FCC RADIO TEST REPORT

Applicant	:	Ubiquiti Inc.
Address	:	685 Third Avenue, New York, New York 10017, USA
Equipment	:	PoE Audio Port
Model No.	:	UPL-Port-W, UPL-Port-B
Trade Name	:	UBIQUITI
FCC ID	:	SWX-UPLP

I HEREBY CERTIFY THAT :

The sample was received on May. 09, 2025 and the testing was completed on Jun. 30, 2025 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:

Vic Hsiao / Supervisor

Laboratory Accreditation:

Cerpass Technology Corporation Test Laboratory

Contents

1. Summary of Test Procedure and Test Results 4
1.1 Applicable Standards 4
2. Test Configuration of Equipment under Test 5
2.1 Feature of Equipment under Test 5
2.2 Test Mode and Test Software 6
2.3 Description of Test System 7
2.4 General Information of Test 8
2.5 Measurement Uncertainty 8
3. Test Equipment and Ancillaries Used for Tests 9
4. Test of AC Power Line Conducted Emission 12
4.1 Test Limit 12
4.2 Test Procedures 12
4.3 Typical Test Setup 13
4.4 Test Result and Data 14
4.5 Test Photographs 18
5. Test of Spurious Emission (Radiated) 19
5.1 Test Limit 19
5.2 Test Procedures 20
5.3 Typical Test Setup 21
5.4 Test Result and Data (9kHz ~ 30MHz) 22
5.5 Test Result and Data (30MHz ~ 1GHz) 22
5.6 Test Result and Data (1GHz ~ 40GHz) 26
5.7 Restricted Bands of Operation 30
5.8 Test Photographs (30MHz ~ 1GHz) 31
5.9 Test Photographs (1GHz ~ 40GHz) 32

History of this test report

Report No.	Issued Date	Description
25040713-TRFCC05	Jul. 01, 2025	Original

1. Summary of Test Procedure and Test Results

1.1 Applicable Standards

ANSI C63.10:2013

. Description of Test	Result
. CO-LOCATION	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

Frequency Range	BT/BLE: 2400-2483.5MHz 802.11b/g/n/ax: 2400-2483.5MHz 802.11a/n/ac/ax: 5150-5250MHz, 5250-5350MHz, 5470-5725MHz, 5725-5850MHz
Center Frequency Range	BT/BLE: 2402-2480MHz 802.11b/g/n/ax: 2412MHz-2462MHz 802.11a/n/ac/ax: 5180-5240MHz, 5260-5320MHz, 5500-5720MHz, 5745-5825MHz
Modulation Type	BT: GFSK, π/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: 802.11n/a: BPSK, QPSK, 16QAM, 64QAM 802.11ac: BPSK, QPSK, 16QAM, 64QAM, 256QAM 802.11ax: BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM
Modulation Technology	FHSS, DTS, DSSS, OFDM, OFDMA
Data Rate	BT: GFSK: 1Mbps, π/4-DQPSK: 2Mbps, 8DPSK: 3Mbps BLE: GFSK: 1Mbps 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, VHT20/40/80 802.11ax: MCS0 – MCS11, HE20/40/80
Antenna Type	BT/BLE: Dipole Antenna WLAN 2.4GHz/5GHz: PIFA Antenna
Antenna Gain	BT/BLE: 2400MHz-2500MHz: 1.0dBi WLAN: 2400MHz-2500MHz: ANT A: 2.0dBi; ANT B: 2.0dBi 5180MHz-5850MHz: ANT A: 6.0dBi; ANT B: 6.0dBi
Adapter	UBIQUITI \ ADS-18LD-12 12018EPCU

Note:
1. EUT support TPC Function.
2. EUT supports DFS Client Mode, without radar detection.
3. For more details, please refer to the User's manual of the EUT.

Difference description:

Model No.	Color of Enclosure
UPL-Port-W	White
UPL-Port-B	Black

2.2 Test Mode and Test Software

a. During testing, the interface cables and equipment positions were varied according to ANSI C63.4.

b. An executive program, ”iwpriv command Ver.: N/A” under Windows 10 system was executed to transmit and receive data via WLAN and Bluetooth.

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

Conducted Emissions from the AC mains power ports	
Test Mode 1	BT GFSK CH00 + 802.11ax HE20 CH06, TX Mode, Power from Adapter (AC 120V/60Hz)
Test Mode 2	BT GFSK CH00 + 802.11ax HE20 CH06, TX Mode, Power from Adapter (AC 240V/60Hz)
Test Mode 3	BT GFSK CH00 + 802.11ax HE40 CH118, TX Mode, Power from Adapter (AC 120V/60Hz)
Test Mode 4	BT GFSK CH00 + 802.11ax HE40 CH118, TX Mode, Power from Adapter (AC 240V/60Hz)
Test Mode 5	BT GFSK CH00 + 802.11ax HE20 CH06, TX Mode, Power from PoE (AC 120V/60Hz)
caused "Test Mode 1,3" generated the worst case, these were reported as the final data.	
Radiated Emissions (30MHz ~ 1GHz)	
Test Mode 1	BT GFSK CH00 + 802.11ax HE20 CH06, TX Mode, Power from Adapter (AC 120V/60Hz)
Test Mode 2	BT GFSK CH00 + 802.11ax HE20 CH06, TX Mode, Power from Adapter (AC 240V/60Hz)
Test Mode 3	BT GFSK CH00 + 802.11ax HE40 CH118, TX Mode, Power from Adapter (AC 120V/60Hz)
Test Mode 4	BT GFSK CH00 + 802.11ax HE40 CH118, TX Mode, Power from Adapter (AC 240V/60Hz)
Test Mode 5	BT GFSK CH00 + 802.11ax HE20 CH06, TX Mode, Power from PoE (AC 120V/60Hz)
caused "Test Mode 1,3" generated the worst case, these were reported as the final data.	
Radiated Emissions (1GHz ~ 40GHz)	
Test Mode 1	BT GFSK CH00 + 802.11ax HE20 CH06, TX Mode, Power from Adapter (AC 120V/60Hz)
Test Mode 2	BT GFSK CH00 + 802.11ax HE20 CH06, TX Mode, Power from Adapter (AC 120V/60Hz)
caused “Test Mode 1,2” generated the worst case, these were reported as the final data.	

2.3 Description of Test System

Radiated Emissions (3M02-NK)				
Equipment	Brand	Model	Length/Type	Power cord/Length/Type
Notebook	DELL	Latitude E5270	N/A	Adapter / 1.8m / NS
Type-C Cable (Blue)	kolin	KEX-DLCP08	1m / NS	N/A
Notebook	ASUS	P2430U	N/A	Adapter / 1.8m / NS
PoE	UBIQUITI	GP-V480-032G	N/A	0.6m / NS
RJ45 Cable	TE CONNECTIVITY	CAT5E	1.2m / NS	N/A

Radiated Emissions (3M03-NK)				
Equipment	Brand	Model	Length/Type	Power cord/Length/Type
Notebook	DELL	Latitude E5270	N/A	Adapter / 1.8m / NS
Type-C Cable (Blue)	kolin	KEX-DLCP08	1m / NS	N/A
Notebook	ASUS	P2430U	N/A	Adapter / 1.8m / NS
PoE	UBIQUITI	GP-V480-032G	N/A	0.6m / NS
RJ45 Cable	TE CONNECTIVITY	CAT5E	1.2m / NS	N/A

AC Power Line Conducted Emission				
Equipment	Brand	Model	Length/Type	Power cord/Length/Type
Notebook	AUAS	P2430U	N/A	Adapter / 1.8m / NS
Type-C Cable (Blue)	kolin	KEX-DLCP08	1m / NS	N/A
PoE	UBIQUITI	GP-V480-032G	N/A	0.6m / NS
RJ45 Cable	TE CONNECTIVITY	CAT5E	1.2m / NS	N/A

2.4 General Information of Test

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

Test Item	Test Site	Test period	Environmental Conditions	Tested By
Radiated Emissions	3M02-NK	2025/06/30	19.8°C / 67%	Leon Huang
Radiated Emissions	3M03-NK	2025/05/24	19.5°C / 64%	Leon Huang
AC Power Line Conducted Emission	CON02-NK	2025/05/24	24.1°C / 59%	Leon Huang

2.5 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)	±3.2dB
Radiated Spurious Emission(9KHz~30MHz)	±3.5dB
Radiated Spurious Emission(30MHz~1GHz)	±5.1dB
Radiated Spurious Emission(1GHz~40GHz)	±5.2dB

3. Test Equipment and Ancillaries Used for Tests

Test Item	Radiated Emissions				
Test Site	Semi Anechoic Room(3M02-NK)				
Instrument	**Manufacturer**	**Model No**	**Serial No**	**Calibration Date**	**Valid Date**
Bilog Antenna	Schwarzbeck	VULB9168	VULB 9168-369	2025/02/17	2026/02/16
Active Loop Antenna	Schwarzbeck	FMZB 1513	00414	2025/02/18	2026/02/17
Horn Antenna	EMCO	3116	31974	2025/02/20	2026/02/19
Horn Antenna	EMCO	3115	31589	2024/06/27	2025/06/26
Spectrum Analyzer	R&S	FSV 40-N	102151	2024/08/22	2025/08/21
EMI Receiver	R&S	ESCI	101423	2024/07/16	2025/07/15
Preamplifier	Agilent	8449B	3008A01954	2025/02/12	2026/02/11
Preamplifier	EMC INSTRUMENTS	EMC184045	980065	2024/10/15	2025/10/14
Preamplifier	EM Electronics corp.	EM330	60659	2024/12/16	2025/12/15
Cable-4m (9k-3G)	EMEC	RG-223	18274M	2024/08/08	2025/08/07
Cable-3in1 (30M-1G)	HARBOUR INDUSTRIES	LL142	CCE1315	2025/02/21	2026/02/20
Cable-0.5m (1G-40G)	HUBER SUHNER	SUCOFLEX 104	805443/4	2025/02/26	2026/02/25
Cable-3m (1G-40G)	HUBER SUHNER	SUCOFLEX 104	805796/4	2025/02/26	2026/02/25
Cable-8m (1G-26.5G)	WOKEN	WCBA-WCA203SM	CCE1374	2025/02/26	2026/02/25
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
Highpass Filter	Warison	WFIL-H7500-18000F	WRQ4BFWC2J1	2025/02/21	2026/02/20
Notch Filter	Warison	WFIL-N5925-7125F-04	WRQ4BFWC4M1	2025/02/11	2026/02/10
Highpass Filter	WOKEN	WFIL-H3000-18000F-03	WR377WC2B1	2024/10/15	2025/10/14
E3	AUDIX	v8.2014-8-6	RK-000529	NA	NA

Test Item	Radiated Emissions				
Test Site	Semi Anechoic Room(3M03-NK)				
Instrument	**Manufacturer**	**Model No**	**Serial No**	**Calibration Date**	**Valid Date**
Bilog Antenna	Sunol	JB1	A020514-2	2024/07/09	2025/07/08
Active Loop Antenna	EMCO	6507	00040855	2025/04/28	2026/04/27
Horn Antenna	EMCO	3116	31974	2024/10/18	2025/10/17
Double Ridged Guide Horn Antenna	RF SPAN	DRH18-E	210309A18-ES	2024/08/28	2025/08/27
Spectrum Analyzer	R&S	FSV 40-N	102151	2024/08/22	2025/08/21
EMI Receiver	R&S	ESCI	101423	2024/07/16	2025/07/15
Preamplifier	EMC INSTRUMENTS	EMC0518A45SE	981069	2024/12/17	2025/12/16
Preamplifier	EMC INSTRUMENTS	EMC184045	980065	2024/10/15	2025/10/14
Preamplifier	EM Electronics corp.	EM330	60820	2024/06/14	2025/06/13
Cable-4m (9k-3G)	EMEC	RG-223	18274M	2024/08/08	2025/08/07
Cable-8m (10M-26.5G)	HUBER SUHNER	SF126E	587396/126E	2024/10/14	2025/10/13
Cable-3m (10M-26.5G)	HUBER SUHNER	SF126E	587399/126E	2024/10/14	2025/10/13
Cable-1m (10M-40G)	HUBER SUHNER	SF102	804398/2	2024/10/14	2025/10/13
Cable-1m (1G-26.5G)	HUBER SUHNER	SF126E	589848/126E	2024/10/14	2025/10/13
Cable-4m (30M-1G)	HUBER SUHNER	RG-214	02953M	2024/09/04	2025/09/03
Cable-1m (30M-1G)	HUBER SUHNER	RG-214	05094M	2024/09/04	2025/09/03
Cable-9m (30M-1G)	HUBER SUHNER	RG-214	00402M	2024/09/04	2025/09/03
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
Highpass Filter	WOKEN	WFIL-H7000-18000F-01	WR377WC2B2	2024/10/15	2025/10/14

Test Item	AC Power Line Conducted Emission				
Test Site	CON02-NK				
Instrument	**Manufacturer**	**Model No**	**Serial No**	**Calibration Date**	**Valid Date**
EMI Receiver	R&S	ESCI	101423	2024/07/16	2025/07/15
Cable-4m(9k-3G)	EMEC	RG-223	18274M	2024/08/08	2025/08/07
LISN	Schwarzbeck	NSLK 8127	8127740	2024/08/27	2025/08/26
Two-Line V-Network	R&S	ENV216	102185	2024/08/27	2025/08/26

4. Test of AC Power Line Conducted Emission

4.1 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.

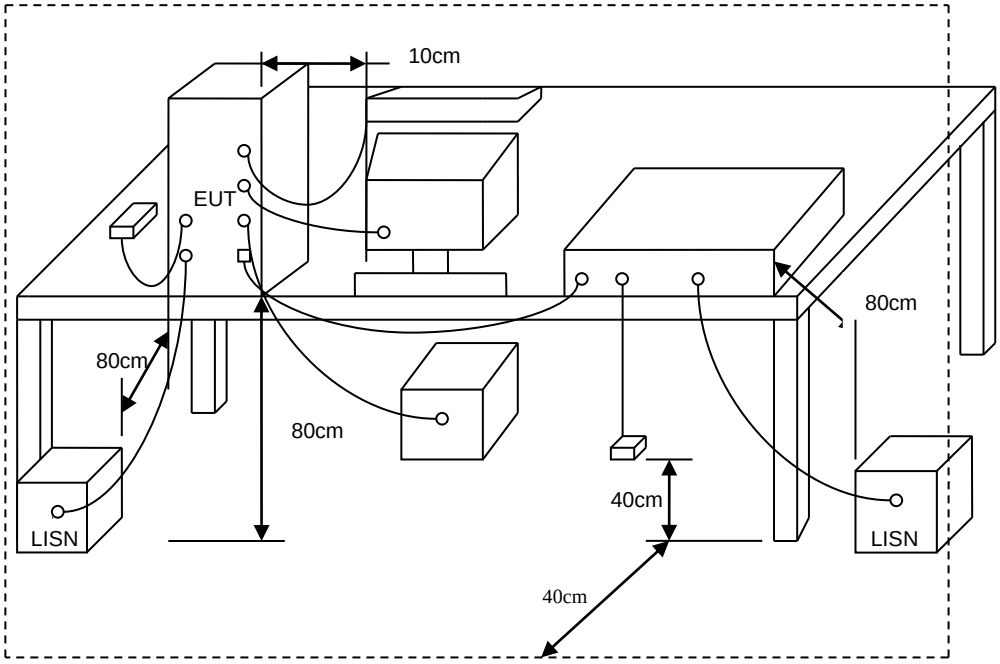
Frequency (MHz)	Quasi Peak (dB μ V)	Average (dB μ V)
0.15 – 0.5	66-56*	56-46*
0.5 – 5.0	56	46
5.0 – 30.0	60	50

*Decreases with the logarithm of the frequency.

4.2 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.

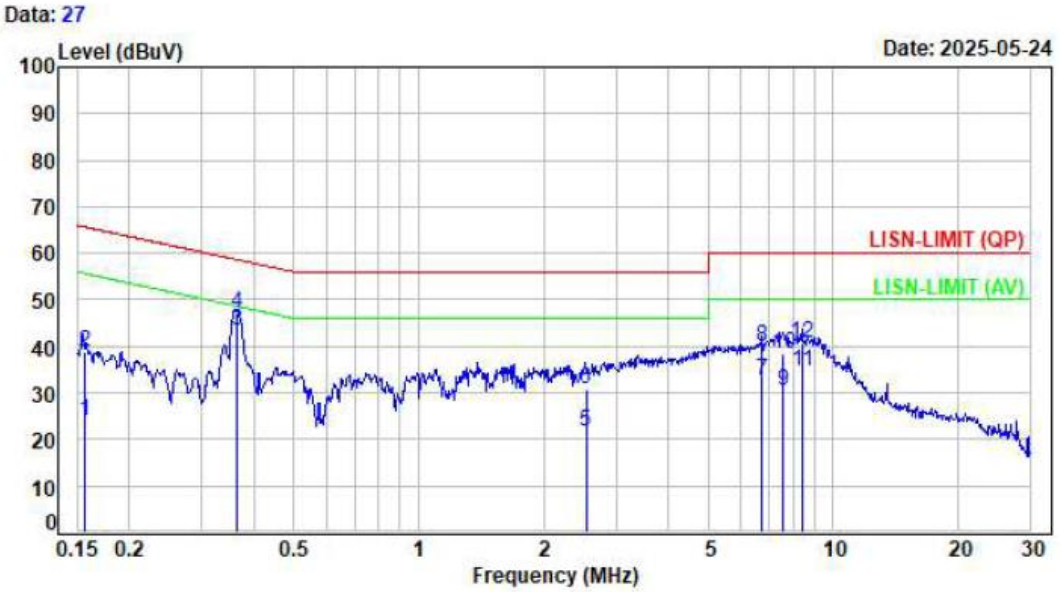
4.3 Typical Test Setup



4.4 Test Result and Data

Test Mode	Mode 1

Test Mode : 2TX 11ax20 CH06+BT 1TX CH00 3Mbps
Voltage : From Adapter(AC 120V/60Hz)
Phase : Line

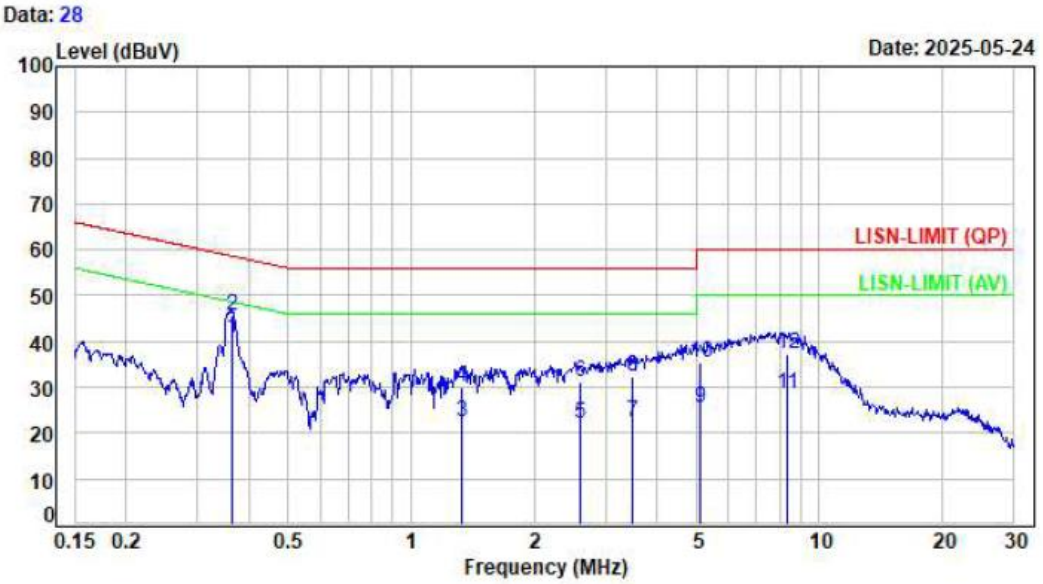


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1562	9.63	14.42	24.05	55.66	-31.61	Average	P
2	0.1562	9.63	29.21	38.84	65.66	-26.82	QP	P
3	0.3634	9.65	33.77	43.42	48.65	-5.23	Average	P
4	0.3634	9.65	37.45	47.10	58.65	-11.55	QP	P
5	2.5319	9.70	11.82	21.52	46.00	-24.48	Average	P
6	2.5319	9.70	21.23	30.93	56.00	-25.07	QP	P
7	6.7136	9.79	22.87	32.66	50.00	-17.34	Average	P
8	6.7136	9.79	30.12	39.91	60.00	-20.09	QP	P
9	7.5504	9.80	20.67	30.47	50.00	-19.53	Average	P
10	7.5504	9.80	28.42	38.22	60.00	-21.78	QP	P
11	8.3924	9.80	24.93	34.73	50.00	-15.27	Average	P
12	8.3924	9.80	30.93	40.73	60.00	-19.27	QP	P

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

Test Mode	Mode 1

Test Mode : 2TX 11ax20 CH06+BT 1TX CH00 3Mbps
Voltage : From Adapter(AC 120V/60Hz)
Phase : Neutral

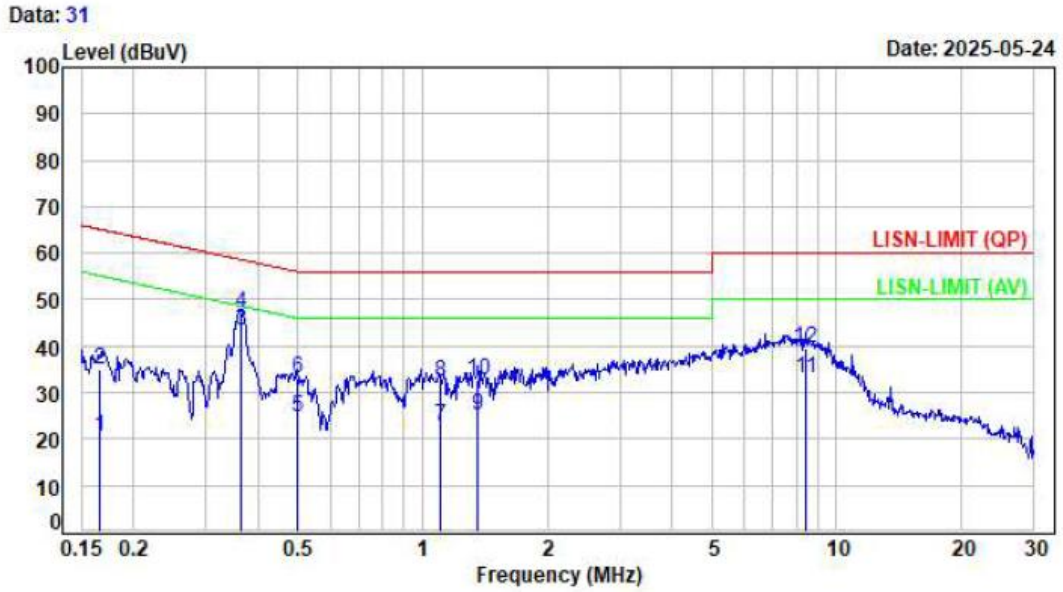


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.3626	9.62	31.22	40.84	48.67	-7.83	Average	P
2	0.3626	9.62	36.20	45.82	58.67	-12.85	QP	P
3	1.3349	9.66	12.86	22.52	46.00	-23.48	Average	P
4	1.3349	9.66	20.30	29.96	56.00	-26.04	QP	P
5	2.5886	9.68	12.24	21.92	46.00	-24.08	Average	P
6	2.5886	9.68	21.63	31.31	56.00	-24.69	QP	P
7	3.4770	9.71	12.53	22.24	46.00	-23.76	Average	P
8	3.4770	9.71	22.66	32.37	56.00	-23.63	QP	P
9	5.0938	9.74	15.57	25.31	50.00	-24.69	Average	P
10	5.0938	9.74	25.68	35.42	60.00	-24.58	QP	P
11	8.3312	9.80	18.78	28.58	50.00	-21.42	Average	P
12	8.3312	9.80	27.38	37.18	60.00	-22.82	QP	P

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

Test Mode	Mode 3

Test Mode : 2TX 11ax40 CH118+BT 1TX CH00 3Mbps
Voltage : From Adapter(AC 120V/60Hz)
Phase : Line

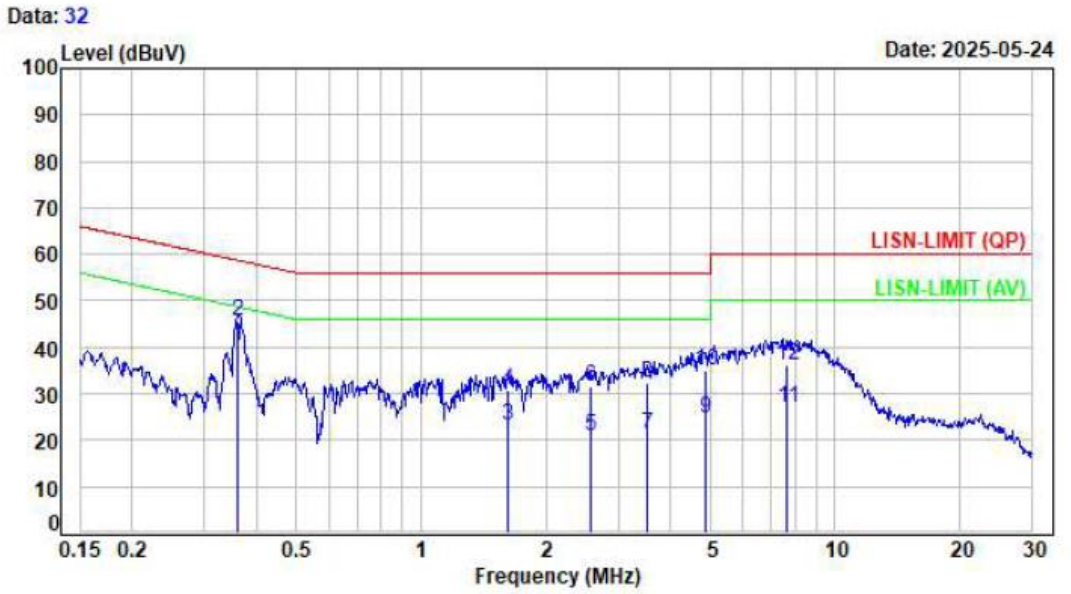


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1663	9.63	10.88	20.51	55.14	-34.63	Average	P
2	0.1663	9.63	25.17	34.80	65.14	-30.34	QP	P
3	0.3627	9.65	33.75	43.40	48.67	-5.27	Average	P
4	0.3627	9.65	37.41	47.06	58.67	-11.61	QP	P
5	0.4981	9.65	14.97	24.62	46.03	-21.41	Average	P
6	0.4981	9.65	23.43	33.08	56.03	-22.95	QP	P
7	1.0992	9.66	13.18	22.84	46.00	-23.16	Average	P
8	1.0992	9.66	22.50	32.16	56.00	-23.84	QP	P
9	1.3600	9.67	15.25	24.92	46.00	-21.08	Average	P
10	1.3600	9.67	22.88	32.55	56.00	-23.45	QP	P
11	8.3944	9.80	23.34	33.14	50.00	-16.86	Average	P
12	8.3944	9.80	29.84	39.64	60.00	-20.36	QP	P

