TEST REPORT

Applicant:	Shenzhen Aoedi Technology CO.,Ltd
Address of Applicant:	6/F, Block 4,Qiyu Industrial Park, Xixiang Town, Baoan Area, Shenzhen, China
Manufacturer/Factory:	Shenzhen Aoedi Technology CO.,Ltd
Address of Manufacturer/Factory:	6/F, Block 4,Qiyu Industrial Park, Xixiang Town, Baoan Area, Shenzhen, China

Equipment Under Test (EUT)

Product Name:	Car Bluetooth FM Transmitter
Model No.:	AD-906, AD-907, AD-908, AD-909, AD-910, AD-912, AD-913, AD-915, AD-916, AD-917, AD-918, AD-919, AD960, AD-961, AD-965, AD-966, AD-968, AD-990, AD-993, AD-994, AD-995, AD-996, AD-126, AD-985, AD-986, AD-987, AD-988, AD-969, AD-969A
FCC ID:	2AKL8-AD916
Applicable standards:	FCC CFR Title 47 Part 15 Subpart C Section 15.239
Date of sample receipt:	September 05, 2019
Date of Test:	September 06-18, 2019
Date of report issued:	September 19, 2019
Test Result :	PASS *

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

Authorized Signature:

Robinson Lo
Laboratory Manager

This results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

2 Version

Version No.	Date	Description
00	*September 19, 2019*	*Original*

Tested By:	Bill. Yuan	***Date:***	*September 19, 2019*
	Project Engineer		
Check By:	Robinson Lo	***Date:***	*September 19, 2019*
	Reviewer		

3 Contents

Page

1 COVER PAGE 1

2 VERSION 2

3 CONTENTS 3

4 TEST SUMMARY 4

4.1 MEASUREMENT UNCERTAINTY 4

5 GENERAL INFORMATION 5

5.1 GENERAL DESCRIPTION OF EUT 5
5.2 TEST MODE 7
5.3 DESCRIPTION OF SUPPORT UNITS 7
5.4 TEST FACILITY 7
5.5 TEST LOCATION 7
5.6 OTHER INFORMATION REQUESTED BY THE CUSTOMER 7

6 TEST INSTRUMENTS LIST 8

7 TEST RESULTS AND MEASUREMENT DATA 10

7.1 ANTENNA REQUIREMENT 10
7.2 RADIATED EMISSION METHOD 11
7.2.1 Field Strength of The Fundamental Signal 13
7.2.2 Radiated Spurious Emissions 14
7.3 20DB OCCUPY BANDWIDTH 20

8 TEST SETUP PHOTO 22

9 EUT CONSTRUCTIONAL DETAILS 22

4 Test Summary

Test Item	Section	Result
Antenna requirement	47 CFR Part 15, Subpart C 15.203	Pass
AC Power Line Conducted Emission	47 CFR Part 15, Subpart C 15.207	N/A
Field strength of the fundamental signal	47 CFR Part 15, Subpart C 15.239(b)	Pass
Radiated Spurious Emissions	47 CFR Part 15, Subpart C 15.209 & 15.239 (c)	Pass
20dB Occupied Bandwidth	47 CFR Part 15, Subpart C 15.239(a)	Pass

Remarks:

1. *Test according to ANSI C63.10: 2013.*
2. *Pass: The EUT complies with the essential requirements in the standard.*
3. *N/A: Not applicable*

4.1 Measurement Uncertainty

Test Item	Frequency Range	Measurement Uncertainty	Notes
Radiated Emission	30MHz-200MHz	3.8039dB	(1)
Radiated Emission	200MHz-1GHz	3.9679dB	(1)
Radiated Emission	1GHz-18GHz	4.29dB	(1)
Radiated Emission	18GHz-40GHz	3.30dB	(1)
Note (1): The measurement uncertainty is for coverage factor of k=2 and a level of confidence of 95%.			

5 General Information

5.1 General Description of EUT

Product Name:	Car Bluetooth FM Transmitter
Model No.:	AD-906, AD-907, AD-908, AD-909, AD-910, AD-912, AD-913, AD-915, AD-916, AD-917, AD-918, AD-919, AD960, AD-961, AD-965, AD-966, AD-968, AD-990, AD-993, AD-994, AD-995, AD-996, AD-126, AD-985, AD-986, AD-987, AD-988, AD-969, AD-969A
Test Model No.:	AD-916
Remark: All above models are identical in the same PCB layout, interior structure and electrical circuits. The difference is model name for commercial purpose.	
Serial No.:	S1258659N
Hardware Version:	ED-916-AC6922E-V1.0
Software Version:	ED[916]-6922E(916 CK-3AA6A715)_V1.2
Test sample(s) ID:	GTS201909000020-1
Sample(s) Status:	Engineer sample
Operation Frequency:	88.1MHz~107.9MHz
Channel numbers:	199
Channel Separation:	100KHz
Modulation Type:	FM
Antenna Type:	Integral antenna
Antenna Gain:	-0.58dBi(declare by applicant)
Power Supply:	Input voltage: DC 12V USB output: 5V/2.1A

