FCC TEST REPORT

According to

47 CFR, Part 2, Part 15B, CISPR PUB. 22

Applicant	: Snapchat, Inc.
Address	: 63 Market Street, Venice, CA 90291, USA
Equipment	: Spectacles
Model No.	: 001
Brand name	: Snapchat
FCC ID	: 2AIRN-001

I HEREBY CERTIFY THAT :

The sample was received on Aug 19, 2016 and the testing was carried out on Aug 25, 2016 at Cerpass Technology Corp. The test result refers exclusively to the test presented test model / sample. Without written approval of Cerpass Technology Corp., the test report shall not be reproduced except in full.

Approved by:

Ray Chou
EMC/RF B.U. Assistant Manager

FCC TEST REPORT

Issued by:

Cerpass Technology Co.,Ltd

No.10, Lane 2, Lianfu Street, Luzhu Township, Taoyuan County 33848, Taiwan(R.O.C.)

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The test record, data evaluation & Equipment. Under Test configurations represented herein are true and accurate accounts of the measurements of the samples EMC characteristics under the conditions specified in this report.

Laboratory Accreditation:

☒ Cerpass Technology Corporation Test Laboratory

NVLAP LAB Code:	**200954-0**
TAF LAB Code:	**1439**

Contents

History of this test report

■ ORIGINAL.

☐ Additional attachment as following record:

Report No	Version	Date	Description
SEFD1608091	Rev 01	Aug 31, 2016	Initial Issue

1. Summary of Test Procedure and Test Result

1.1. Applicable Standards

The measurements shown in this test report were made in accordance with the procedures given in ANSI C63.4 – 2014 and the energy emitted by this equipment was passed Part 2, Part 15, CISPR PUB. 22.

The energy emitted by this equipment was passed both Radiated and Conducted Emissions Class B limits.

Test Item	Normative References	Test Result	Remarks
Conducted Emission	ANSI C63.4-2014 FCC Part 15 Subpart B	PASS	Meets Class B Limit Minimum passing margin(QP) is-13.74dB at 0.1900MHz
Radiated Emission	ANSI C63.4-2014 FCC Part 15 Subpart B	PASS	Meets Class B Limit Minimum passing margin(QP) is-4.35dB at 791.2500MHz

2. Test Configuration of Equipment under Test

2.1. Feature of Equipment under Test

Please refer to SESF1608091 page 5.

2.2. Test Manner

a. During testing, the interface cables and equipment positions were varied according to ANSI C63.4.

b. The complete test system included Notebook PC, Mobile phone and EUT for EMI test.

c. During the test, setup up the EUT and all system, turn on the power of all Equipments.

d. Make the EUT at the test mode and it is normal operation, and then test.

The pre-test modes for CE:

Mode 1	Glass Charging with USB For Bluetooth low energy
Mode 2	Glass Charging with USB For Bluetooth And Bluetooth low energy
Mode 3	Glass Charging with USB For Bluetooth low energy And WIFI
Mode 4	Glass Charging with Case with USB For Bluetooth low energy
Mode 5	Glass Charging with Case with USB For Bluetooth And Bluetooth low energy
Mode 6	Glass Charging with Case with USB For Bluetooth low energy And WIFI

The final modes for CE:

Mode 3	Glass Charging with USB For Bluetooth low energy And WIFI
Mode 6	Glass Charging with Case with USB For Bluetooth low energy And WIFI

The pre-test modes for RE:

Mode 1	Glass Charging with USB For Bluetooth low energy
Mode 2	Glass Charging with USB For Bluetooth And Bluetooth low energy
Mode 3	Glass Charging with USB For Bluetooth low energy And WIFI
Mode 4	Glass Charging with Case with USB For Bluetooth low energy
Mode 5	Glass Charging with Case with USB For Bluetooth And Bluetooth low energy
Mode 6	Glass Charging with Case with USB For Bluetooth low energy And WIFI
Mode 7	Glass For Bluetooth low energy
Mode 8	Glass For Bluetooth And Bluetooth low energy
Mode 9	Glass For Bluetooth low energy And WIFI
Mode 10	Glass Charging with Case For Bluetooth low energy
Mode 11	Glass Charging with Case For Bluetooth And Bluetooth low energy
Mode 12	Glass Charging with Case For Bluetooth low energy And WIFI

The final modes for RE:

Mode 3	Glass Charging with USB For Bluetooth low energy And WIFI
Mode 6	Glass Charging with Case with USB For Bluetooth low energy And WIFI

Mode 9 Glass For Bluetooth low energy And WIFI

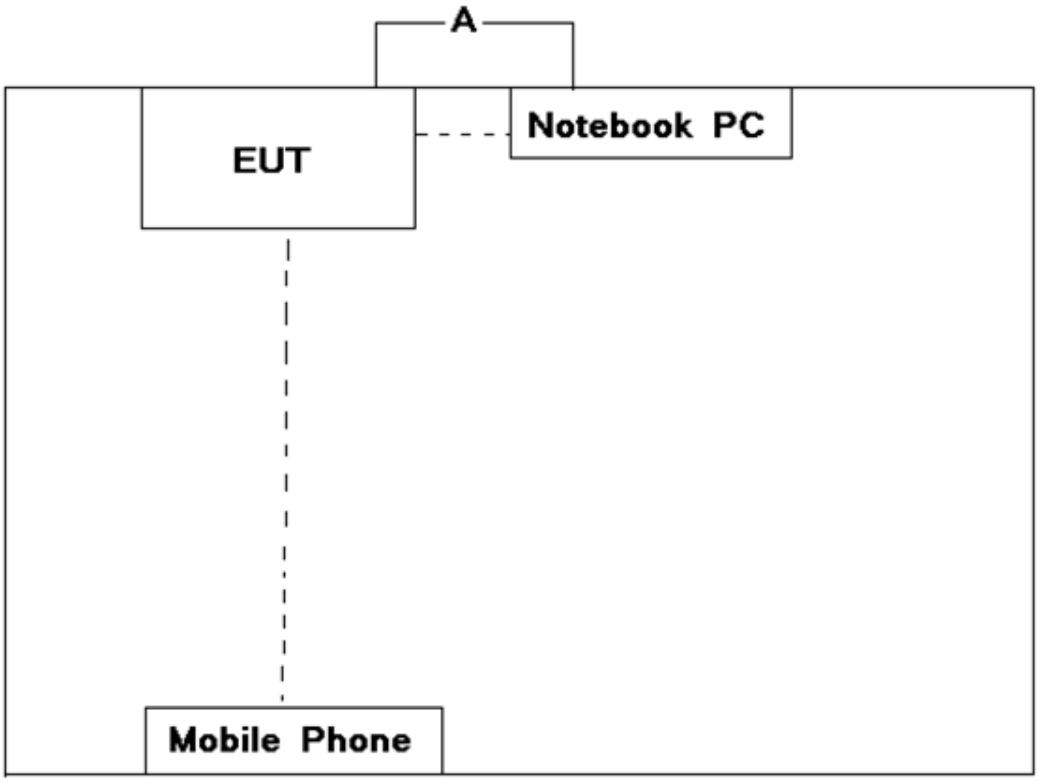
Mode 12 Glass Charging with Case For Bluetooth low energy And WIFI

2.3. Description of Support Unit

No.	Device	Manufacturer	Model No.	Description
1	Notebook PC	DELL	Vostro 3560	R31199
2	Mobile phone	HONGMI	HM NOTE 1W	N/A

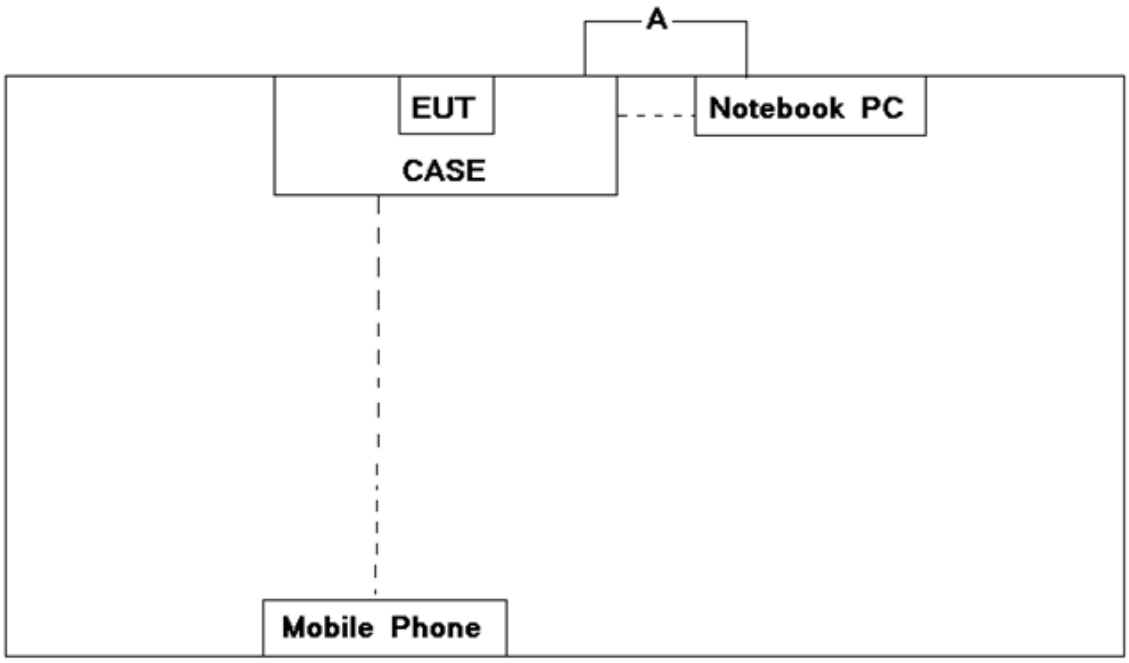
2.4. Connection Diagram of Test System

Mode 3



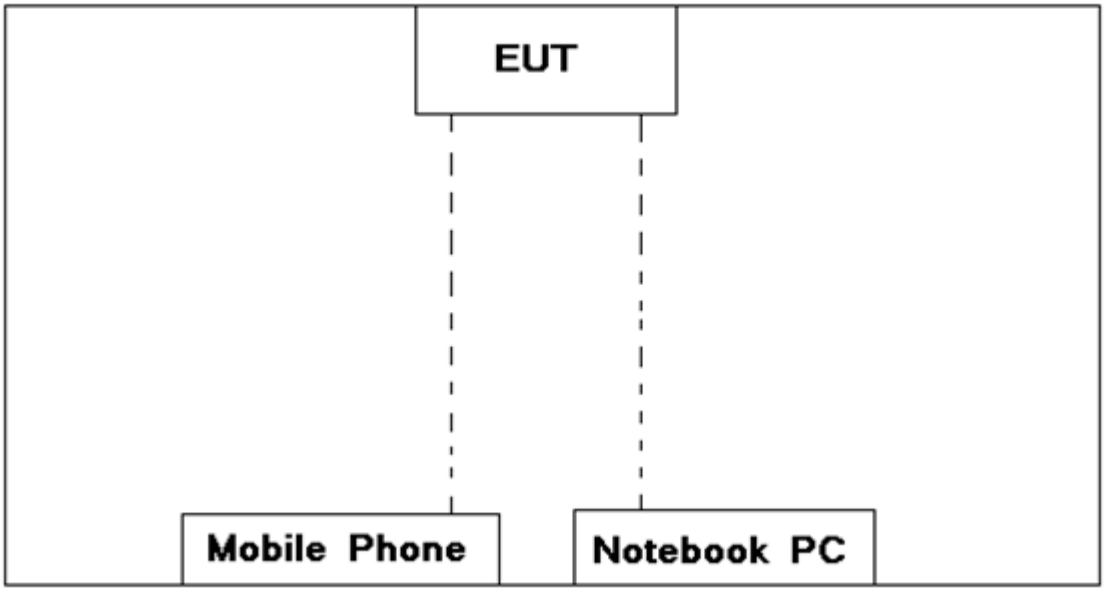
No.	Cable	Quantity	Description
A	USB Cable	1	Non-Shielded, 1.0m

Mode 6

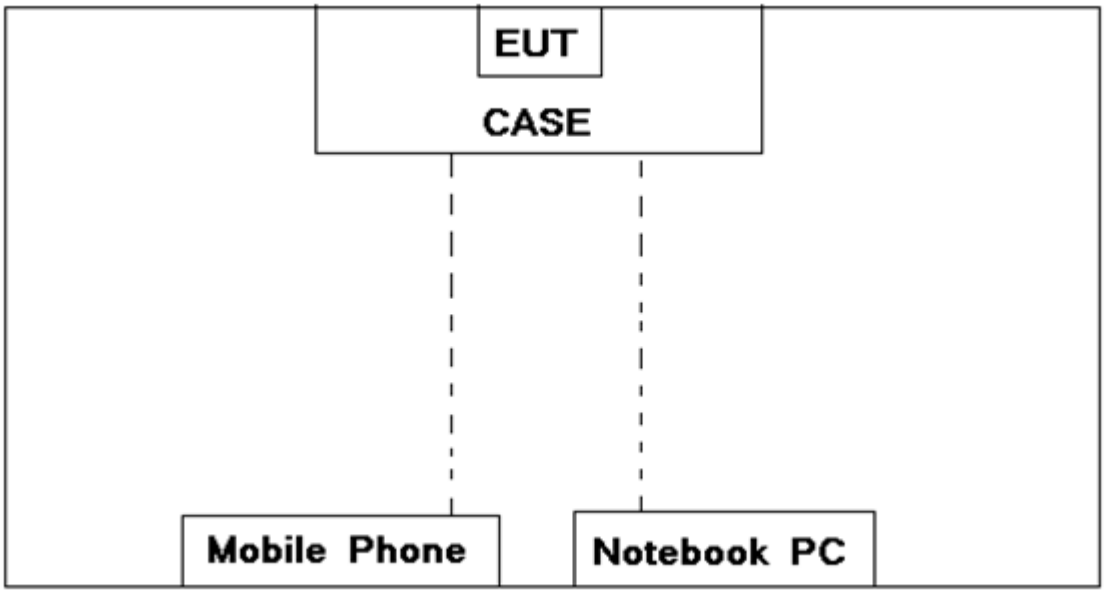


No.	Cable	Quantity	Description
A	USB Cable	1	Non-Shielded, 1.0m

Mode 9



Mode 12



2.5. General Information of Test

Test Site :	**Cerpass Technology Corporation Test Laboratory** Address: No.10, Ln. 2, Lianfu St., Luzhu Dist., Taoyuan City 33848, Taiwan (R.O.C.) Tel:+886-3-3226-888 Fax:+886-3-3226-881 Address: No.68-1, Shihbachongsi, Shihding Township, New Taipei City 223, Taiwan, R.O.C. Tel: +886-2-2663-8582
FCC Registration Number :	TW1079, TW1061,390316, 228391, 641184
IC Registration Number :	4934B-1, 4934E-1, 4934E-2
VCCI	T-2205 for Telecommunication Test C-4663 for Conducted emission test R-3428, R-4218 for Radiated emission test G-812, G-813 for radiated disturbance above 1GHz
Frequency Range Investigated :	Conducted Emission Test: from 150 kHz to 30 MHz Radiated Emission Test: from 30 MHz to 18,000 MHz
Test Distance :	The test distance of radiated emission below 1GHz from antenna to EUT is 3 M. The test distance of radiated emission above 1GHz from antenna to EUT is 3 M.

2.6. Measurement Uncertainty

Measurement Item	Measurement Frequency	Polarization	Uncertainty
Conducted Emission	9 kHz ~ 30 MHz	LINE / NEUTRAL	3.25 dB
Radiated Emission	30 MHz ~ 1,000 MHz	Vertical / Horizontal	3.93 dB
	1,000 MHz ~ 18,000 MHz	Vertical / Horizontal	5.18 dB

The measurement uncertainty will be considered, when test result margin to the limit.

3. Test of Conducted Emission

3.1. Test Limit

Conducted Emissions were measured from 150 kHz to 30 MHz with a bandwidth of 9 KHz on the 120 VAC power and return leads of the EUT according to the methods defined in ANSI C63.4-2009 Section 3.1. The EUT was placed on a nonmetallic stand in a shielded room 0.8 meters above the ground plane as shown in section 2.2. The interface cables and equipment positioning were varied within limits of reasonable applications to determine the position produced maximum conducted emissions.

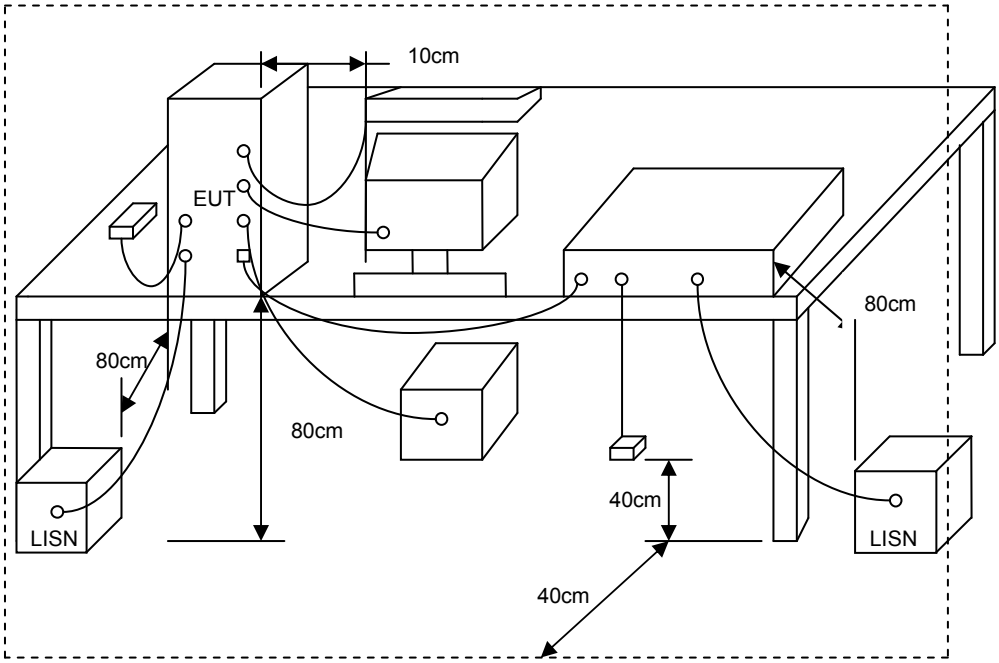
Conducted Emission Limits:

Frequency (MHz)	Quasi Peak (dB μ V)	Average (dB μ V)
0.15 – 0.5	66-56*	56-46*
0.5 – 5.0	56	46
5.0 – 30.0	60	50

3.2. Test Procedures

a. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
b. Connect EUT to the power mains through a line impedance stabilization network (LISN).
c. All the support units are connecting to the other LISN.
d. The LISN provides 50 ohm coupling impedance for the measuring instrument.
e. The FCC states that a 50 ohm, 50 micro-Henry LISN should be used.
f. Both sides of AC line were checked for maximum conducted interference.
g. The frequency range from 150 kHz to 30 MHz was searched.
h. Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

3.3. Typical test Setup

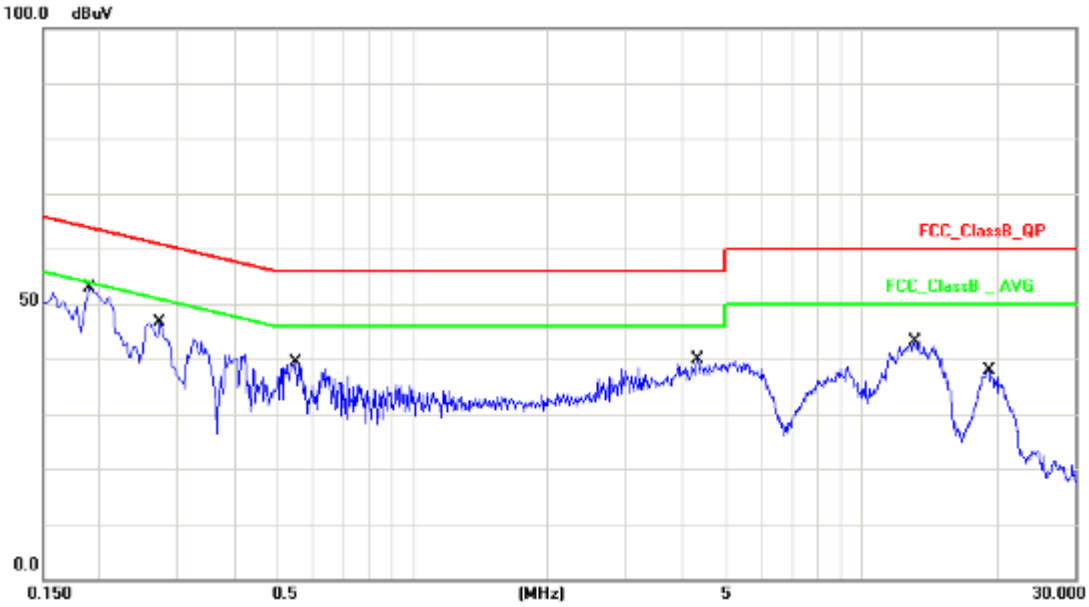


3.4. Measurement Equipment

Instrument/Ancillary	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date.
Test Receiver	R&S	ESCI	100565	2016.03.26	2017.03.25
AMN	R&S	ESH2-Z5	100182	2015.09.06	2016.09.05
Two-Line V-Network	R&S	ENV216	100325	/	/
ISN	FCC	FCC-TLISN-T2-02	20379	2016.03.26	2017.03.25
ISN	FCC	FCC-TLISN-T4-02	20380	2016.03.26	2017.03.25
ISN	FCC	FCC-TLISN-T8-02	20381	2016.03.26	2017.03.25
ISN	TESEQ	ISN ST08	30175	2016.03.26	2017.03.25
Current Probe	R&S	EZ-17	100303	2016.03.26	2017.03.25
Passive Voltage Probe	R&S	ESH2-Z3	100026	2016.03.26	2017.03.25
Pulse Limiter	R&S	ESH3-Z2	100529	2016.03.26	2017.03.25
Temperature/ Humidity Meter	Zhicheng	ZC1-11	CEP-TH-004	2016.03.29	2017.03.28
EZ-EMC	Fala	Ver CT3A1	N/A	N/A	N/A

3.5. Test Result and Data

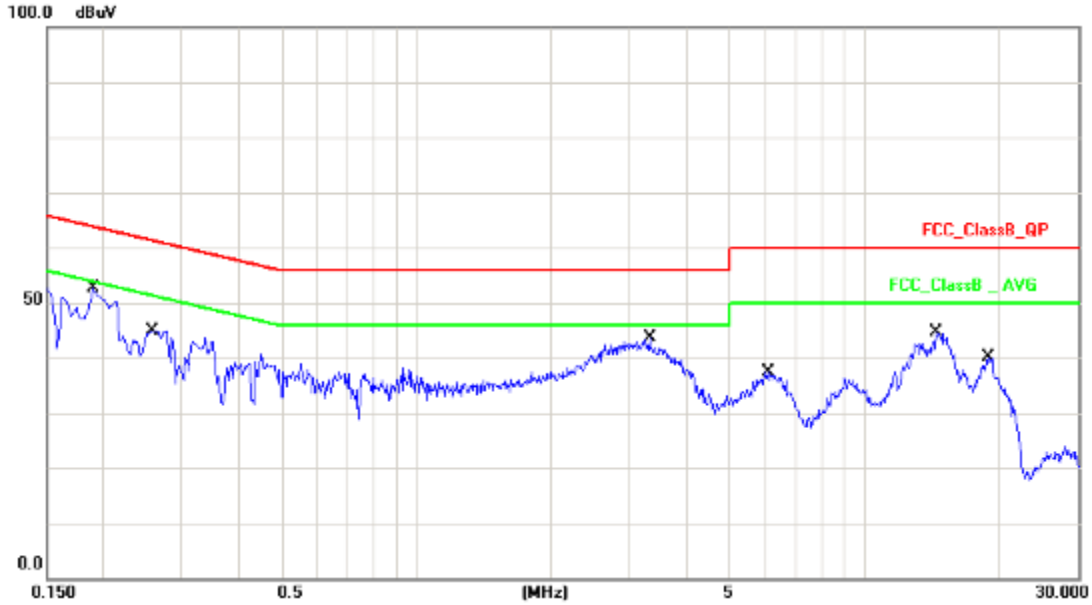
Test Mode :	Mode 3: Glass Charging with USB For Bluetooth low energy And WIFI		
AC Power :	AC 120V/60Hz	Phase :	LINE
Temperature :	26°C	Humidity :	50%
Pressure(mbar) :	1002	Date:	2016/08/20



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1900	10.12	40.17	50.29	64.03	-13.74	QP
2	0.1900	10.12	21.44	31.56	54.03	-22.47	AVG
3	0.2740	10.13	31.91	42.04	60.99	-18.95	QP
4	0.2740	10.13	15.31	25.44	50.99	-25.55	AVG
5	0.5500	10.16	23.86	34.02	56.00	-21.98	QP
6	0.5500	10.16	9.11	19.27	46.00	-26.73	AVG
7	4.3260	10.22	22.74	32.96	56.00	-23.04	QP
8	4.3260	10.22	14.86	25.08	46.00	-20.92	AVG
9	13.2220	10.42	26.08	36.50	60.00	-23.50	QP
10	13.2220	10.42	19.68	30.10	50.00	-19.90	AVG
11	19.2620	10.37	22.72	33.09	60.00	-26.91	QP
12	19.2620	10.37	16.77	27.14	50.00	-22.86	AVG

Note: Measurement Level = Reading Level + Correct Factor

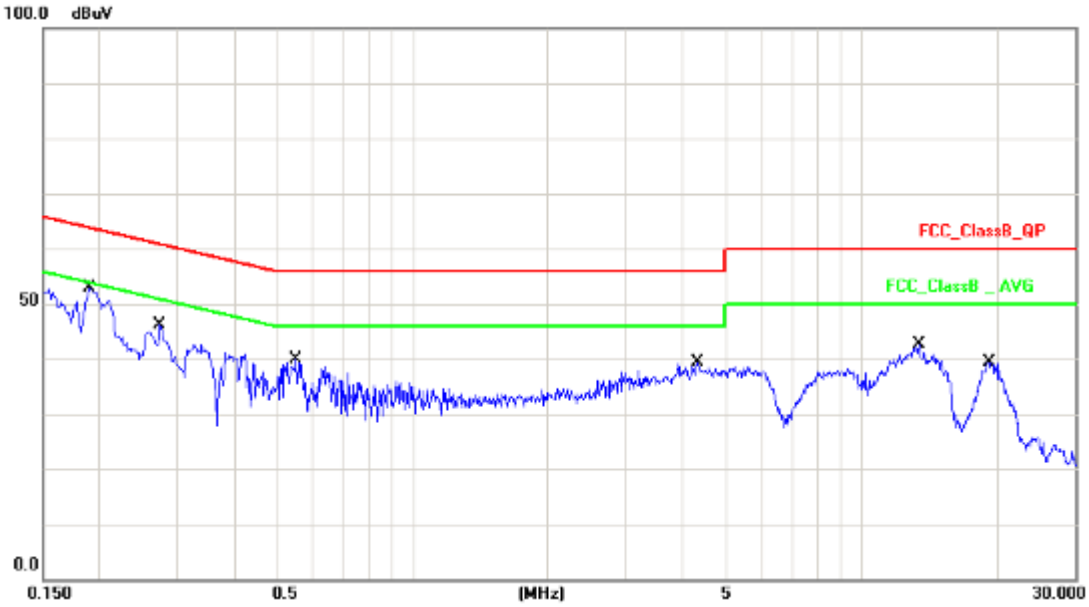
Test Mode :	Mode 3: Glass Charging with USB For Bluetooth low energy And WIFI		
AC Power :	AC 120V/60Hz	Phase :	NEUTRAL
Temperature :	26°C	Humidity :	50%
Pressure(mbar) :	1002	Date:	2016/08/20



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1900	10.13	39.30	49.43	64.03	-14.60	QP
2	0.1900	10.13	21.08	31.21	54.03	-22.82	AVG
3	0.2580	10.13	31.97	42.10	61.49	-19.39	QP
4	0.2580	10.13	16.78	26.91	51.49	-24.58	AVG
5	3.3220	10.21	26.74	36.95	56.00	-19.05	QP
6	3.3220	10.21	18.33	28.54	46.00	-17.46	AVG
7	6.0900	10.27	21.41	31.68	60.00	-28.32	QP
8	6.0900	10.27	16.19	26.46	50.00	-23.54	AVG
9	14.4980	10.50	27.42	37.92	60.00	-22.08	QP
10	14.4980	10.50	22.13	32.63	50.00	-17.37	AVG
11	18.8940	10.46	25.14	35.60	60.00	-24.40	QP
12	18.8940	10.46	18.90	29.36	50.00	-20.64	AVG

Note: Measurement Level = Reading Level + Correct Factor

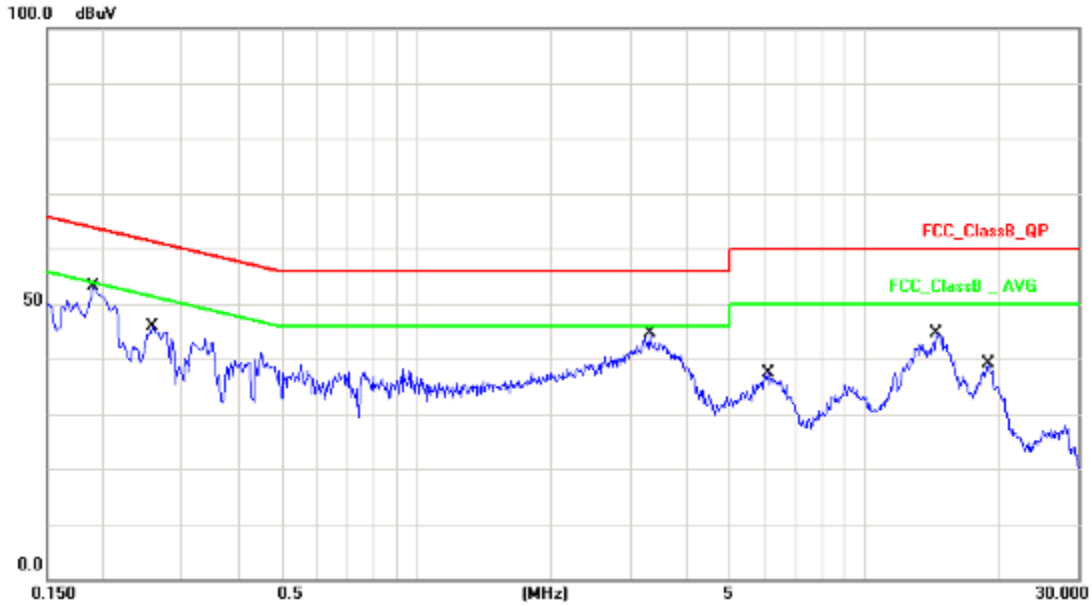
Test Mode :	Mode 6: Glass Charging with Case with USB For Bluetooth low energy And WIFI		
AC Power :	AC 120V/60Hz	Phase :	LINE
Temperature :	26°C	Humidity :	50%
Pressure(mbar) :	1002	Date:	2016/08/20



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1900	10.12	39.68	49.80	64.03	-14.23	QP
2	0.1900	10.12	22.03	32.15	54.03	-21.88	AVG
3	0.2740	10.13	30.57	40.70	60.99	-20.29	QP
4	0.2740	10.13	16.22	26.35	50.99	-24.64	AVG
5	0.5500	10.16	24.16	34.32	56.00	-21.68	QP
6	0.5500	10.16	10.20	20.36	46.00	-25.64	AVG
7	4.3260	10.22	23.51	33.73	56.00	-22.27	QP
8	4.3260	10.22	15.44	25.66	46.00	-20.34	AVG
9	13.4419	10.44	16.84	27.28	60.00	-32.72	QP
10	13.4419	10.44	20.13	30.57	50.00	-19.43	AVG
11	19.2620	10.37	21.06	31.43	60.00	-28.57	QP
12	19.2620	10.37	17.84	28.21	50.00	-21.79	AVG

Note: Measurement Level = Reading Level + Correct Factor

Test Mode :	Mode 6: Glass Charging with Case with USB For Bluetooth low energy And WIFI		
AC Power :	AC 120V/60Hz	Phase :	NEUTRAL
Temperature :	26°C	Humidity :	50%
Pressure(mbar) :	1002	Date:	2016/08/20



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1900	10.13	38.99	49.12	64.03	-14.91	QP
2	0.1900	10.13	22.01	32.14	54.03	-21.89	AVG
3	0.2580	10.13	32.51	42.64	61.49	-18.85	QP
4	0.2580	10.13	17.06	27.19	51.49	-24.30	AVG
5	3.3220	10.21	27.51	37.72	56.00	-18.28	QP
6	3.3220	10.21	19.32	29.53	46.00	-16.47	AVG
7	6.0900	10.27	22.03	32.30	60.00	-27.70	QP
8	6.0900	10.27	17.52	27.79	50.00	-22.21	AVG
9	14.4980	10.50	28.33	38.83	60.00	-21.17	QP
10	14.4980	10.50	23.16	33.66	50.00	-16.34	AVG
11	18.8940	10.46	25.71	36.17	60.00	-23.83	QP
12	18.8940	10.46	19.05	29.51	50.00	-20.49	AVG

Note: Measurement Level = Reading Level + Correct Factor

Test engineer: Dean

4. Test of Radiated Emission

4.1. Test Limit

Below 1GHz (for digital device)

For unintentional device, according to CISPR PUB.22, for Class B digital devices, the general requirement of field strength of radiated emissions from intentional radiators at a distance of 10 meters shall not exceed the below table.

FREQUENCY (MHz)	dBuV/m (At 10m)	
	Class A	Class B
30 ~ 230	40	30
230 ~ 1000	47	37

Limit tables for non-digital device:

Class A Radiated Emission limit at 10m (for others)

Frequency (MHZ)	Field Strength Limit (uV/m)Q.P.	Field Strength Limit (dBuV/m)Q.P.
30 - 88	90	39
88 - 216	150	43.5
216 – 960	210	46.4
Above 960	300	49.5

Class B Radiated Emission limit at 3m (for others)

Frequency (MHZ)	Field Strength Limit (uV/m)Q.P.	Field Strength Limit (dBuV/m)Q.P.
30 - 88	100	40
88 - 216	150	43.5
216 – 960	200	46
Above 960	500	54

Above 1GHz(for all device)

Frequency (MHZ)	Class A (dBuV/m) (At 10m)		Class B (dBuV/m) (At 3m)	
	Average	Peak	Average	Peak
Above 1000	49.5	69.5	54	74

NOTE: (1) The lower limit shall apply at the transition frequencies.
(2) Emission level (dBuV/m) = 20 log Emission level (uV/m).
(3) The measurement above 1GHz is at close-in distances 3m,and determine the limit L2 corresponding to the close-in distance d2 by applying the following relation: L2 = L1 (d1/d2), where L1 is the specified limit in microvolts per metre (uV/m) at the distance d1 (10m), L2 is the new limit for distance d2 (3m).
So the new Class A limit above 1GHz at 3m is as following table:

Frequency (MHZ)	Class A (dBuV/m) (At 3m)	
	Average	Peak
Above 1000	60	80

According to FCC Part 15.33 (b), for an unintentional radiator, including a digital device, the spectrum shall be investigated from the lowest radio frequency signal generated or used in the device, without going below the lowest frequency for which a radiated emission limit is specified, up to the frequency shown in the following table:

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.75	30
1.75-108	1000
108-500	2000
500-1000	5000
Above 1000	5^{th} harmonic of the highest frequency or 40GHz, whichever is lower

4.2. Test Procedures

Procedure of Preliminary Test

- The equipment was set up as per the test configuration to simulate typical 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. When the EUT is a floor standing equipment, it is placed on the ground plane which has a 15 cm non-conductive covering to insulate the EUT from the ground plane.
- Support equipment, if needed, was placed as per ANSI C63.4.
- All I/O cables were positioned to simulate typical usage as per ANSI C63.4.
- The EUT received AC 120VAC/60Hz power source from the outlet socket under the turntable. All support equipment power received from another socket under the turntable.
- The antenna was placed at 3 or 10 meter away from the EUT as stated in ANSI C63.4. The antenna connected to the Spectrum Analyzer via a cable and at times a pre-amplifier would be used.
- The Analyzer / Receiver quickly scanned from 30MHz to 40GHz. 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.

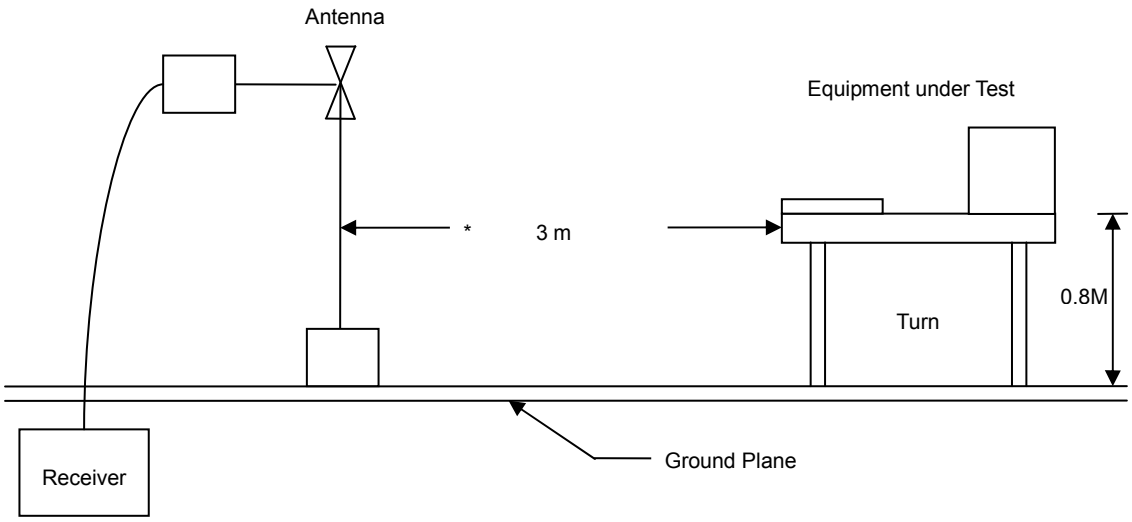
- Set the spectrum analyzer/ Receiver in the following setting as:
  Below 1GHz:
  RBW=120KHz / VBW=300KHz / Sweep=AUTO
  Above 1GHz:
  Peak: RBW=1MHz, VBW=3MHz / Sweep=AUTO
  Average: RBW=1MHz / VBW=1Hz / Sweep=AUTO
- The worst configuration of EUT and cable of the above highest emission level were recorded for reference of the final test.

Procedure of Final Test

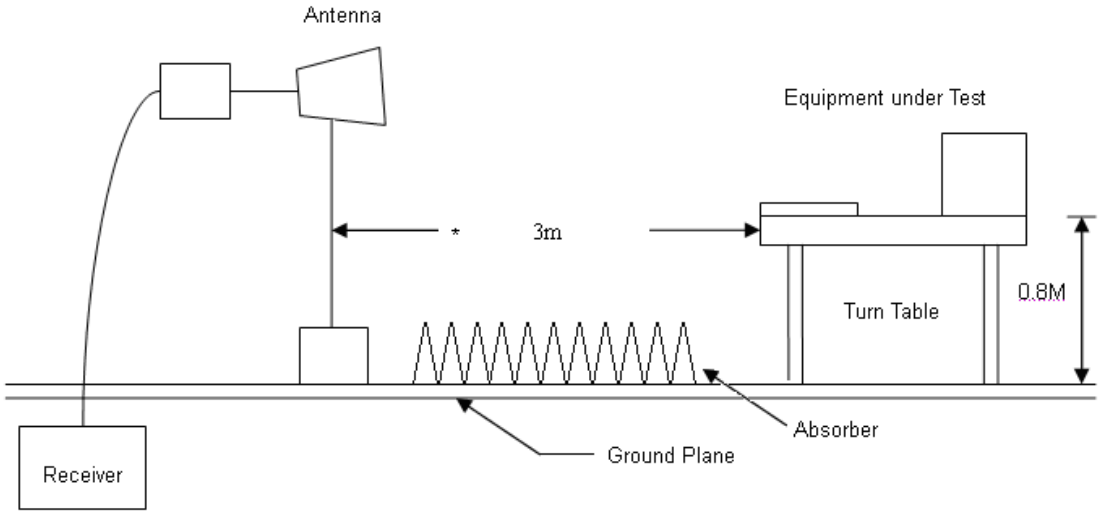
- EUT and support equipment were set up on the turntable as per the configuration with highest emission level in the preliminary test.
- The Analyzer / Receiver scanned from 30MHz to 40GHz. Emissions were scanned and measured rotating the EUT to 360 degrees, varying cable placement and positioning the antenna 1 or 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.
- Recording 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. Below 1GHz the Q.P. reading and above 1GHz the Peak and Average reading are presented.
- The test data of the worst-case condition(s) was recorded.

4.3. Typical test Setup

Below 1GHz Test Setup



Above 1GHz Test Setup

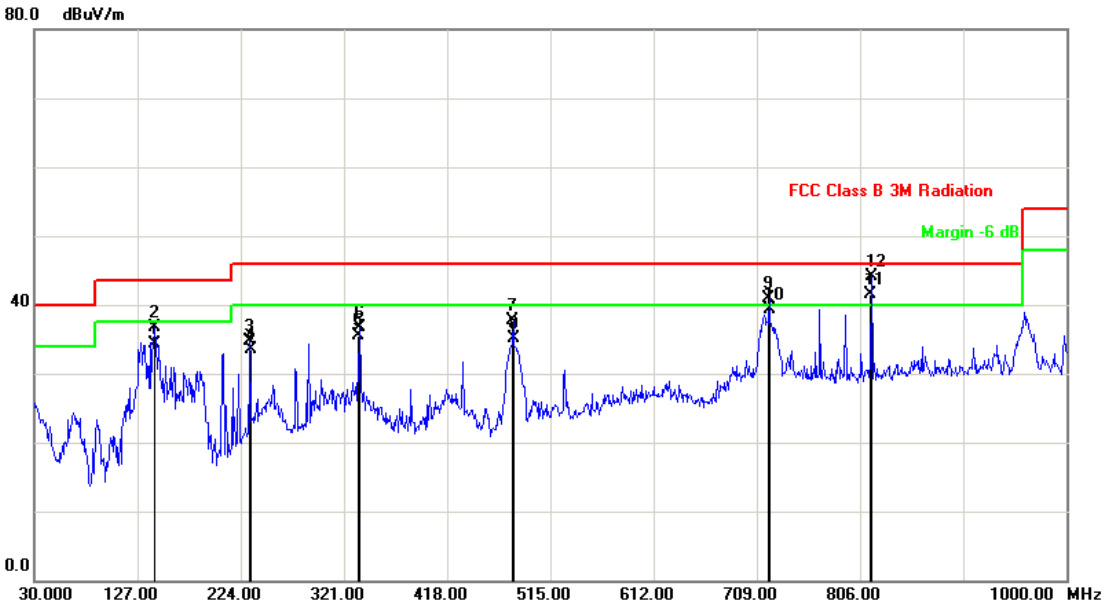


4.4. Measurement Equipment

Instrument/Ancillary	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date.
EMI Test Receiver	R&S	ESCI	101183	2016.03.26	2017.03.25
Preamplifier	songyi	EM330	60618	2016.03.26	2017.03.25
Preamplifier	Agilent	8449B	3008A02342	2016.03.26	2017.03.25
Bilog Antenna	Sunol Science	JB1	A072414-1	2016.04.16	2017.04.15
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	9120D-618	2016.04.16	2017.04.15
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	9170-347	2016.04.16	2017.04.15
Preamplifier	COM-POWER	PA-840	711885	2016.03.26	2017.03.25
Spectrum Analyzer	R&S	FSP40	100324	2016.03.26	2017.03.25
Temperature/ Humidity Meter	Zhicheng	ZC1-11	CEP-TH-002	2016.03.29	2017.03.28
EZ-EMC	Fala	Ver CT3A1	N/A	N/A	N/A

4.5. Test Result and Data (30MHz~1GHz)

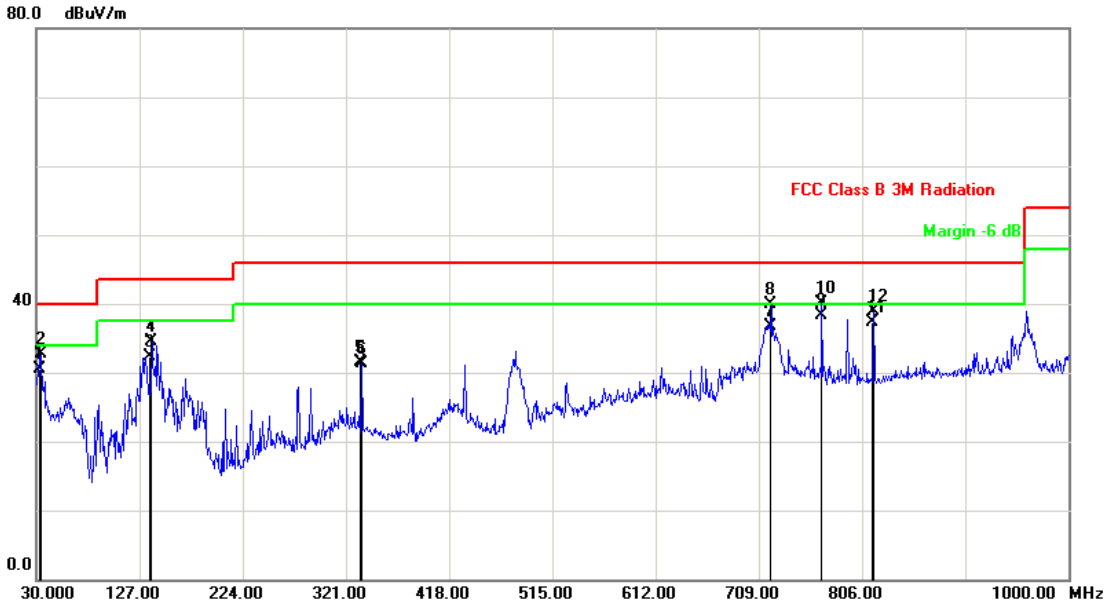
Test Mode :	Mode 3: Glass Charging with USB For Bluetooth low energy And WIFI		
AC Power :	AC 120V/60Hz	Ant. Polarization:	Horizontal
Temp :	25℃	Humidity :	53%
Pressure(mbar) :	1002	Date :	2016/08/25



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	143.4000	-7.77	42.03	34.26	43.50	-9.24	QP	200	65
2	143.4900	-7.77	44.45	36.68	43.50	-6.82	peak	200	163
3	232.7299	-12.02	46.79	34.77	46.00	-11.23	peak	100	265
4	233.2500	-12.01	45.45	33.44	46.00	-12.56	QP	100	23
5	334.2560	-6.48	42.02	35.54	46.00	-10.46	QP	100	2
6	335.5500	-6.50	43.23	36.73	46.00	-9.27	peak	100	177
7	480.0799	-6.19	43.81	37.62	46.00	-8.38	peak	200	206
8	481.2000	-6.11	41.26	35.15	46.00	-10.85	QP	200	360
9	720.6399	1.39	39.47	40.86	46.00	-5.14	peak	100	223
10	721.2000	1.40	37.86	39.26	46.00	-6.74	QP	100	30
11	815.9909	0.94	40.63	41.57	46.00	-4.43	QP	100	200
12	816.6699	0.94	43.24	44.18	46.00	-1.82	peak	100	256

Note: Measurement Level = Reading Level + Correct Factor

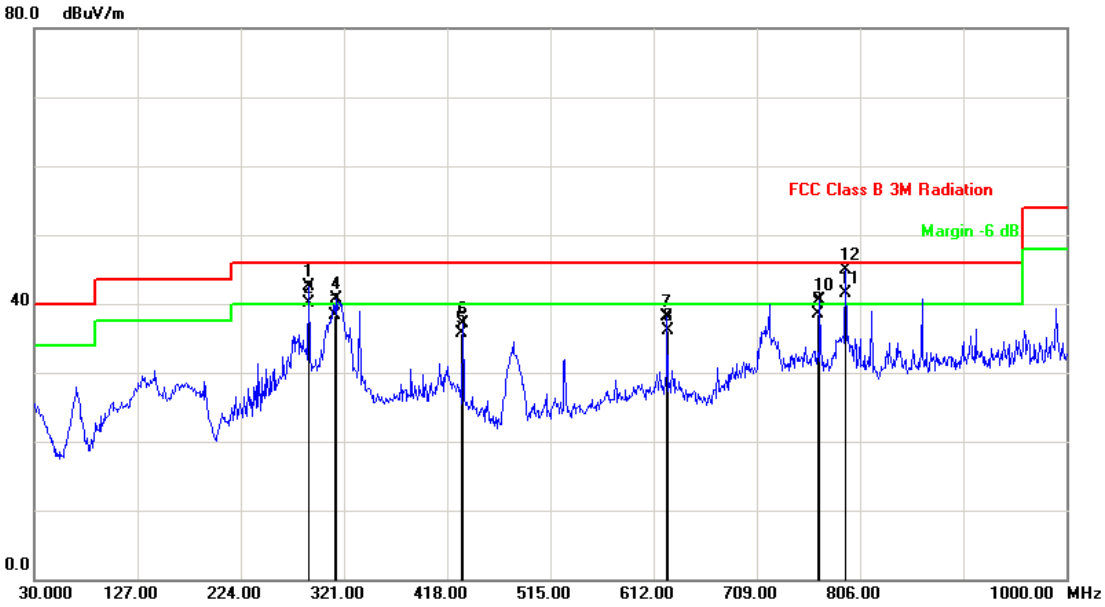
Test Mode :	Mode 3: Glass Charging with USB For Bluetooth low energy And WIFI		
AC Power :	AC 120V/60Hz	Ant. Polarization:	Vertical
Temp :	25℃	Humidity :	53%
Pressure(mbar) :	1002	Date :	2016/08/25



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	33.5800	-3.83	34.36	30.53	40.00	-9.47	QP	144	321
2	33.8800	-3.94	36.62	32.68	40.00	-7.32	peak	144	0
3	137.2560	-8.10	40.36	32.26	43.50	-11.24	QP	100	36
4	138.6399	-7.97	42.40	34.43	43.50	-9.07	peak	100	84
5	334.2600	-6.48	37.98	31.50	46.00	-14.50	QP	200	138
6	335.5500	-6.50	37.76	31.26	46.00	-14.74	peak	200	224
7	720.2560	1.39	35.26	36.65	46.00	-9.35	QP	100	360
8	720.6399	1.39	38.46	39.85	46.00	-6.15	peak	100	4
9	767.2560	0.95	37.31	38.26	46.00	-7.74	QP	100	330
10	768.1699	0.93	39.24	40.17	46.00	-5.83	peak	100	81
11	815.6500	0.93	36.33	37.26	46.00	-8.74	QP	100	31
12	816.6699	0.94	37.90	38.84	46.00	-7.16	peak	100	15

Note: Measurement Level = Reading Level + Correct Factor

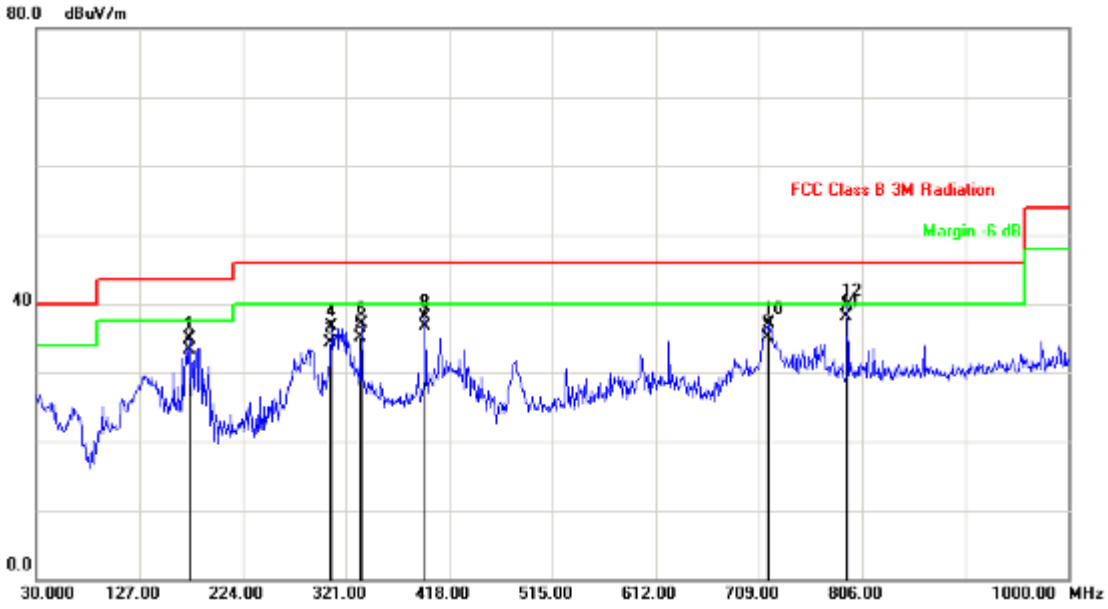
Test Mode :	Mode 6: Glass Charging with Case with USB For Bluetooth low energy And WIFI		
AC Power :	AC 120V/60Hz	Ant. Polarization:	Horizontal
Temp :	25℃	Humidity :	53%
Pressure(mbar) :	1002	Date :	2016/08/25



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	288.0200	-8.70	51.29	42.59	46.00	-3.41	peak	100	254
2	288.2600	-8.69	48.79	40.10	46.00	-5.90	QP	100	51
3	312.2560	-7.03	45.29	38.26	46.00	-7.74	QP	100	146
4	313.2400	-6.93	47.60	40.67	46.00	-5.33	peak	100	21
5	431.2650	-4.48	40.28	35.80	46.00	-10.20	QP	100	28
6	432.5500	-4.61	41.76	37.15	46.00	-8.85	peak	100	320
7	624.6100	-1.47	39.64	38.17	46.00	-7.83	peak	200	65
8	625.2000	-1.49	37.64	36.15	46.00	-9.85	QP	200	24
9	767.1500	0.95	37.53	38.48	46.00	-7.52	QP	200	187
10	768.1700	0.93	39.66	40.59	46.00	-5.41	peak	200	31
11	791.9930	0.73	40.77	41.50	46.00	-4.50	QP	200	239
12	792.4200	0.74	44.07	44.81	46.00	-1.19	peak	200	177

Note: Measurement Level = Reading Level + Correct Factor

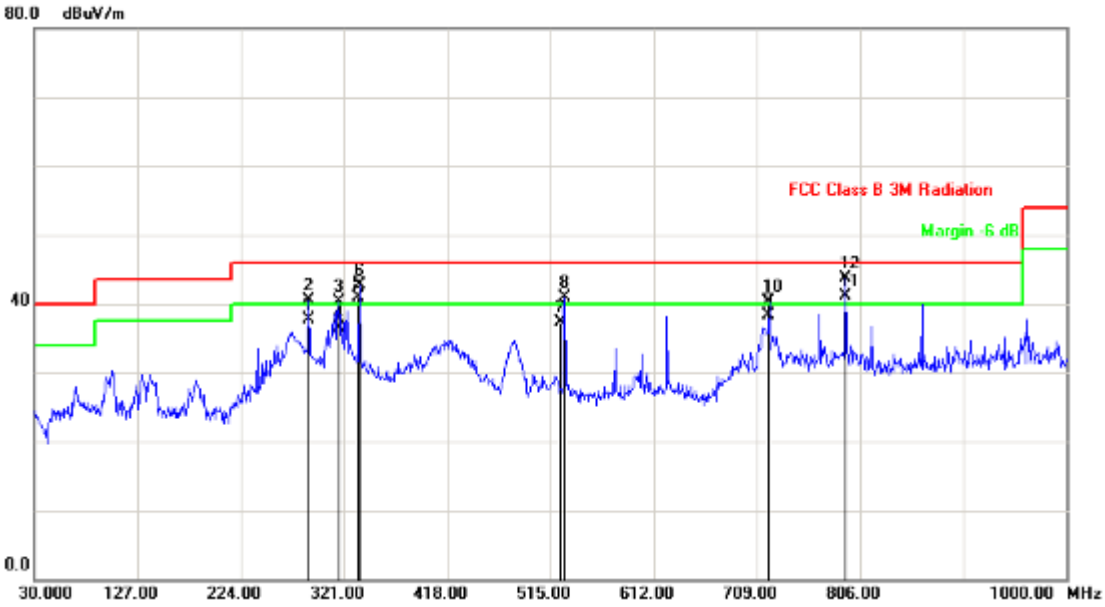
Test Mode :	Mode 6: Glass Charging with Case with USB For Bluetooth low energy And WIFI		
AC Power :	AC 120V/60Hz	Ant. Polarization:	Vertical
Temp :	25℃	Humidity :	53%
Pressure(mbar) :	1002	Date :	2016/08/25



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	173.5600	-7.60	42.48	34.88	43.50	-8.62	peak	100	209
2	174.2560	-7.61	40.87	33.26	43.50	-10.24	QP	100	321
3	306.2560	-7.64	41.90	34.26	46.00	-11.74	QP	200	45
4	307.4200	-7.52	44.14	36.62	46.00	-9.38	peak	200	149
5	334.2560	-6.48	41.63	35.15	46.00	-10.85	QP	200	33
6	335.5500	-6.50	43.58	37.08	46.00	-8.92	peak	200	129
7	395.2500	-6.04	42.78	36.74	46.00	-9.26	QP	200	172
8	395.6900	-6.01	44.11	38.10	46.00	-7.90	peak	200	325
9	717.2600	1.35	33.80	35.15	46.00	-10.85	QP	100	23
10	718.7000	1.37	35.78	37.15	46.00	-8.85	peak	100	240
11	791.2600	0.73	37.42	38.15	46.00	-7.85	QP	100	360
12	792.4200	0.74	38.90	39.64	46.00	-6.36	peak	100	0

Note: Measurement Level = Reading Level + Correct Factor

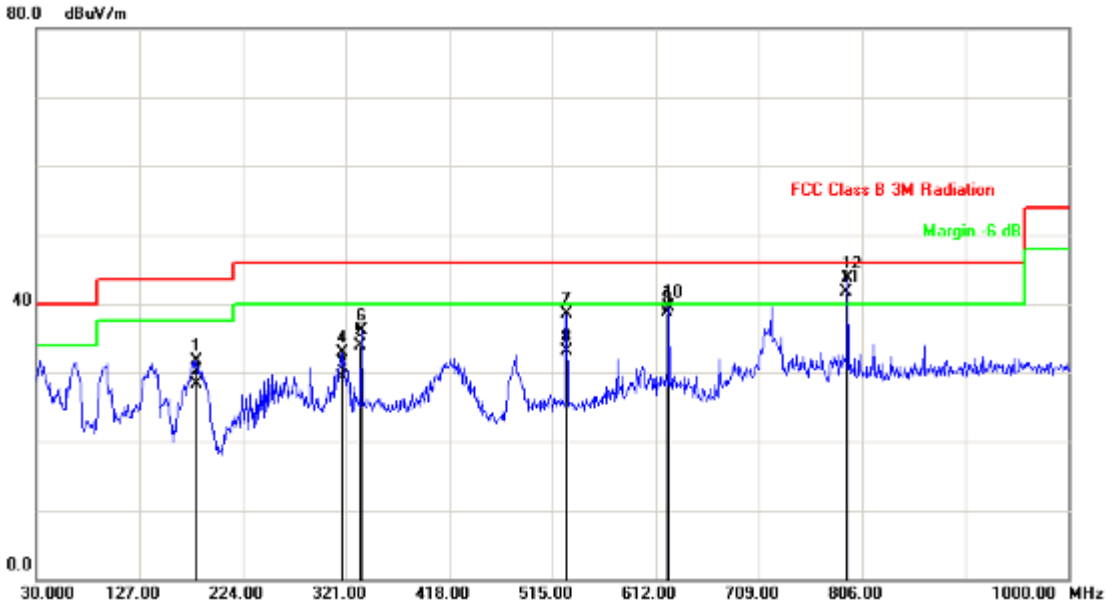
Test Mode :	Mode 9: Glass For Bluetooth low energy And WIFI		
AC Power :	AC 120V/60Hz	Ant. Polarization:	Horizontal
Temp :	25℃	Humidity :	53%
Pressure(mbar) :	1002	Date :	2016/08/25



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	287.9800	-8.70	46.38	37.68	46.00	-8.32	QP	100	152
2	288.0200	-8.70	49.24	40.54	46.00	-5.46	peak	100	152
3	316.1500	-6.63	46.88	40.25	46.00	-5.75	peak	100	360
4	316.2800	-6.62	43.16	36.54	46.00	-9.46	QP	100	360
5	334.5000	-6.49	47.47	40.98	46.00	-5.02	QP	100	45
6	335.5500	-6.50	49.22	42.72	46.00	-3.28	peak	100	150
7	524.5000	-4.35	41.60	37.25	46.00	-8.75	QP	200	8
8	528.5800	-4.26	45.22	40.96	46.00	-5.04	peak	200	170
9	719.6900	1.38	36.87	38.25	46.00	-7.75	QP	200	112
10	720.6399	1.39	39.00	40.39	46.00	-5.61	peak	200	112
11	791.9865	0.73	40.35	41.08	46.00	-4.92	QP	100	221
12	792.4200	0.74	42.92	43.66	46.00	-2.34	peak	100	221

Note: Measurement Level = Reading Level + Correct Factor

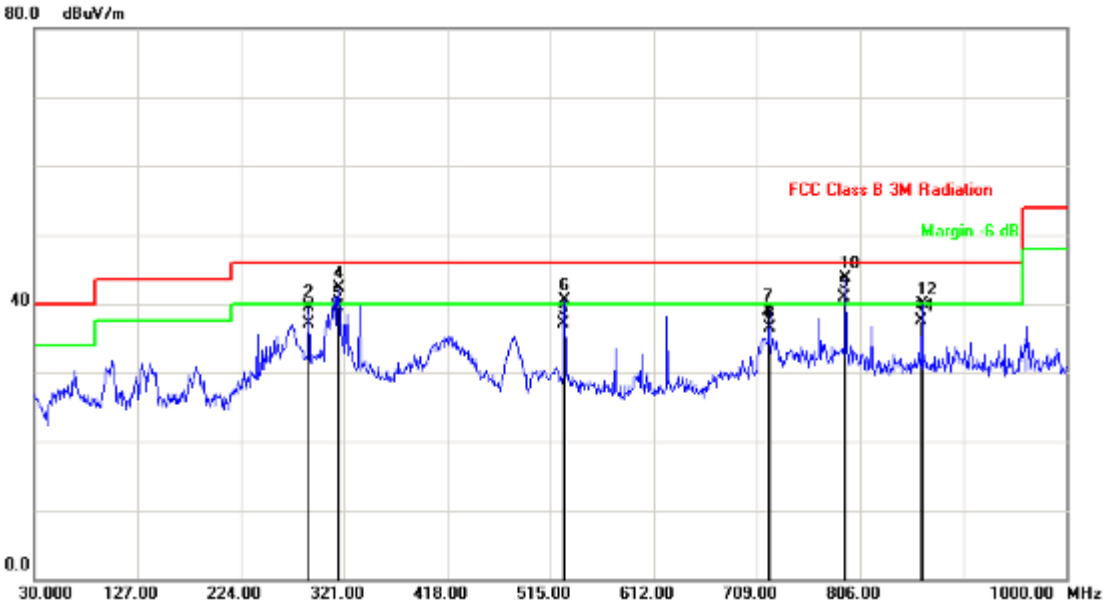
Test Mode :	Mode 9: Glass For Bluetooth low energy And WIFI		
AC Power :	AC 120V/60Hz	Ant. Polarization:	Vertical
Temp :	25℃	Humidity :	53%
Pressure(mbar) :	1002	Date :	2016/08/25



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	180.3500	-7.74	39.38	31.64	43.50	-11.86	peak	200	203
2	181.2000	-7.95	36.21	28.26	43.50	-15.24	QP	200	203
3	317.9600	-6.45	35.79	29.34	46.00	-16.66	QP	100	0
4	318.0899	-6.43	39.36	32.93	46.00	-13.07	peak	100	0
5	334.6000	-6.49	40.33	33.84	46.00	-12.16	QP	200	119
6	335.5500	-6.50	42.65	36.15	46.00	-9.85	peak	200	119
7	528.5800	-4.26	42.77	38.51	46.00	-7.49	peak	100	320
8	528.9800	-4.25	37.40	33.15	46.00	-12.85	QP	100	80
9	623.5000	-1.43	40.08	38.65	46.00	-7.35	QP	100	21
10	624.6100	-1.47	41.03	39.56	46.00	-6.44	peak	100	40
11	791.2500	0.73	40.92	41.65	46.00	-4.35	QP	100	61
12	792.4200	0.74	42.92	43.66	46.00	-2.34	peak	100	254

Note: Measurement Level = Reading Level + Correct Factor

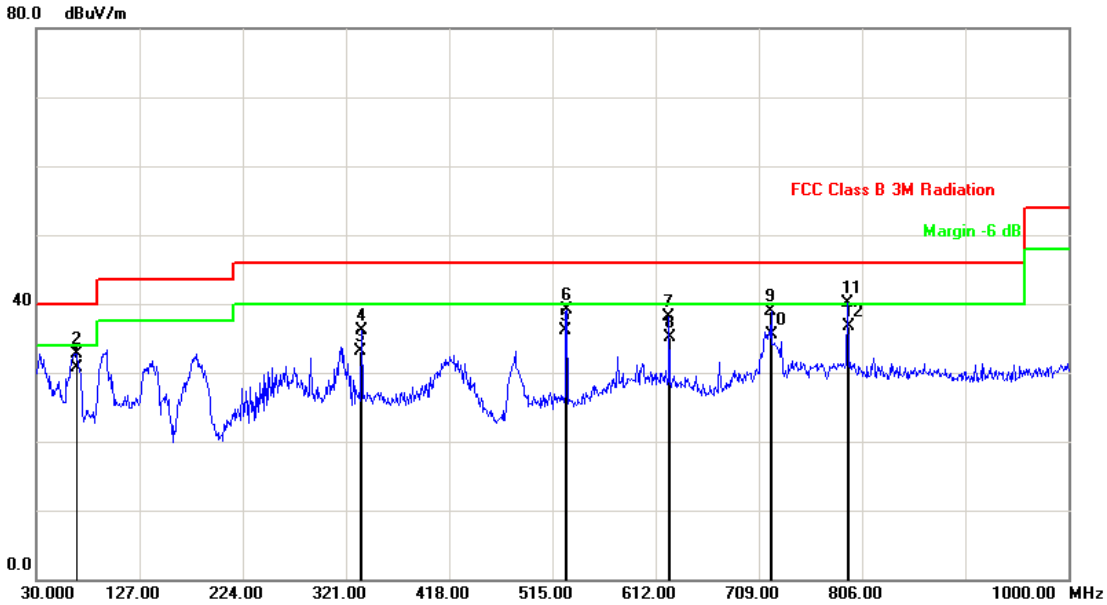
Test Mode :	Mode 12: Glass Charging with Case For Bluetooth low energy And WIFI		
AC Power :	AC 120V/60Hz	Ant. Polarization:	Horizontal
Temp :	25℃	Humidity :	53%
Pressure(mbar) :	1002	Date :	2016/08/25



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	287.6900	-8.71	45.87	37.16	46.00	-8.84	QP	200	215
2	288.0200	-8.70	48.24	39.54	46.00	-6.46	peak	200	215
3	315.4700	-6.70	46.12	39.42	46.00	-6.58	QP	200	41
4	316.1500	-6.63	48.88	42.25	46.00	-3.75	peak	200	41
5	527.1300	-4.29	41.38	37.09	46.00	-8.91	QP	100	0
6	528.5800	-4.26	44.72	40.46	46.00	-5.54	peak	100	0
7	720.6399	1.39	37.50	38.89	46.00	-7.11	peak	200	336
8	721.0600	1.40	35.20	36.60	46.00	-9.40	QP	200	336
9	791.6800	0.73	40.21	40.94	46.00	-5.06	QP	100	218
10	792.4200	0.74	42.92	43.66	46.00	-2.34	peak	100	218
11	863.6900	1.96	35.64	37.60	46.00	-8.40	QP	200	0
12	864.2000	1.96	38.04	40.00	46.00	-6.00	peak	200	0

Note: Measurement Level = Reading Level + Correct Factor

Test Mode :	Mode 12: Glass Charging with Case For Bluetooth low energy And WIFI		
AC Power :	AC 120V/60Hz	Ant. Polarization:	Vertical
Temp :	25℃	Humidity :	53%
Pressure(mbar) :	1002	Date :	2016/08/25

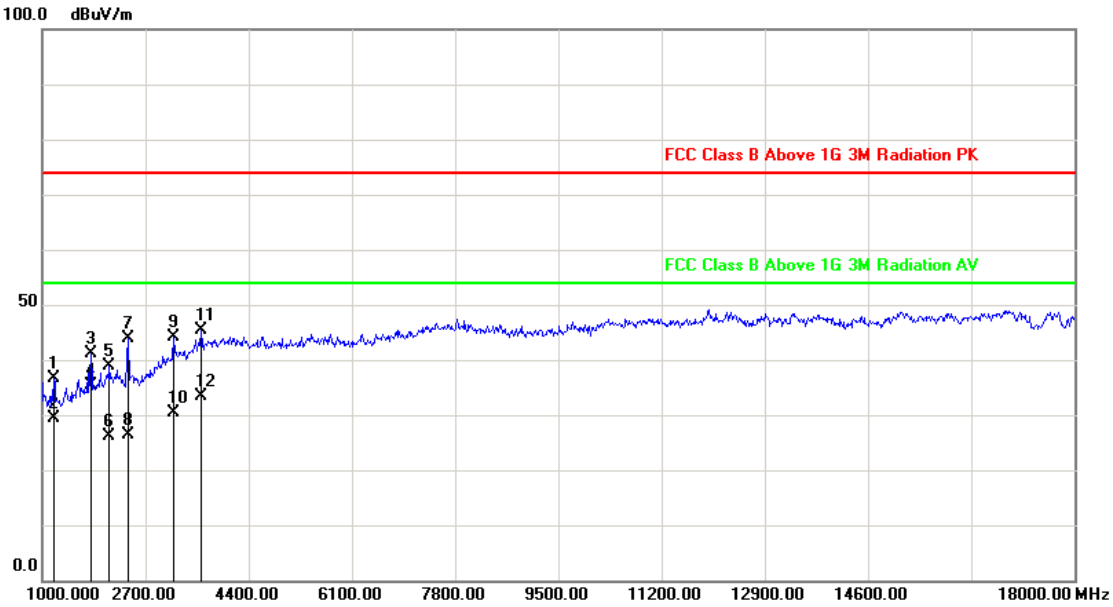


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	67.5900	-13.41	44.02	30.61	40.00	-9.39	QP	200	182
2	67.8299	-13.44	46.19	32.75	40.00	-7.25	peak	200	182
3	334.1600	-6.48	39.57	33.09	46.00	-12.91	QP	100	296
4	335.5500	-6.50	42.65	36.15	46.00	-9.85	peak	100	296
5	527.6000	-4.28	40.39	36.11	46.00	-9.89	QP	200	15
6	528.5800	-4.26	43.27	39.01	46.00	-6.99	peak	200	15
7	624.6100	-1.47	39.53	38.06	46.00	-7.94	peak	100	336
8	625.1200	-1.49	36.52	35.03	46.00	-10.97	QP	100	336
9	720.6399	1.39	37.57	38.96	46.00	-7.04	peak	100	0
10	721.3900	1.40	34.18	35.58	46.00	-10.42	QP	100	0
11	792.4200	0.74	39.42	40.16	46.00	-5.84	peak	200	215
12	793.5000	0.74	36.05	36.79	46.00	-9.21	QP	200	215

Note: Measurement Level = Reading Level + Correct Factor

4.6. Test Result and Data (1GHz ~ 18GHz)

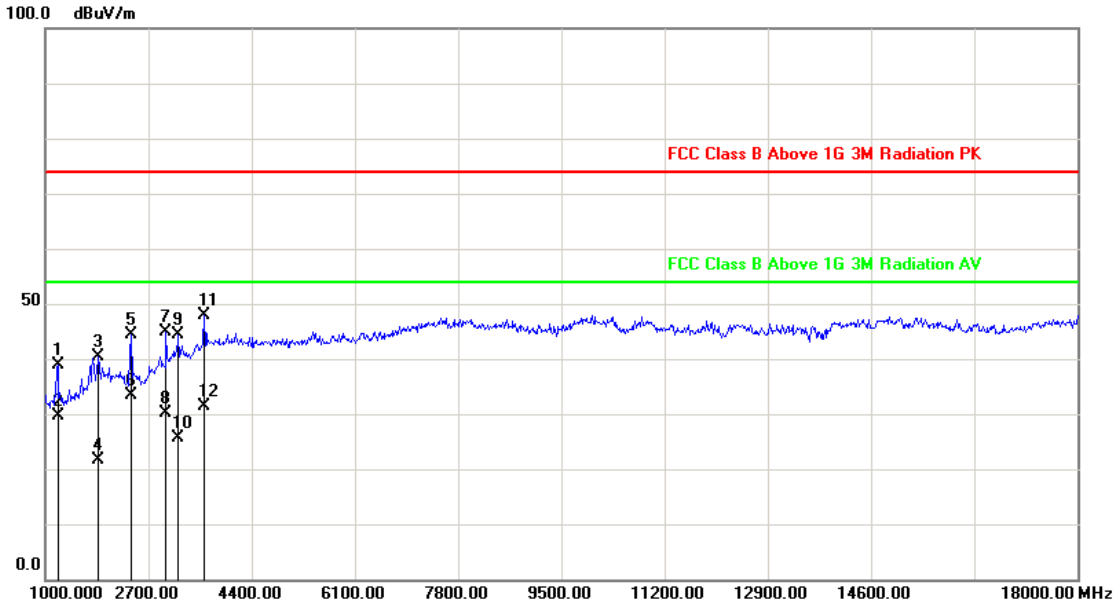
Test Mode :	Mode 3: Glass Charging with USB For Bluetooth low energy And WIFI		
AC Power :	AC 120V/60Hz	Ant. Polarization:	Horizontal
Temp :	25℃	Humidity :	53%
Pressure(mbar) :	1002	Date :	2016/08/25



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	1187.000	-16.49	53.01	36.52	74.00	-37.48	peak	200	176
2	1187.000	-16.49	45.75	29.26	54.00	-24.74	AVG	200	176
3	1799.000	-13.32	54.51	41.19	74.00	-32.81	peak	200	39
4	1799.000	-13.32	48.58	35.26	54.00	-18.74	AVG	200	39
5	2105.000	-11.70	50.49	38.79	74.00	-35.21	peak	100	204
6	2105.000	-11.70	37.85	26.15	54.00	-27.85	AVG	100	204
7	2411.000	-10.35	54.24	43.89	74.00	-30.11	peak	100	341
8	2411.000	-10.35	36.61	26.26	54.00	-27.74	AVG	100	341
9	3159.000	-7.83	51.87	44.04	74.00	-29.96	peak	100	199
10	3159.000	-7.83	38.33	30.50	54.00	-23.50	AVG	100	199
11	3618.000	-5.87	51.14	45.27	74.00	-28.73	peak	100	154
12	3618.000	-5.87	39.13	33.26	54.00	-20.74	AVG	100	154

Note: Measurement Level = Reading Level + Correct Factor

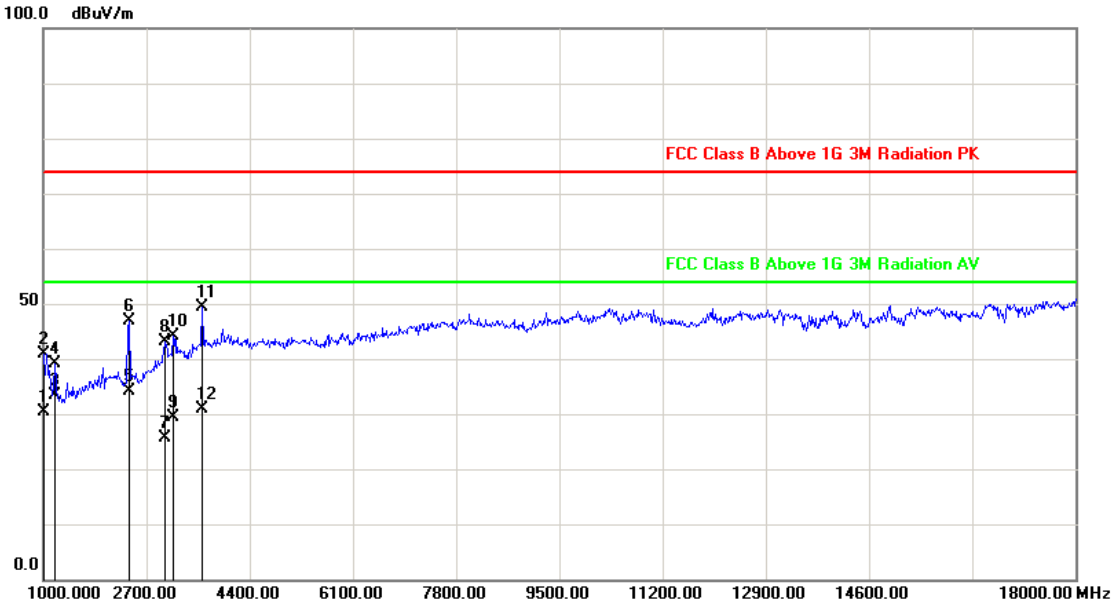
Test Mode :	Mode 3: Glass Charging with USB For Bluetooth low energy And WIFI		
AC Power :	AC 120V/60Hz	Ant. Polarization:	Vertical
Temp :	25℃	Humidity :	53%
Pressure(mbar) :	1002	Date :	2016/08/25



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	1204.000	-16.41	55.39	38.98	74.00	-35.02	peak	200	241
2	1204.000	-16.41	45.97	29.56	54.00	-24.44	AVG	200	241
3	1867.000	-12.93	53.28	40.35	74.00	-33.65	peak	100	157
4	1867.000	-12.93	34.50	21.57	54.00	-32.43	AVG	100	157
5	2411.000	-10.35	54.84	44.49	74.00	-29.51	peak	200	81
6	2411.000	-10.35	43.62	33.27	54.00	-20.73	AVG	200	81
7	2989.000	-8.53	53.39	44.86	74.00	-29.14	peak	100	278
8	2989.000	-8.53	38.78	30.25	54.00	-23.75	AVG	100	278
9	3193.000	-7.68	51.94	44.26	74.00	-29.74	peak	200	9
10	3193.000	-7.68	33.33	25.65	54.00	-28.35	AVG	200	9
11	3618.000	-5.87	53.79	47.92	74.00	-26.08	peak	100	135
12	3618.000	-5.87	37.13	31.26	54.00	-22.74	AVG	100	135

Note: Measurement Level = Reading Level + Correct Factor

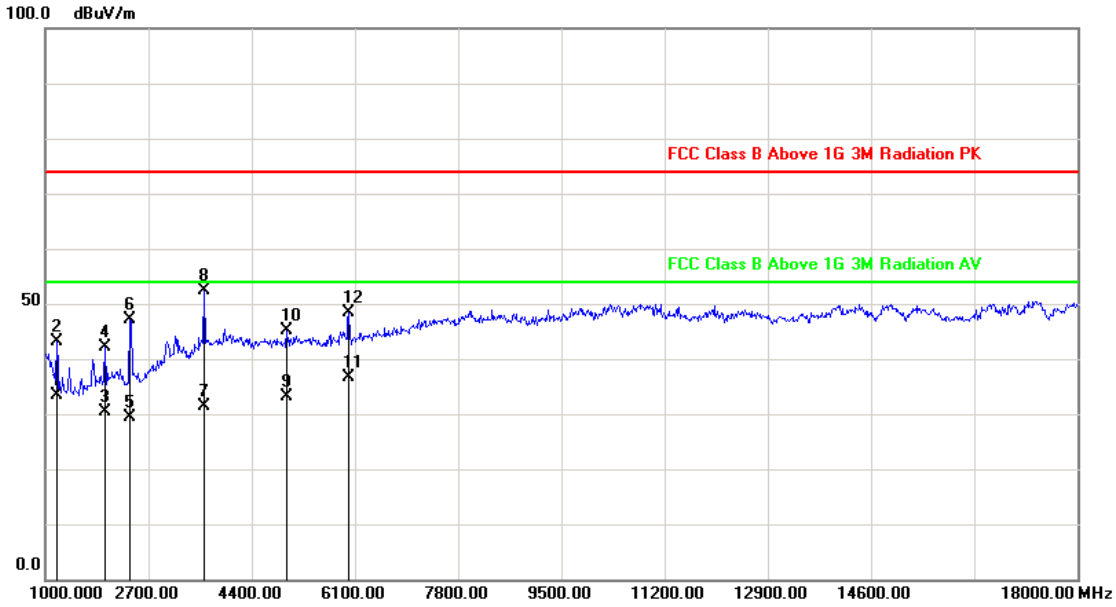
Test Mode :	Mode 6: Glass Charging with Case with USB For Bluetooth low energy And WIFI		
AC Power :	AC 120V/60Hz	Ant. Polarization:	Horizontal
Temp :	25℃	Humidity :	53%
Pressure(mbar) :	1002	Date :	2016/08/25



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	1016.250	-17.29	47.55	30.26	54.00	-23.74	AVG	100	52
2	1017.000	-17.29	58.28	40.99	74.00	-33.01	peak	100	52
3	1186.510	-16.49	49.75	33.26	54.00	-20.74	AVG	101	360
4	1187.000	-16.49	55.56	39.07	74.00	-34.93	peak	101	360
5	2410.256	-10.35	44.51	34.16	54.00	-19.84	AVG	100	283
6	2411.000	-10.35	57.11	46.76	74.00	-27.24	peak	100	283
7	3004.256	-8.48	34.01	25.53	54.00	-28.47	AVG	100	288
8	3006.000	-8.47	51.53	43.06	74.00	-30.94	peak	100	288
9	3141.256	-7.90	37.16	29.26	54.00	-24.74	AVG	100	256
10	3142.000	-7.90	52.05	44.15	74.00	-29.85	peak	100	256
11	3618.000	-5.87	55.13	49.26	74.00	-24.74	peak	200	70
12	3618.256	-5.87	36.72	30.85	54.00	-23.15	AVG	200	70

Note: Measurement Level = Reading Level + Correct Factor

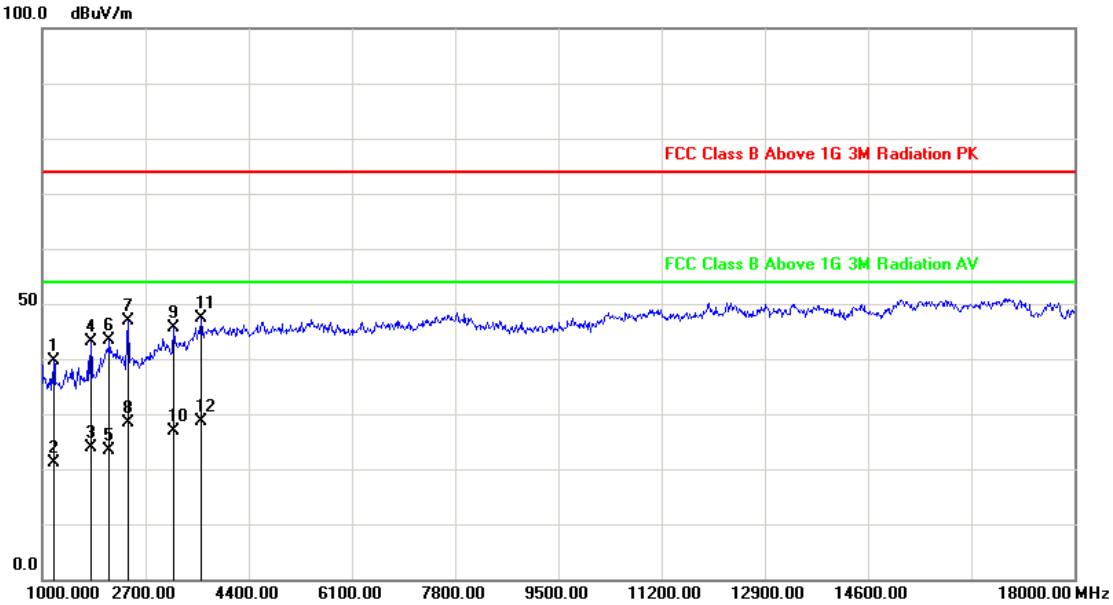
Test Mode :	Mode 6: Glass Charging with Case with USB For Bluetooth low energy And WIFI		
AC Power :	AC 120V/60Hz	Ant. Polarization:	Vertical
Temp :	25℃	Humidity :	53%
Pressure(mbar) :	1002	Date :	2016/08/25



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	1186.260	-16.49	49.75	33.26	54.00	-20.74	AVG	200	207
2	1187.000	-16.49	59.53	43.04	74.00	-30.96	peak	200	207
3	1984.256	-12.26	42.52	30.26	54.00	-23.74	AVG	100	324
4	1986.000	-12.25	54.31	42.06	74.00	-31.94	peak	100	324
5	2391.256	-10.43	39.89	29.46	54.00	-24.54	AVG	100	149
6	2394.000	-10.42	57.49	47.07	74.00	-26.93	peak	100	149
7	3616.256	-5.88	37.14	31.26	54.00	-22.74	AVG	100	142
8	3618.000	-5.87	58.29	52.42	74.00	-21.58	peak	100	142
9	4977.250	-3.78	36.83	33.05	54.00	-20.95	AVG	100	186
10	4978.000	-3.78	48.79	45.01	74.00	-28.99	peak	100	186
11	5997.256	-2.27	39.01	36.74	54.00	-17.26	AVG	100	207
12	5998.000	-2.27	50.57	48.30	74.00	-25.70	peak	100	207

Note: Measurement Level = Reading Level + Correct Factor

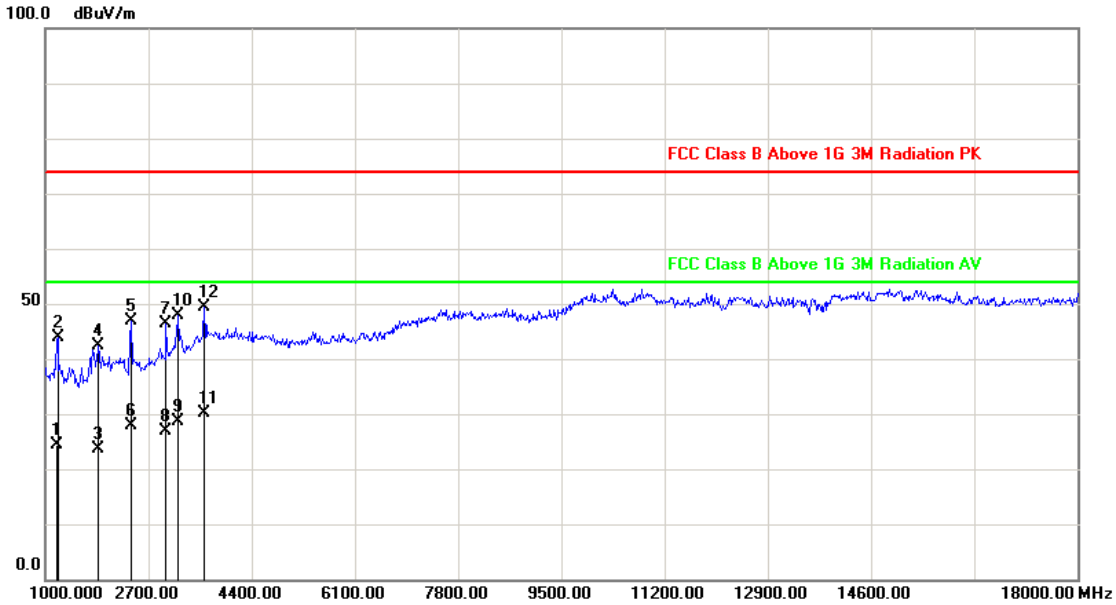
Test Mode :	Mode 9: Glass For Bluetooth low energy And WIFI		
AC Power :	AC 120V/60Hz	Ant. Polarization:	Horizontal
Temp :	25℃	Humidity :	53%
Pressure(mbar) :	1002	Date :	2016/08/25



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	1187.000	-16.49	56.01	39.52	74.00	-34.48	peak	200	191
2	1188.000	-16.49	37.54	21.05	54.00	-32.95	AVG	200	191
3	1798.000	-13.32	37.20	23.88	54.00	-30.12	AVG	200	253
4	1799.000	-13.32	56.51	43.19	74.00	-30.81	peak	200	253
5	2104.000	-11.71	35.16	23.45	54.00	-30.55	AVG	100	162
6	2105.000	-11.70	54.99	43.29	74.00	-30.71	peak	100	162
7	2411.000	-10.35	57.24	46.89	74.00	-27.11	peak	200	28
8	2412.000	-10.34	38.82	28.48	54.00	-25.52	AVG	200	28
9	3159.000	-7.83	53.37	45.54	74.00	-28.46	peak	200	339
10	3160.000	-7.82	34.60	26.78	54.00	-27.22	AVG	200	339
11	3618.000	-5.87	53.14	47.27	74.00	-26.73	peak	100	214
12	3619.000	-5.87	34.56	28.69	54.00	-25.31	AVG	100	214

Note: Measurement Level = Reading Level + Correct Factor

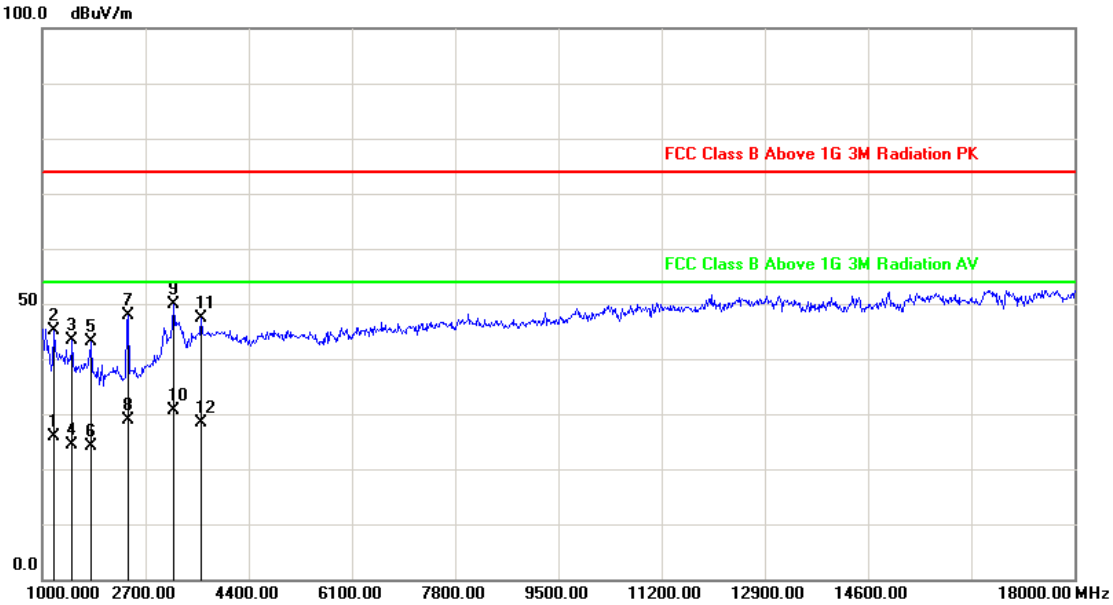
Test Mode :	Mode 9: Glass For Bluetooth low energy And WIFI		
AC Power :	AC 120V/60Hz	Ant. Polarization:	Vertical
Temp :	25℃	Humidity :	53%
Pressure(mbar) :	1002	Date :	2016/08/25



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	1203.000	-16.42	40.69	24.27	54.00	-29.73	AVG	100	163
2	1204.000	-16.41	60.39	43.98	74.00	-30.02	peak	100	163
3	1866.000	-12.93	36.50	23.57	54.00	-30.43	AVG	100	29
4	1867.000	-12.93	55.28	42.35	74.00	-31.65	peak	100	29
5	2411.000	-10.35	57.34	46.99	74.00	-27.01	peak	200	338
6	2412.000	-10.34	38.12	27.78	54.00	-26.22	AVG	200	338
7	2989.000	-8.53	54.89	46.36	74.00	-27.64	peak	100	174
8	2990.000	-8.53	35.50	26.97	54.00	-27.03	AVG	100	174
9	3192.000	-7.69	36.24	28.55	54.00	-25.45	AVG	200	210
10	3193.000	-7.68	55.44	47.76	74.00	-26.24	peak	200	210
11	3617.000	-5.88	35.98	30.10	54.00	-23.90	AVG	100	0
12	3618.000	-5.87	55.29	49.42	74.00	-24.58	peak	100	0

Note: Measurement Level = Reading Level + Correct Factor

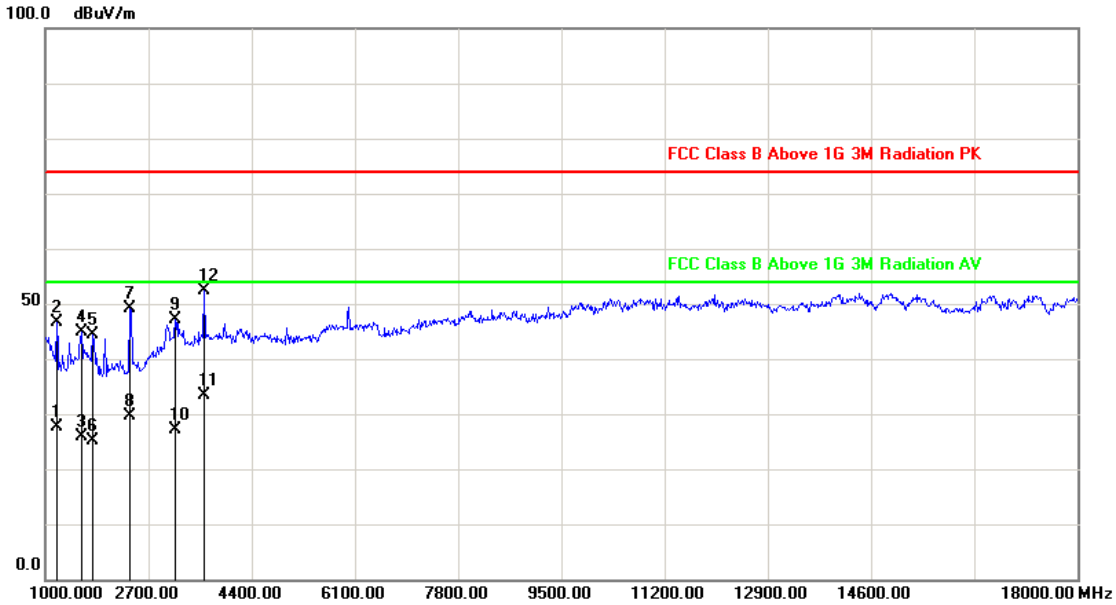
Test Mode :	Mode 12: Glass Charging with Case For Bluetooth low energy And WIFI		
AC Power :	AC 120V/60Hz	Ant. Polarization:	Horizontal
Temp :	25℃	Humidity :	53%
Pressure(mbar) :	1002	Date :	2016/08/25



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	1186.000	-16.50	42.31	25.81	54.00	-28.19	AVG	200	118
2	1187.000	-16.49	61.56	45.07	74.00	-28.93	peak	200	118
3	1493.000	-15.05	58.38	43.33	74.00	-30.67	peak	100	241
4	1494.000	-15.05	39.31	24.26	54.00	-29.74	AVG	100	241
5	1799.000	-13.32	56.52	43.20	74.00	-30.80	peak	200	9
6	1800.000	-13.31	37.51	24.20	54.00	-29.80	AVG	200	9
7	2411.000	-10.35	58.11	47.76	74.00	-26.24	peak	200	360
8	2412.000	-10.34	39.21	28.87	54.00	-25.13	AVG	200	360
9	3159.000	-7.83	57.78	49.95	74.00	-24.05	peak	200	293
10	3160.000	-7.82	38.50	30.68	54.00	-23.32	AVG	200	293
11	3618.000	-5.87	53.13	47.26	74.00	-26.74	peak	100	38
12	3619.000	-5.87	34.16	28.29	54.00	-25.71	AVG	100	38

Note: Measurement Level = Reading Level + Correct Factor

Test Mode :	Mode 12: Glass Charging with Case For Bluetooth low energy And WIFI		
AC Power :	AC 120V/60Hz	Ant. Polarization:	Vertical
Temp :	25℃	Humidity :	53%
Pressure(mbar) :	1002	Date :	2016/08/25



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	1186.000	-16.50	44.21	27.71	54.00	-26.29	AVG	200	162
2	1187.000	-16.49	63.03	46.54	74.00	-27.46	peak	200	162
3	1594.000	-14.48	40.26	25.78	54.00	-28.22	AVG	100	302
4	1595.000	-14.48	59.41	44.93	74.00	-29.07	peak	100	302
5	1782.000	-13.41	57.77	44.36	74.00	-29.64	peak	200	15
6	1783.000	-13.41	38.60	25.19	54.00	-28.81	AVG	200	15
7	2394.000	-10.42	59.49	49.07	74.00	-24.93	peak	200	41
8	2395.000	-10.42	40.15	29.73	54.00	-24.27	AVG	200	41
9	3142.000	-7.90	55.05	47.15	74.00	-26.85	peak	100	193
10	3143.000	-7.89	35.14	27.25	54.00	-26.75	AVG	100	196
11	3616.000	-5.88	39.25	33.37	54.00	-20.63	AVG	100	229
12	3618.000	-5.87	58.29	52.42	74.00	-21.58	peak	100	229

Note: Measurement Level = Reading Level + Correct Factor

Test engineer: Dian

The end