



RADIO TEST REPORT

Applicant : Acer Incorporated

Address : 8F, 88, Sec 1, Hsin Tai Wu Rd ,Hsichih, Taipei
Hsien ,Taiwan 221

Equipment : BT module

Model No. : H7550ST Extension Board

Trade Name : acer

Reference No : TL-19312

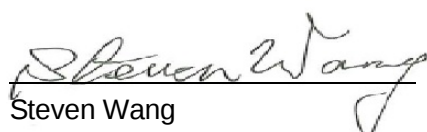
FCC ID : HLZQBT1

I HEREBY CERTIFY THAT :

The sample was received on Oct. 12, 2015 and the testing was carried out on Oct. 13, 2015 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:

Tested by:


Steven Wang
Manager


Spree Yei
Engineer

Laboratory Accreditation:

☒ Cerpass Technology Corporation Test Laboratory



☐ Cerpass Technology(SuZhou) Co., Ltd.





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History of this test report

■ ORIGINAL.

☐ Additional attachment as following record:

[illegible]



1. Summary of Test Procedure and Test Results

1.1 Applicable Standards

ANSI C63.4: 2009

FCC Rules and Regulations Part 15 Subpart C §15.247

FCC Rule	Description of Test	Result
15.203	Antenna Requirement	Pass
15.207	AC Power Line Conducted Emission	---
15.209 15.205	Radiated Spurious Emission	Pass
15.247(d)	Conducted Spurious Emission	---
15.247(a)(1)	Channel Carrier Frequencies Separation	---
15.247(a)(1)	20dB Bandwidth Measurement	---
15.247(a)(1)	Dwell Time	---
15.247(b)	Number of Hopping Channels	---
15.247(b)	Peak Output Power Measurement Data	Pass



2. Test Configuration of Equipment under Test

2.1 Feature of Equipment under Test

Frequency Range	2402-2480 MHz
Type of Modulation	GFSK for 1Mbps $\pi/4$ -DQPSK for 2Mbps 8DPSK for 3Mbps
Type of Antenna	PCB Antenna
Antenna Gain	2.8 dBi
EUT Rating Input	DC 5.0V
Host information	Trade Name: acer Model Number: Z650; EG40S; HG-80ST; Q1P1504 (Host models are the same model with different marketing purposes.)

2.2 Carrier Frequency of Channels

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
*00	2402	20	2422	40	2442	60	2462
01	2403	21	2423	41	2443	61	2463
02	2404	22	2424	42	2444	62	2464
03	2405	23	2425	43	2445	63	2465
04	2406	24	2426	44	2446	64	2466
05	2407	25	2427	45	2447	65	2467
06	2408	26	2428	46	2448	66	2468
07	2409	27	2429	47	2449	67	2469
08	2410	28	2430	48	2450	68	2470
09	2411	29	2431	49	2451	69	2471
10	2412	30	2432	50	2452	70	2472
11	2413	31	2433	51	2453	71	2473
12	2414	32	2434	52	2454	72	2474
13	2415	33	2435	53	2455	73	2475
14	2416	34	2436	54	2456	74	2476
15	2417	35	2437	55	2457	75	2477
16	2418	36	2438	56	2458	76	2478
17	2419	37	2439	57	2459	77	2479
18	2420	38	2440	58	2460	*78	2480
19	2421	*39	2441	59	2461	---	---

Note: Channels remarked * are selected to perform test.



2.3 Test Mode & Test Software

- a. During testing, the interface cables and equipment positions were varied according to ANSI C63.4
- b. The complete test system included Notebook and EUT for RF test.
- c. The test program "ISRT" under WIN7 was executed to keep transmit and receive data via Bluetooth.
- d. Test modes:
Mode 1: GFSK (1Mbps)
Mode 2: $\pi/4$ -DQPSK (2Mbps)
Mode 3: 8DPSK (3Mbps)
Mode 1 generates the worst case; it was reported as final result.

2.4 Description of Test System

Device	Manufacturer	Model No.	Description
Notebook	DELL	Vostro 3560	Power Cable, Unshielding, 1.8m

Used cable

Cable	Quantity	Description
USB Cable	1	Unshielding, 1.2m



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	TW1079, TW1061,390316, 228391, 641184
	IC	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
☐	Test Site	Cerpass Technology (Suzhou) Co.,Ltd Address: No.66,Tangzhuang Road, Suzhou Industrial Park, Jiangsu 215006, China Tel: +86-512-6917-5888 Fax: +86-512-6917-5666
	FCC	916572, 331395
	IC	7290A-1, 7290A-2
	VCCI	T-343 for Telecommunication Test C-2919 for Conducted emission test R-2670 for Radiated emission test G-227 for radiated disturbance above 1GHz
Frequency Range Investigated:		Conducted: from 150kHz to 30 MHz Radiation: from 30 MHz to 25,000MHz
Test Distance:		The test distance of radiated emission from antenna to EUT is 3 M.



3. Test Equipment and Ancillaries Used for Tests

Instrument	Model No.	Manufacturer	Serial No.	Calibration Date	Valid Date
Bilog Antenna	Schwarzbeck	VULB9168	275	2015/9/3	2016/9/2
Active Loop Antenna	EMCO	6507	40855	2015/3/12	2016/3/11
Horn Antenna	EMCO	3115	31601	2015/9/2	2016/9/1
Horn Antenna	EMCO	3116	31974	2015/9/7	2016/9/6
EXA Signal Analyzer	KEYSIGHT	N9010A	MY54200207	2015/3/14	2016/3/13
Preamplifier	QuieTek	AP-0100A	CHM0906075	2015/9/17	2016/9/16
Preamplifier	Agilent	8449B	3008A01954	2015/3/5	2016/3/4
Preamplifier	MITEQ	AMF-7D-0010 100-30-10P	1860212	2015/3/9	2016/3/8
Preamplifier	EMC INSTRUMENTS	EMC184045	980065	2015/9/4	2016/9/3
Signal Generator	KEYSIGHT	83640A	2927A00107	2015/9/1	2016/8/31
MXG MW Analog Signal Generator	KEYSIGHT	N5183A	MY50142931	2015/3/13	2016/3/12
MXG-B RF Vector Signal Generator	KEYSIGHT	N5182B	MY53051383	2015/3/12	2016/3/11
BLUETOOTH TESTER	R&S	CBT	101133	2015/3/12	2016/3/11
Attenuator	KEYSIGHT	8491B	MY39250705	2015/9/2	2016/9/1
Rotary Attenuator	Agilent	8494B	MY42154466	2015/3/9	2016/3/8
Rotary Attenuator	Agilent	8495B	MY42146680	2015/3/9	2016/3/8
Temp & Humi chamber	T-MACHINE	TMJ-9712	T-12-040111	2015/9/8	2016/9/7
Series Power Meter	Anritsu	ML2495A	1224005	2015/3/5	2016/3/4
Power Sensor	Anritsu	MA2411B	1207295	2015/3/5	2016/3/4
USB Average Power Sensor	Theda	4PS6A	TW5451013~ 16	2014/11/8	2015/11/7



4. Antenna Requirements

4.1 Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

4.2 Antenna Construction and Directional Gain

No.	Antenna Type	Antenna Gain
A	PCB antenna	2.8 dBi



5. Test of Radiated Spurious Emission

5.1 Test Limit

Radiated emissions from 30 MHz to 25 GHz were measured according to the methods defines in ANSI C63.4-2009. The EUT was placed, 0.8 meter above the ground plane, as shown in section 5.6.3. The interface cables and equipment positions were varied within limits of reasonable applications to determine the positions producing maximum radiated emissions. For unintentional device, according to § 15.109(a), except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency (MHz)	Distance Meters	Radiated (μ V / M)	Radiated (dB μ V / M)
30-88	3	100	40.0
88-216	3	150	43.5
216-960	3	200	46.0
Above 960	3	500	54.0

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 above table.

Frequency (MHz)	Distance Meters	Radiated (dB μ V / M)
30-230	10	30
230-1000	10	37

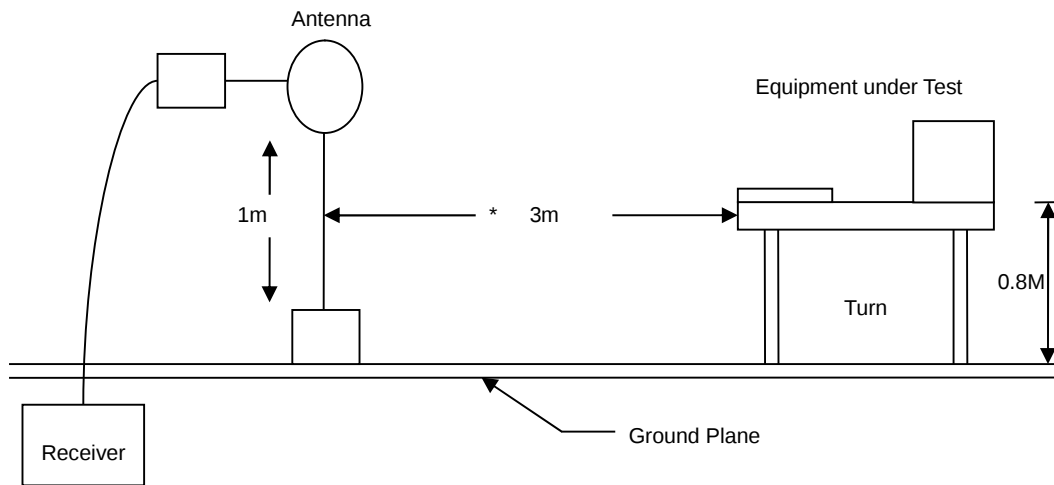
5.2 Test Procedures

- The EUT was placed on a rotatable table top 0.8 meter above ground.
- The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
- The table was rotated 360 degrees to determine the position of the highest radiation.
- The antenna is a broadband antenna and its height is varied between one meter and four meters above ground to find the maximum value of the field strength both horizontal polarization and vertical polarization of the antenna are set to make the measurement.
- For each suspected emission the EUT was arranged to its worst case and then tune the antenna tower (from 1 M to 4 M) and turn table (from 0 degree to 360 degrees) to find the maximum reading.
- Set the test-receiver system to Peak or CISPR quasi-peak Detect Function and specified bandwidth with Maximum Hold Mode.
- If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method and reported.
- For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

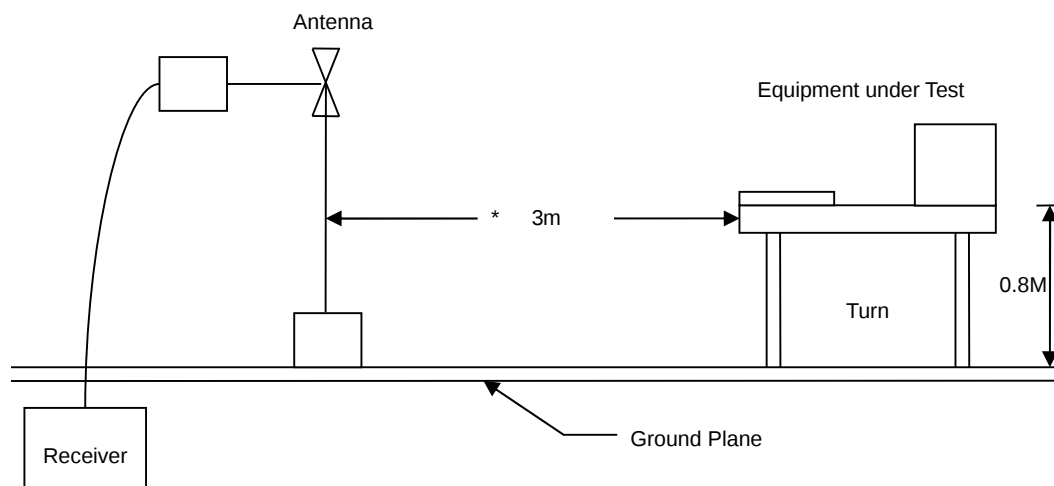


5.3 Typical Test Setup

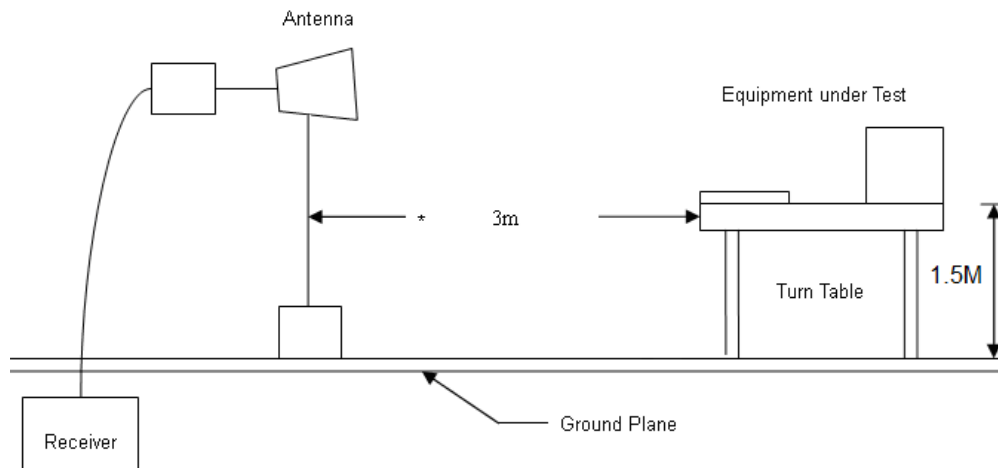
Below 30MHz test setup



30MHz- 1GHz Test Setup



Above 1GHz Test Setup





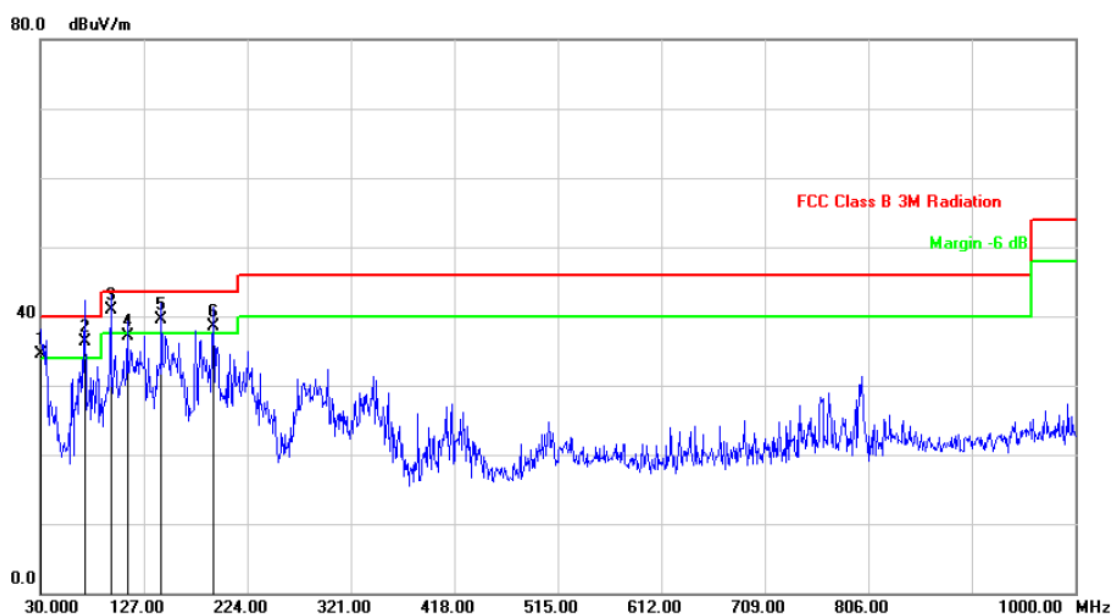
5.4 Test Result and Data (9kHz ~ 30MHz)

The 9kHz-30MHz spurious emission is under limit 20dB more.

5.5 Test Result and Data (30MHz ~ 1GHz)

5.5.1 Test Result and Data of Transmitter

Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1	Temperature	: 23 °C
Test Date	: Oct. 12, 2015	Humidity	: 49 %
Memo	: CH 00	Atmospheric Pressure	: 1008 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	31.0000	-17.90	52.43	34.53	40.00	-5.47	QP	104	240	P
2	71.7100	-21.14	57.39	36.25	40.00	-3.75	QP	105	222	P
3	95.9600	-24.05	65.05	41.00	43.50	-2.50	QP	113	189	P
4	111.4800	-21.32	58.37	37.05	43.50	-6.45	QP	106	111	P
5	143.4900	-18.49	58.05	39.56	43.50	-3.94	QP	114	287	P
6	191.9900	-21.03	59.58	38.55	43.50	-4.95	QP	100	357	P

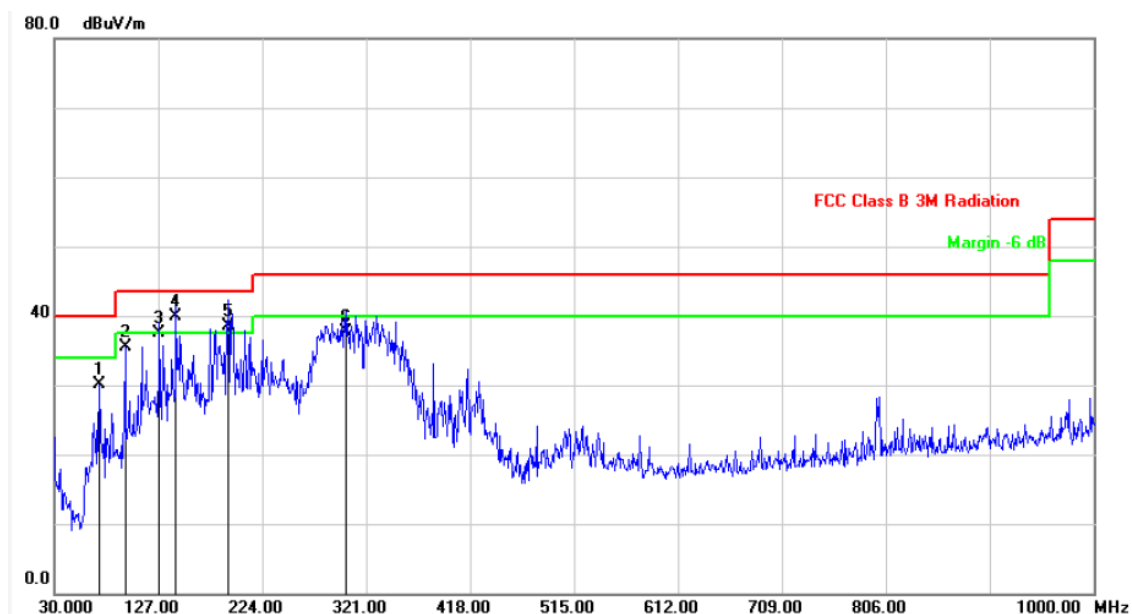
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1	Temperature	: 23 °C
Test Date	: Oct. 12, 2015	Humidity	: 49 %
Memo	: CH 00	Atmospheric Pressure	: 1008 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	71.7100	-21.14	51.31	30.17	40.00	-9.83	peak	400	0	P
2	95.9600	-24.05	59.58	35.53	43.50	-7.97	peak	400	0	P
3	127.9700	-19.69	57.21	37.52	43.50	-5.98	QP	112	298	P
4	143.4900	-18.49	58.34	39.85	43.50	-3.65	QP	103	158	P
5	191.9900	-21.03	59.52	38.49	43.50	-5.01	QP	115	306	P
6	302.5700	-17.45	55.06	37.61	46.00	-8.39	QP	100	288	P

Note: Level = Reading + Factor

Margin = Level – Limit

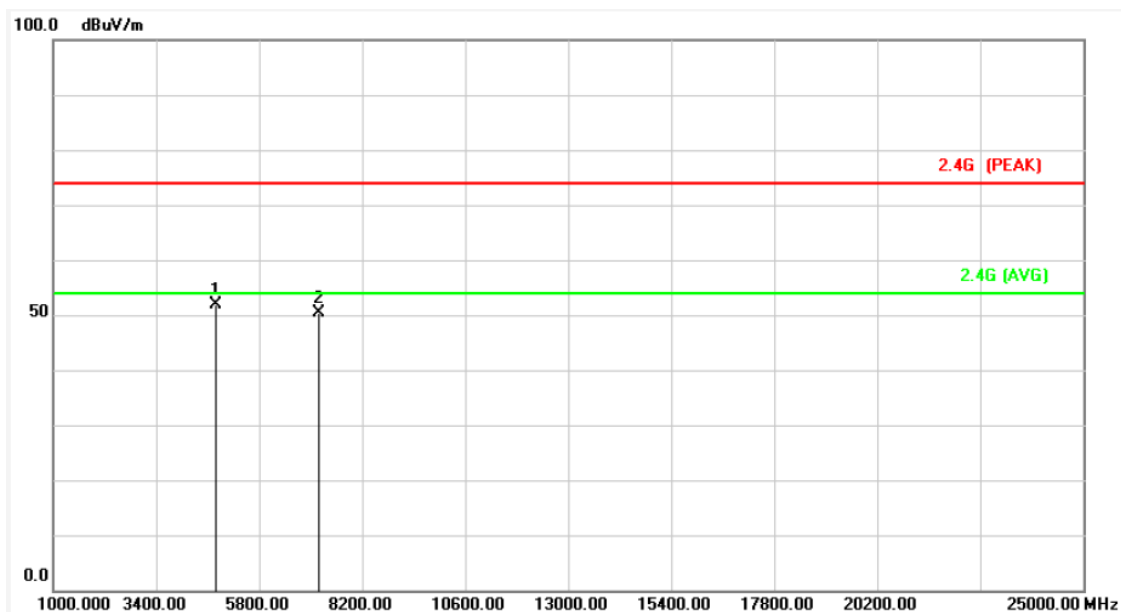
Factor= Antenna Factor + Cable Loss - Amplifier Factor



5.6 Test Result and Data (1GHz~25GHz)

5.6.1 Test Result and Data of Transmitter

Power	:	AC 120V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 1	Temperature	:	23 °C
Test Date	:	Oct. 13, 2015	Humidity	:	52 %
Memo	:	CH 00	Atmospheric Pressure	:	1008 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	4804.000	7.85	44.00	51.85	74.00	-22.15	peak	200	0	P
2	7206.000	13.01	37.42	50.43	74.00	-23.57	peak	200	0	P

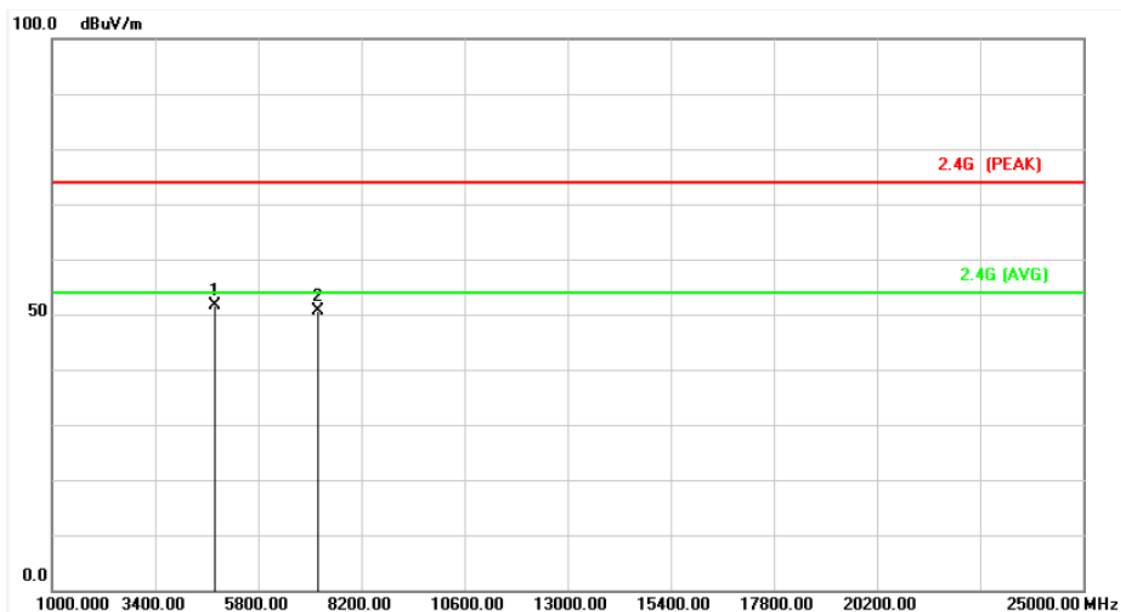
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1	Temperature	: 23 °C
Test Date	: Oct. 13, 2015	Humidity	: 52 %
Memo	: CH 00	Atmospheric Pressure	: 1008 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	4804.000	7.85	43.70	51.55	74.00	-22.45	peak	100	0	P
2	7206.000	13.01	37.65	50.66	74.00	-23.34	peak	100	0	P

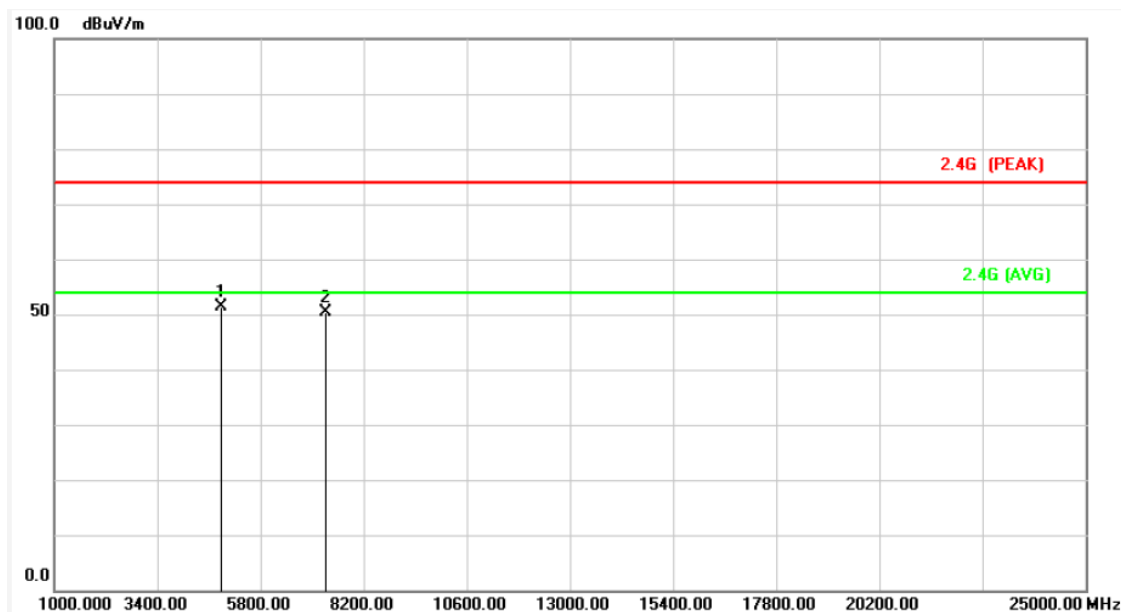
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor.



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1	Temperature	: 23 °C
Test Date	: Oct. 13, 2015	Humidity	: 52 %
Memo	: CH 39	Atmospheric Pressure	: 1008 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	4882.000	8.10	43.35	51.45	74.00	-22.55	peak	200	0	P
2	7323.000	13.43	36.90	50.33	74.00	-23.67	peak	200	0	P

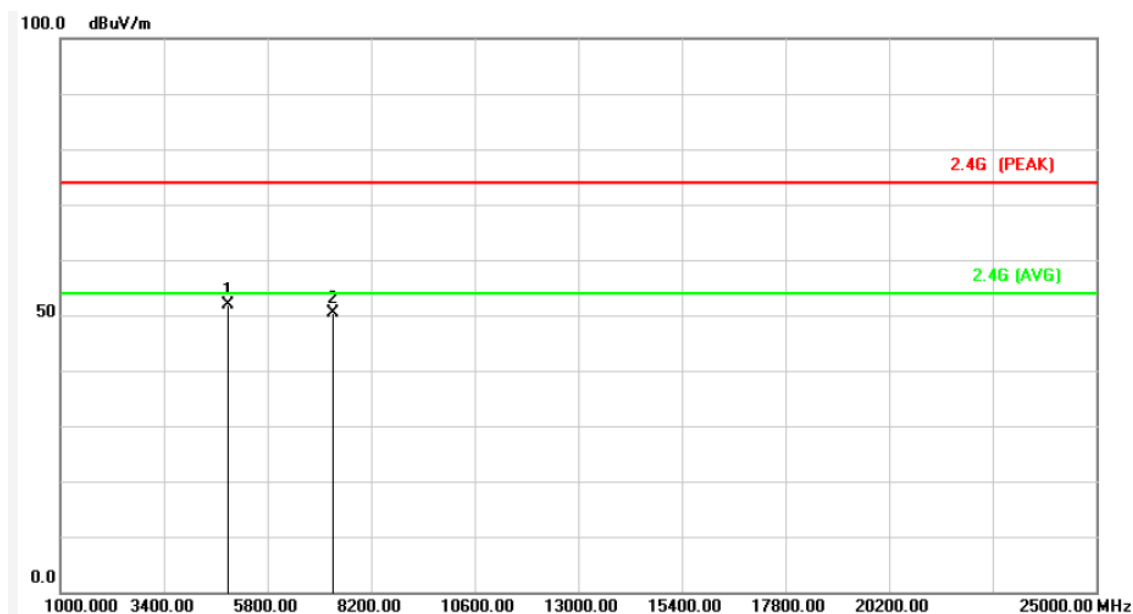
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1	Temperature	: 23 °C
Test Date	: Oct. 13, 2015	Humidity	: 52 %
Memo	: CH 39	Atmospheric Pressure	: 1008 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	4882.000	8.10	43.75	51.85	74.00	-22.15	peak	100	0	P
2	7323.000	13.43	36.93	50.36	74.00	-23.64	peak	100	0	P

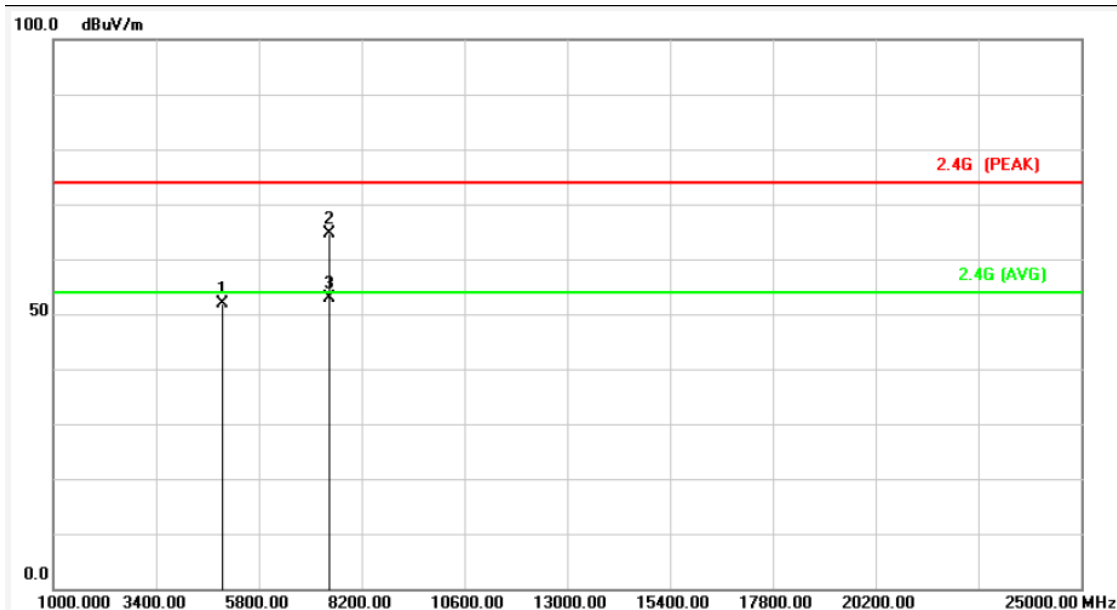
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor.



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1	Temperature	: 23 °C
Test Date	: Oct. 13, 2015	Humidity	: 52 %
Memo	: CH 78	Atmospheric Pressure	: 1008 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	4960.000	8.34	43.42	51.76	74.00	-22.24	peak	100	0	P
2	7440.000	13.84	50.67	64.51	74.00	-9.49	peak	105	180	P
3	7440.000	13.84	39.12	52.96	54.00	-1.04	AVG	105	180	P

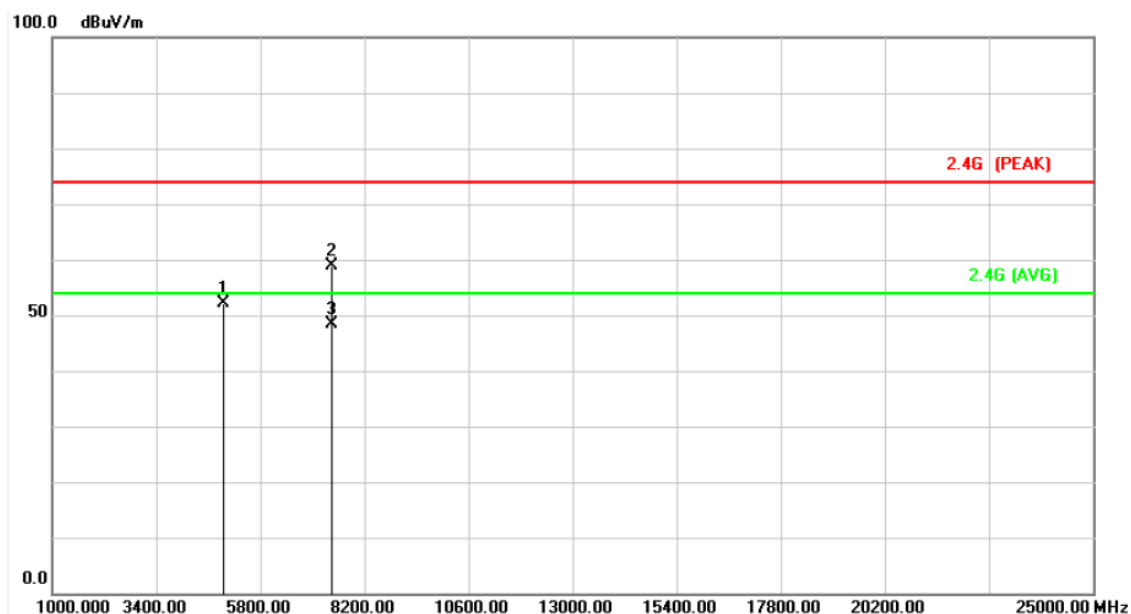
Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1	Temperature	: 23 °C
Test Date	: Oct. 13, 2015	Humidity	: 52 %
Memo	: CH 78	Atmospheric Pressure	: 1008 hpa



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F
1	4960.000	8.34	43.79	52.13	74.00	-21.87	peak	200	0	P
2	7440.000	13.84	44.96	58.80	74.00	-15.20	peak	100	217	P
3	7440.000	13.84	34.46	48.30	54.00	-5.70	AVG	100	217	P

Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor.



5.7 Restricted Bands of Operation

Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.09000 – 0.11000	16.42000 – 16.42300	399.9 – 410.0	4.500 – 5.250
0.49500 – 0.505**	16.69475 – 16.69525	608.0 – 614.0	5.350 – 5.460
2.17350 – 2.19050	16.80425 – 16.80475	960.0 – 1240.0	7.250 – 7.750
4.12500 – 4.12800	25.50000 – 25.67000	1300.0 – 1427.0	8.025 – 8.500
4.17725 – 4.17775	37.50000 – 38.25000	1435.0 – 1626.5	9.000 – 9.200
4.20725 – 4.20775	73.00000 – 74.60000	1645.5 – 1646.5	9.300 – 9.500
6.21500 – 6.21800	74.80000 – 75.20000	1660.0 – 1710.0	10.600 – 12.700
6.26775 – 6.26825	108.00000 – 121.94000	1718.8 – 1722.2	13.250 – 13.400
6.31175 – 6.31225	123.00000 – 138.00000	2200.0 – 2300.0	14.470 – 14.500
8.29100 – 8.29400	149.90000 – 150.05000	2310.0 – 2390.0	15.350 – 16.200
8.36200 – 8.36600	156.52475 – 156.52525	2483.5 – 2500.0	17.700 – 21.400
8.37625 – 8.38675	156.70000 – 156.90000	2655.0 – 2900.0	22.010 – 23.120
8.41425 – 8.41475	162.01250 – 167.17000	3260.0 – 3267.0	23.600 – 24.000
12.29000 – 12.29300	167.72000 – 173.20000	3332.0 – 3339.0	31.200 – 31.800
12.51975 – 12.52025	240.00000 – 285.00000	3345.8 – 3358.0	36.430 – 36.500
12.57675 – 12.57725	322.00000 – 335.40000	3600.0 – 4400.0	Above 38.6
13.36000 – 13.41000			

** : Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz



5.8 Restrict band emission Measurement Data

Test Date: Oct. 13, 2015

Temperature: 23 °C

Atmospheric pressure: 1008 hPa

Humidity: 52 %

Modulation Standard: GFSK

Channel 0						Fundamental Frequency: 2402 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading	Corrected Factor	Result (dBuV/m)	Remark	Limit@3m (dBuV/m)		Margin (dB)	Table (Deg.)	Ant High (m)
						Peak	Ave.			
2390.00	V	43.40	-0.98	42.42	Peak	74	54	-31.58	179	1.81
2390.00	V	34.18	-0.98	33.20	Ave	74	54	-20.80	179	1.81
2390.00	H	42.95	-0.98	41.97	Peak	74	54	-32.03	216	1.05
2390.00	H	33.53	-0.98	32.55	Ave	74	54	-21.45	216	1.05
Channel 78						Fundamental Frequency: 2480 MHz				
2483.50	V	61.97	-0.61	61.36	Peak	74	54	-12.64	174	1.39
2483.50	V	46.51	-0.61	45.90	Ave	74	54	-8.10	174	1.39
2484.02	V	59.24	-0.61	58.63	Peak	74	54	-15.37	174	1.39
2484.02	V	42.91	-0.61	42.30	Ave	74	54	-11.70	174	1.39
2484.88	V	53.51	-0.61	52.90	Peak	74	54	-21.10	174	1.39
2484.88	V	36.41	-0.61	35.80	Ave	74	54	-18.20	174	1.39
2483.59	H	55.74	-0.61	55.13	Peak	74	54	-18.87	216	1.25
2483.59	H	41.71	-0.61	41.10	Ave	74	54	-12.90	216	1.25
2483.91	H	53.88	-0.61	53.27	Peak	74	54	-20.73	216	1.25
2483.91	H	38.11	-0.61	37.50	Ave	74	54	-16.50	216	1.25

Notes:

1. Result = Meter Reading + Factor
2. Factor = Antenna Factor + Cable Loss – Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and video bandwidth is 3 MHz for Peak detection at frequency above 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz



Test Date: Oct. 13, 2015

Temperature: 23 °C

Atmospheric pressure: 1008 hPa

Humidity: 52 %

Modulation Standard: $\pi/4$ -DQPSK

Channel 0						Fundamental Frequency: 2402 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading	Corrected Factor	Result (dBuV/m)	Remark	Limit@3m (dBuV/m)		Margin (dB)	Table (Deg.)	Ant High (m)
						Peak	Ave.			
2390.00	V	44.20	-0.98	43.22	Peak	74	54	-30.78	178	1.86
2390.00	V	34.48	-0.98	33.50	Ave	74	54	-20.50	178	1.86
2390.00	H	45.31	-0.98	44.33	Peak	74	54	-29.67	218	1.04
2390.00	H	34.50	-0.98	33.52	Ave	74	54	-20.48	218	1.04
Channel 78						Fundamental Frequency: 2480 MHz				
2483.50	V	65.96	-0.61	65.35	Peak	74	54	-8.65	172	1.53
2483.50	V	47.39	-0.61	46.78	Ave	74	54	-7.22	172	1.53
2483.50	H	60.62	-0.61	60.01	Peak	74	54	-13.99	213	1.26
2483.50	H	43.86	-0.61	43.25	Ave	74	54	-10.75	213	1.26

Modulation Standard: 8DPSK

Channel 0						Fundamental Frequency: 2402 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading	Corrected Factor	Result (dBuV/m)	Remark	Limit@3m (dBuV/m)		Margin (dB)	Table (Deg.)	Ant High (m)
						Peak	Ave.			
2390.00	V	44.13	-0.98	43.15	Peak	74	54	-30.85	177	1.87
2390.00	V	34.40	-0.98	34.40	Ave	74	54	-20.58	177	1.87
2388.02	H	47.11	-0.99	46.12	Peak	74	54	-27.88	215	1.05
2388.02	H	35.14	-0.99	34.15	Ave	74	54	-19.85	215	1.05
Channel 78						Fundamental Frequency: 2480 MHz				
2483.50	V	69.41	-0.61	68.80	Peak	74	54	-5.20	177	1.52
2483.50	V	48.29	-0.61	47.68	Ave	74	54	-6.32	177	1.52
2483.50	H	59.62	-0.61	59.01	Peak	74	54	-14.99	198	1.04
2483.50	H	41.14	-0.61	40.53	Ave	74	54	-13.47	198	1.04

Notes:

1. Result = Meter Reading + Factor
2. Factor = Antenna Factor + Cable Loss – Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and video bandwidth is 3 MHz for Peak detection at frequency above 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz



6. Maximum Peak Output Power

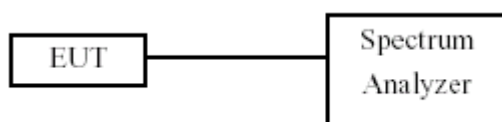
6.1 Test Limit

The Maximum Peak Output Power Measurement is 30dBm.

6.2 Test Procedures

The antenna port(RF output)of the EUT was connected to the input(RF input)of a power meter. Power was read directly from the meter and cable loss connection was added to the reading to obtain power at the EUT antenna terminal. The EUT Output Power was set to maximum to produce the worse case test result.

6.3 Test Setup Layout



6.4 Test Result and Data

Test Date : Oct. 13, 2015 Temperature : 23°C
Atmospheric pressure : 1051 hPa Humidity : 52%

Modulation Type	Channel	Frequency (MHz)	Output Power (dBm)	Output Power (mW)
GFSK	00	2402	-2.05	0.62
	39	2441	-1.95	0.64
	78	2480	-1.76	0.67
$\pi/4$ -DQPSK	00	2402	-1.54	0.70
	39	2441	-1.50	0.71
	78	2480	-1.26	0.75
8DPSK	00	2402	-1.08	0.78
	39	2441	-1.01	0.79
	78	2480	-0.79	0.83