FCC 47 CFR PART 15 SUBPART C

CERTIFICATION TEST REPORT

FOR

PORTABLE GAMING DEVICE

MODEL NUMBER: P2523

FCC ID: VOB-P2523

REPORT NUMBER: 14U19497-E5V2

ISSUE DATE: JULY 6, 2016

Prepared for
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NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
V1	6/20/16	Initial Issue	D. Coronia
V2	7/6/16	Updated 99% data in Page 19 and Test Equipment list in Section 6.	C. Vergonio

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS

COMPANY NAME:	NVIDIA
EUT DESCRIPTION:	Portable Gaming Device
MODEL:	P2523
SERIAL NUMBER:	P2523-E02-S0929
DATE TESTED:	NOVEMBER 21, 2014 - JUNE 20, 2016

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
CFR 47 Part 15 Subpart C	Pass

UL Verification Services Inc. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL Verification Services Inc. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

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2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.10-2013, FCC CFR 47 Part 2, FCC CFR 47 Part 15.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 and 47266 Benicia Street, Fremont, California, USA. Line conducted emissions are measured only at the 47173 address. The following table identifies which facilities were utilized for radiated emission measurements documented in this report. Specific facilities are also identified in the test results sections.

47173 Benicia Street	47266 Benicia Street
☒ Chamber A(IC: 2324B-1)	☐ Chamber D(IC: 2324B-4)
☒ Chamber B(IC: 2324B-2)	☐ Chamber E(IC: 2324B-5)
☒ Chamber C(IC: 2324B-3)	☐ Chamber F(IC: 2324B-6)
	☐ Chamber G(IC: 2324B-7)
	☐ Chamber H(IC: 2324B-8)

The above test sites and facilities are covered under FCC Test Firm Registration # 208313. Chambers A through H are covered under Industry Canada company address code 2324B with site numbers 2324B -1 through 2324B-8, respectively.

UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at http://ts.nist.gov/standards/scopes/2000650.htm.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)

36.5 dBuV + 18.7 dB/m + 0.6 dB – 26.9 dB = 28.9 dBuV/m

4.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	UNCERTAINTY
Conducted Disturbance, 0.15 to 30 MHz	3.52 dB
Radiated Disturbance, 9KHz to 30 MHz	2.14 dB
Radiated Disturbance, 30 to 1000 MHz	4.98 dB
Radiated Disturbance,1000 to 6000 MHz	3.86 dB
Radiated Disturbance,6000 to 18000 MHz	4.23 dB
Radiated Disturbance,18000 to 26000 MHz	5.30 dB
Radiated Disturbance,26000 to 40000 MHz	5.23 dB

Uncertainty figures are valid to a confidence level of 95%.

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a Portable Gaming Device.

5.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum peak conducted output power as follows:

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
2402 - 2480	Basic GFSK	9.75	9.44
2402 - 2480	Enhanced 8PSK	8.67	7.36

Note: GFSK, Pi/4-DQPSK, 8PSK average Power are all investigated, The GFSK & 8PSK Power are the worst case. Testing is based on this mode to showing compliance. For average power data please refer to section 8.6.

5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes an FPCB antenna, with a maximum gain of 3.36dBi.

5.4. WORST-CASE CONFIGURATION AND MODE

Radiated emission and power line conducted emission were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario.

The fundamental of the EUT was investigated in three orthogonal orientations X, Y, Z it was determined that Z orientation was worst-case orientation; therefore, all final radiated testing was performed with the EUT in Z orientation.

5.5. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
AC Adapter	NVIDIA	SPA011AU5W	R43001	N/A

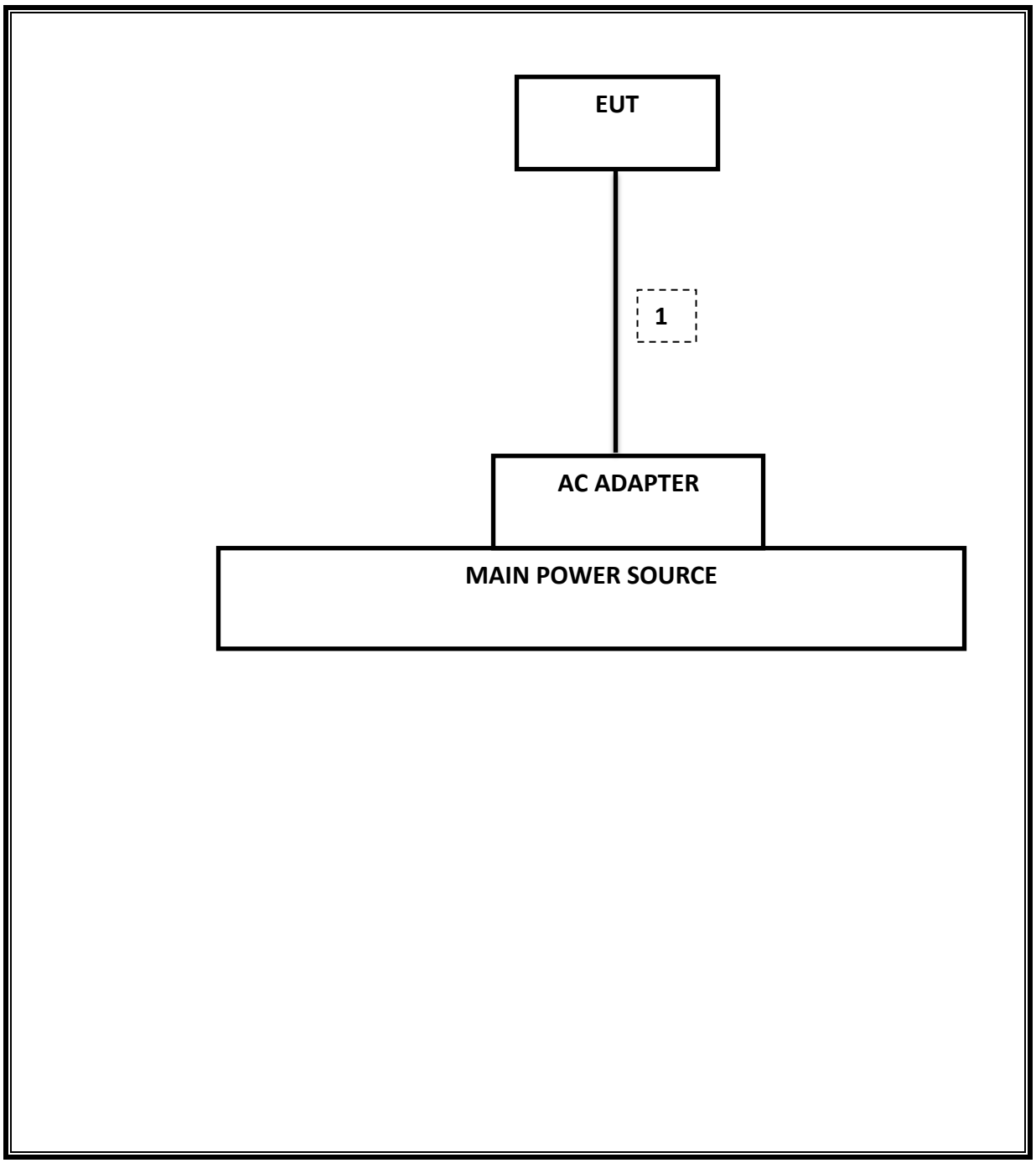
I/O CABLES

Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	DC Power	1	Mini USB	Shielded	1.2m	N/A

TEST SETUP

The EUT is continuously transmitting Bluetooth through the EUT's software.

5.6 SETUP DIAGRAM FOR TESTS



6. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

Test Equipment List				
Description	**Manufacturer**	**Model**	**Asset**	**Cal Due**
Antenna, Biconolog, 30MHz-1 GHz	Sunol Sciences	JB1	C01171	02/13/15
Antenna, Horn, 18 GHz	EMCO	3115	C00783	10/25/15
Antenna, Horn, 26.5 GHz	ARA	MWH-1826/B	1013	01/15/15
Preamplifier, 1300 MHz	Agilent / HP	8447D	C00580	01/28/15
Preamplifier, 26.5 GHz	Agilent / HP	8449B	C01052	10/22/15
Spectrum Analyzer, 44 GHz	Agilent / HP	E4446A	C01069	12/20/14
CBT Bluetooth Tester	R & S	CBT	None	07/12/15
Peak Power Meter	Agilent / HP	E4416A	C00963	12/19/14
Peak / Average Power Sensor	Agilent / HP	E9327A	C00964	12/27/14
LISN, 30 MHz	FCC	50/250-25-2	C00626	01/14/15
Reject Filter, 2.4GHz	Micro-Tronics	BRM50702	N02684	CNR
EMI Test Receiver, 9 kHz-7 GHz	R & S	ESCI 7	1000741	08/13/15
EMI Test Receiver, 30 MHz	R & S	ESHS 20	N02396	08/18/15

Test Equipment List				
Description	**Manufacturer**	**Model**	**Asset**	**Cal Due**
Antenna, Horn, 18GHz	EMCO	3115	59	11/18/16
Antenna, Horn, 26.5 GHz	ARA	MWH-1826/B	447	05/12/16
RF Preamplifier, 1GHz - 18GHz	Miteq	NSP4000-SP2	88	04/07/16
RF Preamplifier, 1GHz - 26.5GHz	HP	8449B	404	06/29/16
Spectrum Analyzer, 44 GHz	Agilent / HP	E4446A	123	10/22/16
CBT Bluetooth Tester	R & S	CBT	None	07/12/16

Test Software List			
Description	**Manufacturer**	**Model**	**Version**
Radiated Software	UL	UL EMC	Ver 9.5, June 24, 2015
Conducted Software	UL	UL EMC	Ver 9.5, May 26, 2015
Antenna Port Software	UL	UL RF	Ver 3.9.1, Dec 28, 2015

7. SUMMARY TABLE

FCC Part Section	RSS Section(s)	Test Description	Test Limit	Test Condition	Test Result
2.1049	RSS-GEN 6.6	Occupied Band width (99%)	N/A	Conducted	Pass
2.1051, 15.247 (d)	RSS-247 5.5	Band Edge / Conducted Spurious Emission	-20dBc		Pass
15.247 (b)(1)	RSS-247 5.4(1)	TX conducted output power	<21dBm		Pass
15.247 (a)(1)	RSS-247 5.1 (1)	Hopping frequency separation	> 25KHz		Pass
15.247 (a)(1)(iii)	RSS-247 5.1(4)	Number of Hopping channels	More than 15 non-overlapping channels		Pass
15.247 (a)(1)(iii)	RSS-247 5.1(4)	Avg Time of Occupancy	< 0.4sec		Pass
15.207 (a)	RSS-GEN 8.8	AC Power Line conducted emissions	Section 10	Radiated	Pass
15.205, 15.209	RSS-GEN 8.9	Radiated Spurious Emission	< 54dBuV/m		Pass

8. ANTENNA PORT TEST RESULTS

8.1. ON TIME, DUTY CYCLE

LIMITS

None; for reporting purposes only

PROCEDURE

KDB 558074 Zero-Span Spectrum Analyzer Method

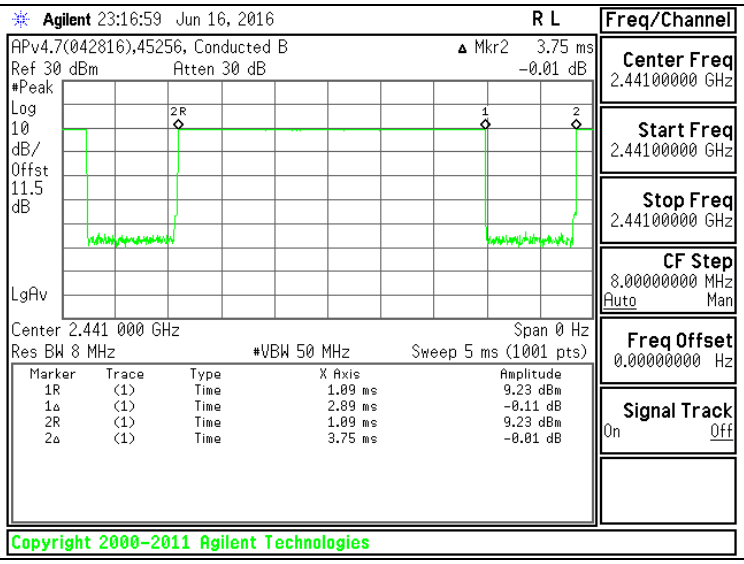
RESULTS

GFSK

ON TIME AND DUTY CYCLE RESULTS

Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)
GFSK	2.890	3.750	0.771	77.07%	1.13	0.346

DUTY CYCLE PLOTS



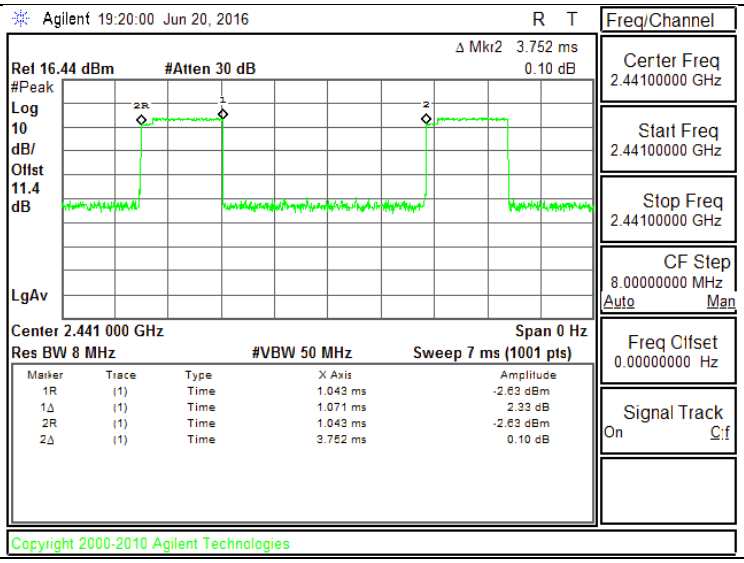
NOTE: --

8PSK

ON TIME AND DUTY CYCLE RESULTS

Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)
8PSK	1.071	3.752	0.285	28.54%	5.44	0.934

DUTY CYCLE PLOTS



NOTE: --

8.2. 20 dB AND 99% BANDWIDTH

LIMIT

None; for reporting purposes only.

TEST PROCEDURE

DA 00-705: The transmitter output is connected to a spectrum analyzer. The RBW is set to ≥ 1% of the 20 dB bandwidth. The VBW is set to ≥ RBW. The sweep time is coupled.

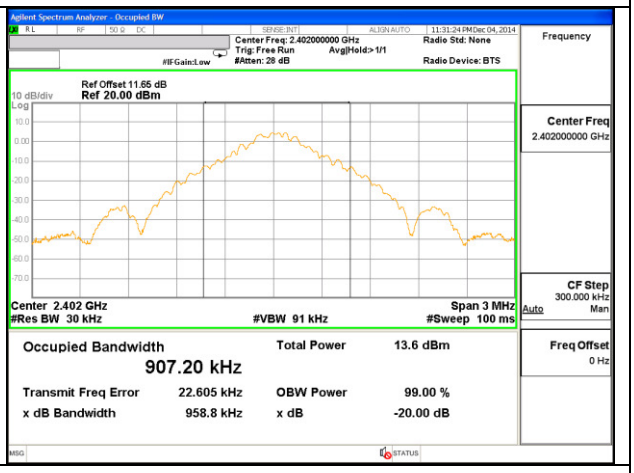
RESULTS

GFSK 20dB BANDWIDTH PLOTS AND TABLE

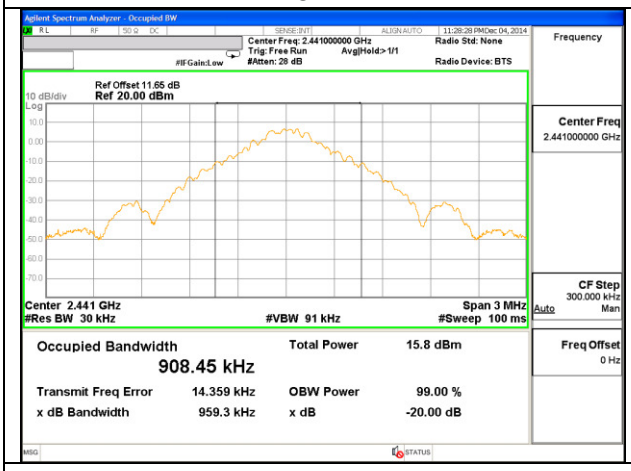
BASIC DATA RATE GFSK TEST RESULT TABLE

Channel	Frequency (MHz)	20 dB Bandwidth (MHz)
Low	2402	0.9588
Middle	2441	0.9593
High	2480	0.9591
Worst		0.9593

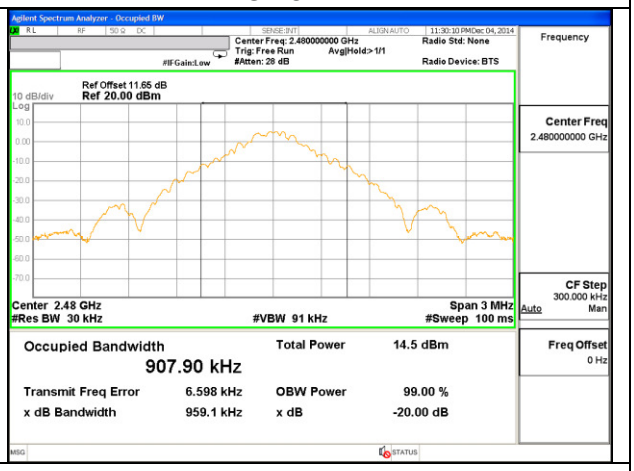
LOW CHANNEL



MID CHANNEL



HIGH CHANNEL



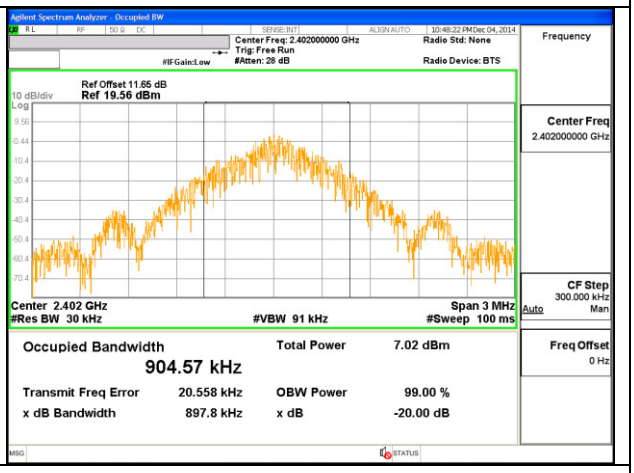
NOTE: --

GFSK 99% BANDWIDTH PLOTS AND TABLE

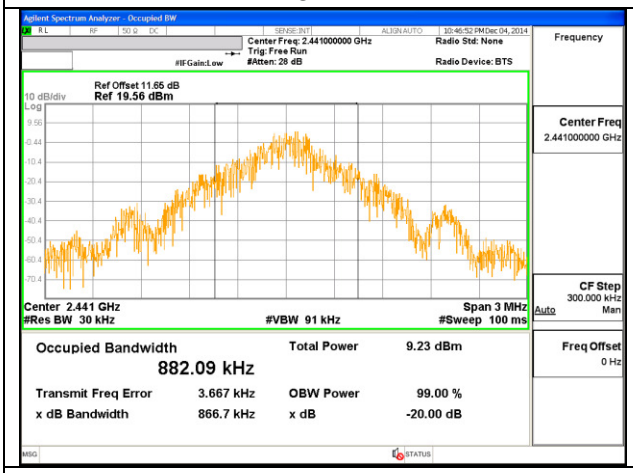
BASIC DATA RATE GFSK TEST RESULT TABLE

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2402	0.9046
Middle	2441	0.8821
High	2480	0.9174
Worst		0.9174

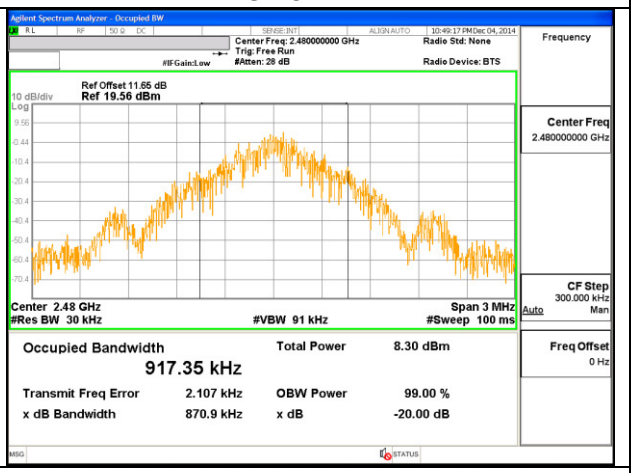
LOW CHANNEL



MID CHANNEL



HIGH CHANNEL



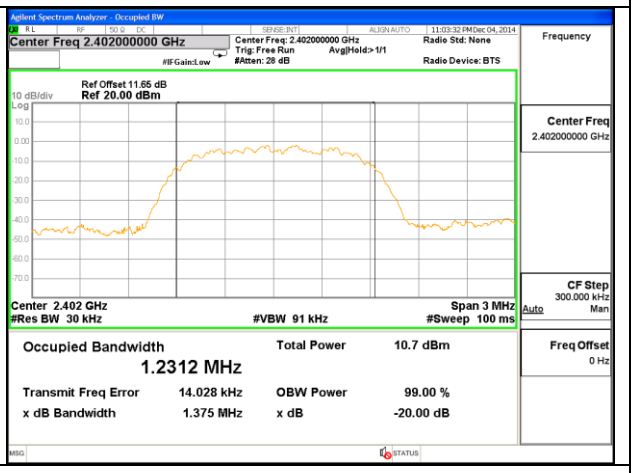
NOTE:

8DPSK 20dB BANDWIDTH PLOTS AND TABLE

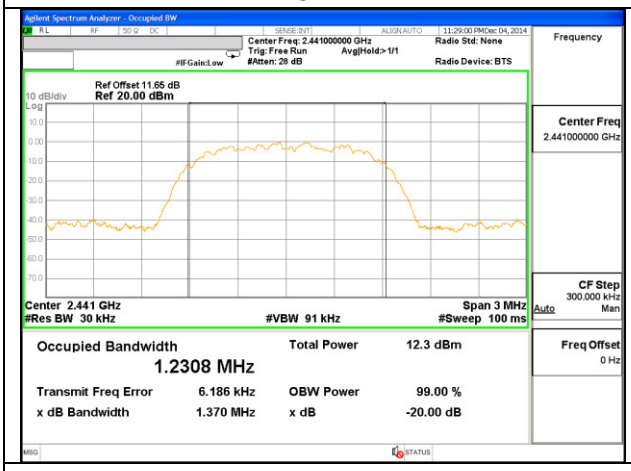
BASIC DATA RATE 8DPSK TEST RESULT TABLE

Channel	Frequency (MHz)	20 dB Bandwidth (MHz)
Low	2402	1.375
Middle	2441	1.370
High	2480	1.370
Worst		1.375

