.70
11ac VHT20	165	5825	18.15	18.45
11ac VHT40	151	5755	36.90	37.10
11ac VHT40	159	5795	36.80	37.00
11ac VHT80	155	5775	76.48	76.32

6dB Bandwidth
ANT A

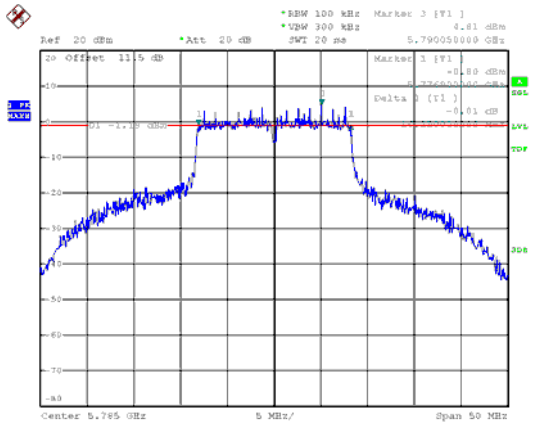
Modulation Type: 802.11a (6Mbps)
CH149



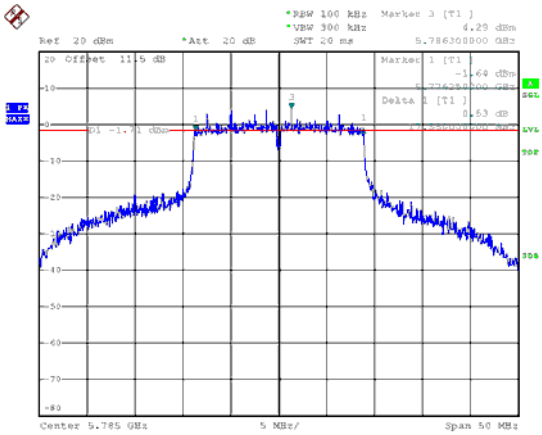
Modulation Type: 802.11ac, VHT20 (6.5Mbps)
CH149



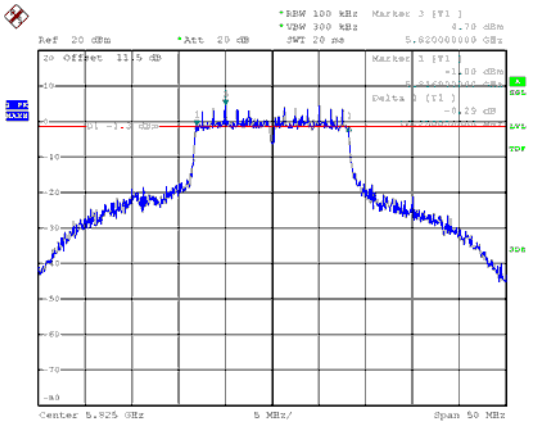
CH157



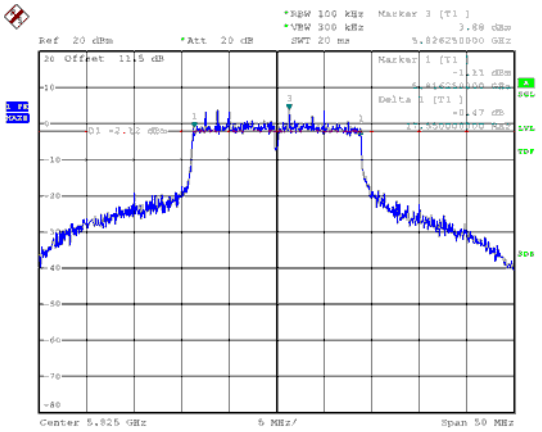
CH157



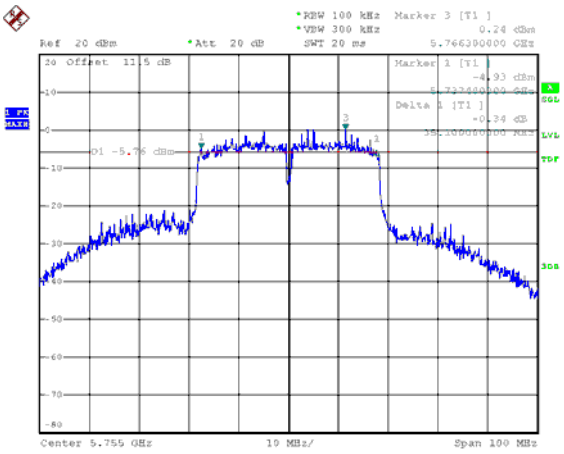
CH165



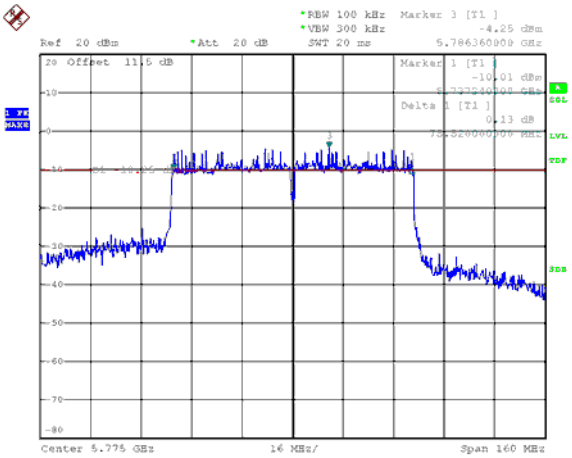
CH165



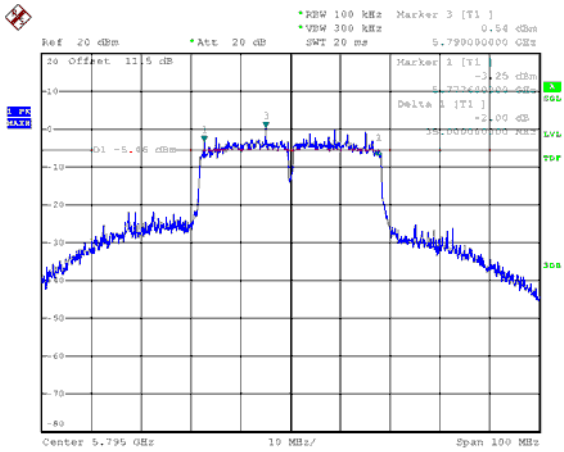
Modulation Type: 802.11ac, VHT40 (13.5Mbps)
CH151



Modulation Type: 802.11ac, VHT80 (29.3Mbps)
CH155



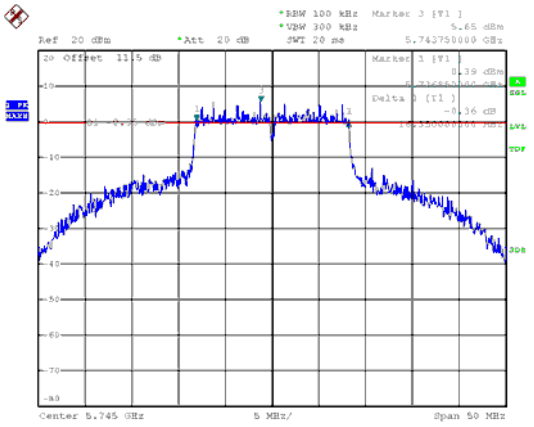
CH159



ANT B

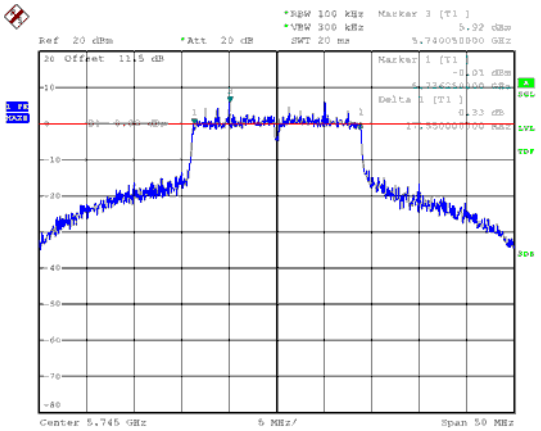
Modulation Type: 802.11a (6Mbps)

CH149



Modulation Type: 802.11ac, VHT20 (6.5Mbps)

CH149



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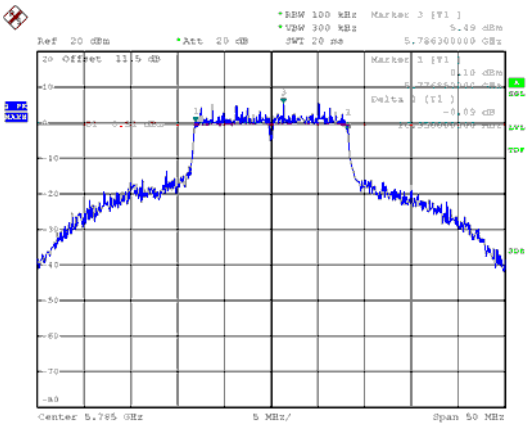
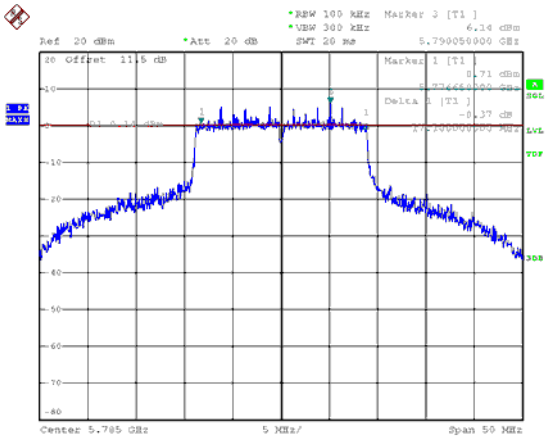
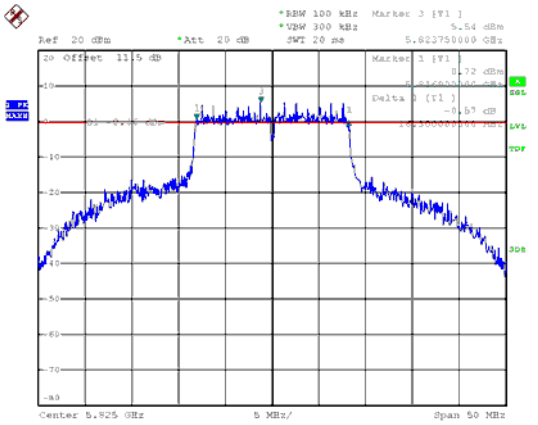


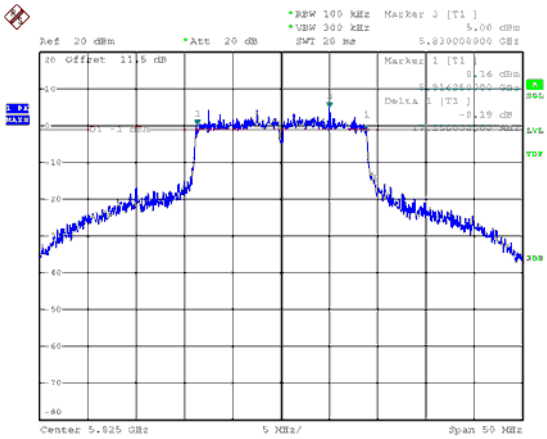
CH157



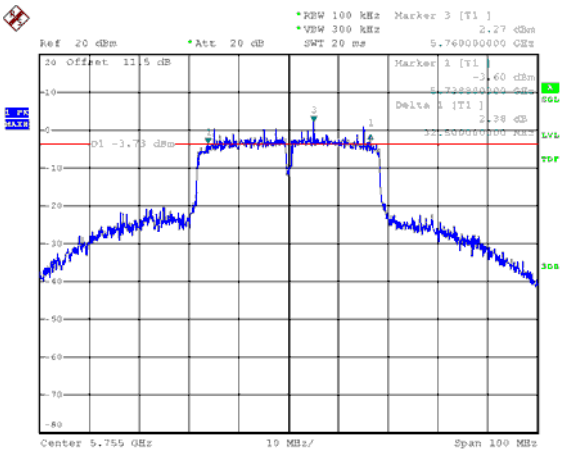
CH165



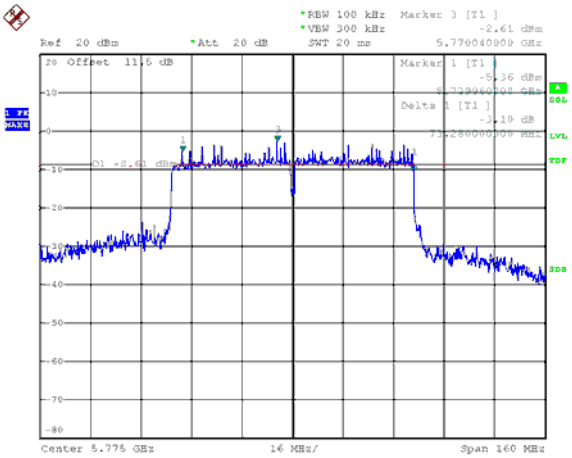
CH165



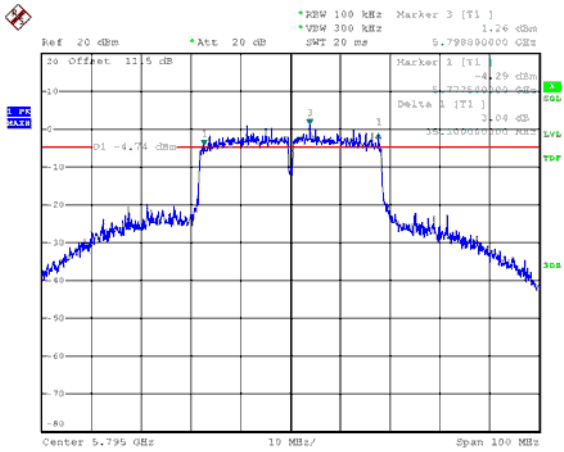
Modulation Type: 802.11ac, VHT40 (13.5Mbps)
CH151



