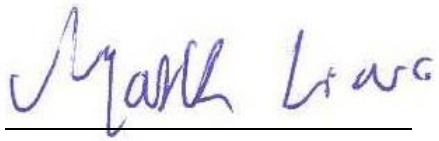
FCC RADIO TEST REPORT

Applicant	:	Allied Telesis K.K.
Address	:	2nd. TOC Bldg. 721-11 Nishi-Gotanda, Shinagawa-ku, Tokyo Japan, 141-0031
Equipment	:	802.11ax 4x4+4x4 dual-radio 2.4G/5G wireless AP
Model No.	:	AT-TQ6602
Trade Name	:	Allied Telesis
FCC ID	:	RSL-TQ6602

I HEREBY CERTIFY THAT :

The sample was received on Aug. 03, 2020 and the testing was completed on Nov. 21, 2020 at Cerpass Technology Corp. The test result refers exclusively to the test presented test model / sample. Without written approval of Cerpass Technology Corp., the test report shall not be reproduced except in full.

Approved by:



Mark Liao / Supervisor

Laboratory Accreditation:

Cerpass Technology Corporation Test Laboratory

CONTENTS

History of this test report

Report No.	Issue Date	Description
TEFE2007311	Nov. 30, 2020	Original

1. Summary of Test Procedure and Test Results

1.1. Applicable Standards

ANSI C63.10:2013

FCC Rules and Regulations Part 15 Subpart E §15.407

KDB789033

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)	Power Spectral Density	PASS
15.407(g)	Frequency Stability	PASS
2.1091	Radio Frequency Exposure	PASS

*The lab has reduced the uncertainty risk factor from test equipment, environment and staff technicians which according to the standard on contract. Therefore, the test result will only be determined by standard requirement.

*This EUT has been also tested and compiled with the requirement of FCC Part 15, Subpart B, recorded in a separate test report(TEFD2007311).

2. Test Configuration of Equipment under Test

2.1. Feature of Equipment under Test

Frequency Range	802.11b/g/n: 2412-2462MHz 802.11a/n/ac: 5180-5240MHz, 5745-5825MHz
Modulation Type	WLAN: 2.4GHz: 802.11b: CCK, DQPSK, DBPSK 802.11g/n: BPSK, QPSK, 16QAM, 64QAM, 256QAM(TurboQAM) 802.11ax: BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM 5GHz: 802.11n/a: BPSK, QPSK, 16QAM, 64QAM 802.11ac: BPSK, QPSK, 16QAM, 64QAM, 256QAM 802.11ax: BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM
Modulation Technology	DSSS, OFDM, OFDMA
Data Rate	WLAN: 2.4GHz: 802.11b: 1, 2, 5.5, 11Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11n: MCS0 – MCS31, HT20/40 MCS0 – MCS9, VHT20/40(TurboQAM) 802.11ax: MCS0 – MCS11,HE20/40 5GHz: 802.11a: 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11n: MCS0 – MCS31, HT20/40 802.11ac: MCS0 – MCS9, VHT20/40/80/80+80 802.11ax: MCS0 – MCS11,HE20/40/80/80+80
Antenna Type	PIFA Antenna
Antenna Gain	2412-2462MHz: ANT E / F / G / H:3.67dBi 5180-5240MHz: ANT A / B / C / D:4.77dBi 5745-5825MHz: ANT A / B / C / D:4.86dBi
Adapter	Brand: Asian Power Devices Inc. Model No: DA-48Z12

Note:

1.The EUT support AP Mode(Master).

2. Wlan 2.4G 802.11n Support TurboQAM.

3..The EUT support STBC.

3..The EUT not support TPC / CDD.

4. WLAN 2.4G and WLAN 5G can simultaneously transmission.

5. WLAN 2.4GHz 802.11n and TurboQAM and 802.11ax support beamforming Function.

6. WLAN 5GHz 802.11n and 802.11ac and 802.11ax support beamforming Function.

7. For more details, please refer to the User's manual of the EUT.

2.2. Carrier Frequency of Channels

Band: 5150MHz-5250MHz

802.11a, 802.11n HT20, 802.11ac VHT20, 802.11ax HE20

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

802.11n HT40, 802.11ac VHT40, 802.11ax HE40

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

802.11ac VHT80 , 802.11ax HE80

Channel	Frequency(MHz)
***42**	**5210**

Band: 5725MHz -5850MHz

802.11a, 802.11n HT20, 802.11ac VHT20, 802.11ax HE20

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

802.11n HT40, 802.11ac VHT40, 802.11ax HE40

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

802.11ac VHT80 , 802.11ax HE80

Channel	Frequency(MHz)
***155**	**5775**

Non-adjacent band:

802.11ac VHT80 + 802.11ac VHT80 , 802.11ax HE80 + 802.11ax HE80

Channel	Frequency(MHz)
***42+155**	**5210+5775**
***155+42**	**5775+5210**

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 C63.10.

b. The complete test system included remote workstation and EUT for RF test. The remote workstation included Notebook.

c. An executive program, ” Dut labtool ver.0.0.1.39” under Windows OS system was executed to transmit and receive data via WLAN.

d. The following test modes were performed for the test:

Conducted Emissions from the AC mains power ports	
Test Mode	Operating Description
1	802.11a (6Mbps) , Power from Adapter
2	802.11n HT20 (6.5Mbps) , Power from Adapter
3	802.11n HT40 (13.5Mbps) , Power from Adapter
4	802.11ac VHT20 (6.5Mbps) , Power from Adapter
5	802.11ac VHT40 (13.5Mbps) , Power from Adapter
6	802.11ac VHT80 (29.3Mbps) , Power from Adapter
7	802.11ac VHT80 + 802.11ac VHT80 (29.3Mbps) , Power from Adapter
8	802.11ax HE20 (7.3Mbps) , Power from Adapter
9	802.11ax HE40 (14.6Mbps) , Power from Adapter
10	802.11ax HE80 (30.6Mbps) , Power from Adapter
11	802.11ax HE80 + 802.11ax HE80 (30.6Mbps) , Power from Adapter
12	802.11a (6Mbps) , Power from PoE
13	802.11n HT20 (6.5Mbps) , Power from PoE
14	802.11n HT40 (13.5Mbps) , Power from PoE
15	802.11ac VHT20 (6.5Mbps) , Power from PoE
16	802.11ac VHT40 (13.5Mbps) , Power from PoE
17	802.11ac VHT80 (29.3Mbps) , Power from PoE
18	802.11ac VHT80 + 802.11ac VHT80 (29.3Mbps , Power from PoE)
19	802.11ax HE20 (7.3Mbps) , Power from PoE
20	802.11ax HE40 (14.6Mbps) , Power from PoE
21	802.11ax HE80 (30.6Mbps) , Power from PoE
22	802.11ax HE80 + 802.11ax HE80 (30.6Mbps) , Power from PoE
caused “Test Mode 19” generated the worst case, it was reported as the final data.	

Radiation Emissions (30MHz ~ 1GHz)	
Test Mode	Operating Description
1	802.11a (6Mbps) , Power from Adapter
2	802.11n HT20 (6.5Mbps) , Power from Adapter
3	802.11n HT40 (13.5Mbps) , Power from Adapter
4	802.11ac VHT20 (6.5Mbps) , Power from Adapter
5	802.11ac VHT40 (13.5Mbps) , Power from Adapter
6	802.11ac VHT80 (29.3Mbps) , Power from Adapter
7	802.11ac VHT80 + 802.11ac VHT80 (29.3Mbps) , Power from Adapter
8	802.11ax HE20 (7.3Mbps) , Power from Adapter
9	802.11ax HE40 (14.6Mbps) , Power from Adapter
10	802.11ax HE80 (30.6Mbps) , Power from Adapter
11	802.11ax HE80 + 802.11ax HE80 (30.6Mbps) , Power from Adapter
12	802.11a (6Mbps) , Power from PoE
13	802.11n HT20 (6.5Mbps) , Power from PoE
14	802.11n HT40 (13.5Mbps) , Power from PoE
15	802.11ac VHT20 (6.5Mbps) , Power from PoE
16	802.11ac VHT40 (13.5Mbps) , Power from PoE
17	802.11ac VHT80 (29.3Mbps) , Power from PoE
18	802.11ac VHT80 + 802.11ac VHT80 (29.3Mbps , Power from PoE)
19	802.11ax HE20 (7.3Mbps) , Power from PoE
20	802.11ax HE40 (14.6Mbps) , Power from PoE
21	802.11ax HE80 (30.6Mbps) , Power from PoE
22	802.11ax HE80 + 802.11ax HE80 (30.6Mbps) , Power from PoE
caused “Test Mode 8” generated the worst case, it was reported as the final data.	

Radiation Emissions (1GHz ~ 40GHz)	
Test Mode	Operating Description
1	802.11a (6Mbps) , Power from Adapter
2	802.11n HT20 (6.5Mbps) , Power from Adapter
3	802.11n HT40 (13.5Mbps) , Power from Adapter
4	802.11ac VHT20 (6.5Mbps) , Power from Adapter
5	802.11ac VHT40 (13.5Mbps) , Power from Adapter
6	802.11ac VHT80 (29.3Mbps) , Power from Adapter
7	802.11ac VHT80 + 802.11ac VHT80 (29.3Mbps) , Power from Adapter
8	802.11ax HE20 (7.3Mbps) , Power from Adapter
9	802.11ax HE40 (14.6Mbps) , Power from Adapter
10	802.11ax HE80 (30.6Mbps) , Power from Adapter
11	802.11ax HE80 + 802.11ax HE80 (30.6Mbps) , Power from Adapter
12	802.11a (6Mbps) , Power from PoE
13	802.11n HT20 (6.5Mbps) , Power from PoE
14	802.11n HT40 (13.5Mbps) , Power from PoE
15	802.11ac VHT20 (6.5Mbps) , Power from PoE
16	802.11ac VHT40 (13.5Mbps) , Power from PoE
17	802.11ac VHT80 (29.3Mbps) , Power from PoE
18	802.11ac VHT80 + 802.11ac VHT80 (29.3Mbps , Power from PoE)
19	802.11ax HE20 (7.3Mbps) , Power from PoE
20	802.11ax HE40 (14.6Mbps) , Power from PoE
21	802.11ax HE80 (30.6Mbps) , Power from PoE
22	802.11ax HE80 + 802.11ax HE80 (30.6Mbps) , Power from PoE
caused “Test Mode 1,4~11” generated the worst case, it was reported as the final data.	

The EUT incorporates a MIMO function

Modulation Type	TX CONFIGURATION
802.11a	4TX
802.11n HT20	4TX
802.11ac VHT20	4TX
802.11ax HE20	4TX
802.11n HT40	4TX
802.11ac VHT40	4TX
802.11ax HE40	4TX
802.11ac VHT80	4TX
802.11ax HE80	4TX
802.11ac VHT80+ VHT80	2TX+2TX
802.11ax HE80+ HE80	2TX+2TX

2.4. Description of Test System

RF Conducted				
Equipment	Brand	Model	Length/Type	Power cord/Length/Type
Notebook	ASUS	P2430U	N/A	Adapter / 1.8m / NS
RJ45 Cable	TE CONNECTIVITY	CAT5E	1.2m / NS	N/A
Radiated Emissions				
Equipment	Brand	Model	Length/Type	Power cord/Length/Type
Notebook	ASUS	P2430U	N/A	Adapter / 1.8m / NS
RJ45 Cable	TE CONNECTIVITY	CAT5E	15m / NS	N/A
AC Power Line Conducted Emission				
Equipment	Brand	Model	Length/Type	Power cord/Length/Type
Notebook	ASUS	P2430U	N/A	Adapter / 1.8m / NS
RJ45 Cable	TE CONNECTIVITY	CAT5E	1.2m / NS	N/A
RJ45 Cable	TE CONNECTIVITY	CAT5E	15m / NS	N/A
POE	CERIO	POE-S53VG	N/A	N/A

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	
	FCC	TW1439, TW1079
	IC	4934E-1, 4934E-2
	VCCI	T-2205 for Telecommunication test C-4663 for Conducted emission test R-4218 for Radiated emission test G-10812, G-10813 for radiated disturbance above 1GHz
Frequency Range Investigated:	Conducted: from 150kHz to 30 MHz Radiation: from 30 MHz to 40,000MHz	
Test Distance:	The test distance of radiated emission from antenna to EUT is 3 M.	

Test Item	Test Site	Test period	Environmental Conditions	Tested By
RF Conducted	RFCON01-NK	2020/11/21	26℃ / 43%	Nick Guan
Radiated Emissions	3M02-NK	2020/11/10~2020/11/19	22℃~28℃ / 41%~ 49%	Nick Guan Leon Huang
AC Power Line Conducted Emission	CON01-NK	2020/11/21	25℃ / 48%	Leon Huang

2.6. Measurement Uncertainty

Measurement Item	Uncertainty
AC Power Line Conduction(150K~30MHz)	±3.42dB
Radiated Spurious Emission(9KHz~30MHz)	±3.404dB
Radiated Spurious Emission(30MHz~1GHz)	±5.686dB
Radiated Spurious Emission(1GHz~40GHz)	±6.597dB
6dB Bandwidth	±4.404%
26dB Bandwidth	±4.422%
Occupied Bandwidth	±4.400%
Peak Output Power(Conducted Power Meter)	±1.02dB
Power Spectral Density	±1.954dB
Duty Cycle	±3.47%
Frequency Stability	±209.668Hz

3. Test Equipment and Ancillaries Used for Tests

Test Item	Radiated Emissions				
Test Site	Semi Anechoic Room(3M02-NK)				
Instrument	**Manufacturer**	**Model No**	**Serial No**	**Calibration Date**	**Valid Date**
Bilog Antenna	Schwarzbeck	VULB9168	369	2020/04/10	2021/04/09
Active Loop Antenna	EMCO	6507	40855	2020/05/21	2021/05/20
Horn Antenna	EMCO	3115	31601	2020/10/16	2021/10/15
Horn Antenna	EMCO	3116	31970	2020/03/26	2021/03/25
EMI Receiver	ROHDE & SCHWARZ	ESCI	101423	2020/06/23	2021/06/22
Spectrum Analyzer	ROHDE & SCHWARZ	FSV 40-N	102151	2020/08/03	2021/08/02
Preamplifier	EM Electronics corp.	EM330	60660	2020/03/16	2021/03/15
Preamplifier	Agilent	8449B	3008A01954	2020/03/16	2021/03/15
Preamplifier	EMC INSTRUMENTS	EMC184045	980065	2020/11/06	2021/11/05
Bluetooth Tester	ROHDE & SCHWARZ	CBT	101133	2020/04/07	2021/04/06
Cable-3in1(30M-1G)	HARBOUR INDUSTRIES	LL142	CCE1315	2020/04/09	2021/04/08
Cable-0.5m(1G-18G)	HUBER SUHNER	SUCOFLEX 100	805443/4	2020/05/27	2021/05/26
Cable-3m(1G-18G)	HUBER SUHNER	SUCOFLEX 100	805796/4	2020/05/27	2021/05/26
Cable-8m(1G-18G)	HUBER SUHNER	SUCOFLEX 100	805795/4	2020/05/27	2021/05/26
Cable-0.5m(30M-40G)	HUBER SUHNER	SUCOFLEX 102	28420/2	2020/04/01	2021/03/31
Cable-3m(30M-40G)	HUBER SUHNER	SUCOFLEX 102	MY2608/2	2020/04/01	2021/03/31
Cable-0.5m(1G-40G)	Rapidtek	40GHZ 50CM	38MS-38MS50 314	2020/04/09	2021/04/08
Cable-6m(9k~300M)	NA	EMC5D-BM-BM-6	130606	2020/03/11	2021/03/10
E3	AUDIX	v8.2014-8-6	RK-000529	NA	NA

Test Item	RF Conducted				
Test Site	RFCON01-NK				
Instrument	**Manufacturer**	**Model No**	**Serial No**	**Calibration Date**	**Valid Date**
Spectrum Analyzer	ROHDE & SCHWARZ	FSV 40-N	101329	2020/07/07	2021/07/06
Bluetooth Tester	ROHDE & SCHWARZ	CBT	101133	2020/04/07	2021/04/06
CAX Signal Analyzer	KEYSIGHT	N9000B	MY57100339	2019/11/25	2020/11/24
Attenuator	KEYSIGHT	8491B	MY39250703	2020/04/17	2021/04/16
TEMP & HUMI CHAMBER	T-MACHINE	TMJ-9712	T-12-040111	2020/08/25	2021/08/24
Power Meter	Anritsu	ML2495A	1224005	2020/04/17	2021/04/16
Power Sensor	Anritsu	MA2411B	1207295	2020/04/17	2021/04/16
Spectrum Analyzer	ROHDE & SCHWARZ	FSV 40-N	101329	2020/07/07	2021/07/06

Test Item	AC Power Line Conducted Emission				
Test Site	CON01-NK				
Instrument	**Manufacturer**	**Model No**	**Serial No**	**Calibration Date**	**Valid Date**
EMI Receiver	ROHDE & SCHWARZ	ESCI	100443	2020/05/25	2021/05/24
Line Impedance Stabilization Network	Schwarzbeck	NSLK 8127	8127-568	2020/03/12	2021/03/11
Pulse Limiter	ROHDE & SCHWARZ	ESH3-Z2	101934	2020/03/11	2021/03/10
Cable-6m(9k~300M)	NA	CFD300-NL	NA	2020/03/11	2021/03/10
E3	AUDIX	v8.2014-8-6	RK-000531	NA	NA

4. Antenna Requirements

4.1. Standard Applicable

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

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

4.2. Antenna Construction and Directional Gain

Antenna Type	PIFA Antenna
Antenna Gain	2412-2462MHz: ANT E / F / G / H:3.67dBi 5180-5240MHz: ANT A / B / C / D:4.77dBi 5745-5825MHz: ANT A / B / C / D:4.86dBi

STBC Mode:

2412-2462MHz
For Power directional gain= Gant= 3.67 dBi For PSD directional gain = Gant= 3.67 dBi
5180MHz -5240MHz
For Power directional gain= G_{ant}= 4.77 dBi For PSD directional gain = G_{ant}= 4.77 dBi
5745MHz -5825MHz
For Power directional gain= G_{ant}= 4.86 dBi For PSD directional gain = G_{ant}= 4.86 dBi

Beamforming Mode:

2412-2462MHz
For Power directional gain= 10 log[(10G1 /20 + 10G2 /20)^2 /NANT] = 9.69 (dBi) For PSD directional gain = 10 log[(10G1 /20 + 10G2 /20)^2 /NANT] = 9.69 (dBi)
5180MHz -5240MHz
For Power directional gain= 10 log[(10G1 /20 + 10G2 /20)^2 /NANT] = 10.79 (dBi) For PSD directional gain = 10 log[(10G1 /20 + 10G2 /20)^2 /NANT] = 10.79 (dBi)
5745MHz -5825MHz
For Power directional gain= 10 log[(10G1 /20 + 10G2 /20)^2 /NANT] = 10.88 (dBi) For PSD directional gain = 10 log[(10G1 /20 + 10G2 /20)^2 /NANT] = 10.88 (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.

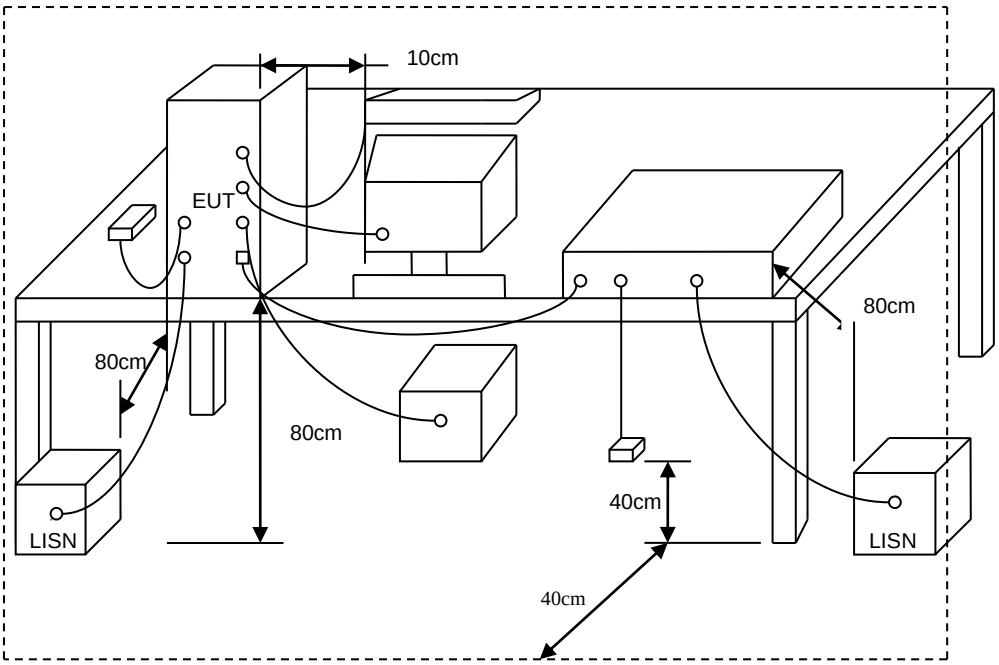
Frequency (MHz)	Quasi Peak (dBμV)	Average (dBμV)
0.15 – 0.5	66-56*	56-46*
0.5 – 5.0	56	46
5.0 – 30.0	60	50

*Decreases with the logarithm of the frequency.

5.2. Test Procedures

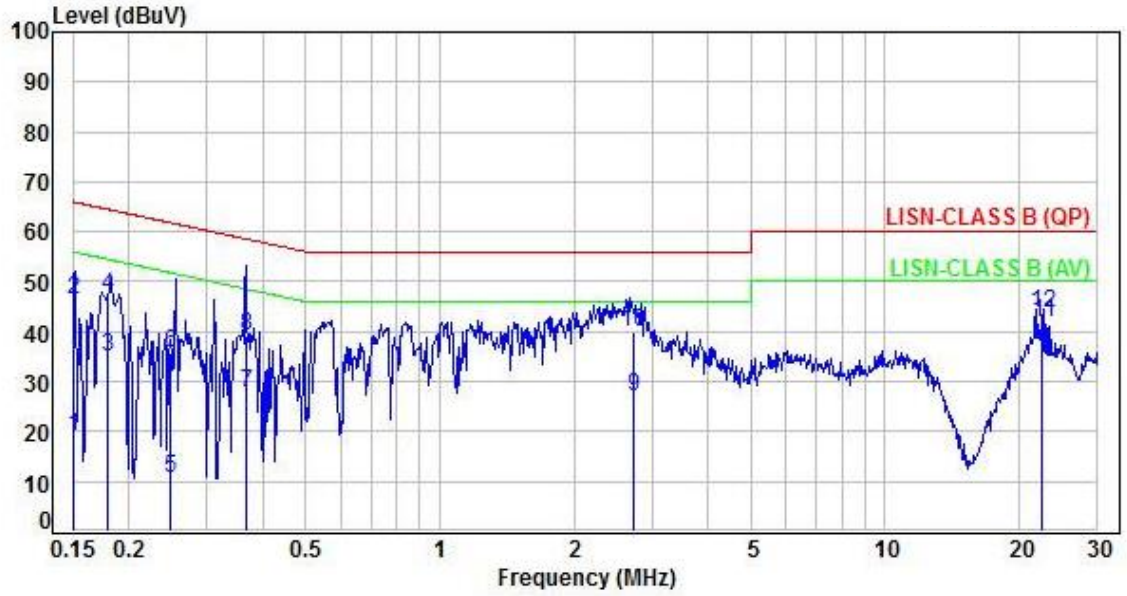
a. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
b. Connect EUT to the power mains through a line impedance stabilization network (LISN).
c. All the support units are connecting to the other LISN.
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

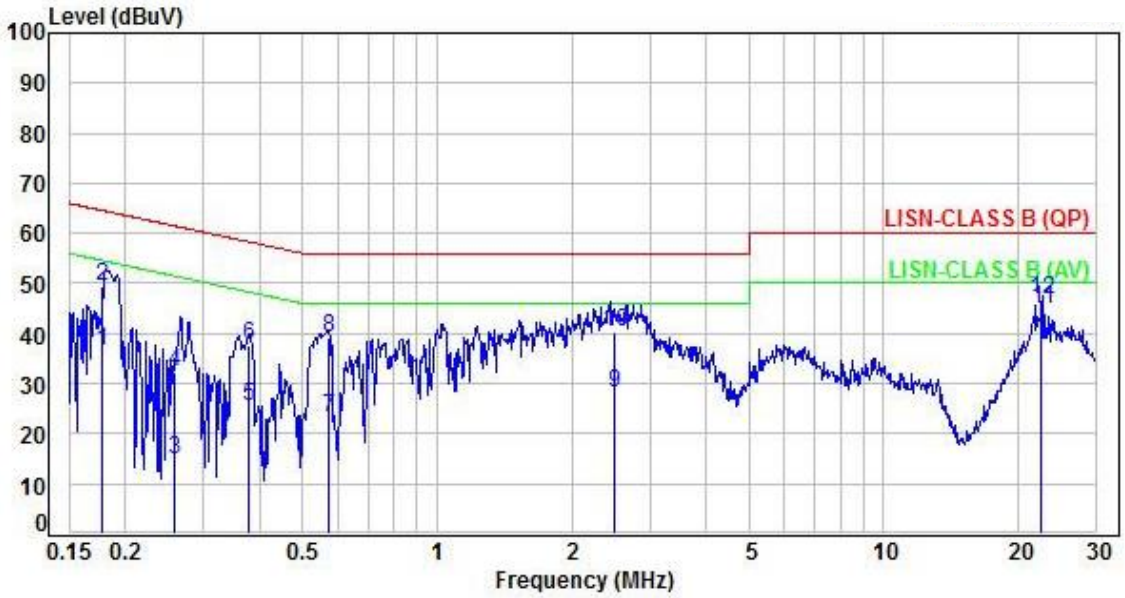
Power :	AC 120V / 60Hz	Pol/Phase :	LINE
Test Mode :	Mode 19	:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.15	10.05	8.89	18.94	55.96	-37.02	Average	P
2	0.15	10.05	36.36	46.41	65.96	-19.55	QP	P
3	0.18	10.05	24.86	34.91	54.52	-19.61	Average	P
4	0.18	10.05	36.93	46.98	64.52	-17.54	QP	P
5	0.25	10.05	0.57	10.62	51.79	-41.17	Average	P
6	0.25	10.05	25.51	35.56	61.79	-26.23	QP	P
7	0.37	10.05	17.68	27.73	48.59	-20.86	Average	P
8	0.37	10.05	29.05	39.10	58.59	-19.49	QP	P
9	2.71	10.18	16.95	27.13	46.00	-18.87	Average	P
10	2.71	10.18	29.58	39.76	56.00	-16.24	QP	P
11	22.62	11.16	30.82	41.98	50.00	-8.02	Average	P
12	22.62	11.16	32.71	43.87	60.00	-16.13	QP	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=(LISN or ISN or Current Probe)Factor + Cable Loss

Power	:	AC 120V / 60Hz	Pol/Phase	:	NEUTRAL
Test Mode	:	Mode 19		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.18	10.02	26.49	36.51	54.58	-18.07	Average	P
2	0.18	10.02	39.46	49.48	64.58	-15.10	QP	P
3	0.26	10.02	4.91	14.93	51.49	-36.56	Average	P
4	0.26	10.02	22.12	32.14	61.49	-29.35	QP	P
5	0.38	10.02	15.35	25.37	48.34	-22.97	Average	P
6	0.38	10.02	27.49	37.51	58.34	-20.83	QP	P
7	0.57	10.03	13.35	23.38	46.00	-22.62	Average	P
8	0.57	10.03	29.08	39.11	56.00	-16.89	QP	P
9	2.50	10.10	17.92	28.02	46.00	-17.98	Average	P
10	2.50	10.10	30.04	40.14	56.00	-15.86	QP	P
11	22.62	11.16	33.87	45.03	50.00	-4.97	Average	P
12	22.62	11.16	35.67	46.83	60.00	-13.17	QP	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=(LISN or ISN or Current Probe)Factor + Cable Loss

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.

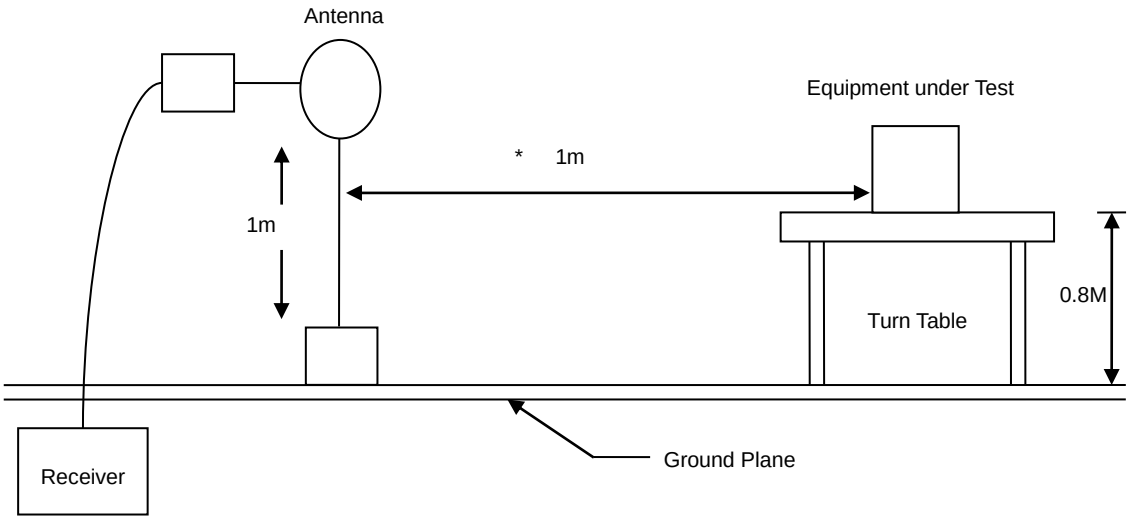
6.2. Test Procedures

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.

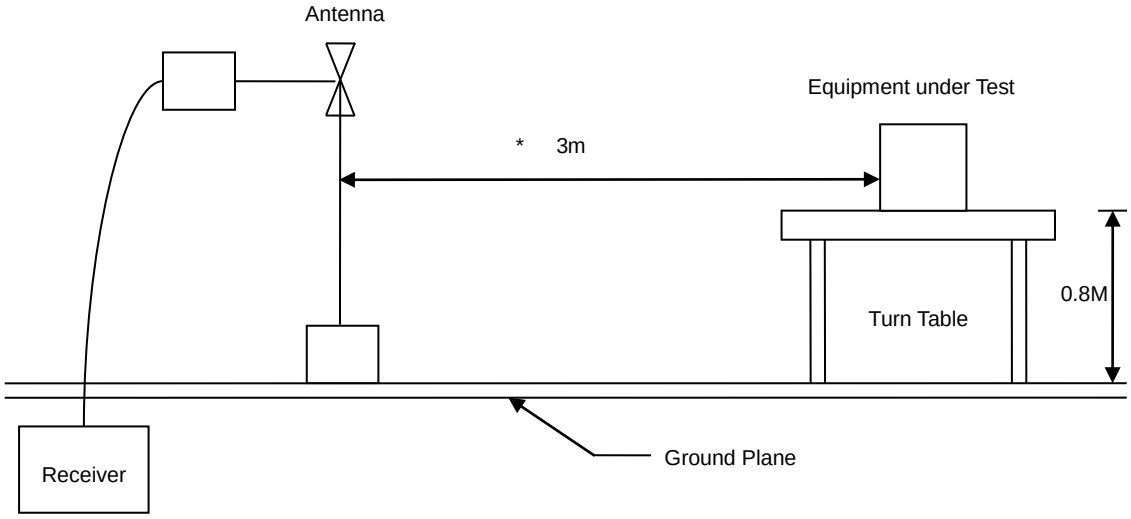
Note: The supporting fixture shall permit orientation of the EUT in each of three orthogonal axis positions such that emissions from the EUT are maximized.
(Z-AXIS is the worst.)

6.3. Typical Test Setup

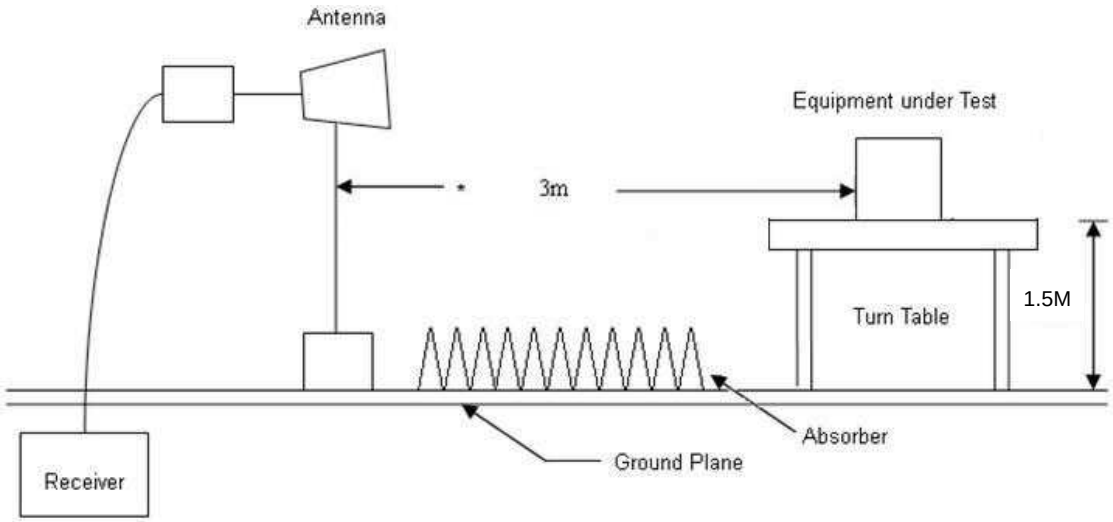
Below 30MHz test setup



30MHz- 1GHz Test Setup



Above 1GHz Test Setup

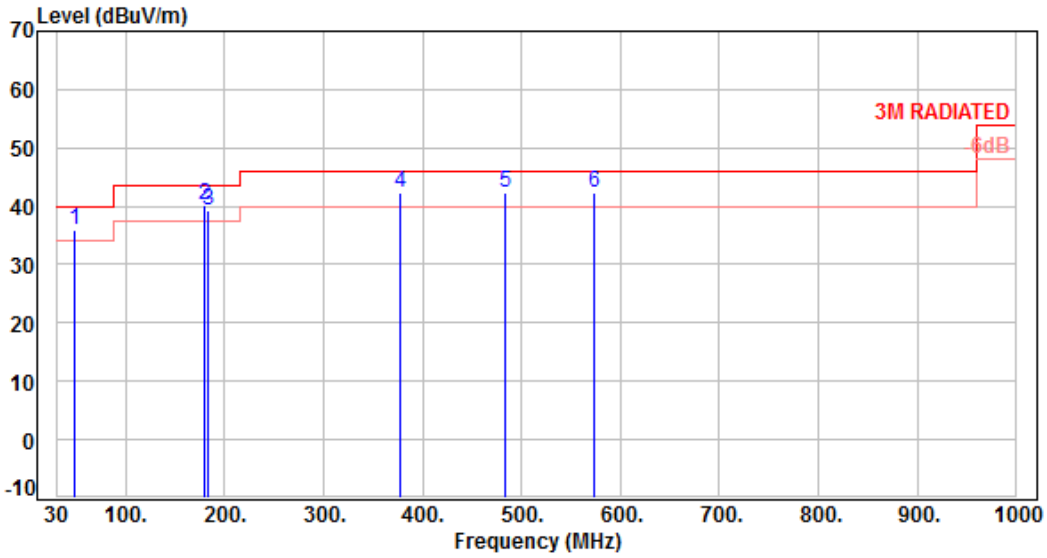


6.4. Test Result and Data (9kHz ~ 30MHz)

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

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

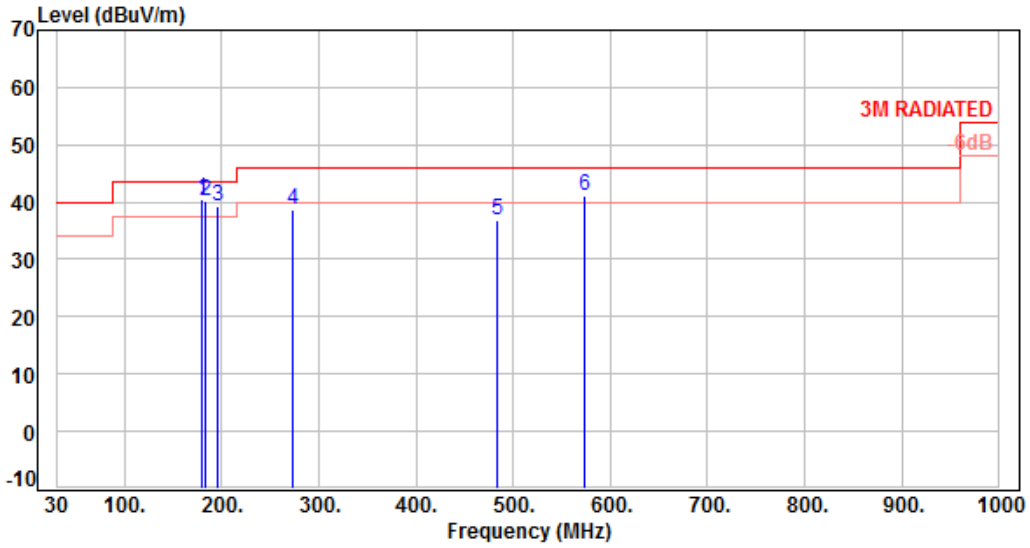
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 8		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	48.43	-9.35	45.36	36.01	40.00	-3.99	Peak	100	0	P
2	180.35	-10.80	50.89	40.09	43.50	-3.41	Peak	100	0	P
3	183.26	-11.09	50.50	39.41	43.50	-4.09	QP	100	360	P
4	377.26	-6.37	48.57	42.20	46.00	-3.80	Peak	100	0	P
5	483.96	-4.08	46.26	42.18	46.00	-3.82	Peak	100	0	P
6	574.17	-1.96	44.40	42.44	46.00	-3.56	Peak	100	0	P

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

Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 8		:	

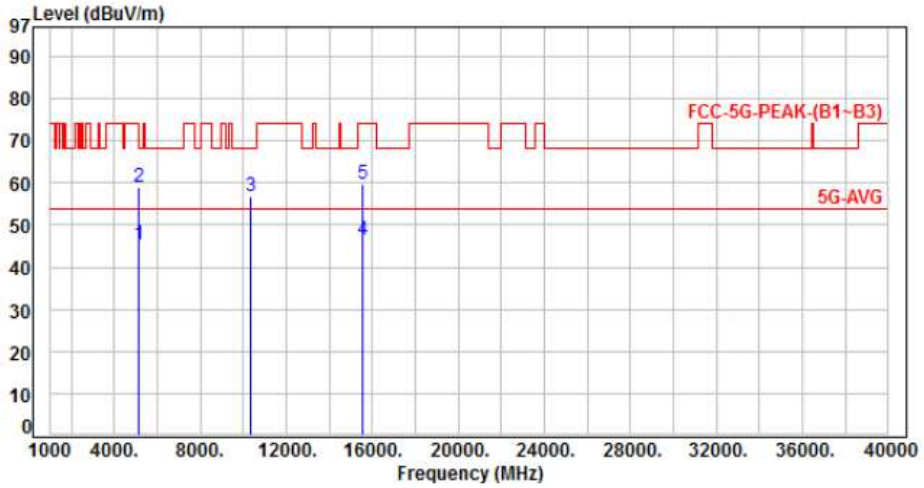


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	180.35	-10.80	51.20	40.40	43.50	-3.10	QP	150	32	P
2	183.26	-11.09	51.30	40.21	43.50	-3.29	QP	150	32	P
3	195.87	-12.02	51.41	39.39	43.50	-4.11	QP	110	45	P
4	273.47	-9.36	47.97	38.61	46.00	-7.39	Peak	400	0	P
5	483.96	-4.08	41.00	36.92	46.00	-9.08	QP	210	267	P
6	574.17	-1.96	43.00	41.04	46.00	-4.96	QP	130	110	P

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

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

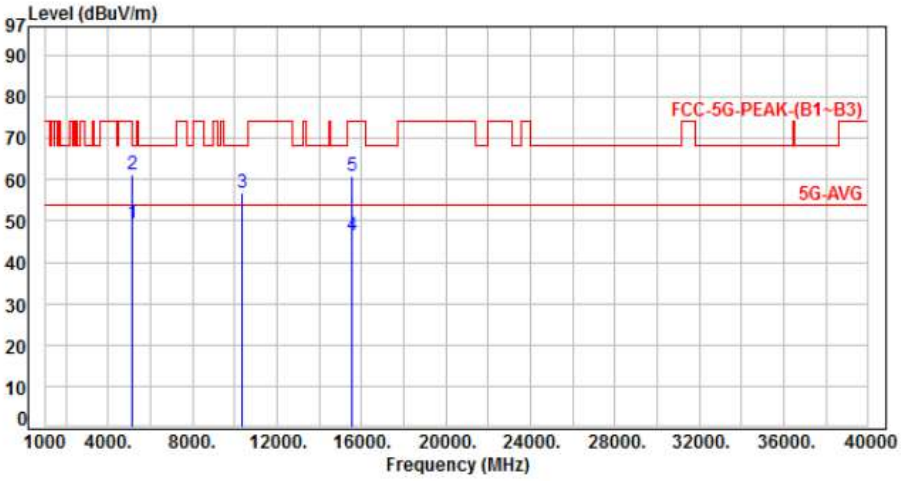
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 1, Band 1, CH36		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.72	39.59	45.31	54.00	-8.69	Average	229	320	P
2	5150.00	5.72	53.22	58.94	74.00	-15.06	Peak	229	320	P
3	10360.00	12.85	44.00	56.85	68.20	-11.35	Peak	113	319	P
4	15540.00	15.25	31.21	46.46	54.00	-7.54	Average	105	343	P
5	15540.00	15.25	44.46	59.71	74.00	-14.29	Peak	105	343	P

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

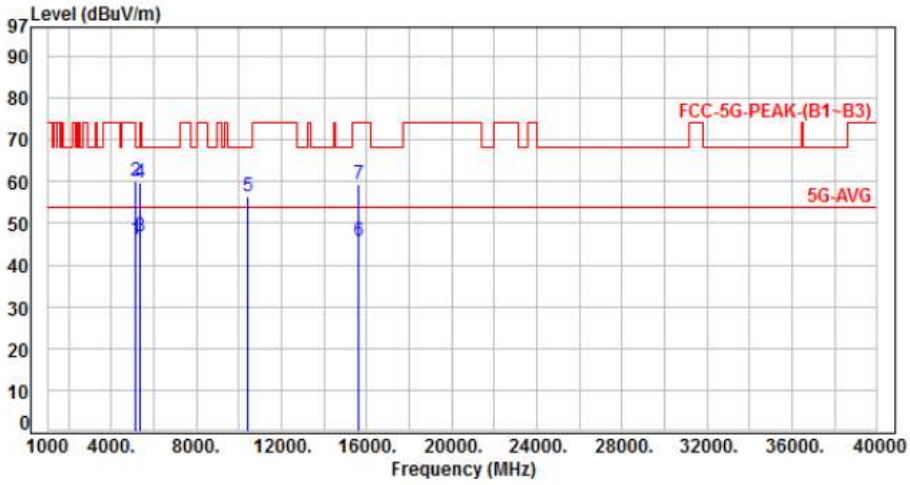
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 1, Band 1, CH36		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.72	43.52	49.24	54.00	-4.76	Average	196	63	P
2	5150.00	5.72	55.66	61.38	74.00	-12.62	Peak	196	63	P
3	10360.00	12.85	43.96	56.81	68.20	-11.39	Peak	278	32	P
4	15540.00	15.25	31.33	46.58	54.00	-7.42	Average	229	46	P
5	15540.00	15.25	45.63	60.88	74.00	-13.12	Peak	229	46	P

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

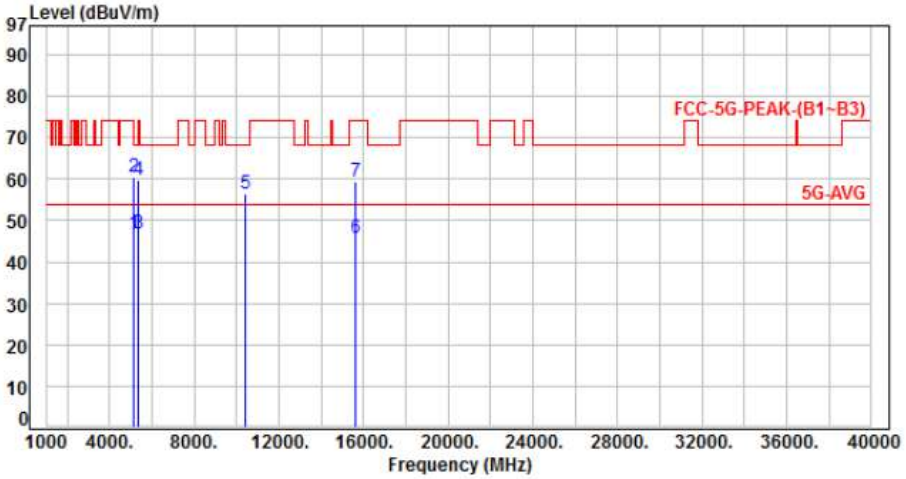
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 1, Band 1, CH40		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.72	40.44	46.16	54.00	-7.84	Average	218	302	P
2	5150.00	5.72	54.53	60.25	74.00	-13.75	Peak	218	302	P
3	5350.00	6.12	40.59	46.71	54.00	-7.29	Average	218	302	P
4	5350.00	6.12	53.47	59.59	74.00	-14.41	Peak	218	302	P
5	10400.00	12.90	43.54	56.44	68.20	-11.76	Peak	115	316	P
6	15600.00	14.85	30.88	45.73	54.00	-8.27	Average	106	348	P
7	15600.00	14.85	44.42	59.27	74.00	-14.73	Peak	106	348	P

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

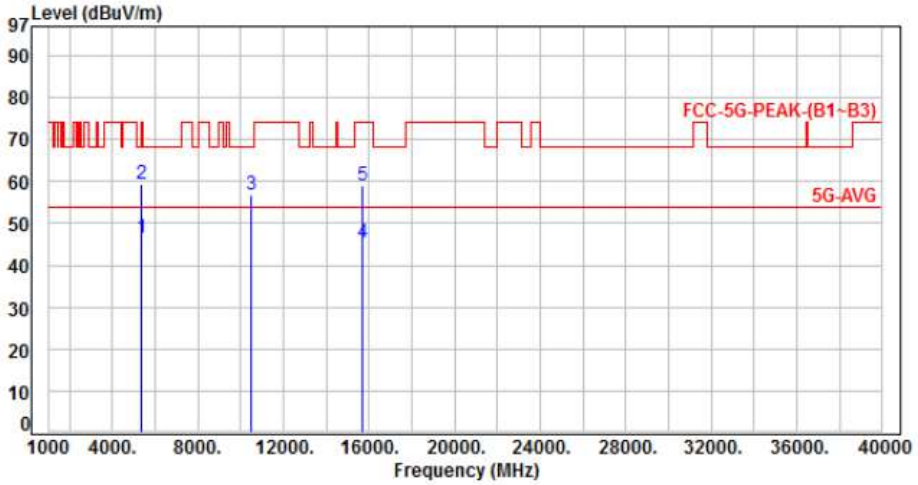
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 1, Band 1, CH40		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.72	41.20	46.92	54.00	-7.08	Average	174	288	P
2	5150.00	5.72	54.69	60.41	74.00	-13.59	Peak	174	288	P
3	5350.00	6.12	40.66	46.78	54.00	-7.22	Average	174	288	P
4	5350.00	6.12	53.58	59.70	74.00	-14.30	Peak	174	288	P
5	10400.00	12.90	43.35	56.25	68.20	-11.95	Peak	269	37	P
6	15600.00	14.85	30.96	45.81	54.00	-8.19	Average	224	43	P
7	15600.00	14.85	44.64	59.49	74.00	-14.51	Peak	224	43	P

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

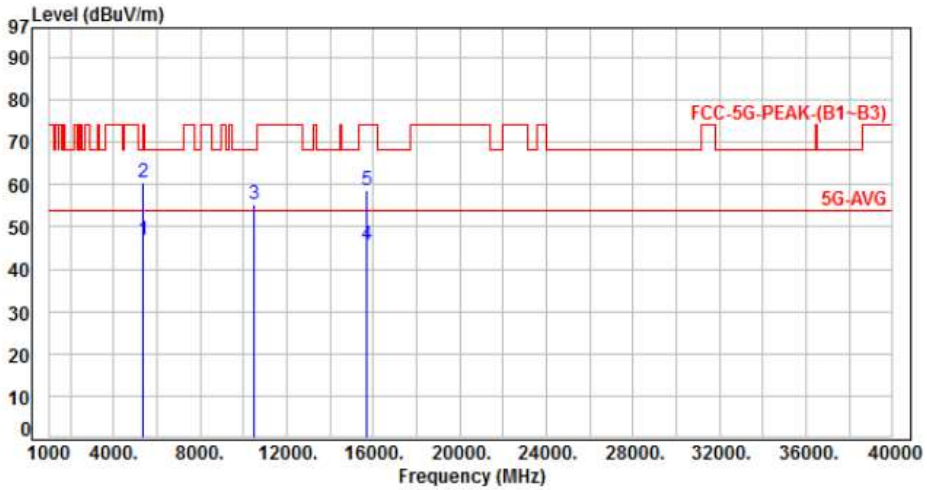
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 1, Band 1, CH48		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	6.12	40.44	46.56	54.00	-7.44	Average	386	30	P
2	5350.00	6.12	53.42	59.54	74.00	-14.46	Peak	386	30	P
3	10480.00	13.03	43.71	56.74	68.20	-11.46	Peak	121	324	P
4	15720.00	14.51	30.96	45.47	54.00	-8.53	Average	112	351	P
5	15720.00	14.51	44.44	58.95	74.00	-15.05	Peak	112	351	P

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

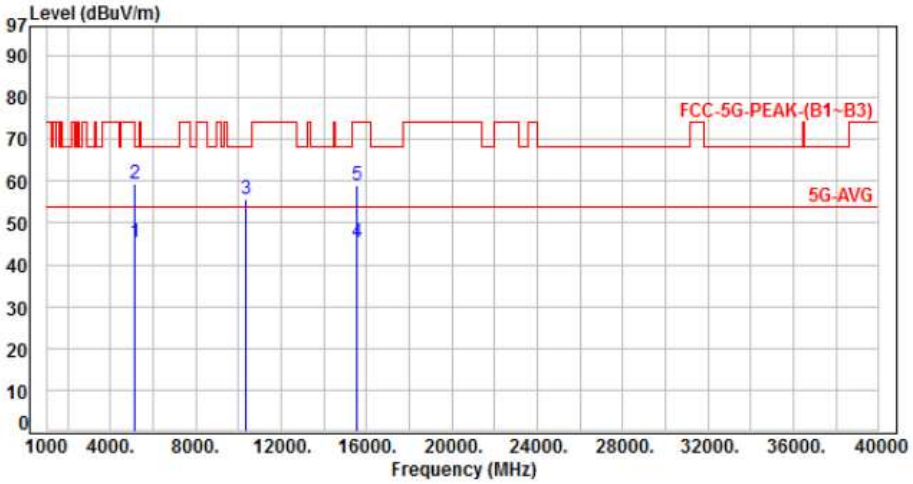
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 1, Band 1, CH48		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	6.12	40.89	47.01	54.00	-6.99	Average	100	297	P
2	5350.00	6.12	54.27	60.39	74.00	-13.61	Peak	100	297	P
3	10480.00	13.03	42.21	55.24	68.20	-12.96	Peak	261	52	P
4	15720.00	14.51	31.13	45.64	54.00	-8.36	Average	221	48	P
5	15720.00	14.51	44.29	58.80	74.00	-15.20	Peak	221	48	P

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

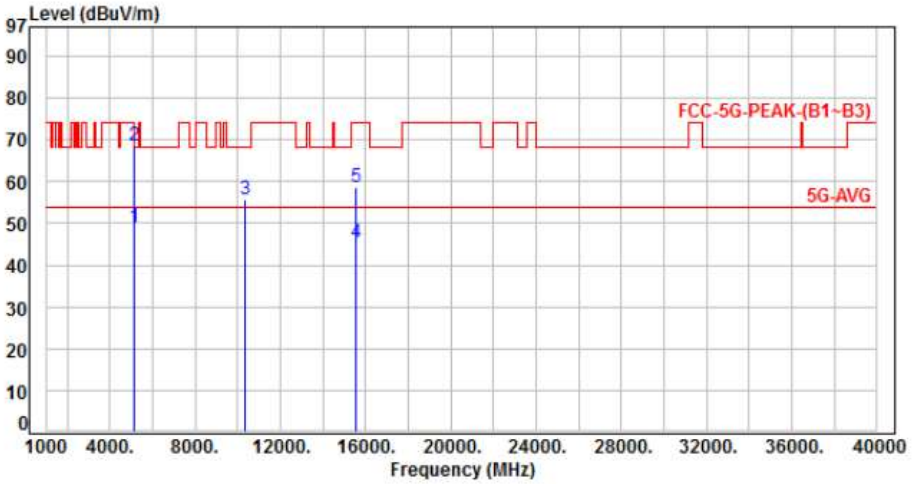
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 4, Band 1, CH36		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.72	39.73	45.45	54.00	-8.55	Average	388	360	P
2	5150.00	5.72	53.66	59.38	74.00	-14.62	Peak	388	360	P
3	10360.00	12.85	42.95	55.80	68.20	-12.40	Peak	113	319	P
4	15540.00	15.25	30.08	45.33	54.00	-8.67	Average	200	344	P
5	15540.00	15.25	43.85	59.10	74.00	-14.90	Peak	200	344	P

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

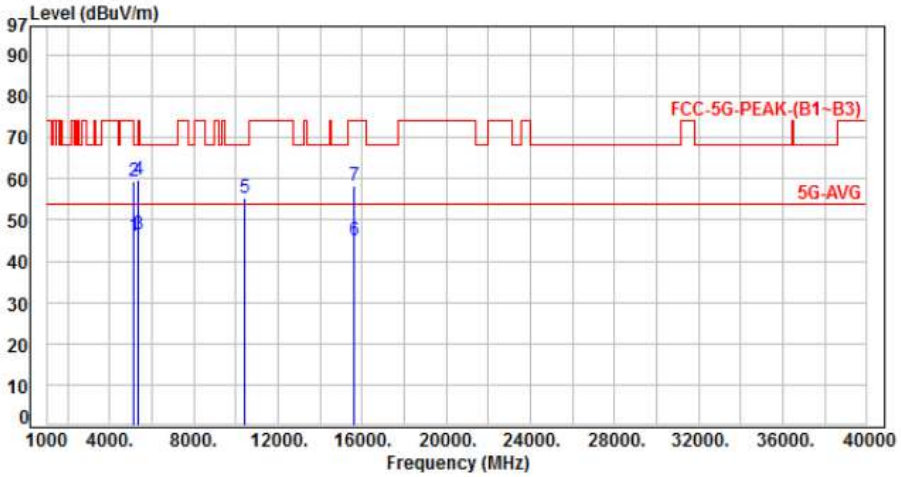
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 4, Band 1, CH36		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.72	43.46	49.18	54.00	-4.82	Average	100	309	P
2	5150.00	5.72	62.86	68.58	74.00	-5.42	Peak	100	309	P
3	10360.00	12.85	42.79	55.64	68.20	-12.56	Peak	284	45	P
4	15540.00	15.25	30.14	45.39	54.00	-8.61	Average	221	52	P
5	15540.00	15.25	43.21	58.46	74.00	-15.54	Peak	221	52	P

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

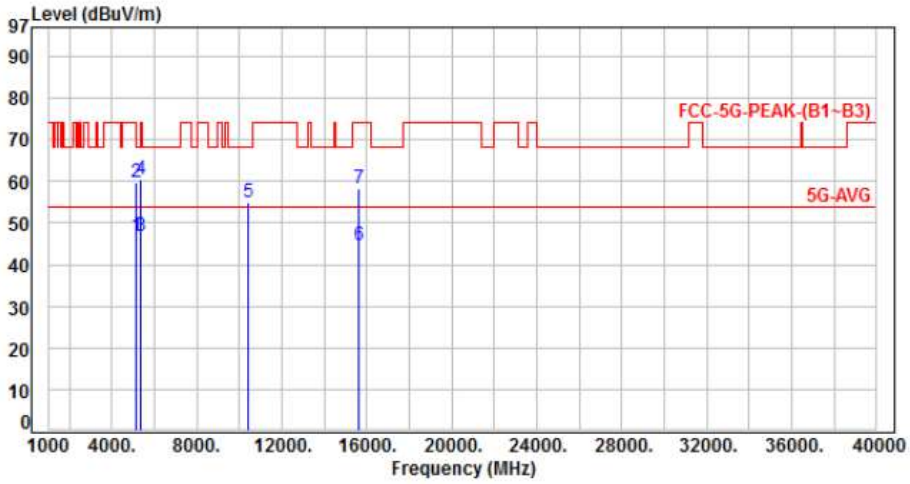
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 4, Band 1, CH40		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.72	40.32	46.04	54.00	-7.96	Average	374	358	P
2	5150.00	5.72	53.78	59.50	74.00	-14.50	Peak	374	358	P
3	5350.00	6.12	40.24	46.36	54.00	-7.64	Average	374	358	P
4	5350.00	6.12	53.59	59.71	74.00	-14.29	Peak	374	358	P
5	10400.00	12.90	42.28	55.18	68.20	-13.02	Peak	112	308	P
6	15600.00	14.85	30.05	44.90	54.00	-9.10	Average	108	342	P
7	15600.00	14.85	43.27	58.12	74.00	-15.88	Peak	108	342	P

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

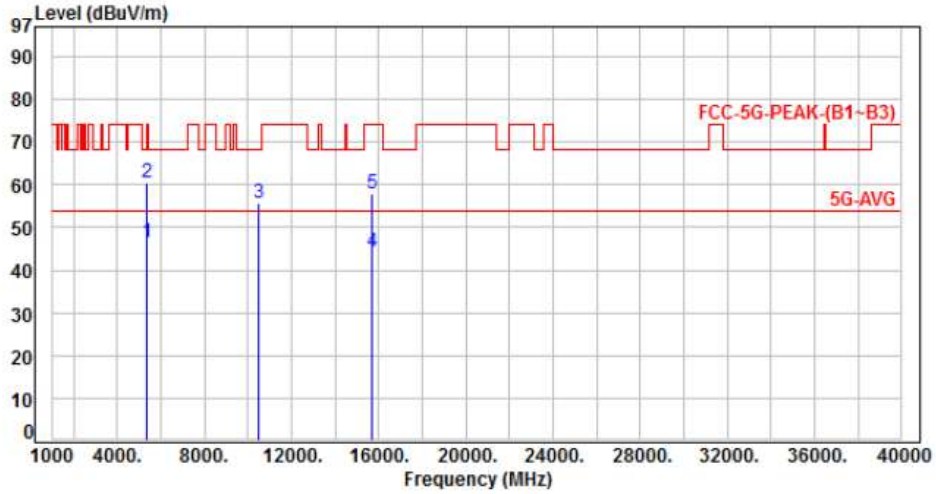
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 4, Band 1, CH40		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.72	40.94	46.66	54.00	-7.34	Average	205	291	P
2	5150.00	5.72	54.14	59.86	74.00	-14.14	Peak	205	291	P
3	5350.00	6.12	40.61	46.73	54.00	-7.27	Average	205	291	P
4	5350.00	6.12	54.31	60.43	74.00	-13.57	Peak	205	291	P
5	10400.00	12.90	42.19	55.09	68.20	-13.11	Peak	258	29	P
6	15600.00	14.85	29.94	44.79	54.00	-9.21	Average	212	57	P
7	15600.00	14.85	43.48	58.33	74.00	-15.67	Peak	212	57	P

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

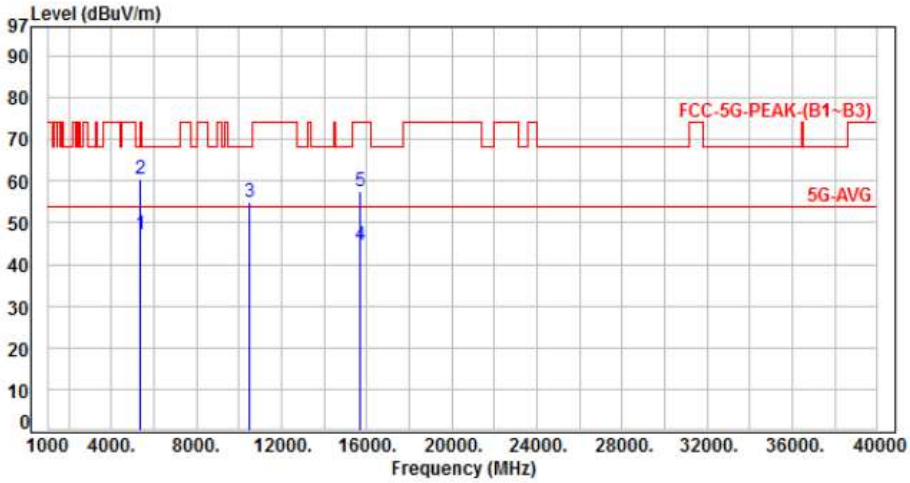
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 4, Band 1, CH48		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	6.12	40.42	46.54	54.00	-7.46	Average	333	360	P
2	5350.00	6.12	54.40	60.52	74.00	-13.48	Peak	333	360	P
3	10480.00	13.03	42.56	55.59	68.20	-12.61	Peak	118	316	P
4	15720.00	14.51	29.89	44.40	54.00	-9.60	Average	106	343	P
5	15720.00	14.51	43.27	57.78	74.00	-16.22	Peak	106	343	P

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

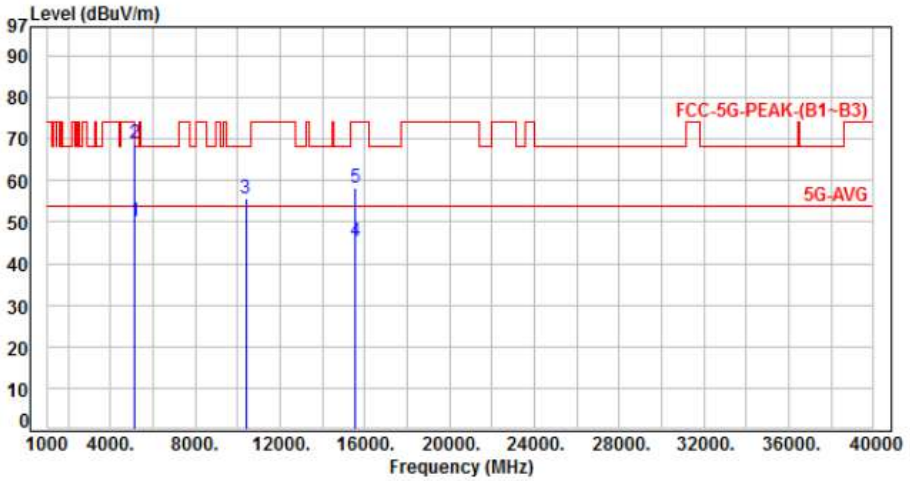
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 4, Band 1, CH48		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	6.12	40.98	47.10	54.00	-6.90	Average	100	294	P
2	5350.00	6.12	54.48	60.60	74.00	-13.40	Peak	100	294	P
3	10480.00	13.03	42.03	55.06	68.20	-13.14	Peak	257	44	P
4	15720.00	14.51	29.97	44.48	54.00	-9.52	Average	212	49	P
5	15720.00	14.51	43.11	57.62	74.00	-16.38	Peak	212	49	P

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

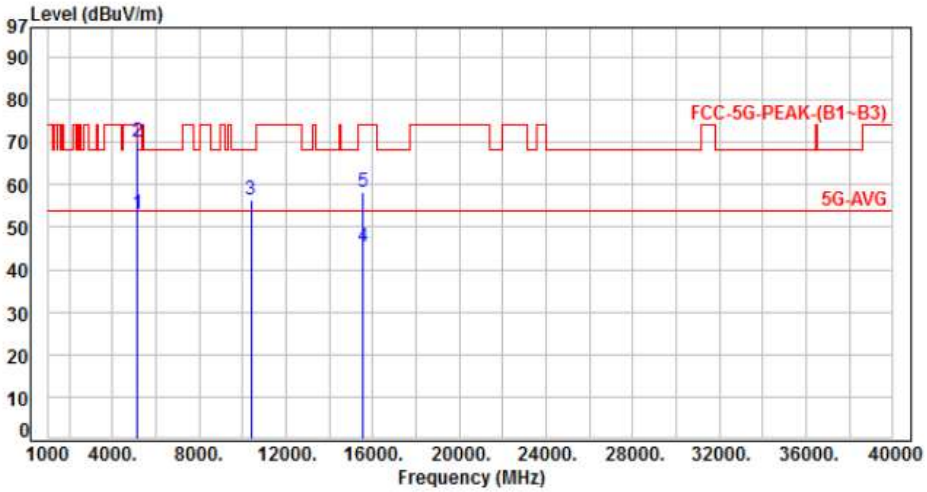
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 5, Band 1, CH38		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.72	44.57	50.29	54.00	-3.71	Average	390	346	P
2	5150.00	5.72	63.32	69.04	74.00	-4.96	Peak	390	346	P
3	10380.00	12.87	42.82	55.69	68.20	-12.51	Peak	127	328	P
4	15570.00	15.05	30.20	45.25	54.00	-8.75	Average	114	356	P
5	15570.00	15.05	43.17	58.22	74.00	-15.78	Peak	114	356	P

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

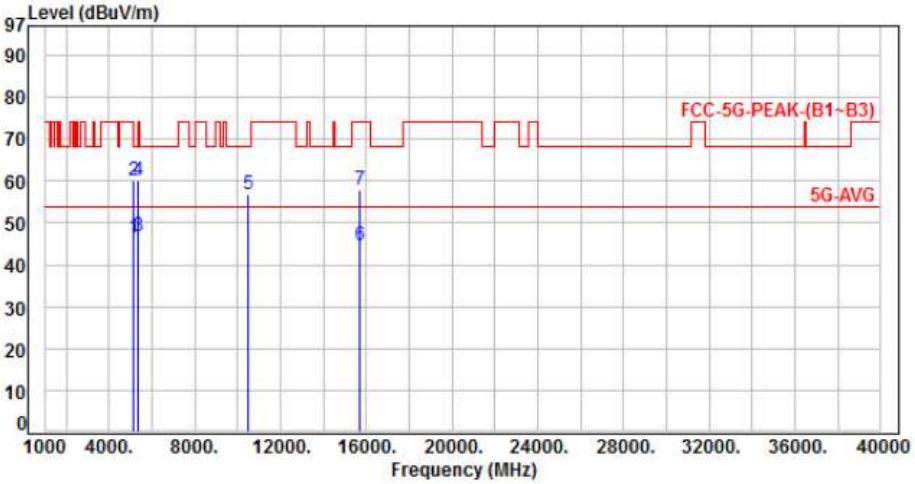
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 5, Band 1, CH38		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.72	47.22	52.94	54.00	-1.06	Average	100	295	P
2	5150.00	5.72	64.30	70.02	74.00	-3.98	Peak	100	295	P
3	10380.00	12.87	43.39	56.26	68.20	-11.94	Peak	264	61	P
4	15570.00	15.05	30.28	45.33	54.00	-8.67	Average	224	42	P
5	15570.00	15.05	43.24	58.29	74.00	-15.71	Peak	224	42	P

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

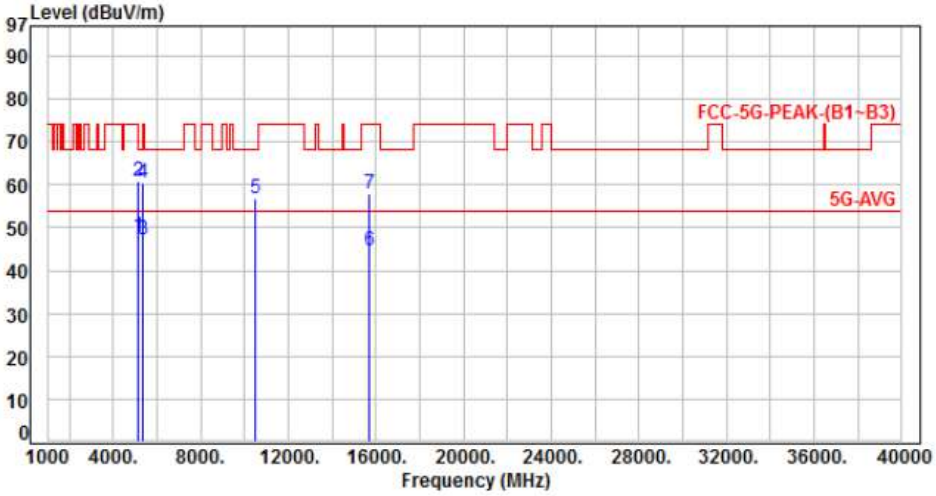
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 5, Band 1, CH46		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.72	40.73	46.45	54.00	-7.55	Average	385	342	P
2	5150.00	5.72	54.53	60.25	74.00	-13.75	Peak	385	342	P
3	5350.00	6.12	40.54	46.66	54.00	-7.34	Average	385	342	P
4	5350.00	6.12	54.18	60.30	74.00	-13.70	Peak	385	342	P
5	10460.00	13.00	43.96	56.96	68.20	-11.24	Peak	124	329	P
6	15690.00	14.52	29.97	44.49	54.00	-9.51	Average	116	357	P
7	15690.00	14.52	43.46	57.98	74.00	-16.02	Peak	116	357	P

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

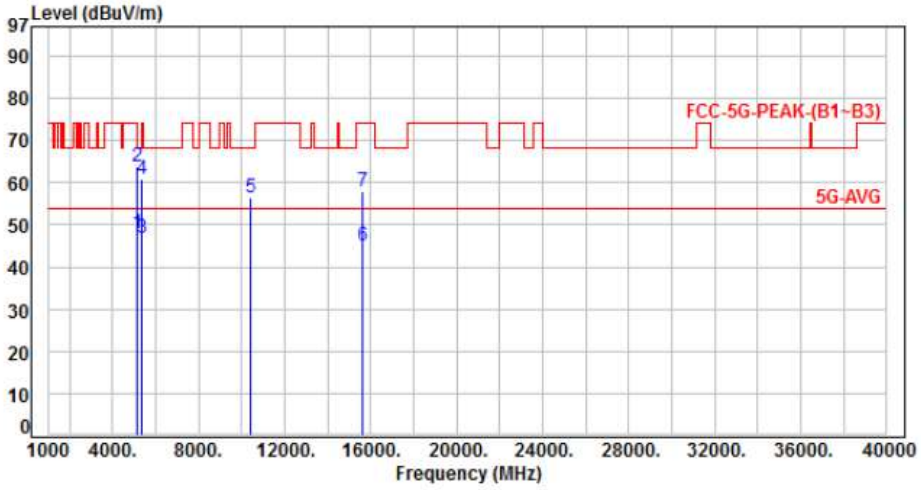
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 5, Band 1, CH46		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.72	42.04	47.76	54.00	-6.24	Average	155	289	P
2	5150.00	5.72	55.13	60.85	74.00	-13.15	Peak	155	289	P
3	5350.00	6.12	41.14	47.26	54.00	-6.74	Average	155	289	P
4	5350.00	6.12	54.51	60.63	74.00	-13.37	Peak	155	289	P
5	10460.00	13.00	43.78	56.78	68.20	-11.42	Peak	258	57	P
6	15690.00	14.52	30.12	44.64	54.00	-9.36	Average	224	43	P
7	15690.00	14.52	43.35	57.87	74.00	-16.13	Peak	224	43	P

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

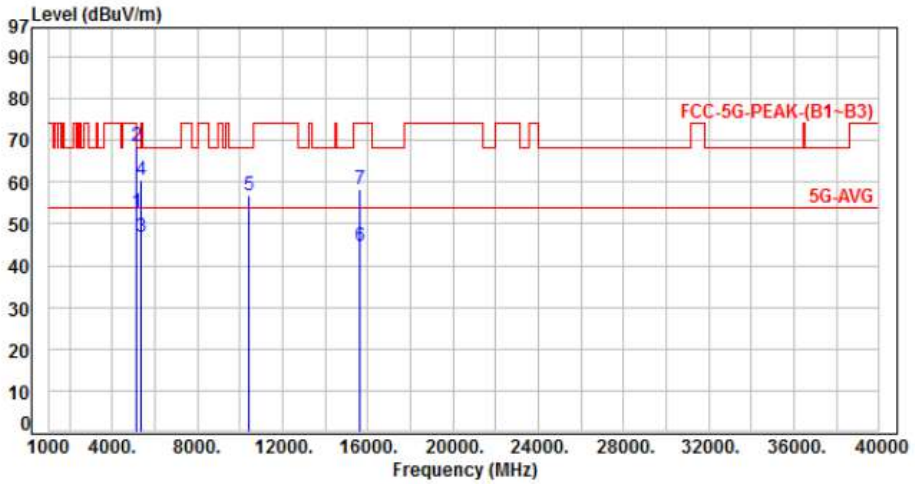
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 6, Band 1, CH42		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.72	42.39	48.11	54.00	-5.89	Average	400	24	P
2	5150.00	5.72	58.03	63.75	74.00	-10.25	Peak	400	24	P
3	5350.00	6.12	40.73	46.85	54.00	-7.15	Average	400	24	P
4	5350.00	6.12	54.67	60.79	74.00	-13.21	Peak	400	24	P
5	10420.00	12.94	43.63	56.57	68.20	-11.63	Peak	134	333	P
6	15630.00	14.74	30.11	44.85	54.00	-9.15	Average	114	352	P
7	15630.00	14.74	43.15	57.89	74.00	-16.11	Peak	114	352	P

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

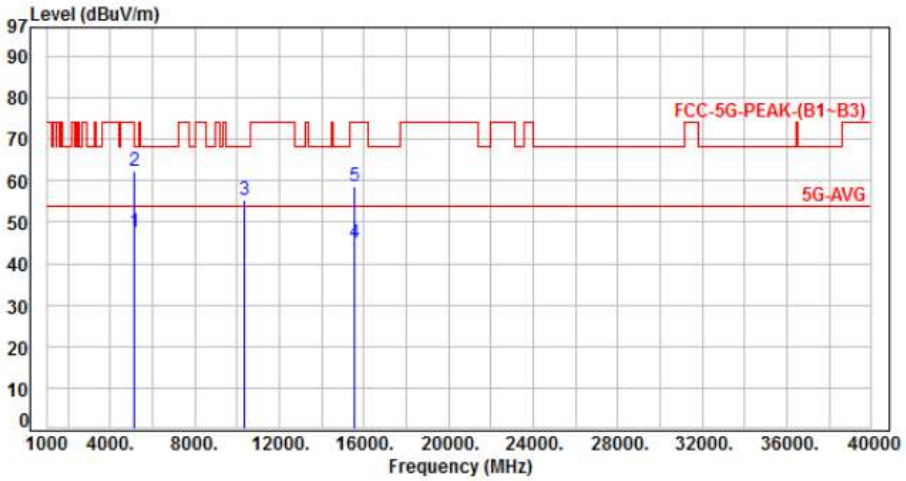
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 6, Band 1, CH42		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.72	46.98	52.70	54.00	-1.30	Average	188	290	P
2	5150.00	5.72	62.81	68.53	74.00	-5.47	Peak	188	290	P
3	5350.00	6.12	40.86	46.98	54.00	-7.02	Average	188	290	P
4	5350.00	6.12	54.38	60.50	74.00	-13.50	Peak	188	290	P
5	10420.00	12.94	43.90	56.84	68.20	-11.36	Peak	263	58	P
6	15630.00	14.74	30.02	44.76	54.00	-9.24	Average	225	49	P
7	15630.00	14.74	43.57	58.31	74.00	-15.69	Peak	225	49	P

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

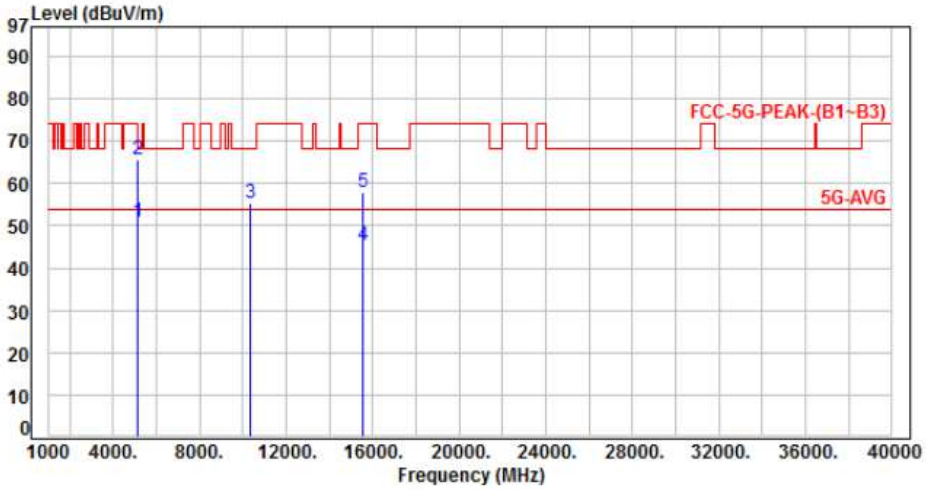
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 8, Band 1, CH36		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.72	41.76	47.48	54.00	-6.52	Average	388	349	P
2	5150.00	5.72	56.51	62.23	74.00	-11.77	Peak	388	349	P
3	10360.00	12.85	42.49	55.34	68.20	-12.86	Peak	128	331	P
4	15540.00	15.25	29.88	45.13	54.00	-8.87	Average	118	354	P
5	15540.00	15.25	43.49	58.74	74.00	-15.26	Peak	118	354	P

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

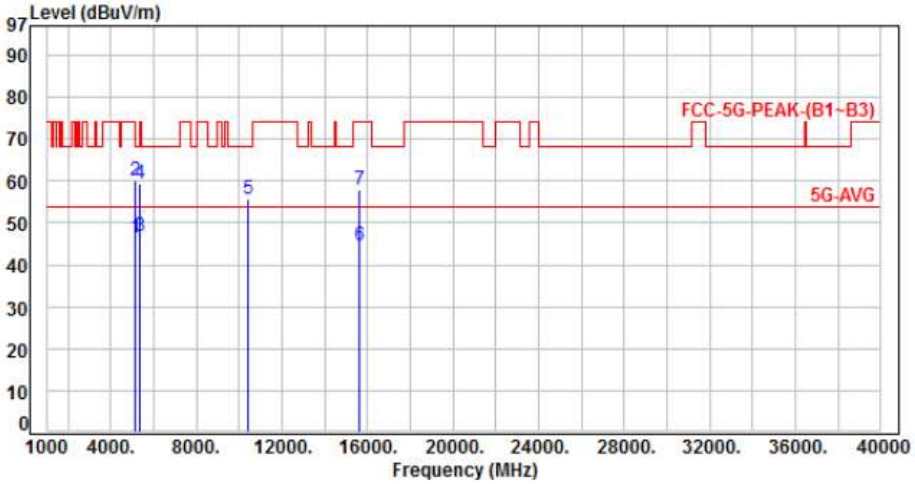
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 8, Band 1, CH36		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.72	45.24	50.96	54.00	-3.04	Average	162	310	P
2	5150.00	5.72	59.87	65.59	74.00	-8.41	Peak	162	310	P
3	10360.00	12.85	42.57	55.42	68.20	-12.78	Peak	252	57	P
4	15540.00	15.25	30.12	45.37	54.00	-8.63	Average	203	59	P
5	15540.00	15.25	42.66	57.91	74.00	-16.09	Peak	203	59	P

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

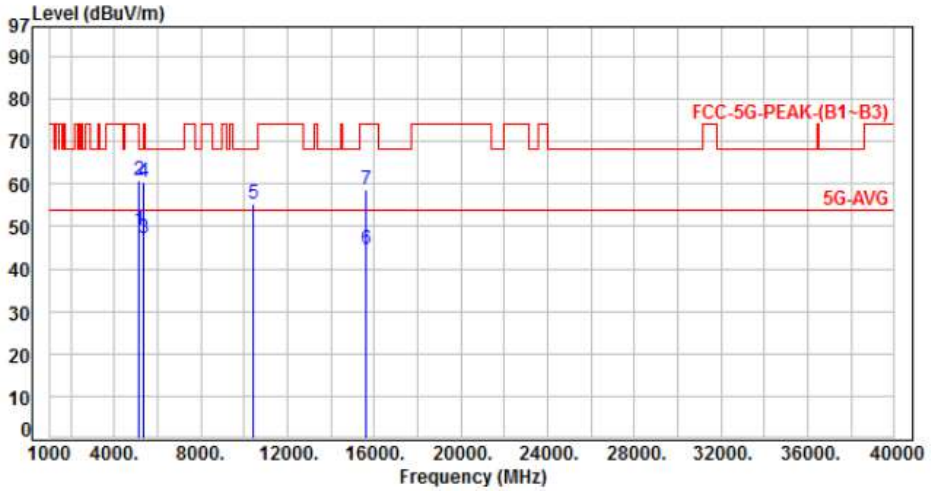
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 8, Band 1, CH40		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.72	40.69	46.41	54.00	-7.59	Average	375	351	P
2	5150.00	5.72	54.48	60.20	74.00	-13.80	Peak	375	351	P
3	5350.00	6.12	40.66	46.78	54.00	-7.22	Average	375	351	P
4	5350.00	6.12	53.40	59.52	74.00	-14.48	Peak	375	351	P
5	10400.00	12.90	42.97	55.87	68.20	-12.33	Peak	113	334	P
6	15600.00	14.85	29.83	44.68	54.00	-9.32	Average	104	345	P
7	15600.00	14.85	43.11	57.96	74.00	-16.04	Peak	104	345	P

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

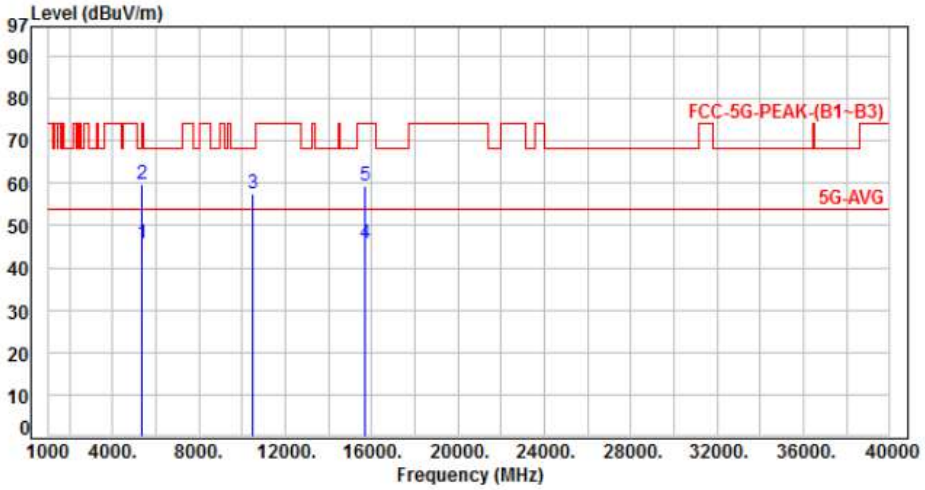
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 8, Band 1, CH40		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.72	43.51	49.23	54.00	-4.77	Average	141	301	P
2	5150.00	5.72	55.24	60.96	74.00	-13.04	Peak	141	301	P
3	5350.00	6.12	41.08	47.20	54.00	-6.80	Average	141	301	P
4	5350.00	6.12	54.21	60.33	74.00	-13.67	Peak	141	301	P
5	10400.00	12.90	42.57	55.47	68.20	-12.73	Peak	252	63	P
6	15600.00	14.85	29.78	44.63	54.00	-9.37	Average	213	42	P
7	15600.00	14.85	43.62	58.47	74.00	-15.53	Peak	213	42	P

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

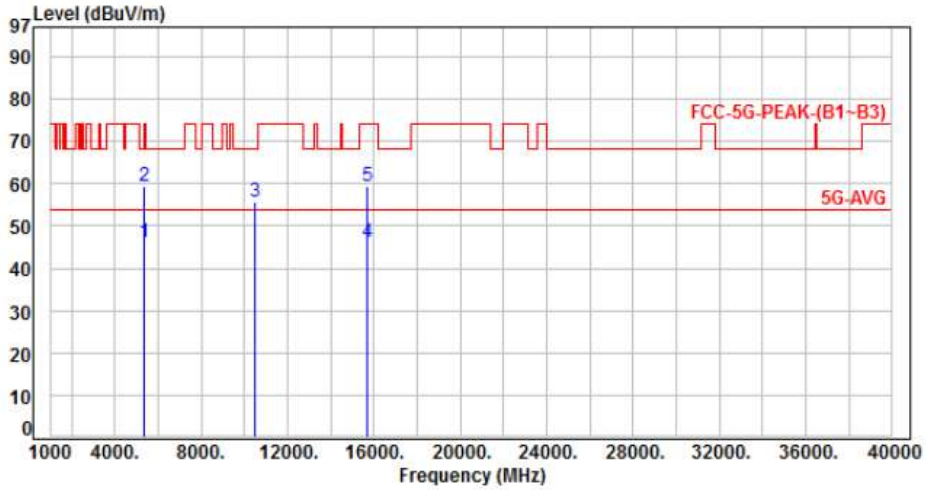
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 8, Band 1, CH48		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	6.12	39.59	45.71	54.00	-8.29	Average	100	10	P
2	5350.00	6.12	53.58	59.70	74.00	-14.30	Peak	100	10	P
3	10480.00	13.03	44.56	57.59	68.20	-10.61	Peak	100	190	P
4	15720.00	14.51	31.21	45.72	54.00	-8.28	Average	120	170	P
5	15720.00	14.51	44.83	59.34	74.00	-14.66	Peak	120	170	P

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

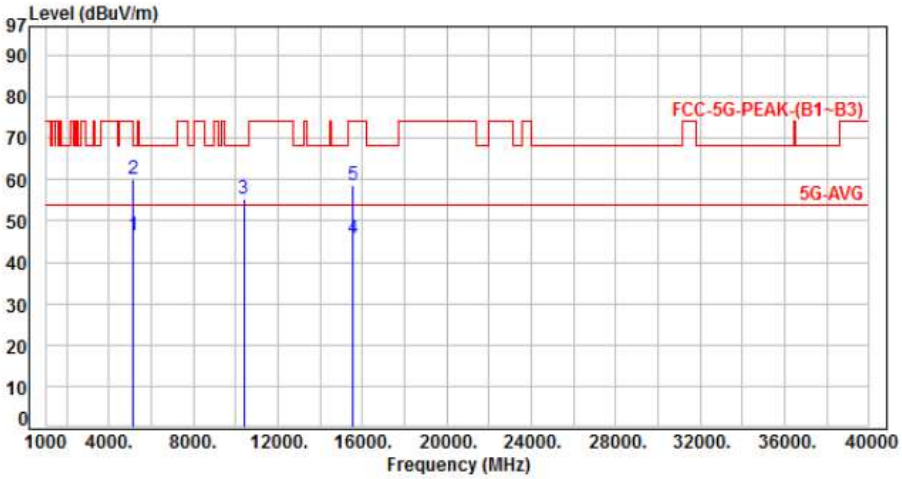
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 8, Band 1, CH48		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	6.12	39.88	46.00	54.00	-8.00	Average	100	50	P
2	5350.00	6.12	53.31	59.43	74.00	-14.57	Peak	100	50	P
3	10480.00	13.03	42.79	55.82	68.20	-12.38	Peak	100	323	P
4	15720.00	14.51	31.67	46.18	54.00	-7.82	Average	115	300	P
5	15720.00	14.51	44.98	59.49	74.00	-14.51	Peak	115	300	P

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

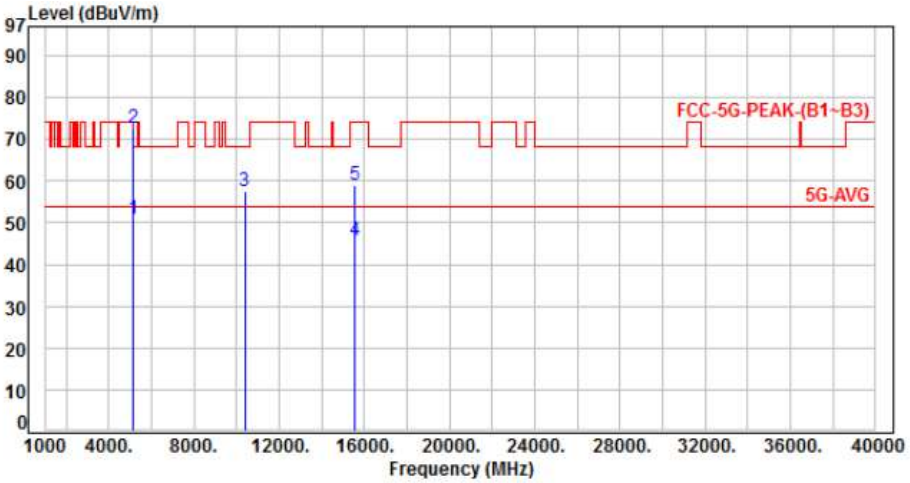
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 9, Band 1, CH38		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.72	40.58	46.30	54.00	-7.70	Average	100	20	P
2	5150.00	5.72	54.39	60.11	74.00	-13.89	Peak	100	20	P
3	10380.00	12.87	42.52	55.39	68.20	-12.81	Peak	110	100	P
4	15570.00	15.05	30.85	45.90	54.00	-8.10	Average	100	132	P
5	15570.00	15.05	43.59	58.64	74.00	-15.36	Peak	100	132	P

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

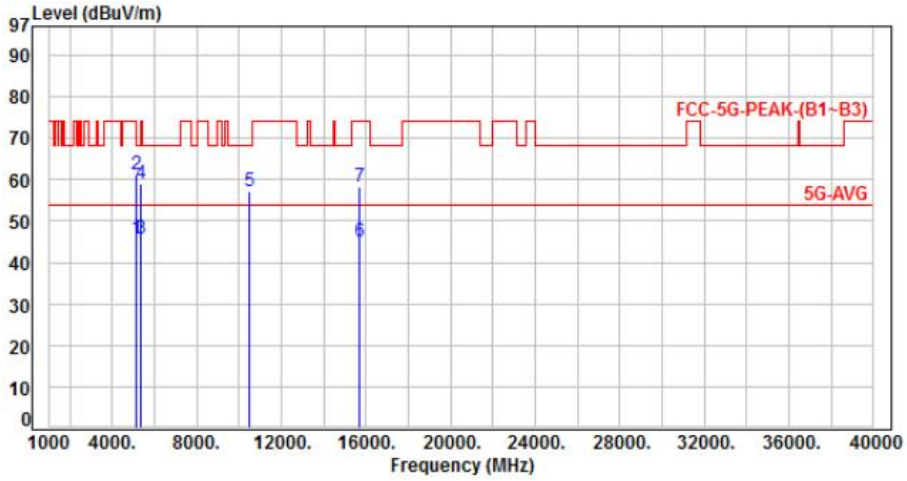
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 9, Band 1, CH38		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.72	45.17	50.89	54.00	-3.11	Average	100	290	P
2	5150.00	5.72	66.88	72.60	74.00	-1.40	Peak	100	290	P
3	10380.00	12.87	44.53	57.40	68.20	-10.80	Peak	100	254	P
4	15570.00	15.05	30.76	45.81	54.00	-8.19	Average	100	230	P
5	15570.00	15.05	43.83	58.88	74.00	-15.12	Peak	100	230	P

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

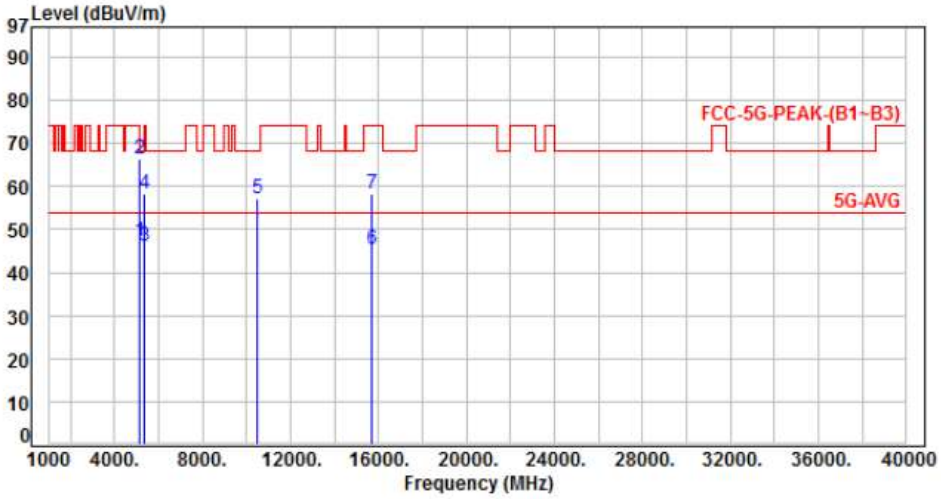
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 9, Band 1, CH46		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.72	39.90	45.62	54.00	-8.38	Average	100	15	P
2	5150.00	5.72	55.34	61.06	74.00	-12.94	Peak	100	15	P
3	5350.00	6.12	39.56	45.68	54.00	-8.32	Average	100	15	P
4	5350.00	6.12	52.91	59.03	74.00	-14.97	Peak	100	15	P
5	10460.00	13.00	44.25	57.25	68.20	-10.95	Peak	100	37	P
6	15690.00	14.52	30.51	45.03	54.00	-8.97	Average	100	93	P
7	15690.00	14.52	43.89	58.41	74.00	-15.59	Peak	100	93	P

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

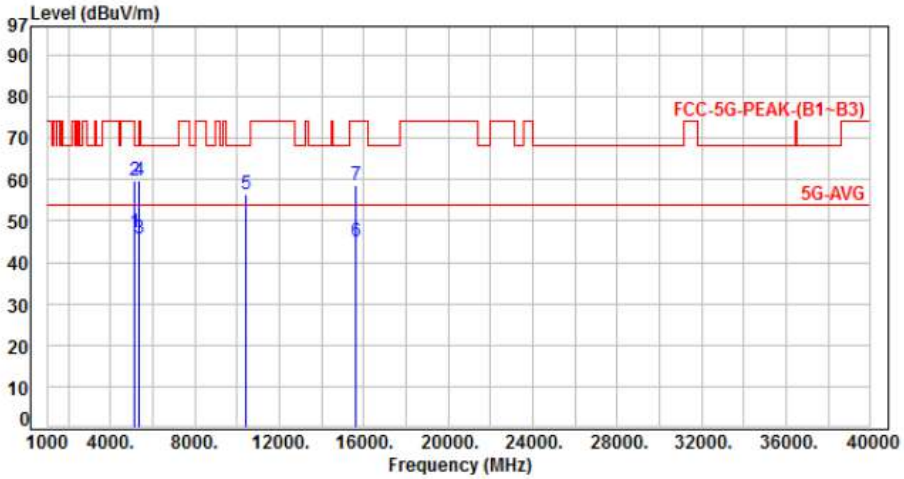
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 9, Band 1, CH46		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.72	41.55	47.27	54.00	-6.73	Average	145	300	P
2	5150.00	5.72	60.57	66.29	74.00	-7.71	Peak	145	300	P
3	5350.00	6.12	39.93	46.05	54.00	-7.95	Average	145	300	P
4	5350.00	6.12	52.21	58.33	74.00	-15.67	Peak	145	300	P
5	10460.00	13.00	44.12	57.12	68.20	-11.08	Peak	120	210	P
6	15690.00	14.52	30.88	45.40	54.00	-8.60	Average	100	195	P
7	15690.00	14.52	43.65	58.17	74.00	-15.83	Peak	100	195	P

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

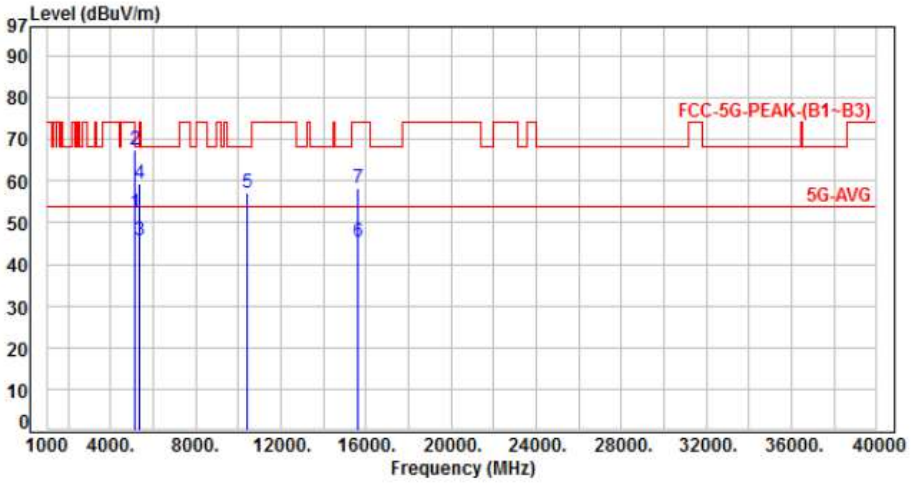
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 10, Band 1, CH42		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.72	41.44	47.16	54.00	-6.84	Average	100	330	P
2	5150.00	5.72	53.97	59.69	74.00	-14.31	Peak	100	330	P
3	5350.00	6.12	39.47	45.59	54.00	-8.41	Average	100	330	P
4	5350.00	6.12	53.55	59.67	74.00	-14.33	Peak	100	330	P
5	10420.00	12.94	43.55	56.49	68.20	-11.71	Peak	100	75	P
6	15630.00	14.74	30.38	45.12	54.00	-8.88	Average	110	135	P
7	15630.00	14.74	43.82	58.56	74.00	-15.44	Peak	110	135	P

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

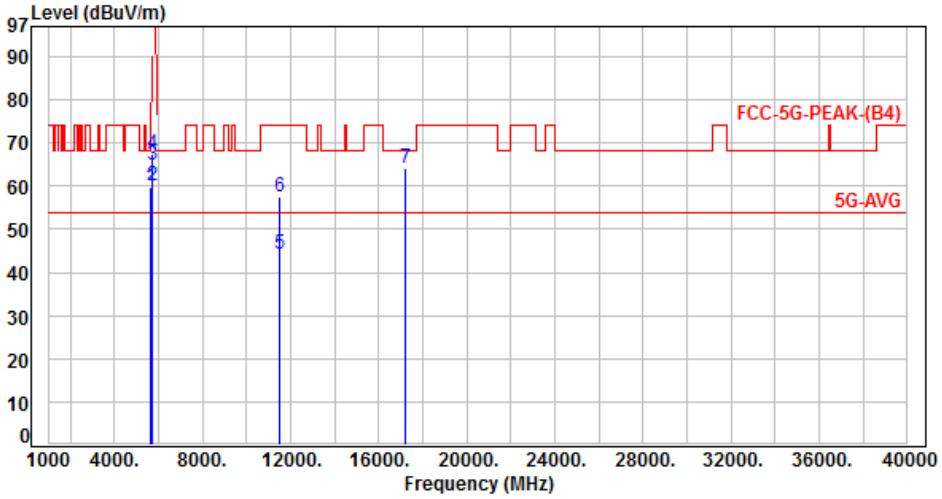
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 10, Band 1, CH42		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.72	46.82	52.54	54.00	-1.46	Average	160	285	P
2	5150.00	5.72	61.78	67.50	74.00	-6.50	Peak	160	285	P
3	5350.00	6.12	39.52	45.64	54.00	-8.36	Average	160	285	P
4	5350.00	6.12	53.38	59.50	74.00	-14.50	Peak	160	285	P
5	10420.00	12.94	44.10	57.04	68.20	-11.16	Peak	120	230	P
6	15630.00	14.74	30.56	45.30	54.00	-8.70	Average	100	193	P
7	15630.00	14.74	43.67	58.41	74.00	-15.59	Peak	100	193	P

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

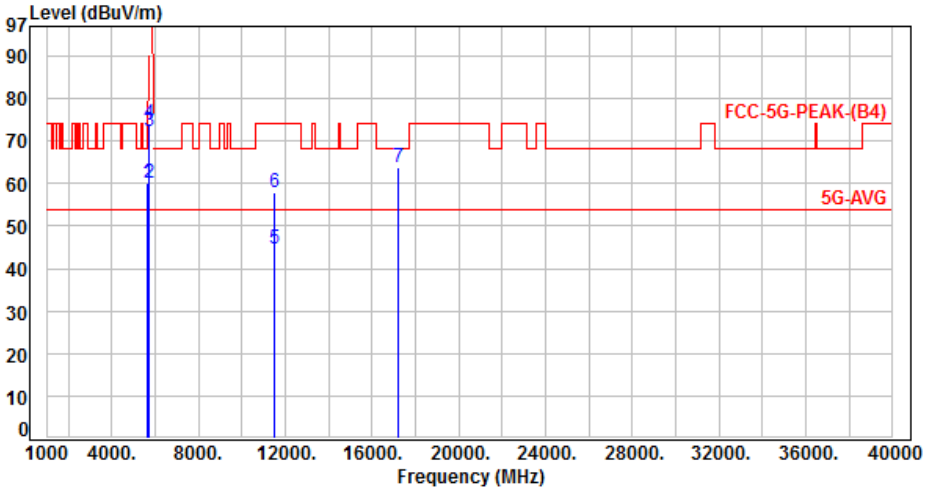
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 1, Band 4, CH149		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	6.26	53.64	59.90	68.20	-8.30	Peak	100	200	P
2	5700.00	6.30	53.81	60.11	105.20	-45.09	Peak	100	200	P
3	5720.00	6.31	58.42	64.73	110.80	-46.07	Peak	100	200	P
4	5725.00	6.32	61.09	67.41	122.20	-54.79	Peak	100	200	P
5	11490.00	14.60	29.73	44.33	54.00	-9.67	Average	120	80	P
6	11490.00	14.60	42.91	57.51	74.00	-16.49	Peak	120	80	P
7	17235.00	20.19	43.88	64.07	68.20	-4.13	Peak	100	245	P

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

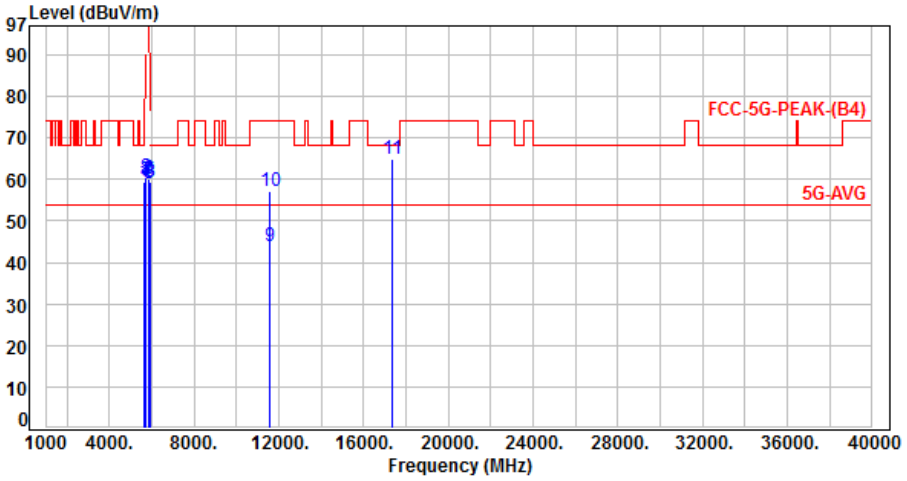
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 1, Band 4, CH149		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	6.26	53.77	60.03	68.20	-8.17	Peak	100	154	P
2	5700.00	6.30	53.89	60.19	105.20	-45.01	Peak	100	154	P
3	5720.00	6.31	65.81	72.12	110.80	-38.68	Peak	100	154	P
4	5725.00	6.32	67.76	74.08	122.20	-48.12	Peak	100	154	P
5	11490.00	14.60	30.05	44.65	54.00	-9.35	Average	100	180	P
6	11490.00	14.60	43.21	57.81	74.00	-16.19	Peak	100	180	P
7	17235.00	20.19	43.75	63.94	68.20	-4.26	Peak	180	250	P

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

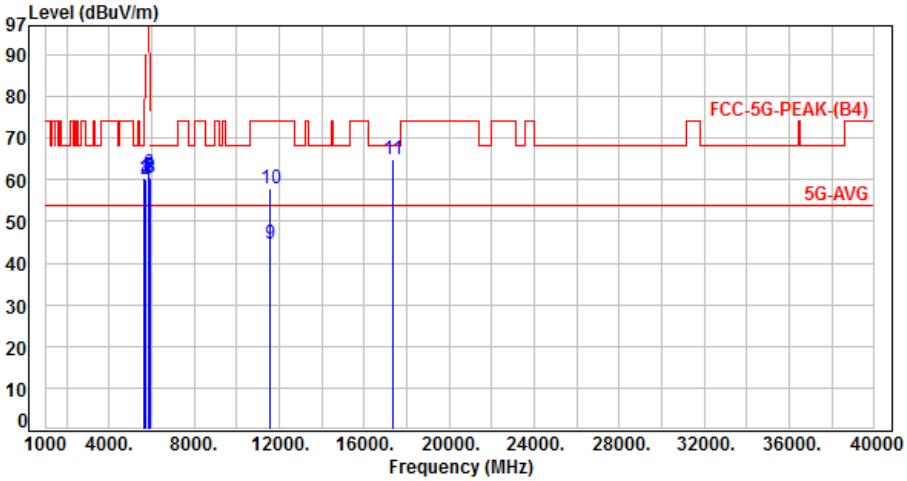
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 1, Band 4, CH157		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	6.26	53.14	59.40	68.20	-8.80	Peak	100	213	P
2	5700.00	6.30	54.12	60.42	105.20	-44.78	Peak	100	213	P
3	5720.00	6.31	53.39	59.70	110.80	-51.10	Peak	100	213	P
4	5725.00	6.32	53.07	59.39	122.20	-62.81	Peak	100	213	P
5	5850.00	6.41	52.71	59.12	122.20	-63.08	Peak	100	213	P
6	5855.00	6.43	53.79	60.22	110.80	-50.58	Peak	100	213	P
7	5875.00	6.53	53.32	59.85	105.20	-45.35	Peak	100	213	P
8	5925.00	6.70	52.62	59.32	68.20	-8.88	Peak	100	213	P
9	11570.00	14.83	29.18	44.01	54.00	-9.99	Average	115	135	P
10	11570.00	14.83	42.28	57.11	74.00	-16.89	Peak	115	135	P
11	17355.00	20.84	44.00	64.84	68.20	-3.36	Peak	100	140	P

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

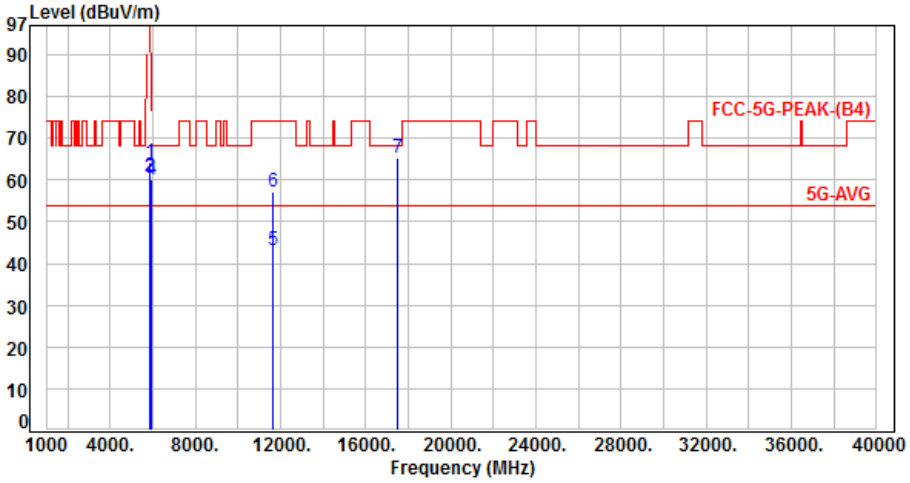
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 1, Band 4, CH157		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	6.26	54.23	60.49	68.20	-7.71	Peak	100	144	P
2	5700.00	6.30	53.79	60.09	105.20	-45.11	Peak	100	144	P
3	5720.00	6.31	53.82	60.13	110.80	-50.67	Peak	100	144	P
4	5725.00	6.32	53.89	60.21	122.20	-61.99	Peak	100	144	P
5	5850.00	6.41	54.37	60.78	122.20	-61.42	Peak	100	144	P
6	5855.00	6.43	55.12	61.55	110.80	-49.25	Peak	100	144	P
7	5875.00	6.53	54.09	60.62	105.20	-44.58	Peak	100	144	P
8	5925.00	6.70	53.75	60.45	68.20	-7.75	Peak	100	144	P
9	11570.00	14.83	29.83	44.66	54.00	-9.34	Average	100	250	P
10	11570.00	14.83	43.11	57.94	74.00	-16.06	Peak	100	250	P
11	17355.00	20.84	44.11	64.95	68.20	-3.25	Peak	110	169	P

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

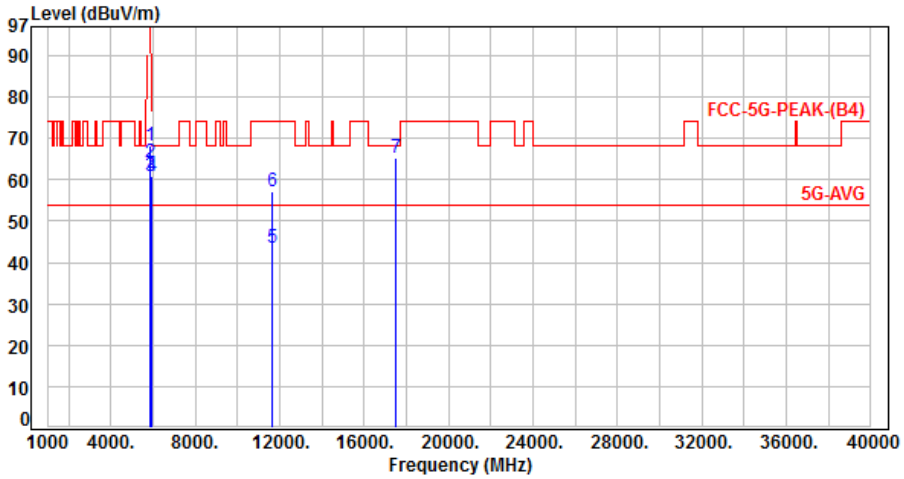
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 1, Band 4, CH165		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5850.00	6.41	57.76	64.17	122.20	-58.03	Peak	100	155	P
2	5855.00	6.43	54.57	61.00	110.80	-49.80	Peak	100	155	P
3	5875.00	6.53	54.03	60.56	105.20	-44.64	Peak	100	155	P
4	5925.00	6.70	53.45	60.15	68.20	-8.05	Peak	100	155	P
5	11650.00	15.01	28.07	43.08	54.00	-10.92	Average	100	130	P
6	11650.00	15.01	42.13	57.14	74.00	-16.86	Peak	100	130	P
7	17475.00	21.75	43.67	65.42	68.20	-2.78	Peak	100	218	P

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

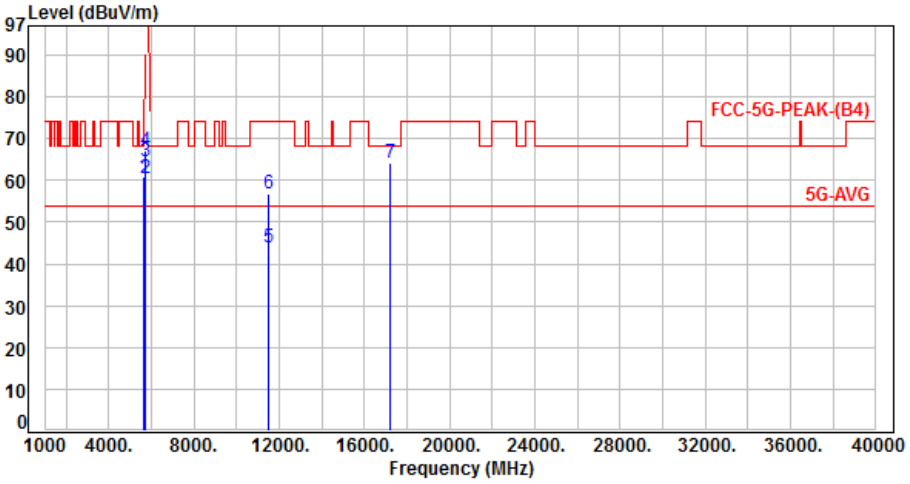
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 1, Band 4, CH165		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5850.00	6.41	61.87	68.28	122.20	-53.92	Peak	100	325	P
2	5855.00	6.43	57.73	64.16	110.80	-46.64	Peak	100	325	P
3	5875.00	6.53	54.16	60.69	105.20	-44.51	Peak	100	325	P
4	5925.00	6.70	54.18	60.88	68.20	-7.32	Peak	100	325	P
5	11650.00	15.01	28.33	43.34	54.00	-10.66	Average	100	105	P
6	11650.00	15.01	42.31	57.32	74.00	-16.68	Peak	100	105	P
7	17475.00	21.75	43.64	65.39	68.20	-2.81	Peak	150	10	P

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

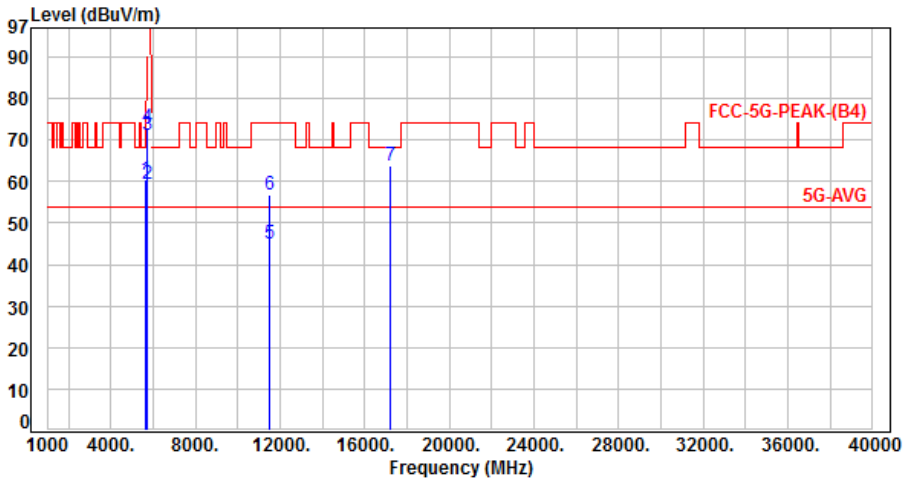
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 4, Band 4, CH149		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	6.26	54.71	60.97	68.20	-7.23	Peak	100	270	P
2	5700.00	6.30	54.22	60.52	105.20	-44.68	Peak	100	270	P
3	5720.00	6.31	58.13	64.44	110.80	-46.36	Peak	100	270	P
4	5725.00	6.32	60.65	66.97	122.20	-55.23	Peak	100	270	P
5	11490.00	14.60	29.44	44.04	54.00	-9.96	Average	100	80	P
6	11490.00	14.60	42.13	56.73	74.00	-17.27	Peak	100	80	P
7	17235.00	20.19	44.01	64.20	68.20	-4.00	Peak	100	280	P

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

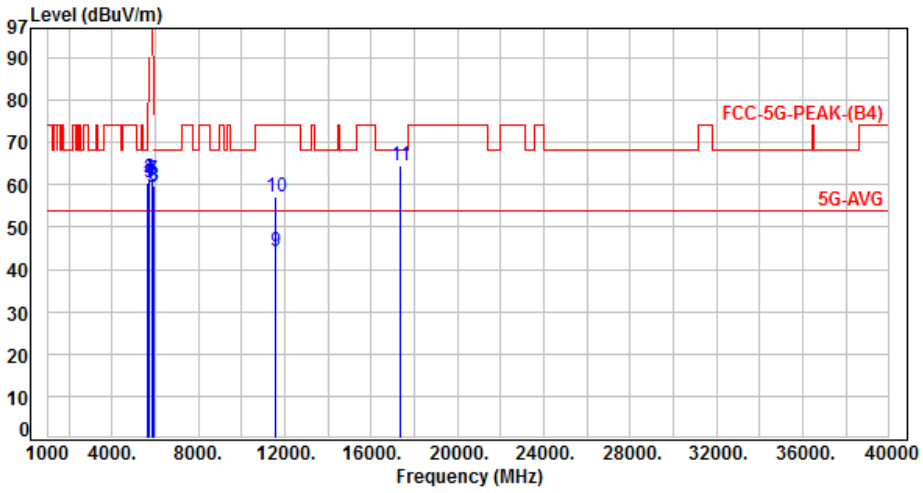
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 4, Band 4, CH149		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	6.26	54.07	60.33	68.20	-7.87	Peak	100	132	P
2	5700.00	6.30	53.15	59.45	105.20	-45.75	Peak	100	132	P
3	5720.00	6.31	64.73	71.04	110.80	-39.76	Peak	100	132	P
4	5725.00	6.32	66.82	73.14	122.20	-49.06	Peak	100	132	P
5	11490.00	14.60	30.26	44.86	54.00	-9.14	Average	100	120	P
6	11490.00	14.60	42.36	56.96	74.00	-17.04	Peak	100	120	P
7	17235.00	20.19	43.55	63.74	68.20	-4.46	Peak	150	200	P

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

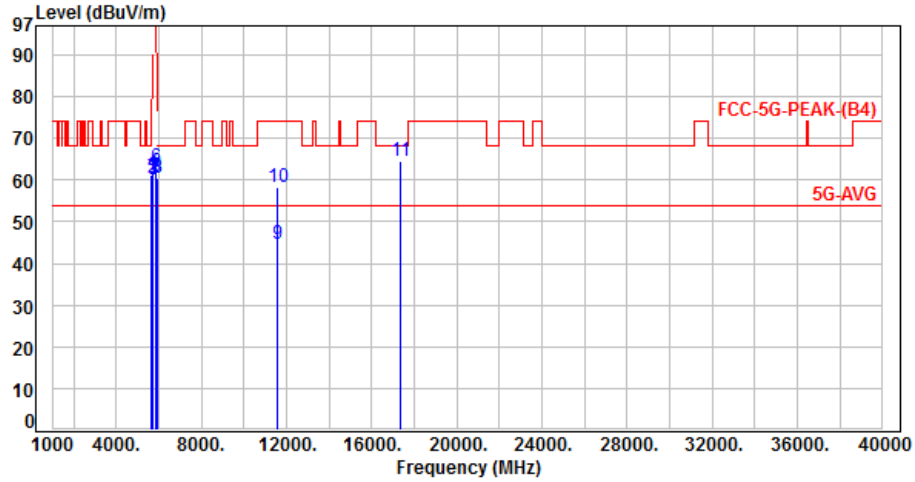
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 4, Band 4, CH157		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	6.26	54.29	60.55	68.20	-7.65	Peak	100	315	P
2	5700.00	6.30	55.28	61.58	105.20	-43.62	Peak	100	315	P
3	5720.00	6.31	54.14	60.45	110.80	-50.35	Peak	100	315	P
4	5725.00	6.32	54.82	61.14	122.20	-61.06	Peak	100	315	P
5	5850.00	6.41	53.10	59.51	122.20	-62.69	Peak	100	315	P
6	5855.00	6.43	54.92	61.35	110.80	-49.45	Peak	100	315	P
7	5875.00	6.53	54.72	61.25	105.20	-43.95	Peak	100	315	P
8	5925.00	6.70	53.09	59.79	68.20	-8.41	Peak	100	315	P
9	11570.00	14.83	29.55	44.38	54.00	-9.62	Average	100	125	P
10	11570.00	14.83	42.46	57.29	74.00	-16.71	Peak	100	125	P
11	17355.00	20.84	43.86	64.70	68.20	-3.50	Peak	130	240	P

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

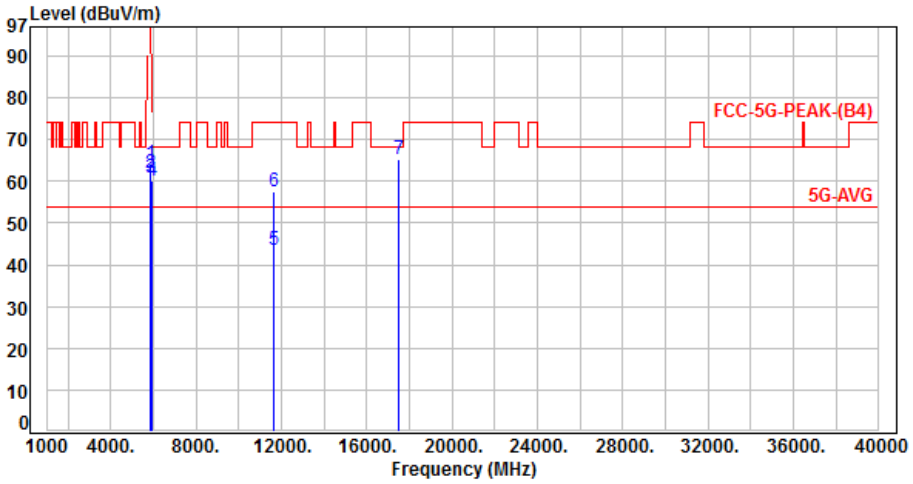
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 4, Band 4, CH157		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	6.26	54.86	61.12	68.20	-7.08	Peak	100	210	P
2	5700.00	6.30	54.29	60.59	105.20	-44.61	Peak	100	210	P
3	5720.00	6.31	53.77	60.08	110.80	-50.72	Peak	100	210	P
4	5725.00	6.32	55.16	61.48	122.20	-60.72	Peak	100	210	P
5	5850.00	6.41	54.49	60.90	122.20	-61.30	Peak	100	210	P
6	5855.00	6.43	56.73	63.16	110.80	-47.64	Peak	100	210	P
7	5875.00	6.53	53.78	60.31	105.20	-44.89	Peak	100	210	P
8	5925.00	6.70	53.78	60.48	68.20	-7.72	Peak	100	210	P
9	11570.00	14.83	29.65	44.48	54.00	-9.52	Average	120	235	P
10	11570.00	14.83	43.59	58.42	74.00	-15.58	Peak	120	235	P
11	17355.00	20.84	43.60	64.44	68.20	-3.76	Peak	100	150	P

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

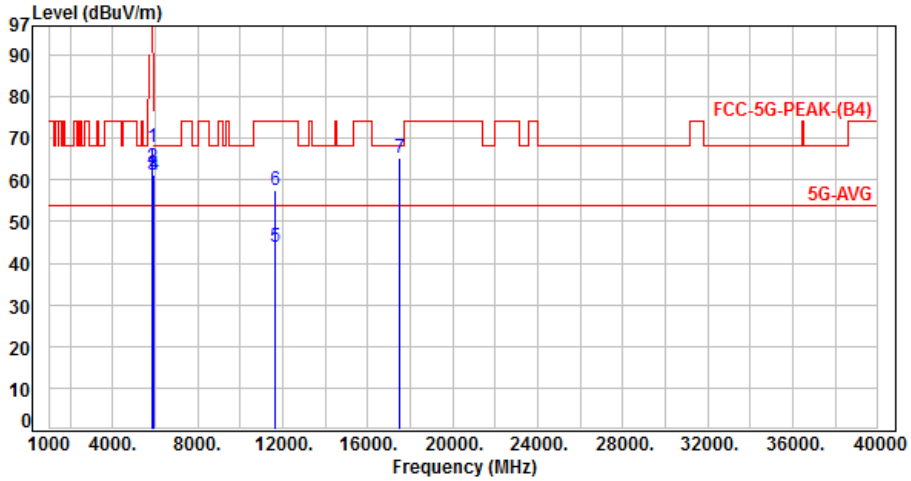
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 4, Band 4, CH165		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5850.00	6.41	57.81	64.22	122.20	-57.98	Peak	110	150	P
2	5855.00	6.43	55.41	61.84	110.80	-48.96	Peak	110	150	P
3	5875.00	6.53	54.32	60.85	105.20	-44.35	Peak	110	150	P
4	5925.00	6.70	53.27	59.97	68.20	-8.23	Peak	110	150	P
5	11650.00	15.01	28.49	43.50	54.00	-10.50	Average	100	300	P
6	11650.00	15.01	42.71	57.72	74.00	-16.28	Peak	100	300	P
7	17475.00	21.75	43.57	65.32	68.20	-2.88	Peak	110	20	P

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

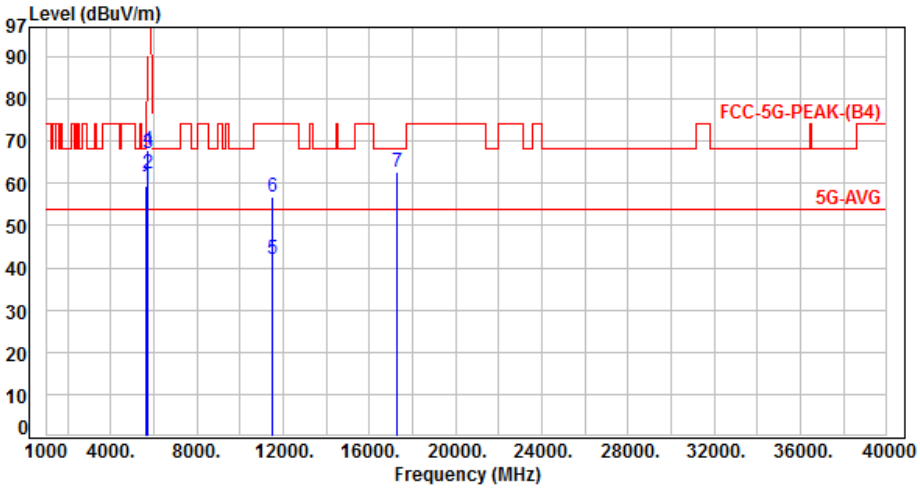
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 4, Band 4, CH165		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5850.00	6.41	61.42	67.83	122.20	-54.37	Peak	100	340	P
2	5855.00	6.43	56.73	63.16	110.80	-47.64	Peak	100	340	P
3	5875.00	6.53	54.69	61.22	105.20	-43.98	Peak	100	340	P
4	5925.00	6.70	54.59	61.29	68.20	-6.91	Peak	100	340	P
5	11650.00	15.01	28.75	43.76	54.00	-10.24	Average	100	100	P
6	11650.00	15.01	42.59	57.60	74.00	-16.40	Peak	100	100	P
7	17475.00	21.75	43.55	65.30	68.20	-2.90	Peak	100	77	P

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

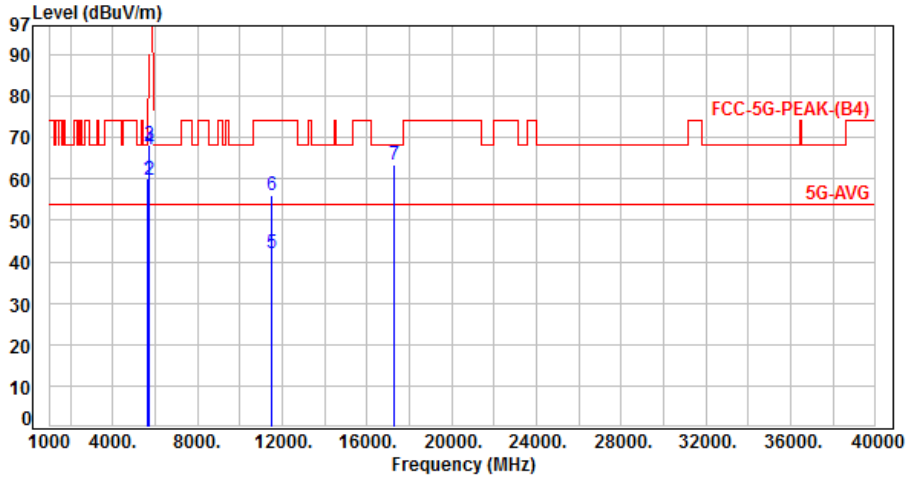
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 5, Band 4, CH151		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	6.26	53.16	59.42	68.20	-8.78	Peak	100	118	P
2	5700.00	6.30	55.98	62.28	105.20	-42.92	Peak	100	118	P
3	5720.00	6.31	60.71	67.02	110.80	-43.78	Peak	100	118	P
4	5725.00	6.32	61.54	67.86	122.20	-54.34	Peak	100	118	P
5	11510.00	14.65	27.30	41.95	54.00	-12.05	Average	100	149	P
6	11510.00	14.65	42.03	56.68	74.00	-17.32	Peak	100	149	P
7	17265.00	20.33	42.42	62.75	68.20	-5.45	Peak	100	50	P

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

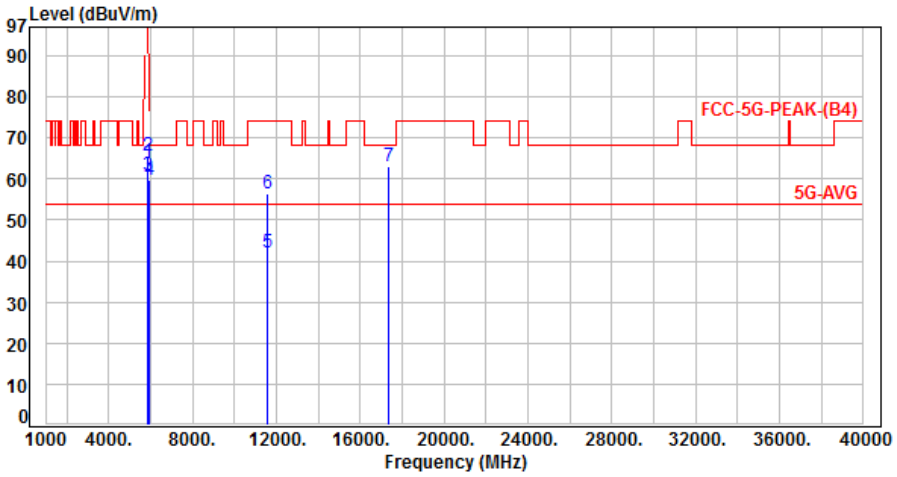
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 5, Band 4, CH151		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	6.26	53.80	60.06	68.20	-8.14	Peak	100	325	P
2	5700.00	6.30	53.44	59.74	105.20	-45.46	Peak	100	325	P
3	5720.00	6.31	61.97	68.28	110.80	-42.52	Peak	100	325	P
4	5725.00	6.32	60.89	67.21	122.20	-54.99	Peak	100	325	P
5	11510.00	14.65	27.29	41.94	54.00	-12.06	Average	100	191	P
6	11510.00	14.65	41.45	56.10	74.00	-17.90	Peak	100	191	P
7	17265.00	20.33	42.98	63.31	68.20	-4.89	Peak	100	113	P

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

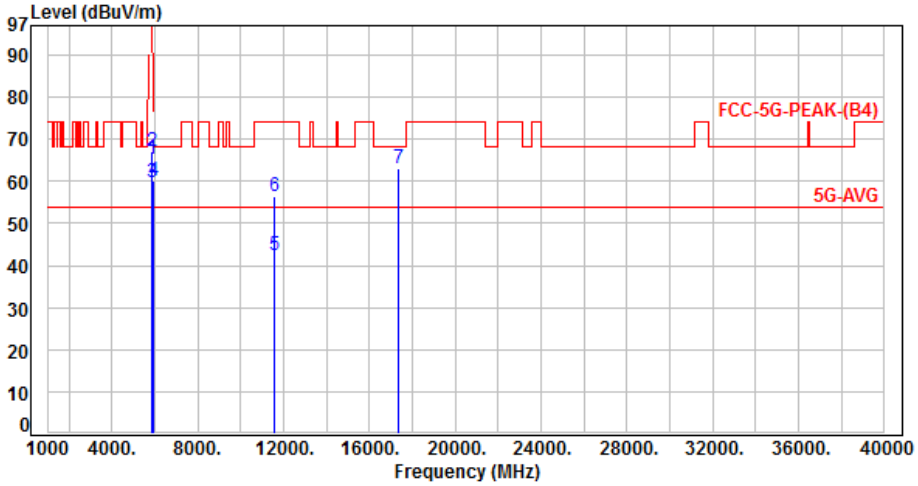
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 5, Band 4, CH159		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5850.00	6.41	57.59	64.00	122.20	-58.20	Peak	100	45	P
2	5855.00	6.43	59.33	65.76	110.80	-45.04	Peak	100	45	P
3	5875.00	6.53	54.24	60.77	105.20	-44.43	Peak	100	45	P
4	5925.00	6.70	53.18	59.88	68.20	-8.32	Peak	100	45	P
5	11590.00	14.89	27.24	42.13	54.00	-11.87	Average	100	21	P
6	11590.00	14.89	41.68	56.57	74.00	-17.43	Peak	100	21	P
7	17385.00	21.02	41.99	63.01	68.20	-5.19	Peak	100	160	P

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

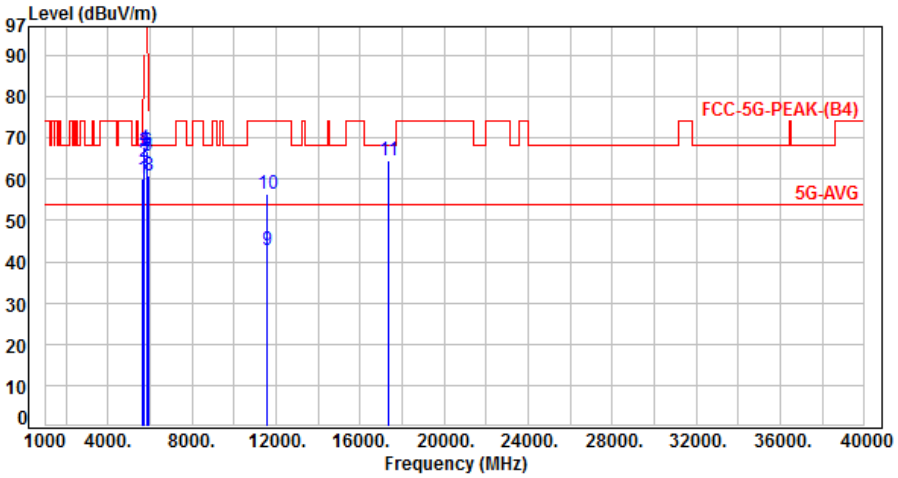
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 5, Band 4, CH159		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5850.00	6.41	58.73	65.14	122.20	-57.06	Peak	100	310	P
2	5855.00	6.43	60.68	67.11	110.80	-43.69	Peak	100	310	P
3	5875.00	6.53	53.34	59.87	105.20	-45.33	Peak	100	310	P
4	5925.00	6.70	53.54	60.24	68.20	-7.96	Peak	100	310	P
5	11590.00	14.89	27.37	42.26	54.00	-11.74	Average	100	75	P
6	11590.00	14.89	41.54	56.43	74.00	-17.57	Peak	100	75	P
7	17385.00	21.02	42.16	63.18	68.20	-5.02	Peak	100	75	P

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

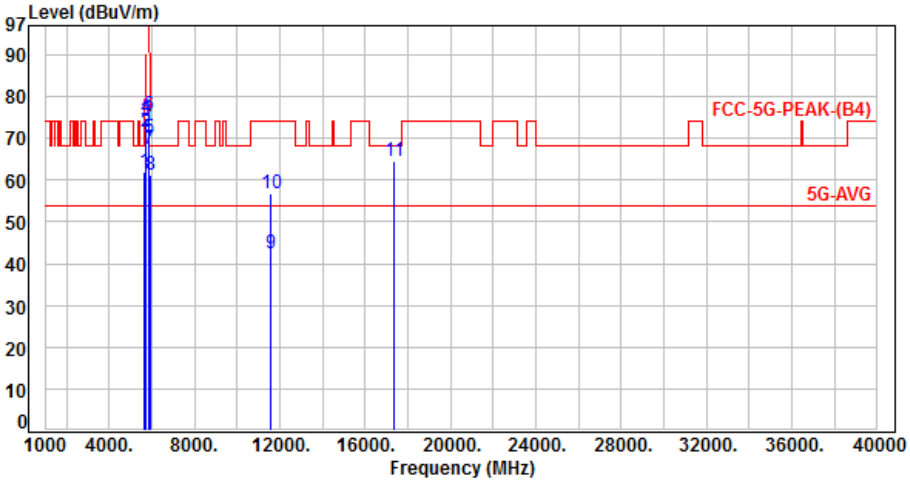
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 6, Band 4, CH155		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	6.26	53.68	59.94	68.20	-8.26	Peak	100	70	P
2	5700.00	6.30	57.84	64.14	105.20	-41.06	Peak	100	70	P
3	5720.00	6.31	60.51	66.82	110.80	-43.98	Peak	100	70	P
4	5725.00	6.32	61.00	67.32	122.20	-54.88	Peak	100	70	P
5	5850.00	6.41	59.41	65.82	122.20	-56.38	Peak	100	70	P
6	5855.00	6.43	60.49	66.92	110.80	-43.88	Peak	100	70	P
7	5875.00	6.53	58.87	65.40	105.20	-39.80	Peak	100	70	P
8	5925.00	6.70	54.17	60.87	68.20	-7.33	Peak	100	70	P
9	11550.00	14.77	27.90	42.67	54.00	-11.33	Average	100	155	P
10	11550.00	14.77	41.67	56.44	74.00	-17.56	Peak	100	155	P
11	17325.00	20.64	43.72	64.36	68.20	-3.84	Peak	100	250	P

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

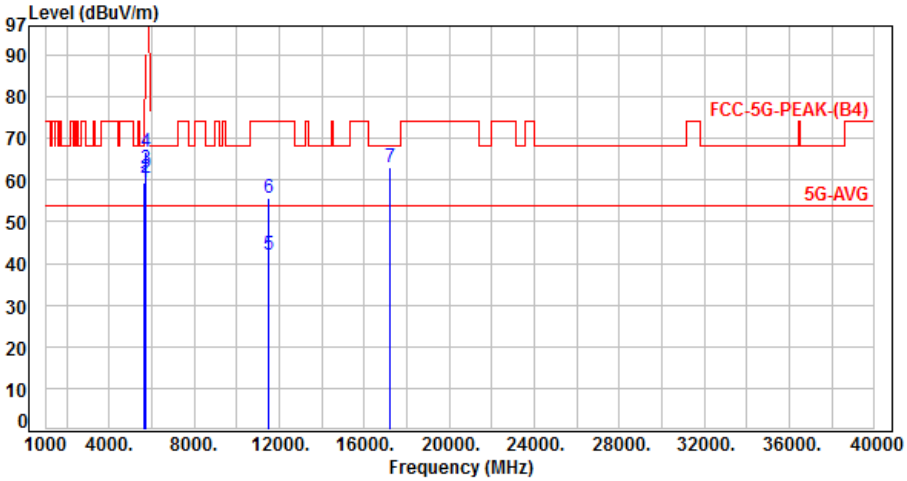
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 6, Band 4, CH155		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	6.26	55.71	61.97	68.20	-6.23	Peak	100	275	P
2	5700.00	6.30	65.43	71.73	105.20	-33.47	Peak	100	275	P
3	5720.00	6.31	67.94	74.25	110.80	-36.55	Peak	100	275	P
4	5725.00	6.32	68.71	75.03	122.20	-47.17	Peak	100	275	P
5	5850.00	6.41	63.73	70.14	122.20	-52.06	Peak	100	275	P
6	5855.00	6.43	69.24	75.67	110.80	-35.13	Peak	100	275	P
7	5875.00	6.53	61.10	67.63	105.20	-37.57	Peak	100	275	P
8	5925.00	6.70	54.69	61.39	68.20	-6.81	Peak	100	275	P
9	11550.00	14.77	27.76	42.53	54.00	-11.47	Average	100	142	P
10	11550.00	14.77	42.17	56.94	74.00	-17.06	Peak	100	142	P
11	17325.00	20.64	43.77	64.41	68.20	-3.79	Peak	100	66	P

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

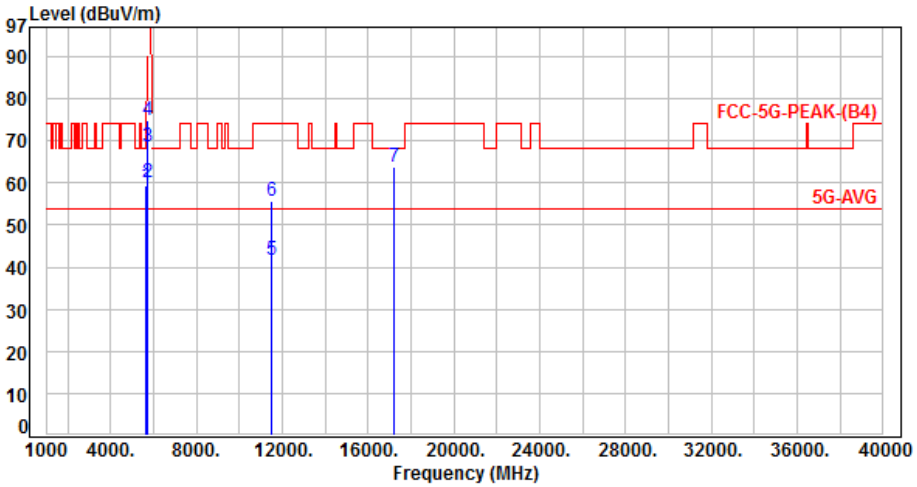
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 8, Band 4, CH149		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	6.26	53.20	59.46	68.20	-8.74	Peak	100	119	P
2	5700.00	6.30	54.02	60.32	105.20	-44.88	Peak	100	119	P
3	5720.00	6.31	56.24	62.55	110.80	-48.25	Peak	100	119	P
4	5725.00	6.32	60.35	66.67	122.20	-55.53	Peak	100	119	P
5	11490.00	14.60	27.36	41.96	54.00	-12.04	Average	100	30	P
6	11490.00	14.60	41.02	55.62	74.00	-18.38	Peak	100	30	P
7	17235.00	20.19	42.93	63.12	68.20	-5.08	Peak	100	120	P

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

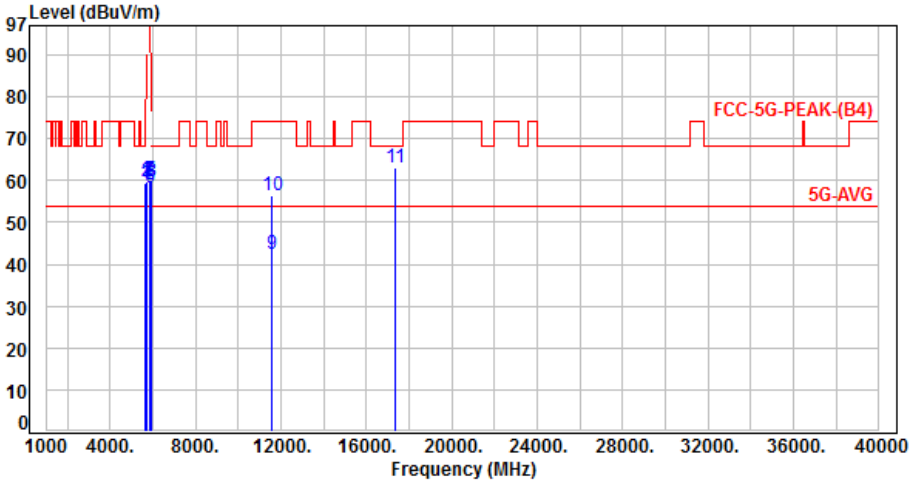
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 8, Band 4, CH149		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	6.26	53.23	59.49	68.20	-8.71	Peak	100	213	P
2	5700.00	6.30	53.94	60.24	105.20	-44.96	Peak	100	213	P
3	5725.00	6.32	62.17	68.49	122.20	-53.71	Peak	100	213	P
4	5725.00	6.32	68.72	75.04	122.20	-47.16	Peak	100	213	P
5	11490.00	14.60	27.03	41.63	54.00	-12.37	Average	100	350	P
6	11490.00	14.60	41.06	55.66	74.00	-18.34	Peak	100	350	P
7	17235.00	20.19	43.52	63.71	68.20	-4.49	Peak	100	15	P

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

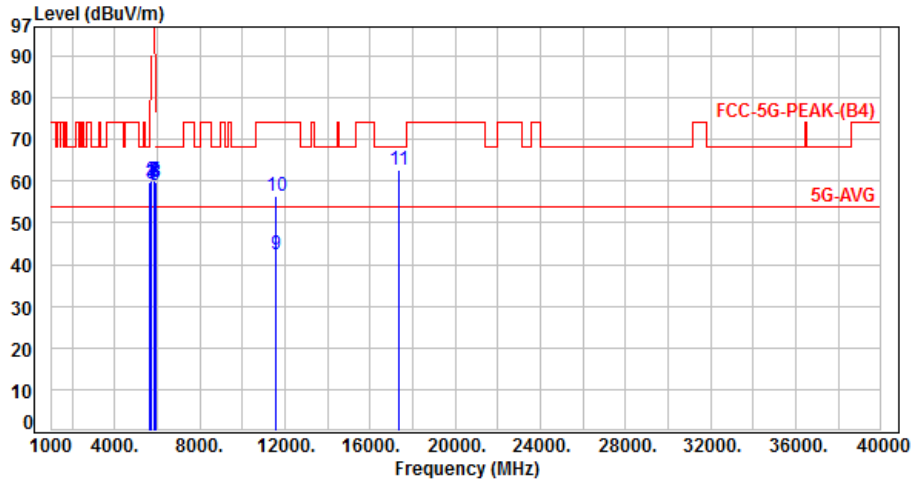
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 8, Band 4, CH157		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	6.26	53.25	59.51	68.20	-8.69	Peak	100	120	P
2	5700.00	6.30	53.57	59.87	105.20	-45.33	Peak	100	120	P
3	5720.00	6.31	53.57	59.88	110.80	-50.92	Peak	100	120	P
4	5725.00	6.32	52.77	59.09	122.20	-63.11	Peak	100	120	P
5	5850.00	6.41	52.55	58.96	122.20	-63.24	Peak	100	120	P
6	5855.00	6.43	51.97	58.40	110.80	-52.40	Peak	100	120	P
7	5875.00	6.53	53.75	60.28	105.20	-44.92	Peak	100	120	P
8	5925.00	6.70	53.18	59.88	68.20	-8.32	Peak	100	120	P
9	11570.00	14.83	27.44	42.27	54.00	-11.73	Average	100	160	P
10	11570.00	14.83	41.51	56.34	74.00	-17.66	Peak	100	160	P
11	17355.00	20.84	42.31	63.15	68.20	-5.05	Peak	100	45	P

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

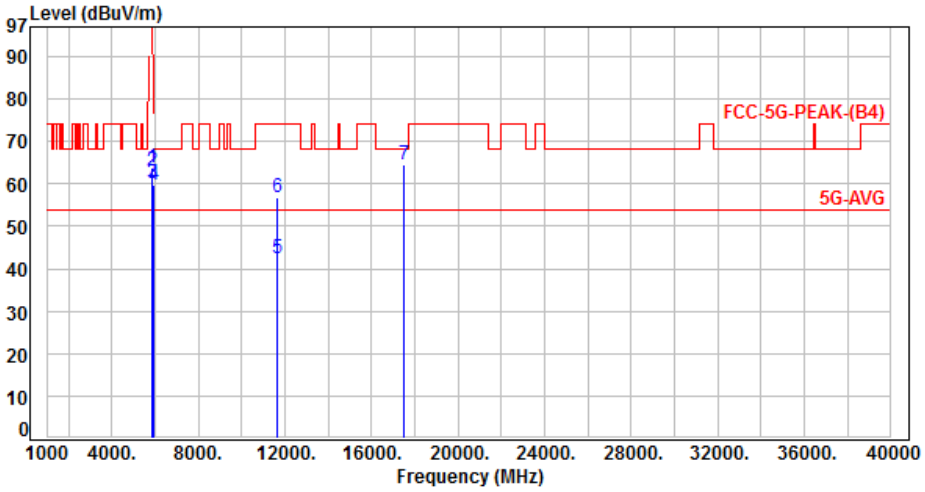
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 8, Band 4, CH157		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	6.26	53.52	59.78	68.20	-8.42	Peak	100	20	P
2	5700.00	6.30	53.70	60.00	105.20	-45.20	Peak	100	20	P
3	5720.00	6.31	53.09	59.40	110.80	-51.40	Peak	100	20	P
4	5725.00	6.32	53.04	59.36	122.20	-62.84	Peak	100	20	P
5	5850.00	6.41	52.76	59.17	122.20	-63.03	Peak	100	20	P
6	5855.00	6.43	53.25	59.68	110.80	-51.12	Peak	100	20	P
7	5875.00	6.53	53.66	60.19	105.20	-45.01	Peak	100	20	P
8	5925.00	6.70	52.91	59.61	68.20	-8.59	Peak	100	20	P
9	11570.00	14.83	27.59	42.42	54.00	-11.58	Average	100	300	P
10	11570.00	14.83	41.76	56.59	74.00	-17.41	Peak	100	300	P
11	17355.00	20.84	42.02	62.86	68.20	-5.34	Peak	100	150	P

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

Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 8, Band 4, CH165		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5850.00	6.41	57.42	63.83	122.20	-58.37	Peak	100	240	P
2	5855.00	6.43	56.55	62.98	110.80	-47.82	Peak	100	240	P
3	5875.00	6.53	53.63	60.16	105.20	-45.04	Peak	100	240	P
4	5925.00	6.70	53.15	59.85	68.20	-8.35	Peak	100	240	P
5	11650.00	15.01	27.27	42.28	54.00	-11.72	Average	100	135	P
6	11650.00	15.01	41.69	56.70	74.00	-17.30	Peak	100	135	P
7	17475.00	21.75	42.92	64.67	68.20	-3.53	Peak	100	30	P

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