

FCC TEST REPORT

Product : Beyond Tablet Mini Edition
Trade mark : Beyond Screen
Model/Type reference : BYM002
Serial Number : N/A
Report Number : EED32K00140004
FCC ID : 2AK5X-BTM6362
Date of Issue : Jul. 03, 2018
Test Standards : 47 CFR Part 15 Subpart C
Test result : PASS

Prepared for:

Beyond Screen Limited
Suite 603, Building 6, Fulltech Plaza, No. 33 North Guangshun Street,
Beijing, 100102, China

Prepared by:

Centre Testing International Group Co., Ltd.
Hongwei Industrial Zone, Bao'an 70 District,
Shenzhen, Guangdong, China

TEL: +86-755-3368 3668

FAX: +86-755-3368 3385

Tested By:

Peter (Test Project)

Compiled by:

Tom chen (Project Engineer)

Reviewed by:

Kevin yang (Reviewer)

Approved by:

Sheek Luo (Lab supervisor)

Date:

Jul. 03, 2018

Check No.:1022500401



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2 Version

Version No.	Date	Description
00	Jul. 03, 2018	Original



3 Test Summary

Test Item	Test Requirement	Test method	Result
AC Power Line Conducted Emission	47 CFR Part 15 Subpart C Section 15.207	ANSI C63.10-2013	PASS
Radiated Emission	47 CFR Part 15 Subpart C Section 15.209; 15.225(a)(b)(c)(d)	ANSI C63.10-2013	PASS
Frequency Tolerance	47 CFR Part 15 Subpart C Section 15.225(e)	ANSI C63.10-2013	PASS
Occupied Bandwidth	47 CFR Part 15 Subpart C Section 15.215	ANSI C63.10-2013	PASS

Remark:

The tested sample and the sample information are provided by the client.

The Beyond Tablet Mini Edition has two color appearance, the electrical circuit design, layout, and operational principle were identical for two color appearance, only the color is different.

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5 General Information

5.1 Client Information

Applicant:	Beyond Screen Limited
Address of Applicant:	Suite 603, Building 6, Fulltech Plaza, No. 33 North Guangshun Street, Beijing, 100102, China
Manufacturer:	Beyond Screen Limited
Address of Manufacturer:	Suite 603, Building 6, Fulltech Plaza, No. 33 North Guangshun Street, Beijing, 100102, China
Factory:	Shenzhen RuiYi Electronic Science and Technology Co., Ltd.
Address of Factory:	4th Floor, No.1, Area A, Tangtou Third Industrial Park, Shiyang Village, Baoan District, Shenzhen City, Guangdong Province, 518108, China

5.2 General Description of EUT

Product Name:	Beyond Tablet Mini Edition
Mode No.(EUT):	BYM002
Trade Mark:	Beyond Screen
EUT Supports Radios application:	Wi-Fi: 802.11 b/g/n(20M)/n(40M) , 2412MHz-2462MHz BT:4.0 BT Dual mode, 2402MHz to 2480MHz NFC :13.56MHz
Power Supply:	DC 12V and AC 120V/60Hz

5.3 Product Specification subjective to this standard

Carrier Frequency:	13.56MHz
Modulation Type:	ASK
Antenna Type:	Loop Antenna
Antenna Gain:	0dBi
Power Source:	Battery: 8.4V, 8000mAh
Test voltage:	DC 12V and AC 120V/60Hz
USB cable:	100cm
Sample Received Date:	Jun. 04, 2018
Sample tested Date:	Jun. 04, 2018 to Jun. 29, 2018

5.4 Test Environment and Mode

Operating Environment:	
Temperature:	26.4 °C
Humidity:	60% RH
Atmospheric Pressure:	1010mbar
Test mode:	
Transmitter mode:	Keep the EUT in transmitting mode (NFC mode) with modulation.

5.5 Description of Support Units

The EUT has been tested independently.

5.6 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd.

Hongwei Industrial Zone, Bao'an 70 District, Shenzhen, Guangdong, China 518101

Telephone: +86 (0) 755 3368 3668 Fax:+86 (0) 755 3368 3385

No tests were sub-contracted.

FCC Designation No.: CN1164

5.7 Deviation from Standards

None.

5.8 Abnormalities from Standard Conditions

None.

5.9 Other Information Requested by the Customer

None.

5.10 Measurement Uncertainty (95% confidence levels, k=2)

No.	Item	Measurement Uncertainty
1	Radio Frequency	7.9×10^{-8}
2	RF power, conducted	0.31dB (30MHz-1GHz)
		0.57dB (1GHz-18GHz)
3	Radiated Spurious emission test	4.5dB (30MHz-1GHz)
		4.8dB (1GHz-12.75GHz)
4	Conduction emission	3.6dB (9kHz to 150kHz)
		3.2dB (150kHz to 30MHz)
5	Temperature test	0.64°C
6	Humidity test	2.8%
7	DC power voltages	0.025%

6 Equipment List

Conducted disturbance Test					
Equipment	Manufacturer	Model No.	Serial Number	Cal. date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)
Receiver	R&S	ESCI	100009	05-25-2018	05-24-2019
Temperature/ Humidity Indicator	TAYLOR	1451	1905	05-02-2018	05-01-2019
LISN	schwarzbeck	NNLK8121	8121-529	05-11-2018	05-10-2019

Conducted RF test					
Equipment	Manufacturer	Model No.	Serial Number	Cal. Date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)
Signal Generator	Keysight	E8257D	MY53401106	03-13-2018	03-12-2019
Spectrum Analyzer	Keysight	N9010A	MY54510339	03-13-2018	03-12-2019
Signal Generator	Keysight	N5182B	MY53051549	03-13-2018	03-12-2019
High-pass filter	Sinoscite	FL3CX03WG 18NM12-0398-002	---	01-10-2018	01-09-2019
High-pass filter	MICRO-TRONICS	SPA-F-63029-4	---	01-10-2018	01-09-2019
DC Power	Keysight	E3642A	MY54426035	03-13-2018	03-12-2019
power meter & power sensor	R&S	OSP120	101374	03-13-2018	03-12-2019
RF control unit	JS Tonscend	JS0806-2	158060006	03-13-2018	03-12-2019
BT&WI-FI Automatic test software	JS Tonscend	JS1120-2	---	03-13-2018	03-12-2019

3M Semi/full-anechoic Chamber					
Equipment	Manufacturer	Model No.	Serial Number	Cal. date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)
3M Chamber & Accessory Equipment	TDK	SAC-3	---	06-04-2016	06-03-2019
TRILOG Broadband Antenna	SCHWARZBEC K	VULB9163	9163-617	03-29-2018	03-28-2019
Preamplifier	JS Tonscend	EMC051845 SE	980380	01-19-2018	01-18-2019
Horn Antenna	ETS-LINDGREN	3117	00057407	07-20-2015	07-18-2018
Loop Antenna	ETS	6502	00071730	06-22-2017	06-21-2019
Spectrum Analyzer	R&S	FSP40	100416	05-11-2018	05-10-2019
Receiver	R&S	ESCI	100435	05-25-2018	05-24-2019
Multi device Controller	maturo	NCD/070/107 11112	---	05-02-2018	05-01-2019
Signal Generator	Keysight	E8257D	MY53401106	03-13-2018	03-12-2019
Temperature/ Humidity Indicator	TAYLOR	1451	1905	05-02-2018	05-01-2019
Cable line	Fulai(7M)	SF106	5219/6A	01-10-2018	01-09-2019
Cable line	Fulai(6M)	SF106	5220/6A	01-10-2018	01-09-2019
Cable line	Fulai(3M)	SF106	5216/6A	01-10-2018	01-09-2019
Cable line	Fulai(3M)	SF106	5217/6A	01-10-2018	01-09-2019
High-pass filter	Sinoscite	FL3CX03WG 18NM12-0398-002	---	01-10-2018	01-09-2019

7 Test Result & Measurement Data

7.1 Antenna Requirement

Standard Requirement:	47 CFR Part 15C Section 15.203
<p>15.203 Requirement:</p> <p>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.</p>	
<p>The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is 0dBi.</p>	

7.2 Conducted Emissions

Test Requirement: 47 CFR Part 15C Section 15.207

Test Method: ANSI C63.10-2013

Test Frequency Range: 150kHz to 30MHz

Limit:

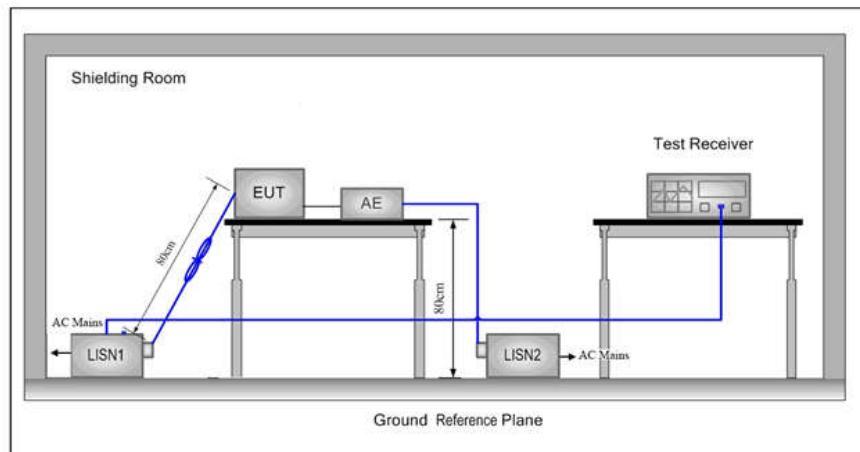
Frequency range (MHz)	Limit (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

* Decreases with the logarithm of the frequency.

- 1) The mains terminal disturbance voltage test was conducted in a shielded room.
- 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a $50\Omega/50\mu\text{H} + 5\Omega$ linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.
- 3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,
- 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.
- 5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10: 2009 on conducted measurement.

Test Procedure:

Test Setup:



Test Mode: Transmitting mode

Instruments Used: Refer to section 6 for details

Test Results: Pass

Test Data

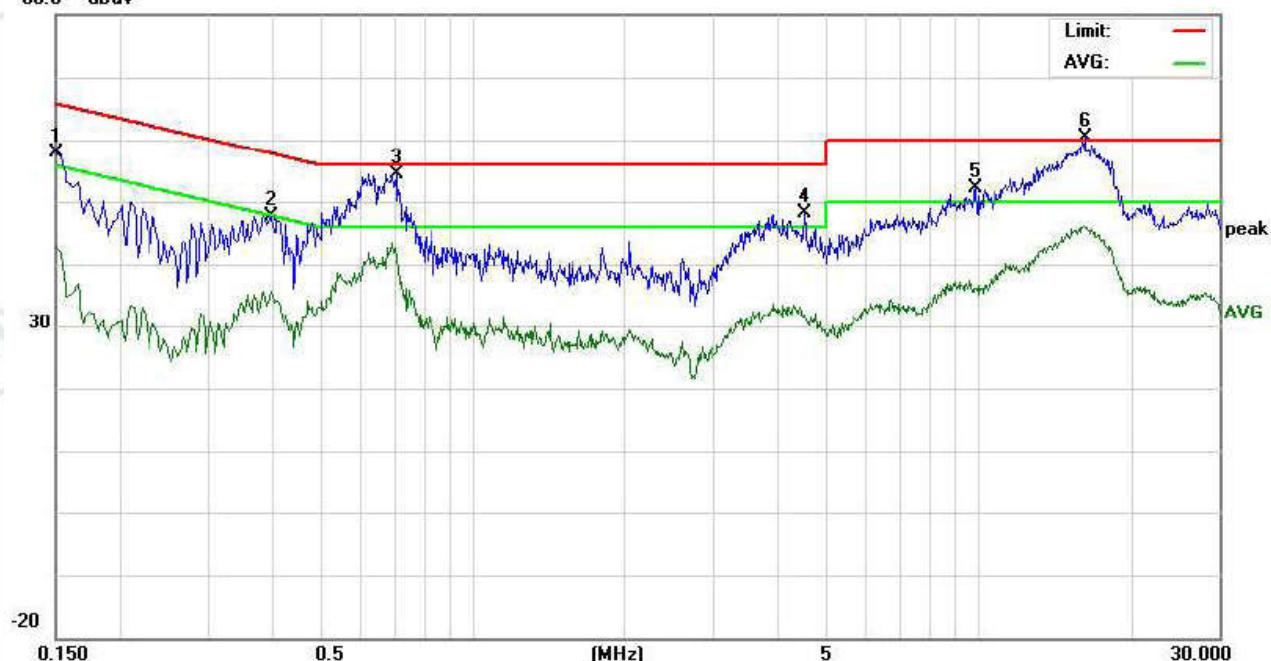
An initial pre-scan was performed on the live and neutral lines with peak detector.

Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

GE0151U-050300

Live Line:

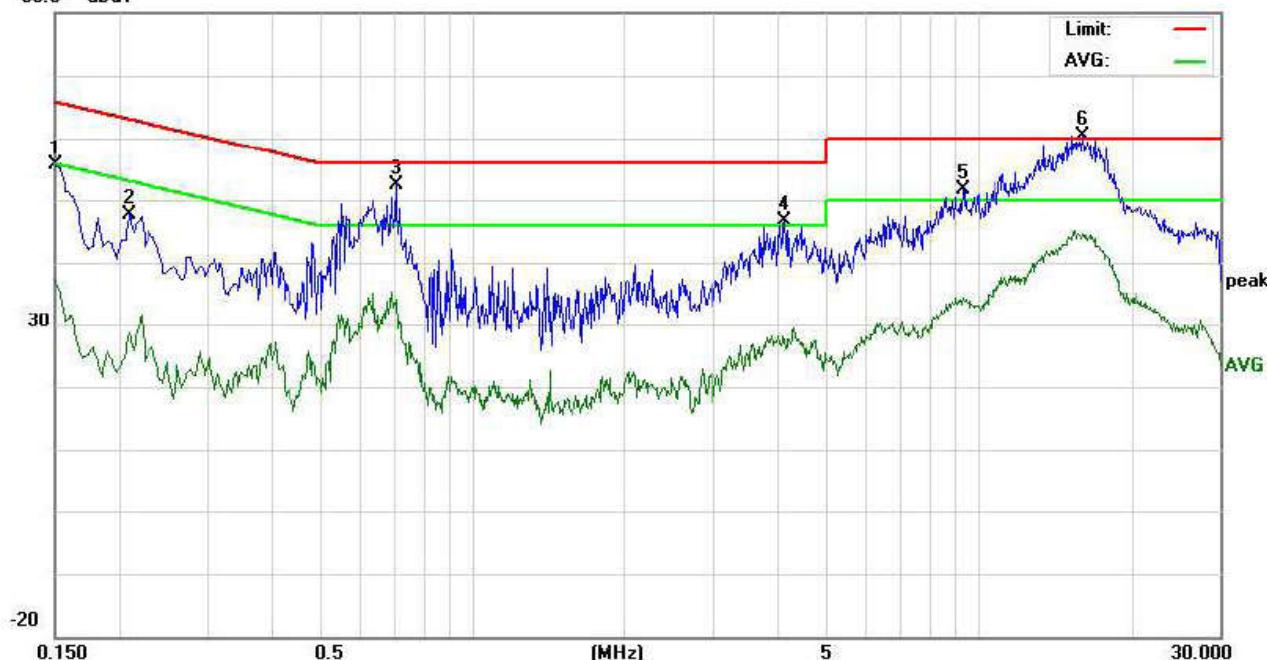
80.0 dBuV



No.	Freq.	Reading_Level (dBuV)			Correct Factor	Measurement (dBuV)			Limit (dBuV)			Margin (dB)		
		MHz	Peak	QP	Avg	peak	QP	Avg	QP	Avg	QP	Avg	P/F	Comment
1	0.1500	48.01	42.10	33.15	9.77	57.78	51.87	42.92	65.99	55.99	-14.12	-13.07	P	
2	0.3980	37.99	32.56	25.83	9.75	47.74	42.31	35.58	57.89	47.89	-15.58	-12.31	P	
3	0.7060	44.60	38.54	30.88	9.75	54.35	48.29	40.63	56.00	46.00	-7.71	-5.37	P	
4	4.5460	38.37	32.10	22.16	9.63	48.00	41.73	31.79	56.00	46.00	-14.27	-14.21	P	
5	9.8660	42.42	38.55	26.37	9.78	52.20	48.33	36.15	60.00	50.00	-11.67	-13.85	P	
6	16.2380	50.39	43.21	33.85	10.02	60.41	53.23	43.87	60.00	50.00	-6.77	-6.13	P	

Neutral Line:

80.0 dBuV

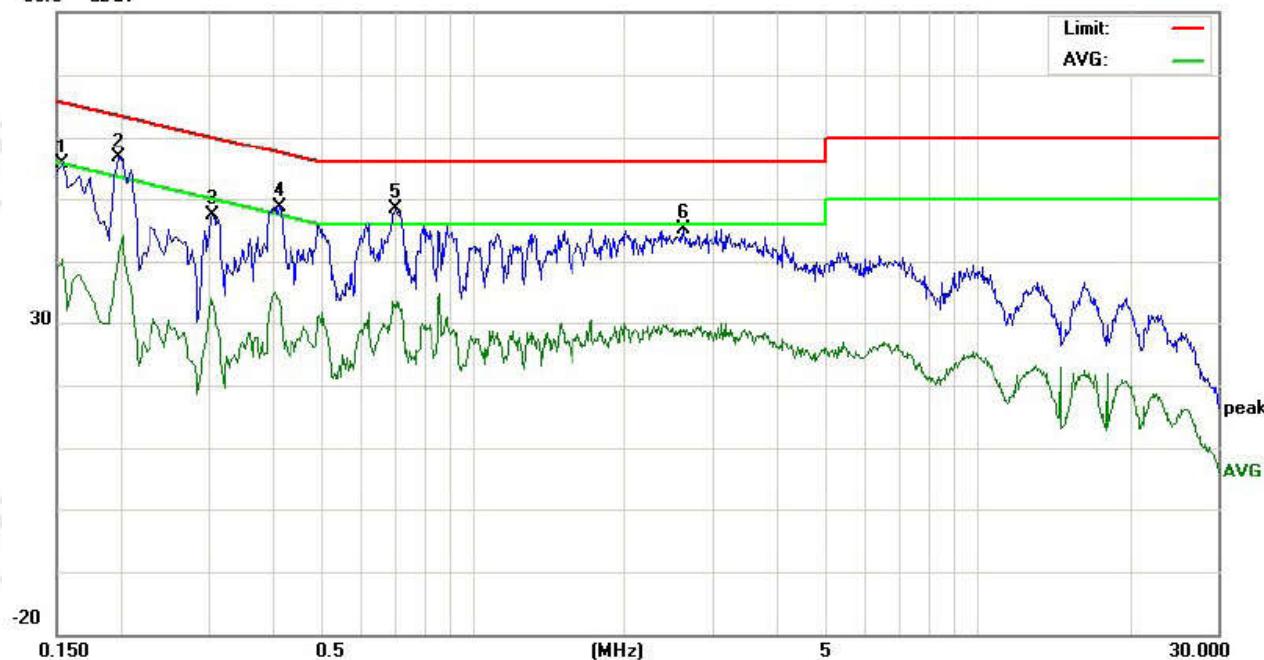


No.	Freq. MHz	Reading_Level (dBuV)			Correct Factor			Measurement (dBuV)			Limit (dBuV)			Margin (dB)		
		Peak	QP	AVG	dB	peak	QP	Avg	QP	Avg	QP	Avg	P/F	Comment		
1	0.1499	45.83	40.12	27.64	9.77	55.60	49.89	37.41	66.00	56.00	-16.11	-18.59	P			
2	0.2100	37.98	32.19	19.02	9.72	47.70	41.91	28.74	63.20	53.20	-21.29	-24.46	P			
3	0.7060	42.61	35.23	22.96	9.75	52.36	44.98	32.71	56.00	46.00	-11.02	-13.29	P			
4	4.1379	36.86	30.45	17.81	9.65	46.51	40.10	27.46	56.00	46.00	-15.90	-18.54	P			
5	9.3419	41.76	35.21	24.68	9.75	51.51	44.96	34.43	60.00	50.00	-15.04	-15.57	P			
6	16.0899	50.42	42.71	32.64	10.02	60.44	52.73	42.66	60.00	50.00	-7.27	-7.34	P			

QC01

Live Line:

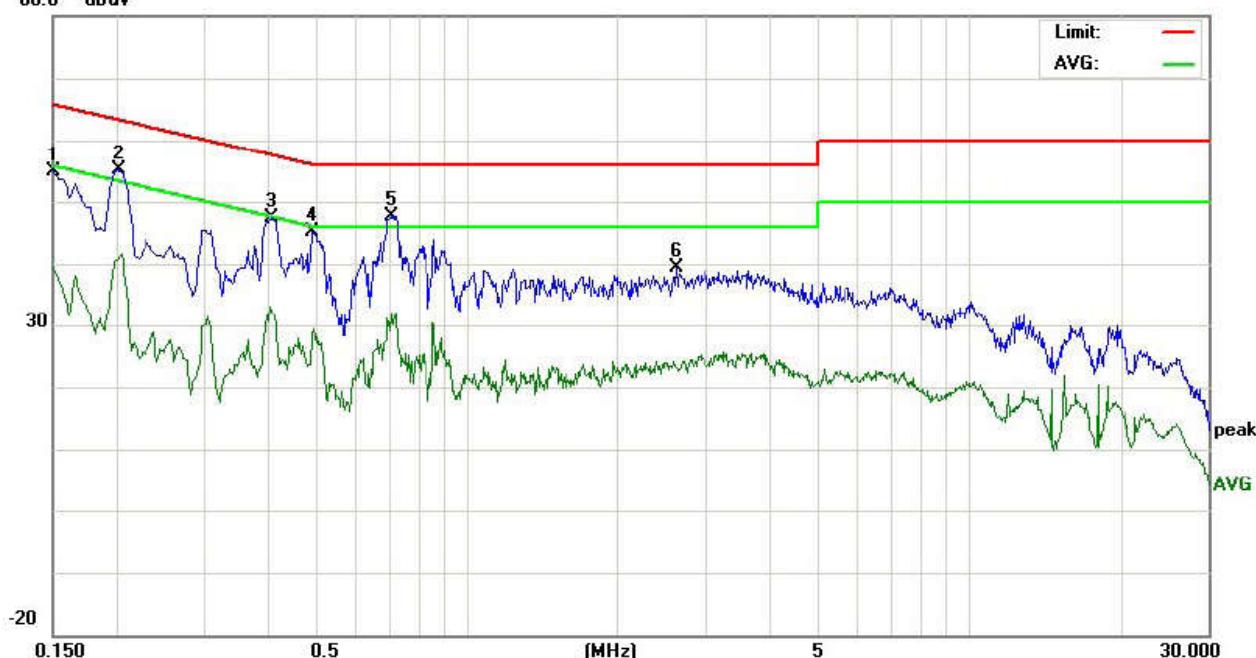
80.0 dBuV



No.	Freq.	Reading_Level (dBuV)				Correct Factor	Measurement (dBuV)				Limit (dBuV)		Margin (dB)		P/F	Comment
		MHz	Peak	QP	AVG		peak	QP	AVG	QP	AVG	QP	AVG	QP	AVG	
1	0.1539	45.96	43.25	30.51	9.76	55.72	53.01	40.27	65.78	55.78	-12.77	-15.51	P			
2	0.1980	46.84	43.68	30.62	9.71	56.55	53.39	40.33	63.69	53.69	-10.30	-13.36	P			
3	0.3060	37.61	34.86	23.91	9.78	47.39	44.64	33.69	60.08	50.08	-15.44	-16.39	P			
4	0.4140	39.00	36.57	24.12	9.74	48.74	46.31	33.86	57.57	47.57	-11.26	-13.71	P			
5	0.7019	38.72	35.89	22.81	9.75	48.47	45.64	32.56	56.00	46.00	-10.36	-13.44	P			
6	2.6099	35.47	32.14	19.26	9.70	45.17	41.84	28.96	56.00	46.00	-14.16	-17.04	P			

Neutral Line:

80.0 dBuV



No.	Freq. MHz	Reading_Level (dBuV)			Correct Factor dB	Measurement (dBuV)			Limit (dBuV)		Margin (dB)			P/F	Comment
		Peak	QP	AVG		peak	QP	Avg	QP	Avg	QP	Avg	P/F		
1	0.1500	45.04	42.16	29.80	9.77	54.81	51.93	39.57	65.99	55.99	-14.06	-16.42	P		
2	0.2020	45.30	42.58	31.17	9.71	55.01	52.29	40.88	63.52	53.52	-11.23	-12.64	P		
3	0.4100	37.62	33.26	22.26	9.75	47.37	43.01	32.01	57.65	47.65	-14.64	-15.64	P		
4	0.4940	35.47	31.47	18.33	9.71	45.18	41.18	28.04	56.10	46.10	-14.92	-18.06	P		
5	0.7060	37.89	33.58	22.10	9.75	47.64	43.33	31.85	56.00	46.00	-12.67	-14.15	P		
6	2.6099	29.62	24.59	13.44	9.70	39.32	34.29	23.14	56.00	46.00	-21.71	-22.86	P		

Notes:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.
3. 13.56MHz is the Fundamental field strength of NFC. According to the 15.207, the limit is not apply.

7.3 Radiated Emissions

Test Requirement: 47 CFR Part 15 Subpart C Section 15.209; 15.225(a)(b)(c)(d)

Test Method: ANSI C63.10-2013

Test Site: 3m (Semi-Anechoic Chamber)

Requirements:

- (a) The field strength of any emissions within the band 13.553-13.567 MHz shall not exceed 15,848 microvolts/meter at 30 meters.
- (b) Within the bands 13.410-13.553 MHz and 13.567-13.710 MHz, the field strength of any emissions shall not exceed 334 microvolts/meter at 30 meters.
- (c) Within the bands 13.110-13.410 MHz and 13.710-14.010 MHz the field strength of any emissions shall not exceed 106 microvolts/meter at 30 meters.
- (d) The field strength of any emissions appearing outside of the 13.110-14.010 MHz band shall not exceed the general radiated emission limits in § 15.209.

Receiver Setup:

Frequency	Detector	RBW	VBW	Remark
0.009MHz-0.090MHz	Quasi-peak	10kHz	30kHz	Peak
0.009MHz-0.090MHz	Quasi-peak	10kHz	30kHz	Average
0.090MHz-0.110MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
0.110MHz-0.490MHz	Quasi-peak	10kHz	30kHz	Peak
0.110MHz-0.490MHz	Quasi-peak	10kHz	30kHz	Average
0.490MHz -30MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
30MHz-1GHz	Quasi-peak	120 kHz	300kHz	Quasi-peak
Above 1GHz	Peak	1MHz	3MHz	Peak
	Peak	1MHz	10Hz	Average

Test Setup:

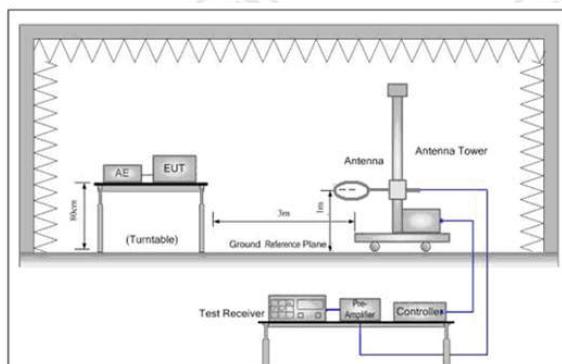


Figure 1. Below 30MHz

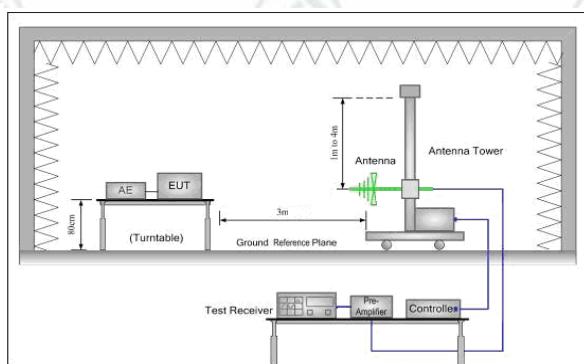


Figure 2. 30MHz to 1GHz

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Test Procedure:

1. The EUT is placed on a turntable, which is 0.8m above ground plane.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is moved from 1m to 4m to find out the maximum emissions.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Repeat above procedures until the measurements for all frequencies are complete.
7. The limit 1.705MHz to 30MHz in clause 4.3 are specified at 30 meters, and measurements were made at 3 meters, the limit is translated to 3 meters by using a formula as follows:
$$\text{Limit3m} = \text{Limit30m} + 40\log(30m/3)$$
8. The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.

Test Mode:

Transmitting mode

Instruments Used:

Refer to section 6 for details

Test Result:

Pass

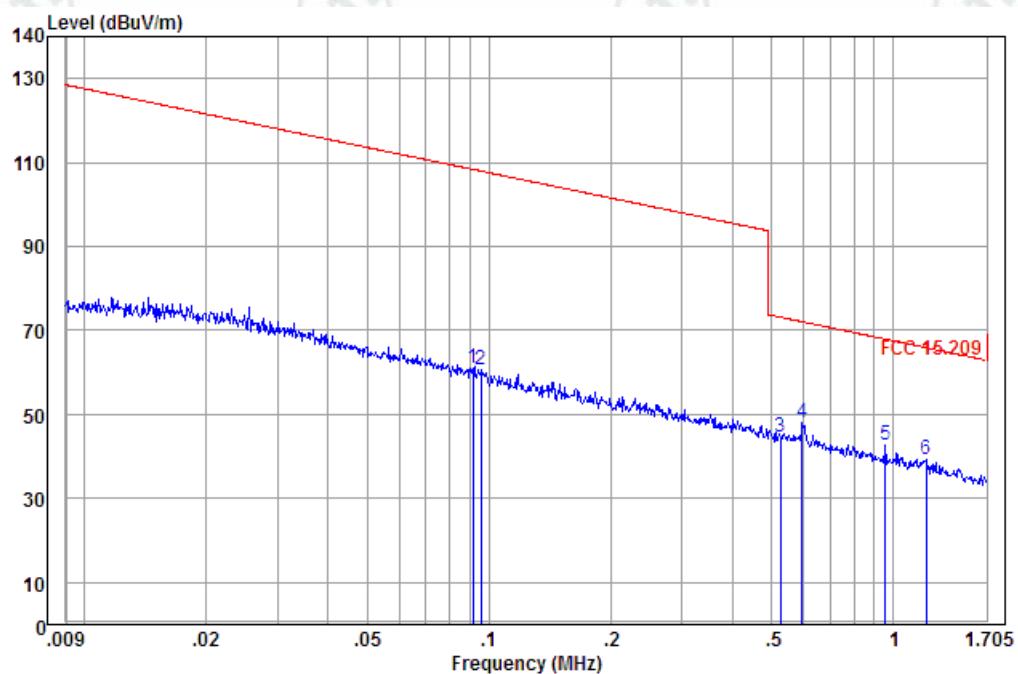
1.705-30MHz

Mode

Test Procedure: For testing performed with the loop antenna, testing was performed in accordance to ANSI C63.4: 2014, section 8.2.1. 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.

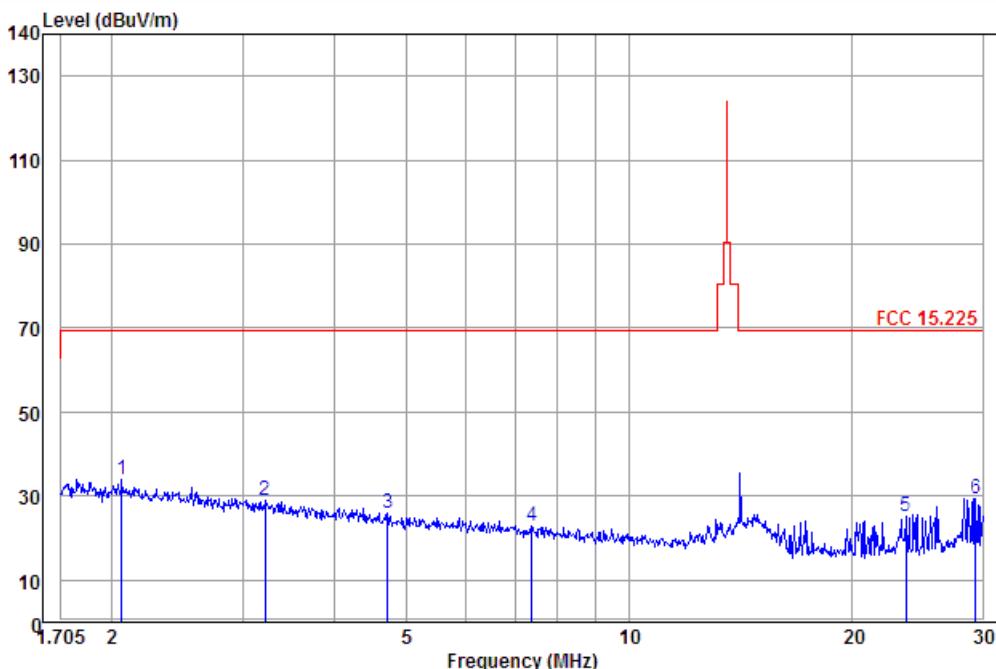
Test data:

9 kHz-1.705MHz



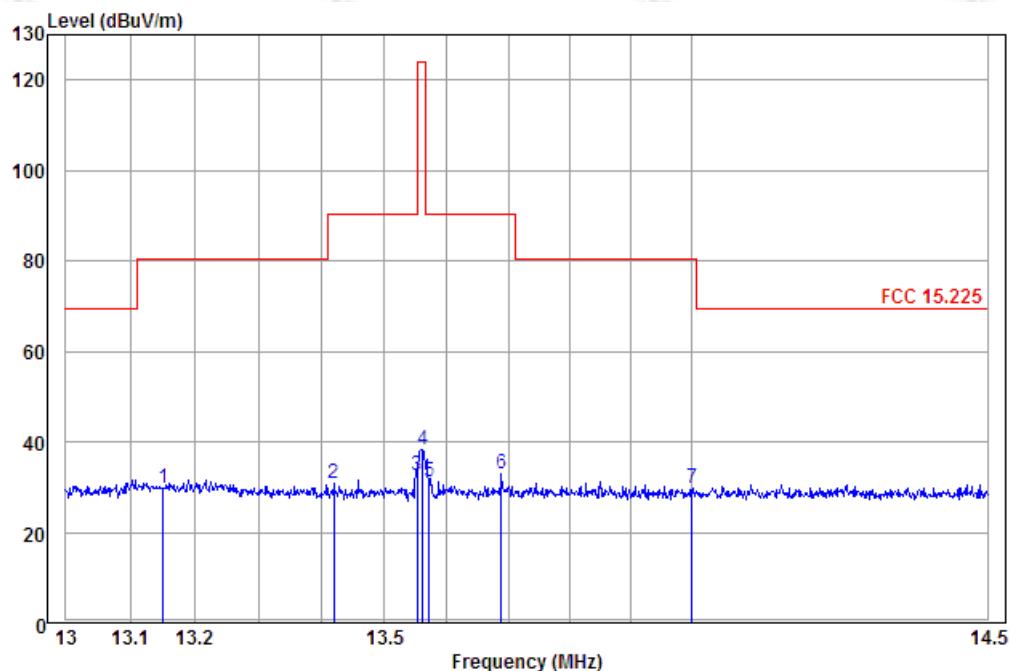
Point	Ant Freq (MHz)	Ant Factor	Cable Loss (dB)	Read Level (dBuV)		Line Level (dBuV/m)	Over Line Limit (dBuV/m)	Over Line Limit Pol/Phase	Remark
				Level	Line				
1	0.091	11.43	0.10	49.57	61.10	108.38	-47.28	Horizontal QP	
2	0.096	11.41	0.11	49.24	60.76	107.97	-47.21	Horizontal QP	
3	0.527	11.30	0.12	33.38	44.80	73.17	-28.37	Horizontal QP	
4 pp	0.597	11.30	0.12	36.64	48.06	72.07	-24.01	Horizontal QP	
5	0.958	11.38	0.13	31.34	42.85	67.94	-25.09	Horizontal QP	
6	1.206	11.40	0.15	27.93	39.48	65.93	-26.45	Horizontal QP	

1.705MHz-30MHz



Freq	Ant Factor	Cable Loss	Read	Limit Line	Over Limit	Over Limit Pol/Phase	Remark
			Level				
MHz	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	2.060	11.41	0.20	22.41	34.02	69.50	-35.48 Horizontal QP
2	3.213	11.45	0.17	17.28	28.90	69.50	-40.60 Horizontal QP
3	4.705	11.23	0.16	14.39	25.78	69.50	-43.72 Horizontal QP
4	7.381	11.03	0.42	11.47	22.92	69.50	-46.58 Horizontal QP
5	23.646	9.65	0.97	14.45	25.07	69.50	-44.43 Horizontal QP
6	29.404	8.34	0.77	20.45	29.56	69.50	-39.94 Horizontal QP

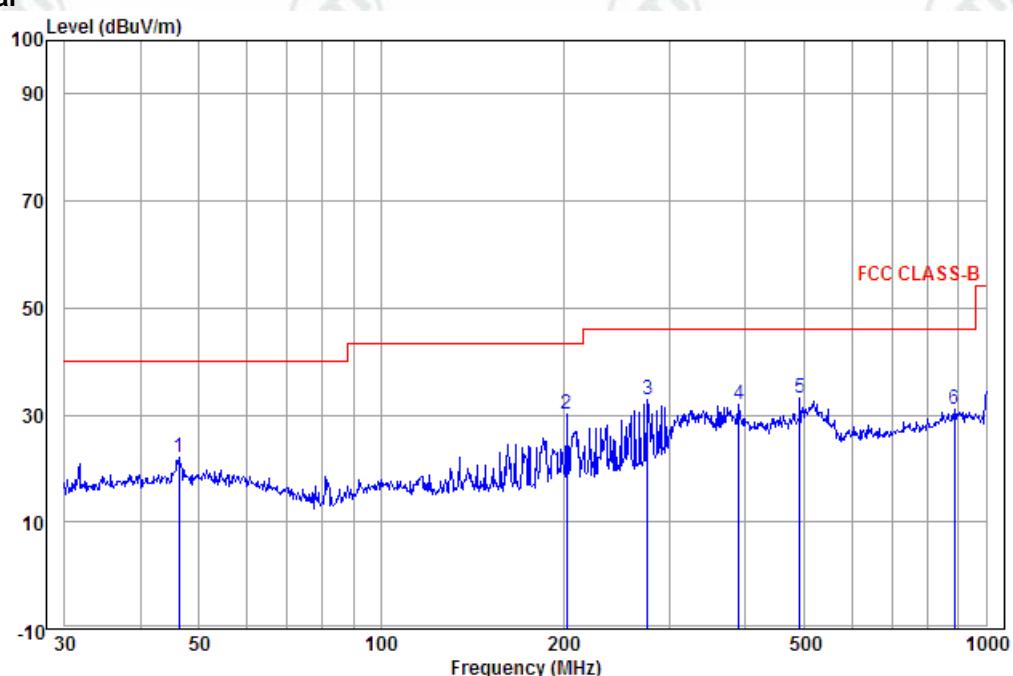
13MHz~14.5MHz



Freq	Ant Factor	Cable Loss	Read Level	Limit Level	Over Line Limit		Over Pol/Phase	Remark
					MHz	dB/m	dB	dBuV
1	13.151	10.76	0.68	18.28	29.72	80.50	-50.78	Vertical
2	13.420	10.75	0.68	19.23	30.66	90.40	-59.74	Vertical
3	13.552	10.75	0.68	21.01	32.44	90.40	-57.96	Vertical
4	13.561	10.75	0.69	26.93	38.37	123.90	-85.53	Vertical
5	13.572	10.75	0.69	19.67	31.11	90.40	-59.29	Vertical
6	13.689	10.75	0.69	21.62	33.06	90.40	-57.34	Vertical
7 pp	14.002	10.73	0.69	18.32	29.74	80.50	-50.76	Vertical

Remark: The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case X axis is shown in the report.

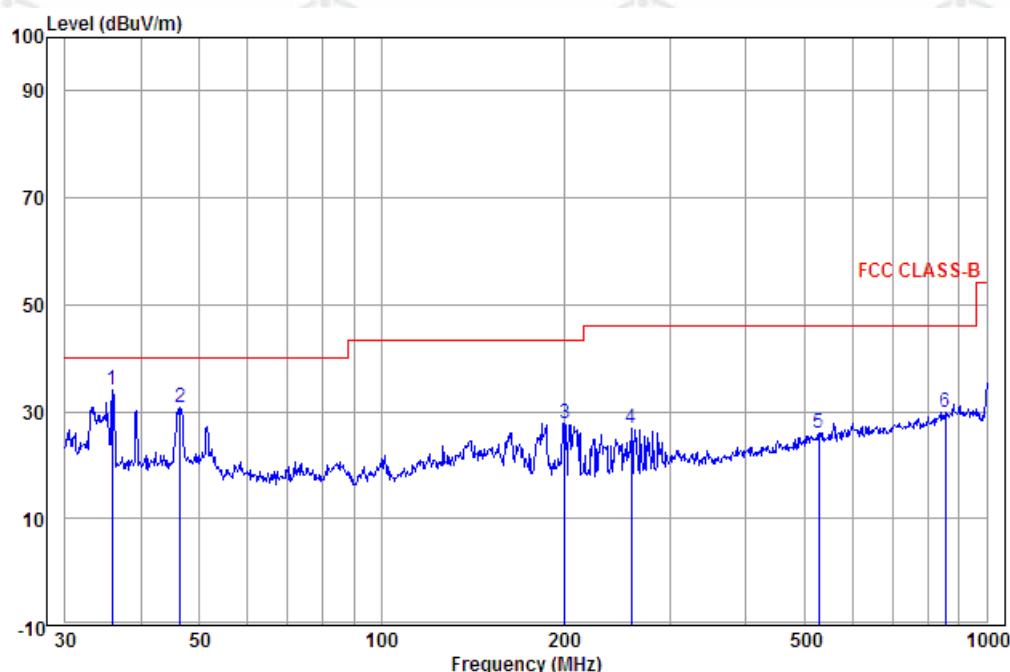
Horizontal



	Ant Freq	Cable Factor	Read Loss	Level Level	Limit Line	Over Limit	Over Pol/Phase	Remark
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	MHz	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	46.340	14.33	0.09	7.62	22.04	40.00	-17.96	Horizontal QP
2	202.810	11.57	1.12	17.52	30.21	43.50	-13.29	Horizontal QP
3	276.124	13.04	1.19	18.57	32.80	46.00	-13.20	Horizontal QP
4	390.723	15.06	1.32	15.61	31.99	46.00	-14.01	Horizontal QP
5 pp	492.469	16.80	1.51	14.72	33.03	46.00	-12.97	Horizontal QP
6	887.610	21.91	2.48	6.67	31.06	46.00	-14.94	Horizontal QP

Vertical



Freq	Ant Factor	Cable Loss	Read Level	Limit		Over Limit	Pol/Phase	Remark		
				MHz	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 pp	35.875	13.08	0.07	20.83	33.98	40.00	40.00	-6.02	Vertical	QP
2	46.503	14.34	0.09	16.43	30.86	40.00	40.00	-9.14	Vertical	QP
3	200.688	11.52	1.10	15.20	27.82	43.50	43.50	-15.68	Vertical	QP
4	258.326	12.74	1.29	12.92	26.95	46.00	46.00	-19.05	Vertical	QP
5	528.246	17.42	1.53	7.13	26.08	46.00	46.00	-19.92	Vertical	QP
6	854.025	21.37	2.45	6.08	29.90	46.00	46.00	-16.10	Vertical	QP

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

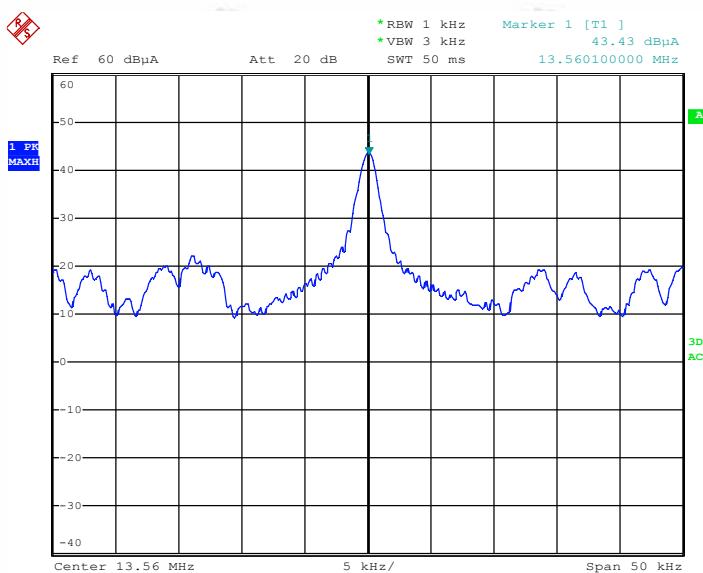
7.4 Frequency Tolerance

Test Requirement:	47 CFR Part 15 Subpart C Section 15.225(e)
Test Method:	ANSI C63.10-2013
Frequency range:	Operation within the band 13.110-14.010 MHz
Requirement :	The frequency tolerance of the carrier signal shall be maintained within +/- 0.01% of the operating frequency over a temperature variation of -20 degrees to +50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. For battery operated equipment, the equipment tests shall be performed using a new battery.
Test Mode:	Transmitter mode
Method of measurement:	The EUT was placed in an environmental test chamber and powered such that control element received normal voltage and the transmitter provided maximum RF output.
Instruments Used:	Refer to section 6 for details
Test Result:	Pass

Test Frequency: 13.56MHz			Temperature:22°C	
Supply Voltage (V)	Test Result (MHz)	Deviation (kHz)	Limit (kHz)	Result
12	13.56010	0.10	1.356	Pass

Test Frequency: 13.56MHz			Temperature:20°C	
Supply Voltage (V)	Test Result (MHz)	Deviation (kHz)	Limit (kHz)	Result
10.2	13.5603	0.3	1.356	Pass
11.1	13.5602	0.2	1.356	Pass
12.0	13.5601	0.1	1.356	Pass
12.9	13.5601	0.1	1.356	Pass
13.8	13.5603	0.3	1.356	Pass

Test Frequency: 13.56MHz			Voltage: 12V	
Temperature (°C)	Test Result (MHz)	Deviation (kHz)	Limit (kHz)	Result
-20	13.5601	0.1	1.356	
-10	13.5601	0.1	1.356	
0	13.5601	0.1	1.356	
10	13.5603	0.3	1.356	
20	13.5602	0.2	1.356	
30	13.5602	0.2	1.356	
40	13.5603	0.3	1.356	
50	13.5601	0.1	1.356	



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7.5 Occupied Bandwidth

Test Requirement:

47 CFR Part 15C Section 15.215 (C)

Test Method:

ANSI C63.10-2013

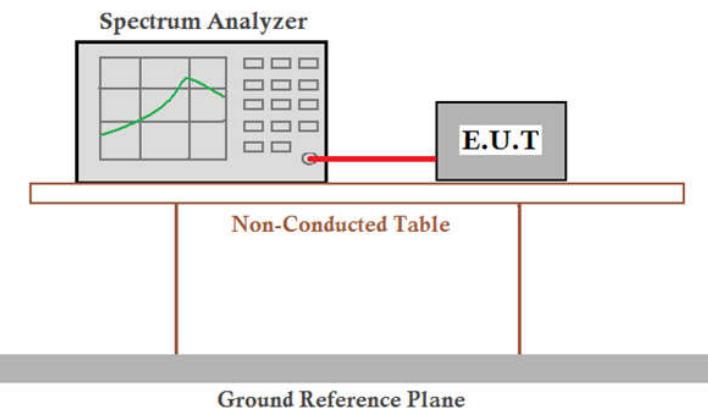
Frequency range:

Operation within the band 13.110 – 14.010 MHz

Requirement :

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§15.217 through 15.257 and in subpart E of this part, must be designed to ensure that 20dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equip compliance with the 20dB attenuation specification may base on measurement at the intentional radiator's antenna output terminal unless the intentional radiator uses a permanently attached antenna, in which case compliance shall be demonstrated by measuring the radiated emissions.

Test Setup:



Test Mode:

Transmitter mode

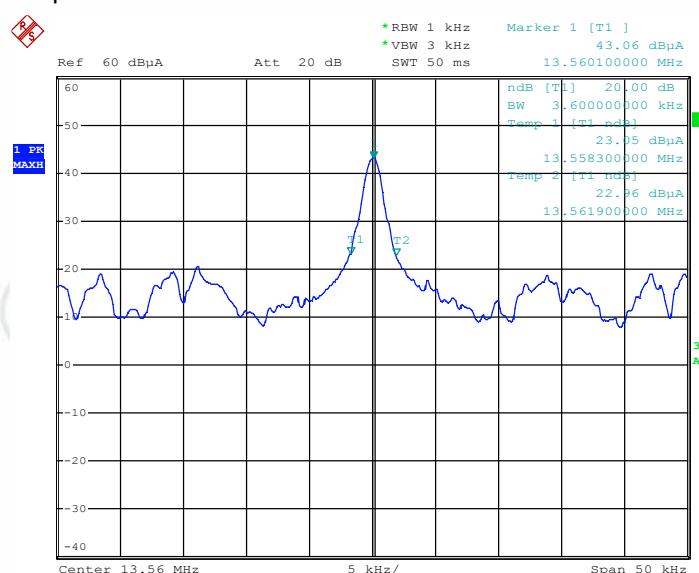
Instruments Used:

Refer to section 6 for details

Test Result:

Pass

The graph as below: represents the emissions take for this device.



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PHOTOGRAPHS OF TEST SETUP

Refer to appendix for EUT Test setup-2.

PHOTOGRAPHS OF EUT Constructional Details

Refer to appendix for EUT external and internal photos.

*** End of Report ***

The test report is effective only with both signature and specialized stamp. The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CTI, this report can't be reproduced except in full.

