



FCC RADIO TEST REPORT

Applicant : AOPEN Inc.

Address : 5F., No.15, Ln. 128, Sinhu 1st Rd., Neihu District,
Taipei City 114, Taiwan(R.O.C.)

Equipment : AOPEN Chromebox Mini Commercial

Model No. : ME4100

Trade Name : AOPEN

FCC ID. : YEW-ME4100CM389

I HEREBY CERTIFY THAT :

The sample was received on Feb. 08, 2017 and the testing was carried out on Feb. 24, 2017 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:

Tested by:

Mark Liao / Assistant Manager

Spree Yei / Engineer

Laboratory Accreditation:

Cerpass Technology Corporation Test Laboratory





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History of this test report

Report No.	Issue Date	Description
TEFE171084	Mar. 09, 2017	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)	Output and PPSD	Pass
15.407	Dynamic Frequency Selection	Pass



2. Test Configuration of Equipment under Test

2.1. Feature of Equipment under Test

WLAN Module		AzureWave / AW-CM389NF
Frequency Range		2.4 GHz ISM radio band / 5 GHz Unlicensed National Information Infrastructure (U-NII) band
Number of Channels		802.11ac: USA-4 802.11a: USA, Taiwan – 12/4 Most European Countries –19 Japan – 4 802.11b: USA, Canada and Taiwan – 11 Most European Countries – 13 France – 4 802.11g: USA, Canada and Taiwan – 11 Most European Countries – 13 Japan – 13 802.11n(HT20): Channel 1~13(2412~2472) 802.11n(HT40): Channel 1~7(2422~2452)
Modulation		DSSS, OFDM, DBPSK, DQPSK, CCK, 16-QAM, 64-QAM and 256-QAM for WLAN GFSK (1Mbps), $\pi/4$ DQPSK (2Mbps) and 8DPSK (3Mbps) for Bluetooth
Data Rates		WLAN 802.11b: 1, 2, 5.5, 11Mbps 802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11n: up to 150Mbps-single 802.11n: up to 300Mbps-2x2 MIMO 802.11ac:up to 192.6Mbps (20MHz channel) 802.11ac:up to 400Mbps (40MHz channel) 802.11ac:up to 866.7Mbps (80MHz channel) Bluetooth Bluetooth 2.1+EDR data rates of 1,2, and 3Mbps NFC NFC data rates up to 848Kbps
Antenna Type/ gain		Dipole antenna / 1.92dBi
Adapter	Model No.	ADP-40KD BB
	INPUT	100-240V~1.2A, 50-60Hz
	OUTPUT	19V, 2.1A

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



2.2. Carrier Frequency of Channels

Band: 5150MHz-5250MHz

802.11a, 802.11an HT 20, 802.11ac VHT20

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

802.11an HT 40, 802.11ac VHT40

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

802.11ac VHT80

Channel	Frequency(MHz)
*42	5210

Band: 5250MHz -5350MHz

802.11a, 802.11an HT 20, 802.11ac VHT20

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

802.11an HT 40, 802.11ac VHT40

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

802.11ac VHT80

Channel	Frequency(MHz)
*58	5290

Band: 5470MHz -5725MHz

802.11a

Channel	Frequency(MHz)	Channel	Frequency(MHz)
*100	5500	*132	5660
*116	5580	*140	5700

802.11an HT 20, 802.11ac VHT20

Channel	Frequency(MHz)	Channel	Frequency(MHz)
*100	5270	*140	5700
*116	5580		

802.11an HT 40, 802.11ac VHT40

Channel	Frequency(MHz)	Channel	Frequency(MHz)
*102	5510	*134	5670
*110	5550		

802.11ac VHT80

Channel	Frequency(MHz)
*106	5530

Band: 5725MHz -5850MHz

802.11a, 802.11an HT20, 802.11ac VHT20

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

802.11an HT 40, 802.11ac VHT40

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

802.11ac VHT80

Channel	Frequency(MHz)
*155	5775

Note: Channels remarked * are selected to perform test.



2.3. Test Mode and Test Software

- a. During testing, the interface cables and equipment positions were varied according to ANSI C63.4.
- b. The complete test system included EUT for RF test.
- c. An executive program, "Dut labtool V2.0.0.44" under Chrome was executed to transmit and receive data via WLAN.
- d. The following test modes were performed for the test:
 - Test Mode 1: 802.11a (6Mbps)
 - Test Mode 2: 802.11an HT20 (6.5Mbps)
 - Test Mode 3: 802.11an HT40 (13.5Mbps)
 - Test Mode 4: 802.11ac VHT20 (6.5Mbps)
 - Test Mode 5: 802.11ac VHT40 (13.5Mbps)
 - Test Mode 6: 802.11ac VHT80 (29.3Mbps)

For conduction test, caused "Test Mode 1" generated the worst case, it was reported as the final data.

For radiated test (below 1GHz), caused "Test Mode 1" generated the worst case, it was reported as the final data.

For radiated test (above 1GHz), caused "Test Mode 1,4,5,6" generated the worst case, they were reported as the final data.

2.4. Description of Test System

The EUT was tested alone. No support devices are needed for testing.



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, 390316, 228391, 641184
	IC	4934E-1, 4934E-2
	VCCI	T-2205 for Telecommunication Test C-4663 for Conducted emission test R-4218, R-4399 for Radiated emission test G-812, G-813 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	Measurement Frequency	Polarization	Uncertainty
Conducted Emission	9 kHz ~ 30 MHz	Line / Neutral	±2.9076 dB
Radiated Emission	9 kHz ~ 25,000 MHz	Vertical / Horizontal	±0.948 dB
Spurious Emission (Conducted)	-	-	±4.011 dB
Maximum Peak and Average Output Power	-	-	±0.322 dB
Power Spectral Density	-	-	±0.322 dB
Bandwidth	-	-	74.224Hz



3. Test Equipment and Ancillaries Used for Tests

Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date
EMI Receiver	R&S	ESCI3	100443	2016/03/28	2017/03/27
LISN	Schwarzbeck	NSLK 8127	8127-740	2016/08/30	2017/08/29
LISN	Schwarzbeck	NSLK 8127	8127-516	2016/09/06	2017/09/05
Pulse Limiter	R&S	ESH3-Z2	101934	2017/02/14	2018/02/13
Bilog Antenna	Schwarzbeck	VULB9168	369	2016/03/22	2017/03/21
Active Loop Antenna	EMCO	6507	40855	2016/05/11	2017/05/10
Horn Antenna	EMCO	3115	31601	2016/09/05	2017/09/04
Horn Antenna	EMCO	3116	31970	2016/03/18	2017/03/17
EXA Signal Analyzer	KEYSIGHT	N9010A	MY54200207	2016/03/16	2017/03/15
Preamplifier	EM	EM330	660	2016/03/16	2017/03/15
Preamplifier	EMC INSTRUMENTS	EMC051845SE	980333	2016/09/13	2017/09/12
Preamplifier	Agilent	8449B	3008A01954	2017/02/09	2018/02/08
Preamplifier	MITEQ	AMF-7D-00101 00-30-10P	1860212	2016/03/16	2017/03/15
Preamplifier	EMC INSTRUMENTS	EMC184045	980065	2016/11/04	2017/11/03
MXG MW Analog Signal Generator	KEYSIGHT	N5183A	MY50142931	2016/03/18	2017/03/17
Spectrum Analyzer	R&S	FSP40	100219	2016/09/01	2017/08/31
Bluetooth Tester	R&S	CBT	101133	2016/03/18	2017/03/17
Attenuator	KEYSIGHT	8491B	MY39250703	2016/03/07	2017/03/06
Rotary Attenuator	Agilent	8494B	MY42154466	2016/03/08	2017/03/07
Rotary Attenuator	Agilent	8495B	MY42146680	2016/03/08	2017/03/07
Temp & Humi chamber	T-MACHINE	TMJ-9712	T-12-040111	2016/09/05	2017/09/04
Series Power Meter	Anritsu	ML2495A	1224005	2016/03/03	2017/03/02
Power Sensor	Anritsu	MA2411B	1207295	2016/03/03	2017/03/02
Cable	HUBER SUHNER	SUCOFLEX 102	28422/2	2016/03/15	2017/03/14
Cable	HUBER SUHNER	SUCOFLEX 102	28418/2	2016/03/16	2017/03/15
Cable	HUBER SUHNER	SUCOFLEX 102	28417/2	2016/03/04	2017/03/03
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	v2.0.0.1	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	Antenna Gain
Dipole Antenna	Antenna A: 1.92 dBi
	Antenna B: 1.92 dBi

For Power directional gain= $G_{ant} = 1.92$ dBi

For PSD directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / NANT]$
= 4.93 (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

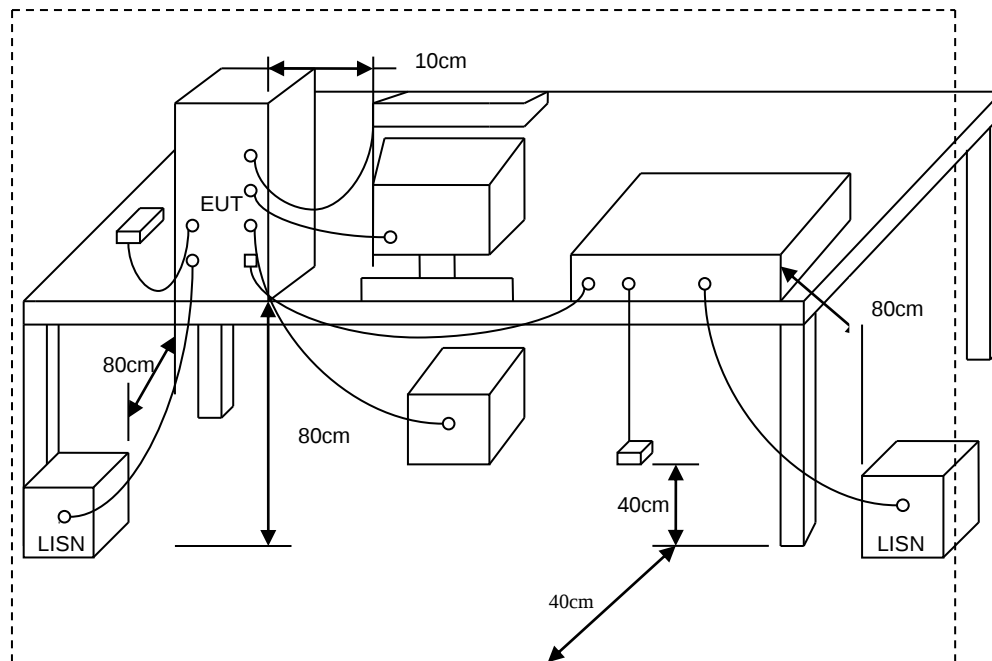
*Decreases with the logarithm of the frequency.

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.



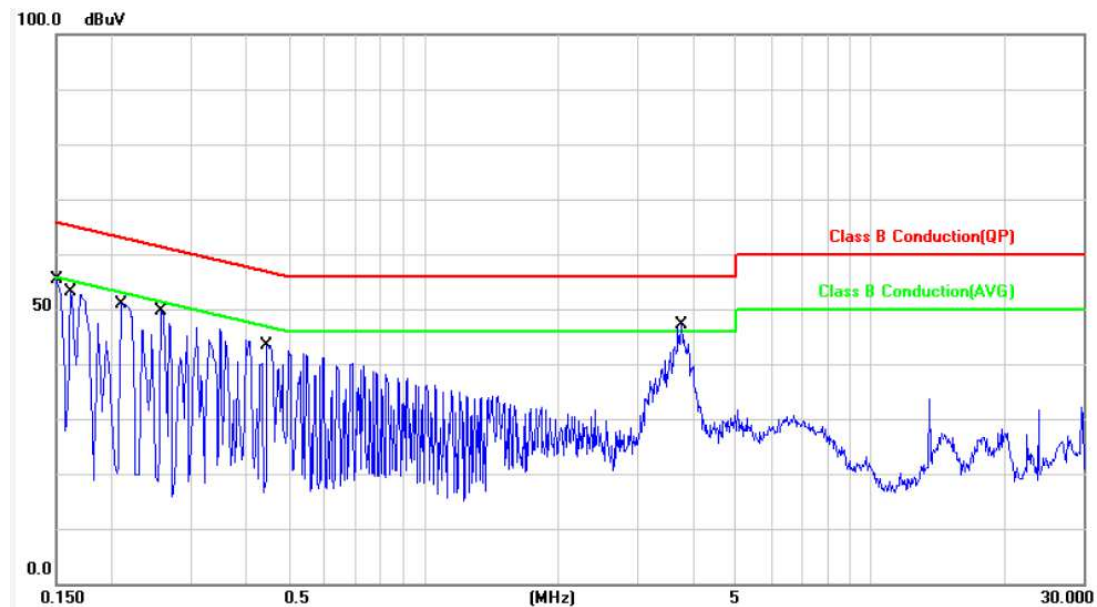
5.3. Typical Test Setup





5.4. Test Result and Data

Power	: AC 120V	Pol/Phase	: LINE
Test Mode	: Mode 1, CH36	Temperature	: 22 °C
Test date	: Feb. 18, 2017	Humidity	: 56 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1500	9.98	39.17	49.15	65.99	-16.84	QP	P
2	0.1500	9.98	20.46	30.44	55.99	-25.55	AVG	P
3	0.1620	9.98	35.97	45.95	65.36	-19.41	QP	P
4	0.1620	9.98	14.45	24.43	55.36	-30.93	AVG	P
5	0.2100	9.97	33.15	43.12	63.20	-20.08	QP	P
6	0.2100	9.97	12.54	22.51	53.20	-30.69	AVG	P
7	0.2580	9.97	30.68	40.65	61.49	-20.84	QP	P
8	0.2580	9.97	9.98	19.95	51.49	-31.54	AVG	P
9	0.4460	9.97	25.13	35.10	56.95	-21.85	QP	P
10	0.4460	9.97	4.55	14.52	46.95	-32.43	AVG	P
11	3.7620	10.14	29.37	39.51	56.00	-16.49	QP	P
12	3.7620	10.14	16.52	26.66	46.00	-19.34	AVG	P

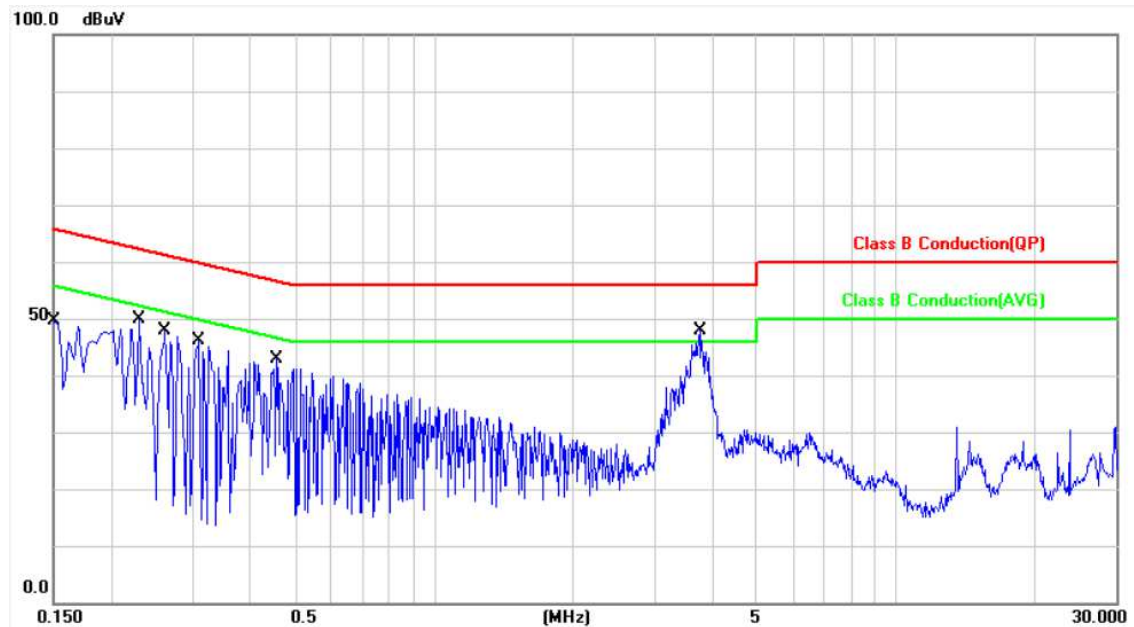
Note: Level = Reading + Factor

Margin = Level – Limit

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



Power	: AC 120V	Pol/Phase	: NEUTRAL
Test Mode	: Mode 1, CH36	Temperature	: 22 °C
Test date	: Feb. 18, 2017	Humidity	: 56 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1500	9.98	38.89	48.87	65.99	-17.12	QP	P
2	0.1500	9.98	20.54	30.52	55.99	-25.47	AVG	P
3	0.2300	9.97	31.65	41.62	62.45	-20.83	QP	P
4	0.2300	9.97	11.61	21.58	52.45	-30.87	AVG	P
5	0.2620	9.96	29.73	39.69	61.36	-21.67	QP	P
6	0.2620	9.96	8.48	18.44	51.36	-32.92	AVG	P
7	0.3100	9.95	28.40	38.35	59.97	-21.62	QP	P
8	0.3100	9.95	6.00	15.95	49.97	-34.02	AVG	P
9	0.4580	9.94	24.63	34.57	56.73	-22.16	QP	P
10	0.4580	9.94	10.52	20.46	46.73	-26.27	AVG	P
11	3.7700	10.13	29.06	39.19	56.00	-16.81	QP	P
12	3.7700	10.13	17.31	27.44	46.00	-18.56	AVG	P

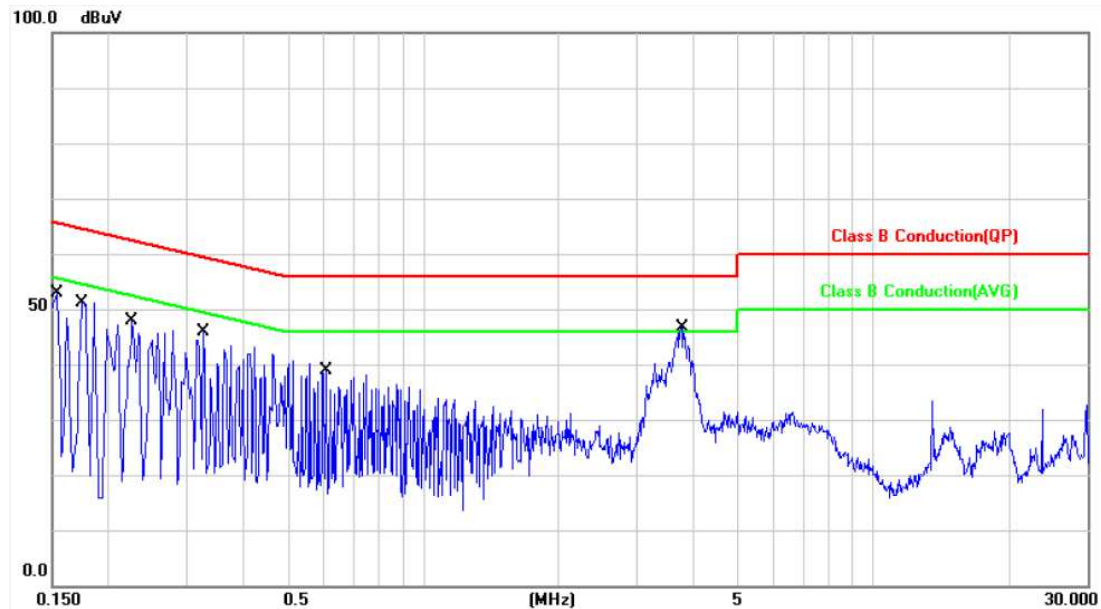
Note: Level = Reading + Factor

Margin = Level – Limit

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



Power	: AC 120V	Pol/Phase	: LINE
Test Mode	: Mode 1, CH52	Temperature	: 22 °C
Test date	: Feb. 18, 2017	Humidity	: 56 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1539	9.98	39.61	49.59	65.78	-16.19	QP	P
2	0.1539	9.98	20.95	30.93	55.78	-24.85	AVG	P
3	0.1740	9.98	35.93	45.91	64.76	-18.85	QP	P
4	0.1740	9.98	16.35	26.33	54.76	-28.43	AVG	P
5	0.2260	9.97	31.69	41.66	62.59	-20.93	QP	P
6	0.2260	9.97	11.58	21.55	52.59	-31.04	AVG	P
7	0.3260	9.96	27.72	37.68	59.55	-21.87	QP	P
8	0.3260	9.96	7.02	16.98	49.55	-32.57	AVG	P
9	0.6100	9.98	21.20	31.18	56.00	-24.82	QP	P
10	0.6100	9.98	3.24	13.22	46.00	-32.78	AVG	P
11	3.7700	10.14	35.09	45.23	56.00	-10.77	QP	P
12	3.7700	10.14	19.72	29.86	46.00	-16.14	AVG	P