Operation Frequency each of Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	88.1MHz	46	92.6MHz	96	97.6MHz	146	102.6MHz
2	88.2MHz	47	92.7MHz	97	97.7MHz	147	102.7MHz
3	88.3MHz	48	92.8MHz	98	97.8MHz	148	102.8MHz
4	88.4MHz	49	92.9MHz	99	97.9MHz	149	102.9MHz
5	88.5MHz	50	93.0MHz	100	98.0MHz	150	103.0MHz
6	88.6MHz	51	93.1MHz	101	98.1MHz	151	103.1MHz
7	88.7MHz	52	93.2MHz	102	98.2MHz	152	103.2MHz
8	88.8MHz	53	93.3MHz	103	98.3MHz	153	103.3MHz
9	88.9MHz	54	93.4MHz	104	98.4MHz	154	103.4MHz
10	89.0MHz	55	93.5MHz	105	98.5MHz	155	103.5MHz
11	89.1MHz	56	93.6MHz	106	98.6MHz	156	103.6MHz
12	89.2MHz	57	93.7MHz	107	98.7MHz	157	103.7MHz
13	89.3MHz	58	93.8MHz	108	98.8MHz	158	103.8MHz
…….	……	……	……	……	……	……	……
45	92.5MHz	95	97.5MHz	145	102.5MHz	199	107.9MHz

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:

Test Channel:

Channel	Frequency
The lowest channel	88.1MHz
The middle channel	98.0MHz
The Highest channel	107.9MHz

5.2 Test mode

Mode 1	Keep transmit mode

Per-test mode:			
We have verified the construction and function in typical operation, The EUT was placed on three different polar directions; i.e. X axis, Y axis, Z axis. which was shown in this test report and defined as follows:			
Axis	X	Y	Z
Field Strength(dBuV/m)	57.14	58.83	56.97

5.3 Description of Support Units

Manufacturer	Description	Model	Serial Number
GS	Lead–acid battery	S5D26R-MFZ	9442804454
SanDisk	USB disk	16GB	N/A

5.4 Test Facility

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

● **FCC —Registration No.: 381383**

Global United Technology 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 files. Registration 381383.

●**IC —Registration No.: 9079A**

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 9079A.

● **NVLAP (LAB CODE:600179-0)**

Global United Technology Services Co., Ltd., is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP). LAB CODE:600179-0

5.5 Test Location

All tests were performed at:

Global United Technology Service Co., Ltd EMC Laboratory

Address: 2nd Floor,Block No.2,Laodong Ind Zone Xixiang Road BaoAn District, Shenzhen, China

Tel: 0755-27798480

Fax: 0755-27798960

5.6 Other Information Requested by the Customer

None.

6 Test Instruments list

Radiated Emission:						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal.Date (mm-dd-yy)**	**Cal.Due date (mm-dd-yy)**
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	July. 03 2015	July. 02 2020
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A
3	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	June. 26 2019	June. 25 2020
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	GTS214	June. 26 2019	June. 25 2020
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120 D	GTS208	June. 26 2019	June. 25 2020
6	Horn Antenna	ETS-LINDGREN	3160	GTS217	June. 26 2019	June. 25 2020
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
8	Coaxial Cable	GTS	N/A	GTS213	June. 26 2019	June. 25 2020
9	Coaxial Cable	GTS	N/A	GTS211	June. 26 2019	June. 25 2020
10	Coaxial cable	GTS	N/A	GTS210	June. 26 2019	June. 25 2020
11	Coaxial Cable	GTS	N/A	GTS212	June. 26 2019	June. 25 2020
12	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	June. 26 2019	June. 25 2020
13	Amplifier(2GHz-20GHz)	HP	84722A	GTS206	June. 26 2019	June. 25 2020
14	Amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	June. 26 2019	June. 25 2020
15	Band filter	Amindeon	82346	GTS219	June. 26 2019	June. 25 2020
16	Power Meter	Anritsu	ML2495A	GTS540	June. 26 2019	June. 25 2020
17	Power Sensor	Anritsu	MA2411B	GTS541	June. 26 2019	June. 25 2020
18	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	GTS575	June. 26 2019	June. 25 2020
19	Splitter	Agilent	11636B	GTS237	June. 26 2019	June. 25 2020
20	Loop Antenna	ZHINAN	ZN30900A	GTS534	June. 26 2019	June. 25 2020
21	Breitband hornantenne	SCHWARZBECK	BBHA 9170	GTS579	Oct. 20 2018	Oct. 19 2019
22	Amplifier	TDK	PA-02-02	GTS574	Oct. 20 2018	Oct. 19 2019
23	Amplifier	TDK	PA-02-03	GTS576	Oct. 20 2018	Oct. 19 2019
24	PSA Series Spectrum Analyzer	Rohde & Schwarz	FSP	GTS578	June. 26 2019	June. 25 2020

RF Conducted Test:						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Serial No.**	**Cal.Date (mm-dd-yy)**	**Cal.Due date (mm-dd-yy)**
1	MXA Signal Analyzer	Agilent	N9020A	GTS566	June. 27 2018	June. 26 2019
2	EMI Test Receiver	R&S	ESCI 7	GTS552	June. 27 2018	June. 26 2019
3	Spectrum Analyzer	Agilent	E4440A	GTS533	June. 27 2018	June. 26 2019
4	MXG vector Signal Generator	Agilent	N5182A	GTS567	June. 27 2018	June. 26 2019
5	ESG Analog Signal Generator	Agilent	E4428C	GTS568	June. 27 2018	June. 26 2019
6	USB RF Power Sensor	DARE	RPR3006W	GTS569	June. 27 2018	June. 26 2019
7	RF Switch Box	Shongyi	RFSW3003328	GTS571	June. 27 2018	June. 26 2019
8	EMI Test Receiver	R&S	ESCI 7	GTS552	June. 27 2018	June. 26 2019
9	Programmable Constant Temp & Humi Test Chamber	WEWON	WHTH-150L-40-880	GTS572	June. 27 2018	June. 26 2019
10	D.C. Power Supply	Instek	PS-3030	GTS232	June. 27 2018	June. 26 2019

General used equipment:						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal.Date (mm-dd-yy)**	**Cal.Due date (mm-dd-yy)**
1	Barometer	ChangChun	DYM3	GTS257	June 27 2018	June 26 2019

7 Test results and Measurement Data

7.1 Antenna requirement

Standard requirement:	47 CFR Part 15, Subpart C 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 antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit permanently attached antenna or of an so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.	
E.U.T Antenna:	
The antenna is Internal antenna, the best case gain of the antenna is -0.58dBi, reference to the appendix II for details.	

7.2 Radiated Emission Method

Test Requirement:	47 CFR Part 15, Subpart C 15.209 & 15.239 (c)
Test Method:	ANSI C63.10:2013
Test Frequency Range:	9kHz to 1100MHz
Receiver setup:	

Frequency	Detector	RBW	VBW	Remark
9kHz-150kHz	Quasi-peak	200Hz	300Hz	Quasi-peak Value
150kHz-30MHz	Quasi-peak	9kHz	10kHz	Quasi-peak Value
30MHz-1GHz	Quasi-peak	120KHz	300KHz	Quasi-peak Value
Above 1GHz	Peak	1MHz	3MHz	Peak Value
	Peak	1MHz	10Hz	Average Value

Limit:
(Field strength of the fundamental signal)

Frequency	Limit (dBuV/m @3m)	Remark
88.1MHz-107.9MHz	48.0	Average Value
	68.0	Peak Value

Limit:
(Spurious Emissions)

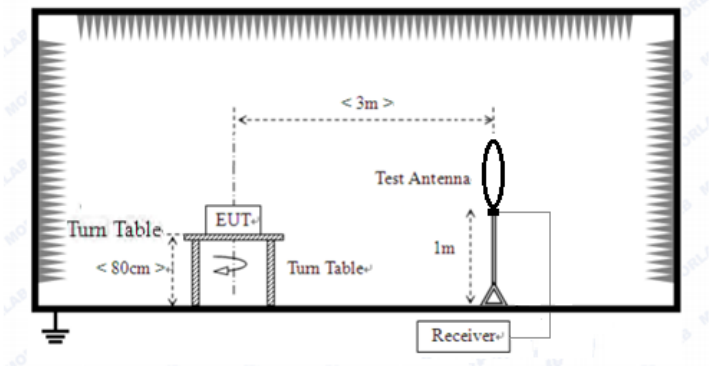
Frequency	Limit (uV/m)	Remark
0.009MHz-0.490MHz	2400/F(kHz) @300m	Quasi-peak Value
0.490MHz-1.705MHz	24000/F(kHz) @30m	Quasi-peak Value
1.705MHz-30.0MHz	30 @30m	Quasi-peak Value
30MHz-88MHz	100 @3m	Quasi-peak Value
88MHz-216MHz	150 @3m	Quasi-peak Value
216MHz-960MHz	200 @3m	Quasi-peak Value
960MHz-1GHz	500 @3m	Quasi-peak Value
Above 1GHz	500 @3m	Average Value
	5000 @3m	Peak Value

Limit:
(band edge)

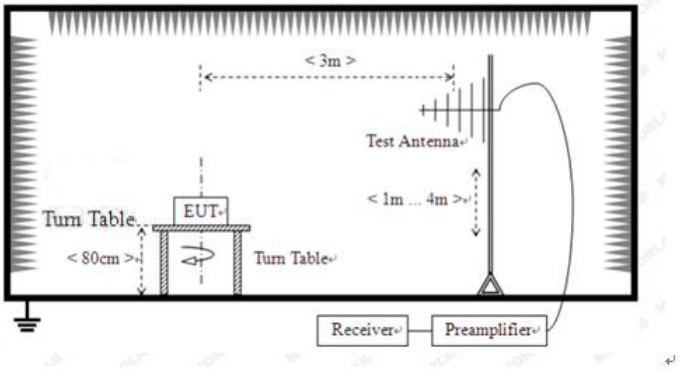
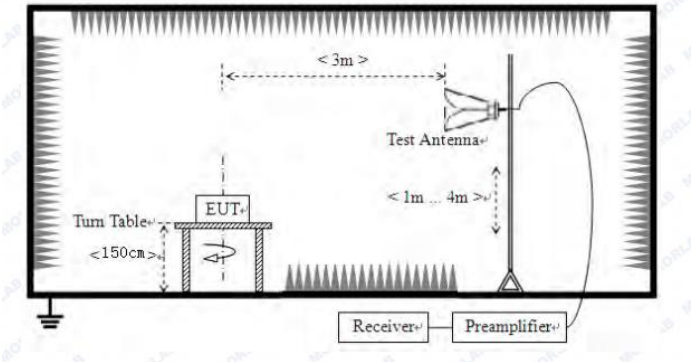
Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

Test setup:

For radiated emissions from 9kHz to 30MHz



For radiated emissions from 30MHz to1GHz

	 For radiated emissions above 1GHz 
Test Procedure:	1. The EUT was placed on the top of a rotating table (0.8m for below 1GHz and 1.5 meters for above 1GHz) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3. 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. 4. 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 rota table was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. 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.
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test voltage:	DC 12V
Test results:	Pass

Measurement data:

7.2.1 Field Strength of The Fundamental Signal

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
88.10	72.45	10.27	1.10	29.87	53.95	68.00	-14.05	Vertical
88.10	76.53	10.27	1.10	29.87	58.03	68.00	-9.97	Horizontal
98.00	70.81	12.12	1.18	29.81	54.30	68.00	-13.70	Vertical
98.00	75.34	12.12	1.18	29.81	58.83	68.00	-9.17	Horizontal
107.90	70.20	11.46	1.26	29.78	53.14	68.00	-14.86	Vertical
107.90	75.19	11.46	1.26	29.78	58.13	68.00	-9.87	Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
88.10	59.62	10.27	1.10	29.87	41.12	48.00	-6.88	Vertical
88.10	62.84	10.27	1.10	29.87	44.34	48.00	-3.66	Horizontal
98.00	58.87	12.12	1.18	29.81	42.36	48.00	-5.64	Vertical
98.00	60.11	12.12	1.18	29.81	43.60	48.00	-4.40	Horizontal
107.90	58.45	11.46	1.26	29.78	41.39	48.00	-6.61	Vertical
107.90	61.37	11.46	1.26	29.78	44.31	48.00	-3.69	Horizontal

Note:
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

7.2.2 Radiated Spurious Emissions

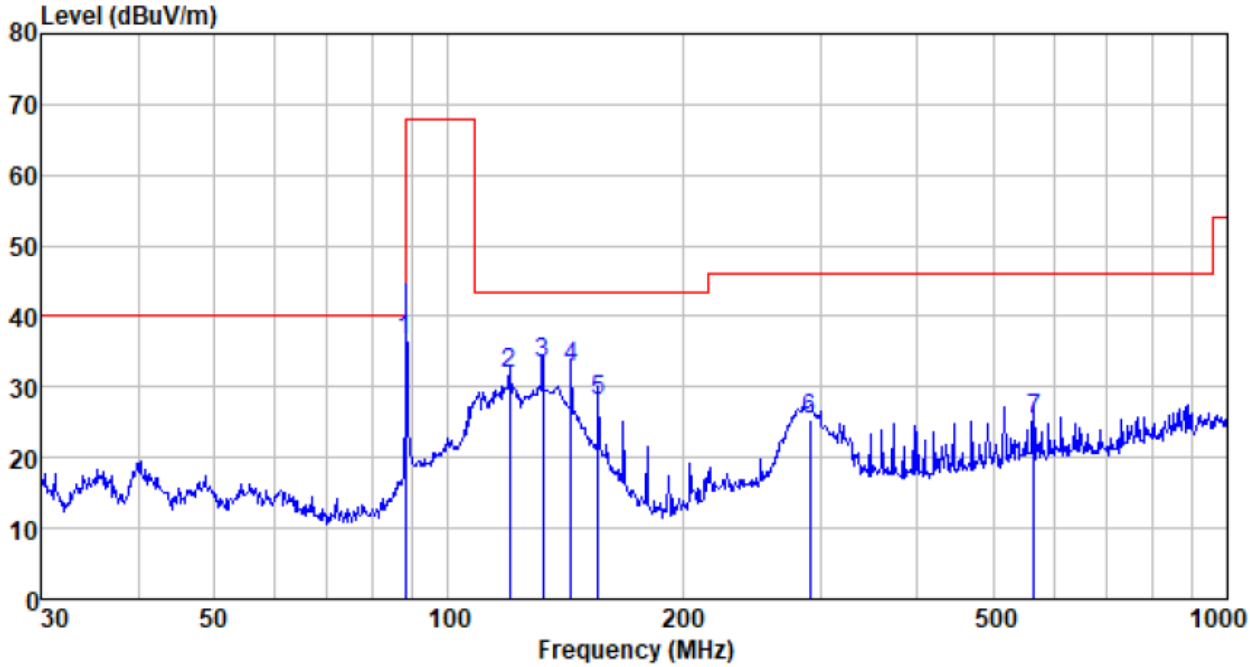
■ **9kHz~30MHz**

The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.

■ **30MHz~1GHz**

Test mode:	Transmitting	Test channel:	Lowest channel

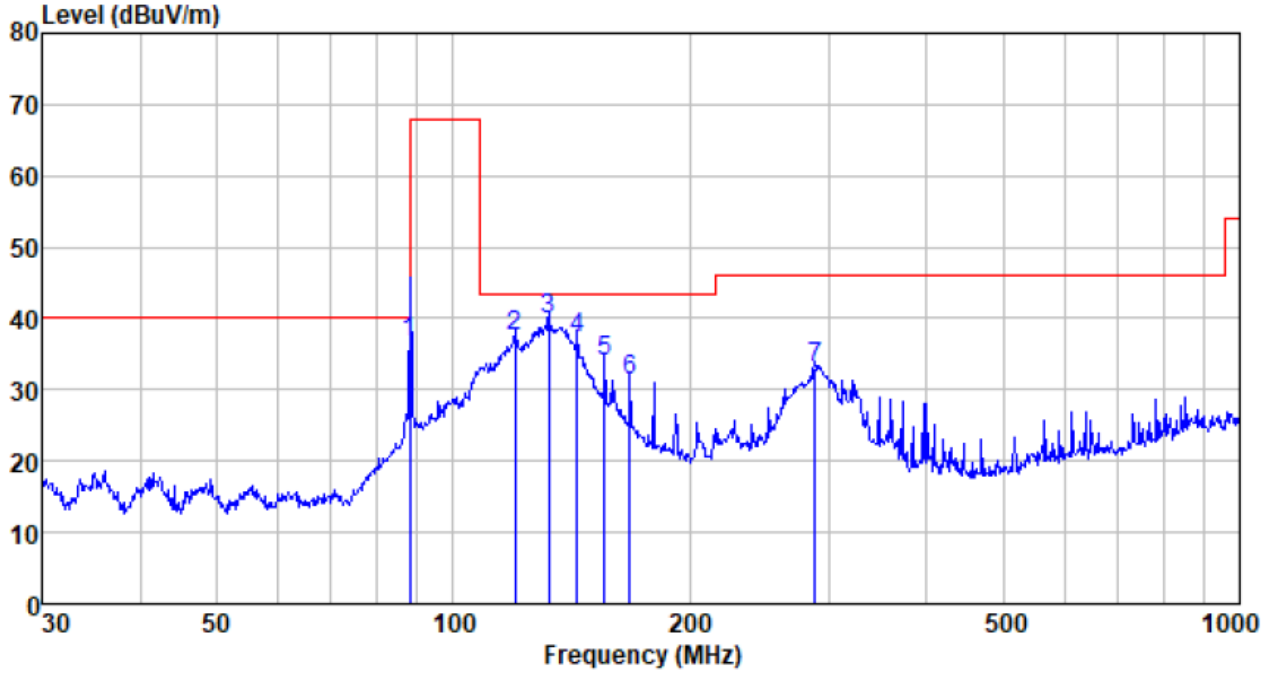
Vertical:



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV	Limit level dBuV/m	Over limit dB	Remark
88.000	61.96	10.07	1.09	36.62	36.50	40.00	-3.50	QP
119.856	57.90	9.50	1.36	36.88	31.88	43.50	-11.62	QP
132.221	60.97	8.01	1.45	36.97	33.46	43.50	-10.04	QP
143.830	60.86	7.47	1.53	37.04	32.82	43.50	-10.68	QP
155.910	55.61	8.05	1.60	37.11	28.15	43.50	-15.35	QP
291.036	47.27	13.35	2.32	37.41	25.53	46.00	-20.47	QP
564.639	40.53	18.73	3.58	37.53	25.31	46.00	-20.69	QP

Test mode:	Transmitting	Test channel:	Lowest channel

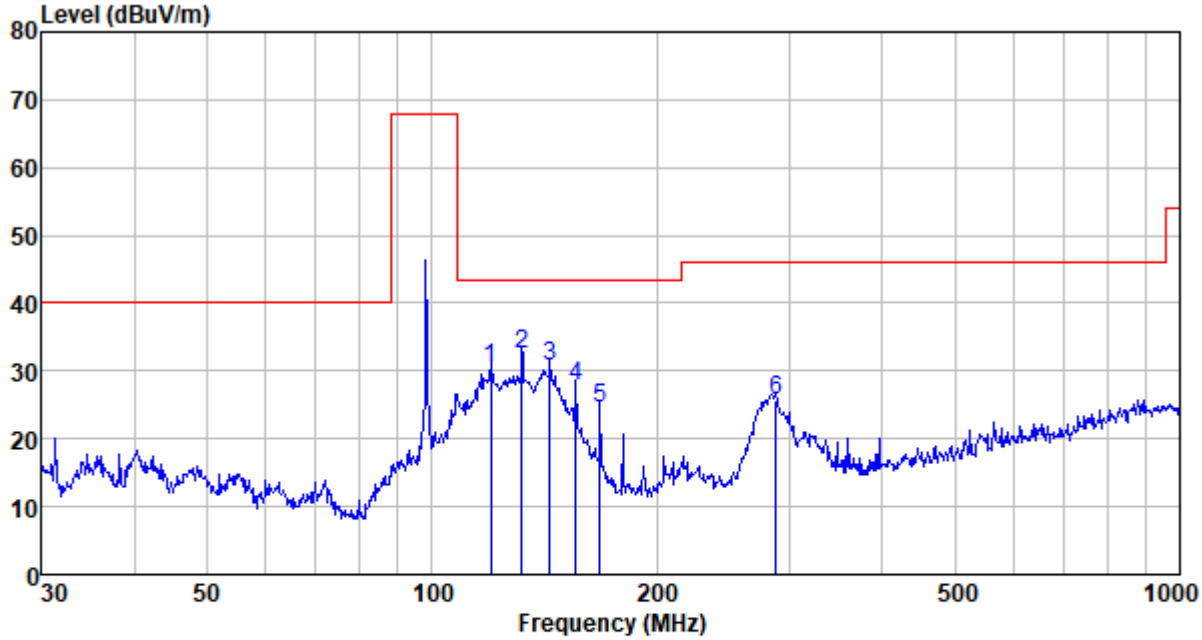
Horizontal:



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV	Limit level dBuV/m	Over limit dB	Remark
88.000	62.10	10.07	1.09	36.62	36.64	40.00	-3.36	QP
119.856	63.60	9.50	1.36	36.88	37.58	43.50	-5.92	QP
132.221	67.50	8.01	1.45	36.97	39.99	43.50	-3.51	QP
143.830	65.30	7.47	1.53	37.04	37.26	43.50	-6.24	QP
155.910	61.48	8.05	1.60	37.11	34.02	43.50	-9.48	QP
167.824	58.21	8.46	1.67	37.18	31.16	43.50	-12.34	QP
287.990	54.83	13.27	2.31	37.41	33.00	46.00	-13.00	QP

Test mode:	Transmitting	Test channel:	Middle channel

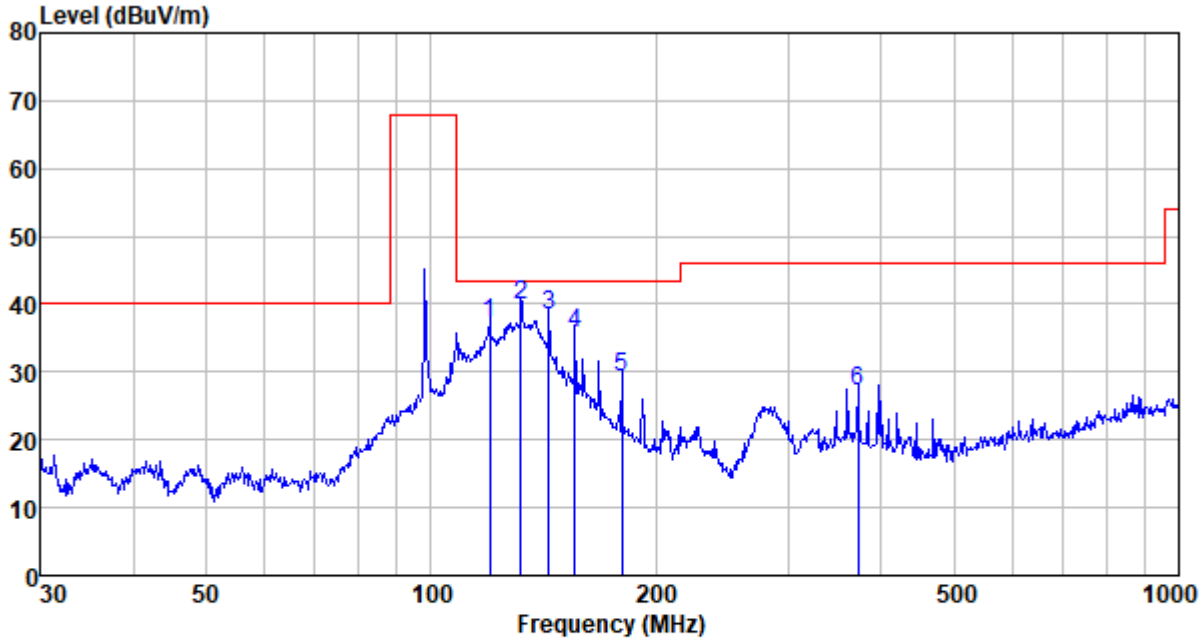
Vertical:



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV	Limit level dBuV/m	Over limit dB	Remark
119.856	56.57	9.50	1.36	36.88	30.55	43.50	-12.95	QP
131.758	60.02	8.06	1.45	36.96	32.57	43.50	-10.93	QP
143.830	58.69	7.47	1.53	37.04	30.65	43.50	-12.85	QP
155.910	55.16	8.05	1.60	37.11	27.70	43.50	-15.80	QP
167.824	51.68	8.46	1.67	37.18	24.63	43.50	-18.87	QP
287.990	47.61	13.27	2.31	37.41	25.78	46.00	-20.22	QP

Test mode:	Transmitting	Test channel:	Middle channel

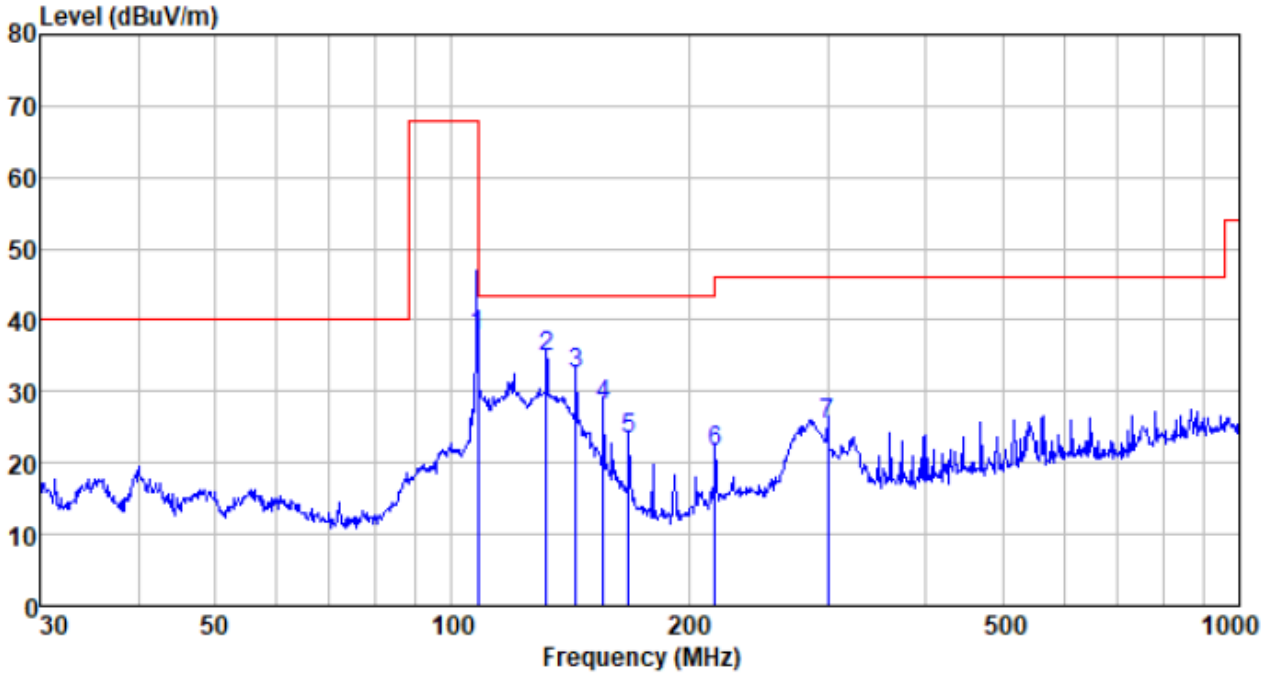
Horizontal



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV	Limit level dBuV/m	Over limit dB	Remark
119.856	63.21	9.50	1.36	36.88	37.19	43.50	-6.31	QP
131.758	67.28	8.06	1.45	36.96	39.83	43.50	-3.67	QP
143.830	66.48	7.47	1.53	37.04	38.44	43.50	-5.06	QP
155.910	63.23	8.05	1.60	37.11	35.77	43.50	-7.73	QP
180.017	55.92	8.90	1.74	37.24	29.32	43.50	-14.18	QP
372.005	47.01	14.89	2.72	37.49	27.13	46.00	-18.87	QP

Test mode:	Transmitting	Test channel:	Highest channel

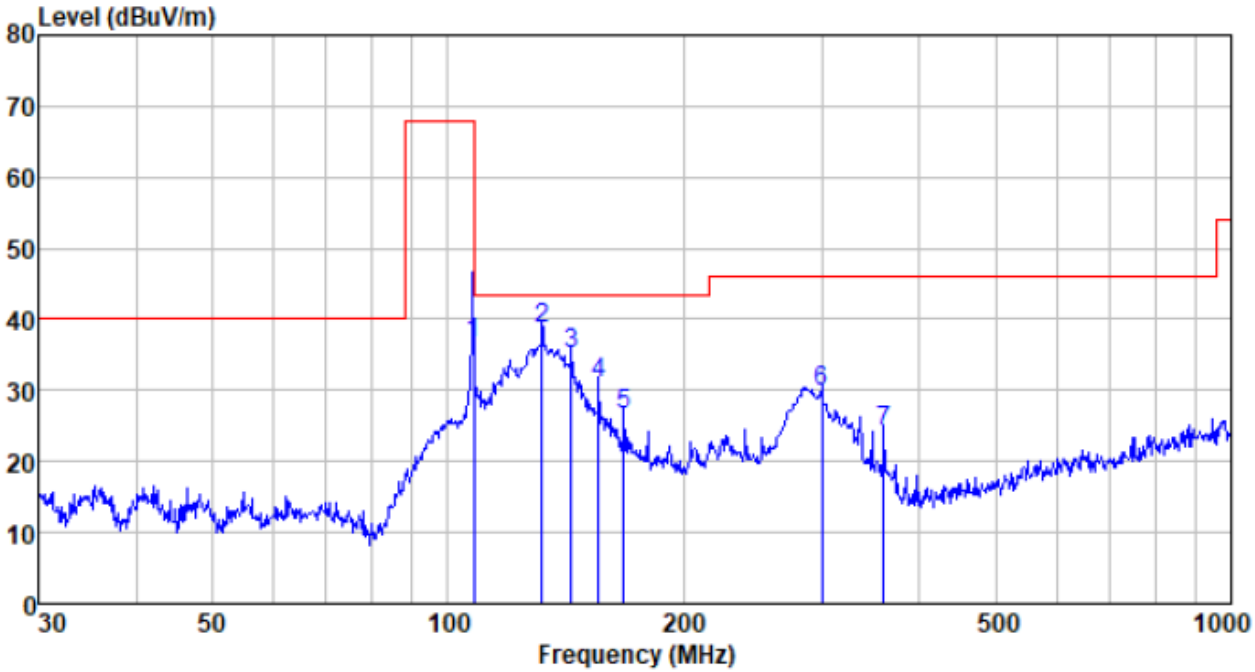
Vertical:



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV	Limit level dBuV/m	Over limit dB	Remark
108.000	61.98	11.31	1.26	36.79	37.76	43.50	-5.74	QP
131.758	62.21	8.06	1.45	36.96	34.76	43.50	-8.74	QP
143.830	60.47	7.47	1.53	37.04	32.43	43.50	-11.07	QP
155.910	55.64	8.05	1.60	37.11	28.18	43.50	-15.32	QP
167.824	50.39	8.46	1.67	37.18	23.34	43.50	-20.16	QP
216.024	46.06	11.02	1.93	37.35	21.66	46.00	-24.34	QP
300.367	46.96	13.60	2.36	37.42	25.50	46.00	-20.50	QP

Test mode:	Transmitting	Test channel:	Highest channel

Horizontal

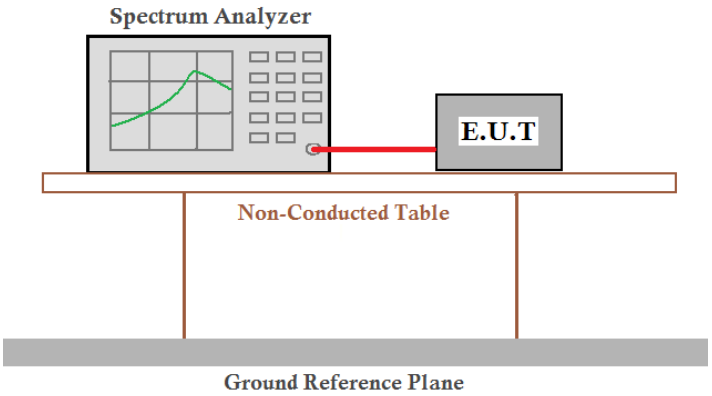


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV	Limit level dBuV/m	Over limit dB	Remark
108.000	60.92	11.31	1.26	36.79	36.70	43.50	-6.80	QP
131.758	66.18	8.06	1.45	36.96	38.73	43.50	-4.77	QP
143.830	63.22	7.47	1.53	37.04	35.18	43.50	-8.32	QP
155.910	58.35	8.05	1.60	37.11	30.89	43.50	-12.61	QP
167.824	53.50	8.46	1.67	37.18	26.45	43.50	-17.05	QP
300.367	51.27	13.60	2.36	37.42	29.81	46.00	-16.19	QP
360.448	44.20	14.70	2.67	37.48	24.09	46.00	-21.91	QP

Remark:

1. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*

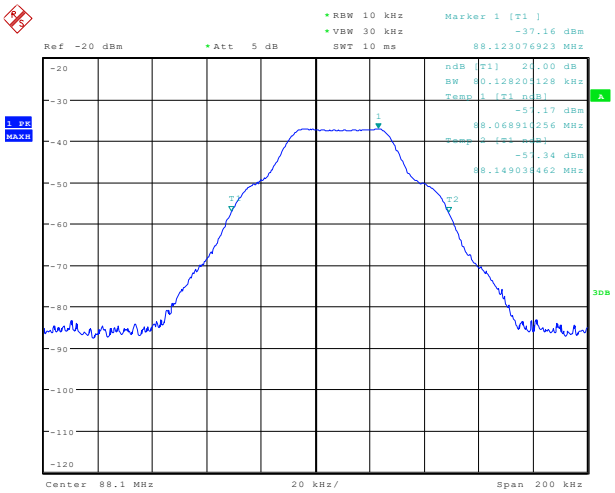
7.3 20dB Occupy Bandwidth

Test Requirement:	47 CFR Part 15, Subpart C 15.239(a)
Test Method:	ANSI C63.10:2013
Receiver setup:	RBW=10KHz, VBW=30KHz, detector: Peak
Limit:	<200 kHz
Test setup:	
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

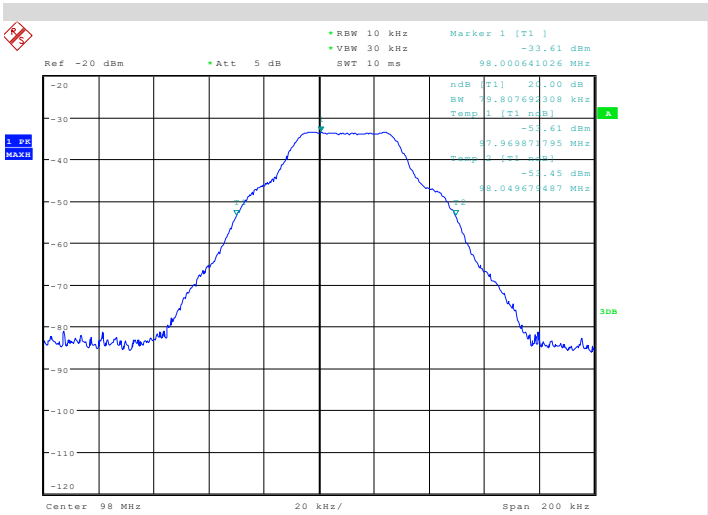
Measurement Data:

Test channel	20dB bandwidth(kHz)	Limit(kHz)
Lowest	80.128	200
Middle	79.808	
Highest	80.128	

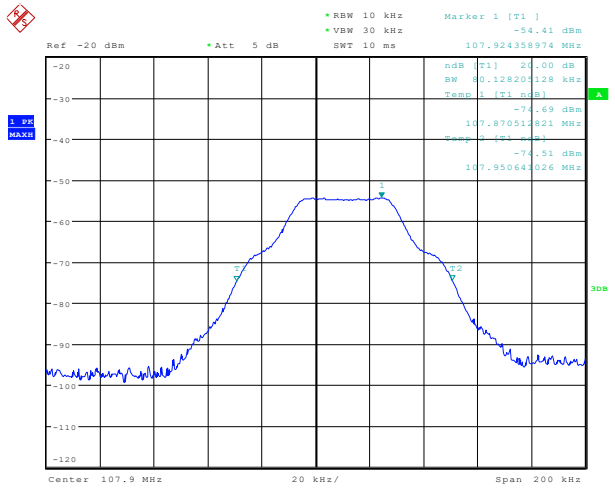
Test plot as follows:



Lowest channel



Middle channel



Highest channel

8 Test Setup Photo

Reference to the **appendix I** for details.

9 EUT Constructional Details

Reference to the **appendix II** for details.

------ End ------