Modulation Type: 802.11ac, VHT80 (29.3Mbps)
CH155

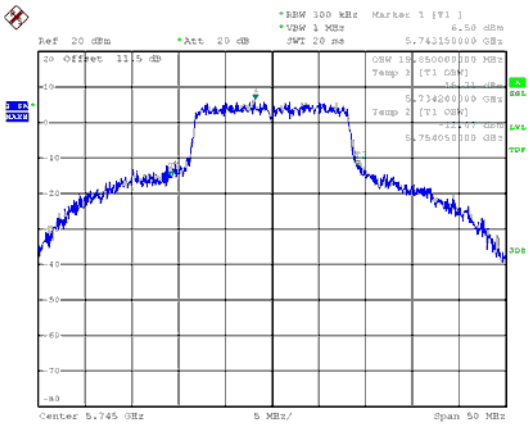


CH159

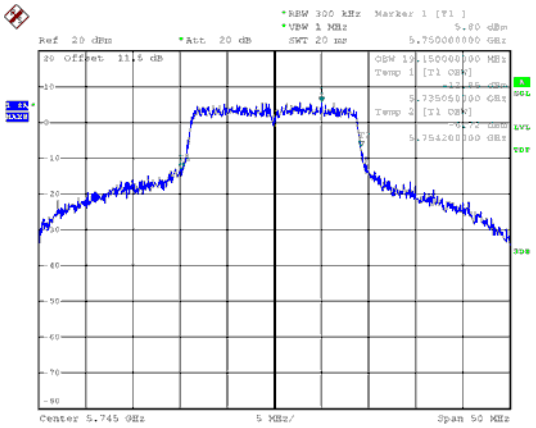


99% Occupied Bandwidth
ANT A

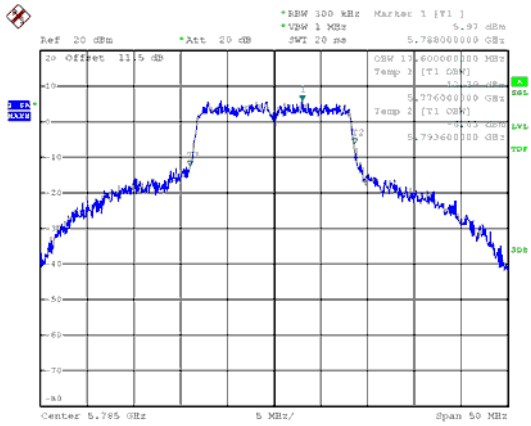
Modulation Type: 802.11a (6Mbps)
CH149

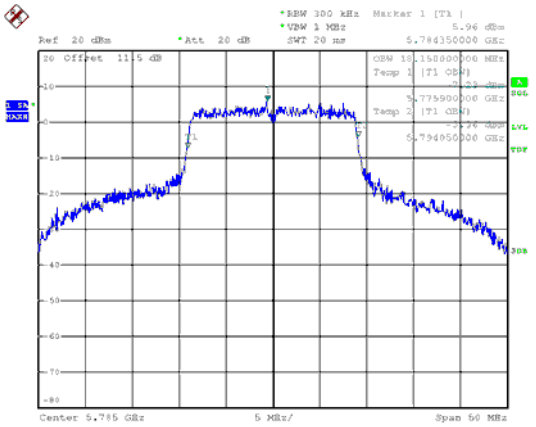


Modulation Type: 802.11ac, VHT20 (6.5Mbps)
CH149



CH





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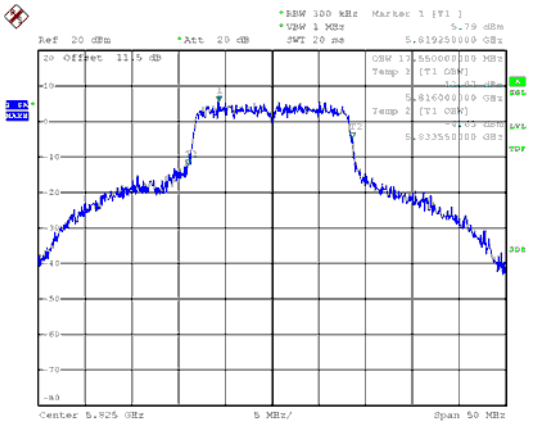

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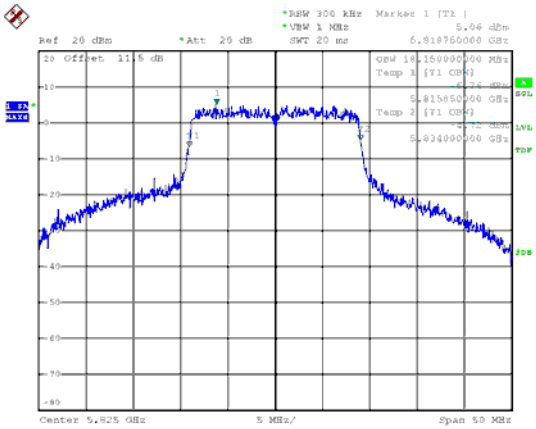
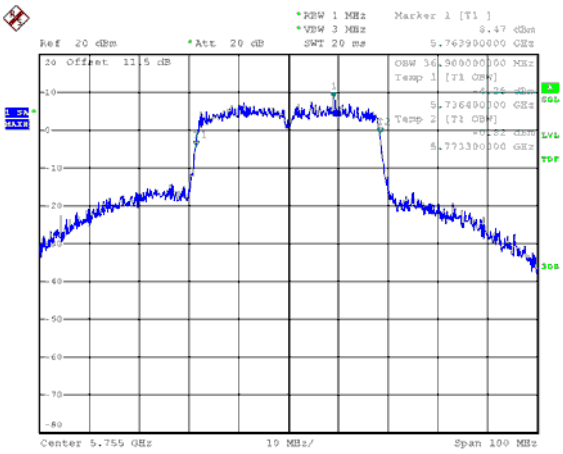
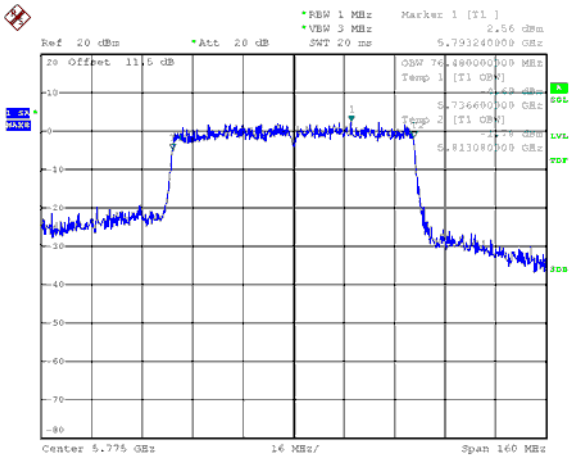


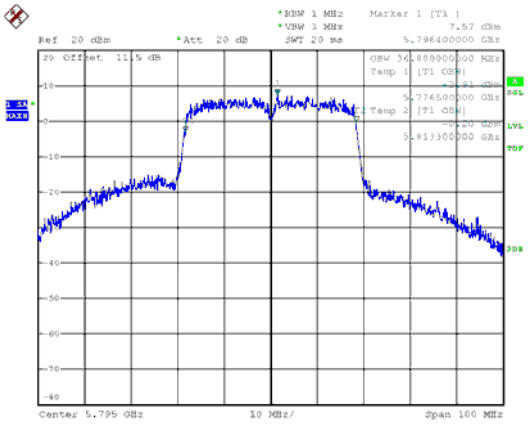
Modulation Type: 802.11ac, VHT40 (13.5Mbps)
CH151



Modulation Type: 802.11ac, VHT80 (29.3Mbps)
CH155



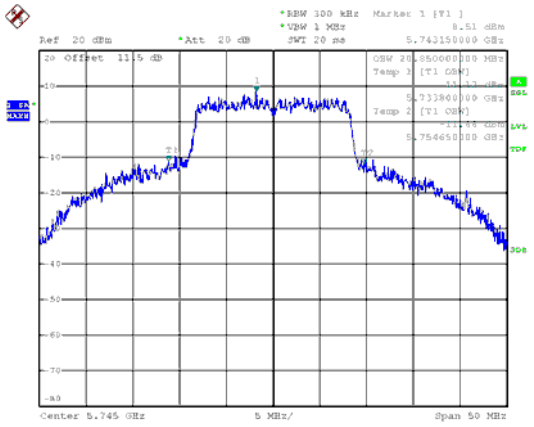
CH159



ANT B

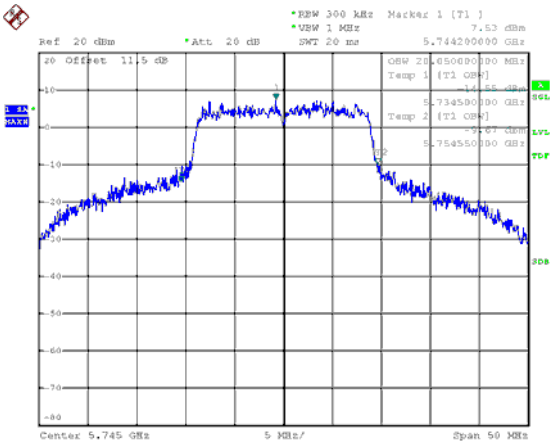
Modulation Type: 802.11a (6Mbps)

CH149



Modulation Type: 802.11ac, VHT20 (6.5Mbps)

CH149



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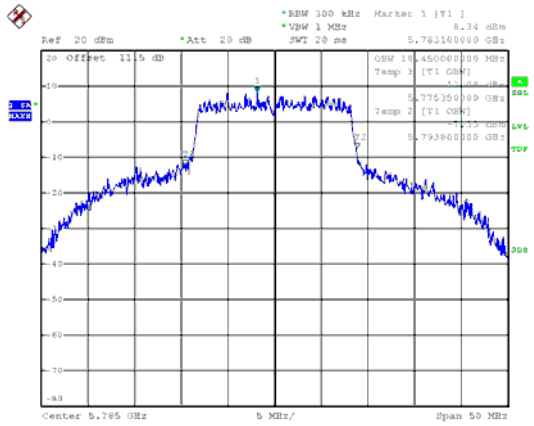

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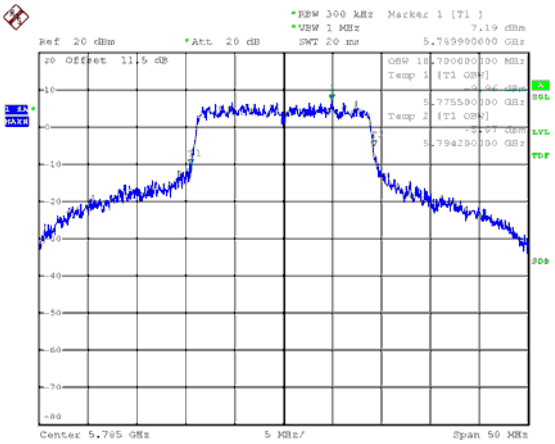

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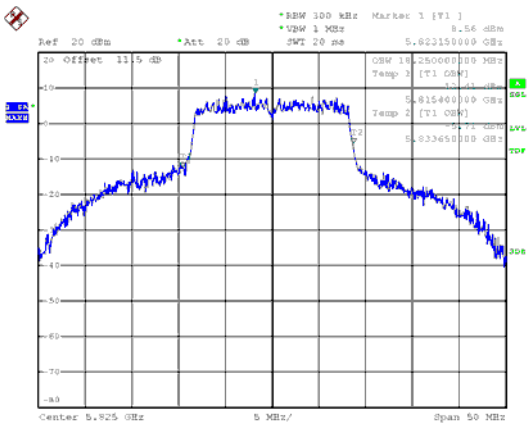
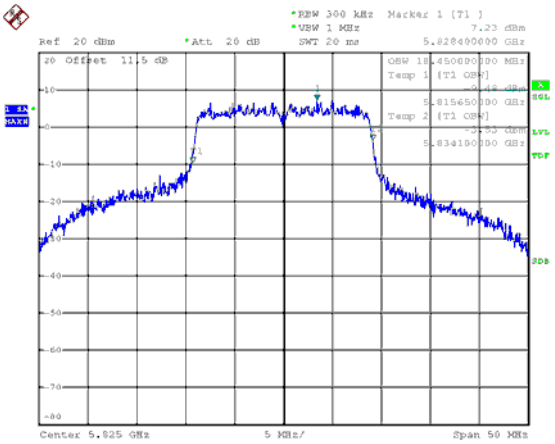
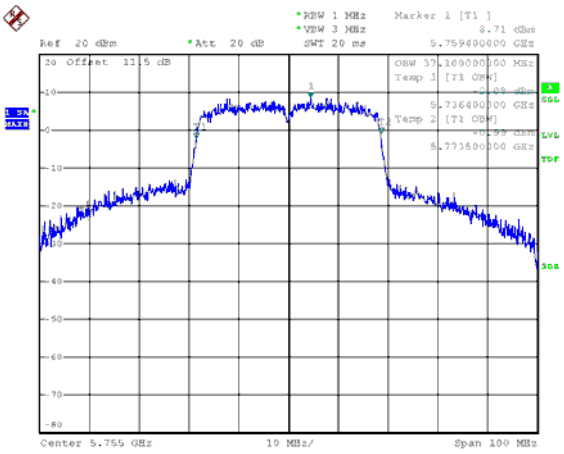


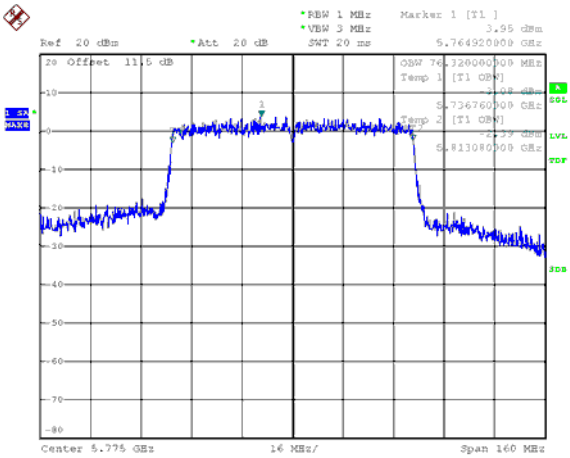
CH165



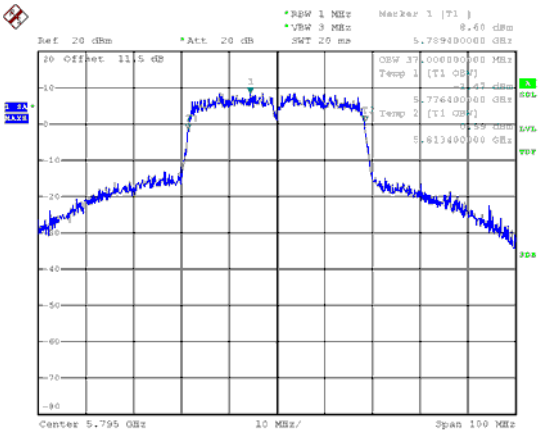
Modulation Type: 802.11ac, VHT40 (13.5Mbps)
CH151



Modulation Type: 802.11ac, VHT80 (29.3Mbps)
CH155



CH159



9. 26dB Bandwidth & 99% Occupied Bandwidth

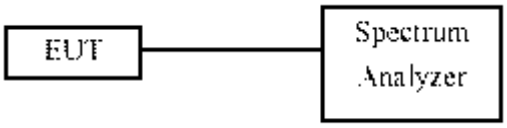
9.1. Test Limit

None; for reporting purposes only.

9.2. Test Procedure

Reference to 789033 D02 General UNII Test Procedures New Rules v01: The transmitter output is connected to a spectrum analyzer with the RBW = approximately 1% of the emission bandwidth, the VBW >= 3 x RBW, peak detector and max hold.

9.3. Test Setup Layout



9.4. Test Result and Data (26dB Bandwidth)

In the 5.2G Band

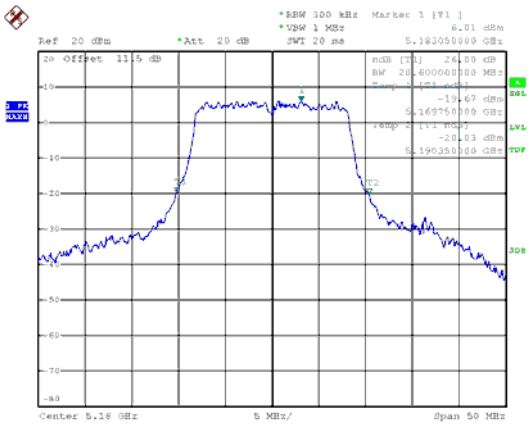
Mode	Channel	Frequency (MHz)	26dB Bandwidth(MHz)	
			ANT A	ANT B
11a	36	5180	20.60	19.75
11a	40	5200	20.75	20.00
11a	48	5240	21.00	20.35
11ac VHT20	36	5180	21.05	20.80
11ac VHT20	40	5200	21.15	20.90
11ac VHT20	48	5240	20.75	20.75
11ac VHT40	38	5190	40.90	41.00
11ac VHT40	46	5230	52.90	41.70
11ac VHT80	42	5210	83.68	83.68

9.5. Test Result and Data (99% Occupied Bandwidth)

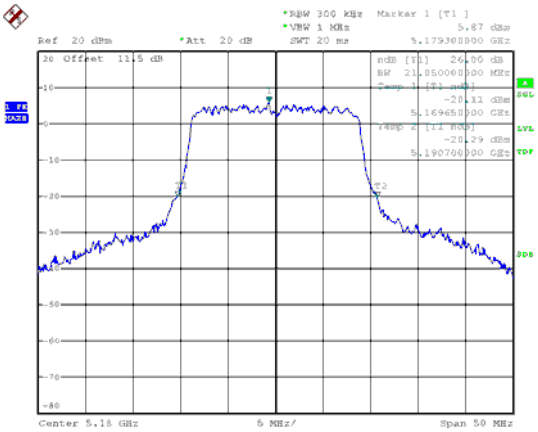
Modulation Type	Channel	Frequency (MHz)	99% Bandwidth(MHz)	
			ANT A	ANT B
11a	36	5180	16.55	16.55
11a	40	5200	16.60	16.55
11a	48	5240	16.60	16.55
11ac VHT20	36	5180	17.70	17.70
11ac VHT20	40	5200	17.70	17.70
11ac VHT20	48	5240	17.70	17.70
11ac VHT40	38	5190	36.30	36.30
11ac VHT40	46	5230	36.80	36.40
11ac VHT80	42	5210	75.84	76.00

26dB Bandwidth
ANT A

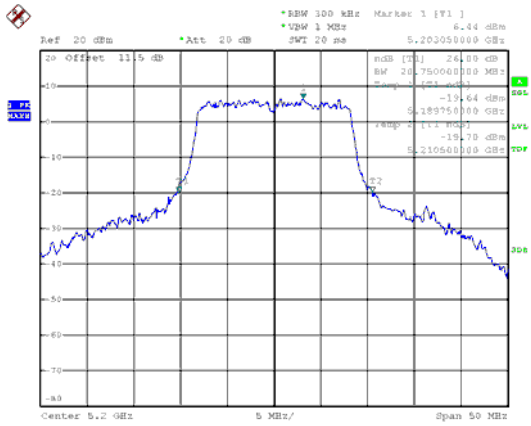
Modulation Type: 802.11a (6Mbps)
CH36



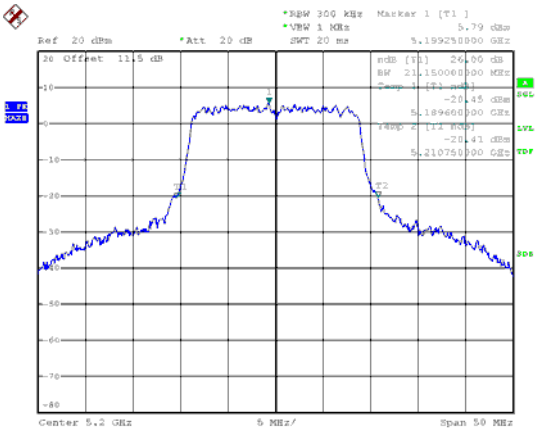
802.11ac VHT20 (6.5Mbps)
CH36



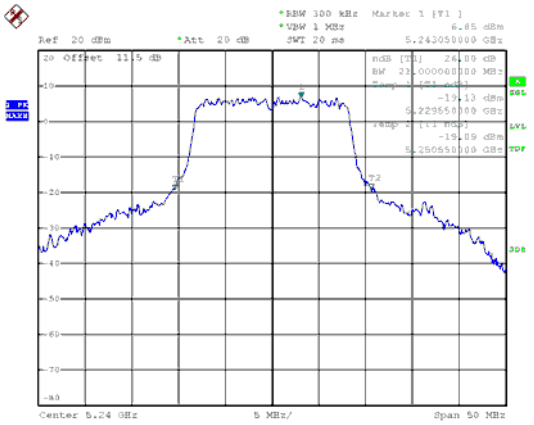
CH40



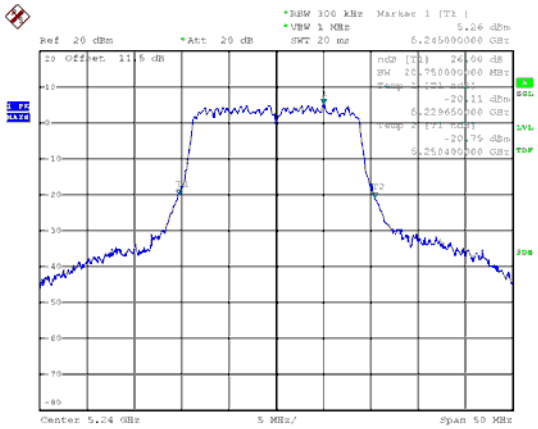
CH40



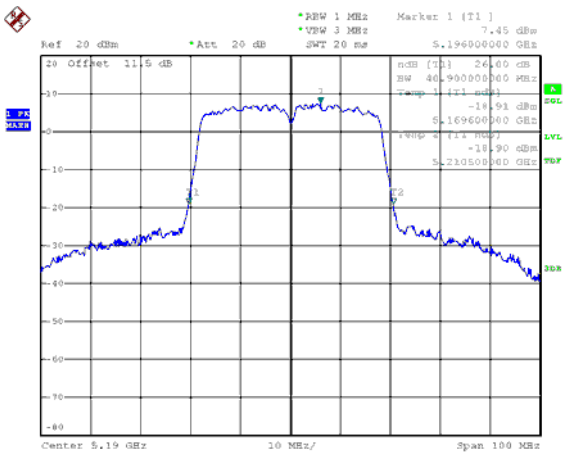
CH48



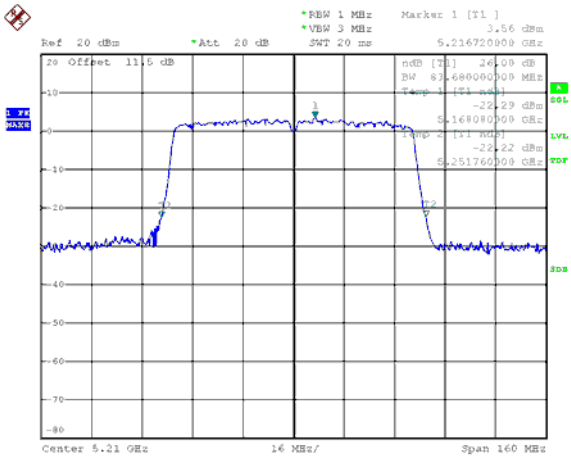
CH48



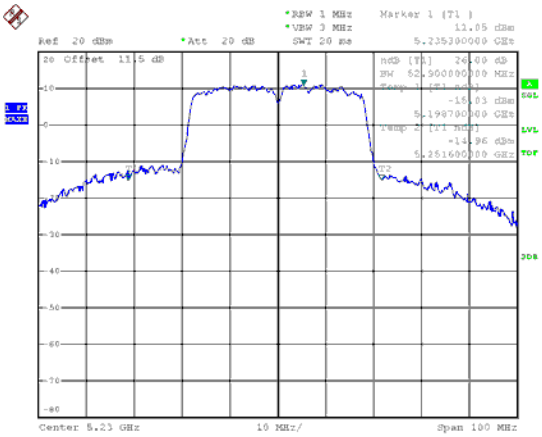
Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH38