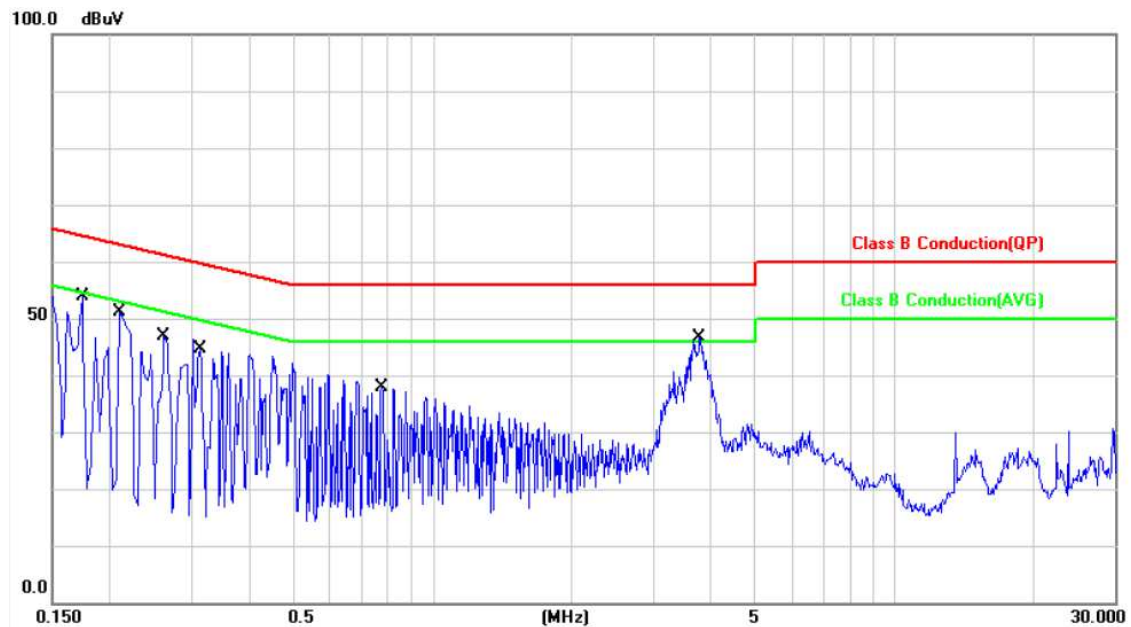
Note: Level = Reading + Factor

Margin = Level – Limit

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



Power	: AC 120V	Pol/Phase	: NEUTRAL
Test Mode	: Mode 1, CH52	Temperature	: 22 °C
Test date	: Feb. 18, 2017	Humidity	: 56 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1740	9.98	35.23	45.21	64.76	-19.55	QP	P
2	0.1740	9.98	16.58	26.56	54.76	-28.20	AVG	P
3	0.2100	9.98	31.79	41.77	63.20	-21.43	QP	P
4	0.2100	9.98	12.18	22.16	53.20	-31.04	AVG	P
5	0.2620	9.96	28.85	38.81	61.36	-22.55	QP	P
6	0.2620	9.96	8.68	18.64	51.36	-32.72	AVG	P
7	0.3140	9.95	26.65	36.60	59.86	-23.26	QP	P
8	0.3140	9.95	5.50	15.45	49.86	-34.41	AVG	P
9	0.7780	9.97	17.27	27.24	56.00	-28.76	QP	P
10	0.7780	9.97	2.11	12.08	46.00	-33.92	AVG	P
11	3.7940	10.13	29.31	39.44	56.00	-16.56	QP	P
12	3.7940	10.13	16.36	26.49	46.00	-19.51	AVG	P

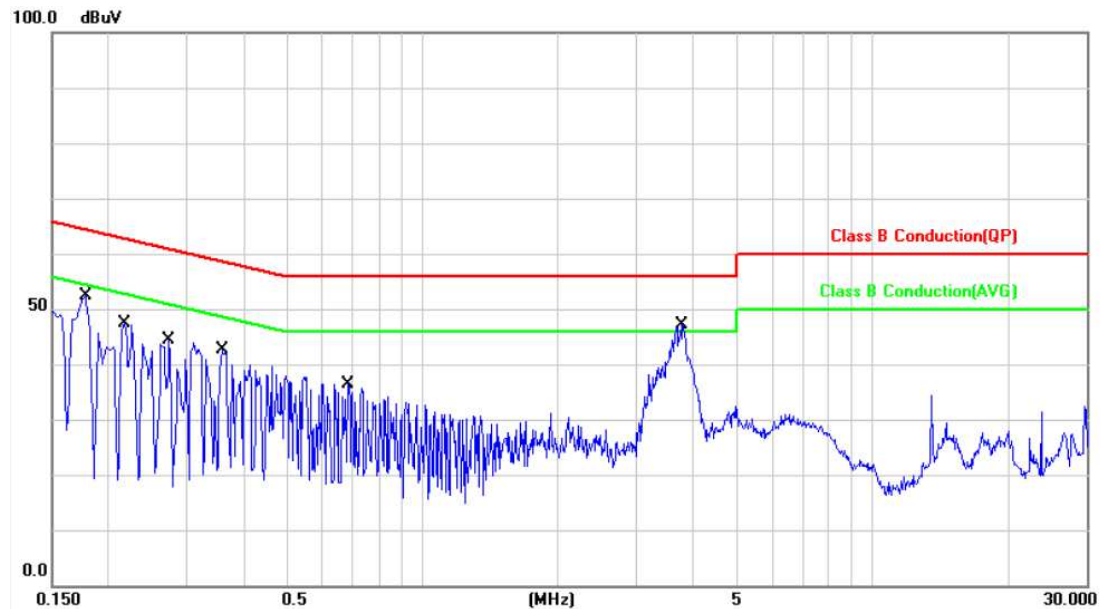
Note: Level = Reading + Factor

Margin = Level – Limit

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



Power	: AC 120V	Pol/Phase	: LINE
Test Mode	: Mode 1, CH149	Temperature	: 22 °C
Test date	: Feb. 18, 2017	Humidity	: 56 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1780	9.97	34.79	44.76	64.57	-19.81	QP	P
2	0.1780	9.97	17.05	27.02	54.57	-27.55	AVG	P
3	0.2180	9.97	28.62	38.59	62.89	-24.30	QP	P
4	0.2180	9.97	9.17	19.14	52.89	-33.75	AVG	P
5	0.2740	9.97	25.73	35.70	60.99	-25.29	QP	P
6	0.2740	9.97	6.26	16.23	50.99	-34.76	AVG	P
7	0.3580	9.97	24.52	34.49	58.77	-24.28	QP	P
8	0.3580	9.97	7.50	17.47	48.77	-31.30	AVG	P
9	0.6860	10.00	18.06	28.06	56.00	-27.94	QP	P
10	0.6860	10.00	3.85	13.85	46.00	-32.15	AVG	P
11	3.7700	10.14	34.48	44.62	56.00	-11.38	QP	P
12	3.7700	10.14	19.36	29.50	46.00	-16.50	AVG	P

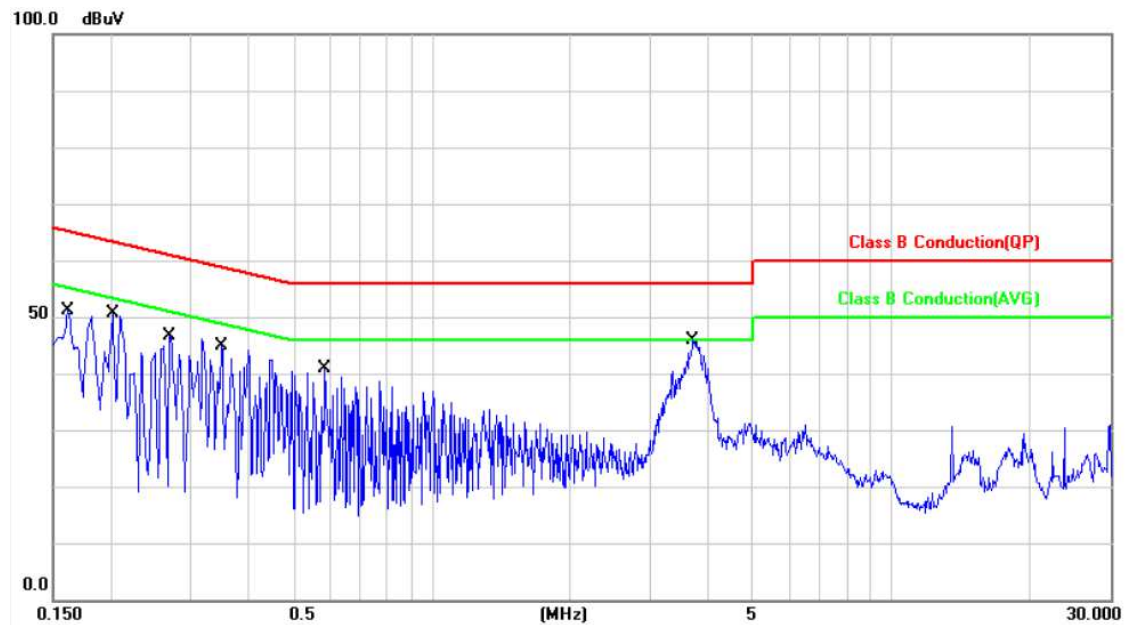
Note: Level = Reading + Factor

Margin = Level – Limit

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



Power	: AC 120V	Pol/Phase	: NEUTRAL
Test Mode	: Mode 1, CH149	Temperature	: 22 °C
Test date	: Feb. 18, 2017	Humidity	: 56 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1620	9.98	34.57	44.55	65.36	-20.81	QP	P
2	0.1620	9.98	14.08	24.06	55.36	-31.30	AVG	P
3	0.2020	9.98	32.05	42.03	63.52	-21.49	QP	P
4	0.2020	9.98	13.32	23.30	53.52	-30.22	AVG	P
5	0.2700	9.96	27.59	37.55	61.12	-23.57	QP	P
6	0.2700	9.96	6.76	16.72	51.12	-34.40	AVG	P
7	0.3500	9.94	24.19	34.13	58.96	-24.83	QP	P
8	0.3500	9.94	3.21	13.15	48.96	-35.81	AVG	P
9	0.5860	9.95	19.81	29.76	56.00	-26.24	QP	P
10	0.5860	9.95	2.67	12.62	46.00	-33.38	AVG	P
11	3.7180	10.12	27.46	37.58	56.00	-18.42	QP	P
12	3.7180	10.12	15.99	26.11	46.00	-19.89	AVG	P

Note: Level = Reading + Factor

Margin = Level – Limit

Factor = (LISN, 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.

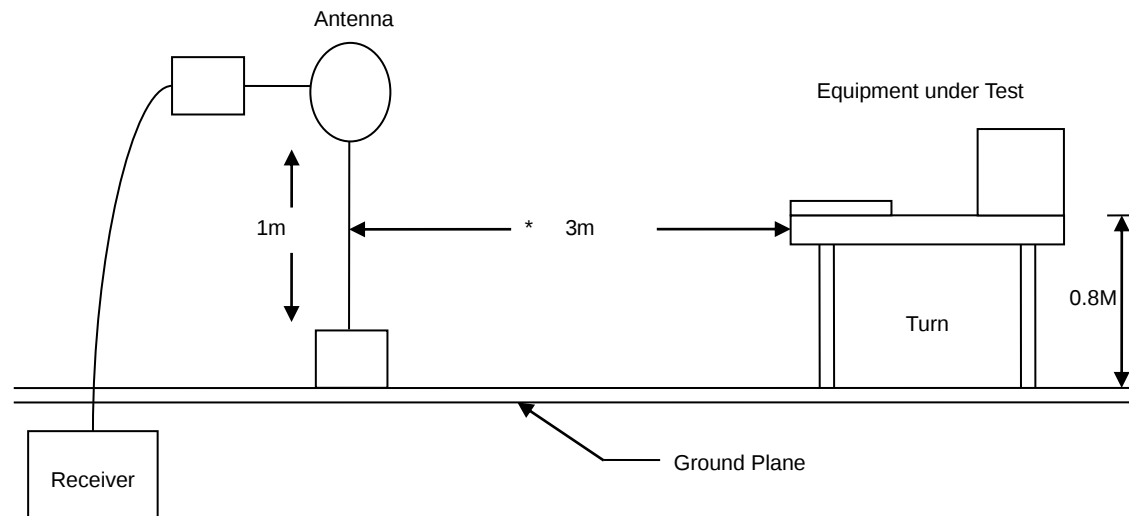
6.2. Test Procedures

- 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.

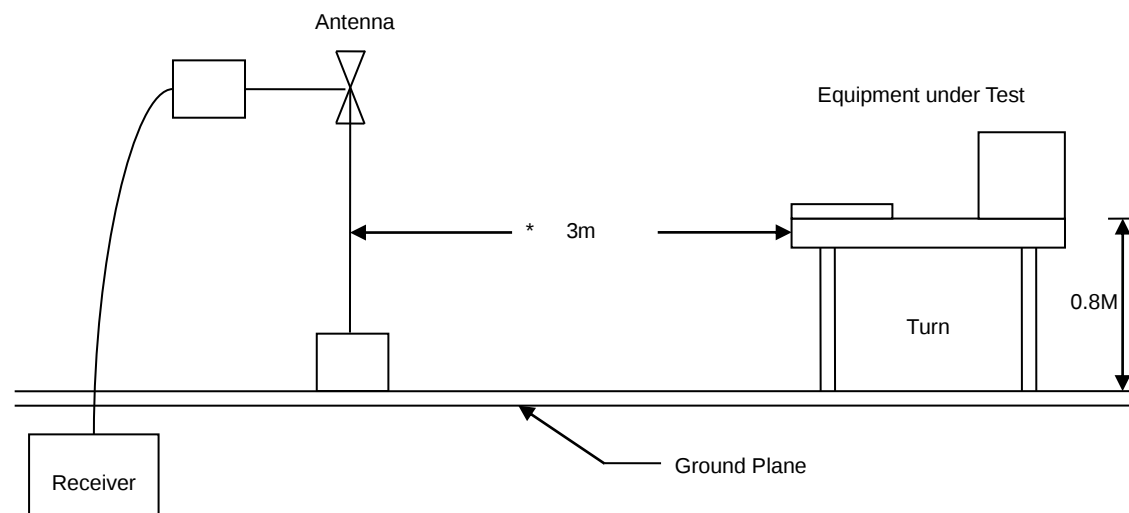


6.3. Typical Test Setup

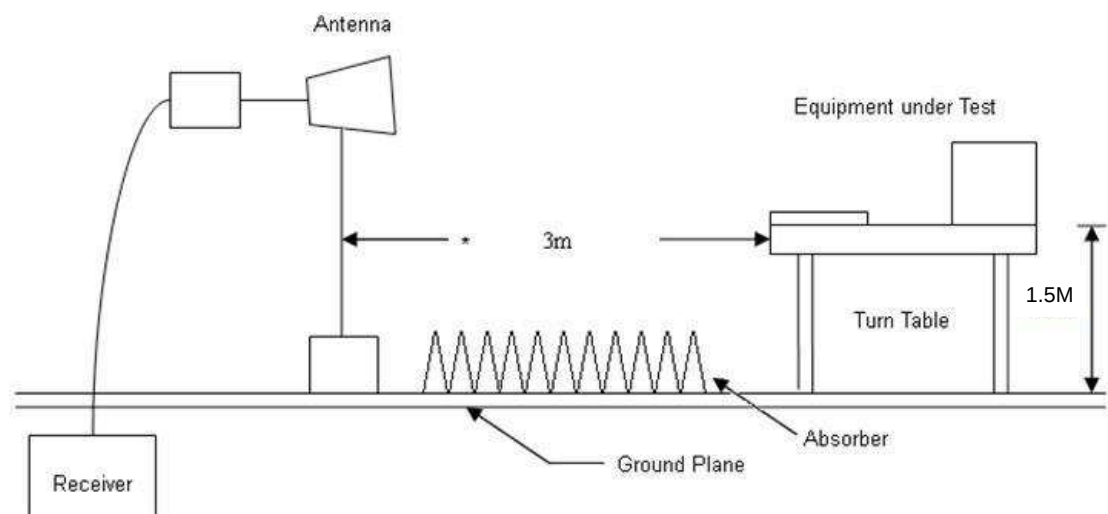
Below 30MHz test setup



30MHz- 1GHz Test Setup



Above 1GHz Test Setup



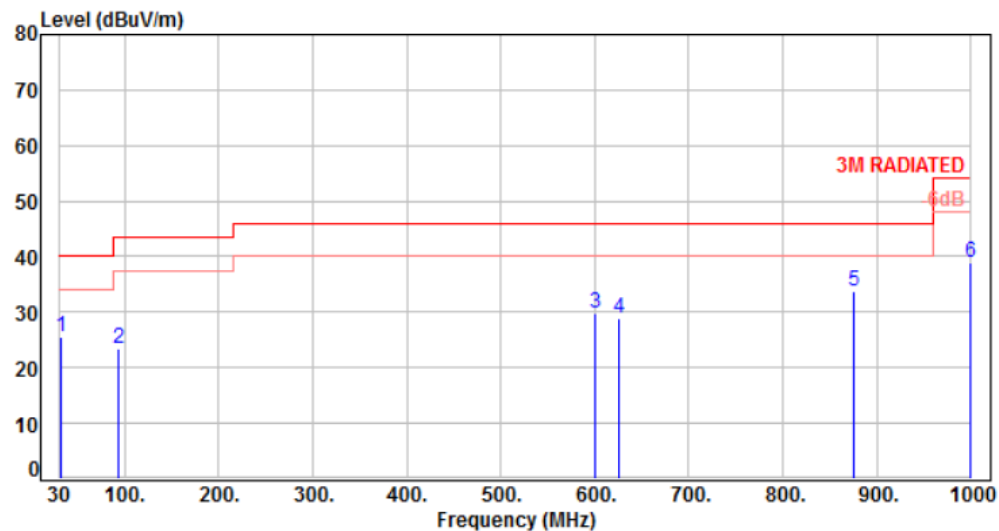


6.4. Test Result and Data (9kHz ~ 30MHz)

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, CH36	Temperature	:	24 °C
Test Date	:	Feb. 15, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	31.94	-10.66	36.08	25.42	40.00	-14.58	Peak	100	0	P
2	94.02	-15.68	39.08	23.40	43.50	-20.10	Peak	100	0	P
3	600.36	-1.98	31.72	29.74	46.00	-16.26	Peak	100	0	P
4	625.58	-1.70	30.57	28.87	46.00	-17.13	Peak	100	0	P
5	875.84	1.87	31.90	33.77	46.00	-12.23	Peak	100	0	P
6	1000.00	3.44	35.43	38.87	54.00	-15.13	Peak	100	0	P

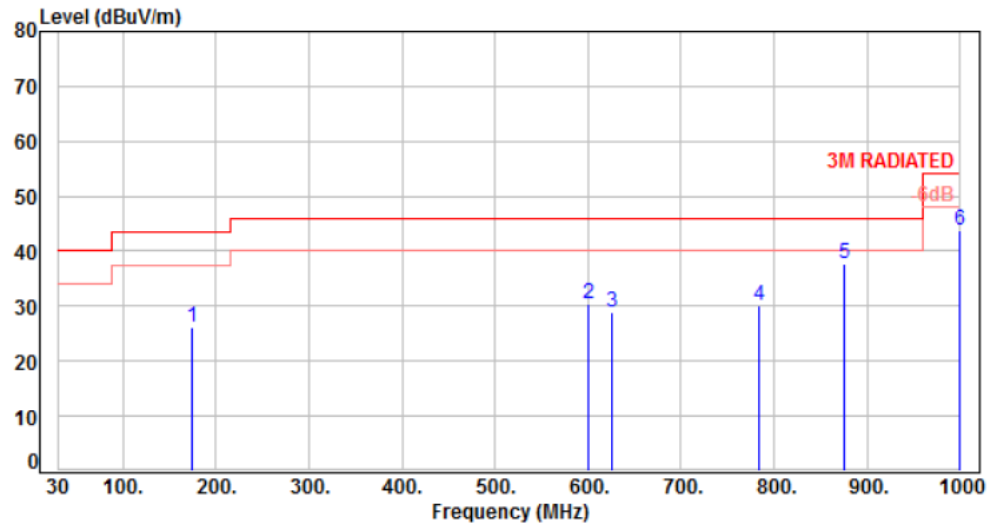
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, CH36	Temperature	: 24 °C
Test Date	: Feb. 15, 2017	Humidity	: 63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	173.56	-10.64	36.75	26.11	43.50	-17.39	Peak	100	0	P
2	600.36	-1.98	32.31	30.33	46.00	-15.67	Peak	100	0	P
3	625.58	-1.70	30.60	28.90	46.00	-17.10	Peak	100	0	P
4	784.66	0.67	29.43	30.10	46.00	-15.90	Peak	100	0	P
5	875.84	1.87	35.87	37.74	46.00	-8.26	Peak	100	0	P
6	1000.00	3.44	40.33	43.77	54.00	-10.23	Peak	100	0	P

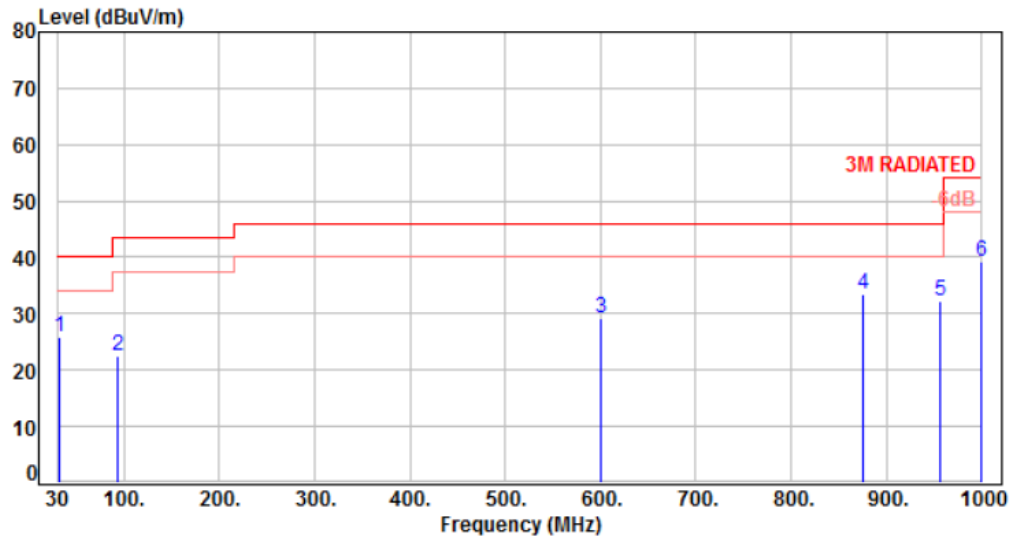
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, CH149	Temperature	: 24 °C
Test Date	: Feb. 15, 2017	Humidity	: 53 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	31.94	-10.66	36.55	25.89	40.00	-14.11	Peak	100	0	P
2	94.02	-15.68	38.25	22.57	43.50	-20.93	Peak	100	0	P
3	600.36	-1.98	31.03	29.05	46.00	-16.95	Peak	100	0	P
4	875.84	1.87	31.68	33.55	46.00	-12.45	Peak	100	0	P
5	957.32	3.16	28.94	32.10	46.00	-13.90	Peak	100	0	P
6	1000.00	3.44	35.75	39.19	54.00	-14.81	Peak	100	0	P

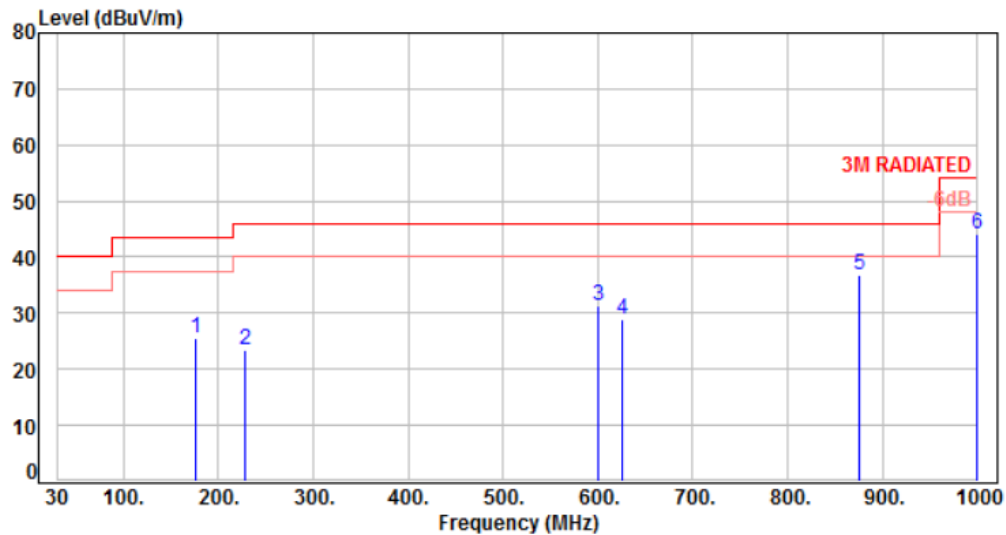
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, CH149	Temperature	: 24 °C
Test Date	: Feb. 15, 2017	Humidity	: 53 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV)	Limit (dBUV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	175.50	-10.86	36.39	25.53	43.50	-17.97	Peak	100	0	P
2	227.88	-12.18	35.55	23.37	46.00	-22.63	Peak	100	0	P
3	600.36	-1.98	33.40	31.42	46.00	-14.58	Peak	100	0	P
4	625.58	-1.70	30.48	28.78	46.00	-17.22	Peak	100	0	P
5	875.84	1.87	34.83	36.70	46.00	-9.30	Peak	100	0	P
6	1000.00	3.44	40.69	44.13	54.00	-9.87	Peak	100	0	P

Note: Level=Reading+Factor

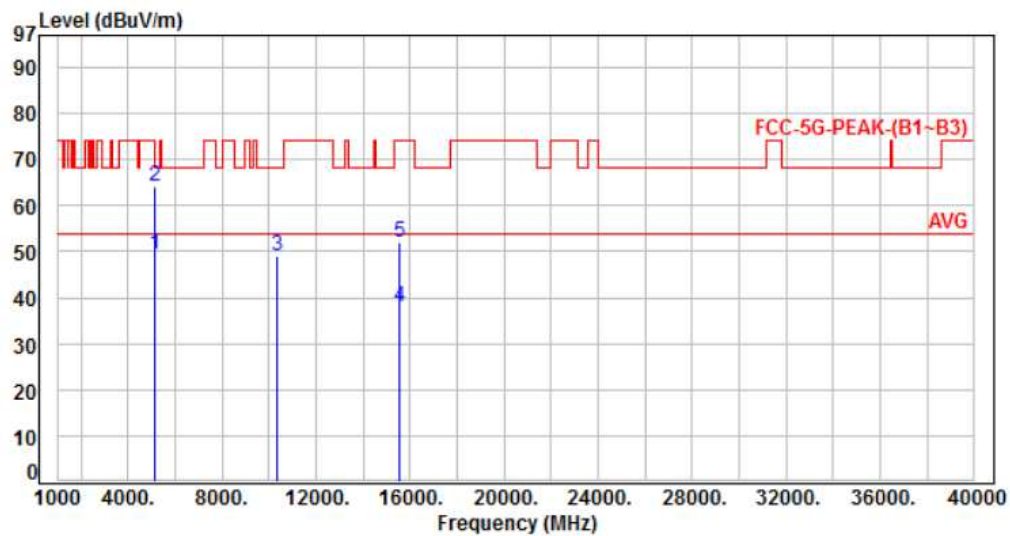
Margin=Level-Limit

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	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-6.54	55.96	49.42	54.00	-4.58	Average	193	167	P
2	5150.00	-6.54	70.66	64.12	74.00	-9.88	Peak	193	167	P
3	10360.00	0.66	48.35	49.01	68.20	-19.19	Peak	100	238	P
4	15540.00	5.36	32.61	37.97	54.00	-16.03	Average	113	218	P
5	15540.00	5.36	46.56	51.92	74.00	-22.08	Peak	113	218	P

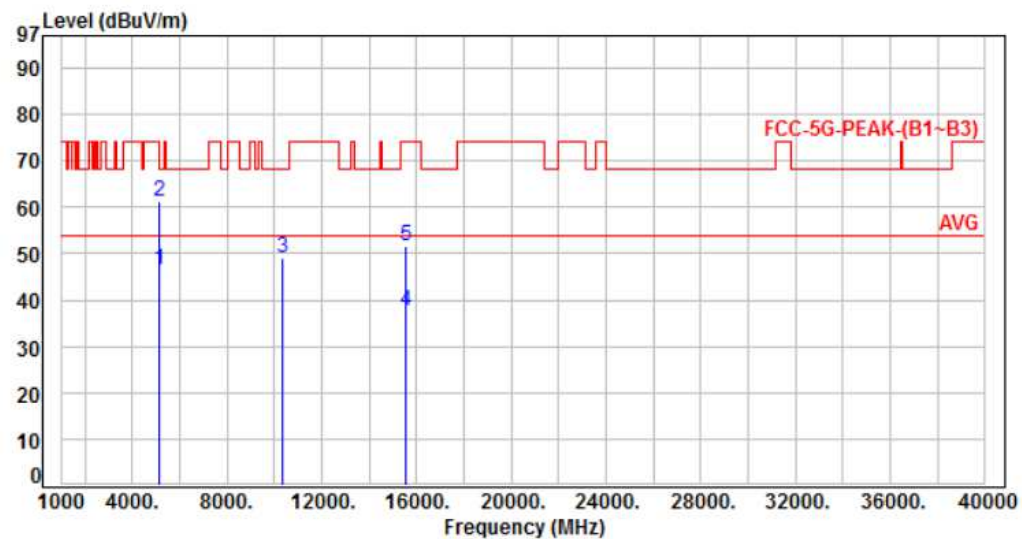
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, CH36	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-6.54	52.88	46.34	54.00	-7.66	Average	120	113	P
2	5150.00	-6.54	67.70	61.16	74.00	-12.84	Peak	120	113	P
3	10360.00	0.66	48.49	49.15	68.20	-19.05	Peak	100	333	P
4	15540.00	5.36	32.37	37.73	54.00	-16.27	Average	100	186	P
5	15540.00	5.36	46.26	51.62	74.00	-22.38	Peak	100	186	P

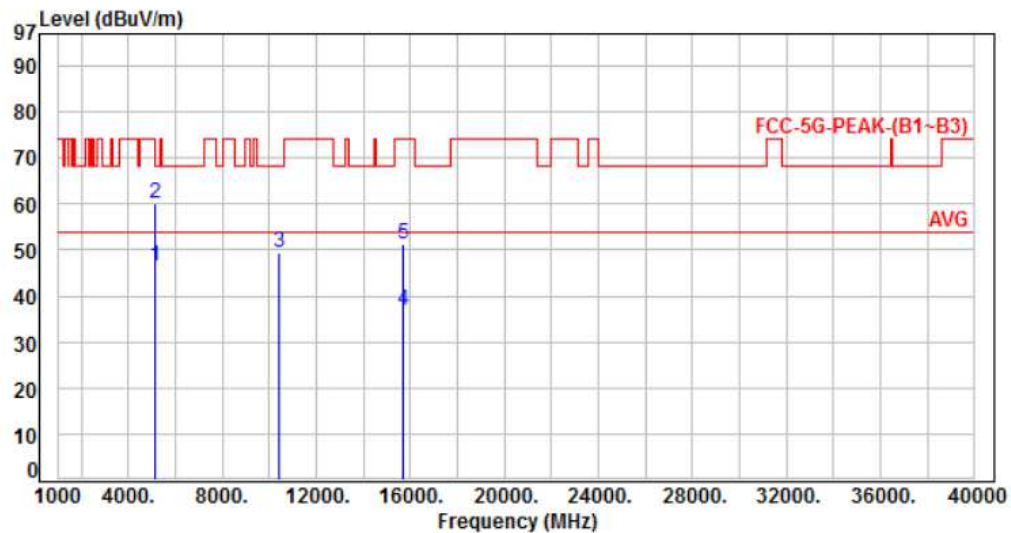
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, CH44	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV)	Limit (dBUV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-6.54	53.15	46.61	54.00	-7.39	Average	233	174	P
2	5150.00	-6.54	66.53	59.99	74.00	-14.01	Peak	233	174	P
3	10440.00	0.70	48.56	49.26	68.20	-18.94	Peak	100	244	P
4	15660.00	5.38	31.36	36.74	54.00	-17.26	Average	112	206	P
5	15660.00	5.38	46.03	51.41	74.00	-22.59	Peak	112	206	P

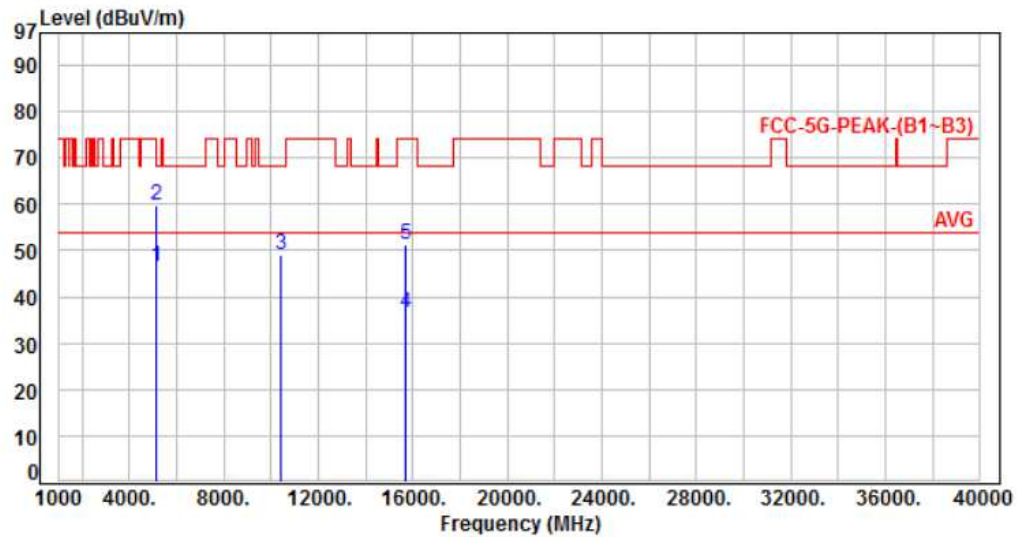
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, CH44	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-6.54	52.86	46.32	54.00	-7.68	Average	137	105	P
2	5150.00	-6.54	66.24	59.70	74.00	-14.30	Peak	137	105	P
3	10440.00	0.70	48.28	48.98	68.20	-19.22	Peak	100	211	P
4	15660.00	5.38	31.14	36.52	54.00	-17.48	Average	106	188	P
5	15660.00	5.38	45.87	51.25	74.00	-22.75	Peak	106	188	P

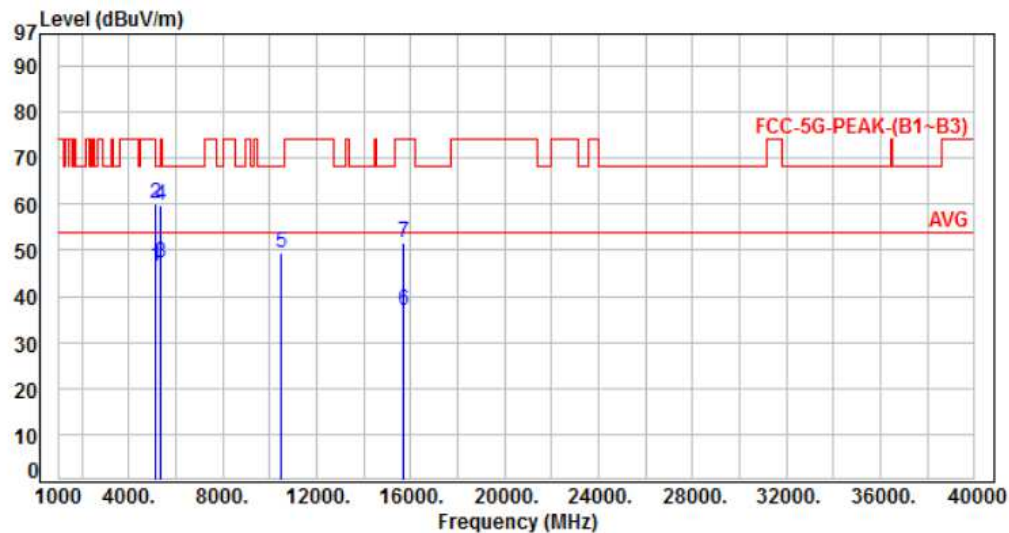
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, CH48	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-6.54	53.19	46.65	54.00	-7.35	Average	228	183	P
2	5150.00	-6.54	66.56	60.02	74.00	-13.98	Peak	228	183	P
3	5350.00	-6.06	53.34	47.28	54.00	-6.72	Average	228	183	P
4	5350.00	-6.06	65.99	59.93	74.00	-14.07	Peak	228	183	P
5	10480.00	0.73	48.76	49.49	68.20	-18.71	Peak	116	222	P
6	15720.00	5.37	31.56	36.93	54.00	-17.07	Average	110	203	P
7	15720.00	5.37	46.38	51.75	74.00	-22.25	Peak	110	203	P

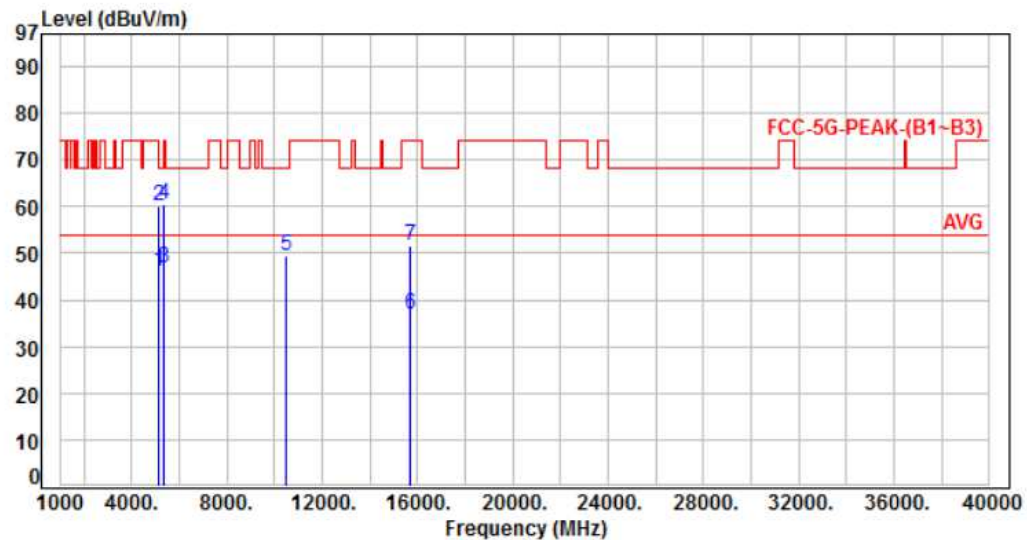
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, CH48	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV)	Limit (dBUV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-6.54	52.73	46.19	54.00	-7.81	Average	132	111	P
2	5150.00	-6.54	66.65	60.11	74.00	-13.89	Peak	132	111	P
3	5350.00	-6.06	52.98	46.92	54.00	-7.08	Average	132	111	P
4	5350.00	-6.06	66.38	60.32	74.00	-13.68	Peak	132	111	P
5	10480.00	0.73	48.66	49.39	68.20	-18.81	Peak	100	208	P
6	15720.00	5.37	31.34	36.71	54.00	-17.29	Average	102	199	P
7	15720.00	5.37	46.13	51.50	74.00	-22.50	Peak	102	199	P

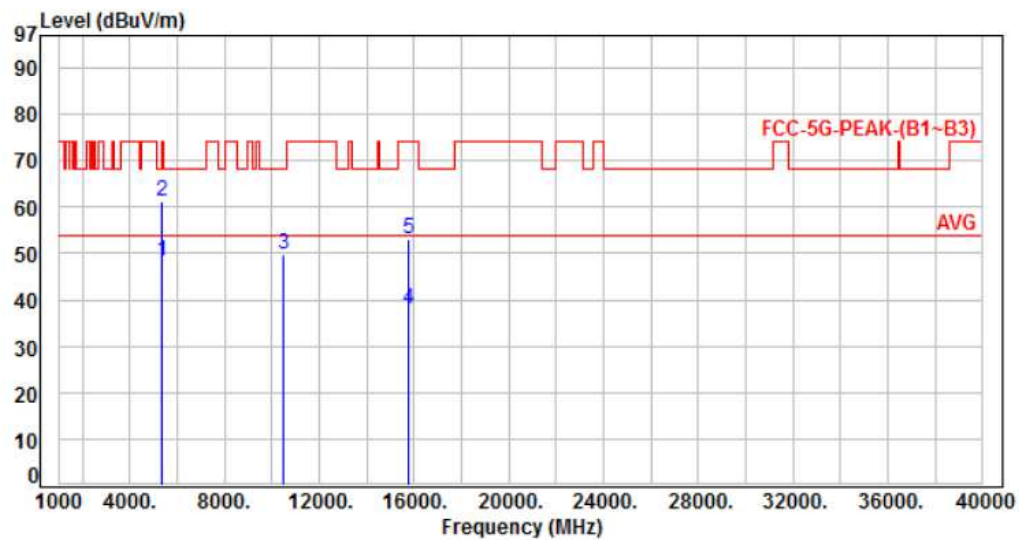
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, CH52	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-6.06	54.34	48.28	54.00	-5.72	Average	231	197	P
2	5350.00	-6.06	67.29	61.23	74.00	-12.77	Peak	231	197	P
3	10520.00	0.77	48.98	49.75	68.20	-18.45	Peak	100	247	P
4	15780.00	5.37	32.49	37.86	54.00	-16.14	Average	121	170	P
5	15780.00	5.37	47.77	53.14	74.00	-20.86	Peak	121	170	P

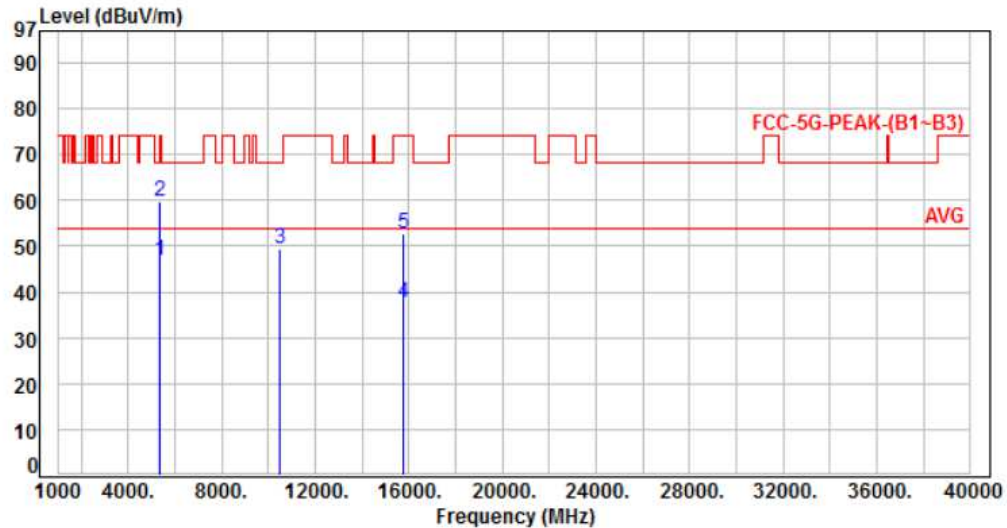
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, CH52	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-6.06	53.06	47.00	54.00	-7.00	Average	144	128	P
2	5350.00	-6.06	65.87	59.81	74.00	-14.19	Peak	144	128	P
3	10520.00	0.77	48.66	49.43	68.20	-18.77	Peak	125	199	P
4	15780.00	5.37	32.19	37.56	54.00	-16.44	Average	100	201	P
5	15780.00	5.37	47.27	52.64	74.00	-21.36	Peak	100	201	P

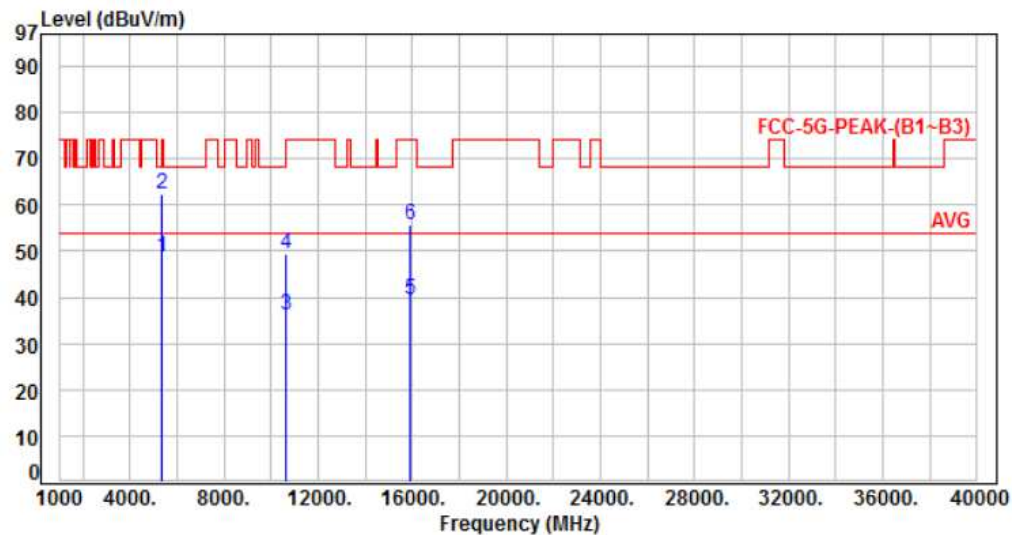
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, CH60	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-6.06	54.72	48.66	54.00	-5.34	Average	155	157	P
2	5350.00	-6.06	68.23	62.17	74.00	-11.83	Peak	155	157	P
3	10600.00	0.87	35.31	36.18	54.00	-17.82	Average	109	170	P
4	10600.00	0.87	48.71	49.58	74.00	-24.42	Peak	109	170	P
5	15900.00	5.37	34.16	39.53	54.00	-14.47	Average	323	170	P
6	15900.00	5.37	50.43	55.80	74.00	-18.20	Peak	323	170	P

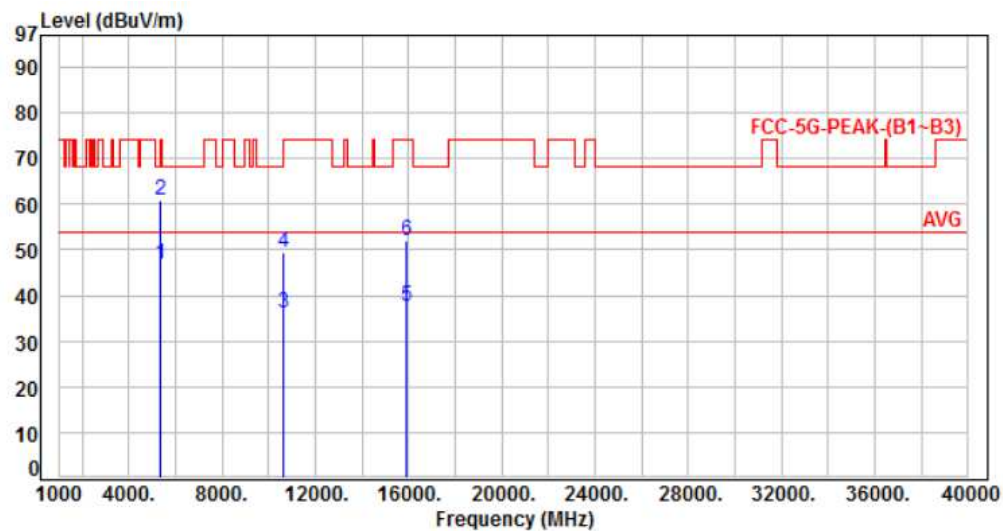
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, CH60	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-6.06	52.90	46.84	54.00	-7.16	Average	142	118	P
2	5350.00	-6.06	66.91	60.85	74.00	-13.15	Peak	142	118	P
3	10600.00	0.87	35.11	35.98	54.00	-18.02	Average	121	243	P
4	10600.00	0.87	48.47	49.34	74.00	-24.66	Peak	121	243	P
5	15900.00	5.37	32.34	37.71	54.00	-16.29	Average	100	203	P
6	15900.00	5.37	46.67	52.04	74.00	-21.96	Peak	100	203	P

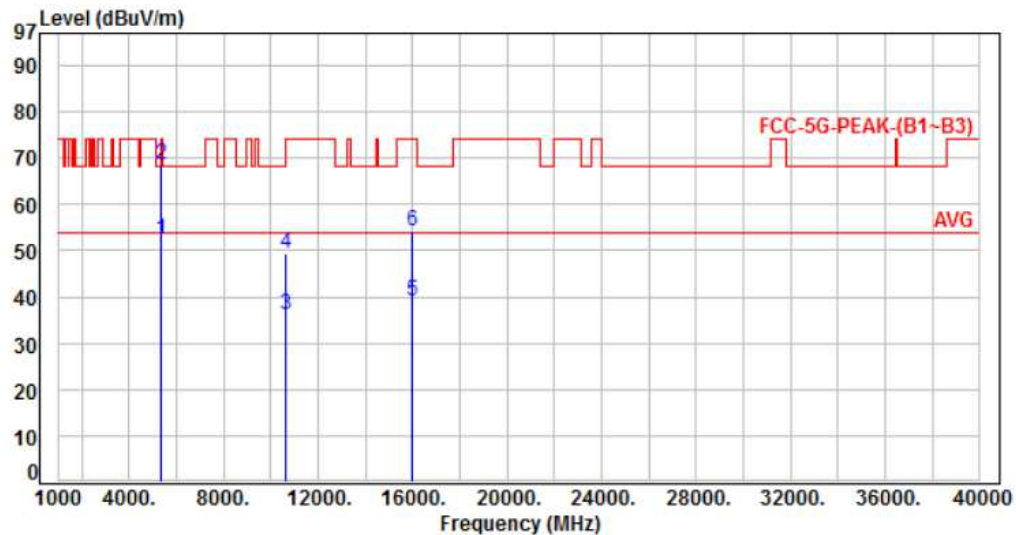
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, CH64	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-6.06	58.31	52.25	54.00	-1.75	Average	206	163	P
2	5350.00	-6.06	74.72	68.66	74.00	-5.34	Peak	206	163	P
3	10640.00	0.93	35.12	36.05	54.00	-17.95	Average	115	178	P
4	10640.00	0.93	48.39	49.32	74.00	-24.68	Peak	115	178	P
5	15960.00	5.38	33.78	39.16	54.00	-14.84	Average	316	167	P
6	15960.00	5.38	48.82	54.20	74.00	-19.80	Peak	316	167	P

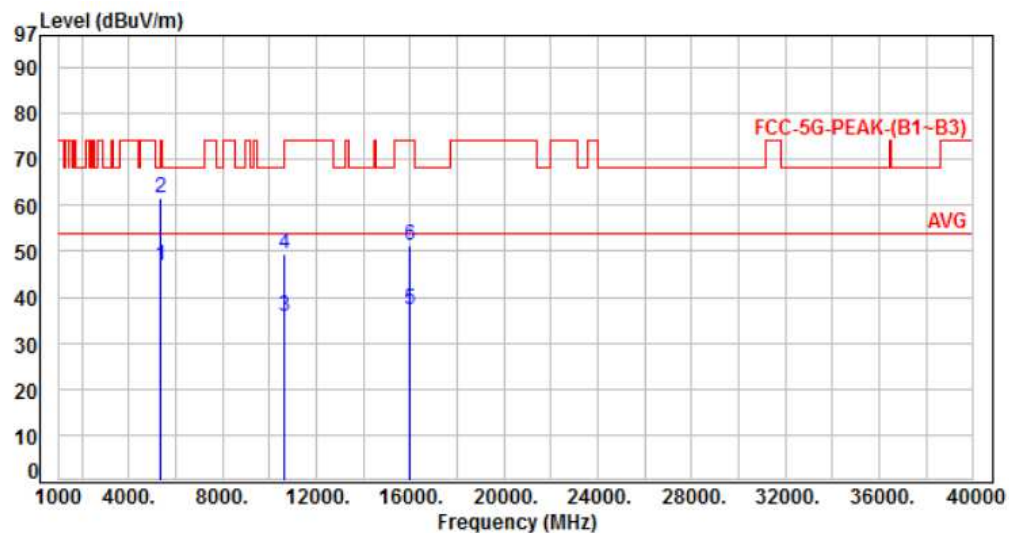
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, CH64	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-6.06	52.98	46.92	54.00	-7.08	Average	113	122	P
2	5350.00	-6.06	67.62	61.56	74.00	-12.44	Peak	113	122	P
3	10640.00	0.93	34.97	35.90	54.00	-18.10	Average	102	149	P
4	10640.00	0.93	48.43	49.36	74.00	-24.64	Peak	102	149	P
5	15960.00	5.38	31.95	37.33	54.00	-16.67	Average	100	133	P
6	15960.00	5.38	45.92	51.30	74.00	-22.70	Peak	100	133	P

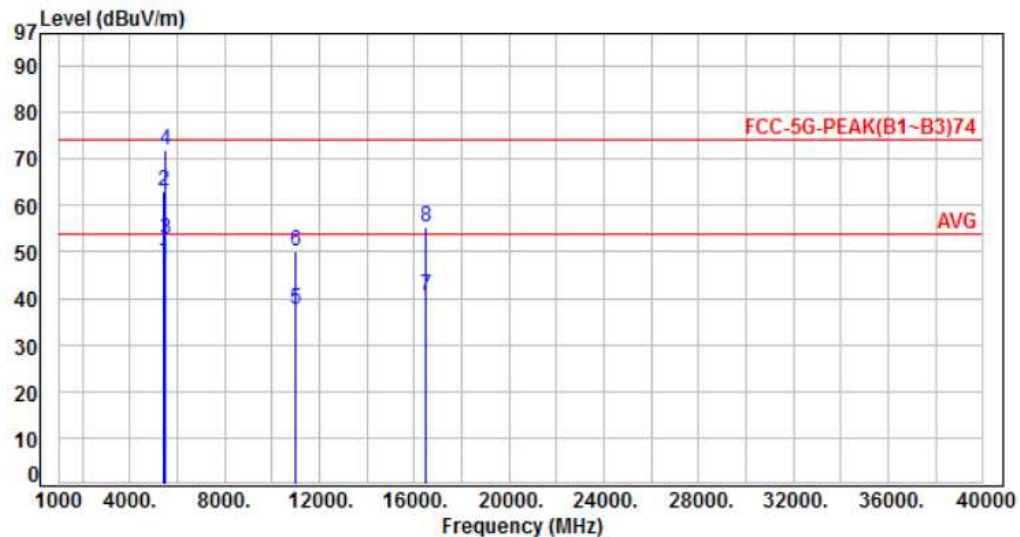
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, CH100	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	-5.80	53.84	48.04	54.00	-5.96	Average	229	167	P
2	5460.00	-5.80	68.78	62.98	74.00	-11.02	Peak	229	167	P
3	5470.00	-5.78	58.36	52.58	54.00	-1.42	Average	229	167	P
4	5470.00	-5.78	77.61	71.83	74.00	-2.17	Peak	229	167	P
5	11000.00	1.41	36.21	37.62	54.00	-16.38	Average	312	189	P
6	11000.00	1.41	48.67	50.08	74.00	-23.92	Peak	312	189	P
7	16500.00	6.62	34.02	40.64	54.00	-13.36	Average	229	167	P
8	16500.00	6.62	48.67	55.29	74.00	-18.71	Peak	229	167	P

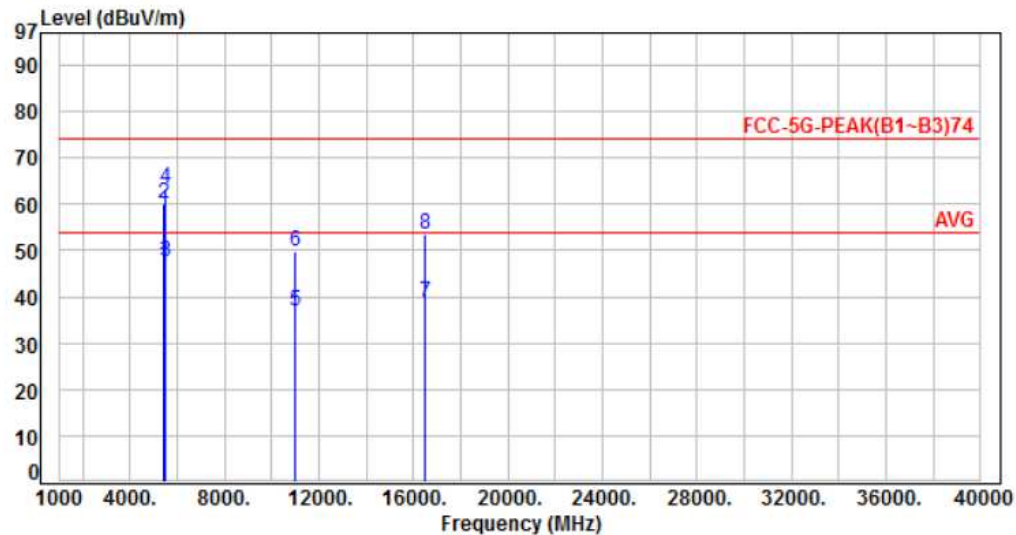
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, CH100	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	-5.80	52.50	46.70	54.00	-7.30	Average	136	209	P
2	5460.00	-5.80	65.96	60.16	74.00	-13.84	Peak	136	209	P
3	5470.00	-5.78	53.19	47.41	54.00	-6.59	Average	136	209	P
4	5470.00	-5.78	69.05	63.27	74.00	-10.73	Peak	136	209	P
5	11000.00	1.41	35.47	36.88	54.00	-17.12	Average	113	151	P
6	11000.00	1.41	48.29	49.70	74.00	-24.30	Peak	113	151	P
7	16500.00	6.62	32.19	38.81	54.00	-15.19	Average	100	166	P
8	16500.00	6.62	46.92	53.54	74.00	-20.46	Peak	100	166	P

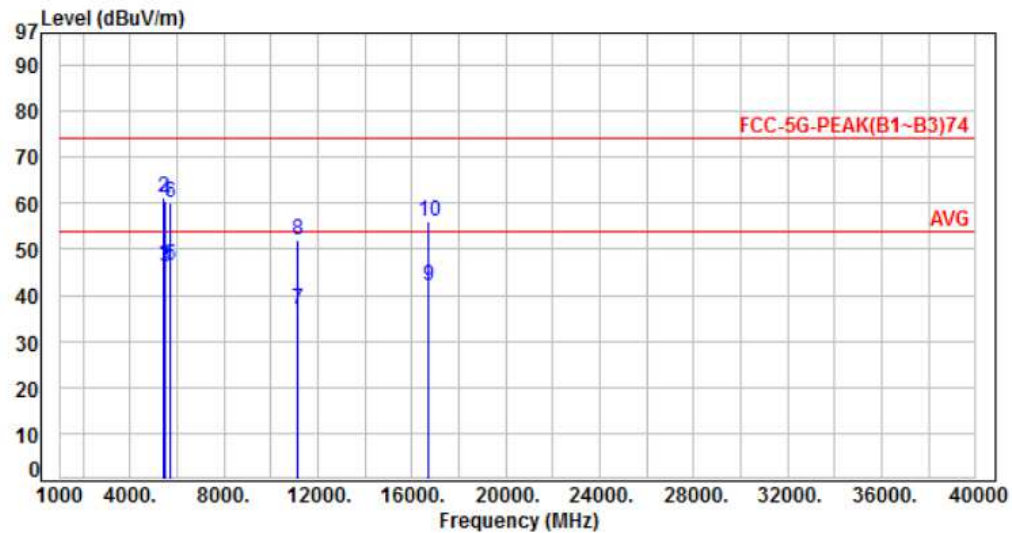
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, CH116	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	-5.80	52.73	46.93	54.00	-7.07	Average	231	173	P
2	5460.00	-5.80	67.06	61.26	74.00	-12.74	Peak	231	173	P
3	5470.00	-5.78	52.01	46.23	54.00	-7.77	Average	231	173	P
4	5470.00	-5.78	66.14	60.36	74.00	-13.64	Peak	231	173	P
5	5725.00	-5.80	52.23	46.43	54.00	-7.57	Average	228	169	P
6	5725.00	-5.80	66.08	60.28	74.00	-13.72	Peak	228	169	P
7	11160.00	1.62	35.11	36.73	54.00	-17.27	Average	106	241	P
8	11160.00	1.62	50.53	52.15	74.00	-21.85	Peak	106	241	P
9	16740.00	8.00	34.16	42.16	54.00	-11.84	Average	113	179	P
10	16740.00	8.00	48.21	56.21	74.00	-17.79	Peak	113	179	P

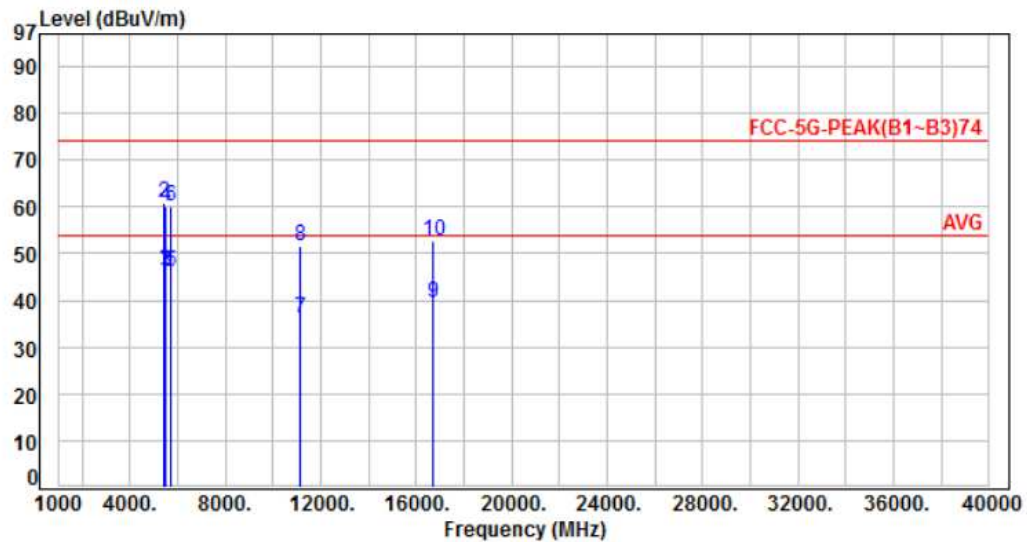
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, CH116	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	-5.80	52.56	46.76	54.00	-7.24	Average	113	149	P
2	5460.00	-5.80	66.73	60.93	74.00	-13.07	Peak	113	149	P
3	5470.00	-5.78	51.75	45.97	54.00	-8.03	Average	113	149	P
4	5470.00	-5.78	65.92	60.14	74.00	-13.86	Peak	113	149	P
5	5725.00	-5.80	51.89	46.09	54.00	-7.91	Average	107	156	P
6	5725.00	-5.80	65.92	60.12	74.00	-13.88	Peak	107	156	P
7	11160.00	1.62	34.66	36.28	54.00	-17.72	Average	100	198	P
8	11160.00	1.62	49.92	51.54	74.00	-22.46	Peak	100	198	P
9	16740.00	8.00	31.55	39.55	54.00	-14.45	Average	163	202	P
10	16740.00	8.00	44.70	52.70	74.00	-21.30	Peak	163	202	P

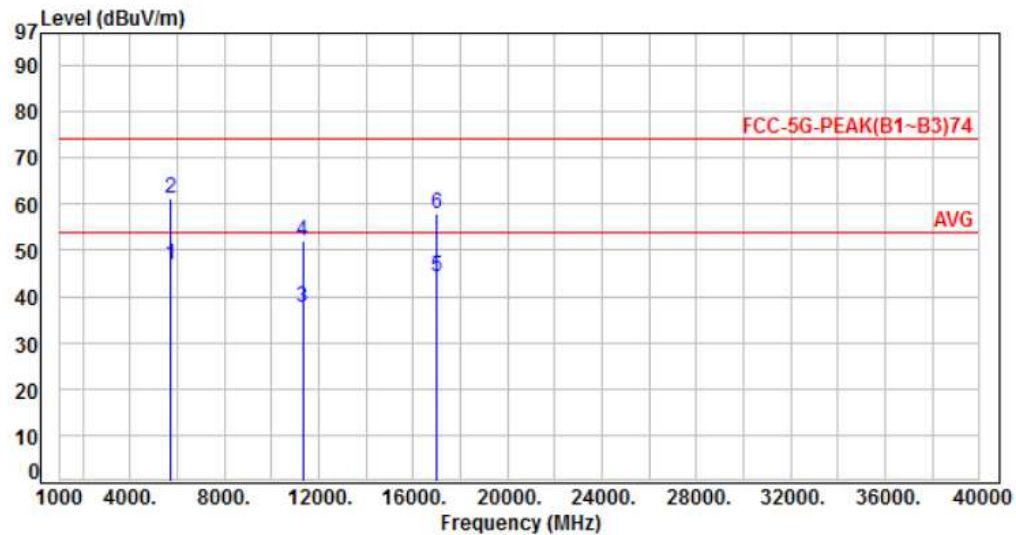
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, CH132	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5725.00	-5.80	52.55	46.75	54.00	-7.25	Average	166	201	P
2	5725.00	-5.80	66.99	61.19	74.00	-12.81	Peak	166	201	P
3	11320.00	1.83	35.78	37.61	54.00	-16.39	Average	121	252	P
4	11320.00	1.83	50.21	52.04	74.00	-21.96	Peak	121	252	P
5	16980.00	9.41	34.86	44.27	54.00	-9.73	Average	149	225	P
6	16980.00	9.41	48.66	58.07	74.00	-15.93	Peak	149	225	P

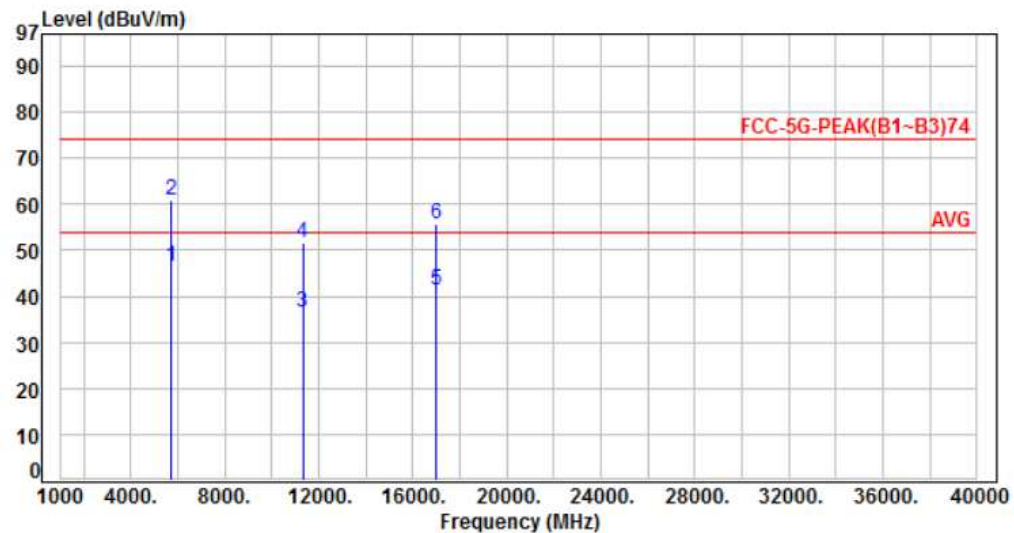
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, CH132	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5725.00	-5.80	52.27	46.47	54.00	-7.53	Average	103	168	P
2	5725.00	-5.80	66.72	60.92	74.00	-13.08	Peak	103	168	P
3	11320.00	1.83	34.68	36.51	54.00	-17.49	Average	149	131	P
4	11320.00	1.83	49.73	51.56	74.00	-22.44	Peak	149	131	P
5	16980.00	9.41	31.86	41.27	54.00	-12.73	Average	100	143	P
6	16980.00	9.41	46.24	55.65	74.00	-18.35	Peak	100	143	P

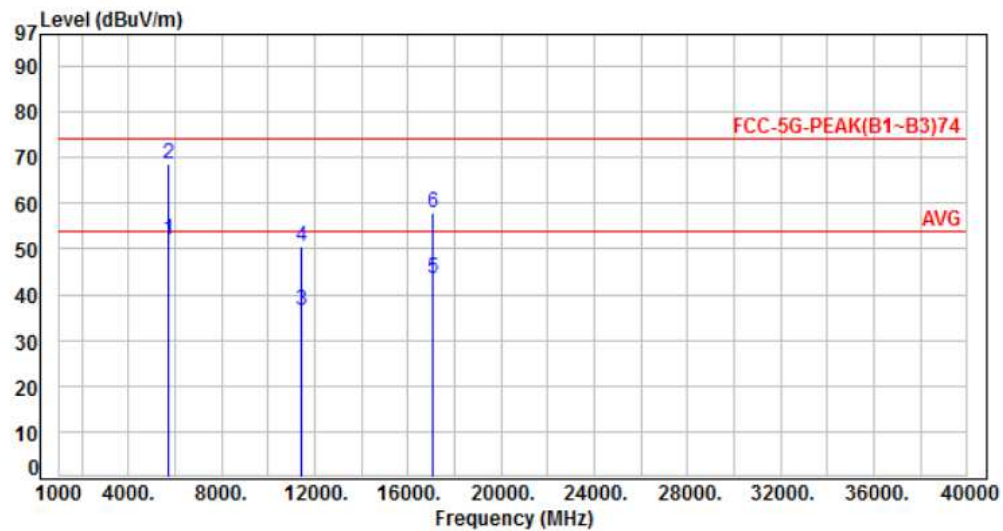
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, CH140	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5725.00	-5.80	57.97	52.17	54.00	-1.83	Average	169	159	P
2	5725.00	-5.80	74.35	68.55	74.00	-5.45	Peak	169	159	P
3	11400.00	1.94	34.72	36.66	54.00	-17.34	Average	121	237	P
4	11400.00	1.94	48.52	50.46	74.00	-23.54	Peak	121	237	P
5	17100.00	10.14	33.34	43.48	54.00	-10.52	Average	116	218	P
6	17100.00	10.14	47.66	57.80	74.00	-16.20	Peak	116	218	P

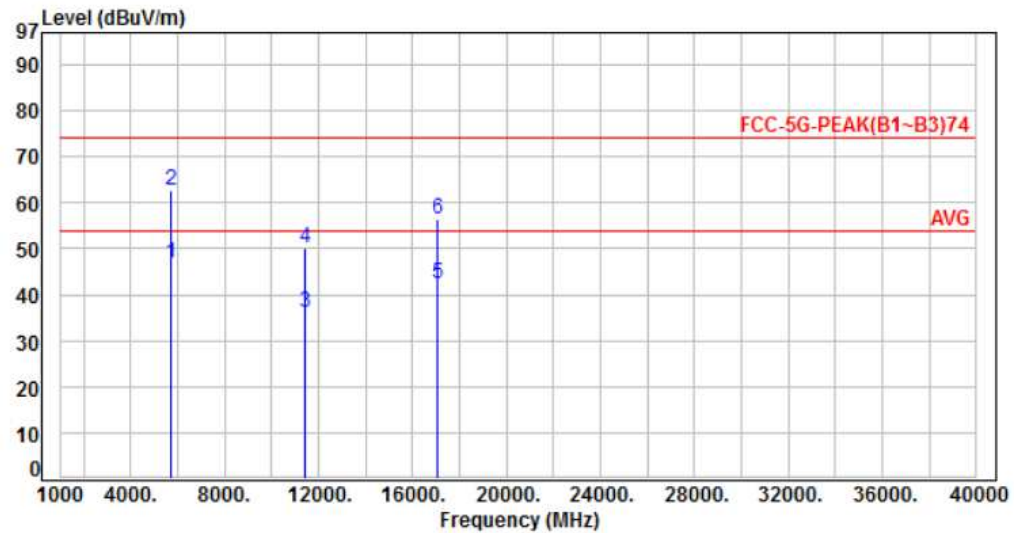
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, CH140	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5725.00	-5.80	52.72	46.92	54.00	-7.08	Average	144	213	P
2	5725.00	-5.80	68.67	62.87	74.00	-11.13	Peak	144	213	P
3	11400.00	1.94	34.13	36.07	54.00	-17.93	Average	100	147	P
4	11400.00	1.94	48.16	50.10	74.00	-23.90	Peak	100	147	P
5	17100.00	10.14	32.15	42.29	54.00	-11.71	Average	103	161	P
6	17100.00	10.14	46.31	56.45	74.00	-17.55	Peak	103	161	P

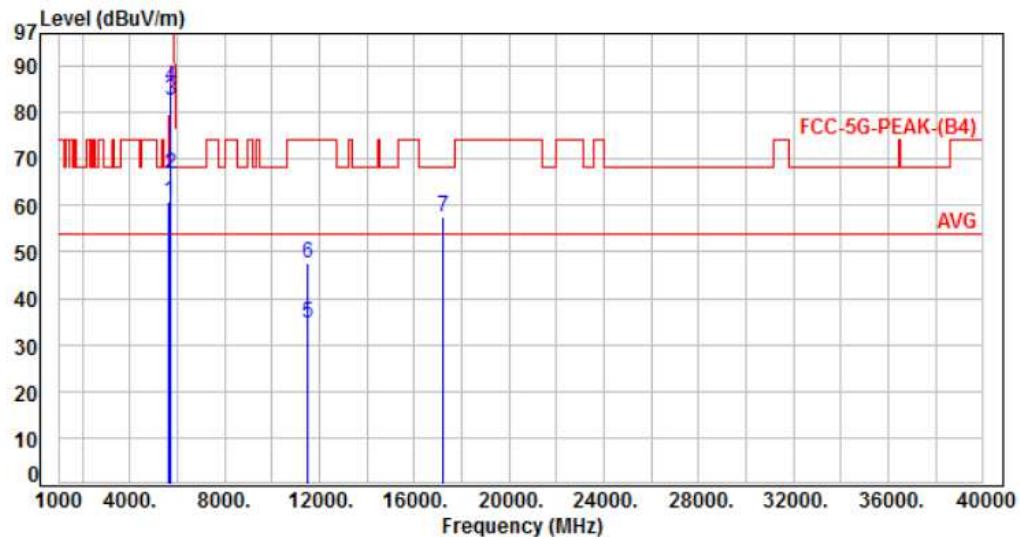
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, CH149	Temperature	: 24°C
Test Date	: Feb. 15, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	-5.77	66.72	60.95	68.20	-7.25	Peak	163	201	P
2	5700.00	-5.79	72.59	66.80	105.20	-38.40	Peak	163	201	P
3	5720.00	-5.80	88.40	82.60	110.80	-28.20	Peak	163	201	P
4	5725.00	-5.80	91.38	85.58	122.20	-36.62	Peak	163	201	P
5	11490.00	2.06	32.43	34.49	54.00	-19.51	Average	167	289	P
6	11490.00	2.06	45.53	47.59	74.00	-26.41	Peak	167	289	P
7	17235.00	10.97	46.68	57.65	68.20	-10.55	Peak	127	163	P

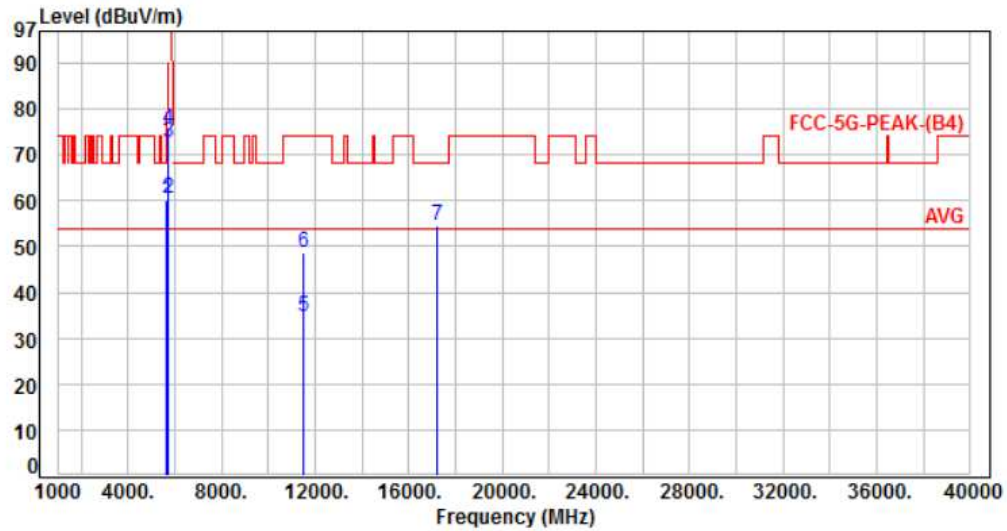
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, CH149	Temperature	: 24°C
Test Date	: Feb. 15, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV)	Limit (dBUV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	-5.77	65.81	60.04	68.20	-8.16	Peak	100	249	P
2	5700.00	-5.79	66.19	60.40	105.20	-44.80	Peak	100	249	P
3	5720.00	-5.80	78.50	72.70	110.80	-38.10	Peak	100	249	P
4	5725.00	-5.80	81.48	75.68	122.20	-46.52	Peak	100	249	P
5	11490.00	2.06	32.69	34.75	54.00	-19.25	Average	116	182	P
6	11490.00	2.06	46.67	48.73	74.00	-25.27	Peak	116	182	P
7	17235.00	10.97	43.59	54.56	68.20	-13.64	Peak	103	177	P

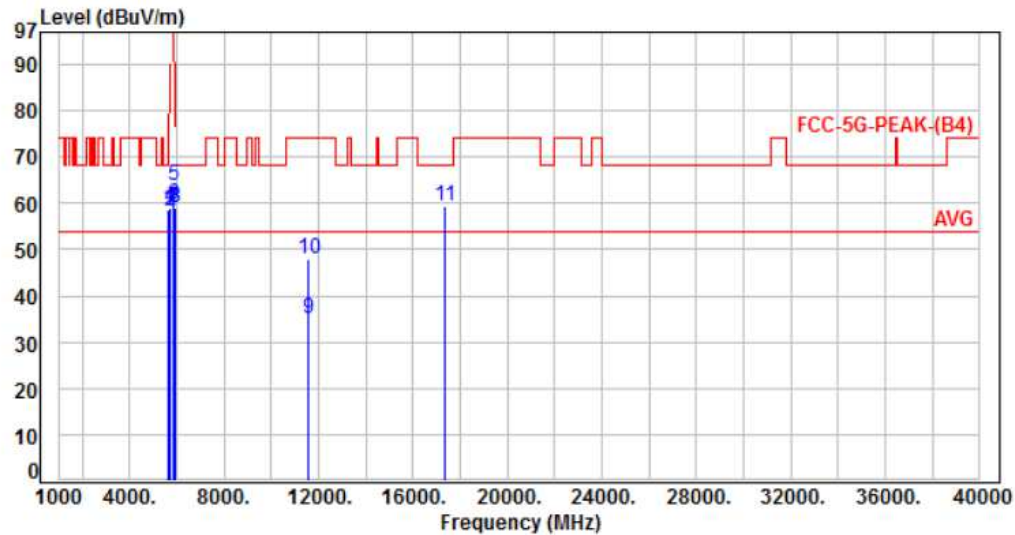
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, CH157	Temperature	: 24°C
Test Date	: Feb. 15, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	-5.77	64.58	58.81	68.20	-9.39	Peak	168	242	P
2	5700.00	-5.79	64.23	58.44	105.20	-46.76	Peak	168	242	P
3	5720.00	-5.80	64.09	58.29	110.80	-52.51	Peak	168	242	P
4	5725.00	-5.80	64.68	58.88	122.20	-63.32	Peak	168	242	P
5	5850.00	-5.84	69.48	63.64	122.20	-58.56	Peak	168	242	P
6	5855.00	-5.84	65.70	59.86	110.80	-50.94	Peak	168	242	P
7	5875.00	-5.85	64.73	58.88	105.20	-46.32	Peak	168	242	P
8	5925.00	-5.87	64.89	59.02	68.20	-9.18	Peak	168	242	P
9	11570.00	2.09	32.93	35.02	54.00	-18.98	Average	149	217	P
10	11570.00	2.09	45.82	47.91	74.00	-26.09	Peak	149	217	P
11	17355.00	11.72	47.59	59.31	68.20	-8.89	Peak	161	125	P

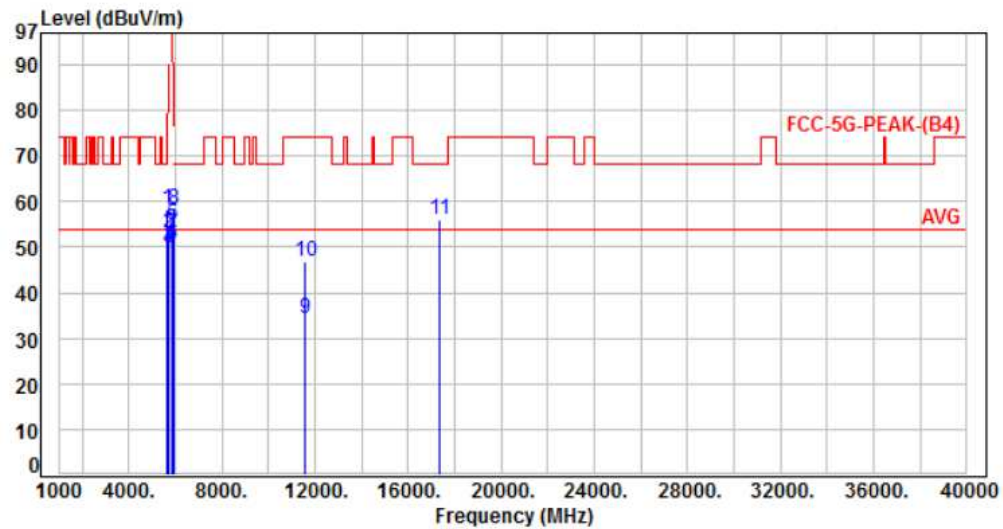
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, CH157	Temperature	: 24°C
Test Date	: Feb. 15, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	-5.77	63.88	58.11	68.20	-10.09	Peak	142	166	P
2	5700.00	-5.79	58.93	53.14	105.20	-52.06	Peak	142	166	P
3	5720.00	-5.80	55.65	49.85	110.80	-60.95	Peak	142	166	P
4	5725.00	-5.80	55.72	49.92	122.20	-72.28	Peak	142	166	P
5	5850.00	-5.84	60.68	54.84	122.20	-67.36	Peak	142	166	P
6	5855.00	-5.84	56.33	50.49	110.80	-60.31	Peak	142	166	P
7	5875.00	-5.85	58.77	52.92	105.20	-52.28	Peak	142	166	P
8	5925.00	-5.87	64.10	58.23	68.20	-9.97	Peak	142	166	P
9	11570.00	2.09	32.19	34.28	54.00	-19.72	Average	115	180	P
10	11570.00	2.09	44.75	46.84	74.00	-27.16	Peak	115	180	P
11	17355.00	11.72	44.39	56.11	68.20	-12.09	Peak	118	148	P

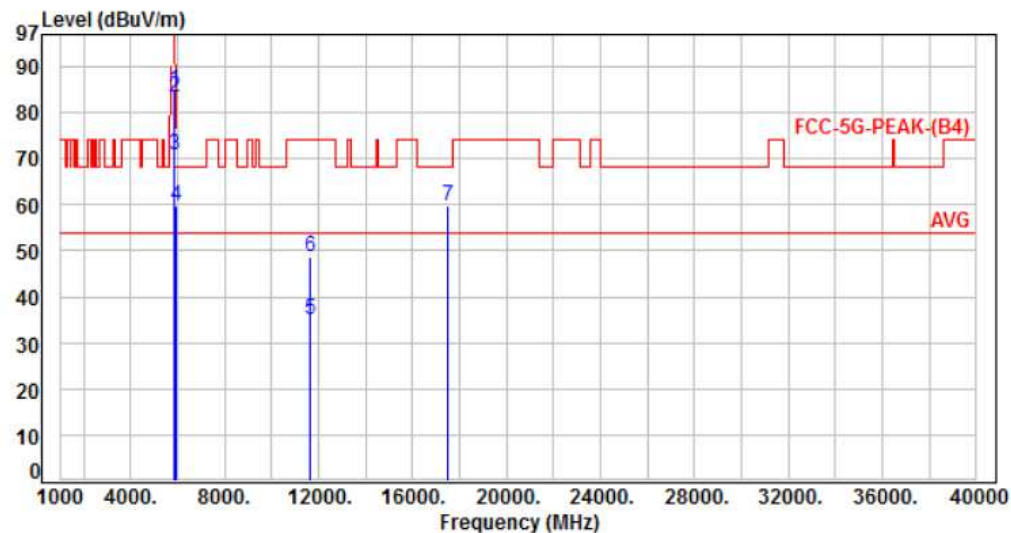
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, CH165	Temperature	: 24°C
Test Date	: Feb. 15, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV)	Limit (dBUV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5850.00	-5.84	90.76	84.92	122.20	-37.28	Peak	142	226	P
2	5855.00	-5.84	89.24	83.40	110.80	-27.40	Peak	142	226	P
3	5875.00	-5.85	76.57	70.72	105.20	-34.48	Peak	142	226	P
4	5925.00	-5.87	65.51	59.64	68.20	-8.56	Peak	142	226	P
5	11650.00	2.12	33.03	35.15	54.00	-18.85	Average	169	198	P
6	11650.00	2.12	46.51	48.63	74.00	-25.37	Peak	169	198	P
7	17475.00	12.46	47.45	59.91	68.20	-8.29	Peak	126	219	P

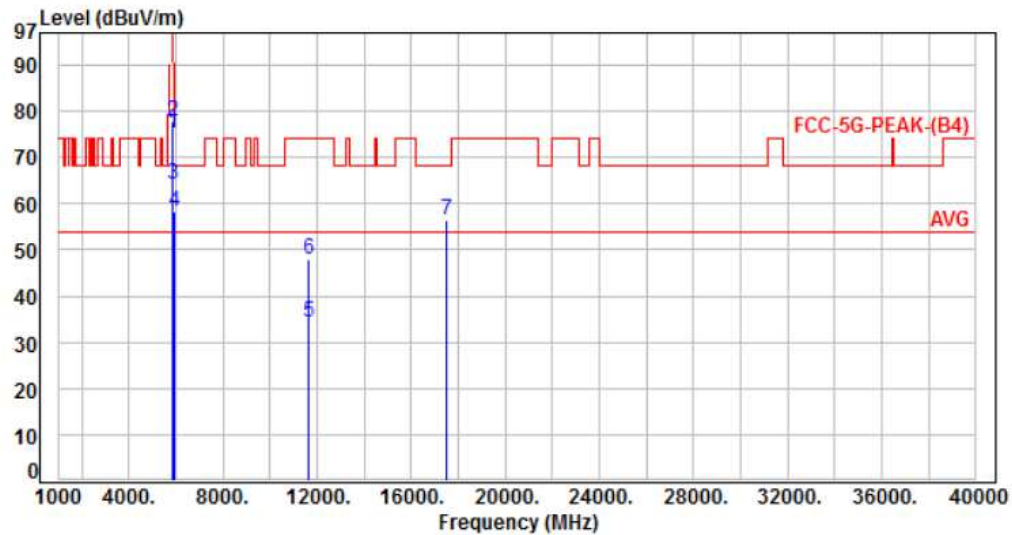
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, CH165	Temperature	: 24°C
Test Date	: Feb. 15, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5850.00	-5.84	81.06	75.22	122.20	-46.98	Peak	137	180	P
2	5855.00	-5.84	83.69	77.85	110.80	-32.95	Peak	137	180	P
3	5875.00	-5.85	70.10	64.25	105.20	-40.95	Peak	137	180	P
4	5925.00	-5.87	64.21	58.34	68.20	-9.86	Peak	137	180	P
5	11650.00	2.12	32.31	34.43	54.00	-19.57	Average	119	255	P
6	11650.00	2.12	45.69	47.81	74.00	-26.19	Peak	119	255	P
7	17475.00	12.46	44.07	56.53	68.20	-11.67	Peak	112	310	P

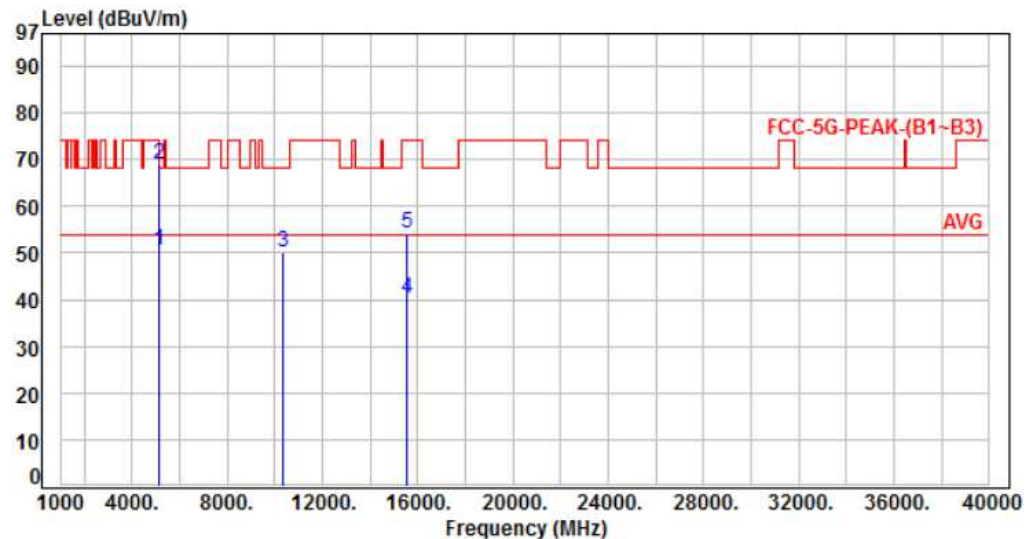
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 4, CH36	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-6.54	57.08	50.54	54.00	-3.46	Average	243	153	P
2	5150.00	-6.54	75.60	69.06	74.00	-4.94	Peak	243	153	P
3	10360.00	0.66	49.44	50.10	68.20	-18.10	Peak	116	216	P
4	15540.00	5.36	34.79	40.15	54.00	-13.85	Average	102	226	P
5	15540.00	5.36	48.70	54.06	74.00	-19.94	Peak	102	226	P

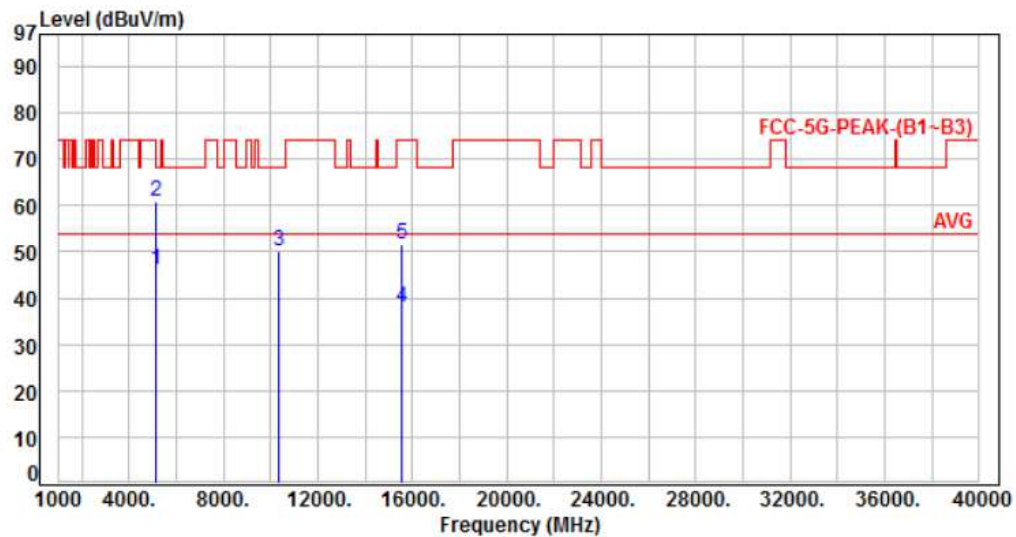
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 4, CH36	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV)	Limit (dBUV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-6.54	52.66	46.12	54.00	-7.88	Average	130	205	P
2	5150.00	-6.54	67.53	60.99	74.00	-13.01	Peak	130	205	P
3	10360.00	0.66	49.51	50.17	68.20	-18.03	Peak	100	316	P
4	15540.00	5.36	32.45	37.81	54.00	-16.19	Average	100	192	P
5	15540.00	5.36	46.38	51.74	74.00	-22.26	Peak	100	192	P

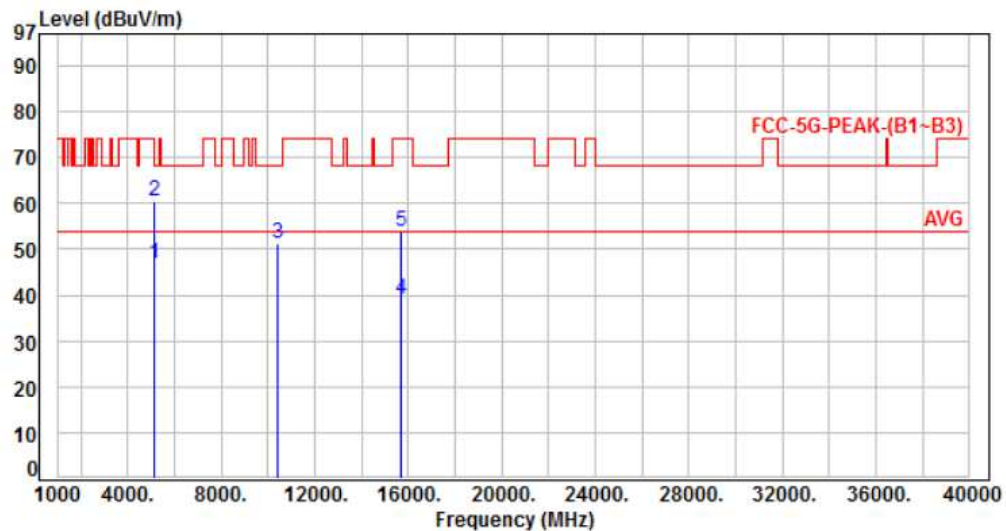
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 4, CH44	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-6.54	53.36	46.82	54.00	-7.18	Average	212	163	P
2	5150.00	-6.54	66.87	60.33	74.00	-13.67	Peak	212	163	P
3	10440.00	0.70	50.69	51.39	68.20	-16.81	Peak	100	242	P
4	15660.00	5.38	33.57	38.95	54.00	-15.05	Average	124	208	P
5	15660.00	5.38	48.44	53.82	74.00	-20.18	Peak	124	208	P

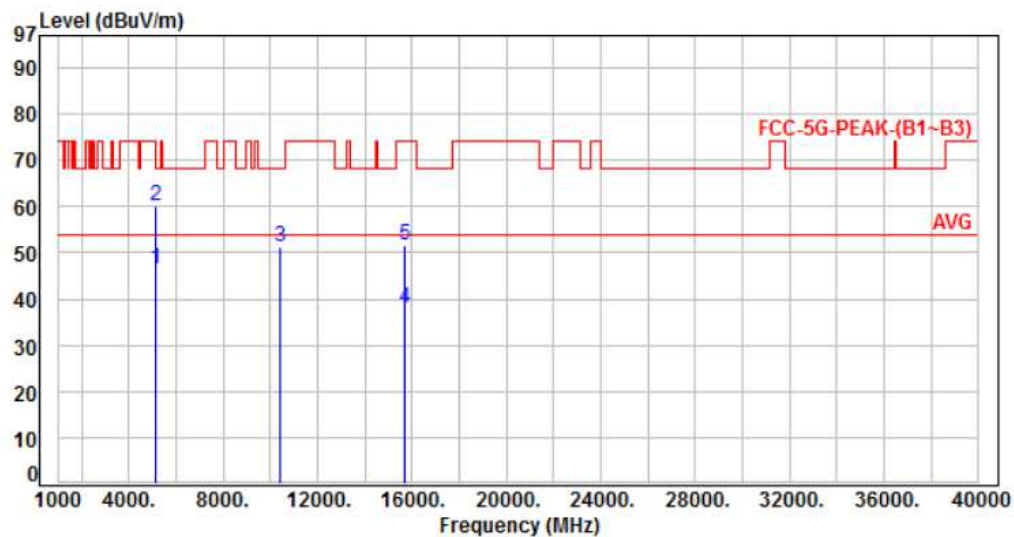
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 4, CH44	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-6.54	53.02	46.48	54.00	-7.52	Average	134	113	P
2	5150.00	-6.54	66.57	60.03	74.00	-13.97	Peak	134	113	P
3	10440.00	0.70	50.66	51.36	68.20	-16.84	Peak	100	203	P
4	15660.00	5.38	32.70	38.08	54.00	-15.92	Average	112	193	P
5	15660.00	5.38	46.24	51.62	74.00	-22.38	Peak	112	193	P

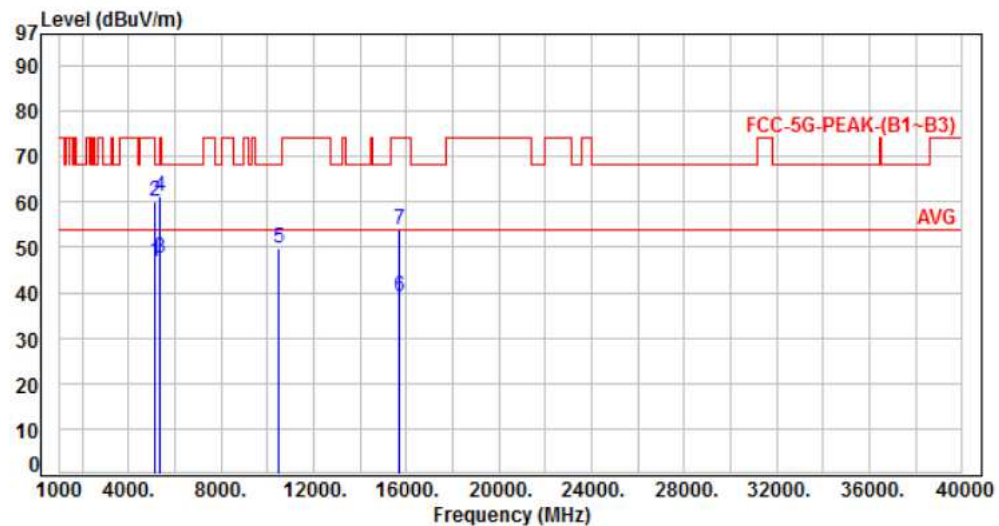
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 4, CH48	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-6.54	53.56	47.02	54.00	-6.98	Average	226	173	P
2	5150.00	-6.54	66.81	60.27	74.00	-13.73	Peak	226	173	P
3	5350.00	-6.06	53.51	47.45	54.00	-6.55	Average	226	173	P
4	5350.00	-6.06	67.13	61.07	74.00	-12.93	Peak	226	173	P
5	10480.00	0.73	49.13	49.86	68.20	-18.34	Peak	121	244	P
6	15720.00	5.37	33.64	39.01	54.00	-14.99	Average	113	212	P
7	15720.00	5.37	48.61	53.98	74.00	-20.02	Peak	113	212	P

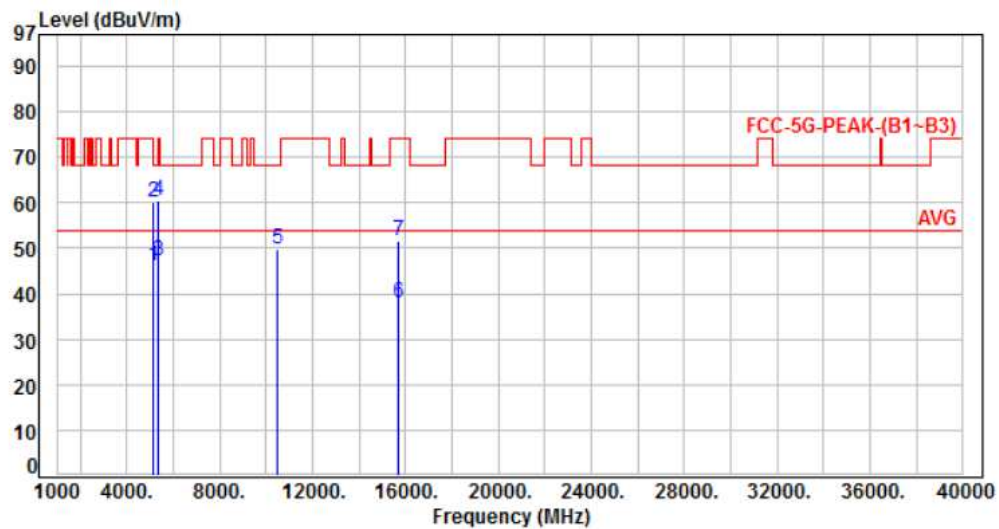
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 4, CH48	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-6.54	52.81	46.27	54.00	-7.73	Average	141	122	P
2	5150.00	-6.54	66.78	60.24	74.00	-13.76	Peak	141	122	P
3	5350.00	-6.06	53.12	47.06	54.00	-6.94	Average	141	122	P
4	5350.00	-6.06	66.57	60.51	74.00	-13.49	Peak	141	122	P
5	10480.00	0.73	48.89	49.62	68.20	-18.58	Peak	100	193	P
6	15720.00	5.37	32.51	37.88	54.00	-16.12	Average	108	211	P
7	15720.00	5.37	46.38	51.75	74.00	-22.25	Peak	108	211	P

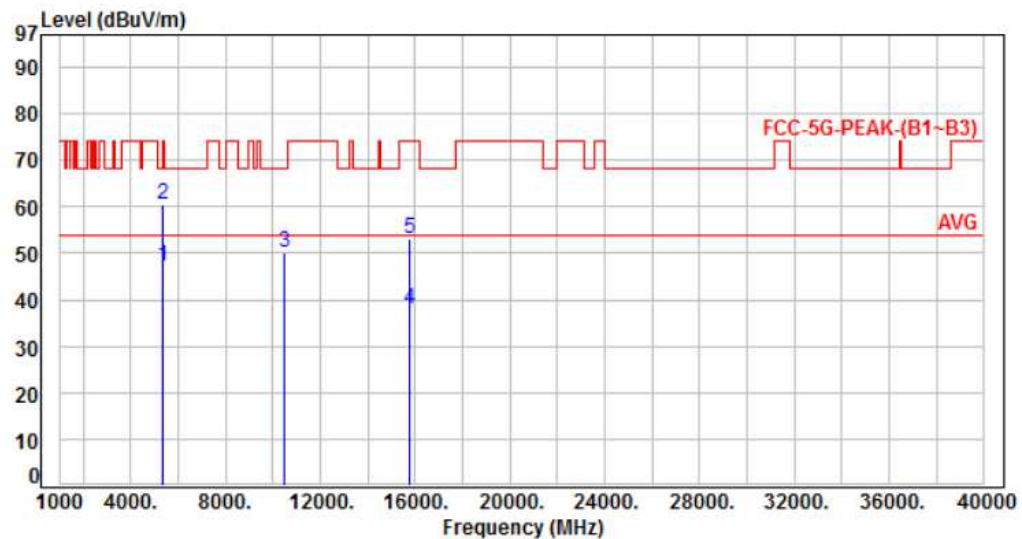
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 4, CH52	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-6.06	53.24	47.18	54.00	-6.82	Average	251	191	P
2	5350.00	-6.06	66.73	60.67	74.00	-13.33	Peak	251	191	P
3	10520.00	0.77	49.22	49.99	68.20	-18.21	Peak	116	231	P
4	15780.00	5.37	32.66	38.03	54.00	-15.97	Average	137	158	P
5	15780.00	5.37	47.92	53.29	74.00	-20.71	Peak	137	158	P

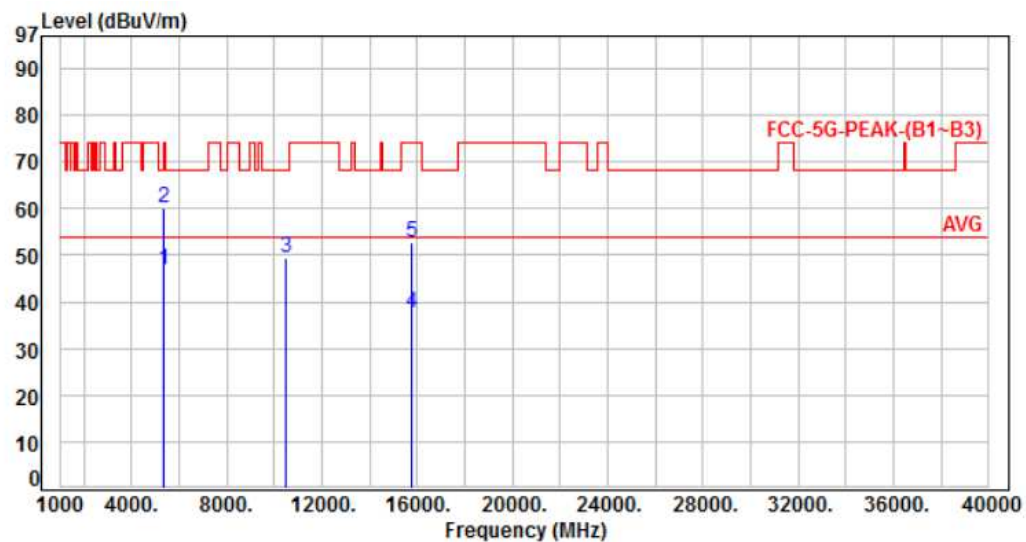
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 4, CH52	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-6.06	53.04	46.98	54.00	-7.02	Average	138	125	P
2	5350.00	-6.06	66.12	60.06	74.00	-13.94	Peak	138	125	P
3	10520.00	0.77	48.78	49.55	68.20	-18.65	Peak	131	202	P
4	15780.00	5.37	32.38	37.75	54.00	-16.25	Average	100	214	P
5	15780.00	5.37	47.51	52.88	74.00	-21.12	Peak	100	214	P

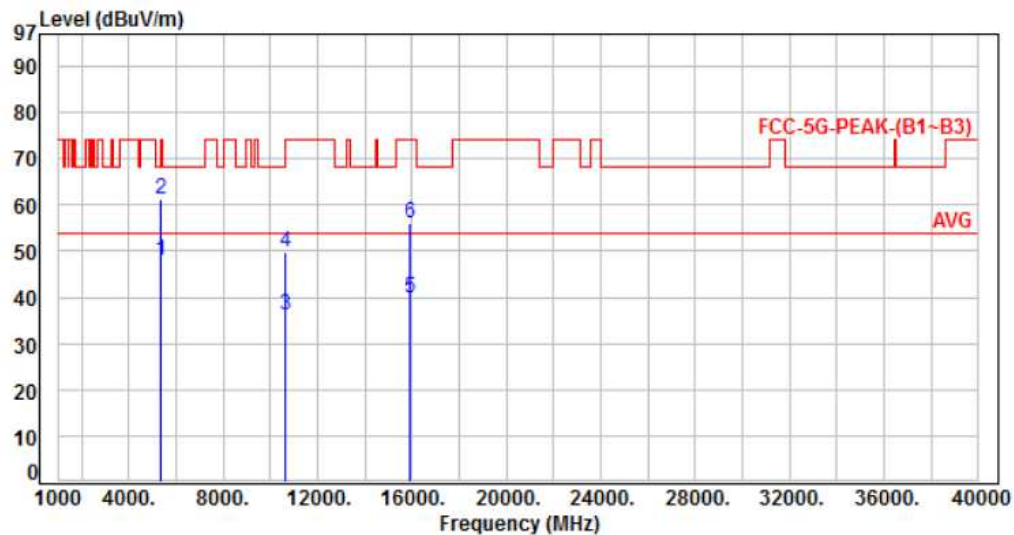
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 4, CH60	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-6.06	53.83	47.77	54.00	-6.23	Average	154	138	P
2	5350.00	-6.06	67.44	61.38	74.00	-12.62	Peak	154	138	P
3	10600.00	0.87	35.40	36.27	54.00	-17.73	Average	112	169	P
4	10600.00	0.87	48.83	49.70	74.00	-24.30	Peak	112	169	P
5	15900.00	5.37	34.55	39.92	54.00	-14.08	Average	311	157	P
6	15900.00	5.37	50.77	56.14	74.00	-17.86	Peak	311	157	P

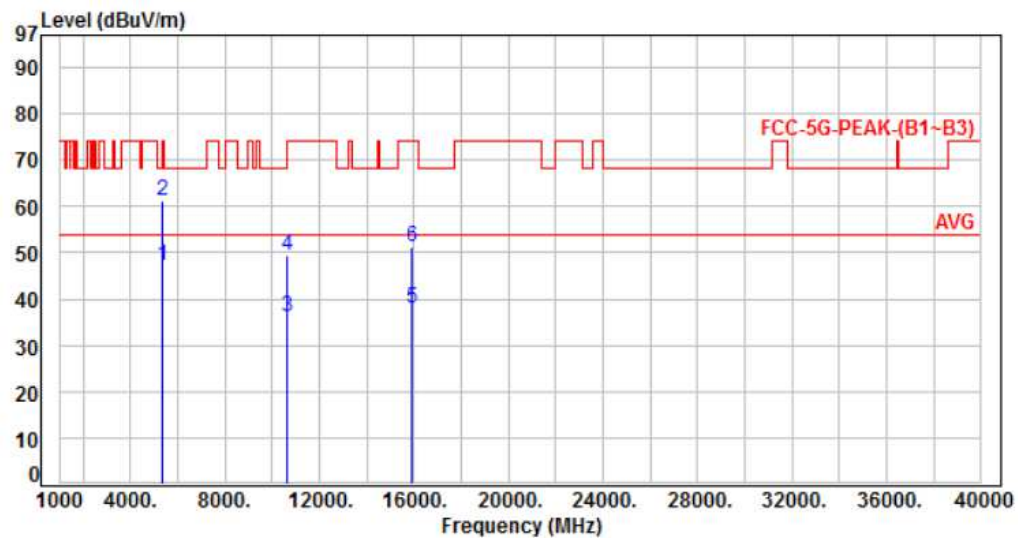
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 4, CH60	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-6.06	53.12	47.06	54.00	-6.94	Average	133	106	P
2	5350.00	-6.06	67.20	61.14	74.00	-12.86	Peak	133	106	P
3	10600.00	0.87	35.43	36.30	54.00	-17.70	Average	138	251	P
4	10600.00	0.87	48.66	49.53	74.00	-24.47	Peak	138	251	P
5	15900.00	5.37	32.57	37.94	54.00	-16.06	Average	112	215	P
6	15900.00	5.37	45.83	51.20	74.00	-22.80	Peak	112	215	P

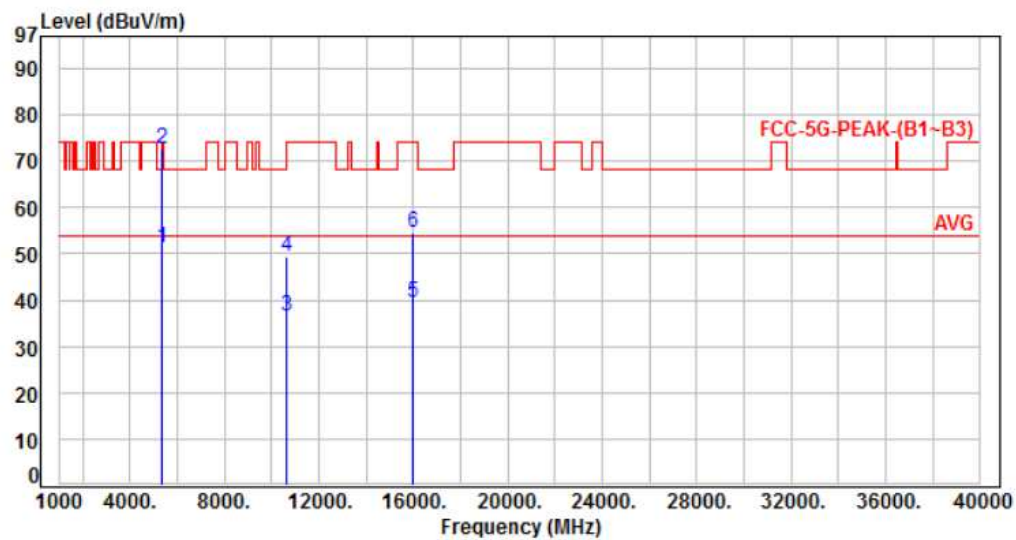
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 4, CH64	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-6.06	57.35	51.29	54.00	-2.71	Average	196	157	P
2	5350.00	-6.06	78.56	72.50	74.00	-1.50	Peak	196	157	P
3	10640.00	0.93	35.47	36.40	54.00	-17.60	Average	122	183	P
4	10640.00	0.93	48.56	49.49	74.00	-24.51	Peak	122	183	P
5	15960.00	5.38	33.91	39.29	54.00	-14.71	Average	298	155	P
6	15960.00	5.38	49.26	54.64	74.00	-19.36	Peak	298	155	P

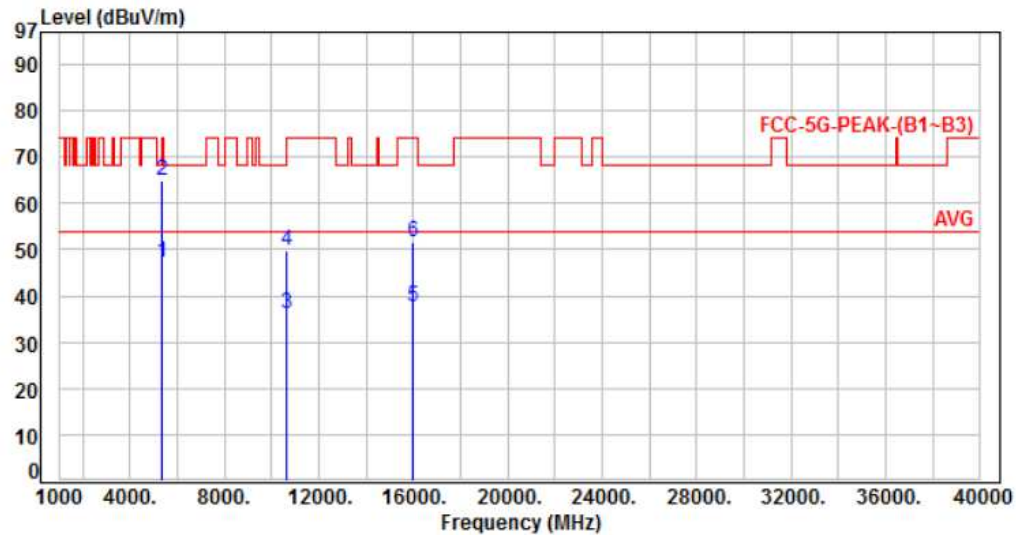
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 4, CH64	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-6.06	53.29	47.23	54.00	-6.77	Average	112	124	P
2	5350.00	-6.06	70.89	64.83	74.00	-9.17	Peak	112	124	P
3	10640.00	0.93	35.13	36.06	54.00	-17.94	Average	106	151	P
4	10640.00	0.93	48.77	49.70	74.00	-24.30	Peak	106	151	P
5	15960.00	5.38	32.15	37.53	54.00	-16.47	Average	100	147	P
6	15960.00	5.38	46.26	51.64	74.00	-22.36	Peak	100	147	P

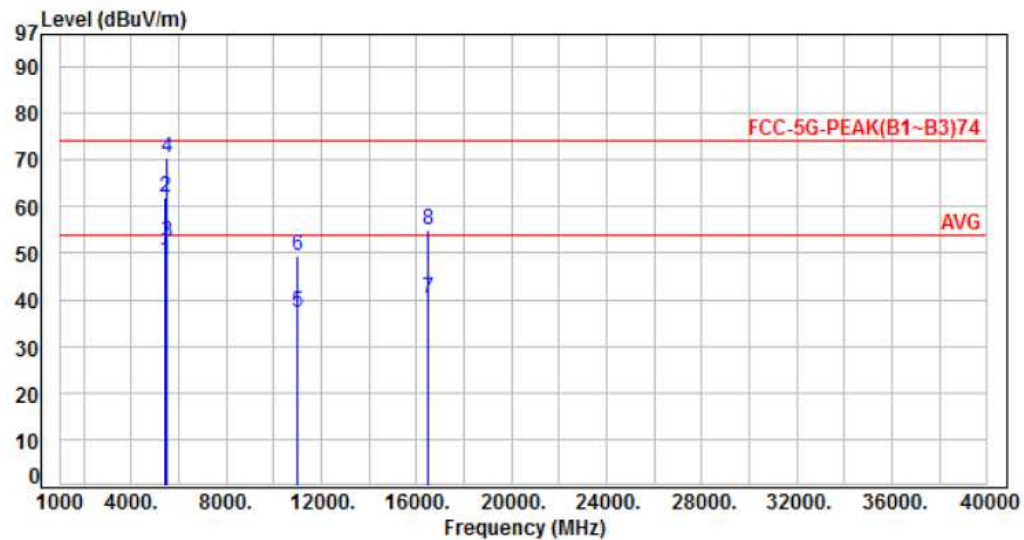
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 4, CH100	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	-5.80	53.96	48.16	54.00	-5.84	Average	226	157	P
2	5460.00	-5.80	67.69	61.89	74.00	-12.11	Peak	226	157	P
3	5470.00	-5.78	58.06	52.28	54.00	-1.72	Average	226	157	P
4	5470.00	-5.78	76.22	70.44	74.00	-3.56	Peak	226	157	P
5	11000.00	1.41	35.78	37.19	54.00	-16.81	Average	298	196	P
6	11000.00	1.41	48.13	49.54	74.00	-24.46	Peak	298	196	P
7	16500.00	6.62	33.72	40.34	54.00	-13.66	Average	221	176	P
8	16500.00	6.62	48.19	54.81	74.00	-19.19	Peak	221	176	P

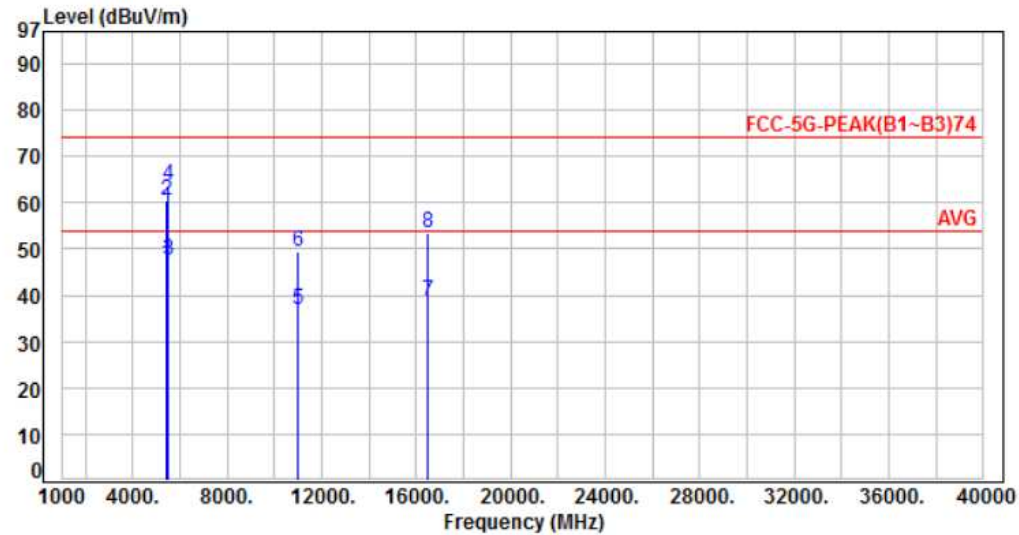
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 4, CH100	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	-5.80	52.73	46.93	54.00	-7.07	Average	149	211	P
2	5460.00	-5.80	66.13	60.33	74.00	-13.67	Peak	149	211	P
3	5470.00	-5.78	53.38	47.60	54.00	-6.40	Average	149	211	P
4	5470.00	-5.78	69.45	63.67	74.00	-10.33	Peak	149	211	P
5	11000.00	1.41	35.52	36.93	54.00	-17.07	Average	112	148	P
6	11000.00	1.41	48.13	49.54	74.00	-24.46	Peak	112	148	P
7	16500.00	6.62	32.05	38.67	54.00	-15.33	Average	100	173	P
8	16500.00	6.62	46.75	53.37	74.00	-20.63	Peak	100	173	P

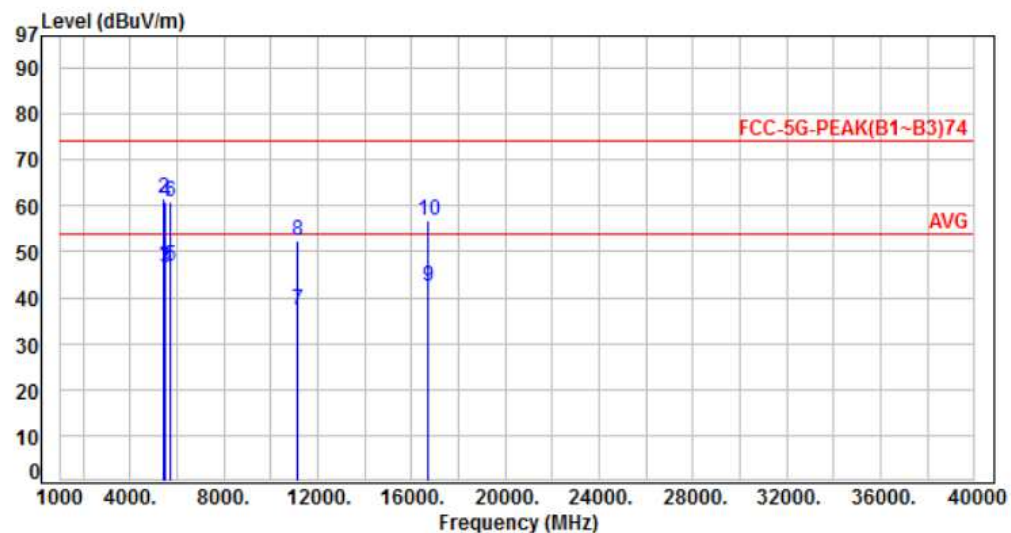
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 4, CH116	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	-5.80	52.92	47.12	54.00	-6.88	Average	228	186	P
2	5460.00	-5.80	67.35	61.55	74.00	-12.45	Peak	228	186	P
3	5470.00	-5.78	52.37	46.59	54.00	-7.41	Average	228	186	P
4	5470.00	-5.78	66.57	60.79	74.00	-13.21	Peak	228	186	P
5	5725.00	-5.80	52.65	46.85	54.00	-7.15	Average	274	191	P
6	5725.00	-5.80	66.47	60.67	74.00	-13.33	Peak	274	191	P
7	11160.00	1.62	35.45	37.07	54.00	-16.93	Average	114	238	P
8	11160.00	1.62	50.81	52.43	74.00	-21.57	Peak	114	238	P
9	16740.00	8.00	34.46	42.46	54.00	-11.54	Average	102	194	P
10	16740.00	8.00	48.63	56.63	74.00	-17.37	Peak	102	194	P

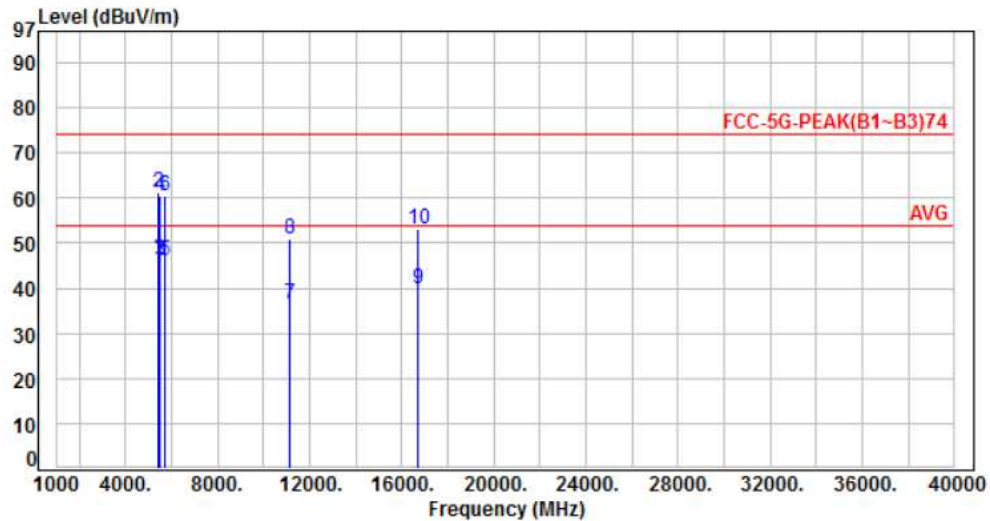
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 4, CH116	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	-5.80	52.69	46.89	54.00	-7.11	Average	132	174	P
2	5460.00	-5.80	66.88	61.08	74.00	-12.92	Peak	132	174	P
3	5470.00	-5.78	51.87	46.09	54.00	-7.91	Average	132	174	P
4	5470.00	-5.78	66.21	60.43	74.00	-13.57	Peak	132	174	P
5	5725.00	-5.80	52.03	46.23	54.00	-7.77	Average	124	177	P
6	5725.00	-5.80	66.13	60.33	74.00	-13.67	Peak	124	177	P
7	11160.00	1.62	34.91	36.53	54.00	-17.47	Average	100	185	P
8	11160.00	1.62	49.23	50.85	74.00	-23.15	Peak	100	185	P
9	16740.00	8.00	31.83	39.83	54.00	-14.17	Average	158	231	P
10	16740.00	8.00	45.22	53.22	74.00	-20.78	Peak	158	231	P

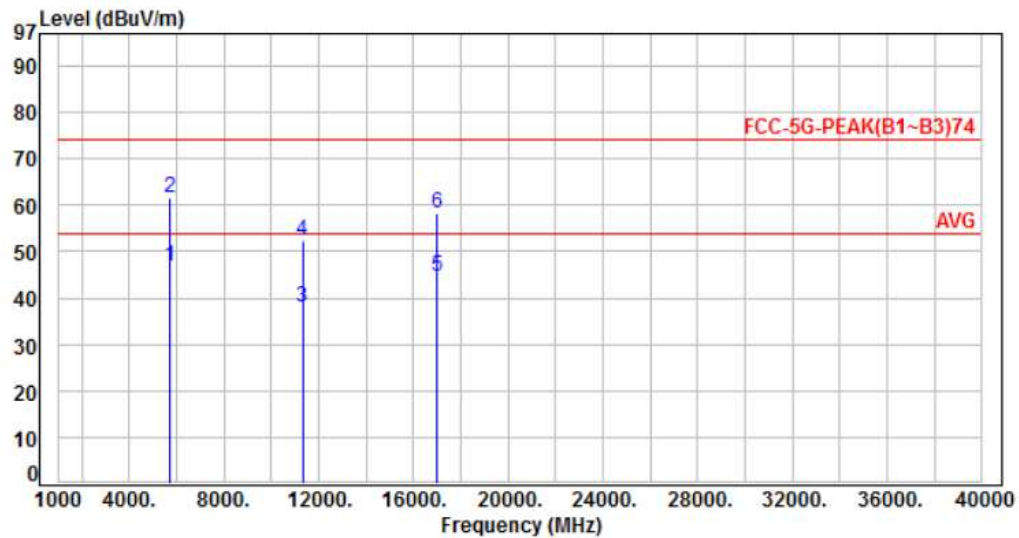
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 4, CH132	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5725.00	-5.80	52.81	47.01	54.00	-6.99	Average	173	242	P
2	5725.00	-5.80	67.36	61.56	74.00	-12.44	Peak	173	242	P
3	11320.00	1.83	36.02	37.85	54.00	-16.15	Average	124	248	P
4	11320.00	1.83	50.63	52.46	74.00	-21.54	Peak	124	248	P
5	16980.00	9.41	35.11	44.52	54.00	-9.48	Average	151	193	P
6	16980.00	9.41	48.93	58.34	74.00	-15.66	Peak	151	193	P

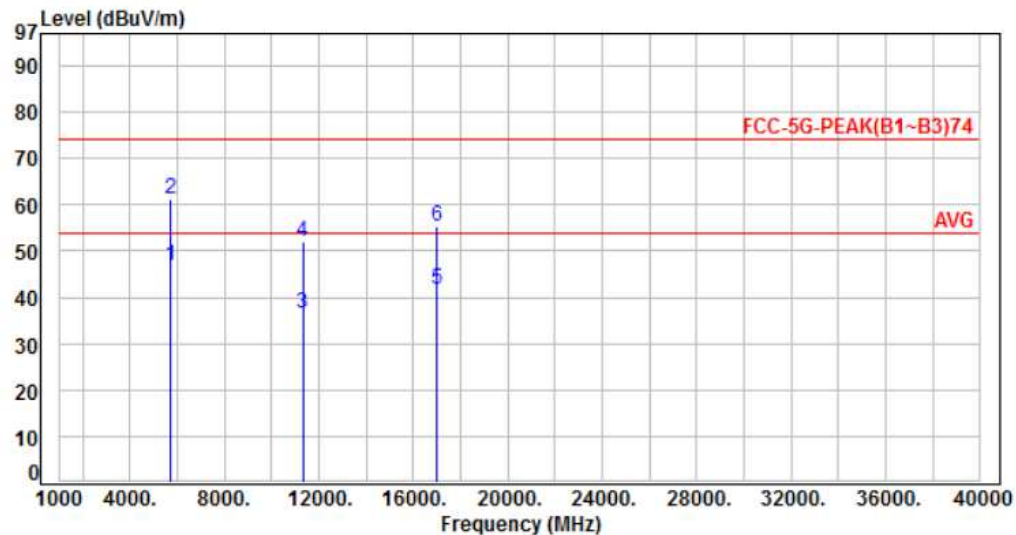
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 4, CH132	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5725.00	-5.80	52.56	46.76	54.00	-7.24	Average	100	177	P
2	5725.00	-5.80	66.95	61.15	74.00	-12.85	Peak	100	177	P
3	11320.00	1.83	34.86	36.69	54.00	-17.31	Average	151	128	P
4	11320.00	1.83	50.13	51.96	74.00	-22.04	Peak	151	128	P
5	16980.00	9.41	32.33	41.74	54.00	-12.26	Average	122	173	P
6	16980.00	9.41	46.02	55.43	74.00	-18.57	Peak	122	173	P

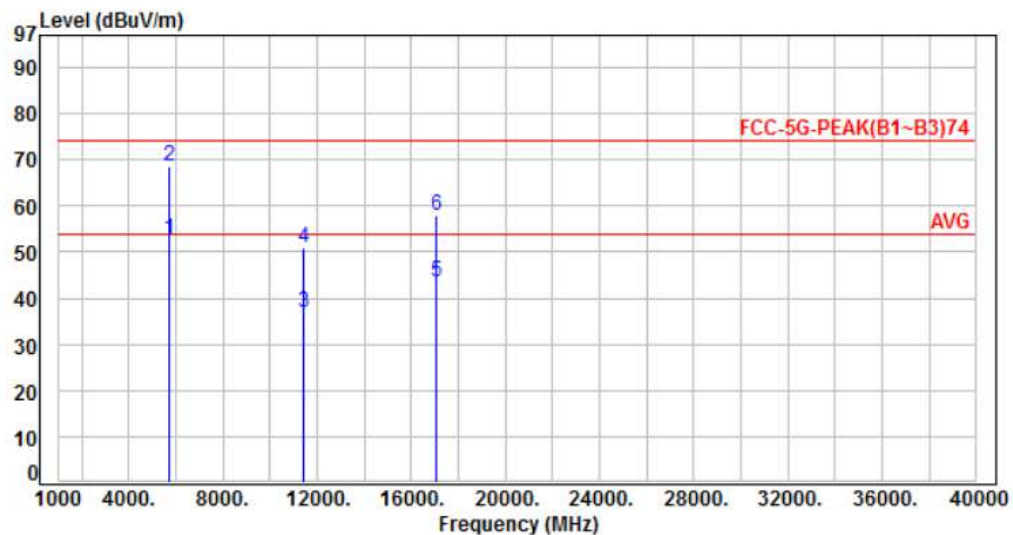
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 4, CH140	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV)	Limit (dBUV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5725.00	-5.80	58.38	52.58	54.00	-1.42	Average	258	186	P
2	5725.00	-5.80	74.40	68.60	74.00	-5.40	Peak	258	186	P
3	11400.00	1.94	34.97	36.91	54.00	-17.09	Average	133	257	P
4	11400.00	1.94	48.79	50.73	74.00	-23.27	Peak	133	257	P
5	17100.00	10.14	33.52	43.66	54.00	-10.34	Average	121	225	P
6	17100.00	10.14	47.95	58.09	74.00	-15.91	Peak	121	225	P

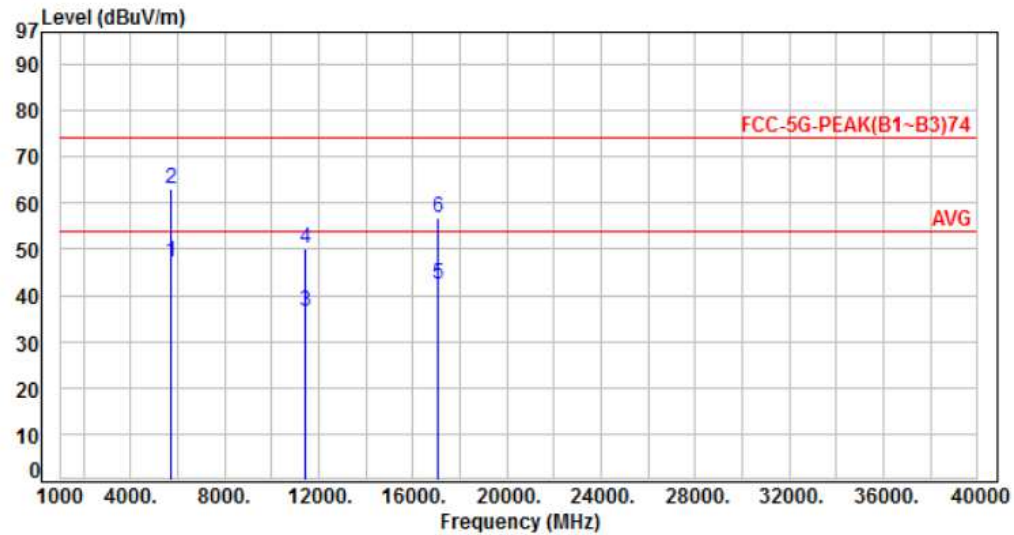
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 4, CH140	Temperature	: 24°C
Test Date	: Feb. 08, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5725.00	-5.80	52.92	47.12	54.00	-6.88	Average	138	225	P
2	5725.00	-5.80	68.76	62.96	74.00	-11.04	Peak	138	225	P
3	11400.00	1.94	34.52	36.46	54.00	-17.54	Average	121	153	P
4	11400.00	1.94	48.34	50.28	74.00	-23.72	Peak	121	153	P
5	17100.00	10.14	32.39	42.53	54.00	-11.47	Average	100	172	P
6	17100.00	10.14	46.61	56.75	74.00	-17.25	Peak	100	172	P

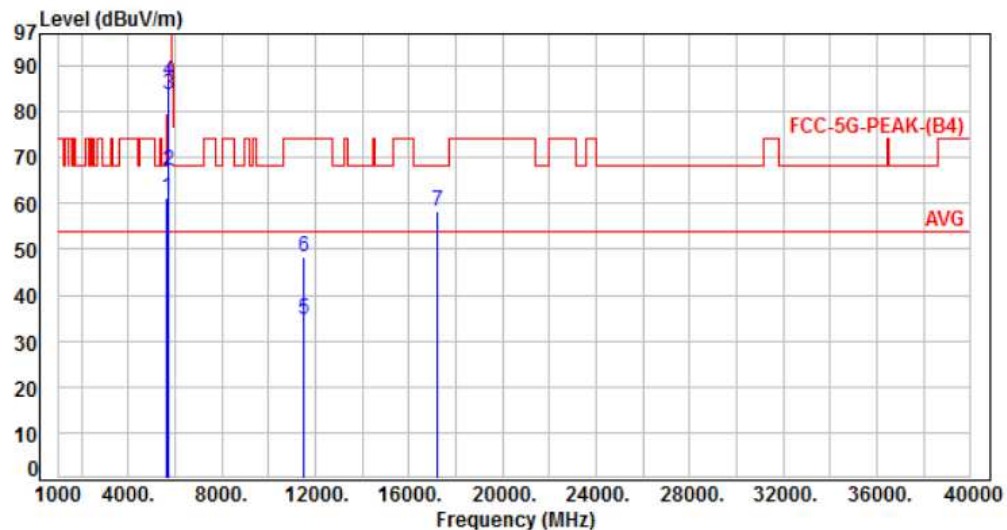
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 4, CH149	Temperature	: 24°C
Test Date	: Feb. 15, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	-5.77	67.03	61.26	68.20	-6.94	Peak	162	198	P
2	5700.00	-5.79	72.91	67.12	105.20	-38.08	Peak	162	198	P
3	5720.00	-5.80	89.37	83.57	110.80	-27.23	Peak	162	198	P
4	5725.00	-5.80	92.34	86.54	122.20	-35.66	Peak	162	198	P
5	11490.00	2.06	32.79	34.85	54.00	-19.15	Average	166	273	P
6	11490.00	2.06	46.36	48.42	74.00	-25.58	Peak	166	273	P
7	17235.00	10.97	47.31	58.28	68.20	-9.92	Peak	141	149	P

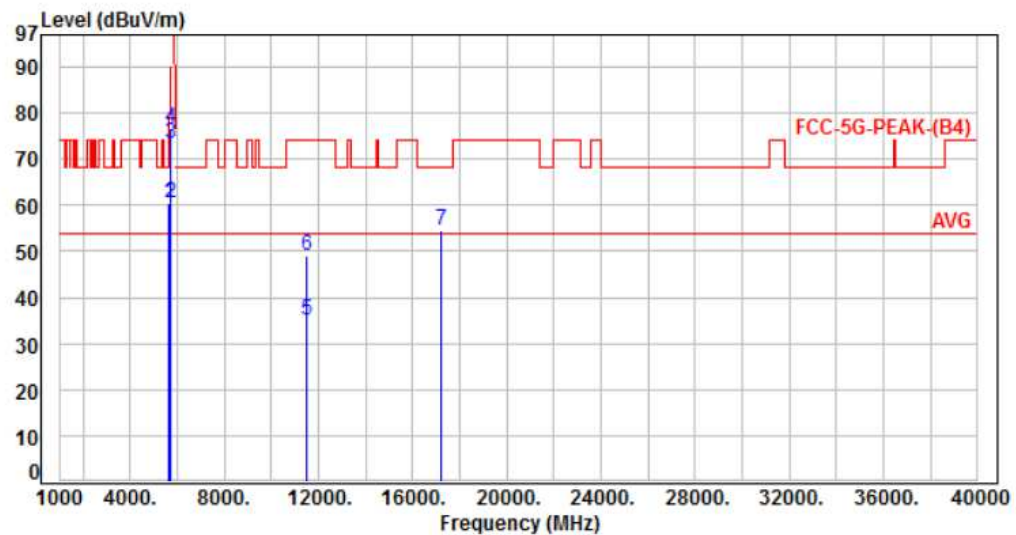
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 4, CH149	Temperature	: 24°C
Test Date	: Feb. 15, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV)	Limit (dBUV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	-5.77	66.13	60.36	68.20	-7.84	Peak	106	241	P
2	5700.00	-5.79	66.44	60.65	105.20	-44.55	Peak	106	241	P
3	5720.00	-5.80	79.38	73.58	110.80	-37.22	Peak	106	244	P
4	5725.00	-5.80	82.37	76.57	122.20	-45.63	Peak	106	244	P
5	11490.00	2.06	32.93	34.99	54.00	-19.01	Average	118	193	P
6	11490.00	2.06	46.82	48.88	74.00	-25.12	Peak	118	193	P
7	17235.00	10.97	43.76	54.73	68.20	-13.47	Peak	100	181	P

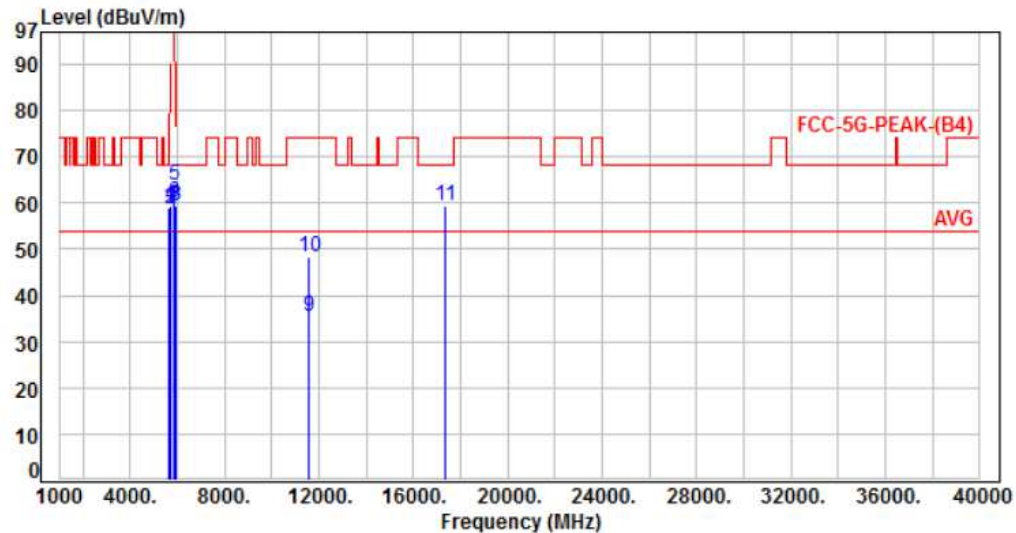
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 4, CH157	Temperature	: 24°C
Test Date	: Feb. 15, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	-5.77	64.72	58.95	68.20	-9.25	Peak	169	240	P
2	5700.00	-5.79	64.56	58.77	105.20	-46.43	Peak	169	240	P
3	5720.00	-5.80	64.53	58.73	110.80	-52.07	Peak	169	240	P
4	5725.00	-5.80	65.13	59.33	122.20	-62.87	Peak	169	240	P
5	5850.00	-5.84	69.78	63.94	122.20	-58.26	Peak	169	240	P
6	5855.00	-5.84	65.91	60.07	110.80	-50.73	Peak	169	240	P
7	5875.00	-5.85	64.98	59.13	105.20	-46.07	Peak	169	240	P
8	5925.00	-5.87	65.13	59.26	68.20	-8.94	Peak	169	240	P
9	11570.00	2.09	33.15	35.24	54.00	-18.76	Average	151	216	P
10	11570.00	2.09	46.13	48.22	74.00	-25.78	Peak	151	216	P
11	17355.00	11.72	47.66	59.38	68.20	-8.82	Peak	158	137	P

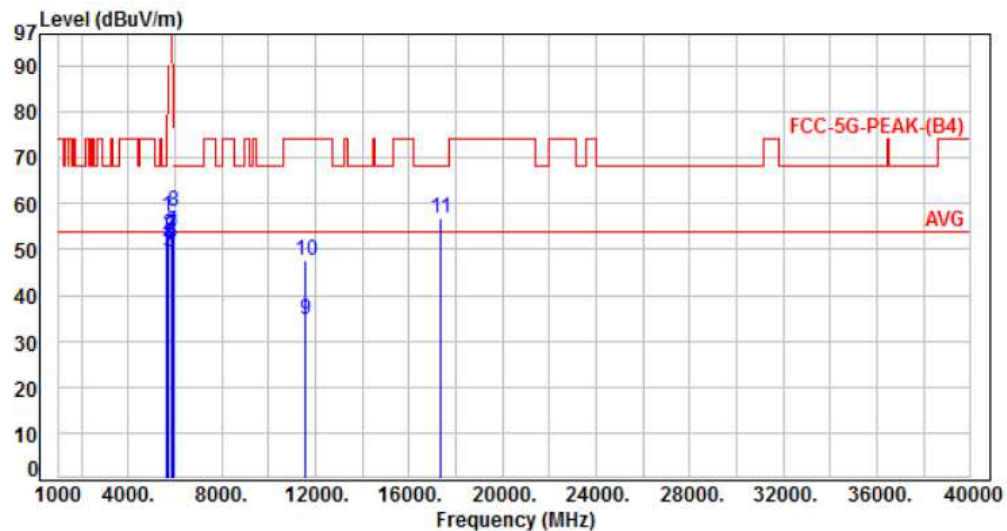
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 4, CH157	Temperature	: 24°C
Test Date	: Feb. 15, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	-5.77	63.06	57.29	68.20	-10.91	Peak	144	89	P
2	5700.00	-5.79	58.76	52.97	105.20	-52.23	Peak	144	89	P
3	5720.00	-5.80	55.22	49.42	110.80	-61.38	Peak	144	89	P
4	5725.00	-5.80	56.64	50.84	122.20	-71.36	Peak	144	89	P
5	5850.00	-5.84	59.68	53.84	122.20	-68.36	Peak	144	89	P
6	5855.00	-5.84	57.01	51.17	110.80	-59.63	Peak	144	89	P
7	5875.00	-5.85	58.86	53.01	105.20	-52.19	Peak	144	89	P
8	5925.00	-5.87	64.03	58.16	68.20	-10.04	Peak	144	89	P
9	11570.00	2.09	32.53	34.62	54.00	-19.38	Average	123	194	P
10	11570.00	2.09	45.39	47.48	74.00	-26.52	Peak	123	194	P
11	17355.00	11.72	45.13	56.85	68.20	-11.35	Peak	108	288	P

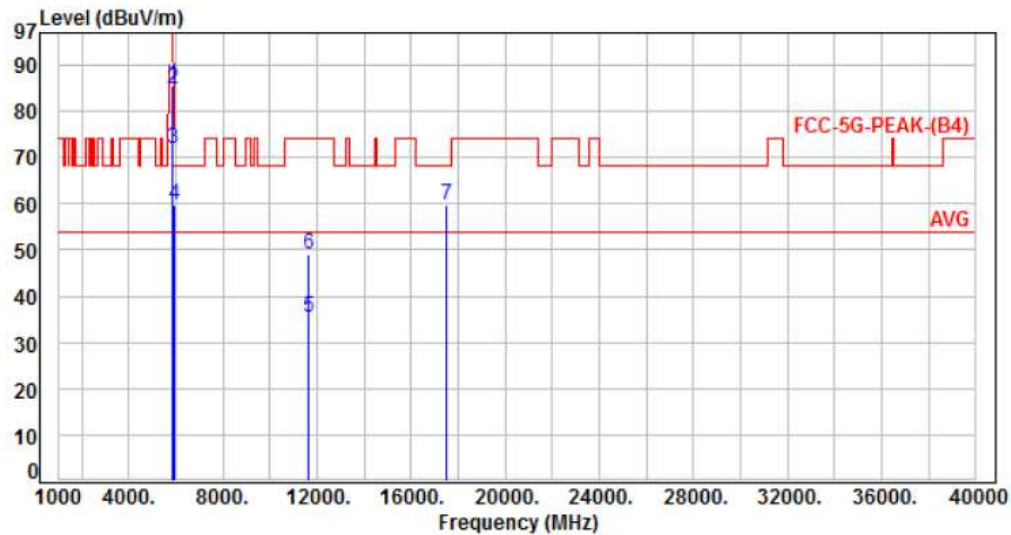
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 4, CH165	Temperature	: 24°C
Test Date	: Feb. 15, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5850.00	-5.84	91.58	85.74	122.20	-36.46	Peak	151	224	P
2	5855.00	-5.84	90.64	84.80	110.80	-26.00	Peak	151	224	P
3	5875.00	-5.85	77.83	71.98	105.20	-33.22	Peak	151	224	P
4	5925.00	-5.87	65.78	59.91	68.20	-8.29	Peak	151	224	P
5	11650.00	2.12	33.47	35.59	54.00	-18.41	Average	161	213	P
6	11650.00	2.12	46.83	48.95	74.00	-25.05	Peak	161	213	P
7	17475.00	12.46	47.12	59.58	68.20	-8.62	Peak	126	219	P

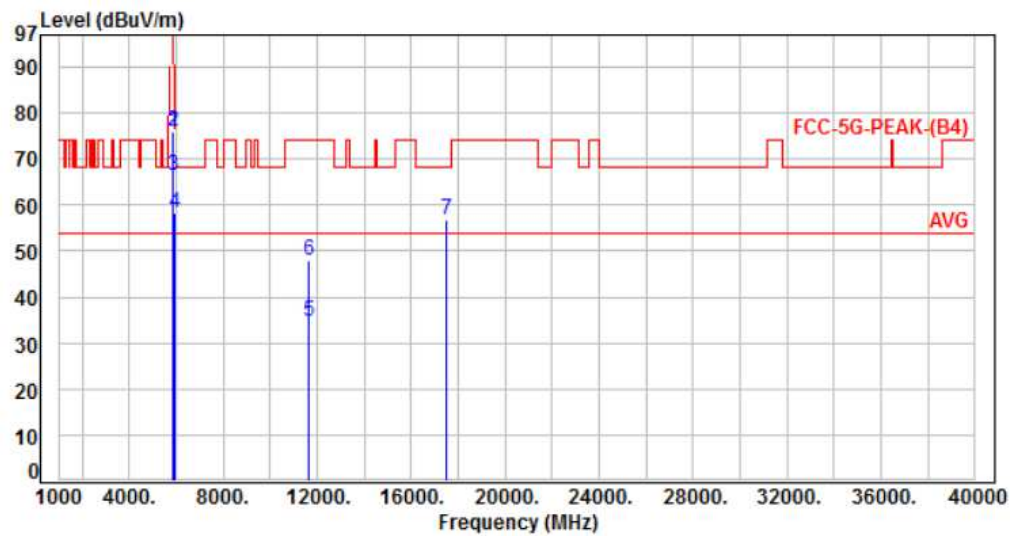
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 4, CH165	Temperature	: 24°C
Test Date	: Feb. 15, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5850.00	-5.84	81.78	75.94	122.20	-46.26	Peak	139	164	P
2	5855.00	-5.84	81.74	75.90	110.80	-34.90	Peak	139	164	P
3	5875.00	-5.85	72.07	66.22	105.20	-38.98	Peak	139	164	P
4	5925.00	-5.87	64.08	58.21	68.20	-9.99	Peak	139	164	P
5	11650.00	2.12	32.52	34.64	54.00	-19.36	Average	136	210	P
6	11650.00	2.12	45.72	47.84	74.00	-26.16	Peak	136	210	P
7	17475.00	12.46	44.42	56.88	68.20	-11.32	Peak	109	188	P

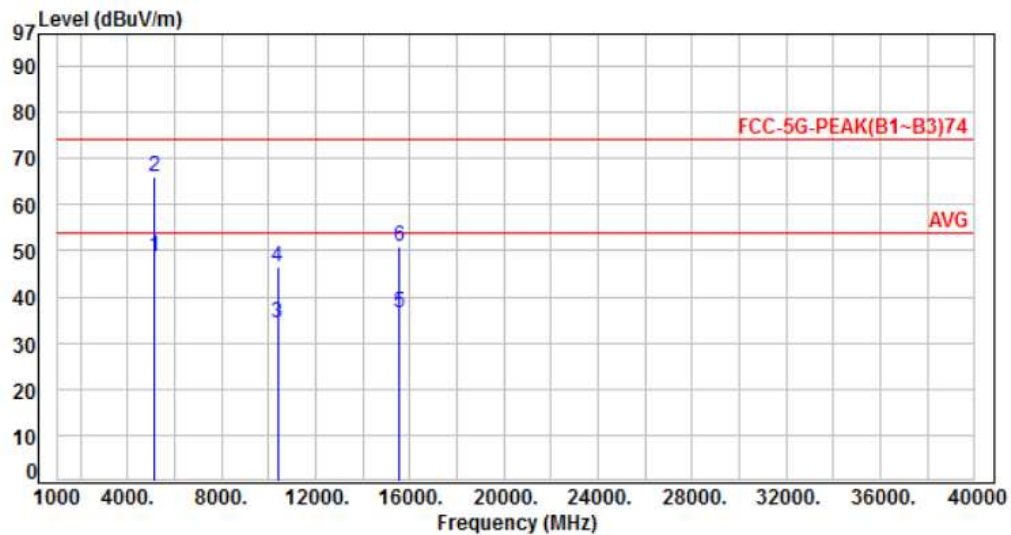
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 5, CH38	Temperature	: 24°C
Test Date	: Feb. 11, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-6.54	55.40	48.86	54.00	-5.14	Average	218	165	P
2	5150.00	-6.54	72.55	66.01	74.00	-7.99	Peak	218	165	P
3	10380.00	0.68	33.53	34.21	54.00	-19.79	Average	141	251	P
4	10380.00	0.68	45.83	46.51	74.00	-27.49	Peak	141	251	P
5	15570.00	5.37	31.26	36.63	54.00	-17.37	Average	157	231	P
6	15570.00	5.37	45.66	51.03	74.00	-22.97	Peak	157	231	P

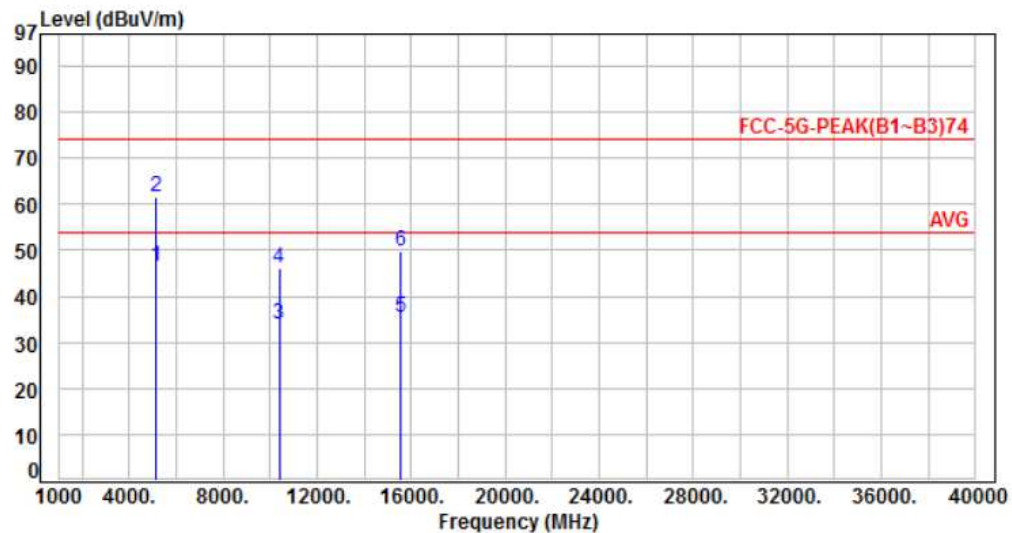
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 5, CH38	Temperature	: 24°C
Test Date	: Feb. 11, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-6.54	52.91	46.37	54.00	-7.63	Average	147	132	P
2	5150.00	-6.54	68.21	61.67	74.00	-12.33	Peak	147	132	P
3	10380.00	0.68	33.11	33.79	54.00	-20.21	Average	103	321	P
4	10380.00	0.68	45.50	46.18	74.00	-27.82	Peak	103	321	P
5	15570.00	5.37	30.18	35.55	54.00	-18.45	Average	100	289	P
6	15570.00	5.37	44.25	49.62	74.00	-24.38	Peak	100	289	P

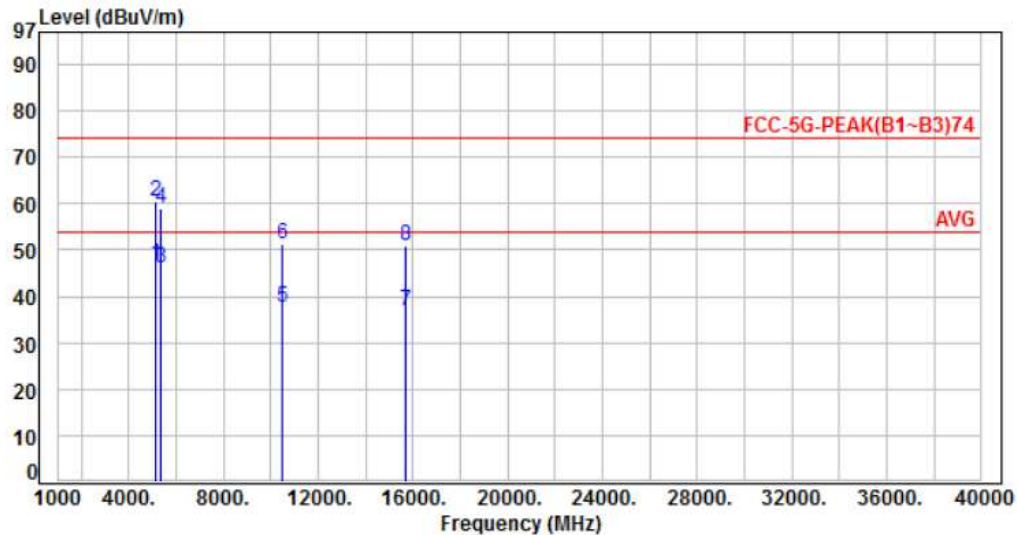
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 5, CH46	Temperature	: 24°C
Test Date	: Feb. 11, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-6.54	53.21	46.67	54.00	-7.33	Average	241	152	P
2	5150.00	-6.54	67.13	60.59	74.00	-13.41	Peak	241	152	P
3	5350.00	-6.06	52.29	46.23	54.00	-7.77	Average	241	152	P
4	5350.00	-6.06	65.09	59.03	74.00	-14.97	Peak	241	152	P
5	10460.00	0.72	36.84	37.56	54.00	-16.44	Average	154	231	P
6	10460.00	0.72	50.61	51.33	74.00	-22.67	Peak	154	231	P
7	15690.00	5.36	31.48	36.84	54.00	-17.16	Average	108	122	P
8	15690.00	5.36	45.37	50.73	74.00	-23.27	Peak	108	122	P

Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor