



FCC RADIO TEST REPORT

Applicant : Frontiir Pte (with Frontiir Co LTD, Myanmar)
Address : 809 Yakima Drive, Fremont, California 94539, United States
Equipment : 802.11ac outdoor CPE
Model No. : LCB
Trade Name : FRONTiir
FCC ID : 2AQLFLCB

I HEREBY CERTIFY THAT :

The sample was received on Dec. 16, 2019 and the testing was completed on Jan. 13, 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

1.	Summary of Test Procedure and Test Results	5
1.1.	Applicable Standards	5
2.	Test Configuration of Equipment under Test	6
2.1.	Feature of Equipment under Test	6
2.2.	Carrier Frequency of Channels	7
2.3.	Test Mode and Test Software	8
2.4.	Description of Test System	9
2.5.	General Information of Test	10
2.6.	Measurement Uncertainty	10
3.	Test Equipment and Ancillaries Used for Tests	11
4.	Antenna Requirements	13
4.1.	Standard Applicable	13
4.2.	Antenna Construction and Directional Gain	13
5.	Test of AC Power Line Conducted Emission	14
5.1.	Test Limit	14
5.2.	Test Procedures	14
5.3.	Typical Test Setup	15
5.4.	Test Result and Data	16
5.5.	Test Photographs	18
6.	Test of Spurious Emission (Radiated)	19
6.1.	Test Limit	19
6.2.	Test Procedures	19
6.3.	Typical Test Setup	20
6.4.	Test Result and Data (9kHz ~ 30MHz)	21
6.5.	Test Result and Data (30MHz ~ 1GHz)	21
6.6.	Test Result and Data (1GHz ~ 40GHz)	23
6.7.	Restricted Bands of Operation	59
6.8.	Test Photographs (30MHz ~ 1GHz)	60
6.9.	Test Photographs (1GHz ~ 40GHz)	61
7.	On Time, Duty Cycle and Measurement methods	62
7.1.	Test Limit	62
7.2.	Test Procedure	62
7.3.	Test Setup Layout	62
7.4.	Test Result and Data	62
7.5.	Measurement Methods	62
8.	6dB Bandwidth & 99% Occupied Bandwidth	64
8.1.	Test Limit	64
8.2.	Test Procedure	64
8.3.	Test Setup Layout	64
8.4.	Test Result and Data (6dB Bandwidth)	64
8.5.	Test Result and Data (99% Occupied Bandwidth)	65
9.	26dB Bandwidth & 99% Occupied Bandwidth	74
9.1.	Test Limit	74
9.2.	Test Procedure	74



9.3.	Test Setup Layout	74
9.4.	Test Result and Data (26dB Bandwidth)	74
9.5.	Test Result and Data (99% Occupied Bandwidth)	75
10.	Average Power.....	84
10.1.	Test Limit	84
10.2.	Test Procedure	85
10.3.	Test Setup Layout	85
10.4.	Test Result and Data.....	86
11.	Power Spectral Density.....	87
11.1.	Test Limit	87
11.2.	Test Procedure	87
11.3.	Test Setup Layout	87
11.4.	Test Result and Data.....	88
12.	Frequency Stability.....	97
12.1.	Test Procedure	97
12.2.	Test Setup Layout	97
12.3.	Test Result and Data.....	98
13.	Radio Frequency Exposure	99
13.1.	Applicable Standards	99
13.2.	EUT Specification	99
13.3.	Test Results.....	99
13.4.	Calculation.....	100
13.5.	Maximum Permissible Exposure.....	101



History of this test report

Report No.	Issue Date	Description
TEFE1912148	Jan. 13 , 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 complied with the requirement of FCC Part 15, Subpart B, recorded in a separate test report(TEFD1912148).



2. Test Configuration of Equipment under Test

2.1. Feature of Equipment under Test

Frequency Range	802.11a/n/ac: 5150-5250MHz, 5725-5850MHz
Modulation Type	802.11a/n: BPSK, QPSK, 16QAM, 64QAM 802.11ac: BPSK, QPSK, 16QAM, 64QAM, 256QAM
Modulation Technology	OFDM
Data Rate	802.11a: 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11n: MCS0 – MCS15, HT20/40 802.11ac: MCS0 – MCS9, VHT20/40/80
Antenna Type	Patch Antenna
Antenna Gain	5150-5250MHz: ANT A:14.4dBi, ANT B:13.8dBi 5725-5850MHz: ANT A:13.6dBi, ANT B:13.2dBi

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.



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

- During testing, the interface cables and equipment positions were varied according to ANSI C63.10.
- The complete test system included remote workstation and EUT for RF test. The remote workstation included Notebook.
- An executive program, "QRCT ver.V3.0-00276" under Windows OS system was executed to transmit and receive data via WLAN.
- 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) 2TX With CDD Mode
2	802.11ac VHT20 (6.5Mbps) 2TX With CDD Mode
3	802.11ac VHT40 (13.5Mbps) 2TX With CDD Mode
4	802.11ac VHT80 (29.3Mbps) 2TX With CDD Mode
5	802.11a (6Mbps) 1TX
6	802.11ac VHT20 (6.5Mbps) 1TX
7	802.11ac VHT40 (13.5Mbps) 1TX
8	802.11ac VHT80 (29.3Mbps) 1TX
caused "Test Mode 1" generated the worst case, it was reported as the final data.	
Radiation Emissions (30MHz ~ 1GHz)	
Test Mode	Operating Description
1	802.11a (6Mbps) 2TX With CDD Mode
2	802.11ac VHT20 (6.5Mbps) 2TX With CDD Mode
3	802.11ac VHT40 (13.5Mbps) 2TX With CDD Mode
4	802.11ac VHT80 (29.3Mbps) 2TX With CDD Mode
5	802.11a (6Mbps) 1TX
6	802.11ac VHT20 (6.5Mbps) 1TX
7	802.11ac VHT40 (13.5Mbps) 1TX
8	802.11ac VHT80 (29.3Mbps) 1TX
caused "Test Mode 1" generated the worst case, they were reported as the final data.	
Radiation Emissions (1GHz ~ 40GHz)	
Test Mode	Operating Description
1	802.11a (6Mbps) 2TX With CDD Mode
2	802.11ac VHT20 (6.5Mbps) 2TX With CDD Mode
3	802.11ac VHT40 (13.5Mbps) 2TX With CDD Mode
4	802.11ac VHT80 (29.3Mbps) 2TX With CDD Mode
5	802.11a (6Mbps) 1TX
6	802.11ac VHT20 (6.5Mbps) 1TX
7	802.11ac VHT40 (13.5Mbps) 1TX
8	802.11ac VHT80 (29.3Mbps) 1TX
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
Network cable	N/A	N/A	1.2m / NS	N/A
POE	UBIQUITI	GP-A240-050	N/A	0.6m / NS
Radiated Emissions				
Equipment	Brand	Model	Length/Type	Power cord/Length/Type
Notebook	ASUS	P2430U	N/A	Adapter / 1.8m / NS
Network cable	N/A	N/A	15m / NS	N/A
POE	UBIQUITI	GP-A240-050	N/A	0.6m / NS
AC Power Line Conducted Emission				
Equipment	Brand	Model	Length/Type	Power cord/Length/Type
Notebook	ASUS	P2430U	N/A	Adapter / 1.8m / NS
Network cable	N/A	N/A	15m / NS	N/A
POE	UBIQUITI	GP-A240-050	N/A	0.6m / NS



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	2020/01/10	22°C / 63%	Nick Guan
Radiated Emissions	3M02-NK	2019/12/30	23°C / 54%	Vic Yeh
AC Power Line Conducted Emission	CON01-NK	2020/01/13	22°C / 53%	Dian Chen

2.6. Measurement Uncertainty

Measurement Item	Uncertainty
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 Antenna	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	100047	2019/03/28	2020/03/27
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	100047	2019/03/28	2020/03/27
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	Patch Antenna
Antenna Gain	5150MHz-5250MHz: ANT A: 14.4 dBi ; ANT B: 13.8 dBi 5725MHz-5850MHz: ANT A: 13.6 dBi ; ANT B: 13.2 dBi

5150MHz -5250MHz
For Power directional gain= $G_{ant}= 14.40$ dBi For PSD directional gain = $10 \log[(10^{G1/20} + 10^{G2/20})^2 / N_{ANT}]$ = 17.12 (dBi)
5725MHz -5850MHz
For Power directional gain= $G_{ant}= 13.60$ dBi For PSD directional gain = $10 \log[(10^{G1/20} + 10^{G2/20})^2 / N_{ANT}]$ = 16.41 (dBi)



5. Test of AC Power Line Conducted Emission

5.1. Test Limit

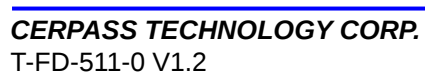
Conducted Emissions were measured from 150 kHz to 30 MHz with a bandwidth of 9 KHz, according to the methods defined in ANSI C63.4-2014. The EUT was placed on a nonmetallic stand in a shielded room 0.8 meters above the ground plane. The interface cables and equipment positioning were varied within limits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

Frequency (MHz)	Quasi Peak (dB μ V)	Average (dB μ V)
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

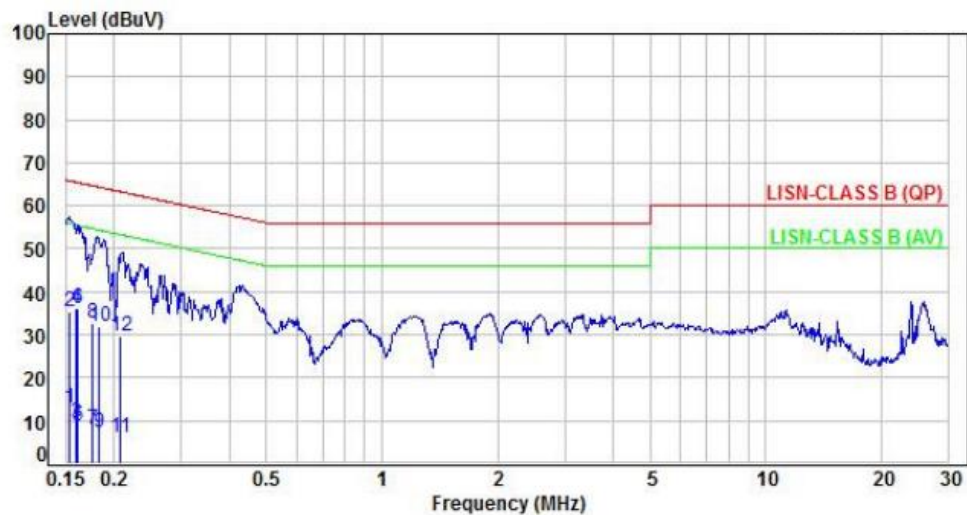
- The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
- Connect EUT to the power mains through a line impedance stabilization network (LISN).
- All the support units are connecting to the other LISN.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





5.4. Test Result and Data

Power	:	From Outside POE (24V)	Pol/Phase	:	LINE
Test Mode	:	Mode 1, Band1		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.15	9.92	2.94	12.86	55.78	-42.92	Average	P
2	0.15	9.92	25.28	35.20	65.78	-30.58	QP	P
3	0.16	9.92	-0.31	9.61	55.52	-45.91	Average	P
4	0.16	9.92	26.02	35.94	65.52	-29.58	QP	P
5	0.16	9.92	-1.25	8.67	55.42	-46.75	Average	P
6	0.16	9.92	26.02	35.94	65.42	-29.48	QP	P
7	0.18	9.92	-2.07	7.85	54.69	-46.84	Average	P
8	0.18	9.92	22.88	32.80	64.69	-31.89	QP	P
9	0.18	9.92	-2.59	7.33	54.33	-47.00	Average	P
10	0.18	9.92	22.18	32.10	64.33	-32.23	QP	P
11	0.21	9.92	-3.75	6.17	53.31	-47.14	Average	P
12	0.21	9.92	19.58	29.50	63.31	-33.81	QP	P

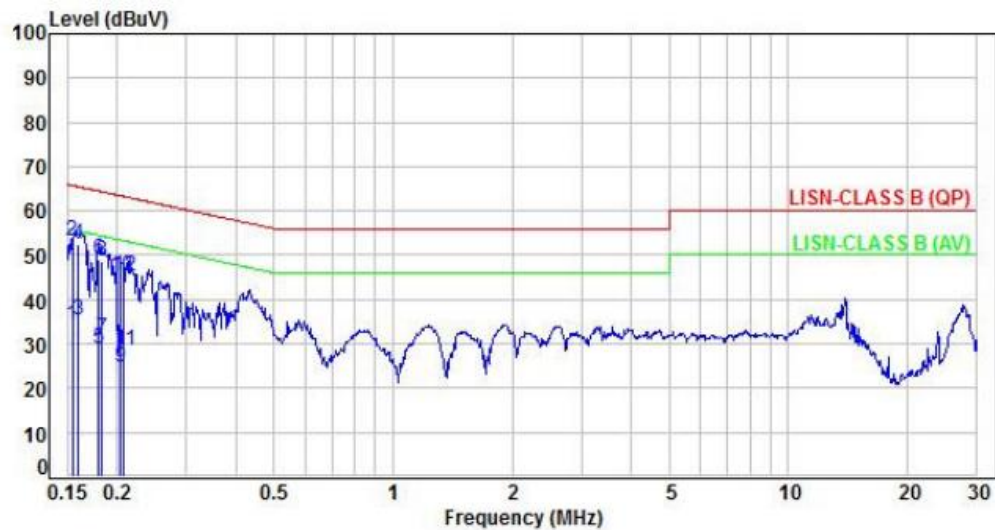
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=(LISN or ISN or Current Probe)Factor + Cable Loss



Power	:	From Outside POE (24V)	Pol/Phase	:	NEUTRAL
Test Mode	:	Mode 1, Band1		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.15	9.95	24.14	34.09	55.78	-21.69	Average	P
2	0.15	9.95	43.14	53.09	65.78	-12.69	QP	P
3	0.16	9.95	25.54	35.49	55.50	-20.01	Average	P
4	0.16	9.95	42.59	52.54	65.50	-12.96	QP	P
5	0.18	9.95	18.84	28.79	54.53	-25.74	Average	P
6	0.18	9.95	39.09	49.04	64.53	-15.49	QP	P
7	0.18	9.95	21.18	31.13	54.38	-23.25	Average	P
8	0.18	9.95	38.87	48.82	64.38	-15.56	QP	P
9	0.20	9.95	14.84	24.79	53.47	-28.68	Average	P
10	0.20	9.95	35.11	45.06	63.47	-18.41	QP	P
11	0.21	9.95	18.64	28.59	53.26	-24.67	Average	P
12	0.21	9.95	35.36	45.31	63.26	-17.95	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.

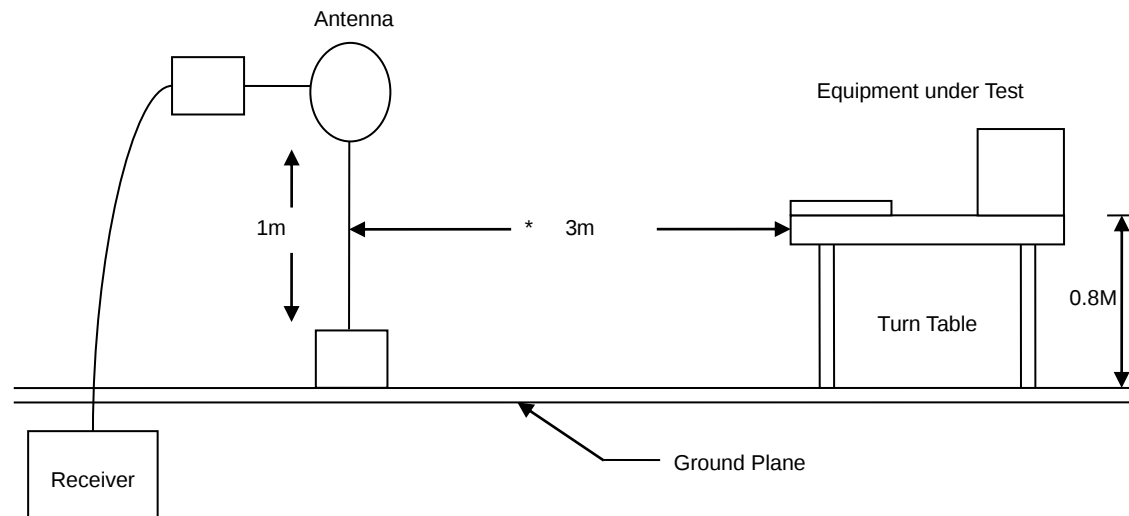
6.2. Test Procedures

- 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.

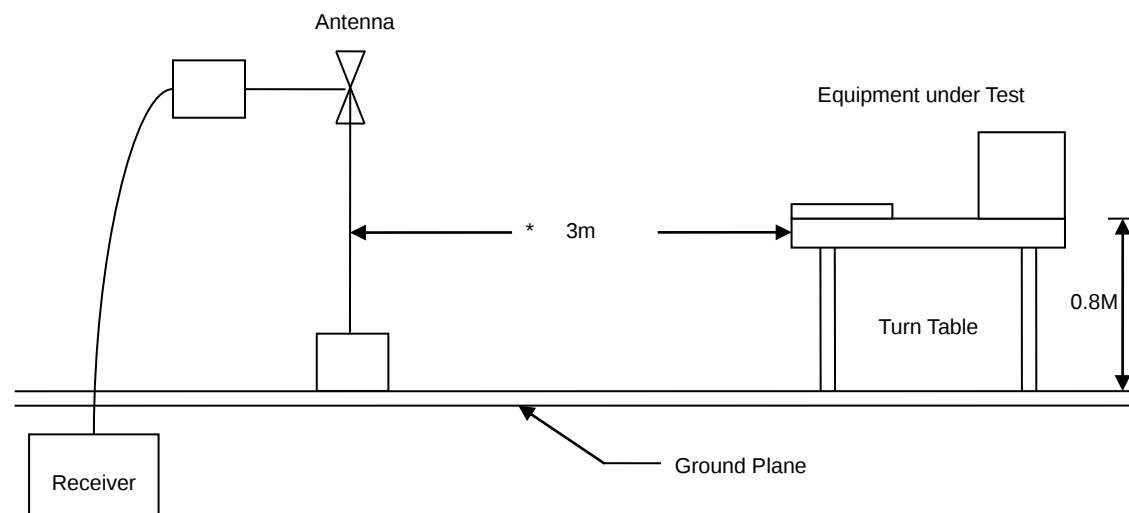


6.3. Typical Test Setup

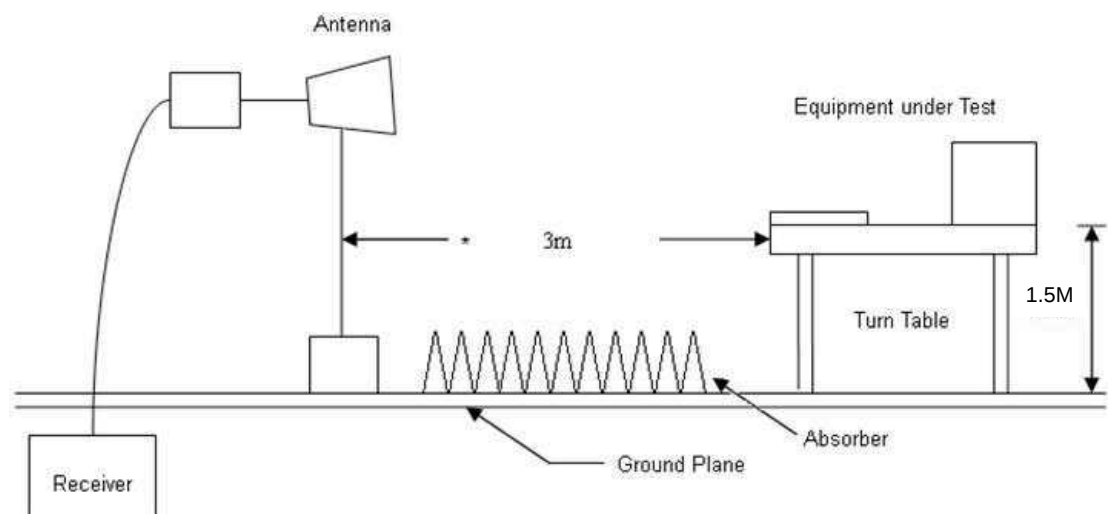
Below 30MHz test setup



30MHz- 1GHz Test Setup



Above 1GHz Test Setup



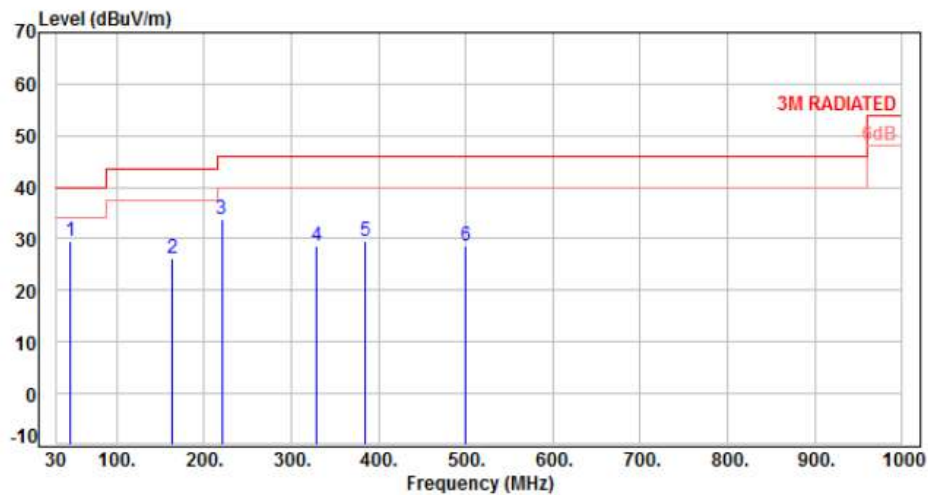


6.4. Test Result and Data (9kHz ~ 30MHz)

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

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

Power	:	From Outside POE (24V)	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	47.46	-9.30	38.80	29.50	40.00	-10.50	Peak	100	0	P
2	163.86	-9.50	35.83	26.33	43.50	-17.17	Peak	100	0	P
3	220.12	-11.93	45.66	33.73	46.00	-12.27	Peak	100	0	P
4	328.76	-7.53	36.18	28.65	46.00	-17.35	Peak	100	0	P
5	385.02	-6.06	35.67	29.61	46.00	-16.39	Peak	100	0	P
6	499.48	-3.59	32.35	28.76	46.00	-17.24	Peak	100	0	P

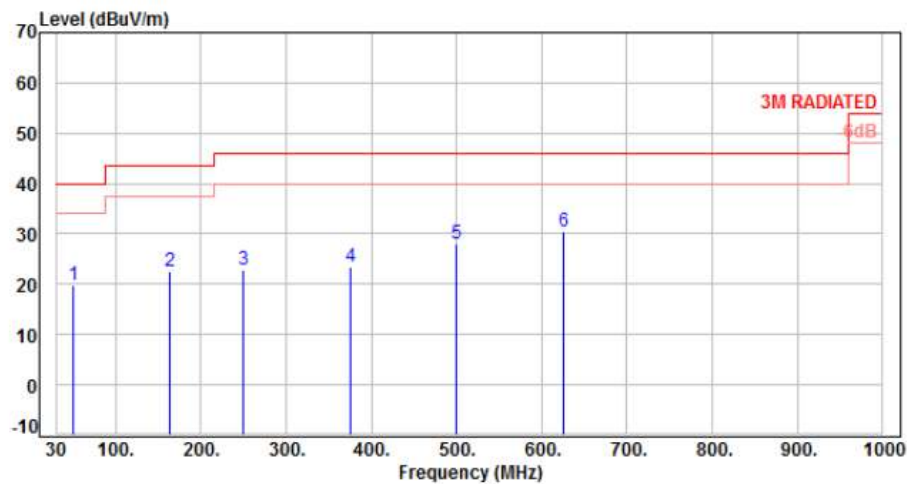
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From Outside POE (24V)	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	49.40	-9.34	29.24	19.90	40.00	-20.10	Peak	100	0	P
2	163.86	-9.50	32.10	22.60	43.50	-20.90	Peak	100	0	P
3	249.22	-10.32	33.20	22.88	46.00	-23.12	Peak	100	0	P
4	375.32	-6.30	29.89	23.59	46.00	-22.41	Peak	100	0	P
5	499.48	-3.59	31.57	27.98	46.00	-18.02	Peak	100	0	P
6	625.58	-0.71	31.15	30.44	46.00	-15.56	Peak	100	0	P

Note: Level=Reading+Factor

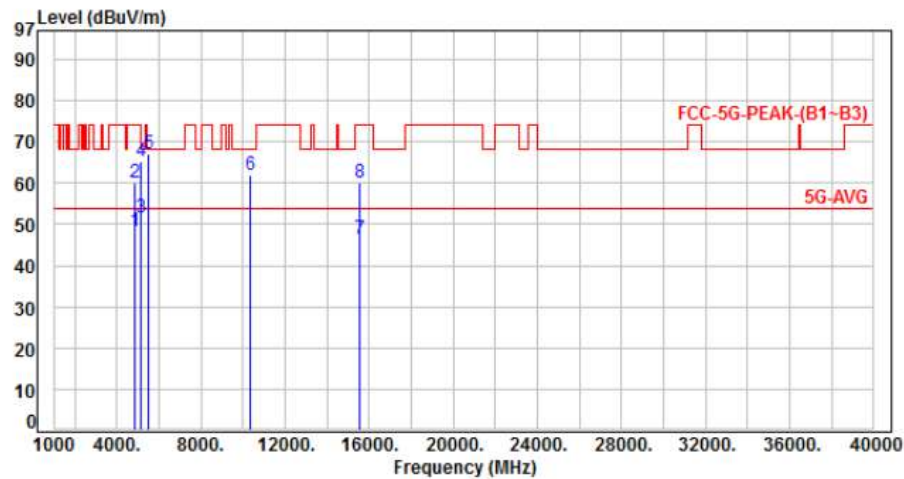
Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



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

Power	:	From Outside POE (24V)	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	4860.00	3.91	44.26	48.17	54.00	-5.83	Average	172	0	P
2	4860.00	3.91	56.18	60.09	74.00	-13.91	Peak	172	0	P
3	5150.00	4.73	46.85	51.58	54.00	-2.42	Average	172	0	P
4	5150.00	4.73	60.60	65.33	74.00	-8.67	Peak	172	0	P
5	5500.00	5.27	61.78	67.05	68.20	-1.15	Peak	172	0	P
6	10360.00	11.43	50.39	61.82	68.20	-6.38	Peak	100	176	P
7	15540.00	14.27	32.34	46.61	54.00	-7.39	Average	100	5	P
8	15540.00	14.27	45.81	60.08	74.00	-13.92	Peak	100	5	P

