



FCC RADIO TEST REPORT

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Equipment	: Unified AC Selectable Dual-band PoE Access Point
Model No.	: DWL-3610AP
Trade Name	: D-Link
FCC ID.	: KA2WL3610APA1

I HEREBY CERTIFY THAT :

The sample was received on Apr. 07, 2017 and the testing was carried out on Apr. 13, 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:

Mark Liao / Assistant Manager

Tested by:

Spree Yei / Engineer

Laboratory Accreditation:

Cerpass Technology Corporation Test Laboratory





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History of this test report

Report No.	Issue Date	Description
TEF1607046	Apr. 17, 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



2. Test Configuration of Equipment under Test

2.1. Feature of Equipment

Equipment	Unified AC Selectable Dual-band PoE Access Point
Model No.	DWL-3610AP
Brand Name	D-Link
Product Description	Please refer to User's Manual.
AC ADAPTER	Adapter Brand: D-Link Model No.: AMS135-1201000FU I/P: AC 100-240V~, 50/60Hz, 0.5A ; O/P: DC 12V, 1.0A
Connecting I/O Port(s)	Please refer to User's Manual.
Frequency Range	802.11b/g/n/ac: 2412-2462 MHz 802.11a/an/ac: 5150MHz-5250MHz, 5725MHz -5850MHz
Modulation Type	OFDM, DSSS, FHSS
Data Rate	802.11b: 1, 2, 5.5, 11Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11n: MCS0 – MCS15, HT20/40 802.11a: 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11ac: MCS0 – MCS9, VHT20/40/80
Antenna Type/ gain	PIFA antenna 2412-2462MHz: ANT 1: 2.8dBi; ANT 2: 3dBi 5150MHz-5250MHz: ANT 1: 3dBi; ANT 2: 3dBi 5725MHz -5850MHz: ANT 1: 2.9dBi; ANT 2: 2.8dBi

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
2. Band 5G 802.11ac VHT20, VHT40 and VHT80 support beamforming.



2.2. Carrier Frequency of Channels

Band 1: 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 4: 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

- During testing, the interface cables and equipment positions were varied according to ANSI C63.4.
- The complete test system included Remote workstation and EUT for RF test. The Remote workstation included Notebook.
- An executive program, "Mtool 2.0.3.2" under WIN 7 was executed to transmit and receive data via WLAN.
- 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 5" generated the worst case, it was reported as the final data.
For radiated test (below 1GHz), caused "Test Mode 5" 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**

Device	Manufacturer	Model No.	Description
Remote workstation			
Notebook	DELL	Vostro 3560	Power Cable, Unshielding, 1.8m

Use Cable:

Cable	Quantity	Description
Network	1	Unshielding, 10m



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	2017/03/07	2018/03/06
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	2017/03/15	2018/03/14
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	2017/03/29	2018/03/28
EXA Signal Analyzer	KEYSIGHT	N9010A	MY54200207	2017/03/17	2018/03/16
Preamplifier	EM	EM330	60660	2017/02/25	2018/02/24
Preamplifier	EMC INSTRUMENTS	EMC051845SE	980333	2016/09/13	2017/09/12
Preamplifier	Agilent	8449B	3008A01954	2017/02/09	2018/02/08
Preamplifier	EMC INSTRUMENTS	EMC184045	980065	2016/11/04	2017/11/03
MXG MW Analog Signal Generator	KEYSIGHT	N5183A	MY50142931	2017/03/17	2018/03/16
Spectrum Analyzer	R&S	FSP40	100219	2016/09/01	2017/08/31
Bluetooth Tester	R&S	CBT	101133	2017/03/10	2018/03/09
Attenuator	KEYSIGHT	8491B	MY39250703	2017/03/07	2018/03/06
Rotary Attenuator	Agilent	8495B	MY42146680	2017/03/13	2018/03/12
Temp & Humi chamber	T-MACHINE	TMJ-9712	T-12-040111	2016/09/05	2017/09/04
Series Power Meter	Anritsu	ML2495A	1224005	2017/03/01	2018/02/28
Power Sensor	Anritsu	MA2411B	1207295	2017/03/01	2018/02/28
Cable	HUBER SUHNER	SUCOFLEX 102	28422/2	2017/02/25	2018/02/24
Cable	HUBER SUHNER	SUCOFLEX 102	28418/2	2017/02/25	2018/02/24
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	PIFA Antenna
Antenna Gain	2412-2462MHz: ANT 1: 2.8dBi; ANT 2: 3dBi 5150MHz-5250MHz: ANT 1: 3dBi; ANT 2: 3dBi 5725MHz -5850MHz: ANT 1: 2.9dBi; ANT 2: 2.8dBi

For Non-Beamforming

2412-2462MHz

For Power directional gain= $G_{ant} = 3 \text{ dBi}$

For PSD directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / NANT]$
= 5.91 (dBi)

5150MHz-5250MHz

For Power directional gain= $G_{ant} = 3 \text{ dBi}$

For PSD directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / NANT]$
= 6.01 (dBi)

5725MHz -5850MHz

For Power directional gain= $G_{ant} = 2.9 \text{ dBi}$

For PSD directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / NANT]$
= 5.86 (dBi)

For Beamforming

5150MHz-5250MHz

For Power directional gain= $G_{ant} = 6.01 \text{ dBi}$

For PSD directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / NANT]$
= 6.01 (dBi)

5725MHz -5850MHz

For Power directional gain= $G_{ant} = 5.86 \text{ dBi}$

For PSD directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / NANT]$
= 5.86 (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

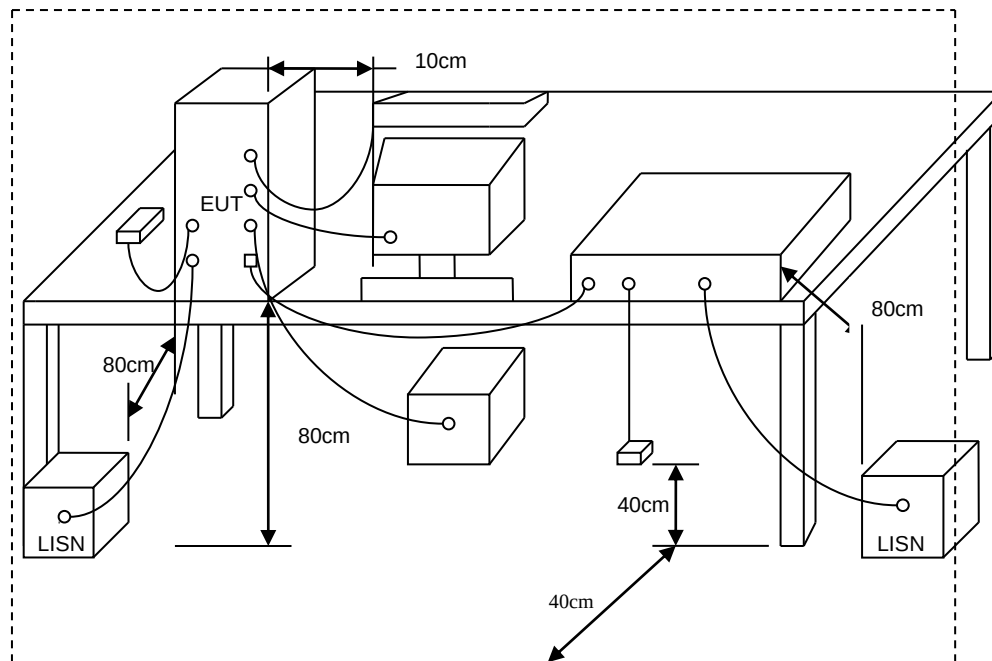
*Decreases with the logarithm of the frequency.

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.



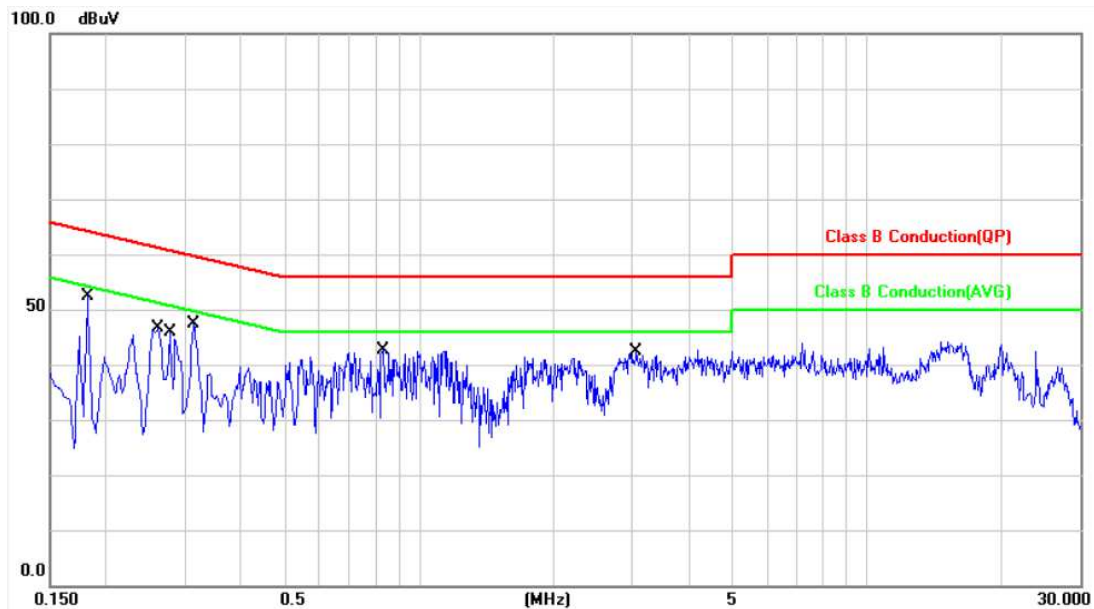
5.3. Typical Test Setup





5.4. Test Result and Data

Power	: AC 120V	Pol/Phase	: LINE
Test Mode	: Mode 5, Band 1	Temperature	: 23 °C
Test date	: Apr. 07, 2017	Humidity	: 48 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1819	9.95	38.33	48.28	64.39	-16.11	QP	P
2	0.1819	9.95	15.66	25.61	54.39	-28.78	AVG	P
3	0.2620	9.95	35.57	45.52	61.36	-15.84	QP	P
4	0.2620	9.95	30.14	40.09	51.36	-11.27	AVG	P
5	0.2779	9.95	29.41	39.36	60.88	-21.52	QP	P
6	0.2779	9.95	18.94	28.89	50.88	-21.99	AVG	P
7	0.3140	9.95	31.80	41.75	59.86	-18.11	QP	P
8	0.3140	9.95	27.34	37.29	49.86	-12.57	AVG	P
9	0.8340	9.98	31.13	41.11	56.00	-14.89	QP	P
10	0.8340	9.98	22.40	32.38	46.00	-13.62	AVG	P
11	3.0660	10.10	28.31	38.41	56.00	-17.59	QP	P
12	3.0660	10.10	19.38	29.48	46.00	-16.52	AVG	P

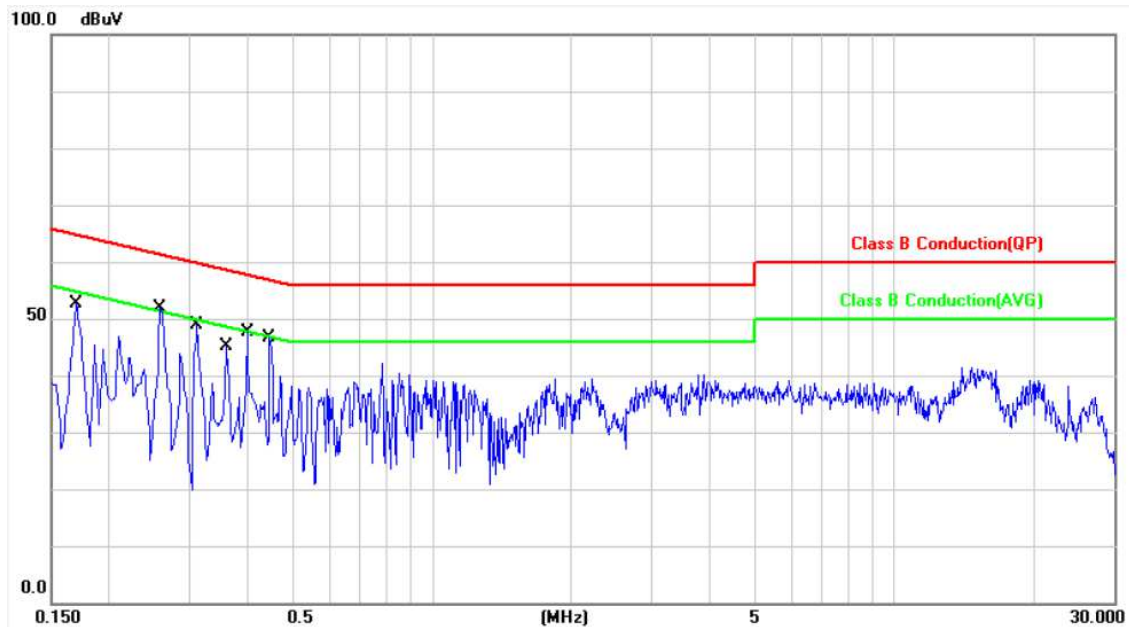
Note: Level = Reading + Factor

Margin = Level – Limit

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



Power	: AC 120V	Pol/Phase	: NEUTRAL
Test Mode	: Mode 5, Band 1	Temperature	: 23 °C
Test date	: Apr. 07, 2017	Humidity	: 48 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1700	9.95	38.46	48.41	64.96	-16.55	QP	P
2	0.1700	9.95	18.31	28.26	54.96	-26.70	AVG	P
3	0.2580	9.94	33.73	43.67	61.49	-17.82	QP	P
4	0.2580	9.94	30.19	40.13	51.49	-11.36	AVG	P
5	0.3100	9.94	27.93	37.87	59.97	-22.10	QP	P
6	0.3100	9.94	20.58	30.52	49.97	-19.45	AVG	P
7	0.3580	9.95	30.99	40.94	58.77	-17.83	QP	P
8	0.3580	9.95	11.74	21.69	48.77	-27.08	AVG	P
9	0.3980	9.95	28.65	38.60	57.89	-19.29	QP	P
10	0.3980	9.95	19.29	29.24	47.89	-18.65	AVG	P
11	0.4460	9.95	25.06	35.01	56.95	-21.94	QP	P
12	0.4460	9.95	11.65	21.60	46.95	-25.35	AVG	P

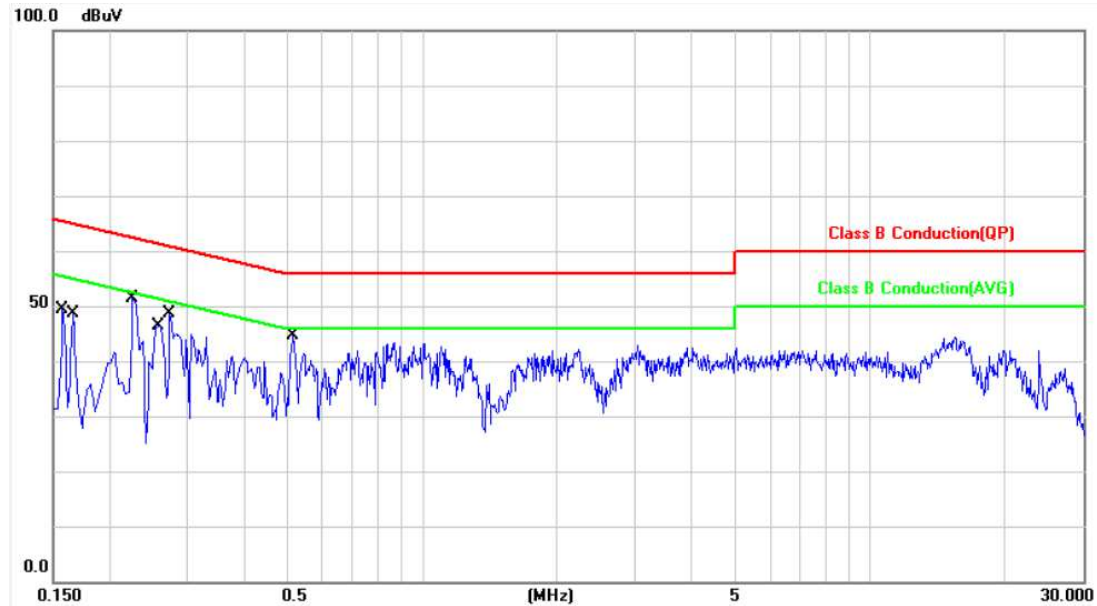
Note: Level = Reading + Factor

Margin = Level – Limit

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



Power	: AC 120V	Pol/Phase	: LINE
Test Mode	: Mode 5, Band 4	Temperature	: 23 °C
Test date	: Apr. 07, 2017	Humidity	: 48 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1580	9.95	35.10	45.05	65.56	-20.51	QP	P
2	0.1580	9.95	15.26	25.21	55.56	-30.35	AVG	P
3	0.1660	9.95	36.86	46.81	65.15	-18.34	QP	P
4	0.1660	9.95	15.88	25.83	55.15	-29.32	AVG	P
5	0.2260	9.95	32.44	42.39	62.59	-20.20	QP	P
6	0.2260	9.95	25.26	35.21	52.59	-17.38	AVG	P
7	0.2580	9.95	37.37	47.32	61.49	-14.17	QP	P
8	0.2580	9.95	34.14	44.09	51.49	-7.40	AVG	P
9	0.2740	9.95	31.34	41.29	60.99	-19.70	QP	P
10	0.2740	9.95	13.39	23.34	50.99	-27.65	AVG	P
11	0.5140	9.96	28.77	38.73	56.00	-17.27	QP	P
12	0.5140	9.96	23.55	33.51	46.00	-12.49	AVG	P

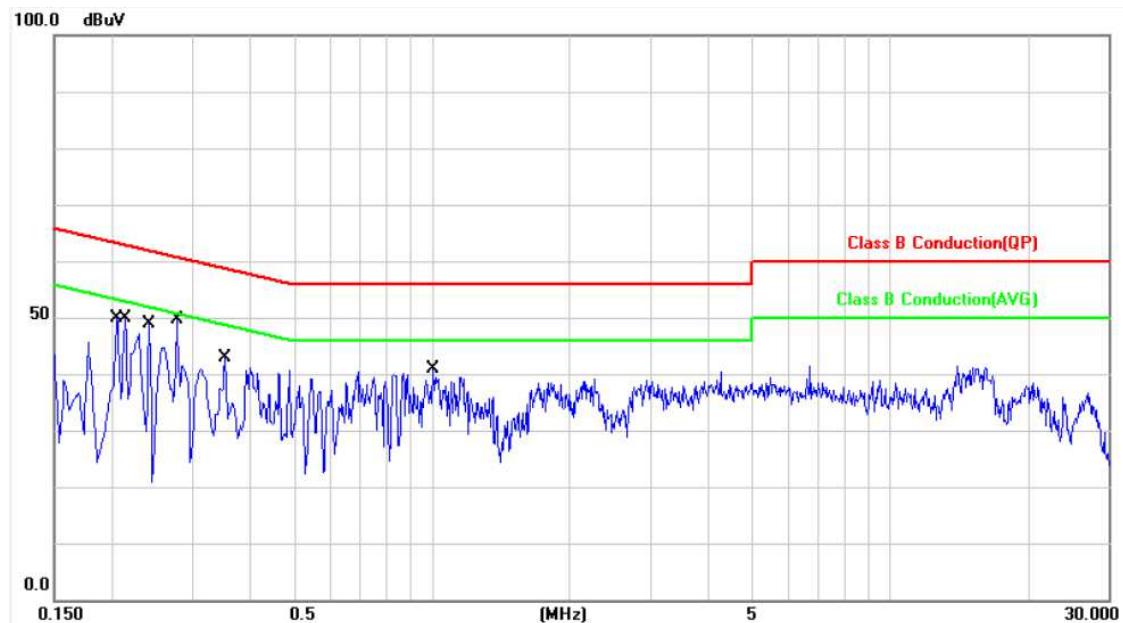
Note: Level = Reading + Factor

Margin = Level – Limit

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



Power	: AC 120V	Pol/Phase	: NEUTRAL
Test Mode	: Mode 5, Band 4	Temperature	: 23 °C
Test date	: Apr. 07, 2017	Humidity	: 48 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.2060	9.94	33.89	43.83	63.36	-19.53	QP	P
2	0.2060	9.94	19.99	29.93	53.36	-23.43	AVG	P
3	0.2140	9.94	32.58	42.52	63.04	-20.52	QP	P
4	0.2140	9.94	16.42	26.36	53.04	-26.68	AVG	P
5	0.2420	9.94	33.44	43.38	62.02	-18.64	QP	P
6	0.2420	9.94	11.85	21.79	52.02	-30.23	AVG	P
7	0.2779	9.94	27.37	37.31	60.88	-23.57	QP	P
8	0.2779	9.94	15.14	25.08	50.88	-25.80	AVG	P
9	0.3540	9.95	22.10	32.05	58.87	-26.82	QP	P
10	0.3540	9.95	12.07	22.02	48.87	-26.85	AVG	P
11	1.0100	9.98	26.96	36.94	56.00	-19.06	QP	P
12	1.0100	9.98	19.90	29.88	46.00	-16.12	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.

