

## CFR 47 FCC PART 15 SUBPART C ISED RSS-210 ISSUE 9

## **TEST REPORT**

For

## **TOY Transmitter**

## **MODEL NUMBER: 3728TNRR**

FCC ID: G6D3728TNRR IC: 9650A-3728TNRR

## **REPORT NUMBER: 4789194952-2**

ISSUE DATE: October 09, 2019

Prepared for

NEW BRIGHT INDUSTRIAL CO., LTD 9/F., NEW BRIGHT BUILDING, 11 SHEUNG YUET ROAD, KOWLOON BAY, KOWLOON,HONG KONG.

Prepared by

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## Revision History

Rev.	Issue Date	Revisions	Revised By
V0	10/09/2019	Initial Issue	



	Summary of Test Results						
Clause	Test Items	FCC/ISED Rules	Test Results				
1	20dB Bandwidth and 99% Occupied Bandwidth	CFR 47 FCC 15.249(d) ISED RSS-Gen Clause 6.7	Pass				
2	Radiated emission	CFR 47 FCC §15.249 (a)(d)(e) ISED RSS-210 Clause Annex B B.10 CFR 47 FCC §15.205 and §15.209 RSS-GEN Clause 8.9 RSS-GEN Clause 8.10	Pass				
3 Antenna Requirement FCC Part 15.203 ISED RSS-Gen Clause 6.8 Pass							
Note: This test report is only published to and used by the applicant, and it is not for evidence purpose in China.							



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# **1. ATTESTATION OF TEST RESULTS**

#### Applicant Information

Company Name: Address:	NEW BRIGHT INDUSTRIAL CO., LTD 9/F., NEW BRIGHT BUILDING, 11 SHEUNG YUET ROAD, KOWLOON BAY, KOWLOON,HONG KONG.
<b>Manufacturer Information</b> Company Name: Address:	NEW BRIGHT INDUSTRIAL CO., LTD 9/F., NEW BRIGHT BUILDING, 11 SHEUNG YUET ROAD, KOWLOON BAY, KOWLOON,HONG KONG.
EUT Description	
EUT Name:	TOY Transmitter
Model:	3728TNRR
Sample Status:	Normal
Sample ID:	2606077
Sample Received Date:	September 19, 2019
Date of Tested:	September 19, 2019~ October 08, 2019

APPLICABLE STANDARDS					
STANDARDS	TEST RESULTS				
CFR 47 FCC PART 15 SUBPART C	PASS				
ISED RSS-210 Issue 9	PASS				
ISED RSS-GEN Issue 5	PASS				

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# 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, ISED RSS-210 Issue 9 and RSS-GEN Issue 5.

# 3. FACILITIES AND ACCREDITATION

Accreditation Certificate	<ul> <li>A2LA (Certificate No.: 4102.01)         UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.         has been assessed and proved to be in compliance with A2LA.     </li> <li>FCC (FCC Designation No.: CN1187)         UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.         Has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules     </li> <li>ISED (Company No.: 21320)         UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.         has been registered and fully described in a report filed with ISED. The Company Number is 21320.         VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011)         UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.         has been assessed and proved to be in compliance with VCCI, the     </li> </ul>
	VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with VCCI, the Membership No. is 3793. Facility Name:
	Chamber D, the VCCI registration No. is G-20019 and R-20004 Shielding Room B , the VCCI registration No. is C-20012 and T-20011

Note:

- All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China
- The test anechoic chamber in UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch 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.
- 3. For below 30MHz, lab had performed measurements at test anechoic chamber and comparing to measurements obtained on an open field site. And these measurements below 30MHz had been correlated to measurements performed on an OFS.



# 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 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		
Conduction emission	3.62dB		
Radiation Emission test(include Fundamental emission) (9KHz-30MHz)	2.2dB		
Radiation Emission test(include Fundamental emission) (30MHz-1GHz)	4.00dB		
Radiation Emission test	5.78dB (1GHz-18Gz)		
(1GHz to 26GHz)( include Fundamental emission)	5.23dB (18GHz-26Gz)		
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

EUT Name	TOY Transmitter		
EUT Description	The EUT is a wireless remote controller.		
Model:	3728TNRR		
Product Description	Operation Frequency 2410 MHz ~ 2475 MHz		
	Modulation Type GFSK		
Battery	DC 3V		

# 5.2. MAXIMUM OUTPUT POWER

Frequency Range (MHz)	Number of Transmit Chains (NTX)	Frequency (MHz)	Channel Number	Max Power (dBµV/m)
2410 ~ 2475	1	2475	1	99.36

# 5.3. CHANNEL LIST

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2410	21	2430	41	2450	61	2470
2	2411	22	2431	42	2451	62	2471
3	2412	23	2432	43	2452	63	2472
4	2413	24	2433	44	2453	64	2473
5	2414	25	2434	45	2454	65	2474
6	2415	26	2435	46	2455	66	2475
7	2416	27	2436	47	2456	١	١
8	2417	28	2437	48	2457	١	١
9	2418	29	2438	49	2458	١	١
10	2419	30	2439	50	2459	١	١
11	2420	31	2440	51	2460	١	١
12	2421	32	2441	52	2461	١	١
13	2422	33	2442	53	2462	١	١
14	2423	34	2443	54	2463	/	١
15	2424	35	2444	55	2464	١	١
16	2425	36	2445	56	2465	١	١
17	2426	37	2446	57	2466	\	N
18	2427	38	2447	58	2467	\	\
19	2428	39	2448	59	2468	\	\
20	2429	40	2449	60	2469	\	\

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5.4.	DESCRIPTION OF AVAILABLE ANTENNAS
------	-----------------------------------

Ant.	Frequency	(MHz)	Antenna Type	Antenna Gain (dBi)	
1	2410 ~ 2	475	Line Antenna	1.9	
Test Mode	Transmit and Receive Mode	Description			
GFSK	⊠1TX, 1RX	Antenna 1 can be used as transmitting/receiving antenn		nitting/receiving antenna.	

## 5.5. TEST CHANNEL CONFIGURATION

Test Mode	Test Channel	Frequency
GFSK	CH 1, CH 34, CH 66/ Low, Middle, High	2410MHz, 2443MHz, 2475MHz

## 5.6. THE WORSE CASE POWER SETTING PARAMETER

The Worse Case Power Setting Parameter under 2410 MHz ~ 2475 MHz Band					
Test Soft	ware Version	/			
Modulation Type	Transmit Antenna	Test Channel			
	Number	CH 1	CH 34	CH 66	
GFSK	1	Default	Default	Default	

## 5.7. TEST ENVIRONMENT

Environment Parameter	Selected Values During Tests			
Relative Humidity	45 ~ 70%			
Atmospheric Pressure:	1	1003Pa		
Temperature	TN	22 ~ 28°C		
	VL	/		
Voltage :	VN	DC 3V		
	VH	/		

Note: VL= Lower Extreme Test Voltage VN= Nominal Voltage VH= Upper Extreme Test Voltage TN= Normal Temperature

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## 5.8. DESCRIPTION OF TEST SETUP

#### SUPPORT EQUIPMENT

Item	Equipment	Brand Name	Model Name	P/N
/	/	/	/	/

#### I/O CABLES

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

#### ACCESSORY

Item	Accessory	Brand Name	Model Name	Description
/	/	/	/	/

#### TEST SETUP

The EUT have the engineer mode inside.

#### SETUP DIAGRAM FOR TEST

EUT

Note: New battery was used during all tests.



## 5.9. MEASURING INSTRUMENT AND SOFTWARE USED

	Radiated Emissions							
			In	strument				
Used	Equipment	Manufacturer	Mo	odel No.	Serial No		Last Cal.	Next Cal.
$\checkmark$	MXE EMI Receiver	KESIGHT	N	9038A	MY564000	36	Dec.10,2018	Dec.10,2019
V	Hybrid Log Periodic Antenna	TDK	HLI	-3003C	130960		Sep.17,2018	Sep.17,2021
$\checkmark$	Preamplifier	HP	8	3447D	2944A0909	99	Dec.10,2018	Dec.10,2019
V	EMI Measurement Receiver	R&S	E	SR26	101377		Dec.10,2018	Dec.10,2019
$\checkmark$	Horn Antenna	TDK	HR	N-0118	130939		Sep.17,2018	Sep.17,2021
V	High Gain Horn Antenna	Schwarzbeck	BBI	HA-9170	691		Aug.11, 2018	Aug.11, 2021
V	Preamplifier	TDK	PA-02-0118		TRS-305- 00066		Dec.10,2018	Dec.10,2019
V	Loop antenna	Schwarzbeck	1	I519B	00008		Jan.17, 2019	Jan.17, 2022
V	Preamplifier	TDK		-02-001- 3000	TRS-302- 00050		Jan. 07, 2019	Jan. 17, 2020
			S	oftware			•	
Used	Descr	ription		Manufact	turer Name			Version
$\checkmark$	Test Software for R	adiated disturb	ance	Farad	EZ-EMC			Ver. UL-3A1
		(	Other	instrumen	ts			
Used	Equipment	Manufacturer	Mo	odel No.	Serial No		Last Cal.	Next Cal.
$\checkmark$	Spectrum Analyzer	Keysight	Ν	9030A	MY554105	12	Dec.10,2018	Dec.10,2019
V	Band Reject Filter	Wainwright	WRCJV8-2350- 2400- 2483.5-2533.5- 40SS		4		Dec.10,2018	Dec.10,2019
V	High Pass Filter	Wi	:	X10-2700- 3000- 00-40SS	23		Dec.10,2018	Dec.10,2019



# 6. ANTENNA PORT TEST RESULTS

# 6.1. ON TIME AND DUTY CYCLE

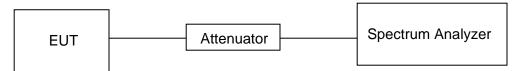
## <u>LIMITS</u>

None; for reporting purposes only

## PROCEDURE

KDB 558074 Zero-Span Spectrum Analyzer Method

### TEST SETUP



### **RESULTS**

	On Time (ms)	Times	Ton (ms)	Total Ton times (ms)
Ton 1	0.840	11	9.24	11.12
Ton 2	0.210	9	1.89	11.13

Note: Total Ton times= Ton1\*11+Ton2\*9

Total Ton times	Period	Duty Cycle	Duty Cycle
(ms)	(ms)	(Linear)	Correction Factor
11.13	100	0.1113	-19.07

Note: Duty Cycle Correction Factor=20log(x). Where: x is Duty Cycle



Ton-1

Receiver Spe	ectrum 🗵				
Ref Level 67.00 dBµ		RBW 1 MHz			
Att Od SGLPS PA	B 👄 SWT 35 ms 👄	VBW 3 MHZ	Input 1 AC		
1Pk Clrw@2Pk Clrw					
			D2[1]		-15.70 dB
	- <u>-</u>	···		П	31. <mark>46</mark> 50 ms
50 dBuV			M1[1]		60.09 dBµV
50 авµv					<mark>770.0 μ</mark> ε
40 d6µV					
30 dBµV					
20 deuv					
to deux datable to a	Marh Bold to And Maley And	- Indates and the second second second	hand the second state of the second states of the s	the harm for the second second second	hahahahaninthan <mark>aku birrati</mark> t
			· · · · · · · · · · · ·		
0 dBµV					
-10 dBµV					
-10 0000					
-20 dBµV					
-30 dBµV					
CF 2.41 GHz		1001 pt	5		3.5 ms/
/larker Type   Ref   Trc	X-value	Y-value	Function	<b></b>	ction Result
Type Ref Trc M1 1	770.0 μs	60.09 dBµV	Function	Fun	LUUTI RESUL
D1 M1 1	840.0 µs	0.17 dB			
D2 M1 1	31.465 ms	-15.70 dB			
			Ready		30.09.2019 15:07:37

Date: 30.SEP.2019 15:07:37

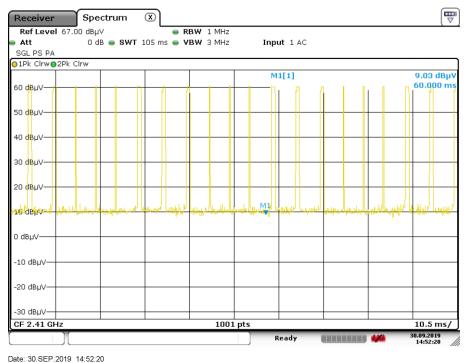
Ton-2



Date: 30.SEP.2019 15:10:51







Note: All test mode has been tested, only the worst data record in the report.



## 6.2. 20 dB BANDWIDTH AND 99% OCCUPIED BANDWIDTH

#### **LIMITS**

CFR 47 FCC Part15 (15.249) , Subpart C RSS-Gen Issue 5					
Section	Test Item	Limit	Frequency Range (MHz)		
CFR 47 FCC 15.249(d)	20dB Bandwidth	for reporting purposes only	2400-2483.5		
ISED RSS-Gen Clause 6.7 Issue 5	99% Occupied Bandwidth	For reporting purposes only.	2400-2483.5		

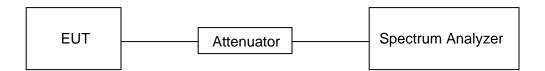
#### TEST PROCEDURE

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	1% to 5% of the occupied bandwidth
VBW	approximately 3×RBW
Trace	Max hold
Sweep	Auto couple

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

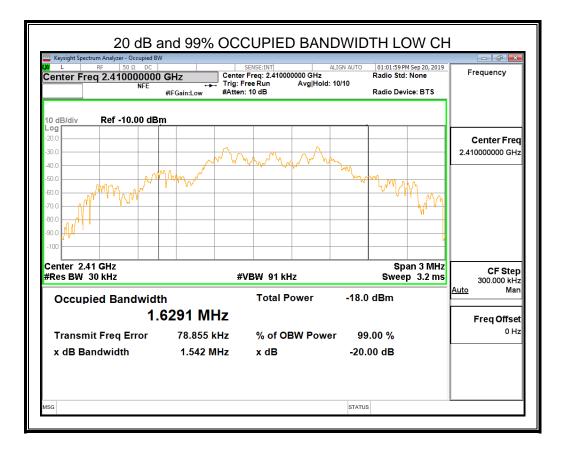
Allow the trace to stabilize and measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 20 dB and 99% relative to the maximum level measured in the fundamental emission.

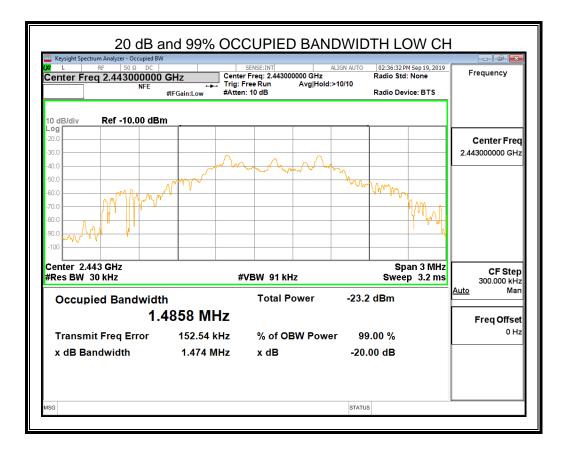
#### TEST SETUP



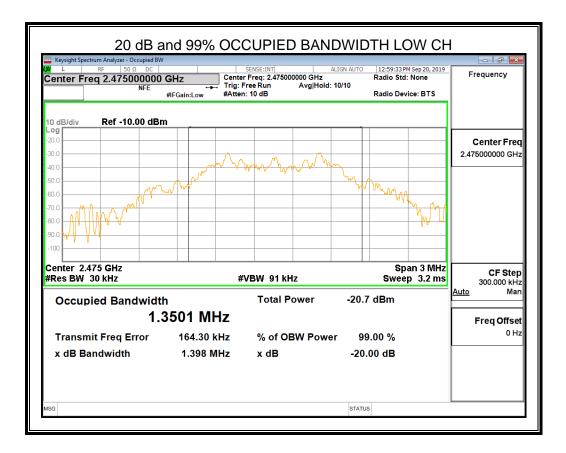


Frequency (MHz)	20dB bandwidth (MHz)	99% occupied bandwidth (MHz)	Result
2410	1.542	1.6291	PASS





Frequency (MHz)	20dB bandwidth (MHz)	99% occupied bandwidth (MHz)	Result
2475	1.398	1.3501	PASS





# 7. RADIATED TEST RESULTS

# 7.1. LIMITS AND PROCEDURE

## LIMITS

CFR 47 FCC §15.205 and §15.209

CFR 47 FCC §15.249 (a)(c)(d)(e)

ISED RSS-210 Issue 9 Clause Annex B B.10

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

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

Emissions radiated outside of the specified frequency bands below 30MHz					
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			

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## IC Restricted bands please refer to ISED RSS-GEN Clause 8.10

Table 7 – Restricted frequency bands <sup>How 1</sup>					
MHz	MHz	GHz			
0.090 - 0.110	149.9 - 150.05	9.0 - 9.2			
0.495 - 0.505	156.52475 - 156.52525	9.3 - 9.5			
2.1735 - 2.1905	156.7 - 156.9	10.6 - 12.7			
3.020 - 3.026	162.0125 - 167.17	13.25 - 13.4			
4.125 - 4.128	167.72 - 173.2	14.47 - 14.5			
4.17725 - 4.17775	240 - 285	15.35 - 16.2			
4.20725 - 4.20775	322 - 335.4	17.7 - 21.4			
5.677 - 5.683	399.9 - 410	22.01 - 23.12			
6.215 - 6.218	608 - 614	23.6 - 24.0			
6.26775 - 6.26825	960 - 1427	31.2 - 31.8			
6.31175 - 6.31225	1435 - 1626.5	36.43 - 36.5			
8.291 - 8.294	1645.5 - 1646.5	Above 38.6			
8.362 - 8.366	1660 - 1710				
8.37625 - 8.38675	1718.8 - 1722.2				
8.41425 - 8.41475	2200 - 2300				
12.29 - 12.293	2310 - 2390				
12.51975 - 12.52025	2483.5 - 2500				
12.57675 - 12.57725	2655 - 2900				
13.36 - 13.41	3260 - 3267				
16.42 - 16.423	3332 - 3339				
16.69475 - 16.69525	3345.8 - 3358				
16.80425 - 16.80475	3500 - 4400				
25.5 - 25.67	4500 - 5150				
37.5 - 38.25	5350 - 5460				
73 - 74.6	7250 - 7750				
74.8 - 75.2	8025 - 8500				
108 - 138					

Note 1: Certain frequency bands listed in table 7 and in bands above 38.6 GHz are designated for licence-exempt applications. These frequency bands and the requirements that apply to related devices are set out in the 200 and 300 series of RSSs.



#### FCC Restricted bands of operation:

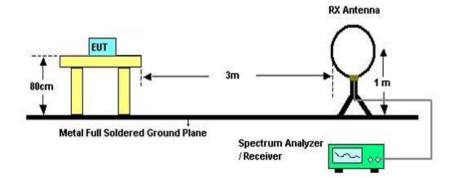
MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
<sup>1</sup> 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
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			

Note: <sup>1</sup>Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz. <sup>2</sup>Above 38.6



#### TEST SETUP AND PROCEDURE

Below 30MHz



The setting of the spectrum analyzer

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 80cm 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.

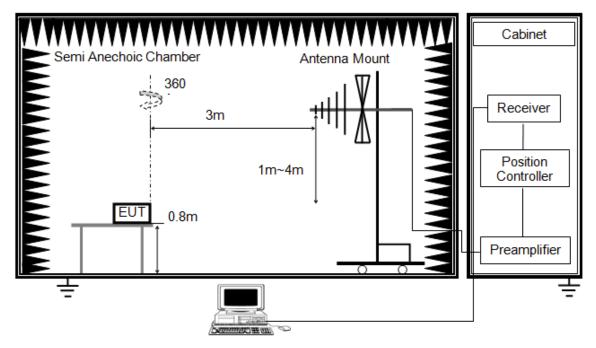
6. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the 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. Although these tests were performed other than open area test site, adequate comparison measurements were confirmed against 30m open field site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 414788.

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#### Below 1G



The setting of the spectrum analyzer

RBW	120K
VBW	300K
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.

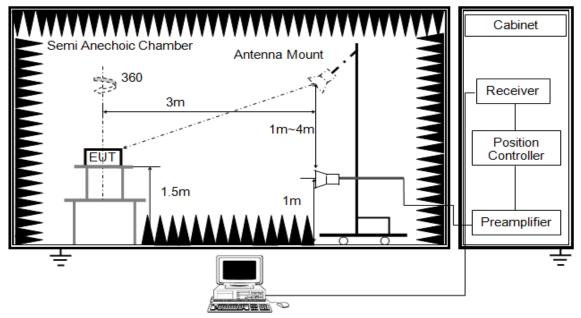
3. The EUT was placed on a turntable with 80cm above ground.

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.



#### Above 1G



The setting of the spectrum analyzer

RBW	1M
IV B W	PEAK: 3M AVG: see note 6
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 (1.5 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 80cm above ground.

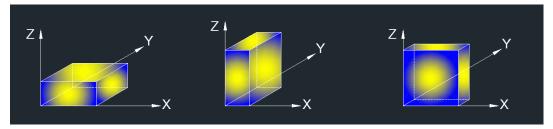
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

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. Where necessary, average emission are determined by applying the Duty Cycle Correction Factor to the peak measurements. For the Duty Cycle and Correction Factor please refer to clause 6.1.ON TIME AND DUTY CYCLE.



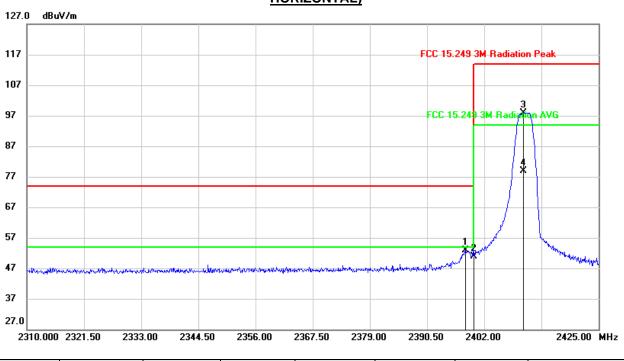
X axis, Y axis, Z axis positions:



Note 1: For all radiated test, EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report.



## 7.2. RESTRICTED BANDEDGE AND FIELD STRENGTH OF INTENTIONAL EMISSIONS



RESTRICTED BANDEDGE AND FIELD STRENGTH OF INTENTIONAL EMISSIONS (LOW CHANNEL,
HORIZONTAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2398.205	19.84	32.98	52.82	74.00	-21.18	peak
2	2400.000	17.90	32.98	50.88	74.00	-23.12	peak
3	2409.820	64.89	33.05	97.94	114.00	-16.06	peak
4	2409.820	45.82	33.05	78.87	94.00	-15.13	AVG

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

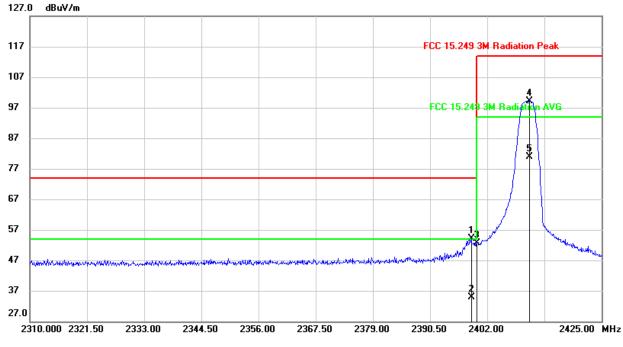
3. Peak: Peak detector.

4. AVG Result=Peak Result + Duty Correction Factor.

5. For the Duty Cycle and Correction Factor, please refer to clause 6.1.



#### RESTRICTED BANDEDGE AND FIELD STRENGTH OF INTENTIONAL EMISSIONS (LOW CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2398.780	21.07	32.98	54.05	74.00	-19.95	peak
2	2398.780	2.00	32.98	34.98	54.00	-19.02	AVG
3	2400.000	19.70	32.98	52.68	74.00	-21.32	peak
4	2410.510	65.99	33.06	99.05	114.00	-14.95	peak
5	2410.510	47.92	33.06	79.98	94.00	-13.02	AVG

Note: 1. Measurement = Reading Level + Correct Factor.

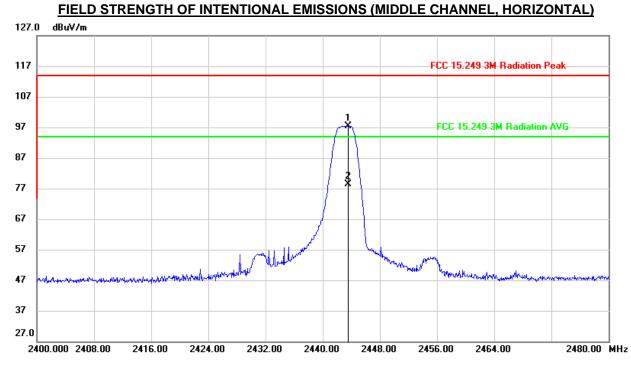
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG Result=Peak Result + Duty Correction Factor.

5. For the Duty Cycle and Correction Factor, please refer to clause 6.1.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2443.520	64.20	33.29	97.49	114.00	-16.51	peak
2	2443.520	45.13	33.29	78.42	94.00	-15.58	AVG

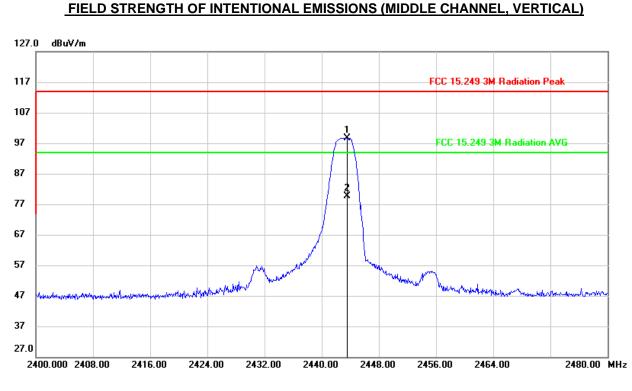
Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG Result=Peak Result + Duty Correction Factor.

5. For the Duty Cycle and Correction Factor, please refer to clause 6.1.



Na	Frequency	Deading	Corroct	Deput	Limit	Margin	Domork
No.	Frequency (MHz)	Reading (dBuV)	Correct	Result	Limit	Margin	Remark
4	(	(	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	a a a la
1	2443.600	65.43	33.30	98.73	114.00	-15.27	peak
2	2443.600	46.36	33.30	79.66	94.00	-14.34	AVG

Note: 1. Measurement = Reading Level + Correct Factor.

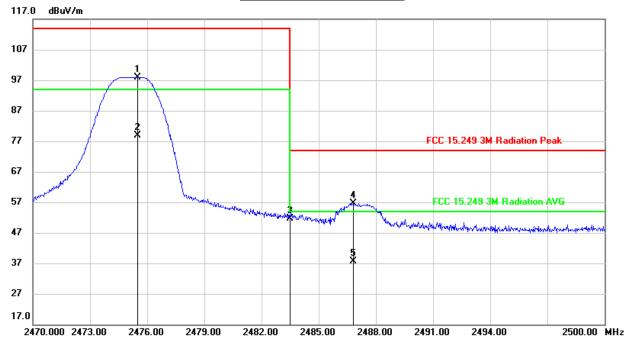
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG Result=Peak Result + Duty Correction Factor.

5. For the Duty Cycle and Correction Factor, please refer to clause 6.1.





#### RESTRICTED BANDEDGE AND FIELD STRENGTH OF INTENTIONAL EMISSIONS (HIGH CHANNEL, HORIZONTAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2475.490	64.40	33.53	97.93	114.00	-16.07	peak
2	2475.490	45.33	33.53	78.86	94.00	-15.14	AVG
3	2483.500	17.94	33.58	51.52	74.00	-22.48	peak
4	2486.830	23.09	33.61	56.70	74.00	-17.30	peak
5	2486.830	4.02	33.61	37.63	54.00	-16.37	AVG

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG Result=Peak Result + Duty Correction Factor.

5. For the Duty Cycle and Correction Factor, please refer to clause 6.1.



#### CHANNEL, VERTICAL) 117.0 dBuV/m 107 97 87 77 FCC 15.249 3M Radiation Peak 67 57 FCC 15.249 3M Radiation AVG where where and the second and the second and the second 47 37 27 17.0 2470.000 2473.00 2476.00 2479.00 2482.00 2485.00 2488.00 2491.00 2494.00 2500.00 MHz

**RESTRICTED BANDEDGE AND FIELD STRENGTH OF INTENTIONAL EMISSIONS (HIGH** 

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2475.460	65.83	33.53	99.36	114.00	-14.64	peak
2	2475.460	46.76	33.53	80.29	94.00	-13.71	AVG
3	2483.500	20.00	33.58	53.58	74.00	-20.42	peak
4	2487.310	24.38	33.61	57.99	74.00	-16.01	peak
5	2487.310	5.31	33.61	38.92	54.00	-15.08	AVG

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

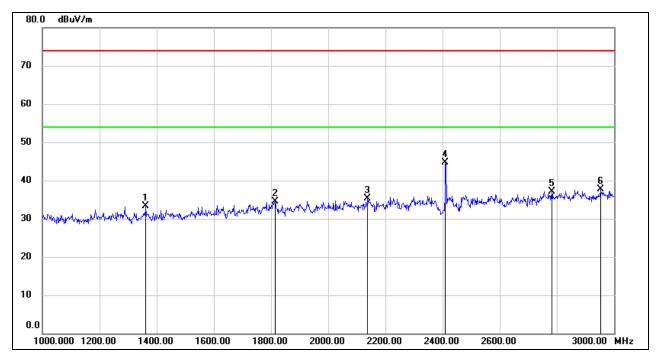
3. Peak: Peak detector.

4. AVG Result=Peak Result + Duty Correction Factor.

5. For the Duty Cycle and Correction Factor, please refer to clause 6.1.



# 7.3. SPURIOUS EMISSIONS (1~3GHz)



### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1362.000	45.93	-12.60	33.33	74.00	-40.67	peak
2	1814.000	44.58	-10.12	34.46	74.00	-39.54	peak
3	2138.000	44.52	-9.12	35.40	74.00	-38.60	peak
4	2410.000	52.60	-7.88	44.72	/	/	fundamental
5	2782.000	43.47	-6.27	37.20	74.00	-36.80	peak
6	2952.000	43.09	-5.39	37.70	74.00	-36.30	peak

Note: 1. Peak Result = Reading Level + Correct Factor.

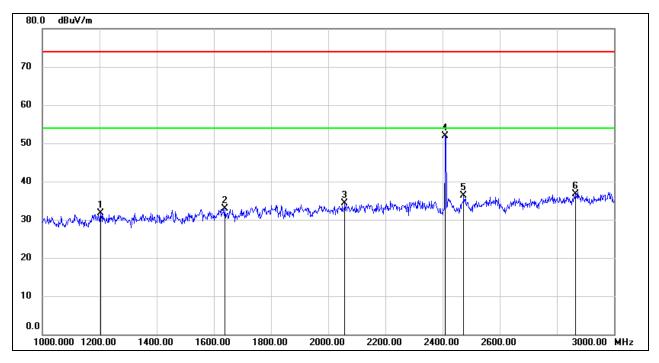
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Filter losses were only considered in then spurious frequency bands and the authorized band was not corrected for BRF losses.



## HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1204.000	44.53	-12.90	31.63	74.00	-42.37	peak
2	1638.000	44.31	-11.42	32.89	74.00	-41.11	peak
3	2058.000	43.86	-9.61	34.25	74.00	-39.75	peak
4	2410.000	59.82	-7.88	51.94	/	/	fundamental
5	2474.000	43.67	-7.43	36.24	74.00	-37.76	peak
6	2866.000	42.43	-5.71	36.72	74.00	-37.28	peak

Note: 1. Peak Result = Reading Level + Correct Factor.

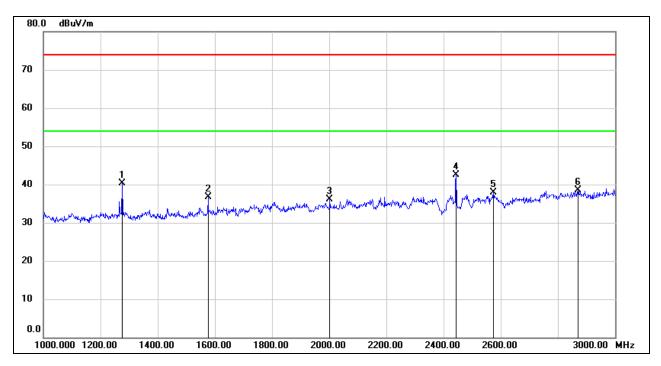
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Filter losses were only considered in then spurious frequency bands and the authorized band was not corrected for BRF losses.







No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1276.000	52.96	-12.66	40.30	74.00	-33.70	peak
2	1576.000	48.47	-11.81	36.66	74.00	-37.34	peak
3	2002.000	46.14	-9.99	36.15	74.00	-37.85	peak
4	2443.000	50.25	-7.65	42.60	/	/	fundamental
5	2574.000	45.62	-7.62	38.00	74.00	-36.00	peak
6	2870.000	44.27	-5.69	38.58	74.00	-35.42	peak

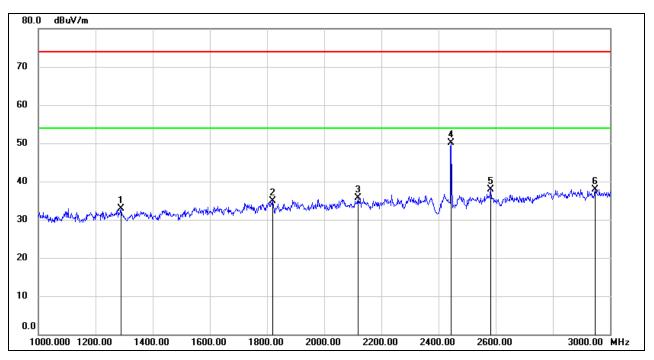
Note: 1. Peak Result = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Filter losses were only considered in then spurious frequency bands and the authorized band was not corrected for BRF losses.





## HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

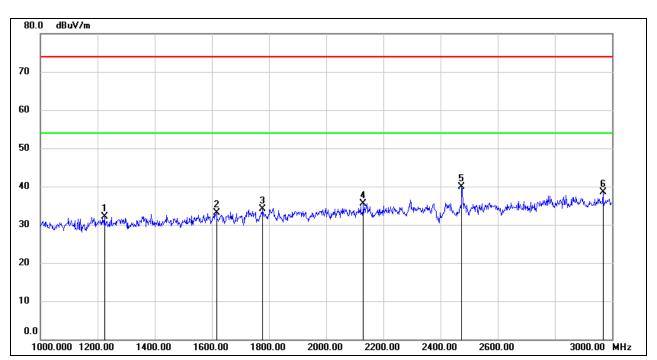
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1288.000	45.52	-12.62	32.90	74.00	-41.10	peak
2	1820.000	45.01	-10.11	34.90	74.00	-39.10	peak
3	2118.000	44.92	-9.22	35.70	74.00	-38.30	peak
4	2443.000	57.77	-7.65	50.12	/	/	fundamental
5	2582.000	45.49	-7.67	37.82	74.00	-36.18	peak
6	2948.000	43.32	-5.41	37.91	74.00	-36.09	peak

Note: 1. Peak Result = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Filter losses were only considered in then spurious frequency bands and the authorized band was not corrected for BRF losses.



#### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1224.000	44.86	-12.84	32.02	74.00	-41.98	peak
2	1616.000	44.66	-11.53	33.13	74.00	-40.87	peak
3	1778.000	44.35	-10.33	34.02	74.00	-39.98	peak
4	2130.000	44.67	-9.17	35.50	74.00	-38.50	peak
5	2475.000	47.30	-7.43	39.87	/	/	fundamental
6	2968.000	43.92	-5.36	38.56	74.00	-35.44	peak

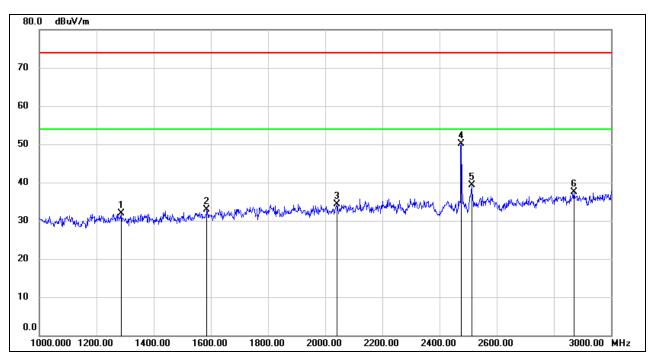
Note: 1. Peak Result = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Filter losses were only considered in then spurious frequency bands and the authorized band was not corrected for BRF losses.





#### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1286.000	44.59	-12.63	31.96	74.00	-42.04	peak
2	1586.000	44.62	-11.72	32.90	74.00	-41.10	peak
3	2042.000	44.04	-9.71	34.33	74.00	-39.67	peak
4	2475.000	57.43	-7.41	50.02	/	/	fundamental
5	2512.000	46.62	-7.31	39.31	74.00	-34.69	peak
6	2870.000	43.19	-5.69	37.50	74.00	-36.50	peak

Note: 1. Peak Result = Reading Level + Correct Factor.

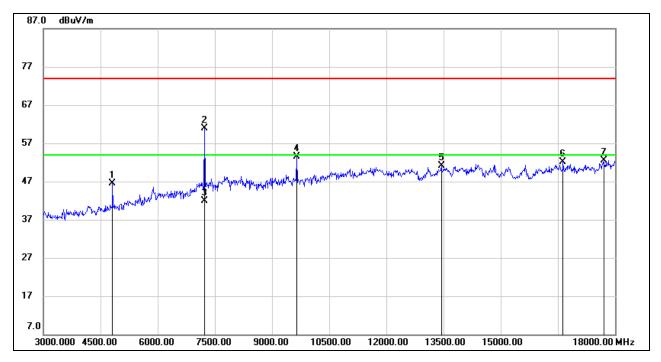
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Filter losses were only considered in then spurious frequency bands and the authorized band was not corrected for BRF losses.



## 7.4. SPURIOUS EMISSIONS (3~18GHz)



#### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4815.000	46.58	-0.10	46.48	74.00	-27.52	peak
2	7230.000	53.81	7.13	60.94	74.00	-13.06	peak
3	7230.000	34.74	7.13	41.87	54.00	-12.13	AVG
4	9645.000	42.81	10.61	53.42	74.00	-20.58	peak
5	13440.000	34.78	16.27	51.05	74.00	-22.95	peak
6	16635.000	32.32	19.88	52.20	74.00	-21.80	peak
7	17700.000	29.94	22.53	52.47	74.00	-21.53	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

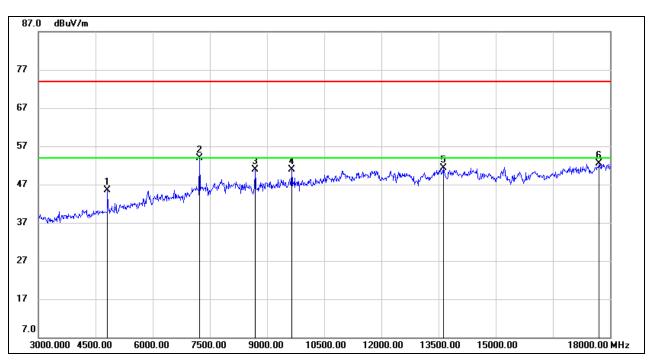
3. Peak: Peak detector.

4. AVG Result=Peak Result + Duty Cycle Correction Factor.

5. For the Duty Cycle and Correction Factor, please refer to clause 6.1.

6. High pass filter was only considered in then spurious frequency bands and the authorized band was not corrected for BRF losses.





#### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4815.000	45.70	-0.10	45.60	74.00	-28.40	peak
2	7230.000	46.71	7.13	53.84	74.00	-20.16	peak
3	8685.000	42.05	8.83	50.88	74.00	-23.12	peak
4	9645.000	40.34	10.61	50.95	74.00	-23.05	peak
5	13620.000	34.85	16.39	51.24	74.00	-22.76	peak
6	17715.000	29.88	22.65	52.53	74.00	-21.47	peak

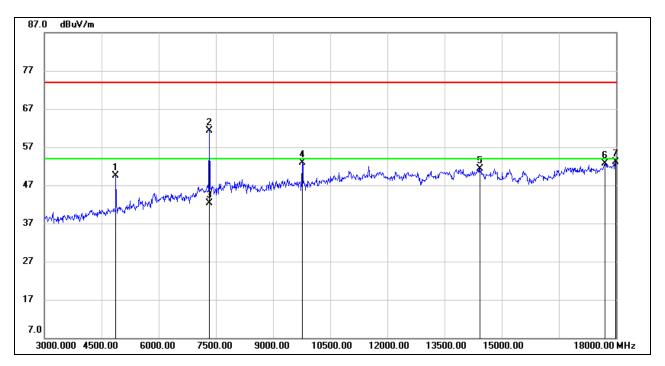
Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. High pass filter was only considered in then spurious frequency bands and the authorized band was not corrected for BRF losses.





#### HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4875.000	49.31	0.10	49.41	74.00	-24.59	peak
2	7329.000	53.92	7.48	61.40	74.00	-12.60	peak
3	7329.000	34.85	7.48	42.33	54.00	-11.67	AVG
4	9765.000	42.35	10.60	52.95	74.00	-21.05	peak
5	14430.000	34.72	16.66	51.38	74.00	-22.62	peak
6	17700.000	30.25	22.53	52.78	74.00	-21.22	peak
7	17985.000	29.65	23.39	53.04	74.00	-20.96	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

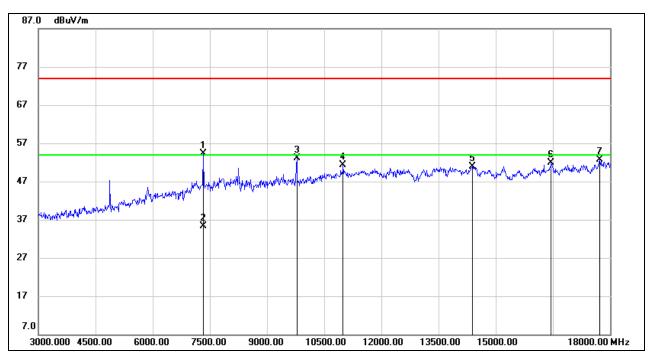
3. Peak: Peak detector.

4. AVG Result=Peak Result + Duty Cycle Correction Factor.

5. For the Duty Cycle and Correction Factor, please refer to clause 6.1.

6. High pass filter was only considered in then spurious frequency bands and the authorized band was not corrected for BRF losses.





#### HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7329.000	46.92	7.48	54.40	74.00	-19.60	peak
2	7329.000	27.85	7.48	35.33	54.00	-18.67	AVG
3	9780.000	42.40	10.62	53.02	74.00	-20.98	peak
4	10995.000	37.71	13.62	51.33	74.00	-22.67	peak
5	14385.000	34.28	16.67	50.95	74.00	-23.05	peak
6	16455.000	32.76	19.16	51.92	74.00	-22.08	peak
7	17730.000	29.84	22.78	52.62	74.00	-21.38	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

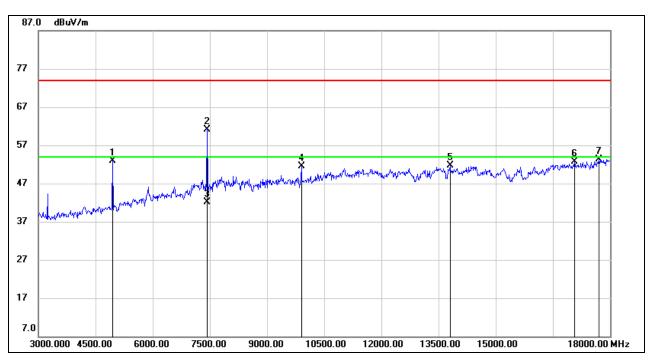
3. Peak: Peak detector.

4. AVG Result=Peak Result + Duty Cycle Correction Factor.

5. For the Duty Cycle and Correction Factor, please refer to clause 6.1.

6. High pass filter was only considered in then spurious frequency bands and the authorized band was not corrected for BRF losses.





#### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4950.000	52.42	0.40	52.82	74.00	-21.18	peak
2	7425.000	53.49	7.71	61.20	74.00	-12.80	peak
3	7425.000	34.42	7.71	42.13	54.00	-11.87	AVG
4	9900.000	40.56	10.95	51.51	74.00	-22.49	peak
5	13800.000	34.04	17.60	51.64	74.00	-22.36	peak
6	17070.000	31.74	20.99	52.73	74.00	-21.27	peak
7	17715.000	30.58	22.65	53.23	74.00	-20.77	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

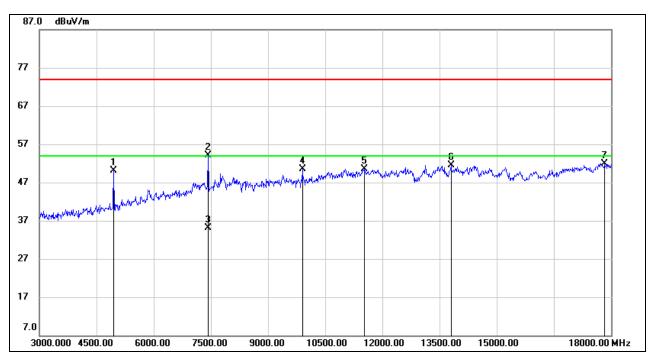
3. Peak: Peak detector.

4. AVG Result=Peak Result + Duty Cycle Correction Factor.

5. For the Duty Cycle and Correction Factor, please refer to clause 6.1.

6. High pass filter was only considered in then spurious frequency bands and the authorized band was not corrected for BRF losses.





#### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4950.000	49.69	0.40	50.09	74.00	-23.91	peak
2	7425.000	46.45	7.71	54.16	74.00	-19.84	peak
3	7425.000	27.38	7.71	35.09	54.00	-18.91	AVG
4	9900.000	39.55	10.95	50.50	74.00	-23.50	peak
5	11520.000	36.12	14.46	50.58	74.00	-23.42	peak
6	13800.000	33.97	17.60	51.57	74.00	-22.43	peak
7	17835.000	28.59	23.34	51.93	74.00	-22.07	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

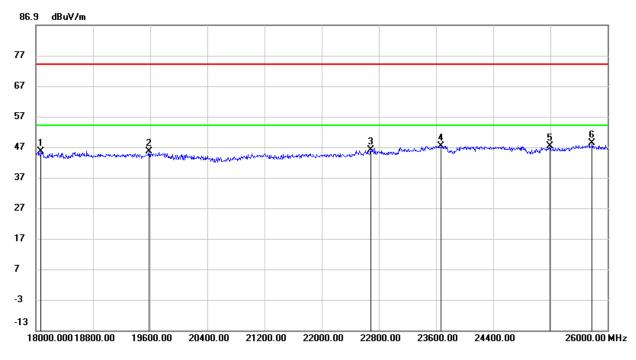
4. AVG Result=Peak Result + Duty Cycle Correction Factor.

5. For the Duty Cycle and Correction Factor, please refer to clause 6.1.

6. High pass filter was only considered in then spurious frequency bands and the authorized band was not corrected for BRF losses.

## 7.5. SPURIOUS EMISSIONS (18~26GHz)





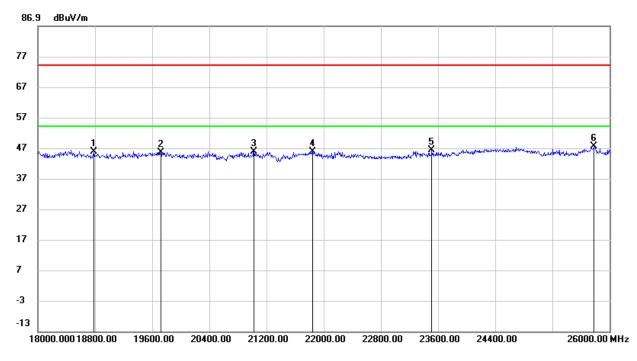
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	18072.000	49.55	-4.02	45.53	74.00	-28.47	peak
2	19584.000	50.17	-4.64	45.53	74.00	-28.47	peak
3	22688.000	51.69	-5.75	45.94	74.00	-28.06	peak
4	23672.000	51.99	-4.67	47.32	74.00	-26.68	peak
5	25192.000	48.49	-1.16	47.33	74.00	-26.67	peak
6	25784.000	49.73	-1.49	48.24	74.00	-25.76	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

#### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, WORST-CASE CONFIGURATION, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	18784.000	50.55	-4.84	45.71	74.00	-28.29	peak
2	19720.000	50.00	-4.39	45.61	74.00	-28.39	peak
3	21024.000	51.14	-5.30	45.84	74.00	-28.16	peak
4	21848.000	51.76	-5.95	45.81	74.00	-28.19	peak
5	23512.000	51.01	-4.76	46.25	74.00	-27.75	peak
6	25784.000	49.08	-1.49	47.59	74.00	-26.41	peak

Note: 1. Measurement = Reading Level + Correct Factor.

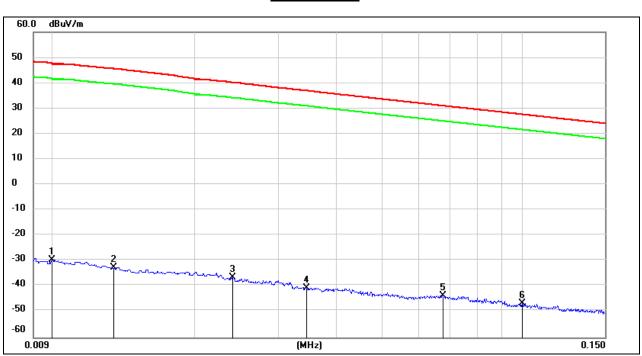
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

Note: All test mode has been tested, only the worst data record in the report.



### 7.6. SPURIOUS EMISSIONS BELOW 30M



#### SPURIOUS EMISSIONS (LOOP ANTENNA FACE ON TO THE EUT, WORST-CASE CONFIGURATION)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	0.0100	71.72	-101.40	-29.68	47.60	-77.28	peak
2	0.0134	68.73	-101.39	-32.66	45.55	-78.21	peak
3	0.0240	64.82	-101.36	-36.54	40.17	-76.71	peak
4	0.0345	60.88	-101.41	-40.53	36.94	-77.47	peak
5	0.0675	57.85	-101.56	-43.71	31.03	-74.74	peak
6	0.1000	55.17	-101.80	-46.63	27.60	-74.23	peak

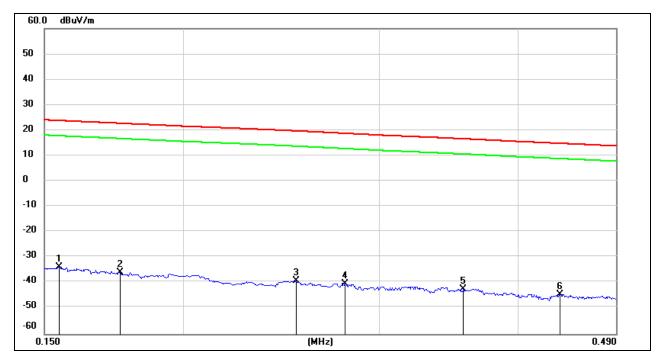
<u>9kHz~ 150kHz</u>

Note: 1. Measurement = Reading Level + Correct 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.

#### <u>150kHz ~ 490kHz</u>



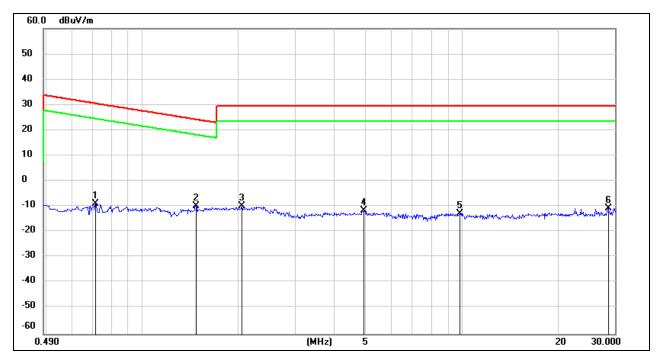
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	0.1547	67.81	-101.65	-33.84	23.82	-57.66	peak
2	0.1756	65.84	-101.68	-35.84	22.72	-58.56	peak
3	0.2530	62.59	-101.80	-39.21	19.71	-58.92	peak
4	0.2796	61.41	-101.83	-40.42	18.78	-59.20	peak
5	0.3573	59.58	-101.91	-42.33	16.63	-58.96	peak
6	0.4364	57.36	-101.99	-44.63	14.85	-59.48	peak

Note: 1. Measurement = Reading Level + Correct 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.

#### <u>490kHz ~ 30MHz</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	0.7125	53.32	-62.12	-8.80	30.55	-39.35	peak
2	1.4700	52.39	-62.05	-9.66	24.26	-33.92	peak
3	2.0430	51.95	-61.82	-9.87	29.54	-39.41	peak
4	4.9165	49.88	-61.48	-11.60	29.54	-41.14	peak
5	9.8152	48.08	-60.82	-12.74	29.54	-42.28	peak
6	28.6128	49.37	-60.10	-10.73	29.54	-40.27	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.

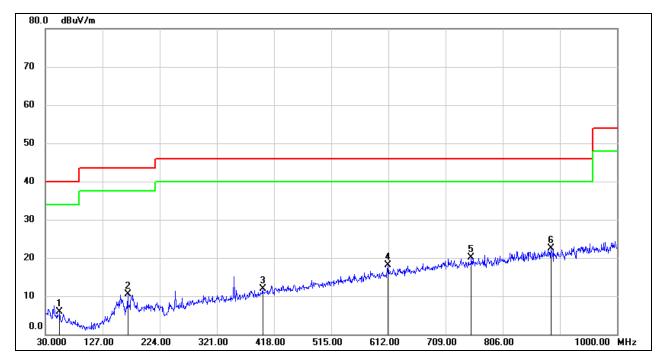
3. All 3 polarizations (Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.

Note: All the modes have been tested, only the worst data record in the report.



### 7.7. SPURIOUS EMISSIONS 30MHz - 1GHz





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	54.2500	24.66	-18.78	5.88	40.00	-34.12	QP
2	169.6799	27.36	-16.85	10.51	43.50	-32.99	QP
3	398.6000	24.29	-12.44	11.85	46.00	-34.15	QP
4	611.0300	26.37	-8.25	18.12	46.00	-27.88	QP
5	752.6500	26.18	-6.02	20.16	46.00	-25.84	QP
6	887.4800	26.67	-4.20	22.47	46.00	-23.53	QP

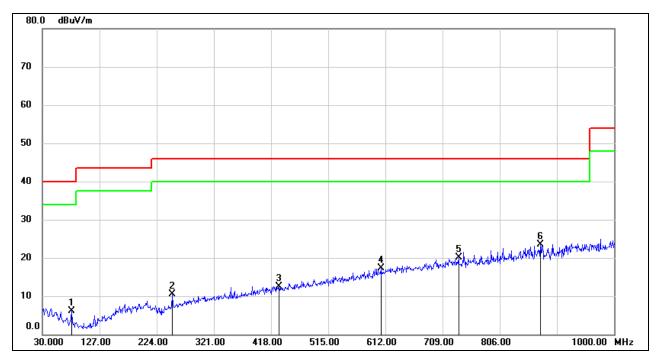
Note: 1. Result Level = Read Level + Correct Factor.

2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.



#### SPURIOUS EMISSIONS (HIGH CHANNEL, WORST-CASE CONFIGURATION, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	79.4700	26.55	-20.48	6.07	40.00	-33.93	QP
2	250.1900	26.62	-16.12	10.50	46.00	-35.50	QP
3	431.5800	24.26	-11.72	12.54	46.00	-33.46	QP
4	604.2400	25.75	-8.38	17.37	46.00	-28.63	QP
5	736.1599	26.15	-6.14	20.01	46.00	-25.99	QP
6	874.8700	27.86	-4.34	23.52	46.00	-22.48	QP

Note: 1. Result Level = Read Level + Correct Factor.

2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto

Note: All test mode has been tested, only the worst data record in the report.

# 8. 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.

#### Please refer to FCC §15.247(b)(4)

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

### <u>RESULTS</u>

Complies

# **END OF REPORT**