SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

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TEST REPORT

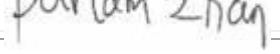
Application No.:	SHEM1804002592CR
Applicant:	Kohler Co.
Address of Applicant:	444 Highland Drive Kohler, WI 53044 United States
Manufacturer:	Shanghai Kohler Electronics., Ltd.
Address of Manufacturer:	No. 1955, Fengxiang Road, Baoshan Area, Shanghai, PRC Post code: 200444
Factory:	Shanghai Kohler Electronics., Ltd.
Address of Factory:	No. 1955, Fengxiang Road, Baoshan Area, Shanghai, PRC Post code: 200444
FCC ID:	N82-KOHLER030
IC:	4554A- KOHLER030
Equipment Under Test (EUT):	
EUT Name:	Remote Controller
Model No.:	1340047
Standard(s) :	47 CFR Part 15, Subpart C 15.249
	RSS-210 Issue 9 August 2016 (Amendment)
	RSS-Gen Issue 5, May 2018
Date of Receipt:	2018-04-10
Date of Test:	2018-04-11 to 2018-04-23
Date of Issue:	2018-05-03
Test Result:	**Pass***

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

Parlam Zhan
E&E Section 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.

Revision Record			
Version	**Description**	**Date**	**Remark**
00	Original	2018-05-03	/

Authorized for issue by:				
				
		Eddy Zong / Project Engineer		
				
		Parlam Zhan /Reviewer		

2 Test Summary

Radio Spectrum Technical Requirement				
Item	**Standard**	**Method**	**Requirement**	**Result**
Antenna Requirement	RSS-210 Issue 9 August 2016 (Amendment)	N/A	RSS-Gen Section 8.3	Pass

Radio Spectrum Matter Part				
Item	**Standard**	**Method**	**Requirement**	**Result**
20dB Bandwidth	47 CFR Part 15, Subpart C 15.249	ANSI C63.10 (2013) Section 6.9	47 CFR Part 15, Subpart C 15.215	Pass
99% Bandwidth	RSS-210 Issue 9 August 2016 (Amendment)	RSS-Gen Issue 5 Section 6.6	RSS-Gen Issue 5 Section 6.6	Pass
Field Strength of the Fundamental Signal	RSS-210 Issue 9 August 2016 (Amendment)	ANSI C63.10 (2013) Section 6.5&6.6	RSS-210 A2.9 (a)	Pass
Restricted Band Around Fundamental Frequency	RSS-210 Issue 9 August 2016 (Amendment)	ANSI C63.10 (2013) Section 6.4&6.5&6.6	RSS-Gen Issue 5 Section 8.9 & 8.10	Pass
Radiated Emissions	RSS-210 Issue 9 August 2016 (Amendment)	ANSI C63.10 (2013) Section 6.4&6.5&6.6	RSS-Gen Issue 5 Section 8.9 & RSS-210 A2.9 (b)	Pass

3 Contents

4 General Information

4.1 Details of E.U.T.

Power supply:	DC 6V by 4*1.5V AA battery
Operation Frequency	2415.5MHz to 2449.5MHz
Modulation Type	MSK
Antenna Type	Integral
Antenna Gain	2.88dBi

4.2 Description of Support Units

The EUT has been tested as an independent unit.

4.3 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	7.25 x 10-8
2	Timeout	2s
3	Duty cycle	0.37%
4	Occupied Bandwidth	3%
5	RF conducted power	0.75dB
6	RF power density	2.84dB
7	Conducted Spurious emissions	0.75dB
8	RF Radiated power	4.5dB (Below 1GHz)
		4.8dB (Above 1GHz)
9	Radiated Spurious emission test	4.2dB (Below 30MHz)
		4.4dB (30MHz-1GHz)
		4.6dB (1GHz-18GHz)
		5.2dB (Above 18GHz)
10	Temperature test	1°C
11	Humidity test	3%
12	Supply voltages	1.5%
13	Time	3%

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

4.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. E&E Lab

588 West Jindu Road, Xinqiao, Songjiang, 201612 Shanghai, China

Tel: +86 21 6191 5666 Fax: +86 21 6191 5678

No tests were sub-contracted.

4.5 Test Facility

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

• CNAS (No. CNAS L0599)

CNAS has accredited SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. 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.

• NVLAP (Certificate No. 201034-0)

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. is accredited by the National Voluntary Laboratory Accreditation Program(NVLAP). Certificate No. 201034-0.

• FCC –Designation Number: CN5033

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been recognized as an accredited testing laboratory.

Designation Number: CN5033. Test Firm Registration Number: 479755.

• Industry Canada (IC) – IC Assigned Code: 8617A

The 3m Semi-anechoic chamber of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 8617A-1.

• VCCI (Member No.: 3061)

The 3m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-3868,C-4336,T-12221,G-10830 respectively.

4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None

5 Equipment List

Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Conducted Test					
Spectrum Analyzer	R&S	FSP-30	SHEM002-1	2017-12-20	2018-12-19
Spectrum Analyzer	Agilent	N9020A	SHEM181-1	2017-09-26	2018-09-25
Power meter	R&S	NRP	SHEM057-1	2017-12-26	2018-12-25
Power Sensor	R&S	NRP-Z22	SHEM136-1	2017-07-22	2018-07-21
Power Sensor	R&S	NRP-Z91	SHEM057-2	2017-12-26	2018-12-25
Signal Generator	R&S	SMR40	SHEM058-1	2017-07-03	2018-07-02
Signal Generator	Agilent	N5182A	SHEM182-1	2017-09-26	2018-09-25
Communication Tester	R&S	CMW270	SHEM183-1	2017-10-22	2018-10-21
Switcher	Tonscend	JS0806	SHEM184-1	2017-09-26	2018-09-25
Splitter	Anritsu	MA1612A	SHEM185-1	/	/
Coupler	e-meca	803-S-1	SHEM186-1	/	/
High-low Temp Cabinet	Suzhou Zhihe	TL-40	SHEM087-1	2017-09-26	2018-09-25
AC Power Stabilizer	WOCEN	6100	SHEM045-1	2017-12-26	2018-12-25
DC Power Supply	QJE	QJ30003SII	SHEM046-1	2017-12-26	2018-12-25
Conducted test Cable	/	RF01, RF 02	/	2017-12-26	2018-12-25
Radiated Test					
EMI test receiver	R&S	ESU40	SHEM051-1	2017-12-20	2018-12-19
Spectrum Analyzer	R&S	FSP-30	SHEM002-1	2017-12-20	2018-12-19
Loop Antenna (9kHz-30MHz)	Schwarzbeck	FMZB1519	SHEM135-1	2017-04-10	2020-04-09
Antenna (25MHz-2GHz)	Schwarzbeck	VULB9168	SHEM048-1	2017-02-28	2020-02-27
Antenna (25MHz-3GHz)	Schwarzbeck	HL562	SHEM010-1	2017-02-28	2020-02-27
Horn Antenna (1-8GHz)	Schwarzbeck	HF906	SHEM009-1	2017-10-24	2020-10-23
Horn Antenna (1-18GHz)	Schwarzbeck	BBHA9120D	SHEM050-1	2017-01-14	2020-01-13
Horn Antenna (14-40GHz)	Schwarzbeck	BBHA 9170	SHEM049-1	2017-12-03	2020-12-02
Pre-amplifier (9KHz-2GHz)	CLAVIIO	)LNA-0001-412010	SHEM164-1	2017-08-22	2018-08-21
Pre-amplifier (1-18GHz)	CLAVIIO	BDLNA-0118-352810	SHEM050-2	2017-08-22	2018-08-21
High-amplifier (14-40GHz)	Schwarzbeck	10001	SHEM049-2	2017-12-20	2018-12-19
Band filter	LORCH	9BRX-875/X150-SR	SHEM156-1	/	/
Band filter	LORCH	13BRX-1950/X500-SR	SHEM083-2	/	/
Band filter	LORCH	5BRX-2400/X200-SR	SHEM155-1	/	/
Band filter	LORCH	5BRX-5500/X1000-SR	SHEM157-2	/	/
High pass Filter	Wainwright	WHK3.0/18G-100SS	SHEM157-1	/	/
High pass Filter	Wainwright	WHKS1700-3SS	SHEM157-3	/	/
Semi/Fully Anechoic	ST	11*6*6M	SHEM078-2	2017-07-22	2020-07-21
RE test Cable	/	RE01, RE02, RE06	/	2017-12-26	2018-12-25

6 Radio Spectrum Technical Requirement

6.1 Antenna Requirement

6.1.1 Test Requirement:

RSS-Gen Section 8.3

Limit:

The applicant for equipment certification, as per RSP-100, must provide a list of all antenna types that may be used with the licence-exempt transmitter, indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna.

Licence-exempt transmitters that have received equipment certification may operate with different types of antennas. However, it is not permissible to exceed the maximum equivalent isotropically radiated power (e.i.r.p.) limits specified in the applicable standard (RSS) for the licence-exempt apparatus.

Testing shall be performed using the highest gain antenna of each combination of licence-exempt transmitter and antenna type, with the transmitter output power set at the maximum level.9 When a measurement at the antenna connector is used to determine RF output power, the effective gain of the device's antenna shall be stated, based on a measurement or on data from the antenna manufacturer.

User manuals for transmitters equipped with detachable antennas shall also contain the following notice in a conspicuous location:

This radio transmitter (identify the device by certification number) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Immediately following the above notice, the manufacturer shall provide a list of all antenna types approved for use with the transmitter, indicating the maximum permissible antenna gain (in dBi).

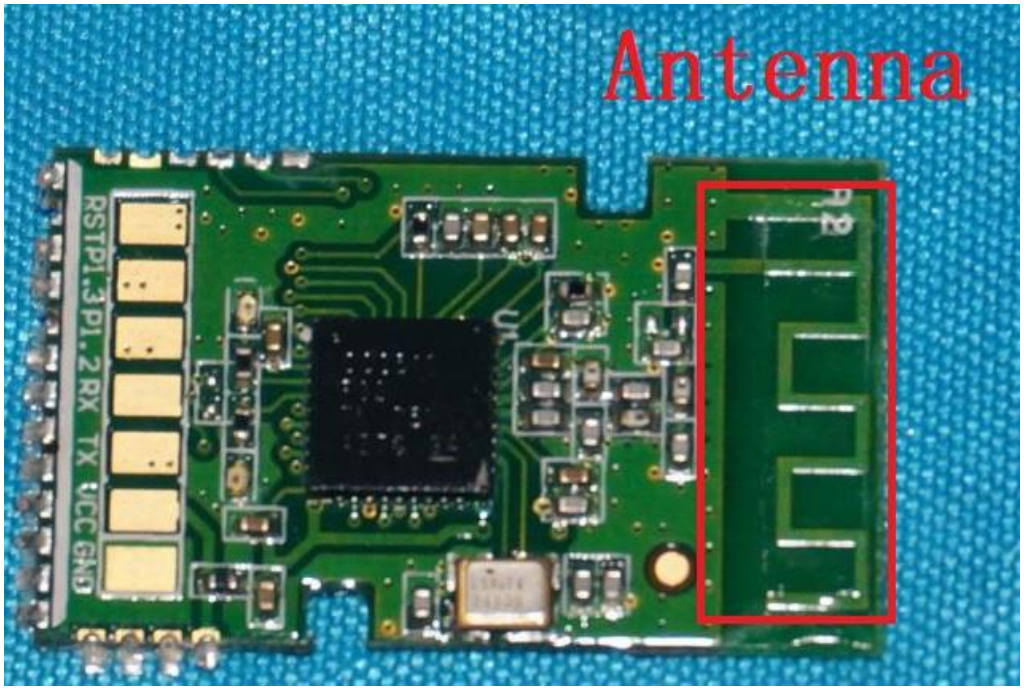
6.1.2 Conclusion

Standard Requirement:

Testing shall be performed using the highest gain antenna of each combination of licence-exempt transmitter and antenna type, with the transmitter output power set at the maximum level. When a measurement at the antenna connector is used to determine RF output power, the effective gain of the device's antenna shall be stated, based on a measurement or on data from the antenna manufacturer.

EUT Antenna:

The antenna is Integral and no consideration of replacement. The best case gain of the antenna is 2.88dBi.



7 Radio Spectrum Matter Test Results

7.1 20dB Bandwidth

Test Requirement 47 CFR Part 15, Subpart C 15.215
Test Method: ANSI C63.10 (2013) Section 6.9
Limit: N/A

7.1.1 E.U.T. Operation

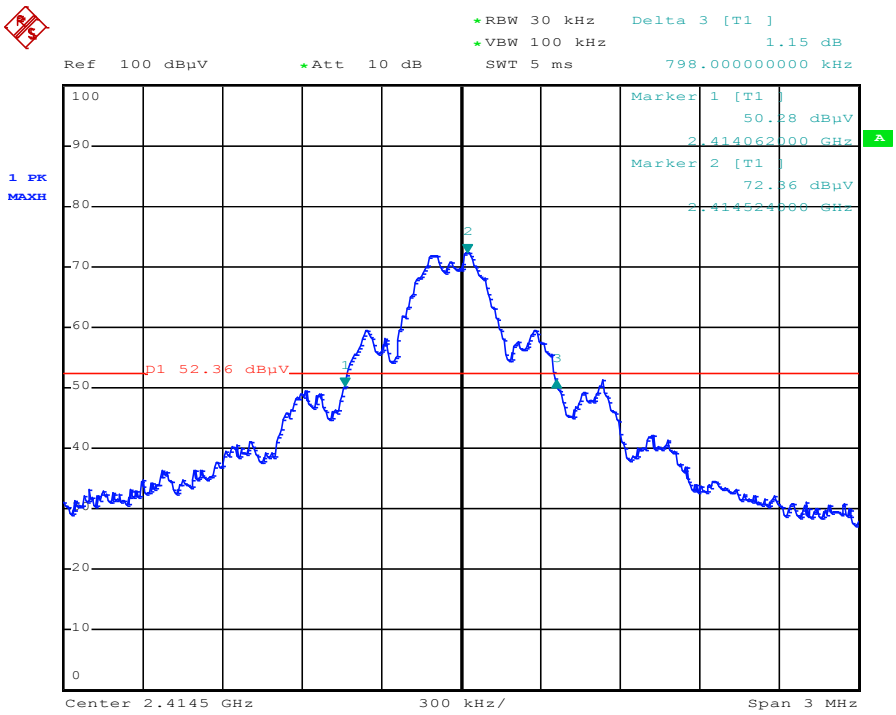
Operating Environment:
Temperature: 21 °C Humidity: 45 % RH Atmospheric Pressure: 1010 mbar
Test mode a:TX mode_Keep the EUT in transmitting with modulation mode.

7.1.2 Measurement Procedure and Data

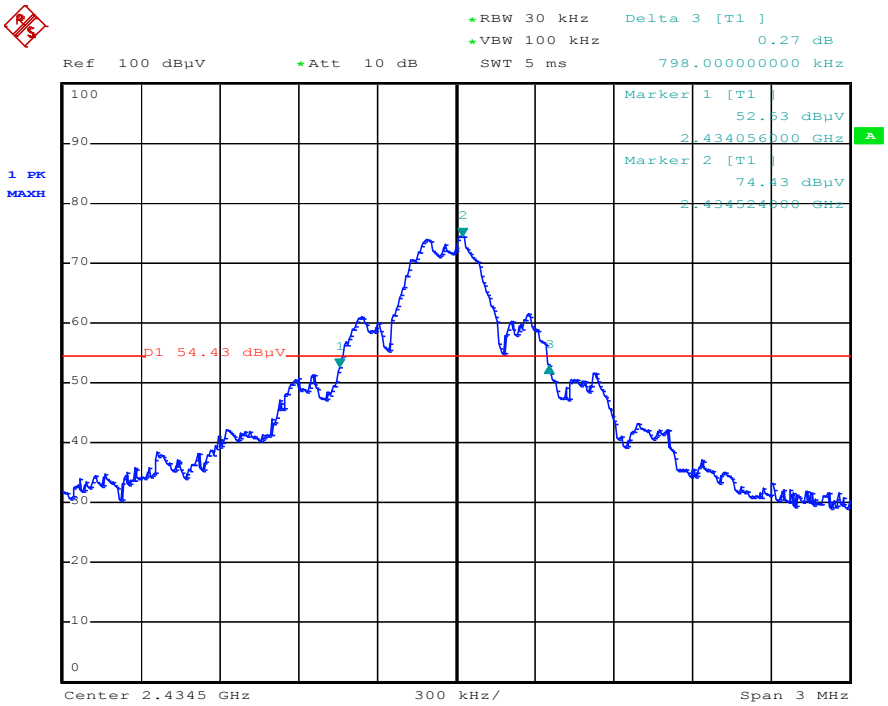
CH	Frequency (MHz)	Bandwidth (kHz)	Result
Low	2414.5	798	PASS
Mid	2434.5	798	PASS
High	2449.5	798	PASS

Test plot as follows:

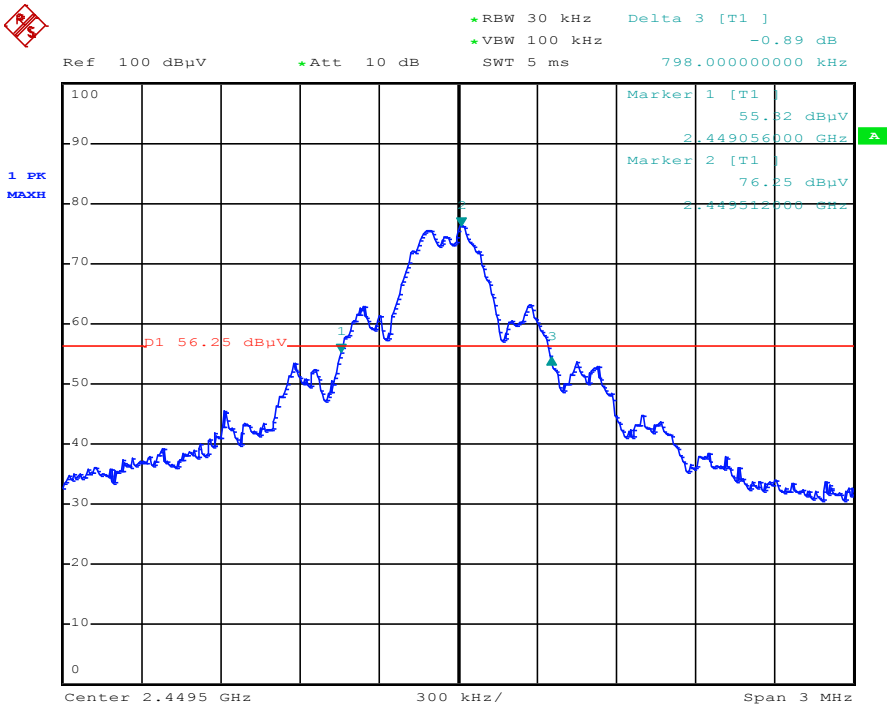
Channel: Lowest



Channel: Middle



Channel: Highest



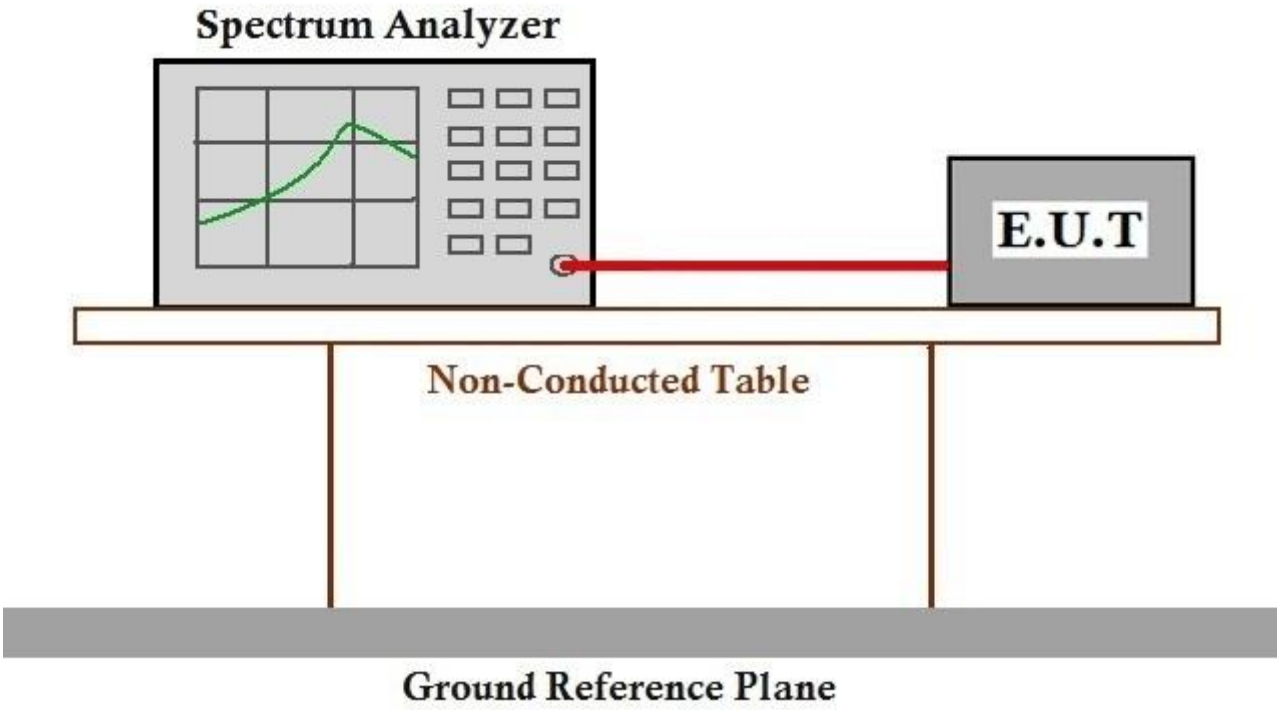
7.2 99% Bandwidth

Test Requirement RSS-Gen Section 6.6
Test Method: RSS-Gen Section 6.6
Limit: N/A

7.2.1 E.U.T. Operation

Operating Environment:
Temperature: 21 °C Humidity: 45 % RH Atmospheric Pressure: 1010 mbar
Test mode a:TX mode_Keep the EUT in transmitting with modulation mode.

7.2.2 Test Setup Diagram

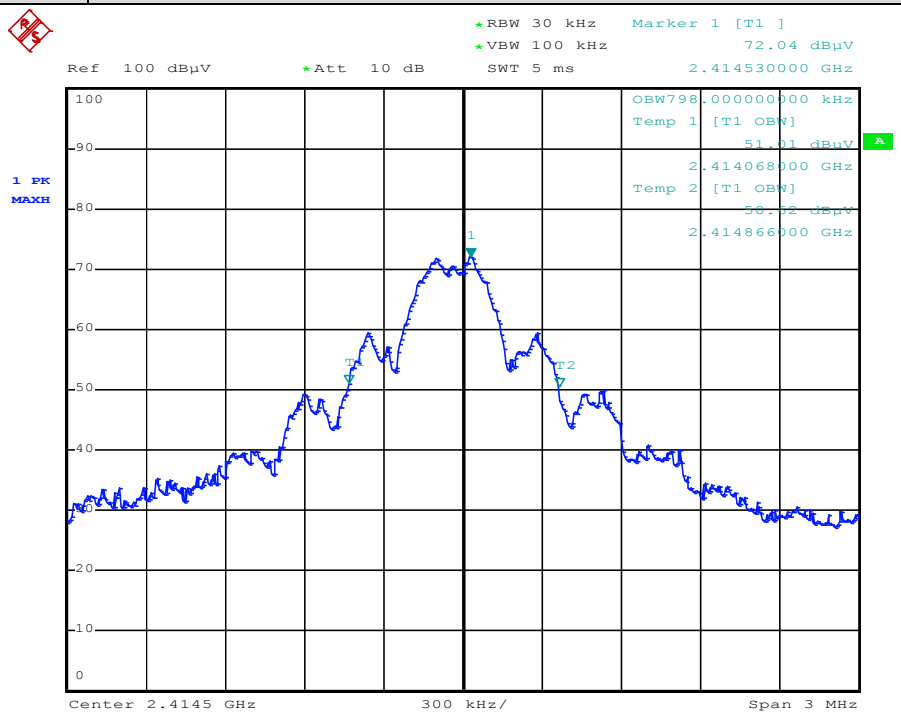


7.2.3 Measurement Procedure and Data

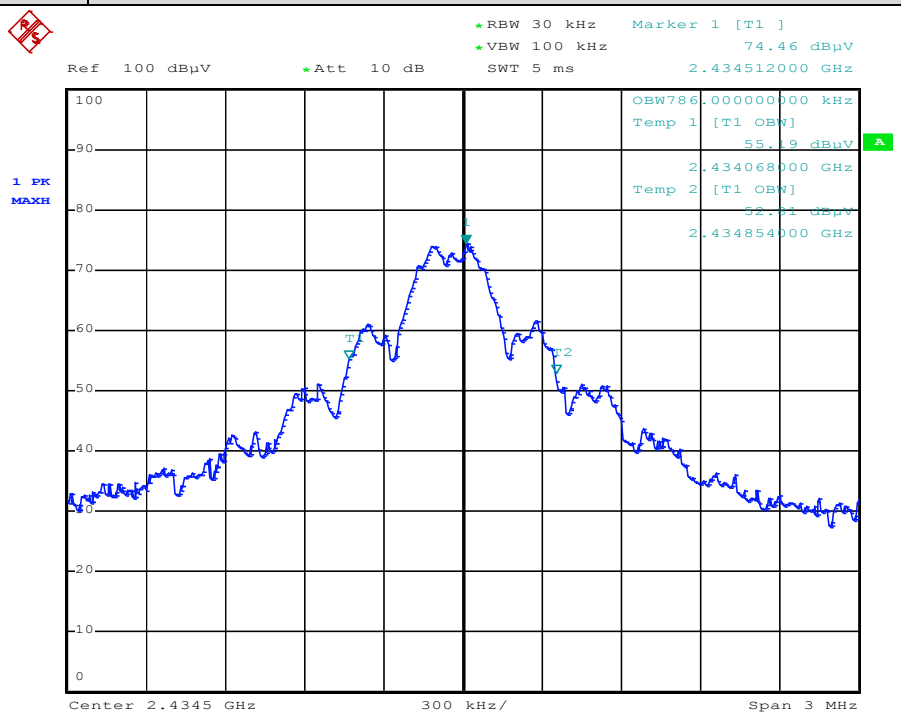
CH	Frequency (MHz)	Bandwidth (MHz)
Low	2414.5	0.798
Mid	2434.5	0.788
High	2449.5	0.786

Test plot as follows:

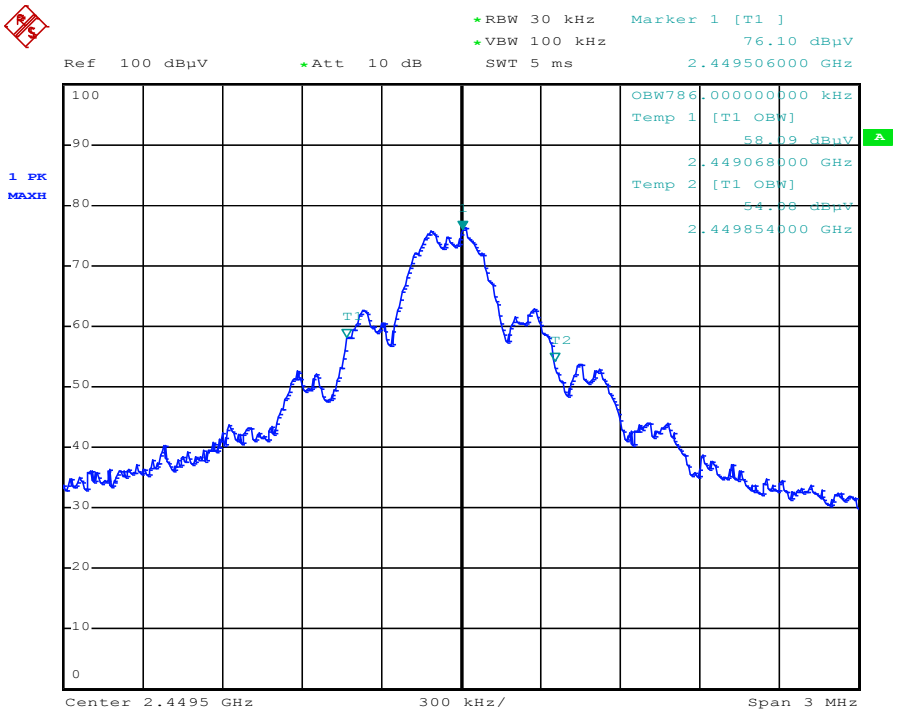
Channel:	lowest



Channel:	Middle



Channel:	Highest



7.3 Field Strength of the Fundamental Signal

Test Requirement RSS-210 A2.9 (a)

Test Method: ANSI C63.10 (2013) Section 6.5&6.6

Limit:

Fundamental frequency(MHz)	Field strength of fundamental(microvolts/meter)	Field strength of harmonics(microvolts/meter)
902-928	50	500
2400-2483.5	50	500
5725-5875	50	500
24000-24250	250	2500
Remark: The frequencies above 1000MHz 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.		

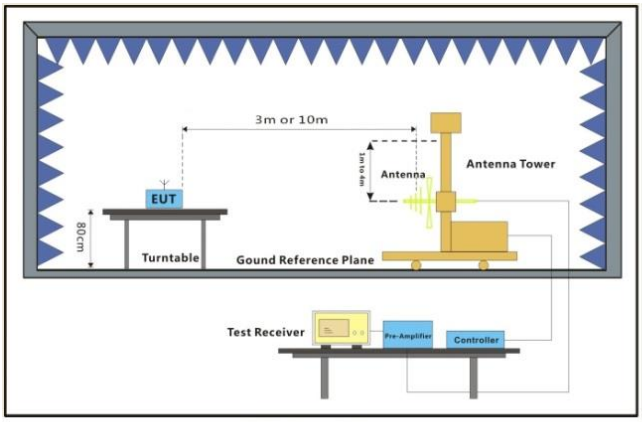
7.3.1 E.U.T. Operation

Operating Environment:

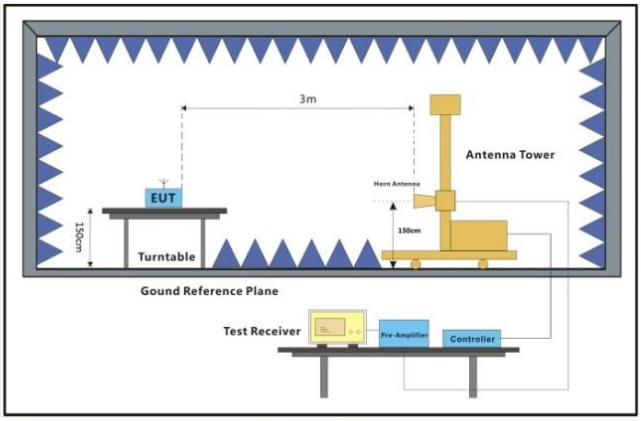
Temperature: 21 °C Humidity: 45 % RH Atmospheric Pressure: 1010 mbar

Test mode a:TX mode_Keep the EUT in transmitting with modulation mode.

7.3.2 Test Setup Diagram



30MHz-1GHz



Above 1GHz

7.3.3 Measurement Procedure and Data

a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 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 fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

c. The EUT was set 3 or 10 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 (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.

f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

g. 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 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 the worst case.

j. Repeat above procedures until all frequencies measured was complete.

Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

Peak value:

Channel	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
Lowest	92.78	-3.93	88.85	94	-5.15	Horizontal
	79.14	-3.94	75.2	94	-18.8	Vertical
Middle	88.15	-3.96	84.19	94	-9.81	Horizontal
	79.39	-3.96	75.43	94	-18.57	Vertical
Highest	87.41	-3.97	83.44	94	-10.56	Horizontal
	76.17	-3.97	72.2	94	-21.8	Vertical

Remark:

1) The basic equation with a sample calculation is as follows: Level = Read Level + Factor.
   (The Factor is calculated by adding the Antenna Factor, Cable Loss and Preamp Factor)
2) If the Peak value below the AV Limit, the AV test doesn't perform for this submission.

7.4 Restricted Band Around Fundamental Frequency

Test Requirement RSS-Gen Section 8.9 & 8.10

Test Method: ANSI C63.10 (2013) Section 6.4&6.5&6.6

Limit:

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
Above 1GHz	74.0	Peak Value
Emission 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.		

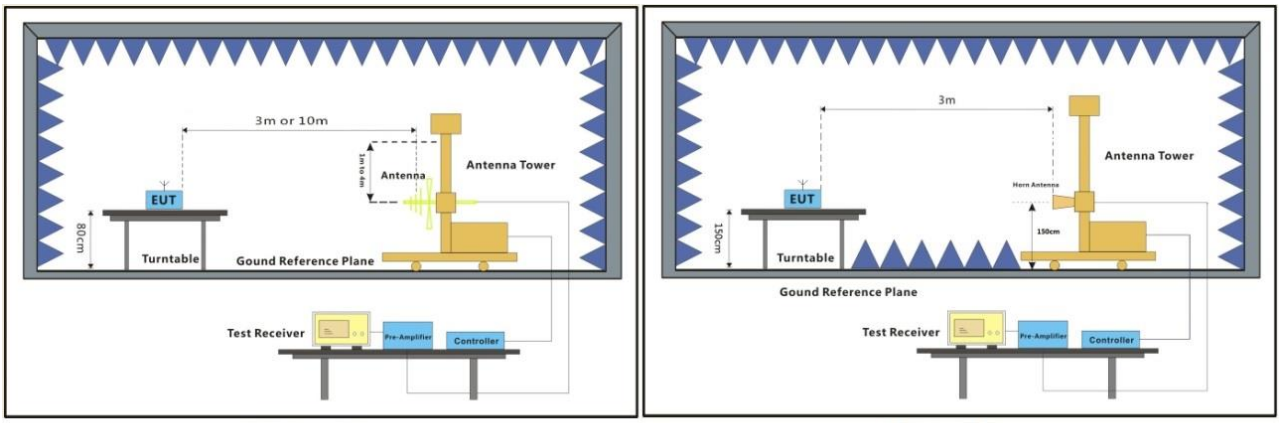
7.4.1 E.U.T. Operation

Operating Environment:

Temperature: 21 °C Humidity: 45 % RH Atmospheric Pressure: 1010 mbar

Test mode a:TX mode_Keep the EUT in transmitting with modulation mode.

7.4.2 Test Setup Diagram



30MHz-1GHz Above 1GHz

7.4.3 Measurement Procedure and Data

a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 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 fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

c. The EUT was set 3 or 10 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 (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.

f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

g. 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 as specified and then reported in a data sheet.

h. Test the EUT in the lowest channel, the middle channel, the Highest channel.

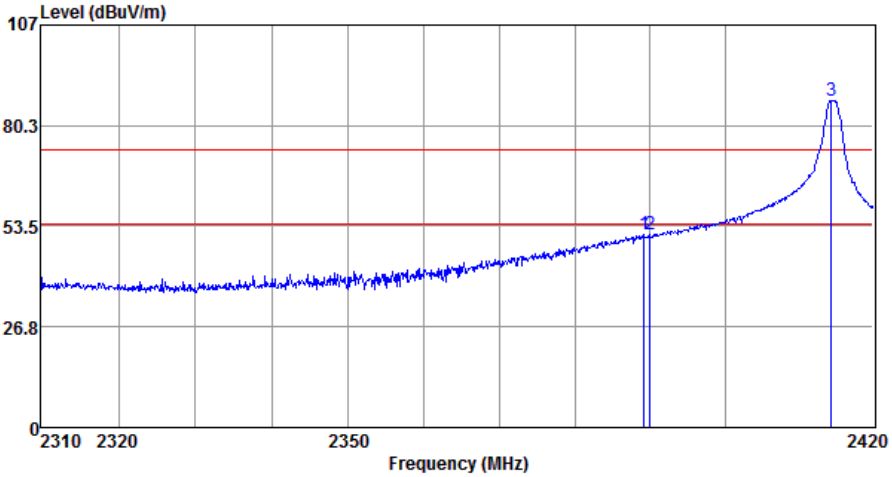
i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.

j. Repeat above procedures until all frequencies measured was complete.

Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

Channel: lowest

Horizontal:

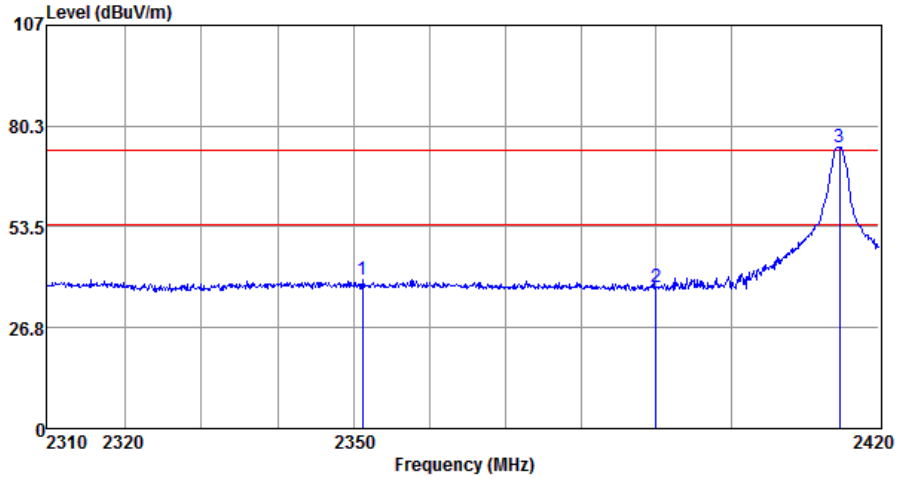


Antenna Polarity :HORIZONTAL

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	2389.24	56.00	26.03	6.47	37.36	51.14	74.00	-22.86	Peak
2	2390.00	56.00	26.03	6.47	37.36	51.14	74.00	-22.86	Peak
3	2414.38	91.81	26.08	6.50	37.36	87.03	74.00	13.03	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Vertical:



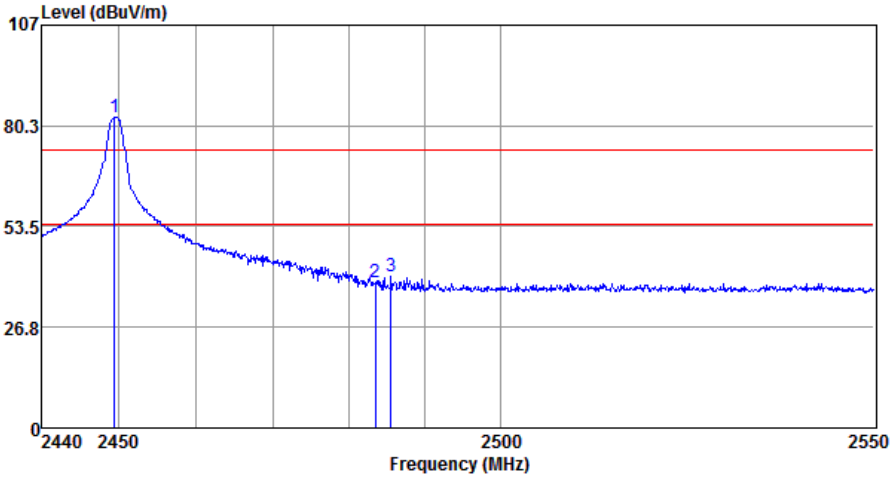
Antenna Polarity :VERTICAL

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	2351.09	44.54	25.98	6.40	37.36	39.56	74.00	-34.44	Peak
2	2390.00	42.45	26.03	6.47	37.36	37.59	74.00	-36.41	Peak
3	2414.60	79.32	26.08	6.50	37.36	74.54	74.00	0.54	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Channel: Highest

Horizontal:

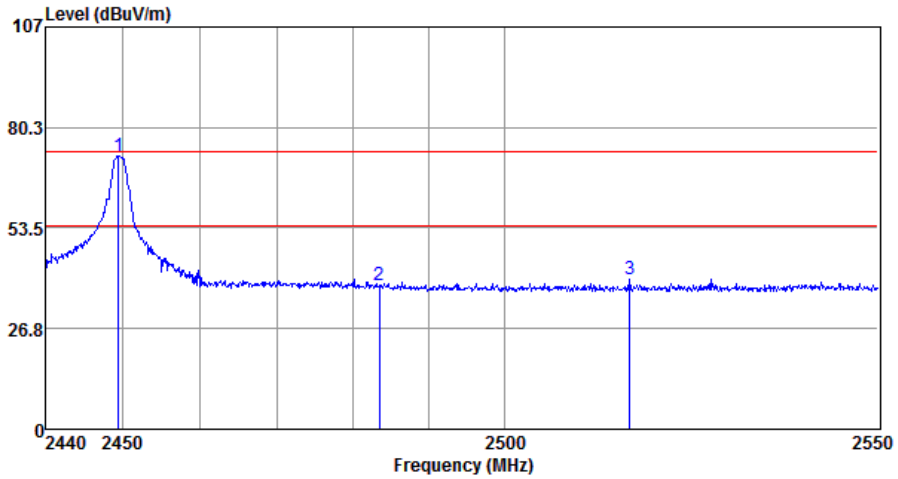


Antenna Polarity :HORIZONTAL

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	2449.38	86.99	26.13	6.68	37.43	82.37	74.00	8.37	Peak
2	2483.50	43.26	26.18	6.80	37.51	38.73	74.00	-35.27	Peak
3	2485.50	44.79	26.18	6.80	37.51	40.26	74.00	-33.74	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Vertical:



Antenna Polarity :VERTICAL

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	2449.38	77.16	26.13	6.68	37.43	72.54	74.00	-1.46	Peak
2	2483.50	42.74	26.18	6.80	37.51	38.21	74.00	-35.79	Peak
3	2516.60	44.44	26.24	6.94	37.56	40.06	74.00	-33.94	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

7.5 Radiated Emissions

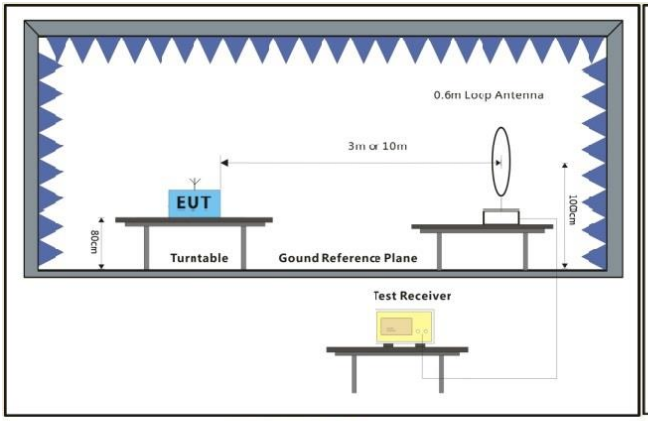
Test Requirement RSS-Gen Section 8.9 & RSS-210 A2.9 (b)
Test Method: ANSI C63.10 (2013) Section 6.4&6.5&6.6
Limit:

Frequency(MHz)	Field strength (microvolts/meter)	Limit (dBuV/m)	Detector	Measurement Distance (meters)
0.009-0.490	2400/F(kHz)	-	-	300
0.490-1.705	24000/F(kHz)	-	-	30
1.705-30	30	-	-	30
30-88	100	40.0	QP	3
88-216	150	43.5	QP	3
216-960	200	46.0	QP	3
960-1000	500	54.0	QP	3
Above 1000	500	54.0	AV	3

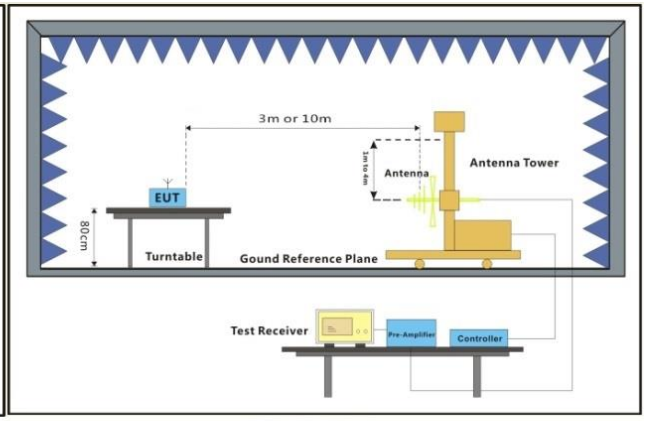
7.5.1 E.U.T. Operation

Operating Environment:
Temperature: 21 °C Humidity: 45 % RH Atmospheric Pressure: 1010 mbar
Test mode a:TX mode_Keep the EUT in transmitting with modulation mode.

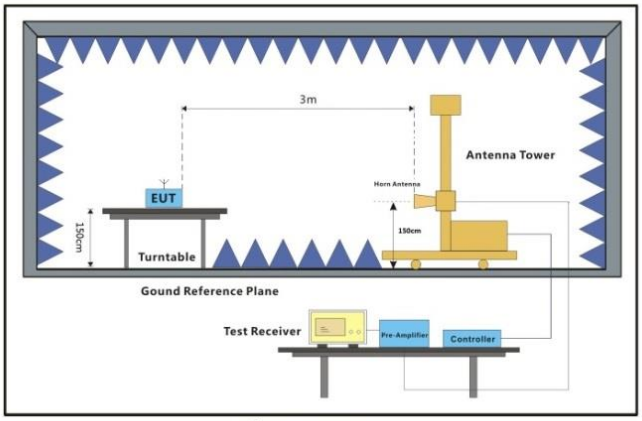
7.5.2 Test Setup Diagram



Below 30MHz



30MHz-1GHz



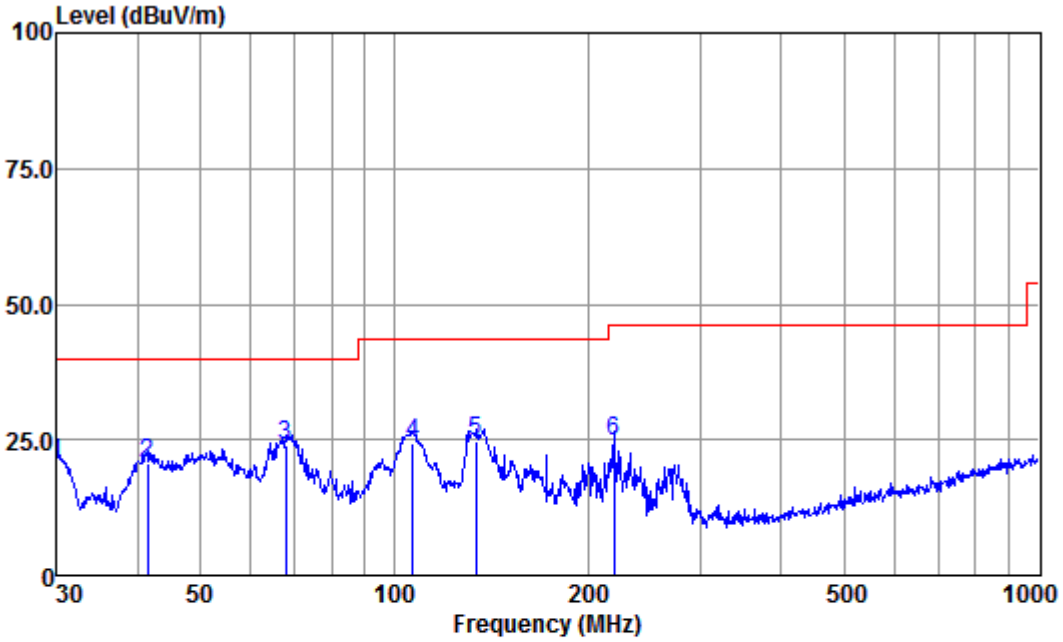
Above 1GHz

7.5.3 Measurement Procedure and Data

For testing performed with the loop antenna, the center of the loop was positioned 1 m above the ground and positioned with its plane vertical at the specified distance from the EUT. During testing the loop was rotated about its vertical axis for maximum response at each azimuth and also investigated with the loop positioned in the horizontal plane. Only the worst position of vertical was shown in the report.

30MHz-1GHz:

Mode:a; Polarization:Horizontal

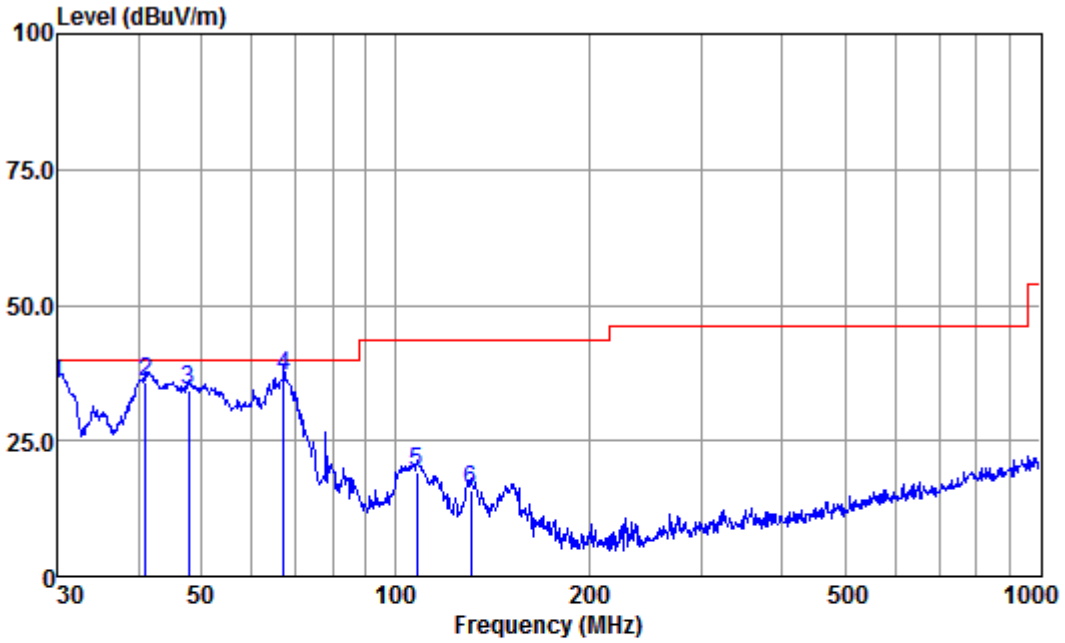


Antenna Polarity :HORIZONTAL

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	30.00	47.75	15.30	0.18	42.60	20.63	40.00	-19.37	QP
2	41.42	47.84	15.41	0.23	42.63	20.85	40.00	-19.15	QP
3	67.91	54.62	11.65	0.33	42.66	23.94	40.00	-16.06	QP
4	107.13	57.05	9.57	0.49	42.70	24.41	43.50	-19.09	QP
5	134.09	54.75	12.16	0.59	42.64	24.86	43.50	-18.64	QP
6	219.84	56.23	10.28	0.72	42.49	24.74	46.00	-21.26	QP

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Mode:a; Polarization:Vertical



Antenna Polarity :VERTICAL

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	30.00	62.62	15.30	0.18	42.60	35.50	40.00	-4.50	QP
2	40.99	62.49	15.68	0.23	42.62	35.78	40.00	-4.22	QP
3	47.83	64.84	11.76	0.25	42.64	34.21	40.00	-5.79	QP
4	67.20	67.42	11.73	0.33	42.66	36.82	40.00	-3.18	QP
5	108.27	51.95	9.58	0.49	42.70	19.32	43.50	-24.18	QP
6	131.30	45.43	12.59	0.58	42.65	15.95	43.50	-27.55	QP

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Above 1GHz:

Channel: lowest

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	4829	41.43	6.45	47.88	54	-6.12	peak	Horizontal
2	7243.5	37.6	10.79	48.39	54	-5.61	peak	Horizontal
3	9658	34.46	14.35	48.81	54	-5.19	peak	Horizontal
4	4829	44.08	6.45	50.53	54	-3.47	peak	Vertical
5	7243.5	39.08	10.79	49.87	54	-4.13	peak	Vertical
6	9658	36.34	14.35	50.69	54	-3.31	peak	Vertical

Channel: Middle

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	4869	43.06	6.86	49.92	54	-4.08	peak	Horizontal
2	7303.5	38.3	11.06	49.36	54	-4.64	peak	Horizontal
3	9738	33.78	14.36	48.14	54	-5.86	peak	Horizontal
4	4869	40.59	6.86	47.45	54	-6.55	peak	Vertical
5	7303.5	37.89	11.06	48.95	54	-5.05	peak	Vertical
6	9738	36.55	14.36	50.91	54	-3.09	peak	Vertical

Channel: Highest

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	4899	41.81	7.19	49	54	-5	peak	Horizontal
2	7348.5	39.97	11.25	51.22	54	-2.78	peak	Horizontal
3	9798	34.64	14.37	49.01	54	-4.99	peak	Horizontal
4	4899	43.43	7.19	50.62	54	-3.38	peak	Vertical
5	7348.5	37.15	11.25	48.4	54	-5.6	peak	Vertical
6	9798	35.87	14.37	50.24	54	-3.76	peak	Vertical

8 Test Setup Photographs

Refer to the < Test Setup photos-FCC>.

9 EUT Constructional Details

Refer to the < External Photos > & < Internal Photos >.

- End of the Report -