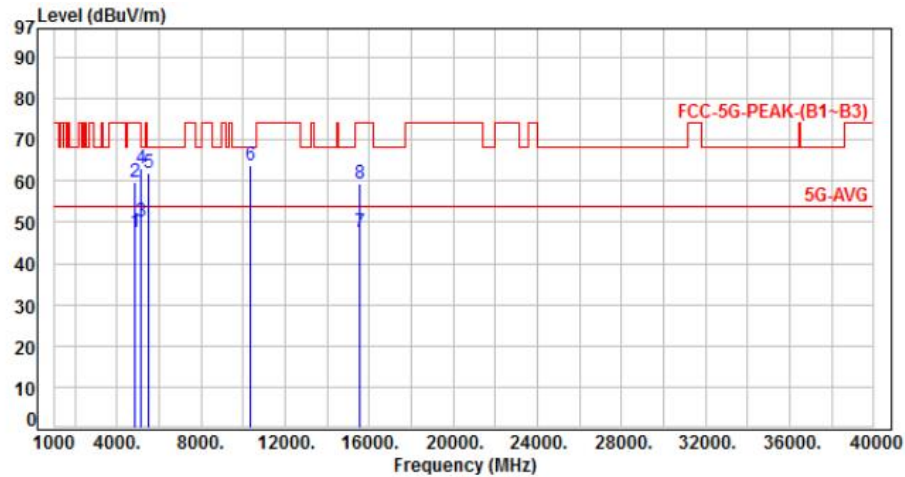
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From Outside POE (24V)	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	4860.00	3.91	43.51	47.42	54.00	-6.58	Average	168	0	P
2	4860.00	3.91	55.96	59.87	74.00	-14.13	Peak	168	0	P
3	5150.00	4.73	45.26	49.99	54.00	-4.01	Average	168	0	P
4	5150.00	4.73	58.40	63.13	74.00	-10.87	Peak	168	0	P
5	5500.00	5.27	56.52	61.79	68.20	-6.41	Peak	168	0	P
6	10360.00	11.43	52.50	63.93	68.20	-4.27	Peak	228	62	P
7	15540.00	14.27	33.23	47.50	54.00	-6.50	Average	203	12	P
8	15540.00	14.27	44.97	59.24	74.00	-14.76	Peak	203	12	P

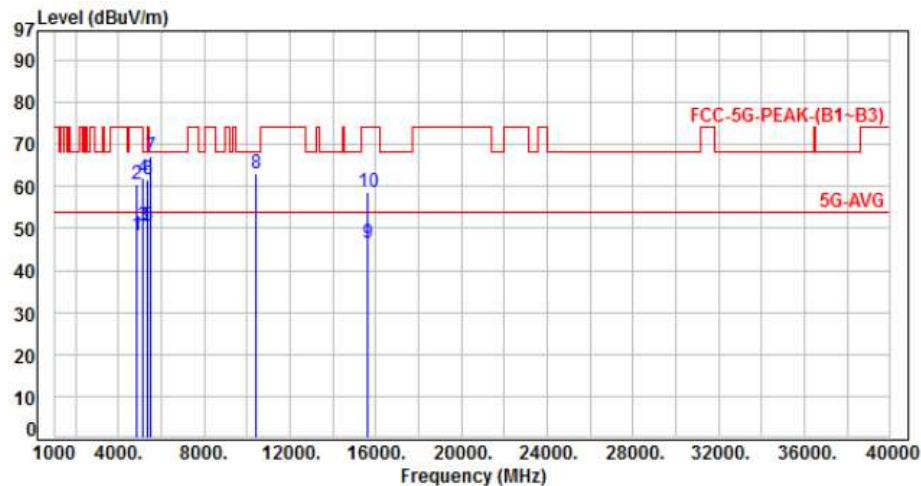
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From Outside POE (24V)	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	4880.00	3.97	44.50	48.47	54.00	-5.53	Average	170	0	P
2	4880.00	3.97	56.65	60.62	74.00	-13.38	Peak	170	0	P
3	5150.00	4.73	45.66	50.39	54.00	-3.61	Average	170	0	P
4	5150.00	4.73	57.30	62.03	74.00	-11.97	Peak	170	0	P
5	5350.00	5.07	45.34	50.41	54.00	-3.59	Average	170	0	P
6	5350.00	5.07	56.55	61.62	74.00	-12.38	Peak	170	0	P
7	5520.00	5.28	61.75	67.03	68.20	-1.17	Peak	170	0	P
8	10400.00	11.45	51.60	63.05	68.20	-5.15	Peak	100	174	P
9	15600.00	13.88	32.70	46.58	54.00	-7.42	Average	100	200	P
10	15600.00	13.88	44.80	58.68	74.00	-15.32	Peak	100	200	P

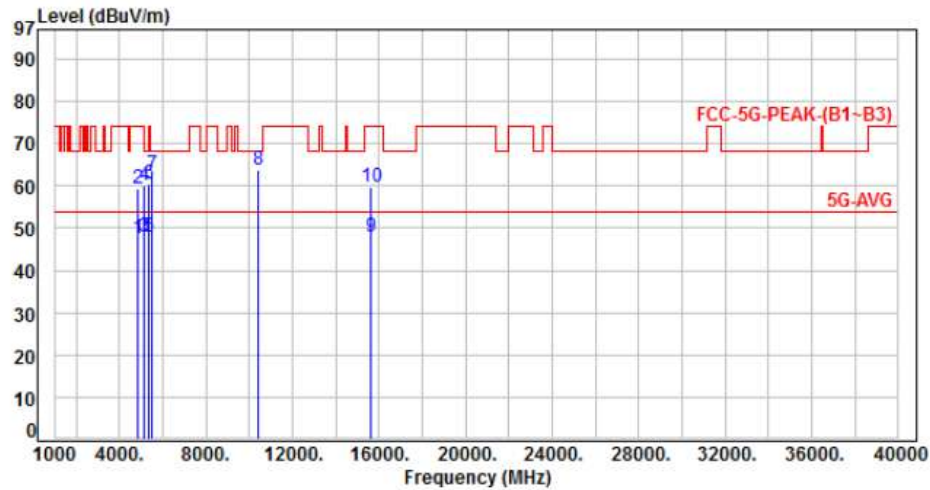
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From Outside POE (24V)	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	4880.00	3.97	43.52	47.49	54.00	-6.51	Average	174	0	P
2	4880.00	3.97	55.35	59.32	74.00	-14.68	Peak	174	0	P
3	5150.00	4.73	43.23	47.96	54.00	-6.04	Average	174	0	P
4	5150.00	4.73	55.46	60.19	74.00	-13.81	Peak	174	0	P
5	5350.00	5.07	43.03	48.10	54.00	-5.90	Average	174	0	P
6	5350.00	5.07	55.41	60.48	74.00	-13.52	Peak	174	0	P
7	5520.00	5.28	57.40	62.68	68.20	-5.52	Peak	174	0	P
8	10400.00	11.45	52.53	63.98	68.20	-4.22	Peak	220	66	P
9	15600.00	13.88	34.21	48.09	54.00	-5.91	Average	212	5	P
10	15600.00	13.88	45.90	59.78	74.00	-14.22	Peak	212	5	P

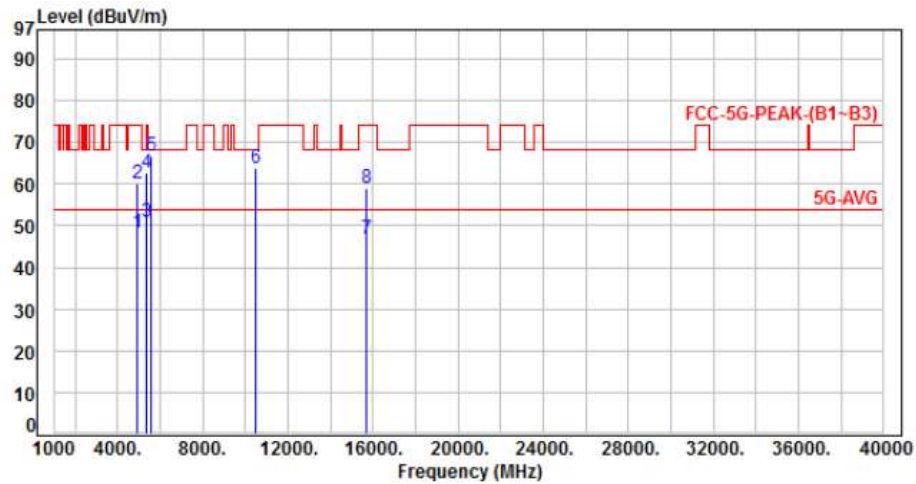
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From Outside POE (24V)	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	4920.00	4.09	44.22	48.31	54.00	-5.69	Average	172	0	P
2	4920.00	4.09	56.08	60.17	74.00	-13.83	Peak	172	0	P
3	5350.00	5.07	45.67	50.74	54.00	-3.26	Average	172	0	P
4	5350.00	5.07	57.50	62.57	74.00	-11.43	Peak	172	0	P
5	5560.00	5.29	61.55	66.84	68.20	-1.36	Peak	172	0	P
6	10480.00	11.65	52.26	63.91	68.20	-4.29	Peak	100	175	P
7	15720.00	13.60	33.41	47.01	54.00	-6.99	Average	100	196	P
8	15720.00	13.60	45.56	59.16	74.00	-14.84	Peak	100	196	P

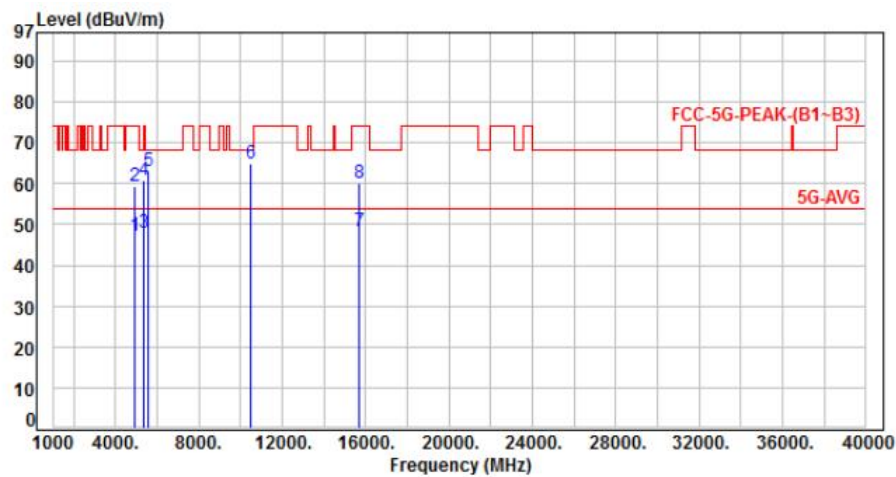
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From Outside POE (24V)	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	4920.00	4.09	43.27	47.36	54.00	-6.64	Average	166	0	P
2	4920.00	4.09	55.28	59.37	74.00	-14.63	Peak	166	0	P
3	5350.00	5.07	42.74	47.81	54.00	-6.19	Average	166	0	P
4	5350.00	5.07	55.66	60.73	74.00	-13.27	Peak	166	0	P
5	5560.00	5.29	57.64	62.93	68.20	-5.27	Peak	166	0	P
6	10480.00	11.65	53.22	64.87	68.20	-3.33	Peak	223	70	P
7	15720.00	13.60	34.66	48.26	54.00	-5.74	Average	206	6	P
8	15720.00	13.60	46.38	59.98	74.00	-14.02	Peak	206	6	P

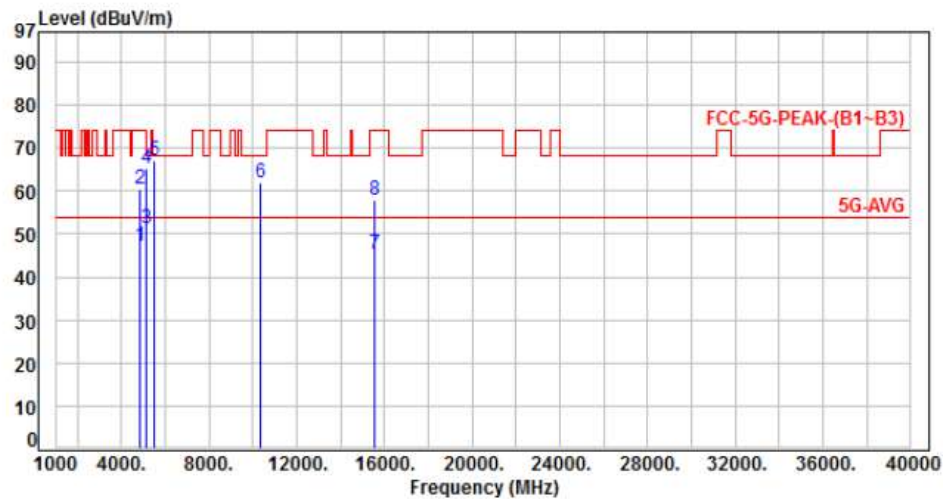
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From Outside POE (24V)	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	4860.00	3.91	43.23	47.14	54.00	-6.86	Average	173	0	P
2	4860.00	3.91	56.60	60.51	74.00	-13.49	Peak	173	0	P
3	5150.00	4.73	46.42	51.15	54.00	-2.85	Average	173	0	P
4	5150.00	4.73	60.73	65.46	74.00	-8.54	Peak	173	0	P
5	5500.00	5.27	61.69	66.96	68.20	-1.24	Peak	173	0	P
6	10360.00	11.43	50.53	61.96	68.20	-6.24	Peak	100	174	P
7	15540.00	14.27	31.22	45.49	54.00	-8.51	Average	100	197	P
8	15540.00	14.27	43.73	58.00	74.00	-16.00	Peak	100	197	P

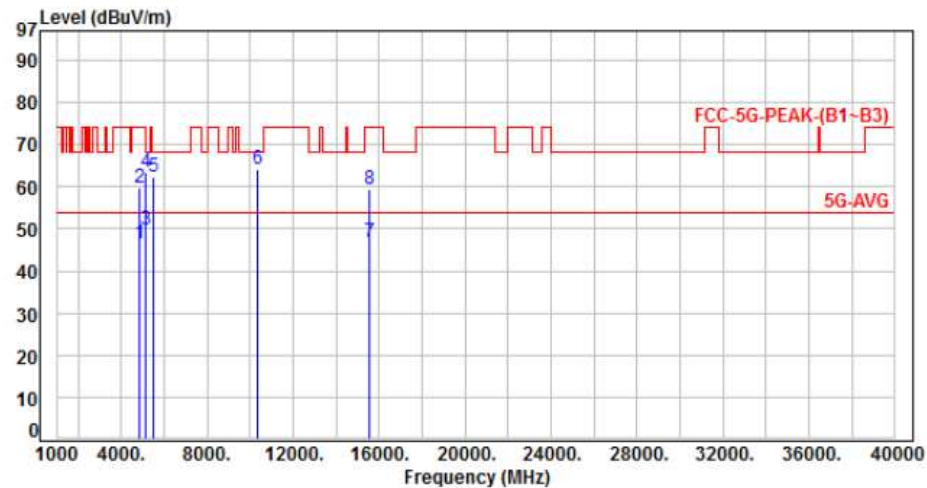
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From Outside POE (24V)	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	4860.00	3.91	42.68	46.59	54.00	-7.41	Average	166	0	P
2	4860.00	3.91	55.70	59.61	74.00	-14.39	Peak	166	0	P
3	5150.00	4.73	45.12	49.85	54.00	-4.15	Average	166	0	P
4	5150.00	4.73	58.60	63.33	74.00	-10.67	Peak	166	0	P
5	5500.00	5.27	57.17	62.44	68.20	-5.76	Peak	166	0	P
6	10360.00	11.43	52.91	64.34	68.20	-3.86	Peak	226	71	P
7	15540.00	14.27	32.46	46.73	54.00	-7.27	Average	198	9	P
8	15540.00	14.27	45.28	59.55	74.00	-14.45	Peak	198	9	P

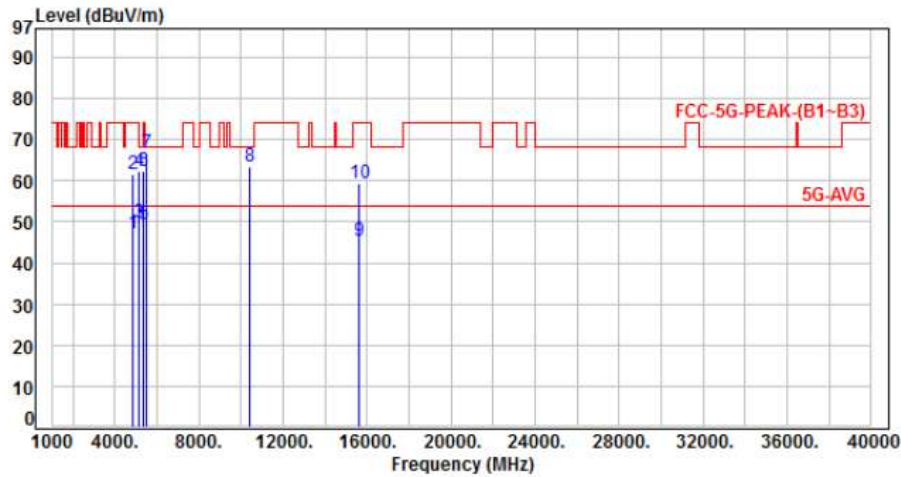
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From Outside POE (24V)	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	4880.00	3.97	43.41	47.38	54.00	-6.62	Average	174	0	P
2	4880.00	3.97	57.45	61.42	74.00	-12.58	Peak	174	0	P
3	5150.00	4.73	44.90	49.63	54.00	-4.37	Average	174	0	P
4	5150.00	4.73	57.66	62.39	74.00	-11.61	Peak	174	0	P
5	5350.00	5.07	44.48	49.55	54.00	-4.45	Average	174	0	P
6	5350.00	5.07	57.08	62.15	74.00	-11.85	Peak	174	0	P
7	5520.00	5.28	61.64	66.92	68.20	-1.28	Peak	174	0	P
8	10400.00	11.45	51.96	63.41	68.20	-4.79	Peak	100	170	P
9	15600.00	13.88	31.66	45.54	54.00	-8.46	Average	100	203	P
10	15600.00	13.88	45.39	59.27	74.00	-14.73	Peak	100	203	P

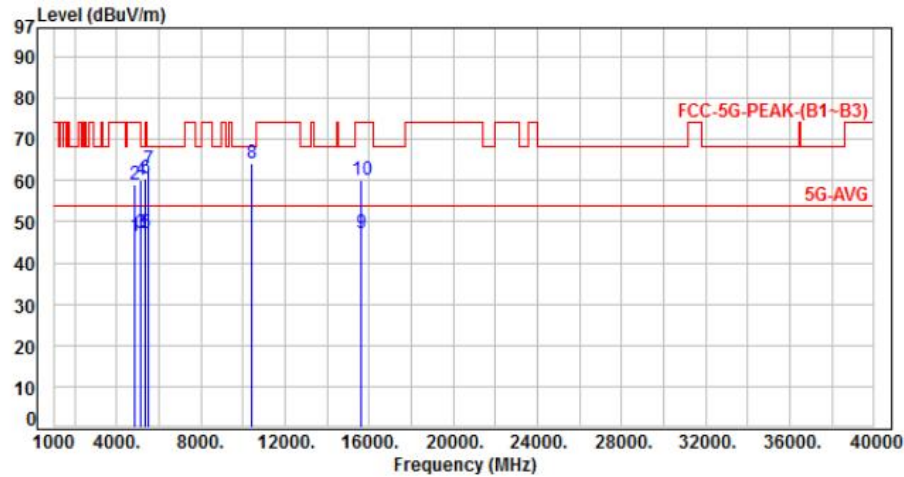
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From Outside POE (24V)	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	4880.00	3.97	42.53	46.50	54.00	-7.50	Average	167	0	P
2	4880.00	3.97	54.90	58.87	74.00	-15.13	Peak	167	0	P
3	5150.00	4.73	42.56	47.29	54.00	-6.71	Average	167	0	P
4	5150.00	4.73	55.49	60.22	74.00	-13.78	Peak	167	0	P
5	5350.00	5.07	42.22	47.29	54.00	-6.71	Average	167	0	P
6	5350.00	5.07	55.50	60.57	74.00	-13.43	Peak	167	0	P
7	5520.00	5.28	57.60	62.88	68.20	-5.32	Peak	167	0	P
8	10400.00	11.45	52.79	64.24	68.20	-3.96	Peak	216	65	P
9	15600.00	13.88	33.17	47.05	54.00	-6.95	Average	210	9	P
10	15600.00	13.88	46.41	60.29	74.00	-13.71	Peak	210	9	P

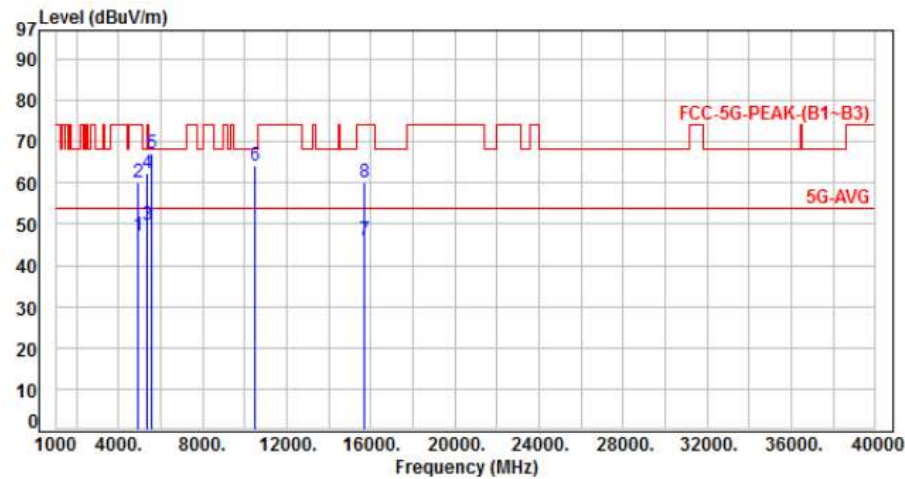
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From Outside POE (24V)	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	4920.00	4.09	43.04	47.13	54.00	-6.87	Average	175	0	P
2	4920.00	4.09	55.86	59.95	74.00	-14.05	Peak	175	0	P
3	5350.00	5.07	44.80	49.87	54.00	-4.13	Average	175	0	P
4	5350.00	5.07	57.41	62.48	74.00	-11.52	Peak	175	0	P
5	5560.00	5.29	61.71	67.00	68.20	-1.20	Peak	175	0	P
6	10480.00	11.65	52.59	64.24	68.20	-3.96	Peak	100	172	P
7	15720.00	13.60	32.39	45.99	54.00	-8.01	Average	100	203	P
8	15720.00	13.60	46.35	59.95	74.00	-14.05	Peak	100	203	P

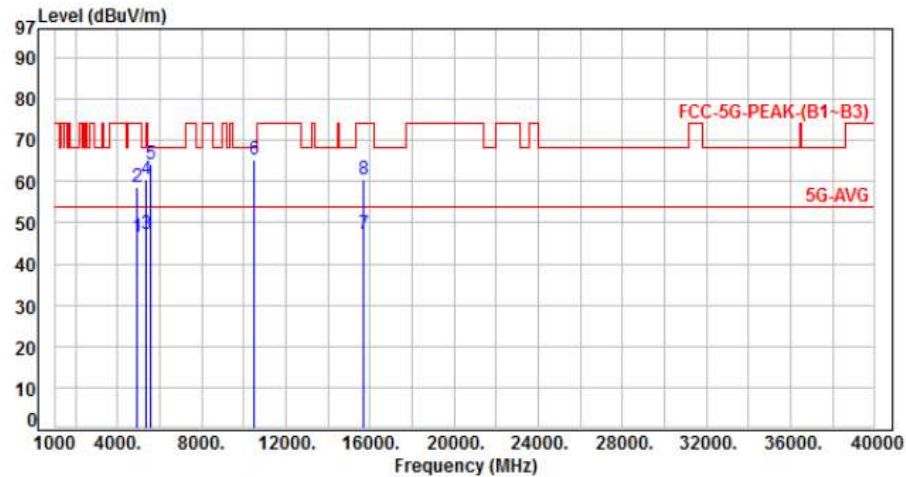
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From Outside POE (24V)	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	4920.00	4.09	42.53	46.62	54.00	-7.38	Average	162	0	P
2	4920.00	4.09	54.48	58.57	74.00	-15.43	Peak	162	0	P
3	5350.00	5.07	41.97	47.04	54.00	-6.96	Average	162	0	P
4	5350.00	5.07	55.38	60.45	74.00	-13.55	Peak	162	0	P
5	5560.00	5.29	58.70	63.99	68.20	-4.21	Peak	162	0	P
6	10480.00	11.65	53.51	65.16	68.20	-3.04	Peak	221	68	P
7	15720.00	13.60	33.73	47.33	54.00	-6.67	Average	203	3	P
8	15720.00	13.60	46.87	60.47	74.00	-13.53	Peak	203	3	P

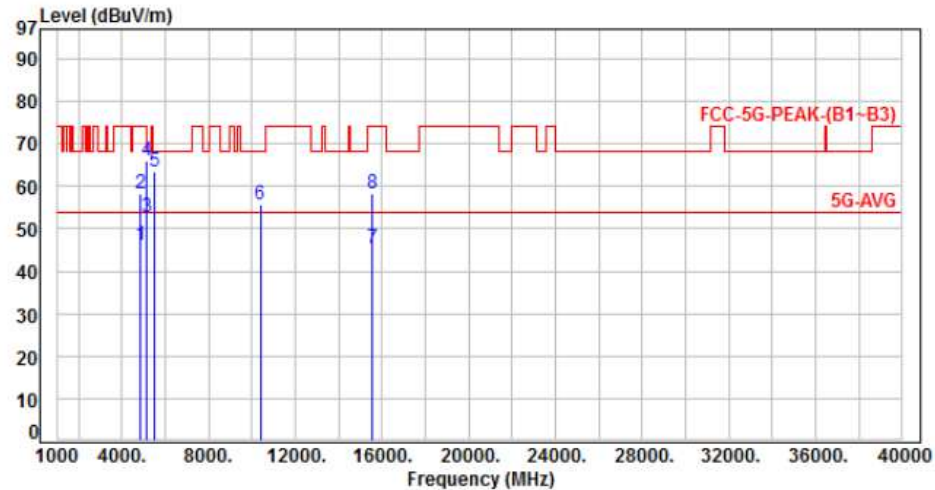
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From Outside POE (24V)	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	4870.00	3.94	42.03	45.97	54.00	-8.03	Average	176	0	P
2	4870.00	3.94	54.40	58.34	74.00	-15.66	Peak	176	0	P
3	5150.00	4.73	48.18	52.91	54.00	-1.09	Average	176	0	P
4	5150.00	4.73	61.35	66.08	74.00	-7.92	Peak	176	0	P
5	5510.00	5.28	58.12	63.40	68.20	-4.80	Peak	176	0	P
6	10380.00	11.44	44.26	55.70	68.20	-12.50	Peak	100	170	P
7	15570.00	14.07	31.17	45.24	54.00	-8.76	Average	100	11	P
8	15570.00	14.07	44.35	58.42	74.00	-15.58	Peak	100	11	P

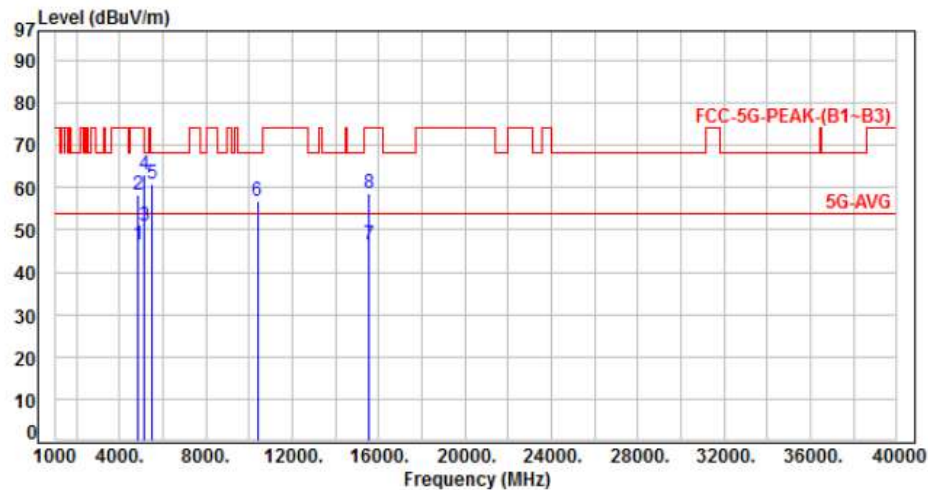
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From Outside POE (24V)	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	4870.00	3.94	42.57	46.51	54.00	-7.49	Average	163	0	P
2	4870.00	3.94	54.48	58.42	74.00	-15.58	Peak	163	0	P
3	5150.00	4.73	46.06	50.79	54.00	-3.21	Average	163	0	P
4	5150.00	4.73	58.21	62.94	74.00	-11.06	Peak	163	0	P
5	5510.00	5.28	55.47	60.75	68.20	-7.45	Peak	163	0	P
6	10380.00	11.44	45.45	56.89	68.20	-11.31	Peak	232	67	P
7	15570.00	14.07	32.34	46.41	54.00	-7.59	Average	202	16	P
8	15570.00	14.07	44.73	58.80	74.00	-15.20	Peak	202	16	P

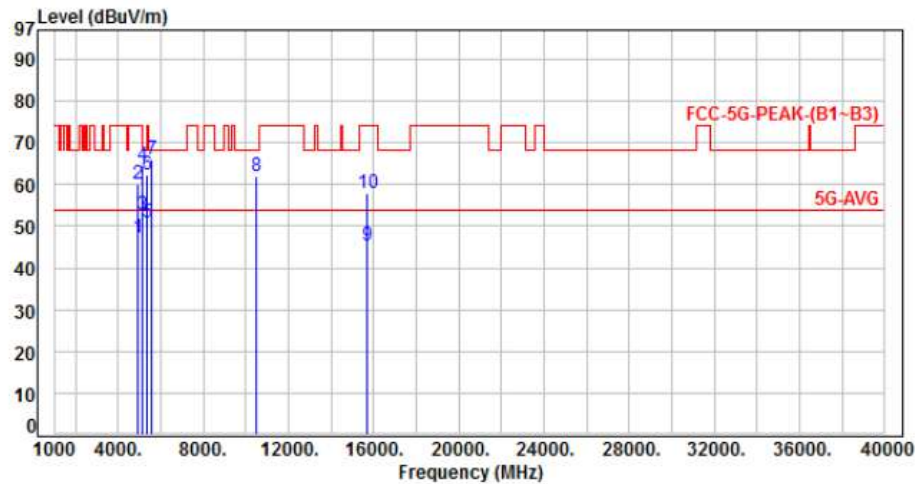
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From Outside POE (24V)	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	4910.00	4.06	43.22	47.28	54.00	-6.72	Average	177	0	P
2	4910.00	4.06	56.20	60.26	74.00	-13.74	Peak	177	0	P
3	5150.00	4.73	48.13	52.86	54.00	-1.14	Average	177	0	P
4	5150.00	4.73	59.80	64.53	74.00	-9.47	Peak	177	0	P
5	5350.00	5.07	45.74	50.81	54.00	-3.19	Average	177	0	P
6	5350.00	5.07	57.41	62.48	74.00	-11.52	Peak	177	0	P
7	5550.00	5.30	60.65	65.95	68.20	-2.25	Peak	179	0	P
8	10460.00	11.60	50.22	61.82	68.20	-6.38	Peak	100	173	P
9	15690.00	13.64	31.81	45.45	54.00	-8.55	Average	100	203	P
10	15690.00	13.64	44.21	57.85	74.00	-16.15	Peak	100	203	P

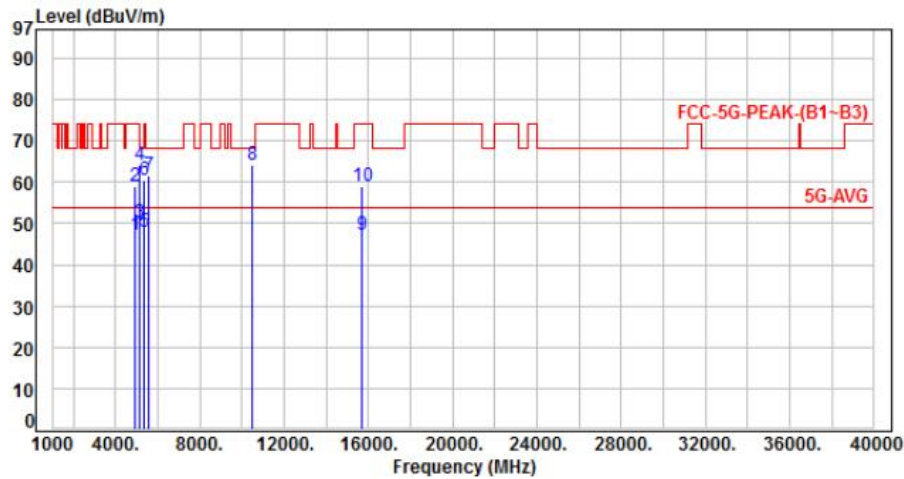
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From Outside POE (24V)	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	4910.00	4.06	43.08	47.14	54.00	-6.86	Average	160	0	P
2	4910.00	4.06	54.85	58.91	74.00	-15.09	Peak	160	0	P
3	5150.00	4.73	45.61	50.34	54.00	-3.66	Average	160	0	P
4	5150.00	4.73	59.42	64.15	74.00	-9.85	Peak	160	0	P
5	5350.00	5.07	42.94	48.01	54.00	-5.99	Average	160	0	P
6	5350.00	5.07	55.51	60.58	74.00	-13.42	Peak	160	0	P
7	5550.00	5.30	56.45	61.75	68.20	-6.45	Peak	160	0	P
8	10460.00	11.60	52.70	64.30	68.20	-3.90	Peak	233	66	P
9	15690.00	13.64	33.52	47.16	54.00	-6.84	Average	204	22	P
10	15690.00	13.64	45.55	59.19	74.00	-14.81	Peak	204	22	P

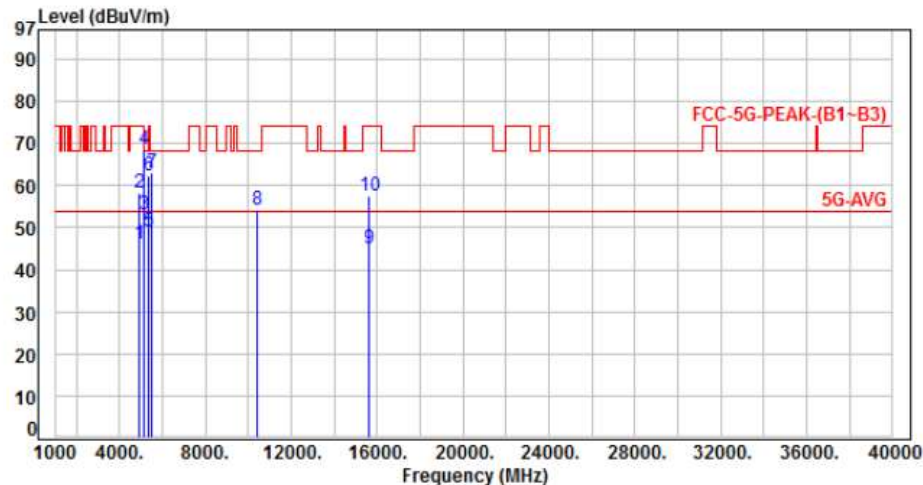
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From Outside POE (24V)	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	4890.00	4.00	41.92	45.92	54.00	-8.08	Average	174	0	P
2	4890.00	4.00	54.34	58.34	74.00	-15.66	Peak	174	0	P
3	5150.00	4.73	48.21	52.94	54.00	-1.06	Average	174	0	P
4	5150.00	4.73	63.97	68.70	74.00	-5.30	Peak	174	0	P
5	5350.00	5.07	43.88	48.95	54.00	-5.05	Average	174	0	P
6	5350.00	5.07	57.28	62.35	74.00	-11.65	Peak	174	0	P
7	5530.00	5.29	57.60	62.89	68.20	-5.31	Peak	174	0	P
8	10420.00	11.49	42.87	54.36	68.20	-13.84	Peak	100	165	P
9	15630.00	13.80	31.34	45.14	54.00	-8.86	Average	100	16	P
10	15630.00	13.80	43.71	57.51	74.00	-16.49	Peak	100	16	P

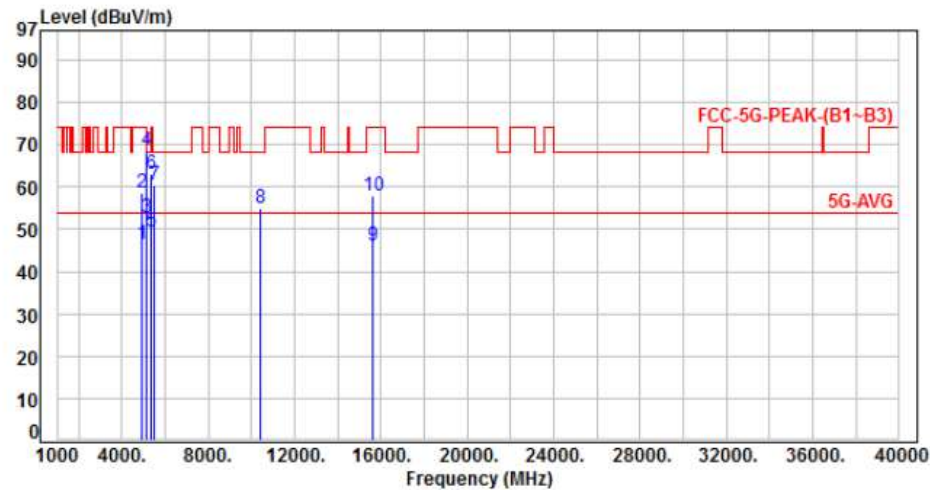
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From Outside POE (24V)	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	4890.00	4.00	42.34	46.34	54.00	-7.66	Average	163	0	P
2	4890.00	4.00	54.58	58.58	74.00	-15.42	Peak	163	0	P
3	5150.00	4.73	48.02	52.75	54.00	-1.25	Average	163	0	P
4	5150.00	4.73	63.75	68.48	74.00	-5.52	Peak	163	0	P
5	5350.00	5.07	44.22	49.29	54.00	-4.71	Average	163	0	P
6	5350.00	5.07	57.93	63.00	74.00	-11.00	Peak	163	0	P
7	5530.00	5.29	55.06	60.35	68.20	-7.85	Peak	163	0	P
8	10420.00	11.49	43.37	54.86	68.20	-13.34	Peak	230	62	P
9	15630.00	13.80	32.29	46.09	54.00	-7.91	Average	206	12	P
10	15630.00	13.80	43.93	57.73	74.00	-16.27	Peak	206	12	P

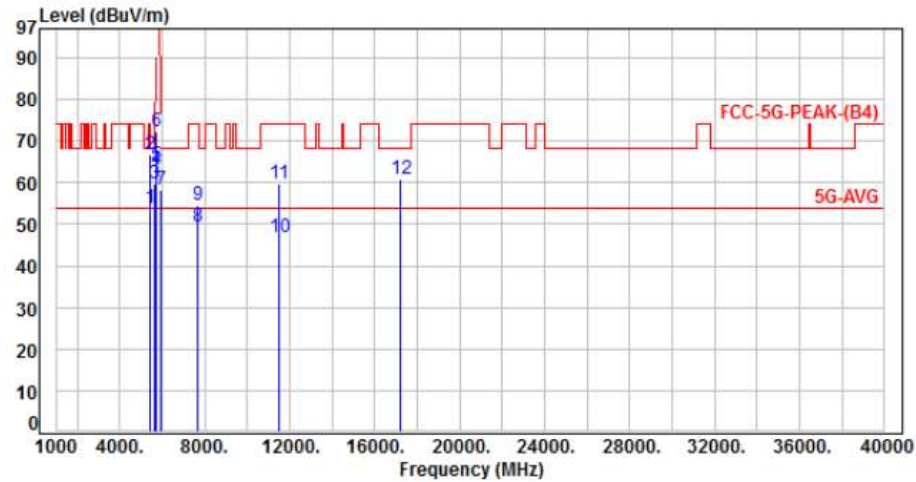
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From Outside POE (24V)	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	5425.00	5.22	48.64	53.86	54.00	-0.14	Average	171	0	P
2	5425.00	5.22	61.40	66.62	74.00	-7.38	Peak	171	0	P
3	5650.00	5.25	54.51	59.76	68.20	-8.44	Peak	171	0	P
4	5700.00	5.18	57.96	63.14	105.20	-42.06	Peak	171	0	P
5	5720.00	5.19	59.02	64.21	110.80	-46.59	Peak	171	0	P
6	5725.00	5.19	67.14	72.33	122.20	-49.87	Peak	171	0	P
7	5925.00	5.60	52.51	58.11	68.20	-10.09	Peak	171	0	P
8	7660.00	8.84	40.66	49.50	54.00	-4.50	Average	133	153	P
9	7660.00	8.84	45.57	54.41	74.00	-19.59	Peak	133	153	P
10	11490.00	13.16	33.70	46.86	54.00	-7.14	Average	100	166	P
11	11490.00	13.16	46.74	59.90	74.00	-14.10	Peak	100	166	P
12	17235.00	19.21	41.74	60.95	68.20	-7.25	Peak	100	25	P

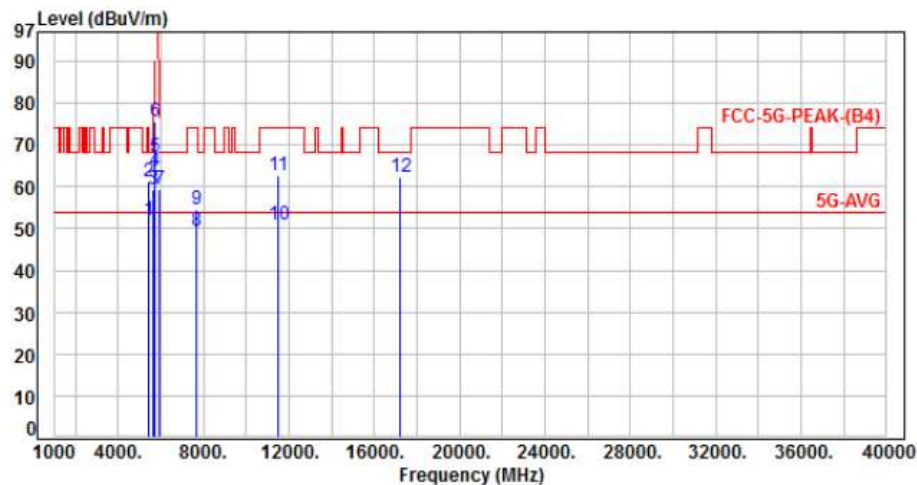
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From Outside POE (24V)	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	5425.00	5.22	46.70	51.92	54.00	-2.08	Average	158	0	P
2	5425.00	5.22	56.06	61.28	74.00	-12.72	Peak	158	0	P
3	5650.00	5.25	54.31	59.56	68.20	-8.64	Peak	158	0	P
4	5700.00	5.18	58.59	63.77	105.20	-41.43	Peak	158	0	P
5	5720.00	5.19	61.98	67.17	110.80	-43.63	Peak	158	0	P
6	5725.00	5.19	70.36	75.55	122.20	-46.65	Peak	158	0	P
7	5925.00	5.60	53.75	59.35	68.20	-8.85	Peak	158	0	P
8	7660.00	8.84	40.67	49.51	54.00	-4.49	Average	100	246	P
9	7660.00	8.84	45.89	54.73	74.00	-19.27	Peak	100	246	P
10	11490.00	13.16	37.59	50.75	54.00	-3.25	Average	212	155	P
11	11490.00	13.16	49.69	62.85	74.00	-11.15	Peak	212	155	P
12	17235.00	19.21	43.17	62.38	68.20	-5.82	Peak	100	235	P

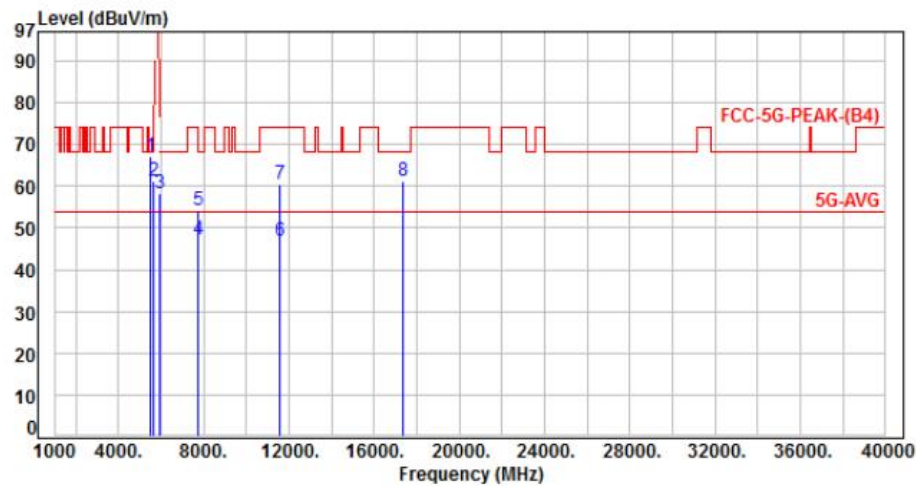
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From Outside POE (24V)	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	5465.00	5.32	61.80	67.12	68.20	-1.08	Peak	166	0	P
2	5650.00	5.25	56.04	61.29	68.20	-6.91	Peak	166	0	P
3	5925.00	5.60	52.78	58.38	68.20	-9.82	Peak	166	0	P
4	7713.00	8.89	38.39	47.28	54.00	-6.72	Average	135	158	P
5	7713.00	8.89	45.14	54.03	74.00	-19.97	Peak	135	158	P
6	11570.00	13.44	33.50	46.94	54.00	-7.06	Average	100	177	P
7	11570.00	13.44	47.17	60.61	74.00	-13.39	Peak	100	177	P
8	17355.00	19.83	41.46	61.29	68.20	-6.91	Peak	100	31	P

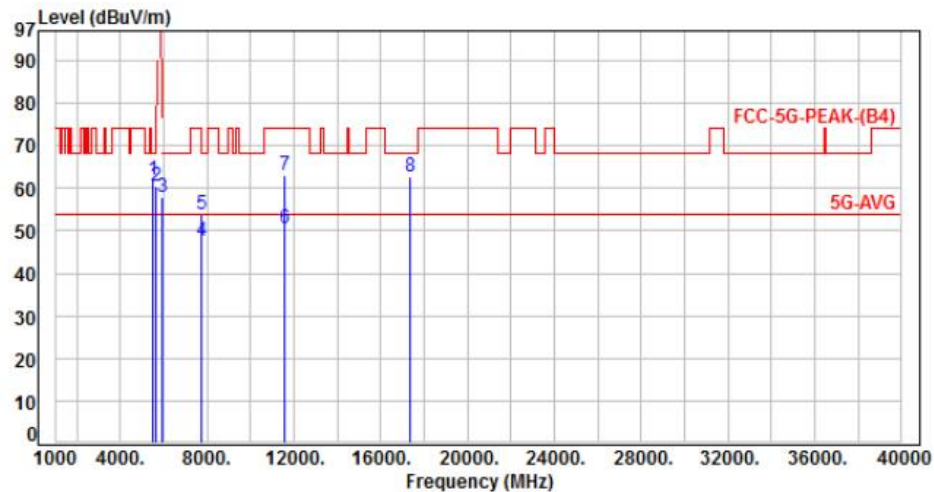
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From Outside POE (24V)	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	5465.00	5.32	56.56	61.88	68.20	-6.32	Peak	155	0	P
2	5650.00	5.25	55.23	60.48	68.20	-7.72	Peak	155	0	P
3	5925.00	5.60	52.31	57.91	68.20	-10.29	Peak	155	0	P
4	7713.00	8.89	38.59	47.48	54.00	-6.52	Average	100	243	P
5	7713.00	8.89	44.89	53.78	74.00	-20.22	Peak	100	243	P
6	11570.00	13.44	37.08	50.52	54.00	-3.48	Average	202	160	P
7	11570.00	13.44	49.62	63.06	74.00	-10.94	Peak	202	160	P
8	17355.00	19.83	42.79	62.62	68.20	-5.58	Peak	100	239	P

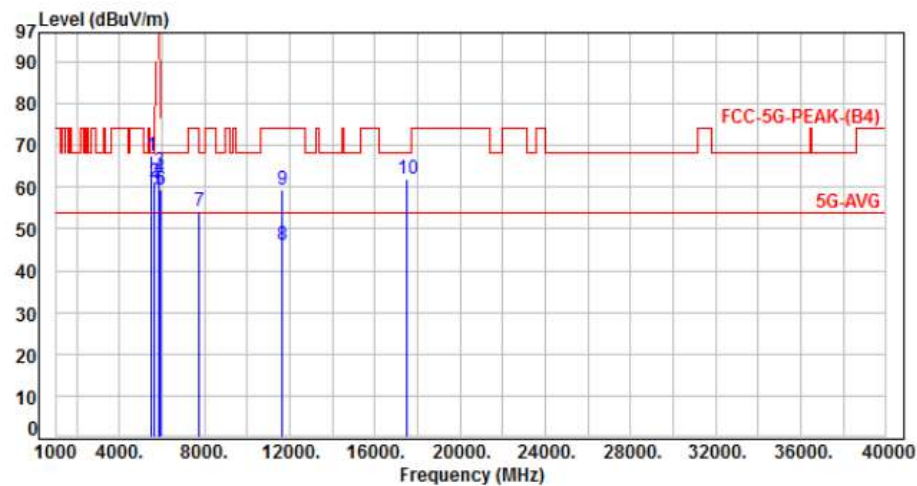
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From Outside POE (24V)	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	5505.00	5.27	62.25	67.52	68.20	-0.68	Peak	176	0	P
2	5650.00	5.25	55.92	61.17	68.20	-7.03	Peak	176	0	P
3	5850.00	5.37	58.31	63.68	122.20	-58.52	Peak	176	0	P
4	5855.00	5.39	56.85	62.24	110.80	-48.56	Peak	176	0	P
5	5875.00	5.47	53.77	59.24	105.20	-45.96	Peak	176	0	P
6	5925.00	5.60	53.64	59.24	68.20	-8.96	Peak	176	0	P
7	7766.00	8.97	45.20	54.17	68.20	-14.03	Peak	128	193	P
8	11650.00	13.60	32.62	46.22	54.00	-7.78	Average	100	177	P
9	11650.00	13.60	45.75	59.35	74.00	-14.65	Peak	100	177	P
10	17475.00	20.67	41.28	61.95	68.20	-6.25	Peak	100	35	P

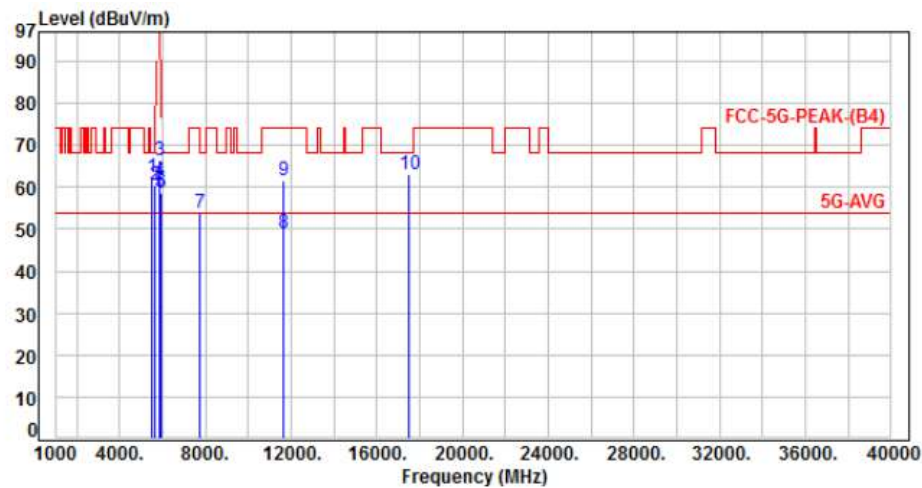
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From Outside POE (24V)	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	5505.00	5.27	56.98	62.25	68.20	-5.95	Peak	155	0	P
2	5650.00	5.25	55.36	60.61	68.20	-7.59	Peak	155	0	P
3	5850.00	5.37	60.94	66.31	122.20	-55.89	Peak	155	0	P
4	5855.00	5.39	56.20	61.59	110.80	-49.21	Peak	155	0	P
5	5875.00	5.47	53.67	59.14	105.20	-46.06	Peak	155	0	P
6	5925.00	5.60	53.09	58.69	68.20	-9.51	Peak	155	0	P
7	7766.00	8.97	44.92	53.89	68.20	-14.31	Peak	187	216	P
8	11650.00	13.60	35.45	49.05	54.00	-4.95	Average	152	197	P
9	11650.00	13.60	47.97	61.57	74.00	-12.43	Peak	152	197	P
10	17475.00	20.67	42.49	63.16	68.20	-5.04	Peak	100	215	P

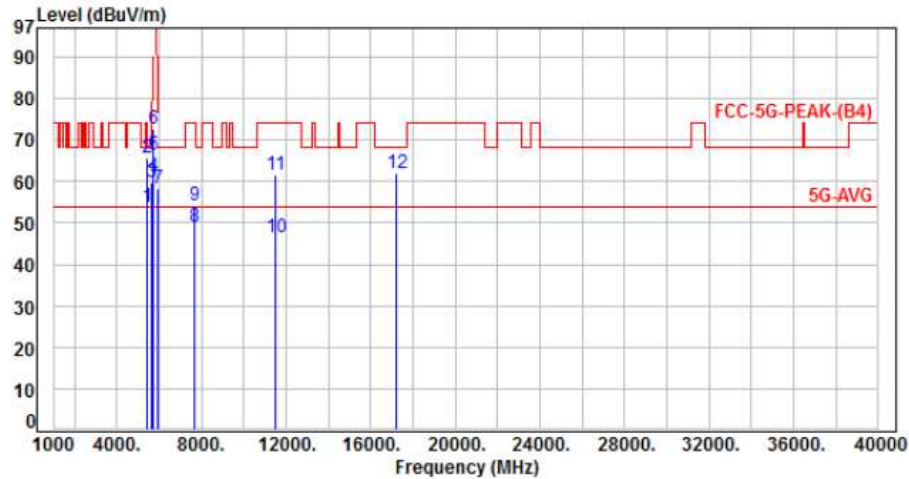
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From Outside POE (24V)	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	5425.00	5.22	48.56	53.78	54.00	-0.22	Average	176	0	P
2	5425.00	5.22	60.54	65.76	74.00	-8.24	Peak	176	0	P
3	5650.00	5.25	54.58	59.83	68.20	-8.37	Peak	176	0	P
4	5700.00	5.18	56.05	61.23	105.20	-43.97	Peak	176	0	P
5	5720.00	5.19	61.27	66.46	110.80	-44.34	Peak	176	0	P
6	5725.00	5.19	67.34	72.53	122.20	-49.67	Peak	176	0	P
7	5925.00	5.60	52.56	58.16	68.20	-10.04	Peak	176	0	P
8	7660.00	8.84	40.14	48.98	54.00	-5.02	Average	123	164	P
9	7660.00	8.84	45.33	54.17	74.00	-19.83	Peak	123	164	P
10	11490.00	13.16	33.29	46.45	54.00	-7.55	Average	100	177	P
11	11490.00	13.16	48.35	61.51	74.00	-12.49	Peak	100	177	P
12	17235.00	19.21	42.66	61.87	68.20	-6.33	Peak	100	28	P

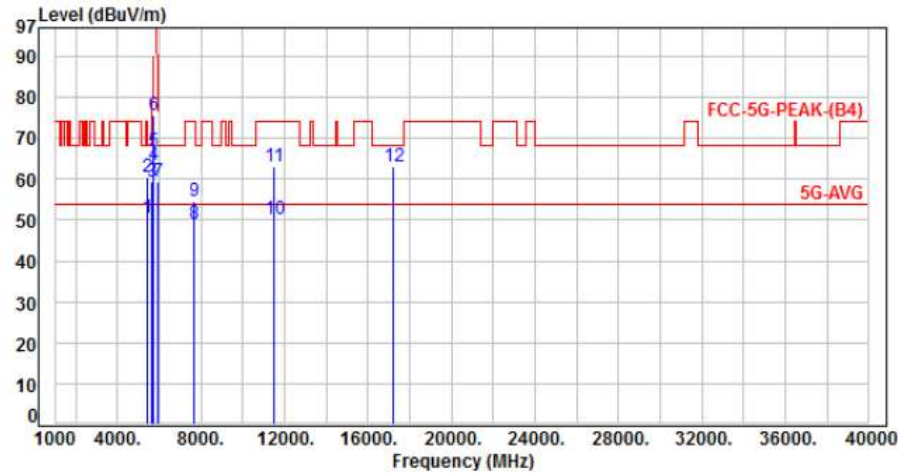
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From Outside POE (24V)	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	5425.00	5.22	45.42	50.64	54.00	-3.36	Average	156	0	P
2	5425.00	5.22	55.16	60.38	74.00	-13.62	Peak	156	0	P
3	5650.00	5.25	54.26	59.51	68.20	-8.69	Peak	156	0	P
4	5700.00	5.18	58.39	63.57	105.20	-41.63	Peak	156	0	P
5	5720.00	5.19	61.74	66.93	110.80	-43.87	Peak	156	0	P
6	5725.00	5.19	70.59	75.78	122.20	-46.42	Peak	156	0	P
7	5925.00	5.60	53.67	59.27	68.20	-8.93	Peak	156	0	P
8	7660.00	8.84	40.09	48.93	54.00	-5.07	Average	100	243	P
9	7660.00	8.84	45.72	54.56	74.00	-19.44	Peak	100	243	P
10	11490.00	13.16	37.15	50.31	54.00	-3.69	Average	206	161	P
11	11490.00	13.16	49.94	63.10	74.00	-10.90	Peak	206	161	P
12	17235.00	19.21	43.88	63.09	68.20	-5.11	Peak	100	230	P

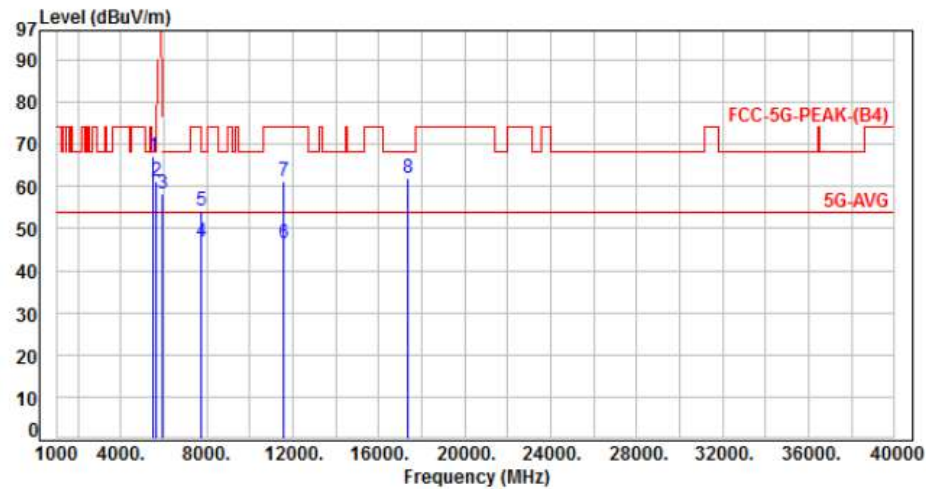
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From Outside POE (24V)	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	5465.00	5.32	61.68	67.00	68.20	-1.20	Peak	185	0	P
2	5650.00	5.25	55.89	61.14	68.20	-7.06	Peak	185	0	P
3	5925.00	5.60	52.69	58.29	68.20	-9.91	Peak	185	0	P
4	7713.00	8.89	38.05	46.94	54.00	-7.06	Average	131	163	P
5	7713.00	8.89	45.20	54.09	74.00	-19.91	Peak	131	163	P
6	11570.00	13.44	33.19	46.63	54.00	-7.37	Average	100	175	P
7	11570.00	13.44	47.85	61.29	74.00	-12.71	Peak	100	175	P
8	17355.00	19.83	42.19	62.02	68.20	-6.18	Peak	100	36	P

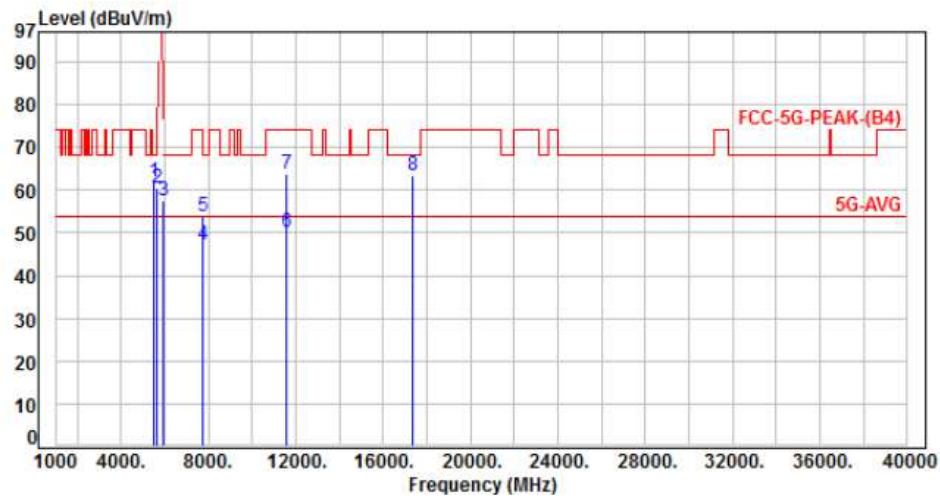
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From Outside POE (24V)	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	5465.00	5.32	56.51	61.83	68.20	-6.37	Peak	154	0	P
2	5650.00	5.25	55.12	60.37	68.20	-7.83	Peak	154	0	P
3	5925.00	5.60	52.12	57.72	68.20	-10.48	Peak	154	0	P
4	7713.00	8.89	38.31	47.20	54.00	-6.80	Average	100	240	P
5	7713.00	8.89	44.95	53.84	74.00	-20.16	Peak	100	240	P
6	11570.00	13.44	36.75	50.19	54.00	-3.81	Average	196	165	P
7	11570.00	13.44	50.28	63.72	74.00	-10.28	Peak	196	165	P
8	17355.00	19.83	43.47	63.30	68.20	-4.90	Peak	100	225	P

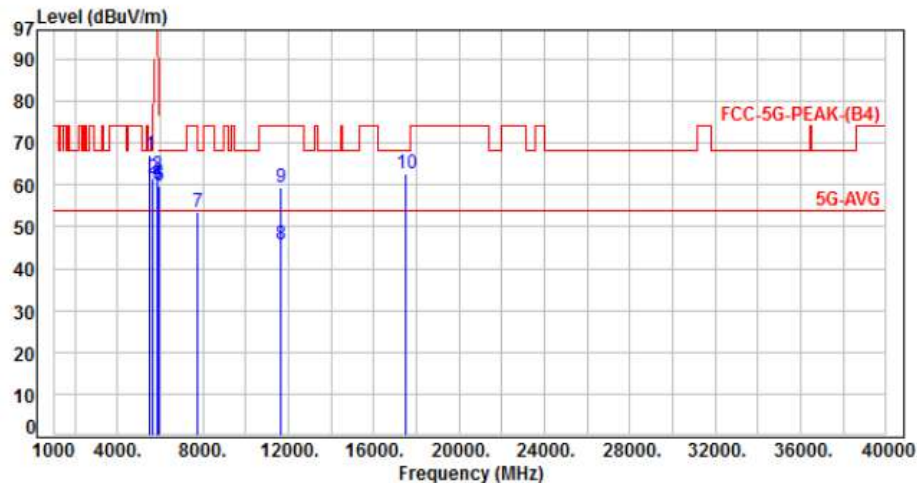
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From Outside POE (24V)	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	5505.00	5.27	61.82	67.09	68.20	-1.11	Peak	195	0	P
2	5650.00	5.25	56.30	61.55	68.20	-6.65	Peak	195	0	P
3	5850.00	5.37	57.07	62.44	122.20	-59.76	Peak	195	0	P
4	5855.00	5.39	55.21	60.60	110.80	-50.20	Peak	195	0	P
5	5875.00	5.47	54.51	59.98	105.20	-45.22	Peak	195	0	P
6	5925.00	5.60	54.17	59.77	68.20	-8.43	Peak	195	0	P
7	7766.00	8.97	44.49	53.46	68.20	-14.74	Peak	126	186	P
8	11650.00	13.60	32.29	45.89	54.00	-8.11	Average	100	174	P
9	11650.00	13.60	45.95	59.55	74.00	-14.45	Peak	100	174	P
10	17475.00	20.67	42.08	62.75	68.20	-5.45	Peak	100	39	P

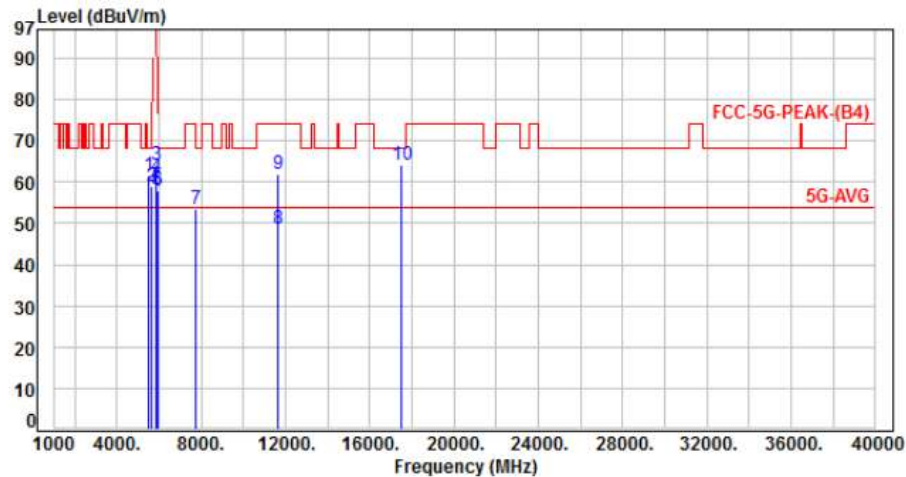
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From Outside POE (24V)	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	5505.00	5.27	56.34	61.61	68.20	-6.59	Peak	157	0	P
2	5650.00	5.25	53.87	59.12	68.20	-9.08	Peak	157	0	P
3	5850.00	5.37	58.75	64.12	122.20	-58.08	Peak	157	0	P
4	5855.00	5.39	55.77	61.16	110.80	-49.64	Peak	157	0	P
5	5875.00	5.47	52.81	58.28	105.20	-46.92	Peak	157	0	P
6	5925.00	5.60	52.31	57.91	68.20	-10.29	Peak	157	0	P
7	7766.00	8.97	44.33	53.30	68.20	-14.90	Peak	186	205	P
8	11650.00	13.60	35.03	48.63	54.00	-5.37	Average	159	196	P
9	11650.00	13.60	48.26	61.86	74.00	-12.14	Peak	159	196	P
10	17475.00	20.67	43.58	64.25	68.20	-3.95	Peak	159	196	P

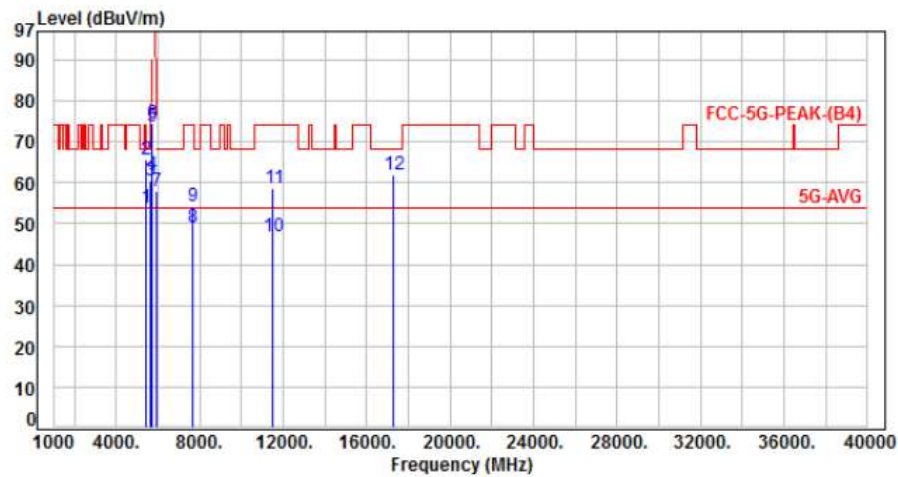
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From Outside POE (24V)	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	5435.00	5.27	48.56	53.83	54.00	-0.17	Average	164	0	P
2	5435.00	5.27	60.40	65.67	74.00	-8.33	Peak	164	0	P
3	5650.00	5.25	55.33	60.58	68.20	-7.62	Peak	164	0	P
4	5700.00	5.18	56.89	62.07	105.20	-43.13	Peak	164	0	P
5	5720.00	5.19	68.60	73.79	110.80	-37.01	Peak	164	0	P
6	5725.00	5.19	69.31	74.50	122.20	-47.70	Peak	164	0	P
7	5925.00	5.60	52.23	57.83	68.20	-10.37	Peak	164	0	P
8	7673.00	8.85	40.17	49.02	54.00	-4.98	Average	127	183	P
9	7673.00	8.85	45.55	54.40	74.00	-19.60	Peak	127	183	P
10	11510.00	13.20	33.71	46.91	54.00	-7.09	Average	100	168	P
11	11510.00	13.20	45.61	58.81	74.00	-15.19	Peak	100	168	P
12	17265.00	19.34	42.50	61.84	68.20	-6.36	Peak	100	38	P

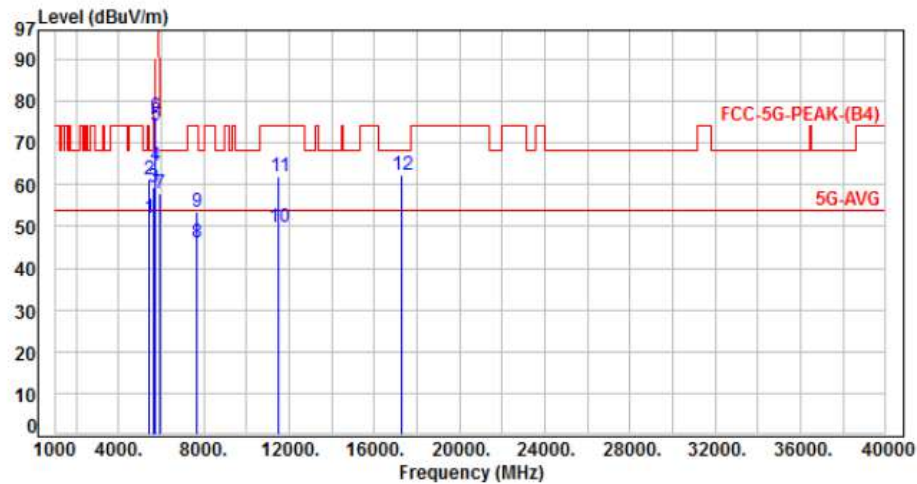
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From Outside POE (24V)	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	5435.00	5.27	46.89	52.16	54.00	-1.84	Average	152	0	P
2	5435.00	5.27	55.80	61.07	74.00	-12.93	Peak	152	0	P
3	5650.00	5.25	54.31	59.56	68.20	-8.64	Peak	152	0	P
4	5700.00	5.18	59.21	64.39	105.20	-40.81	Peak	152	0	P
5	5720.00	5.19	69.11	74.30	110.80	-36.50	Peak	152	0	P
6	5725.00	5.19	71.10	76.29	122.20	-45.91	Peak	152	0	P
7	5925.00	5.60	52.14	57.74	68.20	-10.46	Peak	152	0	P
8	7673.00	8.85	37.32	46.17	54.00	-7.83	Average	132	218	P
9	7673.00	8.85	44.78	53.63	74.00	-20.37	Peak	132	218	P
10	11510.00	13.20	36.63	49.83	54.00	-4.17	Average	208	158	P
11	11510.00	13.20	48.88	62.08	74.00	-11.92	Peak	208	158	P
12	17265.00	19.34	42.95	62.29	68.20	-5.91	Peak	100	232	P

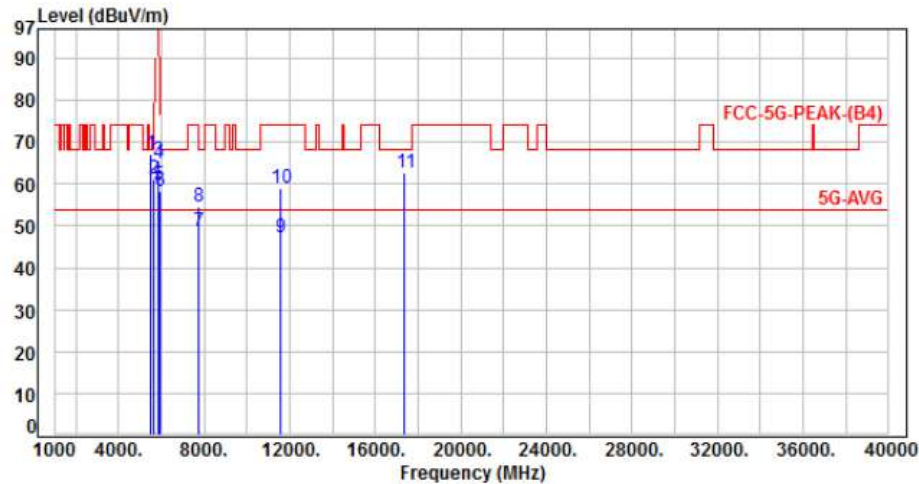
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From Outside POE (24V)	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	5475.00	5.30	61.66	66.96	68.20	-1.24	Peak	183	0	P
2	5650.00	5.25	56.03	61.28	68.20	-6.92	Peak	183	0	P
3	5850.00	5.37	60.41	65.78	122.20	-56.42	Peak	183	0	P
4	5855.00	5.39	59.46	64.85	110.80	-45.95	Peak	183	0	P
5	5875.00	5.47	54.31	59.78	105.20	-45.42	Peak	183	0	P
6	5925.00	5.60	52.68	58.28	68.20	-9.92	Peak	183	0	P
7	7726.00	8.91	39.92	48.83	54.00	-5.17	Average	120	194	P
8	7726.00	8.91	45.77	54.68	74.00	-19.32	Peak	120	194	P
9	11590.00	13.52	33.64	47.16	54.00	-6.84	Average	100	165	P
10	11590.00	13.52	45.49	59.01	74.00	-14.99	Peak	100	165	P
11	17385.00	20.03	42.68	62.71	68.20	-5.49	Peak	100	32	P

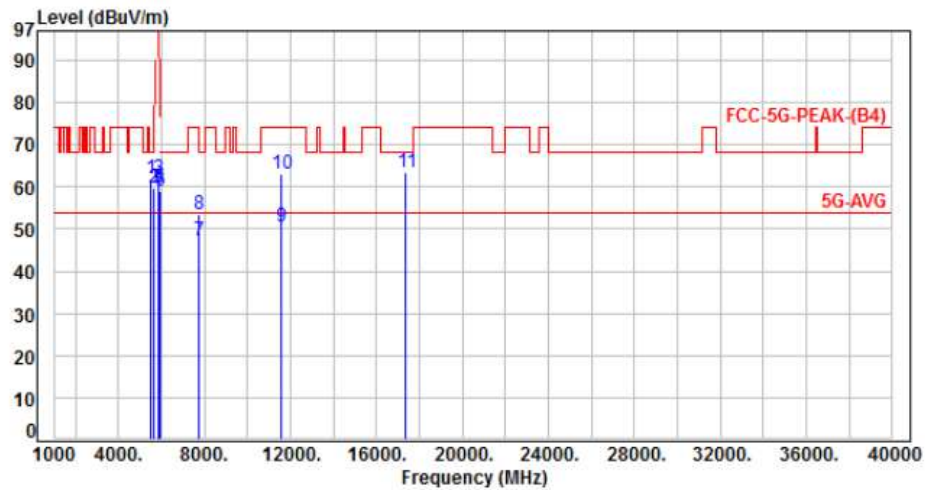
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From Outside POE (24V)	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	5475.00	5.30	56.66	61.96	68.20	-6.24	Peak	150	0	P
2	5650.00	5.25	54.32	59.57	68.20	-8.63	Peak	150	0	P
3	5850.00	5.37	56.54	61.91	122.20	-60.29	Peak	150	0	P
4	5855.00	5.39	54.78	60.17	110.80	-50.63	Peak	150	0	P
5	5875.00	5.47	54.17	59.64	105.20	-45.56	Peak	150	0	P
6	5925.00	5.60	53.35	58.95	68.20	-9.25	Peak	150	0	P
7	7726.00	8.91	38.44	47.35	54.00	-6.65	Average	145	216	P
8	7726.00	8.91	44.55	53.46	74.00	-20.54	Peak	145	216	P
9	11590.00	13.52	37.01	50.53	54.00	-3.47	Average	204	174	P
10	11590.00	13.52	49.40	62.92	74.00	-11.08	Peak	204	174	P
11	17385.00	20.03	43.33	63.36	68.20	-4.84	Peak	100	252	P

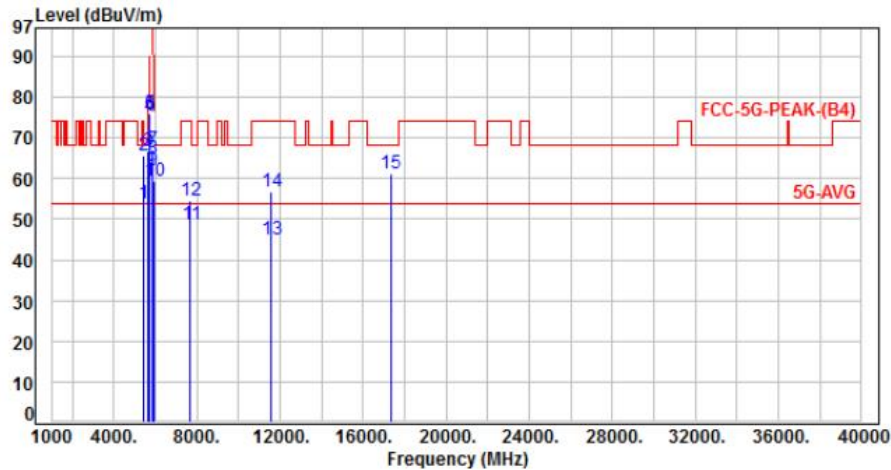
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From Outside POE (24V)	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	5455.00	5.33	48.56	53.89	54.00	-0.11	Average	171	0	P
2	5455.00	5.33	60.50	65.83	74.00	-8.17	Peak	171	0	P
3	5650.00	5.25	61.58	66.83	68.20	-1.37	Peak	171	0	P
4	5700.00	5.18	70.23	75.41	105.20	-29.79	Peak	171	0	P
5	5720.00	5.19	70.72	75.91	110.80	-34.89	Peak	171	0	P
6	5725.00	5.19	70.60	75.79	122.20	-46.41	Peak	171	0	P
7	5850.00	5.37	61.80	67.17	122.20	-55.03	Peak	171	0	P
8	5855.00	5.39	59.60	64.99	110.80	-45.81	Peak	171	0	P
9	5875.00	5.47	56.67	62.14	105.20	-43.06	Peak	171	0	P
10	5925.00	5.60	53.66	59.26	68.20	-8.94	Peak	171	0	P
11	7700.00	8.85	39.66	48.51	54.00	-5.49	Average	134	190	P
12	7700.00	8.85	45.66	54.51	74.00	-19.49	Peak	134	190	P
13	11550.00	13.36	31.65	45.01	54.00	-8.99	Average	100	176	P
14	11550.00	13.36	43.34	56.70	74.00	-17.30	Peak	100	176	P
15	17325.00	19.64	41.67	61.31	68.20	-6.89	Peak	100	36	P

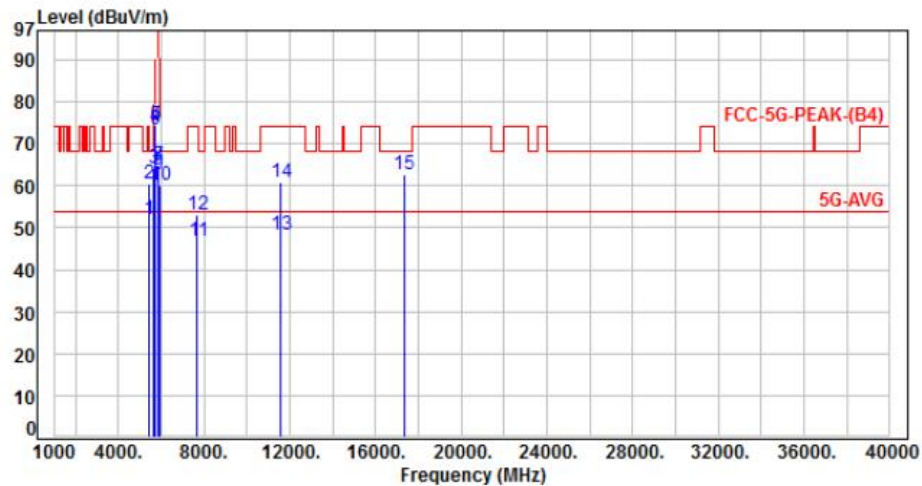
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From Outside POE (24V)	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	5455.00	5.33	46.73	52.06	54.00	-1.94	Average	168	0	P
2	5455.00	5.33	55.22	60.55	74.00	-13.45	Peak	168	0	P
3	5650.00	5.25	58.82	64.07	68.20	-4.13	Peak	168	0	P
4	5700.00	5.18	68.90	74.08	105.20	-31.12	Peak	168	0	P
5	5720.00	5.19	69.42	74.61	110.80	-36.19	Peak	168	0	P
6	5725.00	5.19	68.09	73.28	122.20	-48.92	Peak	168	0	P
7	5850.00	5.37	59.61	64.98	122.20	-57.22	Peak	168	0	P
8	5855.00	5.39	59.70	65.09	110.80	-45.71	Peak	168	0	P
9	5875.00	5.47	57.10	62.57	105.20	-42.63	Peak	168	0	P
10	5925.00	5.60	54.47	60.07	68.20	-8.13	Peak	168	0	P
11	7700.00	8.85	38.08	46.93	54.00	-7.07	Average	141	202	P
12	7700.00	8.85	44.31	53.16	74.00	-20.84	Peak	141	202	P
13	11550.00	13.36	34.95	48.31	54.00	-5.69	Average	202	178	P
14	11550.00	13.36	47.55	60.91	74.00	-13.09	Peak	202	178	P
15	17325.00	19.64	42.89	62.53	68.20	-5.67	Peak	100	227	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

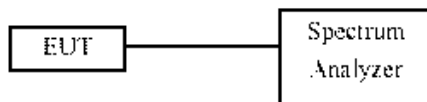
7.1. Test Limit

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

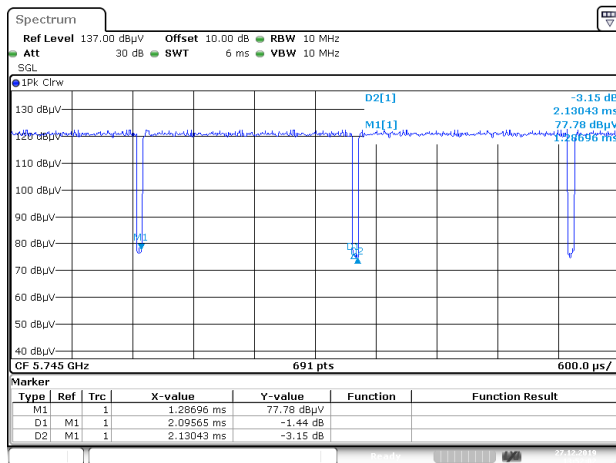
Modulation Type	On Time (ms)	Period Time (ms)	Duty Cycle (%)
802.11a,6M	2.10	2.13	98.37%
802.11ac VHT20	5.06	5.10	99.32%
802.11ac VHT40	2.45	2.50	97.92%
802.11ac VHT80	1.16	1.21	95.70%

7.5. Measurement Methods

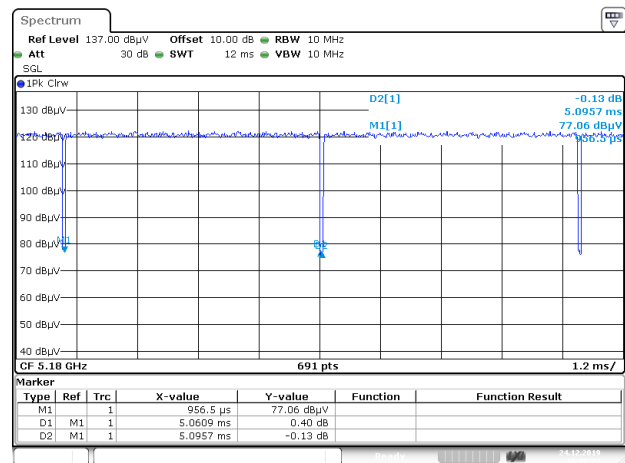
26 dB and 6dB Emission BW	KDB 789033 D02 v02r01, Section C
99% Occupied BW	KDB 789033 D02 v02r01, Section D
Conducted Output Power	KDB 789033 D02 v02r01, Section E.2.d and E.3.b (Method PM-G)
Power Spectral Density	KDB 789033 D02 v02r01, Section F
Unwanted emissions in restricted bands	KDB 789033 D02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



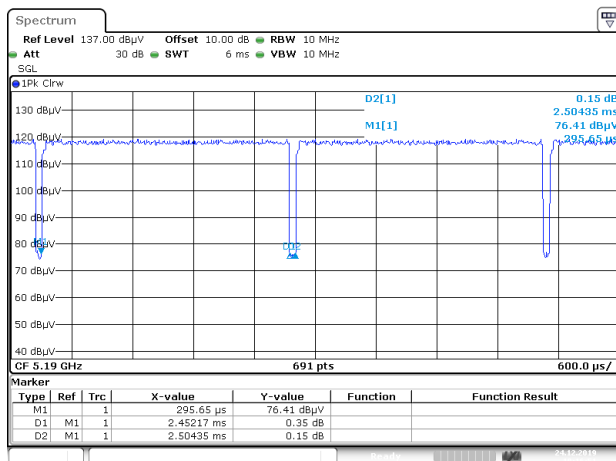
Modulation Type: 802.11a (6Mbps)



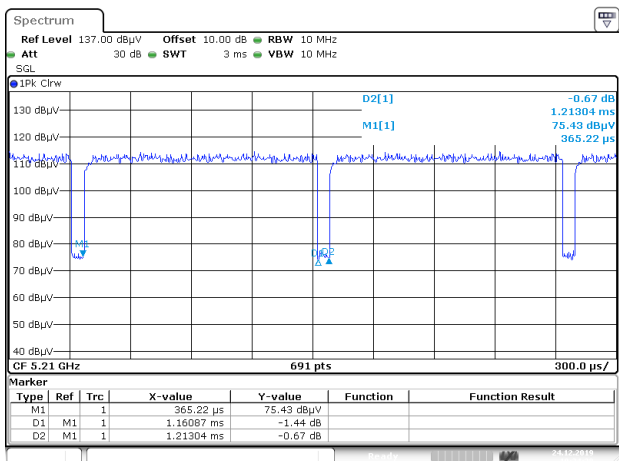
Modulation Type: 802.11ac VHT20 (6.5Mbps)



Modulation Type: 802.11ac VHT40 (13.5Mbps)



Modulation Type: 802.11ac VHT80 (29.3Mbps)





8. 6dB Bandwidth & 99% Occupied Bandwidth

8.1. Test Limit

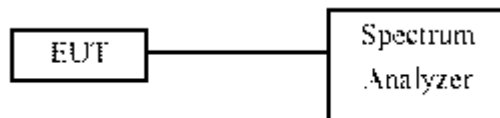
FCC §15.407

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 to 100KHz, the VBW $\geq 3 \times$ 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	16.05	15.70	0.50
11a	157	5785	16.05	15.00	0.50
11a	165	5825	16.30	15.10	0.50
11ac VHT20	149	5745	16.25	17.55	0.50
11ac VHT20	157	5785	17.25	15.05	0.50
11ac VHT20	165	5825	16.95	17.55	0.50
11ac VHT40	151	5755	34.50	31.60	0.50
11ac VHT40	159	5795	33.80	35.00	0.50
11ac VHT80	155	5775	75.84	73.92	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	16.50	16.45
11a	157	5785	16.50	16.50
11a	165	5825	16.55	16.45
11ac VHT20	149	5745	17.65	17.80
11ac VHT20	157	5785	17.70	17.55
11ac VHT20	165	5825	17.65	17.80
11ac VHT40	151	5755	36.10	36.50
11ac VHT40	159	5795	36.10	36.50
11ac VHT80	155	5775	76.00	75.68

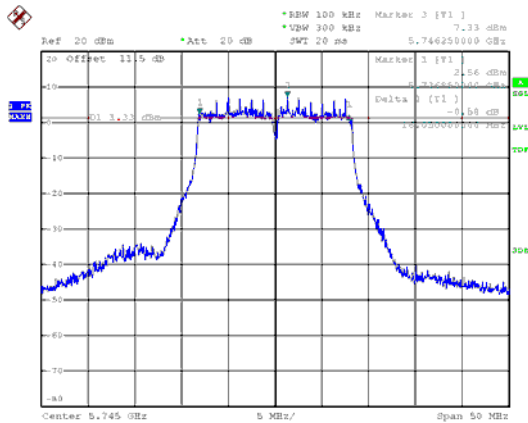


6dB Bandwidth

ANT A

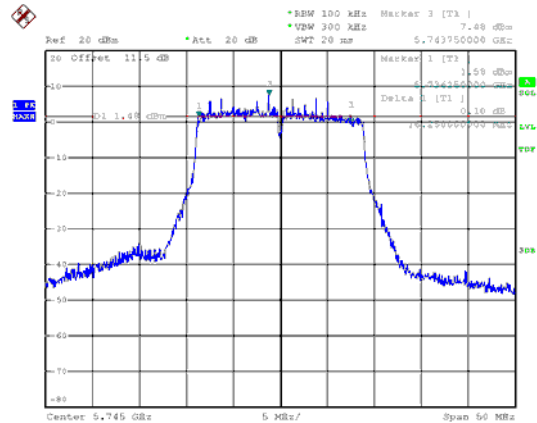
Modulation Type: 802.11a (6Mbps)

CH149

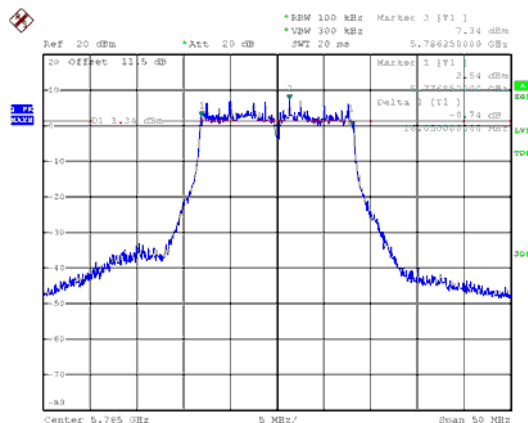


Modulation Type: 802.11ac, VHT20 (6.5Mbps)

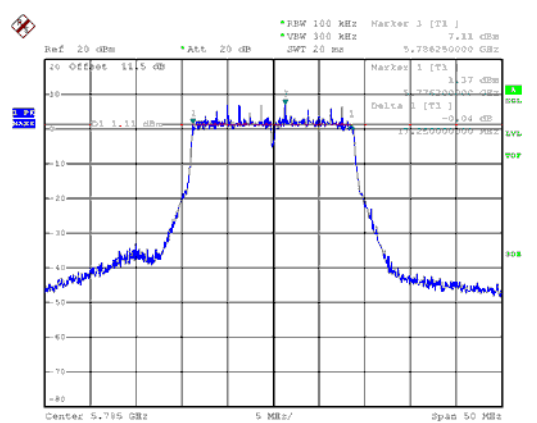
CH149



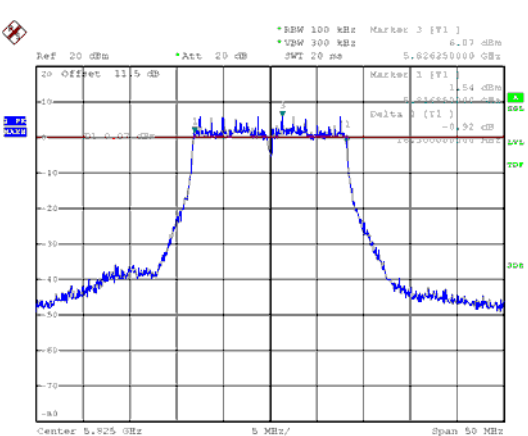
CH157



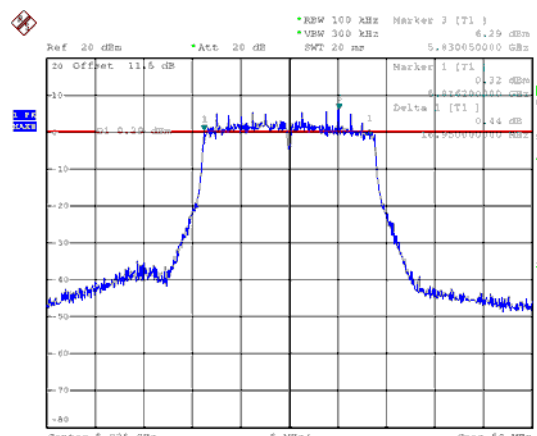
CH157



CH165

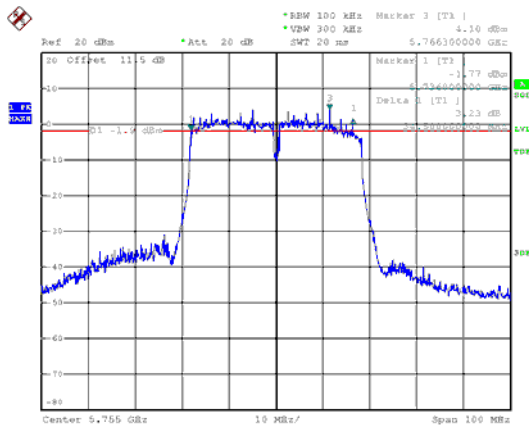


CH165

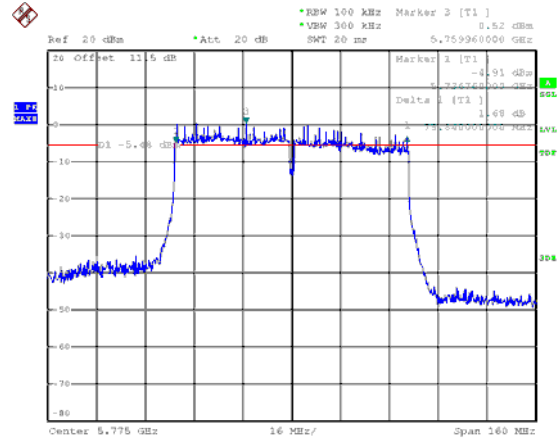




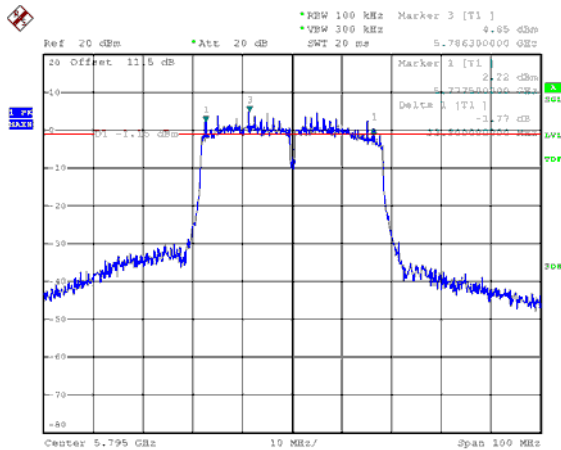
Modulation Type: 802.11ac, VHT40 (13.5Mbps)
CH151



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

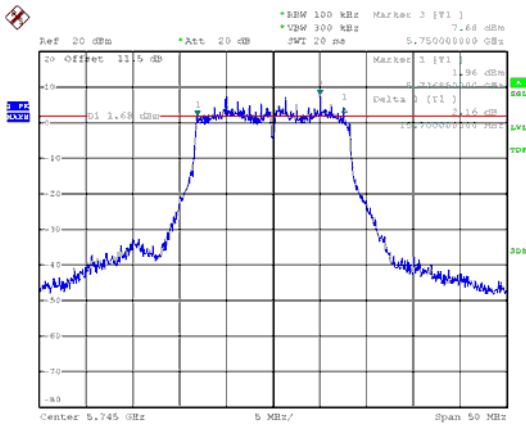


CH159

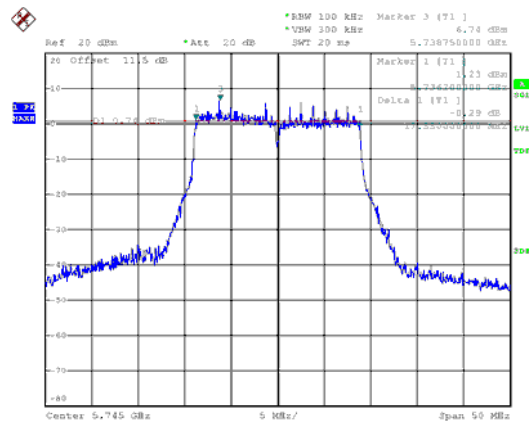




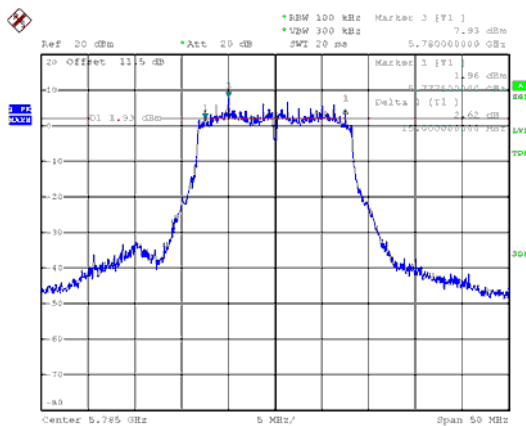
ANT B
Modulation Type: 802.11a (6Mbps)
CH149



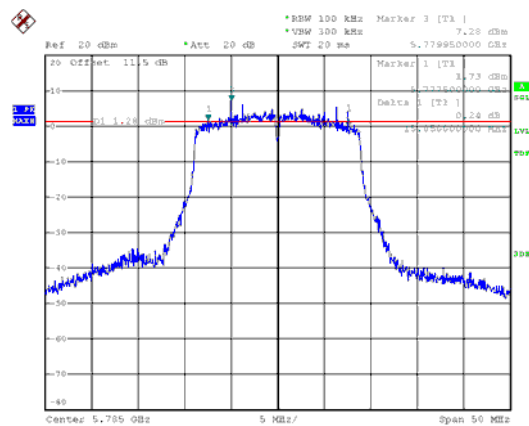
Modulation Type: 802.11ac, VHT20 (6.5Mbps)
CH149



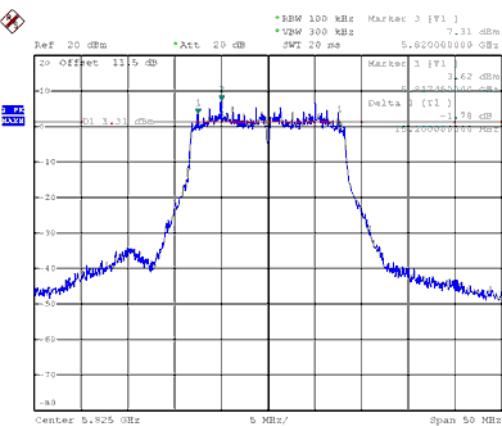
CH157



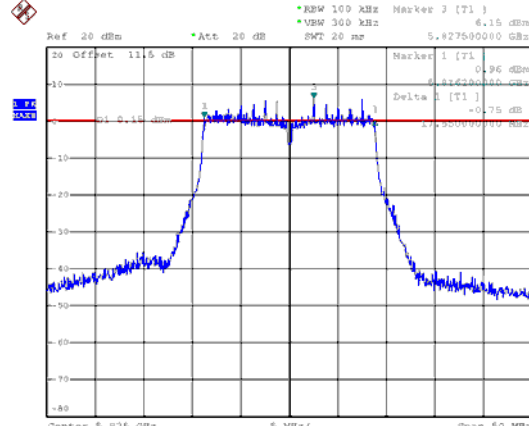
CH157



CH165

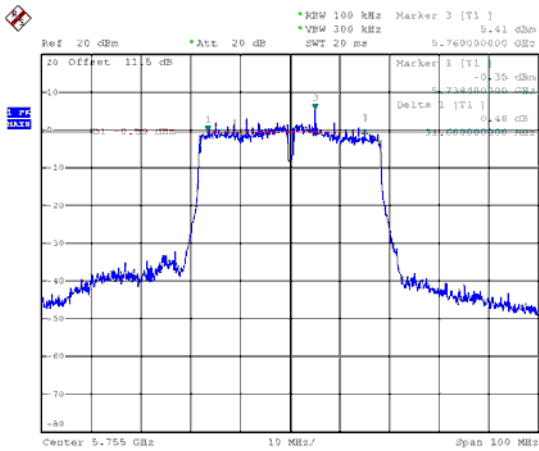


CH165

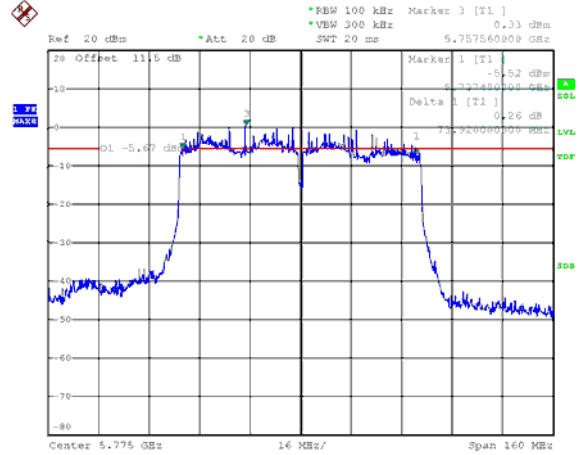




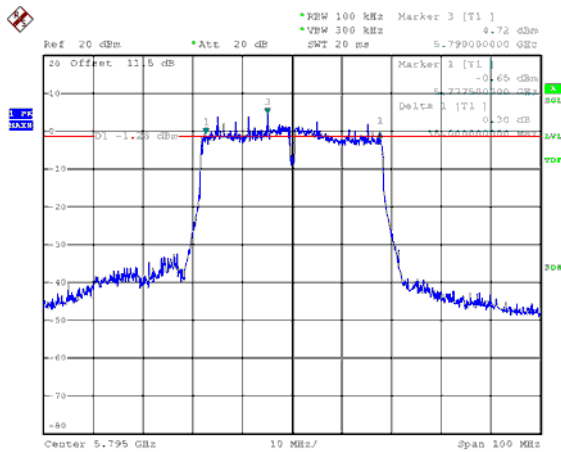
Modulation Type: 802.11ac, VHT40 (13.5Mbps)
CH151



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



CH159



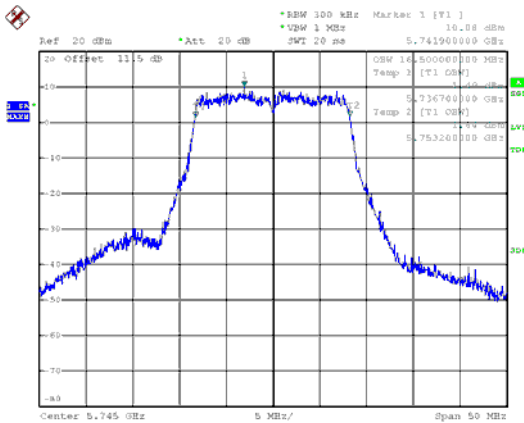


99% Occupied Bandwidth

ANT A

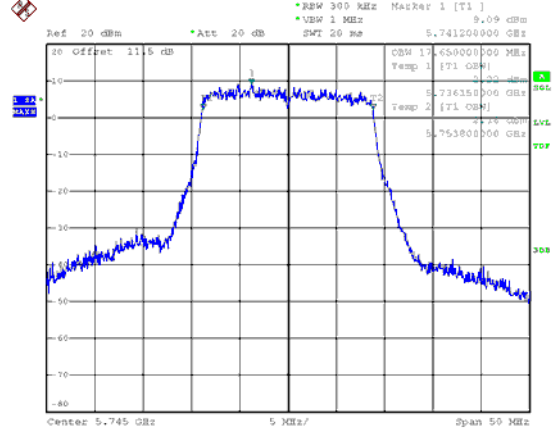
Modulation Type: 802.11a (6Mbps)

CH149

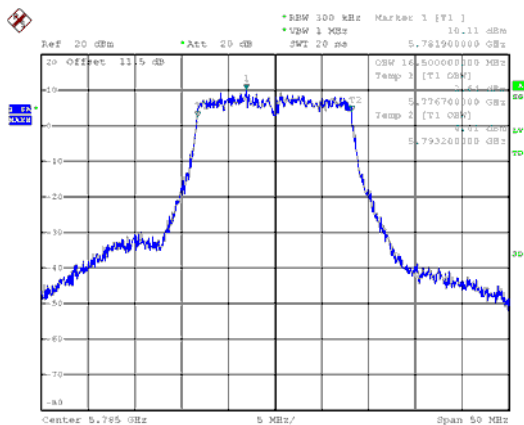


Modulation Type: 802.11ac, VHT20 (6.5Mbps)

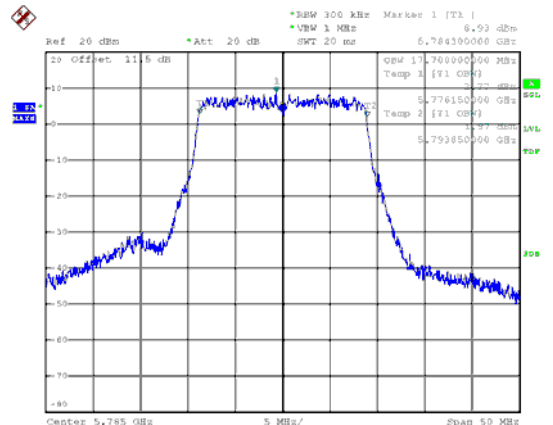
CH149



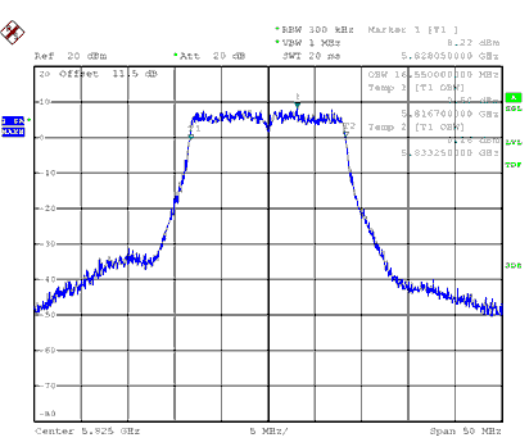
CH157



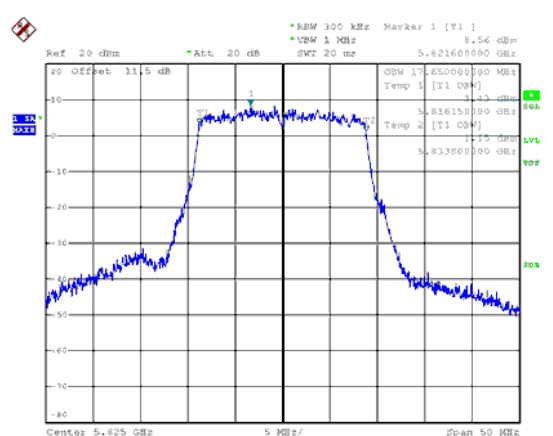
CH157



CH165

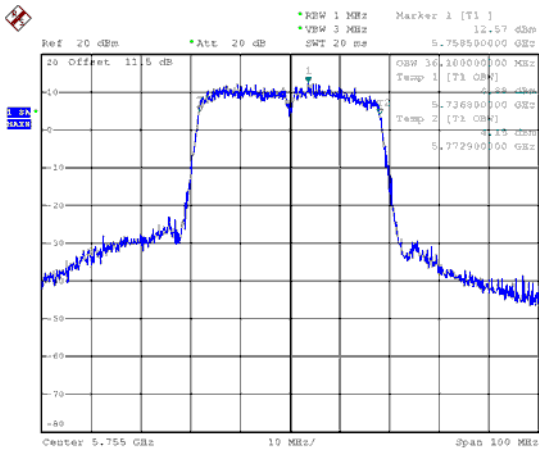


CH165

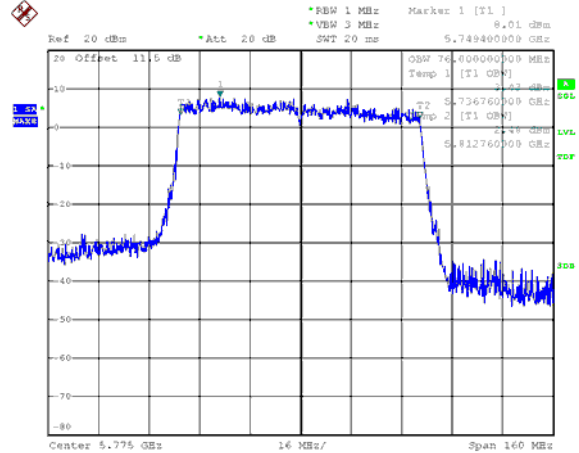




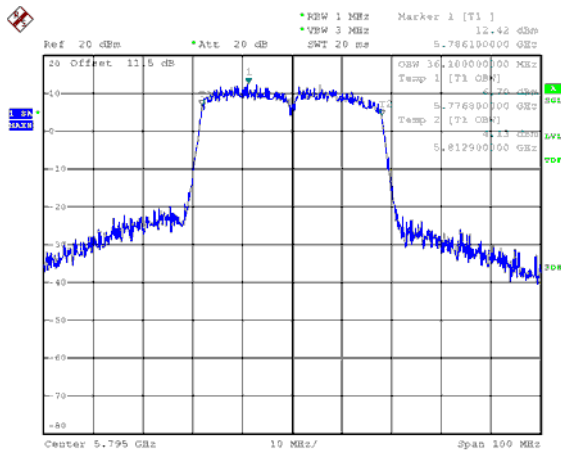
Modulation Type: 802.11ac, VHT40 (13.5Mbps)
CH151



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



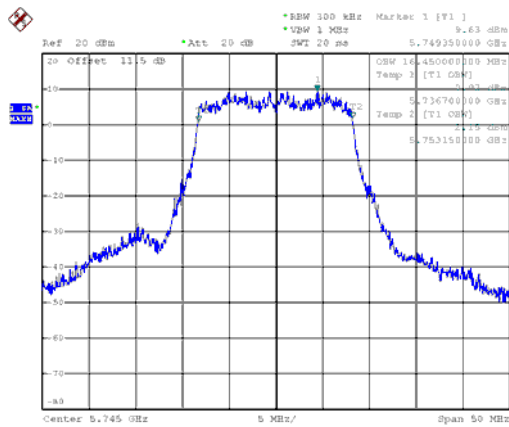
CH159



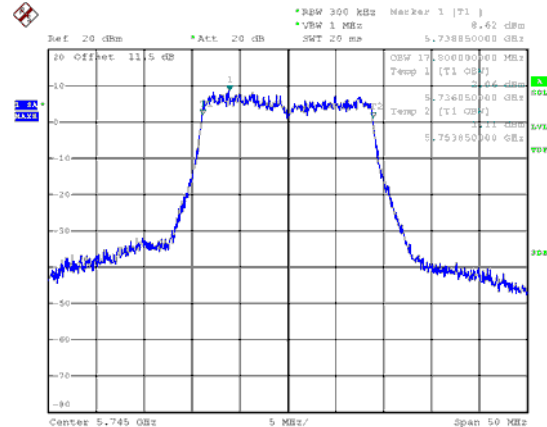


ANT B

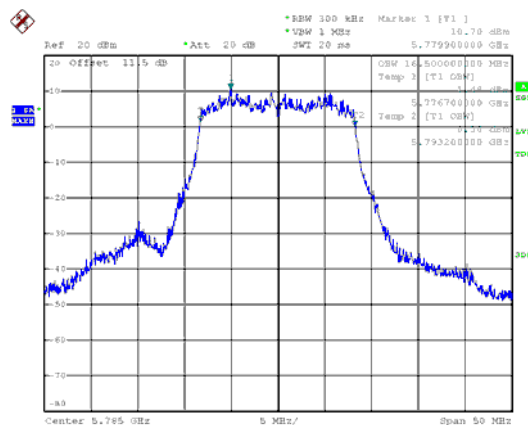
Modulation Type: 802.11a (6Mbps)
CH149



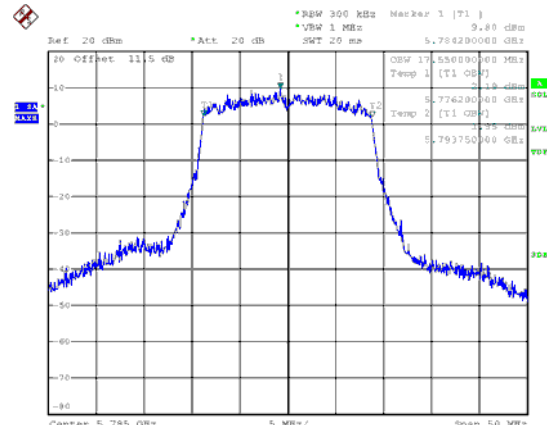
Modulation Type: 802.11ac, VHT20 (6.5Mbps)
CH149



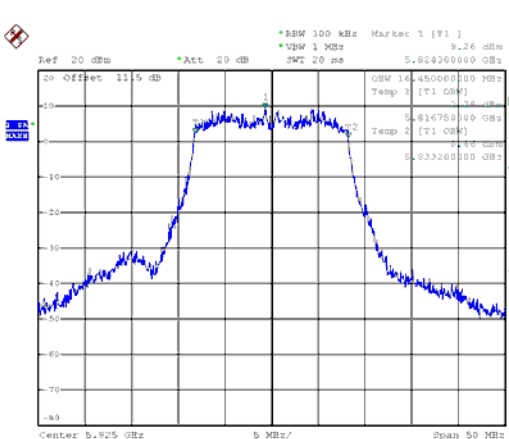
CH157



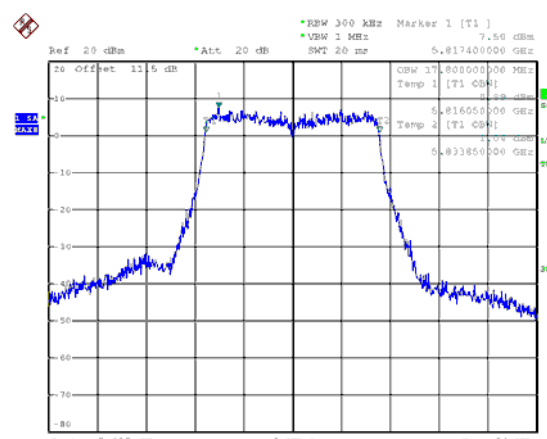
CH157



CH165

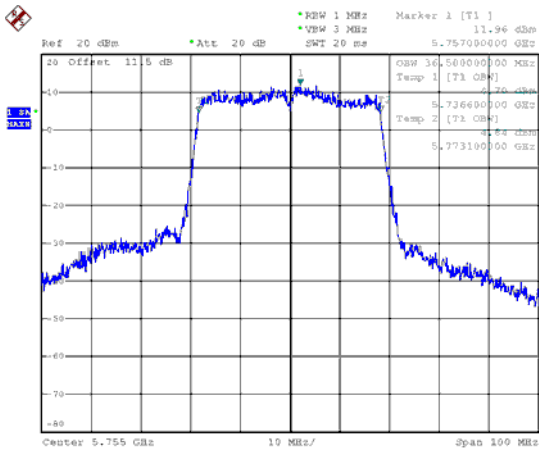


CH165

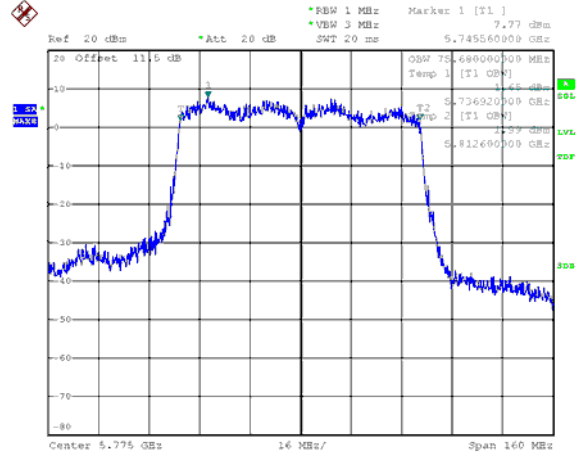




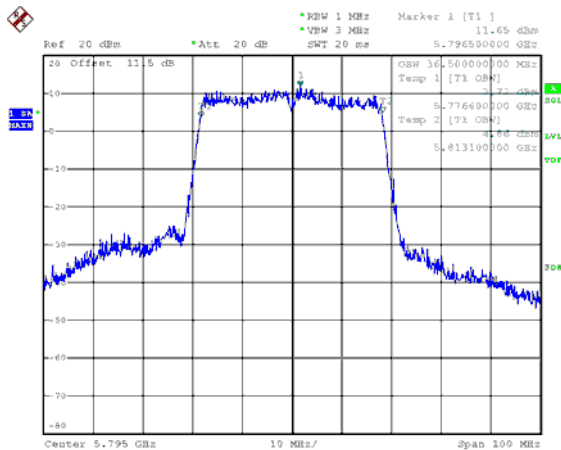
Modulation Type: 802.11ac, VHT40 (13.5Mbps)
CH151



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



CH159





9. 26dB Bandwidth & 99% Occupied Bandwidth

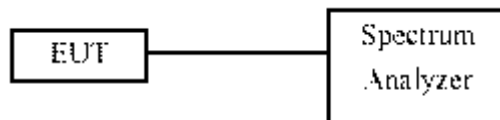
9.1. Test Limit

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 $\geq 3 \times$ RBW, peak detector and max hold.

9.3. Test Setup Layout



9.4. Test Result and Data (26dB Bandwidth)

In the 5.2G Band

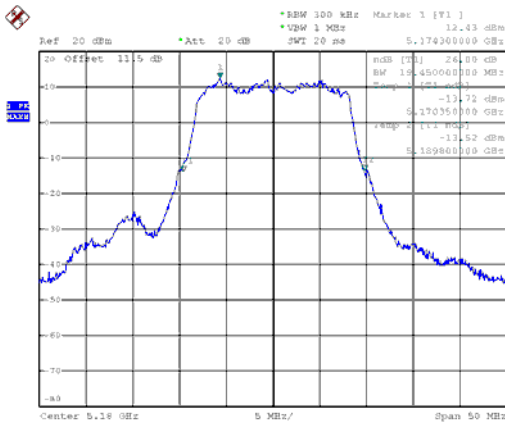
Mode	Channel	Frequency (MHz)	26dB Bandwidth(MHz)	
			ANT A	ANT B
11a	36	5180	19.45	19.10
11a	40	5200	19.60	19.15
11a	48	5240	20.30	19.65
11ac VHT20	36	5180	20.25	20.25
11ac VHT20	40	5200	20.95	20.60
11ac VHT20	48	5240	21.15	20.55
11ac VHT40	38	5190	40.70	40.70
11ac VHT40	46	5230	41.00	41.00
11ac VHT80	42	5210	83.52	83.36

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

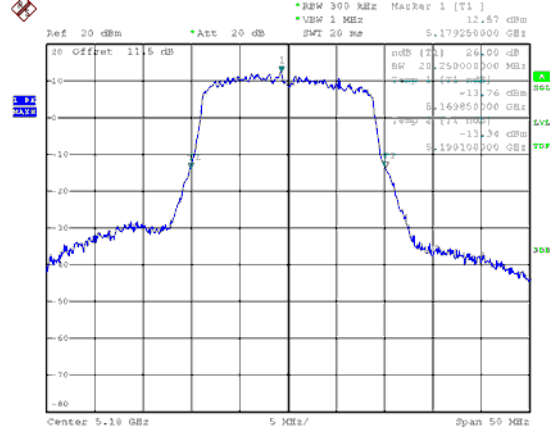
Modulation Type	Channel	Frequency (MHz)	99% Bandwidth(MHz)	
			ANT A	ANT B
11a	36	5180	16.45	16.45
11a	40	5200	16.55	16.55
11a	48	5240	16.45	16.55
11ac VHT20	36	5180	17.55	17.65
11ac VHT20	40	5200	17.80	17.70
11ac VHT20	48	5240	17.80	17.70
11ac VHT40	38	5190	36.40	36.30
11ac VHT40	46	5230	36.40	36.30
11ac VHT80	42	5210	75.84	75.84



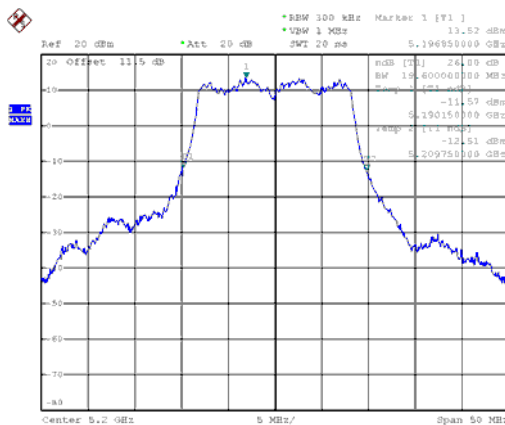
26dB Bandwidth
Band 1, ANT A
Modulation Type: 802.11a (6Mbps)
CH36



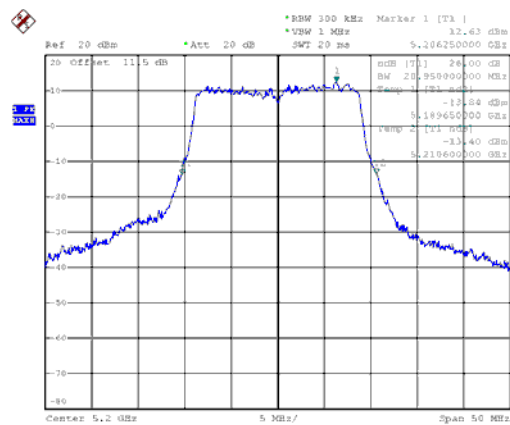
Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH36



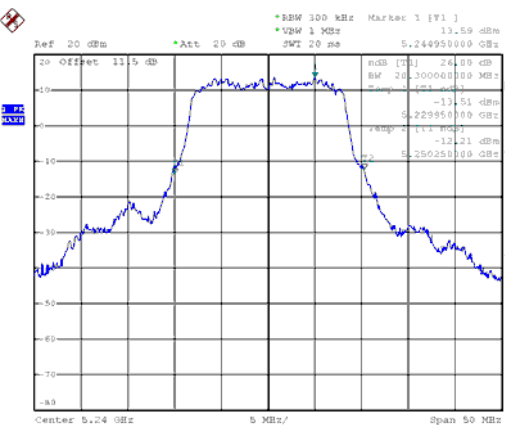
CH40



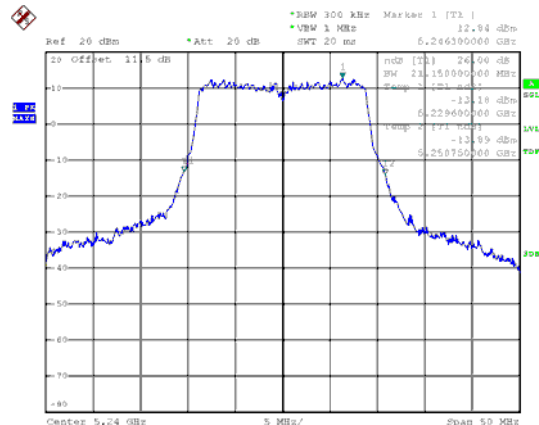
CH40



CH48

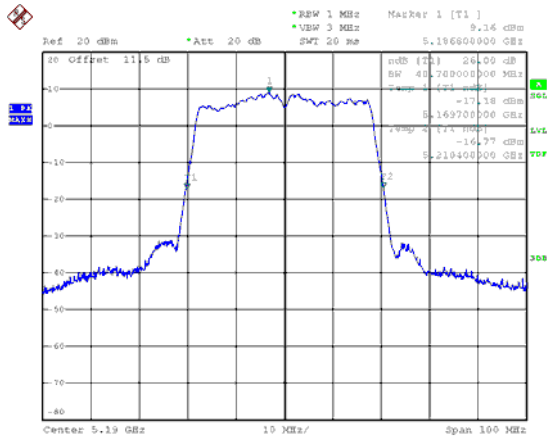


CH48

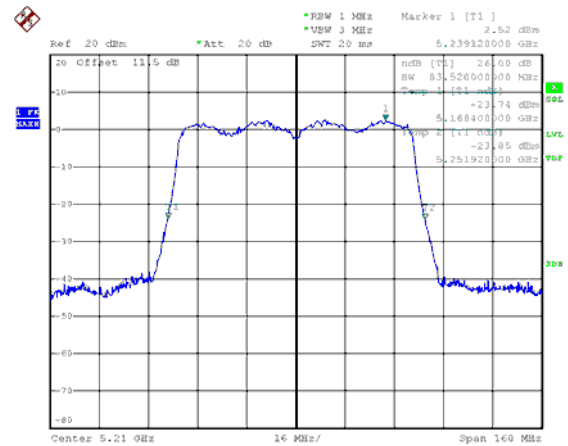




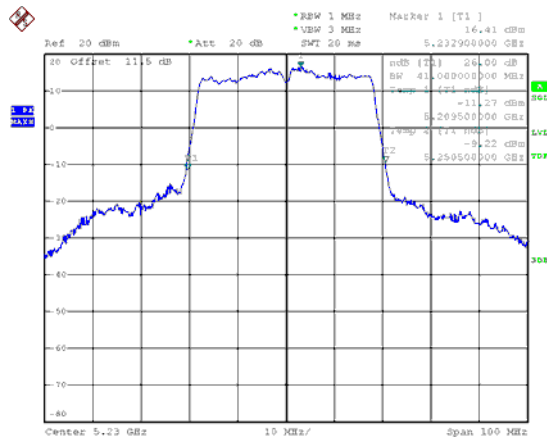
26dB Bandwidth Band 1, ANT A
Modulation Type: 802.11ac VHT40 (6.5Mbps)
CH38



Modulation Type: 802.11ac VHT80 (13.5Mbps)
CH42

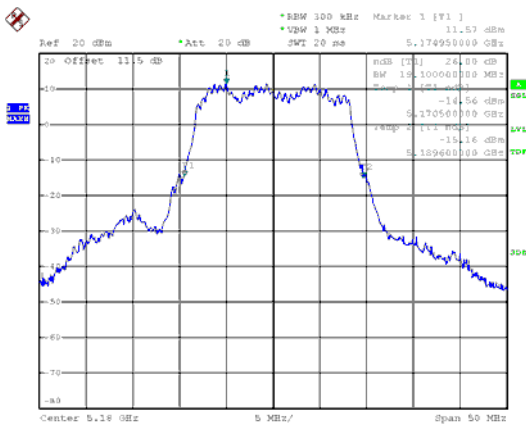


CH46

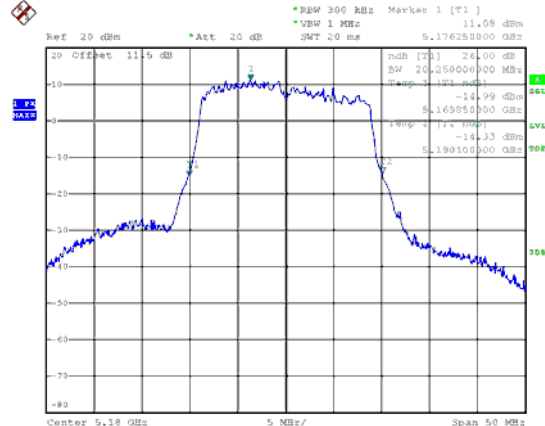




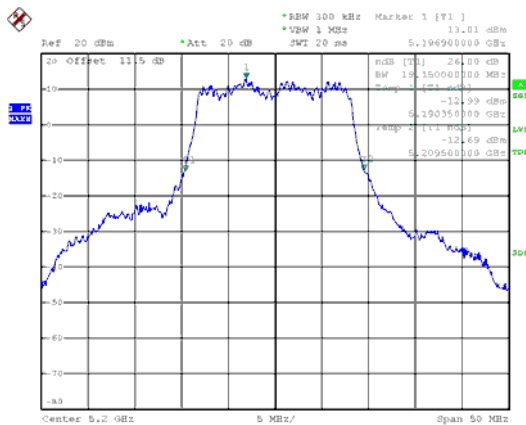
26dB Bandwidth Band 1, ANT B
Modulation Type: 802.11a (6Mbps)
CH36



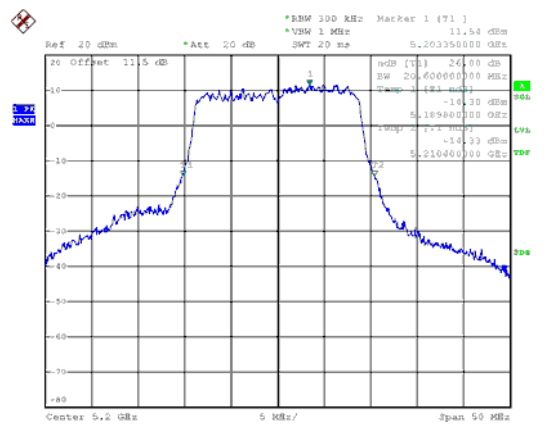
Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH36



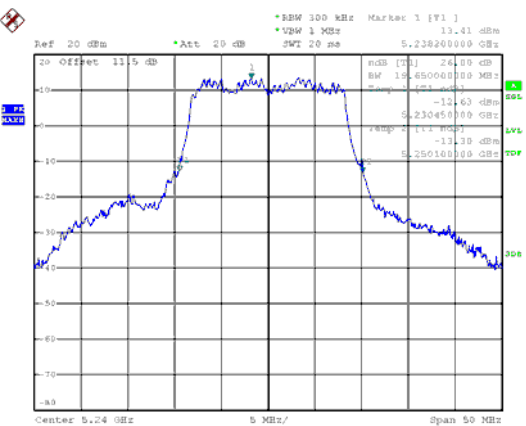
CH40



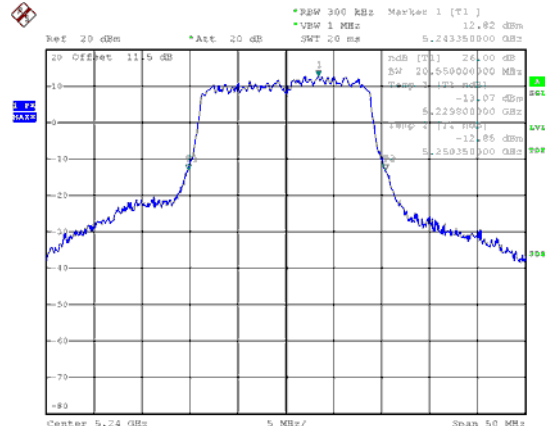
CH40



CH48

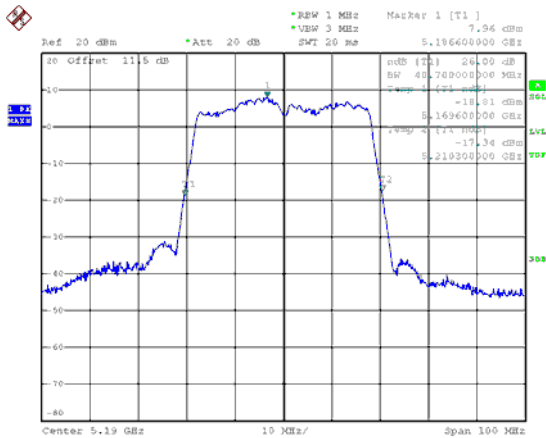
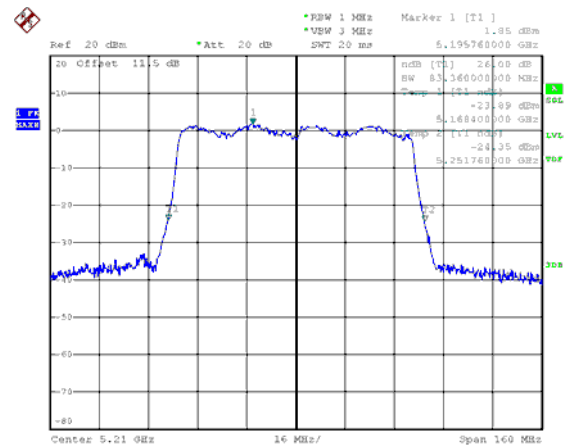


