RF TEST REPORT

Report No.: 17020575-FCC-R3
Supersede Report No.: N/A

Applicant	Nanjing Hanlong Technology Co., Ltd.
Product Name	IP PHONE
Main Model	UC926E
Serial Model	UC924E
Test Standard	FCC Part 15.247: 2016, ANSI C63.10: 2013
Test Date	June 09 to June 27, 2017
Issue Date	June 27, 2017
Test Result	☑ Pass ☐ Fail
Equipment complied with the specification	☑
Equipment did not comply with the specification	☐

Trety Lu	Deon Dai	
Trety Lu **Test Engineer**	**Deon Dai** **Engineer Reviewer**	

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Test result presented in this test report is applicable to the tested sample only

Issued by:
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Laboratories Introduction

SIEMIC, headquartered in the heart of Silicon Valley, with superior facilities in US and Asia, is one of the leading independent testing and certification facilities providing customers with one-stop shop services for Compliance Testing and Global Certifications.

In addition to testing and certification, SIEMIC provides initial design reviews and compliance management throughout a project. Our extensive experience with China, Asia Pacific, North America, European, and International compliance requirements, assures the fastest, most cost effective way to attain regulatory compliance for the global markets.

Accreditations for Conformity Assessment

Country/Region	Scope
USA	EMC, RF/Wireless, SAR, Telecom
Canada	EMC, RF/Wireless, SAR, Telecom
Taiwan	EMC, RF, Telecom, SAR, Safety
Hong Kong	RF/Wireless, SAR, Telecom
Australia	EMC, RF, Telecom, SAR, Safety
Korea	EMI, EMS, RF, SAR, Telecom, Safety
Japan	EMI, RF/Wireless, SAR, Telecom
Singapore	EMC, RF, SAR, Telecom
Europe	EMC, RF, SAR, Telecom, Safety

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1. Report Revision History

Report No.	Report Version	Description	Issue Date
17020575-FCC-R3	NONE	Original	June 27, 2017

2. Customer information

Applicant Name	Nanjing Hanlong Technology Co., Ltd.
Applicant Add	5th Floor, 1st Building, Huashen Tech Park, 10 Huashen Temple, Yuhuatai Dis, Nanjing China
Manufacturer	Nanjing Hanlong Technology Co., Ltd.
Manufacturer Add	5th Floor, 1st Building, Huashen Tech Park, 10 Huashen Temple, Yuhuatai Dis, Nanjing China

3. Test site information

Lab performing tests	SIEMIC (Nanjing-China) Laboratories
Lab Address	2-1 Longcang Avenue Yuhua Economic and Technology Development Park, Nanjing, China
FCC Test Site No.	986914
IC Test Site No.	4842B-1
Test Software	EZ_EMC

4. Equipment under Test (EUT) Information

Description of EUT:	IP PHONE
Main Model:	UC926E
Serial Model:	UC924E
Date EUT received:	May 18, 2017
Test Date(s):	June 09 to June 27, 2017
Output Max power	2.704 dBm
Antenna Gain:	BLE: 2.8 dBi
Type of Modulation:	BLE: GFSK
RF Operating Frequency (ies):	BLE: 2402-2480 MHz
Number of Channels:	BLE: 40CH
Port:	Power Port、Ext Port、Internet Port、PC Port、Earphone Port、Telephone Port
Input Power:	Adapter: Model:NBS05B050120VU Input Power:100-240V,50/60Hz,0.2A Output:5V,1.2A
Trade Name :	Htek
FCC ID:	2ACUGUC926ESERIAL

Operating channel list

Channel	Frequency(MHz)	Channel	Frequency(MHz)	Channel	Frequency(MHz)
00	2402	14	2430	28	2458
01	2404	15	2432	29	2460
02	2406	16	2434	30	2462
03	2408	17	2436	31	2464
04	2410	18	2438	32	2466
05	2412	19	2440	33	2468
06	2414	20	2442	34	2470
07	2416	21	2444	35	2472
08	2418	22	2446	36	2474
09	2420	23	2448	37	2476
10	2422	24	2450	38	2478
11	2424	25	2452	39	2480
12	2426	26	2454		
13	2428	27	2456		

5. Test Summary

The product was tested in accordance with the following specifications.
All testing has been performed according to below product classification:

FCC Rules	Description of Test	Result
§15.247 (i), §2.1091	RF Exposure	Compliance
§15.203	Antenna Requirement	Compliance
§15.247 (a)(2)	DTS (6 dB) CHANNEL BANDWIDTH	Compliance
§15.247(b)(3)	Conducted Maximum Output Power	Compliance
§15.247(e)	Power Spectral Density	Compliance
§15.247(d)	Band-Edge & Unwanted Emissions into Non-Restricted Frequency Bands	Compliance
§15.207 (a),	AC Power Line Conducted Emissions	Compliance
§15.205, §15.209, §15.247(d)	Radiated Spurious Emissions & Unwanted Emissions into Restricted Frequency Bands	Compliance

Measurement Uncertainty

Test Item	Description	Uncertainty
Radiated Emissions	Confidence level of approximately 95% (in the case where distributions are normal), with a coverage factor of 2 (for EUTs < 0.5m X 0.5m X 0.5m)	3.952dB

6. Measurements, Examination And Derived Results

6.1 RF Exposure

The EUT is a mobile device, thus requires RF exposure evaluation;
Please refer to SIEMIC RF Exposure Report: 17020575-FCC-H1.

6.2 Antenna Requirement

Applicable Standard

According to § 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 permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

a. Antenna must be permanently attached to the unit.
b. Antenna must use a unique type of connector to attach to the EUT.

Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit. And according to FCC 47 CFR section 15.247 (b), if the transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Antenna Connector Construction

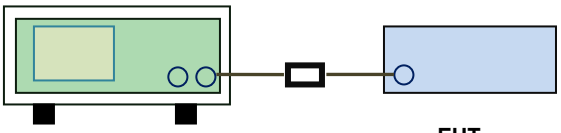
The EUT has 1 antennas:
A permanently attached PCB antenna for BLE, the gain is 2.8 dBi for BLE.

Antenna must be permanently attached to the unit ,it meets up with the ANTENNA REQUIREMENT.

Result: Compliant.

6.3 DTS (6 dB) Channel Bandwidth

Temperature	20°C
Relative Humidity	50%
Atmospheric Pressure	1019mbar
Test date :	June 23, 2017
Tested By :	Trety Lu

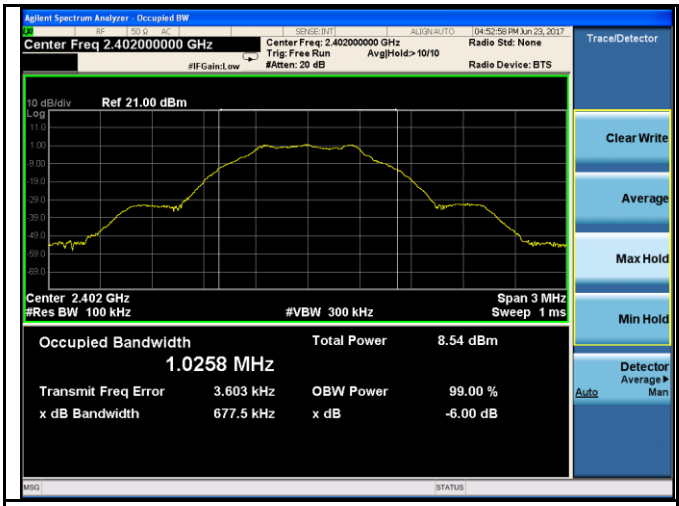
Spec	Item	Requirement	Applicable
§ 15.247(a)(2) RSSGen (4.6.1)	a)	6dB BW≥500kHz;	☑
	b)	20dB BW: For FCC reference only; required by IC.	N/A
Test Setup			
Test Procedure	558074 D01 DTS Meas Guidance V04, 8.1 DTS bandwidth 6dB Emission bandwidth measurement procedure - Set RBW = 100 kHz. - Set the video bandwidth (VBW) ≥ 3 x RBW. - Detector = Peak. - Trace mode = max hold. - Sweep = auto couple. - Allow the trace to stabilize. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.		
Remark			
Result	☑ Pass	☐ Fail	
Test Data	☑ Yes	☐ N/A	
Test Plot	☑ Yes (See below)	☐ N/A	

6dB Bandwidth measurement result

Type	Test mode	CH	Freq (MHz)	Result (MHz)	Limit (MHz)	Result
6dB BW	BLE	Low	2402	0.6775	≥0.5	Pass
		Mid	2440	0.6831	≥0.5	Pass
		High	2480	0.6748	≥0.5	Pass

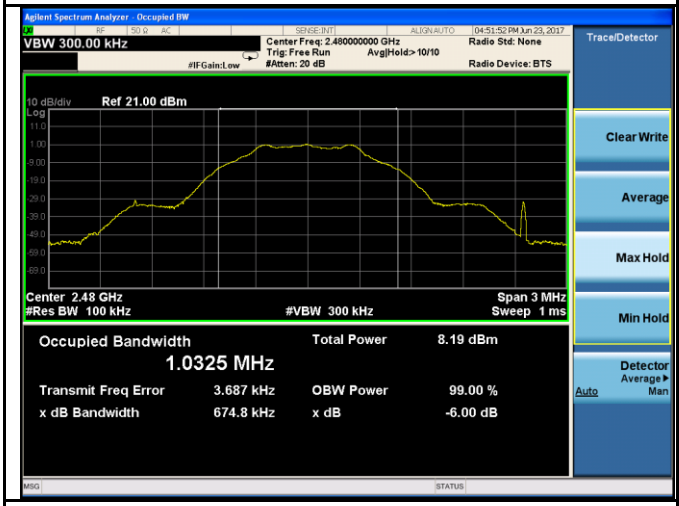
Test Plots

6dB Bandwidth measurement result



6dB Bandwidth - Low CH 2402

6dB Bandwidth - Mid CH 2440

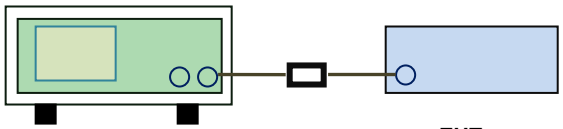


6dB Bandwidth - High CH 2480

6.4 Maximum Output Power

Temperature	20°C
Relative Humidity	50%
Atmospheric Pressure	1019mbar
Test date :	June 27, 2017
Tested By :	Trety Lu

Requirement(s):

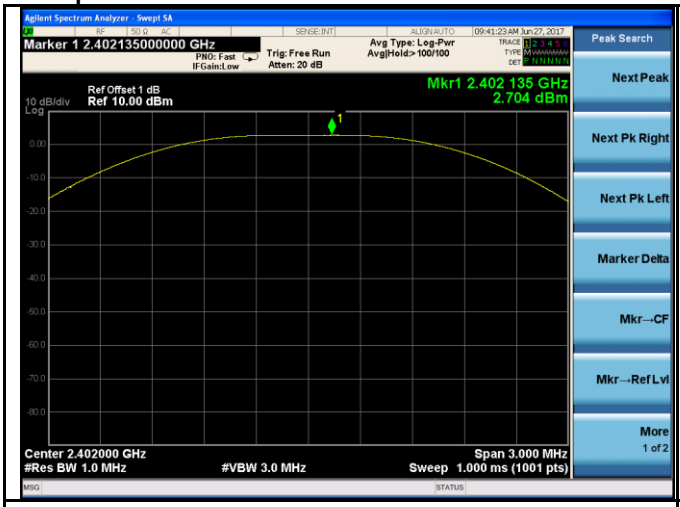
Spec	Item	Requirement	Applicable
§15.247(b)(2),RSS210 (A8.4)	a)	FHSS in 2400-2483.5MHz with ≥ 75 channels: ≤1 Watt	☐
	b)	FHSS in 5725-5850MHz: ≤1 Watt	☐
	c)	For all other FHSS in the 2400-2483.5MHz band: ≤0.125 Watt.	☐
	d)	FHSS in 902-928MHz with ≥ 50 channels: ≤1 Watt	☐
	e)	FHSS in 902-928MHz with ≥ 25 & <50 channels: ≤0.25 Watt	☐
	f)	DSSS in 902-928MHz, 2400-2483.5MHz, 5725-5850MHz: ≤1 Watt	☑
Test Setup			
Test Procedure	558074 D01 DTS Meas Guidance V04, 9.1.2 Integrated band power method Maximum output power measurement procedure a) Set the RBW ≥ DTS bandwidth. b) Set VBW ≥ 3 × RBW. c) Set span ≥ 3 x RBW d) Sweep time = auto couple. e) Detector = peak. f) Trace mode = max hold. g) Allow trace to fully stabilize. h) Use peak marker function to determine the peak amplitude level.		
Remark			
Result	☑ Pass ☐ Fail		
Test Data	☑ Yes ☐ N/A		
Test Plot	☑ Yes (See below) ☐ N/A		

Output Power measurement result

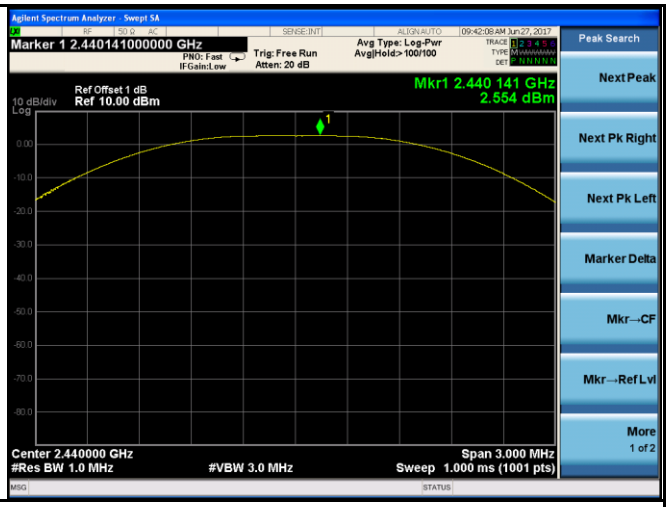
Type	Test mode	CH	Freq (MHz)	Conducted Power (dBm)	Limit (dBm)	Result
Output power	BLE	Low	2402	2.704	30	Pass
		Mid	2440	2.554	30	Pass
		High	2480	2.491	30	Pass

Test Plots

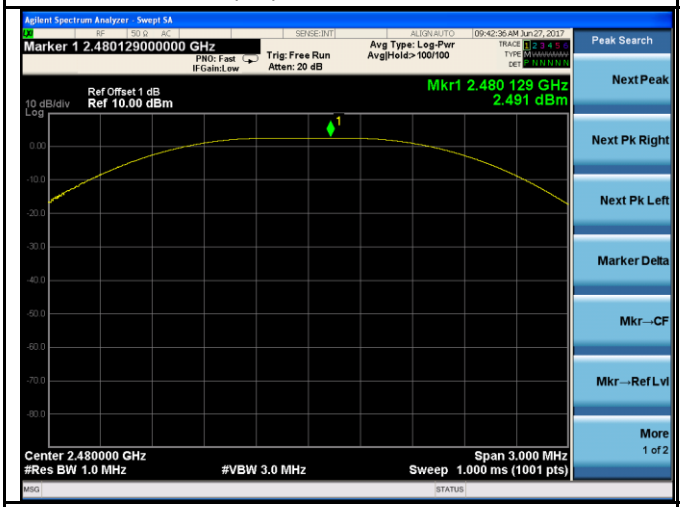
Output Power measurement result



Output power - Low CH 2402



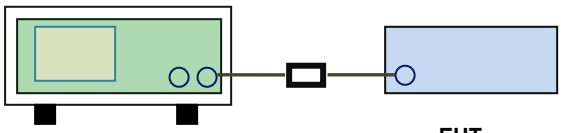
Output power - Mid CH 2440



Output power - High CH 2480

6.5 Power Spectral Density

Temperature	20°C
Relative Humidity	50%
Atmospheric Pressure	1019mbar
Test date :	June 23, 2017
Tested By :	Trety Lu

Spec	Item	Requirement	Applicable
§15.247(e)	a)	The power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.	☑
Test Setup			
Test Procedure	558074 D01 DTS MEAS Guidance V04, 10.2 power spectral density method power spectral density measurement procedure a) Set analyzer center frequency to DTS channel center frequency. b) Set the span to 1.5 times the DTS bandwidth. c) Set the RBW to: 3 kHz ≤ RBW ≤ 100 kHz. d) Set the VBW ≥ 3 × RBW. e) Detector = peak. f) Sweep time = auto couple. g) Trace mode = max hold. h) Allow trace to fully stabilize. i) Use the peak marker function to determine the maximum amplitude level within the RBW. j) If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.		
Remark			
Result	☑ Pass	☐ Fail	
Result	☑ Pass	☐ Fail	
Test Data	☑ Yes	☐ N/A	

Power Spectral Density measurement result

Type	Test mode	CH	Freq (MHz)	PSD (dBm)	Limit (dBm)	Result
PSD	BLE	Low	2402	-1.673	8	Pass
		Mid	2440	-2.170	8	Pass
		High	2480	-1.974	8	Pass

Test Plots

Power Spectral Density measurement result

PSD - Low CH 2402

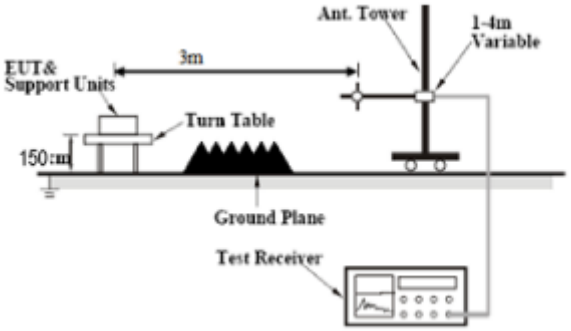
PSD - Mid CH 2440

PSD - High CH 2480

6.6 Band-Edge & Unwanted Emissions into Non-Restricted Frequency Bands

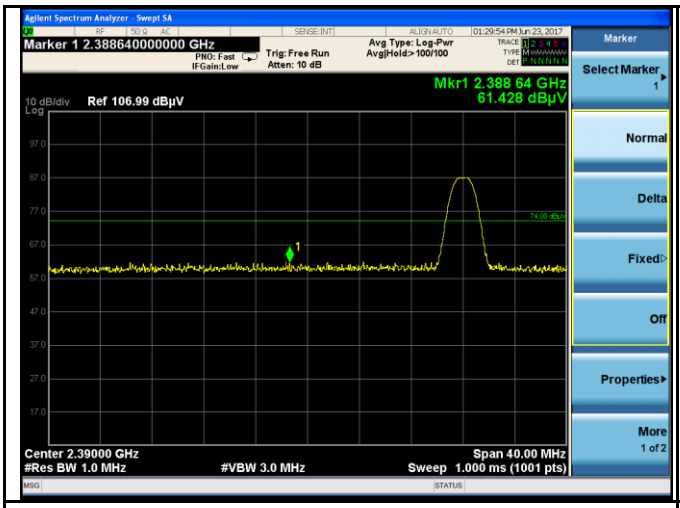
Temperature	20°C
Relative Humidity	50%
Atmospheric Pressure	1019mbar
Test date :	June 23, 2017
Tested By :	Trety Lu

Requirement(s):

