

Reference No.: 168367

FCC/IC Test Report

FCC/IC EVALUATION REPORT FOR VERIFICATION			
Project Reference No.	168367		
Product Cyberlink			
Brand Name Mindray			
Model WM1010BGN			
Alternate Model N/A			
FCC Rules and Regulations Part 15 Subpart C 2008,			
Tested according to	IC Rules and Regulations RSS-210 Issue 8,		
	ANSI C63.4-2009		

Tested in period	2011.4.27 to 2011.6.30	
Issued date	2011.6.30	
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1. Client Information

1.1 Applicant

Company Name: Shenzhen Mindray BIO-Medical electronics Co.,LTD.

Company Address: Mindray Building Keji 12th Road South, High-tech Industrial

Park, Nan Shan Shenzhen, Guangdong, P.R.China

1.2 Manufacturer

Company Name: Shenzhen Mindray BIO-Medical electronics Co.,LTD.

Company Address: Mindray Building Keji 12th Road South, High-tech Industrial

Park, Nan Shan Shenzhen, Guangdong, P.R.China

1.3 Scope

•Measurement and determination of electromagnetic emissions (EME) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission under FCC part 15.247.

•Measurement and determination of electromagnetic emissions (EME) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the RSS-210 ISSUE 8 and RSS-GEN ISSUE 3.



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2. Equipment under Test (EUT)

2.1 Identification of EUT

Category: IEEE 802.11b/g /n WLAN module

Name: Cyberlink

Model Name: WM1010BGN

Alternate model: N/A

Brand name: Mindray

2.2 Detail Spec: Spec: 3.3 VDC input

Operation Frequency 2412 MHz -2462 MHz

Channel Number: 11

Type of Modulation: 802.11b; 802.11g; 802.11n

Antenna Type Integral Antenna

Antenna Number: 2

Antenna Type: Rod Antenna; Antenna gain: 2 dBi

Antenna Type: Tape Antenna; Antenna gain :2 dBi

Antenna Type: PCB Antenna; Antenna gain :2 dBi

Data rate:

IEEE 802.11b: 1 Mbps up to 11 Mbps data rate IEEE 802.11g: 6 Mbps up to 54 Mbps data rate IEEE 802.11n: 6.5 Mbps up to 65 Mbps data rate

Output Power: 23.92 dBm

EIPR: 25.92 dBm

Remark: The 2 Antenna can not work together ,only can work individually (SISO).

2.3 Additional Information Related to Testing

CH1: 2412 MHz CH6: 2437 MHz CH11: 2462 MHz Duty cycle: 100%

IEEE 802.11b : 1Mbps data rate IEEE 802.11g : 6Mbps data rate IEEE 802.11n : 6.5Mbps data rate

Remark: Only the worse case found by prescan is listed.



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2.4 AE list

AE Equipment:

1: PERSONAL COMPUTER

EMC CODE: Test PC P; M/N: Studio 540; S/N: 124XK2X

Manufacturer: DELL

Power cord: Unshielded, Detachabled, 1.8m

FCC: DoC; BSMI ID: R33002

Display Card HD3450(VGA+DVI+HDMI)

2: DC source M/N:RXN-350D

Manufacturer: ZHAOXIN

FCC VOC

3. General Test Conditions

3.1 Location

These measurement tests were conducted at Shenzhen Huatongwei International Inspection Co., Ltd Keji Nan No.12 road ,Hi-tech park Shenzhen,P.R.China – ELA 125

FCC-Registration No.: 662850 ;

IC-Registration No.: 5377

Note: all test are witnessed by NEMKO engineer.



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3.2 Operating Environment

All tests and measurements were performed in a shielded enclosure or a controlled environment suitable for the tests conducted. The climatic conditions in the test area are automatically controlled and recorded continuously.

Parameters	Recording during test	Accepted deviation	
Ambient temperature	24-25°C	15 – 35 °C	
Relative humidity	50-55%	30 - 60%	
Atmospheric pressure	101.2 kPa -101.3kPa	86-106kPa	

3.3 Operating During Test

Test mode

TM1 : ANTENNA 1 TX MODE TM2 : ANTENNA 2 TX MODE

TM3: RX mode

3.4 Test Equipment

The test equipments used in testing are calibrated on a regular basis. For most of the testing equipments accredited calibration is conducted once a year. For certain equipment the calibration interval is longer. Between the calibrations all test equipment are controlled and verified on a regular basis. The test equipments used are defined in each test section of this report.

4. Measurement Uncertainty

The Measurement Uncertainties stated were calculated in accordance with the requirements of NIST Technical Note 1297 with the confidence level of 95 %.

Conducted Emission Test 3.6dB

Radiated Emission Test 4.7dB --3m chamber



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5. Radiated Electromagnetic Disturbances

5.1 Test Procedure

The EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber. An antenna was located 3m from the EUT on an adjustable mast.

The EUT were rotated 0 to 360 degree and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. The test result are reported as below.

For below 1GHz

RBW=120 kHz; VBW=300KHz.QP detector, The frequency range from 30MHz to 1000MHz is checked.

For above 1GHz. The frequency range from 1GHz to 25GHz(10th harmonics) is checked.

RBW=1MHz; VBW=1MHz,PK detector for peak emissions measurement above 1GHz

RBW=1MHz; VBW=10Hz, PK detector for average emissions measure above 1GHz

5.2 Measurement Equipment

	Equipment	Last Calibration	Туре	Serial No.	Manufacturer
\boxtimes	Spectrum Analyzer	2011-5-14	FSEM	848597、001	RS
\boxtimes	Test Receiver	2011-5-14	ESCS30	100139	ROHDE&SCHWARZ
\boxtimes	Ultra Broadband ANT	2011-5-14	VULB9163	9163/340	Schwarebeck
\boxtimes	Pre-amplifier	2011-5-14	8447D	2727A05017	HP
\boxtimes	Pre-amplifier	2011-5-14	EM30265	2727A05017	EM
	Horn Antenna	2011-5-14	BBHA 9170	BBHA9170265	Schwarebeck
\boxtimes	Horn Antenna	2011-5-14	BBHA9120D	9120D-631	Schwarebeck

Shenzhen Timeway Technology Consulting Co., Ltd.

FCC-Registration No.: 899988 ; IC- Registration No.: IC5205A-01

	Equipment	Last Calibration	Type	Serial No.	Manufacturer
	ULTRA-BROADBAND ANTENNA	2010/10	HL562	100015	R&S
\boxtimes	EMI TEST RECEIVER	2010/10	ESI 26	100009	R&S
	RF TEST PANEL	2010/10	TS / RSP	335015/ 0017	R&S
\boxtimes	TURNTABLE	2010/10	2088	2149	ETS
	ANTENNA MAST	2010/10	2075	2346	ETS
	EMI TEST SOFTWAR E	2010/10	ESK1	N/A	R&S
\boxtimes	Pre-Amp	2010/10	310	335378	SONO MIA
	Double-Ridged-Wavegu ide Horn Antenna	2010/10	HF906	100039	R&S
	3GHz high pass filter	2010/10	DSU-6	34202	CDS

Shenzhen Huatongwei International Inspection Co., Ltd FCC-Registration No.: 662850 ; IC-Registration No.: 5377

	Equipment	Last Calibration	Туре	Serial No.	Manufacturer
\boxtimes	Spectrum Analyzer	2011.05.08	E4446A	US44300459	Agilent
\boxtimes	PREAmplifier	2011.05.08	8449B	3008A02495	Agilent
\boxtimes	RF Cable	2011.05.08	SUCOFLEX 102	28620/2	Hubersuhner
\boxtimes	RF Cable	2011.05.08	SUCOFLEX 102	271471/4	Hubersuhner
\boxtimes	RF Cable	2011.05.08	SUCOFLEX 102	29086/2	Hubersuhner
\boxtimes	RF Cable	2011.05.08	SUCOFLEX 102	271473/4	Hubersuhner
\boxtimes	Horn Antenna	2010.10.25	3116	00060089	EMCO
For radiated emission test (18GHz~25GHz)—AUDIX Technology (Shenzhen) Co.,Ltd					



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IC Registration No.:90454 ;IC Registration No.:794232; FCC Registration No.:90454;FCC Registration No.:794232

5.3 Test Result

For restriction band test :All EUT ANT foldings are prescaned and only list the worse mode. Only list the restriction band test which there found emission.

For other restriction band: no emission found.

Mode	Data rate	Antenna port	Channel	Antenna type	EUT ANT folding	Test ANT polarity	Diagram	Test Result
		Port 1	CH1	Tape Ant	upright	Н	5-1	Pass
		Port 1	CH1	Tape Ant	upright	V	5-2	Pass
		Port 1	CH11	Tape Ant	upright	Н	5-3	Pass
802.11.b	1MHz	Port 1	CH11	Tape Ant	upright	V	5-4	Pass
		Port 2	CH1	Tape Ant	upright	Н	5-5	Pass
		Port 2	CH1	Tape Ant	upright	V	5-6	Pass
		Port 2	CH11	Tape Ant	upright	Н	5-7	Pass
		Port 2	CH11	Tape Ant	upright	V	5-8	Pass
		Port 1	CH1	Tape Ant	upright	Н	5-9	Pass
		Port 1	CH1	Tape Ant	upright	V	5-10	Pass
		Port 1	CH11	Tape Ant	upright	Н	5-11	Pass
802.11.g	6MHz	Port 1	CH11	Tape Ant	upright	V	5-12	Pass
		Port 2	CH1	Tape Ant	upright	Н	5-13	Pass
		Port 2	CH1	Tape Ant	upright	V	5-14	Pass
		Port 2	CH11	Tape Ant	upright	Н	5-15	Pass
		Port 2	CH11	Tape Ant	upright	V	5-16	Pass
		Port 1	CH1	Tape Ant	upright	Н	5-17	Pass
		Port 1	CH1	Tape Ant	upright	V	5-18	Pass
		Port 1	CH11	Tape Ant	upright	Н	5-19	Pass
802.11.n	6.5 MHz	Port 1	CH11	Tape Ant	upright	V	5-20	Pass
	IVITIZ	Port 2	CH1	Tape Ant	upright	Н	5-21	Pass
		Port 2	CH1	Tape Ant	upright	V	5-22	Pass
		Port 2	CH11	Tape Ant	upright	Н	5-23	Pass
		Port 2	CH11	Tape Ant	upright	V	5-24	Pass
		Port 1	CH1	PCB Ant	upright	Н	5-25	Pass
		Port 1	CH1	PCB Ant	upright	V	5-26	Pass
		Port 1	CH11	PCB Ant	upright	Н	5-27	Pass
802.11.b	1MHz	Port 1	CH11	PCB Ant	upright	V	5-28	Pass
		Port 2	CH1	PCB Ant	upright	Н	5-29	Pass
		Port 2	CH1	PCB Ant	upright	V	5-30	Pass
		Port 2	CH11	PCB Ant	upright	Н	5-31	Pass
		Port 2	CH11	PCB Ant	upright	V	5-32	Pass
802.11.g	6MHz	Port 1	CH1	PCB Ant	upright	Н	5-33	Pass



				<u>.</u>	101010110011	0 100001		
		Port 1	CH1	PCB Ant	upright	V	5-34	Pass
		Port 1	CH11	PCB Ant	upright	Н	5-35	Pass
		Port 1	CH11	PCB Ant	upright	V	5-36	Pass
		Port 2	CH1	PCB Ant	upright	Н	5-37	Pass
		Port 2	CH1	PCB Ant	upright	V	5-38	Pass
	-	Port 2	CH11	PCB Ant	upright	Н	5-39	Pass
	-	Port 2	CH11	PCB Ant	upright	V	5-40	Pass
		Port 1	CH1	PCB Ant	upright	Н	5-41	Pass
	-	Port 1	CH1	PCB Ant	upright	V	5-42	Pass
	-	Port 1	CH11	PCB Ant	upright	Н	5-43	Pass
802.11.n	6.5	Port 1	CH11	PCB Ant	upright	V	5-44	Pass
	MHz	Port 2	CH1	PCB Ant	upright	Н	5-45	Pass
	-	Port 2	CH1	PCB Ant	upright	V	5-46	Pass
	-	Port 2	CH11	PCB Ant	upright	Н	5-47	Pass
	-	Port 2	CH11	PCB Ant	upright	V	5-48	Pass
		Port 1	CH1	Rod Ant	keep flat	Н	5-49	Pass
	-	Port 1	CH1	Rod Ant	keep flat	V	5-50	Pass
	-	Port 1	CH11	Rod Ant	keep flat	Н	5-51	Pass
802.11.b	1MHz	Port 1	CH11	Rod Ant	keep flat	V	5-52	Pass
		Port 2	CH1	Rod Ant	keep flat	Н	5-53	Pass
	-	Port 2	CH1	Rod Ant	keep flat	V	5-54	Pass
	-	Port 2	CH11	Rod Ant	keep flat	Н	5-55	Pass
	-	Port 2	CH11	Rod Ant	keep flat	V	5-56	Pass
		Port 1	CH1	Rod Ant	keep flat	Н	5-57	Pass
	-	Port 1	CH1	Rod Ant	keep flat	V	5-58	Pass
	-	Port 1	CH11	Rod Ant	keep flat	Н	5-59	Pass
802.11.g	6MHz	Port 1	CH11	Rod Ant	keep flat	V	5-60	Pass
	-	Port 2	CH1	Rod Ant	keep flat	Н	5-61	Pass
	-	Port 2	CH1	Rod Ant	keep flat	V	5-62	Pass
	-	Port 2	CH11	Rod Ant	keep flat	Н	5-63	Pass
	-	Port 2	CH11	Rod Ant	keep flat	V	5-64	Pass
		Port 1	CH1	Rod Ant	keep flat	Н	5-65	Pass
	-	Port 1	CH1	Rod Ant	keep flat	V	5-66	Pass
		Port 1	CH11	Rod Ant	keep flat	Н	5-67	Pass
802.11.n	6.5	Port 1	CH11	Rod Ant	keep flat	V	5-68	Pass
00=	MHz	Port 2	CH1	Rod Ant	keep flat	Н	5-69	Pass
		Port 2	CH1	Rod Ant	keep flat	V	5-70	Pass
		Port 2	CH11	Rod Ant	keep flat	Н	5-71	Pass
1				1	1	1		1



Reference No.: 168367

For Radiated emission test :All EUT ANT foldings are prescaned and only list the worse mode.

So upright mode for Tape and PCB antenna and Keep flat mode for Rod Antenna.

Data rate:802.11b --- 1MHz ,802.11g --- 6MHz ,802.11n --- 6.5MHz

Antenna port 1 is the worse case and only list the worse case.

About all spurious emission at 1GHz to 18GHz , all AV value are more than 6dB lower than the Average Limits.

Mode	Data rate	Freq range	Channel	Antenna type	EUT ANT folding	Test ANT polarity	Diagram	Test Result
		1GHz-18GHz:	CH1	Tape Ant	upright	Н	5-ty-1	Pass
		1GHz-18GHz:	CH1	Tape Ant	upright	V	5-ty-2	Pass
802.11.b	1MHz	1GHz-18GHz:	CH6	Tape Ant	upright	Н	5-ty-3	Pass
		1GHz-18GHz:	CH6	Tape Ant	upright	V	5-ty-4	Pass
		1GHz-18GHz:	CH11	Tape Ant	upright	Н	5-ty-5	Pass
		1GHz-18GHz:	CH11	Tape Ant	upright	V	5-ty-6	Pass

Mode	Data rate	Freq range	Channel	Antenna type	EUT ANT folding	Test ANT polarity	Diagram	Test Result
		1GHz-18GHz:	CH1	Tape Ant	upright	Н	5-ty-7	Pass
		1GHz-18GHz:	CH1	Tape Ant	upright	V	5-ty-8	Pass
802.11.g	6MHz	1GHz-18GHz:	CH6	Tape Ant	upright	Н	5-ty-9	Pass
		1GHz-18GHz:	CH6	Tape Ant	upright	V	5-ty-10	Pass
		1GHz-18GHz:	CH11	Tape Ant	upright	Н	5-ty-11	Pass
		1GHz-18GHz:	CH11	Tape Ant	upright	V	5-ty-12	Pass

Mode	Data rate	Freq range	Channel	Antenna type	EUT ANT folding	Test ANT polarity	Diagram	Test Result
		1GHz-18GHz:	CH1	Tape Ant	upright	Н	5-ty-13	Pass
		1GHz-18GHz:	CH1	Tape Ant	upright	V	5-ty-14	Pass
802.11.n	6.5	1GHz-18GHz:	CH6	Tape Ant	upright	Н	5-ty-15	Pass
	MHz	1GHz-18GHz:	CH6	Tape Ant	upright	V	5-ty-16	Pass
		1GHz-18GHz:	CH11	Tape Ant	upright	Н	5-ty-17	Pass
		1GHz-18GHz:	CH11	Tape Ant	upright	V	5-ty-18	Pass

Mode	Data rate	Freq range	Channel	Antenna type	EUT ANT folding	Test ANT polarity	Diagram	Test Result
		1GHz-18GHz:	CH1	PCB Ant	upright	Н	5-P-1	Pass
		1GHz-18GHz:	CH1	PCB Ant	upright	V	5-P-2	Pass
802.11.b	1MHz	1GHz-18GHz:	CH6	PCB Ant	upright	Н	5-P-3	Pass
		1GHz-18GHz:	CH6	PCB Ant	upright	V	5-P-4	Pass
		1GHz-18GHz:	CH11	PCB Ant	upright	Н	5-P-5	Pass
		1GHz-18GHz:	CH11	PCB Ant	upright	V	5-P-6	Pass



Mode	Data rate	Freq range	Channel	Antenna type	EUT ANT folding	Test ANT polarity	Diagram	Test Result
		1GHz-18GHz:	CH1	PCB Ant	upright	Н	5-P-7	Pass
		1GHz-18GHz:	CH1	PCB Ant	upright	V	5-P-8	Pass
802.11.g	6MHz	1GHz-18GHz:	CH6	PCB Ant	upright	Н	5-P-9	Pass
		1GHz-18GHz:	CH6	PCB Ant	upright	V	5-P-10	Pass
		1GHz-18GHz:	CH11	PCB Ant	upright	Н	5-P-11	Pass
		1GHz-18GHz:	CH11	PCB Ant	upright	V	5-P-12	Pass

Mode	Data rate	Freq range	Channel	Antenna type	EUT ANT folding	Test ANT polarity	Diagram	Test Result
		1GHz-18GHz:	CH1	PCB Ant	upright	Н	5-P-13	Pass
		1GHz-18GHz:	CH1	PCB Ant	upright	V	5-P-14	Pass
802.11.n	6.5	1GHz-18GHz:	CH6	PCB Ant	upright	Н	5-P-15	Pass
	MHz	1GHz-18GHz:	CH6	PCB Ant	upright	V	5-P-16	Pass
		1GHz-18GHz:	CH11	PCB Ant	upright	Н	5-P-17	Pass
		1GHz-18GHz:	CH11	PCB Ant	upright	V	5-P-18	Pass

Mode	Data rate	Freq range	Channel	Antenna type	EUT ANT folding	Test ANT polarity	Diagram	Test Result
		1GHz-18GHz:	CH1	Rod Ant	upright	Н	5-d-1	Pass
		1GHz-18GHz:	CH1	Rod Ant	upright	V	5-d-2	Pass
802.11.b	1MHz	1GHz-18GHz:	CH6	Rod Ant	upright	Н	5-d-3	Pass
		1GHz-18GHz:	CH6	Rod Ant	upright	V	5-d-4	Pass
		1GHz-18GHz:	CH11	Rod Ant	upright	Н	5-d-5	Pass
		1GHz-18GHz:	CH11	Rod Ant	upright	V	5-d-6	Pass

Mode	Data rate	Freq range	Channel	Antenna type	EUT ANT folding	Test ANT polarity	Diagram	Test Result
		1GHz-18GHz:	CH1	Rod Ant	upright	Н	5-d-7	Pass
		1GHz-18GHz:	CH1	Rod Ant	upright	V	5-d-8	Pass
802.11.g	6MHz	1GHz-18GHz:	CH6	Rod Ant	upright	Н	5-d-9	Pass
		1GHz-18GHz:	CH6	Rod Ant	upright	V	5-d-10	Pass
		1GHz-18GHz:	CH11	Rod Ant	upright	Н	5-d-11	Pass
		1GHz-18GHz:	CH11	Rod Ant	upright	V	5-d-12	Pass

Mode	Data rate	Freq range	Channel	Antenna type	EUT ANT folding	Test ANT polarity	Diagram	Test Result
802.11.n	6.5	1GHz-18GHz:	CH1	Rod Ant	upright	Н	5-d-13	Pass



Reference No.: 168367

MHz	1GHz-18GHz:	CH1	Rod Ant	upright	V	5-d-14	Pass
	1GHz-18GHz:	CH6	Rod Ant	upright	Н	5-d-15	Pass
	1GHz-18GHz:	CH6	Rod Ant	upright	V	5-d-16	Pass
	1GHz-18GHz:	CH11	Rod Ant	upright	Н	5-d-17	Pass
	1GHz-18GHz:	CH11	Rod Ant	upright	V	5-d-18	Pass

For Tape Antenna: CH1, 6, 11 all have been prescan and only list the worse channel record.

Mode	СН	Antenna Polarity	Remark	Test Data	Test Result
802.11b	6	Horizontal	30-1000MHz	5-T-1	Pass
802.110	0	Vertical	30-1000MHz	000MHz 5-T-2 Pass	Pass
802.11g	1	Horizontal	30-1000MHz	5-T-3	Pass
802.119		Vertical	30-1000MHz	5-T-4	Pass
802.11n	6	Horizontal	30-1000MHz	5-T-5	Pass
002.1111	0	Vertical	30-1000MHz	5-T-6	Pass

For PCB antenna: CH1, 6, 11 all have been prescan and only list the worse channel record.

Mode	СН	Antenna Polarity	Remark	Test Data	Test Result
802.11b	6	Horizontal	30-1000MHz	5-T-7	Pass
002.110	0	Vertical	30-1000MHz	5-T-8	Pass
802.11g	1	Horizontal	30-1000MHz	5-T-9	Pass
602.11g	' [Vertical	30-1000MHz	5-T-10	Pass
802.11n	6	Horizontal	30-1000MHz	5-T-11	Pass
	0	Vertical	30-1000MHz	5-T-12	Pass

For Rod antenna: CH1, 6, 11 all have been prescan and only list the worse channel record.

Mode	СН	Antenna Polarity	Remark	Test Data	Test Result
802.11b	6	Horizontal	30-1000MHz	5-T-13	Pass
002.110	0	Vertical	30-1000MHz	5-T-14	Pass
902.11a	1	Horizontal	30-1000MHz	5-T-15	Pass
802.11g	'	Vertical	30-1000MHz	5-T-16	Pass
802.11n	6	Horizontal	30-1000MHz	5-T-17	Pass
002.1111	0	Vertical	30-1000MHz	5-T-18	Pass

Mode	Antenna Polarity	Remark	Test Data	Test Result
TV MODE @	Horizontal	18GHz-25GHz	5-T-19	Pass
TX MODE @	Vertical	18GHz-25GHz	5-T-20	Pass
	Horizontal	30-1000MHz	5-R-1	Pass
	Vertical	30-1000MHz	5-R-2	Pass
RXmode @	Horizontal	1GHz-18GHz	5-R-3	Pass
	Vertical	1GHz-18GHz	5-R-4	Pass
	Horizontal	18GHz-25GHz	5-R-5	Pass
	Vertical	18GHz-25GHz	5-R-6	Pass

Remark: If PK value is lower than AV limit, only show PK diagram as below.



Reference No.: 168367

@) From 18GHz to 25GHz, spurious can not be found for 3 types antenna, only the PCB antenna results were exhibited.

Reference No.: 168367

NOTES:

- 1.All modes were measured and only the worst case emission was reported.
- 2. H =Horizontal V=Vertical
- 3. Emission = Reading +Antenna Factor + Cable Loss -Amp Factor
- 4. Emission level dB μ V = 20 log Emission level μ V/m
- 5. The lower limit shall apply at the transition frequencies
- 6. For IC :All the emissions appearing within RSSgen Section 7.2.2 Restricted bands shall not exceed the limits shown in (RSSgen Table 5 limit)[#];

For FCC :All the emissions appearing within 15.205 Restricted bands shall not exceed the limits shown in (15.209 limit)#.

7. For IC :Unwanted emissions not falling within restricted frequency bands shall be at least 20dB below the fundamental emissions, or comply with RSS gen Table 5 limits;

For FCC:Unwanted emissions not falling within restricted frequency bands shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits;

Remark:

The limit of "#" of 3 meter distance is

Frequency	Distance	Field strength		Distance	Field strength
MHz	m	μ V/m	dBμV/m(QP)	m	dBμV/m(QP)
30-88	3	100	40.0	10	30.0
88-216	3	150	43.5	10	33.5
216-960	3	200	46.0	10	36.0
960-1000	3	500	54.0	10	44.0
Above 1000	3	74.0 dBµV/m (PK)		/	/
		54.0 dBµV/m (AV)			

15.205 Restricted bands:

MHz	MHz	MHz	GHz
0.090-0.110	1642-16423	399.9-410	4.5–5.15
10,495-0,505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	725–7.75
4.125-4.128	25.5-25.67	1300-1427	8.025–8.5
4.17725–4.17775	37.5–3825	1435–1626.5	9.0-92
4.20725-4.20775	73–74.6	1645.5-1646.5	93-95
6.215-6.218	74.8–75.2	1660-1710	10.6–12.7
6.26775–6.26825	108-121.94	1718.8-1722.2	1325-134
6.31175–6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	1535-162
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7–156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	312-318
12.51975-12.52025	240-285	3345.8-3358	3643-36.5
12.57675-12.57725	322-335.4	3800-4400	(2)
13.36–13.41.			

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

²Above 38.6



Reference No.: 168367

RSS gen Section 7.2.2 Table 3 Restricted bands of operation:

MHz
0.090-0.110
2.1735-2.1905
3.020-3.026
4.125-4.128
4.17725-4.17775
4.20725-4.20775
5.677-5.683
6.215-6.218
6.26775-6.26825
6.31175-6.31225
8.291-8.294
8.362-8.366
8.37625-8.38675
8.41425-8.41475
12.29-12.293
12.51975-12.52025
12.57675-12.57725
13.36-13.41
16.42-16.423
16.69475-16.69525
16.80425-16.80475
25.5-25.67
37.5-38.25
73-74.6
74.8-75.2
108-138
156.52475-156.52525
156.7-156.9

MHz
240-285
322-335.4
399.9-410
608-614
960-1427
1435-1626.5
1645.5-1646.5
1660-1710
1718.8-1722.2
2200-2300
2310-2390
2655-2900
3260-3267
3332-3339
3345.8-3358
3500-4400
4500-5150
5350-5460
7250-7750
8025-8500

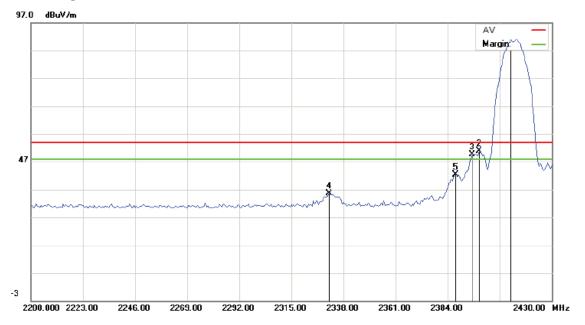
GHz
9.0-9.2
9.3-9.5
10.6-12.7
13.25-13.4
14.47-14.5
15.35-16.2
17.7-21.4
22.01-23.12
23.6-24.0
31.2-31.8
36.43-36.5
Above 38.6

Note: Certain frequency bands listed in Table 1 and in bands above 38.6 GHz are designated for licence-exempt applications. These frequency bands and the requirements that apply to the devices are set out in the 200- and 300- series RSSs, such as RSS-210 and RSS-310, which contain the requirements that apply to licence-exempt radio apparatus.



Reference No.: 168367

5.3.1 Diagram 5-1



No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBuV	dΒ	dBuV/m	Value
1	2412.175	97.70	-6.73	90.97	peak
2	2397.800	57.72	-6.76	50.96	peak
3	2394.925	56.48	-6.77	49.71	peak
4	2331.675	42.70	-6.95	35.75	peak
5	2387.450	49.18	-6.80	42.38	peak



Reference No.: 168367

5.3.2 Diagram 5-2

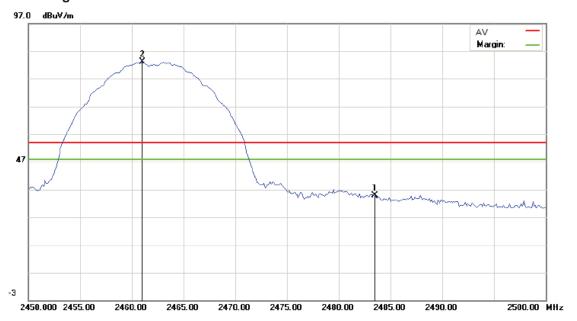


No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBuV	dΒ	dBuV/m	Value
1	2414.475	91.42	-6.71	84.71	peak
2	2398.375	52.56	-6.76	45.80	peak
3	2389.175	44.64	-6.78	37.86	peak
4	2333.400	40.57	-6.94	33.63	peak



Reference No.: 168367

5.3.3 Diagram 5-3

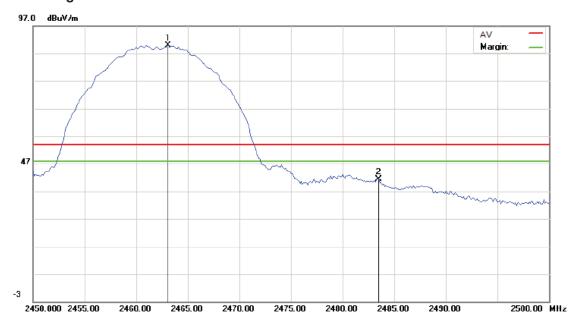


No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBuV	dΒ	dBuV/m	Value
1	2483.500	41.51	-6.53	34.98	peak
2	2461.000	89.64	-6.59	83.05	peak



Reference No.: 168367

5.3.4 Diagram 5-4

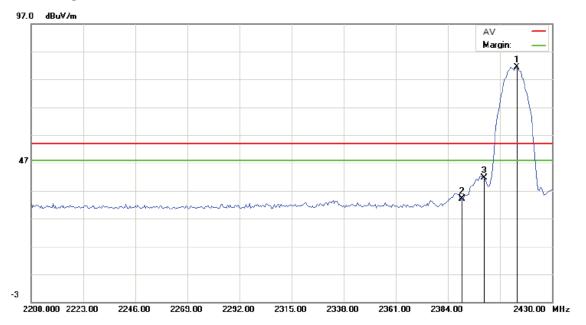


No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBuV	dВ	dBuV/m	Value
1	2463.125	96.51	-6.58	89.93	peak
2	2483.500	47.86	-6.53	41.33	peak



Reference No.: 168367

5.3.5 Diagram 5-5

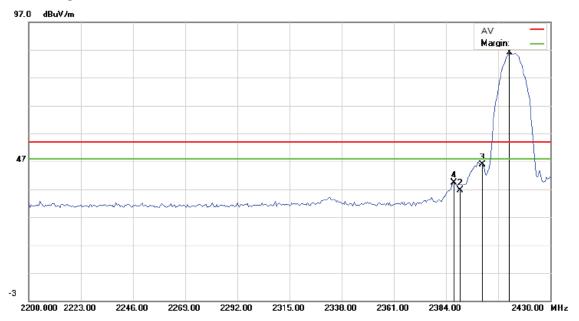


No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBuV	dΒ	dBuV/m	Value
1	2414.475	88.15	-6.71	81.44	peak
2	2390.000	40.80	-6.78	34.02	peak
3	2400.000	48.34	-6.76	41.58	peak



Reference No.: 168367

5.3.6 Diagram 5-6

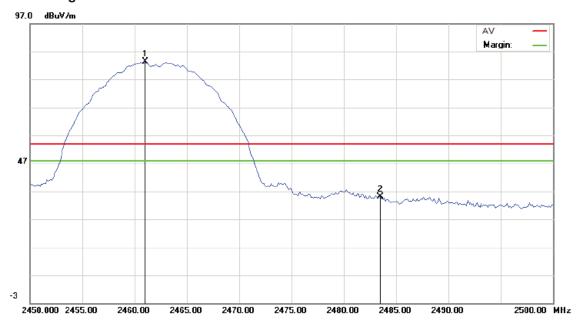


No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBuV	dΒ	dBuV/m	Value
1	2412.175	92.88	-6.73	86.15	peak
2	2390.000	43.51	-6.78	36.73	peak
3	2400.000	52.63	-6.76	45.87	peak
4	2387.450	46.13	-6.80	39.33	peak



Reference No.: 168367

5.3.7 Diagram 5-7

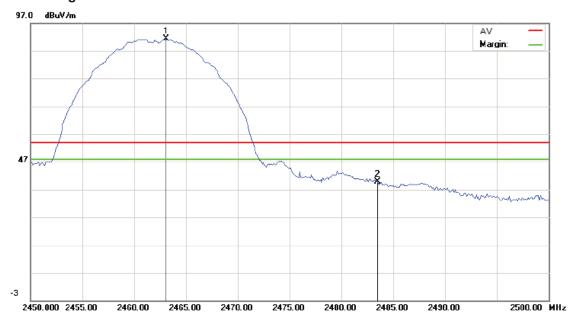


No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBuV	dΒ	dBuV/m	Value
1	2461.000	89.93	-6.59	83.34	peak
2	2483.500	41.67	-6.53	35.14	peak



Reference No.: 168367

5.3.8 Diagram 5-8



No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBuV	dΒ	dBuV/m	Value
1	2463.125	97.89	-6.58	91.31	peak
2	2483.500	46.39	-6.53	39.86	peak



Reference No.: 168367

5.3.9 Diagram 5-9

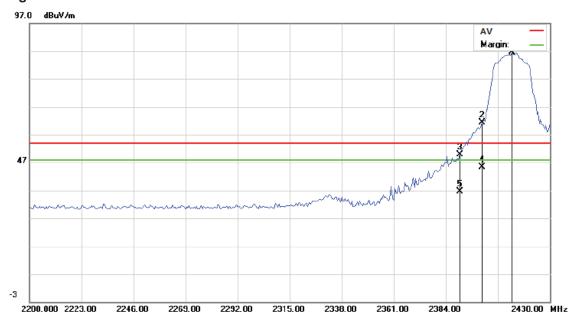


No.	. Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBuV	dΒ	dBuV/m	Value
1	2413.325	100.48	-6.71	93.77	peak
2	2390.000	63.70	-6.78	56.92	peak
3	2400.000	72.89	-6.76	66.13	peak
4	2390.000	48.25	-6.78	41.47	AVG
5	2400.000	56.27	-6.76	49.51	AVG



Reference No.: 168367

5.3.10 Diagram 5-10

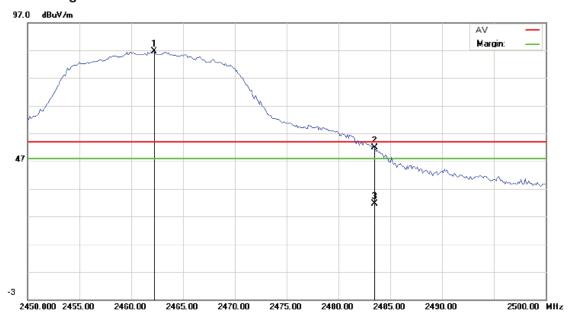


No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBuV	dΒ	dBuV/m	Value
1	2413.325	93.37	-6.71	86.66	peak
2	2400.000	68.05	-6.76	61.29	peak
3	2390.000	56.73	-6.78	49.95	peak
4	2400.000	52.08	-6.76	45.32	AVG
5	2390.000	43.44	-6.78	36.66	AVG



Reference No.: 168367

5.3.11 Diagram 5-11

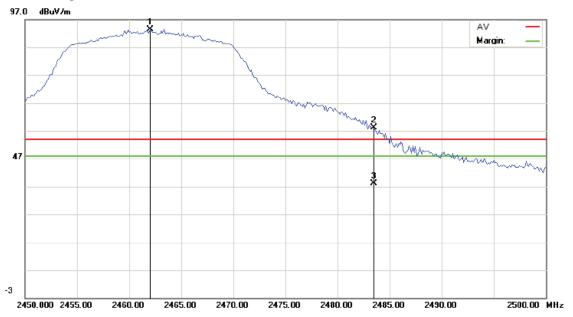


No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBuV	dΒ	dBuV/m	Value
1	2462.250	93.19	-6.59	86.60	peak
2	2483.500	58.42	-6.53	51.89	peak
3	2483.500	38.24	-6.53	31.71	AVG



Reference No.: 168367

5.3.12 Diagram 5-12



•	No.	Freq.	Reading Level	Correct Factor	Measure- ment	
		MHz	dBuV	dΒ	dBuV/m	Detector
•	1	2462.000	99.90	-6.59	93.31	peak
	2	2483.500	64.55	-6.53	58.02	peak
	3	2483.500	44.58	-6.53	38.05	AVG



Reference No.: 168367

5.3.13 Diagram 5-13



No.	. Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBuV	dΒ	dBuV/m	Value
1	2416.775	89.86	-6.71	83.15	peak
2	2400.000	64.48	-6.76	57.72	peak
3	2390.000	54.87	-6.78	48.09	peak
4	2397.225	63.46	-6.76	56.70	peak
5	2393.775	61.24	-6.77	54.47	peak
6	2390.010	38.38	-6.78	31.60	AVG
7	2400.000	45.30	-6.76	38.54	AVG
8	2393.790	40.91	-6.77	34.14	AVG
9	2397.240	43.34	-6.76	36.58	AVG



Reference No.: 168367

5.3.14 Diagram 5-14 97.0 dBuV/m

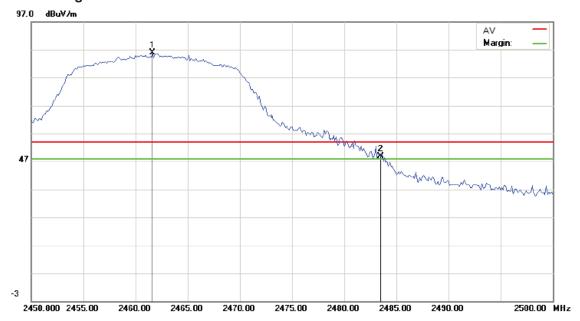


No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBuV	dΒ	dBuV/m	Value
1	2413.325	94.30	-6.71	87.59	peak
2	2390.000	57.68	-6.78	50.90	peak
3	2400.000	71.14	-6.76	64.38	peak
4	2393.775	64.59	-6.77	57.82	peak
5	2396.650	66.63	-6.76	59.87	peak
6	2389.990	43.44	-6.78	36.66	AVG
7	2400.010	51.38	-6.76	44.62	AVG
8	2393.770	46.35	-6.77	39.58	AVG
9	2396.650	48.54	-6.76	41.78	AVG



Reference No.: 168367

5.3.15 Diagram 5-15

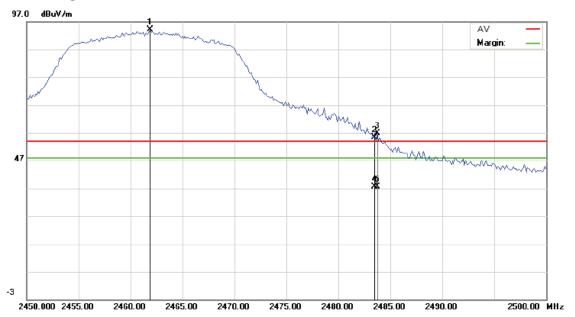


No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBuV	d₿	dBuV/m	Value
1	2461.625	92.59	-6.59	86.00	peak
2	2483.500	55.40	-6.53	48.87	peak



Reference No.: 168367

5.3.16 Diagram 5-16

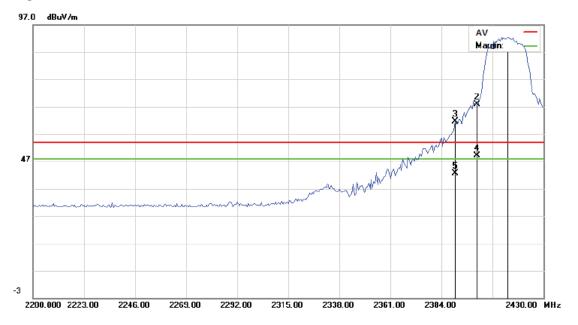


No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBuV	dΒ	dBuV/m	Value
1	2461.875	100.79	-6.59	94.20	peak
2	2483.500	61.89	-6.53	55.36	peak
3	2483.750	63.49	-6.53	56.96	peak
4	2483.500	44.15	-6.53	37.62	AVG
5	2483.750	44.26	-6.53	37.73	AVG



Reference No.: 168367

5.3.17 Diagram 5-17



No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBuV	dΒ	dBuV/m	Value
1	2413.900	99.04	-6.71	92.33	peak
2	2400.000	74.73	-6.76	67.97	peak
3	2390.000	68.49	-6.78	61.71	peak
4	2400.010	55.79	-6.76	49.03	AVG
5	2389.990	49.30	-6.78	42.52	AVG



Reference No.: 168367

5.3.18 Diagram 5-18

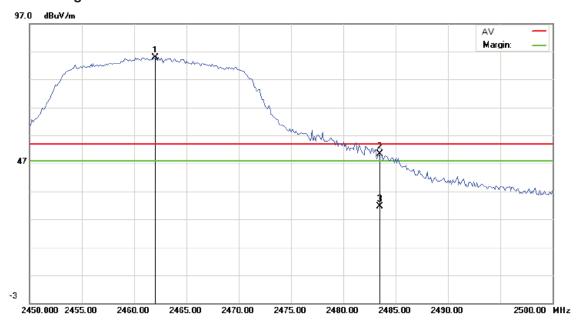


No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBuV	dΒ	dBuV/m	Value
1	2413.325	93.16	-6.71	86.45	peak
2	2400.000	67.45	-6.76	60.69	peak
3	2390.000	59.73	-6.78	52.95	peak
4	2388.600	60.17	-6.78	53.39	peak
5	2398.950	68.98	-6.76	62.22	peak
6	2390.020	42.61	-6.78	35.83	AVG
7	2399.990	49.58	-6.76	42.82	AVG
8	2398.950	48.75	-6.76	41.99	AVG
9	2388.590	41.43	-6.78	34.65	AVG



Reference No.: 168367

5.3.19 Diagram 5-19

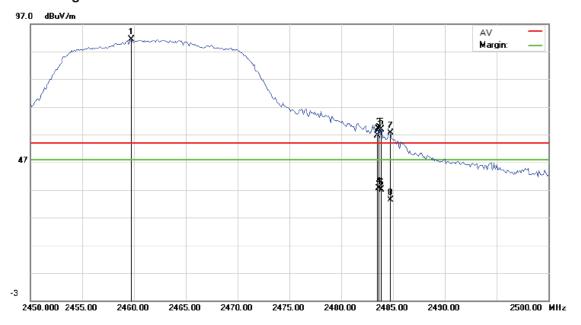


No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBuV	dΒ	dBuV/m	Value
1	2462.000	91.59	-6.59	85.00	peak
2	2483.500	57.03	-6.53	50.50	peak
3	2483.500	38.08	-6.53	31.55	AVG



Reference No.: 168367

5.3.20 Diagram 5-20

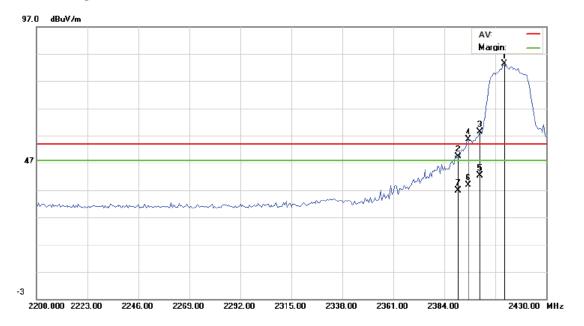


No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBuV	dΒ	dBuV/m	Value
1	2459.750	98.09	-6.59	91.50	peak
2	2483.500	63.05	-6.53	56.52	peak
3	2483.540	65.40	-6.53	58.87	peak
4	2483.540	44.08	-6.53	37.55	AVG
5	2483.855	65.39	-6.53	58.86	peak
6	2483.855	43.65	-6.53	37.12	AVG
7	2484.750	64.24	-6.53	57.71	peak
8	2484.680	39.85	-6.53	33.32	AVG



Reference No.: 168367

5.3.21 Diagram 5-21

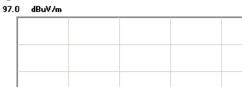


No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBuV	dΒ	dBuV/m	Value
1	2411.025	90.10	-6.73	83.37	peak
2	2390.000	56.06	-6.78	49.28	peak
3	2400.000	65.08	-6.76	58.32	peak
4	2394.925	62.42	-6.77	55.65	peak
5	2400.010	49.23	-6.76	42.47	AVG
6	2394.925	45.70	-6.77	38.93	AVG
7	2390.000	43.77	-6.78	36.99	AVG



Reference No.: 168367

5.3.22 Diagram 5-22



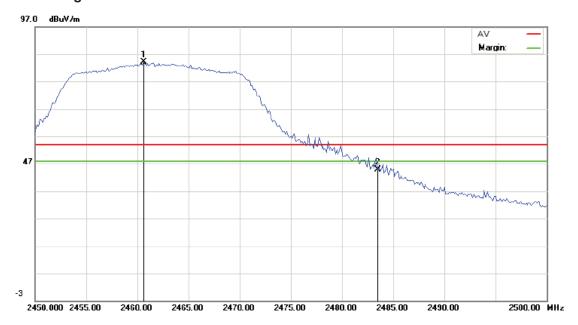


No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBuV	dΒ	dBuV/m	Value
1	2412.750	93.89	-6.72	87.17	peak
2	2400.000	68.58	-6.76	61.82	peak
3	2390.000	58.17	-6.78	51.39	peak
4	2400.010	51.40	-6.76	44.64	AVG
5	2389.990	44.67	-6.78	37.89	AVG



Reference No.: 168367

5.3.23 Diagram 5-23

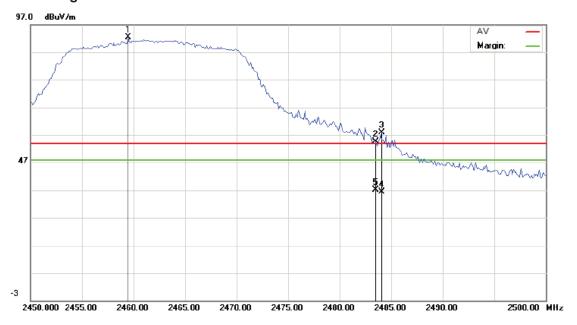


No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBuV	dΒ	dBuV/m	Value
1	2460.625	90.63	-6.59	84.04	peak
2	2483.500	51.49	-6.53	44.96	peak



Reference No.: 168367

5.3.24 Diagram 5-24

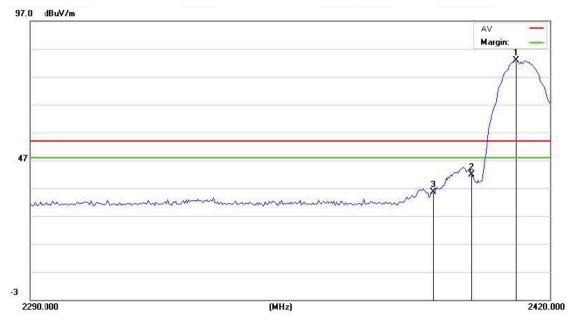


No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBuV	dΒ	dBuV/m	Value
1	2459.500	99.00	-6.60	92.40	peak
2	2483.500	61.18	-6.53	54.65	peak
3	2484.050	64.47	-6.53	57.94	peak
4	2484.050	43.03	-6.53	36.50	AVG
5	2483.500	43.66	-6.53	37.13	AVG



Reference No.: 168367

5.3.25 Diagram 5-25

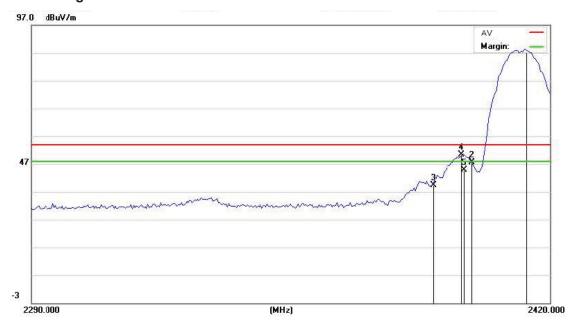


No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBu∨	dB	dBuV/m	Value
1	2411.225	89.53	-6.73	82.80	peak
2	2400.000	48.59	-6.76	41.83	peak
3	2390.000	42.30	-6.78	35.52	peak



Reference No.: 168367

5.3.26 Diagram 5-26

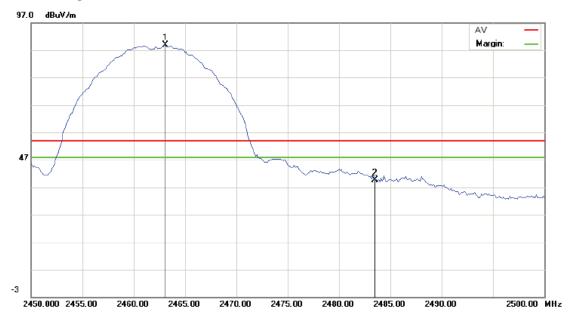


No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBu∨	dB	dBuV/m	Value
1	2413.825	95.03	-6.71	88.32	peak
2	2400.000	54.36	-6.76	47.60	peak
3	2390.000	46.22	-6.78	39.44	peak
4	2397.330	57.16	-6.76	50.40	peak
5	2397,780	51.57	-6.76	44.81	AVG



Reference No.: 168367

5.3.27 Diagram 5-27

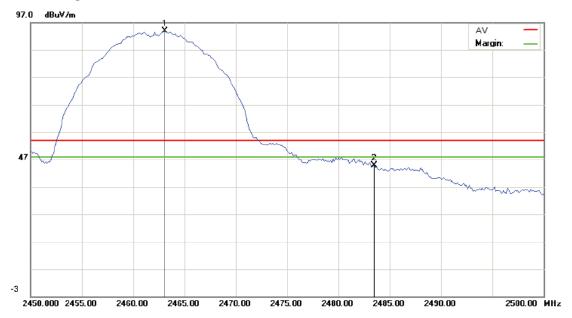


No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBuV	d₿	dBuV/m	Value
1	2463.125	95.43	-6.58	88.85	peak
2	2483.500	46.28	-6.53	39.75	peak



Reference No.: 168367

5.3.28 Diagram 5-28

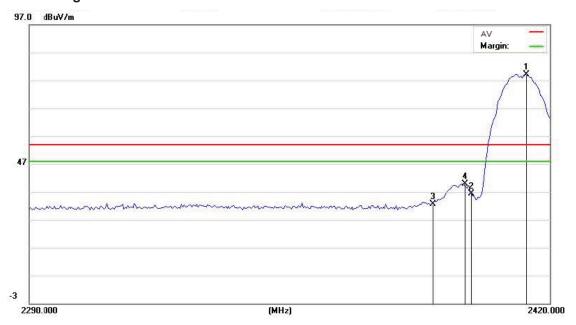


-			D 15		M	
	No.	Freq.	Reading Level	Correct Factor	Measure- ment	
		MHz	dBuV	dΒ	dBuV/m	Value
Ī	1	2463.125	100.43	-6.58	93.85	peak
Ī	2	2483.500	51.34	-6.53	44.81	peak



Reference No.: 168367

5.3.29 Diagram 5-29

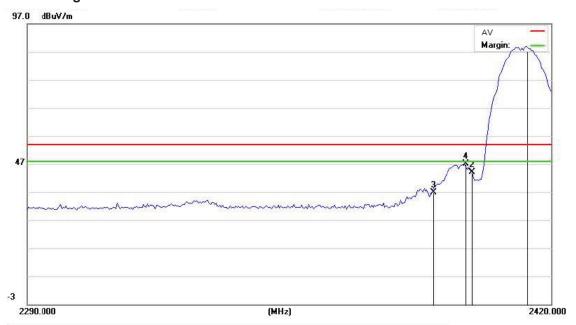


No.	МІ	K	Freq.	Reading Level	Correct Factor	Measure- ment	
			MHz	dBu∨	dB	dBuV/m	Value
1	*	24	13.825	85.93	-6.71	79.22	peak
2		24	100.000	43.06	-6.76	36.30	peak
3		23	390.000	39.46	-6.78	32.68	peak
4		23	398.225	46.72	-6.76	39.96	peak



Reference No.: 168367

5.3.30 Diagram 5-30

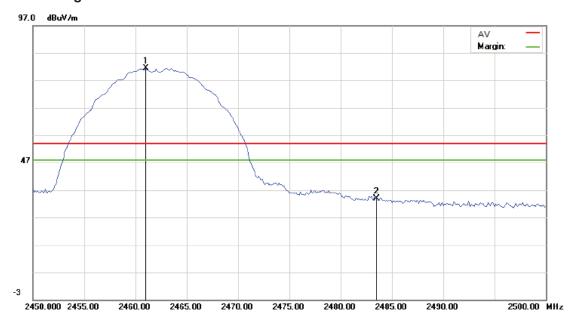


No.	МІ	ζ.	Freq.	Reading Level	Correct Factor	Measure- ment	
			MHz	dBu∨	dB	dBuV/m	Value
1	*	24	113.825	95.58	-6.71	88.87	peak
2		24	100.000	50.96	-6.76	44.20	peak
3		23	390.000	43.72	-6.78	36.94	peak
4		23	398.225	53.87	-6.76	47.11	peak



Reference No.: 168367

5.3.31 Diagram 5-31

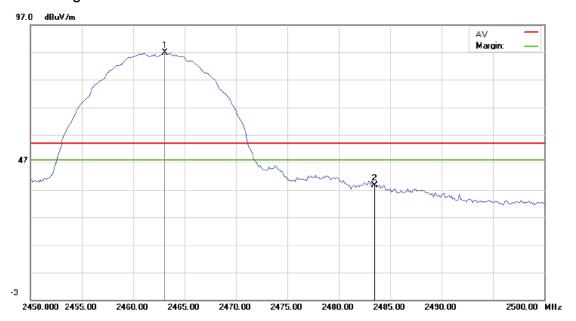


No.	MI	<.	Freq.	Reading Level	Correct Factor	Measure- ment	
			MHz	dBuV	dΒ	dBuV/m	Value
1	*	24	461.000	88.01	-6.59	81.42	peak
2		24	483.500	40.29	-6.53	33.76	peak



Reference No.: 168367

5.3.32 Diagram 5-32

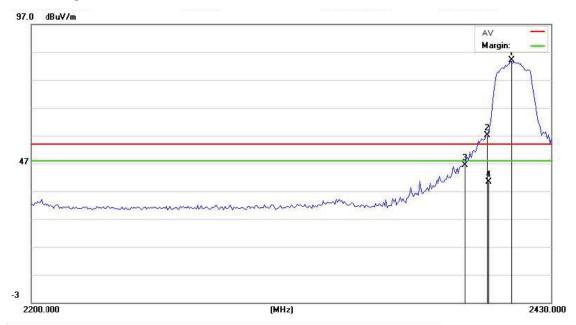


No).	MI	۲.	Freq.	Reading Level	Correct Factor	Measure- ment	
				MHz	dBuV	dΒ	dBuV/m	Value
1		*	24	463.125	93.56	-6.58	86.98	peak
2	2		24	483.500	45.24	-6.53	38.71	peak



Reference No.: 168367

5.3.33 Diagram 5-33

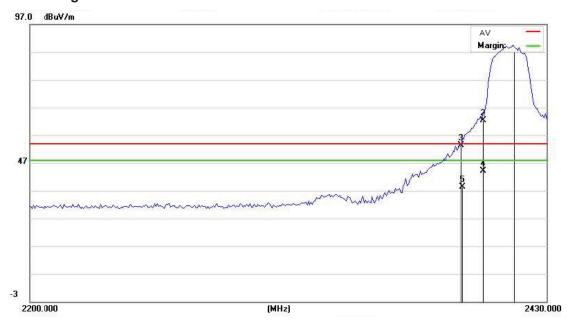


No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBu∨	dB	dBuV/m	Value
1	2411.600	90.82	-6.73	84.09	peak
2	2400.000	63.82	-6.76	57.06	peak
3	2390.000	53.09	-6.78	46.31	peak
4	2400.945	47.12	-6.75	40.37	AVG



Reference No.: 168367

5.3.34 Diagram 5-34

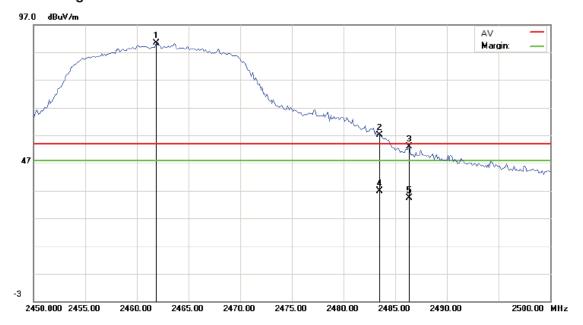


No.	30	Freq.	Reading Level	Correct Factor	Measure- ment	
		MHz	dBu∨	dB	dBuV/m	Value
1	24	14.475	96.26	-6.71	89.55	peak
2	24	-00.000	69.13	-6.76	62.37	peak
3	23	90.000	60.06	-6.78	53.28	peak
4	24	00.000	50.93	-6.76	44.17	AVG
5	23	90.990	45.06	-6.78	38.28	AVG



Reference No.: 168367

5.3.35 Diagram 5-35

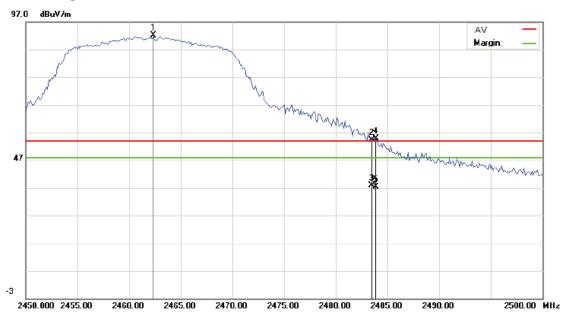


No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBuV	dΒ	dBuV/m	Value
1	2461.875	96.92	-6.59	90.33	peak
2	2483.500	63.69	-6.53	57.16	peak
3	2486.375	59.29	-6.52	52.77	peak
4	2483.500	43.43	-6.53	36.90	AVG
5	2486.375	41.02	-6.52	34.50	AVG



Reference No.: 168367

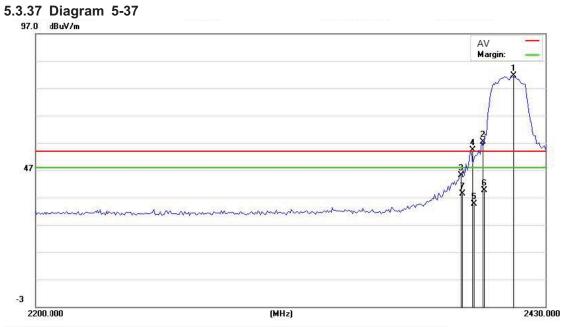
5.3.36 Diagram 5-36



No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBuV	dΒ	dBuV/m	Value
1	2462.375	98.60	-6.59	92.01	peak
2	2483.500	60.84	-6.53	54.31	peak
3	2483.500	44.34	-6.53	37.81	AVG
4	2483.875	61.53	-6.53	55.00	peak
5	2483.875	43.98	-6.53	37.45	AVG



Reference No.: 168367



No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBu∨	dB	dBuV/m	Value
1	2414.475	88.42	-6.71	81.71	peak
2	2400.000	64.12	-6.76	57.36	peak
3	2390.000	51.84	-6.78	45.06	peak
4	2395.385	61.16	-6.77	54.39	peak
5	2395.985	41.35	-6.77	34.58	AVG
6	2400.935	46.38	-6.75	39.63	AVG
7	2390.555	45.06	-6.78	38.28	AVG



Reference No.: 168367

5.3.38 Diagram 5-38

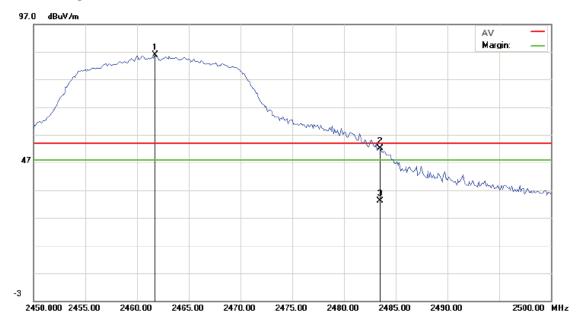


No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBu∨	dB	dBuV/m	Value
1	2411.600	97.65	-6.73	90.92	peak
2	2400.000	69.45	-6.76	62.69	peak
3	2390,000	61,40	-6.78	54.62	peak
4	2390.895	63.98	-6.78	57.20	peak
5	2390.975	44.60	-6.78	37.82	AVG
6	2400.000	46.11	-6.76	39.35	AVG



Reference No.: 168367

5.3.39 Diagram 5-39

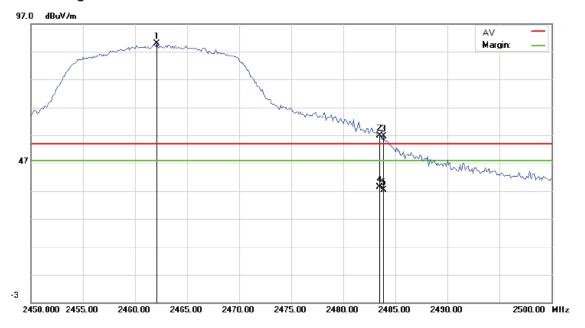


No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBuV	dΒ	dBuV/m	Value
1	2461.750	92.52	-6.59	85.93	peak
2	2483.500	58.66	-6.53	52.13	peak
3	2483.500	39.66	-6.53	33.13	AVG



Reference No.: 168367

5.3.40 Diagram 5-40

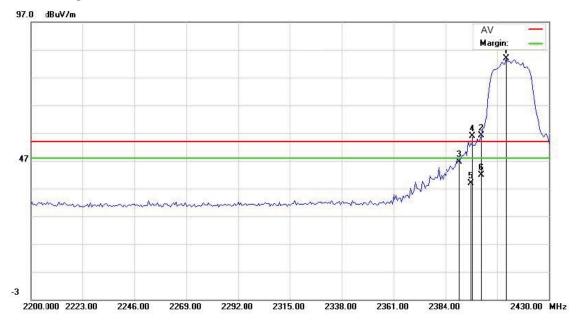


No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBuV	dΒ	dBuV/m	Value
1	2462.125	96.45	-6.59	89.86	peak
2	2483.500	63.41	-6.53	56.88	peak
3	2483.875	63.14	-6.53	56.61	peak
4	2483.500	44.84	-6.53	38.31	AVG
5	2483.875	43.86	-6.53	37.33	AVG



Reference No.: 168367

5.3.41 Diagram 5-41

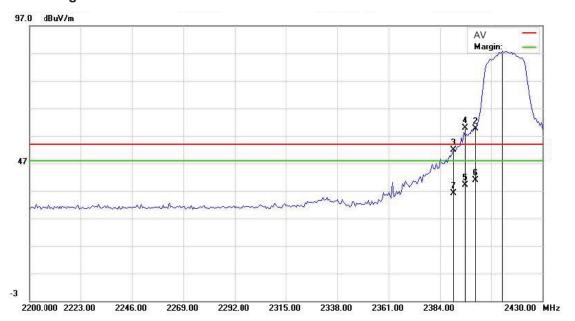


Freq.	Reading Level	Correct Factor	Measure- ment	
MHz	dBu∨	dB	dBuV/m	Value
2411.025	90.71	-6.73	83.98	peak
2400.000	62.96	-6.76	56.20	peak
2390.000	53.53	-6.78	46.75	peak
2395.935	62.59	-6.77	55.82	peak
2395.355	45.59	-6.77	38.82	AVG
2400.000	48.56	-6.76	41.80	AVG
	MHz 2411.025 2400.000 2390.000 2395.935 2395.355	Freq. Level MHz dBuV 2411.025 90.71 2400.000 62.96 2390.000 53.53 2395.935 62.59 2395.355 45.59	Freq. Level Factor MHz dBuV dB 2411.025 90.71 -6.73 2400.000 62.96 -6.76 2390.000 53.53 -6.78 2395.935 62.59 -6.77 2395.355 45.59 -6.77	Freq. Level Factor ment MHz dBuV dB dBuV/m 2411.025 90.71 -6.73 83.98 2400.000 62.96 -6.76 56.20 2390.000 53.53 -6.78 46.75 2395.935 62.59 -6.77 55.82 2395.355 45.59 -6.77 38.82



Reference No.: 168367

5.3.42 Diagram 5-42

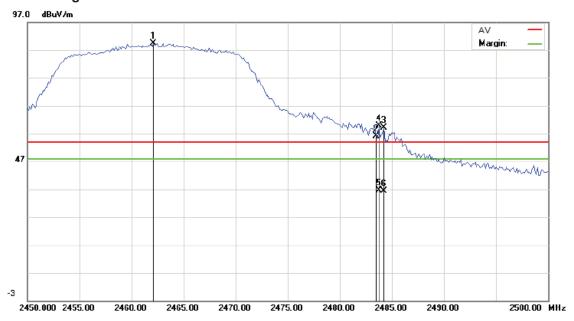


No		Freq.	Reading Level	Correct Factor	Measure- ment	
		MHz	dBu∨	dB	dBuV/m	Value
1 8	24	12.175	94.72	-6.73	87.99	peak
2	24	100.000	66.32	-6.76	59.56	peak
3	23	390.000	58.71	-6.78	51.93	peak
4	23	395.425	66.61	-6.77	59.84	peak
5	23	395.425	45.95	-6.77	39.18	AVG
6	24	000.004	47.64	-6.76	40.88	AVG
7	23	390.000	42.87	-6.78	36.09	AVG



Reference No.: 168367

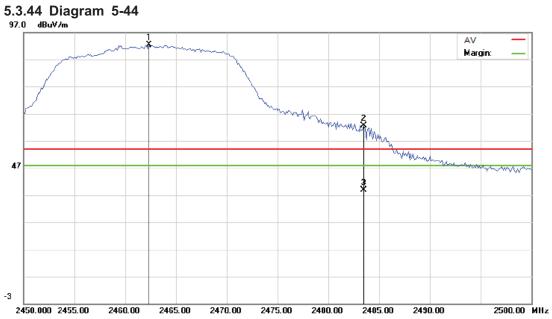
5.3.43 Diagram 5-43



No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBuV	dΒ	dBuV/m	Value
1	2462.125	95.91	-6.59	89.32	peak
2	2483.500	62.65	-6.53	56.12	peak
3	2484.250	65.78	-6.53	59.25	peak
4	2483.750	66.45	-6.53	59.92	peak
5	2483.750	43.27	-6.53	36.74	AVG
6	2484.250	43.01	-6.53	36.48	AVG



Reference No.: 168367

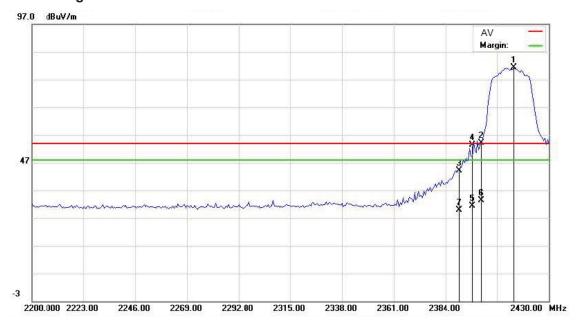


No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBuV	dΒ	dBuV/m	Value
1	2462.375	98.89	-6.59	92.30	peak
2	2483.500	69.09	-6.53	62.56	peak
3	2483.500	45.37	-6.53	38.84	AVG



Reference No.: 168367

5.3.45 Diagram 5-45



No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBu∨	dB	dBuV/m	Detector
1	2414.475	88.01	-6.71	81.30	peak
2	2400.000	60.98	-6.76	54.22	peak
3	2390.000	50.86	-6.78	44.08	peak
4	2395.760	60.27	-6.77	53.50	peak
5	2395,760	38.04	-6.77	31.27	AVG
6	2400.000	40.24	-6.76	33.48	AVG
7	2390.000	36.61	-6.78	29.83	AVG



Reference No.: 168367

5.3.46 Diagram 5-46

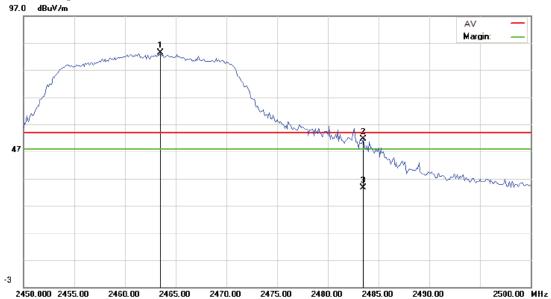


No.		Freq.	Reading Level	Correct Factor	Measure- ment	
		MHz	dBu∨	dB	dBuV/m	Value
1	24	15.625	96.15	-6.71	89.44	peak
2	24	-00.000	69.55	-6.76	62.79	peak
3	23	90.000	58.41	-6.78	51.63	peak
4	23	94.315	67.22	-6.77	60.45	peak
5	23	94.315	43.39	-6.77	36.62	AVG
6	24	000,000	45.79	-6.76	39.03	AVG
7	23	90.000	40.98	-6.78	34.20	AVG



Reference No.: 168367

5.3.47 Diagram 5-47

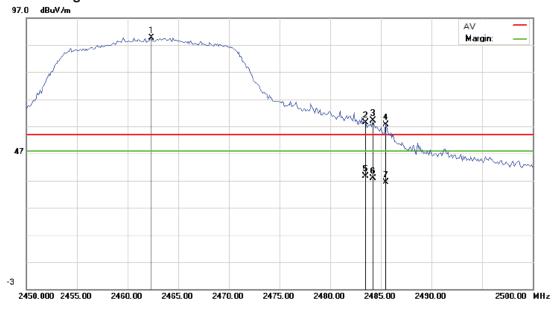


No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBuV	dΒ	dBuV/m	Value
1	2463.500	90.06	-6.58	83.48	peak
2	2483.500	58.23	-6.53	51.70	peak
3	2483.500	40.12	-6.53	33.59	AVG



Reference No.: 168367

5.3.48 Diagram 5-48

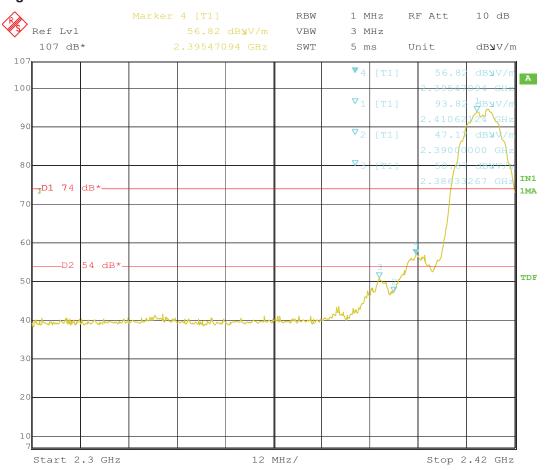


No.	Freq.	Reading Level	Correct Factor	Measure- ment	
	MHz	dBuV	dΒ	dBuV/m	Value
1	2462.375	96.27	-6.59	89.68	peak
2	2483.500	64.83	-6.53	58.30	peak
3	2484.250	65.71	-6.53	59.18	peak
4	2485.500	64.27	-6.52	57.75	peak
5	2483.500	45.09	-6.53	38.56	AVG
6	2484.250	44.30	-6.53	37.77	AVG
7	2485.500	42.83	-6.52	36.31	AVG



Reference No.: 168367

5.3.49 Diagram 5-49

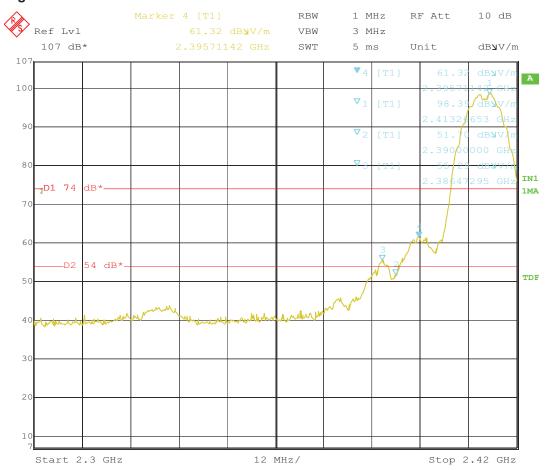


Date: 27.APR.2011 12:10:47



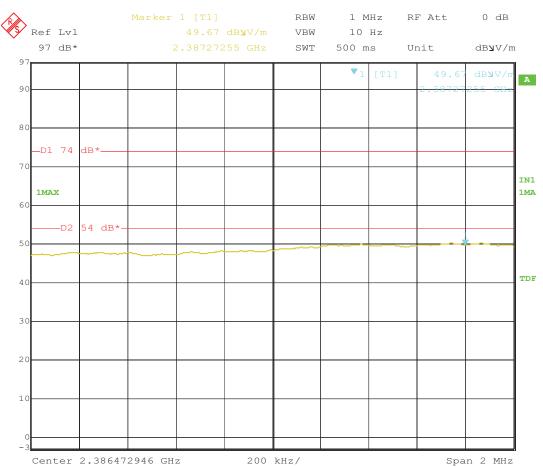
Reference No.: 168367

5.3.50 Diagram 5-50



Date: 27.APR.2011 12:05:09

Reference No.: 168367

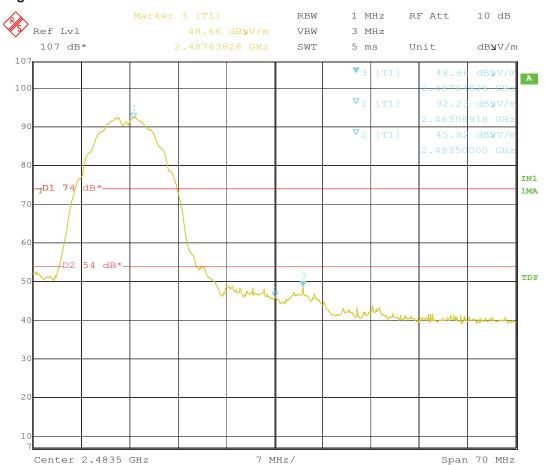


Date: 27.APR.2011 12:08:03



Reference No.: 168367

5.3.51 Diagram 5-51

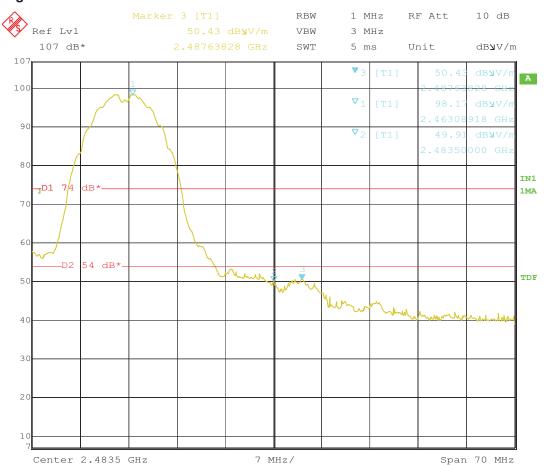


Date: 27.APR.2011 13:03:41



Reference No.: 168367

5.3.52 Diagram 5-52

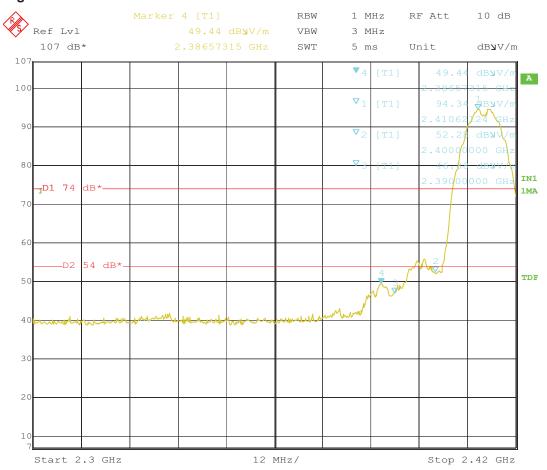


Date: 27.APR.2011 13:02:20



Reference No.: 168367

5.3.53 Diagram 5-53

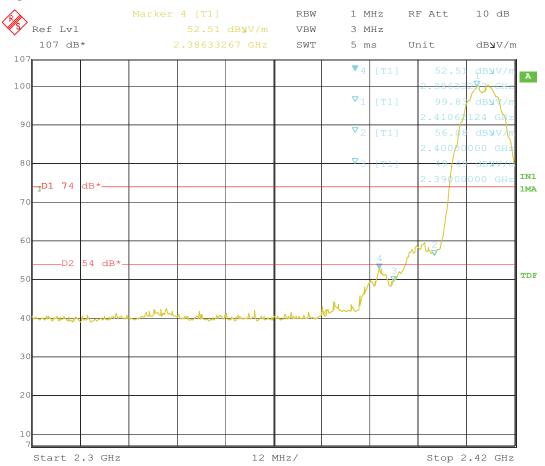


Date: 27.APR.2011 14:31:52



Reference No.: 168367

5.3.54 Diagram 5-54

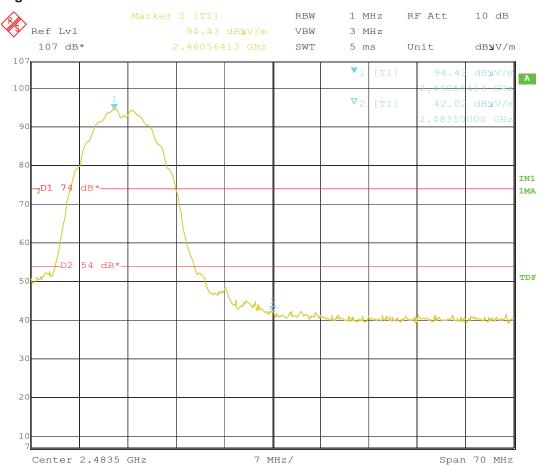


Date: 27.APR.2011 14:30:09



Reference No.: 168367

5.3.55 Diagram 5-55

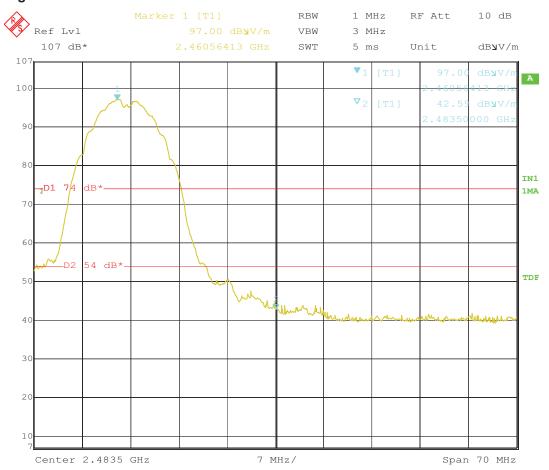


Date: 27.APR.2011 14:41:40



Reference No.: 168367

5.3.56 Diagram 5-56

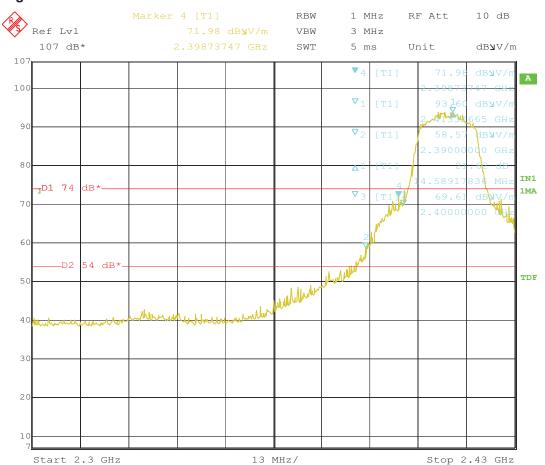


Date: 27.APR.2011 14:43:19



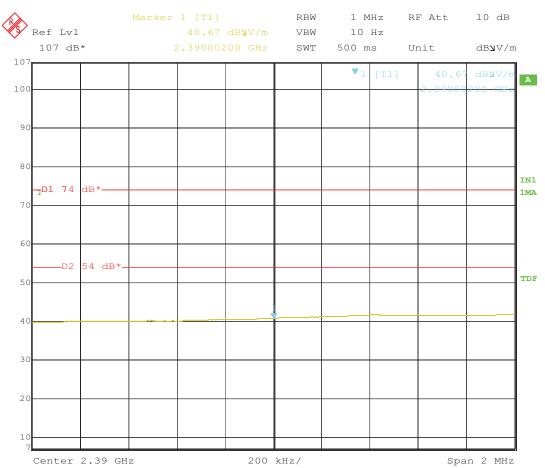
Reference No.: 168367

5.3.57 Diagram 5-57



Date: 27.APR.2011 13:17:34

Reference No.: 168367

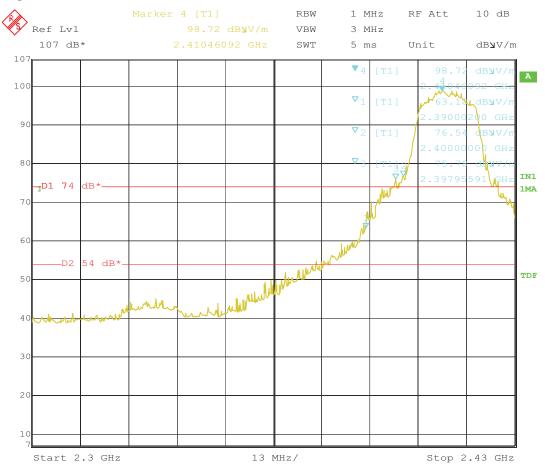


Date: 27.APR.2011 13:20:12



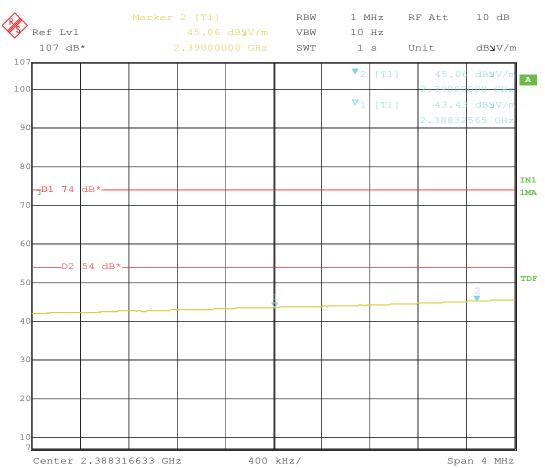
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5.3.58 Diagram 5-58



Date: 27.APR.2011 13:21:47

Reference No.: 168367

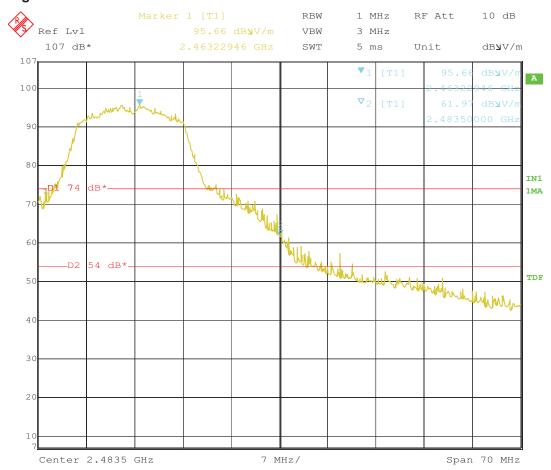


Date: 27.APR.2011 13:25:05



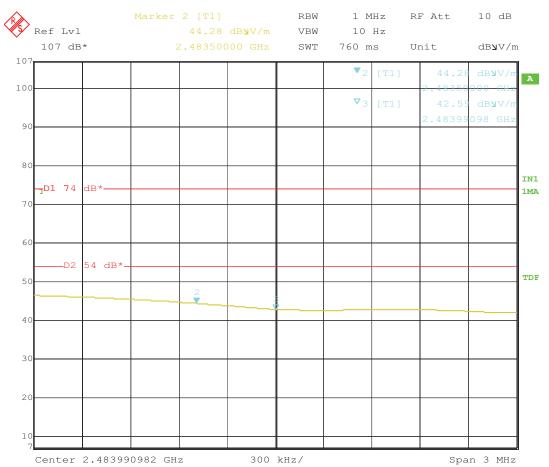
Reference No.: 168367

5.3.59 Diagram 5-59



Date: 27.APR.2011 13:38:08

Reference No.: 168367

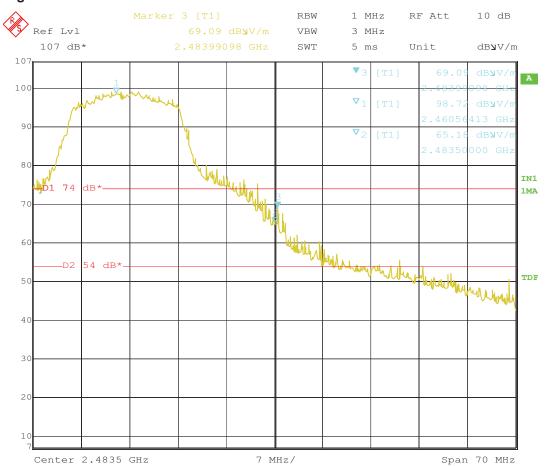


27.APR.2011 13:42:39 Date:



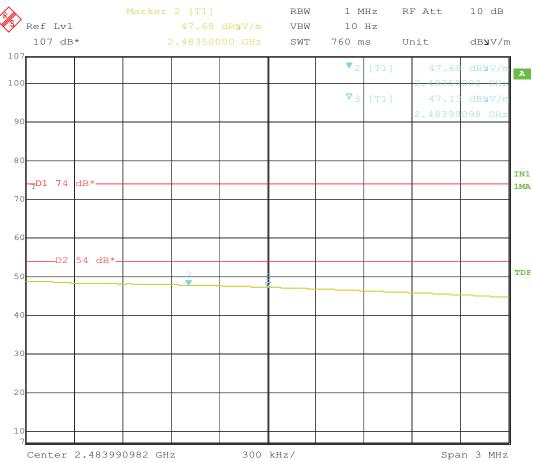
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5.3.60 Diagram 5-60



Date: 27.APR.2011 13:39:45

Reference No.: 168367

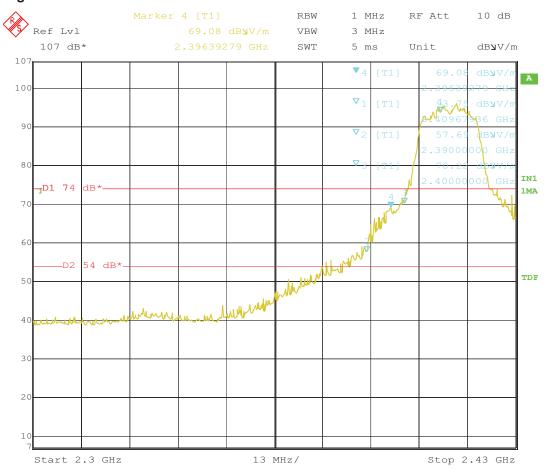


Date:



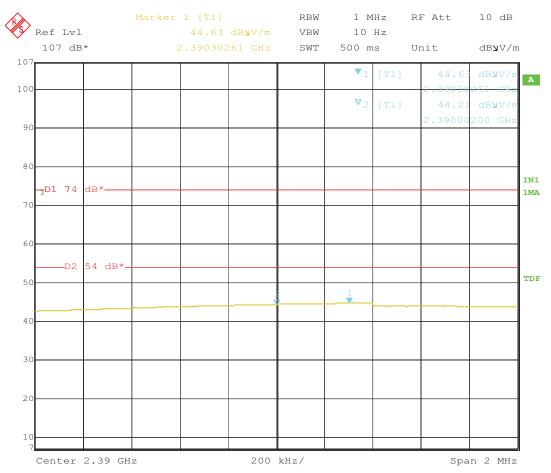
Reference No.: 168367

5.3.61 Diagram 5-61



Date: 27.APR.2011 14:55:57

Reference No.: 168367

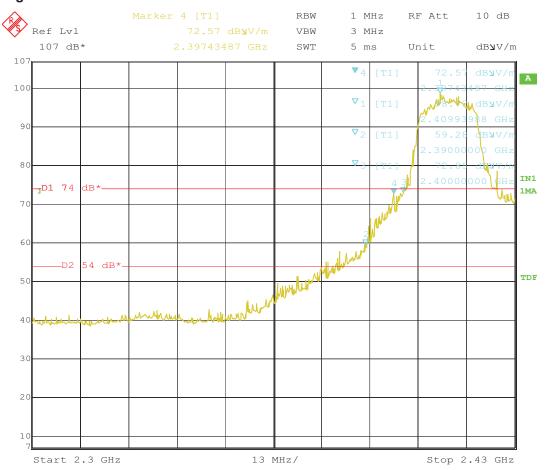


Date: 27.APR.2011 15:03:13



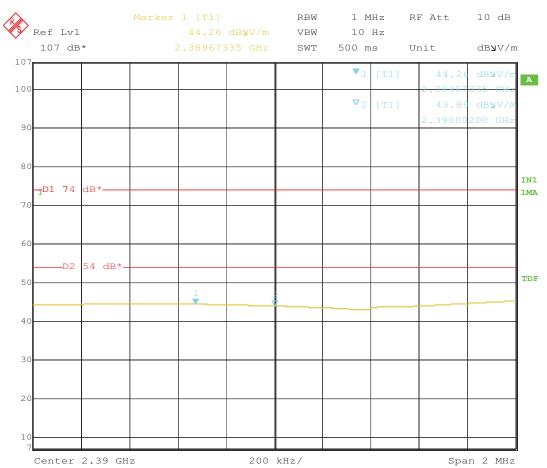
Reference No.: 168367

5.3.62 Diagram 5-62



Date: 27.APR.2011 14:57:35

Reference No.: 168367

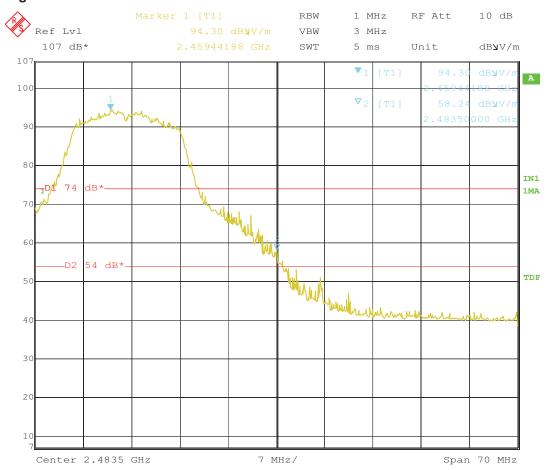


Date: 27.APR.2011 15:01:53



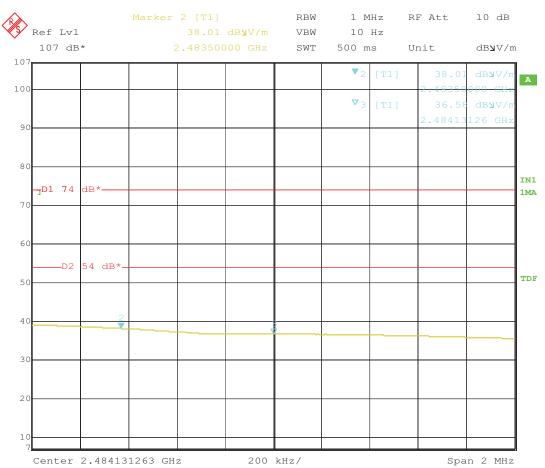
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5.3.63 Diagram 5-63



Date: 27.APR.2011 15:12:09

Reference No.: 168367

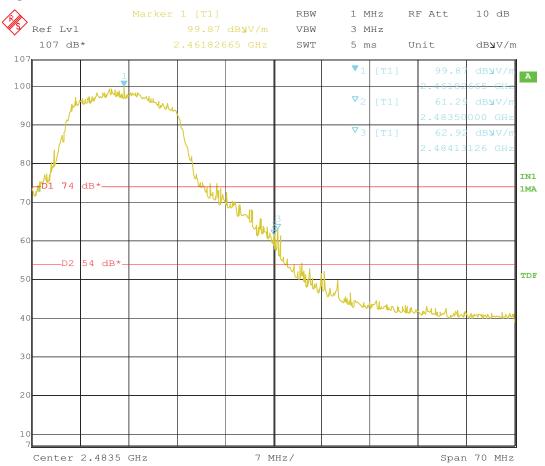


Date: 27.APR.2011 15:17:24



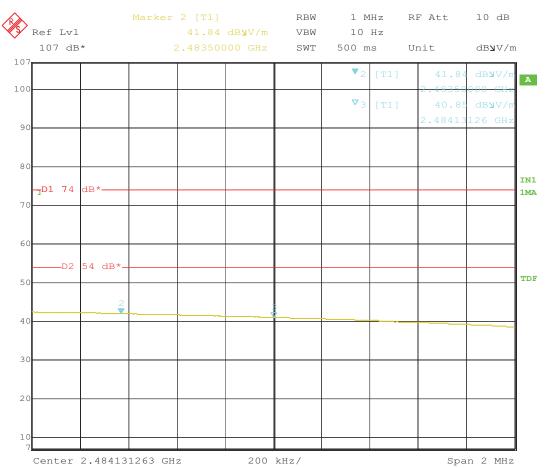
Reference No.: 168367

5.3.64 Diagram 5-64



Date: 27.APR.2011 15:14:31

Reference No.: 168367

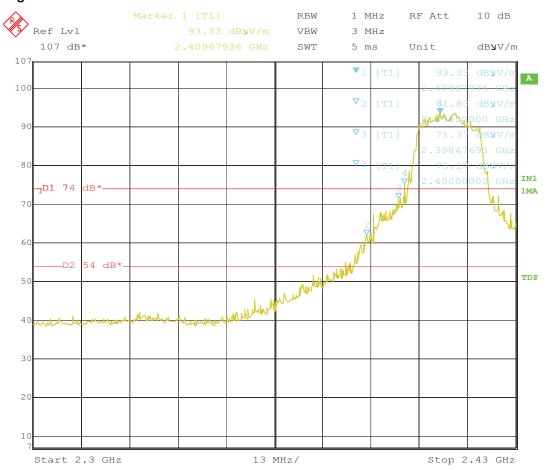


Date: 27.APR.2011 15:16:11



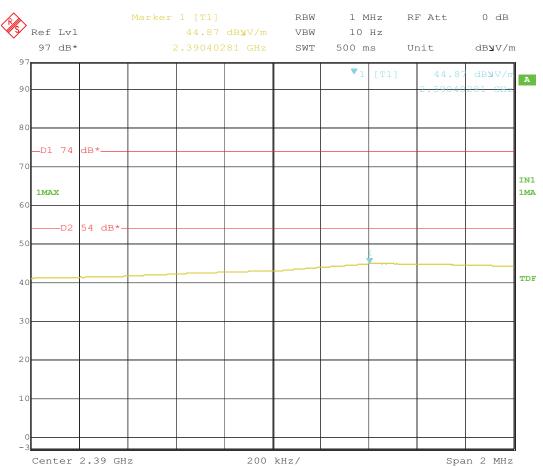
Reference No.: 168367

5.3.65 Diagram 5-65



Date: 27.APR.2011 12:18:00

Reference No.: 168367

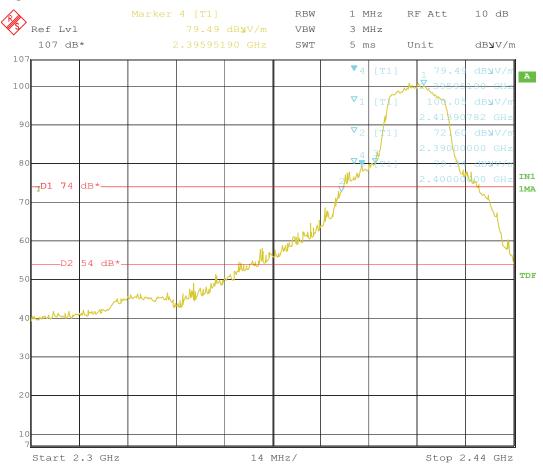


Date: 27.APR.2011 12:20:09



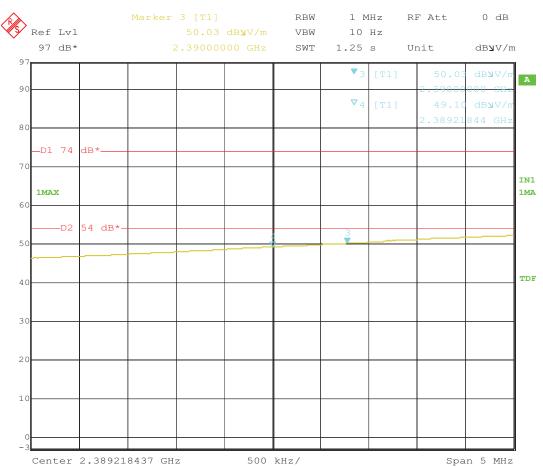
Reference No.: 168367

5.3.66 Diagram 5-66



Date: 27.APR.2011 12:26:38

Reference No.: 168367

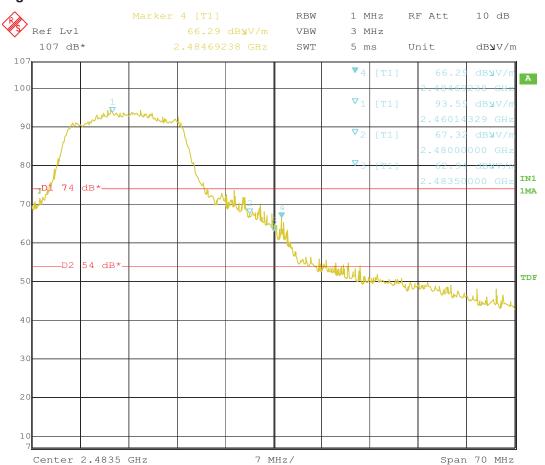


Date: 27.APR.2011 12:28:34



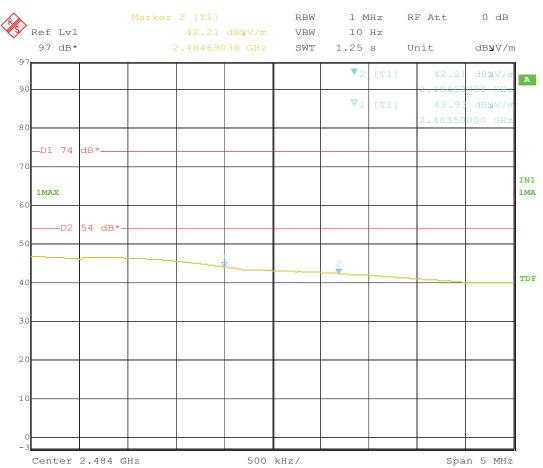
Reference No.: 168367

5.3.67 Diagram 5-67



Date: 27.APR.2011 12:36:33

Reference No.: 168367

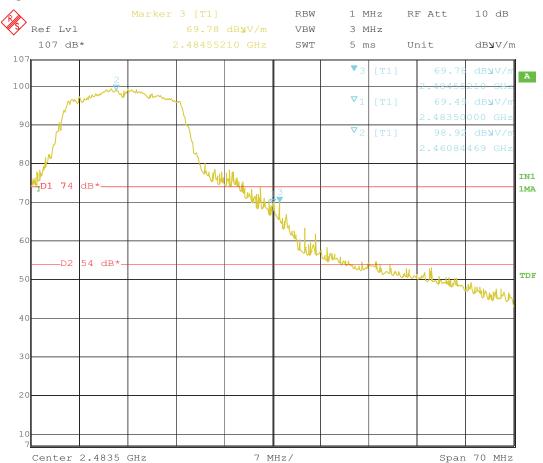


Date: 27.APR.2011 12:40:26



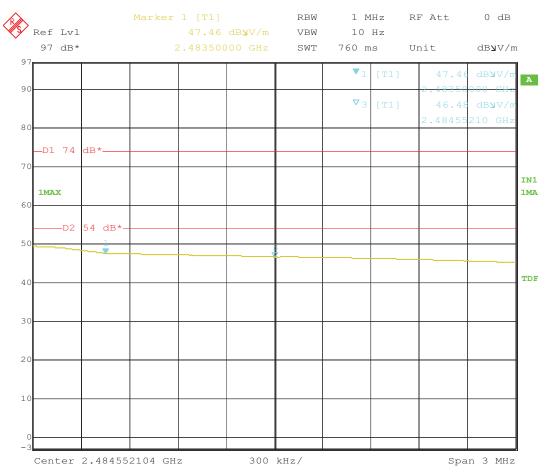
Reference No.: 168367

5.3.68 Diagram 5-68



Date: 27.APR.2011 12:43:01

Reference No.: 168367

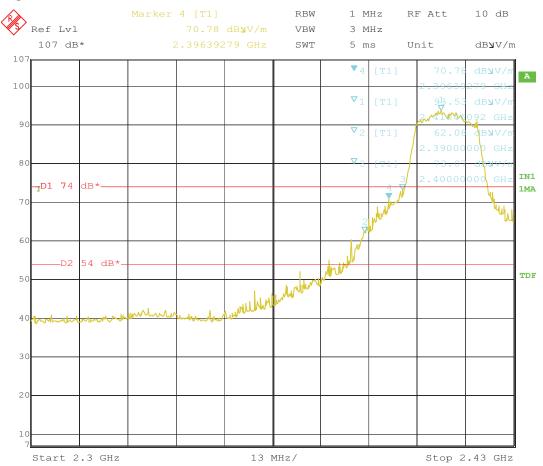


Date: 27.APR.2011 12:44:41



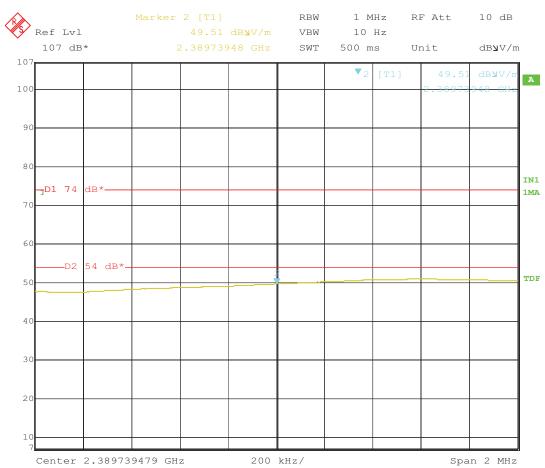
Reference No.: 168367

5.3.69 Diagram 5-69



Date: 27.APR.2011 13:53:24

Reference No.: 168367

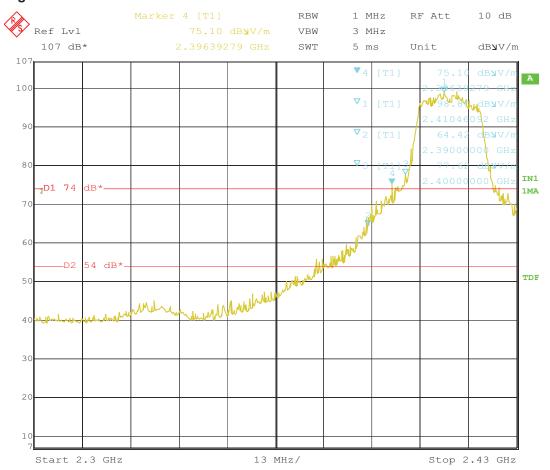


Date: 27.APR.2011 13:59:36



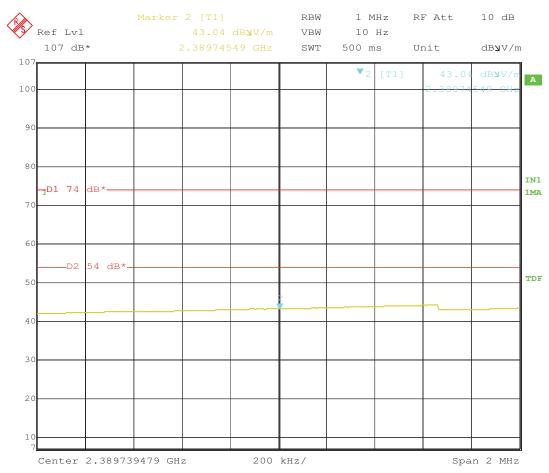
Reference No.: 168367

5.3.70 Diagram 5-70



Date: 27.APR.2011 13:56:19

Reference No.: 168367

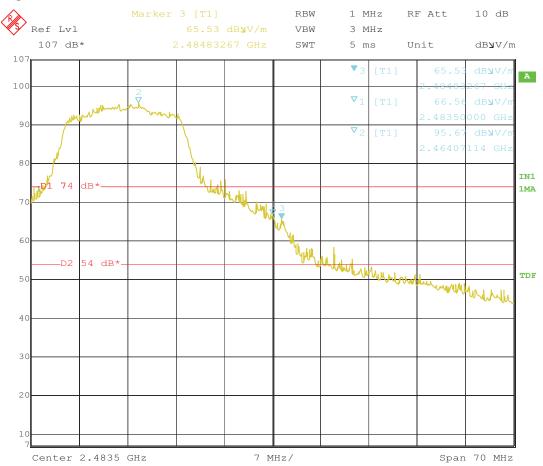


Date: 27.APR.2011 14:00:58



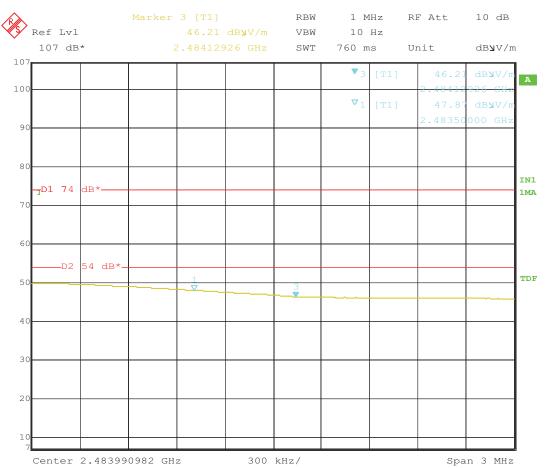
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5.3.71 Diagram 5-71



Date: 27.APR.2011 14:08:32

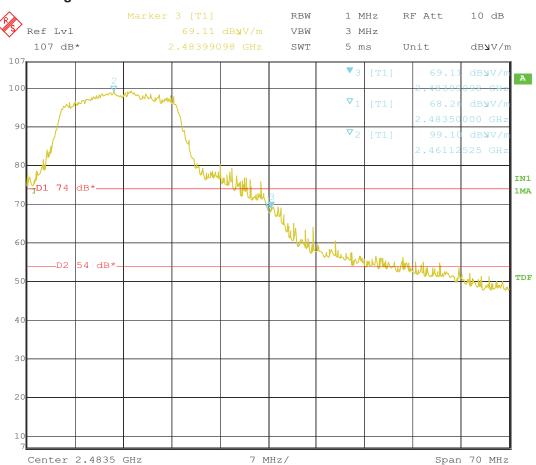
Reference No.: 168367



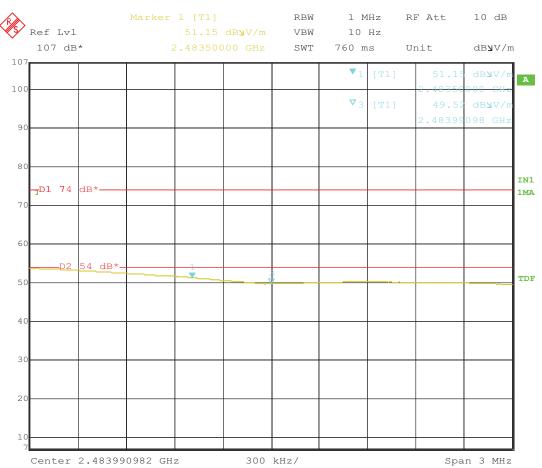


Reference No.: 168367

5.3.72 Diagram 5-72



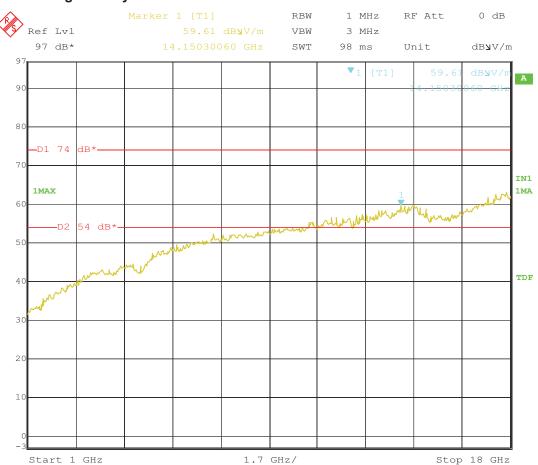
Reference No.: 168367





Reference No.: 168367

5.3.73 Diagram 5-ty-1

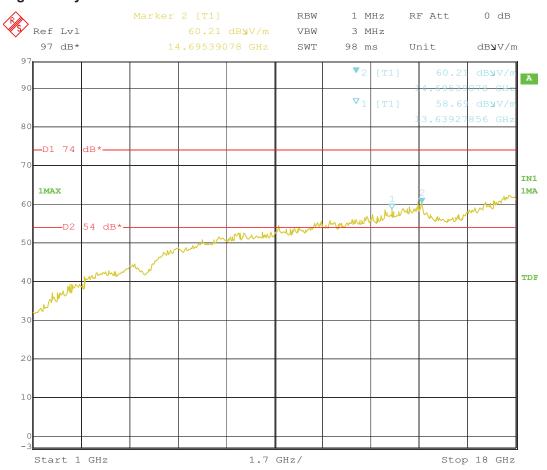


Date: 27.APR.2011 16:26:28



Reference No.: 168367

5.3.74 Diagram 5-ty-2

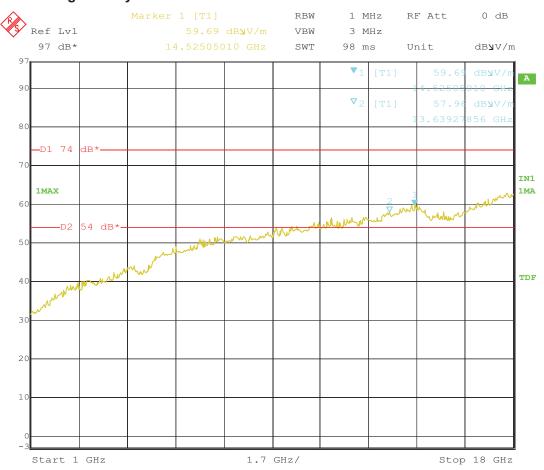


Date: 27.APR.2011 16:27:19



Reference No.: 168367

5.3.75 Diagram 5-ty-3

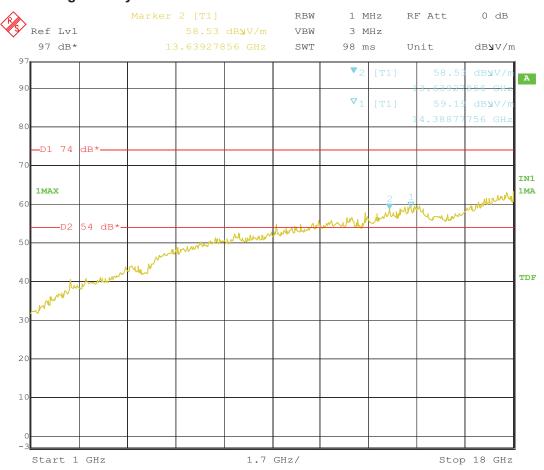


Date: 27.APR.2011 16:47:14



Reference No.: 168367

5.3.76 Diagram 5-ty-4

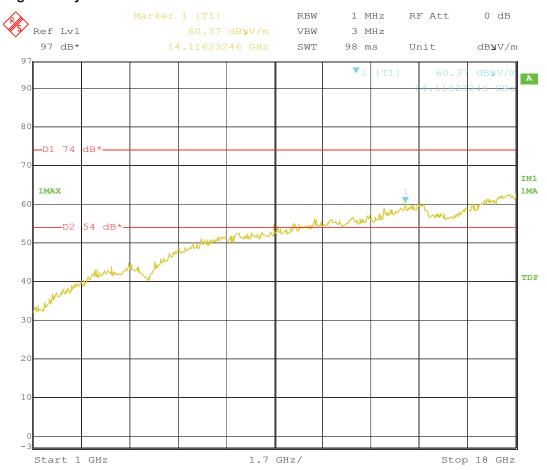


Date: 27.APR.2011 16:46:02



Reference No.: 168367

5.3.77 Diagram 5-ty-5

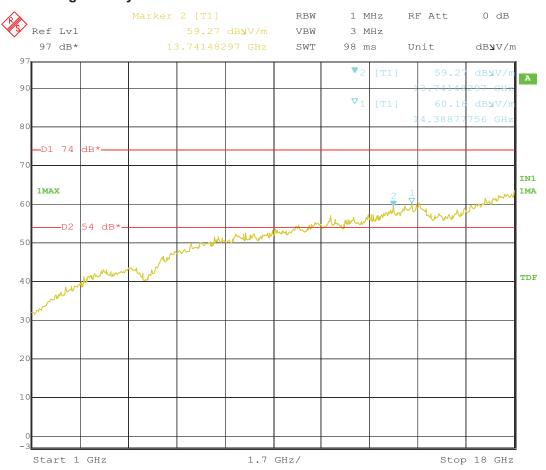


Date: 27.APR.2011 16:34:48



Reference No.: 168367

5.3.78 Diagram 5-ty-6

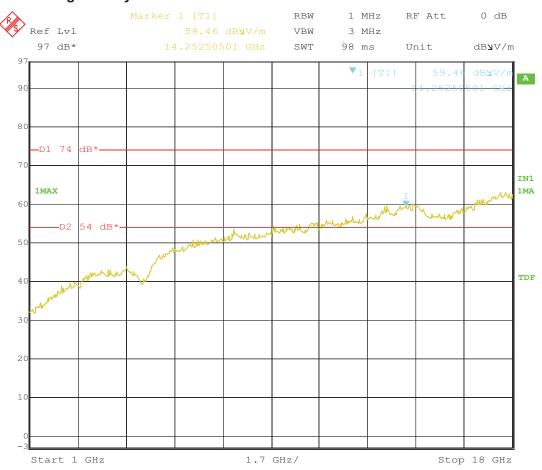


Date: 27.APR.2011 16:35:50



Reference No.: 168367

5.3.79 Diagram 5-ty-7

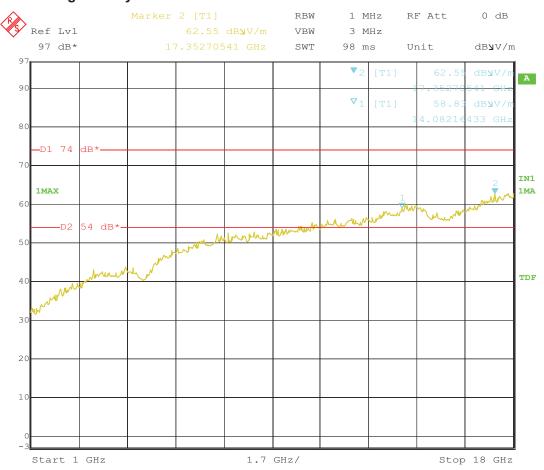


Date: 27.APR.2011 16:50:35



Reference No.: 168367

5.3.80 Diagram 5-ty-8

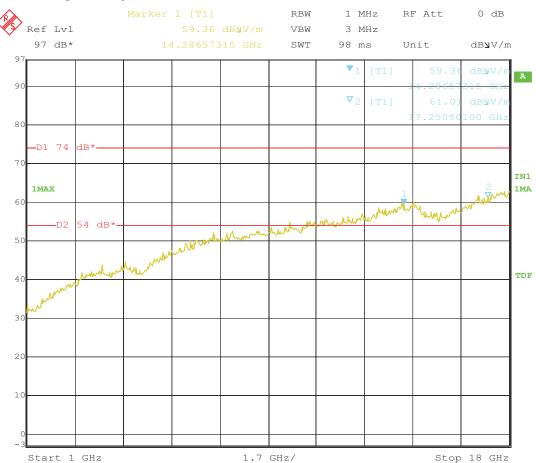


Date: 27.APR.2011 16:51:37



Reference No.: 168367

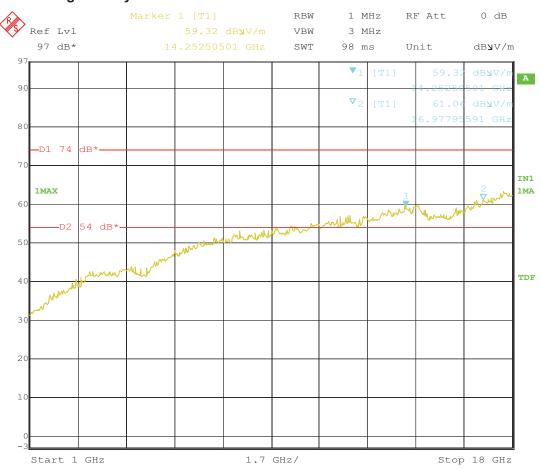
5.3.81 Diagram 5-ty-9





Reference No.: 168367

5.3.82 Diagram 5-ty-10



Date: 27.APR.2011 17:08:03

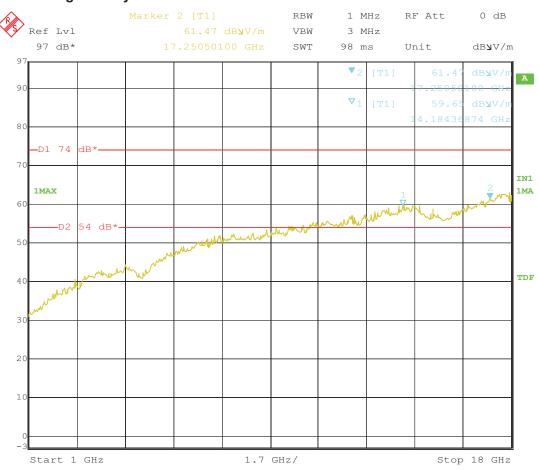


Reference No.: 168367

5.3.83 Diagram 5-ty-11

27.APR.2011 17:05:09

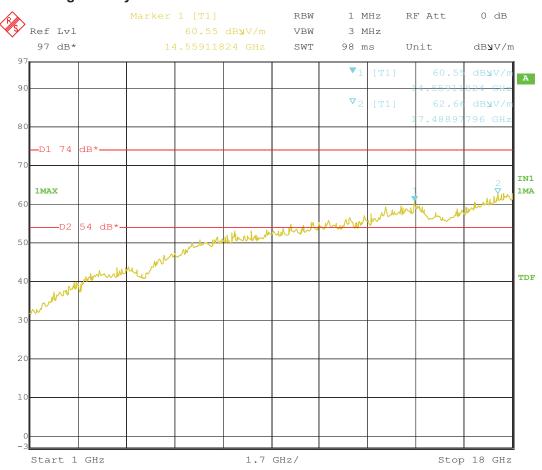
Date:





Reference No.: 168367

5.3.84 Diagram 5-ty-12

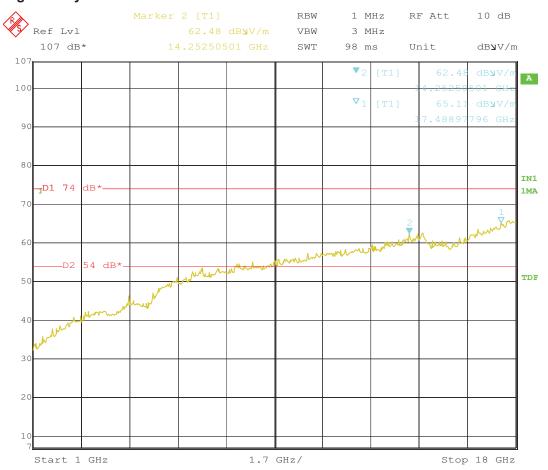


Date: 27.APR.2011 17:04:09



Reference No.: 168367

5.3.85 Diagram 5-ty-13

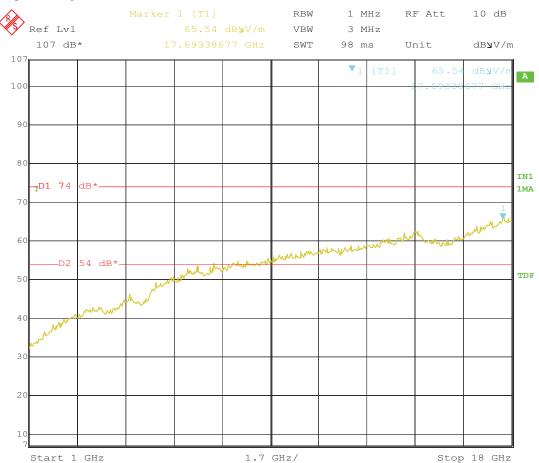


Date: 27.APR.2011 16:07:51



Reference No.: 168367

5.3.86 Diagram 5-ty-14

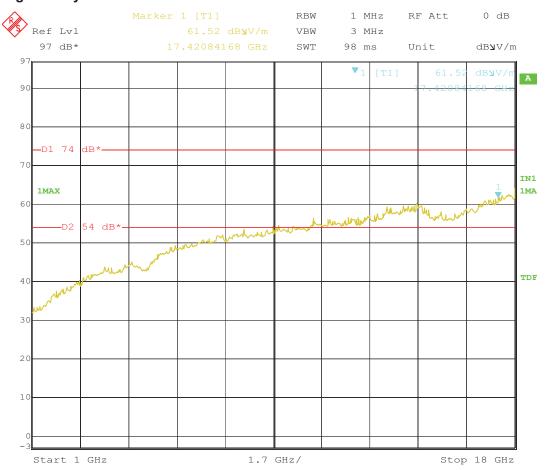


Date: 27.APR.2011 16:06:33



Reference No.: 168367

5.3.87 Diagram 5-ty-15

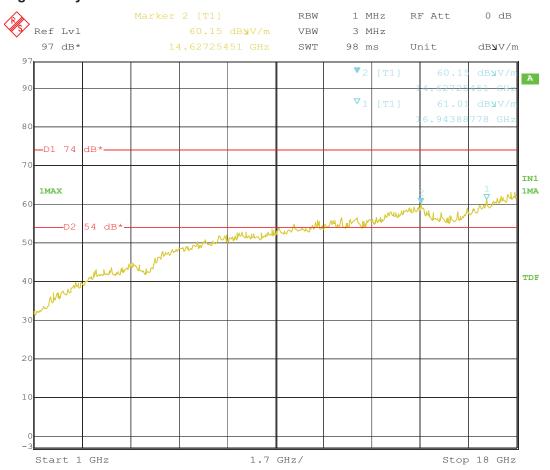


Date: 27.APR.2011 16:19:18



Reference No.: 168367

5.3.88 Diagram 5-ty-16

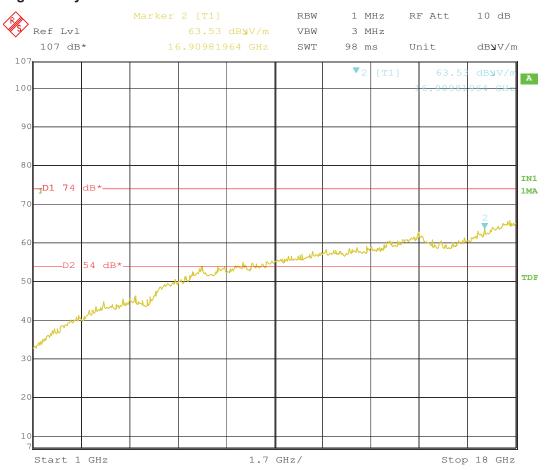


Date: 27.APR.2011 16:20:30



Reference No.: 168367

5.3.89 Diagram 5-ty-17

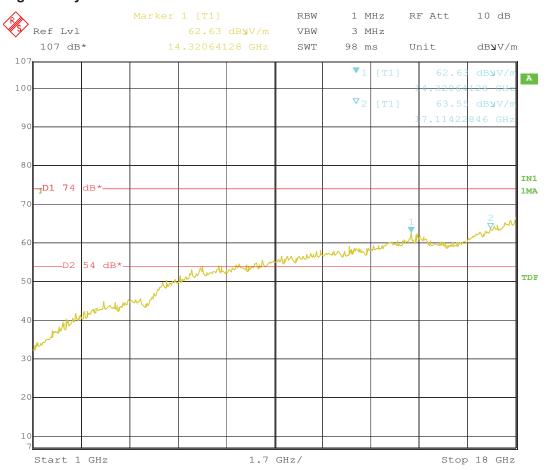


Date: 27.APR.2011 16:10:20



Reference No.: 168367

5.3.90 Diagram 5-ty-18

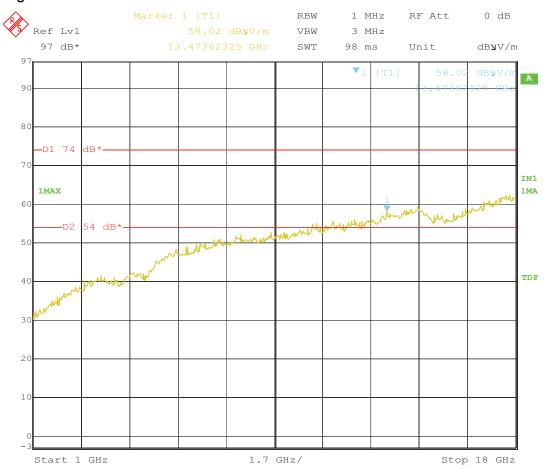


Date: 27.APR.2011 16:11:29



Reference No.: 168367

5.3.91 Diagram 5-P-1

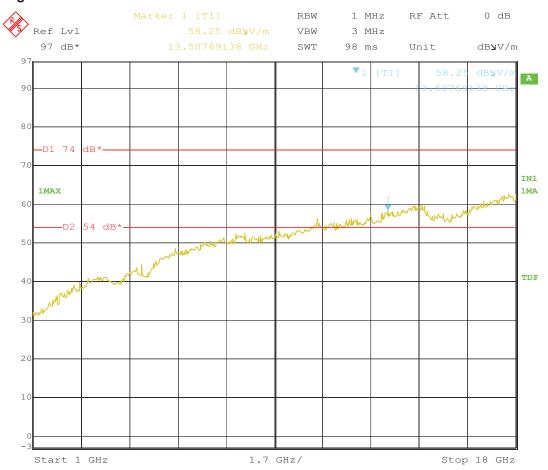


Date: 27.APR.2011 19:17:54



Reference No.: 168367

5.3.92 Diagram 5-P-2

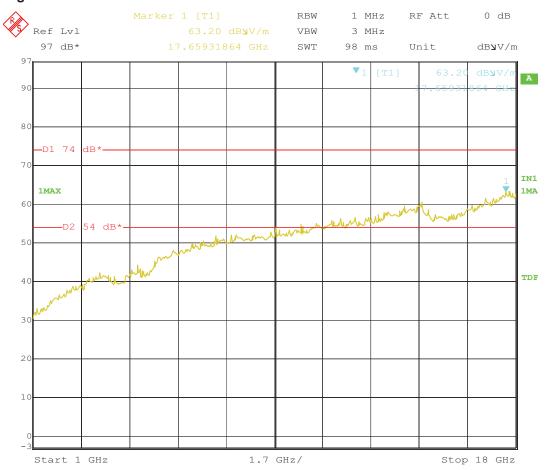


Date: 27.APR.2011 19:18:38



Reference No.: 168367

5.3.93 Diagram 5-P-3

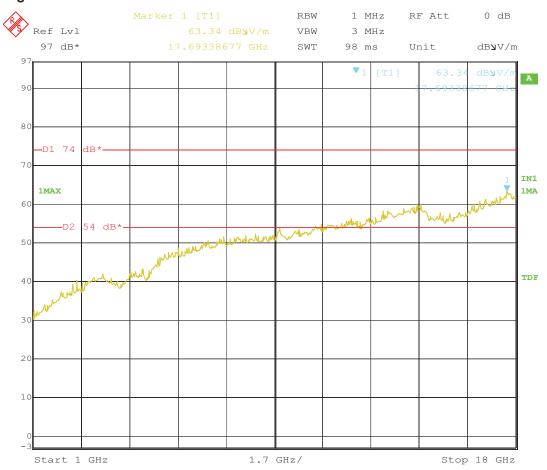


Date: 27.APR.2011 19:32:11



Reference No.: 168367

5.3.94 Diagram 5-P-4

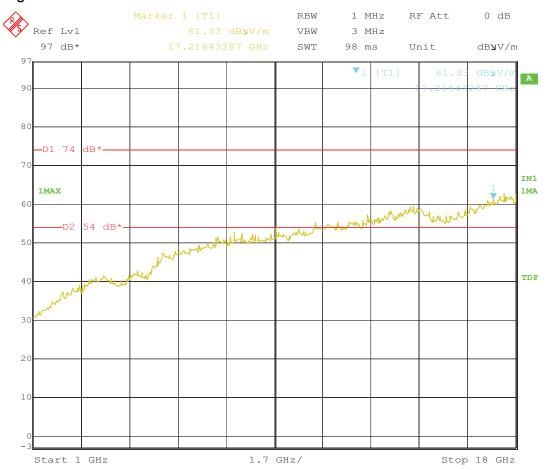


Date: 27.APR.2011 19:32:55



Reference No.: 168367

5.3.95 Diagram 5-P-5

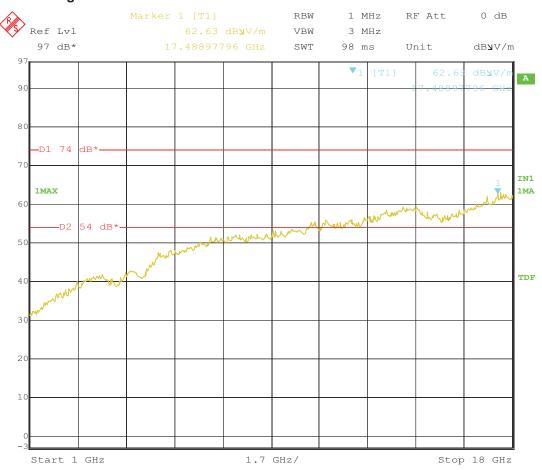


Date: 27.APR.2011 19:30:05



Reference No.: 168367

5.3.96 Diagram 5-P-6

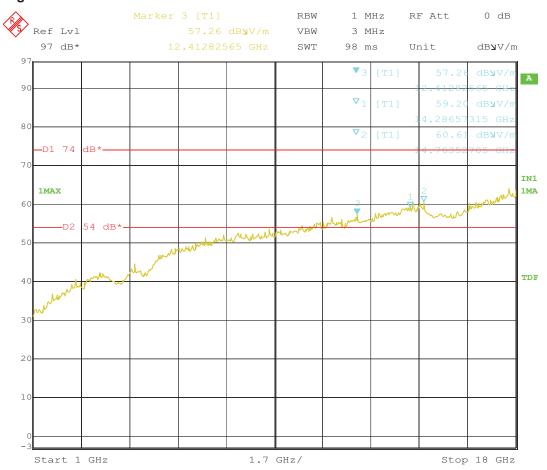


Date: 27.APR.2011 19:29:09



Reference No.: 168367

5.3.97 Diagram 5-P-7

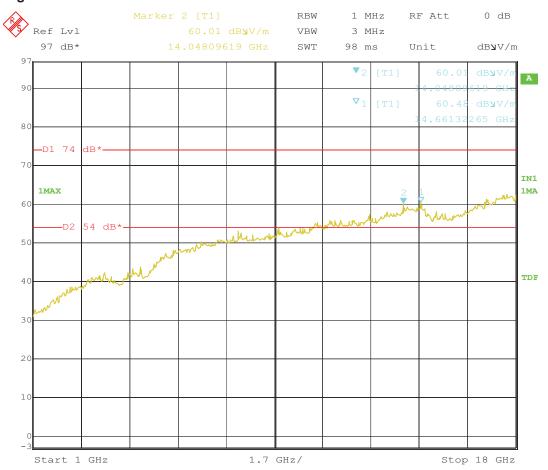


Date: 27.APR.2011 19:39:08



Reference No.: 168367

5.3.98 Diagram 5-P-8

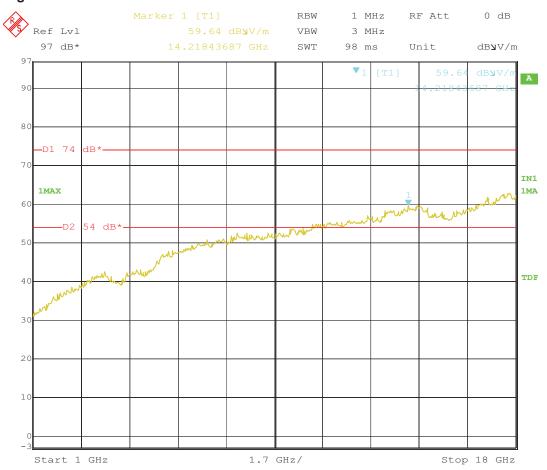


Date: 27.APR.2011 19:39:56



Reference No.: 168367

5.3.99 Diagram 5-P-9

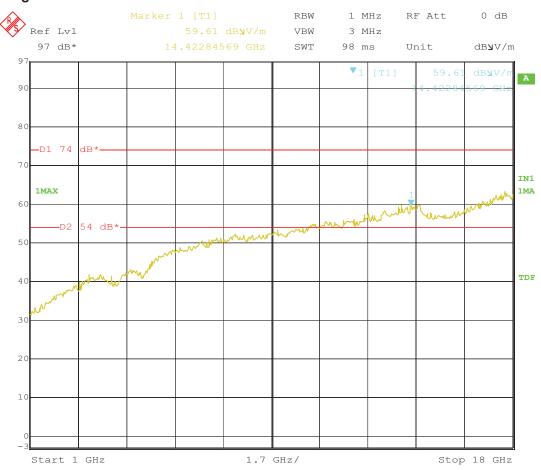


Date: 27.APR.2011 19:53:42



Reference No.: 168367

5.3.100 Diagram 5-P-10

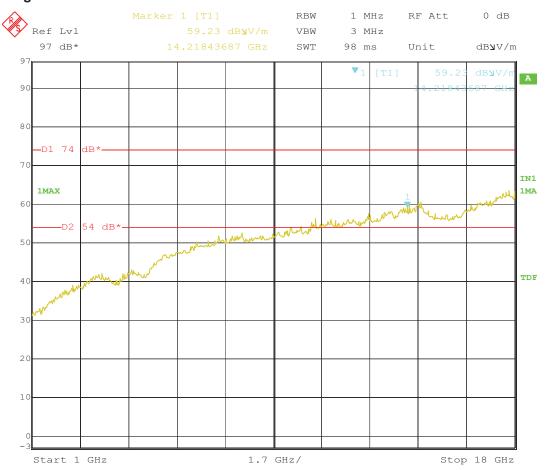


Date: 27.APR.2011 19:54:47



Reference No.: 168367

5.3.101 Diagram 5-P-11

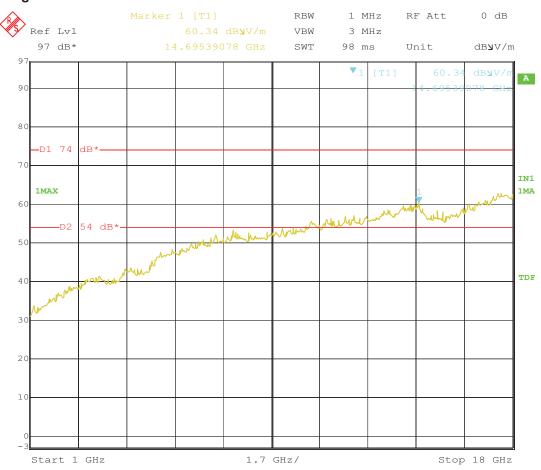


Date: 27.APR.2011 19:51:29



Reference No.: 168367

5.3.102 Diagram 5-P-12

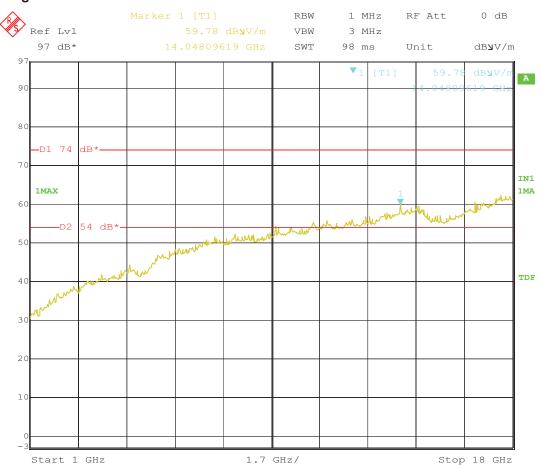


Date: 27.APR.2011 19:50:22



Reference No.: 168367

5.3.103 Diagram 5-P-13

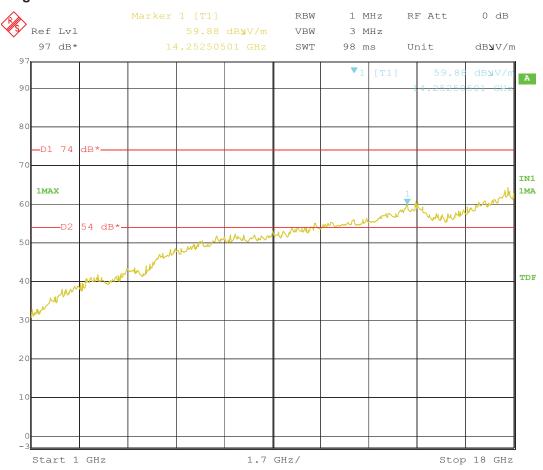


Date: 27.APR.2011 19:08:04



Reference No.: 168367

5.3.104 Diagram 5-P-14

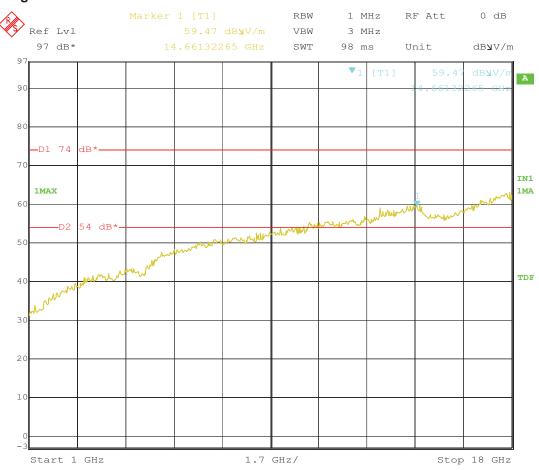


Date: 27.APR.2011 19:09:08



Reference No.: 168367

5.3.105 Diagram 5-P-15

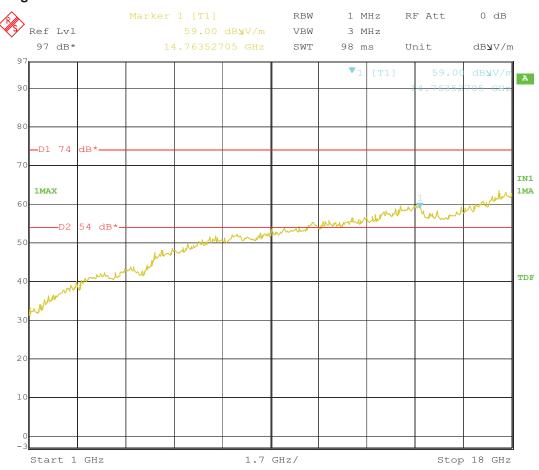


Date: 27.APR.2011 19:12:13



Reference No.: 168367

5.3.106 Diagram 5-P-16

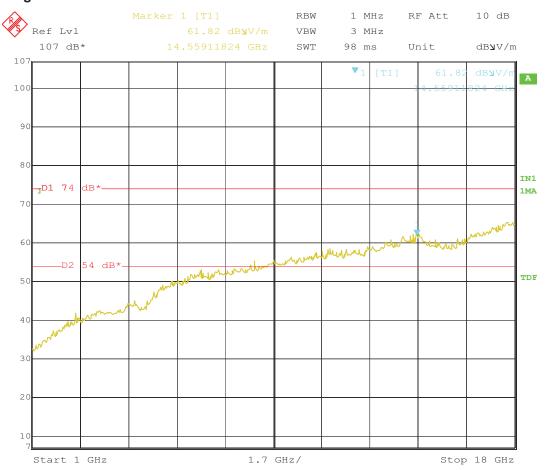


Date: 27.APR.2011 19:11:04



Reference No.: 168367

5.3.107 Diagram 5-P-17

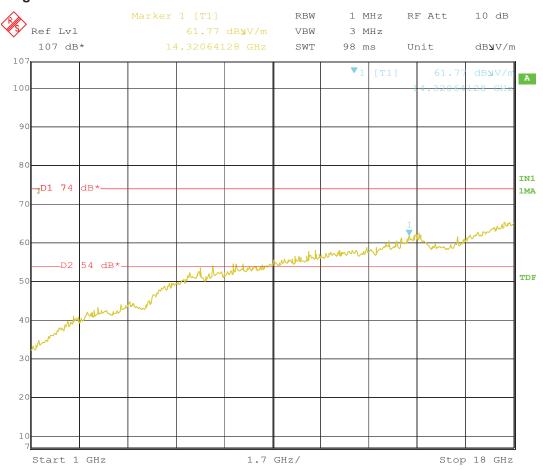


Date: 27.APR.2011 18:33:32



Reference No.: 168367

5.3.108 Diagram 5-P-18

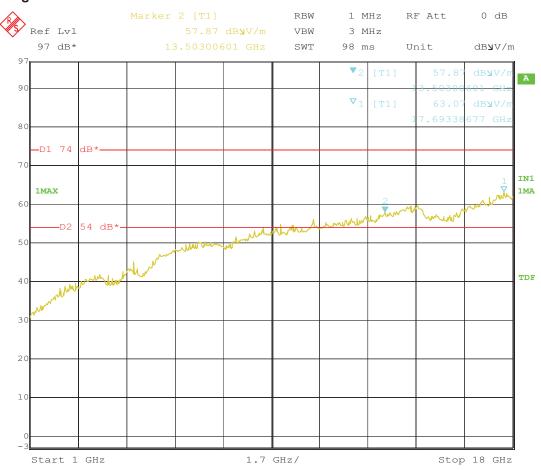


Date: 27.APR.2011 18:34:32



Reference No.: 168367

5.3.109 Diagram 5-d-1

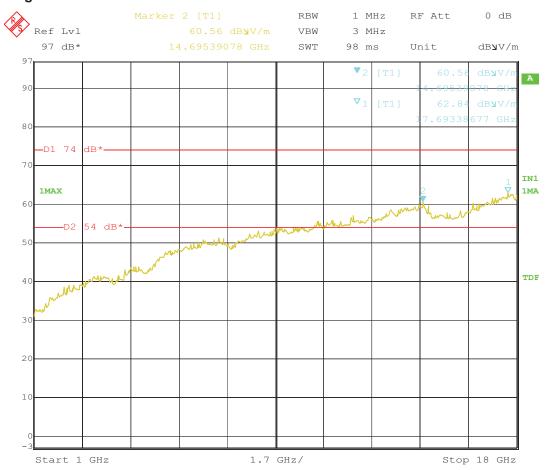


Date: 27.APR.2011 11:46:01



Reference No.: 168367

5.3.110 Diagram 5-d-2

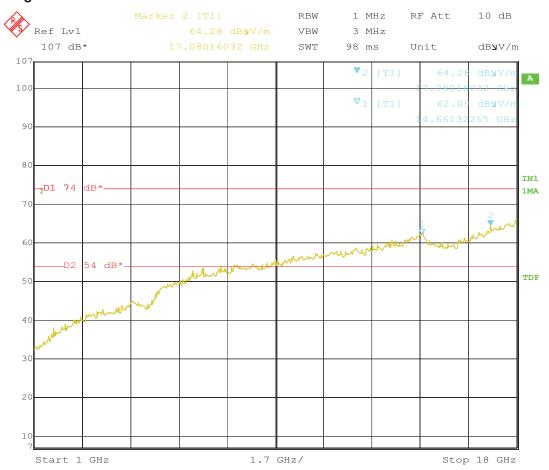


Date: 27.APR.2011 11:43:23



Reference No.: 168367

5.3.111 Diagram 5-d-3

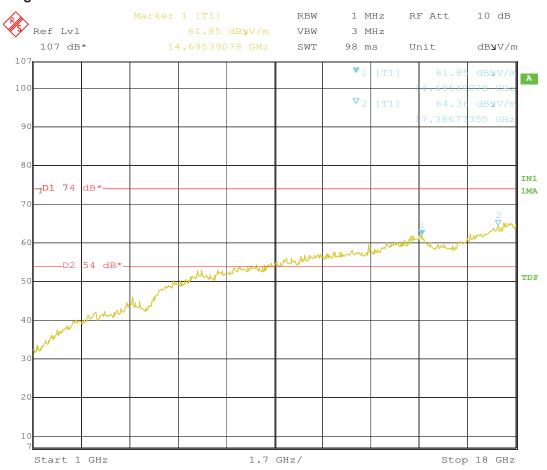


Date: 27.APR.2011 13:06:46



Reference No.: 168367

5.3.112 Diagram 5-d-4

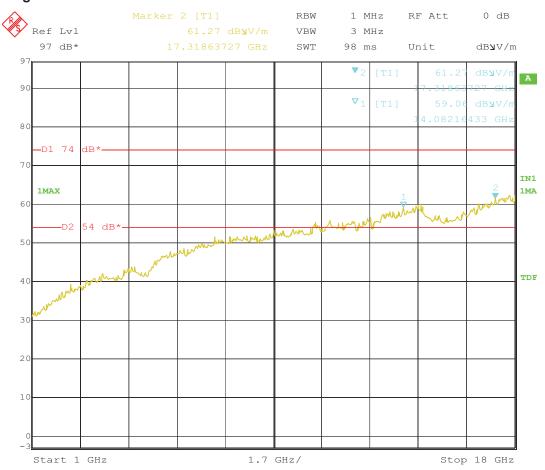


Date: 27.APR.2011 13:07:59



Reference No.: 168367

5.3.113 Diagram 5-d-5

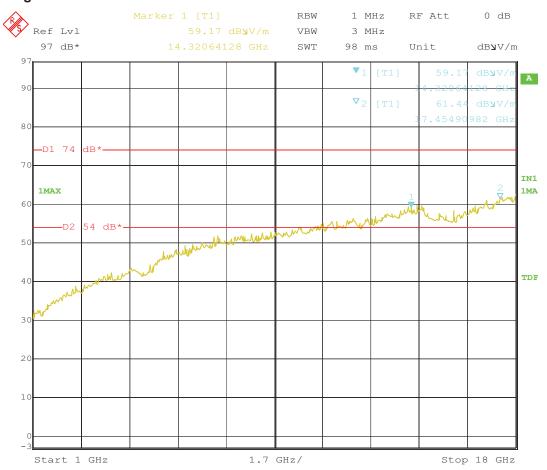


Date: 27.APR.2011 12:59:12



Reference No.: 168367

5.3.114 Diagram 5-d-6

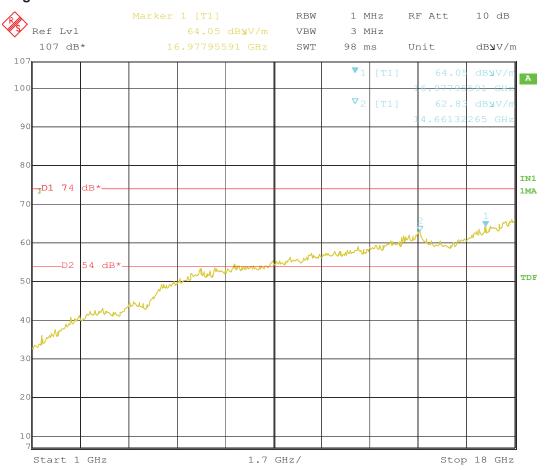


Date: 27.APR.2011 13:00:10



Reference No.: 168367

5.3.115 Diagram 5-d-7

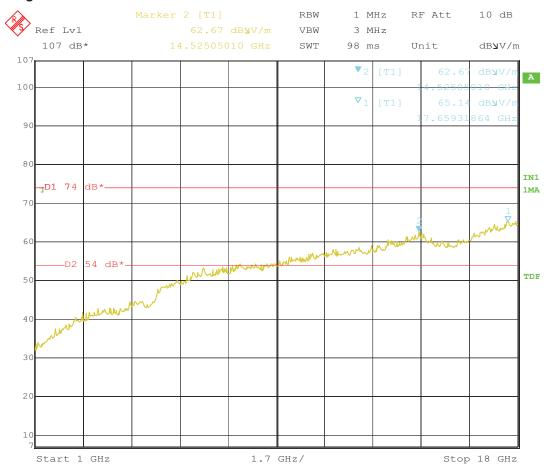


Date: 27.APR.2011 13:27:51



Reference No.: 168367

5.3.116 Diagram 5-d-8

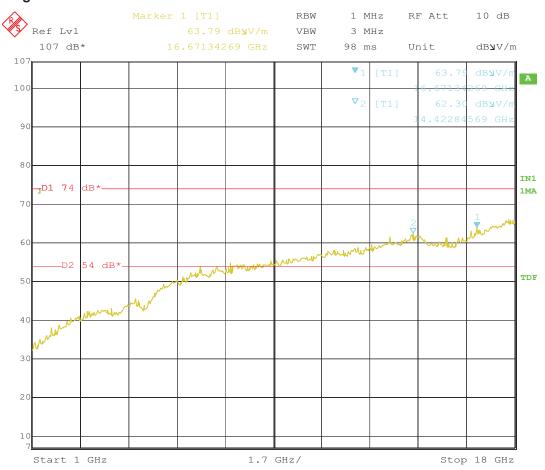


Date: 27.APR.2011 13:26:35



Reference No.: 168367

5.3.117 Diagram 5-d-9

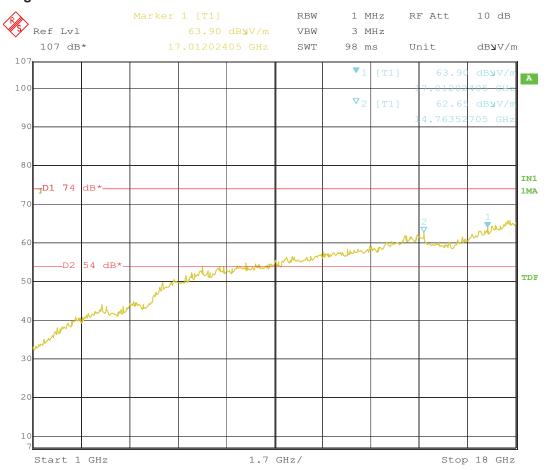


Date: 27.APR.2011 13:30:53



Reference No.: 168367

5.3.118 Diagram 5-d-10

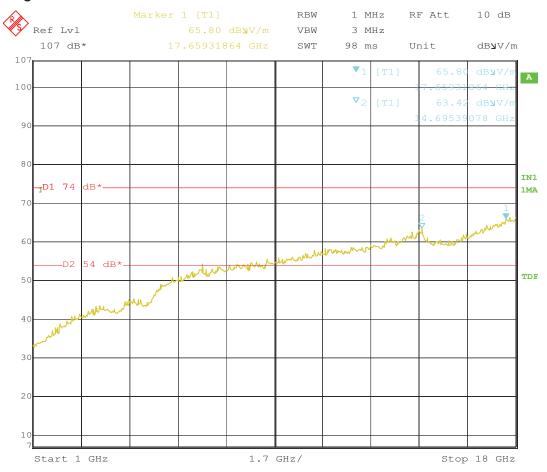


Date: 27.APR.2011 13:32:07



Reference No.: 168367

5.3.119 Diagram 5-d-11

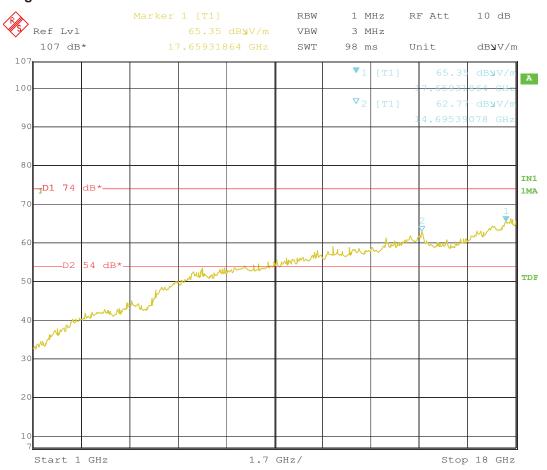


Date: 27.APR.2011 13:44:48



Reference No.: 168367

5.3.120 Diagram 5-d-12

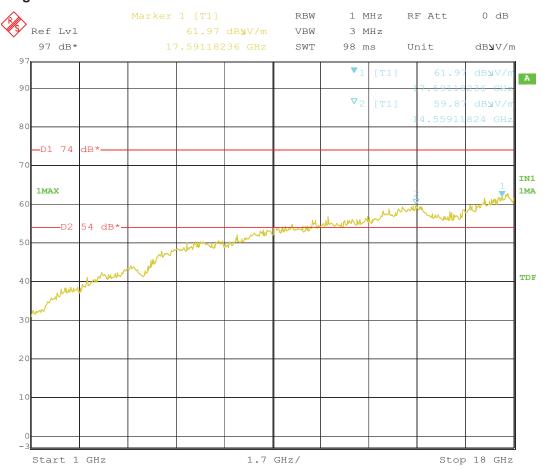


Date: 27.APR.2011 13:45:39



Reference No.: 168367

5.3.121 Diagram 5-d-13

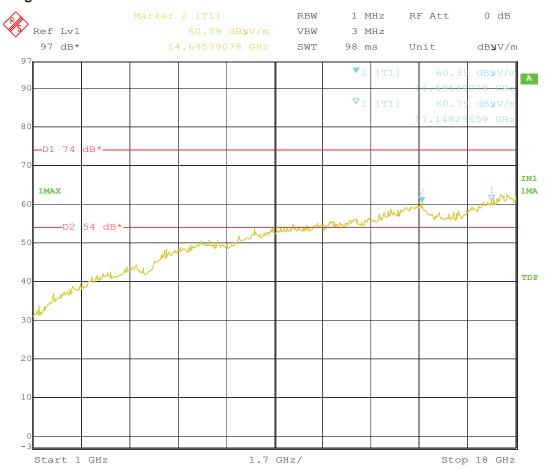


Date: 27.APR.2011 12:33:22



Reference No.: 168367

5.3.122 Diagram 5-d-14

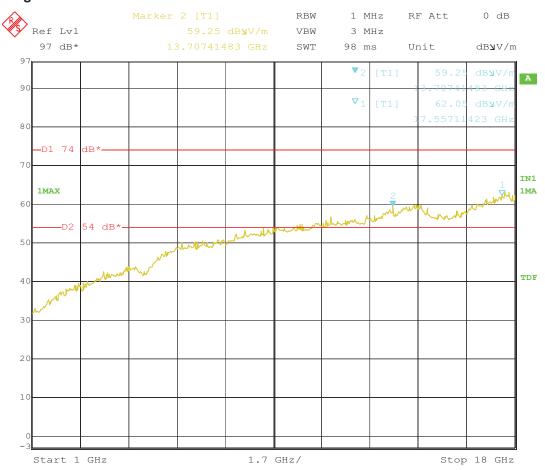


Date: 27.APR.2011 12:32:09



Reference No.: 168367

5.3.123 Diagram 5-d-15

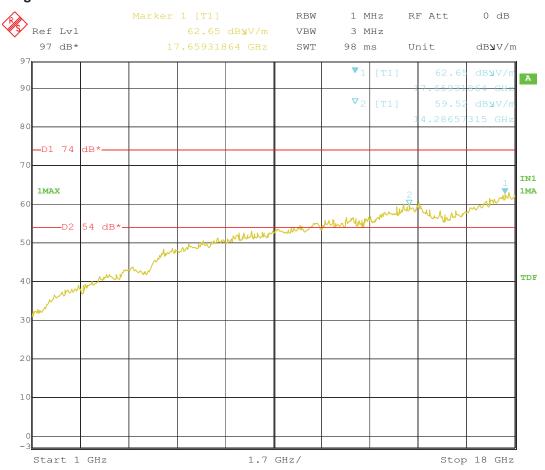


Date: 27.APR.2011 12:52:04



Reference No.: 168367

5.3.124 Diagram 5-d-16

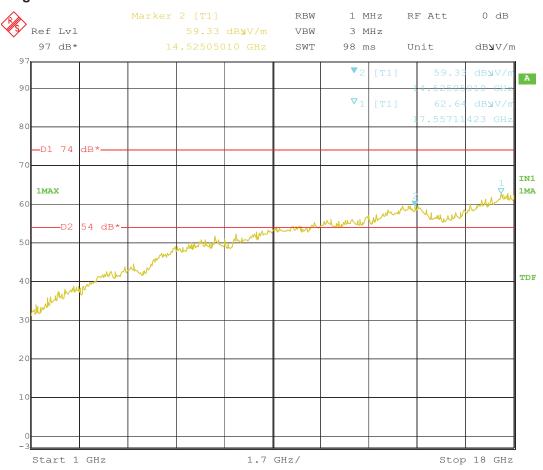


Date: 27.APR.2011 12:53:19



Reference No.: 168367

5.3.125 Diagram 5-d-17

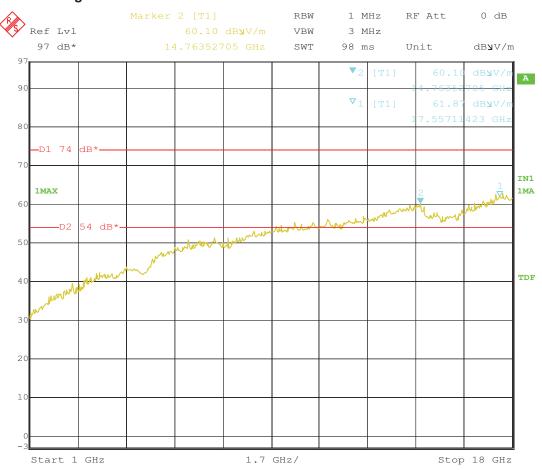


Date: 27.APR.2011 12:47:45



Reference No.: 168367

5.3.126 Diagram 5-d-18

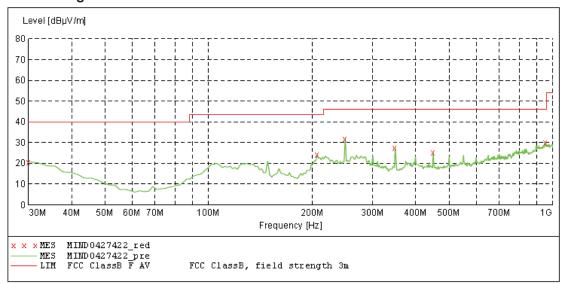


Date: 27.APR.2011 12:46:16



Reference No.: 168367

5.3.127 Diagram 5-T-1

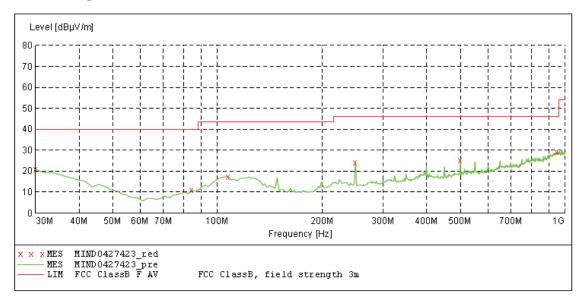


Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
30.000000	20.70	-10.2	40.0	19.3	100.0	349.00	HORIZONTAL
206.893788	24.00	-21.3	43.5	19.5	100.0	224.00	HORIZONTAL
249.659319	31.90	-20.0	46.0	14.1	100.0	76.00	HORIZONTAL
348.797595	27.50	-16.8	46.0	18.5	100.0	299.00	HORIZONTAL
449.879760	25.10	-15.5	46.0	20.9	100.0	320.00	HORIZONTAL
955.290581	29.90	-5.2	46.0	16.1	100.0	211.00	HORIZONTAL



Reference No.: 168367

5.3.128 Diagram 5-T-2

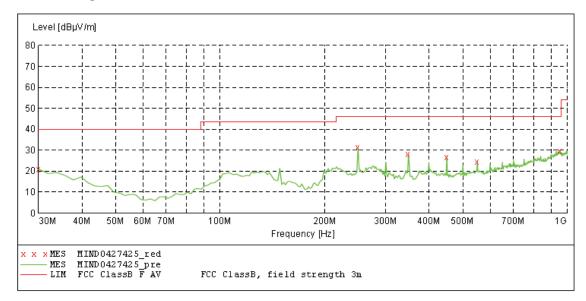


Frequency	Level	Transd	Limit	Margin	Height	Azimuth	Polarization
MHz	dBµV/m	dB	dBµV/m	dB	cm	deg	
30.000000	20.80	-10.2	40.0	19.2	100.0	335.00	VERTICAL
84.428858	11.00	-22.2	40.0	29.0	100.0	282.00	VERTICAL
107.755511	17.40	-19.2	43.5	26.1	100.0	354.00	VERTICAL
249.659319	24.20	-20.0	46.0	21.8	100.0	145.00	VERTICAL
500.420842	25.40	-14.3	46.0	20.6	100.0	149.00	VERTICAL
949.458918	29.10	-5.1	46.0	16.9	100.0	149.00	VERTICAL



Reference No.: 168367

5.3.129 Diagram 5-T-3

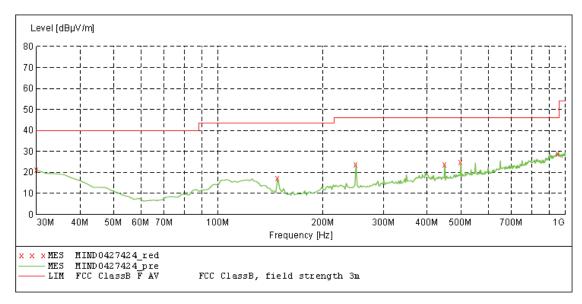


Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
30.000000 249.659319	21.00 31.50	-10.2 -20.0	40.0 46.0	19.0 14.5	100.0 100.0	251.00 79.00	HORIZONTAL HORIZONTAL
348.797595	28.20	-16.8	46.0	17.8	100.0	293.00	HORIZONTAL
449.879760	26.80	-15.5	46.0	19.2	100.0	321.00	HORIZONTAL
550.961924	24.70	-13.2	46.0	21.3	100.0	247.00	HORIZONTAL
951.402806	29.70	-5.1	46.0	16.3	100.0	208.00	HORIZONTAL



Reference No.: 168367

5.3.130 Diagram 5-T-4

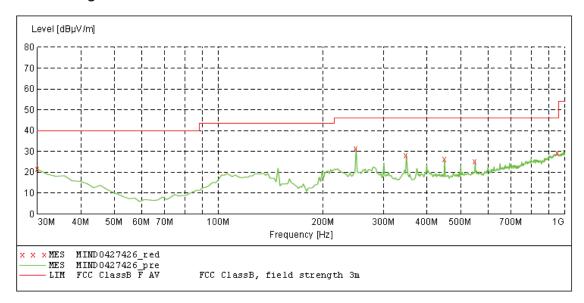


Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
30.000000	21.10	-10.2	40.0	18.9	100.0	247.00	VERTICAL
148.577154	17.20	-22.1	43.5	26.3			
140.3//134	17.20	-22.1	43.3	46.3	100.0	62.00	VERTICAL
249.659319	23.70	-20.0	46.0	22.3	100.0	138.00	VERTICAL
449.879760	23.80	-15.5	46.0	22.2	100.0	51.00	VERTICAL
500.420842	24.80	-14.3	46.0	21.2	100.0	138.00	VERTICAL
951.402806	29.00	-5.1	46.0	17.0	100.0	304.00	VERTICAL



Reference No.: 168367

5.3.131 Diagram 5-T-5

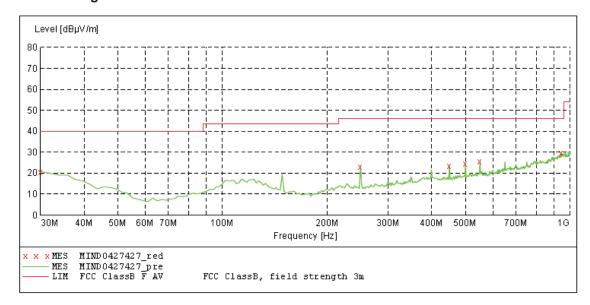


Polarization	Azimuth deg	Height cm	Margin dB	Limit dBµV/m	Transd dB	Level dBµV/m	Frequency MHz
HORIZONTAL	334.00	100.0	18.5	40.0	-10.2	21.50	30.000000
HORIZONTAL	87.00	100.0	14.6	46.0	-20.0	31.40	249.659319
HORIZONTAL	307.00	100.0	17.7	46.0	-16.8	28.30	348.797595
HORIZONTAL	318.00	100.0	19.8	46.0	-15.5	26.20	449.879760
HORIZONTAL	232.00	100.0	20.9	46.0	-13.2	25.10	550.961924
HORIZONTAL	279.00	100.0	16.9	46.0	-5.2	29.10	953.346693



Reference No.: 168367

5.3.132 Diagram 5-T-6

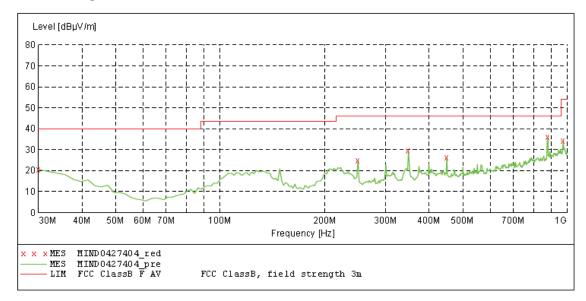


Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
30.000000	20.70	-10.2	40.0	19.3	100.0	114.00	VERTICAL
249.659319	23.00	-20.0	46.0	23.0	100.0	152.00	VERTICAL
449.879760	23.40	-15.5	46.0	22.6	100.0	65.00	VERTICAL
500.420842	24.50	-14.3	46.0	21.5	100.0	140.00	VERTICAL
550.961924	25.50	-13.2	46.0	20.5	100.0	304.00	VERTICAL
943.627255	29.70	-5.4	46.0	16.3	100.0	109.00	VERTICAL



Reference No.: 168367

5.3.133 Diagram 5-T-7

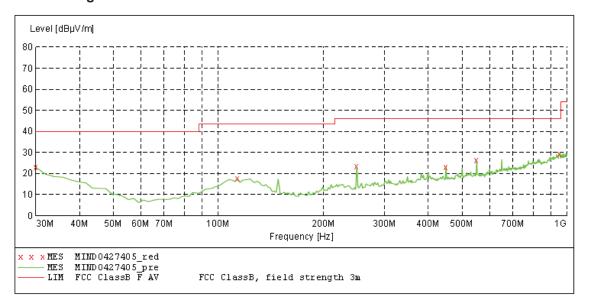


Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
30.000000	20.60	-10.2	40.0	19.4	100.0	326.00	HORIZONTAL
249.659319	25.00	-20.0	46.0	21.0	100.0	291.00	HORIZONTAL
348.797595	29.50	-16.8	46.0	16.5	100.0	295.00	HORIZONTAL
449.879760	26.40	-15.5	46.0	19.6	100.0	311.00	HORIZONTAL
879.478958	36.00	-7.5	46.0	10.0	100.0	295.00	HORIZONTAL
974.729459	34.40	-5.4	53.9	19.5	100.0	29.00	HORTZONTAL



Reference No.: 168367

5.3.134 Diagram 5-T-8

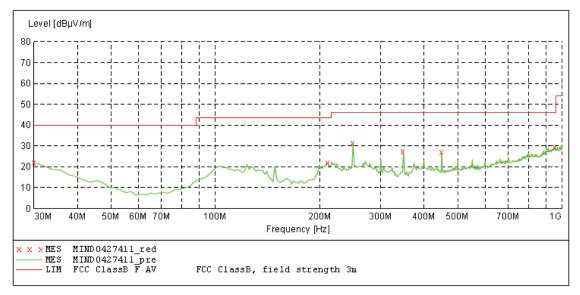


Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
30.000000	22.90	-10.2	40.0	17.1	100.0	0.00	VERTICAL
113.587174	17.50	-18.7	43.5	26.0	100.0	348.00	VERTICAL
249.659319	23.40	-20.0	46.0	22.6	100.0	143.00	VERTICAL
449.879760	23.20	-15.5	46.0	22.8	100.0	11.00	VERTICAL
550.961924	26.40	-13.2	46.0	19.6	100.0	296.00	VERTICAL
951.402806	29.30	-5.1	46.0	16.7	100.0	192.00	VERTICAL



Reference No.: 168367

5.3.135 Diagram 5-T-9

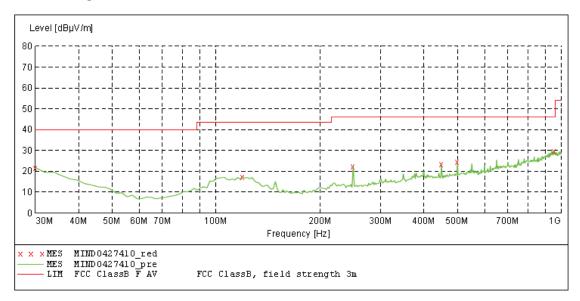


Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
30.000000	22.10	-10.2	40.0	17.9	100.0	168.00	HORIZONTAL
210.781563	21.90	-21.2	43.5	21.6	100.0	214.00	HORIZONTAL
249.659319	31.30	-20.0	46.0	14.7	100.0	105.00	HORIZONTAL
348.797595	27.40	-16.8	46.0	18.6	100.0	289.00	HORIZONTAL
449.879760	26.90	-15.5	46.0	19.1	100.0	317.00	HORIZONTAL
955.290581	29.70	-5.2	46.0	16.3	100.0	190.00	HORIZONTAL



Reference No.: 168367

5.3.136 Diagram 5-T-10

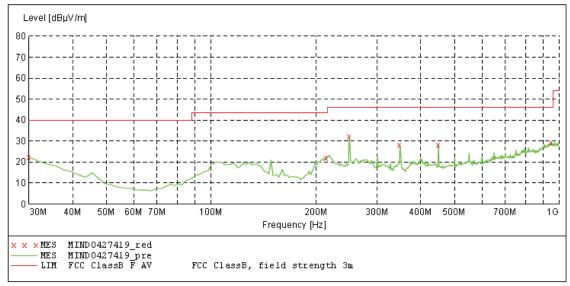


Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
30.000000	21.80	-10.2	40.0	18.2	100.0	312.00	VERTICAL
119.418838	17.30	-18.4	43.5	26.2	100.0	26.00	VERTICAL
249.659319	22.40	-20.0	46.0	23.6	100.0	136.00	VERTICAL
449.879760	23.30	-15.5	46.0	22.7	100.0	50.00	VERTICAL
500.420842	24.60	-14.3	46.0	21.4	100.0	151.00	VERTICAL
951.402806	29.60	-5.1	46.0	16.4	100.0	325.00	VERTICAL



Reference No.: 168367

5.3.137 Diagram 5-T-11

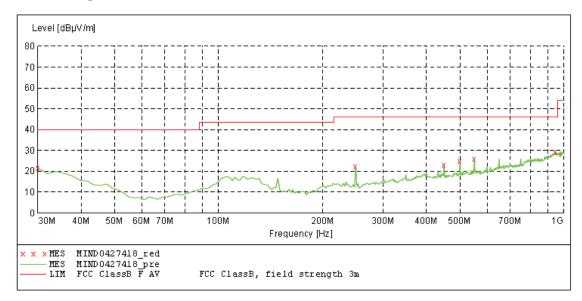


Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
30.000000	22.40	-10.2	40.0	17.6	100.0	11.00	HORIZONTAL
214.669339	21.90	-21.0	43.5	21.6	100.0	242.00	HORIZONTAL
249.659319	32.20	-20.0	46.0	13.8	100.0	89.00	HORIZONTAL
348.797595	28.20	-16.8	46.0	17.8	100.0	293.00	HORIZONTAL
449.879760	28.10	-15.5	46.0	17.9	100.0	330.00	HORIZONTAL
951.402806	29.30	-5.1	46.0	16.7	100.0	15.00	HORIZONTAL



Reference No.: 168367

5.3.138 Diagram 5-T-12

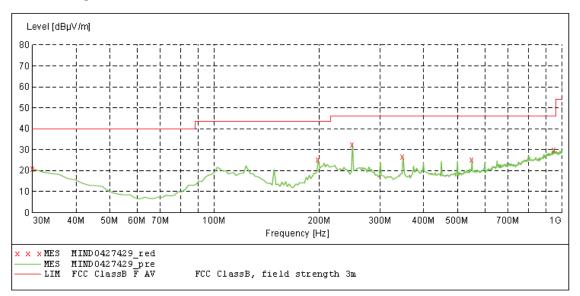


Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
30.000000	21.60	-10.2	40.0	18.4	100.0	0.00	VERTICAL
249.659319	22.30	-20.0	46.0	23.7	100.0	149.00	VERTICAL
449.879760	23.20	-15.5	46.0	22.8	100.0	57.00	VERTICAL
500.420842	24.80	-14.3	46.0	21.2	100.0	144.00	VERTICAL
550.961924	26.10	-13.2	46.0	19.9	100.0	302.00	VERTICAL
945.571142	29.40	-5.3	46.0	16.6	100.0	260.00	VERTICAL



Reference No.: 168367

5.3.139 Diagram 5-T-13

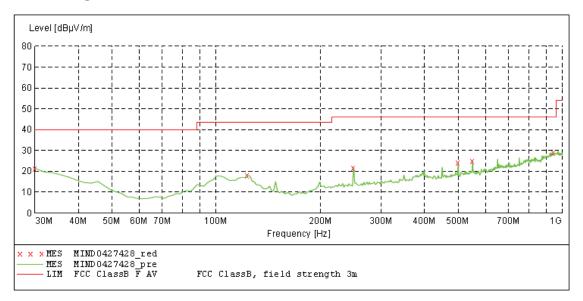


Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
30.000000	20.90	-10.2	40.0	19.1	100.0	94.00	HORIZONTAL
199.118236	25.10	-21.4	43.5	18.4	100.0	297.00	HORIZONTAL
249.659319	32.50	-20.0	46.0	13.5	100.0	321.00	HORIZONTAL
348.797595	26.80	-16.8	46.0	19.2	100.0	46.00	HORIZONTAL
550.961924	25.40	-13.2	46.0	20.6	100.0	234.00	HORIZONTAL
949.458918	30.00	-5.1	46.0	16.0	100.0	33.00	HORTZONTAL



Reference No.: 168367

5.3.140 Diagram 5-T-14

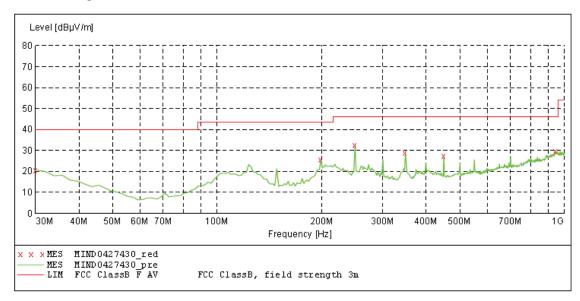


Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
30.000000	21.40	-10.2	40.0	18.6	100.0	105.00	VERTICAL
123.306613	18.00	-18.4	43.5	25.5	100.0	53.00	VERTICAL
249.659319	21.80	-20.0	46.0	24.2	100.0	18.00	VERTICAL
500.420842	24.20	-14.3	46.0	21.8	100.0	144.00	VERTICAL
550.961924	24.90	-13.2	46.0	21.1	100.0	299.00	VERTICAL
945.571142	28.80	-5.3	46.0	17.2	100.0	257.00	VERTICAL



Reference No.: 168367

5.3.141 Diagram 5-T-15

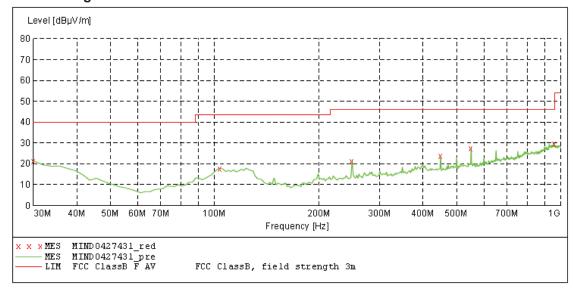


Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
30.000000	20.70	-10.2	40.0	19.3	100.0	358.00	HORIZONTAL
199.118236	25.70	-21.4	43.5	17.8	100.0	114.00	HORIZONTAL
249.659319	32.50	-20.0	46.0	13.5	100.0	279.00	HORIZONTAL
348.797595	28.70	-16.8	46.0	17.3	100.0	355.00	HORIZONTAL
449.879760	27.40	-15.5	46.0	18.6	100.0	359.00	HORIZONTAL
941.683367	29.50	-5.5	46.0	16.5	100.0	74.00	HORIZONTAL



Reference No.: 168367

5.3.142 Diagram 5-T-16

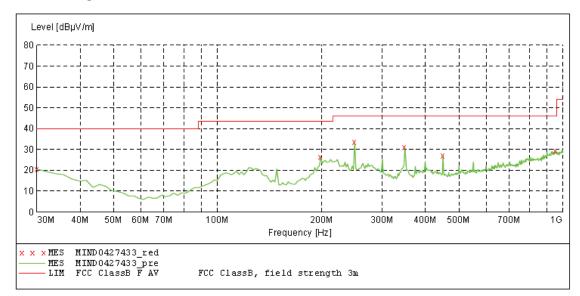


Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
30.000000	21.40	-10.2	40.0	18.6	100.0	24.00	VERTICAL
103.867735	17.80	-19.4	43.5	25.7	100.0	336.00	VERTICAL
249.659319	21.40	-20.0	46.0	24.6	100.0	20.00	VERTICAL
449.879760	23.80	-15.5	46.0	22.2	100.0	324.00	VERTICAL
550.961924	27.60	-13.2	46.0	18.4	100.0	257.00	VERTICAL
957.234469	29.70	-5.3	46.0	16.3	100.0	319.00	VERTICAL



Reference No.: 168367

5.3.143 Diagram 5-T-17

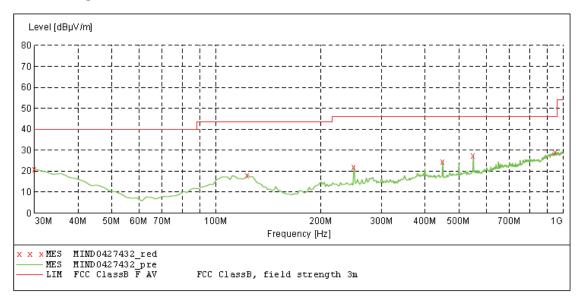


Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
30.000000	20.50	-10.2	40.0	19.5	100.0	202.00	HORIZONTAL
199.118236	26.40	-21.4	43.5	17.1	100.0	70.00	HORIZONTAL
249.659319	33.70	-20.0	46.0	12.3	100.0	292.00	HORIZONTAL
348.797595	31.10	-16.8	46.0	14.9	100.0	349.00	HORIZONTAL
449.879760	27.10	-15.5	46.0	18.9	100.0	9.00	HORIZONTAL
955.290581	29.40	-5.2	46.0	16.6	100.0	57.00	HORIZONTAL



Reference No.: 168367

5.3.144 Diagram 5-T-18

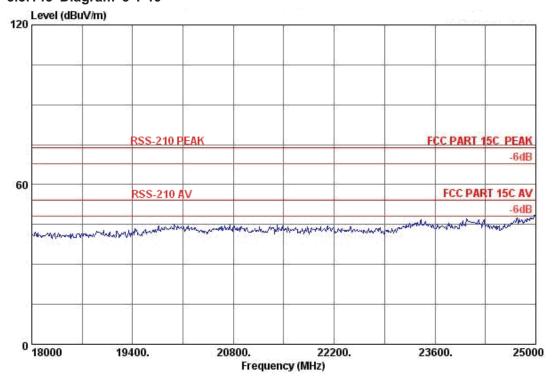


Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
30.000000	21.00	-10.2	40.0	19.0	100.0	337.00	VERTICAL
123.306613	18.10	-18.4	43.5	25.4	100.0	72.00	VERTICAL
249.659319	21.90	-20.0	46.0	24.1	100.0	7.00	VERTICAL
449.879760	24.50	-15.5	46.0	21.5	100.0	308.00	VERTICAL
550.961924	27.30	-13.2	46.0	18.7	100.0	250.00	VERTICAL
949.458918	28.90	-5.1	46.0	17.1	100.0	219.00	VERTICAL

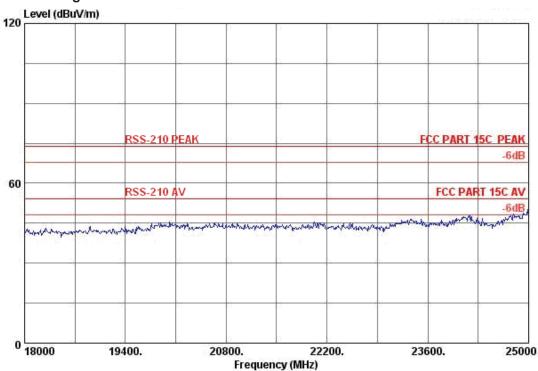


Reference No.: 168367

5.3.145 Diagram 5-T-19



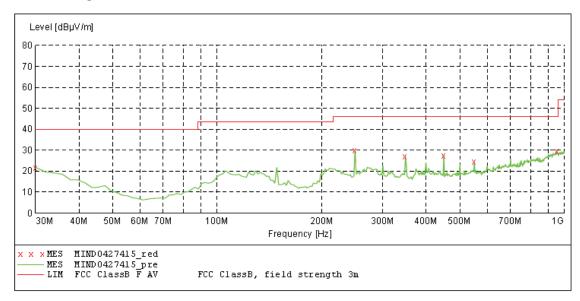
5.3.146 Diagram 5-T-20





Reference No.: 168367

5.3.147 Diagram 5-R-1

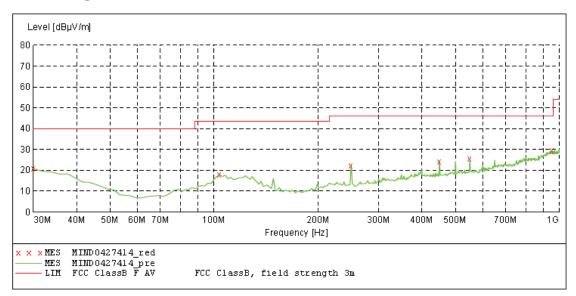


Frequency	Level	Transd	Limit	Margin	Height	Azimuth	Polarization
MHz	dBµV/m	dB	dBµV/m	dB	cm	deg	
30.000000	21.80	-10.2	40.0	18.2	100.0	356.00	HORIZONTAL
249.659319	30.00	-20.0	46.0	16.0	100.0	107.00	HORIZONTAL
348.797595	26.90	-20.0 -16.8	46.0	19.1	100.0	271.00	HORIZONTAL HORIZONTAL
449.879760	27.60	-15.5	46.0	18.4	100.0	315.00	HORIZONTAL
550.961924	24.40	-13.2	46.0	21.6	100.0	258.00	HORIZONTAL
951.402806	29.70	-5.1	46.0	16.3	100.0	302.00	HORIZONTAL



Reference No.: 168367

5.3.148 Diagram 5-R-2

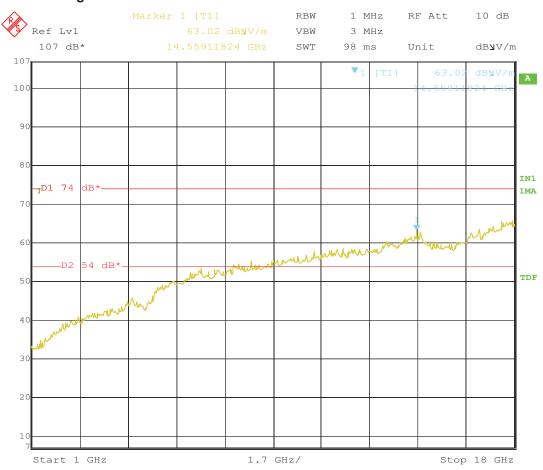


Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
30.000000	20.80	-10.2	40.0	19.2	100.0	146.00	VERTICAL
103.867735	17.90	-19.4	43.5	25.6	100.0	347.00	VERTICAL
249.659319	22.40	-20.0	46.0	23.6	100.0	138.00	VERTICAL
449.879760	24.30	-15.5	46.0	21.7	100.0	33.00	VERTICAL
550.961924	25.50	-13.2	46.0	20.5	100.0	251.00	VERTICAL
951.402806	29.50	-5.1	46.0	16.5	100.0	96.00	VERTICAL



Reference No.: 168367

5.3.149 Diagram 5-R-3

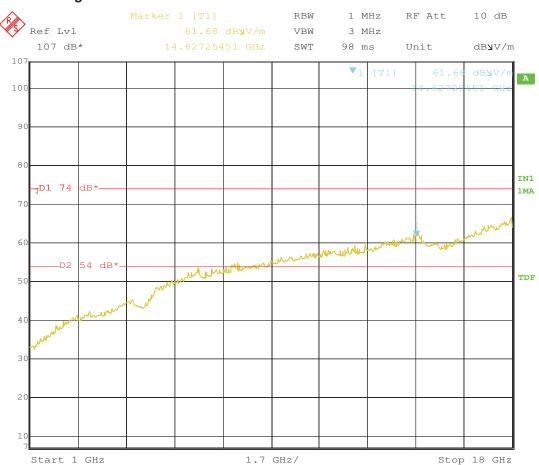


Date: 27.APR.2011 14:53:43



Reference No.: 168367

5.3.150 Diagram 5-R-4

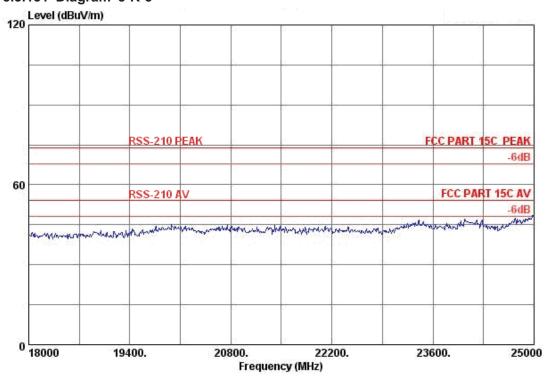


Date: 27.APR.2011 14:52:52

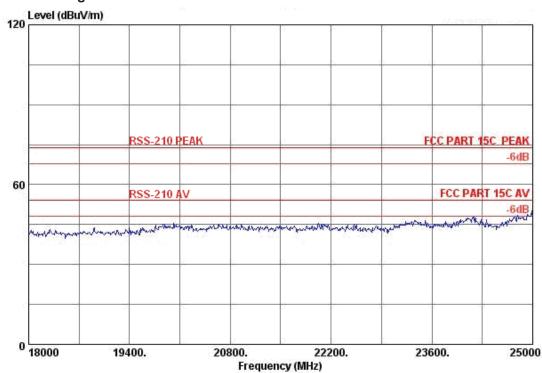


Reference No.: 168367

5.3.151 Diagram 5-R-5



5.3.152 Diagram 5-R-6





Reference No.: 168367

6. 6dB Bandwidth and 99% bandwidth test

6.1 Test Procedure

6dB Bandwidth:

Systems using digital modulation techniques may operate in the 902 - 928 MHz,2400 - 2483.5 MHz, and 5725 - 5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

The transmitter output was connected to a spectrum analyzer. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100 KHz RBW and 300 KHz VBW. The 6dB bandwidth is defined as the total spectrum with the power of which is lower than peak power for 6dB.

99% bandwidth:

When an occupied bandwidth value is not specified in the applicable RSS, the transmitted signal bandwidth to be reported is to be its 99% emission bandwidth, as calculated or measured. The transmitter shall be operated at its maximum carrier power measured under normal test conditions. The span of the analyzer shall be set to capture all products of the modulation process, including the emission skirts. The resolution bandwidth shall be set to as close to 1% of the selected span as is possible without being below 1%. The video bandwidth shall be set to 3 times the resolution bandwidth. Video averaging is not permitted. Where practical, a sampling detector shall be used since a peak or, peak hold, may produce a wider bandwidth than actual.

The trace data points are recovered and are directly summed in linear terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached and that frequency recorded. The process is repeated for the highest frequency data points. This frequency is recorded. The span between the two recorded frequencies is the occupied bandwidth.

6.2 Measurement Equipment

Equipment	Last Calibration	Туре	Serial No.	Manufacturer
Spectrum Analyzer	2010/12	FSP30	193412007	RS

6.3 Test Result

Remark: 1: Antenna port 1 is worse case, and only list the worse case.

2: Conducted measurement .

6dB Bandwidth:

802.11.b				
Channel D	Diagram	6dB bandwidth MHz	Limit MHz	Result
1 6	i-1	8.10	>=0.5	Pass
6 6	i-2	8.52	>=0.5	Pass
11 6	3-3	8.10	>=0.5	Pass
802.11.g				
Channel D	Diagram	6dB bandwidth MHz	Limit MHz	Result
1 6	5-4	15.18	>=0.5	Pass
6 6	5-5	15.12	>=0.5	Pass
11 6	5-6	15.12	>=0.5	Pass



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0	\cap	12	- 1	1		_
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Chann	iel Diagram	6dB bandwidth MHz	Limit MHz	Result
1	6-7	15.18	>=0.5	Pass
6	6-8	15.18	>=0.5	Pass
11	6-9	15.18	>=0.5	Pass

99% Bandwidth:

002.11.0		
Channel	Diagram	99% bandwidth MHz
1	6-10	13.08
6	6-11	12.9
11	6-12	12.9

802.11.g

Channe	l Diagram	99% bandwidth MHz
1	6-13	18.6
6	6-14	18.6
11	6-15	18.7

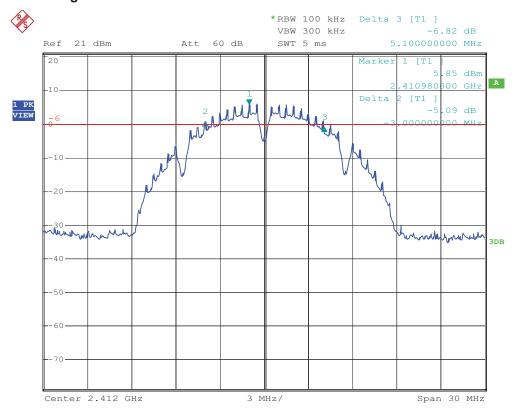
802.11.n

00=:::::			
Channel	Diagram	99%	bandwidth MHz
1	6-16	19.6	
6	6-17	19.7	
11	6-18	19.6	



Reference No.: 168367

6.3.1 Diagram 6-1

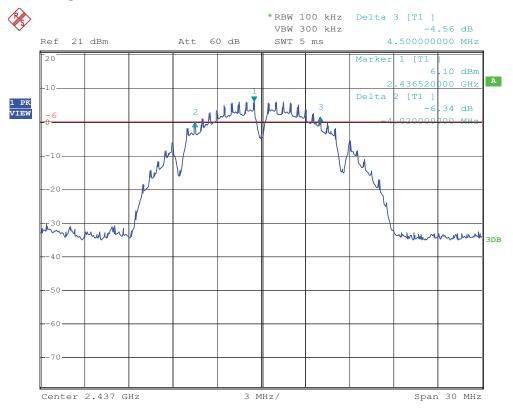


Date: 2.JUN.2011 08:25:42



Reference No.: 168367

6.3.2 Diagram 6-2

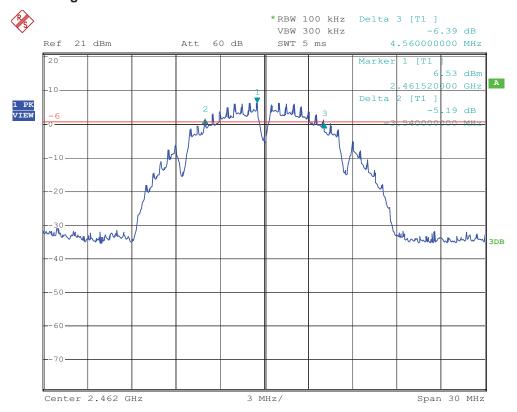


Date: 2.JUN.2011 08:28:40



Reference No.: 168367

6.3.3 Diagram 6-3

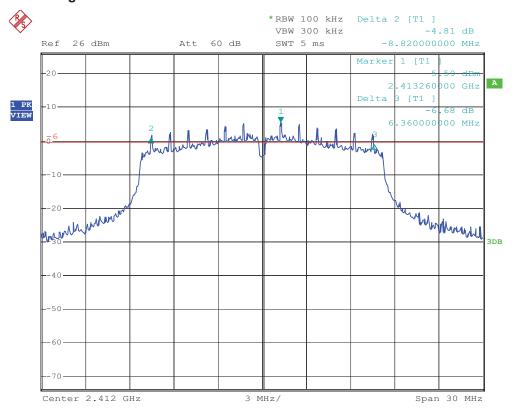


Date: 2.JUN.2011 08:31:03



Reference No.: 168367

6.3.4 Diagram 6-4

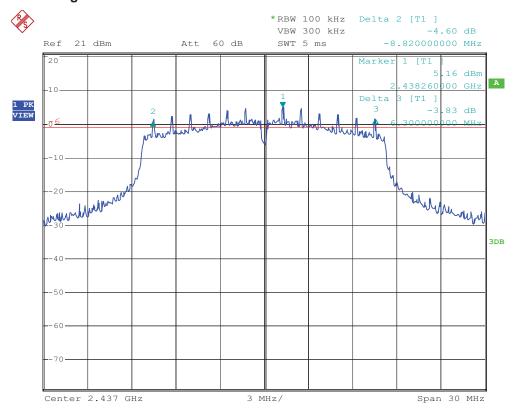


Date: 2.JUN.2011 08:06:37



Reference No.: 168367

6.3.5 Diagram 6-5

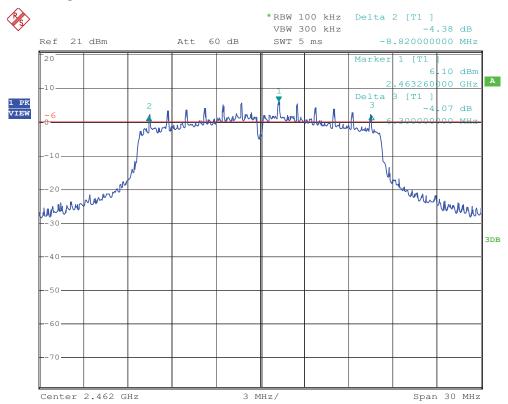


Date: 2.JUN.2011 08:33:44



Reference No.: 168367

6.3.6 Diagram 6-6

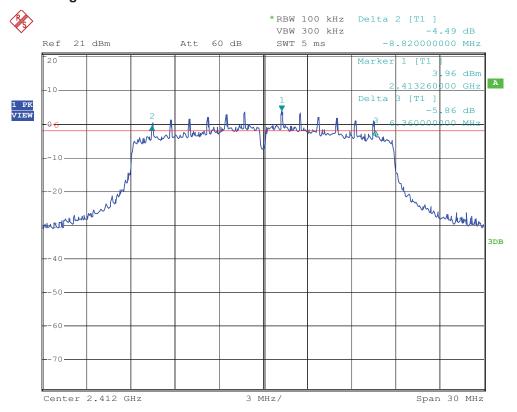


Date: 2.JUN.2011 08:13:11



Reference No.: 168367

6.3.7 Diagram 6-7

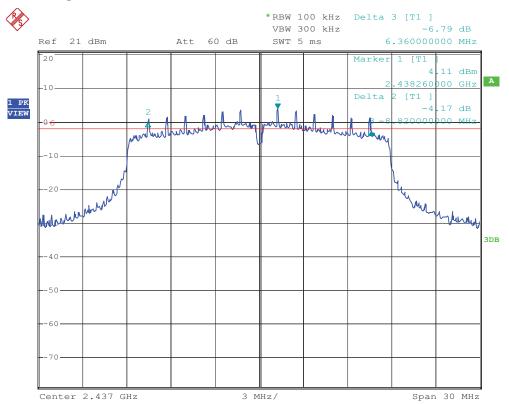


Date: 2.JUN.2011 08:17:26



Reference No.: 168367

6.3.8 Diagram 6-8

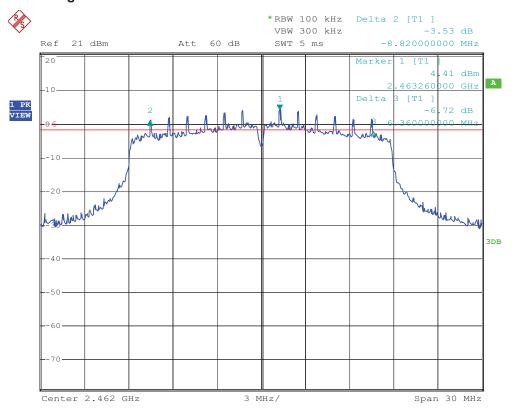


Date: 2.JUN.2011 08:20:22



Reference No.: 168367

6.3.9 Diagram 6-9

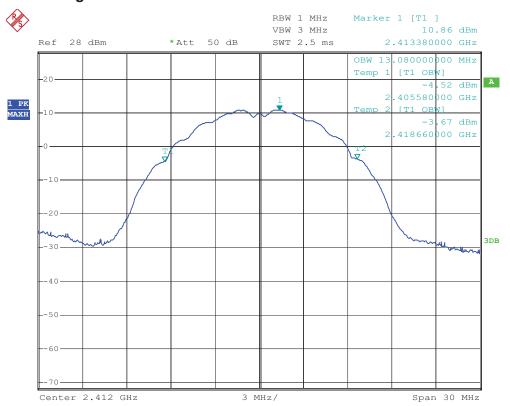


Date: 2.JUN.2011 08:22:58



Reference No.: 168367

6.3.10 Diagram 6-10

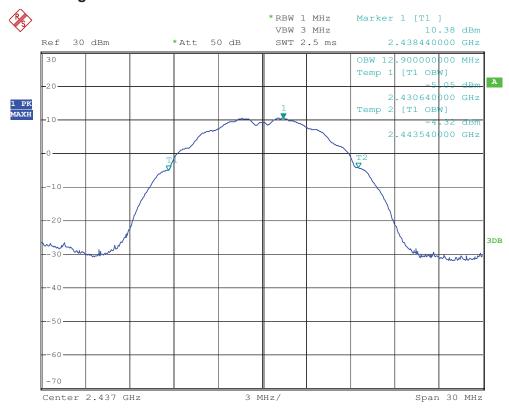


Date: 13.MAY.2011 12:07:27



Reference No.: 168367

6.3.11 Diagram 6-11

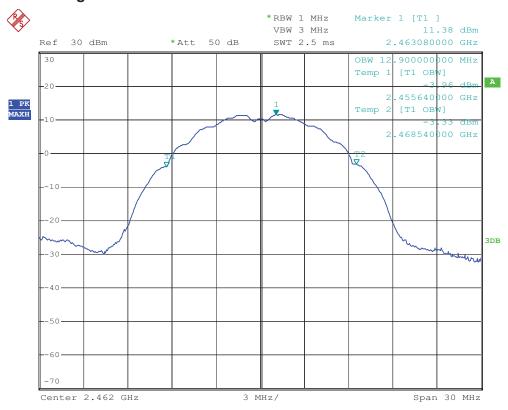


Date: 13.MAY.2011 12:43:51



Reference No.: 168367

6.3.12 Diagram 6-12

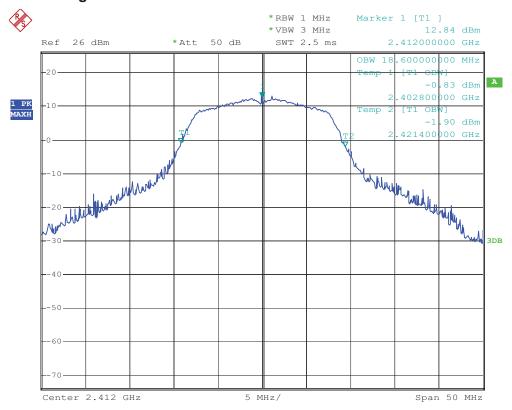


Date: 13.MAY.2011 13:18:09



Reference No.: 168367

6.3.13 Diagram 6-13

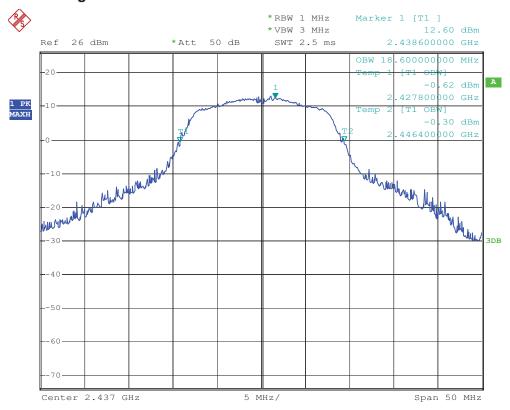


Date: 13.MAY.2011 18:35:12



Reference No.: 168367

6.3.14 Diagram 6-14

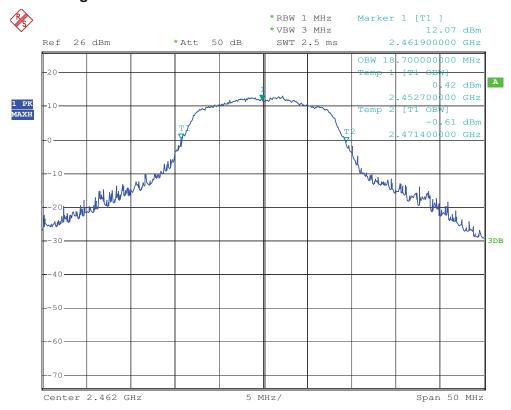


Date: 13.MAY.2011 18:46:12



Reference No.: 168367

6.3.15 Diagram 6-15

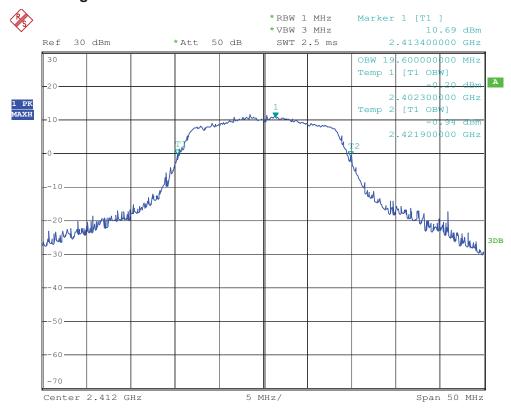


Date: 13.MAY.2011 18:54:46



Reference No.: 168367

6.3.16 Diagram 6-16

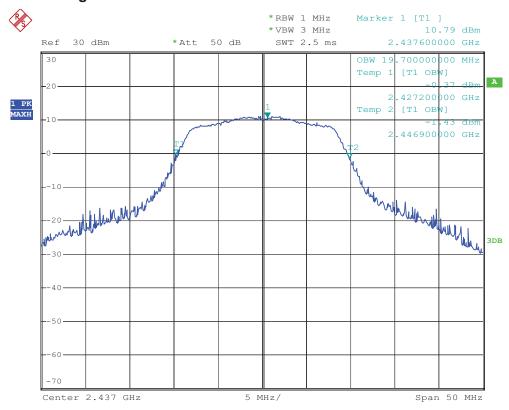


Date: 13.MAY.2011 17:08:00



Reference No.: 168367

6.3.17 Diagram 6-17

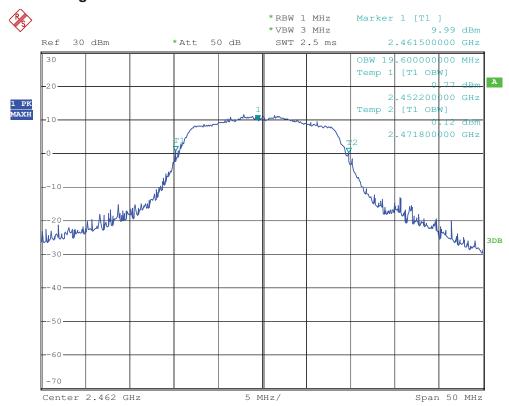


Date: 13.MAY.2011 18:06:21



Reference No.: 168367

6.3.18 Diagram 6-18



Date: 13.MAY.2011 18:16:31



Reference No.: 168367

7. Band Edge Compliance Test

7.1 Test Procedure

In any 100 kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator in operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.

7.2 Measurement Equipment

	Equipment	Last Calibration	Туре	Serial No.	Manufacturer
\boxtimes	Spectrum Analyzer	2010/10	FSP30	193412007	RS

7.3 Test Result

Conducted measurement

PK detector

Max hold

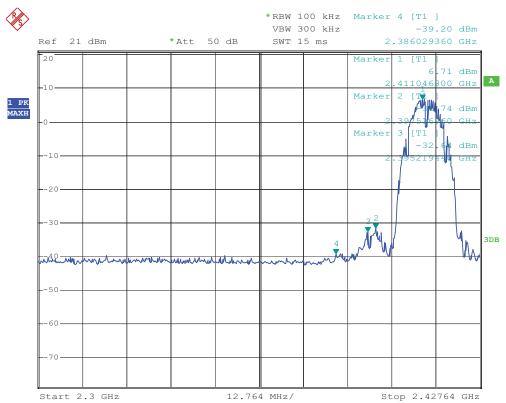
RMB100kHz VBW 300kHz

Mode	Antenna Port	Channel	Test Data	Test Result
802.11.b	Port 1	CH1	Diagram 7-1	Pass
	Port 1	CH11	Diagram 7-2	Pass
802.11.g	Port 1	CH1	Diagram 7-3	Pass
	Port 1	CH11	Diagram 7-4	Pass
802.11.n	Port 1	CH1	Diagram 7-5	Pass
	Port 1	CH11	Diagram 7-6	Pass
802.11.b	Port 2	CH1	Diagram 7-7	Pass
	Port 2	CH11	Diagram 7-8	Pass
802.11.g	Port 2	CH1	Diagram 7-9	Pass
	Port 2	CH11	Diagram 7-10	Pass
802.11.n	Port 2	CH1	Diagram 7-11	Pass
	Port 2	CH11	Diagram 7-12	Pass



Reference No.: 168367

7.3.1 Diagram 7-1

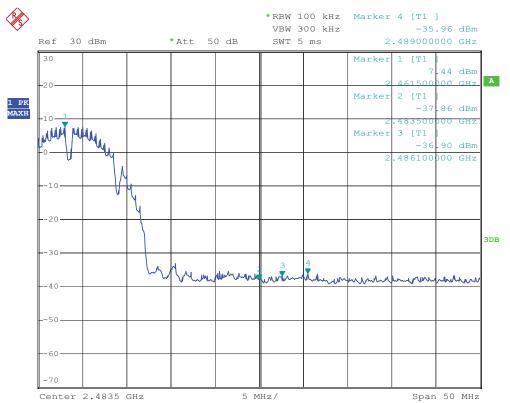


Date: 13.MAY.2011 12:36:46



Reference No.: 168367

7.3.2 Diagram 7-2

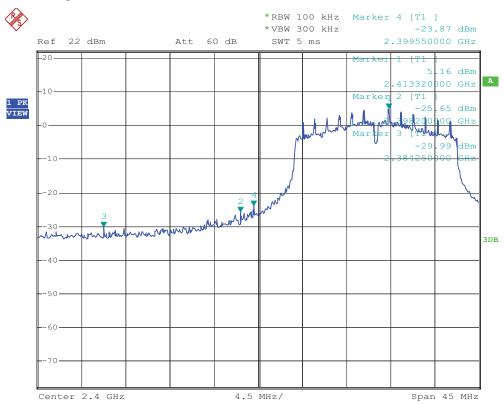


Date: 13.MAY.2011 13:29:13



Reference No.: 168367

7.3.3 Diagram 7-3

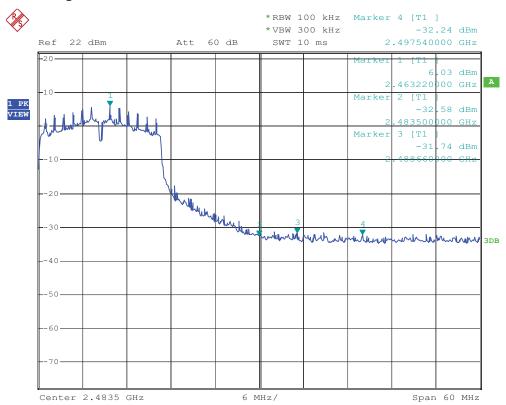


Date: 30.JUN.2011 08:56:02



Reference No.: 168367

7.3.4 Diagram 7-4

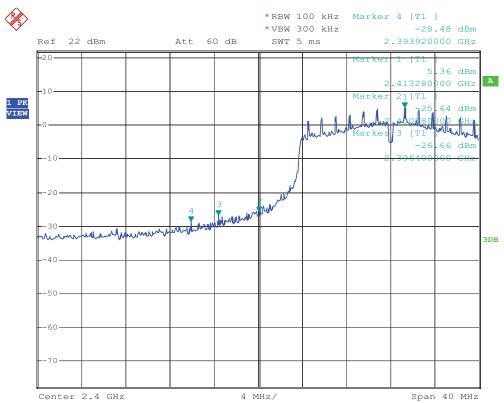


Date: 30.JUN.2011 08:52:24



Reference No.: 168367

7.3.5 Diagram 7-5

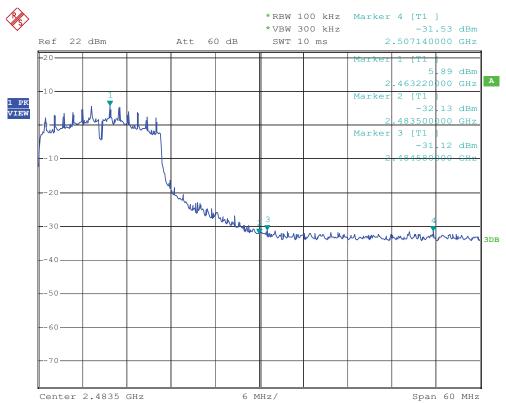


Date: 30.JUN.2011 09:10:59



Reference No.: 168367

7.3.6 Diagram 7-6

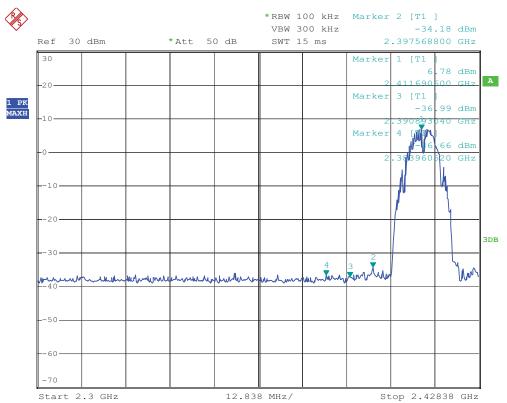


Date: 30.JUN.2011 09:15:39



Reference No.: 168367

7.3.7 Diagram 7-7

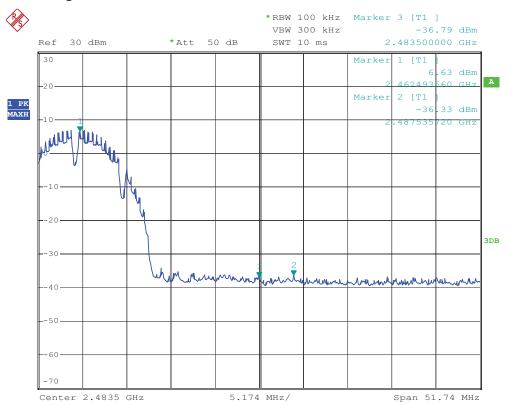


Date: 13.MAY.2011 14:16:22



Reference No.: 168367

7.3.8 Diagram 7-8

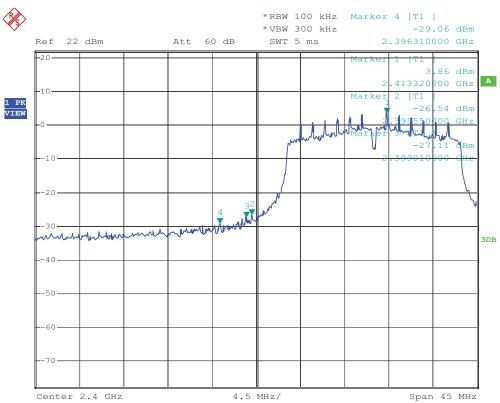


Date: 13.MAY.2011 14:47:22



Reference No.: 168367

7.3.9 Diagram 7-9

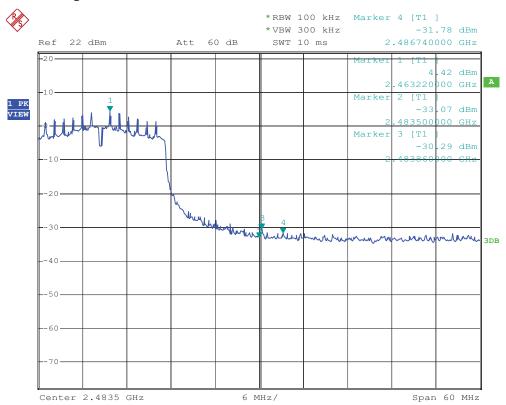


Date: 30.JUN.2011 09:00:49



Reference No.: 168367

7.3.10 Diagram 7-10

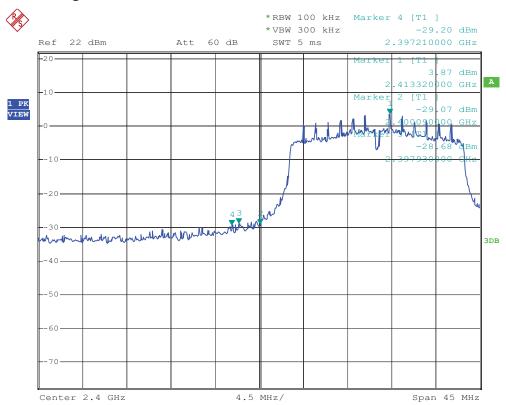


Date: 30.JUN.2011 09:03:55



Reference No.: 168367

7.3.11 Diagram 7-11

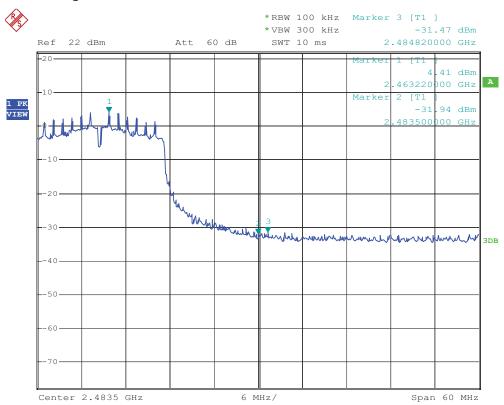


Date: 30.JUN.2011 09:25:35



Reference No.: 168367

7.3.12 Diagram 7-12



Date: 30.JUN.2011 09:21:43



Reference No.: 168367

8. Power Spectral Density Test

8.1 Test Procedure

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band during any time interval of continuous transmission.

The transmitter output was connected to a spectrum analyzer. The maximum power density level was measured by spectrum analyzer with 3 kHz RBW and sweep time=span/3kHz, Detector: PK

8.2 Measurement Equipment

Equipment	Last Calibration	Туре	Serial No.	Manufacturer
Spectrum Analyzer	2010/12	FSP30	193412007	Rohde&Schwarz

8.3 Test Result

Antenna Port 1:

Mode	Channel	Diagram	Read (dBm)	Cable Loss (dB)	Result (dBm)	Limit dBm	Result
802.11b	1	8-1	-5.73	1.18	-4.55	8	Pass
802.11b	6	8-2	-7.73	1.18	-6.55	8	Pass
802.11b	11	8-3	-7.38	1.18	-6.20	8	Pass
802.11g	1	8-4	-10.20	1.18	-9.02	8	Pass
802.11g	6	8-5	-10.06	1.18	-8.88	8	Pass
802.11g	11	8-6	-8.93	1.18	-7.75	8	Pass
802.11n	1	8-7	-10.43	1.18	-9.25	8	Pass
802.11n	6	8-8	-10.64	1.18	-9.46	8	Pass
802.11n	11	8-9	-10.82	1.18	-9.64	8	Pass

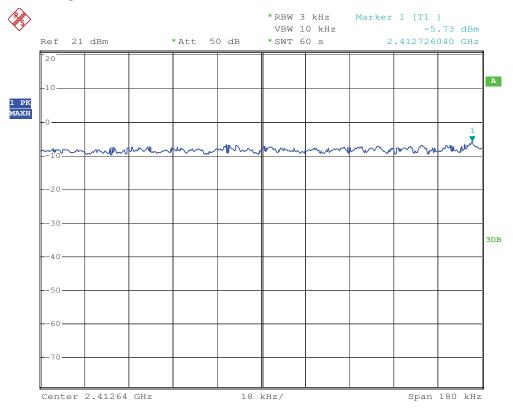
Antenna Port 2:

Mode	Channel	Diagram	Read	Cable	Result	Limit	Result
			(dBm)	Loss	(dBm)	dBm	
				(dB)			
802.11b	1	8-10	-8.14	1.18	-6.96	8	Pass
802.11b	6	8-11	-7.8	1.18	-6.62	8	Pass
802.11b	11	8-12	-6.52	1.18	-5.34	8	Pass
802.11g	1	8-13	-10.25	1.18	-9.07	8	Pass
802.11g	6	8-14	-9.59	1.18	-8.41	8	Pass
802.11g	11	8-15	-10.39	1.18	-9.21	8	Pass
802.11n	1	8-16	-11.49	1.18	-10.31	8	Pass
802.11n	6	8-17	-10.99	1.18	-9.81	8	Pass
802.11n	11	8-18	-11.99	1.18	-10.81	8	Pass



Reference No.: 168367

8.3.1 Diagram 8-1

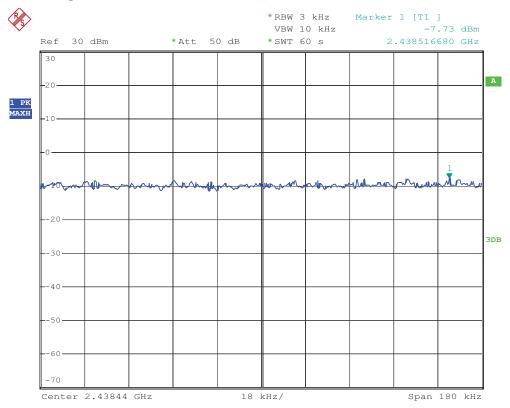


Date: 13.MAY.2011 12:27:08



Reference No.: 168367

8.3.2 Diagram 8-2

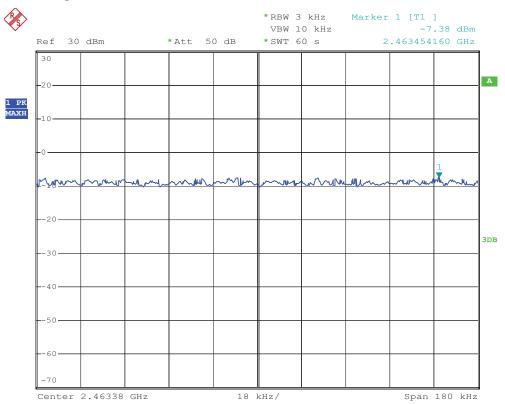


Date: 13.MAY.2011 12:49:37



Reference No.: 168367

8.3.3 Diagram 8-3

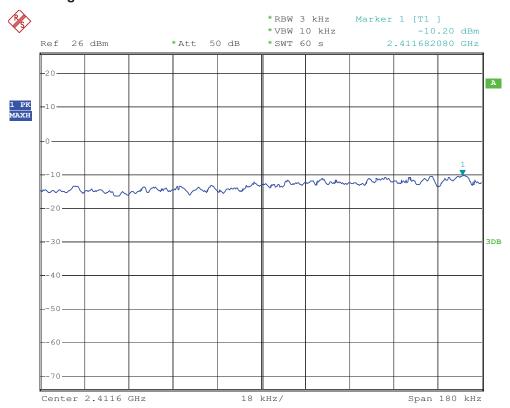


Date: 13.MAY.2011 13:23:26



Reference No.: 168367

8.3.4 Diagram 8-4

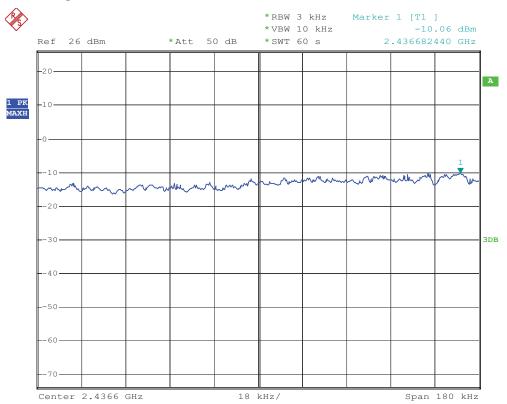


Date: 13.MAY.2011 18:38:42



Reference No.: 168367

8.3.5 Diagram 8-5

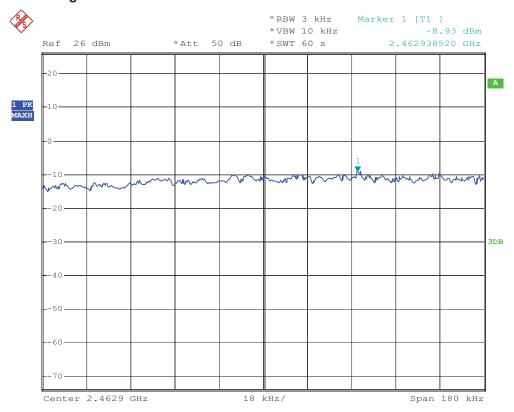


Date: 13.MAY.2011 18:49:17



Reference No.: 168367

8.3.6 Diagram 8-6

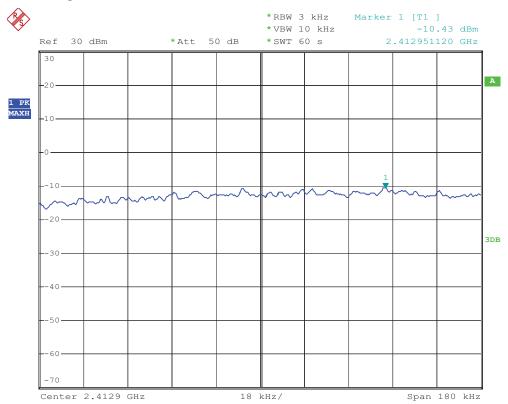


Date: 13.MAY.2011 18:59:20



Reference No.: 168367

8.3.7 Diagram 8-7

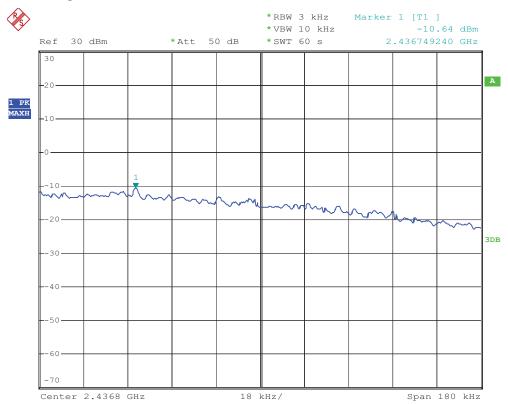


Date: 13.MAY.2011 17:17:52



Reference No.: 168367

8.3.8 Diagram 8-8

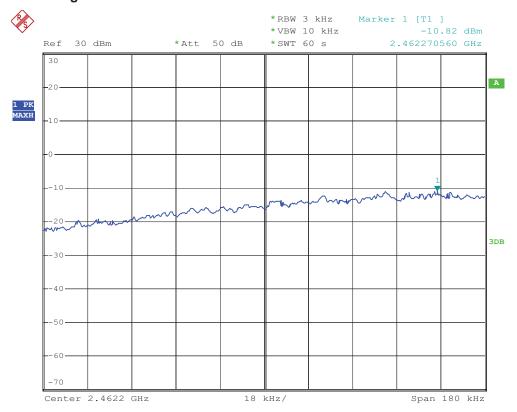


Date: 13.MAY.2011 18:10:41



Reference No.: 168367

8.3.9 Diagram 8-9

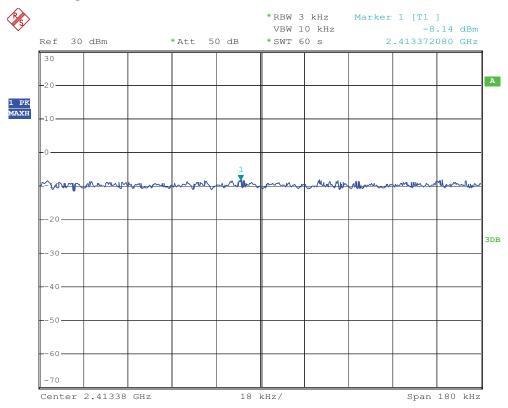


Date: 13.MAY.2011 18:20:27



Reference No.: 168367

8.3.10 Diagram 8-10

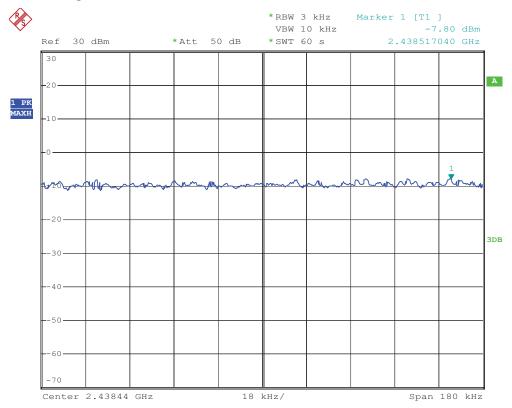


Date: 13.MAY.2011 13:43:09



Reference No.: 168367

8.3.11 Diagram 8-11

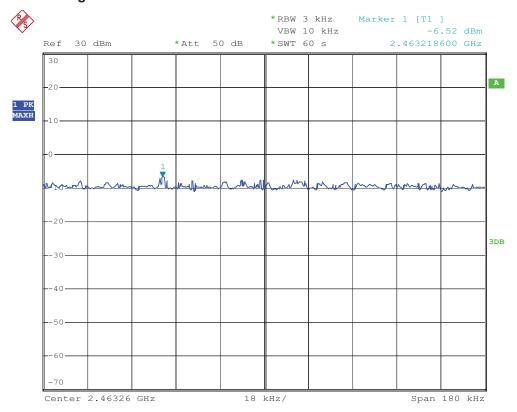


Date: 13.MAY.2011 14:33:07



Reference No.: 168367

8.3.12 Diagram 8-12

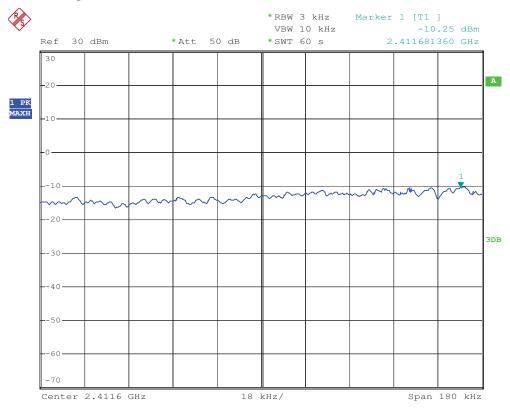


Date: 13.MAY.2011 14:44:21



Reference No.: 168367

8.3.13 Diagram 8-13

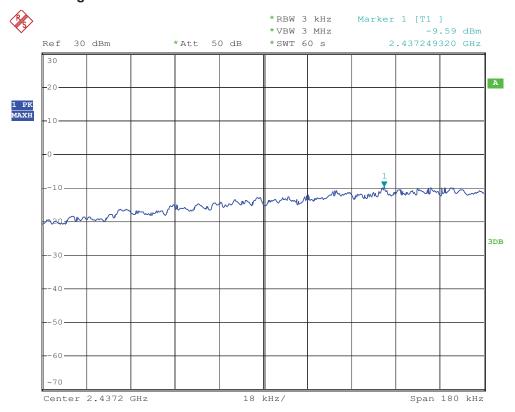


Date: 13.MAY.2011 15:03:16



Reference No.: 168367

8.3.14 Diagram 8-14

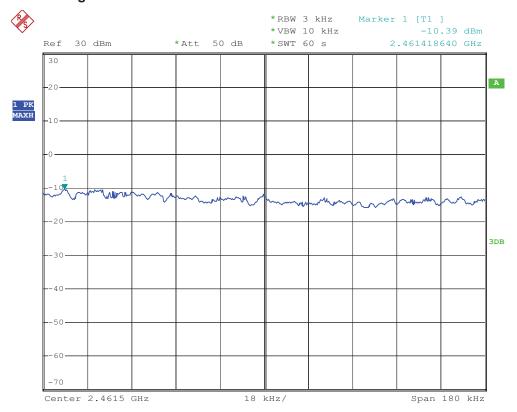


Date: 13.MAY.2011 15:21:30



Reference No.: 168367

8.3.15 Diagram 8-15

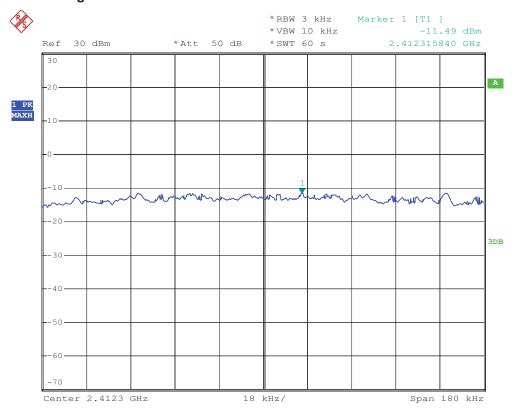


Date: 13.MAY.2011 15:39:51



Reference No.: 168367

8.3.16 Diagram 8-16

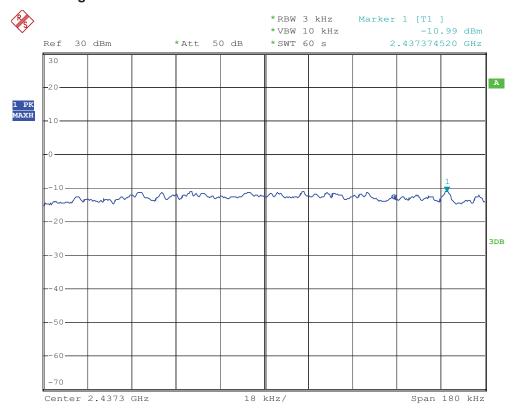


Date: 13.MAY.2011 16:09:52



Reference No.: 168367

8.3.17 Diagram 8-17

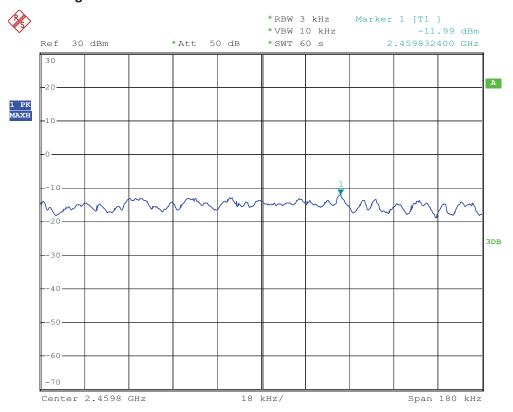


Date: 13.MAY.2011 16:27:32



Reference No.: 168367

8.3.18 Diagram 8-18



Date: 13.MAY.2011 16:36:40

Reference No.: 168367

9. Output Power and EIRP Test

9.1 Test Procedure

For systems using digital modulation in the 2400—2483.5MHz, The Peak out put power shall not exceed 1W(30dBm)

The transmitter output was connected to a Spectrum ,using CH Power function (set BW no less than 26dB bandwidth—See Annex A)

PK detector

Max hold

Cable loss: 1.18 dB; Antenna Gain: 2dBi

9.2 Measurement Equipment

	Equipment	Last Calibration	Type	Serial No.	Manufacturer
\boxtimes	Spectrum analyze	2010.12	FSP30	193412007	RS

9.3 Test Result

Output power:

Antenna Port 1:

Mode	Channel	Diagram	Read (dBm)	Cable Loss (dB)	Result (dBm)	Limit dBm	Result
802.11b	1	9-1	18.23	1.18	19.41	30	Pass
802.11b	6	9-2	17.59	1.18	18.77	30	Pass
802.11b	11	9-3	18.79	1.18	19.97	30	Pass
802.11g	1	9-4	22.18	1.18	23.36	30	Pass
802.11g	6	9-5	22.39	1.18	23.57	30	Pass
802.11g	11	9-6	22.41	1.18	23.59	30	Pass
802.11n	1	9-7	21.17	1.18	22.35	30	Pass
802.11n	6	9-8	21.01	1.18	22.19	30	Pass
802.11n	11	9-9	21.21	1.18	22.39	30	Pass

Antenna Port 2:

Mode	Channel	Diagram	Read (dBm)	Cable Loss (dB)	Result (dBm)	Limit dBm	Result
802.11b	1	9-10	18.01	1.18	19.19	30	Pass
802.11b	6	9-11	17.77	1.18	18.95	30	Pass
802.11b	11	9-12	18.01	1.18	19.19	30	Pass
802.11g	1	9-13	22.37	1.18	23.55	30	Pass
802.11g	6	9-14	22.45	1.18	23.63	30	Pass
802.11g	11	9-15	22.74	1.18	23.92	30	Pass
802.11n	1	9-16	20.75	1.18	21.93	30	Pass
802.11n	6	9-17	21.50	1.18	22.68	30	Pass
802.11n	11	9-18	21.38	1.18	22.56	30	Pass

EIRP:

EIRP= output power (max) +Antenna Gain =23.92 +2= 25.92 dBm< 36dBm (Pass)



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9.3.1 Diagram 9-1

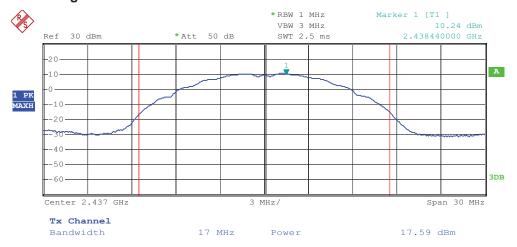


Date: 13.MAY.2011 12:11:13



Reference No.: 168367

9.3.2 Diagram 9-2



Date: 13.MAY.2011 13:31:26



Reference No.: 168367

9.3.3 Diagram 9-3

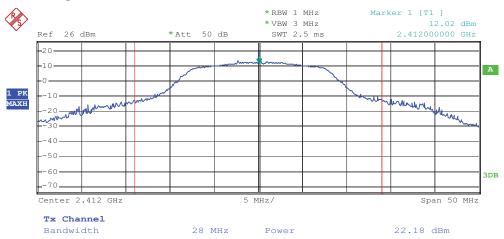


Date: 13.MAY.2011 13:19:13



Reference No.: 168367

9.3.4 Diagram 9-4

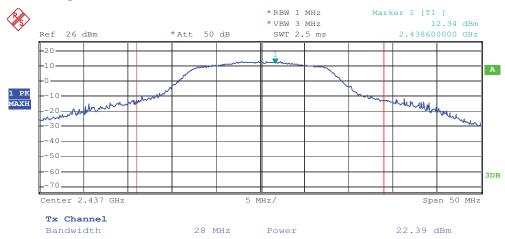


Date: 13.MAY.2011 18:35:47



Reference No.: 168367

9.3.5 Diagram 9-5

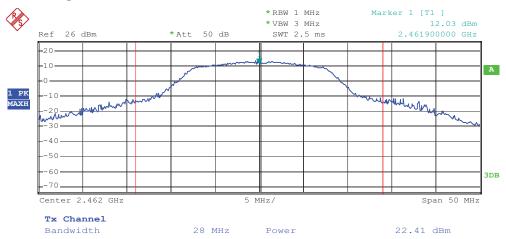


Date: 13.MAY.2011 18:47:03



Reference No.: 168367

9.3.6 Diagram 9-6

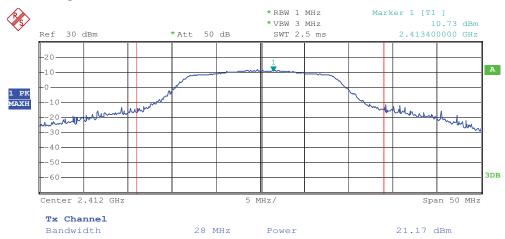


Date: 13.MAY.2011 18:55:28



Reference No.: 168367

9.3.7 Diagram 9-7



Date: 13.MAY.2011 17:08:45



Reference No.: 168367

9.3.8 Diagram 9-8

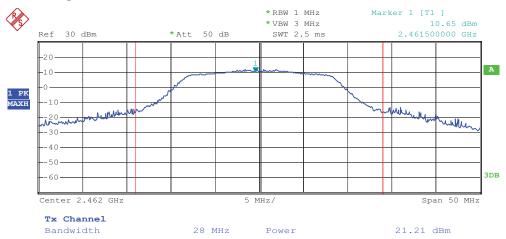


Date: 13.MAY.2011 18:06:48



Reference No.: 168367

9.3.9 Diagram 9-9

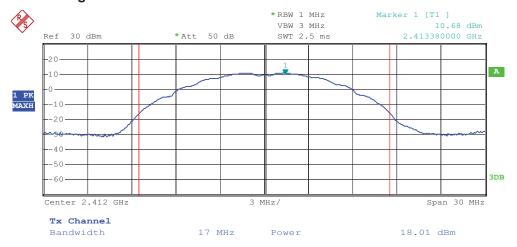


Date: 13.MAY.2011 18:17:09



Reference No.: 168367

9.3.10 Diagram 9-10

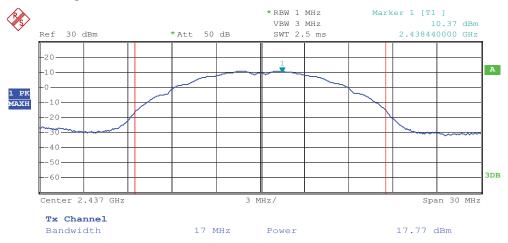


Date: 13.MAY.2011 13:39:37



Reference No.: 168367

9.3.11 Diagram 9-11

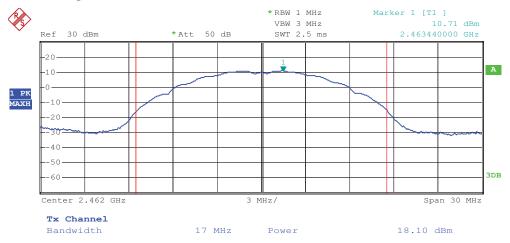


Date: 13.MAY.2011 14:25:49



Reference No.: 168367

9.3.12 Diagram 9-12

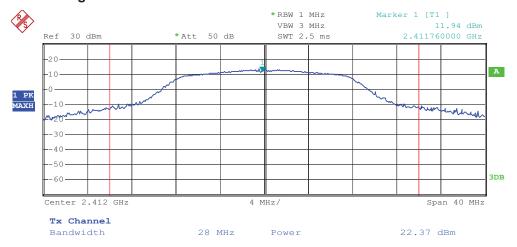


Date: 13.MAY.2011 14:39:26



Reference No.: 168367

9.3.13 Diagram 9-13



Date: 13.MAY.2011 14:57:46



Reference No.: 168367

9.3.14 Diagram 9-14

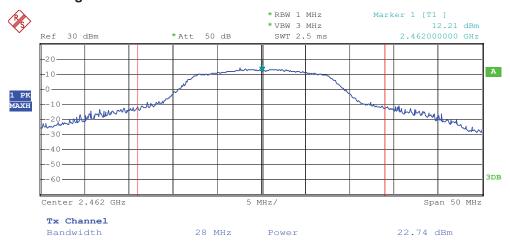


Date: 13.MAY.2011 15:17:10



Reference No.: 168367

9.3.15 Diagram 9-15

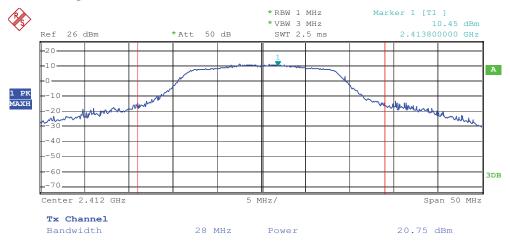


Date: 13.MAY.2011 15:31:23



Reference No.: 168367

9.3.16 Diagram 9-16



Date: 13.MAY.2011 18:30:21



Reference No.: 168367

9.3.17 Diagram 9-17

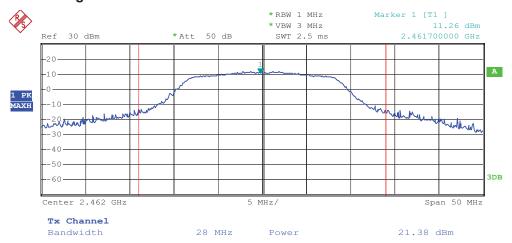


Date: 13.MAY.2011 16:23:08



Reference No.: 168367

9.3.18 Diagram 9-18



Date: 13.MAY.2011 16:34:11



Reference No.: 168367

10 POWER LINE CONDUCTED EMISSION TEST

10.1 Test Procedure

An intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μ H/50 Ω line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency of emission (MHz)	Conducted limit (dBµV)			
	Quasi-peak	Average		
0.15–0.5	66 to 56*	56 to 46*		
0.5–5	56	46		
5–30	60	50		
*-Decreases with the logarithm of the frequency.				

10.2 Measurement Equipment

	Equipment	Last Calibration	Туре	Serial No.	Manufacturer
\boxtimes	EMI Receiver	2011.5.14	ESH3	860905/006	R&S
\boxtimes	Spectrum Analyzer	2011.5.14	ESA-L1500A	US37451154	R&S
	PULSE LIMITER	2011.5.14	ESH3-Z2	100281	R&S
\boxtimes	LISN	2011.5.14	ESH3-Z5	100294	R&S

10.3 Test Result

The EUT was placed on a non-metallic table, 80cm above the ground plane. The other peripheral devices power cord connected to the power mains through another line impedance stabilization network. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.4-2009 on conducted Emission test.

Preview measurements: Final measurement: 0.15 MHz to 30 MHz 0.15 MHz to 30 MHz

Receiver settings: PK&AV detector Receiver settings: QP&AV detector

RBW:9 kHz

Test mode	Power Line	Test Data	Test Result
TX MODE	Line	Diagram 10-1	Pass
I V IVIODE	Neutral	Diagram 10-2	Pass

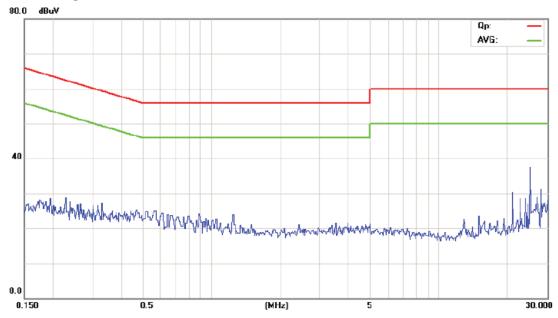
NOTES:

- 1. Measurements using CISPR quasi-peak mode & average mode.
- 2. All modes of operation were investigated and the worst -case emission are reported. See attached Plots.
- 3: If PK value is lower than AV limit then QP and AV value are deemed to be complied with rules and only diagram will be shown as below..

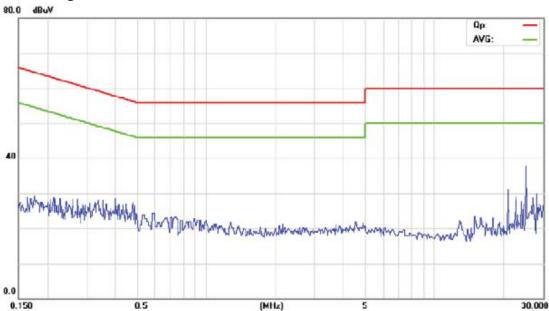


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10.3.1 Diagram 10-1



10.3.2 Diagram 10-2





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11. Antenna requirement

11.1 Requirement

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.

11.2 Result

The antenna used for this product is Internal Patch antennas with unique antenna connectors. no antenna other than that furnished by the manufacturer shall be used with the device. The maximum peak gain of this antenna is 2dBi.

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12 .MPE

Prediction of MPE limit at a given distance

$$S = \frac{PG}{4\pi R^2}$$

where: S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

Maximum peak output power at antenna input terminal: (23.92) dBm

Maximum peak output power at antenna input terminal: (240.6)mW

Antenna gain(typical): 2 (dBi)

Maximum antenna gain: (1.58) numeric

Time Averaging: 100 (%) Prediction distance: 20 (cm)

Prediction frequency: (2462) MHz

MPE limit for uncontrolled exposure at prediction frequency: 1 (mW/cm^2)

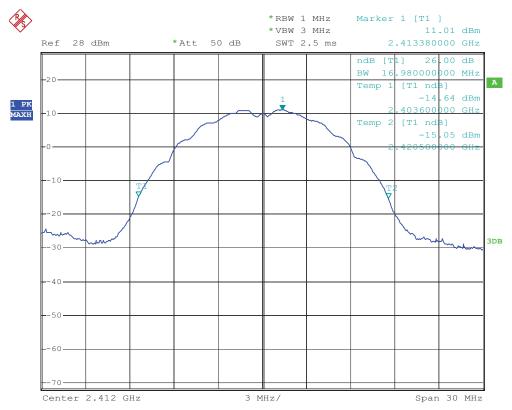
Power density at prediction frequency: (0.07776) mW/cm^2



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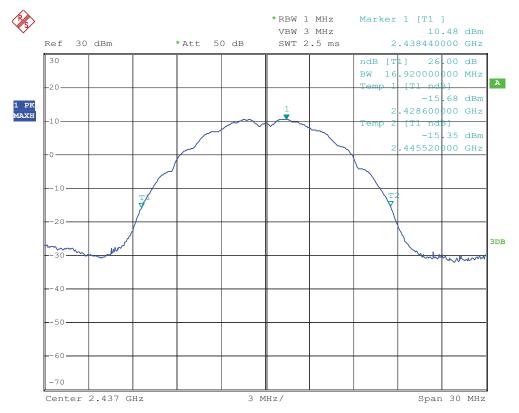
Annex A 26 dB bandwidth

Port1(worse case) 802.11b:16.98MHz max



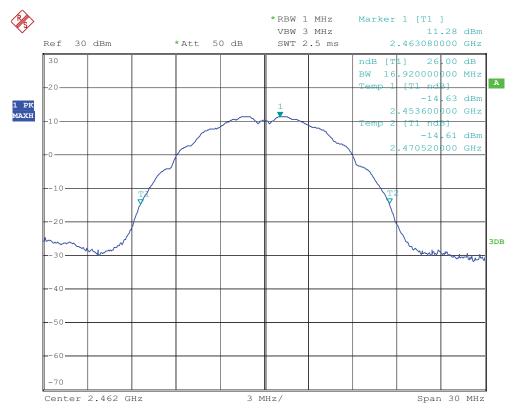
Date: 13.MAY.2011 12:04:03

Reference No.: 168367



Date: 13.MAY.2011 12:41:15

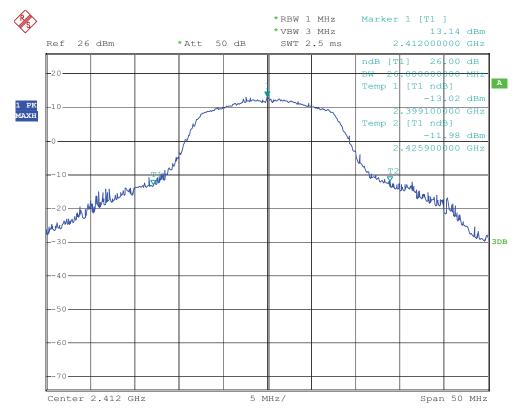
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Date: 13.MAY.2011 13:14:24

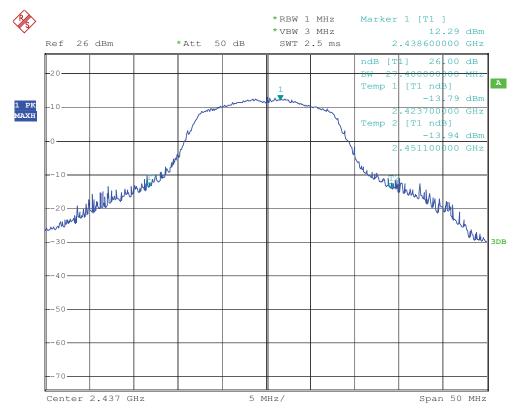
802.11g:27.4MHz max

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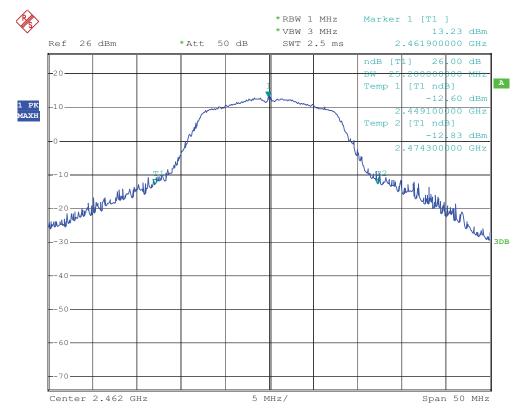
Date: 13.MAY.2011 18:34:20

Reference No.: 168367



Date: 13.MAY.2011 18:44:22

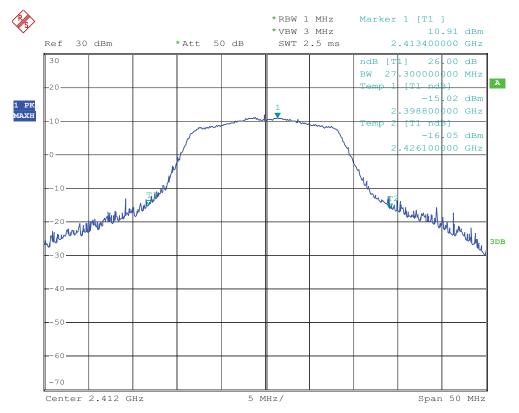
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Date: 13.MAY.2011 18:53:45

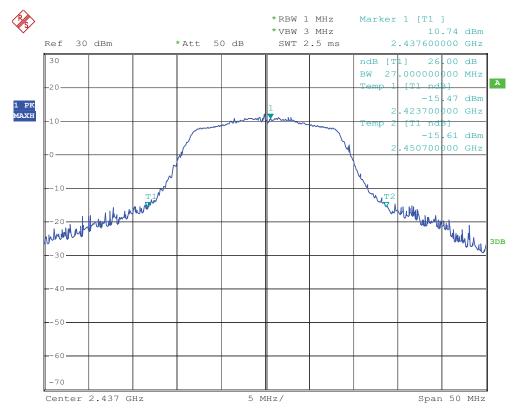
802.11n:27.3MHz max

Reference No.: 168367



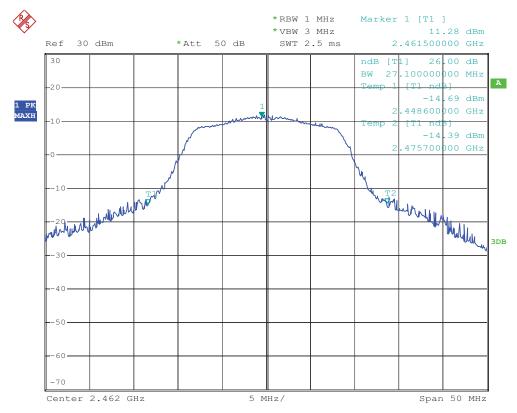
Date: 13.MAY.2011 17:07:16

Reference No.: 168367



Date: 13.MAY.2011 18:05:00

Reference No.: 168367



Date: 13.MAY.2011 18:15:42

END OF REPORT