CH48

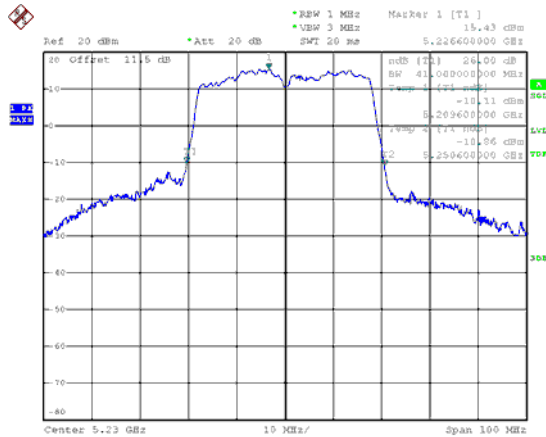




26dB Bandwidth Band 1, ANT B

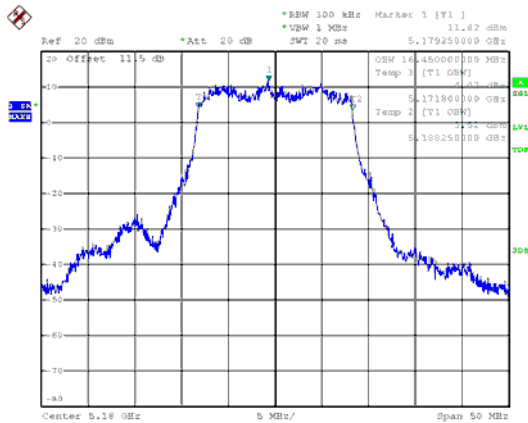
Modulation Type: 802.11ac VHT40 (6.5Mbps)
CH38Modulation Type: 802.11ac VHT80 (13.5Mbps)
CH42

CH46

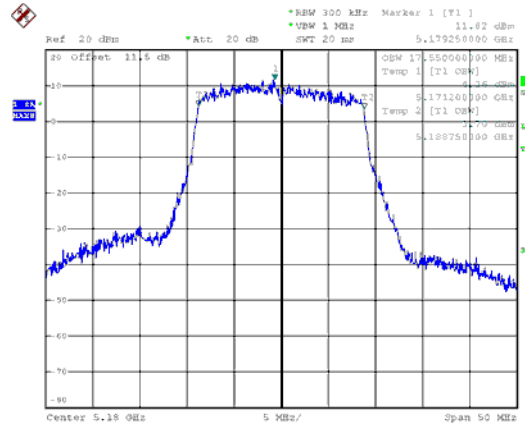




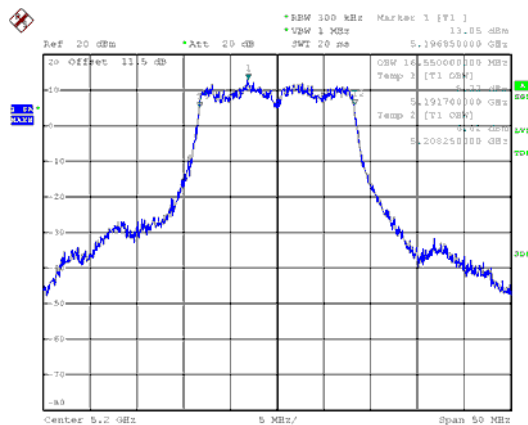
99% Occupied Bandwidth
Band 1, ANT A
Modulation Type: 802.11a (6Mbps)
CH36



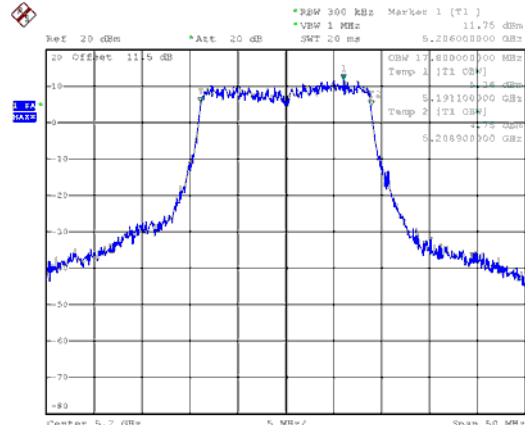
Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH36



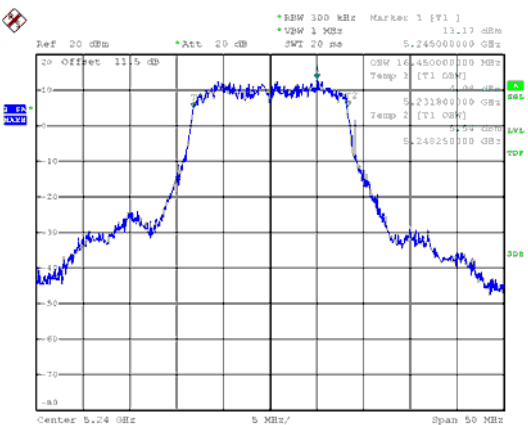
CH40



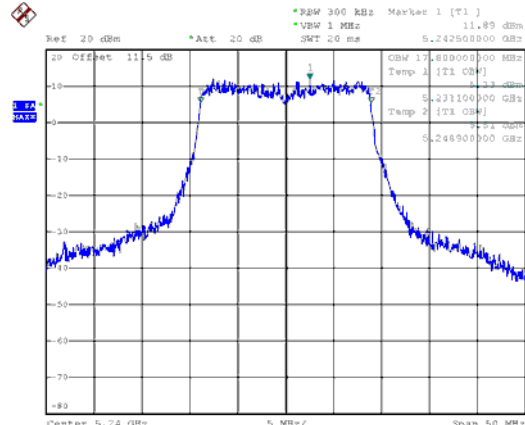
CH40



CH48

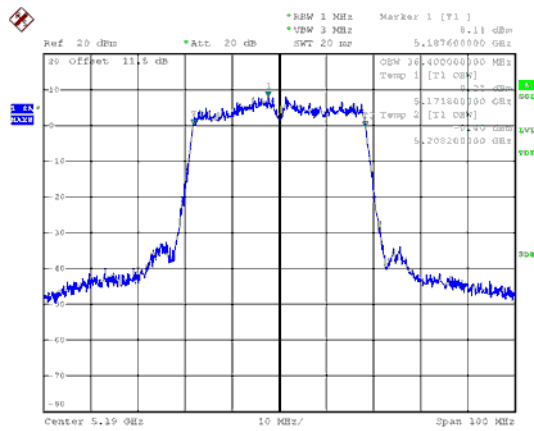


CH48

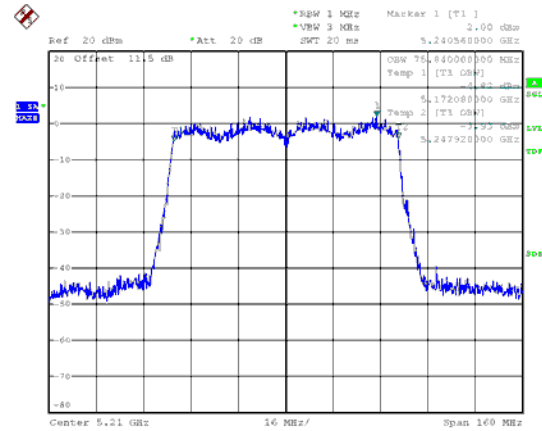




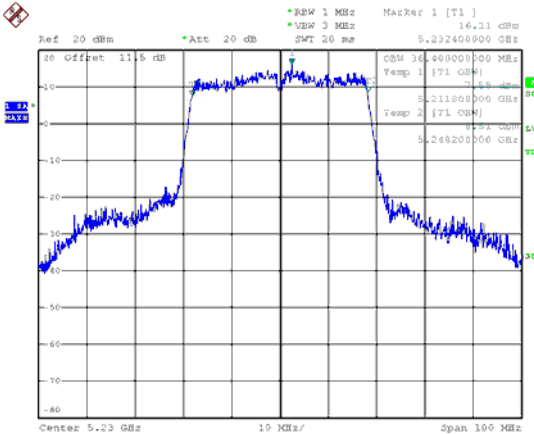
99% Bandwidth Band 1, ANT A
Modulation Type: 802.11ac VHT40 (6.5Mbps)
CH38



Modulation Type: 802.11ac VHT80 (13.5Mbps)
CH42

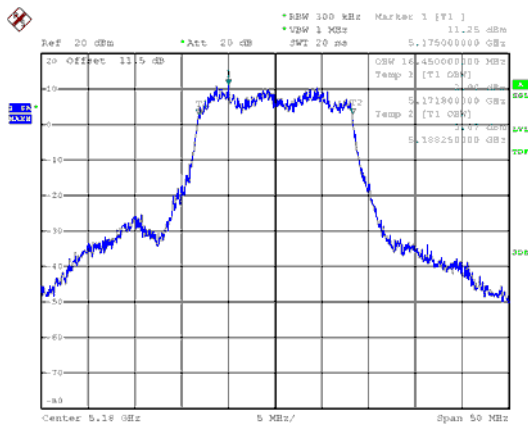


CH46

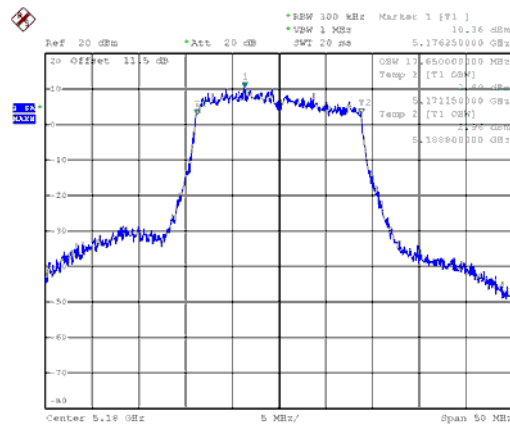




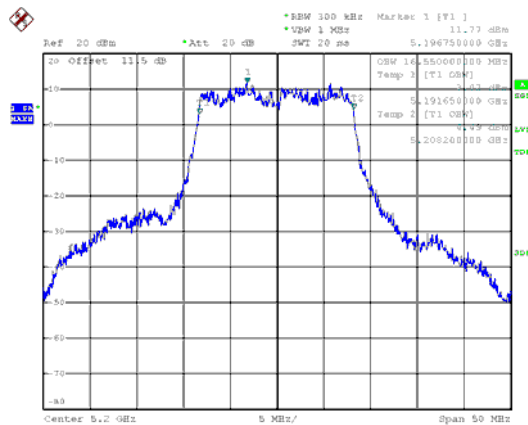
99% Bandwidth Band 1, ANT B
Modulation Type: 802.11a (6Mbps)
CH36



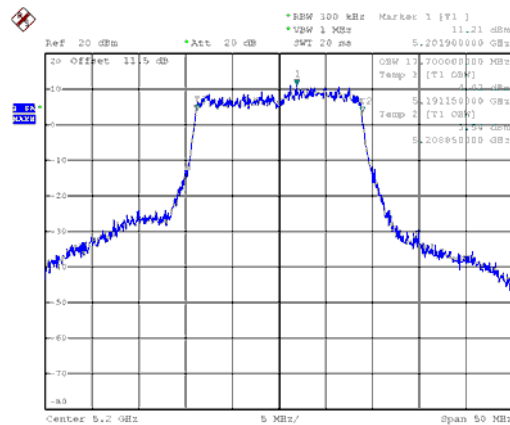
Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH36



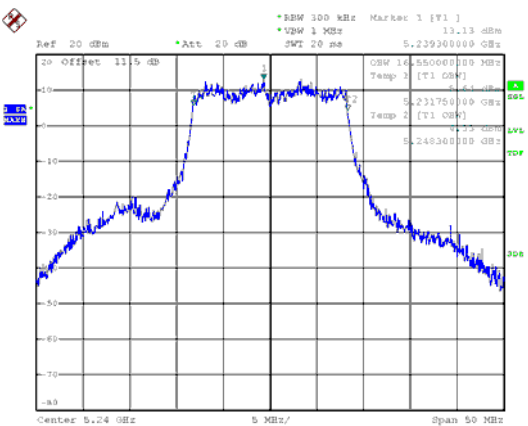
CH40



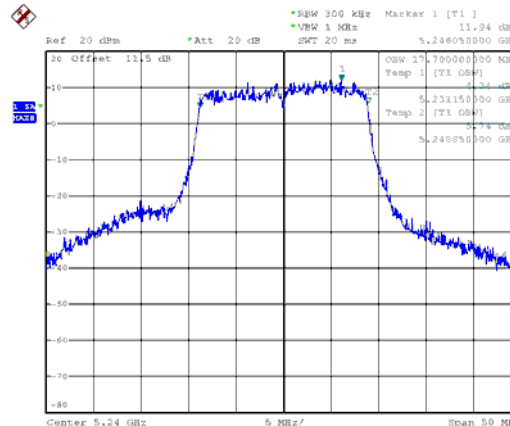
CH40



CH48

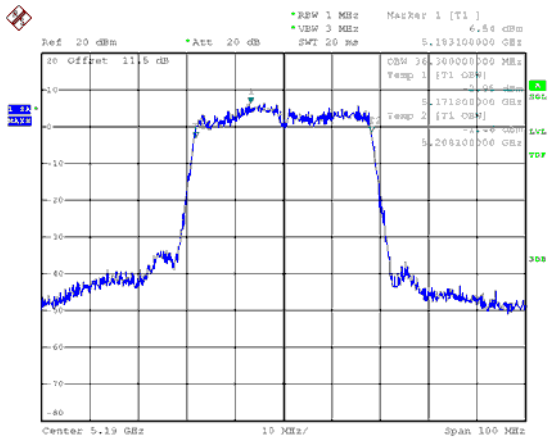
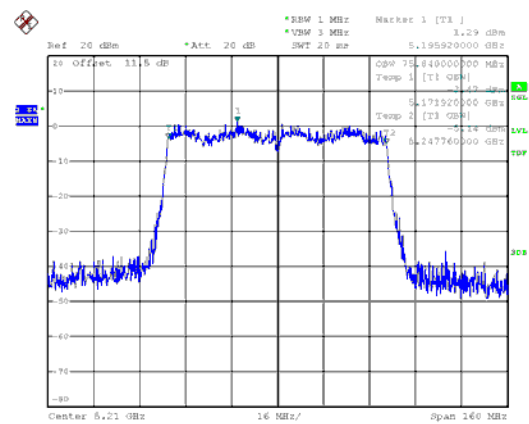


CH48

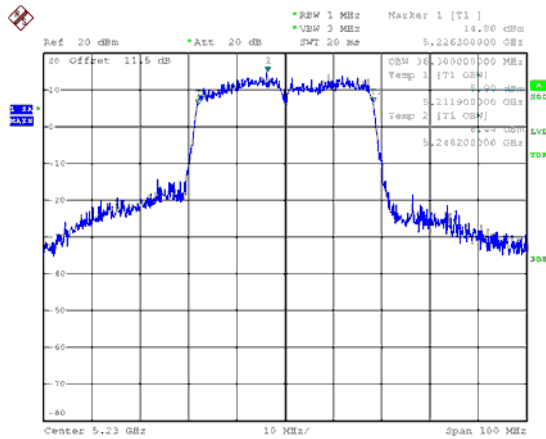




99% Bandwidth Band 1, ANT B

Modulation Type: 802.11ac VHT40 (6.5Mbps)
CH38Modulation Type: 802.11ac VHT80 (13.5Mbps)
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 exceed 125 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.



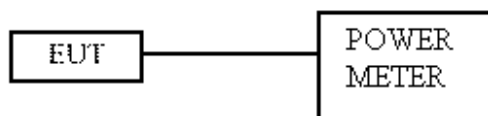
Frequency Band		Limit
☐	5.25-5.35 GHz	The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW (24dBm) or 11 dBm 10 log B, where B is the 26 dB emission bandwidth in megahertz. If transmitting antennas of directional gain greater than 6 dBi are used, 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	21	36	5180	19.28	17.59	21.53	142.134	30.00
11a	6 Mbps	22.5	40	5200	20.59	19.35	23.02	200.651	30.00
11a	6 Mbps	23	48	5240	21.04	20.65	23.86	243.202	30.00
11n HT20	MCS 0	21	36	5180	18.63	17.58	21.15	130.225	30.00
11n HT20	MCS 0	22.5	40	5200	20.52	19.52	23.06	202.256	30.00
11n HT20	MCS 0	23	48	5240	21.07	20.45	23.78	238.856	30.00
11n HT40	MCS 0	15	38	5190	13.72	12.10	16.00	39.769	30.00
11n HT40	MCS 0	22.5	46	5230	21.11	20.34	23.75	237.265	30.00
11ac VHT20	MCS0-NSS1	21	36	5180	18.68	17.61	21.19	131.467	30.00
11ac VHT20	MCS0-NSS1	22.5	40	5200	20.57	19.58	23.11	204.807	30.00
11ac VHT20	MCS0-NSS1	23	48	5240	21.15	20.49	23.84	242.260	30.00
11ac VHT40	MCS0-NSS1	15	38	5190	13.74	12.15	16.03	40.065	30.00
11ac VHT40	MCS0-NSS1	22.5	46	5230	21.17	20.39	23.81	240.314	30.00
11ac VHT80	MCS0-NSS1	12.5	42	5210	11.13	10.52	13.85	24.244	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	18	149	5745	17.57	17.85	20.72	118.102	30.00
11a	6 Mbps	18	157	5785	17.62	17.93	20.79	119.897	30.00
11a	6 Mbps	17.5	165	5825	17.03	17.46	20.26	106.185	30.00
11n HT20	MCS 0	18	149	5745	17.45	17.48	20.48	111.566	30.00
11n HT20	MCS 0	18	157	5785	17.27	17.94	20.63	115.564	30.00
11n HT20	MCS 0	17.5	165	5825	16.61	17.74	20.22	105.243	30.00
11n HT40	MCS 0	18	151	5755	18.21	18.76	21.50	141.384	30.00
11n HT40	MCS 0	18	159	5795	18.14	18.74	21.46	139.980	30.00
11ac VHT20	MCS0-NSS1	18	149	5745	17.50	17.54	20.53	112.989	30.00
11ac VHT20	MCS0-NSS1	18	157	5785	17.32	18.02	20.69	117.338	30.00
11ac VHT20	MCS0-NSS1	17.5	165	5825	16.65	17.79	20.27	106.355	30.00
11ac VHT40	MCS0-NSS1	18	151	5755	18.26	18.83	21.56	143.372	30.00
11ac VHT40	MCS0-NSS1	18	159	5795	18.19	18.78	21.51	141.427	30.00
11ac VHT80	MCS0-NSS1	17	155	5775	16.95	17.34	20.16	103.745	30.00



11. Power Spectral Density

11.1. Test Limit

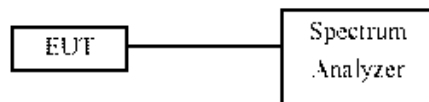
PSD:

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

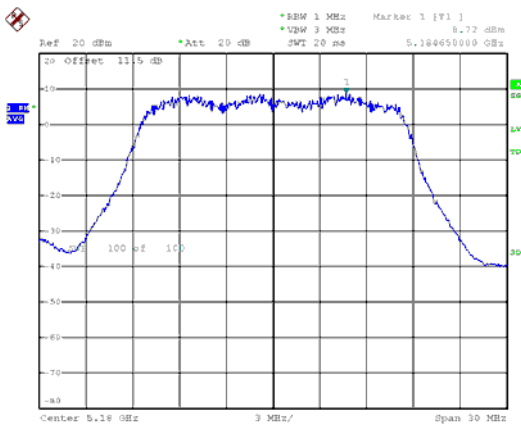
Modulation Type	Channel	Frequency (MHz)	Meas PSD (dBm/MHz)		Sum chain (dBm)	Duty Cycle CF(dB)	Total Corr'd PSD (dBm/MHz)	PSD Limit (dBm/MHz)
			ANT A	ANT B				
11a	36	5180	8.72	7.42	11.13	0.00	11.13	17.00
11a	40	5200	9.67	8.53	12.15	0.00	12.15	17.00
11a	48	5240	10.21	9.62	12.94	0.00	12.94	17.00
11ac VHT20	36	5180	8.44	7.43	10.97	0.00	10.97	17.00
11ac VHT20	40	5200	8.84	8.20	11.54	0.00	11.54	17.00
11ac VHT20	48	5240	9.13	9.31	12.23	0.00	12.23	17.00
11ac VHT40	38	5190	0.10	-1.20	2.51	0.09	2.60	17.00
11ac VHT40	46	5230	7.22	6.40	9.84	0.09	9.93	17.00
11ac VHT80	42	5210	-6.61	-7.41	-3.98	0.19	-3.79	17.00

In the 5.8G Band

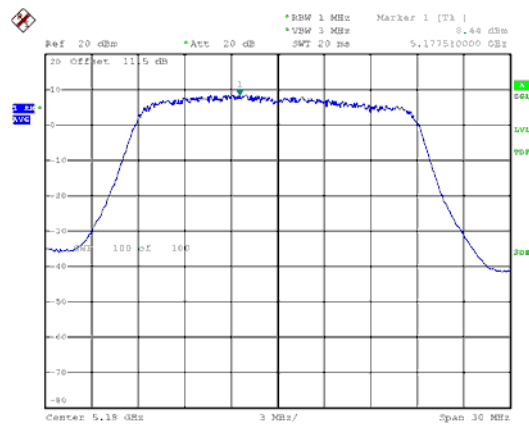
Modulation Type	Channel (MHz)	Frequency (MHz)	Meas PSD (dBm/MHz)		Sum chain (dBm)	Duty Cycle CF(dB)	10log (500KHz/RBW) CF (dB)	Total Corr'd PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)
			ANT A	ANT B					
11a	149	5745	6.50	6.64	9.58	0.00	-3.01	6.57	30.00
11a	157	5785	6.60	6.84	9.73	0.00	-3.01	6.72	30.00
11a	165	5825	5.67	6.06	8.88	0.00	-3.01	5.87	30.00
11ac VHT20	149	5745	6.24	5.76	9.02	0.00	-3.01	6.01	30.00
11ac VHT20	157	5785	5.80	6.21	9.02	0.00	-3.01	6.01	30.00
11ac VHT20	165	5825	5.29	4.69	8.01	0.00	-3.01	5.00	30.00
11ac VHT40	151	5755	3.85	3.96	6.92	0.09	-3.01	4.00	30.00
11ac VHT40	159	5795	3.98	3.88	6.94	0.09	-3.01	4.02	30.00
11ac VHT80	155	5775	-0.26	-0.56	2.60	0.19	-3.01	-0.22	30.00



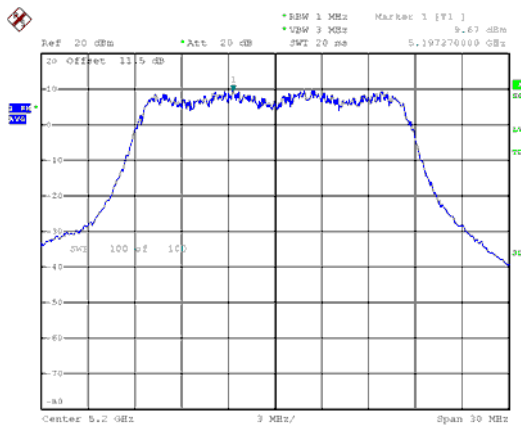
Band 1, ANT A
Modulation Type: 802.11a (6Mbps)
CH36



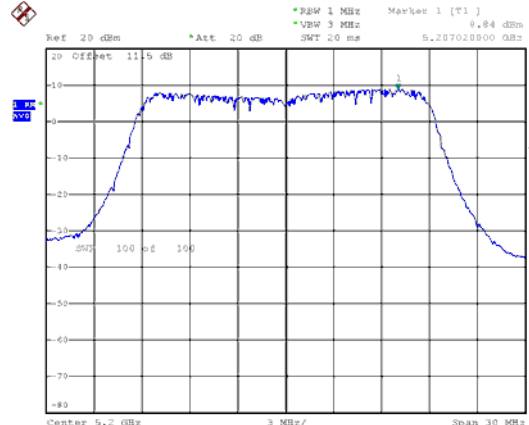
Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH36



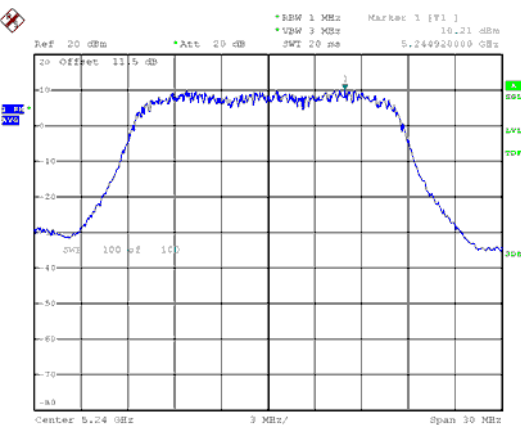
CH40



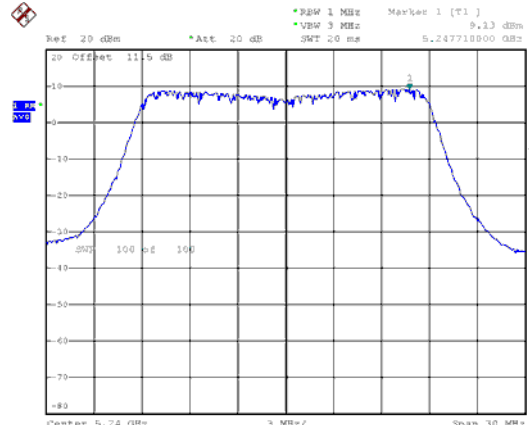
CH40



CH48

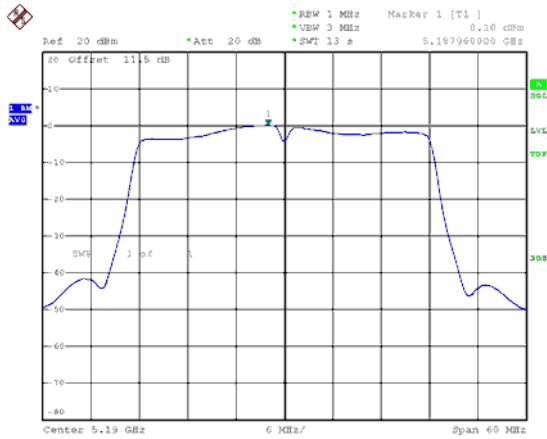


CH48

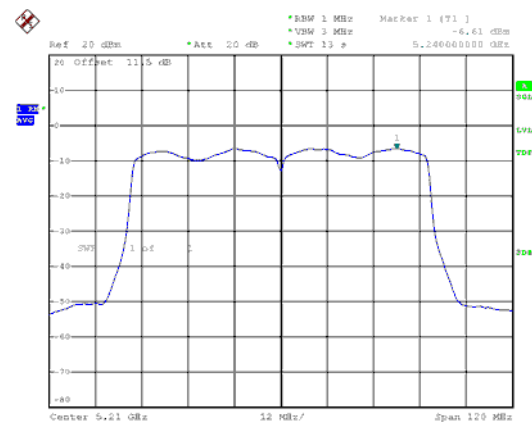




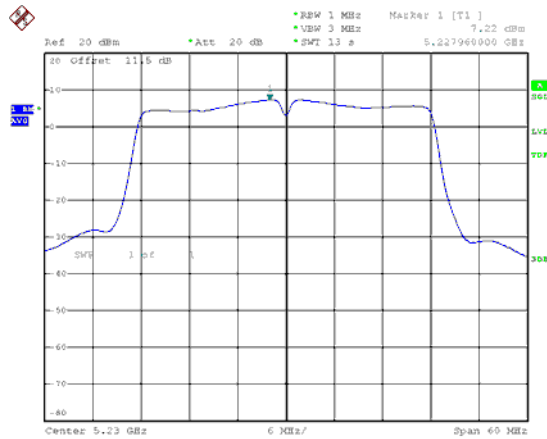
Band 1, ANT A
Modulation Type: 802.11ac VHT40 (6.5Mbps)
CH38



