FCC RADIO TEST REPORT

Applicant	:	LAERDAL MEDICAL AS
Address	:	P.O. Box 377 Tanke Svilandsgate 30 4002 Stavanger, Norway
Equipment	:	Laerdal CPU module
Model No.	:	20-11480
Trade Name	:	LAERDAL MEDICAL AS
FCC ID.	:	QHQ-2011480

I HEREBY CERTIFY THAT :

The sample was received on Aug. 24, 2017 and the testing was carried out on Sep. 19, 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
TEFE1707220	Sep. 20, 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(g)	Frequency Stability	Pass
15.407(c)	Automatically Discontinue Transmission	Pass
15.407	Dynamic Frequency Selection	Pass

2. Test Configuration of Equipment under Test

2.1. Feature of Equipment under Test

Modulation Type	DSSS, OFDM, FHSS, GFSK
Frequency Range	802.11b/g/n: 2412-2462MHz 802.11a/an: 5150-5250MHz, 5250-5350MHz, 5470-5725MHz, 5725-5850MHz BLE: 2402-2480MHz
Data Rate	WLAN: 802.11b: 1, 2, 5.5, 11Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11n: MCS0 – MCS15, HT20 802.11a: 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11an: MCS0 – MCS9, HT20/40 BLE: GFSK: 1Mbps
Antenna Type	PIFA Antenna
Antenna Gain	2.4G: 1TX: ANT B: 1.1dBi 2TX: ANT A: 0.9dBi, ANT B: 1.1dBi 5G: 1TX: ANT A: 5.8dBi 2TX: ANT A: 5.8dBi, ANT B: 5.1dBi BLE: ANT B: 1.1dBi

2.2. Carrier Frequency of Channels

Band 1: 5150MHz-5250MHz
802.11a, 802.11an HT 20

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

802.11an HT 40

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

Band 2: 5250MHz -5350MHz
802.11a, 802.11an HT 20

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

802.11an HT 40

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

Band 3: 5470MHz -5725MHz
802.11a, 802.11an HT 20

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

802.11an HT 40

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

Band 4: 5725MHz -5850MHz
802.11a, 802.11an HT20

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

802.11an HT 40

Channel	Frequency(MHz)	Channel	Frequency(MHz)
***155**	**5755**	***159**	**5795**

Note: Channels remarked * are selected to perform test.

2.3. Test Mode and Test Software

a. During testing, the interface cables and equipment positions were varied according to ANSI C63.4.
b. The complete test system included remote workstation and EUT for RF test. The remote workstation included Notebook and AP.
c. An executive program,"wl command" under WIN 7 was executed to transmit and receive data via WLAN.
d. The following test modes were performed for the test:

Test Mode	Operating Description
1	802.11a (6Mbps), 1TX
2	802.11an HT20 (6.5Mbps), 1TX
3	802.11an HT40 (13.5Mbps), 1TX
4	802.11a (6Mbps), 2TX
5	802.11an HT20 (6.5Mbps), 2TX
6	802.11an HT40 (13.5Mbps), 2TX
For conduction test, caused "Test Mode 4" generated the worst case, it was reported as the final data. For radiation test (below 1GHz), caused "Test Mode 4" generated the worst case, it was reported as the final data. For radiation test (above 1GHz), caused "Test Mode 1~6" 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	LatitudeE5450/5450	Power Cable, Unshielding, 1.8m
AP	D-Link	DIR-868L	Power Cable, Unshielding, 1.8m

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	8127-568	2017/02/15	2018/02/14
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	2017/05/15	2018/05/14
Horn Antenna	EMCO	3115	31589	2017/02/18	2018/02/17
Horn Anrenna	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	2017/09/20	2018/09/19
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	2017/07/01	2018/06/30
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	2017/09/04	2018/09/03
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	Dual band and PIFA Type Antenna
Antenna Gain	1TX: ANT A: 5.8dBi 2TX: ANT A: 5.8dBi, ANT B: 5.1dBi

2412-2462MHz	
1TX	For Power directional gain= G_{ant}= 1.1 dBi For PSD directional gain = 1.1 (dBi)
2TX	For Power directional gain= G_{ant}= 1.1 dBi For PSD directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2$ /NANT] = 4.01 (dBi)

5150-5250MHz, 5250-5350MHz, 5470-5725MHz, 5725-5850MHz	
1TX	For Power directional gain= G_{ant}= 5.8 dBi For PSD directional gain = 5.8 (dBi)
2TX	For Power directional gain= G_{ant}= 5.8 dBi For PSD directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2$ /NANT] = 8.47 (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.

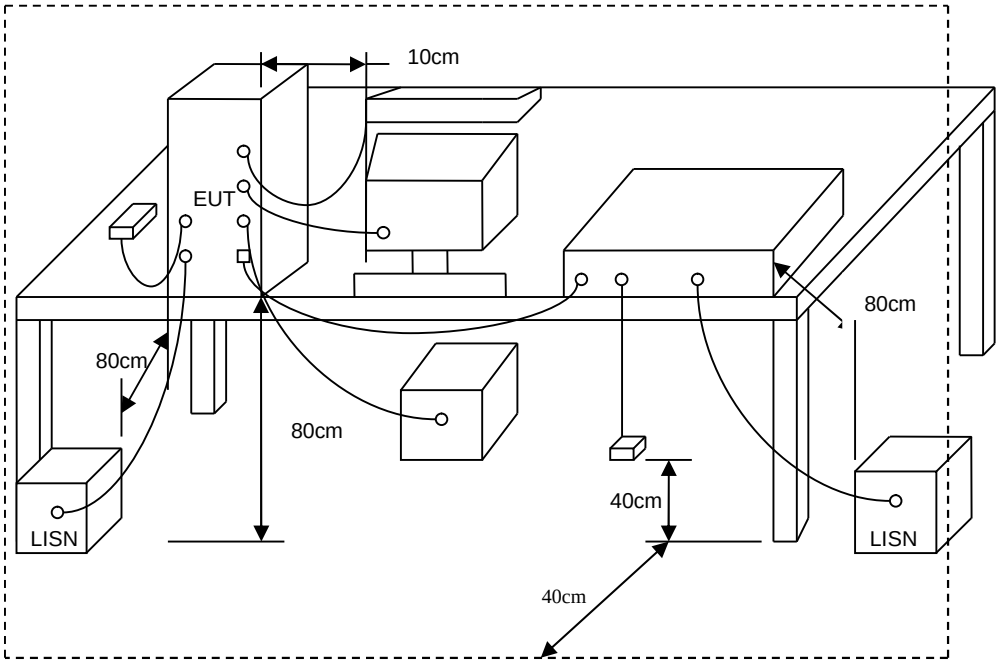
Frequency (MHz)	Quasi Peak (dBμV)	Average (dBμV)
0.15 – 0.5	66-56*	56-46*
0.5 – 5.0	56	46
5.0 – 30.0	60	50

*Decreases with the logarithm of the frequency.

5.2. Test Procedures

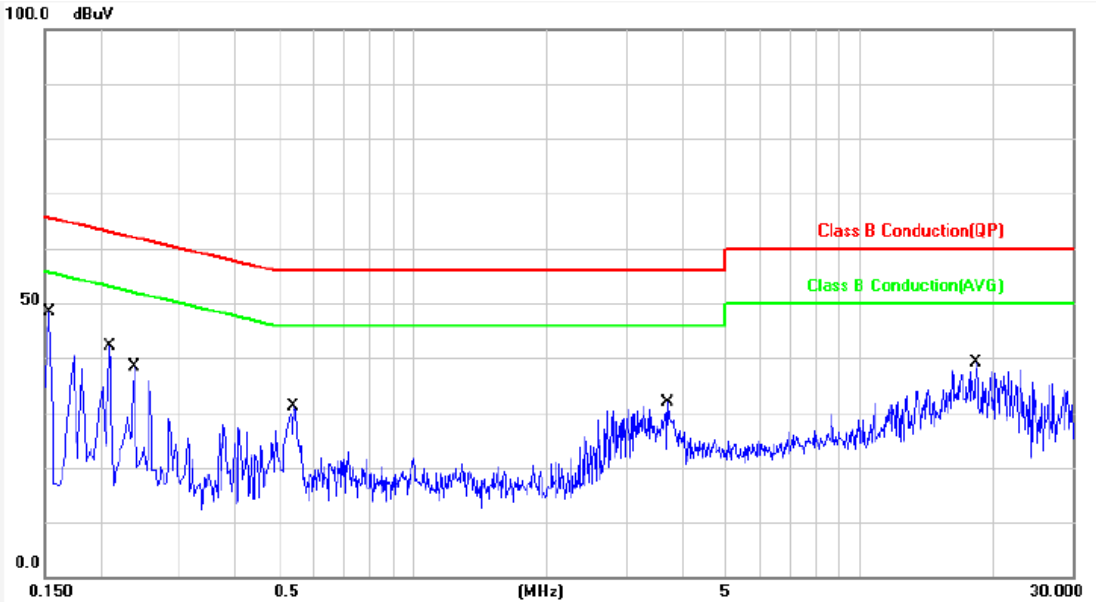
a. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
b. Connect EUT to the power mains through a line impedance stabilization network (LISN).
c. All the support units are connecting to the other LISN.
d. The LISN provides 50 ohm coupling impedance for the measuring instrument.
e. The FCC states that a 50 ohm, 50 micro-Henry LISN should be used.
f. Both sides of AC line were checked for maximum conducted interference.
g. The frequency range from 150 kHz to 30 MHz was searched.
h. 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

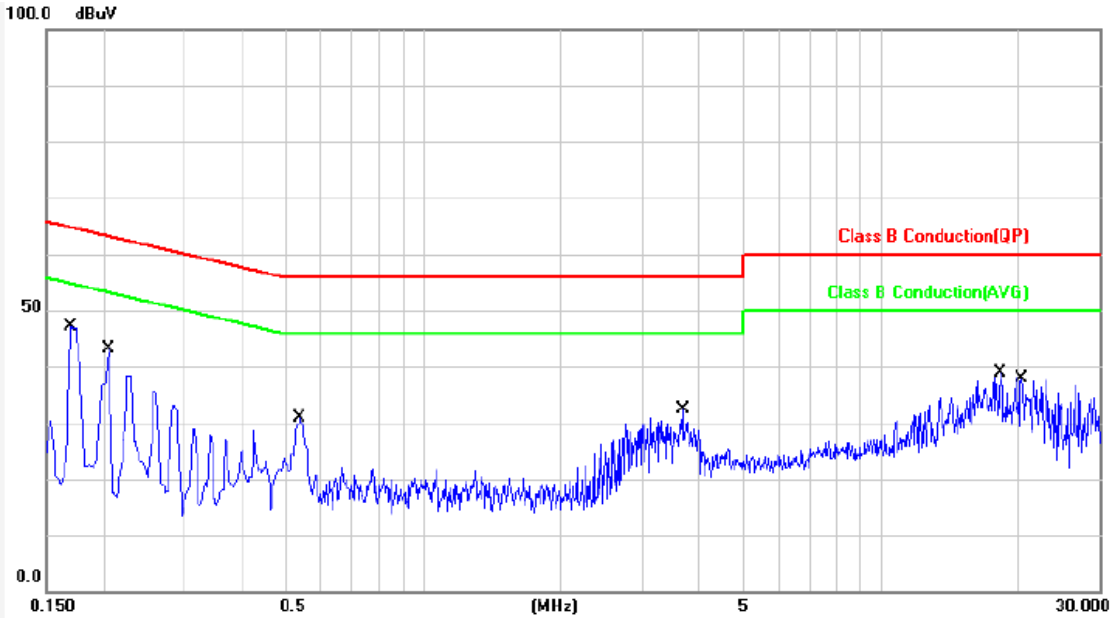
Power	:	AC 120V	Pol/Phase	:	LINE
Test Mode	:	Mode 4, Band 1	Temperature	:	22 °C
Test Date	:	Sep. 07, 2017	Humidity	:	64 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1539	9.91	36.89	46.80	65.78	-18.98	QP	P
2	0.1539	9.91	16.83	26.74	55.78	-29.04	AVG	P
3	0.2100	9.91	29.62	39.53	63.20	-23.67	QP	P
4	0.2100	9.91	11.94	21.85	53.20	-31.35	AVG	P
5	0.2380	9.91	25.81	35.72	62.16	-26.44	QP	P
6	0.2380	9.91	9.18	19.09	52.16	-33.07	AVG	P
7	0.5420	9.93	19.18	29.11	56.00	-26.89	QP	P
8	0.5420	9.93	11.46	21.39	46.00	-24.61	AVG	P
9	3.7380	10.12	16.93	27.05	56.00	-28.95	QP	P
10	3.7380	10.12	7.17	17.29	46.00	-28.71	AVG	P
11	18.2420	10.56	26.13	36.69	60.00	-23.31	QP	P
12	18.2420	10.56	22.28	32.84	50.00	-17.16	AVG	P

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

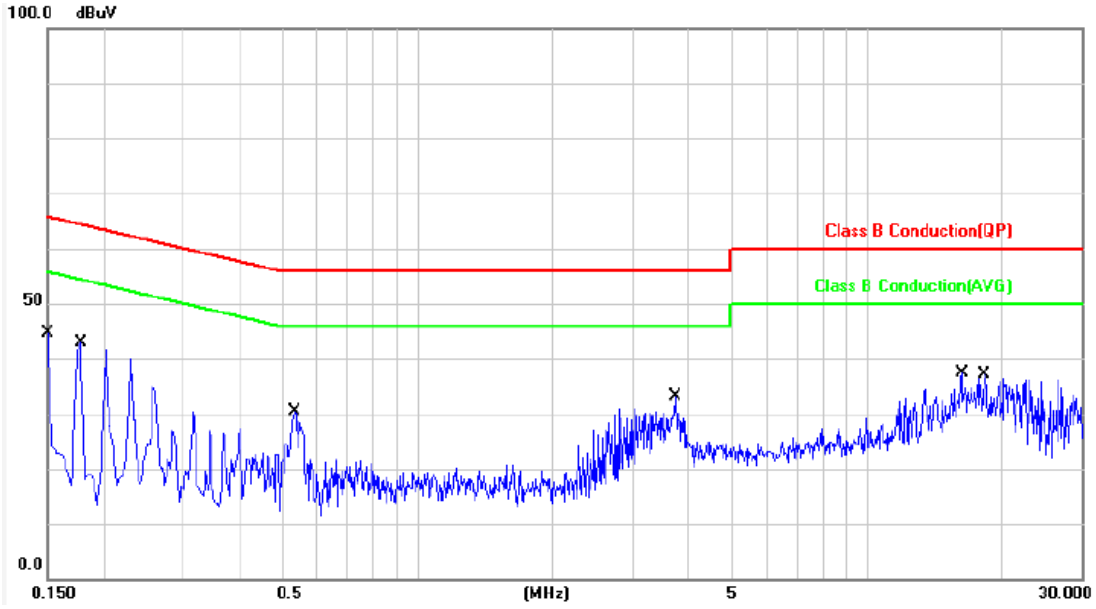
Power	:	AC 120V	Pol/Phase	:	NEUTRAL
Test Mode	:	Mode 4, Band 1	Temperature	:	22 °C
Test Date	:	Sep. 07, 2017	Humidity	:	64 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1700	9.88	34.13	44.01	64.96	-20.95	QP	P
2	0.1700	9.88	13.66	23.54	54.96	-31.42	AVG	P
3	0.2060	9.88	29.83	39.71	63.36	-23.65	QP	P
4	0.2060	9.88	11.78	21.66	53.36	-31.70	AVG	P
5	0.5380	9.89	19.51	29.40	56.00	-26.60	QP	P
6	0.5380	9.89	12.02	21.91	46.00	-24.09	AVG	P
7	3.6940	10.06	17.01	27.07	56.00	-28.93	QP	P
8	3.6940	10.06	7.20	17.26	46.00	-28.74	AVG	P
9	18.2420	10.58	26.98	37.56	60.00	-22.44	QP	P
10	18.2420	10.58	23.59	34.17	50.00	-15.83	AVG	P
11	20.3180	10.64	23.78	34.42	60.00	-25.58	QP	P
12	20.3180	10.64	20.41	31.05	50.00	-18.95	AVG	P

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

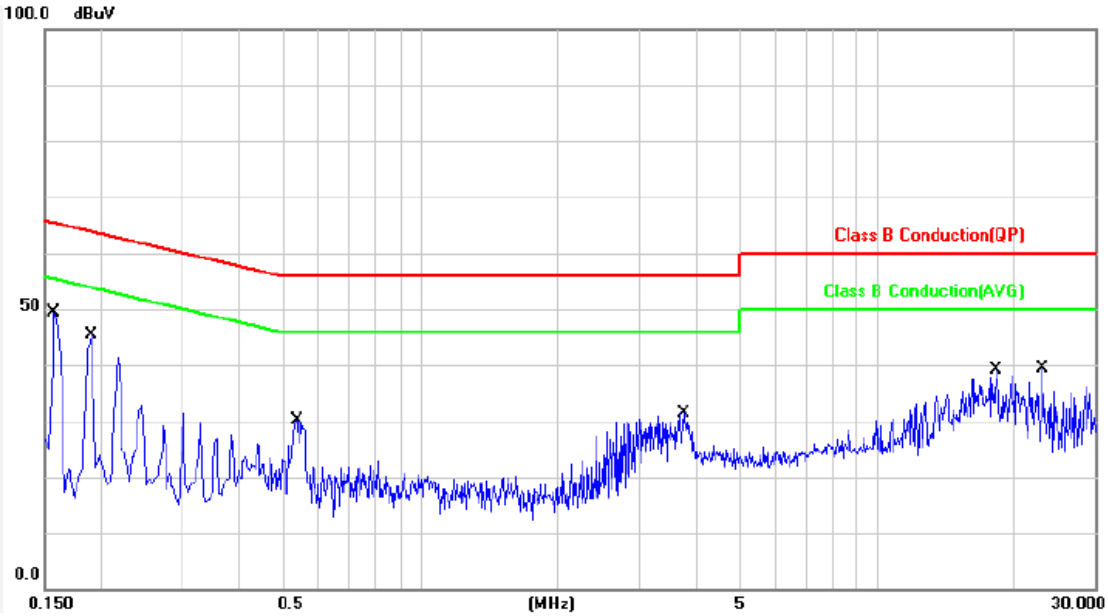
Power	:	AC 120V	Pol/Phase	:	LINE
Test Mode	:	Mode 4, Band 2	Temperature	:	22 °C
Test Date	:	Sep. 07, 2017	Humidity	:	64 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1500	9.91	37.44	47.35	65.99	-18.64	QP	P
2	0.1500	9.91	16.95	26.86	55.99	-29.13	AVG	P
3	0.1780	9.91	32.85	42.76	64.57	-21.81	QP	P
4	0.1780	9.91	12.59	22.50	54.57	-32.07	AVG	P
5	0.5340	9.93	19.37	29.30	56.00	-26.70	QP	P
6	0.5340	9.93	12.25	22.18	46.00	-23.82	AVG	P
7	3.7580	10.13	15.84	25.97	56.00	-30.03	QP	P
8	3.7580	10.13	6.77	16.90	46.00	-29.10	AVG	P
9	16.2300	10.51	25.32	35.83	60.00	-24.17	QP	P
10	16.2300	10.51	21.51	32.02	50.00	-17.98	AVG	P
11	18.3060	10.56	25.93	36.49	60.00	-23.51	QP	P
12	18.3060	10.56	22.60	33.16	50.00	-16.84	AVG	P

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

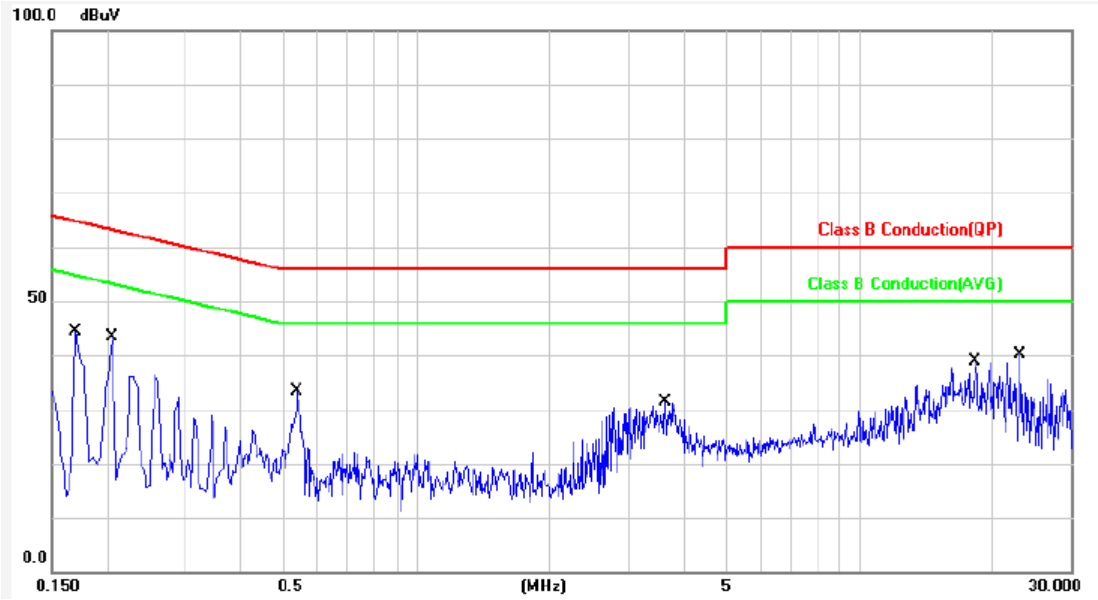
Power	:	AC 120V	Pol/Phase	:	NEUTRAL
Test Mode	:	Mode 4, Band 2	Temperature	:	22 °C
Test Date	:	Sep. 07, 2017	Humidity	:	64 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1580	9.88	36.36	46.24	65.56	-19.32	QP	P
2	0.1580	9.88	16.35	26.23	55.56	-29.33	AVG	P
3	0.1900	9.88	31.48	41.36	64.03	-22.67	QP	P
4	0.1900	9.88	12.22	22.10	54.03	-31.93	AVG	P
5	0.5380	9.89	19.42	29.31	56.00	-26.69	QP	P
6	0.5380	9.89	11.88	21.77	46.00	-24.23	AVG	P
7	3.7860	10.08	17.39	27.47	56.00	-28.53	QP	P
8	3.7860	10.08	6.88	16.96	46.00	-29.04	AVG	P
9	18.2420	10.58	26.92	37.50	60.00	-22.50	QP	P
10	18.2420	10.58	23.66	34.24	50.00	-15.76	AVG	P
11	23.1299	10.70	28.32	39.02	60.00	-20.98	QP	P
12	23.1299	10.70	25.55	36.25	50.00	-13.75	AVG	P

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

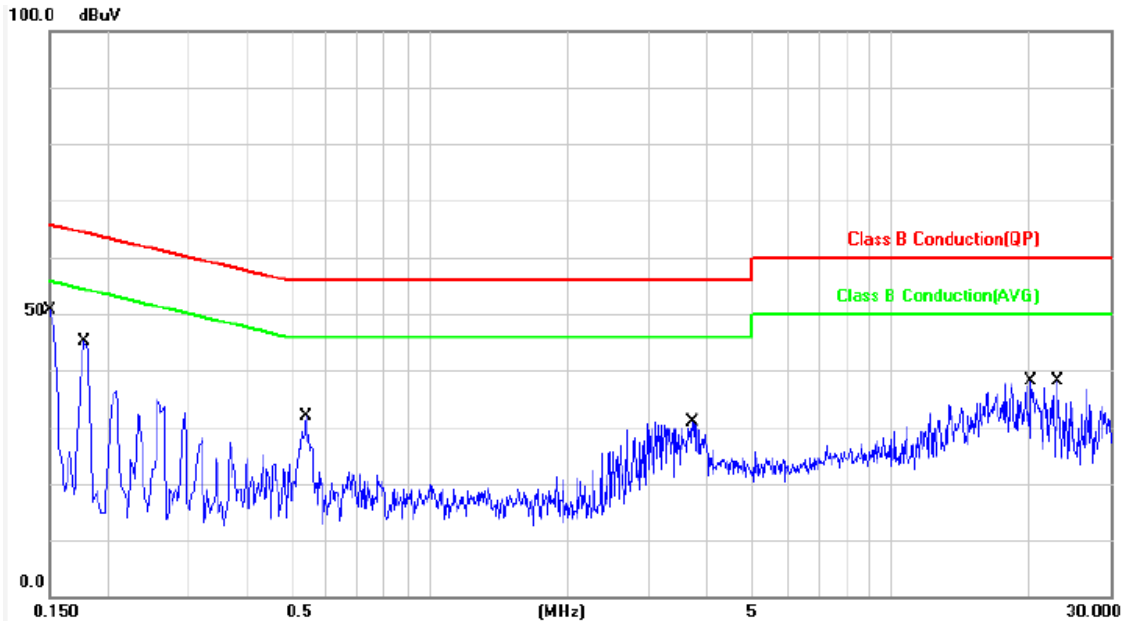
Power	:	AC 120V	Pol/Phase	:	LINE
Test Mode	:	Mode 4, Band 3	Temperature	:	22 °C
Test Date	:	Sep. 07, 2017	Humidity	:	64 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1700	9.91	33.97	43.88	64.96	-21.08	QP	P
2	0.1700	9.91	13.47	23.38	54.96	-31.58	AVG	P
3	0.2060	9.91	29.75	39.66	63.36	-23.70	QP	P
4	0.2060	9.91	11.78	21.69	53.36	-31.67	AVG	P
5	0.5380	9.93	19.47	29.40	56.00	-26.60	QP	P
6	0.5380	9.93	12.06	21.99	46.00	-24.01	AVG	P
7	3.6500	10.12	15.17	25.29	56.00	-30.71	QP	P
8	3.6500	10.12	6.98	17.10	46.00	-28.90	AVG	P
9	18.2420	10.56	26.92	37.48	60.00	-22.52	QP	P
10	18.2420	10.56	23.61	34.17	50.00	-15.83	AVG	P
11	23.1299	10.67	28.32	38.99	60.00	-21.01	QP	P
12	23.1299	10.67	25.49	36.16	50.00	-13.84	AVG	P

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

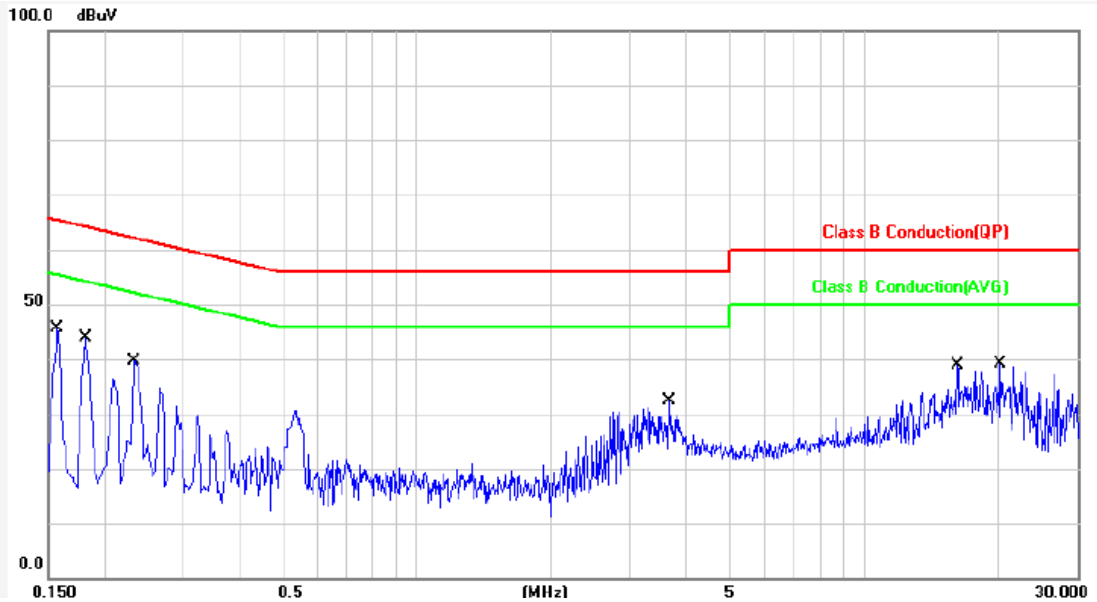
Power	:	AC 120V	Pol/Phase	:	NEUTRAL
Test Mode	:	Mode 4, Band 3	Temperature	:	22 °C
Test Date	:	Sep. 07, 2017	Humidity	:	64 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1500	9.88	37.20	47.08	65.99	-18.91	QP	P
2	0.1500	9.88	16.83	26.71	55.99	-29.28	AVG	P
3	0.1780	9.88	32.93	42.81	64.57	-21.76	QP	P
4	0.1780	9.88	12.53	22.41	54.57	-32.16	AVG	P
5	0.5420	9.89	19.06	28.95	56.00	-27.05	QP	P
6	0.5420	9.89	11.44	21.33	46.00	-24.67	AVG	P
7	3.7260	10.06	17.18	27.24	56.00	-28.76	QP	P
8	3.7260	10.06	7.18	17.24	46.00	-28.76	AVG	P
9	20.2580	10.64	26.83	37.47	60.00	-22.53	QP	P
10	20.2580	10.64	24.11	34.75	50.00	-15.25	AVG	P
11	23.1299	10.70	28.36	39.06	60.00	-20.94	QP	P
12	23.1299	10.70	25.69	36.39	50.00	-13.61	AVG	P

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

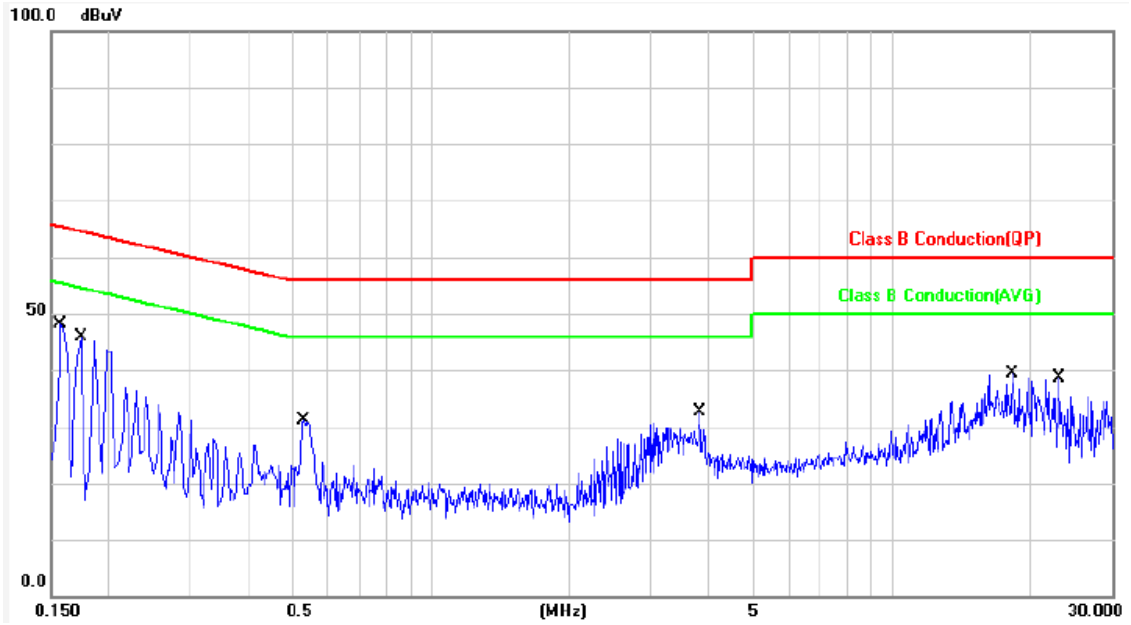
Power	:	AC 120V	Pol/Phase	:	LINE
Test Mode	:	Mode 4, Band 4	Temperature	:	22 °C
Test Date	:	Sep. 07, 2017	Humidity	:	64 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1580	9.91	36.14	46.05	65.56	-19.51	QP	P
2	0.1580	9.91	16.26	26.17	55.56	-29.39	AVG	P
3	0.1819	9.91	32.74	42.65	64.39	-21.74	QP	P
4	0.1819	9.91	13.58	23.49	54.39	-30.90	AVG	P
5	0.2340	9.91	26.02	35.93	62.30	-26.37	QP	P
6	0.2340	9.91	9.94	19.85	52.30	-32.45	AVG	P
7	3.6780	10.12	16.78	26.90	56.00	-29.10	QP	P
8	3.6780	10.12	7.29	17.41	46.00	-28.59	AVG	P
9	16.1660	10.51	24.64	35.15	60.00	-24.85	QP	P
10	16.1660	10.51	20.83	31.34	50.00	-18.66	AVG	P
11	20.2580	10.61	26.18	36.79	60.00	-23.21	QP	P
12	20.2580	10.61	23.16	33.77	50.00	-16.23	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 4, Band 4	Temperature	:	22 °C
Test Date	:	Sep. 07, 2017	Humidity	:	64 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1580	9.88	36.16	46.04	65.56	-19.52	QP	P
2	0.1580	9.88	16.24	26.12	55.56	-29.44	AVG	P
3	0.1740	9.88	33.25	43.13	64.76	-21.63	QP	P
4	0.1740	9.88	12.70	22.58	54.76	-32.18	AVG	P
5	0.5299	9.89	18.64	28.53	56.00	-27.47	QP	P
6	0.5299	9.89	11.96	21.85	46.00	-24.15	AVG	P
7	3.8300	10.08	16.40	26.48	56.00	-29.52	QP	P
8	3.8300	10.08	6.74	16.82	46.00	-29.18	AVG	P
9	18.2420	10.58	25.80	36.38	60.00	-23.62	QP	P
10	18.2420	10.58	22.05	32.63	50.00	-17.37	AVG	P
11	23.1299	10.70	27.77	38.47	60.00	-21.53	QP	P
12	23.1299	10.70	24.80	35.50	50.00	-14.50	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.

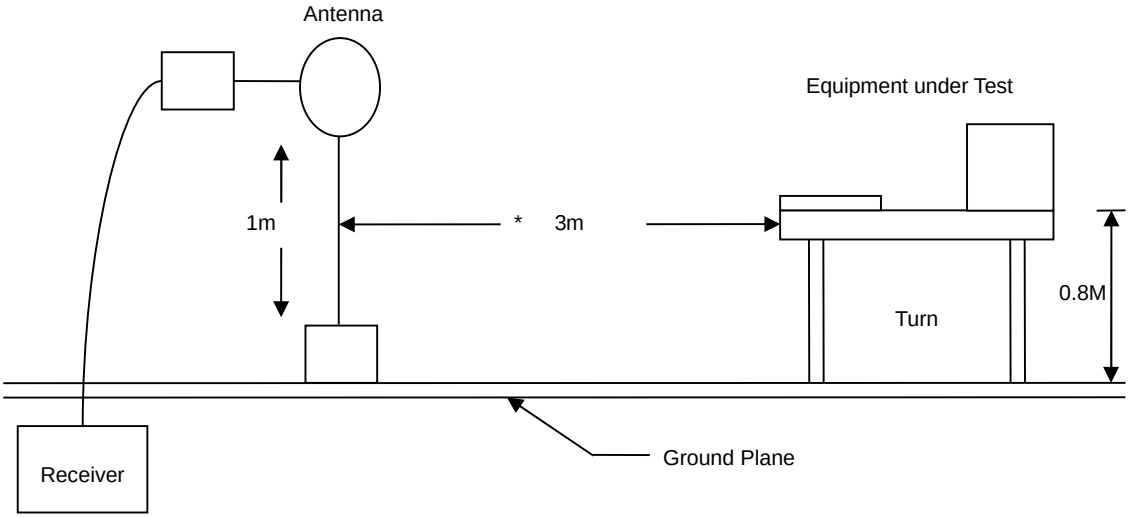
(8) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the upper and lower frequency band edges as the design of the equipment permits.

6.2. Test Procedures

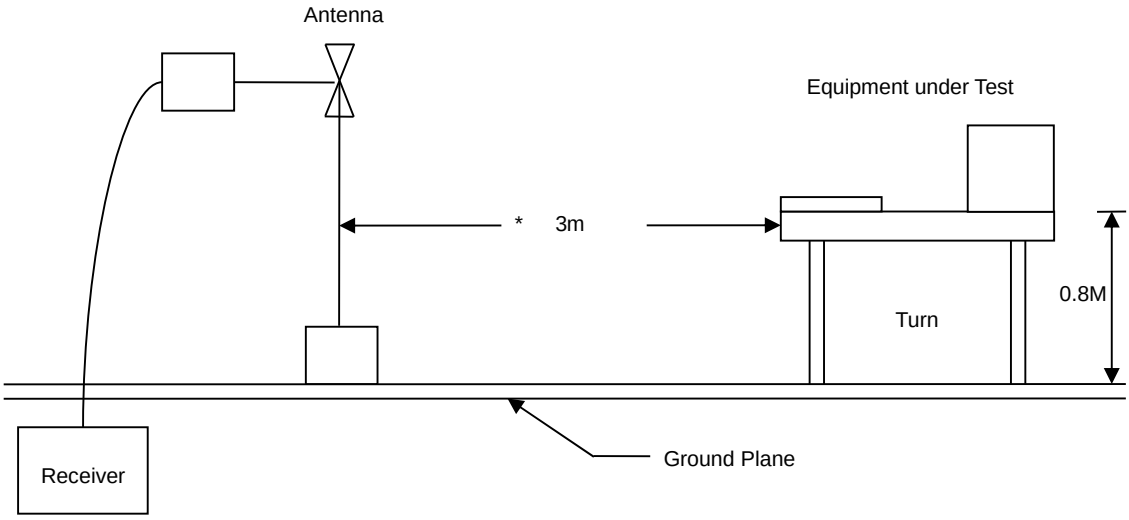
a. The EUT was placed on a rotatable table top 0.8 meter above ground.
b. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
c. The table was rotated 360 degrees to determine the position of the highest radiation.
d. The antenna 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

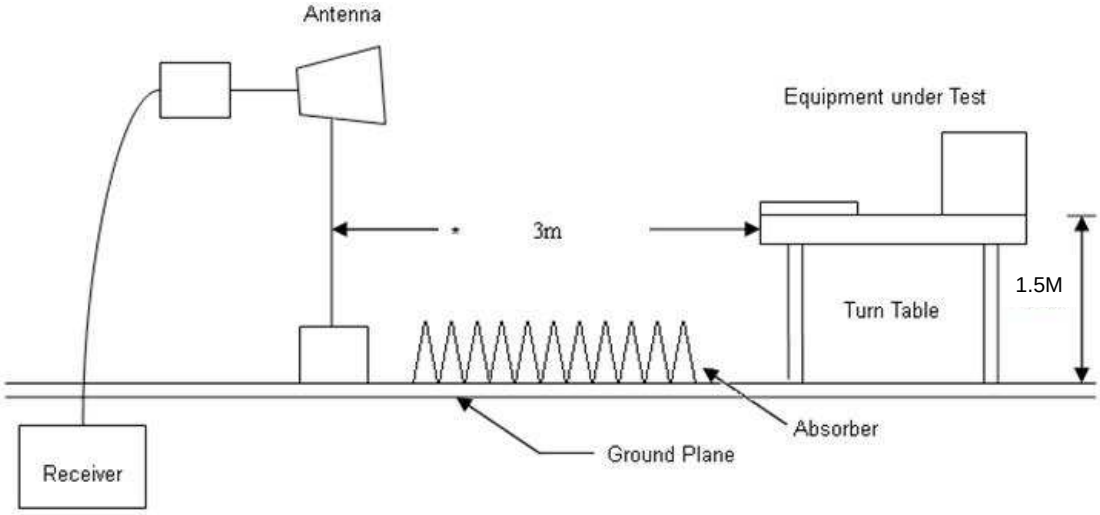
Below 30MHz test setup



30MHz- 1GHz Test Setup



Above 1GHz Test Setup

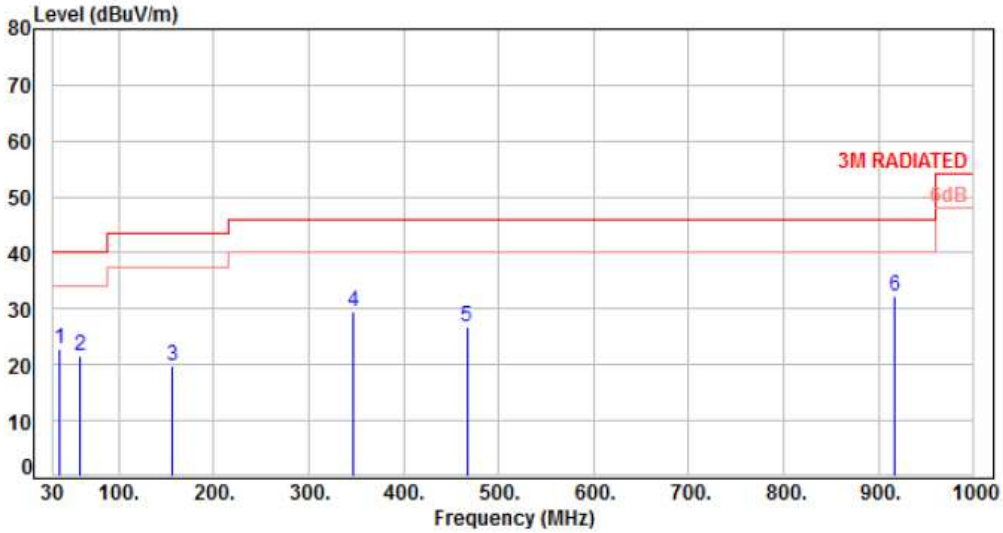


6.4. Test Result and Data (9kHz ~ 30MHz)

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

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

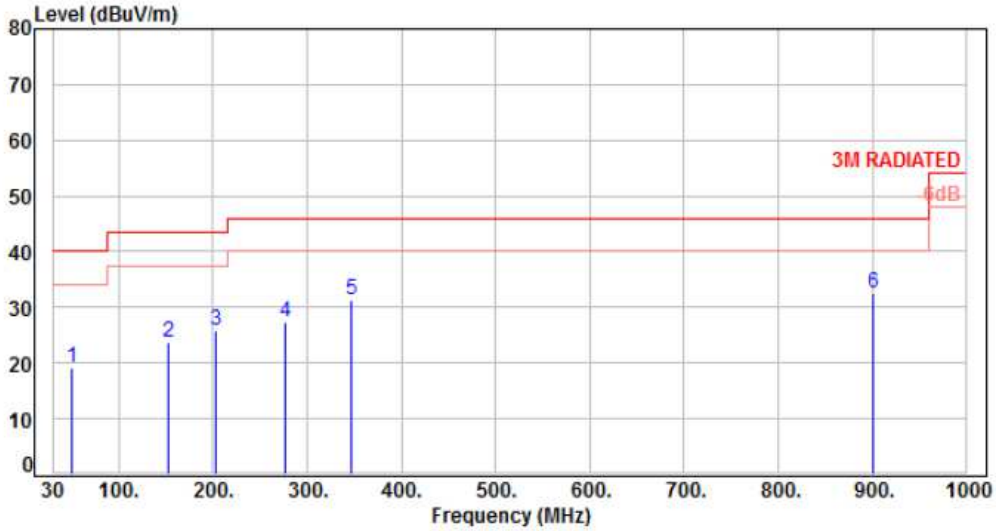
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 4, Band 1	Temperature	:	24 °C
Test Date	:	Sep. 06, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	37.76	-10.36	33.05	22.69	40.00	-17.31	Peak	100	0	P
2	59.10	-10.35	32.01	21.66	40.00	-18.34	Peak	100	0	P
3	156.10	-9.92	29.82	19.90	43.50	-23.60	Peak	100	0	P
4	346.22	-7.64	37.27	29.63	46.00	-16.37	Peak	100	0	P
5	466.50	-4.59	31.35	26.76	46.00	-19.24	Peak	100	0	P
6	916.58	3.13	29.13	32.26	46.00	-13.74	Peak	100	0	P

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

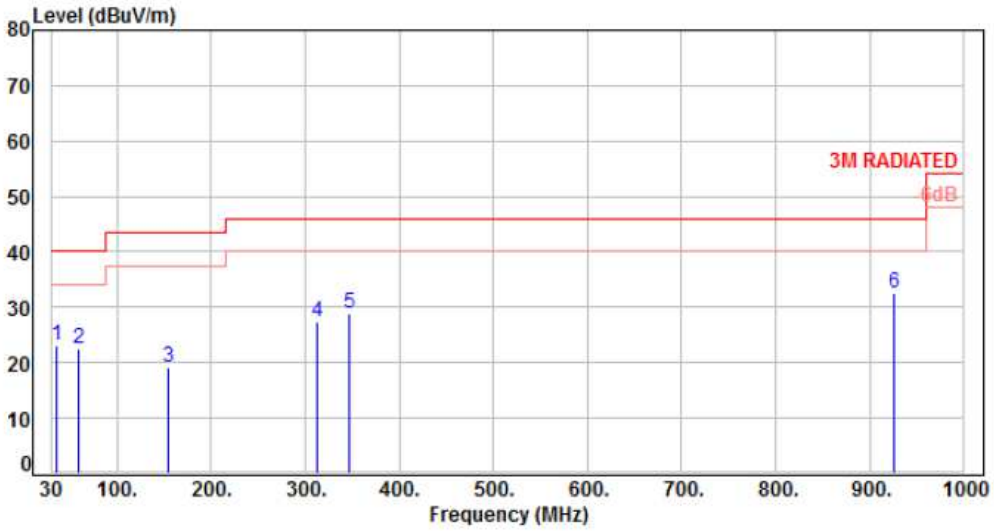
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 4, Band 1	Temperature	:	24 °C
Test Date	:	Sep. 06, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	49.40	-9.79	29.07	19.28	40.00	-20.72	Peak	100	0	P
2	152.22	-9.93	33.55	23.62	43.50	-19.88	Peak	100	0	P
3	202.66	-12.49	38.28	25.79	43.50	-17.71	Peak	100	0	P
4	276.38	-9.58	36.81	27.23	46.00	-18.77	Peak	100	0	P
5	346.22	-7.64	38.90	31.26	46.00	-14.74	Peak	100	0	P
6	901.06	2.96	29.57	32.53	46.00	-13.47	Peak	100	0	P

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

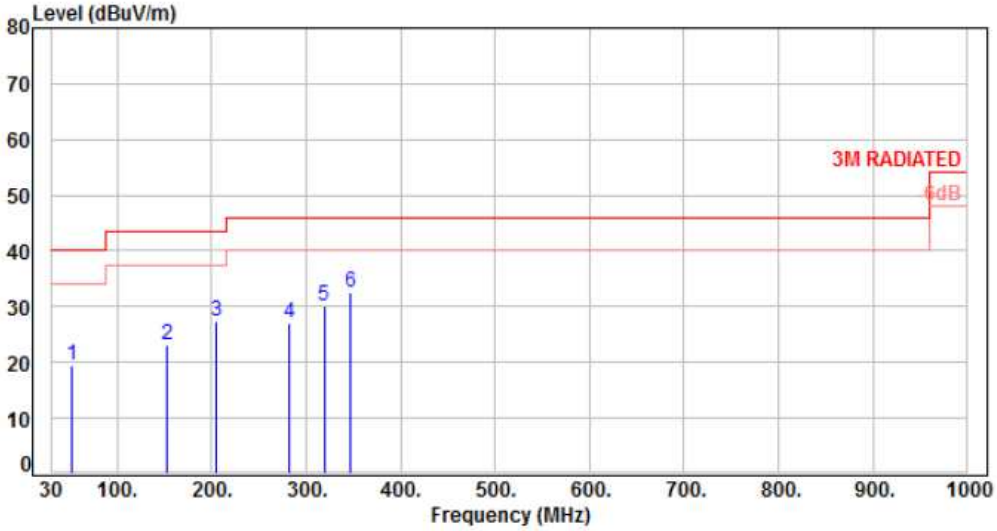
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 4, Band 2	Temperature	:	24 °C
Test Date	:	Sep. 06, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	35.82	-10.50	33.54	23.04	40.00	-16.96	Peak	100	0	P
2	59.10	-10.35	32.75	22.40	40.00	-17.60	Peak	100	0	P
3	154.16	-9.92	29.20	19.28	43.50	-24.22	Peak	100	0	P
4	313.24	-8.52	36.01	27.49	46.00	-18.51	Peak	100	0	P
5	346.22	-7.64	36.53	28.89	46.00	-17.11	Peak	100	0	P
6	926.28	3.25	29.17	32.42	46.00	-13.58	Peak	100	0	P

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

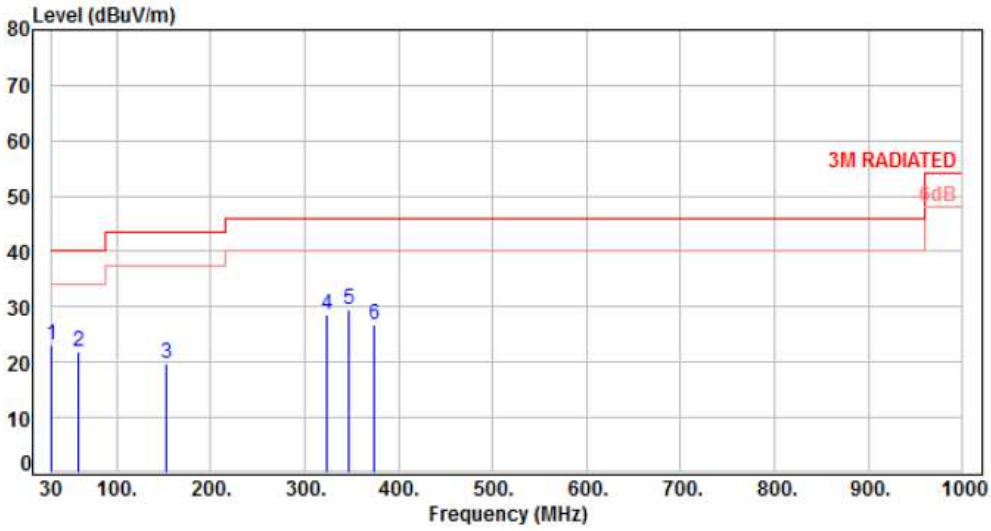
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 4, Band 2	Temperature	:	24 °C
Test Date	:	Sep. 06, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	51.34	-9.86	29.20	19.34	40.00	-20.66	Peak	100	0	P
2	152.22	-9.93	33.16	23.23	43.50	-20.27	Peak	100	0	P
3	204.60	-12.48	39.76	27.28	43.50	-16.22	Peak	100	0	P
4	282.20	-9.37	36.54	27.17	46.00	-18.83	Peak	100	0	P
5	319.06	-8.36	38.39	30.03	46.00	-15.97	Peak	100	0	P
6	346.22	-7.64	40.17	32.53	46.00	-13.47	Peak	100	0	P

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

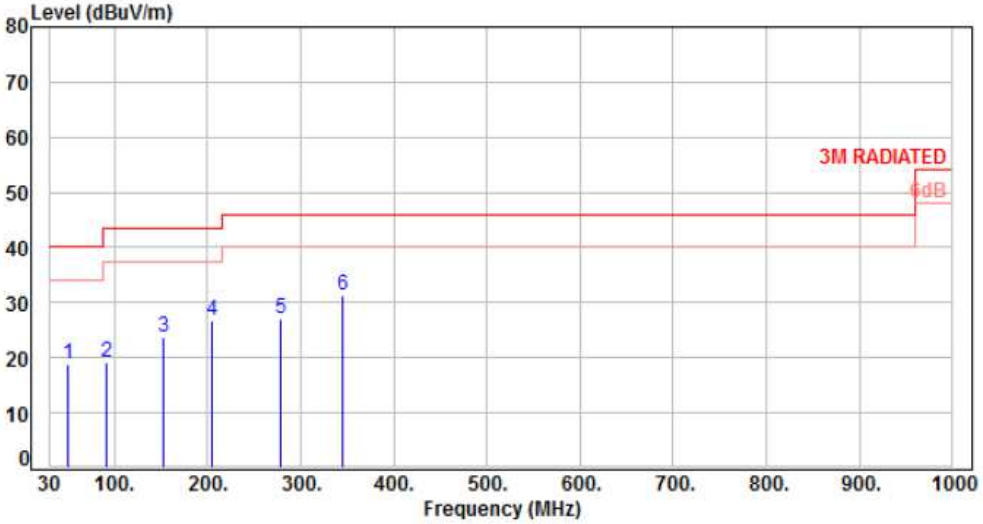
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 4, Band 3	Temperature	:	24 °C
Test Date	:	Sep. 06, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	30.00	-10.67	33.69	23.02	40.00	-16.98	Peak	100	0	P
2	59.10	-10.35	32.35	22.00	40.00	-18.00	Peak	100	0	P
3	152.22	-9.93	29.77	19.84	43.50	-23.66	Peak	100	0	P
4	322.94	-8.27	36.93	28.66	46.00	-17.34	Peak	100	0	P
5	346.22	-7.64	37.05	29.41	46.00	-16.59	Peak	100	0	P
6	373.38	-6.89	33.63	26.74	46.00	-19.26	Peak	100	0	P

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

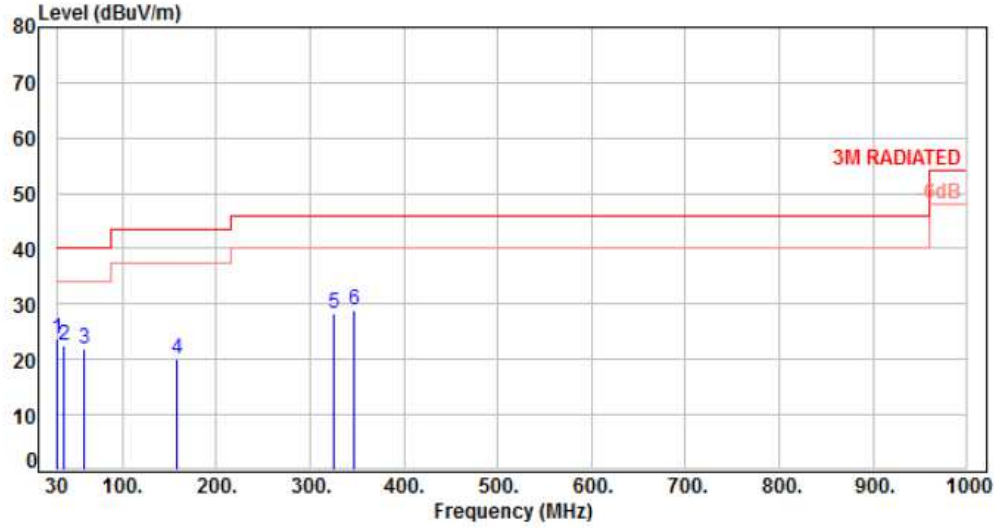
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 4, Band 3	Temperature	:	24 °C
Test Date	:	Sep. 06, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	49.40	-9.79	28.60	18.81	40.00	-21.19	Peak	100	0	P
2	92.08	-15.80	34.98	19.18	43.50	-24.32	Peak	100	0	P
3	152.22	-9.93	33.61	23.68	43.50	-19.82	Peak	100	0	P
4	204.60	-12.48	39.11	26.63	43.50	-16.87	Peak	100	0	P
5	278.32	-9.51	36.59	27.08	46.00	-18.92	Peak	100	0	P
6	344.28	-7.71	39.15	31.44	46.00	-14.56	Peak	100	0	P

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

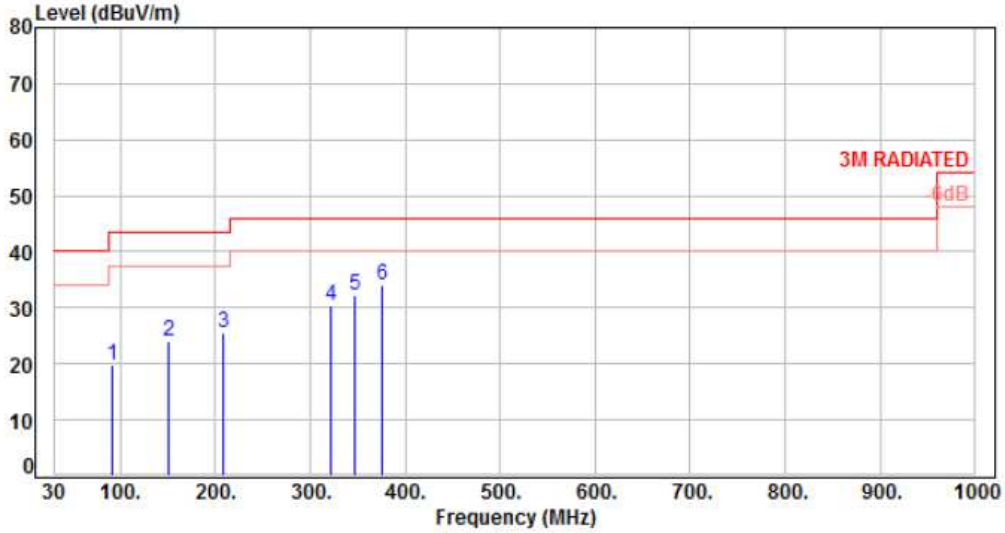
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 4, Band 4	Temperature	:	24 °C
Test Date	:	Sep. 06, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	30.00	-10.67	34.41	23.74	40.00	-16.26	Peak	100	0	P
2	37.76	-10.36	32.96	22.60	40.00	-17.40	Peak	100	0	P
3	59.10	-10.35	32.34	21.99	40.00	-18.01	Peak	100	0	P
4	158.04	-9.91	30.09	20.18	43.50	-23.32	Peak	100	0	P
5	324.88	-8.21	36.42	28.21	46.00	-17.79	Peak	100	0	P
6	346.22	-7.64	36.67	29.03	46.00	-16.97	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 4, Band 4	Temperature	:	24 °C
Test Date	:	Sep. 06, 2017	Humidity	:	63 %

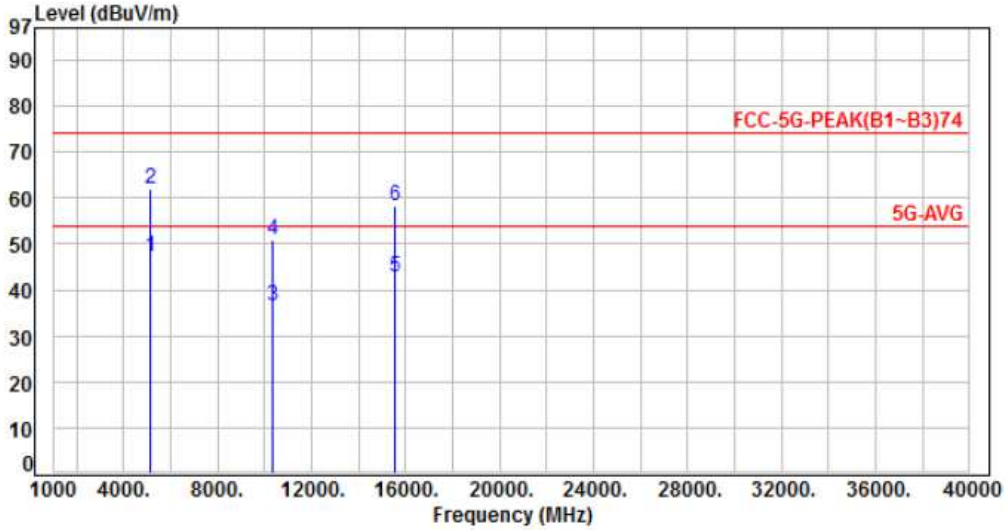


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	92.08	-15.80	35.57	19.77	43.50	-23.73	Peak	100	0	P
2	150.28	-9.94	34.06	24.12	43.50	-19.38	Peak	100	0	P
3	208.48	-12.45	37.86	25.41	43.50	-18.09	Peak	100	0	P
4	321.00	-8.31	38.62	30.31	46.00	-15.69	Peak	100	0	P
5	346.22	-7.64	39.98	32.34	46.00	-13.66	Peak	100	0	P
6	375.32	-6.84	40.91	34.07	46.00	-11.93	Peak	100	0	P

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

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

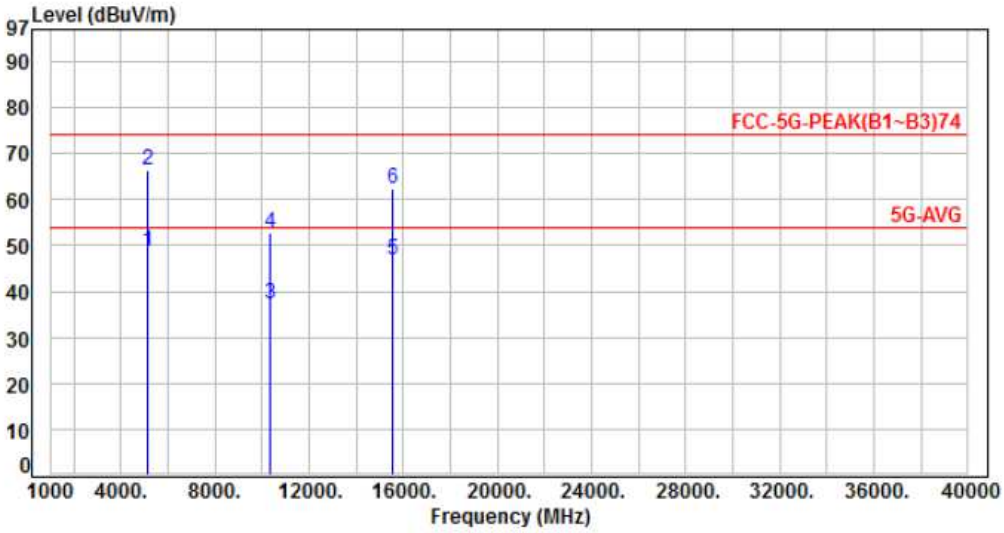
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 1, Band 1, CH36	Temperature	:	24 °C
Test Date	:	Aug. 24, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-12.71	59.97	47.26	54.00	-6.74	Average	292	227	P
2	5150.00	-12.71	74.74	62.03	74.00	-11.97	Peak	292	227	P
3	10360.00	-7.44	44.01	36.57	54.00	-17.43	Average	129	131	P
4	10360.00	-7.44	58.16	50.72	74.00	-23.28	Peak	129	131	P
5	15540.00	-3.78	46.62	42.84	54.00	-11.16	Average	286	122	P
6	15540.00	-3.78	61.98	58.20	74.00	-15.80	Peak	286	122	P

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

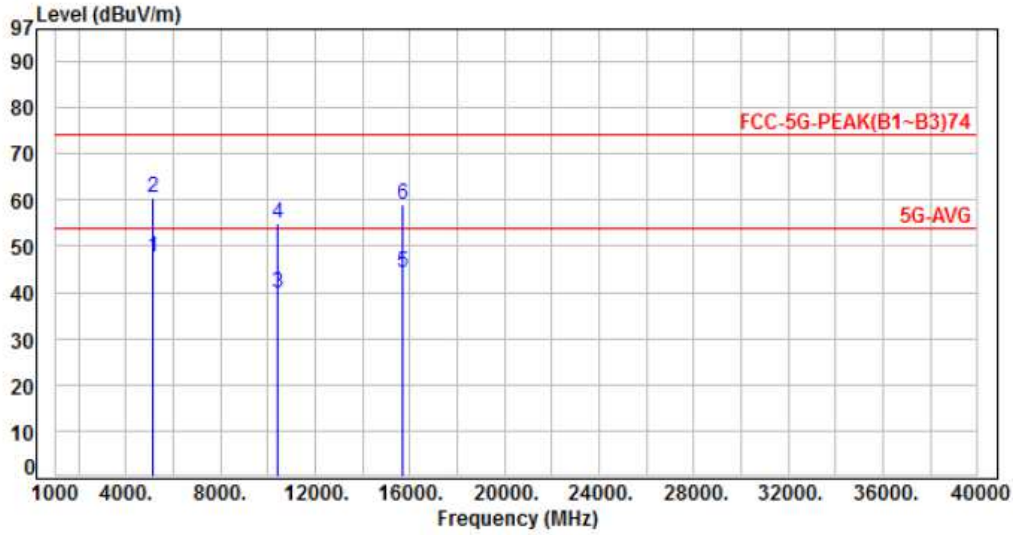
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 1, Band 1, CH36	Temperature	:	24 °C
Test Date	:	Aug. 24, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-12.71	61.40	48.69	54.00	-5.31	Average	178	136	P
2	5150.00	-12.71	79.17	66.46	74.00	-7.54	Peak	178	136	P
3	10360.00	-7.44	44.77	37.33	54.00	-16.67	Average	155	159	P
4	10360.00	-7.44	60.32	52.88	74.00	-21.12	Peak	155	159	P
5	15540.00	-3.78	50.59	46.81	54.00	-7.19	Average	101	144	P
6	15540.00	-3.78	65.93	62.15	74.00	-11.85	Peak	101	144	P

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

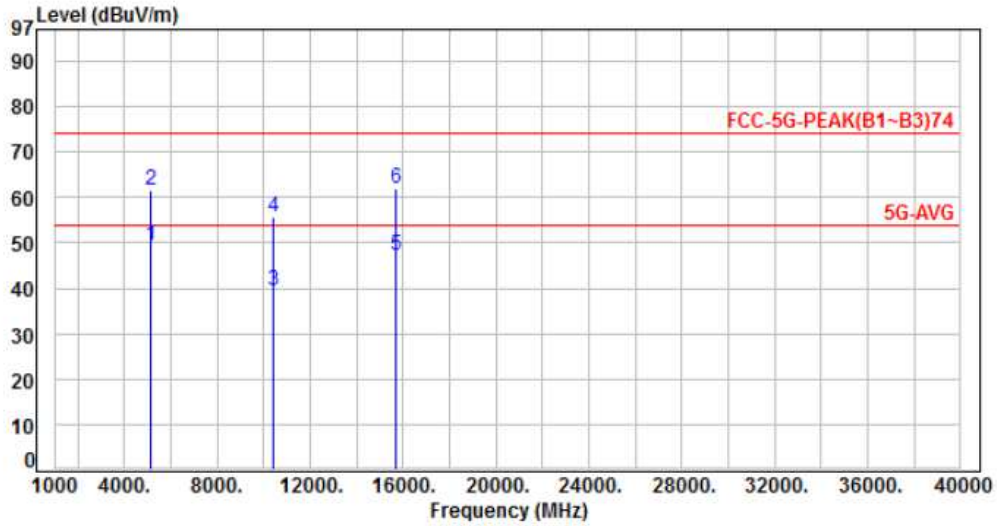
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 1, Band 1, CH44	Temperature	:	24 °C
Test Date	:	Aug. 24, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-12.71	60.12	47.41	54.00	-6.59	Average	145	236	P
2	5150.00	-12.71	73.20	60.49	74.00	-13.51	Peak	145	236	P
3	10440.00	-7.43	47.20	39.77	54.00	-14.23	Average	143	144	P
4	10440.00	-7.43	62.45	55.02	74.00	-18.98	Peak	143	144	P
5	15660.00	-3.80	48.10	44.30	54.00	-9.70	Average	262	117	P
6	15660.00	-3.80	62.81	59.01	74.00	-14.99	Peak	262	117	P

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

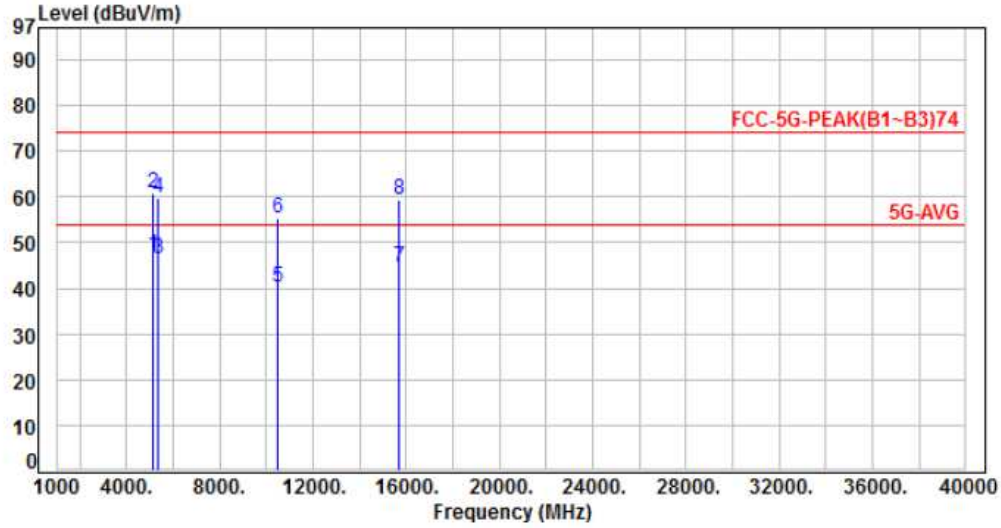
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 1, Band 1, CH44	Temperature	:	24 °C
Test Date	:	Aug. 24, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-12.71	62.06	49.35	54.00	-4.65	Average	146	139	P
2	5150.00	-12.71	74.26	61.55	74.00	-12.45	Peak	146	139	P
3	10440.00	-7.43	47.06	39.63	54.00	-14.37	Average	179	158	P
4	10440.00	-7.43	63.13	55.70	74.00	-18.30	Peak	179	158	P
5	15660.00	-3.80	50.94	47.14	54.00	-6.86	Average	167	165	P
6	15660.00	-3.80	65.73	61.93	74.00	-12.07	Peak	167	165	P

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

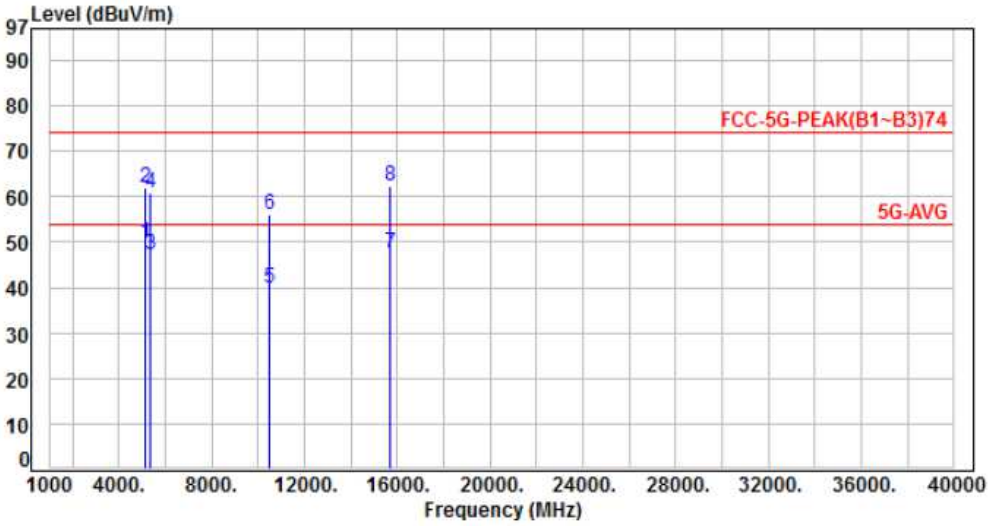
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 1, Band 1, CH48	Temperature	:	24 °C
Test Date	:	Aug. 24, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-12.71	60.04	47.33	54.00	-6.67	Average	148	243	P
2	5150.00	-12.71	73.59	60.88	74.00	-13.12	Peak	148	243	P
3	5350.00	-12.32	58.81	46.49	54.00	-7.51	Average	148	243	P
4	5350.00	-12.32	72.13	59.81	74.00	-14.19	Peak	148	243	P
5	10480.00	-7.42	47.62	40.20	54.00	-13.80	Average	151	162	P
6	10480.00	-7.42	62.91	55.49	74.00	-18.51	Peak	151	162	P
7	15720.00	-3.81	48.39	44.58	54.00	-9.42	Average	257	124	P
8	15720.00	-3.81	63.25	59.44	74.00	-14.56	Peak	257	124	P

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

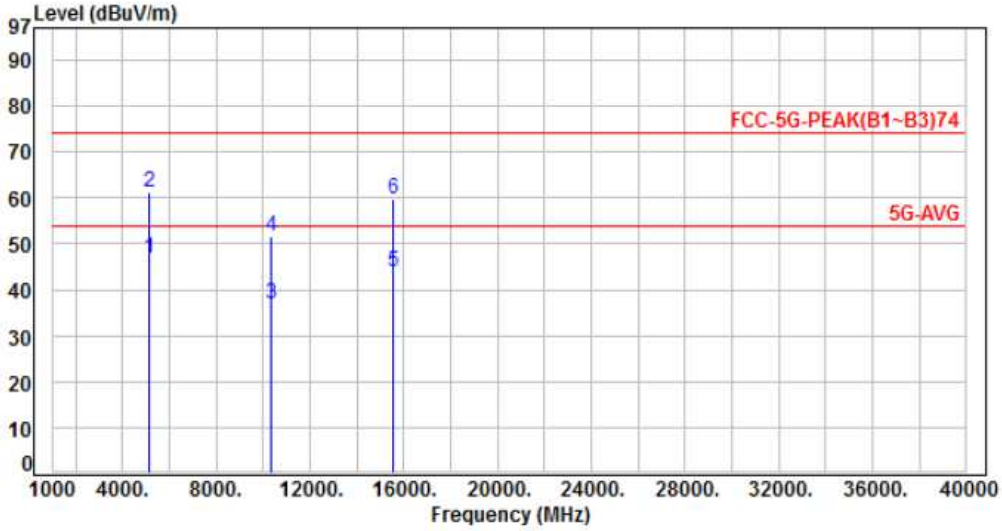
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 1, Band 1, CH48	Temperature	:	24 °C
Test Date	:	Aug. 24, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-12.71	62.44	49.73	54.00	-4.27	Average	148	142	P
2	5150.00	-12.71	74.53	61.82	74.00	-12.18	Peak	148	142	P
3	5350.00	-12.32	59.68	47.36	54.00	-6.64	Average	148	142	P
4	5350.00	-12.32	73.20	60.88	74.00	-13.12	Peak	148	142	P
5	10480.00	-7.42	47.33	39.91	54.00	-14.09	Average	182	147	P
6	10480.00	-7.42	63.61	56.19	74.00	-17.81	Peak	182	147	P
7	15720.00	-3.81	51.35	47.54	54.00	-6.46	Average	171	168	P
8	15720.00	-3.81	66.13	62.32	74.00	-11.68	Peak	171	168	P

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

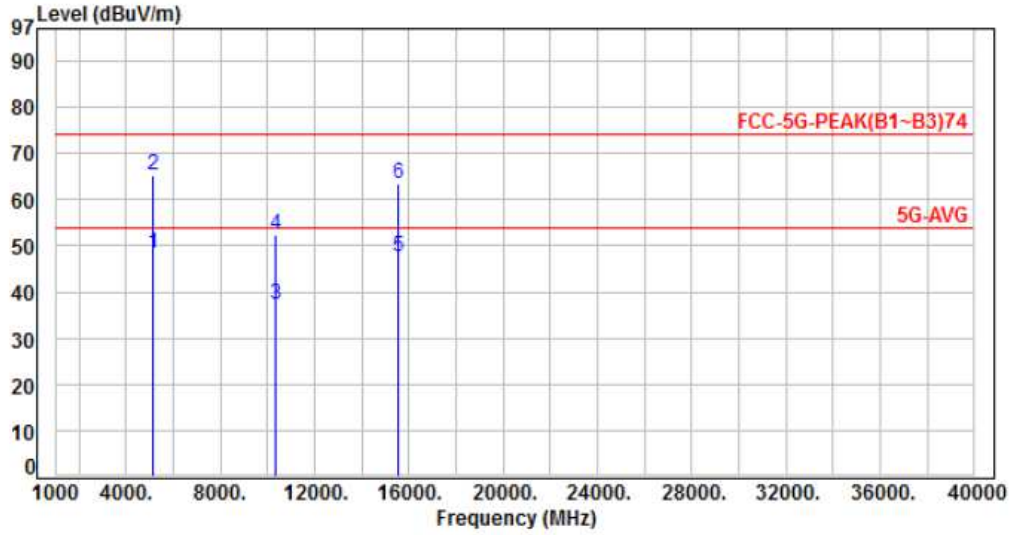
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 2, Band 1, CH36	Temperature	:	24 °C
Test Date	:	Aug. 24, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-12.71	59.72	47.01	54.00	-6.99	Average	287	214	P
2	5150.00	-12.71	73.87	61.16	74.00	-12.84	Peak	287	214	P
3	10360.00	-7.44	44.25	36.81	54.00	-17.19	Average	147	120	P
4	10360.00	-7.44	59.21	51.77	74.00	-22.23	Peak	147	120	P
5	15540.00	-3.78	47.57	43.79	54.00	-10.21	Average	271	144	P
6	15540.00	-3.78	63.35	59.57	74.00	-14.43	Peak	271	144	P

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

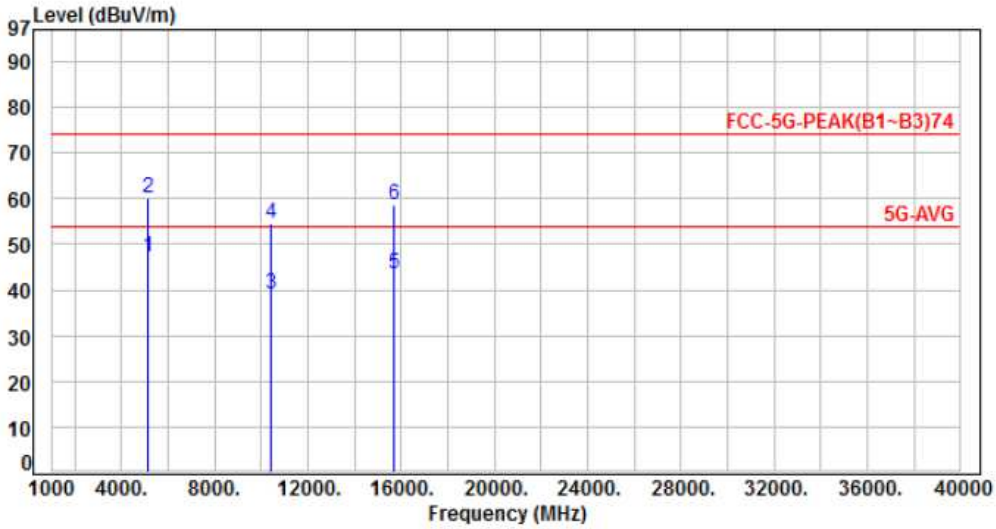
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 2, Band 1, CH36	Temperature	:	24 °C
Test Date	:	Aug. 24, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-12.71	61.04	48.33	54.00	-5.67	Average	159	151	P
2	5150.00	-12.71	77.86	65.15	74.00	-8.85	Peak	159	151	P
3	10360.00	-7.44	44.82	37.38	54.00	-16.62	Average	142	190	P
4	10360.00	-7.44	59.82	52.38	74.00	-21.62	Peak	142	190	P
5	15540.00	-3.78	51.37	47.59	54.00	-6.41	Average	143	120	P
6	15540.00	-3.78	67.18	63.40	74.00	-10.60	Peak	143	120	P

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

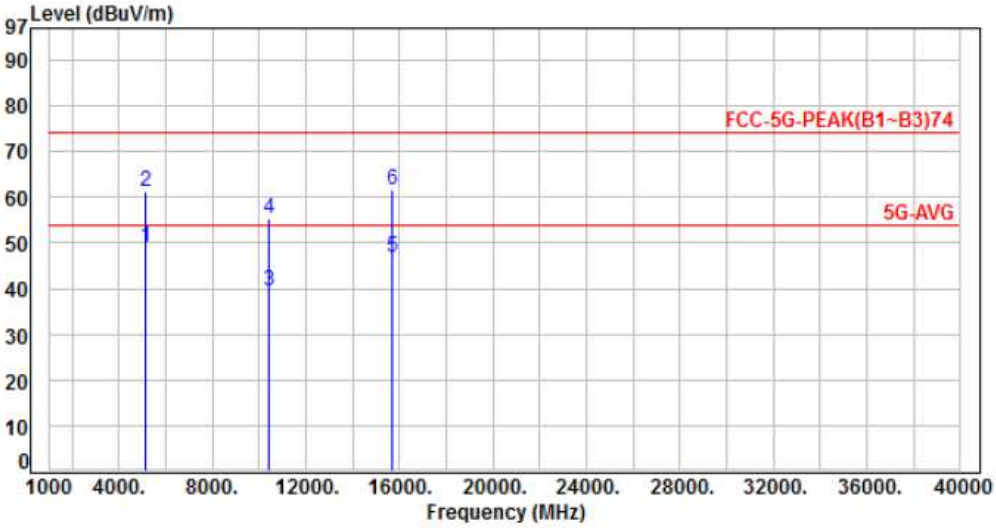
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 2, Band 1, CH44	Temperature	:	24 °C
Test Date	:	Aug. 24, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-12.71	59.85	47.14	54.00	-6.86	Average	147	231	P
2	5150.00	-12.71	72.86	60.15	74.00	-13.85	Peak	147	231	P
3	10440.00	-7.43	46.57	39.14	54.00	-14.86	Average	129	138	P
4	10440.00	-7.43	61.95	54.52	74.00	-19.48	Peak	129	138	P
5	15660.00	-3.80	47.44	43.64	54.00	-10.36	Average	253	126	P
6	15660.00	-3.80	62.37	58.57	74.00	-15.43	Peak	253	126	P

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

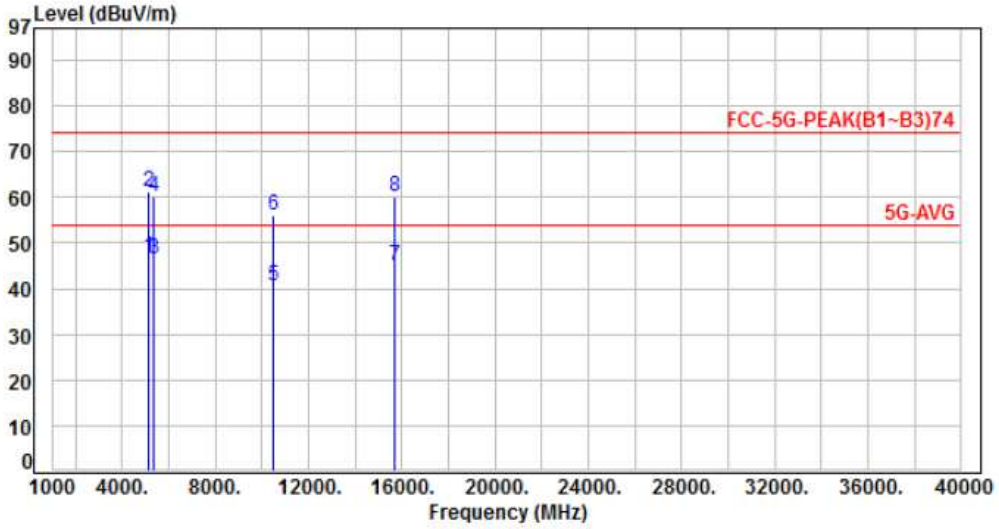
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 2, Band 1, CH44	Temperature	:	24 °C
Test Date	:	Aug. 24, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-12.71	61.70	48.99	54.00	-5.01	Average	159	125	P
2	5150.00	-12.71	73.85	61.14	74.00	-12.86	Peak	159	125	P
3	10440.00	-7.43	46.73	39.30	54.00	-14.70	Average	161	142	P
4	10440.00	-7.43	62.83	55.40	74.00	-18.60	Peak	161	142	P
5	15660.00	-3.80	50.62	46.82	54.00	-7.18	Average	158	153	P
6	15660.00	-3.80	65.24	61.44	74.00	-12.56	Peak	158	153	P

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

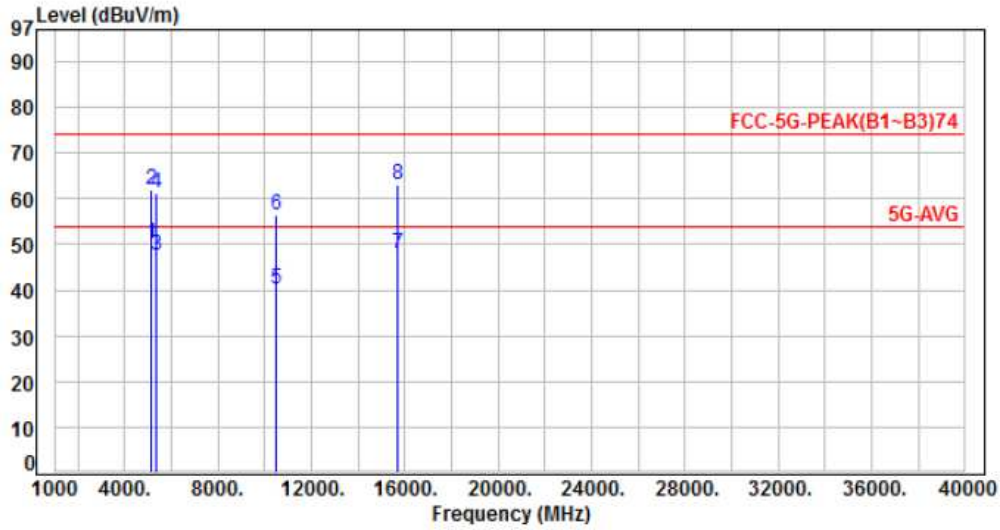
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 2, Band 1, CH48	Temperature	:	24 °C
Test Date	:	Aug. 24, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-12.71	59.65	46.94	54.00	-7.06	Average	151	267	P
2	5150.00	-12.71	73.85	61.14	74.00	-12.86	Peak	151	267	P
3	5350.00	-12.32	58.97	46.65	54.00	-7.35	Average	151	267	P
4	5350.00	-12.32	72.49	60.17	74.00	-13.83	Peak	151	267	P
5	10480.00	-7.42	47.85	40.43	54.00	-13.57	Average	162	173	P
6	10480.00	-7.42	63.45	56.03	74.00	-17.97	Peak	162	173	P
7	15720.00	-3.81	48.77	44.96	54.00	-9.04	Average	255	136	P
8	15720.00	-3.81	63.84	60.03	74.00	-13.97	Peak	255	136	P

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

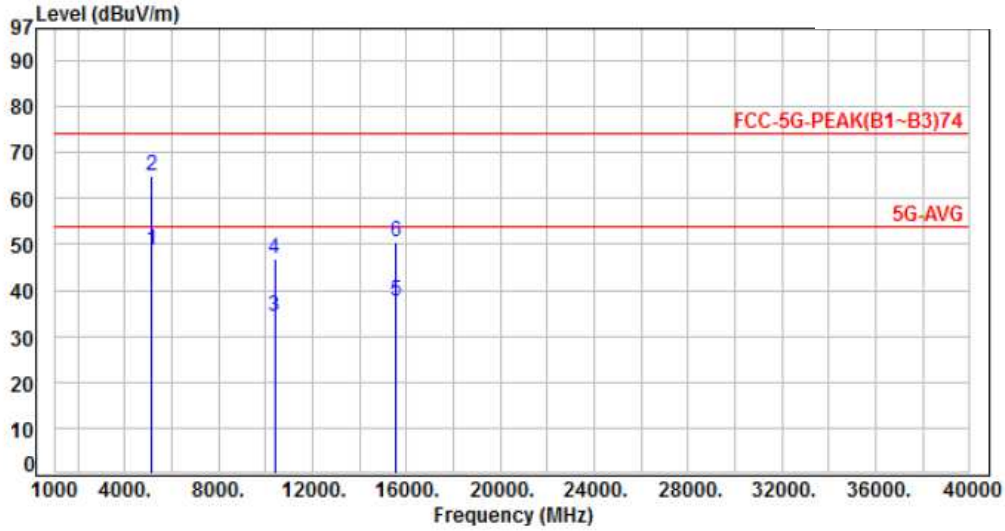
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 2, Band 1, CH48	Temperature	:	24 °C
Test Date	:	Aug. 24, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-12.71	62.72	50.01	54.00	-3.99	Average	146	138	P
2	5150.00	-12.71	74.83	62.12	74.00	-11.88	Peak	146	138	P
3	5350.00	-12.32	59.79	47.47	54.00	-6.53	Average	146	138	P
4	5350.00	-12.32	73.65	61.33	74.00	-12.67	Peak	146	138	P
5	10480.00	-7.42	47.52	40.10	54.00	-13.90	Average	197	152	P
6	10480.00	-7.42	63.94	56.52	74.00	-17.48	Peak	197	152	P
7	15720.00	-3.81	51.68	47.87	54.00	-6.13	Average	174	159	P
8	15720.00	-3.81	66.77	62.96	74.00	-11.04	Peak	174	159	P

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

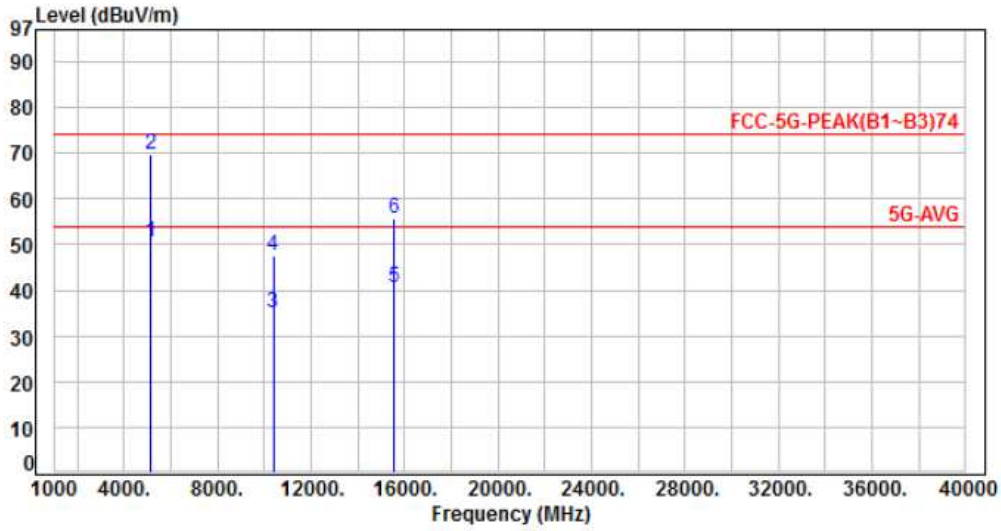
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 3, Band 1, CH38	Temperature	:	24 °C
Test Date	:	Aug. 24, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-12.71	61.26	48.55	54.00	-5.45	Average	303	217	P
2	5150.00	-12.71	77.56	64.85	74.00	-9.15	Peak	303	217	P
3	10380.00	-7.43	41.70	34.27	54.00	-19.73	Average	138	144	P
4	10380.00	-7.43	54.12	46.69	74.00	-27.31	Peak	138	144	P
5	15570.00	-3.78	41.56	37.78	54.00	-16.22	Average	303	151	P
6	15570.00	-3.78	54.30	50.52	74.00	-23.48	Peak	303	151	P

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

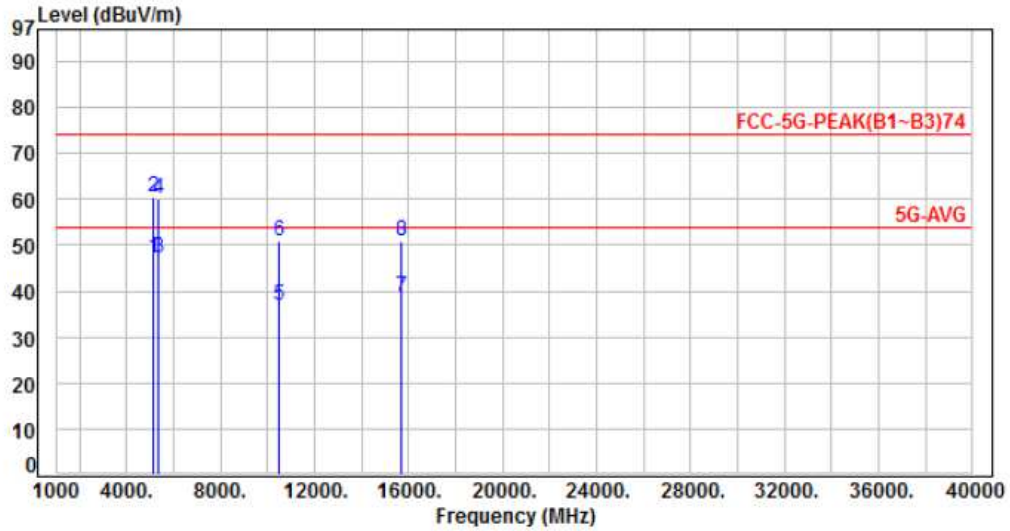
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 3, Band 1, CH38	Temperature	:	24 °C
Test Date	:	Aug. 24, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-12.71	63.29	50.58	54.00	-3.42	Average	165	154	P
2	5150.00	-12.71	82.35	69.64	74.00	-4.36	Peak	165	154	P
3	10380.00	-7.43	42.59	35.16	54.00	-18.84	Average	160	175	P
4	10380.00	-7.43	54.97	47.54	74.00	-26.46	Peak	160	175	P
5	15570.00	-3.78	44.34	40.56	54.00	-13.44	Average	142	118	P
6	15570.00	-3.78	59.39	55.61	74.00	-18.39	Peak	142	118	P

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

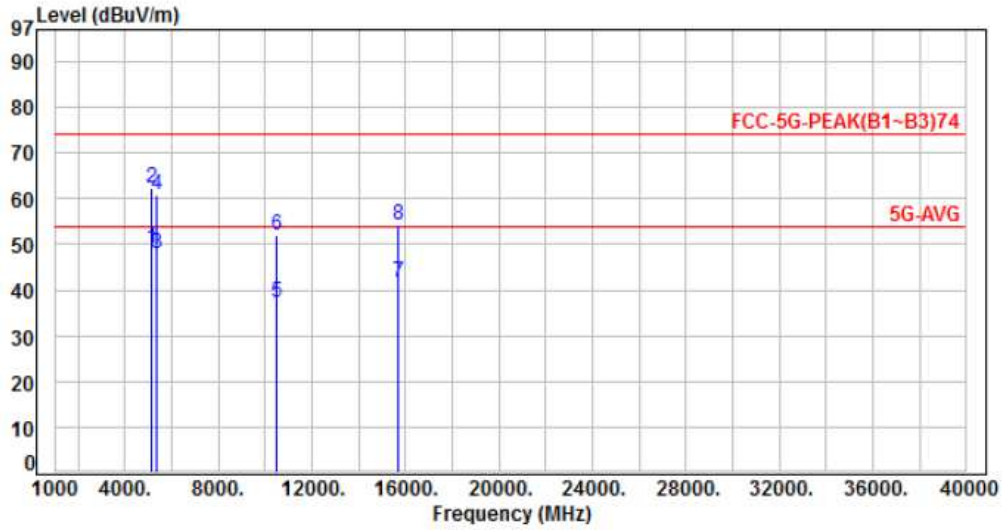
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 3, Band 1, CH46	Temperature	:	24 °C
Test Date	:	Aug. 24, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-12.71	59.79	47.08	54.00	-6.92	Average	305	223	P
2	5150.00	-12.71	73.06	60.35	74.00	-13.65	Peak	305	223	P
3	5350.00	-12.32	59.56	47.24	54.00	-6.76	Average	305	223	P
4	5350.00	-12.32	72.31	59.99	74.00	-14.01	Peak	305	223	P
5	10460.00	-7.42	44.42	37.00	54.00	-17.00	Average	130	146	P
6	10460.00	-7.42	58.13	50.71	74.00	-23.29	Peak	130	146	P
7	15690.00	-3.81	42.46	38.65	54.00	-15.35	Average	298	148	P
8	15690.00	-3.81	54.64	50.83	74.00	-23.17	Peak	298	148	P

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

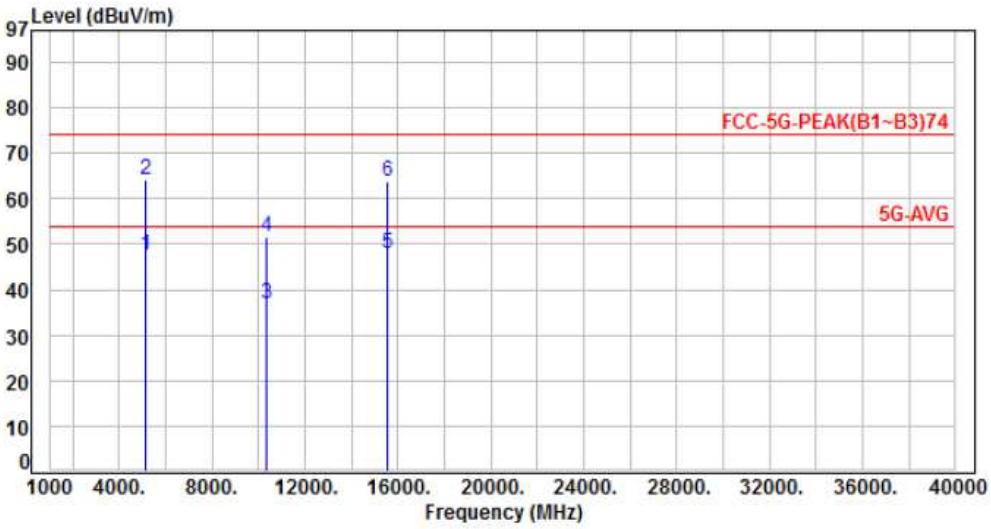
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 3, Band 1, CH46	Temperature	:	24 °C
Test Date	:	Aug. 24, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-12.71	61.74	49.03	54.00	-4.97	Average	162	156	P
2	5150.00	-12.71	75.20	62.49	74.00	-11.51	Peak	162	156	P
3	5350.00	-12.32	60.10	47.78	54.00	-6.22	Average	162	156	P
4	5350.00	-12.32	73.22	60.90	74.00	-13.10	Peak	162	156	P
5	10460.00	-7.42	44.59	37.17	54.00	-16.83	Average	151	182	P
6	10460.00	-7.42	59.33	51.91	74.00	-22.09	Peak	151	182	P
7	15690.00	-3.81	45.36	41.55	54.00	-12.45	Average	152	118	P
8	15690.00	-3.81	58.03	54.22	74.00	-19.78	Peak	152	118	P

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

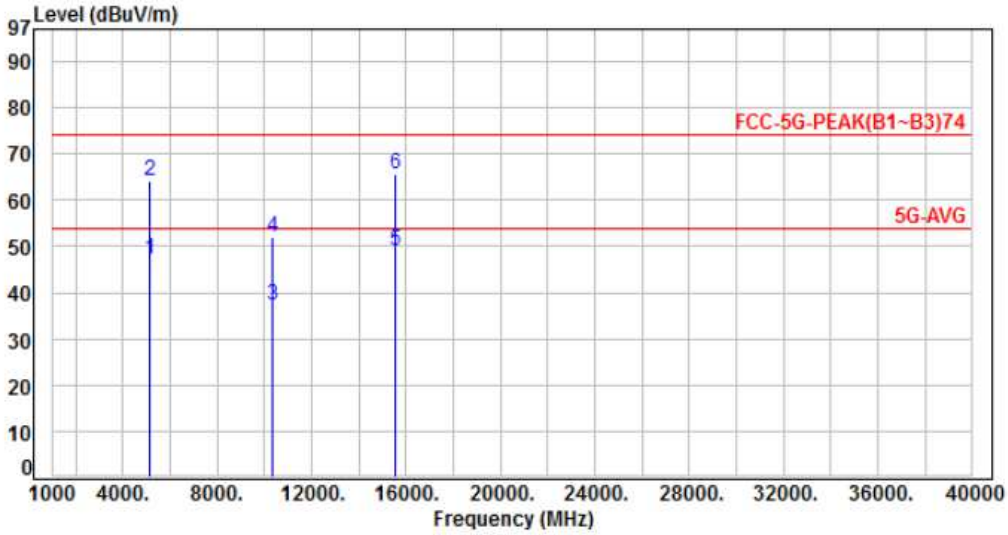
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 4, Band 1, CH36	Temperature	:	24 °C
Test Date	:	Sep. 04, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-12.64	60.29	47.65	54.00	-6.35	Average	231	314	P
2	5150.00	-12.64	77.00	64.36	74.00	-9.64	Peak	231	314	P
3	10360.00	-7.40	44.23	36.83	54.00	-17.17	Average	173	144	P
4	10360.00	-7.40	59.07	51.67	74.00	-22.33	Peak	173	144	P
5	15540.00	-3.38	51.22	47.84	54.00	-6.16	Average	349	138	P
6	15540.00	-3.38	67.21	63.83	74.00	-10.17	Peak	349	138	P

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

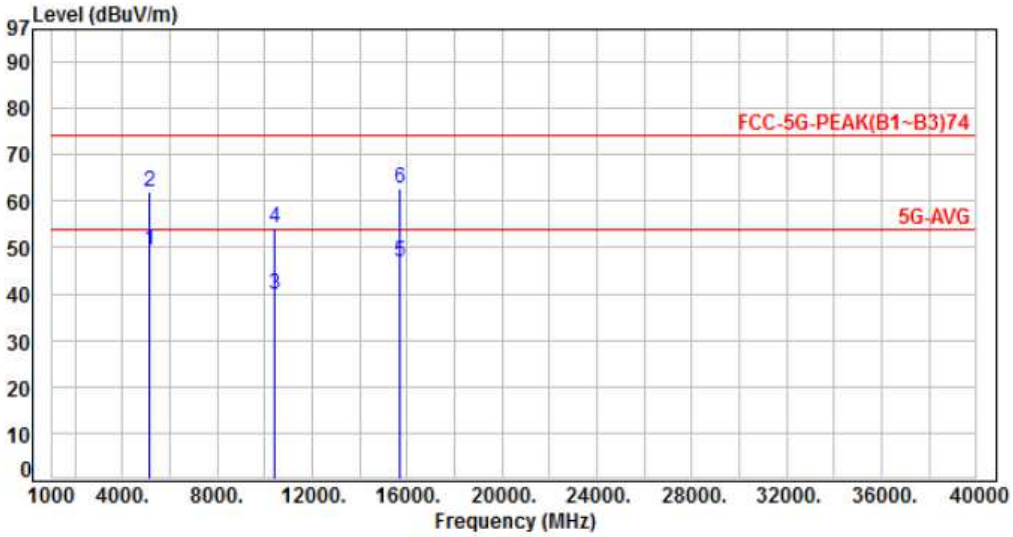
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 4, Band 1, CH36	Temperature	:	24 °C
Test Date	:	Sep. 04, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-12.64	59.83	47.19	54.00	-6.81	Average	130	287	P
2	5150.00	-12.64	76.83	64.19	74.00	-9.81	Peak	130	287	P
3	10360.00	-7.40	44.57	37.17	54.00	-16.83	Average	202	156	P
4	10360.00	-7.40	59.53	52.13	74.00	-21.87	Peak	202	156	P
5	15540.00	-3.38	52.36	48.98	54.00	-5.02	Average	178	124	P
6	15540.00	-3.38	68.95	65.57	74.00	-8.43	Peak	178	124	P

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

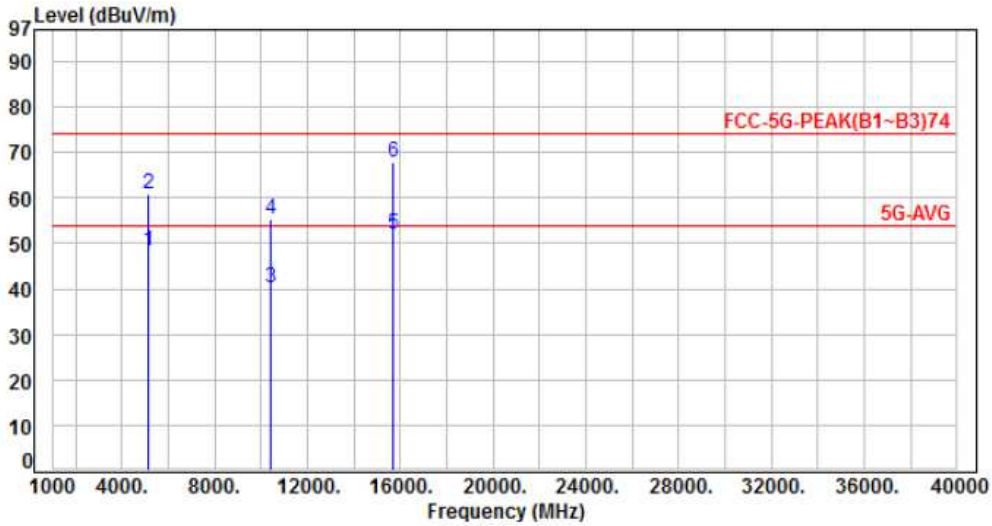
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 4, Band 1, CH44	Temperature	:	24 °C
Test Date	:	Sep. 04, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-12.64	62.17	49.53	54.00	-4.47	Average	233	326	P
2	5150.00	-12.64	74.49	61.85	74.00	-12.15	Peak	233	326	P
3	10440.00	-7.35	47.02	39.67	54.00	-14.33	Average	174	159	P
4	10440.00	-7.35	61.43	54.08	74.00	-19.92	Peak	174	159	P
5	15660.00	-3.44	50.13	46.69	54.00	-7.31	Average	282	161	P
6	15660.00	-3.44	66.13	62.69	74.00	-11.31	Peak	282	161	P

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

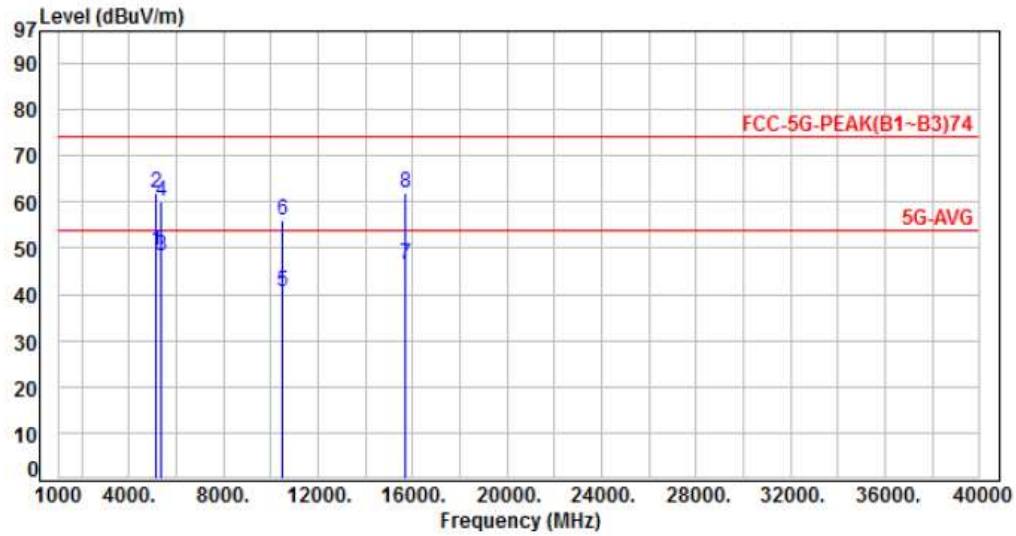
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 4, Band 1, CH44	Temperature	:	24 °C
Test Date	:	Sep. 04, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-12.64	60.88	48.24	54.00	-5.76	Average	134	288	P
2	5150.00	-12.64	73.36	60.72	74.00	-13.28	Peak	134	288	P
3	10440.00	-7.35	47.72	40.37	54.00	-13.63	Average	201	104	P
4	10440.00	-7.35	62.58	55.23	74.00	-18.77	Peak	201	104	P
5	15660.00	-3.44	55.42	51.98	54.00	-2.02	Average	180	125	P
6	15660.00	-3.44	71.13	67.69	74.00	-6.31	Peak	180	125	P

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

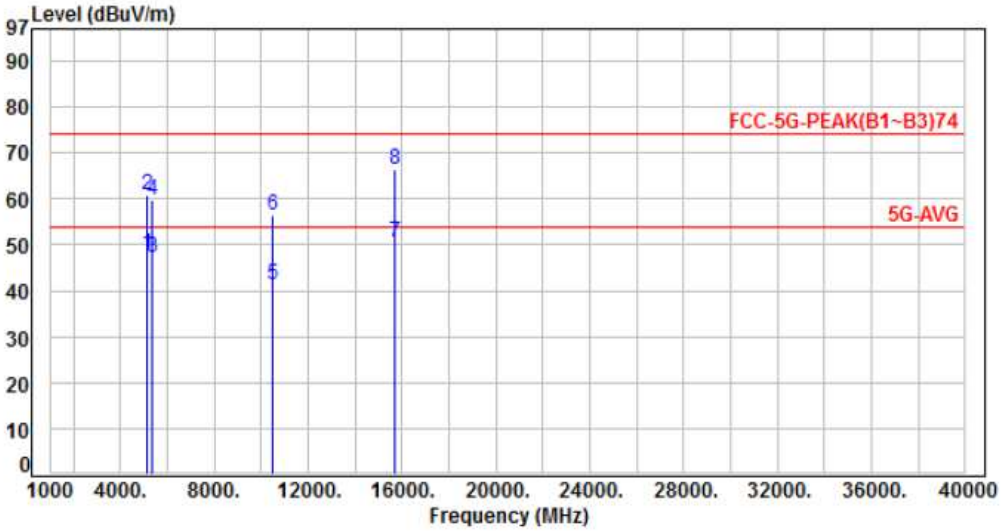
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 4, Band 1, CH48	Temperature	:	24 °C
Test Date	:	Sep. 04, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-12.64	62.20	49.56	54.00	-4.44	Average	203	323	P
2	5150.00	-12.64	74.58	61.94	74.00	-12.06	Peak	203	323	P
3	5350.00	-12.29	60.76	48.47	54.00	-5.53	Average	203	323	P
4	5350.00	-12.29	72.39	60.10	74.00	-13.90	Peak	203	323	P
5	10480.00	-7.33	47.93	40.60	54.00	-13.40	Average	172	156	P
6	10480.00	-7.33	63.22	55.89	74.00	-18.11	Peak	172	156	P
7	15720.00	-3.45	49.86	46.41	54.00	-7.59	Average	294	163	P
8	15720.00	-3.45	65.38	61.93	74.00	-12.07	Peak	294	163	P

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

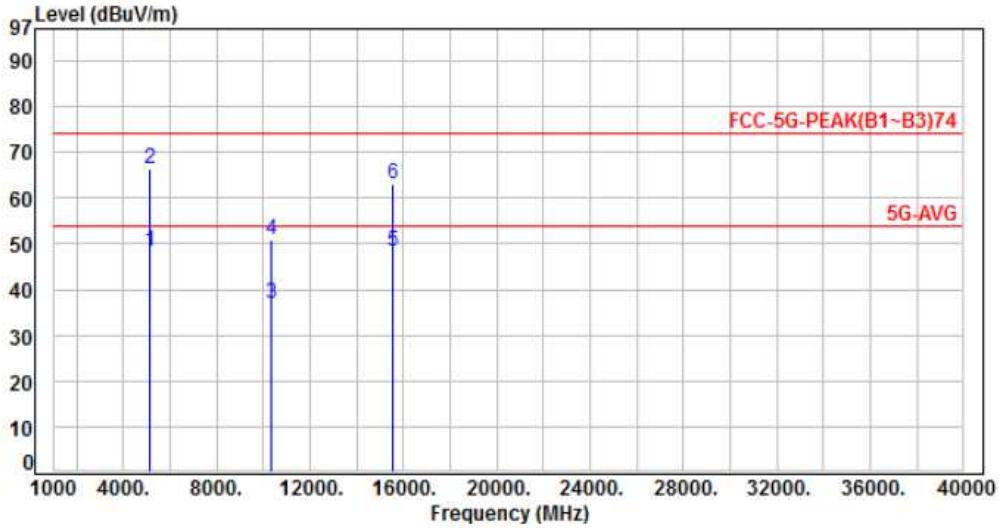
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 4, Band 1, CH48	Temperature	:	24 °C
Test Date	:	Sep. 04, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-12.64	60.75	48.11	54.00	-5.89	Average	123	290	P
2	5150.00	-12.64	73.58	60.94	74.00	-13.06	Peak	123	290	P
3	5350.00	-12.29	59.44	47.15	54.00	-6.85	Average	123	290	P
4	5350.00	-12.29	72.15	59.86	74.00	-14.14	Peak	123	290	P
5	10480.00	-7.33	48.53	41.20	54.00	-12.80	Average	200	105	P
6	10480.00	-7.33	63.62	56.29	74.00	-17.71	Peak	200	105	P
7	15720.00	-3.45	53.84	50.39	54.00	-3.61	Average	185	124	P
8	15720.00	-3.45	69.79	66.34	74.00	-7.66	Peak	185	124	P

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

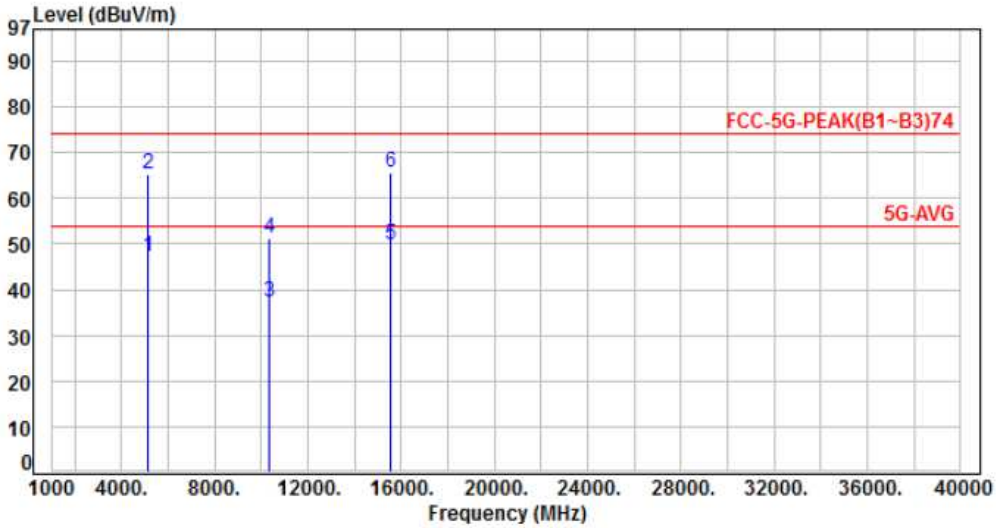
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 5, Band 1, CH36	Temperature	:	24 °C
Test Date	:	Sep. 04, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-12.64	60.97	48.33	54.00	-5.67	Average	217	320	P
2	5150.00	-12.64	79.03	66.39	74.00	-7.61	Peak	217	320	P
3	10360.00	-7.40	44.37	36.97	54.00	-17.03	Average	171	138	P
4	10360.00	-7.40	58.27	50.87	74.00	-23.13	Peak	171	138	P
5	15540.00	-3.38	51.54	48.16	54.00	-5.84	Average	353	136	P
6	15540.00	-3.38	66.44	63.06	74.00	-10.94	Peak	353	136	P

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

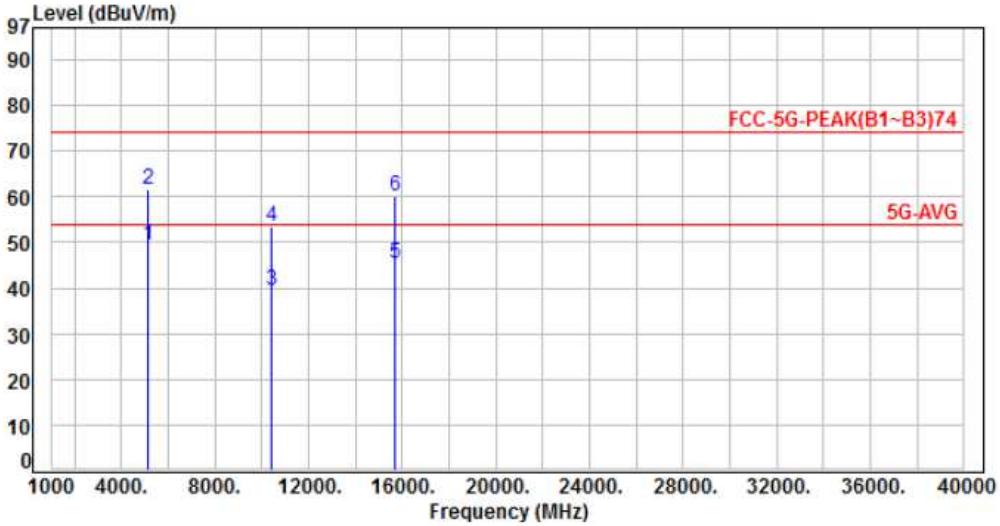
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 5, Band 1, CH36	Temperature	:	24 °C
Test Date	:	Sep. 04, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-12.64	59.79	47.15	54.00	-6.85	Average	147	288	P
2	5150.00	-12.64	77.97	65.33	74.00	-8.67	Peak	147	288	P
3	10360.00	-7.40	44.65	37.25	54.00	-16.75	Average	201	145	P
4	10360.00	-7.40	58.82	51.42	74.00	-22.58	Peak	201	145	P
5	15540.00	-3.38	53.04	49.66	54.00	-4.34	Average	181	127	P
6	15540.00	-3.38	68.95	65.57	74.00	-8.43	Peak	181	127	P

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

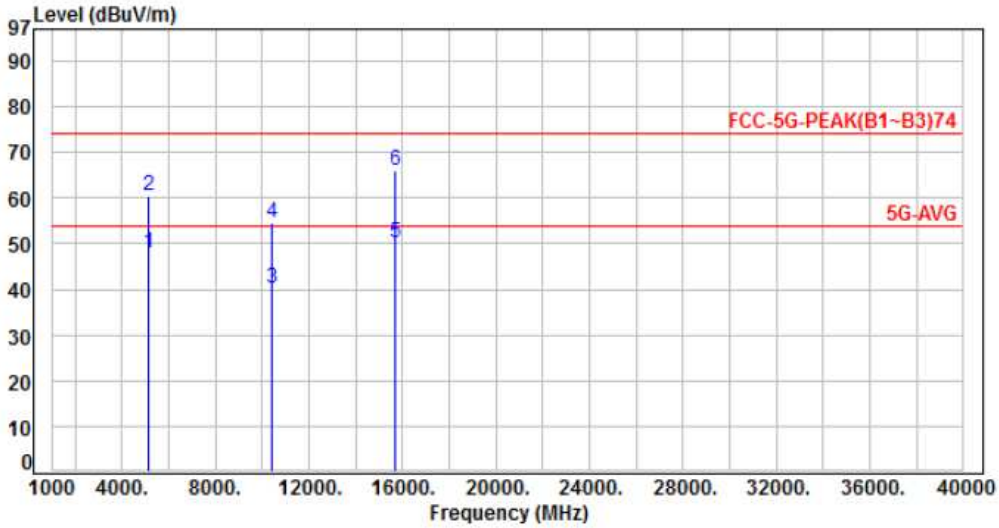
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 5, Band 1, CH44	Temperature	:	24 °C
Test Date	:	Sep. 04, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-12.64	62.04	49.40	54.00	-4.60	Average	234	331	P
2	5150.00	-12.64	74.25	61.61	74.00	-12.39	Peak	234	331	P
3	10440.00	-7.35	46.76	39.41	54.00	-14.59	Average	169	155	P
4	10440.00	-7.35	60.88	53.53	74.00	-20.47	Peak	169	155	P
5	15660.00	-3.44	48.89	45.45	54.00	-8.55	Average	289	135	P
6	15660.00	-3.44	63.60	60.16	74.00	-13.84	Peak	289	135	P

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

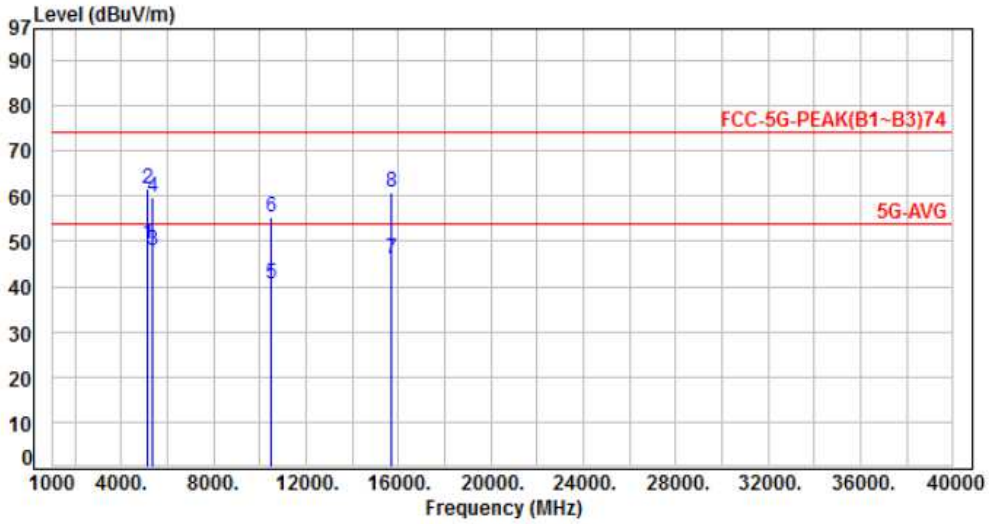
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 5, Band 1, CH44	Temperature	:	24 °C
Test Date	:	Sep. 04, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-12.64	60.70	48.06	54.00	-5.94	Average	138	284	P
2	5150.00	-12.64	73.15	60.51	74.00	-13.49	Peak	138	284	P
3	10440.00	-7.35	47.58	40.23	54.00	-13.77	Average	198	112	P
4	10440.00	-7.35	61.99	54.64	74.00	-19.36	Peak	198	112	P
5	15660.00	-3.44	53.78	50.34	54.00	-3.66	Average	179	126	P
6	15660.00	-3.44	69.39	65.95	74.00	-8.05	Peak	179	126	P

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

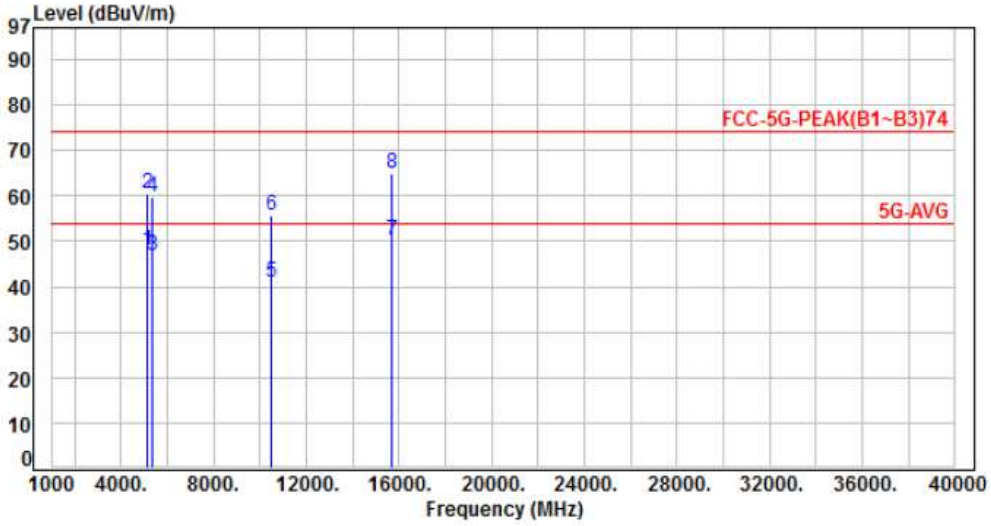
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 5, Band 1, CH48	Temperature	:	24 °C
Test Date	:	Sep. 04, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-12.64	62.08	49.44	54.00	-4.56	Average	211	324	P
2	5150.00	-12.64	74.25	61.61	74.00	-12.39	Peak	211	324	P
3	5350.00	-12.29	60.40	48.11	54.00	-5.89	Average	211	324	P
4	5350.00	-12.29	72.12	59.83	74.00	-14.17	Peak	211	324	P
5	10480.00	-7.33	47.75	40.42	54.00	-13.58	Average	168	152	P
6	10480.00	-7.33	62.74	55.41	74.00	-18.59	Peak	168	152	P
7	15720.00	-3.45	49.62	46.17	54.00	-7.83	Average	289	158	P
8	15720.00	-3.45	64.45	61.00	74.00	-13.00	Peak	289	158	P

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

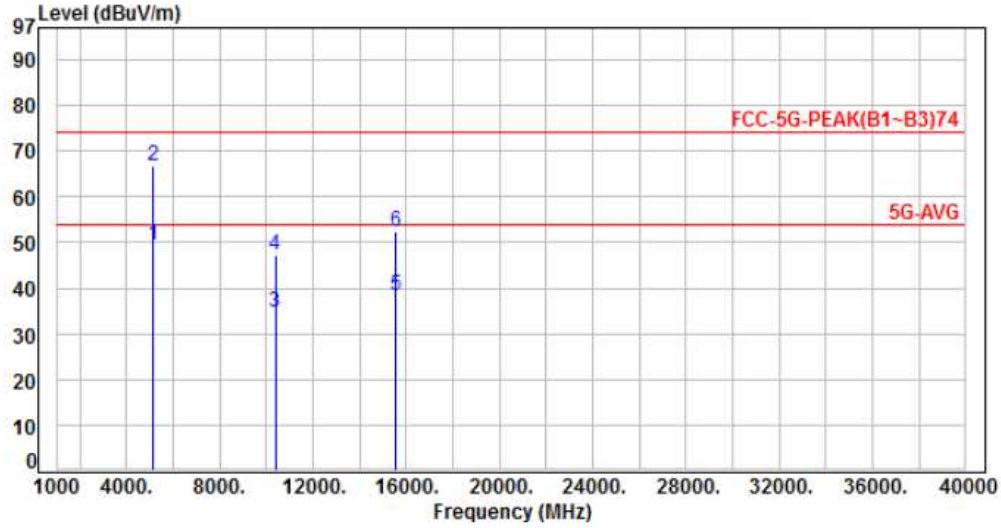
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 5, Band 1, CH48	Temperature	:	24 °C
Test Date	:	Sep. 04, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-12.64	60.52	47.88	54.00	-6.12	Average	124	288	P
2	5150.00	-12.64	73.25	60.61	74.00	-13.39	Peak	124	288	P
3	5350.00	-12.29	59.15	46.86	54.00	-7.14	Average	124	288	P
4	5350.00	-12.29	71.88	59.59	74.00	-14.41	Peak	124	288	P
5	10480.00	-7.33	48.23	40.90	54.00	-13.10	Average	201	104	P
6	10480.00	-7.33	63.19	55.86	74.00	-18.14	Peak	201	104	P
7	15720.00	-3.45	53.64	50.19	54.00	-3.81	Average	179	133	P
8	15720.00	-3.45	68.30	64.85	74.00	-9.15	Peak	179	133	P

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

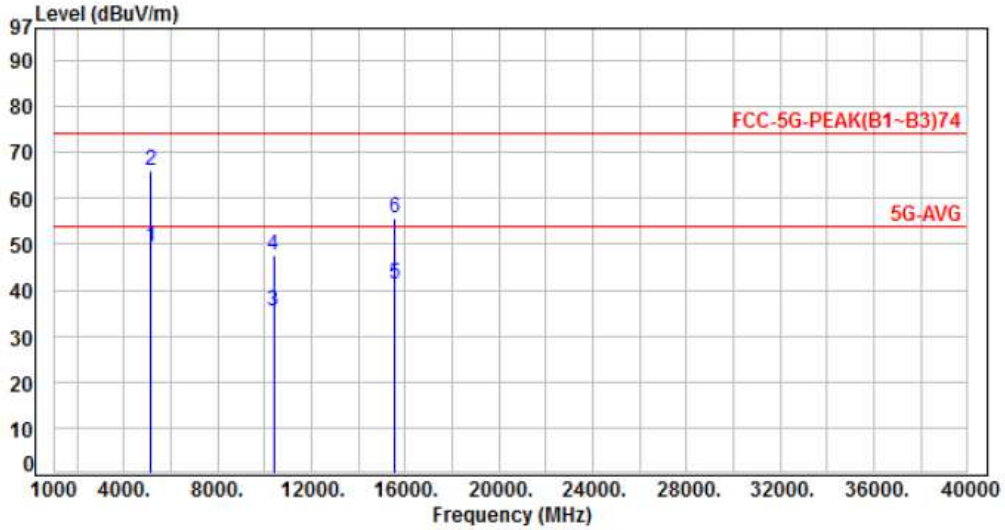
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 6, Band 1, CH38	Temperature	:	24 °C
Test Date	:	Sep. 04, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-12.64	62.15	49.51	54.00	-4.49	Average	223	325	P
2	5150.00	-12.64	79.25	66.61	74.00	-7.39	Peak	223	325	P
3	10380.00	-7.38	42.12	34.74	54.00	-19.26	Average	161	175	P
4	10380.00	-7.38	54.52	47.14	74.00	-26.86	Peak	161	175	P
5	15570.00	-3.39	41.86	38.47	54.00	-15.53	Average	169	128	P
6	15570.00	-3.39	55.78	52.39	74.00	-21.61	Peak	169	128	P

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

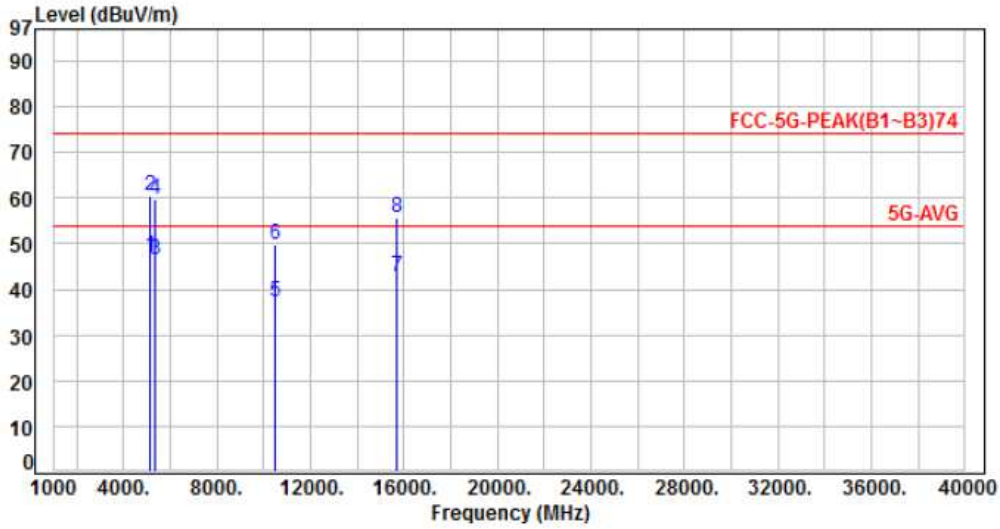
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 6, Band 1, CH38	Temperature	:	24 °C
Test Date	:	Sep. 04, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-12.64	62.13	49.49	54.00	-4.51	Average	130	290	P
2	5150.00	-12.64	78.75	66.11	74.00	-7.89	Peak	130	290	P
3	10380.00	-7.38	42.86	35.48	54.00	-18.52	Average	208	114	P
4	10380.00	-7.38	55.11	47.73	74.00	-26.27	Peak	208	114	P
5	15570.00	-3.39	44.86	41.47	54.00	-12.53	Average	182	126	P
6	15570.00	-3.39	59.18	55.79	74.00	-18.21	Peak	182	126	P

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

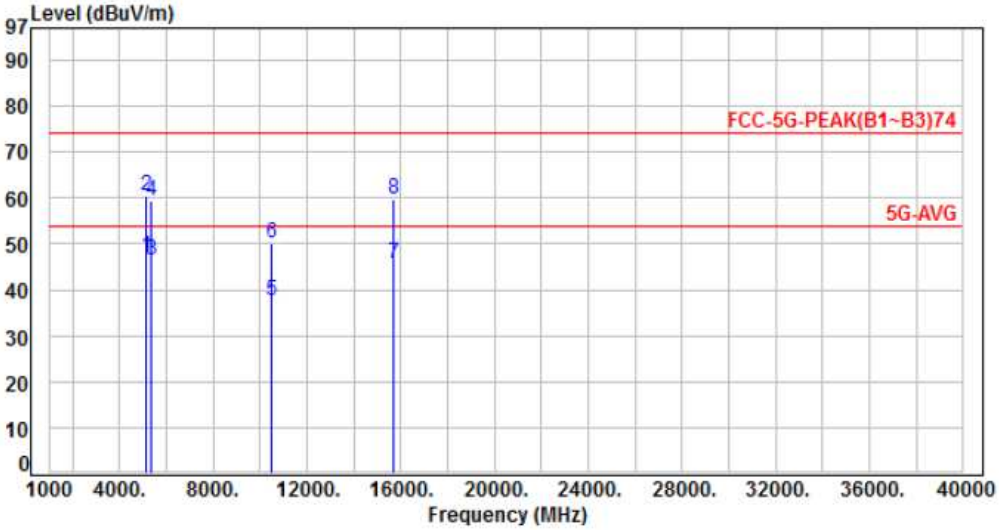
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 6, Band 1, CH46	Temperature	:	24 °C
Test Date	:	Sep. 04, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-12.64	59.84	47.20	54.00	-6.80	Average	228	331	P
2	5150.00	-12.64	73.20	60.56	74.00	-13.44	Peak	228	331	P
3	5350.00	-12.29	58.94	46.65	54.00	-7.35	Average	228	331	P
4	5350.00	-12.29	71.85	59.56	74.00	-14.44	Peak	228	331	P
5	10460.00	-7.34	44.51	37.17	54.00	-16.83	Average	169	173	P
6	10460.00	-7.34	57.19	49.85	74.00	-24.15	Peak	169	173	P
7	15690.00	-3.44	46.34	42.90	54.00	-11.10	Average	167	133	P
8	15690.00	-3.44	59.09	55.65	74.00	-18.35	Peak	167	133	P

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

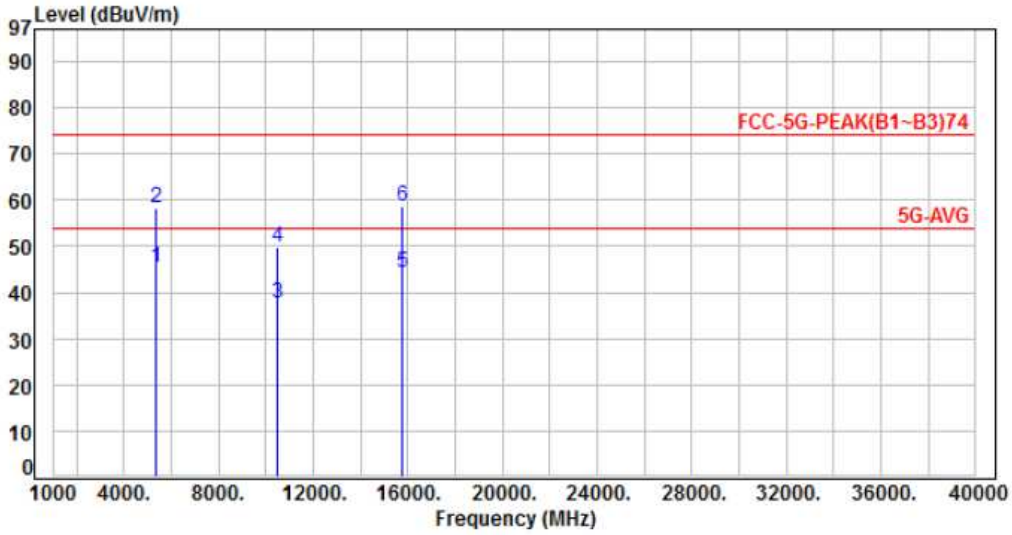
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 6, Band 1, CH46	Temperature	:	24 °C
Test Date	:	Sep. 04, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-12.64	59.76	47.12	54.00	-6.88	Average	131	278	P
2	5150.00	-12.64	72.95	60.31	74.00	-13.69	Peak	131	278	P
3	5350.00	-12.29	58.63	46.34	54.00	-7.66	Average	131	278	P
4	5350.00	-12.29	71.71	59.42	74.00	-14.58	Peak	131	278	P
5	10460.00	-7.34	44.96	37.62	54.00	-16.38	Average	206	115	P
6	10460.00	-7.34	57.34	50.00	74.00	-24.00	Peak	206	115	P
7	15690.00	-3.44	49.25	45.81	54.00	-8.19	Average	181	128	P
8	15690.00	-3.44	63.26	59.82	74.00	-14.18	Peak	181	128	P

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

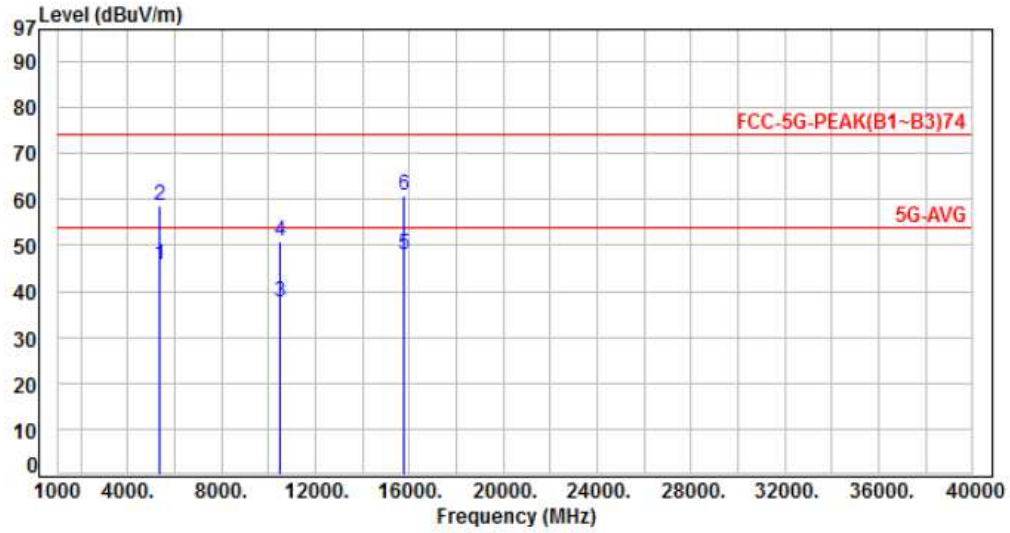
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 1, Band 2, CH52	Temperature	:	24 °C
Test Date	:	Aug. 29, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-12.32	57.56	45.24	54.00	-8.76	Average	354	202	P
2	5350.00	-12.32	70.76	58.44	74.00	-15.56	Peak	354	202	P
3	10520.00	-7.37	44.87	37.50	54.00	-16.50	Average	225	174	P
4	10520.00	-7.37	57.21	49.84	74.00	-24.16	Peak	225	174	P
5	15780.00	-3.83	48.13	44.30	54.00	-9.70	Average	271	152	P
6	15780.00	-3.83	62.35	58.52	74.00	-15.48	Peak	271	152	P

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

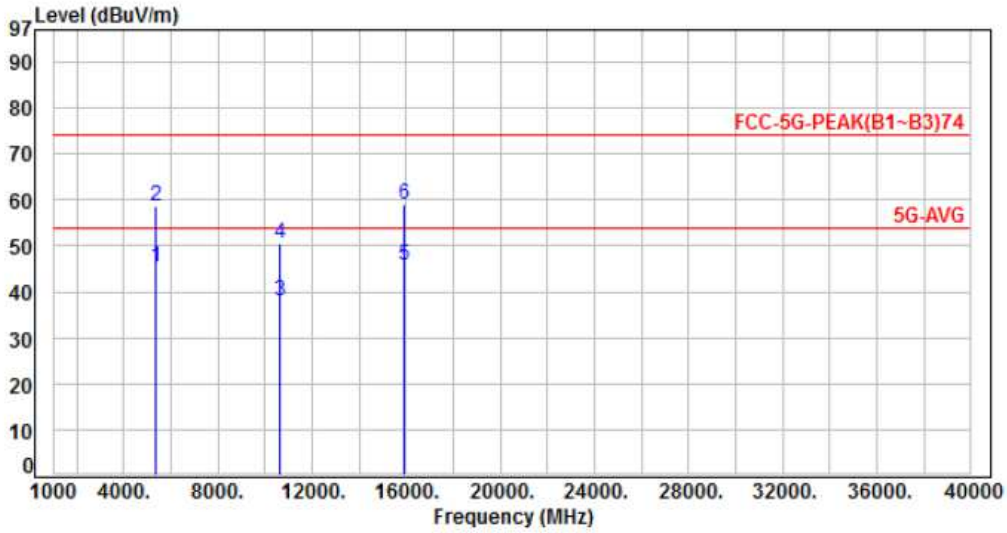
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 1, Band 2, CH52	Temperature	:	24 °C
Test Date	:	Aug. 29, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-12.32	58.11	45.79	54.00	-8.21	Average	129	351	P
2	5350.00	-12.32	70.97	58.65	74.00	-15.35	Peak	129	351	P
3	10520.00	-7.37	45.02	37.65	54.00	-16.35	Average	184	153	P
4	10520.00	-7.37	58.12	50.75	74.00	-23.25	Peak	184	153	P
5	15780.00	-3.83	51.77	47.94	54.00	-6.06	Average	101	105	P
6	15780.00	-3.83	64.83	61.00	74.00	-13.00	Peak	101	105	P

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

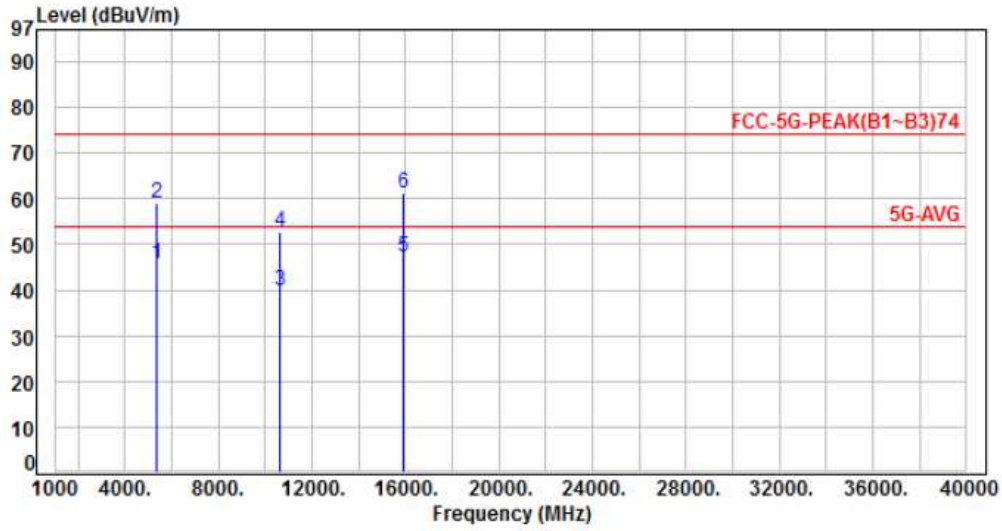
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 1, Band 2, CH60	Temperature	:	24 °C
Test Date	:	Aug. 29, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-12.32	57.81	45.49	54.00	-8.51	Average	351	198	P
2	5350.00	-12.32	70.93	58.61	74.00	-15.39	Peak	351	198	P
3	10600.00	-7.19	45.21	38.02	54.00	-15.98	Average	231	168	P
4	10600.00	-7.19	57.84	50.65	74.00	-23.35	Peak	231	168	P
5	15900.00	-3.85	49.52	45.67	54.00	-8.33	Average	276	142	P
6	15900.00	-3.85	62.97	59.12	74.00	-14.88	Peak	276	142	P

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

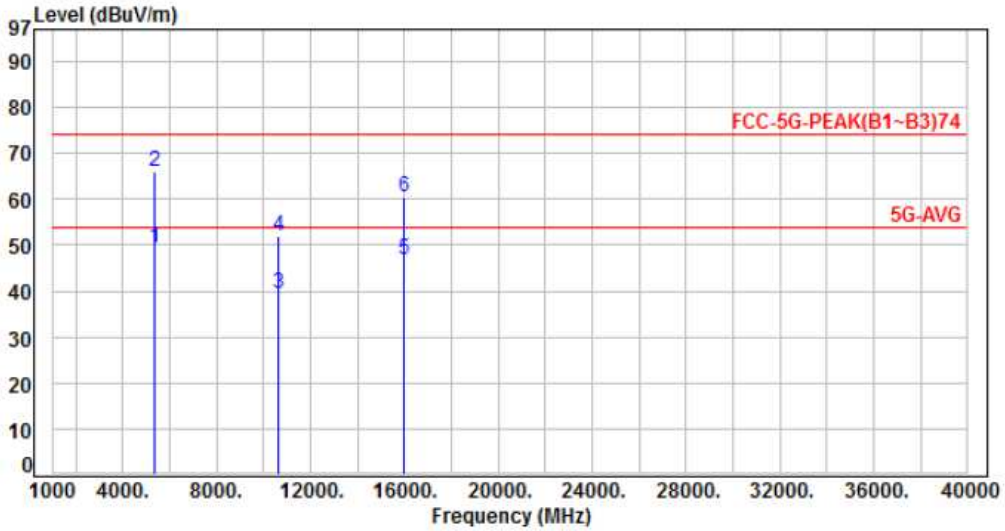
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 1, Band 2, CH60	Temperature	:	24 °C
Test Date	:	Aug. 29, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-12.32	57.90	45.58	54.00	-8.42	Average	127	348	P
2	5350.00	-12.32	71.27	58.95	74.00	-15.05	Peak	127	348	P
3	10600.00	-7.19	47.12	39.93	54.00	-14.07	Average	188	149	P
4	10600.00	-7.19	59.93	52.74	74.00	-21.26	Peak	188	149	P
5	15900.00	-3.85	51.12	47.27	54.00	-6.73	Average	102	108	P
6	15900.00	-3.85	65.21	61.36	74.00	-12.64	Peak	102	108	P

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

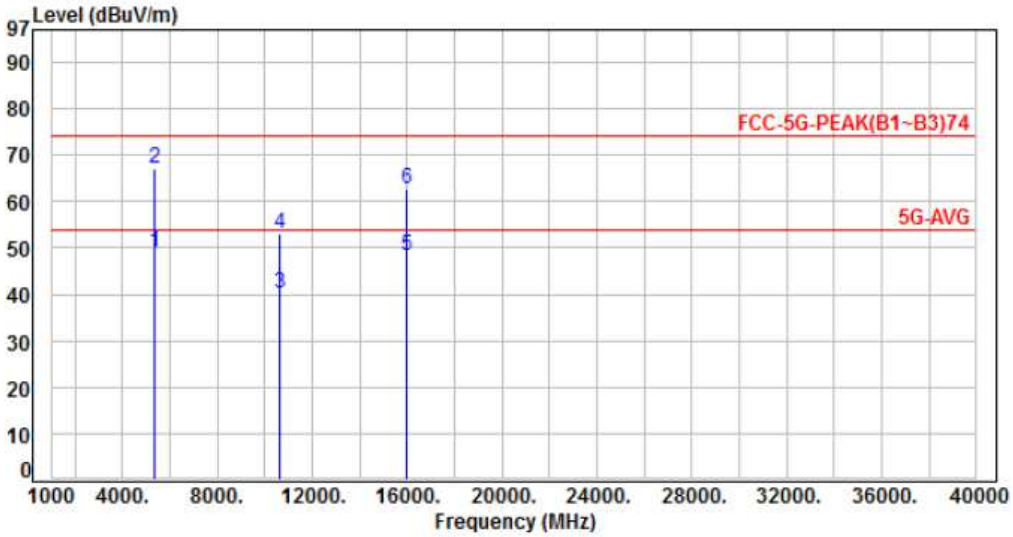
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 1, Band 2, CH64	Temperature	:	24 °C
Test Date	:	Aug. 29, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-12.32	61.58	49.26	54.00	-4.74	Average	353	203	P
2	5350.00	-12.32	78.46	66.14	74.00	-7.86	Peak	353	203	P
3	10640.00	-7.10	46.45	39.35	54.00	-14.65	Average	235	172	P
4	10640.00	-7.10	59.03	51.93	74.00	-22.07	Peak	235	172	P
5	15960.00	-3.86	50.80	46.94	54.00	-7.06	Average	282	137	P
6	15960.00	-3.86	64.53	60.67	74.00	-13.33	Peak	282	137	P

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

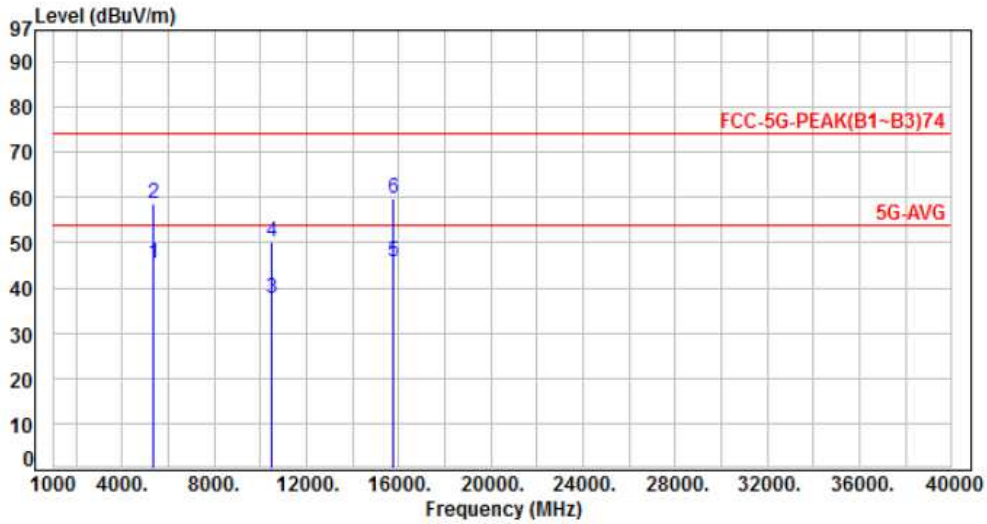
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 1, Band 2, CH64	Temperature	:	24 °C
Test Date	:	Aug. 29, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-12.32	61.44	49.12	54.00	-4.88	Average	125	351	P
2	5350.00	-12.32	79.31	66.99	74.00	-7.01	Peak	125	351	P
3	10640.00	-7.10	47.36	40.26	54.00	-13.74	Average	192	152	P
4	10640.00	-7.10	60.05	52.95	74.00	-21.05	Peak	192	152	P
5	15960.00	-3.86	52.06	48.20	54.00	-5.80	Average	101	102	P
6	15960.00	-3.86	66.58	62.72	74.00	-11.28	Peak	101	102	P

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

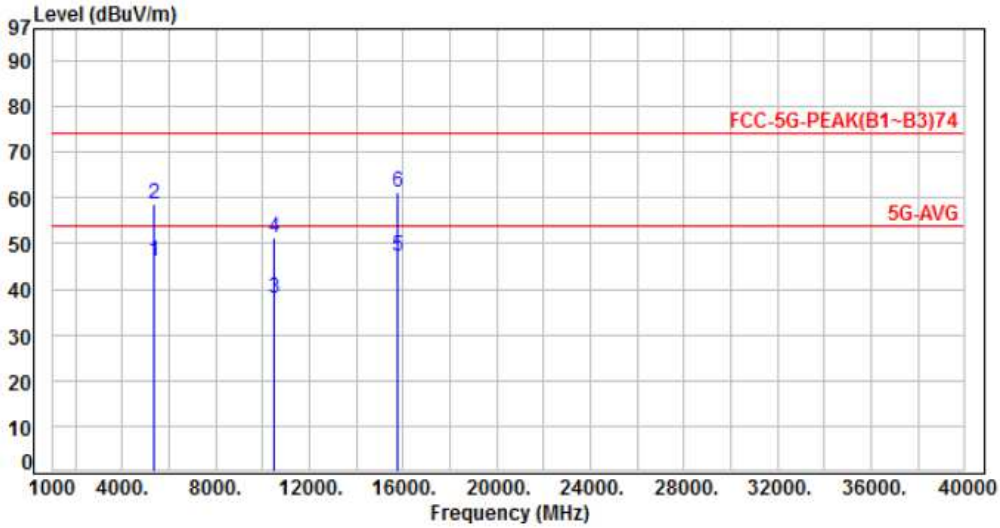
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 2, Band 2, CH52	Temperature	:	24 °C
Test Date	:	Aug. 29, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-12.32	57.77	45.45	54.00	-8.55	Average	356	197	P
2	5350.00	-12.32	70.83	58.51	74.00	-15.49	Peak	356	197	P
3	10520.00	-7.37	44.96	37.59	54.00	-16.41	Average	221	168	P
4	10520.00	-7.37	57.58	50.21	74.00	-23.79	Peak	221	168	P
5	15780.00	-3.83	49.47	45.64	54.00	-8.36	Average	269	144	P
6	15780.00	-3.83	63.61	59.78	74.00	-14.22	Peak	269	144	P

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

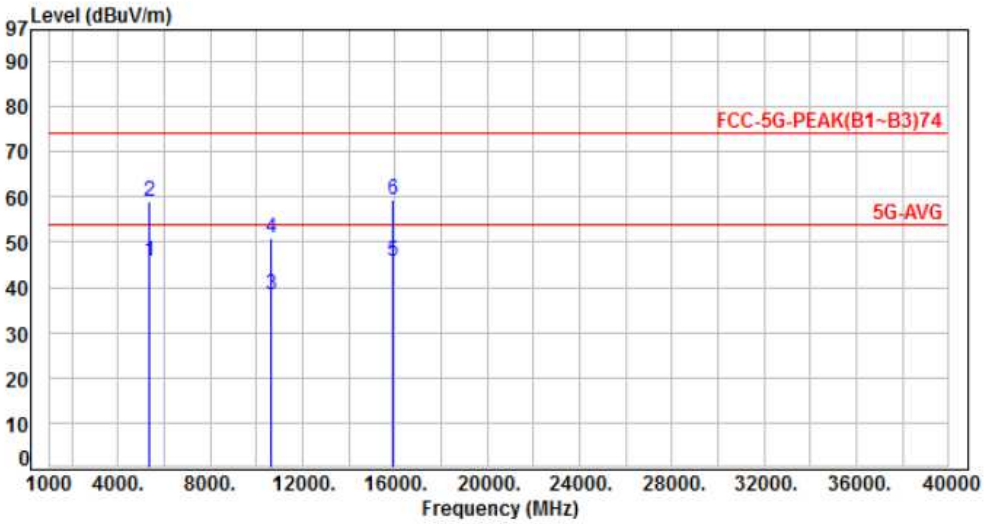
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 2, Band 2, CH52	Temperature	:	24 °C
Test Date	:	Aug. 29, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-12.32	58.33	46.01	54.00	-7.99	Average	131	348	P
2	5350.00	-12.32	71.11	58.79	74.00	-15.21	Peak	131	348	P
3	10520.00	-7.37	45.39	38.02	54.00	-15.98	Average	192	156	P
4	10520.00	-7.37	58.58	51.21	74.00	-22.79	Peak	192	156	P
5	15780.00	-3.83	50.94	47.11	54.00	-6.89	Average	102	113	P
6	15780.00	-3.83	65.18	61.35	74.00	-12.65	Peak	102	113	P

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

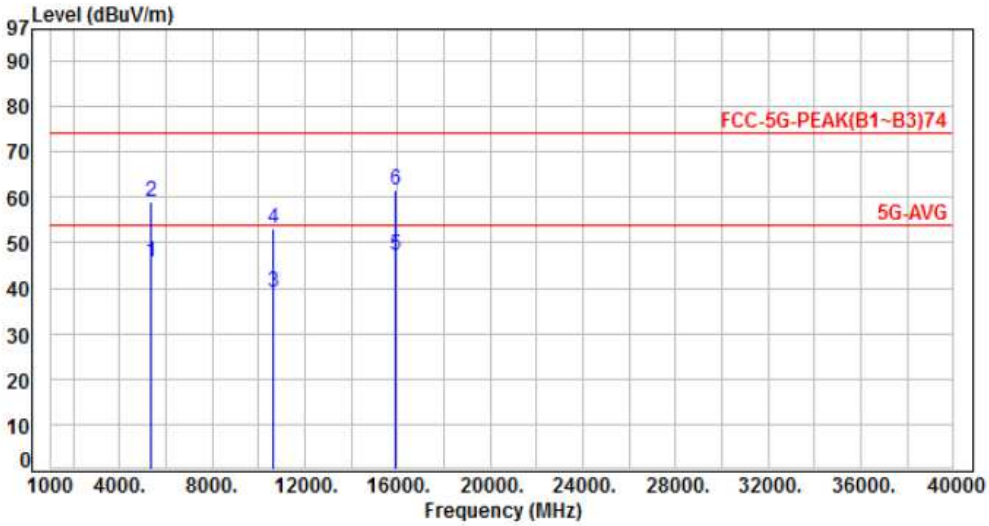
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 2, Band 2, CH60	Temperature	:	24 °C
Test Date	:	Aug. 29, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-12.32	57.97	45.65	54.00	-8.35	Average	346	195	P
2	5350.00	-12.32	71.22	58.90	74.00	-15.10	Peak	346	195	P
3	10600.00	-7.19	45.47	38.28	54.00	-15.72	Average	228	174	P
4	10600.00	-7.19	58.07	50.88	74.00	-23.12	Peak	228	174	P
5	15900.00	-3.85	49.69	45.84	54.00	-8.16	Average	271	138	P
6	15900.00	-3.85	63.08	59.23	74.00	-14.77	Peak	271	138	P

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

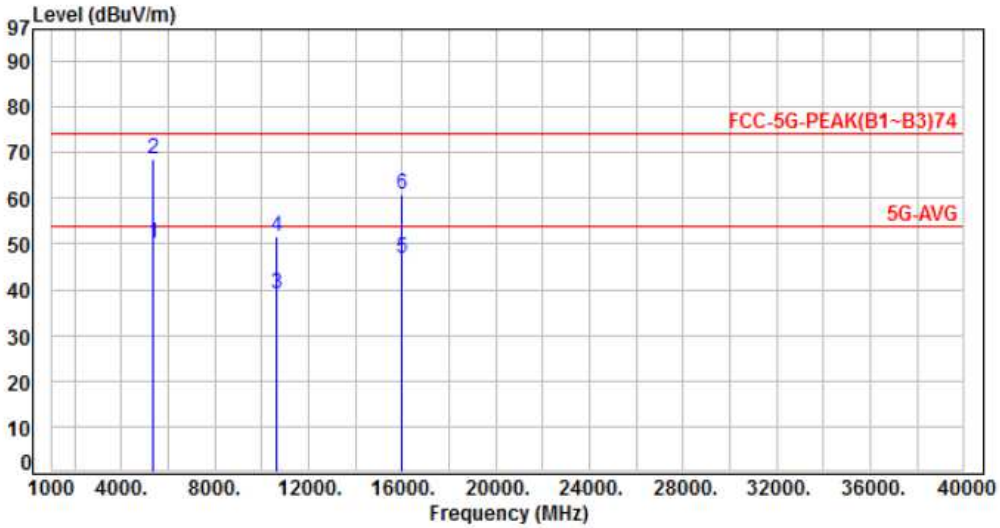
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 2, Band 2, CH60	Temperature	:	24 °C
Test Date	:	Aug. 29, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-12.32	58.02	45.70	54.00	-8.30	Average	124	339	P
2	5350.00	-12.32	71.51	59.19	74.00	-14.81	Peak	124	339	P
3	10600.00	-7.19	46.28	39.09	54.00	-14.91	Average	187	152	P
4	10600.00	-7.19	60.17	52.98	74.00	-21.02	Peak	187	152	P
5	15900.00	-3.85	51.24	47.39	54.00	-6.61	Average	101	109	P
6	15900.00	-3.85	65.38	61.53	74.00	-12.47	Peak	101	109	P

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

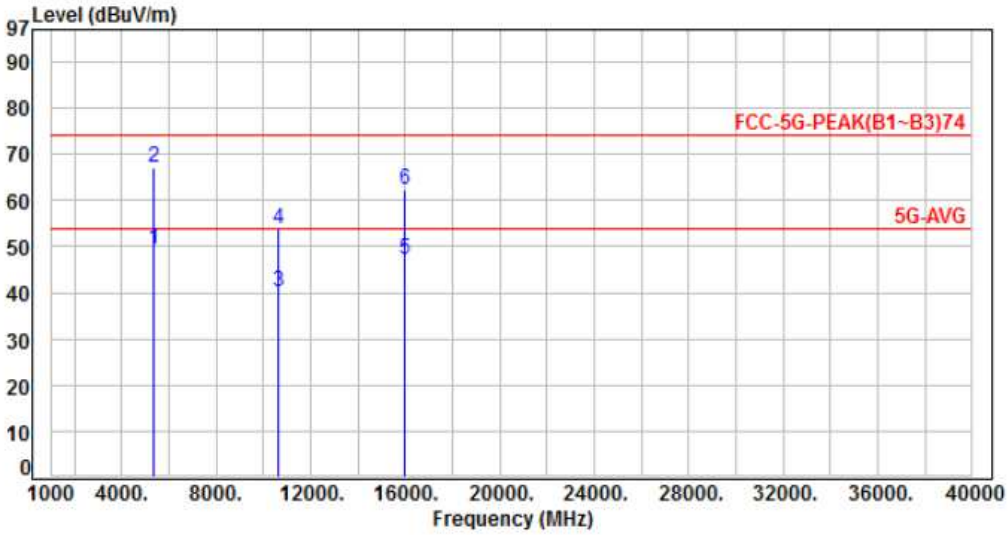
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 2, Band 2, CH64	Temperature	:	24 °C
Test Date	:	Aug. 29, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-12.32	62.42	50.10	54.00	-3.90	Average	337	214	P
2	5350.00	-12.32	80.85	68.53	74.00	-5.47	Peak	337	214	P
3	10640.00	-7.10	46.13	39.03	54.00	-14.97	Average	219	188	P
4	10640.00	-7.10	58.72	51.62	74.00	-22.38	Peak	219	188	P
5	15960.00	-3.86	50.61	46.75	54.00	-7.25	Average	128	225	P
6	15960.00	-3.86	64.77	60.91	74.00	-13.09	Peak	128	225	P

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

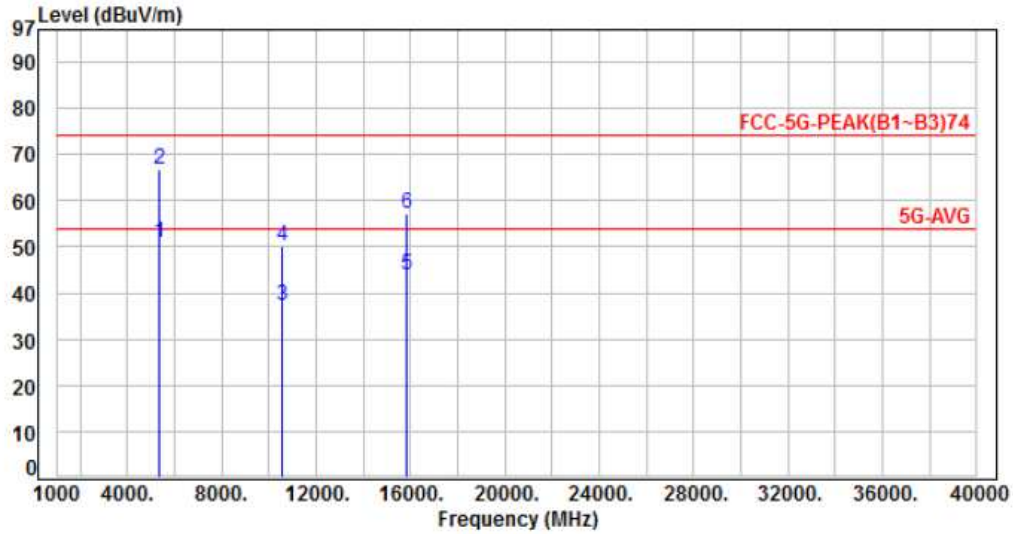
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 2, Band 2, CH64	Temperature	:	24 °C
Test Date	:	Aug. 29, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-12.32	61.74	49.42	54.00	-4.58	Average	101	352	P
2	5350.00	-12.32	79.31	66.99	74.00	-7.01	Peak	101	352	P
3	10640.00	-7.10	47.15	40.05	54.00	-13.95	Average	188	149	P
4	10640.00	-7.10	60.82	53.72	74.00	-20.28	Peak	188	149	P
5	15960.00	-3.86	50.97	47.11	54.00	-6.89	Average	101	125	P
6	15960.00	-3.86	66.01	62.15	74.00	-11.85	Peak	101	125	P

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

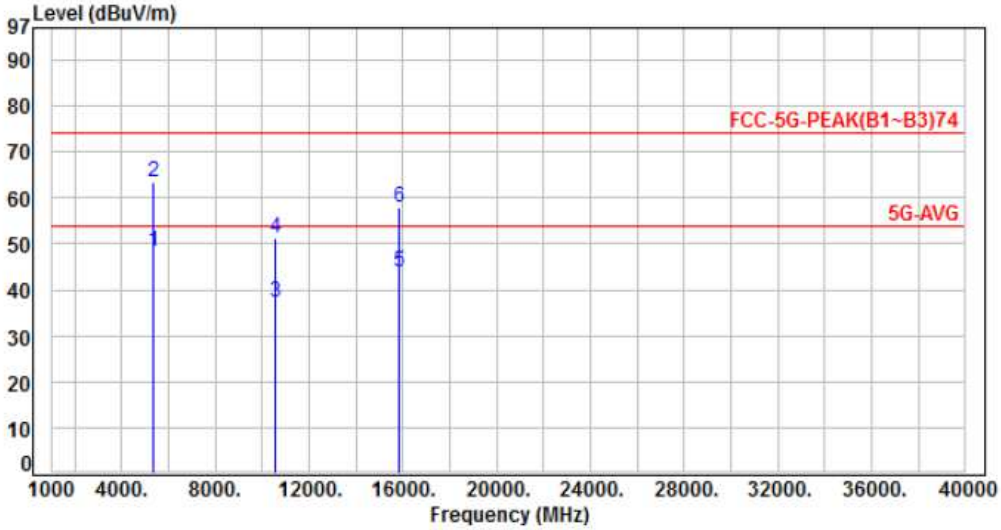
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 3, Band 2, CH54	Temperature	:	24 °C
Test Date	:	Aug. 29, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-12.32	63.24	50.92	54.00	-3.08	Average	340	228	P
2	5350.00	-12.32	78.97	66.65	74.00	-7.35	Peak	340	228	P
3	10540.00	-7.33	44.60	37.27	54.00	-16.73	Average	333	207	P
4	10540.00	-7.33	57.41	50.08	74.00	-23.92	Peak	333	207	P
5	15810.00	-3.83	47.74	43.91	54.00	-10.09	Average	101	227	P
6	15810.00	-3.83	61.11	57.28	74.00	-16.72	Peak	101	227	P

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

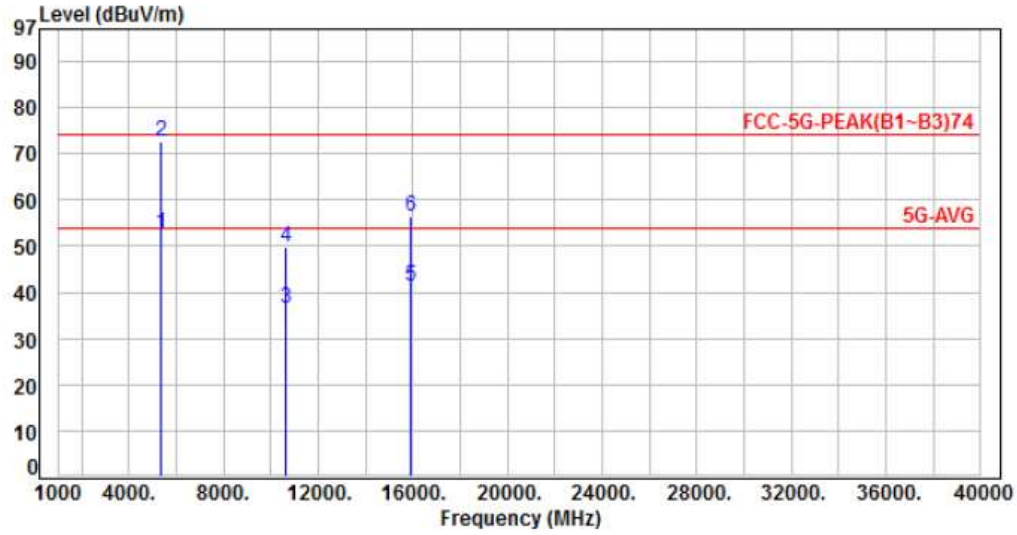
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 3, Band 2, CH54	Temperature	:	24 °C
Test Date	:	Aug. 29, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-12.32	60.52	48.20	54.00	-5.80	Average	102	353	P
2	5350.00	-12.32	75.82	63.50	74.00	-10.50	Peak	102	353	P
3	10540.00	-7.33	44.54	37.21	54.00	-16.79	Average	201	156	P
4	10540.00	-7.33	58.65	51.32	74.00	-22.68	Peak	201	156	P
5	15810.00	-3.83	47.87	44.04	54.00	-9.96	Average	101	134	P
6	15810.00	-3.83	61.92	58.09	74.00	-15.91	Peak	101	134	P

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

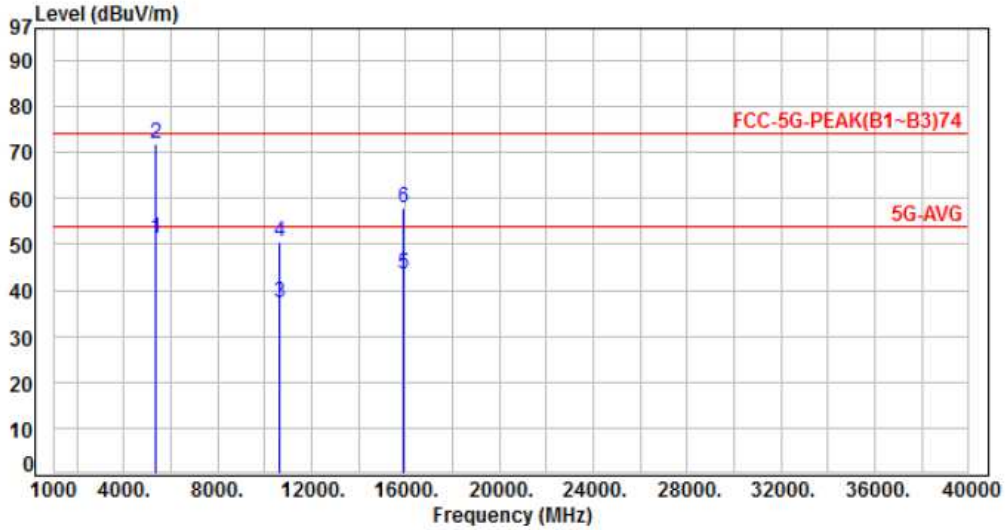
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 3, Band 2, CH62	Temperature	:	24 °C
Test Date	:	Aug. 29, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-12.32	65.24	52.92	54.00	-1.08	Average	298	101	P
2	5350.00	-12.32	84.96	72.64	74.00	-1.36	Peak	298	101	P
3	10620.00	-7.14	43.81	36.67	54.00	-17.33	Average	325	206	P
4	10620.00	-7.14	56.79	49.65	74.00	-24.35	Peak	325	206	P
5	15930.00	-3.86	45.12	41.26	54.00	-12.74	Average	101	225	P
6	15930.00	-3.86	60.28	56.42	74.00	-17.58	Peak	101	225	P

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

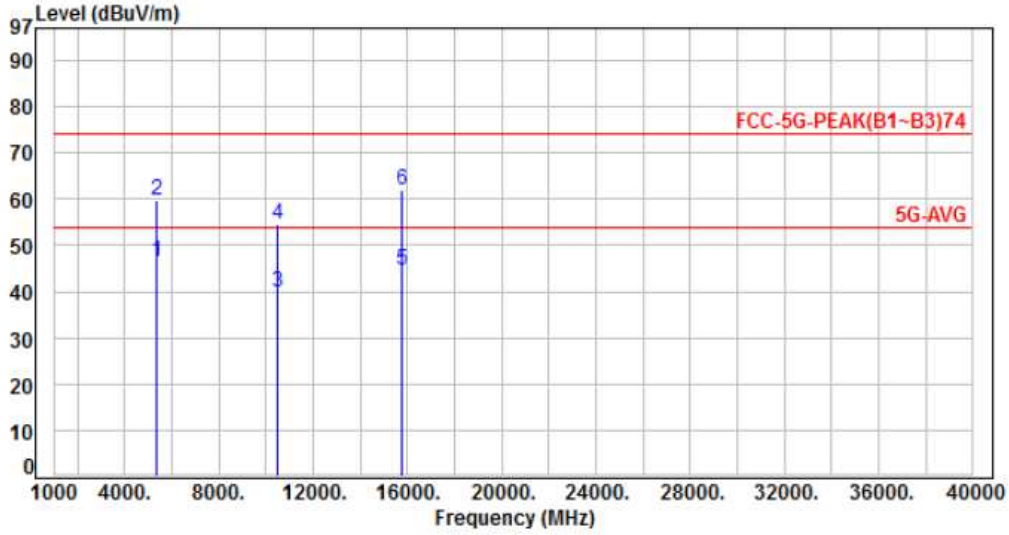
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 3, Band 2, CH62	Temperature	:	24 °C
Test Date	:	Aug. 29, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-12.32	63.52	51.20	54.00	-2.80	Average	110	350	P
2	5350.00	-12.32	84.35	72.03	74.00	-1.97	Peak	110	350	P
3	10630.00	-7.12	44.28	37.16	54.00	-16.84	Average	198	159	P
4	10630.00	-7.12	57.73	50.61	74.00	-23.39	Peak	198	159	P
5	15930.00	-3.86	47.32	43.46	54.00	-10.54	Average	101	136	P
6	15930.00	-3.86	61.88	58.02	74.00	-15.98	Peak	101	136	P

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

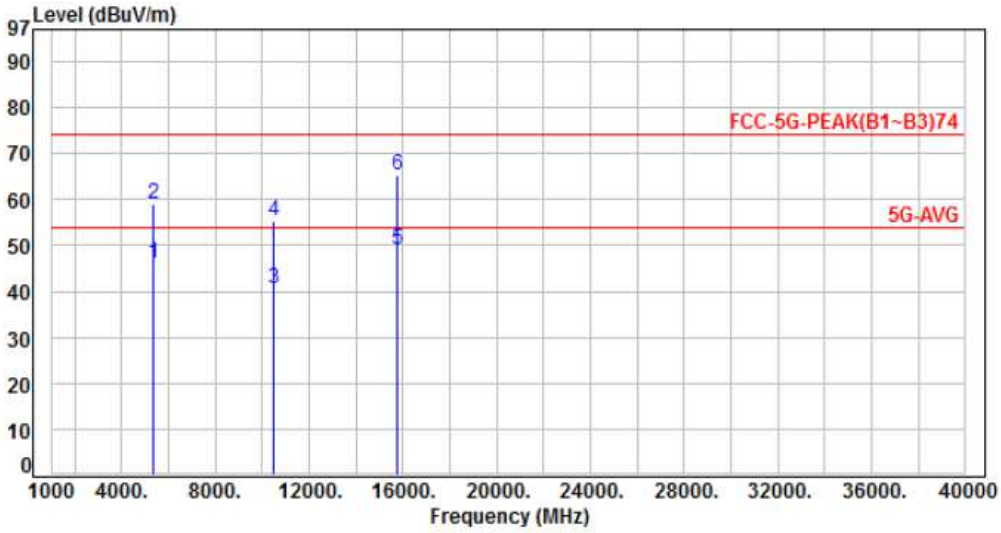
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 4, Band 2, CH52	Temperature	:	24 °C
Test Date	:	Sep. 04, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-12.29	58.72	46.43	54.00	-7.57	Average	218	334	P
2	5350.00	-12.29	71.89	59.60	74.00	-14.40	Peak	218	334	P
3	10520.00	-7.30	47.22	39.92	54.00	-14.08	Average	175	142	P
4	10520.00	-7.30	61.73	54.43	74.00	-19.57	Peak	175	142	P
5	15780.00	-3.49	48.29	44.80	54.00	-9.20	Average	188	163	P
6	15780.00	-3.49	65.40	61.91	74.00	-12.09	Peak	188	163	P

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

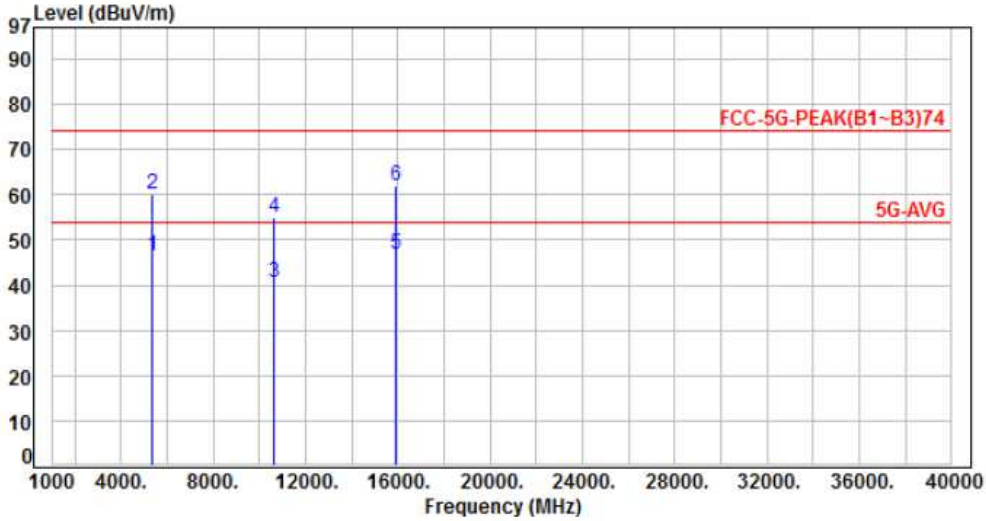
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 4, Band 2, CH52	Temperature	:	24 °C
Test Date	:	Sep. 04, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-12.29	58.26	45.97	54.00	-8.03	Average	137	289	P
2	5350.00	-12.29	71.12	58.83	74.00	-15.17	Peak	137	289	P
3	10520.00	-7.30	47.83	40.53	54.00	-13.47	Average	202	113	P
4	10520.00	-7.30	62.70	55.40	74.00	-18.60	Peak	202	113	P
5	15780.00	-3.49	52.47	48.98	54.00	-5.02	Average	171	157	P
6	15780.00	-3.49	68.66	65.17	74.00	-8.83	Peak	171	157	P

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

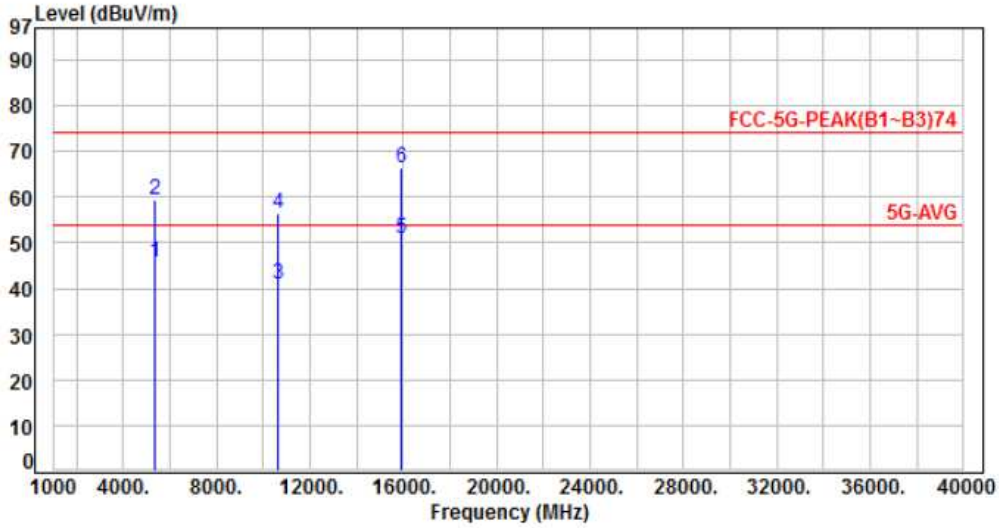
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 4, Band 2, CH60	Temperature	:	24 °C
Test Date	:	Sep. 04, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-12.29	58.94	46.65	54.00	-7.35	Average	231	328	P
2	5350.00	-12.29	72.25	59.96	74.00	-14.04	Peak	231	328	P
3	10600.00	-7.25	47.76	40.51	54.00	-13.49	Average	182	155	P
4	10600.00	-7.25	62.33	55.08	74.00	-18.92	Peak	182	155	P
5	15900.00	-3.53	50.34	46.81	54.00	-7.19	Average	284	153	P
6	15900.00	-3.53	65.58	62.05	74.00	-11.95	Peak	284	153	P

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

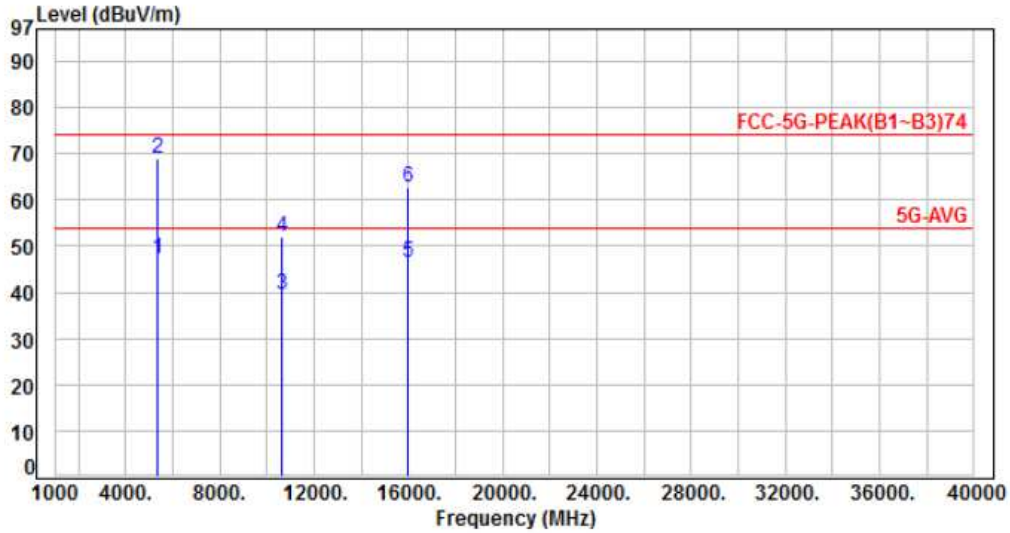
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 4, Band 2, CH60	Temperature	:	24 °C
Test Date	:	Sep. 04, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-12.29	57.96	45.67	54.00	-8.33	Average	125	316	P
2	5350.00	-12.29	71.51	59.22	74.00	-14.78	Peak	125	316	P
3	10600.00	-7.25	48.35	41.10	54.00	-12.90	Average	208	126	P
4	10600.00	-7.25	63.68	56.43	74.00	-17.57	Peak	208	126	P
5	15900.00	-3.53	54.43	50.90	54.00	-3.10	Average	175	144	P
6	15900.00	-3.53	70.07	66.54	74.00	-7.46	Peak	175	144	P

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

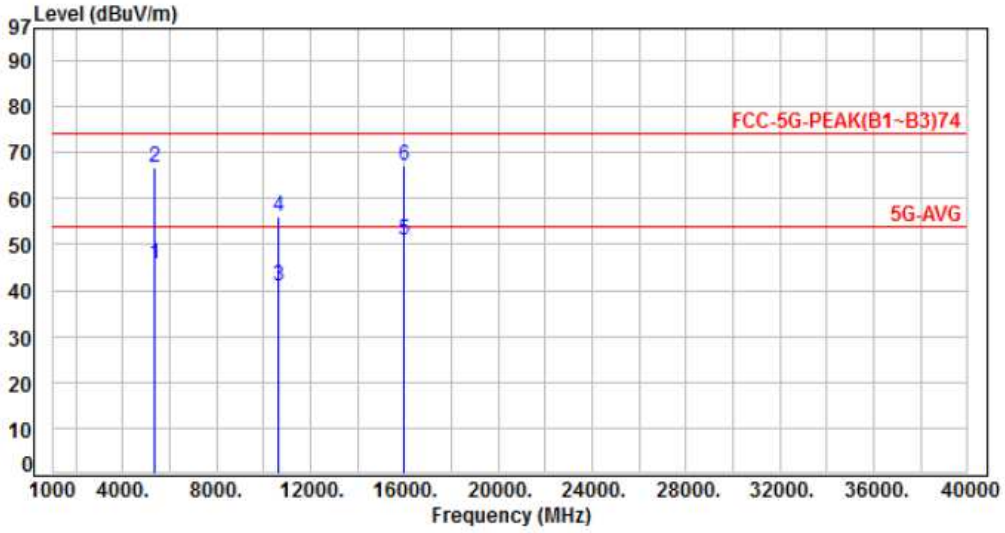
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 4, Band 2, CH64	Temperature	:	24 °C
Test Date	:	Sep. 04, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-12.29	59.62	47.33	54.00	-6.67	Average	249	332	P
2	5350.00	-12.29	81.39	69.10	74.00	-4.90	Peak	249	332	P
3	10640.00	-7.22	46.68	39.46	54.00	-14.54	Average	191	156	P
4	10640.00	-7.22	59.24	52.02	74.00	-21.98	Peak	191	156	P
5	15960.00	-3.56	50.14	46.58	54.00	-7.42	Average	282	137	P
6	15960.00	-3.56	66.19	62.63	74.00	-11.37	Peak	282	137	P

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

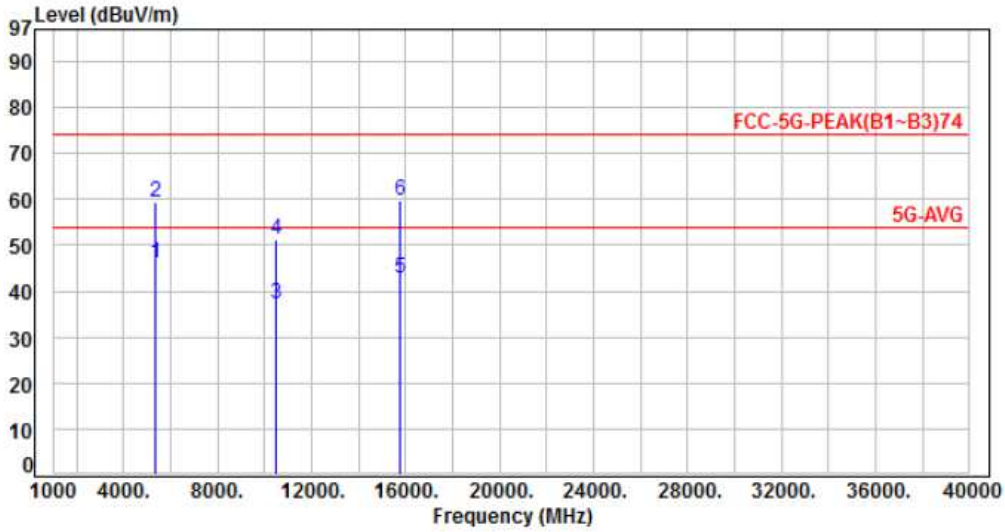
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 4, Band 2, CH64	Temperature	:	24 °C
Test Date	:	Sep. 04, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-12.29	57.96	45.67	54.00	-8.33	Average	122	324	P
2	5350.00	-12.29	78.98	66.69	74.00	-7.31	Peak	122	324	P
3	10640.00	-7.22	48.12	40.90	54.00	-13.10	Average	199	137	P
4	10640.00	-7.22	63.31	56.09	74.00	-17.91	Peak	199	137	P
5	15960.00	-3.56	54.38	50.82	54.00	-3.18	Average	178	151	P
6	15960.00	-3.56	70.55	66.99	74.00	-7.01	Peak	178	151	P

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

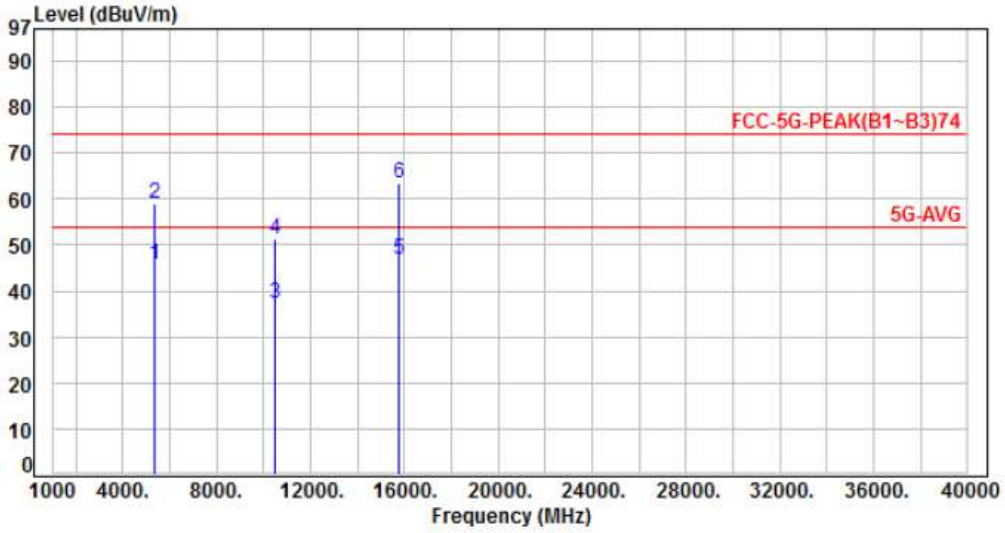
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 5, Band 2, CH52	Temperature	:	24 °C
Test Date	:	Sep. 04, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-12.29	58.35	46.06	54.00	-7.94	Average	217	328	P
2	5350.00	-12.29	71.64	59.35	74.00	-14.65	Peak	217	328	P
3	10520.00	-7.30	44.66	37.36	54.00	-16.64	Average	172	135	P
4	10520.00	-7.30	58.55	51.25	74.00	-22.75	Peak	172	135	P
5	15780.00	-3.49	46.40	42.91	54.00	-11.09	Average	182	161	P
6	15780.00	-3.49	63.15	59.66	74.00	-14.34	Peak	182	161	P

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

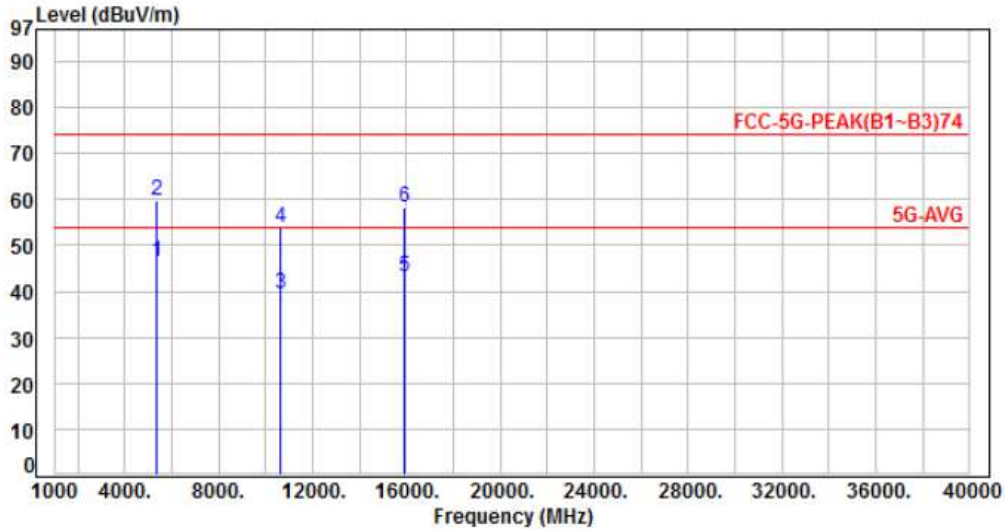
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 5, Band 2, CH52	Temperature	:	24 °C
Test Date	:	Sep. 04, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-12.29	58.12	45.83	54.00	-8.17	Average	142	278	P
2	5350.00	-12.29	71.24	58.95	74.00	-15.05	Peak	142	278	P
3	10520.00	-7.30	44.71	37.41	54.00	-16.59	Average	214	157	P
4	10520.00	-7.30	58.51	51.21	74.00	-22.79	Peak	214	157	P
5	15780.00	-3.49	50.27	46.78	54.00	-7.22	Average	173	154	P
6	15780.00	-3.49	66.98	63.49	74.00	-10.51	Peak	173	154	P

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

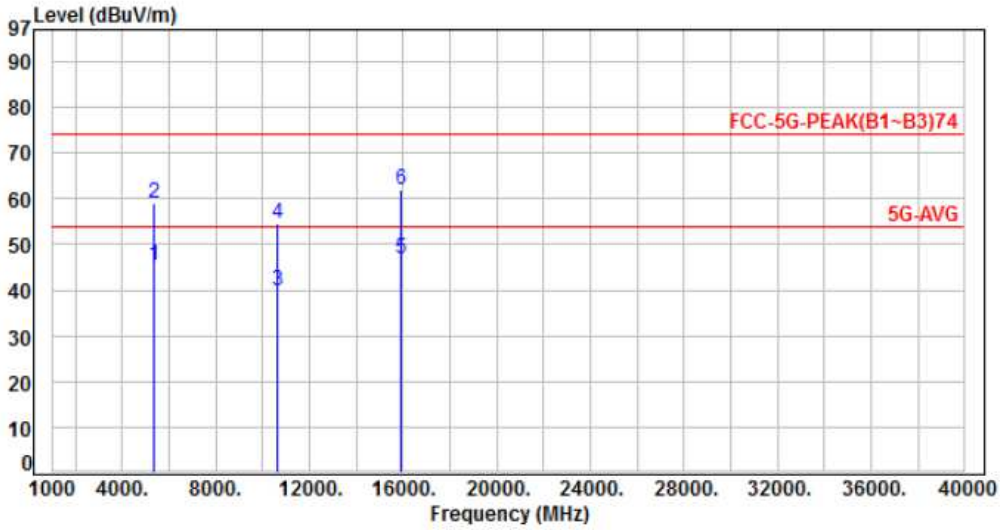
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 5, Band 2, CH60	Temperature	:	24 °C
Test Date	:	Sep. 04, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-12.29	58.71	46.42	54.00	-7.58	Average	228	316	P
2	5350.00	-12.29	72.06	59.77	74.00	-14.23	Peak	228	316	P
3	10600.00	-7.25	46.81	39.56	54.00	-14.44	Average	178	153	P
4	10600.00	-7.25	61.12	53.87	74.00	-20.13	Peak	178	153	P
5	15900.00	-3.53	46.61	43.08	54.00	-10.92	Average	282	157	P
6	15900.00	-3.53	61.97	58.44	74.00	-15.56	Peak	282	157	P

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

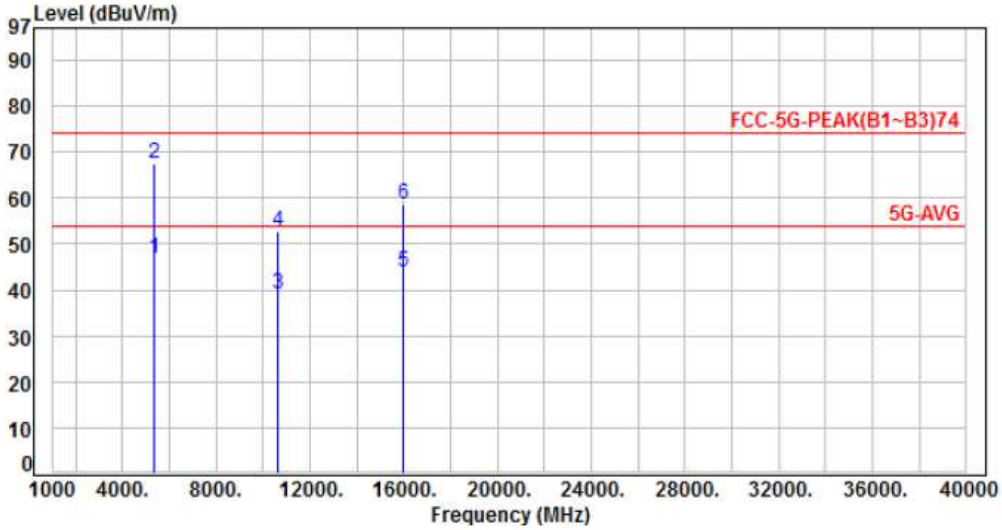
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 5, Band 2, CH60	Temperature	:	24 °C
Test Date	:	Sep. 04, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-12.29	57.78	45.49	54.00	-8.51	Average	116	309	P
2	5350.00	-12.29	71.47	59.18	74.00	-14.82	Peak	116	309	P
3	10600.00	-7.25	47.25	40.00	54.00	-14.00	Average	205	129	P
4	10600.00	-7.25	61.78	54.53	74.00	-19.47	Peak	205	129	P
5	15900.00	-3.53	50.27	46.74	54.00	-7.26	Average	172	157	P
6	15900.00	-3.53	65.63	62.10	74.00	-11.90	Peak	172	157	P

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

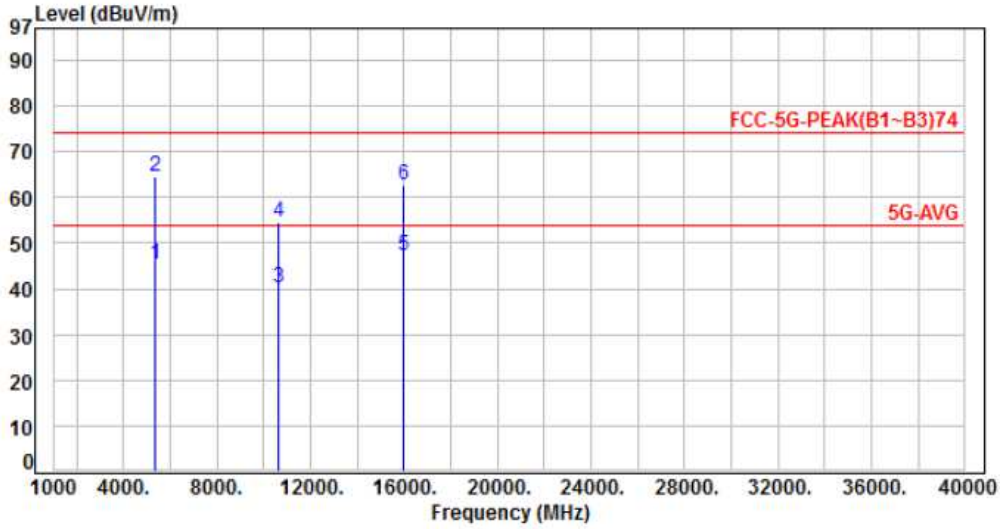
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 5, Band 2, CH64	Temperature	:	24 °C
Test Date	:	Sep. 04, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-12.29	59.22	46.93	54.00	-7.07	Average	232	323	P
2	5350.00	-12.29	79.72	67.43	74.00	-6.57	Peak	232	323	P
3	10640.00	-7.22	46.13	38.91	54.00	-15.09	Average	187	154	P
4	10640.00	-7.22	60.07	52.85	74.00	-21.15	Peak	187	154	P
5	15960.00	-3.56	47.43	43.87	54.00	-10.13	Average	278	129	P
6	15960.00	-3.56	62.34	58.78	74.00	-15.22	Peak	278	129	P

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

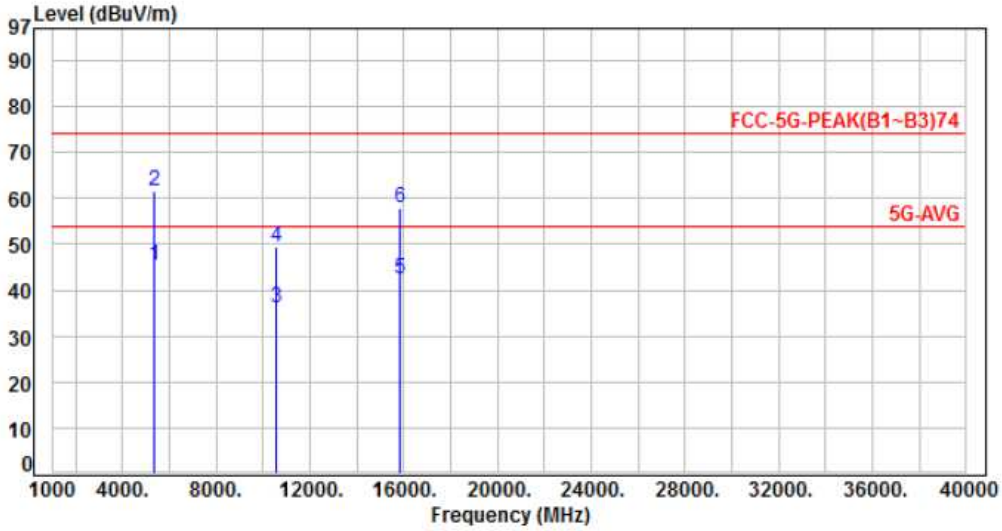
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 5, Band 2, CH64	Temperature	:	24 °C
Test Date	:	Sep. 04, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-12.29	57.81	45.52	54.00	-8.48	Average	129	287	P
2	5350.00	-12.29	76.90	64.61	74.00	-9.39	Peak	129	287	P
3	10640.00	-7.22	47.32	40.10	54.00	-13.90	Average	202	144	P
4	10640.00	-7.22	61.78	54.56	74.00	-19.44	Peak	202	144	P
5	15960.00	-3.56	50.68	47.12	54.00	-6.88	Average	171	156	P
6	15960.00	-3.56	66.35	62.79	74.00	-11.21	Peak	171	156	P

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

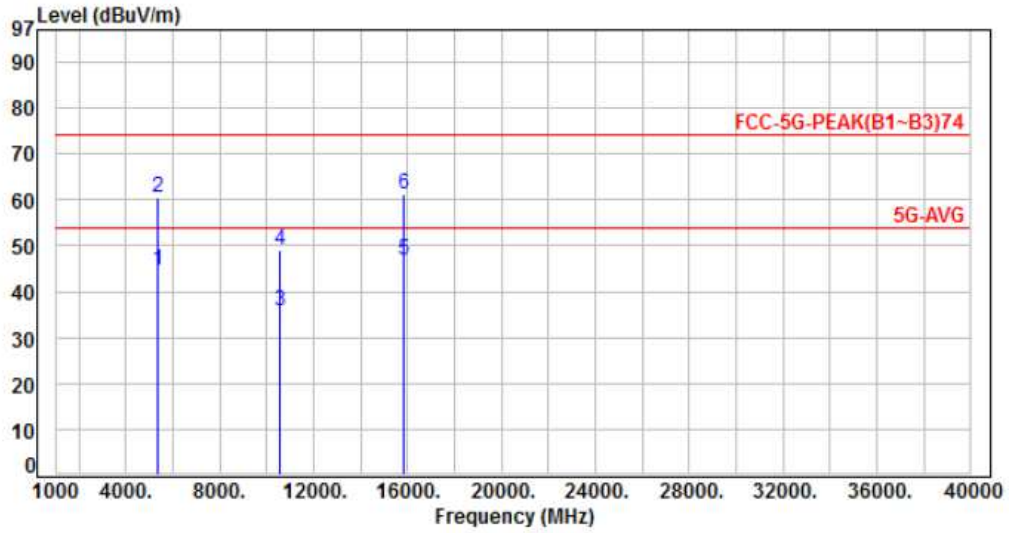
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 6, Band 2, CH54	Temperature	:	24 °C
Test Date	:	Sep. 04, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-12.29	57.74	45.45	54.00	-8.55	Average	216	327	P
2	5350.00	-12.29	73.78	61.49	74.00	-12.51	Peak	216	327	P
3	10540.00	-7.29	43.45	36.16	54.00	-17.84	Average	180	170	P
4	10540.00	-7.29	56.59	49.30	74.00	-24.70	Peak	180	170	P
5	15810.00	-3.50	45.95	42.45	54.00	-11.55	Average	266	138	P
6	15810.00	-3.50	61.44	57.94	74.00	-16.06	Peak	266	138	P

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

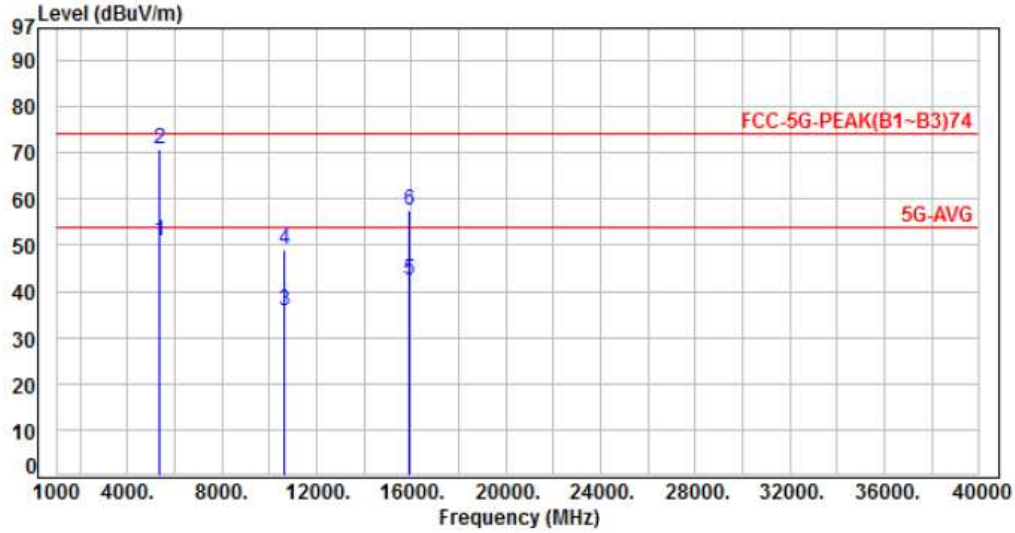
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 6, Band 2, CH54	Temperature	:	24 °C
Test Date	:	Sep. 04, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-12.29	56.87	44.58	54.00	-9.42	Average	125	283	P
2	5350.00	-12.29	72.62	60.33	74.00	-13.67	Peak	125	283	P
3	10540.00	-7.29	43.01	35.72	54.00	-18.28	Average	204	127	P
4	10540.00	-7.29	56.40	49.11	74.00	-24.89	Peak	204	127	P
5	15810.00	-3.50	50.34	46.84	54.00	-7.16	Average	181	157	P
6	15810.00	-3.50	64.81	61.31	74.00	-12.69	Peak	181	157	P

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

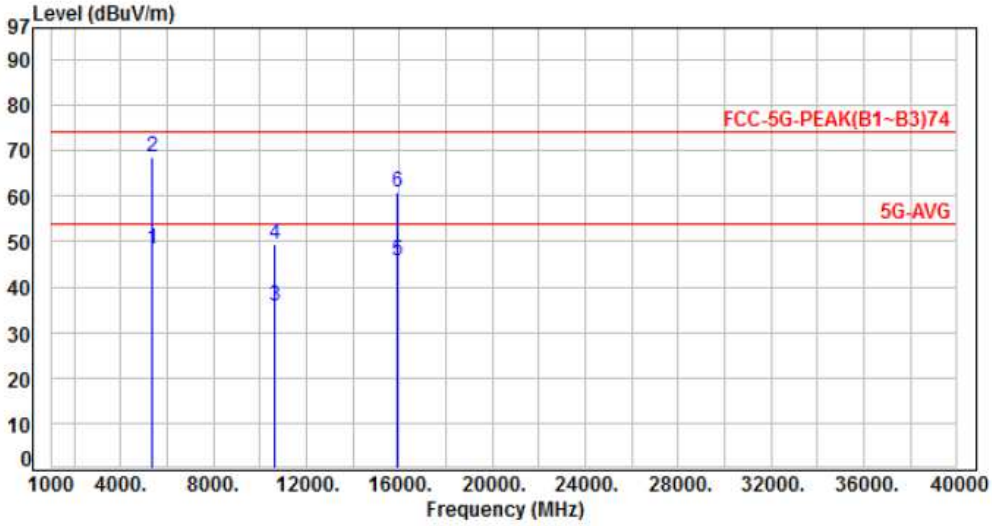
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 6, Band 2, CH62	Temperature	:	24 °C
Test Date	:	Sep. 04, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-12.29	63.21	50.92	54.00	-3.08	Average	197	319	P
2	5350.00	-12.29	83.00	70.71	74.00	-3.29	Peak	197	319	P
3	10620.00	-7.23	43.19	35.96	54.00	-18.04	Average	183	169	P
4	10620.00	-7.23	56.28	49.05	74.00	-24.95	Peak	183	169	P
5	15930.00	-3.55	45.84	42.29	54.00	-11.71	Average	258	141	P
6	15930.00	-3.55	61.18	57.63	74.00	-16.37	Peak	258	141	P

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

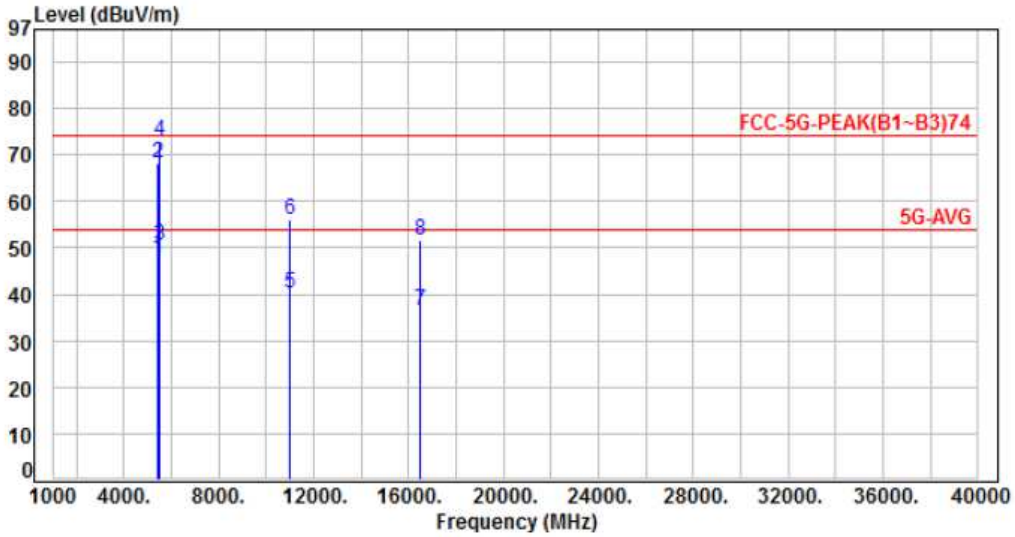
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 6, Band 2, CH62	Temperature	:	24 °C
Test Date	:	Sep. 04, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	-12.29	60.55	48.26	54.00	-5.74	Average	148	284	P
2	5350.00	-12.29	80.97	68.68	74.00	-5.32	Peak	148	284	P
3	10630.00	-7.23	43.14	35.91	54.00	-18.09	Average	208	139	P
4	10630.00	-7.23	56.77	49.54	74.00	-24.46	Peak	208	139	P
5	15930.00	-3.55	49.13	45.58	54.00	-8.42	Average	192	148	P
6	15930.00	-3.55	64.26	60.71	74.00	-13.29	Peak	192	148	P

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

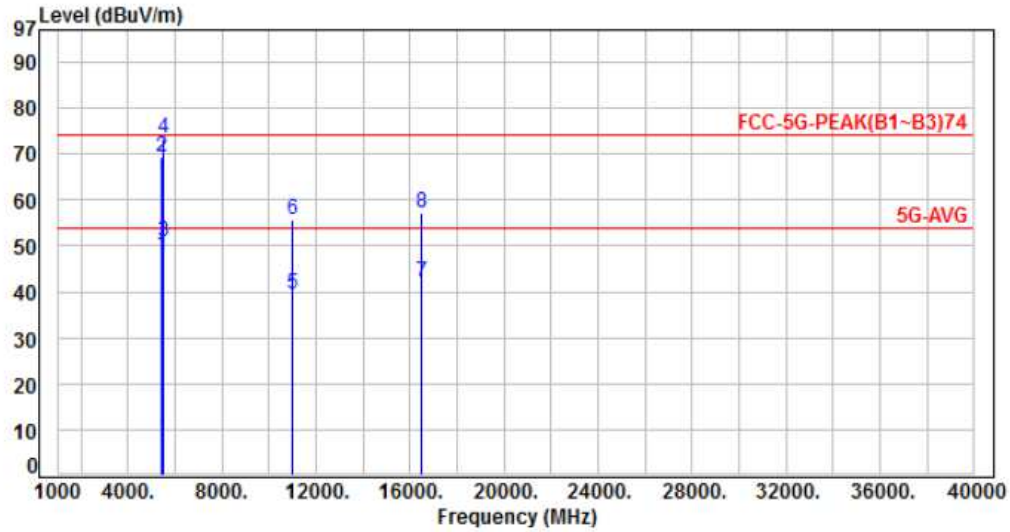
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 1, Band 3, CH100	Temperature	:	24 °C
Test Date	:	Sep. 02, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	-12.11	59.86	47.75	54.00	-6.25	Average	201	320	P
2	5460.00	-12.11	80.30	68.19	74.00	-5.81	Peak	201	320	P
3	5470.00	-12.09	62.60	50.51	54.00	-3.49	Average	201	320	P
4	5470.00	-12.09	85.03	72.94	74.00	-1.06	Peak	201	320	P
5	11000.00	-6.26	46.62	40.36	54.00	-13.64	Average	153	155	P
6	11000.00	-6.26	62.45	56.19	74.00	-17.81	Peak	153	155	P
7	16500.00	-2.47	38.85	36.38	54.00	-17.62	Average	101	222	P
8	16500.00	-2.47	53.95	51.48	74.00	-22.52	Peak	101	222	P

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

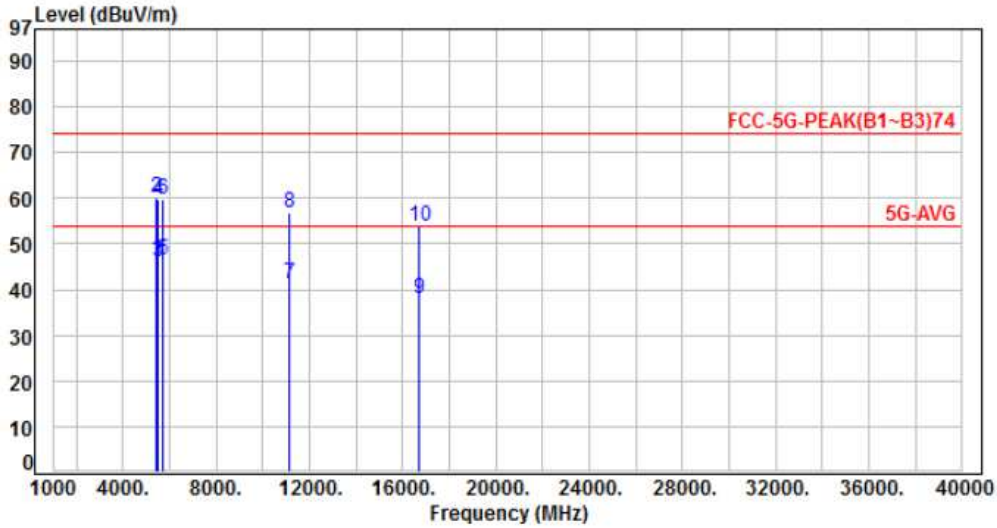
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 1, Band 3, CH100	Temperature	:	24 °C
Test Date	:	Sep. 02, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	-12.11	59.94	47.83	54.00	-6.17	Average	303	133	P
2	5460.00	-12.11	81.45	69.34	74.00	-4.66	Peak	303	133	P
3	5470.00	-12.09	62.83	50.74	54.00	-3.26	Average	303	133	P
4	5470.00	-12.09	85.34	73.25	74.00	-0.75	Peak	303	133	P
5	11000.00	-6.26	45.81	39.55	54.00	-14.45	Average	101	129	P
6	11000.00	-6.26	62.02	55.76	74.00	-18.24	Peak	101	129	P
7	16500.00	-2.47	44.60	42.13	54.00	-11.87	Average	171	207	P
8	16500.00	-2.47	59.70	57.23	74.00	-16.77	Peak	171	207	P

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

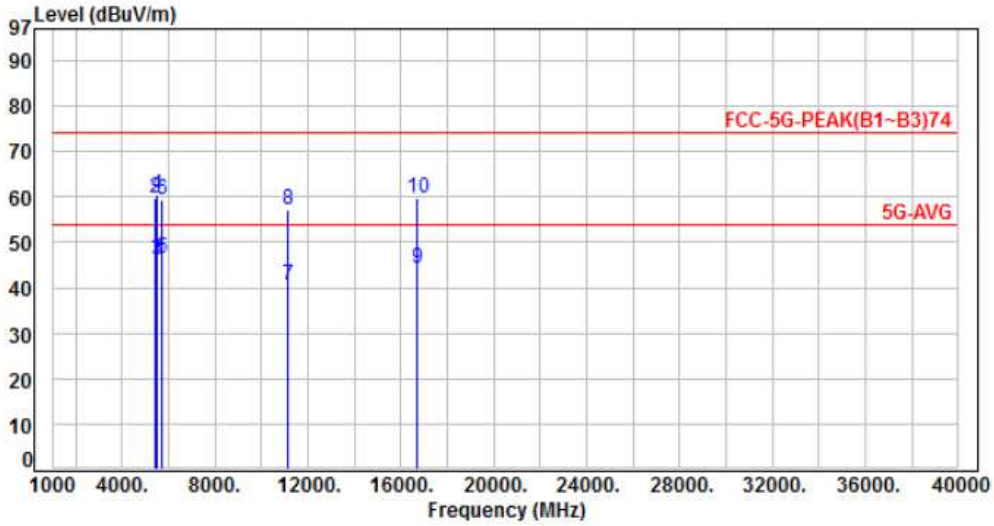
Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 1, Band 3, CH116	Temperature	:	24 °C
Test Date	:	Sep. 02, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	-12.11	58.73	46.62	54.00	-7.38	Average	198	316	P
2	5460.00	-12.11	72.34	60.23	74.00	-13.77	Peak	198	316	P
3	5470.00	-12.09	58.17	46.08	54.00	-7.92	Average	198	316	P
4	5470.00	-12.09	71.87	59.78	74.00	-14.22	Peak	198	316	P
5	5725.00	-12.12	58.54	46.42	54.00	-7.58	Average	198	316	P
6	5725.00	-12.12	71.99	59.87	74.00	-14.13	Peak	198	316	P
7	11160.00	-6.27	47.49	41.22	54.00	-12.78	Average	154	162	P
8	11160.00	-6.27	63.22	56.95	74.00	-17.05	Peak	154	162	P
9	16740.00	-1.16	39.03	37.87	54.00	-16.13	Average	101	224	P
10	16740.00	-1.16	54.90	53.74	74.00	-20.26	Peak	101	224	P

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

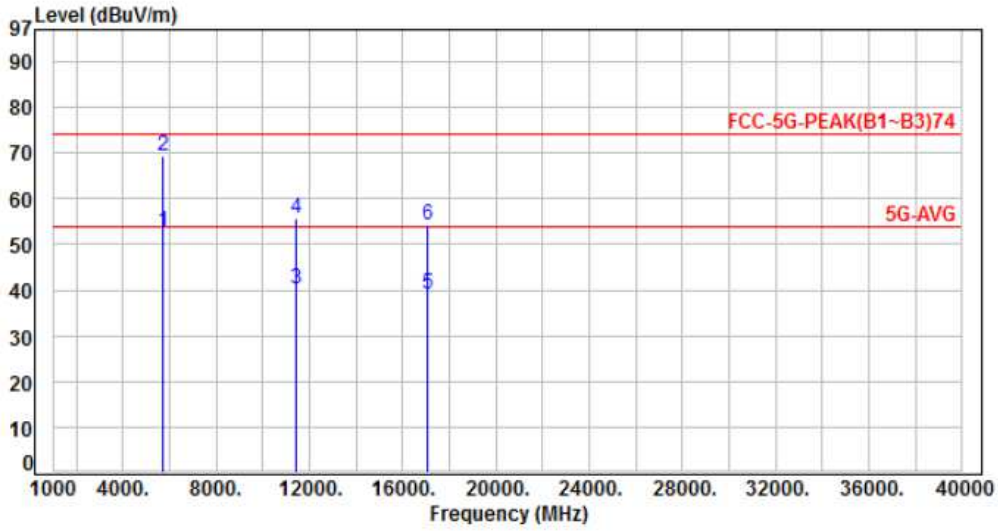
Power	:	AC 120V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 1, Band 3, CH116	Temperature	:	24 °C
Test Date	:	Sep. 02, 2017	Humidity	:	63 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	-12.11	58.63	46.52	54.00	-7.48	Average	306	142	P
2	5460.00	-12.11	71.68	59.57	74.00	-14.43	Peak	306	142	P
3	5470.00	-12.09	58.35	46.26	54.00	-7.74	Average	306	142	P
4	5470.00	-12.09	72.53	60.44	74.00	-13.56	Peak	306	142	P
5	5725.00	-12.12	58.76	46.64	54.00	-7.36	Average	306	142	P
6	5725.00	-12.12	71.61	59.49	74.00	-14.51	Peak	306	142	P
7	11160.00	-6.27	46.75	40.48	54.00	-13.52	Average	103	136	P
8	11160.00	-6.27	63.47	57.20	74.00	-16.80	Peak	103	136	P
9	16740.00	-1.16	45.53	44.37	54.00	-9.63	Average	168	204	P
10	16740.00	-1.16	60.87	59.71	74.00	-14.29	Peak	168	204	P

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

Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 1, Band 3, CH140	Temperature	:	24 °C
Test Date	:	Sep. 02, 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	-12.12	64.97	52.85	54.00	-1.15	Average	254	313	P
2	5725.00	-12.12	81.54	69.42	74.00	-4.58	Peak	254	313	P
3	11400.00	-6.26	46.29	40.03	54.00	-13.97	Average	148	159	P
4	11400.00	-6.26	62.13	55.87	74.00	-18.13	Peak	148	159	P
5	17100.00	0.79	38.46	39.25	54.00	-14.75	Average	101	228	P
6	17100.00	0.79	53.32	54.11	74.00	-19.89	Peak	101	228	P

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