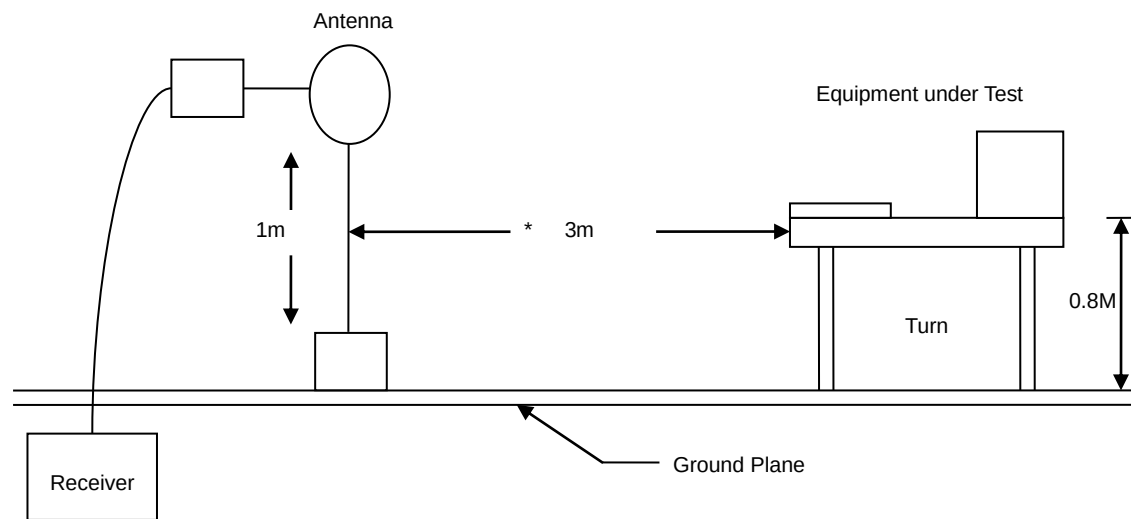
6.2. Test Procedures

- 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.

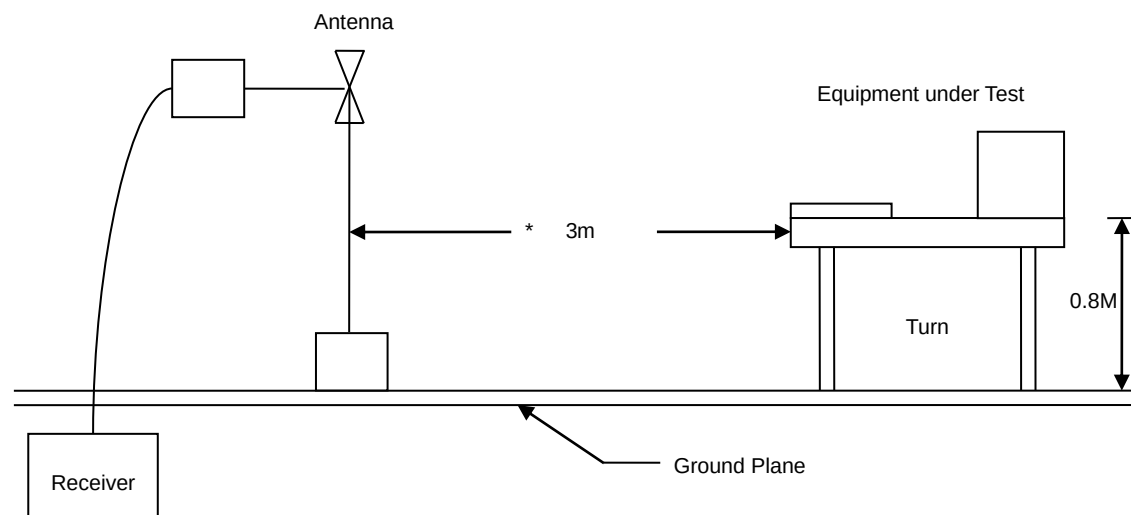


6.3. Typical Test Setup

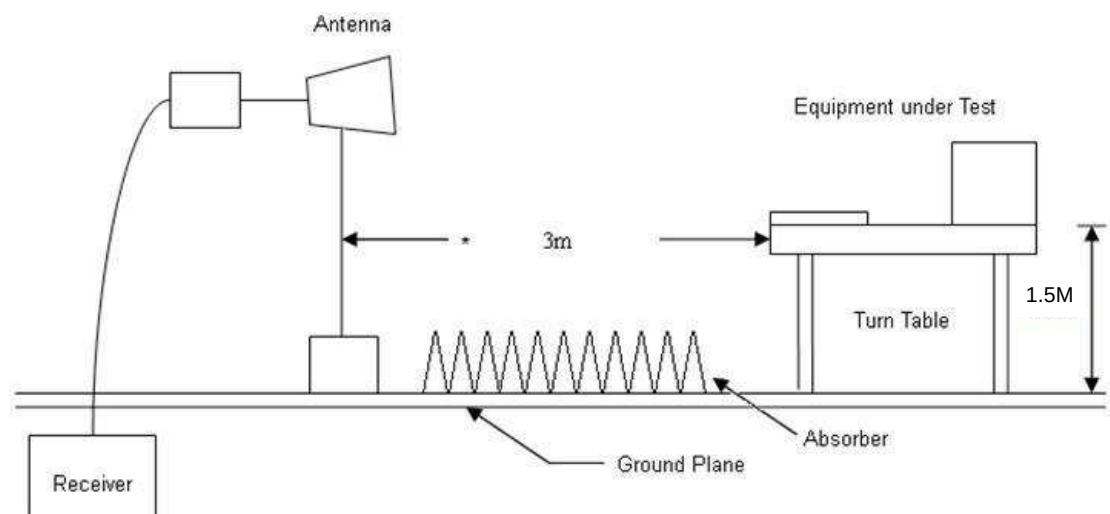
Below 30MHz test setup



30MHz- 1GHz Test Setup



Above 1GHz Test Setup



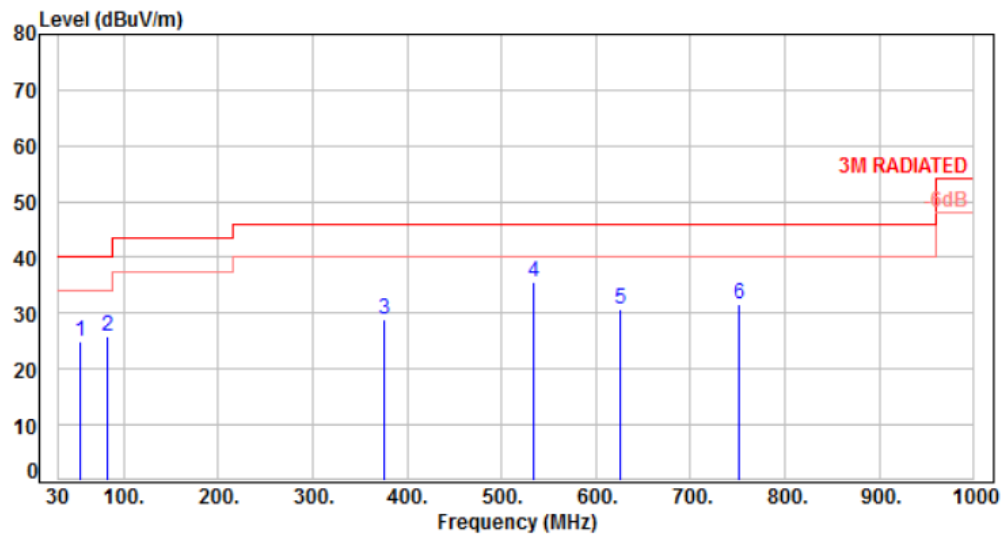


6.4. Test Result and Data (9kHz ~ 30MHz)

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 5, Band 1	Temperature	: 24 °C
Test Date	: Apr. 10, 2017	Humidity	: 63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	53.28	20.93	3.95	24.88	40.00	-15.12	QP	103	55	P
2	82.38	15.72	10.15	25.87	40.00	-14.13	QP	110	86	P
3	375.32	23.62	5.42	29.04	46.00	-16.96	Peak	100	0	P
4	533.43	26.84	8.90	35.74	46.00	-10.26	Peak	100	0	P
5	625.58	28.68	1.89	30.57	46.00	-15.43	Peak	100	0	P
6	750.71	30.60	1.03	31.63	46.00	-14.37	Peak	100	0	P

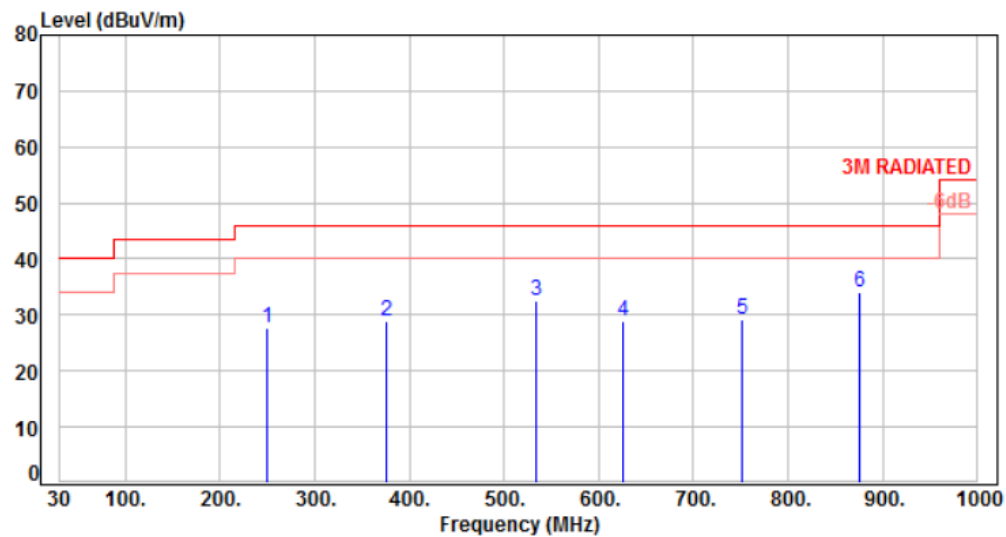
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 5, Band 1	Temperature	: 24 °C
Test Date	: Apr. 10, 2017	Humidity	: 63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	250.19	19.85	7.76	27.61	46.00	-18.39	Peak	100	0	P
2	375.32	23.62	5.38	29.00	46.00	-17.00	Peak	100	0	P
3	533.43	26.84	5.67	32.51	46.00	-13.49	Peak	100	0	P
4	625.58	28.68	0.12	28.80	46.00	-17.20	Peak	100	0	P
5	750.71	30.60	-1.41	29.19	46.00	-16.81	Peak	100	0	P
6	875.84	31.91	2.16	34.07	46.00	-11.93	Peak	100	0	P

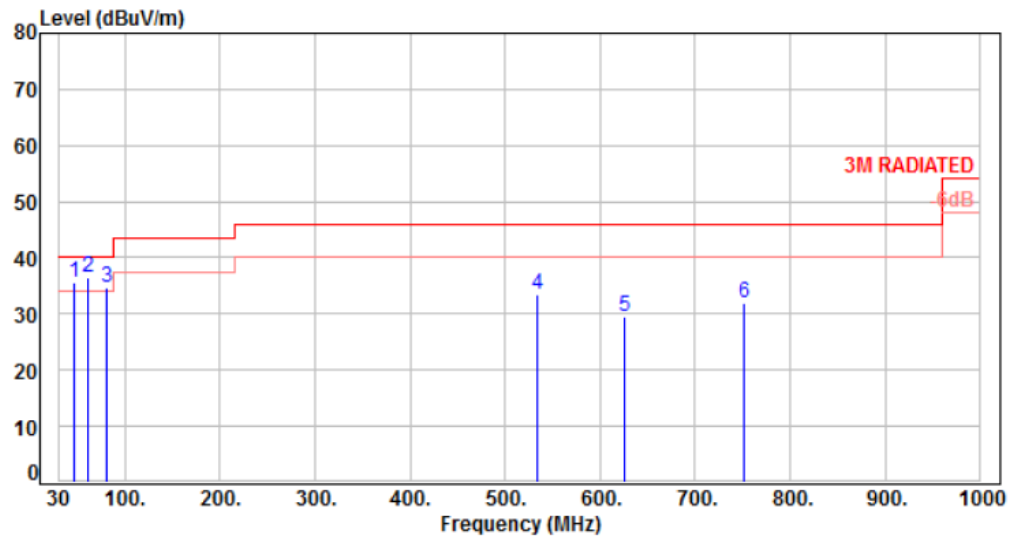
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 5, Band 4	Temperature	: 24 °C
Test Date	: Apr. 10, 2017	Humidity	: 63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	46.49	21.10	14.61	35.71	40.00	-4.29	Peak	100	0	P
2	61.04	20.20	16.21	36.41	40.00	-3.59	Peak	100	0	P
3	81.41	15.85	18.96	34.81	40.00	-5.19	Peak	100	0	P
4	533.43	26.84	6.62	33.46	46.00	-12.54	Peak	100	0	P
5	625.58	28.68	0.91	29.59	46.00	-16.41	Peak	100	0	P
6	750.71	30.60	1.38	31.98	46.00	-14.02	Peak	100	0	P

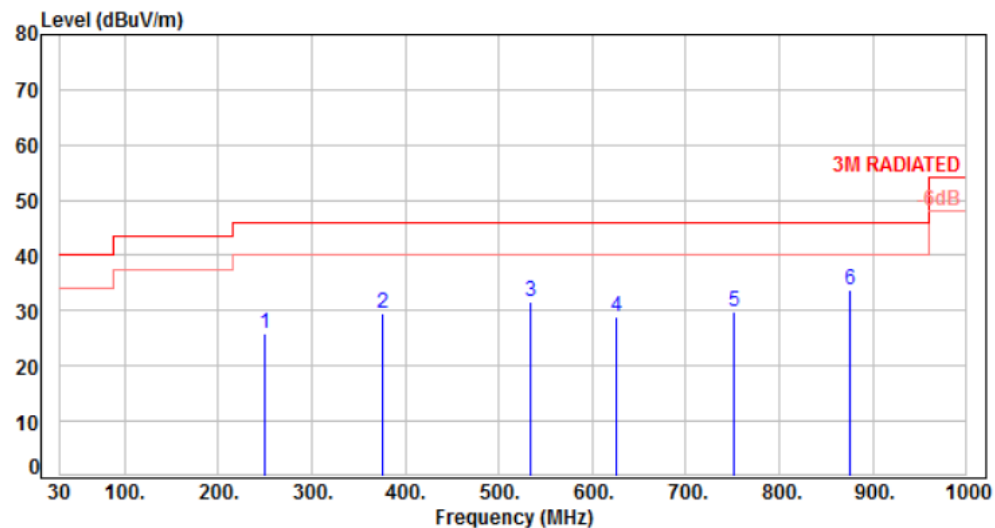
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 5, Band 4	Temperature	: 24 °C
Test Date	: Apr. 10, 2017	Humidity	: 63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	250.19	19.85	6.15	26.00	46.00	-20.00	Peak	100	0	P
2	375.32	23.62	5.98	29.60	46.00	-16.40	Peak	100	0	P
3	533.43	26.84	4.80	31.64	46.00	-14.36	Peak	100	0	P
4	625.58	28.68	0.33	29.01	46.00	-16.99	Peak	100	0	P
5	750.71	30.60	-0.90	29.70	46.00	-16.30	Peak	100	0	P
6	875.84	31.91	1.92	33.83	46.00	-12.17	Peak	100	0	P

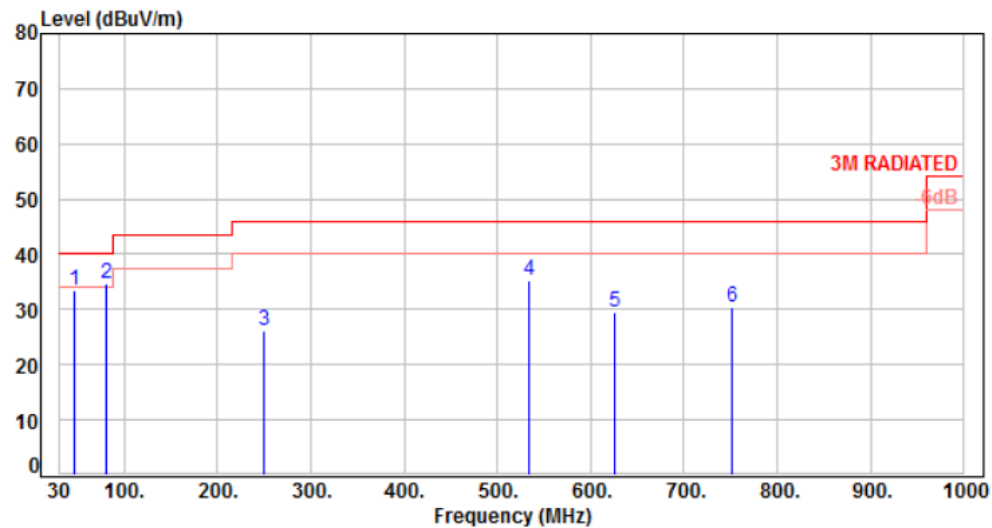
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: PoE	Pol/Phase	: VERTICAL
Test Mode	: Mode 5, Band 1	Temperature	: 24 °C
Test Date	: Apr. 10, 2017	Humidity	: 63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	47.46	21.12	12.21	33.33	40.00	-6.67	Peak	100	0	P
2	81.41	15.85	18.89	34.74	40.00	-5.26	Peak	100	0	P
3	250.19	19.85	6.23	26.08	46.00	-19.92	Peak	100	0	P
4	533.43	26.84	8.32	35.16	46.00	-10.84	Peak	100	0	P
5	625.58	28.68	0.68	29.36	46.00	-16.64	Peak	100	0	P
6	750.71	30.60	-0.22	30.38	46.00	-15.62	Peak	100	0	P

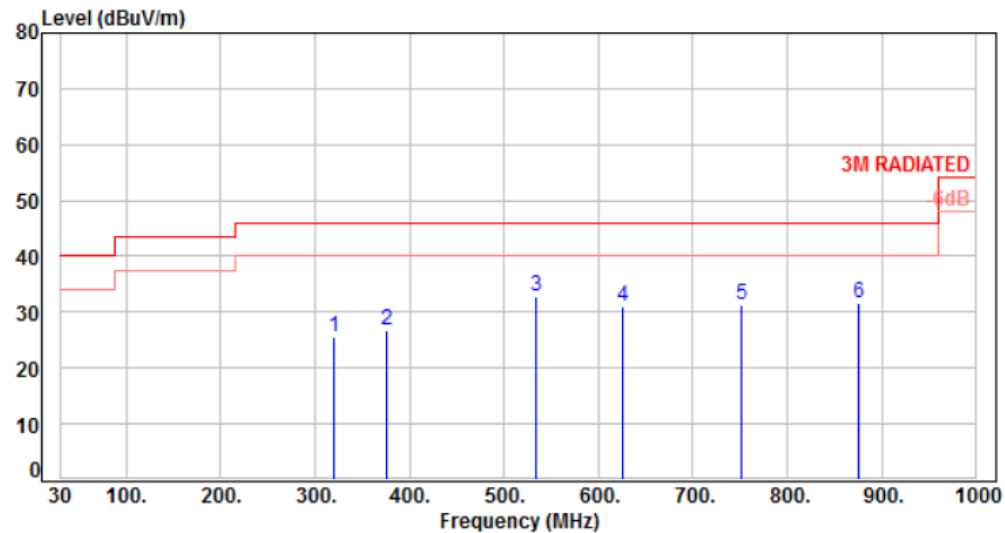
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: PoE	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 5, Band 1	Temperature	: 24 °C
Test Date	: Apr. 10, 2017	Humidity	: 63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	320.03	22.18	3.51	25.69	46.00	-20.31	Peak	100	0	P
2	375.32	23.62	3.07	26.69	46.00	-19.31	Peak	100	0	P
3	533.43	26.84	5.93	32.77	46.00	-13.23	Peak	100	0	P
4	625.58	28.68	2.29	30.97	46.00	-15.03	Peak	100	0	P
5	750.71	30.60	0.85	31.45	46.00	-14.55	Peak	100	0	P
6	875.84	31.91	-0.37	31.54	46.00	-14.46	Peak	100	0	P

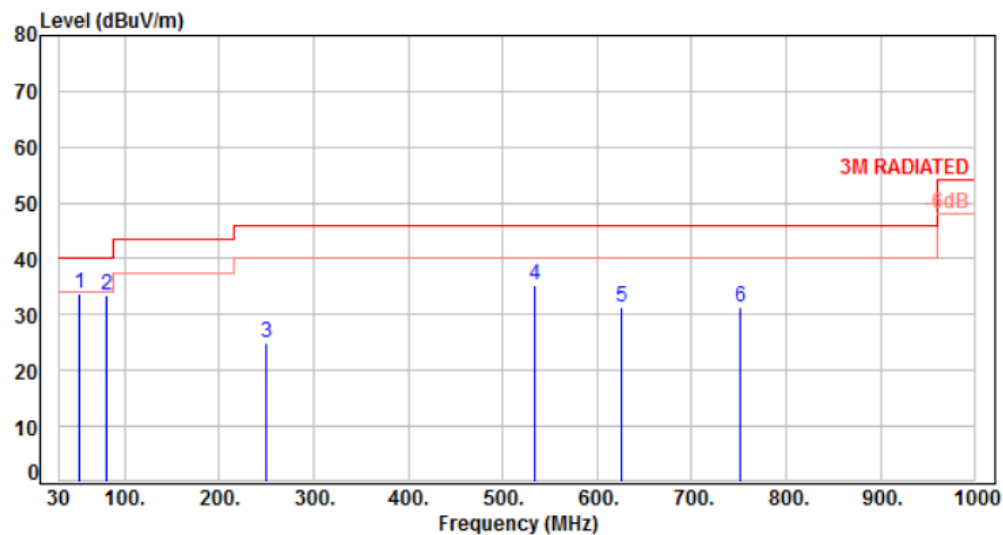
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: PoE	Pol/Phase	: VERTICAL
Test Mode	: Mode 5, Band 4	Temperature	: 24 °C
Test Date	: Apr. 10, 2017	Humidity	: 63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	51.34	21.07	12.60	33.67	40.00	-6.33	Peak	100	0	P
2	80.44	15.97	17.36	33.33	40.00	-6.67	Peak	100	0	P
3	250.19	19.85	5.24	25.09	46.00	-20.91	Peak	100	0	P
4	533.43	26.84	8.49	35.33	46.00	-10.67	Peak	100	0	P
5	625.58	28.68	2.56	31.24	46.00	-14.76	Peak	100	0	P
6	750.71	30.60	0.64	31.24	46.00	-14.76	Peak	100	0	P

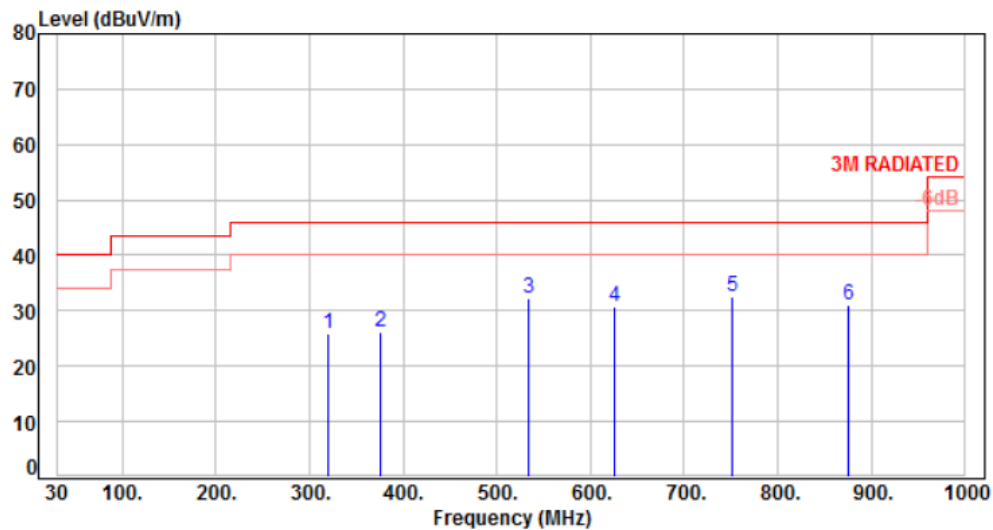
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	PoE	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 5, Band 4	Temperature	:	24 °C
Test Date	:	Apr. 10, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV)	Limit (dBUV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	320.03	22.18	3.56	25.74	46.00	-20.26	Peak	100	0	P
2	375.32	23.62	2.58	26.20	46.00	-19.80	Peak	100	0	P
3	533.43	26.84	5.32	32.16	46.00	-13.84	Peak	100	0	P
4	625.58	28.68	2.10	30.78	46.00	-15.22	Peak	100	0	P
5	750.71	30.60	1.90	32.50	46.00	-13.50	Peak	100	0	P
6	875.84	31.91	-0.79	31.12	46.00	-14.88	Peak	100	0	P

Note: Level=Reading+Factor

Margin=Level-Limit

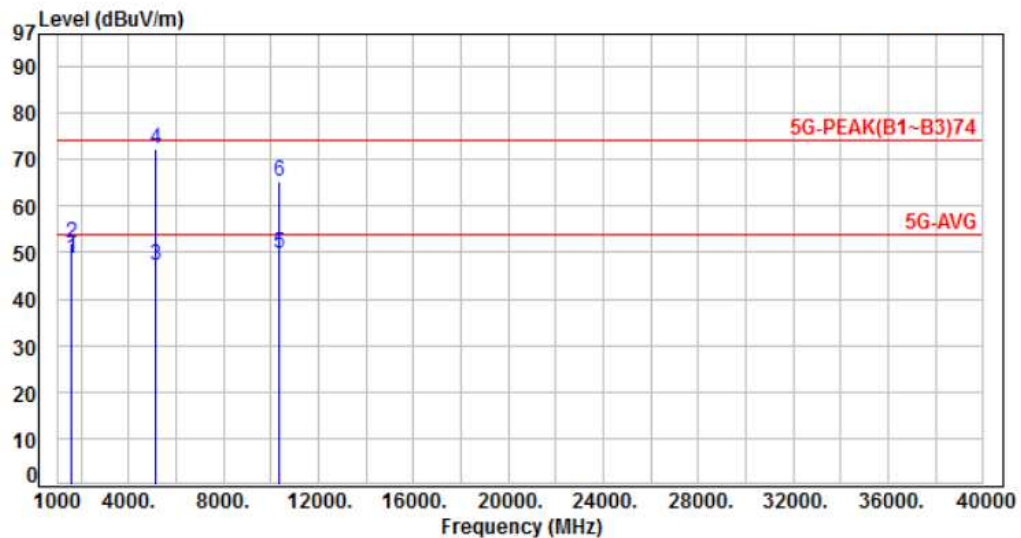
Factor=Antenna Factor + cable loss - Amplifier Factor



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

6.6.1. Test Result and Data of Non Beamforming

Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, CH36	Temperature	: 24°C
Test Date	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	1600.00	-4.92	53.72	48.80	54.00	-5.20	Average	282	177	P
2	1600.00	-4.92	56.92	52.00	74.00	-22.00	Peak	282	177	P
3	5150.00	9.14	38.02	47.16	54.00	-6.84	Average	327	359	P
4	5150.00	9.14	63.05	72.19	74.00	-1.81	Peak	327	359	P
5	10360.00	17.55	32.29	49.84	54.00	-4.16	Average	168	110	P
6	10360.00	17.55	47.82	65.37	74.00	-8.63	Peak	168	110	P

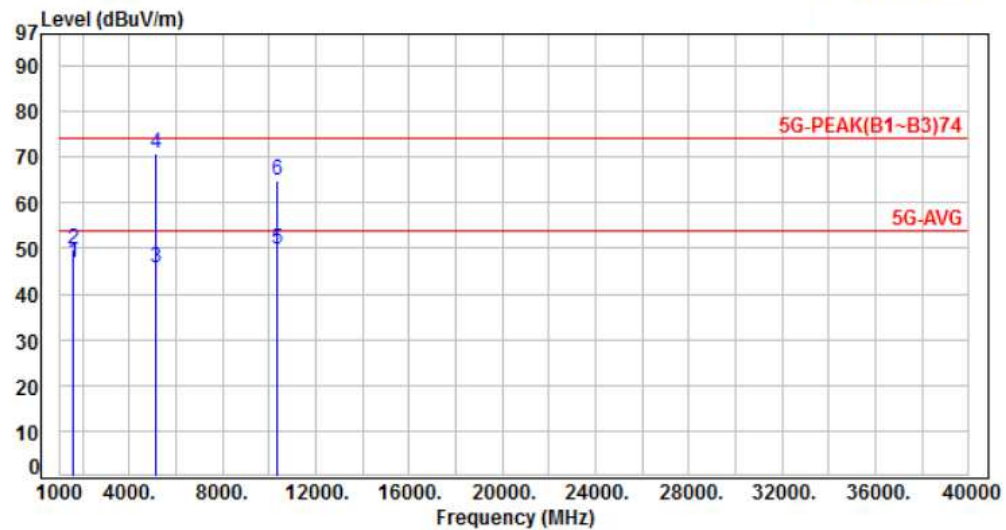
Note: Level=Reading+Factor

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	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	1600.00	-4.92	51.69	46.77	54.00	-7.23	Average	276	210	P
2	1600.00	-4.92	54.85	49.93	74.00	-24.07	Peak	276	210	P
3	5150.00	9.14	36.46	45.60	54.00	-8.40	Average	141	277	P
4	5150.00	9.14	61.75	70.89	74.00	-3.11	Peak	141	277	P
5	10360.00	17.55	32.22	49.77	54.00	-4.23	Average	186	228	P
6	10360.00	17.55	47.43	64.98	74.00	-9.02	Peak	186	228	P

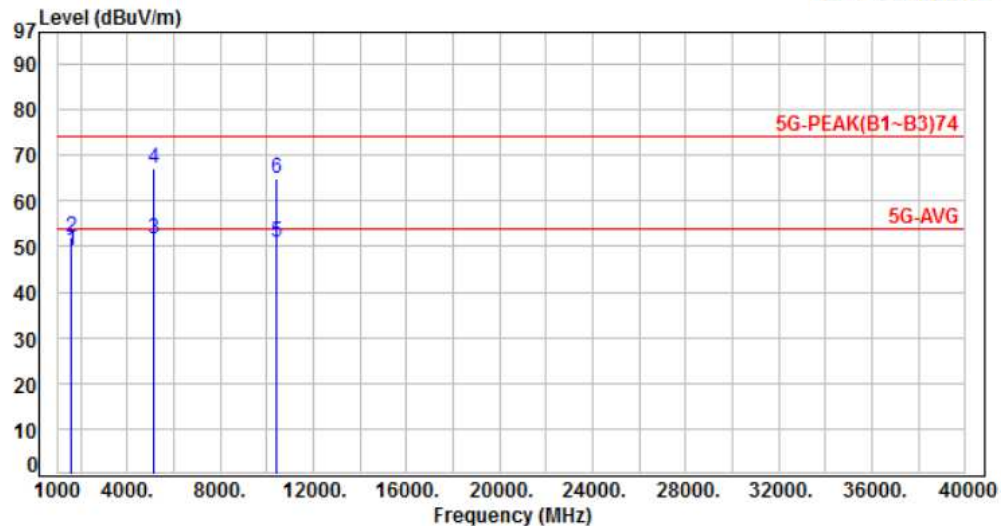
Note: Level=Reading+Factor

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	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	1600.00	-4.92	53.85	48.93	54.00	-5.07	Average	274	180	P
2	1600.00	-4.92	57.05	52.13	74.00	-21.87	Peak	274	180	P
3	5150.00	9.14	42.67	51.81	54.00	-2.19	Average	396	329	P
4	5150.00	9.14	58.12	67.26	74.00	-6.74	Peak	396	329	P
5	10440.00	17.65	33.15	50.80	54.00	-3.20	Average	225	326	P
6	10440.00	17.65	47.29	64.94	74.00	-9.06	Peak	225	326	P

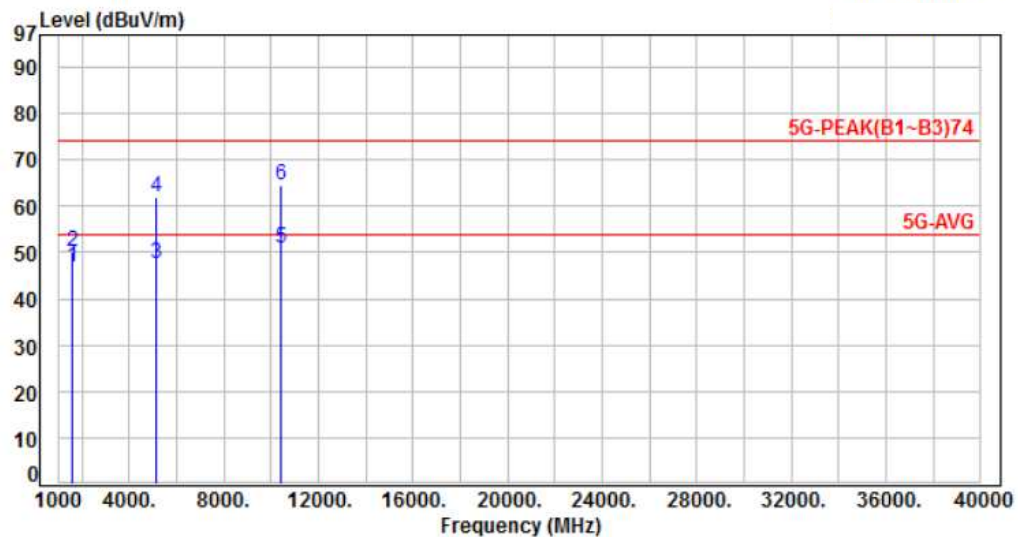
Note: Level=Reading+Factor

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	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	1600.00	-4.92	51.83	46.91	54.00	-7.09	Average	280	202	P
2	1600.00	-4.92	54.96	50.04	74.00	-23.96	Peak	280	202	P
3	5150.00	9.14	38.30	47.44	54.00	-6.56	Average	351	265	P
4	5150.00	9.14	52.91	62.05	74.00	-11.95	Peak	351	265	P
5	10440.00	17.65	33.13	50.78	54.00	-3.22	Average	327	162	P
6	10440.00	17.65	47.04	64.69	74.00	-9.31	Peak	327	162	P

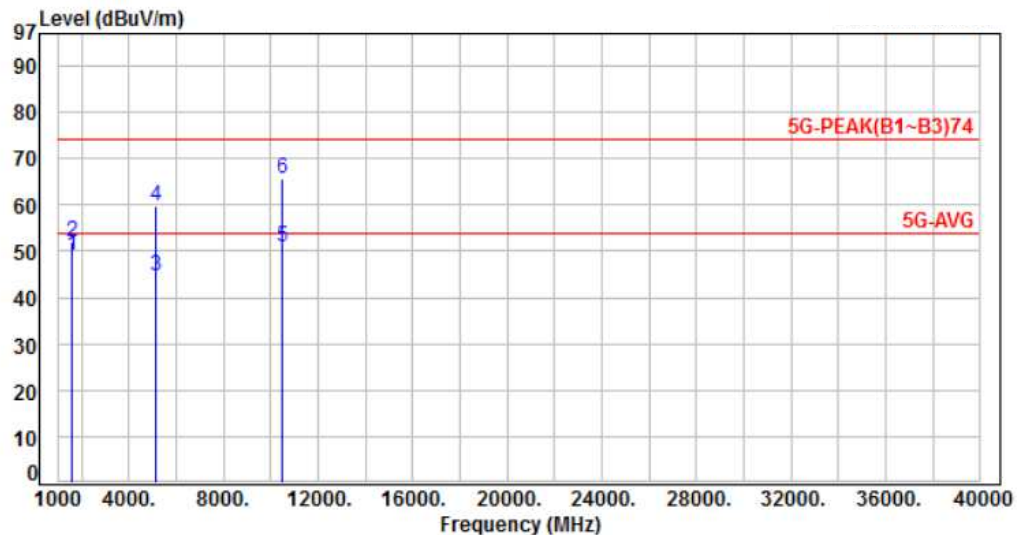
Note: Level=Reading+Factor

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	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	1600.00	-4.92	53.91	48.99	54.00	-5.01	Average	281	175	P
2	1600.00	-4.92	57.03	52.11	74.00	-21.89	Peak	281	175	P
3	5150.00	9.14	35.62	44.76	54.00	-9.24	Average	284	326	P
4	5150.00	9.14	50.79	59.93	74.00	-14.07	Peak	284	326	P
5	10480.00	17.71	33.19	50.90	54.00	-3.10	Average	173	256	P
6	10480.00	17.71	47.86	65.57	74.00	-8.43	Peak	173	256	P

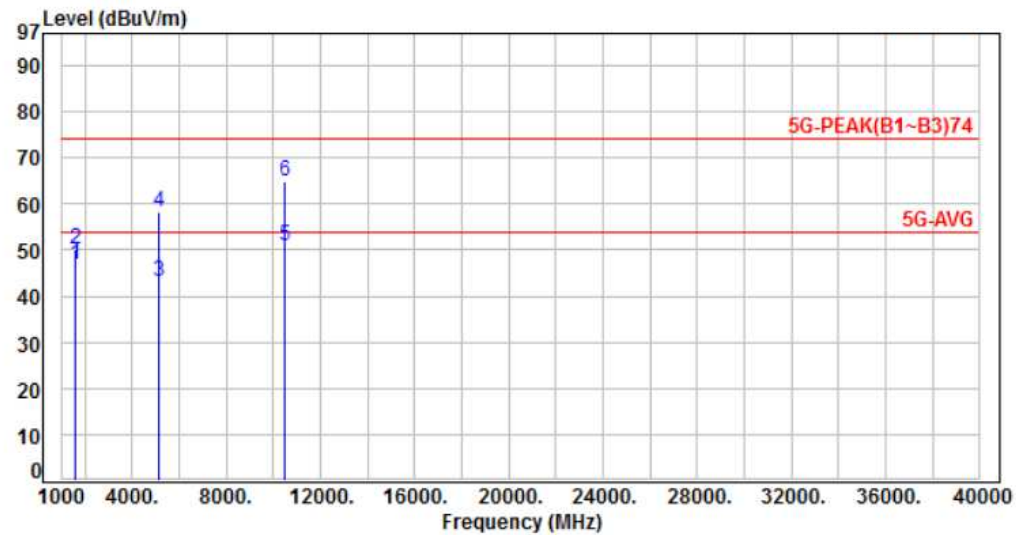
Note: Level=Reading+Factor

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	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	1600.00	-4.92	51.75	46.83	54.00	-7.17	Average	273	214	P
2	1600.00	-4.92	55.02	50.10	74.00	-23.90	Peak	273	214	P
3	5150.00	9.14	34.05	43.19	54.00	-10.81	Average	230	254	P
4	5150.00	9.14	49.13	58.27	74.00	-15.73	Peak	230	254	P
5	10480.00	17.71	33.10	50.81	54.00	-3.19	Average	218	192	P
6	10480.00	17.71	47.03	64.74	74.00	-9.26	Peak	218	192	P

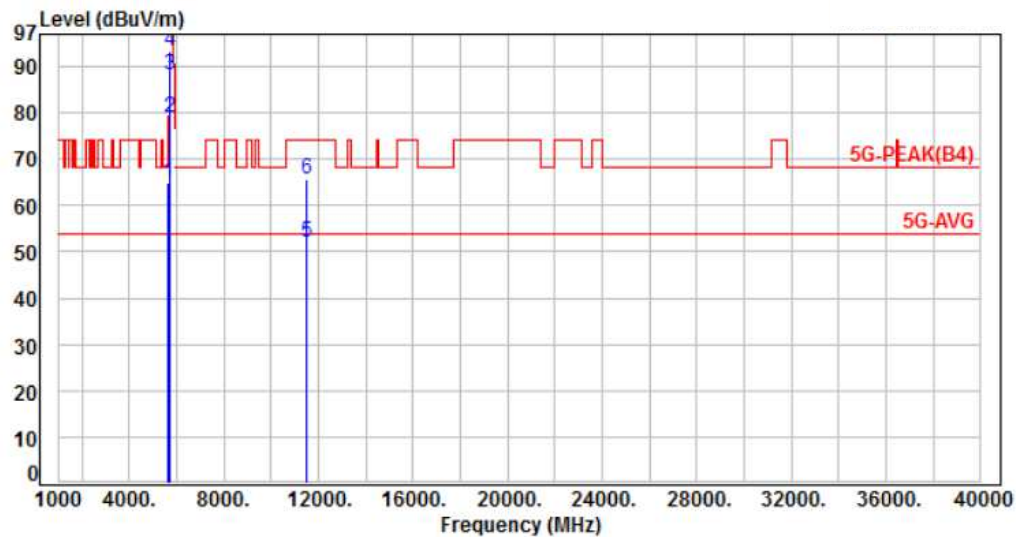
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, CH149	Temperature	: 24°C
Test Date	: Apr. 10, 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	9.99	54.98	64.97	68.20	-3.23	Peak	351	34	P
2	5700.00	10.02	68.95	78.97	105.20	-26.23	Peak	351	34	P
3	5720.00	10.03	78.08	88.11	110.80	-22.69	Peak	351	34	P
4	5725.00	10.03	83.30	93.33	122.20	-28.87	Peak	351	34	P
5	11490.00	19.24	32.63	51.87	54.00	-2.13	Average	322	258	P
6	11490.00	19.24	46.36	65.60	74.00	-8.40	Peak	322	258	P

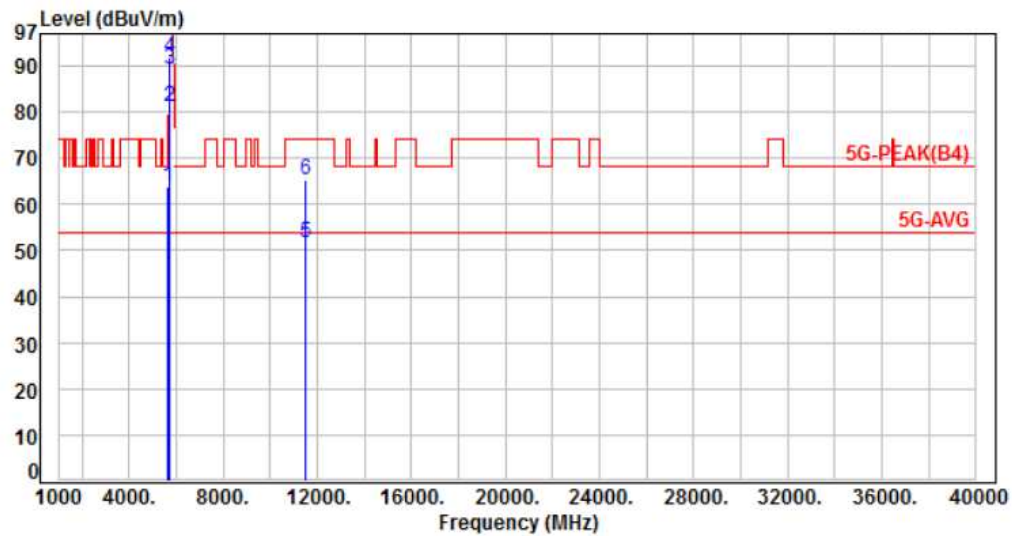
Note: Level=Reading+Factor

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	: Apr. 10, 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	9.99	53.92	63.91	68.20	-4.29	Peak	236	286	P
2	5700.00	10.02	71.04	81.06	105.20	-24.14	Peak	236	286	P
3	5720.00	10.03	79.09	89.12	110.80	-21.68	Peak	236	286	P
4	5725.00	10.03	81.71	91.74	122.20	-30.46	Peak	236	286	P
5	11490.00	19.24	32.30	51.54	54.00	-2.46	Average	386	293	P
6	11490.00	19.24	46.17	65.41	74.00	-8.59	Peak	386	293	P

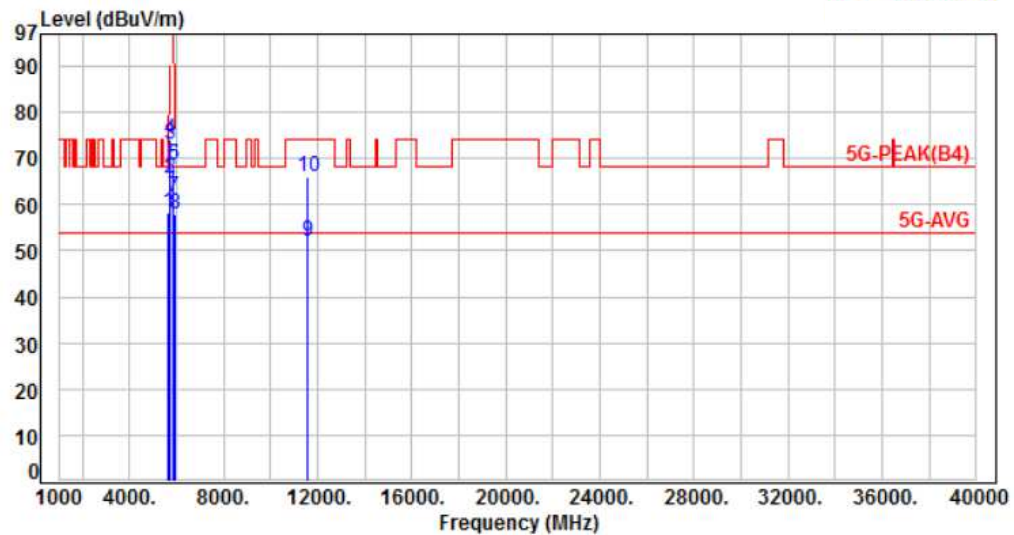
Note: Level=Reading+Factor

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	: Apr. 10, 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	9.99	48.30	58.29	68.20	-9.91	Peak	360	321	P
2	5700.00	10.02	55.69	65.71	105.20	-39.49	Peak	360	321	P
3	5720.00	10.03	62.97	73.00	110.80	-37.80	Peak	360	321	P
4	5720.00	10.03	64.11	74.14	110.80	-36.66	Peak	360	321	P
5	5850.00	10.12	58.60	68.72	122.20	-53.48	Peak	360	321	P
6	5855.00	10.12	58.64	68.76	110.80	-42.04	Peak	360	321	P
7	5875.00	10.13	51.57	61.70	105.20	-43.50	Peak	360	321	P
8	5925.00	10.16	47.74	57.90	68.20	-10.30	Peak	360	321	P
9	11570.00	19.33	32.63	51.96	54.00	-2.04	Average	295	198	P
10	11570.00	19.33	46.75	66.08	74.00	-7.92	Peak	295	198	P

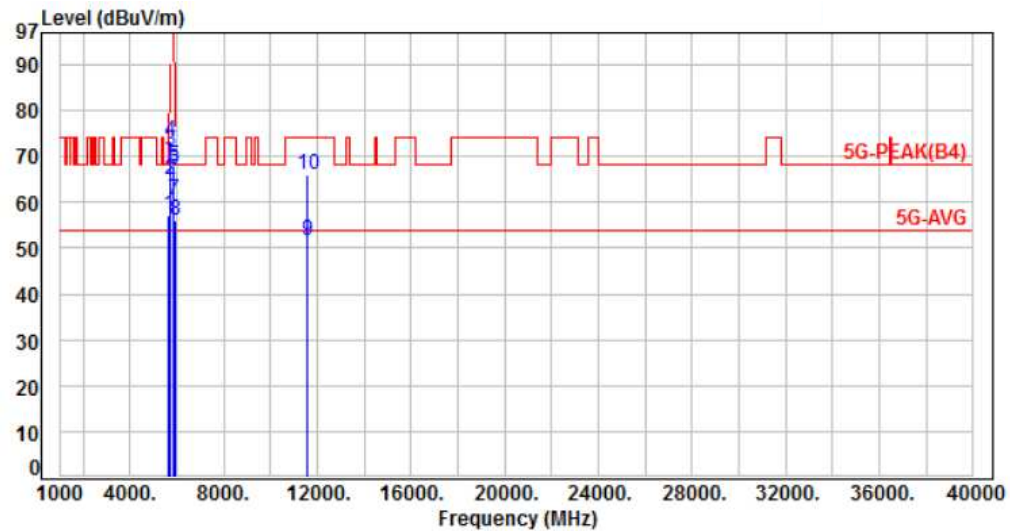
Note: Level=Reading+Factor

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	: Apr. 10, 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	9.99	47.24	57.23	68.20	-10.97	Peak	315	216	P
2	5700.00	10.02	54.97	64.99	105.20	-40.21	Peak	315	216	P
3	5720.00	10.03	61.34	71.37	110.80	-39.43	Peak	315	216	P
4	5720.00	10.03	63.26	73.29	110.80	-37.51	Peak	315	216	P
5	5850.00	10.12	57.93	68.05	122.20	-54.15	Peak	315	216	P
6	5855.00	10.12	56.99	67.11	110.80	-43.69	Peak	315	216	P
7	5875.00	10.13	50.22	60.35	105.20	-44.85	Peak	315	216	P
8	5925.00	10.16	46.03	56.19	68.20	-12.01	Peak	315	216	P
9	11570.00	19.33	32.44	51.77	54.00	-2.23	Average	328	342	P
10	11570.00	19.33	46.54	65.87	74.00	-8.13	Peak	328	342	P

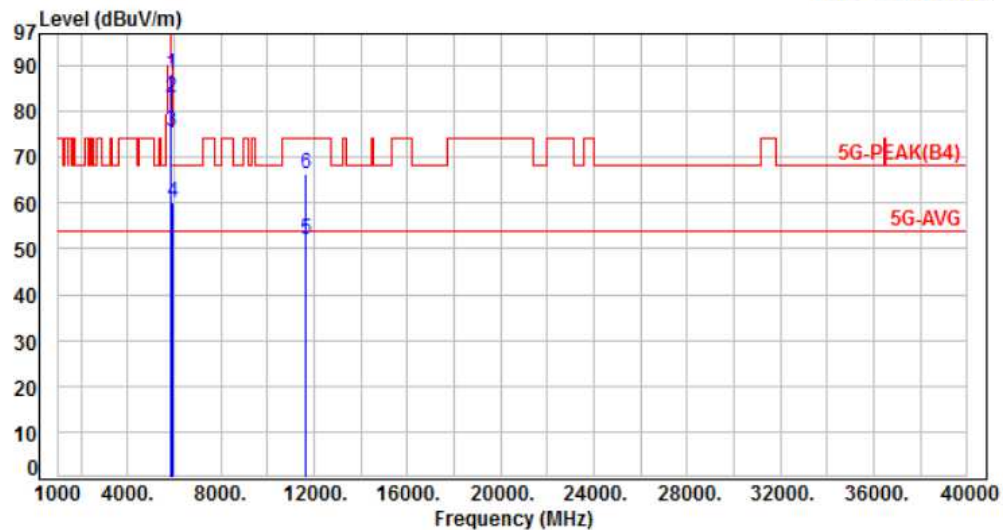
Note: Level=Reading+Factor

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	: Apr. 10, 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	10.12	77.94	88.06	122.20	-34.14	Peak	356	323	P
2	5855.00	10.12	73.01	83.13	110.80	-27.67	Peak	356	323	P
3	5875.00	10.13	65.63	75.76	105.20	-29.44	Peak	356	323	P
4	5925.00	10.16	50.12	60.28	68.20	-7.92	Peak	356	323	P
5	11650.00	19.41	32.69	52.10	54.00	-1.90	Average	268	96	P
6	11650.00	19.41	46.85	66.26	74.00	-7.74	Peak	268	96	P

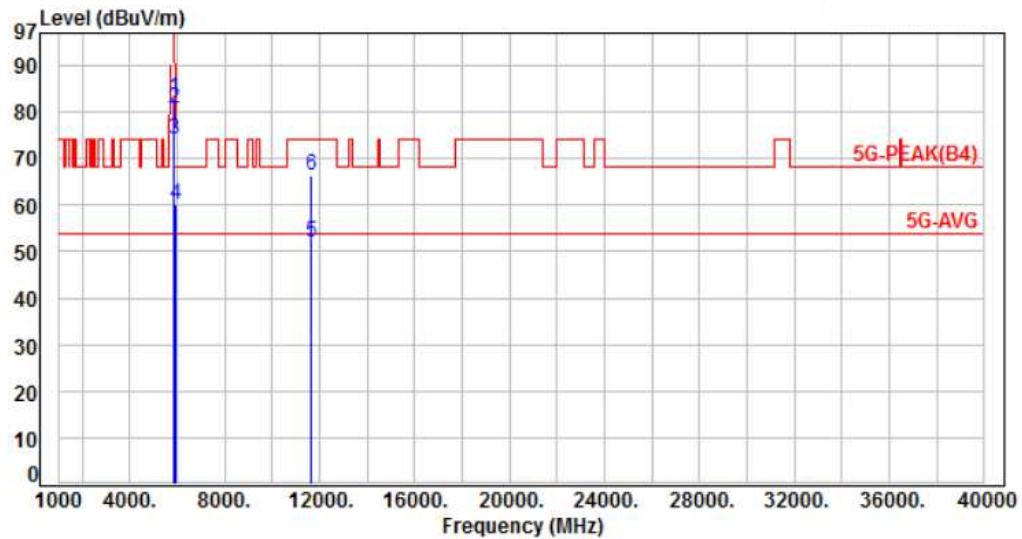
Note: Level=Reading+Factor

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	: Apr. 10, 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	10.12	72.89	83.01	122.20	-39.19	Peak	369	271	P
2	5855.00	10.12	70.73	80.85	110.80	-29.95	Peak	369	271	P
3	5875.00	10.13	63.92	74.05	105.20	-31.15	Peak	369	271	P
4	5925.00	10.16	49.83	59.99	68.20	-8.21	Peak	369	271	P
5	11650.00	19.41	32.62	52.03	54.00	-1.97	Average	270	126	P
6	11650.00	19.41	46.93	66.34	74.00	-7.66	Peak	270	126	P

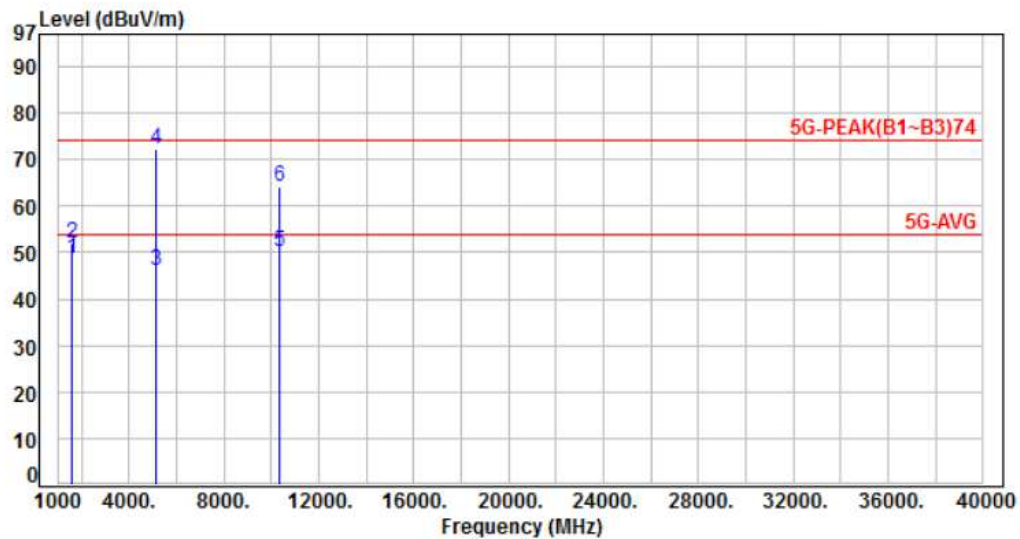
Note: Level=Reading+Factor

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	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	1600.00	-4.92	53.66	48.74	54.00	-5.26	Average	280	178	P
2	1600.00	-4.92	56.88	51.96	74.00	-22.04	Peak	280	178	P
3	5150.00	9.14	36.82	45.96	54.00	-8.04	Average	291	325	P
4	5150.00	9.14	63.15	72.29	74.00	-1.71	Peak	291	325	P
5	10360.00	17.55	32.55	50.10	54.00	-3.90	Average	180	132	P
6	10360.00	17.55	46.56	64.11	74.00	-9.89	Peak	180	132	P

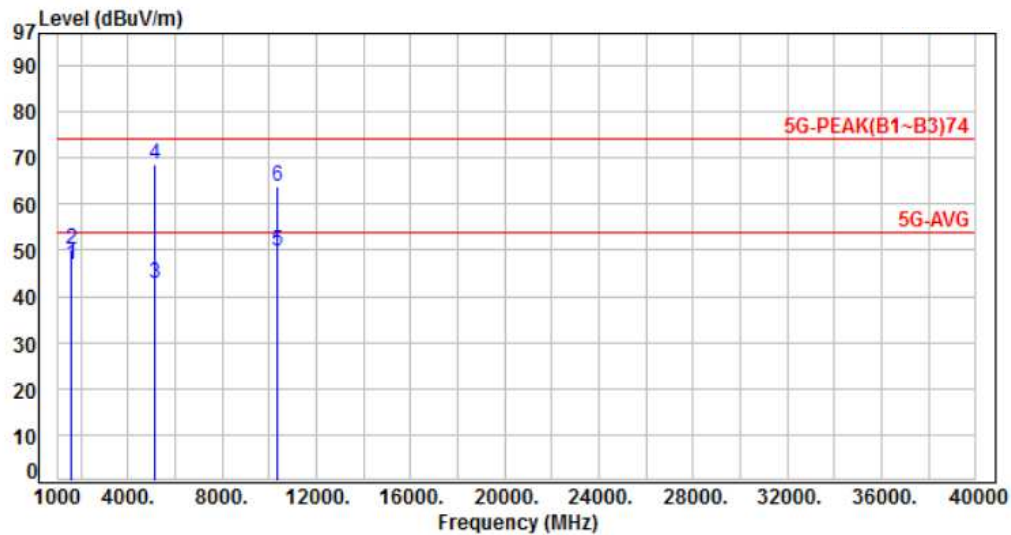
Note: Level=Reading+Factor

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	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	1600.00	-4.92	51.60	46.68	54.00	-7.32	Average	279	212	P
2	1600.00	-4.92	54.91	49.99	74.00	-24.01	Peak	279	212	P
3	5150.00	9.14	33.48	42.62	54.00	-11.38	Average	163	104	P
4	5150.00	9.14	59.43	68.57	74.00	-5.43	Peak	163	104	P
5	10360.00	17.55	32.42	49.97	54.00	-4.03	Average	185	216	P
6	10360.00	17.55	46.40	63.95	74.00	-10.05	Peak	185	216	P

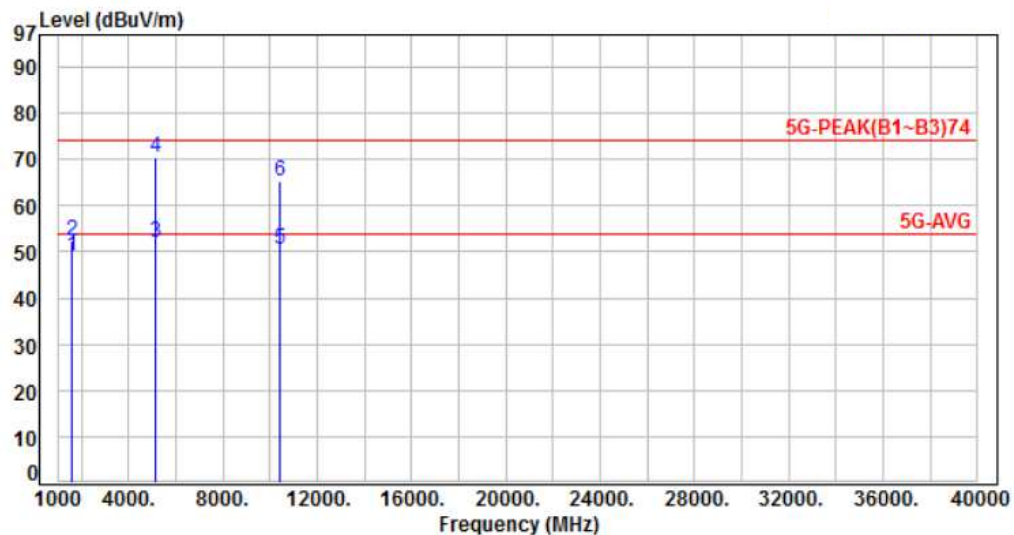
Note: Level=Reading+Factor

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	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	1600.00	-4.92	53.97	49.05	54.00	-4.95	Average	284	177	P
2	1600.00	-4.92	57.19	52.27	74.00	-21.73	Peak	284	177	P
3	5150.00	9.14	42.97	52.11	54.00	-1.89	Average	397	328	P
4	5150.00	9.14	61.37	70.51	74.00	-3.49	Peak	397	328	P
5	10440.00	17.65	33.03	50.68	54.00	-3.32	Average	312	242	P
6	10440.00	17.65	47.79	65.44	74.00	-8.56	Peak	312	242	P

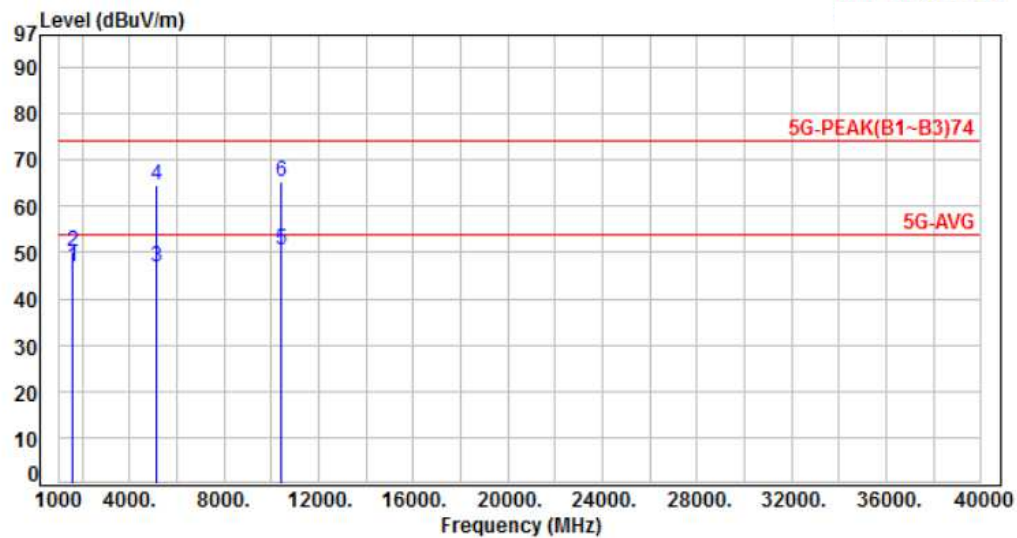
Note: Level=Reading+Factor

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	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	1600.00	-4.92	51.82	46.90	54.00	-7.10	Average	275	210	P
2	1600.00	-4.92	55.21	50.29	74.00	-23.71	Peak	275	210	P
3	5150.00	9.14	37.84	46.98	54.00	-7.02	Average	388	266	P
4	5150.00	9.14	55.39	64.53	74.00	-9.47	Peak	388	266	P
5	10440.00	17.65	32.90	50.55	54.00	-3.45	Average	352	258	P
6	10440.00	17.65	47.78	65.43	74.00	-8.57	Peak	352	258	P

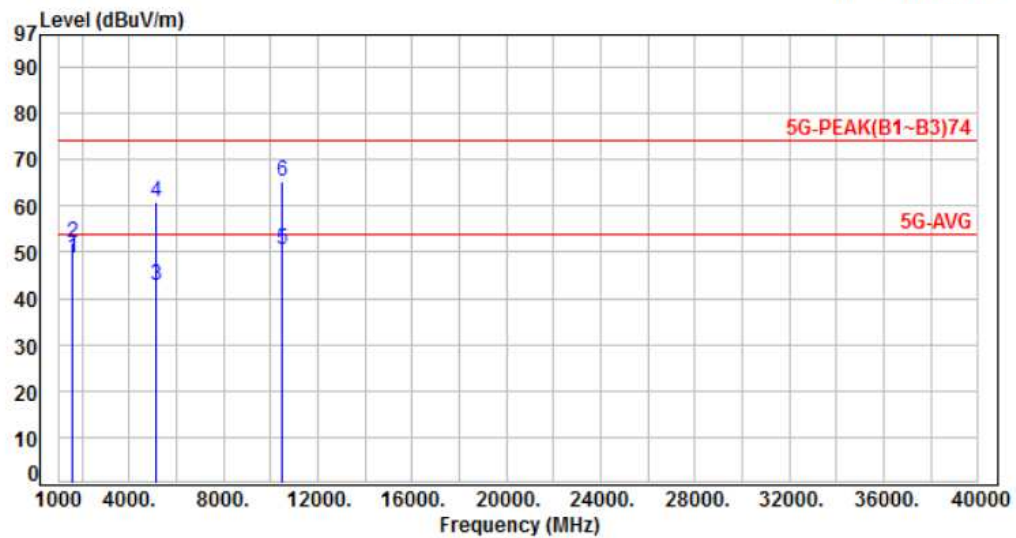
Note: Level=Reading+Factor

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	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	1600.00	-4.92	53.51	48.59	54.00	-5.41	Average	278	174	P
2	1600.00	-4.92	56.77	51.85	74.00	-22.15	Peak	278	174	P
3	5150.00	9.14	33.80	42.94	54.00	-11.06	Average	288	318	P
4	5150.00	9.14	51.56	60.70	74.00	-13.30	Peak	288	318	P
5	10480.00	17.71	32.92	50.63	54.00	-3.37	Average	391	289	P
6	10480.00	17.71	47.58	65.29	74.00	-8.71	Peak	391	289	P

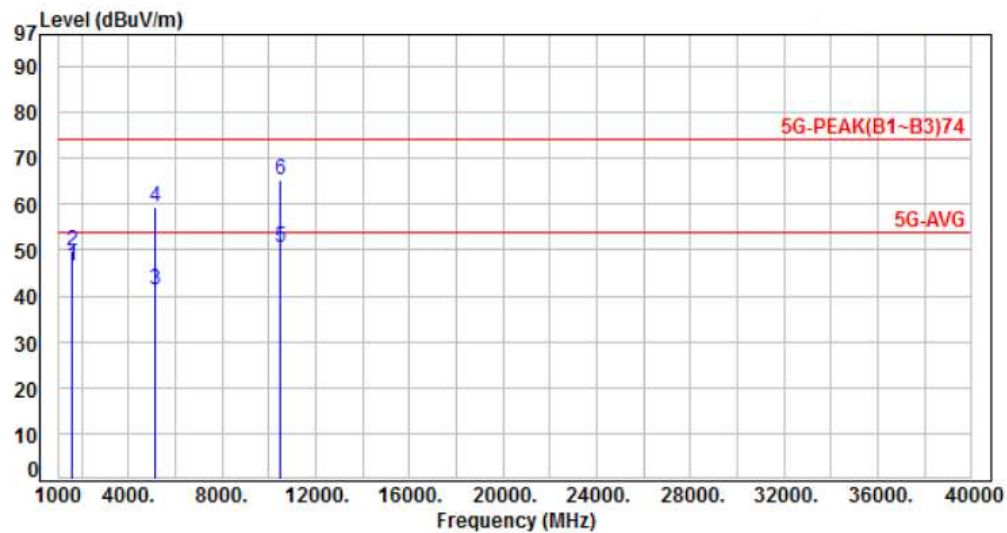
Note: Level=Reading+Factor

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	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	1600.00	-4.92	51.42	46.50	54.00	-7.50	Average	270	204	P
2	1600.00	-4.92	54.63	49.71	74.00	-24.29	Peak	270	204	P
3	5150.00	9.14	32.16	41.30	54.00	-12.70	Average	296	330	P
4	5150.00	9.14	50.33	59.47	74.00	-14.53	Peak	296	330	P
5	10480.00	17.71	32.86	50.57	54.00	-3.43	Average	387	252	P
6	10480.00	17.71	47.41	65.12	74.00	-8.88	Peak	387	252	P

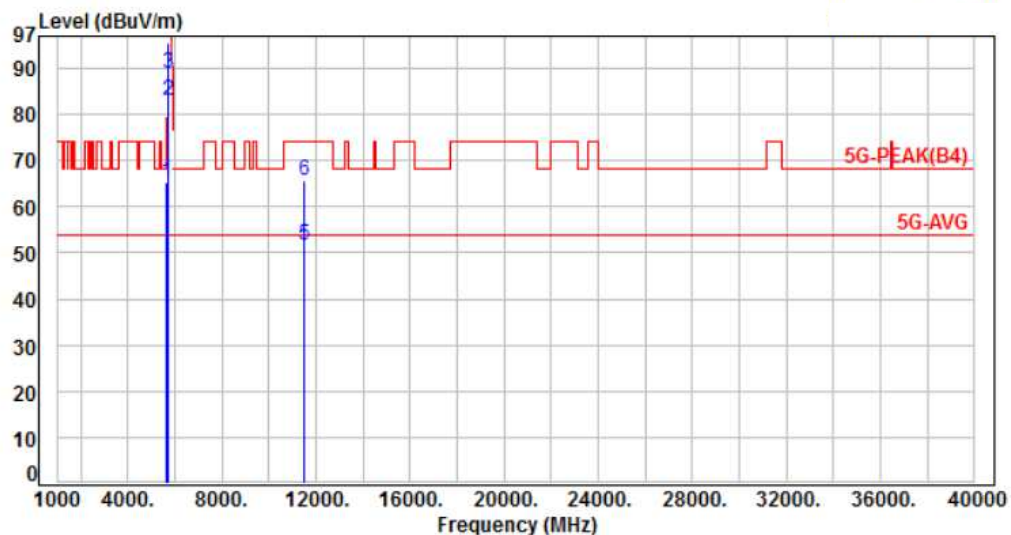
Note: Level=Reading+Factor

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	: Apr. 10, 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	9.99	55.25	65.24	68.20	-2.96	Peak	376	343	P
2	5700.00	10.02	73.05	83.07	105.20	-22.13	Peak	376	343	P
3	5720.00	10.03	79.02	89.05	110.80	-21.75	Peak	376	343	P
4	5725.00	10.03	85.58	95.61	122.20	-26.59	Peak	376	343	P
5	11490.00	19.24	32.47	51.71	54.00	-2.29	Average	324	261	P
6	11490.00	19.24	46.51	65.75	74.00	-8.25	Peak	324	261	P

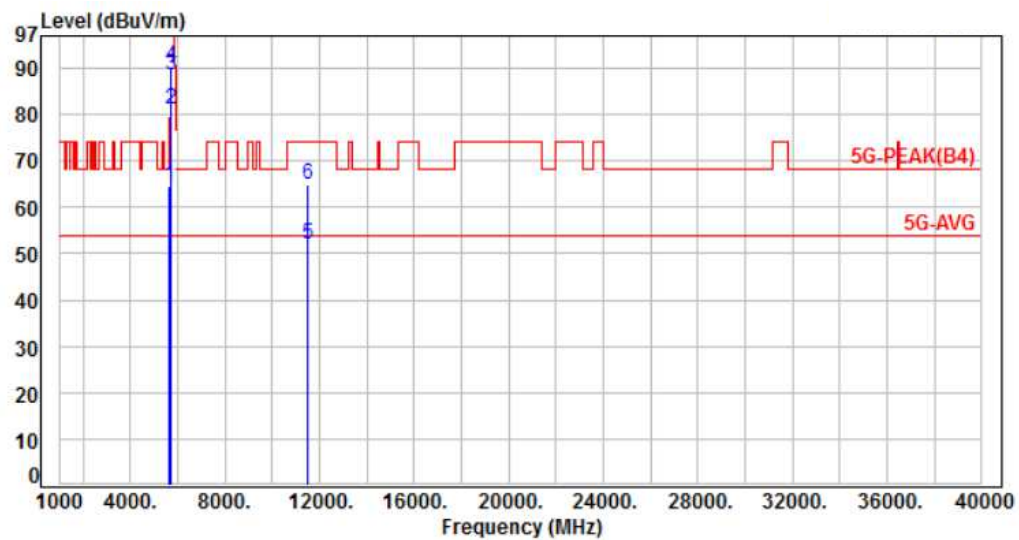
Note: Level=Reading+Factor

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	: Apr. 10, 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	9.99	54.61	64.60	68.20	-3.60	Peak	364	262	P
2	5700.00	10.02	71.21	81.23	105.20	-23.97	Peak	364	262	P
3	5720.00	10.03	78.62	88.65	110.80	-22.15	Peak	364	262	P
4	5725.00	10.03	80.27	90.30	122.20	-31.90	Peak	364	262	P
5	11490.00	19.24	32.65	51.89	54.00	-2.11	Average	386	297	P
6	11490.00	19.24	45.74	64.98	74.00	-9.02	Peak	386	297	P