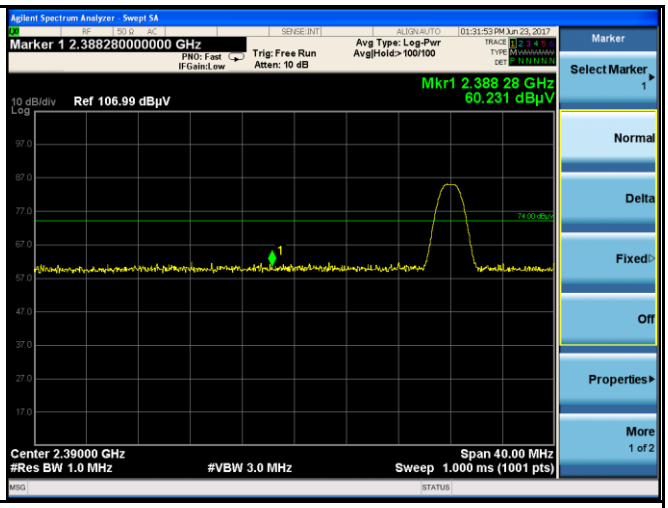
Spec	Item	Requirement	Applicable
§15.247(d)	a)	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.	☑
Test Setup			
Test Procedure	Radiated Method Only - 1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator. - 2. Position the EUT without connection to measurement instrument. Put it on the Rotated table and turn on the EUT and make it operate in transmitting mode. Then set it to Low Channel and High Channel within its operating range, and make sure the instrument is operated in its linear range. - 3. First, set both RBW and VBW of spectrum analyzer to 100 kHz with a convenient frequency span including 100kHz bandwidth from band edge, check the emission of EUT, if pass then set Spectrum Analyzer as below: a. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi Peak detection at frequency below 1GHz. b. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz. c. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth for Average detection (AV) as below at frequency above 1GHz. ■ 1/T kHz (Duty cycle < 98%) □ 10 Hz (Duty cycle > 98%) - 4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency. - 5. Repeat above procedures until all measured frequencies were complete.		
Remark			
Result	☑ Pass	☐ Fail	
Test Data	☐ Yes	☑ N/A	
Test Plot	☑ Yes (See below)	☐ N/A	

Test Plots

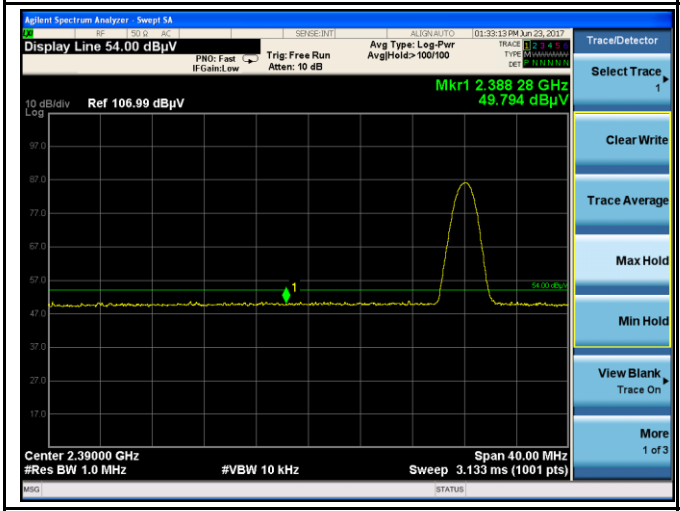
Band Edge measurement result



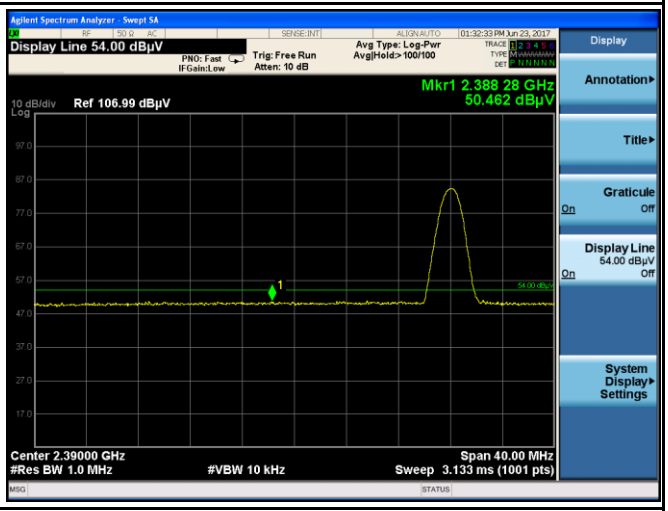
GFSK-Left Side-PK-H



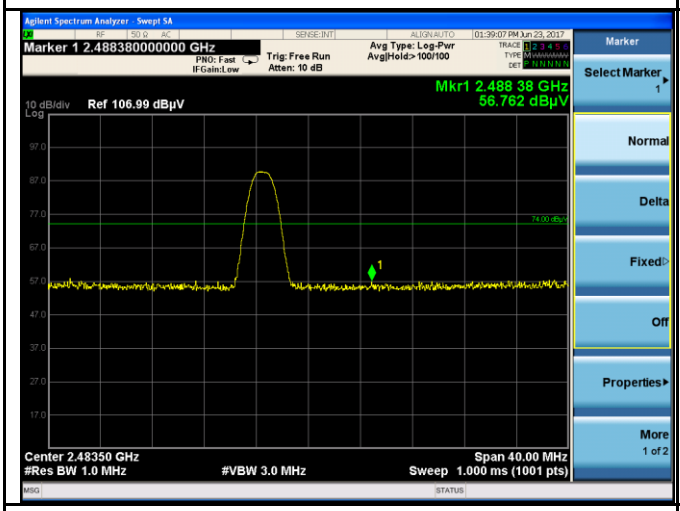
GFSK-Left Side-PK-V



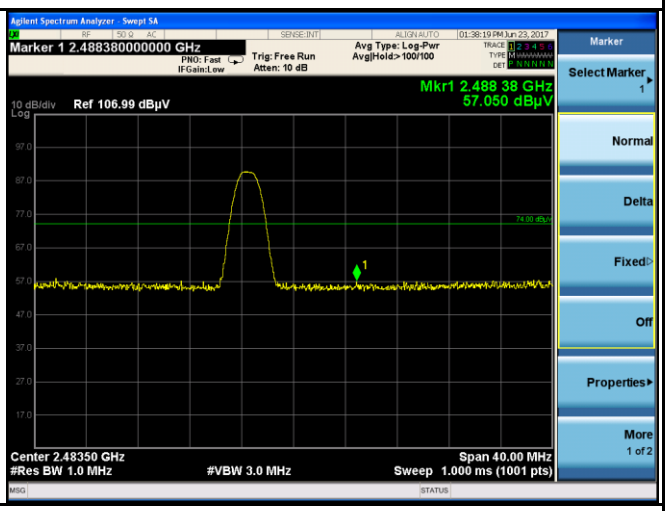
GFSK-Left Side-AV-H



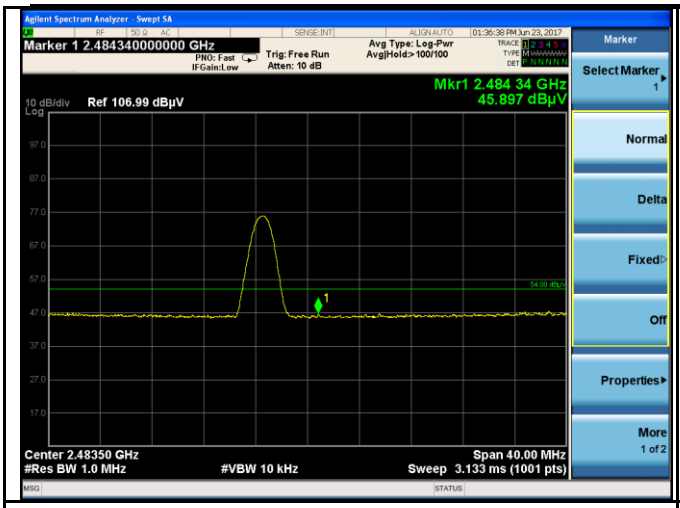
GFSK- Left Side-AV-V



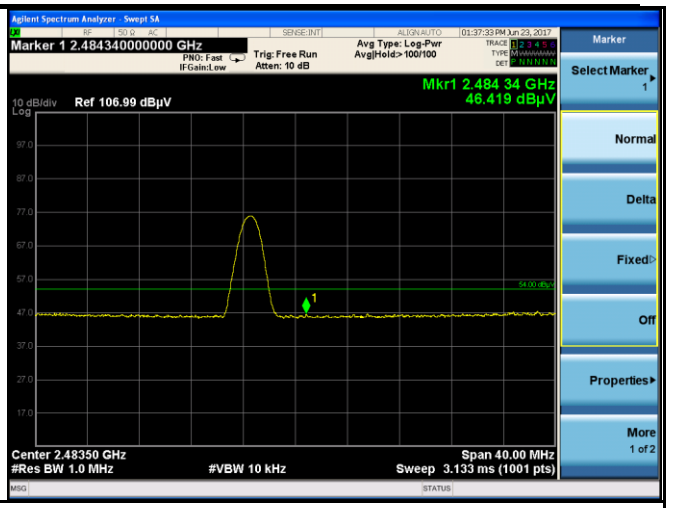
GFSK-Right Side-PK-H



GFSK-Right Side-PK-V



GFSK-Right Side-AV-H



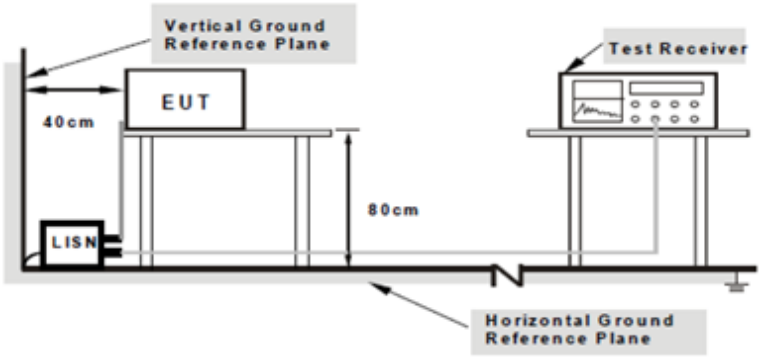
GFSK-Right Side-AV-V

6.7 AC Power Line Conducted Emissions

Temperature	20°C
Relative Humidity	50%
Atmospheric Pressure	1019mbar
Test date :	June 09, 2017
Tested By :	Trety Lu

Requirement(s):

<table>
<tr><th>Spec</th><th>Item</th><th>Requirement</th><th>Applicable</th></tr>
<tr><td>47CFR§15.207, RSS210 (A8.1)</td><td>a)</td><td>For Low-power radio-frequency devices 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 frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 [mu]H/50 ohms line impedance stabilization network (LISN). The lower limit applies at the boundary between the frequencies ranges.

Class A Limit
<table>
<tr><th rowspan="2">Frequency ranges (MHz)</th><th colspan="2">Limit (dBμV)</th></tr>
<tr><th>QP</th><th>Average</th></tr>
<tr><td>0.15 ~ 0.5</td><td>79</td><td>66</td></tr>
<tr><td>0.5 ~ 30</td><td>73</td><td>60</td></tr>
</table>
Class B Limit
<table>
<tr><th rowspan="2">Frequency ranges (MHz)</th><th colspan="2">Limit (dBμV)</th></tr>
<tr><th>QP</th><th>Average</th></tr>
<tr><td>0.15 ~ 0.5</td><td>66 – 56</td><td>56 – 46</td></tr>
<tr><td>0.5 ~ 5</td><td>56</td><td>46</td></tr>
<tr><td>5 ~ 30</td><td>60</td><td>50</td></tr>
</table></td><td>☑</td></tr>
<tr><td>Test Setup</td><td colspan="3"> 

Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80cm from EUT and at least 80cm from other units and other metal planes support units.</td></tr>
<tr><td>Procedure</td><td colspan="3">1. The EUT and supporting equipment were set up in accordance with the requirements of the standard on top of a 1.5m x 1m x 0.8m high, non-metallic table.
2. The power supply for the EUT was fed through a 50W/50mH EUT LISN, connected to filtered mains.
3. The RF OUT of the EUT LISN was connected to the EMI test receiver via a low-loss coaxial cable.
4. All other supporting equipment were powered separately from another main supply.
5. The EUT was switched on and allowed to warm up to its normal operating condition.
6. A scan was made on the NEUTRAL line (for AC mains) or Earth line (for DC power) over the required frequency range using an EMI test receiver.
7. High peaks, relative to the limit line, The EMI test receiver was then tuned to the selected frequencies and the necessary measurements made with a receiver bandwidth setting of 10 kHz.
8. Step 7 was then repeated for the LIVE line (for AC mains) or DC line (for DC power).</td></tr>
<tr><td>Remark</td><td colspan="3"></td></tr>
<tr><td>Result</td><td colspan="3">☑ Pass ☐ Fail</td></tr>
</table>

Test Data	☑ Yes ☐ N/A
Test Plot	☑ Yes (See below) ☐ N/A

Data sample

No.	Frequency	Reading	Detector	Lisn/Isn	Ps_Lmt	Cab_L	Result	Limit	Margin
	(MHz)	(dBμV)		(dB}	(dB)	(dB)	(dBμV)	(dBμV)	(dB)

Frequency (MHz) = Emission frequency in MHz

Reading (dBμV) = Receiver Reading Value

Detector=Quasi Peak Detector or Average Detector

Lisn/ISN= Insertion loss of LISN

Ps_Lmt= Insertion loss of transient limiter (The transient limiter included 10dB attenuation)

Cab_L= cable loss

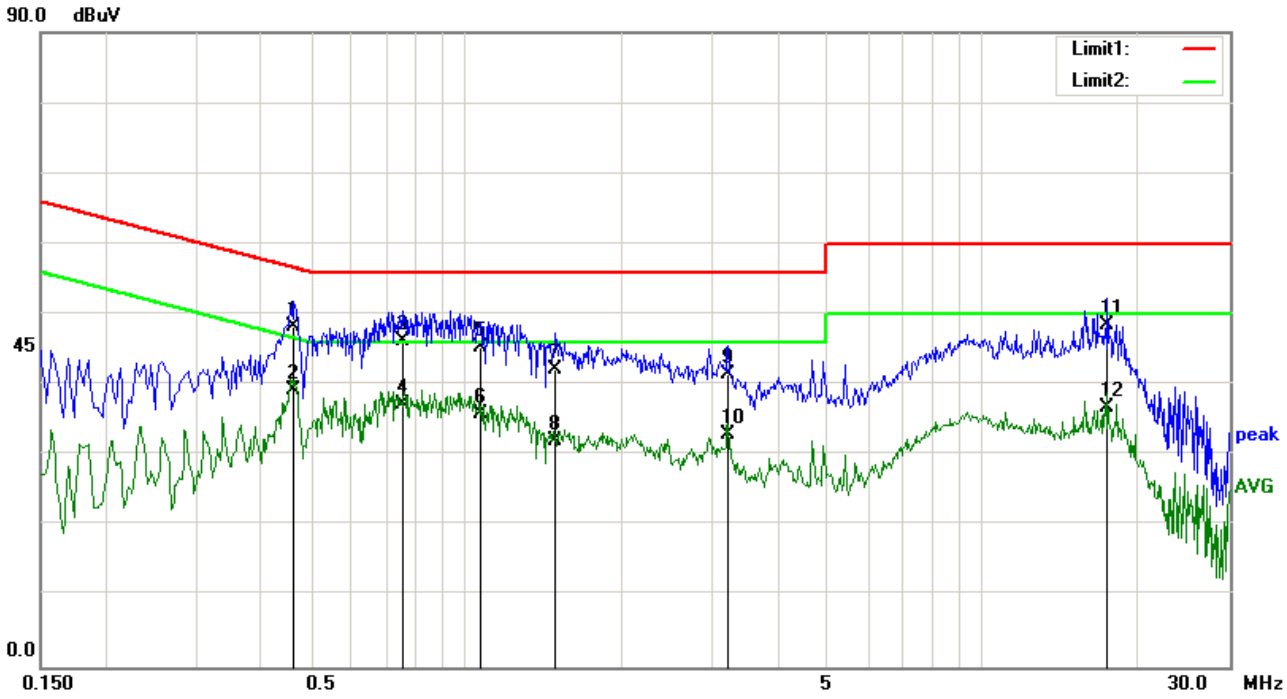
Result (dBμV) = Reading Value + Corrected Value

Limit (dBμV) = Limit stated in standard

Calculation Formula:

Margin (dB) = Result (dBμV) – limit (dBμV)

Test Mode:	Transmitting BLE Mode (Low Channel)

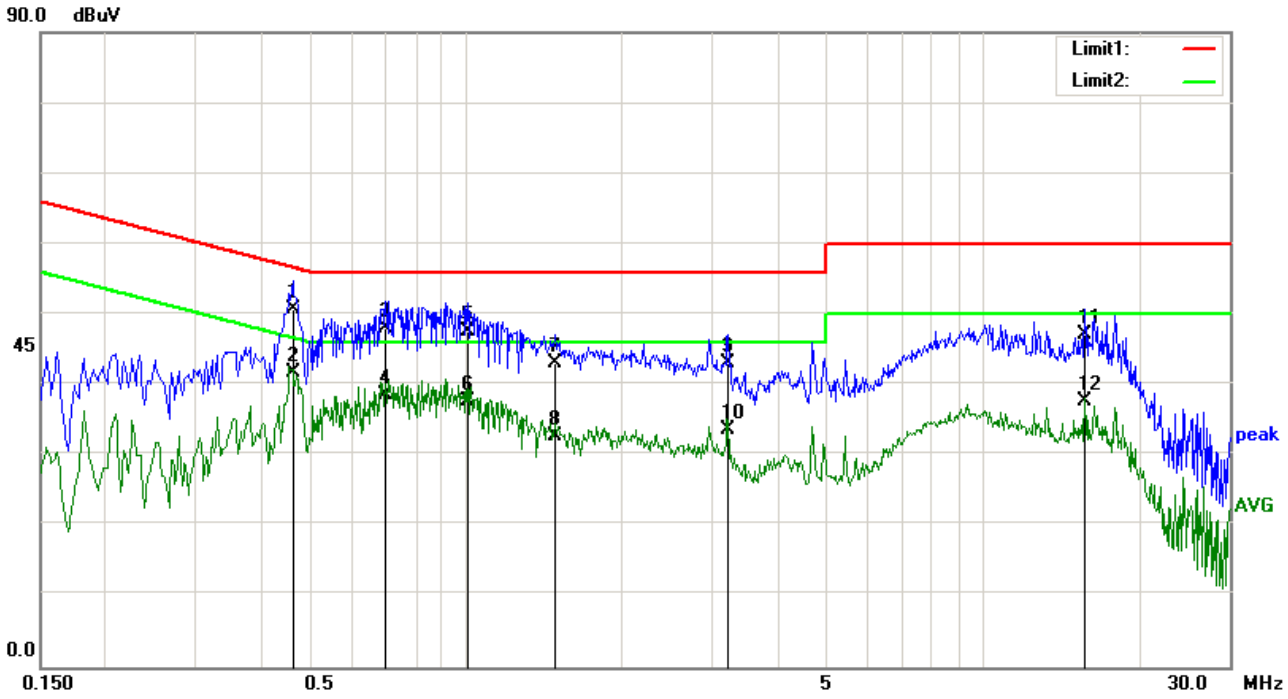


Test Data

Phase Line Plot at 120Vac, 60Hz

No.	Frequency (MHz)	Reading (dBuV)	Detector	Lisn/lsn (dB}	Ps_Lmt (dB)	Cab_L (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	0.4660	37.95	QP	0.12	-10.00	0.21	48.28	56.58	-8.30
2	0.4660	28.95	AVG	0.12	-10.00	0.21	39.28	46.58	-7.30
3	0.7540	35.81	QP	0.13	-10.00	0.20	46.14	56.00	-9.86
4	0.7540	26.80	AVG	0.13	-10.00	0.20	37.13	46.00	-8.87
5	1.0700	34.89	QP	0.14	-10.00	0.20	45.23	56.00	-10.77
6	1.0700	25.63	AVG	0.14	-10.00	0.20	35.97	46.00	-10.03
7	1.4940	31.74	QP	0.15	-10.00	0.20	42.09	56.00	-13.91
8	1.4940	21.70	AVG	0.15	-10.00	0.20	32.05	46.00	-13.95
9	3.2140	31.11	QP	0.20	-10.00	0.24	41.55	56.00	-14.45
10	3.2140	22.42	AVG	0.20	-10.00	0.24	32.86	46.00	-13.14
11	17.4580	37.02	QP	0.97	-10.00	0.48	48.47	60.00	-11.53
12	17.4580	25.25	AVG	0.97	-10.00	0.48	36.70	50.00	-13.30

Test Mode:	Transmitting BLE Mode (Low Channel)

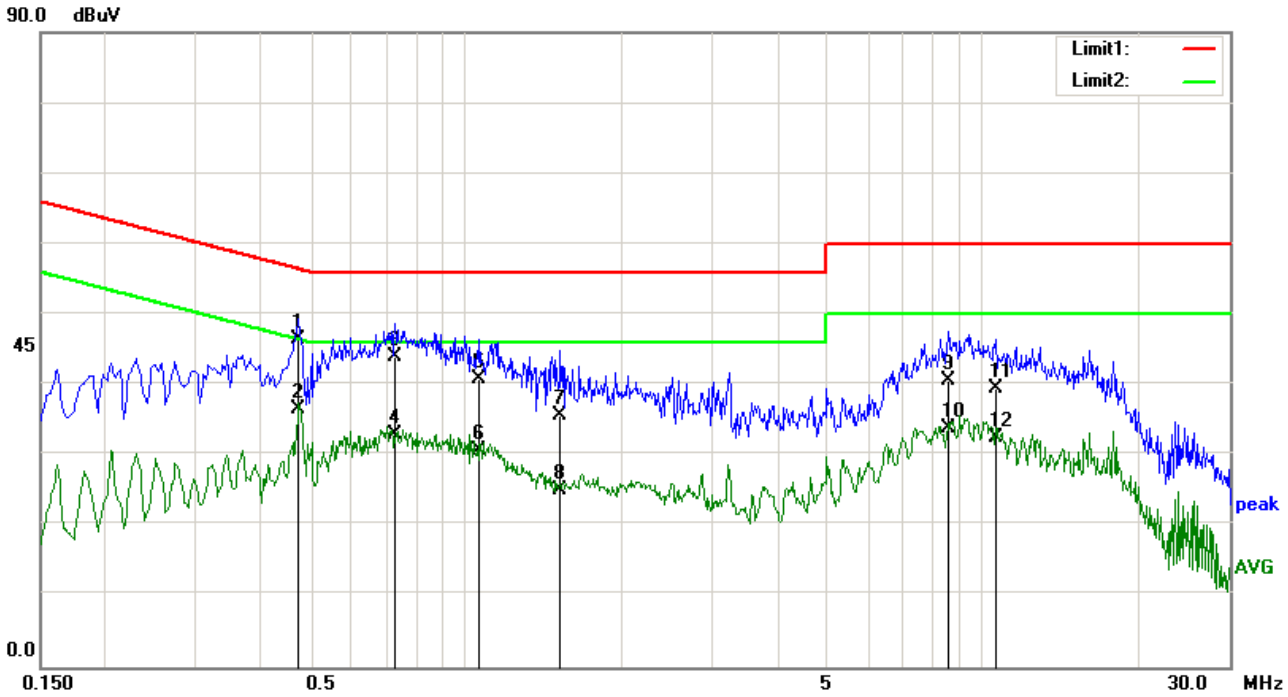


Test Data

Phase Neutral Plot at 120Vac, 60Hz

No.	Frequency (MHz)	Reading (dBuV)	Detector	Lisn/lsn (dB}	Ps_Lmt (dB)	Cab_L (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	0.4620	40.35	QP	0.11	-10.00	0.21	50.67	56.66	-5.99
2	0.4620	31.48	AVG	0.11	-10.00	0.21	41.80	46.66	-4.86
3	0.6980	37.63	QP	0.12	-10.00	0.20	47.95	56.00	-8.05
4	0.6980	28.33	AVG	0.12	-10.00	0.20	38.65	46.00	-7.35
5	1.0100	37.21	QP	0.13	-10.00	0.19	47.53	56.00	-8.47
6	1.0100	27.42	AVG	0.13	-10.00	0.19	37.74	46.00	-8.26
7	1.4900	32.72	QP	0.15	-10.00	0.20	43.07	56.00	-12.93
8	1.4900	22.30	AVG	0.15	-10.00	0.20	32.65	46.00	-13.35
9	3.2140	32.68	QP	0.21	-10.00	0.24	43.13	56.00	-12.87
10	3.2140	23.26	AVG	0.21	-10.00	0.24	33.71	46.00	-12.29
11	15.7340	35.73	QP	0.99	-10.00	0.47	47.19	60.00	-12.81
12	15.7340	26.26	AVG	0.99	-10.00	0.47	37.72	50.00	-12.28

Test Mode:	Transmitting BLE Mode (Low Channel)

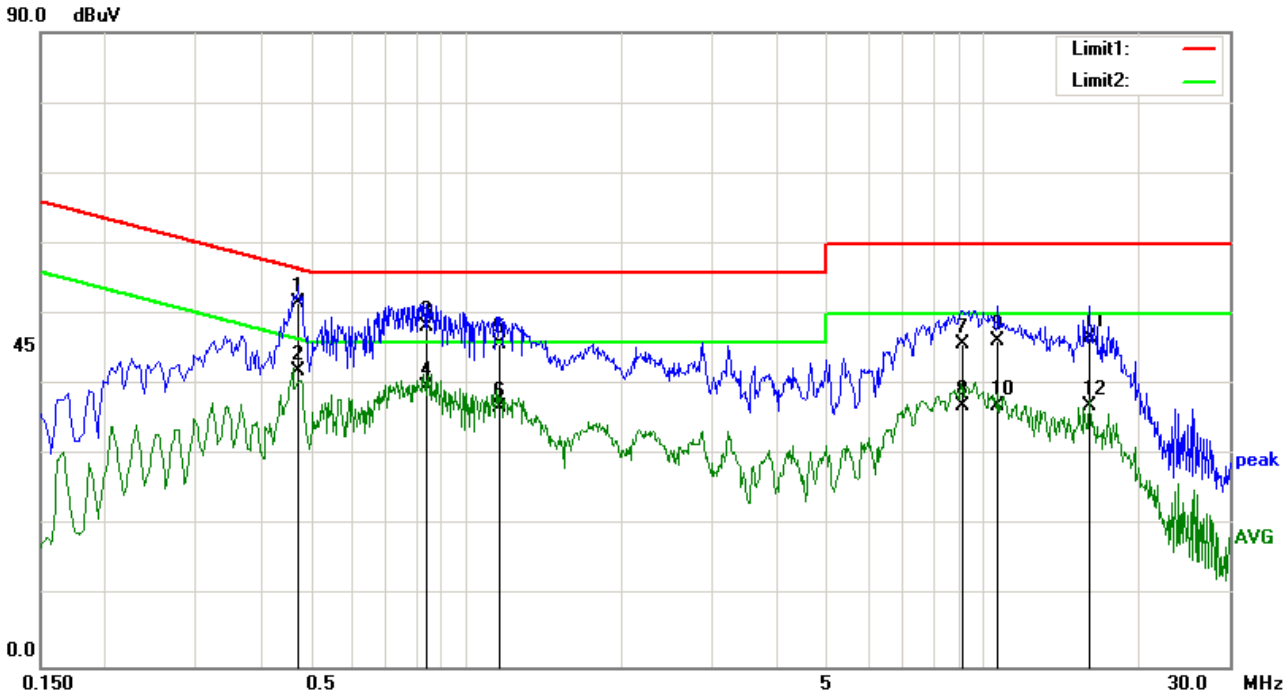


Test Data

Phase Line Plot at 230Vac, 50Hz

No.	Frequency (MHz)	Reading (dBuV)	Detector	Lisn/lsn (dB}	Ps_Lmt (dB)	Cab_L (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	0.4740	36.09	QP	0.11	-10.00	0.21	46.41	56.44	-10.03
2	0.4740	26.31	AVG	0.11	-10.00	0.21	36.63	46.44	-9.81
3	0.7300	33.60	QP	0.12	-10.00	0.20	43.92	56.00	-12.08
4	0.7300	22.57	AVG	0.12	-10.00	0.20	32.89	46.00	-13.11
5	1.0620	30.49	QP	0.13	-10.00	0.19	40.81	56.00	-15.19
6	1.0620	20.31	AVG	0.13	-10.00	0.19	30.63	46.00	-15.37
7	1.5220	25.33	QP	0.15	-10.00	0.20	35.68	56.00	-20.32
8	1.5220	14.85	AVG	0.15	-10.00	0.20	25.20	46.00	-20.80
9	8.5780	29.74	QP	0.47	-10.00	0.36	40.57	60.00	-19.43
10	8.5780	23.10	AVG	0.47	-10.00	0.36	33.93	50.00	-16.07
11	10.6140	28.38	QP	0.58	-10.00	0.50	39.46	60.00	-20.54
12	10.6140	21.46	AVG	0.58	-10.00	0.50	32.54	50.00	-17.46

Test Mode:	Transmitting BLE Mode (Low Channel)

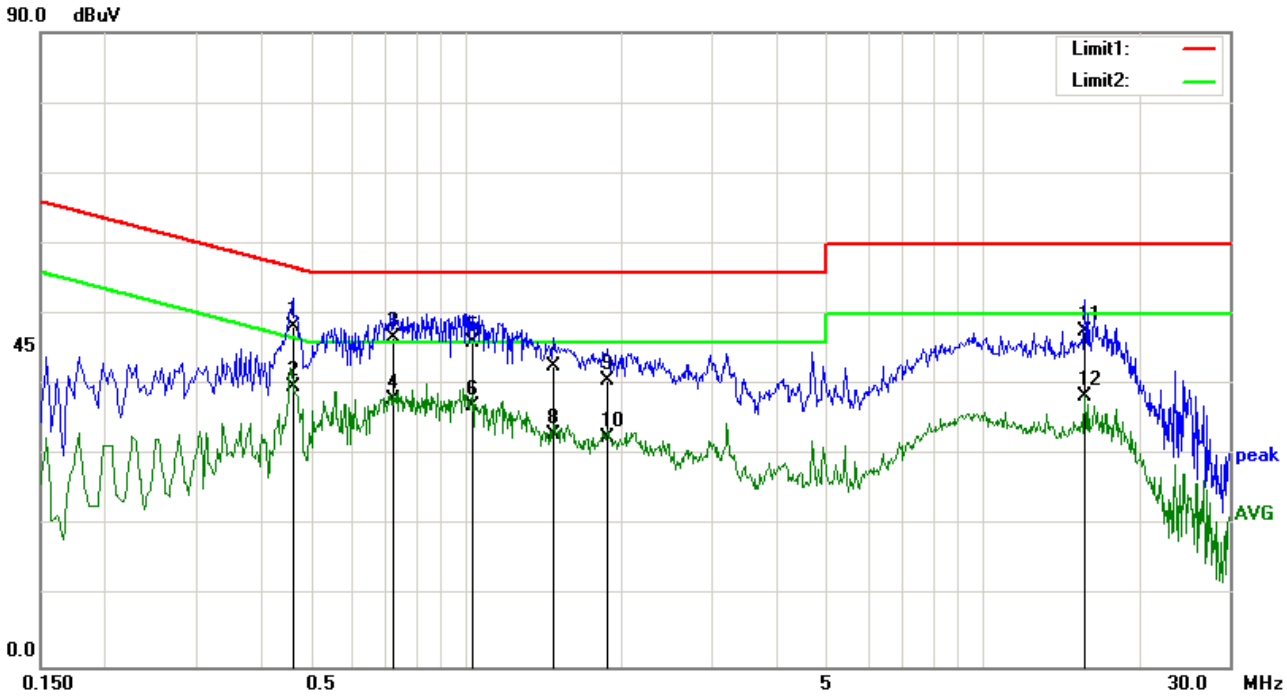


Test Data

Phase Neutral Plot at 230Vac, 50Hz

No.	Frequency (MHz)	Reading (dBuV)	Detector	Lisn/lsn (dB}	Ps_Lmt (dB)	Cab_L (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	0.4740	41.32	QP	0.11	-10.00	0.21	51.64	56.44	-4.80
2	0.4740	31.73	AVG	0.11	-10.00	0.21	42.05	46.44	-4.39
3	0.8380	37.98	QP	0.12	-10.00	0.20	48.30	56.00	-7.70
4	0.8380	29.30	AVG	0.12	-10.00	0.20	39.62	46.00	-6.38
5	1.1620	35.46	QP	0.14	-10.00	0.20	45.80	56.00	-10.20
6	1.1620	26.44	AVG	0.14	-10.00	0.20	36.78	46.00	-9.22
7	9.1260	34.87	QP	0.50	-10.00	0.38	45.75	60.00	-14.25
8	9.1260	26.11	AVG	0.50	-10.00	0.38	36.99	50.00	-13.01
9	10.7140	35.10	QP	0.59	-10.00	0.50	46.19	60.00	-13.81
10	10.7140	25.94	AVG	0.59	-10.00	0.50	37.03	50.00	-12.97
11	16.0700	35.13	QP	1.00	-10.00	0.48	46.61	60.00	-13.39
12	16.0700	25.47	AVG	1.00	-10.00	0.48	36.95	50.00	-13.05

Test Mode:	Transmitting BLE Mode (Middle Channel)

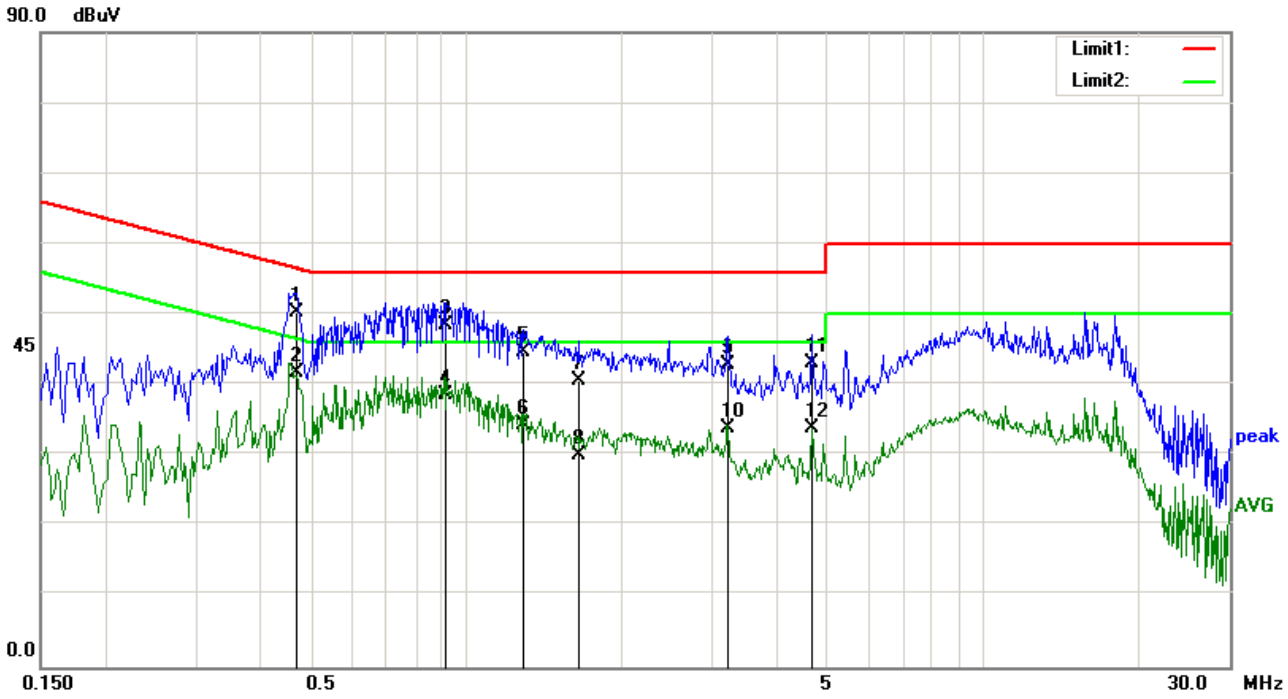


Test Data

Phase Line Plot at 120Vac, 60Hz

No.	Frequency (MHz)	Reading (dBuV)	Detector	Lisn/lsn (dB}	Ps_Lmt (dB)	Cab_L (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	0.4620	38.03	QP	0.12	-10.00	0.21	48.36	56.66	-8.30
2	0.4620	29.48	AVG	0.12	-10.00	0.21	39.81	46.66	-6.85
3	0.7220	36.27	QP	0.13	-10.00	0.20	46.60	56.00	-9.40
4	0.7220	27.51	AVG	0.13	-10.00	0.20	37.84	46.00	-8.16
5	1.0300	35.70	QP	0.14	-10.00	0.19	46.03	56.00	-9.97
6	1.0300	26.75	AVG	0.14	-10.00	0.19	37.08	46.00	-8.92
7	1.4740	32.37	QP	0.15	-10.00	0.20	42.72	56.00	-13.28
8	1.4740	22.71	AVG	0.15	-10.00	0.20	33.06	46.00	-12.94
9	1.8860	30.24	QP	0.16	-10.00	0.19	40.59	56.00	-15.41
10	1.8860	22.07	AVG	0.16	-10.00	0.19	32.42	46.00	-13.58
11	15.7380	36.21	QP	0.89	-10.00	0.47	47.57	60.00	-12.43
12	15.7380	27.08	AVG	0.89	-10.00	0.47	38.44	50.00	-11.56

Test Mode:	Transmitting BLE Mode (Middle Channel)

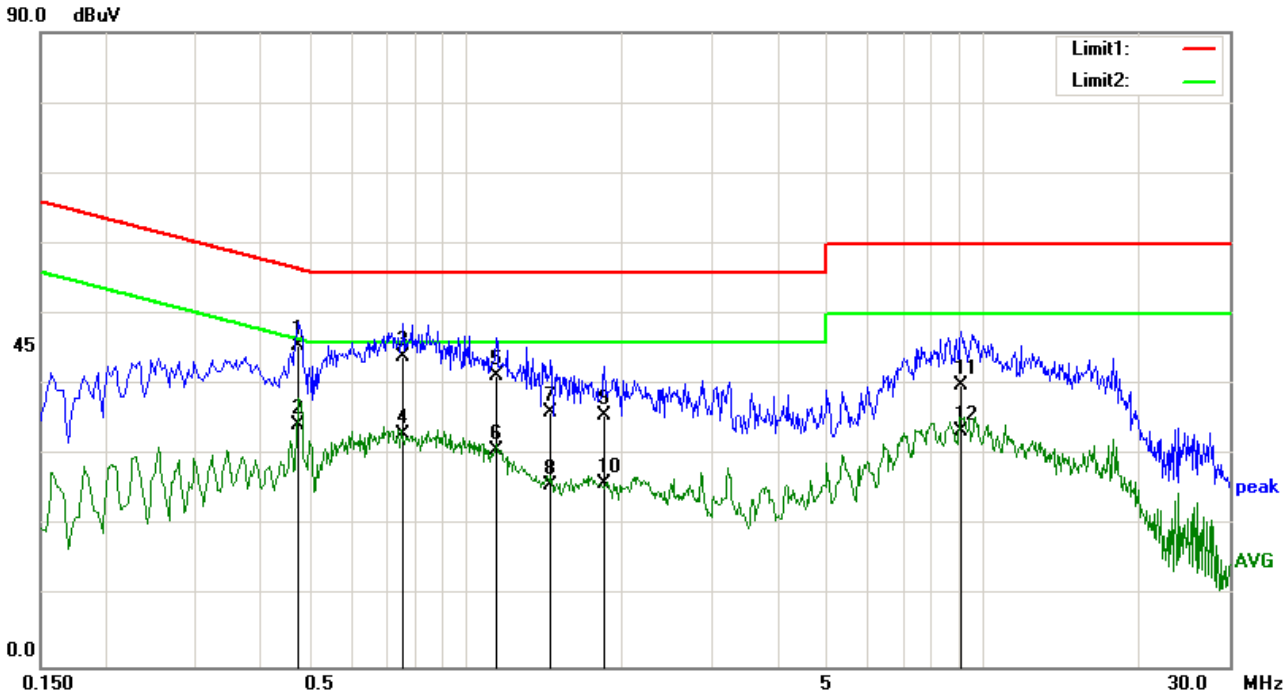


Test Data

Phase Neutral Plot at 120Vac, 60Hz

No.	Frequency (MHz)	Reading (dBuV)	Detector	Lisn/lsn (dB}	Ps_Lmt (dB)	Cab_L (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	0.4700	39.96	QP	0.11	-10.00	0.21	50.28	56.51	-6.23
2	0.4700	31.45	AVG	0.11	-10.00	0.21	41.77	46.51	-4.74
3	0.9140	38.15	QP	0.13	-10.00	0.19	48.47	56.00	-7.53
4	0.9140	28.20	AVG	0.13	-10.00	0.19	38.52	46.00	-7.48
5	1.2900	34.34	QP	0.14	-10.00	0.21	44.69	56.00	-11.31
6	1.2900	24.04	AVG	0.14	-10.00	0.21	34.39	46.00	-11.61
7	1.6460	30.32	QP	0.16	-10.00	0.21	40.69	56.00	-15.31
8	1.6460	19.74	AVG	0.16	-10.00	0.21	30.11	46.00	-15.89
9	3.2180	32.51	QP	0.21	-10.00	0.24	42.96	56.00	-13.04
10	3.2180	23.35	AVG	0.21	-10.00	0.24	33.80	46.00	-12.20
11	4.6700	32.51	QP	0.27	-10.00	0.28	43.06	56.00	-12.94
12	4.6700	23.30	AVG	0.27	-10.00	0.28	33.85	46.00	-12.15

Test Mode:	Transmitting BLE Mode (Middle Channel)

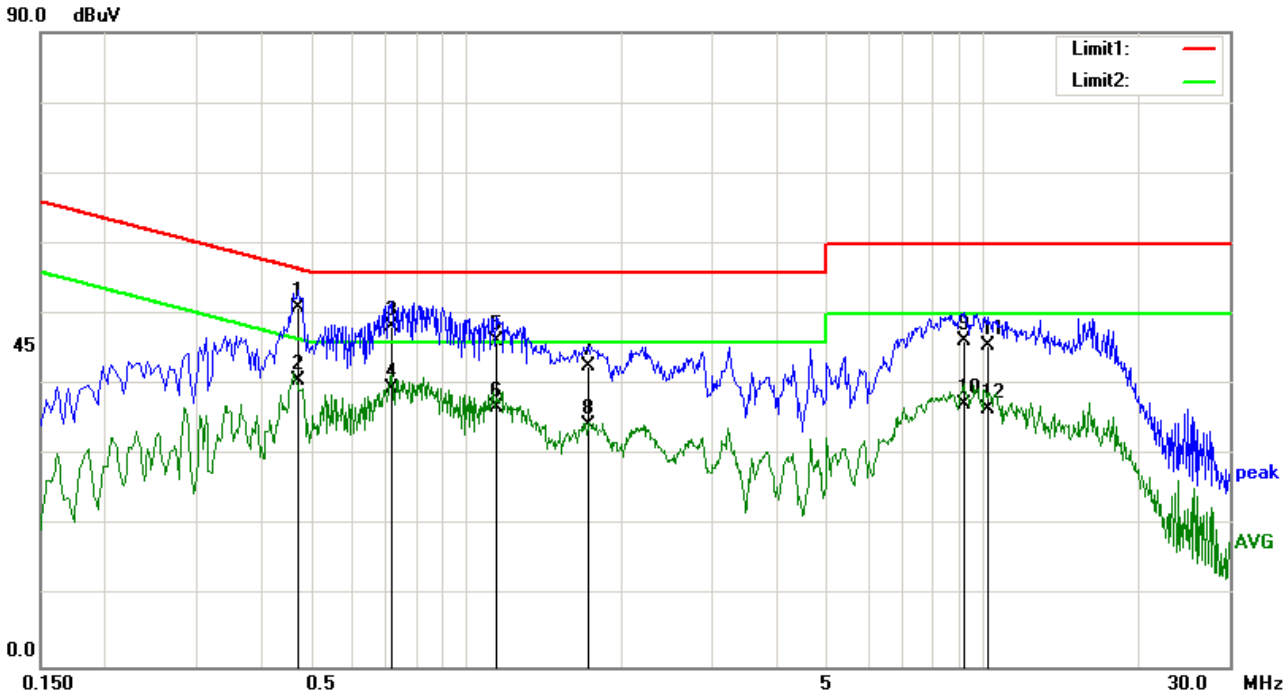


Test Data

Phase Line Plot at 230Vac, 50Hz

No.	Frequency (MHz)	Reading (dBuV)	Detector	Lisn/lsn (dB}	Ps_Lmt (dB)	Cab_L (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	0.4740	35.27	QP	0.11	-10.00	0.21	45.59	56.44	-10.85
2	0.4740	24.08	AVG	0.11	-10.00	0.21	34.40	46.44	-12.04
3	0.7580	33.65	QP	0.12	-10.00	0.20	43.97	56.00	-12.03
4	0.7580	22.64	AVG	0.12	-10.00	0.20	32.96	46.00	-13.04
5	1.1420	30.89	QP	0.14	-10.00	0.20	41.23	56.00	-14.77
6	1.1420	20.29	AVG	0.14	-10.00	0.20	30.63	46.00	-15.37
7	1.4580	25.75	QP	0.15	-10.00	0.20	36.10	56.00	-19.90
8	1.4580	15.38	AVG	0.15	-10.00	0.20	25.73	46.00	-20.27
9	1.8540	25.37	QP	0.16	-10.00	0.20	35.73	56.00	-20.27
10	1.8540	15.70	AVG	0.16	-10.00	0.20	26.06	46.00	-19.94
11	9.0980	29.14	QP	0.49	-10.00	0.37	40.00	60.00	-20.00
12	9.0980	22.52	AVG	0.49	-10.00	0.37	33.38	50.00	-16.62

Test Mode:	Transmitting BLE Mode (Middle Channel)

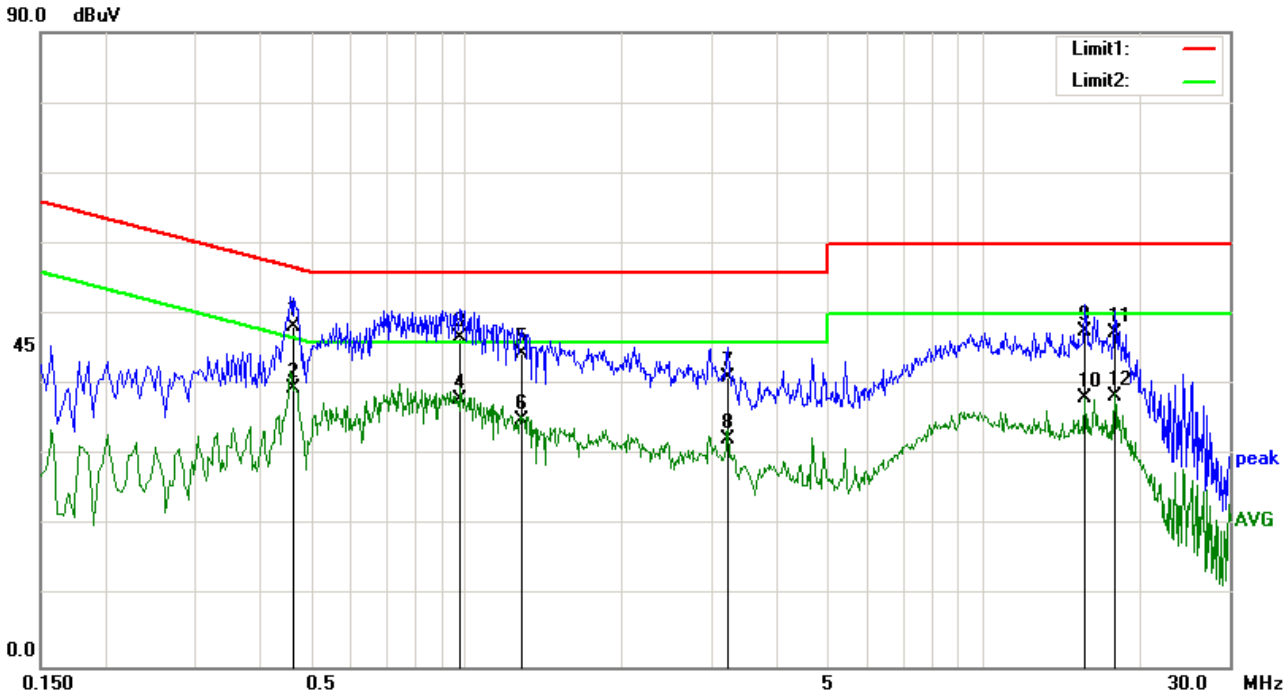


Test Data

Phase Neutral Plot at 230Vac, 50Hz

No.	Frequency (MHz)	Reading (dBuV)	Detector	Lisn/lsn (dB}	Ps_Lmt (dB)	Cab_L (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	0.4740	40.70	QP	0.11	-10.00	0.21	51.02	56.44	-5.42
2	0.4740	30.29	AVG	0.11	-10.00	0.21	40.61	46.44	-5.83
3	0.7180	37.98	QP	0.12	-10.00	0.20	48.30	56.00	-7.70
4	0.7180	29.19	AVG	0.12	-10.00	0.20	39.51	46.00	-6.49
5	1.1420	35.95	QP	0.14	-10.00	0.20	46.29	56.00	-9.71
6	1.1420	26.56	AVG	0.14	-10.00	0.20	36.90	46.00	-9.10
7	1.7260	32.34	QP	0.16	-10.00	0.21	42.71	56.00	-13.29
8	1.7260	23.93	AVG	0.16	-10.00	0.21	34.30	46.00	-11.70
9	9.1620	35.46	QP	0.50	-10.00	0.38	46.34	60.00	-13.66
10	9.1620	26.43	AVG	0.50	-10.00	0.38	37.31	50.00	-12.69
11	10.2220	34.67	QP	0.55	-10.00	0.45	45.67	60.00	-14.33
12	10.2220	25.55	AVG	0.55	-10.00	0.45	36.55	50.00	-13.45

Test Mode:	Transmitting BLE Mode (High Channel)

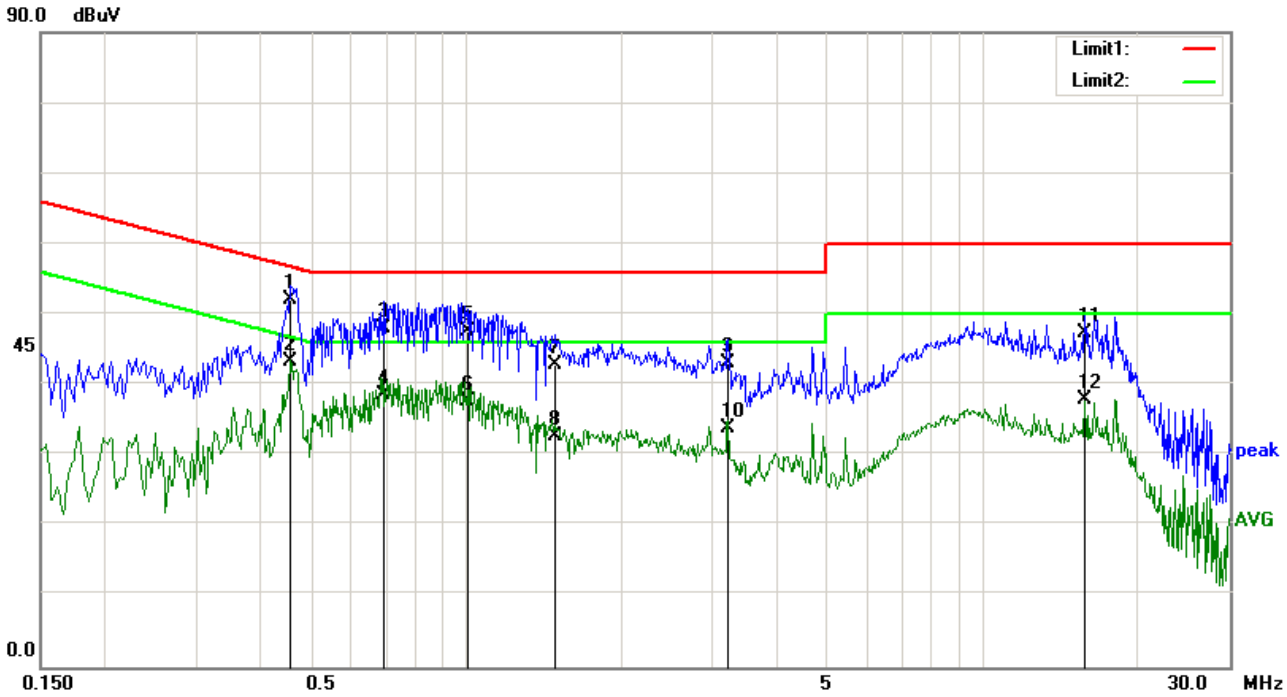


Test Data

Phase Line Plot at 120Vac, 60Hz

No.	Frequency (MHz)	Reading (dBuV)	Detector	Lisn/lsn (dB}	Ps_Lmt (dB)	Cab_L (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	0.4660	37.88	QP	0.12	-10.00	0.21	48.21	56.58	-8.37
2	0.4660	29.24	AVG	0.12	-10.00	0.21	39.57	46.58	-7.01
3	0.9740	36.47	QP	0.14	-10.00	0.19	46.80	56.00	-9.20
4	0.9740	27.69	AVG	0.14	-10.00	0.19	38.02	46.00	-7.98
5	1.2780	34.02	QP	0.15	-10.00	0.21	44.38	56.00	-11.62
6	1.2780	24.66	AVG	0.15	-10.00	0.21	35.02	46.00	-10.98
7	3.2180	30.71	QP	0.20	-10.00	0.24	41.15	56.00	-14.85
8	3.2180	21.85	AVG	0.20	-10.00	0.24	32.29	46.00	-13.71
9	15.7340	36.31	QP	0.89	-10.00	0.47	47.67	60.00	-12.33
10	15.7340	26.88	AVG	0.89	-10.00	0.47	38.24	50.00	-11.76
11	17.9540	35.98	QP	0.99	-10.00	0.50	47.47	60.00	-12.53
12	17.9540	26.85	AVG	0.99	-10.00	0.50	38.34	50.00	-11.66

Test Mode:	Transmitting BLE Mode (High Channel)

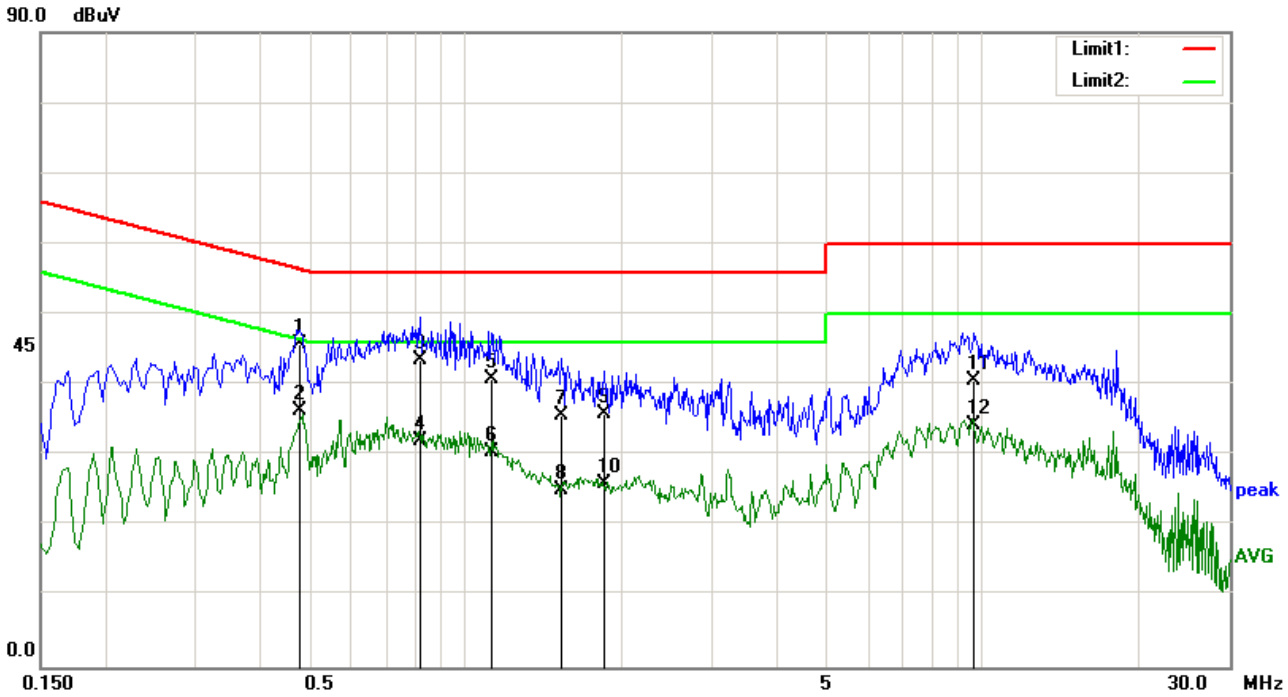


Test Data

Phase Neutral Plot at 120Vac, 60Hz

No.	Frequency (MHz)	Reading (dBuV)	Detector	Lisn/lsn (dB}	Ps_Lmt (dB)	Cab_L (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	0.4580	41.81	QP	0.11	-10.00	0.21	52.13	56.73	-4.60
2	0.4580	33.01	AVG	0.11	-10.00	0.21	43.33	46.73	-3.40
3	0.6940	37.70	QP	0.12	-10.00	0.20	48.02	56.00	-7.98
4	0.6940	28.19	AVG	0.12	-10.00	0.20	38.51	46.00	-7.49
5	1.0100	37.26	QP	0.13	-10.00	0.19	47.58	56.00	-8.42
6	1.0100	27.34	AVG	0.13	-10.00	0.19	37.66	46.00	-8.34
7	1.4900	32.50	QP	0.15	-10.00	0.20	42.85	56.00	-13.15
8	1.4900	22.31	AVG	0.15	-10.00	0.20	32.66	46.00	-13.34
9	3.2140	32.54	QP	0.21	-10.00	0.24	42.99	56.00	-13.01
10	3.2140	23.46	AVG	0.21	-10.00	0.24	33.91	46.00	-12.09
11	15.7380	35.89	QP	0.99	-10.00	0.47	47.35	60.00	-12.65
12	15.7380	26.54	AVG	0.99	-10.00	0.47	38.00	50.00	-12.00

Test Mode:	Transmitting BLE Mode (High Channel)

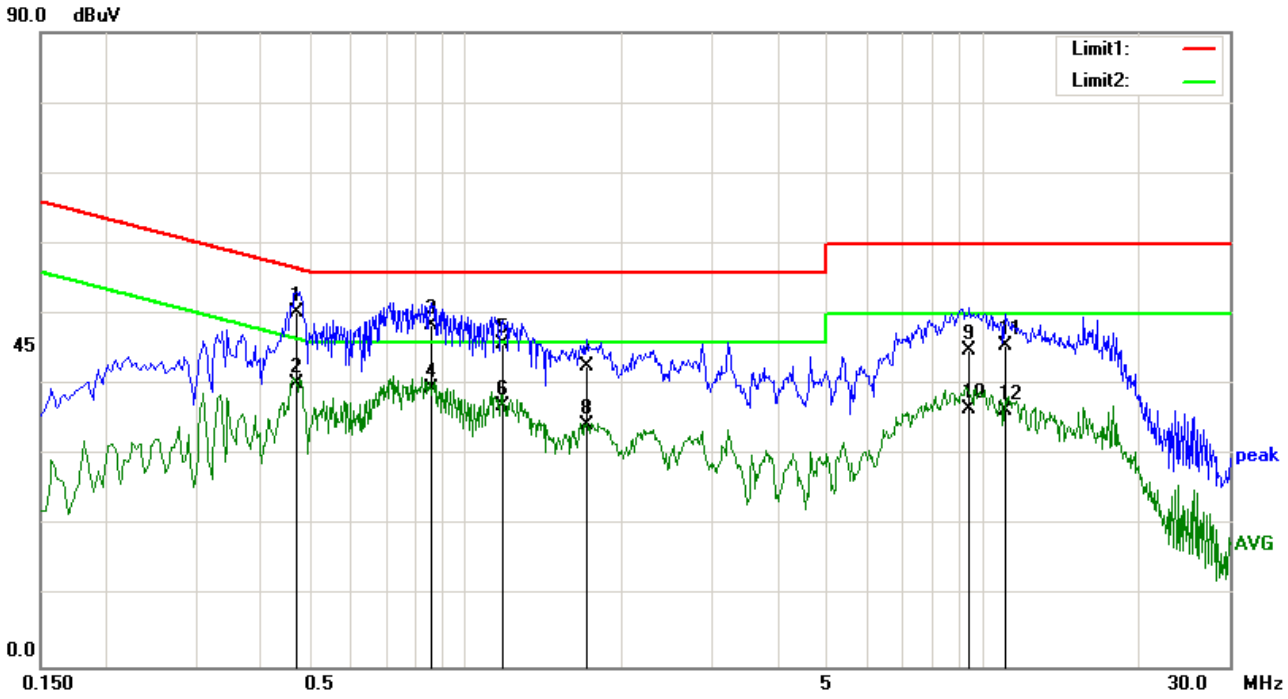


Test Data

Phase Line Plot at 230Vac, 50Hz

No.	Frequency (MHz)	Reading (dBuV)	Detector	Lisn/lsn (dB}	Ps_Lmt (dB)	Cab_L (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	0.4780	35.52	QP	0.11	-10.00	0.21	45.84	56.37	-10.53
2	0.4780	25.94	AVG	0.11	-10.00	0.21	36.26	46.37	-10.11
3	0.8140	33.22	QP	0.12	-10.00	0.20	43.54	56.00	-12.46
4	0.8140	21.83	AVG	0.12	-10.00	0.20	32.15	46.00	-13.85
5	1.1180	30.48	QP	0.13	-10.00	0.20	40.81	56.00	-15.19
6	1.1180	20.12	AVG	0.13	-10.00	0.20	30.45	46.00	-15.55
7	1.5300	25.25	QP	0.15	-10.00	0.20	35.60	56.00	-20.40
8	1.5300	14.72	AVG	0.15	-10.00	0.20	25.07	46.00	-20.93
9	1.8580	25.48	QP	0.16	-10.00	0.20	35.84	56.00	-20.16
10	1.8580	15.60	AVG	0.16	-10.00	0.20	25.96	46.00	-20.04
11	9.6380	29.68	QP	0.52	-10.00	0.39	40.59	60.00	-19.41
12	9.6380	23.47	AVG	0.52	-10.00	0.39	34.38	50.00	-15.62

Test Mode:	Transmitting BLE Mode (High Channel)



Test Data

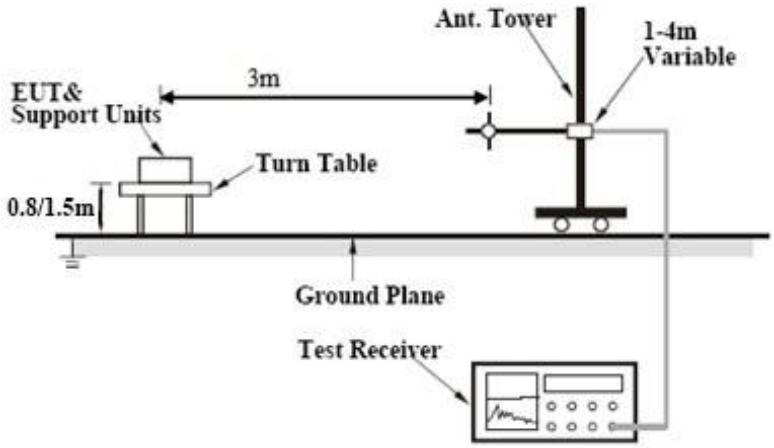
Phase Neutral Plot at 230Vac, 50Hz

No.	Frequency (MHz)	Reading (dBuV)	Detector	Lisn/lsn (dB}	Ps_Lmt (dB)	Cab_L (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	0.4700	39.97	QP	0.11	-10.00	0.21	50.29	56.51	-6.22
2	0.4700	29.84	AVG	0.11	-10.00	0.21	40.16	46.51	-6.35
3	0.8580	38.05	QP	0.13	-10.00	0.20	48.38	56.00	-7.62
4	0.8580	29.17	AVG	0.13	-10.00	0.20	39.50	46.00	-6.50
5	1.1820	35.48	QP	0.14	-10.00	0.20	45.82	56.00	-10.18
6	1.1820	26.58	AVG	0.14	-10.00	0.20	36.92	46.00	-9.08
7	1.7140	32.37	QP	0.16	-10.00	0.21	42.74	56.00	-13.26
8	1.7140	23.85	AVG	0.16	-10.00	0.21	34.22	46.00	-11.78
9	9.4220	33.99	QP	0.51	-10.00	0.39	44.89	60.00	-15.11
10	9.4220	25.55	AVG	0.51	-10.00	0.39	36.45	50.00	-13.55
11	11.0740	34.40	QP	0.62	-10.00	0.49	45.51	60.00	-14.49
12	11.0740	25.22	AVG	0.62	-10.00	0.49	36.33	50.00	-13.67

6.8 Radiated Emissions

Temperature	20°C
Relative Humidity	50%
Atmospheric Pressure	1019mbar
Test date :	June 20, 2017
Tested By :	Trety Lu

Requirement(s):

<table>
<tr><th>Spec</th><th>Item</th><th>Requirement</th><th>Applicable</th></tr>
<tr><td>47CFR§15.247(d)</td><td>a)</td><td>Except higher limit as specified elsewhere in other section, the emissions from the low-power radio-frequency devices shall not exceed the field strength levels specified in the following table and the level of any unwanted emissions shall not exceed the level of the fundamental emission. The tighter limit applies at the band edges
Class A Limit
<table>
<tr><th>Frequency range (MHz)</th><th>Field Strength (μV/m)</th></tr>
<tr><td>30 – 88</td><td>90</td></tr>
<tr><td>88 – 216</td><td>150</td></tr>
<tr><td>216 – 960</td><td>210</td></tr>
<tr><td>Above 960</td><td>300</td></tr>
</table>
Class B Limit
<table>
<tr><th>Frequency range (MHz)</th><th>Field Strength (μV/m)</th></tr>
<tr><td>30 – 88</td><td>100</td></tr>
<tr><td>88 – 216</td><td>150</td></tr>
<tr><td>216 – 960</td><td>200</td></tr>
<tr><td>Above 960</td><td>500</td></tr>
</table></td><td>☑</td></tr>
<tr><td>Test Setup</td><td colspan="3"> 
</td></tr>
<tr><td>Procedure</td><td colspan="3">1. The EUT was switched on and allowed to warm up to its normal operating condition.
2. The test was carried out at the selected frequency points obtained from the EUT characterization. Maximization of the emissions, was carried out by rotating the EUT, changing the antenna polarization, and adjusting the antenna height in the following manner:
a. Vertical or horizontal polarization (whichever gave the higher emission level over a full rotation of the EUT) was chosen.
b. The EUT was then rotated to the direction that gave the maximum emission.
c. Finally, the antenna height was adjusted to the height that gave the maximum emission.
3. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasiy Peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz with Peak detection for Peak measurement at frequency above 1GHz.
The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth with Peak detection for Average Measurement as below at frequency above 1GHz.
■ 1/T kHz (Duty cycle < 98%) □ 10 Hz (Duty cycle > 98%)</td></tr>
</table>

	5. Steps 2 and 3 were repeated for the next frequency point, until all selected frequency points were measured.
Remark	
Result	☑ Pass ☐ Fail
Test Data	☑ Yes ☐ N/A
Test Plot	☑ Yes (See below) ☐ N/A

Data sample

No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBμV/m)		(dB/m)	(dB)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	(cm)	(°)

Frequency (MHz) = Emission frequency in MHz

Reading (dBμV/m) = Receiver Reading Value

Detector= Peak Detector or Quasi Peak Detector

Ant_F=Antenna Factor

PA_G=Pre-Amplifier Gain

Cab_L=Cable Loss

Result (dBμV/m) = Read ing Value + Corrected Value

Limit (dBμV/m) = Limit stated in standard

Height (cm) = Height of Receiver antenna

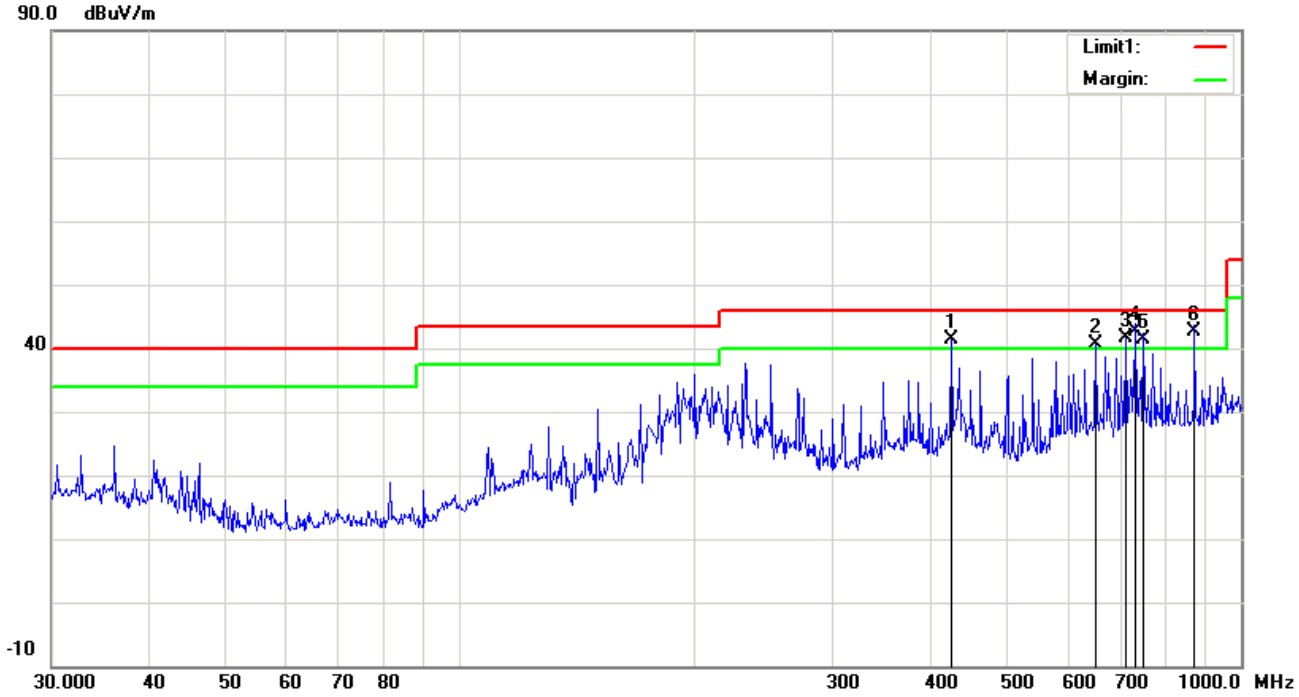
Degree = Turn table degree

Calculation Formula:

Margin (dB) = Result (dBμV/m) – limit (dBμV/m)

Test Mode:	Transmitting BLE Mode (Low Channel)

Below 1GHz



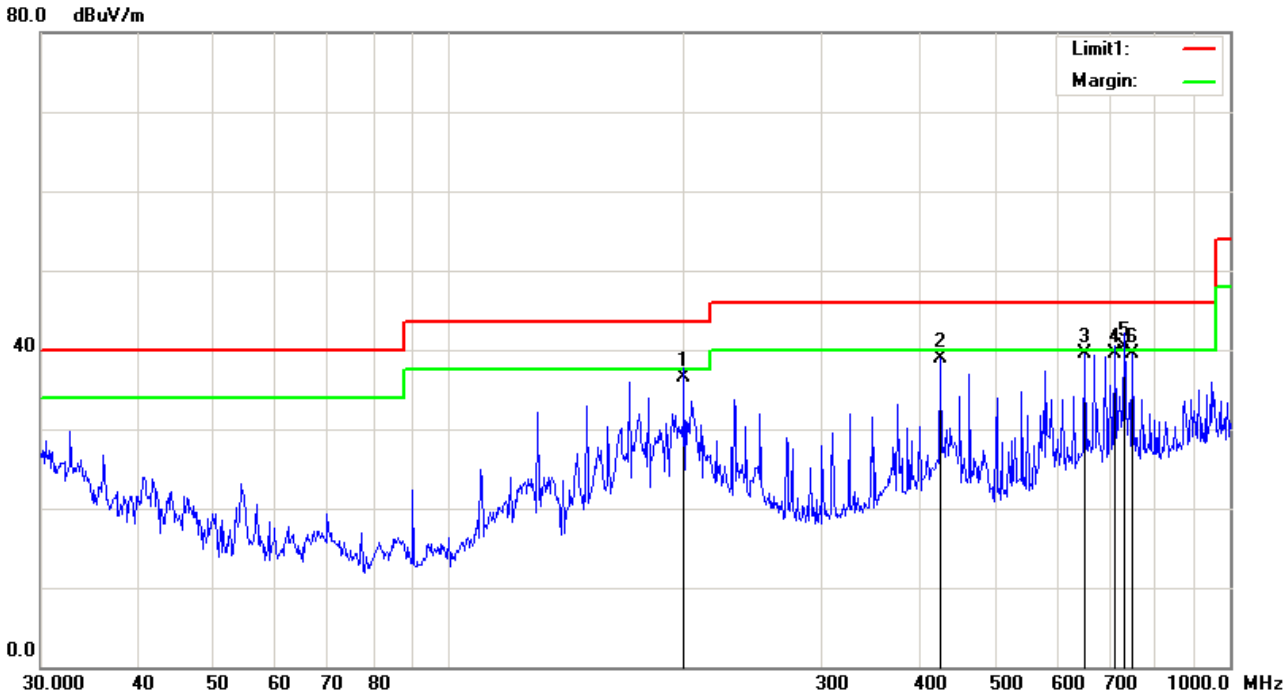
Test Data

Horizontal Polarity Plot @3m

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Ant_F (dB/m)	PA_G (dB)	Cab_L (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)
1	425.0280	71.16	QP	16.00	49.09	3.31	41.38	46.00	-4.62	200	213
2	651.9417	62.79	QP	21.85	48.15	4.10	40.59	46.00	-5.41	300	238
3	711.6734	60.48	QP	22.47	45.60	4.29	41.64	46.00	-4.36	200	192
4	731.9203	61.03	QP	22.59	45.38	4.34	42.58	46.00	-3.42	200	197
5	750.1083	59.31	QP	22.70	45.02	4.40	41.39	46.00	-4.61	200	218
6	872.1832	61.09	QP	22.78	46.06	4.77	42.58	46.00	-3.42	200	239

Test Mode:	Transmitting BLE Mode (Low Channel)

Below 1GHz

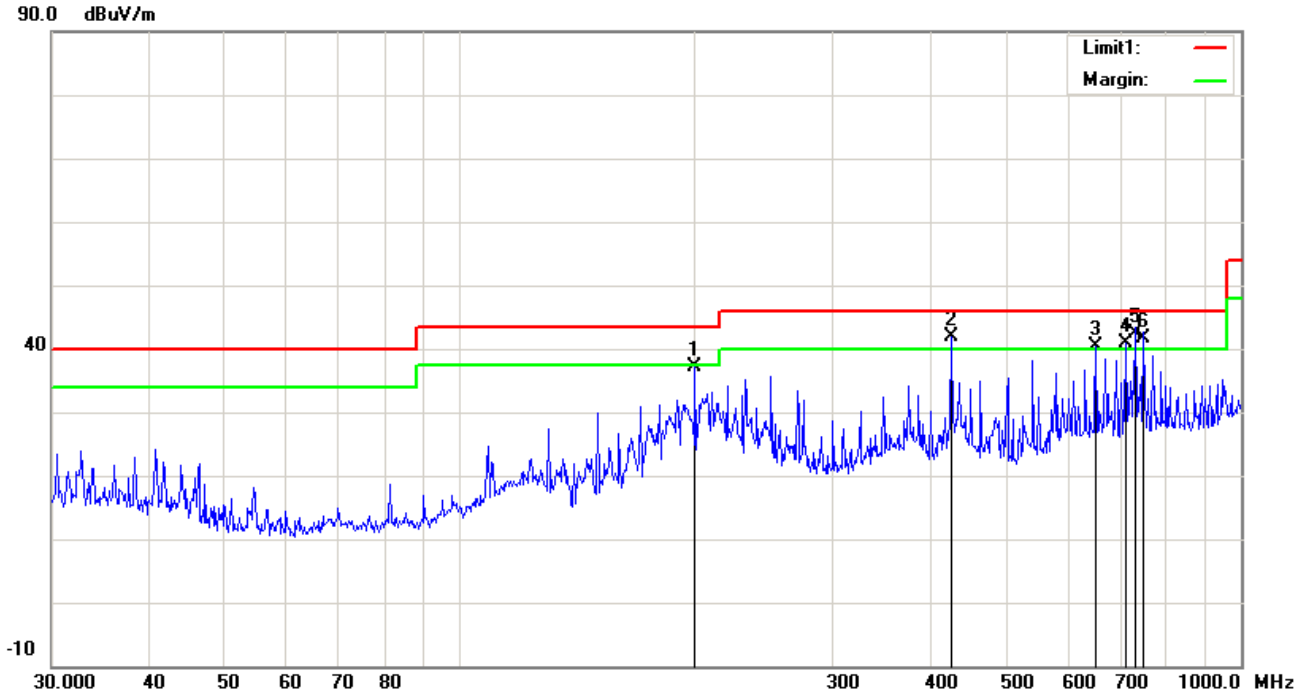


Vertical Polarity Plot @3m

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Ant_F (dB/m)	PA_G (dB)	Cab_L (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)
1	199.9856	66.81	QP	14.85	47.34	2.26	36.58	43.50	-6.92	100	215
2	425.0280	68.20	peak	16.58	49.09	3.31	39.00	46.00	-7.00	100	250
3	651.9417	62.11	peak	21.47	48.15	4.10	39.53	46.00	-6.47	100	160
4	711.6734	58.31	QP	22.47	45.60	4.29	39.47	46.00	-6.53	100	259
5	731.9203	59.07	QP	22.26	45.38	4.34	40.29	46.00	-5.71	100	254
6	750.1083	58.02	peak	22.07	45.02	4.40	39.47	46.00	-6.53	100	256

Test Mode:	Transmitting BLE Mode (Middle Channel)

Below 1GHz



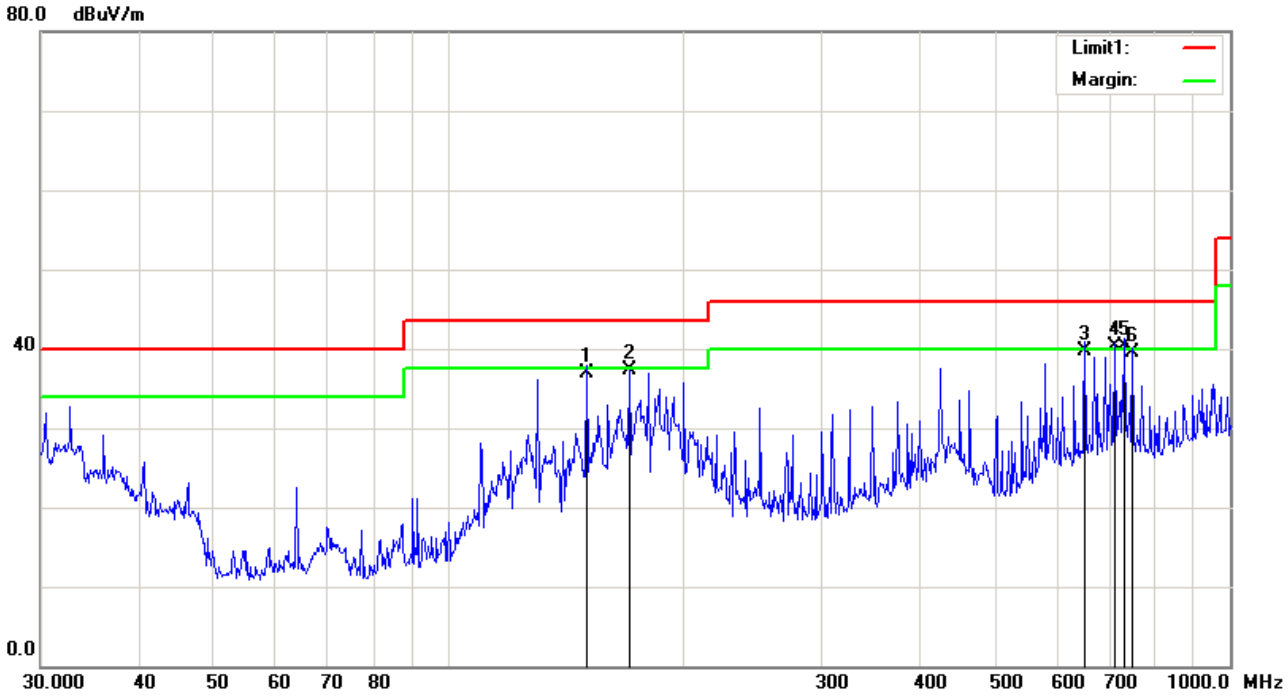
Test Data

Horizontal Polarity Plot @3m

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Ant_F (dB/m)	PA_G (dB)	Cab_L (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)
1	199.9856	68.72	peak	13.39	47.34	2.26	37.03	43.50	-6.47	200	227
2	425.0280	71.60	QP	16.00	49.09	3.31	41.82	46.00	-4.18	200	222
3	651.9417	62.68	QP	21.85	48.15	4.10	40.48	46.00	-5.52	300	249
4	711.6734	59.81	QP	22.47	45.60	4.29	40.97	46.00	-5.03	200	206
5	731.9203	60.75	QP	22.59	45.38	4.34	42.30	46.00	-3.70	200	201
6	750.1083	59.47	QP	22.70	45.02	4.40	41.55	46.00	-4.45	200	214

Test Mode:	Transmitting BLE Mode (Middle Channel)

Below 1GHz

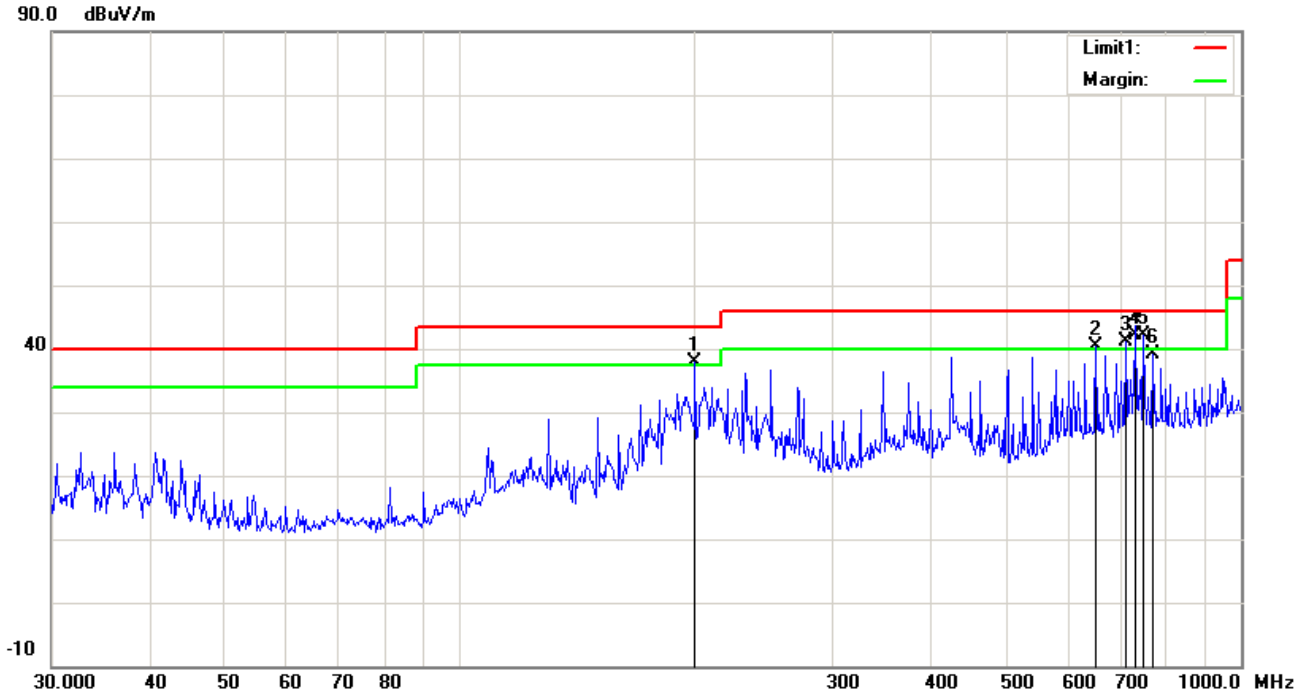


Vertical Polarity Plot @3m

No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(°)
1	150.0108	68.79	QP	13.99	47.99	2.10	36.89	43.50	-6.61	200	227
2	170.1948	67.36	peak	14.36	46.49	2.09	37.32	43.50	-6.18	200	222
3	651.9417	62.23	QP	21.47	48.15	4.10	39.65	46.00	-6.35	300	249
4	711.6734	59.21	QP	22.47	45.60	4.29	40.37	46.00	-5.63	200	206
5	731.9203	59.03	QP	22.26	45.38	4.34	40.25	46.00	-5.75	200	201
6	750.1083	58.13	QP	22.07	45.02	4.40	39.58	46.00	-6.42	200	214

Test Mode:	Transmitting BLE Mode (High Channel)

Below 1GHz



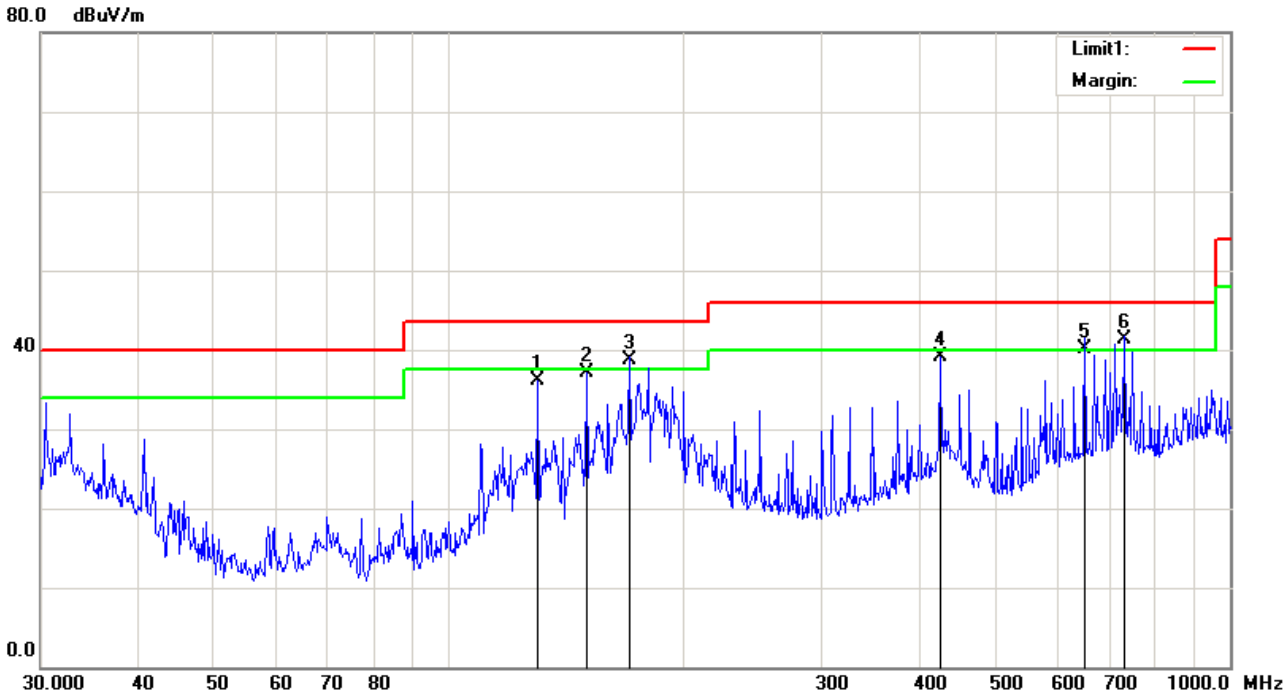
Test Data

Horizontal Polarity Plot @3m

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Ant_F (dB/m)	PA_G (dB)	Cab_L (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)
1	199.9856	69.69	QP	13.39	47.34	2.26	38.00	43.50	-5.50	200	242
2	651.9417	62.63	QP	21.85	48.15	4.10	40.43	46.00	-5.57	300	256
3	711.6734	59.85	QP	22.47	45.60	4.29	41.01	46.00	-4.99	200	184
4	731.9203	60.60	QP	22.59	45.38	4.34	42.15	46.00	-3.85	200	197
5	750.1083	59.96	QP	22.70	45.02	4.40	42.04	46.00	-3.96	200	221
6	771.4486	57.36	peak	22.83	45.62	4.46	39.03	46.00	-6.97	200	210

Test Mode:	Transmitting BLE Mode (High Channel)

Below 1GHz



Vertical Polarity Plot @3m

No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(°)
1	129.9226	65.23	peak	16.37	47.29	1.86	36.17	43.50	-7.33	100	166
2	150.0108	68.93	peak	13.99	47.99	2.10	37.03	43.50	-6.47	100	357
3	170.1948	68.79	QP	14.36	46.49	2.09	38.75	43.50	-4.75	100	194
4	425.0280	68.22	peak	16.58	49.09	3.31	39.02	46.00	-6.98	100	0
5	651.9417	62.69	QP	21.47	48.15	4.10	40.11	46.00	-5.89	100	157
6	731.9203	60.01	QP	22.26	45.38	4.34	41.23	46.00	-4.77	100	318

Test Mode:	Transmitting BLE Mode (Low Channel)

Above 1GHz
Horizontal

No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(°)
1	4965.000	61.18	peak	33.58	54.04	5.88	46.6	74	-27.4	200	0
2	6300.000	53.29	peak	34.32	52.22	5.84	41.23	74	-32.77	200	5
3	8582.000	52.16	peak	37.37	53.91	8.33	43.95	74	-30.05	200	0
4	10758.000	53.86	peak	38.05	53.13	9.43	48.21	74	-25.79	100	30
5	11436.000	52.37	peak	38.37	53.15	10.05	47.64	74	-26.36	200	256
6	13912.000	51.34	peak	39.98	52.11	9.11	48.32	74	-25.68	100	280

Vertical

No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(°)
1	4918.000	58.46	peak	33.43	53.81	5.96	44.04	74	-29.96	200	170
2	5992.000	54.39	peak	34.2	51.29	5.85	43.15	74	-30.85	100	310
3	8636.000	52.34	peak	37.35	54.02	8.29	43.96	74	-30.04	100	298
4	10778.000	53.28	peak	38.05	53.14	9.43	47.62	74	-26.38	100	106
5	13182.000	53.49	peak	39.13	51.88	9.56	50.3	74	-23.7	200	114
6	14715.000	54.67	peak	40.34	52.74	9.36	51.63	74	-22.37	200	9

Test Mode:	Transmitting BLE Mode (Middle Channel)

Above 1GHz
Horizontal

No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(°)
1	4967.000	60.15	peak	33.58	54.04	5.88	45.57	74	-28.43	154	360
2	6308.000	55.49	peak	34.32	52.22	5.84	43.43	74	-30.57	200	2
3	8589.000	53.26	peak	37.37	53.91	8.33	45.05	74	-28.95	154	360
4	10756.000	51.29	peak	38.05	53.13	9.43	45.64	74	-28.36	100	30
5	11452.000	53.48	peak	38.37	53.15	10.05	48.75	74	-25.25	200	256
6	13904.000	52.17	peak	39.98	52.11	9.11	49.15	74	-24.85	100	282

Vertical

No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(°)
1	4920.000	58.69	peak	33.43	53.81	5.88	44.19	74	-29.81	200	170
2	5980.000	54.28	peak	34.2	51.29	5.84	43.03	74	-30.97	100	310
3	8640.000	53.14	peak	37.35	54.02	8.33	44.8	74	-29.2	100	298
4	10780.000	52.47	peak	38.05	53.14	9.43	46.81	74	-27.19	100	106
5	13190.000	53.67	peak	39.13	51.88	10.05	50.97	74	-23.03	200	114
6	14720.000	54.13	peak	40.34	52.74	9.11	50.84	74	-23.16	200	9

Test Mode:	Transmitting BLE Mode (High Channel)

Above 1GHz
Horizontal

No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(°)
1	4962.000	58.74	peak	33.58	54.04	5.88	44.16	74	-29.84	200	360
2	6305.000	51.33	peak	34.32	52.22	5.84	39.27	74	-34.73	200	2
3	8580.000	52.27	peak	37.37	53.91	8.33	44.06	74	-29.94	150	360
4	10757.000	53.25	peak	38.05	53.13	9.43	47.6	74	-26.4	100	30
5	11454.000	54.19	peak	38.37	53.15	10.05	49.46	74	-24.54	200	256
6	13904.000	53.48	peak	39.98	52.11	9.11	50.46	74	-23.54	100	282

Vertical

No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(°)
1	4900.000	57.36	peak	33.43	53.81	5.96	42.94	74	-31.06	200	170
2	5970.000	54.29	peak	34.2	51.29	5.85	43.05	74	-30.95	100	310
3	8620.000	53.48	peak	37.35	54.02	8.29	45.1	74	-28.9	100	298
4	10740.000	52.17	peak	38.05	53.14	9.43	46.51	74	-27.49	100	106
5	13189.000	51.28	peak	39.13	51.88	9.56	48.09	74	-25.91	200	114
6	14719.000	54.79	peak	40.34	52.74	9.36	51.75	74	-22.25	200	9

Annex A. TEST INSTRUMENT

Instrument	Model	Serial #	Cal Date	Cal Due	In use
AC Line Conducted Emissions					
R&S EMI Test Receiver	ESPI3	101216	05/03/2017	05/02/2018	☒
V-LISN	ESH3-Z5	838979/005	03/30/2017	03/29/2018	☒
INFOMW Antenna (1 ~18GHz)	JXTXLB-10180	J2031081120092	10/08/2016	10/07/2017	☒
SIEMIC Labview Conducted Emissions software	V1.0	N/A	N/A	N/A	☒
RF conducted test					
R&S EMI Receiver	ESPI3	101216	05/03/2017	05/02/2018	☒
Power Splitter	1#	1#	02/02/2017	02/01/2018	☒
Spectrum Analyzer	N9010A	MY47191130	03/30/2017	03/29/2018	☒
Radiated Emissions					
Spectrum Analyzer	N9010A	MY47191130	05/03/2017	05/02/2018	☒
R&S EMI Receiver	ESPI3	101216	05/03/2017	05/02/2018	☒
Antenna (30MHz~6GHz)	JB6	A121411	10/31/2016	10/31/2017	☒
EMCO Horn Antenna (1 ~18GHz)	3115	N/A	11/15/2016	11/14/2017	☒
INFOMW Antenna (1 ~18GHz)	JXTXLB-10180	J2031081120092	10/09/2016	10/08/2017	☒
Hp Pre-Amplifier	8447F	1937A01160	10/31/2016	10/30/2017	☒
Agilent Pre-Amplifier	8447B	N/A	10/31/2016	10/30/2017	☒
MITEQ Pre-Amplifier (0.1 ~ 18GHz)	AMF-7D-00101800-30-10P	1451709	10/27/2015	10/26/2016	☒
SIEMIC Labview Radiated Emissions software	V1.0	N/A	N/A	N/A	☒

Annex B. EUT And Test Setup Photographs

Annex B.i. Photograph: EUT External Photo

The Whole of EUT - Front View

Adapter - Front View

Adapter – Right View

EUT - Top View

EUT - Bottom View

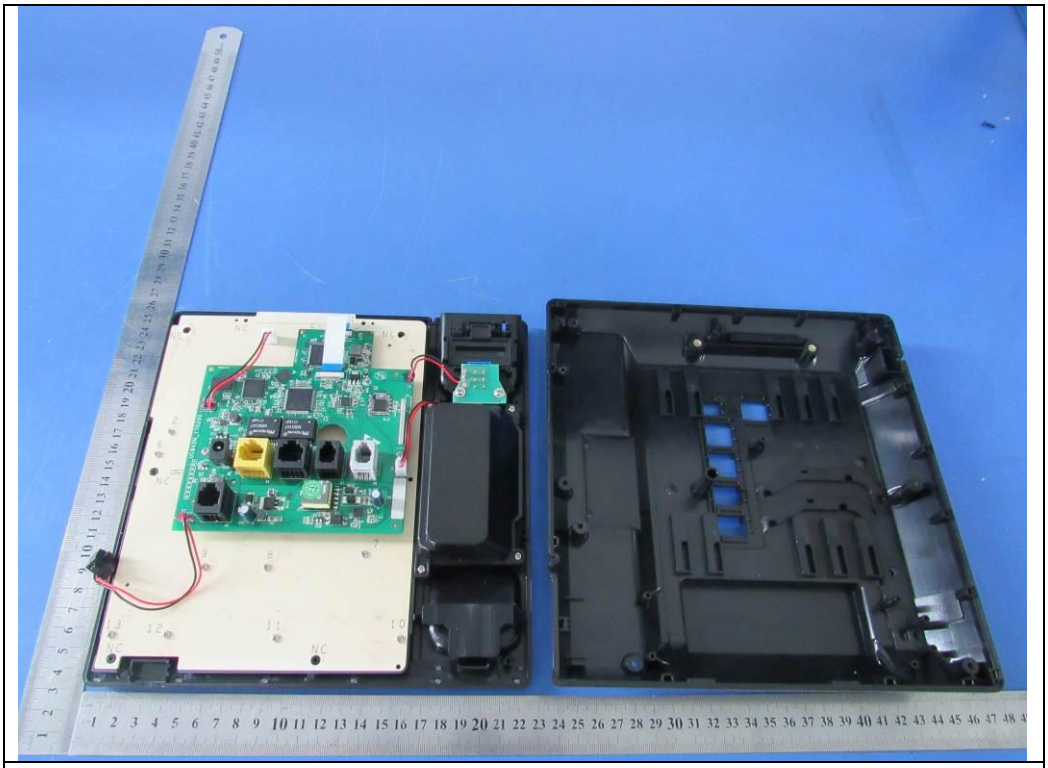
EUT - Front View

EUT - Rear View

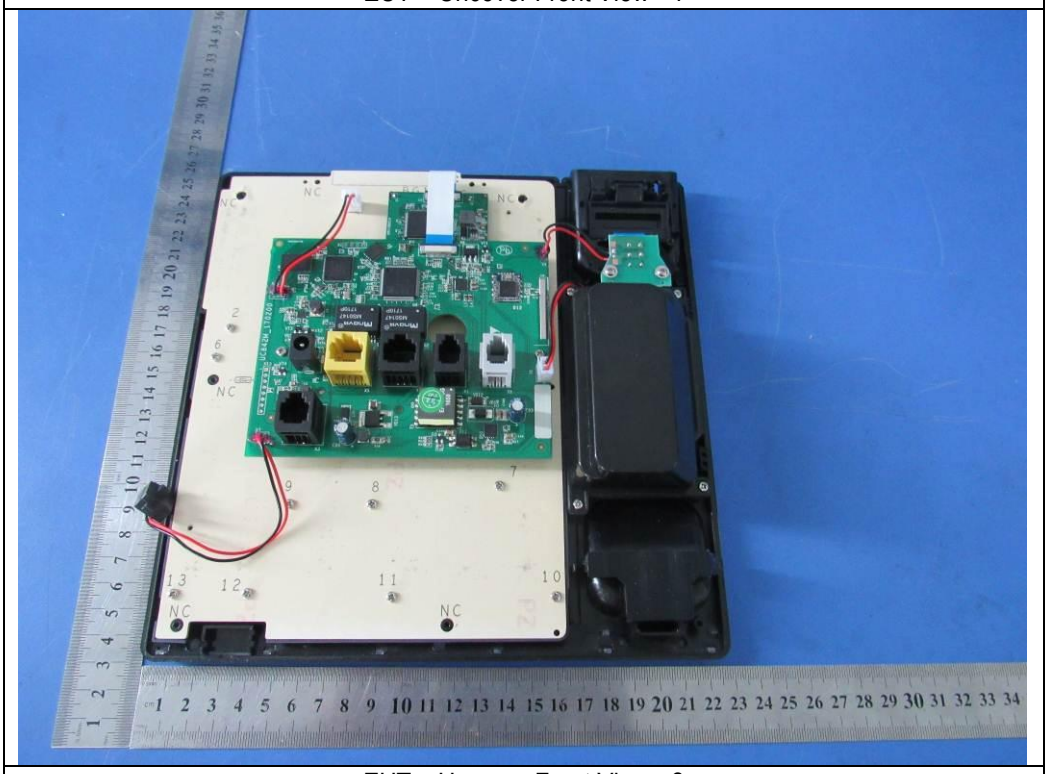
EUT - Left View

EUT - Right View

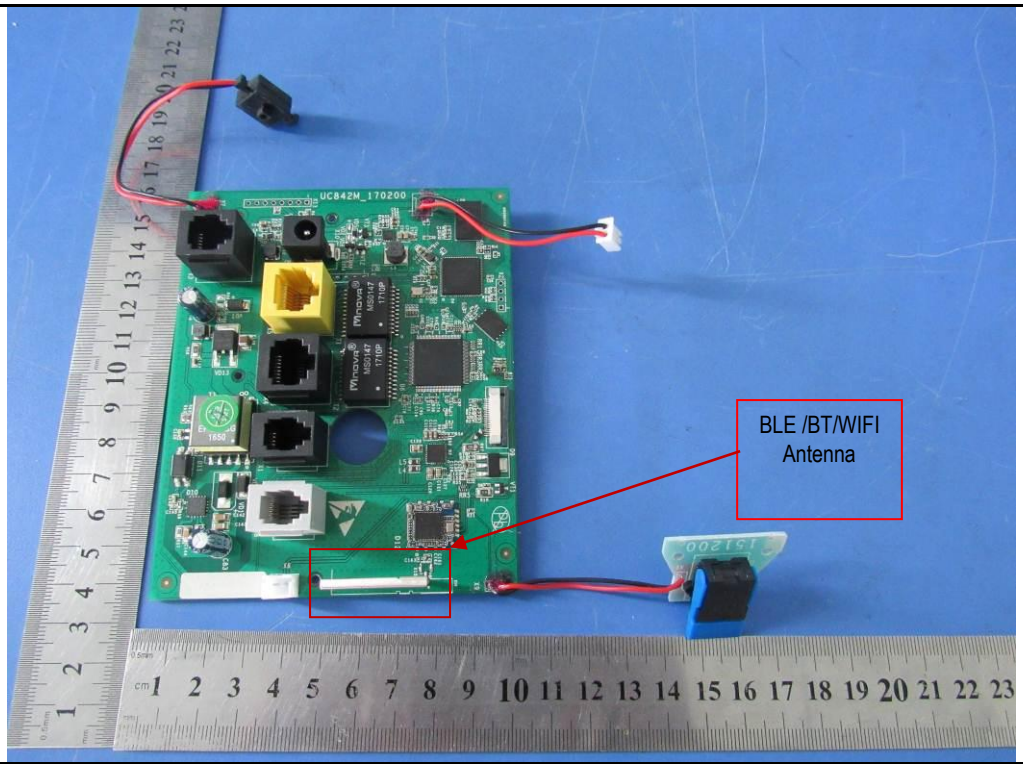
Annex B.ii. Photograph: EUT Internal Photo



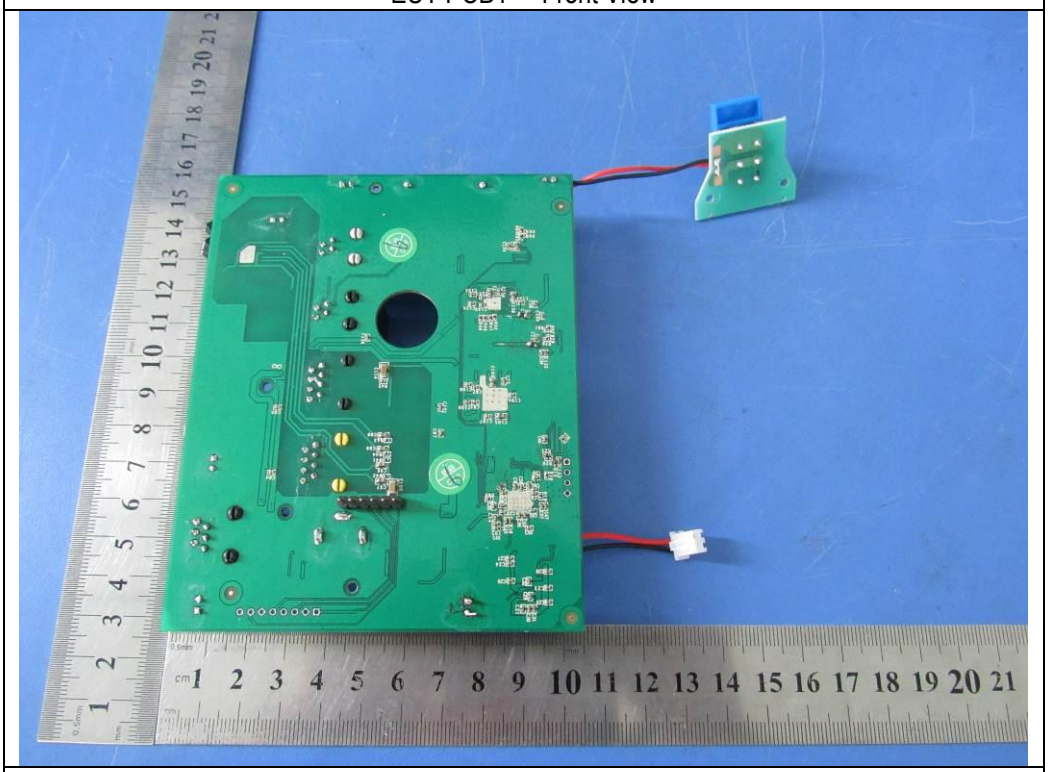
EUT – Uncover Front View - 1



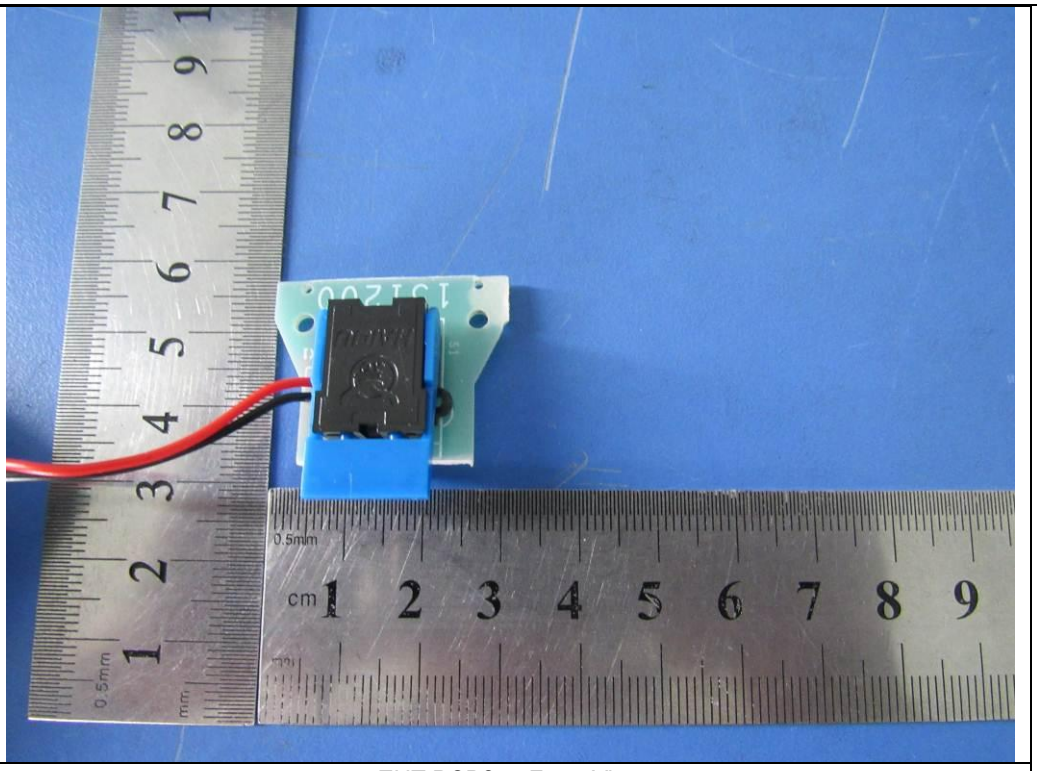
EUT – Uncover Front View - 2



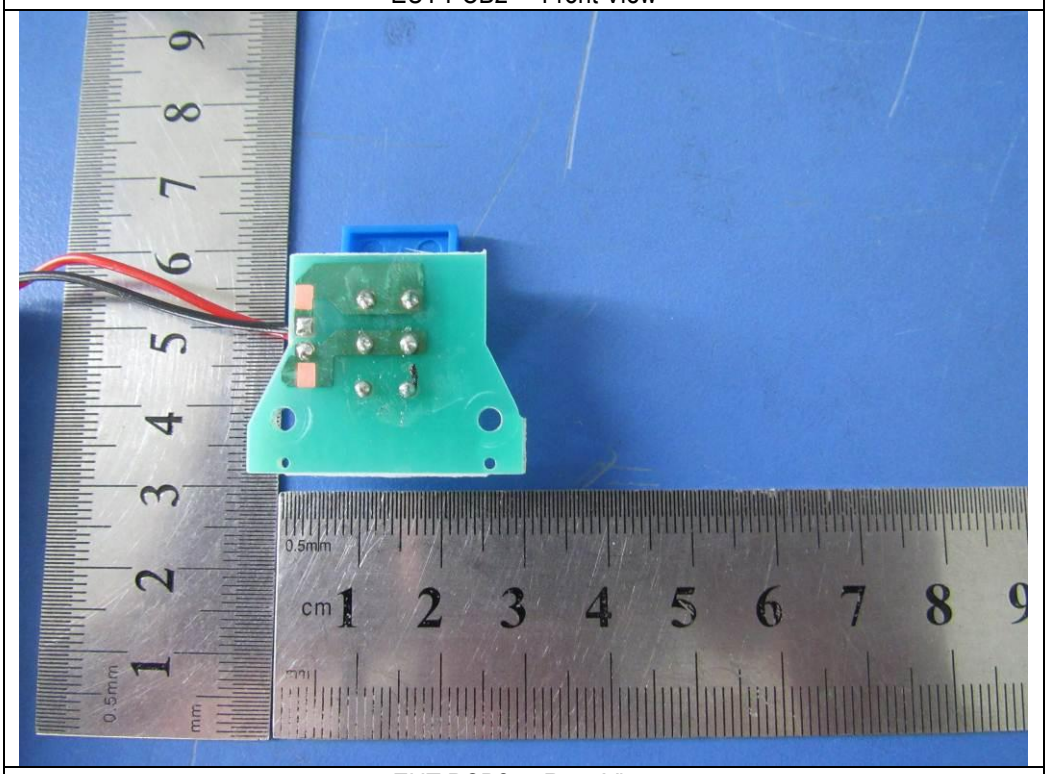
EUT PCB1 – Front View



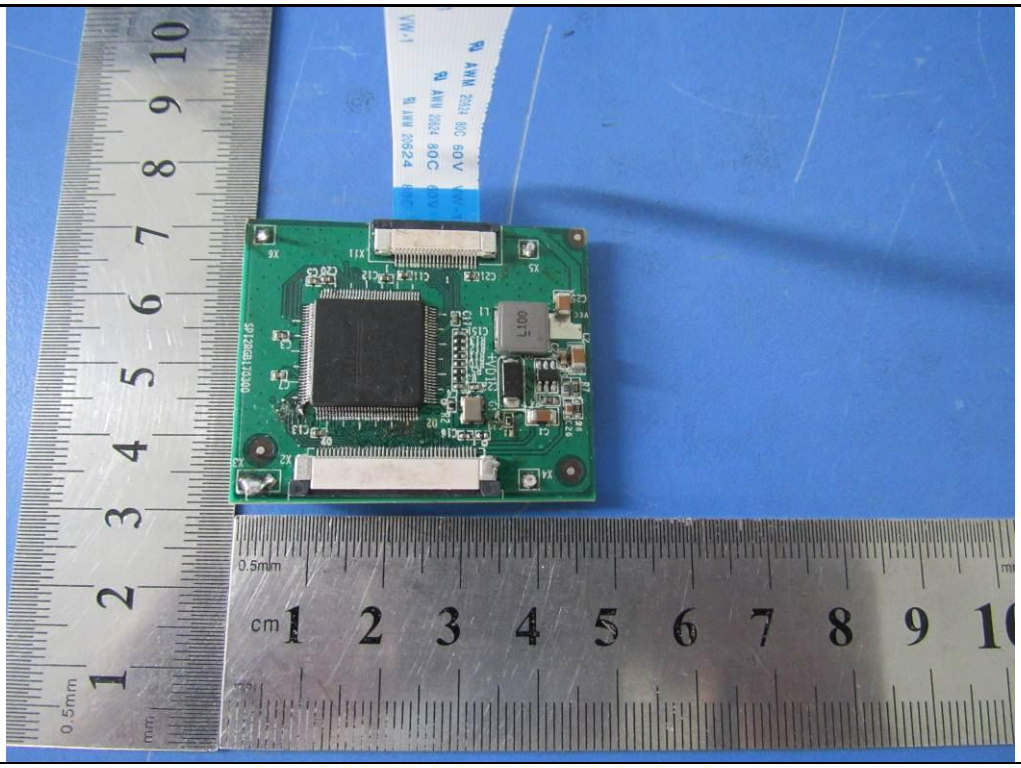
EUT PCB1 – Rear View



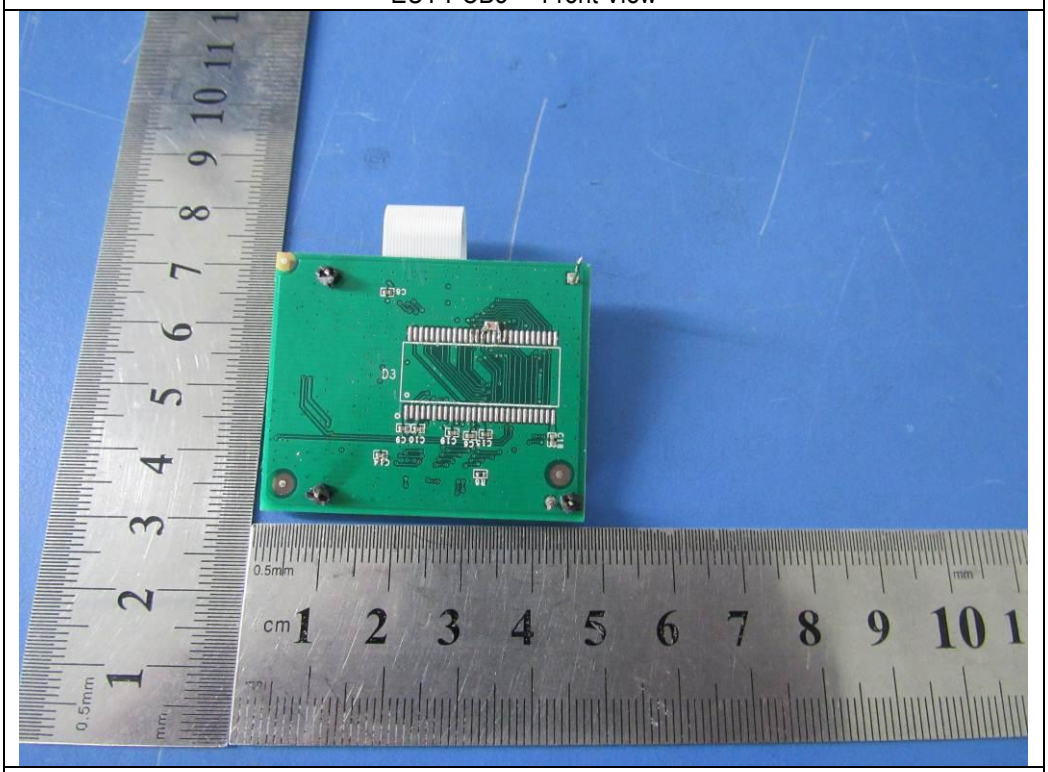
EUT PCB2 – Front View



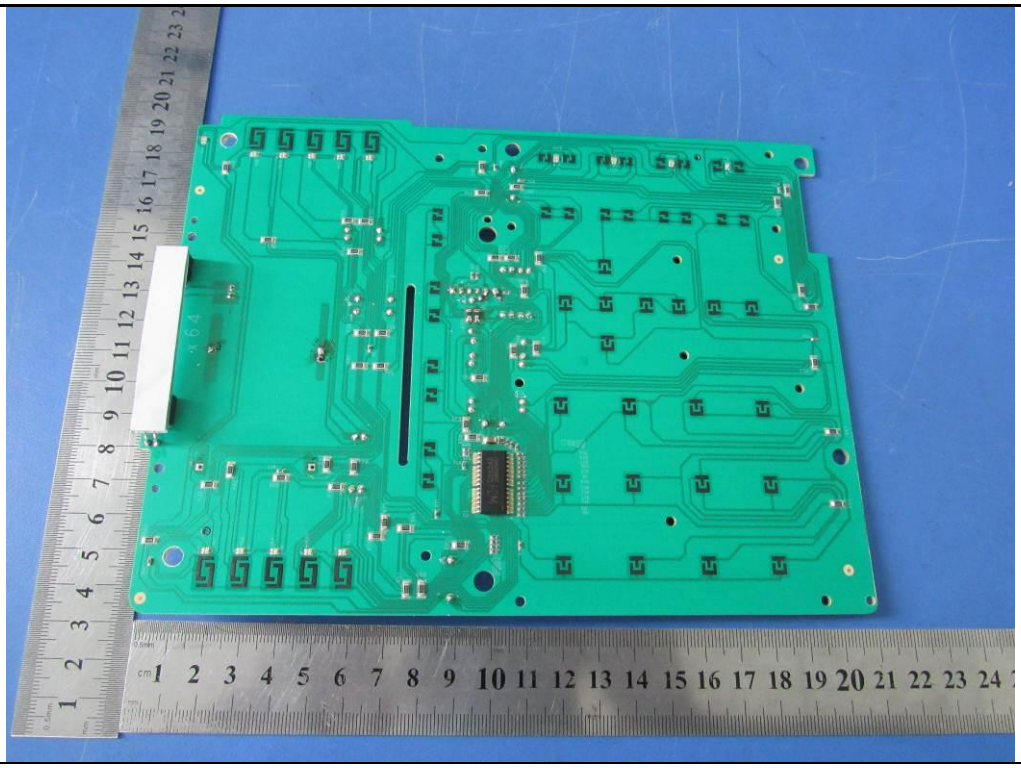
EUT PCB2 – Rear View



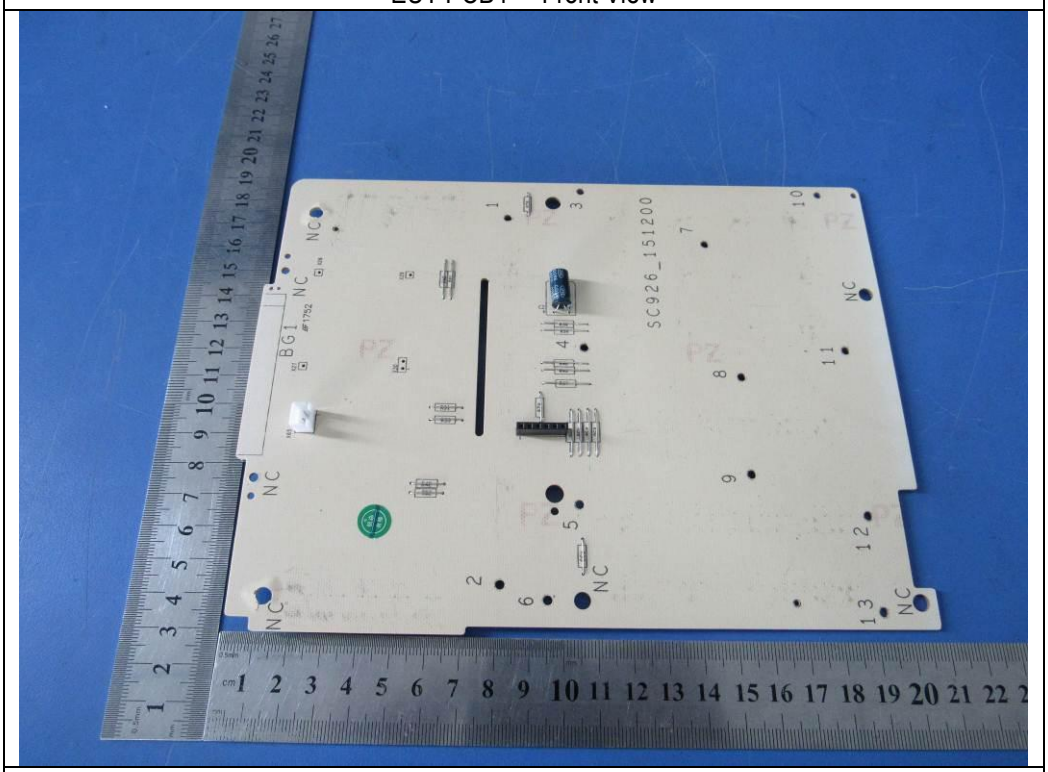
EUT PCB3 – Front View



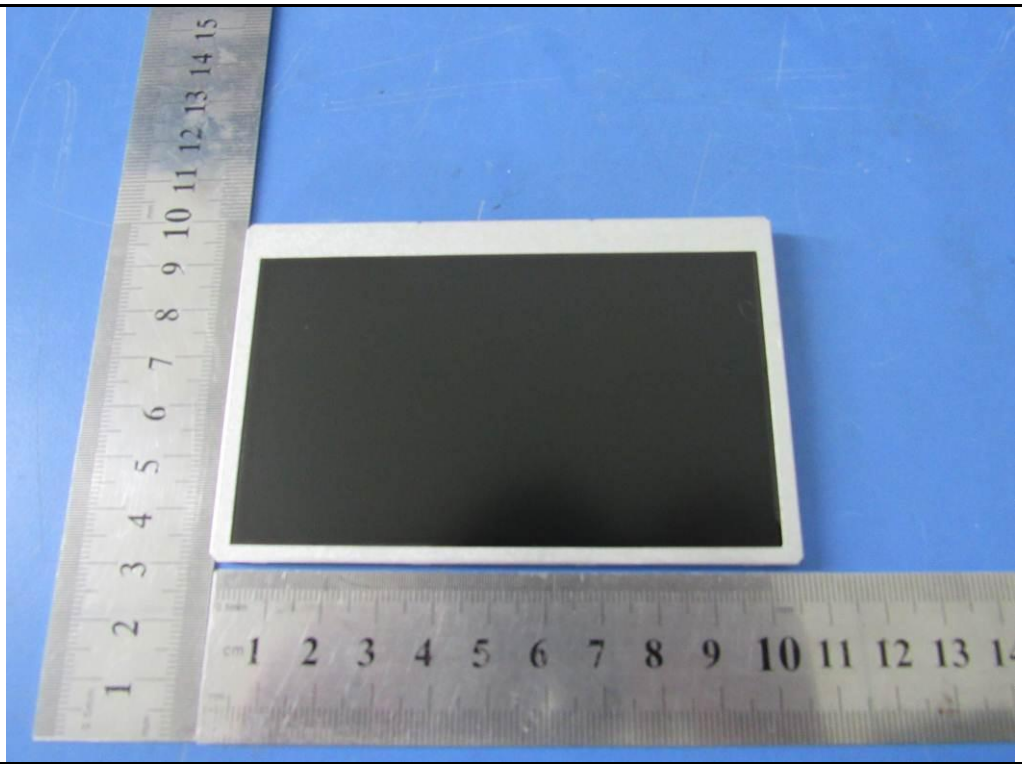
EUT PCB3 – Rear View



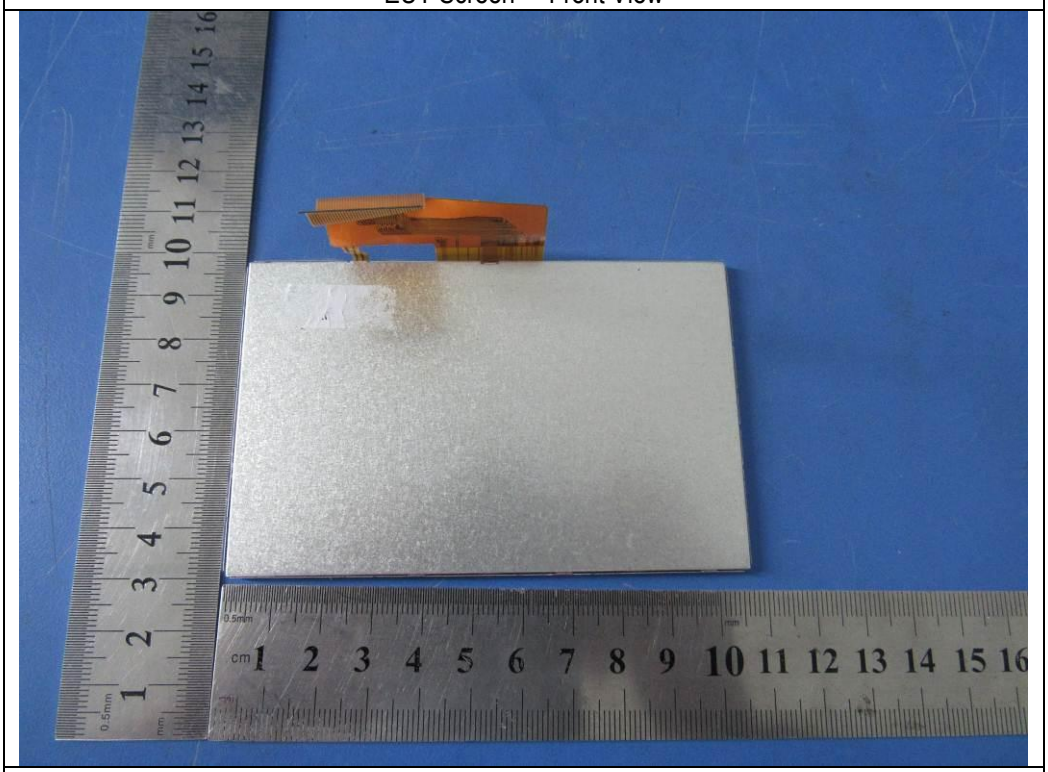
EUT PCB4 – Front View



EUT PCB4 – Rear View



EUT Screen – Front View

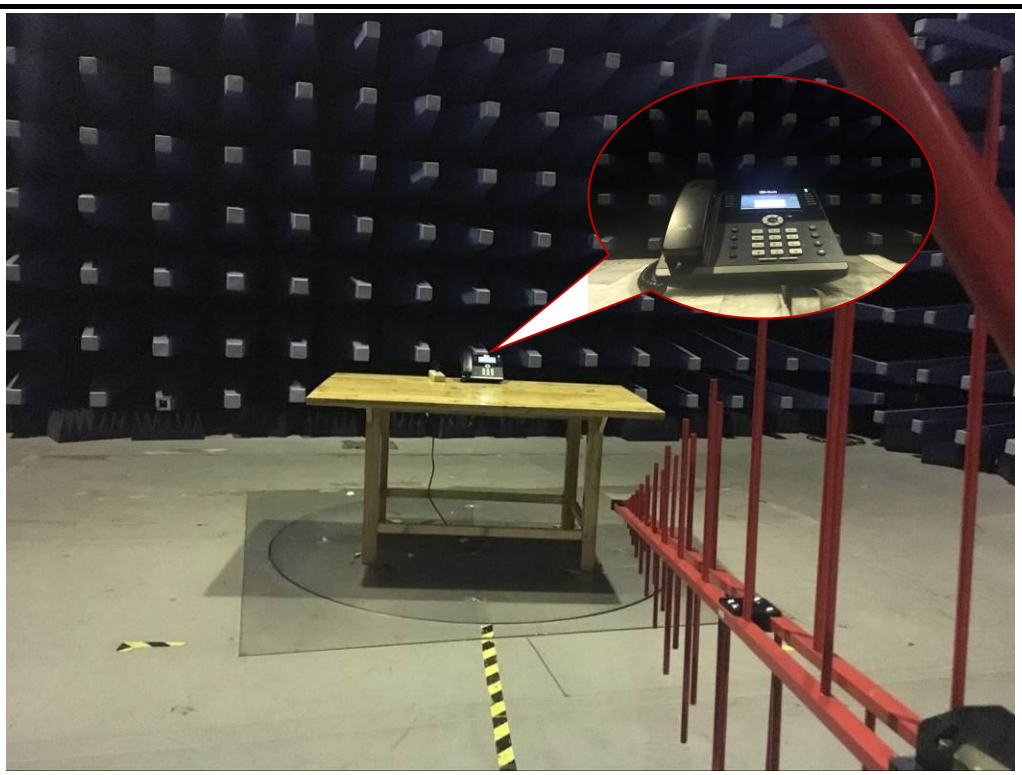


EUT Screen – Rear View

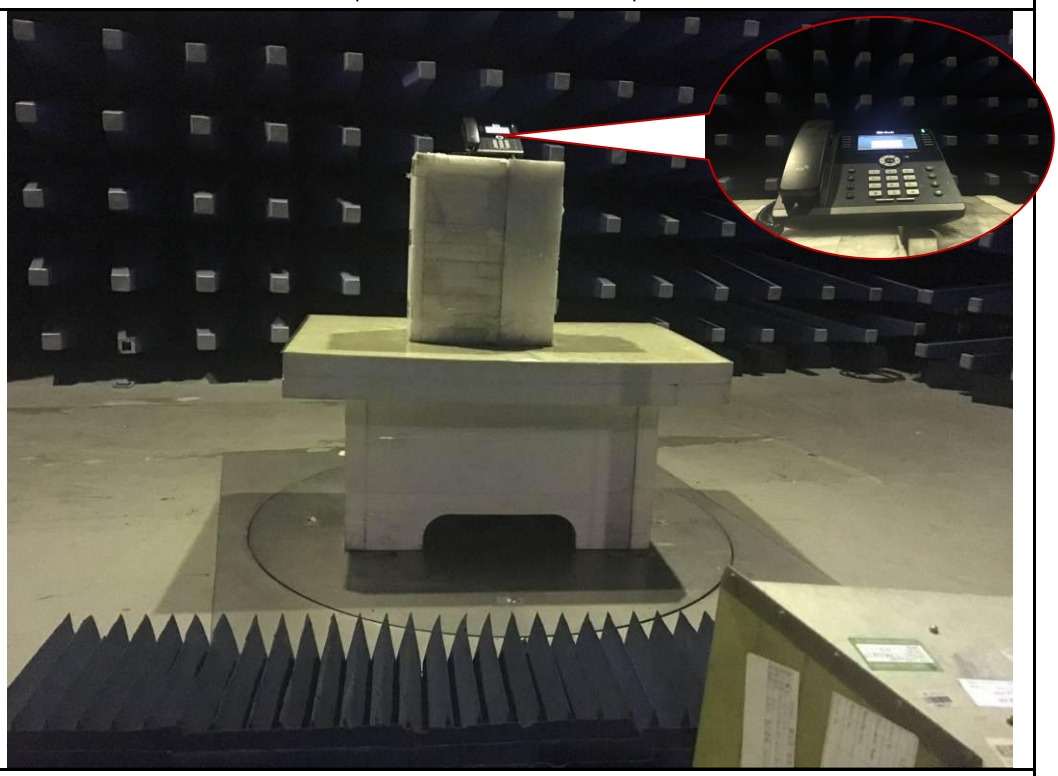
Annex B.iii. Photograph: Test Setup Photo

Conducted Emissions Test Setup Front View

Conducted Emissions Test Setup Side View



Radiated Spurious Emissions Test Setup Below 1GHz

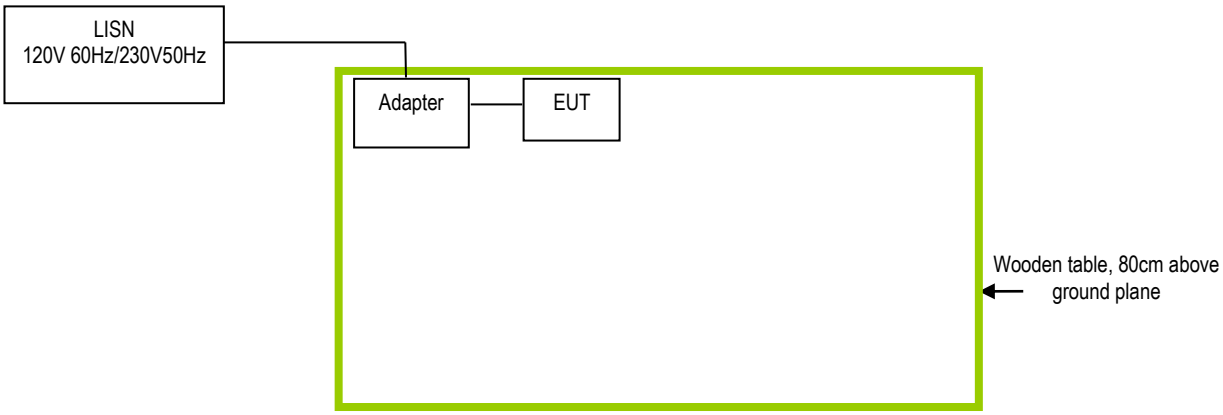


Radiated Spurious Emissions Test Setup Above 1GHz

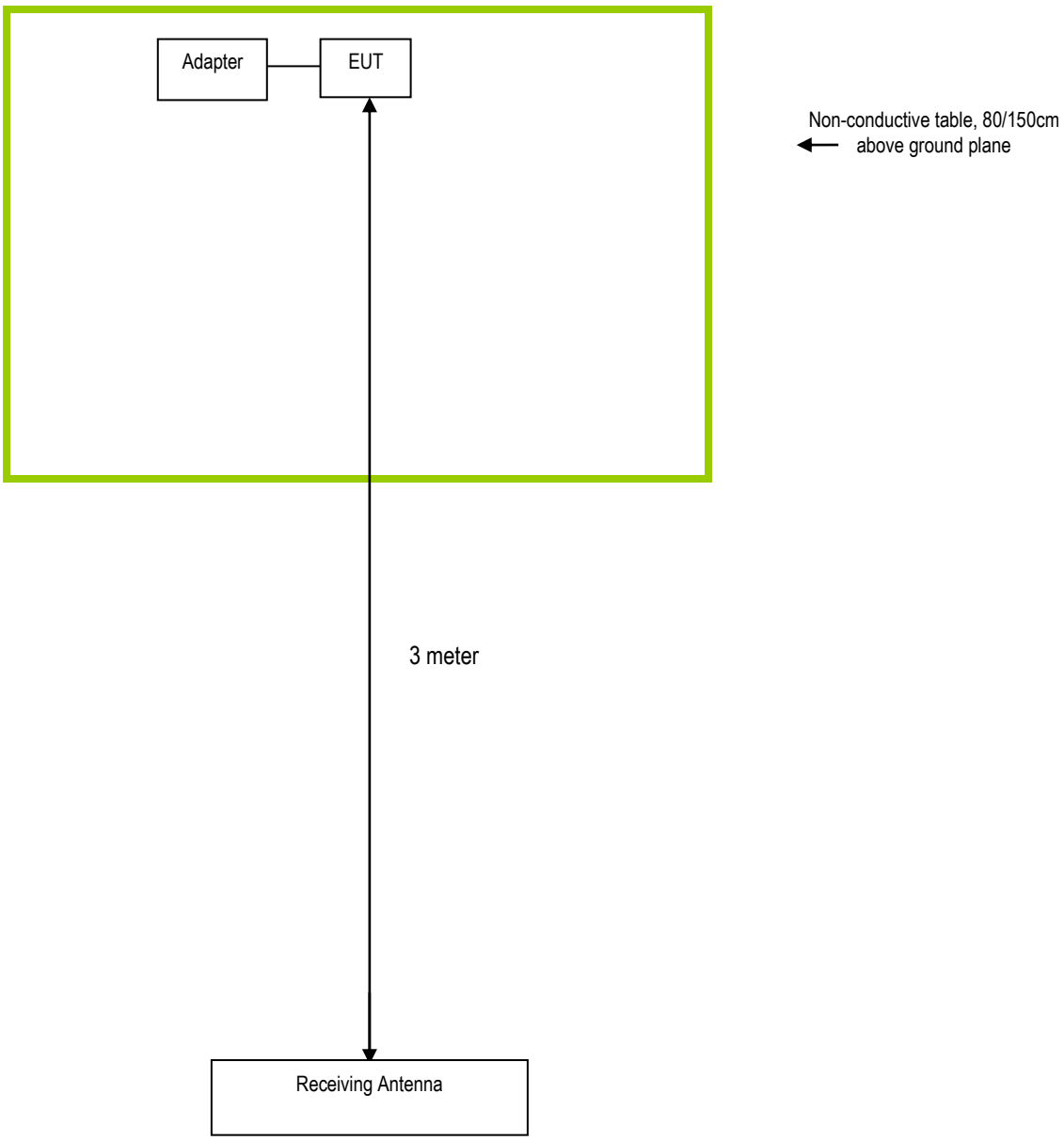
Annex C. TEST SETUP AND SUPPORTING EQUIPMENT

Annex C.i. TEST SET UP BLOCK

Block Configuration Diagram for AC Line Conducted Emissions



Block Configuration Diagram for Radiated Emissions



Annex C. ii. SUPPORTING EQUIPMENT DESCRIPTION

The following is a description of supporting equipment and details of cables used with the EUT.

Manufacturer	Equipment Description	Model	Calibration Date	Calibration Due Date
N/A	N/A	N/A	N/A	N/A

Annex D. User Manual / Block Diagram / Schematics / Partlist

Please see attachment

Annex E. DECLARATION OF SIMILARITY

Nanjing Hanlong Technology Co., Ltd.

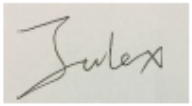
Statement

Model number: UC926E，UC924E

FCC ID: 2ACUGUC926ESERIAL

We hereby state that UC926E，UC924E are identical in interior structure, electrical circuits and components, and just model names 、the number of account keys and screen sizes are different.

Your assistance on this matter is highly appreciated.
Sincerely,

Signature: 
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