



FCC RADIO TEST REPORT

Applicant : Allied Telesis K.K.
Address : 2nd. TOC Bldg. 721-11 Nishi-Gotanda, Shinagawa-ku,
Tokyo Japan, 141-0031
Equipment : 802.11ac wave2 2x2 2.4G/5G/ wireless AP
Model No. : AT-TQ1402, AT-TQm1402
Trade Name : Allied Telesis
FCC ID. : RSL-TQ1402

I HEREBY CERTIFY THAT :

The sample was received on Dec. 12, 2018 and the testing was carried out on May. 14, 2019 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





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History of this test report

Report No.	Issue Date	Description
TEF1804234	May. 17, 2019	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 (a) & (a)(3)	Average Power	PASS
15.407(a)	Power Spectral Density	PASS
15.407(g)	Frequency Stability	PASS
15.407(c)	Automatically Discontinue Transmission	PASS

*The principle of judgment is made according to the laboratory's reporting control and measurement uncertainty standard procedures.

*This EUT has been also tested and compiled with the requirement of FCC Part 15, Subpart B, recorded in a separate test report(TEFD1804234).



2. Test Configuration of Equipment under Test

2.1. Feature of Equipment and Model Description

Equipment	802.11ac wave2 2x2 2.4G/5G/ wireless AP
Model No.	AT-TQ1402, AT-TQm1402
Brand Name	Allied Telesis
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	48V/0.4A
Memo	A1
Frequency Range	802.11a/n/ac: 5250MHz-5350MHz, 5470MHz-5725MHz
Modulation Type	OFDM
Data Rate	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	Dipole Antenna
Antenna Gain	5250-5350MHz: ANT A: 3.5dBi, ANT B: 3.2dBi 5470-5725MHz: ANT A: 3.1dBi, ANT B: 3.5dBi

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
2. This device supports DFS master mode.



2.2. Carrier Frequency of Channels

Band 2: 5250MHz -5350MHz

802.11a, 802.11n HT20, 802.11ac VHT20

Channel	Frequency(MHz)	Channel	Frequency(MHz)
*52	5260	*60	5300
56	5280	*64	5320

802.11n HT40, 802.11ac VHT40

Channel	Frequency(MHz)	Channel	Frequency(MHz)
*54	5270	*62	5310

802.11ac VHT80

Channel	Frequency(MHz)
*58	5290

Band 3: 5470MHz -5725MHz

802.11a, 802.11n HT20, 802.11ac VHT20

Channel	Frequency(MHz)	Channel	Frequency(MHz)
*100	5500	124	5620
104	5520	128	5640
108	5540	132	5660
112	5560	136	5680
116	5580	*140	5700
*120	5600		

802.11n HT40, 802.11ac VHT40

Channel	Frequency(MHz)	Channel	Frequency(MHz)
*102	5510	126	5630
110	5550	*134	5670
*118	5590		

802.11ac VHT80

Channel	Frequency(MHz)	Channel	Frequency(MHz)
*106	5530	*122	5610

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 3.0.219.0" 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)
2	802.11ac VHT20 (6.5Mbps)
3	802.11ac VHT40 (13.5Mbps)
4	802.11ac VHT80 (29.3Mbps)
caused "Test Mode 3" generated the worst case, it was reported as the final data.	
Radiation Emissions (30MHz ~ 1GHz)	
Test Mode	Operating Description
1	802.11a (6Mbps), Power from Adapter
2	802.11ac VHT20 (6.5Mbps), Power from Adapter
3	802.11ac VHT40 (13.5Mbps), Power from Adapter
4	802.11ac VHT80 (29.3Mbps), Power from Adapter
5	802.11a (6Mbps), Power from PoE
6	802.11ac VHT20 (6.5Mbps), Power from PoE
7	802.11ac VHT40 (13.5Mbps), Power from PoE
8	802.11ac VHT80 (29.3Mbps), Power from PoE
caused "Test Mode 3 & 7" generated the worst case, it was reported as the final data.	
Radiation Emissions (1GHz ~ 40GHz)	
Test Mode	Operating Description
1	802.11a (6Mbps)
2	802.11ac VHT20 (6.5Mbps)
3	802.11ac VHT40 (13.5Mbps)
4	802.11ac VHT80 (29.3Mbps)

Note: Non-Beamforming was the worst case, so it was used for the test result.



2.4. Description of Test System

RF Conducted						
Equipment	Brand	Model	Serial No	Inspection mark	Length/Type	Power cord/Length/Type
Notebook	ASUS	P2430U	GBNXCV13M064467	R31018	N/A	Adapter / 1.8m / NS
Network cable	N/A	N/A		N/A	1.2m / NS	N/A

Radiated Emissions						
Equipment	Brand	Model	Serial No	Inspection mark	Length/Type	Power cord/Length/Type
Notebook	ASUS	P2430U	GBNXCV13M064467	R31018	N/A	Adapter / 1.8m / NS
Network cable	N/A	N/A		N/A	15m / NS	N/A

AC Power Line Conducted Emission						
Equipment	Brand	Model	Serial No	Inspection mark	Length/Type	Power cord/Length/Type
Notebook	ASUS	P2430U	GBNXCV13M064467	R31018	N/A	Adapter / 1.8m / NS
Network cable	N/A	N/A		N/A	15m / NS	N/A

DFS						
Equipment	Brand	Model	Serial No	Inspection mark	Length/Type	Power cord/Length/Type
Notebook	ASUS	P2430U	GBNXCV13M066465	R31018	N/A	Adapter / 1.8m / NS
Notebook	DELL	Latitude E5450	28KZR32	R31199	N/A	Adapter / 1.8m / NS
Network cable	N/A	N/A		N/A	1.2m / NS	N/A
Network cable	N/A	N/A		N/A	15m / NS	N/A

Note:1.Latitude E5450(Intel Dual band Wireless-AC 7265,FCC ID: PD97265NGU)

2.EUT FW: 6.0.0.A05-tq1402_dfs-20190411-1



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 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.	

Test Item	Test Site	Tested Date	Environmental Conditions	Tested By
RF Conducted	RFCON01-NK	2019/01/29	21°C / 62%	Nick Guan
Radiated Emissions	3M02-NK	2018/12/28	23°C / 62%	Spree Yeh
RF Conduction	CON01-NK	2018/12/20	22°C / 49%	Spree Yeh
DFS	RFDFS01-NK	2019/05/14	25°C / 67%	Dian Chen

**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℃
Humidity	±2.7%
Channel Move Time	±5.4%
Channel Closing Transmission Time	±6.79%
Threshold	±1.875dB



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	2018/09/17	2019/09/16
Active Loop Antenna	EMCO	6507	40855	2018/05/22	2019/05/21
Horn Antenna	EMCO	3115	31589	2018/04/02	2019/04/01
Horn Antenna	EMCO	3116	31974	2018/09/07	2019/09/06
EMI Receiver	ROHDE & SCHWARZ	ESCI	101402	2018/02/23	2019/02/22
Spectrum Analyzer	ROHDE & SCHWARZ	FSP 40	100047	2018/03/20	2019/03/19
Preamplifier	EM Electronics corp.	EM330	60660	2018/03/08	2019/03/07
Preamplifier	EMC INSTRUMENTS	EMC051845SE	980333	2018/09/18	2019/09/17
Bluetooth Tester	ROHDE & SCHWARZ	CBT	101133	2018/04/02	2019/04/01
Cable-3in1(30M-1G)	HARBOUR INDUSTRIES	LL142	CCE1315	2018/04/20	2019/04/19
Cable-0.5m(1G-40G)	Rapidtek	40GHZ 50CM	38MS-38MS50314	2018/03/27	2019/03/26
Cable-3m(1G-40G)	Rapidtek	40GHZ 300CM	38MS-38MS300314	2018/03/27	2019/03/26
Cable-8m(1G-40G)	Rapidtek	40GHZ 800CM	38MS-38MS800314	2018/03/27	2019/03/26
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	275	2018/09/17	2019/09/16
Bluetooth Tester	ROHDE & SCHWARZ	CBT	40855	2018/05/22	2019/05/21
Attenuator	KEYSIGHT	8491B	31589	2018/04/02	2019/04/01
TEMP & HUMIDITY CHAMBER	T-MACHINE	TMJ-9712	31974	2018/09/07	2019/09/06
Power Sensor	Anritsu	MA2411B	101402	2018/02/23	2019/02/22

Test Item	AC Power Line Conducted Emission				
Test Site	CON02-NK				
Instrument	Manufacturer	Model No	Serial No	Calibration Date	Valid Date
EMI Receiver	ROHDE & SCHWARZ	ESCI	100443	2018/03/15	2019/03/14
Line Impedance Stabilization Network	Schwarzbeck	NSLK 8127	8127-740	2018/06/13	2019/06/12
Pulse Limiter	ROHDE & SCHWARZ	ESH3-Z2	101933	2018/09/04	2019/09/03
E3	AUDIX	v8.2014-8-6	RK-000529	NA	NA



Test Item	DFS				
Test Site	RFDFS01-NK				
Instrument	Manufacturer	Model No	Serial No	Calibration Date	Valid Date
Horn Antenna	EMCO	3115	31589	2019/04/01	2020/03/31
Horn Antenna	EMCO	3115	31601	2018/09/26	2019/09/25
CAX Signal Analyzer	KEYSIGHT	N9000B	MY57100339	2018/11/20	2019/11/19
MXG Vector Signal Generator	KEYSIGHT	N5182A	MY50141551	2018/10/07	2019/10/06
N7607B Signal Studio	KEYSIGHT	v3.2.0.0	NA	NA	NA
InServiceMonitorUtility	Theda	v10.0.0.0	NA	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	Dipole Antenna
Antenna Gain	5250-5350MHz: ANT A: 3.5dBi, ANT B: 3.2dBi 5470-5725MHz: ANT A: 3.1dBi, ANT B: 3.5dBi

(Non-Beamforming)

5250-5350MHz
For Power directional gain= $G_{ant} = 3.50 \text{ dBi}$ For PSD directional gain = $10 \log[(10^{G1/20} + 10^{G2/20})^2 / NANT]$ = 6.36 (dBi)
5470-5725MHz
For Power directional gain= $G_{ant} = 3.50 \text{ dBi}$ For PSD directional gain = $10 \log[(10^{G1/20} + 10^{G2/20})^2 / NANT]$ = 6.31 (dBi)

(Beamforming)

5250-5350MHz
For Power directional gain= $10 \log[(10^{G1/20} + 10^{G2/20})^2 / NANT] = 6.36 \text{ (dBi)}$ For PSD directional gain = $10 \log[(10^{G1/20} + 10^{G2/20})^2 / NANT] = 6.36 \text{ (dBi)}$
5470-5725MHz
For Power directional gain= $10 \log[(10^{G1/20} + 10^{G2/20})^2 / NANT] = 6.31 \text{ (dBi)}$ For PSD directional gain = $10 \log[(10^{G1/20} + 10^{G2/20})^2 / NANT] = 6.31 \text{ (dBi)}$



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

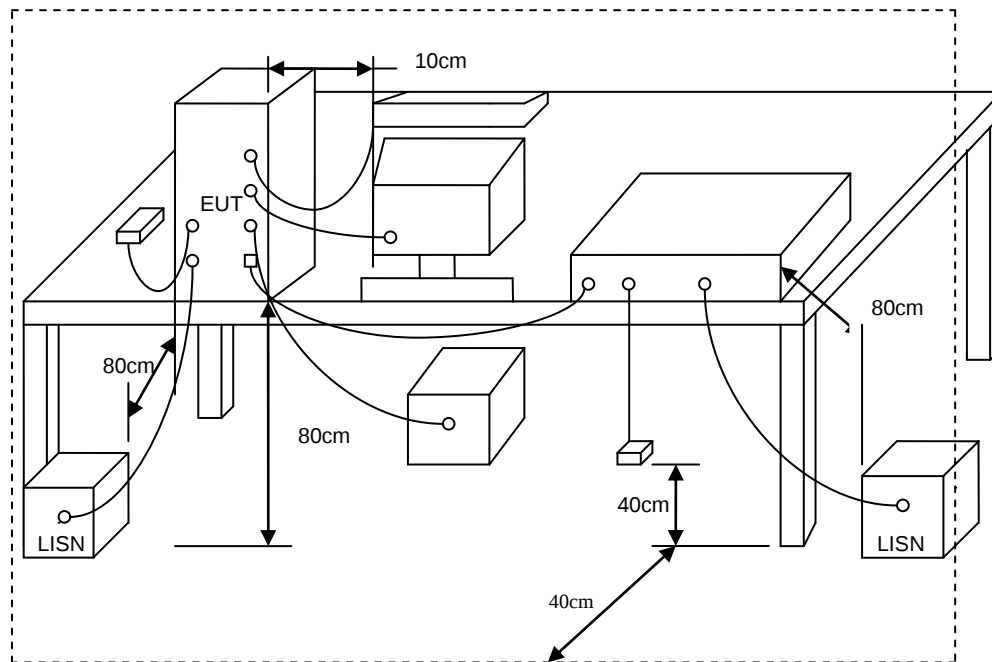
*Decreases with the logarithm of the frequency.

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.



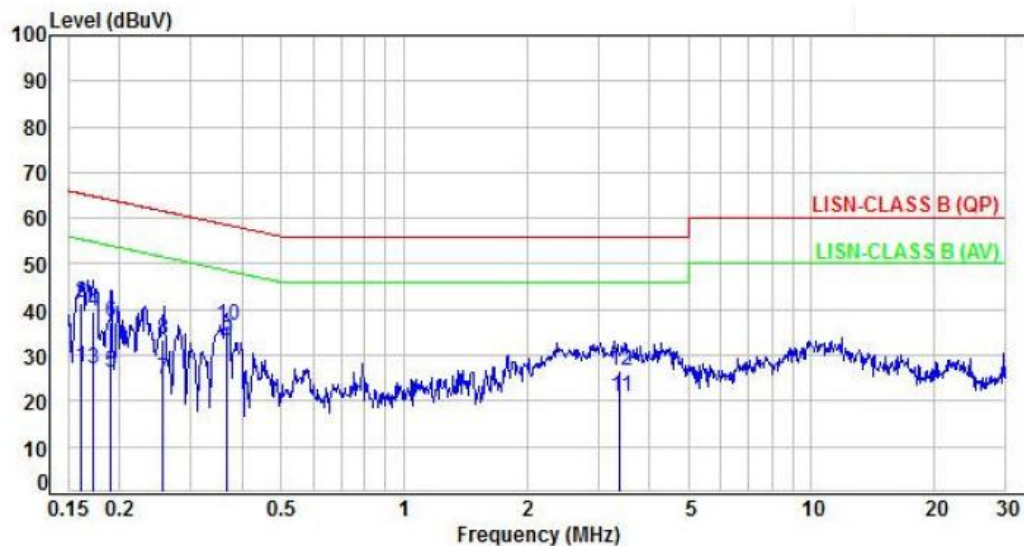
5.3. Typical Test Setup





5.4. Test Result and Data

Power	: AC 120V / 60Hz	Pol/Phase	: LINE
Test Mode	: Mode 3, Band 2		



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.16	9.97	17.42	27.39	55.41	-28.02	Average	P
2	0.16	9.97	31.56	41.53	65.41	-23.88	QP	P
3	0.17	9.97	16.85	26.82	54.85	-28.03	Average	P
4	0.17	9.97	29.56	39.53	64.85	-25.32	QP	P
5	0.19	9.97	16.24	26.21	54.06	-27.85	Average	P
6	0.19	9.97	27.44	37.41	64.06	-26.65	QP	P
7	0.26	9.97	14.78	24.75	51.56	-26.81	Average	P
8	0.26	9.97	23.67	33.64	61.56	-27.92	QP	P
9	0.37	9.98	23.16	33.14	48.53	-15.39	Average	P
10	0.37	9.98	26.59	36.57	58.53	-21.96	QP	P
11	3.39	10.09	10.88	20.97	46.00	-25.03	Average	P
12	3.39	10.09	16.52	26.61	56.00	-29.39	QP	P

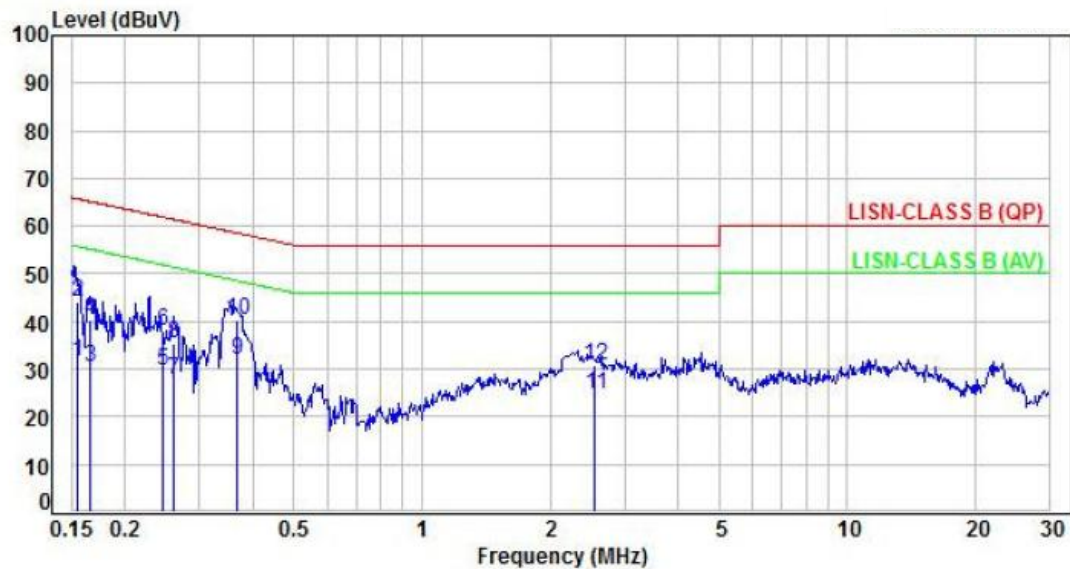
Note: Level = Reading + Factor

Margin = Level – Limit

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



Power	: AC 120V / 60Hz	Pol/Phase	: NEUTRAL
Test Mode	: Mode 3, Band 2		



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.15	9.97	21.52	31.49	55.76	-24.27	Average	P
2	0.15	9.97	34.18	44.15	65.76	-21.61	QP	P
3	0.17	9.97	20.29	30.26	55.13	-24.87	Average	P
4	0.17	9.97	30.47	40.44	65.13	-24.69	QP	P
5	0.24	9.97	19.68	29.65	51.94	-22.29	Average	P
6	0.24	9.97	27.89	37.86	61.94	-24.08	QP	P
7	0.26	9.97	17.86	27.83	51.40	-23.57	Average	P
8	0.26	9.97	25.55	35.52	61.40	-25.88	QP	P
9	0.37	9.98	21.84	31.82	48.59	-16.77	Average	P
10	0.37	9.98	30.49	40.47	58.59	-18.12	QP	P
11	2.55	10.05	14.79	24.84	46.00	-21.16	Average	P
12	2.55	10.05	20.61	30.66	56.00	-25.34	QP	P

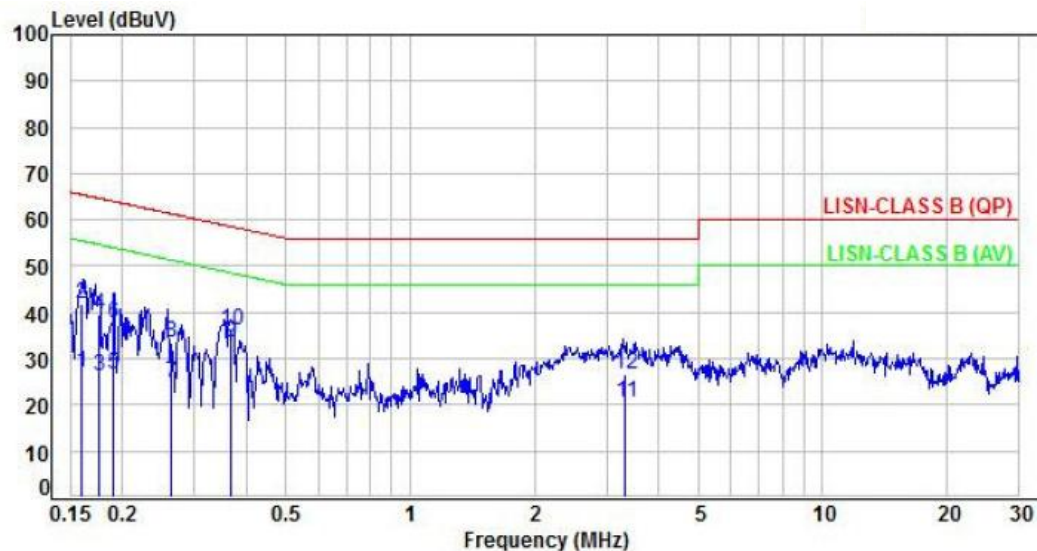
Note: Level = Reading + Factor

Margin = Level – Limit

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



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



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.16	9.97	17.16	27.13	55.46	-28.33	Average	P
2	0.16	9.97	31.67	41.64	65.46	-23.82	QP	P
3	0.18	9.97	16.37	26.34	54.70	-28.36	Average	P
4	0.18	9.97	29.47	39.44	64.70	-25.26	QP	P
5	0.19	9.97	16.49	26.46	54.04	-27.58	Average	P
6	0.19	9.97	27.58	37.55	64.04	-26.49	QP	P
7	0.26	9.97	14.89	24.86	51.36	-26.50	Average	P
8	0.26	9.97	23.44	33.41	61.36	-27.95	QP	P
9	0.37	9.98	23.51	33.49	48.55	-15.06	Average	P
10	0.37	9.98	26.33	36.31	58.55	-22.24	QP	P
11	3.32	10.09	10.61	20.70	46.00	-25.30	Average	P
12	3.32	10.09	16.69	26.78	56.00	-29.22	QP	P

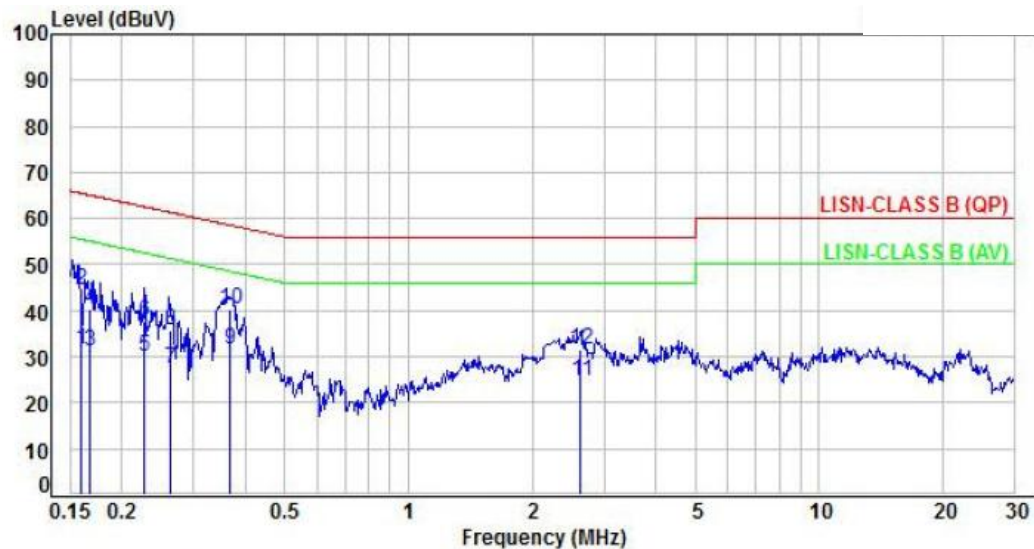
Note: Level = Reading + Factor

Margin = Level – Limit

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



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



No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV)	Limit (dBUV)	Margin (dB)	Detector	P/F
1	0.16	9.97	21.63	31.60	55.53	-23.93	Average	P
2	0.16	9.97	34.67	44.64	65.53	-20.89	QP	P
3	0.17	9.97	21.33	31.30	55.06	-23.76	Average	P
4	0.17	9.97	30.29	40.26	65.06	-24.80	QP	P
5	0.23	9.97	19.91	29.88	52.57	-22.69	Average	P
6	0.23	9.97	27.63	37.60	62.57	-24.97	QP	P
7	0.26	9.97	17.58	27.55	51.33	-23.78	Average	P
8	0.26	9.97	25.66	35.63	61.33	-25.70	QP	P
9	0.37	9.98	21.57	31.55	48.54	-16.99	Average	P
10	0.37	9.98	30.41	40.39	58.54	-18.15	QP	P
11	2.63	10.05	14.58	24.63	46.00	-21.37	Average	P
12	2.63	10.05	21.34	31.39	56.00	-24.61	QP	P

Note: Level = Reading + Factor

Margin = Level – Limit

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



5.5. Test Photographs

Front View



Rear View





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.

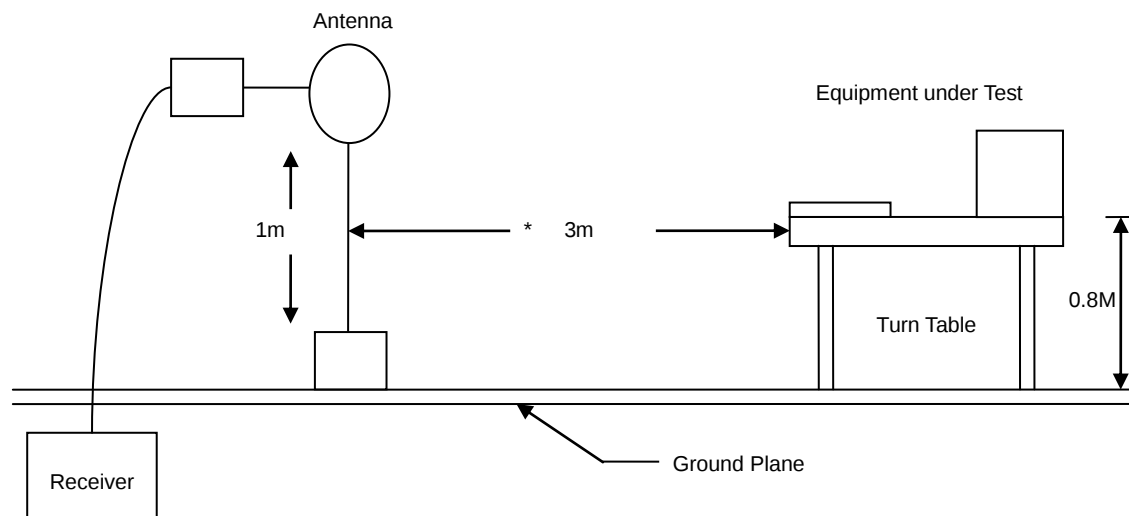
6.2. Test Procedures

- 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.