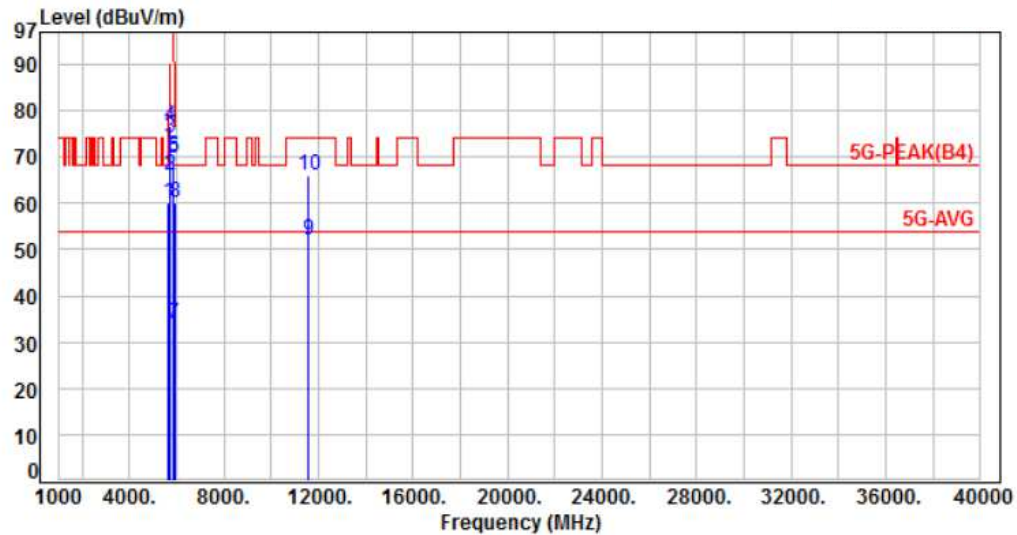
Note: Level=Reading+Factor

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	: Apr. 10, 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	9.99	50.02	60.01	68.20	-8.19	Peak	332	274	P
2	5700.00	10.02	55.83	65.85	105.20	-39.35	Peak	332	274	P
3	5720.00	10.03	64.22	74.25	110.80	-36.55	Peak	332	274	P
4	5720.00	10.03	66.86	76.89	110.80	-33.91	Peak	332	274	P
5	5850.00	10.12	59.61	69.73	122.20	-52.47	Peak	332	274	P
6	5855.00	10.12	59.85	69.97	110.80	-40.83	Peak	332	274	P
7	5875.00	10.13	23.89	34.02	105.20	-71.18	Peak	332	274	P
8	5925.00	10.16	50.02	60.18	68.20	-8.02	Peak	332	274	P
9	11570.00	19.33	32.57	51.90	54.00	-2.10	Average	255	183	P
10	11570.00	19.33	46.66	65.99	74.00	-8.01	Peak	255	183	P

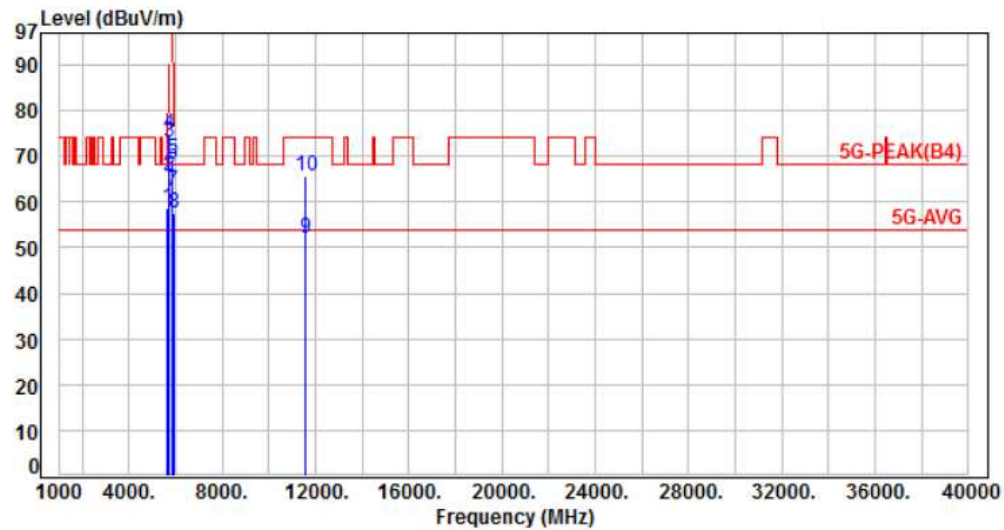
Note: Level=Reading+Factor

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	: Apr. 10, 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	9.99	48.54	58.53	68.20	-9.67	Peak	372	305	P
2	5700.00	10.02	55.61	65.63	105.20	-39.57	Peak	372	305	P
3	5720.00	10.03	62.88	72.91	110.80	-37.89	Peak	372	305	P
4	5720.00	10.03	64.75	74.78	110.80	-36.02	Peak	372	305	P
5	5850.00	10.12	59.23	69.35	122.20	-52.85	Peak	372	305	P
6	5855.00	10.12	58.05	68.17	110.80	-42.63	Peak	372	305	P
7	5875.00	10.13	52.12	62.25	105.20	-42.95	Peak	372	305	P
8	5925.00	10.16	47.25	57.41	68.20	-10.79	Peak	372	305	P
9	11570.00	19.33	32.52	51.85	54.00	-2.15	Average	292	48	P
10	11570.00	19.33	46.37	65.70	74.00	-8.30	Peak	292	48	P

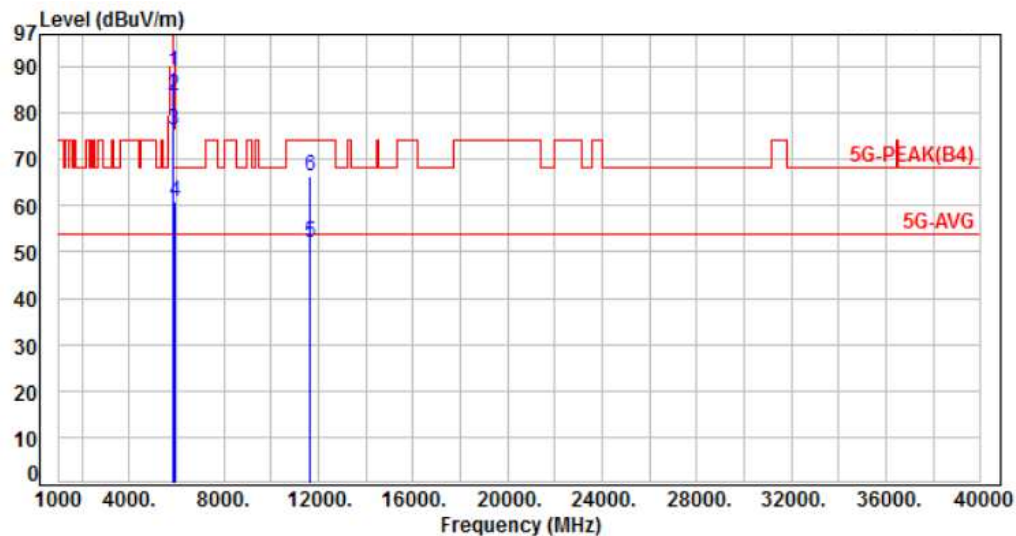
Note: Level=Reading+Factor

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	: Apr. 10, 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	10.12	78.82	88.94	122.20	-33.26	Peak	372	318	P
2	5855.00	10.12	73.59	83.71	110.80	-27.09	Peak	372	318	P
3	5875.00	10.13	66.22	76.35	105.20	-28.85	Peak	372	318	P
4	5925.00	10.16	50.78	60.94	68.20	-7.26	Peak	372	318	P
5	11650.00	19.41	32.70	52.11	54.00	-1.89	Average	352	298	P
6	11650.00	19.41	47.06	66.47	74.00	-7.53	Peak	352	298	P

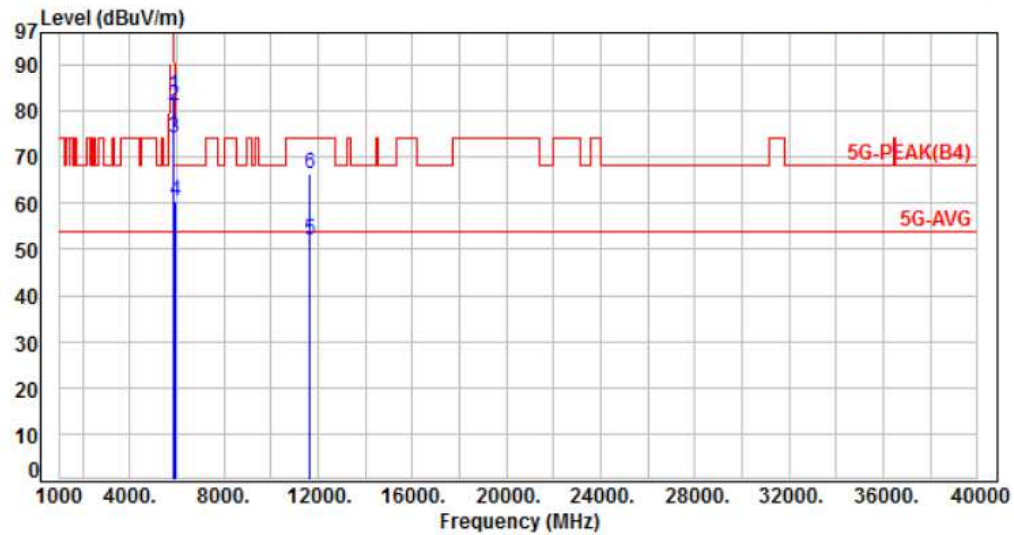
Note: Level=Reading+Factor

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	: Apr. 10, 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	10.12	73.30	83.42	122.20	-38.78	Peak	345	299	P
2	5855.00	10.12	71.19	81.31	110.80	-29.49	Peak	345	299	P
3	5875.00	10.13	64.02	74.15	105.20	-31.05	Peak	345	299	P
4	5925.00	10.16	50.34	60.50	68.20	-7.70	Peak	345	299	P
5	11650.00	19.41	32.60	52.01	54.00	-1.99	Average	321	285	P
6	11650.00	19.41	47.01	66.42	74.00	-7.58	Peak	321	285	P

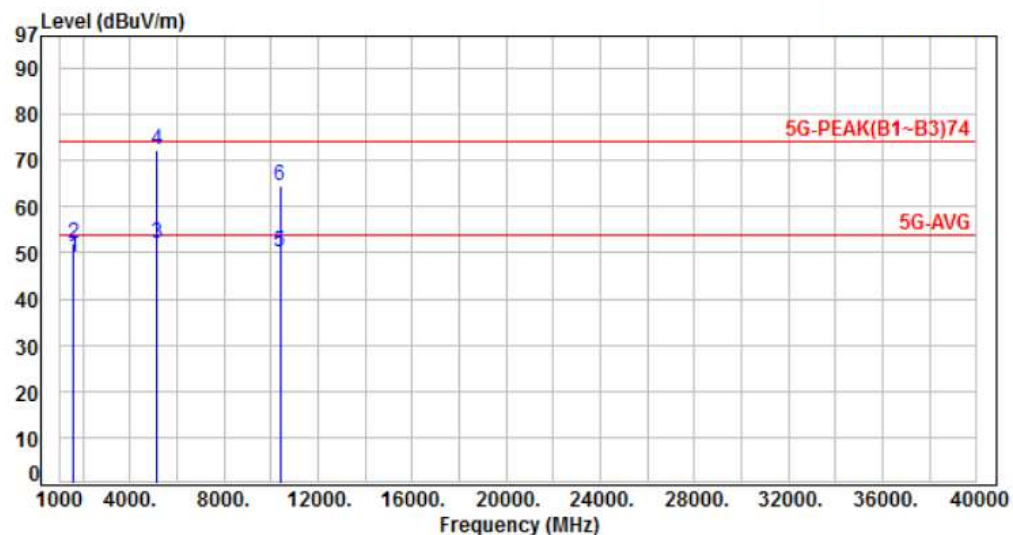
Note: Level=Reading+Factor

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	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	1600.00	-4.92	53.97	49.05	54.00	-4.95	Average	283	178	P
2	1600.00	-4.92	57.11	52.19	74.00	-21.81	Peak	283	178	P
3	5150.00	9.14	42.75	51.89	54.00	-2.11	Average	298	0	P
4	5150.00	9.14	63.31	72.45	74.00	-1.55	Peak	298	0	P
5	10380.00	17.57	32.56	50.13	54.00	-3.87	Average	313	240	P
6	10380.00	17.57	46.95	64.52	74.00	-9.48	Peak	313	240	P

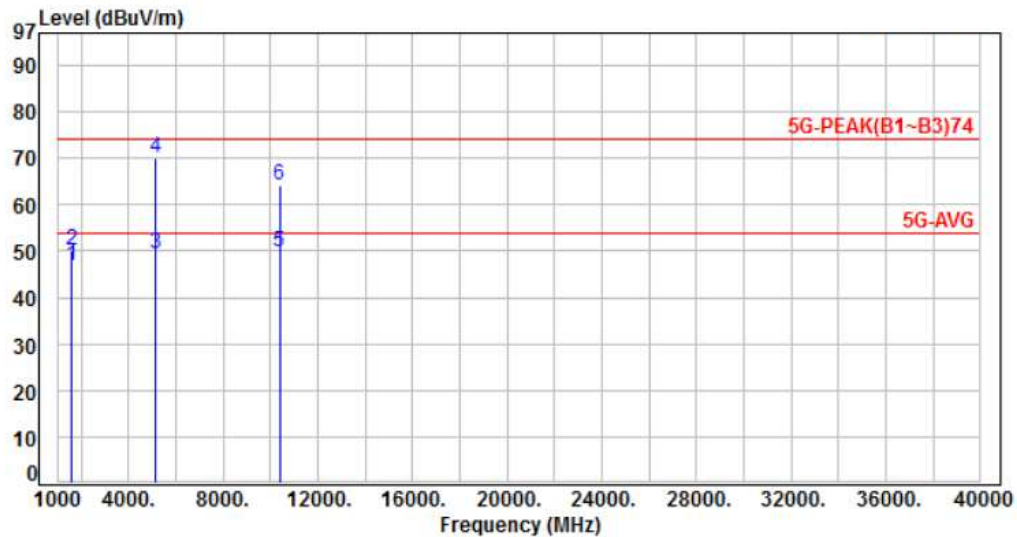
Note: Level=Reading+Factor

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	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	1600.00	-4.92	51.91	46.99	54.00	-7.01	Average	275	209	P
2	1600.00	-4.92	54.99	50.07	74.00	-23.93	Peak	275	209	P
3	5150.00	9.14	40.20	49.34	54.00	-4.66	Average	357	292	P
4	5150.00	9.14	61.06	70.20	74.00	-3.80	Peak	357	292	P
5	10380.00	17.57	32.40	49.97	54.00	-4.03	Average	252	167	P
6	10380.00	17.57	46.46	64.03	74.00	-9.97	Peak	252	167	P

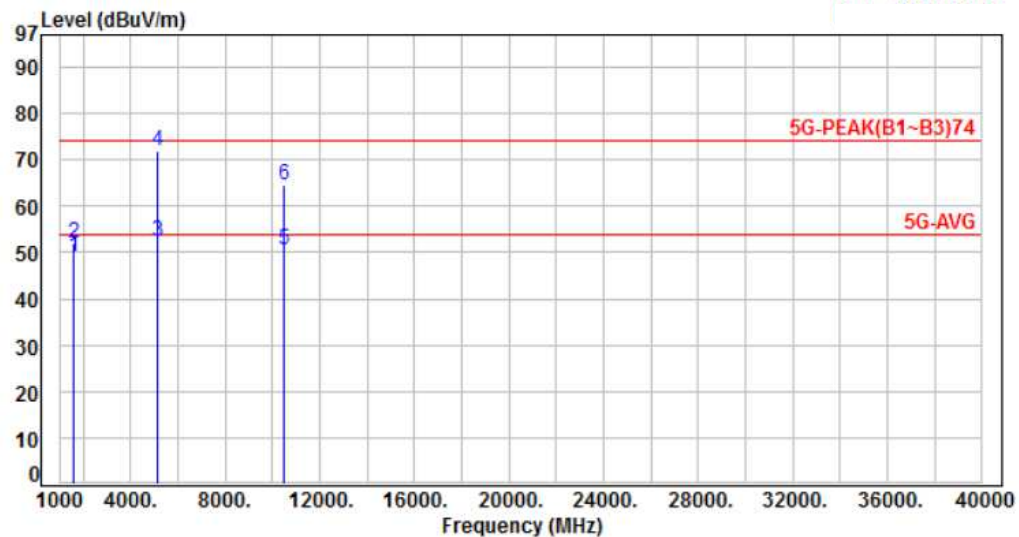
Note: Level=Reading+Factor

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	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	1600.00	-4.92	53.98	49.06	54.00	-4.94	Average	282	176	P
2	1600.00	-4.92	56.95	52.03	74.00	-21.97	Peak	282	176	P
3	5150.00	9.14	43.11	52.25	54.00	-1.75	Average	363	322	P
4	5150.00	9.14	62.67	71.81	74.00	-2.19	Peak	363	322	P
5	10460.00	17.69	32.70	50.39	54.00	-3.61	Average	311	192	P
6	10460.00	17.69	46.91	64.60	74.00	-9.40	Peak	311	192	P

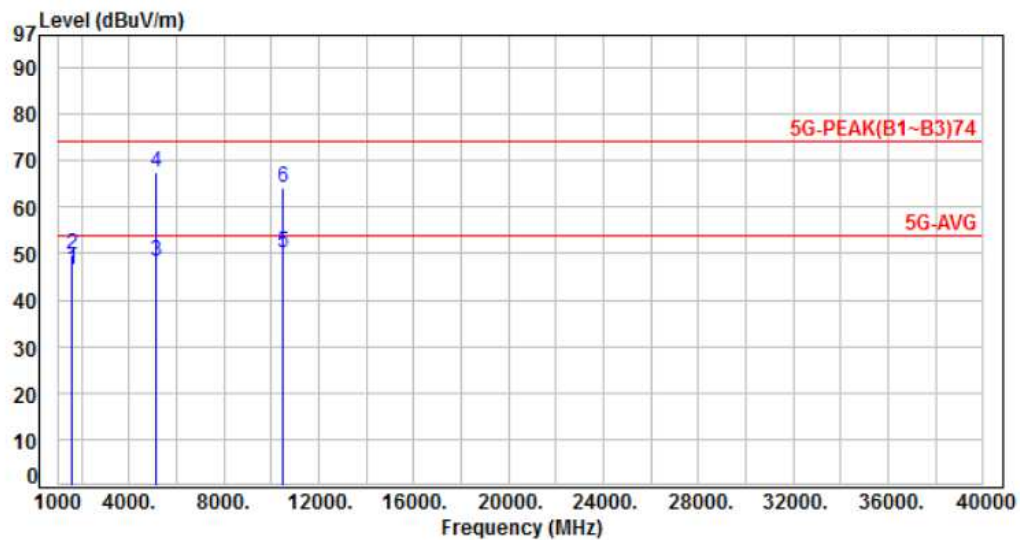
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 5, CH46	Temperature	: 24°C
Test Date	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	1600.00	-4.92	51.49	46.57	54.00	-7.43	Average	271	212	P
2	1600.00	-4.92	54.63	49.71	74.00	-24.29	Peak	271	212	P
3	5150.00	9.14	39.18	48.32	54.00	-5.68	Average	385	263	P
4	5150.00	9.14	58.25	67.39	74.00	-6.61	Peak	385	263	P
5	10460.00	17.69	32.62	50.31	54.00	-3.69	Average	313	325	P
6	10460.00	17.69	46.66	64.35	74.00	-9.65	Peak	313	325	P

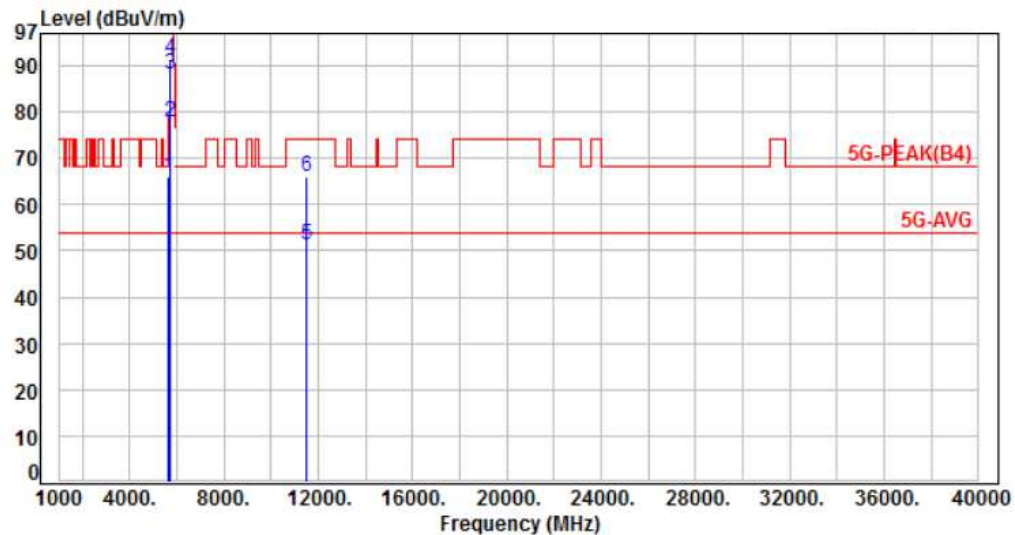
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 5, CH151	Temperature	: 24°C
Test Date	: Apr. 10, 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	9.99	56.06	66.05	68.20	-2.15	Peak	360	351	P
2	5700.00	10.02	67.83	77.85	105.20	-27.35	Peak	360	351	P
3	5720.00	10.03	77.96	87.99	110.80	-22.81	Peak	344	338	P
4	5725.00	10.03	81.41	91.44	122.20	-30.76	Peak	360	351	P
5	11510.00	19.27	32.06	51.33	54.00	-2.67	Average	283	262	P
6	11510.00	19.27	46.59	65.86	74.00	-8.14	Peak	283	262	P

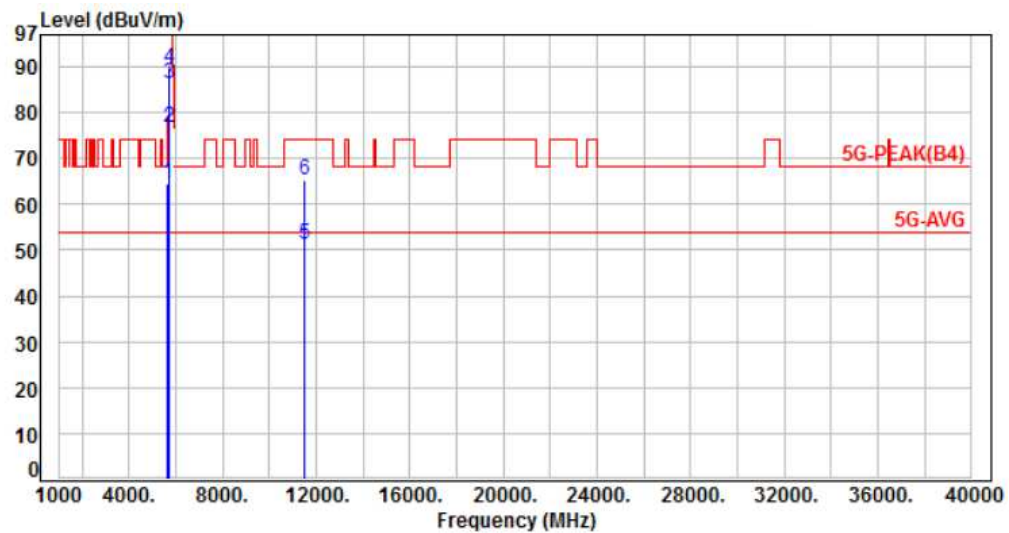
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 5, CH151	Temperature	: 24°C
Test Date	: Apr. 10, 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	9.99	54.54	64.53	68.20	-3.67	Peak	285	305	P
2	5700.00	10.02	66.77	76.79	105.20	-28.41	Peak	285	305	P
3	5720.00	10.03	76.26	86.29	110.80	-24.51	Peak	285	305	P
4	5725.00	10.03	79.65	89.68	122.20	-32.52	Peak	285	305	P
5	11510.00	19.27	31.98	51.25	54.00	-2.75	Average	292	341	P
6	11510.00	19.27	46.19	65.46	74.00	-8.54	Peak	292	341	P

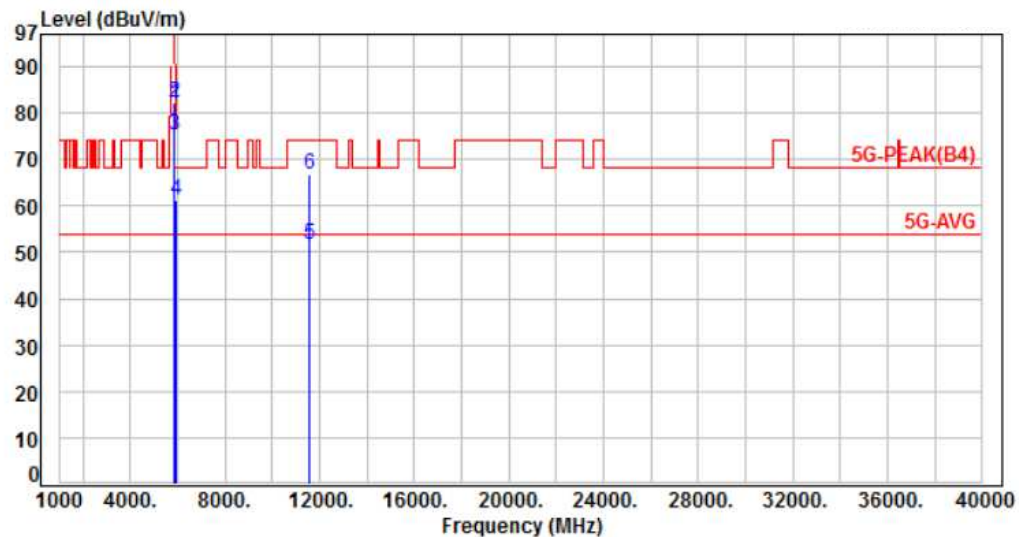
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 5, CH159	Temperature	: 24°C
Test Date	: Apr. 10, 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	10.12	71.94	82.06	122.20	-40.14	Peak	325	356	P
2	5855.00	10.12	72.23	82.35	110.80	-28.45	Peak	325	356	P
3	5875.00	10.13	65.28	75.41	105.20	-29.79	Peak	325	356	P
4	5925.00	10.16	51.15	61.31	68.20	-6.89	Peak	325	356	P
5	11590.00	19.34	32.39	51.73	54.00	-2.27	Average	367	296	P
6	11590.00	19.34	47.31	66.65	74.00	-7.35	Peak	367	296	P

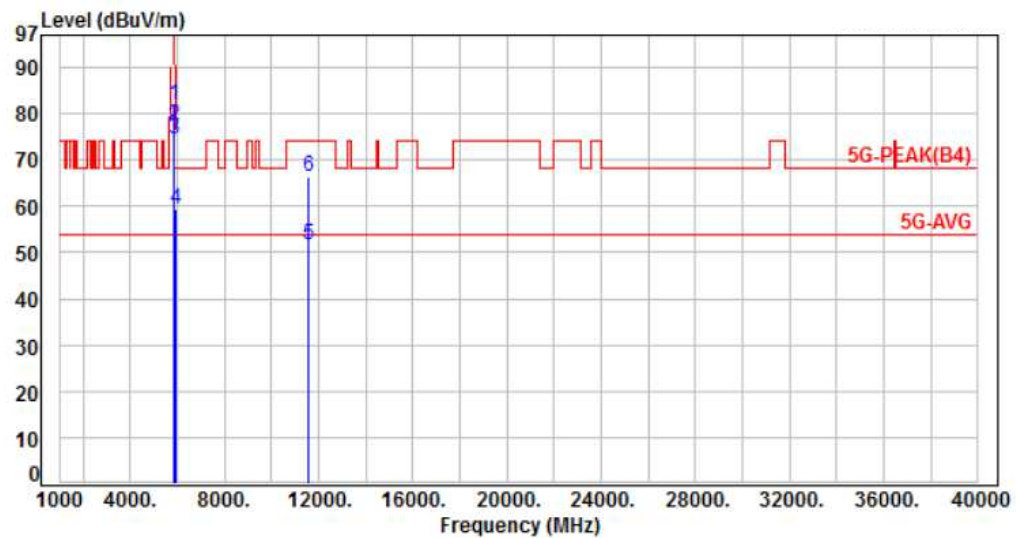
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 5, CH159	Temperature	: 24°C
Test Date	: Apr. 10, 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	10.12	71.76	81.88	122.20	-40.32	Peak	323	299	P
2	5855.00	10.12	67.41	77.53	110.80	-33.27	Peak	323	299	P
3	5875.00	10.13	64.25	74.38	105.20	-30.82	Peak	323	299	P
4	5925.00	10.16	49.21	59.37	68.20	-8.83	Peak	323	299	P
5	11590.00	19.34	32.30	51.64	54.00	-2.36	Average	302	345	P
6	11590.00	19.34	47.19	66.53	74.00	-7.47	Peak	302	345	P

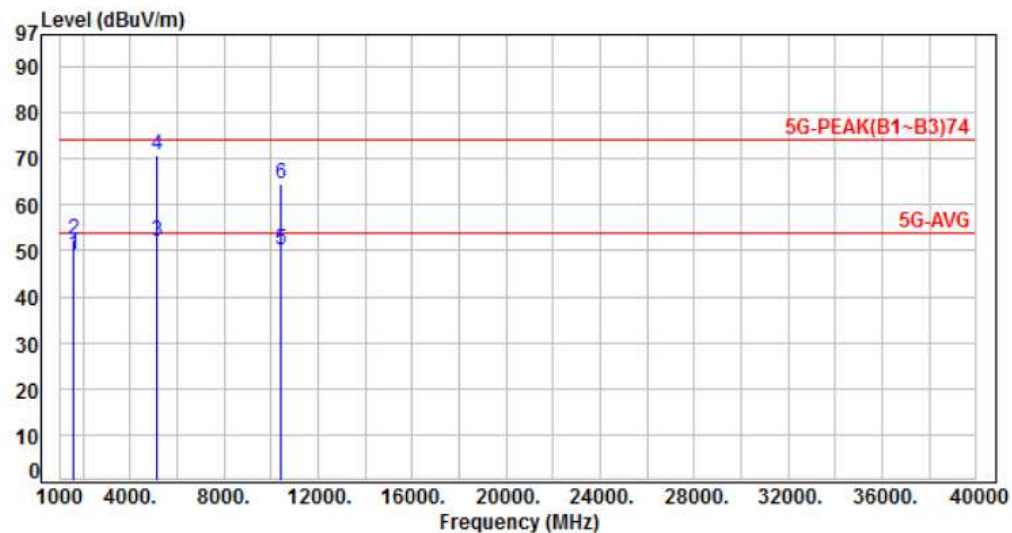
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 6, CH42	Temperature	: 24°C
Test Date	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	1600.00	-4.92	54.02	49.10	54.00	-4.90	Average	280	177	P
2	1600.00	-4.92	57.29	52.37	74.00	-21.63	Peak	280	177	P
3	5150.00	9.14	42.89	52.03	54.00	-1.97	Average	257	4	P
4	5150.00	9.14	61.57	70.71	74.00	-3.29	Peak	257	4	P
5	10420.00	17.63	32.64	50.27	54.00	-3.73	Average	302	346	P
6	10420.00	17.63	46.96	64.59	74.00	-9.41	Peak	302	346	P

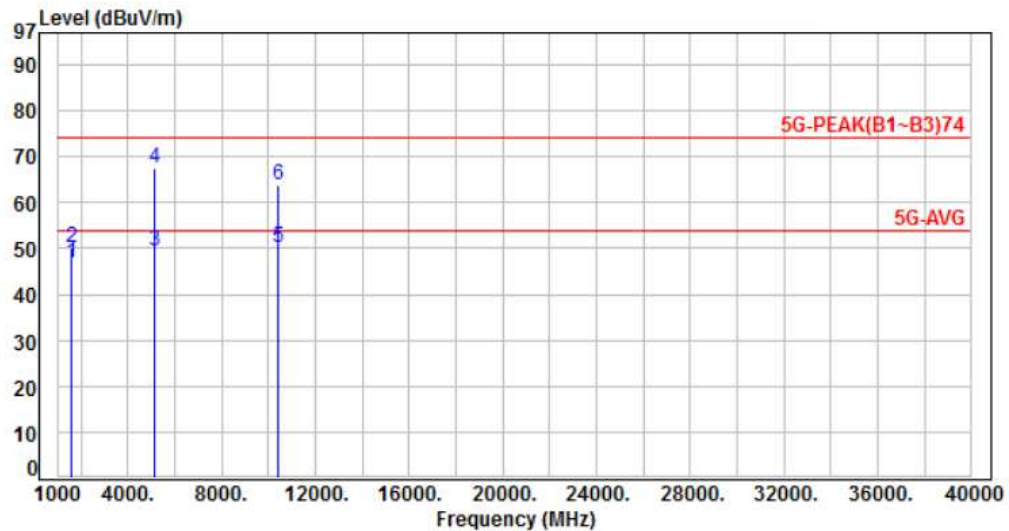
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 6, CH42	Temperature	: 24°C
Test Date	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	1600.00	-4.92	51.86	46.94	54.00	-7.06	Average	275	211	P
2	1600.00	-4.92	55.05	50.13	74.00	-23.87	Peak	275	211	P
3	5150.00	9.14	40.36	49.50	54.00	-4.50	Average	306	285	P
4	5150.00	9.14	58.21	67.35	74.00	-6.65	Peak	306	285	P
5	10420.00	17.63	32.55	50.18	54.00	-3.82	Average	242	331	P
6	10420.00	17.63	46.04	63.67	74.00	-10.33	Peak	242	331	P

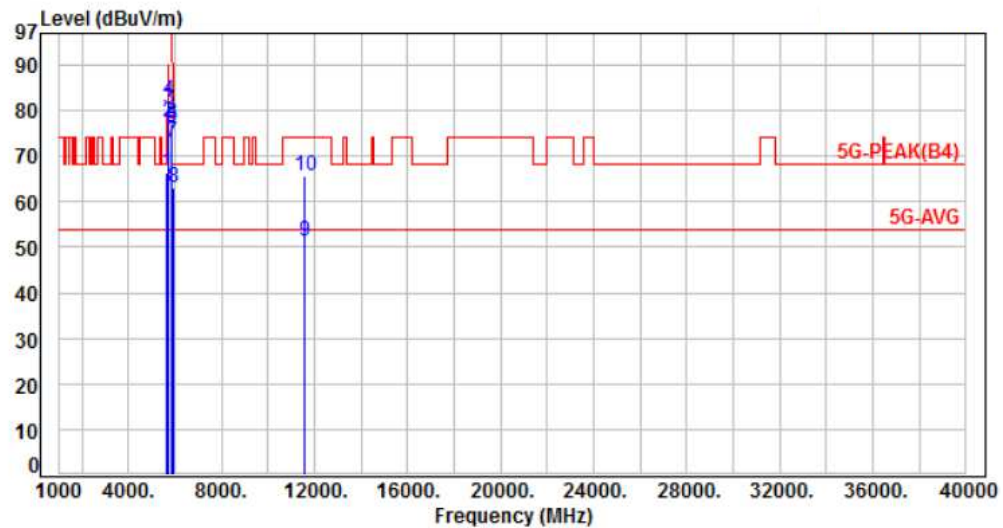
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 6, CH155	Temperature	: 24°C
Test Date	: Apr. 10, 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	9.99	56.24	66.23	68.20	-1.97	Peak	381	349	P
2	5700.00	10.02	67.32	77.34	105.20	-27.86	Peak	381	349	P
3	5720.00	10.03	70.39	80.42	110.80	-30.38	Peak	381	349	P
4	5725.00	10.03	72.38	82.41	122.20	-39.79	Peak	381	349	P
5	5850.00	10.12	66.22	76.34	122.20	-45.86	Peak	381	349	P
6	5855.00	10.12	67.03	77.15	110.80	-33.65	Peak	381	349	P
7	5875.00	10.13	62.78	72.91	105.20	-32.29	Peak	381	349	P
8	5925.00	10.16	52.83	62.99	68.20	-5.21	Peak	381	349	P
9	11550.00	19.31	31.86	51.17	54.00	-2.83	Average	312	299	P
10	11550.00	19.31	46.44	65.75	74.00	-8.25	Peak	312	299	P