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

Test Mode	Mode 3

Test Mode : 2TX 11ax40 CH118+BT 1TX CH00 3Mbps
Voltage : From Adapter(AC 120V/60Hz)
Phase : Neutral



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.3612	9.62	30.69	40.31	48.70	-8.39	Average	P
2	0.3612	9.62	36.02	45.64	58.70	-13.06	QP	P
3	1.6177	9.67	13.56	23.23	46.00	-22.77	Average	P
4	1.6177	9.67	21.15	30.82	56.00	-25.18	QP	P
5	2.5576	9.68	11.06	20.74	46.00	-25.26	Average	P
6	2.5576	9.68	21.71	31.39	56.00	-24.61	QP	P
7	3.5232	9.71	11.74	21.45	46.00	-24.55	Average	P
8	3.5232	9.71	22.48	32.19	56.00	-23.81	QP	P
9	4.8589	9.73	15.07	24.80	46.00	-21.20	Average	P
10	4.8589	9.73	25.30	35.03	56.00	-20.97	QP	P
11	7.6669	9.79	17.30	27.09	50.00	-22.91	Average	P
12	7.6669	9.79	26.46	36.25	60.00	-23.75	QP	P

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

5. Test of Spurious Emission (Radiated)

5.1 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

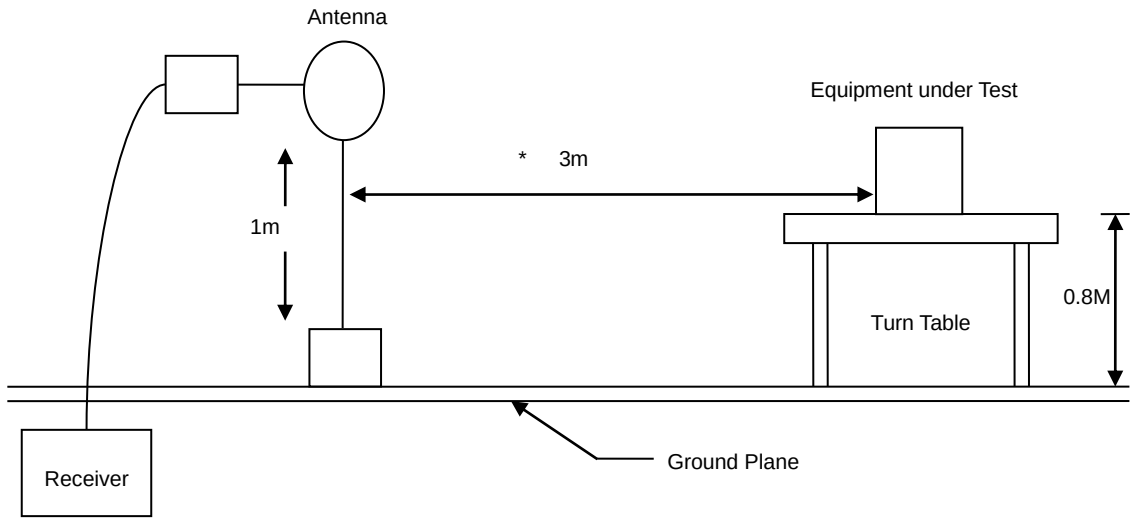
5.2 Test Procedures

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 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.

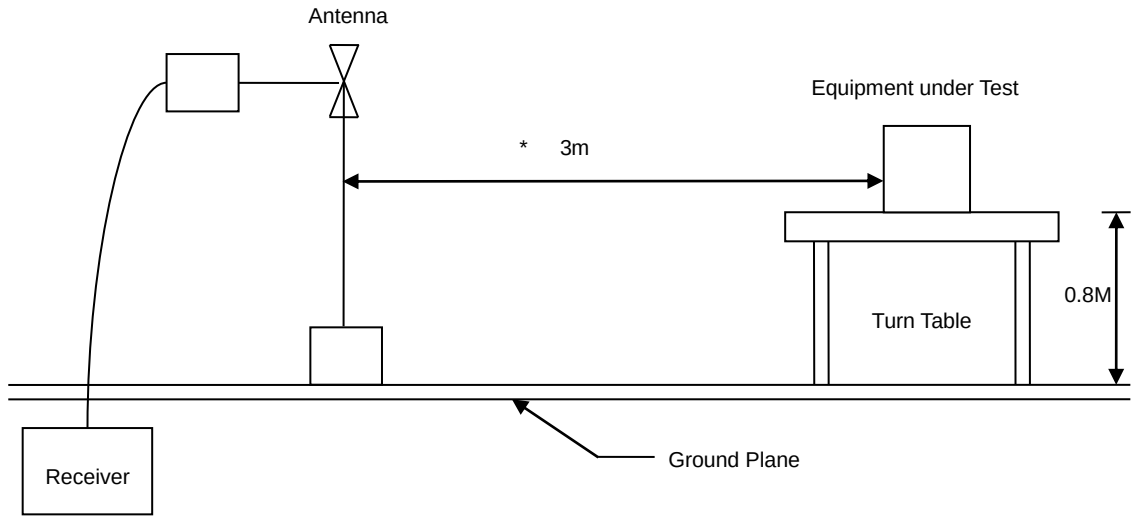
Note:
1. The supporting fixture shall permit orientation of the EUT in each of three orthogonal axis positions such that emissions from the EUT are maximized.
2. Due to the test software function limit the operation band setting (200dBuV/m). There’s no corresponding limitation in the actual test item.

5.3 Typical Test Setup

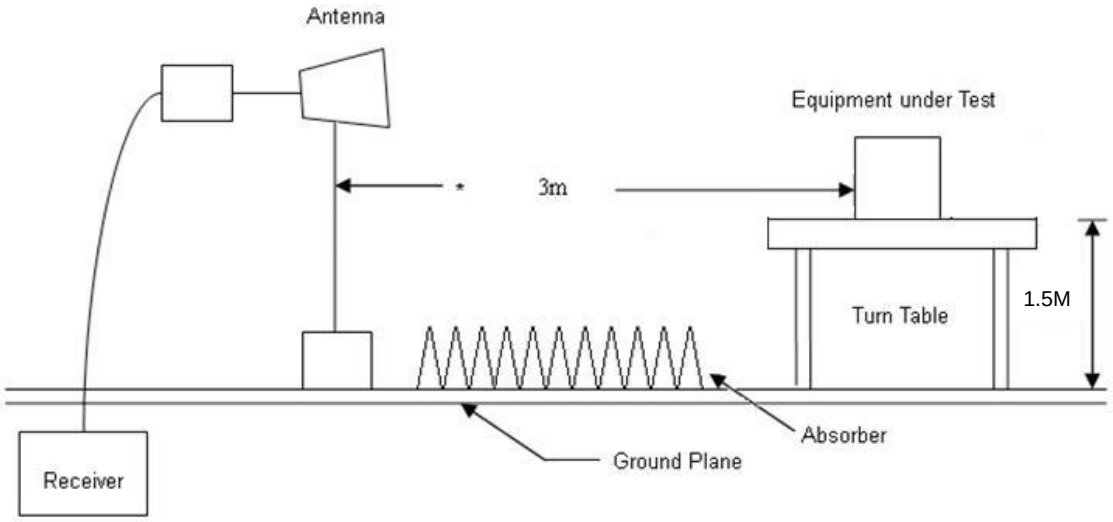
Below 30MHz test setup



30MHz- 1GHz Test Setup



Above 1GHz Test Setup



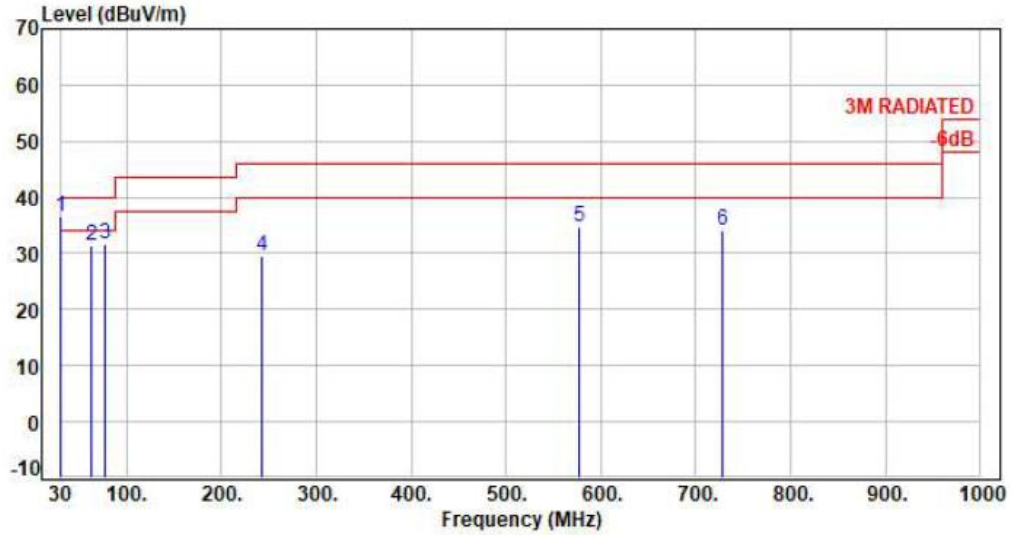
5.4 Test Result and Data (9kHz ~ 30MHz)

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

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

Test Mode	Mode 1

Test Mode : 2TX 11ax20 CH06+BT 1TX CH00 3Mbps
Voltage : From Adapter(AC 120V/60Hz)
Pol : Vertical

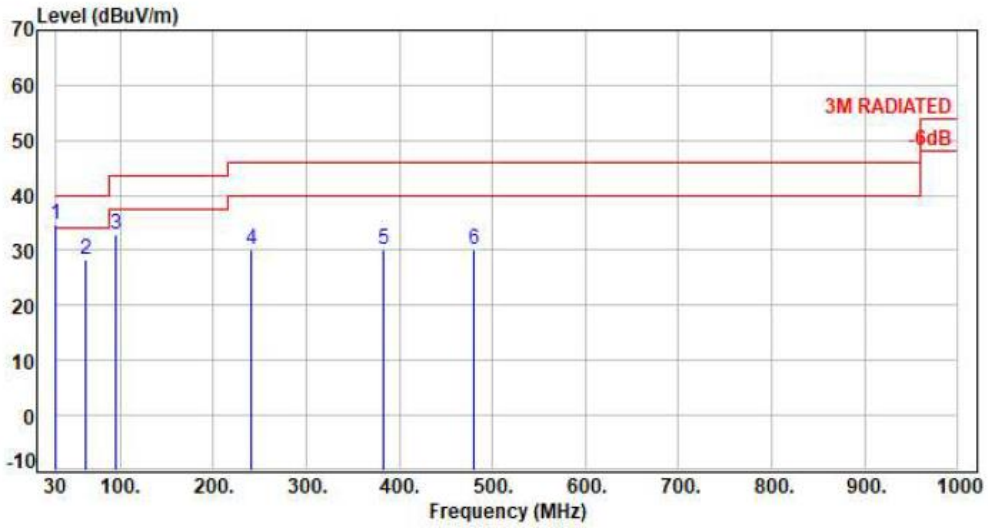


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	30.00	-3.37	39.80	36.43	40.00	-3.57	QP	100	118	P
2	63.26	-16.56	47.80	31.24	40.00	-8.76	QP	100	85	P
3	76.56	-16.86	48.47	31.61	40.00	-8.39	Peak	400	0	P
4	243.40	-11.82	41.25	29.43	46.00	-16.57	Peak	400	0	P
5	577.08	-3.48	38.32	34.84	46.00	-11.16	Peak	400	0	P
6	728.40	-0.84	34.83	33.99	46.00	-12.01	Peak	400	0	P

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

Test Mode	Mode 1

Test Mode : 2TX 11ax20 CH06+BT 1TX CH00 3Mbps
Voltage : From Adapter(AC 120V/60Hz)
Pol : Horizontal

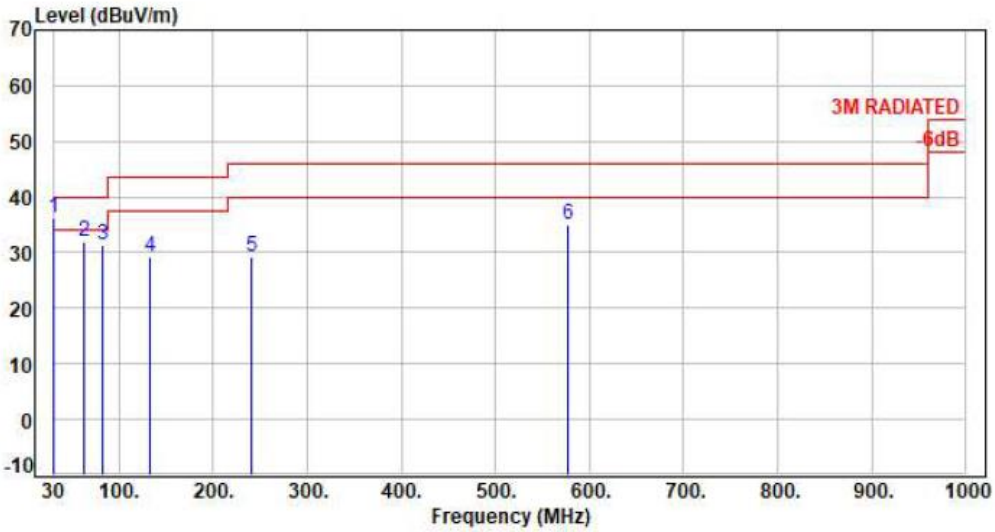


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	30.00	-3.37	38.15	34.78	40.00	-5.22	QP	100	360	P
2	62.98	-16.61	45.02	28.41	40.00	-11.59	Peak	400	0	P
3	95.96	-15.32	48.18	32.86	43.50	-10.64	Peak	400	0	P
4	241.46	-11.87	42.07	30.20	46.00	-15.80	Peak	400	0	P
5	383.08	-7.83	37.84	30.01	46.00	-15.99	Peak	400	0	P
6	480.08	-4.97	35.18	30.21	46.00	-15.79	Peak	400	0	P

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

Test Mode	Mode 3

Test Mode : 2TX 11ax40 CH118+BT 1TX CH00 3Mbps
Voltage : From Adapter(AC 120V/60Hz)
Pol : Vertical

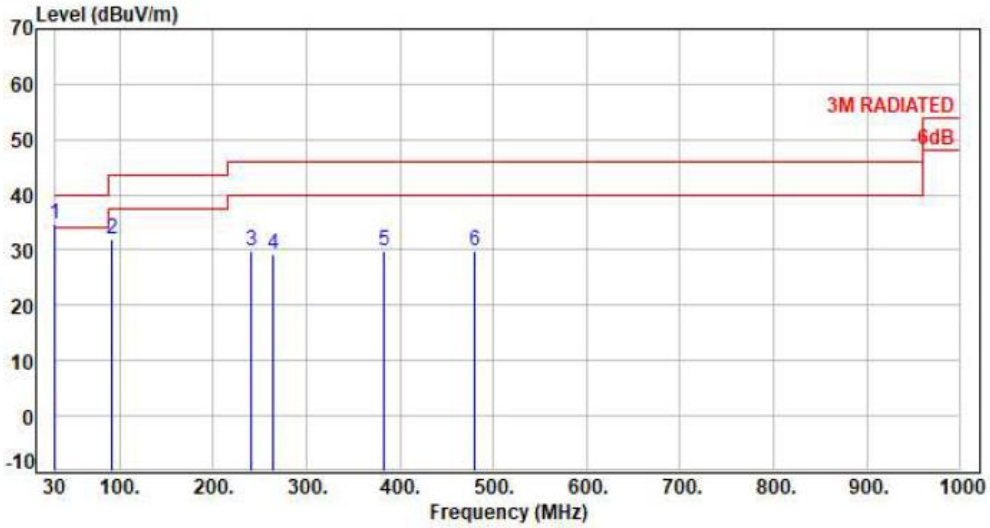


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	30.00	-3.37	39.52	36.15	40.00	-3.85	QP	100	115	P
2	62.98	-16.61	48.46	31.85	40.00	-8.15	QP	100	88	P
3	82.38	-17.45	48.78	31.33	40.00	-8.67	Peak	400	0	P
4	132.82	-10.38	39.55	29.17	43.50	-14.33	Peak	400	0	P
5	241.46	-11.87	41.25	29.38	46.00	-16.62	Peak	400	0	P
6	577.08	-3.48	38.35	34.87	46.00	-11.13	Peak	400	0	P

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

Test Mode	Mode 3

Test Mode : 2TX 11ax40 CH118+BT 1TX CH00 3Mbps
Voltage : From Adapter(AC 120V/60Hz)
Pol : Horizontal



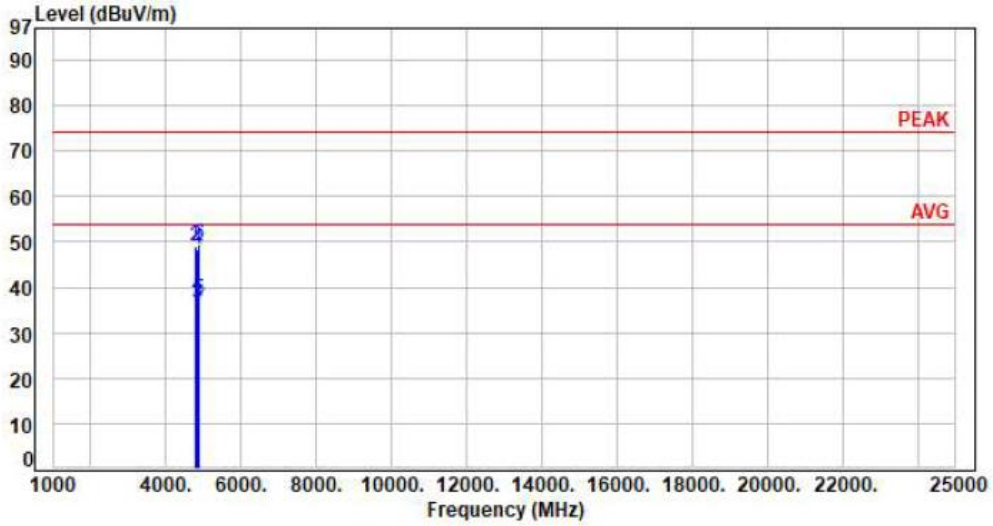
No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	30.00	-3.37	38.10	34.73	40.00	-5.27	QP	100	0	P
2	92.08	-16.50	48.34	31.84	43.50	-11.66	Peak	400	0	P
3	241.46	-11.87	41.83	29.96	46.00	-16.04	Peak	400	0	P
4	264.74	-10.60	39.79	29.19	46.00	-16.81	Peak	400	0	P
5	383.08	-7.83	37.79	29.96	46.00	-16.04	Peak	400	0	P
6	480.08	-4.97	34.91	29.94	46.00	-16.06	Peak	400	0	P

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

5.6 Test Result and Data (1GHz ~ 40GHz)

Test Mode	Mode 1

Test Mode : 2TX 11ax20 CH06 + BT 1TX CH00
Voltage : From Adapter(AC120V/60Hz)
Pol : Vertical

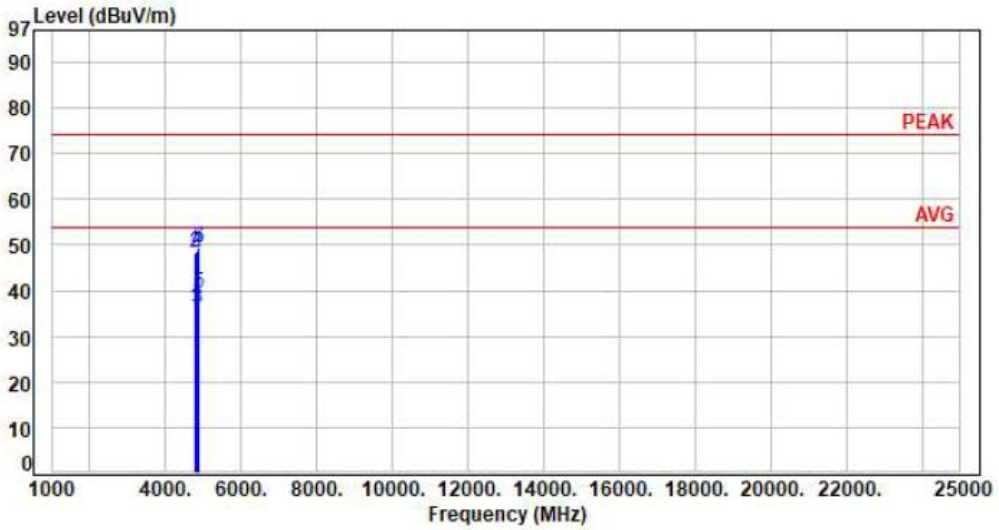


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	4804.00	6.59	29.87	36.46	54.00	-17.54	Average	100	178	P
2	4804.00	6.59	42.56	49.15	74.00	-24.85	Peak	100	178	P
3	4839.00	6.66	29.88	36.54	54.00	-17.46	Average	100	162	P
4	4839.00	6.66	41.62	48.28	74.00	-25.72	Peak	100	162	P
5	4874.00	6.83	30.34	37.17	54.00	-16.83	Average	100	225	P
6	4874.00	6.83	42.61	49.44	74.00	-24.56	Peak	100	225	P

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

Test Mode	Mode 1

Test Mode : 2TX 11ax20 CH06 + BT 1TX CH00
Voltage : From Adapter(AC120V/60Hz)
Pol : Horizontal

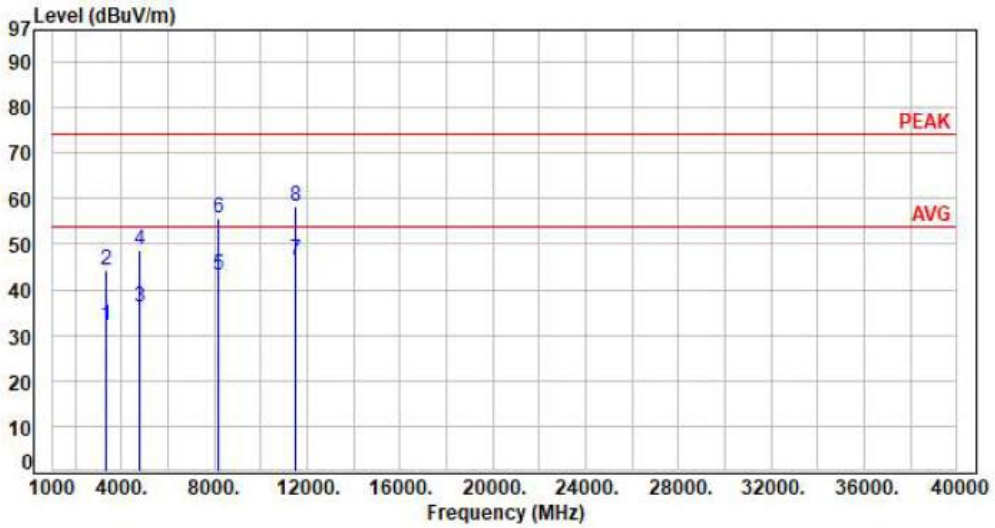


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	4804.00	6.59	29.62	36.21	54.00	-17.79	Average	100	163	P
2	4804.00	6.59	41.63	48.22	74.00	-25.78	Peak	100	163	P
3	4839.00	6.66	29.48	36.14	54.00	-17.86	Average	100	176	P
4	4839.00	6.66	42.16	48.82	74.00	-25.18	Peak	100	176	P
5	4874.00	6.83	32.51	39.34	54.00	-14.66	Average	100	198	P
6	4874.00	6.83	42.60	49.43	74.00	-24.57	Peak	100	198	P

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

Test Mode	Mode 2

Test Mode : 2TX 11ax40 CH151 + BT 1TX CH00
Voltage : From Adapter(AC120V/60Hz)
Pol : Vertical

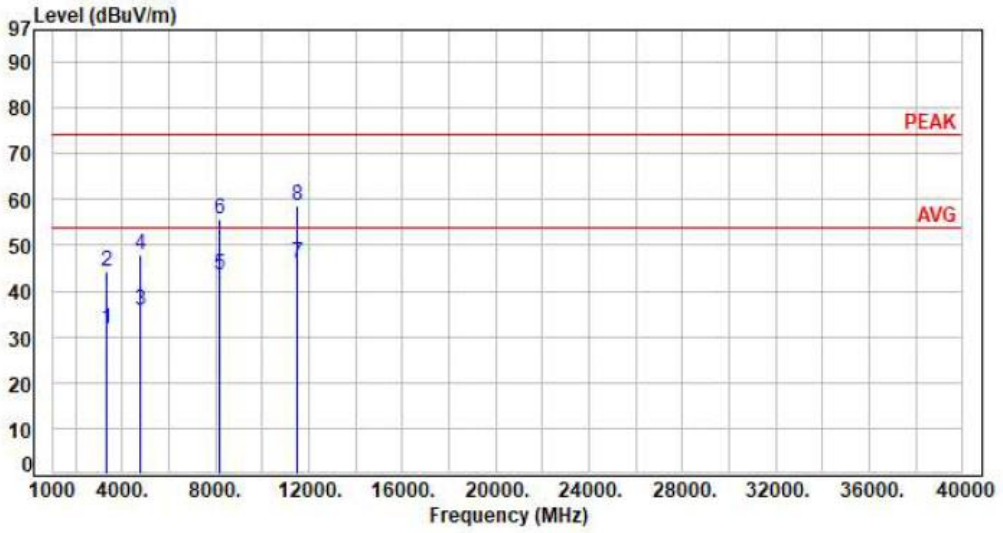


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	3353.00	2.25	29.76	32.01	54.00	-21.99	Average	100	169	P
2	3353.00	2.25	42.17	44.42	74.00	-29.58	Peak	100	169	P
3	4804.00	6.18	29.87	36.05	54.00	-17.95	Average	100	178	P
4	4804.00	6.18	42.56	48.74	74.00	-25.26	Peak	100	178	P
5	8157.00	13.77	29.49	43.26	54.00	-10.74	Average	100	145	P
6	8157.00	13.77	41.89	55.66	74.00	-18.34	Peak	100	145	P
7	11510.00	16.78	29.74	46.52	54.00	-7.48	Average	100	166	P
8	11510.00	16.78	41.62	58.40	74.00	-15.60	Peak	100	166	P

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

Test Mode	Mode 2

Test Mode : 2TX 11ax20 CH151 + BT 1TX CH00
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	3353.00	2.25	29.65	31.90	54.00	-22.10	Average	100	202	P
2	3353.00	2.25	41.94	44.19	74.00	-29.81	Peak	100	202	P
3	4804.00	6.18	29.62	35.80	54.00	-18.20	Average	100	163	P
4	4804.00	6.18	41.63	47.81	74.00	-26.19	Peak	100	163	P
5	8157.00	13.77	29.75	43.52	54.00	-10.48	Average	100	177	P
6	8157.00	13.77	41.87	55.64	74.00	-18.36	Peak	100	177	P
7	11510.00	16.78	29.48	46.26	54.00	-7.74	Average	100	201	P
8	11510.00	16.78	41.85	58.63	74.00	-15.37	Peak	100	201	P

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

5.7 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