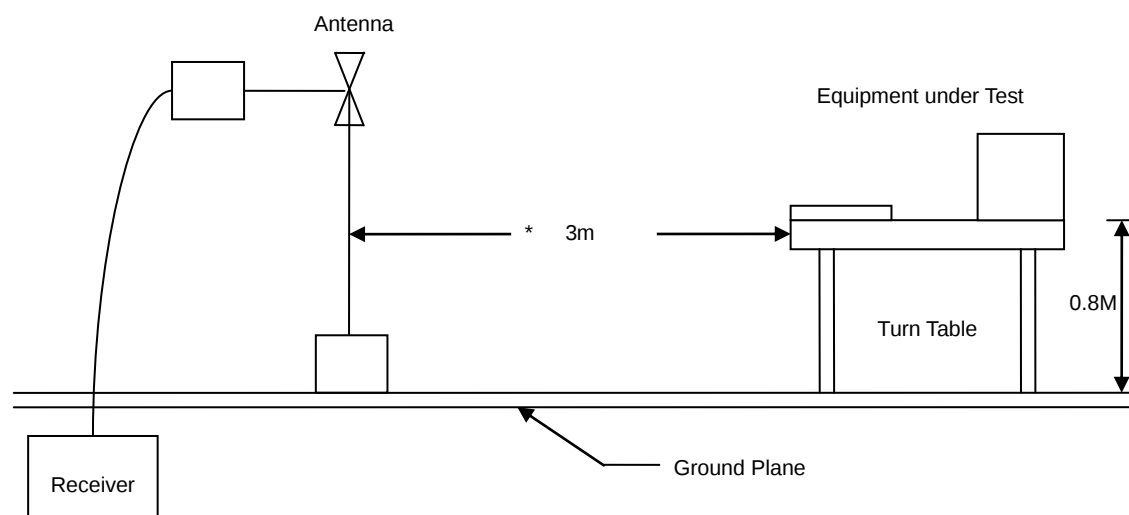


6.3. Typical Test Setup

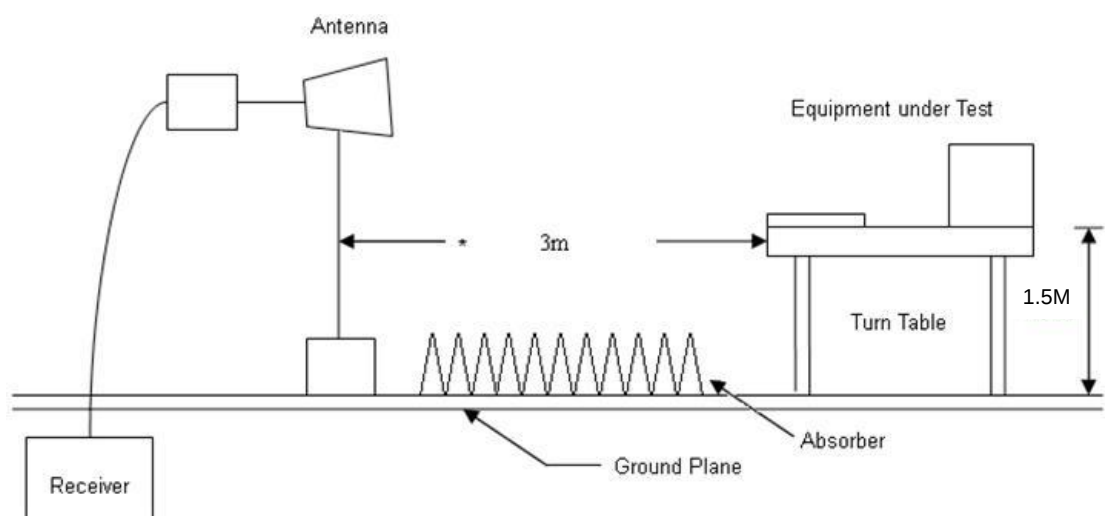
Below 30MHz test setup



30MHz- 1GHz Test Setup



Above 1GHz Test Setup



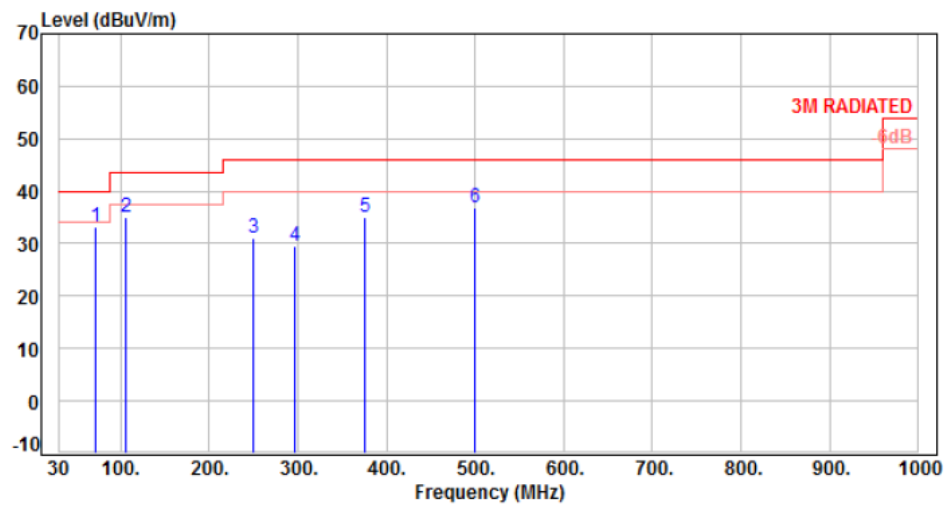


6.4. Test Result and Data (9kHz ~ 30MHz)

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

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

Power	:	AAC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 3, Band 2			



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	71.23	-11.68	44.96	33.28	40.00	-6.72	Peak	400	0	P
2	105.88	-13.35	48.31	34.96	43.50	-8.54	Peak	400	0	P
3	250.25	-10.23	41.37	31.14	46.00	-14.86	Peak	400	0	P
4	296.88	-8.70	38.36	29.66	46.00	-16.34	Peak	400	0	P
5	375.32	-6.35	41.37	35.02	46.00	-10.98	Peak	400	0	P
6	500.45	-3.64	40.54	36.90	46.00	-9.10	Peak	400	0	P

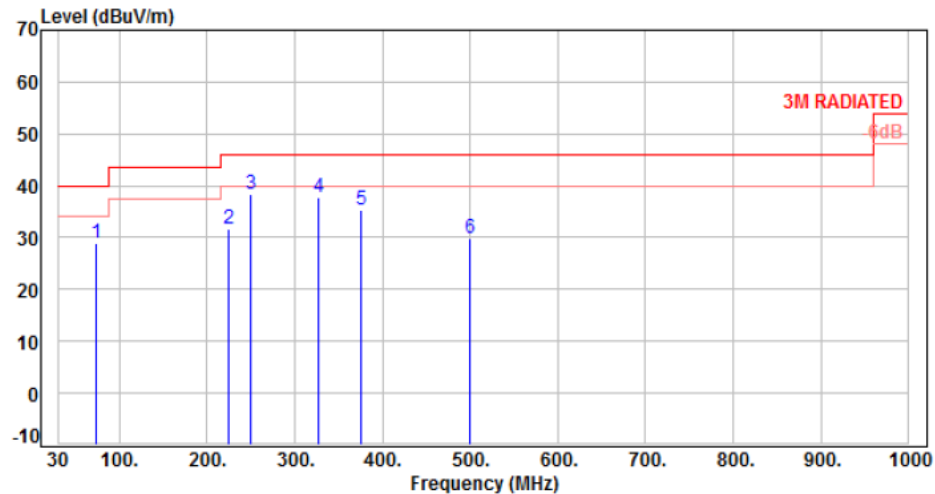
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60Hz	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 3, Band 2		



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	73.84	-12.21	41.08	28.87	40.00	-11.13	Peak	100	0	P
2	225.22	-11.50	43.32	31.82	46.00	-14.18	Peak	100	0	P
3	250.50	-10.22	48.49	38.27	46.00	-7.73	Peak	100	0	P
4	327.66	-7.76	45.37	37.61	46.00	-8.39	Peak	100	0	P
5	375.55	-6.35	41.80	35.45	46.00	-10.55	Peak	100	0	P
6	500.00	-3.66	33.37	29.71	46.00	-16.29	Peak	100	0	P

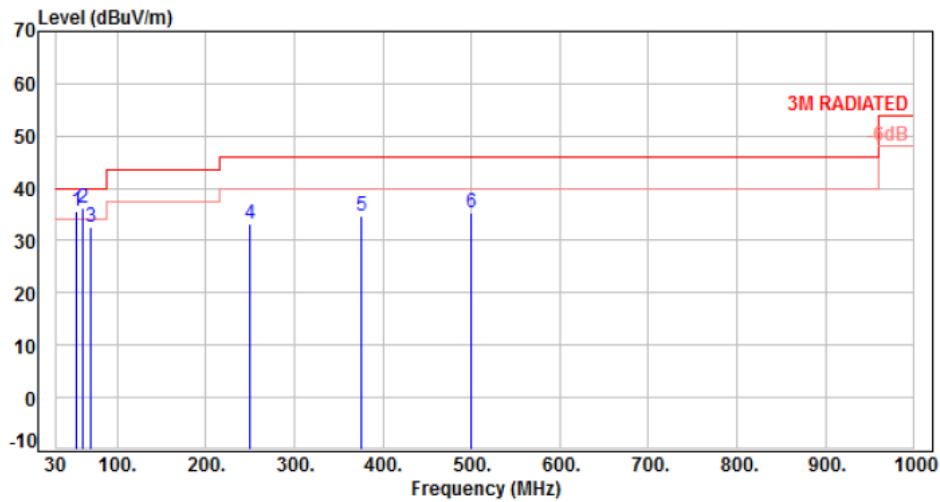
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	PoE	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 7, Band 2			



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	54.25	-9.53	45.04	35.51	40.00	-4.49	Peak	400	0	P
2	61.77	-10.25	46.34	36.09	40.00	-3.91	Peak	400	0	P
3	69.23	-11.32	44.02	32.70	40.00	-7.30	QP	100	338	P
4	250.00	-10.24	43.44	33.20	46.00	-12.80	Peak	400	0	P
5	375.35	-6.35	41.11	34.76	46.00	-11.24	Peak	400	0	P
6	500.50	-3.64	39.11	35.47	46.00	-10.53	Peak	400	0	P

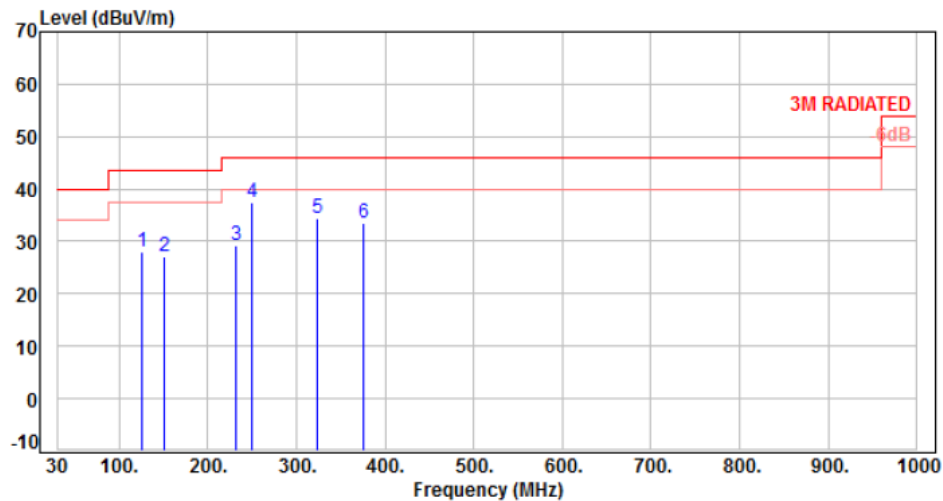
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	PoE	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 7, Band 2			



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	125.25	-11.23	39.17	27.94	43.50	-15.56	Peak	100	0	P
2	150.22	-9.60	36.64	27.04	43.50	-16.46	Peak	100	0	P
3	232.55	-11.22	40.34	29.12	46.00	-16.88	Peak	100	0	P
4	250.19	-10.23	47.67	37.44	46.00	-8.56	Peak	100	0	P
5	323.65	-7.94	42.47	34.53	46.00	-11.47	Peak	100	0	P
6	375.50	-6.35	39.72	33.37	46.00	-12.63	Peak	100	0	P

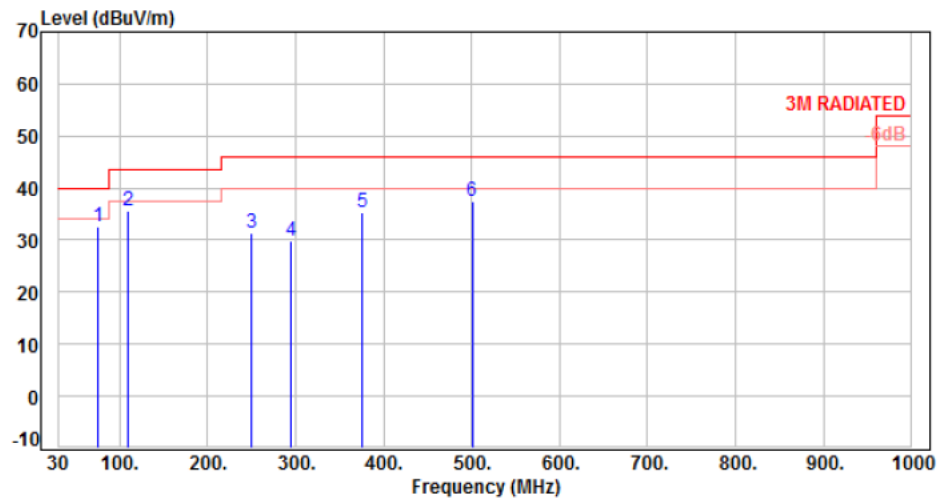
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



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



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	75.44	-12.38	44.84	32.46	40.00	-7.54	Peak	400	0	P
2	110.35	-12.76	48.38	35.62	43.50	-7.88	Peak	400	0	P
3	250.15	-10.23	41.56	31.33	46.00	-14.67	Peak	400	0	P
4	295.41	-8.72	38.59	29.87	46.00	-16.13	Peak	400	0	P
5	375.00	-6.36	41.67	35.31	46.00	-10.69	Peak	400	0	P
6	500.69	-3.63	41.07	37.44	46.00	-8.56	Peak	400	0	P

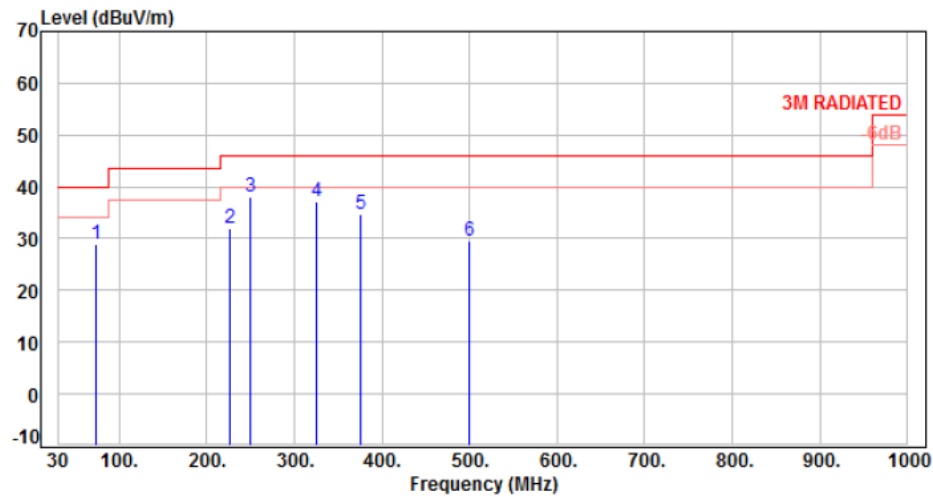
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



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



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	74.32	-12.25	41.27	29.02	40.00	-10.98	Peak	100	0	P
2	226.36	-11.50	43.54	32.04	46.00	-13.96	Peak	100	0	P
3	250.50	-10.22	48.37	38.15	46.00	-7.85	Peak	100	0	P
4	325.58	-7.87	45.03	37.16	46.00	-8.84	Peak	100	0	P
5	375.50	-6.35	41.05	34.70	46.00	-11.30	Peak	100	0	P
6	500.05	-3.66	33.33	29.67	46.00	-16.33	Peak	100	0	P

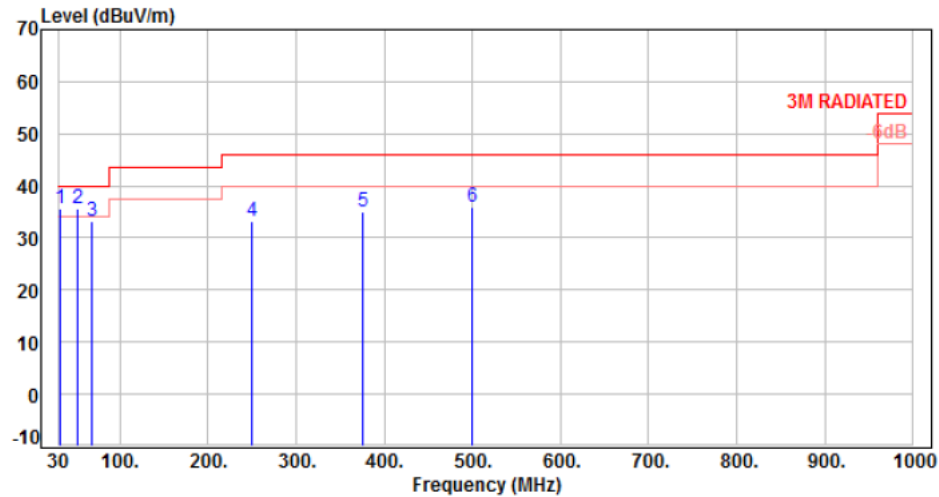
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	PoE	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 7, Band 3			



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	32.42	-10.60	46.12	35.52	40.00	-4.48	Peak	400	0	P
2	52.68	-9.55	45.03	35.48	40.00	-4.52	Peak	400	0	P
3	68.55	-11.18	44.48	33.30	40.00	-6.70	QP	100	316	P
4	250.15	-10.23	43.55	33.32	46.00	-12.68	Peak	400	0	P
5	375.50	-6.35	41.48	35.13	46.00	-10.87	Peak	400	0	P
6	500.00	-3.66	39.52	35.86	46.00	-10.14	Peak	400	0	P

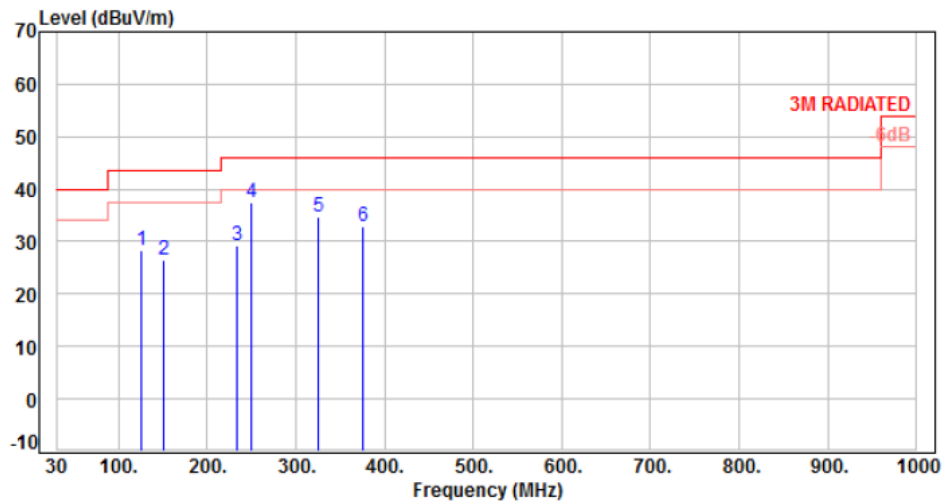
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	PoE	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 7, Band 3			



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	125.50	-11.20	39.53	28.33	43.50	-15.17	Peak	100	0	P
2	150.44	-9.58	36.06	26.48	43.50	-17.02	Peak	100	0	P
3	233.69	-11.11	40.38	29.27	46.00	-16.73	Peak	100	0	P
4	250.25	-10.23	47.74	37.51	46.00	-8.49	Peak	100	0	P
5	324.75	-7.90	42.53	34.63	46.00	-11.37	Peak	100	0	P
6	375.44	-6.35	39.10	32.75	46.00	-13.25	Peak	100	0	P

Note: Level=Reading+Factor

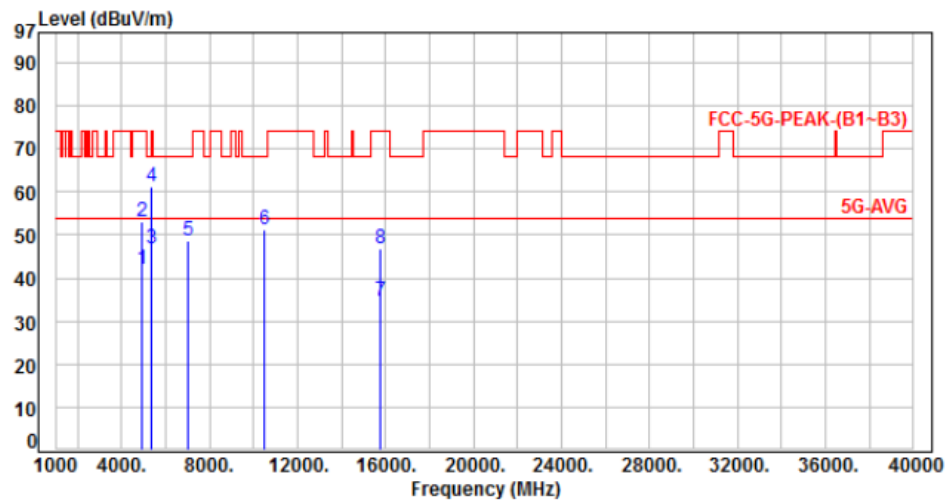
Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



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

Power	: AC 120V / 60Hz	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, Band 2, CH52		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	4940.00	-8.14	50.11	41.97	54.00	-12.03	Average	100	117	P
2	4940.00	-8.14	61.21	53.07	74.00	-20.93	Peak	100	117	P
3	5350.00	-7.30	54.20	46.90	54.00	-7.10	Average	335	336	P
4	5350.00	-7.30	68.60	61.30	74.00	-12.70	Peak	335	336	P
5	7011.00	-4.65	53.42	48.77	68.20	-19.43	Peak	395	335	P
6	10520.00	0.04	51.21	51.25	68.20	-16.95	Peak	100	345	P
7	15780.00	5.41	29.22	34.63	54.00	-19.37	Average	100	347	P
8	15780.00	5.41	41.50	46.91	74.00	-27.09	Peak	100	347	P

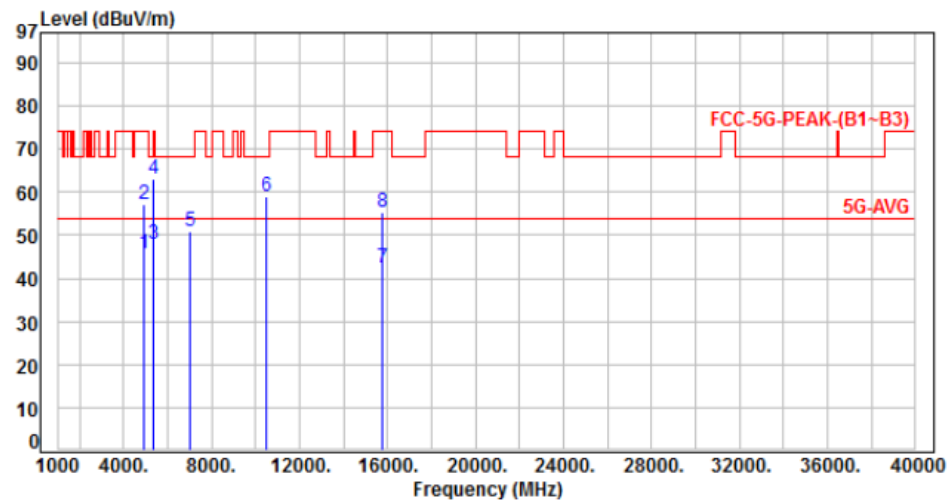
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60HZ	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, Band 2, CH52		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	4940.00	-8.14	54.01	45.87	54.00	-8.13	Average	133	120	P
2	4940.00	-8.14	65.31	57.17	74.00	-16.83	Peak	133	120	P
3	5350.00	-7.30	55.40	48.10	54.00	-5.90	Average	181	80	P
4	5350.00	-7.30	70.50	63.20	74.00	-10.80	Peak	181	80	P
5	7011.00	-4.65	55.70	51.05	68.20	-17.15	Peak	222	274	P
6	10520.00	0.04	58.81	58.85	68.20	-9.35	Peak	200	305	P
7	15780.00	5.41	36.90	42.31	54.00	-11.69	Average	190	39	P
8	15780.00	5.41	49.90	55.31	74.00	-18.69	Peak	190	39	P

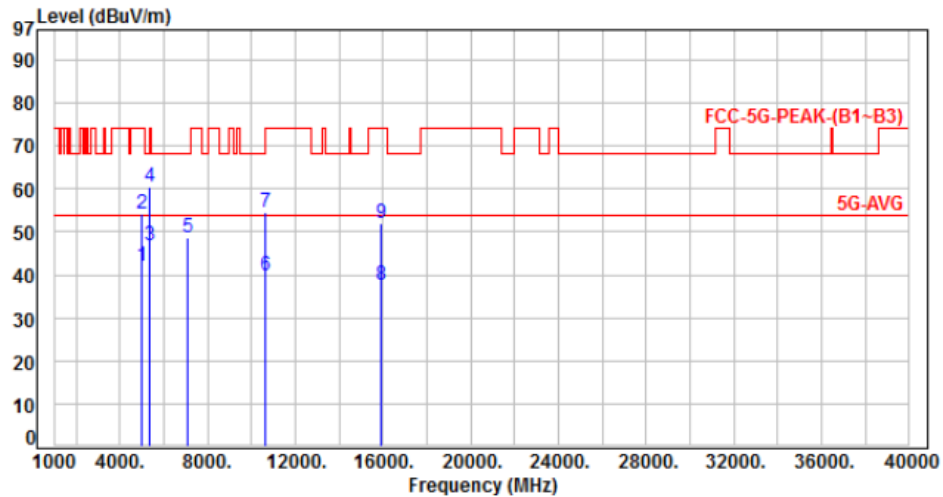
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60HZ	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, Band 2, CH60		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	4980.00	-8.01	50.11	42.10	54.00	-11.90	Average	239	339	P
2	4980.00	-8.01	62.39	54.38	74.00	-19.62	Peak	239	339	P
3	5350.00	-7.30	54.10	46.80	54.00	-7.20	Average	300	331	P
4	5350.00	-7.30	67.70	60.40	74.00	-13.60	Peak	300	331	P
5	7065.00	-4.51	53.10	48.59	68.20	-19.61	Peak	396	340	P
6	10600.00	0.12	39.70	39.82	54.00	-14.18	Average	210	8	P
7	10600.00	0.12	54.50	54.62	74.00	-19.38	Peak	210	8	P
8	15900.00	5.49	32.30	37.79	54.00	-16.21	Average	100	304	P
9	15900.00	5.49	46.50	51.99	74.00	-22.01	Peak	100	304	P

