



# FCC RADIO TEST REPORT

Applicant : Everest Networks, Inc.

Address : 205 Ravendale Dr, Mountain View, CA 94043, USA

Equipment : AP300 3-Radio Omni-Directional Indoor Access Point

Model No. : AP23I300

Trade Name : **EVEREST**  
NETWORKS

FCC ID : 2AGMRAP23I300

## I HEREBY CERTIFY THAT :

The sample was received on Jul. 07, 2018 and the testing was carried out on Aug. 03, 2018 at CerpPASS Technology Corp. The test result refers exclusively to the test presented test model / sample. Without written approval of CerpPASS Technology Corp., the test report shall not be reproduced except in full.

Approved by:

Mark Liao / Assistant Manager

Tested by:

Spree Yei / Engineer

Laboratory Accreditation:

CerpPASS Technology Corporation Test Laboratory





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History of this test report

Report No.	Issue Date	Description
TEFE1811129	Nov. 30, 2018	Original



# 1. Summary of Test Procedure and Test Results

## 1.1. Applicable Standards

ANSI C63.4:2014

ANSI C63.10:2013

FCC Rules and Regulations Part 15 Subpart E §15.407

First R&O 14-30

KDB662911

KDB789033

KDB644545

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)	Maximum Power Spectral Density	Pass
15.407(g)	Frequency Stability	Pass
15.407(c)	Automatically Discontinue Transmission	Pass
2.1091	Radio Frequency Exposure	Pass



## 2. Test Configuration of Equipment under Test

### 2.1. Feature of Equipment and Model Description

Equipment	AP300 3-Radio Omni-Directional Indoor Access Point
Model No.	AP23I300
Brand Name	<b>EVEREST</b> NETWORKS
Product Description	Please refer to User's Manual.
Connecting I/O Port(s)	Please refer to User's Manual.
AC ADAPTER	Adapter Brand: APD Model No.: WA-24Q12R I/P: AC 100-240V~, 50-60Hz, 0.7A MAX. ; O/P: DC 12V, 2.0A
PoE	48Vdc/0.67A
Memo	A1
Frequency Range	802.11b/g/n: 2400~2483.5 MHz 802.11a/n/ac: 5150~5250 MHz, 5725~5850 MHz
Modulation Type	OFDM, DSSS
Data Rate	2.4GHz: 802.11b: 1, 2, 5.5, 11Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11n: MCS0 – MCS15, HT20/40, VHT20/40 5GHz: 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	PIFA Antenna
Antenna Gain	2.4GHz: ANT A: 4.85 dBi ; ANT B: 4.4 dBi 5150MHz-5250MHz: ANT A: 4.18 dBi ; ANT B: 4.81 dBi 5725MHz-5850MHz: ANT A: 4.9 dBi ; ANT B: 4.18 dBi

Note: 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 1: 5150MHz-5250MHz

802.11a, 802.11n HT20, 802.11ac VHT20

Channel	Frequency(MHz)	Channel	Frequency(MHz)
<b>*36</b>	<b>5180</b>	<b>*44</b>	<b>5220</b>
40	5200	<b>*48</b>	<b>5240</b>

802.11n HT40, 802.11ac VHT40

Channel	Frequency(MHz)	Channel	Frequency(MHz)
<b>*38</b>	<b>5190</b>	<b>*46</b>	<b>5230</b>

802.11ac VHT80

Channel	Frequency(MHz)
<b>*42</b>	<b>5210</b>

Band 4: 5725MHz -5850MHz

802.11a, 802.11n HT20, 802.11ac VHT20

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

802.11n HT40, 802.11ac VHT40

Channel	Frequency(MHz)	Channel	Frequency(MHz)
<b>*151</b>	<b>5755</b>	<b>*159</b>	<b>5795</b>

802.11ac VHT80

Channel	Frequency(MHz)
<b>*155</b>	<b>5775</b>

Note: Channels remarked \* are selected to perform test.



2.3. Test Mode and Test Software

- a. During testing, the interface cables and equipment positions were varied according to ANSI C63.4.
- b. The complete test system included remote workstation and EUT for RF test. The remote workstation included Notebook.
- c. An executive program, "QDART:39.1" under WIN 8 was executed to transmit and receive data via WLAN.
- d. The following test modes were performed for the test:

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

- Note: 1. Non-Beamforming was the worst case of test result, and record in this test report.
- 2. The Thermal Pad of P300K was the worst case, so it was used for the test result.

2.4. Description of Test System

Device	Manufacturer	Model No.	Description
Remote workstation			
Notebook	DELL	LatitudeE5450/5450	Power Cable, Unshielding, 1.8m



**2.5. General Information of Test**

Test Site	<b>Cerpass Technology Corporation Test Laboratory</b> 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 Address: No.68-1, Shihbachongsi, Shihding Township, New Taipei City 223, Taiwan, R.O.C. Tel: +886-2-2663-8582	
	FCC	TW1079, TW1061, TW1439
	IC	4934E-1, 4934E-2
	VCCI	T-2205 for Telecommunication Test C-4663 for Conducted emission test R-4399, 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.	

**2.6. Measurement Uncertainty**

Measurement Item	Uncertainty
Radiated Spurious Emission(9KHz~30MHz)	±5.007dB
Radiated Spurious Emission(30MHz~1GHz)	±5.157dB
Radiated Spurious Emission(1GHz~18GHz)	±6.383dB
Radiated Spurious Emission(18GHz~40GHz)	±6.648dB
Conducted Spurious Emission	±1.253dB
6dB Bandwidth	±6.89%
Power Spectral Density	±0.630dB
26 dB Occupied Bandwidth	±6.10%
Frequency Stability	±375KHz
Channel Frequencies Separation	±6.10%
20dB Bandwidth	±6.12%
Dwell Time	±1.34%
Peak Output Power(Conducted Power Meter)	±0.86dB
Temperature	±1.2°C
Humidity	±2.7%
Channel Move Time	±4.53%
Channel Closing Transmission Time	±6.61%
Threshold	±0.631dB
Non occupancy period	±1.17%



### 3. Test Equipment and Ancillaries Used for Tests

Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date
EMI Receiver	R&S	ESCI3	100821	2017/09/08	2018/09/07
LISN	Schwarzbeck	NSLK 8127	8127-568	2018/02/26	2019/02/25
Pulse Limiter	R&S	ESH3-Z2	101934	2018/02/22	2019/02/21
Bilog Antenna	Schwarzbeck	VULB9168	275	2017/08/31	2018/08/30
Active Loop Antenna	EMCO	6507	40855	2018/05/22	2019/05/21
Horn Antenna	EMCO	3115	31601	2017/09/11	2018/09/10
Horn Antenna	EMCO	3116	31970	2018/03/23	2019/03/22
Preamplifier	EM	EM330	60658	2017/09/08	2018/09/07
Preamplifier	EMC INSTRUMENTS	EMC051845SE	980333	2017/09/20	2018/09/19
Preamplifier	EMC INSTRUMENTS	EMC184045	980065	2017/11/10	2018/11/09
MXG MW Analog Signal Generator	KEYSIGHT	N5183A	MY50142931	2018/04/10	2019/04/09
Spectrum Analyzer	R&S	FSP40	100219	2018/07/03	2019/07/02
BLUETOOTH TESTER	R&S	CBT	101133	2018/04/02	2019/04/01
Attenuator	KEYSIGHT	8491B	MY39250705	2017/09/04	2018/09/03
Rotary Attenuator	Agilent	8495B	MY42146680	2018/03/29	2019/03/28
Temp & Humi chamber	T-MACHINE	TMJ-9712	T-12-040111	2017/09/04	2018/09/03
Series Power Meter	Anritsu	ML2495A	1224005	2018/03/23	2019/03/22
Power Sensor	Anritsu	MA2411B	1207295	2018/03/23	2019/03/22
Software	Farad	Ez-EMC	ver.ct3a1	N/A	N/A
Software	AUDIX	E3	V8.2014-8-6	N/A	N/A
Software	Keysight	N7607B Signal Studio	V3.0.0.0	N/A	N/A
Software	Keysight	Inservice MonitorUtility	N/A	N/A	N/A



## 4. Antenna Requirements

### 4.1. Standard Applicable

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

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

### 4.2. Antenna Construction and Directional Gain

Antenna Type	PIFA Antenna
Antenna Gain	2.4GHz: ANT A: 4.85 dBi ; ANT B: 4.4 dBi 5150MHz-5250MHz: ANT A: 4.18 dBi ; ANT B: 4.81 dBi 5725MHz-5850MHz: ANT A: 4.9 dBi ; ANT B: 4.18 dBi

#### **(Non-Beamforming)**

2412-2462MHz
For Power directional gain= $G_{ant}= 4.85$ dBi For PSD directional gain = $10 \log[(10^{G1/20} + 10^{G2/20})^2 / NANT]$ = 7.64 (dBi)
5150MHz -5250MHz
For Power directional gain= $G_{ant}= 4.81$ dBi For PSD directional gain = $10 \log[(10^{G1/20} + 10^{G2/20})^2 / NANT]$ = 7.51 (dBi)
5725MHz -5850MHz
For Power directional gain= $G_{ant}= 4.9$ dBi For PSD directional gain = $10 \log[(10^{G1/20} + 10^{G2/20})^2 / NANT]$ = 7.56 (dBi)

PSD directional gain is exceed to 6dBi, the limit is reduced accordingly.

#### **(Beamforming)**

2412-2462MHz
For Power directional gain = $10 \log[(10^{G1/20} + 10^{G2/20})^2 / NANT] = 7.64$ dBi For PSD directional gain = $10 \log[(10^{G1/20} + 10^{G2/20})^2 / NANT] = 7.64$ (dBi)
5150MHz -5250MHz
For Power directional gain= $10 \log[(10^{G1/20} + 10^{G2/20})^2 / NANT] = 7.51$ (dBi) For PSD directional gain = $10 \log[(10^{G1/20} + 10^{G2/20})^2 / NANT]= 7.51$ (dBi)
5725MHz -5850MHz
For Power directional gain= $10 \log[(10^{G1/20} + 10^{G2/20})^2 / NANT] = 7.56$ (dBi) For PSD directional gain = $10 \log[(10^{G1/20} + 10^{G2/20})^2 / NANT]= 7.56$ (dBi)

Power directional gain is exceed to 6dBi, the limit is reduced accordingly.

PSD directional gain is exceed to 6dBi, the limit is reduced accordingly.



## 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 $\mu$ V)	Average (dB $\mu$ V)
0.15 – 0.5	66-56*	56-46*
0.5 – 5.0	56	46
5.0 – 30.0	60	50

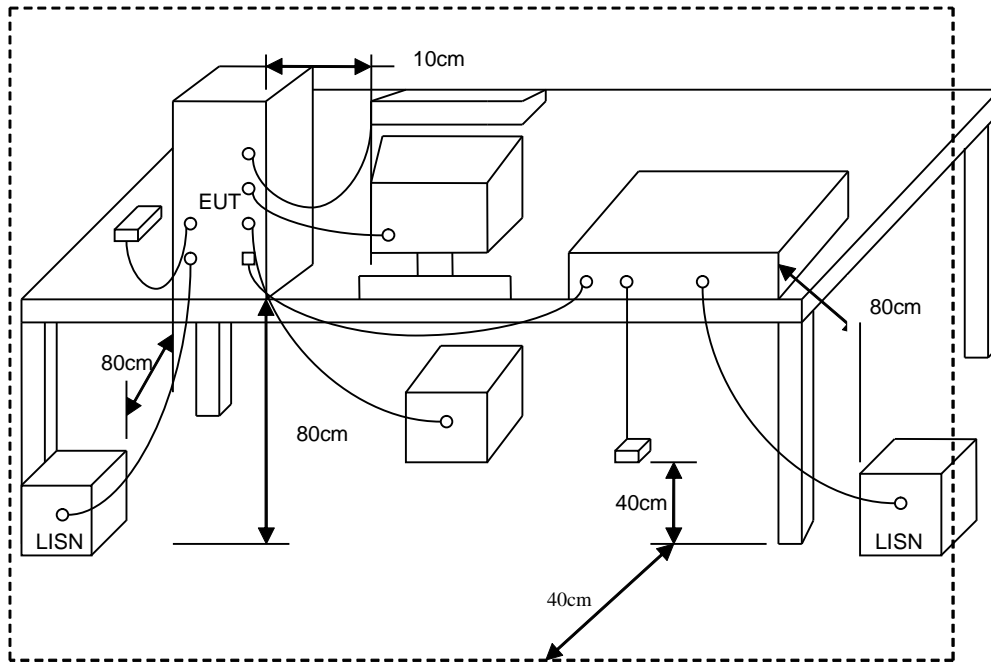
\*Decreases with the logarithm of the frequency.

### 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.



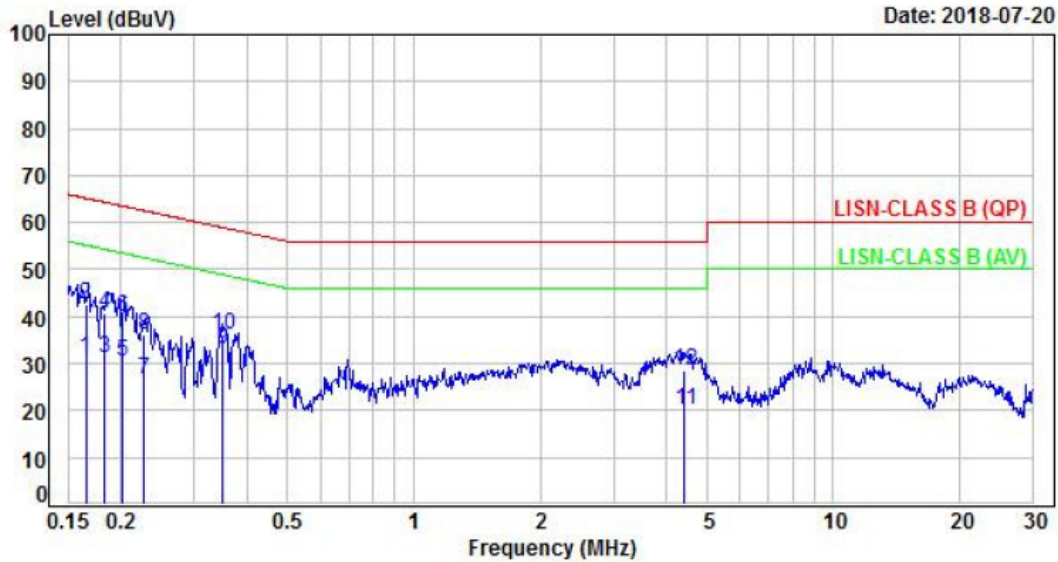
### 5.3. Typical Test Setup





5.4. Test Result and Data

Power	: AC 120V	Pol/Phase	: LINE
Test Mode	: Mode 1, Band 1	Temperature	: 20 °C
Test Date	: Jul. 20, 2018	Humidity	: 40 %

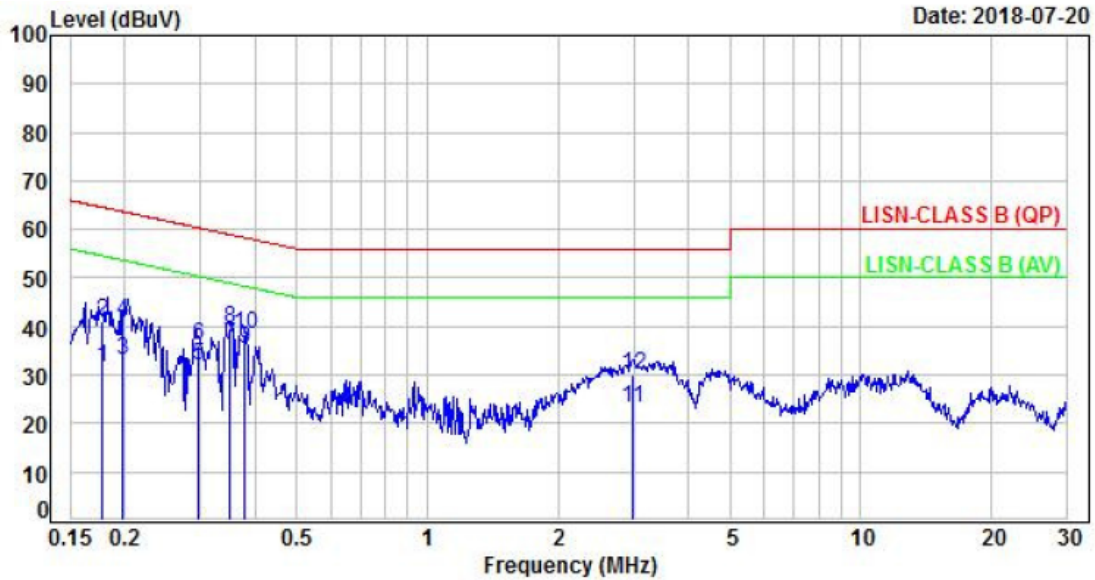


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.17	9.70	21.56	31.26	55.21	-23.95	Average	P
2	0.17	9.70	32.78	42.48	65.21	-22.73	QP	P
3	0.18	9.69	21.48	31.17	54.37	-23.20	Average	P
4	0.18	9.69	30.83	40.52	64.37	-23.85	QP	P
5	0.20	9.69	20.61	30.30	53.51	-23.21	Average	P
6	0.20	9.69	30.07	39.76	63.51	-23.75	QP	P
7	0.23	9.69	16.76	26.45	52.57	-26.12	Average	P
8	0.23	9.69	26.26	35.95	62.57	-26.62	QP	P
9	0.35	9.70	23.42	33.12	48.93	-15.81	Average	P
10	0.35	9.70	26.54	36.24	58.93	-22.69	QP	P
11	4.43	9.85	10.20	20.05	46.00	-25.95	Average	P
12	4.43	9.85	18.52	28.37	56.00	-27.63	QP	P

Note: Level = Reading + Factor  
 Margin = Level – Limit  
 Factor = (LISN, ISN, PLC or current probe) Factor + Cable Loss+ Attenuator



Power	: AC 120V	Pol/Phase	: NEUTRAL
Test Mode	: Mode 1, Band 1	Temperature	: 20 °C
Test Date	: Jul. 20, 2018	Humidity	: 40 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.18	9.70	22.01	31.71	54.58	-22.87	Average	P
2	0.18	9.70	31.46	41.16	64.58	-23.42	QP	P
3	0.20	9.70	23.43	33.13	53.66	-20.53	Average	P
4	0.20	9.70	31.25	40.95	63.66	-22.71	QP	P
5	0.30	9.69	22.18	31.87	50.34	-18.47	Average	P
6	0.30	9.69	26.53	36.22	60.34	-24.12	QP	P
7	0.35	9.70	26.51	36.21	48.98	-12.77	Average	P
8	0.35	9.70	29.81	39.51	58.98	-19.47	QP	P
9	0.38	9.70	25.68	35.38	48.29	-12.91	Average	P
10	0.38	9.70	28.69	38.39	58.29	-19.90	QP	P
11	2.97	9.83	13.23	23.06	46.00	-22.94	Average	P
12	2.97	9.83	20.05	29.88	56.00	-26.12	QP	P

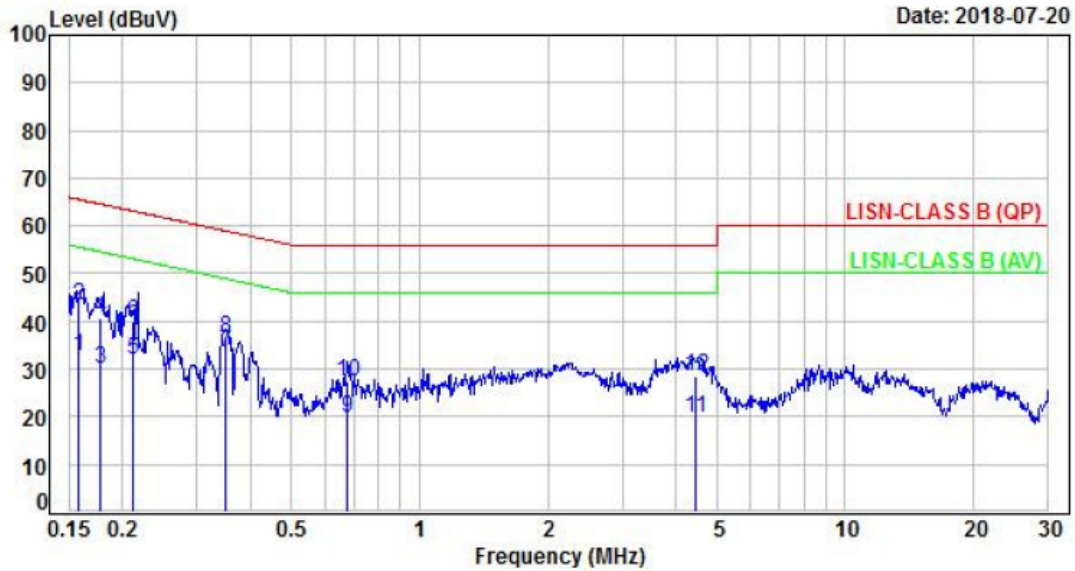
Note: Level = Reading + Factor

Margin = Level – Limit

Factor = (LISN, ISN, PLC or current probe) Factor + Cable Loss+ Attenuator



Power	: AC 120V	Pol/Phase	: LINE
Test Mode	: Mode 1, Band 4	Temperature	: 20 °C
Test Date	: Jul. 20, 2018	Humidity	: 40 %



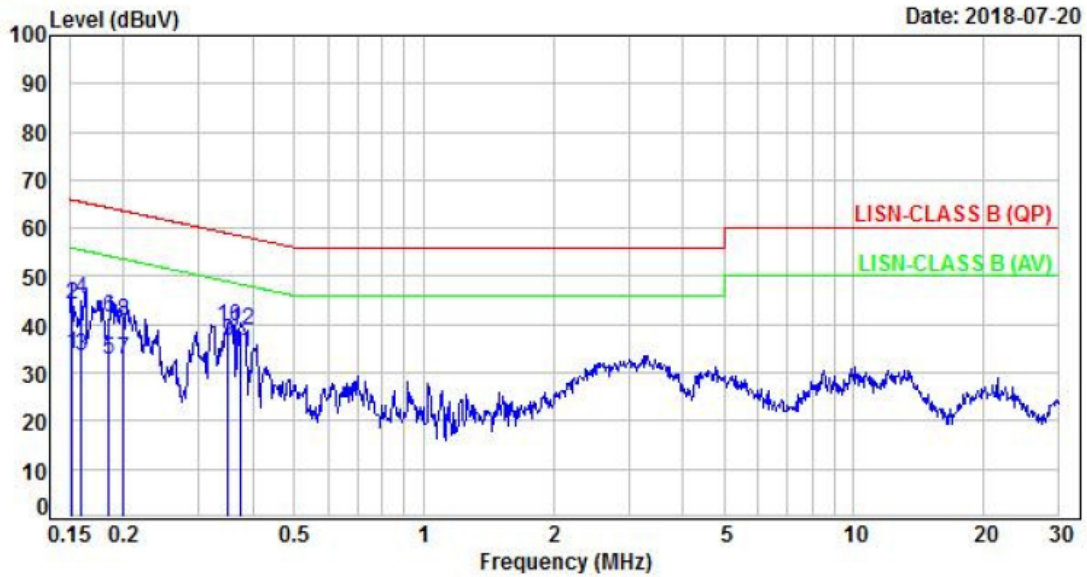
No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV)	Limit (dBUV)	Margin (dB)	Detector	P/F
1	0.16	9.70	22.96	32.66	55.57	-22.91	Average	P
2	0.16	9.70	33.52	43.22	65.57	-22.35	QP	P
3	0.18	9.69	20.33	30.02	54.62	-24.60	Average	P
4	0.18	9.69	31.05	40.74	64.62	-23.88	QP	P
5	0.21	9.69	22.25	31.94	53.16	-21.22	Average	P
6	0.21	9.69	30.15	39.84	63.16	-23.32	QP	P
7	0.35	9.70	23.74	33.44	48.95	-15.51	Average	P
8	0.35	9.70	26.73	36.43	58.95	-22.52	QP	P
9	0.68	9.71	10.24	19.95	46.00	-26.05	Average	P
10	0.68	9.71	17.76	27.47	56.00	-28.53	QP	P
11	4.44	9.85	9.92	19.77	46.00	-26.23	Average	P
12	4.44	9.85	18.49	28.34	56.00	-27.66	QP	P

Note: Level = Reading + Factor  
 Margin = Level – Limit  
 Factor = (LISN, ISN, PLC or current probe) Factor + Cable Loss+ Attenuator





Power	: AC 120V	Pol/Phase	: NEUTRAL
Test Mode	: Mode 1, Band 4	Temperature	: 20 °C
Test Date	: Jul. 20, 2018	Humidity	: 40 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.15	9.70	24.32	34.02	55.93	-21.91	Average	P
2	0.15	9.70	34.24	43.94	65.93	-21.99	QP	P
3	0.16	9.70	23.94	33.64	55.47	-21.83	Average	P
4	0.16	9.70	35.48	45.18	65.47	-20.29	QP	P
5	0.18	9.70	22.91	32.61	54.28	-21.67	Average	P
6	0.18	9.70	31.76	41.46	64.28	-22.82	QP	P
7	0.20	9.70	22.96	32.66	53.62	-20.96	Average	P
8	0.20	9.70	30.84	40.54	63.62	-23.08	QP	P
9	0.35	9.70	26.68	36.38	48.97	-12.59	Average	P
10	0.35	9.70	29.80	39.50	58.97	-19.47	QP	P
11	0.37	9.70	24.39	34.09	48.41	-14.32	Average	P
12	0.37	9.70	29.12	38.82	58.41	-19.59	QP	P

Note: Level = Reading + Factor

Margin = Level – Limit

Factor = (LISM, ISN, PLC or current probe) Factor + Cable Loss+ Attenuator



## 6. Test of Spurious Emission (Radiated)

### 6.1. Test Limit

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

- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of  $-27$  dBm/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of  $-27$  dBm/MHz.
- (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of  $-27$  dBm/MHz.
- (4) For transmitters operating in the 5.725-5.85 GHz band:  
All emissions shall be limited to a level of  $-27$  dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27dBm/MHz at the band edge.
- (5) The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.
- (6) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in §15.207.
- (7) The provisions of §15.205 apply to intentional radiators operating under this section.
- (8) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the upper and lower frequency band edges as the design of the equipment permits.

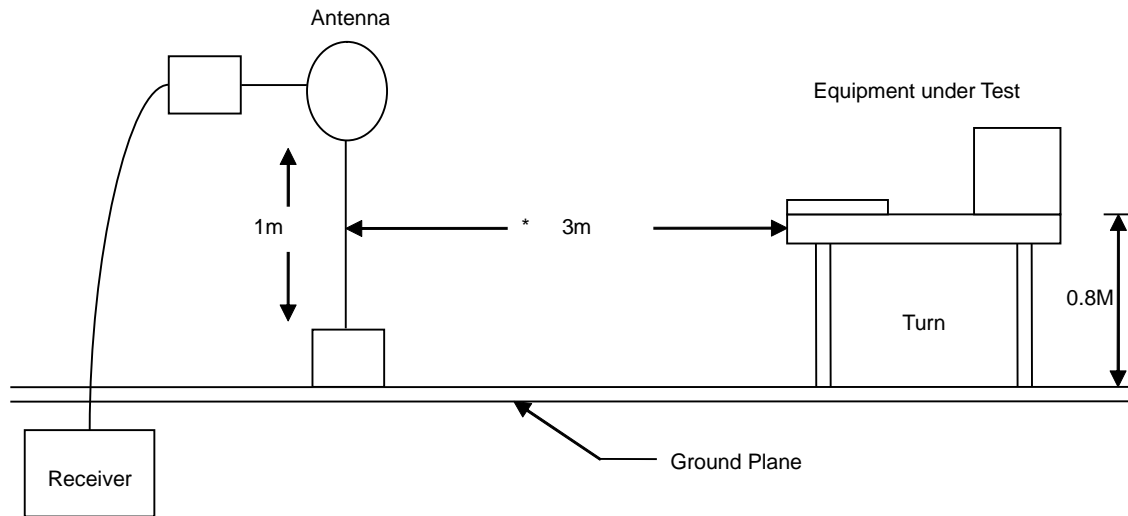
### 6.2. Test Procedures

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

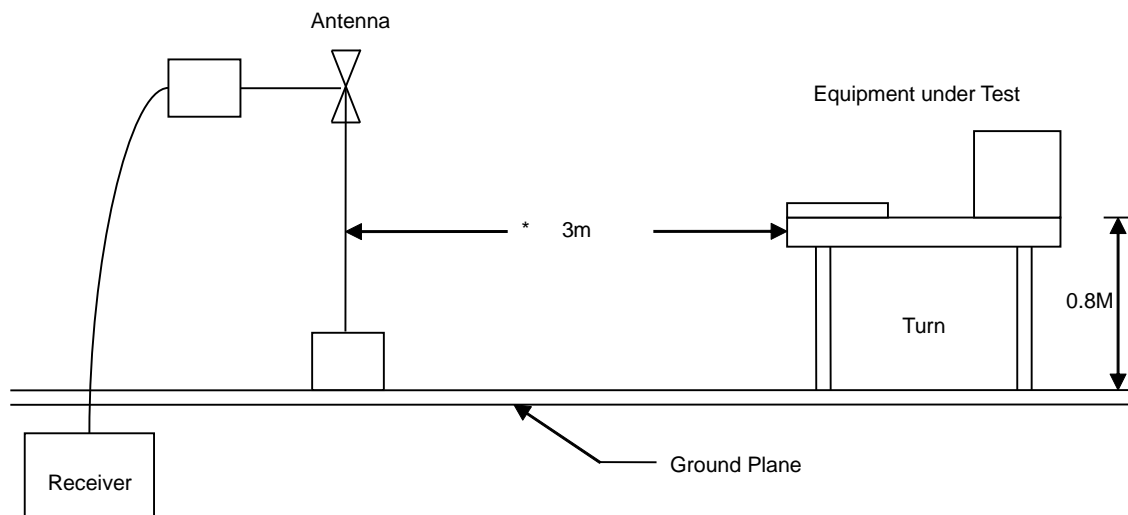


### 6.3. Typical Test Setup

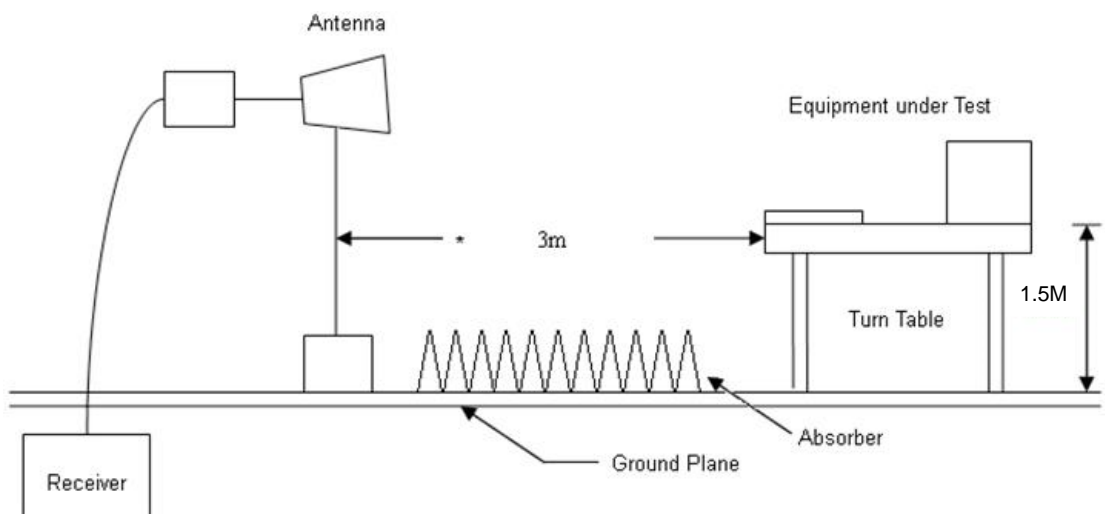
Below 30MHz test setup



30MHz- 1GHz Test Setup



Above 1GHz Test Setup



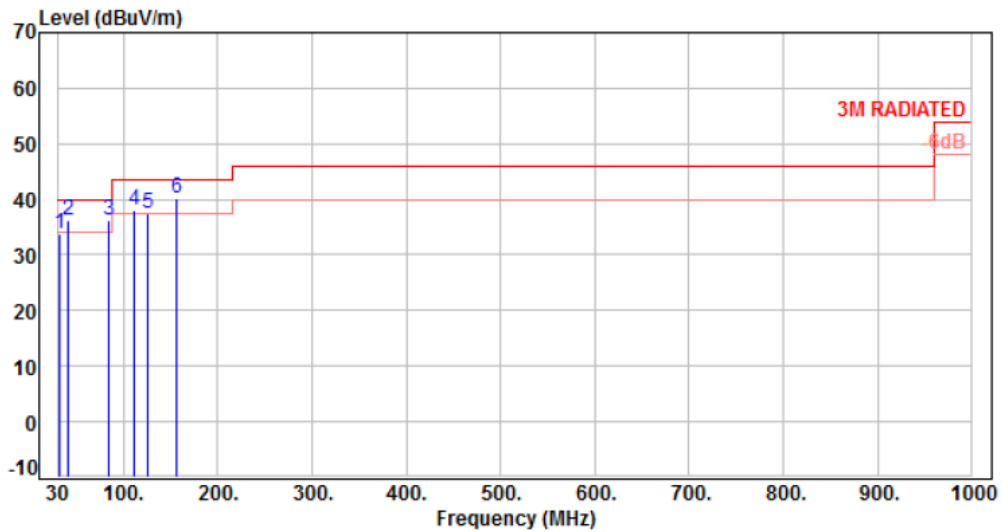


### 6.4. Test Result and Data (9kHz ~ 30MHz)

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

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

Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, Band 1	Temperature	: 23 °C
Test Date	: Jul. 07, 2018	Humidity	: 61 %

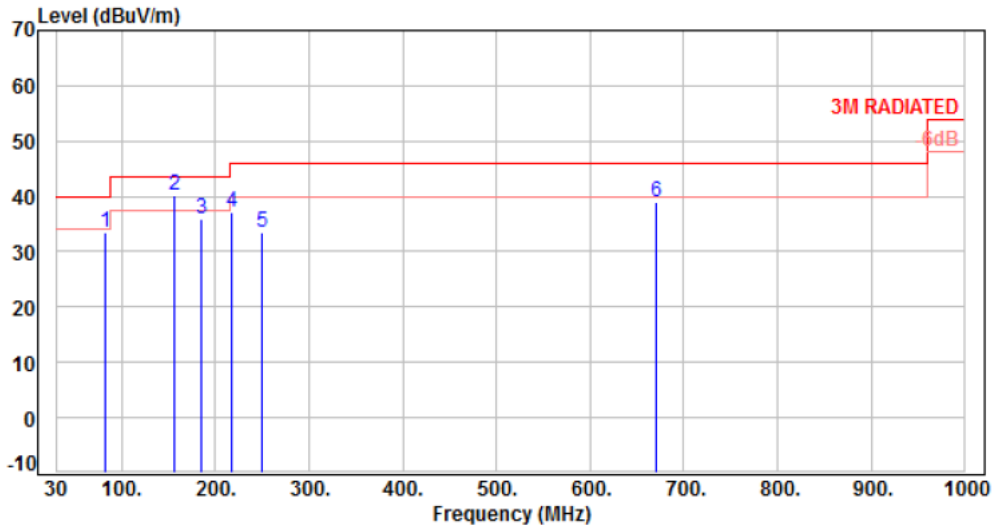


No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	32.91	-11.64	45.32	33.68	40.00	-6.32	QP	100	182	P
2	41.64	-11.01	47.13	36.12	40.00	-3.88	QP	100	144	P
3	84.32	-15.85	52.19	36.34	40.00	-3.66	Peak	400	0	P
4	111.48	-14.08	52.21	38.13	43.50	-5.37	Peak	400	0	P
5	125.06	-12.88	50.23	37.35	43.50	-6.15	Peak	400	0	P
6	156.10	-10.93	51.13	40.20	43.50	-3.30	QP	100	17	P

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



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, Band 1	Temperature	: 23 °C
Test Date	: Jul. 07, 2018	Humidity	: 61 %

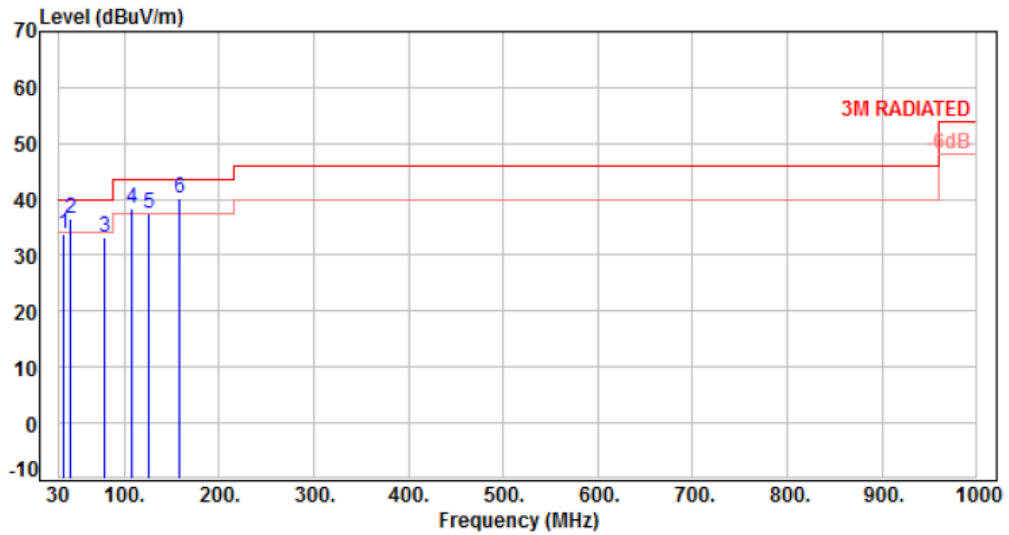


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	83.35	-15.71	49.27	33.56	40.00	-6.44	Peak	100	0	P
2	156.10	-10.93	51.12	40.19	43.50	-3.31	QP	147	132	P
3	184.23	-12.44	48.26	35.82	43.50	-7.68	Peak	100	0	P
4	217.21	-12.90	49.94	37.04	46.00	-8.96	Peak	100	0	P
5	250.19	-11.64	45.17	33.53	46.00	-12.47	Peak	100	0	P
6	671.17	-1.81	40.66	38.85	46.00	-7.15	Peak	100	0	P

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



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, Band 4	Temperature	: 23 °C
Test Date	: Jul. 07, 2018	Humidity	: 61 %

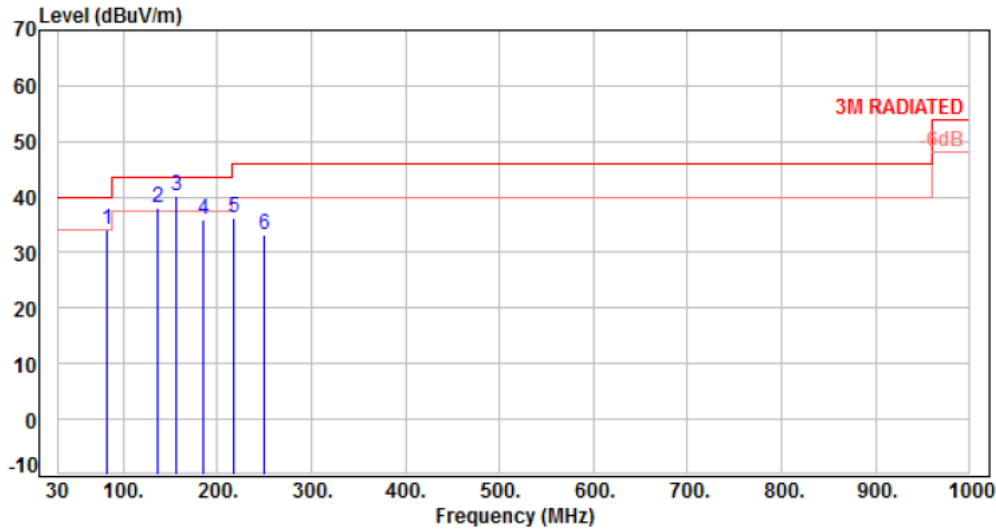


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	35.82	-11.55	45.33	33.78	40.00	-6.22	QP	100	182	P
2	43.58	-10.86	47.31	36.45	40.00	-3.55	QP	100	144	P
3	79.47	-15.08	48.30	33.22	40.00	-6.78	QP	100	23	P
4	107.60	-14.62	52.92	38.30	43.50	-5.20	Peak	400	0	P
5	125.06	-12.88	50.37	37.49	43.50	-6.01	Peak	400	0	P
6	158.04	-10.88	51.10	40.22	43.50	-3.28	QP	100	15	P

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



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, Band 4	Temperature	: 23 °C
Test Date	: Jul. 07, 2018	Humidity	: 61 %

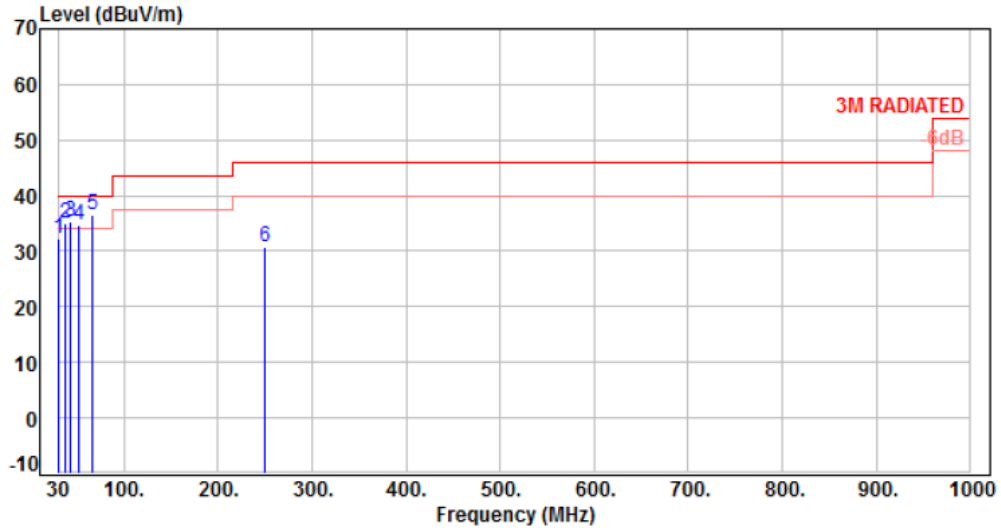


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	83.35	-15.71	49.92	34.21	40.00	-5.79	Peak	100	0	P
2	135.73	-11.81	49.89	38.08	43.50	-5.42	Peak	100	0	P
3	156.10	-10.93	51.02	40.09	43.50	-3.41	QP	151	135	P
4	184.23	-12.44	48.43	35.99	43.50	-7.51	Peak	100	0	P
5	217.21	-12.90	49.27	36.37	46.00	-9.63	Peak	100	0	P
6	250.19	-11.64	44.69	33.05	46.00	-12.95	Peak	100	0	P

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



Power	: PoE	Pol/Phase	: VERTICAL
Test Mode	: Mode 5, Band 1	Temperature	: 23 °C
Test Date	: Jul. 07, 2018	Humidity	: 61 %



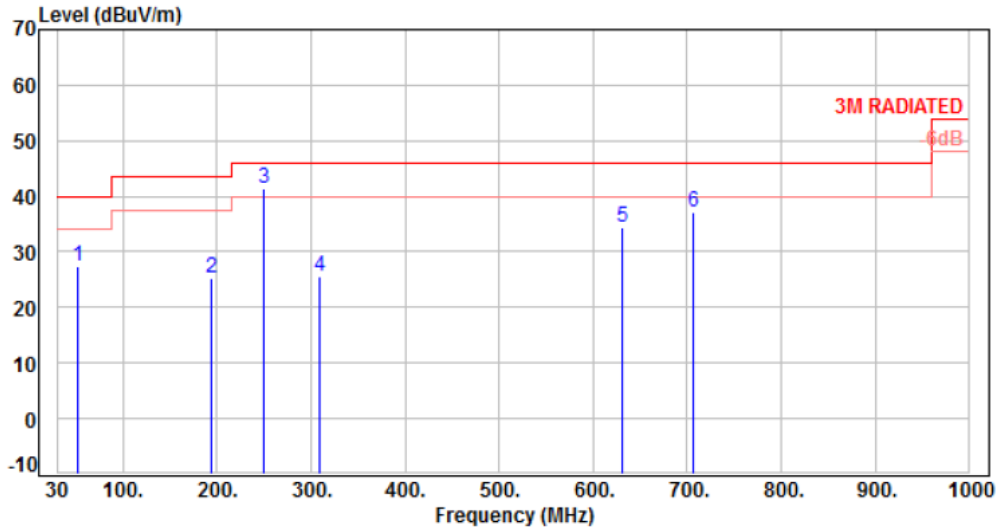
No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	30.00	-11.65	43.90	32.25	40.00	-7.75	QP	100	350	P
2	36.79	-11.44	46.59	35.15	40.00	-4.85	QP	100	299	P
3	43.58	-10.86	46.10	35.24	40.00	-4.76	QP	100	292	P
4	51.34	-10.69	45.33	34.64	40.00	-5.36	QP	100	337	P
5	65.89	-12.21	48.79	36.58	40.00	-3.42	Peak	400	0	P
6	250.19	-11.64	42.37	30.73	46.00	-15.27	Peak	400	0	P

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





Power	: PoE	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 5, Band 1	Temperature	: 23 °C
Test Date	: Jul. 07, 2018	Humidity	: 61 %

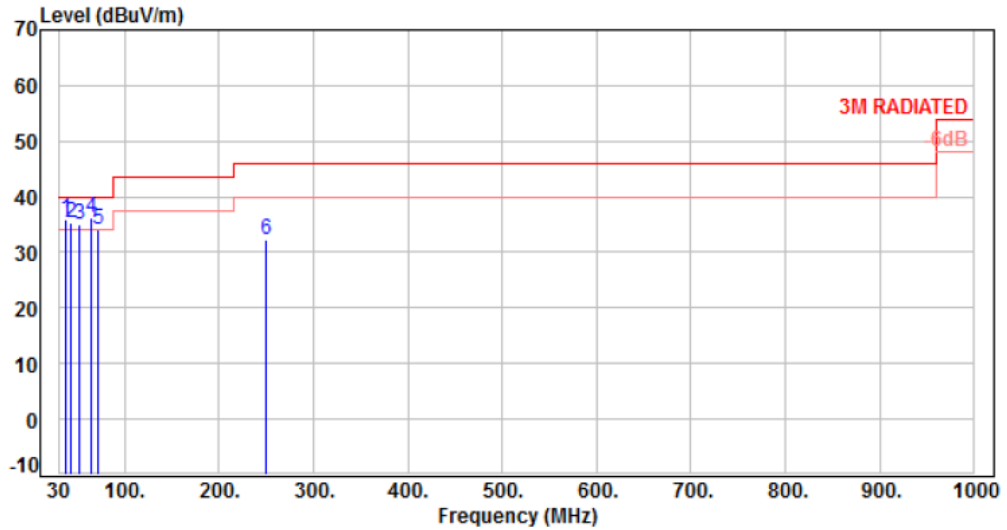


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	51.34	-10.69	38.14	27.45	40.00	-12.55	Peak	100	0	P
2	193.93	-12.95	38.27	25.32	43.50	-18.18	Peak	100	0	P
3	250.19	-11.64	53.16	41.52	46.00	-4.48	Peak	100	0	P
4	308.39	-9.65	35.26	25.61	46.00	-20.39	Peak	100	0	P
5	631.40	-2.41	36.70	34.29	46.00	-11.71	Peak	100	0	P
6	706.09	-1.19	38.30	37.11	46.00	-8.89	Peak	100	0	P

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



Power	: PoE	Pol/Phase	: VERTICAL
Test Mode	: Mode 5, Band 4	Temperature	: 23 °C
Test Date	: Jul. 07, 2018	Humidity	: 61 %

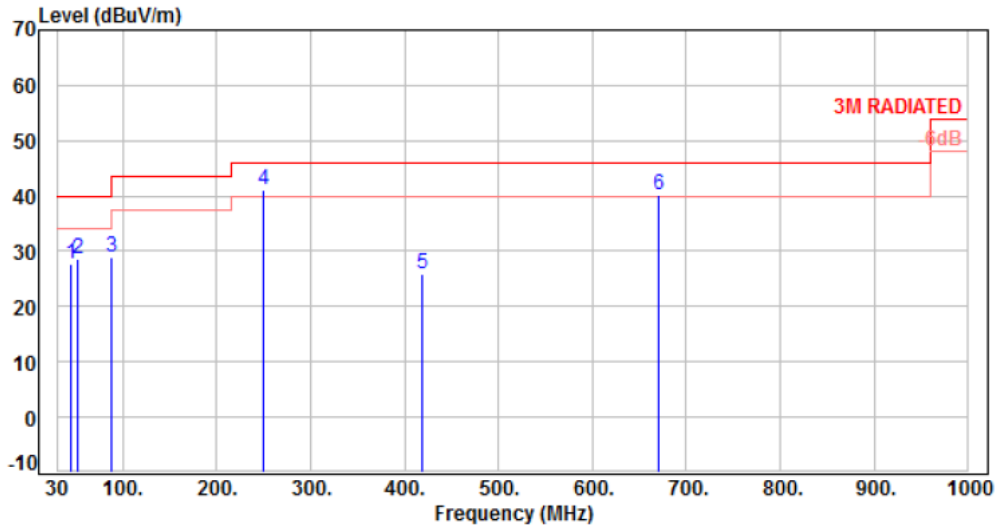


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	36.88	-11.44	47.22	35.78	40.00	-4.22	QP	100	278	P
2	43.62	-10.86	46.11	35.25	40.00	-4.75	QP	100	293	P
3	51.52	-10.70	45.66	34.96	40.00	-5.04	QP	100	336	P
4	65.10	-12.07	48.24	36.17	40.00	-3.83	Peak	400	0	P
5	72.54	-13.48	47.65	34.17	40.00	-5.83	Peak	400	0	P
6	250.22	-11.64	43.85	32.21	46.00	-13.79	Peak	400	0	P

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



Power	: PoE	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 5, Band 4	Temperature	: 23 °C
Test Date	: Jul. 07, 2018	Humidity	: 61 %



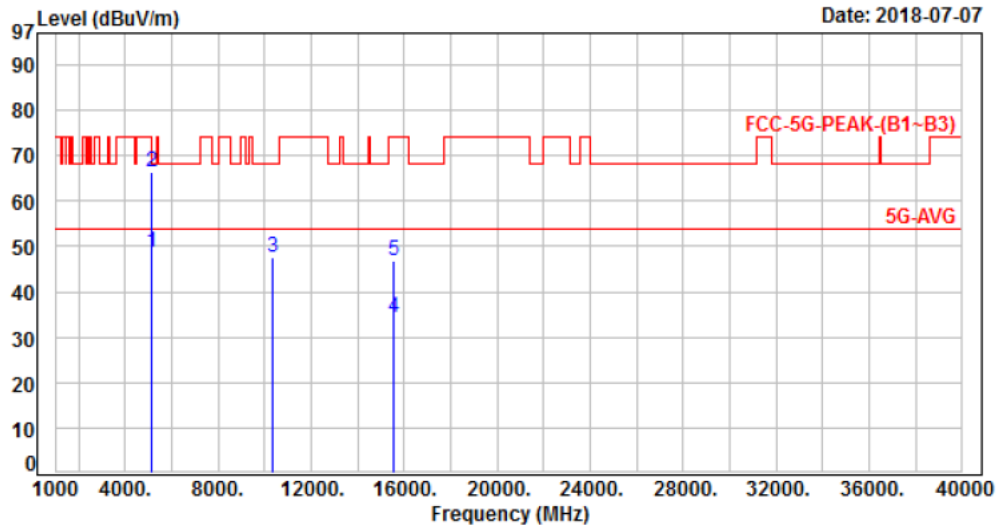
No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	44.63	-10.79	38.51	27.72	40.00	-12.28	Peak	100	0	P
2	51.66	-10.71	39.24	28.53	40.00	-11.47	Peak	100	0	P
3	88.51	-16.47	45.46	28.99	43.50	-14.51	Peak	100	0	P
4	250.11	-11.64	52.67	41.03	46.00	-4.97	Peak	100	0	P
5	418.63	-6.62	32.66	26.04	46.00	-19.96	Peak	100	0	P
6	671.00	-1.82	41.89	40.07	46.00	-5.93	Peak	100	0	P

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



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

Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, CH36, Band 1	Temperature	: 23 °C
Test Date	: Jul. 07, 2018	Humidity	: 61 %

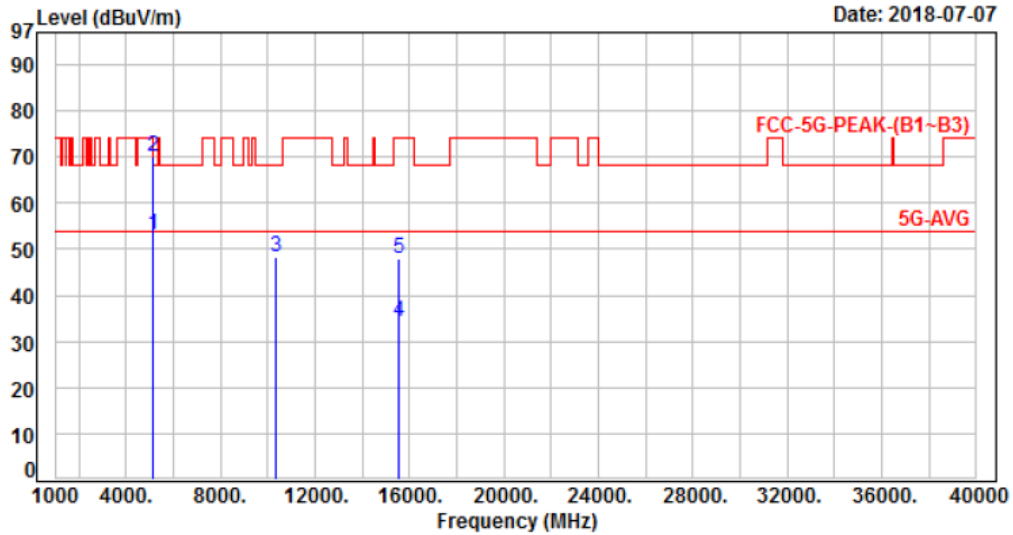


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-8.01	56.76	48.75	54.00	-5.25	Average	380	360	P
2	5150.00	-8.01	74.24	66.23	74.00	-7.77	Peak	380	360	P
3	10360.00	-0.89	48.55	47.66	68.20	-20.54	Peak	100	350	P
4	15540.00	4.33	29.86	34.19	54.00	-19.81	Average	100	100	P
5	15540.00	4.33	42.37	46.70	74.00	-27.30	Peak	100	100	P

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



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, CH36, Band 1	Temperature	: 23 °C
Test Date	: Jul. 07, 2018	Humidity	: 61 %

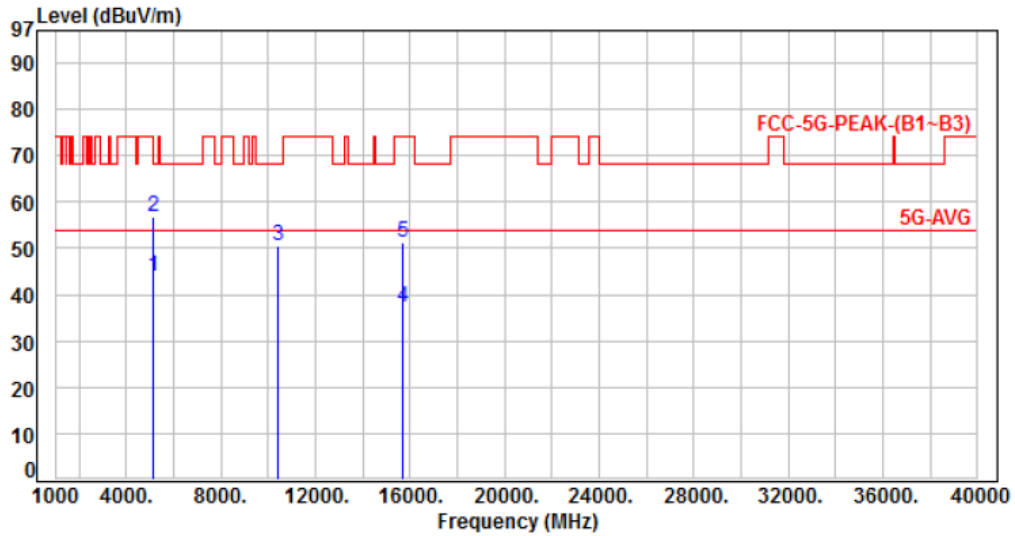


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-8.01	61.00	52.99	54.00	-1.01	Average	186	287	P
2	5150.00	-8.01	78.05	70.04	74.00	-3.96	Peak	186	287	P
3	10360.00	-0.89	49.21	48.32	68.20	-19.88	Peak	100	78	P
4	15540.00	4.33	30.04	34.37	54.00	-19.63	Average	100	360	P
5	15540.00	4.33	43.75	48.08	74.00	-25.92	Peak	100	360	P

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



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, CH44, Band 1	Temperature	: 23 °C
Test Date	: Jul. 07, 2018	Humidity	: 61 %

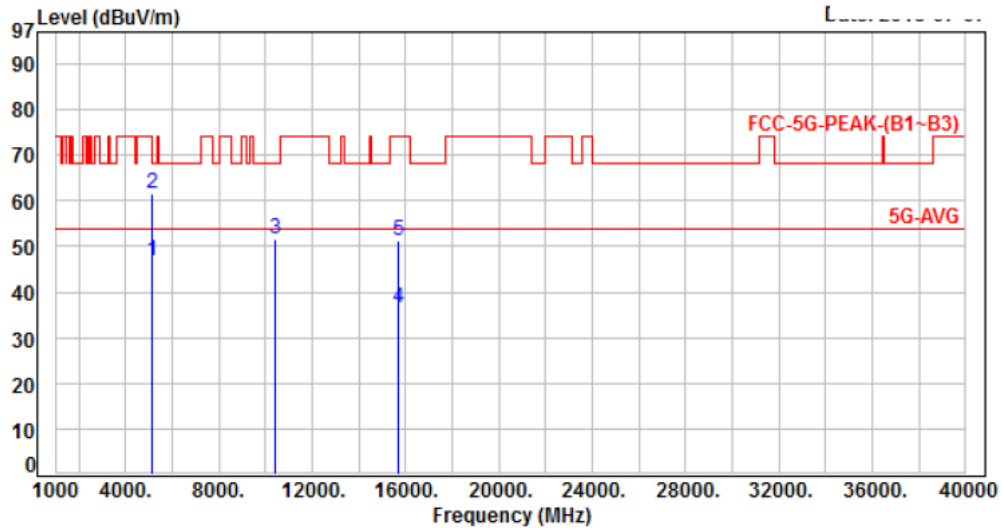


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-8.01	52.06	44.05	54.00	-9.95	Average	325	325	P
2	5150.00	-8.01	64.93	56.92	74.00	-17.08	Peak	325	325	P
3	10440.00	-0.82	51.20	50.38	68.20	-17.82	Peak	100	315	P
4	15660.00	4.39	32.75	37.14	54.00	-16.86	Average	204	315	P
5	15660.00	4.39	46.74	51.13	74.00	-22.87	Peak	204	315	P

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



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, CH44, Band 1	Temperature	: 23 °C
Test Date	: Jul. 07, 2018	Humidity	: 61 %

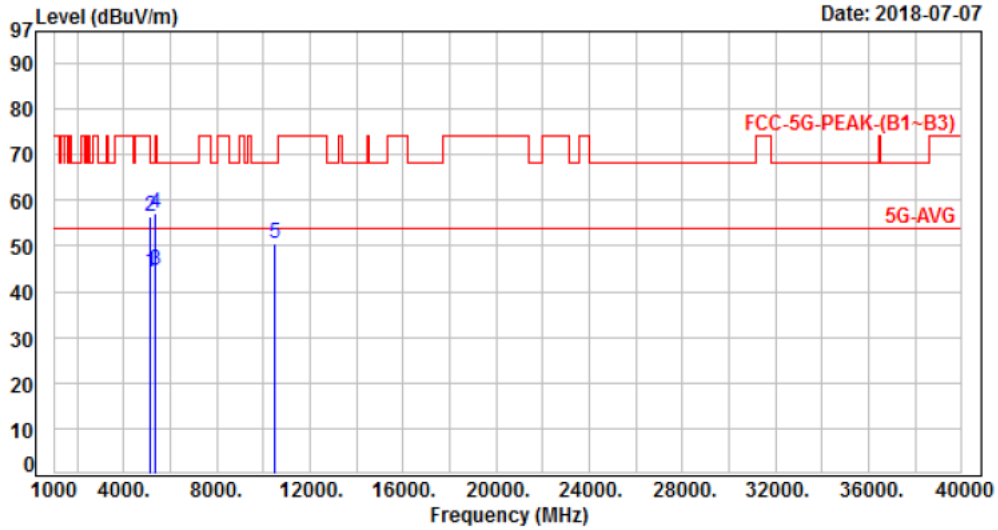


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-8.01	54.99	46.98	54.00	-7.02	Average	396	280	P
2	5150.00	-8.01	69.51	61.50	74.00	-12.50	Peak	396	280	P
3	10440.00	-0.82	52.36	51.54	68.20	-16.66	Peak	100	70	P
4	15660.00	4.39	32.27	36.66	54.00	-17.34	Average	296	5	P
5	15660.00	4.39	47.06	51.45	74.00	-22.55	Peak	296	5	P

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



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, CH48, Band 1	Temperature	: 23 °C
Test Date	: Jul. 07, 2018	Humidity	: 61 %



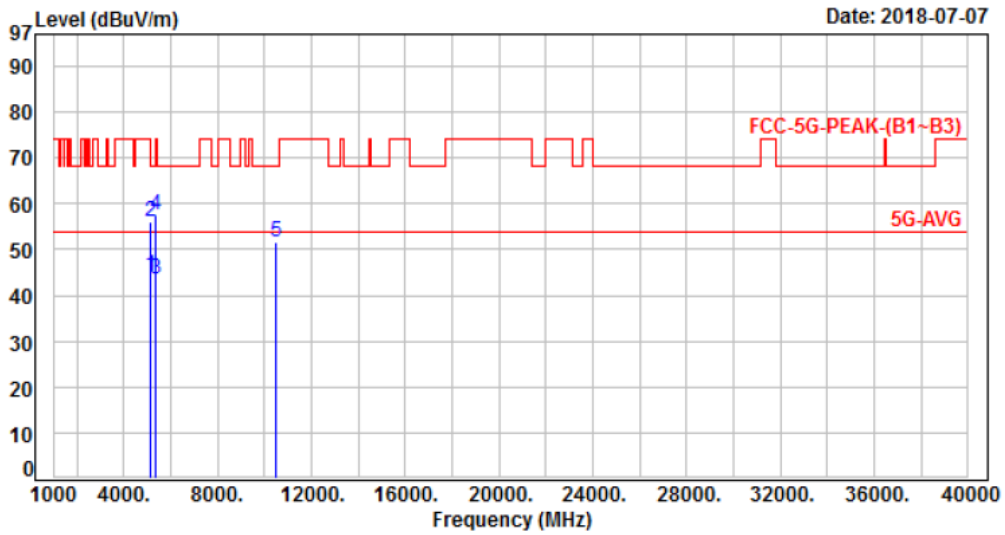
No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-8.01	52.09	44.08	54.00	-9.92	Average	308	325	P
2	5150.00	-8.01	64.54	56.53	74.00	-17.47	Peak	308	325	P
3	5350.00	-7.67	52.18	44.51	54.00	-9.49	Average	308	325	P
4	5350.00	-7.67	64.68	57.01	74.00	-16.99	Peak	308	325	P
5	10480.00	-0.78	51.31	50.53	68.20	-17.67	Peak	191	317	P

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





Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, CH48, Band 1	Temperature	: 23 °C
Test Date	: Jul. 07, 2018	Humidity	: 61 %

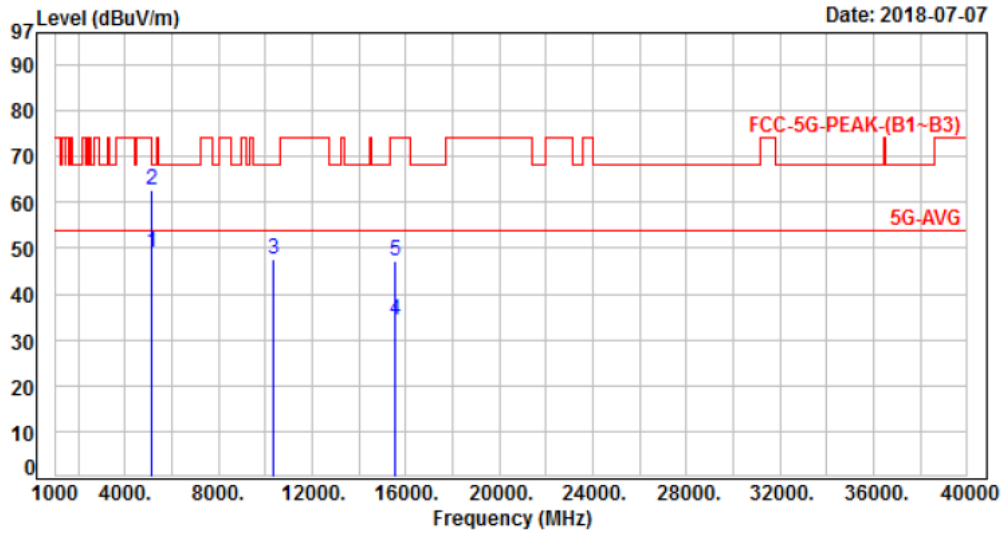


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-8.01	52.13	44.12	54.00	-9.88	Average	204	285	P
2	5150.00	-8.01	64.24	56.23	74.00	-17.77	Peak	204	285	P
3	5350.00	-7.67	51.02	43.35	54.00	-10.65	Average	204	285	P
4	5350.00	-7.67	65.04	57.37	74.00	-16.63	Peak	204	285	P
5	10480.00	-0.78	52.52	51.74	68.20	-16.46	Peak	100	73	P

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



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 2, CH36, Band 1	Temperature	: 23 °C
Test Date	: Jul. 07, 2018	Humidity	: 61 %

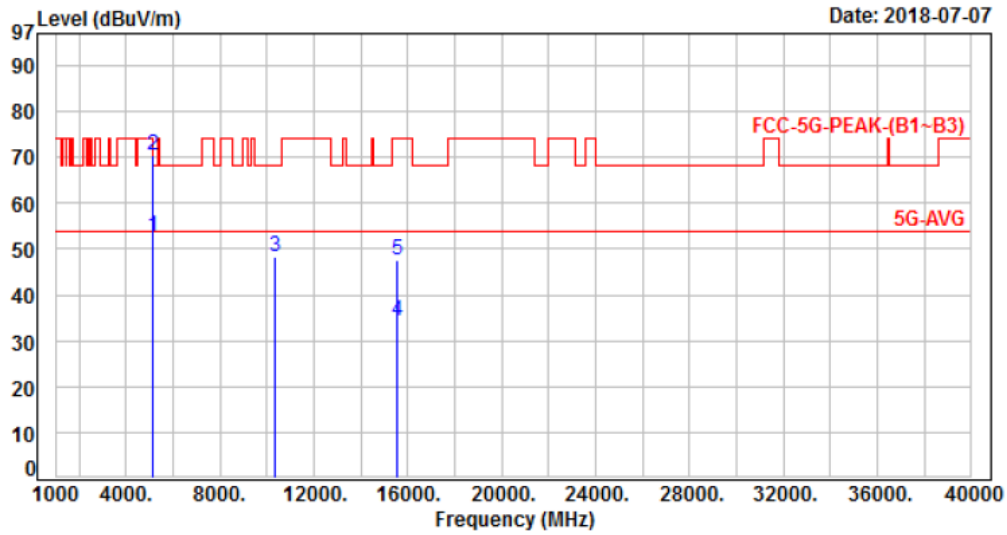


No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV)	Limit (dBUV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-8.01	57.12	49.11	54.00	-4.89	Average	396	320	P
2	5150.00	-8.01	70.62	62.61	74.00	-11.39	Peak	396	320	P
3	10360.00	-0.89	48.31	47.42	68.20	-20.78	Peak	100	350	P
4	15540.00	4.33	30.10	34.43	54.00	-19.57	Average	100	100	P
5	15540.00	4.33	42.71	47.04	74.00	-26.96	Peak	100	100	P

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



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 2, CH36, Band 1	Temperature	: 23 °C
Test Date	: Jul. 07, 2018	Humidity	: 61 %

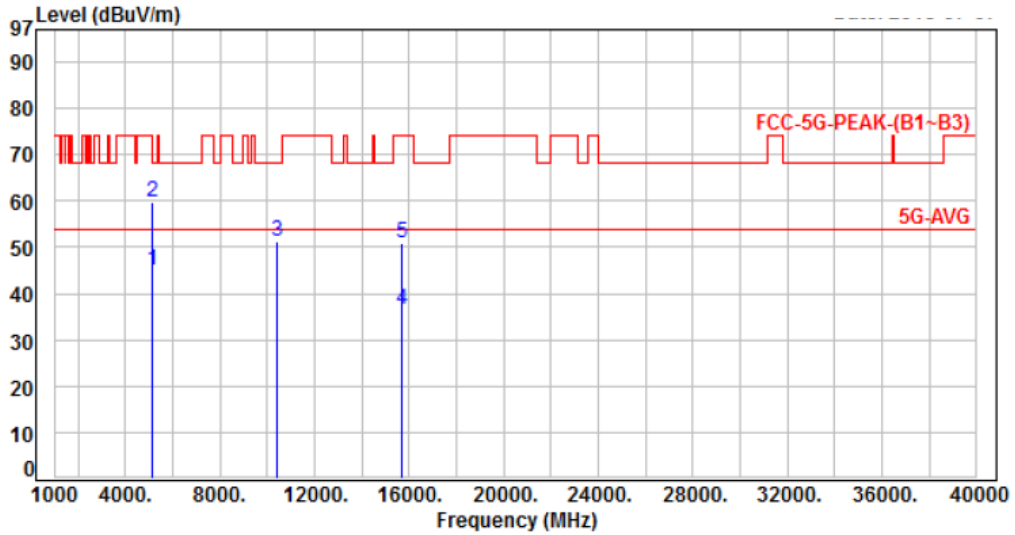


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-8.01	60.62	52.61	54.00	-1.39	Average	157	287	P
2	5150.00	-8.01	78.58	70.57	74.00	-3.43	Peak	157	287	P
3	10360.00	-0.89	49.27	48.38	68.20	-19.82	Peak	100	72	P
4	15540.00	4.33	30.10	34.43	54.00	-19.57	Average	100	358	P
5	15540.00	4.33	43.12	47.45	74.00	-26.55	Peak	100	358	P

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



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 2, CH44, Band 1	Temperature	: 23 °C
Test Date	: Jul. 07, 2018	Humidity	: 61 %

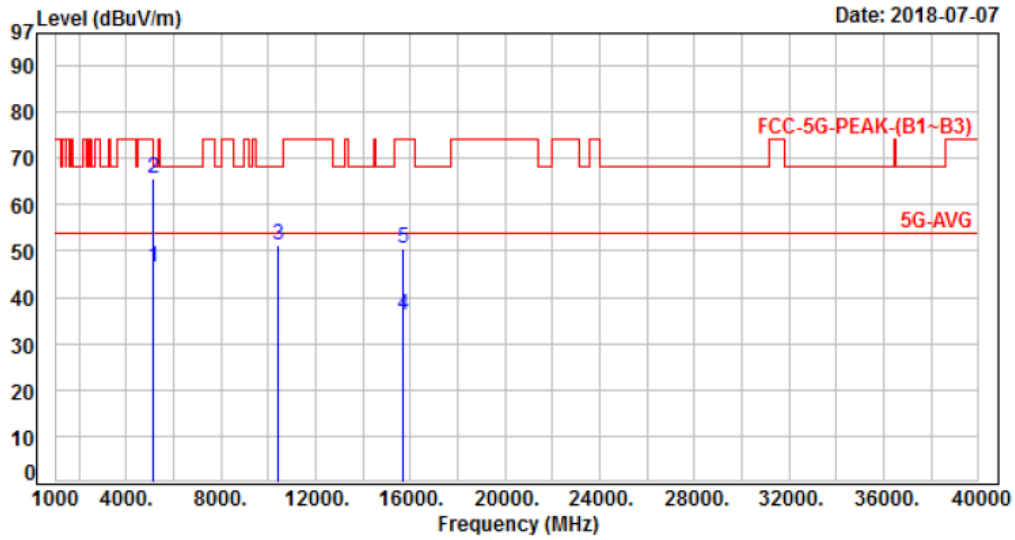


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-8.01	52.83	44.82	54.00	-9.18	Average	100	323	P
2	5150.00	-8.01	67.63	59.62	74.00	-14.38	Peak	100	323	P
3	10440.00	-0.82	52.16	51.34	68.20	-16.86	Peak	100	311	P
4	15660.00	4.39	31.97	36.36	54.00	-17.64	Average	205	315	P
5	15660.00	4.39	46.63	51.02	74.00	-22.98	Peak	205	315	P

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



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 2, CH44, Band 1	Temperature	: 23 °C
Test Date	: Jul. 07, 2018	Humidity	: 61 %

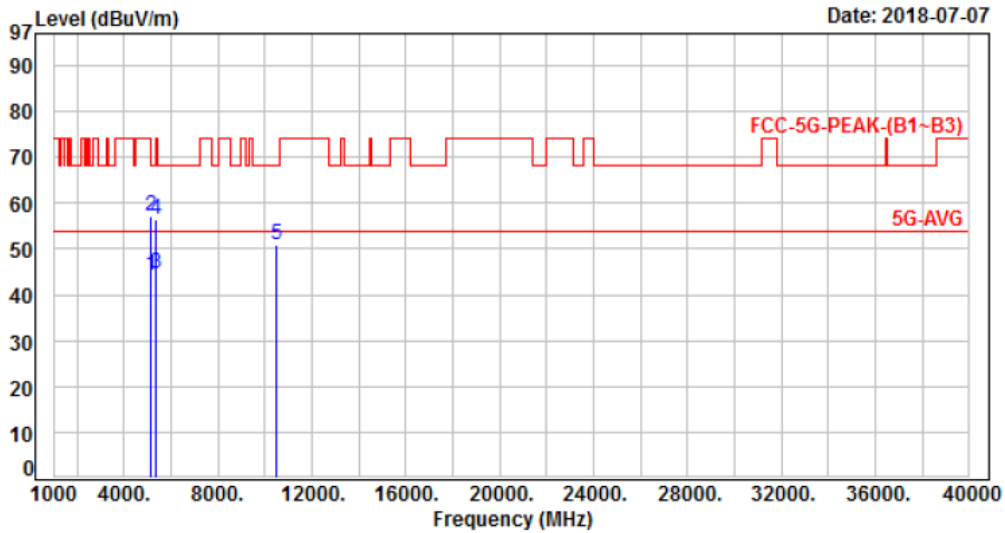


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-8.01	54.64	46.63	54.00	-7.37	Average	100	284	P
2	5150.00	-8.01	73.58	65.57	74.00	-8.43	Peak	100	284	P
3	10440.00	-0.82	51.93	51.11	68.20	-17.09	Peak	100	72	P
4	15660.00	4.39	31.89	36.28	54.00	-17.72	Average	320	5	P
5	15660.00	4.39	46.19	50.58	74.00	-23.42	Peak	320	5	P

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



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 2, CH48, Band 1	Temperature	: 23 °C
Test Date	: Jul. 07, 2018	Humidity	: 61 %

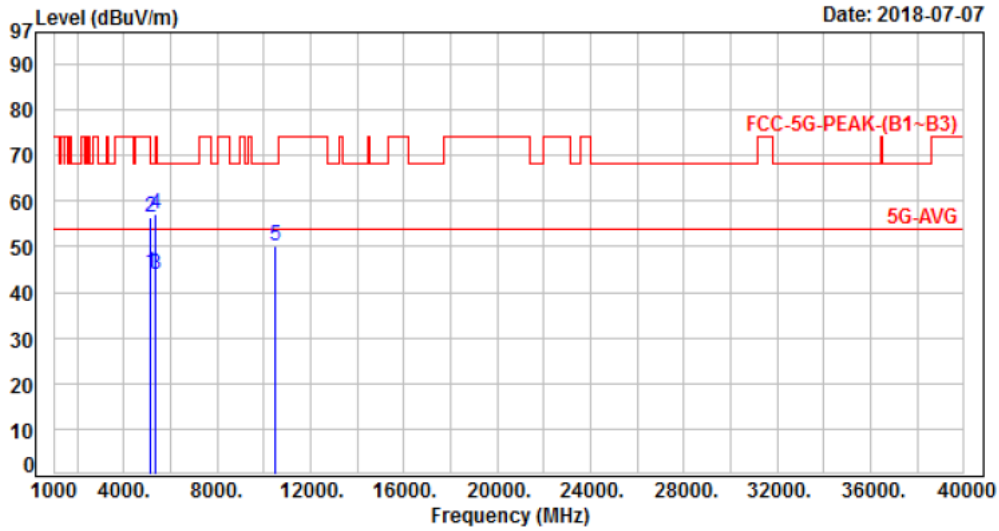


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-8.01	52.36	44.35	54.00	-9.65	Average	310	325	P
2	5150.00	-8.01	65.18	57.17	74.00	-16.83	Peak	310	325	P
3	5350.00	-7.67	52.34	44.67	54.00	-9.33	Average	310	325	P
4	5350.00	-7.67	64.20	56.53	74.00	-17.47	Peak	310	325	P
5	10480.00	-0.78	51.82	51.04	68.20	-17.16	Peak	190	317	P

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



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 2, CH48, Band 1	Temperature	: 23 °C
Test Date	: Jul. 07, 2018	Humidity	: 61 %

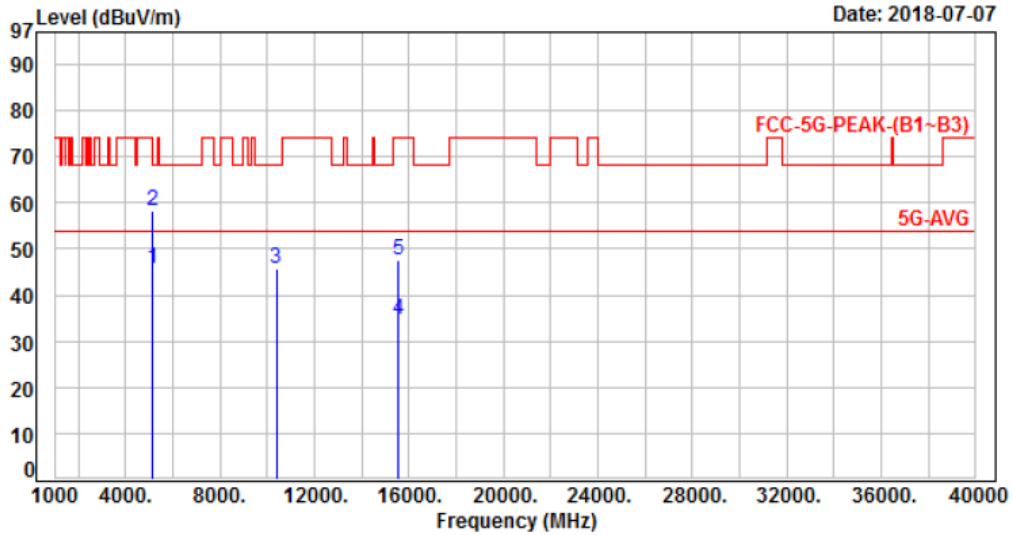


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-8.01	52.10	44.09	54.00	-9.91	Average	100	295	P
2	5150.00	-8.01	64.52	56.51	74.00	-17.49	Peak	100	295	P
3	5350.00	-7.67	51.42	43.75	54.00	-10.25	Average	100	295	P
4	5350.00	-7.67	64.79	57.12	74.00	-16.88	Peak	100	295	P
5	10480.00	-0.78	50.96	50.18	68.20	-18.02	Peak	100	72	P

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



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 3, CH38, Band 1	Temperature	: 23 °C
Test Date	: Jul. 07, 2018	Humidity	: 61 %



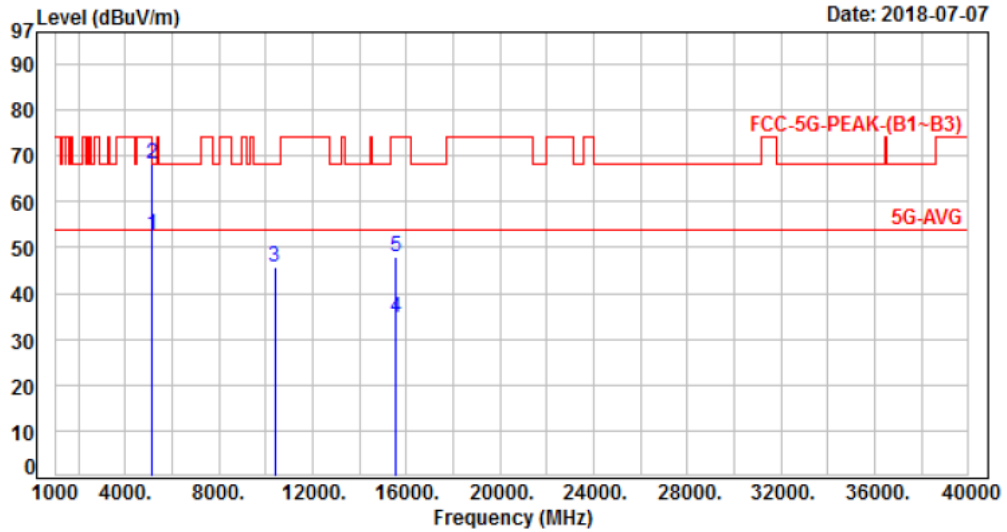
No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-8.01	53.89	45.88	54.00	-8.12	Average	400	345	P
2	5150.00	-8.01	66.15	58.14	74.00	-15.86	Peak	400	345	P
3	10380.00	-0.87	46.73	45.86	68.20	-22.34	Peak	100	349	P
4	15570.00	4.34	30.31	34.65	54.00	-19.35	Average	100	100	P
5	15570.00	4.34	43.19	47.53	74.00	-26.47	Peak	100	100	P

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





Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 3, CH38, Band 1	Temperature	: 23 °C
Test Date	: Jul. 07, 2018	Humidity	: 61 %

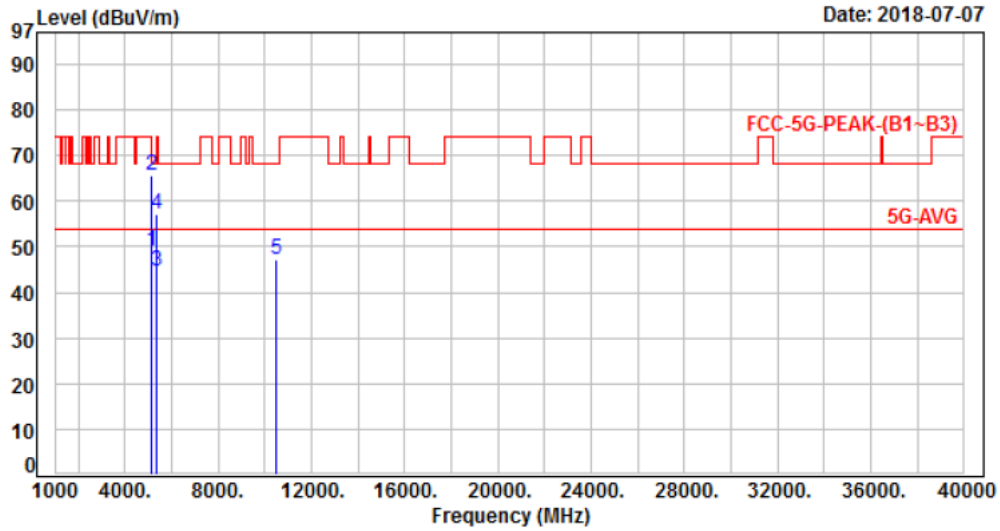


No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV)	Limit (dBUV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-8.01	60.84	52.83	54.00	-1.17	Average	198	286	P
2	5150.00	-8.01	76.29	68.28	74.00	-5.72	Peak	198	286	P
3	10380.00	-0.87	46.44	45.57	68.20	-22.63	Peak	100	112	P
4	15570.00	4.34	30.26	34.60	54.00	-19.40	Average	100	360	P
5	15570.00	4.34	43.56	47.90	74.00	-26.10	Peak	100	360	P

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



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 3, CH46, Band 1	Temperature	: 23 °C
Test Date	: Jul. 07, 2018	Humidity	: 61 %

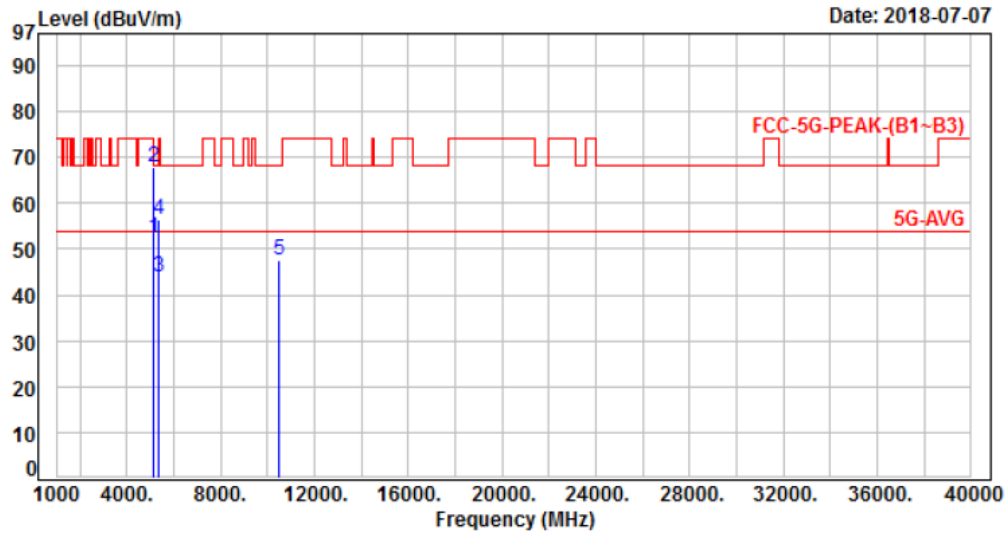


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-8.01	57.19	49.18	54.00	-4.82	Average	400	347	P
2	5150.00	-8.01	73.65	65.64	74.00	-8.36	Peak	400	347	P
3	5350.00	-7.67	52.21	44.54	54.00	-9.46	Average	400	347	P
4	5350.00	-7.67	64.89	57.22	74.00	-16.78	Peak	400	347	P
5	10460.00	-0.81	47.86	47.05	68.20	-21.15	Peak	100	345	P

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



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 3, CH46, Band 1	Temperature	: 23 °C
Test Date	: Jul. 07, 2018	Humidity	: 61 %

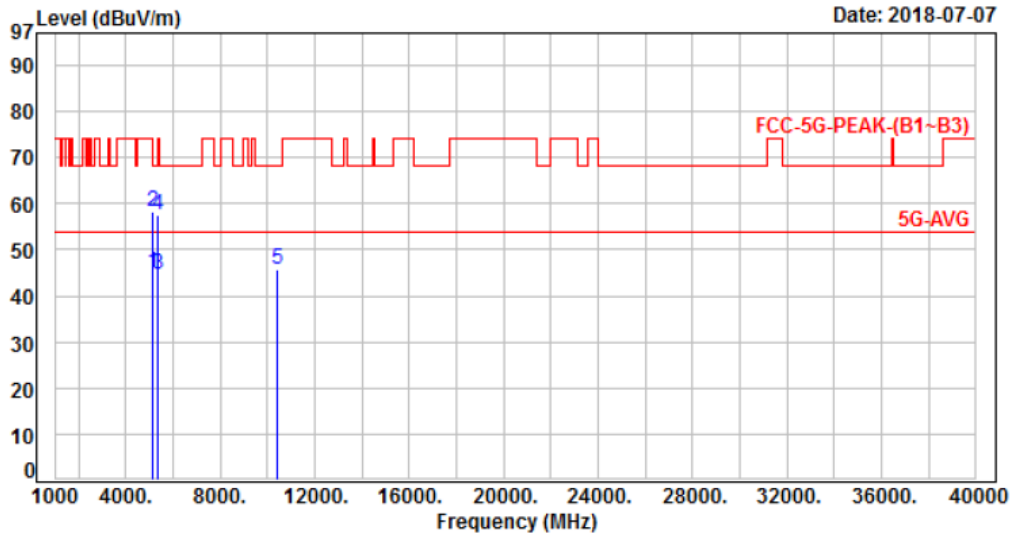


No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV)	Limit (dBUV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-8.01	60.54	52.53	54.00	-1.47	Average	354	285	P
2	5150.00	-8.01	75.89	67.88	74.00	-6.12	Peak	354	285	P
3	5350.00	-7.67	51.56	43.89	54.00	-10.11	Average	354	285	P
4	5350.00	-7.67	64.18	56.51	74.00	-17.49	Peak	354	285	P
5	10460.00	-0.81	48.57	47.76	68.20	-20.44	Peak	100	70	P

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



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 4, CH42, Band 1	Temperature	: 23 °C
Test Date	: Jul. 07, 2018	Humidity	: 61 %

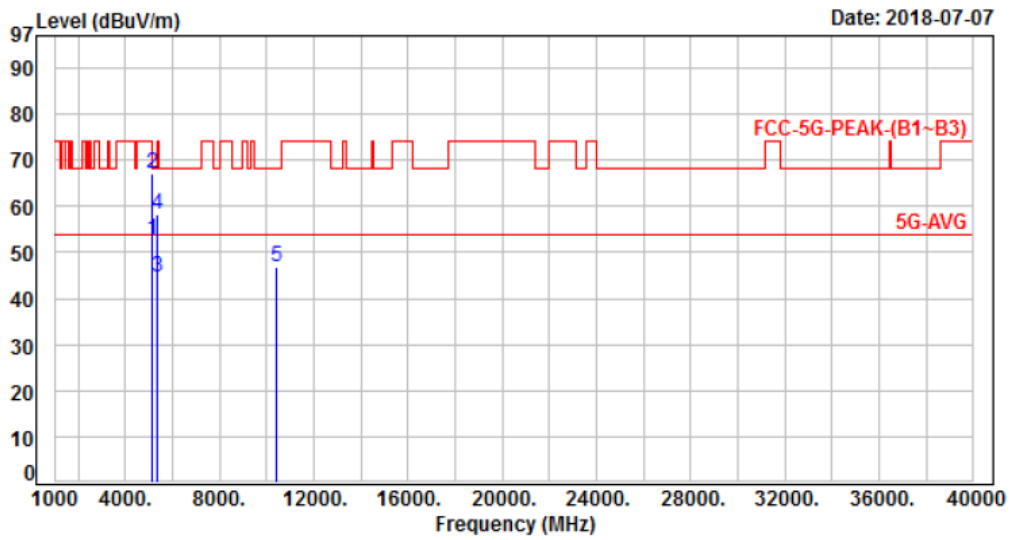


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-8.01	53.16	45.15	54.00	-8.85	Average	400	360	P
2	5150.00	-8.01	66.40	58.39	74.00	-15.61	Peak	400	360	P
3	5350.00	-7.67	52.45	44.78	54.00	-9.22	Average	400	360	P
4	5350.00	-7.67	65.05	57.38	74.00	-16.62	Peak	400	360	P
5	10420.00	-0.84	46.68	45.84	68.20	-22.36	Peak	100	346	P

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



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 4, CH42, Band 1	Temperature	: 23 °C
Test Date	: Jul. 07, 2018	Humidity	: 61 %

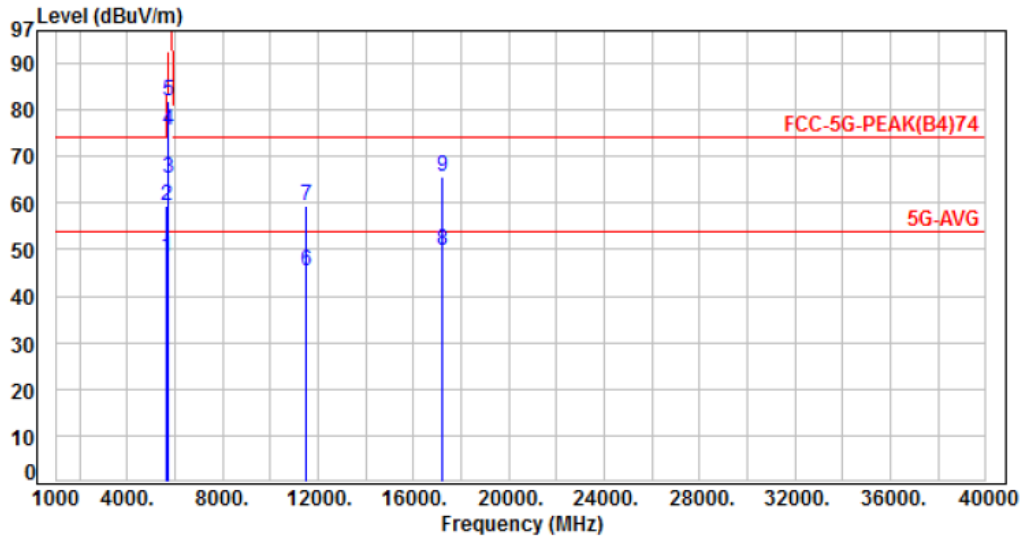


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-8.01	60.60	52.59	54.00	-1.41	Average	212	285	P
2	5150.00	-8.01	75.00	66.99	74.00	-7.01	Peak	212	285	P
3	5350.00	-7.67	52.18	44.51	54.00	-9.49	Average	212	285	P
4	5350.00	-7.67	65.88	58.21	74.00	-15.79	Peak	212	285	P
5	10420.00	-0.84	47.50	46.66	68.20	-21.54	Peak	71	100	P

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



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, CH149, Band 4	Temperature	: 23 °C
Test Date	: Jul. 14, 2018	Humidity	: 61 %

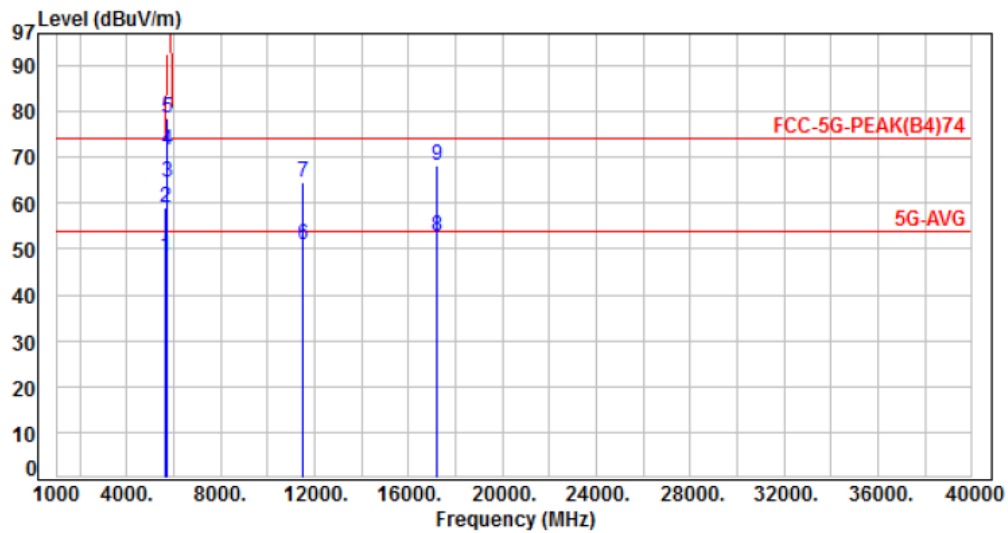


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	-7.37	55.61	48.24	54.00	-5.76	Average	385	360	P
2	5650.00	-7.37	66.83	59.46	74.00	-14.54	Peak	385	360	P
3	5700.00	-7.35	72.54	65.19	105.20	-40.01	Peak	385	360	P
4	5720.00	-7.35	82.94	75.59	110.80	-35.21	Peak	385	360	P
5	5725.00	-7.35	89.38	82.03	122.20	-40.17	Peak	385	360	P
6	11490.00	0.78	44.44	45.22	54.00	-8.78	Average	373	331	P
7	11490.00	0.78	58.74	59.52	74.00	-14.48	Peak	373	331	P
8	17235.00	9.95	39.75	49.70	54.00	-4.30	Average	102	294	P
9	17235.00	9.95	55.83	65.78	74.00	-8.22	Peak	102	294	P

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



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, CH149, Band 4	Temperature	: 23 °C
Test Date	: Jul. 14, 2018	Humidity	: 61 %

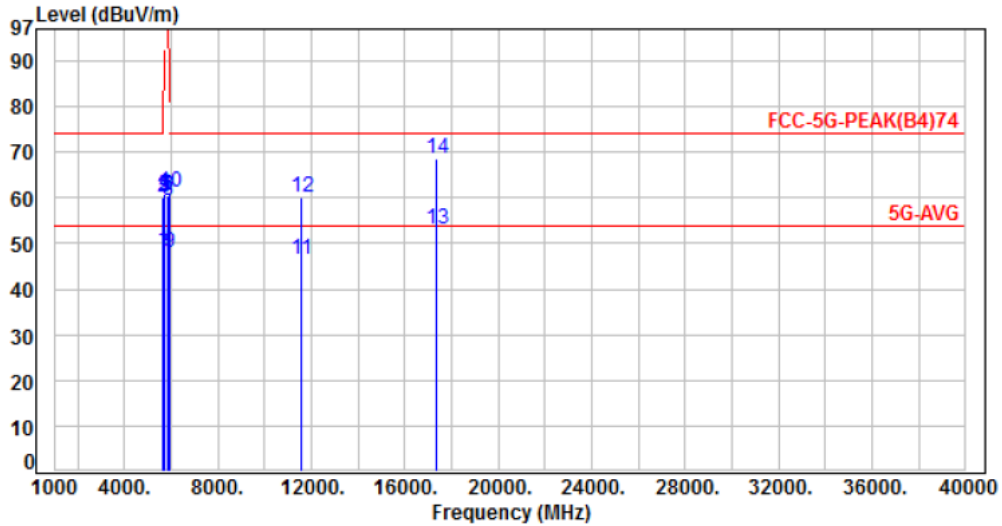


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	-7.37	55.76	48.39	54.00	-5.61	Average	109	73	P
2	5650.00	-7.37	66.20	58.83	74.00	-15.17	Peak	109	73	P
3	5700.00	-7.35	71.80	64.45	105.20	-40.75	Peak	109	73	P
4	5720.00	-7.35	78.82	71.47	110.80	-39.33	Peak	109	73	P
5	5725.00	-7.35	86.07	78.72	122.20	-43.48	Peak	109	73	P
6	11490.00	0.78	50.29	51.07	54.00	-2.93	Average	197	35	P
7	11490.00	0.78	63.74	64.52	74.00	-9.48	Peak	197	35	P
8	17235.00	9.95	42.63	52.58	54.00	-1.42	Average	106	275	P
9	17235.00	9.95	58.14	68.09	74.00	-5.91	Peak	106	275	P

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



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, CH157, Band 4	Temperature	: 23 °C
Test Date	: Jul. 14, 2018	Humidity	: 61 %



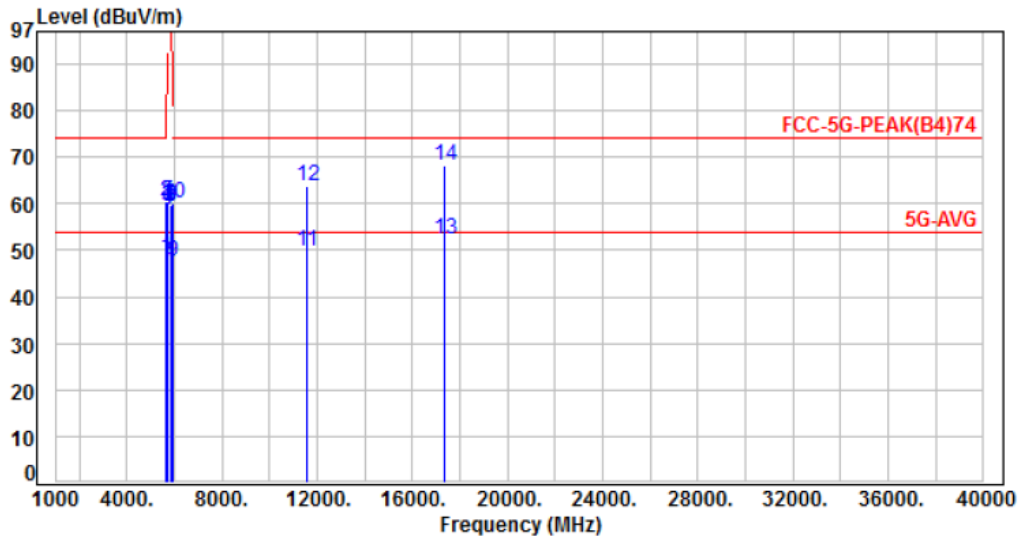
No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	-7.37	55.82	48.45	54.00	-5.55	Average	383	360	P
2	5650.00	-7.37	67.36	59.99	74.00	-14.01	Peak	383	360	P
3	5700.00	-7.35	67.33	59.98	105.20	-45.22	Peak	383	360	P
4	5720.00	-7.35	68.34	60.99	110.80	-49.81	Peak	383	360	P
5	5725.00	-7.35	67.71	60.36	122.20	-61.84	Peak	383	360	P
6	5850.00	-7.30	67.86	60.56	122.20	-61.64	Peak	383	360	P
7	5855.00	-7.30	67.40	60.10	110.80	-50.70	Peak	383	360	P
8	5875.00	-7.30	66.67	59.37	105.20	-45.83	Peak	383	360	P
9	5925.00	-7.28	55.27	47.99	54.00	-6.01	Average	383	360	P
10	5925.00	-7.28	68.44	61.16	74.00	-12.84	Peak	383	360	P
11	11570.00	0.85	45.61	46.46	54.00	-7.54	Average	364	329	P
12	11570.00	0.85	59.24	60.09	74.00	-13.91	Peak	364	329	P
13	17355.00	10.63	42.54	53.17	54.00	-0.83	Average	192	173	P
14	17355.00	10.63	57.79	68.42	74.00	-5.58	Peak	192	173	P

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





Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, CH157, Band 4	Temperature	: 23 °C
Test Date	: Jul. 14, 2018	Humidity	: 61 %

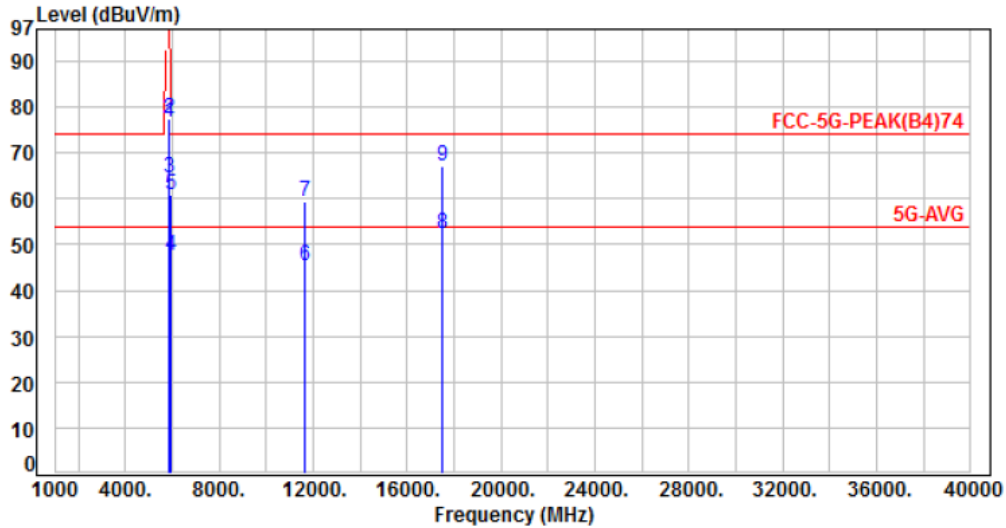


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	-7.37	55.56	48.19	54.00	-5.81	Average	112	76	P
2	5650.00	-7.37	67.91	60.54	74.00	-13.46	Peak	112	76	P
3	5700.00	-7.35	66.75	59.40	105.20	-45.80	Peak	112	76	P
4	5720.00	-7.35	66.44	59.09	110.80	-51.71	Peak	112	76	P
5	5725.00	-7.35	67.99	60.64	122.20	-61.56	Peak	112	76	P
6	5850.00	-7.30	66.94	59.64	122.20	-62.56	Peak	112	76	P
7	5855.00	-7.30	66.10	58.80	110.80	-52.00	Peak	112	76	P
8	5875.00	-7.30	66.79	59.49	105.20	-45.71	Peak	112	76	P
9	5925.00	-7.28	55.02	47.74	54.00	-6.26	Average	112	76	P
10	5925.00	-7.28	67.35	60.07	74.00	-13.93	Peak	112	76	P
11	11570.00	0.85	48.95	49.80	54.00	-4.20	Average	183	38	P
12	11570.00	0.85	62.93	63.78	74.00	-10.22	Peak	183	38	P
13	17355.00	10.63	41.91	52.54	54.00	-1.46	Average	206	287	P
14	17355.00	10.63	57.73	68.36	74.00	-5.64	Peak	206	287	P

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



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, CH165, Band 4	Temperature	: 23 °C
Test Date	: Jul. 14, 2018	Humidity	: 61 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5850.00	-7.30	84.10	76.80	122.20	-45.40	Peak	378	360	P
2	5855.00	-7.30	84.57	77.27	110.80	-33.53	Peak	378	360	P
3	5875.00	-7.30	71.88	64.58	105.20	-40.62	Peak	378	360	P
4	5925.00	-7.28	54.84	47.56	54.00	-6.44	Average	378	360	P
5	5925.00	-7.28	67.98	60.70	74.00	-13.30	Peak	378	360	P
6	11650.00	0.91	44.30	45.21	54.00	-8.79	Average	375	326	P
7	11650.00	0.91	58.39	59.30	74.00	-14.70	Peak	375	326	P
8	17475.00	11.29	41.25	52.54	54.00	-1.46	Average	202	190	P
9	17475.00	11.29	55.73	67.02	74.00	-6.98	Peak	202	190	P

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