
FCC Test Report

Report No.: AGC02931200610FE08

FCC ID : POD-ANG8
PRODUCT DESIGNATION : Analog Transceiver
BRAND NAME : TYT
MODEL NAME : TH-UV8000D, UV8000E
APPLICANT : TYT ELECTRONICS CO., LTD
DATE OF ISSUE : Jul. 22, 2020
STANDARD(S) : FCC Part 15 Rules
REPORT VERSION : V 1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd

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Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Jul. 22, 2020	Valid	Initial Release



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1. VERIFICATION OF COMPLIANCE

Applicant	TYT ELECTRONICS CO., LTD
Address	Block 39-1, Optoelectronics-information industry base, Nan'an, Quanzhou, Fujian, China.
Manufacturer	TYT ELECTRONICS CO., LTD
Address	Block 39-1, Optoelectronics-information industry base, Nan'an, Quanzhou, Fujian, China.
Factory	TYT ELECTRONICS CO., LTD
Address	Block 39-1, Optoelectronics-information industry base, Nan'an, Quanzhou, Fujian, China.
Product Designation	Analog Transceiver
Brand name	TYT
Test Model	TH-UV8000D
Series Model	UV8000E
Declaration of Difference	All the same, only model different.
Measurement Procedure	ANSI C63.4: 2014
Date of test	Jun. 23, 2020~Jul. 22, 2020
Deviation	No any deviation from the test method.
Condition of Test Sample	Normal
Test Result	Pass

The above equipment was tested by Attestation Of Global Compliance (Shenzhen) Co., Ltd. for compliance with the requirements set forth in the FCC Rules and Regulations Part 15, the measurement procedure according to ANSI C63.4:2014. This said equipment in the configuration described in this report shows the maximum emission levels emanating from equipment are within the compliance requirements. The test results of this report relate only to the tested sample identified in this report.

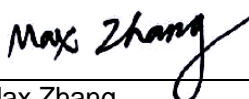
Prepared By



Calvin Liu
(Project Engineer)

Jul. 22, 2020

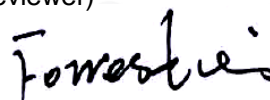
Reviewed By



Max Zhang
(Reviewer)

Jul. 22, 2020

Approved By



Forrest Lei
(Authorized Officer)

Jul. 22, 2020



2. PRODUCT INFORMATION

The EUT is a **Analog Transceiver** designed for voice communication. It is designed by way of utilizing the F3E modulation achieves the system operating.

A major technical description of EUT is described as following:

Communication Type	Voice / Tone only
Modulation	FM
RX Frequency Range	RX: 136MHz-174MHz, 400MHz -520MHz
Emission Type	F3E
Antenna Designation	Detachable
Antenna Type	Integral Antenna
Antenna Gain	Long antenna: 1.5dBi Short antenna: 1.5dBi
Power Supply	DC 7.4V, 3600mAh by battery
Adapter Parameter	Input: AC 100-240V 50/60Hz, 0.2A Output: DC 12V 0.5A
Charger Parameter	Input: DC 12V 0.5A Output: DC 8.4V 400mA

I/O Port Information (☒Applicable ☐Not Applicable)

I/O Port of EUT			
I/O Port Type	Q'TY	Cable	Tested with
Antenna Port	1	0	1



3. IDENTIFICATION OF THE RESPONSIBLE TESTING LOCATION

Test Site	Attestation of Global Compliance (Shenzhen) Co., Ltd
Location	1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China
Designation Number	CN1259
FCC Test Firm Registration Number	975832
A2LA Cert. No.	5054.02
Description	Attestation of Global Compliance(Shenzhen) Co., Ltd is accredited by A2LA

List Of Test Equipment:

TEST EQUIPMENT OF CONDUCTED EMISSION TEST

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
TEST RECEIVER	R&S	ESCI	10096	May 15, 2020	May 14, 2022
AMN/LISN	R&S	ESH2-Z5	100086	Aug. 22, 2019	Aug. 21, 2020
TEST SOFTWARE	FR	EZ-EMC	AGC-CON03 A	--	--

TEST EQUIPMENT OF RADIATED EMISSION TEST

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
TEST RECEIVER	R&S	ESPI	101206	May 15, 2020	May 14, 2022
ANTENNA	SCHWARZBECK	VULB9168	494	Jan. 09, 2019	Jan. 08, 2021
TEST RECEIVER	R&S	ESCI	100694	June 25, 2020	June 24, 2021
ANTENNA	SCHWARZBECK	VULB9168	D69250	Sep. 20, 2019	Sep. 19, 2020
POSITIONING CONTROLLER	MF	MF-7802	MF780208285	--	--
HORN ANTENNA	ETS LINDGREN	3117	00034609	May. 16, 2019	May. 15, 2021
RF Communication Test Set	HP	8920B	--	Oct. 08, 2019	Oct. 07, 2020
EXA Signal Analyzer	Agilent	N9020A	W1312-60196	Oct. 08, 2019	Oct. 07, 2020
Attenuator	Schaffner	58-30-33	ML030	Oct. 28, 2019	Oct. 27, 2020



4. SUPPORT EQUIPMENT LIST

Device Type	Manufacturer	Model Name	Serial No.	Data Cable	Power Cable
Back clip	--	--	--	--	--
Charger	TYT	NA	--	--	--
Adapter	TYT	DLD-418	--	--	0.6m
Lanyard	TYT	NA	--	--	0.1m
Battery	TYT	NA	--	--	--
Long Antenna	TYT	TA-8000L	--	--	--
Short Antenna	TYT	TA-8000	--	--	--

5. SYSTEM DESCRIPTION

EUT test procedure:

1. Connect EUT and peripheral devices.
2. Power on the EUT, the EUT begins to work.
3. Make sure the EUT normal working.

EMC TEST MODES

No.	TEST MODES
1	Scanning mode
2	Scanning stopped/Receiving at low channel of 136 MHz -174 MHz
3	Scanning stopped/Receiving at middle channel of 136 MHz -174 MHz
4	Scanning stopped/Receiving at high channel of 136 MHz -174 MHz
5	Scanning stopped/Receiving at low channel of 400 MHz -520 MHz
6	Scanning stopped/Receiving at middle channel of 400 MHz -520 MHz
7	Scanning stopped/Receiving at high channel of 400 MHz -520 MHz

Note: Only the result of the worst case was recorded in the report.



6. SUMMARY OF TEST RESULTS

FCC Rules	Description Of Test	Result
§15.107	Conduction Emission	Compliant
§15.109	Radiated Emission	Compliant
§15.111	Antenna Conducted Power for receivers	Compliant
§15.121(b)	Scanning receivers and frequency converters used with scanning receivers	Compliant



7. FCC RADIATED EMISSION TEST

7.1. TEST EQUIPMENT OF RADIATED EMISSION

7.2. LIMITS OF RADIATED EMISSION TEST

Frequency (MHz)	Distance (m)	Maximum Field Strength Limit (dBuV/m/ Q.P.)
30~88	3	40.0
88~216	3	43.5
216~960	3	46.0
ABOVE 960	3	54.0

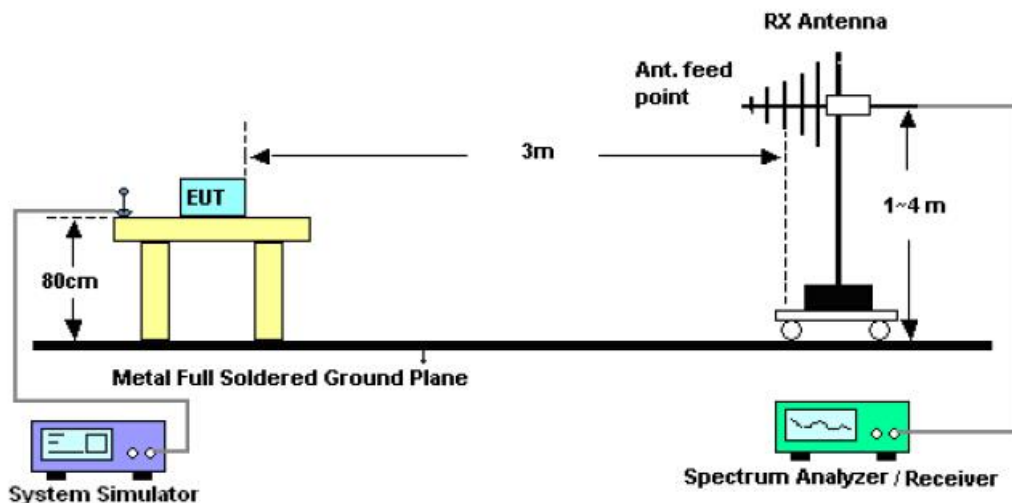
Frequency (MHz)	Distance (m)	Maximum Field Strength Limit (dBuV/m/ P.K.)	Maximum Field Strength Limit (dBuV/m/ A.V.)
ABOVE 1G	3	74	54

**Note: The lower limit shall apply at the transition frequency. Because the EUT RX frequency range up to 174 MHz, so the upper the frequency range up to 2 GHz.

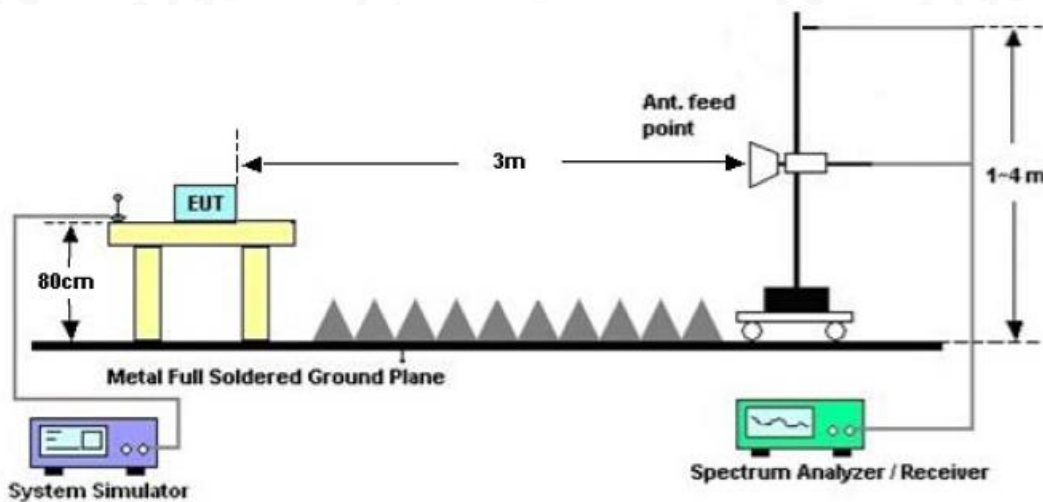


7.3 BLOCK DIAGRAM OF RADIATED EMISSION TEST

RADIATED EMISSION TEST SETUP 30MHz-1000MHz



RADIATED EMISSION TEST SETUP ABOVE 1000MHz



7.4 PROCEDURE OF RADIATED EMISSION TEST

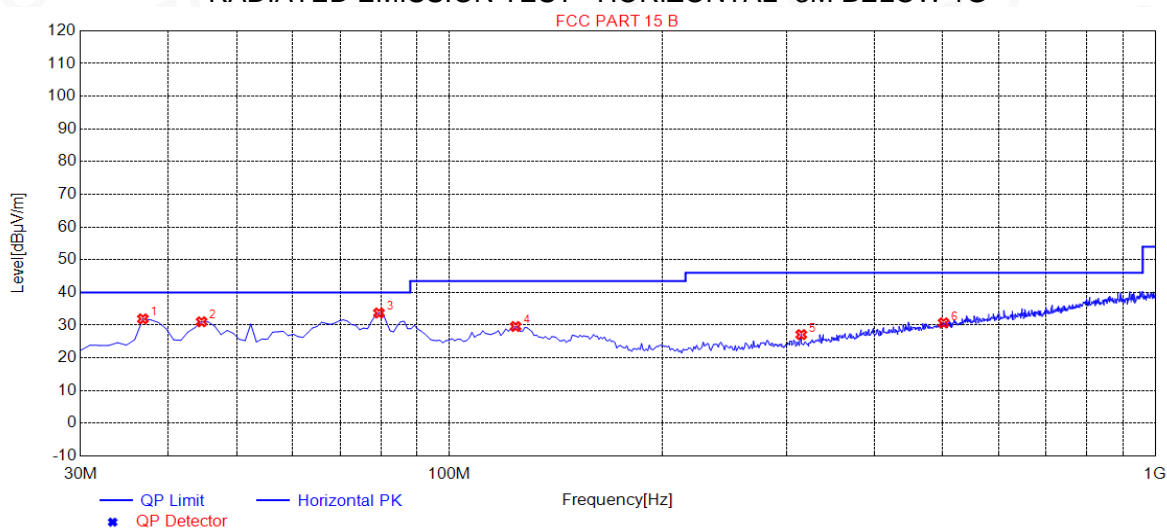
- 1) The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden turntable with a height of 0.8 meters is used which is placed on the ground plane as per ANSI C63.4 (see Test Facility for the dimensions of the ground plane used). When the EUT is floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- 2) Support equipment, if needed, was placed as per ANSI C63.4.
- 3) All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- 4) The EUT received power by AC 120V/60Hz.
- 5) The antenna was placed at 3 meter away from the EUT as stated in FCC Part 15. The antenna connected to the Analyzer via a cable and at times a pre-amplifier would be used.
- 6) The Analyzer / Receiver quickly scanned from 30MHz to 1000MHz. The EUT test program was started. Emissions were scanned and measured rotating the EUT to 360 degrees and positioning the antenna 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.
- 7) The test mode(s) were scanned during the test:
- 8) Recorded at least the six highest emissions. Emission frequency, amplitude, antenna position, polarization and turntable position were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit and Q.P./Peak reading is presented. For emissions below 1GHz, use 120KHz RBW and VBW \geq 3RBW for QP reading.
- 9) For emissions above 1GHz, use 1MHz RBW and 3MHz VBW for peak reading. Then 1MHz RBW and 10Hz VBW for average reading in spectrum analyzer.
- 10) When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum values.
- 11) If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
- 12) For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
- 13) In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High - Low scan is not required in this case.
- 14) The test data of the worst case condition (mode 1) was reported on the following Data page



7.5 Test result of radiated emission test

LONG ANTENNA

RADIATED EMISSION TEST –HORIZONTAL -3M BELOW 1G



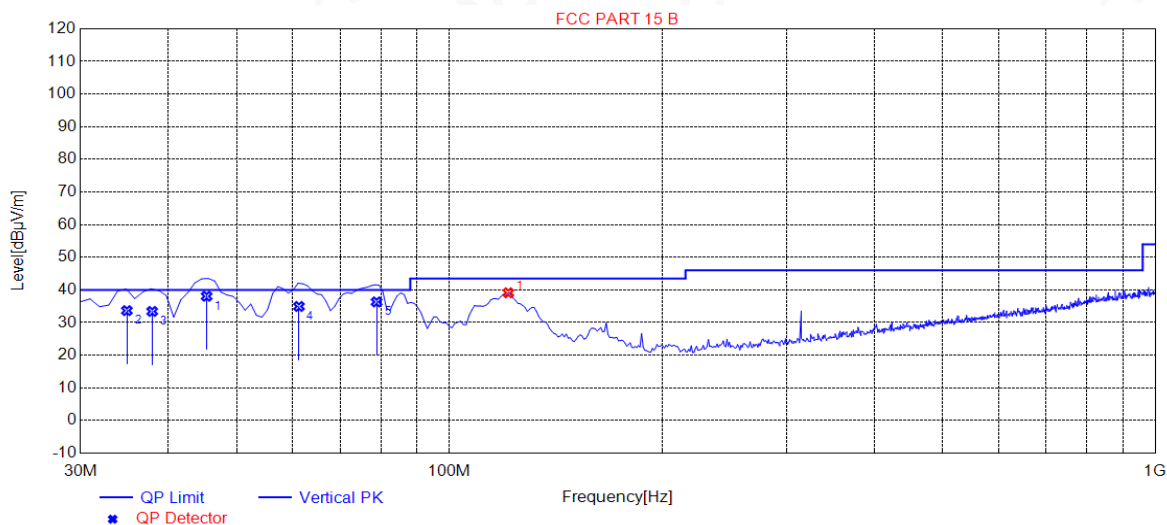
Suspected Data List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	36.7900	31.94	17.16	40.00	8.06	100	30	Horizontal
2	44.5500	31.04	17.82	40.00	8.96	100	356	Horizontal
3	79.4700	33.73	13.26	40.00	6.27	100	173	Horizontal
4	124.0900	29.60	16.75	43.50	13.90	100	196	Horizontal
5	315.1800	27.12	19.48	46.00	18.88	100	2	Horizontal
6	501.4200	30.70	25.21	46.00	15.30	100	67	Horizontal