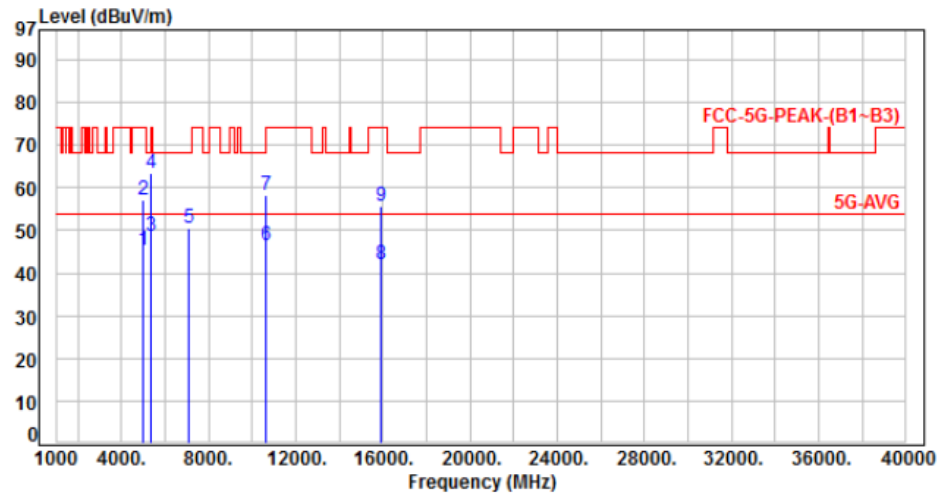
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60HZ	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, Band 2, CH60		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	4980.00	-8.01	53.29	45.28	54.00	-8.72	Average	220	63	P
2	4980.00	-8.01	65.19	57.18	74.00	-16.82	Peak	220	63	P
3	5350.00	-7.30	56.10	48.80	54.00	-5.20	Average	209	80	P
4	5350.00	-7.30	70.60	63.30	74.00	-10.70	Peak	209	80	P
5	7065.00	-4.51	55.10	50.59	68.20	-17.61	Peak	230	275	P
6	10600.00	0.12	46.50	46.62	54.00	-7.38	Average	200	308	P
7	10600.00	0.12	58.10	58.22	74.00	-15.78	Peak	200	308	P
8	15900.00	5.49	36.40	41.89	54.00	-12.11	Average	100	46	P
9	15900.00	5.49	50.20	55.69	74.00	-18.31	Peak	100	46	P

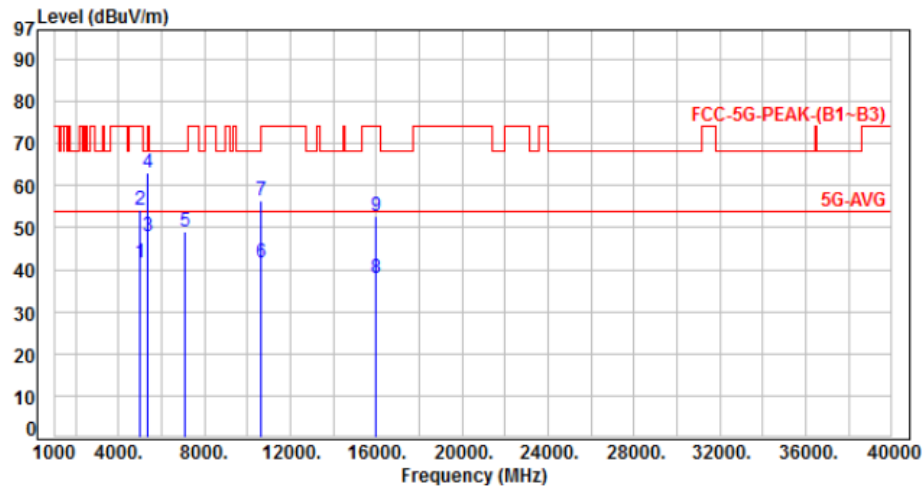
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60HZ	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, Band 2, CH64		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5000.00	-7.96	49.60	41.64	54.00	-12.36	Average	100	336	P
2	5000.00	-7.96	62.10	54.14	74.00	-19.86	Peak	100	336	P
3	5350.00	-7.30	55.20	47.90	54.00	-6.10	Average	379	332	P
4	5350.00	-7.30	70.30	63.00	74.00	-11.00	Peak	379	332	P
5	7094.00	-4.43	53.51	49.08	68.20	-19.12	Peak	338	351	P
6	10640.00	0.15	41.50	41.65	54.00	-12.35	Average	194	8	P
7	10640.00	0.15	56.24	56.39	74.00	-17.61	Peak	194	8	P
8	15960.00	5.53	32.60	38.13	54.00	-15.87	Average	100	308	P
9	15960.00	5.53	47.20	52.73	74.00	-21.27	Peak	100	308	P

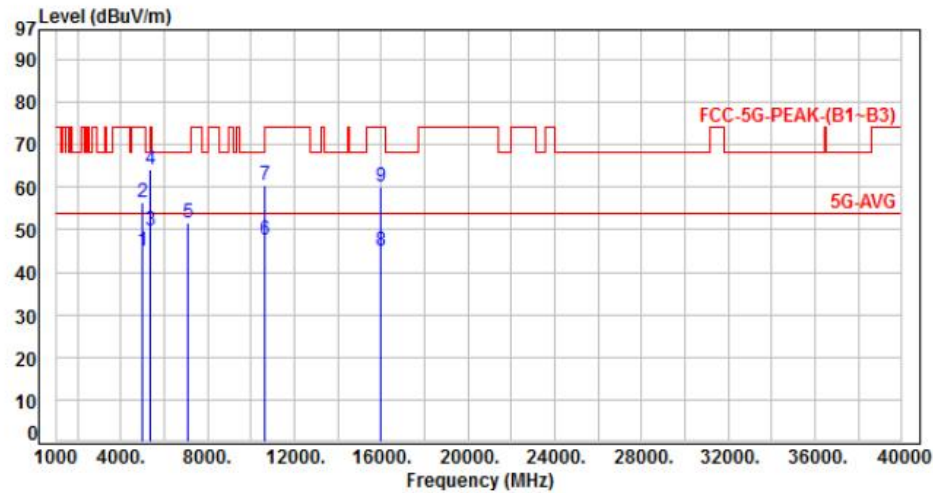
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60HZ	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, Band 2, CH64		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5000.00	-7.96	52.80	44.84	54.00	-9.16	Average	290	65	P
2	5000.00	-7.96	64.30	56.34	74.00	-17.66	Peak	290	65	P
3	5350.00	-7.30	57.20	49.90	54.00	-4.10	Average	210	81	P
4	5350.00	-7.30	71.60	64.30	74.00	-9.70	Peak	210	81	P
5	7094.00	-4.43	56.20	51.77	68.20	-16.43	Peak	220	119	P
6	10640.00	0.15	47.35	47.50	54.00	-6.50	Average	220	305	P
7	10640.00	0.15	60.50	60.65	74.00	-13.35	Peak	220	305	P
8	15960.00	5.53	39.56	45.09	54.00	-8.91	Average	183	41	P
9	15960.00	5.53	54.50	60.03	74.00	-13.97	Peak	183	41	P

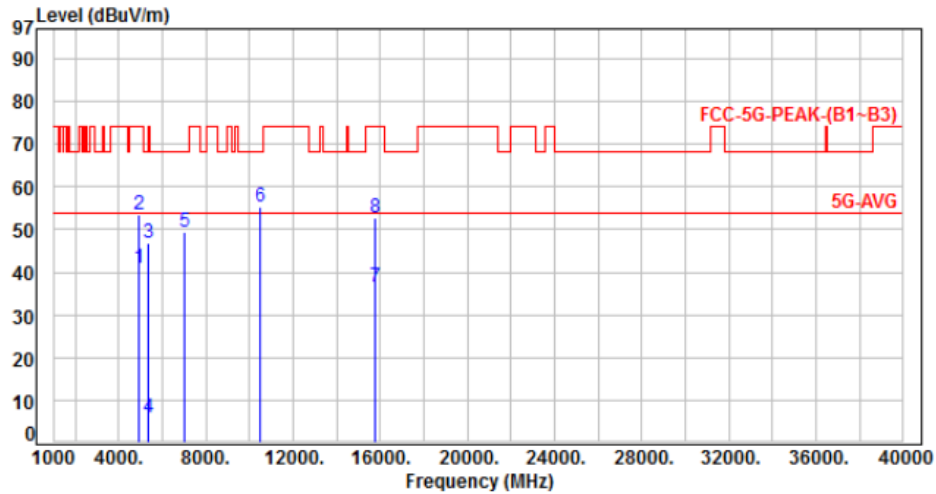
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60HZ	Pol/Phase	: VERTICAL
Test Mode	: Mode 2, Band 2, CH52		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	4940.00	-8.14	48.91	40.77	54.00	-13.23	Average	100	339	P
2	4940.00	-8.14	61.51	53.37	74.00	-20.63	Peak	100	339	P
3	5350.00	-7.30	54.30	47.00	54.00	-7.00	Average	400	328	P
4	5350.00	-7.30	13.30	6.00	74.00	-68.00	Peak	400	328	P
5	7012.00	-4.65	54.11	49.46	68.20	-18.74	Peak	382	342	P
6	10520.00	0.04	55.31	55.35	68.20	-12.85	Peak	106	338	P
7	15780.00	5.41	31.20	36.61	54.00	-17.39	Average	100	312	P
8	15780.00	5.41	47.51	52.92	74.00	-21.08	Peak	100	312	P

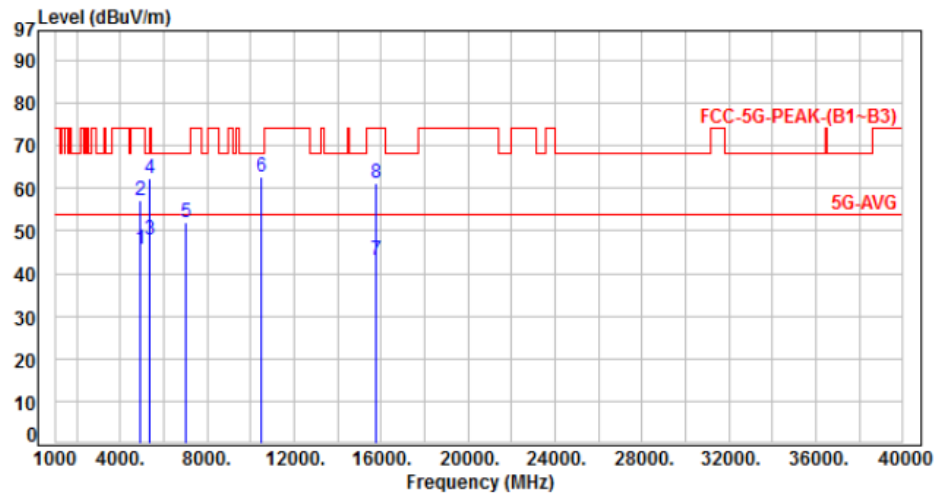
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60HZ	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 2, Band 2, CH52		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	4940.00	-8.14	53.71	45.57	54.00	-8.43	Average	100	114	P
2	4940.00	-8.14	65.21	57.07	74.00	-16.93	Peak	100	114	P
3	5350.00	-7.30	55.20	47.90	54.00	-6.10	Average	220	70	P
4	5350.00	-7.30	69.80	62.50	74.00	-11.50	Peak	220	70	P
5	7012.00	-4.65	56.50	51.85	68.20	-16.35	Peak	209	117	P
6	10520.00	0.04	62.61	62.65	68.20	-5.55	Peak	220	305	P
7	15780.00	5.41	37.80	43.21	54.00	-10.79	Average	200	41	P
8	15780.00	5.41	55.90	61.31	74.00	-12.69	Peak	200	41	P

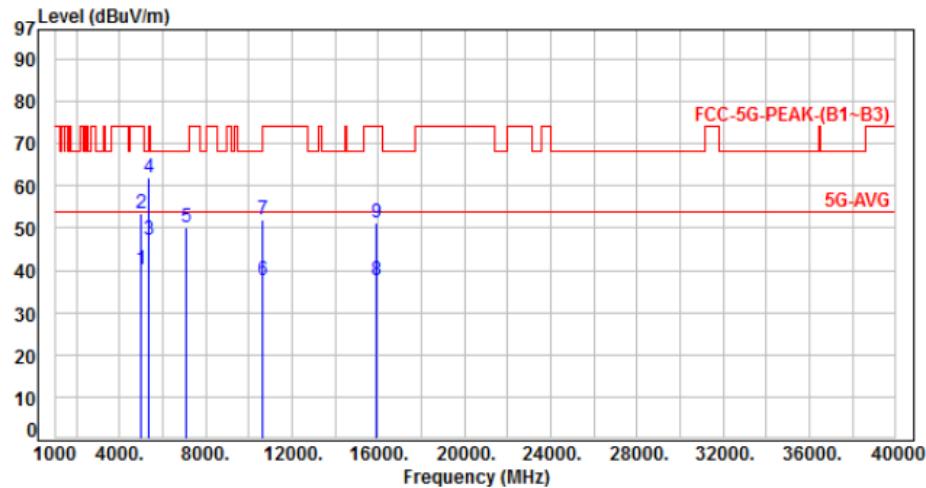
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60HZ	Pol/Phase	: VERTICAL
Test Mode	: Mode 2, Band 2, CH60		



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	4980.00	-8.01	48.32	40.31	54.00	-13.69	Average	100	311	P
2	4980.00	-8.01	61.55	53.54	74.00	-20.46	Peak	100	311	P
3	5350.00	-7.30	54.50	47.20	54.00	-6.80	Average	395	332	P
4	5350.00	-7.30	69.32	62.02	74.00	-11.98	Peak	395	332	P
5	7066.00	-4.51	54.82	50.31	68.20	-17.89	Peak	378	352	P
6	10600.00	0.12	37.50	37.62	54.00	-16.38	Average	220	340	P
7	10600.00	0.12	51.80	51.92	74.00	-22.08	Peak	220	340	P
8	15900.00	5.49	32.23	37.72	54.00	-16.28	Average	100	348	P
9	15900.00	5.49	45.80	51.29	74.00	-22.71	Peak	100	348	P

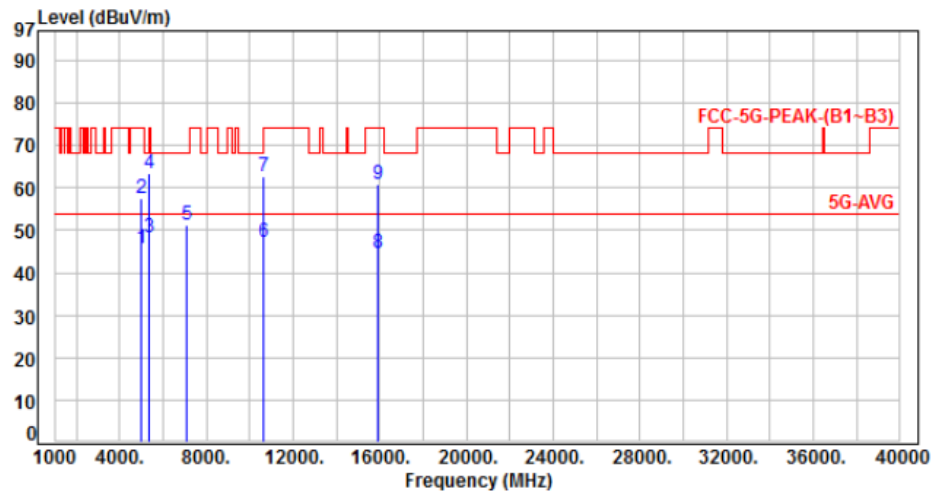
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60HZ	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 2, Band 2, CH60		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	4980.00	-8.01	53.69	45.68	54.00	-8.32	Average	205	70	P
2	4980.00	-8.01	65.66	57.65	74.00	-16.35	Peak	205	70	P
3	5350.00	-7.30	55.50	48.20	54.00	-5.80	Average	210	66	P
4	5350.00	-7.30	70.60	63.30	74.00	-10.70	Peak	210	66	P
5	7066.00	-4.51	55.70	51.19	68.20	-17.01	Peak	253	105	P
6	10600.00	0.12	47.22	47.34	54.00	-6.66	Average	230	310	P
7	10600.00	0.12	62.60	62.72	74.00	-11.28	Peak	230	310	P
8	15900.00	5.49	39.00	44.49	54.00	-9.51	Average	200	41	P
9	15900.00	5.49	55.50	60.99	74.00	-13.01	Peak	200	41	P

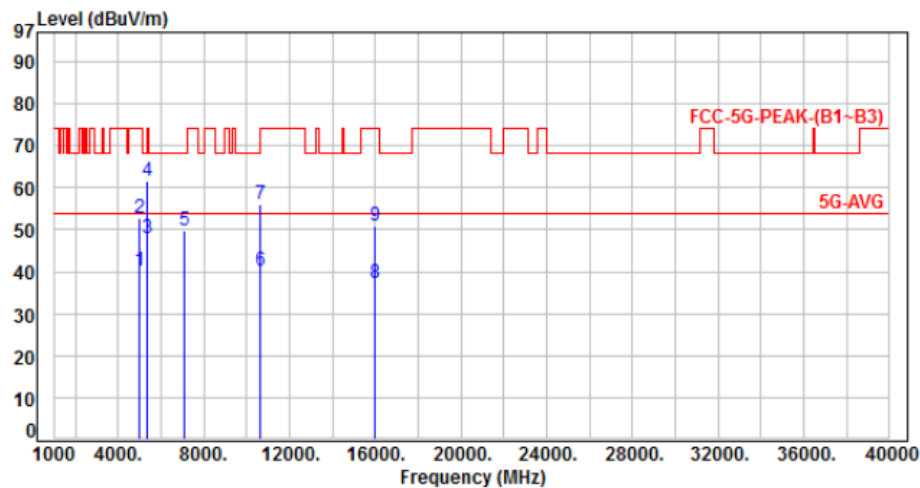
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60HZ	Pol/Phase	: VERTICAL
Test Mode	: Mode 2, Band 2, CH64		



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5000.00	-7.96	48.32	40.36	54.00	-13.64	Average	105	325	P
2	5000.00	-7.96	60.68	52.72	74.00	-21.28	Peak	105	325	P
3	5350.00	-7.30	55.10	47.80	54.00	-6.20	Average	400	330	P
4	5350.00	-7.30	68.90	61.60	74.00	-12.40	Peak	400	330	P
5	7094.00	-4.43	54.21	49.78	68.20	-18.42	Peak	366	347	P
6	10640.00	0.15	40.20	40.35	54.00	-13.65	Average	220	10	P
7	10640.00	0.15	55.80	55.95	74.00	-18.05	Peak	220	10	P
8	15960.00	5.53	31.55	37.08	54.00	-16.92	Average	203	350	P
9	15960.00	5.53	45.51	51.04	74.00	-22.96	Peak	203	350	P

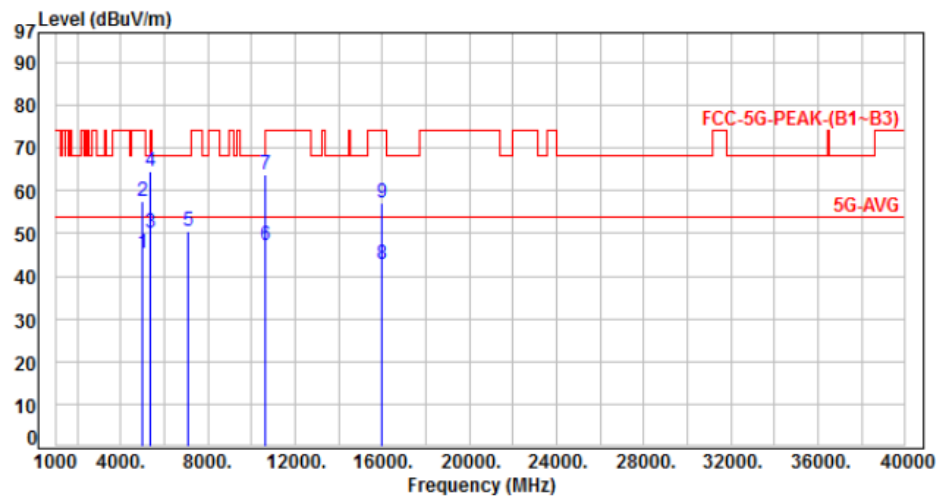
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60HZ	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 2, Band 2, CH64		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5000.00	-7.96	53.20	45.24	54.00	-8.76	Average	250	62	P
2	5000.00	-7.96	65.60	57.64	74.00	-16.36	Peak	250	62	P
3	5350.00	-7.30	57.50	50.20	54.00	-3.80	Average	129	75	P
4	5350.00	-7.30	71.80	64.50	74.00	-9.50	Peak	129	75	P
5	7094.00	-4.43	54.80	50.37	68.20	-17.83	Peak	249	99	P
6	10640.00	0.15	47.20	47.35	54.00	-6.65	Average	230	312	P
7	10640.00	0.15	63.60	63.75	74.00	-10.25	Peak	230	312	P
8	15960.00	5.53	37.25	42.78	54.00	-11.22	Average	190	43	P
9	15960.00	5.53	51.80	57.33	74.00	-16.67	Peak	190	43	P

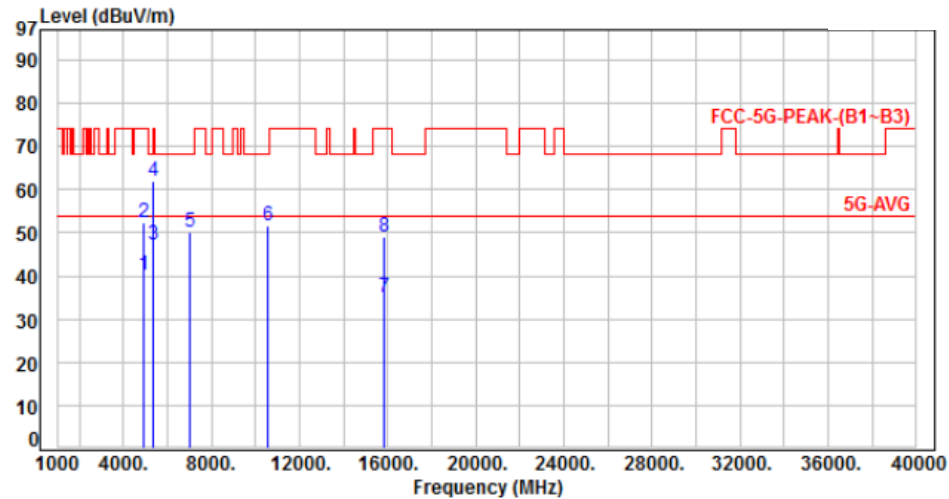
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60HZ	Pol/Phase	: VERTICAL
Test Mode	: Mode 3, Band 2, CH54		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	4950.00	-8.10	48.29	40.19	54.00	-13.81	Average	115	327	P
2	4950.00	-8.10	60.52	52.42	74.00	-21.58	Peak	115	327	P
3	5350.00	-7.30	54.45	47.15	54.00	-6.85	Average	332	330	P
4	5350.00	-7.30	69.20	61.90	74.00	-12.10	Peak	332	330	P
5	7026.00	-4.62	54.64	50.02	68.20	-18.18	Peak	352	339	P
6	10540.00	0.07	51.59	51.66	68.20	-16.54	Peak	217	12	P
7	15810.00	5.43	29.66	35.09	54.00	-18.91	Average	100	351	P
8	15810.00	5.43	43.51	48.94	74.00	-25.06	Peak	100	351	P

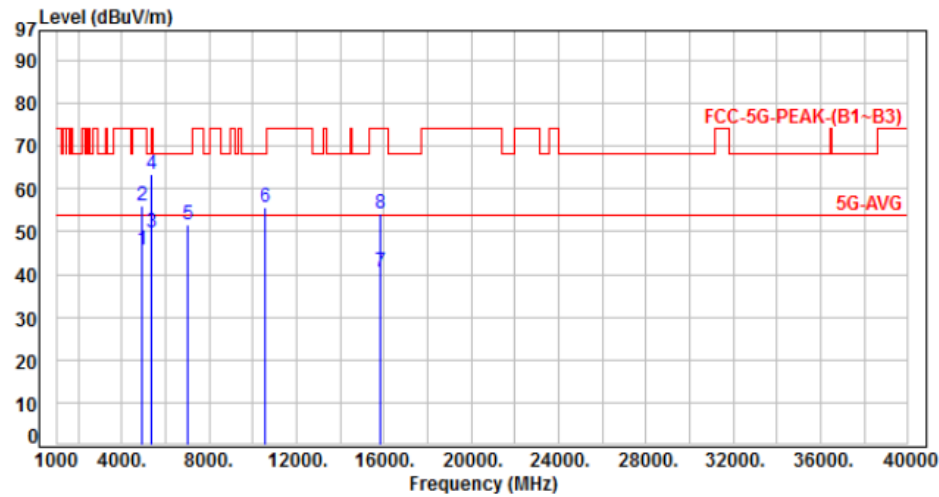
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60HZ	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 3, Band 2, CH54		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	4950.00	-8.10	53.79	45.69	54.00	-8.31	Average	100	110	P
2	4950.00	-8.10	64.20	56.10	74.00	-17.90	Peak	100	110	P
3	5350.00	-7.30	57.23	49.93	54.00	-4.07	Average	230	77	P
4	5350.00	-7.30	70.85	63.55	74.00	-10.45	Peak	230	77	P
5	7026.00	-4.62	56.11	51.49	68.20	-16.71	Peak	245	100	P
6	10540.00	0.07	55.59	55.66	68.20	-12.54	Peak	209	303	P
7	15810.00	5.43	35.23	40.66	54.00	-13.34	Average	191	40	P
8	15810.00	5.43	48.80	54.23	74.00	-19.77	Peak	191	40	P

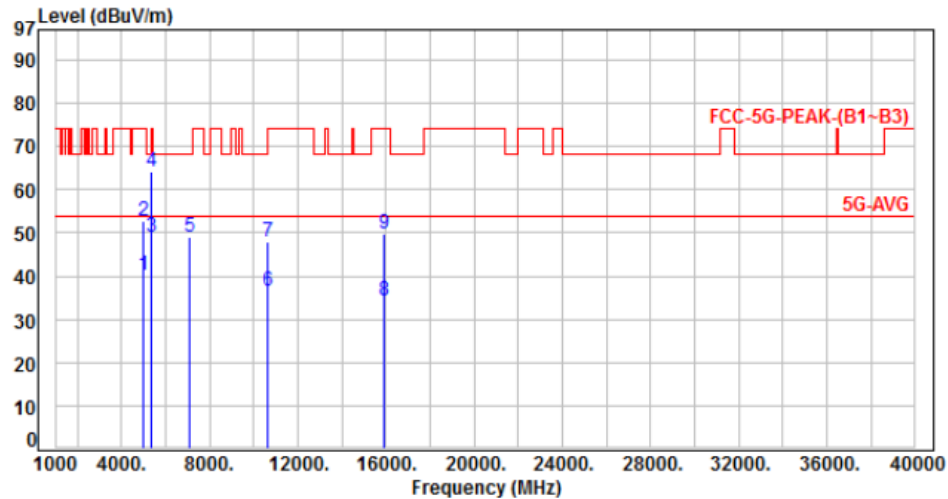
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60HZ	Pol/Phase	: VERTICAL
Test Mode	: Mode 3, Band 2, CH62		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	4990.00	-7.99	48.35	40.36	54.00	-13.64	Average	123	301	P
2	4990.00	-7.99	60.71	52.72	74.00	-21.28	Peak	123	301	P
3	5350.00	-7.30	56.40	49.10	54.00	-4.90	Average	201	100	P
4	5350.00	-7.30	71.30	64.00	74.00	-10.00	Peak	201	100	P
5	7080.00	-4.47	53.50	49.03	68.20	-19.17	Peak	327	311	P
6	10620.00	0.13	36.22	36.35	54.00	-17.65	Average	100	334	P
7	10620.00	0.13	47.80	47.93	74.00	-26.07	Peak	100	334	P
8	15930.00	5.51	28.68	34.19	54.00	-19.81	Average	100	342	P
9	15930.00	5.51	44.20	49.71	74.00	-24.29	Peak	100	342	P

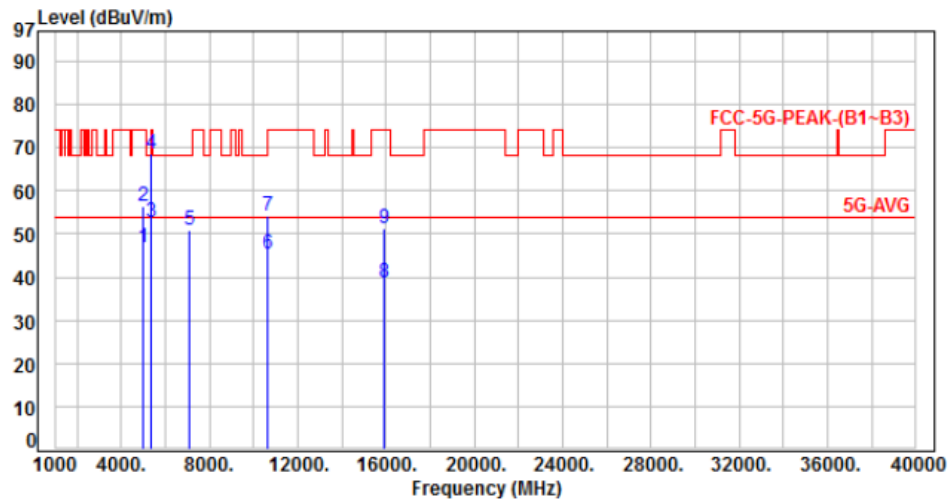
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60HZ	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 3, Band 2, CH62		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	4990.00	-7.99	54.81	46.82	54.00	-7.18	Average	231	80	P
2	4990.00	-7.99	64.50	56.51	74.00	-17.49	Peak	231	80	P
3	5350.00	-7.30	60.13	52.83	54.00	-1.17	Average	220	74	P
4	5350.00	-7.30	75.80	68.50	74.00	-5.50	Peak	220	74	P
5	7080.00	-4.47	55.50	51.03	68.20	-17.17	Peak	250	120	P
6	10620.00	0.13	45.20	45.33	54.00	-8.67	Average	200	307	P
7	10620.00	0.13	53.90	54.03	74.00	-19.97	Peak	200	307	P
8	15930.00	5.51	33.20	38.71	54.00	-15.29	Average	198	42	P
9	15930.00	5.51	45.60	51.11	74.00	-22.89	Peak	198	42	P

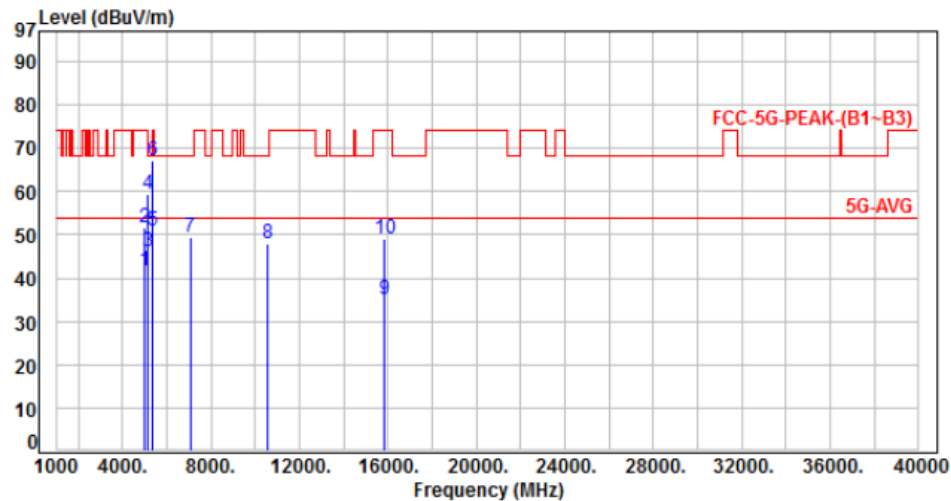
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60HZ	Pol/Phase	: VERTICAL
Test Mode	: Mode 4, Band 2, CH58		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	4970.00	-8.05	49.70	41.65	54.00	-12.35	Average	243	335	P
2	4970.00	-8.05	59.80	51.75	74.00	-22.25	Peak	243	335	P
3	5150.00	-7.68	53.80	46.12	54.00	-7.88	Average	400	340	P
4	5150.00	-7.68	67.20	59.52	74.00	-14.48	Peak	400	340	P
5	5350.00	-7.30	58.10	50.80	54.00	-3.20	Average	400	340	P
6	5350.00	-7.30	74.50	67.20	74.00	-6.80	Peak	400	340	P
7	7053.00	-4.54	54.12	49.58	68.20	-18.62	Peak	381	325	P
8	10580.00	0.10	47.80	47.90	68.20	-20.30	Peak	226	303	P
9	15870.00	5.47	29.63	35.10	54.00	-18.90	Average	100	88	P
10	15870.00	5.47	43.51	48.98	74.00	-25.02	Peak	100	88	P

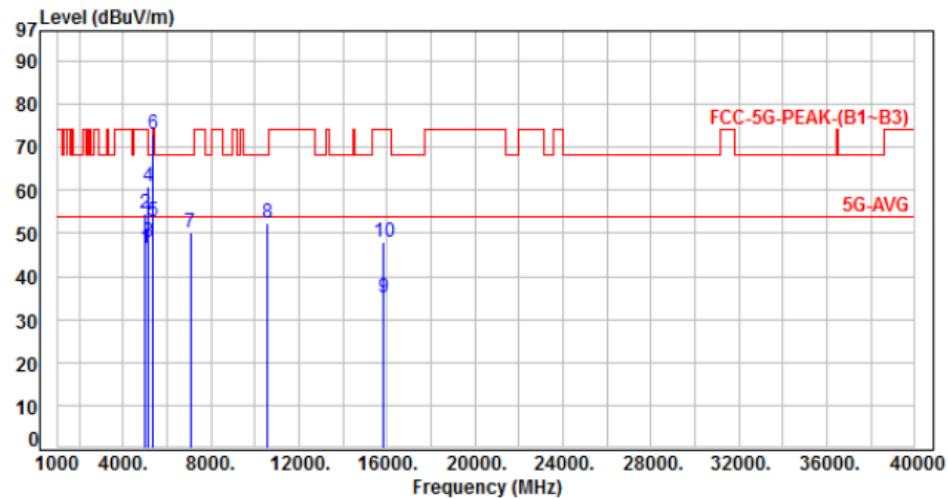
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60HZ	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 4, Band 2, CH58		



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	4970.00	-8.05	54.40	46.35	54.00	-7.65	Average	210	81	P
2	4970.00	-8.05	62.50	54.45	74.00	-19.55	Peak	210	81	P
3	5150.00	-7.68	55.50	47.82	54.00	-6.18	Average	212	81	P
4	5150.00	-7.68	68.70	61.02	74.00	-12.98	Peak	212	81	P
5	5350.00	-7.30	60.20	52.90	54.00	-1.10	Average	212	81	P
6	5350.00	-7.30	80.29	72.99	74.00	-1.01	Peak	212	81	P
7	7053.00	-4.54	54.70	50.16	68.20	-18.04	Peak	241	123	P
8	10580.00	0.10	52.10	52.20	68.20	-16.00	Peak	211	313	P
9	15870.00	5.47	29.60	35.07	54.00	-18.93	Average	100	324	P
10	15870.00	5.47	42.66	48.13	74.00	-25.87	Peak	100	324	P

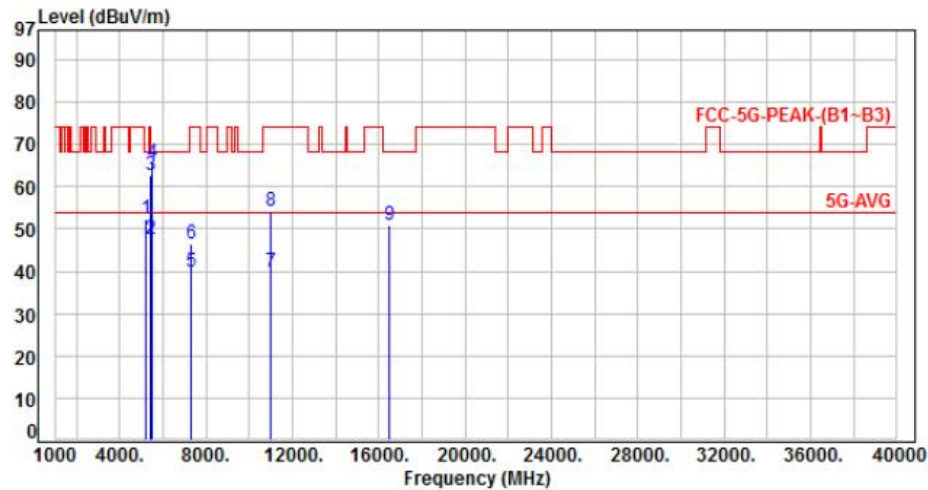
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60HZ	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, Band 3, CH100		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5180.00	-7.62	60.10	52.48	68.20	-15.72	Peak	270	336	P
2	5460.00	-7.10	54.82	47.72	54.00	-6.28	Average	400	321	P
3	5460.00	-7.10	69.80	62.70	74.00	-11.30	Peak	400	321	P
4	5470.00	-7.08	72.60	65.52	68.20	-2.68	Peak	400	321	P
5	7333.00	-3.80	43.60	39.80	54.00	-14.20	Average	400	355	P
6	7333.00	-3.80	50.20	46.40	74.00	-27.60	Peak	400	355	P
7	11000.00	0.46	39.50	39.96	54.00	-14.04	Average	222	333	P
8	11000.00	0.46	53.80	54.26	74.00	-19.74	Peak	222	333	P
9	16500.00	7.26	43.57	50.83	68.20	-17.37	Peak	100	311	P

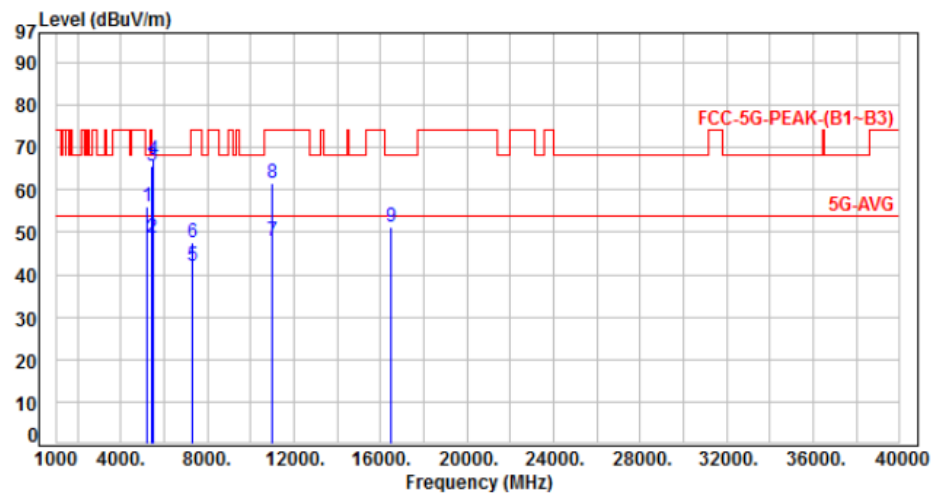
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60HZ	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, Band 3, CH100		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5180.00	-7.62	63.60	55.98	68.20	-12.22	Peak	207	77	P
2	5460.00	-7.10	55.80	48.70	54.00	-5.30	Average	180	85	P
3	5460.00	-7.10	72.70	65.60	74.00	-8.40	Peak	180	85	P
4	5470.00	-7.08	74.12	67.04	68.20	-1.16	Peak	180	85	P
5	7333.00	-3.80	45.70	41.90	54.00	-12.10	Average	257	110	P
6	7333.00	-3.80	51.50	47.70	74.00	-26.30	Peak	257	110	P
7	11000.00	0.46	47.50	47.96	54.00	-6.04	Average	220	12	P
8	11000.00	0.46	61.30	61.76	74.00	-12.24	Peak	220	12	P
9	16500.00	7.26	44.10	51.36	68.20	-16.84	Peak	100	330	P

