

EUROFINS ELECTRICAL TESTING SERVICE (SHENZHEN) CO., LTD.

# **RADIO TEST - REPORT**

# FCC Compliance Test Report for

Product name: Desire Luxury Strapless Strap On Remote Control (non rabbit)

Model name: 80238

FCC ID: 2AM7I-80238

Test Report Number: EFGX20090210-IE-02-E04

Test Report No.: EFGX20090210-IE-02-E04 Eurofins Electrical Testing Service (Shenzhen) Co., Ltd. 101 and 201, Building 2, Dongfangming Industrial Area, No 83. Dabao Rd., Area 33 Shanghe Neibourhood, Xin'an Community, Bao'an District, Shenzhen, P.R. China. Telephone: +86-755-82911867, Fax : +86-755-82910749



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# **1** General Information

# 1.1 Notes

The results of this test report relate exclusively to the item tested as specified in chapter "Description of test item" and are not transferable to any other test items.

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#### **Operator:**

2020-11-27		Bruce Zheng / Project I	Engineer The short
Date	Eurofins-Lab.	Name / Title	Signature
Technical res	sponsibility for area	a of testing:	Tasting Service Greening Control of the Control of Cont
2020-11-27		Tom Tian / Supervisor	Tom lion
Date	Eurofins-Lab.	Name / Title	Signature



# 1.2 Testing laboratory

## Eurofins Electrical Testing Service (Shenzhen) Co., Ltd.

1st Floor, Building 2, Chungu, Meisheng Huigu Science and Technology Park, No. 83 Dabao Road, Bao'an District, Shenzhen. P.R.China.

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The Laboratory has passed the Accreditation by the American Association for Laboratory Accrediation (A2LA). The Accreditation number is 5376.01

The Laboratory has been listed by industry Canada to perform electromagnetic emission measurements, The CAB identifier is CN0088

# 1.3 Details of applicant

Name	:	Lovehoney Ltd.
Address	:	100 Locksbrook Road, Bath, BA1 3EN, UK
Telephone	:	+44 (0)1225 489355
Fax	:	01225 428267

# 1.4 Details of Manufacturer

Name	:	JM Sunflower Ltd.
Address	:	7th Floor, Goldsland Building,
		22-26 Minden Avenue, Tsim Sha Tsui, Kowloon,
		Hong Kong
Telephone	:	N/A
Fax	:	N/A



#### 1.5 **Application details**

Date of receipt of application	
Date of receipt of test item	
Date of test	
Date of issue	

2020-09-25 2020-09-25 : 2020-09-25 to 2020-11-20 : 2020-11-27

:

#### **Test item** 1.6

Product type Model name Brand Serial number Ratings Test voltage FCC ID Additional information	:	Desire Luxury Strapless Strap On Remote Control 80238 Lovehoney Desire N/A DC 3V DC 3V Button cell 2AM7I-80238 N/A
RadioTechnical data Frequency range Radio Tech. Frequency channel Modulation Antenna type Antenna gain	:	433.92MHz N/A 1 Channel ASK PCB antenna 3 dBi

#### 1.7 **Test standards**

Test Standards				
FCC Part 15 Subpart C	PART 15 - RADIO FREQUENCY DEVICES			
November 9, 2020	Subpart C - Intentional Radiators			

# **Test Method**

1: ANSI C63.4-2014, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz. 2: ANSI C63.10-2013, American National Standard for Testing Unlicensed Wireless Devices.



# 2 Technical test

# 2.1 Summary of test results

No deviations from the technical specification(s) were ascertained in the course of the tests performed.	
or	

The deviations as specified were ascertained in the course of the tests performed.

# 2.2 Test environment

Temperature	: 15	 35°C
Relative humidity content	: 20	 75 %
Air pressure	: 86	 106 kPa

# 2.3 Measurement uncertainty

The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in Measurement" (GUM) published by ISO.

System Measurement Uncertainty			
Test Items	Extended Uncertainty		
Uncertainty for Conducted RF test	RF Power Conducted: 1.16dB Frequency test involved: 1.05×10-7 or 1%		
Uncertainty for Radiated Spurious Emission 25MHz-3000MHz	Horizontal: 4.46dB; Vertical: 4.54dB;		
Uncertainty for Radiated Spurious Emission 3000MHz-18000MHz	Horizontal: 4.42dB; Vertical: 4.41dB;		
Uncertainty for Radiated Spurious Emission 18000MHz- 40000MHz	Horizontal: 4.63dB; Vertical: 4.62dB;		

# 2.4 Test mode

The EUT was set at continuously transmitting during the test.



# 2.5 Test equipment utilized

EQUIPMENT ID	EQUIPMENT NAME	MODEL NO.	CAL. DUE DATE
23-2-13-12	Signal Analyzer	N9010B-544	2021-04-24
23-2-13-14	Signal Generator	N5183B-520	2021-04-23
23-2-13-15	Vector Signal Generator	N5182B-506	2021-04-23
23-2-10-43	Switch and Control Unit	ERIT-E-JS0806-2	2021-06-17
23-2-10-44	DC power supply	E3642A	2021-06-03
23-2-10-45	Temperature test chamber	SG-80-CC-2	2021-04-23
23-2-13-01	EMI Test Receiver	ESR7	2021-04-24
23-2-13-02	Signal Analyzer	N9020B-544	2020-04-24
23-2-12-01	Active Loop Antenna	FMZB 1519B	2021-05-13
23-2-12-02	TRILOG Broadband Antenna	VULB9168	2021-04-27
23-2-12-03	Horn Antenna	3117	2021-05-11
23-2-10-01	Preamplifier	BBV9745	2021-04-23
23-2-10-02	Preamplifier	TAP01018048	2021-04-24
23-2-10-14	Switch and Control Unit	ERIT-E-JS0806-SF1	N/A

# 2.6 Auxiliary Equipment Used during Test:

DESCRIPTION	MANUFACTURER	MODEL NO.	S/N
N/A	N/A	N/A	N/A

# 2.7 Test software information

Test Software Version	N/A		
Modulation	Setting TX Power	TX Pattern	Packet Type
ASK	Default	Default	Default

Remark: The EUT has six buttons with same duty cycle and it was setted to continue transimitting by debug software, therefore we pressed one button to transmitting 433.92MHz Fundamental frequency during Testing.

# 2.8 Customized Configurations

EUT Conf.	Signal Description	Operating Frequency	Duty Cycle
TM1	ASK	433.92MHz	47.6%



# 2.9 Test results

X 1st test

test after modification

production test

	Technical Requirements				
FCC Part 15 Su	bpart C				
Test Condition		Test Result	Verdict	Test Site	
§15.207	Conducted emission AC power port		N/A		
§15.231(a)(1)	Automatically Deativate	Page 11	Pass	Site 1	
§15.231(b)(3)	Field strength of fundamental	Page 18	Pass	Site 1	
§15.231(b)(3) §15.209 & §15.205	Field strength of spurious emission	Page 20	Pass	Site 1	
§15.231(c)	-20dB Bandwidth	Page 13	Pass	Site 1	
§15.203	Antenna requirement	See note 1	Pass		

Remark 1: N/A – Not Applicable.

Note 1: The EUT uses a PCB antenna, the gain: 3 dBi. According to §15.203, it is considered sufficiently to comply with the provisions of this section.



# 3 Technical Requirement

# 3.1 Conducted Emission

# **Test Method:**

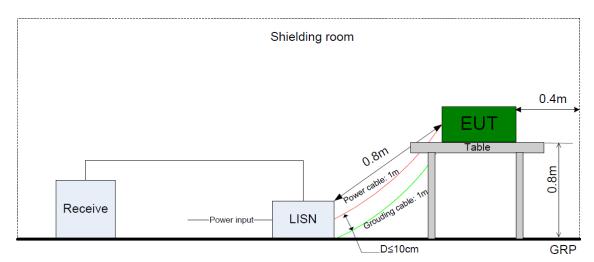
The test method was refered to the subclause 5.2 of ANSI C63.4-2014.

- 1. The EUT was placed on a table, which is 0.8m above ground plane
- 2. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.).
- 3. Maximum procedure was performed to ensure EUT compliance
- 4. A EMI test receiver is used to test the emissions from both sides of AC line

## **Test Setup:**

The mains cable of the EUT (per AC/DC Adapter) must be connected to LISN. The LISN shall be placed 0.8 m from the boundary of EUT and bonded to a ground reference plane for LISN mounted on top of the ground reference plane. This distance is between the closest points of the LISN and the EUT. All other units of the EUT and associated equipment shall be at least 0.8m from the LISN.

Ground connections, where required for safety purposes, shall be connected to the reference ground point of the LISN and, where not otherwise provided or specified by the manufacturer, shall be of same length as the mains cable and run parallel to the mains connection at a separation distance of not more than 0.1 m.



## Limit:

Freq	uency	QP Limit	AV Limit
N	lHz	dBµV	dBµV
0.150	)-0.500	66-56*	56-46*
0.5	00-5	56	46
5	-30	60	50

Decreasing linear.

# Test Result:

Not Applicable, the EUT was supplied by 3Vdc from a Button cell.



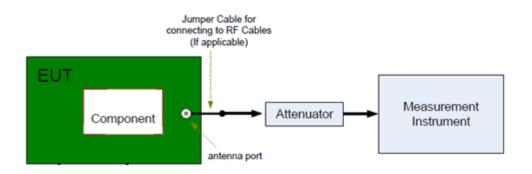
# 3.2 Automatically Deativate

## **Test Method**

- 1. Connect EUT test port to spectrum analyzer.
- 2. Set the EUT to transmit maximum output power at 433.92MHz.
- 3. RBW=1MHz, VBW≥3RBW, Span=0MHz, Sweep = 10s, Detector function = Average, Sweep time = single
- 4. Remark transmission time and record test plot.

#### **Test Setup:**

The component's antenna ports(s) of the EUT are connected to the measurement instrument per an appropriate attenuator. The press a button of the EUT is to emit the specified signals for the purpose of measurements.



## Limits:

According to §15.231 (a) (1), automatically deactivate limit as below:

(1) A manually operated transmitter shall employ a switch that will automatically deactivate the transmitter within not more than 5 seconds of being released.



## Test Data:

Time of Transmitting (ms	s) Limit (s	sec)	F	Result
600	5			Pass
Spectrum Analyzer 1 + Swept SA FEYSIGHT Input RF Input Z:	50 Ω Atten: 10 dB PNO: Fast	Avg Type: Log-Power	1 2 3 4 5 6 Center	Frequency
Coupling: DC Correct	ons: Off Gate: Off f: Int (S) IF Gain: Low Sig Track: C	Trig: Free Run	W₩₩₩₩₩ 433.92	Frequency 0000 MHz
1 Spectrum v Scale/Div 10 dB Log	Ref Level 0.00 dBm	ΔMkr	-1.72 dB Sw	0000 Hz ept Span
-10.0				ro Span iull Span
-20.0				0000 MHz
-40.0			Stop Fr 433.92	eq 0000 MHz
-60.0			CF Step	
-70.0 this and the state of the	and the second structure of the se		3.0000 	
-90.0			Freq Of 0 Hz	fset
Center 433.920000 MHz Res BW 3.0 MHz	Video BW 3.0 MHz	Sweep 1	Span 0 Hz 0.0 s (1001 pts)	q
	1, 2020 18 AM		Signal 1	Track

**Test Result: Pass** 



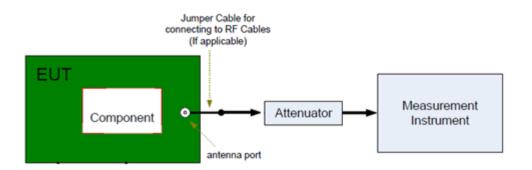
# 3.3 20dB & 99% bandwidth

# **Test Method:**

- 1. Connect EUT test port to spectrum analyzer.
- 2. Set the EUT to transmit maximum output power at 433.92MHz.
- 3. Then set the EUT to transmit at high, middle and low frequency separately.
- 4. Set Span = approximately 1.5 to 5 times the 99% bandwidth.
- 5. Set RBW  $\geq$  1% to 5% of the 99% bandwidth, VBW  $\geq$  RBW.
- 6. Set Sweep = auto.
- 7. Set Detector function = Average.
- 8. Allow the trace to stabilize.
- 9. Repeat above procedures until all frequencies measured were complete.

## **Test Setup:**

The component's antenna ports(s) of the EUT are connected to the measurement instrument per an appropriate attenuator. The press a button of the EUT is to emit the specified signals for the purpose of measurements.



#### Limit:

According to §15.231 (c), automatically deactivate limit as below:

The bandwidth of the emission shall be no wider than 0.25% of the center frequency for devices operating above 70 MHz and below 900 MHz.



## **Test Result**

20dB Bandwidth (KHz)	99% Bandwidth (KHz)	Limit (KHz)	Result
15.14	N/A	1084.80	Pass
Spectrum Analyzer 1		<b>‡</b>	Sweep V
KEYSIGHT Input: RF Coupling: DC Align: Auto L L L L L L L L L L L L L	Off Gate: Off A	AVQ[FI0]Q.210/10	eep Time Sweep/ 1 ms Control Sweep
1 Graph			Man Config
Scale/Div 10.0 dB	Ref Value -30.00 dBm	Swe	eep / Measure Continuous Single
-50.0 -60.0 -70.0			Restart
-80.0			Pause
-100 -110 -120			
Center 433.9200 MHz #Res BW 3.0000 kHz	#Video BW 10.000 kHz*	Span 500 kHz Sweep 68.1 ms (1001 pts)	
2 Metrics Y		<u>Sweep 00.1 ms (1001 pts)</u>	
Occupied Bandwidth 75.374 kHz	Total Power	-43.1 dBm	
	15 kHz % of OBW Power 14 kHz x dB	99.00 % -20.00 dB	
Nov 11, 20			



# 3.4 Field strength of fundamental and Field strength of spurious emission for transmitter

#### **Test Method:**

1: The EUT was place on a turn table which is 1.5m above ground plane for above 1GHz and 0.8m above ground for below 1GHz at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

2: The EUT was set 3 meters away from the interference – receiving antenna, which was mounted on the top of a variable – height antenna tower.

3: The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

4: For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

5: Use the following spectrum analyzer settings According to C63.10:

For Above 1GHz

Span = wide enough to capture the peak level of the in-band emission and all spurious RBW = 1MHz, VBW≥RBW for peak measurement and VBW = 10Hz for average measurement, Sweep = auto, Detector function = peak, Trace = max hold.

For Below 1GHz

Use the following spectrum analyzer settings:

Span = wide enough to capture the peak level of the in-band emission and all spurious RBW = 100 KHz, VBW≥RBW for peak measurement, Sweep = auto, Detector function = peak, Trace = max hold.

For Below 30MHz

Use the following spectrum analyzer settings:

Span = wide enough to capture the peak level of the in-band emission and all spurious RBW = 200 Hz, VBW  $\geq$  RBW from 9KHz to 0.15MHz, RBW 9KHz VBW  $\geq$  RBW from 0.15MHz to 30MHz for peak measurement, Sweep = auto, Detector function = peak, Trace = max hold.

#### Note:

1: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 KHz for Quasi-peak detection (QP) at frequency below 1GHz.

2: The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for peak detection (PK) at frequency above 1GHz.

3: The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for RMS Average ((duty cycle < 98%) for Average detection (AV) at frequency above 1GHz, then the measurement results was added to a correction factor (20log(1/duty cycle)).

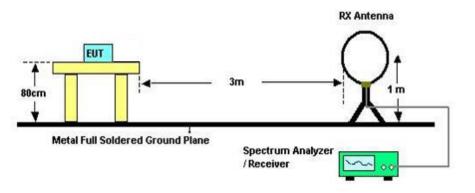
4: The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz (duty cycle > 98%) for Average detection (AV) at frequency above 1GHz.

#### **Test Setup:**

#### Test Setup 1: Radiated Emission test below 30MHz

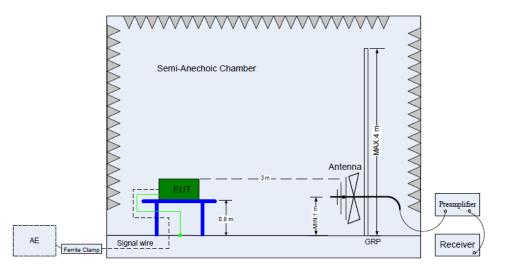
The test site semi-anechoic chamber has met the requirement of NSA tolerance 4 dB according to the standards: ANSI C63.4. The test distance is 3m. The setup is according to ANSI C63.4.





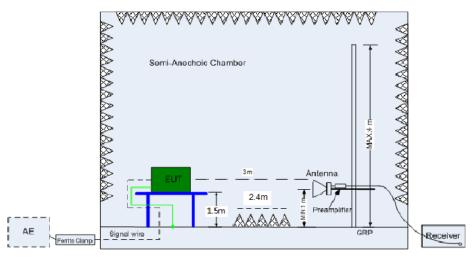
## Test Setup 2: Radiated Emission test below 1GHz

The test site semi-anechoic chamber has met the requirement of NSA tolerance 4 dB according to the standards: ANSI C63.4. The test distance is 3m. The setup is according to ANSI C63.4.



#### Test Setup 3: Radiated Emission test above 1GHz

The test site semi-anechoic chamber has met the requirement of NSA tolerance 4 dB according to the standards: ANSI C63.4. The test distance is 3m. The setup is according to ANSI C63.4.



Test Report No.: EFGX20090210-IE-02-E04 Eurofins Electrical Testing Service (Shenzhen) Co., Ltd. 1st Floor, Building 2, Chungu, Meisheng Huigu Science and Technology Park, No. 83 Dabao Road, Bao'an District, Shenzhen. P.R.China. Telephone: +86-755-82911867, Fax : +86-755-82910749



## Limit:

Radiated emissions which fall in the restricted bands, as defined in section15.205, must comply with the radiated emission limits specified in section 15.209.

#### § 15.209

0	Frequency	Field Strength	Field Strength	Detector
	MHz	uV/m	dBµV/m	
	30-88	100	40	QP
	88-216	150	43.5	QP
	216-960	200	46	QP
	960-1000	500	54	QP
	Above 1000	500	54	AV
	Above 1000	5000	74	PK

## §15.205 Restricted bands of operation

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
<sup>1</sup> 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	( <sup>2</sup> )
13.36-13.41			

#### RSS-GEN 8.10

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	1660 - 1710	9.0 - 9.2
0.495 - 0.505	16.69475 - 16.69525	1718.8 - 1722.2	9.3 - 9.5
2.1735 - 2.1905	25.5 - 25.67	2200 - 2300	10.6 - 12.7
3.020 - 3.026	37.5 - 38.25	2310 - 2390	13.25 - 13.4
4.125 - 4.128	73 - 74.6	2483.5 - 2500	14.47 - 14.5
4.17725 - 4.17775	74.8 - 75.2	2655 - 2900	15.35 - 16.2
.20725 - 4.20775	108 – 138	3260 – 3267	17.7 - 21.4
5.677 - 5.683	149.9 - 150.05	3332 - 3339	22.01 - 23.12
6.215 - 6.218	156.52475 - 156.52525	3345.8 - 3358	23.6 - 24.0
6.26775 - 6.26825	156.7 - 156.9	3500 - 4400	31.2 - 31.8
6.31175 - 6.31225	162.0125 - 167.17	4500 - 5150	36.43 - 36.5
8.291 - 8.294	167.72 - 173.2	5350 - 5460	Above 38.6
8.362 - 8.366	240 – 285	7250 - 7750	
8.37625 - 8.38675	322 - 335.4	8025 – 8500	
8.41425 - 8.41475	399.9 - 410		
12.29 - 12.293	608 - 614		
12.51975 - 12.52025	960 - 1427		



12.57675 - 12.57725	1435 - 1626.5	
13.36 - 13.41	1645.5 - 1646.5	

§15.231 (b) In addition to the provisions of §15.205, the field strength of emissions from intentional radiators operated under this section shall not exceed the following:

Fundamental frequency (MHz)	Field strength of fundamental (microvolts/meter)	Field strength of spurious emissions (microvolts/meter)
40.66-40.70	2,250	225
70-130	1,250	125
130-174	<sup>1</sup> 1,250 to 3,750	<sup>1</sup> 125 to 375
174-260	3,750	375
260-470	<sup>1</sup> 3,750 to 12,500	<sup>1</sup> 375 to 1,250
Above 470	12,500	1,250

RSS-210 A1.2 (b) Unwanted emissions shall be 10 times below the fundamental emissions field strength limits in Table A1 or comply with the limits specified in RSS-Gen, whichever is less stringent.

Fundamental Frequency (MHz), Excluding Re- stricted Frequency Bands Specified in RSS- Gen	Field Strength of the Fundamental Emissions ( $\mu$ V/m at 3m)
70-130	1,250
130-174	1,250 to 3,750*
174-260 (Note 1)	3,750
260-470 (Note 1)	3,750 to 12,500*
Above 470	12,500

\* Linear interpolation with frequency, f, in MHz:

For 130-174 MHz: Field Strength ( $\mu$ V/m) = (56.82 × f)-6136

For 260-470 MHz: Field Strength ( $\mu$ V/m) = (41.67 × f)-7083

**Note 1:** Frequency bands 225-328.6 MHz and 335.4-399.9 MHz are designated for the exclusive use of the Government of Canada. Manufacturers should be aware of possible harmful interference and degradation of their licence-exempt radio equipment in these frequency bands.

Field Strength of the Fundamental Emissions

The limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit.

Fundamental Average (dB $\mu$ V/m) = 20log (41.67x433.92)-7083=80.83dBuV/m (Average) Fundamental Peak (dB $\mu$ V/m) = 80.83dBuV/m + 20 = 100.83dBuV/m

#### Remark:

- (1) "\*" means the emission(s) appear within the restrict bands shall follow the requirement of section 15.205.
- (2) Data of measurement within this frequency range shown "--" in the table above means the reading of emissions are the noise floor or attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (3) Above 1GHz: Corrector factor = Antenna Factor + Cable Loss Amplifier Gain.
- (4) Below 1GHz: Corrector factor = Antenna Factor + Cable Loss Amplifier Gain.
- (5) Note: The low frequency, which started from 9 kHz to 30MHz with X/Y/Z axis, was prescanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.



# Field Strength of the Fundamental Emissions Horizontal

PK

Freq.	Factor	PK Level	Limit	Margin	Height	Angle	Polarity
[MHz]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[cm]	[°]	
433.9210	-12.74	68.31	100.83	32.52	208.9	112	Horizontal

PK with Duty factor (AV)

Freq.	AV Level	Factor	Average	Limit	Margin	Polarity
[MHz]	[dBµV/m]	(dB)	Factor (dB)	[dBµV/m]	[dB]	
433.9210	62.15	-12.74	-6.16	80.83	18.68	Horizontal

Vertical

PK							
Freq. [MHz]	Factor [dB/m]	PK Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
433.9181	-12.74	58.53	100.83	42.3	229.6	195	Vertical

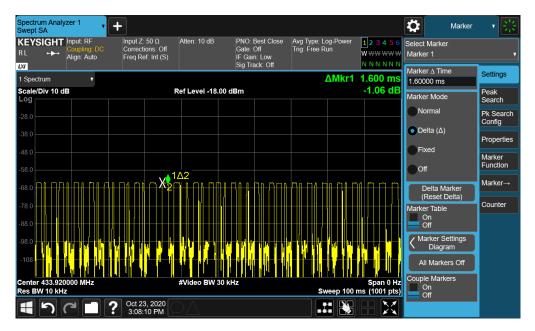
PK with Duty factor (AV)

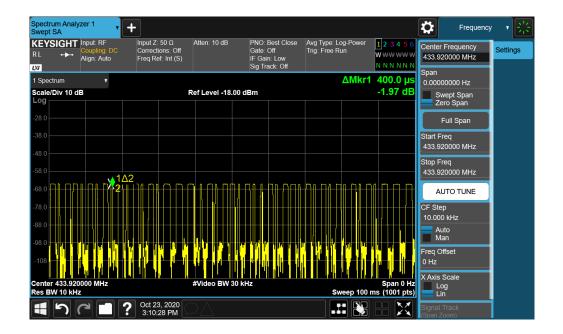
Freq.	AV Level	Factor	Average	Limit	Margin	Polarity
[MHz]	[dBµV/m]	(dB)	Factor (dB)	[dBµV/m]	[dB]	
433.9181	52.37	-12.74	-6.16	80.83	28.46	Vertical

Result of PK=Reading Level + Factor(Antenna Factor + Cable Loss - Amplifier Gain). Result of AV= Reading Level + Factor(Antenna Factor + Cable Loss - Amplifier Gain)+ Average factor.



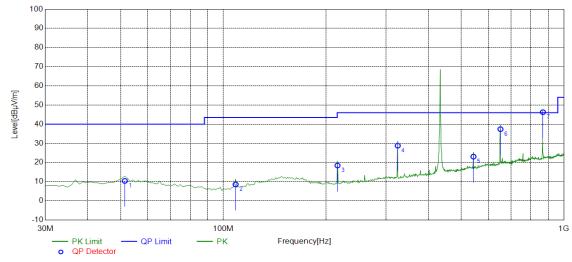
 $\label{eq:DC} DC = (1.6ms \times 26 + 0.4ms \times 19)/100ms \approx 0.492 \text{ or } 49.2\%$  Therefore, the averaging factor is found by 20 log10 ( 0.492 )  $\approx$  -6.16dB







# Field strength of spurious emission for transmitter 30MHz - 1GHz

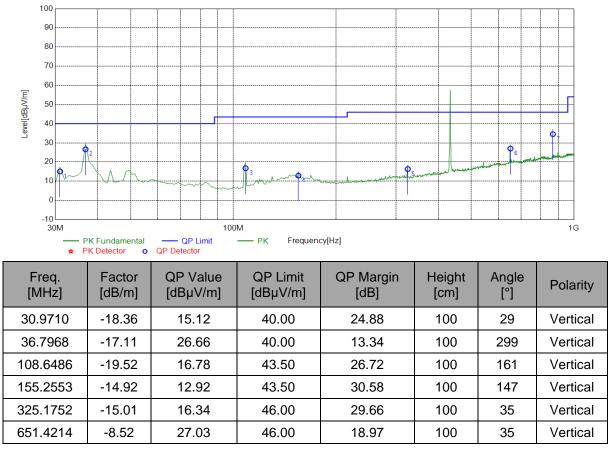


Freq. [MHz]	Factor [dB/m]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
51.3614	-16.01	10.41	40.00	29.59	100	302	Horizontal
108.6486	-19.52	8.57	43.50	34.93	200	264	Horizontal
216.4264	-17.96	18.46	46.00	27.54	100	105	Horizontal
325.1752	-15.01	28.79	46.00	17.21	100	291	Horizontal
542.6727	-10.52	23.08	46.00	22.92	200	97	Horizontal
651.4214	-8.52	37.41	46.00	8.59	100	101	Horizontal

Freq.	Factor	PK Value	PK Limit	PK Margin	Height	Angle	Polarity
[MHz]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[cm]	[°]	
867.8350	-5.93	46.28	80.82	34.54	104.6	256.7	Horizontal

Freq. [MHz]	Factor [dB/m]	Average factor (dB)	AV Level [dBµV/m]	AV Limit [dBµV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity
867.8350	-5.93	-6.16	40.12	60.83	20.7	104.6	256.7	Horizontal





Freq.	Factor	PK Value	PK Limit	PK Margin	Height	Angle	Polarity
[MHz]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[cm]	[°]	
867.9479	-5.93	34.55	80.82	46.27	200	32	Horizontal

Freq. [MHz]	Factor [dB/m]	Average factor (dB)	AV Level [dBµV/m]	AV Limit [dBµV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity
867.9479	-5.93	-6.16	28.39	60.83	32.43	200	32	Horizontal

Result of QP=Reading Level + Factor(Antenna Factor + Cable Loss - Amplifier Gain).

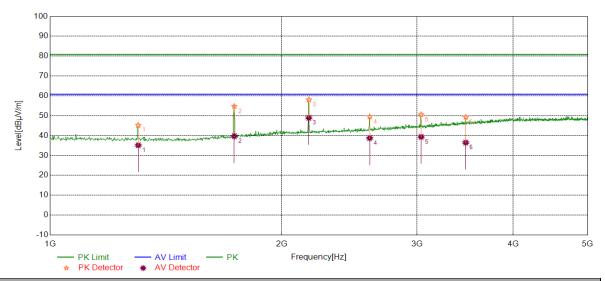
Result of PK=Reading Level + Factor(Antenna Factor + Cable Loss - Amplifier Gain).

Result of AV= Reading Level + Factor(Antenna Factor + Cable Loss - Amplifier Gain)+ Average factor.



Field strength of spurious emission for transmitter above 1GHz

According to C63.10, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement, so AV emission value did not show in below table if the peak value complies with average limit.

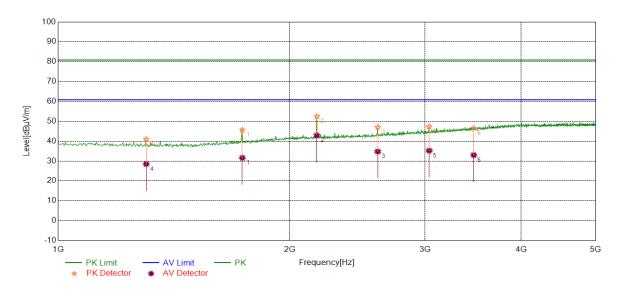


PK Final Data	PK Final Data List											
Freq. [MHz]	Factor [dB/m]	PK Value [dBµV/m]	PK Limit [dBµV/m]	PK Margin [dB]	Height [cm]	Angle [°]	Polarity					
1301.7565	-27.79	45.29	80.82	35.53	127.3	246.2	Horizontal					
1735.6808	-26.08	54.75	80.82	26.07	109.3	271.3	Horizontal					
2169.5973	-23.48	58.08	80.82	22.74	132.1	119.3	Horizontal					
2603.5178	-22.01	49.59	80.82	31.23	105.1	96.3	Horizontal					
3037.4309	-20.11	50.60	80.82	30.22	109.2	319.8	Horizontal					
3471.3731	-18.28	49.35	80.82	31.47	115.6	124.9	Horizontal					

AV Final Da	AV Final Data List											
Freq. [MHz]	Factor [dB/m]	Average factor (dB)	AV Value [dBµV/m]	AV Limit [dBµV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity				
1301.7565	-27.79	-6.16	39.13	60.82	21.69	127.3	246.2	Horizontal				
1735.6808	-26.08	-6.16	48.59	60.82	12.23	109.3	271.3	Horizontal				
2169.5973	-23.48	-6.16	51.92	60.82	8.9	132.1	119.3	Horizontal				
2603.5178	-22.01	-6.16	43.43	60.82	17.39	105.1	96.3	Horizontal				
3037.4309	-20.11	-6.16	44.44	60.82	16.38	109.2	319.8	Horizontal				
3471.3731	-18.28	-6.16	43.19	60.82	17.63	115.6	124.9	Horizontal				

Test Report No.: EFGX20090210-IE-02-E04 Eurofins Electrical Testing Service (Shenzhen) Co., Ltd. 1st Floor, Building 2, Chungu, Meisheng Huigu Science and Technology Park, No. 83 Dabao Road, Bao'an District, Shenzhen. P.R.China. Telephone: +86-755-82911867, Fax : +86-755-82910749





PK Final Data	PK Final Data List											
Freq. [MHz]	Factor [dB/m]	PK Value [dBµV/m]	PK Limit [dBµV/m]	PK Margin [dB]	Height [cm]	Angle [°]	Polarity					
1735.6692	-26.08	45.64	80.82	35.18	119.6	320.6	Vertical					
2169.5973	-23.48	52.45	80.82	28.37	234.6	193.5	Vertical					
2603.5104	-22.01	47.03	80.82	33.79	117.2	358.6	Vertical					
1301.7561	-27.79	40.97	80.82	39.85	260	170	Vertical					
3037.4385	-20.11	47.31	80.82	33.51	180	200	Vertical					
3471.3476	-18.28	46.53	80.82	34.29	200	110	Vertical					

AV Final Data List								
Freq. [MHz]	Factor [dB/m]	Average factor (dB)	AV Value [dBµV/m]	AV Limit [dBµV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity
1735.6692	-26.08	-6.16	39.48	60.82	21.34	119.6	320.6	Vertical
2169.5973	-23.48	-6.16	46.29	60.82	14.53	234.6	193.5	Vertical
2603.5104	-22.01	-6.16	40.87	60.82	19.95	117.2	358.6	Vertical
1301.7561	-27.79	-6.16	34.81	60.82	26.01	260	170	Vertical
3037.4385	-20.11	-6.16	41.15	60.82	19.67	180	200	Vertical
3471.3476	-18.28	-6.16	40.37	60.82	20.45	200	110	Vertical

Result of PK=Reading Level + Factor(Antenna Factor + Cable Loss - Amplifier Gain). Result of AV= Reading Level + Factor(Antenna Factor + Cable Loss - Amplifier Gain)+ Average factor.

# END