RESULT: PASS



RADIATED EMISSION TEST –VERTICAL -3M BELOW 1G



Suspected Data List

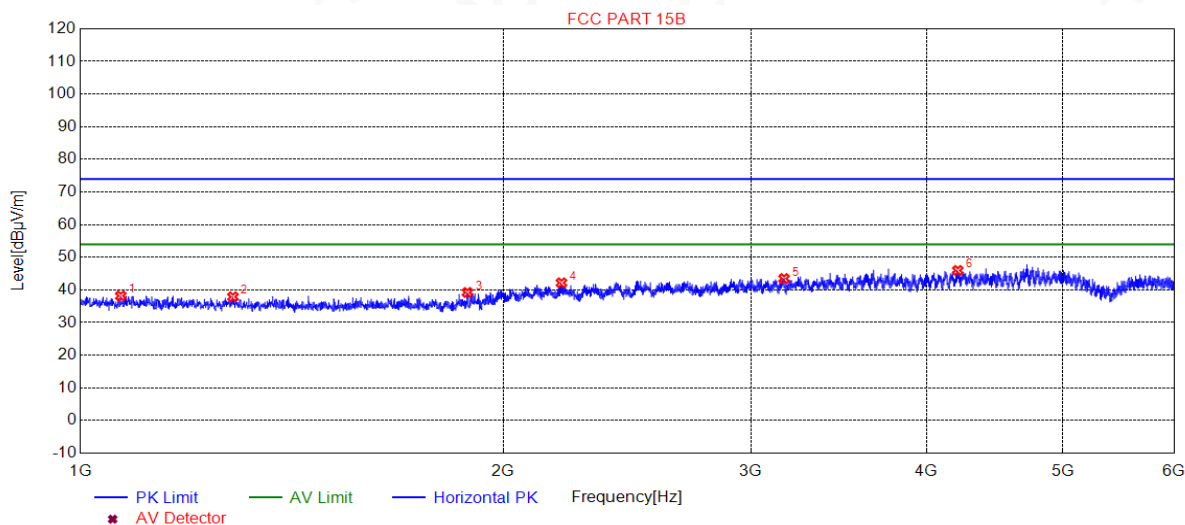
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	121.1800	39.14	16.55	43.50	4.36	100	149	Vertical

Final Data List

NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	45.2942	17.80	38.07	40.00	1.93	101	82.7	Vertical
2	34.9134	16.72	33.67	40.00	6.33	200	200	Vertical
3	37.9209	17.43	33.43	40.00	6.57	110	220	Vertical
4	61.2121	16.71	34.95	40.00	5.05	160	40	Vertical
5	78.8501	13.39	36.34	40.00	3.66	120	200	Vertical



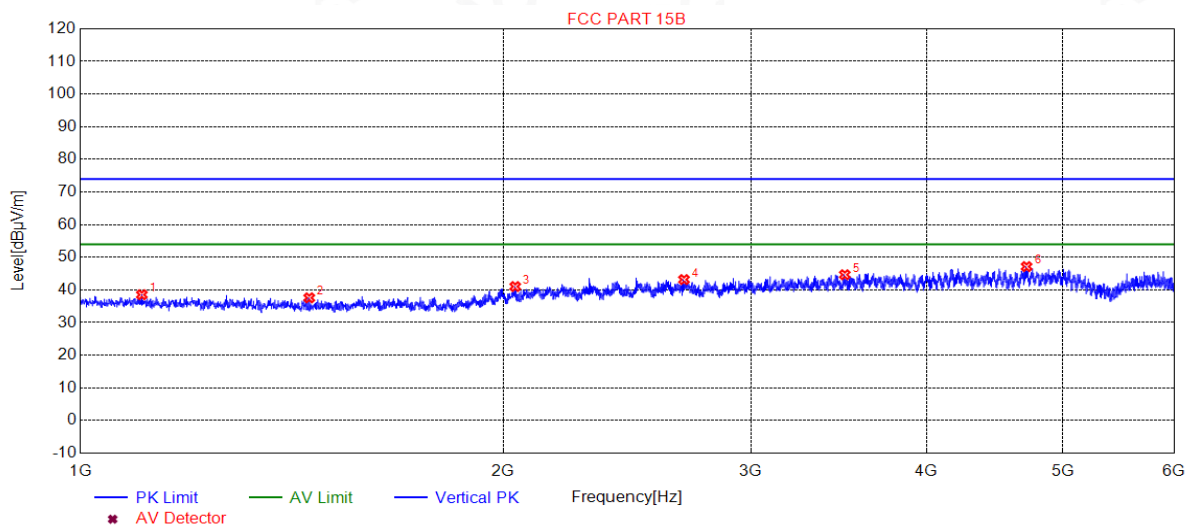
RADIATED EMISSION TEST –HORIZONTAL -3M ABOVE 1G



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1068.5069	38.18	-16.71	74.00	35.82	100	250	Horizontal
2	1284.0284	37.90	-16.92	74.00	36.10	100	270	Horizontal
3	1885.5886	39.24	-13.04	74.00	34.76	100	240	Horizontal
4	2199.6200	42.18	-10.98	74.00	31.82	100	120	Horizontal
5	3167.7168	43.49	-8.75	74.00	30.51	100	180	Horizontal
6	4210.8211	45.98	-5.95	74.00	28.02	100	120	Horizontal



RADIATED EMISSION TEST –VERTICAL -3M ABOVE 1G



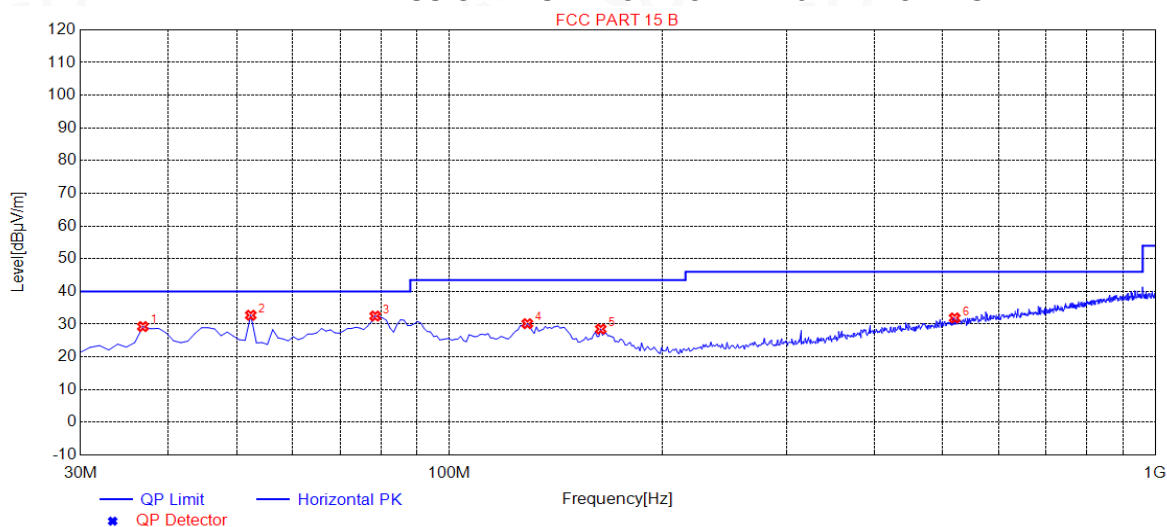
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1106.0106	38.54	-16.74	74.00	35.46	100	50	Vertical
2	1455.0455	37.59	-17.09	74.00	36.41	100	320	Vertical
3	2039.1039	41.04	-11.66	74.00	32.96	100	60	Vertical
4	2688.6689	43.18	-9.57	74.00	30.82	100	260	Vertical
5	3499.2499	44.67	-7.60	74.00	29.33	100	80	Vertical
6	4713.3713	47.16	-5.00	74.00	26.84	100	200	Vertical

RESULT: PASS

Note: 1. Factor=Antenna Factor + Cable loss - Amplifier gain, Margin=Measurement-Limit.
2. The "Factor" value can be calculated automatically by software of measurement system.



SHORT ANTENNA
RADIATED EMISSION TEST –HORIZONTAL -3M BELOW 1G



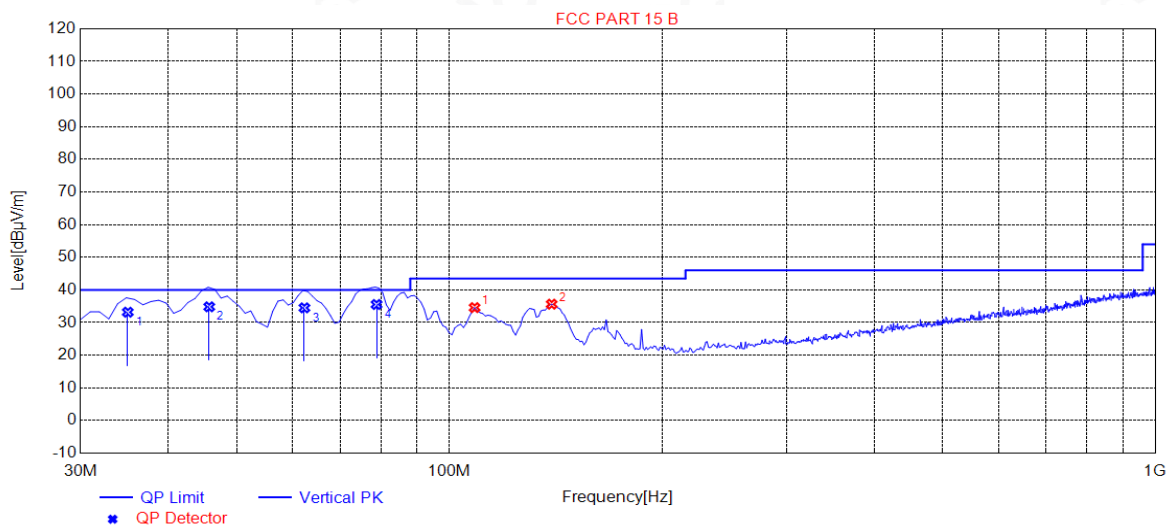
Suspected Data List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	36.7900	29.27	17.16	40.00	10.73	100	93	Horizontal
2	52.3100	32.74	17.49	40.00	7.26	100	120	Horizontal
3	78.5000	32.49	13.46	40.00	7.51	100	176	Horizontal
4	128.9400	30.16	17.08	43.50	13.34	100	360	Horizontal
5	163.8600	28.52	17.55	43.50	14.98	100	4	Horizontal
6	519.8500	31.91	25.60	46.00	14.09	100	112	Horizontal

RESULT: PASS



RADIATED EMISSION TEST –VERTICAL -3M BELOW 1G



Suspected Data List

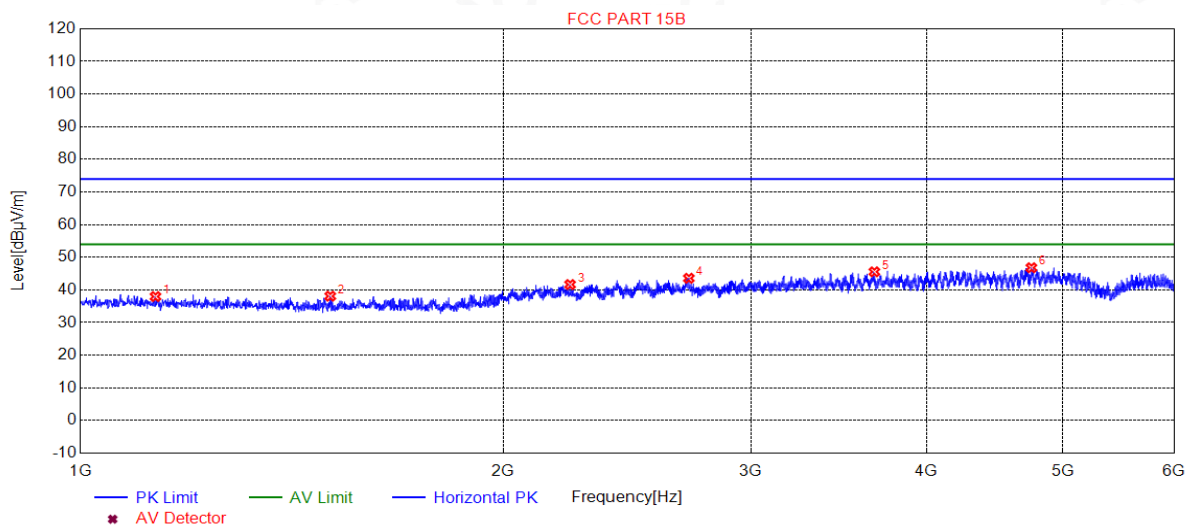
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	108.5700	34.60	15.27	43.50	8.90	100	7	Vertical
2	139.6100	35.65	17.85	43.50	7.85	100	157	Vertical

Final Data List

NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	35.0215	16.73	33.19	40.00	6.81	140	290	Vertical
2	45.6821	17.79	34.84	40.00	5.16	120	200	Vertical
3	62.3089	16.52	34.52	40.00	5.48	130	130	Vertical
4	78.8391	13.40	35.55	40.00	4.45	102	171.8	Vertical



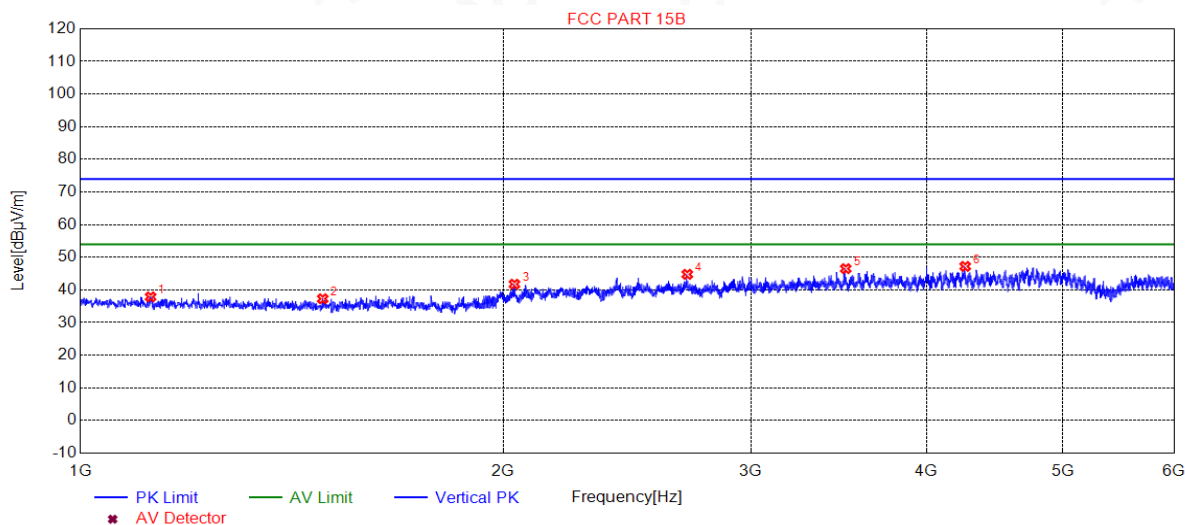
RADIATED EMISSION TEST –HORIZONTAL -3M ABOVE 1G



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1131.0131	37.98	-16.77	74.00	36.02	100	270	Horizontal
2	1506.0506	38.10	-17.07	74.00	35.90	100	350	Horizontal
3	2231.1231	41.66	-10.85	74.00	32.34	100	30	Horizontal
4	2710.1710	43.58	-9.56	74.00	30.42	100	80	Horizontal
5	3672.7673	45.56	-7.22	74.00	28.44	100	250	Horizontal
6	4750.8751	46.81	-4.96	74.00	27.19	100	330	Horizontal



RADIATED EMISSION TEST –VERTICAL -3M ABOVE 1G



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1122.0122	37.88	-16.76	74.00	36.12	100	170	Vertical
2	1487.5488	37.30	-17.12	74.00	36.70	100	310	Vertical
3	2036.6037	41.77	-11.67	74.00	32.23	100	230	Vertical
4	2703.1703	44.79	-9.56	74.00	29.21	100	160	Vertical
5	3504.7505	46.53	-7.59	74.00	27.47	100	30	Vertical
6	4262.3262	47.22	-5.82	74.00	26.78	100	150	Vertical

RESULT: PASS

Note: 1. Factor=Antenna Factor + Cable loss - Amplifier gain, Margin=Measurement-Limit.
2. The "Factor" value can be calculated automatically by software of measurement system.



8. CONDUCTED EMISSION TEST

8.1 PROVISIONS APPLICABLE

For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequencies within the band 150 KHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50uH/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequencies ranges.

Frequency of Emission (MHz)	Conducted Limit(dBuV)	
	Quasi-Peak	Average
0.15 – 0.5	66 to 56 *	56 to 46 *
0.5 – 5	56	46
5 – 30	60	50

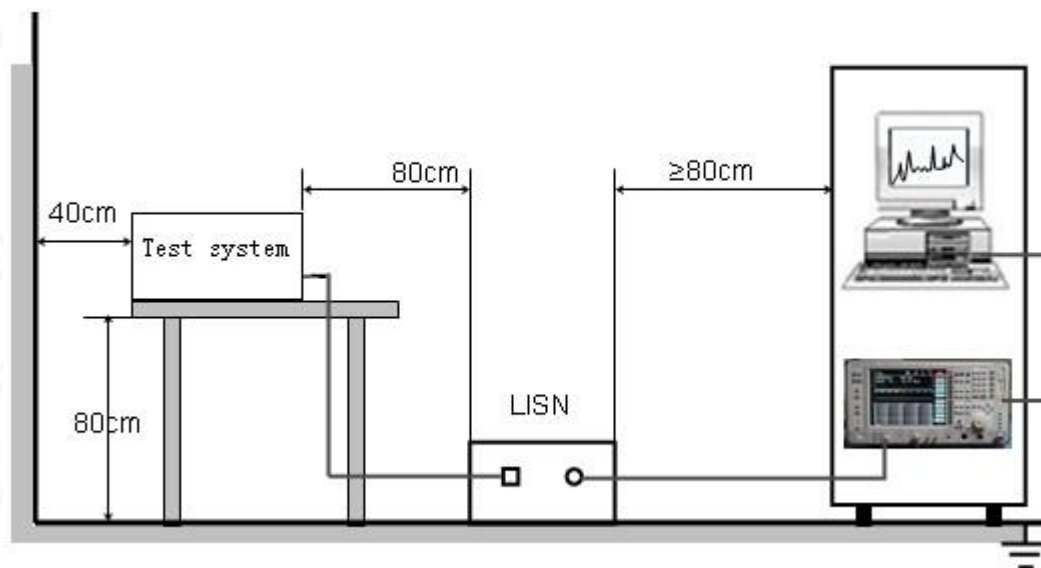
* Decreases with the logarithm of the frequency.

8.2 MEASUREMENT PROCEDURE

- (1) The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.4 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- (2) Support equipment, if needed, was placed as per ANSI C63.4.
- (3) All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- (4) The EUT received AC 120V/60Hz power through a Line Impedance Stabilization Network (LISN) which supplied power source and was grounded to the ground plane.
- (5) All support equipments received AC power from a second LISN, if any.
- (6) The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
- (7) Analyzer / Receiver scanned from 150 KHz to 30MHz for emissions in each of the test modes.
During the above scans, the emissions were maximized by cable manipulation.

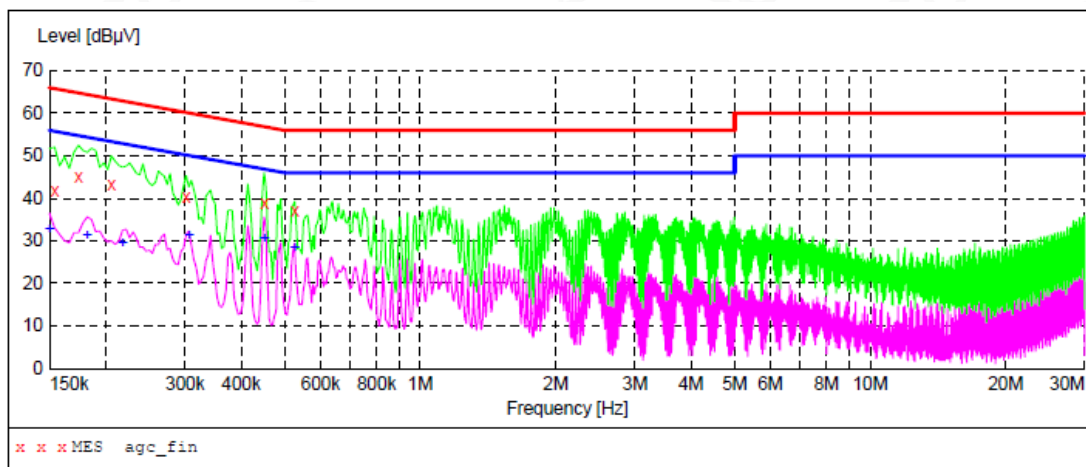


8.3 TEST SETUP BLOCK DIAGRAM



8.4 TEST RESULT

LONG ANTENNA CONDUCTED EMISSION TEST-L



MEASUREMENT RESULT: "agc_fin"

2020/7/20 10:31

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.154000	41.80	9.3	66	24.0	QP	L1	GND
0.174000	45.10	9.3	65	19.7	QP	L1	GND
0.206000	43.10	9.3	63	20.3	QP	L1	GND
0.302000	40.20	9.3	60	20.0	QP	L1	GND
0.450000	39.00	9.3	57	17.9	QP	L1	GND
0.526000	37.20	9.3	56	18.8	QP	L1	GND

MEASUREMENT .

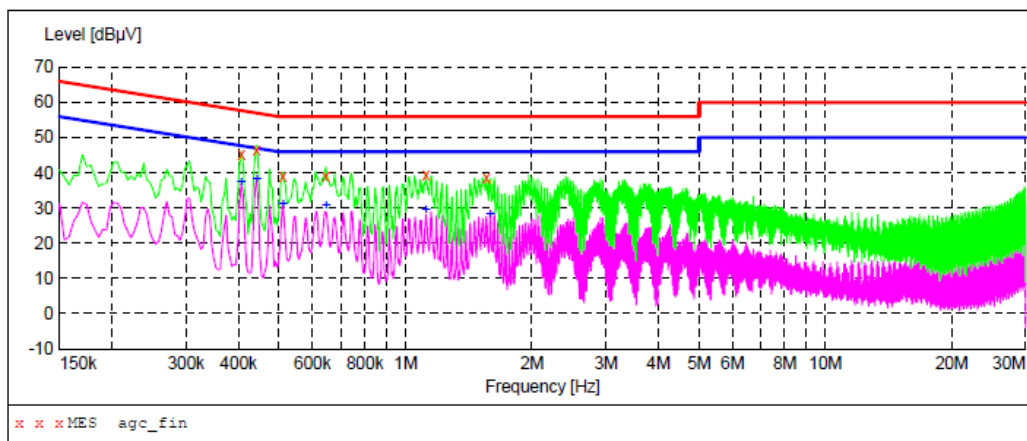
2020/7/20 10:30

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.150000	32.80	9.3	56	23.2	AV	L1	GND
0.182000	31.40	9.3	54	23.0	AV	L1	GND
0.218000	29.50	9.3	53	23.4	AV	L1	GND
0.306000	31.10	9.3	50	19.0	AV	L1	GND
0.450000	30.50	9.3	47	16.4	AV	L1	GND
0.526000	28.40	9.3	46	17.6	AV	L1	GND

RESULT: PASS



CONDUCTED EMISSION TEST-N



MEASUREMENT RESULT: "agc_fin"

2020/7/20 10:46

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.406000	45.40	9.3	58	12.3	QP	N	GND
0.442000	46.50	9.3	57	10.5	QP	N	GND
0.510000	39.00	9.3	56	17.0	QP	N	GND
0.646000	39.10	9.3	56	16.9	QP	N	GND
1.118000	39.20	9.3	56	16.8	QP	N	GND
1.558000	38.70	9.3	56	17.3	QP	N	GND

MEASUREMENT RESULT: "agc_fin2"

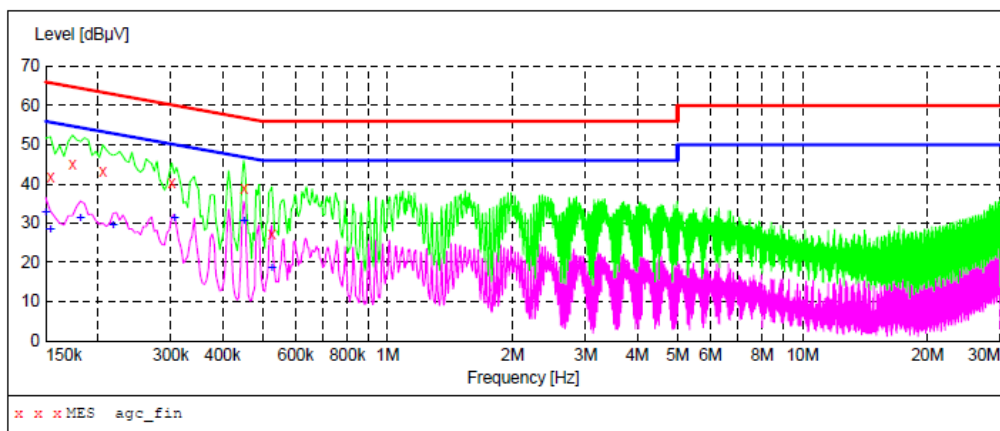
2020/7/20 10:46

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.406000	37.40	9.3	48	10.3	AV	N	GND
0.442000	38.00	9.3	47	9.0	AV	N	GND
0.510000	30.90	9.3	46	15.1	AV	N	GND
0.646000	30.60	9.3	46	15.4	AV	N	GND
1.118000	29.30	9.3	46	16.7	AV	N	GND
1.590000	28.10	9.3	46	17.9	AV	N	GND

RESULT: PASS



SHORT ANTENNA CONDUCTED EMISSION TEST-L



MEASUREMENT RESULT: "agc_fin"

2020/7/20 10:22

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.154000	41.80	9.3	66	24.0	QP	L1	GND
0.174000	45.10	9.3	65	19.7	QP	L1	GND
0.206000	43.10	9.3	63	20.3	QP	L1	GND
0.302000	40.20	9.3	60	20.0	QP	L1	GND
0.450000	39.00	9.3	57	17.9	QP	L1	GND
0.526000	27.20	9.3	56	28.8	QP	L1	GND

MEASUREMENT .

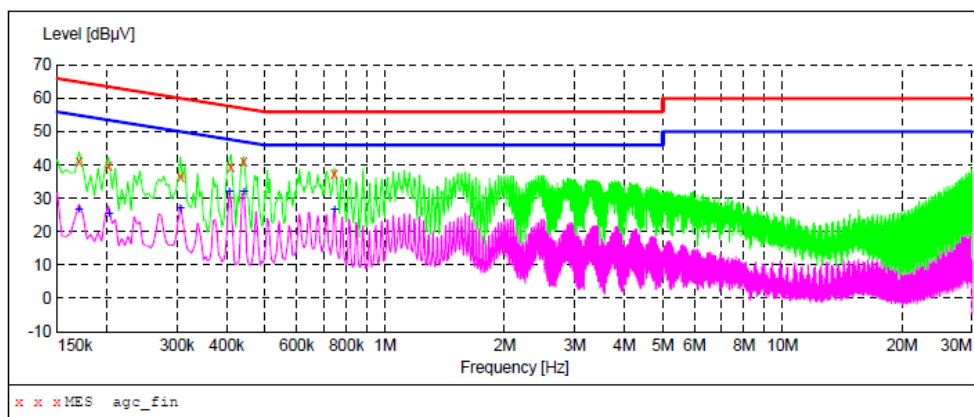
2020/7/20 10:22

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.150000	32.80	9.3	56	23.2	AV	L1	GND
0.154000	28.20	9.3	56	27.6	AV	L1	GND
0.182000	31.40	9.3	54	23.0	AV	L1	GND
0.218000	29.50	9.3	53	23.4	AV	L1	GND
0.306000	31.10	9.3	50	19.0	AV	L1	GND
0.450000	30.50	9.3	47	16.4	AV	L1	GND
0.526000	18.40	9.3	46	27.6	AV	L1	GND

RESULT: PASS



CONDUCTED EMISSION TEST-N



MEASUREMENT RESULT: "agc_fin"

2020/7/20 10:54

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.170000	41.20	9.3	65	23.8	QP	N	GND
0.202000	39.70	9.3	64	23.8	QP	N	GND
0.306000	36.60	9.3	60	23.5	QP	N	GND
0.410000	39.20	9.3	58	18.4	QP	N	GND
0.442000	41.20	9.3	57	15.8	QP	N	GND
0.746000	37.30	9.3	56	18.7	QP	N	GND

MEASUREMENT .

2020/7/20 10:54

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.170000	26.60	9.3	55	28.4	AV	N	GND
0.202000	25.30	9.3	54	28.2	AV	N	GND
0.306000	27.10	9.3	50	23.0	AV	N	GND
0.406000	31.90	9.3	48	15.8	AV	N	GND
0.442000	32.10	9.3	47	14.9	AV	N	GND
0.746000	26.40	9.3	46	19.6	AV	N	GND

RESULT: PASS



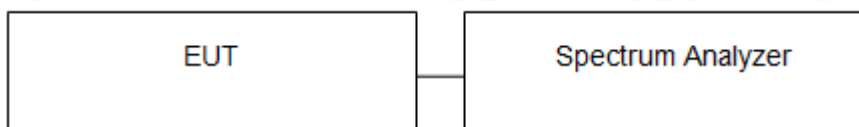
9. ANTENNA CONDUCTED POWER FOR RECEIVERS

LIMIT

The antenna conducted power of the receiver as defined in §15.111 shall not exceed the values given in the following tables

Frequency Range	9 KHz to 2GHz
Limit	2.0 nW (-57 dBm)

TEST CONFIGURATION



TEST PROCEDURE

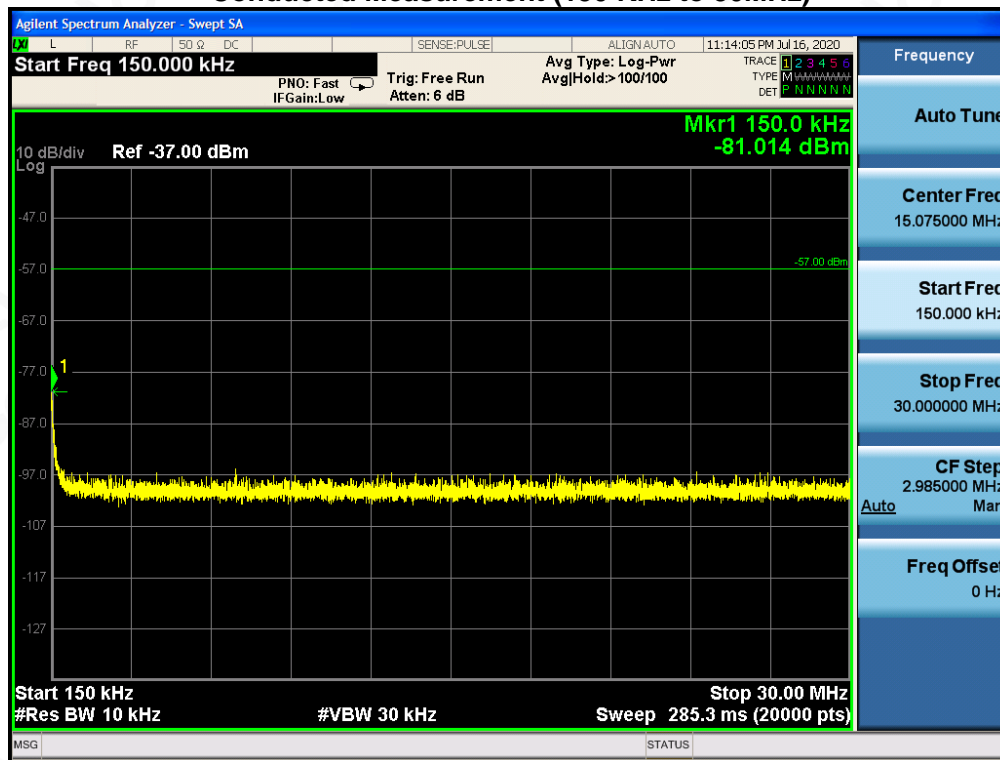
1. The receiver antenna terminal connected to a spectrum analyzer.
2. The test data of the worst case condition (mode 1) was reported on the following Data page.

TEST RESULTS:

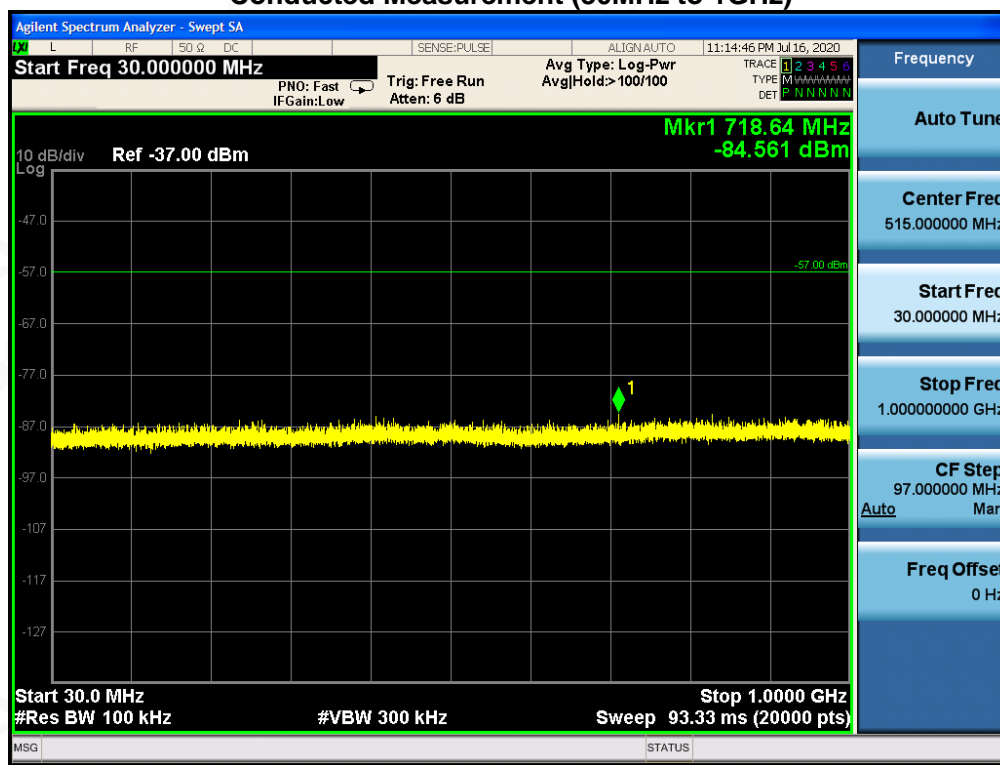
Conducted Measurement (9 KHz to 150 KHz)



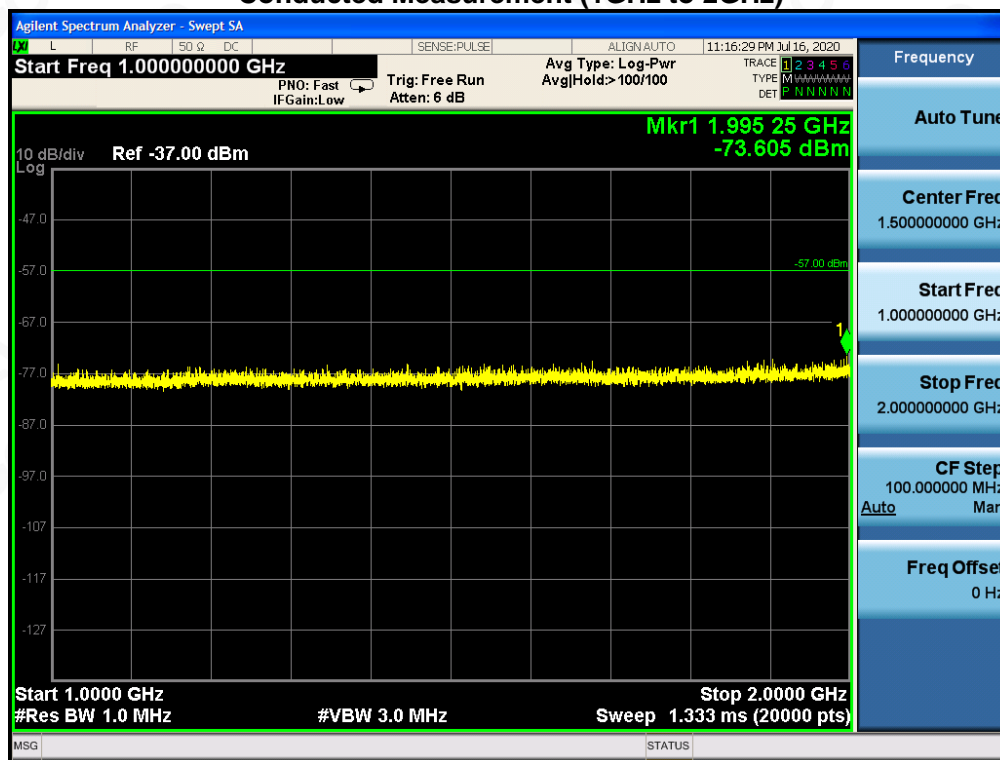
Conducted Measurement (150 KHz to 30MHz)



Conducted Measurement (30MHz to 1GHz)



Conducted Measurement (1GHz to 2GHz)



PASS

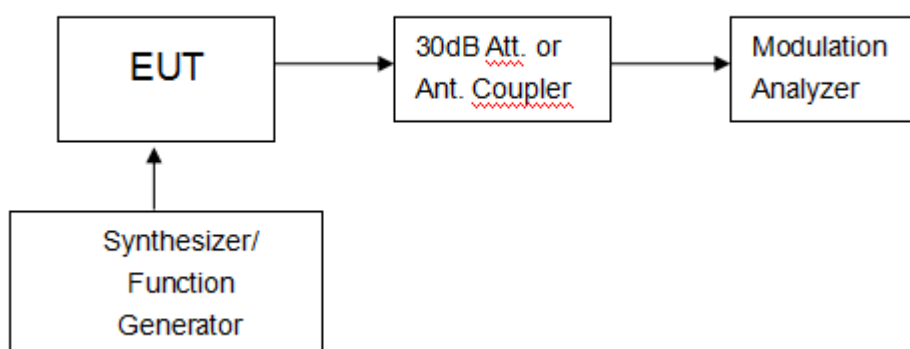


10. SANNING RECEIVERS AND FREQUENCY CONVERTERS USED WITH SANNING RECEIVERS.

LIMIT

Except as provided in paragraph (c) of this section, scanning receivers shall reject any signals from the Cellular Radiotelephone Service frequency bands that are 38 dB or lower based upon a 12 dB SINAD measurement, which is considered the threshold where a signal can be clearly discerned from any interference that may be present.

TEST CONFIGURATION



TEST PROCEDURE

Please review the FCC Part 15.121 b section requirements to meet the testing process

TEST RESULTS

VHF:

Frequency Range(MHz)	Channel	Measurement Result (dB)	Limit(dB)	Result
136-174	Bottom	46	>38	Pass
136-174	Middle	47	>38	Pass
136-174	Top	47	>38	Pass



UHF:

Frequency Range(MHz)	Channel	Measurement Result (dB)	Limit(dB)	Result
400-520	Bottom	49	>38	Pass
400-520	Middle	47	>38	Pass
400-520	Top	48	>38	Pass

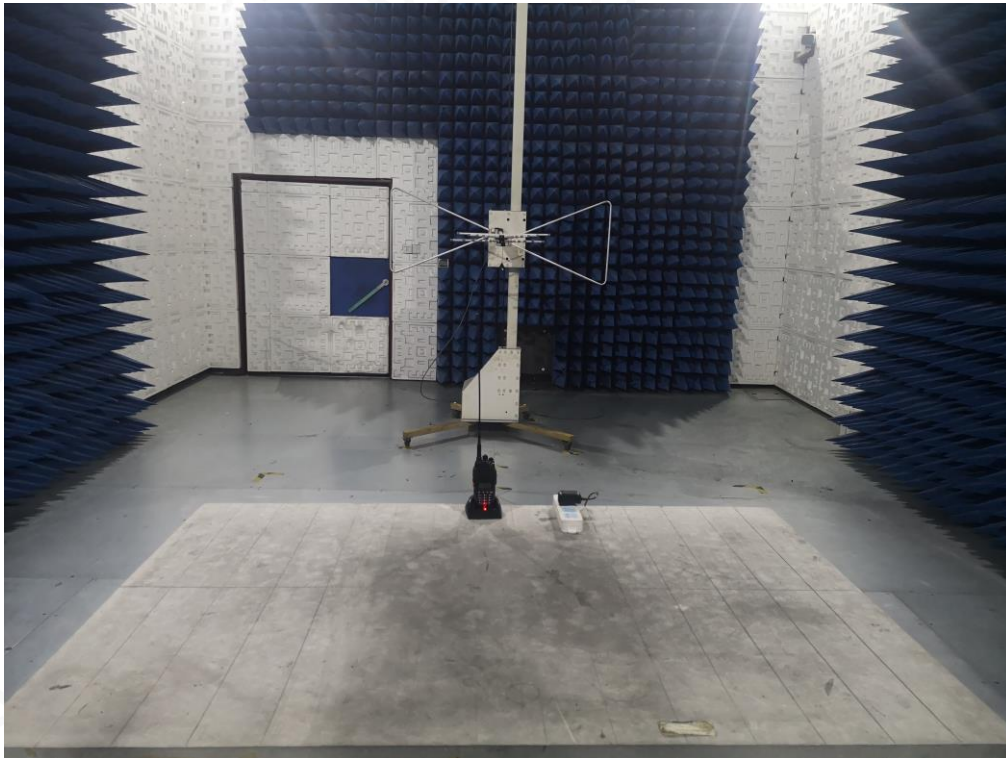
Note:1.This device meets the requirements of FCC PART 15.121.b

2.The test report only shows the worst test results

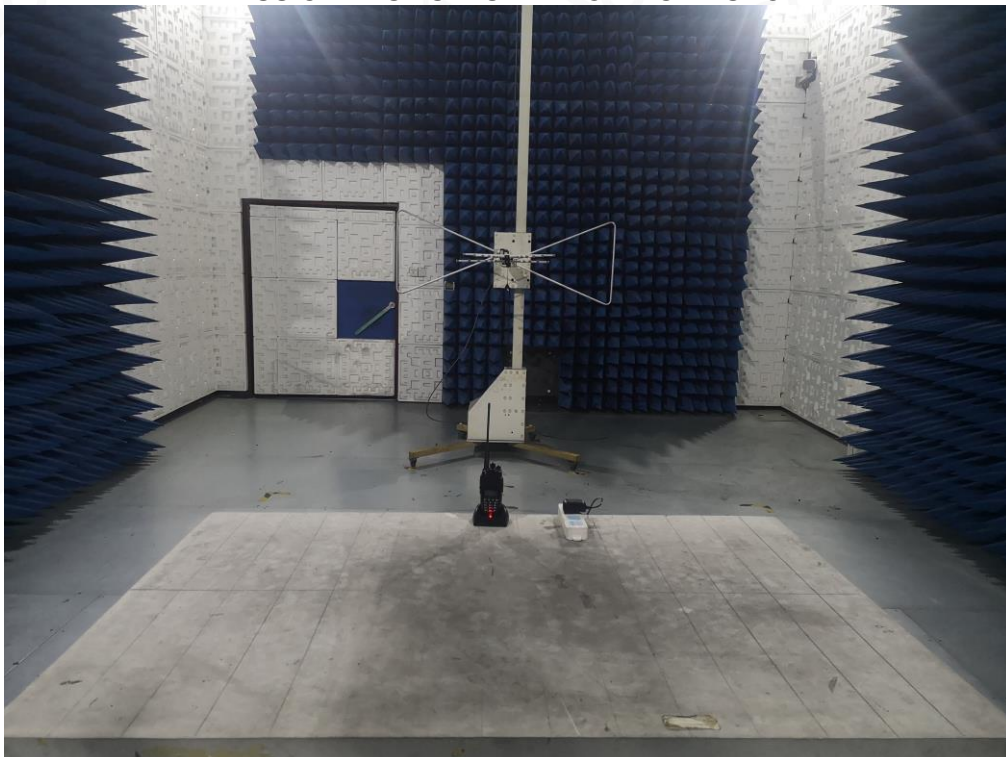


APPENDIX 1 PHOTOGRAPHS OF TEST SETUP
CONDUCTED EMISSION TEST SETUP-LONG ANTENNA**CONDUCTED EMISSION TEST SETUP-SHORT ANTENNA**

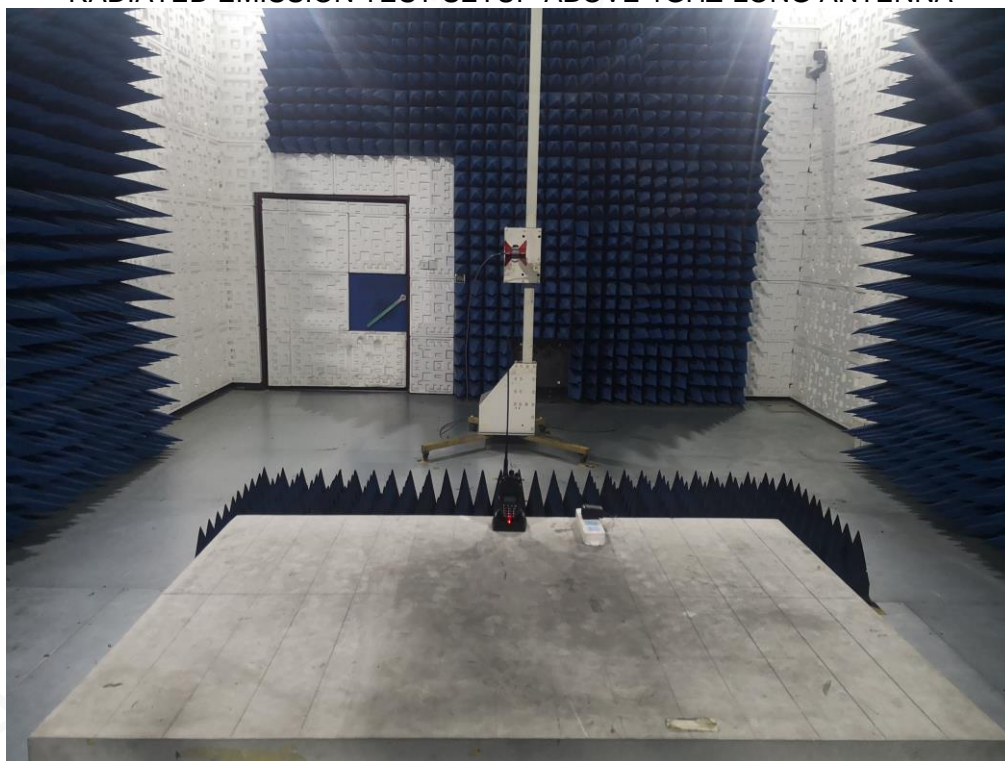
RADIATED EMISSION TEST SETUP-BELOW 1GHZ-LONG ANTENNA



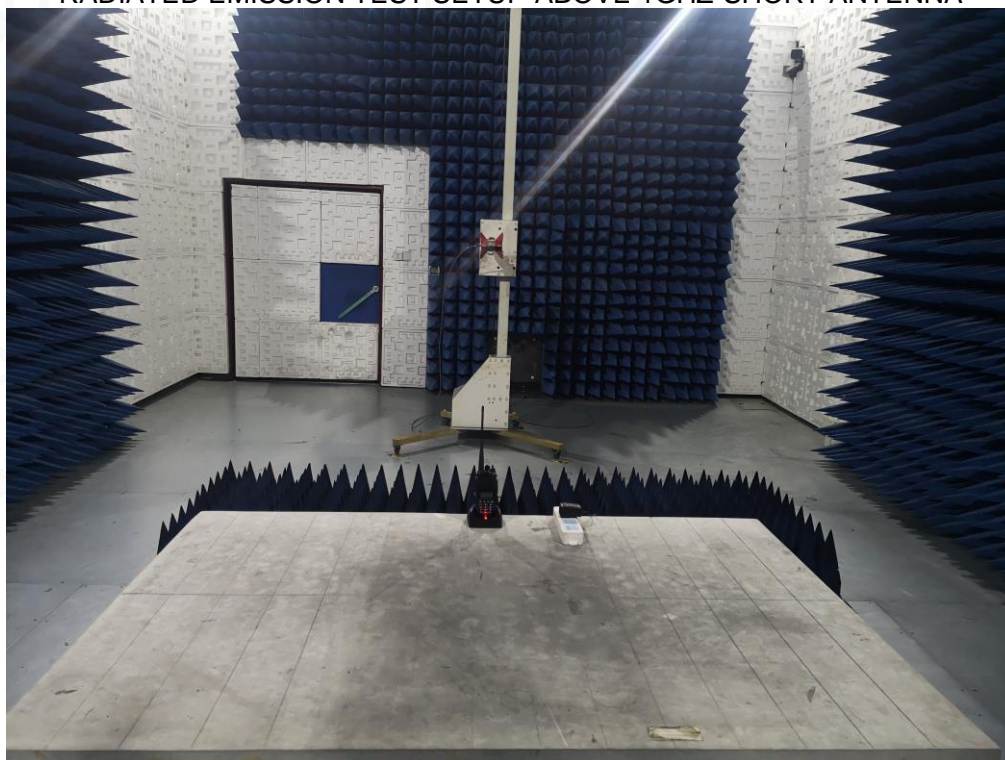
RADIATED EMISSION TEST SETUP-BELOW 1GHZ-SHORT ANTENNA



RADIATED EMISSION TEST SETUP-ABOVE 1GHZ-LONG ANTENNA



RADIATED EMISSION TEST SETUP-ABOVE 1GHZ-SHORT ANTENNA



----END OF REPORT----