

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

#### **TEST REPORT**

For

**TOY Transmitter** 

**MODEL NUMBER: G21HHNRR** 

FCC ID: G6DG21HHNRR

IC: 9650A-G21HHNRR

REPORT NUMBER: 4789024237.1-1

**ISSUE DATE: June 12, 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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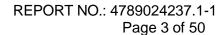
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# **Revision History**

Rev.	Issue Date	Revisions	Revised By
V0	06/12/2019	Initial Issue	





Summary of Test Results **Test Results** Test Items IC Rules Clause 20dB Bandwidth and 99% CFR 47 FCC 15.249(d) 1 Pass Occupied Bandwidth ISED RSS-Gen Clause 6.7 CFR 47 FCC §15.249 (a)(d)(e) ISED RSS-210 Clause Annex B B.10 CFR 47 FCC §15.205 and §15.209 2 Radiated emission Pass **RSS-GEN Clause 8.9 RSS-GEN Clause 8.10** FCC Part 15.203 3 Antenna Requirement **Pass** ISED RSS-Gen Clause 8.3



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# 1. ATTESTATION OF TEST RESULTS

**Applicant Information** 

Company Name: NEW BRIGHT INDUSTRIAL CO., LTD

Address: 9/F., NEW BRIGHT BUILDING, 11 SHEUNG YUET ROAD,

KOWLOON BAY, KOWLOON, HONG KONG.

**Manufacturer Information** 

Company Name: NEW BRIGHT INDUSTRIAL CO., LTD

Address: 9/F., NEW BRIGHT BUILDING, 11 SHEUNG YUET ROAD,

KOWLOON BAY, KOWLOON, HONG KONG.

**EUT Description** 

EUT Name: TOY Transmitter Model: G21HHNRR

Brand Name: /

Sample Status: Normal

Sample Received Date: May 13, 2019

Date of Tested: May 24, 2019 ~ June 12, 2019

APPLICABLE STANDARDS					
STANDARD 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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Approved By:

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Checked By:

Laboratory Leader

Stephen Guo

Laboratory Manager



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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 C63.10-2014, ISED RSS-210 Issue 9 and RSS-GEN Issue 5.

### 3. FACILITIES AND ACCREDITATION

	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.  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 Delcaration of Conformity (DoC) and Certification rules
	IC(Company No.: 21320)
Accreditation	,
Certificate	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
	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:

- 1. 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
- 2. 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.



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## 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	
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)	
	1 ( ' ( ) ( )	

Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

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# 5. EQUIPMENT UNDER TEST

## 5.1. DESCRIPTION OF EUT

EUT Name	TOY Transmitter				
EUT Description	The EUT is a wireless remote controller.				
Model	G21HHNRR				
Product Description	Operation Frequency 2410 MHz ~ 2475 MHz				
Product Description	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	66[66]	96.76

# 5.3. CHANNEL LIST

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



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### 5.4. DESCRIPTION OF AVAILABLE ANTENNAS

Ant.	Frequency (MHz)	Antenna Type	Antenna Gain (dBi)
1	2410 ~ 2475	Line Antenna	0

Test Mode Transmit and Receive Mode		Description
GFSK	⊠1TX, 1RX	Antenna 1 can be used as transmitting/receiving antenna.

#### 5.5. TEST CHANNEL CONFIGURATION

Test Mode	Test Channel	Frequency	
GFSK	CH 1, CH 34, CH 66	2410MHz, 2443MHz, 2475MHz	

#### 5.6. THE WORSE CASE POWER SETTING PARAMETER

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

#### 5.7. TEST ENVIRONMENT

Environment Parameter	Selected Values During Tests			
Relative Humidity	55	55 ~ 65%		
Atmospheric Pressure:	1025Pa			
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
1	/	/	1	/

#### **I/O CABLES**

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

#### **ACCESSORY**

Item	Equipment	Mfr/Brand	Model/Type No.	Specification	Series No.
1	/	/	/	/	/

#### **TEST SETUP**

The EUT have the engineer mode inside.

#### **SETUP DIAGRAM FOR TEST**

EUT

Note: New battery was used during all tests.



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# 5.9. MEASURING INSTRUMENT AND SOFTWARE USED

	Radiated Emissions							
			Ins	strument				
Used	Equipment	Manufacturer	Мо	del No.	Se	rial No.	Last Cal.	Next Cal.
$\overline{\checkmark}$	MXE EMI Receiver	KESIGHT	N	9038A	MY5	6400036	Dec.10,2018	Dec.10,2019
V	Hybrid Log Periodic Antenna	TDK	HLF	P-3003C	1;	30960	Sep.17,2018	Sep.17,2021
$\checkmark$	Preamplifier	HP	8	447D	2944	4A09099	Dec.10,2018	Dec.10,2019
V	EMI Measurement Receiver	R&S	E	SR26	10	01377	Dec.10,2018	Dec.10,2019
$\checkmark$	Horn Antenna	TDK	HR	N-0118	1:	30939	Sep.17,2018	Sep.17,2021
V	High Gain Horn Antenna	Schwarzbeck	BBI	HA-9170		691	Aug.18,2018	Aug.18,2021
V	Preamplifier	TDK	PA-	02-0118		S-305- 0066	Dec.10,2018	Dec.10,2019
V	Preamplifier	TDK	P	A-02-2		S-307- 0003	Dec.10,2018	Dec.10,2019
V	Loop antenna	Schwarzbeck	1	519B	0	8000	Jan.17, 2019	Jan.17,2022
			S	oftware				
Used				Manufact	urer	1	Name	Version
V	Test Software distur			Farac	ł	EZ-EMC		Ver. UL-3A1
				instrumer				
Used	Equipment	Manufacturer	Мо	del No.	Se	rial No.	Last Cal.	Next Cal.
$\overline{\checkmark}$	Spectrum Analyzer	Keysight	N	9030A	MY5	5410512	Dec.10,2018	Dec.10,2019
V	Spectrum Analyzer	R&S	F	SV40	10	01117	Dec.10,2018	Dec.10,2019
V	Band Reject Filter	Wainwright	235 24	RCJV8- 60-2400- 483.5- 3.5-40SS		4	Dec.10,2018	Dec.10,2019
	High Pass Filter	Wi	270	HKX10- 00-3000- 00-40SS		23	Dec.10,2018	Dec.10,2019



# 6.1. ON TIME AND DUTY CYCLE

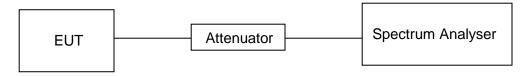
#### **LIMITS**

None; for reporting purposes only

#### **PROCEDURE**

KDB 558074 Zero-Span Spectrum Analyzer Method

#### **TEST SETUP**



#### **RESULTS**

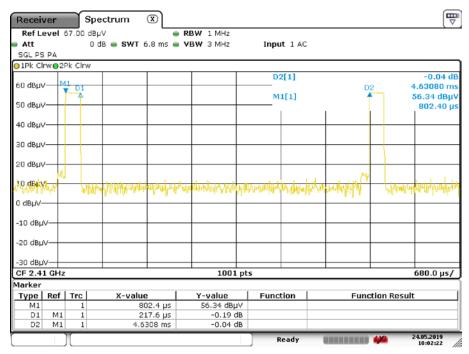
Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (db)
GFSK	5.0	100	0.05	5.0	-26.02

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

Where: x is Duty Cycle

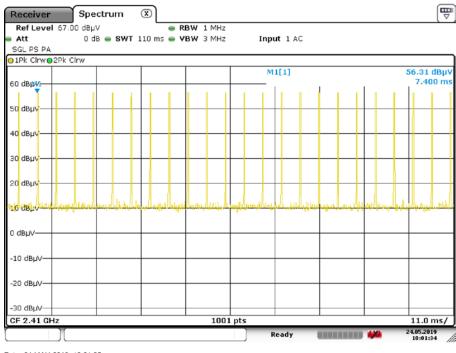


#### ON TIME AND DUTY CYCLE MID CH PLOT



Date: 24.MAY.2019 10:02:23

#### ON TIME AND DUTY CYCLE MID CH PLOT-2



Date: 24.MAY.2019 10:01:35

Note: All the mode and buttons had been tested, but only the worst duty cycle recorded in the report.



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#### 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 Rang (MHz)				
CFR 47 FCC 15.249(d)	FR 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	

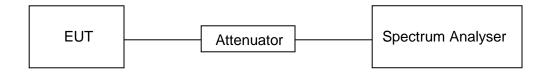
#### **TEST PROCEDURE**

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

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

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 relative to the maximum level measured in the fundamental emission.

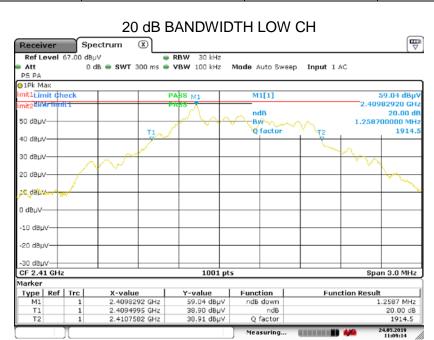
#### **TEST SETUP**



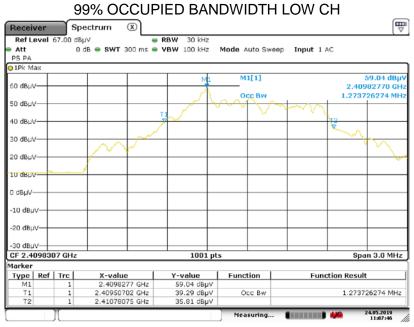


#### **RESULTS**

Frequency	20dB bandwidth	99% bandwidth	Result
(MHz)	(MHz)	(MHz)	
2410	1.2587	1.2737	PASS



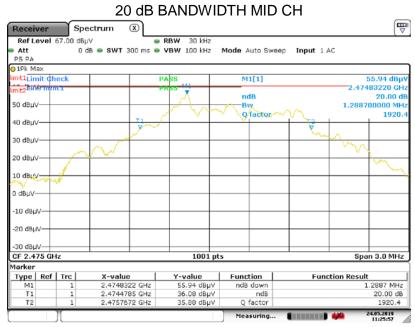
Date: 24.MAY.2019 11:09:15



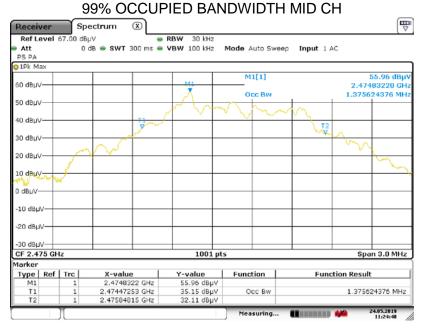
Date: 24.MAY.2019 11:07:46



Frequency	20dB bandwidth	99% bandwidth	Result
(MHz)	(MHz)	(MHz)	
2443	1.2887	1.3756	PASS



Date: 24.MAY.2019 11:25:58

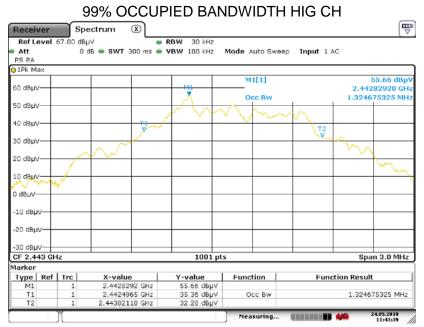




Frequency<br/>(MHz)20dB bandwidth<br/>(MHz)99% bandwidth<br/>(MHz)Result24751.26171.3247PASS

#### 20 dB BANDWIDTH HIG CH Spectrum Receiver RBW Ref Level 67.00 dBuV 0 dB - SWT 300 ms - VBW 100 kHz Att Mode Auto Sweep Input 1 AC PS PA 1Pk Max 55.70 dBµ\ M1[1] nit2BuVe mrnts 2.44282920 GH 20.00 di ndB 50 dBuV 1.261700000 MH Q facto 1936. 40 dBuV 30 dBuV 20 dBuV 10 dBuV 0 dBuV -10 dBµV--20 dBµV -30 dBµV-Span 3.0 MHz CF 2.443 GHz 1001 pts Marker Type | Ref | Trc | Function X-value Y-value **Function Result** 2.4428292 GHz 2.4424995 GHz 55.70 dBµV 35.79 dBµV ndB down ndB 1.2617 MHz 20.00 dB Q factor 2.4437612 GHz 35.96 dBµV 1936.1

Date: 24.MAY.2019 11:45:34





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# 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)(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	Field strength of Harmonics	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	n) at 3 m		
(1411.12)	(a v/m) at o m	Quasi	i-Peak		
30 - 88	100	40			
88 - 216	150	43.5			
216 - 960	200	46			
Above 960	500	54			
Above 1000	500	Peak	Average		
Above 1000	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					

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



Table 7 – Restricted frequency bands <sup>koss 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:

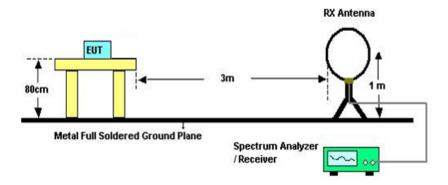
MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
<sup>1</sup> 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
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:  $^1$ Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.  $^2$ Above 38.6c



#### TEST SETUP AND PROCEDURE

Below 30MHz



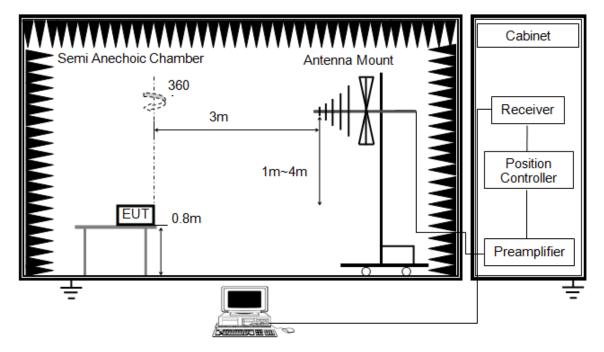
The setting of the spectrum analyser

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 and vertical 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 variable 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.



Below 1G



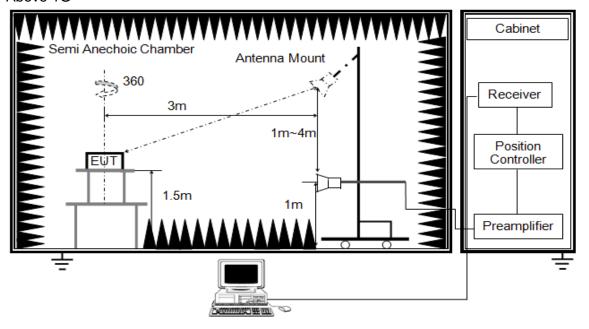
The setting of the spectrum analyser

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



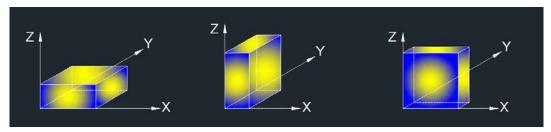
#### The setting of the spectrum analyser

RBW	1M
IVBW	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:



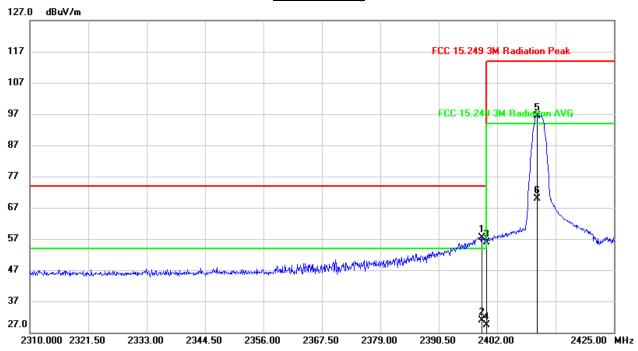
Note 1: For all radiated test, EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report.



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# 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	2399.010	24.45	32.98	57.43	74.00	-16.57	peak
2	2399.010	24.45	32.98	31.41	54.00	-22.59	AVG
3	2400.000	22.88	32.98	55.86	74.00	-18.14	peak
4	2400.000	22.88	32.98	29.84	54.00	-24.16	AVG
5	2409.820	63.37	33.05	96.42	114.00	-17.58	peak
6	2409.820	63.37	33.05	70.40	94.00	-23.60	AVG

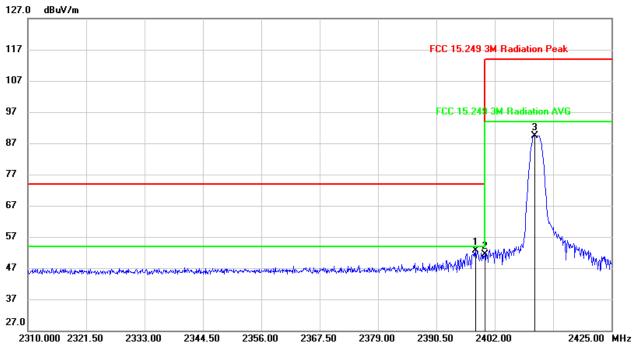
Note: 1. Measurement = Reading Level + Correct Factor.

- 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.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



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# $\frac{\text{RESTRICTED BANDEDGE AND FIELD STRENGTH OF INTENTIONAL EMISSIONS (LOW CHANNEL,}}{\text{VERTICAL})}$



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2398.205	19.68	32.98	52.66	74.00	-21.34	peak
2	2400.000	18.49	32.98	51.47	74.00	-22.53	peak
3	2409.820	56.38	33.05	89.43	114.00	-24.57	peak

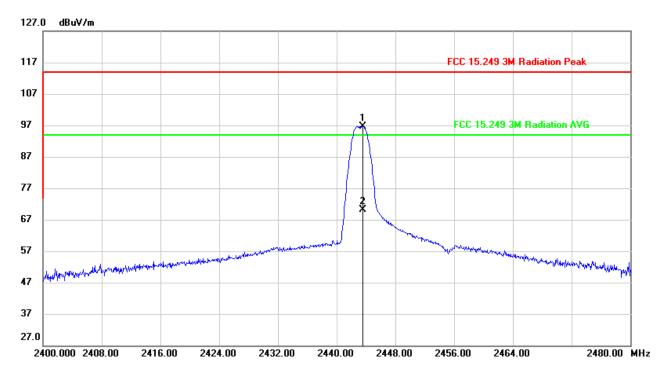
Note: 1. Peak Result = Reading Level + Correct Factor.

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

3. Peak: Peak detector.



#### FIELD STRENGTH OF INTENTIONAL EMISSIONS (MIDDLE CHANNEL, HORIZONTAL)



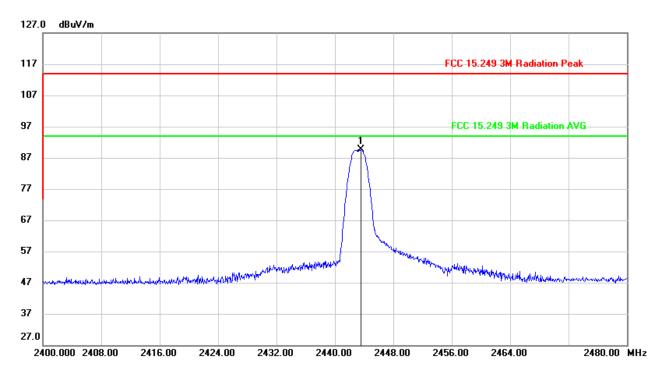
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2443.520	63.41	33.29	96.70	114.00	-17.30	peak
2	2443.520	63.41	33.29	70.68	94.00	-23.32	AVG

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.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



#### FIELD STRENGTH OF INTENTIONAL EMISSIONS (MIDDLE CHANNEL, VERTICAL)

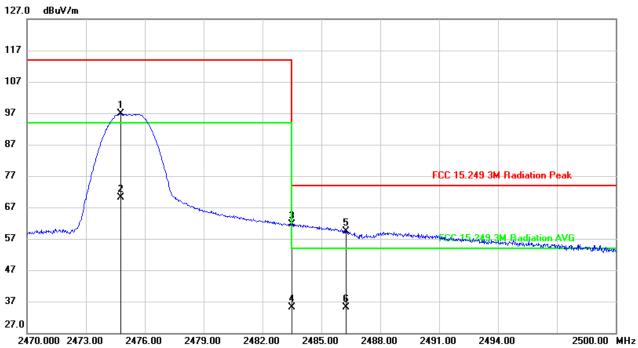


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2443.600	56.41	33.30	89.71	114.00	-24.29	peak

- 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.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



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



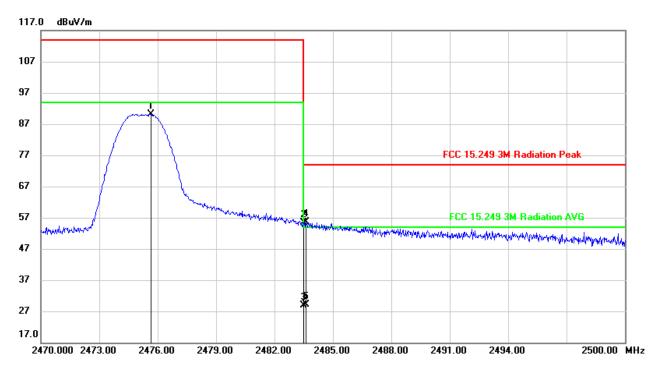
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2474.770	63.25	33.51	96.76	114.00	-17.24	peak
2	2474.770	63.25	33.51	70.74	94.00	-23.26	AVG
3	2483.500	28.12	33.58	61.70	74.00	-12.30	peak
4	2483.500	28.12	33.58	35.68	54.00	-18.32	AVG
5	2486.260	25.72	33.61	59.33	74.00	-14.67	peak
6	2486.260	25.72	33.61	33.31	54.00	-20.69	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.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



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



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2475.640	56.56	33.53	90.09	114.00	-23.91	peak
2	2483.500	21.78	33.58	55.36	74.00	-18.64	peak
3	2483.500	21.78	33.58	29.34	54.00	-24.66	AVG
4	2483.620	22.00	33.58	55.58	74.00	-18.42	peak
5	2483.620	22.00	33.58	29.56	54.00	-24.44	AVG

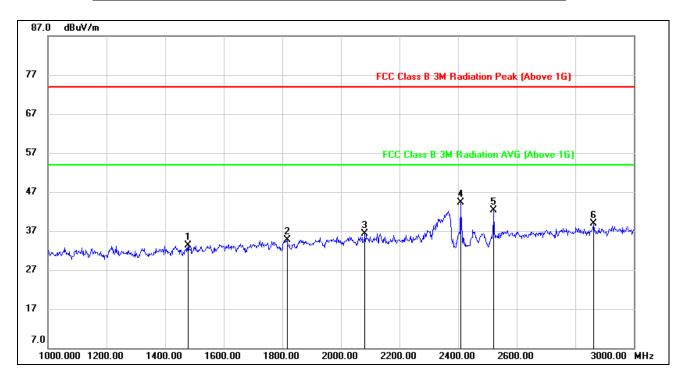
Note: 1. Measurement = Reading Level + Correct Factor.

- 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.
- 6. 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 (1~3GHz)

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

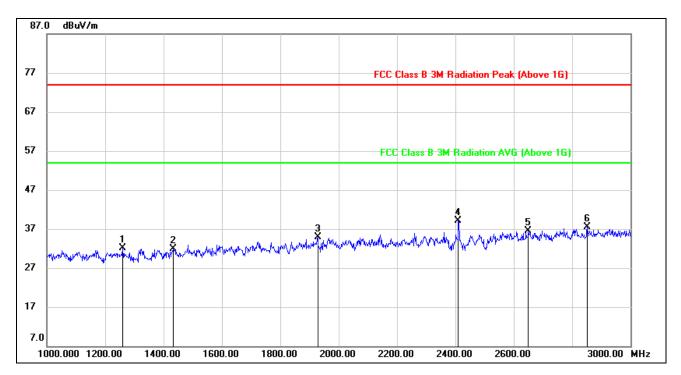


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1478.000	45.72	-12.42	33.30	74.00	-40.70	peak
2	1816.000	45.21	-10.54	34.67	74.00	-39.33	peak
3	2082.000	45.56	-9.31	36.25	74.00	-37.75	peak
4	2408.000	52.21	-7.83	44.38	74.00	-29.62	peak
5	2522.000	49.76	-7.44	42.32	74.00	-31.68	peak
6	2862.000	44.53	-5.62	38.91	74.00	-35.09	peak

- 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.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



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



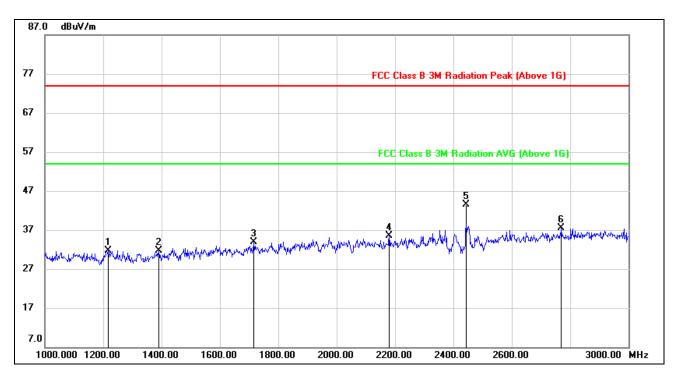
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1260.000	45.31	-13.22	32.09	74.00	-41.91	peak
2	1434.000	44.57	-12.58	31.99	74.00	-42.01	peak
3	1928.000	44.85	-9.89	34.96	74.00	-39.04	peak
4	2410.000	46.90	-7.82	39.08	74.00	-34.92	peak
5	2650.000	43.27	-6.83	36.44	74.00	-37.56	peak
6	2852.000	43.18	-5.68	37.50	74.00	-36.50	peak

- 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.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



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HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

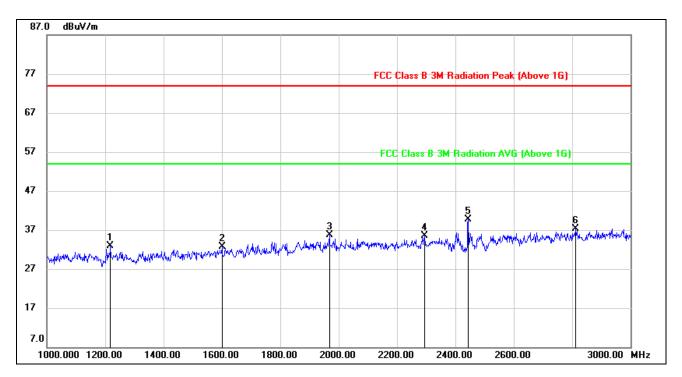


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1218.000	45.06	-13.32	31.74	74.00	-42.26	peak
2	1390.000	44.51	-12.74	31.77	74.00	-42.23	peak
3	1716.000	44.94	-11.04	33.90	74.00	-40.10	peak
4	2180.000	44.51	-9.01	35.50	74.00	-38.50	peak
5	2444.000	51.23	-7.72	43.51	74.00	-30.49	peak
6	2770.000	43.63	-6.22	37.41	74.00	-36.59	peak

- 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.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



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

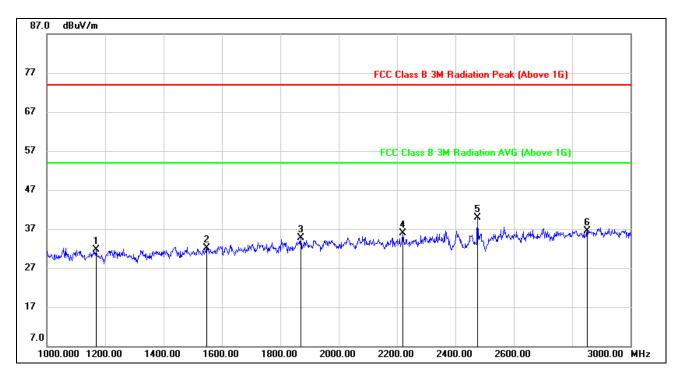


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1218.000	46.13	-13.32	32.81	74.00	-41.19	peak
2	1600.000	44.52	-11.74	32.78	74.00	-41.22	peak
3	1968.000	45.55	-9.78	35.77	74.00	-38.23	peak
4	2294.000	43.66	-8.20	35.46	74.00	-38.54	peak
5	2444.000	47.34	-7.72	39.62	74.00	-34.38	peak
6	2812.000	43.38	-5.98	37.40	74.00	-36.60	peak

- 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.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



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

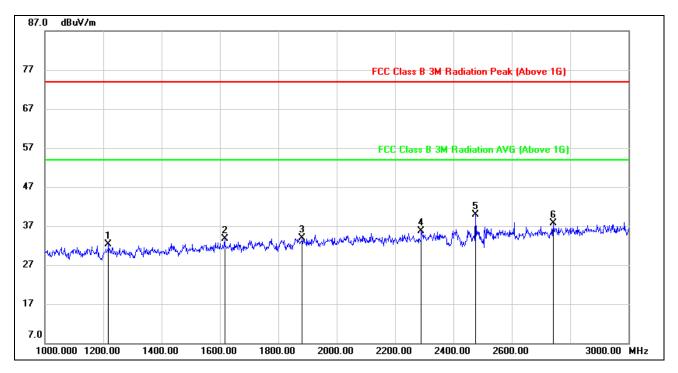


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1168.000	45.14	-13.49	31.65	74.00	-42.35	peak
2	1548.000	44.23	-12.05	32.18	74.00	-41.82	peak
3	1870.000	44.85	-10.18	34.67	74.00	-39.33	peak
4	2220.000	44.63	-8.78	35.85	74.00	-38.15	peak
5	2476.000	47.60	-7.61	39.99	74.00	-34.01	peak
6	2852.000	42.28	-5.68	36.60	74.00	-37.40	peak

- 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.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



#### 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	1218.000	45.72	-13.32	32.40	74.00	-41.60	peak
2	1616.000	45.42	-11.64	33.78	74.00	-40.22	peak
3	1882.000	44.08	-10.10	33.98	74.00	-40.02	peak
4	2290.000	43.86	-8.23	35.63	74.00	-38.37	peak
5	2476.000	47.51	-7.61	39.90	74.00	-34.10	peak
6	2742.000	43.97	-6.36	37.61	74.00	-36.39	peak

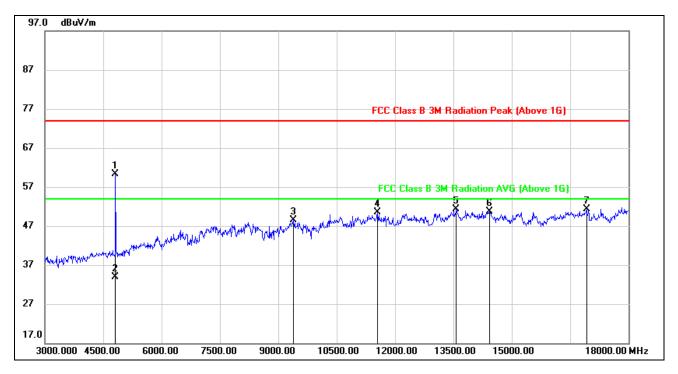
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in then spurious frequency bands and the authorized band was not corrected for BRF losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



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

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



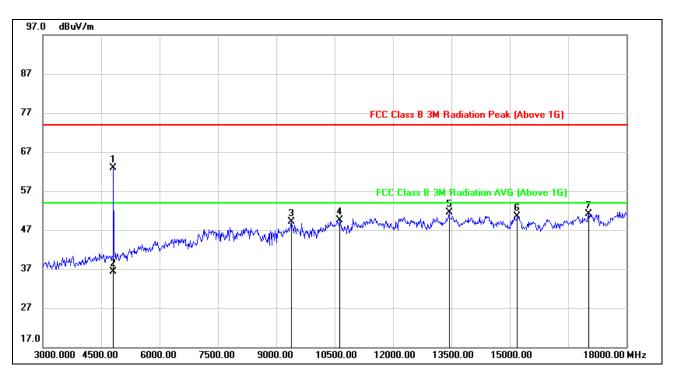
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4821.074	60.59	-0.21	60.38	74.00	-13.62	peak
2	4821.074	60.59	-0.21	34.36	54.00	-19.64	AVG
3	9390.000	38.27	10.24	48.51	74.00	-25.49	peak
4	11550.000	36.42	14.13	50.55	74.00	-23.45	peak
5	13575.000	35.24	15.98	51.22	74.00	-22.78	peak
6	14430.000	34.40	16.39	50.79	74.00	-23.21	peak
7	16920.000	31.31	20.01	51.32	74.00	-22.68	peak

- 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.
- 6. The Band Reject filter loss factor already add into the correct factor.
- 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



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HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)



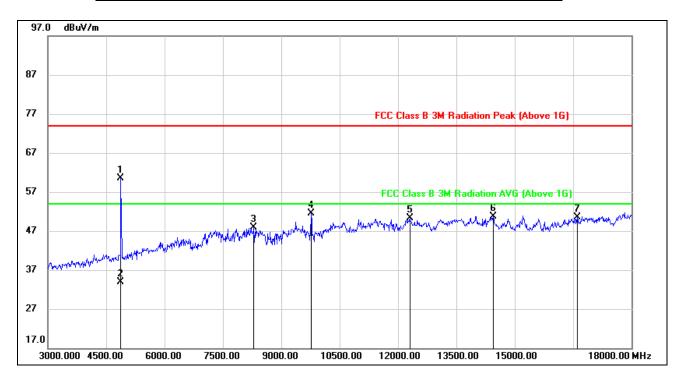
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4821.154	63.14	-0.21	62.93	74.00	-11.07	peak
2	4821.154	63.14	-0.21	36.91	54.00	-17.09	AVG
3	9390.000	38.80	10.24	49.04	74.00	-24.96	peak
4	10635.000	36.99	12.59	49.58	74.00	-24.42	peak
5	13440.000	35.74	15.80	51.54	74.00	-22.46	peak
6	15195.000	34.99	15.56	50.55	74.00	-23.45	peak
7	17025.000	30.57	20.45	51.02	74.00	-22.98	peak

- 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.
- 6. The Band Reject filter loss factor already add into the correct factor.
- 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



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

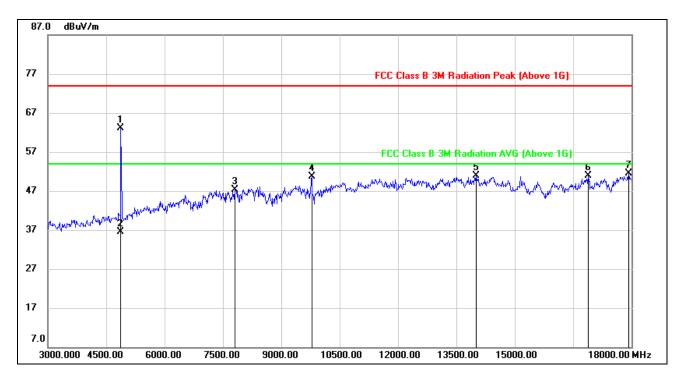


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4885.669	60.55	-0.11	60.44	74.00	-13.56	peak
2	4885.669	60.55	-0.11	34.42	54.00	-19.58	AVG
3	8295.000	39.31	8.57	47.88	74.00	-26.12	peak
4	9765.000	41.45	10.14	51.59	74.00	-22.41	peak
5	12300.000	35.85	14.39	50.24	74.00	-23.76	peak
6	14445.000	34.33	16.37	50.70	74.00	-23.30	peak
7	16605.000	31.10	19.40	50.50	74.00	-23.50	peak

- 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.
- 6. The Band Reject filter loss factor already add into the correct factor.
- 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



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

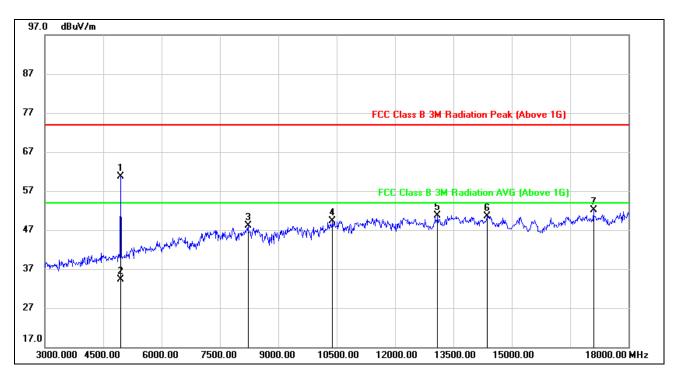


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4885.689	63.19	-0.11	63.08	74.00	-10.92	peak
2	4885.689	63.19	-0.11	37.06	54.00	-16.94	AVG
3	7800.000	38.43	8.87	47.30	74.00	-26.70	peak
4	9780.000	40.57	10.16	50.73	74.00	-23.27	peak
5	14010.000	34.50	16.34	50.84	74.00	-23.16	peak
6	16890.000	30.94	19.93	50.87	74.00	-23.13	peak
7	17925.000	28.26	23.18	51.44	74.00	-22.56	peak

- 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.
- 6. The Band Reject filter loss factor already add into the correct factor.
- 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

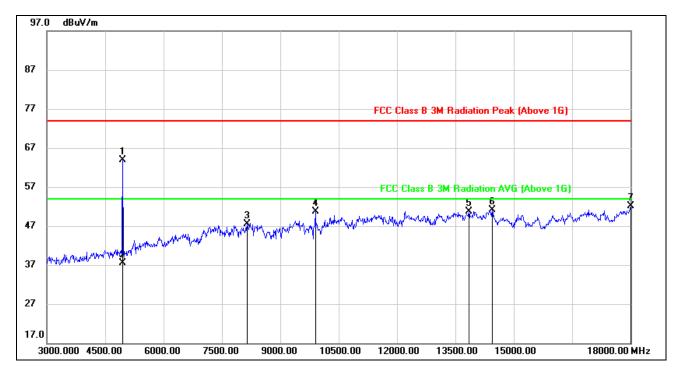


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4951.159	60.56	0.20	60.76	74.00	-13.24	peak
2	4951.159	60.56	0.20	34.74	54.00	-19.26	AVG
3	8220.000	38.73	9.40	48.13	74.00	-25.87	peak
4	10395.000	37.81	11.53	49.34	74.00	-24.66	peak
5	13095.000	35.69	14.97	50.66	74.00	-23.34	peak
6	14370.000	34.10	16.39	50.49	74.00	-23.51	peak
7	17100.000	31.34	20.78	52.12	74.00	-21.88	peak

- 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.
- 6. The Band Reject filter loss factor already add into the correct factor.
- 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



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



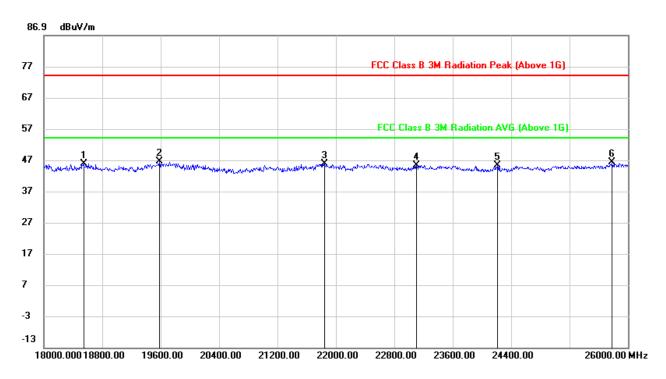
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4951.119	63.80	0.20	64.00	74.00	-10.00	peak
2	4951.119	63.80	0.20	37.98	54.00	-16.02	AVG
3	8145.000	38.28	9.30	47.58	74.00	-26.42	peak
4	9900.000	40.13	10.55	50.68	74.00	-23.32	peak
5	13845.000	34.26	16.52	50.78	74.00	-23.22	peak
6	14445.000	34.79	16.37	51.16	74.00	-22.84	peak
7	18000.000	28.75	23.27	52.02	74.00	-21.98	peak

- 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.
- 6. The Band Reject filter loss factor already add into the correct factor.
- 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

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7.5. SPURIOUS EMISSIONS (18~26GHz)

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

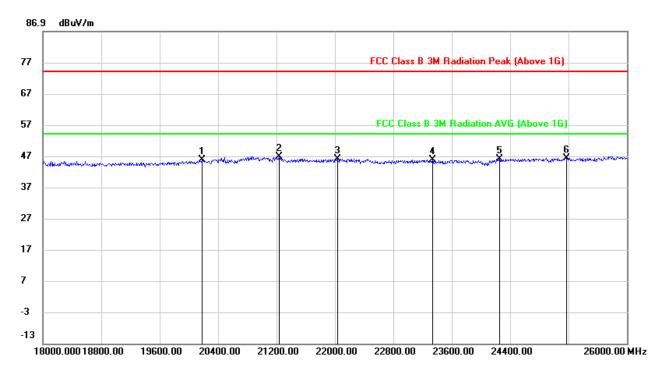


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1	18544.000	50.26	-4.46	45.80	74.00	-28.20	peak
2	19584.000	51.17	-4.64	46.53	74.00	-27.47	peak
3	21840.000	51.59	-5.93	45.66	74.00	-28.34	peak
4	23104.000	50.85	-5.47	45.38	74.00	-28.62	peak
5	24216.000	48.94	-3.65	45.29	74.00	-28.71	peak
6	25784.000	47.73	-1.49	46.24	74.00	-27.76	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.



# <u>HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, WORST-CASE CONFIGURATION, VERTICAL)</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1	20176.000	50.60	-4.73	45.87	74.00	-28.13	peak
2	21232.000	52.38	-5.49	46.89	74.00	-27.11	peak
3	22032.000	52.34	-6.22	46.12	74.00	-27.88	peak
4	23336.000	50.88	-5.08	45.80	74.00	-28.20	peak
5	24256.000	49.68	-3.56	46.12	74.00	-27.88	peak
6	25168.000	47.52	-1.14	46.38	74.00	-27.62	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.

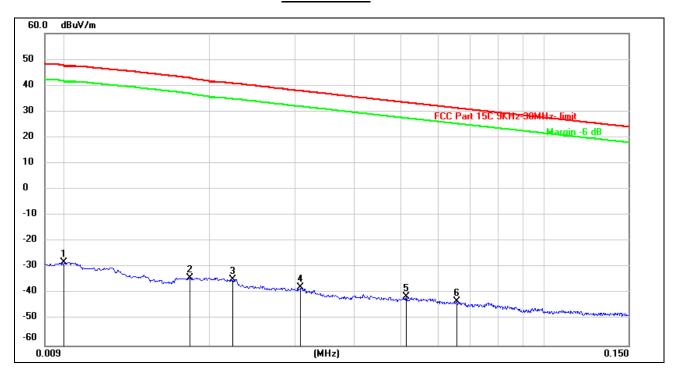
Note: All test mode has been tested, only the worst data record in the report.



## 7.6. SPURIOUS EMISSIONS BELOW 30M

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

#### 9kHz~ 150kHz

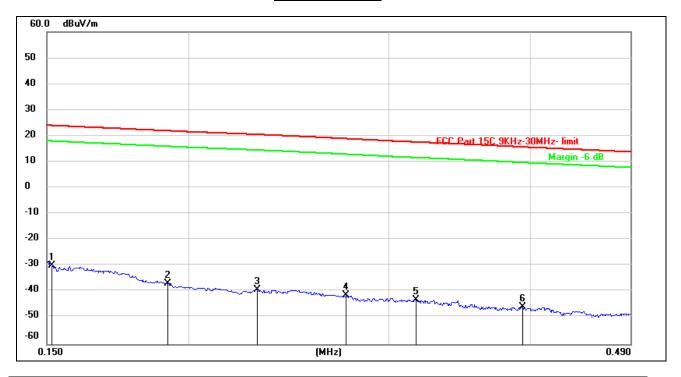


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1	0.0100	73.35	-101.40	-28.05	47.60	-75.65	peak
2	0.0181	67.35	-101.36	-34.01	42.72	-76.73	peak
3	0.0223	66.79	-101.35	-34.56	40.77	-75.33	peak
4	0.0309	63.68	-101.39	-37.71	37.84	-75.55	peak
5	0.0514	60.18	-101.48	-41.30	33.40	-74.70	peak
6	0.0656	58.36	-101.55	-43.19	31.29	-74.48	peak

- 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.



### 150kHz ~ 490kHz

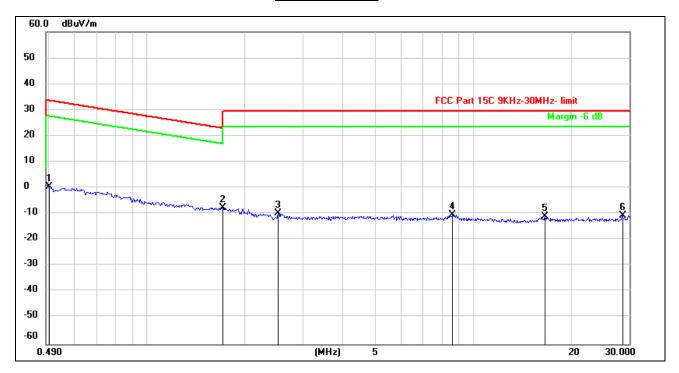


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1	0.1517	71.75	-101.63	-29.88	23.98	-53.86	peak
2	0.1917	65.04	-101.70	-36.66	21.95	-58.61	peak
3	0.2298	62.55	-101.77	-39.22	20.53	-59.75	peak
4	0.2754	60.72	-101.83	-41.11	18.93	-60.04	peak
5	0.3173	58.76	-101.87	-43.11	17.63	-60.74	peak
6	0.3936	56.33	-101.96	-45.63	15.72	-61.35	peak

- 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.



## 490kHz ~ 30MHz



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1	0.5020	62.48	-62.07	0.41	33.61	-33.20	peak
2	1.7040	54.44	-61.96	-7.52	22.97	-30.49	peak
3	2.5261	51.91	-61.69	-9.78	29.54	-39.32	peak
4	8.6348	50.60	-60.99	-10.39	29.54	-39.93	peak
5	16.5730	49.92	-60.96	-11.04	29.54	-40.58	peak
6	28.6128	49.37	-60.10	-10.73	29.54	-40.27	peak

- 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.

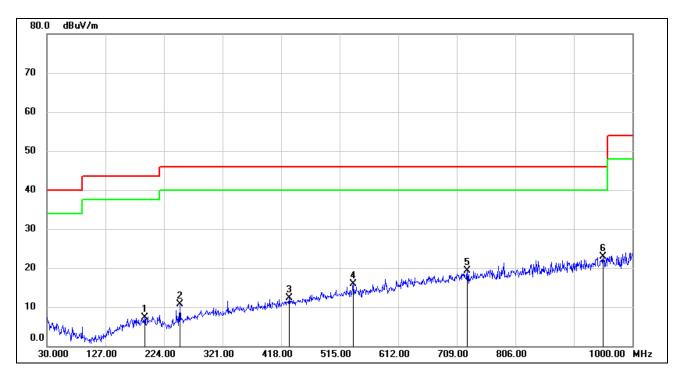


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## 7.7. SPURIOUS EMISSIONS BELOW 1 GHz

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



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	191.9900	23.64	-16.43	7.21	43.50	-36.29	QP
2	250.1900	26.74	-16.12	10.62	46.00	-35.38	QP
3	431.5800	23.93	-11.72	12.21	46.00	-33.79	QP
4	537.3100	25.47	-9.63	15.84	46.00	-30.16	QP
5	726.4600	25.41	-6.19	19.22	46.00	-26.78	QP
6	951.5000	26.18	-3.36	22.82	46.00	-23.18	QP

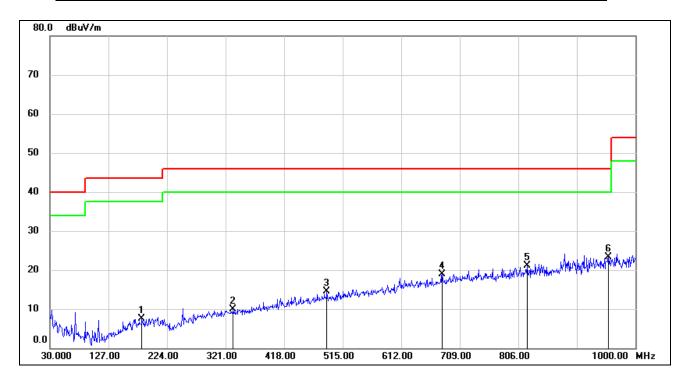
Note: 1. Result Level = Read Level + Correct Factor.

- 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.

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## 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	182.2899	24.23	-16.77	7.46	43.50	-36.04	QP
2	333.6099	23.34	-13.50	9.84	46.00	-36.16	QP
3	488.8100	25.23	-10.66	14.57	46.00	-31.43	QP
4	679.9000	25.90	-6.95	18.95	46.00	-27.05	QP
5	820.5500	25.90	-4.85	21.05	46.00	-24.95	QP
6	955.3800	26.70	-3.40	23.30	46.00	-22.70	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.



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## 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.

#### **RESULTS**

Complies

**END OF REPORT**