



FCC RADIO TEST REPORT

Applicant : ELO TOUCH SOLUTIONS, INC.

Address : 670 N. McCarthy Blvd., Suite 100 Milpitas, CA
95035 USA

Equipment : Computer Box

Model No. : ESY00I1E

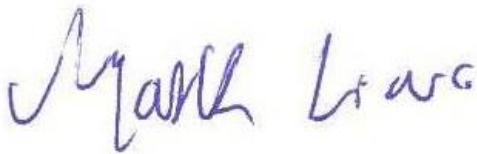
Trade Name : Elo or 

FCC ID : RBWESY00I1E

I HEREBY CERTIFY THAT :

The sample was received on Aug. 19, 2024 and the testing was completed on Oct. 26, 2024 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

1.	Summary of Test Procedure and Test Results	5
1.1.	Applicable Standards	5
2.	Test Configuration of Equipment under Test	6
2.1.	Feature of Equipment under Test.....	6
2.2.	Carrier Frequency of Channels	8
2.3.	Test Mode and Test Software	10
2.4.	Description of Test System.....	12
2.5.	General Information of Test.....	13
2.6.	Measurement Uncertainty	14
3.	Test Equipment and Ancillaries Used for Tests	15
4.	Antenna Requirements	18
4.1.	Standard Applicable	18
4.2.	Antenna Construction and Directional Gain.....	19
5.	Test of AC Power Line Conducted Emission	21
5.1.	Test Limit	21
5.2.	Test Procedures	21
5.3.	Typical Test Setup	22
5.4.	Test Result and Data.....	23
5.5.	Test Photographs	25
6.	Test of Spurious Emission (Radiated).....	26
6.1.	Test Limit	26
6.2.	Test Procedures	27
6.3.	Typical Test Setup	28
6.4.	Test Result and Data (9kHz ~ 30MHz).....	29
6.5.	Test Result and Data (30MHz ~ 1GHz)	29
6.6.	Test Result and Data (1GHz ~ 40GHz).....	31
6.7.	Restricted Bands of Operation	119
6.8.	Test Photographs (30MHz ~ 1GHz).....	120
6.9.	Test Photographs (1GHz ~ 40GHz)	121
7.	On Time, Duty Cycle and Measurement methods	123
7.1.	Test Limit	123
7.2.	Test Procedure	123
7.3.	Test Setup Layout	123
7.4.	Test Result and Data.....	124
7.5.	Measurement Methods	124
8.	6dB Bandwidth & 99% Occupied Bandwidth	127
8.1.	Test Limit	127
8.2.	Test Procedure	127
8.3.	Test Setup Layout	127
8.4.	Test Result and Data.....	128
9.	26dB Bandwidth & 99% Occupied Bandwidth	142
9.1.	Test Limit	142



9.2.	Test Procedure	142
9.3.	Test Setup Layout	142
9.4.	Test Result and Data	143
10.	Average Power	178
10.1.	Test Limit	178
10.2.	Test Procedure	179
10.3.	Test Setup Layout	179
10.4.	Test Result and Data	180
11.	Power Spectral Density	193
11.1.	Test Limit	193
11.2.	Test Procedure	193
11.3.	Test Setup Layout	193
11.4.	Test Result and Data	194
12.	Radio Frequency Exposure	216
12.1.	Applicable Standards	216
12.2.	EUT Specification	217
12.3.	Result	218



History of this test report

Report No.	Issued Date	Description
24080253-TRFCC04	Nov. 06, 2024	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

KDB 789033

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
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, measurement uncertainty evaluation is not considered.



2. Test Configuration of Equipment under Test

2.1. Feature of Equipment under Test

Operation Frequency Range	BT / BLE: 2400-2483.5MHz WLAN:802.11b/g/n/ax: 2400-2483.5MHz 5GHz:802.11a/n/ac/ax:5150-5250MHz, 5250-5350MHz, 5470-5725MHz, 5725-5875MHz 6GHz: 802.11a/ax: 5925MHz~6425MHz, 6425MHz~6525MHz 6525MHz~6875MHz, 6875MHz~7125MHz
Center Frequency Range	BT / BLE: 2402MHz-2480MHz WLAN:802.11b/g/n/ax: 2412MHz-2462MHz 5GHz:802.11a/n/ac/ax:5180-5240MHz, 5260-5320MHz, 5500-5700MHz, 5745-5825MHz 6GHz: 802.11a/ax: 5955MHz~6415MHz, 6435MHz~6515MHz 6535MHz~6855MHz, 6895MHz~7115MHz
Modulation Type	BT: GFSK, $\pi/4$ -DQPSK, 8DPSK BLE: GFSK WLAN: 2.4GHz: 802.11b: CCK, DQPSK, DBPSK 802.11g/n: BPSK, QPSK, 16QAM, 64QAM 802.11ax: BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM 5GHz: 802.11a/n: BPSK, QPSK, 16QAM, 64QAM 802.11ac: BPSK, QPSK, 16QAM, 64QAM, 256QAM 802.11ax: BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM 6GHz 802.11a: BPSK, QPSK, 16QAM, 64QAM 802.11ax: BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM
Modulation Technology	DSSS, OFDM, FHSS, DTS, OFDMA
Data Rate	BT: GFSK: 1Mbps, $\pi/4$ -DQPSK: 2Mbps, 8DPSK: 3Mbps BLE: GFSK: 1Mbps, 2Mbps WLAN: 2.4GHz: 802.11b: 1, 2, 5.5, 11Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11n: MCS0 – MCS15, HT20/40 802.11ax: 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, VHT20/40/80/160 802.11ax: MCS0 – MCS11, HE20/40/80/160 6GHz 802.11a: 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11ax: MCS0 – MCS11, HE20/40/80/160
Antenna Type	Dipole Antenna



Antenna Gain	For BT / BLE: 2402-2480MHz: ANT A: 3dBi For WLAN: 2412-2462MHz: ANT A: 3dBi, ANT B: 3dBi 5180-5240MHz: ANT A: 3.5dBi, ANT B: 3.5dBi 5260-5320MHz: ANT A: 3.5dBi, ANT B: 3.5dBi 5500-5700MHz: ANT A: 3.5dBi, ANT B: 3.5dBi 5745-5825MHz: ANT A: 3.5dBi, ANT B: 3.5dBi 5945~6425MHz: ANT A: 3.5dBi, ANT B: 3.5dBi 6425~6525MHz: ANT A: 3.5dBi, ANT B: 3.5dBi 6525~6875MHz: ANT A: 3.5dBi, ANT B: 3.5dBi 6875~7125MHz: ANT A: 3.5dBi, ANT B: 3.5dBi
Adapter	Brand: Billion Model: BA070-190342MBX
Adapter	Brand: Delta Model: ADP-65JH HB
Power cord (US)	Brand: I-SHENG Model: V44VS336T1218000-A01
Power cord (EU)	Brand: I-SHENG Model: EU85B300S121800

Note:

- 1.EUT support TPC Function.
- 2.WLAN and BT can simultaneously transmission.
- 3.EUT supports DFS Client Mode, without radar detection.
- 4.The device not support Channel Puncturing or Bandwidth Reduction mechanisms supported.
- 5.802.11ax EUT only Support Full RU.
- 6.EUT Operating mode: Indoor Client.
- 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

802.11ac VHT160, 802.11ax HE160

Channel	Frequency(MHz)
*50	5250

Band: 5250MHz-5350MHz

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

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

802.11n HT40, 802.11ac VHT40, 802.11ax HE40

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

802.11ac VHT80, 802.11ax HE80

Channel	Frequency(MHz)
*58	5290

Band: 5470MHz-5725MHz

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

Channel	Frequency(MHz)	Channel	Frequency(MHz)
*100	5500	124	5620
104	5520	128	5640
108	5540	132	5660
112	5560	136	5680
116	5580	*140	5700
*120	5600		

802.11n HT40, 802.11ac VHT40, 802.11ax HE40

Channel	Frequency(MHz)	Channel	Frequency(MHz)
*102	5510	126	5630
110	5550	*134	5670
*118	5590		

802.11ac VHT80, 802.11ax HE80

Channel	Frequency(MHz)	Channel	Frequency(MHz)
*106	5530	*122	5610

802.11ac VHT160, 802.11ax HE160

Channel	Frequency(MHz)
*114	5570



Band 3: Straddle Channel

802.11a, 802.11n HT 20, 802.11ac VHT20, 802.11ax HE20

Channel	Frequency(MHz)
*144	5720

802.11n HT40, 802.11ac VHT40, 802.11ax HE40

Channel	Frequency(MHz)
*142	5710

802.11ac VHT80, 802.11ax HE80

Channel	Frequency(MHz)
*138	5690

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

Note: Channels remarked * are selected to perform test.



2.3. Test Mode and Test Software

- During testing, the interface cables and equipment positions were varied according to ANSI C63.10.
- The complete test system included remote workstation and EUT for RF test. The remote workstation included Notebook.
- An executive program," QRCT V4.0.211.0" under Windows OS system was executed to transmit and receive data via WLAN.
- 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)
2	802.11ax HE20 (7.3Mbps)
3	802.11ax HE40 (14.6Mbps)
4	802.11ax HE80 (30.6Mbps)
5	802.11ax HE160 (61.3Mbps)
caused "Test Mode 2" generated the worst case, it was reported as the final data.	
Radiation Emissions (9KHz ~30MHz & 30MHz ~ 1GHz)	
Test Mode	Operating Description
1	802.11a (6Mbps)
2	802.11ax HE20 (7.3Mbps)
3	802.11ax HE40 (14.6Mbps)
4	802.11ax HE80 (30.6Mbps)
5	802.11ax HE160 (61.3Mbps)
caused "Test Mode 2" generated the worst case, it was reported as the final data.	
Radiation Emissions (1GHz ~ 40GHz)	
Test Mode	Operating Description
1	802.11a (6Mbps)
2	802.11ax HE20 (7.3Mbps)
3	802.11ax HE40 (14.6Mbps)
4	802.11ax HE80 (30.6Mbps)
5	802.11ax HE160 (61.3Mbps)
caused "Test Mode 1~5" 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.

worst case (V)

Test Item /test voltage	AC 120V / 60Hz	AC 240V / 60Hz.
AC Power Line Conducted Emission: SISO ANT/ MIMO ANT	V	
Radiation Emissions (Below 1GHz) : SISO ANT/ MIMO ANT		V

2.The EUT has Two types of Adapters. After engineering evaluation,

For AC Power Line Conducted Emission, ADP-65JH HB is worst case.

For Radiated Spurious Emission(9kHz~30MHz,30MHz~1GHz), BA070-190342MBX is worst case.

For Radiated Spurious Emission(1GHz~40GHz), ADP-65JH HB is worst case., hence, are used at test report

Adapter	Brand: Billion Model: BA070-190342MBX
Adapter	Brand: Delta Model: ADP-65JH HB



The EUT incorporates a MIMO function

Modulation Type	TX CONFIGURATION
802.11a	1TX (Diversity)
802.11n HT20	2TX
802.11n HT40	2TX
802.11ac VHT20	2TX
802.11ac VHT40	2TX
802.11ac VHT80	2TX
802.11ac VHT160	2TX
802.11ax HE20	2TX
802.11ax HE40	2TX
802.11ax HE80	2TX
802.11ax HE160	2TX



2.4. Description of Test System

RF Conducted				
Equipment	Brand	Model	Length/Type	Power cord/Length/Type
Notebook	lenovo	S1GL2W	N/A	N/A
USB Cable (A to A)	BENEVO	E210567AWM	1m / NS	N/A

Radiated Emissions				
Equipment	Brand	Model	Length/Type	Power cord/Length/Type
Notebook	DELL	Latitude E5470	N/A	Adapter / 1.8m / NS
USB Cable (A to A)	BENEVO	E210567AWM	1m / NS	N/A
Flash*2	TranScend	USB3.0 16GB	N/A	N/A
Monitor	LG	24UD58	N/A	N/A
HDMI Cable	J5Create	HDMI 8K	1.8m / NS	N/A
TYPE-C(Blue)	kolin	KEX-DLCP08	1m / NS	N/A
RJ45 Cable	TE CONNECTIVITY	CAT5E	1.2m / NS	N/A
MicroSDHC	ADATA	8G	N/A	N/A
Mouse	DELL	MS116t	1.85m / NS	N/A

AC Power Line Conducted Emission				
Equipment	Brand	Model	Length/Type	Power cord/Length/Type
USB Cable (A to A)	BENEVO	E210567AWM	1m / NS	N/A
Notebook	Lenovo	S1GL2W	N/A	Adapter / 1.8m / NS
Monitor	LG	24UD58	N/A	N/A
HDMI Cable	YD-TECH	H1	1.8m / S	N/A
Mouse	Micsoft	MSK-1113	1.85m / S	N/A



2.5. General Information of Test

☒ Test Site	CerpPASS 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
Frequency Range Investigated	Conducted: from 150kHz to 30 MHz Radiation: from 9kHz to 40,000MHz	
Test Distance	The test distance of radiated emission from antenna to EUT is 3 M.	

ANT A

Test Item	Test Site	Test Period	Environmental Conditions	Tested By
RF Conducted	RFCON01-NK	2024/10/07	27.1°C / 45%	Leon Huang
RF Conducted	RFCON01-NK	2024/10/08	25.6°C / 44%	Leon Huang
Radiated Emissions	3M02-NK	2024/10/05	25°C / 45%	Park Chen
Radiated Emissions	3M02-NK	2024/10/26	23.1°C / 53%	Park Chen

ANT B

Test Item	Test Site	Test Period	Environmental Conditions	Tested By
RF Conducted	RFCON01-NK	2024/10/07	27.1°C / 45%	Leon Huang
RF Conducted	RFCON01-NK	2024/10/08	25.6°C / 44%	Leon Huang

ANT A, B

Test Item	Test Site	Test Period	Environmental Conditions	Tested By
RF Conducted	RFCON01-NK	2024/09/20	26.7°C / 49%	Leon Huang
RF Conducted	RFCON01-NK	2024/10/07	27.1°C / 45%	Leon Huang
RF Conducted	RFCON01-NK	2024/10/08	25.6°C / 44%	Leon Huang
Radiated Emissions	3M02-NK	2024/10/05	25.0°C / 45%	Leon Huang
Radiated Emissions	3M02-NK	2024/10/26	23.1°C / 53%	Park Chen
AC Power Line Conducted Emission	CON02-NK	2024/10/21	25°C / 63%	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)	$\pm 3.12\text{dB}$
Radiated Spurious Emission(9KHz~30MHz)	$\pm 3.5\text{dB}$
Radiated Spurious Emission(30MHz~1GHz)	$\pm 5.1\text{dB}$
Radiated Spurious Emission(1GHz~40GHz)	$\pm 5.2\text{dB}$
6dB Bandwidth	$\pm 5.4\%$
26dB Bandwidth	$\pm 4.4\%$
Occupied Bandwidth	$\pm 4.5\%$
Peak Output Power(Conducted Power Meter)	$\pm 1.1\text{dB}$
Power Spectral Density	$\pm 2.0\text{dB}$
Duty Cycle	$\pm 3.5\%$
Frequency Stability	$\pm 0.23\text{KHz}$



3. Test Equipment and Ancillaries Used for Tests

Test Item	Radiated Emissions				
Test Site	Semi Anechoic Room(3M02-NK) (2024/10/05)				
Instrument	Manufacturer	Model No	Serial No	Calibration Date	Valid Date
Bilog Antenna	Schwarzbeck	VULB9168	369	2024/02/19	2025/02/18
Active Loop Antenna	Schwarzbeck	FMZB 1513	414	2024/01/16	2025/01/15
Horn Antenna	EMCO	3115	31589	2024/02/26	2025/02/25
Horn Antenna	EMCO	3116	31974	2023/10/16	2024/10/15
EMI Receiver	ROHDE & SCHWARZ	ESR 7	101906	2024/05/13	2025/05/12
Spectrum Analyzer	ROHDE & SCHWARZ	FSV 40-N	101329	2024/07/16	2025/07/15
Preamplifier	Agilent	8449B	3008A01954	2024/03/01	2025/02/28
Preamplifier	EMC INSTRUMENTS	EMC184045	980065	2023/10/13	2024/10/12
Preamplifier	EM Electronics corp.	EM330	60659	2024/02/17	2025/02/16
Cable-4m(9k-3G)	EMEC	RG-223	18274M	2024/08/08	2025/08/07
Cable-3in1(30M-1G)	HARBOUR INDUSTRIES	LL142	CCE1315	2024/02/23	2025/02/22
Cable-0.5m(1G-40G)	HUBER SUHNER	SUCOFLEX 104	805443/4	2024/03/05	2025/03/04
Cable-3m(1G-40G)	HUBER SUHNER	SUCOFLEX 104	805796/4	2024/03/05	2025/03/04
Cable-8m(1G-26.5G)	WOKEN	WCBA-WCA203SM	CCE1374	2024/03/05	2025/03/04
Cable-1m(1G-40G)	HUBER SUHNER	HUBER SUHNER / SF102	804398/2	2023/10/12	2024/10/11
Cable-3m(1G-40G)	HUBER SUHNER	HUBER SUHNER / SF102	804619/2	2023/10/12	2024/10/11
E3	AUDIX	v8.2014-8-6	RK-000529	NA	NA
High Pass Filter	Warison	WFIL-H3000-18000F-03	WRJ5CFWC2J1	2024/07/03	2025/07/02
Notch Filter	Warison	WFIL-N5925-7125F-04	WRQ4BFWC4M1	2024/03/11	2025/03/10
Hipass Filter	Warison	WFIL-H7500-18000F	WRQ4BFWC2J1	2024/03/11	2025/03/10



Test Item	Radiated Emissions				
Test Site	Semi Anechoic Room(3M02-NK) (2024/10/26)				
Instrument	Manufacturer	Model No	Serial No	Calibration Date	Valid Date
Bilog Antenna	Schwarzbeck	VULB9168	369	2024/02/19	2025/02/18
Active Loop Antenna	Schwarzbeck	FMZB 1513	414	2024/01/16	2025/01/15
Horn Antenna	EMCO	3115	31589	2024/02/26	2025/02/25
Horn Antenna	EMCO	3116	31970	2024/02/23	2025/02/22
EMI Receiver	ROHDE & SCHWARZ	ESR 7	101906	2024/05/13	2025/05/12
Spectrum Analyzer	ROHDE & SCHWARZ	FSV 40-N	101329	2024/07/16	2025/07/15
Preamplifier	Agilent	8449B	3008A01954	2024/03/01	2025/02/28
Preamplifier	EMC INSTRUMENTS	EMC184045	980065	2024/10/15	2025/10/14
Preamplifier	EM Electronics corp.	EM330	60659	2024/02/17	2025/02/16
Cable-4m(9k-3G)	EMEC	RG-223	18274M	2024/08/08	2025/08/07
Cable-3in1(30M-1G)	HARBOUR INDUSTRIES	LL142	CCE1315	2024/02/23	2025/02/22
Cable-0.5m(1G-40G)	HUBER SUHNER	SUCOFLEX 104	805443/4	2024/03/05	2025/03/04
Cable-3m(1G-40G)	HUBER SUHNER	SUCOFLEX 104	805796/4	2024/03/05	2025/03/04
Cable-8m(1G-26.5G)	WOKEN	WCBA-WCA203SM	CCE1374	2024/03/05	2025/03/04
Cable-3m(10M-40G)	HUBER SUHNER	SF102	804619/2	2024/10/14	2025/10/13
Cable-1m(10M-40G)	HUBER SUHNER	SF102	804398/2	2024/10/14	2025/10/13
E3	AUDIX	v8.2014-8-6	RK-000529	NA	NA
High Pass Filter	Warison	WFIL-H3000-18000F-03	WRJ5CFWC2J1	2024/07/03	2025/07/02
Notch Filter	Warison	WFIL-N5925-7125F-04	WRQ4BFWC4M1	2024/03/11	2025/03/10
Hipass Filter	Warison	WFIL-H7500-18000F	WRQ4BFWC2J1	2024/03/11	2025/03/10

Test Item	RF Conducted				
Test Site	RFCON01-NK				
Instrument	Manufacturer	Model No	Serial No	Calibration Date	Valid Date
CAX Signal Analyzer	KEYSIGHT	N9000B	MY57100339	2023/11/06	2024/11/05
Power Meter	Anritsu	ML2495A	1224005	2024/02/17	2025/02/16
Power Sensor	Anritsu	MA2411B	1207295	2024/02/17	2025/02/16
Attenuator	KEYSIGHT	8491B	MY39250703	2024/02/20	2025/02/19



Test Item	AC Power Line Conducted Emission				
Test Site	CON02-NK				
Instrument	Manufacturer	Model No	Serial No	Calibration Date	Valid Date
EMI Receiver	ROHDE & SCHWARZ	ESR 7	101906	2024/05/13	2025/05/12
Cable-4m(9k-3G)	EMEC	RG-223	18274M	2024/08/08	2025/08/07
Line Impedance Stabilization Network	Schwarzbeck	NSLK 8127	8127740	2024/08/27	2025/08/26
Two-Line V-Network	ROHDE & SCHWARZ	ENV216	102185	2024/08/27	2025/08/26
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	Dipole Antenna
Antenna Gain	5180-5240MHz: ANT A: 3.5dBi, ANT B: 3.5dBi 5260-5320MHz: ANT A: 3.5dBi, ANT B: 3.5dBi 5500-5700MHz: ANT A: 3.5dBi, ANT B: 3.5dBi 5745-5825MHz: ANT A: 3.5dBi, ANT B: 3.5dBi

SISO ANT A

5180-5240MHz
For Power directional gain= Gant= 3.50dBi For PSD directional gain = Gant= 3.50dBi
5260-5320MH
For Power directional gain= Gant= 3.50dBi For PSD directional gain = Gant= 3.50dBi
5500-5700MHz
For Power directional gain= Gant= 3.50dBi For PSD directional gain = Gant= 3.50dBi
5745-5825MHz
For Power directional gain= Gant=3.50dBi For PSD directional gain = Gant=3.50dBi

SISO ANT B

5180-5240MHz
For Power directional gain= Gant= 3.50dBi For PSD directional gain = Gant= 3.50dBi
5260-5320MH
For Power directional gain= Gant= 3.50dBi For PSD directional gain = Gant= 3.50dBi
5500-5700MHz
For Power directional gain= Gant= 3.50dBi For PSD directional gain = Gant= 3.50dBi
5745-5825MHz
For Power directional gain= Gant=3.50dBi For PSD directional gain = Gant=3.50dBi



MIMO

5180-5240MHz
For Power directional gain= $G_{ant}= 3.50\text{dBi}$ For PSD directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / N_{ANT}]$ = 6.51(dBi)
5260-5320MH
For Power directional gain= $G_{ant}= 3.50\text{dBi}$ For PSD directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / N_{ANT}]$ = 6.51 (dBi)
5500-5700MHz
For Power directional gain= $G_{ant}= 3.50\text{dBi}$ For PSD directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / N_{ANT}]$ = 6.51(dBi)
5745-5825MHz
For Power directional gain= $G_{ant}= 3.50\text{dBi}$ For PSD directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / N_{ANT}]$ = 6.51(dBi)

*MIMO type: Cyclic Delay Diversity (CDD) mode.



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

- The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
- Connect EUT to the power mains through a line impedance stabilization network (LISN).
- All the support units are connecting to the other LISN.
- The LISN provides 50 ohm coupling impedance for the measuring instrument.
- The FCC states that a 50 ohm, 50 micro-Henry LISN should be used.
- Both sides of AC line were checked for maximum conducted interference.
- The frequency range from 150 kHz to 30 MHz was searched.
- Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.



5.4. Test Result and Data

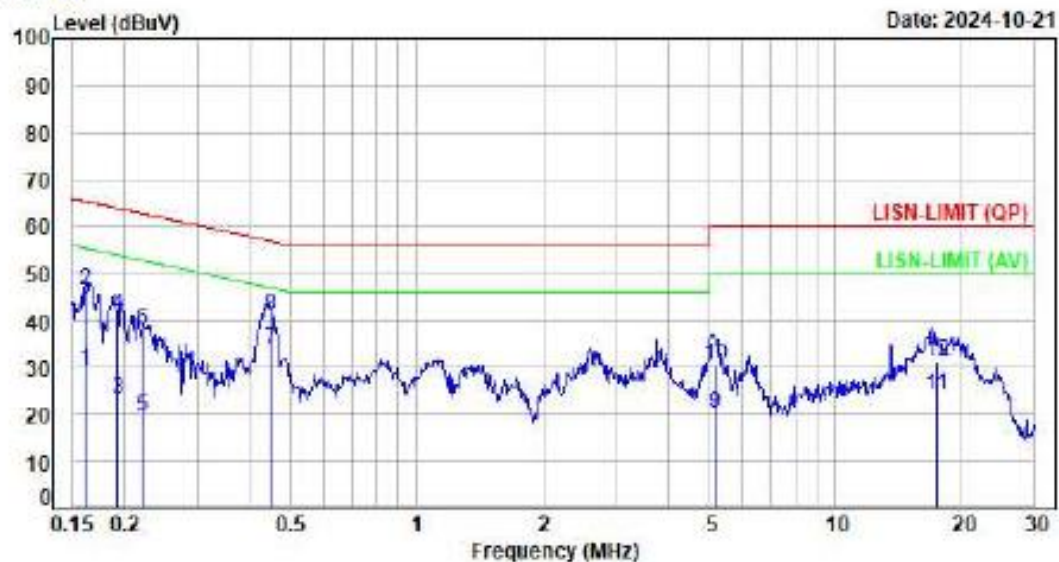
MIMO

Test Mode : 2TX 11ax20 CH48 5240MHz NSS1 MCS0

Voltage : From Adapter(AC 120V/60Hz)

Phase : Line

Data: 15



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1605	9.63	19.73	29.36	55.44	-26.08	Average	P
2	0.1605	9.63	36.90	46.53	65.44	-18.91	QP	P
3	0.1919	9.63	13.65	23.28	53.95	-30.67	Average	P
4	0.1919	9.63	31.54	41.17	63.95	-22.78	QP	P
5	0.2197	9.63	9.84	19.47	52.83	-33.36	Average	P
6	0.2197	9.63	28.23	37.86	62.83	-24.97	QP	P
7	0.4459	9.65	24.05	33.70	46.95	-13.25	Average	P
8	0.4459	9.65	31.47	41.12	56.95	-15.83	QP	P
9	5.1561	9.76	10.57	20.33	50.00	-29.67	Average	P
10	5.1561	9.76	20.59	30.35	60.00	-29.65	QP	P
11	17.3736	9.89	14.04	23.93	50.00	-26.07	Average	P
12	17.3736	9.89	21.19	31.08	60.00	-28.92	QP	P

Note: Level=Reading+Factor

Margin=Level-Limit

Factor=(LISN or ISN or Current Probe)Factor + Cable Loss

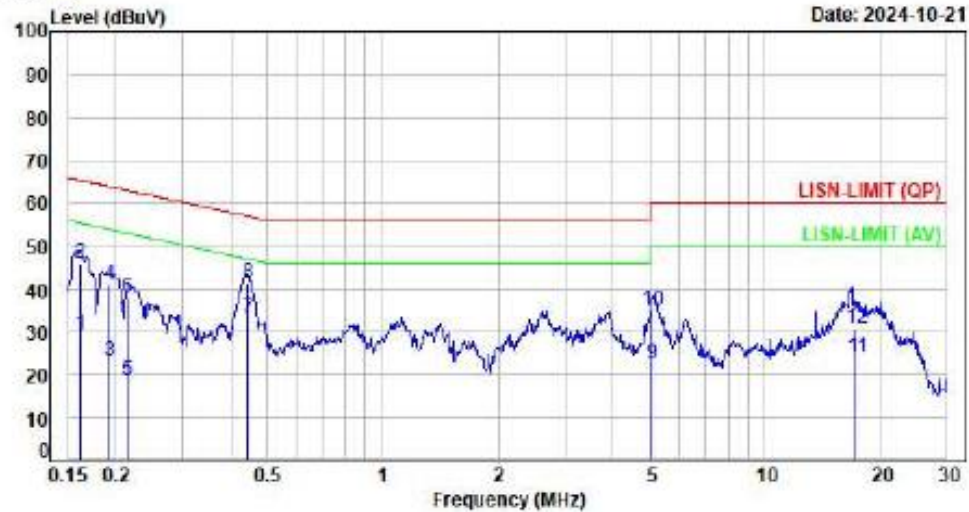


Test Mode : 2TX 11x20 CH48 5240MHz NSS1 MCS0

Voltage : From Adapter(AC 120V/60Hz)

Phase : Neutral

Data: 16



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1608	9.61	19.84	29.45	55.42	-25.97	Average	P
2	0.1608	9.61	36.48	46.09	65.42	-19.33	QP	P
3	0.1923	9.61	13.59	23.20	53.94	-30.74	Average	P
4	0.1923	9.61	31.40	41.01	63.94	-22.93	QP	P
5	0.2141	9.61	9.14	18.75	53.84	-34.29	Average	P
6	0.2141	9.61	28.22	37.83	63.84	-25.21	QP	P
7	0.4415	9.62	23.64	33.26	47.83	-13.77	Average	P
8	0.4415	9.62	31.88	41.50	57.83	-15.53	QP	P
9	5.0818	9.74	12.75	22.49	50.00	-27.51	Average	P
10	5.0818	9.74	25.17	34.91	60.00	-25.09	QP	P
11	17.3391	9.95	14.05	24.00	50.00	-26.00	Average	P
12	17.3391	9.95	20.83	30.78	60.00	-29.22	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.

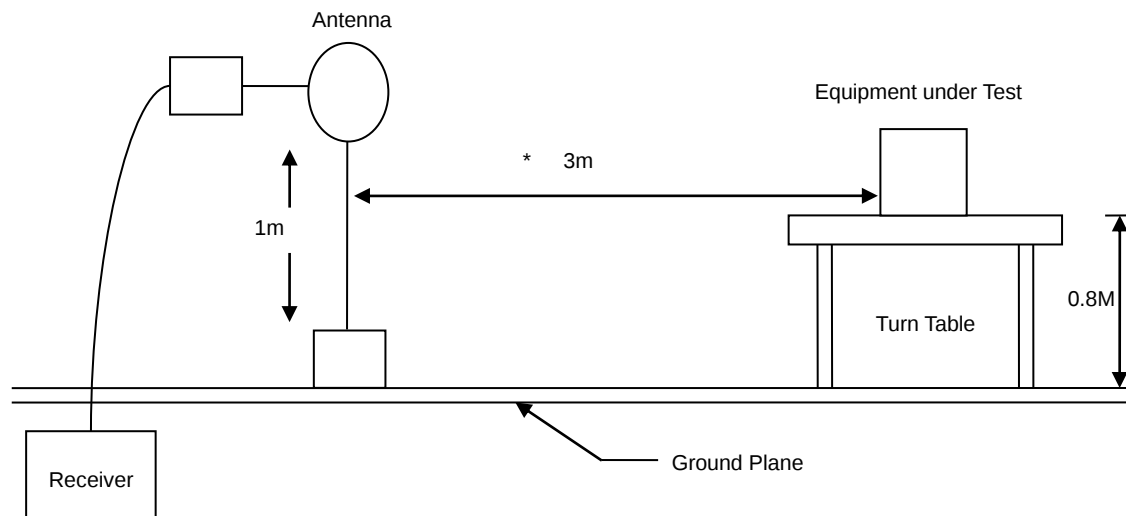
Note:

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.
(Y-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.

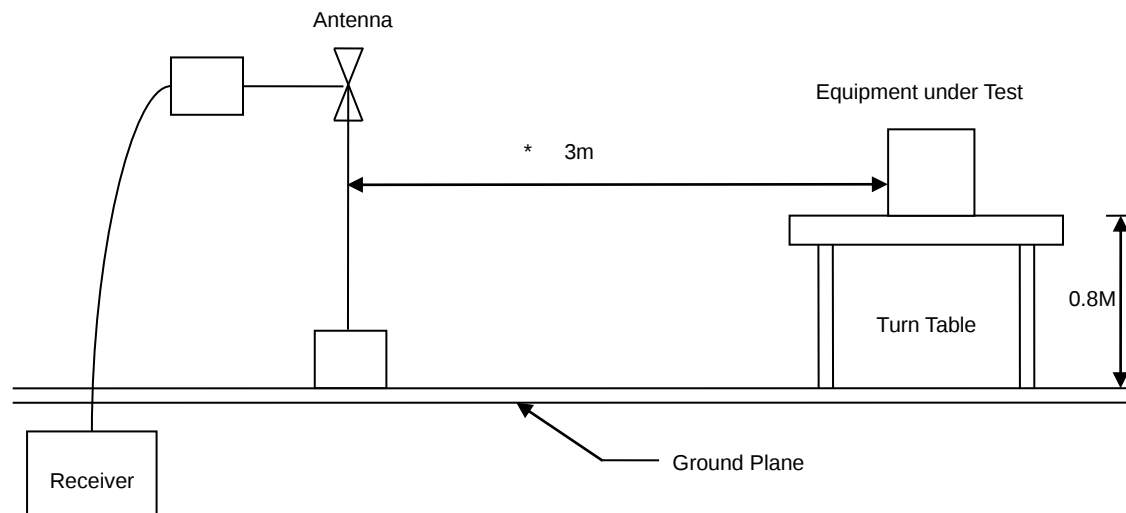


6.3. Typical Test Setup

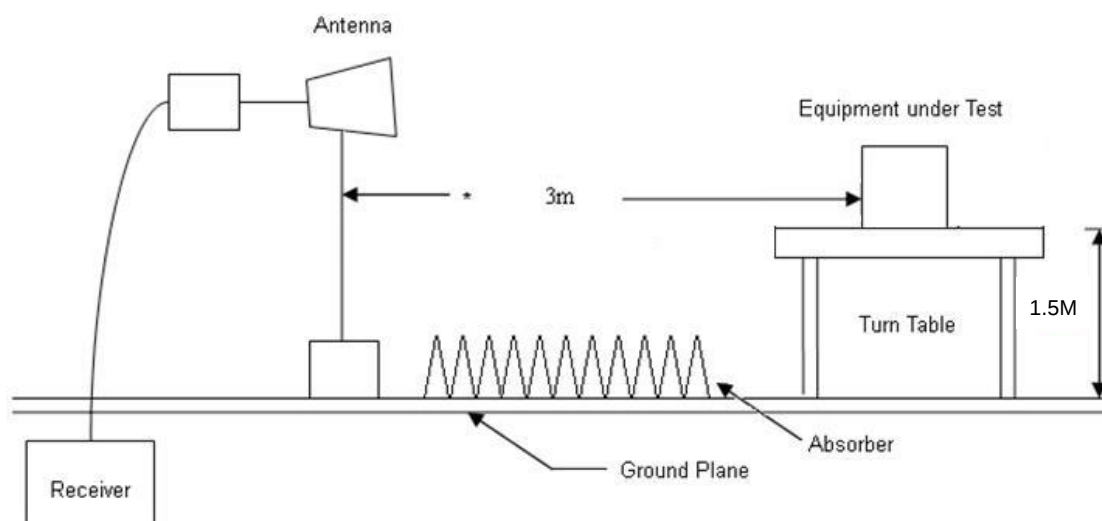
Below 30MHz test setup



30MHz- 1GHz Test Setup



Above 1GHz Test Setup





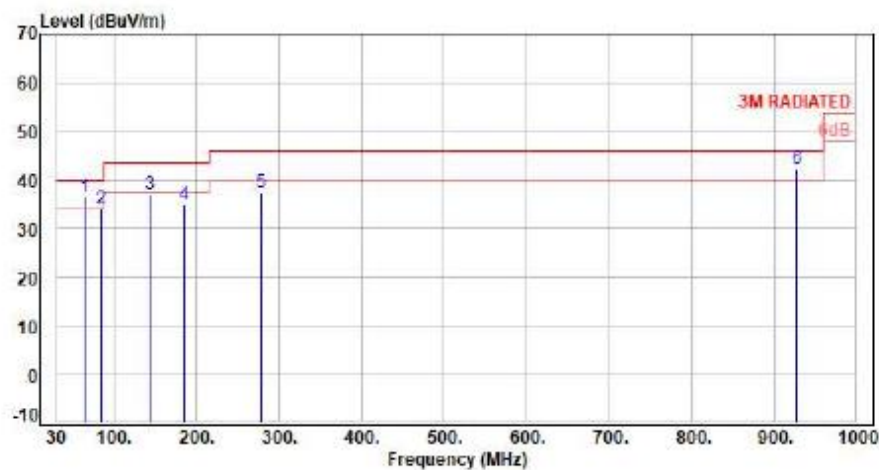
6.4. Test Result and Data (9kHz ~ 30MHz)

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

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

MIMO

Test Mode : 2TX 11ax20 CH144 NSS1 MCS0
Voltage : From Adapter(AC240V/60Hz)
Pol : Vertical



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	64.92	-10.48	46.87	36.39	40.00	-3.61	QP	100	217	P
2	84.32	-15.52	49.51	33.99	40.00	-6.01	Peak	100	0	P
3	144.46	-9.73	46.84	37.11	43.50	-6.39	Peak	100	0	P
4	185.20	-11.17	46.28	35.11	43.50	-8.39	Peak	100	0	P
5	278.32	-9.27	46.68	37.41	46.00	-8.59	Peak	100	0	P
6	928.22	4.41	37.97	42.38	46.00	-3.62	Peak	100	0	P

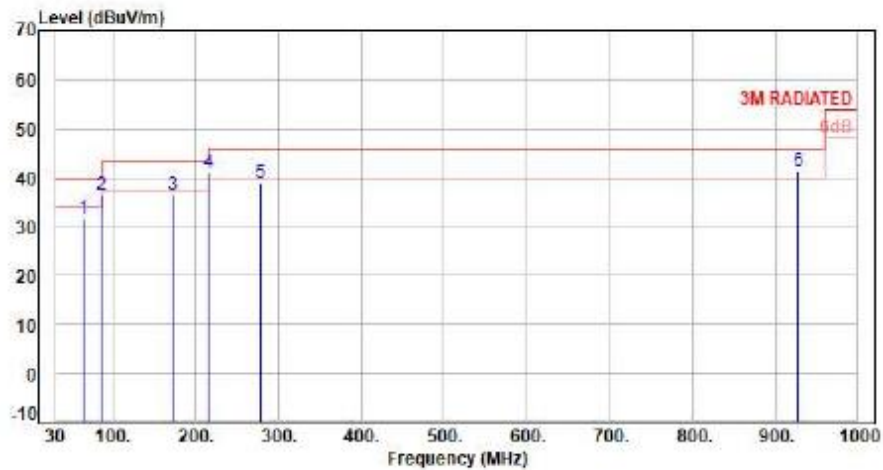
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Test Mode : 2TX 11ax20 CH144 NSS1 MCS0
Voltage : From Adapter(AC240V/60Hz)
Pol : Horizontal



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	64.92	-10.48	42.16	31.68	40.00	-8.32	Peak	400	360	P
2	86.26	-15.85	52.27	36.42	40.00	-3.58	Peak	400	360	P
3	171.62	-9.79	46.41	36.62	43.50	-6.88	Peak	400	360	P
4	216.24	-11.95	52.98	41.03	46.00	-4.97	Peak	400	360	P
5	278.32	-9.27	48.39	39.12	46.00	-6.88	Peak	400	360	P
6	928.22	4.41	36.91	41.32	46.00	-4.68	Peak	400	360	P

Note: Level=Reading+Factor

Margin=Level-Limit

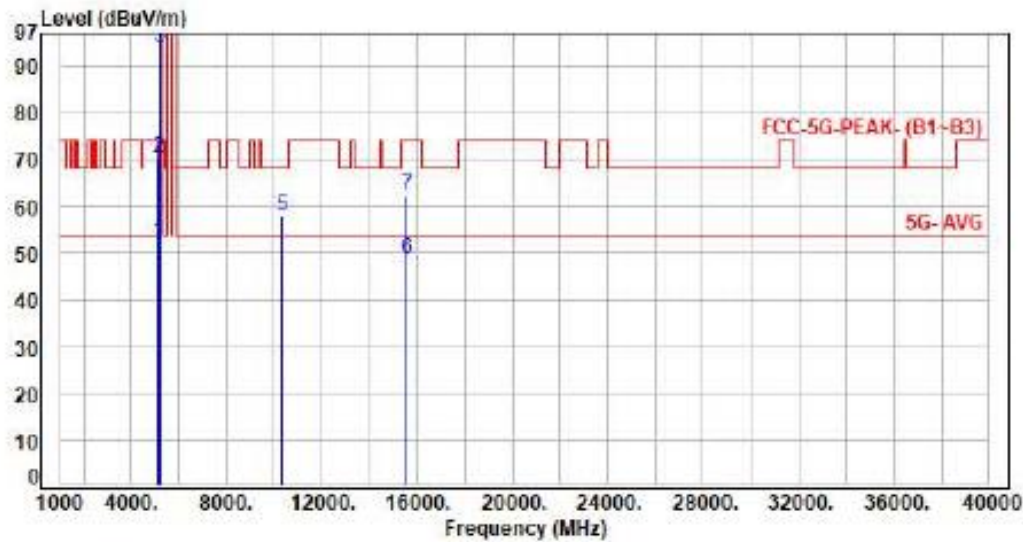
Factor=Antenna Factor + cable loss - Amplifier Factor



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

SISO ANT A

Test Mode : ITX 11a CH36 6Mbps
Voltage : From Adapter(AC120V/60Hz)
Pol : Vertical



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	6.69	45.81	52.50	54.00	-1.50	Average	319	132	P
2	5150.00	6.69	63.69	70.38	74.00	-3.62	Peak	319	132	P
3	5180.00	6.79	87.43	94.22	200.00	-105.78	Average	319	132	P
4	5180.00	6.79	99.65	106.44	200.00	-93.56	Peak	319	132	P
5	10360.00	16.31	41.53	57.84	68.20	-10.36	Peak	100	223	P
6	15540.00	20.54	28.15	48.69	54.00	-5.31	Average	100	306	P
7	15540.00	20.54	41.87	62.41	74.00	-11.59	Peak	100	306	P

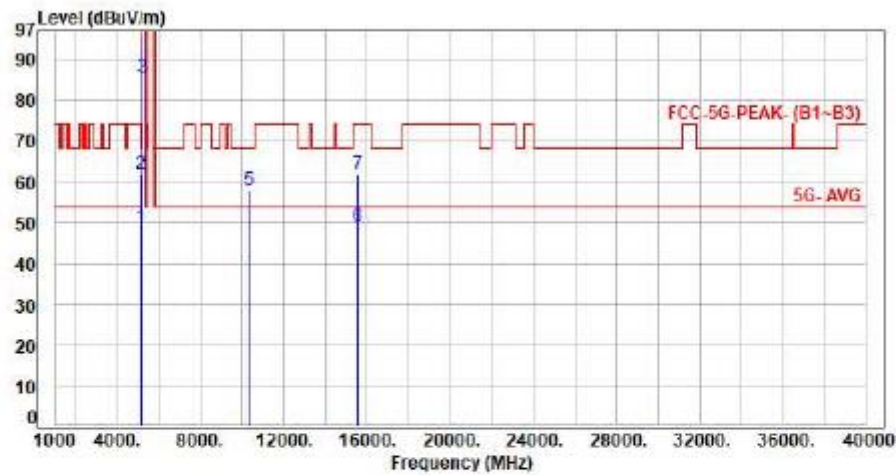
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Test Mode : 1TX 11a CH36 8Mbps
Voltage : From Adapter(AC120V/60Hz)
Pol : Horizontal



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	6.69	42.20	48.89	54.00	-5.11	Average	103	237	P
2	5150.00	6.69	55.43	62.12	74.00	-11.88	Peak	103	237	P
3	5180.00	6.79	78.65	85.44	200.00	-114.56	Average	103	237	P
4	5180.00	6.79	88.70	95.49	200.00	-104.51	Peak	103	237	P
5	10360.00	16.31	41.63	57.94	68.20	-10.26	Peak	100	100	P
6	15540.00	20.54	28.66	49.20	54.00	-4.80	Average	100	86	P
7	15540.00	20.54	41.56	62.10	74.00	-11.90	Peak	100	86	P

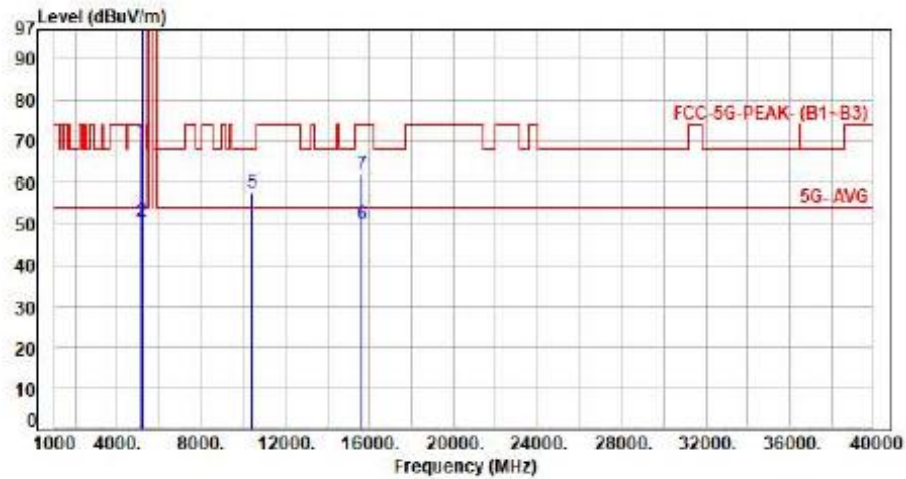
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Test Mode : 1TX 11a CH48 6Mbps
Voltage : From Adapter(AC120V/60Hz)
Pol : Vertical



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	6.69	63.08	69.77	74.00	-4.23	Peak	332	138	P
2	5150.00	6.69	43.71	50.40	74.00	-23.60	Peak	332	138	P
3	5200.00	6.86	90.12	96.98	200.00	-103.02	Average	332	138	P
4	5200.00	6.86	101.40	108.26	200.00	-91.74	Peak	332	138	P
5	10400.00	16.35	41.28	57.63	68.20	-10.57	Peak	100	224	P
6	15600.00	20.35	29.51	49.86	54.00	-4.14	Average	100	311	P
7	15600.00	20.35	41.54	61.89	74.00	-12.11	Peak	100	311	P

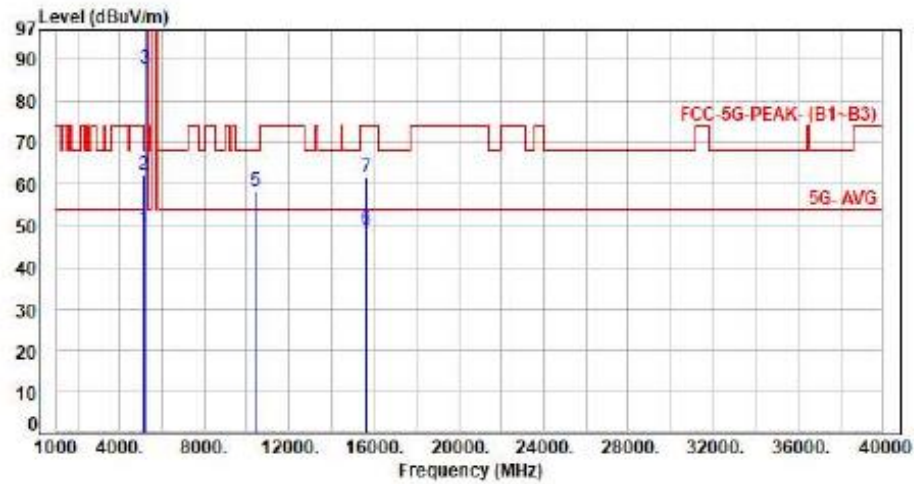
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Test Mode : 1TX 11a CH40 8Mbps
Voltage : From Adapter(AC120V/60Hz)
Pol : Horizontal



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	6.69	42.27	48.96	54.00	-5.04	Average	100	238	P
2	5150.00	6.69	55.67	62.36	74.00	-11.64	Peak	100	238	P
3	5200.00	6.86	80.83	87.69	200.00	-112.31	Average	100	238	P
4	5200.00	6.86	92.14	99.00	200.00	-101.00	Peak	100	238	P
5	10400.00	16.35	41.89	58.24	68.20	-9.96	Peak	100	109	P
6	15600.00	20.35	28.53	48.88	54.00	-5.12	Average	100	81	P
7	15600.00	20.35	41.34	61.69	74.00	-12.31	Peak	100	81	P

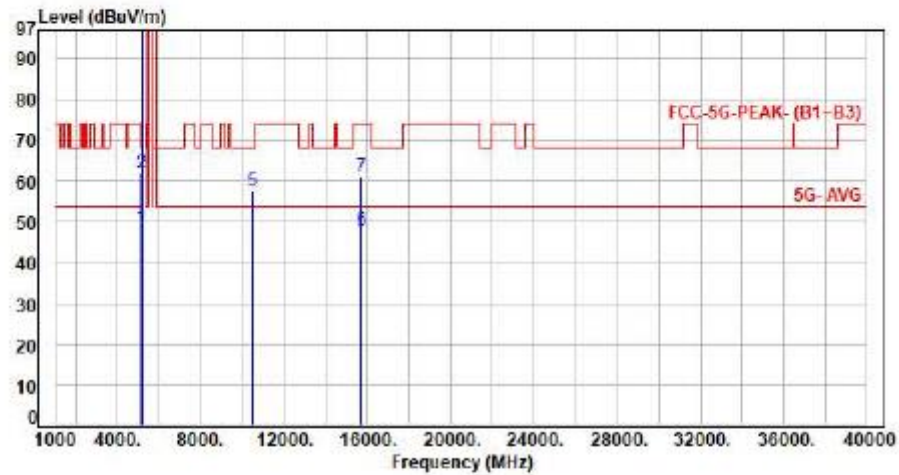
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Test Mode : 1TX 11a CH48 6Mbps
Voltage : From Adapter(AC120V/60Hz)
Pol : Vertical



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	6.69	41.09	48.78	54.00	-5.22	Average	329	138	P
2	5150.00	6.69	55.37	62.06	74.00	-11.94	Peak	329	138	P
3	5240.00	6.91	89.81	96.72	200.00	-103.28	Average	329	138	P
4	5240.00	6.91	101.80	108.71	200.00	-91.29	Peak	329	138	P
5	10480.00	16.43	41.15	57.58	68.20	-10.62	Peak	100	224	P
6	15720.00	19.84	28.17	48.01	54.00	-5.99	Average	100	308	P
7	15720.00	19.84	41.48	61.32	74.00	-12.68	Peak	100	308	P

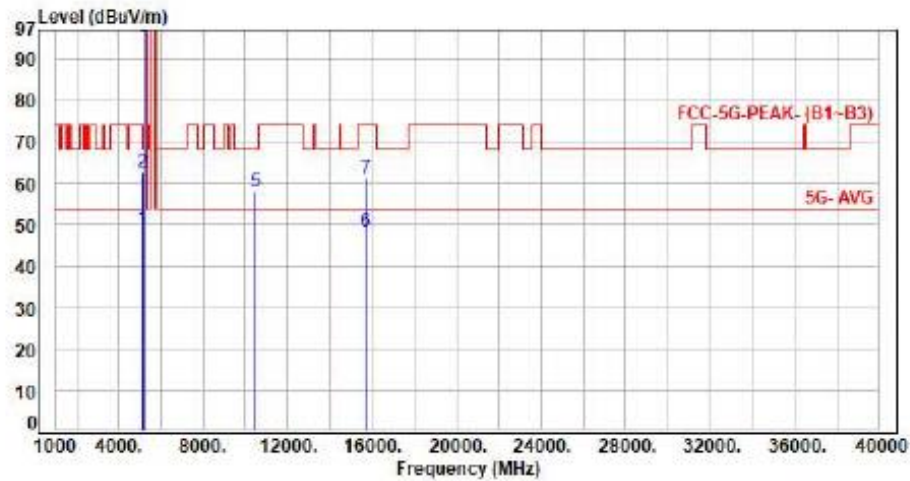
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Test Mode : 1TX 11a CH48 6Mbps
Voltage : From Adapter(AC120V/60Hz)
Pol : Horizontal



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	6.69	42.21	48.90	54.00	-5.10	Average	100	235	P
2	5150.00	6.69	55.96	62.65	74.00	-11.35	Peak	100	235	P
3	5240.00	6.91	88.21	95.12	200.00	-104.88	Average	100	235	P
4	5240.00	6.91	92.05	98.96	200.00	-101.04	Peak	100	235	P
5	10480.00	16.43	41.36	57.79	68.20	-10.41	Peak	100	107	P
6	15720.00	19.84	28.59	48.43	54.00	-5.57	Average	100	85	P
7	15720.00	19.84	41.48	61.32	74.00	-12.68	Peak	100	85	P

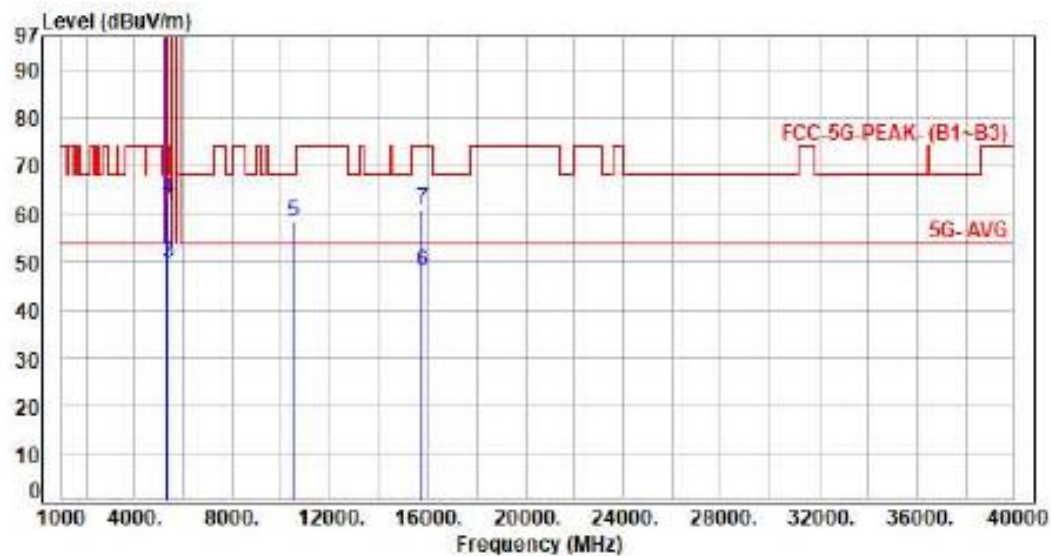
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Test Mode : 1TX 11a CH52 6Mbps
Voltage : From Adapter(AC120V/60Hz)
Pol : Vertical



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5260.00	6.99	89.36	96.35	200.00	-103.65	Average	333	136	P
2	5260.00	6.99	100.06	107.05	200.00	-92.95	Peak	333	136	P
3	5350.00	7.27	42.58	49.85	54.00	-4.15	Average	333	136	P
4	5350.00	7.27	55.88	63.15	74.00	-10.85	Peak	333	136	P
5	10520.00	16.55	41.85	58.40	68.20	-9.80	Peak	100	221	P
6	15780.00	19.61	28.47	48.08	54.00	-5.92	Average	100	304	P
7	15780.00	19.61	41.36	60.97	74.00	-13.03	Peak	100	304	P

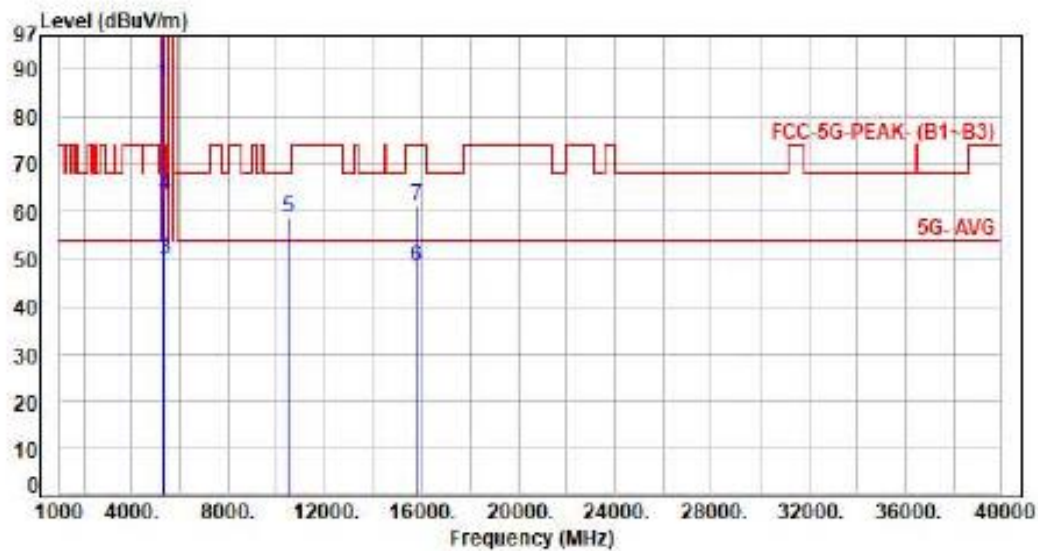
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Test Mode : ITX 11a CH52 6Mbps
Voltage : From Adapter(AC120V/60Hz)
Pol : Horizontal



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5260.00	6.99	80.18	87.17	200.00	-112.83	Average	123	229	P
2	5260.00	6.99	90.70	97.69	200.00	-102.31	Peak	123	229	P
3	5350.00	7.27	42.56	49.83	54.00	-4.17	Average	123	229	P
4	5350.00	7.27	56.00	63.27	74.00	-10.73	Peak	123	229	P
5	10520.00	16.55	42.04	58.59	68.20	-9.61	Peak	100	101	P
6	15780.00	19.61	28.84	48.45	54.00	-5.55	Average	100	85	P
7	15780.00	19.61	41.78	61.39	74.00	-12.61	Peak	100	85	P

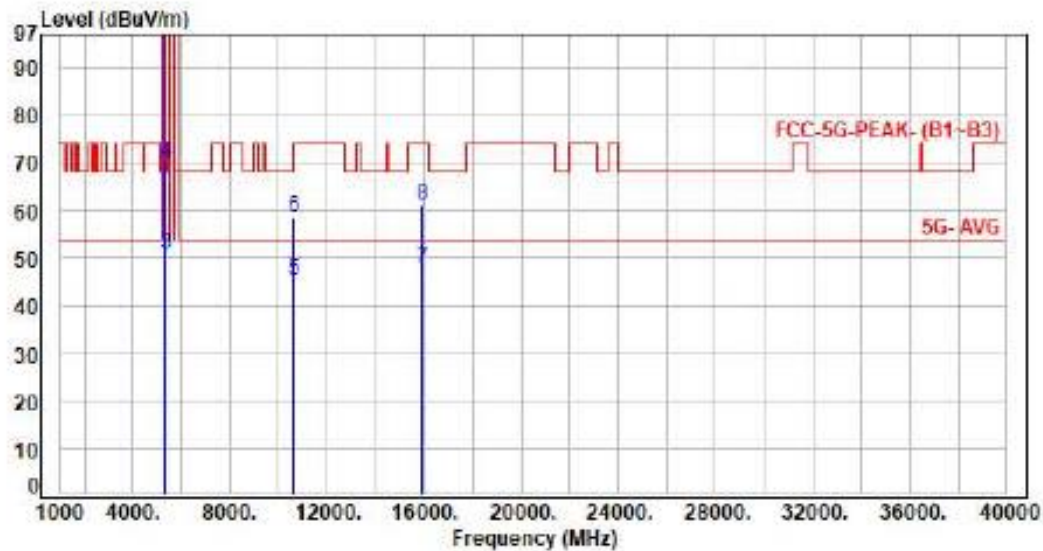
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Test Mode : 1TX 11a CH60 6Mbps
Voltage : From Adapter(AC120V/60Hz)
Pol : Vertical



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5300.00	7.20	89.05	96.25	200.00	-103.75	Average	307	136	P
2	5300.00	7.20	100.49	107.69	200.00	-92.31	Peak	307	136	P
3	5350.00	7.27	43.54	50.81	54.00	-3.19	Average	307	136	P
4	5350.00	7.27	62.99	70.26	74.00	-3.74	Peak	307	136	P
5	10600.00	16.78	28.49	45.27	54.00	-8.73	Average	100	227	P
6	10600.00	16.78	41.73	58.51	74.00	-15.49	Peak	100	227	P
7	15900.00	19.54	28.51	48.05	54.00	-5.95	Average	100	308	P
8	15900.00	19.54	41.54	61.08	74.00	-12.92	Peak	100	308	P

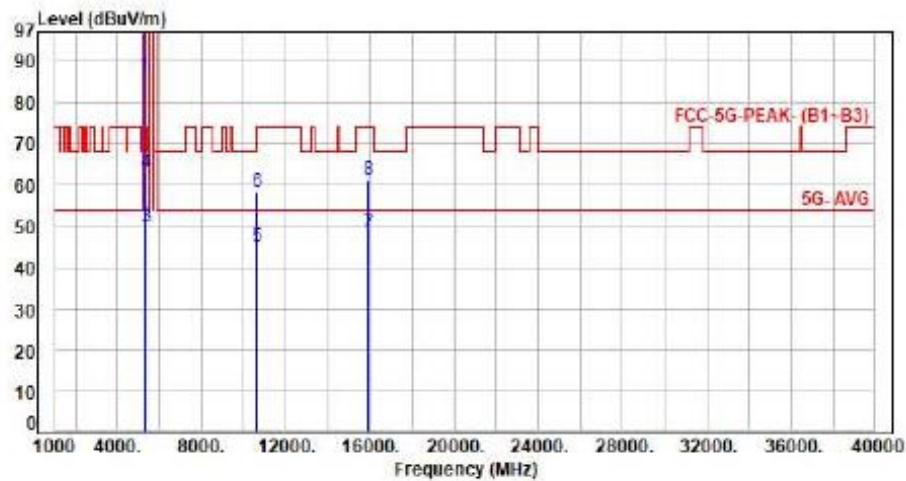
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Test Mode : ITX 11a CH60 6Mbps
Voltage : From Adapter(AC120V/60Hz)
Pol : Horizontal



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5300.00	7.20	79.31	86.51	200.00	-113.49	Average	107	227	P
2	5300.00	7.20	91.23	98.43	200.00	-101.57	Peak	107	227	P
3	5350.00	7.27	42.61	49.88	54.00	-4.12	Average	107	227	P
4	5350.00	7.27	55.75	63.02	74.00	-10.98	Peak	107	227	P
5	10600.00	16.78	28.32	45.10	54.00	-8.90	Average	100	101	P
6	10600.00	16.78	41.63	58.41	74.00	-15.59	Peak	100	101	P
7	15900.00	19.54	28.85	48.39	54.00	-5.61	Average	100	83	P
8	15900.00	19.54	41.59	61.13	74.00	-12.87	Peak	100	83	P

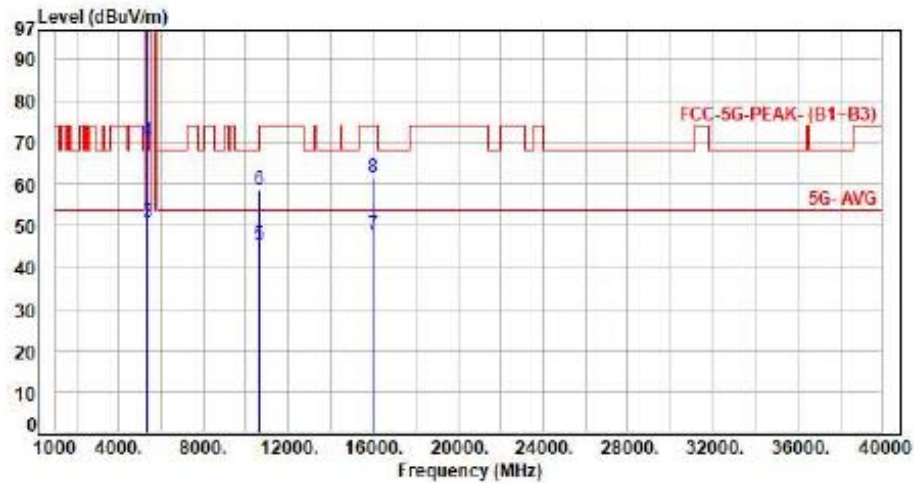
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Test Mode : 1TX 11a CH64 6Mbps
Voltage : From Adapter(AC120V/60Hz)
Pol : Vertical



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5320.00	7.23	86.00	93.23	200.00	-106.77	Average	328	182	P
2	5320.00	7.23	96.69	103.92	200.00	-96.08	Peak	328	182	P
3	5350.00	7.27	43.78	51.05	54.00	-2.95	Average	328	182	P
4	5350.00	7.27	63.02	70.29	74.00	-3.71	Peak	328	182	P
5	10640.00	16.96	28.41	45.37	54.00	-8.63	Average	100	221	P
6	10640.00	16.96	41.59	58.55	74.00	-15.45	Peak	100	221	P
7	15960.00	19.50	28.46	47.96	54.00	-6.04	Average	100	302	P
8	15960.00	19.50	42.11	61.61	74.00	-12.39	Peak	100	302	P

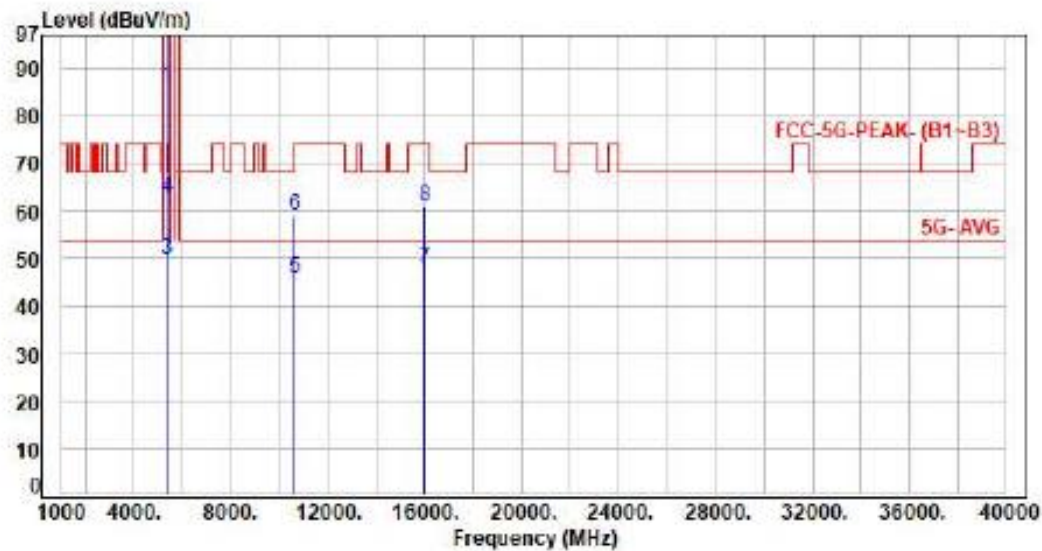
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Test Mode : 1TX 11a CH64 6Mbps
Voltage : From Adapter(AC120V/60Hz)
Pol : Horizontal



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5320.00	7.23	78.56	85.79	200.00	-114.21	Average	118	225	P
2	5320.00	7.23	89.98	97.21	200.00	-102.79	Peak	118	225	P
3	5350.00	7.27	42.47	49.74	54.00	-4.26	Average	118	225	P
4	5350.00	7.27	55.29	62.56	74.00	-11.44	Peak	118	225	P
5	10640.00	16.96	28.65	45.61	54.00	-8.39	Average	100	106	P
6	10640.00	16.96	41.91	58.87	74.00	-15.13	Peak	100	106	P
7	15960.00	19.50	28.39	47.89	54.00	-6.11	Average	100	84	P
8	15960.00	19.50	41.47	60.97	74.00	-13.03	Peak	100	84	P

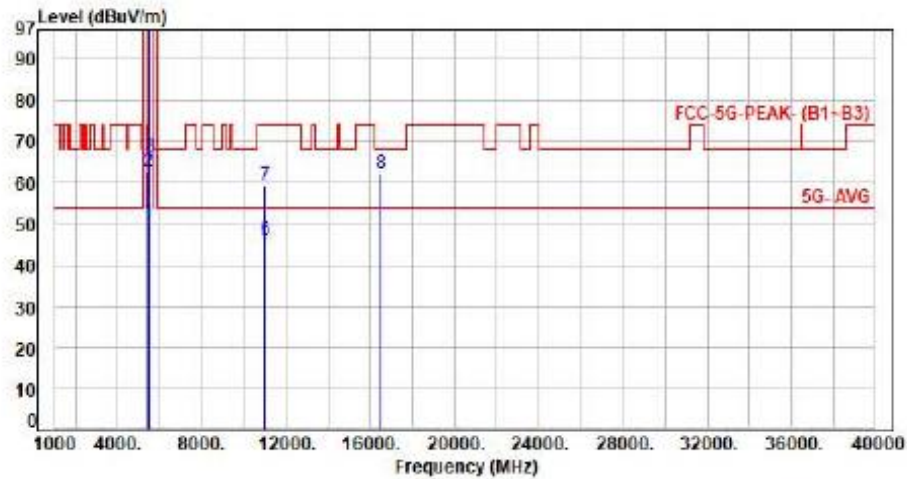
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Test Mode : ITX 11a CH100 6Mbps
Voltage : From Adapter(AC120V/60Hz)
Pol : Vertical



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	7.55	42.87	50.42	54.00	-3.58	Average	288	143	P
2	5460.00	7.55	55.25	62.80	74.00	-11.20	Peak	288	143	P
3	5470.00	7.58	58.76	66.34	68.20	-1.86	Peak	288	143	P
4	5500.00	7.68	89.55	97.23	200.00	-102.77	Average	288	143	P
5	5500.00	7.68	100.12	107.80	200.00	-92.20	Peak	288	143	P
6	11000.00	17.78	28.29	46.07	54.00	-7.93	Average	100	228	P
7	11000.00	17.78	41.52	59.30	74.00	-14.70	Peak	100	228	P
8	16500.00	20.78	41.40	62.18	68.20	-6.02	Peak	100	307	P

Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor