


FCC Radio Test Report

FCC ID: V7TA18

This report concerns: Class II Change

Project No. : 1710C164C
Equipment : AC1200 Dual Band WiFi Repeater, AC750 Dual Band WiFi Repeater
Brand Name : Tenda
Test Model : A18
Series Model : A15
Applicant : SHENZHEN TENDA TECHNOLOGY CO.,LTD
Address : 6-8 Floor, Tower E3, No. 1001, Zhongshanyuan Road, Nanshan District, Shenzhen, China. 518052
Manufacturer : SHENZHEN TENDA TECHNOLOGY CO.,LTD
Address : 6-8 Floor, Tower E3, No. 1001, Zhongshanyuan Road, Nanshan District, Shenzhen, China. 518052
Date of Receipt : May 06, 2020
Date of Test : May 22, 2020 ~ May 27, 2020
Issued Date : Jun. 18, 2020
Report Version : R00
Test Sample : Engineering Sample No.: D171008586, DG20200520146
Standard(s) : FCC Part15, Subpart E(15.407)
 ANSI C63.10-2013

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.



Prepared by : Chella Zheng



Approved by : Ethan Ma



Certificate #5123.02

Add: No.3, Jinshagang 1st Road, Shixia, Dalang Town,Dongguan, Guangdong, China.

Tel: +86-769-8318-3000

Web: www.newbtl.com

Declaration

BTL represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

BTL's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **BTL** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **BTL** issued reports.

BTL's report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

This report is the confidential property of the client. As a mutual protection to the clients, the public and **BTL-self**, extracts from the test report shall not be reproduced except in full with **BTL's** authorized written approval.

BTL's laboratory quality assurance procedures are in compliance with the **ISO Guide 17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

Table of Contents	Page
1 . SUMMARY OF TEST RESULTS	5
1.1 TEST FACILITY	6
1.2 MEASUREMENT UNCERTAINTY	6
2 . GENERAL INFORMATION	7
2.1 GENERAL DESCRIPTION OF EUT	7
2.2 DESCRIPTION OF TEST MODES	10
3.3 TABLE OF PARAMETERS OF TEST SOFTWARE SETTING	12
3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	14
3.5 DESCRIPTION OF SUPPORT UNITS	14
3 . EMC EMISSION TEST	15
3.1 CONDUCTED EMISSION MEASUREMENT	15
3.1.1 POWER LINE CONDUCTED EMISSION	15
3.1.2 TEST PROCEDURE	15
3.1.3 DEVIATION FROM TEST STANDARD	15
3.1.4 TEST SETUP	16
3.1.5 EUT OPERATING CONDITIONS	16
3.1.6 EUT TEST CONDITIONS	16
3.1.7 TEST RESULTS	16
3.2 RADIATED EMISSION MEASUREMENT	17
3.2.1 RADIATED EMISSION LIMITS	17
3.2.2 TEST PROCEDURE	18
3.2.3 DEVIATION FROM TEST STANDARD	18
3.2.4 TEST SETUP	18
3.2.5 EUT OPERATING CONDITIONS	19
3.2.6 EUT TEST CONDITIONS	19
3.2.7 TEST RESULTS (9K TO 30MHz)	19
3.2.8 TEST RESULTS (BETWEEN 30 TO 1000 MHz)	19
4 . MEASUREMENT INSTRUMENTS LIST	20
5 . EUT TEST PHOTOS	21
APPENDIX A - CONDUCTED EMISSION	24
APPENDIX B - RADIATED EMISSION (9KHZ TO 30MHZ)	29
APPENDIX C - RADIATED EMISSION (30MHZ TO 1000MHZ)	34

REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Compared with previous report (BTL-FCCP-2-1710C164), Changed the power board.so the test data of radiated emissions below 1GHz and AC Power Conducted Emissions have been re-evaluated and recorded in the test report, the original test results please refer to original report.	Jun. 18, 2020

Remark: For the original report BTL-FCCP-2-1710C164), the test data, data evaluation and equipment configuration contained was accredited by the Authority of NVLAP according to the ISO/IEC 17025 quality assessment standard and technical standard(s).

1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC Part15, Subpart E(15.407)			
Standard(s) Section	Test Item	Judgment	Remark
15.207 15.407(b)	AC Power Line Conducted Emissions	PASS	
15.407(b) 15.205(a) 15.209(a)	Radiated Emissions	PASS	

NOTE:

(1)" N/A" denotes test is not applicable in this test report.

1.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No.3,Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.

BTL's Test Firm Registration Number for FCC: 357015

BTL's Designation Number for FCC: CN1240

1.2 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))

The BTL measurement uncertainty as below table:

A. AC power line conducted emissions test:

Test Site	Method	Measurement Frequency Range	U, (dB)
DG-C02	CISPR	150kHz ~ 30MHz	2.60

B. Radiated emissions test:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U, (dB)
DG-CB03	CISPR	9kHz ~ 30MHz	V	3.79
		9kHz ~ 30MHz	H	3.57
		30MHz ~ 200MHz	V	4.88
		30MHz ~ 200MHz	H	4.14
		200MHz ~ 1,000MHz	V	4.62
		200MHz ~ 1,000MHz	H	4.80

Note: Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	AC1200 Dual Band WiFi Repeater	
Brand Name	Tenda	
Test Model	A18	
Series Model	A15	
Model Difference(s)	Only differ in model name.	
Product Description	Operation Frequency	UNII-1: 5150-5250MHz UNII-3: 5725-5850MHz
	Modulation Type	OFDM
	Bit Rate of Transmitter	887 Mbps
	Output Power (Max.)for UNII-1	802.11a: 16.25dBm 802.11n (20M): 19.30dBm 802.11n (40M): 20.68dBm 802.11ac (20M): 18.74dBm 802.11ac (40M): 20.38dBm 802.11ac (80M): 14.87dBm
	Output Power (Max.)for UNII-3	802.11a: 20.97dBm 802.11n (20M): 20.89dBm 802.11n (40M): 21.79dBm 802.11ac (20M): 19.88dBm 802.11ac (40M): 21.49dBm 802.11ac (80M): 21.67dBm
Power Source	AC Mains.	
Power Rating	AC100-240V 50/60Hz 0.3A	

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
2. Channel List:

IEEE 802.11a IEEE 802.11n (HT20) IEEE 802.11ac (VHT20)		IEEE 802.11n (HT40) IEEE 802.11ac (VHT40)		IEEE 802.11ac (VHT80)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	38	5190	42	5210
40	5200	46	5230		
44	5220				
48	5240				

IEEE 802.11a IEEE 802.11n (HT20) IEEE 802.11ac (VHT20)		IEEE 802.11n (HT40) IEEE 802.11ac (VHT40)		IEEE 802.11ac (VHT80)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	151	5755	155	5775
153	5765	159	5795		
157	5785				
161	5805				
165	5825				

3. Antenna Specification:

Ant.	Manufacturer	Model Name	Antenna Type	Connector	Gain (dBi)	Note
1	N/A	N/A	Dipole	N/A	3	N/A
2	N/A	N/A	Dipole	N/A	3	N/A

4. Operating Mode

TX Mode	1TX	2TX
802.11a	V (ANT 1)	-
802.11n (20MHz)	-	V (ANT 1+ANT 2)
802.11n (40MHz)	-	V (ANT 1+ANT 2)
802.11ac (20MHz)	-	V (ANT 1+ANT 2)
802.11ac (40MHz)	-	V (ANT 1+ANT 2)
802.11ac (80MHz)	-	V (ANT 1+ANT 2)

Note:

This EUT supports MIMO, and all antennas have the same gain.

Antenna Gain=3 dBi. This EUT supports MIMO 2X2, any transmit signals are correlated with each other, so Directional gain = $G_{ANT} + 10\log(N)$ dBi, that is Directional gain = $3 + 10\log(2)$ dBi = 6.01

So, the output power limit is $30 - (6.01 - 6) = 29.99$, the power spectra density limit is $8 - (6.01 - 6) = 7.99$.

2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	TX A Mode / CH36, CH40, CH48 (UNII-1)
Mode 2	TX N20 Mode / CH36, CH40, CH48 (UNII-1)
Mode 3	TX N40 Mode / CH38, CH46 (UNII-1)
Mode 4	TX AC20 Mode / CH36, CH40, CH48 (UNII-1)
Mode 5	TX AC40 Mode / CH38, CH46 (UNII-1)
Mode 6	TX AC80 Mode / CH42 (UNII-1)
Mode 7	TX A Mode / CH149,CH157,CH165 (UNII-3)
Mode 8	TX N20 Mode / CH149,CH157,CH165 (UNII-3)
Mode 9	TX N40 Mode / CH151,CH159 (UNII-3)
Mode 10	TX AC20 Mode / CH149,CH157,CH165 (UNII-3)
Mode 11	TX AC40 Mode / CH151,CH159 (UNII-3)
Mode 12	TX AC80 Mode / CH155 (UNII-3)
Mode 13	TX N40 Mode /CH159 (UNII-3)

The EUT system operated these modes were found to be the worst case during the pre-scanning test as following:

For Conducted Test	
Final Test Mode	Description
Mode 13	TX N40 Mode /CH159 (UNII-3)

For Radiated Test	
Final Test Mode	Description
Mode 1	TX A Mode / CH36, CH40, CH48 (UNII-1)
Mode 2	TX N20 Mode / CH36, CH40, CH48 (UNII-1)
Mode 3	TX N40 Mode / CH38, CH46 (UNII-1)
Mode 4	TX AC20 Mode / CH36, CH40, CH48 (UNII-1)
Mode 5	TX AC40 Mode / CH38, CH46 (UNII-1)
Mode 6	TX AC80 Mode / CH42 (UNII-1)
Mode 7	TX A Mode / CH149,CH157,CH165 (UNII-3)
Mode 8	TX N20 Mode / CH149,CH157,CH165 (UNII-3)
Mode 9	TX N40 Mode / CH151,CH159 (UNII-3)
Mode 10	TX AC20 Mode / CH149,CH157,CH165 (UNII-3)
Mode 11	TX AC40 Mode / CH151,CH159 (UNII-3)
Mode 12	TX AC80 Mode / CH155 (UNII-3)

Note:

- (1) For radiated below 1GHz test, the TX N40 Mode /CH159 (UNII-3) mode is found to be the worst case and recorded.

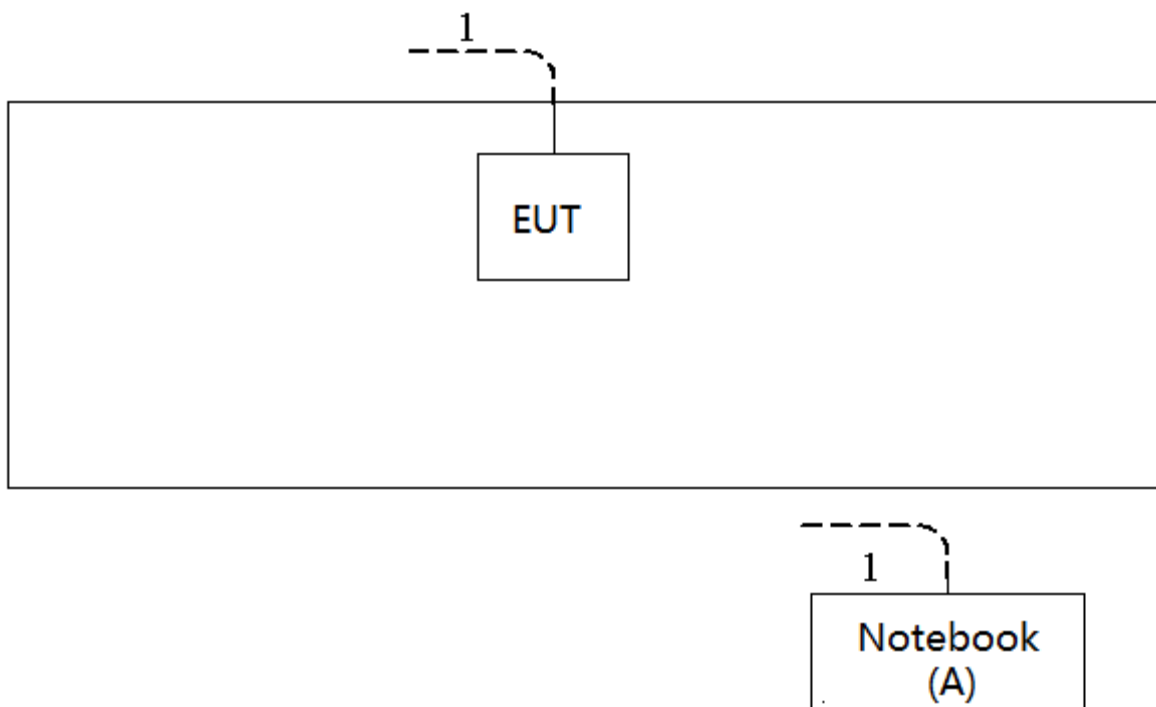
3.3 TABLE OF PARAMETERS OF TEST SOFTWARE SETTING

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product

UNII-1			
Test Software Version	MP-v3.4		
Frequency (MHz)	5180	5200	5240
A Mode	50	51	51
N20 Mode	52	52	52
Frequency (MHz)	5190	5230	
N40 Mode	46	57	
Frequency (MHz)	5180	5200	5240
AC20 Mode	53	52	52
Frequency (MHz)	5190	5230	
AC40 Mode	46	57	
Frequency (MHz)	5210		
AC80 Mode	46		

UNII-3			
Test Software Version	MP-v3.4		
Frequency (MHz)	5745	5785	5825
A Mode	63	63	63
N20 Mode	54	54	55
Frequency (MHz)	5755	5795	
N40 Mode	59	59	
Frequency (MHz)	5745	5785	5825
AC20 Mode	52	54	54
Frequency (MHz)	5755	5795	
AC40 Mode	58	59	
Frequency (MHz)	5775		
AC80 Mode	62		

3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



3.5 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.
A	Notebook	Dell	DCSM	G7K832X

Item	Cable Type	Shielded Type	Ferrite Core	Length
1	RJ45 Cable	NO	NO	10m

3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION (Frequency Range 150kHz-30MHz)

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 -0.50	79.00	66.00	66 - 56 *	56 - 46 *
0.50 -5.0	73.00	60.00	56.00	46.00
5.0 -30.0	73.00	60.00	60.00	50.00

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

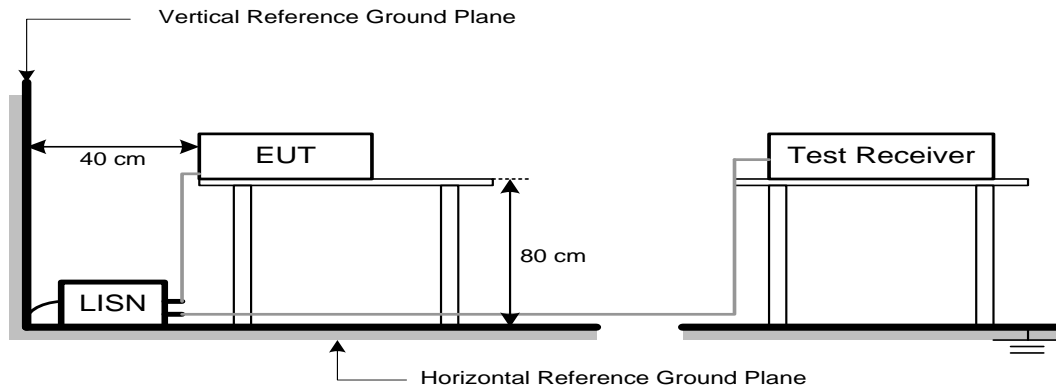
3.1.2 TEST PROCEDURE

- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

3.1.3 DEVIATION FROM TEST STANDARD

No deviation

3.1.4 TEST SETUP



3.1.5 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

The EUT was programmed to be in continuously transmitting/TX Mode mode.

3.1.6 EUT TEST CONDITIONS

Temperature: 25°C Relative Humidity: 53% Test Voltage: AC 120V/60Hz

3.1.7 TEST RESULTS

Please refer to the Appendix A.

Remark:

- (1) All readings are QP Mode value unless otherwise stated AVG in column of 『Note』 . If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform. In this case, a “ * ” marked in AVG Mode column of Interference Voltage Measured.
- (2) Measuring frequency range from 150kHz to 30MHz.

3.2 RADIATED EMISSION MEASUREMENT

3.2.1 RADIATED EMISSION LIMITS

In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (micorvolts/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

Frequencies (MHz)	EIRP Limit (dBm)	Equivalent Field Strength at 3m (dBμV/m)
5150-5250	-27	68.3
5725-5850	-27(Note 2)	68.3
	10(Note 2)	105.3
	15.6(Note 2)	110.9
	27(Note 2)	122.3

Note:

1. The following formula is used to convert the equipment isotropic radiated power (eirp) to field

strength: $E = \frac{1000000\sqrt{30P}}{3} \mu\text{V/m}$, where P is the eirp (Watts)

2. According to FCC 15.407(b)(4)(i), 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.

3.2.2 TEST PROCEDURE

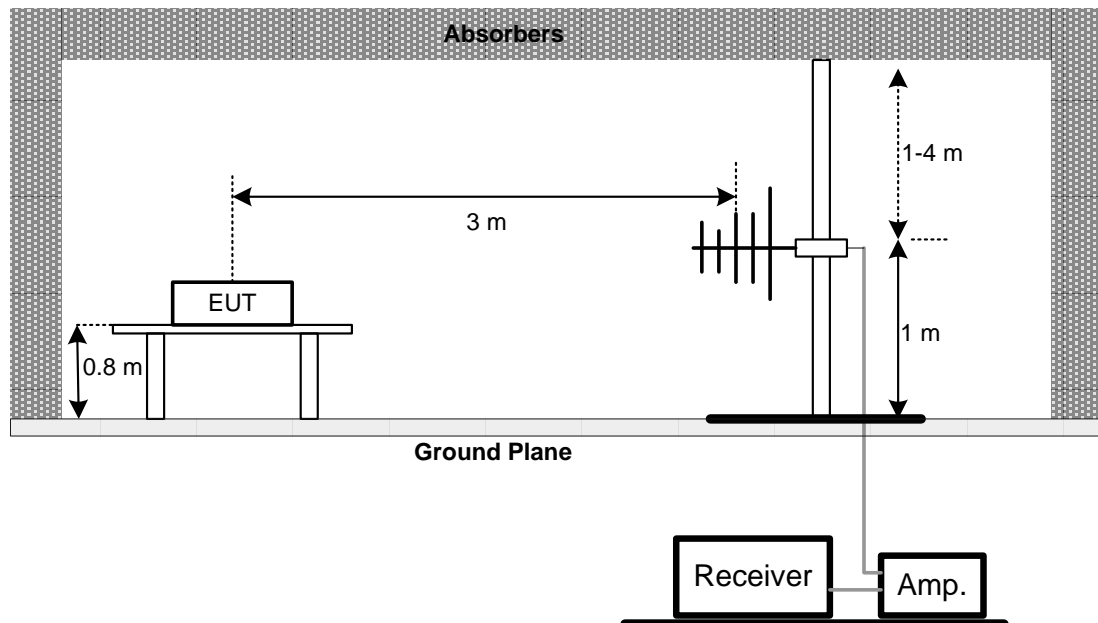
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- The height of the equipment or of the substitution antenna shall be 0.8m or 1.5m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
- The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1GHz.
- The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform. (below 1GHz)
- All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform. (above 1GHz)
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

3.2.3 DEVIATION FROM TEST STANDARD

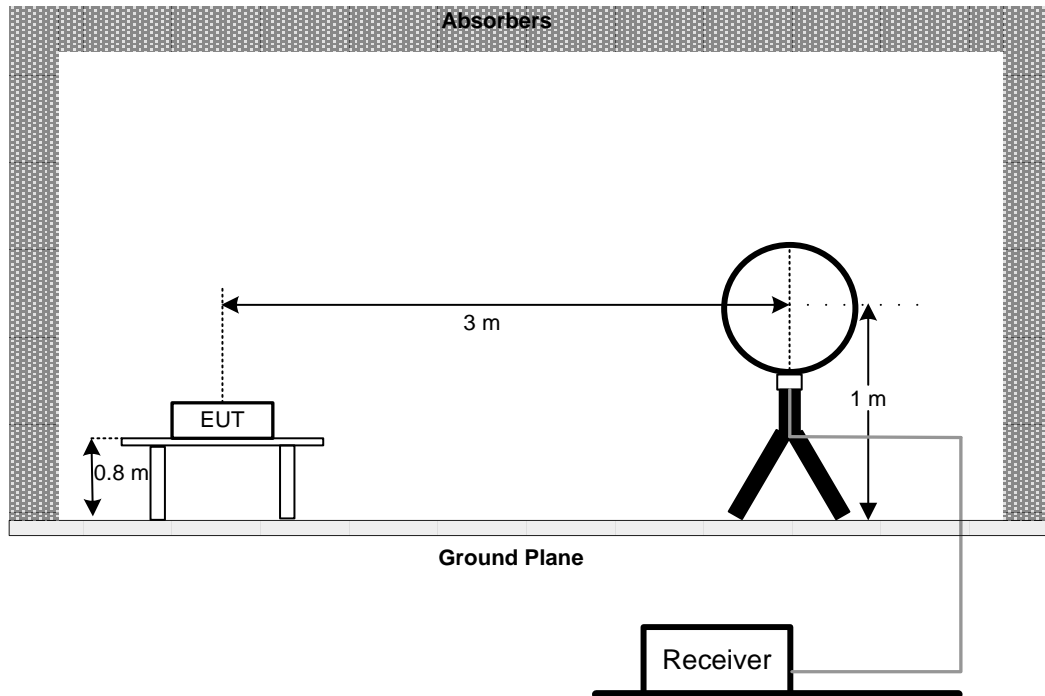
No deviation

3.2.4 TEST SETUP

(A)Radiated Emission Test Set-Up Frequency Below 1GHz



(b) Radiated emissions below 30MHz



3.2.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 3.1.5 unless otherwise a special operating condition is specified in the follows during the testing.

3.2.6 EUT TEST CONDITIONS

Temperature: 25°C Relative Humidity: 60% Test Voltage: AC 120V/60Hz

3.2.7 TEST RESULTS (9K TO 30MHz)

Please refer to the Appendix B

Remark:

- (1) The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
- (2) Distance extrapolation factor = $40 \log (\text{specific distance} / \text{test distance})$ (dB);
- (3) Limit line = specific limits (dBuV) + distance extrapolation factor.

3.2.8 TEST RESULTS (BETWEEN 30 TO 1000 MHz)

Please refer to the Appendix C.

Remark:

- (1) No limit: This is fundamental signal, the judgment is not applicable.
For fundamental signal judgment was referred to Peak output test.

4. MEASUREMENT INSTRUMENTS LIST

Conducted Emission					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	EMI Test Receiver	R&S	ESCI	100382	Feb. 28, 2021
2	LISN	EMCO	3816/2	52765	Mar. 01, 2021
3	TWO-LINE V-NETWORK	R&S	ENV216	101447	Feb. 28, 2021
4	50Ω Terminator	SHX	TF5-3	15041305	Mar. 01, 2021
5	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
6	Cable	N/A	RG223	12m	Mar. 10, 2021

Radiated Emissions - 9 kHz to 30 MHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Loop Antenna	EM	EM-6876-1	230	Apr. 16, 2021
2	Cable	N/A	RG 213/U	C-102	May 29, 2021
3	EMI Test Receiver	R&S	ESCI	100895	Feb. 28, 2021
4	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Radiated Emissions - 30 MHz to 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarzbeck	VULB9160	9160-3232	Mar. 09, 2021
2*	Amplifier	HP	8447D	2944A08742	Mar. 01, 2021
3	Receiver	Agilent	N9038A	MY52130039	Aug. 03, 2020
4	Cable	emci	LMR-400(30MHz-1 GHz)(8m+5m)	N/A	May. 22, 2021
5	Controller	CT	SC100	N/A	N/A
6	Controller	MF	MF-7802	MF780208416	N/A
7	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

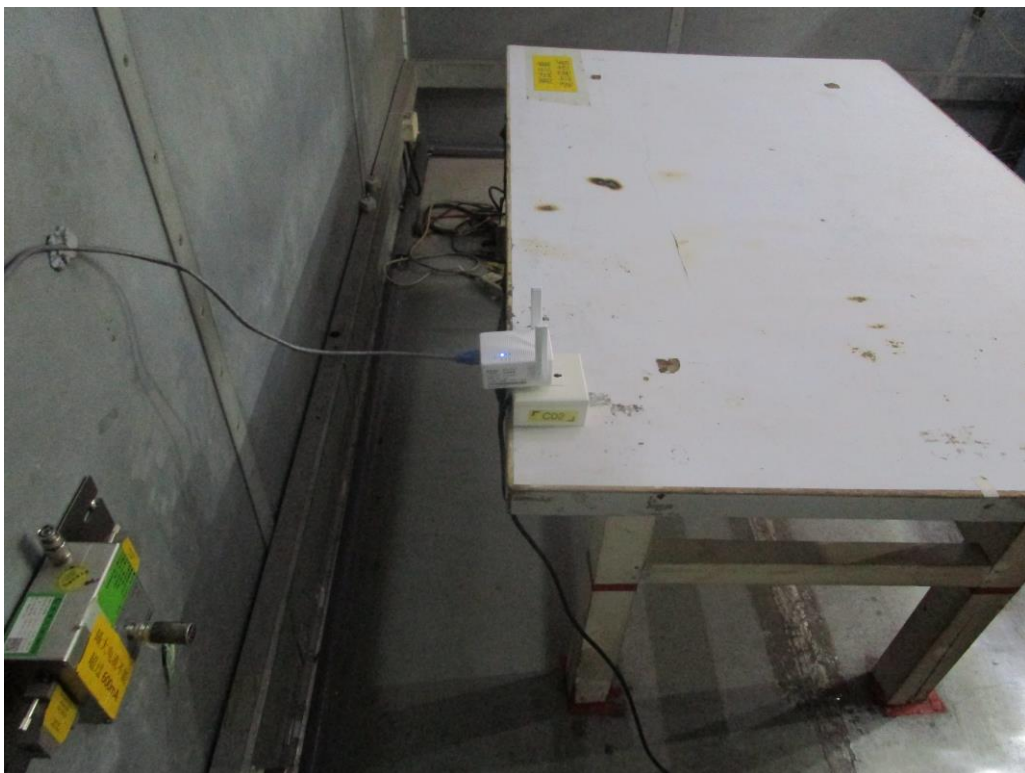
Remark: "N/A" denotes no model name, serial no. or calibration specified.

"*" calibration period of equipment list is three year.

All calibration period of equipment list is one year.

5. EUT TEST PHOTOS

Conducted Measurement Photos



Radiated Measurement Photos**9KHz to 30MHz**

Radiated Measurement Photos

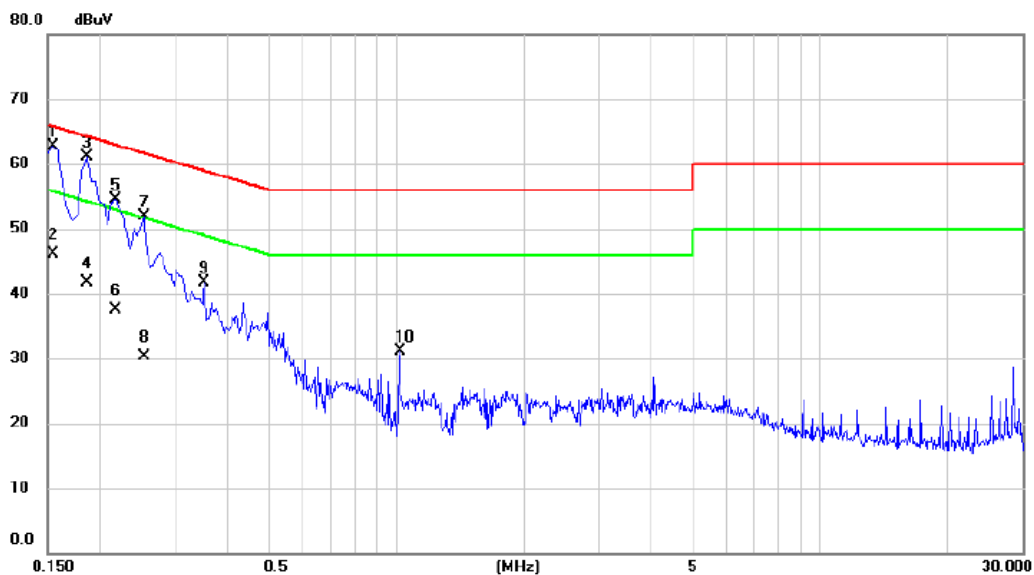
30MHz to 1000MHz



APPENDIX A - CONDUCTED EMISSION

Test Mode:	TX N40 Mode /CH159 (UNII-3)
Test Voltage:	AC 120V / 60Hz

Line

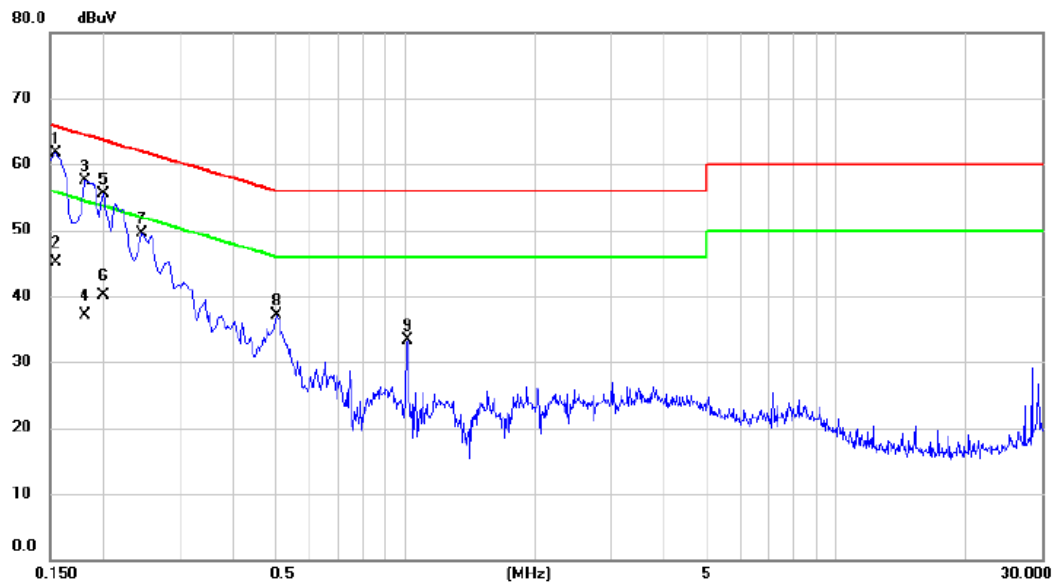


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	*	0.1545	53.02	9.70	62.72	65.75	-3.03	peak	
2		0.1545	36.50	9.70	46.20	55.75	-9.55	AVG	
3		0.1860	51.16	9.86	61.02	64.21	-3.19	peak	
4		0.1860	31.80	9.86	41.66	54.21	-12.55	AVG	
5		0.2175	44.65	9.90	54.55	62.91	-8.36	peak	
6		0.2175	27.60	9.90	37.50	52.91	-15.41	AVG	
7		0.2535	42.08	9.88	51.96	61.64	-9.68	peak	
8		0.2535	20.40	9.88	30.28	51.64	-21.36	AVG	
9		0.3525	31.70	9.91	41.61	58.90	-17.29	peak	
10		1.0184	21.16	10.01	31.17	56.00	-24.83	peak	

Note: The test result has included the cable loss.

Test Mode:	TX N40 Mode /CH159 (UNII-3)
Test Voltage:	AC 120V / 60Hz

Neutral

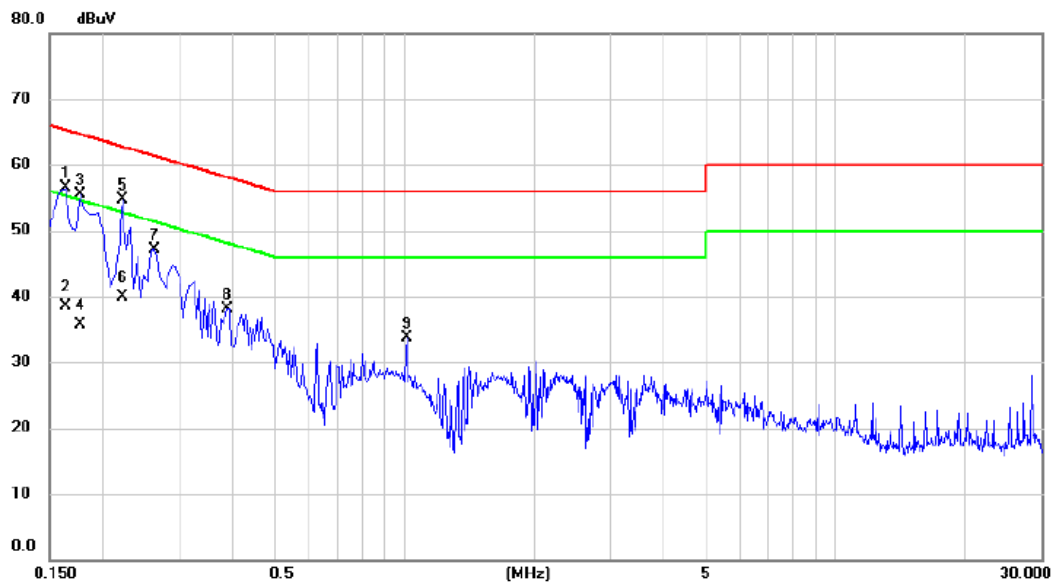


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	*	0.1545	51.99	9.77	61.76	65.75	-3.99	peak	
2		0.1545	35.30	9.77	45.07	55.75	-10.68	AVG	
3		0.1815	47.55	9.94	57.49	64.42	-6.93	peak	
4		0.1815	27.10	9.94	37.04	54.42	-17.38	AVG	
5		0.1995	45.58	10.01	55.59	63.63	-8.04	peak	
6		0.1995	30.10	10.01	40.11	53.63	-13.52	AVG	
7		0.2445	39.46	9.97	49.43	61.94	-12.51	peak	
8		0.5055	26.93	10.14	37.07	56.00	-18.93	peak	
9		1.0140	23.09	10.30	33.39	56.00	-22.61	peak	

Note: The test result has included the cable loss.

Test Mode:	TX N40 Mode /CH159 (UNII-3)
Test Voltage:	AC 240V / 50Hz

Line

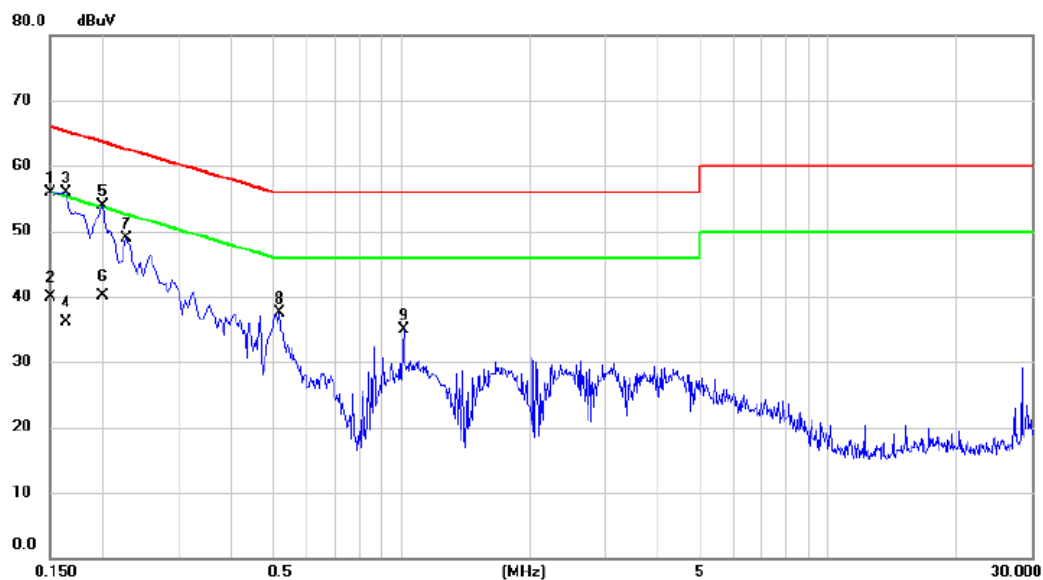


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0.1635	46.72	9.77	56.49	65.28	-8.79	peak	
2	0.1635	28.70	9.77	38.47	55.28	-16.81	AVG	
3	0.1770	45.57	9.84	55.41	64.63	-9.22	peak	
4	0.1770	25.90	9.84	35.74	54.63	-18.89	AVG	
5 *	0.2220	44.78	9.89	54.67	62.74	-8.07	peak	
6	0.2220	30.10	9.89	39.99	52.74	-12.75	AVG	
7	0.2625	37.23	9.88	47.11	61.35	-14.24	peak	
8	0.3885	28.21	9.92	38.13	58.10	-19.97	peak	
9	1.0140	23.71	10.01	33.72	56.00	-22.28	peak	

Note: The test result has included the cable loss.

Test Mode:	TX N40 Mode /CH159 (UNII-3)
Test Voltage:	AC 240V / 50Hz

Neutral



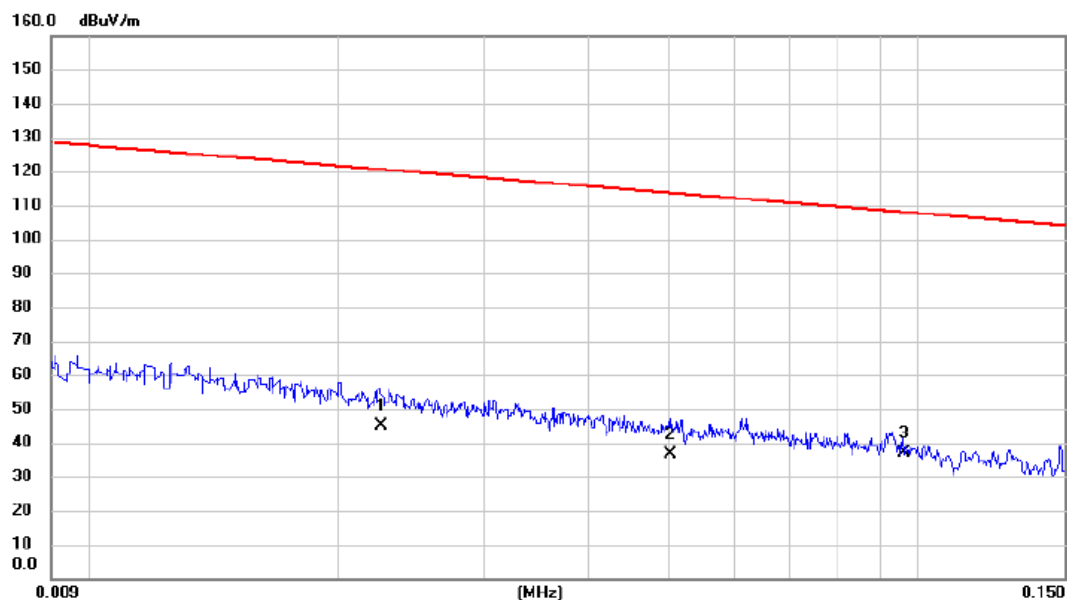
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.1500	46.15	9.74	55.89	66.00	-10.11	peak	
2		0.1500	30.10	9.74	39.84	56.00	-16.16	AVG	
3	*	0.1635	46.02	9.85	55.87	65.28	-9.41	peak	
4		0.1635	26.30	9.85	36.15	55.28	-19.13	AVG	
5		0.1995	43.80	10.01	53.81	63.63	-9.82	peak	
6		0.1995	30.10	10.01	40.11	53.63	-13.52	AVG	
7		0.2265	38.95	9.99	48.94	62.58	-13.64	peak	
8		0.5190	27.34	10.15	37.49	56.00	-18.51	peak	
9		1.0140	24.61	10.30	34.91	56.00	-21.09	peak	

Note: The test result has included the cable loss.

APPENDIX B - RADIATED EMISSION (9KHZ TO 30MHZ)

Test Mode:	TX N40 Mode /CH159 (UNII-3)
------------	-----------------------------

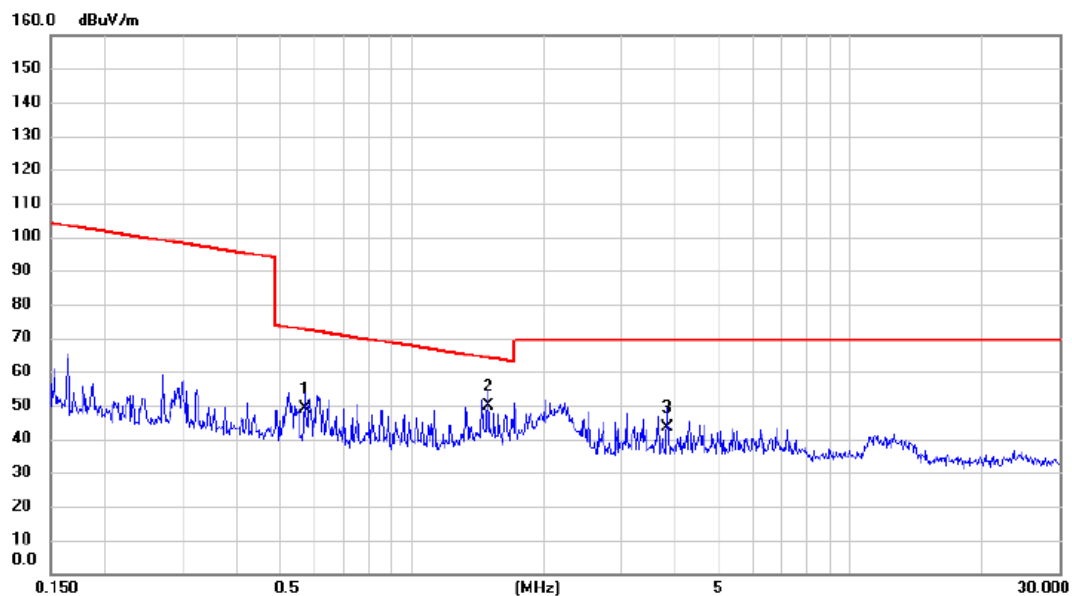
Ant 0°



No.	Mk.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.0225	31.76	13.05	44.81	120.56	-75.75	AVG	
2		0.0502	24.28	12.33	36.61	113.59	-76.98	AVG	
3	*	0.0960	24.43	12.62	37.05	107.96	-70.91	QP	

Test Mode: TX N40 Mode /CH159 (UNII-3)

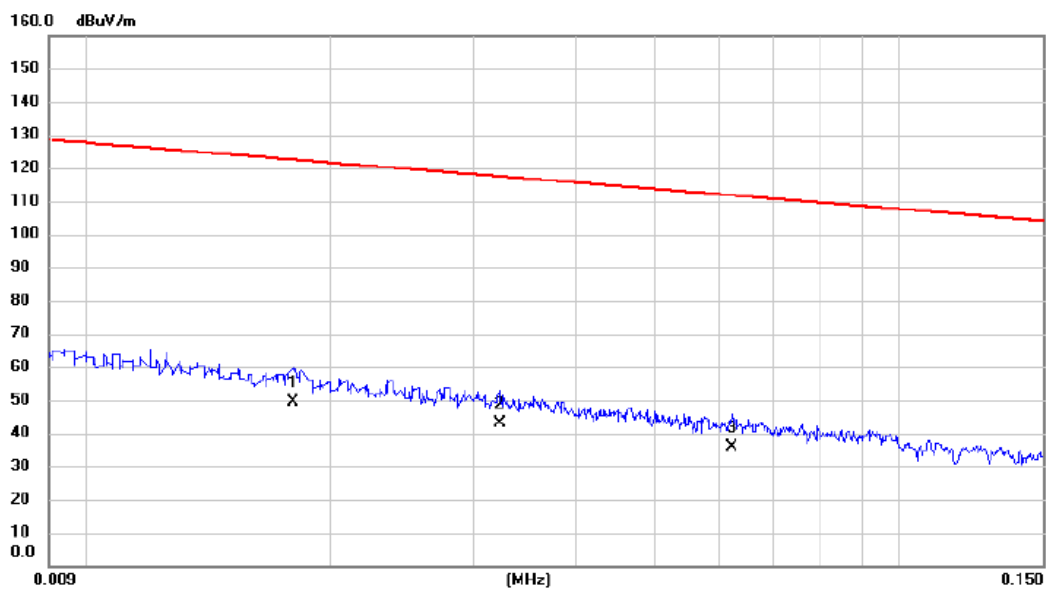
Ant 0°



No.	Mk.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.5701	37.46	11.74	49.20	72.48	-23.28	QP	
2	*	1.4953	38.36	11.31	49.67	64.11	-14.44	QP	
3		3.8196	32.95	10.48	43.43	69.54	-26.11	QP	

Test Mode:	TX N40 Mode /CH159 (UNII-3)
------------	-----------------------------

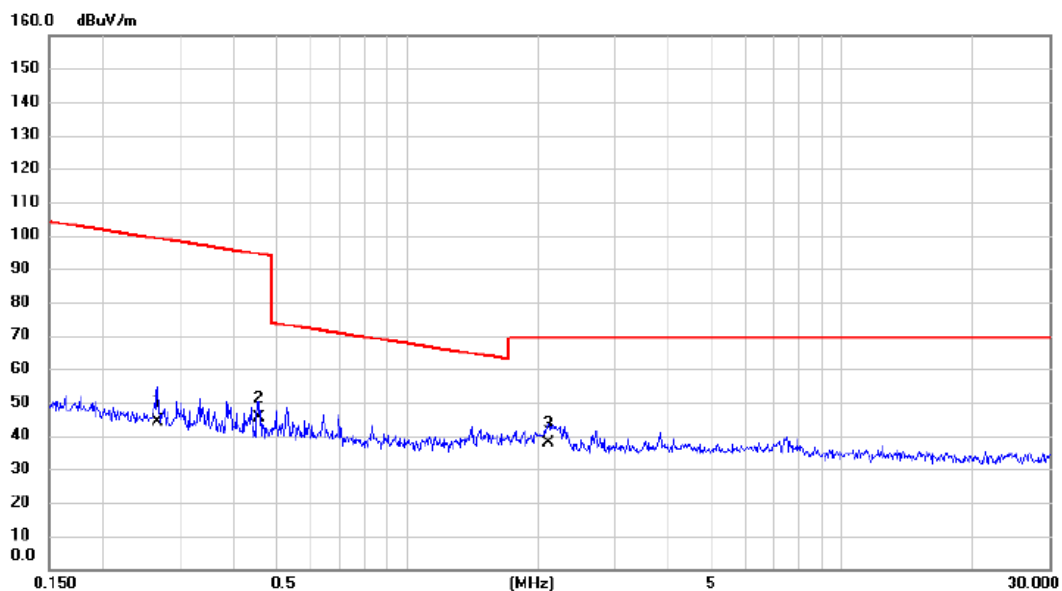
Ant 90°



No.	Mk.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	0.0180	35.85	13.74	49.59	122.50	-72.91	AVG	
2		0.0323	30.29	12.80	43.09	117.42	-74.33	AVG	
3		0.0623	23.34	12.40	35.74	111.72	-75.98	AVG	

Test Mode: TX N40 Mode /CH159 (UNII-3)

Ant 90°

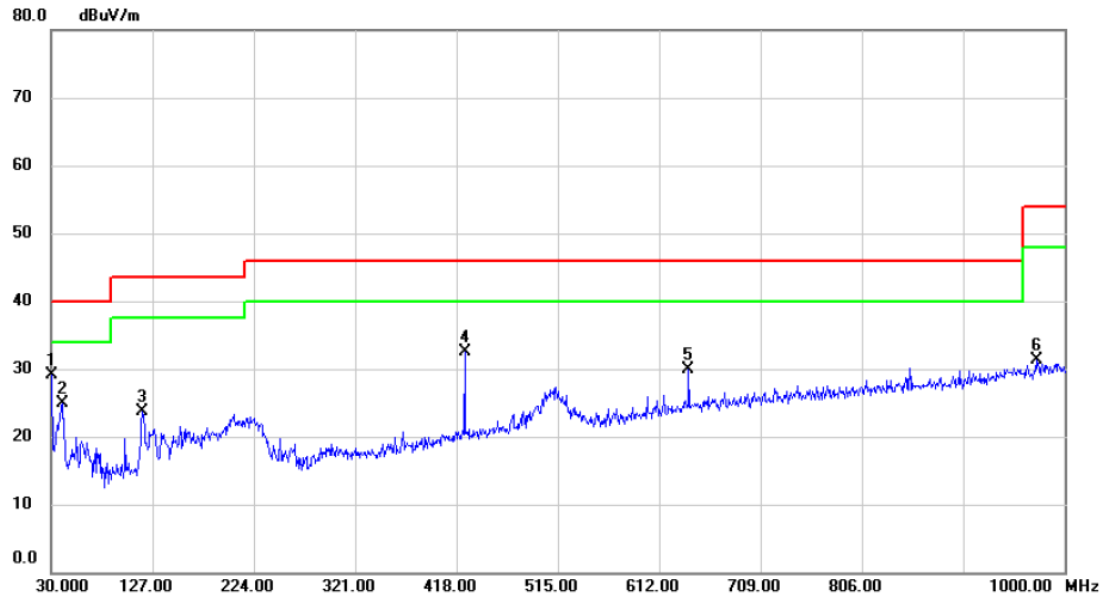


No.	Mk.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.2672	31.93	12.46	44.39	99.07	-54.68	AVG	
2		0.4564	33.34	11.89	45.23	94.42	-49.19	AVG	
3	*	2.1213	26.76	10.95	37.71	69.54	-31.83	QP	

APPENDIX C - RADIATED EMISSION (30MHZ TO 1000MHZ)

Test Mode:	TX N40 Mode /CH159 (UNII-3)
------------	-----------------------------

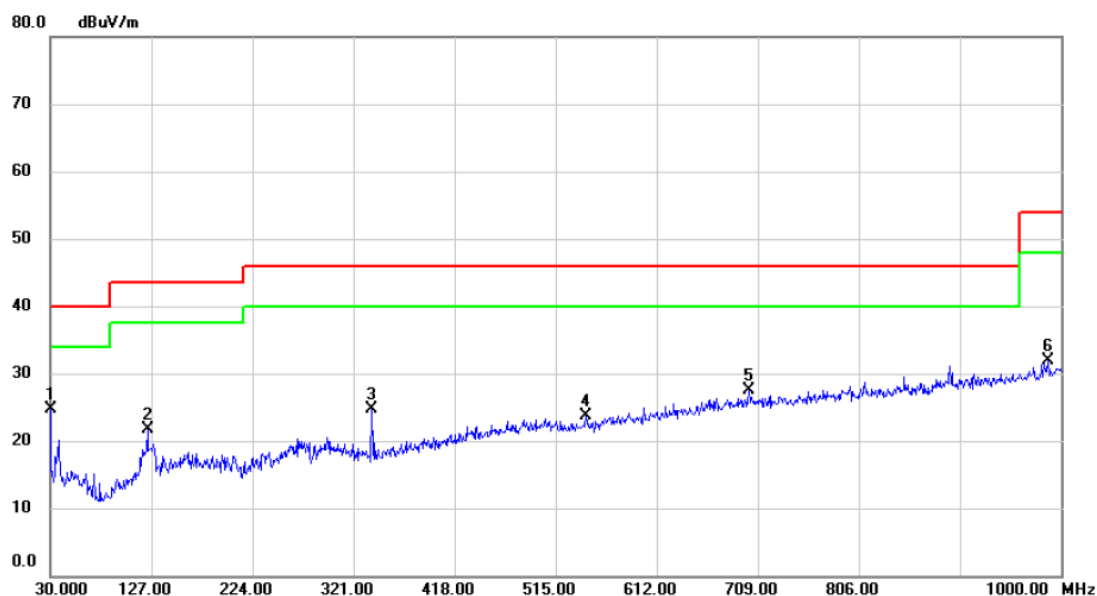
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	30.000	43.77	-14.60	29.17	40.00	-10.83	peak	
2		40.670	38.45	-13.58	24.87	40.00	-15.13	peak	
3		117.300	36.65	-13.01	23.64	43.50	-19.86	peak	
4		425.760	40.48	-8.03	32.45	46.00	-13.55	peak	
5		640.130	34.10	-4.11	29.99	46.00	-16.01	peak	
6		972.840	30.06	1.15	31.21	54.00	-22.79	peak	

Test Mode:	TX N40 Mode /CH159 (UNII-3)
------------	-----------------------------

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	30.000	39.26	-14.60	24.66	40.00	-15.34	peak	
2		123.120	34.30	-12.61	21.69	43.50	-21.81	peak	
3		338.460	34.93	-10.16	24.77	46.00	-21.23	peak	
4		544.100	30.17	-6.53	23.64	46.00	-22.36	peak	
5		700.270	30.66	-3.17	27.49	46.00	-18.51	peak	
6		987.390	30.47	1.44	31.91	54.00	-22.09	peak	

End of Test Report