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH42



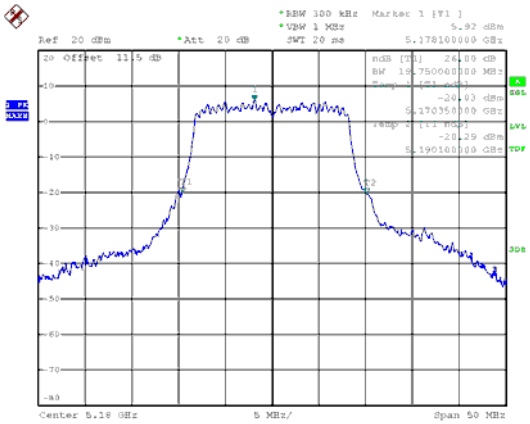
CH46



ANT B

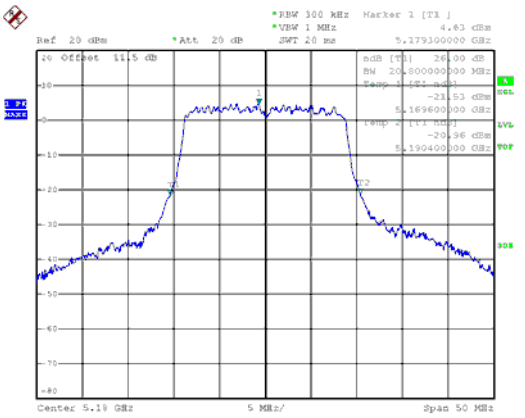
Modulation Type: 802.11a (6Mbps)

CH36



802.11ac VHT20 (6.5Mbps)

CH36



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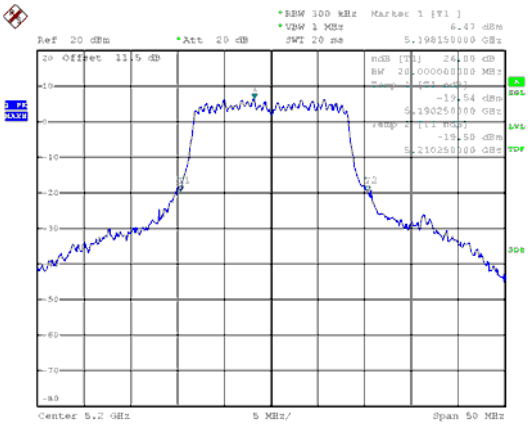

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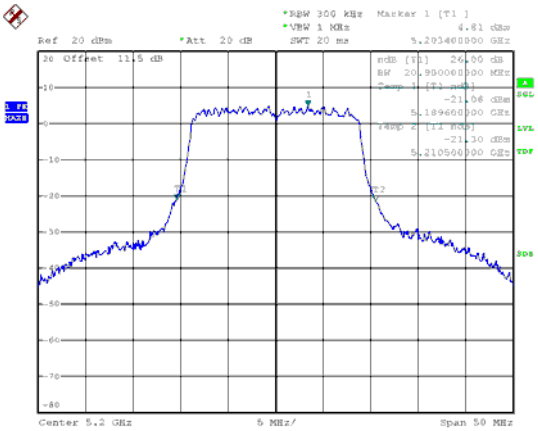
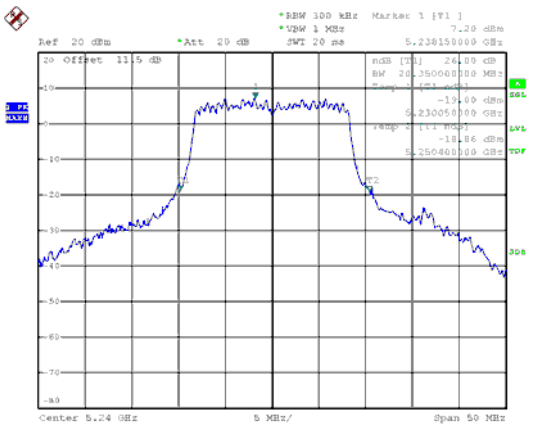


CH48



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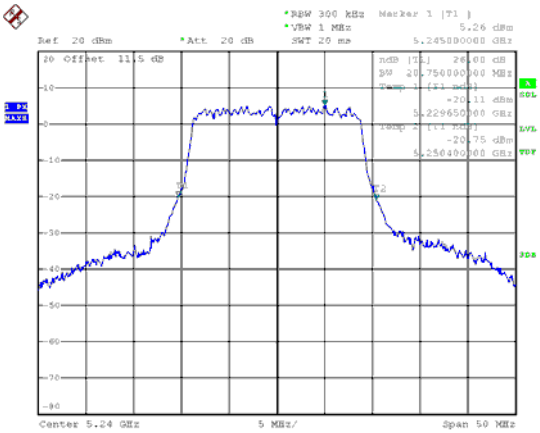
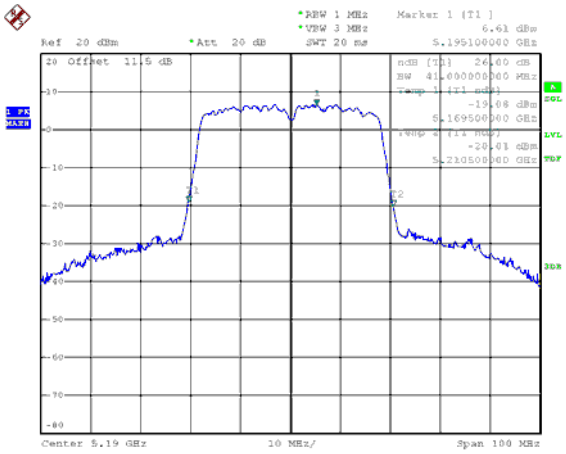
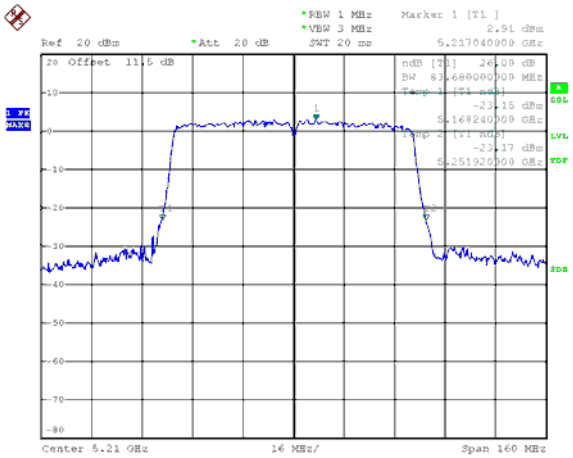


Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH38



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH42



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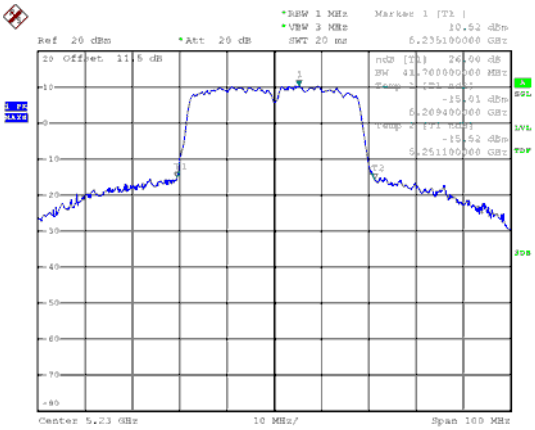
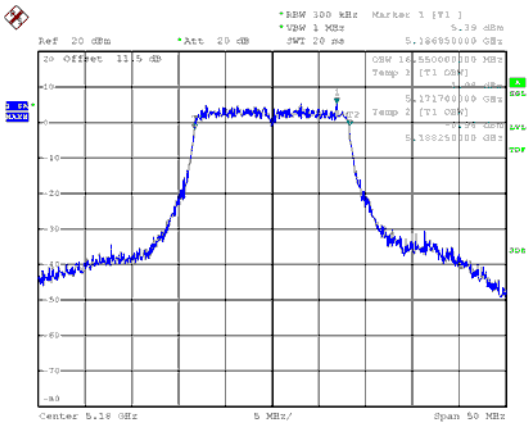
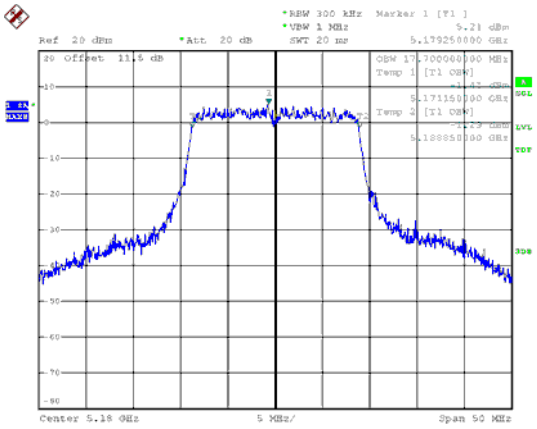


99% Occupied Bandwidth
ANT A

Modulation Type: 802.11a (6Mbps)
CH36



802.11ac VHT20 (6.5Mbps)
CH36



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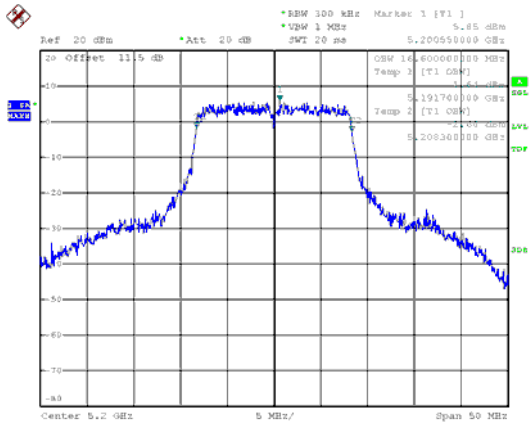

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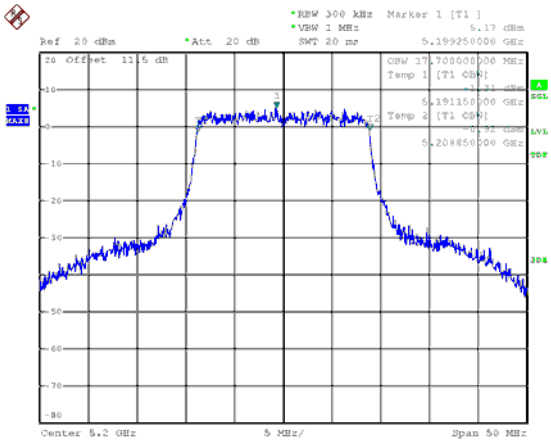

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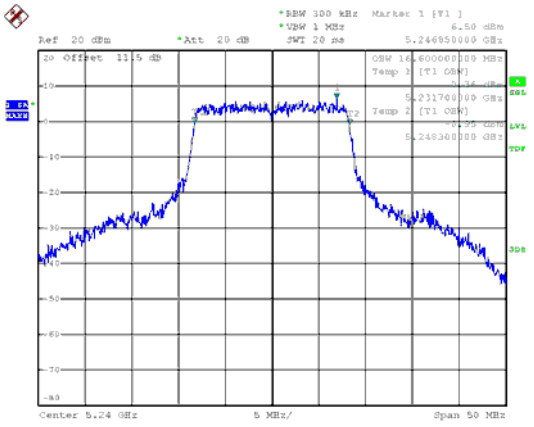

