



**SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch**

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Report No.: SZEM160100013001
Page: 1 of 29

FCC REPORT

Application No. : SZEM1601000130CR (SGS SZ No.:T51510270125EM)
Applicant: KID GALAXY INC.
Product Name: 2.4G Claw Climber RC tiger, 2.4G Claw Climber RC cheetah, 2.4G
Claw Climber RC rhino
Model No.(EUT): 10300
Add Model No.: 10301, 10302
FCC ID: QEA-T689-24GT
Standards: 47 CFR Part 15, Subpart C (2015)
Date of Receipt: 2016-01-08
Date of Test: 2016-01-11 to 2016-01-15
Date of Issue: 2016-01-18

Test Result:

PASS *

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:



Jack Zhang
EMC Laboratory Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

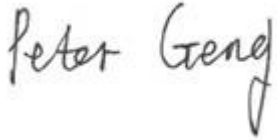
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2 Version

Revision Record				
Version	Chapter	Date	Modifier	Remark
00		2016-01-18		Original

Authorized for issue by:				
Tested By		 (Peter Geng) /Project Engineer		2016-01-15
				Date
Prepared By		 (Iris Zhou) /Clerk		2016-01-18
				Date
Checked By		 (Eric Fu) /Reviewer		2016-01-18
				Date



3 Test Summary

Test Item	Test Requirement	Test method	Result
Antenna Requirement	47 CFR Part 15, Subpart C Section 15.203	ANSI C63.10 (2013)	PASS
Field Strength of the Fundamental Signal	47 CFR Part 15, Subpart C Section 15.249 (a)	ANSI C63.10 (2013)	PASS
Spurious Emissions	47 CFR Part 15, Subpart C Section 15.249 (a)/15.209	ANSI C63.10 (2013)	PASS
Restricted bands around fundamental frequency (Radiated Emission)	47 CFR Part 15, Subpart C Section 15.249(a)/15.205	ANSI C63.10 (2013)	PASS
20dB Occupied Bandwidth	47 CFR Part 15, Subpart C Section 15.215 (c)	ANSI C63.10 (2013)	PASS

Remark:

Model No.: 10300, 10301, 10302

Only the model 10300 was tested, since the electrical circuit design, layout, components used and internal wiring were identical for all above models. Only different on shape and color.



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5 General Information

5.1 Client Information

Applicant:	KID GALAXY INC.
Address of Applicant:	150 Dow Street, Tower 2, Unit 425B, Manchester, New Hampshire 03101 U.S.A

5.2 General Description of EUT

Product Name:	2.4G Claw Climber RC tiger, 2.4G Claw Climber RC cheetah, 2.4G Claw Climber RC rhino
Model No.:	10300
Country of Origin:	CHINA
Request Age Grading:	5+
Frequency Range:	2405MHz-2468MHz
Modulation Type:	GFSK
Number of Channels:	6 (declared by the client)
Channel List:	Please refer to the next page
Sample Type:	Portable production
Antenna Type:	Integral
Antenna Gain:	0dBi
Power Supply:	3.0V DC (2 x 1.5V "AAA" Size Battery)



Operation Frequency each of channel					
Channel	Frequency	Channel	Frequency	Channel	Frequency
1CH	2405 MHz	N/A		N/A	
2CH	2415 MHz	N/A		N/A	
3CH	2428 MHz	N/A		N/A	
4CH	2442 MHz	N/A		N/A	
5CH	2458 MHz	N/A		N/A	
6CH	2468 MHz	N/A		N/A	

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Channel	Frequency
The Lowest channel(CH1)	2405MHz
The Middle channel(CH4)	2442MHz
The Highest channel(CH6)	2468MHz



5.3 Test Environment and Mode

Operating Environment:	
Temperature:	25.0 °C
Humidity:	50 % RH
Atmospheric Pressure:	1015 mbar
Test mode:	
Transmitting mode:	Keep the EUT in transmitting mode with modulation.

5.4 Description of Support Units

The EUT has been tested independently.

5.5 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch E&E Lab,
No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong,
China.

518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.



5.6 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **CNAS (No. CNAS L2929)**

CNAS has accredited SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

- **A2LA (Certificate No. 3816.01)**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

- **VCCI**

The 10m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-823, R-4188, T-1153 and C-2383 respectively.

- **FCC – Registration No.: 556682**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No.: 556682.

- **Industry Canada (IC)**

The 3m Semi-anechoic chambers and the 10m Semi-anechoic chambers of SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab have been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 4620C-2, 4620C-3.

5.7 Deviation from Standards

None.

5.8 Abnormalities from Standard Conditions

None.

5.9 Other Information Requested by the Customer

None.



5.10 Equipment List

RE in Chamber						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date (yyyy-mm-dd)	Cal.Due date (yyyy-mm-dd)
1	3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEL0017	2015-05-13	2016-05-13
2	EMI Test Receiver	Agilent Technologies	N9038A	SEL0312	2015-09-16	2016-09-16
3	EMI Test software	AUDIX	E3	SEL0050	N/A	N/A
4	BiConiLog Antenna (26-3000MHz)	ETS-LINDGREN	3142C	SEL0015	2014-11-15	2017-11-15
5	Double-ridged horn (1-18GHz)	ETS-LINDGREN	3117	SEL0006	2015-10-17	2016-10-17
6	Horn Antenna (18-26GHz)	ETS-LINDGREN	3160	SEL0076	2014-11-24	2017-11-24
7	Pre-amplifier (0.1-1300MHz)	Agilent Technologies	8447D	SEL0053	2015-05-13	2016-05-13
8	Pre-Amplifier (0.1-26.5GHz)	Compliance Directions Systems Inc.	PAP-0126	SEL0168	2015-10-17	2016-10-17
9	Coaxial cable	SGS	N/A	SEL0027	2015-05-13	2016-05-13
10	Coaxial cable	SGS	N/A	SEL0189	2015-05-13	2016-05-13
11	Coaxial cable	SGS	N/A	SEL0121	2015-05-13	2016-05-13
12	Coaxial cable	SGS	N/A	SEL0178	2015-05-13	2016-05-13
13	Band filter	Amindeon	82346	SEL0094	2015-05-13	2016-05-13
14	Barometer	Chang Chun	DYM3	SEL0088	2015-05-13	2016-05-13
15	DC Power Supply	Zhao Xin	RXN-305D	SEL0117	2015-10-09	2016-10-09
16	Humidity/ Temperature Indicator	Shanghai Qixiang	ZJ1-2B	SEL0103	2015-10-24	2016-10-24
17	Signal Generator (10M-27GHz)	Rohde & Schwarz	SMR27	SEL0067	2015-05-13	2016-05-13
18	Loop Antenna	Beijing Daze	ZN30401	SEL0203	2015-05-13	2016-05-13



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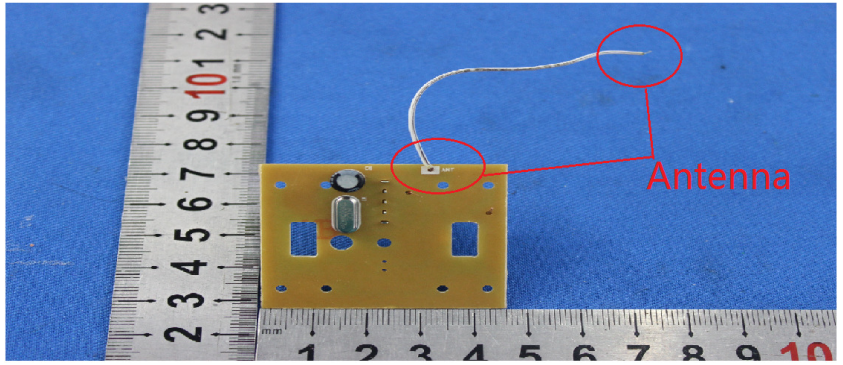
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RF connected test						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date (yyyy-mm-dd)	Cal.Due date (yyyy-mm-dd)
1	DC Power Supply	Zhao Xin	RXN-305D	SEL0117	2015-10-09	2016-10-09
2	Humidity/ Temperature Indicator	HYGRO	ZJ1-2B	SEL0033	2015-10-24	2016-10-24
3	Spectrum Analyzer	Rohde & Schwarz	FSP	SEL0154	2015-10-17	2016-10-17
4	Coaxial cable	SGS	N/A	SEL0178	2015-05-13	2016-05-13
5	Coaxial cable	SGS	N/A	SEL0179	2015-05-13	2016-05-13
6	Barometer	ChangChun	DYM3	SEL0088	2015-05-13	2016-05-13
7	Signal Generator	Rohde & Schwarz	SML03	SEL0068	2015-04-25	2016-04-25
8	POWER METER	R & S	NRVS	SEL0144	2015-10-09	2016-10-09
9	Attenuator	Beijin feihang taida	TST-2-6dB	SEL0205	2015-04-25	2016-04-25

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6 Test results and Measurement Data

6.1 Antenna Requirement

Standard requirement:	47 CFR Part 15C Section 15.203
15.203 requirement: 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, 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.	
EUT Antenna:	
The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is 0dBi.	





6.2 Spurious Emissions

6.2.1 Spurious Emissions

Test Requirement:	47 CFR Part 15C Section 15.249 and 15.209				
Test Method:	ANSI C63.10: 2013				
Test Site:	Measurement Distance: 3m				
Receiver Setup:	Frequency	Detector	RBW	VBW	Remark
	0.009MHz-0.090MHz	Peak	10kHz	30KHz	Peak
	0.009MHz-0.090MHz	Average	10kHz	30KHz	Average
	0.090MHz-0.110MHz	Quasi-peak	10kHz	30KHz	Quasi-peak
	0.110MHz-0.490MHz	Peak	10kHz	30KHz	Peak
	0.110MHz-0.490MHz	Average	10kHz	30KHz	Average
	0.490MHz -30MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
	30MHz-1GHz	Quasi-peak	100 kHz	300KHz	Quasi-peak
	Above 1GHz	Peak	1MHz	3MHz	Peak
Peak		1MHz	10Hz	Average	
Limit: (Spurious Emissions)	Frequency	Field strength (microvolt/ meter)	Limit (dBuV/m)	Remark	Measurement distance (m)
	0.009MHz-0.490MHz	2400/F(kHz)	-	-	300
	0.490MHz-1.705MHz	24000/F(kHz)	-	-	30
	1.705MHz-30MHz	30	-	-	30
	30MHz-88MHz	100	40.0	Quasi-peak	3
	88MHz-216MHz	150	43.5	Quasi-peak	3
	216MHz-960MHz	200	46.0	Quasi-peak	3
	960MHz-1GHz	500	54.0	Quasi-peak	3
	Above 1GHz	500	54.0	Average	3
Note: 15.35(b), Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device.					
Limit: (Field strength of the fundamental signal)	Frequency	Limit (dBuV/m @3m)		Remark	
	2400MHz-2483.5MHz	94.0		Average Value	
		114.0		Peak Value	
Test Setup:					

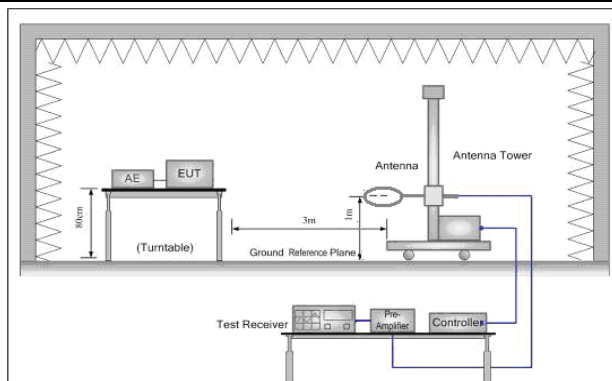


Figure 1. Below 30MHz

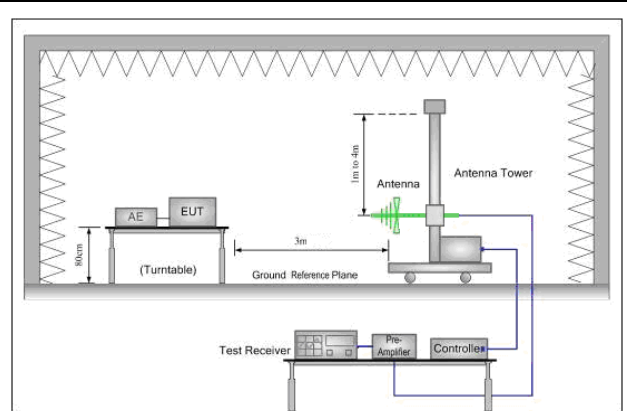


Figure 2. 30MHz to 1GHz

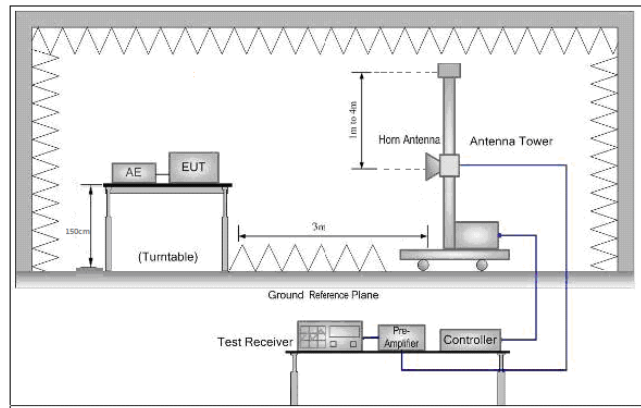


Figure 3. Above 1 GHz

Test Procedure:

- For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method.



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	as specified and then reported in a data sheet. h. Test the EUT in the lowest channel, the middle channel, the Highest channel i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, And found the X axis positioning which it is worse case. j. Repeat above procedures until all frequencies measured was complete.
Instruments Used:	Refer to section 5.10 for details
Exploratory Test Mode:	Transmitting mode
Final Test Mode:	Transmitting mode
Test Results:	Pass



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Measurement Data

6.2.1.1 Field Strength Of The Fundamental Signal

Peak value:

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamplifier Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2405	28.62	5.35	38.11	87.66	83.52	114.00	-30.48	Horizontal
2405	28.62	5.35	38.11	84.53	80.39	114.00	-33.61	Vertical
2442	28.79	5.38	38.11	85.72	81.78	114.00	-32.22	Horizontal
2442	28.79	5.38	38.11	85.09	81.15	114.00	-32.85	Vertical
2468	28.92	5.4	38.12	86.68	82.88	114.00	-31.12	Horizontal
2468	28.92	5.4	38.12	81.34	77.54	114.00	-36.46	Vertical



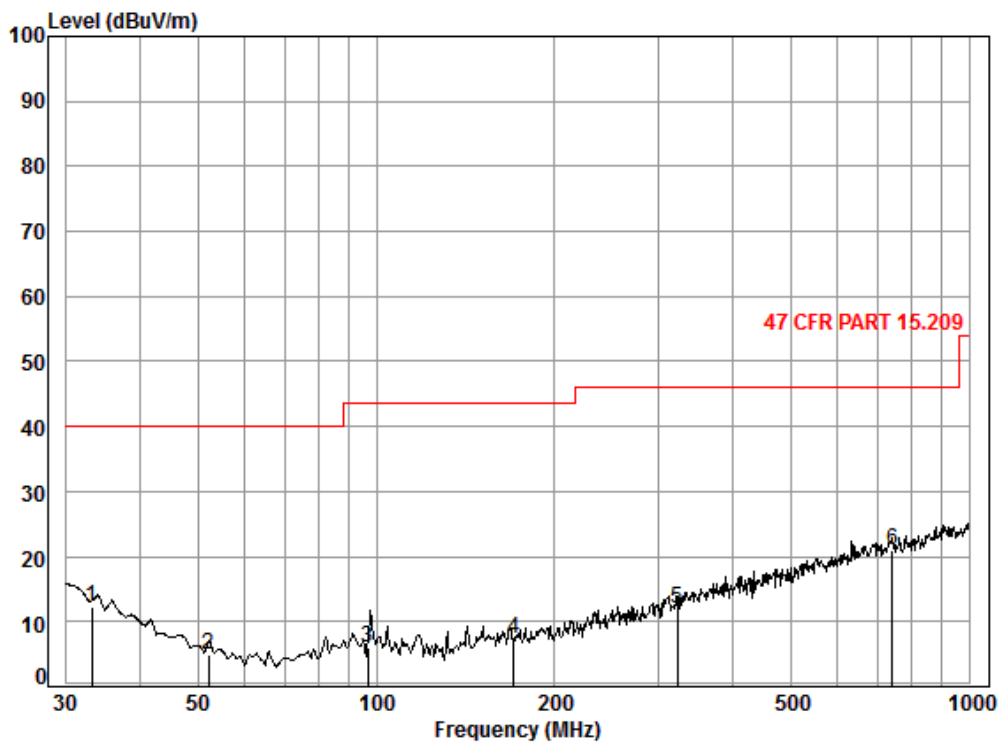
6.2.1.2 Spurious Emissions

30MHz~1GHz	
Test mode:	Transmitting

QP value:

Horizontal:

Data: 44



Condition: 47 CFR PART 15.209 3m 3142C HORIZONTAL

Job No. : 0130CR

Mode : TX mode

		Cable	Ant	Preamp	Read	Over	
	Freq	Loss	Factor	Factor	Level	Level	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dB
1	33.09	0.60	17.02	27.34	21.98	12.26	-27.74
2	52.21	0.80	8.50	27.28	22.81	4.83	-35.17
3	96.77	1.17	9.01	27.20	23.13	6.11	-37.39
4	170.79	1.35	9.53	26.81	23.32	7.39	-36.11
5	322.19	1.97	14.67	26.58	21.81	11.87	-34.13
6	742.26	3.03	21.60	27.36	23.74	21.01	-24.99



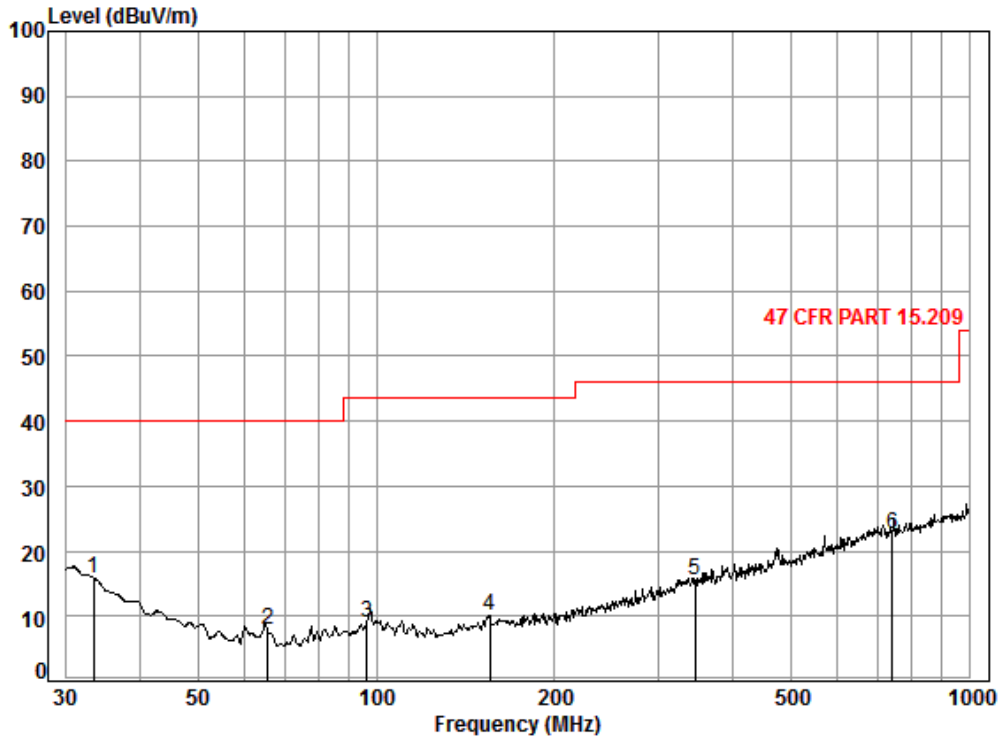
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Vertical:

Data: 43



Condition: 47 CFR PART 15.209 3m 3142C VERTICAL

Job No. : 0130CR

Mode : TX mode

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Over Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dB
1	33.33	0.60	16.88	27.34	25.78	15.92	-24.08
2	65.57	0.80	7.03	27.26	27.28	7.85	-32.15
3	96.44	1.17	9.00	27.21	26.10	9.06	-34.44
4	155.36	1.33	9.52	26.88	26.04	10.01	-33.49
5	344.39	2.04	15.35	26.75	24.98	15.62	-30.38
6	742.26	3.03	21.60	27.36	25.23	22.50	-23.50



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Above 1GHz								
Test mode:		Transmitting		Test channel:		Lowest		Remark:
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
3892.524	32.99	7.77	38.52	44.42	46.66	74	-27.34	Vertical
4810.000	34.11	8.88	38.75	44.87	49.11	74	-24.89	Vertical
6087.002	34.74	10.45	38.85	45.29	51.63	74	-22.37	Vertical
7215.000	35.59	10.68	37.63	40.28	48.92	74	-25.08	Vertical
9620.000	37.10	12.51	36.33	35.87	49.15	74	-24.85	Vertical
12603.270	37.90	14.44	37.75	38.28	52.87	74	-21.13	Vertical
3770.567	32.78	7.73	38.47	45.13	47.17	74	-26.83	Horizontal
4810.000	34.11	8.88	38.75	46.34	50.58	74	-23.42	Horizontal
5982.226	34.66	10.51	38.96	46.24	52.45	74	-21.55	Horizontal
7215.000	35.59	10.68	37.63	40.48	49.12	74	-24.88	Horizontal
9620.000	37.10	12.51	36.33	36.51	49.79	74	-24.21	Horizontal
12639.790	37.92	14.55	37.79	37.51	52.19	74	-21.81	Horizontal

Test mode:		Transmitting		Test channel:		Middle		Remark:
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
3770.567	32.78	7.73	38.47	44.65	46.69	74	-27.31	Vertical
4884.000	34.18	8.98	38.77	45.74	50.13	74	-23.87	Vertical
6016.949	34.71	10.54	38.94	45.81	52.12	74	-21.88	Vertical
7326.000	35.54	10.73	37.59	42.27	50.95	74	-23.05	Vertical
9768.000	37.10	12.59	36.13	37.44	51.00	74	-23.00	Vertical
12603.270	37.90	14.44	37.75	37.56	52.15	74	-21.85	Vertical
3814.467	32.91	7.75	38.49	44.51	46.68	74	-27.32	Horizontal
4884.000	34.18	8.98	38.77	46.50	50.89	74	-23.11	Horizontal
6087.002	34.74	10.45	38.85	46.21	52.55	74	-21.45	Horizontal
7326.000	35.54	10.73	37.59	43.53	52.21	74	-21.79	Horizontal
9768.000	37.10	12.59	36.13	37.20	50.76	74	-23.24	Horizontal
12603.270	37.90	14.44	37.75	38.85	53.44	74	-20.56	Horizontal

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Test mode:		Transmitting		Test channel:		Highest		Remark:		Peak	
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamplifier Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization			
3641.878	32.27	7.68	38.42	46.15	47.68	74	-26.32	Vertical			
4936.000	34.24	9.05	38.78	45.33	49.84	74	-24.16	Vertical			
5964.939	34.61	10.46	38.95	45.78	51.90	74	-22.10	Vertical			
7404.000	35.51	10.75	37.55	39.46	48.17	74	-25.83	Vertical			
9872.000	37.17	12.64	36.00	38.13	51.94	74	-22.06	Vertical			
12603.270	37.90	14.44	37.75	38.70	53.29	74	-20.71	Vertical			
3684.279	32.44	7.70	38.44	43.97	45.67	74	-28.33	Horizontal			
4936.000	34.24	9.05	38.78	47.54	52.05	74	-21.95	Horizontal			
6016.949	34.71	10.54	38.94	45.99	52.30	74	-21.70	Horizontal			
7404.000	35.51	10.75	37.55	39.81	48.52	74	-25.48	Horizontal			
9872.000	37.17	12.64	36.00	38.60	52.41	74	-21.59	Horizontal			
12603.270	37.90	14.44	37.75	36.76	51.35	74	-22.65	Horizontal			

Remark:

- 1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:
Final Test Level = Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor
- 2) Scan from 9kHz to 25GHz, The disturbance above 13GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported .
- 3) As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. So, only the peak measurements were shown in the report.

6.3 Restricted bands around fundamental frequency

Test Requirement:	47 CFR Part 15C Section 15.209 and 15.205																					
Test Method:	ANSI C63.10: 2013																					
Test site:	Measurement Distance: 3m																					
Limit(band edge):	Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation. <table border="1"> <thead> <tr> <th>Frequency</th><th>Limit (dBuV/m @3m)</th><th>Remark</th></tr> </thead> <tbody> <tr> <td>30MHz-88MHz</td><td>40.0</td><td>Quasi-peak Value</td></tr> <tr> <td>88MHz-216MHz</td><td>43.5</td><td>Quasi-peak Value</td></tr> <tr> <td>216MHz-960MHz</td><td>46.0</td><td>Quasi-peak Value</td></tr> <tr> <td>960MHz-1GHz</td><td>54.0</td><td>Quasi-peak Value</td></tr> <tr> <td rowspan="2">Above 1GHz</td><td>54.0</td><td>Average Value</td></tr> <tr> <td>74.0</td><td>Peak Value</td></tr> </tbody> </table>		Frequency	Limit (dBuV/m @3m)	Remark	30MHz-88MHz	40.0	Quasi-peak Value	88MHz-216MHz	43.5	Quasi-peak Value	216MHz-960MHz	46.0	Quasi-peak Value	960MHz-1GHz	54.0	Quasi-peak Value	Above 1GHz	54.0	Average Value	74.0	Peak Value
Frequency	Limit (dBuV/m @3m)	Remark																				
30MHz-88MHz	40.0	Quasi-peak Value																				
88MHz-216MHz	43.5	Quasi-peak Value																				
216MHz-960MHz	46.0	Quasi-peak Value																				
960MHz-1GHz	54.0	Quasi-peak Value																				
Above 1GHz	54.0	Average Value																				
	74.0	Peak Value																				
Test Setup:																						

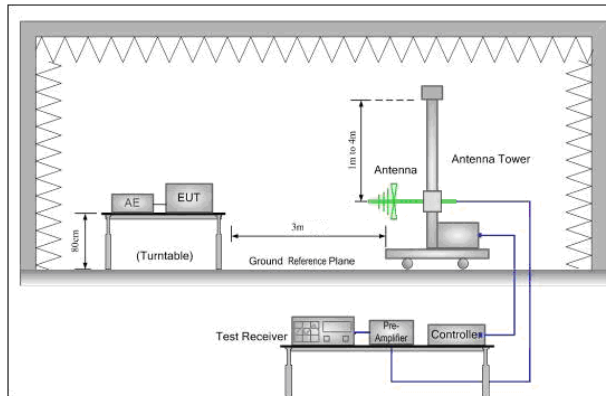


Figure 1. 30MHz to 1GHz

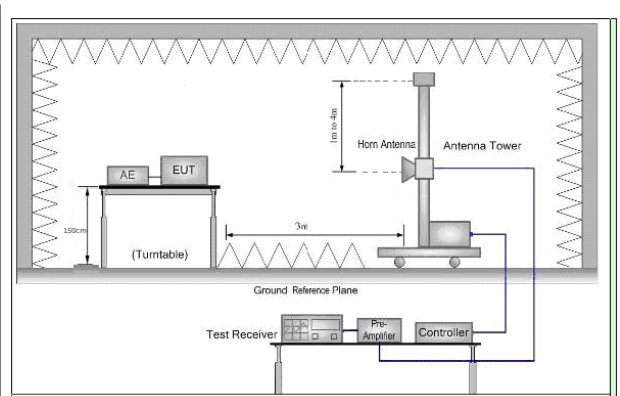


Figure 2. Above 1 GHz



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Test Procedure:	a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. c. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. g. Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel h. Test the EUT in the lowest channel , the Highest channel i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode,And found the X axis positioning which it is worse case.. j. Repeat above procedures until all frequencies measured was complete.
Instruments Used:	Refer to section 5.10 for details
Exploratory Test Mode:	Transmitting mode
Final Test Mode:	Transmitting mode
Test Results:	Pass





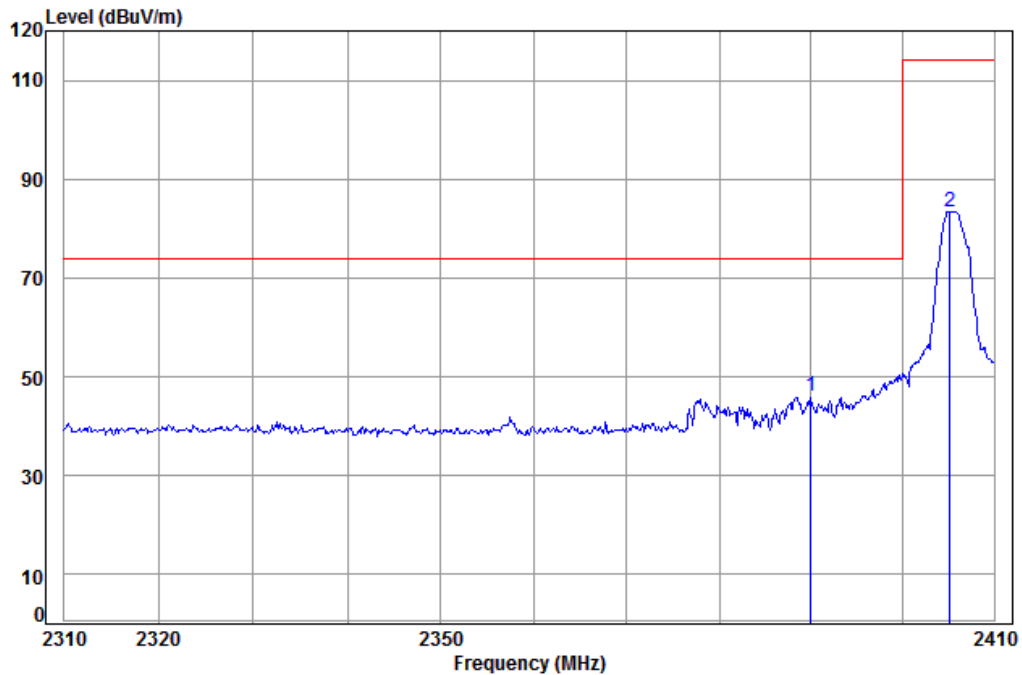
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Band edge (Radiated Emission)					
Test mode:	Transmitting	Test channel:	Lowest	Remark:	Peak

Horizontal:



Condition: 3m Horizontal

Job No: : 0130CR

Mode: : 2405 Band edge

		Cable	Ant	Preamp	Read		Limit	Over
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 pp	2390.00	5.34	28.57	38.11	50.22	46.02	74.00	-27.98
2	2405.21	5.35	28.62	38.11	87.66	83.52	114.00	-30.48

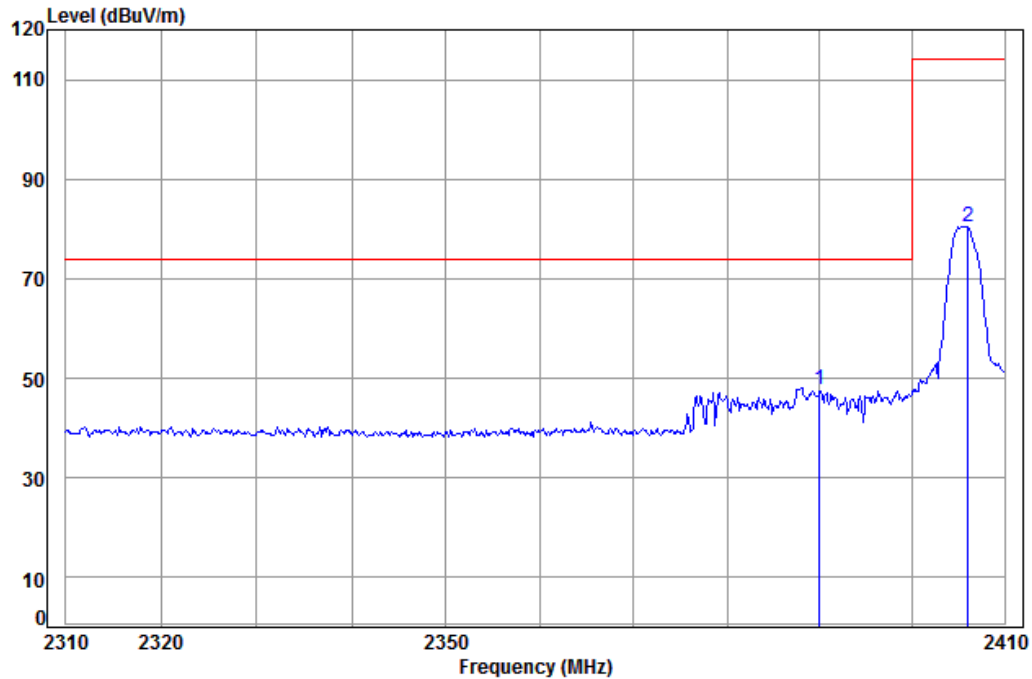


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Vertical:



Condition: 3m Vertical

Job No: : 0130CR

Mode: : 2405 Band edge

		Cable	Ant	Preamp	Read	Limit	Over	
	Freq	Loss	Factor	Factor	Level	Line	Limit	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 pp	2390.00	5.34	28.57	38.11	51.96	47.76	74.00	-26.24
2	2406.02	5.35	28.63	38.11	84.53	80.40	114.00	-33.60



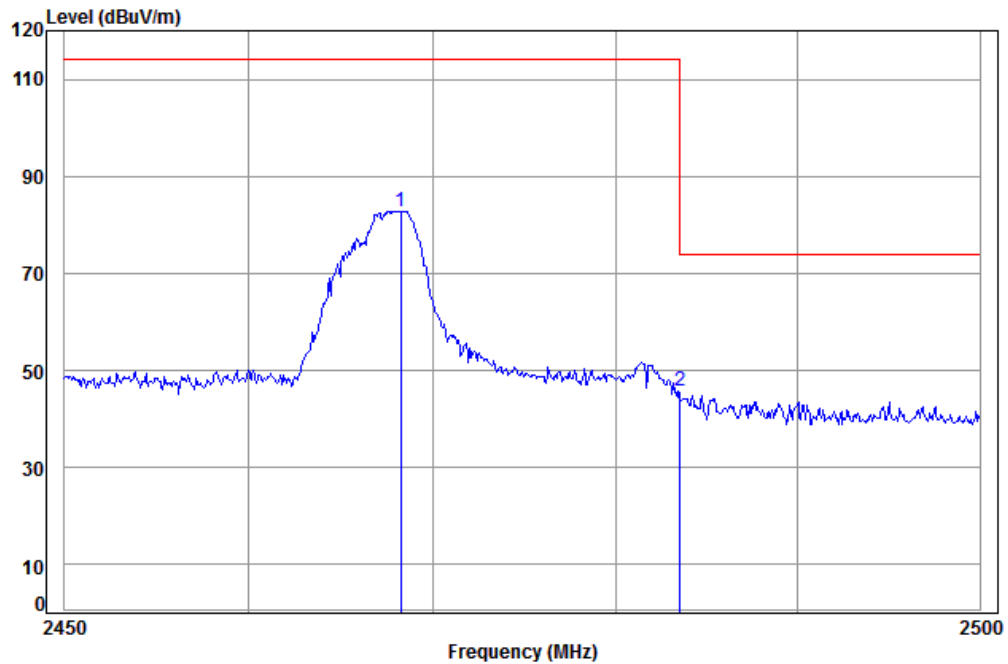
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Test mode:	Transmitting	Test channel:	Highest	Remark:	Peak
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Horizontal:



Condition: 3m Horizontal

Job No: : 0130CR

Mode: : 2468 Band edge

		Cable	Ant	Preamp	Read	Limit	Over
	Freq	Loss	Factor	Factor	Level	Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dB
1	2468.23	5.40	28.92	38.12	86.68	82.88	114.00 -31.12
2 pp	2483.50	5.41	28.98	38.12	49.54	45.81	74.00 -28.19

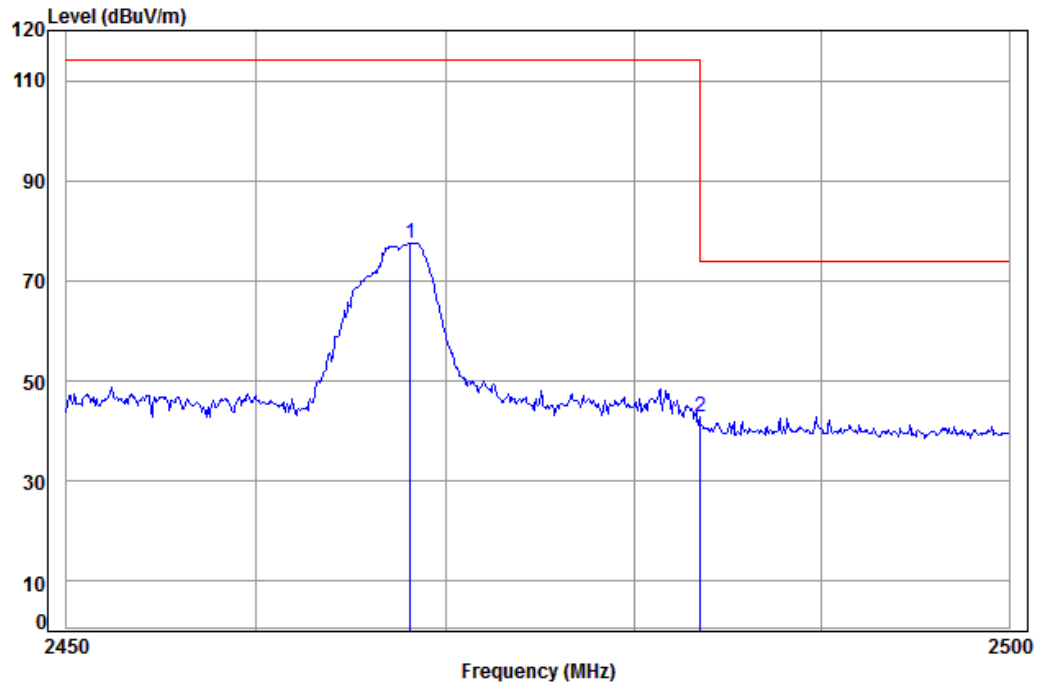


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Vertical:



Condition: 3m Vertical

Job No: : 0130CR

Mode: : 2468 Band edge

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	2468.13	5.40	28.91	38.12	81.34	77.53	114.00	-36.47
2 pp	2483.50	5.41	28.98	38.12	46.56	42.83	74.00	-31.17

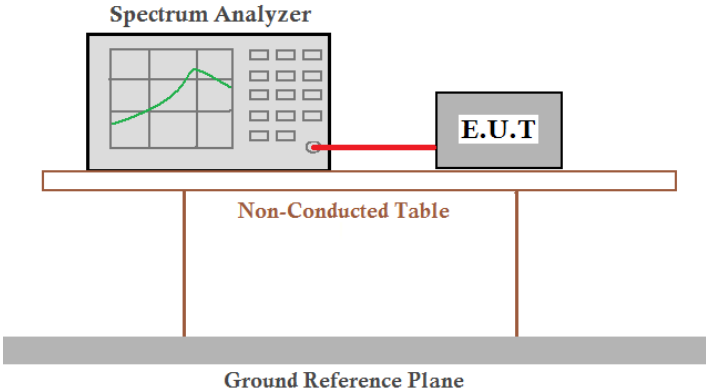
Note:

1)The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

2)Final Test Level =Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor

3)The spurious emissions in the restricted band with Peak detector are below the Average limit, so the tests with Average detector is no need to conduct. It is deemed to comply with the requirement.

6.4 20dB Bandwidth

Test Requirement:	47 CFR Part 15C Section 15.215
Test Method:	ANSI C63.10:2013
Test Setup:	
Instruments Used:	Refer to section 5.10 for details
Test mode:	Transmitting mode
Limit:	Within the band 2400MHz-2483.5MHz
Test Results:	Pass

Measurement Data

Test channel	20dB bandwidth (MHz)	Results
Lowest	1.007	Pass
Middle	1.431	Pass
Highest	0.989	Pass



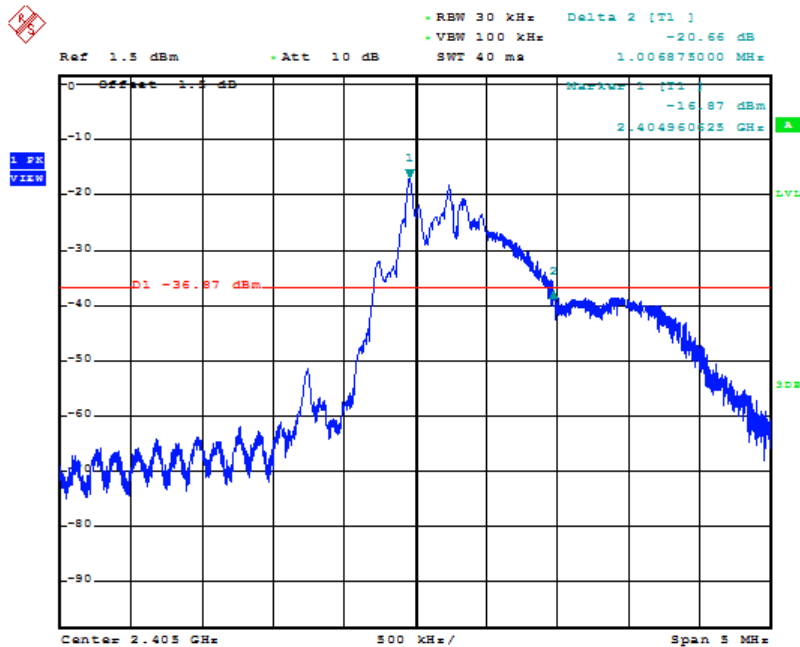
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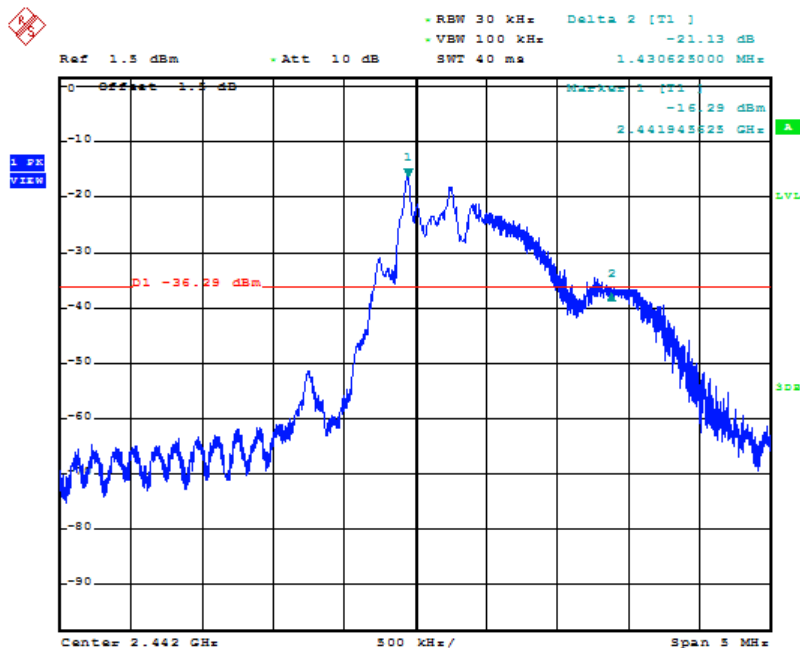
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Test plot as follows:

Test channel:	Lowest
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Test channel:	Middle
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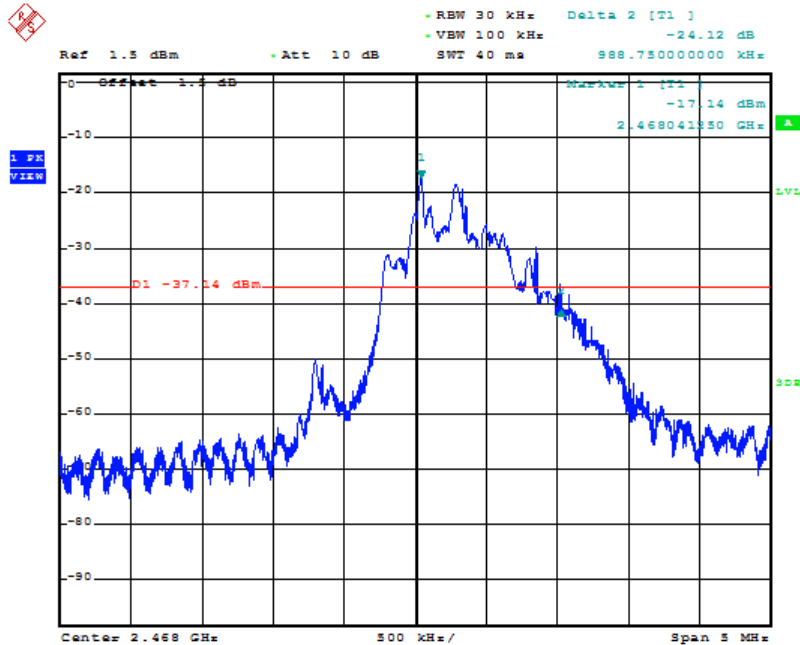


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Test channel:	Highest
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7 Photographs

Test model No.: 10300

7.1 Radiated Emission Test Setup

