



Test Report

FCC Part 15.247

FOR:

**NEC Engineering, Ltd
1753, Shimonumabe Nakahara-ku
Kawasaki, Kanagawa 211-8666
Japan**

MODEL #: TY24FM-E2024-01

FCC ID: V24241

**TEST REPORT #: EMC_CET10_020_15.247
DATE: 2008-3-3**



**FCC listed:
A2LA
accredited**

**IC recognized #
3462B**

CETECOM Inc.

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CETECOM Inc. is a Delaware Corporation with Corporation number: 2113686

Board of Directors: Dr. Harald Ansorge, Dr. Klaus Matkey, Hans Peter May

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1 Assessment

The following is in compliance with the applicable criteria specified in FCC rules Part 15.247 of the Code of Federal Regulations.

Company	Model #
NEC Engineering, Ltd	TY24FM-E2024-01

This report is reviewed by:

Lothar Schmidt
(Director Regulatory and
Antenna Services)

2008-3-3 EMC & Radio

Date

Section

Name

Signature

This report is prepared by:

Peter Mu
(EMC Project Engineer)

2008-3-3 EMC & Radio

Date

Section

Name

Signature

The test results of this test report relate exclusively to the test item specified in Identification of the Equipment under Test. The CETECOM Inc. USA does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens or samples of the type of the equipment represented by the test item. The test report may only be reproduced or published in full. Reproduction or publication of extracts from the report requires the prior written approval of the CETECOM Inc USA.

2 Administrative Data

2.1 Identification of the Testing Laboratory Issuing the EMC Test Report

Company Name:	CETECOM Inc.
Department:	EMC
Address:	411 Dixon Landing Road Milpitas, CA 95035 U.S.A.
Telephone:	+1 (408) 586 6200
Fax:	+1 (408) 586 6299
Responsible Test Lab Manager:	Lothar Schmidt
Responsible Project Leader:	Peter Mu
Date of test:	2008-2-28 to 2008-3-3

2.2 Identification of the Client

APPLICANT	
Applicant (Company Name)	NEC Engineering, Ltd
Street Address	1753, Shimonumabe Nakahara-ku
City/Zip Code	Kawasaki, Kanagawa 211-8666
Country	Japan
Contact Person	Hiroyuki Fujimi
Telephone	+81-44-435-9626
Fax	+81-44-435-9672
e-mail	h-fujimi@pb.jp.nec.com

2.3 Identification of the Manufacturer

Firm:	NEC Computertechno,Ltd.
Contact Person:	Tsuyoshi Kato
Telephone:	+81-55-243-4172
Fax:	+81-55-243-4234
Address Line 1:	1088-3,Oohtsu-tyou
City/State/Postal Code:	Kouhu, Yamanashi 400-0055
Country:	Japan
e-mail:	ts-kato@vx.jp.nec.com

3 Equipment Under Test (EUT)

3.1 Specification of the Equipment under Test

EUT	
Marketing Name of EUT (if not same as Model No.)	None
Description	None
Model No.	TY24FM-E2024-01
HW:	0A
SW:	01
FCC-ID	V24241

Frequency Range:	2405MHz – 2480MHz
Type(s) of Modulation:	OQPSK
Number of Channels:	15
Antenna Type:	Built in PCB Antenna, -0.33dBi
Output Power:	Radiated: -0.93dBm (0.807mW) 2405MHz EIRP. Conducted: -1.53dBm (0.703mW) 2405MHz.

3.2 Identification of the Equipment under Test (EUT)

EUT #	TYPE	MANF.	MODEL	SERIAL #
1	EUT	NEC	TY24FM-E2024-01	81-0A-00001
2	EUT	NEC	TY24FM-E2024-01	81-0A-0000E
2	EUT	NEC	TY24FM-E2024-01	81-0A-0000F

3.3 Identification of Accessory equipment

EUT #	TYPE	MANF.	MODEL	SERIAL #
1	Serial Interface Board	NEC	N/A	N/A
2	Adaptor Board	NEC	N/A	N/A



4 Subject Of Investigation

All testing was performed on the product referred to in Section 3 as EUT. This test report contains full radiated and conducted testing as per FCC15.247 on the EUT.

During the testing process the EUT was tested on low, mid, and high channels using normal modulation settings provided by the manufacture. All data in this report shows the worst case between horizontal and vertical polarization for above 1GHz.

The objective of the measurements done by Cetecom Inc. was to measure the performance of the EUT as specified by requirements listed in FCC rules Part 15.247 of Title 47 of the Code of Federal Regulations. The maximization of portable equipment is conducted in accordance with ANSI C63.4.

5 Measurements (RADIATED)

5.1 MAXIMUM PEAK OUTPUT POWER § 15.247 (RADIATED)

5.1.1 LIMIT SUB CLAUSE § 15.247 (b) (1) (2) (3) (4)

Frequency range	RF power output
2400-2483.5 MHz	36dBm EIRP

*limit is based upon antenna gain of less than or equal to 6dBi.

5.1.2 Test Results

TEST CONDITIONS		MAXIMUM PEAK OUTPUT POWER (dBm)		
Frequency (MHz)		2405	2440	2480
T _{nom} (23)°C	V _{nom} (3.0VDC)	-0.93	-1.34	-2.81
Measurement uncertainty		±0.5dBm		

EIRP 2405MHz

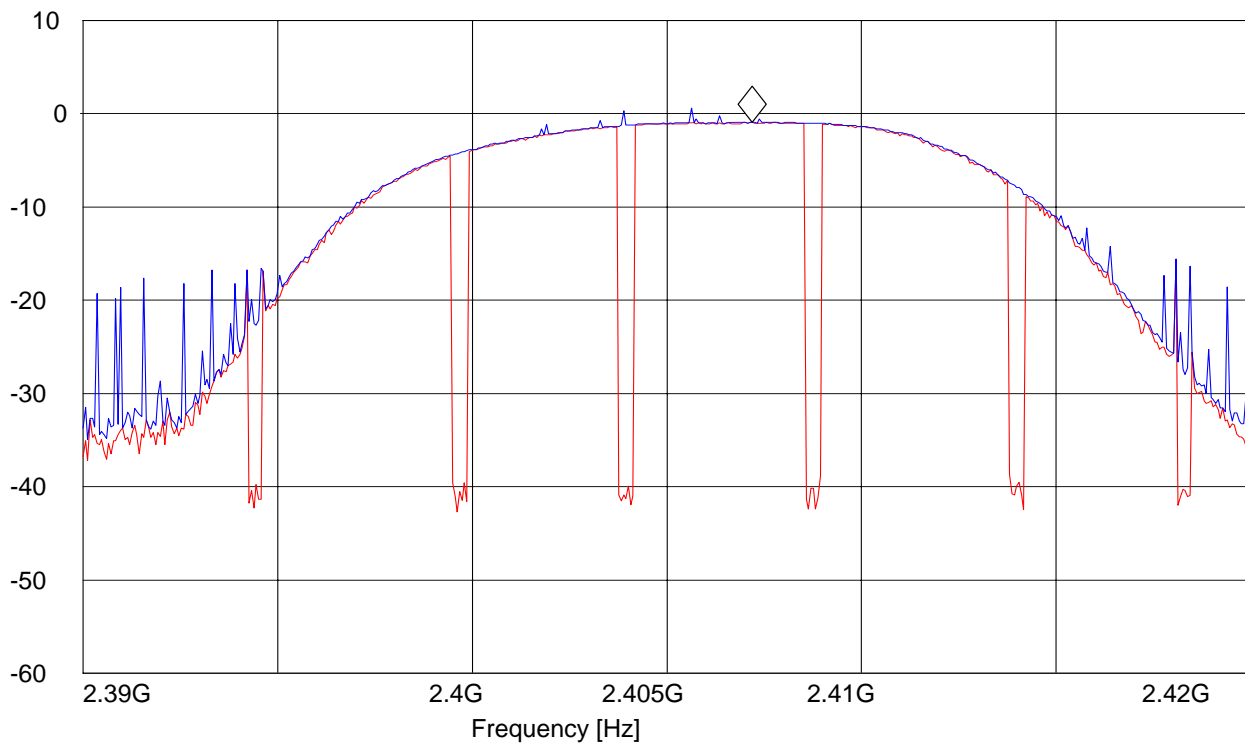
EUT: 81-0A-0000F
Customer:: NEC
Test Mode: modulated
ANT Orientation: H
EUT Orientation: H
Test Engineer: Peter Mu
Voltage: DC 3V
Comments: TT 55°

SWEEP TABLE: "EIRP RLAN 2405"

Short Description:		EIRP RLAN channel-2412 MHz			
Start	Stop	Detector	Meas.	IF	Transducer
Frequency	Frequency		Time	Bandw.	
2.4 GHz	2.4 GHz	MaxPeak	Coupled	10 MHz	DUMMY-DBM
		MaxPeak			

Marker: 2.407194389 GHz -0.93 dBm

Level [dBm]



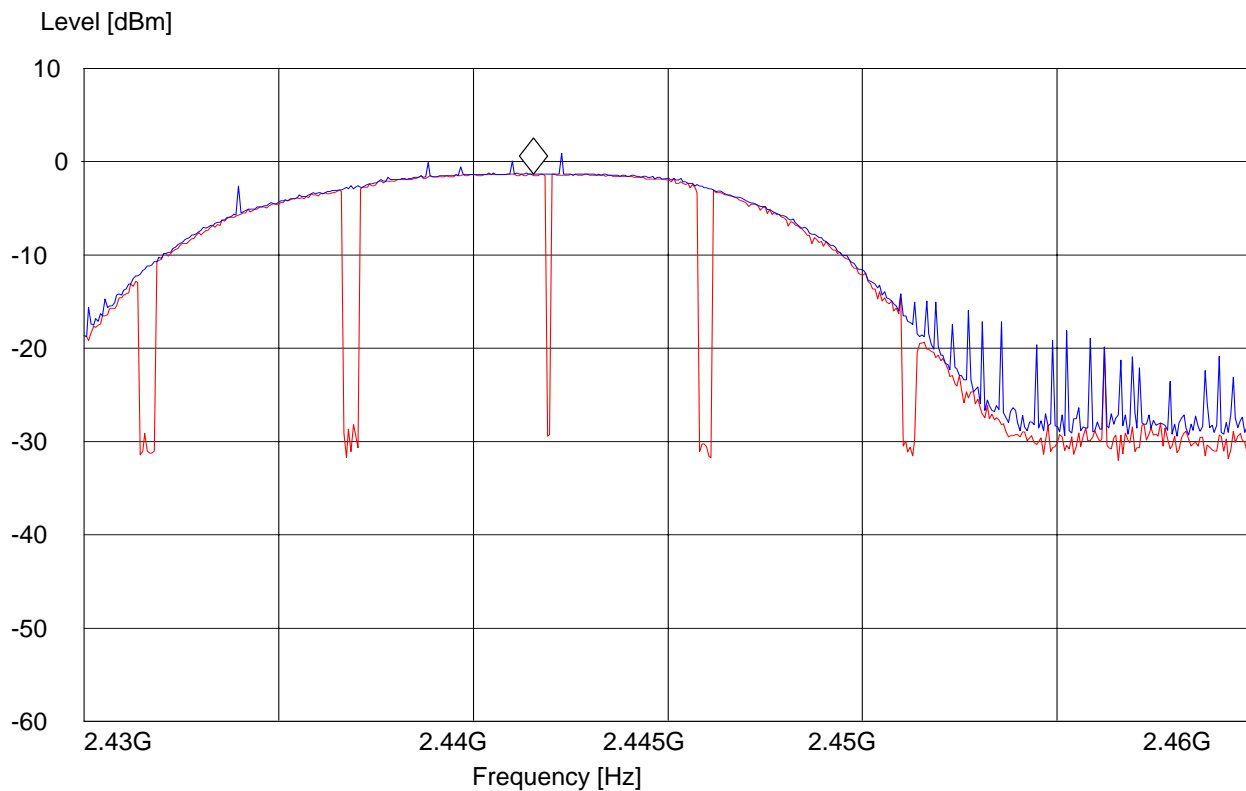
EIRP 2440MHz

EUT / Description: 81-0A-0000F
Manufacturer: NEC
Operation Mode: modulated
ANT Orientation: : H
EUT Orientation:: H
Test Engineer: Peter Mu
Voltage: DC 3V
Comments:: TT 55°

SWEEP TABLE: "EIRP RLAN 2445"

Short Description:		EIRP RLAN channel-2442 MHz			
Start	Stop	Detector	Meas.	IF	Transducer
Frequency	Frequency		Time	Bandw.	
2.4 GHz	2.5 GHz	MaxPeak	Coupled	10 MHz	DUMMY-DBM
		MaxPeak			

Marker: 2.441543086 GHz -1.34 dBm



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EIRP 2480MHz

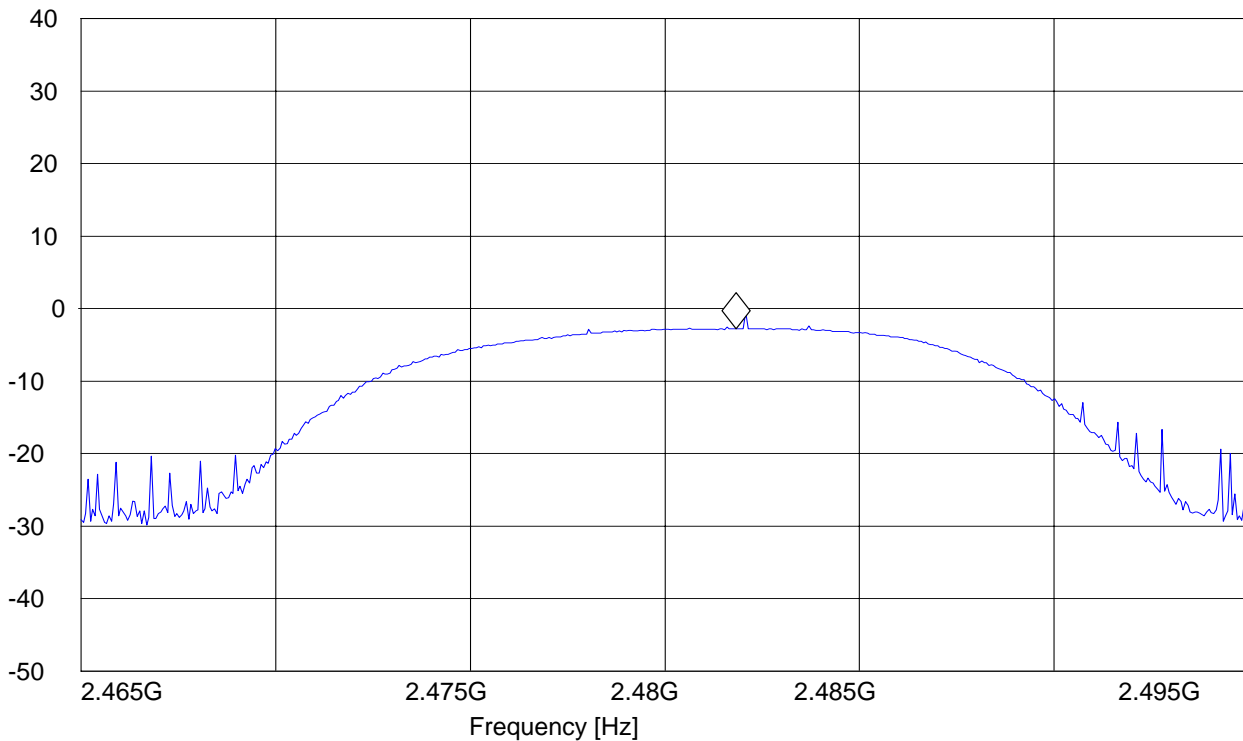
EUT: 81-0A-0000F
Customer:: NEC
Test Mode: modulated
ANT Orientation: H
EUT Orientation: H
Test Engineer: Peter Mu
Voltage: DC 3V
Comments:

SWEEP TABLE: "EIRP RLAN 2480"

Short Description:		EIRP RLAN channel-2462 MHz			
Start	Stop	Detector	Meas.	IF	Transducer
Frequency	Frequency		Time	Bandw.	
2.5 GHz	2.5 GHz	MaxPeak	Coupled	10 MHz	DUMMY-DBM
		MaxPeak			

Marker: 2.481833667 GHz -2.81 dBm

Level [dBm]



5.2 RESTRICTED BAND EDGE COMPLIANCE RADIATED §15.247/15.205

5.2.1 LIMITS

30. Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
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	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
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	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)
13.36 - 13.41			

*PEAK LIMIT= 74dBuV/m

*AVG. LIMIT= 54dBuV/m

5.2.2 RESULTS:**(2405MHz) LOWER BAND EDGE PEAK**

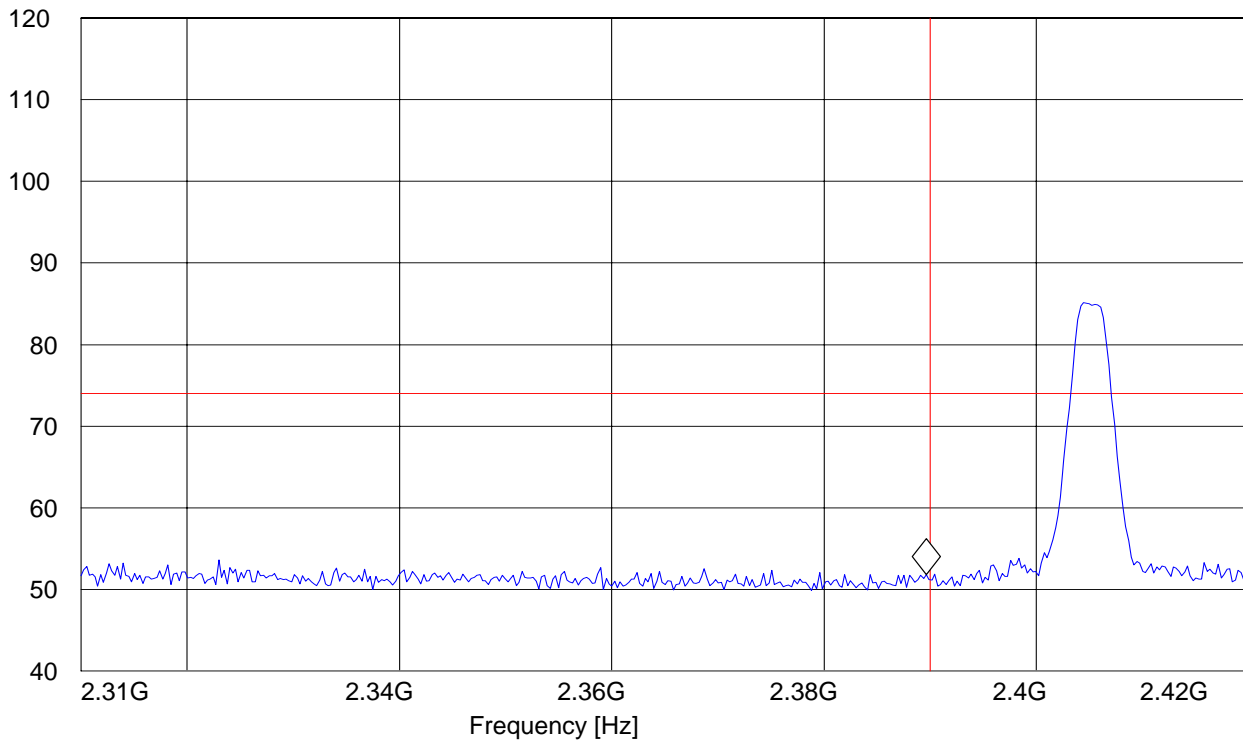
EUT: 0000E
Customer:: NEC
Test Mode: Zigbee CH0
ANT Orientation: H
EUT Orientation: H
Test Engineer: Sam
Voltage: DC 3V
Comments:

SWEEP TABLE: "FCC15.247 LBE_PK"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
2.3 GHz	2.4 GHz	MaxPeak MaxPeak	Coupled	1 MHz	#326horn_AF_vert

Marker: 2.389623246 GHz 51.79 dBµV/m

Level [dBµV/m]



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(2405MHz) LOWER BAND EDGE AVERAGE

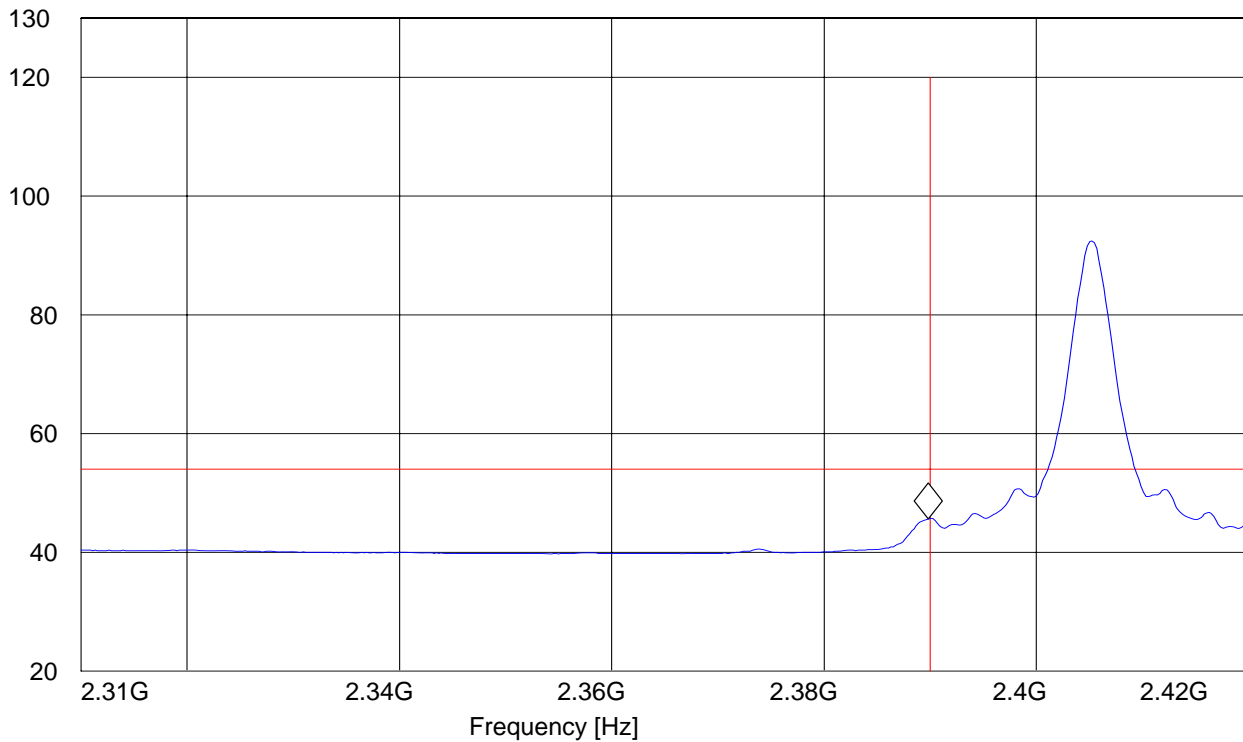
EUT: 81-0A-0000F
Customer:: NEC
Test Mode: modulated
ANT Orientation: H
EUT Orientation: H
Test Engineer: Peter Mu
Voltage: DC 3V
Comments:

SWEEP TABLE: "FCC15.247 LBE_AVG"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
2.3 GHz	2.4 GHz	MaxPeak	Coupled	1 MHz	#326horn_AF_vert

Marker: 2.389799599 GHz 45.66 dB μ V/m

Level [dB μ V/m]



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(2480MHz) HIGHER BAND EDGE PEAK

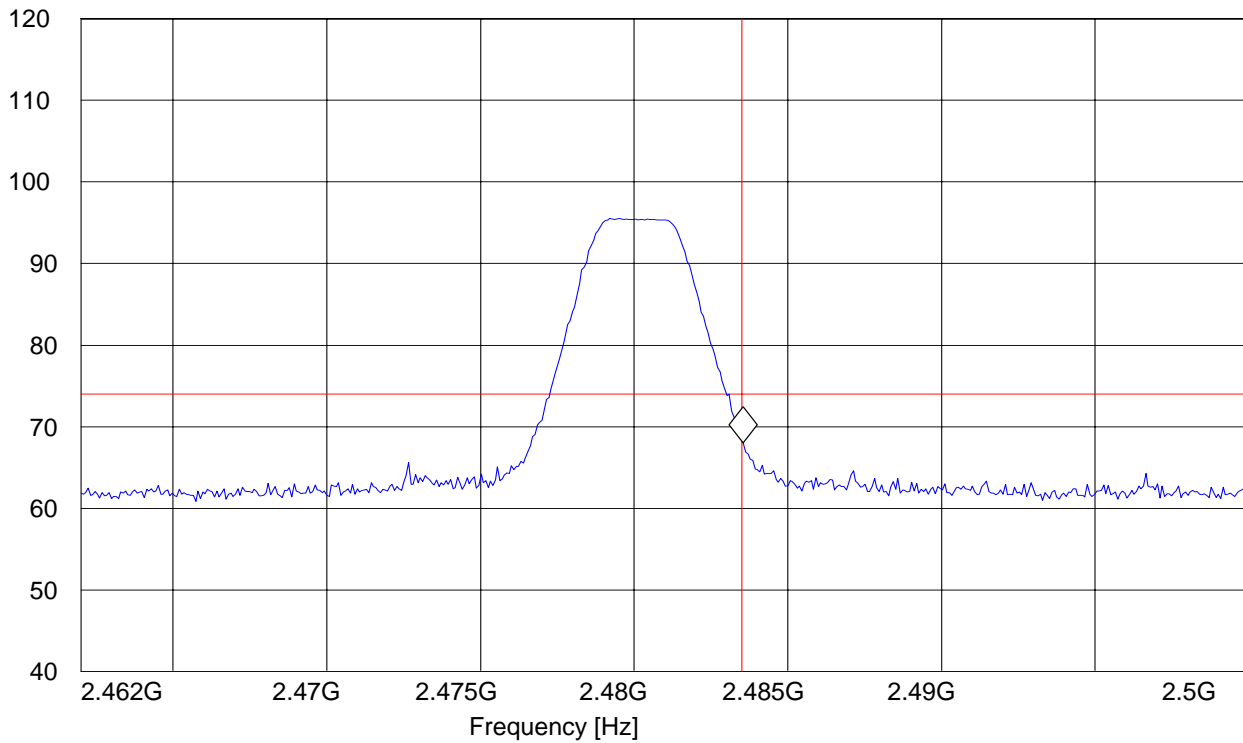
EUT: 0000E
Customer:: NEC
Test Mode: Zigbee
ANT Orientation: H
EUT Orientation: H
Test Engineer: Peter
Voltage: DC 3V
Comments: TT105°

SWEEP TABLE: "FCC15.247 HBE_PK"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
2.5 GHz	2.5 GHz	MaxPeak MaxPeak	Coupled	1 MHz	#326horn_AF_vert

Marker: 2.483551102 GHz 68.04 dB μ V/m

Level [dB μ V/m]



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HIGHER BAND EDGE AVERAGE-GFSK MODULATION

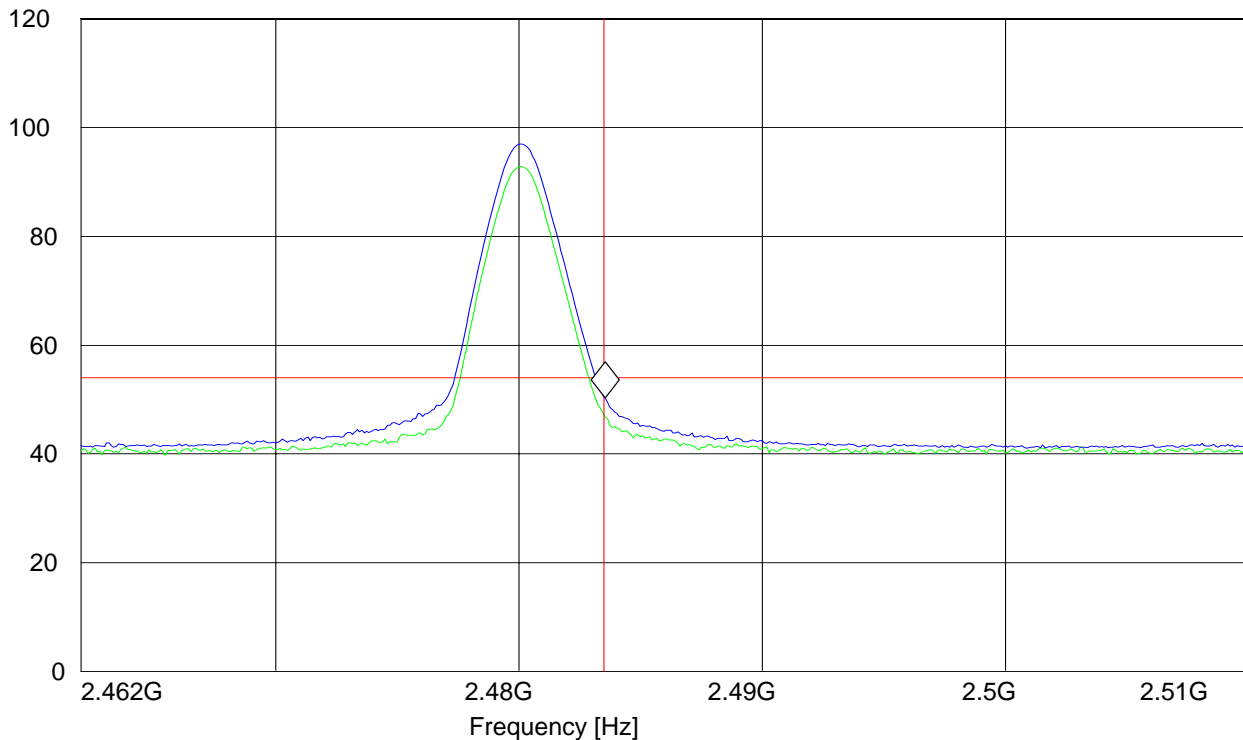
EUT / Description: 0000E
Manufacturer: NEC
Operation Mode: Zigbee
ANT Orientation: : H
EUT Orientation:: H
Test Engineer: peter
Voltage: 3VDC
Comments::

SWEEP TABLE: "FCC15.247 HBE_AVG_PS"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
2.5 GHz	2.5 GHz	MaxPeak MaxPeak	Coupled	1 MHz	#326horn_AF_horz

Marker: 2.483547094 GHz 50.32 dB μ V/m

Level [dB μ V/m]



5.3 TRANSMITTER SPURIOUS EMISSIONS RADIATED § 15.247/15.205/15.209

5.3.1 LIMITS

Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
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	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
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	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)
13.36 - 13.41			

*PEAK LIMIT= 74dBuV/m

*AVG. LIMIT= 54dBuV/m

NOTE:

1. The radiated emissions were done with different settings, using the relevant pre-amplifiers for the relevant frequency ranges. This is the reason that the graphs show different noise levels. In the range between 3 and 25 GHz very short cable connections to the antenna was used to minimize the noise level.

2. All measurements are done in peak mode using an average limit , unless specified with the plots.

Results for the radiated measurements below 30MHz according § 15.33

Frequency	Measured values	Remarks
9KHz – 30MHz	No emissions found, caused by the EUT	This is valid for all the tested channels

All Spurious Emission measurements are done in GFSK mode and represents the worse case emission from the device.

5.3.2 RESULTS

30MHz – 1GHz Antenna: vertical

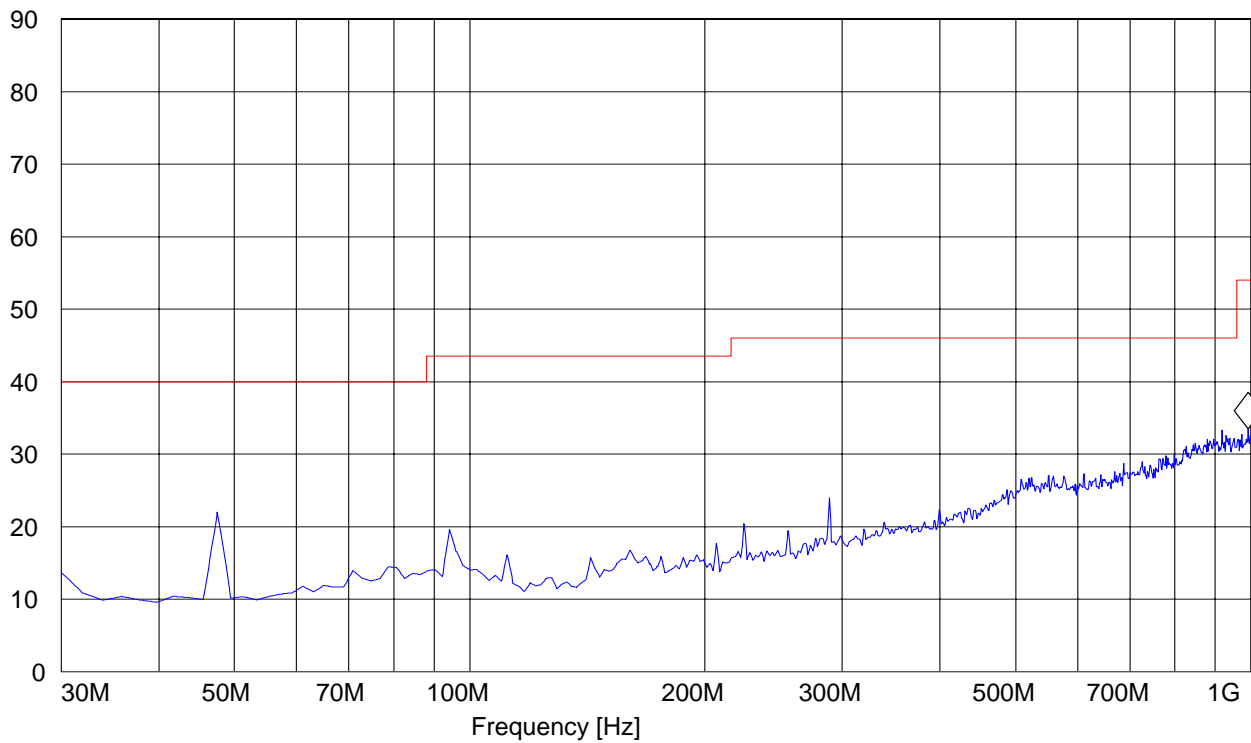
Note: This plot is valid for low, mid, high channels (worst-case plot)

EUT: 0000E
Customer:: NEC
Test Mode: Zigbee CH0
ANT Orientation: V
EUT Orientation: H
Test Engineer: Sam
Voltage: DC 3V
Comments:

SWEEP TABLE: "FCC15.247_30M-1G_Ver"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	3141-#1186_Vert

Marker: 992.224449 MHz

33.46 dB μ V/mLevel [dB μ V/m]

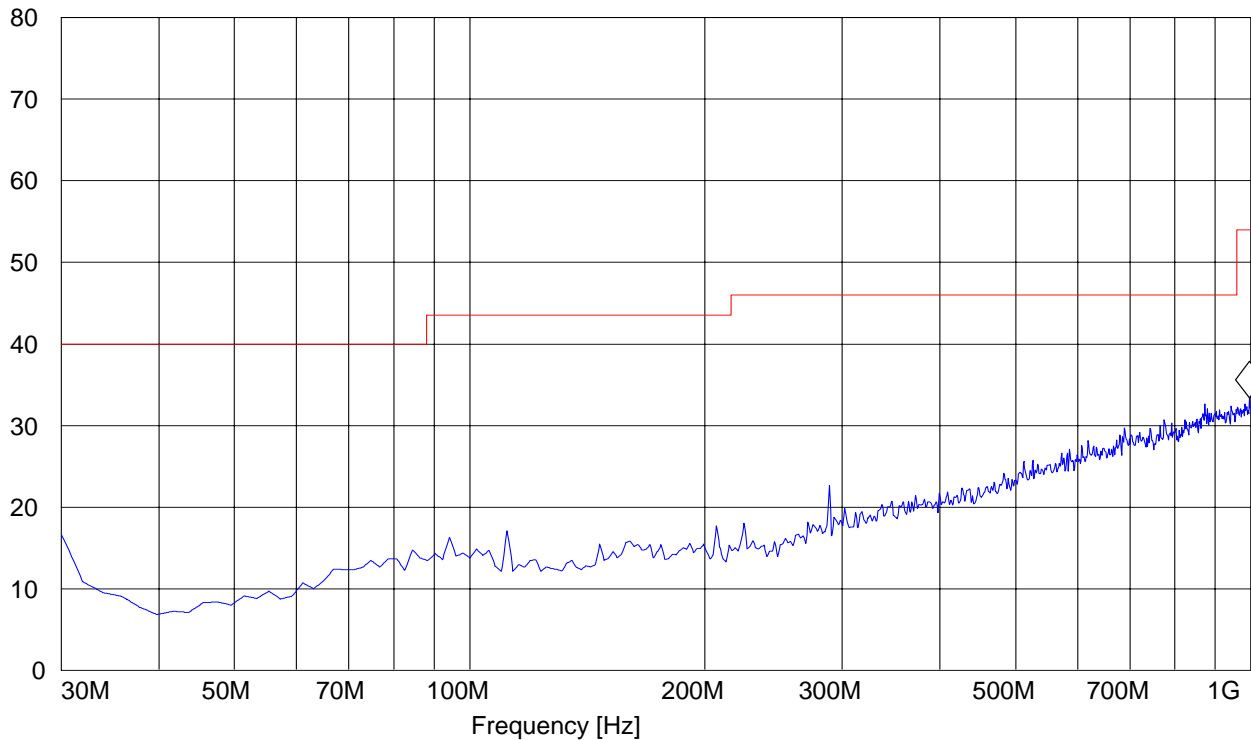
30MHz – 1GHz Antenna: horizontal

Note: This plot is valid for low, mid, high channels (worst-case plot)

EUT: 0000E
Customer:: NEC
Test Mode: Zigbee CH7
ANT Orientation: H
EUT Orientation: H
Test Engineer: Sam
Voltage: DC 3V
Comments:

SWEEP TABLE: "FCC15.247_30M-1G_Hor"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	3141-#1186_Horz

Marker: 996.112224 MHz 33.36 dB μ V/mLevel [dB μ V/m]

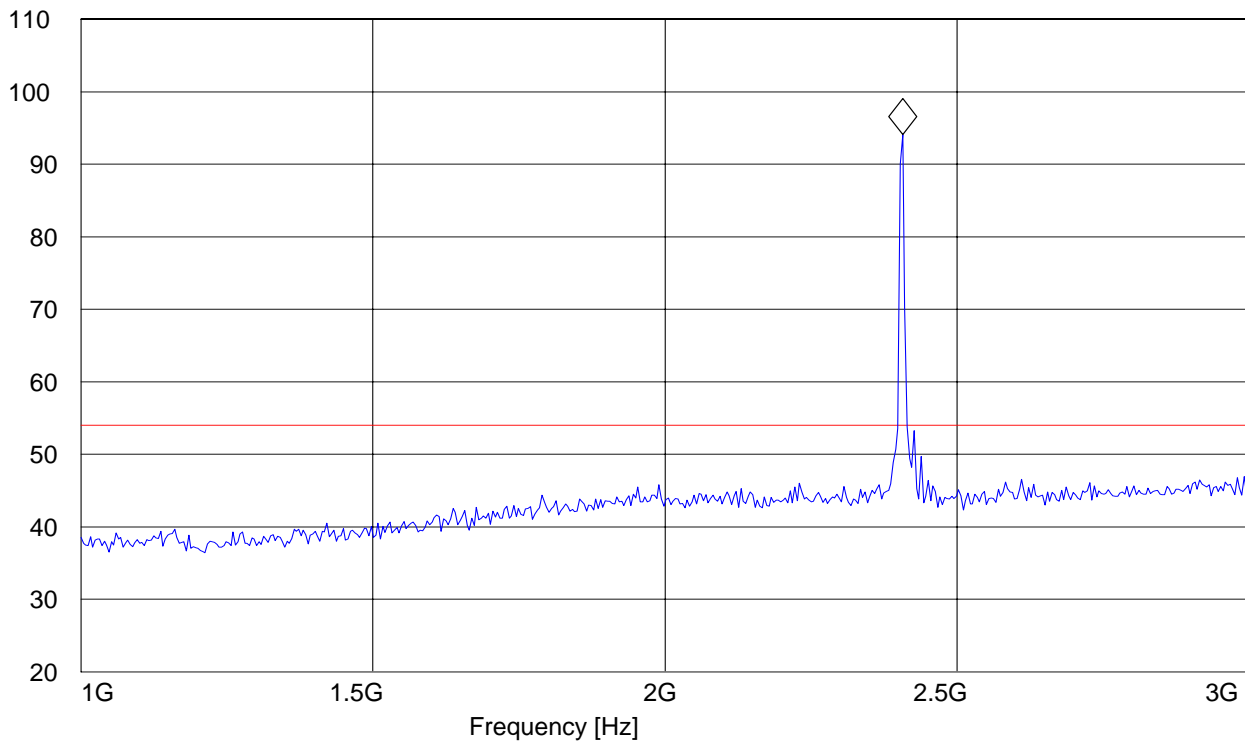
1-3GHz (2405MHz)**Note: The peak above the limit line is the carrier freq.****Note: Peak Reading vs. Average limit**

EUT: 81-0A-0000F
Customer:: NEC
Test Mode: modulated
ANT Orientation: H
EUT Orientation: H
Test Engineer: Peter Mu
Voltage: DC 3V
Comments: marker is intentional transmission

SWEEP TABLE: "FCC15.247_1-3G"

Start	Stop	Detector	Meas.	IF	Transducer
Frequency	Frequency		Time	Bandw.	
1.0 GHz	3.0 GHz	MaxPeak	Coupled	1 MHz	#326horn_AF_vert

Marker: 2.406813627 GHz 94.06 dB μ V/m

Level [dB μ V/m]

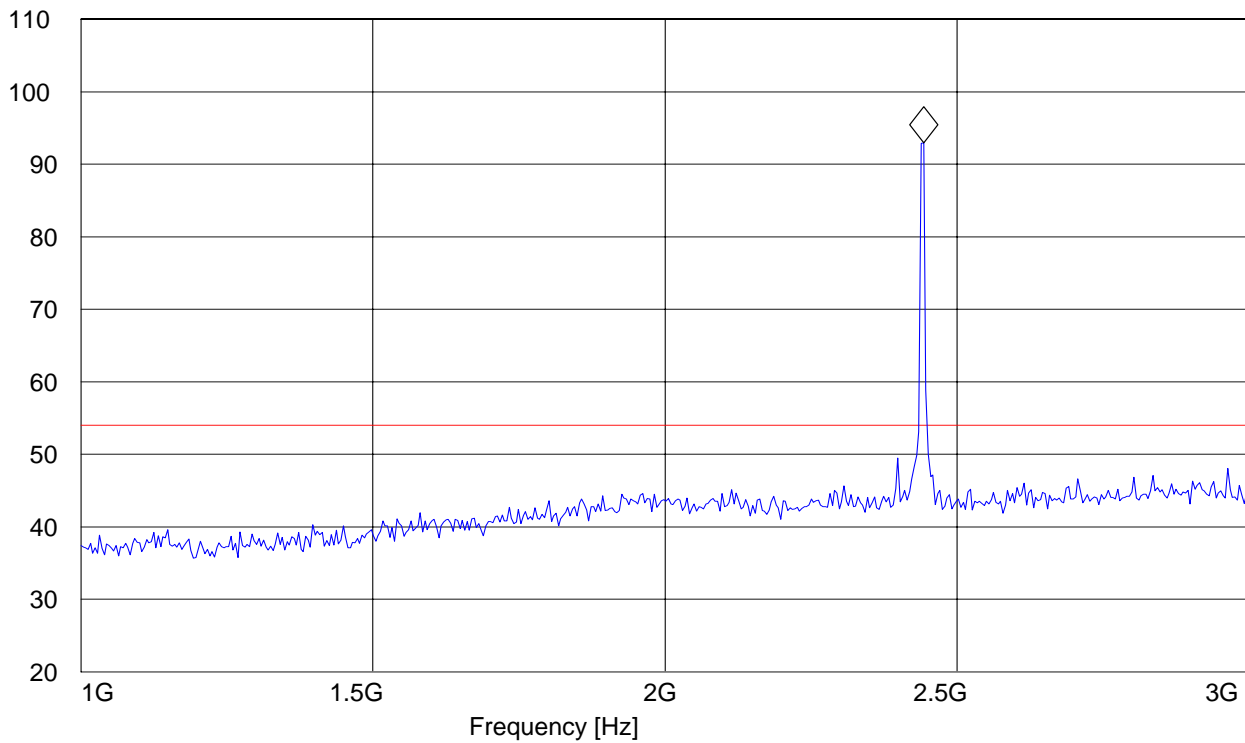
1-3GHz (2440MHz)**Note: The peaks above the limit line is the carrier freq.****Note: Peak Reading vs. Average limit**

EUT: 81-0A-0000F
Customer:: NEC
Test Mode: modulated
ANT Orientation: H
EUT Orientation: H
Test Engineer: Peter Mu
Voltage: DC 3V
Comments:

SWEEP TABLE: "FCC15.247_1-3G"

Start	Stop	Detector	Meas.	IF	Transducer
Frequency	Frequency		Time	Bandw.	
1.0 GHz	3.0 GHz	MaxPeak	Coupled	1 MHz	#326horn_AF_vert

Marker: 2.442885772 GHz 92.97 dB μ V/m

Level [dB μ V/m]

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1-3GHz (2480MHz)

Note: The peaks above the limit line is the carrier freq.

Note: Peak Reading vs. Average limit

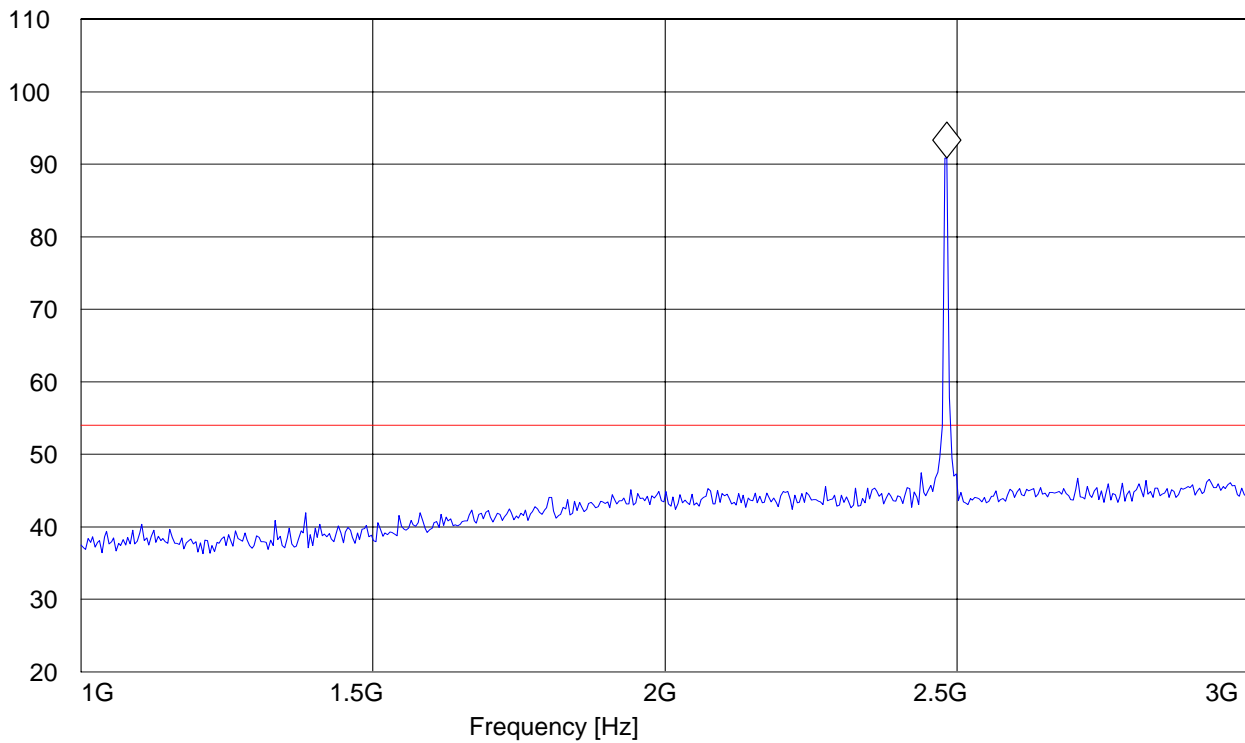
EUT: 81-0A-0000F
Customer:: NEC
Test Mode: modulated
ANT Orientation: H
EUT Orientation: H
Test Engineer: Peter Mu
Voltage: DC 3V
Comments:

SWEEP TABLE: "FCC15.247_1-3G"

Start	Stop	Detector	Meas.	IF	Transducer
Frequency	Frequency		Time	Bandw.	
1.0 GHz	3.0 GHz	MaxPeak	Coupled	1 MHz	#326horn_AF_vert

Marker: 2.482965932 GHz 90.83 dB μ V/m

Level [dB μ V/m]



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3-18GHz (2405MHz)

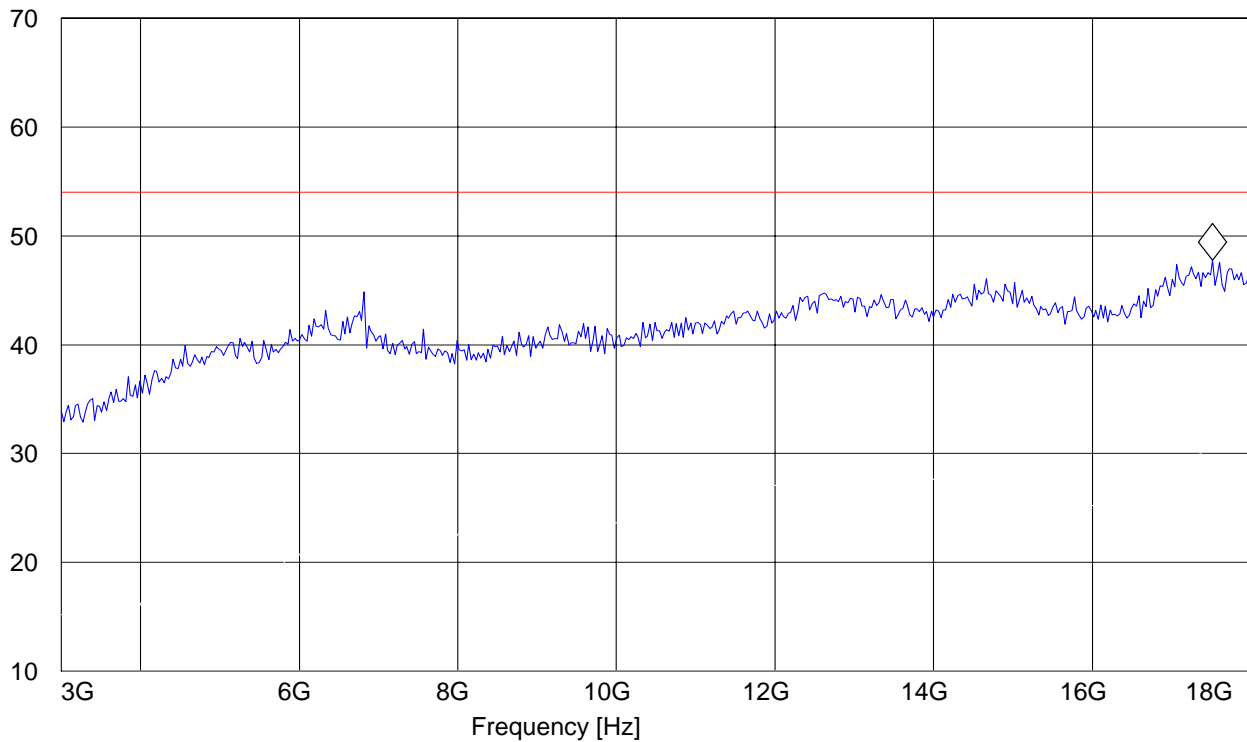
EUT: 81-0A-0000F
Customer:: NEC
Test Mode: modulated
ANT Orientation: H
EUT Orientation: H
Test Engineer: Peter Mu
Voltage: DC 3V
Comments:

SWEEP TABLE: "FCC15.247_3-18G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
3.0 GHz	18.0 GHz	MaxPeak	Coupled	1 MHz	#326horn_AF_vert

Marker: 17.519038076 GHz 47.79 dB μ V/m

Level [dB μ V/m]



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3-18GHz (2440MHz)

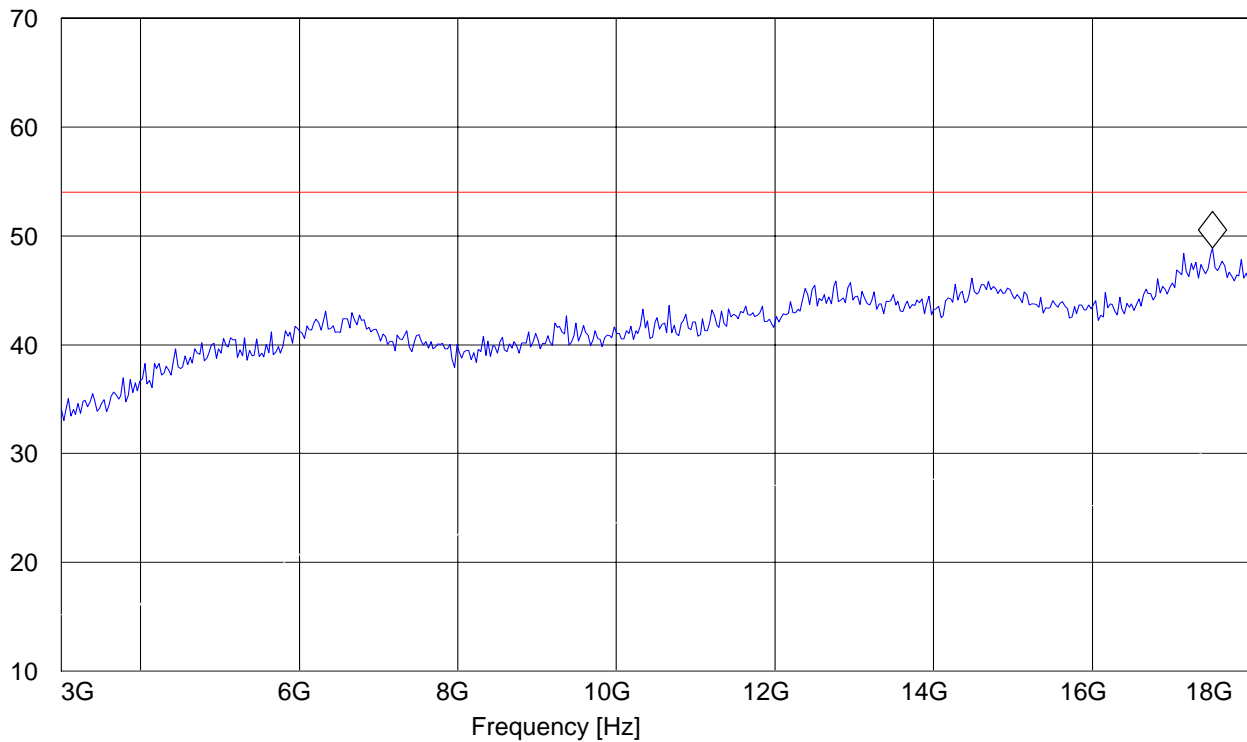
EUT: 81-0A-0000F
Customer:: NEC
Test Mode: modulated
ANT Orientation: H
EUT Orientation: H
Test Engineer: Peter Mu
Voltage: DC 3V
Comments:

SWEEP TABLE: "FCC15.247_3-18G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
3.0 GHz	18.0 GHz	MaxPeak	Coupled	1 MHz	#326horn_AF_vert

Marker: 17.519038076 GHz 48.85 dB μ V/m

Level [dB μ V/m]



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3-18GHz (2480MHz)

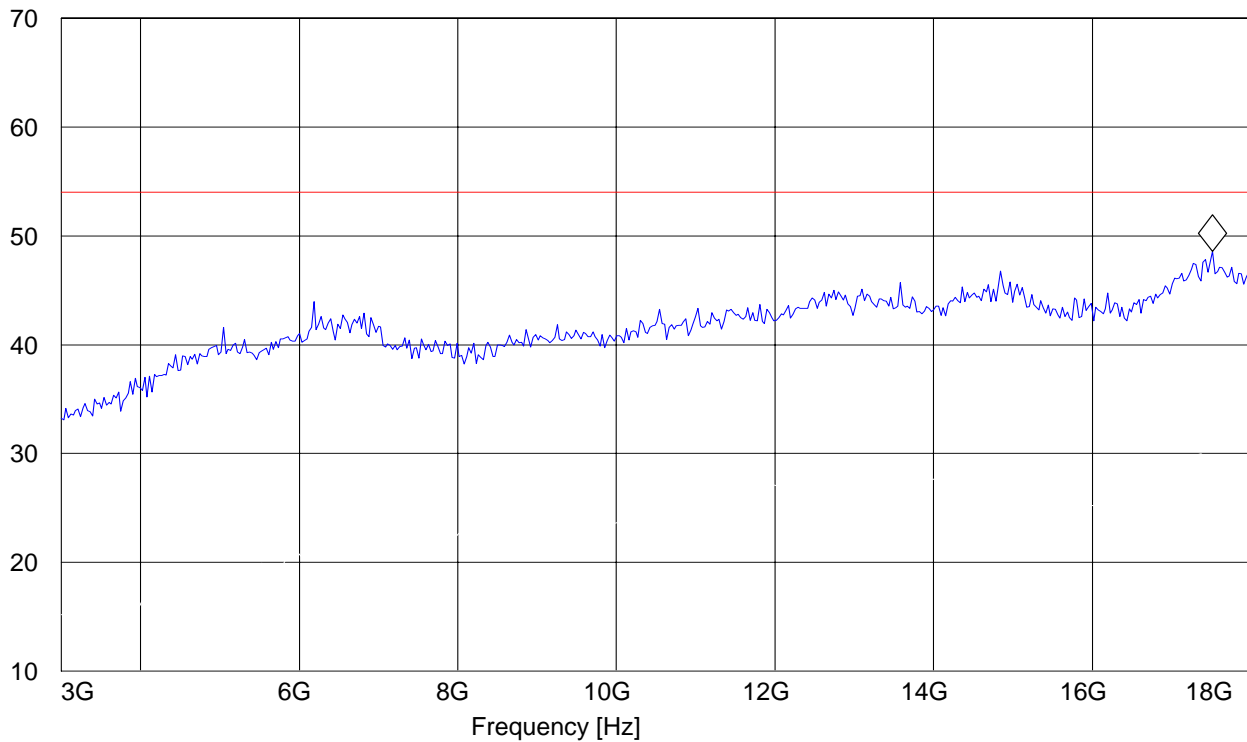
EUT: 81-0A-0000F
Customer:: NEC
Test Mode: modulated
ANT Orientation: H
EUT Orientation: H
Test Engineer: Peter Mu
Voltage: DC 3V
Comments:

SWEEP TABLE: "FCC15.247_3-18G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
3.0 GHz	18.0 GHz	MaxPeak	Coupled	1 MHz	#326horn_AF_vert

Marker: 17.519038076 GHz 48.59 dB μ V/m

Level [dB μ V/m]



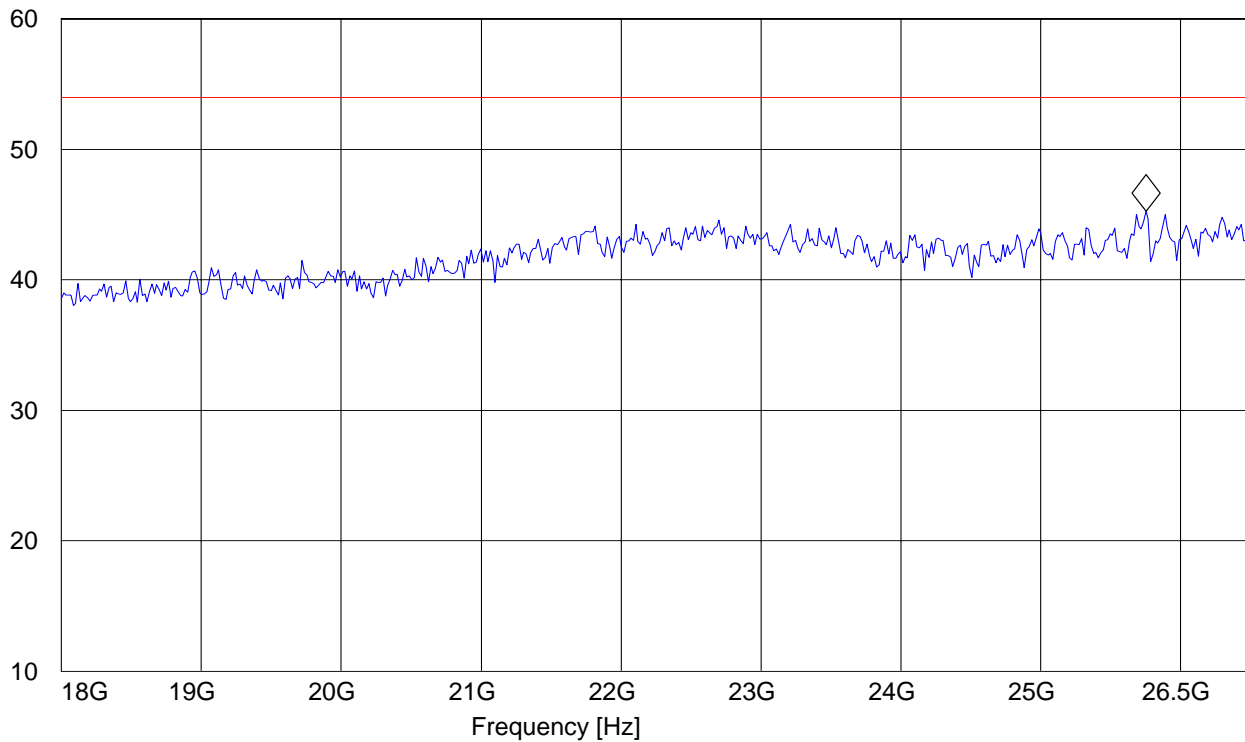
**18-25GHz****Note: This plot is valid for low, mid, high channels (worst-case plot)****Note: Peak Reading vs. Average limit**

EUT: 0000E
Customer:: NEC
Test Mode: Zigbee CH15
ANT Orientation: H
EUT Orientation: H
Test Engineer: Sam
Voltage: DC 3V
Comments:

SWEEP TABLE: "FCC15.247_18-26.5G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
18.0 GHz	26.5 GHz	MaxPeak MaxPeak	Coupled	100 kHz	Horn # 3116_18-40G

Marker: 25.750501002 GHz 45.25 dB μ V/m

Level [dB μ V/m]

6 Measurements (CONDUCTED)**6.1 MAXIMUM PEAK OUTPUT POWER § 15.247 (CONDUCTED)****6.1.1 LIMIT SUB CLAUSE § 15.247 (b) (1)**

Frequency range	RF power output
2400-2483.5 MHz	30dBm

*limit is based upon antenna gain of less than or equal to 6dBi.

6.1.2 RESULTS:

TEST CONDITIONS		MAXIMUM PEAK OUTPUT POWER (dBm)		
Frequency (MHz)		2405 MHz	2440 MHz	2480 MHz
T _{nom} (23)°C	V _{nom} VDC	-1.53	-1.83	-2.06

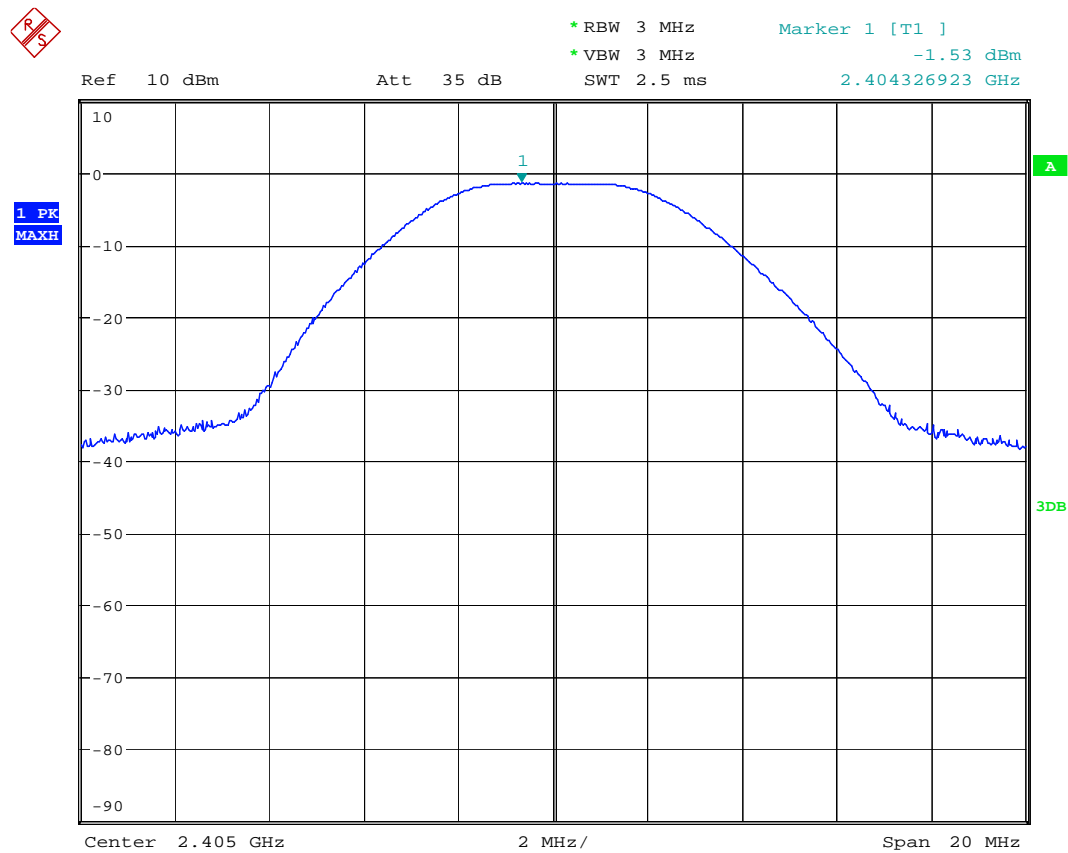
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Conducted Peak Power (2405 MHz)



Date: 28.FEB.2008 10:30:27

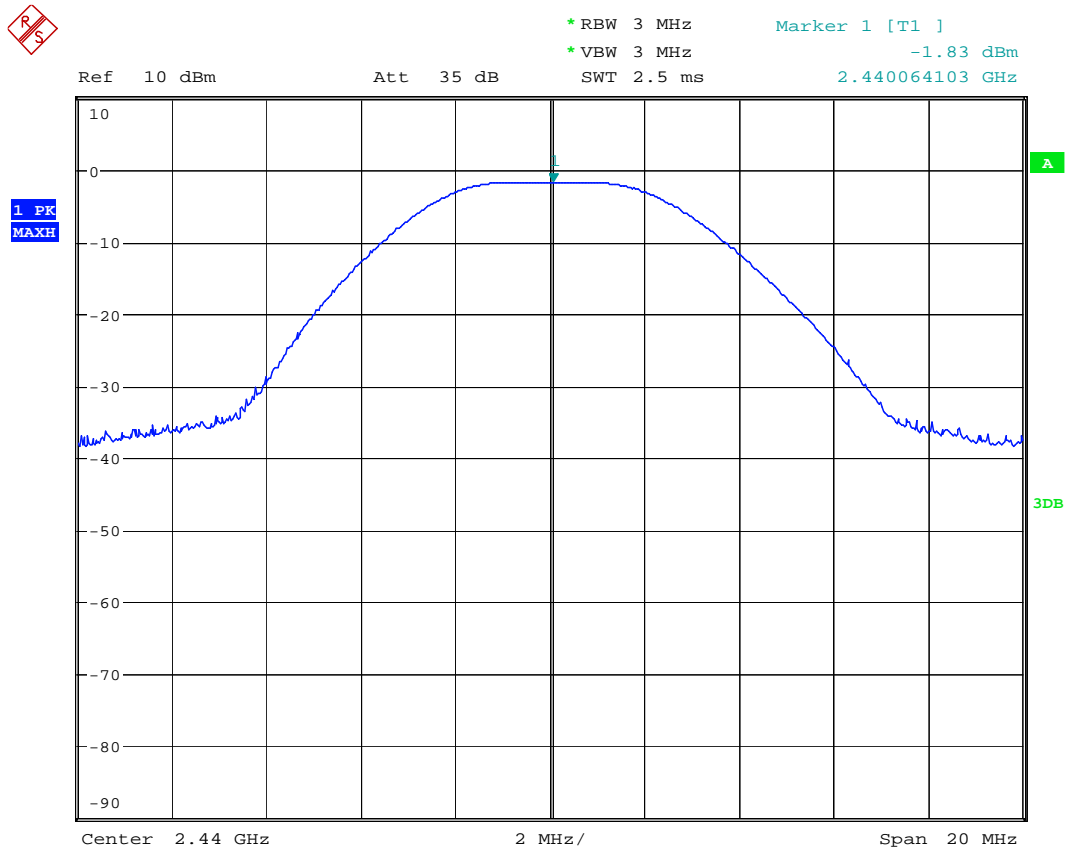
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Conducted Peak Power (2440 MHz)



Date: 28.FEB.2008 10:28:35

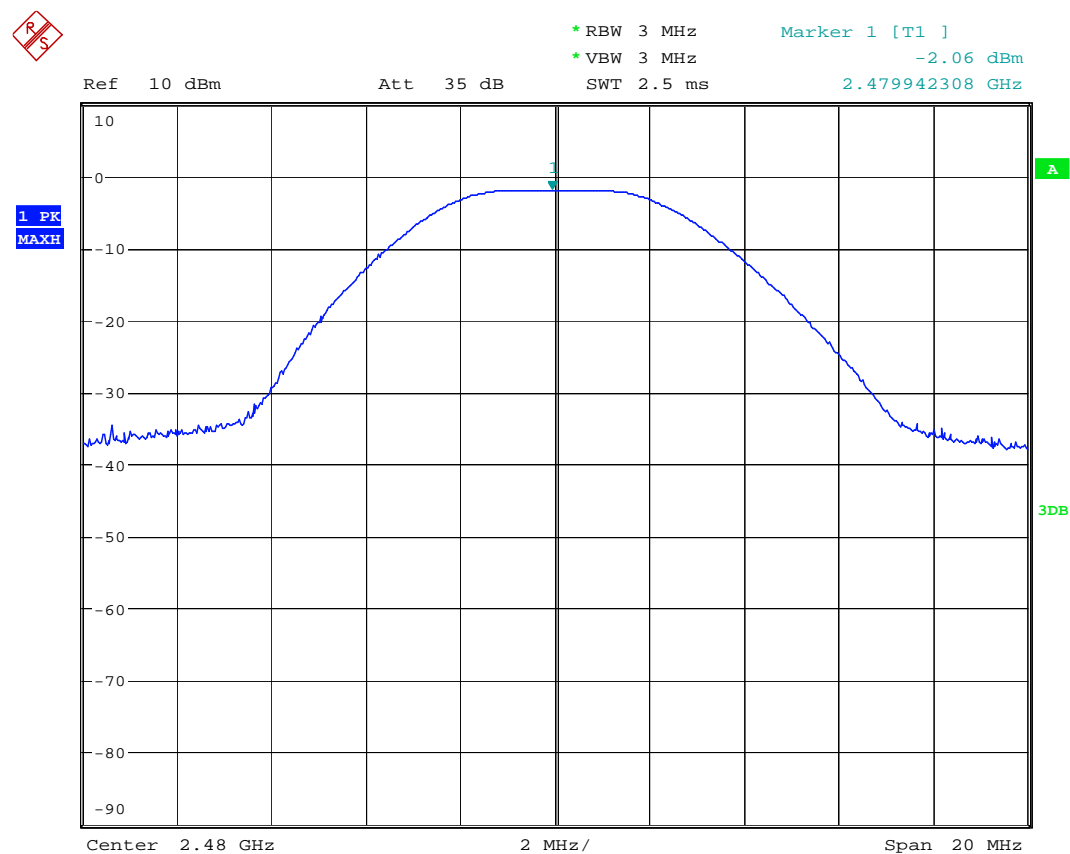
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Conducted Peak Power (2480 MHz)



Date: 28.FEB.2008 10:22:07

6.2 6dB BANDWIDTH**6.2.1 LIMIT SUB CLAUSE § 15.247 (a) (2)**

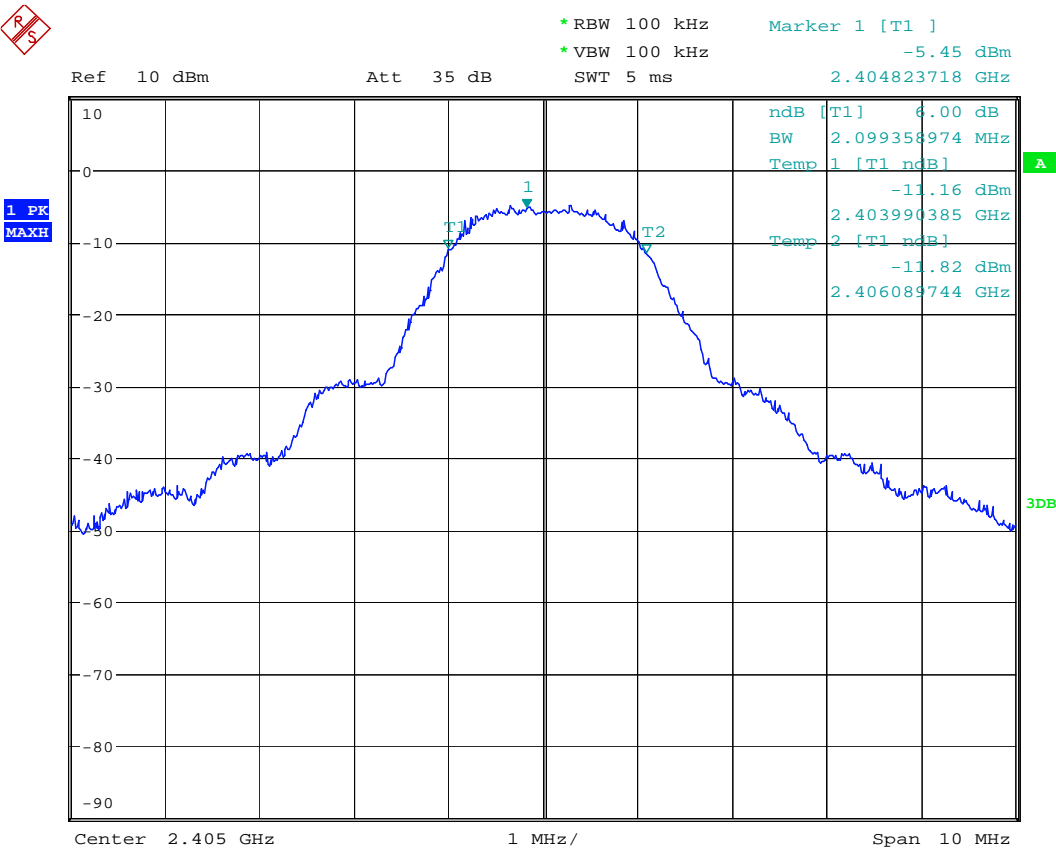
Systems using digital modulation techniques may operate in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

6.2.2 RESULTS:

TEST CONDITIONS		BANDWIDTH (KHz)		
		2405 MHz	2440 MHz	2480 MHz
Frequency (MHz)				
T _{nom} (23)°C	V _{nom} VDC	2837	2837	2805

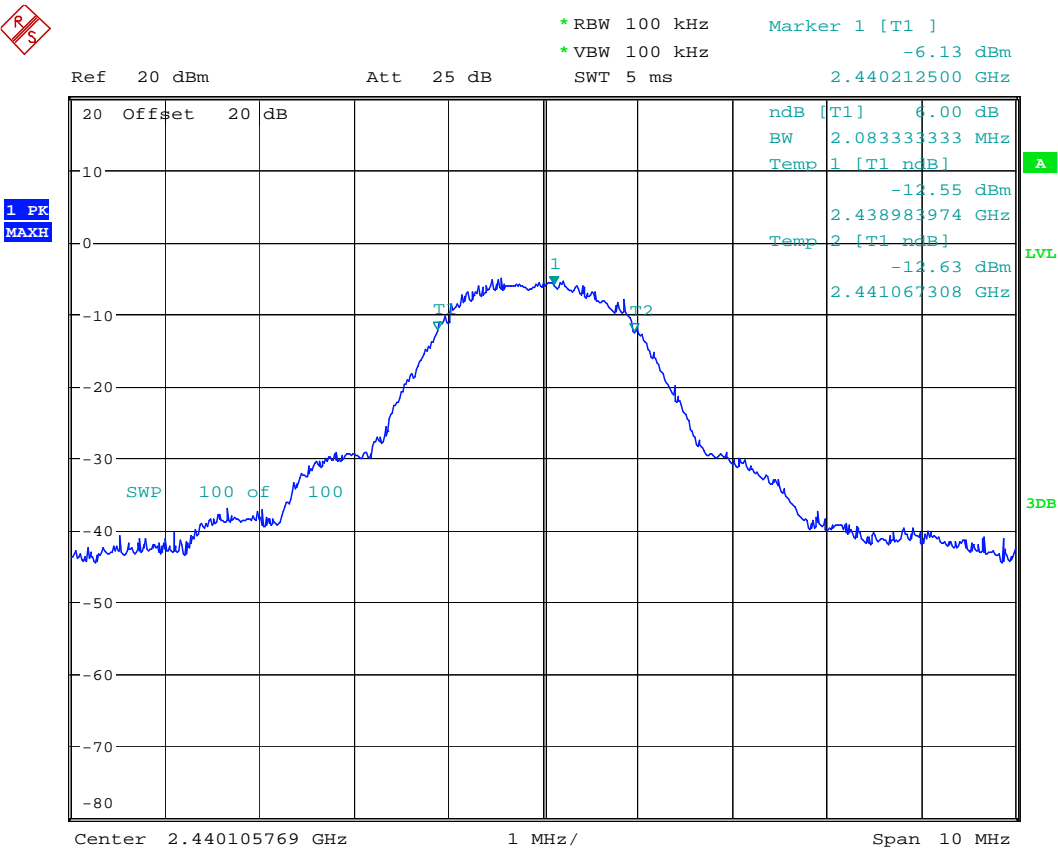


6dB Bandwidth (2405MHz)



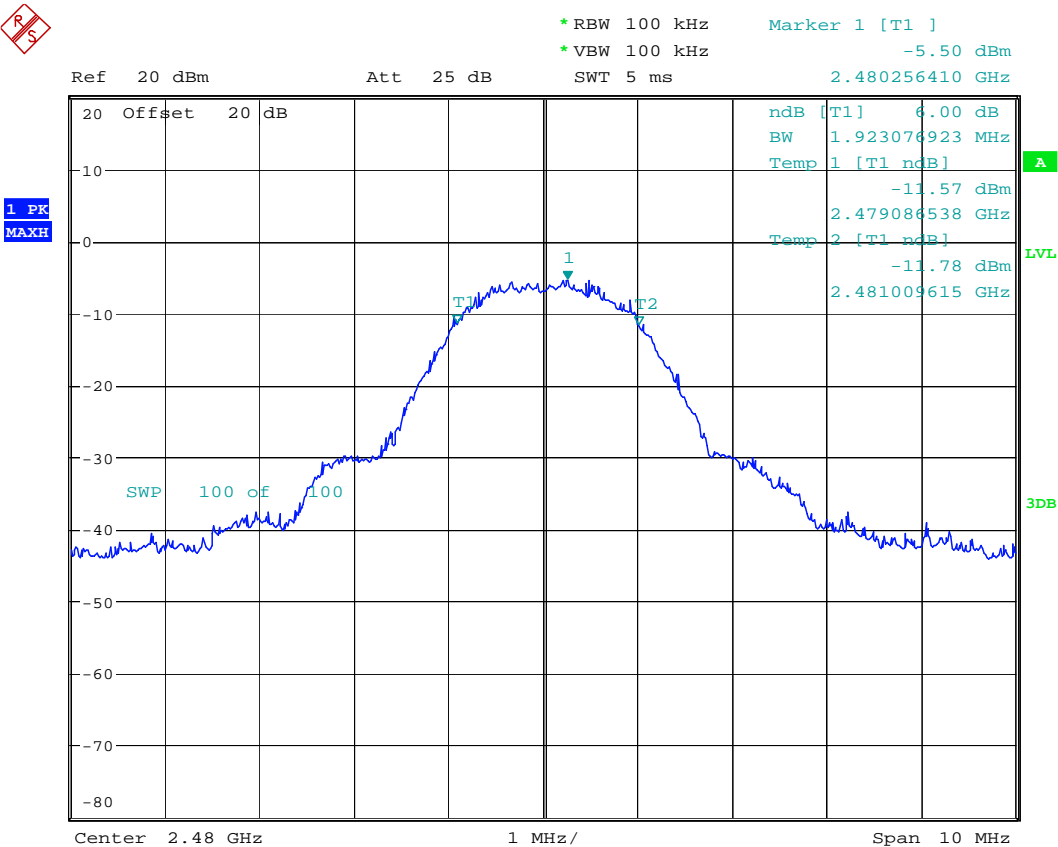


6dB Bandwidth (2440MHz)





6dB Bandwidth (2480MHz)



6.3 POWER SPECTRAL DENSITY

6.3.1 LIMIT SUB CLAUSE § 15.247 5 (d)

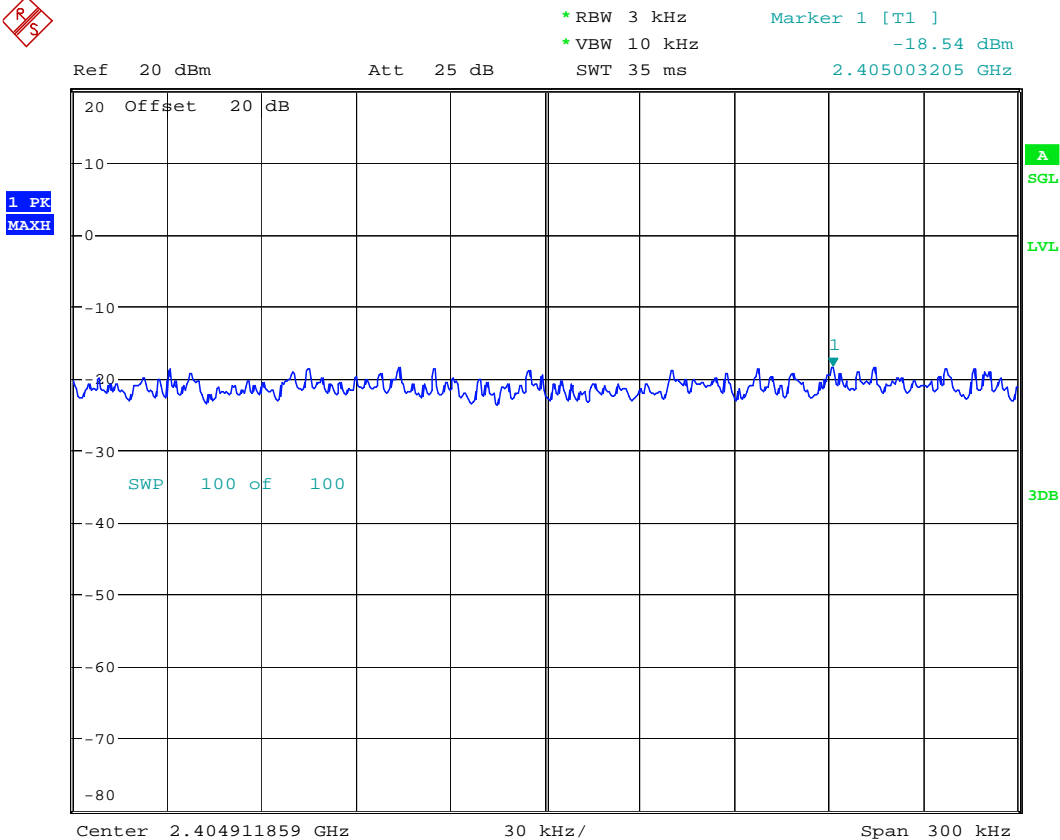
FREQUENCY RANGE	limit
2400-2483.5	8dBm (in 3kHz BW)

6.3.2 RESULTS:

TEST CONDITIONS	POWER SPECTRAL DENSITY (dBm)		
	2405 MHz	2440 MHz	2480 MHz
V _{nom} VDC, T _{nom} (23)°C	-18.54	-16.19	-17.87

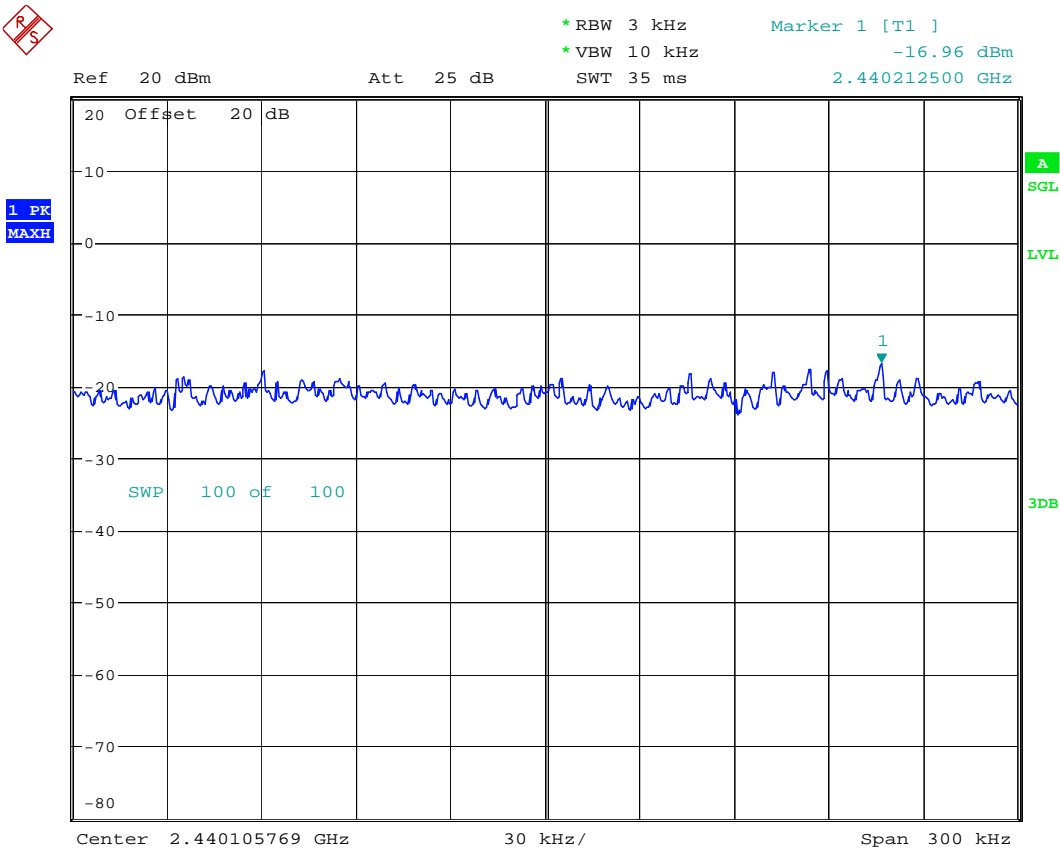


POWER SPECTRAL DENSITY (2405 MHz)





POWER SPECTRAL DENSITY (2440 MHz)



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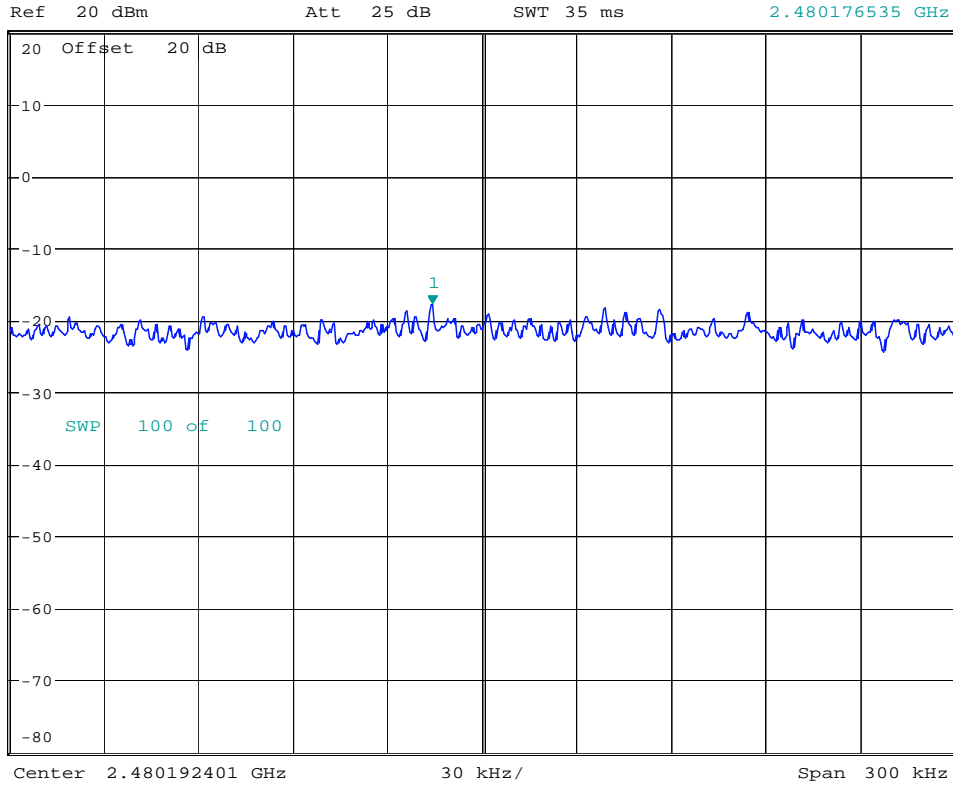
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POWER SPECTRAL DENSITY (2480 MHz)



*RBW 3 kHz
*VBW 10 kHz
Marker 1 [T1]
-17.87 dBm
2.480176535 GHz



Date: 28.FEB.2008 12:13:36

6.4 CONDUCTED SPURIOUS EMISSION

6.4.1 LIMIT SUB CLAUSE § 15.247 (d)

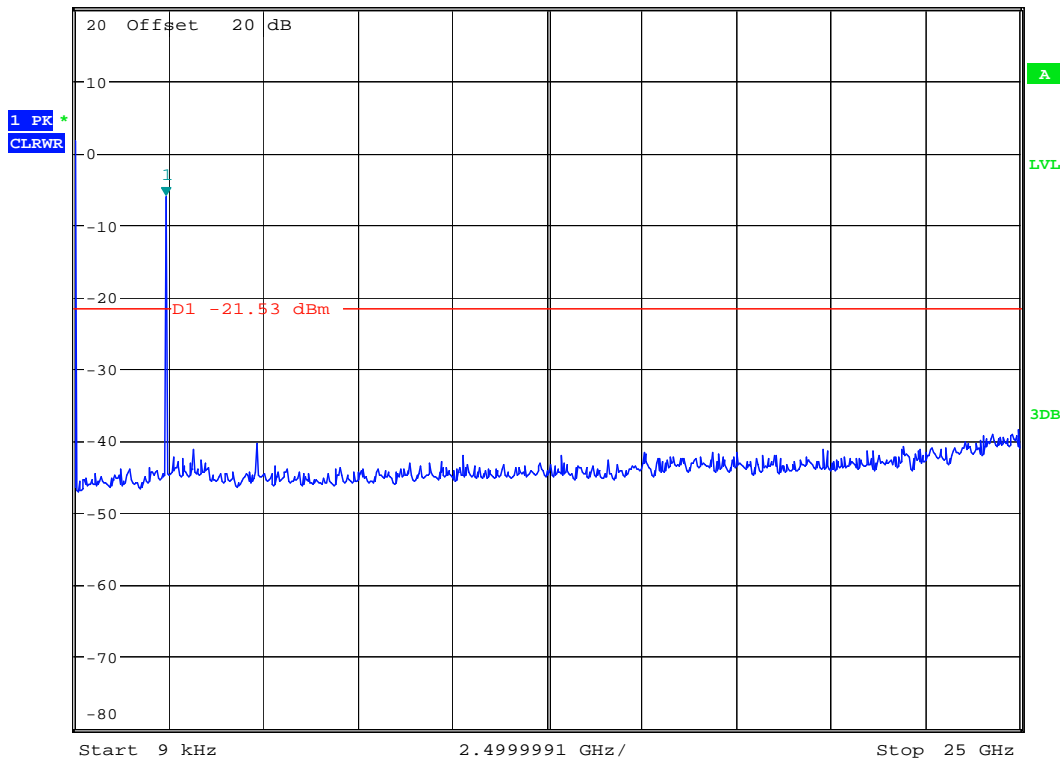
FREQUENCY RANGE	limit
30M-25GHz	-20dBc

6.4.2 RESULTS: Tnom(23)°C VnomVDC

Conducted Spurious Emissions (2405MHz)



*RBW 100 kHz Marker 1 [T1]
 *VBW 100 kHz -6.10 dBm
 Ref 20 dBm Att 25 dB SWT 2.5 s 2.403854288 GHz



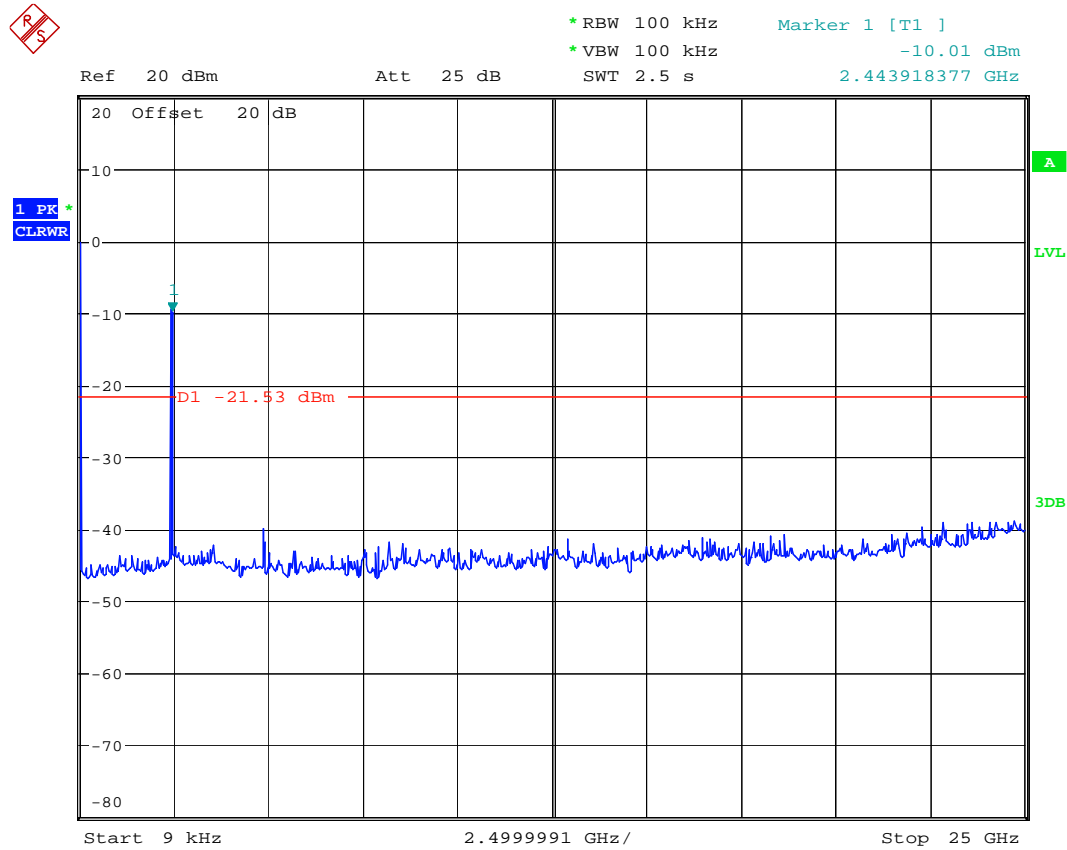
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Conducted Spurious Emissions (2440MHz)



Date: 28.FEB.2008 12:08:20

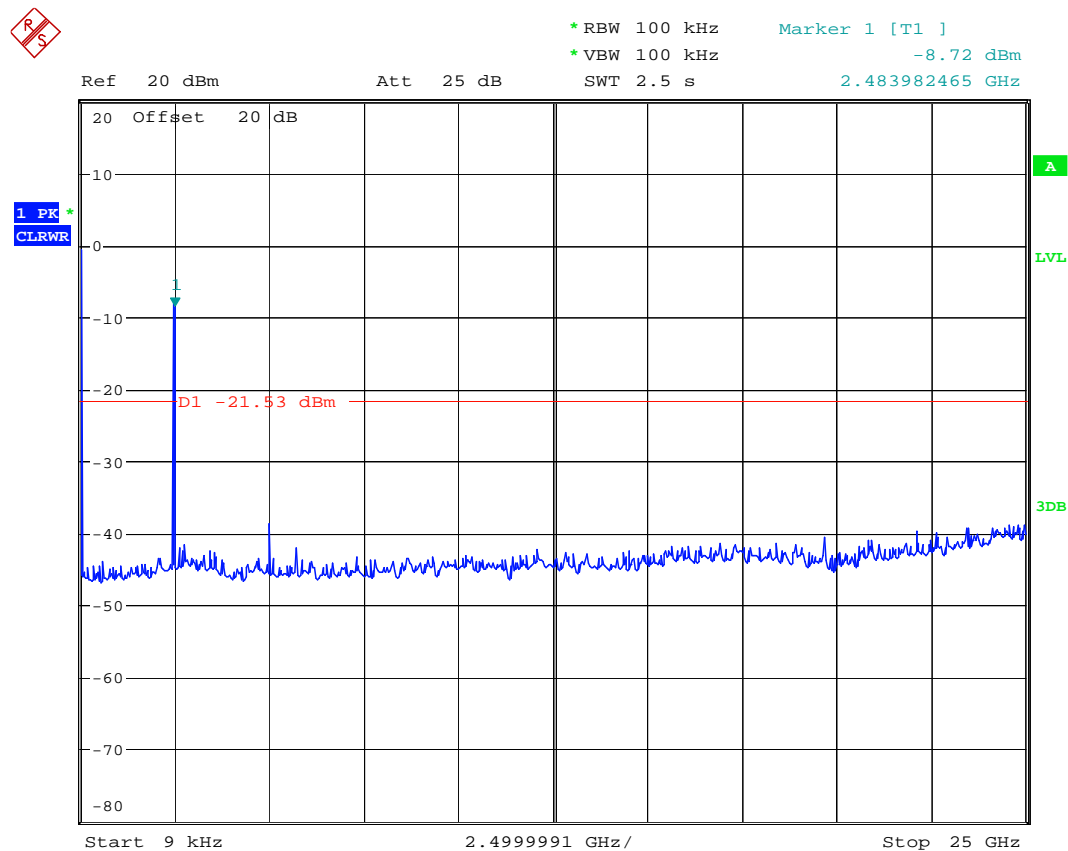
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Conducted Spurious Emissions (2480MHz)



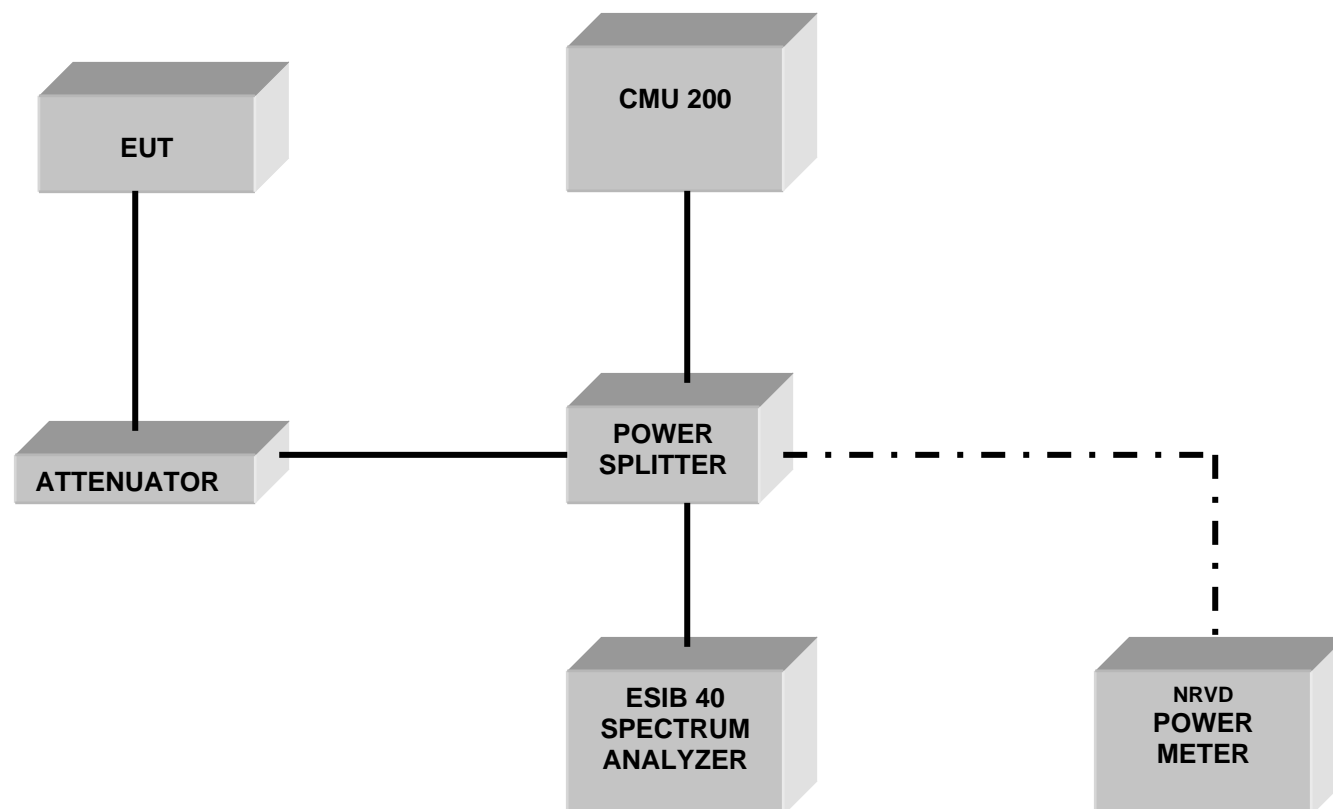
Date: 28.FEB.2008 12:09:18

7 TEST EQUIPMENT AND ANCILLARIES USED FOR TESTS

No	Instrument/Ancillary	Type	Manufacturer	Serial No.	Cal Due	Interval
01	Spectrum Analyzer	ESIB 40	Rohde & Schwarz	100107	May 2008	1 year
02	Spectrum Analyzer	FSEM 30	Rohde & Schwarz	100017	August 2008	1 year
03	Signal Generator	SMY02	Rohde & Schwarz	836878/011	May 2008	1 year
04	Power-Meter	NRVD	Rohde & Schwarz	0857.8008.02	May 2008	1 year
05	Biconilog Antenna	3141	EMCO	0005-1186	June 2008	1 year
06	Horn Antenna (1-18GHz)	SAS-200/571	AH Systems	325	June 2008	1 year
07	Horn Antenna (18-26.5GHz)	3160-09	EMCO	1240	June 2008	1 year
08	Power Splitter	11667B	Hewlett Packard	645348	n/a	n/a
09	Climatic Chamber	VT4004	Voltsch	G1115	May 2008	1 year
10	High Pass Filter	5HC2700	Trilithic Inc.	9926013	n/a	n/a
11	High Pass Filter	4HC1600	Trilithic Inc.	9922307	n/a	n/a
12	Pre-Amplifier	JS4-00102600	Miteq	00616	May 2008	1 year
13	Power Sensor	URV5-Z2	Rohde & Schwarz	DE30807	May 2008	1 year
14	Digital Radio Comm. Tester	CMD-55	Rohde & Schwarz	847958/008	May 2008	1 year
15	Universal Radio Comm. Tester	CMU 200	Rohde & Schwarz	832221/06	May 2008	1 year
16	LISN	ESH3-Z5	Rohde & Schwarz	836679/003	May 2008	1 year
17	Loop Antenna	6512	EMCO	00049838	July 2008	2 years

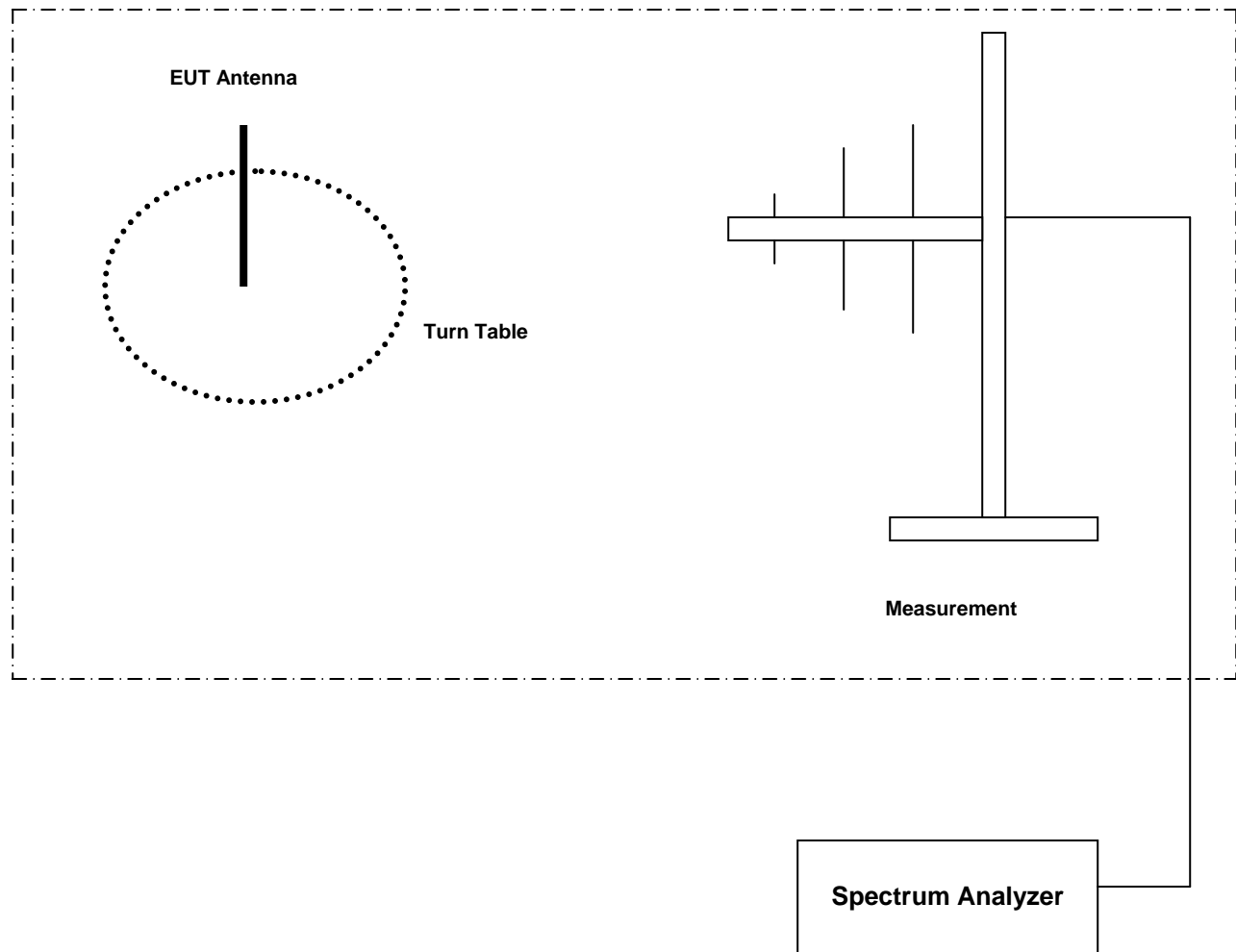
8 BLOCK DIAGRAMS

Conducted Testing



Radiated Testing

ANECHOIC CHAMBER



Test Report #: **EMC_CET10_020_15.247**

Date of Report : **2008-3-3**

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9 Revision History.

2008-3-3: First Issue