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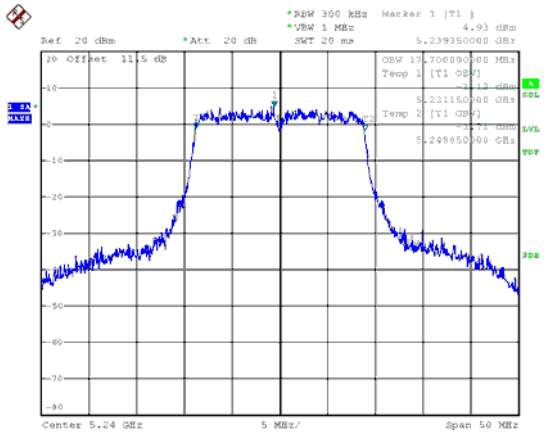
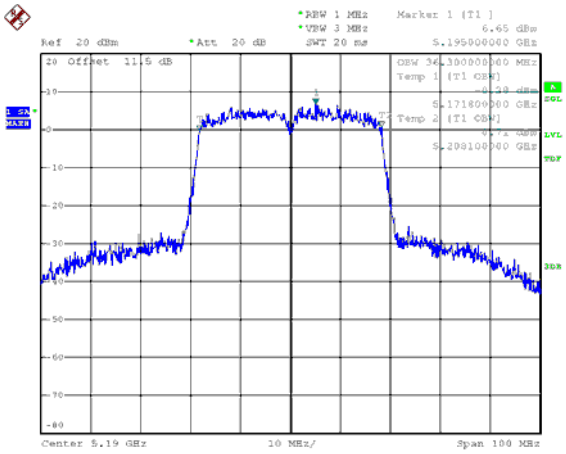
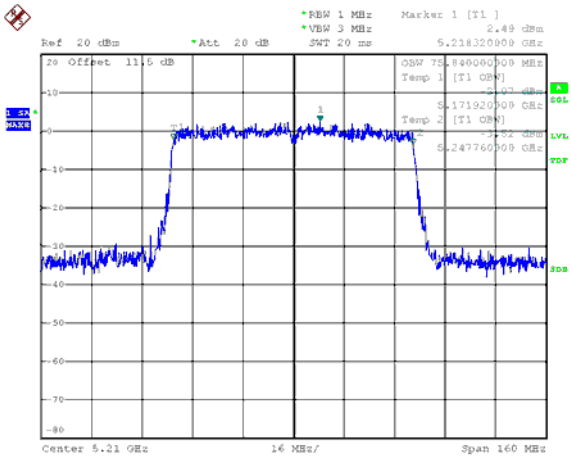


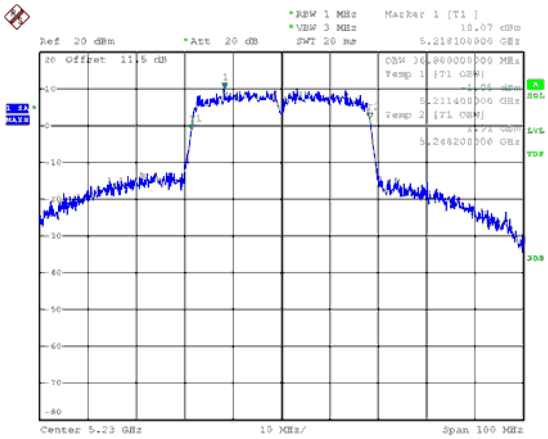
Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH38



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH42



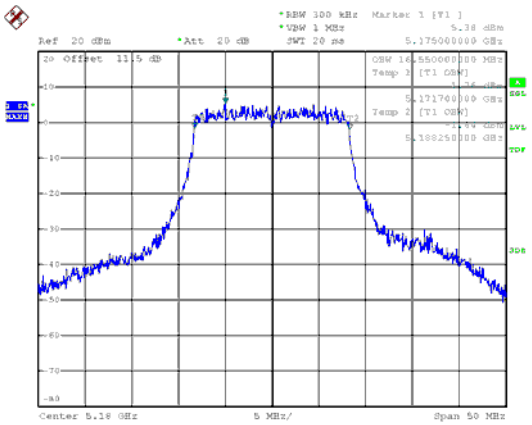
CH46



ANT B

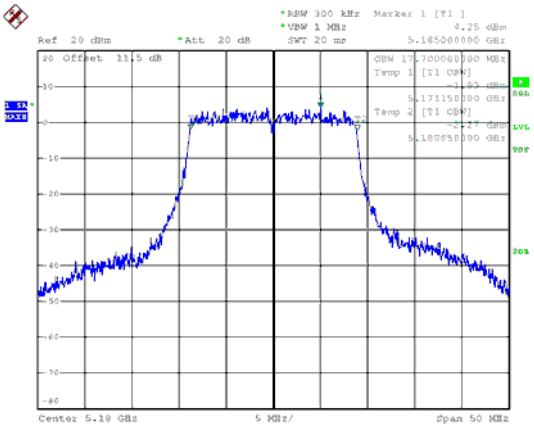
Modulation Type: 802.11a (6Mbps)

CH36

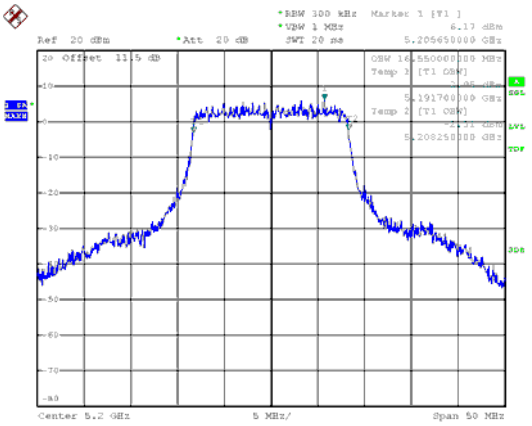


802.11ac VHT20 (6.5Mbps)

CH36



CH40



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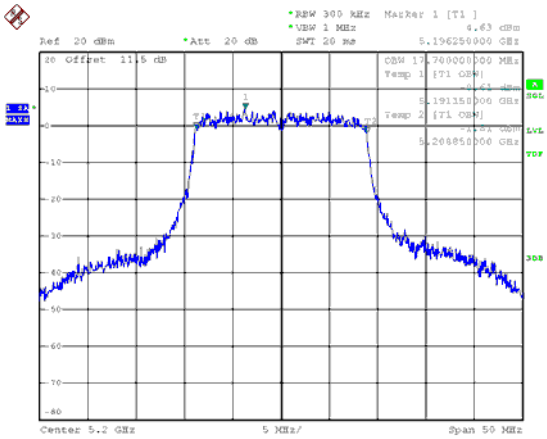

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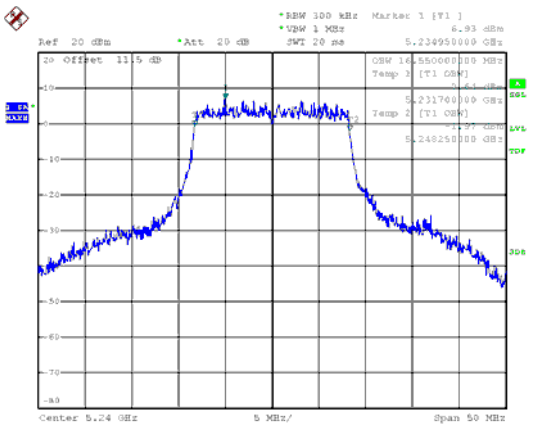

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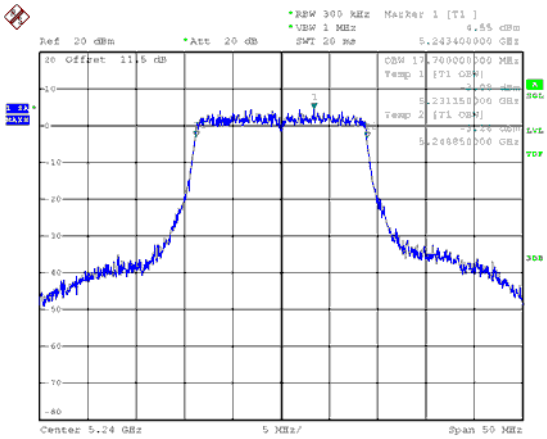
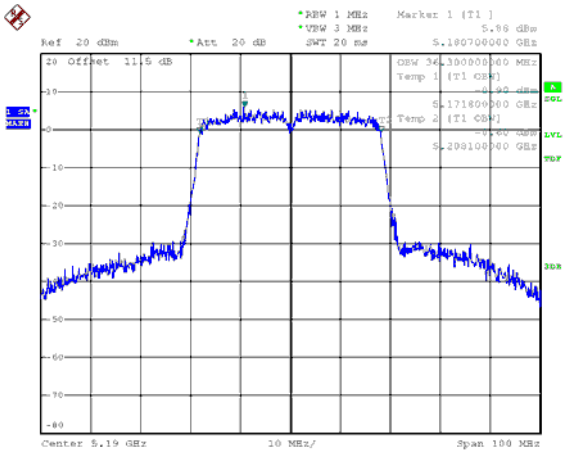
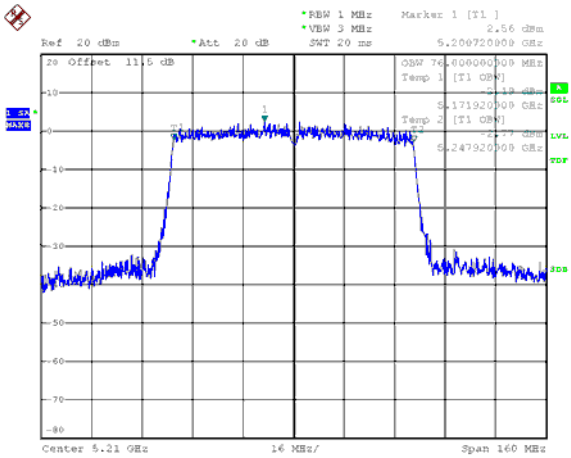


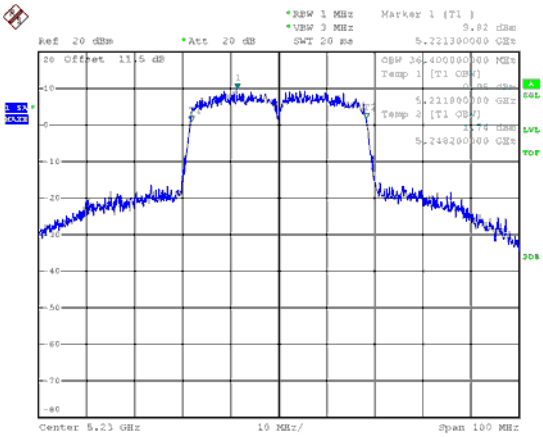
Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH38



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH42



CH46



10. Average Power

10.1. Test Limit

Output Power:

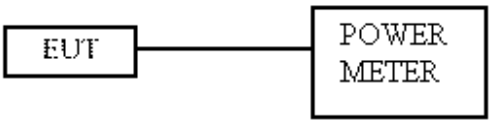
Frequency Band			Limit
☒	5.15~5.25GHz		
	Operating Mode		
	☐	Outdoor access point	The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm) provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30degrees as measured from the horizon must not exceed125 mW (21 dBm).
	☒	Indoor access point	The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm) provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
	☐	Fixed point-to-point access points	The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm). Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi.
	☐	client devices	The maximum conducted output power over the frequency band of operation shall not exceed 250 mW (24dBm) provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Frequency Band		Limit
☐	5.25-5.35 GHz	The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW (24dBm) or 11 dBm 10 log B, where B is the 26 dB emission bandwidth in megahertz. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
☐	5.470-5.725 GHz	
☒	5.725~5.85 GHz	The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm). If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power.

10.2.Test Procedure

The transmitter output is connected to a power meter.
The cable assembly insertion loss of 11.5 dB (including 10 dB pad and 1.5 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

10.3.Test Setup Layout



10.4.Test Result and Data

In the 5.2G Band

Modulation Type	Data Rate	Setting	Channel	Frequency (MHz)	Measured value of each antenna port (dBm)		Total power (dBm)	Total power (mW)	FCC Limit (dBm)
					ANT A	ANT B			
11a	6 Mbps	14	36	5180	15.88	15.05	18.50	70.715	30.00
11a	6 Mbps	14.5	40	5200	16.24	15.81	19.04	80.179	30.00
11a	6 Mbps	15	48	5240	16.79	16.23	19.53	89.729	30.00
11n HT20	MCS 0	14	36	5180	15.38	15.17	18.29	67.400	30.00
11n HT20	MCS 0	14	40	5200	15.57	15.12	18.36	68.567	30.00
11n HT20	MCS 0	14	48	5240	15.04	15.13	18.10	64.499	30.00
11n HT40	MCS 0	13	38	5190	14.78	14.09	17.46	55.706	30.00
11n HT40	MCS 0	17	46	5230	17.82	18.03	20.94	124.067	30.00
11ac VHT20	NSS1-MCS0	14	36	5180	15.41	15.24	18.34	68.173	30.00
11ac VHT20	NSS1-MCS0	14	40	5200	15.66	15.16	18.43	69.622	30.00
11ac VHT20	NSS1-MCS0	14	48	5240	15.09	15.26	18.19	65.859	30.00
11ac VHT40	NSS1-MCS0	13	38	5190	14.90	14.21	17.58	57.266	30.00
11ac VHT40	NSS1-MCS0	17	46	5230	17.92	18.15	**21.05**	127.257	30.00
11ac VHT80	NSS1-MCS0	12.5	42	5210	13.99	13.65	16.83	48.235	30.00