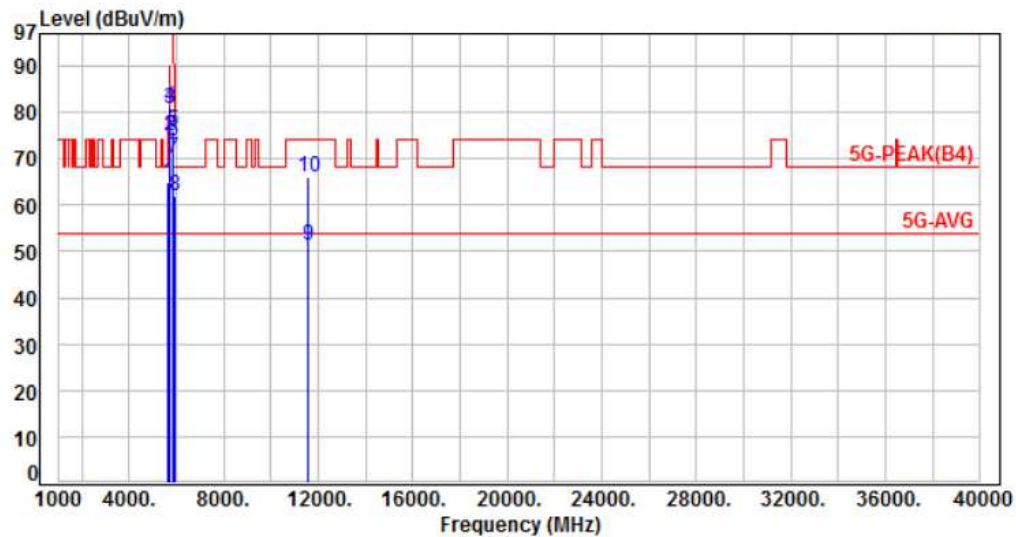
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 6, CH155	Temperature	: 24°C
Test Date	: Apr. 10, 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	9.99	55.07	65.06	68.20	-3.14	Peak	290	301	P
2	5700.00	10.02	64.90	74.92	105.20	-30.28	Peak	290	301	P
3	5720.00	10.03	70.76	80.79	110.80	-30.01	Peak	290	301	P
4	5725.00	10.03	71.17	81.20	122.20	-41.00	Peak	290	301	P
5	5850.00	10.12	65.80	75.92	122.20	-46.28	Peak	388	269	P
6	5855.00	10.12	63.66	73.78	110.80	-37.02	Peak	388	269	P
7	5875.00	10.13	59.90	70.03	105.20	-35.17	Peak	388	269	P
8	5925.00	10.16	51.88	62.04	68.20	-6.16	Peak	388	269	P
9	11550.00	19.31	31.82	51.13	54.00	-2.87	Average	317	286	P
10	11550.00	19.31	46.62	65.93	74.00	-8.07	Peak	317	286	P

Note: Level=Reading+Factor

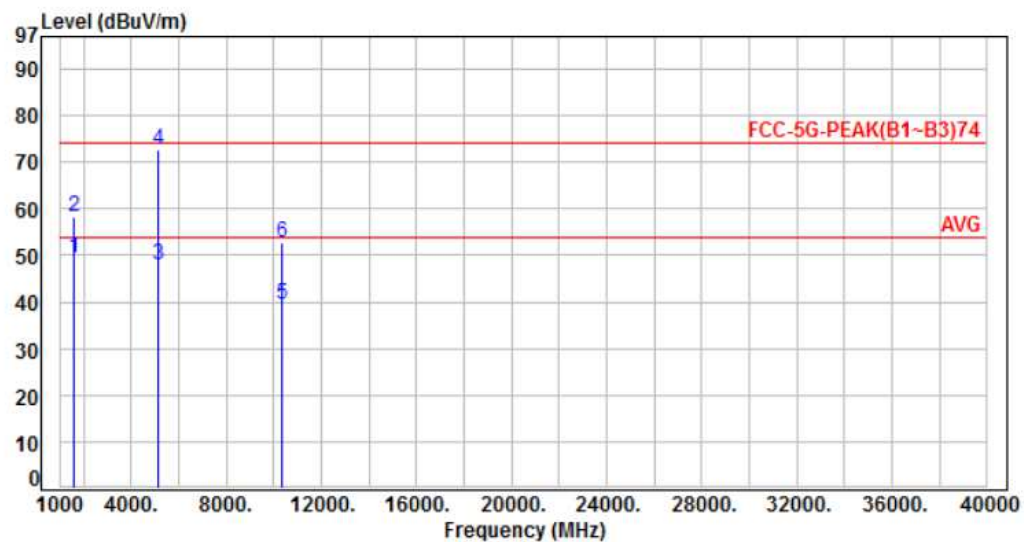
Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



6.6.2. Test Result and Data of Beamforming

Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 4, CH36	Temperature	: 24°C
Test Date	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	1600.00	-19.29	68.72	49.43	54.00	-4.57	Average	202	213	P
2	1600.00	-19.29	77.45	58.16	74.00	-15.84	Peak	202	213	P
3	5150.00	-6.47	54.30	47.83	54.00	-6.17	Average	195	141	P
4	5150.00	-6.47	78.95	72.48	74.00	-1.52	Peak	195	141	P
5	10360.00	0.83	38.45	39.28	54.00	-14.72	Average	100	181	P
6	10360.00	0.83	51.82	52.65	74.00	-21.35	Peak	100	181	P

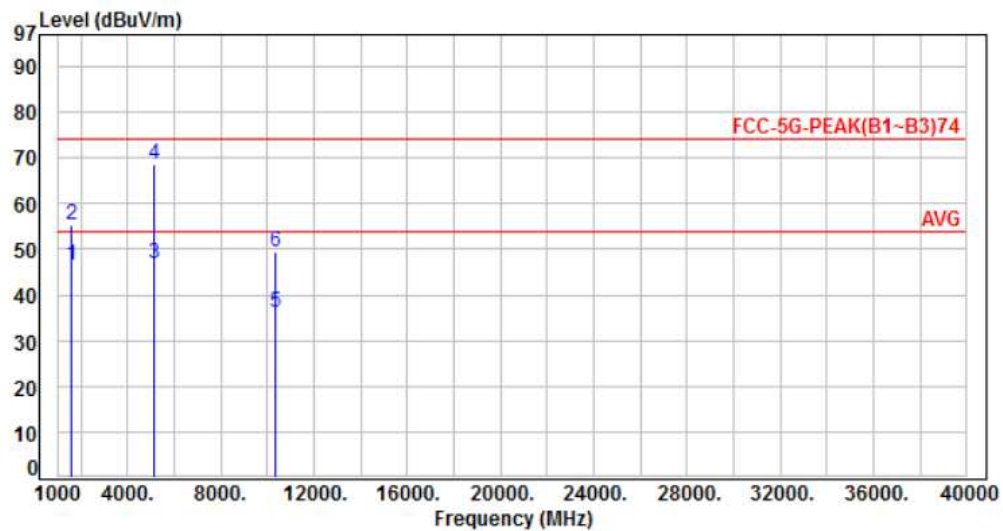
Note: Level=Reading+Factor

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	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	1600.00	-19.29	65.78	46.49	54.00	-7.51	Average	100	192	P
2	1600.00	-19.29	74.66	55.37	74.00	-18.63	Peak	100	192	P
3	5150.00	-6.47	53.34	46.87	54.00	-7.13	Average	194	204	P
4	5150.00	-6.47	75.08	68.61	74.00	-5.39	Peak	194	204	P
5	10360.00	0.83	35.48	36.31	54.00	-17.69	Average	198	211	P
6	10360.00	0.83	48.67	49.50	74.00	-24.50	Peak	198	211	P

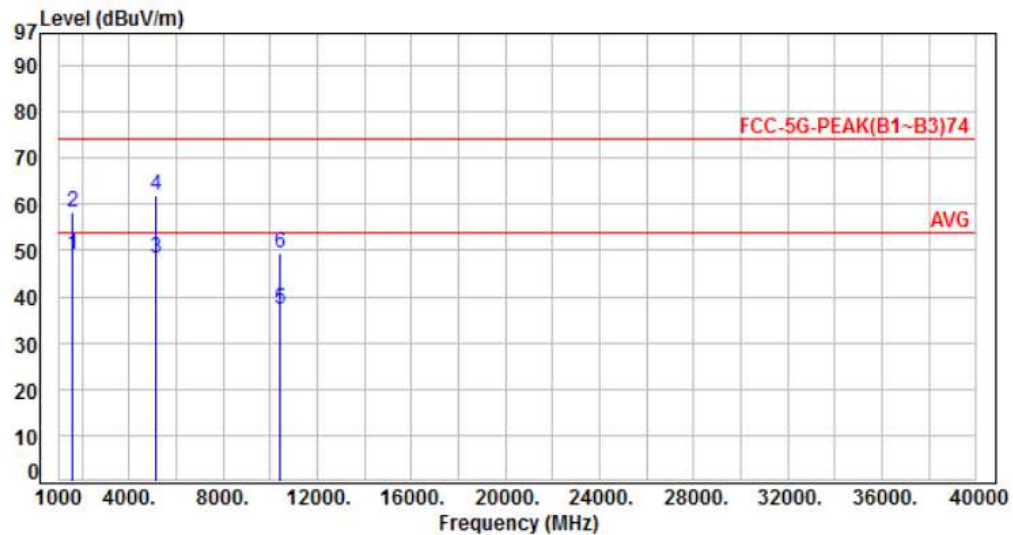
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 4, CH44	Temperature	: 24°C
Test Date	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	1600.00	-19.35	68.47	49.12	54.00	-4.88	Average	200	215	P
2	1600.00	-19.35	77.63	58.28	74.00	-15.72	Peak	200	215	P
3	5150.00	-6.54	54.90	48.36	54.00	-5.64	Average	204	168	P
4	5150.00	-6.54	68.53	61.99	74.00	-12.01	Peak	204	168	P
5	10440.00	0.70	36.73	37.43	54.00	-16.57	Average	100	164	P
6	10440.00	0.70	48.84	49.54	74.00	-24.46	Peak	100	164	P

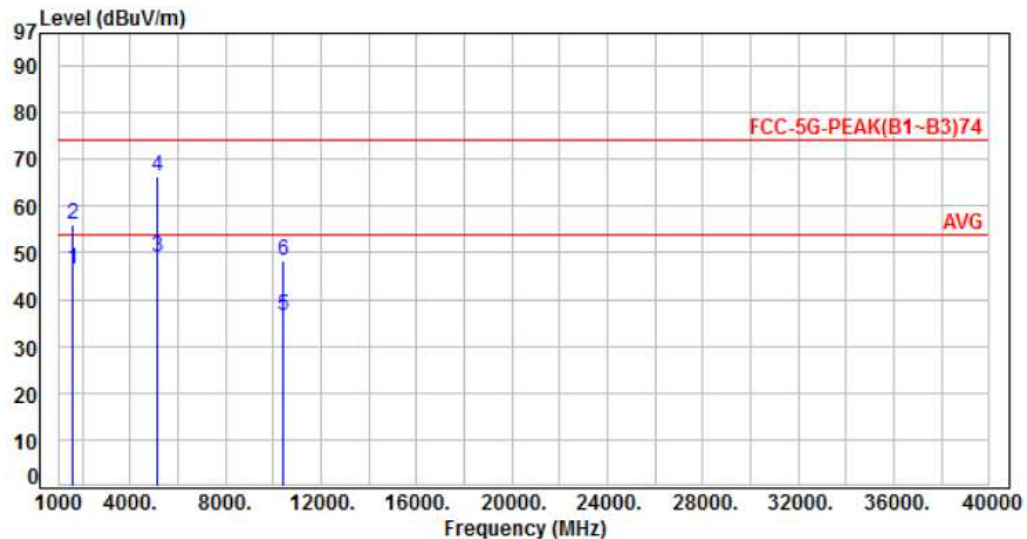
Note: Level=Reading+Factor

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	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	1600.00	-19.35	65.97	46.62	54.00	-7.38	Average	100	188	P
2	1600.00	-19.35	75.56	56.21	74.00	-17.79	Peak	100	188	P
3	5150.00	-6.54	55.72	49.18	54.00	-4.82	Average	102	205	P
4	5150.00	-6.54	72.91	66.37	74.00	-7.63	Peak	102	205	P
5	10440.00	0.70	35.97	36.67	54.00	-17.33	Average	100	212	P
6	10440.00	0.70	47.45	48.15	74.00	-25.85	Peak	100	212	P

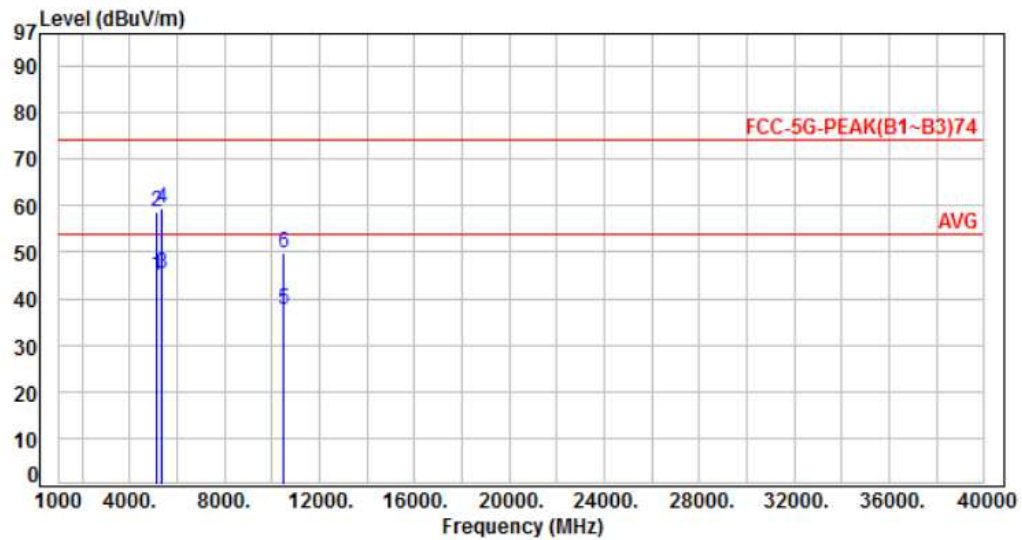
Note: Level=Reading+Factor

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	: Apr. 10, 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	51.66	45.12	54.00	-8.88	Average	347	153	P
2	5150.00	-6.54	65.21	58.67	74.00	-15.33	Peak	347	153	P
3	5350.00	-6.06	51.46	45.40	54.00	-8.60	Average	347	153	P
4	5350.00	-6.06	65.47	59.41	74.00	-14.59	Peak	347	153	P
5	10480.00	0.73	36.79	37.52	54.00	-16.48	Average	100	170	P
6	10480.00	0.73	48.92	49.65	74.00	-24.35	QP	100	170	P

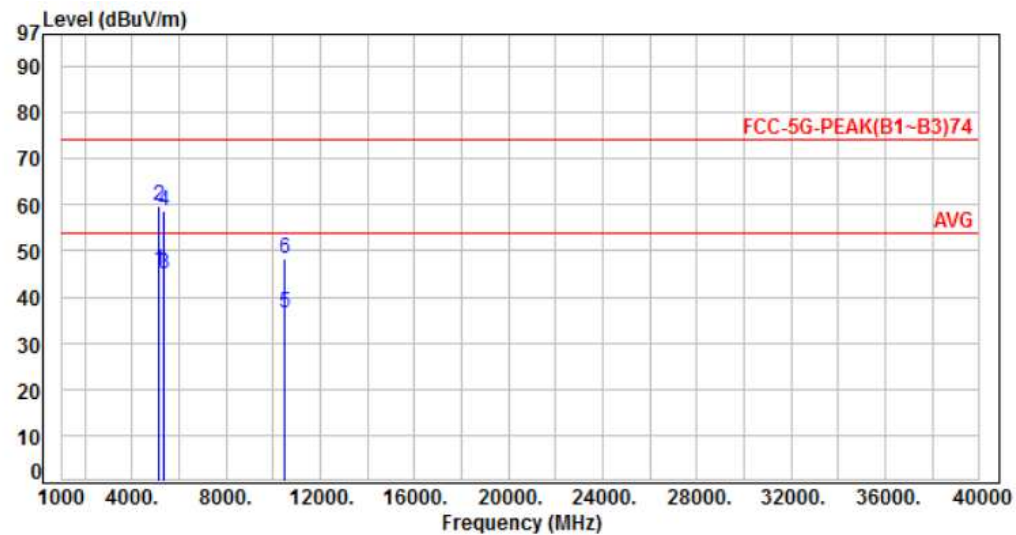
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 4, CH48	Temperature	: 24°C
Test Date	: Apr. 10, 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	52.24	45.70	54.00	-8.30	Average	100	203	P
2	5150.00	-6.54	66.33	59.79	74.00	-14.21	Peak	100	203	P
3	5350.00	-6.06	51.19	45.13	54.00	-8.87	Average	100	203	P
4	5350.00	-6.06	64.82	58.76	74.00	-15.24	Peak	100	203	P
5	10480.00	0.73	35.89	36.62	54.00	-17.38	Average	113	224	P
6	10480.00	0.73	47.65	48.38	74.00	-25.62	Peak	113	224	P

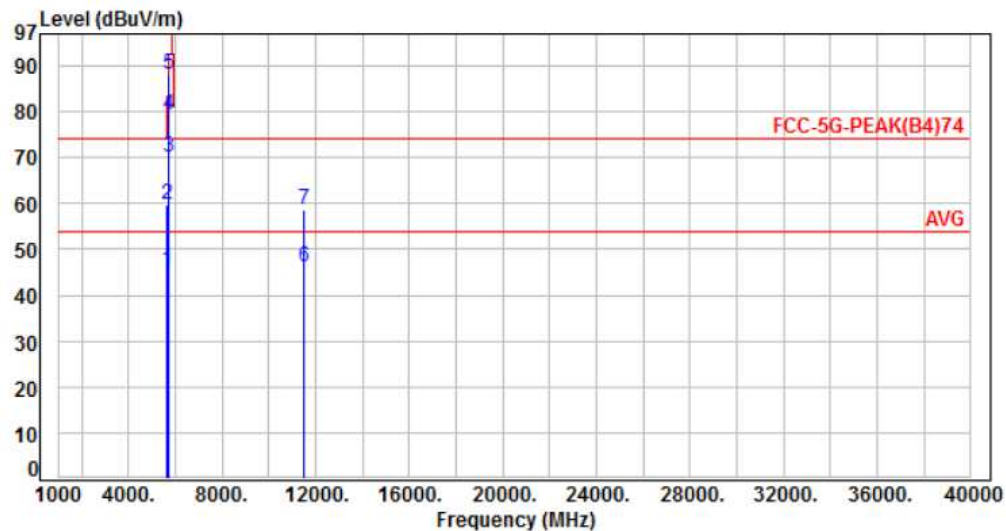
Note: Level=Reading+Factor

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	: Apr. 10, 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	51.19	45.42	54.00	-8.58	Average	100	147	P
2	5650.00	-5.77	65.45	59.68	74.00	-14.32	Peak	100	147	P
3	5700.00	-5.79	75.94	70.15	105.20	-35.05	Peak	100	147	P
4	5720.00	-5.80	85.28	79.48	110.80	-31.32	Peak	100	147	P
5	5725.00	-5.80	93.86	88.06	122.20	-34.14	Peak	100	147	P
6	11490.00	2.06	44.03	46.09	54.00	-7.91	Average	102	239	P
7	11490.00	2.06	56.60	58.66	74.00	-15.34	Peak	102	239	P

Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor