

# FCC EMC Test Report

**Report No.** : BTL-FCCE-1-2112T064  
**Equipment** : LCD Color Display  
**Model Name** : AMM215WTTXXXXX (X= 0~9 ,A~Z ,a~z ,"-“ or blank)  
**Brand Name** : Barco  
**Applicant** : BARCO, INC.  
**Address** : 3059 Premiere Parkway, Suite 400 Duluth, GA 30097 U.S.A.  
  
**FCC Rule Part(s)** : FCC CFR Title 47, Part 15, Subpart B, Class B  
**Measurement** : ANSI C63.4-2014  
**Procedure(s)**  
  
**Date of Receipt** : 2021/12/15  
**Date of Test** : 2021/12/15 ~ 2021/12/28  
**Issued Date** : 2022/1/18

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

**Prepared by**

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### 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 manufacturer'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.

This report is the confidential property of the client. As a mutual protection to the clients, the public and ourselves, the test report shall not be reproduced, except in full, without our written approval.

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

**BTL** is not responsible for the sampling stage, so the results only apply to the sample as received.

The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

### 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.

Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.

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**REVISION HISTORY**

Report No.	Version	Description	Issued Date
BTL-FCCE-1-2112T064	R00	Original Report.	2022/1/18

## 1 SUMMARY OF TEST RESULTS

Emission			
Standard	Test Item	Limit	Judgment
FCC CFR Title 47, Part 15, Subpart B	AC power line conducted emissions	Class B	PASS
	Radiated emissions below 1 GHz	Class B	PASS
	Radiated emissions above 1 GHz	Class B	PASS

NOTE:

- (1) "N/A" denotes test is not applicable in this Test Report.
- (2) The report format version is TP.1.1.1.

## 1.1 TEST FACILITY

The test facilities used to collect the test data in this report:

No. 68-1, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan  
The test sites and facilities are covered under FCC RN: 355421 and DN: TW1099.

C05       CB08       CB11       CB15       CB16

## 1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement  $y \pm U$ , where expanded uncertainty  $U$  is based on a standard uncertainty multiplied by a coverage factor of  $k = 2$ , providing a level of confidence of approximately 95 %. The measurement instrumentation uncertainty considerations contained in CISPR 16-4-2. The BTL measurement uncertainty is less than the CISPR 16-4-2  $U_{cisp}$  requirement.

A. AC power line conducted emissions test:

Test Site	Method	Measurement Frequency Range	U (dB)
C05	CISPR	150 kHz ~ 30 MHz	3.44

B. Radiated emissions up to 1 GHz test:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U,(dB)
CB08 (10m)	CISPR	30 MHz ~ 200 MHz	V	3.12
		30 MHz ~ 200 MHz	H	3.26
		200 MHz ~ 1,000 MHz	V	3.22
		200 MHz ~ 1,000 MHz	H	3.12

C. Radiated emissions above 1 GHz test:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U,(dB)
CB08 (3m)	CISPR	1 GHz ~ 6 GHz	V	4.52
		1 GHz ~ 6 GHz	H	4.36
		6 GHz ~ 18 GHz	V	4.46
		6 GHz ~ 18 GHz	H	4.36

### NOTE:

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

## 1.3 TEST ENVIRONMENT CONDITIONS

Test Item	Environment Condition	Tested by
Conducted emissions	20°C, 58%	Eric Tai
Radiated emissions below 1 GHz	22°C, 50%	Steve Yang
Radiated emissions above 1 GHz	22°C, 50%	Steve Yang

## 2 GENERAL INFORMATION

### 2.1 EUT INFORMATION

Equipment	LCD Color Display
Model Name	AMM215WTTXXXX (X= 0~9 ,A~Z ,a~z ,"-“ or blank)
Brand Name	Barco
Model Difference	Different model distribute to different area.
Power Source	DC voltage supplied from AC/DC adapter.
Power Rating	For EUT: 12VDC, 3A For Adapter: 100-240VAC~, 50-60Hz, 1.5A (1.5A-0.7A)
Products Covered	1 * Adapter: Bridge Power Corp. / BPM050S12F09 1 * DVI Cable 1 * USB Cable 1 * VGA Cable
Test Model	AMM215WTT
Sample Status	Engineering Sample
Highest Internal Frequency	148.5 MHz
EUT Modification(s)	N/A

NOTE:

(1) For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

## 2.2 TEST MODES

The test system was pre-tested based on the consideration of all possible combinations of EUT operation modes according to test plan.

Test Mode	Test Sample / Panel	Resolution		Picture Rotation	Stand	Panel Position
Mode 1	LG LM215WF3	DVI	1920*1080@60Hz	0°	With stand	Normal
Mode 2		D-sub	1920*1080@60Hz			
Mode 3		DVI	1280*1024@75Hz			
Mode 4		DVI	640*480@60Hz			
Mode 5		DVI	1080*1920@60Hz	90°		Sky faced
Mode 6		DVI	1920*1080@60Hz	N/A		
Mode 7		DVI	1920*1080@60Hz	0°	Without stand	Normal
Mode 8		DVI	1080*1920@60Hz	90°		Sky faced
Mode 9		DVI	1920*1080@60Hz	N/A		

Following mode(s) was (were) found to be the worst case(s) and selected for the final test.

### AC power line conducted emissions test

Final Test Mode	Description
Mode 1	DVI 1920*1080@60Hz (0°)

### Radiated emissions below 1 GHz test

Final Test Mode	Description
Mode 1	DVI 1920*1080@60Hz (0°)

### Radiated emissions above 1 GHz test

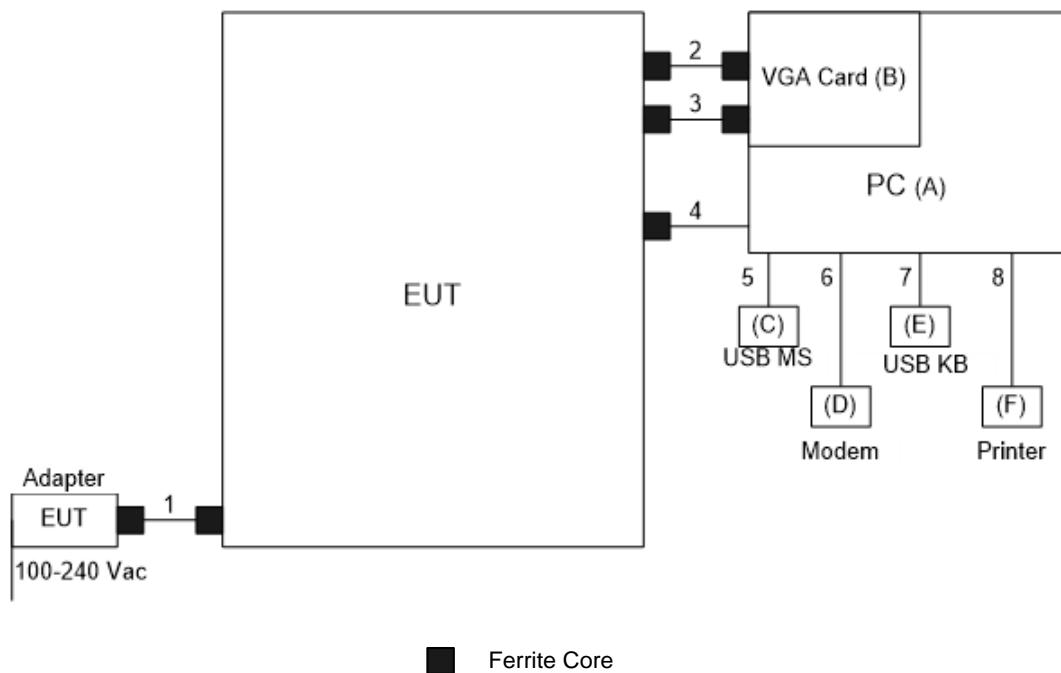
Final Test Mode	Description
Mode 1	DVI 1920*1080@60Hz (0°)

## 2.3 EUT OPERATING CONDITION

The PC exercise program (BurninTEST V9.0) used during radiated and/or conducted emissions measurement was designed to exercise the various system components in a manner similar to a typical use.

## 2.4 TESTED CONFIGURATION DIAGRAM

Equipment letters and Cable numbers refer to item numbers described in the tables of clause 2.5.



■ Ferrite Core

## 2.5 SUPPORT UNITS

Item	Equipment	Brand	Model No.	Series No.	Remarks
A	PC	DELL	OptiPlex 9020 MT	JC22052	Furnished by test lab.
B	VGA Card	NVIDIA	GT640 P2010	180-12010-1202-A 02	Furnished by test lab.
C	USB Mouse	DELL	MOCZUL	CN-049TWY-PRC0 0-79E-01HA	Furnished by test lab.
D	Modem	ACEEX	DM-1414V	8041708	Furnished by test lab.
E	USB K/B	DELL	KB216t	CN-0W33XP-L030 0-797-05TY-A03	Furnished by test lab.
F	Printer	HP	SNPRH-1504	N/A	Furnished by test lab.

Item	Cable Type	Shielded	Ferrite Core	Length	Remarks
1	Power Cable	YES	YES	3m	Supplied by test requester.
2	D-SUB Cable	YES	YES	4.5m	Supplied by test requester.
3	DVI Cable	YES	YES	1.8m	Supplied by test requester.
4	USB Cable	YES	YES	4.5m	Supplied by test requester.
5	USB Cable	YES	NO	1.7m	Type: USB 2.0 Furnished by test lab.
6	RS-232 Cable	YES	NO	1.8m	Furnished by test lab.
7	USB Cable	YES	NO	1.7m	Type: USB 2.0 Furnished by test lab.
8	USB Cable	YES	NO	1.8m	Type: USB 2.0 Furnished by test lab.

### 3 EMC EMISSION TEST

#### 3.1 CONDUCTED EMISSIONS TEST

##### 3.1.1 LIMITS

Frequency (MHz)	Class A (dB $\mu$ V)		Class B (dB $\mu$ V)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 - 0.5	79	66	66 - 56 *	56 - 46 *
0.50 - 5.0	73	60	56	46
5.0 - 30.0	73	60	60	50

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) The test result calculated as following:

Measurement Value = Reading Level + Correct Factor

Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor (if use)

Margin Level = Measurement Value – Limit Value

Calculation example:

Reading Level		Correct Factor		Measurement Value
38.22	+	3.45	=	41.67

Measurement Value		Limit Value		Margin Level
41.67	-	60	=	-18.33

##### 3.1.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	TWO-LINE V-NETWORK	R&S	ENV216	101339	2021/3/10	2022/3/9
2	Test Cable	EMCI	EMCRG58-BM-B M-9000	210501	2021/5/3	2022/5/2
3	EMI Test Receiver	R&S	ESR7	101433	2021/11/24	2022/11/23
4	Measurement Software	Farad	EZ_EMC (Ver. NB-03A1-01)	N/A	N/A	N/A

REMARK:

- (1) "N/A" denotes no model name, no serial no. or no calibration specified.
- (2) All calibration period of equipment list is one year.

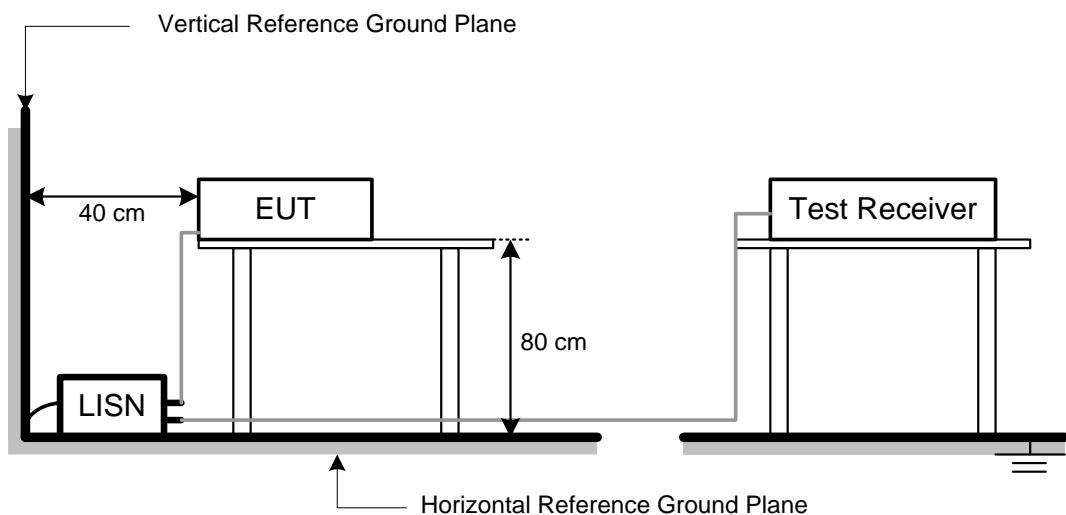
### 3.1.3 TEST PROCEDURE

- a. The EUT was placed 0.8 m above the horizontal ground plane with the EUT being connected to the power mains through a line impedance stabilization network (LISN).  
All other support equipment were powered from an additional LISN(s).  
The LISN provides 50 Ohm/50uH of 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 to keep the cable above 40 cm.
- c. Excess I/O cables that are not connected to a peripheral shall be bundled in the center.  
The end of the cable will be terminated, using the correct terminating impedance.  
The overall length shall not exceed 1 m.
- d. The LISN is spaced at least 80 cm from the nearest part of the EUT chassis.
- e. The receiver was set to quasi-peak and average detect function and specified bandwidth with maximum hold mode.
- f. For the actual test configuration, please refer to the related Item - TEST PHOTOS.

### 3.1.4 DEVIATION FROM TEST STANDARD

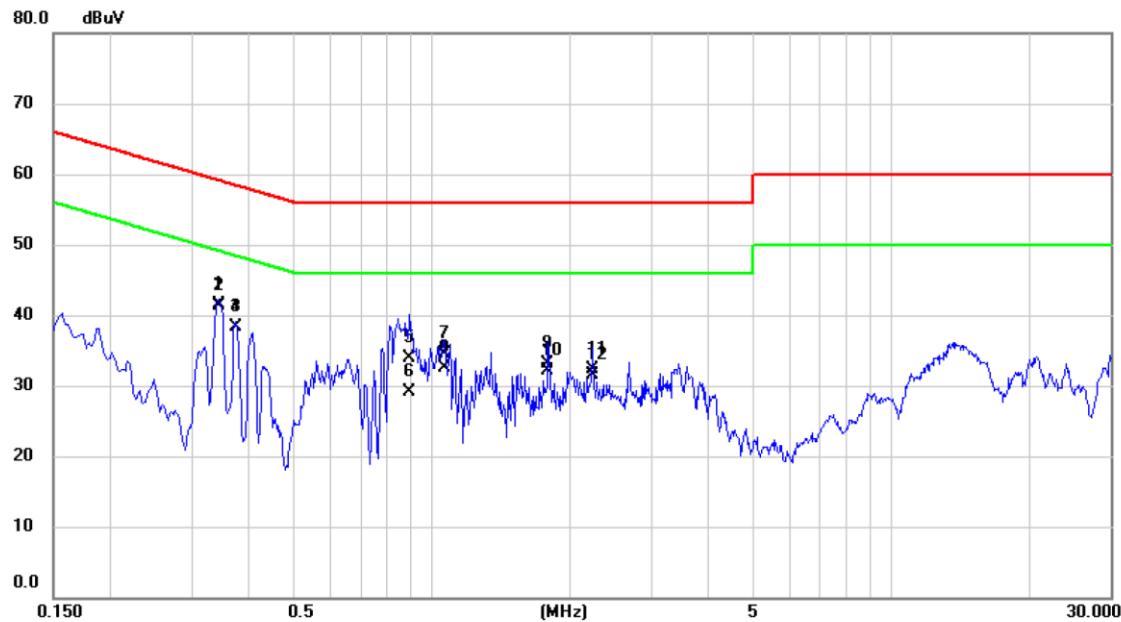
No deviation.

### 3.1.5 TEST SETUP



### 3.1.6 TEST RESULT

Test Mode	Mode 1	Tested Date	2021/12/20
Test Voltage	AC 120V/60Hz	Phase	Line

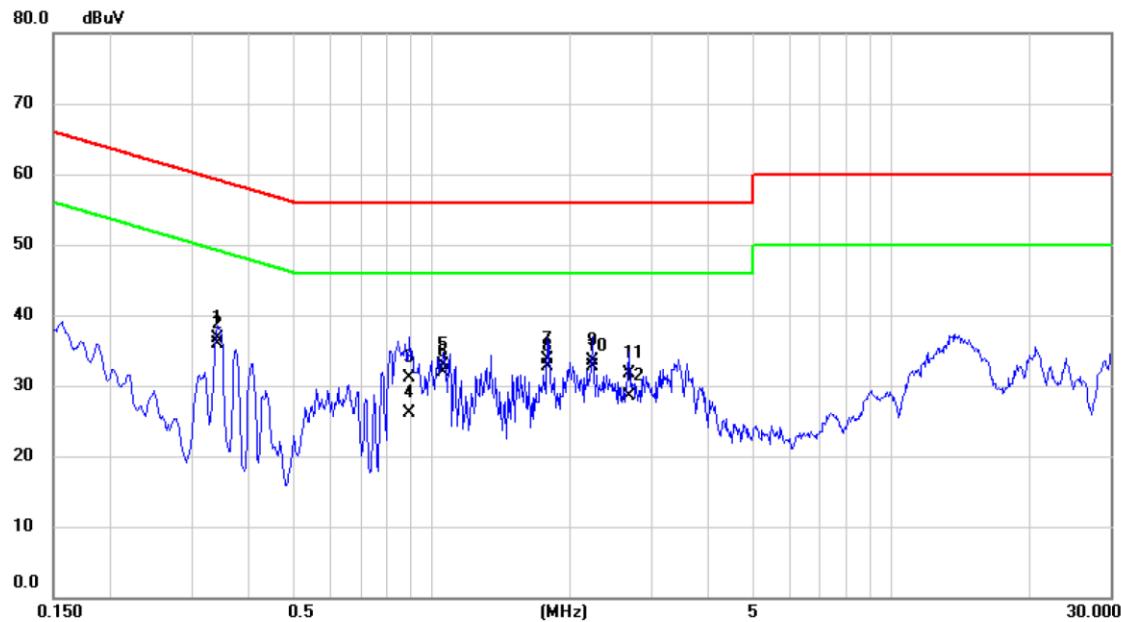


No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.3435	31.80	9.72	41.52	59.12	-17.60	QP	
2 *		0.3435	31.60	9.72	41.32	49.12	-7.80	AVG	
3		0.3750	28.60	9.72	38.32	58.39	-20.07	QP	
4		0.3750	28.50	9.72	38.22	48.39	-10.17	AVG	
5		0.8947	24.20	9.74	33.94	56.00	-22.06	QP	
6		0.8947	19.40	9.74	29.14	46.00	-16.86	AVG	
7		1.0635	24.80	9.74	34.54	56.00	-21.46	QP	
8		1.0635	22.80	9.74	32.54	46.00	-13.46	AVG	
9		1.7903	23.40	9.77	33.17	56.00	-22.83	QP	
10		1.7903	22.40	9.77	32.17	46.00	-13.83	AVG	
11		2.2380	22.50	9.78	32.28	56.00	-23.72	QP	
12		2.2380	21.70	9.78	31.48	46.00	-14.52	AVG	

#### REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	Mode 1	Tested Date	2021/12/20
Test Voltage	AC 120V/60Hz	Phase	Neutral



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.3412	27.00	9.73	36.73	59.17	-22.44	QP	
2		0.3412	26.20	9.73	35.93	49.17	-13.24	AVG	
3		0.8947	21.30	9.75	31.05	56.00	-24.95	QP	
4		0.8947	16.30	9.75	26.05	46.00	-19.95	AVG	
5		1.0611	23.20	9.75	32.95	56.00	-23.05	QP	
6		1.0611	22.10	9.75	31.85	46.00	-14.15	AVG	
7		1.7903	24.00	9.78	33.78	56.00	-22.22	QP	
8 *		1.7903	23.00	9.78	32.78	46.00	-13.22	AVG	
9		2.2380	23.80	9.79	33.59	56.00	-22.41	QP	
10		2.2380	22.90	9.79	32.69	46.00	-13.31	AVG	
11		2.6835	22.00	9.80	31.80	56.00	-24.20	QP	
12		2.6835	18.70	9.80	28.50	46.00	-17.50	AVG	

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

### 3.2 RADIATED EMISSIONS BELOW 1 GHZ TEST

#### 3.2.1 LIMITS

FCC CFR Title 47, Part 15, Subpart B:

Frequency (MHz)	Class A (at 10 m)		Class A (at 3 m)*		Class B (at 3 m)	
	(uV/m) Field strength	(dB $\mu$ V/m) Field strength	(dB $\mu$ V/m) Field strength	(uV/m) Field strength	(dB $\mu$ V/m) Field strength	
30 - 88	90	39	49.46	100	40	
88 - 216	150	43.5	53.96	150	43.5	
216 - 960	210	46.4	56.86	200	46	
Above 960	300	49.5	59.96	500	54	

\* FCC CFR Title 47, Part 15, Subpart A, section 15.31(f)(1), the distance could be extrapolated by using 20 dB/decade factor.

Alternative Limits:

Frequency (MHz)	Class A (at 10 m)		Class B (at 10 m)	
	dB $\mu$ V/m		dB $\mu$ V/m	
30 - 230	40		30	
230 - 1000	47		37	

FCC CFR Title 47, Part 15, Subpart B, section 15.109(g) provides, as an alternative, compliance to the CISPR 22 (Third Edition) radiated emission limits in the 30 MHz to 1000 MHz range.

Frequency range of radiated measurements (For unintentional radiators)

Highest frequency generated or Upper frequency of measurement used in the device or on which the device operates or tunes (MHz)	Range (MHz)
Below 1.705	30
1.705 - 108	1000
108 - 500	2000
500 - 1000	5000
Above 1000	5 <sup>th</sup> harmonic of the highest frequency or 40 GHz, whichever is lower

NOTE:

- (1) The tighter limit applies at the band edges.
- (2) Emission level (dB $\mu$ V/m) = 20log Emission level (uV/m).  
3 m Emission level = 10 m Emission level + 20log(10 m/3 m).
- (3) The test result calculated as following:

Measurement Value = Reading Level + Correct Factor

Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain (if use)

Margin Level = Measurement Value - Limit Value

Calculation example:

Reading Level		Correct Factor		Measurement Value
19.11	+	2.11	=	21.22

Measurement Value		Limit Value		Margin Level
21.22	-	40	=	-18.78

### 3.2.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Log-Bicon Antenna	Schwarzbeck	VULB 9168	9168-641	2021/2/22	2022/2/21
2	Attenuator	Inmet	EMCI-N-6-05	AT-N0507	2021/2/22	2022/2/21
3	Pre-Amplifier	EMCI	EMC 9135	980282	2021/9/22	2022/9/21
4	Test Cable	EMCI	EMC104-SM-SM-800	150332	2021/10/21	2022/10/20
5	Test Cable	EMCI	EMCCFD400-NM-NM-8000	200345	2021/10/21	2022/10/20
6	Test Cable	EMCI	EMCCFD400-NM-NM-3500	191016	2021/10/21	2022/10/20
7	Test Cable	EMCI	EMC104-SM-SM-2500	191018	2021/10/21	2022/10/20
8	EMI Test Receiver	Keysight	N9038A	MY54130009	2021/6/8	2022/6/7
9	Log-Bicon Antenna	Schwarzbeck	VULB 9168	9168-673	2021/3/25	2022/3/24
10	Attenuator	Inmet	EMCI-N-6-05	AT-N0615	2021/3/25	2022/3/24
11	Pre-Amplifier	EMCI	EMC 9135	980281	2021/9/22	2022/9/21
12	Test Cable	EMCI	EMC104-SM-SM-1000	150330	2021/10/21	2022/10/20
13	Test Cable	EMCI	EMC104-SM-NM-2500	191019	2021/10/21	2022/10/20
14	Test Cable	EMCI	EMCCFD400-NM-NM-8000	200342	2021/10/21	2022/10/20
15	Test Cable	EMCI	EMCCFD400-NM-NM-11000	191021	2021/10/21	2022/10/20
16	EXA Signal Analyzer	Keysight	N9010A	MY54200483	2021/10/6	2022/10/5
17	Measurement Software	Farad	EZ EMC (Ver. NB-03A1-01)	N/A	N/A	N/A

#### REMARK:

- (1) "N/A" denotes no model name, no serial no. or no calibration specified.
- (2) All calibration period of equipment list is one year.

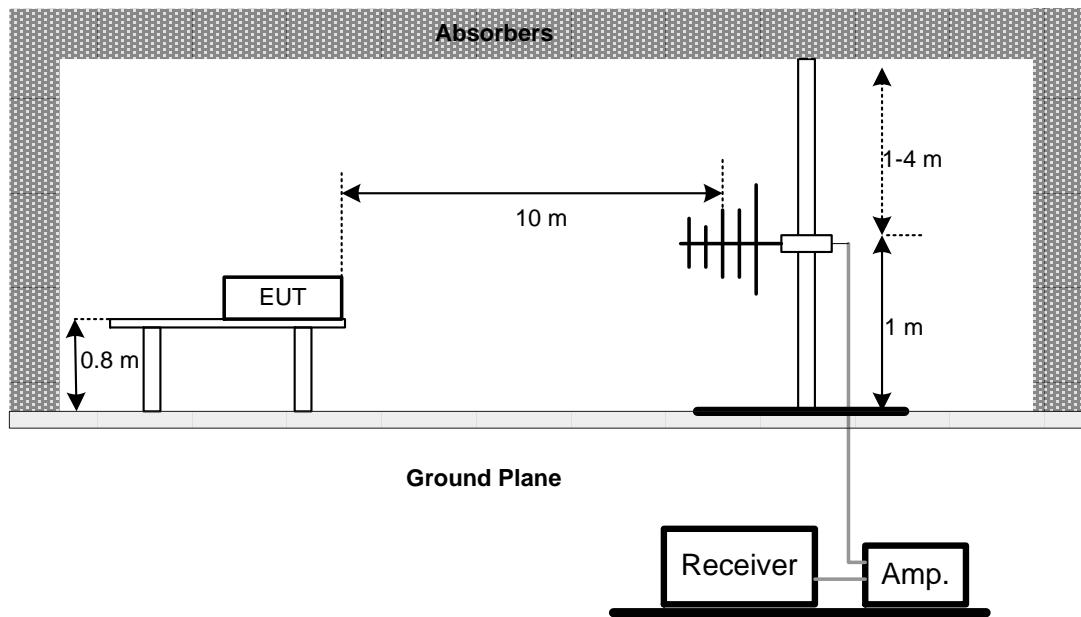
### 3.2.3 TEST PROCEDURE

- a. The separation distance of 10 m was used for measurements below 1 GHz. The EUT was placed on the top of a rotating table 0.8 m above the ground in a 10 m semi-anechoic chamber.
- b. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The height of the receive antenna was varied between 1 m and 4 m. Both horizontal and vertical polarizations of the antenna were checked.
- d. For each suspected emission, the EUT was arranged at its worst case and then the antenna was scanned in height to find the maximum. The tower Bore sight function was used.
- e. The receiver was set to quasi-peak detect function and specified bandwidth with maximum hold mode.
- f. For the actual test configuration, please refer to the related Item - TEST PHOTOS.

### 3.2.4 DEVIATION FROM TEST STANDARD

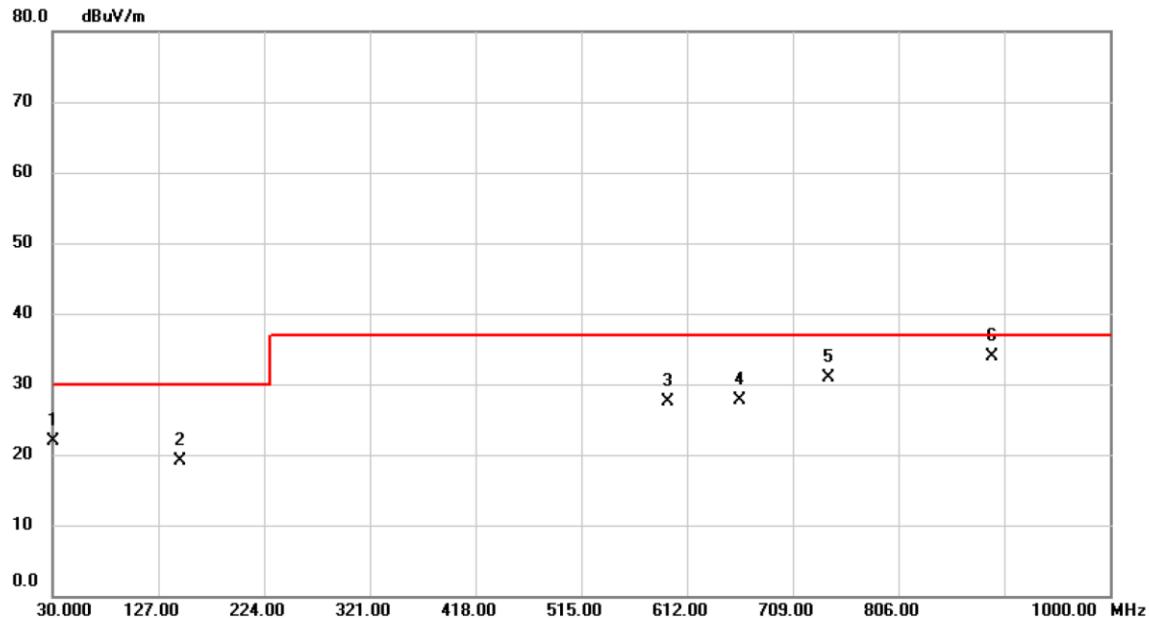
No deviation.

### 3.2.5 TEST SETUP



### 3.2.6 TEST RESULT

Test Mode	Mode 1	Tested Date	2021/12/17
Test Voltage	AC 120V/60Hz	Polarization	Vertical

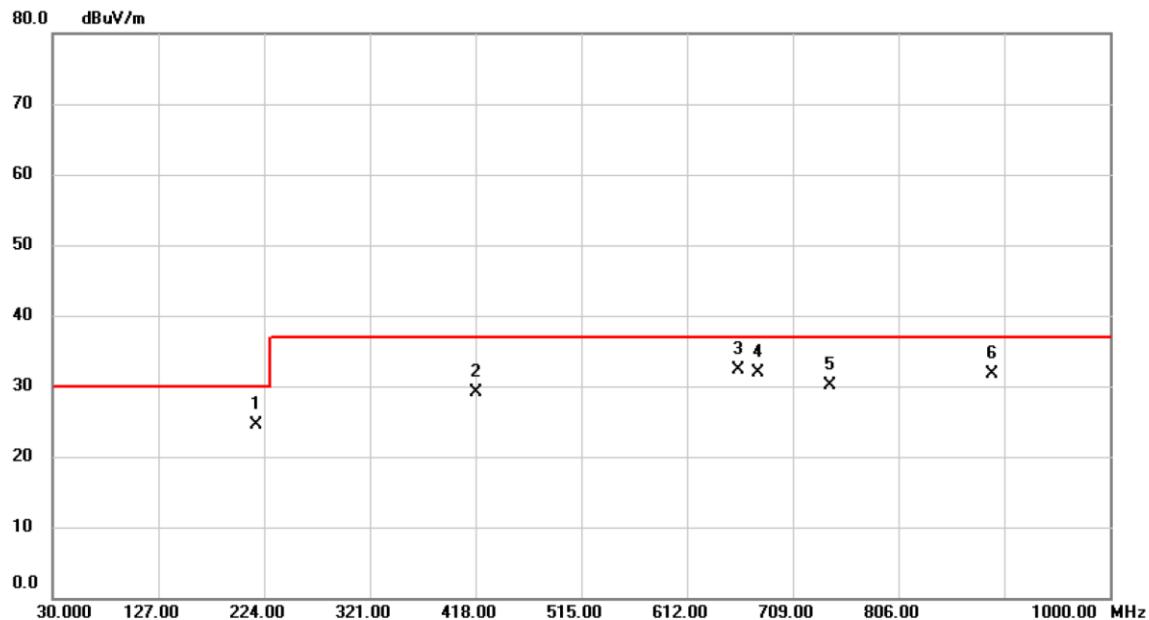


No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Antenna	Table	
			Level	Factor	ment					
		MHz	dBuV	dB	dBuV/m	dB	Detector	cm	degree	Comment
1		30.970	40.58	-18.72	21.86	30.00	-8.14	QP	100	359
2		146.400	34.98	-15.81	19.17	30.00	-10.83	QP	100	360
3		594.540	35.17	-7.76	27.41	37.00	-9.59	QP	300	343
4		660.500	34.55	-6.93	27.62	37.00	-9.38	QP	300	56
5		741.980	36.57	-5.67	30.90	37.00	-6.10	QP	300	65
6 *		891.360	38.24	-4.35	33.89	37.00	-3.11	QP	243	0

#### REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	Mode 1	Tested Date	2021/12/17
Test Voltage	AC 120V/60Hz	Polarization	Horizontal



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Antenna	Table	
			Level	Factor	ment					
		MHz	dBuV	dB	dBuV/m	dB	Detector	cm	degree	Comment
1	216.240	44.28	-19.75	24.53	30.00	-5.47	QP	343	360	
2	418.000	42.17	-13.14	29.03	37.00	-7.97	QP	153	360	
3 *	659.530	41.27	-8.88	32.39	37.00	-4.61	QP	100	83	
4	676.990	40.59	-8.74	31.85	37.00	-5.15	QP	100	93	
5	742.950	37.43	-7.39	30.04	37.00	-6.96	QP	148	360	
6	891.360	37.63	-5.97	31.66	37.00	-5.34	QP	100	179	

## REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.  
 (2) Margin Level = Measurement Value - Limit Value.

### 3.3 RADIATED EMISSIONS ABOVE 1 GHZ TEST

#### 3.3.1 LIMITS

Frequency (GHz)	Class A				Class B	
	(dBuV/m) (at 3 m)		(dBuV/m) (at 10 m)		(dBuV/m) (at 3 m)	
	Peak	Average	Peak	Average	Peak	Average
Above 1	80	60	69.5	49.5	74	54

Frequency range of radiated measurements (For unintentional radiators)

Highest frequency generated or Upper frequency of measurement used in the device or on which the device operates or tunes (MHz)	Range (MHz)
Below 1.705	30
1.705 - 108	1000
108 - 500	2000
500 - 1000	5000
Above 1000	5 <sup>th</sup> harmonic of the highest frequency or 40 GHz, whichever is lower

NOTE:

- (1) The tighter limit applies at the band edges.
- (2) Emission level (dBuV/m) = 20log Emission level (uV/m).
- (3) The test result calculated as following:

Measurement Value = Reading Level + Correct Factor  
Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain (if use)

Margin Level = Measurement Value - Limit Value

Calculation example:

Reading Level		Correct Factor		Measurement Value
36.89	+	4.23	=	41.12

Measurement Value		Limit Value		Margin Level
41.12	-	54	=	-12.88

#### 3.3.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Horn Antenna	ETS-Lindgren	3117	00202724	2021/11/19	2022/11/18
2	Pre-Amplifier	EMCI	EMC012645B	980344	2021/1/18	2022/1/17
3	Test Cable	EMCI	EMC104-SM-SM-800	180309	2021/4/21	2022/4/20
4	Test Cable	EMCI	EMC104-SM-SM-6000	180304	2021/4/21	2022/4/20
5	EXA Signal Analyzer	Keysight	N9010A	MY54200483	2021/10/6	2022/10/5
6	Measurement Software	Farad	EZ_EMC (Ver. NB-03A1-01)	N/A	N/A	N/A

REMARK:

- (1) "N/A" denotes no model name, no serial no. or no calibration specified.
- (2) All calibration period of equipment list is one year.

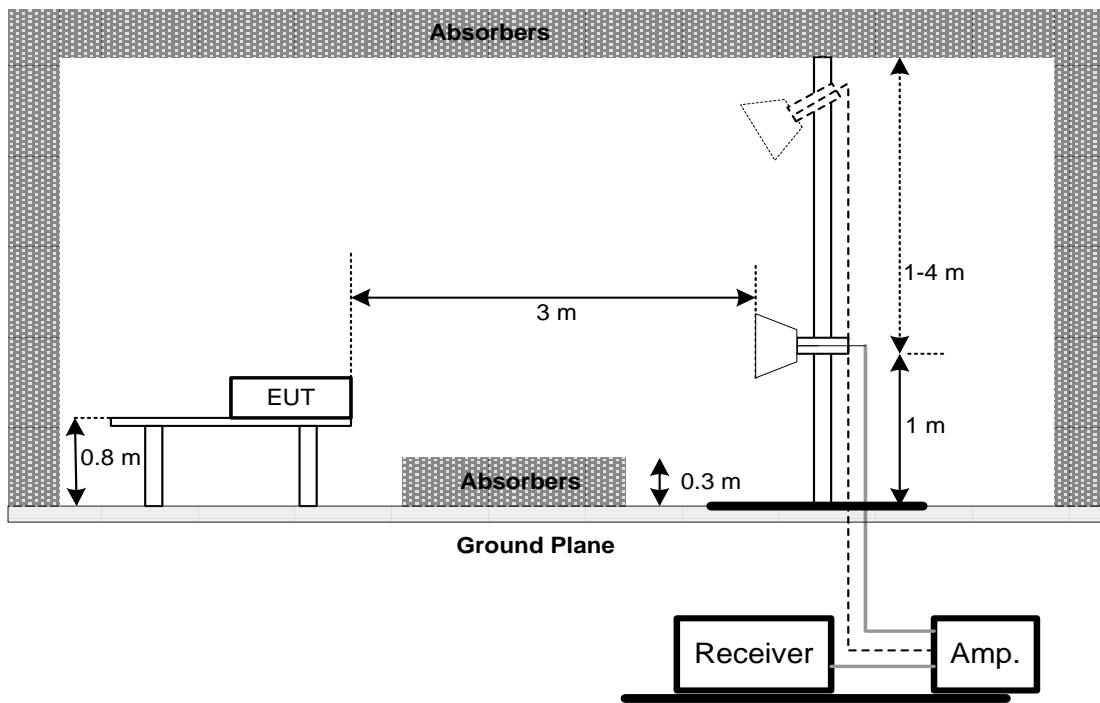
### 3.3.3 TEST PROCEDURE

- a. The separation distance of 3 m was used for measurements above 1 GHz.  
The test limits were altered using the 20 dB/decade extrapolation factor.  
The EUT was placed on the top of a rotating table 0.8 m above the ground in a 3 m semi-anechoic chamber.
- b. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The height of the receive antenna was varied between 1 m and 4 m. Both horizontal and vertical polarizations of the antenna were checked.
- d. For each suspected emission, the EUT was arranged at its worst case and then the antenna was scanned in height to find the maximum. The tower Bore sight function was used.
- e. The receiver/spectrum analyzer was set to peak and average detect function and specified bandwidth with maximum hold mode.
- f. For the actual test configuration, please refer to the related Item - TEST PHOTOS.

### 3.3.4 DEVIATION FROM TEST STANDARD

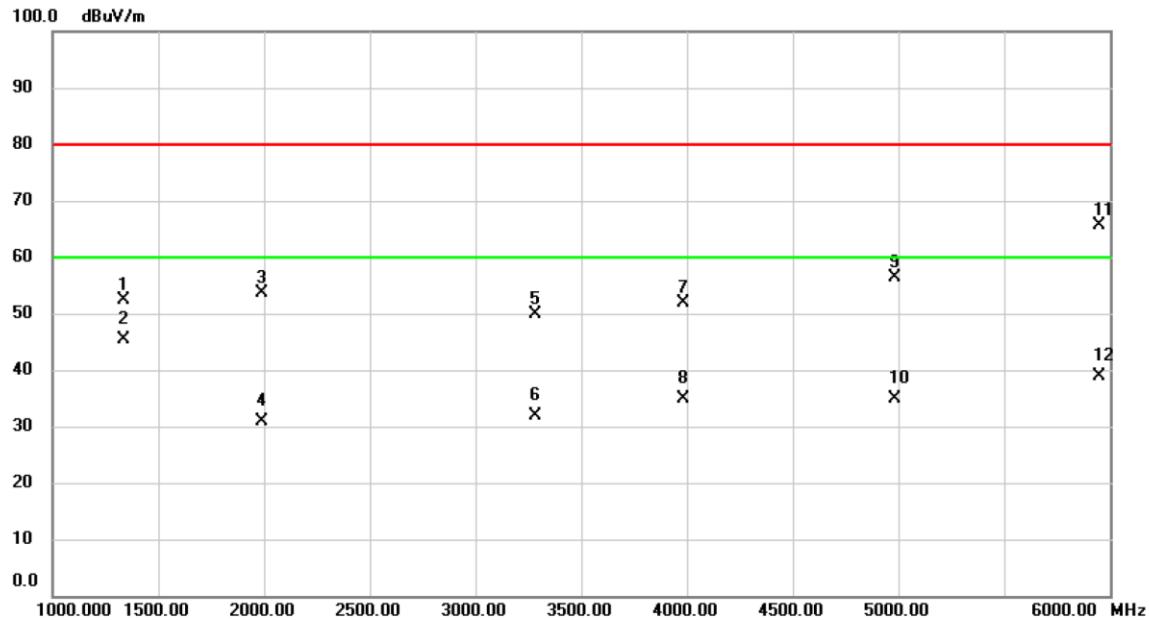
No deviation.

### 3.3.5 TEST SETUP



## 3.3.6 TEST RESULT

Test Mode	Mode 1	Tested Date	2021/12/17
Test Voltage	AC 120V/60Hz	Polarization	Vertical

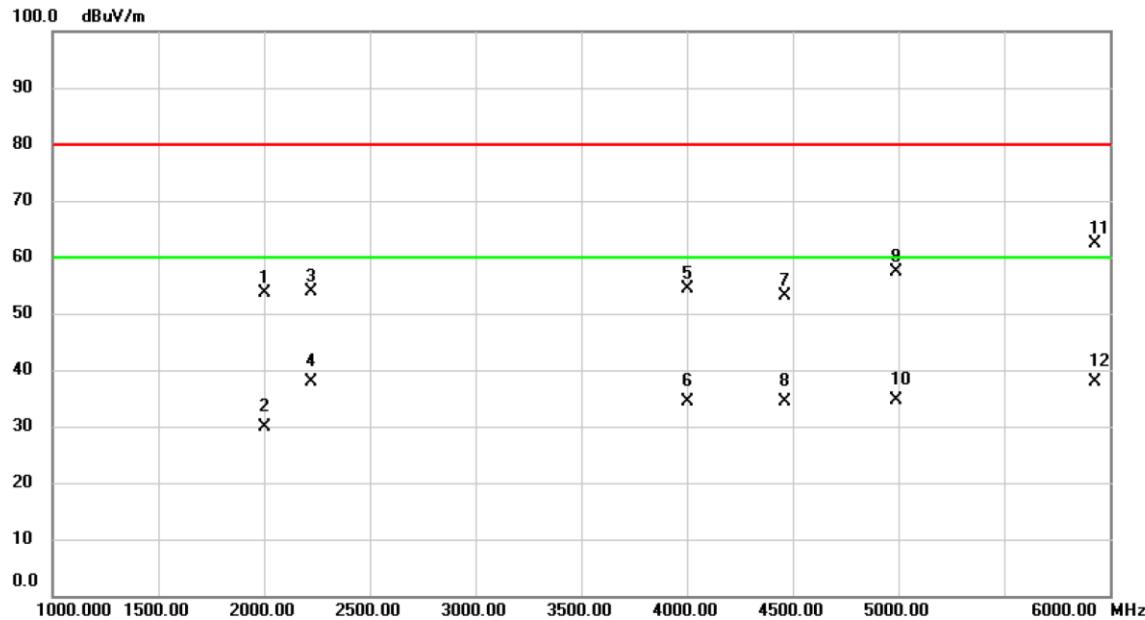


No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Antenna	Table		
			Level	Factor	ment					Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		1335.000	63.84	-11.46	52.38	80.00	-27.62	peak	100	68	
2		1335.000	56.87	-11.46	45.41	60.00	-14.59	AVG	100	68	
3		1990.000	60.19	-6.47	53.72	80.00	-26.28	peak	100	198	
4		1990.000	37.31	-6.47	30.84	60.00	-29.16	AVG	100	198	
5		3280.000	49.14	0.74	49.88	80.00	-30.12	peak	101	0	
6		3280.000	31.07	0.74	31.81	60.00	-28.19	AVG	101	0	
7		3985.000	49.70	2.22	51.92	80.00	-28.08	peak	100	315	
8		3985.000	32.63	2.22	34.85	60.00	-25.15	AVG	100	315	
9		4985.000	52.65	3.78	56.43	80.00	-23.57	peak	100	234	
10		4985.000	31.10	3.78	34.88	60.00	-25.12	AVG	100	234	
11*		5950.000	60.81	4.83	65.64	80.00	-14.36	peak	100	355	
12		5950.000	34.08	4.83	38.91	60.00	-21.09	AVG	100	355	

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	Mode 1	Tested Date	2021/12/17
Test Voltage	AC 120V/60Hz	Polarization	Horizontal



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Antenna	Table	
			Level	Factor	ment					Degree
		MHz	dBuV	dB	dBuV/m	dB	Detector	cm	degree	Comment
1		2000.000	59.93	-6.38	53.55	80.00	-26.45	peak	200	200
2		2000.000	36.23	-6.38	29.85	60.00	-30.15	AVG	200	200
3		2225.000	58.47	-4.68	53.79	80.00	-26.21	peak	200	107
4		2225.000	42.63	-4.68	37.95	60.00	-22.05	AVG	200	107
5		4000.000	52.04	2.25	54.29	80.00	-25.71	peak	100	297
6		4000.000	32.23	2.25	34.48	60.00	-25.52	AVG	100	297
7		4460.000	49.92	3.25	53.17	80.00	-26.83	peak	200	360
8		4460.000	31.24	3.25	34.49	60.00	-25.51	AVG	200	360
9		4990.000	53.53	3.78	57.31	80.00	-22.69	peak	100	297
10		4990.000	30.90	3.78	34.68	60.00	-25.32	AVG	100	297
11	*	5930.000	57.65	4.79	62.44	80.00	-17.56	peak	100	293
12		5930.000	32.99	4.79	37.78	60.00	-22.22	AVG	100	293

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

## 5 EUT PHOTOS

Please refer to document Appendix No.: EP-2112T064-1 (APPENDIX-EUT PHOTOS).

**End of Test Report**