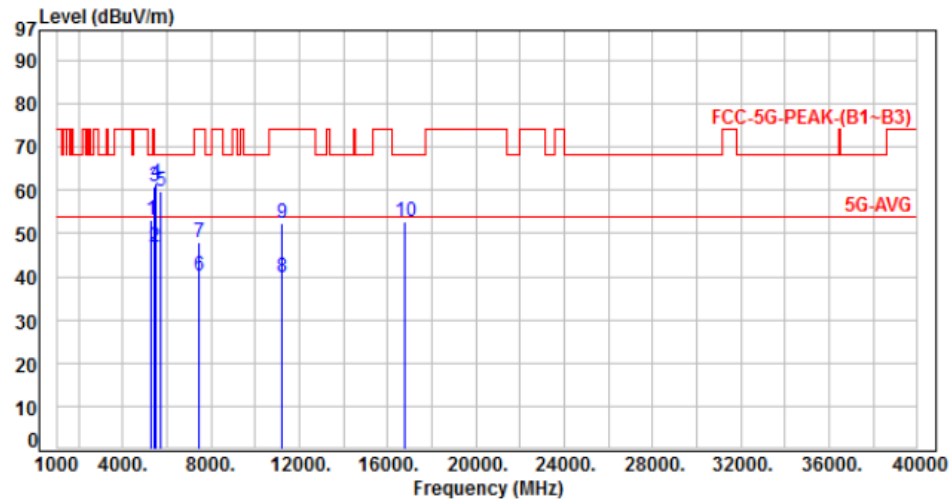
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60HZ	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, Band 3, CH120		



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5280.00	-7.43	60.57	53.14	68.20	-15.06	Peak	311	302	P
2	5460.00	-7.10	53.90	46.80	54.00	-7.20	Average	118	164	P
3	5460.00	-7.10	67.80	60.70	74.00	-13.30	Peak	118	164	P
4	5470.00	-7.08	68.50	61.42	68.20	-6.78	Peak	118	164	P
5	5725.00	-6.95	66.61	59.66	68.20	-8.54	Peak	118	164	P
6	7466.00	-3.46	43.66	40.20	54.00	-13.80	Average	392	337	P
7	7466.00	-3.46	51.27	47.81	74.00	-26.19	Peak	392	337	P
8	11200.00	0.76	38.90	39.66	54.00	-14.34	Average	112	328	P
9	11200.00	0.76	51.80	52.56	74.00	-21.44	Peak	112	328	P
10	16800.00	8.99	43.76	52.75	68.20	-15.45	Peak	100	35	P

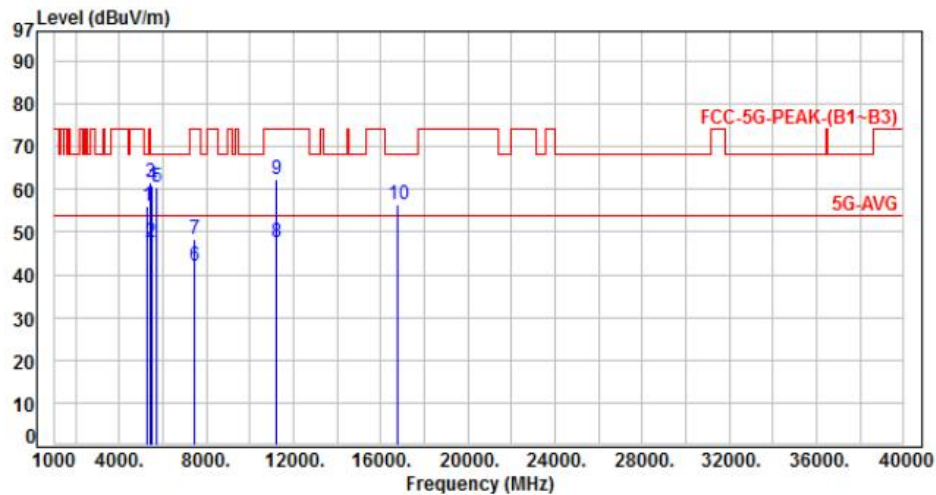
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60HZ	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, Band 3, CH120		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5280.00	-7.43	63.36	55.93	68.20	-12.27	Peak	215	82	P
2	5460.00	-7.10	54.60	47.50	54.00	-6.50	Average	100	260	P
3	5460.00	-7.10	68.60	61.50	74.00	-12.50	Peak	100	260	P
4	5470.00	-7.08	67.90	60.82	68.20	-7.38	Peak	100	260	P
5	5725.00	-6.95	67.61	60.66	68.20	-7.54	Peak	100	260	P
6	7466.00	-3.46	45.37	41.91	54.00	-12.09	Average	242	156	P
7	7466.00	-3.46	51.89	48.43	74.00	-25.57	Peak	242	156	P
8	11200.00	0.76	46.70	47.46	54.00	-6.54	Average	230	16	P
9	11200.00	0.76	61.50	62.26	74.00	-11.74	Peak	230	16	P
10	16800.00	8.99	47.30	56.29	68.20	-11.91	Peak	100	342	P

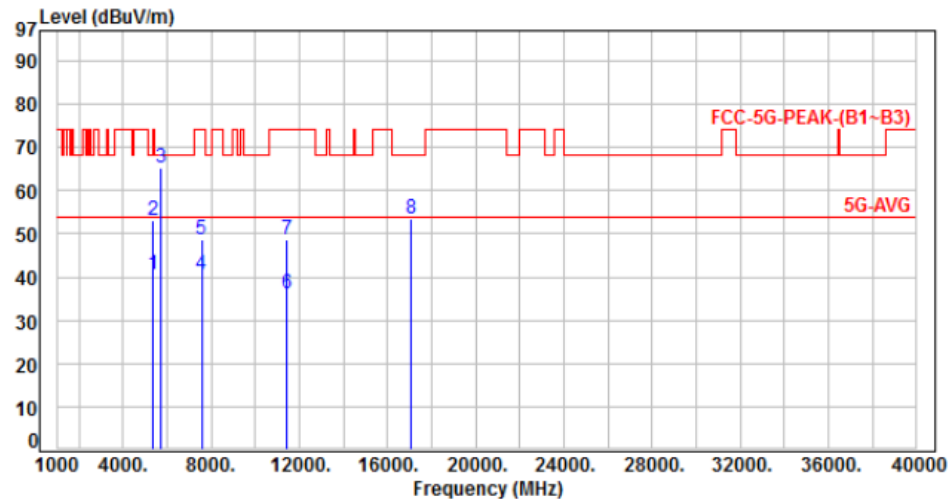
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60HZ	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, Band 3, CH140		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5380.00	-7.25	47.65	40.40	54.00	-13.60	Average	321	334	P
2	5380.00	-7.25	60.52	53.27	74.00	-20.73	Peak	321	334	P
3	5725.00	-6.95	72.41	65.46	68.20	-2.74	Peak	351	342	P
4	7560.00	-3.31	43.92	40.61	54.00	-13.39	Average	358	344	P
5	7560.00	-3.31	52.11	48.80	74.00	-25.20	Peak	358	344	P
6	11400.00	1.05	35.20	36.25	54.00	-17.75	Average	224	335	P
7	11400.00	1.05	47.60	48.65	74.00	-25.35	Peak	224	335	P
8	17100.00	10.79	42.67	53.46	68.20	-14.74	Peak	100	125	P

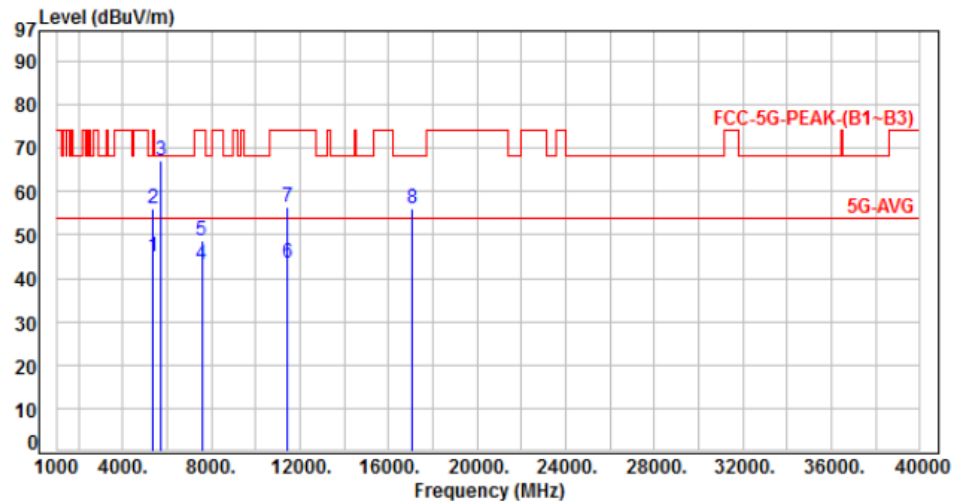
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60HZ	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, Band 3, CH140		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5380.00	-7.25	52.33	45.08	54.00	-8.92	Average	212	83	P
2	5380.00	-7.25	63.44	56.19	74.00	-17.81	Peak	212	83	P
3	5725.00	-6.95	73.96	67.01	68.20	-1.19	Peak	230	78	P
4	7560.00	-3.31	46.33	43.02	54.00	-10.98	Average	245	293	P
5	7560.00	-3.31	52.11	48.80	74.00	-25.20	Peak	245	293	P
6	11400.00	1.05	42.60	43.65	54.00	-10.35	Average	228	15	P
7	11400.00	1.05	55.30	56.35	74.00	-17.65	Peak	228	15	P
8	17100.00	10.79	45.20	55.99	68.20	-12.21	Peak	100	336	P

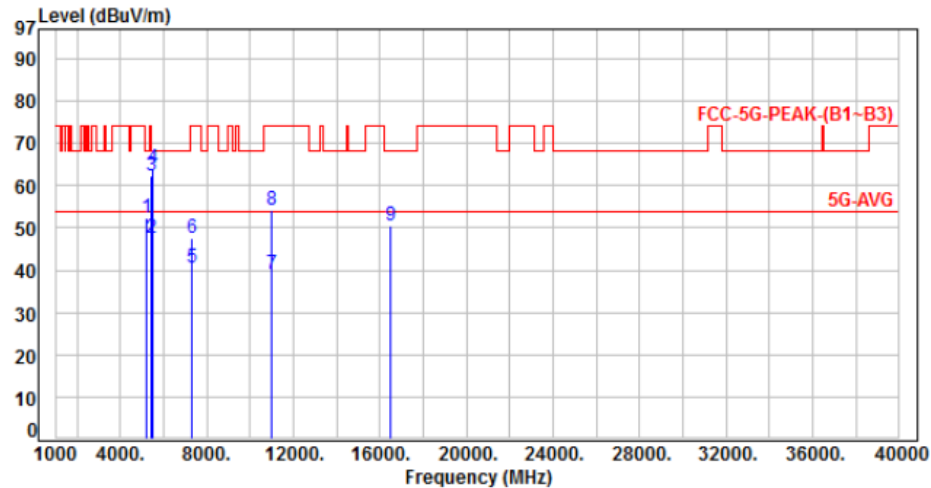
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60HZ	Pol/Phase	: VERTICAL
Test Mode	: Mode 2, Band 3, CH100		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5180.00	-7.62	59.90	52.28	68.20	-15.92	Peak	262	343	P
2	5460.00	-7.10	54.60	47.50	54.00	-6.50	Average	100	160	P
3	5460.00	-7.10	69.50	62.40	74.00	-11.60	Peak	100	160	P
4	5470.00	-7.08	71.20	64.12	68.20	-4.08	Peak	100	160	P
5	7333.00	-3.80	44.40	40.60	54.00	-13.40	Average	385	341	P
6	7333.00	-3.80	51.20	47.40	74.00	-26.60	Peak	385	341	P
7	11000.00	0.46	38.60	39.06	54.00	-14.94	Average	230	340	P
8	11000.00	0.46	53.80	54.26	74.00	-19.74	Peak	230	340	P
9	16500.00	7.26	43.15	50.41	68.20	-17.79	Peak	100	310	P

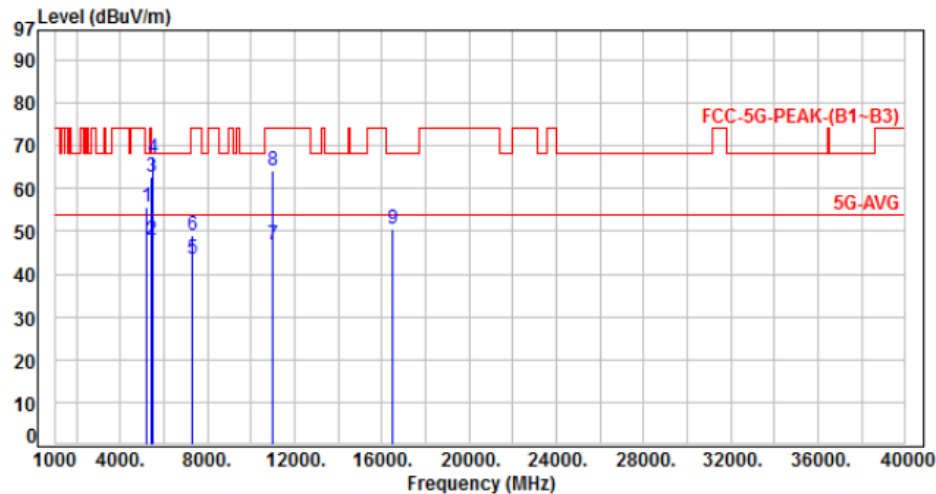
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60HZ	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 2, Band 3, CH100		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5180.00	-7.62	63.30	55.68	68.20	-12.52	Peak	100	75	P
2	5460.00	-7.10	55.20	48.10	54.00	-5.90	Average	165	250	P
3	5460.00	-7.10	69.70	62.60	74.00	-11.40	Peak	165	250	P
4	5470.00	-7.08	74.14	67.06	68.20	-1.14	Peak	165	250	P
5	7333.00	-3.80	47.20	43.40	54.00	-10.60	Average	242	99	P
6	7333.00	-3.80	52.80	49.00	74.00	-25.00	Peak	242	99	P
7	11000.00	0.46	46.40	46.86	54.00	-7.14	Average	231	11	P
8	11000.00	0.46	63.62	64.08	74.00	-9.92	Peak	231	11	P
9	16500.00	7.26	43.35	50.61	68.20	-17.59	Peak	100	333	P

Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor