

FCC Test Report

Product Name : ID GEBER Display
Trade Name : BMW
Model No. : i12
FCC ID. : 2ABPEI12

Applicant : HON HAI PRECISION IND.CO., LTD.
Address : No.53, Sec. 4, Zhongyang Rd., Tucheng Dist.,
New Taipei City 236, Taiwan (R.O.C.)

Date of Receipt : Jul. 14, 2016
Issued Date : Jul. 27, 2016
Report No. : 1670275R-RFUSP14V00
Report Version : V2.0



The declaration results relate only to the samples calculated.
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Test Report Certification

Issued Date : Jul. 27, 2016
Report No. : 1670275R-RFUSP14V00



Product Name : ID GEBER Display
Applicant : HON HAI PRECISION IND.CO., LTD.
Address : No.53, Sec. 4, Zhongyang Rd., Tucheng Dist., New Taipei
City 236, Taiwan (R.O.C.)
Manufacturer : Foxconn Technology Co., Ltd.
Model No. : i12
FCC ID. : 2ABPEI12
EUT Voltage : Mode 1/3: DC 5V (Power by PC)
Mode 2/4: DC 3.7V (Power by Battery)
Testing Voltage : Mode 1/3: DC 5V (Power by PC)
Mode 2/4: DC 3.7V (Power by Battery)
Trade Name : BMW
Applicable Standard : FCC 15 Subpart C Section 15.231(b): 2014
Test Lab : Hsin Chu Laboratory
Test Result : Complied

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(Roy Wang / Director)

Revision History

Report No.	Version	Description	Issued Date
1670275R-RFUSP14V00	V2.0	Initial issue of report.	Jul. 27, 2016

Laboratory Information

We, **Quietek Corporation**, are an independent RF consultancy that was established the whole facility in our laboratories. The test facility has been accredited/accepted (audited or listed) by the following related bodies in compliance with ISO 17025 specified testing scopes:

Taiwan R.O.C.	:	TAF, Accreditation Number: 3024
USA	:	FCC, Registration Number: 834100
Canada	:	IC, Submission No: 181665 / IC Registration Number: 4075C-4

The related certificate for our laboratories about the test site and management system can be downloaded from Quietek Corporation's Web Site:<http://www.quietek.com/english/about/certificates.aspx?bval=5>

The address and introduction of Quietek Corporation's laboratories can be founded in our Web site :
http://www.quietek.com/index_en.aspx

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

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1. General Information

1.1. EUT Description

Product Name	ID GEBER Display
Trade Name	BMW
Model No.	i12
Frequency Range	433.2 MHz / 434.64 MHz
Channel Number	2
Type of Modulation	FSK
Channel Control	Auto
Antenna Type	Printed
Antenna Gain	-15dBi

Working Frequency of Each Channel	
Channel	Frequency
001	433.2 MHz
002	434.64 MHz

Note:

1. This device is an ID GEBER Display included a 433.2MHz/434.64MHz transceiver function.
2. These tests are conducted on a sample for the purpose of demonstrating compliance with Part 15 Subpart C Paragraph 15.231.
3. The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.
4. This device is a composite device in accordance with Part 15 regulations. The function receiving was measured and made a test report that the report number is 1670275R-RFUSP01V00 under Declaration of Conformity.

1.2. Test Mode

QuieTek verified the construction and function in typical operation. All the test modes are performed in normal operation and are defined as:

Pre-Test Mode	
TX	Mode 1: 433.2MHz (Power by PC) Mode 2: 433.2MHz (Power by Battery) Mode 3: 434.64MHz (Power by PC) Mode 4: 434.64MHz (Power by Battery)
Final Test Mode	
TX	Mode 1: 433.2MHz (Power by PC) Mode 2: 433.2MHz (Power by Battery) Mode 3: 434.64MHz (Power by PC) Mode 4: 434.64MHz (Power by Battery)

Emission				
Performed Item	Mode 1	Mode 2	Mode 3	Mode 4
Conducted Emission	Yes	No	Yes	No
Radiated Emission	Yes	Yes	Yes	Yes
Occupied Bandwidth	Yes	No	Yes	No
Duty cycle	Yes	No	Yes	No
Transmitter time	Yes	No	Yes	No

1.3. Tested System Details

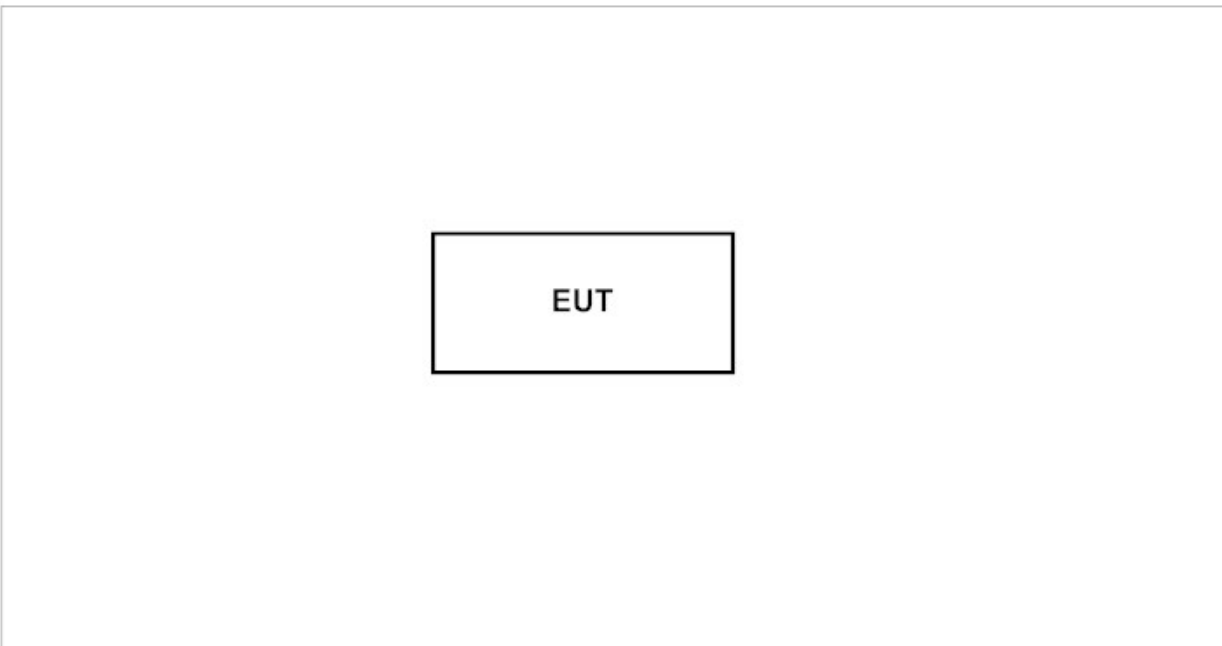
The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

Test Mode		Mode 1: 433.2MHz (Power by PC) Mode 3: 434.64MHz (Power by PC)				
Product		Manufacturer	Model No.	Serial No.	FCC ID	Power Cord
1	Notebook PC	HP	HSTNN-146C	CNU8253S1X	DoC	Non-Shielded, 1.8m
2	USB Mouse	Logitech	M-UV83	LZE35006065	DoC	--
3	Microphone & Earphone	Fujiei	SBZ-38	N/A	DoC	--

Test Mode		Mode 2: 433.2MHz (Power by Battery) Mode 4: 434.64MHz (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: 433.2MHz (Power by PC) Mode 3: 434.64MHz (Power by PC)
Connection Diagram		
<pre> graph TD EUT[EUT] --- D[USB Cable] --- PC[Notebook PC (1)] PC --- A[LAN Cable] --- Internet[Internet] PC --- B[USB Mouse Cable] --- Mouse[USB Mouse (2)] PC --- C[Microphone & Earphone Cable] --- Mic[Microphone & Earphone (3)] </pre>		
Signal Cable Type		Signal cable Description
A	LAN Cable	Non-Shielded, 3m
B	USB Mouse Cable	Shielded, 1.8m
C	Microphone & Earphone Cable	Non-Shielded, 1.2m
D	USB Cable	Shielded, 1m

Test Mode	Mode 2: 433.2MHz (Power by Battery) Mode 4: 434.64MHz (Power by Battery)
Connection Diagram	
	

1.5. EUT Exercise Software

1	Setup the EUT as shown in section 1.4.
2	Turn on the EUT power.
3	The RF signal's status will continue transmit through EUT.
4	Repeat the above procedure.

2. Conducted Emission

2.1. Test Equipment

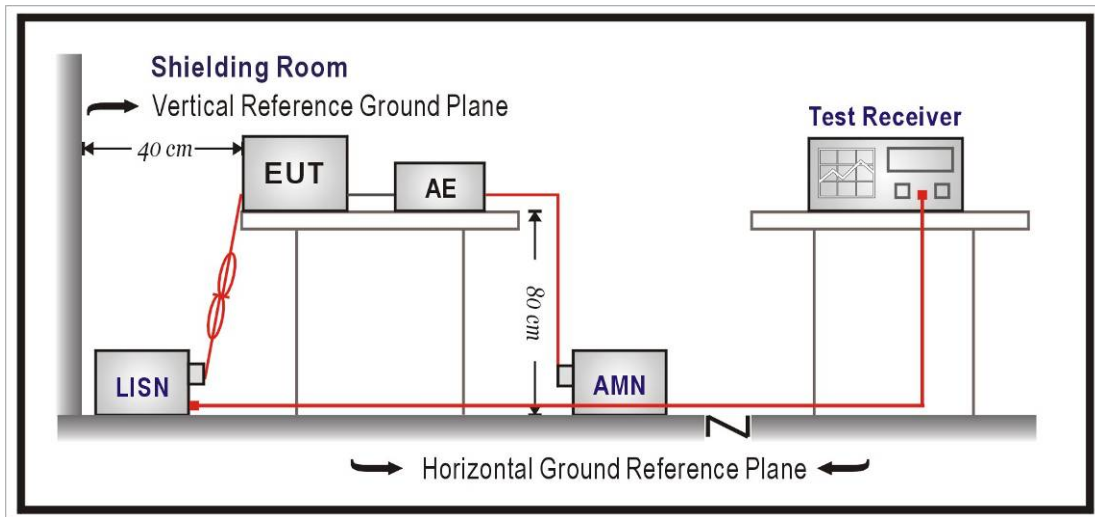
The following test equipments are used during the test:

Conducted Emission / SR6

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Artificial Mains Network	R&S	ENV4200	848411/010	2017/01/20
LISN	R&S	ENV216	100092	2016/08/17
Test Receiver	R&S	ESCS 30	825442/014	2016/07/16

Note: All equipments that need to calibrate are with calibration period of 1 year.

2.2. Test Setup



2.3. 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.

2.4. 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.

2.5. Test Specification

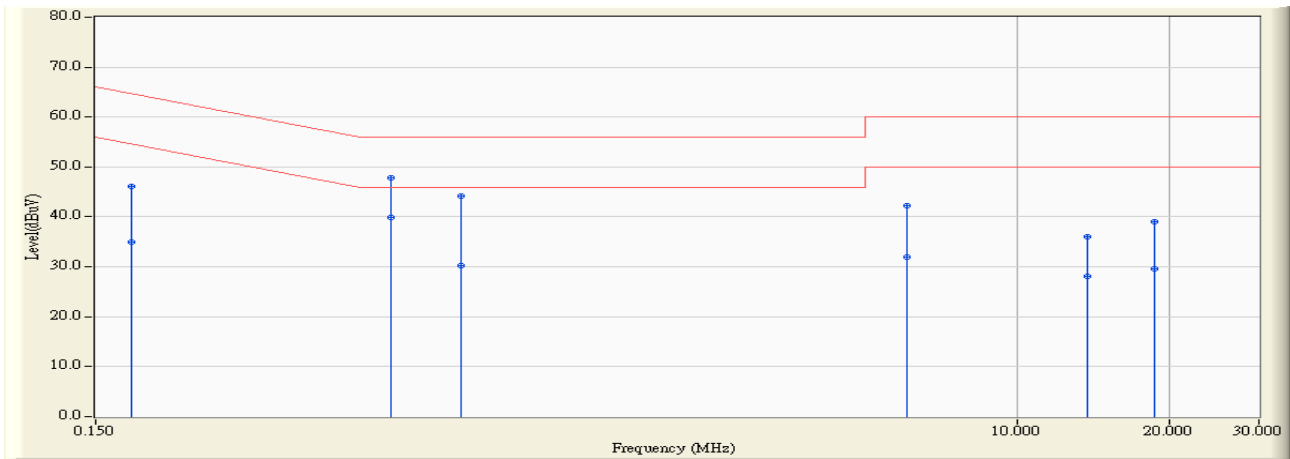
According to FCC Part 15 Subpart C Paragraph 15.207: 2014

2.6. Uncertainty

The measurement uncertainty is defined as ± 2.26 dB.

2.7. Test Result

Site : SR3	Time : 2016/03/11 - 23:16
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR3_LISN(16A)-5_0728 - Line1	Power : DC 5V (Power by PC)
EUT : ID GEBER Display	Note : Mode 1: 433.2MHz (Power by PC)

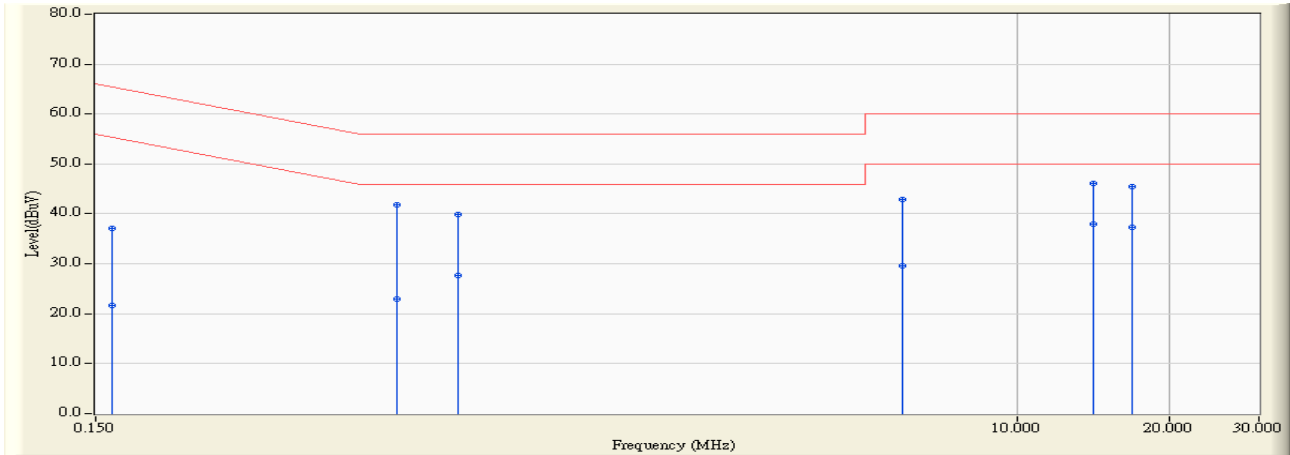


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	0.177	9.749	36.390	46.138	-18.484	64.623	QUASIPeAK
2	0.177	9.749	25.300	35.048	-19.574	54.623	AVERAGE
3	0.576	9.790	38.130	47.920	-8.080	56.000	QUASIPeAK
4	*	9.790	30.170	39.960	-6.040	46.000	AVERAGE
5	0.791	9.790	34.460	44.250	-11.750	56.000	QUASIPeAK
6	0.791	9.790	20.450	30.240	-15.760	46.000	AVERAGE
7	6.041	9.968	32.250	42.218	-17.782	60.000	QUASIPeAK
8	6.041	9.968	22.070	32.038	-17.962	50.000	AVERAGE
9	13.705	10.179	25.890	36.069	-23.931	60.000	QUASIPeAK
10	13.705	10.179	17.950	28.129	-21.871	50.000	AVERAGE
11	18.677	10.252	28.730	38.981	-21.019	60.000	QUASIPeAK
12	18.677	10.252	19.410	29.661	-20.339	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 : SR3	Time : 2016/03/11 - 23:38
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR3_LISN(16A)-5_0728 - Line2	Power : DC 5V (Power by PC)
EUT : ID GEBER Display	Note : Mode 1: 433.2MHz (Power by PC)

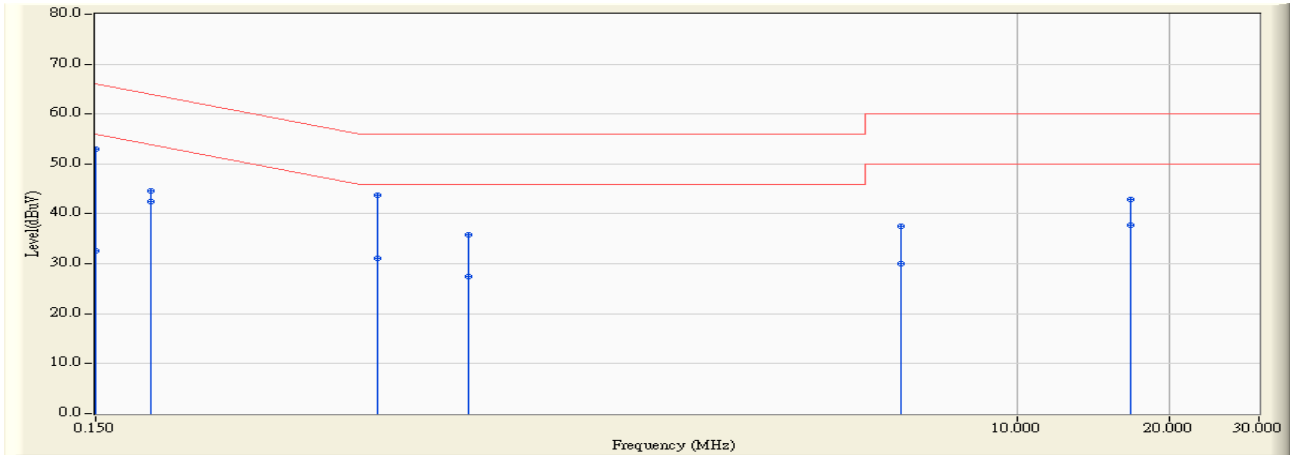


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.162	9.746	27.380	37.125	-28.250	65.375	QUASPEAK
2		0.162	9.746	11.850	21.595	-33.780	55.375	AVERAGE
3		0.591	9.783	31.960	41.743	-14.257	56.000	QUASPEAK
4		0.591	9.783	13.090	22.873	-23.127	46.000	AVERAGE
5		0.783	9.786	30.150	39.936	-16.064	56.000	QUASPEAK
6		0.783	9.786	17.840	27.626	-18.374	46.000	AVERAGE
7		5.927	9.974	32.870	42.844	-17.156	60.000	QUASPEAK
8		5.927	9.974	19.590	29.564	-20.436	50.000	AVERAGE
9		14.111	10.257	35.830	46.087	-13.913	60.000	QUASPEAK
10	*	14.111	10.257	27.610	37.867	-12.133	50.000	AVERAGE
11		16.864	10.340	35.110	45.450	-14.550	60.000	QUASPEAK
12		16.864	10.340	27.070	37.410	-12.590	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 : SR3	Time : 2016/03/12 - 00:06
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR3_LISN(16A)-5_0728 - Line1	Power : DC 5V (Power by PC)
EUT : ID GEBER Display	Mode 3: 434.64MHz (Power by PC)

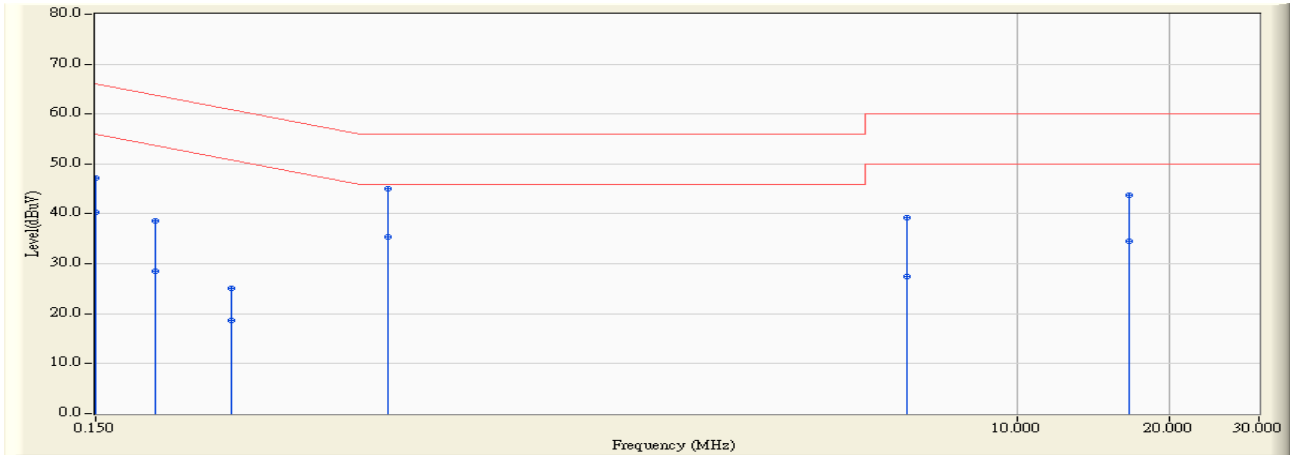


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	0.150	9.751	43.290	53.041	-12.959	66.000	QUASPEAK
2	0.150	9.751	22.920	32.671	-23.329	56.000	AVERAGE
3	0.193	9.748	34.800	44.548	-19.360	63.908	QUASPEAK
4	*	9.748	32.720	42.468	-11.440	53.908	AVERAGE
5	0.541	9.790	33.860	43.650	-12.350	56.000	QUASPEAK
6	0.541	9.790	21.350	31.140	-14.860	46.000	AVERAGE
7	0.818	9.790	26.080	35.870	-20.130	56.000	QUASPEAK
8	0.818	9.790	17.650	27.440	-18.560	46.000	AVERAGE
9	5.892	9.963	27.620	37.582	-22.418	60.000	QUASPEAK
10	5.892	9.963	20.040	30.002	-19.998	50.000	AVERAGE
11	16.740	10.225	32.570	42.794	-17.206	60.000	QUASPEAK
12	16.740	10.225	27.590	37.814	-12.186	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 : SR3	Time : 2016/03/12 - 00:08
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR3_LISN(16A)-5_0728 - Line2	Power : DC 5V (Power by PC)
EUT : ID GEBER Display	Mode 3: 434.64MHz (Power by PC)



	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	0.150	9.746	37.530	47.276	-18.724	66.000	QUASPEAK
2	0.150	9.746	30.600	40.346	-15.654	56.000	AVERAGE
3	0.197	9.748	28.940	38.687	-25.054	63.741	QUASPEAK
4	0.197	9.748	18.860	28.607	-25.134	53.741	AVERAGE
5	0.279	9.754	15.370	25.124	-35.724	60.848	QUASPEAK
6	0.279	9.754	8.950	18.704	-32.144	50.848	AVERAGE
7	0.568	9.783	35.160	44.943	-11.057	56.000	QUASPEAK
8	*	9.783	25.650	35.433	-10.567	46.000	AVERAGE
9	6.029	9.978	29.270	39.248	-20.752	60.000	QUASPEAK
10	6.029	9.978	17.550	27.528	-22.472	50.000	AVERAGE
11	16.642	10.332	33.490	43.823	-16.177	60.000	QUASPEAK
12	16.642	10.332	24.120	34.453	-15.547	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. Radiated Emission

3.1. Test Equipment

The following test equipments are used during the test:

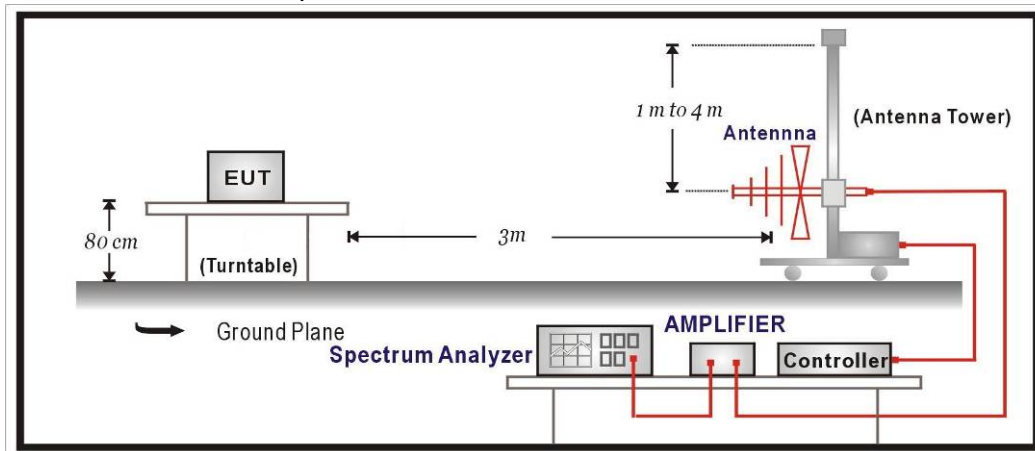
Radiated Emission / CB1

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Bilog Antenna	Schaffner	CBL6112B	2895	2016/08/14
Double Ridged Guide Horn Antenna	Schwarzbeck	BBHA 9120	D743	2017/01/14
Pre-Amplifier	EMCI	EMC0031835	4583/10/13	2017/01/26
Pre-Amplifier	Quietek	AP-025C	CHM-0706049	2017/01/03
Spectrum Analyzer	Agilent	E4440A	MY46187335	2016/12/24
k Type Cable	Huber+Suhner	SF 102	25623/2	2017/01/11
Horn Antenna	Schwarzbeck	BBHA 9170	203	2016/09/07
Signal & Spectrum Analyzer	R&S	FSV40	101049	2017/01/05

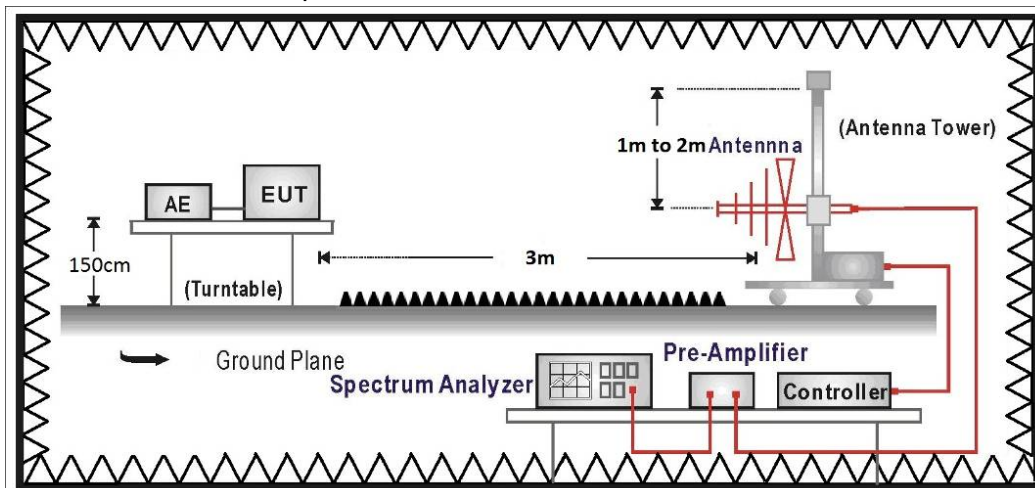
Note: All equipments that need to calibrate are with calibration period of 1 year.

3.2. Test Setup

Under 1GHz Test Setup:



Above 1GHz Test Setup:



3.3. Limits

➤ Fundamental and Harmonics Emission Limits

FCC Part 15 Subpart C Paragraph 15.231(b) Limits				
Fundamental Frequency MHz	Field Strength of Fundamental		Field Strength of Harmonics	
	uV/m	dBuV/m	uV/m	dBuV/m
40.66 - 40.70	2250	67.04	225	47.04
70 - 130	1250	61.94	125	41.94
130 - 174	1250 - 3750	61.94 - 71.48	125 - 375	41.94 - 51.48
174 - 260	3750	71.48	375	51.48
260 - 470	3750 - 12500	71.48 - 81.94	375 - 1250	51.48 - 61.94
above 470	12500	81.94	1250	61.94

- Remarks:
1. RF Voltage (dBuV) = 20 log RF Voltage (uV)
 2. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.
 3. The emission limit in this paragraph is based on measurement instrumentation employing an average detector.

➤ Spurious electric field strength limits

FCC Part 15 Subpart C Paragraph 15.209 Limits			
Frequency MHz	uV/m	dBuV/m	Measurement distance (meter)
0.009 - 0.490	2400/F(kHz)	See Remark ¹	300
0.490 - 1.705	24000/F(kHz)	See Remark ¹	30
1.705 - 30	30	29.5	30
30 - 88	100	40	3
88 - 216	150	43.5	3
216 - 960	200	46	3
Above 960	500	54	3

- Remarks :
1. RF Voltage (dBuV) = 20 log RF Voltage (uV)
 2. In the Above Table, the tighter limit applies at the band edges.
 3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

3.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 and 1.5 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.

Both horizontal and vertical polarizations 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 C63.10: 2013 on radiated measurement.

The resolution bandwidth below 1GHz setting on the field strength meter is 120 kHz and above 1GHz is 1MHz.

Radiated emission measurements below 1GHz are made using broadband Bilog antenna and above 1GHz are made using Horn Antennas.

The measurement is divided into the Preliminary Measurement and the Final Measurement.

The suspected frequencies are searched for in Preliminary Measurement with the measurement antenna kept pointed at the source of the emission both in azimuth and elevation, with the polarization of the antenna oriented for maximum response. The antenna is pointed at an angle towards the source of the emission, and the EUT is rotated in both height and polarization to maximize the measured emission. The emission is kept within the illumination area of the 3 dB beamwidth of the antenna.

The worst radiated emission is measured on the Final Measurement.

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

3.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.231(b): 2014

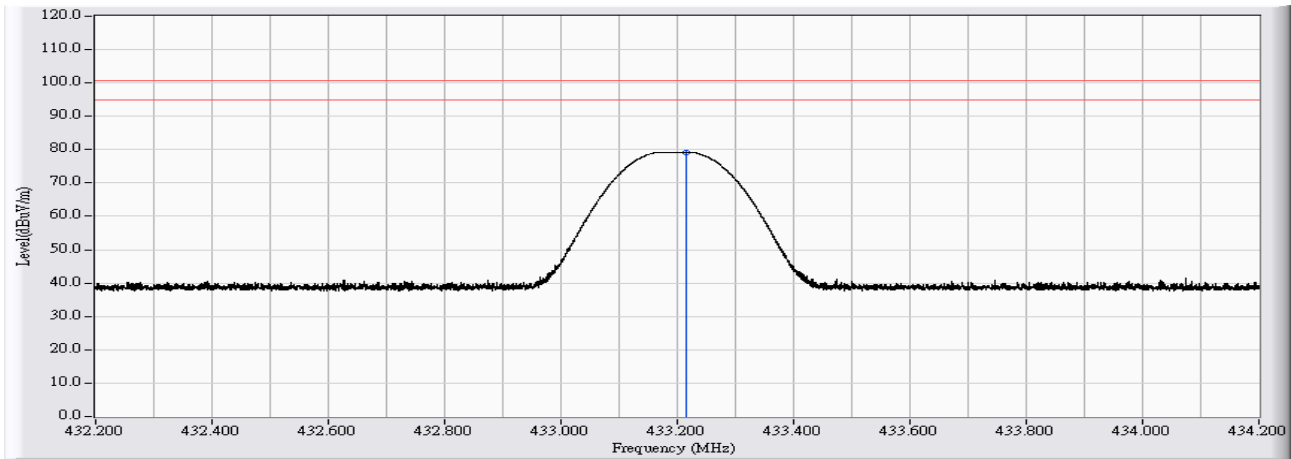
3.6. Uncertainty

± 3.8 dB below 1GHz

± 3.9 dB above 1GHz

3.7. Test Result

Site : CB1	Time : 2016/03/10 - 01:53
Limit : FCC_SPARTC_15.231(b)_F_433.92_03M_PK	Margin : 6
Probe : CB1_FCC_30M-1G-4_9161 - HORIZONTAL	Power : DC 5V (Power by PC)
EUT : ID GEBER Display	Note : Mode 1: 433.2MHz (Power by PC) X-axis

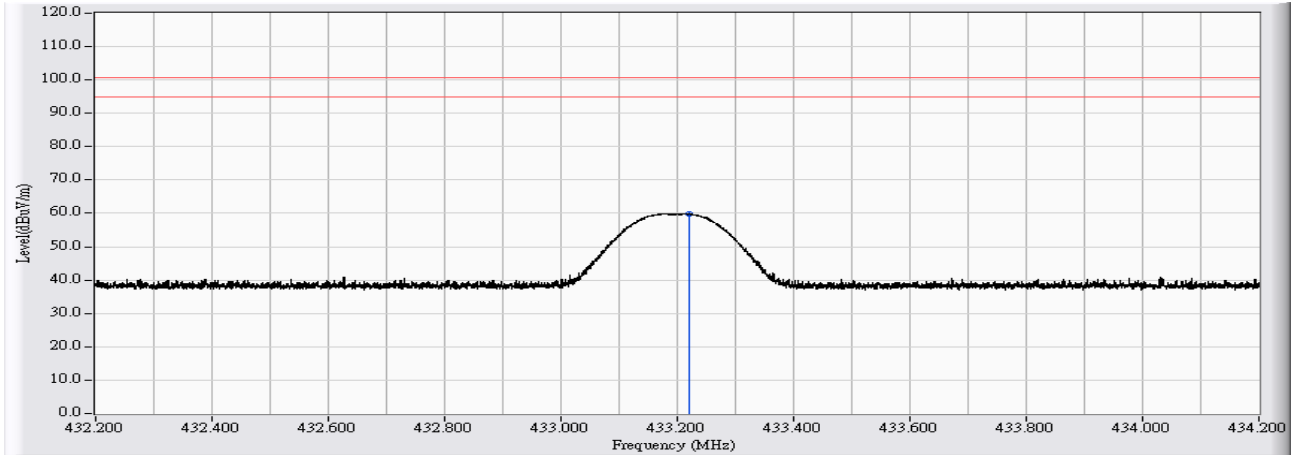


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	433.216	16.755	62.526	79.280	-21.550	100.830	PEAK

Note:

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

Site : CB1	Time : 2016/03/10 - 01:50
Limit : FCC_SPARTC_15.231(b)_F_433.92_03M_PK	Margin : 6
Probe : CB1_FCC_30M-1G-4_9161 - VERTICAL	Power : DC 5V (Power by PC)
EUT : ID GEBER Display	Note : Mode 1: 433.2MHz (Power by PC) X-axis

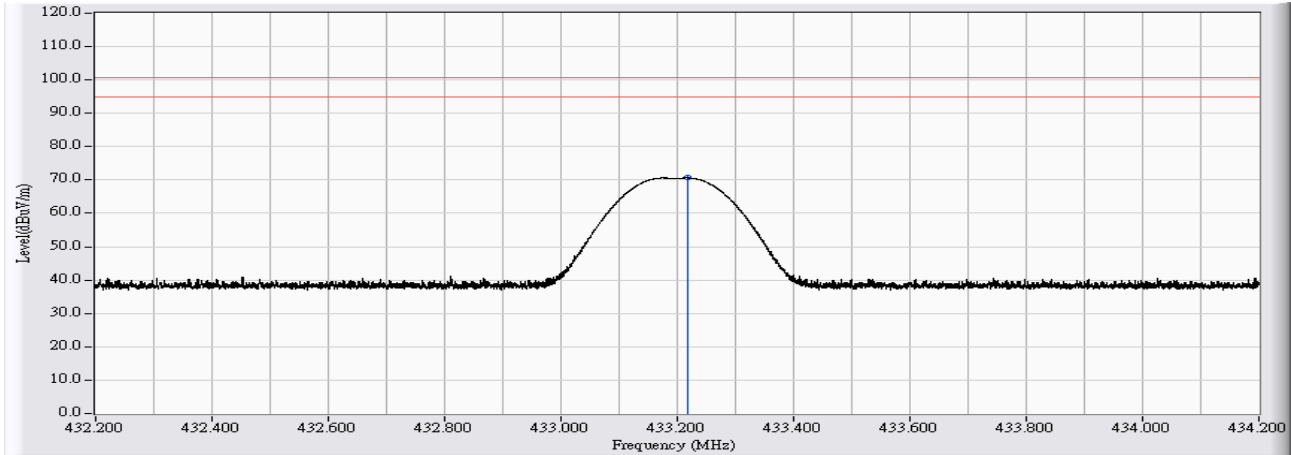


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	433.221	16.755	43.190	59.945	-40.885	100.830	PEAK

Note:

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

Site : CB1	Time : 2016/03/10 - 01:42
Limit : FCC_SPARTC_15.231(b)_F_433.92_03M_PK	Margin : 6
Probe : CB1_FCC_30M-1G-4_9161 - HORIZONTAL	Power : DC 5V (Power by PC)
EUT : ID GEBER Display	Note : Mode 1: 433.2MHz (Power by PC) Y-axis

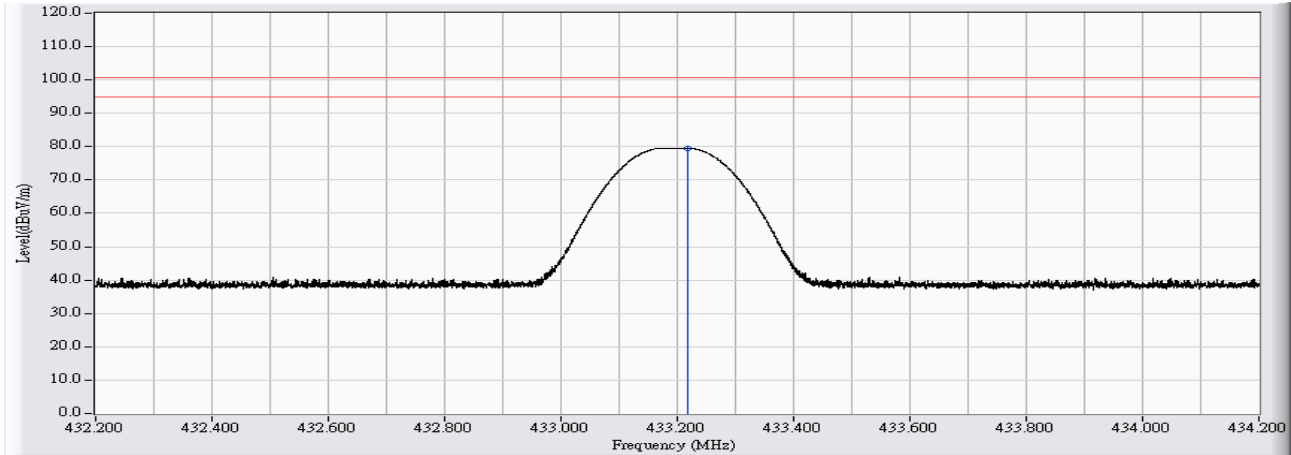


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	433.217	16.755	53.903	70.657	-30.173	100.830	PEAK

Note:

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

Site : CB1	Time : 2016/03/10 - 01:45
Limit : FCC_SPARTC_15.231(b)_F_433.92_03M_PK	Margin : 6
Probe : CB1_FCC_30M-1G-4_9161 - VERTICAL	Power : DC 5V (Power by PC)
EUT : ID GEBER Display	Note : Mode 1: 433.2MHz (Power by PC) Y-axis

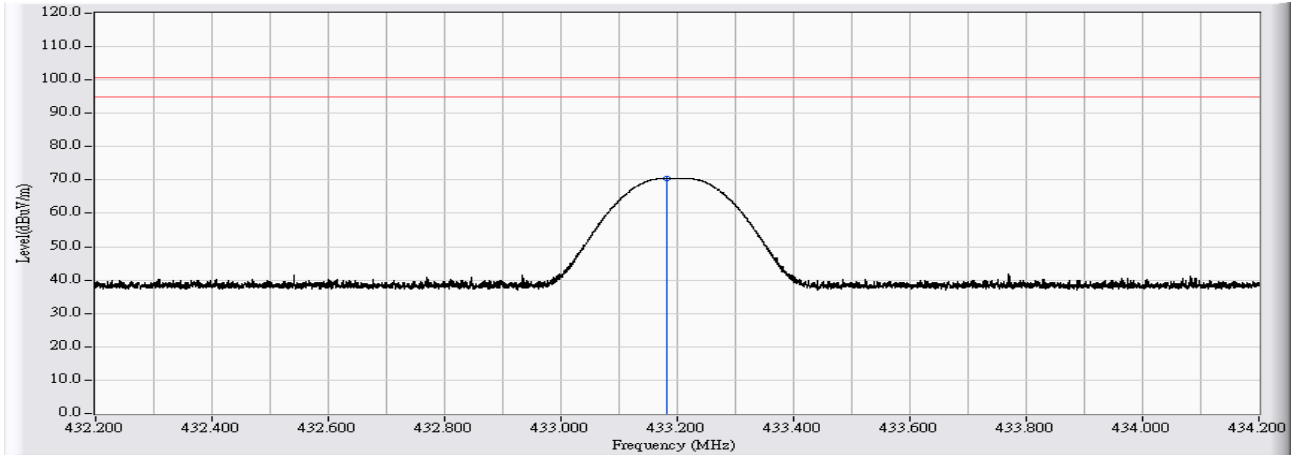


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	433.219	16.755	62.816	79.571	-21.259	100.830	PEAK

Note:

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

Site : CB1	Time : 2016/03/10 - 01:39
Limit : FCC_SPARTC_15.231(b)_F_433.92_03M_PK	Margin : 6
Probe : CB1_FCC_30M-1G-4_9161 - HORIZONTAL	Power : DC 5V (Power by PC)
EUT : ID GEBER Display	Note : Mode 1: 433.2MHz (Power by PC) Z-axis

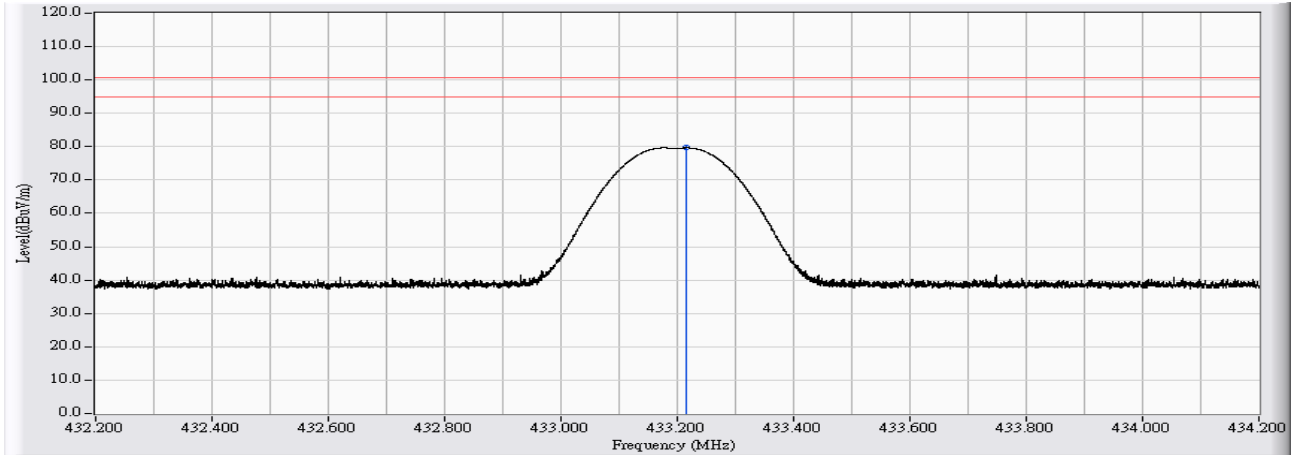


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	433.183	16.754	53.776	70.530	-30.300	100.830	PEAK

Note:

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

Site : CB1	Time : 2016/03/10 - 01:36
Limit : FCC_SPARTC_15.231(b)_F_433.92_03M_PK	Margin : 6
Probe : CB1_FCC_30M-1G-4_9161 - VERTICAL	Power : DC 5V (Power by PC)
EUT : ID GEBER Display	Note : Mode 1: 433.2MHz (Power by PC) Z-axis



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	433.216	16.755	62.907	79.661	-21.169	100.830	PEAK

Note:

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

Product	ID GEBER Display		
Test Item	Fundamental Radiated Emission		
Test Mode	Mode 1: 433.2MHz (Power by PC)		
Date of Test	2016/03/10	Test Site	CB1

Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Peak Measurement Level (dBuV/m)	Average Measurement Level (dBuV/m)	Average Limit (dBuV/m)
Horizontal					
433.200 (X-axis)	16.755	62.526	79.280	71.868	80.830
433.200 (Y-axis)	16.755	53.903	70.657	63.245	80.830
433.200 (Z-axis)	16.754	53.776	70.530	63.118	80.830
Vertical					
433.200 (X-axis)	16.755	43.190	59.945	52.533	80.830
433.200 (Y-axis)	16.755	62.816	79.571	72.159	80.830
433.200 (Z-axis)	16.755	62.907	79.661	72.249	80.830

Note1:

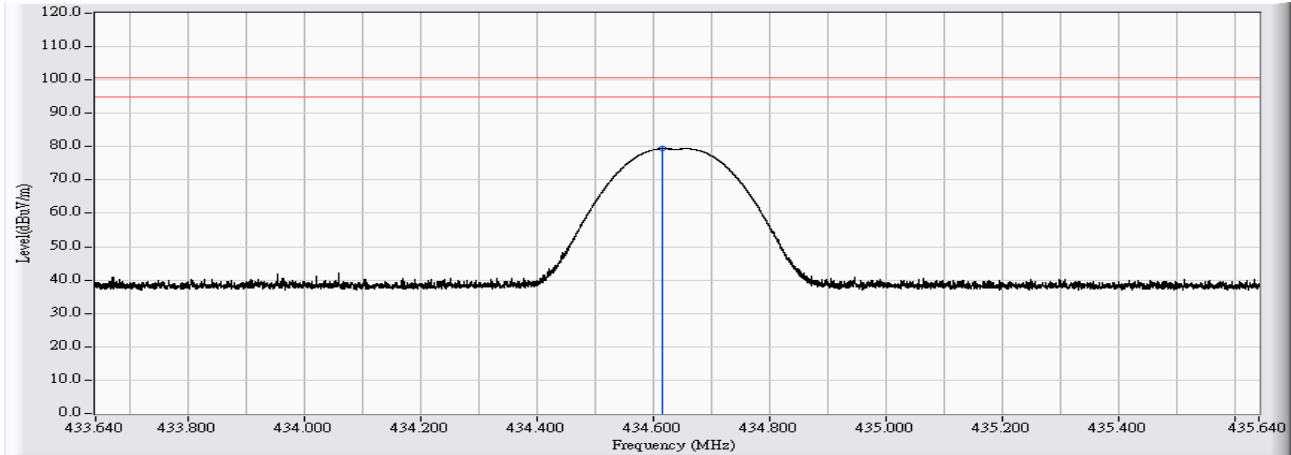
Peak Measurement Level = Reading Level + Correct Factor

Average Measurement Level = Peak Measurement Level + 20Log (Duty Cycle)

Duty Cycle(Only Ton)= Ton/ Ton+off=(42ms/99.72ms)=0.42

20*Log(Duty Cycle) = -7.412

Site : CB1	Time : 2016/03/10 - 01:58
Limit : FCC_SPARTC_15.231(b)_F_433.92_03M_PK	Margin : 6
Probe : CB1_FCC_30M-1G-4_9161 - HORIZONTAL	Power : DC 5V (Power by PC)
EUT : ID GEBER Display	Note : Mode 3: 434.64MHz (Power by PC) X-axis

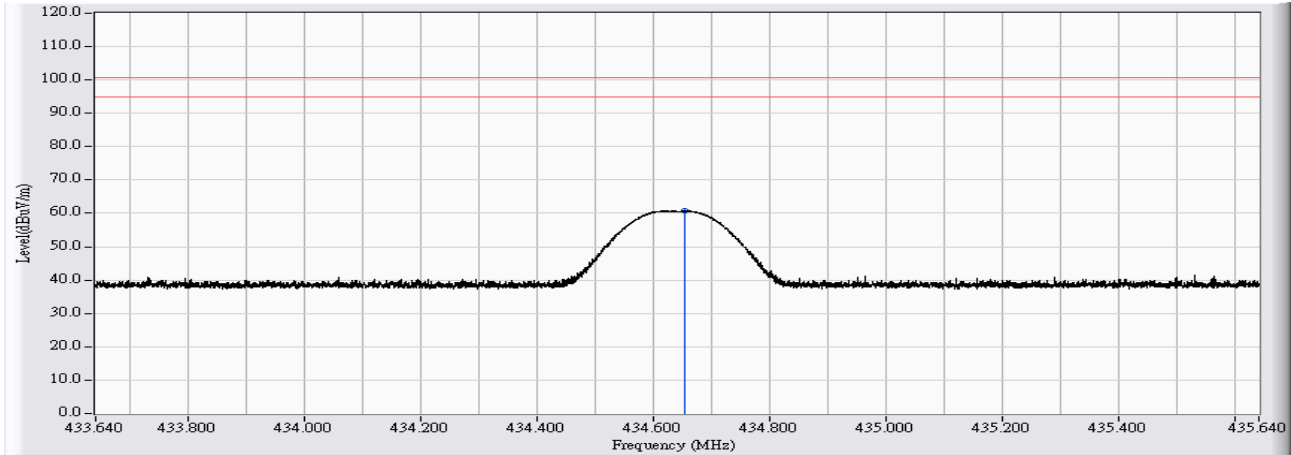


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	434.614	16.787	62.582	79.370	-21.460	100.830	PEAK

Note:

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

Site : CB1	Time : 2016/03/10 - 02:00
Limit : FCC_SPARTC_15.231(b)_F_433.92_03M_PK	Margin : 6
Probe : CB1_FCC_30M-1G-4_9161 - VERTICAL	Power : DC 5V (Power by PC)
EUT : ID GEBER Display	Note : Mode 3: 434.64MHz (Power by PC) X-axis

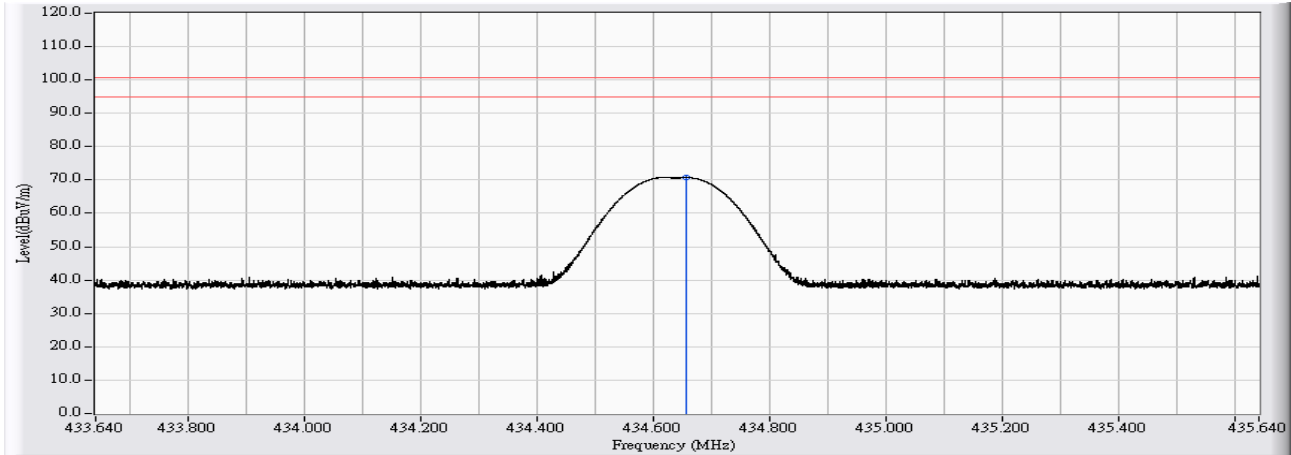


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	434.652	16.788	44.054	60.843	-39.987	100.830	PEAK

Note:

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

Site : CB1	Time : 2016/03/10 - 02:06
Limit : FCC_SPARTC_15.231(b)_F_433.92_03M_PK	Margin : 6
Probe : CB1_FCC_30M-1G-4_9161 - HORIZONTAL	Power : DC 5V (Power by PC)
EUT : ID GEBER Display	Note : Mode 3: 434.64MHz (Power by PC) Y-axis

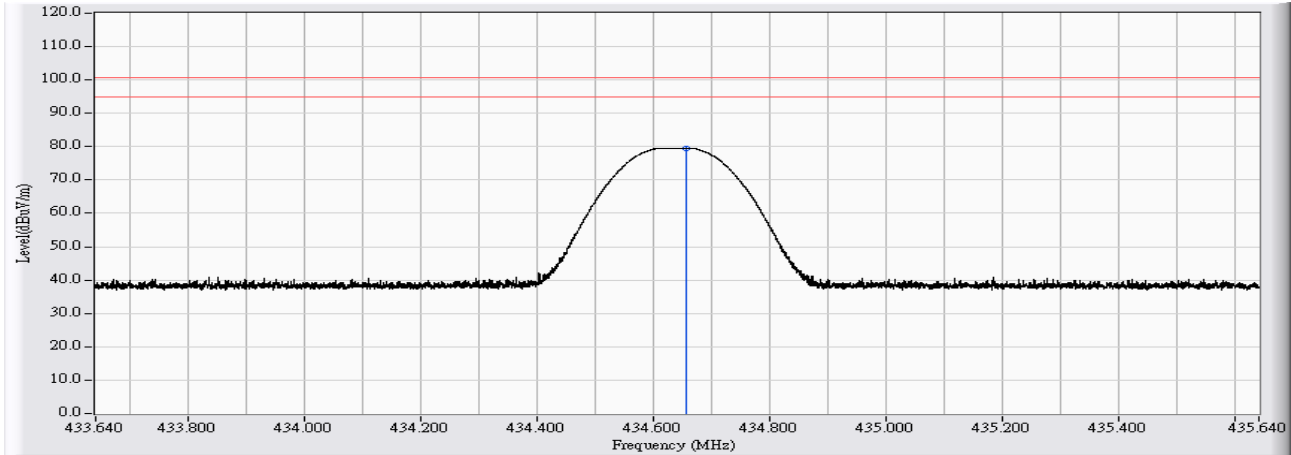


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	434.656	16.788	53.960	70.749	-30.081	100.830	PEAK

Note:

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

Site : CB1	Time : 2016/03/10 - 02:04
Limit : FCC_SPARTC_15.231(b)_F_433.92_03M_PK	Margin : 6
Probe : CB1_FCC_30M-1G-4_9161 - VERTICAL	Power : DC 5V (Power by PC)
EUT : ID GEBER Display	Note : Mode 3: 434.64MHz (Power by PC) Y-axis

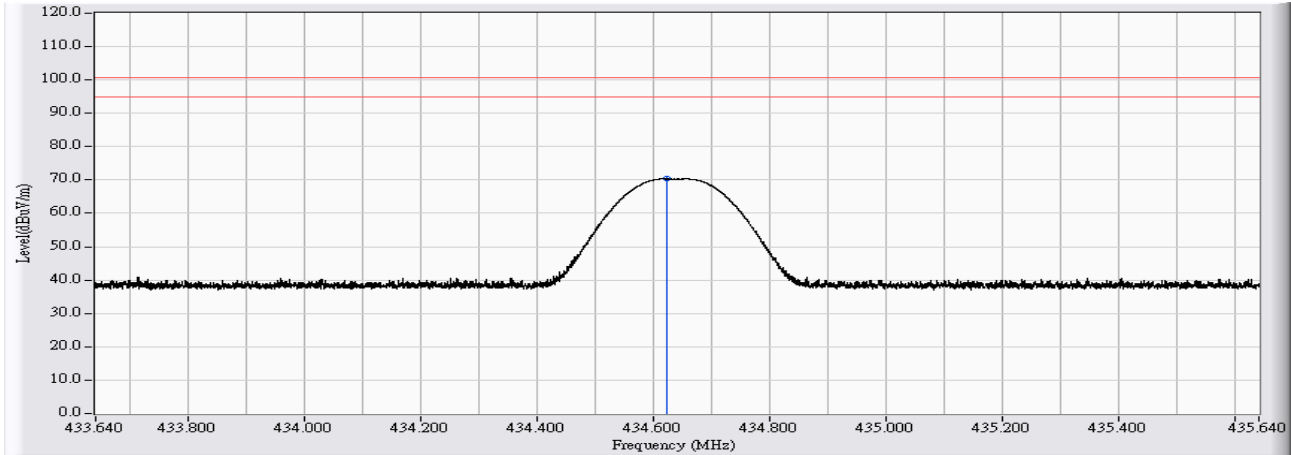


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	434.655	16.788	62.821	79.610	-21.220	100.830	PEAK

Note:

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

Site : CB1	Time : 2016/03/10 - 02:09
Limit : FCC_SPARTC_15.231(b)_F_433.92_03M_PK	Margin : 6
Probe : CB1_FCC_30M-1G-4_9161 - HORIZONTAL	Power : DC 5V (Power by PC)
EUT : ID GEBER Display	Note : Mode 3: 434.64MHz (Power by PC) Z-axis

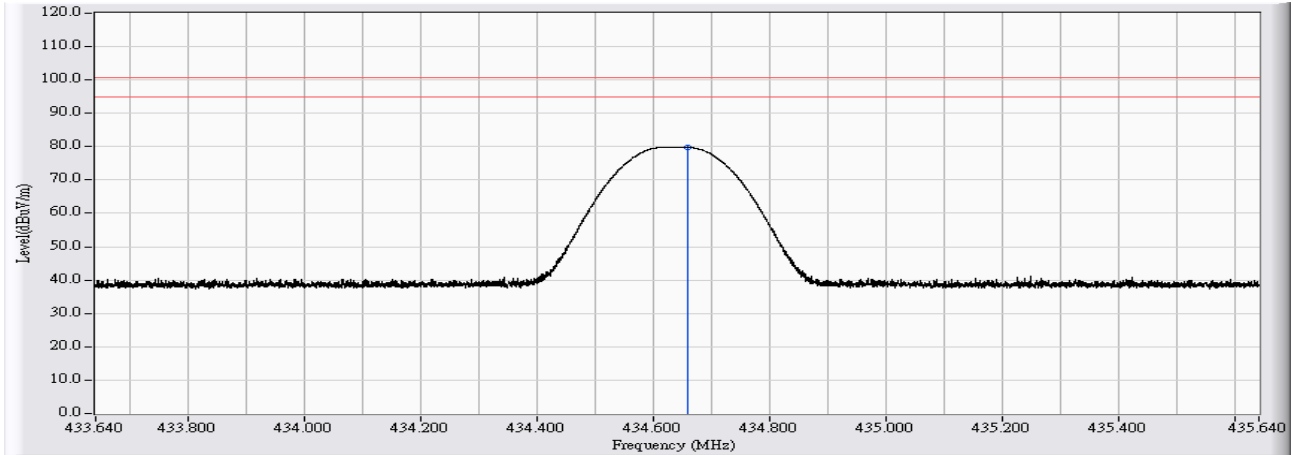


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	434.622	16.787	53.593	70.381	-30.449	100.830	PEAK

Note:

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

Site : CB1	Time : 2016/03/10 - 02:11
Limit : FCC_SPARTC_15.231(b)_F_433.92_03M_PK	Margin : 6
Probe : CB1_FCC_30M-1G-4_9161 - VERTICAL	Power : DC 5V (Power by PC)
EUT : ID GEBER Display	Note : Mode 3: 434.64MHz (Power by PC) Z-axis



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	434.659	16.788	63.031	79.820	-21.010	100.830	PEAK

Note:

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

Product	ID GEBER Display		
Test Item	Fundamental Radiated Emission		
Test Mode	Mode 3: 434.64MHz (Power by PC)		
Date of Test	2016/03/10	Test Site	CB1

Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Peak Measurement Level (dBuV/m)	Average Measurement Level (dBuV/m)	Average Limit (dBuV/m)
Horizontal					
434.640 (X-axis)	16.787	62.582	79.370	71.958	80.830
434.640 (Y-axis)	16.788	53.960	70.749	63.337	80.830
434.640 (Z-axis)	16.787	53.593	70.381	62.969	80.830
Vertical					
434.640 (X-axis)	16.788	44.054	60.843	53.431	80.830
434.640 (Y-axis)	16.788	62.821	79.610	72.198	80.830
434.640 (Z-axis)	16.788	63.031	79.820	72.408	80.830

Note1:

Peak Measurement Level = Reading Level + Correct Factor

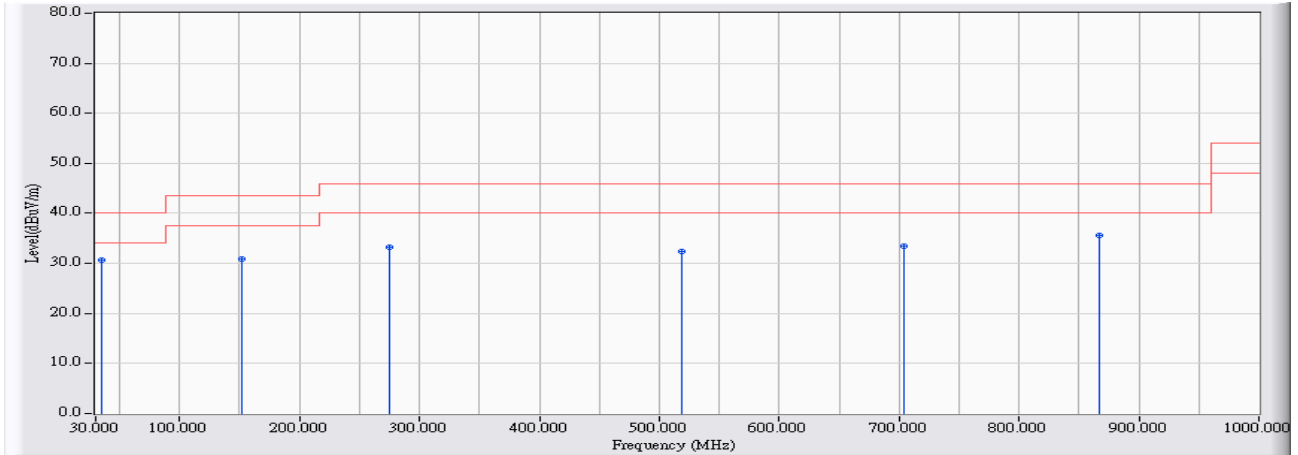
Average Measurement Level = Peak Measurement Level + 20Log (Duty Cycle)

Duty Cycle(Only Ton)= Ton/ Ton+off=(42.1ms/99.72ms)=0.42

20*Log(Duty Cycle) = -7.412

30MHz-1GHz Spurious :

Site : CB1	Time : 2016/03/11 - 01:23
Limit : FCC_CLASS_B_03M_QP	Margin : 6
Probe : CB1_FCC_30M-1G-4_9161 - HORIZONTAL	Power : DC 5V (Power by PC)
EUT : ID GEBER Display	Note : Mode 1: 433.2MHz (Power by PC)

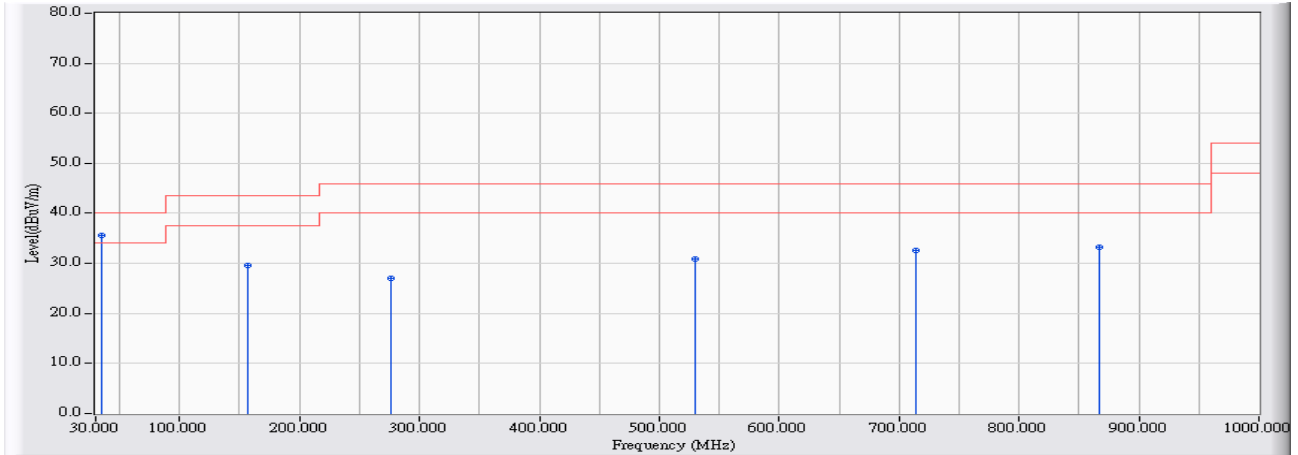


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	34.947	11.886	18.770	30.656	-9.344	40.000	QUASPEAK
2		152.014	17.819	12.978	30.797	-12.703	43.500	QUASPEAK
3		275.191	13.084	20.112	33.196	-12.804	46.000	QUASPEAK
4		518.152	18.107	14.222	32.329	-13.671	46.000	QUASPEAK
5		704.180	21.115	12.439	33.554	-12.446	46.000	QUASPEAK
6		866.832	23.078	12.566	35.644	-10.356	46.000	QUASPEAK

Note:

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

Site : CB1	Time : 2016/03/11 - 01:26
Limit : FCC_CLASS_B_03M_QP	Margin : 6
Probe : CB1_FCC_30M-1G-4_9161 - VERTICAL	Power : DC 5V (Power by PC)
EUT : ID GEBER Display	Note : Mode 1: 433.2MHz (Power by PC)

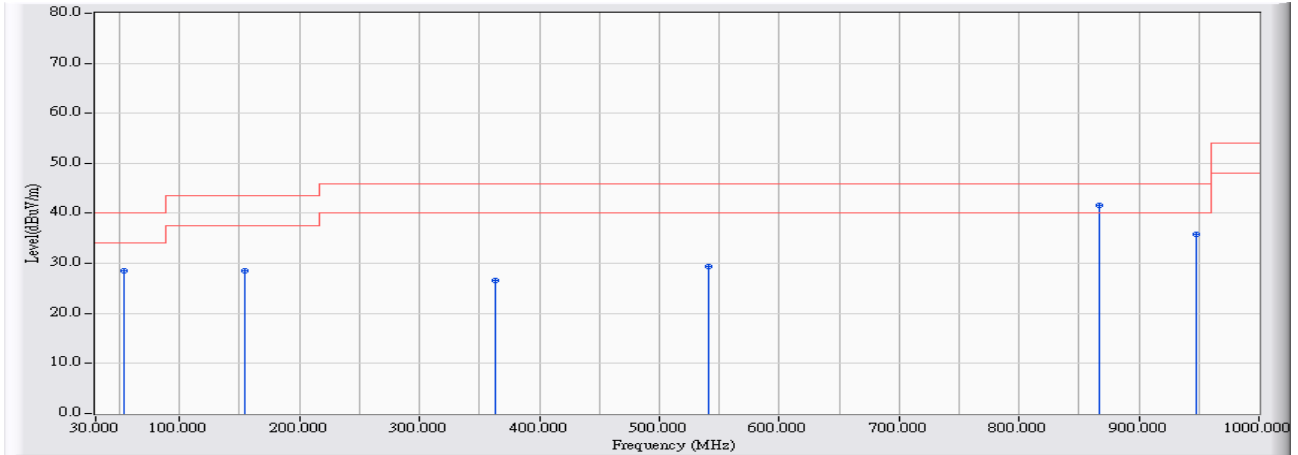


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	35.043	11.894	23.701	35.595	-4.405	40.000	QUASPEAK
2		156.863	17.915	11.578	29.492	-14.008	43.500	QUASPEAK
3		276.355	13.119	13.954	27.073	-18.927	46.000	QUASPEAK
4		529.306	18.324	12.551	30.875	-15.125	46.000	QUASPEAK
5		714.267	21.243	11.359	32.601	-13.399	46.000	QUASPEAK
6		866.444	23.074	10.277	33.351	-12.649	46.000	QUASPEAK

Note:

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

Site : CB1	Time : 2016/03/10 - 00:28
Limit : FCC_CLASS_B_03M_QP	Margin : 6
Probe : CB1_FCC_30M-1G-4_9161 - HORIZONTAL	Power : DC 3.7V (Power by Battery)
EUT : ID GEBER Display	Note : Mode 2: 433.2MHz (Power by Battery)

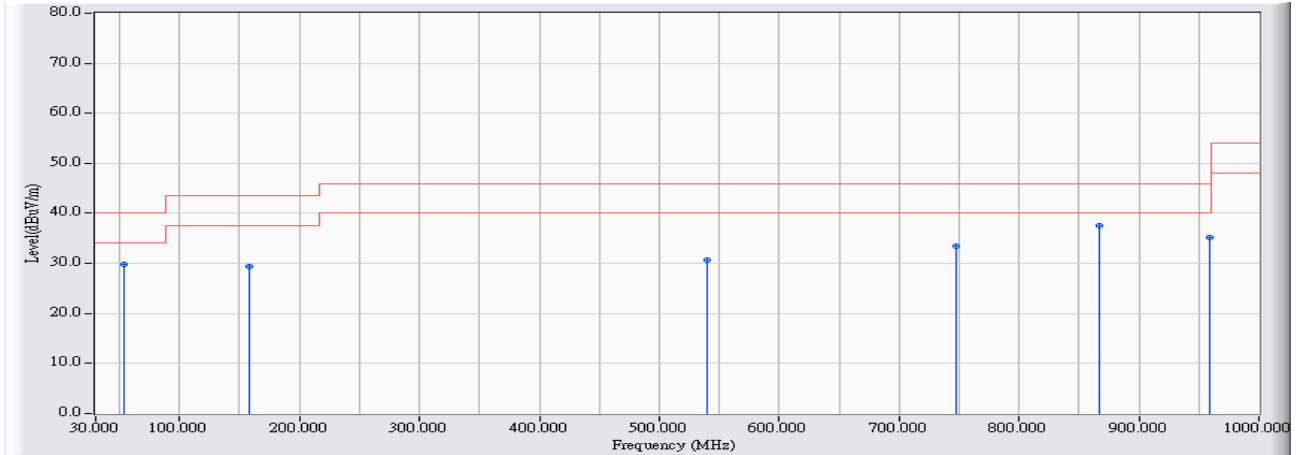


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	53.472	11.504	17.002	28.505	-11.495	40.000	QUASPEAK
2	154.633	17.870	10.751	28.621	-14.879	43.500	QUASPEAK
3	363.356	15.124	11.394	26.518	-19.482	46.000	QUASPEAK
4	541.042	18.553	10.883	29.436	-16.564	46.000	QUASPEAK
5	* 866.444	23.074	18.521	41.595	-4.405	46.000	QUASPEAK
6	947.916	23.910	11.945	35.856	-10.144	46.000	QUASPEAK

Note:

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

Site : CB1	Time : 2016/03/10 - 00:30
Limit : FCC_CLASS_B_03M_QP	Margin : 6
Probe : CB1_FCC_30M-1G-4_9161 - VERTICAL	Power : DC 3.7V (Power by Battery)
EUT : ID GEBER Display	Note : Mode 2: 433.2MHz (Power by Battery)

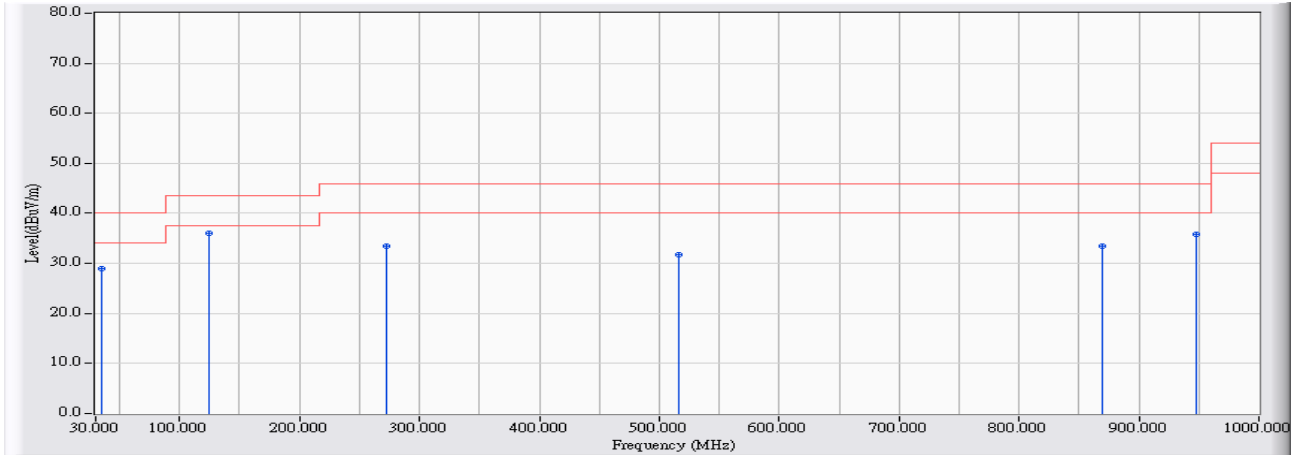


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	53.472	11.504	18.391	29.894	-10.106	40.000	QUASPEAK
2	158.318	17.943	11.446	29.389	-14.111	43.500	QUASPEAK
3	539.975	18.533	12.035	30.568	-15.432	46.000	QUASPEAK
4	747.437	21.661	11.872	33.533	-12.467	46.000	QUASPEAK
5	* 866.444	23.074	14.452	37.526	-8.474	46.000	QUASPEAK
6	959.070	24.018	11.157	35.174	-10.826	46.000	QUASPEAK

Note:

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

Site : CB1	Time : 2016/03/11 - 01:47
Limit : FCC_CLASS_B_03M_QP	Margin : 6
Probe : CB1_FCC_30M-1G-4_9161 - HORIZONTAL	Power : DC 5V (Power by PC)
EUT : ID GEBER Display	Note : Mode 3: 434.64MHz (Power by PC)

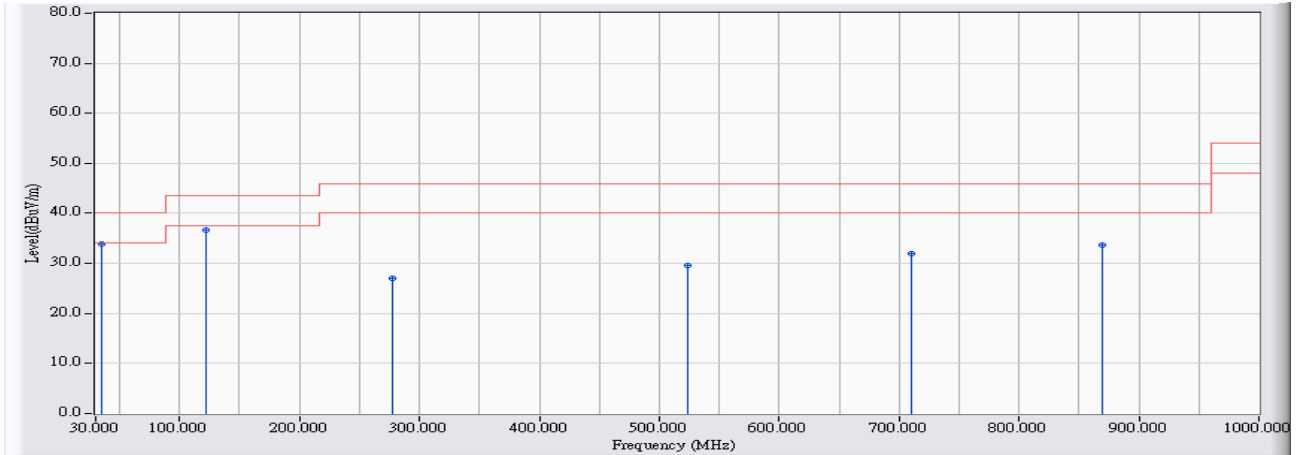


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	35.043	11.894	17.141	29.035	-10.965	40.000	QUASPEAK
2	* 124.566	13.623	22.334	35.957	-7.543	43.500	QUASPEAK
3	272.670	13.006	20.508	33.515	-12.485	46.000	QUASPEAK
4	515.921	18.063	13.583	31.646	-14.354	46.000	QUASPEAK
5	869.160	23.104	10.348	33.452	-12.548	46.000	QUASPEAK
6	948.304	23.915	11.946	35.860	-10.140	46.000	QUASPEAK

Note:

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

Site : CB1	Time : 2016/03/11 - 01:50
Limit : FCC_CLASS_B_03M_QP	Margin : 6
Probe : CB1_FCC_30M-1G-4_9161 - VERTICAL	Power : DC 5V (Power by PC)
EUT : ID GEBER Display	Note : Mode 3: 434.64MHz (Power by PC)

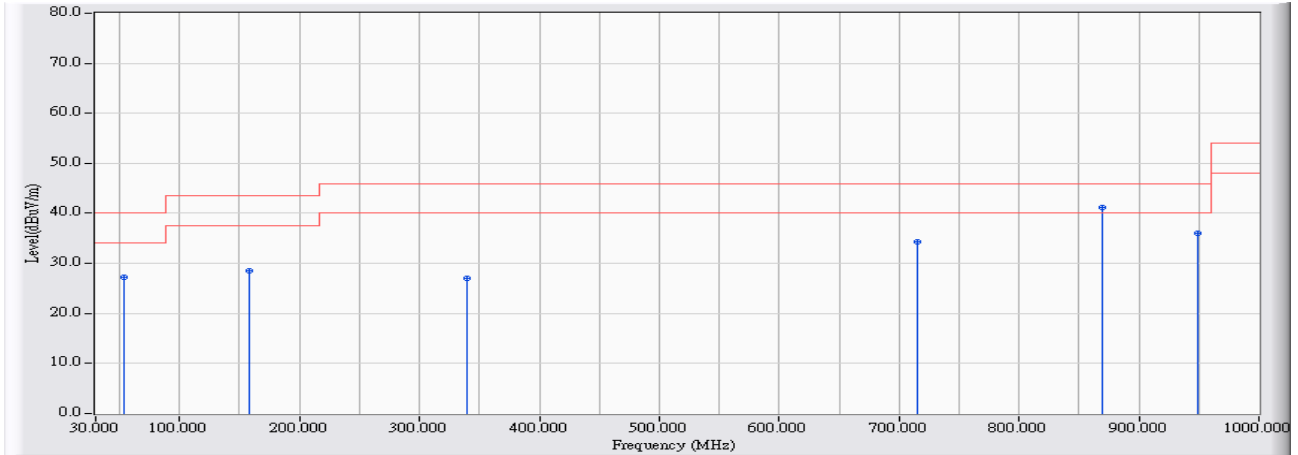


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	35.043	11.894	21.927	33.821	-6.179	40.000	QUASPEAK
2		122.529	13.398	23.328	36.726	-6.774	43.500	QUASPEAK
3		277.713	13.161	13.757	26.918	-19.082	46.000	QUASPEAK
4		523.778	18.217	11.320	29.537	-16.463	46.000	QUASPEAK
5		710.096	21.190	10.676	31.866	-14.134	46.000	QUASPEAK
6		869.354	23.106	10.576	33.682	-12.318	46.000	QUASPEAK

Note:

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

Site : CB1	Time : 2016/03/10 - 00:48
Limit : FCC_CLASS_B_03M_QP	Margin : 6
Probe : CB1_FCC_30M-1G-4_9161 - HORIZONTAL	Power : DC 3.7V (Power by Battery)
EUT : ID GEBER Display	Note : Mode 4: 434.64MHz (Power by Battery)

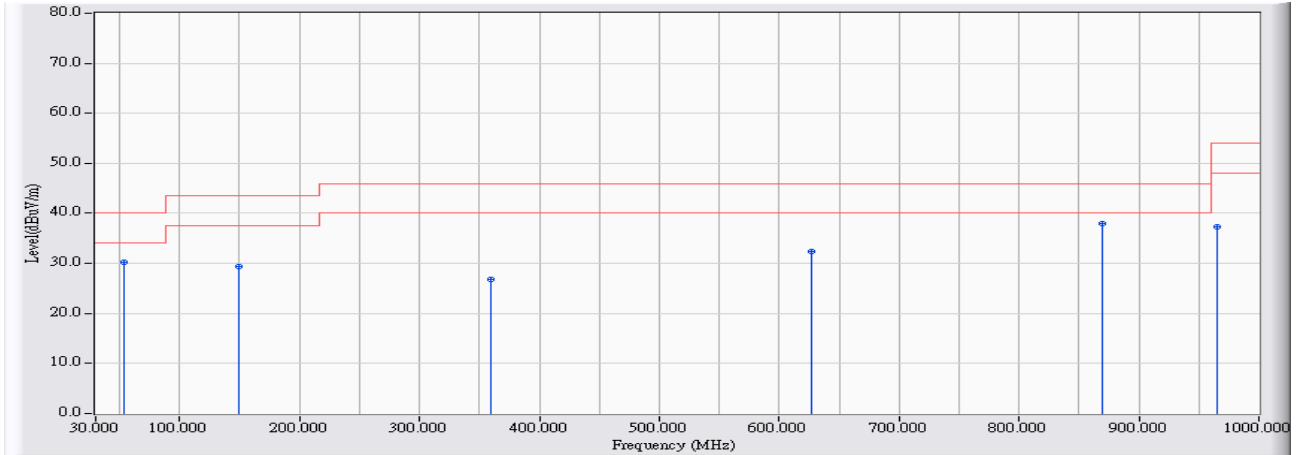


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	53.472	11.504	15.760	27.263	-12.737	40.000	QUASPEAK
2	157.930	17.936	10.658	28.593	-14.907	43.500	QUASPEAK
3	339.981	14.591	12.401	26.992	-19.008	46.000	QUASPEAK
4	715.624	21.259	12.990	34.249	-11.751	46.000	QUASPEAK
5	* 869.257	23.105	18.130	41.235	-4.765	46.000	QUASPEAK
6	948.886	23.920	12.068	35.988	-10.012	46.000	QUASPEAK

Note:

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

Site : CB1	Time : 2016/03/10 - 00:45
Limit : FCC_CLASS_B_03M_QP	Margin : 6
Probe : CB1_FCC_30M-1G-4_9161 - VERTICAL	Power : DC 3.7V (Power by Battery)
EUT : ID GEBER Display	Note : Mode 4: 434.64MHz (Power by Battery)



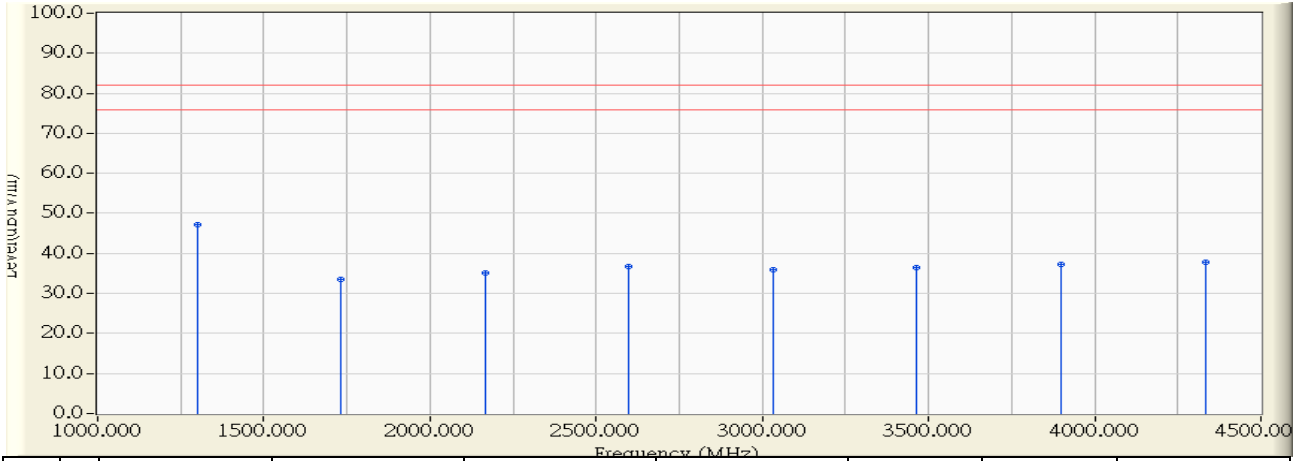
	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	53.472	11.504	18.737	30.240	-9.760	40.000	QUASPEAK
2	149.783	17.721	11.575	29.296	-14.204	43.500	QUASPEAK
3	359.476	15.036	11.834	26.870	-19.130	46.000	QUASPEAK
4	627.363	20.075	12.219	32.294	-13.706	46.000	QUASPEAK
5	* 869.257	23.105	14.876	37.981	-8.019	46.000	QUASPEAK
6	965.180	24.076	13.241	37.317	-16.683	54.000	QUASPEAK

Note:

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

Above 1GHz Spurious:

Site : CB1	Time : 2016/07/20 - 17:48
Limit : FCC_SpartC_15.231(b)_H_03M_PK	Margin : 6
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	Power : DC 5V (Power By PC)
EUT : ID GEBER Display	Note : Mode 1: 433.2MHz (Power by PC)

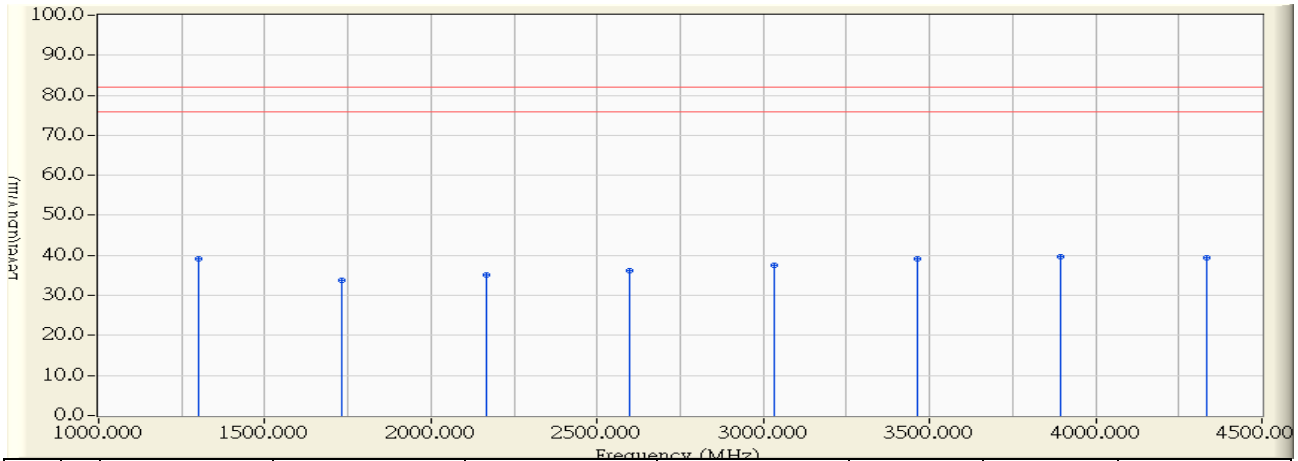


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	1299.600	-9.868	57.180	47.313	-34.617	81.930	PEAK
2		1732.800	-9.221	42.620	33.399	-48.531	81.930	PEAK
3		2166.000	-7.140	42.200	35.060	-46.870	81.930	PEAK
4		2599.200	-4.104	40.810	36.706	-45.224	81.930	PEAK
5		3032.400	-5.012	40.860	35.848	-46.082	81.930	PEAK
6		3465.600	-4.834	41.370	36.536	-45.394	81.930	PEAK
7		3898.800	-3.550	40.810	37.259	-44.671	81.930	PEAK
8		4332.000	-2.674	40.490	37.816	-44.114	81.930	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. “ * ”, means this data is the worst emission level.
4. Measurement Level = Reading Level + Correct Factor.
5. Average Measurement Level = Peak Measurement Level + 20Log (Duty Cycle)
 Duty Cycle(Only Ton)= Ton/ Ton+off=(42.3ms/99.3ms)=0.426
 20*Log(Duty Cycle) = -7.412
6. The average measurement was not performed when the peak measured data under the limit of peak detection.

Site : CB1	Time : 2016/07/20 - 17:54
Limit : FCC_SpartC_15.231(b)_H_03M_PK	Margin : 6
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	Power : DC 5V (Power By PC)
EUT : ID GEBER Display	Note : Mode 1: 433.2MHz (Power by PC)

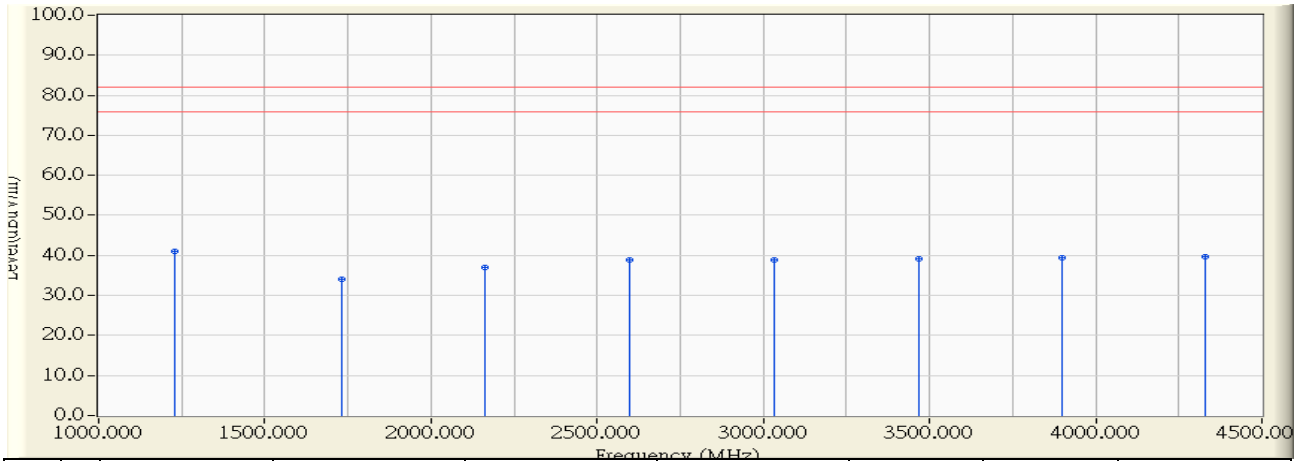


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	1299.600	-9.184	48.360	39.176	-42.754	81.930	PEAK
2	1732.800	-8.971	42.850	33.879	-48.051	81.930	PEAK
3	2166.000	-6.774	41.800	35.026	-46.904	81.930	PEAK
4	2599.200	-2.872	39.140	36.268	-45.662	81.930	PEAK
5	3032.400	-2.962	40.430	37.467	-44.463	81.930	PEAK
6	3465.600	-2.351	41.400	39.049	-42.881	81.930	PEAK
7	* 3895.800	-0.648	40.330	39.683	-42.247	81.930	PEAK
8	4332.000	-0.546	40.030	39.483	-42.447	81.930	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. “ * ”, means this data is the worst emission level.
4. Measurement Level = Reading Level + Correct Factor.
5. Average Measurement Level = Peak Measurement Level + 20Log (Duty Cycle)
 Duty Cycle(Only Ton)= Ton/ Ton+off=(42.3ms/99.3ms)=0.426
 20*Log(Duty Cycle) = -7.412
6. The average measurement was not performed when the peak measured data under the limit of peak detection.

Site : CB1	Time : 2016/07/21 - 15:11
Limit : FCC_SpartC_15.231(b)_H_03M_PK	Margin : 6
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	Power : DC 5V (Power By Battery)
EUT : ID GEBER Display	Note : Mode 2: 433.2MHz (Power By Battery)

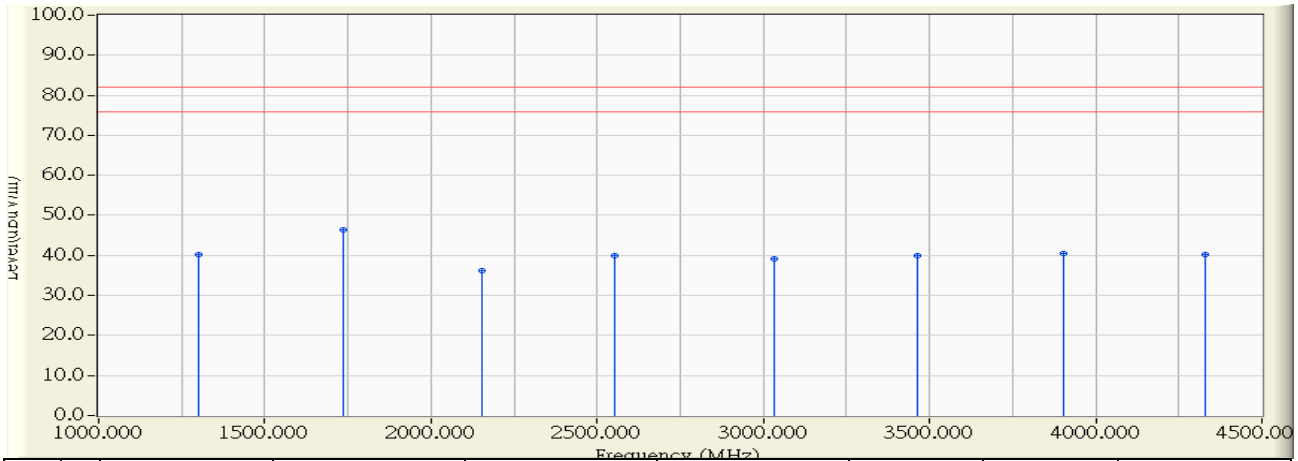


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	1229.000	-10.052	51.120	41.067	-40.863	81.930	PEAK
2		1732.000	-9.222	43.250	34.028	-47.902	81.930	PEAK
3		2164.000	-7.160	44.030	36.869	-45.061	81.930	PEAK
4		2597.000	-4.099	42.950	38.851	-43.079	81.930	PEAK
5		3034.000	-5.011	43.840	38.828	-43.102	81.930	PEAK
6		3469.000	-4.832	43.880	39.048	-42.882	81.930	PEAK
7		3898.000	-3.553	42.960	39.407	-42.523	81.930	PEAK
8		4330.000	-2.677	42.290	39.612	-42.318	81.930	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. “ * ”, means this data is the worst emission level.
4. Measurement Level = Reading Level + Correct Factor.
5. Average Measurement Level = Peak Measurement Level + 20Log (Duty Cycle)
 Duty Cycle(Only Ton)= Ton/ Ton+off=(42.3ms/99.3ms)=0.426
 20*Log(Duty Cycle) = -7.412
6. The average measurement was not performed when the peak measured data under the limit of peak detection.

Site : CB1	Time : 2016/07/21 - 15:30
Limit : FCC_SpartC_15.231(b)_H_03M_PK	Margin : 6
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	Power : DC 5V (Power By Battery)
EUT : ID GEBER Display	Note : Mode 2: 433.2MHz (Power By Battery)

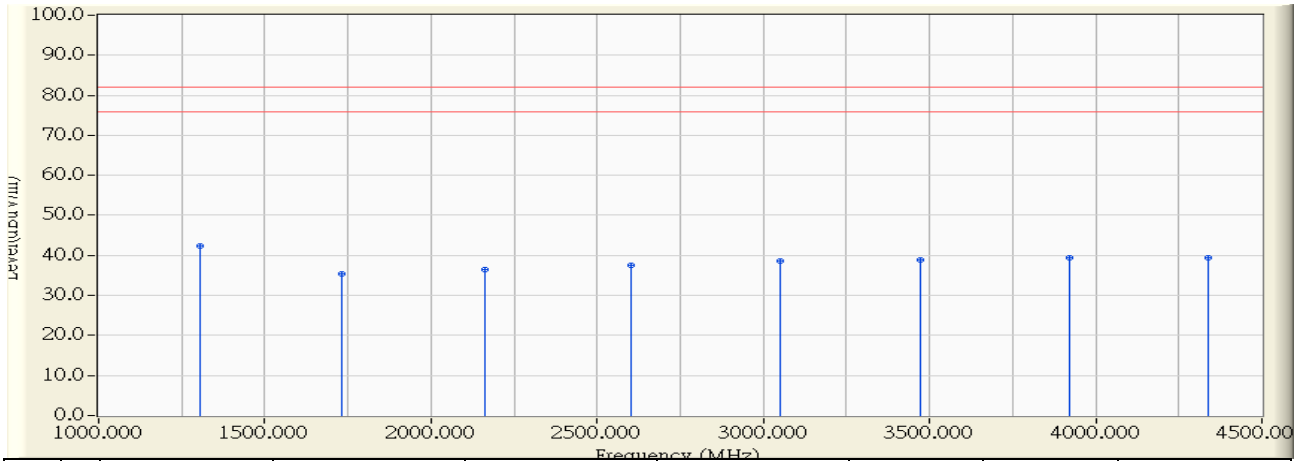


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	1299.000	-9.185	49.300	40.115	-41.815	81.930	PEAK
2	* 1736.000	-8.972	55.340	46.368	-35.562	81.930	PEAK
3	2155.000	-6.912	43.140	36.229	-45.701	81.930	PEAK
4	2554.000	-2.853	42.930	40.077	-41.853	81.930	PEAK
5	3033.000	-2.962	42.110	39.148	-42.782	81.930	PEAK
6	3465.000	-2.352	42.210	39.858	-42.072	81.930	PEAK
7	3901.000	-0.626	41.230	40.604	-41.326	81.930	PEAK
8	4330.000	-0.545	40.880	40.335	-41.595	81.930	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. “ * ”, means this data is the worst emission level.
4. Measurement Level = Reading Level + Correct Factor.
5. Average Measurement Level = Peak Measurement Level + 20Log (Duty Cycle)
 Duty Cycle(Only Ton)= Ton/ Ton+off=(42.3ms/99.3ms)=0.426
 20*Log(Duty Cycle) = -7.412
6. The average measurement was not performed when the peak measured data under the limit of peak detection.

Site : CB1	Time : 2016/07/21 - 16:02
Limit : FCC_SpartC_15.231(b)_H_03M_PK	Margin : 6
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	Power : DC 5V (Power By PC)
EUT : ID GEBER Display	Note : Mode 3: 434.64MHz (Power by PC)

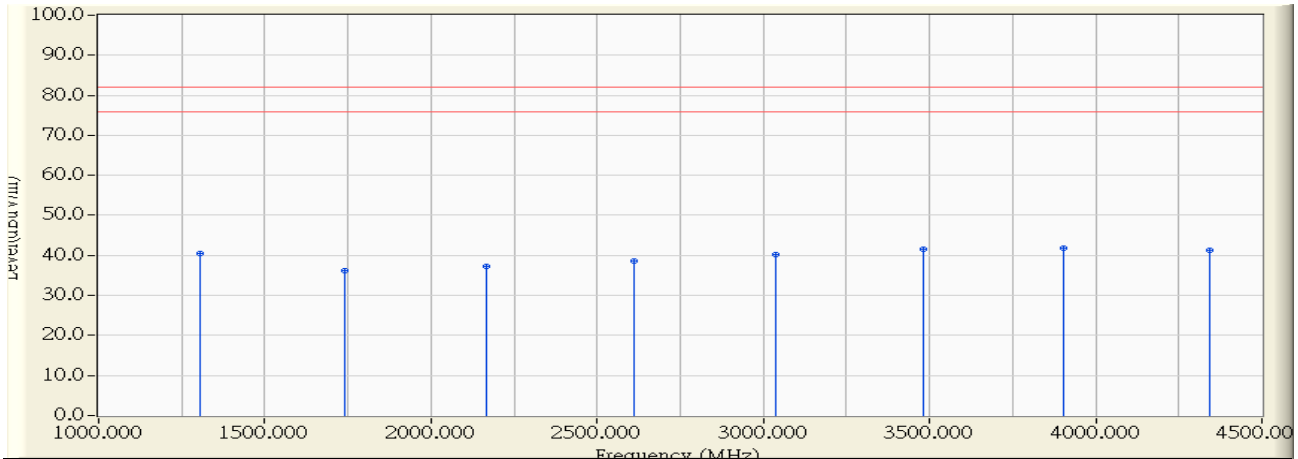


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	1303.000	-9.859	52.240	42.381	-39.549	81.930	PEAK
2		1730.000	-9.223	44.540	35.317	-46.613	81.930	PEAK
3		2164.000	-7.160	43.590	36.429	-45.501	81.930	PEAK
4		2602.000	-4.111	41.720	37.609	-44.321	81.930	PEAK
5		3050.000	-5.005	43.620	38.615	-43.315	81.930	PEAK
6		3473.000	-4.831	43.780	38.949	-42.981	81.930	PEAK
7		3919.000	-3.489	42.880	39.391	-42.539	81.930	PEAK
8		4336.920	-2.665	41.980	39.315	-42.615	81.930	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. “ * ”, means this data is the worst emission level.
4. Measurement Level = Reading Level + Correct Factor.
5. Average Measurement Level = Peak Measurement Level + 20Log (Duty Cycle)
 Duty Cycle(Only Ton)= Ton/ Ton+off=(42.3ms/99.3ms)=0.426
 20*Log(Duty Cycle) = -7.412
6. The average measurement was not performed when the peak measured data under the limit of peak detection.

Site : CB1	Time : 2016/07/21 - 16:13
Limit : FCC_SpartC_15.231(b)_H_03M_PK	Margin : 6
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	Power : DC 5V (Power By PC)
EUT : ID GEBER Display	Note : Mode 3: 434.64MHz (Power by PC)

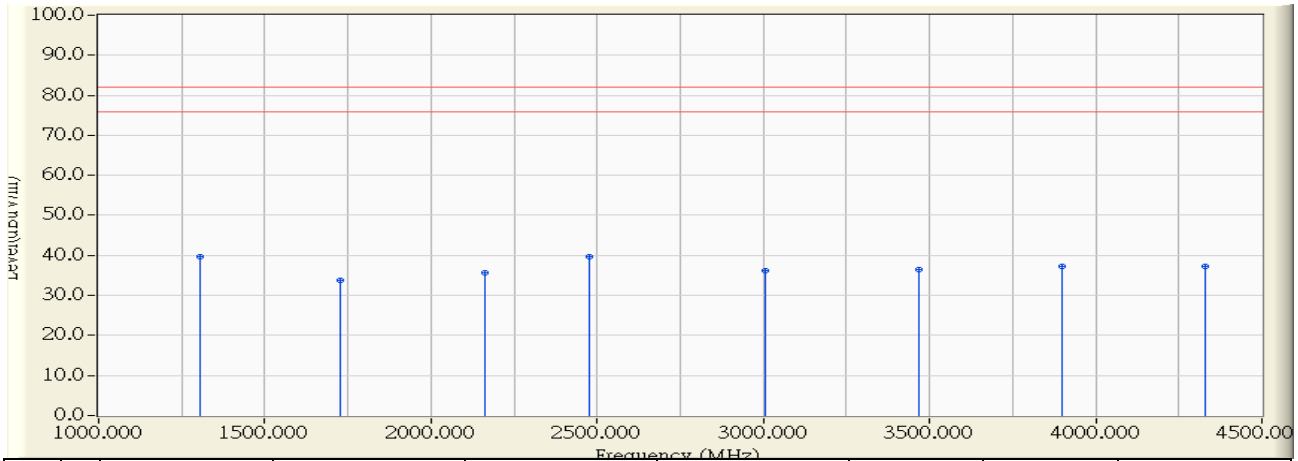


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	1304.000	-9.177	49.770	40.593	-41.337	81.930	PEAK
2	1739.000	-8.973	45.090	36.117	-45.813	81.930	PEAK
3	2168.000	-6.749	44.030	37.281	-44.649	81.930	PEAK
4	2612.000	-2.877	41.580	38.703	-43.227	81.930	PEAK
5	3039.000	-2.953	43.160	40.206	-41.724	81.930	PEAK
6	3483.000	-2.324	43.880	41.556	-40.374	81.930	PEAK
7	* 3905.000	-0.609	42.350	41.740	-40.190	81.930	PEAK
8	4343.000	-0.555	41.950	41.395	-40.535	81.930	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. “ * ”, means this data is the worst emission level.
4. Measurement Level = Reading Level + Correct Factor.
5. Average Measurement Level = Peak Measurement Level + 20Log (Duty Cycle)
 Duty Cycle(Only Ton)= Ton/ Ton+off=(42.3ms/99.3ms)=0.426
 20*Log(Duty Cycle) = -7.412
6. The average measurement was not performed when the peak measured data under the limit of peak detection.

Site : CB1	Time : 2016/07/21 - 16:26
Limit : FCC_SpartC_15.231(b)_H_03M_PK	Margin : 6
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	Power : DC 5V (Power By Battery)
EUT : ID GEBER Display	Note : Mode 4: 434.64MHz (Power By Battery)

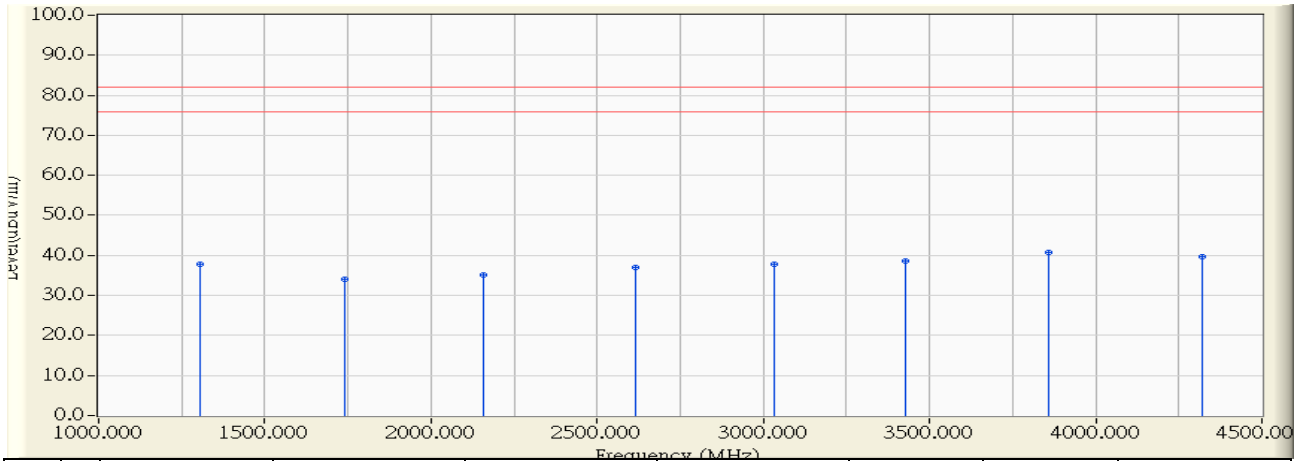


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	1304.500	-9.854	49.628	39.773	-42.157	81.930	PEAK
2	1728.000	-9.225	43.056	33.832	-48.098	81.930	PEAK
3	2162.000	-7.183	42.902	35.720	-46.210	81.930	PEAK
4	* 2477.000	-3.884	43.695	39.811	-42.119	81.930	PEAK
5	3005.500	-5.023	41.202	36.179	-45.751	81.930	PEAK
6	3467.500	-4.833	41.393	36.560	-45.370	81.930	PEAK
7	3898.000	-3.553	40.826	37.273	-44.657	81.930	PEAK
8	4330.250	-2.677	40.039	37.362	-44.568	81.930	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. “ * ”, means this data is the worst emission level.
4. Measurement Level = Reading Level + Correct Factor.
5. Average Measurement Level = Peak Measurement Level + 20Log (Duty Cycle)
 Duty Cycle(Only Ton)= Ton/ Ton+off=(42.3ms/99.3ms)=0.426
 20*Log(Duty Cycle) = -7.412
6. The average measurement was not performed when the peak measured data under the limit of peak detection.

Site : CB1	Time : 2016/07/21 - 16:29
Limit : FCC_SpartC_15.231(b)_H_03M_PK	Margin : 6
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	Power : DC 5V (Power By Battery)
EUT : ID GEBER Display	Note : Mode 4: 434.64MHz (Power By Battery)



	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	1304.500	-9.176	47.104	37.928	-44.002	81.930	PEAK
2	1742.000	-8.975	43.060	34.086	-47.844	81.930	PEAK
3	2156.750	-6.890	41.924	35.035	-46.895	81.930	PEAK
4	2613.500	-2.877	39.777	36.899	-45.031	81.930	PEAK
5	3031.750	-2.964	40.709	37.745	-44.185	81.930	PEAK
6	3427.250	-2.405	40.897	38.492	-43.438	81.930	PEAK
7	* 3857.750	-0.802	41.511	40.709	-41.221	81.930	PEAK
8	4321.500	-0.539	40.114	39.575	-42.355	81.930	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. “ * ”, means this data is the worst emission level.
4. Measurement Level = Reading Level + Correct Factor.
5. Average Measurement Level = Peak Measurement Level + 20Log (Duty Cycle)
 Duty Cycle(Only Ton)= Ton/ Ton+off=(42.3ms/99.3ms)=0.426
 20*Log(Duty Cycle) = -7.412
6. The average measurement was not performed when the peak measured data under the limit of peak detection.

4. Occupied Bandwidth

4.1. Test Equipment

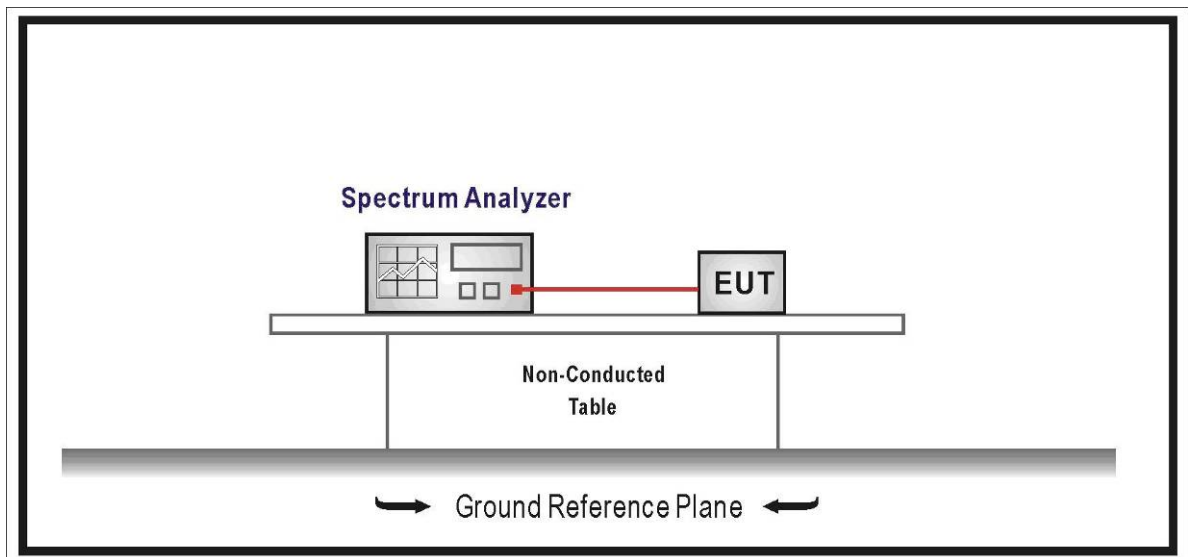
The following test equipments are used during the radiated emission tests:

Occupied Bandwidth / SR7

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A-EXA	US47140172	2016/08/23
Signal & Spectrum Analyzer	R&S	FSV40	101049	2017/01/05
Signal Analyzer	R&S	FSV7	101650	2016/11/30

Note: All equipments that need to calibrate are with calibration period of 1 year.

4.2. Test Setup



4.3. 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.

4.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.231(b): 2014

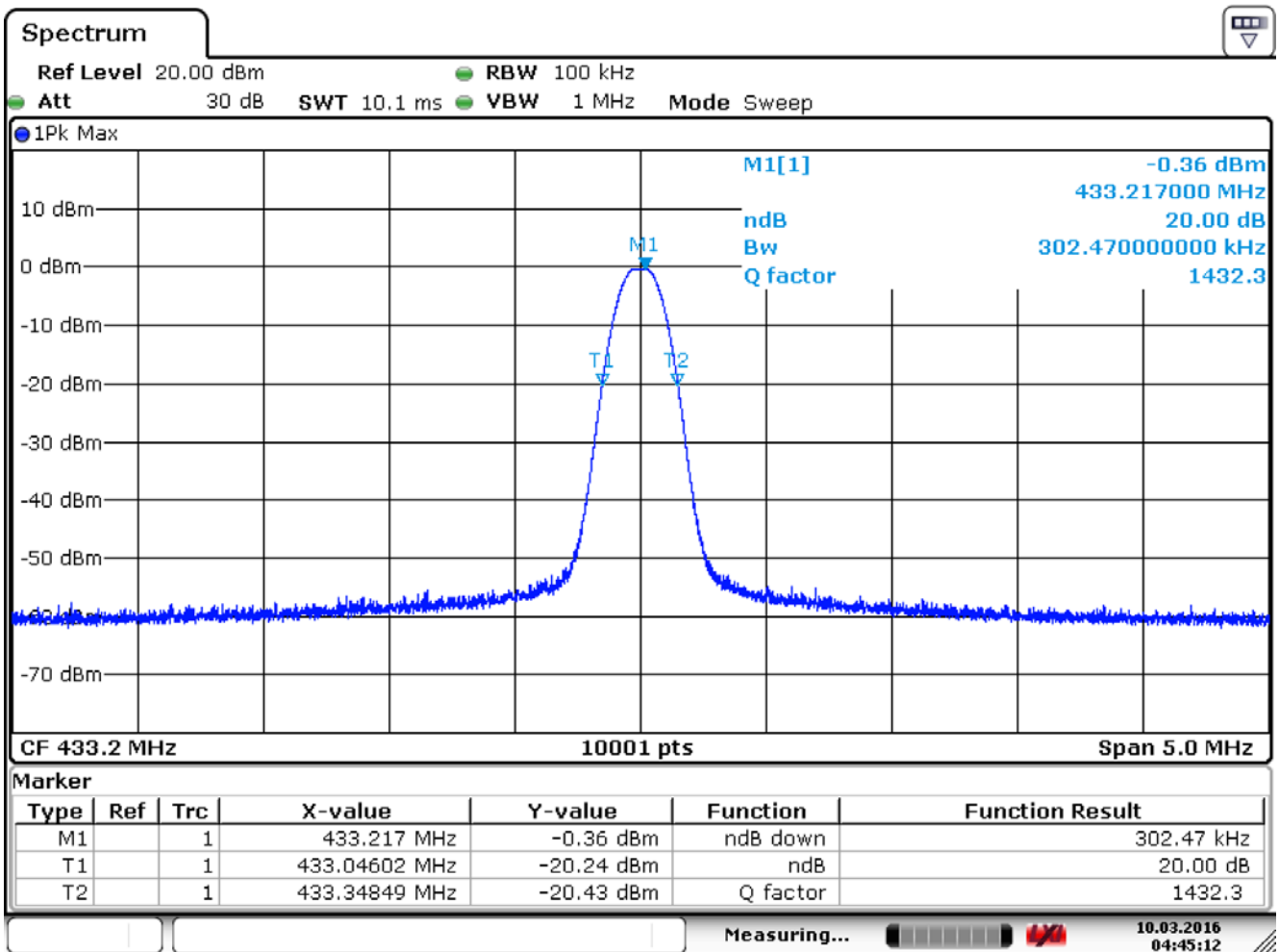
4.5. Uncertainty

± 150Hz

4.6. Test Result

Product	ID GEBER Display		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: 433.2MHz (Power by PC)		
Date of Test	2016/03/10	Test Site	SR7

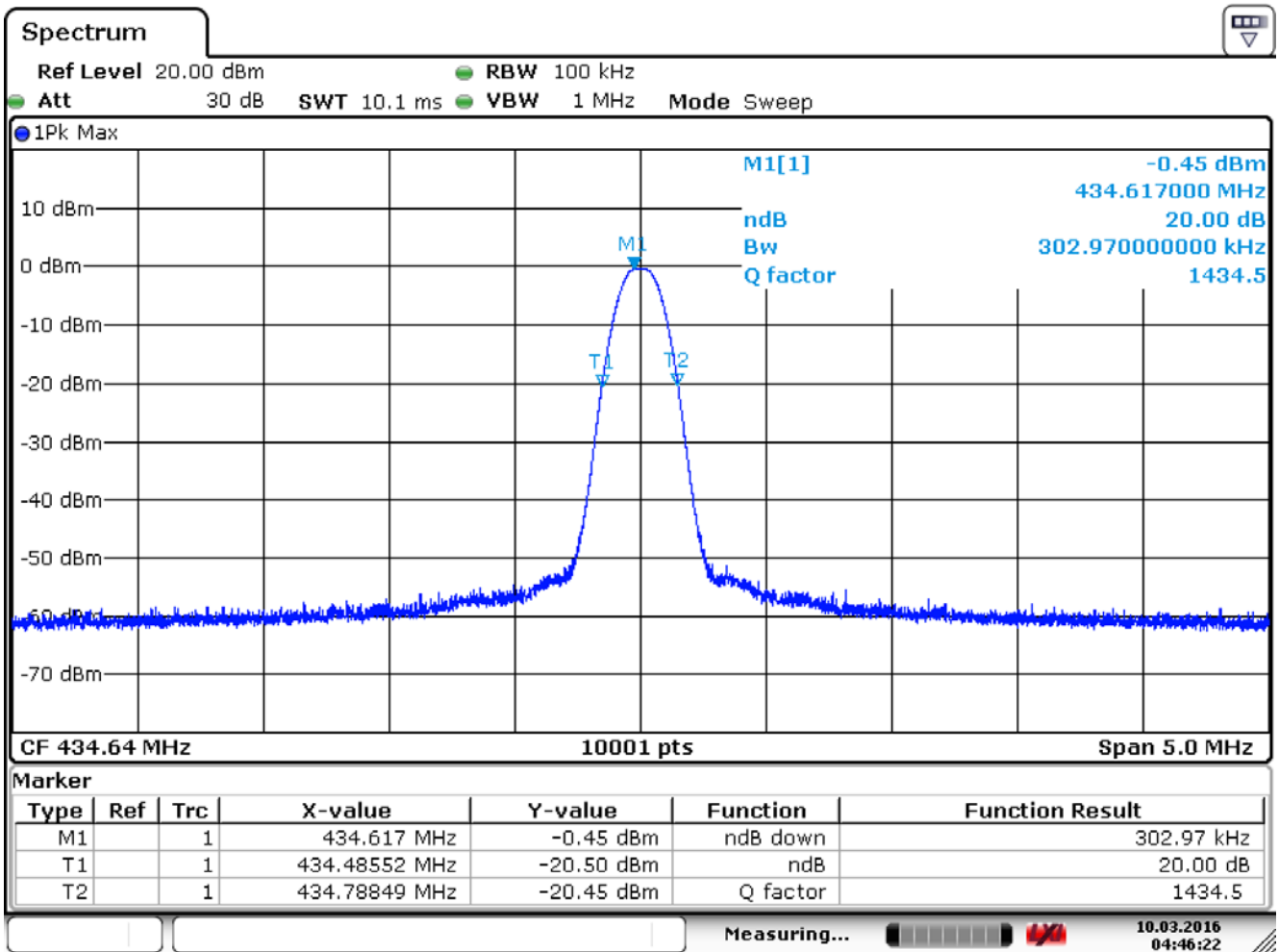
Center Frequency	433.2 MHz
Allowable Bandwidth (433.2 MHz: 0.25%)	1.083 MHz
Bandwidth at 20dB down (Max)	302.47 kHz
Result	PASS



Date: 10.MAR.2016 04:45:12

Product	ID GEBER Display		
Test Item	Occupied Bandwidth		
Test Mode	Mode 3: 434.64MHz (Power by PC)		
Date of Test	2016/03/10	Test Site	SR7

Center Frequency	434.64 MHz
Allowable Bandwidth (434.64 MHz: 0.25%)	1.0866 MHz
Bandwidth at 20dB down (Max)	302.97 kHz
Result	PASS



Date: 10.MAR.2016 04:46:22

5. Duty cycle

5.1. Test Equipment

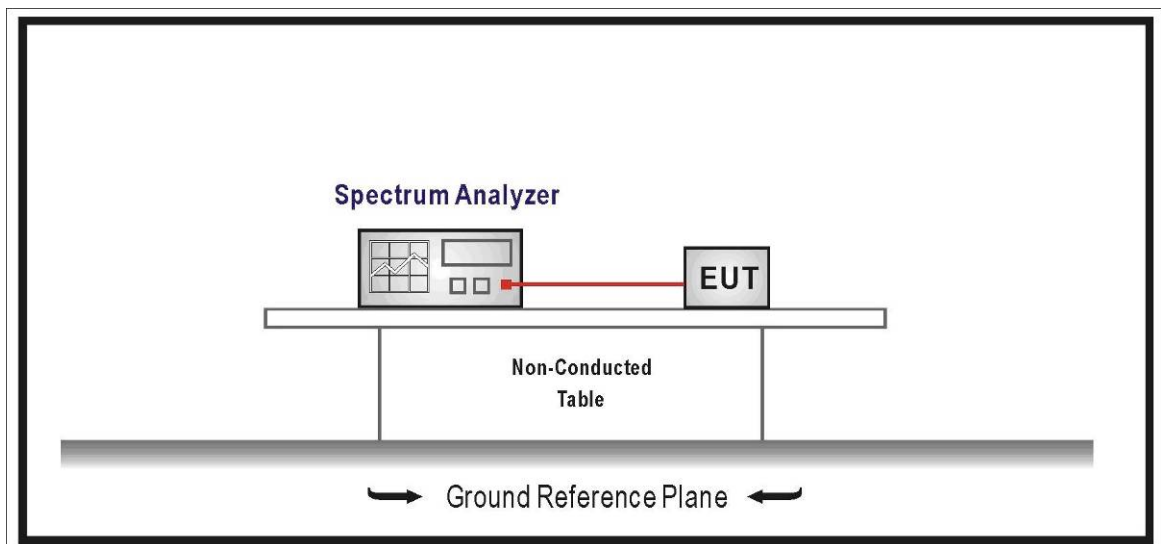
The following test equipments are used during the radiated emission tests:

Duty cycle / SR7

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A-EXA	US47140172	2016/08/23
Signal & Spectrum Analyzer	R&S	FSV40	101049	2017/01/05
Signal Analyzer	R&S	FSV7	101650	2016/11/30

Note: All equipments that need to calibrate are with calibration period of 1 year.

5.2. Test Setup



5.3. Limits

N/A

5.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.231(b): 2014

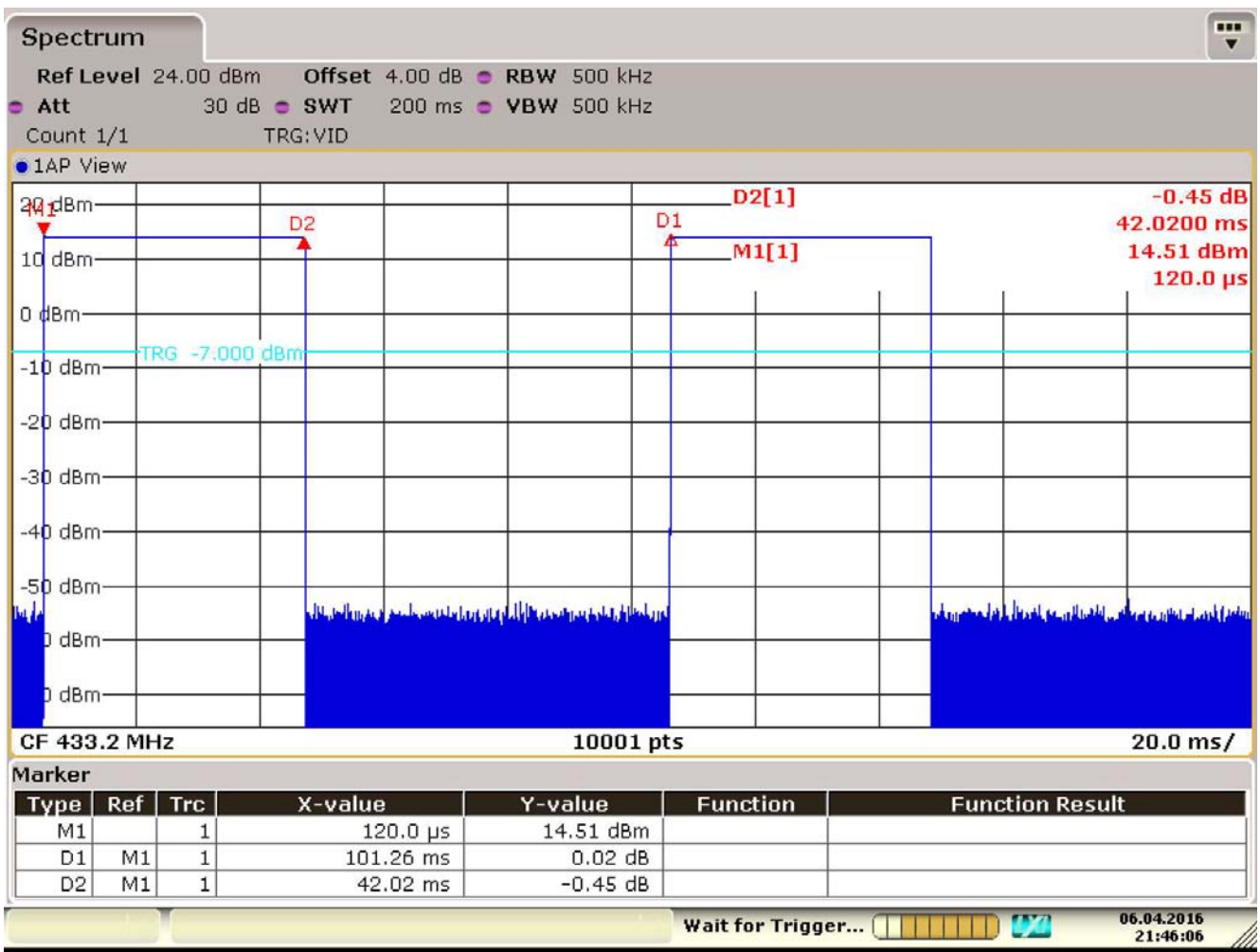
5.5. Uncertainty

± 25msec

5.6. Test Result

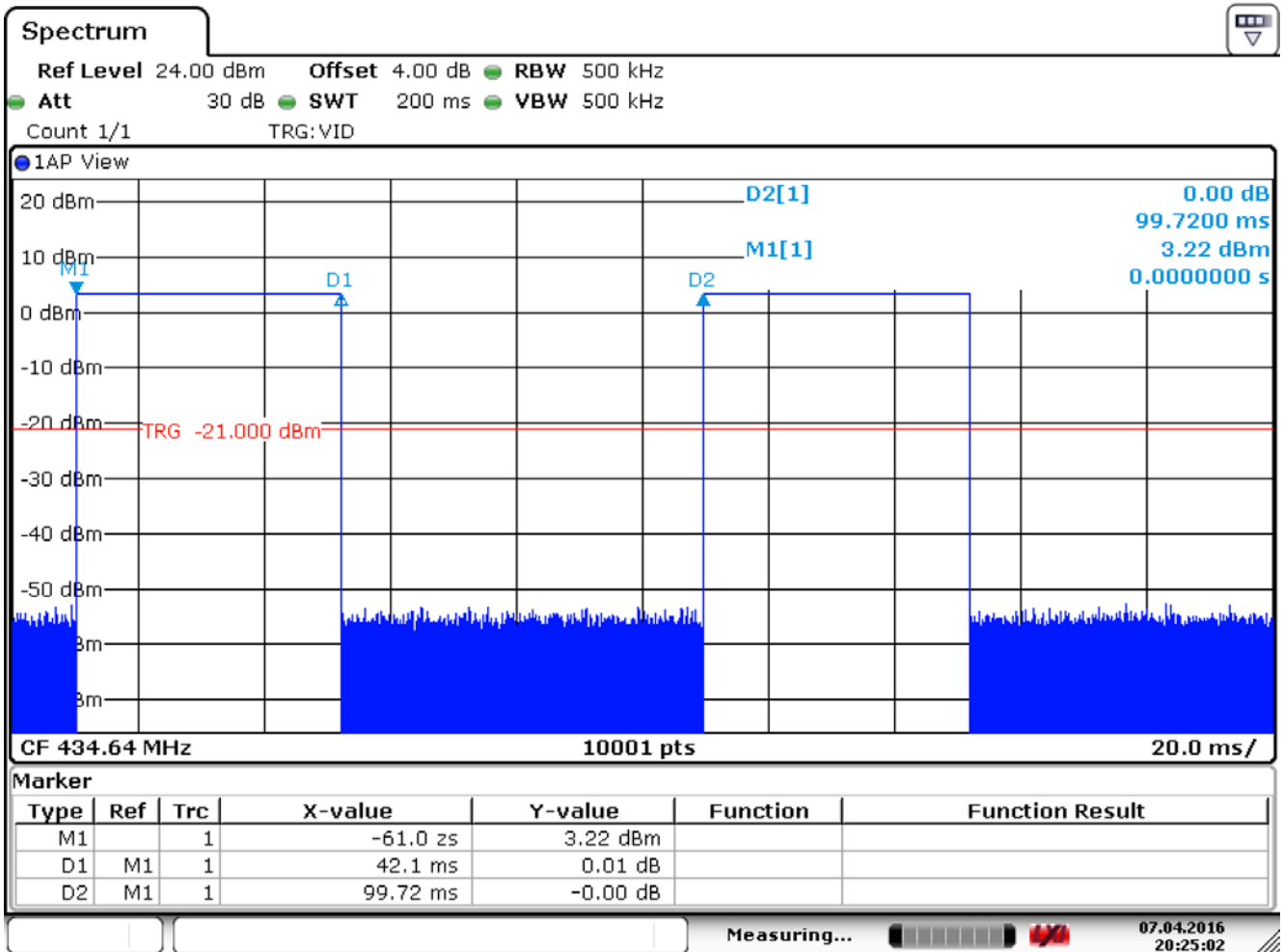
Product	ID GEBER Display		
Test Item	Duty Cycle		
Test Mode	Mode 1: 433.2MHz (Power by PC)		
Date of Test	2016/04/07	Test Site	SR7

Center Frequency	433.2 MHz
$T_{ON} = 42.02ms$	
$T_{ON} + T_{Off} = 101.26ms$	
Duty Cycle = 42.02/101.26	0.415%



Product	ID GEBER Display		
Test Item	Duty Cycle		
Test Mode	Mode 3: 434.64MHz (Power by PC)		
Date of Test	2016/04/07	Test Site	SR7

Center Frequency	434.64MHz
$T_{ON} = 42.1ms$	
$T_{ON} + T_{Off} = 99.72ms$	
Duty Cycle = 42.12/100	0.4212%



6. Transmitter time

6.1. Test Equipment

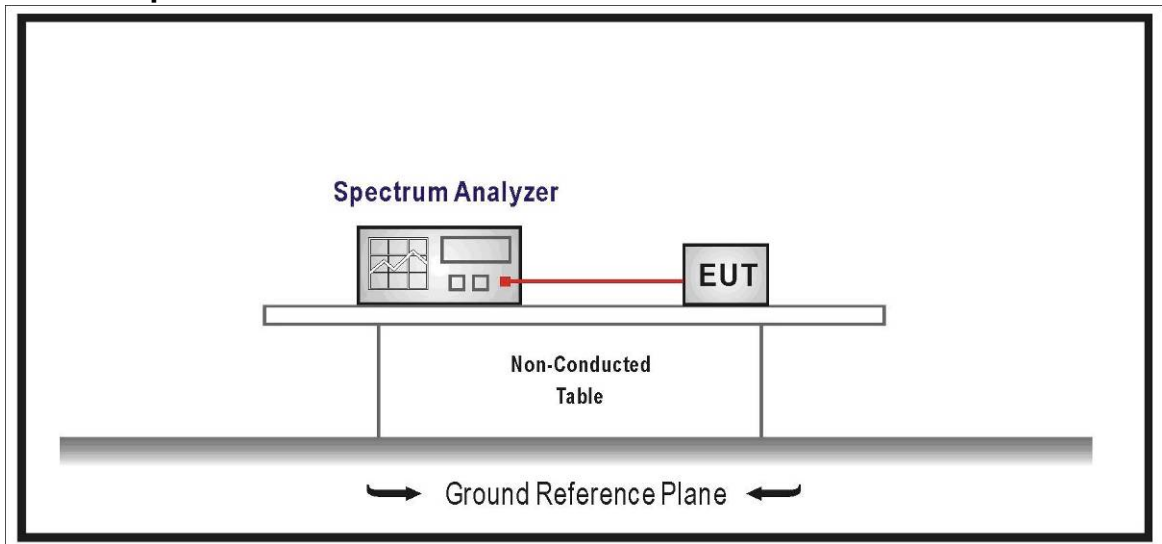
The following test equipments are used during the radiated emission tests:

Transmitter time / SR7

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A-EXA	US47140172	2016/08/23
Signal & Spectrum Analyzer	R&S	FSV40	101049	2017/01/05
Signal Analyzer	R&S	FSV7	101650	2016/11/30

Note: All equipments that need to calibrate are with calibration period of 1 year.

6.2. Test Setup



6.3. Limits

A manually operated transmitter shall employ a switch that will automatically deactivate the transmitter within not more than 5 seconds of being released. A transmitter activated automatically shall cease transmission within 5 seconds after activation.

6.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.231(b): 2014

6.5. Uncertainty

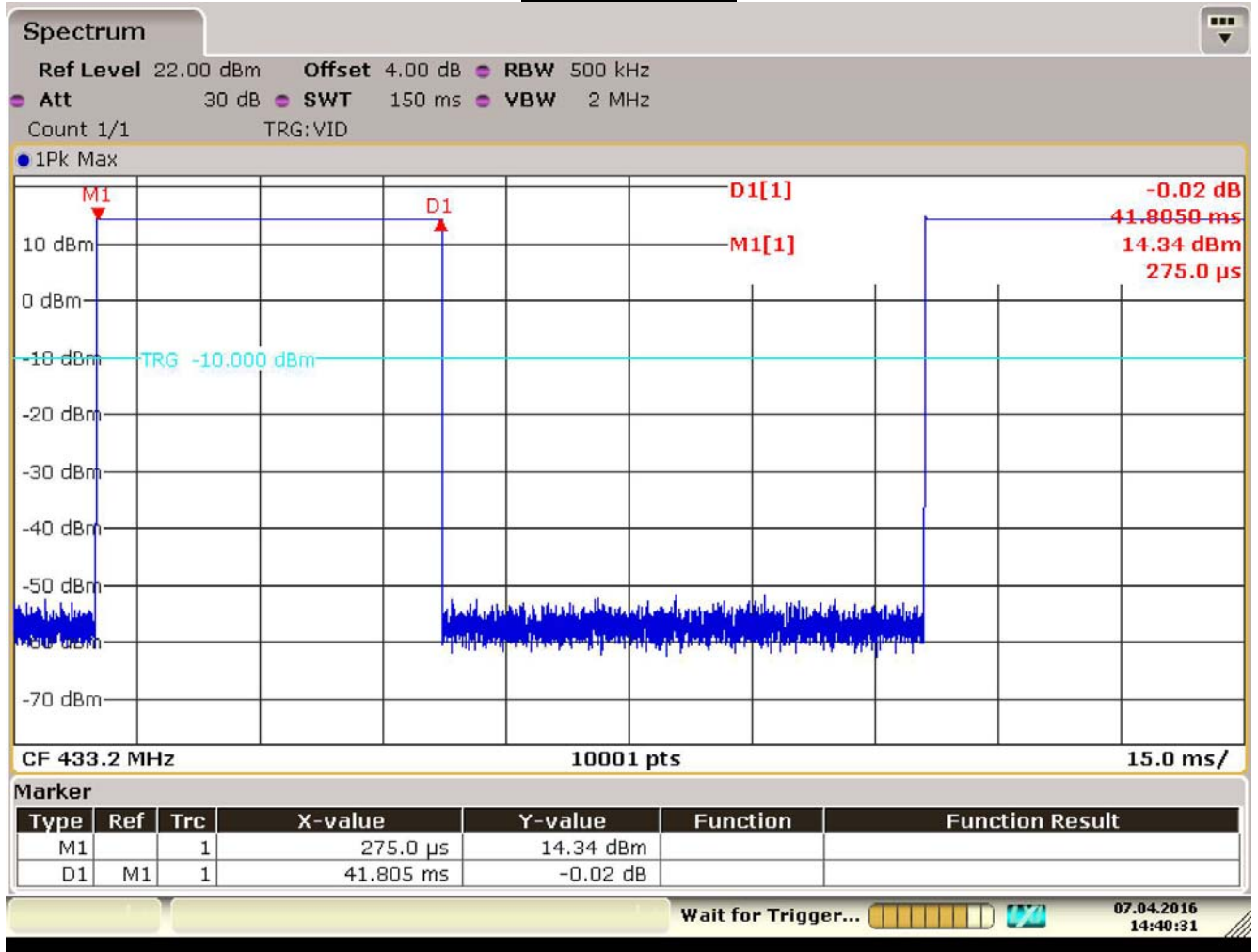
± 25msec

6.6. Test Result

Product	ID GEBER Display		
Test Item	Transmitter time		
Test Mode	Mode 1: 433.2MHz (Power by PC)		
Date of Test	2016/04/07	Test Site	SR7

Center Frequency	433.2 MHz
Transmitter time = 41.805ms < 5 sec.	Below 5 sec.
Result	PASS

Transmitter time



Product	ID GEBER Display		
Test Item	Transmitter time		
Test Mode	Mode 3: 433.64MHz (Power by PC)		
Date of Test	2016/04/07	Test Site	SR7

Center Frequency	434.64 MHz
Transmitter time = 36.945ms < 5 sec.	Below 5 sec.
Result	PASS

Transmitter time

