



Solutions

CFR 47 FCC PART 15 SUBPART C

TEST REPORT

For

Wireless Controller

MODEL NUMBER: LED-CONTROL-MODULE-EASYLUX-12V-1

**ADDITIONAL MODEL NUMBER: LED-CONTROL-MODULE-EASYLUX-24V-1,
Mec Driver Sensor Module 12V, Mec Driver Sensor Module 24V**

PROJECT NUMBER: 4791074448

REPORT NUMBER: 4791074448-2

FCC ID: 2BD9AS05051-4051

ISSUE DATE: Jan. 02, 2024

Prepared for

L&S Lighting Equipment (Shanghai) Co., Ltd.

Prepared by

UL-CCIC COMPANY LIMITED

No. 2, Chengwan Road, Suzhou Industrial Park, Suzhou 215122, China

Tel: +86 512-6808 6400

Fax: +86 512-6808 4099

Website: www.ul.com

Revision History

Rev.	Issue Date	Revisions	Revised By
V0	01/02/2024	Initial Issue	

Summary of Test Results			
Clause	Test Items	FCC Rules	Test Results
1	20 dB Bandwidth	CFR 47 FCC §15.215 (c)	Pass
2	Radiated Emission	CFR 47 FCC §15.249 (a)(d)(e) CFR 47 FCC §15.205 and §15.209	Pass
3	Conducted Emission Test for AC Power Port	CFR 47 FCC §15.207	N/A
4	Antenna Requirement	CFR 47 FCC §15.203	Pass

Note 1: "N/A" denotes test is not applicable in this Test Report.
Note 2: The four models are identical except the input voltage, the input voltage of model LED-CONTROL-MODULE-EASYLUX-12V-1 & Mec Driver Sensor Module 12V is DC 12V, the input voltage of model LED-CONTROL-MODULE-EASYLUX-24V-1 & Mec Driver Sensor Module 24V is DC 24V, the result of model LED-CONTROL-MODULE-EASYLUX-12V-1 was the worse case and recorded in this report.
Note 3: The measurement result for the sample received is < Pass > according to < CFR 47 FCC PART 15 SUBPART C > when < Accuracy Method > decision rule is applied.

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS	5
2. TEST METHODOLOGY	7
3. FACILITIES AND ACCREDITATION	7
4. CALIBRATION AND UNCERTAINTY	8
4.1. <i>MEASURING INSTRUMENT CALIBRATION</i>	8
4.2. <i>MEASUREMENT UNCERTAINTY</i>	8
5. EQUIPMENT UNDER TEST	9
5.1. <i>DESCRIPTION OF EUT</i>	9
5.2. <i>MAXIMUM EMISSIONS FIELD STRENGTH</i>	10
5.3. <i>CHANNEL LIST</i>	10
5.4. <i>TEST CHANNEL CONFIGURATION</i>	10
5.5. <i>THE WORSE CASE CONFIGURATIONS</i>	10
5.6. <i>THE WORSE CASE POWER SETTING PARAMETER</i>	10
5.7. <i>DESCRIPTION OF AVAILABLE ANTENNAS</i>	11
5.8. <i>TEST ENVIRONMENT</i>	11
5.9. <i>DESCRIPTION OF TEST SETUP</i>	12
5.10. <i>MEASURING INSTRUMENT AND SOFTWARE USED</i>	13
6. ANTENNA PORT TEST RESULTS	14
6.1. <i>ON TIME AND DUTY CYCLE</i>	14
6.2. <i>20 dB BANDWIDTH</i>	17
7. RADIATED TEST RESULTS.....	19
7.1. <i>LIMITS AND PROCEDURE</i>	19
7.2. <i>RESTRICTED BANDEdge AND FIELD STRENGTH OF INTENTIONAL EMISSIONS</i>	25
7.3. <i>SPURIOUS EMISSIONS BELOW 30M</i>	27
7.4. <i>SPURIOUS EMISSIONS 30MHz ~ 1GHz</i>	30
7.5. <i>SPURIOUS EMISSIONS 1GHz ~ 6.5GHz</i>	32
7.6. <i>SPURIOUS EMISSIONS 6.5GHz ~ 18GHz</i>	34
7.7. <i>SPURIOUS EMISSIONS 18GHz ~26GHz</i>	36
8. AC POWER LINE CONDUCTED EMISSIONS	38
9. ANTENNA REQUIREMENTS.....	43

1. ATTESTATION OF TEST RESULTS

Applicant Information	
Company Name:	L&S Lighting Equipment (Shanghai) Co., Ltd.
Address:	Building No.1, Lane 255 Longpan Road, Malu Town, Jiading District, Shanghai, China
Manufacturer Information	
Company Name:	L&S Lighting Equipment (Shanghai) Co., Ltd.
Address:	Building No.1, Lane 255 Longpan Road, Malu Town, Jiading District, Shanghai, China
Factory Information-1	
Company Name:	L&S Lighting Equipment (Shanghai) Co., Ltd.
Address:	Building No.1, Lane 255, Longpan Road, Malu Town, Jiading District, Shanghai, 201801, China
Factory Information-2	
Company Name:	Ningbo Technic Lighting Co., Ltd.
Address:	No.8, Caiyuan Road, Lizhou Street, Yuyao City, Zhejiang Province, China
EUT Description	
Product Name:	Wireless Controller
Model Number:	LED-CONTROL-MODULE-EASYLUX-12V-1
Additional Model Number:	LED-CONTROL-MODULE-EASYLUX-24V-1, Mec Driver Sensor Module 12V, Mec Driver Sensor Module 24V
Model Difference:	The four models are identical except the input voltage, the input voltage of model LED-CONTROL-MODULE-EASYLUX-12V-1 & Mec Driver Sensor Module 12V is DC 12V, the input voltage of model LED-CONTROL-MODULE-EASYLUX-24V-1 & Mec Driver Sensor Module 24V is DC 24V.
Sample Number:	6720020
Data of Receipt Sample:	Dec. 05, 2023
Date Tested:	Dec. 05, 2023~ Jan. 02, 2024

APPLICABLE STANDARDS

STANDARD	TEST RESULTS
CFR 47 FCC PART 15 SUBPART C	PASS

Prepared By:

Tom Tang

Tom Tang

Reviewed By:

Kevin Shen

Kevin Shen

Authorized By:

Leon Wu

Leon Wu

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with KDB 414788 D01 Radiated Test Site v01r01, FCC CFR 47 Part 2, FCC CFR 47 Part 15, ANSI C63.10-2013.

3. FACILITIES AND ACCREDITATION

Accreditation Certificate	<p>A2LA (Certificate No.: 4829.01) UL-CCIC COMPANY LIMITED has been assessed and proved to be in compliance with A2LA.</p> <p>FCC (FCC Designation No.: CN1247) UL-CCIC COMPANY LIMITED has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules.</p> <p>IC (IC Designation No.: 25056; CAB No.: CN0073) UL-CCIC COMPANY LIMITED has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules.</p>
---------------------------	--

Note 1: All tests measurement facilities use to collect the measurement data are located at No. 2, Chengwan Road, Suzhou Industrial Park, Suzhou 215122, China.

Note 2: For below 30MHz, lab had performed measurements at test anechoic chamber and comparing to measurements obtained on an open field site. These measurements below 30MHz had been correlated to measurements performed on an OFS.

Note 3: The test anechoic chamber in UL-CCIC COMPANY LIMITED had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations and is traceable to recognized national standards.

4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Test Item	Uncertainty
Emission Bandwidth	±9.2 PPM
Unwanted Emissions in Non-restricted Freq Bands	9kHz-30MHz: ±0.90dB 30MHz-1GHz: ±1.5 dB 1GHz-12.75GHz: ±1.9dB 12.75GHz-26.5GHz: ±2.1dB
Radiation Emission test (include Fundamental emission) (9kHz-30MHz)	3.4dB
Radiation Emission test (include Fundamental emission) (30MHz-1GHz)	3.4dB
Radiation Emission test (1GHz to 26GHz) (include Fundamental emission)	3.5dB (1GHz-18GHz) 3.9dB (18GHz-26.5GHz)
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

Product Name:	Wireless Controller	
Model No.:	LED-CONTROL-MODULE-EASYLUX-12V-1	
Operating Frequency:	Operation Frequency	2440 MHz
	Modulation Type	GFSK
Channels Step:	/	
Test Software of EUT:	/	
Antenna Type:	PCB Antenna	
Antenna Gain:	-2.09 dBi	
	Note: This data is provided by customer and our lab isn't responsible for this data.	
Power Supply:	AC 120V	

5.2. MAXIMUM EMISSIONS FIELD STRENGTH

Number of Transmit Chains (NTX)	Frequency (MHz)	Channel Number	Max PK Field Strength (dB μ V/m)
1	2440	1	92.55

5.3. CHANNEL LIST

Channel	Frequency (MHz)						
1	2440	2	/	3	/	4	/

5.4. TEST CHANNEL CONFIGURATION

Test Mode	Test Channel	Frequency
TX	CH 1	2440MHz

5.5. THE WORSE CASE CONFIGURATIONS

The Worse Case Power Setting Parameter under 2400 ~ 2483.5MHz Band	
Test Software	/
Transmit Antenna Number	Test Channel
	NCB: 1MHz
	CH 1
1	2440

5.6. THE WORSE CASE POWER SETTING PARAMETER

The Worse Case Power Setting Parameter under 2400 ~ 2483.5MHz Band		
Test Software		/
Modulation Type	Transmit Antenna Number	Test Channel
GFSK	1	CH 1

5.7. DESCRIPTION OF AVAILABLE ANTENNAS

Ant.	Frequency (MHz)	Antenna Type	Antenna Gain (dBi)
1	2440	PCB Antenna	-2.09

Note: This data is provided by customer and the lab isn't responsible for this data.

Test Mode	Transmit and Receive Mode	Description
GFSK	<input checked="" type="checkbox"/> 1TX, 1RX	Antenna1 can be used as transmitting/receiving antenna independently.

5.8. TEST ENVIRONMENT

Environment Parameter	Selected Values During Tests	
Relative Humidity	55 ~ 65%	
Atmospheric Pressure:	101kPa	
Temperature	TN	23 ~ 28°C
Voltage:	VL	N/A
	VN	AC 120V
	VH	N/A

Note: VL= Lower Extreme Test Voltage

VN= Nominal Voltage

VH= Upper Extreme Test Voltage

TN= Normal Temperature

5.9. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Item	Equipment	Brand Name	Model Name	Description
1	DC Adapter	HONOR	ADS-24S-12 1224GPCU	INPUT: 100-240V~ 50/60Hz max. 0.7A OUTPUT: 12V--2.0A

I/O CABLES

Cable No.	Port	Connector Type	Cable Type	Cable Length(m)	Remarks
1	/	/	/	/	/

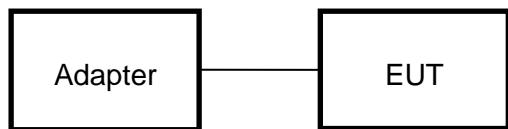
ACCESSORY

Item	Accessory	Brand Name	Model Name	Description
1	LED Lamp	/	/	Provided by customer
	Infrared Sensor	/	/	Provided by customer

TEST SETUP

The EUT can work in an engineer mode with a software through a laptop.

SETUP DIAGRAM FOR TESTS



5.10. MEASURING INSTRUMENT AND SOFTWARE USED

Conducted Emissions (Instrument)							
Used	Equipment	Manufacturer	Model No.	Serial No.	Upper Last Cal.	Last Cal.	Next Cal.
<input checked="" type="checkbox"/>	EMI Test Receiver	R&S	ESR3	126700	2022-11-26	2023-11-25	2024-11-24
<input checked="" type="checkbox"/>	Two-Line V-Network	R&S	ENV216	126701	2022-11-26	2023-11-25	2024-11-24
<input checked="" type="checkbox"/>	Artificial Mains Networks	R&S	ENY81	126712	2022-09-27	2023-09-26	2024-09-25
Software							
Used	Description		Manufacturer	Name	Version		
<input checked="" type="checkbox"/>	Test Software for Conducted disturbance		R&S	EMC32	Ver. 9.25		
Radiated Emissions (Instrument)							
Used	Equipment	Manufacturer	Model No.	Serial No.	Upper Last Cal.	Last Cal.	Next Cal.
<input checked="" type="checkbox"/>	EMI test receiver	R&S	ESR7	222993	2022-05-20	2023-04-08	2024-04-07
<input checked="" type="checkbox"/>	EMI test receiver	R&S	ESR26	126703	2022-11-26	2023-11-25	2024-11-24
<input checked="" type="checkbox"/>	Spectrum Analyzer	R&S	FSV3044	222992	2022-05-20	2023-04-08	2024-04-07
<input checked="" type="checkbox"/>	Receiver Antenna (9kHz-30MHz)	Schwarzbeck	FMZB 1513	155456	2018-06-04	2021-06-03	2024-06-02
<input checked="" type="checkbox"/>	Receiver Antenna (30MHz-1GHz)	SunAR RF Motion	JB1	177821	2019-01-28	2022-01-18	2025-01-17
<input checked="" type="checkbox"/>	Receiver Antenna (1GHz-18GHz)	R&S	HF907	126705	2019-01-27	2022-02-28	2025-02-27
<input checked="" type="checkbox"/>	Receiver Antenna (18GHz-26.5GHz)	Schwarzbeck	BBHA9170	126706	2019-02-29	2022-02-28	2025-02-27
<input checked="" type="checkbox"/>	Pre-amplification (To 18GHz)	Tonscned	TAP01018050	224539	2022-10-11	2023-10-10	2024-10-09
<input checked="" type="checkbox"/>	Pre-amplification (To 18GHz)	R&S	SCU-18D	134667	2022-11-26	2023-11-25	2024-11-24
<input checked="" type="checkbox"/>	Pre-amplification (To 26.5GHz)	R&S	SCU-26D	135391	2022-11-26	2023-11-25	2024-11-24
<input checked="" type="checkbox"/>	Band Reject Filter	Wainwright	WRCGV12-2375-2400-2485-2510-40SS	1	2022-12-19	2023-12-18	2024-12-17
<input checked="" type="checkbox"/>	High Pass Filter	Wainwright	WHKX10-5850-6500-1800-40SS	2	2022-12-19	2023-12-18	2024-12-17
Software							
Used	Description		Manufacturer	Name	Version		
<input checked="" type="checkbox"/>	Test Software for Radiated disturbance		Tonscned	TS+	Ver. 2.5		
Other instruments							
Used	Equipment	Manufacturer	Model No.	Serial No.	Upper Last Cal.	Last Cal.	Next Cal.
<input checked="" type="checkbox"/>	Spectrum Analyzer	Keysight	N9010B	155368	2022-05-20	2023-04-08	2024-04-07
<input checked="" type="checkbox"/>	Power Meter	MWT	MW100-RFCB	221694	2022-05-23	2023-04-08	2024-04-07
<input checked="" type="checkbox"/>	Attenuator	PASTERNACK	PE7087-6	1624	2022-05-23	2023-04-08	2024-04-07

6. ANTENNA PORT TEST RESULTS

6.1. ON TIME AND DUTY CYCLE

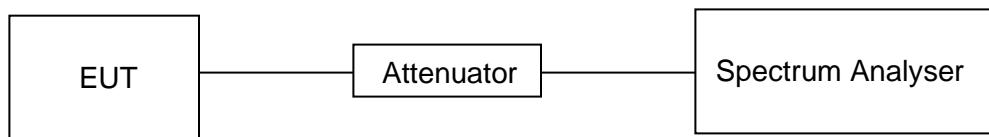
LIMITS

None; for reporting purposes only

PROCEDURE

KDB 558074 Zero-Span Spectrum Analyzer Method

TEST SETUP



TEST ENVIRONMENT

Temperature	20°C	Relative Humidity	56%
Atmosphere Pressure	101kPa	Test Voltage	AC 120V

RESULTS

	On Time (ms)	Times	Total Ton times (ms)	1/T Minimum VBW (kHz)	Final setting For VBW (kHz)
Ton	0.715	11	7.865	1.33	2

On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (db)
39.325	100	0.3933	39.33%	4.05

Note:

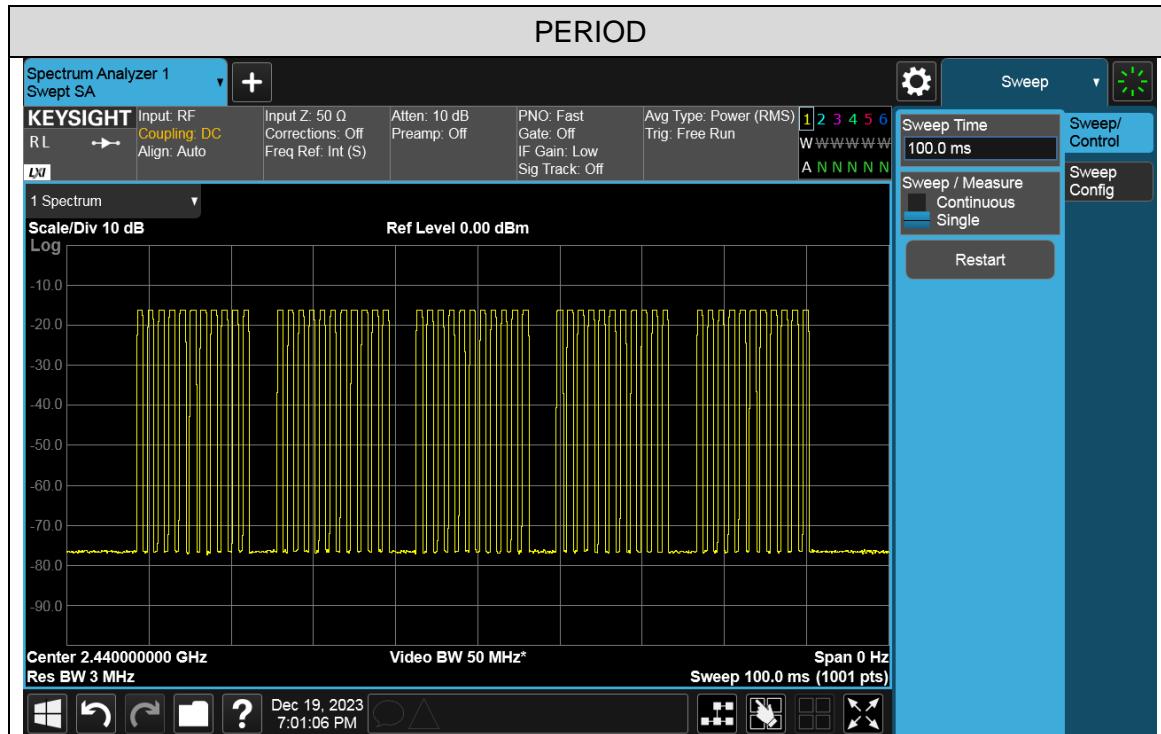
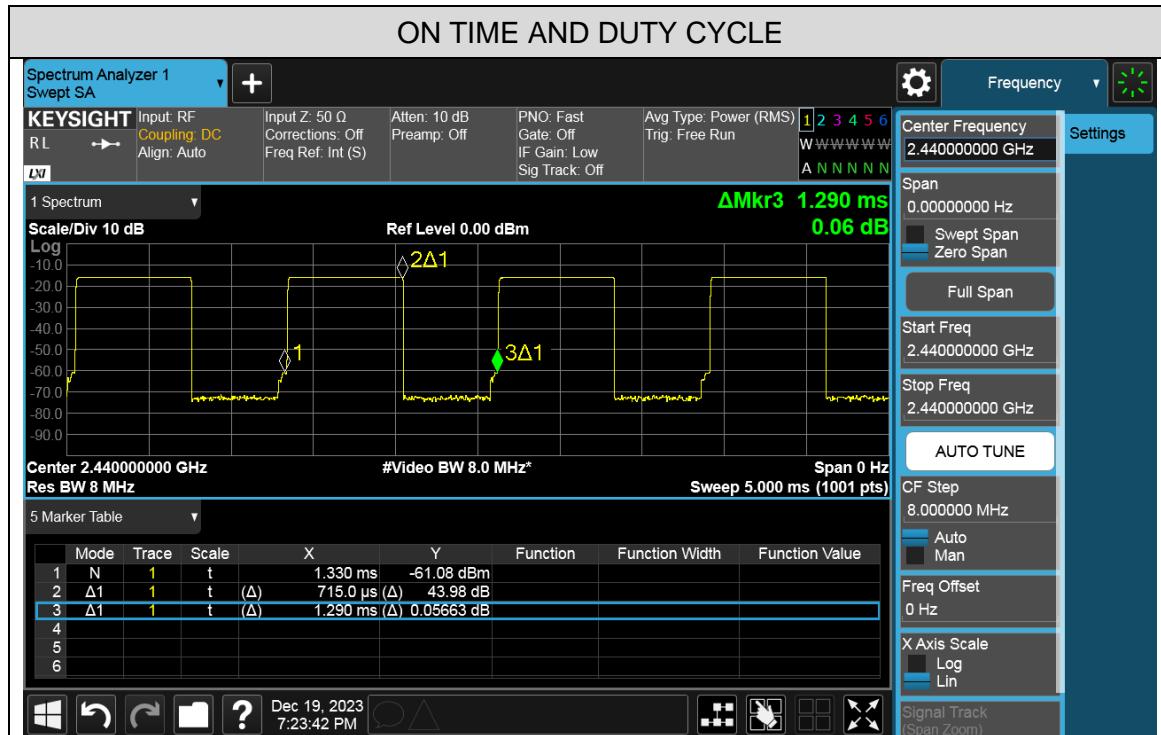
Duty Cycle Correction Factor=10log (1/x).

Where: x is Duty Cycle (Linear)

Where: T is On Time

If that calculated VBW which is used for above 1GHz average measurement is not available on the analyzer then the next higher value should be used.

TEST GRAPHS



6.2. 20 dB BANDWIDTH

LIMITS

FCC Part15 (15.249), Subpart C			
Section	Test Item	Limit	Frequency Range (MHz)
CFR 47 FCC §15.215 (c)	20 dB Bandwidth	For reporting purposes only	2400-2483.5

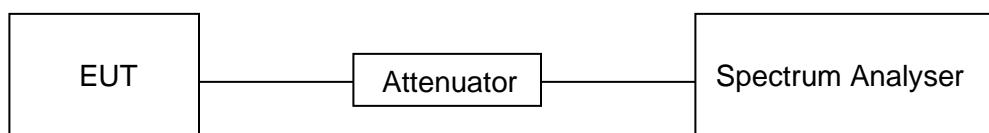
TEST PROCEDURE

Connect the UUT to the spectrum analyser and use the following settings:

Center Frequency	The centre frequency of the channel under test
Detector	Peak
RBW	1 % to 5 % of the 20 dB bandwidth
VBW	Approximately 3×RBW
Span	Approximately 1.5 to 5 times the OBW
Trace	Max hold
Sweep	Auto couple

Allow the trace to stabilize and measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 20 dB / 99 % relative to the maximum level measured in the fundamental emission.

TEST SETUP



RESULTS

Channel	20dB bandwidth (MHz)	Result
2440 MHz	0.9205	Pass

TEST GRAPHS



7. RADIATED TEST RESULTS

7.1. LIMITS AND PROCEDURE

LIMITS

CFR 47 FCC §15.205 and §15.209

CFR 47 FCC §15.249 (a)(d)(c)(e)

The field strength of emissions from intentional radiators operated within these frequency bands			
Frequency (MHz)	Field strength of Fundamental	Field strength of Harmonics	Distance (m)
902 - 928	50 mV/m (94dB _{UV} /m)	500 uV/m (54dB _{UV} /m)	3
2400 – 2483.5	50 mV/m (94dB _{UV} /m)	500 uV/m (54dB _{UV} /m)	3
5725 – 5875	50 mV/m (94dB _{UV} /m)	500 uV/m (54dB _{UV} /m)	3

Emissions radiated outside of the specified frequency bands			
Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dB _{UV} /m) at 3 m	
		Quasi-Peak	Peak
30 - 88	100	40	40
88 - 216	150	43.5	43.5
216 - 960	200	46	46
Above 960	500	54	54
Above 1000	500	Peak 74	Average 54

FCC Emissions radiated outside of the specified frequency bands below 30 MHz		
Frequency (MHz)	Field strength (microvolts/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

FCC Restricted bands of operation:

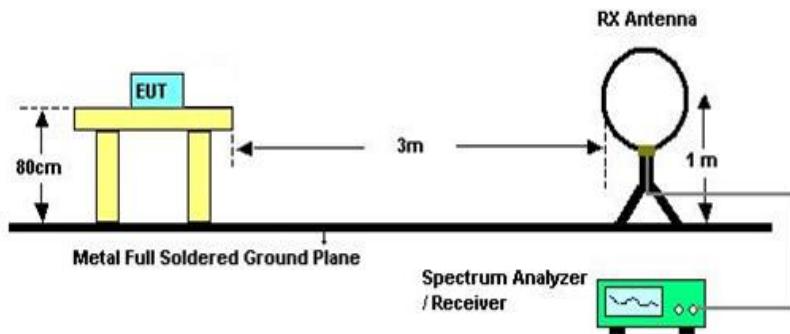
MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
¹ 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(²)
13.36-13.41			

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

²Above 38.6c

TEST SETUP AND PROCEDURE

Below 30MHz

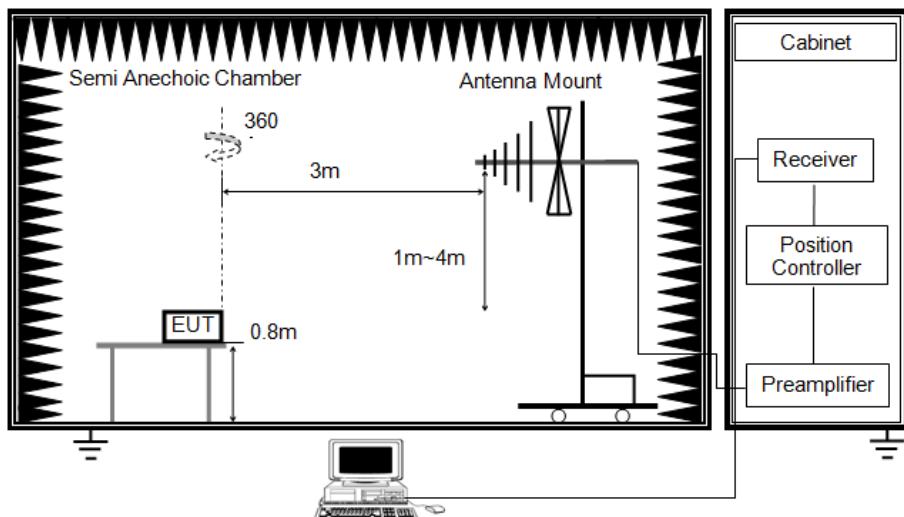


The setting of the spectrum analyser

RBW	200Hz (From 9kHz to 0.15MHz) / 9KHz (From 0.15MHz to 30MHz)
VBW	200Hz (From 9kHz to 0.15MHz) / 9KHz (From 0.15MHz to 30MHz)
Sweep	Auto
Detector	Peak/QP/Average
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013
2. The EUT was arranged to its worst case and then turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both Horizontal, Face-on and Face-off polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 0.8 meter above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a 1m height antenna tower.
5. The radiated emission limits are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.
6. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
7. For the actual test configuration, please refer to the related item in this test report (Photographs of the Test Configuration)

Below 1G

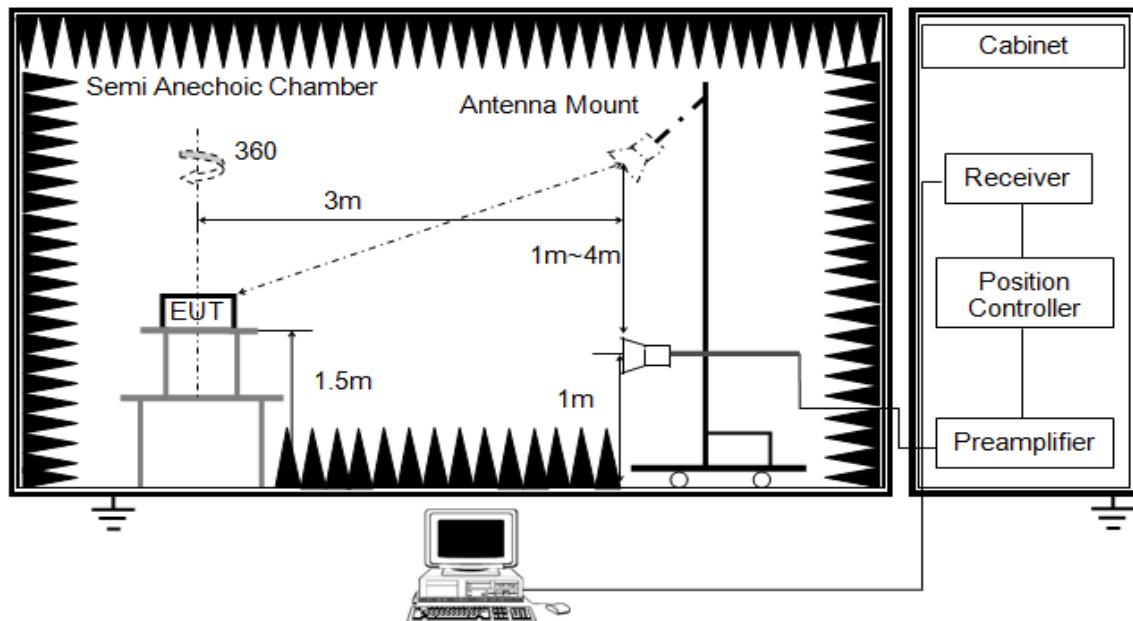


The setting of the spectrum analyser

RBW	120 kHz
VBW	300 kHz
Sweep	Auto
Detector	Peak/QP
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 0.8 meter above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
6. For the actual test configuration, please refer to the related item in this test report (Photographs of the Test Configuration)

Above 1G

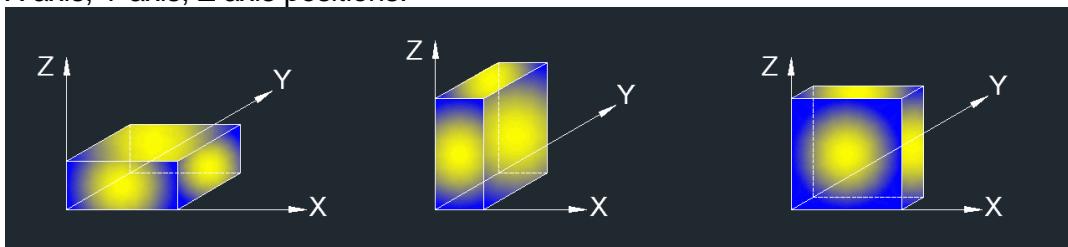


The setting of the spectrum analyser

RBW	1 MHz
VBW	PEAK: 3MHz AVG: See note6
Sweep	Auto
Detector	Peak
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 1.5m above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. For measurement above 1GHz, the emission measurement will be measured by the peak detector. This peak level, once corrected, must comply with the limit specified in Section 15.209.
6. For measurements above 1 GHz, the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements; and 1 MHz resolution bandwidth with 2kHz video bandwidth listed in section 6.1 when using peak detector, max hold to run for at least $[50 * (1/\text{Duty Cycle})]$ traces for average measurements. For the Duty Cycle need to refer the results in section 6.1.
7. For the actual test configuration, please refer to the related item in this test report (Photographs of the Test Configuration)

