

FCC Certification Test Report

Product Name : RF Module

Trade Name : Westbay

Model No. : WJT844-1000M

FCC ID : XZDWJT844-1000M

Applicant: Westbay Technologies Ltd.
Room 701, Building 1, Lane 336 Haitong Road
Shanghai, China 201204

Manufacturer: Westbay Technologies Ltd.
Room 701, Building 1, Lane 336 Haitong Road
Shanghai, China 201204

Test Lab Name: Inventec (Pudong) Corporation
699 Pu-xing Road, Minghang District, Shanghai
201114, China

Date of Receipt : 11/09/2009
Date of Test : 06/26~08/05/2010
Issued Date : 08/05/2010
Report No. : LABC091101-RF1

The test results are only related to the sample under test.

The measurement traceability is based on all test equipments calibration, directly or indirectly traced to SI.

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The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP.NIST, or any agency of the Federal Government.

Test Summary

Report No. : LABC091101-RFI

Product Name : RF Module
Trade Name : Westbay
Model No. : WJT844-1000M
FCC ID : XZDWJT844-1000M
Applicant : Westbay Technologies Ltd.
Address : Room 701, Building 1, Lane 336 Haitong Road
Shanghai, China 201204
Manufacturer : Westbay Technologies Ltd.
Address : Room 701, Building 1, Lane 336 Haitong Road
Shanghai, China 201204
EUT Voltage : DC 3.3V
Applicable Standards : FCC Part 15 Subpart C: Jul.2008
ANSI C63.4: 2003
Test Results : Complied with the test standards
Performed Location : Inventec (Pudong) Corporation
699 Pu-xing Road, Minghang District, Shanghai
201114, China
TEL: +86-21-6429-8888 / FAX: +86-21-6429-5571

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Approved By :

Kenny Liu

(Kenny Liu)

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1. General Information

1.1 EUT Description

Product Name : RF Module
Trade Name : Westbay
Model No. : WJT844-1000M
FCC ID : XZDWJT844-1000M
Frequency Range : 905MHz - 925MHz
Channel Number : 12
Type of Modulation : FSK
Antenna type : MMCX connector
Antenna Gain : 2dBi
Frequency of Each Channel : Channel 1: 922.0MHz
Channel 2: 909.5MHz
Channel 3: 905.5MHz
Channel 4: 919.0MHz
Channel 5: 911.0MHz
Channel 6: 915.0MHz
Channel 7: 913.0MHz
Channel 8: 918.5MHz
Channel 9: 925MHz
Channel 10: 905.0MHz
Channel 11: 909.0MHz
Channel 12: 921.5MHz

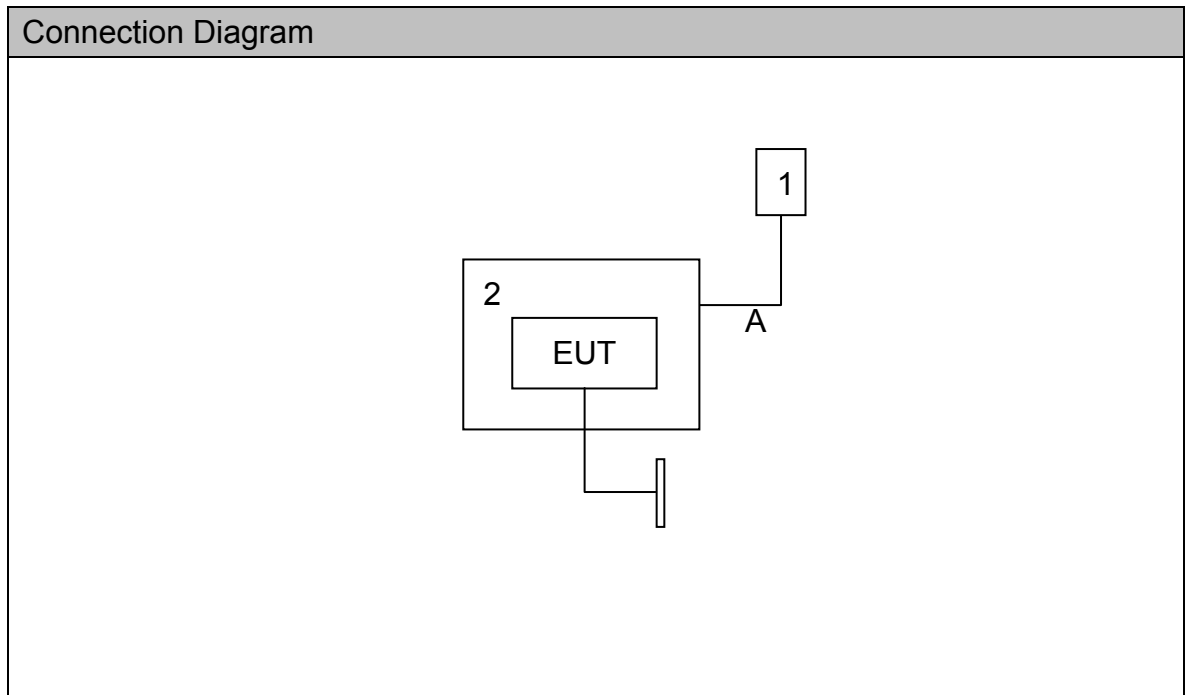
1.2 Mode of Operation

Item	Test Mode
1	905MHz(low) transmitter
2	915MHz(middle) transmitter
3	925MHz(high) transmitter

1.3 EUT Exercise Software

1	Connect EUT and peripherals and set them at center of turntable;
2	Set EUT work at transmitter mode.

1.4 Configuration of EUT and Peripherals



1.5 Test Peripherals List

	Product	Manufacturer	Model No.	Serial No.
1	Battery (DC input)	N/A	N/A	N/A
2	Power PCB board	N/A	N/A	N/A

1.6 The Signal Cable of the Peripherals List

	Signal Cable Type	Signal cable Description
A	Power Cable	Un-shielding, 0.16m

2. Test Facility

The Test site used by Inventec (Pudong) Corporation to collect test data is located in 699 Pu-xing Road, Minhang District, Shanghai, 201114, China

Test site at Inventec (Pudong) Corporation has been fully described in reports submitted to the Federal Communication Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on September 24, 2007. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4:2003

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 156746. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

Additionally, Inventec (Pudong) Corporation is a National Institute of Standards and Technology (NIST) accredited laboratory, under the National Voluntary Laboratory Accredited Program, Lab Code 500018-0; VCCI certification: the registration No. C-2913, T-1664, R-2663, R-2664, G-88 and G-89; Nemko Authorisation Aut. No.: ELA 606

3. Technical Information of Testing

3.1 Summary of Test Result

Performed Test Item	Normative References	Test result
Conducted Emission	FCC Part 15 section 15.207 ANSI C63.4:2003 Clause 13	Not Applicable ^{Note}
Radiated Emission	FCC Part 15 section 15.249 (a)(d) ANSI C63.4:2003 Clause 13	PASS
20dB bandwidth	FCC Part 15 section 15.215 (c) ANSI C63.4:2003 Clause 13	See Chapter 6
Duty Cycle	FCC Part 15 section 15.35 (c) ANSI C63.4:2003 Clause 13	See Chapter 7

Note: Due to the EUT is powered by DC battery; the conduction emission measurement is not applicable.

3.2 Measurement Uncertainty

Test Item	Frequency Range	Expanded Uncertainty	Description
Conducted Emission	0.15-30MHz	1.03dB	k=2
Radiated Emission	30-300MHz	3.51 dB (H)	k=2
	300-1GHz	3.55 dB (H)	k=2
	1-18GHz	4.59 dB (H)	k=2
	30-300MHz	3.69 dB (V)	k=2
	300-1GHz	3.65 dB (V)	k=2
	1-18GHz	4.58 dB (V)	k=2
20dB bandwidth	-	283Hz	k=2

Note: the coverage factor k=2 yields approximately a 95% level of confidence for the near-normal distribution typical of most measurement results.

3.3 Test Environment

Performed Item	Items	Required	Actual
Radiated Emission	Temperature (°C)	15-35	24
	Humidity (%RH)	25-75	52
20dB bandwidth	Temperature (°C)	15-35	22
	Humidity (%RH)	25-75	47
Duty Cycle	Temperature (°C)	15-35	24
	Humidity (%RH)	25-75	52

4. Conducted Emission

4.1 Test Standard

FCC Part 15 Subpart C: Jul.2008 section 15.207
 ANSI C63.4:2003 Clause 13

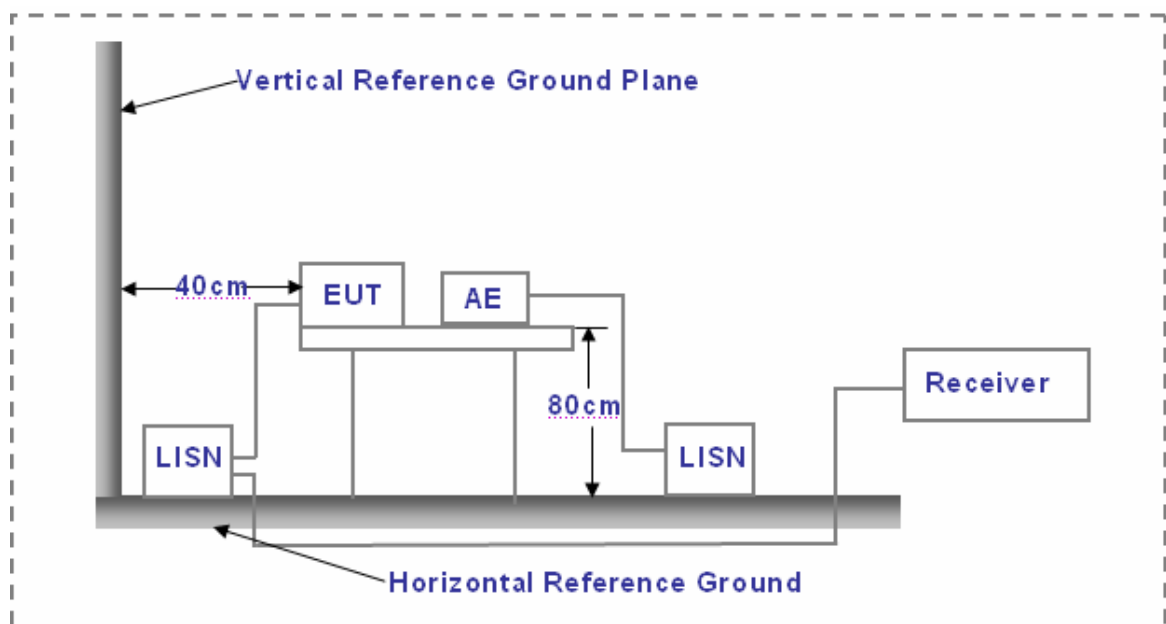
4.2 Limits for Conducted Emission

Frequency (MHz)	QP (dB μ V)	AV (dB μ V)
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50


Note1: The lower limit applies at the boundary between the frequency ranges;

Note2: The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

4.3 Test setup at SR4 CE Test Site



4.4 Test Equipment

Instrument	Manufacturer	Type No.	Serial No	Cal. Date	Cal. Interval	Cal. Body
Test Receiver	R&S	ESCI	100525	01/12/2010	1Y	CEPREI 
LISN	SCHWARZBECK	NSLK 8127	8127-462	10/27/2009	1Y	SIMT 
LISN	SCHWARZBECK	NNLK 8121	8121-493	02/03/2010	1Y	SIMT 
Pulse Limiter	R&S	ESH3-Z2	100734	02/03/2010	1Y	SIMT 
50ohm Termination	-	50ohmT	387880(RN)	01/12/2010	1Y	CEPREI 

Note: Calibration is performed with test equipment and standards directly or indirectly traceable by means of approved calibration techniques to the national/international standards, which realize the physical units of measurement according to the International System of Units (SI).

4.5 Test Procedure

The measuring process is according to Clause 13 of ANSI C63.4:2003 standard and laboratory internal procedure “Conducted Emission Measurement SOP”TMSP11”.

In the conducted emission measurement, the EUT and all peripheral devices were set up on a non-metallic table which was 0.8m height above the ground plane, and 0.4m far away from the vertical plane. The EUT was powered by a Line Impedance Stabilization Network (L.I.S.N), other peripheral devices were powered by AC mains through the second Line Impedance Stabilization Network (L.I.S.N). For the measurement, the first L.I.S.N measuring port was terminated by 50Ω measuring equipment and the second L.I.S.N measuring port was terminated by a 50Ω resistive load. All measurements were done on the phase and neutral line of the EUT’s power cord. All cables or wires placement were verified to find out the maximum emission.

The bandwidth of measuring receiver was set at 9 kHz.

4.6 Test Results

Since the EUT does not have AC port, the test item is not applicable.

5. Radiated Emission

5.1 Test Standard

FCC Part 15 Subpart C: Jul.2008 section 15.249(a)(d)
 ANSI C63.4:2003 Clause 13

5.2 Limits for Radiated Emission

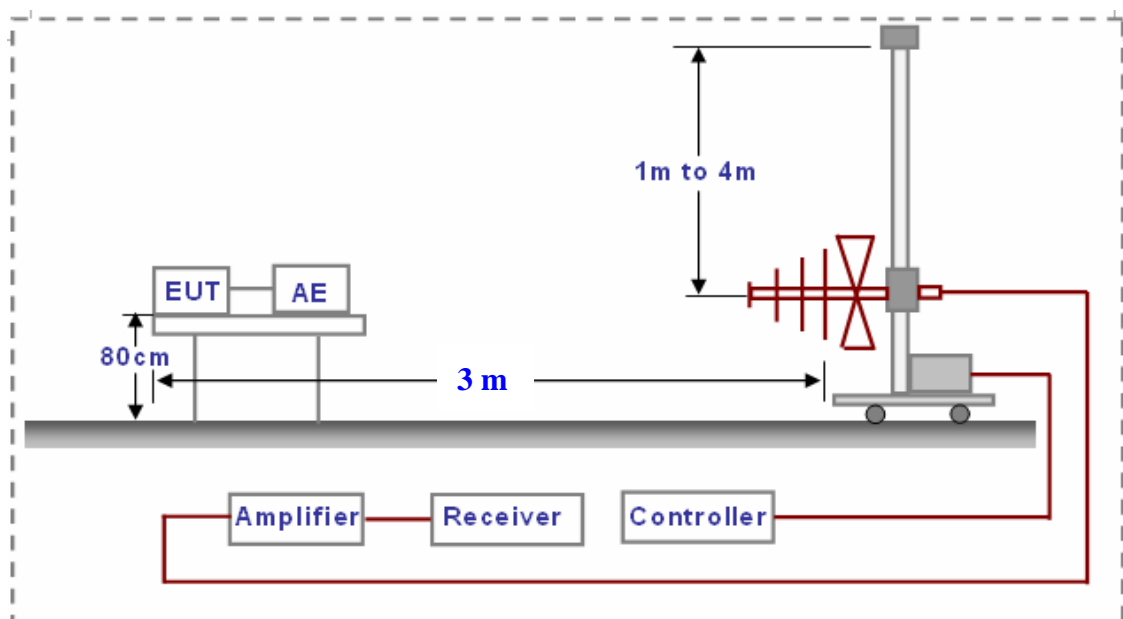
Fundamental and harmonic emission limits from FCC Part 15 section 15.249(a):

Fundamental Frequency	Distance (m)	Field Strength of Fundamental (millivolts/meter)	Field Strength of Harmonics (microvolts/meter)
902-928MHz	3	50(94dB μ V/m)	500(54dB μ V/m)

Spurious emission limits from FCC Part 15 section 15.249(d):




Frequency (MHz)	Distance (meter)	Field Strength Limit	
		μ V/m	(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

5.3 Test setup at SAC3 3m-HF Chamber






5.4 Test Equipment

For 30MHz~1GHz (Fundamental and Spurious Emissions)

Instrument	Manufacturer	Type No.	Serial No	Cal. Date	Cal. Interval	Cal. Body
Bi-log antenna	TESEQ	CBL-6112D	23180	05/10/2010	1Y	NIM 
Preamplifier	Agilent	8447D	2944A11039	03/09/2010	1Y	CEPREI 
Spectrum Analyzer	R&S	FSL3	100584	01/12/2010	1Y	CEPREI 



Note: Calibration is performed with test equipment and standards directly or indirectly traceable by means of approved calibration techniques to the national/international standards, which realize the physical units of measurement according to the International System of Units (SI).

For above 1G-6GHz (Harmonic Emissions)

Instrument	Manufacturer	Type No.	Serial No	Cal. Date	Cal. Interval	Cal. Body
Horn antenna	ETS LINDGREN	3117	69382	01/09/2009	2Y	SIMT 
Preamplifier	Agilent	8449B	3008A02356	01/12/2010	1Y	CEPREI 
Spectrum Analyzer	Agilent	E7405A	MY45112670	01/12/2010	1Y	CEPREI 

Note: Calibration is performed with test equipment and standards directly or indirectly traceable by means of approved calibration techniques to the national/international standards, which realize the physical units of measurement according to the International System of Units (SI).

For above 6G-10GHz (Harmonic Emissions)

Instrument	Manufacturer	Type No.	Serial No	Cal. Date	Cal. Interval	Cal. Body
Horn antenna	SCHWARZBECK	HAP06-18W	00000044	09/09/2009	1Y	SIMT 
Spectrum Analyzer	Agilent	E7405A	MY45112670	01/12/2010	1Y	CEPREI 

Note: Calibration is performed with test equipment and standards directly or indirectly traceable by means of approved calibration techniques to the national/international standards, which realize the physical units of measurement according to the International System of Units (SI).

5.5 Test Procedure

The measuring process is according to Clause 13 of ANSI C63.4:2003 standard and laboratory internal procedure "Radiated Emission Measurement for section 15.249 of FCC Part 15" TMSP33".

The EUT and all simulators are placed on a turn table which is 0.8 meter above ground. Measurement between the EUT and receiving antenna was set at 3 meters. During the radiated measurement, the turn table can rotate 360 degrees to determine the position of the maximum emission level. The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level. One receiving antenna was used for both horizontal and vertical polarization detection at the same time. In order to find the maximum emission, all of the interface cables must be manipulated on radiated measurement.

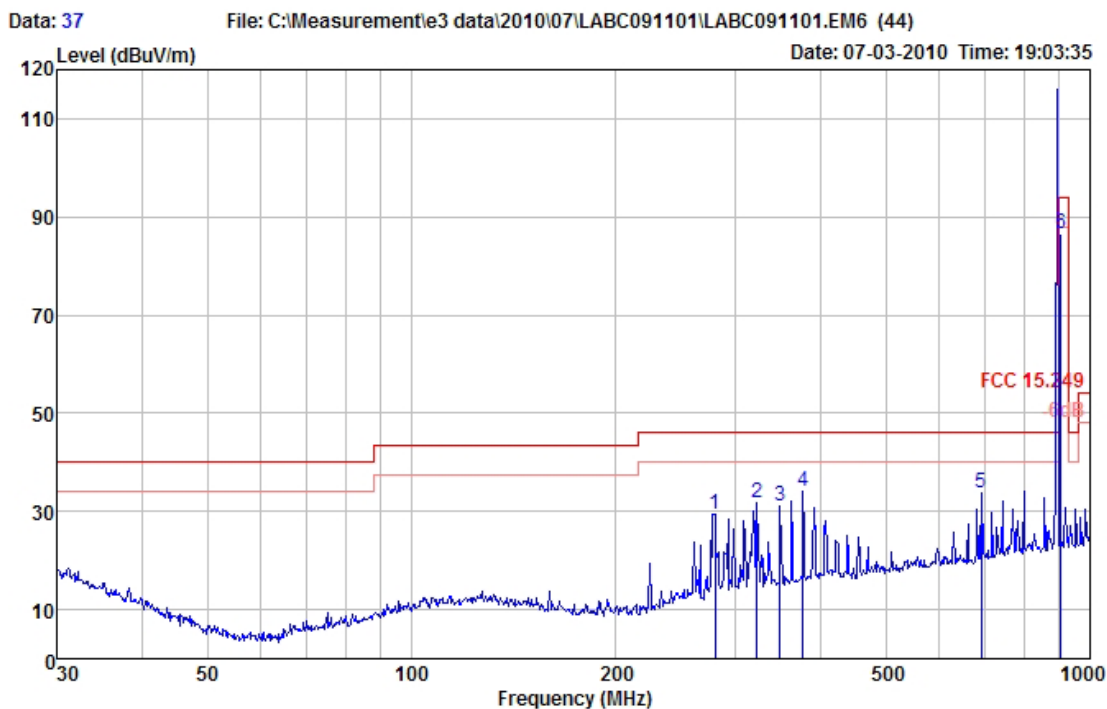
Radiated emissions were investigated over the frequency range from 30MHz to 1GHz using a spectrum analyzer resolution bandwidth of 120kHz in Quasi-Peak detector. Radiated emissions were investigated over the frequency range from 1GHz to 10GHz using a spectrum analyzer resolution bandwidth of 1MHz in Peak detector .

Average= Peak -20log (Duty cycle)

5.6 Test Results

For 30MHz~1GHz Fundamental and Spurious Emissions

Site: SAC3 3m-HF Temp/Humi: 24C/52% Test Engineer: li.han-hui
 EUT/Model: RF Module Power: DC3.3V Test Mode: 905MHz(10w)
 Condition: FCC 15.249 1G-CBL6122D Pol/Phase: HORIZONTAL
 Memo: Westbay/WJT844-1000M



Item	Freq. MHz	Factor dB	Level dBμV/m	Read dBμV/m	Limit dBμV/m	Margin dB	Remark	Height cm	Angle deg.
1	280.024	-12.54	29.52	42.06	46	16.48	QP	108	301
2	323.32	-11.79	31.67	43.46	46	14.33	QP	142	89
3	349.25	-10.77	31.12	41.89	46	14.88	QP	163	52
4	377.259	-10.21	34.06	44.27	46	11.94	QP	133	241
5	691.987	-7	33.61	40.61	46	12.39	QP	113	267
6	905	-3.82	86.63	90.45	94	7.37	QP	100	118

Above data cannot be used for EMC approvals unless it contains the approved signature.

Check By

hanhui, li

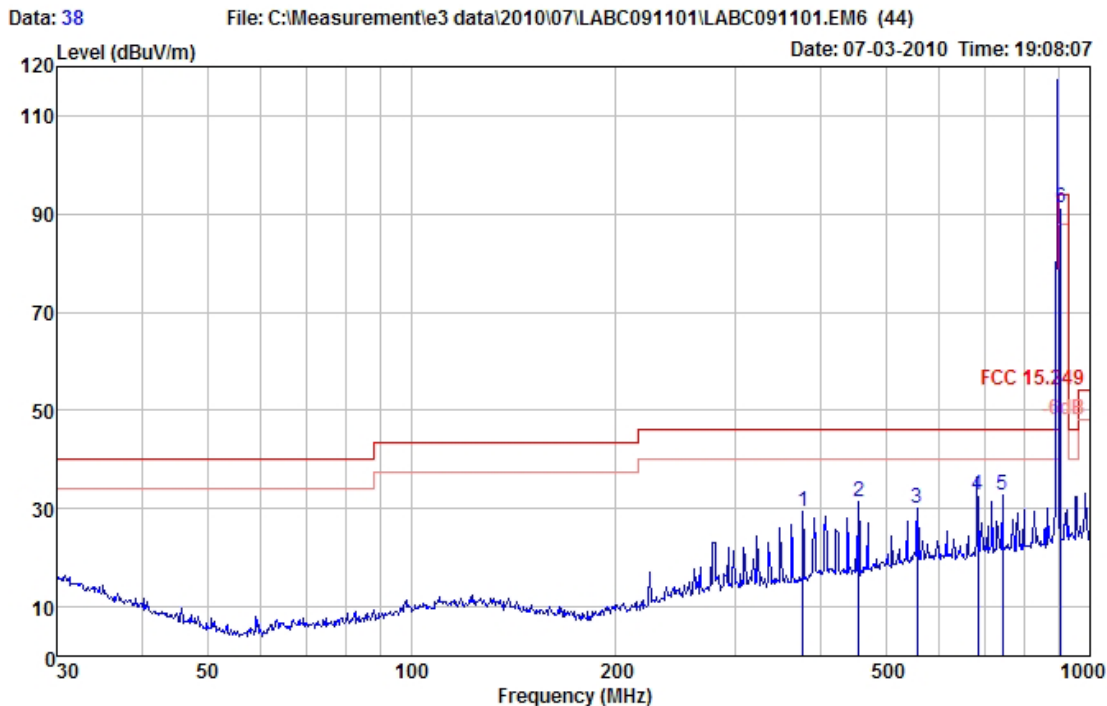
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Site: SAC3 3m-HF
 EUT/Model: RF Module
 Condition: FCC 15.249
 Memo: Westbay/WJT844-1000M

Temp/Humi: 24C/52%
 Power: DC3.3V
 1G-CBL6122D

Test Engineer: li.han-hui
 Test Mode: 905MHz(low)
 Pol/Phase: VERTICAL



Item	Freq. MHz	Factor dB	Level dBμV/m	Read dBμV/m	Limit dBμV/m	Margin dB	Remark -	Height cm	Angle deg.
1	377.259	-10.61	29.43	40.04	46	16.57	QP	121	154
2	455.906	-9.88	31.51	41.39	46	14.49	QP	152	69
3	556.774	-7.61	30.07	37.68	46	15.93	QP	133	96
4	683.2	-6.56	32.71	39.27	46	13.29	QP	121	241
5	742.259	-5.53	32.87	38.4	46	13.13	QP	122	36
6	905	-3.15	91.36	94.51	94	2.64	QP	117	90

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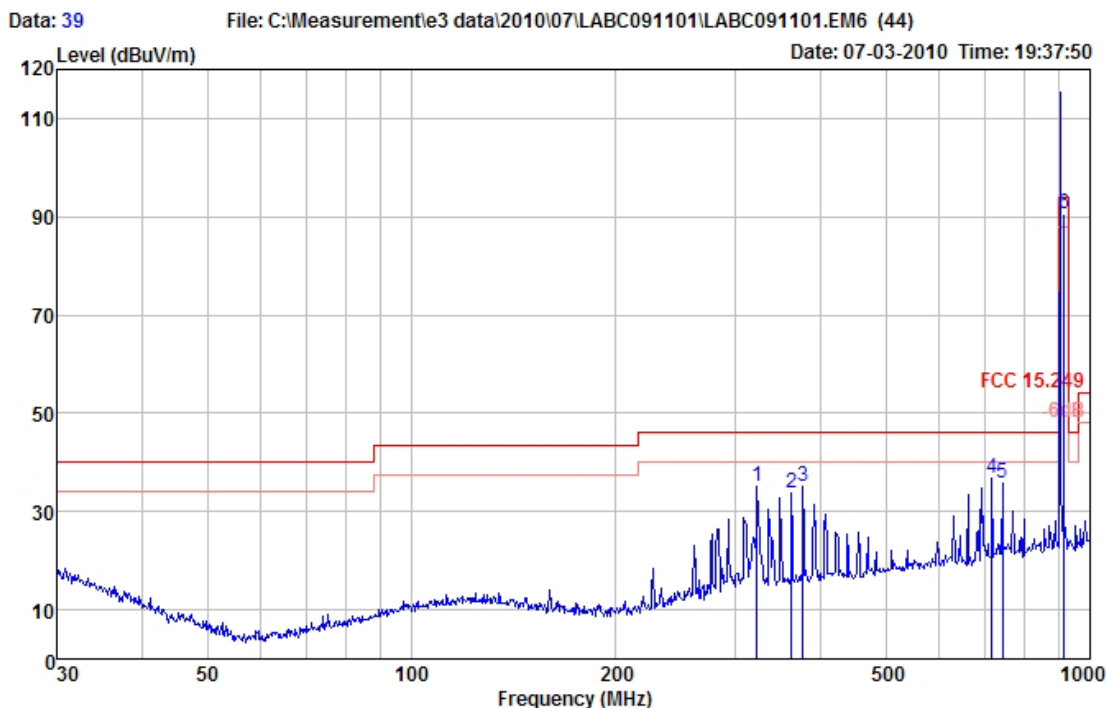
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Approved By *[Signature]*

Site: SAC3 3m-HF
 EUT/Model: RF Module
 Condition: FCC 15.249
 Memo: Westbay/WJT844-1000M

Temp/Humi: 24C/52%
 Power: DC3.3V
 1G-CBL6122D

Test Engineer: li.han-hui
 Test Mode: 915MHz(middle)
 Pol/Phase: HORIZONTAL



Item	Freq. MHz	Factor dB	Level dB μ V/m	Read dB μ V/m	Limit dB μ V/m	Margin dB	Remark -	Height cm	Angle deg.
1	323.32	-11.79	35.01	46.8	46	10.99	QP	122	65
2	362.985	-10.33	33.63	43.96	46	12.37	QP	105	182
3	377.259	-10.21	35.05	45.26	46	10.95	QP	156	312
4	716.682	-6.49	36.72	43.21	46	9.28	QP	100	93
5	742.259	-5.78	35.92	41.7	46	10.08	QP	163	67
6	915	-3.84	90.46	94.3	94	3.54	QP	113	91

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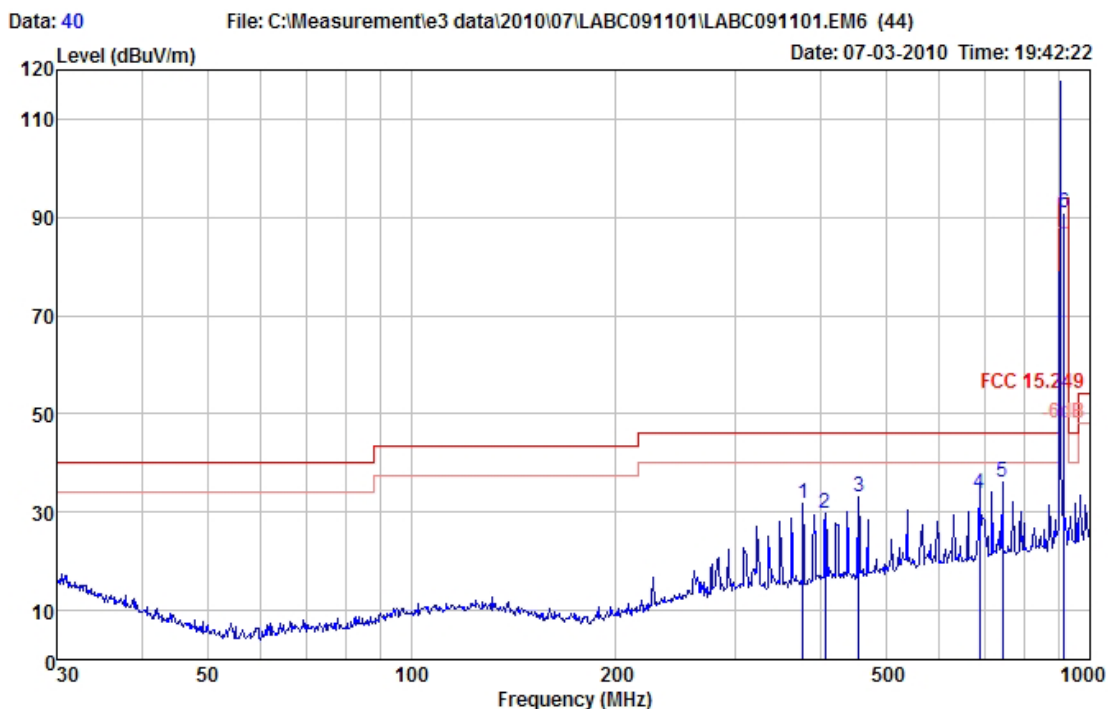
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Approved By *[Signature]*

Site: SAC3 3m-HF
 EUT/Model: RF Module
 Condition: FCC 15.249
 Memo: Westbay/WJT844-1000M

Temp/Humi: 24C/52%
 Power: DC3.3V
 1G-CBL6122D

Test Engineer: li.han-hui
 Test Mode: 915MHz(middle)
 Pol/Phase: VERTICAL



Item	Freq. MHz	Factor dB	Level dBUV/m	Read dBUV/m	Limit dBUV/m	Margin dB	Remark -	Height cm	Angle deg.
1	377.259	-10.61	31.88	42.49	46	14.12	QP	135	287
2	407.515	-9.55	29.77	39.32	46	16.23	QP	165	78
3	455.906	-9.88	32.99	42.87	46	13.01	QP	116	54
4	687.151	-6.51	33.65	40.16	46	12.35	QP	100	177
5	742.259	-5.53	36.16	41.69	46	9.84	QP	109	61
6	915	-3.15	90.97	94.12	94	3.03	QP	116	360

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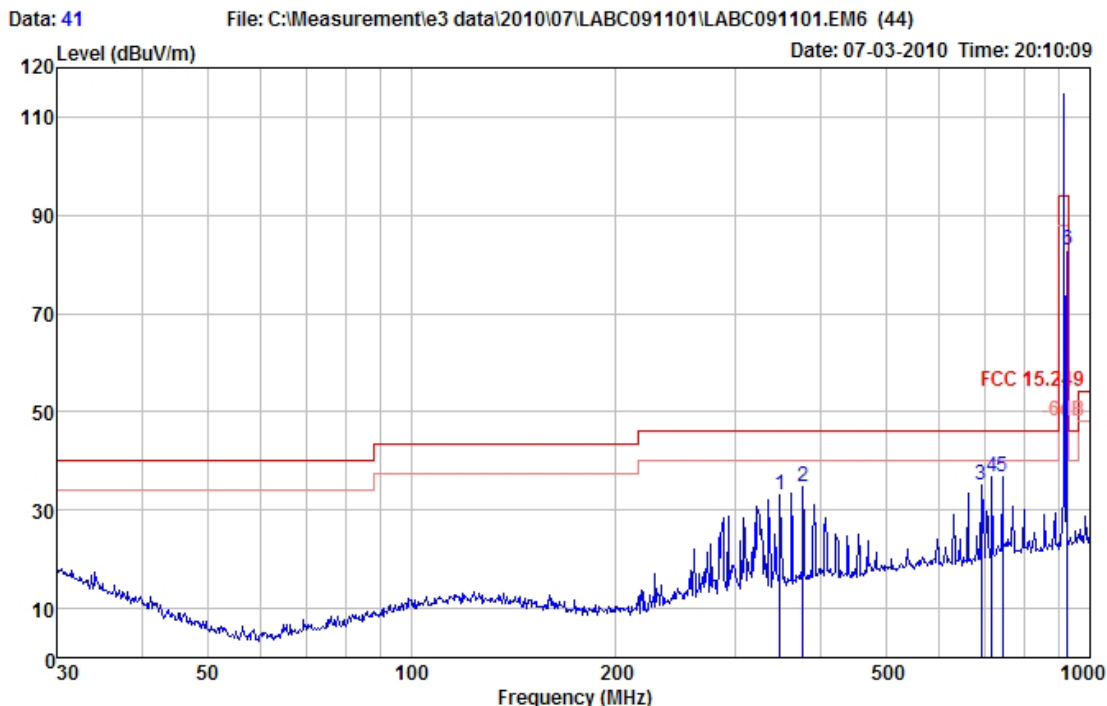
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Approved By *[Signature]*

Site: SAC3 3m-HF
 EUT/Model: RF Module
 Condition: FCC 15.249
 Memo: Westbay/WJT844-1000M

Temp/Humi: 24C/52%
 Power: DC3.3V
 1G-CBL6122D

Test Engineer: li.han-hui
 Test Mode: 925MHz(high)
 Pol/Phase: HORIZONTAL



Item	Freq. MHz	Factor dB	Level dB μ V/m	Read dB μ V/m	Limit dB μ V/m	Margin dB	Remark -	Height cm	Angle deg.
1	349.25	-10.77	32.94	43.71	46	13.06	QP	120	63
2	377.259	-10.21	34.84	45.05	46	11.16	QP	112	54
3	691.987	-7	35	42	46	11	QP	109	165
4	716.682	-6.49	36.76	43.25	46	9.24	QP	100	98
5	742.259	-5.78	36.64	42.42	46	9.36	QP	166	39
6	925	-3.81	82.85	86.66	94	11.15	QP	100	130

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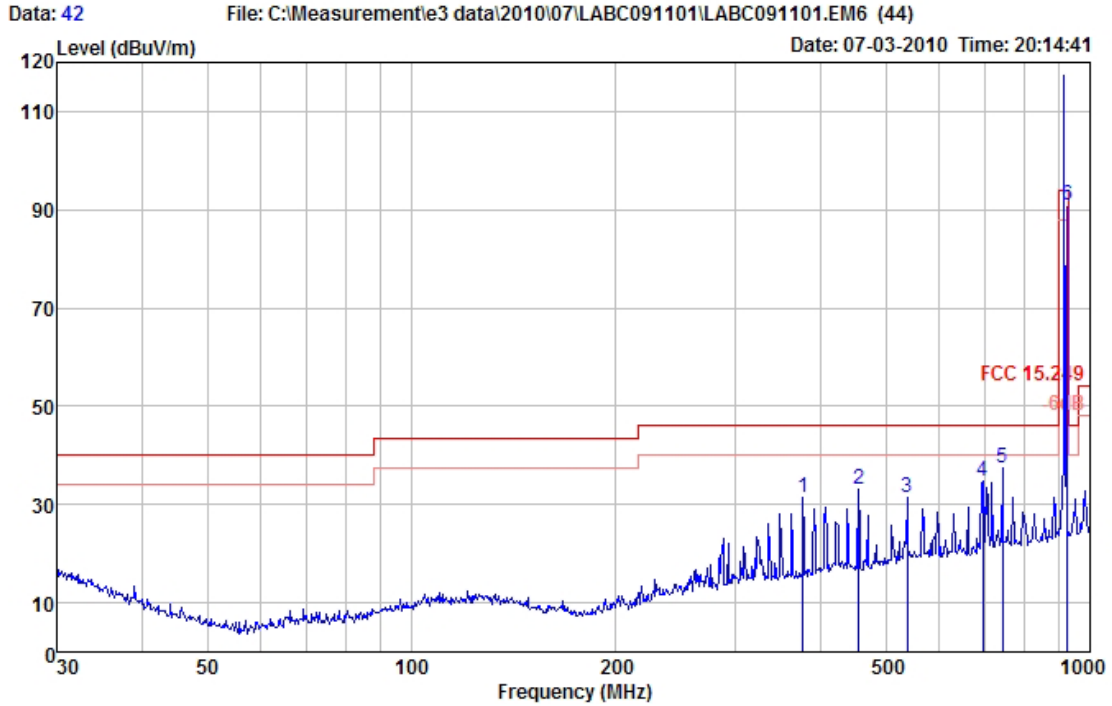
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Site: SAC3 3m-HF
 EUT/Model: RF Module
 Condition: FCC 15.249
 Memo: Westbay/WJT844-1000M

Temp/Humi: 24C/52%
 Power: DC3.3V
 1G-CBL6122D

Test Engineer: li.han-hui
 Test Mode: 925MHz(high)
 Pol/Phase: VERTICAL



Item	Freq. MHz	Factor dB	Level dBμV/m	Read dBμV/m	Limit dBμV/m	Margin dB	Remark -	Height cm	Angle deg.
1	377.259	-10.61	31.36	41.97	46	14.64	QP	133	93
2	455.906	-9.88	32.93	42.81	46	13.07	QP	100	25
3	537.589	-7.89	31.27	39.16	46	14.73	QP	154	85
4	694.417	-6.39	34.78	41.17	46	11.22	QP	131	78
5	742.259	-5.53	37.34	42.87	46	8.66	QP	129	66
6	925	-3.05	90.81	93.86	94	3.19	QP	105	100

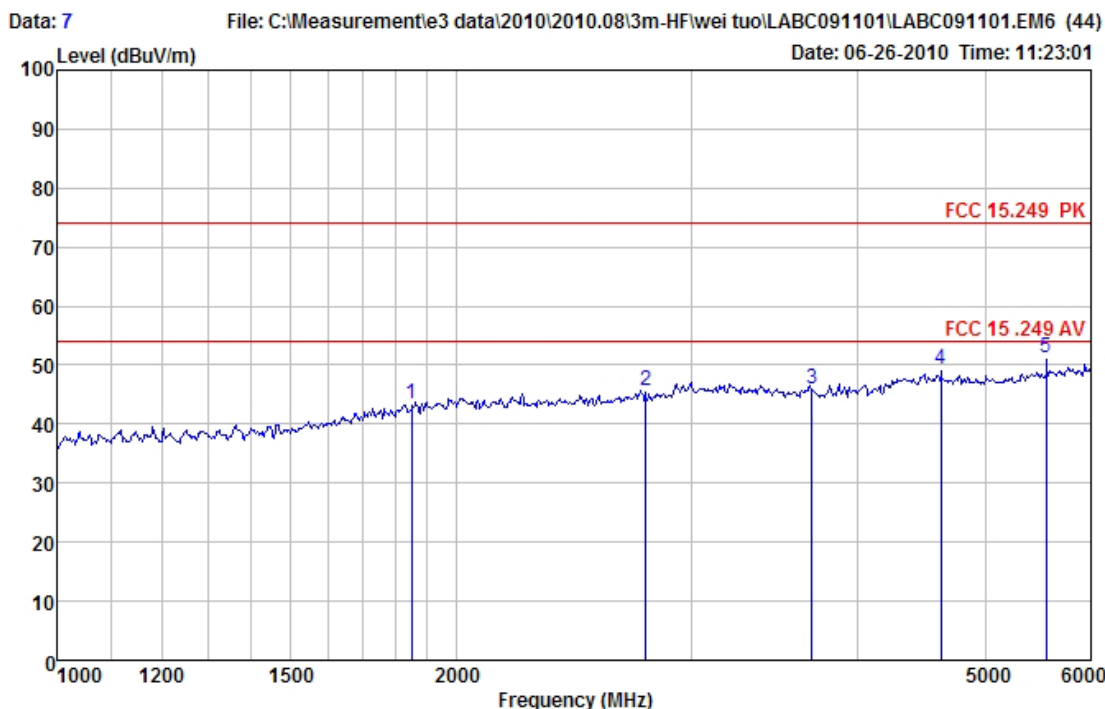
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Approved By *[Signature]*

For 1GHz-6GHz Harmonic Emissions

Site: SAC3 3m-HF Temp/Humi: 24C/52% Test Engineer: li.han-hui
 EUT/Model: RF Module Power: DC3.3V Test Mode: 925MHz(high)
 Condition: FCC 15.249 PK ANTENNA3117 Po1/Phase: HORIZONTAL
 Memo: Westbay/WJT844-1000M



Item	Freq.	Factor	Level	Read	Limit	Margin	Remark	Height	Angle
	MHz	dB	dBuV/m	dBuV/m	dBuV/m	dB	-	cm	deg.
1	1850	1.95	43.45	41.5	74	30.55	Peak	112	360
2	2775	4.27	45.78	41.51	74	28.22	Peak	119	157
3	3700	5.97	45.97	40	74	28.03	Peak	120	196
4	4625	8.18	49.43	41.25	74	24.57	Peak	156	302
5	5550	10.69	51.38	40.69	74	22.62	Peak	118	247

Above data cannot be used for EMC approvals unless it contains the approved signature.

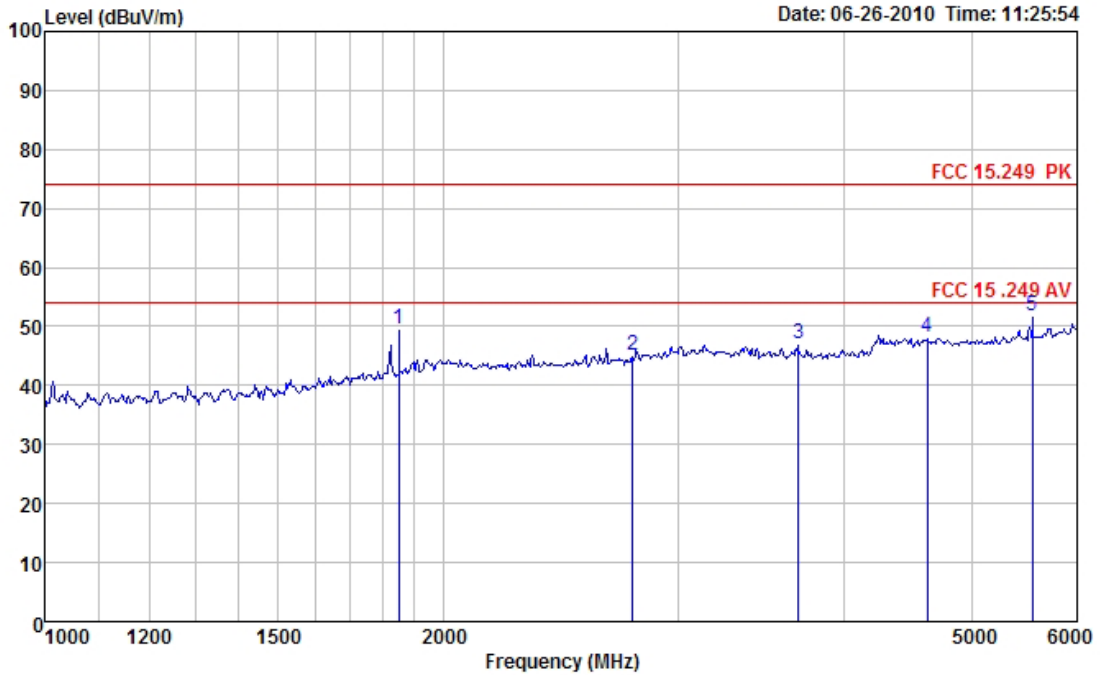
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Site:SAC3 3m-HF
 EUT/Model:RF Module
 Condition:FCC 15.249 PK
 Memo: Westbay/WJT844-1000M

Temp/Humi:24C/52%
 Power: DC3.3V
 ANTENNA3117

Test Engineer: li.han-hui
 Test Mode: 925MHz(high)
 Pol/Phase: VERTICAL

Data: 8 File: C:\Measurement\3 data\2010\2010.08\3m-HF\wei tuo\LABC091101\LABC091101.EM6 (44)
 Date: 06-26-2010 Time: 11:25:54



Item	Freq.	Factor	Level	Read	Limit	Margin	Remark	Height	Angle
	MHz	dB	dB μ V/m	dB μ V/m	dB μ V/m	dB	-	cm	deg.
1	1850	1.95	49.65	47.7	74	24.35	Peak	179	0
2	2775	4.27	45.24	40.97	74	28.76	Peak	100	0
3	3700	5.97	46.97	41	74	27.03	Peak	119	23
4	4625	8.18	48.17	39.99	74	25.83	Peak	100	0
5	5550	10.69	51.69	41	74	22.31	Peak	100	0

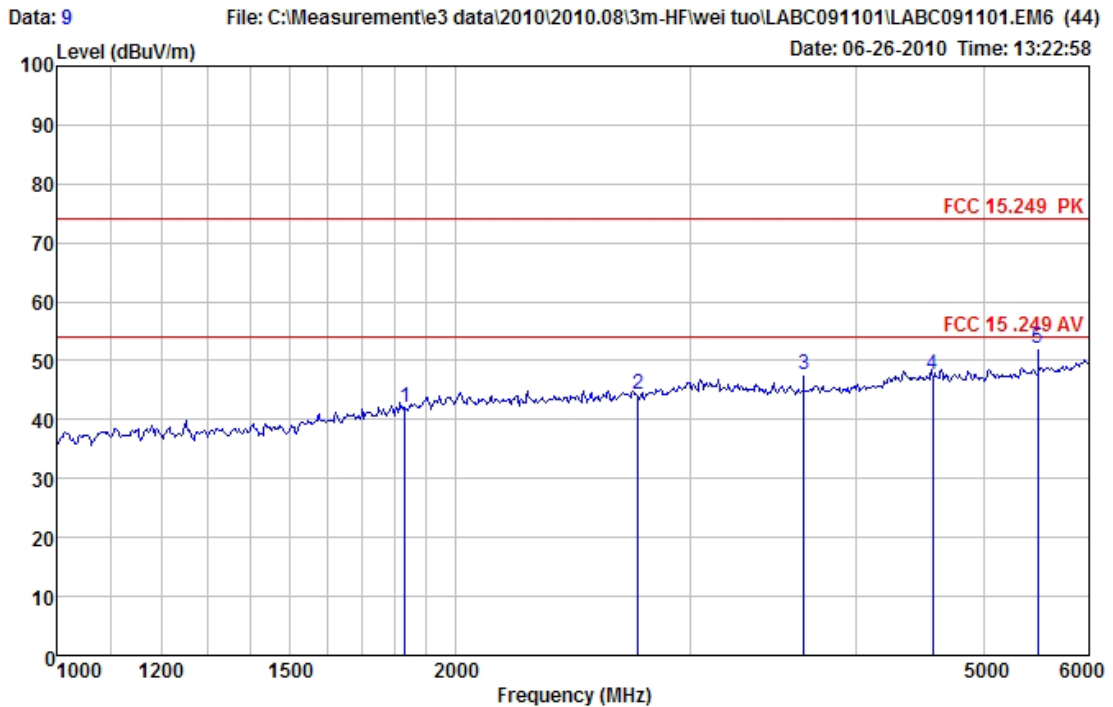
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Site:SAC3 3m-HF
 EUT/Model:RF Module
 Condition:FCC 15.249 PK
 Memo: Westbay/WJT844-1000M

Temp/Humi:24C/52%
 Power: DC3.3V
 ANTENNA3117

Test Engineer: li.han-hui
 Test Mode: 915MHz(Middle)
 Pol/Phase: HORIZONTAL



Item	Freq.	Factor	Level	Read	Limit	Margin	Remark	Height	Angle
	MHz	dB	dB μ V/m	dB μ V/m	dB μ V/m	dB	-	cm	deg.
1	1830	1.74	41.92	40.18	74	32.08	Peak	129	275
2	2745	4.21	44.19	39.98	74	29.81	Peak	118	88
3	3660	5.89	47.69	41.8	74	26.31	Peak	165	274
4	4575	8.13	47.68	39.55	74	26.32	Peak	100	0
5	5490	10.48	52.07	41.59	74	21.93	Peak	154	225

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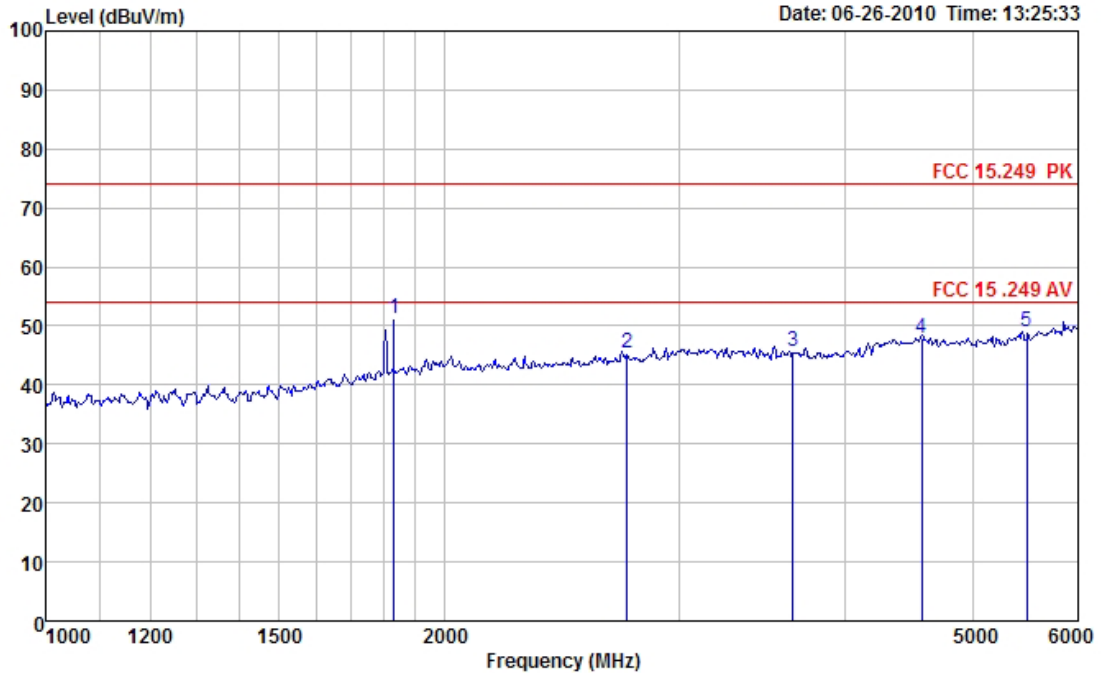
Check By hanhui, li Approved By [Signature]

Site:SAC3 3m-HF
 EUT/Model:RF Module
 Condition:FCC 15.249 PK
 Memo: Westbay/WJT844-1000M

Temp/Humi:24C/52%
 Power: DC3.3V
 ANTENNA3117

Test Engineer: li.han-hui
 Test Mode: 915MHz(Middle)]
 Pol/Phase: VERTICAL

Data: 10 File: C:\Measurement\3 data\2010\2010.08\3m-HF\wei tuo\LABC091101\LABC091101.EM6 (44)
 Date: 06-26-2010 Time: 13:25:33



Item	Freq.	Factor	Level	Read	Limit	Margin	Remark	Height	Angle
	MHz	dB	dBuV/m	dBuV/m	dBuV/m	dB	-	cm	deg.
1	1830	1.74	51.27	49.53	74	22.73	Peak	124	360
2	2745	4.21	45.46	41.25	74	28.54	Peak	121	245
3	3660	5.89	45.77	39.88	74	28.23	Peak	100	273
4	4575	8.13	47.89	39.76	74	26.11	Peak	107	86
5	5490	10.48	48.95	38.47	74	25.05	Peak	114	152

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Check By hanhui, li

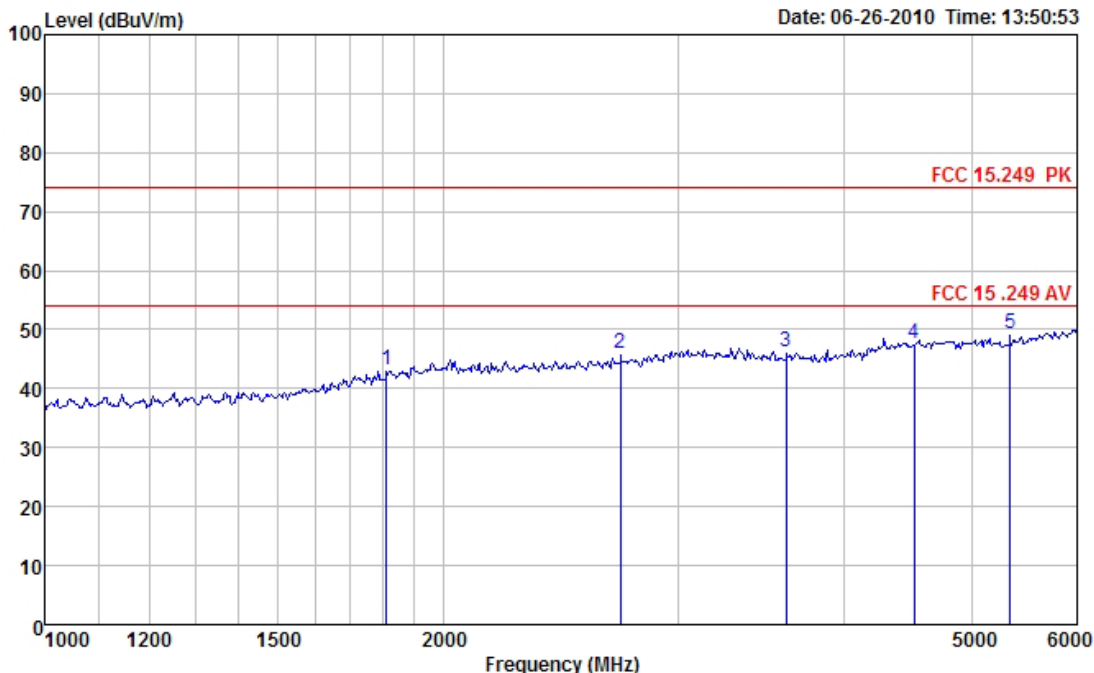
Approved By [Signature]

Site:SAC3 3m-HF
 EUT/Model:RF Module
 Condition:FCC 15.249 PK
 Memo: Westbay/WJT844-1000M

Temp/Humi:24C/52%
 Power: DC3.3V
 ANTENNA3117

Test Engineer: li.han-hui
 Test Mode: 905MHz(low)
 Pol/Phase: HORIZONTAL

Data: 11 File: C:\Measurement\3 data\2010\2010.08\3m-HF\wei tuo\LABC091101\LABC091101.EM6 (44)
 Date: 06-26-2010 Time: 13:50:53



Item	Freq.	Factor	Level	Read	Limit	Margin	Remark	Height	Angle
	MHz	dB	dB μ V/m	dB μ V/m	dB μ V/m	dB	-	cm	deg.
1	1810	1.53	43.04	41.51	74	30.96	Peak	100	0
2	2715	4.16	45.92	41.76	74	28.08	Peak	116	66
3	3620	5.81	46.38	40.57	74	27.62	Peak	185	211
4	4525	8.08	47.49	39.41	74	26.51	Peak	100	103
5	5340	9.9	49.39	39.49	74	24.61	Peak	146	89

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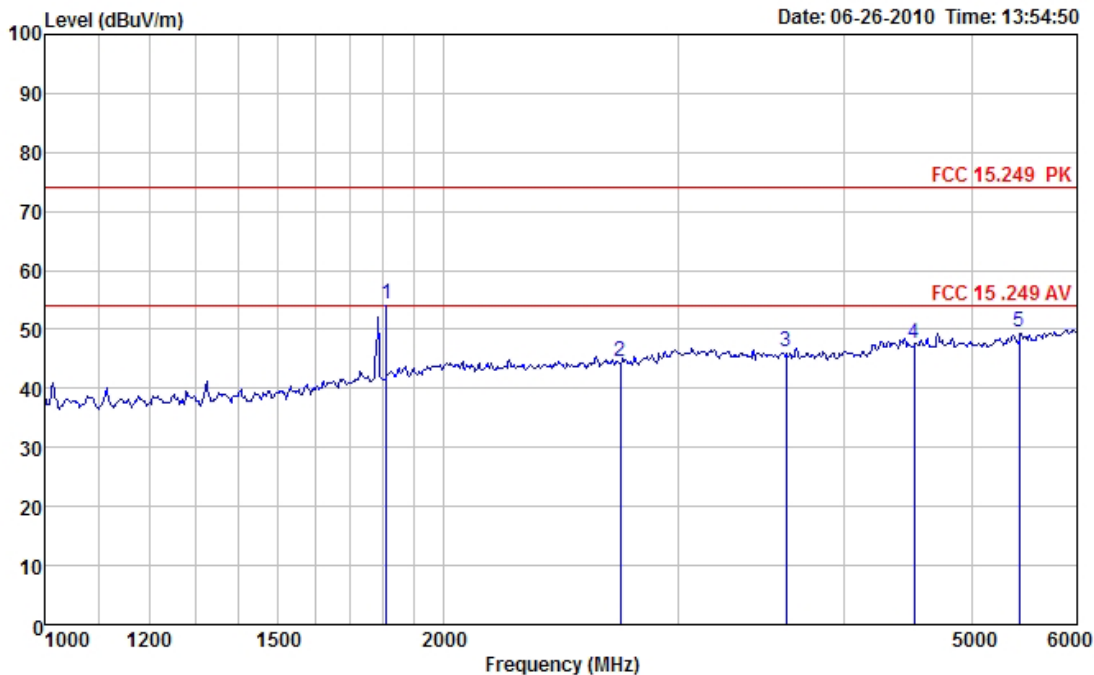
Check By hanhui, li Approved By [Signature]

Site: SAC3 3m-HF
 EUT/Model: RF Module
 Condition: FCC 15.249 PK
 Memo: Westbay/WJT844-1000M

Temp/Humi: 24C/52%
 Power: DC3.3V
 ANTENNA3117

Test Engineer: li.han-hui
 Test Mode: 905MHz(low)
 Pol/Phase: VERTICAL

Data: 12 File: C:\Measurement\3 data\2010\2010.08\3m-HF\wei tuo\LABC091101\LABC091101.EM6 (44)
 Date: 06-26-2010 Time: 13:54:50



Item	Freq.	Factor	Level	Read	Limit	Margin	Remark	Height	Angle
	MHz	dB	dBuV/m	dBuV/m	dBuV/m	dB	-	cm	deg.
1	1810	1.53	54.33	52.8	74	19.67	Peak	120	90
	1810	-	42.15	-	54	11.85	Average	-	-
2	2715	4.16	44.55	40.39	74	29.45	Peak	114	86
3	3620	5.81	46.13	40.32	74	27.87	Peak	100	186
4	4525	8.08	47.75	39.67	74	26.25	Peak	103	243
5	5430	10.22	49.51	39.29	74	24.49	Peak	111	145

Note: Average level=peak level – duty cycle correction (duty cycle correction=12.18)

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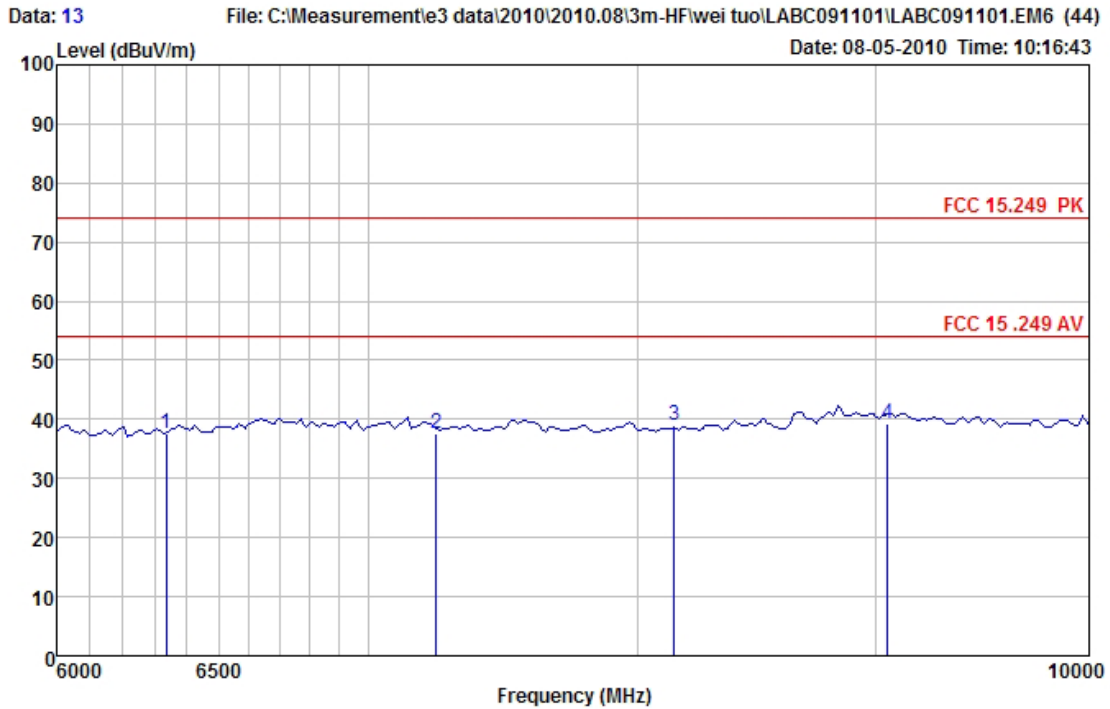
Check By hanhui, Li Approved By [Signature]

For 6GHz-10GHz Harmonic Emissions

Site: SAC3 3m-HF
 EUT/Model: RF Module
 Condition: FCC 15.249 PK
 Memo: Westbay/WJT844-1000M

Temp/Humi: 24C/52%
 Power: DC3.3V
 HAP06-18W

Test Engineer: li.han-hui
 Test Mode: 905MHz (low)
 Pol/Phase: HORIZONTAL



Item	Freq.	Factor	Level	Read	Limit	Margin	Remark	Height	Angle
	MHz	dB	dB μ V/m	dB μ V/m	dB μ V/m	dB	-	cm	deg.
1	6335	-9.9	37.5	47.4	74	36.5	Peak	100	0
2	7240	-8.64	37.57	46.21	74	36.43	Peak	133	168
3	8145	-6.84	38.92	45.76	74	35.08	Peak	188	113
4	9050	-5.01	39.38	44.39	74	34.62	Peak	177	226

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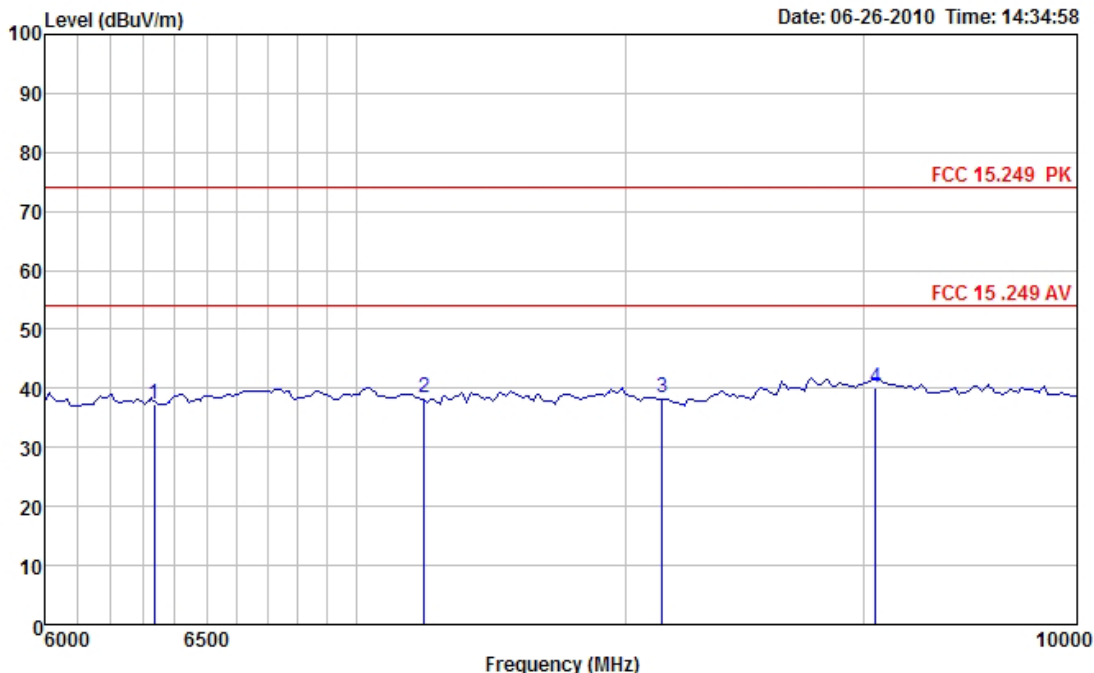
Approved By [Signature]

Site: SAC3 3m-HF
 EUT/Model: RF Module
 Condition: FCC 15.249 PK
 Memo: Westbay/WJT844-1000M

Temp/Humi: 24C/52%
 Power: DC3.3V
 HAP06-18W

Test Engineer: li.han-hui
 Test Mode: 905MHz(low)
 Pol/Phase: VERTICAL

Data: 14 File: C:\Measurementie3 data\2010\2010.08\3m-HF\wei tuo\LABC091101\LABC091101.EM6 (44)
 Date: 06-26-2010 Time: 14:34:58



Item	Freq.	Factor	Level	Read	Limit	Margin	Remark	Height	Angle
	MHz	dB	dBuV/m	dBuV/m	dBuV/m	dB	-	cm	deg.
1	6335	-9.9	37.46	47.36	74	36.54	Peak	100	0
2	7240	-8.64	38.41	47.05	74	35.59	Peak	115	248
3	8145	-6.84	38.32	45.16	74	35.68	Peak	109	335
4	9050	-5.01	40.25	45.26	74	33.75	Peak	178	186

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Check By

han-hui, li

Approved By

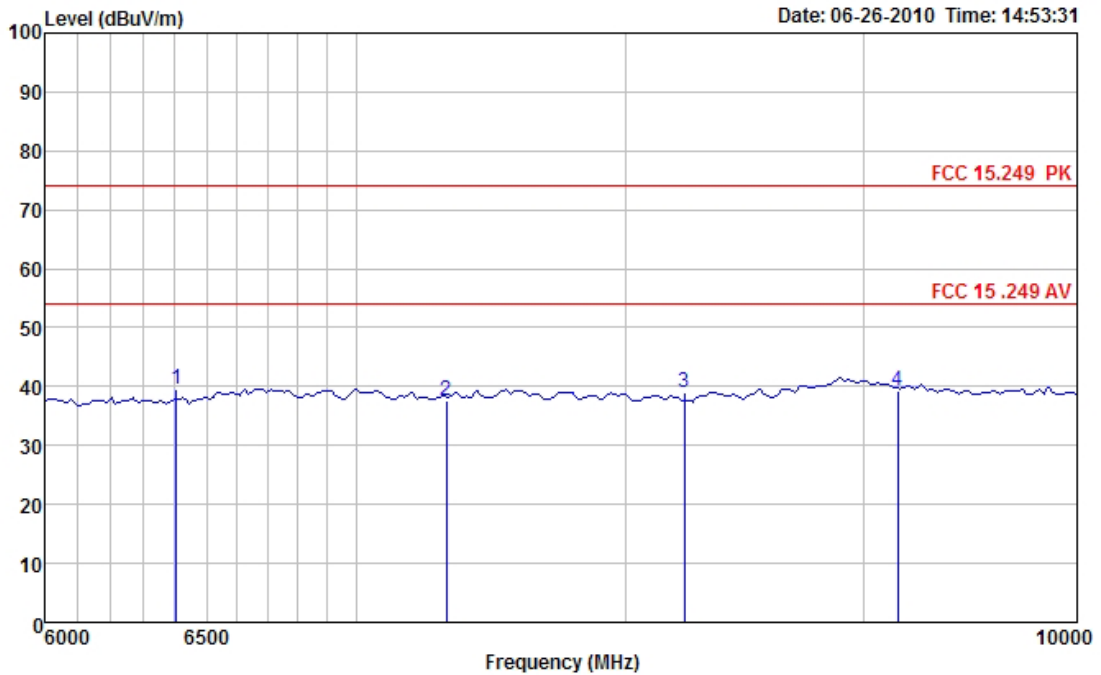
[Signature]

Site: SAC3 3m-HF
 EUT/Model: RF Module
 Condition: FCC 15.249 PK
 Memo: Westbay/WJT844-1000M

Temp/Humi: 24C/52%
 Power: DC3.3V
 HAP06-18W

Test Engineer: li.han-hui
 Test Mode: 915MHz(Middle)
 Pol/Phase: HORIZONTAL

Data: 15 File: C:\Measurement\3 data\2010\2010.08\3m-HF\wei tuo\LABC091101\LABC091101.EM6 (44)



Item	Freq.	Factor	Level	Read	Limit	Margin	Remark	Height	Angle
	MHz	dB	dB μ V/m	dB μ V/m	dB μ V/m	dB	-	cm	deg.
1	6405	-9.3	39.6	48.9	74	34.4	Peak	149	68
2	7320	-8.34	37.55	45.89	74	36.45	Peak	151	332
3	8235	-6.6	38.94	45.54	74	35.06	Peak	118	224
4	9150	-4.92	39.26	44.18	74	34.74	Peak	100	265

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han-hui, li

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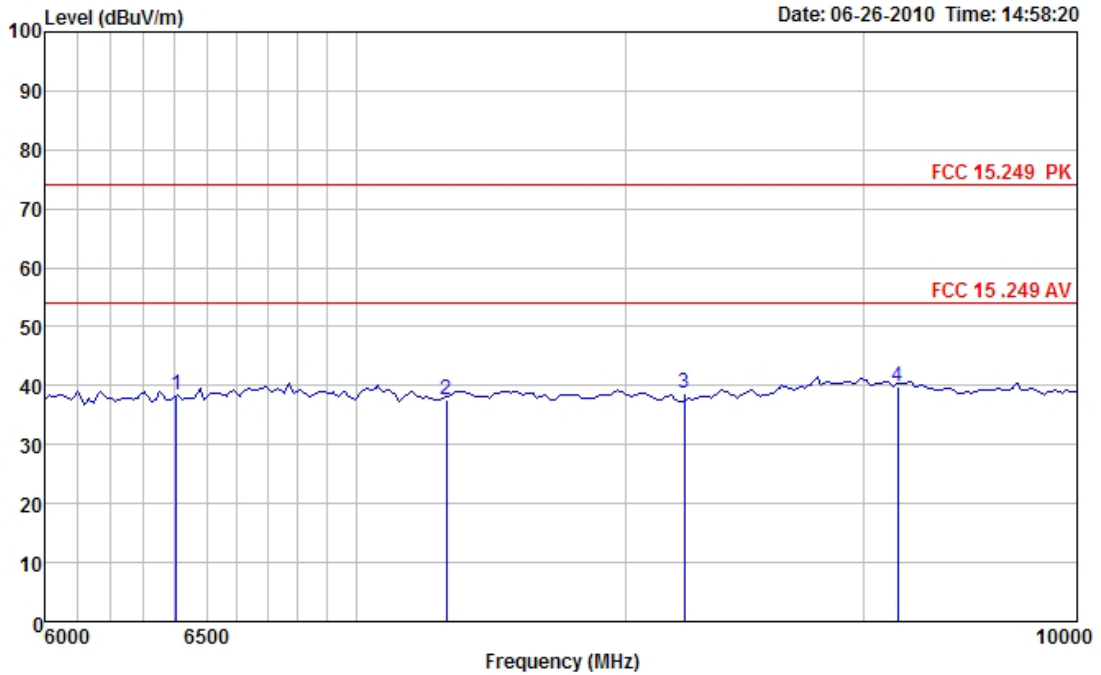
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Site: SAC3 3m-HF
 EUT/Model: RF Module
 Condition: FCC 15.249 PK
 Memo: Westbay/WJT844-1000M

Temp/Humi: 24C/52%
 Power: DC3.3V
 HAP06-18W

Test Engineer: li.han-hui
 Test Mode: 915MHz(Middle)
 Pol/Phase: VERTICAL

Data: 16 File: C:\Measurement\3 data\2010\2010.08\3m-HF\wei tuo\LABC091101\LABC091101.EM6 (44)
 Date: 06-26-2010 Time: 14:58:20



Item	Freq.	Factor	Level	Read	Limit	Margin	Remark	Height	Angle
	MHz	dB	dB μ V/m	dB μ V/m	dB μ V/m	dB	-	cm	deg.
1	6405	-9.3	38.31	47.61	74	35.69	Peak	100	0
2	7320	-8.34	37.64	45.98	74	36.36	Peak	132	64
3	8235	-6.6	38.6	45.2	74	35.4	Peak	144	124
4	9150	-4.92	39.73	44.65	74	34.27	Peak	171	113

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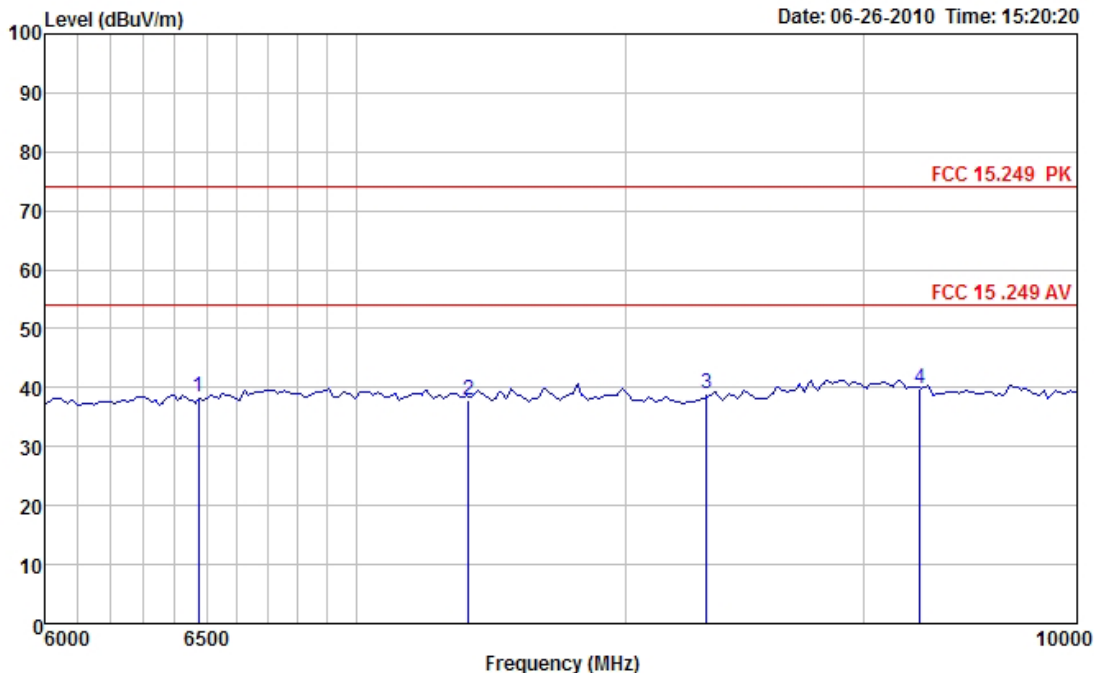
Check By han-hui, li Approved By [Signature]

Site: SAC3 3m-HF
 EUT/Model: RF Module
 Condition: FCC 15.249 PK
 Memo: Westbay/WJT844-1000M

Temp/Humi: 24C/52%
 Power: DC3.3V
 HAP06-18W

Test Engineer: li.han-hui
 Test Mode: 925MHz(high)
 Pol/Phase: HORIZONTAL

Data: 17 File: C:\Measurement\3 data\2010\2010.08\3m-HF\wei tuo\LABC091101\LABC091101.EM6 (44)
 Date: 06-26-2010 Time: 15:20:20



Item	Freq.	Factor	Level	Read	Limit	Margin	Remark	Height	Angle
	MHz	dB	dB μ V/m	dB μ V/m	dB μ V/m	dB	-	cm	deg.
1	6475	-9.36	38.33	47.69	74	35.67	Peak	153	204
2	7400	-8.33	37.9	46.23	74	36.1	Peak	119	324
3	8325	-6.42	39.08	45.5	74	34.92	Peak	124	113
4	9250	-4.92	39.87	44.79	74	34.13	Peak	161	65

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Check By

han-hui, li

Approved By

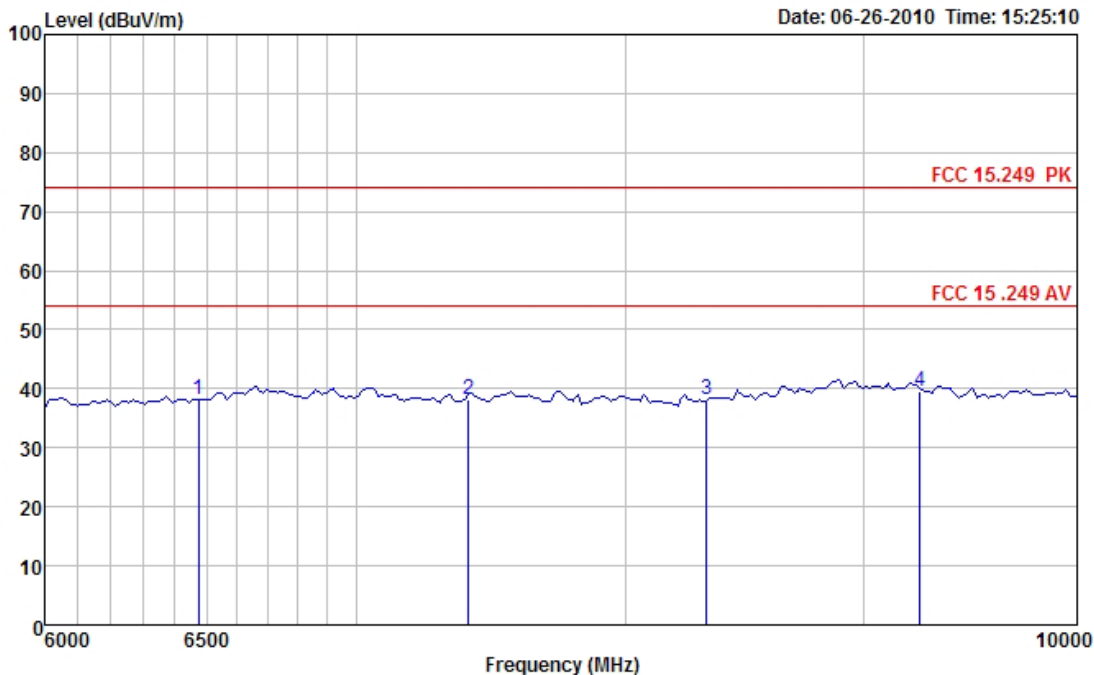
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Site:SAC3 3m-HF
 EUT/Model:RF Module
 Condition:FCC 15.249 PK
 Memo: Westbay/WJT844-1000M

Temp/Humi:24C/52%
 Power: DC3.3V
 HAP06-18W

Test Engineer: li.han-hui
 Test Mode: 925MHz(high)
 Pol/Phase: VERTICAL

Data: 18 File: C:\Measurement\3 data\2010\2010.08\3m-HF\wei tuo\LABC091101\LABC091101.EM6 (44)
 Date: 06-26-2010 Time: 15:25:10



Item	Freq.	Factor	Level	Read	Limit	Margin	Remark	Height	Angle
	MHz	dB	dB μ V/m	dB μ V/m	dB μ V/m	dB	-	cm	deg.
1	6475	-9.36	38.29	47.65	74	35.71	Peak	120	50
2	7400	-8.33	38.23	46.56	74	35.77	Peak	118	114
3	8325	-6.42	38.17	44.59	74	35.83	Peak	138	100
4	9250	-4.92	39.5	44.42	74	34.5	Peak	143	169

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Check By

han-hui, li

Approved By

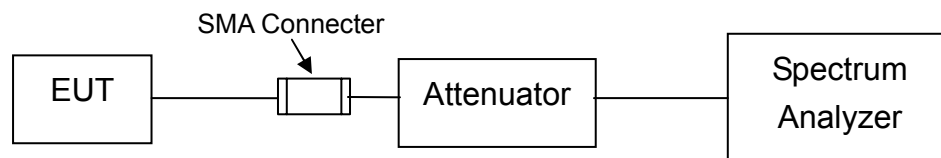
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6. 20dB Bandwidth

6.1 Test Standard

FCC Part 15 Subpart B: Jul.2008 section 15.215(c)
 ANSI C63.4:2003 Clause 13

6.2 Test setup at RF-Con site



6.3 Test Equipment

Instrument	Manufacturer	Type No.	Serial No	Cal. Date	Cal. Interval	Cal. Body
Spectrum Analyzer	R&S	FSL3	100584	01/12/2010	1Y	CEPREI
20dB Attenuator	Huber+Suhner	6820.17.A	776592	02/03/2010	1Y	SIMT

Note: Calibration is performed with test equipment and standards directly or indirectly traceable by means of approved calibration techniques to the national/international standards, which realize the physical units of measurement according to the International System of Units (SI).

6.4 Test Procedure

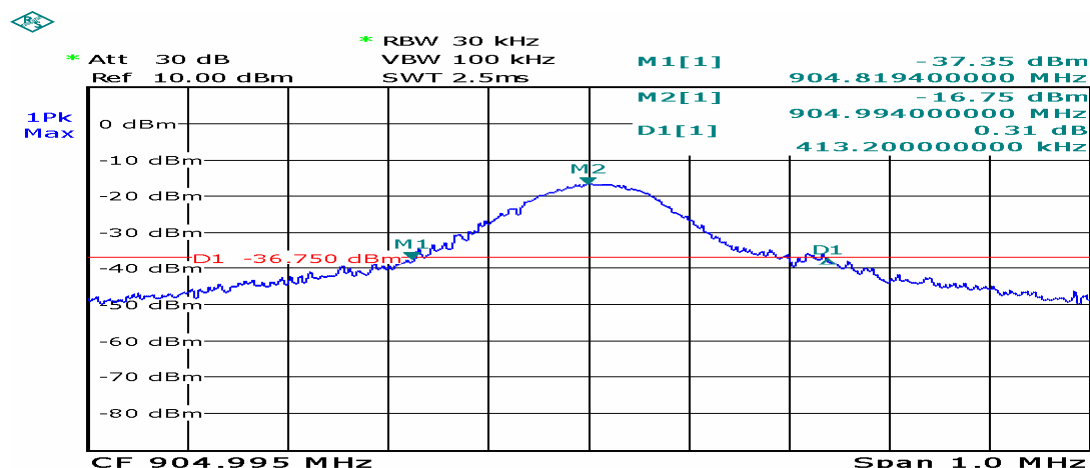
The measuring process is according to Clause 13 of ANSI C63.4:2003 standard and laboratory internal procedure “Radiated Emission Measurement for section 15.249 of FCC Part 15” TMSP33”.

6.5 Test Results

Site: RF-Con	Temperature/Humidity.: 22 /47%	Test Engineer: Juri Wang
EUT/Model: RF Module/WJT844-1000M	Power: DC 3.3V	Date: 08/05/2010
Test Mode: transmitter mode		
Test Frequency: 905MHz (low), 915MHz (middle), 925MHz (high)		

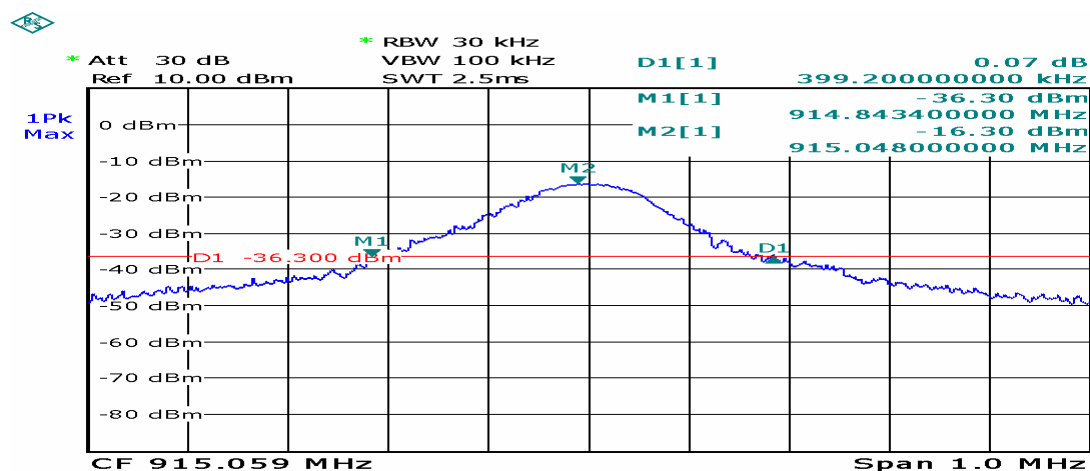
Test Frequency	Limits	20dB Bandwidth
905MHz (low)	N/A	413.2kHz
915MHz (middle)	N/A	399.2kHz
925MHz (high)	N/A	357.3kHz

(1) 905MHz (low)



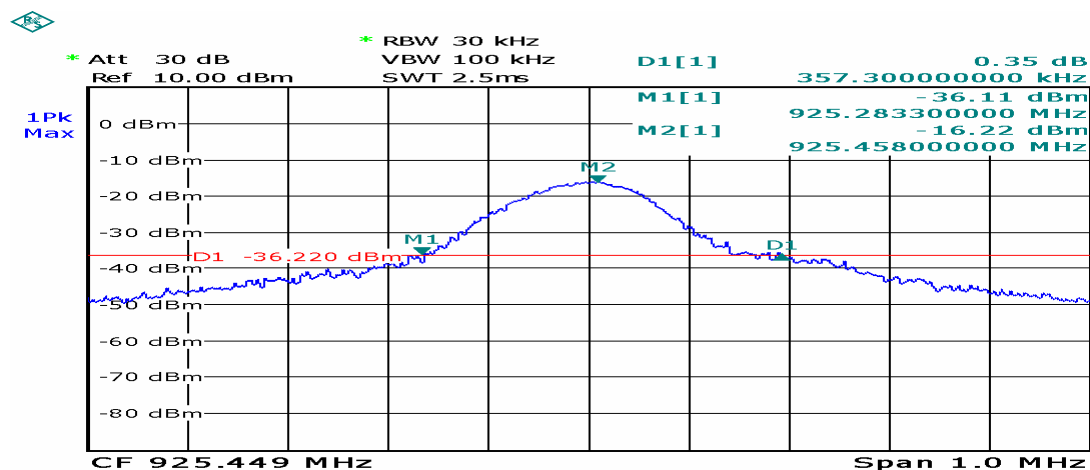
Date: 5.AUG.2010 14:00:39

(2) 915MHz (middle)



Date: 5.AUG.2010 14:15:51

(3) 925MHz (high)



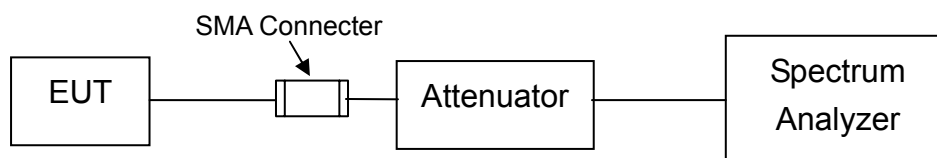
Date: 5.AUG.2010 14:25:48

7. Duty Cycle Correction



7.1 Test Standard

FCC Part 15 Subpart B: Jul.2008 section 15.35(c)
 ANSI C63.4:2003 Clause 13

7.2 Test setup at RF-Con site



7.3 Test Equipment

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Interval	Cal. Body
Spectrum Analyzer	R&S	FSL6	100414	01/12/2010	1Y	CEPREI 
20dB Attenuator	Huber+Suhner	6820.17.A	776592	02/03/2010	1Y	SIMT 

Note: Calibration is performed with test equipment and standards directly or indirectly traceable by means of approved calibration techniques to the national/international standards, which realize the physical units of measurement according to the International System of Units (SI).

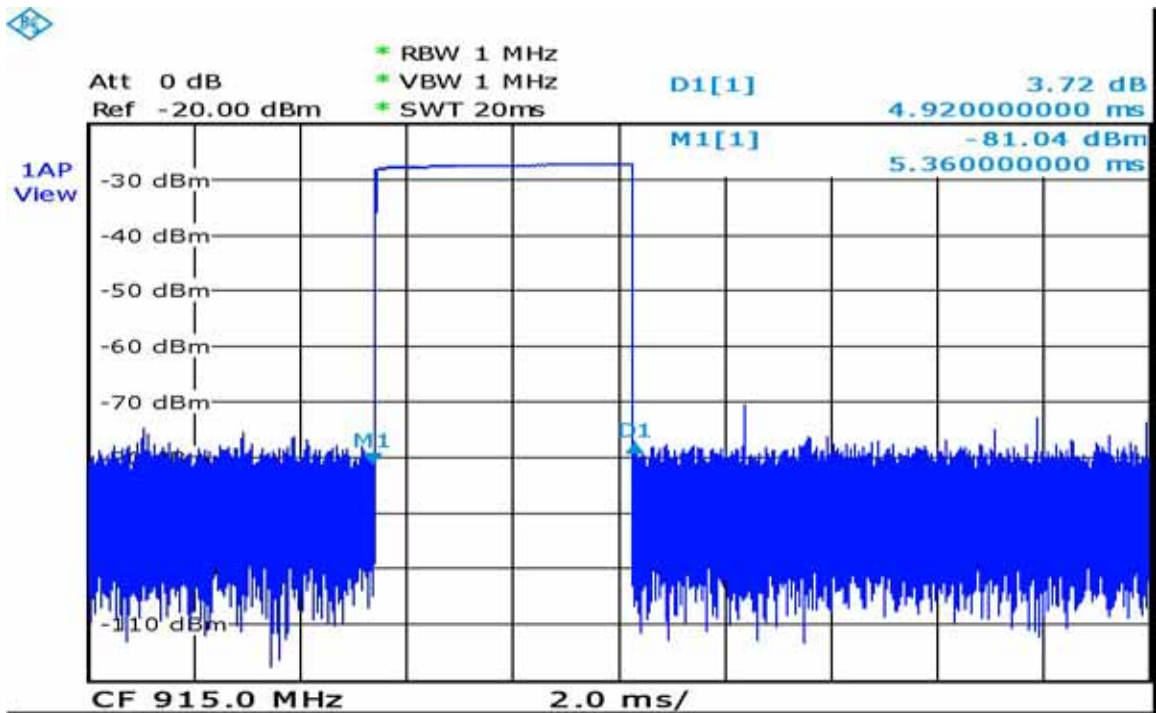
7.4 Test Procedure

The measuring process is according to Clause 13 of ANSI C63.4:2003 standard and laboratory internal procedure “Radiated Emission Measurement for section 15.249 of FCC Part 15” TMSP33”.

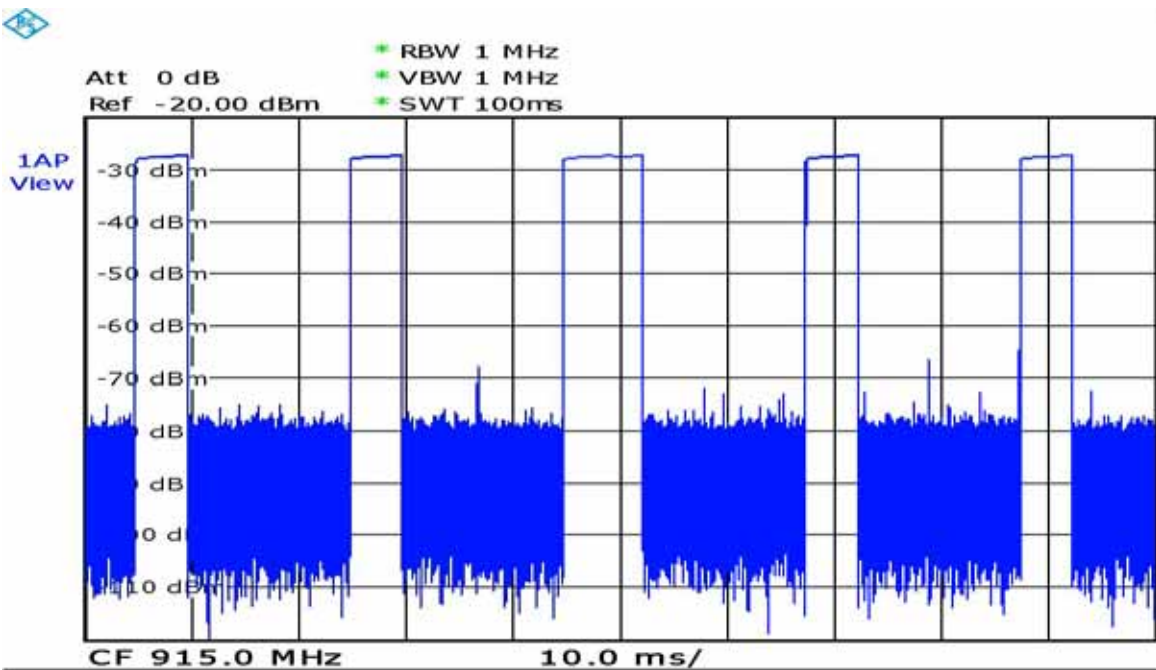
7.5 Test Results

Site: RF-Con	Temperature/Humidity.: 24 /52%	Test Engineer: Juri Wang
EUT/Model: RF Module/WJT844-1000M	Power: DC 3.3V	Date: 07/23/2010
Test Mode: transmitter mode	Test Frequency: 915MHz (middle)	

Duty Cycle Correction:	12.18dB
Sample Equations:	One pulse at 4.92ms, 5 pulses during 100ms sweep Total on Time: 24.6ms during 100ms sweep $20 \log (24.6/100) = -12.18\text{dB}$ Duty Cycle Correction Factor=12.18dB



Date: 23.JUL.2010 16:11:47



Date: 23.JUL.2010 16:15:04

-----The End-----