FCC RADIO TEST REPORT

Applicant	:	DrayTek Corp.
Address	:	No.26 Fu Shing Rd., HuKou County,Hsin-Chu Industrial Park,Hsin-Chu,Taiwan 303 R.O.C
Equipment	:	802.11ax Ceiling-mount AP
Model No.	:	VigorAP 1062C
Trade Name	:	DrayTek
FCC ID	:	VGYAP1062C

I HEREBY CERTIFY THAT :

The sample was received on Aug. 31, 2022 and the testing was completed on Dec. 13, 2022 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.	Issued Date	Description
22030270-TRFCC06	Mar. 07, 2023	Original

1. Summary of Test Procedure and Test Results

1.1 Applicable Standards

ANSI C63.10:2013

FCC Rules and Regulations Part 15 Subpart C §15.247

FCC Rule	. Description of Test	Result
15.203	. Antenna Requirement	PASS
15.207	. AC Power Line Conducted Emission	PASS
15.209 15.205	. Radiated Spurious Emission	PASS
15.247(d)	. Conducted Spurious Emission	PASS
15.247(a)(2)	. 6dB Bandwidth	PASS
15.247(b)	. Output Power	PASS
15.247(e)	. Power Spectral Density	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.

2. Test Configuration of Equipment under Test

2.1 Feature of Equipment under Test

Operation Frequency Range	802.11b/g/n(TurboQAM)/ax: 2400-2483.5MHz 802.11a/n/ac/ax: 5150-5250MHz, 5725-5850MHz
Center Frequency Range	802.11b/g/n(TurboQAM)/ax: 2412MHz-2462MHz 802.11a/n/ac/ax: 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 – MCS15, 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 – MCS15, HT20/40 802.11ac: MCS0 – MCS9, VHT20/40/80 802.11ax: MCS0 – MCS11,HE20/40/80
Antenna Type	PCB Antenna
Antenna Gain	For WLAN: 2400-2483.5MHz: ANT A: 6.03 dBi, ANT B: 3.31 dBi ANT C: 2.37 dBi, ANT D: 1.88 dBi 5150-5250MHz: ANT A: 2.48 dBi, ANT B: 3.52 dBi ANT C: 2.01 dBi, ANT D: 1.63 dBi 5725-5850MHz: ANT A: 4.40 dBi, ANT B: 1.55 dBi ANT C: 0.89 dBi, ANT D: 1.33 dBi
RJ45	Brand: Nienyi Model: 4105-00000151-01Z
Adapter	Brand: AMIGO Model: AMS200-1202000FU

Note:
1. WLAN 2.4G 802.11n support TurboQAM.
2. EUT support TPC Function.
3. WLAN 2.4GHz 802.11ax and WLAN 5GHz 802.11ax support beamforming Function.
4. EUT support Master/Bridge/Repeater/Mesh Function.
5. For more details, please refer to the User's manual of the EUT.

2.2 Carrier Frequency of Channels

802.11b, 802.11g, 802.11n HT20, VHT20, 802.11ax HE20 (2412MHz-2462MHz)

Channel	Frequency(MHz)	Channel	Frequency(MHz)
***01**	**2412**	07	2442
02	2417	08	2447
03	2422	09	2452
04	2427	10	2457
05	2432	***11**	**2462**
***06**	**2437**	---	---

802.11n HT40, VHT40, 802.11ax HE40 (2422MHz-2452MHz)

Channel	Frequency(MHz)	Channel	Frequency(MHz)
---	---	07	2442
---	---	08	2447
***03**	**2422**	***09**	**2452**
04	2427	---	---
05	2432	---	---
***06**	**2437**	---	---

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, ” QATool ver. 0.0.2.88” under Windows OS system was executed to transmit and receive data via WLAN.(Non BeamForming)
d. An executive program, ” PuTTY suite ver. Release 0.74” under Windows OS system was executed to transmit and receive data via WLAN.(BeamForming)
e. The following test modes were performed for the test:

Conducted Emissions from the AC mains power ports	
Test Mode	Operating Description
1	802.11b (1Mbps), Non BeamForming
2	802.11g (6Mbps), Non BeamForming
3	802.11n HT20 (6.5Mbps), Non BeamForming
4	802.11n HT40 (13.5Mbps), Non BeamForming
5	802.11ac VHT20 (6.5Mbps), Non BeamForming
6	802.11ac VHT40 (13.5Mbps), Non BeamForming
7	802.11ax HE20 (7.3Mbps), Non BeamForming
8	802.11ax HE40 (14.6Mbps), Non BeamForming
9	802.11ax HE20 (7.3Mbps), BeamForming
10	802.11ax HE40 (14.6Mbps), BeamForming
caused “Test Mode 8,9” generated the worst case, it was reported as the final data.	
Radiation Emissions (BELOW 1GHz)	
Test Mode	Operating Description
1	802.11b (1Mbps), Non BeamForming
2	802.11g (6Mbps), Non BeamForming
3	802.11n HT20 (6.5Mbps), Non BeamForming
4	802.11n HT40 (13.5Mbps), Non BeamForming
5	802.11ac VHT20 (6.5Mbps), Non BeamForming
6	802.11ac VHT40 (13.5Mbps), Non BeamForming
7	802.11ax HE20 (7.3Mbps), Non BeamForming
8	802.11ax HE40 (14.6Mbps), Non BeamForming
9	802.11ax HE20 (7.3Mbps), BeamForming
10	802.11ax HE40 (14.6Mbps), BeamForming
caused “Test Mode 8,9” generated the worst case, they were reported as the final data.	
Radiation Emissions (1GHz ~ 25GHz)	
Test Mode	Operating Description
1	802.11b (1Mbps), Non BeamForming
2	802.11g (6Mbps), Non BeamForming
3	802.11ax HE20 (7.3Mbps), Non BeamForming
4	802.11ax HE40 (14.6Mbps), Non BeamForming
5	802.11ax HE20 (7.3Mbps), BeamForming
6	802.11ax HE40 (14.6Mbps), BeamForming
caused “Test Mode 1~6” generated the worst case, they were reported as the final data.	

Note: 1.There are two kinds of test voltage: AC 120V / 60Hz and AC 240V / 60Hz.
For AC Power Line Conducted Emission,& Radiation Emissions (BELOW 1GHz) &Radiated Spurious Emission(1GHz ~ 25GHz), AC 120V / 60Hz was worst case.
2.Adapter and PoE were used for the test, Power from Adapter was worst case.

The EUT incorporates a MIMO function

Modulation Type	TX CONFIGURATION
802.11b	4TX
802.11g	4TX
802.11n HT20	4TX
802.11n HT40	4TX
802.11n HT20(TurboQAM)	4TX
802.11n HT40(TurboQAM)	4TX
802.11ax HE20	4TX
802.11ax HE40	4TX

2.4 Description of Test System

Non BeamForming

RF Conducted				
Equipment	Brand	Model	Length/Type	Power cord/Length/Type
Notebook	Lenovo	S1GL2W	N/A	Adapter / 1.8m / NS
RJ45 Cable	TE CONNECTIVITY	CAT5E	1.2m / NS	N/A
POE	Edimax	PE-1000IPF	N/A	N/A
Switching Adapter	DEE VAN ENTERPRISE CO., LTD.	DSA-38PFD-54 FUS 540070	1.5m / 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
POE	Edimax	PE-1000IPF	N/A	N/A
Switching Adapter	DEE VAN ENTERPRISE CO., LTD.	DSA-38PFD-54 FUS 540070	1.5m / 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
POE	Edimax	PE-1000IPF	N/A	N/A
Switching Adapter	DEE VAN ENTERPRISE CO., LTD.	DSA-38PFD-54 FUS 540070	1.5m / NS	N/A

BeamForming

RF Conducted				
Equipment	Brand	Model	Length/Type	Power cord/Length/Type
Notebook	Lenovo	S1GL2W	N/A	Adapter / 1.8m / NS
Notebook	DELL	Latitude E5470	N/A	Adapter / 1.8m / NS
RJ45 Cable * 2	TE CONNECTIVITY	CAT5E	1.2m / NS	N/A
POE	Edimax	PE-1000IPF	N/A	N/A
Switching Adapter	DEE VAN ENTERPRISE CO., LTD.	DSA-38PFD-54 FUS 540070	1.5m / NS	N/A
802.11ax Ceiling-mount AP	DrayTek	VigorAP 1062C	N/A	N/A
Radiated Emissions				
Equipment	Brand	Model	Length/Type	Power cord/Length/Type
Notebook	ASUS	P2430U	N/A	Adapter / 1.8m / NS
RJ45 Cable	N/A	N/A	15m / NS	N/A
Notebook	DELL	Latitude E5470	N/A	Adapter / 1.8m / NS
RJ45 Cable	TE CONNECTIVITY	CAT5E	1.2m / NS	N/A
POE	Edimax	PE-1000IPF	N/A	N/A
Switching Adapter	DEE VAN ENTERPRISE CO., LTD.	DSA-38PFD-54 FUS 540070	1.5m / NS	N/A
802.11ax Ceiling-mount AP	DrayTek	VigorAP 1062C	N/A	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
Notebook	DELL	Latitude E5470	N/A	Adapter / 1.8m / NS
POE	Edimax	PE-1000IPF	N/A	N/A
Switching Adapter	DEE VAN ENTERPRISE CO., LTD.	DSA-38PFD-54 FUS 540070	1.5m / NS	N/A
802.11ax Ceiling-mount AP	DrayTek	VigorAP 1062C	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 25,000MHz	
Test Distance:	The test distance of radiated emission from antenna to EUT is 3 M.	

Non BeamForming

Test Item	Test Site	Test period	Environmental Conditions	Tested By
RF Conducted	RFCON01-NK	2022/09/13~2022/09/14	24.4~24.7℃ / 53~58%	Leon Huang
		2022/12/12~2022/12/13	23.4~24.2℃ / 56~58%	Leon Huang
Radiated Emissions	3M02-NK	2022/09/05~2022/09/16	21~27℃ / 33~39%	Leon Huang
AC Power Line Conducted Emission	CON01-NK	2022/09/12	25℃ / 52%	Leon Huang

BeamForming

Test Item	Test Site	Test period	Environmental Conditions	Tested By
RF Conducted	RFCON01-NK	2022/12/07~2022/12/08	25.3~25.4℃ / 49~52%	Leon Huang
Radiated Emissions	3M02-NK	2022/10/05~2022/10/07	24~26℃ / 33~34%	Leon Huang
AC Power Line Conducted Emission	CON01-NK	2022/09/14	24℃ / 49%	Leon Huang

2.6 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)

Measurement Item	Uncertainty
AC Power Line Conduction(150K~30MHz)	±3.28dB
Radiated Spurious Emission(9KHz~30MHz)	±3.4dB
Radiated Spurious Emission(30MHz~1GHz)	±5.7dB
Radiated Spurious Emission(1GHz~25GHz)	±6.8dB
Conducted Spurious Emission	±1.8dB
6dB Bandwidth	±4.4%
20dB Bandwidth	±4.4%
Occupied Bandwidth	±4.4%
Peak Output Power(Conducted Power Meter)	±1.1dB
Dwell Time / Deactivation Time	±1.2%
Power Spectral Density	±1.8dB
Duty Cycle	±1.2%

3. Test Equipment and Ancillaries Used for Tests

Non BeamForming

Test Item	Radiated Emissions				
Test Site	Semi Anechoic Room(3M02-NK)				
Instrument	**Manufacturer**	**Model No**	**Serial No**	**Calibration Date**	**Valid Date**
Bilog Antenna	Schwarzbeck	VULB9168	275	2021/11/05	2022/11/04
Active Loop Antenna	EMCO	6507	40855	2022/05/25	2023/05/24
Horn Antenna	EMCO	3115	31589	2022/04/26	2023/04/25
Horn Antenna	EMCO	3116	31970	2022/03/18	2023/03/17
EMI Receiver	ROHDE & SCHWARZ	ESCI	101423	2022/07/05	2023/07/04
Spectrum Analyzer	ROHDE & SCHWARZ	FSV 40-N	101329	2022/07/20	2023/07/19
Preamplifier	Agilent	8449B	3008A01954	2022/03/17	2023/03/16
Preamplifier	EMC INSTRUMENTS	EMC184045	980065	2021/11/16	2022/11/15
Preamplifier	EM Electronics corp.	EM330	60660	2022/04/08	2023/04/07
Cable-6m(9k~300M)	NA	EMC5D-BM-BM-6	130605	2021/09/22	2022/09/21
Cable-3in1(30M-1G)	HARBOUR INDUSTRIES	LL142	CCE1315	2022/03/21	2023/03/20
Cable-0.5m(30M-40G)	HUBER SUHNER	SUCOFLEX 102	28420/2	2022/04/09	2023/04/08
Cable-3m(30M-40G)	HUBER SUHNER	SUCOFLEX 102	MY2608/2	2022/04/09	2023/04/08
Cable-0.5m(1G-40G)	Rapidtek	40GHZ 50CM	38MS-38MS50 314	2022/04/09	2023/04/08
Cable-3m(1G-40G)	Rapidtek	40GHZ 300CM	38MS-38MS30 0314	2022/04/09	2023/04/08
Cable-0.5m(1G-40G)	HUBER SUHNER	SUCOFLEX 104	805443/4	2022/01/11	2023/01/10
Cable-3m(1G-40G)	HUBER SUHNER	SUCOFLEX 104	805796/4	2022/01/11	2023/01/10
Cable-8m(1G-26.5G)	WOKEN	WCBA-WCA203SM	CCE1374	2022/04/25	2023/04/24
E3	AUDIX	v8.2014-8-6	RK-000529	NA	NA

Test Item	RF Conducted(2022/09/13~2022/09/14)				
Test Site	RFCON01-NK				
Instrument	**Manufacturer**	**Model No**	**Serial No**	**Calibration Date**	**Valid Date**
CAX Signal Analyzer	KEYSIGHT	N9000B	MY57100339	2022/01/10	2023/01/09
Attenuator	KEYSIGHT	8491B	MY39250703	2022/04/12	2023/04/11
Cable-0.5m(1G-26.5G)	HUBER SUHNER	SUCOFLEX 102	28422/2	2022/04/09	2023/04/08
Power Meter	Anritsu	ML2495A	1224005	2022/04/12	2023/04/11
Power Sensor	Anritsu	MA2411B	1207295	2022/04/12	2023/04/11
Switch Box	Theda	1-4	TW5451159	NA	NA

Test Item	RF Conducted(2022/12/12~2022/12/13)				
Test Site	RFCON01-NK				
Instrument	**Manufacturer**	**Model No**	**Serial No**	**Calibration Date**	**Valid Date**
CAX Signal Analyzer	KEYSIGHT	N9000B	MY57100339	2022/11/29	2023/11/28
Attenuator	KEYSIGHT	8491B	MY39250703	2022/04/12	2023/04/11
Cable-0.5m(1G-26.5G)	HUBER SUHNER	SUCOFLEX 102	28422/2	2022/04/09	2023/04/08
Power Meter	Anritsu	ML2495A	1224005	2022/04/12	2023/04/11
Power Sensor	Anritsu	MA2411B	1207295	2022/04/12	2023/04/11
Switch Box	Theda	1-4	TW5451159	NA	NA

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	100821	2021/11/15	2022/11/14
Line Impedance Stabilization Network	Schwarzbeck	NSLK 8127	8127-516	2021/10/05	2022/10/04
Pulse Limiter	ROHDE & SCHWARZ	ESH3-Z2	101934	2022/03/21	2023/03/20
Cable-6m(9k~300M)	NA	EMC5D-BM-BM-6	130606	2022/03/21	2023/03/20
E3	AUDIX	v8.2014-8-6	RK-000531	NA	NA

BeamForming

Test Item	Radiated Emissions				
Test Site	Semi Anechoic Room(3M02-NK)				
Instrument	**Manufacturer**	**Model No**	**Serial No**	**Calibration Date**	**Valid Date**
Bilog Antenna	Schwarzbeck	VULB9168	275	2021/11/05	2022/11/04
Active Loop Antenna	EMCO	6507	40855	2022/05/25	2023/05/24
Horn Antenna	EMCO	3115	31589	2022/04/26	2023/04/25
Horn Antenna	EMCO	3116	31970	2022/03/18	2023/03/17
EMI Receiver	ROHDE & SCHWARZ	ESCI	101423	2022/07/05	2023/07/04
Spectrum Analyzer	ROHDE & SCHWARZ	FSV 40-N	101329	2022/07/20	2023/07/19
Preamplifier	Agilent	8449B	3008A01954	2022/03/17	2023/03/16
Preamplifier	EMC INSTRUMENTS	EMC184045	980065	2021/11/16	2022/11/15
Preamplifier	EM Electronics corp.	EM330	60660	2022/04/08	2023/04/07
Cable-6m(9k~300M)	NA	EMC5D-BM-BM-6	130605	2022/09/06	2023/09/05
Cable-3in1(30M-1G)	HARBOUR INDUSTRIES	LL142	CCE1315	2022/03/21	2023/03/20
Cable-0.5m(30M-40G)	HUBER SUHNER	SUCOFLEX 102	28420/2	2022/4/9	2023/4/8
Cable-3m(30M-40G)	HUBER SUHNER	SUCOFLEX 102	MY2608/2	2022/4/9	2023/4/8
Cable-0.5m(1G-40G)	Rapidtek	40GHZ 50CM	38MS-38MS50 314	2022/4/9	2023/4/8
Cable-3m(1G-40G)	Rapidtek	40GHZ 300CM	38MS-38MS30 0314	2022/4/9	2023/4/8
Cable-0.5m(1G-40G)	HUBER SUHNER	SUCOFLEX 104	805443/4	2022/01/11	2023/01/10
Cable-3m(1G-40G)	HUBER SUHNER	SUCOFLEX 104	805796/4	2022/01/11	2023/01/10
Cable-8m(1G-26.5G)	WOKEN	WCBA-WCA203SM	CCE1374	2022/04/25	2023/04/24
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**
CAX Signal Analyzer	KEYSIGHT	N9000B	MY57100339	2022/11/29	2023/11/28
Attenuator	KEYSIGHT	8491B	MY39250703	2022/04/12	2023/04/11
Power Meter	Anritsu	ML2495A	1224005	2022/04/12	2023/04/11
Power Sensor	Anritsu	MA2411B	1207295	2022/04/12	2023/04/11

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	100821	2021/11/15	2022/11/14
Line Impedance Stabilization Network	Schwarzbeck	NSLK 8127	8127-516	2021/10/05	2022/10/04
Pulse Limiter	ROHDE & SCHWARZ	ESH3-Z2	101934	2022/03/21	2023/03/20
Cable-6m(9k~300M)	NA	EMC5D-BM-BM-6	130606	2022/03/21	2023/03/20
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 15.247 (b), 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	PCB Antenna
Antenna Gain	2400-2483.5MHz: ANT A: 6.03 dBi, ANT B: 3.31 dBi ANT C: 2.37 dBi, ANT D: 1.88 dBi

(Non-Beamforming)

For Power directional gain= 6.03 dBi
For PSD directional gain = 6.03 (dBi)
* Power and PSD directional gain refer to PAG Gain Report.

(Beamforming)

For Power directional gain= 6.03 dBi
For PSD directional gain = 6.03 (dBi)
* Power and PSD directional gain refer to PAG Gain Report.

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 C63.10-2013. The EUT was placed on a nonmetallic stand in a shielded room 0.8 meters above the ground plane. The interface cables and equipment positioning were varied within limits of reasonable applications to determine the position produced maximum conducted emissions.

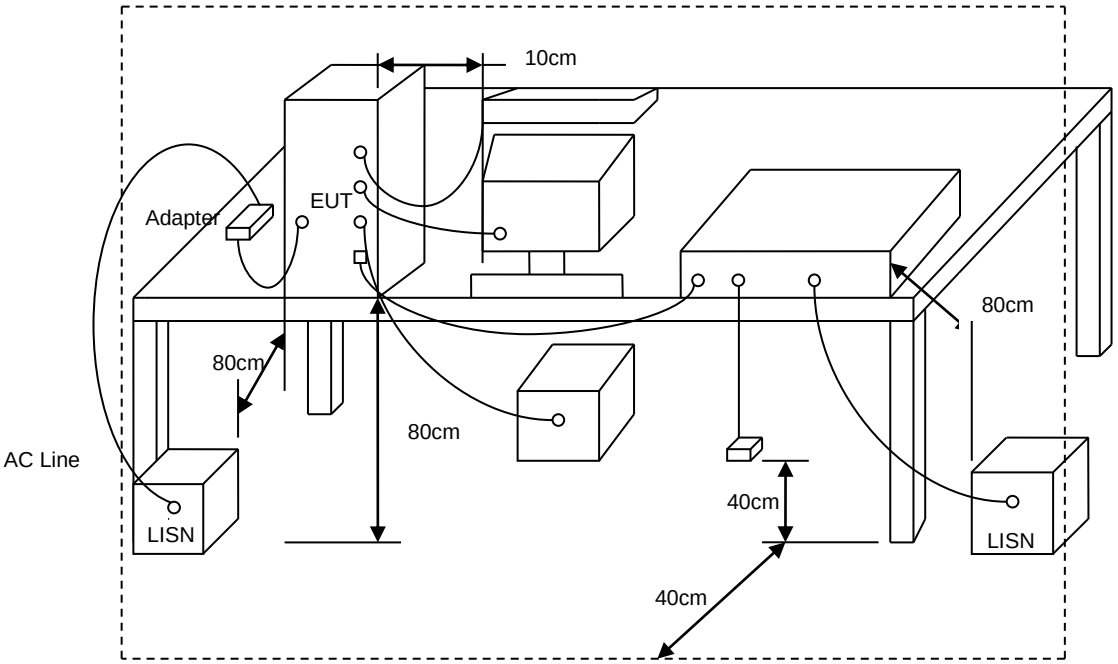
Frequency (MHz)	Quasi Peak (dB μ V)	Average (dB μ V)
0.15 – 0.5	66-56*	56-46*
0.5 – 5.0	56	46
5.0 – 30.0	60	50

*Decreases with the logarithm of the frequency.

5.2 Test Procedures

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.

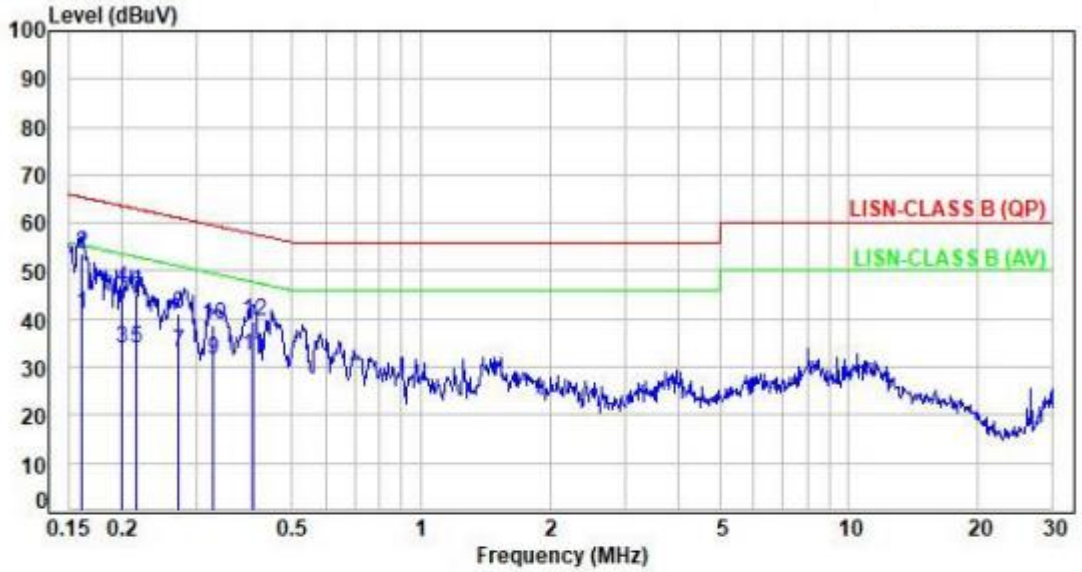
5.3 Typical Test Setup



5.4 Test Result and Data

Non BeamForming

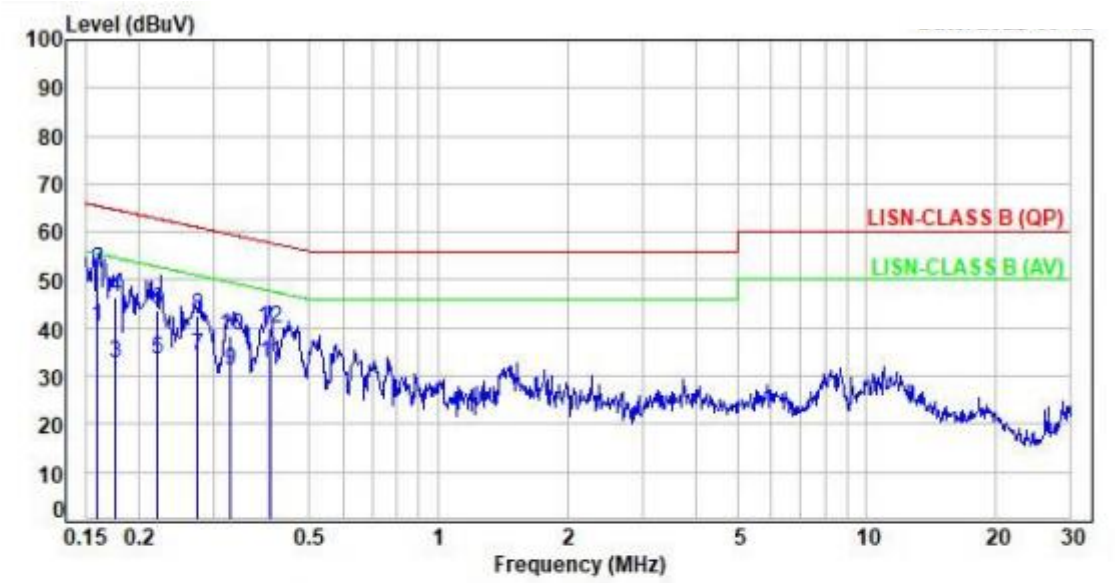
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	LINE
Test Mode	:	Mode 8		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.16	9.92	31.03	40.95	55.42	-14.47	Average	P
2	0.16	9.92	43.56	53.48	65.42	-11.94	QP	P
3	0.20	9.91	23.97	33.88	53.65	-19.77	Average	P
4	0.20	9.91	36.37	46.28	63.65	-17.37	QP	P
5	0.22	9.91	24.10	34.01	52.95	-18.94	Average	P
6	0.22	9.91	35.50	45.41	62.95	-17.54	QP	P
7	0.27	9.90	23.29	33.19	51.08	-17.89	Average	P
8	0.27	9.90	31.15	41.05	61.08	-20.03	QP	P
9	0.33	9.91	21.53	31.44	49.53	-18.09	Average	P
10	0.33	9.91	28.76	38.67	59.53	-20.86	QP	P
11	0.41	9.90	22.33	32.23	47.74	-15.51	Average	P
12	0.41	9.90	29.48	39.38	57.74	-18.36	QP	P

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

Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	NEUTRAL
Test Mode	:	Mode 8		:	

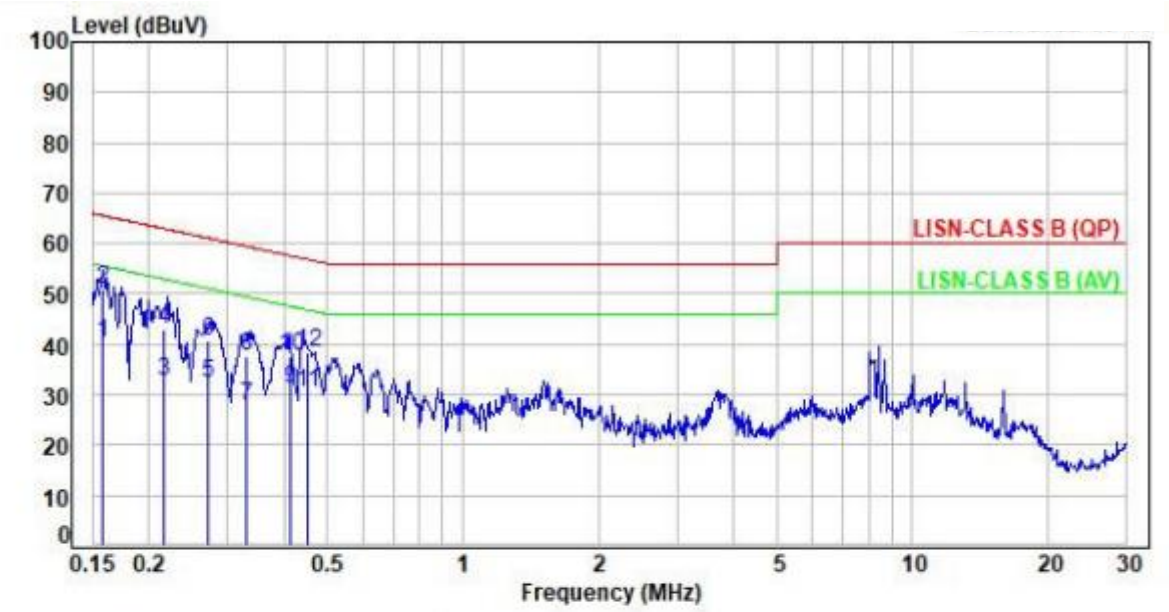


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.16	9.90	30.42	40.32	55.51	-15.19	Average	P
2	0.16	9.90	42.37	52.27	65.51	-13.24	QP	P
3	0.18	9.89	22.68	32.57	54.70	-22.13	Average	P
4	0.18	9.89	36.60	46.49	64.70	-18.21	QP	P
5	0.22	9.89	23.42	33.31	52.80	-19.49	Average	P
6	0.22	9.89	33.85	43.74	62.80	-19.06	QP	P
7	0.27	9.88	24.38	34.26	51.03	-16.77	Average	P
8	0.27	9.88	32.63	42.51	61.03	-18.52	QP	P
9	0.33	9.89	21.20	31.09	49.56	-18.47	Average	P
10	0.33	9.89	28.55	38.44	59.56	-21.12	QP	P
11	0.40	9.88	22.78	32.66	47.78	-15.12	Average	P
12	0.40	9.88	30.01	39.89	57.78	-17.89	QP	P

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

BeamForming

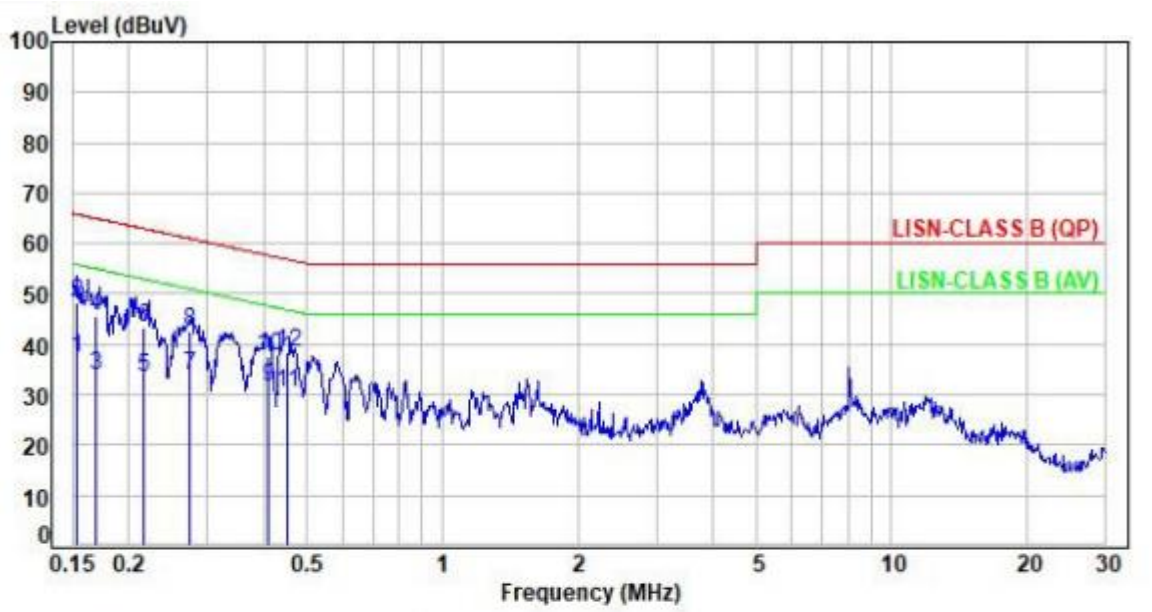
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	LINE
Test Mode	:	Mode 9		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.16	9.92	30.24	40.16	55.55	-15.39	Average	P
2	0.16	9.92	41.10	51.02	65.55	-14.53	QP	P
3	0.22	9.91	22.97	32.88	52.97	-20.09	Average	P
4	0.22	9.91	33.16	43.07	62.97	-19.90	QP	P
5	0.27	9.90	22.36	32.26	51.11	-18.85	Average	P
6	0.27	9.90	30.62	40.52	61.11	-20.59	QP	P
7	0.33	9.91	17.87	27.78	49.47	-21.69	Average	P
8	0.33	9.91	27.81	37.72	59.47	-21.75	QP	P
9	0.41	9.90	21.34	31.24	47.58	-16.34	Average	P
10	0.41	9.90	27.66	37.56	57.58	-20.02	QP	P
11	0.45	9.90	20.64	30.54	46.84	-16.30	Average	P
12	0.45	9.90	28.44	38.34	56.84	-18.50	QP	P

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

Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	NEUTRAL
Test Mode	:	Mode 9		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.15	9.90	27.52	37.42	55.84	-18.42	Average	P
2	0.15	9.90	38.28	48.18	65.84	-17.66	QP	P
3	0.17	9.90	23.85	33.75	55.04	-21.29	Average	P
4	0.17	9.90	35.72	45.62	65.04	-19.42	QP	P
5	0.22	9.89	23.71	33.60	52.99	-19.39	Average	P
6	0.22	9.89	33.36	43.25	62.99	-19.74	QP	P
7	0.27	9.88	24.15	34.03	51.02	-16.99	Average	P
8	0.27	9.88	32.59	42.47	61.02	-18.55	QP	P
9	0.41	9.88	21.67	31.55	47.63	-16.08	Average	P
10	0.41	9.88	27.63	37.51	57.63	-20.12	QP	P
11	0.45	9.88	20.62	30.50	46.85	-16.35	Average	P
12	0.45	9.88	28.44	38.32	56.85	-18.53	QP	P

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

6. Test of Radiated Spurious Emission

6.1 Test Limit

In any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. If the transmitter measurement is based on the maximum conducted output power, the attenuation required under this paragraph shall be 30dB instead of 20dB. In addition, radiated emissions which fall in section 15.205(a) the restricted bands must also comply with the radiated emission limit specified in section 15.209(a).

Frequency (MHz)	Field Strength (microvolt/meter)	Measurement Distance (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

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.

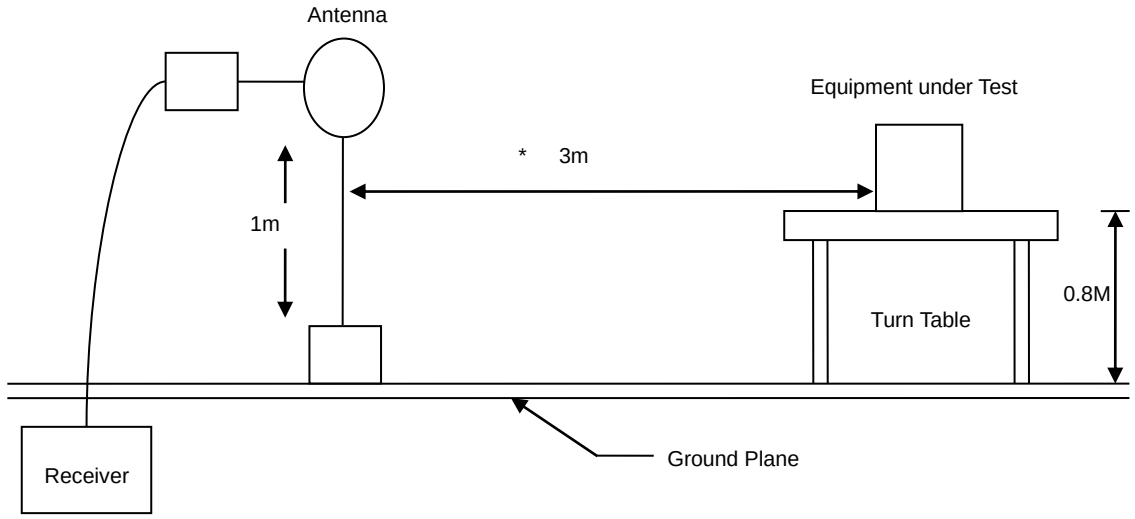
Note:

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

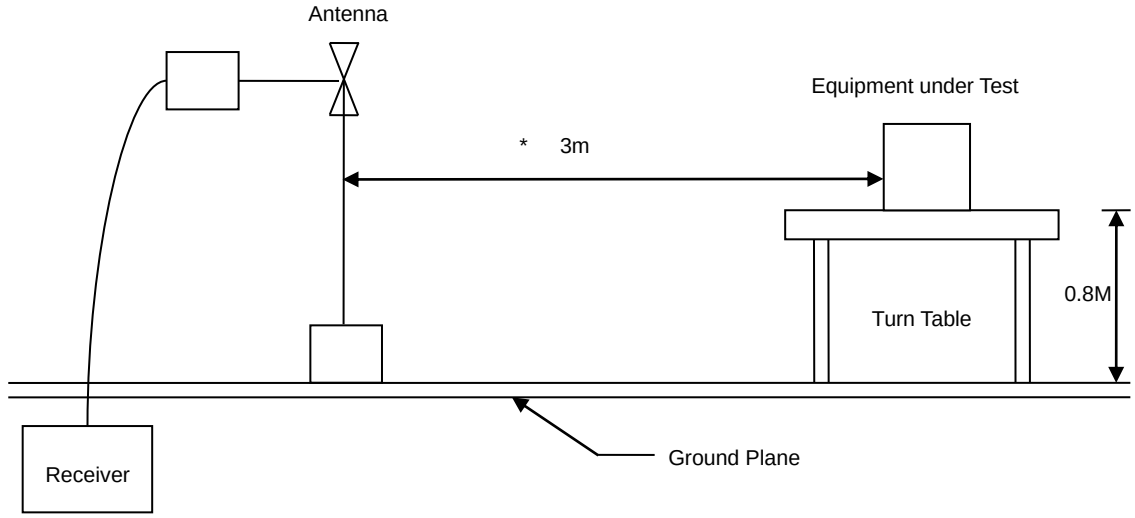
2.Due to the test software function limit the operation band setting(200dBuV/m).
There's no corresponding limitation in the actual test item.

