TÜVRheinland®

Produkte
Products

Prüfbericht - Nr.: *Test Report No.:*	**10034983 001**		**Seite 1 von 42** *Page 1 of 42*
Auftraggeber: *Client:*	**Marlow Industries** 10451 Vista Park Road, Dallas, Texas 75238		
Gegenstand der Prüfung: *Test item:*	Bed Heating/Cooling		
Bezeichnung: *Identification:*	PCE-2	**Serien-Nr.:** *Serial No.:*	N/A
Wareneingangs-Nr.: *Receipt No.:*	TPE71707	**Eingangsdatum:** *Date of receipt:*	2012/02/10
Zustand des Prüfgegenstandes bei Anlieferung: **Condition of test item at delivery:**	The sample is ok for testing and not damaged		
Prüfort: *Testing location:*	**TÜV Rheinland Taiwan Ltd.** 11F., No.758, Sec. 4, Bade Rd., Songshan Dist., Taipei City 105 Taiwan **FCC Registration No.: 365730**		
Prüfgrundlage: *Test specification:*	**FCC CFR47 Part 15: Subpart C Section 15.247** **RSS-210 (Issue 8): Dec. 2010** **RSS-Gen (Issue 3): Dec. 2010**		
Prüfergebnis: *Test Result:*	**Der Prüfgegenstand entspricht oben genannter Prüfgrundlage(n).** *The test item passed the test specification(s).*		
Prüflaboratorium: *Testing Laboratory:*	**TÜV Rheinland Taiwan Ltd.** **11F., No.758, Sec. 4, Bade Rd., Songshan Dist., Taipei City 105, Taiwan, R.O.C.**		

geprüft/ *tested by:*

Datum / Date	Name/Stellung / Name/Position	Unterschrift / Signature
2012-04-06	Arvin Ho/Section Manager	

kontrolliert/ *reviewed by:*

Datum / Date	Name/Stellung / Name/Position	Unterschrift / Signature
2012-04-06	Rene Charlton/Senior Project Manager	

Sonstiges/ *Other Aspects:*

Abkürzungen:				Abbreviations:			
P(ass)	=	entspricht Prüfgrundlage		P(ass)	=	passed	
F(ail)	=	entspricht nicht Prüfgrundlage		F(ail)	=	failed	
N/A	=	nicht anwendbar		N/A	=	not applicable	
N/T	=	nicht getestet		N/T	=	not tested	

TEST SUMMARY

5.1.1 ANTENNA REQUIREMENT
RESULT: Passed

5.1.2 PEAK OUTPUT POWER
RESULT: Passed

5.1.3 20DB BANDWIDTH
RESULT: Passed

5.1.4 99% BANDWIDTH
RESULT: Passed

5.1.5 CONDUCTED SPURIOUS EMISSIONS AND FREQUENCY BAND EDGE MEASURED IN 100KHZ BANDWIDTH
RESULT: Passed

5.1.6 SPURIOUS EMISSION
RESULT: Passed

5.1.7 FREQUENCY SEPARATION
RESULT: Passed

5.1.8 NUMBER OF HOPPING FREQUENCY
RESULT: Passed

5.1.9 TIME OF OCCUPANCY
RESULT: Passed

6.1.1 ELECTROMAGNETIC FIELDS
RESULT: Passed

Contents

1. General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix 1: Photo
(File:10034983APPENDIX1)

Appendix 2: Test Result of Radiated Emissions
(File:10034983APPENDIX2)

Test Specifications
The following standards were applied (in bold: product standards, otherwise: basic standards).

Table 1: Applied Standard and Test Levels

Radio
FCC CFR47 Part 15: Subpart C Section 15.247 DA 00-705 of March 30, 2000

2. Test Sites

2.1 Test Facilities

TUV Rheinland Taiwan Ltd.

11F. No.758, Sec. 4, Bade Rd., Songshan Dist.
Taipei City 105
Taiwan (R.O.C.)
FCC Registration No.: 365730

2.2 List of Test and Measurement Instruments

Table 2: List of Test and Measurement Equipment

Kind of Equipment	Manufacturer	Type	S/N	Calibrated until
EMI Test Receiver	R&S	ESCI 7	1166.5950K07-100797-Pt	9-Nov-12
Bilog Antenna	TESEQ	CBL6111D	29802	1-Oct-12
Pre-Amplifier	HP	8447F	2805A03335	22-Dec-12
Spectrum Analyzer	R&S	FSV 40	100921	12-Oct-12
Horn Antenna (1GHz~18GHz)	COM-POWER	AHA118	701101	27-Dec-12
Horn Antenna (18GHz~25GHz)	COM-POWER	AH840	101031	1-Oct-12
Power meter	R&S	NRVD	100439	27-Mar-13
Power sensor	R&S	NRV-Z1	100013	27-Mar-13
Temp. & Humid. Chamber	Giant Force	GCT-099-40-S	MAF0103-007	13-May-13

2.3 Traceability

All measurement equipment calibrations are traceable to NML(Taiwan)/NIST(USA) or where calibration is performed outside Taiwan, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basics using in house standards or comparisons.

2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements are ±3dB.

Table 3: Emission Measurement Uncertainty

Parameter	Uncertainty
Radio Frequency	± 1 x 10^{-7}
RF power, conducted	± 1 dB
Adjacent channel power	± 3 dB
Radiated emission of transmitter, valid up to 26 GHz	± 6 dB
Radiated emission of receiver, valid up to 26 GHz	± 6 dB
Temperature	± 2 ºC
Humidity	± 10 %

3. General Product Information

3.1 Product Function and Intended Use

Bed Heating/Cooling and can be controlled by Bluetooth technology.
For details refer to the User Guide, Data Sheet and Circuit Diagram.

3.2 Ratings and System Details

Table 4: Technical Specification of EUT

Technical Specification	Value
Kind of Equipment	Bed Heating/Cooling
Brand Name	Marlow Industries
FCC ID	FNO-PCE2
IC ID	10260A-PCE2
Type Designation	PCE-2
Operating Frequency	2402 MHz ~ 2480 MHz
Channel Spacing	1 MHz
Channel number	79
Operation Voltage	5 V
Modulation	GFSK, π/4 QPSK, 8 DPSK
Antenna gain	1.19 dBi

Table 5: Frequency hopping information

Technical Specification	Description
Hopping Range	Hereby we declare that the maximum frequency of this device is: 2402-2480MHz. This is according the Bluetooth Core Specification V2.1+EDR for devices which will be operated in the USA. This was checked during the Bluetooth Qualification tests (Test Case: TRM/CA/04).
Hopping Sequence	Example of a 79 hopping sequence in data mode: 33,04,21,44,23,42,53,46,55,48,40,59,72,29,76,31,08,73, 07,75,09,45,60,39,58,13,47,11,77,52,35,50,65,54,67,56, 69,62,71,64, 7,25,27,66,57,70,74,61,78,63,10,41,05,43, 15,44,64,68,02,70,06,01,51,03,55,05,03,66,53,49,36,47,
Receiver input bandwidth	The input bandwidth of the receiver is 1MHz. In every connection one Bluetooth device is the master and the other one is the slave. The master determines the hopping sequence. The slave follows this sequence. Both devices shift between RX and TX time slot according to the clock of the master. Additionally the type of connection is set up at the beginning of the connection. The master adapts its hopping frequency and its TX/RX timing according to the packet type of the connection. Also the slave of the connection will use these settings. Repeating of a packer has no influence on the hopping sequence. The hopping sequence generated by the master of the connection will be followed in any case. That means a repeated packet will not be send on the same frequency, it is send on the next frequency of the hopping sequence.

3.3 Independent Operation Modes

The basic operation modes are:

A. Transmitting
    1. Low channel
    2. Middle channel
    3. High channel
B. Receiving
C. Standby
D. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.

3.5 Submitted Documents

- Bill of Material
- PCB Layout
- Photo Document
- Technical Description
- Circuit Diagram
- Instruction Manual
- Rating Label

4. Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

The equipment under test (EUT) was configured to measure its maximum power level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 4. All testing were performed according to the procedures in ANSI C63.10: 2009 and DA 00-705 of March 30, 2000.

Full test was applied on all test modes, but only worst case was shown.

4.3 Special Accessories and Auxiliary Equipment

The product has been tested together with the following additional accessories:

Kind of Equipment	Manufacturer	Model Name	S/N
Laptop	MSI	MSI4532 (CX420MX)	CX420 MX-233TWK 1008000096

4.4 Countermeasures to achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Constructional Data Form or the Technical Construction File. No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test

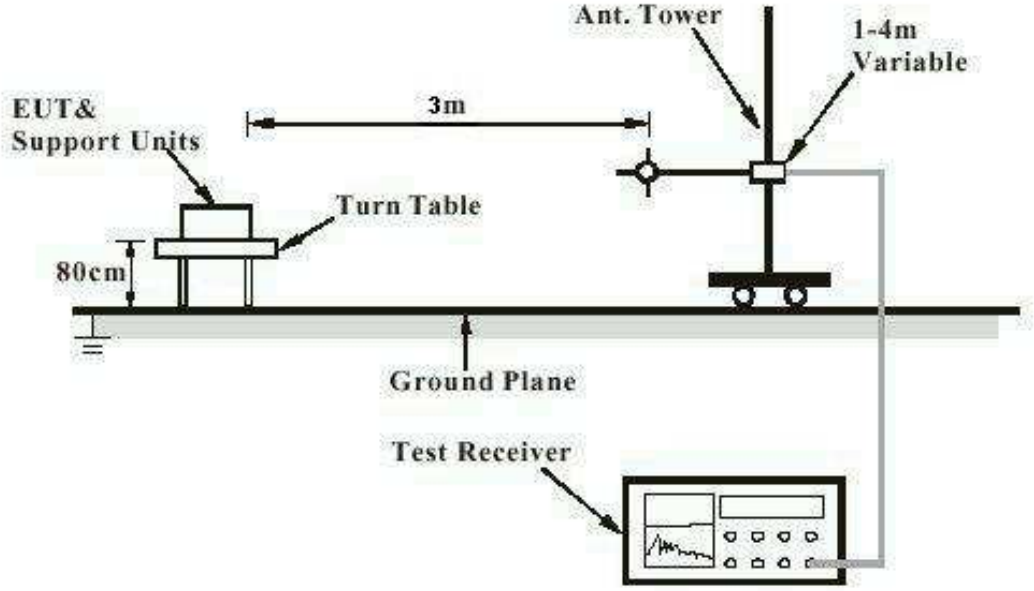


Diagram of Measurement Equipment Configuration for Mains Conduction Measurement

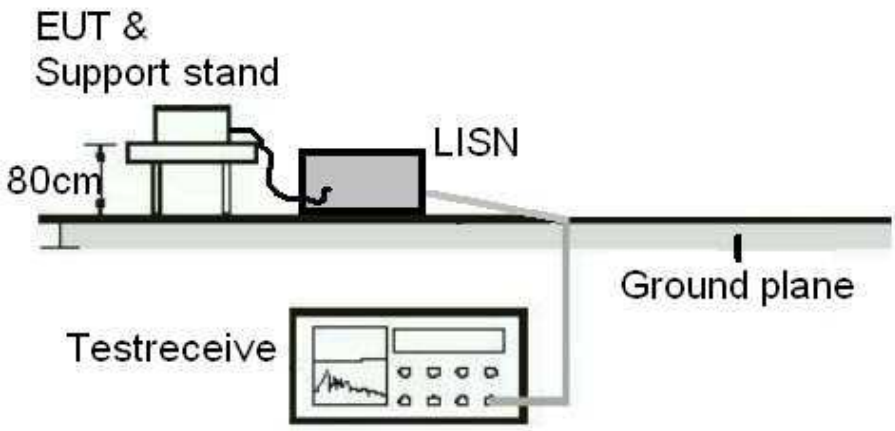
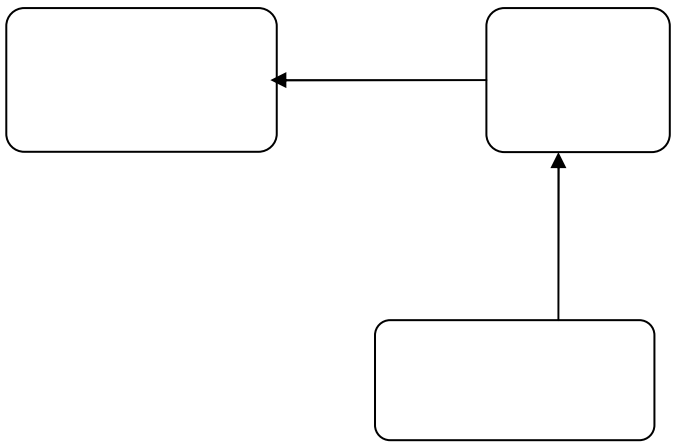


Diagram of Measurement Equipment Configuration for Conducted Transmitter Measurement



5. Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT: **Passed**

Test date	:	February 20, 2012
Test standard	:	FCC Part 15.247(b)(4), Part 15.203 and RSS-Gen 7.1.4
Limit	:	the use of antennas with directional gains that do not exceed 6 dBi

According to the manufacturer declaration, the EUT has an internal antenna with an directional gain of 1.19 dBi, and the antenna is a printed PCB trace with no possibility of replacement. Therefore, the EUT is considered to comply the provision.

Refer to EUT photo for details.

5.1.2 Peak Output Power

RESULT: **Passed**

Test date	:	February 20, 2012
Test standard	:	FCC Part 15.247(b)(1), RSS-210 A8.4(2)
Basic standard	:	DA 00-705 of March 30, 2000
Limit	:	0.125W
Kind of test site	:	Shielded room

Test setup

Test Channel	:	Low/ Middle/ High
Operation Mode	:	A
Ambient temperature	:	22℃
Relative humidity	:	52%
Atmospheric pressure	:	102 kPa

Table 6: Test result of Peak Output Power, GFSK modulation

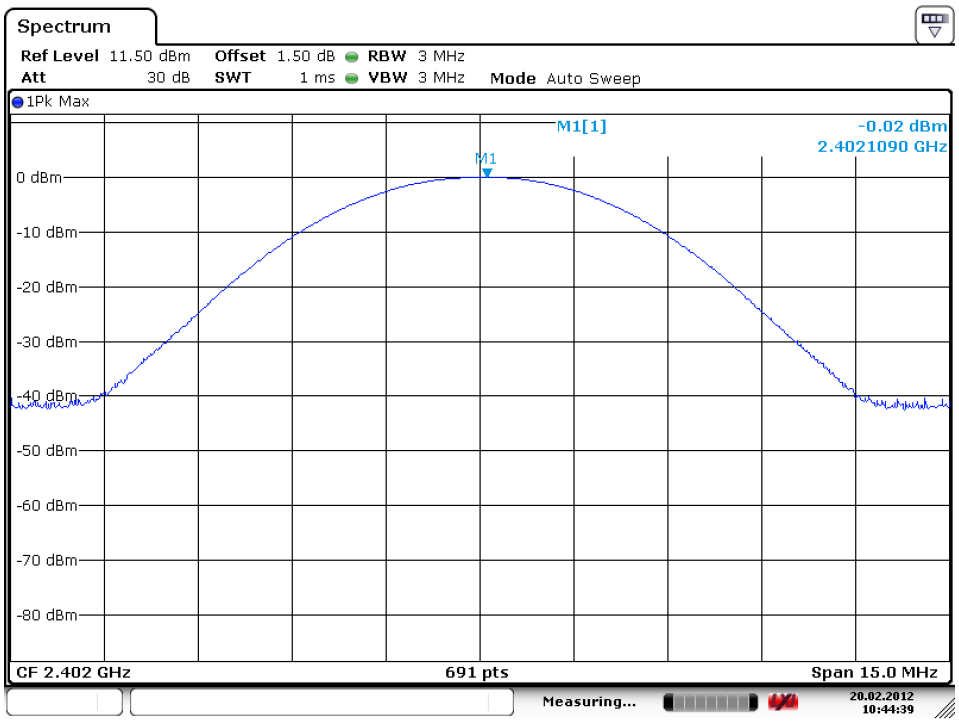
Channel	Channel Frequency (MHz)	Peak Output Power		Limit
		(dBm)	(W)	(W)
Low Channel	2402	0.5	0.0011	0.125
Middle Channel	2442	0.79	0.0012	0.125
High Channel	2480	0.63	0.0012	0.125

Table 7: Test result of Peak Output Power, QPSK modulation

Channel	Channel Frequency (MHz)	Peak Output Power		Limit
		(dBm)	(W)	(W)
Low Channel	2402	0.5	0.0011	0.125
Middle Channel	2442	0.79	0.0012	0.125
High Channel	2480	0.63	0.0012	0.125

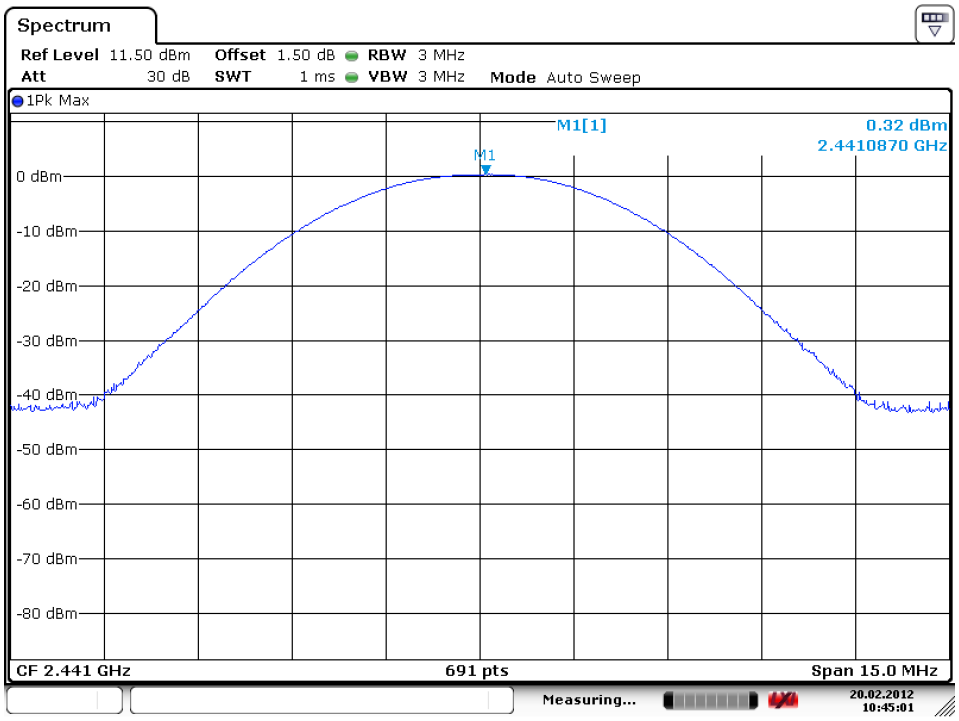
Test Plot of Peak Output Power, GFSK modulation

Low Channel



Date: 20.FEB.2012 10:44:39

Middle Channel



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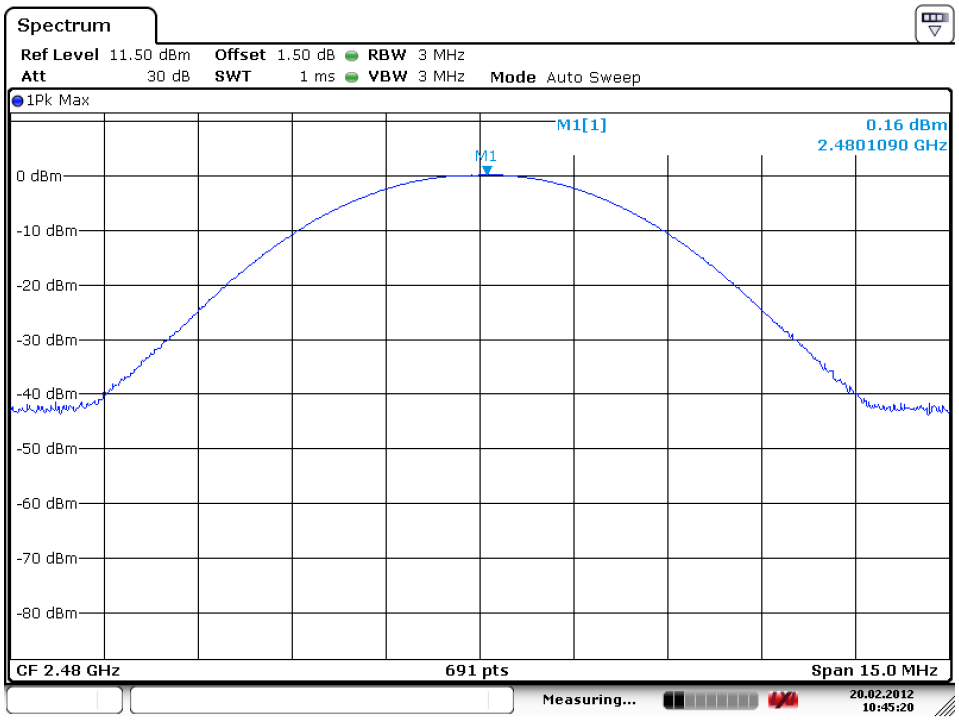
High Channel



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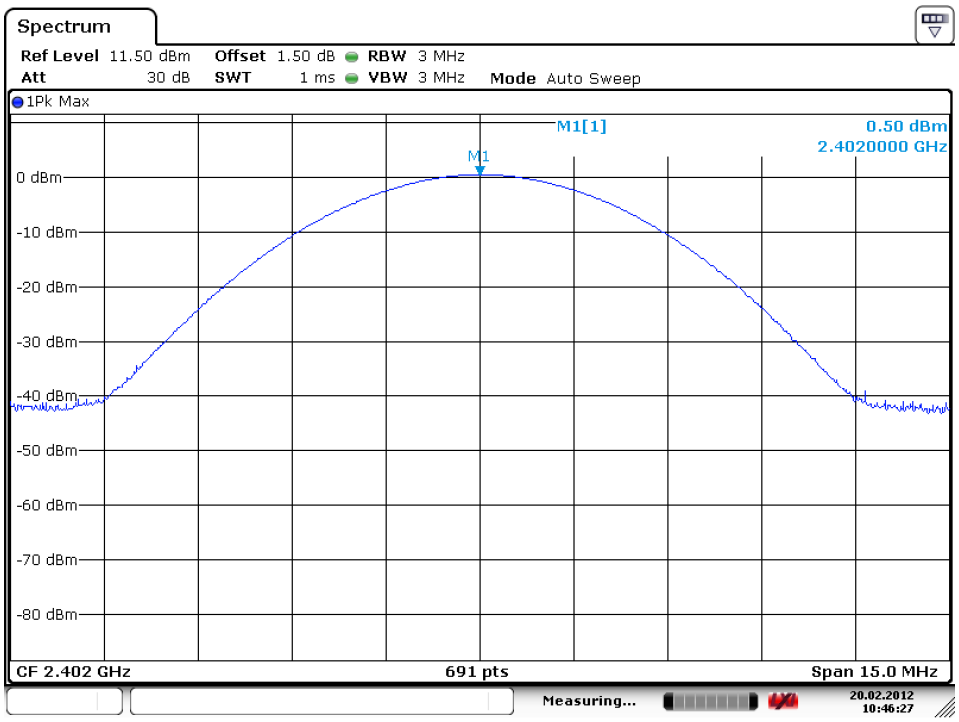
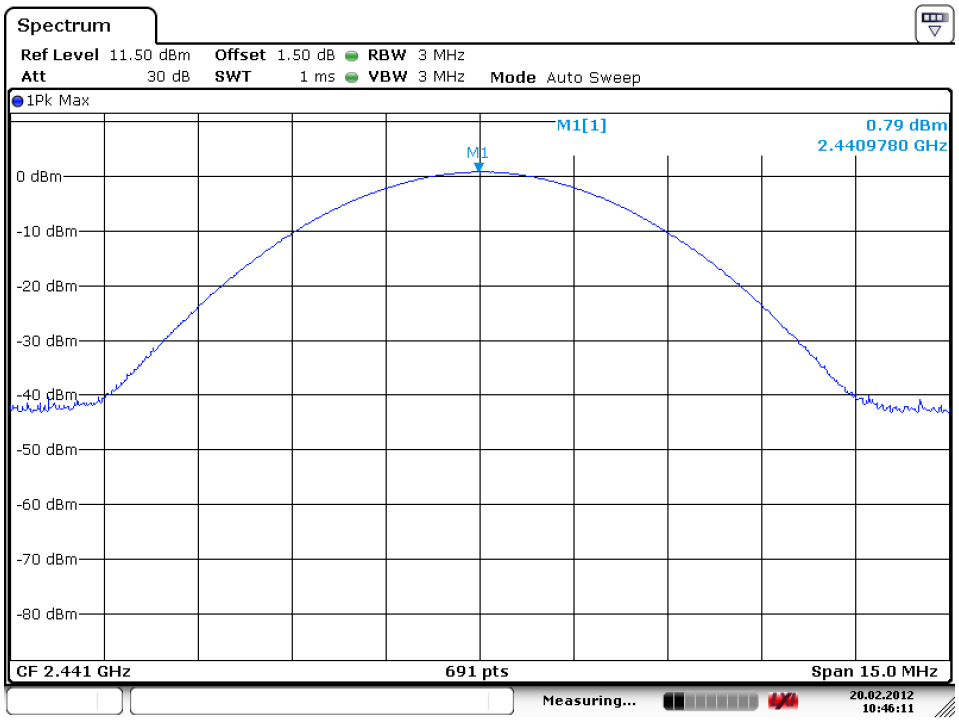
Test Plot of Peak Output Power, QPSK modulation

Low Channel



Date: 20.FEB.2012 10:46:27

Middle Channel



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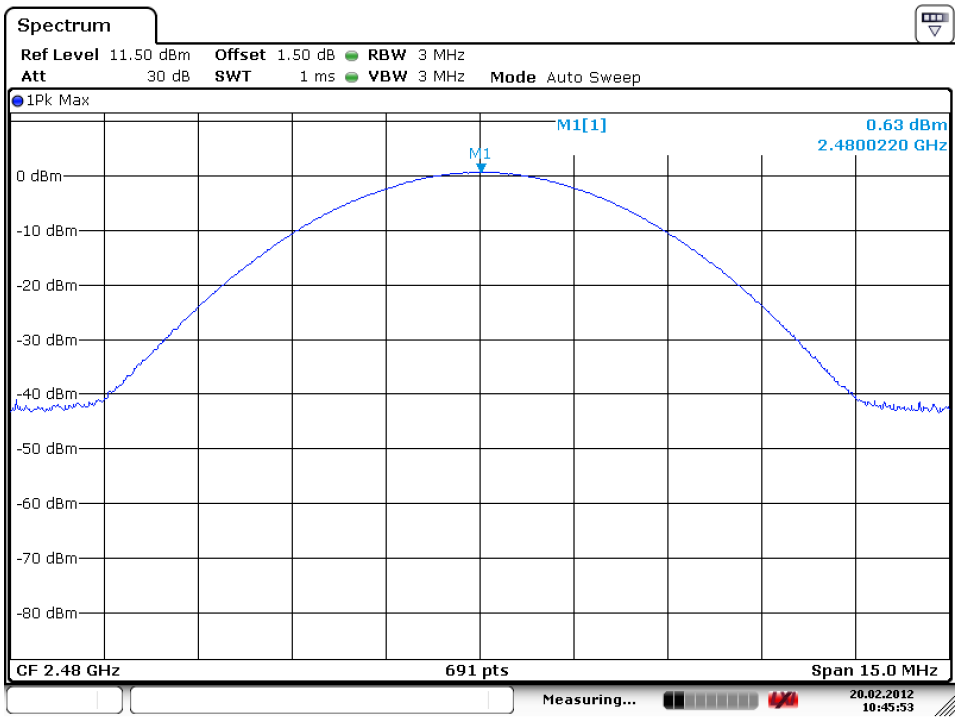
High Channel



Date: 20.FEB.2012 10:45:53

5.1.3 20dB Bandwidth

RESULT: **Passed**

Date of testing	:	February 20, 2012
Test standard	:	FCC Part 15.247(a)(1), RSS-210 A8.1(a)
Basic standard	:	DA 00-705 of March 30, 2000
Kind of test site	:	Shielded room

Test setup

Test Channel	:	Low/ Middle/ High
Operation Mode	:	A
Ambient temperature	:	24℃
Relative humidity	:	53%
Atmospheric pressure	:	102 kPa

Table 8: Test result of 20dB Bandwidth, GFSK modulation

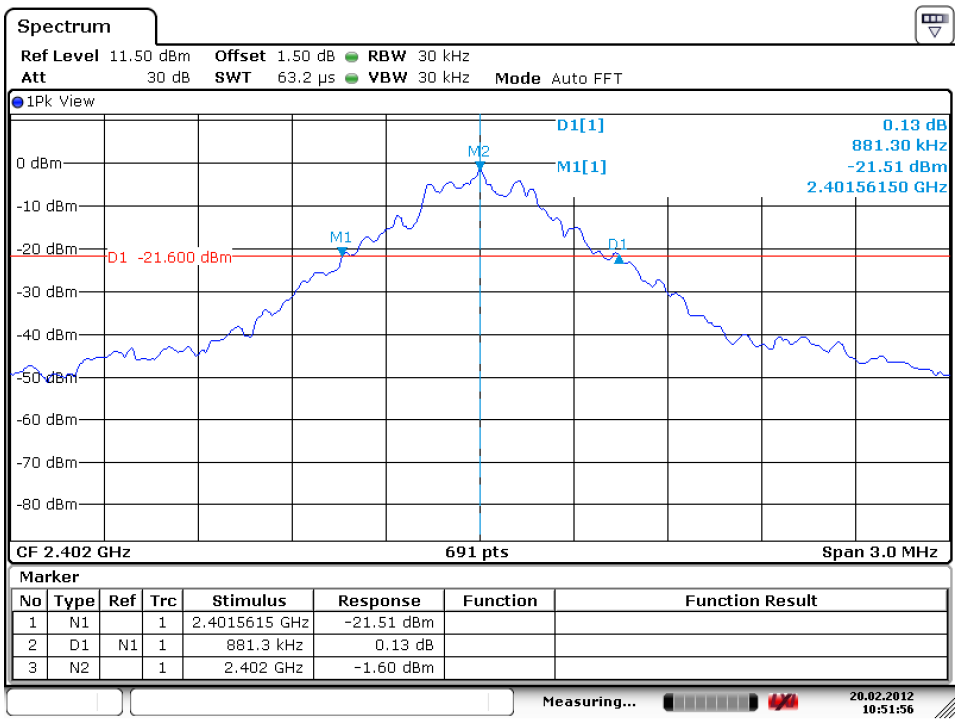
Channel	Channel Frequency (MHz)	20dB Bandwidth (kHz)	Limit (MHz)	Result
Low Channel	2402	881.3	/	Pass
Mid Channel	2441	881.3	/	Pass
High Channel	2480	885.7	/	Pass

Table 9: Test result of 20dB Bandwidth, QPSK modulation

Channel	Channel Frequency (MHz)	20dB Bandwidth (kHz)	Limit (MHz)	Result
Low Channel	2402	1250.4	/	Pass
Mid Channel	2441	1250.4	/	Pass
High Channel	2480	1254.7	/	Pass

Test Plot of 20dB Bandwidth, GFSK modulation

Low Channel



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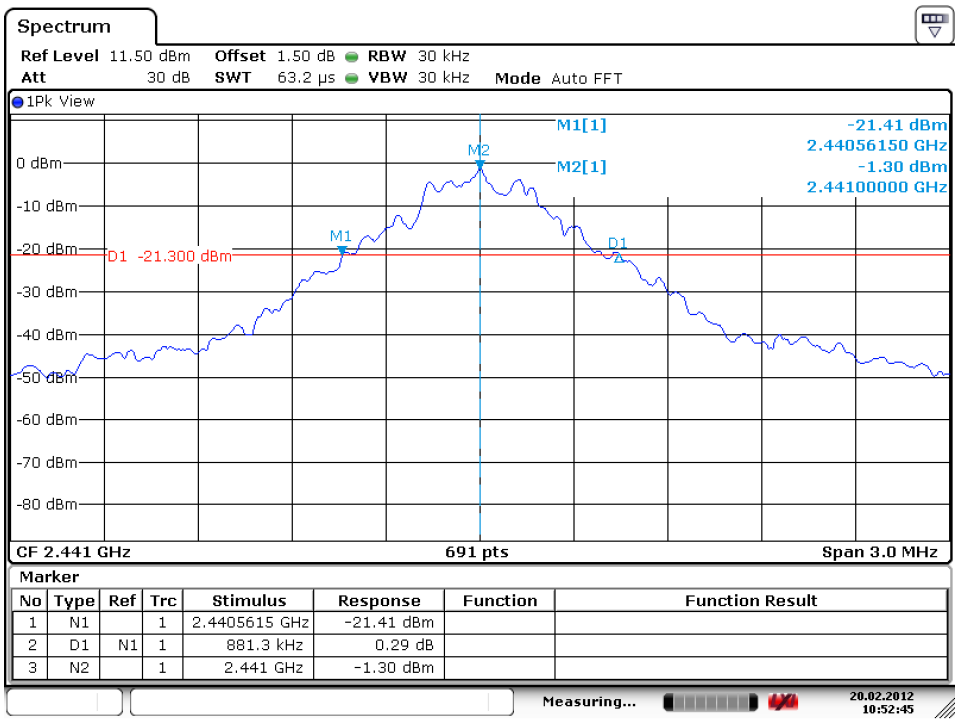
Middle Channel



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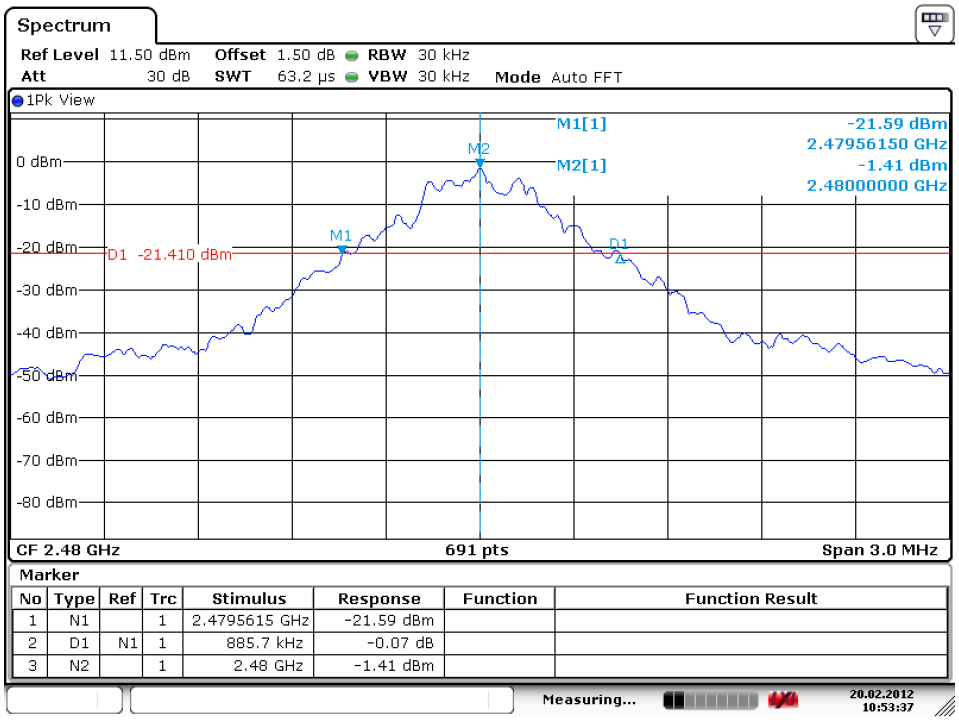
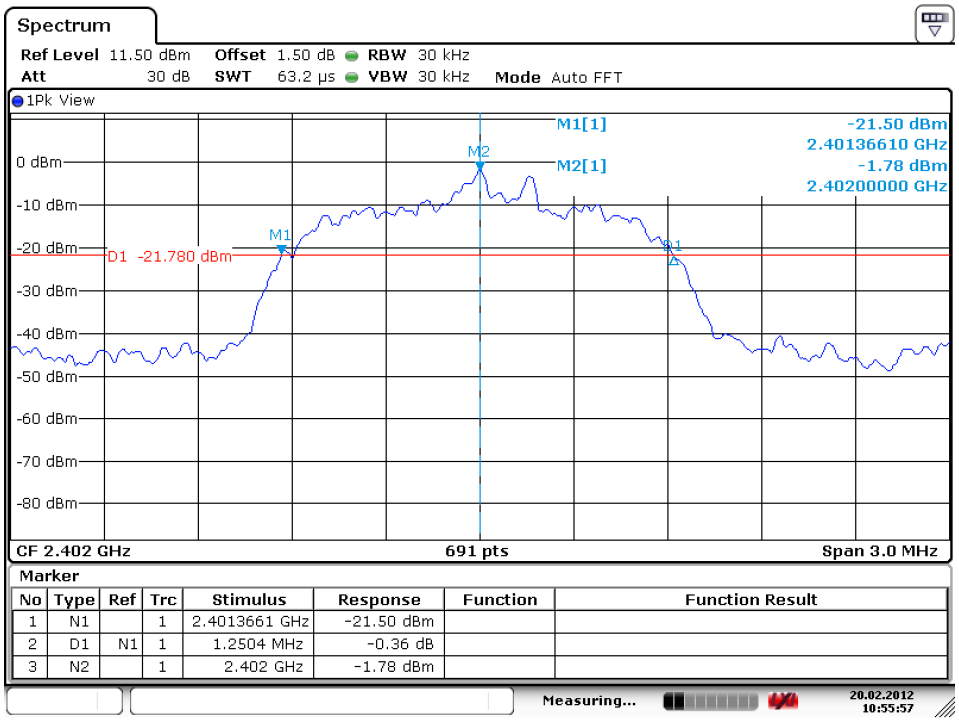
High Channel



Date: 20.FEB.2012 10:53:37

Test Plot of 20dB Bandwidth, QPSK modulation

Low Channel



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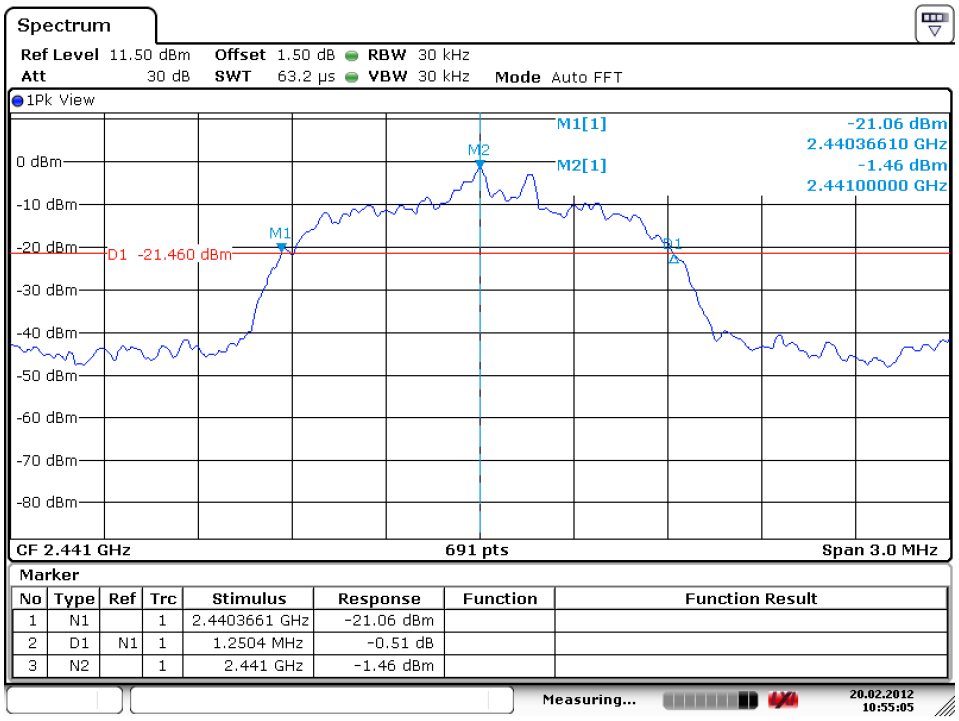
Middle Channel



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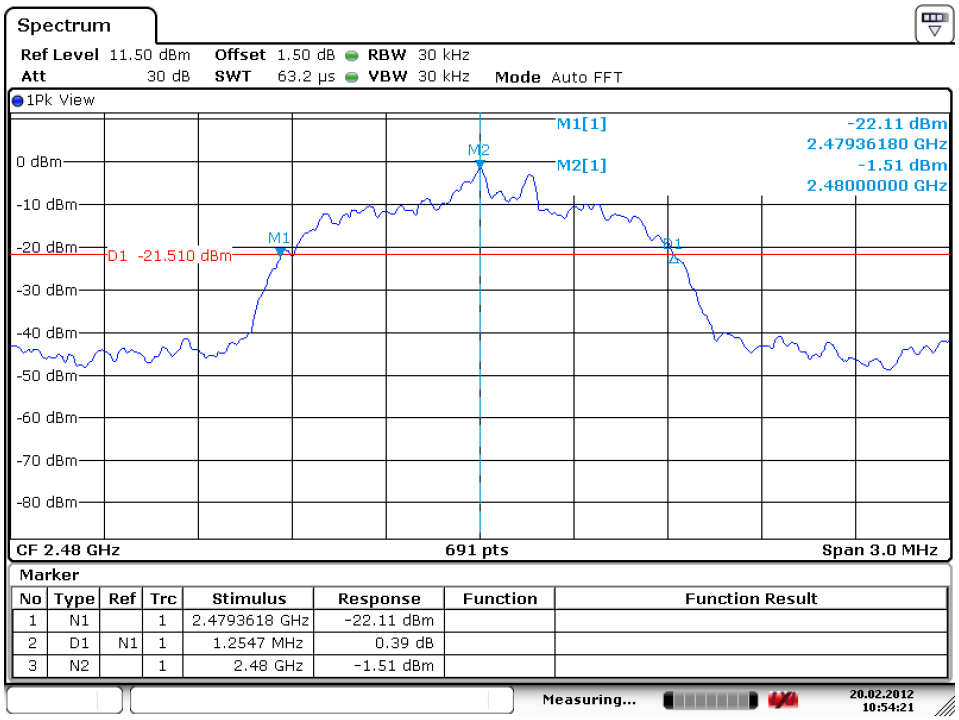
High Channel



Date: 20.FEB.2012 10:54:21

5.1.4 99% Bandwidth

RESULT: **Passed**

Date of testing	:	February 20, 2012
Test standard	:	RSS-Gen (Issue 3) Dec. 2010
Basic standard	:	RSS-Gen (Issue 3) Dec. 2010
Kind of test site	:	Shielded room

Test setup

Test Channel	:	Low/ Middle/ High
Operation Mode	:	A
Ambient temperature	:	24℃
Relative humidity	:	53%
Atmospheric pressure	:	102 kPa

Table 10: Test result of 99% Bandwidth, GFSK modulation

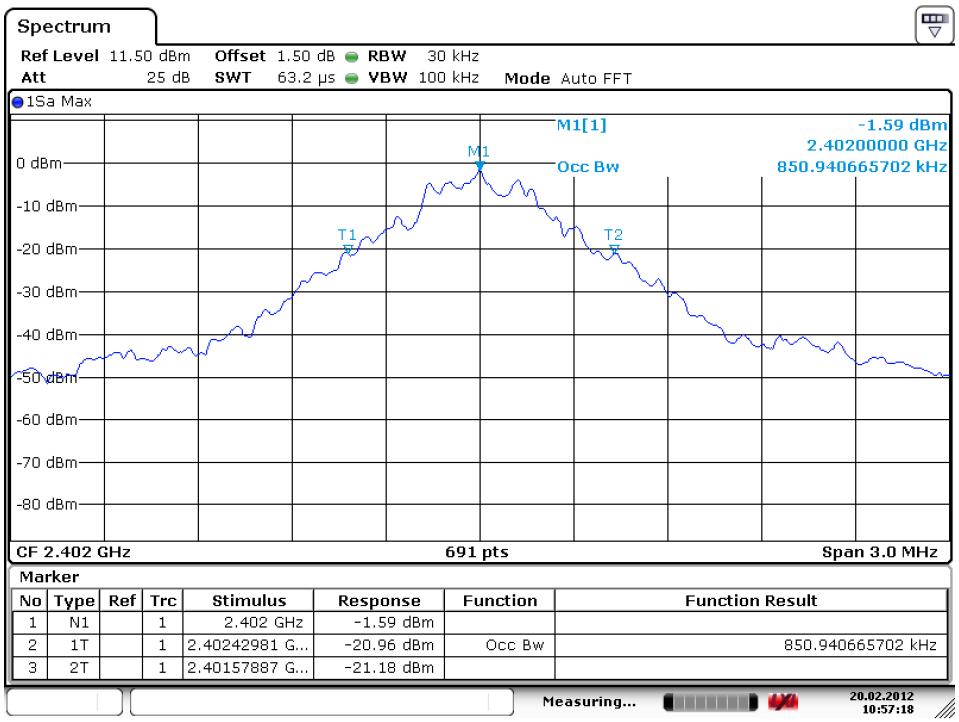
Channel	Channel Frequency (MHz)	99% Bandwidth (kHz)	Limit (MHz)	Result
Low Channel	2402	850.94	/	Pass
Mid Channel	2441	846.60	/	Pass
High Channel	2480	846.60	/	Pass

Table 11: Test result of 99% Bandwidth, QPSK modulation

Channel	Channel Frequency (MHz)	99% Bandwidth (kHz)	Limit (MHz)	Result
Low Channel	2402	1159.19	/	Pass
Mid Channel	2441	1163.53	/	Pass
High Channel	2480	1159.19	/	Pass

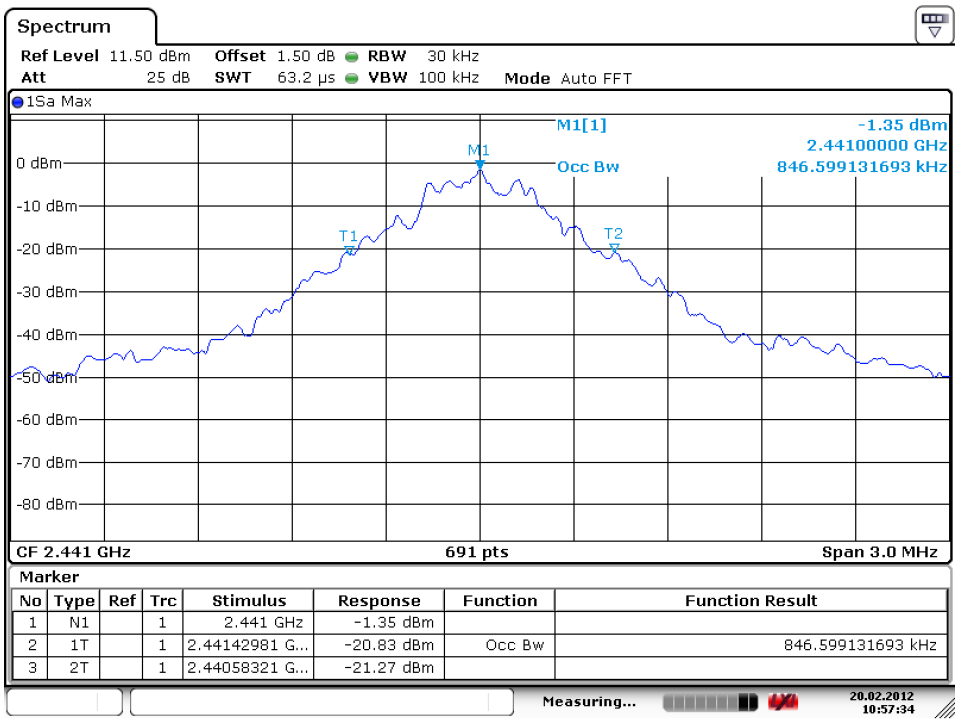
Test Plot of 99% Bandwidth, GFSK modulation

Low Channel



Date: 20.FEB.2012 10:57:18

Middle Channel



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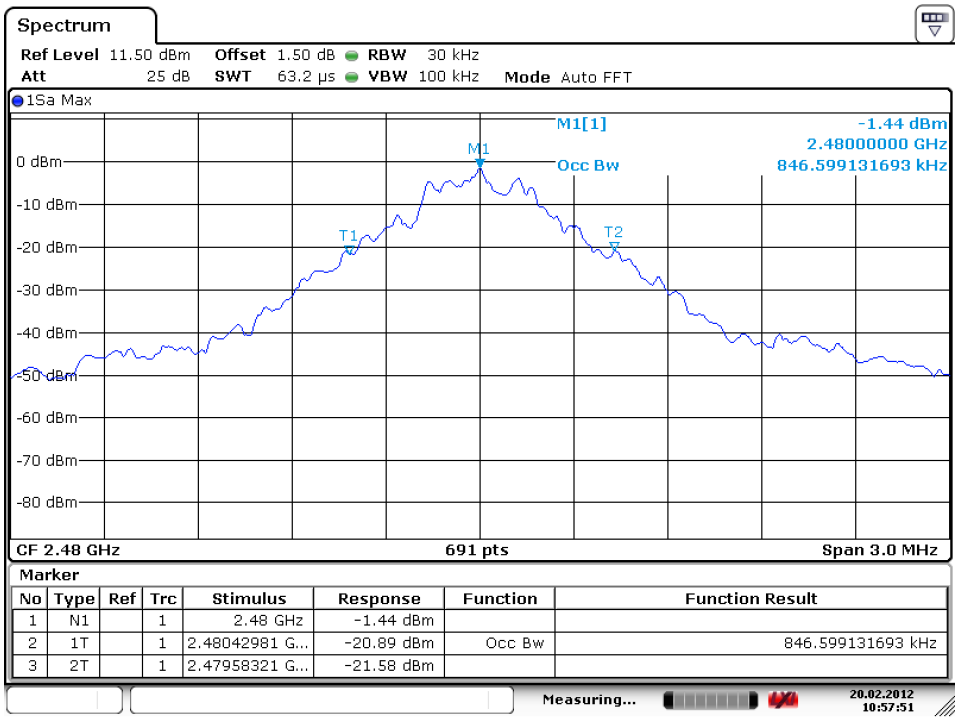
High Channel



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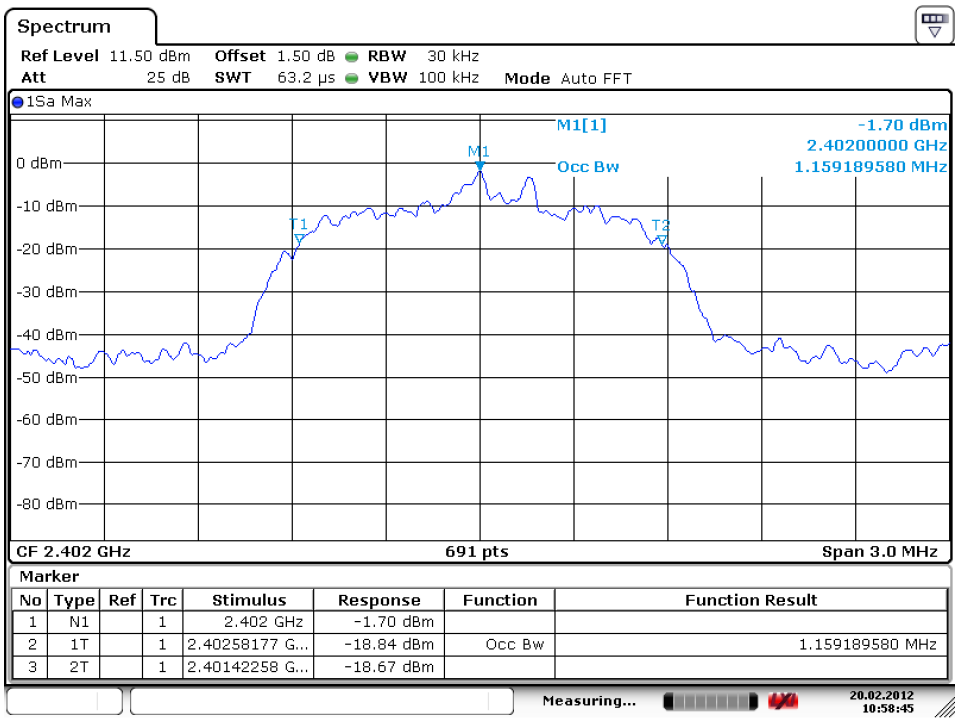
Test Plot of 99% Bandwidth, QPSK modulation

Low Channel



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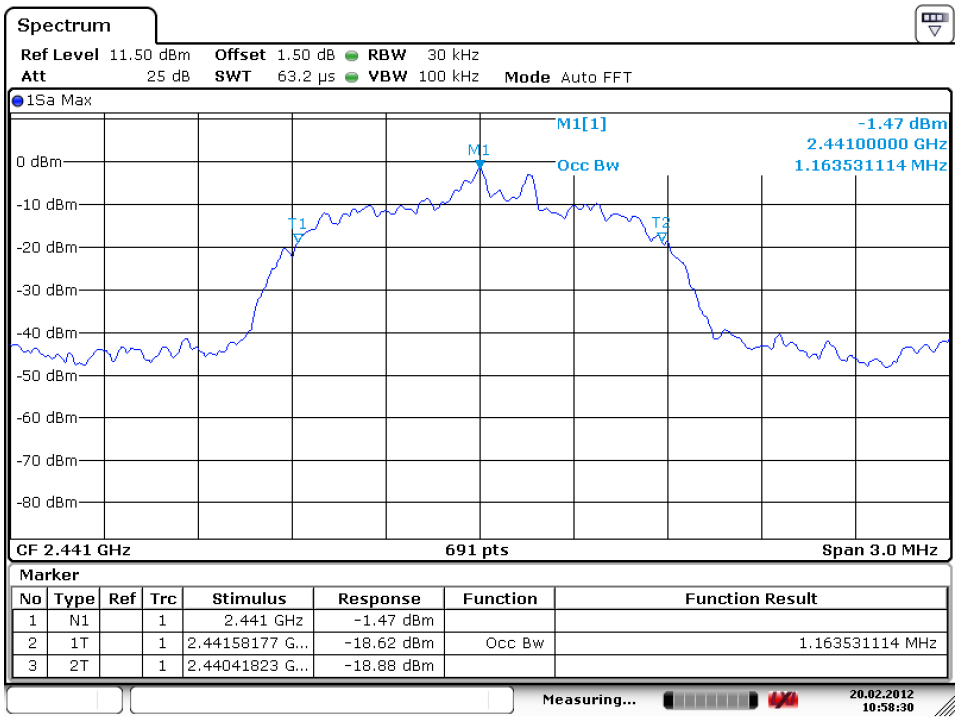
Middle Channel



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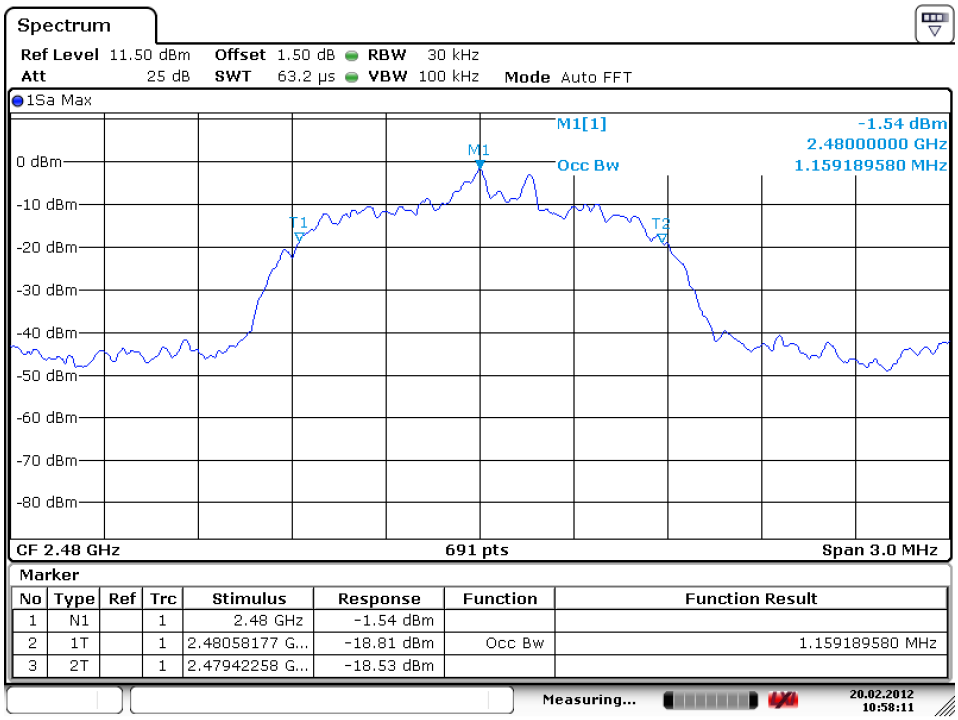
High Channel



Date: 20.FEB.2012 10:58:11

5.1.5 Conducted spurious emissions and Frequency Band Edge measured in 100kHz Bandwidth

RESULT: **Passed**

Date of testing	:	February 20, 2012
Test standard	:	FCC part 15.247(d), RSS-210 A8.5
Basic standard	:	DA 00-705 of March 30, 2000
Limit	:	20dB (below that in the 100kHz bandwidth within the band that contains the highest level of the desired power)
Kind of test site	:	Shielded room

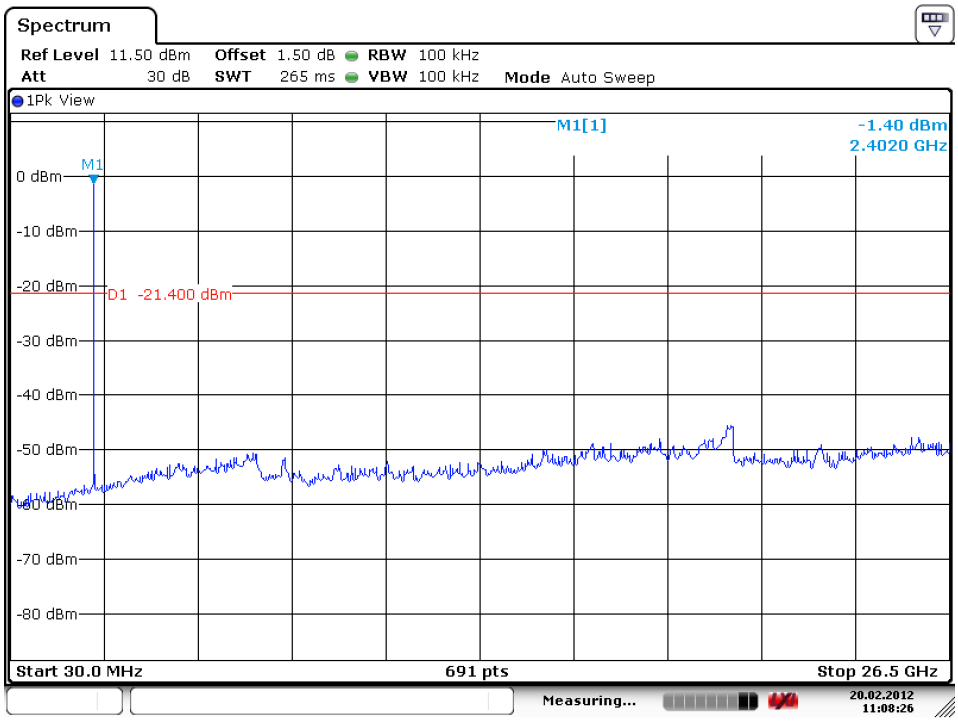
Test setup

Test Channel	:	Low/ High
Operation mode	:	A
Ambient temperature	:	22℃
Relative humidity	:	52%
Atmospheric pressure	:	102 kPa

All emissions are more than 20dB below fundamental, details refer to following test plot, and compliance is achived as well.
Due to the small size of the product and that there are no inductive components of significant size, 9kHz to 30MHz frequency range is not tested based on technical judgment.

Test Plot of 100kHz Conducted Emissions, GFSK modulation

Low Channel



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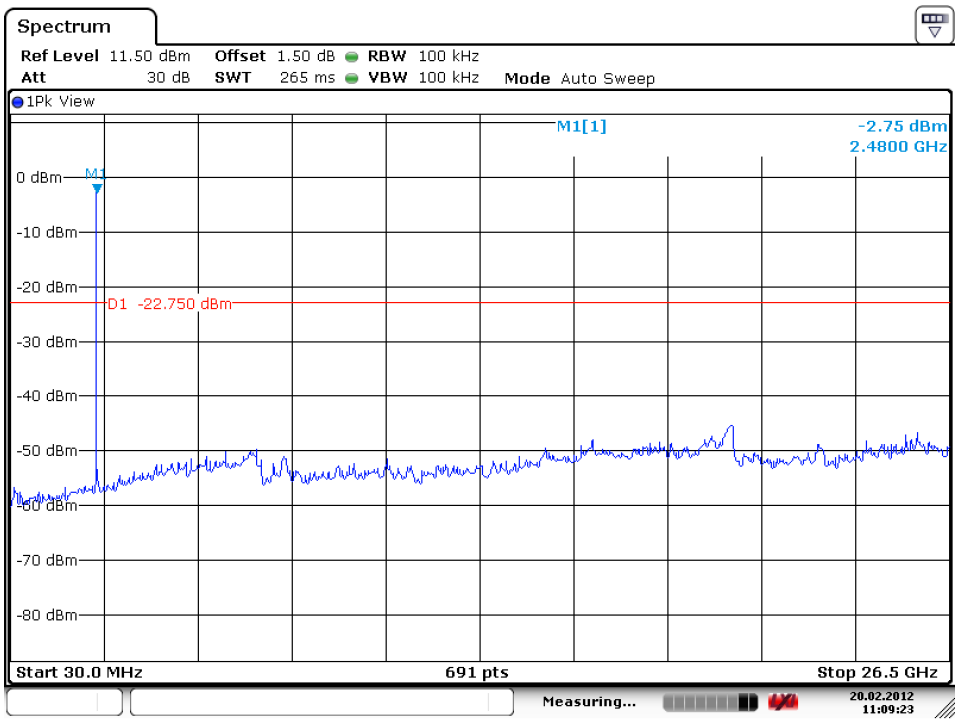
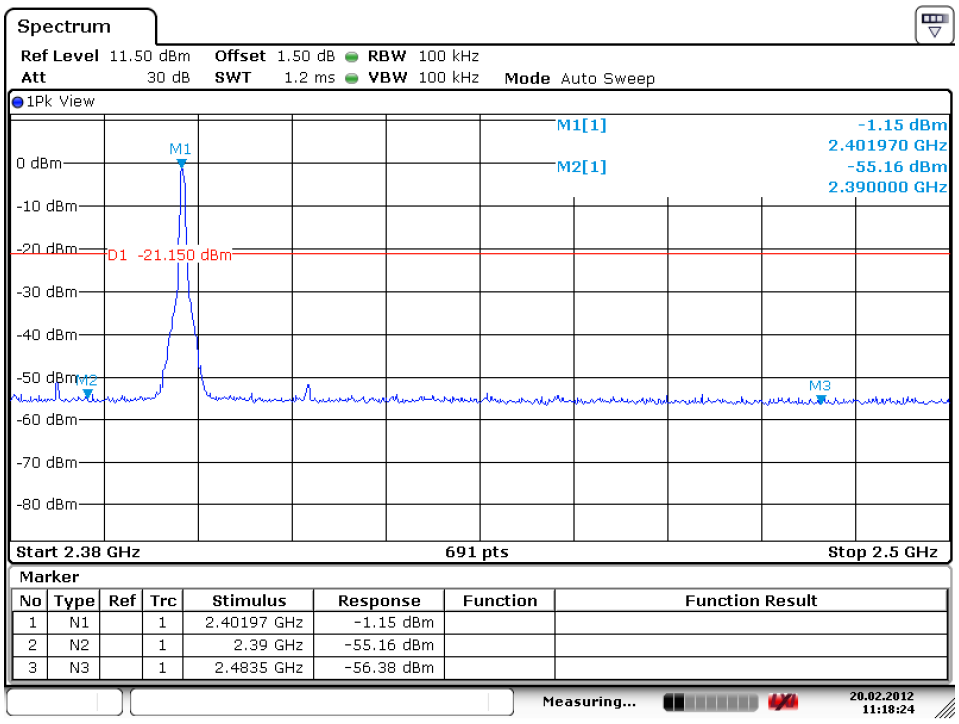
High Channel



Date: 20.FEB.2012 11:09:23

Test Plot of 100kHz Bandwidth of Frequency Band Edge, GFSK modulation

Low Channel



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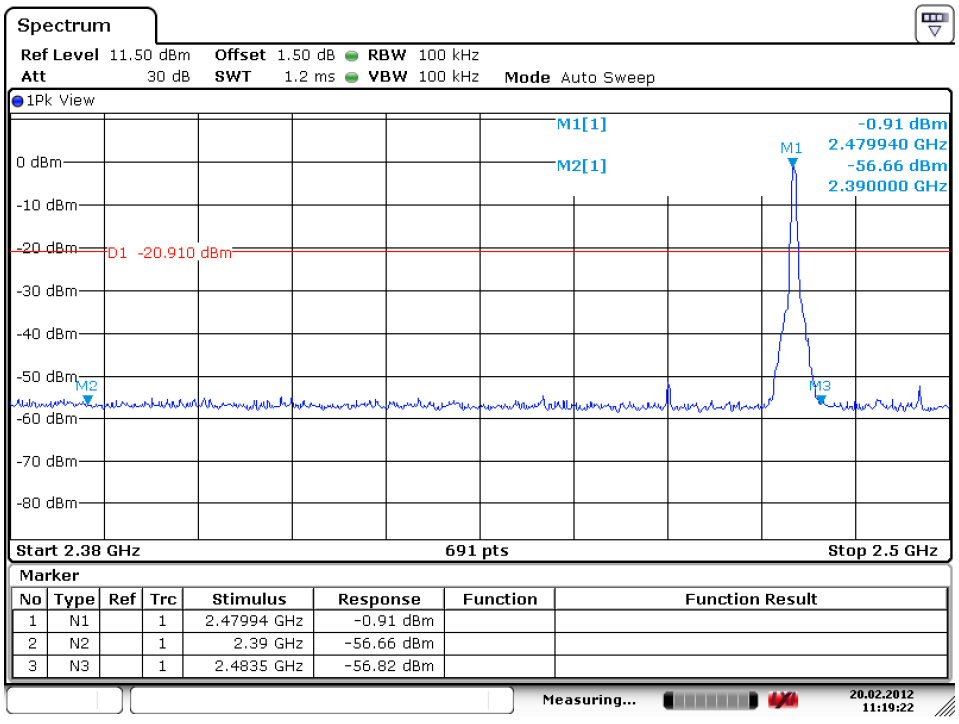
High Channel



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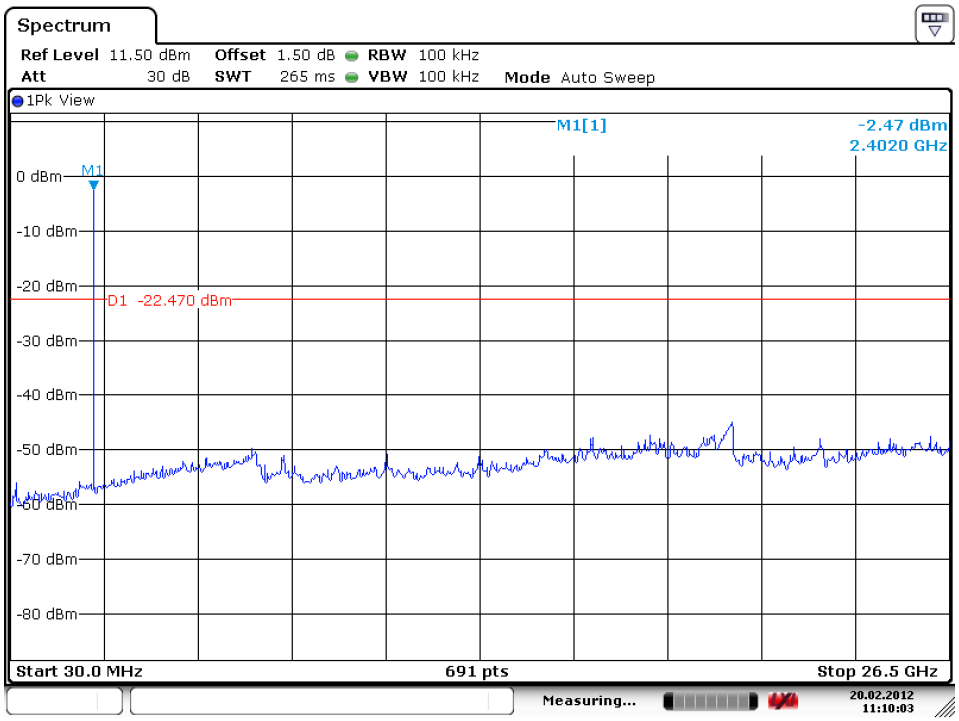
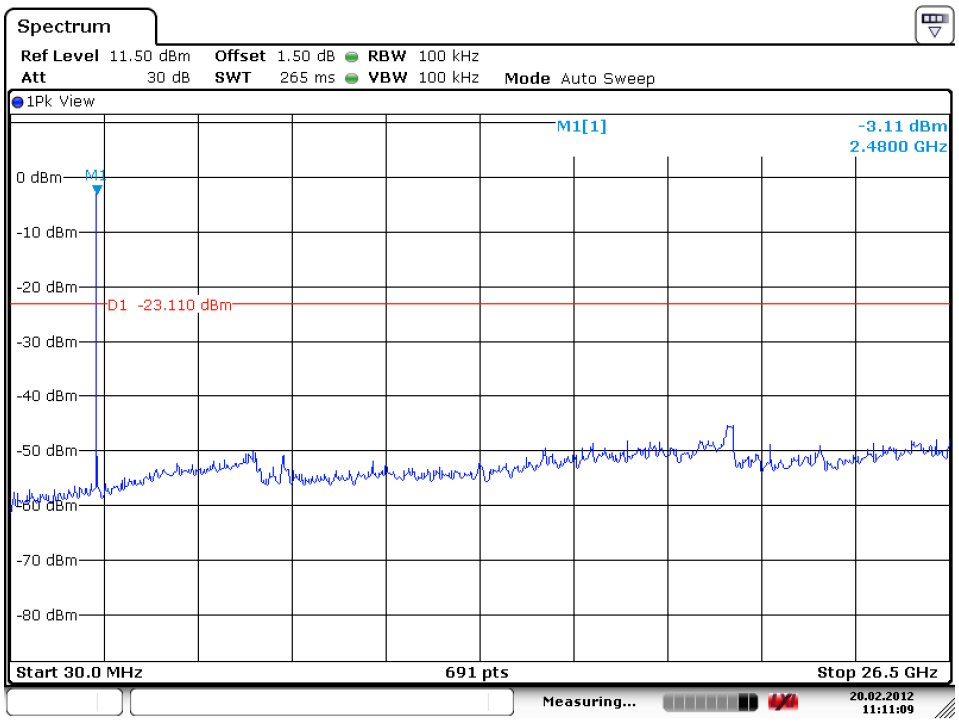
Test Plot of 100kHz Conducted Emissions, QPSK modulation

Low Channel



Date: 20.FEB.2012 11:10:04

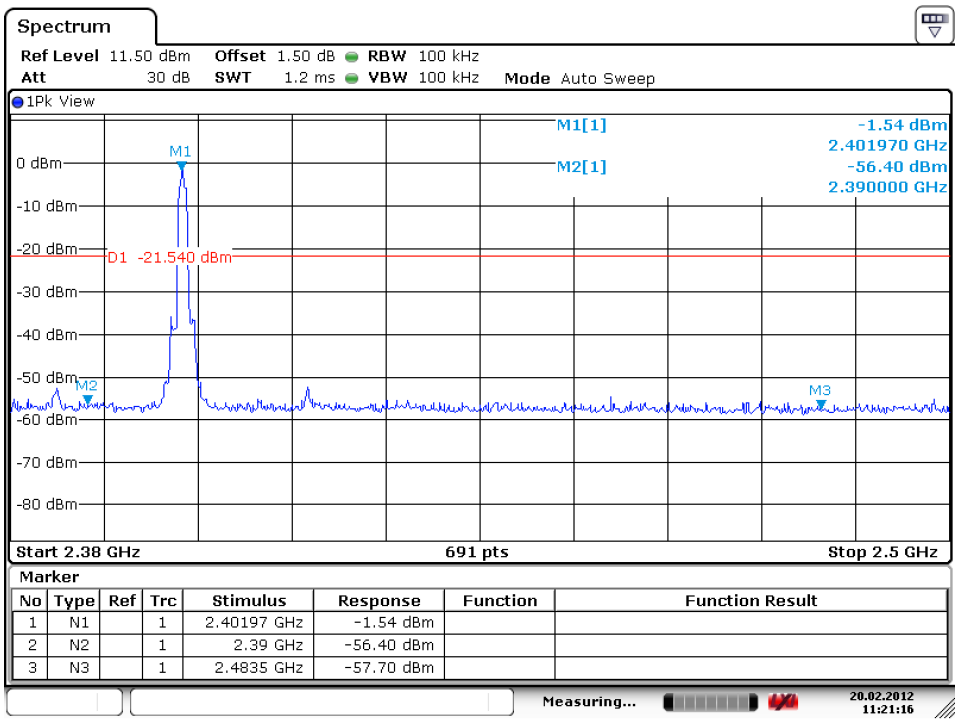
High Channel



Date: 20.FEB.2012 11:11:10

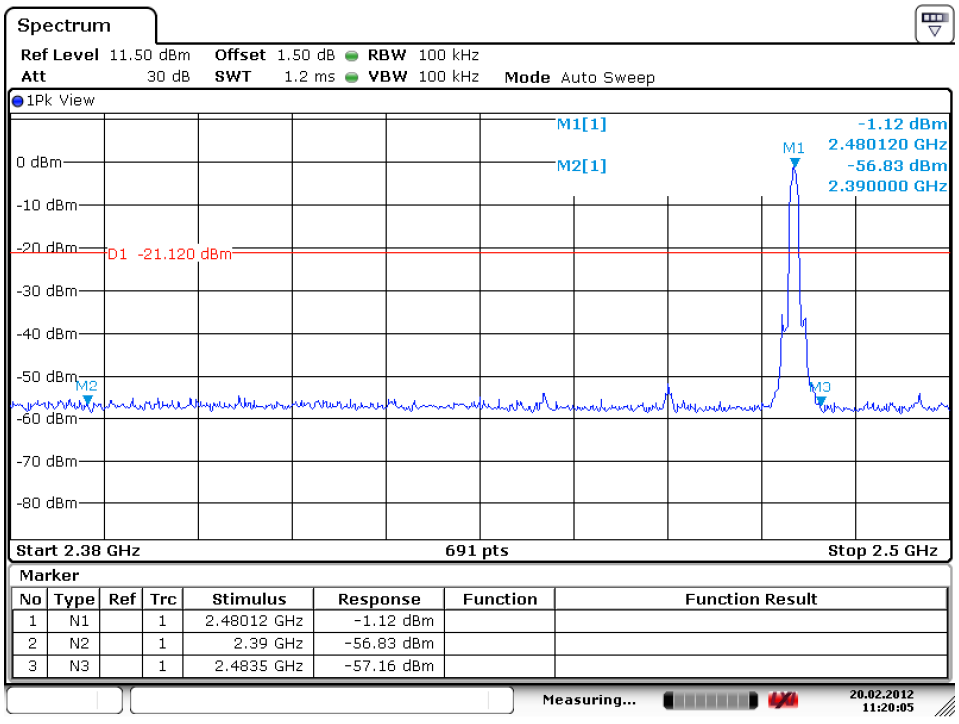
Test Plot of 100kHz Bandwidth of Frequency Band Edge, QPSK modulation

Low Channel



Date: 20.FEB.2012 11:21:16

High Channel



Date: 20.FEB.2012 11:20:05

5.1.6 Spurious Emission

RESULT: **Passed**

Date of testing	:	February 20, 2012
Test standard	:	FCC part 15.247(d), FCC 15.205, FCC 15.209, RSS-210 2.2, RSS-210 A8.5 and RSS-Gen 7.2.1
Basic standard	:	ANSI C63.10: 2009
Limits	:	Radiated emissions which fall in the restricted bands, as defined in FCC 15.205(a) and RSS-210 2.7 (Table 1), must comply with the radiated emission limits specified in FCC 15.209(a) and RSS-210 2.7 (Table 2 and 3). Emission radiated outside the specified frequency bands must comply with the radiated emission limits specified in FCC 15.209(a) and FCC 15.249(a), RSS-210 2.7 (Table 2 and 3) and RSS-210 A2.9(a).
Kind of test site	:	3m Semi-Anechoic Chamber

Test setup

Test Channel	:	Low/ Middle/ High
Operation mode	:	A, C
Ambient temperature	:	24℃
Relative humidity	:	56%
Atmospheric pressure	:	102 kPa

Remark: Testing was carried out within frequency range 30MHz to the tenth harmonic. For details refer to Appendix 2. The Radiated Emissions testing was performed in the X, Y and Z axis orientation. The X Axis orientation is the worst-case and recorded in this test report. Due to the small size of the product and that there are no inductive components of significant size, 9kHz to 30MHz frequency range is not tested based on technical judgment.

5.1.7 Frequency Separation

RESULT: **Passed**

Date of testing	:	February 20, 2012
Test standard	:	FCC part 15.247(a)(1), RSS-210 A8.1(b)
Basic standard	:	DA 00-705 of March 30, 2000
Limit	:	≥ 25kHz or 2/3 of 20dB bandwidth, whichever is greater

Test setup

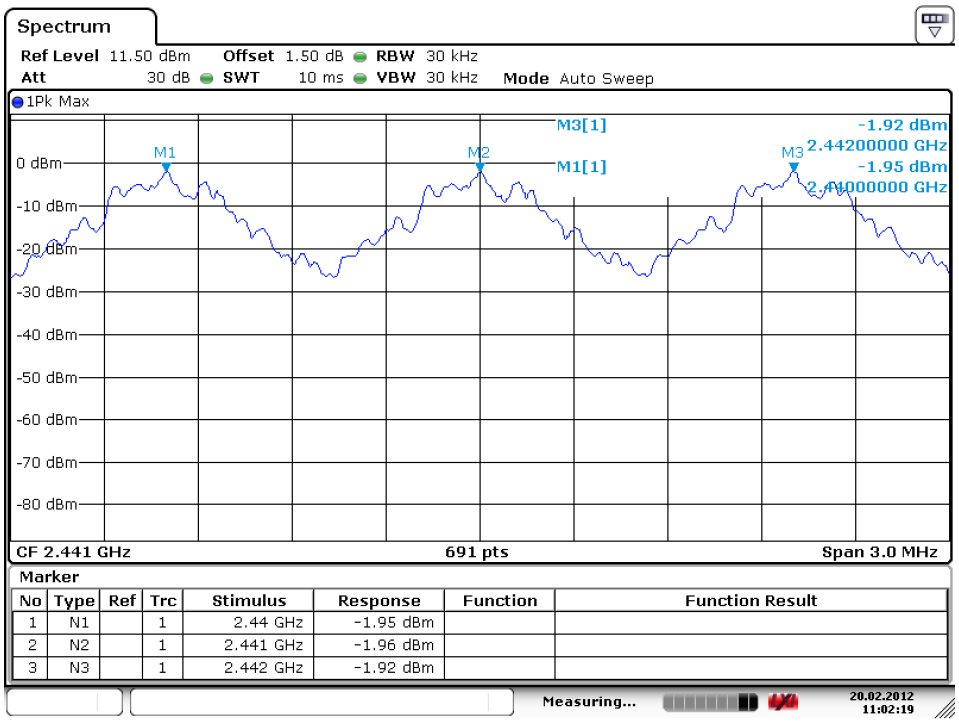
Test Channel	:	Low/ Middle/ High
Operation Mode	:	A
Ambient temperature	:	24℃
Relative humidity	:	53%
Atmospheric pressure	:	102 kPa

Table 12: Test result of Frequency Separation

Channel	Channel Frequency (MHz)	Measured Channel Separation (MHz)	Limit (kHz)	Result
Record Channel	2441	1	≥ 25kHz or 2/3 of 20dB bandwidth	Pass
Record Channel adj 1	2440			
Record Channel adj 2	2442			

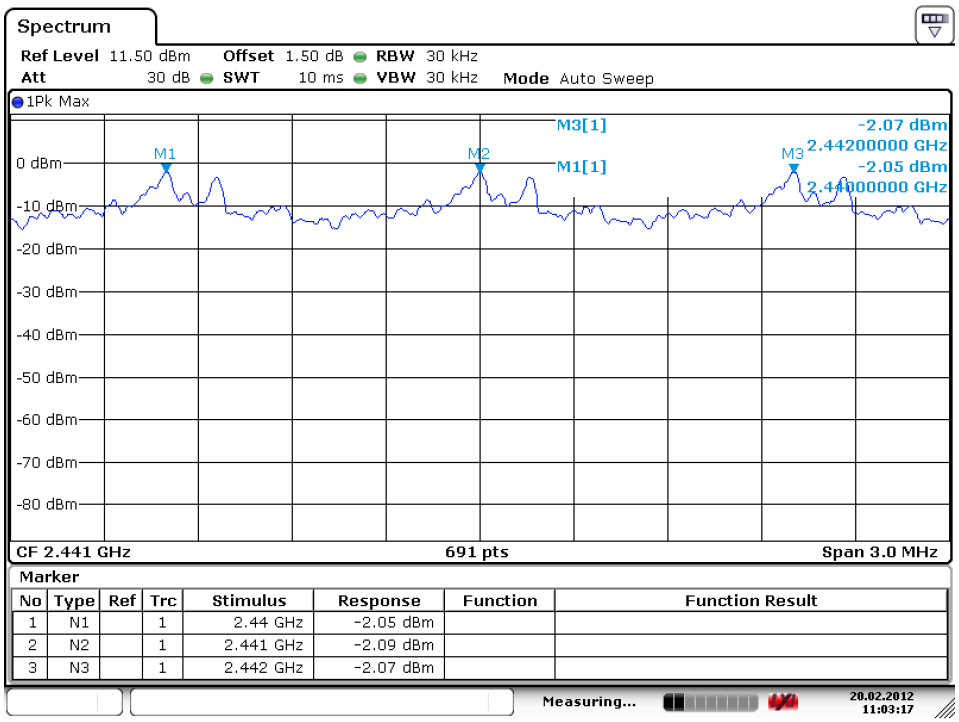
Test Plot of Frequency Separation

GFSK



Date: 20.FEB.2012 11:02:20

QPSK



Date: 20.FEB.2012 11:03:17

5.1.8 Number of hopping frequency

RESULT: **Passed**

Date of testing	:	February 20, 2012
Test standard	:	FCC part 15.247(a)(1)(iii), RSS-210 A8.1(d)
Basic standard	:	DA 00-705 of March 30, 2000
Limits	:	≥ 15
Kind of test site	:	Shield room

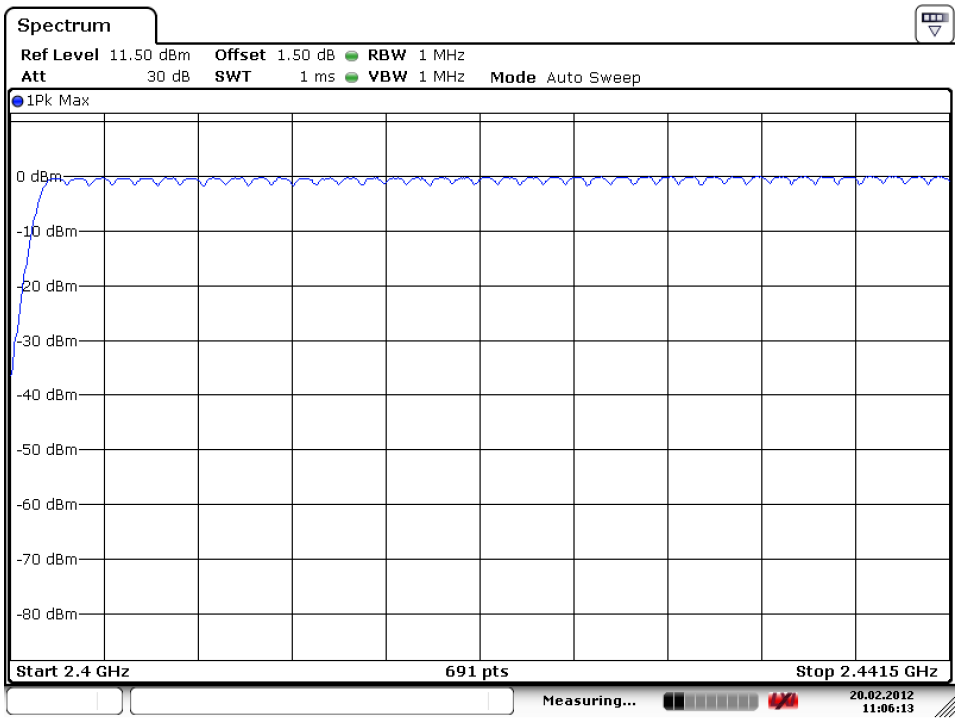
Test setup

Test Channel	:	Low/ Middle/ High
Operation Mode	:	A
Ambient temperature	:	24℃
Relative humidity	:	53%
Atmospheric pressure	:	102 kPa

Table 13: Test result of Number of hopping frequency

Frequency Range	Measured Quantity of Hopping Channel	Limit	Result
2400 to 2483.5 MHz	79	≥15	Pass

Test Plot of Number of hopping frequencies



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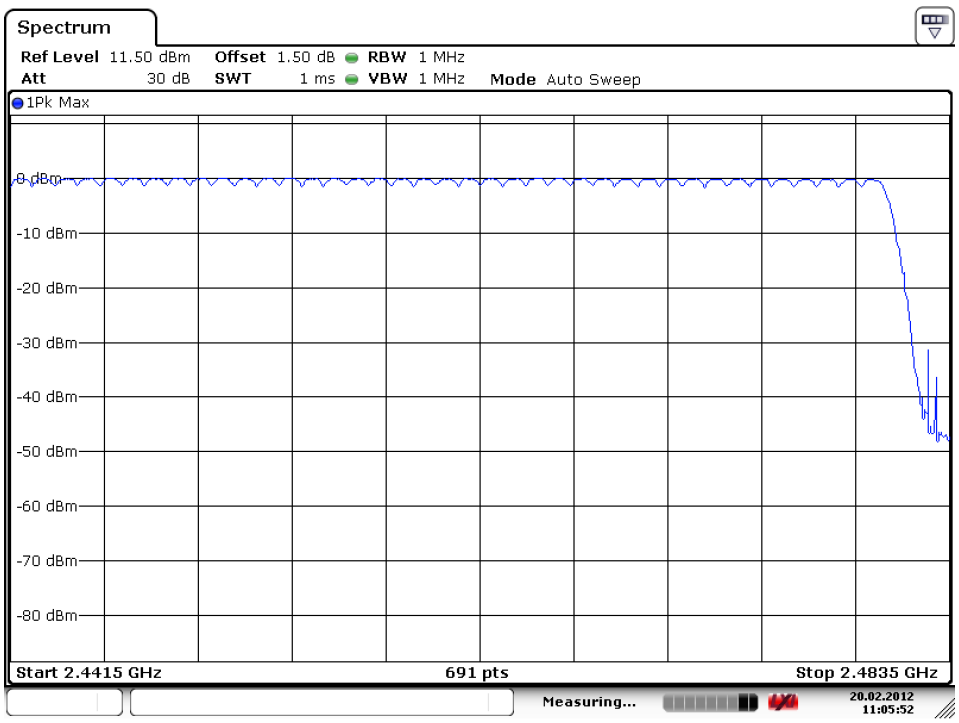


Date: 20.FEB.2012 11:05:52

5.1.9 Time of Occupancy

RESULT: **Passed**

Date of testing	:	February 20, 2012
Test standard	:	FCC part 15.247(a)(1)(iii) , RSS-210 A8.1(d)
Basic standard	:	DA 00-705 of March 30, 2000
Limits	:	0.4s
Kind of test site	:	Shield room

Test setup

Test Channel	:	Low/ Middle/ High
Operation Mode	:	A
Ambient temperature	:	24℃
Relative humidity	:	53%
Atmospheric pressure	:	102 kPa

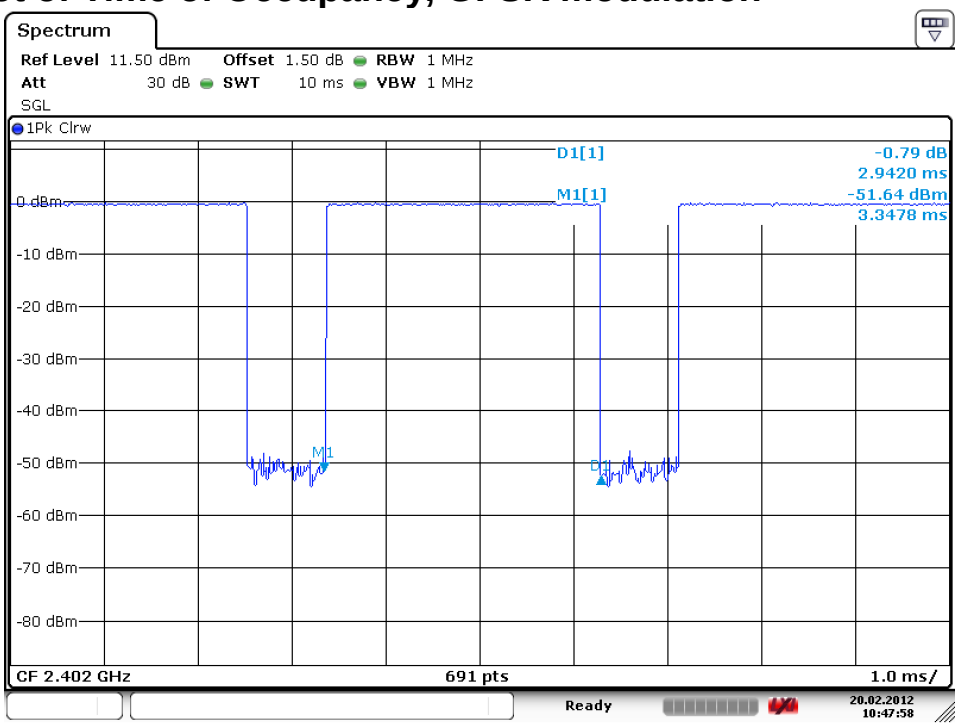
Table 14: Test result of Time of Occupancy

Data Mode	Captured Burst (s)	Dwell time (s)	Limit (s)	Result
DH5	0.00294	0.3133	0.4	Pass
3DH5	0.00294	0.3133	0.4	Pass

Note:
Dwell time = Pulse width x (Hopping rate / Number of channels) x Period

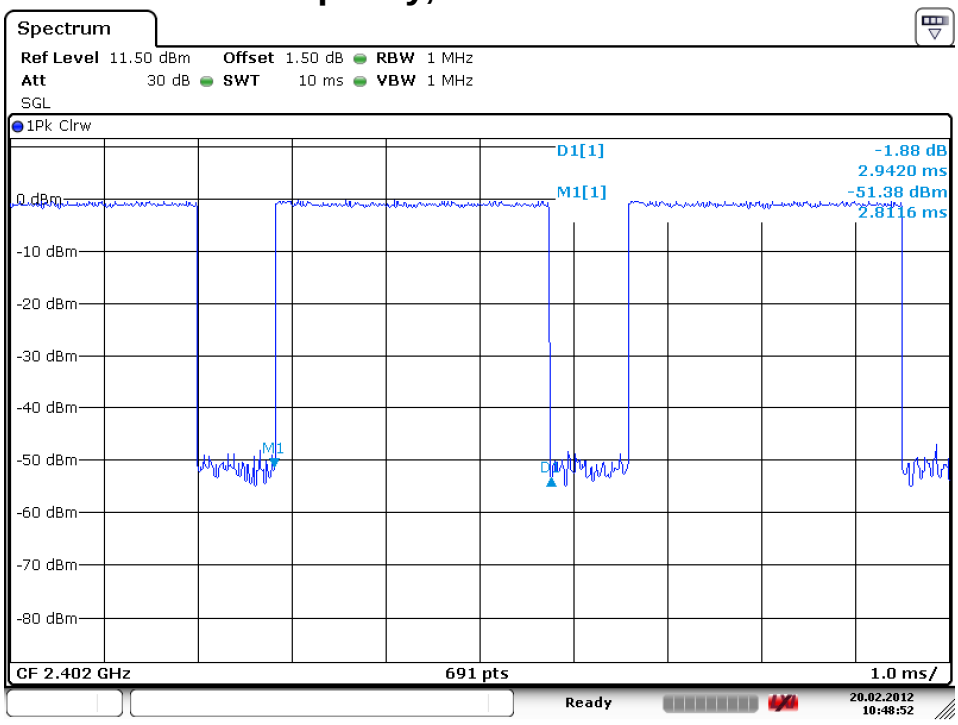
Period = 0.4 (seconds/ channel) x 79 (channel) = 31.6 seconds

Test Plot of Time of Occupancy, GFSK modulation



Date: 20.FEB.2012 10:47:58

Test Plot of Time of Occupancy, PSK modulation



Date: 20.FEB.2012 10:48:52

6. Safety Human exposure

6.1 Radio Frequency Exposure Compliance

6.1.1 Electromagnetic Fields

RESULT: **Passed**

Test standard : FCC KDB Publication 447498

Since maximum peak output power of the transmitter is <60/f(GHz)mW, i.e. 1.1995 mW<25(=60/2.4)mW, hence the EUT is exclueded from SAR evaluation according to FCC KDB publication 447498 D01: Mobile Portable RF Exposure.

8. List of Tables

9. List of Photographs

Test Report No.10034983 001

Appendix 2: Test Result of Radiated Emissions and Radiated Band Edge

(File: 10034983Appendix2)

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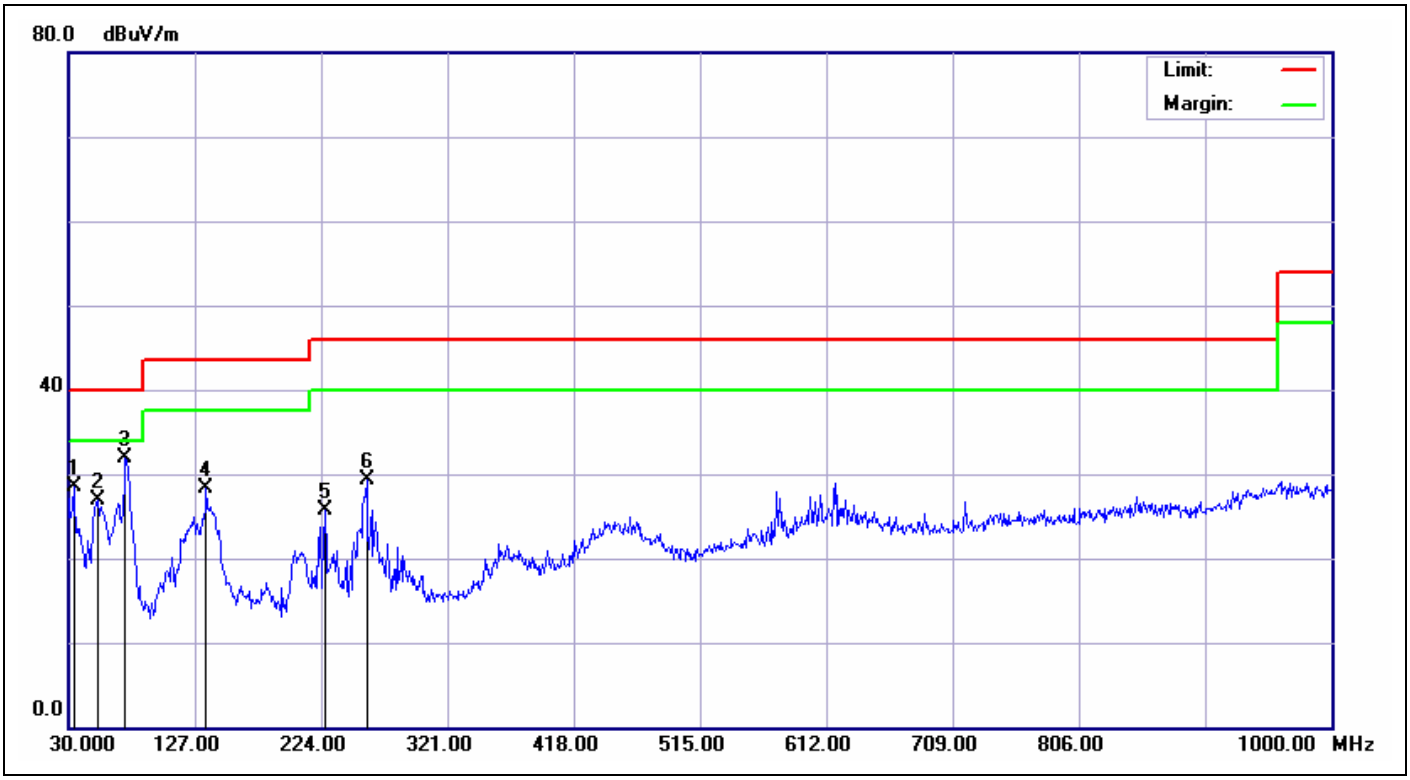

Service No.:	**113150660**	**Test Distance:**	**3m**
Test Standard:	**FCC Class B 3M Radiation**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2012/2/20 PM 01:20:54**
Applicant:	**Marlow Industries,Inc**	**Test Rating:**	**AC 110V/60Hz**
Product:	**Black Box**	**Temp.(℃)/Hum.(%):**	**16(℃)/63%**
Model No.:	**PCE-201-M-1-0**	**Test Engineer:**	**Hugo Chang**
Test Mode:	**BT 2402**		
Remark:	Input:100-240Vac,47-63Hz,2.2A MAX Output:24Vdc,6.6A		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (◦)	Remark
1	33.8800	-9.83	38.24	28.41	40.00	-11.59	QP	100	341	
2	52.3100	-18.92	45.87	26.95	40.00	-13.05	QP	100	341	
3	73.6500	-19.47	51.29	31.82	40.00	-8.18	QP	100	134	
4	135.7300	-13.60	41.81	28.21	43.50	-15.29	QP	100	31	
5	226.9100	-15.05	40.67	25.62	46.00	-20.38	QP	100	257	
6	258.9200	-11.56	40.78	29.22	46.00	-16.78	QP	200	116	

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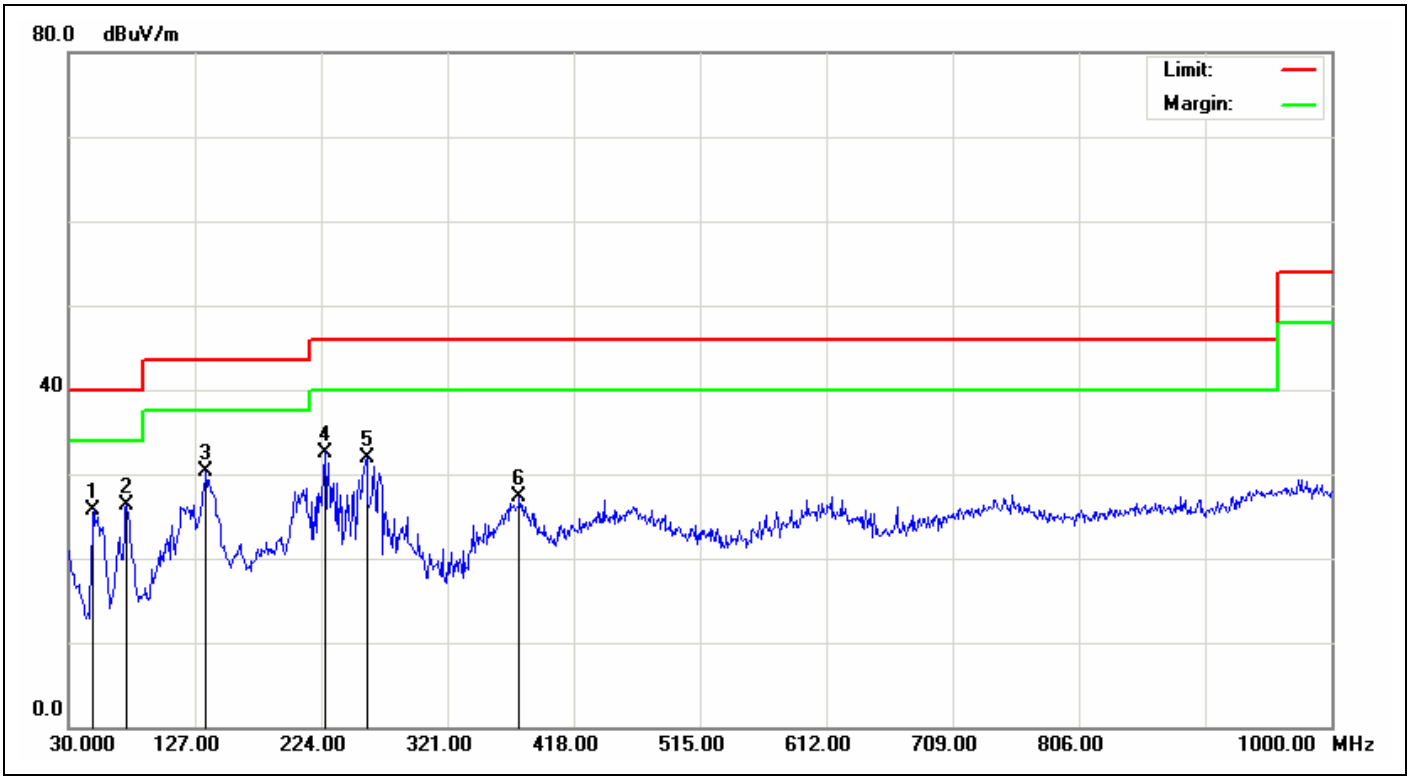

Service No.:	**113150660**	**Test Distance:**	**3m**
Test Standard:	**FCC Class B 3M Radiation**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2012/2/20 PM 01:15:56**
Applicant:	**Marlow Industries,Inc**	**Test Rating:**	**AC 110V/60Hz**
Product:	**Black Box**	**Temp.(℃)/Hum.(%):**	**16(℃)/63%**
Model No.:	**PCE-201-M-1-0**	**Test Engineer:**	**Hugo Chang**
Test Mode:	**BT 2402**		
Remark:	Input:100-240Vac,47-63Hz,2.2A MAX Output:24Vdc,6.6A		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (◦)	Remark
1	49.3998	-17.97	43.72	25.75	40.00	-14.25	QP	400	134	
2	74.6200	-19.34	45.55	26.21	40.00	-13.79	QP	200	264	
3	135.7298	-13.60	43.84	30.24	43.50	-13.26	QP	200	78	
4	226.9099	-15.05	47.65	32.60	46.00	-13.40	QP	100	119	
5	258.9200	-11.56	43.37	31.81	46.00	-14.19	QP	100	53	
6	376.2900	-9.51	36.77	27.26	46.00	-18.74	QP	100	223	

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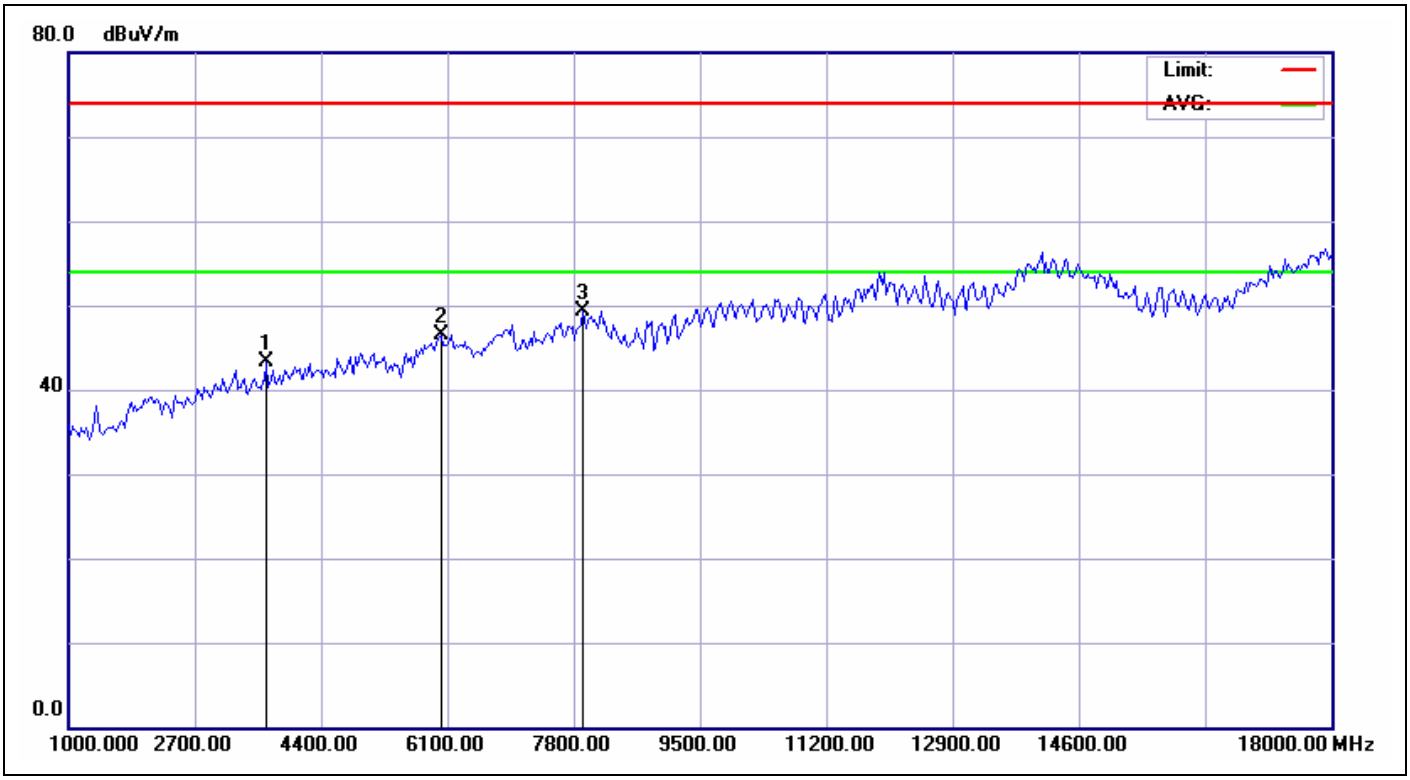

Service No.:	**113150660**	**Test Distance:**	**3m**
Test Standard:	**FCC above 1G PEAK**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2012/2/20 PM 03:46:40**
Applicant:	**Marlow Industries,Inc**	**Test Rating:**	**AC 110V/60Hz**
Product:	**Black Box**	**Temp.(℃)/Hum.(%):**	**16(℃)/63%**
Model No.:	**PCE-201-M-1-0**	**Test Engineer:**	**Hugo Chang**
Test Mode:	**BT 2402 TX**		
Remark:	Input:100-240Vac,47-63Hz,2.2A MAX Output:24Vdc,6.6A		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (◦)	Remark
1	3669.872	10.67	32.54	43.21	74.00	-30.79	peak			
2	6012.821	17.18	29.37	46.55	74.00	-27.45	peak			
3	7919.872	20.84	28.48	49.32	74.00	-24.68	peak			

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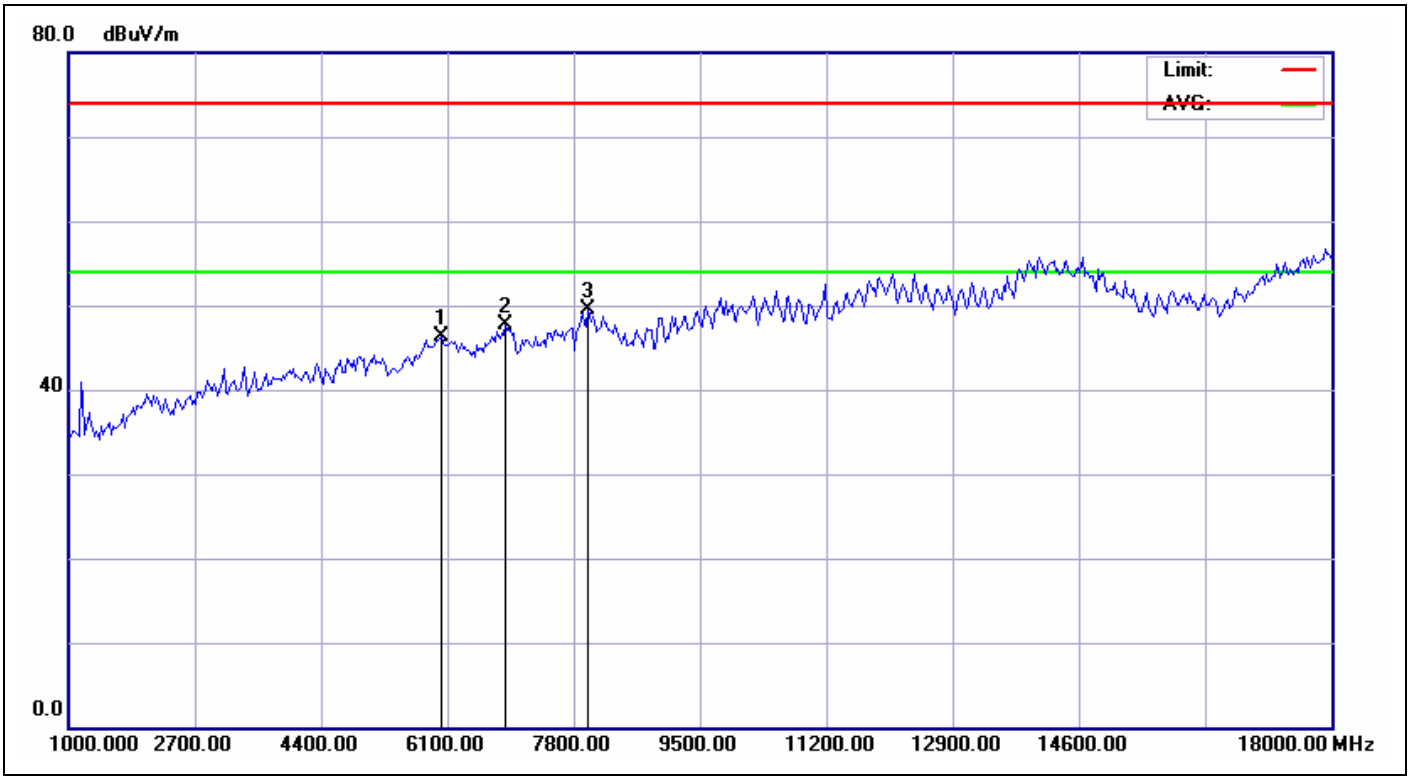

Service No.:	**113150660**	**Test Distance:**	**3m**
Test Standard:	**FCC above 1G PEAK**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2012/2/20 PM 03:48:12**
Applicant:	**Marlow Industries,Inc**	**Test Rating:**	**AC 110V/60Hz**
Product:	**Black Box**	**Temp.(℃)/Hum.(%):**	**16(℃)/63%**
Model No.:	**PCE-201-M-1-0**	**Test Engineer:**	**Hugo Chang**
Test Mode:	**BT 2402 TX**		
Remark:	Input:100-240Vac,47-63Hz,2.2A MAX Output:24Vdc,6.6A		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (◦)	Remark
1	6012.821	17.18	29.10	46.28	74.00	-27.72	peak			
2	6884.615	18.20	29.48	47.68	74.00	-26.32	peak			
3	8001.603	21.15	28.30	49.45	74.00	-24.55	peak			

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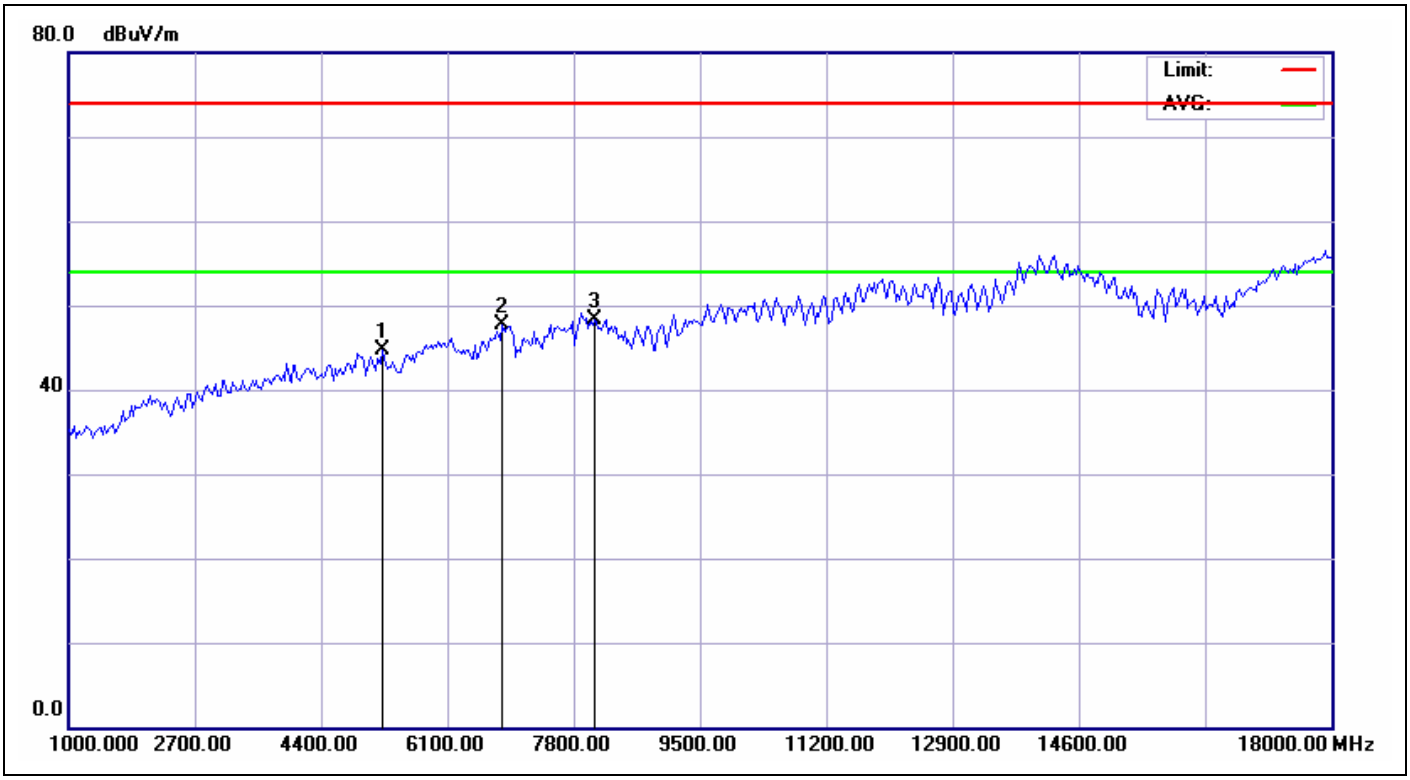

Service No.:	**113150660**	**Test Distance:**	**3m**
Test Standard:	**FCC above 1G PEAK**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2012/2/20 PM 03:49:50**
Applicant:	**Marlow Industries,Inc**	**Test Rating:**	**AC 110V/60Hz**
Product:	**Black Box**	**Temp.(℃)/Hum.(%):**	**16(℃)/63%**
Model No.:	**PCE-201-M-1-0**	**Test Engineer:**	**Hugo Chang**
Test Mode:	**BT 2441 TX**		
Remark:	Input:100-240Vac,47-63Hz,2.2A MAX Output:24Vdc,6.6A		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (◦)	Remark
1	5222.756	14.05	30.67	44.72	74.00	-29.28	peak			
2	6830.128	18.00	29.80	47.80	74.00	-26.20	peak			
3	8083.333	20.78	27.62	48.40	74.00	-25.60	peak			

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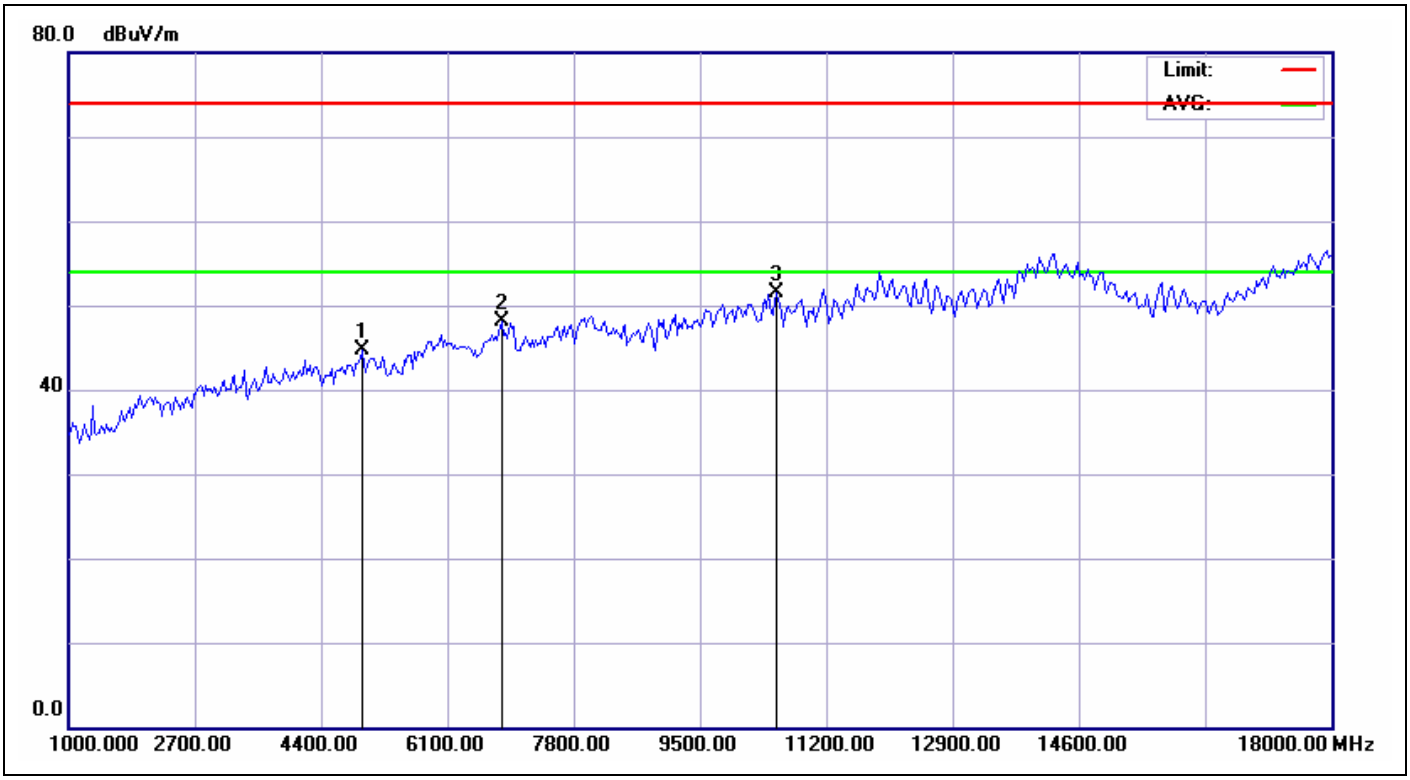

Service No.:	**113150660**	**Test Distance:**	**3m**
Test Standard:	**FCC above 1G PEAK**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2012/2/20 PM 03:51:24**
Applicant:	**Marlow Industries,Inc**	**Test Rating:**	**AC 110V/60Hz**
Product:	**Black Box**	**Temp.(℃)/Hum.(%):**	**16(℃)/63%**
Model No.:	**PCE-201-M-1-0**	**Test Engineer:**	**Hugo Chang**
Test Mode:	**BT 2441 TX**		
Remark:	Input:100-240Vac,47-63Hz,2.2A MAX Output:24Vdc,6.6A		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (◦)	Remark
1	4950.321	13.60	31.16	44.76	74.00	-29.24	peak			
2	6830.128	18.00	30.15	48.15	74.00	-25.85	peak			
3	10535.256	23.09	28.38	51.47	74.00	-22.53	peak			

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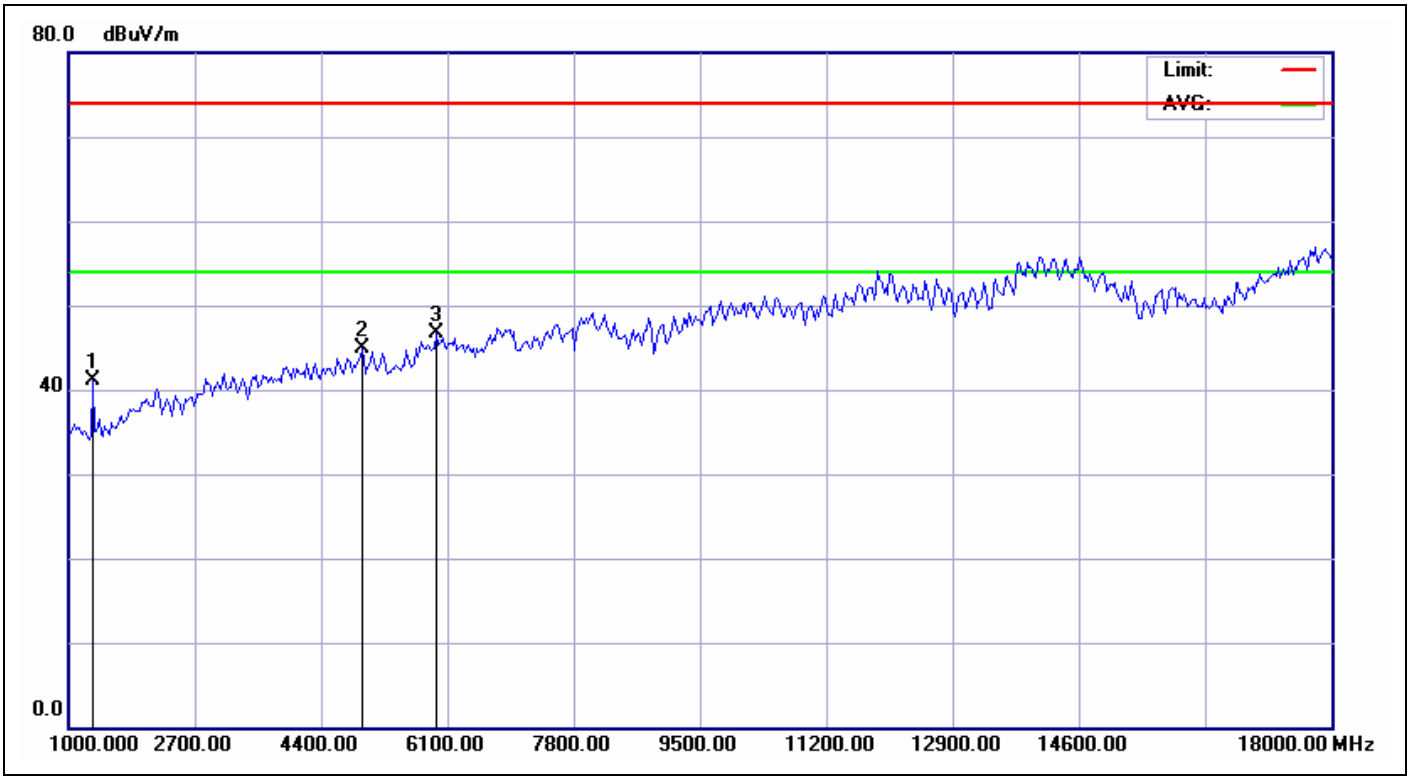

Service No.:	**113150660**	**Test Distance:**	**3m**
Test Standard:	**FCC above 1G PEAK**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2012/2/20 PM 03:53:16**
Applicant:	**Marlow Industries,Inc**	**Test Rating:**	**AC 110V/60Hz**
Product:	**Black Box**	**Temp.(℃)/Hum.(%):**	**16(℃)/63%**
Model No.:	**PCE-201-M-1-0**	**Test Engineer:**	**Hugo Chang**
Test Mode:	**BT 2480 TX**		
Remark:	Input:100-240Vac,47-63Hz,2.2A MAX Output:24Vdc,6.6A		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (◦)	Remark
1	1326.923	3.66	37.54	41.20	74.00	-32.80	peak			
2	4950.321	13.60	31.22	44.82	74.00	-29.18	peak			
3	5958.333	16.96	29.66	46.62	74.00	-27.38	peak			

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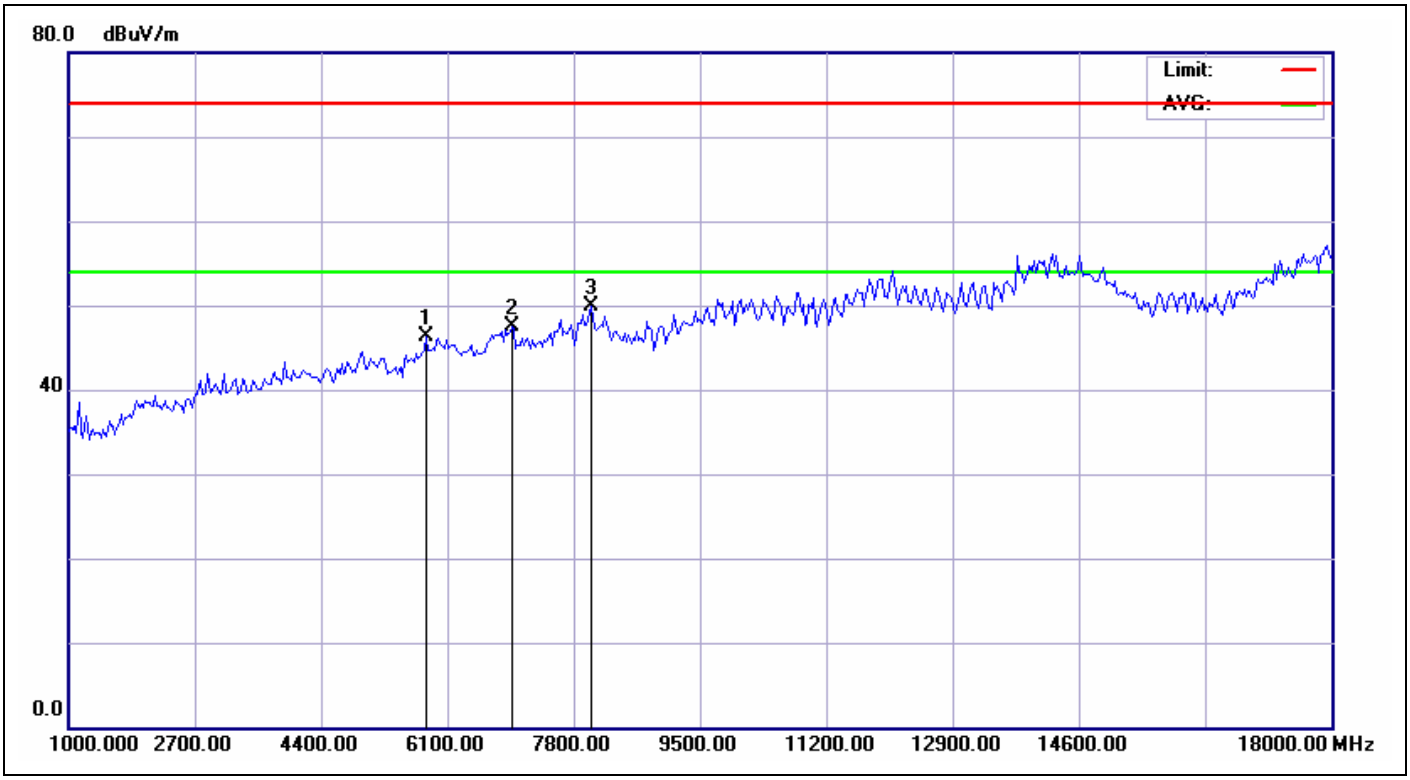

Service No.:	**113150660**	**Test Distance:**	**3m**
Test Standard:	**FCC above 1G PEAK**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2012/2/20 PM 03:54:43**
Applicant:	**Marlow Industries,Inc**	**Test Rating:**	**AC 110V/60Hz**
Product:	**Black Box**	**Temp.(℃)/Hum.(%):**	**16(℃)/63%**
Model No.:	**PCE-201-M-1-0**	**Test Engineer:**	**Hugo Chang**
Test Mode:	**BT 2480 TX**		
Remark:	Input:100-240Vac,47-63Hz,2.2A MAX Output:24Vdc,6.6A		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (◦)	Remark
1	5822.115	16.21	30.02	46.23	74.00	-27.77	peak			
2	6966.346	18.49	29.08	47.57	74.00	-26.43	peak			
3	8028.846	21.02	28.86	49.88	74.00	-24.12	peak			

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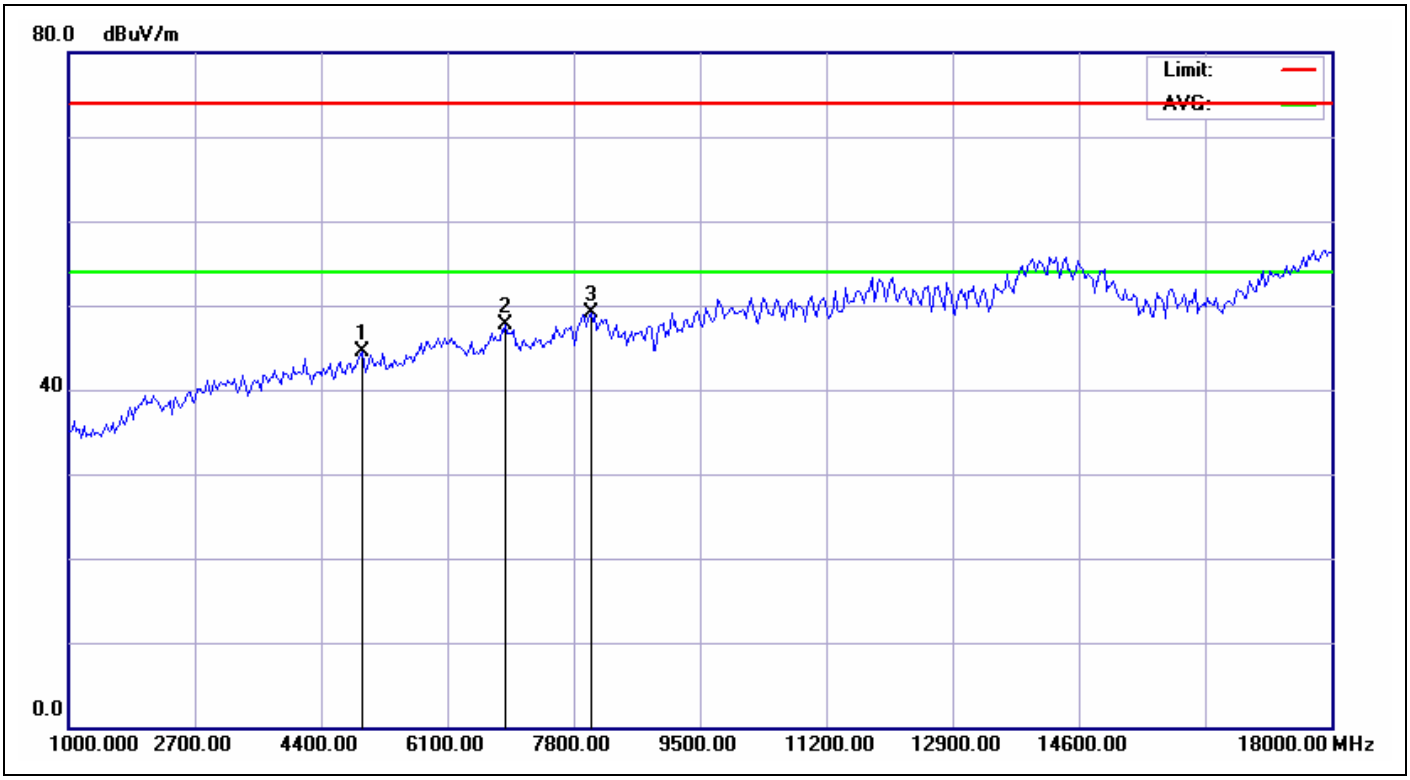

Service No.:	**113150660**	**Test Distance:**	**3m**
Test Standard:	**FCC above 1G PEAK**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2012/2/20 PM 03:56:44**
Applicant:	**Marlow Industries,Inc**	**Test Rating:**	**AC 110V/60Hz**
Product:	**Black Box**	**Temp.(℃)/Hum.(%):**	**16(℃)/63%**
Model No.:	**PCE-201-M-1-0**	**Test Engineer:**	**Hugo Chang**
Test Mode:	**EDR 2402 TX**		
Remark:	Input:100-240Vac,47-63Hz,2.2A MAX Output:24Vdc,6.6A		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (◦)	Remark
1	4950.321	13.60	30.81	44.41	74.00	-29.59	peak			
2	6884.615	18.20	29.57	47.77	74.00	-26.23	peak			
3	8028.846	21.02	28.05	49.07	74.00	-24.93	peak			

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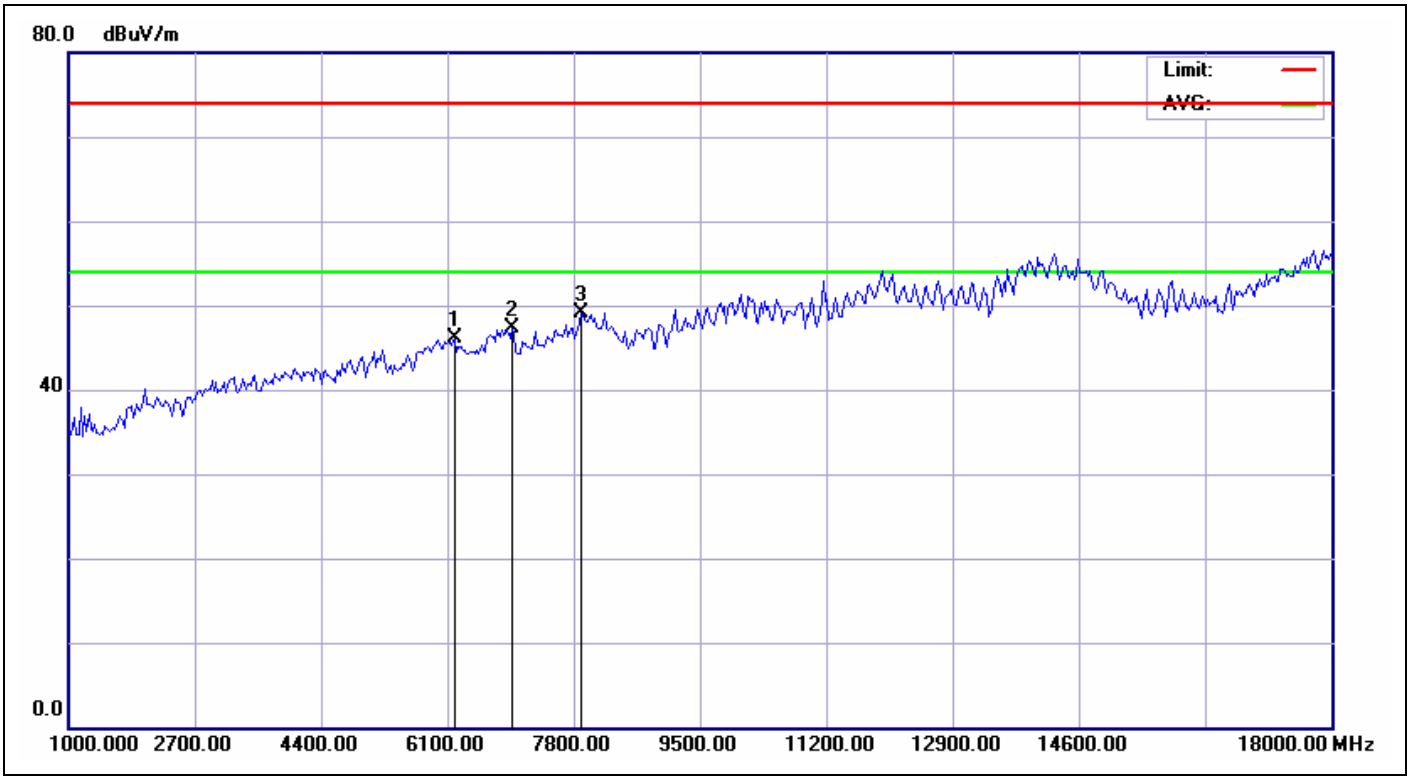

Service No.:	**113150660**	**Test Distance:**	**3m**
Test Standard:	**FCC above 1G PEAK**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2012/2/20 PM 03:58:31**
Applicant:	**Marlow Industries,Inc**	**Test Rating:**	**AC 110V/60Hz**
Product:	**Black Box**	**Temp.(℃)/Hum.(%):**	**16(℃)/63%**
Model No.:	**PCE-201-M-1-0**	**Test Engineer:**	**Hugo Chang**
Test Mode:	**EDR 2402 TX**		
Remark:	Input:100-240Vac,47-63Hz,2.2A MAX Output:24Vdc,6.6A		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (◦)	Remark
1	6203.526	17.05	28.98	46.03	74.00	-27.97	peak			
2	6966.346	18.49	28.90	47.39	74.00	-26.61	peak			
3	7892.628	20.73	28.33	49.06	74.00	-24.94	peak			

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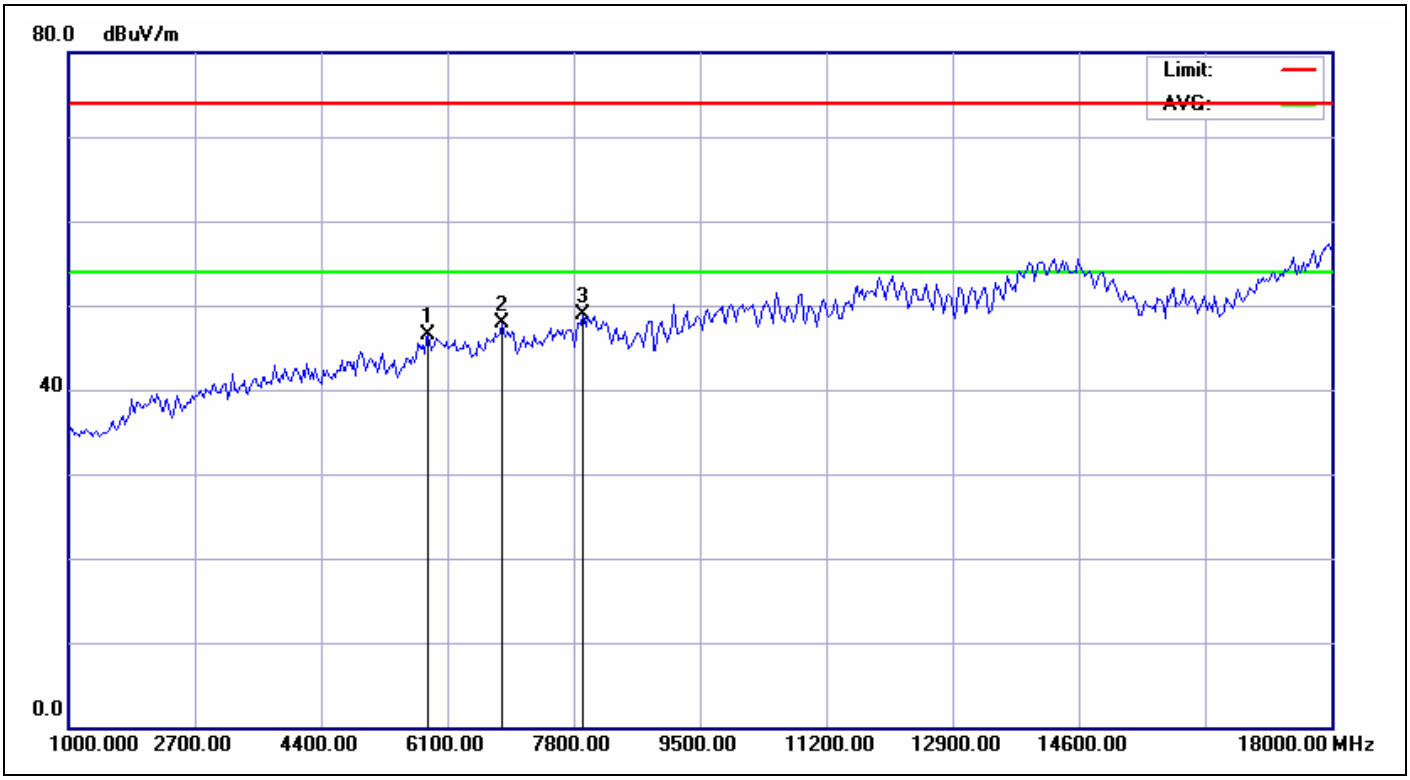

Service No.:	**113150660**	**Test Distance:**	**3m**
Test Standard:	**FCC above 1G PEAK**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2012/2/20 PM 04:00:05**
Applicant:	**Marlow Industries,Inc**	**Test Rating:**	**AC 110V/60Hz**
Product:	**Black Box**	**Temp.(℃)/Hum.(%):**	**16(℃)/63%**
Model No.:	**PCE-201-M-1-0**	**Test Engineer:**	**Hugo Chang**
Test Mode:	**EDR 2441 TX**		
Remark:	Input:100-240Vac,47-63Hz,2.2A MAX Output:24Vdc,6.6A		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (◦)	Remark
1	5849.359	16.36	30.22	46.58	74.00	-27.42	peak			
2	6830.128	18.00	29.85	47.85	74.00	-26.15	peak			
3	7919.872	20.84	27.97	48.81	74.00	-25.19	peak			

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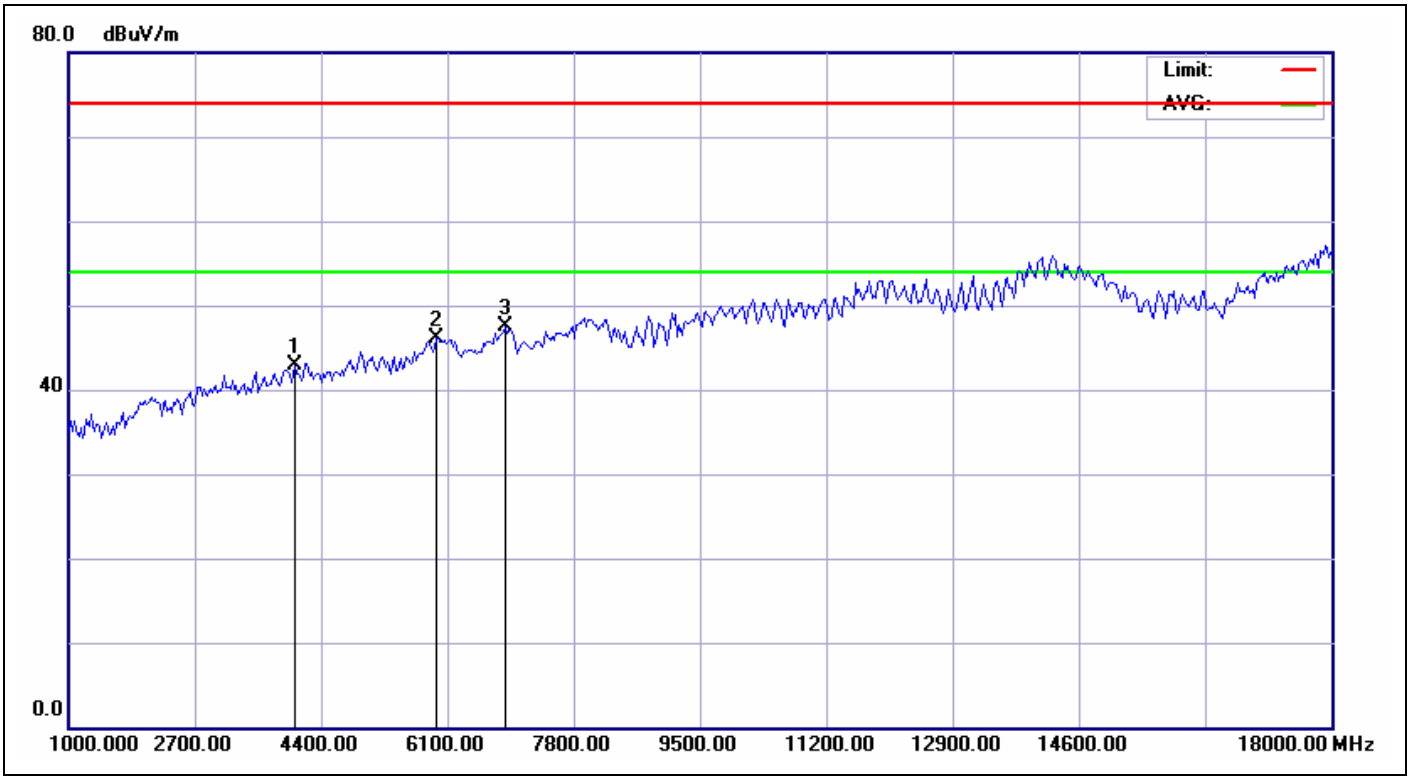

Service No.:	**113150660**	**Test Distance:**	**3m**
Test Standard:	**FCC above 1G PEAK**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2012/2/20 PM 04:01:33**
Applicant:	**Marlow Industries,Inc**	**Test Rating:**	**AC 110V/60Hz**
Product:	**Black Box**	**Temp.(℃)/Hum.(%):**	**16(℃)/63%**
Model No.:	**PCE-201-M-1-0**	**Test Engineer:**	**Hugo Chang**
Test Mode:	**EDR 2441 TX**		
Remark:	Input:100-240Vac,47-63Hz,2.2A MAX Output:24Vdc,6.6A		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (◦)	Remark
1	4051.282	11.45	31.37	42.82	74.00	-31.18	peak			
2	5958.333	16.96	29.22	46.18	74.00	-27.82	peak			
3	6884.615	18.20	29.38	47.58	74.00	-26.42	peak			

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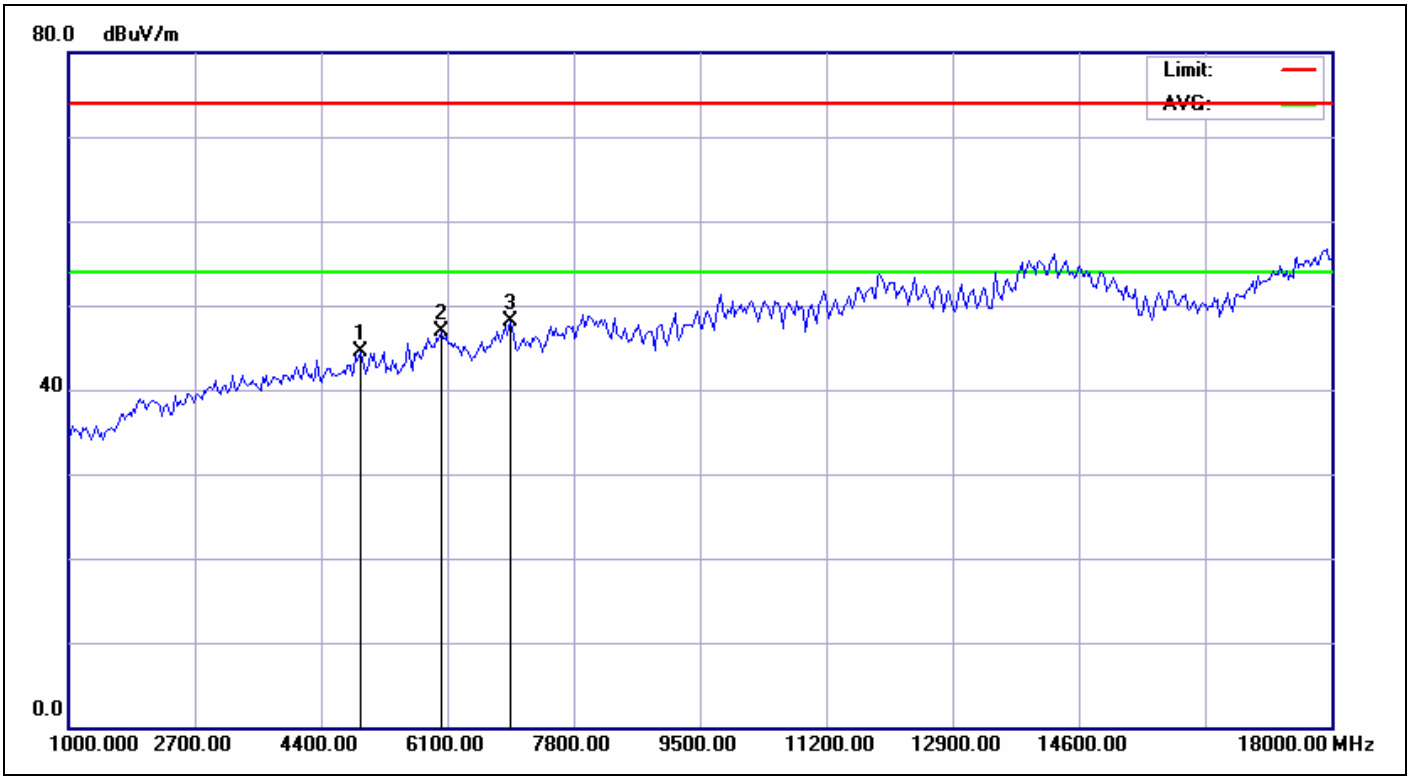

Service No.:	**113150660**	**Test Distance:**	**3m**
Test Standard:	**FCC above 1G PEAK**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2012/2/20 PM 04:03:17**
Applicant:	**Marlow Industries,Inc**	**Test Rating:**	**AC 110V/60Hz**
Product:	**Black Box**	**Temp.(℃)/Hum.(%):**	**16(℃)/63%**
Model No.:	**PCE-201-M-1-0**	**Test Engineer:**	**Hugo Chang**
Test Mode:	**EDR 2480 TX**		
Remark:	Input:100-240Vac,47-63Hz,2.2A MAX Output:24Vdc,6.6A		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (◦)	Remark
1	4923.077	13.51	31.09	44.60	74.00	-29.40	peak			
2	6012.821	17.18	29.64	46.82	74.00	-27.18	peak			
3	6939.103	18.38	29.73	48.11	74.00	-25.89	peak			

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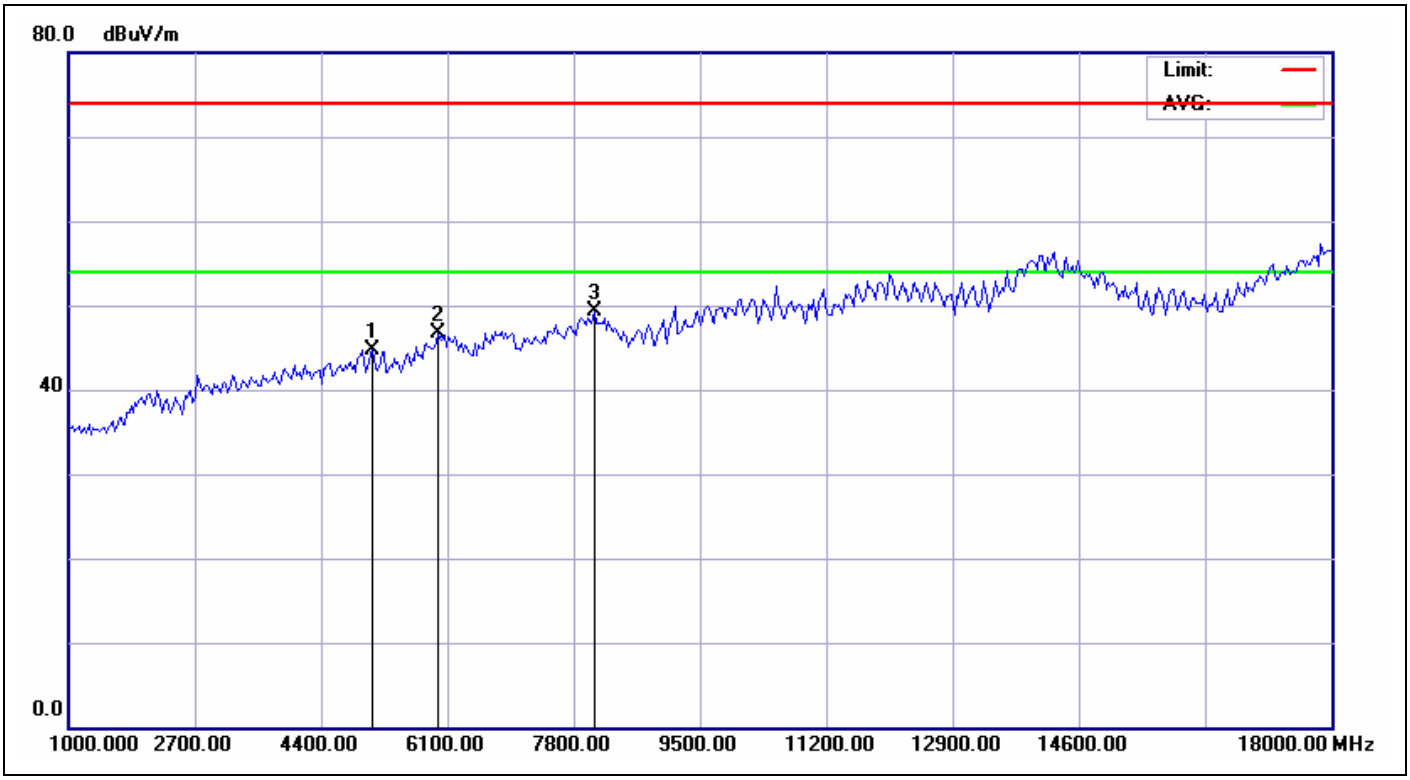

Service No.:	**113150660**	**Test Distance:**	**3m**
Test Standard:	**FCC above 1G PEAK**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2012/2/20 PM 04:05:42**
Applicant:	**Marlow Industries,Inc**	**Test Rating:**	**AC 110V/60Hz**
Product:	**Black Box**	**Temp.(℃)/Hum.(%):**	**16(℃)/63%**
Model No.:	**PCE-201-M-1-0**	**Test Engineer:**	**Hugo Chang**
Test Mode:	**EDR 2480 TX**		
Remark:	Input:100-240Vac,47-63Hz,2.2A MAX Output:24Vdc,6.6A		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (◦)	Remark
1	5086.538	13.88	30.80	44.68	74.00	-29.32	peak			
2	5985.577	17.11	29.50	46.61	74.00	-27.39	peak			
3	8083.333	20.78	28.51	49.29	74.00	-24.71	peak			

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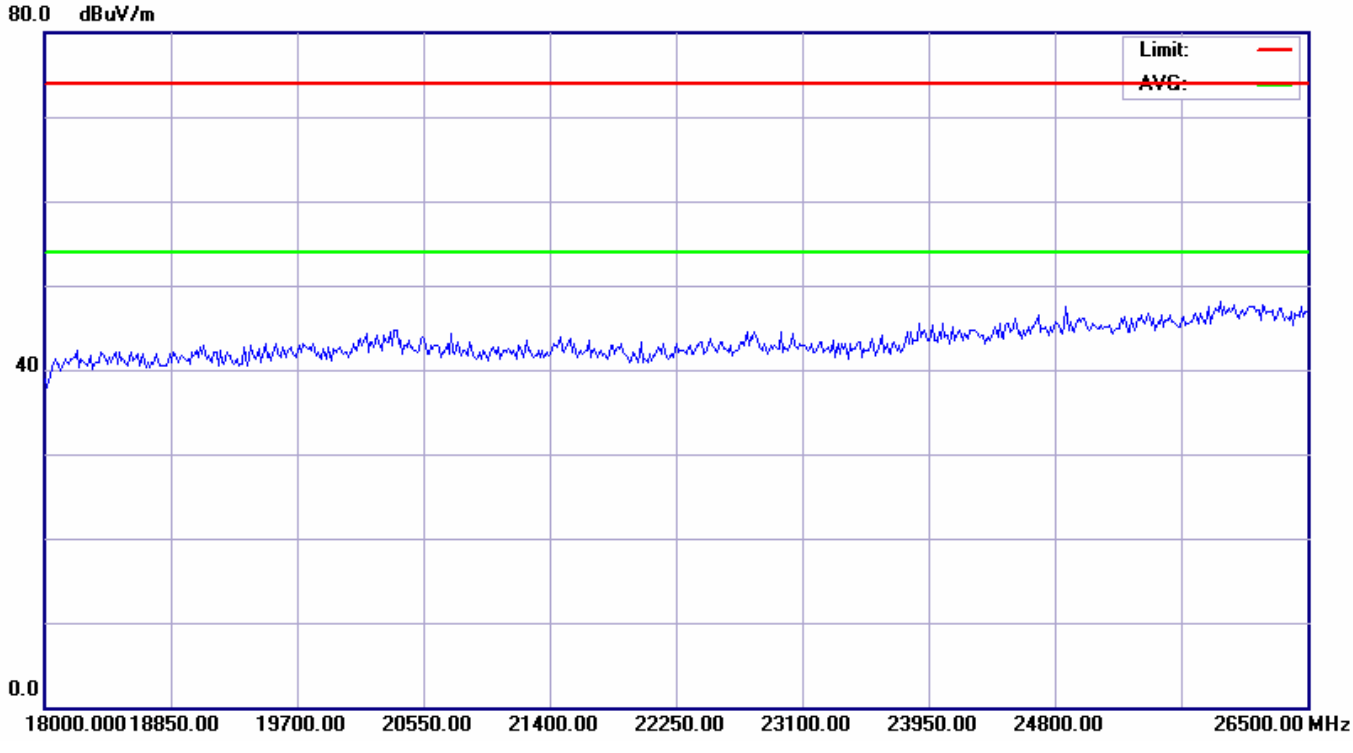

Service No.:	**113150660**	**Test Distance:**	**3m**
Test Standard:	**FCC above 1G PEAK**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2012/2/20 PM 04:48:01**
Applicant:	**Marlow Industries,Inc**	**Test Rating:**	**AC 110V/60Hz**
Product:	**Black Box**	**Temp.(℃)/Hum.(%):**	**16(℃)/63%**
Model No.:	**PCE-201-M-1-0**	**Test Engineer:**	**Hugo Chang**
Test Mode:	**BT 2402 TX**		
Remark:	Input:100-240Vac,47-63Hz,2.2A MAX Output:24Vdc,6.6A		

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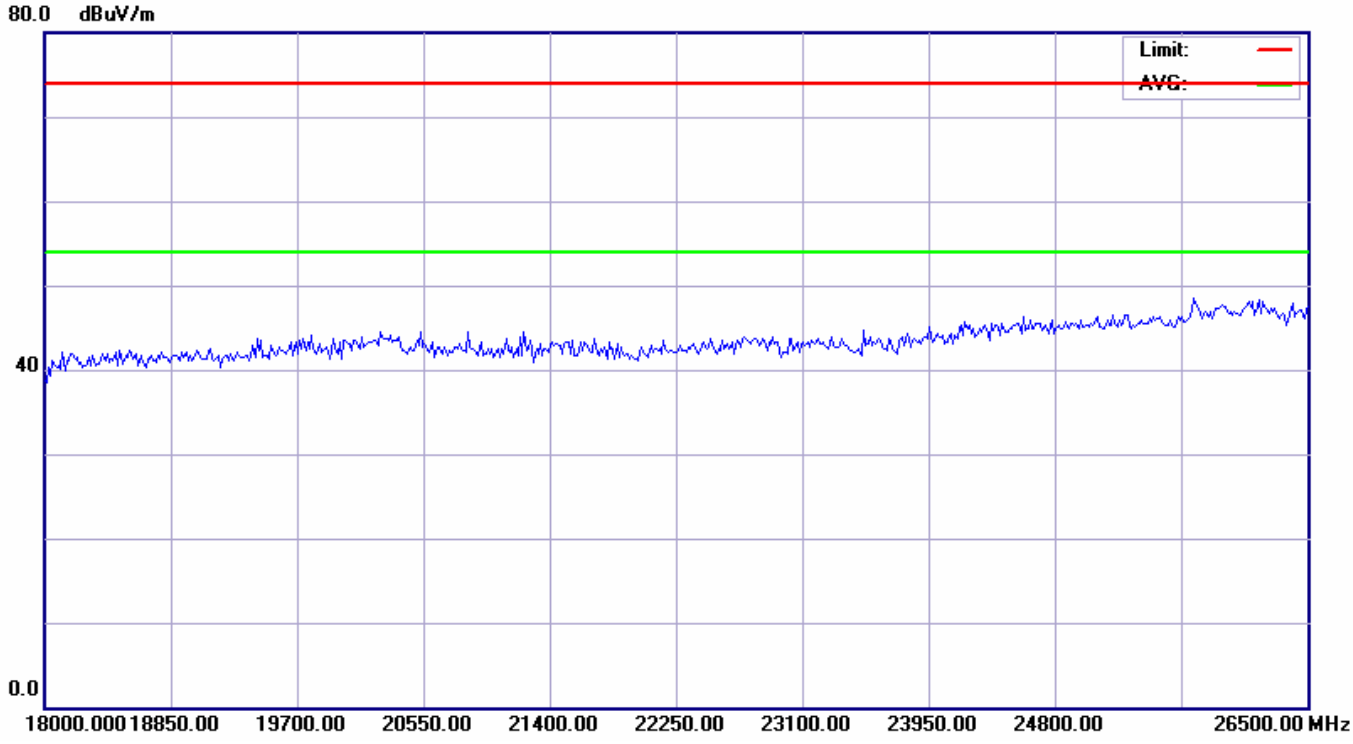

Service No.:	**113150660**	**Test Distance:**	**3m**
Test Standard:	**FCC above 1G PEAK**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2012/2/20 PM 04:48:39**
Applicant:	**Marlow Industries,Inc**	**Test Rating:**	**AC 110V/60Hz**
Product:	**Black Box**	**Temp.(℃)/Hum.(%):**	**16(℃)/63%**
Model No.:	**PCE-201-M-1-0**	**Test Engineer:**	**Hugo Chang**
Test Mode:	**BT 2402 TX**		
Remark:	Input:100-240Vac,47-63Hz,2.2A MAX Output:24Vdc,6.6A		

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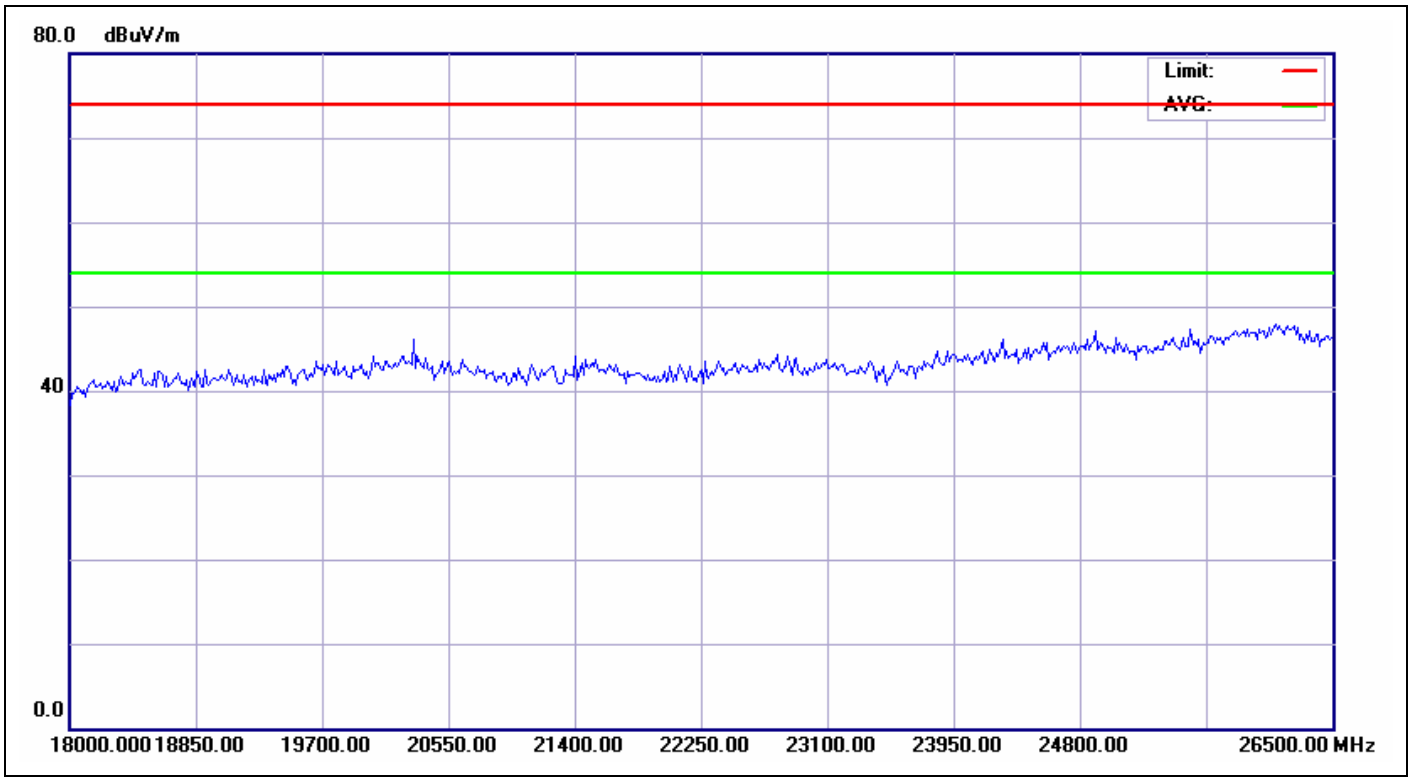

Service No.:	**113150660**	**Test Distance:**	**3m**
Test Standard:	**FCC above 1G PEAK**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2012/2/20 PM 04:49:13**
Applicant:	**Marlow Industries,Inc**	**Test Rating:**	**AC 110V/60Hz**
Product:	**Black Box**	**Temp.(℃)/Hum.(%):**	**16(℃)/63%**
Model No.:	**PCE-201-M-1-0**	**Test Engineer:**	**Hugo Chang**
Test Mode:	**BT 2441 TX**		
Remark:	Input:100-240Vac,47-63Hz,2.2A MAX Output:24Vdc,6.6A		

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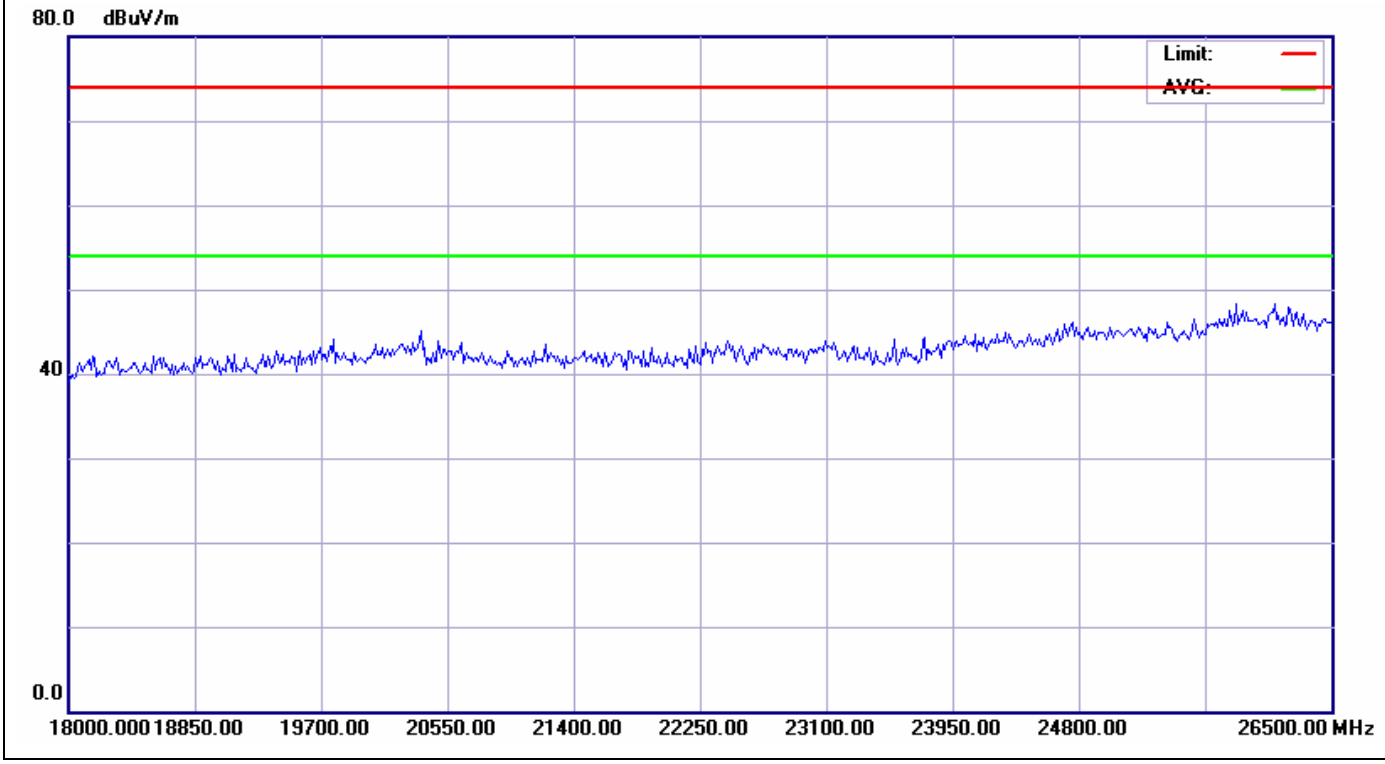

Service No.:	**113150660**	**Test Distance:**	**3m**
Test Standard:	**FCC above 1G PEAK**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2012/2/20 PM 04:49:36**
Applicant:	**Marlow Industries,Inc**	**Test Rating:**	**AC 110V/60Hz**
Product:	**Black Box**	**Temp.(℃)/Hum.(%):**	**16(℃)/63%**
Model No.:	**PCE-201-M-1-0**	**Test Engineer:**	**Hugo Chang**
Test Mode:	**BT 2441 TX**		
Remark:	Input:100-240Vac,47-63Hz,2.2A MAX Output:24Vdc,6.6A		

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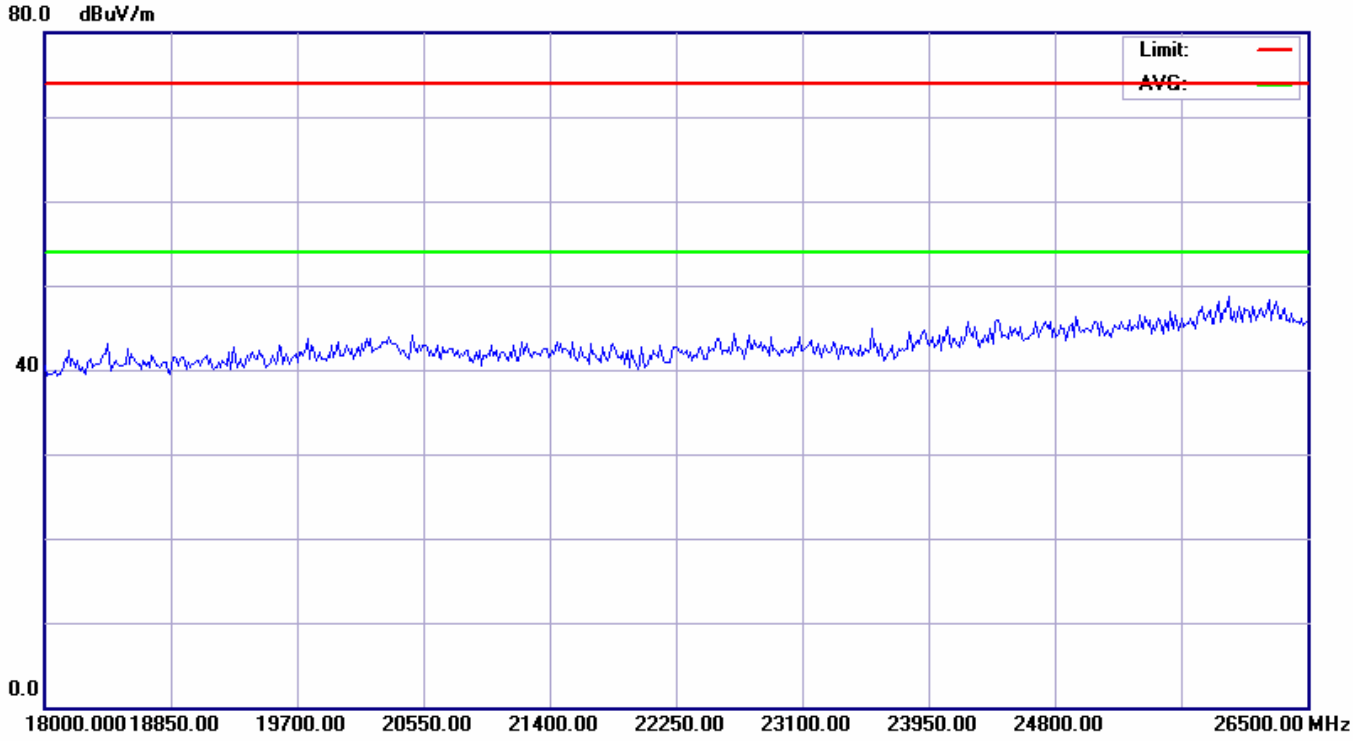

Service No.:	**113150660**	**Test Distance:**	**3m**
Test Standard:	**FCC above 1G PEAK**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2012/2/20 PM 04:50:06**
Applicant:	**Marlow Industries,Inc**	**Test Rating:**	**AC 110V/60Hz**
Product:	**Black Box**	**Temp.(℃)/Hum.(%):**	**16(℃)/63%**
Model No.:	**PCE-201-M-1-0**	**Test Engineer:**	**Hugo Chang**
Test Mode:	**BT 2480 TX**		
Remark:	Input:100-240Vac,47-63Hz,2.2A MAX Output:24Vdc,6.6A		

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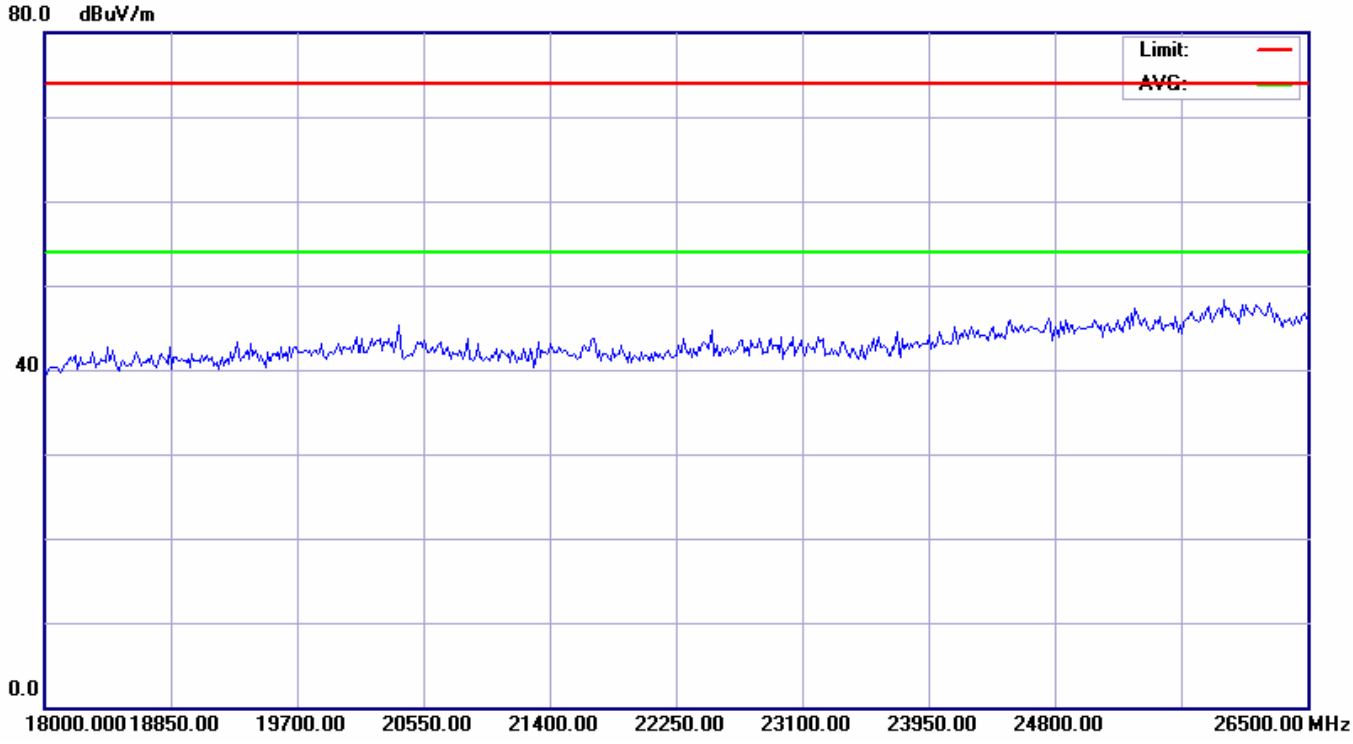

Service No.:	**113150660**	**Test Distance:**	**3m**
Test Standard:	**FCC above 1G PEAK**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2012/2/20 PM 04:50:33**
Applicant:	**Marlow Industries,Inc**	**Test Rating:**	**AC 110V/60Hz**
Product:	**Black Box**	**Temp.(℃)/Hum.(%):**	**16(℃)/63%**
Model No.:	**PCE-201-M-1-0**	**Test Engineer:**	**Hugo Chang**
Test Mode:	**BT 2480 TX**		
Remark:	Input:100-240Vac,47-63Hz,2.2A MAX Output:24Vdc,6.6A		

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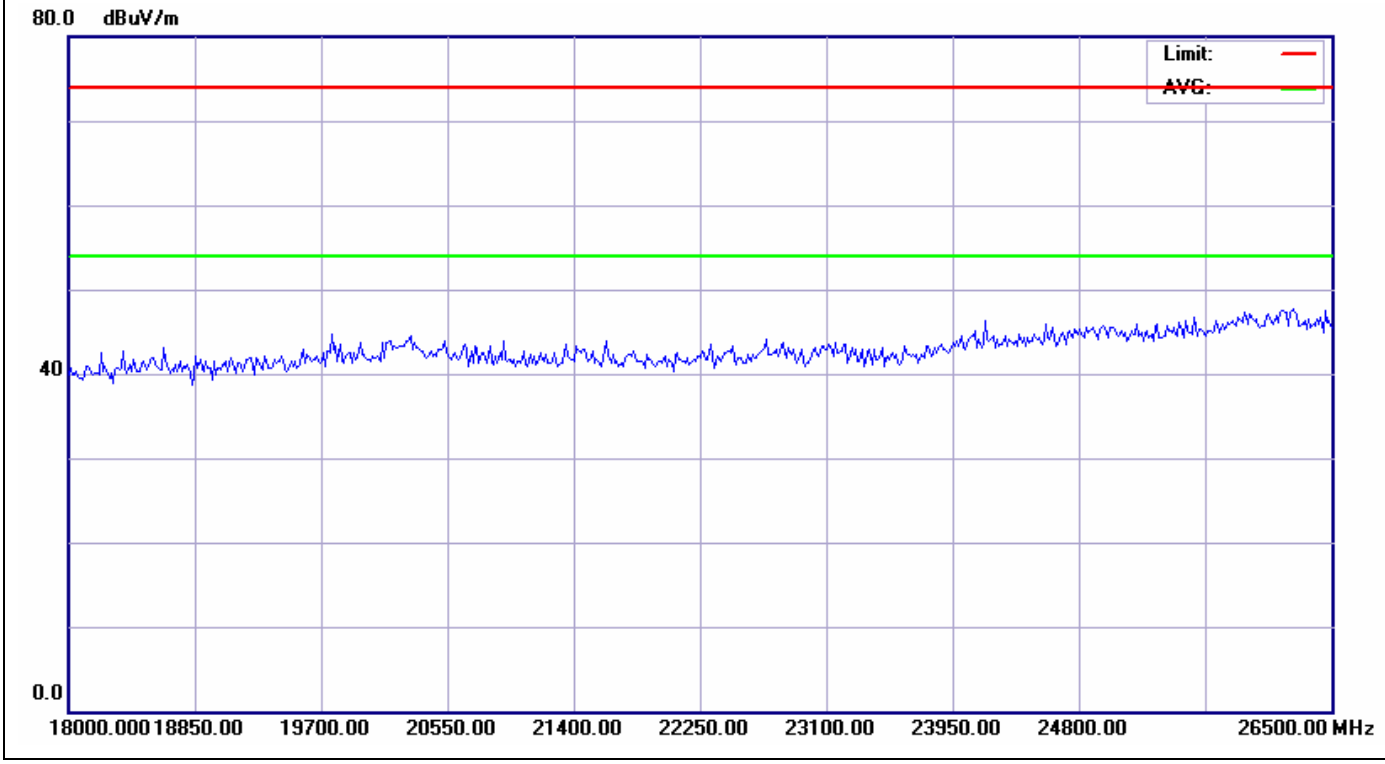

Service No.:	**113150660**	**Test Distance:**	**3m**
Test Standard:	**FCC above 1G PEAK**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2012/2/20 PM 04:51:05**
Applicant:	**Marlow Industries,Inc**	**Test Rating:**	**AC 110V/60Hz**
Product:	**Black Box**	**Temp.(℃)/Hum.(%):**	**16(℃)/63%**
Model No.:	**PCE-201-M-1-0**	**Test Engineer:**	**Hugo Chang**
Test Mode:	**EDR 2402 TX**		
Remark:	Input:100-240Vac,47-63Hz,2.2A MAX Output:24Vdc,6.6A		

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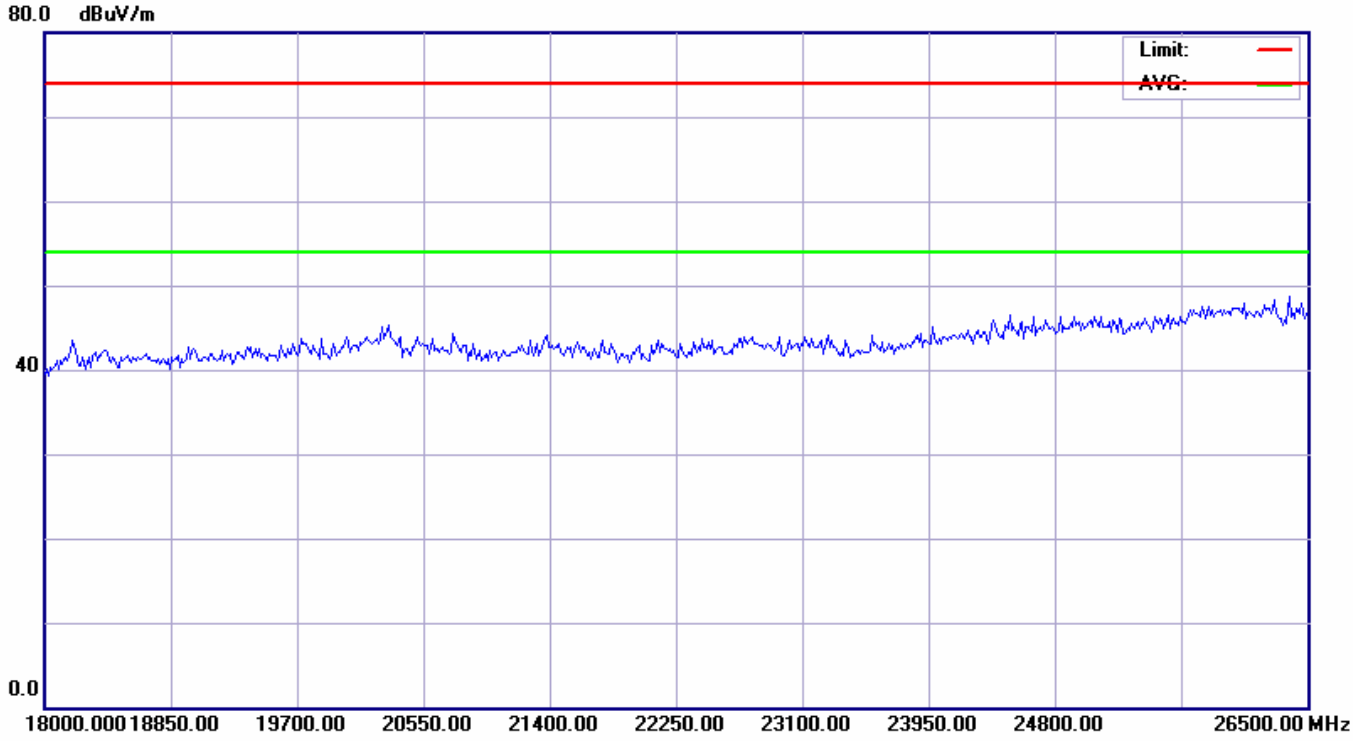

Service No.:	**113150660**	**Test Distance:**	**3m**
Test Standard:	**FCC above 1G PEAK**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2012/2/20 PM 04:51:33**
Applicant:	**Marlow Industries,Inc**	**Test Rating:**	**AC 110V/60Hz**
Product:	**Black Box**	**Temp.(℃)/Hum.(%):**	**16(℃)/63%**
Model No.:	**PCE-201-M-1-0**	**Test Engineer:**	**Hugo Chang**
Test Mode:	**EDR 2402 TX**		
Remark:	Input:100-240Vac,47-63Hz,2.2A MAX Output:24Vdc,6.6A		

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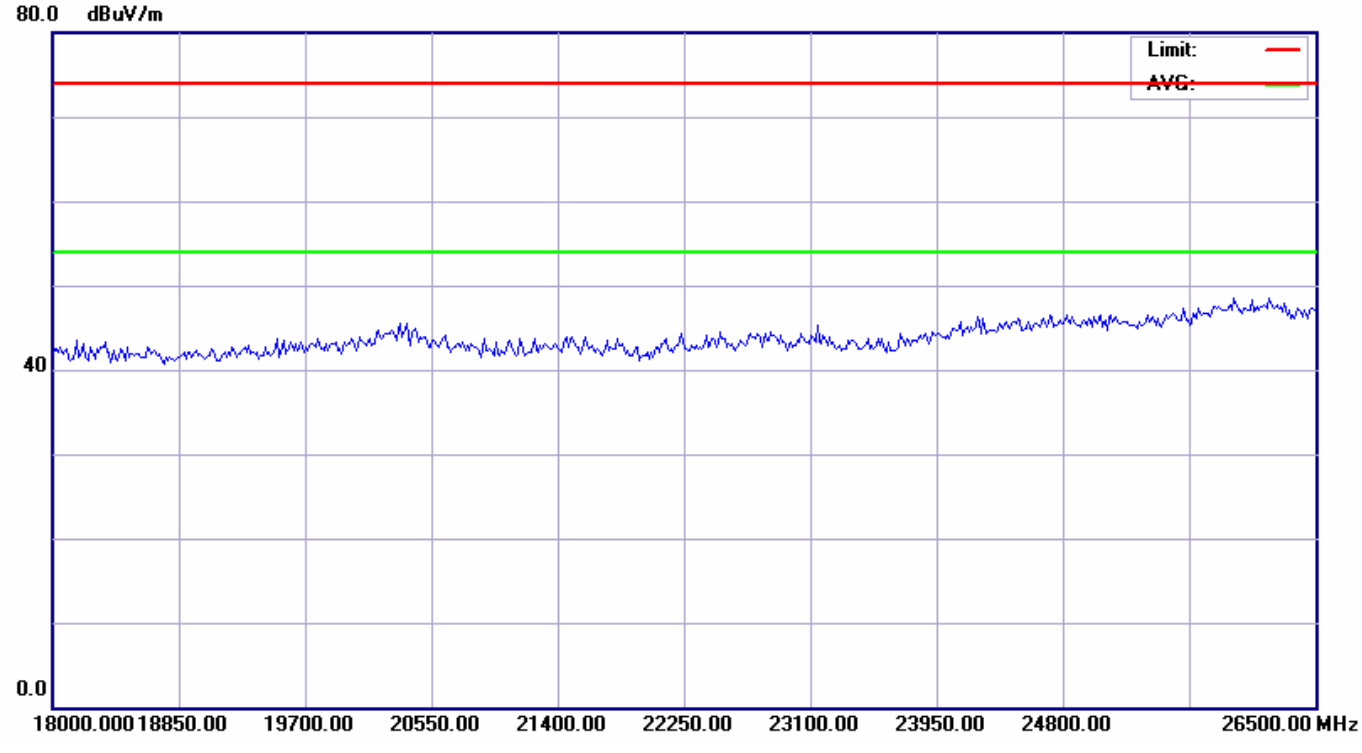

Service No.:	**113150660**	**Test Distance:**	**3m**
Test Standard:	**FCC above 1G PEAK**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2012/2/20 PM 04:52:22**
Applicant:	**Marlow Industries,Inc**	**Test Rating:**	**AC 110V/60Hz**
Product:	**Black Box**	**Temp.(℃)/Hum.(%):**	**16(℃)/63%**
Model No.:	**PCE-201-M-1-0**	**Test Engineer:**	**Hugo Chang**
Test Mode:	**EDR 2441 TX**		
Remark:	Input:100-240Vac,47-63Hz,2.2A MAX Output:24Vdc,6.6A		

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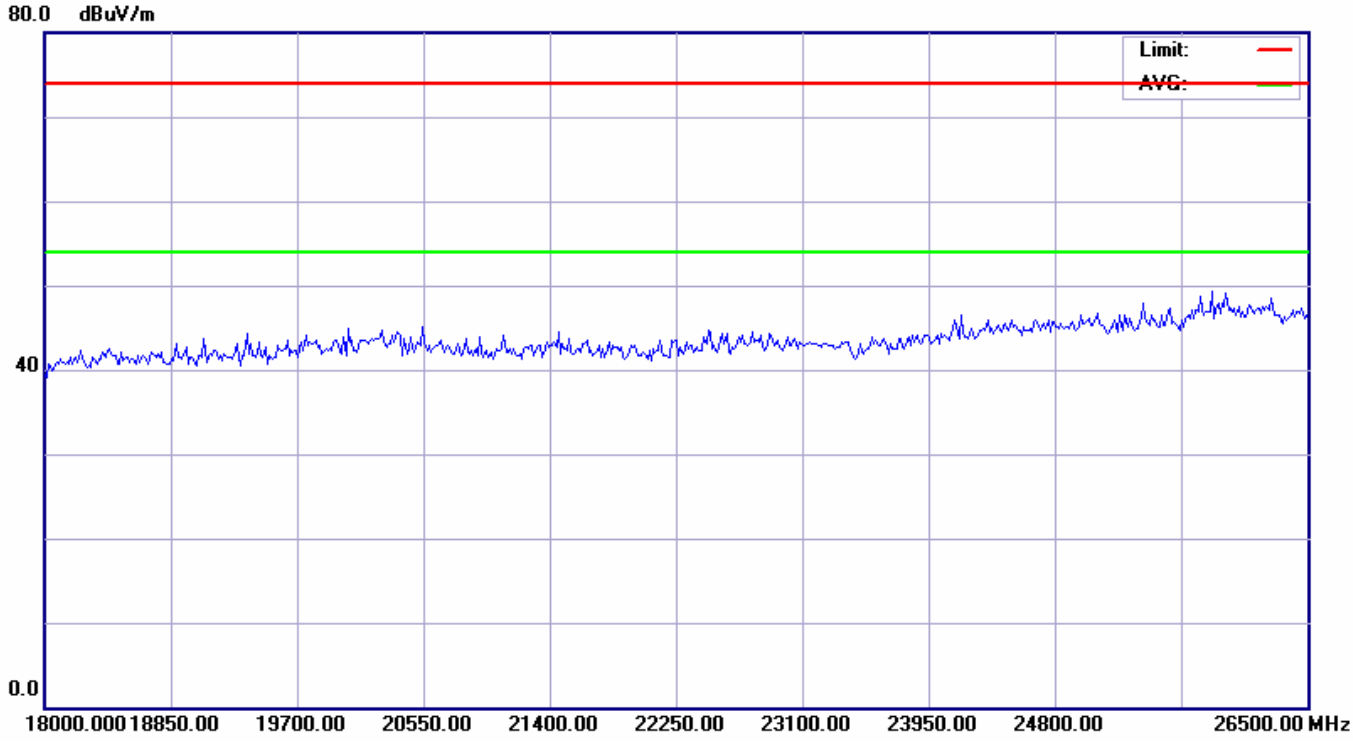

Service No.:	**113150660**	**Test Distance:**	**3m**
Test Standard:	**FCC above 1G PEAK**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2012/2/20 PM 04:53:32**
Applicant:	**Marlow Industries,Inc**	**Test Rating:**	**AC 110V/60Hz**
Product:	**Black Box**	**Temp.(℃)/Hum.(%):**	**16(℃)/63%**
Model No.:	**PCE-201-M-1-0**	**Test Engineer:**	**Hugo Chang**
Test Mode:	**EDR 2441 TX**		
Remark:	Input:100-240Vac,47-63Hz,2.2A MAX Output:24Vdc,6.6A		

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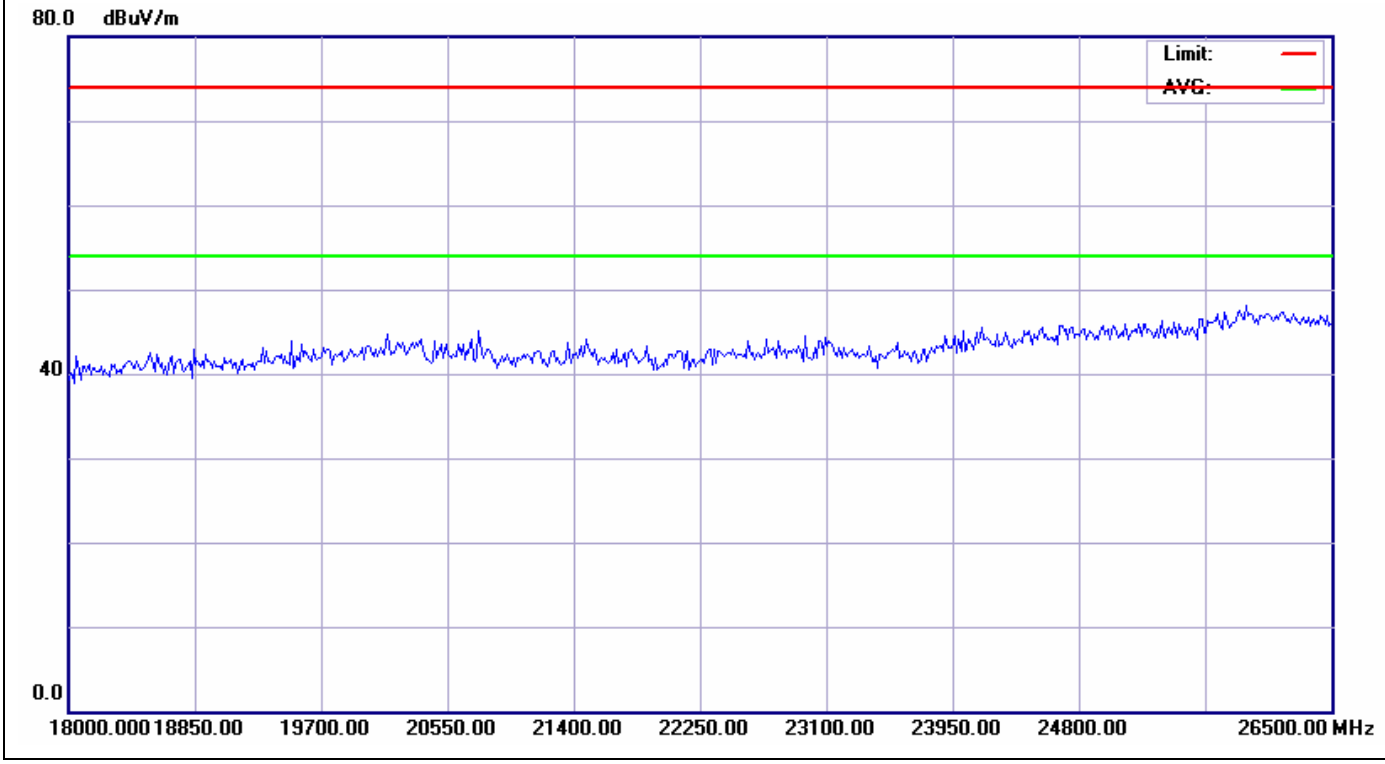

Service No.:	**113150660**	**Test Distance:**	**3m**
Test Standard:	**FCC above 1G PEAK**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2012/2/20 PM 04:54:02**
Applicant:	**Marlow Industries,Inc**	**Test Rating:**	**AC 110V/60Hz**
Product:	**Black Box**	**Temp.(℃)/Hum.(%):**	**16(℃)/63%**
Model No.:	**PCE-201-M-1-0**	**Test Engineer:**	**Hugo Chang**
Test Mode:	**EDR 2480 TX**		
Remark:	Input:100-240Vac,47-63Hz,2.2A MAX Output:24Vdc,6.6A		

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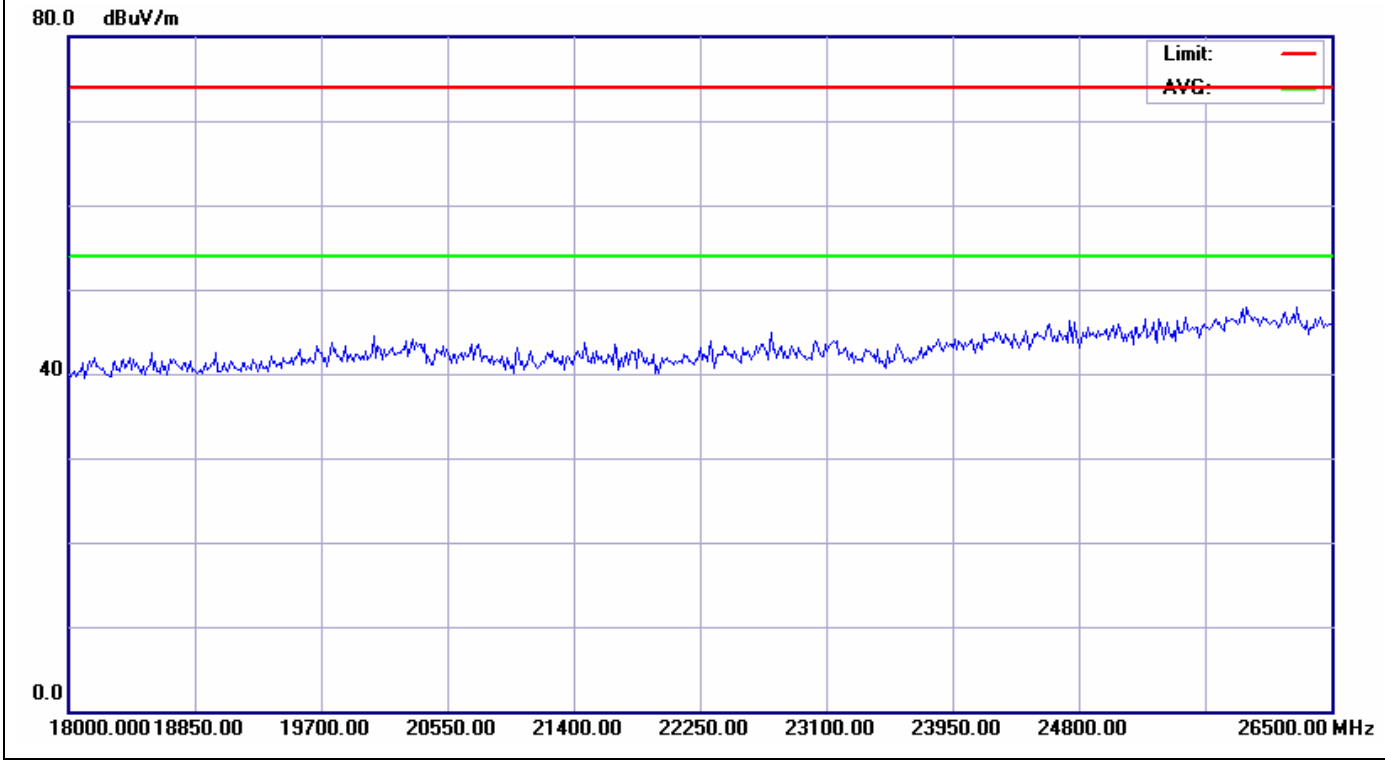
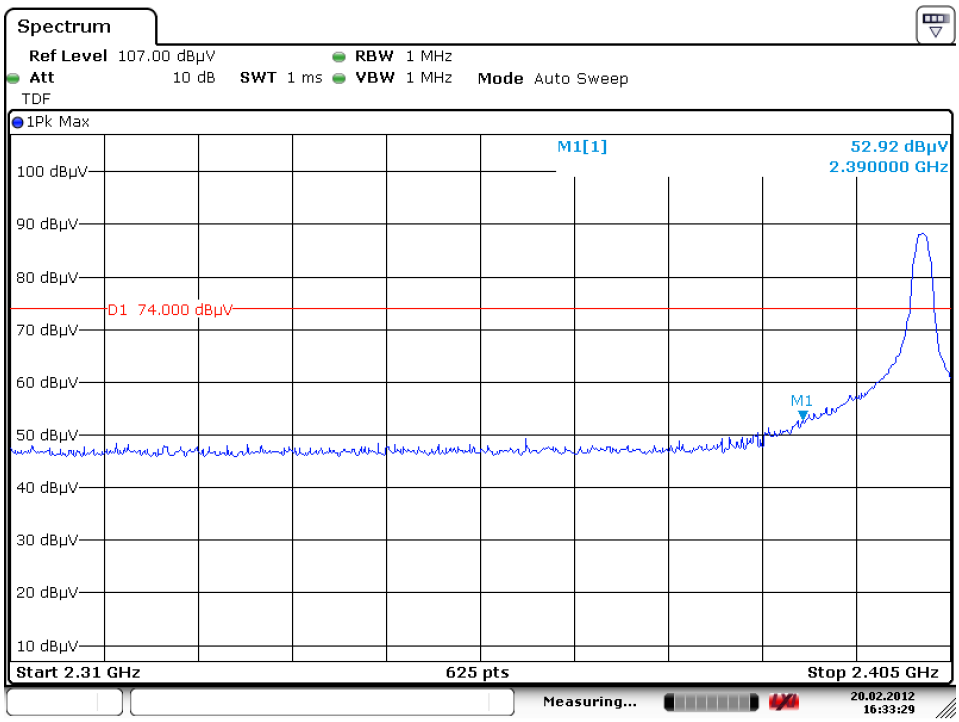


Service No.:	**113150660**	**Test Distance:**	**3m**
Test Standard:	**FCC above 1G PEAK**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2012/2/20 PM 04:54:26**
Applicant:	**Marlow Industries,Inc**	**Test Rating:**	**AC 110V/60Hz**
Product:	**Black Box**	**Temp.(℃)/Hum.(%):**	**16(℃)/63%**
Model No.:	**PCE-201-M-1-0**	**Test Engineer:**	**Hugo Chang**
Test Mode:	**EDR 2480 TX**		
Remark:	Input:100-240Vac,47-63Hz,2.2A MAX Output:24Vdc,6.6A		

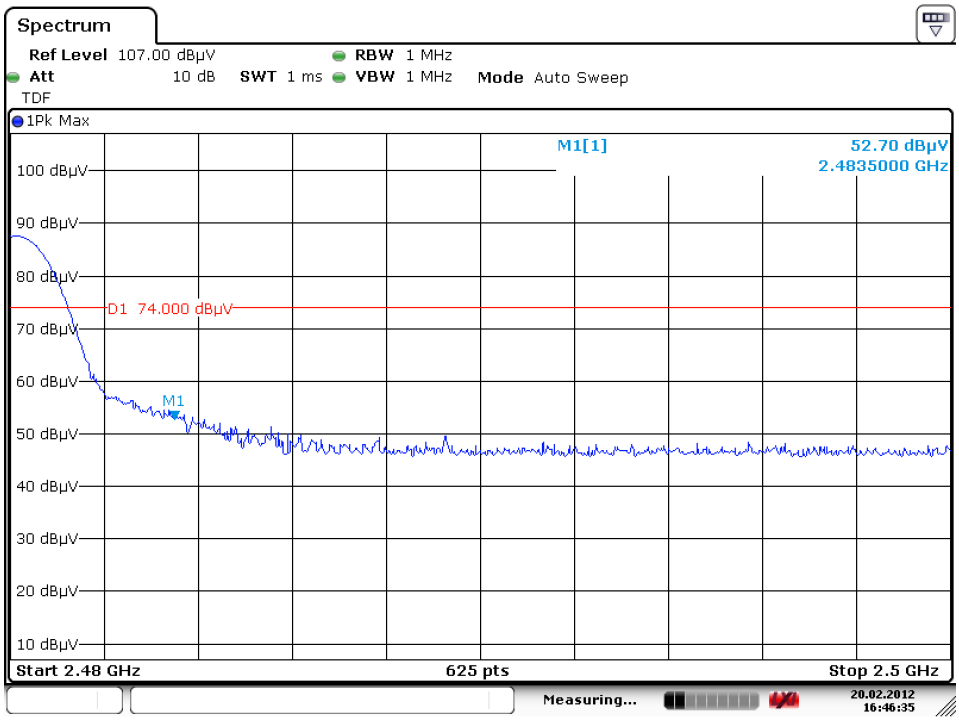
Radiated Bandedge (GFSK)

Low Channel (H)



Date: 20.FEB.2012 16:33:29

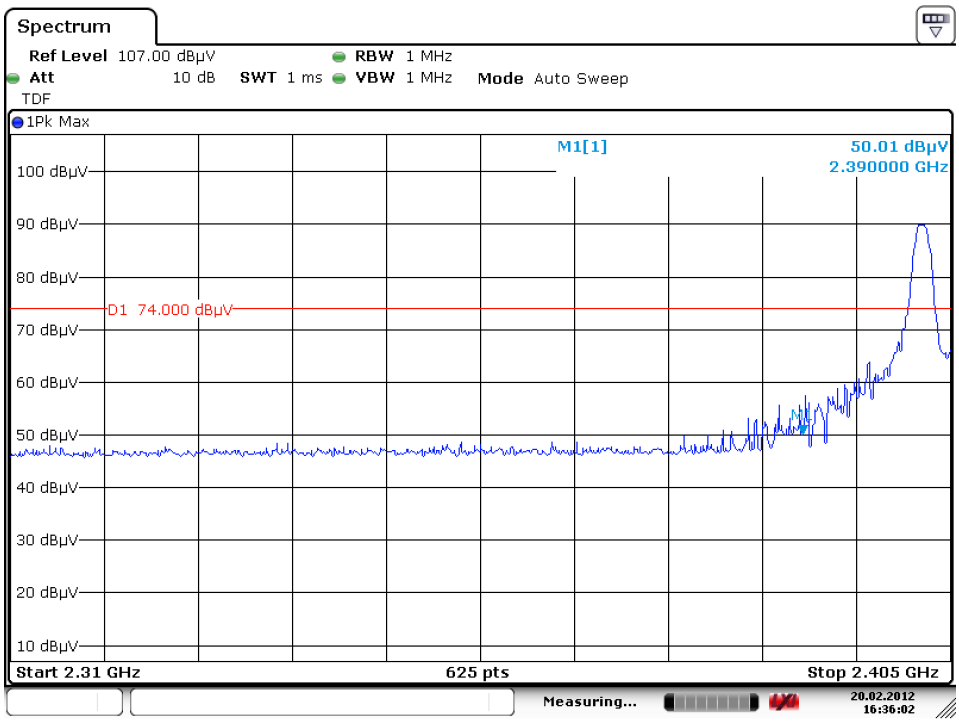
High Channel (H)



Date: 20.FEB.2012 16:46:35

Radiated Bandedge (GFSK)

Low Channel (V)



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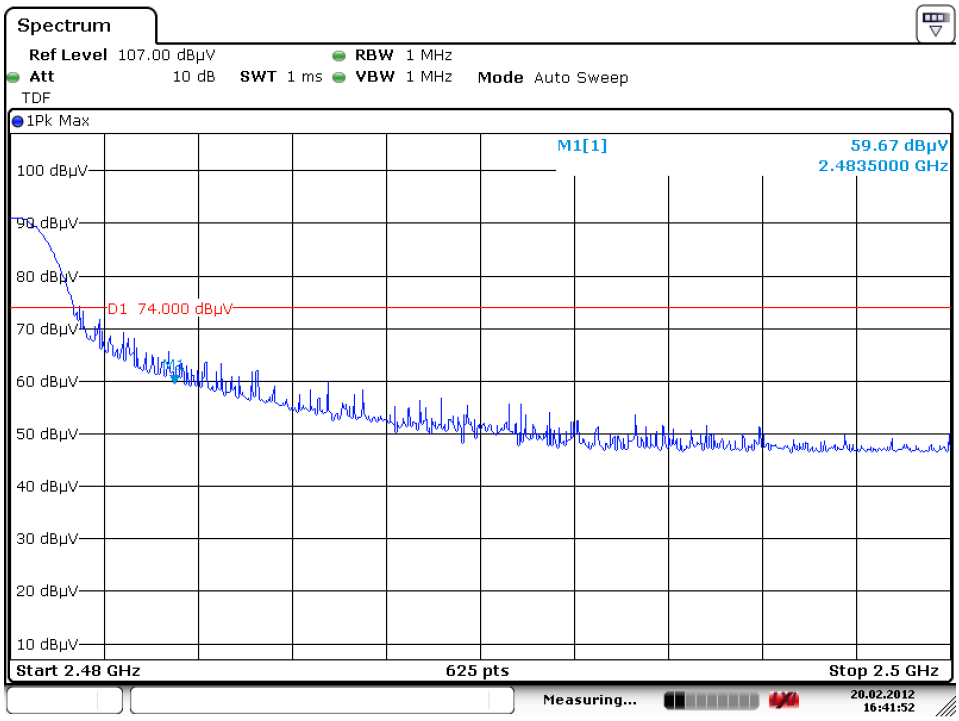
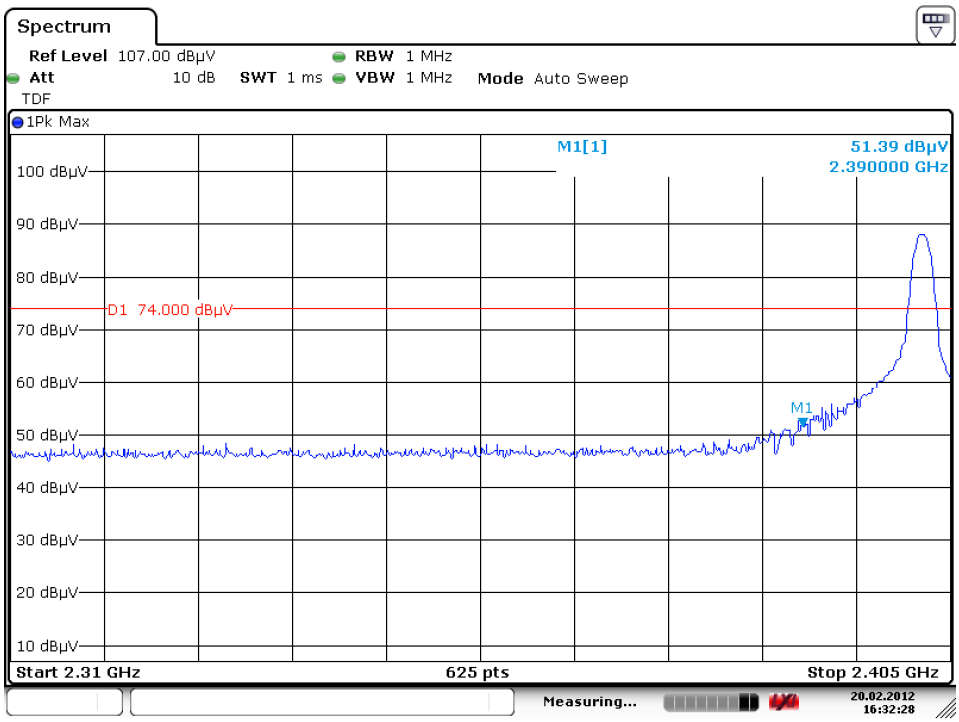
High Channel (V)



Date: 20.FEB.2012 16:41:51

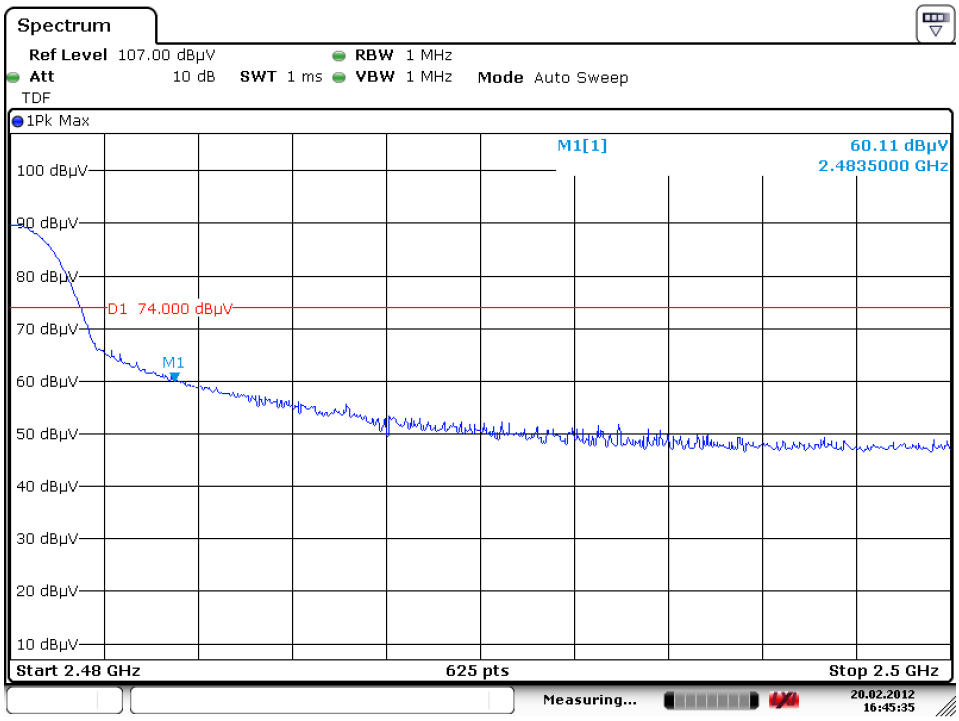
Radiated Bandedge (QPSK)

Low Channel (H)



Date: 20.FEB.2012 16:32:28

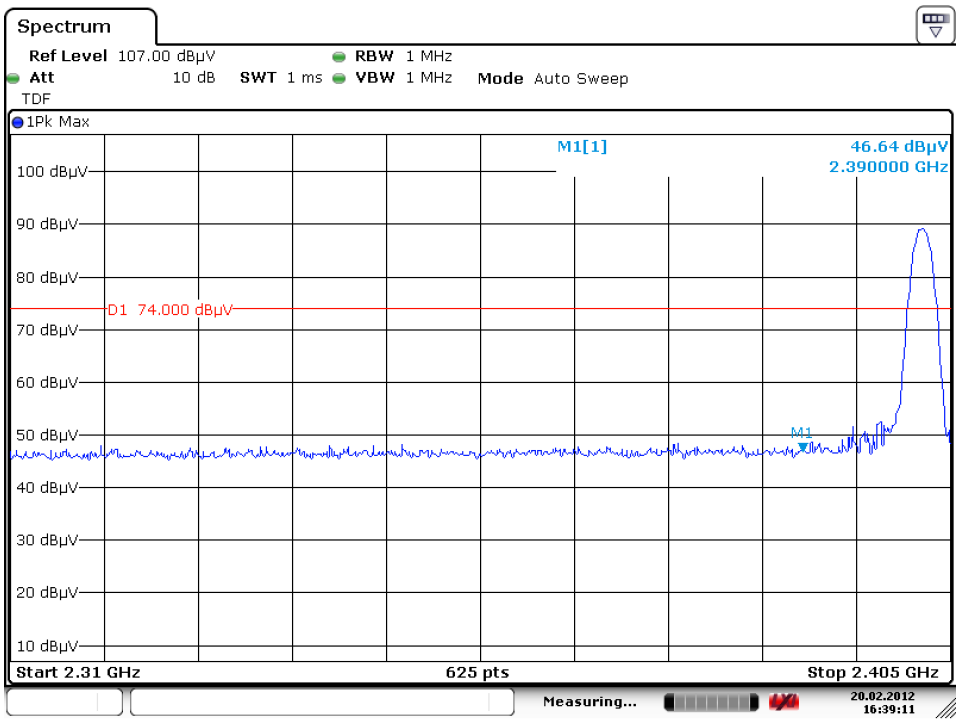
High Channel (H)



Date: 20.FEB.2012 16:45:35

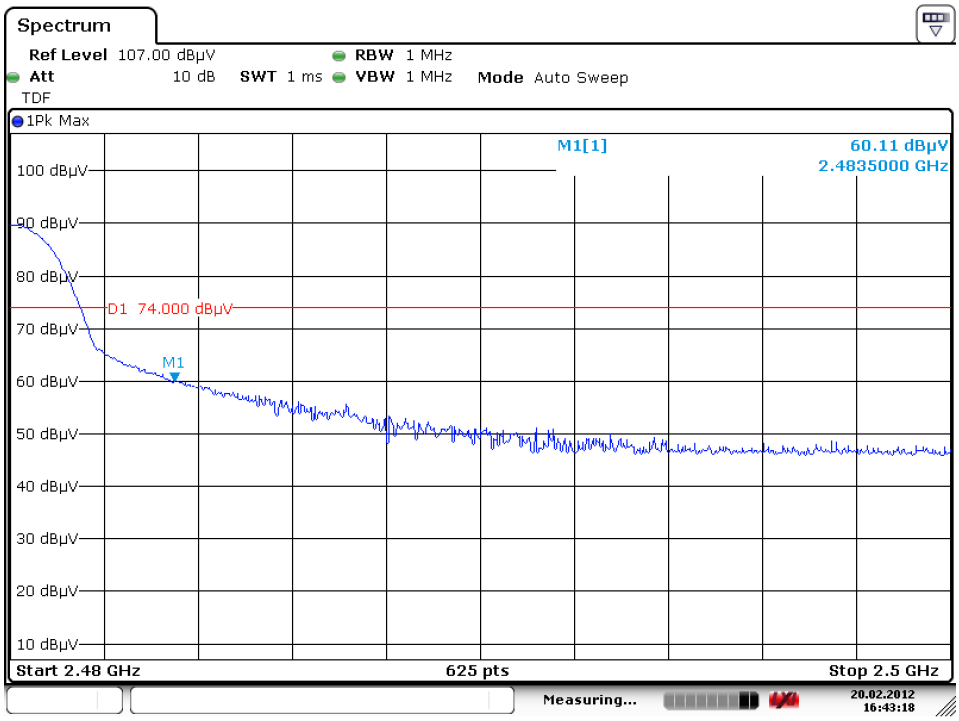
Radiated Bandedge (QPSK)

Low Channel (V)



Date: 20.FEB.2012 16:39:11

High Channel (V)



Date: 20.FEB.2012 16:43:17

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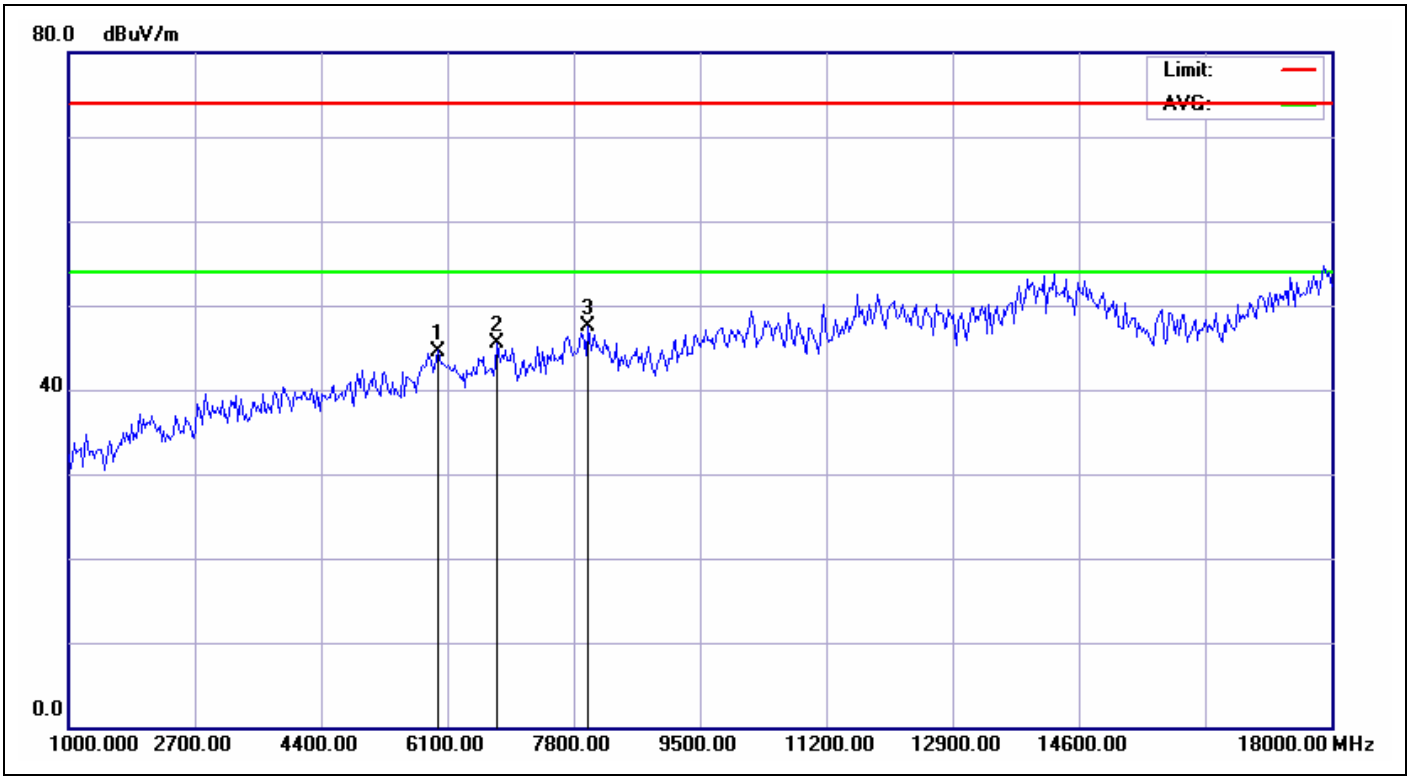

Service No.:	**113150660**	**Test Distance:**	**3m**
Test Standard:	**FCC above 1G PEAK**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2012/2/20 PM 04:07:19**
Applicant:	**Marlow Industries,Inc**	**Test Rating:**	**AC 110V/60Hz**
Product:	**Black Box**	**Temp.(℃)/Hum.(%):**	**16(℃)/63%**
Model No.:	**PCE-201-M-1-0**	**Test Engineer:**	**Hugo Chang**
Test Mode:	**RX**		
Remark:	Input:100-240Vac,47-63Hz,2.2A MAX Output:24Vdc,6.6A		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (◦)	Remark
1	5985.577	17.11	27.49	44.60	74.00	-29.40	peak			
2	6775.641	17.82	27.66	45.48	74.00	-28.52	peak			
3	8001.603	21.15	26.40	47.55	74.00	-26.45	peak			

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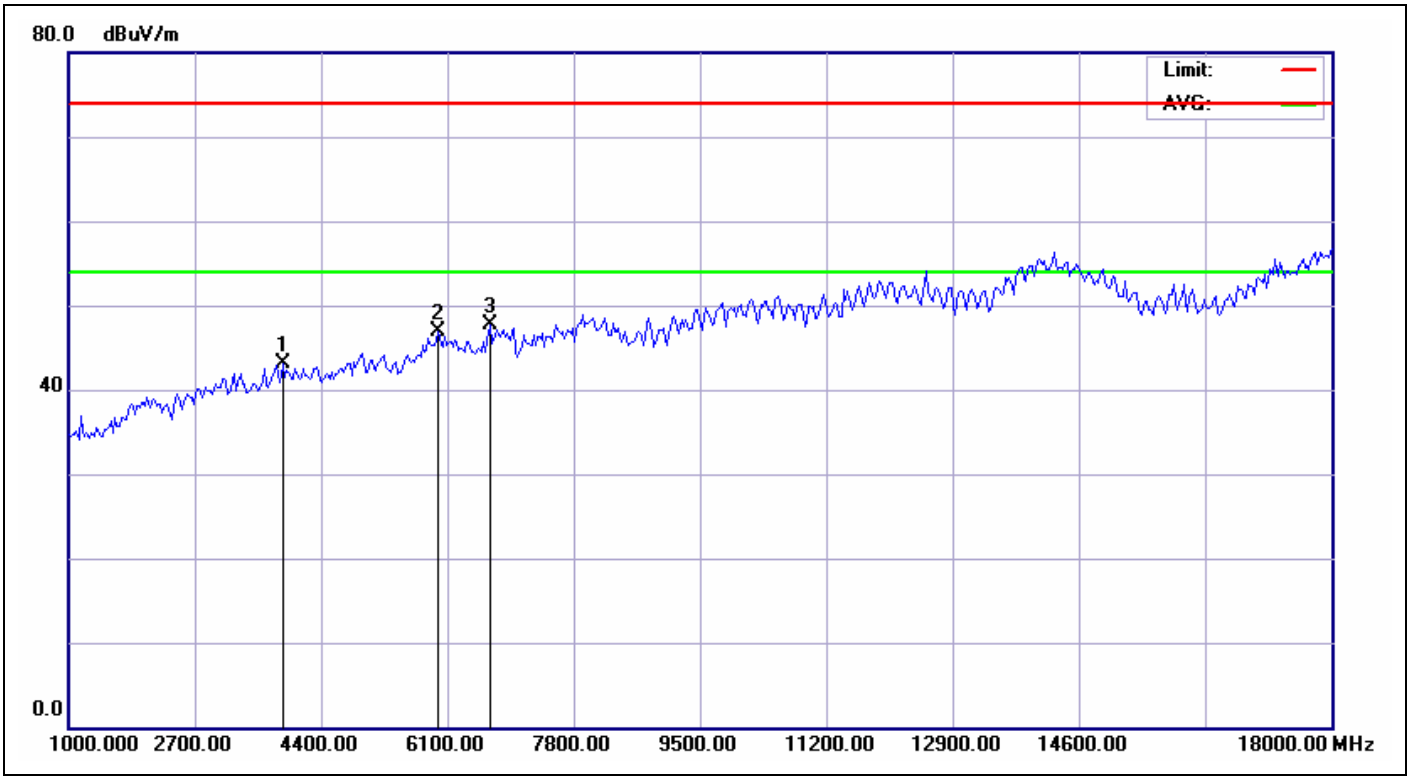

Service No.:	**113150660**	**Test Distance:**	**3m**
Test Standard:	**FCC above 1G PEAK**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2012/2/20 PM 04:09:27**
Applicant:	**Marlow Industries,Inc**	**Test Rating:**	**AC 110V/60Hz**
Product:	**Black Box**	**Temp.(℃)/Hum.(%):**	**16(℃)/63%**
Model No.:	**PCE-201-M-1-0**	**Test Engineer:**	**Hugo Chang**
Test Mode:	**RX**		
Remark:	Input:100-240Vac,47-63Hz,2.2A MAX Output:24Vdc,6.6A		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (◦)	Remark
1	3887.821	11.13	32.01	43.14	74.00	-30.86	peak			
2	5985.577	17.11	29.71	46.82	74.00	-27.18	peak			
3	6666.667	17.44	30.20	47.64	74.00	-26.36	peak			

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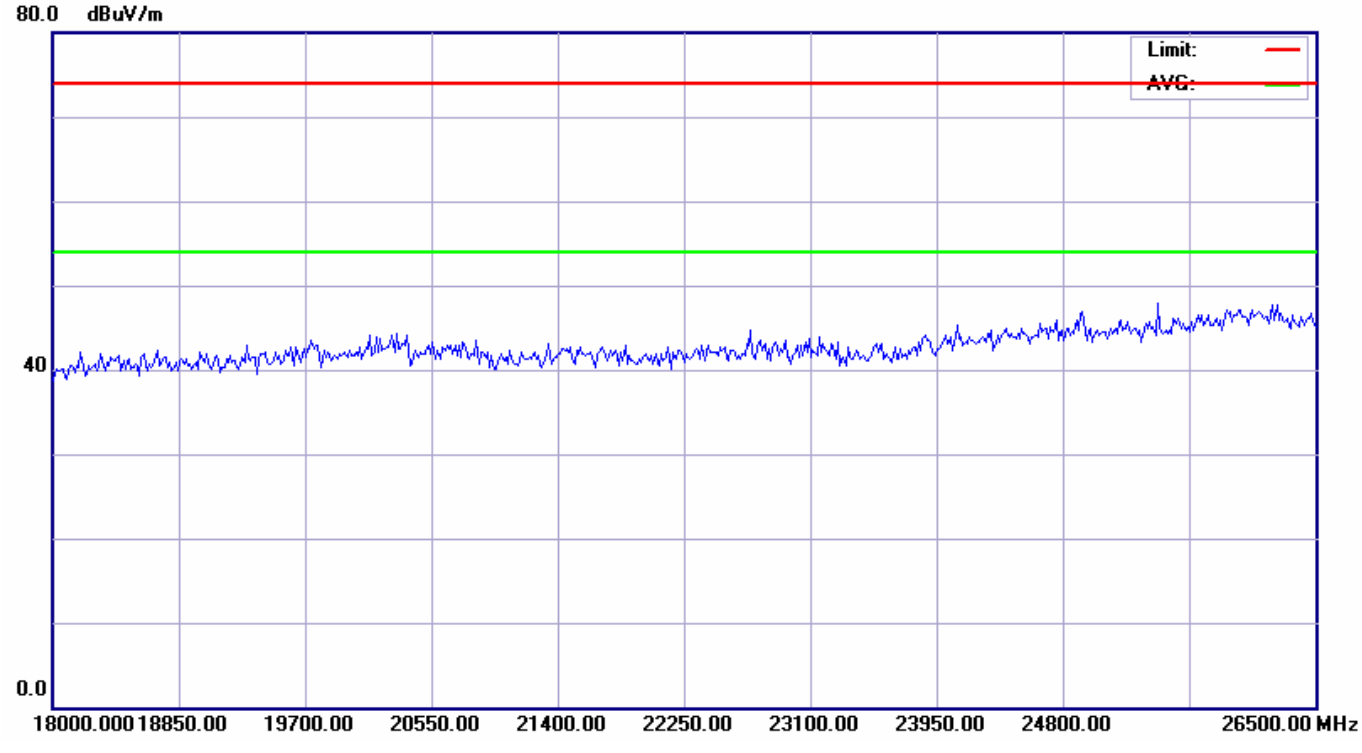

Service No.:	**113150660**	**Test Distance:**	**3m**
Test Standard:	**FCC above 1G PEAK**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2012/2/20 PM 04:54:52**
Applicant:	**Marlow Industries,Inc**	**Test Rating:**	**AC 110V/60Hz**
Product:	**Black Box**	**Temp.(℃)/Hum.(%):**	**16(℃)/63%**
Model No.:	**PCE-201-M-1-0**	**Test Engineer:**	**Hugo Chang**
Test Mode:	**RX**		
Remark:	Input:100-240Vac,47-63Hz,2.2A MAX Output:24Vdc,6.6A		

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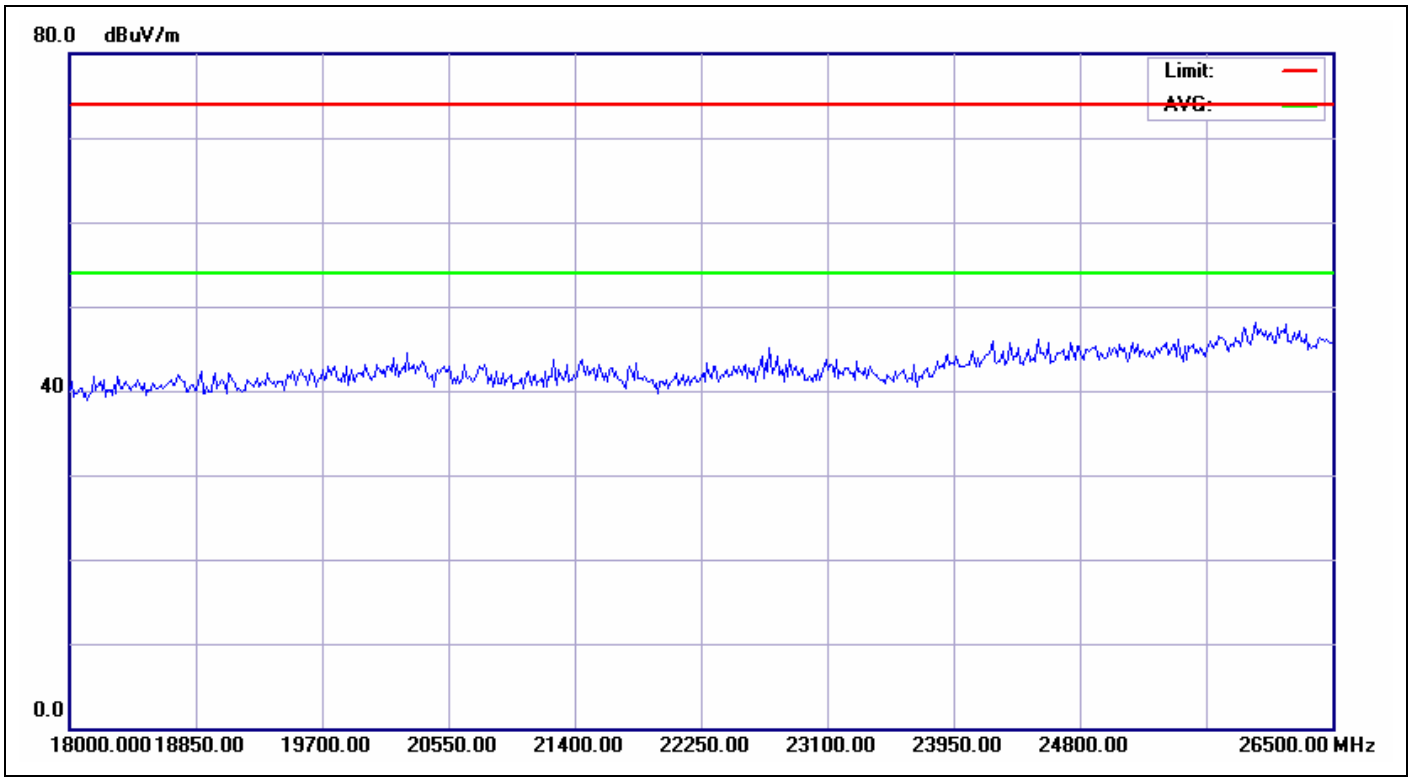

Service No.:	**113150660**	**Test Distance:**	**3m**
Test Standard:	**FCC above 1G PEAK**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2012/2/20 PM 04:55:17**
Applicant:	**Marlow Industries,Inc**	**Test Rating:**	**AC 110V/60Hz**
Product:	**Black Box**	**Temp.(℃)/Hum.(%):**	**16(℃)/63%**
Model No.:	**PCE-201-M-1-0**	**Test Engineer:**	**Hugo Chang**
Test Mode:	**RX**		
Remark:	Input:100-240Vac,47-63Hz,2.2A MAX Output:24Vdc,6.6A		