Modulation Type: 802.11ac VHT80 (13.5Mbps)
CH42



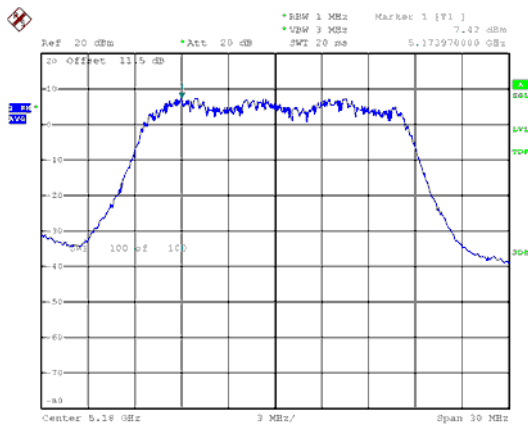
CH46



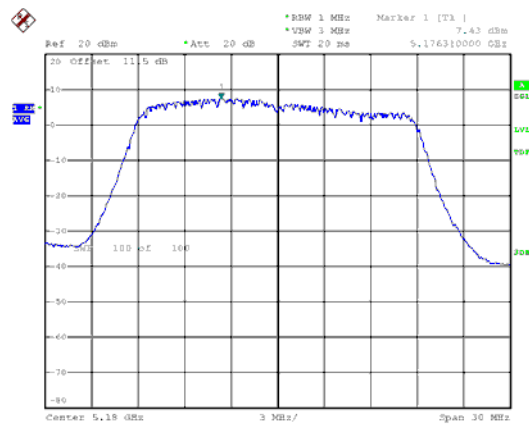


Band 1, ANT B

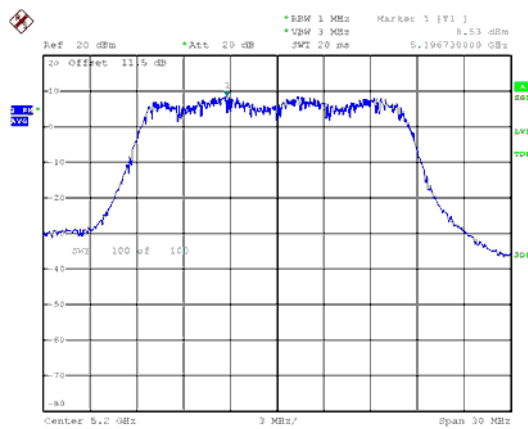
Modulation Type: 802.11a (6Mbps)
CH36



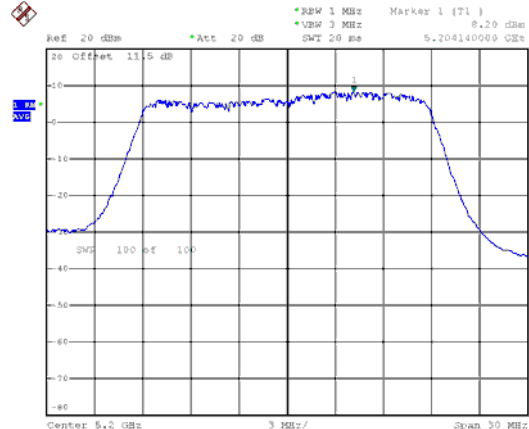
Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH36



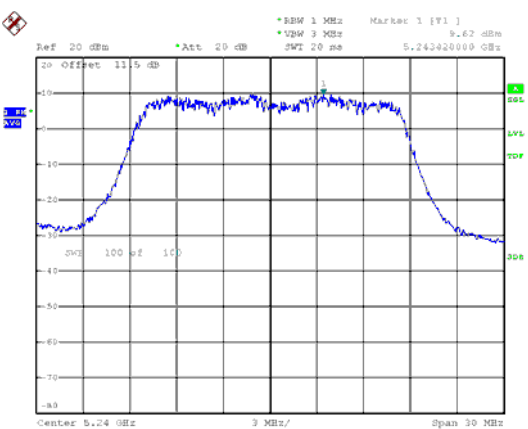
CH40



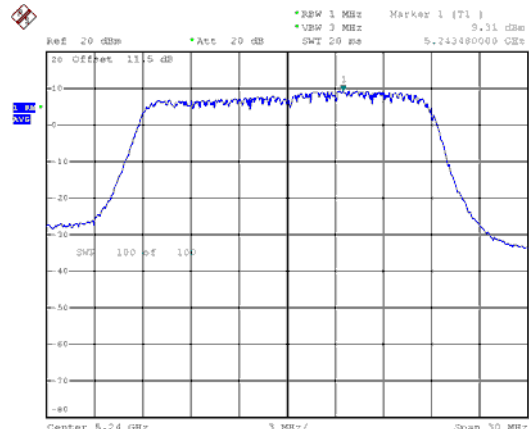
CH40



CH48



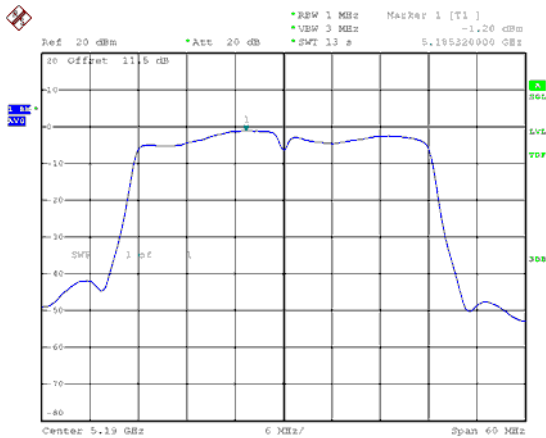
CH48



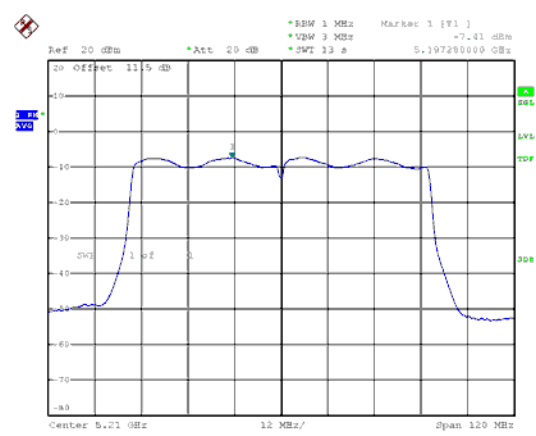


Band 1, ANT B

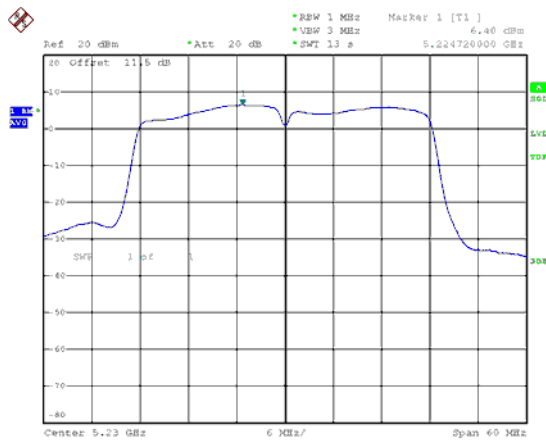
Modulation Type: 802.11ac VHT40 (6.5Mbps)
CH38



Modulation Type: 802.11ac VHT80 (13.5Mbps)
CH42

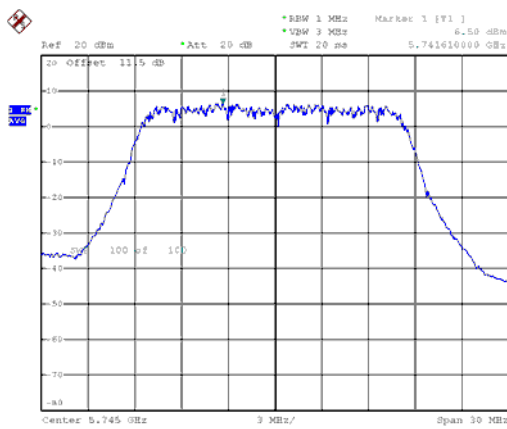


CH46

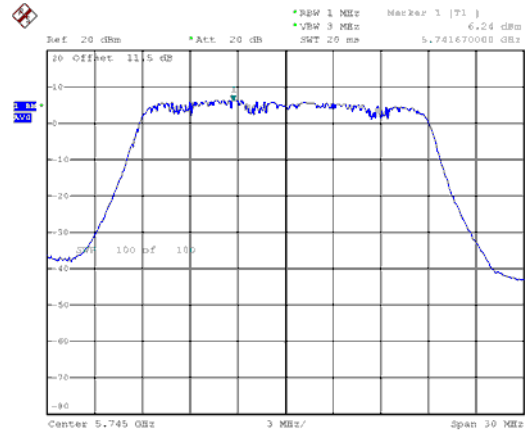




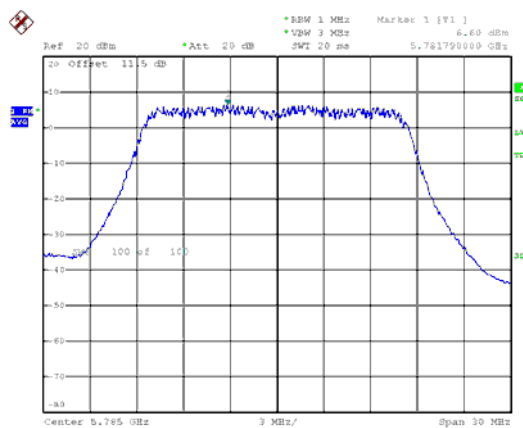
Band 4, ANT A
Modulation Type: 802.11a (6Mbps)
CH149



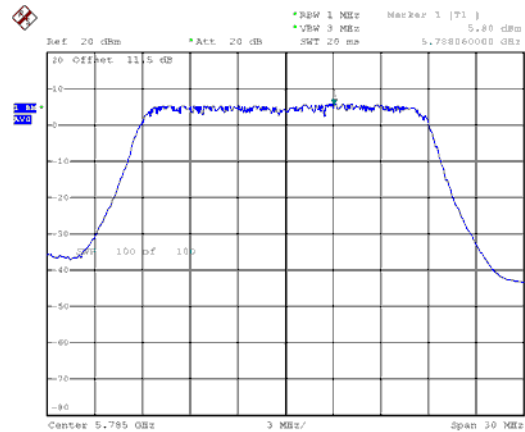
Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH149



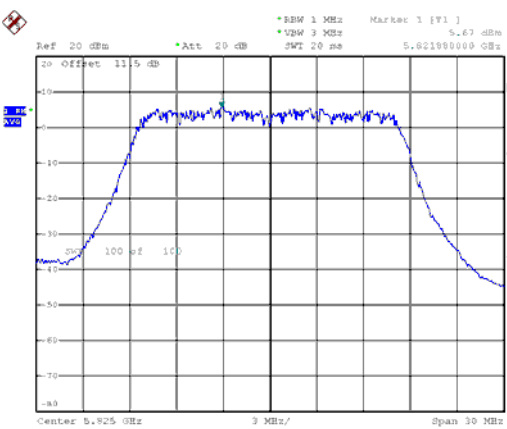
CH157



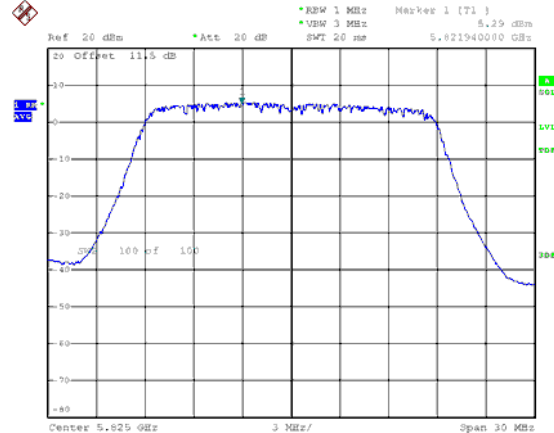
CH157



CH165



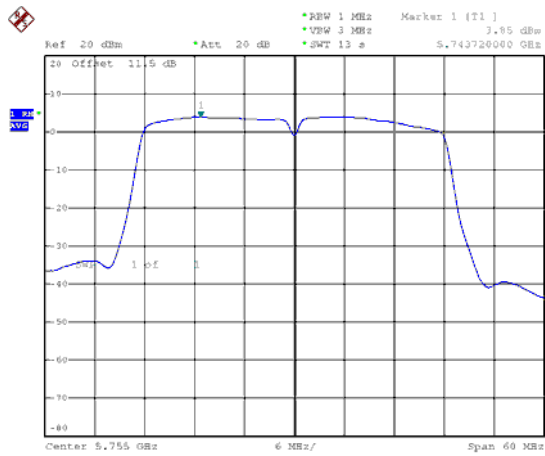
CH165



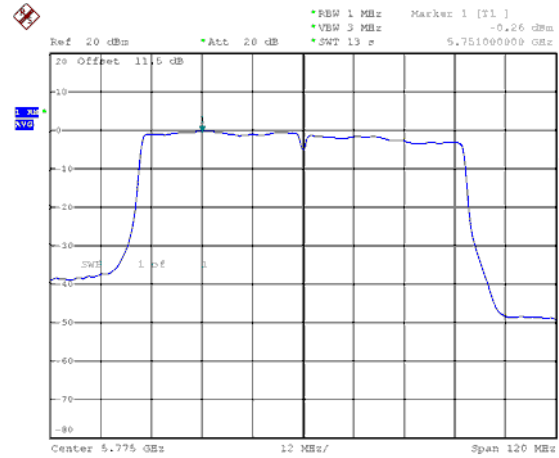


Band 4, ANT A

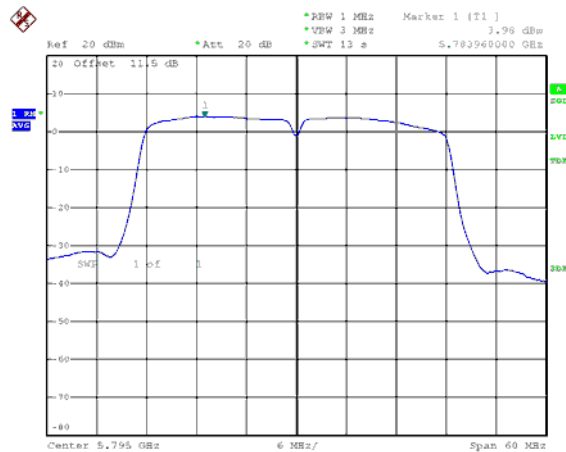
Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH151



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH155

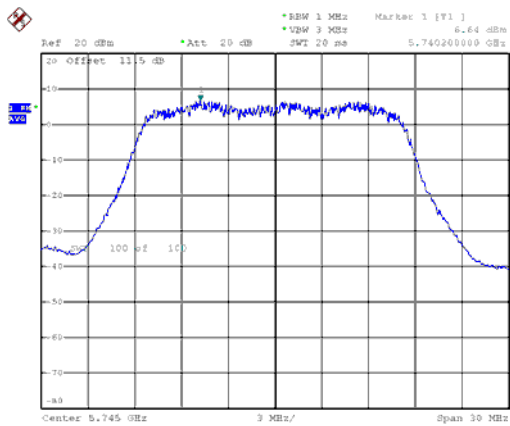


CH159

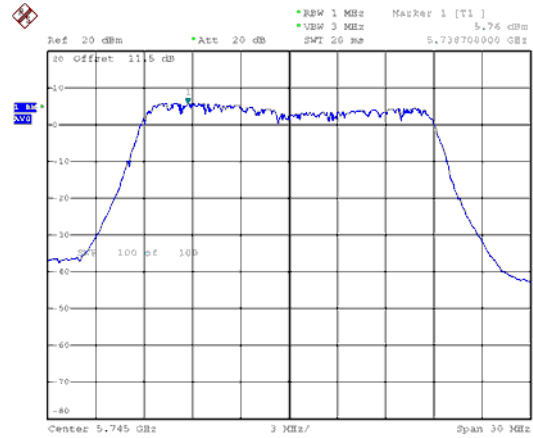




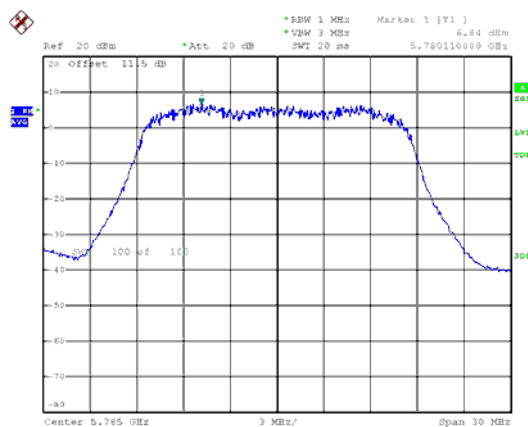
Band 4, ANT B
Modulation Type: 802.11a (6Mbps)
CH149



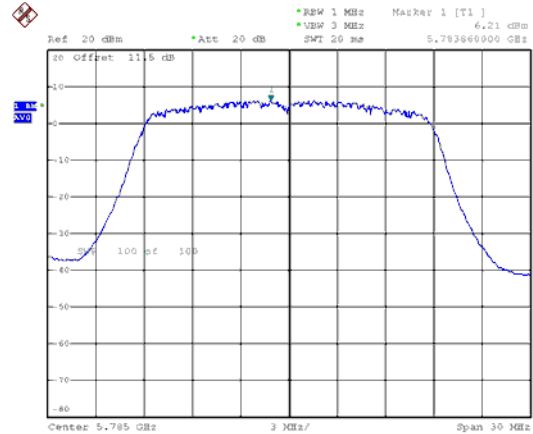
Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH149



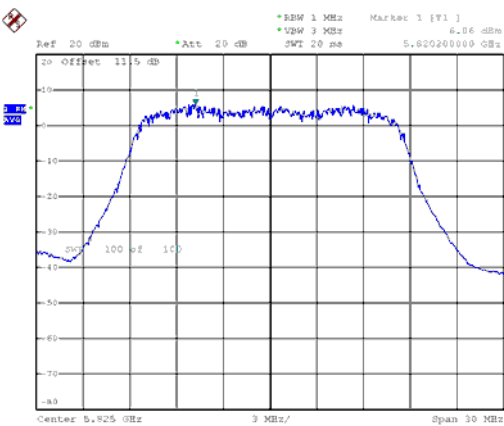
CH157



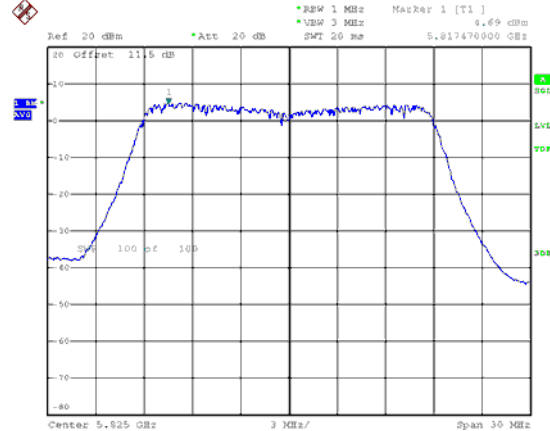
CH157



CH165



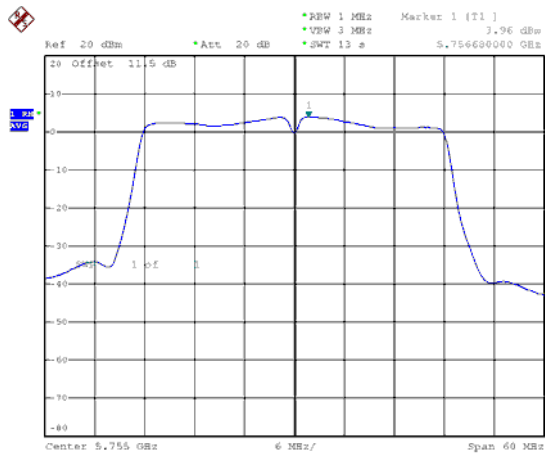
CH165



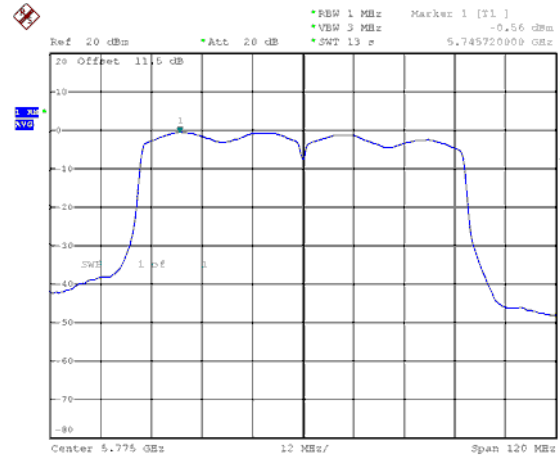


Band 4, ANT B

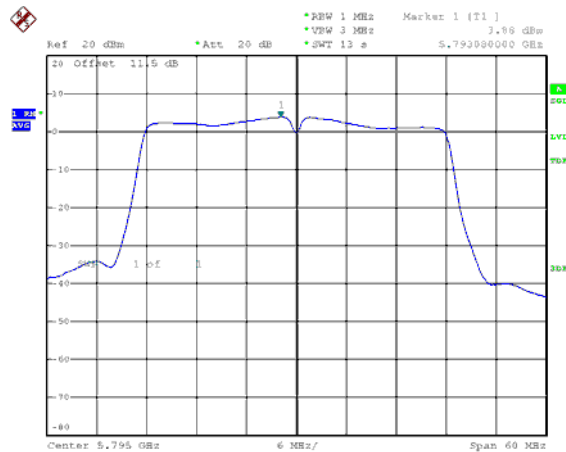
Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH151



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH155



CH159



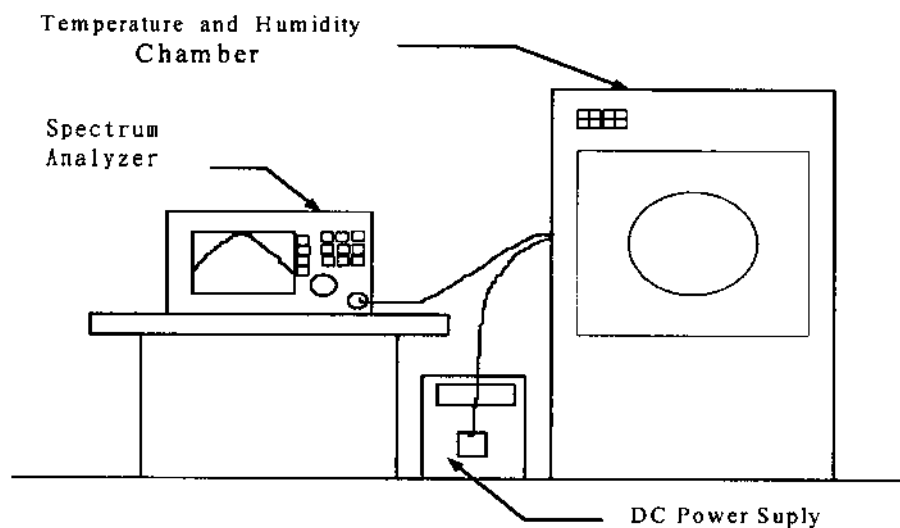


12. Frequency Stability

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 frequency record.

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)	(%)
55	102	5180.0347	0.000670	5180.0455	0.000878	5180.0527	0.001017
	120	5180.0394	0.000761	5180.0463	0.000894	5180.0566	0.001093
	138	5180.0349	0.000674	5180.0425	0.000820	5180.5036	0.009722
40	102	5180.0043	0.000083	5180.0049	0.000095	5180.0147	0.000284
	120	5180.0041	0.000079	5180.0075	0.000145	5180.0125	0.000241
	138	5180.0019	0.000037	5180.0039	0.000075	5180.0156	0.000301
30	102	5179.9981	-0.000037	5180.0023	0.000044	5180.0006	0.000012
	120	5179.9941	-0.000114	5180.0010	0.000019	5180.0030	0.000058
	138	5179.9933	-0.000129	5180.0052	0.000100	5180.0041	0.000079
20	102	5179.9926	-0.000143	5179.9983	-0.000033	5179.9906	-0.000181
	120	5179.9939	-0.000118	5179.9940	-0.000116	5179.9940	-0.000116
	138	5179.9946	-0.000104	5179.9953	-0.000091	5179.9925	-0.000145
10	102	5179.9942	-0.000112	5179.9948	-0.000100	5179.9909	-0.000176
	120	5179.9956	-0.000085	5179.9964	-0.000069	5179.9974	-0.000050
	138	5179.9938	-0.000120	5179.9922	-0.000151	5179.9965	-0.000068
0	102	5180.0036	0.000069	5180.0026	0.000050	5180.0013	0.000025
	120	5180.0066	0.000127	5180.0040	0.000077	5180.0022	0.000042
	138	5180.0081	0.000156	5180.0068	0.000131	5180.0024	0.000046

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.