



**CFR 47 FCC PART 15 SUBPART C
ISED RSS-210 ISSUE 10**

TEST REPORT

For

RC WHIRL BIG WHEEL STUNT CAR

MODEL NUMBER: 1003928

FCC ID: 2ACFM1003928001

REPORT NUMBER: E04A25051105F002

ISSUE DATE: June 12 2025

Prepared for

Shantou City Daye Plastic Toys Co.,Ltd

**Baisha Industry Areas,Chenghai Borough, Shantou City,Guangdong Province,
China**

Prepared by

Guangdong Global Testing Technology Co., Ltd.

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Dongguan city, Guangdong, People's Republic of China, 523808**

**This report is based on a single evaluation of the submitted sample(s) of the above mentioned product, it does not imply an assessment of the production of the products.
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Guangdong Global Testing Technology Co., Ltd.**

Revision History

Rev.	Issue Date	Revisions	Revised By
V0	June 12 2025	Initial Issue	

Summary of Test Results			
Clause	Test Items	FCC/ISED Rules	Test Results
1	20 dB Bandwidth and 99 % Occupied Bandwidth	CFR 47 FCC §15.215 (c) ISED RSS-Gen Clause 6.7	Pass
2	Radiated Emission	CFR 47 FCC §15.249 (a)(d)(e) ISED RSS-210 Annex B B.10 CFR 47 FCC §15.205 and §15.209 RSS-GEN Clause 8.9 RSS-GEN Clause 8.10	Pass
3	Conducted Emission Test for AC Power Port	CFR 47 FCC §15.207 RSS-GEN Clause 8.8	Pass
4	Antenna Requirement	CFR 47 FCC §15.203 ISED RSS-Gen Clause 6.3	Pass
Note 1: N/A: In this whole report not applicable. Note 2: This test report is only published to and used by the applicant, and it is not for evidence purpose in China. Note 3: The measurement result for the sample received is <Pass> according to < CFR 47 FCC PART 15 SUBPART C, ISED RSS-210 Issue 10 and ISED RSS-GEN Issue 5 > when <Accuracy Method> decision rule is applied.			

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1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name: Shantou City Daye Plastic Toys Co.,Ltd
Address: Baisha Industry Areas,Chenghai Borough, Shantou
City,Guangdong Province, China

Manufacturer Information

Company Name: Shantou City Daye Plastic Toys Co.,Ltd
Address: Baisha Industry Areas,Chenghai Borough, Shantou
City,Guangdong Province, China

EUT Information

EUT Name: RC WHIRL BIG WHEEL STUNT CAR
Model: 1003928
Serial Model: /
Brand: /
Sample Received Date: May 30, 2025
Sample Status: Normal
Sample ID: A25051105 003
Date of Tested: May 30, 2025 to June 12 2025

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 FCC PART 15 SUBPART C	PASS
ISED RSS-210 ISSUE 10	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 10 and RSS-GEN Issue 5.

3. FACILITIES AND ACCREDITATION

Accreditation Certificate	A2LA (Certificate No.: 6947.01) Guangdong Global Testing Technology Co., Ltd. has been assessed and proved to be in compliance with A2LA. FCC (FCC Designation No.: CN1343) Guangdong Global Testing Technology Co., Ltd. has been recognized to perform compliance testing on equipment subject to Supplier's Declaration of Conformity (SDoC) and Certification rules ISED (Company No.: 30714) Guangdong Global Testing Technology Co., Ltd. has been registered and fully described in a report filed with ISED. The Company Number is 30714 and the test lab Conformity Assessment Body Identifier (CABID) is CN0148.
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Note: All tests measurement facilities use to collect the measurement data are located at Room 101-105, 203-210, Building 1, No.2, Keji 8 Road, Songshan Lake Park, Dongguan city, Guangdong, People's Republic of China, 523808

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 Items	k	Uncertainty
20dB Emission Bandwidth	1.96	±9.2 PPM
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=1.96.		

Test Item	Measurement Frequency Range	K	U(dB)
Conducted emissions from the AC mains power ports (AMN)	150 kHz ~ 30 MHz	2	3.37
Radiated emissions	9 kHz ~ 30 MHz	2	4.16
Radiated emissions	30 MHz ~ 1 GHz	2	3.79
Radiated emissions	1 GHz ~ 18 GHz	2	5.62
Radiated emissions	18 GHz ~ 40 GHz	2	5.54
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	RC WHIRL BIG WHEEL STUNT CAR		
Model	1003928		
Series Model	/		
Model Difference	/		
Product Description	Operation Frequency		2405 MHz ~ 2475 MHz
	Modulation Type		GFSK
Ratings	DC 5 V		
Power Supply	Power Adapter	Input	/
		Output	/
	Battery	DC 3.7V 500mAh, 1.85Wh	

5.2. MAXIMUM FIELD STRENGTH

Frequency (MHz)	Channel Number	Max PEAK field strength (dBμV/m)
2440	4[4]	64.58

5.3. CHANNEL LIST

Channel	Frequency (MHz)
1	2405
2	2440
3	2462
4	2475

5.4. DESCRIPTION OF AVAILABLE ANTENNAS

Ant.	Frequency (MHz)	Antenna Type	Antenna Gain (dBi)
1	2405~ 2475	Wire Antenna	0.17

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

Note: The value of the antenna gain was declared by customer.

5.5. TEST CHANNEL CONFIGURATION

Test Mode	Test Channel	Frequency
GFSK	CH 1(Low Channel), CH 2(MID Channel), CH 4(High Channel)	2405 MHz, 2440 MHz, 2475 MHz

5.6. THE WORSE CASE POWER SETTING PARAMETER

The Worse Case Power Setting Parameter under 2405 MHz ~ 2475 MHz Band				
Test Software Version		/		
Modulation Type	Transmit Antenna Number	Test Channel		
		CH 1	CH 2	CH 4
GFSK	1	Default	Default	Default

5.7. TEST ENVIRONMENT

Environment Parameter	Selected Values During Tests	
Relative Humidity	50 ~ 60%	
Atmospheric Pressure:	1001Pa	
Temperature	TN	-10 ~ +60 °C
Voltage:	VL	/
	VN	Adapter(AC 120V 60Hz) to DC 5V, DC 3.7V
	VH	/

Note: VL= Lower Extreme Test Voltage

VN= Nominal Voltage

VH= Upper Extreme Test Voltage

TN= Normal Temperature

5.8. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
E-1	Adapter	Xiaomi	MDY-11-EX	N/A	GTG Support

I/O CABLES

No I/O cable.

ACCESSORY

Cable	
Accessory:	USB-A Cable

Model No.:	/
Description:	USB-A Cable
Cable Type:	Unshielded without ferrite
Length:	0.26 Meter

TEST SETUP

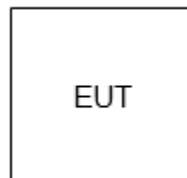
The EUT have an engineer mode inside.

SETUP DIAGRAM FOR TEST

AC Power Line Conducted Emission:



Radiated emissions:



Note: New battery was used during all tests.

6. MEASURING INSTRUMENT AND SOFTWARE USED

Test Equipment of Conducted RF					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
Spectrum Analyzer	Rohde & Schwarz	FSV40	102257	2024/09/14	2025/09/13
Spectrum Analyzer	KEYSIGHT	N9020A	MY51285127	2024/09/14	2025/09/13
EXG Analog Signal Generator	KEYSIGHT	N5173B	MY61253075	2024/09/14	2025/09/13
Vector Signal Generator	Rohde & Schwarz	SMM100A	101899	2024/09/14	2025/09/13
RF Control box	MWRF-test	MW100-RFCB	MW220926GTG	2024/09/14	2025/09/13
Wideband Radio Communication Tester	Rohde & Schwarz	CMW270	102792	2024/09/14	2025/09/13
Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	103235	2024/09/14	2025/09/13
temperature humidity chamber	Espec	SH-241	SH-241-2014	2024/09/14	2025/09/13
RF Test Software	MWRF-test	MTS8310E (Ver. V2/0)	N/A	N/A	N/A

Test Equipment of Radiated emissions below 1GHz					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
3m Semi-anechoic Chamber	ETS	9m*6m*6m	Q2146	2022/08/30	2025/08/29
EMI Test Receiver	Rohde & Schwarz	ESCI3	101409	2024/09/14	2025/09/13
Spectrum Analyzer	KEYSIGHT	N9020A	MY51283932	2024/09/14	2025/09/13
Pre-Amplifier	HzEMC	HPA-9K0130	HYPA21001	2024/09/14	2025/09/13
Biconilog Antenna	Schwarzbeck	VULB 9168	01315	2022/10/10	2025/10/09
Biconilog Antenna	ETS	3142E	00243651	2025/02/22	2028/02/21
Loop Antenna	ETS	6502	00243668	2025/02/22	2028/02/21
Test Software	Farad	EZ-EMC (Ver.FA-03A2 RE)	N/A	N/A	N/A

Test Equipment of Radiated emissions above 1GHz					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
3m Semi-anechoic Chamber	ETS	9m*6m*6m	Q2149	2022/08/30	2025/08/29
Spectrum Analyzer	Rohde & Schwarz	FSV40	101413	2024/09/14	2025/09/13
Spectrum Analyzer	KEYSIGHT	N9020A	MY51283932	2024/09/14	2025/09/13
Pre-Amplifier	HzEMC	HPA-1G1850	HYPA21003	2024/09/14	2025/09/13
Horn antenna	ETS	3117	00246069	2025/02/22	2028/02/21

Pre-Amplifier	HzEMC	HPA-184057	HYP A21004	2024/09/14	2025/09/13
Horn antenna	ETS	3116C	00246265	2025/02/22	2028/02/21
RF Filter Bank	HzEMC	HSW-F18	HSWF2218E01	2024/09/14	2025/09/13
RF Filter Bank	HzEMC	HPF18	HPF2218E02	2024/09/14	2025/09/13
Test Software	Farad	EZ-EMC (Ver.FA-03A2 RE+)	N/A	N/A	N/A

7. ANTENNA PORT TEST RESULTS

7.1. ON TIME AND DUTY CYCLE

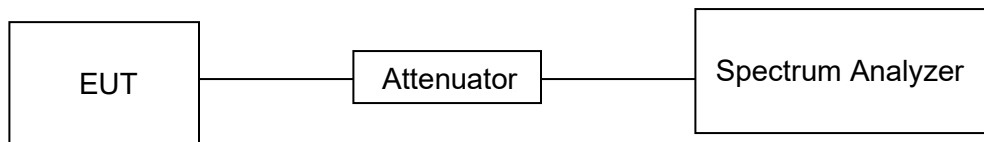
LIMITS

None; for reporting purposes only

PROCEDURE

KDB 558074 Zero-Span Spectrum Analyzer Method

TEST SETUP



TEST ENVIRONMENT

Temperature	22.9 °C	Relative Humidity	53 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 3.7 V

RESULTS

Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (db)
GFSK	32.87	100	0.3287	32.87	-9.66

Note:

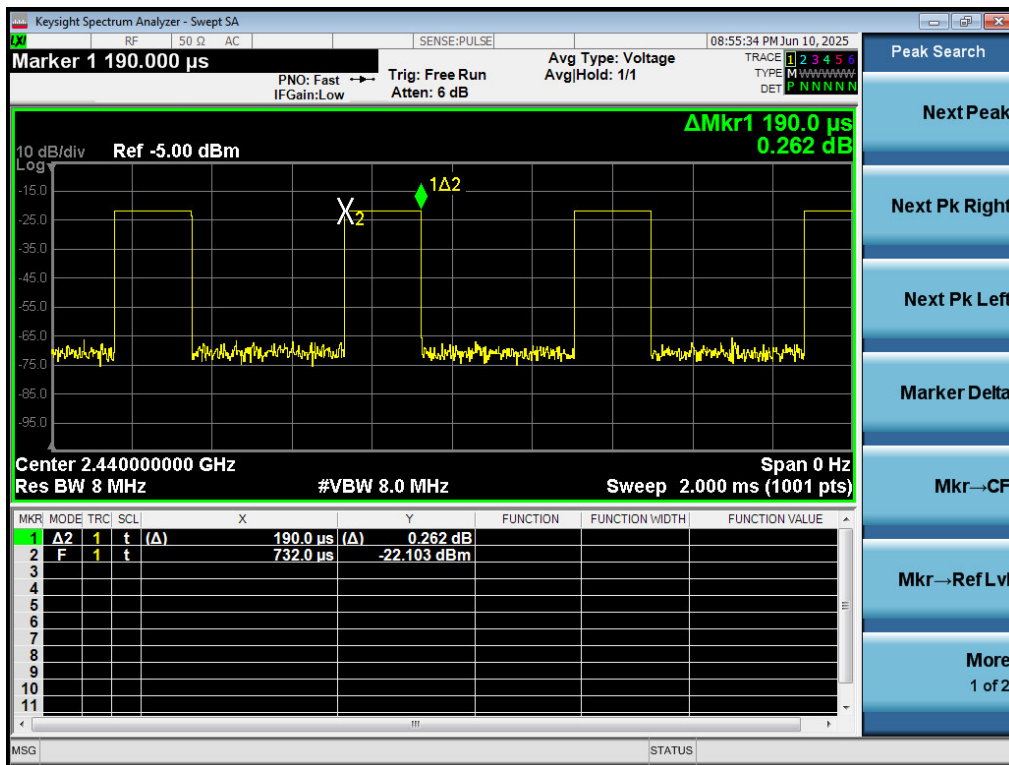
On Time = On Time * On Time Burst Number = 0.190 * 173 = 32.87 ms;

Duty Cycle = On Time / Period % = 32.87/100*% = 32.87%;

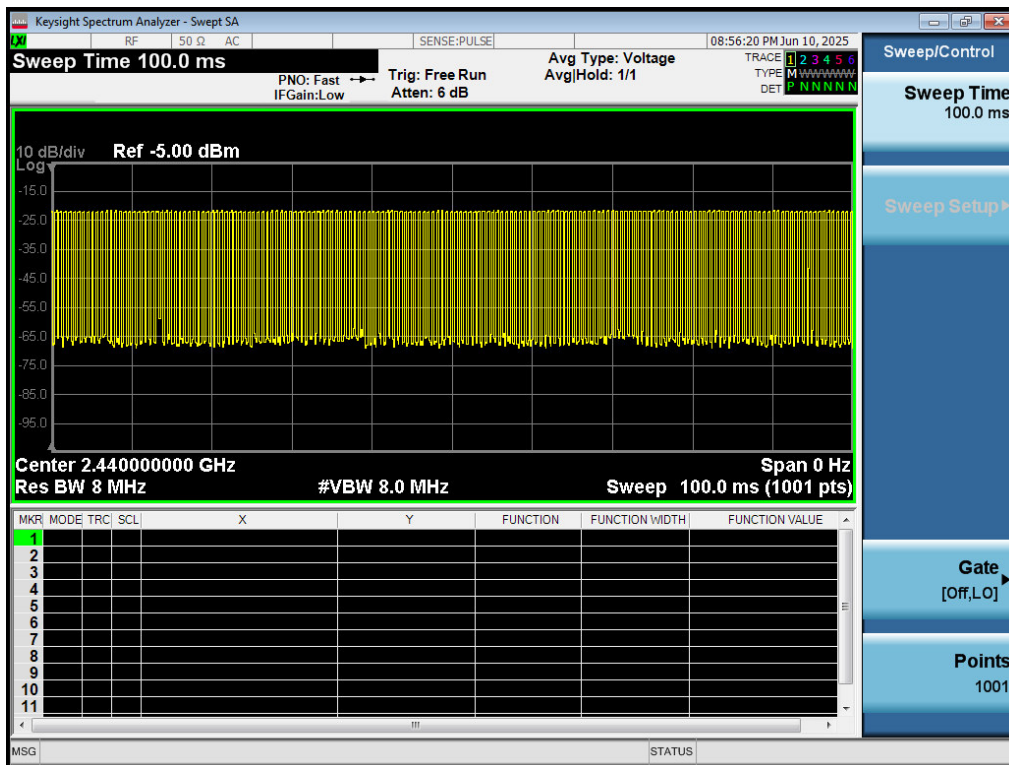
Duty Cycle Correction Factor=20log(x);

Where: x is Duty Cycle

ON TIME AND DUTY CYCLE MID CH PLOT



ON TIME AND DUTY CYCLE MID CH PLOT-2



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

TRF No.: 04-E001-0B

Global Testing , Great Quality.

7.2. 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 §15.215 (c)	20 dB 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

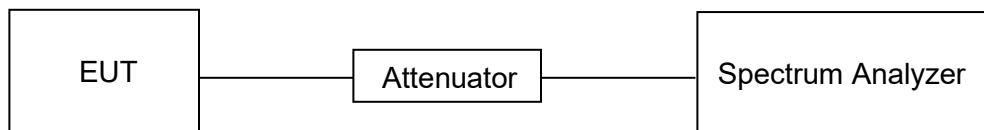
TEST PROCEDURE

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 6 dB / 99 % relative to the maximum level measured in the fundamental emission.

TEST SETUP



TEST ENVIRONMENT

Temperature	22.9 °C	Relative Humidity	53 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 3.7 V

RESULTS

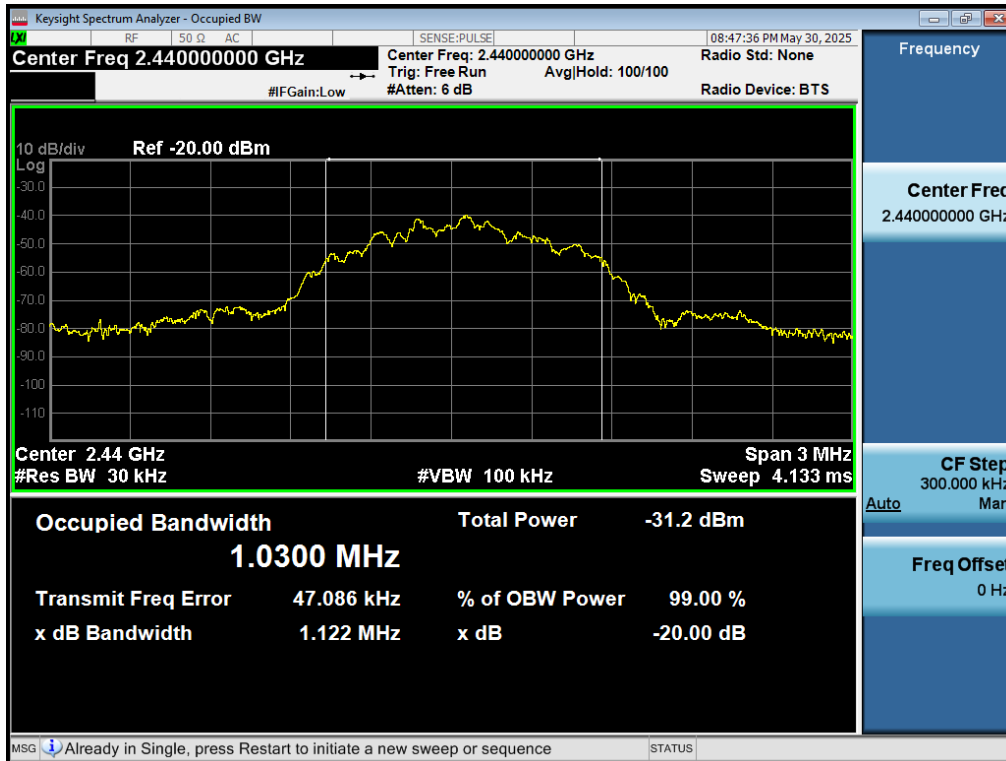
Frequency (MHz)	20 dB bandwidth (MHz)	99 % bandwidth (MHz)	Result
2405	1.071	1.0183	PASS

20 dB and 99% BANDWIDTH LOW CH



Frequency (MHz)	20 dB bandwidth (MHz)	99 % bandwidth (MHz)	Result
2440	1.122	1.0300	PASS

20 dB and 99% BANDWIDTH MID CH



Frequency (MHz)	20 dB bandwidth (MHz)	99 % bandwidth (MHz)	Result
2475	1.122	1.0346	PASS

20 dB and 99% HIG CH



8. RADIATED TEST RESULTS

8.1. LIMITS AND PROCEDURE

LIMITS

CFR 47 FCC §15.205 and §15.209

CFR 47 FCC §15.249 (a)(d)(c)(e)

ISED RSS-210 Issue 10 Annex B B.10

RSS-GEN Clause 8.9

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 (94 dBuV/m)	500 uV/m (54 dBuV/m)	3
2400 – 2483.5	50 mV/m (94 dBuV/m)	500 uV/m (54 dBuV/m)	3
5725 – 5875	50 mV/m (94 dBuV/m)	500 uV/m (54 dBuV/m)	3

Emissions radiated outside of the specified frequency bands above 30MHz			
Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (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
		74	54

FCC Emissions radiated outside of the specified frequency bands below 30 MHz		
Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30

ISED General field strength limits at frequencies below 30 MHz

Table 6 – General field strength limits at frequencies below 30 MHz

Frequency	Magnetic field strength (H-Field) (µA/m)	Measurement distance (m)
9 - 490 kHz ^{Note 1}	6.37/F (F in kHz)	300
490 - 1705 kHz	63.7/F (F in kHz)	30
1.705 - 30 MHz	0.08	30

Note 1: The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector.

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

Table 7 – Restricted frequency bands^{Note 1}

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 36.6
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 - 2360	
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 36.6 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:

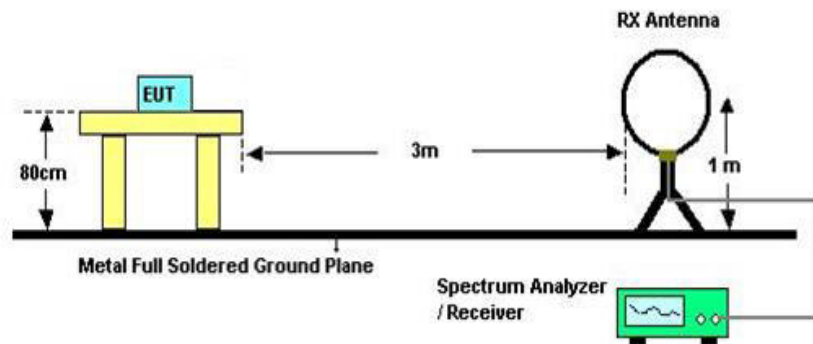
MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
¹ 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218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

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

²Above 38.6c

TEST SETUP AND PROCEDURE

Below 30 MHz



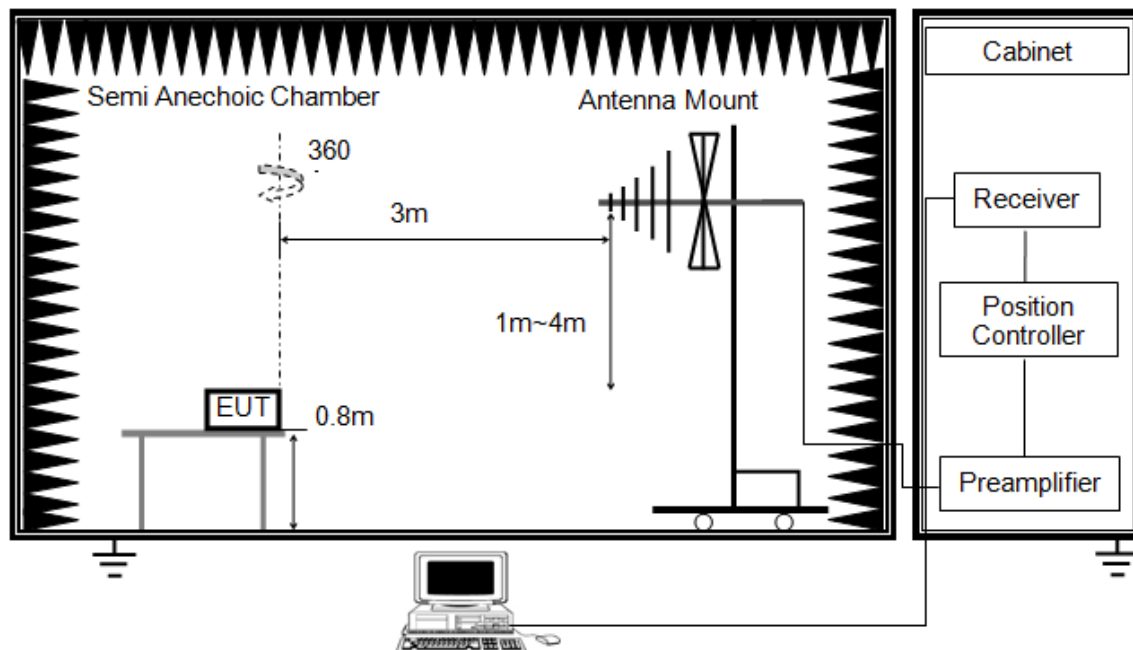
The setting of the spectrum analyzer

RBW	200 Hz (From 9 kHz to 0.15 MHz)/ 9 kHz (From 0.15 MHz to 30 MHz)
VBW	200 Hz (From 9 kHz to 0.15 MHz)/ 9 kHz (From 0.15 MHz to 30 MHz)
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. Although these tests were performed other than open area test site, adequate comparison measurements were confirmed against 30m open field site. Therefore, the 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 1GHz



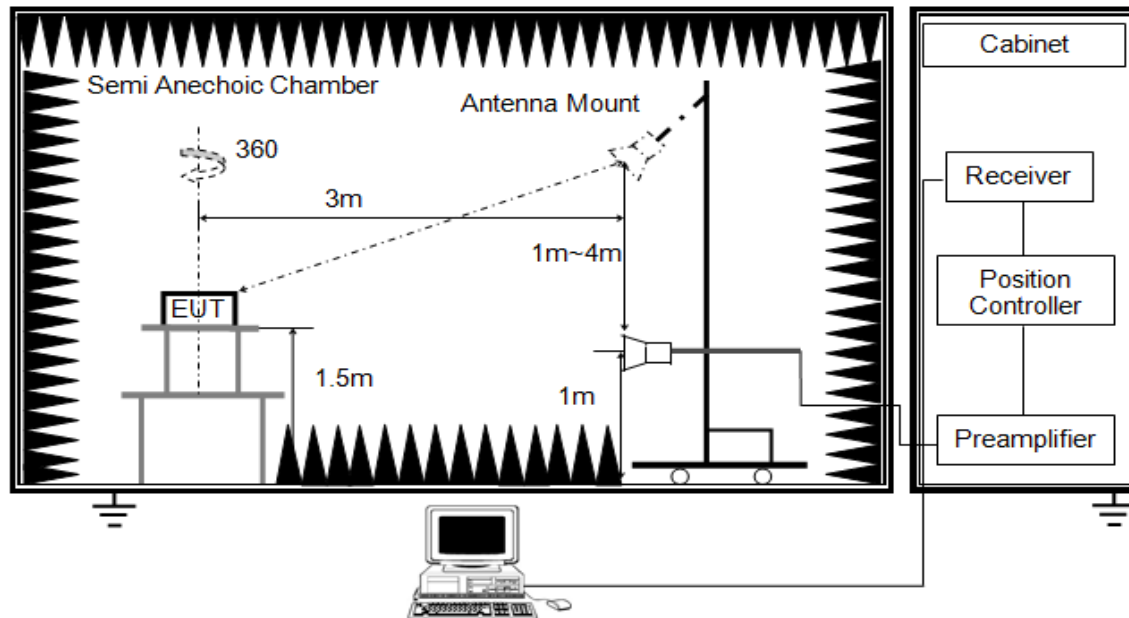
The setting of the spectrum analyzer

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

1. The testing follows the guidelines in ANSI C63.10-2013.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 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. 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

Above 1 GHz

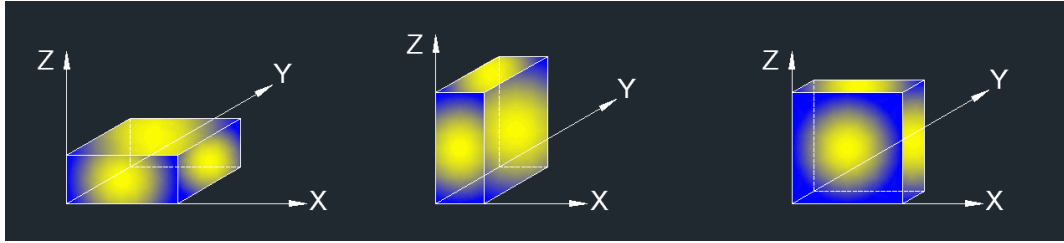


The setting of the spectrum analyzer

RBW	1 MHz
VBW	PEAK: 3 MHz 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 or band reject 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 150 cm 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 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.

TEST ENVIRONMENT

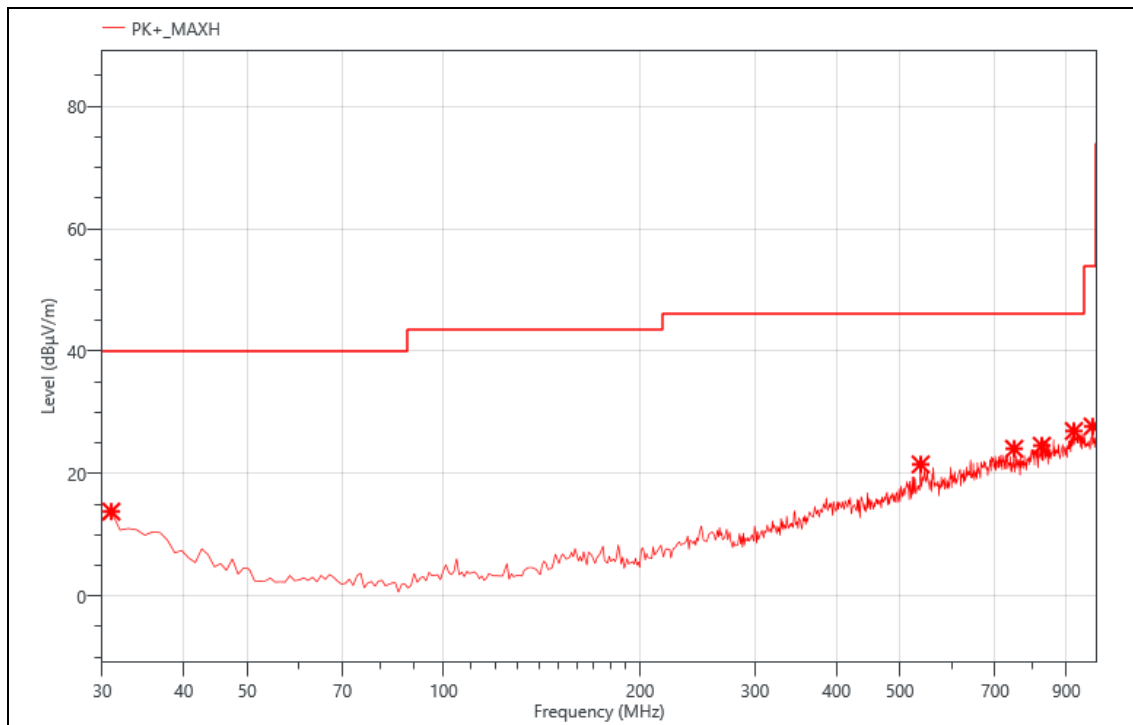
Temperature	23.6°C	Relative Humidity	51%
Atmosphere Pressure	101 kPa	Test Voltage	DC 3.7V

TEST RESULTS

Undesirable radiated Spurious Emission below 1GHz (30MHz to 1GHz)

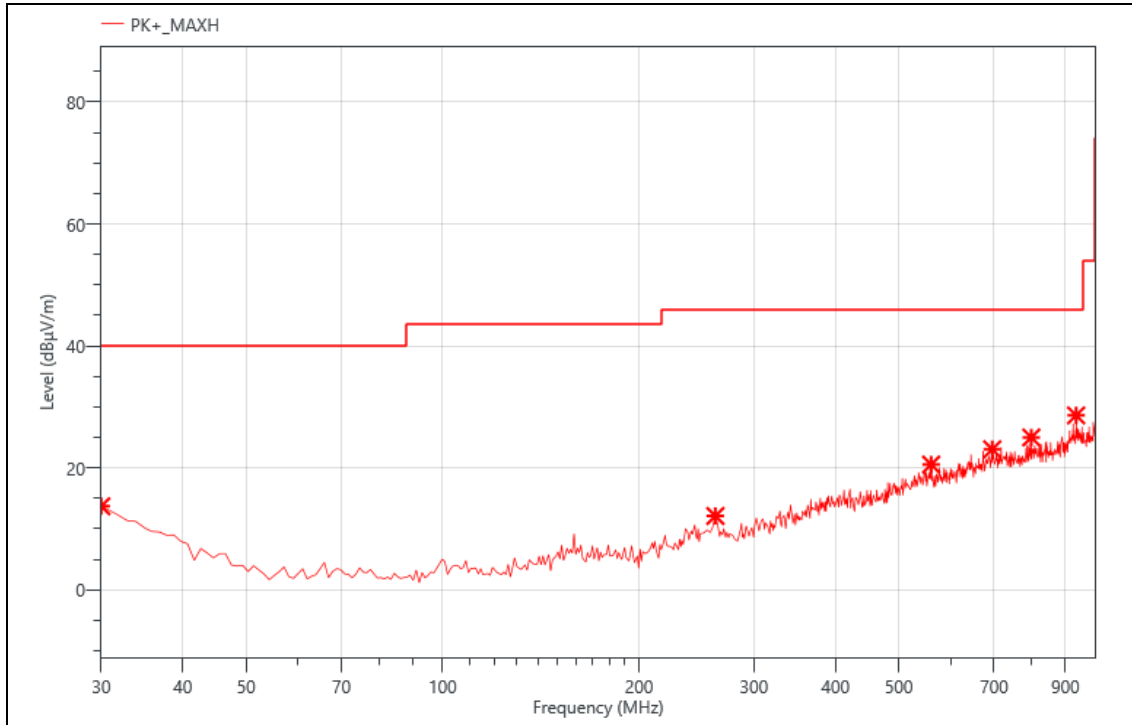
All modes have been tested and the worst result as bellow:

Mode:	2405
Power:	DC 3.7V
TE:	Big
Date	2025/06/3
T/A/P	23.5°C/51%/101Kpa

**Critical_Freqs**

No.	Freq. (MHz)	Reading (dBμV)	Corr. (dB)	Meas. (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Det.	Pol.
1	30.970	28.64	-14.87	13.77	40.00	26.23	PK+	H
2	538.280	31.57	-10.09	21.48	46.00	24.52	PK+	H
3	748.770	30.69	-6.65	24.04	46.00	21.96	PK+	H
4	825.400	29.91	-5.37	24.54	46.00	21.46	PK+	H
5	924.340	29.45	-2.51	26.94	46.00	19.06	PK+	H
6	987.390	30.22	-2.54	27.68	53.90	26.22	PK+	H

Mode:	2405
Power:	DC 3.7V
TE:	Big
Date	2025/06/3
T/A/P	23.5°C/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBμV)	Corr. (dB)	Meas. (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Det.	Pol.
1	30.000	28.02	-14.32	13.70	40.00	26.30	PK+	V
2	261.830	30.37	-18.26	12.11	46.00	33.89	PK+	V
3	560.590	30.58	-10.04	20.54	46.00	25.46	PK+	V
4	695.420	30.15	-7.1	23.05	46.00	22.95	PK+	V
5	798.240	30.82	-5.83	24.99	46.00	21.01	PK+	V
6	935.010	30.77	-2.16	28.61	46.00	17.39	PK+	V

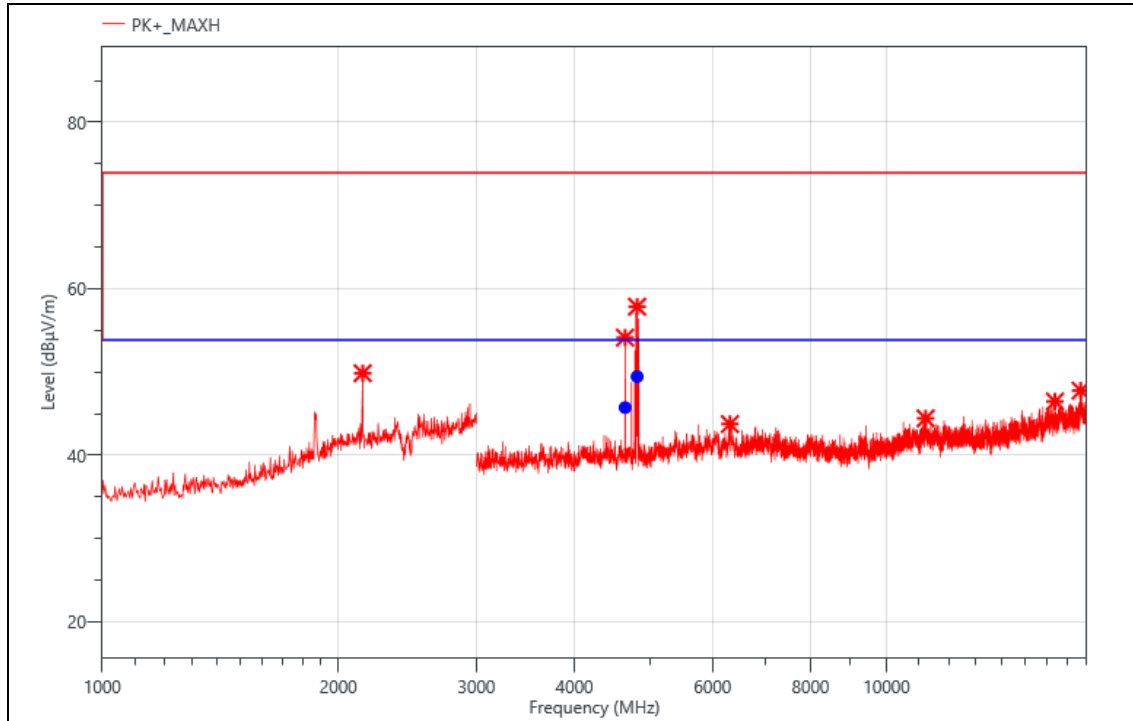
Note:

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. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

Undesirable radiated Spurious Emission Above 1GHz (1GHz to 40GHz)

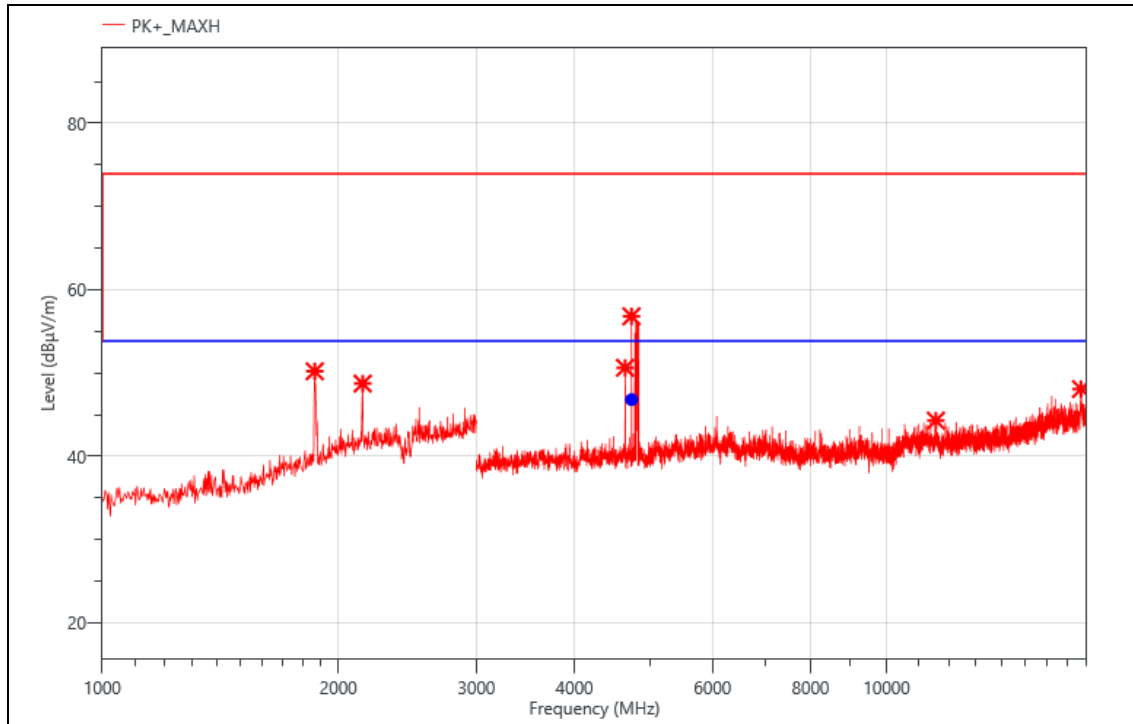
All modes have been tested and the worst result as bellow:

Mode:	2405
Power:	DC 3.7V
TE:	Berny
Date	2025/06/10
T/A/P	23.6°C/51%/101Kpa

**Critical_Freqs**

No.	Freq. (MHz)	Reading (dBμV)	Corr. (dB)	Meas. (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Det.	Pol.
1	2148.000	58.91	-9.05	49.86	74.00	24.14	PK+	V
2	4641.000	65.67	-11.53	54.14	74.00	19.86	PK+	V
/	/	/	/	44.48	53.90	9.42	AVG	V
3	4807.500	69.22	-11.36	57.86	74.00	16.14	PK+	V
/	/	/	/	48.20	53.90	5.70	AVG	V
4	6313.500	51.38	-7.62	43.76	74.00	30.24	PK+	V
5	11215.500	48.59	-4.14	44.45	74.00	29.55	PK+	V
6	16395.000	47.66	-1.18	46.48	74.00	27.52	PK+	V
7	17679.000	47.49	0.29	47.78	74.00	26.22	PK+	V

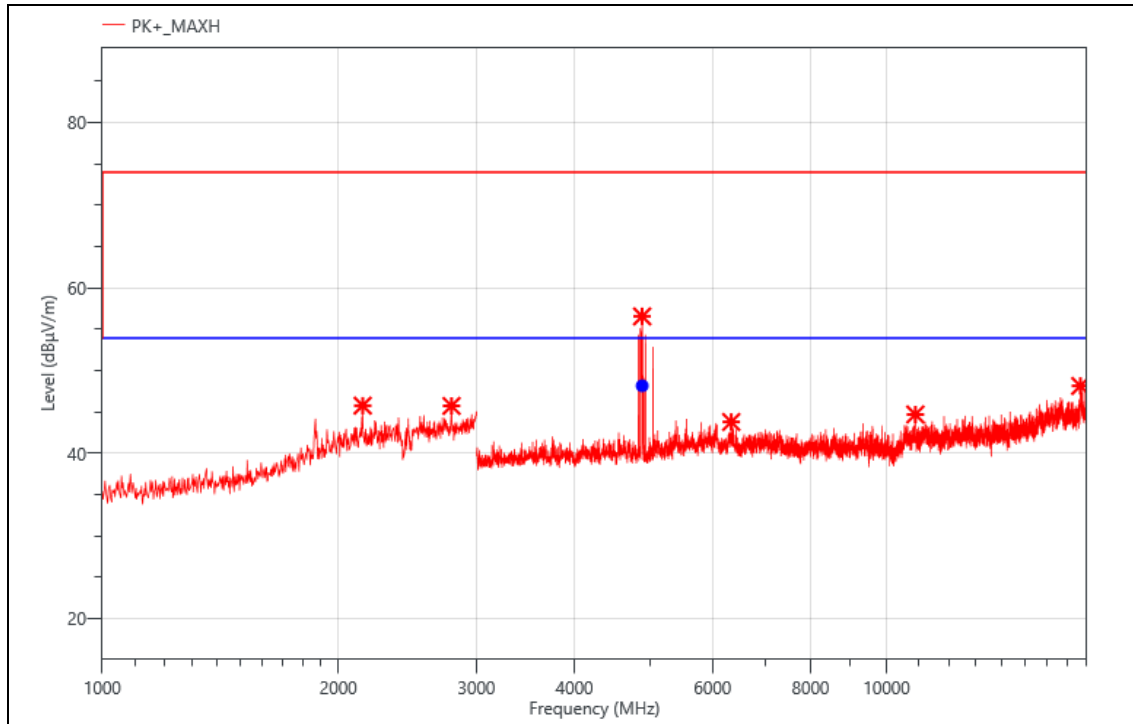
Mode:	2405
Power:	DC 3.7V
TE:	Berny
Date	2025/06/10
T/A/P	23.6°C/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBμV)	Corr. (dB)	Meas. (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Det.	Pol.
1	1866.000	60.61	-10.39	50.22	74.00	23.78	PK+	H
2	2148.000	57.80	-9.05	48.75	74.00	25.25	PK+	H
3	4641.000	62.17	-11.53	50.64	74.00	23.36	PK+	H
4	4729.500	68.47	-11.65	56.82	74.00	17.18	PK+	H
/	/	/	/	47.16	53.90	6.74	AVG	H
5	11557.500	48.52	-4.22	44.30	74.00	29.70	PK+	H
6	17698.500	47.89	0.19	48.08	74.00	25.92	PK+	H

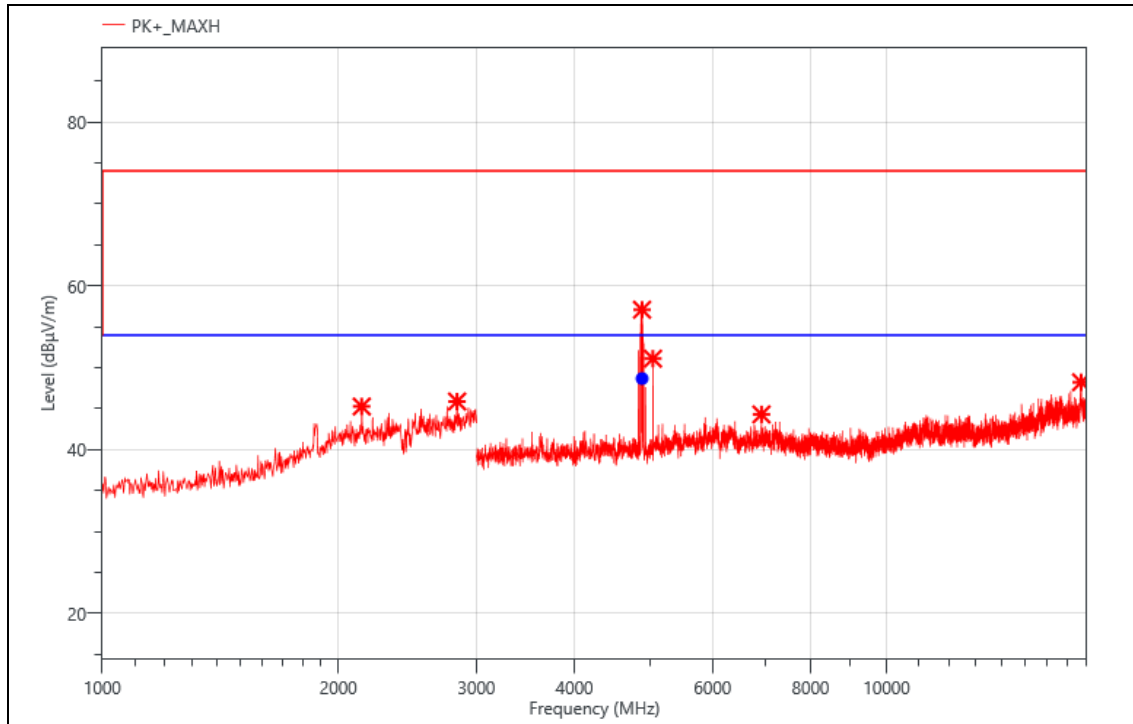
Mode:	2440
Power:	DC 3.7V
TE:	Berny
Date	2025/06/10
T/A/P	23.6°C/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBμV)	Corr. (dB)	Meas. (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Det.	Pol.
1	2148.000	54.80	-9.05	45.75	74.00	28.25	PK+	H
2	2788.000	54.15	-8.43	45.72	74.00	28.28	PK+	H
3	4879.500	67.69	-11.14	56.55	74.00	17.45	PK+	H
/	/	/	/	46.89	53.90	7.01	AVG	H
4	6337.500	51.79	-8.02	43.77	74.00	30.23	PK+	H
5	10882.500	49.81	-5.13	44.68	74.00	29.32	PK+	H
6	17664.000	47.96	0.17	48.13	74.00	25.87	PK+	H

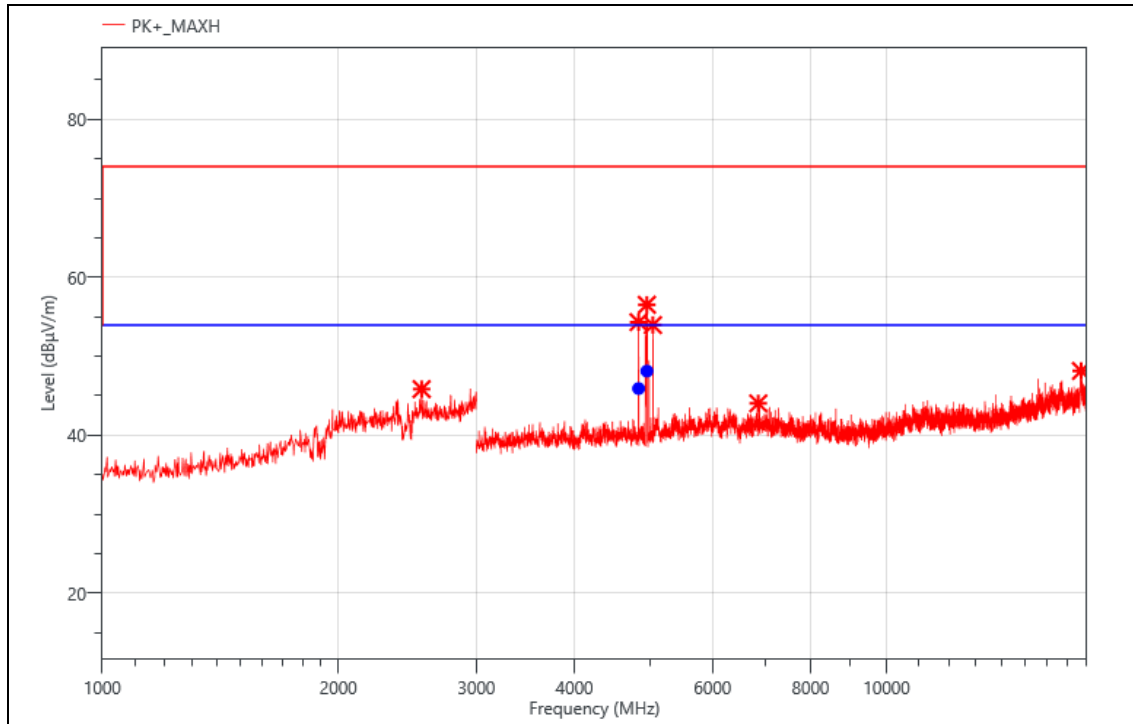
Mode:	2440
Power:	DC 3.7V
TE:	Berny
Date	2025/06/10
T/A/P	23.6°C/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	2142.000	54.31	-9.05	45.26	74.00	28.74	PK+	V
2	2834.000	53.64	-7.77	45.87	74.00	28.13	PK+	V
3	4878.000	68.21	-11.14	57.07	74.00	16.93	PK+	V
/	/	/	/	47.41	53.90	6.49	AVG	V
4	5035.500	62.19	-11.09	51.10	74.00	22.90	PK+	V
5	6925.500	52.39	-8.1	44.29	74.00	29.71	PK+	V
6	17704.500	48.14	0.08	48.22	74.00	25.78	PK+	V

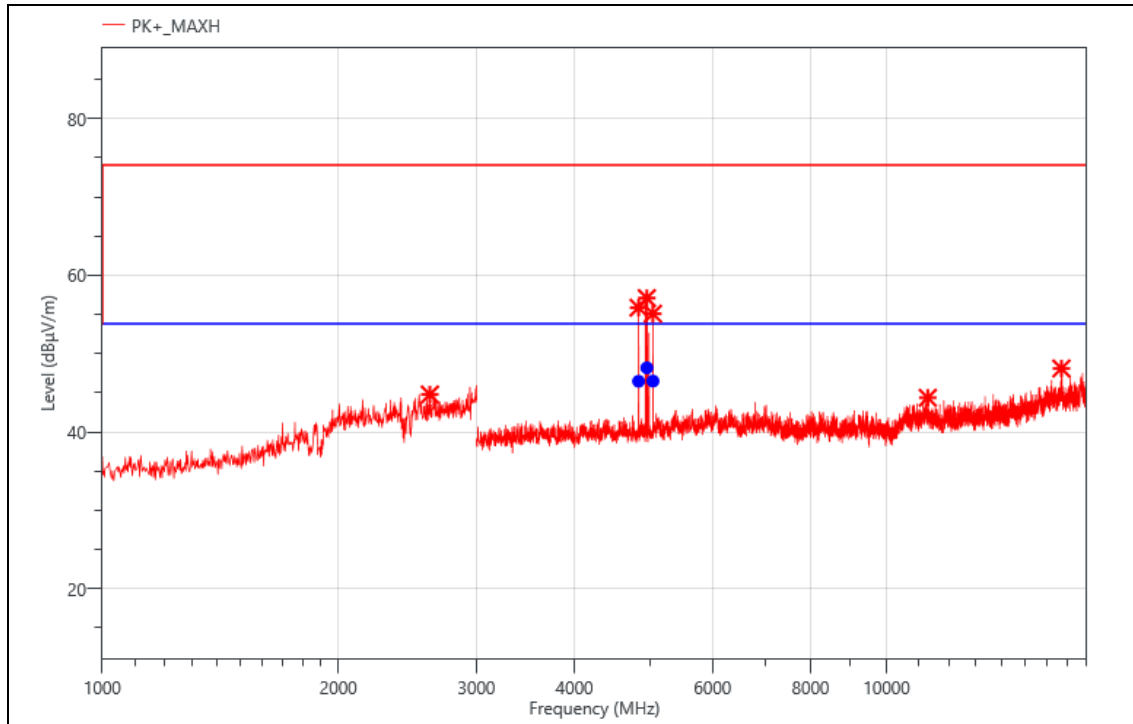
Mode:	2475
Power:	DC 3.7V
TE:	Berny
Date	2025/06/10
T/A/P	23.6°C/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBμV)	Corr. (dB)	Meas. (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Det.	Pol.
1	2554.000	53.92	-8.07	45.85	74.00	28.15	PK+	V
2	4828.500	65.82	-11.5	54.32	74.00	19.68	PK+	V
/	/	/	/	44.66	53.90	9.24	AVG	V
3	4947.000	67.78	-11.25	56.53	74.00	17.47	PK+	V
/	/	/	/	46.87	53.90	7.03	AVG	V
4	5035.500	65.05	-11.09	53.96	74.00	20.04	PK+	V
5	6862.500	52.23	-8.18	44.05	74.00	29.95	PK+	V
6	17701.500	48.01	0.14	48.15	74.00	25.85	PK+	V

Mode:	2475
Power:	DC 3.7V
TE:	Berny
Date	2025/06/10
T/A/P	23.6°C/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBμV)	Corr. (dB)	Meas. (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Det.	Pol.
1	2616.000	53.14	-8.36	44.78	74.00	29.22	PK+	H
2	4828.500	67.37	-11.5	55.87	74.00	18.13	PK+	H
/	/	/	/	46.21	53.90	7.69	AVG	H
3	4947.000	68.34	-11.25	57.09	74.00	16.91	PK+	H
/	/	/	/	47.43	53.90	6.47	AVG	H
4	5035.500	66.19	-11.09	55.10	74.00	18.90	PK+	H
/	/	/	/	45.44	53.90	8.46	AVG	H
5	11286.000	48.56	-4.2	44.36	74.00	29.64	PK+	H
6	16708.500	48.83	-0.73	48.10	74.00	25.90	PK+	H

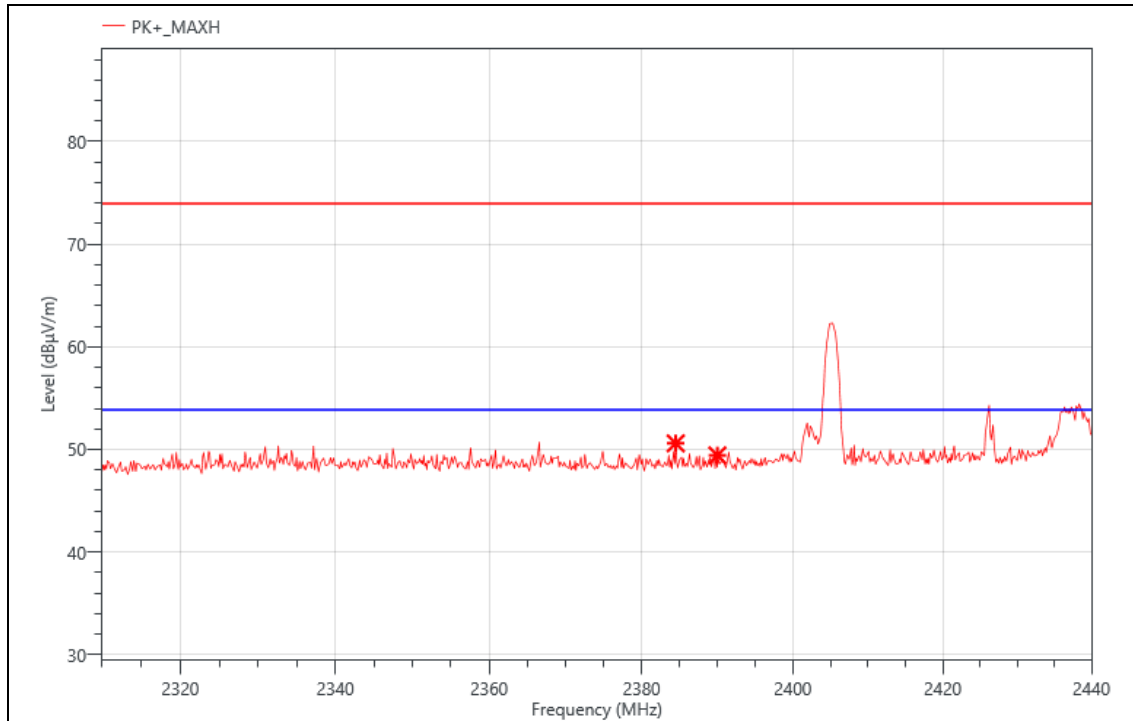
Note:

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. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.
 5. AVG Meas = Peak Meas - Duty Cycle Correction Factor (db).
- For 9KHz to the frequency above 18 GHz, a pre-scan was performed, and the result was 20 dB lower than the limit line, the test data was not shown in the report.

Band Edge

All modes have been tested and the worst result as bellow:

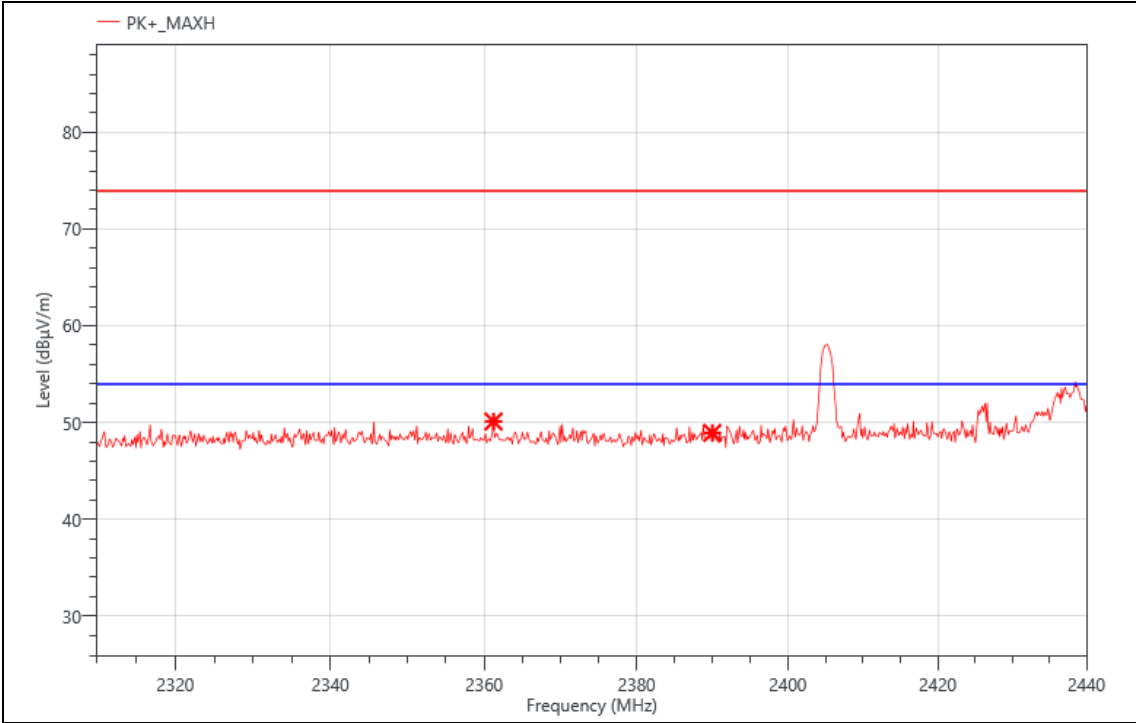
Mode:	2405
Power:	DC 3.7V
TE:	Berny
Date	2025/06/10
T/A/P	23.6°C/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBμV)	Corr. (dB)	Meas. (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Det.	Pol.
1	2384.490	27.99	22.61	50.60	74.00	23.40	PK+	H
2	2390.000	26.71	22.72	49.43	74.00	24.57	PK+	H

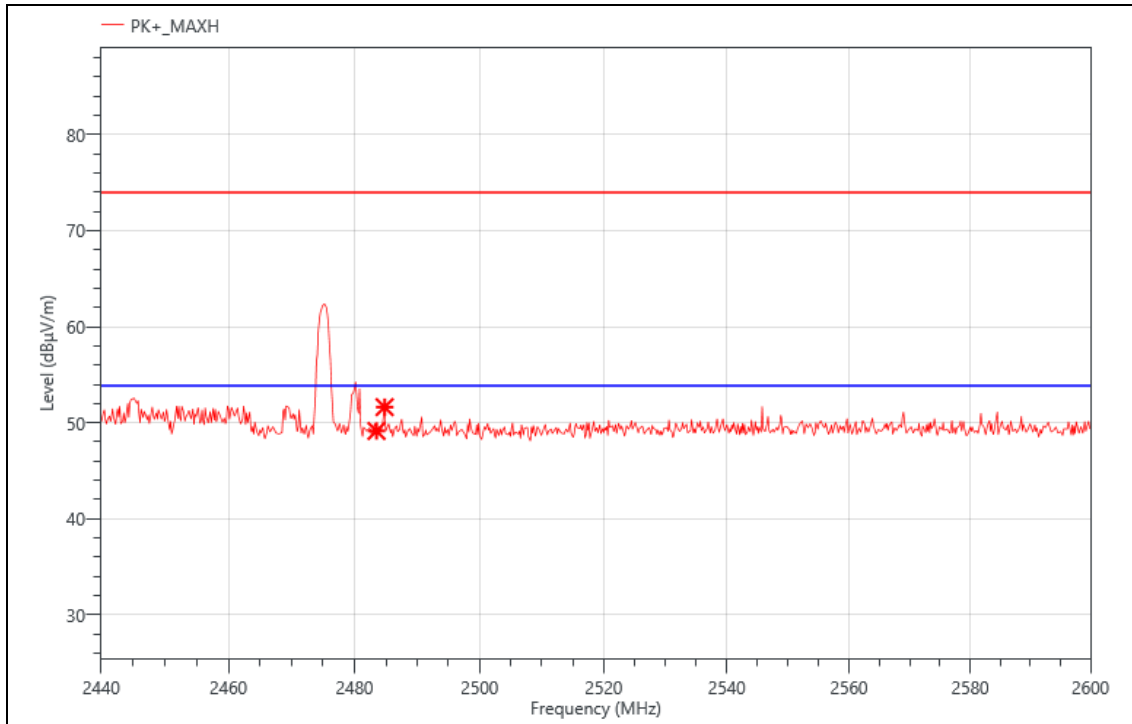
Mode:	2405
Power:	DC 3.7V
TE:	Berny
Date	2025/06/10
T/A/P	23.6°C/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	2361.220	27.40	22.71	50.11	74.00	23.89	PK+	V
2	2390.000	26.20	22.72	48.92	74.00	25.08	PK+	V

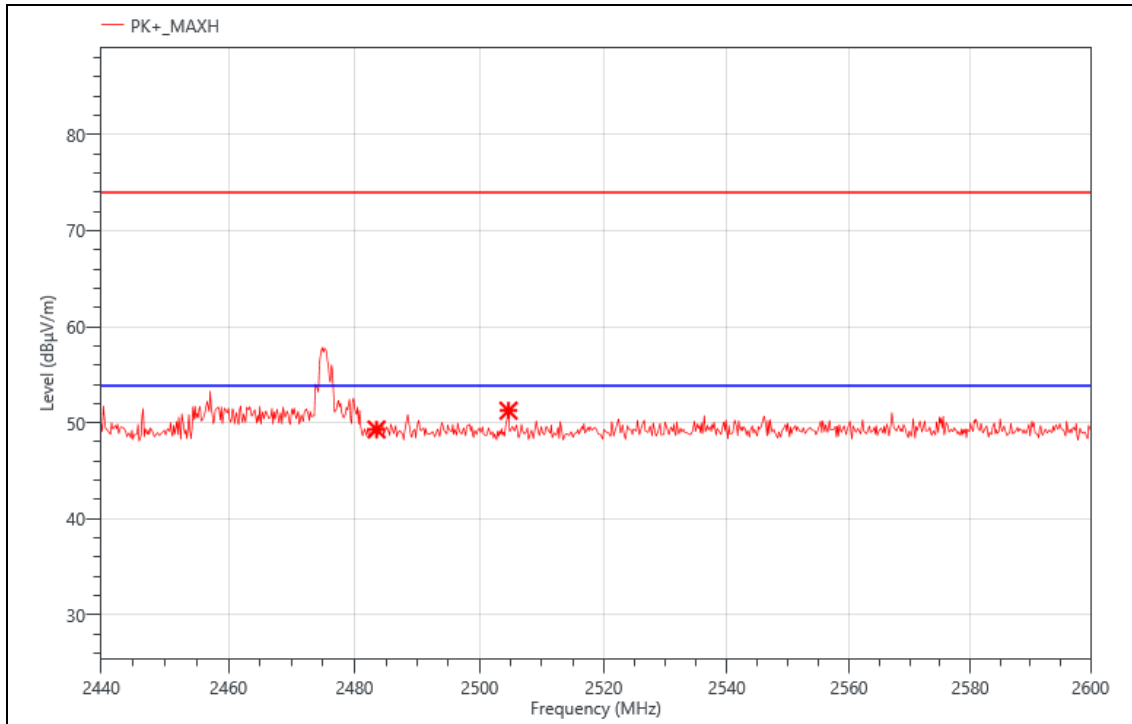
Mode:	2475
Power:	DC 3.7V
TE:	Berny
Date	2025/06/10
T/A/P	23.6°C/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	2483.500	25.99	23.15	49.14	74.00	24.86	PK+	H
2	2484.800	28.48	23.15	51.63	74.00	22.37	PK+	H

Mode:	2475
Power:	DC 3.7V
TE:	Berny
Date	2025/06/10
T/A/P	23.6°C/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBμV)	Corr. (dB)	Meas. (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Det.	Pol.
1	2483.500	26.15	23.15	49.30	74.00	24.70	PK+	V
2	2504.640	28.16	23.1	51.26	74.00	22.74	PK+	V

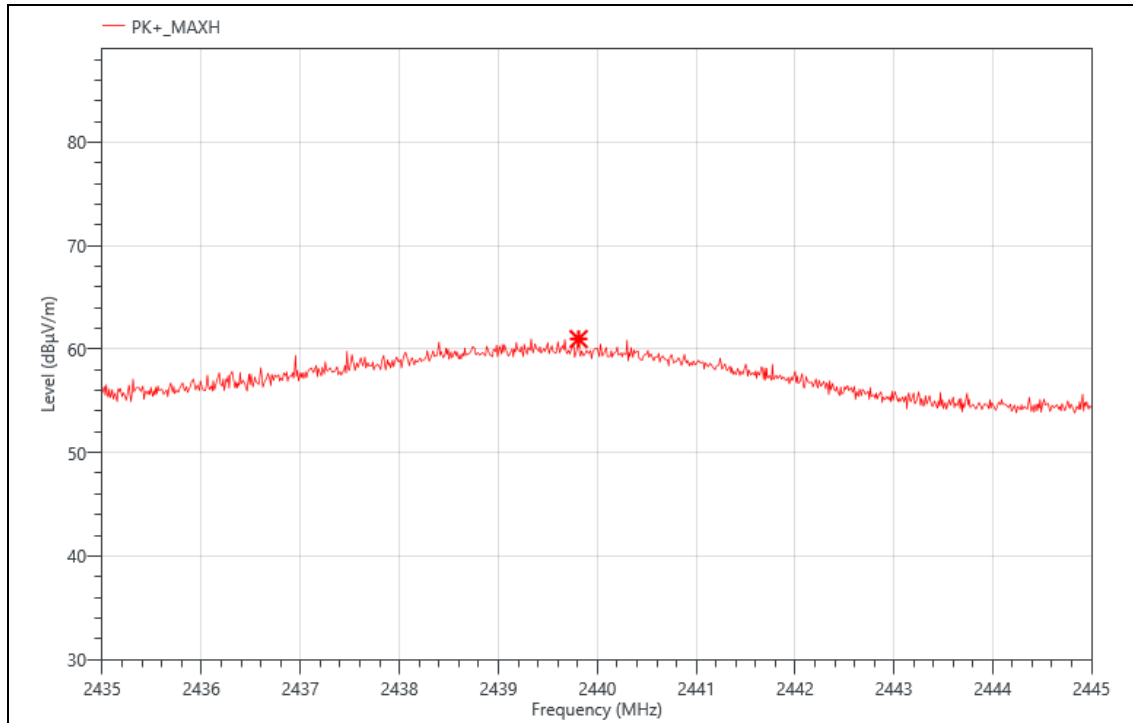
Note:

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. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

Maximum Field Strength

All modes have been tested and the worst result as bellow:

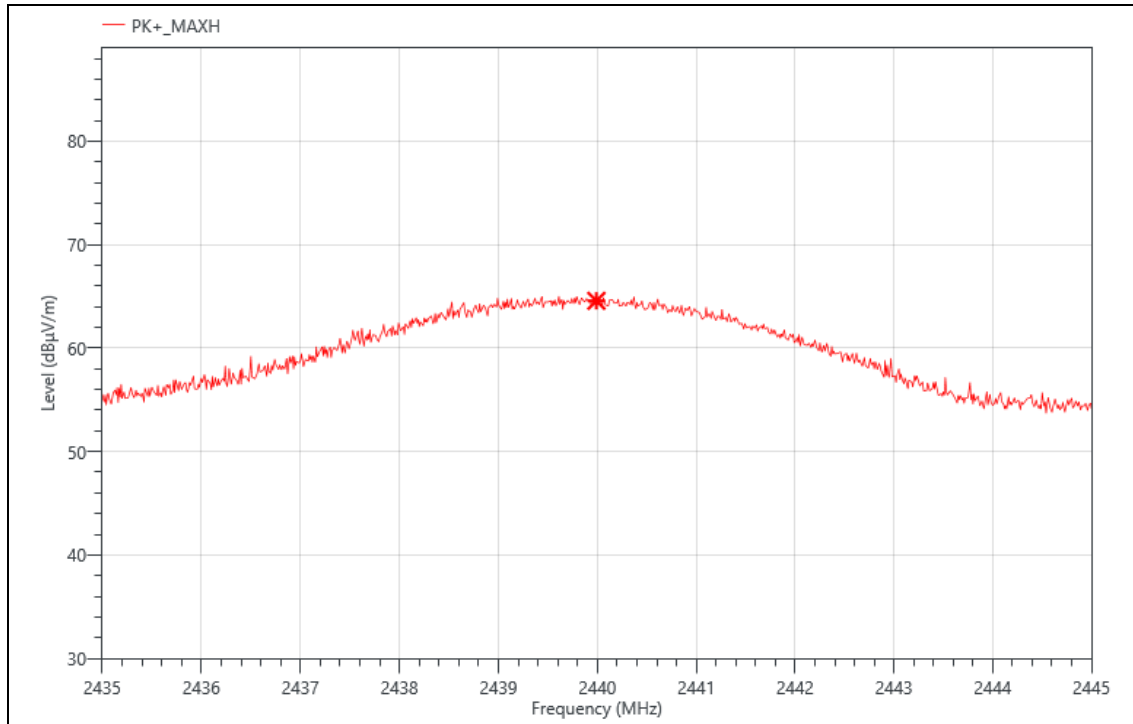
Mode:	2440
Power:	DC 3.7V
TE:	Berny
Date	2025/06/10
T/A/P	23.6°C/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	2439.810	37.89	23.09	60.98	114.00	53.02	PK+	V

Mode:	2440
Power:	DC 3.7V
TE:	Berny
Date	2025/06/10
T/A/P	23.6°C/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	2439.990	41.49	23.09	64.58	114.00	49.42	PK+	H

9. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

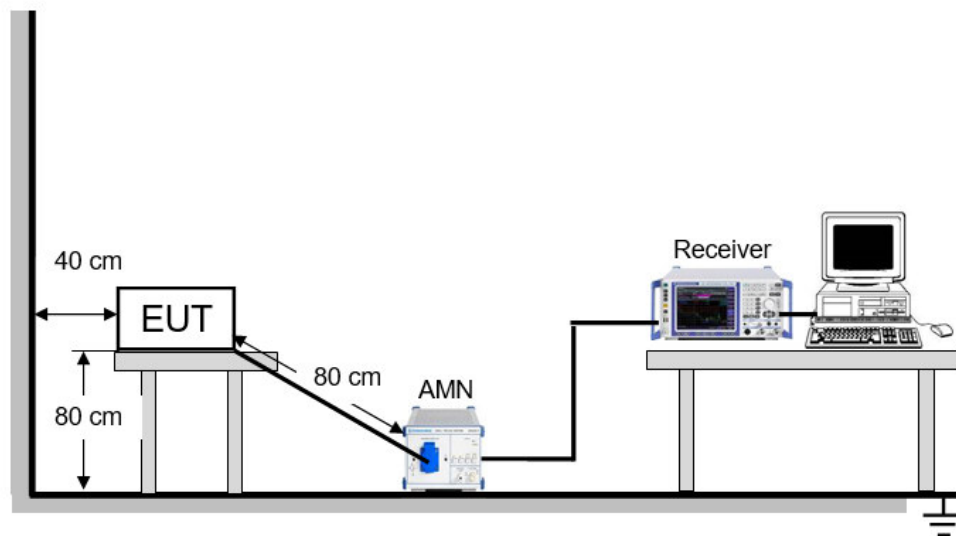
Please refer to CFR 47 FCC §15.207 (a) and ISED RSS-Gen Clause 8.8

FREQUENCY (MHz)	Quasi-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

TEST SETUP AND PROCEDURE



The following table is the setting of the receiver

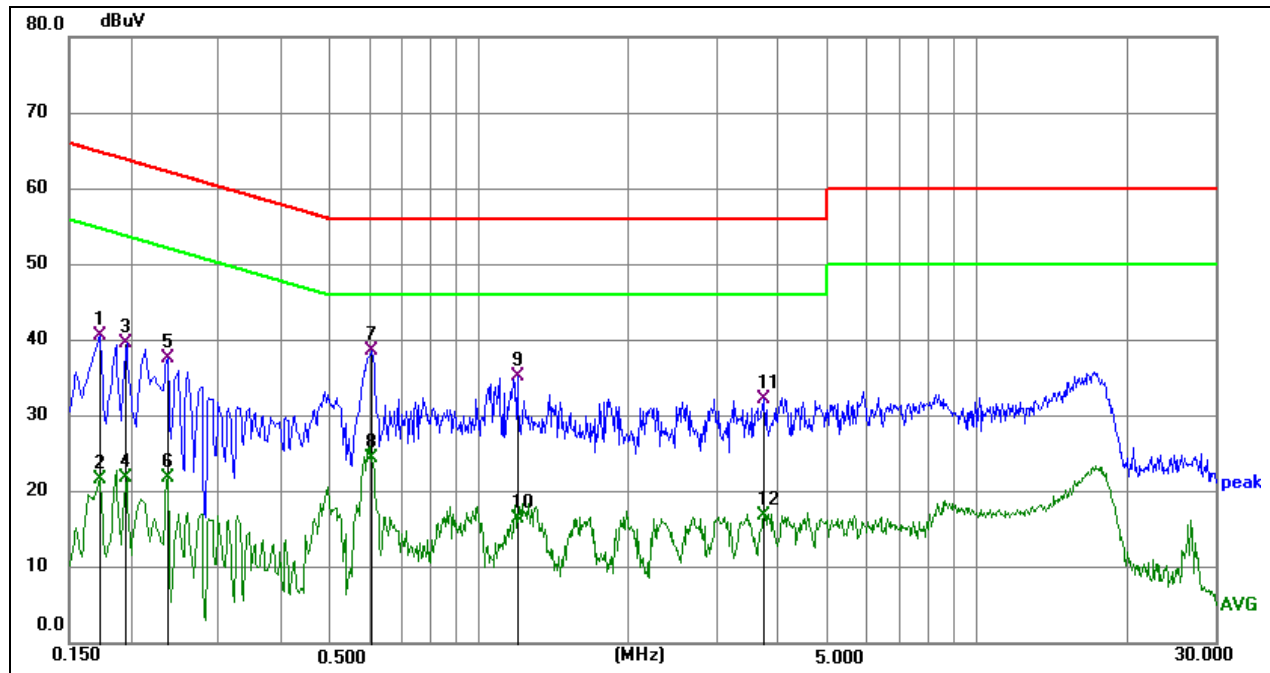
Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

1. The testing follows the guidelines in ANSI C63.10-2013.

2. The EUT was placed on the top of a rotating table 0.8 meters above the horizontal ground plane and being connected to the power mains through a line impedance stabilization network (LISN). All other support equipment powered from additional LISN(s). The LISN provide 50 ohm/ 50 uH of coupling impedance for the measuring instrument.
3. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
4. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
5. LISN at least 80 cm from nearest part of EUT chassis.
6. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-Peak and average detector mode.
7. The arrangement of the equipment is installed to meet the standards and operating in a manner, which tends to maximize its emission characteristics in a normal application.

TEST ENVIRONMENT

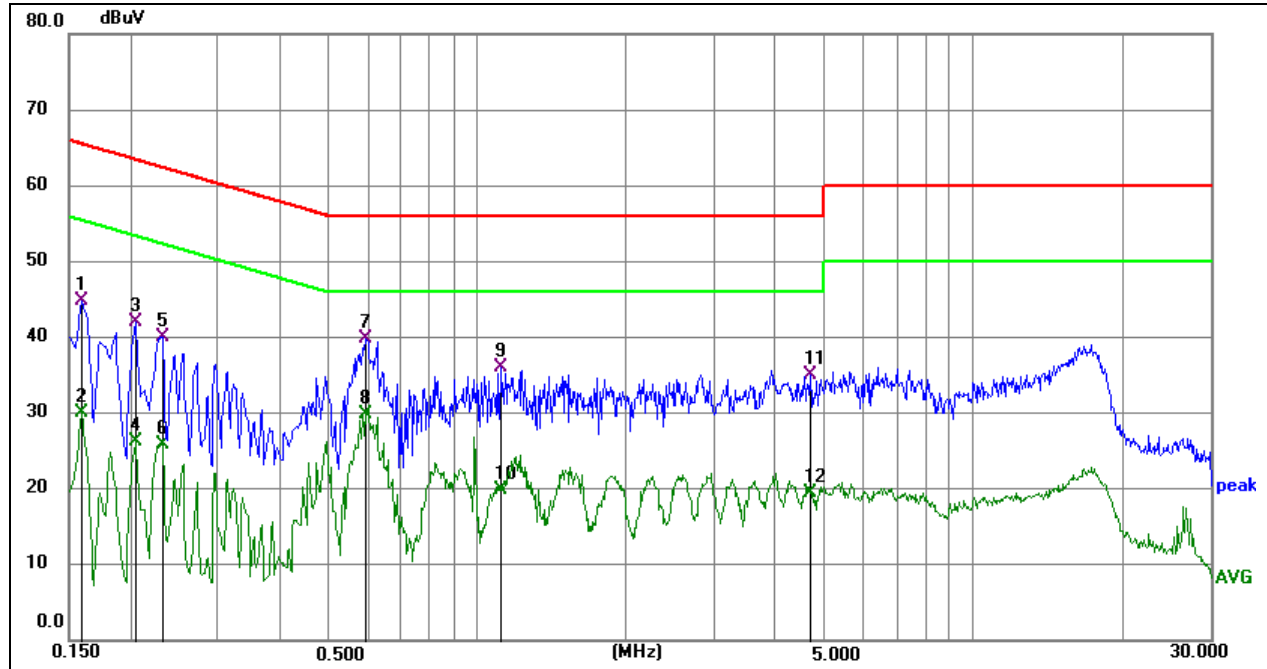
Temperature	23.2°C	Relative Humidity	52%
Atmosphere Pressure	101kPa	Test Voltage	

TEST RESULTS

Phase:N

Mode: 2.4G

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1725	31.00	9.67	40.67	64.84	-24.17	QP
2	0.1725	11.96	9.67	21.63	54.84	-33.21	AVG
3	0.1949	29.93	9.68	39.61	63.83	-24.22	QP
4	0.1949	12.12	9.68	21.80	53.83	-32.03	AVG
5	0.2355	27.86	9.68	37.54	62.25	-24.71	QP
6	0.2355	12.22	9.68	21.90	52.25	-30.35	AVG
7	0.6090	28.83	9.69	38.52	56.00	-17.48	QP
8	0.6090	14.67	9.69	24.36	46.00	-21.64	AVG
9	1.1940	25.50	9.71	35.21	56.00	-20.79	QP
10	1.1940	6.77	9.71	16.48	46.00	-29.52	AVG
11	3.7230	22.48	9.75	32.23	56.00	-23.77	QP
12	3.7230	7.09	9.75	16.84	46.00	-29.16	AVG



Phase:L1

Mode: 2.4G

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1590	35.03	9.77	44.80	65.52	-20.72	QP
2	0.1590	20.26	9.77	30.03	55.52	-25.49	AVG
3	0.2040	32.20	9.78	41.98	63.45	-21.47	QP
4	0.2040	16.38	9.78	26.16	53.45	-27.29	AVG
5	0.2310	30.31	9.78	40.09	62.41	-22.32	QP
6	0.2310	16.12	9.78	25.90	52.41	-26.51	AVG
7	0.5955	30.01	9.79	39.80	56.00	-16.20	QP
8	0.5955	19.98	9.79	29.77	46.00	-16.23	AVG
9	1.1130	26.18	9.81	35.99	56.00	-20.01	QP
10	1.1130	10.04	9.81	19.85	46.00	-26.15	AVG
11	4.6815	25.20	9.87	35.07	56.00	-20.93	QP
12	4.6815	9.66	9.87	19.53	46.00	-26.47	AVG

10. 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.

Standard	Requirement
RSS-Gen issue 5 6.8.	The applicant for equipment certification shall provide a list of all antenna types that may be used with the transmitter, where applicable (i.e. for transmitters with detachable antenna), indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna. The test report shall demonstrate the compliance of the transmitter with the limit for maximum equivalent isotropically radiated power (e.i.r.p.) specified in the applicable RSS, when the transmitter is equipped with any antenna type, selected from this list. For expediting the testing, measurements may be performed using only the antenna with highest gain of each combination of transmitter and antenna type, with the transmitter output power set at the maximum level. However, the transmitter shall comply with the applicable requirements under all operational conditions and when in combination with any type of antenna from the list provided in the test report (and in the notice to be included in the user manual, provided below). When measurements at the antenna port are used to determine the RF output power, the effective gain of the device's antenna shall be stated, based on a measurement or on data from the antenna's manufacturer. The test report shall state the RF power, output power setting and spurious emission measurements with each antenna type that is used with the transmitter being tested. For licence-exempt equipment with detachable antennas, the user manual shall also contain the following notice in a conspicuous location: This radio transmitter [enter the device's ISED certification number] has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater

	than the maximum gain indicated for any type listed are strictly prohibited for use with this device. Immediately following the above notice, the manufacturer shall provide a list of all antenna types which can be used with the transmitter, indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna type.
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RESULTS

Complies.

END OF REPORT