6.3 Typical Test Setup

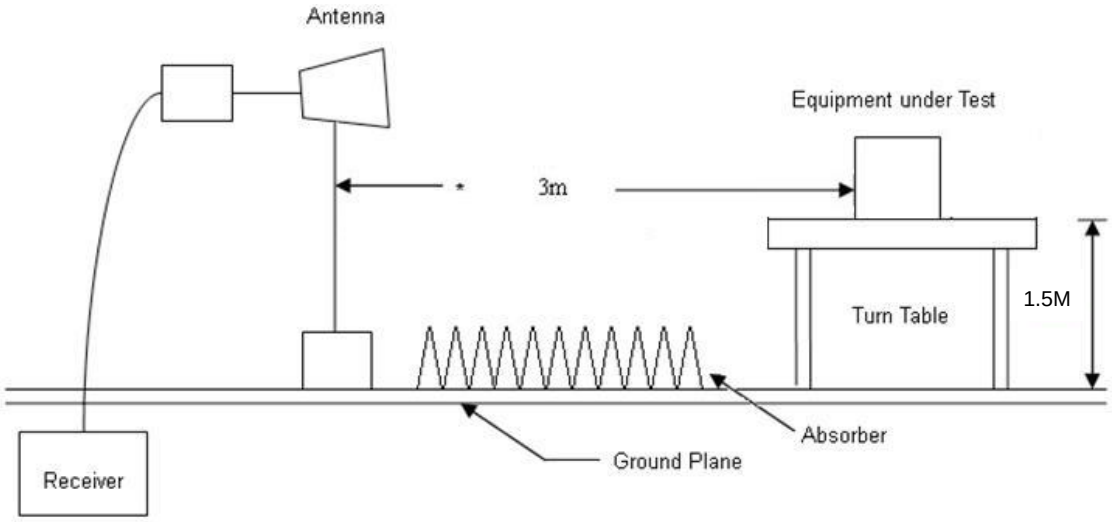
Below 30MHz test setup



30MHz- 1GHz Test Setup



Above 1GHz Test Setup



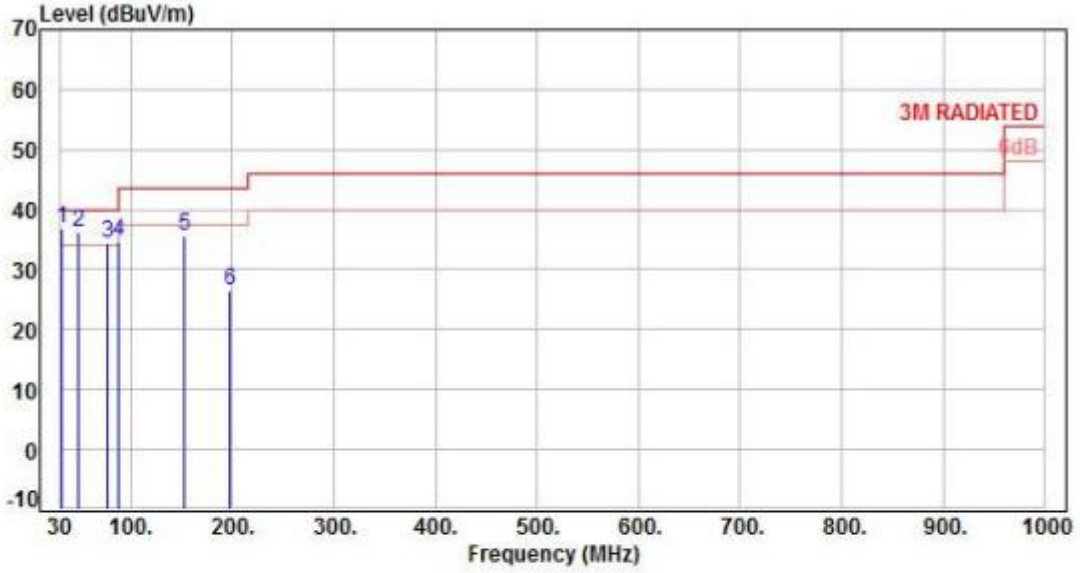
6.4 Test Result and Data (9KHz ~ 30MHz)

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

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

Non BeamForming

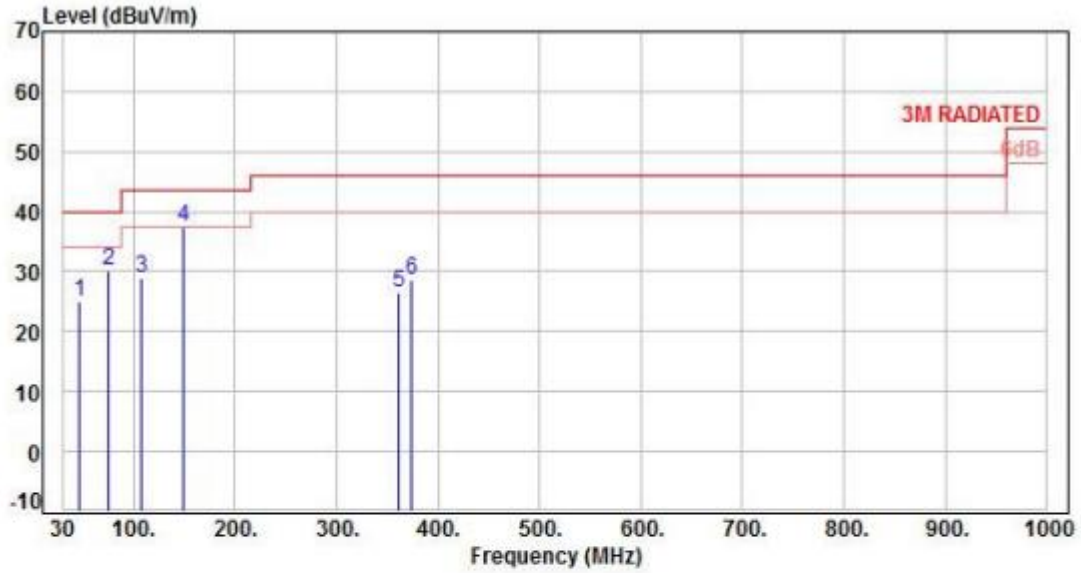
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 8		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	31.94	-11.99	48.81	36.82	40.00	-3.18	Peak	400	360	P
2	48.43	-10.84	47.21	36.37	40.00	-3.63	Peak	400	360	P
3	76.56	-14.94	49.36	34.42	40.00	-5.58	Peak	400	360	P
4	88.20	-16.78	51.40	34.62	43.50	-8.88	Peak	400	360	P
5	153.19	-11.43	47.07	35.64	43.50	-7.86	Peak	400	360	P
6	196.84	-13.12	39.54	26.42	43.50	-17.08	Peak	400	360	P

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

Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 8		:	

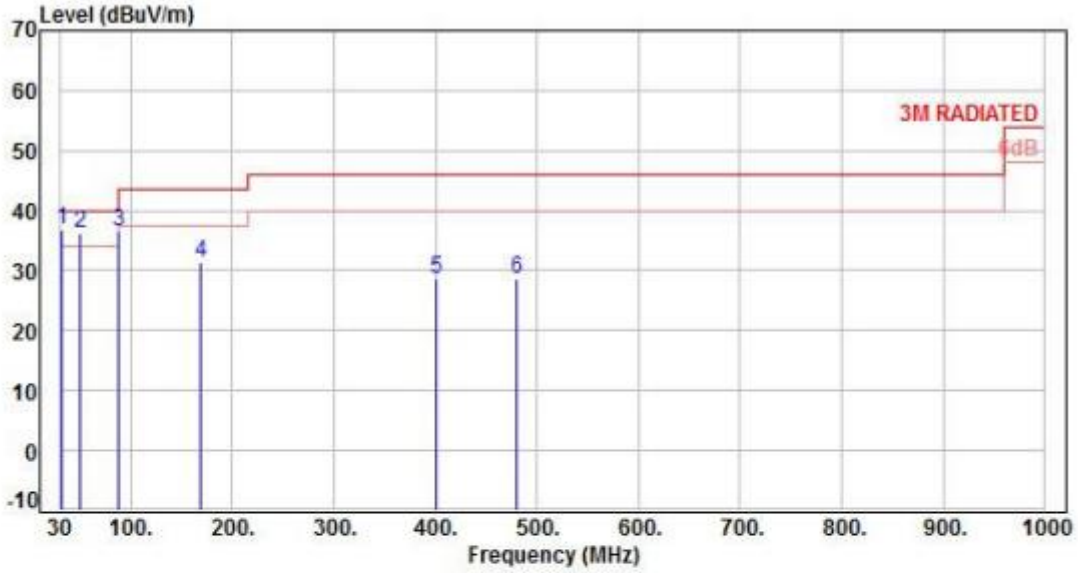


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	47.46	-10.98	36.10	25.12	40.00	-14.88	Peak	400	360	P
2	74.62	-14.42	44.54	30.12	40.00	-9.88	Peak	400	360	P
3	107.60	-14.68	43.49	28.81	43.50	-14.69	Peak	400	360	P
4	148.34	-11.49	48.83	37.34	43.50	-6.16	Peak	400	360	P
5	361.74	-8.78	35.14	26.36	46.00	-19.64	Peak	400	360	P
6	373.38	-8.30	36.86	28.56	46.00	-17.44	Peak	400	360	P

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

BeamForming

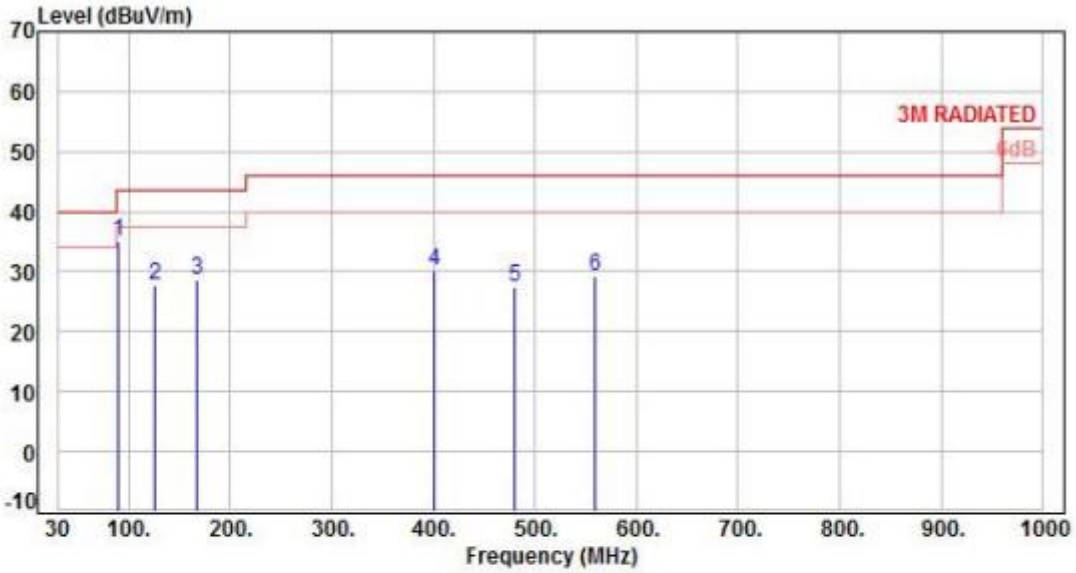
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 9		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	31.94	-10.82	47.81	36.99	40.00	-3.01	Peak	100	360	P
2	49.40	-9.62	45.94	36.32	40.00	-3.68	Peak	100	360	P
3	88.20	-15.62	52.23	36.61	43.50	-6.89	Peak	100	360	P
4	169.68	-10.82	42.24	31.42	43.50	-12.08	Peak	100	360	P
5	400.54	-6.46	35.18	28.72	46.00	-17.28	Peak	100	360	P
6	480.08	-4.50	33.14	28.64	46.00	-17.36	Peak	100	360	P

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

Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 9		:	



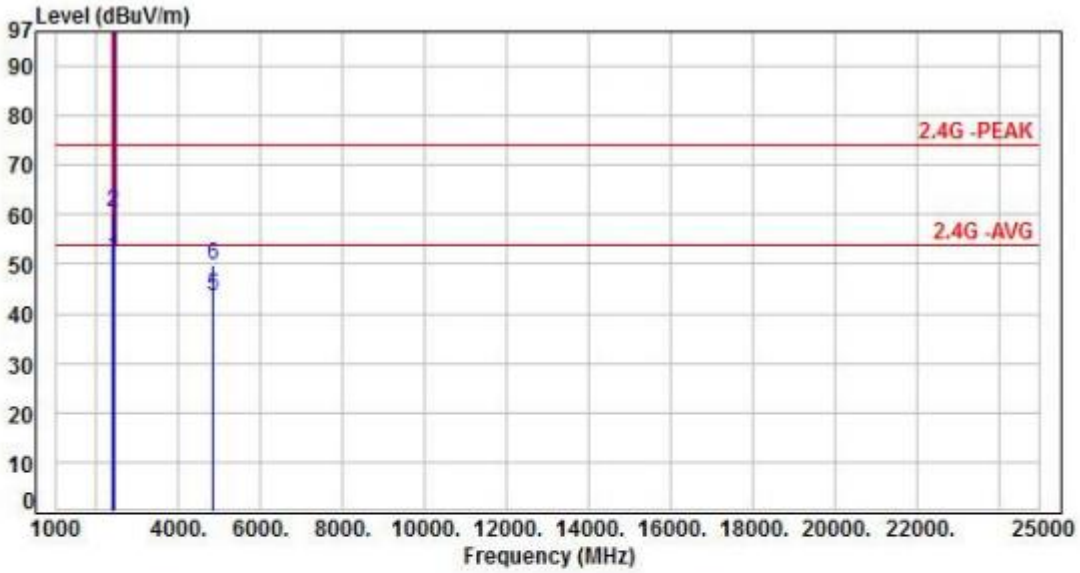
No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	90.14	-15.58	50.67	35.09	43.50	-8.41	Peak	100	0	P
2	125.06	-12.22	39.95	27.73	43.50	-15.77	Peak	100	0	P
3	167.74	-10.59	39.07	28.48	43.50	-15.02	Peak	100	0	P
4	400.54	-6.46	36.60	30.14	46.00	-15.86	Peak	100	0	P
5	480.08	-4.50	31.89	27.39	46.00	-18.61	Peak	100	0	P
6	559.62	-2.87	32.16	29.29	46.00	-16.71	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 ~ 25GHz)

Non BeamForming

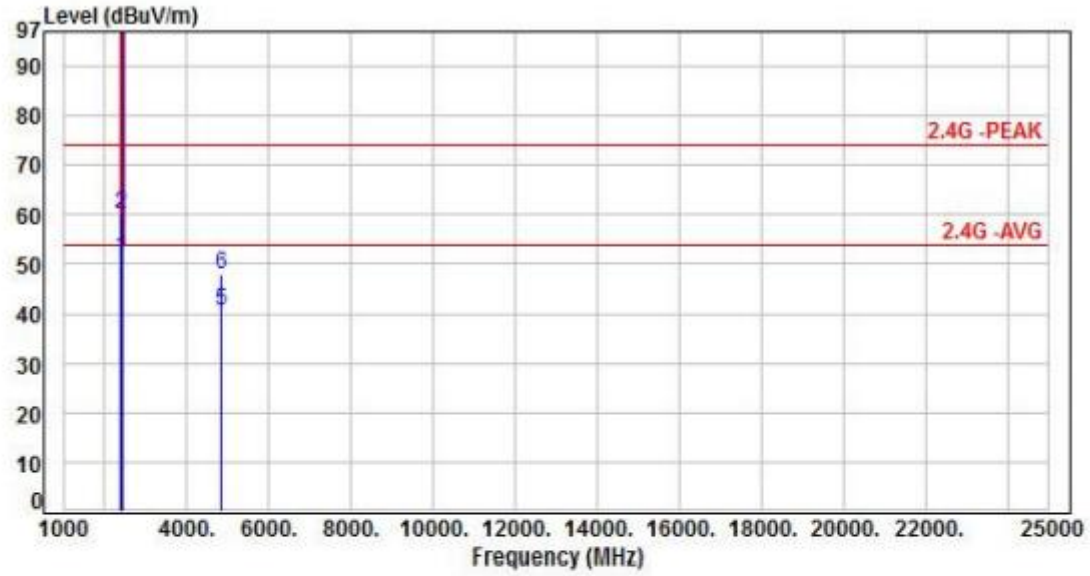
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 1, CH01		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.64	53.99	51.35	54.00	-2.65	Average	128	336	P
2	2390.00	-2.64	63.03	60.39	74.00	-13.61	Peak	128	336	P
3	2412.00	-2.60	115.99	113.39	200.00	-86.61	Average	128	336	P
4	2412.00	-2.60	118.51	115.91	200.00	-84.09	Peak	128	336	P
5	4824.00	5.03	38.37	43.40	54.00	-10.60	Average	100	26	P
6	4824.00	5.03	44.80	49.83	74.00	-24.17	Peak	100	26	P

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

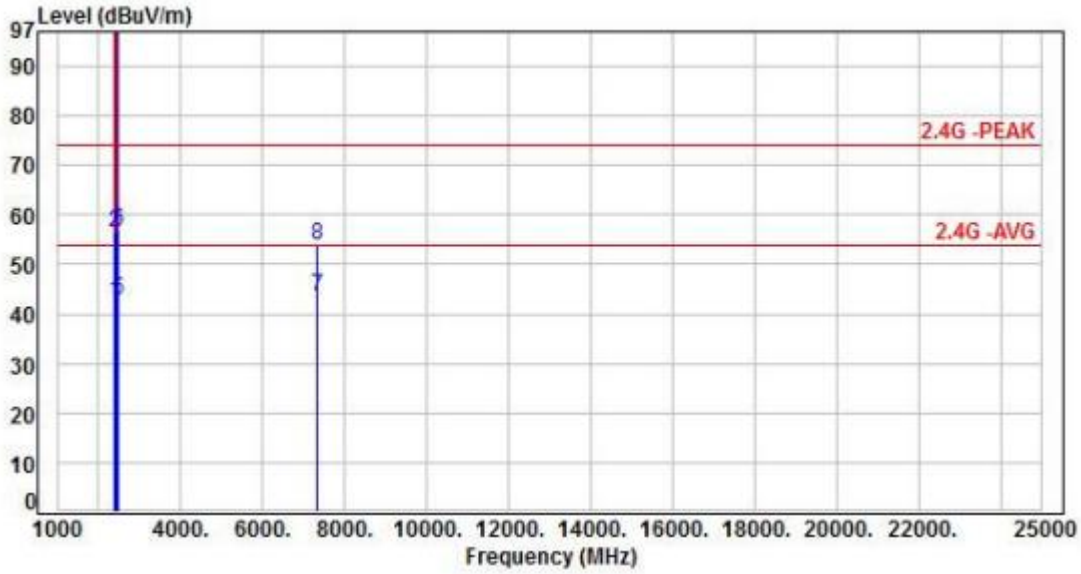
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 1, CH01		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.64	53.95	51.31	54.00	-2.69	Average	170	10	P
2	2390.00	-2.64	62.59	59.95	74.00	-14.05	Peak	170	10	P
3	2412.00	-2.60	115.13	112.53	200.00	-87.47	Average	170	10	P
4	2412.00	-2.60	118.04	115.44	200.00	-84.56	Peak	170	10	P
5	4824.00	5.03	35.57	40.60	54.00	-13.40	Average	277	74	P
6	4824.00	5.03	42.83	47.86	74.00	-26.14	Peak	277	74	P

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

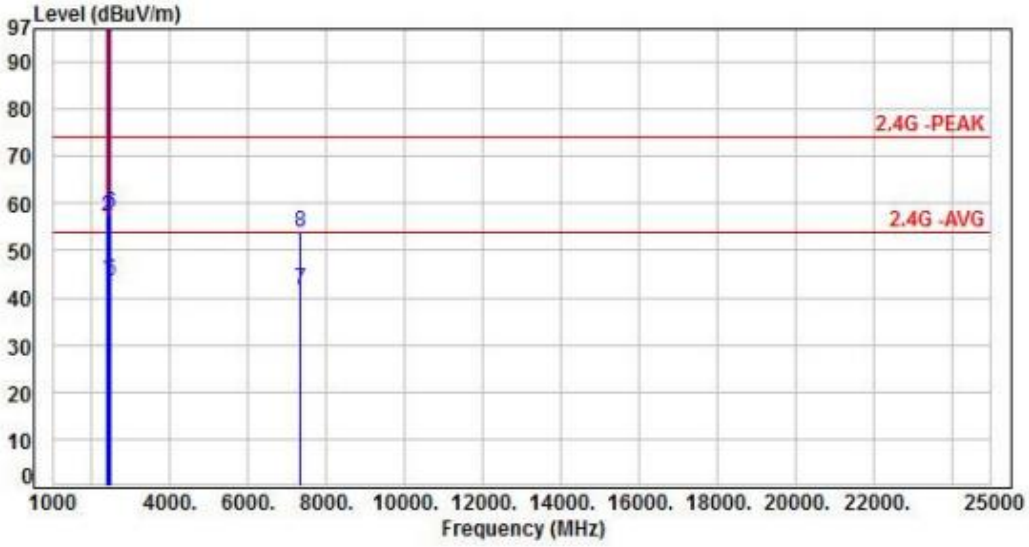
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 1, CH06		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.64	45.03	42.39	54.00	-11.61	Average	112	360	P
2	2390.00	-2.64	59.11	56.47	74.00	-17.53	Peak	112	360	P
3	2437.00	-2.57	113.72	111.15	200.00	-88.85	Average	112	360	P
4	2437.00	-2.57	115.52	112.95	200.00	-87.05	Peak	112	360	P
5	2483.50	-2.39	45.31	42.92	54.00	-11.08	Average	112	360	P
6	2483.50	-2.39	59.23	56.84	74.00	-17.16	Peak	112	360	P
7	7311.00	10.16	33.25	43.41	54.00	-10.59	Average	145	3	P
8	7311.00	10.16	43.69	53.85	74.00	-20.15	Peak	145	3	P

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

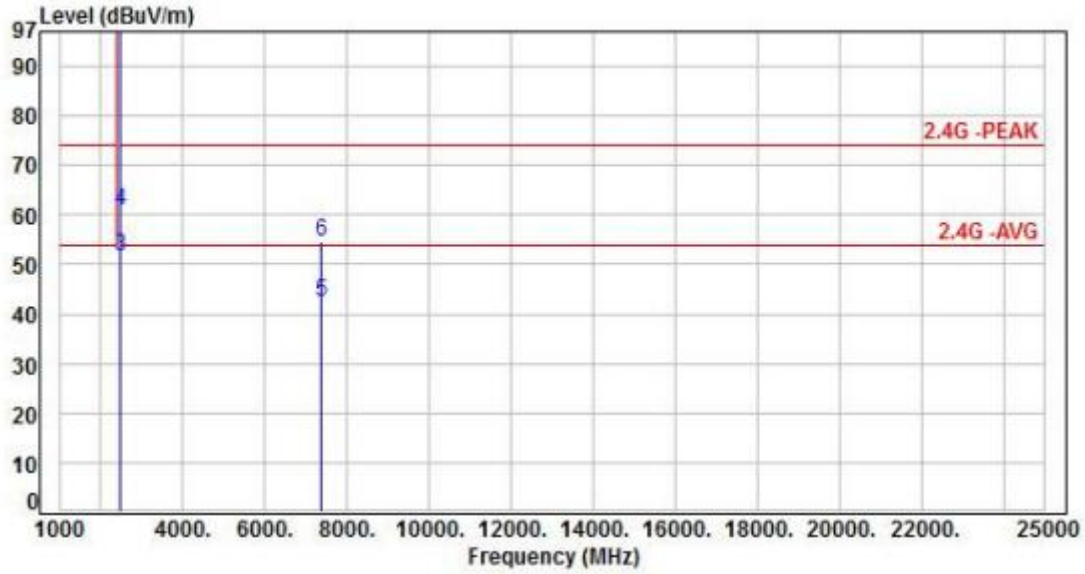
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 1, CH06		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.64	46.63	43.99	54.00	-10.01	Average	219	37	P
2	2390.00	-2.64	59.85	57.21	74.00	-16.79	Peak	219	37	P
3	2437.00	-2.57	120.04	117.47	200.00	-82.53	Average	219	37	P
4	2437.00	-2.57	122.56	119.99	200.00	-80.01	Peak	219	37	P
5	2483.50	-2.39	45.96	43.57	54.00	-10.43	Average	219	37	P
6	2483.50	-2.39	60.40	58.01	74.00	-15.99	Peak	219	37	P
7	7311.00	10.16	31.63	41.79	54.00	-12.21	Average	218	64	P
8	7311.00	10.16	43.74	53.90	74.00	-20.10	Peak	218	64	P

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

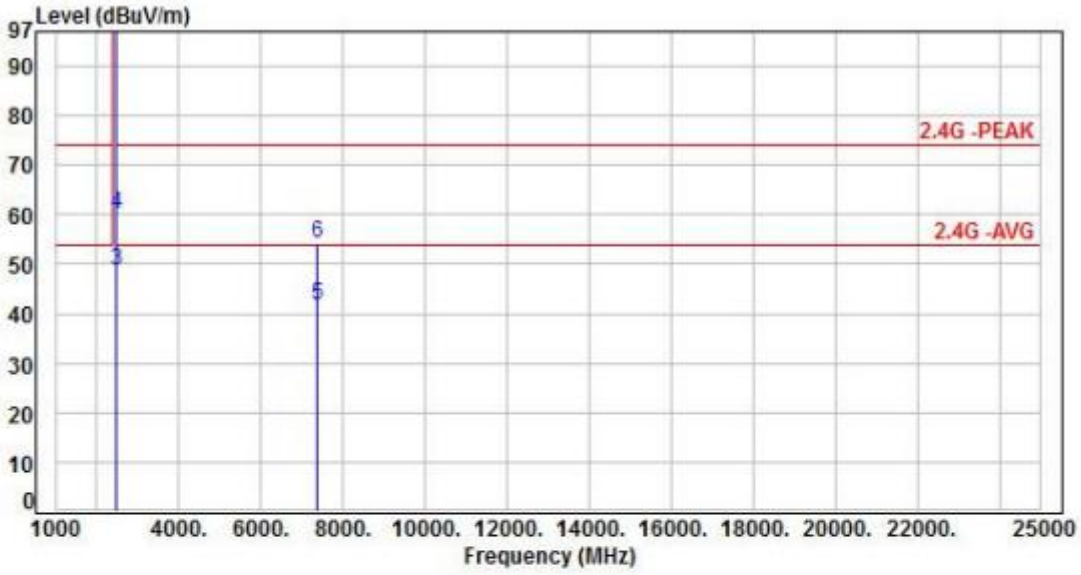
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 1, CH11		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2462.00	-2.49	116.08	113.59	200.00	-86.41	Average	150	341	P
2	2462.00	-2.49	118.48	115.99	200.00	-84.01	Peak	150	341	P
3	2483.50	-2.39	53.93	51.54	54.00	-2.46	Average	150	341	P
4	2483.50	-2.39	63.27	60.88	74.00	-13.12	Peak	150	341	P
5	7386.00	10.18	32.23	42.41	54.00	-11.59	Average	120	5	P
6	7386.00	10.18	44.56	54.74	74.00	-19.26	Peak	120	5	P

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

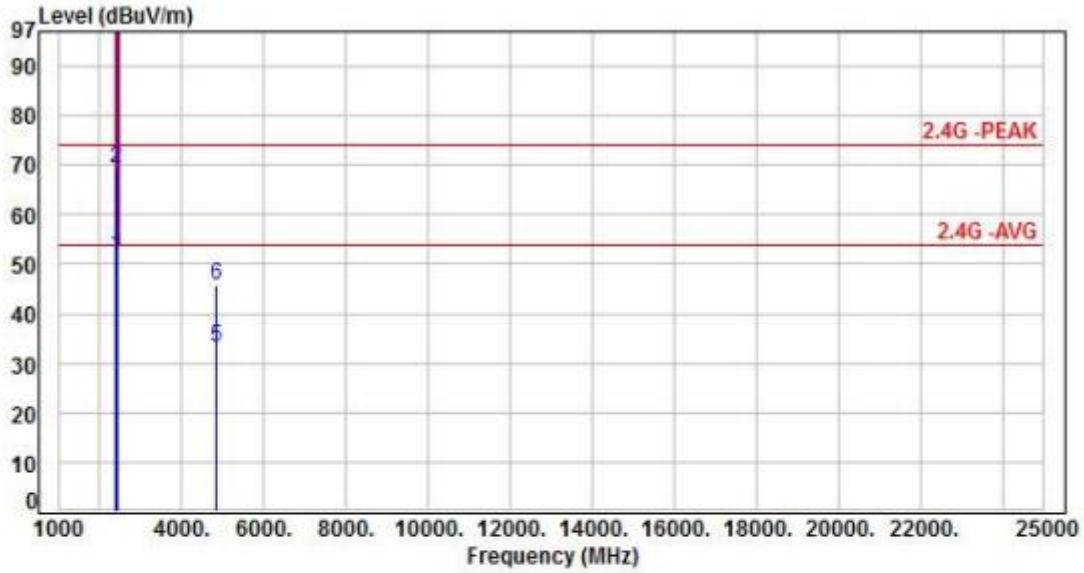
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 1, CH11		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2462.00	-2.49	115.85	113.36	200.00	-86.64	Average	135	8	P
2	2462.00	-2.49	118.37	115.88	200.00	-84.12	Peak	135	8	P
3	2483.50	-2.39	51.06	48.67	54.00	-5.33	Average	135	8	P
4	2483.50	-2.39	62.38	59.99	74.00	-14.01	Peak	135	8	P
5	7386.00	10.18	31.60	41.78	54.00	-12.22	Average	219	63	P
6	7386.00	10.18	44.18	54.36	74.00	-19.64	Peak	219	63	P

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

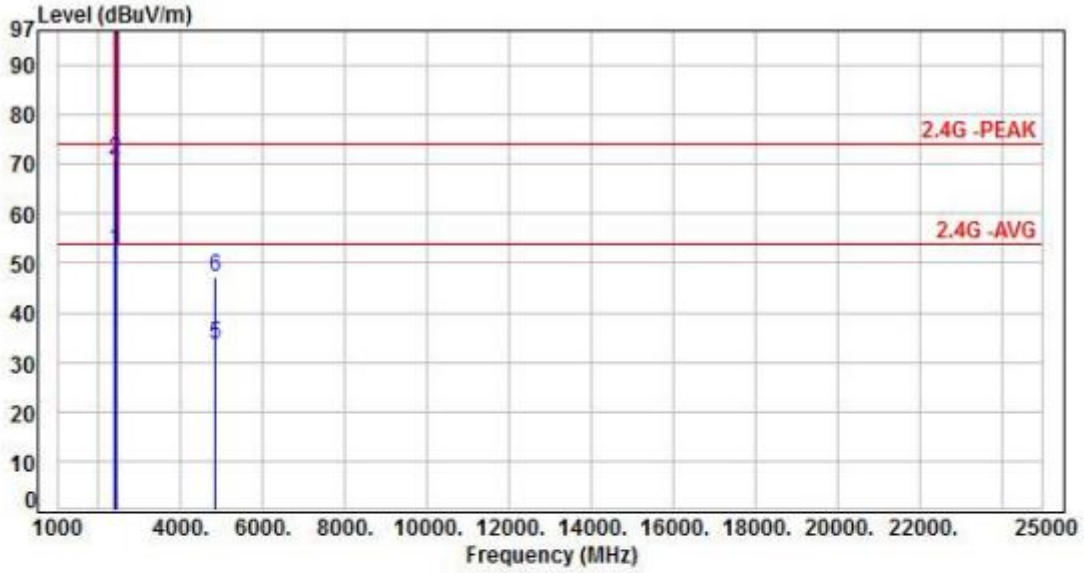
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 2, CH01		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.64	54.45	51.81	54.00	-2.19	Average	400	347	P
2	2390.00	-2.64	71.88	69.24	74.00	-4.76	Peak	400	347	P
3	2412.00	-2.60	109.47	106.87	200.00	-93.13	Average	400	347	P
4	2412.00	-2.60	119.66	117.06	200.00	-82.94	Peak	400	347	P
5	4824.00	5.03	27.98	33.01	54.00	-20.99	Average	100	30	P
6	4824.00	5.03	40.82	45.85	74.00	-28.15	Peak	100	30	P

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

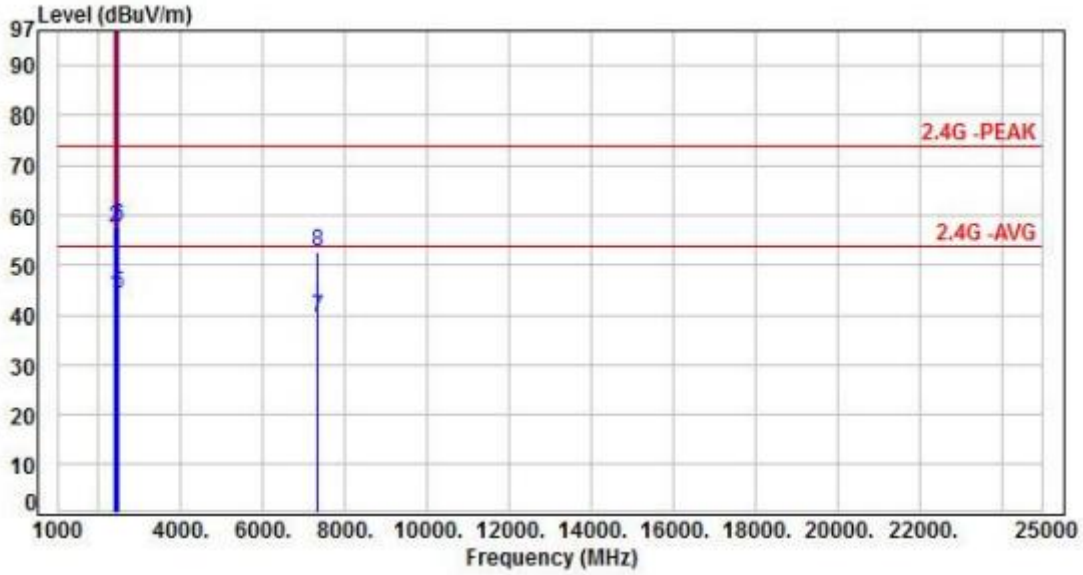
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 2, CH01		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.64	55.38	52.74	54.00	-1.26	Average	100	39	P
2	2390.00	-2.64	73.53	70.89	74.00	-3.11	Peak	100	39	P
3	2412.00	-2.60	109.99	107.39	200.00	-92.61	Average	100	39	P
4	2412.00	-2.60	120.12	117.52	200.00	-82.48	Peak	100	39	P
5	4824.00	5.03	28.60	33.63	54.00	-20.37	Average	261	2	P
6	4824.00	5.03	42.00	47.03	74.00	-26.97	Peak	261	2	P

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

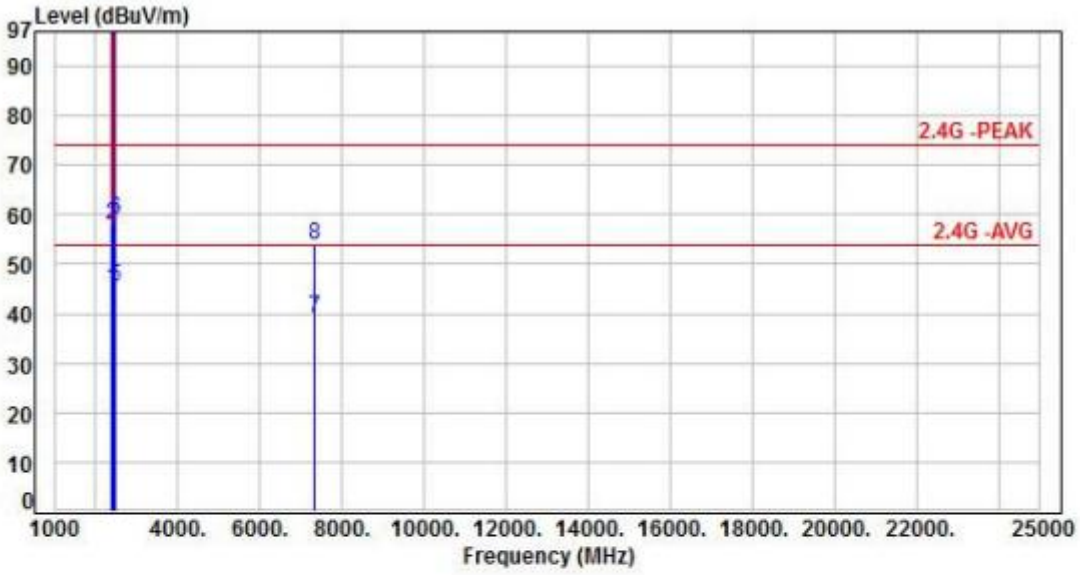
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 2, CH06		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.64	46.68	44.04	54.00	-9.96	Average	100	340	P
2	2390.00	-2.64	60.25	57.61	74.00	-16.39	Peak	100	340	P
3	2437.00	-2.57	108.40	105.83	200.00	-94.17	Average	100	340	P
4	2437.00	-2.57	118.10	115.53	200.00	-84.47	Peak	100	340	P
5	2483.50	-2.39	46.79	44.40	54.00	-9.60	Average	100	340	P
6	2483.50	-2.39	60.46	58.07	74.00	-15.93	Peak	100	340	P
7	7311.00	10.16	29.16	39.32	54.00	-14.68	Average	100	23	P
8	7311.00	10.16	42.41	52.57	74.00	-21.43	Peak	100	23	P

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

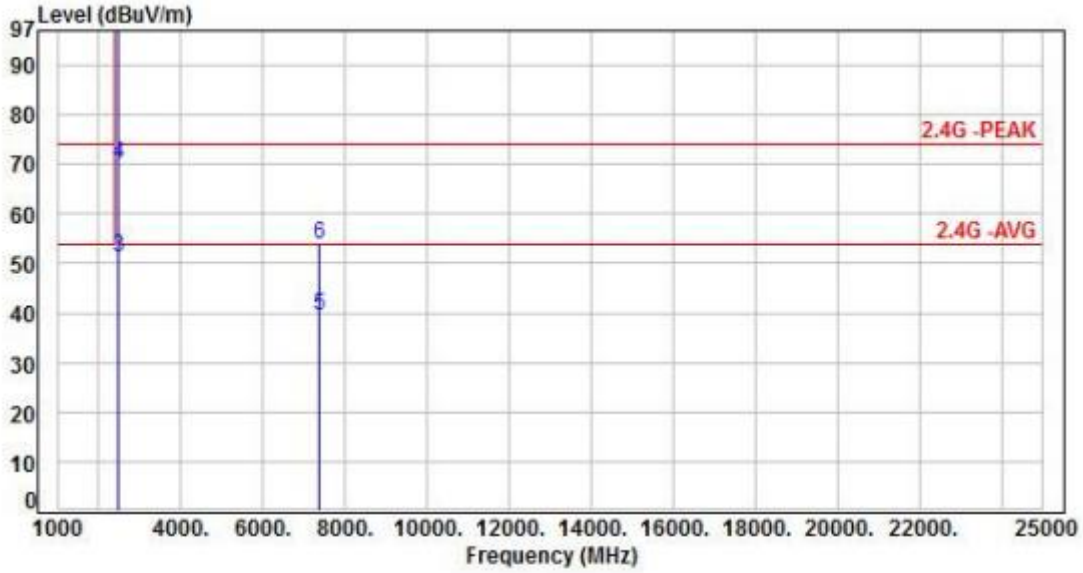
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 2, CH06		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.64	47.74	45.10	54.00	-8.90	Average	112	26	P
2	2390.00	-2.64	60.43	57.79	74.00	-16.21	Peak	112	26	P
3	2437.00	-2.57	111.08	108.51	200.00	-91.49	Average	112	26	P
4	2437.00	-2.57	121.81	119.24	200.00	-80.76	Peak	112	26	P
5	2483.50	-2.39	47.58	45.19	54.00	-8.81	Average	112	26	P
6	2483.50	-2.39	61.24	58.85	74.00	-15.15	Peak	112	26	P
7	7311.00	10.16	29.10	39.26	54.00	-14.74	Average	100	67	P
8	7311.00	10.16	43.54	53.70	74.00	-20.30	Peak	100	67	P

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

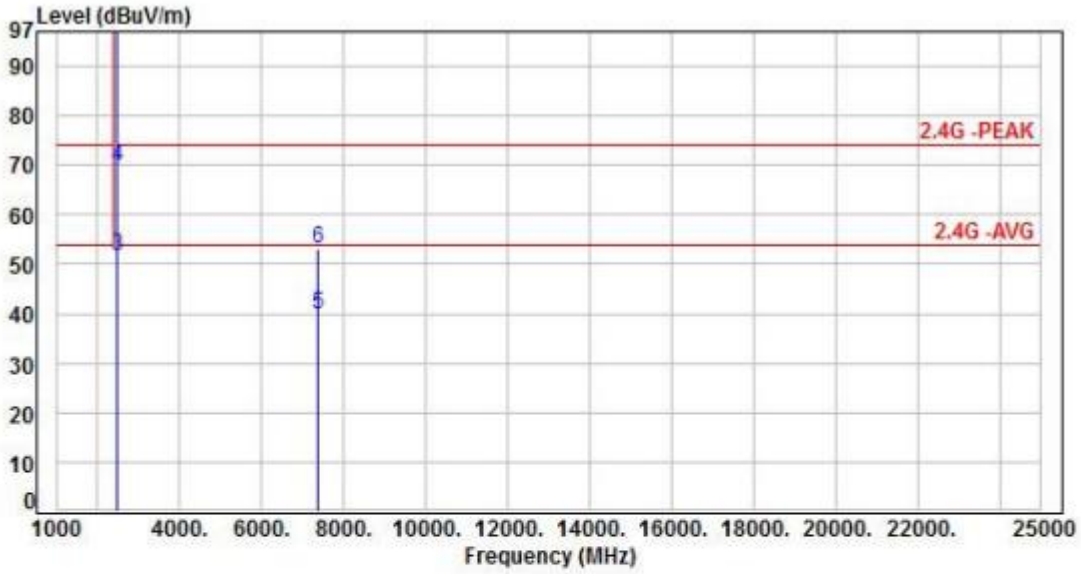
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 2, CH11		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2462.00	-2.49	108.40	105.91	200.00	-94.09	Average	347	360	P
2	2462.00	-2.49	117.99	115.50	200.00	-84.50	Peak	347	360	P
3	2483.50	-2.39	53.65	51.26	54.00	-2.74	Average	347	360	P
4	2483.50	-2.39	72.47	70.08	74.00	-3.92	Peak	347	360	P
5	7386.00	10.18	29.47	39.65	54.00	-14.35	Average	100	10	P
6	7386.00	10.18	43.75	53.93	74.00	-20.07	Peak	100	10	P

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

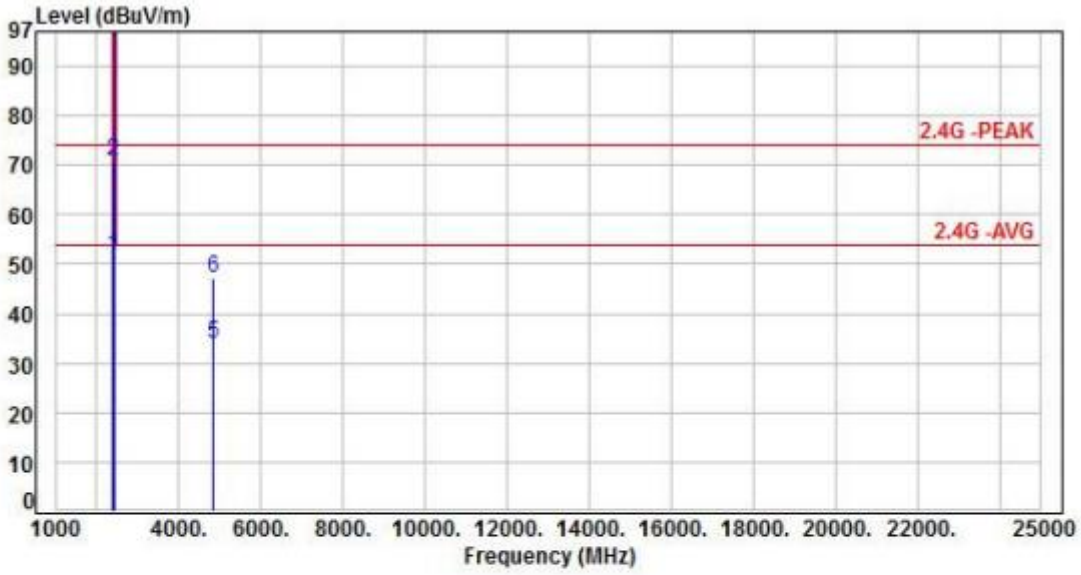
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 2, CH11		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2462.00	-2.49	111.68	109.19	200.00	-90.81	Average	162	26	P
2	2462.00	-2.49	122.32	119.83	200.00	-80.17	Peak	162	26	P
3	2483.50	-2.39	53.97	51.58	54.00	-2.42	Average	162	26	P
4	2483.50	-2.39	72.00	69.61	74.00	-4.39	Peak	162	26	P
5	7386.00	10.18	29.67	39.85	54.00	-14.15	Average	255	53	P
6	7386.00	10.18	43.04	53.22	74.00	-20.78	Peak	255	53	P

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

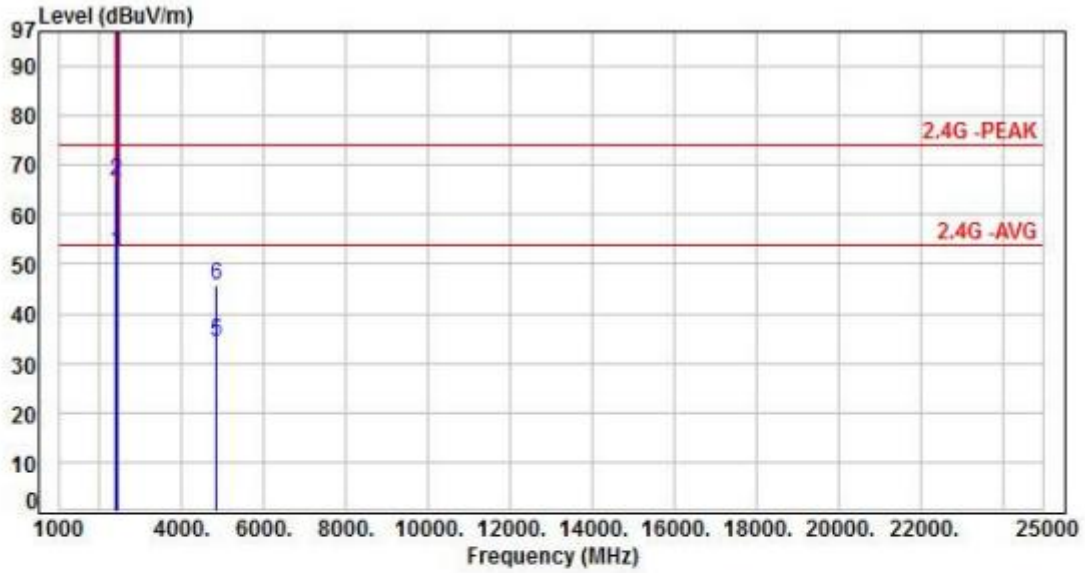
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 3, CH01		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.64	54.14	51.50	54.00	-2.50	Average	113	338	P
2	2390.00	-2.64	73.53	70.89	74.00	-3.11	Peak	113	338	P
3	2412.00	-2.60	104.74	102.14	200.00	-97.86	Average	113	338	P
4	2412.00	-2.60	116.36	113.76	200.00	-86.24	Peak	113	338	P
5	4824.00	5.03	29.02	34.05	54.00	-19.95	Average	100	26	P
6	4824.00	5.03	42.09	47.12	74.00	-26.88	Peak	100	26	P

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

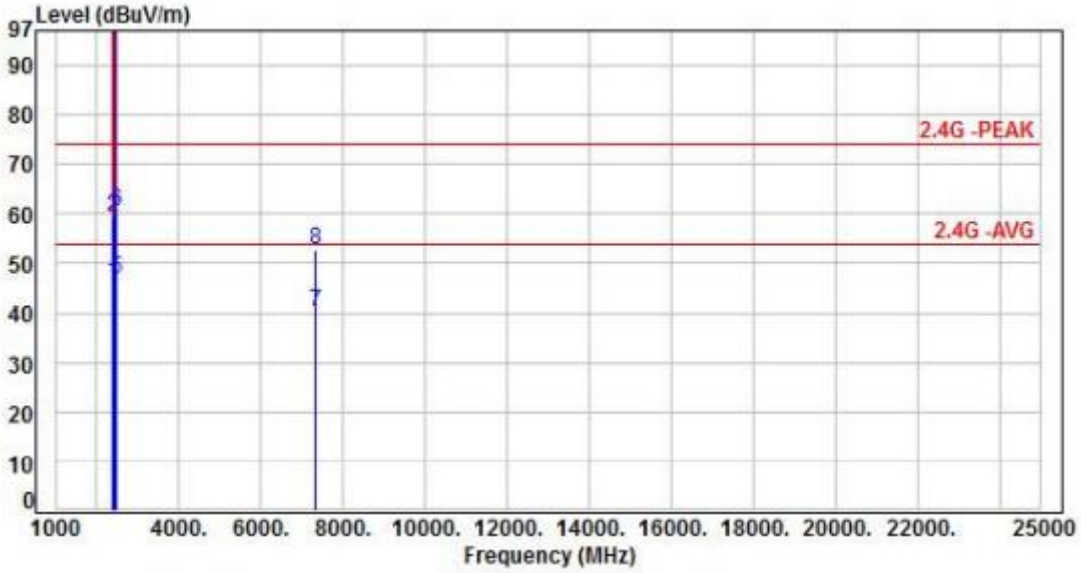
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 3, CH01		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.64	55.13	52.49	54.00	-1.51	Average	253	32	P
2	2390.00	-2.64	69.50	66.86	74.00	-7.14	Peak	253	32	P
3	2412.00	-2.60	106.59	103.99	200.00	-96.01	Average	253	32	P
4	2412.00	-2.60	117.65	115.05	200.00	-84.95	Peak	253	32	P
5	4824.00	5.03	29.25	34.28	54.00	-19.72	Average	100	129	P
6	4824.00	5.03	40.83	45.86	74.00	-28.14	Peak	100	129	P

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

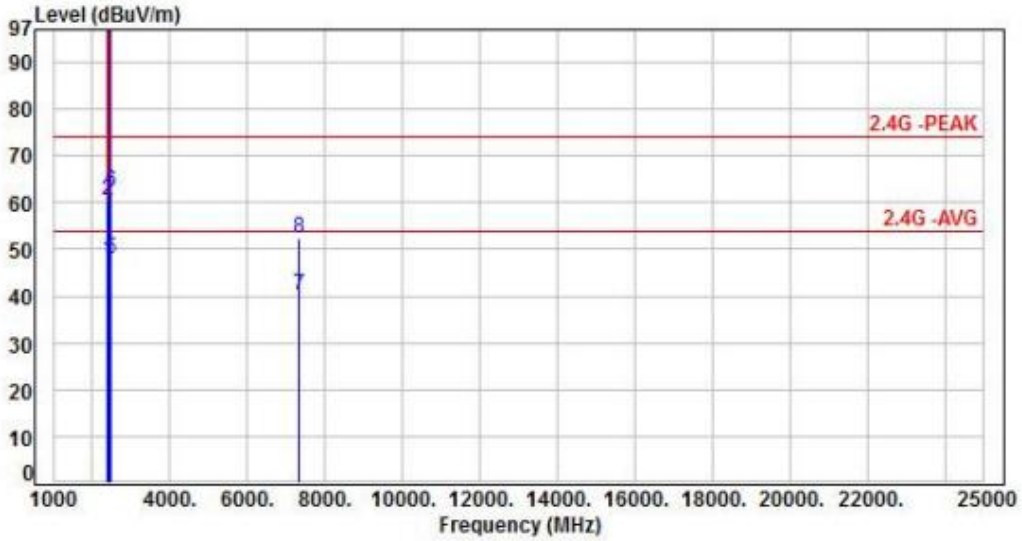
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 3, CH06		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.64	48.70	46.06	54.00	-7.94	Average	100	342	P
2	2390.00	-2.64	62.13	59.49	74.00	-14.51	Peak	100	342	P
3	2437.00	-2.57	108.60	106.03	200.00	-93.97	Average	100	342	P
4	2437.00	-2.57	119.27	116.70	200.00	-83.30	Peak	100	342	P
5	2483.50	-2.39	49.16	46.77	54.00	-7.23	Average	100	342	P
6	2483.50	-2.39	62.73	60.34	74.00	-13.66	Peak	100	342	P
7	7311.00	10.16	29.89	40.05	54.00	-13.95	Average	100	27	P
8	7311.00	10.16	42.60	52.76	74.00	-21.24	Peak	100	27	P

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

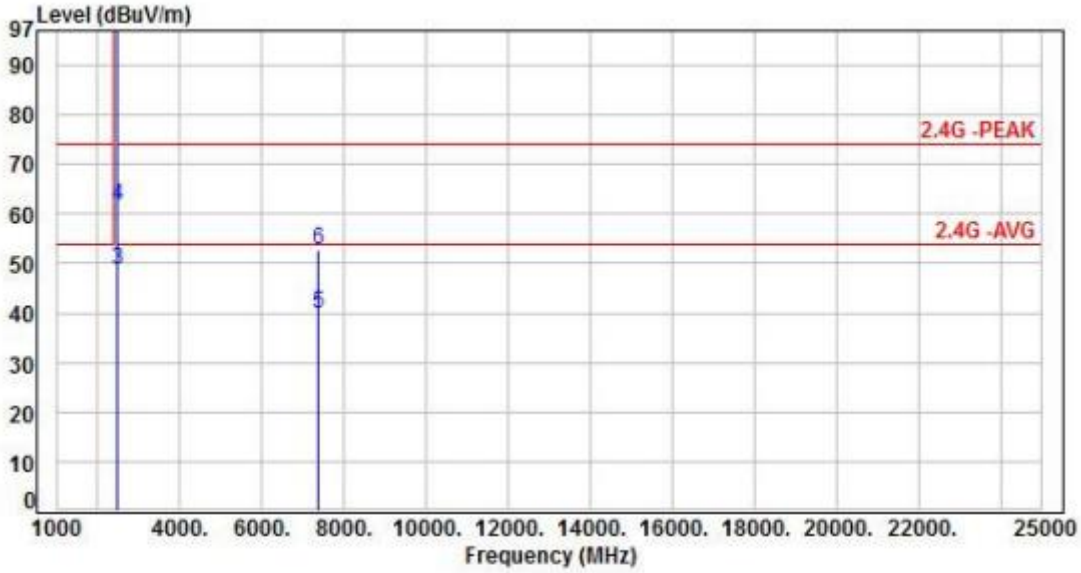
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 3, CH06		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.64	50.16	47.52	54.00	-6.48	Average	146	30	P
2	2390.00	-2.64	63.18	60.54	74.00	-13.46	Peak	146	30	P
3	2437.00	-2.57	111.21	108.64	200.00	-91.36	Average	146	30	P
4	2437.00	-2.57	122.08	119.51	200.00	-80.49	Peak	146	30	P
5	2483.50	-2.39	50.46	48.07	54.00	-5.93	Average	146	30	P
6	2483.50	-2.39	64.67	62.28	74.00	-11.72	Peak	146	30	P
7	7311.00	10.16	30.20	40.36	54.00	-13.64	Average	100	334	P
8	7311.00	10.16	42.26	52.42	74.00	-21.58	Peak	100	334	P

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

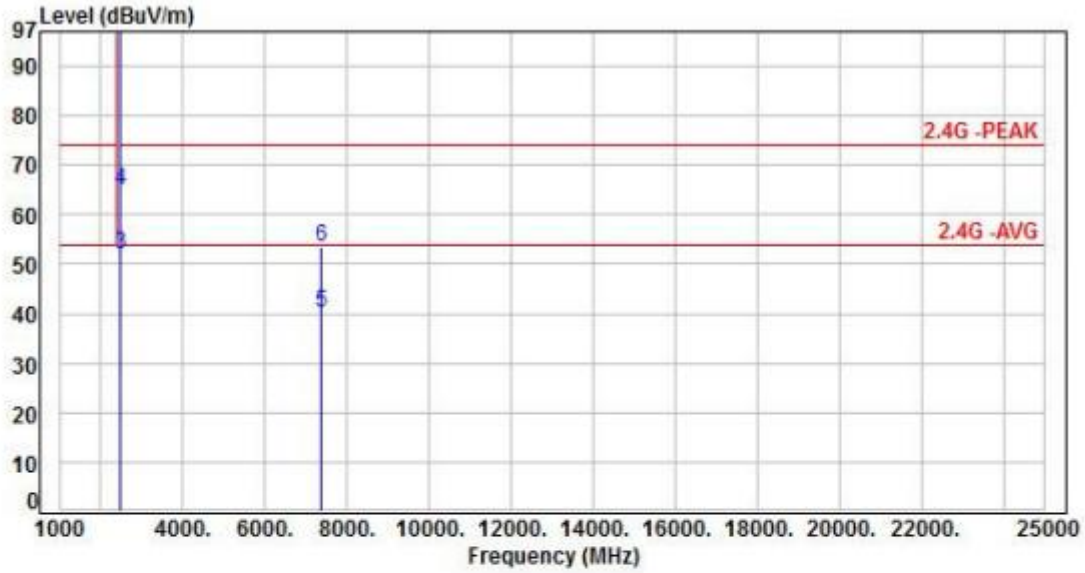
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 3, CH11		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2462.00	-2.49	104.05	101.56	200.00	-98.44	Average	110	348	P
2	2462.00	-2.49	115.81	113.32	200.00	-86.68	Peak	110	348	P
3	2483.50	-2.39	50.93	48.54	54.00	-5.46	Average	110	348	P
4	2483.50	-2.39	63.93	61.54	74.00	-12.46	Peak	110	348	P
5	7386.00	10.18	29.78	39.96	54.00	-14.04	Average	100	136	P
6	7386.00	10.18	42.51	52.69	74.00	-21.31	Peak	100	136	P

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

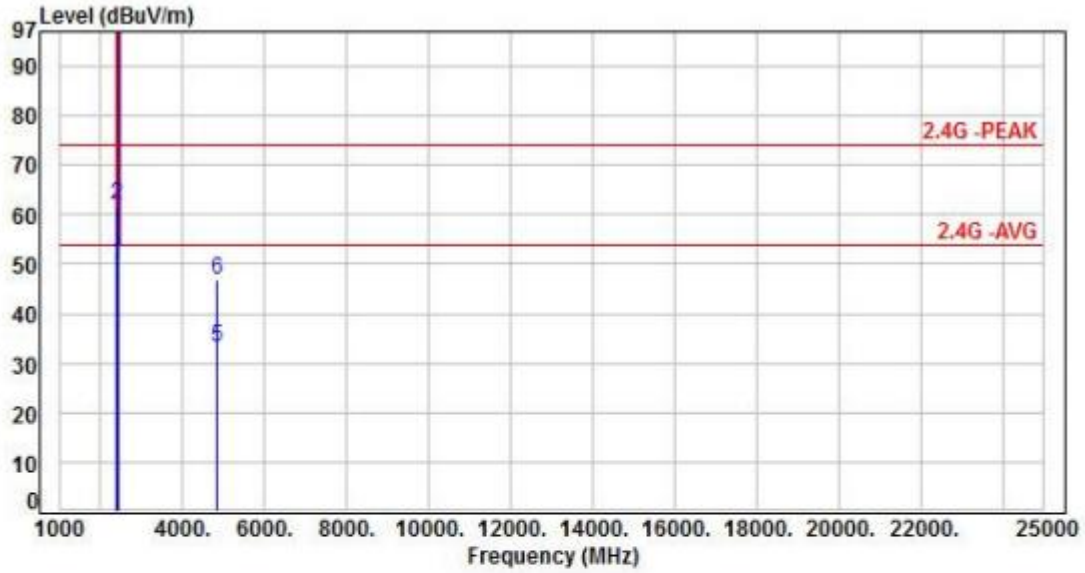
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 3, CH11		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2462.00	-2.49	107.55	105.06	200.00	-94.94	Average	148	43	P
2	2462.00	-2.49	119.29	116.80	200.00	-83.20	Peak	148	43	P
3	2483.50	-2.39	54.40	52.01	54.00	-1.99	Average	148	43	P
4	2483.50	-2.39	67.47	65.08	74.00	-8.92	Peak	148	43	P
5	7386.00	10.18	30.17	40.35	54.00	-13.65	Average	100	255	P
6	7386.00	10.18	43.20	53.38	74.00	-20.62	Peak	100	255	P

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

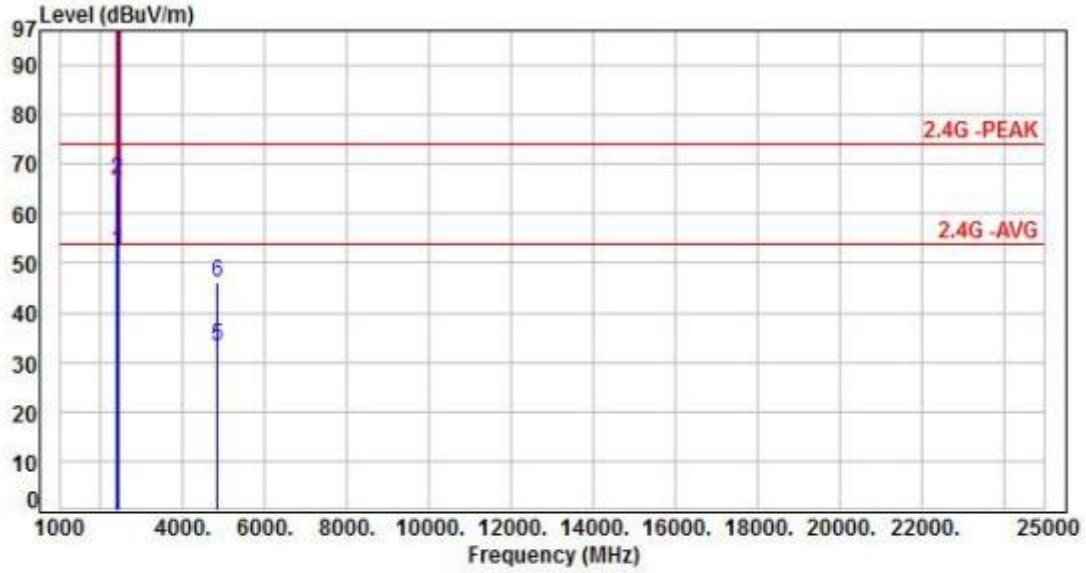
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 4, CH03		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.64	52.83	50.19	54.00	-3.81	Average	100	345	P
2	2390.00	-2.64	64.48	61.84	74.00	-12.16	Peak	100	345	P
3	2422.00	-2.59	99.62	97.03	200.00	-102.97	Average	100	345	P
4	2422.00	-2.59	113.46	110.87	200.00	-89.13	Peak	100	345	P
5	4844.00	5.09	28.22	33.31	54.00	-20.69	Average	100	67	P
6	4844.00	5.09	41.60	46.69	74.00	-27.31	Peak	100	67	P

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

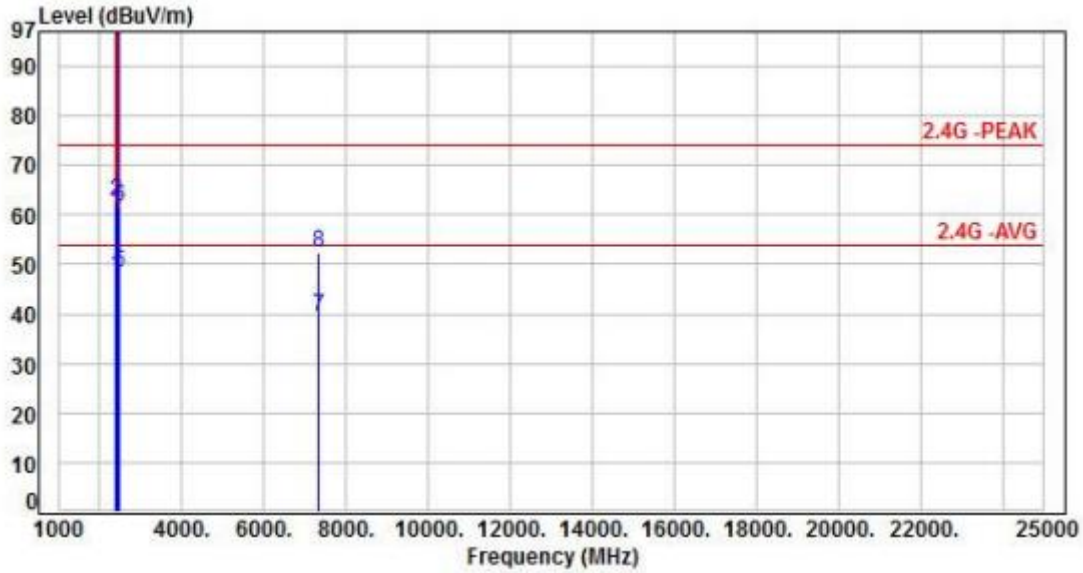
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 4, CH03		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.64	55.12	52.48	54.00	-1.52	Average	245	30	P
2	2390.00	-2.64	69.37	66.73	74.00	-7.27	Peak	245	30	P
3	2422.00	-2.59	102.13	99.54	200.00	-100.46	Average	245	30	P
4	2422.00	-2.59	116.36	113.77	200.00	-86.23	Peak	245	30	P
5	4844.00	5.09	28.26	33.35	54.00	-20.65	Average	100	229	P
6	4844.00	5.09	41.07	46.16	74.00	-27.84	Peak	100	229	P

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

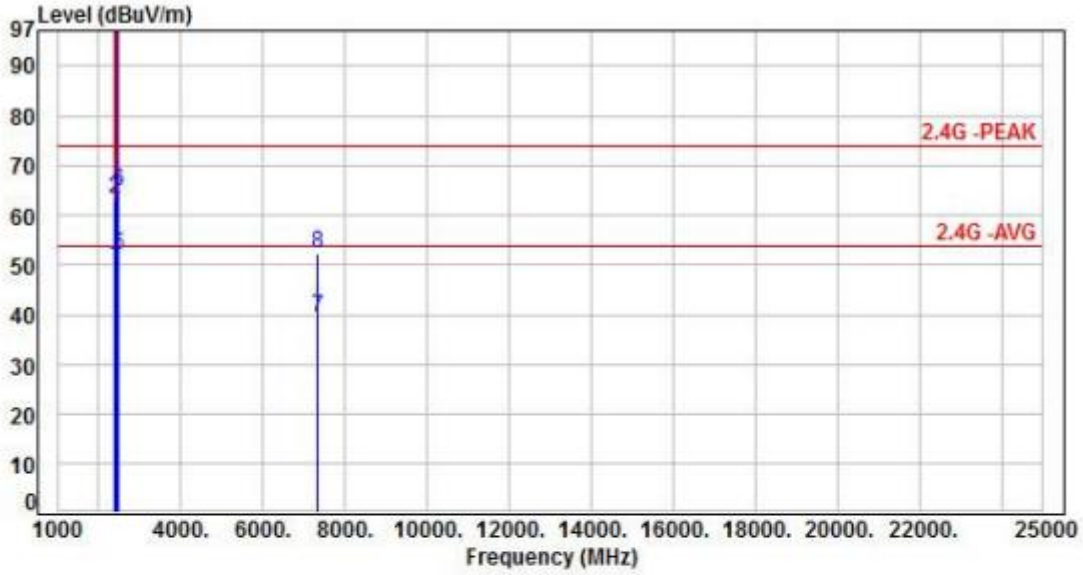
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 4, CH06		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.64	50.26	47.62	54.00	-6.38	Average	100	348	P
2	2390.00	-2.64	65.49	62.85	74.00	-11.15	Peak	100	348	P
3	2437.00	-2.57	101.06	98.49	200.00	-101.51	Average	100	348	P
4	2437.00	-2.57	114.65	112.08	200.00	-87.92	Peak	100	348	P
5	2483.50	-2.39	50.71	48.32	54.00	-5.68	Average	100	348	P
6	2483.50	-2.39	63.98	61.59	74.00	-12.41	Peak	100	348	P
7	7311.00	10.16	29.35	39.51	54.00	-14.49	Average	100	54	P
8	7311.00	10.16	42.11	52.27	74.00	-21.73	Peak	100	54	P

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

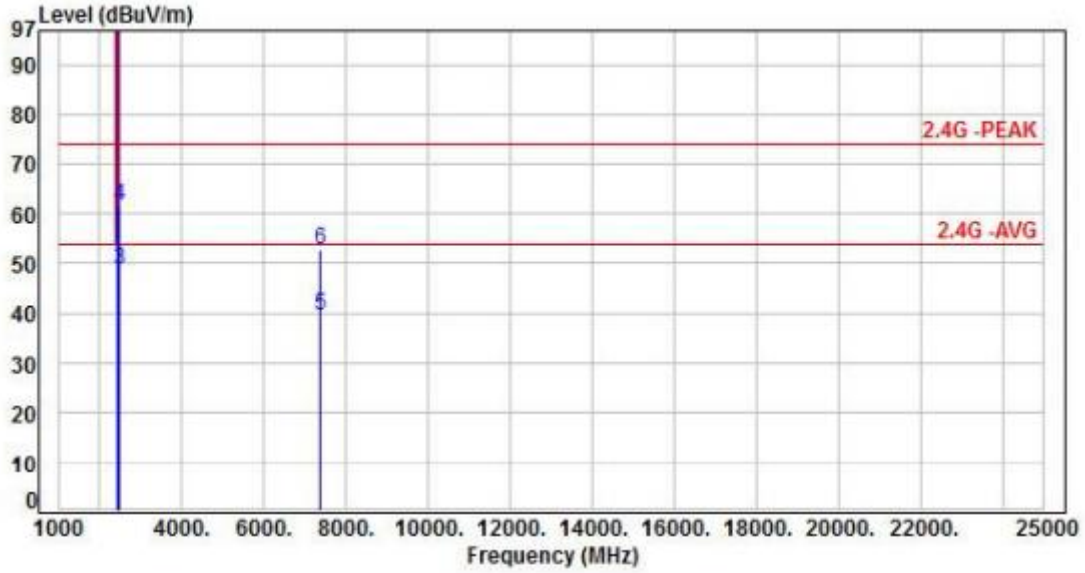
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 4, CH06		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.64	52.51	49.87	54.00	-4.13	Average	247	37	P
2	2390.00	-2.64	66.26	63.62	74.00	-10.38	Peak	247	37	P
3	2437.00	-2.57	104.50	101.93	200.00	-98.07	Average	247	37	P
4	2437.00	-2.57	118.49	115.92	200.00	-84.08	Peak	247	37	P
5	2483.50	-2.39	54.40	52.01	54.00	-1.99	Average	247	37	P
6	2483.50	-2.39	67.25	64.86	74.00	-9.14	Peak	247	37	P
7	7311.00	10.16	29.34	39.50	54.00	-14.50	Average	100	232	P
8	7311.00	10.16	42.09	52.25	74.00	-21.75	Peak	100	232	P

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

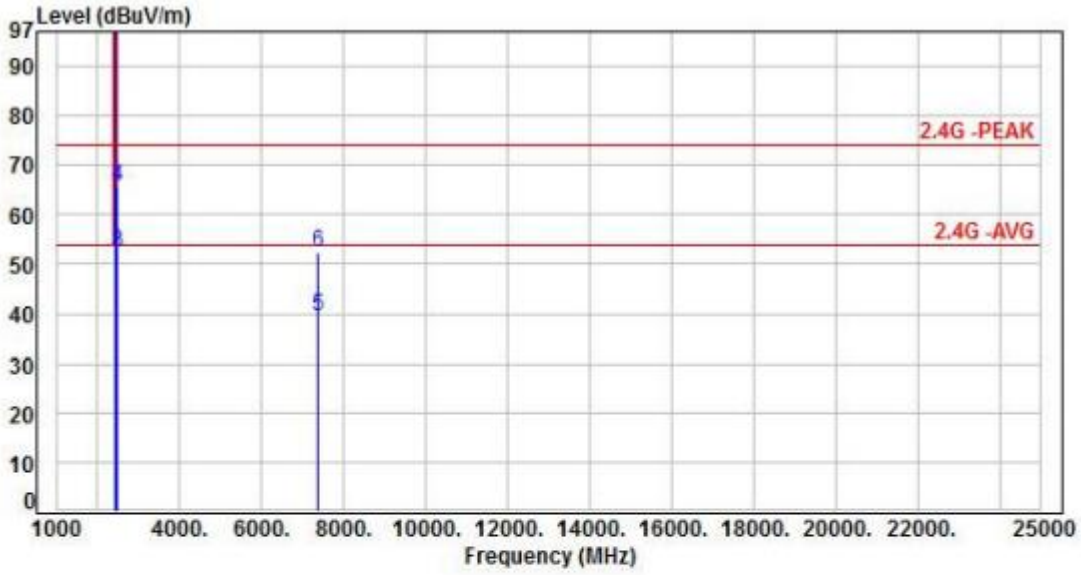
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 4, CH09		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2452.00	-2.54	98.99	96.45	200.00	-103.55	Average	100	348	P
2	2452.00	-2.54	112.23	109.69	200.00	-90.31	Peak	100	348	P
3	2483.50	-2.39	51.14	48.75	54.00	-5.25	Average	100	348	P
4	2483.50	-2.39	63.83	61.44	74.00	-12.56	Peak	100	348	P
5	7356.00	10.11	29.47	39.58	54.00	-14.42	Average	100	264	P
6	7356.00	10.11	42.78	52.89	74.00	-21.11	Peak	100	264	P

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

Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 4, CH09		:	

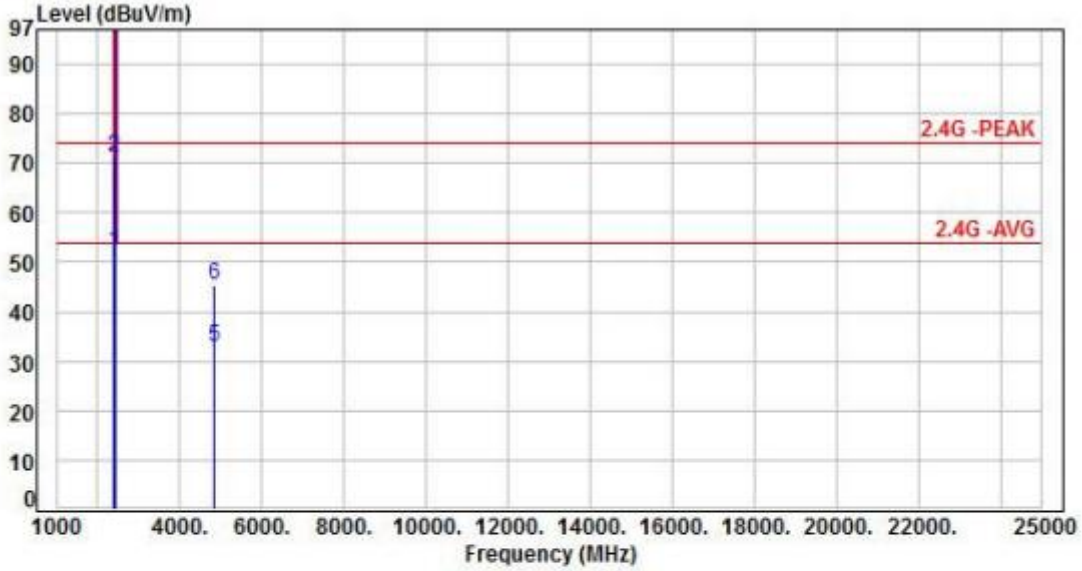


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2452.00	-2.54	102.31	99.77	200.00	-100.23	Average	307	34	P
2	2452.00	-2.54	116.62	114.08	200.00	-85.92	Peak	307	34	P
3	2483.50	-2.39	54.74	52.35	54.00	-1.65	Average	307	34	P
4	2483.50	-2.39	68.08	65.69	74.00	-8.31	Peak	307	34	P
5	7356.00	10.11	29.51	39.62	54.00	-14.38	Average	100	126	P
6	7356.00	10.11	42.22	52.33	74.00	-21.67	Peak	100	126	P

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

BeamForming

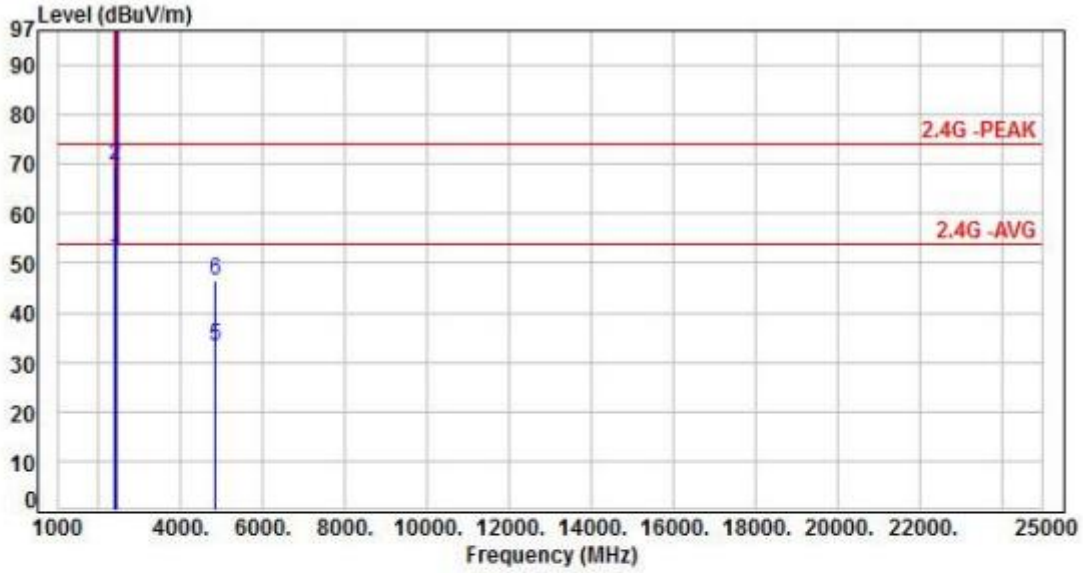
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 5, CH01		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.52	54.60	52.08	54.00	-1.92	Average	106	345	P
2	2390.00	-2.52	73.77	71.25	74.00	-2.75	Peak	106	345	P
3	2412.00	-2.45	106.70	104.25	200.00	-95.75	Average	106	345	P
4	2412.00	-2.45	119.29	116.84	200.00	-83.16	Peak	106	345	P
5	4824.00	5.18	27.51	32.69	54.00	-21.31	Average	100	18	P
6	4824.00	5.18	40.33	45.51	74.00	-28.49	Peak	100	18	P

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

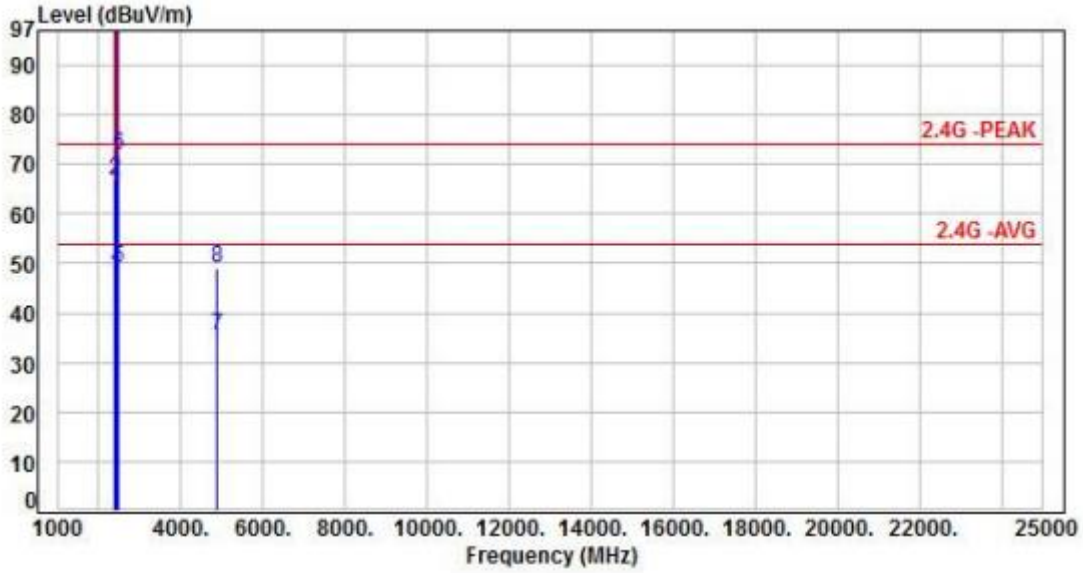
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 5, CH01		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.52	53.45	50.93	54.00	-3.07	Average	258	32	P
2	2390.00	-2.52	72.40	69.88	74.00	-4.12	Peak	258	32	P
3	2412.00	-2.45	109.36	106.91	200.00	-93.09	Average	258	32	P
4	2412.00	-2.45	120.46	118.01	200.00	-81.99	Peak	258	32	P
5	4824.00	5.18	28.08	33.26	54.00	-20.74	Average	100	354	P
6	4824.00	5.18	41.26	46.44	74.00	-27.56	Peak	100	354	P

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

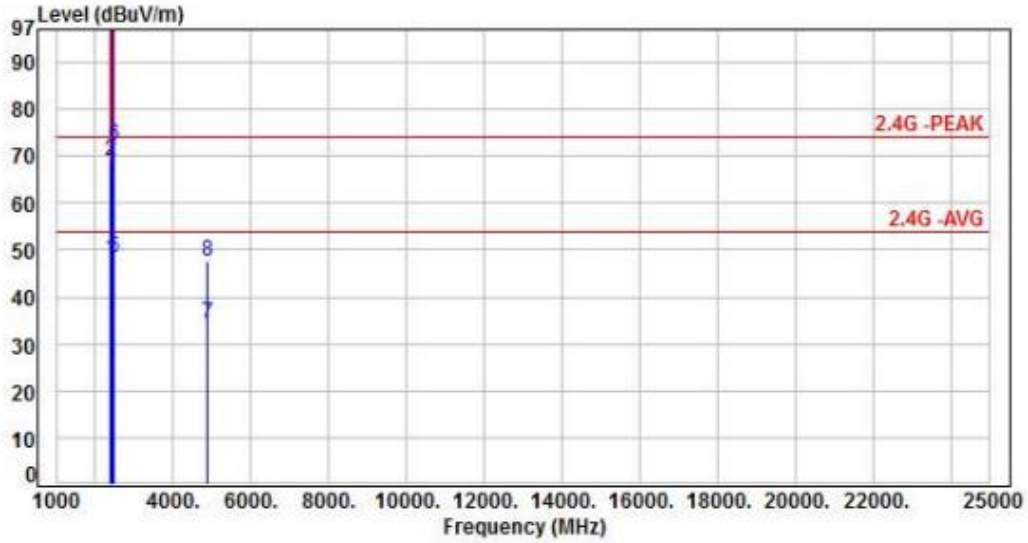
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 5, CH06		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.52	50.00	47.48	54.00	-6.52	Average	105	338	P
2	2390.00	-2.52	69.29	66.77	74.00	-7.23	Peak	105	338	P
3	2437.00	-2.32	109.84	107.52	200.00	-92.48	Average	105	338	P
4	2437.00	-2.32	123.20	120.88	200.00	-79.12	Peak	105	338	P
5	2483.50	-2.15	51.29	49.14	54.00	-4.86	Average	105	338	P
6	2483.50	-2.15	74.03	71.88	74.00	-2.12	Peak	105	338	P
7	4874.00	5.43	29.94	35.37	54.00	-18.63	Average	119	328	P
8	4874.00	5.43	43.44	48.87	74.00	-25.13	Peak	119	328	P

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

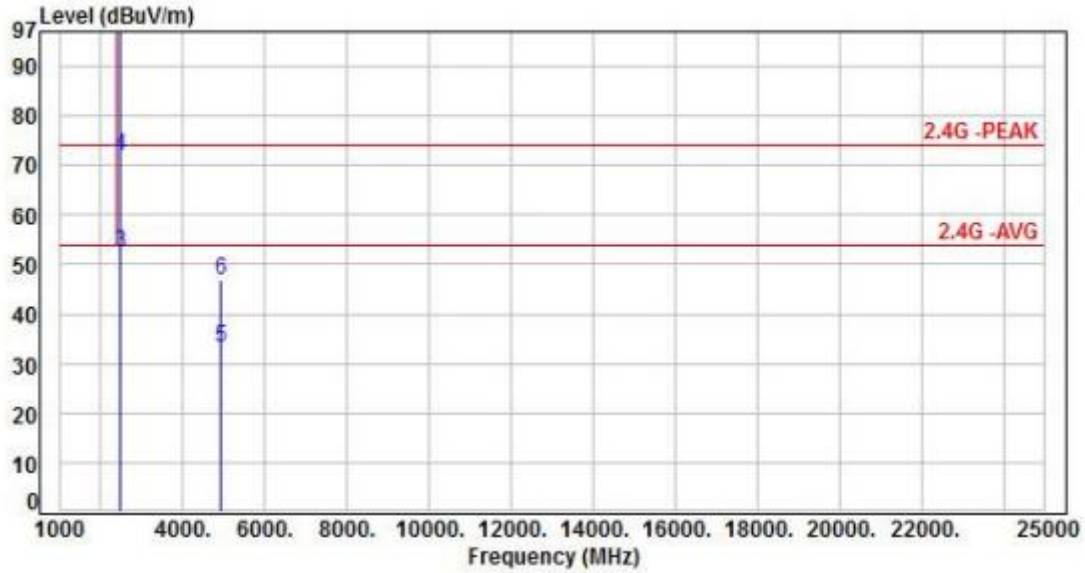
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 5, CH06		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.52	50.61	48.09	54.00	-5.91	Average	192	37	P
2	2390.00	-2.52	71.35	68.83	74.00	-5.17	Peak	192	37	P
3	2437.00	-2.32	110.59	108.27	200.00	-91.73	Average	192	37	P
4	2437.00	-2.32	123.38	121.06	200.00	-78.94	Peak	192	37	P
5	2483.50	-2.15	50.44	48.29	54.00	-5.71	Average	192	37	P
6	2483.50	-2.15	74.55	72.40	74.00	-1.60	Peak	192	37	P
7	4874.00	5.43	28.87	34.30	54.00	-19.70	Average	100	359	P
8	4874.00	5.43	42.01	47.44	74.00	-26.56	Peak	100	359	P

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

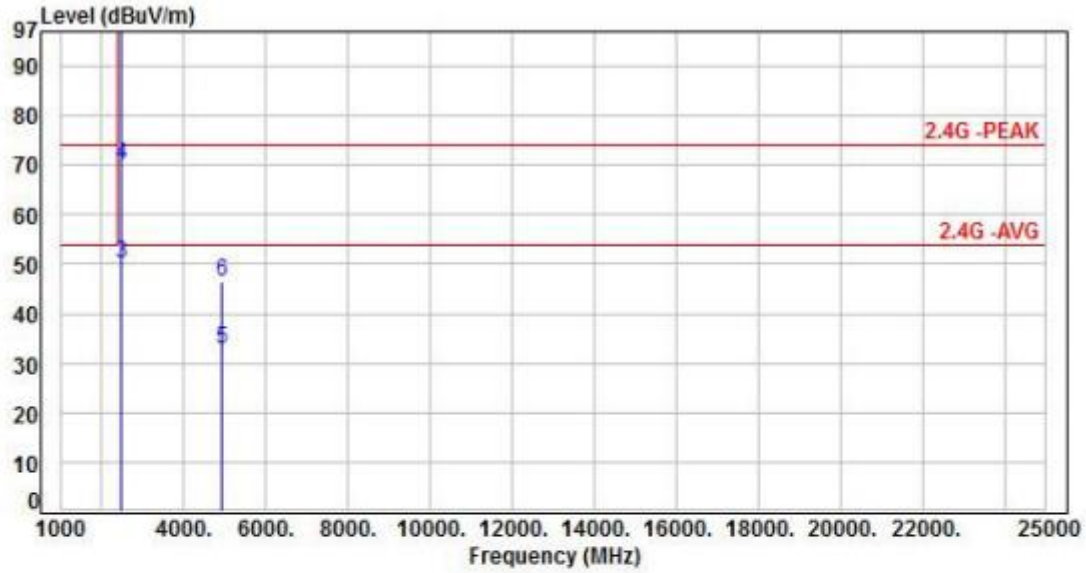
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 5, CH11		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2462.00	-2.22	106.07	103.85	200.00	-96.15	Average	134	333	P
2	2462.00	-2.22	118.83	116.61	200.00	-83.39	Peak	134	333	P
3	2483.50	-2.15	54.55	52.40	54.00	-1.60	Average	134	333	P
4	2483.50	-2.15	74.00	71.85	74.00	-2.15	Peak	134	333	P
5	4924.00	5.64	27.48	33.12	54.00	-20.88	Average	100	29	P
6	4924.00	5.64	41.20	46.84	74.00	-27.16	Peak	100	29	P

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

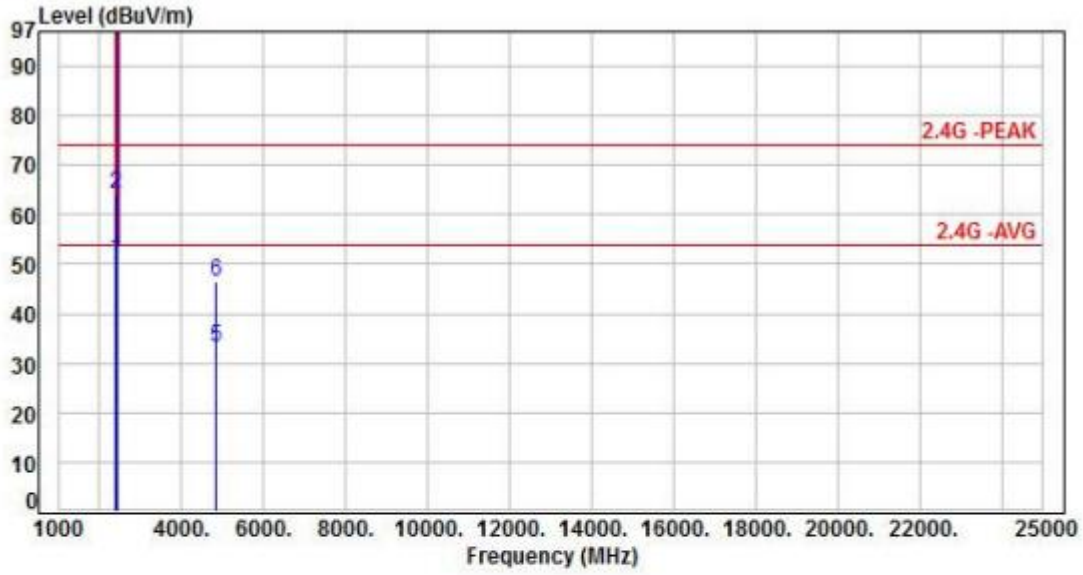
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 5, CH11		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2462.00	-2.22	105.58	103.36	200.00	-96.64	Average	378	298	P
2	2462.00	-2.22	118.42	116.20	200.00	-83.80	Peak	378	298	P
3	2483.50	-2.15	52.40	50.25	54.00	-3.75	Average	378	298	P
4	2483.50	-2.15	72.11	69.96	74.00	-4.04	Peak	378	298	P
5	4924.00	5.64	27.27	32.91	54.00	-21.09	Average	100	311	P
6	4924.00	5.64	40.75	46.39	74.00	-27.61	Peak	100	311	P

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

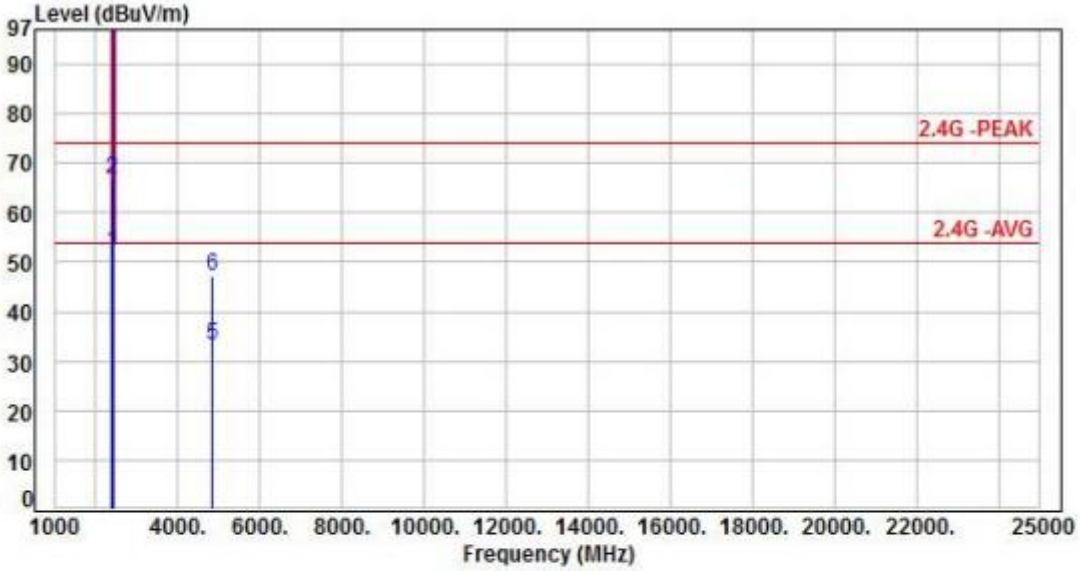
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 6, CH03		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.52	53.40	50.88	54.00	-3.12	Average	109	345	P
2	2390.00	-2.52	66.56	64.04	74.00	-9.96	Peak	109	345	P
3	2422.00	-2.40	102.87	100.47	200.00	-99.53	Average	109	345	P
4	2422.00	-2.40	116.06	113.66	200.00	-86.34	Peak	109	345	P
5	4844.00	5.28	28.04	33.32	54.00	-20.68	Average	100	34	P
6	4844.00	5.28	41.09	46.37	74.00	-27.63	Peak	100	34	P

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

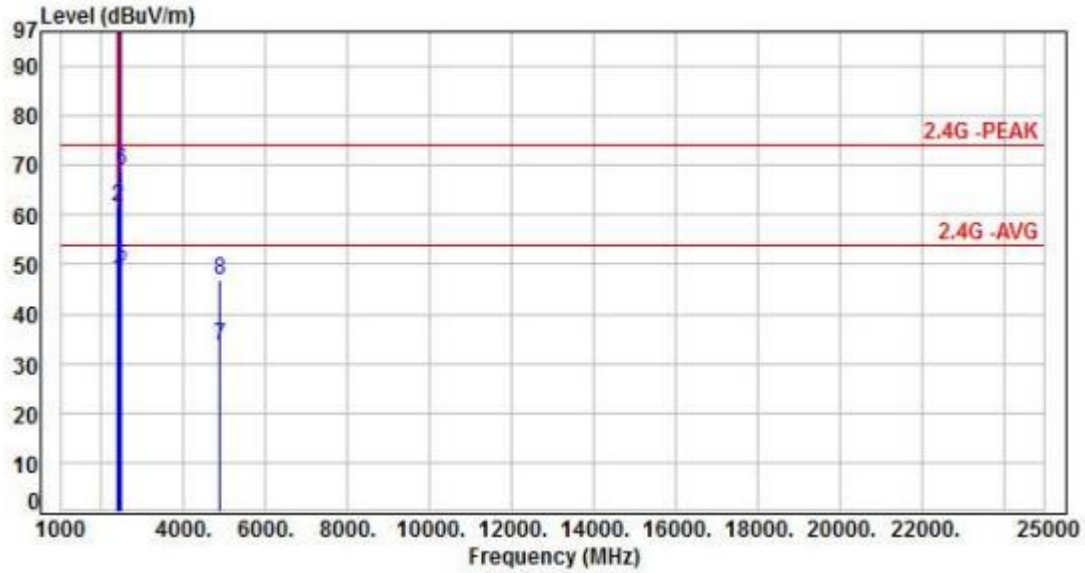
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 6, CH03		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.52	54.53	52.01	54.00	-1.99	Average	390	310	P
2	2390.00	-2.52	69.23	66.71	74.00	-7.29	Peak	390	310	P
3	2422.00	-2.40	103.93	101.53	200.00	-98.47	Average	390	310	P
4	2422.00	-2.40	116.96	114.56	200.00	-85.44	Peak	390	310	P
5	4844.00	5.28	27.89	33.17	54.00	-20.83	Average	100	351	P
6	4844.00	5.28	41.94	47.22	74.00	-26.78	Peak	100	351	P

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

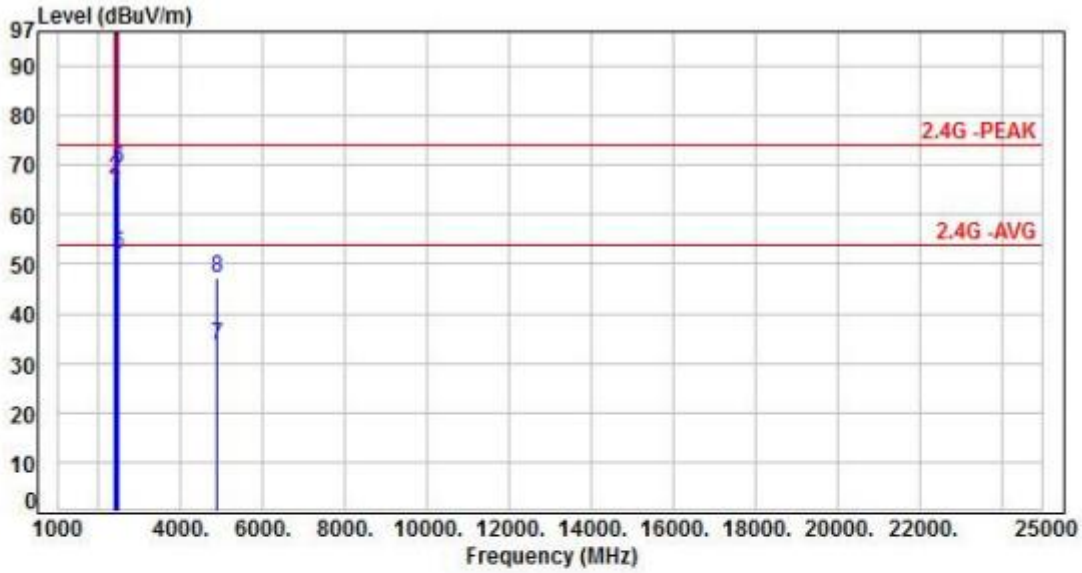
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 6, CH06		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.52	49.43	46.91	54.00	-7.09	Average	104	341	P
2	2390.00	-2.52	64.14	61.62	74.00	-12.38	Peak	104	341	P
3	2437.00	-2.32	104.33	102.01	200.00	-97.99	Average	104	341	P
4	2437.00	-2.32	117.47	115.15	200.00	-84.85	Peak	104	341	P
5	2483.50	-2.15	51.70	49.55	54.00	-4.45	Average	104	341	P
6	2483.50	-2.15	71.08	68.93	74.00	-5.07	Peak	104	341	P
7	4874.00	5.43	28.30	33.73	54.00	-20.27	Average	100	29	P
8	4874.00	5.43	41.39	46.82	74.00	-27.18	Peak	100	29	P

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

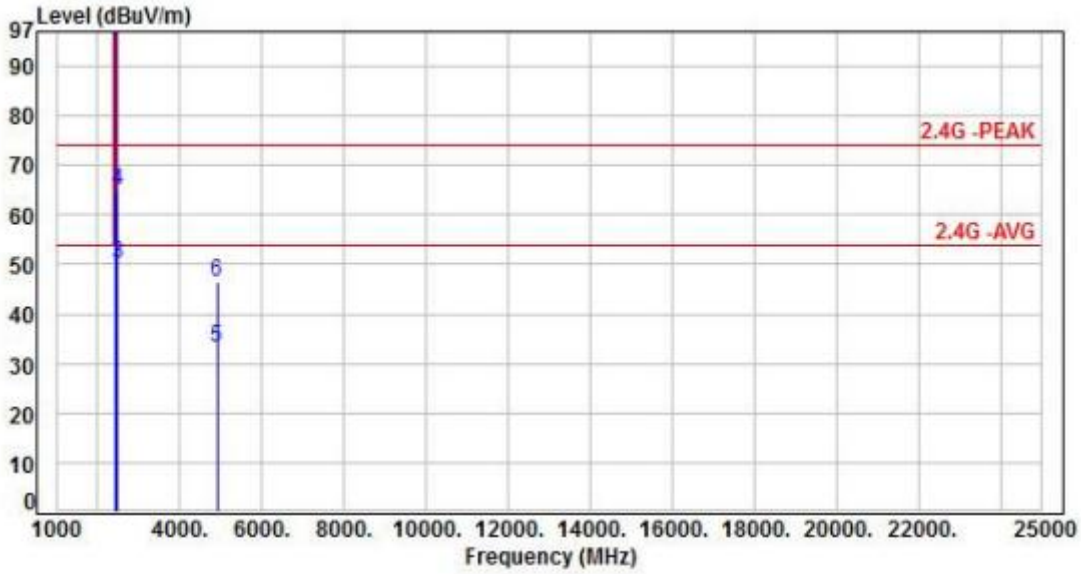
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 6, CH06		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.52	52.64	50.12	54.00	-3.88	Average	378	304	P
2	2390.00	-2.52	69.71	67.19	74.00	-6.81	Peak	378	304	P
3	2437.00	-2.32	104.26	101.94	200.00	-98.06	Average	378	304	P
4	2437.00	-2.32	117.47	115.15	200.00	-84.85	Peak	378	304	P
5	2483.50	-2.15	54.16	52.01	54.00	-1.99	Average	378	304	P
6	2483.50	-2.15	71.46	69.31	74.00	-4.69	Peak	378	304	P
7	4874.00	5.43	27.99	33.42	54.00	-20.58	Average	100	348	P
8	4874.00	5.43	41.94	47.37	74.00	-26.63	Peak	100	348	P

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

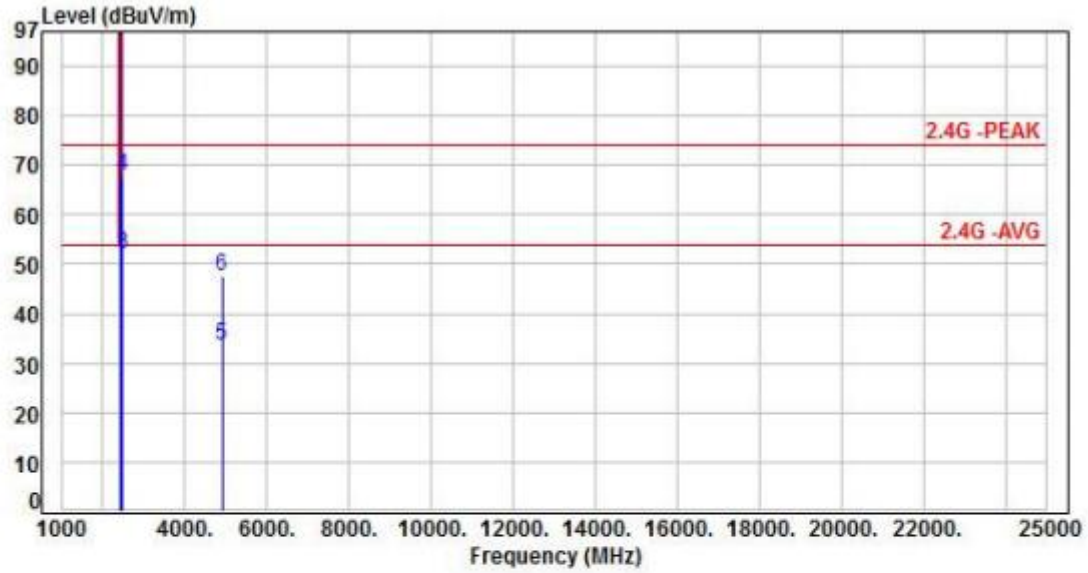
Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 6, CH09		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2452.00	-2.25	103.03	100.78	200.00	-99.22	Average	100	345	P
2	2452.00	-2.25	115.52	113.27	200.00	-86.73	Peak	100	345	P
3	2483.50	-2.15	52.34	50.19	54.00	-3.81	Average	100	345	P
4	2483.50	-2.15	66.98	64.83	74.00	-9.17	Peak	100	345	P
5	4904.00	5.58	27.56	33.14	54.00	-20.86	Average	100	54	P
6	4904.00	5.58	40.92	46.50	74.00	-27.50	Peak	100	54	P

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

Power	:	DC 12V From adapter (120V/60Hz)	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 6, CH09		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2452.00	-2.25	102.96	100.71	200.00	-99.29	Average	337	302	P
2	2452.00	-2.25	115.81	113.56	200.00	-86.44	Peak	337	302	P
3	2483.50	-2.15	54.17	52.02	54.00	-1.98	Average	337	302	P
4	2483.50	-2.15	70.04	67.89	74.00	-6.11	Peak	337	302	P
5	4904.00	5.58	27.84	33.42	54.00	-20.58	Average	100	347	P
6	4904.00	5.58	41.94	47.52	74.00	-26.48	Peak	100	347	P

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

6.7 Restricted Bands of Operation

Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.09000 – 0.11000	16.42000 – 16.42300	399.9 – 410.0	4.500 – 5.250
0.49500 – 0.505**	16.69475 – 16.69525	608.0 – 614.0	5.350 – 5.460
2.17350 – 2.19050	16.80425 – 16.80475	960.0 – 1240.0	7.250 – 7.750
4.12500 – 4.12800	25.50000 – 25.67000	1300.0 – 1427.0	8.025 – 8.500
4.17725 – 4.17775	37.50000 – 38.25000	1435.0 – 1626.5	9.000 – 9.200
4.20725 – 4.20775	73.00000 – 74.60000	1645.5 – 1646.5	9.300 – 9.500
6.21500 – 6.21800	74.80000 – 75.20000	1660.0 – 1710.0	10.600 – 12.700
6.26775 – 6.26825	108.00000 – 121.94000	1718.8 – 1722.2	13.250 – 13.400
6.31175 – 6.31225	123.00000 – 138.00000	2200.0 – 2300.0	14.470 – 14.500
8.29100 – 8.29400	149.90000 – 150.05000	2310.0 – 2390.0	15.350 – 16.200
8.36200 – 8.36600	156.52475 – 156.52525	2483.5 – 2500.0	17.700 – 21.400
8.37625 – 8.38675	156.70000 – 156.90000	2655.0 – 2900.0	22.010 – 23.120
8.41425 – 8.41475	162.01250 – 167.17000	3260.0 – 3267.0	23.600 – 24.000
12.29000 – 12.29300	167.72000 – 173.20000	3332.0 – 3339.0	31.200 – 31.800
12.51975 – 12.52025	240.00000 – 285.00000	3345.8 – 3358.0	36.430 – 36.500
12.57675 – 12.57725	322.00000 – 335.40000	3600.0 – 4400.0	Above 38.6
13.36000 – 13.41000			

**: Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz

7. Test of Conducted Spurious Emission

7.1 Test Limit

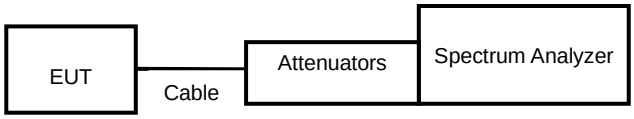
According to the methods defined in ANSI C63.10-2013 Section 11.11.1
Below –30dB of the highest emission level of operating band (In 100 kHz Resolution Bandwidth)

7.2 Test Procedure

According to the methods defined in ANSI C63.10-2013 Section 11.11.2 & 11.11.3

a. The transmitter output was connected to the spectrum analyzer via a low loss cable.
b. Set RBW of spectrum analyzer to 100 KHz and VBW of spectrum analyzer to 300 KHz with convenient frequency span including 100 KHz bandwidth from band edge.
c. Peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 30dB relative to the maximum measured in-band peak PSD level.
d. The band edges was measured and recorded.

7.3 Test Setup Layout

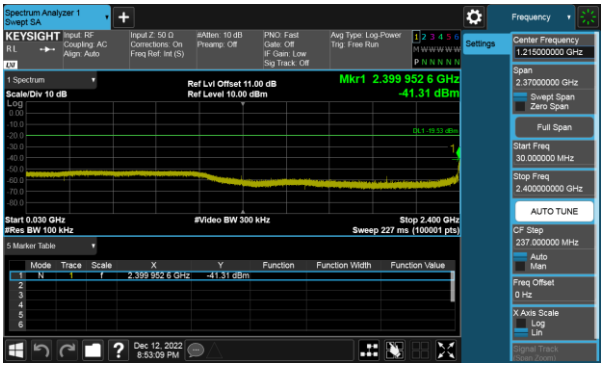


7.4 Test Result and Data

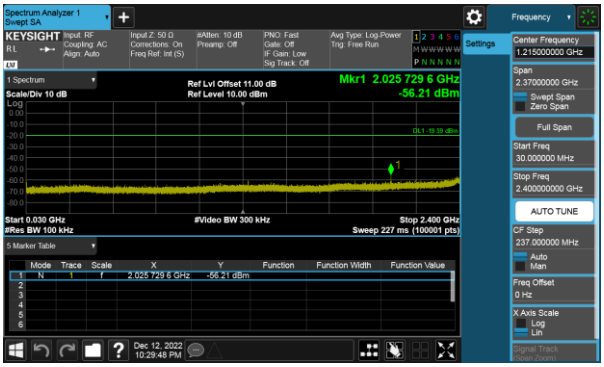
Note: Test plots refers to the following pages.

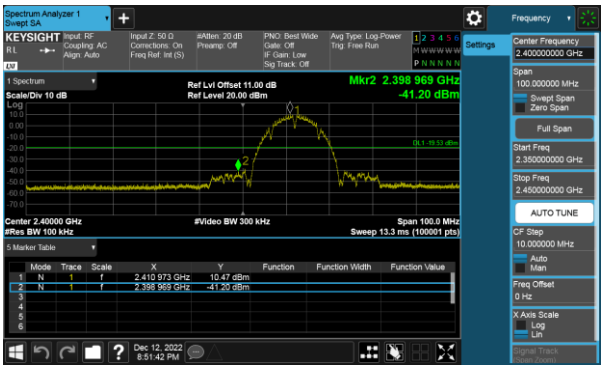
Non BeamForming,ANT A

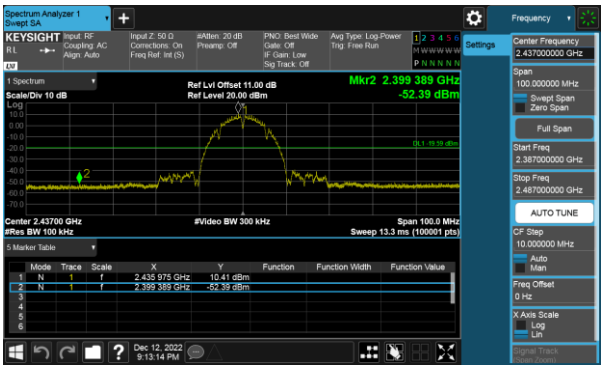
Modulation Type: 802.11b, CH 01



Modulation Type: 802.11b, CH 06







Modulation Type: 802.11b, CH 11