

FCC Test Report

Product Name : Electrand
Trade Name : genteq
Model No. : 8794700LAG01
FCC ID. : 2AQRT-LAG01

Applicant : Regal Beloit

Address : 1946 West Cook Road, Fort Wayne, Indiana 46818, United States

Date of Receipt : Oct. 31, 2018
Issued Date : Nov. 28, 2018
Report No. : 18B0105R-RFUSP17V01
Version : V1.0



The test results relate only to the samples tested.

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Test Report Certification

Issued Date : Nov. 28, 2018

Report No. : 18B0105R-RFUSP17V01



Product Name : Electrand
Applicant : Regal Beloit
Address : 1946 West Cook Road, Fort Wayne, Indiana 46818, United States
Manufacturer : PCI Limited
Trade Name : genteq
Model No. : 8794700LAG01
FCC ID. : 2AQRT-LAG01
EUT Voltage : AC 120V / 60Hz (Power by PC)
DC 3.7V (Power by Battery)
Testing Voltage : AC 120V / 60Hz (Power by PC)
DC 3.7V (Power by Battery)
Applicable Standard : FCC CFR Title 47 Part 15 Subpart C Section 15.225
Laboratory Name : Hsin Chu Laboratory
Address : No.372-2, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 310, Taiwan, R.O.C.
TEL: +886-3-582-8001 / FAX: +886-3-582-8958
Test Result : Complied

Documented By

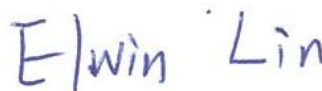
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(Demi Chang / Senior Engineering Adm. Specialist)

Tested By

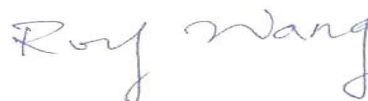
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(Elwin Lin / Engineer)

Approved By

:



(Roy Wang / Director)

Revision History

Report No.	Version	Description	Issued Date
18B0105R-RFUSP17V01	V1.0	Initial issue of report	Nov. 28, 2018

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1. General Information

1.1. EUT Description

Product Name	Electrand
Trade Name	genteq
Model No.	8794700LAG01
Frequency Range	13.56MHz
Type of Modulation	ASK

Antenna Information	
MFR. / Model No.	PCI / RGPC002300
Antenna Type	Patch antenna
Antenna Gain	0 dBi

Accessories Information	
USB Cable	Non-Shielded, 0.96m

Working Frequency of Each Channel	
Channel	Frequency
Channel 1	13.56MHz

Note: These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 15 Subpart C Paragraph 15.225 for spread spectrum devices.

1.2. Test Mode

DEKRA has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Test Mode	Mode 1: Transmit_Power by PC Mode 2: Transmit_Power by Battery
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Test Items	
Conducted Emission	Yes
Occupied Bandwidth	Yes
Fundamental Radiated Emission	Yes
Frequency Tolerance	Yes

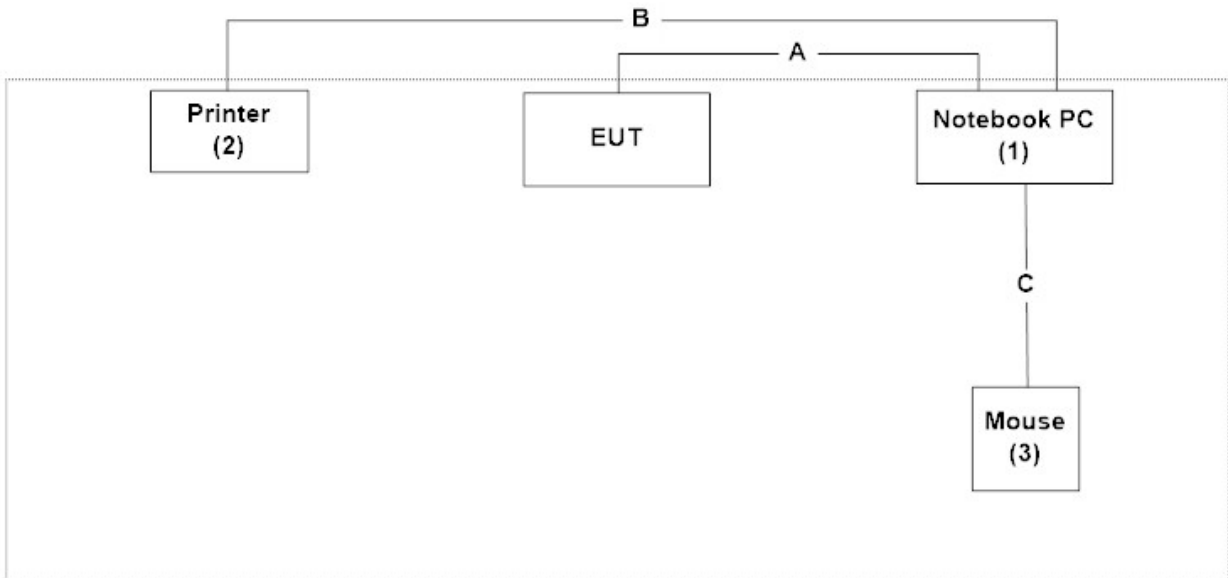
1.3. Tested System Details

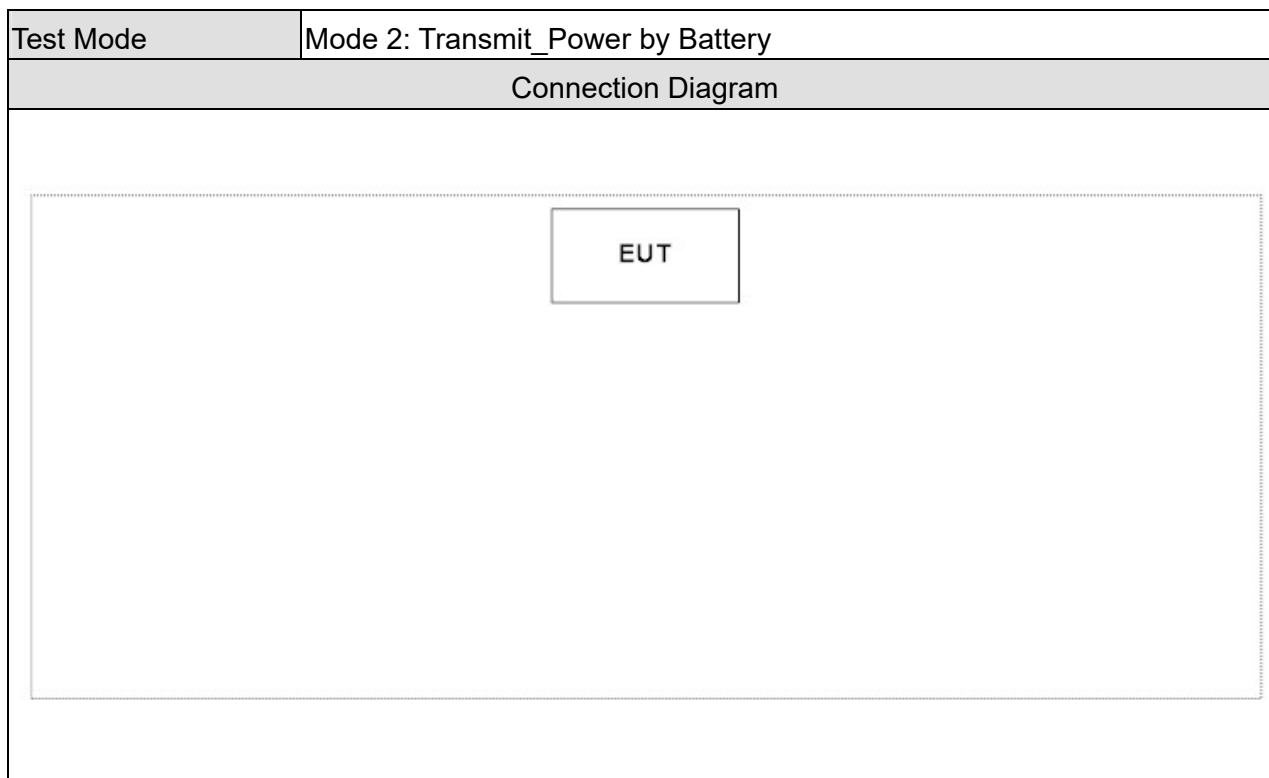
The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

Test Mode		Mode 1: Transmit_Power by PC				
Product		Manufacturer	Model No.	Serial No.	FCC ID	Power Cord
1	Notebook PC	ACER	PAV70	LUSEW0D03711 05FE221601	DoC	Non-Shielded, 2.5m one ferrite core bonded
2	Printer	HP	C2642A	MY75J1D1D2	DoC	Non-Shielded, 0.7m
3	Mouse	Logitech	M-SBF83	HCA52200174	DoC	--

Test Mode		Mode 2: Transmit_Power by Battery				
Product		Manufacturer	Model No.	Serial No.	FCC ID	Power Cord
N/A						

1.4. Configuration of tested System

Test Mode		Mode 1: Transmit_Power by PC	
Connection Diagram			
			
Signal Cable Type		Signal cable Description	
A	USB Cable	Shielded, 2m	
B	Print Cable	Non-Shielded, 3m	
C	USB Cable	Non-Shielded, 1.5m	



1.5. EUT Exercise Software

1	Setup the EUT as shown in Section 1.4.
2	Execute the TestAppwin on the EUT.
3	Configure the test mode, the test channel
4	Verify that the EUT works properly.

1.6. Test Facility

Ambient conditions in the laboratory:

Items	Test Item	Required (IEC 68-1)	Actual	Test Site
Temperature (°C)	FCC PART 15 C 15.225 Conducted Emission	15 - 35	25°C	3
Humidity (%RH)		25 - 75	45%RH	
Barometric pressure (mbar)		860 - 1060	950-1000	
Temperature (°C)	FCC PART 15 C 15.225 Occupied Bandwidth	15 - 35	25°C	3
Humidity (%RH)		25 - 75	45%RH	
Barometric pressure (mbar)		860 - 1060	950-1000	
Temperature (°C)	FCC PART 15 C 15.225 Fundamental Radiated Emission	15 - 35	25°C	2
Humidity (%RH)		25 - 75	65%RH	
Barometric pressure (mbar)		860 - 1060	950-1000	
Temperature (°C)	FCC PART 15 C 15.225 Frequency Stability	15 - 35	25°C	3
Humidity (%RH)		25 - 75	45%RH	
Barometric pressure (mbar)		860 - 1060	950-1000	

Note: Test Site information refers to Laboratory Information.

USA : FCC, Registration Number: TW3024

The related certificate for our laboratories about the test site and management system can be downloaded from DEKRA Testing and Certification Co., Ltd. Web Site:

<http://www.dekra.com.tw/english/about/certificates.aspx?bval=5>

The address and introduction of DEKRA Testing and Certification Co., Ltd. laboratories can be founded in our Web site: http://www.dekra.com.tw/index_en.aspx

If you have any comments, Please don't hesitate to contact us. Our test sites as below:

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1.7. List of Test Equipment

Conducted Emission / SR2-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Artificial Mains Network	R&S	ENV4200	848411/010	2018/01/22	2019/01/21
Test Receiver	R&S	ESCS 30	836858/022	2018/03/30	2019/03/29
LISN	R&S	ENV216	100092	2018/07/23	2019/07/22

Occupied Bandwidth / SR10-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Temperature & Humidity Test Chamber	WIT	TH-1S-B	1082101	2018/01/23	2019/01/22
Power Supply	Agilent	E3649A	MY50040066	NA	NA
Spectrum Analyzer	Keysight	N9030B	MY57140404	2018/06/26	2019/06/25
Spectrum Analyzer	Keysight	N9010B	MY57110159	2018/05/25	2019/05/24
Spectrum Analyzer	Agilent	N9010A	US47140172	2018/07/18	2019/07/17
Signal & Spectrum Analyzer	R&S	FSV40	101049	2018/01/10	2019/01/09

Fundamental Radiated Emission / CB2-H, CB1-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal Analyzer	R&S	FSVA40	101455	2017/11/21	2018/11/20
Signal & Spectrum Analyzer	R&S	FSV40	101049	2018/01/10	2019/01/09
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2018/03/05	2019/03/04
Bilog Antenna	Teseq	CBL6112D	23191	2018/06/26	2019/06/25
Horn Antenna	Schwarzbeck	BBHA 9120D	639	2018/06/01	2019/05/31
Horn Antenna	Schwarzbeck	BBHA 9170	202	2018/01/31	2019/01/30
Pre-Amplifier	EMCI	EMC003240	980324	2018/02/26	2019/02/25
Pre-Amplifier	EMCI	EMC0031835	980233	2018/01/23	2019/01/22
Pre-Amplifier	EMCI	EMC01820I	980364	2018/01/16	2019/01/15
Band Reject Filter	Micro-Tronics	BRM50702	G192	2018/04/11	2019/04/10
Coaxial Cable	Suhner	SF104_SF104_SF104_SF104 (19m)	CB3_1	2018/09/20	2019/08/19

Frequency Stability / SR10-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Temperature & Humidity Test Chamber	WIT	TH-1S-B	1082101	2018/01/23	2019/01/22
Power Supply	Agilent	E3649A	MY50040066	NA	NA
Signal & Spectrum Analyzer	R&S	FSV40	101049	2018/01/10	2019/01/09
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2018/03/05	2019/03/04

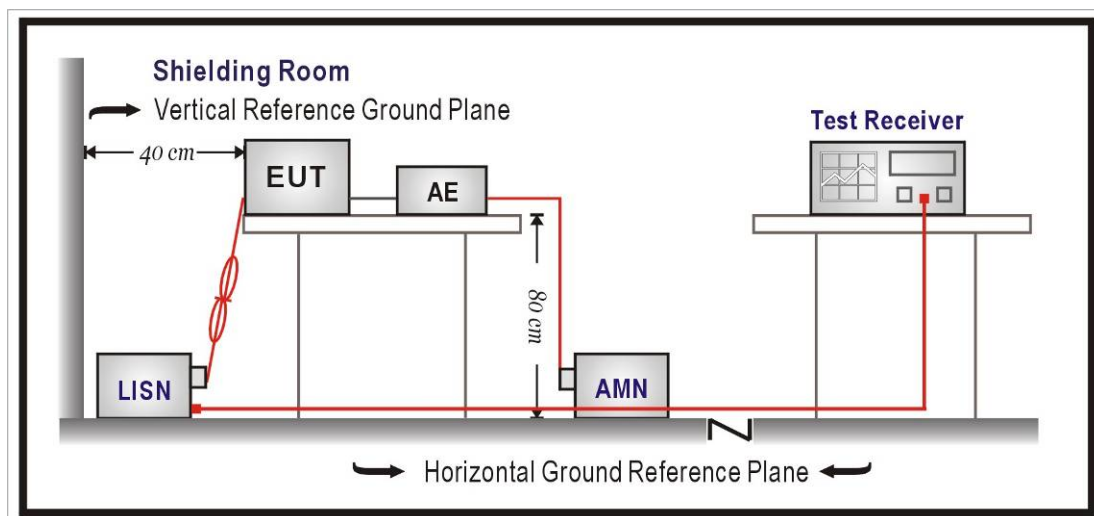
Note: All equipment upon which need to calibrated are with calibration period of 1 year.

1.8. **Uncertainty**

Test item	Uncertainty
Conducted Emission	$\pm 2.26 \text{ dB}$
Occupied Bandwidth	$\pm 150 \text{ Hz}$
Fundamental Radiated Emission	30MHz~1GHz as $\pm 3.19 \text{ dB}$
Frequency Stability	$\pm 150 \text{ Hz}$

2. Conducted Emission

2.1. Test Setup



2.2. Limits

FCC Part 15 Subpart C Paragraph 15.207 Limits (dBuV)		
Frequency MHz	QP	AV
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Remarks: In the above table, the tighter limit applies at the band edges.

2.3. Test Procedure

The EUT was setup according to ANSI C63.10: 2013 and tested according to DTS test procedure of KDB558074 for compliance to FCC 47CFR 15.247 requirements.

The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs.)

Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.

The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.

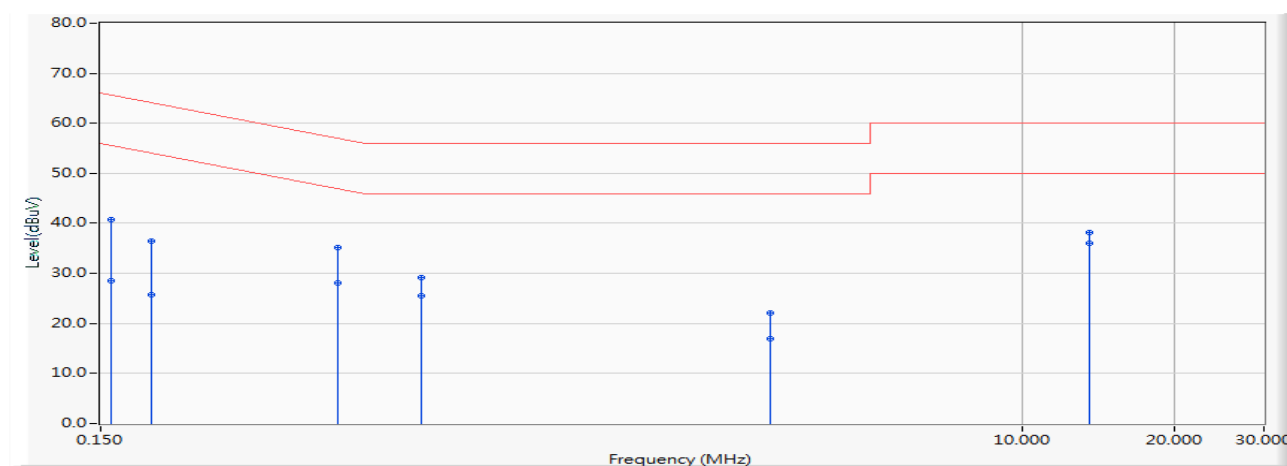
Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.

2.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.207: 2014

2.5. Test Result

Site : SR2-H	Time : 2018/11/14
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-B127_LISN(16A)-8 - Line1	Power : AC 120V/60Hz
EUT : Electrand	Note : Mode 1: Transmit_Power by PC_13.56MHz

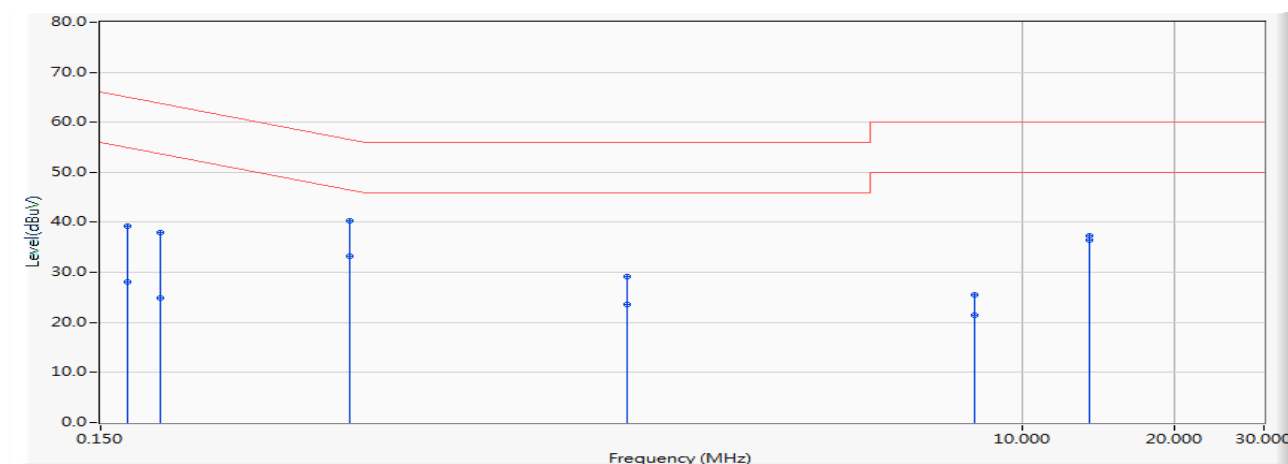


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.158	9.680	31.038	40.718	-25.064	65.782	QUASIPeAK
2		0.158	9.680	18.922	28.602	-37.182	55.782	AVERAGE
3		0.189	9.680	26.684	36.364	-28.525	64.889	QUASIPeAK
4		0.189	9.680	15.980	25.660	-39.221	54.889	AVERAGE
5		0.443	9.681	25.440	35.121	-22.514	57.635	QUASIPeAK
6		0.443	9.681	18.318	27.999	-29.638	47.635	AVERAGE
7		0.646	9.713	19.418	29.131	-26.869	56.000	QUASIPeAK
8		0.646	9.713	15.731	25.444	-30.556	46.000	AVERAGE
9		3.170	9.806	12.323	22.129	-33.871	56.000	QUASIPeAK
10		3.170	9.806	7.140	16.946	-39.054	46.000	AVERAGE
11	*	13.560	10.275	27.960	38.235	-21.765	60.000	QUASIPeAK
12	*	13.560	10.275	25.809	36.084	-23.916	50.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : SR2-H	Time : 2018/11/14
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-B127_LISN(16A)-8 - Line2	Power : AC 120V/60Hz
EUT : Electrand	Note : Mode 1: Transmit_Power by PC_13.56MHz



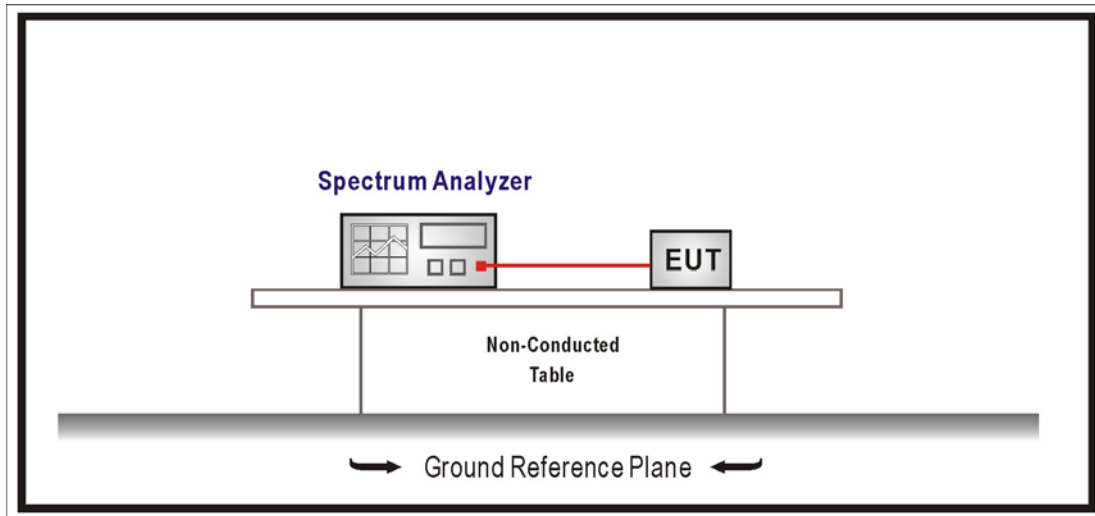
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.170	9.680	29.608	39.288	-26.152	65.439	QUASIPeAK
2		0.170	9.680	18.365	28.045	-37.403	55.439	AVERAGE
3		0.197	9.680	28.315	37.995	-26.665	64.659	QUASIPeAK
4		0.197	9.680	15.202	24.882	-39.788	54.669	AVERAGE
5	*	0.466	9.681	30.601	40.282	-16.685	56.966	QUASIPeAK
6	*	0.466	9.681	23.662	33.343	-23.626	46.966	AVERAGE
7		1.650	9.797	19.462	29.259	-26.741	56.000	QUASIPeAK
8		1.650	9.797	13.699	23.496	-32.504	46.000	AVERAGE
9		8.021	9.981	15.629	25.610	-34.390	60.000	QUASIPeAK
10		8.021	9.981	11.394	21.375	-38.625	50.000	AVERAGE
11		13.560	10.250	27.169	37.419	-22.581	60.000	QUASIPeAK
12		13.560	10.250	26.244	36.494	-23.506	50.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

3. Occupied Bandwidth

3.1. Test Setup



3.2. Limits

The bandwidth of the emission shall be no wider than 0.25% of the center frequency for devices operating above 70 MHz and below 900 MHz. For devices operating above 900 MHz, the emission shall be no wider than 0.5% of the center frequency. Bandwidth is determined at the points 20 dB down from the modulated carrier.

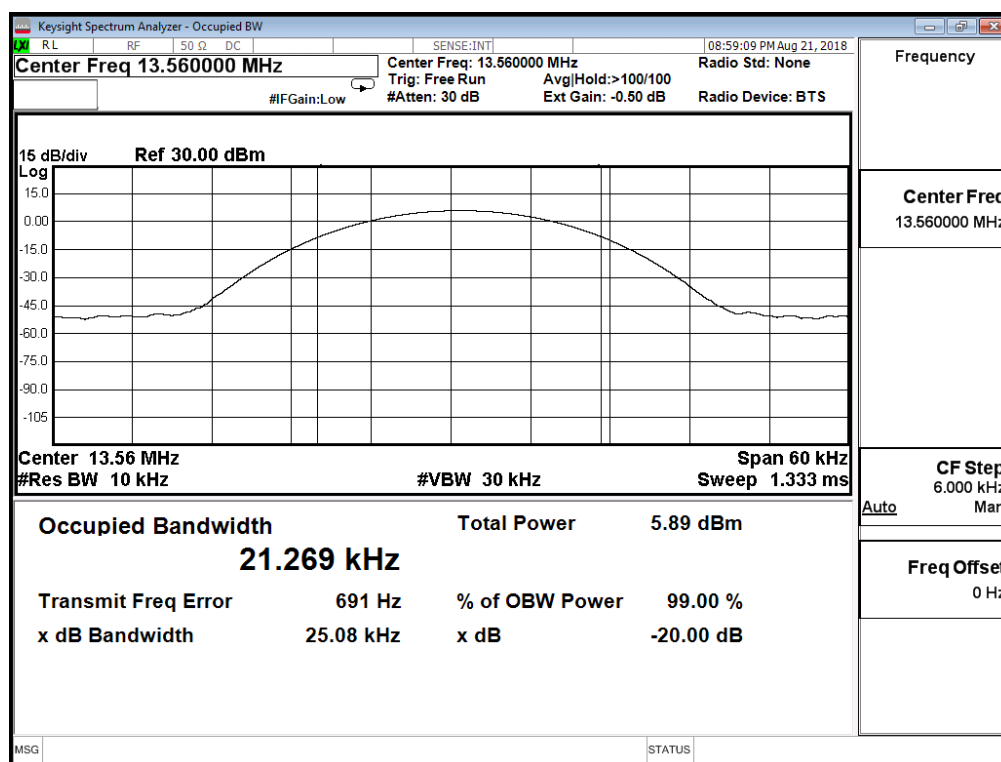
3.3. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.231(b): 2015

3.4. Test Result

Product	Electrand		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmit_Power by PC		
Date of Test	2018/08/21	Test Site	SR10-H

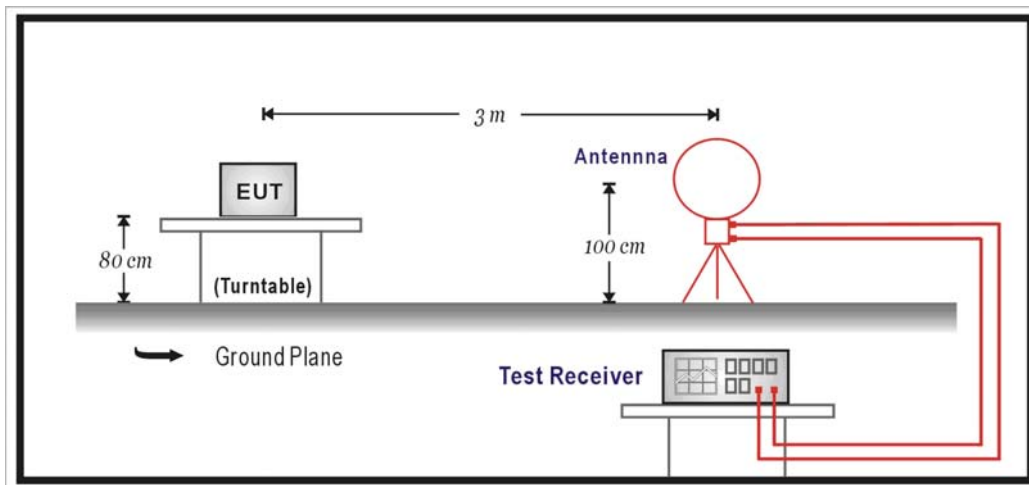
Center Frequency	13.56 MHz
Allowable Bandwidth	--
Bandwidth at 20dB down (Max)	25.08 kHz
Bandwidth at 99% (Max)	21.269 kHz
Result	PASS



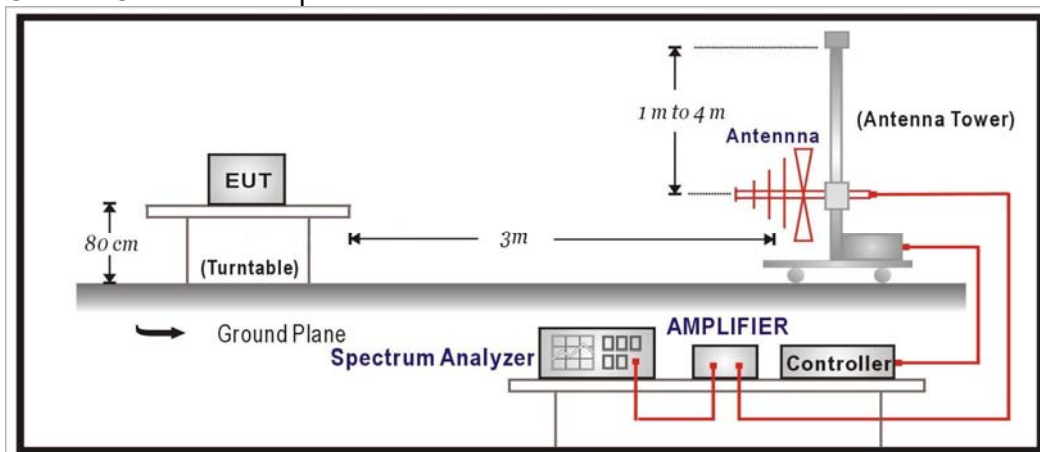
4. Radiated Emission

4.1. Test Setup

Under 30MHz Test Setup:



Under 1GHz Test Setup:



4.2. Limits

➤ FCC Part 15 Subpart C Paragraph 15.225 Limit

- The field strength of any emissions within the band 13.553-13.567 MHz shall not exceed 15,848 microvolts/meter at 30 meters.

FCC Part 15 Subpart C Paragraph 15.225 Limits				
Field strength of fundamental				
Frequency (MHz)	30m		3m	
	uV/m	dBuV/m	uV/m	dBuV/m
13.553~13.567	15,848	84	1,584,800	124
13.410-13.553 13.567-13.710	334	50.475	33,400	90.475
13.110-13.410 13.710-14.010	106	40.506	10,600	80.506

Remarks: Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

➤ General Radiated Emission Limits

FCC Part 15 Paragraph 15.209 Limits		
Frequency MHz	Field Strength (Microvolts/meter)	Distance (Meters)
0.009-0.490	2400/F (kHz)	300
0.490-1.705	24000/F (kHz)	30
1.705-30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Remark:

- The tighter limit shall apply at the edge between two frequency bands.
- Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.
- $\text{RF Voltage (dBuV/m)} = 20 \cdot \log \text{RF Voltage (uV/m)}$
- When the very low emission of EUT, the 3m measurement distance was performed. Regards to an inverse linear extrapolation 40dB/dec is adopted. The collection factor will be 80dB for this case.

4.3. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Regard to the characteristic and operation band of EUT, Loop antenna was used for this measurement. The measurement method is based on ANSI C63.4 section 8.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4: 2003 on radiated measurement.

Radiated emissions were investigated over the frequency range from 9kHz to 30MHz using a receive bandwidth of 9kHz and 30MHz to 1GHz using a receiver bandwidth of 120kHz.

Radiated was performed at an antenna to EUT distance of 3 meters.

The frequency range from 30MHz to 10th harmonics is checked.

The emission limit shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000MHz.

Radiated emission limit in these three bands are based on measurements employing an average detector.

4.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.225: 2007

4.5. Test Result

Product	Electrand		
Test Item	Fundamental Radiated Emission		
Test Mode	Mode 1: Transmit_Power by PC		
Date of Test	2018/11/02	Test Site	CB1-H

Axis	Frequency (MHz)	Reading Level (dB μ V@3M)	Measure Level (dB μ V/m@3M)	Limit (dB μ V/m@3M)	Margin (dB)
X	13.560	51.170	71.170	123.999	-52.829
Y	13.560	43.900	63.900	123.999	-60.099
Z	13.560	39.410	59.410	123.999	-64.589

Frequency (MHz)	Reading Level (dB μ V@3M)	Measure Level (dB μ V/m@3M)	Limit (dB μ V/m@3M)	Margin (dB)
13.553-13.567	51.170	71.170	123.999	-52.829
13.410-13.553	45.680	65.680	90.475	-24.795
13.567-13.710	45.190	65.190	90.475	-25.285
13.110-13.410	16.600	36.600	80.506	-43.906
13.710-14.010	16.560	36.560	80.506	-43.946

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Antenna Factor (AF_E)

Product	Electrand		
Test Item	Fundamental Radiated Emission		
Test Mode	Mode 2: Transmit_Power by Battery		
Date of Test	2018/11/02	Test Site	CB1-H

Axis	Frequency (MHz)	Reading Level (dB μ V@3M)	Measure Level (dB μ V/m@3M)	Limit (dB μ V/m@3M)	Margin (dB)
X	13.560	51.200	71.200	123.999	-52.799
Y	13.560	43.860	63.860	123.999	-60.139
Z	13.560	40.010	60.010	123.999	-63.989

Frequency (MHz)	Reading Level (dB μ V@3M)	Measure Level (dB μ V/m@3M)	Limit (dB μ V/m@3M)	Margin (dB)
13.553-13.567	51.200	71.200	123.999	-52.799
13.410-13.553	45.620	65.620	90.475	-24.855
13.567-13.710	45.310	65.310	90.475	-25.165
13.110-13.410	16.300	36.300	80.506	-44.206
13.710-14.010	15.260	35.260	80.506	-45.246

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Antenna Factor (AF_E)

Product	Electrand		
Test Item	Radiated Emission (<30MHz)		
Test Mode	Mode 1: Transmit_Power by PC		
Date of Test	2018/11/02	Test Site	CB1-H

Frequency (MHz)	Reading Level (dBμV@3M)	Measure Level (dBμV/m@3M)	Limit (dBμV/m@3M)	Margin (dB)
1.195	18.130	38.130	66.060	-27.930
3.732	16.800	36.800	69.540	-32.740
7.493	18.620	38.620	69.540	-30.920
14.956	15.590	35.590	69.540	-33.950
23.851	16.810	36.810	69.540	-32.730
27.612	16.830	36.830	69.540	-32.710

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Antenna Factor (AF_E)

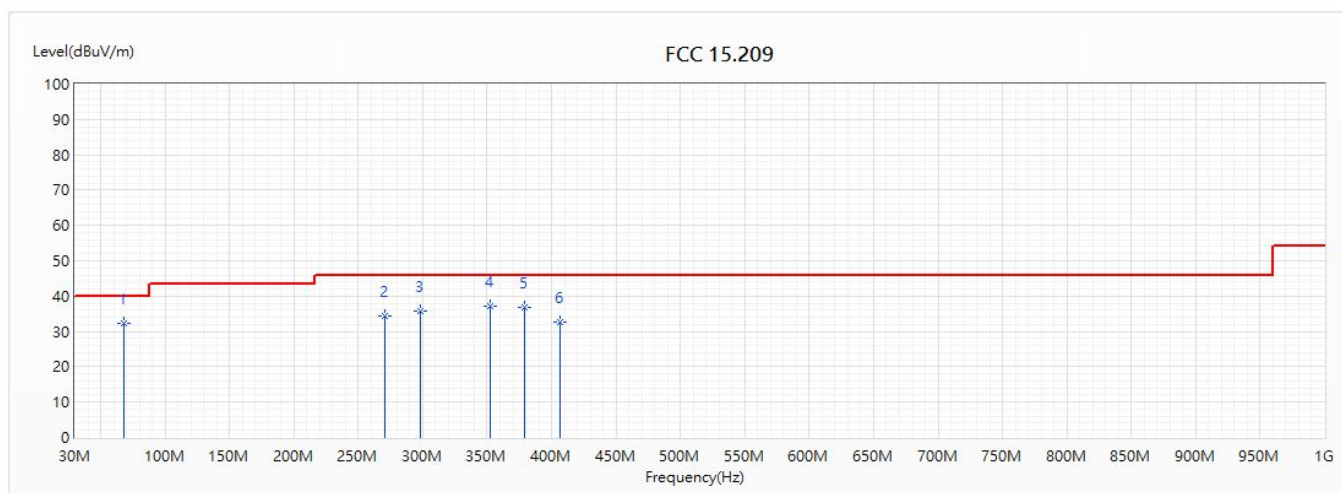
Product	Electrand		
Test Item	Radiated Emission (<30MHz)		
Test Mode	Mode 2: Transmit_Power by Battery		
Date of Test	2018/11/02	Test Site	CB1-H

Frequency (MHz)	Reading Level (dB μ V@3M)	Measure Level (dB μ V/m@3M)	Limit (dB μ V/m@3M)	Margin (dB)
1.463	16.720	36.720	64.300	-27.580
5.493	15.840	35.840	69.540	-33.700
8.687	16.000	36.000	69.540	-33.540
11.254	17.820	37.820	69.540	-31.720
17.403	15.930	35.930	69.540	-33.610
21.941	17.160	37.160	69.540	-32.380

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Antenna Factor (AF_E)

Spurious Emission (30MHz~1GHz)

Site :	CB2-H	Engineer :	Mark
Model No :	8794700LAG01	Test Date :	2018/10/24
Test Voltage :	AC 120V/60Hz	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit_Power by PC		
Note :	13.56MHz		

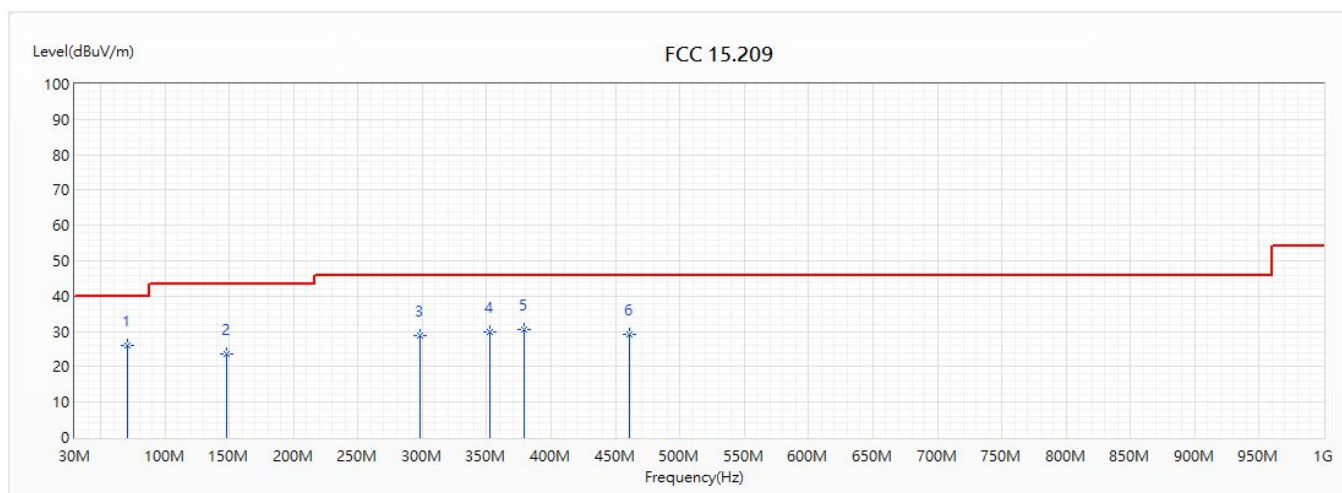


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	67.83	32.28	40.00	-7.72	60.54	-28.26	QP
2	270.56	34.53	46.00	-11.47	54.41	-19.88	QP
3	297.72	35.77	46.00	-10.23	55.00	-19.23	QP
4	352.04	37.23	46.00	-8.77	54.68	-17.45	QP
5	379.2	36.93	46.00	-9.07	53.53	-16.60	QP
6	406.36	32.77	46.00	-13.23	48.61	-15.84	QP

Note:

1. All Reading Levels is Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Emission Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site :	CB2-H	Engineer :	Mark
Model No :	8794700LAG01	Test Date :	2018/10/24
Test Voltage :	AC 120V/60Hz	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Power by PC		
Note :	13.56MHz		

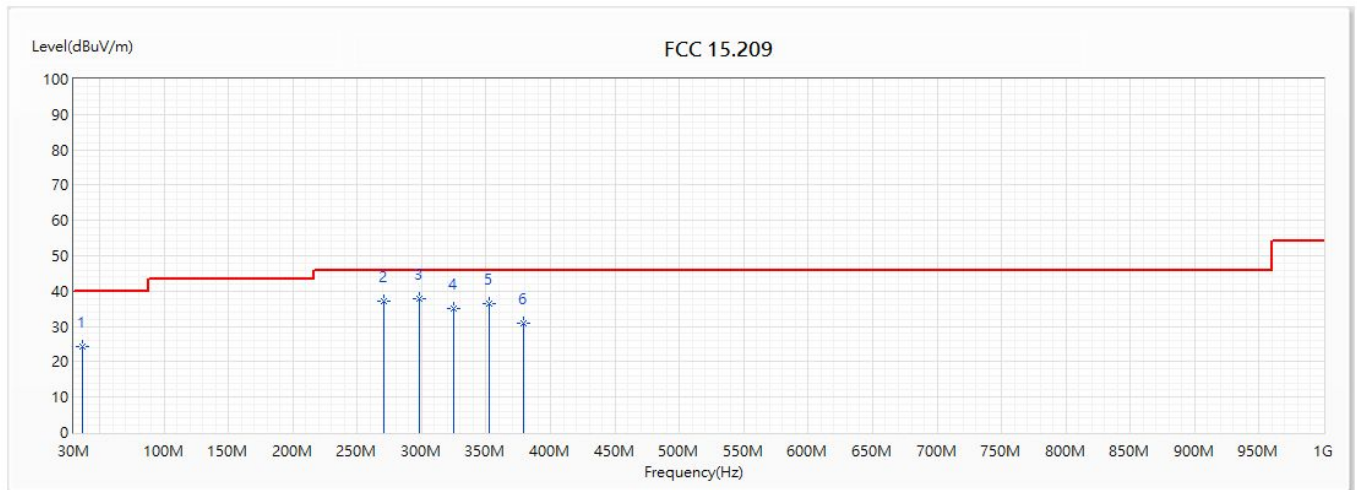


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	70.74	26.00	40.00	-14.00	54.09	-28.09	QP
2	148.34	23.72	43.50	-19.78	46.10	-22.38	QP
3	297.72	28.69	46.00	-17.31	47.92	-19.23	QP
4	352.04	29.81	46.00	-16.19	47.26	-17.45	QP
5	379.2	30.47	46.00	-15.53	47.07	-16.60	QP
6	460.68	29.04	46.00	-16.96	44.06	-15.02	QP

Note:

1. All Reading Levels is Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Emission Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site :	CB2-H	Engineer :	Mark
Model No :	8794700LAG01	Test Date :	2018/10/24
Test Voltage :	DC 3.7V	Polarity :	Horizontal
Test Mode :	Mode 2: Transmit Power by Battery		
Note :	13.56MHz		

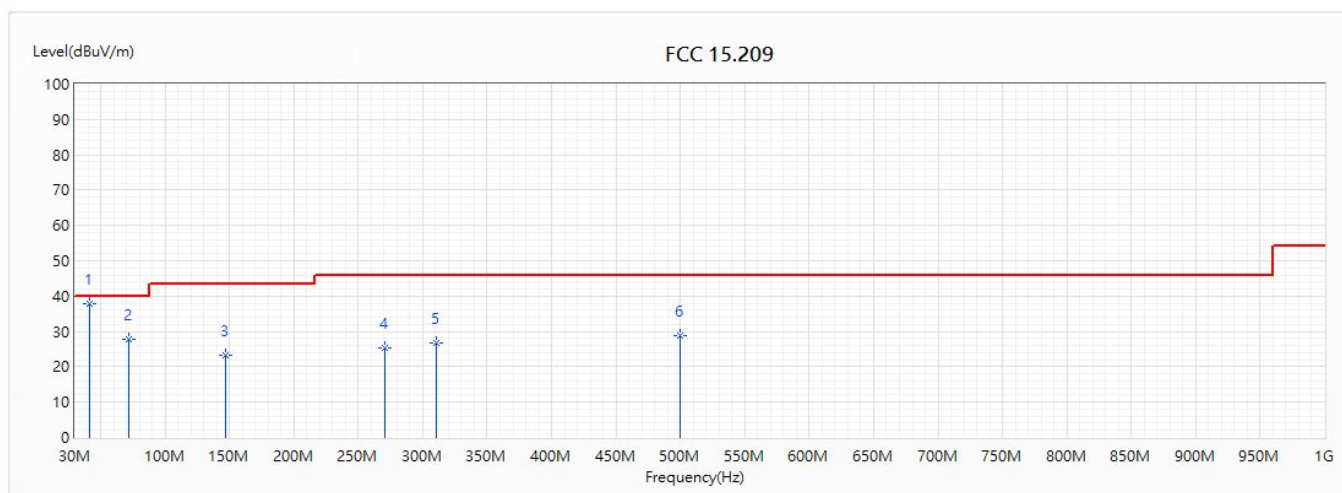


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	36.79	24.40	40.00	-15.60	41.10	-16.70	QP
2	270.56	37.29	46.00	-8.71	57.17	-19.88	QP
* 3	297.72	37.81	46.00	-8.19	57.04	-19.23	QP
4	324.88	35.03	46.00	-10.97	53.33	-18.30	QP
5	352.04	36.34	46.00	-9.66	53.79	-17.45	QP
6	379.2	30.81	46.00	-15.19	47.41	-16.60	QP

Note:

1. All Reading Levels is Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Emission Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

Site :	CB2-H	Engineer :	Mark
Model No :	8794700LAG01	Test Date :	2018/10/24
Test Voltage :	DC 3.7V	Polarity :	Vertical
Test Mode :	Mode 2: Transmit Power by Battery		
Note :	13.56MHz		



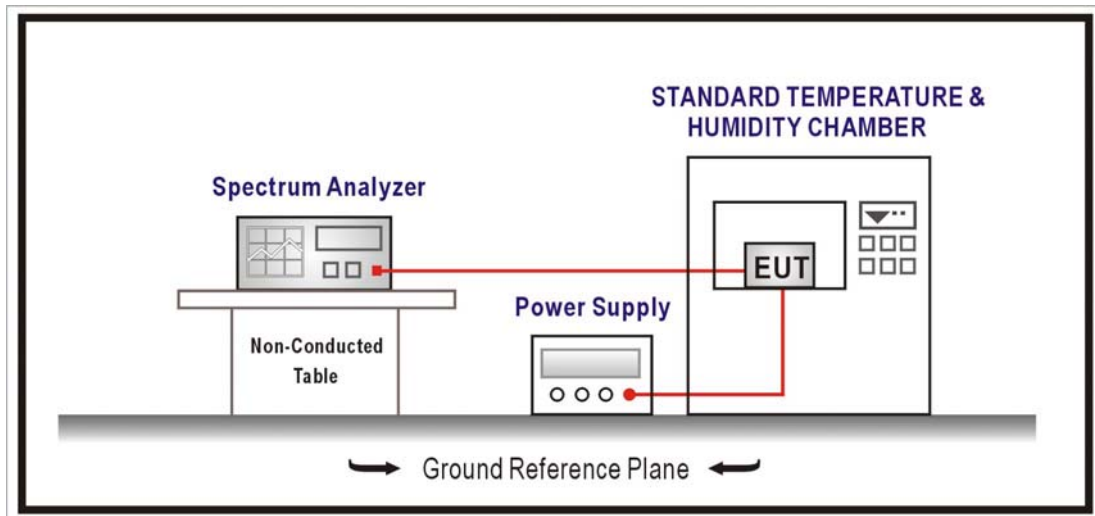
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	41.64	37.78	40.00	-2.22	56.59	-18.81	QP
2	71.71	27.92	40.00	-12.08	55.93	-28.01	QP
3	147.37	23.22	43.50	-20.28	45.56	-22.34	QP
4	270.56	25.42	46.00	-20.58	45.30	-19.88	QP
5	310.33	26.78	46.00	-19.22	45.57	-18.79	QP
6	499.48	28.81	46.00	-17.19	43.28	-14.47	QP

Note:

1. All Reading Levels is Quasi-Peak value.
2. “ * ”, means this data is the worst emission level.
3. Emission Level = Reading Level + Correct Factor
4. The Emission under 30MHz were not included is because their levels are too low.

5. Frequency Stability

5.1. Test Setup



5.2. Test Procedure

The frequency tolerance of the carrier signal shall be maintained within $\pm 0.01\%$ of the operating frequency over a temperature variation of -20 degrees to 50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. For battery operated equipment, the equipment tests shall be performed using a new battery.

5.3. Test Result

Product	Electrand
Test Item	Frequency Stability
Test Mode	Mode 1: Transmit Power by PC
Date of Test	2018/11/02

Temperature Interval (°C)	AC Voltage (V)	Frequency(MHz)	Deviation(%)	Result
0	3.700	13.561050	0.0077434	Pass
10		13.561100	0.0081121	Pass
20		13.561200	0.0088496	Pass
30		13.560900	0.0066372	Pass
40		13.561050	0.0077434	Pass
50		13.560800	0.0058997	Pass
60		13.560950	0.0070059	Pass

Temperature Interval (°C)	DC Voltage (V)	Frequency(MHz)	Deviation(%)	Result
20	3.145	13.561200	0.0088496	Pass
	3.700	13.561150	0.0084808	Pass
	4.255	13.561150	0.0084808	Pass