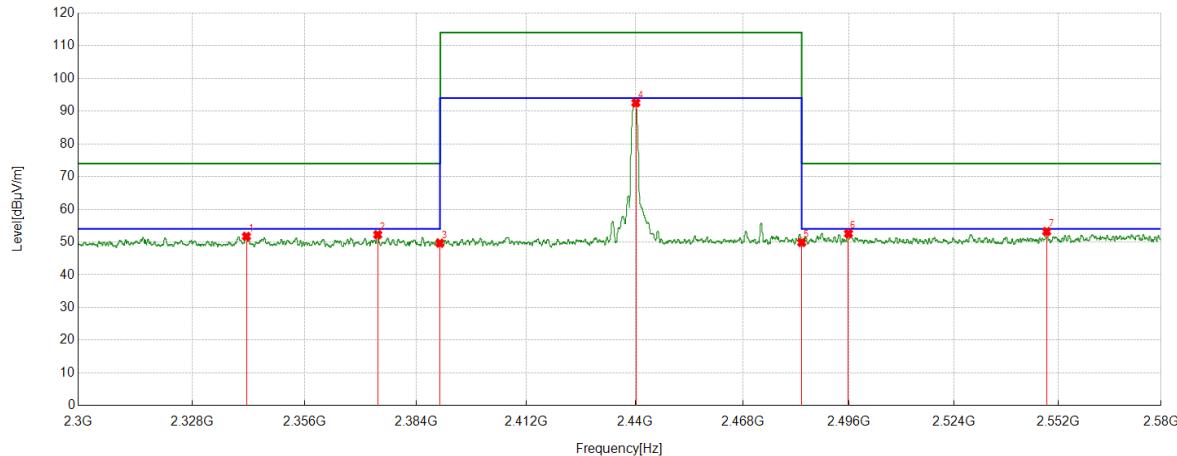
X axis, Y axis, Z axis positions:



Note: For all radiated test, EUT in each of three orthogonal axis emissions had been tested, but only the worst case (Z axis) data recorded in the report.

7.2. RESTRICTED BANDEDGE AND FIELD STRENGTH OF INTENTIONAL EMISSIONS

Channel	Polarization	Verdict
2440 MHz	Horizontal	PASS

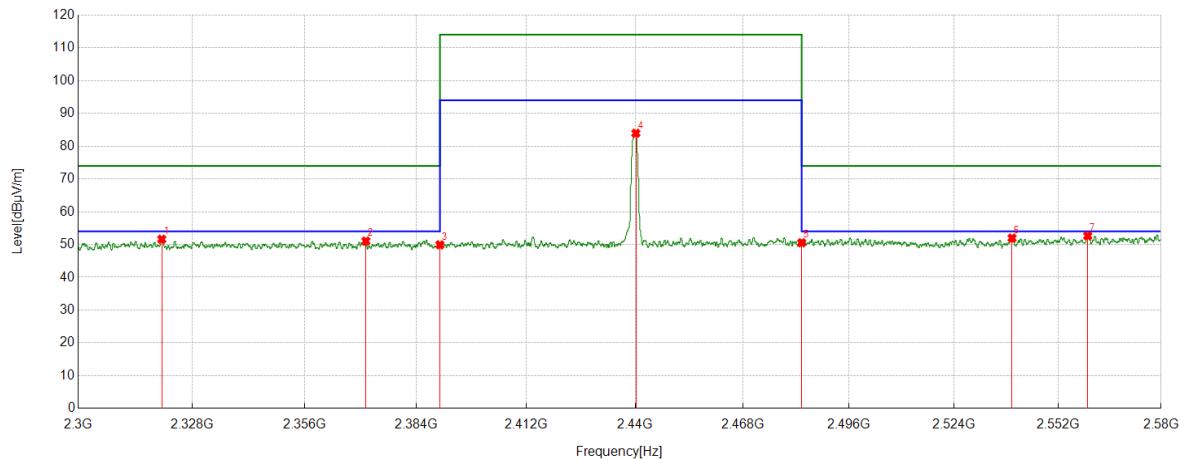


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2341.4452	38.27	13.45	51.72	74.00	-22.28	Horizontal
2	2374.2793	38.69	13.57	52.26	74.00	-21.74	Horizontal
3	2390.0000	36.17	13.48	49.65	74.00	-24.35	Horizontal
4	2440.1925	78.60	13.95	92.55	114.00	-21.45	Horizontal
5	2483.5000	35.61	14.25	49.86	74.00	-24.14	Horizontal
6	2495.8495	38.27	14.32	52.59	74.00	-21.41	Horizontal
7	2548.8811	38.59	14.62	53.21	74.00	-20.79	Horizontal

Note: 1. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
2. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 6.1.).
3. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Attenuator) – Amplifier Gain.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

Channel	Polarization	Verdict
2440 MHz	Vertical	PASS

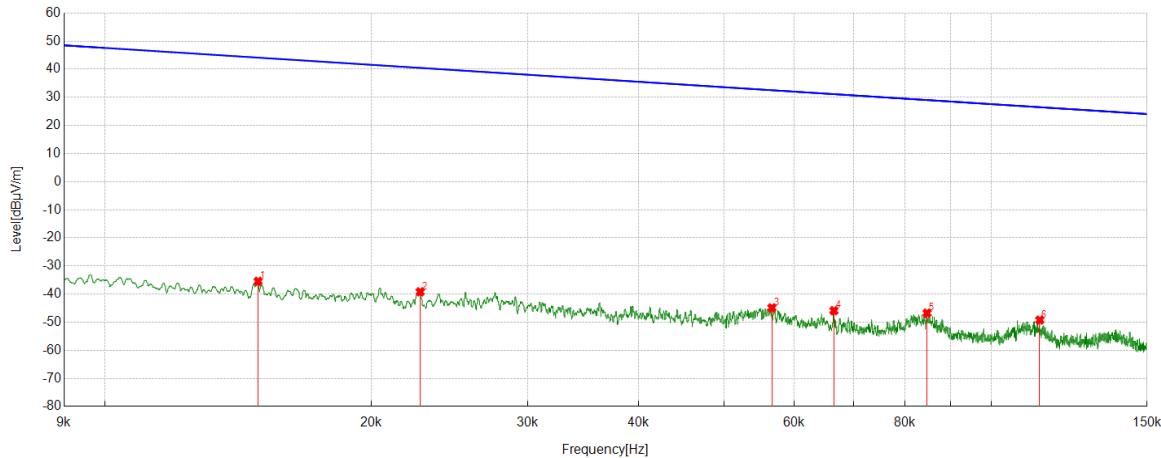

PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2320.5126	38.08	13.53	51.61	74.00	-22.39	Vertical
2	2371.3039	37.51	13.56	51.07	74.00	-22.93	Vertical
3	2390.0000	36.43	13.48	49.91	74.00	-24.09	Vertical
4	2440.1925	69.99	13.95	83.94	114.00	-30.06	Vertical
5	2483.5000	36.30	14.25	50.55	74.00	-23.45	Vertical
6	2539.5349	37.43	14.55	51.98	74.00	-22.02	Vertical
7	2560.0125	38.13	14.51	52.64	74.00	-21.36	Vertical

Note: 1. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
2. Average detector: RBW: 1 MHz, VBW: 1/T MHz (refer to clause 6.1.).
3. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Attenuator) – Amplifier Gain.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

7.3. SPURIOUS EMISSIONS BELOW 30M

Channel	Frequency Range	Verdict
LCH	9kHz~150kHz	PASS

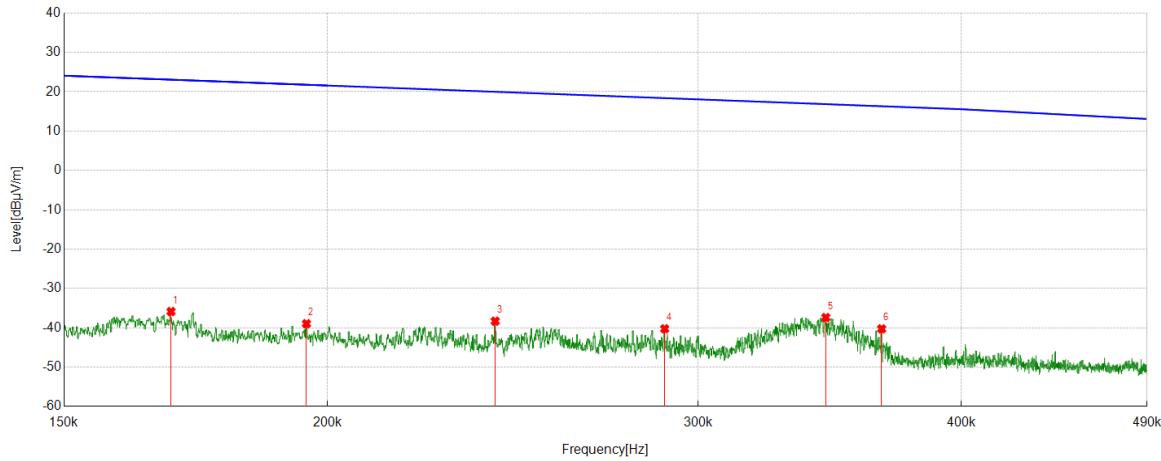


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	0.0149	26.49	-61.95	-35.46	44.15	-79.61	Peak
2	0.0227	22.68	-61.87	-39.19	40.50	-79.69	Peak
3	0.0566	16.93	-61.82	-44.89	32.54	-77.43	Peak
4	0.0665	15.96	-61.86	-45.90	31.15	-77.05	Peak
5	0.0847	15.14	-61.91	-46.77	29.05	-75.82	Peak
6	0.1135	12.67	-61.92	-49.25	26.51	-75.76	Peak

Note:

1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable) + Distance Factor.
2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.
3. All 3 polarizations (Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.

Channel	Frequency Range	Verdict
LCH	150kHz ~ 490kHz	PASS

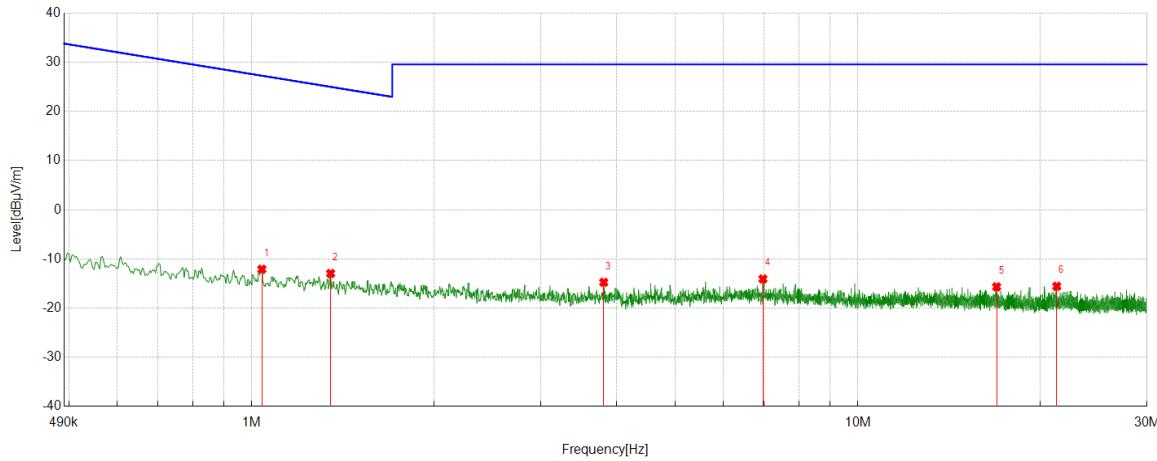


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	0.1686	26.08	-61.95	-35.87	23.07	-58.94	Peak
2	0.1955	23.02	-61.97	-38.95	21.78	-60.73	Peak
3	0.2403	23.68	-61.99	-38.31	19.98	-58.29	Peak
4	0.2892	21.76	-62.01	-40.25	18.38	-58.63	Peak
5	0.3449	24.64	-62.03	-37.39	16.85	-54.24	Peak
6	0.3666	21.77	-62.03	-40.26	16.32	-56.58	Peak

Note:

1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable) + Distance Factor.
2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.
3. All 3 polarizations (Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.

Channel	Frequency Range	Verdict
LCH	490kHz ~ 30MHz	PASS



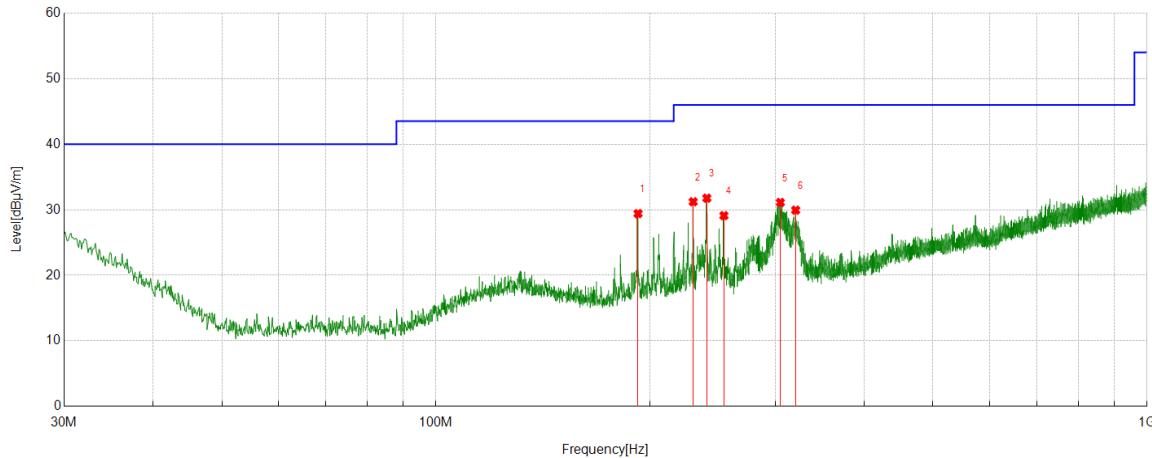
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1.0389	9.98	-22.07	-12.09	27.27	-39.36	Peak
2	1.3488	9.09	-22.04	-12.95	25.01	-37.96	Peak
3	3.8073	7.21	-21.96	-14.75	29.54	-44.29	Peak
4	6.9710	7.84	-21.91	-14.07	29.54	-43.61	Peak
5	16.9376	6.01	-21.67	-15.66	29.54	-45.20	Peak
6	21.2848	6.17	-21.73	-15.56	29.54	-45.10	Peak

Note:

1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable) + Distance Factor.
2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.
3. All 3 polarizations (Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.

7.4. SPURIOUS EMISSIONS 30MHz ~ 1GHz

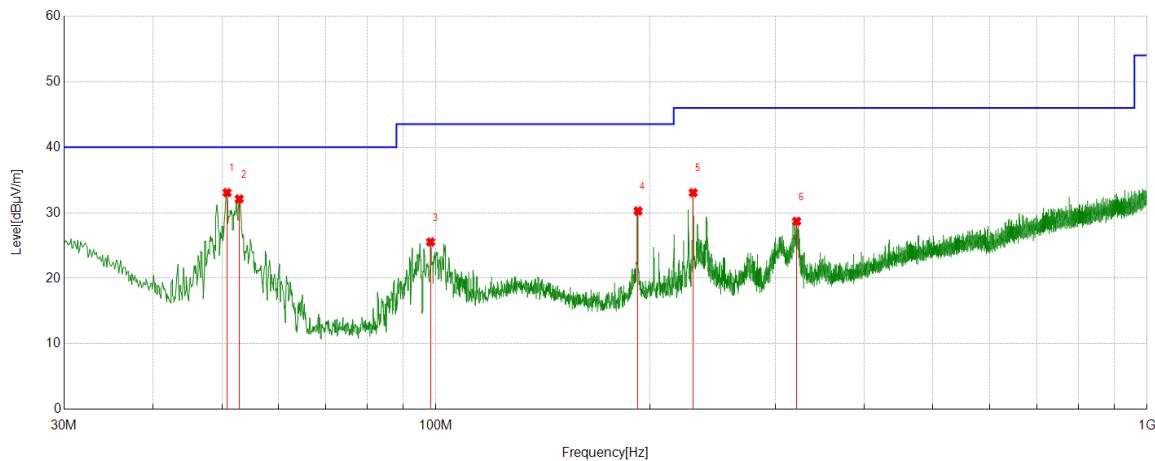
Channel	Polarization	Verdict
LCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	192.3942	10.71	18.70	29.41	43.50	-14.09	Horizontal
2	230.0340	11.86	19.36	31.22	46.00	-14.78	Horizontal
3	240.4140	12.55	19.22	31.77	46.00	-14.23	Horizontal
4	254.0924	9.84	19.27	29.11	46.00	-16.89	Horizontal
5	305.0225	10.02	21.09	31.11	46.00	-14.89	Horizontal
6	320.5441	8.52	21.42	29.94	46.00	-16.06	Horizontal

Note: 1. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
2. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.
3. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable).
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

Channel	Polarization	Verdict
LCH	Vertical	PASS



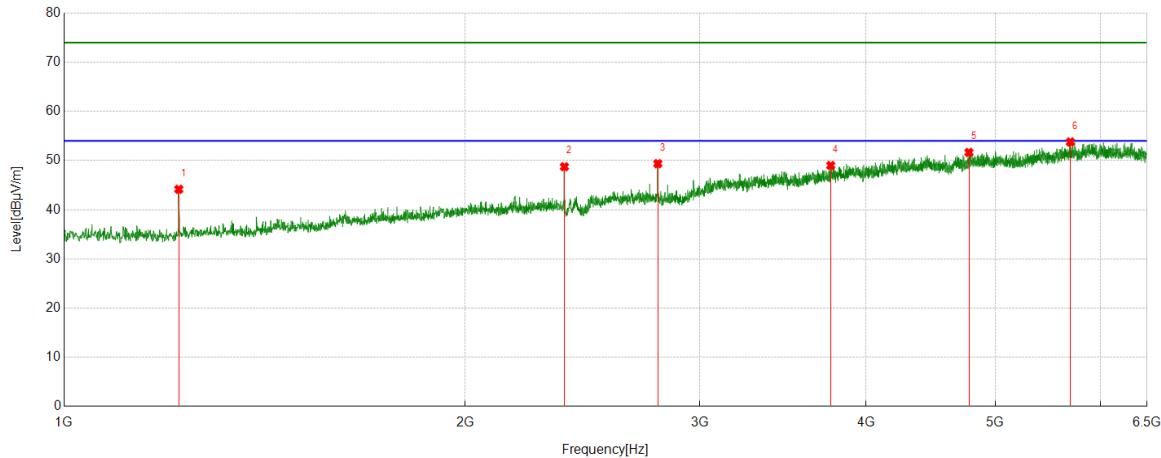
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	50.8571	18.69	14.38	33.07	40.00	-6.93	Vertical
2	52.8943	17.78	14.33	32.11	40.00	-7.89	Vertical
3	98.2948	9.06	16.48	25.54	43.50	-17.96	Vertical
4	192.3942	11.57	18.70	30.27	43.50	-13.23	Vertical
5	230.0340	13.70	19.36	33.06	46.00	-12.94	Vertical
6	321.5142	7.25	21.45	28.70	46.00	-17.30	Vertical

Note:

1. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
2. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.
3. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable).
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

7.5. SPURIOUS EMISSIONS 1GHz ~ 6.5GHz

Channel	Polarization	Verdict
2440 MHz	Horizontal	PASS



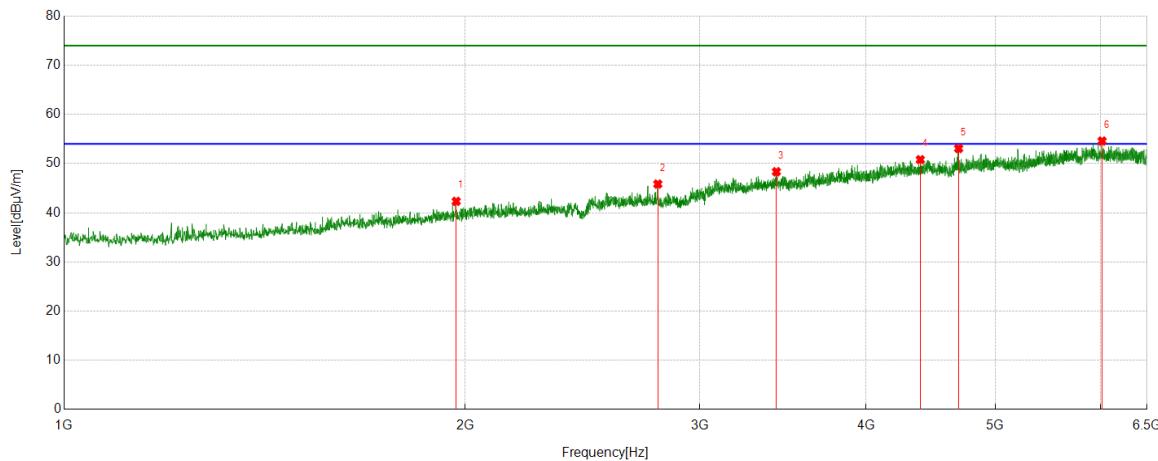
PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1219.3399	46.36	-2.19	44.17	74.00	-29.83	Horizontal
2	2374.4843	43.93	4.82	48.75	74.00	-25.25	Horizontal
3	2790.4738	43.25	6.13	49.38	74.00	-24.62	Horizontal
4	3762.7203	36.85	12.16	49.01	74.00	-24.99	Horizontal
5	4777.5972	36.89	14.77	51.66	74.00	-22.34	Horizontal
6	5692.7741	36.39	17.40	53.79	74.00	-20.21	Horizontal

Note:

1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

Channel	Polarization	Verdict
2440 MHz	Vertical	PASS


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1969.4962	39.35	2.97	42.32	74.00	-31.68	Vertical
2	2790.4738	39.71	6.13	45.84	74.00	-28.16	Vertical
3	3425.1156	37.92	10.43	48.35	74.00	-25.65	Vertical
4	4392.5491	37.03	13.77	50.80	74.00	-23.20	Vertical
5	4693.0241	37.65	15.42	53.07	74.00	-20.93	Vertical
6	6013.8767	36.52	18.07	54.59	74.00	-19.41	Vertical

AV Result:

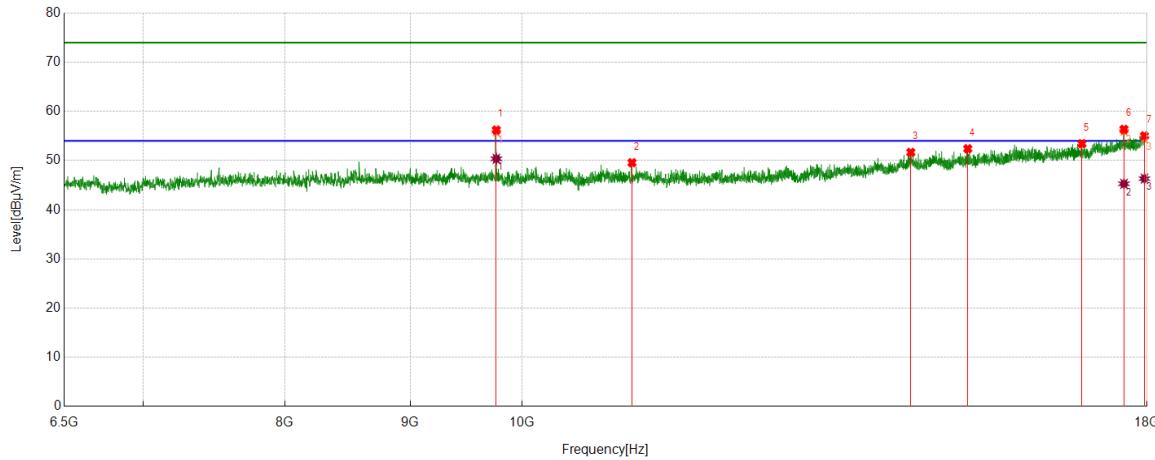
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	6013.8767	25.41	18.07	43.48	54.00	-10.52	Vertical

Note:

1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

7.6. SPURIOUS EMISSIONS 6.5GHz ~ 18GHz

Channel	Polarization	Verdict
2440 MHz	Horizontal	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	9760.6576	49.69	6.52	56.21	74.00	-17.79	Horizontal
2	11089.0736	42.22	7.35	49.57	74.00	-24.43	Horizontal
3	14412.9891	38.77	12.90	51.67	74.00	-22.33	Horizontal
4	15206.5883	38.95	13.46	52.41	74.00	-21.59	Horizontal
5	16930.3663	37.38	16.05	53.43	74.00	-20.57	Horizontal
6	17613.2642	38.29	18.06	56.35	74.00	-17.65	Horizontal
7	17955.4319	35.46	19.57	55.03	74.00	-18.97	Horizontal

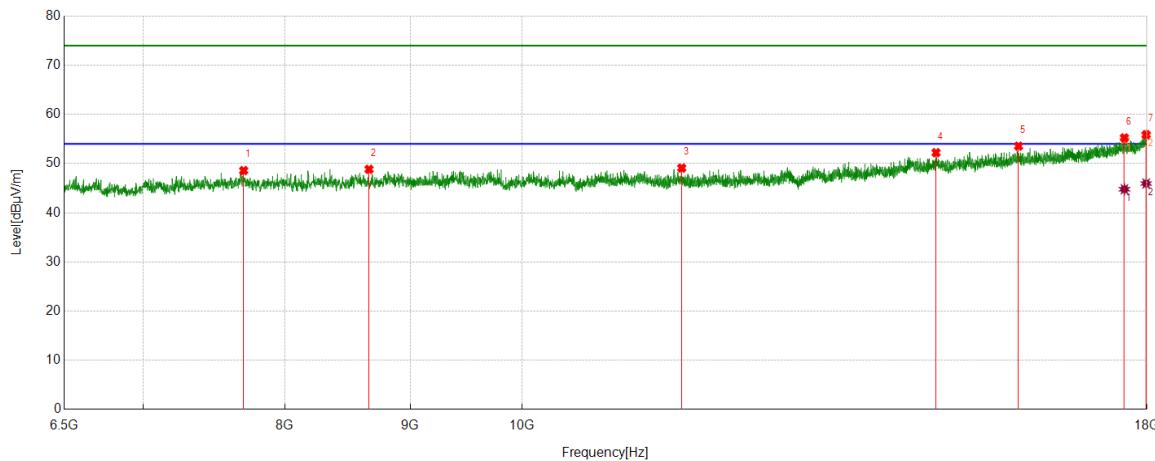
AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	9760.6576	43.85	6.52	50.37	54.00	-3.63	Horizontal
2	17613.2642	27.22	18.06	45.28	54.00	-8.72	Horizontal
3	17955.4319	26.76	19.57	46.33	54.00	-7.67	Horizontal

Note:

1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
4. Average detector: RBW: 1 MHz, VBW: 1/T MHz (refer to clause 6.1.).
5. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

Channel	Polarization	Verdict
2440 MHz	Vertical	PASS


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	7696.1495	43.15	5.43	48.58	74.00	-25.42	Vertical
2	8659.3949	42.39	6.45	48.84	74.00	-25.16	Vertical
3	11619.5774	41.50	7.59	49.09	74.00	-24.91	Vertical
4	14759.4699	39.27	12.95	52.22	74.00	-21.78	Vertical
5	15949.8687	39.11	14.44	53.55	74.00	-20.45	Vertical
6	17620.4526	37.16	18.07	55.23	74.00	-18.77	Vertical
7	17984.1855	36.08	19.80	55.88	74.00	-18.12	Vertical

AV Result:

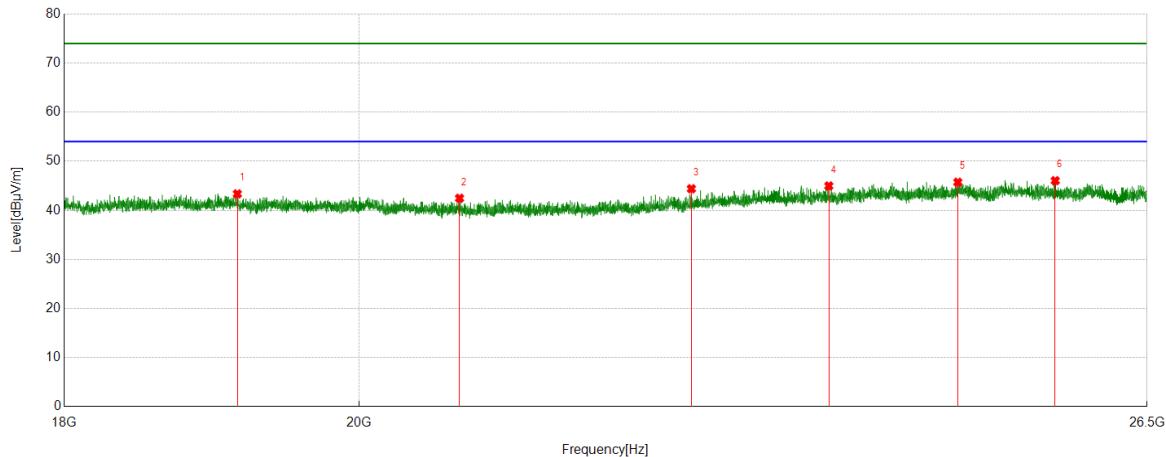
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	17620.4526	26.71	18.07	44.78	54.00	-9.22	Vertical
2	17984.1855	26.15	19.80	45.95	54.00	-8.05	Vertical

Note:

1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
4. Average detector: RBW: 1 MHz, VBW: 1/T MHz (refer to clause 6.1.).
5. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

7.7. SPURIOUS EMISSIONS 18GHz ~26GHz

Channel	Polarization	Verdict
LCH	Horizontal	PASS

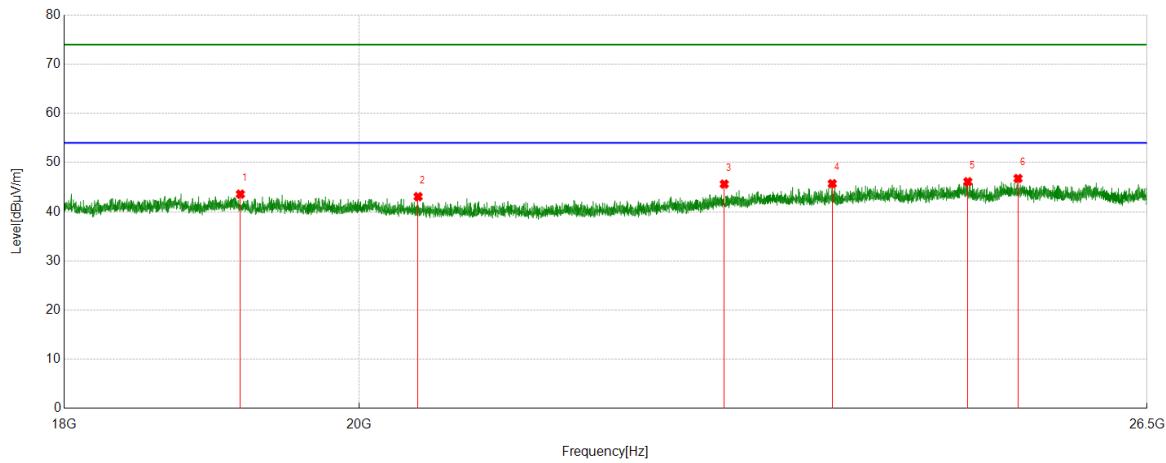


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	19149.3149	49.18	-5.83	43.35	74.00	-30.65	Horizontal
2	20730.4730	48.36	-5.90	42.46	74.00	-31.54	Horizontal
3	22519.9020	49.03	-4.64	44.39	74.00	-29.61	Horizontal
4	23653.0653	48.03	-3.06	44.97	74.00	-29.03	Horizontal
5	24768.3768	49.00	-3.28	45.72	74.00	-28.28	Horizontal
6	25644.8145	49.07	-3.03	46.04	74.00	-27.96	Horizontal

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
3. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable) – Amplifier Gain.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

Channel	Polarization	Verdict
LCH	Vertical	PASS


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	19169.7170	49.38	-5.80	43.58	74.00	-30.42	Vertical
2	20426.1426	48.64	-5.57	43.07	74.00	-30.93	Vertical
3	22785.9786	49.60	-3.97	45.63	74.00	-28.37	Vertical
4	23681.9682	48.75	-3.04	45.71	74.00	-28.29	Vertical
5	24856.7857	49.51	-3.41	46.10	74.00	-27.90	Vertical
6	25306.4806	50.08	-3.31	46.77	74.00	-27.23	Vertical

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
3. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable) – Amplifier Gain.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

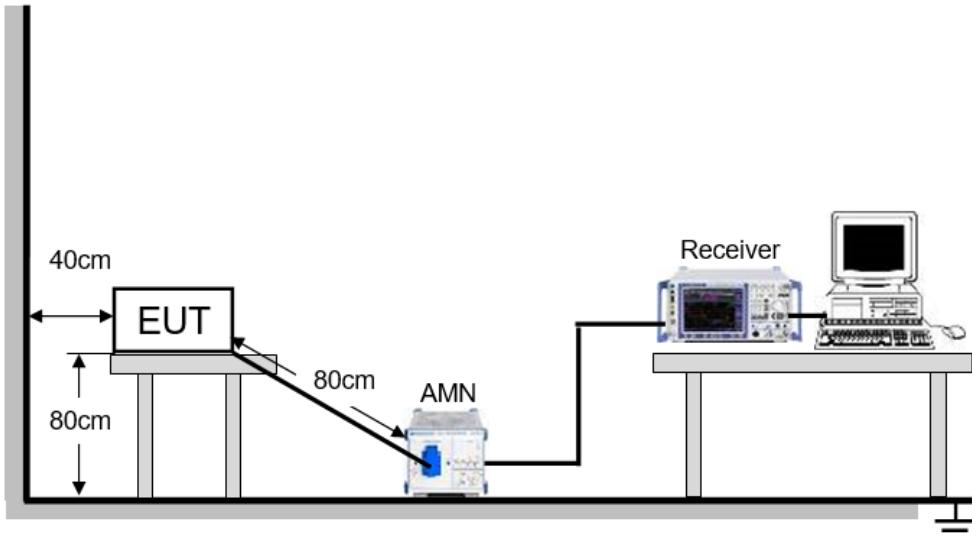
8. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

Please refer to FCC §15.207 (a)

FREQUENCY [MHz]	Limit [dBuV]	
	Quasi-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

TEST SETUP AND PROCEDURE



The EUT is put on a table of non-conducting material that is 80cm high. The vertical conducting wall of shielding is located 40cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through an Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) is used to test the emissions from both sides of AC line. According to the requirements in Section 6.2 of ANSI C63.10-2013. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-Peak and average detector mode. The bandwidth of EMI test receiver is set at 9kHz.

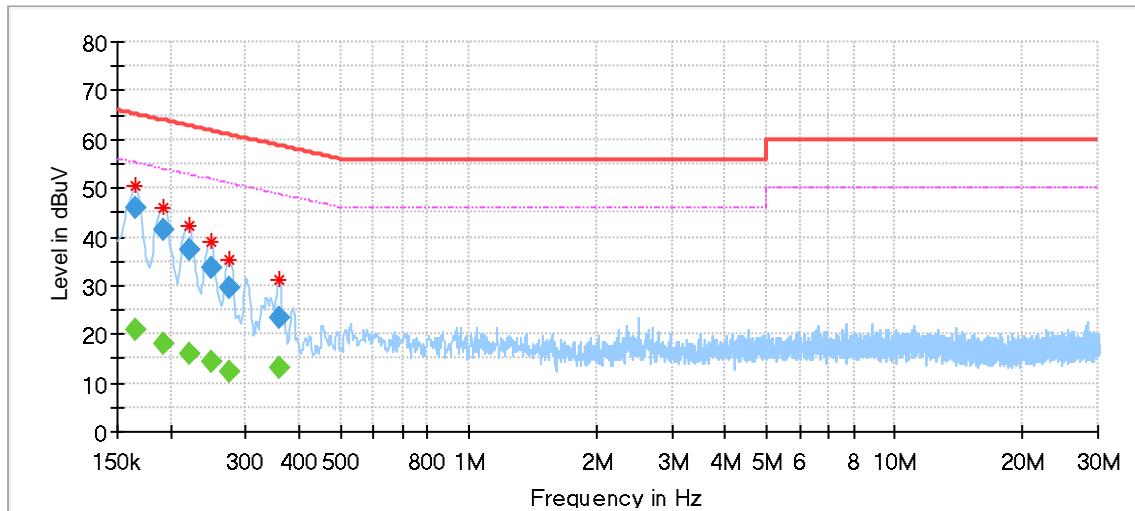
The arrangement of the equipment is installed to meet the standards and operating in a manner, which tends to maximize its emission characteristics in a normal application.

TEST ENVIRONMENT

Temperature	22°C	Relative Humidity	56%
Atmosphere Pressure	101kPa	Test Voltage	AC 120V

TEST RESULTS For Model LED-CONTROL-MODULE-EASYLUX-12V-1

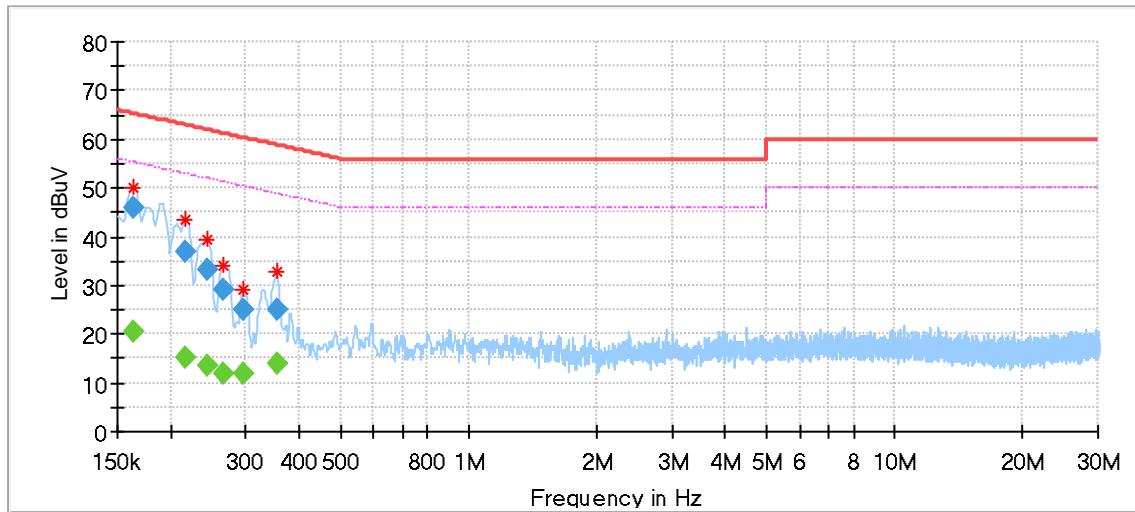
LINE L RESULTS (WORST-CASE CONFIGURATION)



Final Result

Frequency [MHz]	QuasiPeak [dB μ V]	Average [dB μ V]	Limit [dB μ V]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Filter	Corr. [dB]
0.164925	---	20.76	55.21	34.45	1000.0	9.000	L1	OFF	9.6
0.164925	45.87	---	65.21	19.35	1000.0	9.000	L1	OFF	9.6
0.193283	---	17.85	53.89	36.05	1000.0	9.000	L1	OFF	9.6
0.193283	41.40	---	63.89	22.49	1000.0	9.000	L1	OFF	9.6
0.221640	---	15.87	52.76	36.89	1000.0	9.000	L1	OFF	9.6
0.221640	37.38	---	62.76	25.38	1000.0	9.000	L1	OFF	9.6
0.248505	---	14.16	51.81	37.65	1000.0	9.000	L1	OFF	9.6
0.248505	33.79	---	61.81	28.01	1000.0	9.000	L1	OFF	9.6
0.275370	---	12.42	50.95	38.53	1000.0	9.000	L1	OFF	9.6
0.275370	29.69	---	60.95	31.27	1000.0	9.000	L1	OFF	9.6
0.358950	---	13.11	48.75	35.64	1000.0	9.000	L1	OFF	9.5
0.358950	23.38	---	58.75	35.37	1000.0	9.000	L1	OFF	9.5

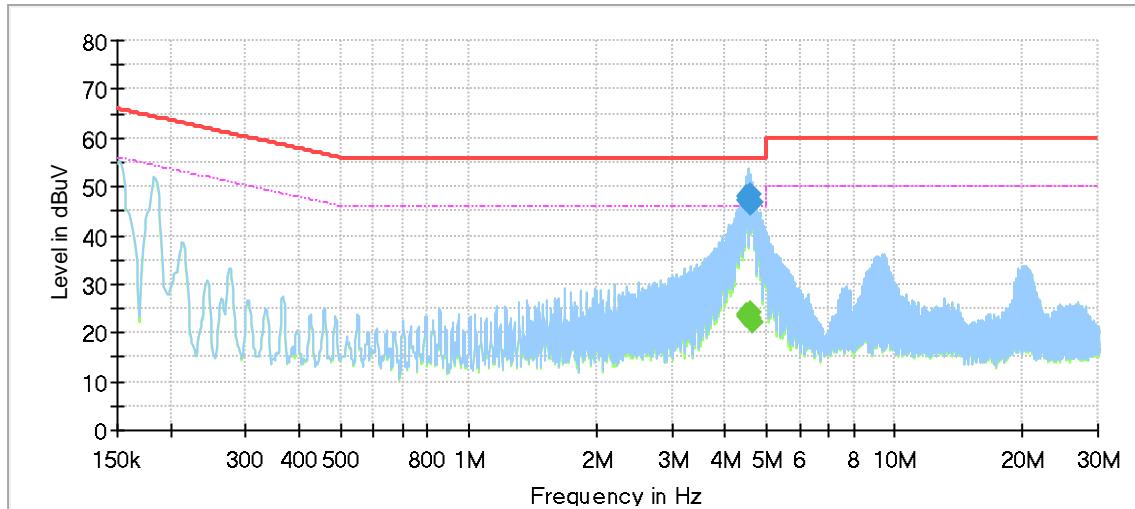
Note: 1. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).
3. Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.
4. The extension cord/outlet strip was calibrated with the LISN as required by ANSI C63.10:2013 Clause 6.2.2.
5. Pre-testing all test modes and channels, and find the MCH is the worst case, so only the worst case is included in this test report.
6. The model LED-CONTROL-MODULE-EASYLUX-12V-1 & Mec Driver Sensor Module 12V are identical except the shape of the connector for load, so model LED-CONTROL-MODULE-EASYLUX-12V-1 was selected for test and recorded in this report.

LINE N RESULTS (WORST-CASE CONFIGURATION)


Final Result

Frequency [MHz]	QuasiPeak [dB μ V]	Average [dB μ V]	Limit [dB μ V]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Filter	Corr. [dB]
0.163433	---	20.59	55.29	34.69	1000.0	9.000	N	OFF	9.6
0.163433	45.75	---	65.29	19.54	1000.0	9.000	N	OFF	9.6
0.217163	---	15.19	52.93	37.74	1000.0	9.000	N	OFF	9.5
0.217163	36.93	---	62.93	26.00	1000.0	9.000	N	OFF	9.5
0.244028	---	13.70	51.96	38.26	1000.0	9.000	N	OFF	9.5
0.244028	33.16	---	61.96	28.80	1000.0	9.000	N	OFF	9.5
0.264923	---	12.03	51.28	39.24	1000.0	9.000	N	OFF	9.5
0.264923	29.16	---	61.28	32.11	1000.0	9.000	N	OFF	9.5
0.296265	---	11.80	50.35	38.55	1000.0	9.000	N	OFF	9.5
0.296265	25.09	---	60.35	35.26	1000.0	9.000	N	OFF	9.5
0.354473	---	13.93	48.86	34.93	1000.0	9.000	N	OFF	9.5
0.354473	25.01	---	58.86	33.84	1000.0	9.000	N	OFF	9.5

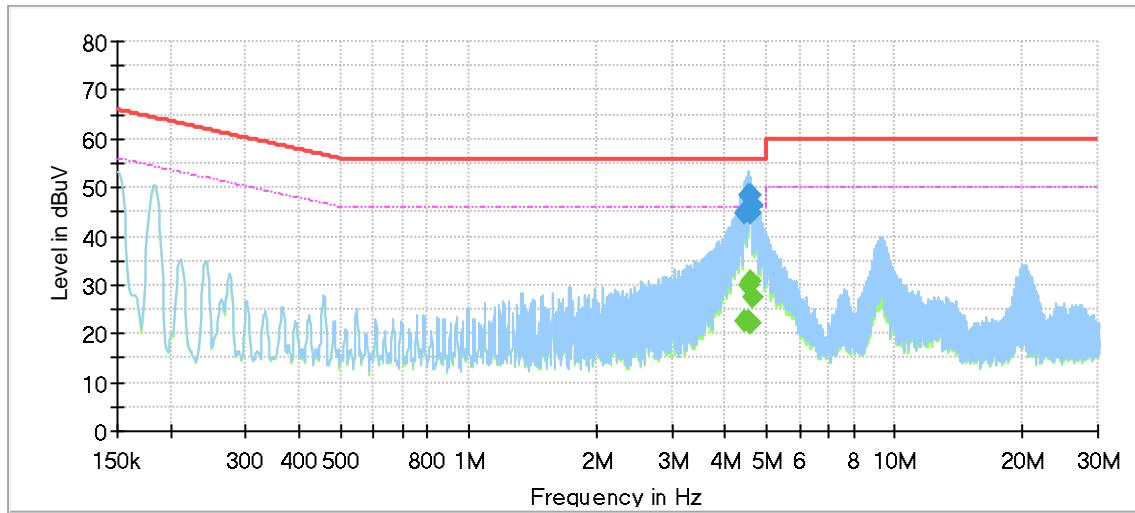
Note: 1. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).
3. Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.
4. The extension cord/outlet strip was calibrated with the LISN as required by ANSI C63.10:2013 Clause 6.2.2.
5. Pre-testing all test modes and channels, and find the MCH is the worst case, so only the worst case is included in this test report.
6. The model LED-CONTROL-MODULE-EASYLUX-12V-1 & Mec Driver Sensor Module 12V are identical except the shape of the connector for load, so model LED-CONTROL-MODULE-EASYLUX-12V-1 was selected for test and recorded in this report.

TEST RESULTS For Model LED-CONTROL-MODULE-EASYLUX-24V-1
LINE L RESULTS (WORST-CASE CONFIGURATION)

Final Result

Frequency [MHz]	QuasiPeak [dBμV]	Average [dBμV]	Limit [dBμV]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Filter	Corr. [dB]
4.482728	---	23.22	46.00	22.78	1000.0	9.000	L1	OFF	9.5
4.482728	47.29	---	56.00	8.71	1000.0	9.000	L1	OFF	9.5
4.511085	---	23.99	46.00	22.01	1000.0	9.000	L1	OFF	9.5
4.511085	47.94	---	56.00	8.06	1000.0	9.000	L1	OFF	9.5
4.543920	---	23.71	46.00	22.29	1000.0	9.000	L1	OFF	9.5
4.543920	48.00	---	56.00	8.00	1000.0	9.000	L1	OFF	9.5
4.570785	48.50	---	56.00	7.50	1000.0	9.000	L1	OFF	9.5
4.570785	---	24.10	46.00	21.90	1000.0	9.000	L1	OFF	9.5
4.605113	46.20	---	56.00	9.80	1000.0	9.000	L1	OFF	9.5
4.605113	---	23.09	46.00	22.91	1000.0	9.000	L1	OFF	9.5
4.631978	---	22.02	46.00	23.98	1000.0	9.000	L1	OFF	9.5
4.631978	46.85	---	56.00	9.15	1000.0	9.000	L1	OFF	9.5

Note:

1. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).
3. Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.
4. The extension cord/outlet strip was calibrated with the LISN as required by ANSI C63.10:2013 Clause 6.2.2.
5. Pre-testing all test modes and channels, and find the MCH is the worst case, so only the worst case is included in this test report.
6. The model LED-CONTROL-MODULE-EASYLUX-24V-1 & Mec Driver Sensor Module 24V are identical except the shape of the connector for load, so model LED-CONTROL-MODULE-EASYLUX-12V-1 was selected for test and recorded in this report.

LINE N RESULTS (WORST-CASE CONFIGURATION)

Final_Result

Frequency [MHz]	QuasiPeak [dB μ V]	Average [dB μ V]	Limit [dB μ V]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Filter	Corr. [dB]
4.458848	---	22.64	46.00	23.36	1000.0	9.000	N	OFF	9.4
4.458848	44.70	---	56.00	11.30	1000.0	9.000	N	OFF	9.4
4.520040	---	22.74	46.00	23.26	1000.0	9.000	N	OFF	9.4
4.520040	45.24	---	56.00	10.76	1000.0	9.000	N	OFF	9.4
4.539443	---	30.05	46.00	15.95	1000.0	9.000	N	OFF	9.4
4.539443	48.28	---	56.00	7.72	1000.0	9.000	N	OFF	9.4
4.569293	48.60	---	56.00	7.40	1000.0	9.000	N	OFF	9.4
4.569293	---	30.65	46.00	15.35	1000.0	9.000	N	OFF	9.4
4.609590	44.86	---	56.00	11.14	1000.0	9.000	N	OFF	9.4
4.609590	---	21.98	46.00	24.02	1000.0	9.000	N	OFF	9.4
4.630485	---	27.50	46.00	18.50	1000.0	9.000	N	OFF	9.4
4.630485	46.17	---	56.00	9.83	1000.0	9.000	N	OFF	9.4

Note:

1. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).
3. Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.
4. The extension cord/outlet strip was calibrated with the LISN as required by ANSI C63.10:2013 Clause 6.2.2.
5. Pre-testing all test modes and channels, and find the MCH is the worst case, so only the worst case is included in this test report.
6. The model LED-CONTROL-MODULE-EASYLUX-24V-1 & Mec Driver Sensor Module 24V are identical except the shape of the connector for load, so model LED-CONTROL-MODULE-EASYLUX-12V-1 was selected for test and recorded in this report.

9. ANTENNA REQUIREMENTS

APPLICABLE REQUIREMENTS

Please refer to FCC §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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

ANTENNA CONNECTOR

EUT has an Internal antenna without antenna connector.

ANTENNA GAIN

The antenna gain of EUT is less than 6 dBi.

END OF REPORT