In the 5.8G Band

Modulation Type	Data Rate	Setting	Channel	Frequency (MHz)	Measured value of each antenna port (dBm)		Total power (dBm)	Total power (mW)	FCC Limit (dBm)
					ANT A	ANT B			
11a	6 Mbps	17	149	5745	17.20	18.37	20.83	121.188	30.00
11a	6 Mbps	17	157	5785	16.54	17.92	20.29	107.026	30.00
11a	6 Mbps	17	165	5825	16.25	17.78	20.09	102.149	30.00
11n HT20	MCS 0	17	149	5745	15.87	17.74	19.92	98.066	30.00
11n HT20	MCS 0	17	157	5785	16.79	18.02	20.46	111.140	30.00
11n HT20	MCS 0	17	165	5825	16.04	17.66	19.94	98.524	30.00
11n HT40	MCS 0	17	151	5755	15.73	17.52	19.73	93.905	30.00
11n HT40	MCS 0	17	159	5795	16.98	17.05	20.03	100.588	30.00
11ac VHT20	NSS1-MCS0	17	149	5745	15.96	17.83	20.01	100.119	30.00
11ac VHT20	NSS1-MCS0	17	157	5785	16.85	18.13	20.55	113.430	30.00
11ac VHT20	NSS1-MCS0	17	165	5825	16.11	17.78	20.04	100.811	30.00
11ac VHT40	NSS1-MCS0	17	151	5755	15.86	17.62	19.84	96.357	30.00
11ac VHT40	NSS1-MCS0	17	159	5795	17.08	17.20	20.15	103.531	30.00
11ac VHT80	NSS1-MCS0	17	155	5775	15.23	16.94	19.18	82.774	30.00

11. Power Spectral Density

11.1.Test Limit

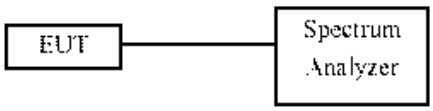
PSD:

Frequency Band			Limit
☒	5.15~5.25GHz		
	Operating Mode		
	☐	Outdoor access point	17 dBm/MHz
	☒	Indoor access point	17 dBm/MHz
	☐	Fixed point-to-point access points	17 dBm/MHz
	☐	Mobile and portable client devices	11 dBm/MHz
☐	5.725~5.85 GHz		11 dBm/MHz
☐	5.470-5.725 GHz		11 dBm/MHz
☒	5.725~5.85 GHz		30 dBm/500kHz

11.2.Test Procedure

Reference to KDB789033 D02 General UNII Test Procedures New Rules v02r01

11.3.Test Setup Layout



11.4. Test Result and Data

In the 5.2G Band

Modulation Type	Channel	Frequency (MHz)	Meas PSD (dBm/MHz)		Sum chain (dBm)	Duty Cycle CF(dB)	Total Corr'd PSD (dBm/MHz)	PSD Limit (dBm/MHz)
			ANT A	ANT B				
11a	36	5180	2.58	1.65	5.15	0.09	5.24	14.79
11a	40	5200	2.87	2.24	5.58	0.09	5.67	14.79
11a	48	5240	3.38	2.96	6.19	0.09	6.28	14.79
11ac VHT20	36	5180	1.87	1.00	4.47	0.00	4.47	14.79
11ac VHT20	40	5200	2.00	1.28	4.67	0.00	4.67	14.79
11ac VHT20	48	5240	1.85	1.32	4.60	0.00	4.60	14.79
11ac VHT40	38	5190	-1.87	-2.39	0.89	0.00	0.89	14.79
11ac VHT40	46	5230	1.77	1.22	4.51	0.00	4.51	14.79
11ac VHT80	42	5210	-5.73	-6.30	-3.00	0.18	-2.82	14.79

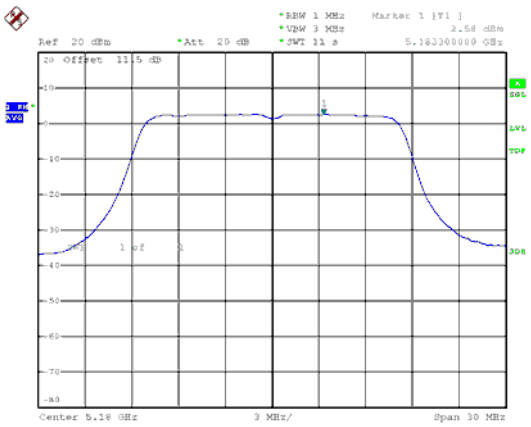
In the 5.8G Band

Modulation Type	Channel (MHz)	Frequency (MHz)	Meas PSD (dBm/MHz)		Sum chain (dBm)	Duty Cycle CF(dB)	10log(500KHz/RBW) CF (dB)	Total Corr'd PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)
			ANT A	ANT B					
11a	149	5745	2.87	4.19	6.59	0.09	-3.01	3.67	27.79
11a	157	5785	2.94	4.04	6.54	0.09	-3.01	3.61	27.79
11a	165	5825	2.59	4.20	6.48	0.09	-3.01	3.56	27.79
11ac VHT20	149	5745	2.56	3.87	6.27	0.00	-3.01	3.26	27.79
11ac VHT20	157	5785	2.43	3.80	6.18	0.00	-3.01	3.17	27.79
11ac VHT20	165	5825	2.21	3.81	6.09	0.00	-3.01	3.08	27.79
11ac VHT40	151	5755	-1.11	0.20	2.60	0.00	-3.01	-0.41	27.79
11ac VHT40	159	5795	-0.97	0.41	2.78	0.00	-3.01	-0.23	27.79
11ac VHT80	155	5775	-6.05	-4.67	-2.30	0.18	-3.01	-5.13	27.79

5.2G Band 1, ANT A

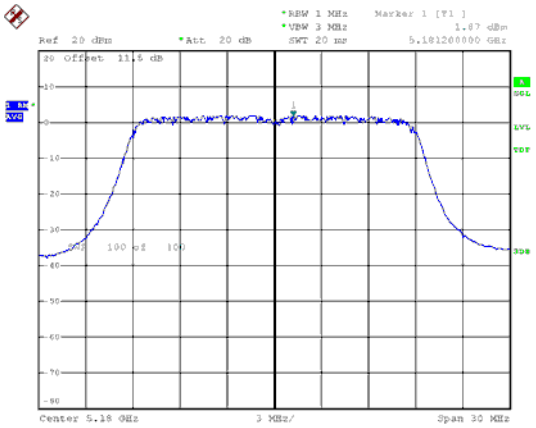
Modulation Type: 802.11a (6Mbps)

CH36

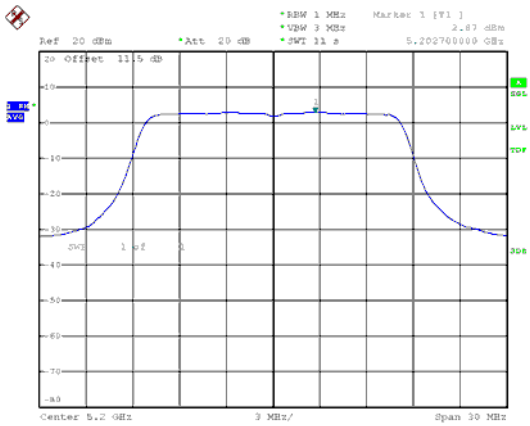


Modulation Type: 802.11ac VHT20 (6.5Mbps)

CH36



CH40



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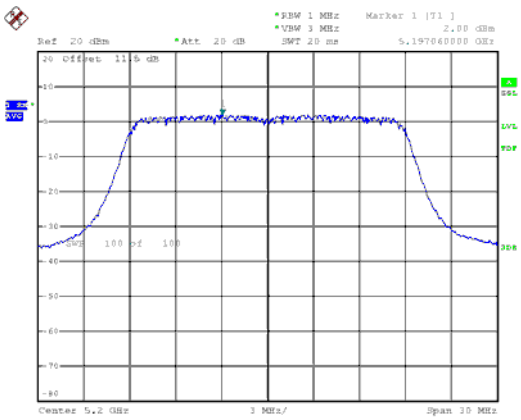
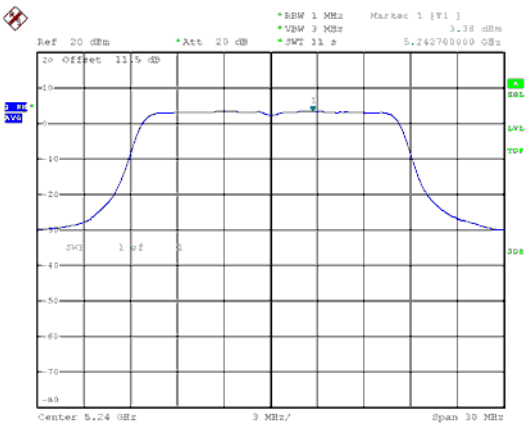
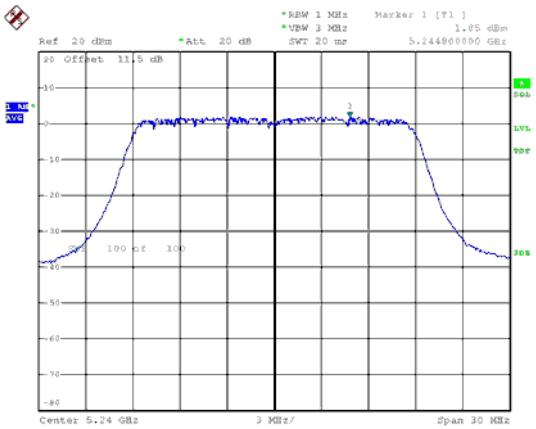


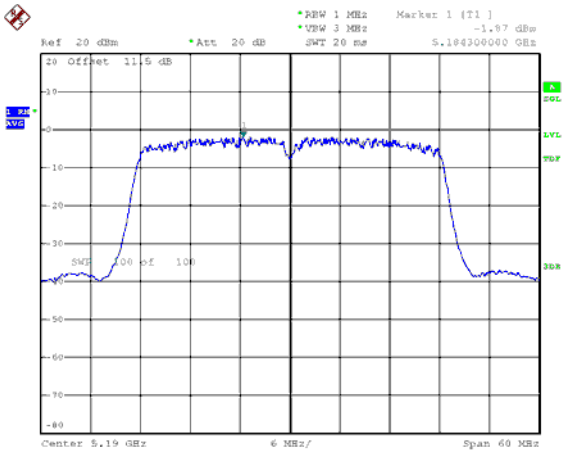
CH48



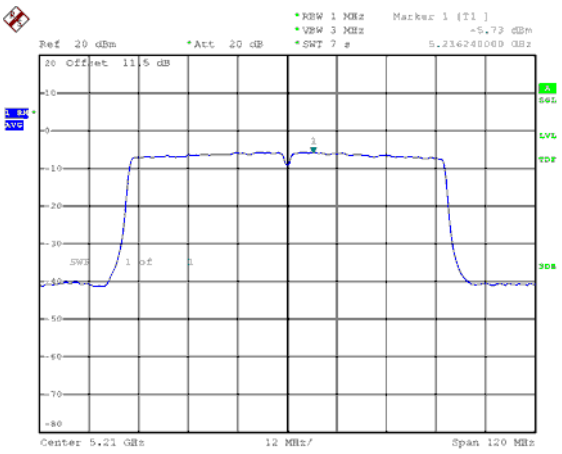
CH48



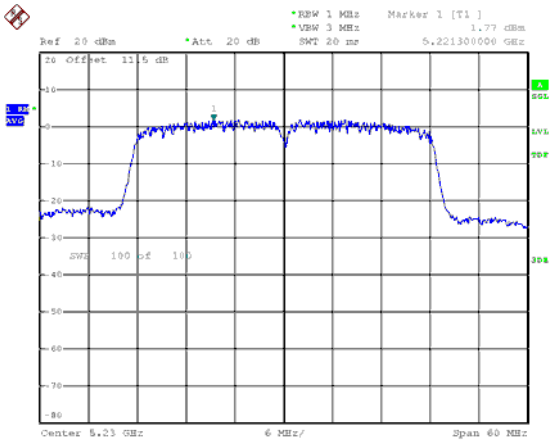
Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH38



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH42



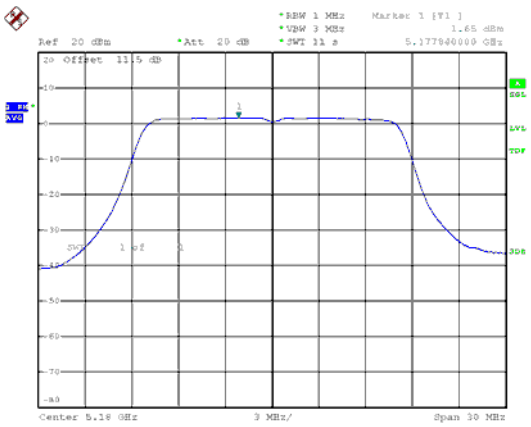
CH46



5.2G Band 1, ANT B

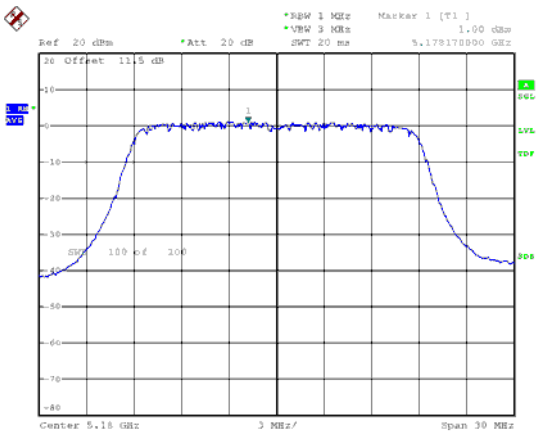
Modulation Type: 802.11a (6Mbps)

CH36

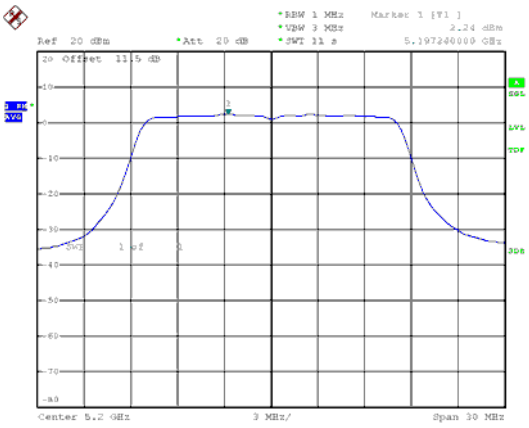


Modulation Type: 802.11ac VHT20 (6.5Mbps)

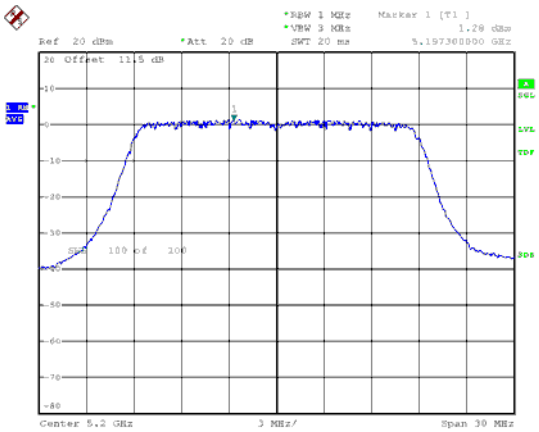
CH36



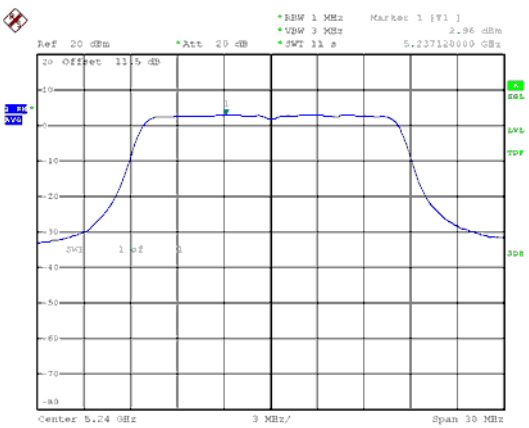
CH40



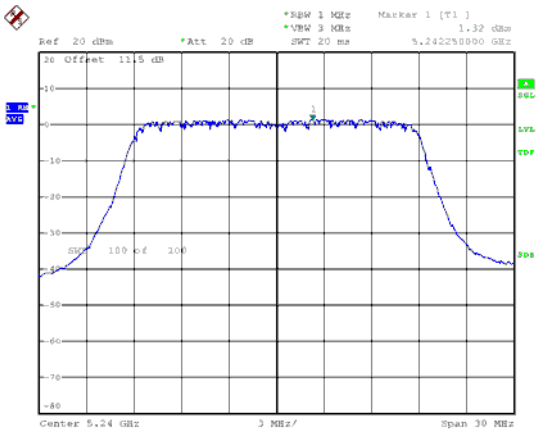
CH40



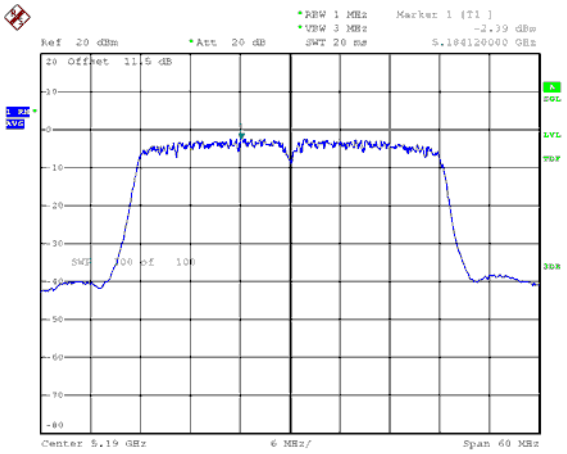
CH48



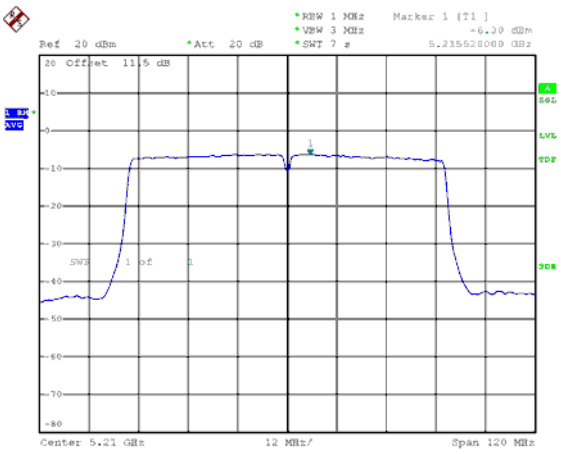
CH48



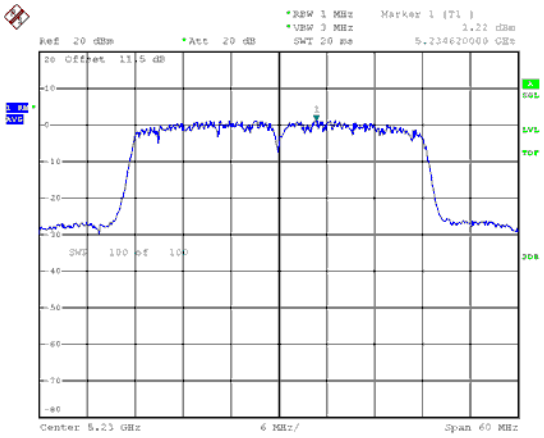
Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH38



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH42



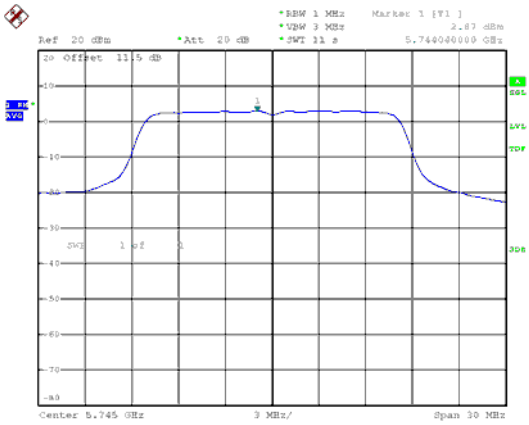
CH46



5.8G Band 4, ANT A

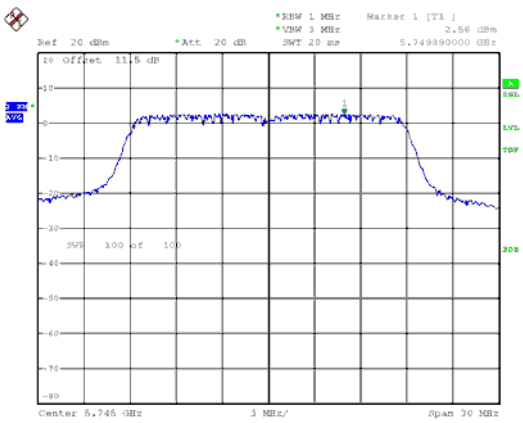
Modulation Type: 802.11a (6Mbps)

CH149

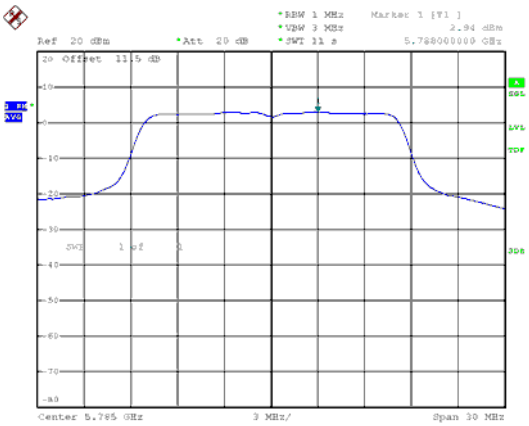


Modulation Type: 802.11ac VHT20 (6.5Mbps)

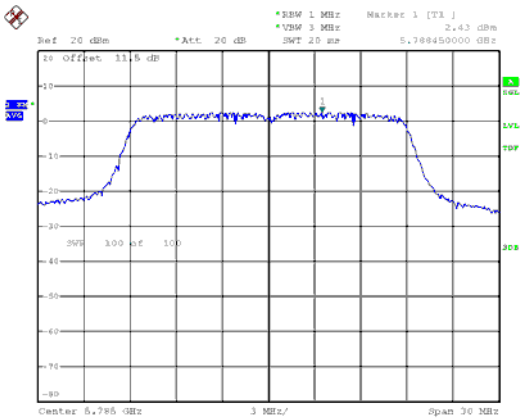
CH149



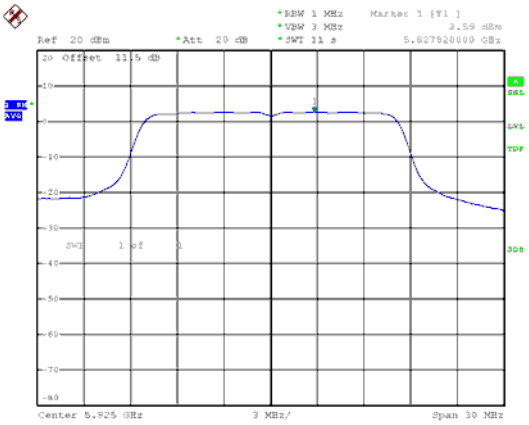
CH157



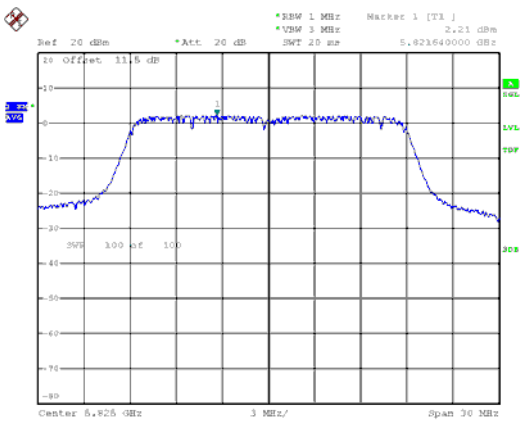
CH157



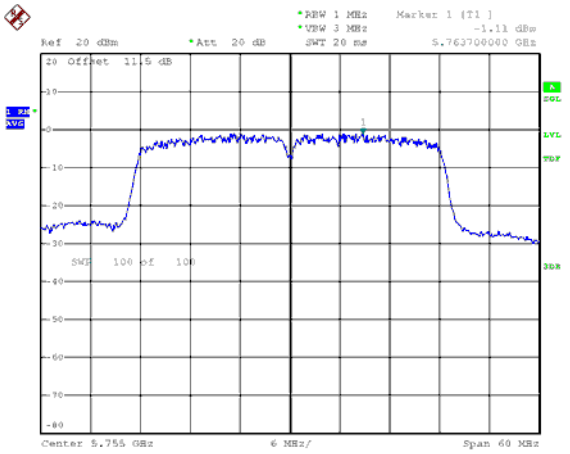
CH165



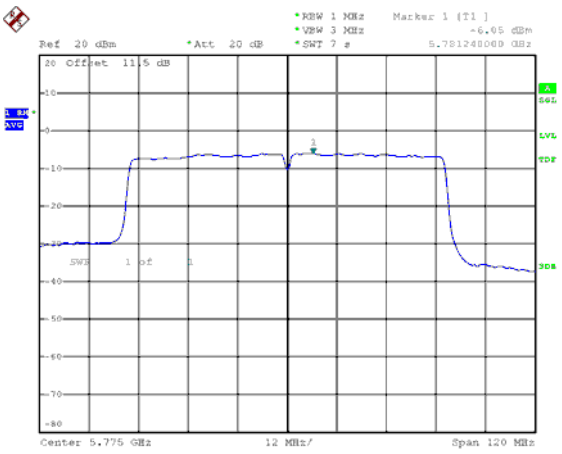
CH165



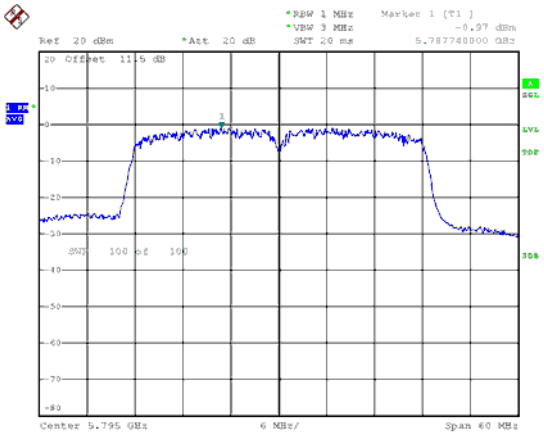
Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH151



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH155



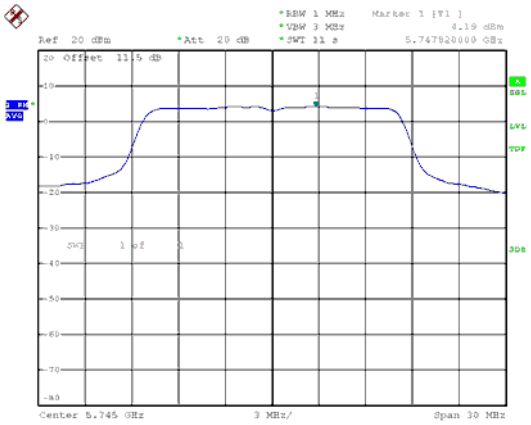
CH159



5.8G Band 4, ANT B

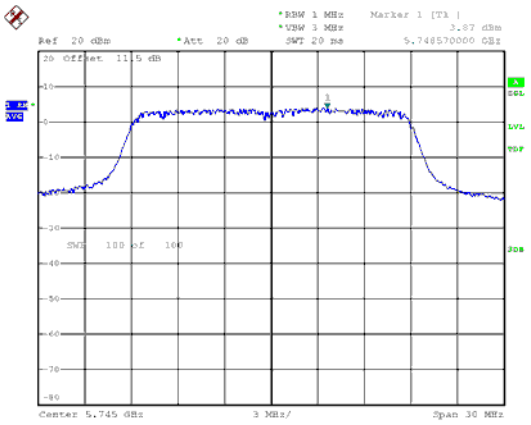
Modulation Type: 802.11a (6Mbps)

CH149

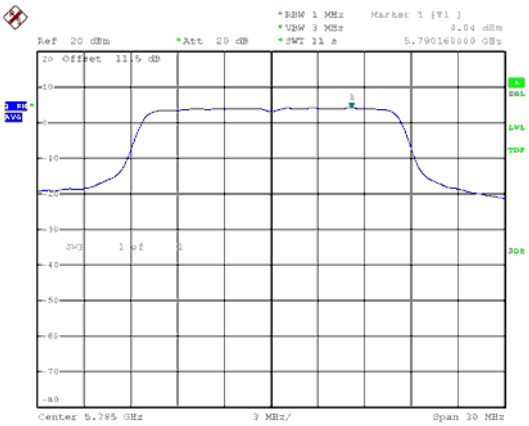


Modulation Type: 802.11ac VHT20 (6.5Mbps)

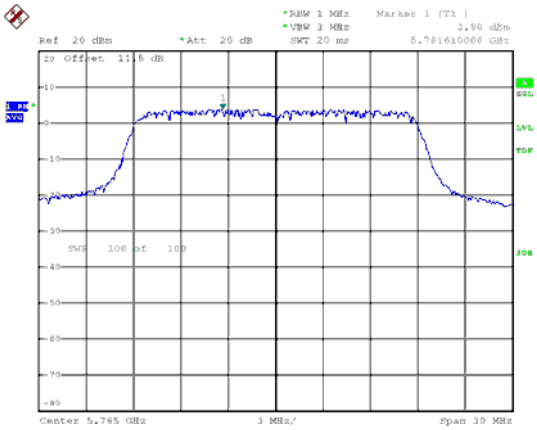
CH149



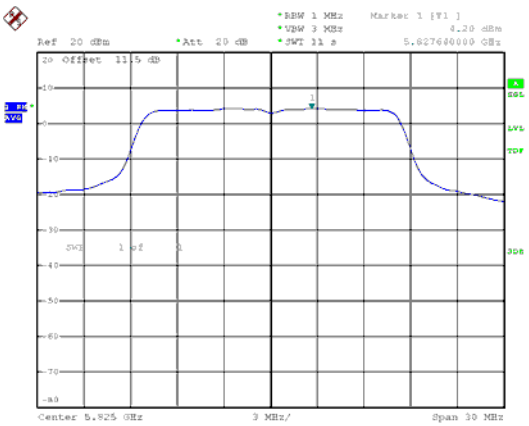
CH157



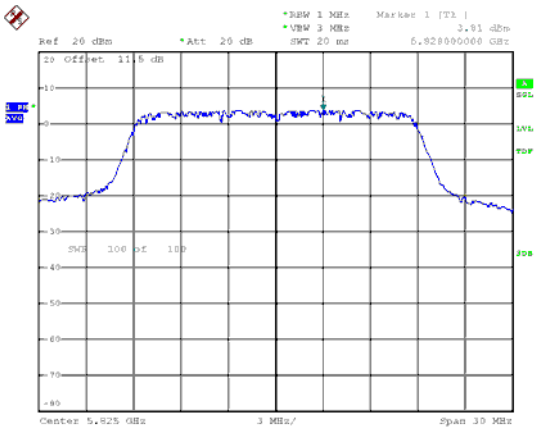
CH157



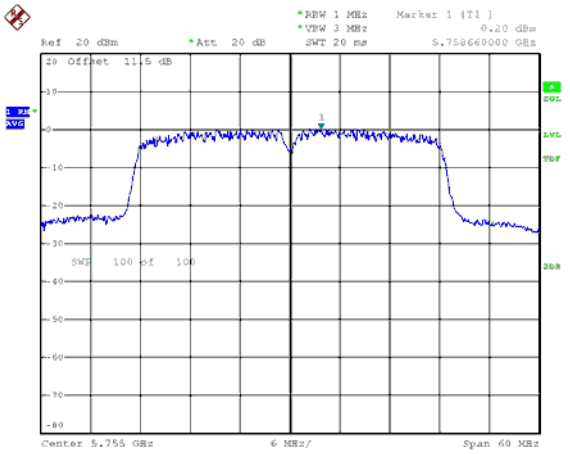
CH165



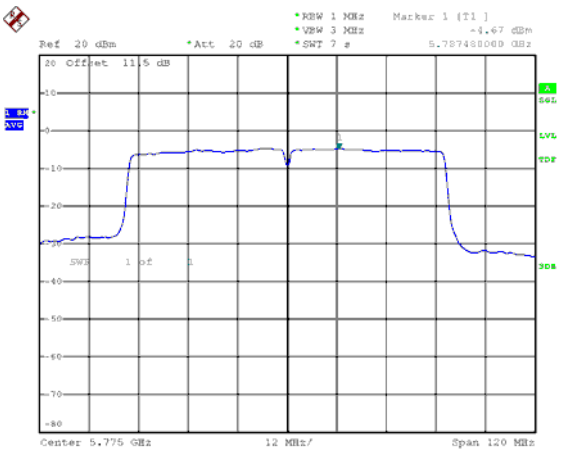
CH165



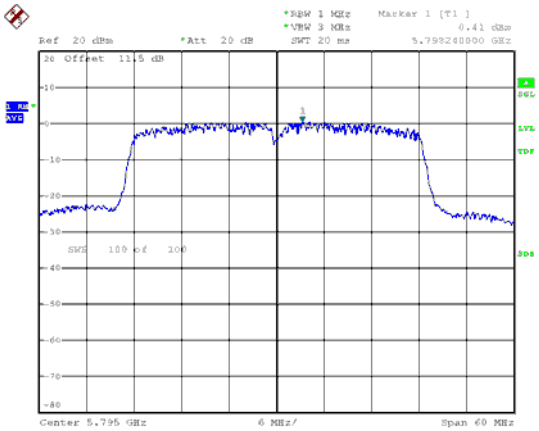
Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH151



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH155



CH159

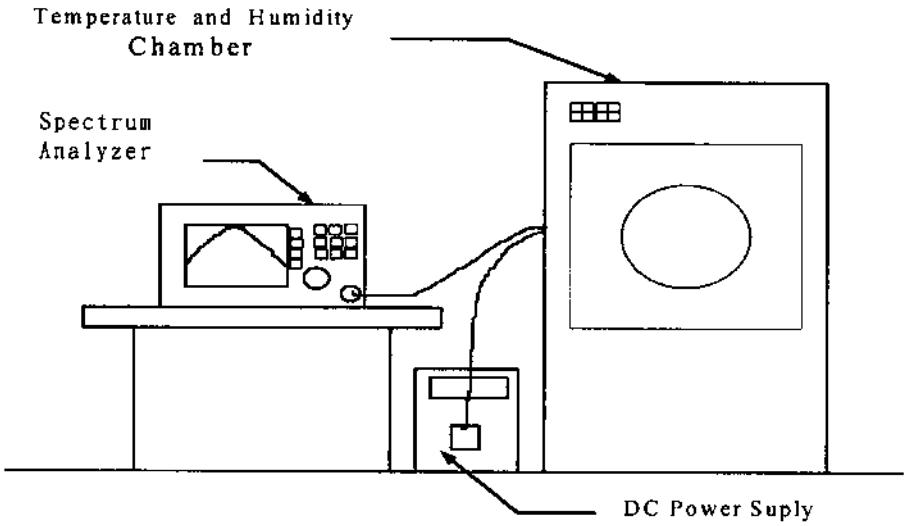


12. Frequency Stability

12.1.Test Procedure

1. The EUT was placed inside the Temperature and Humidity chamber.
2. The transmitter output was connected to spectrum analyzer.
3. Turn the EUT on and couple its output to a spectrum analyzer.
4. Turn the EUT off and set the chamber to the highest temperature specified.
5. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes.
6. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.
7. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes.The supply voltage was then adjusted on the EUT from 85% to 115% and the frequencyrecord.

12.2.Test Setup Layout



12.3.Test Result and Data

Operating frequency:5180 MHz							
Temp (°C)	Power supply (V)	2 minute		5 minute		10 minute	
		(MHz)	(%)	(MHz)	(%)	(MHz)	(%)
45	102	5180.0658	0.001270	5180.0623	0.001203	5180.0642	0.001239
	120	5180.0626	0.001208	5180.0628	0.001212	5180.0742	0.001432
	138	5180.0654	0.001263	5180.0681	0.001315	5180.0649	0.001253
40	102	5180.0582	0.001124	5180.0558	0.001077	5180.0546	0.001054
	120	5180.0582	0.001124	5180.0580	0.001120	5180.0534	0.001031
	138	5180.0562	0.001085	5180.0569	0.001098	5180.0525	0.001014
30	102	5180.0170	0.000328	5180.0113	0.000218	5180.0141	0.000272
	120	5180.0160	0.000309	5180.0170	0.000328	5180.0172	0.000332
	138	5180.0158	0.000305	5180.0156	0.000301	5180.0142	0.000274
20	102	5180.0085	0.000164	5180.0044	0.000085	5180.0051	0.000098
	120	5180.0090	0.000174	5180.0076	0.000147	5180.0046	0.000089
	138	5180.0026	0.000050	5180.0089	0.000172	5180.0023	0.000044
10	102	5180.0050	0.000097	5180.0027	0.000052	5180.0011	0.000021
	120	5180.0008	0.000015	5180.0012	0.000023	5180.0003	0.000006
	138	5180.0013	0.000025	5180.0004	0.000008	5180.0021	0.000041
0	102	5180.0158	0.000305	5180.0117	0.000226	5180.0118	0.000228
	120	5180.0124	0.000239	5180.0126	0.000243	5180.0108	0.000208
	138	5180.0103	0.000199	5180.0256	0.000494	5180.0138	0.000266
-10	102	5180.0273	0.000527	5180.0251	0.000485	5180.0205	0.000396
	120	5180.0258	0.000498	5180.0286	0.000552	5180.0226	0.000436
	138	5180.0246	0.000475	5180.0258	0.000498	5180.0251	0.000485
-20	102	5180.0263	0.000508	5180.0244	0.000471	5180.0257	0.000496
	120	5180.0256	0.000494	5180.0238	0.000459	5180.0263	0.000508
	138	5180.0208	0.000402	5180.0246	0.000475	5180.0248	0.000479

Limit: Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.