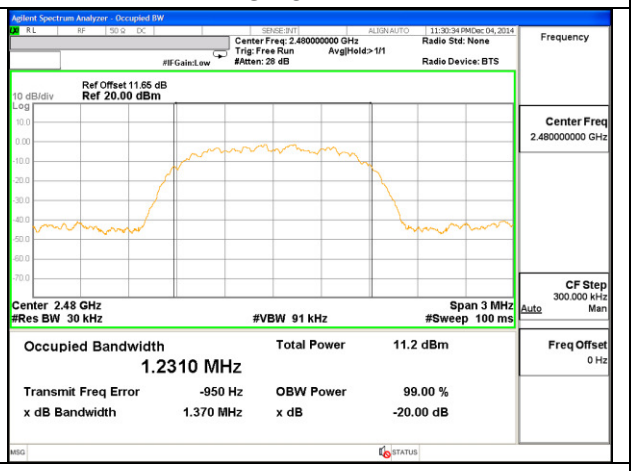
LOW CHANNEL



MID CHANNEL



HIGH CHANNEL



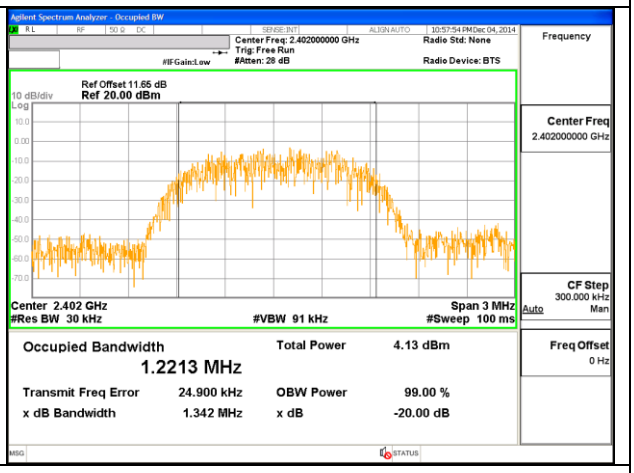
NOTE: --

8DPSK 99% BANDWIDTH PLOTS AND TABLE

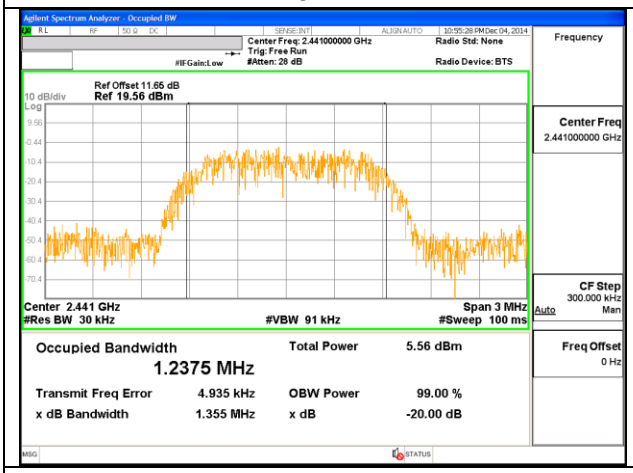
BASIC DATA RATE 8DPSK TEST RESULT TABLE

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2402	1.2213
Middle	2441	1.2375
High	2480	1.2365
Worst		1.2375

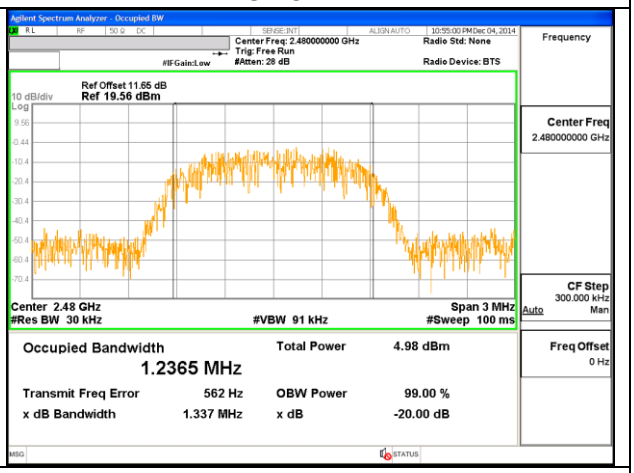
LOW CHANNEL



MID CHANNEL



HIGH CHANNEL



NOTE:

8.3. HOPPING FREQUENCY SEPARATION

LIMIT

FCC §15.247 (a) (1)

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hoping channel, whichever is greater.

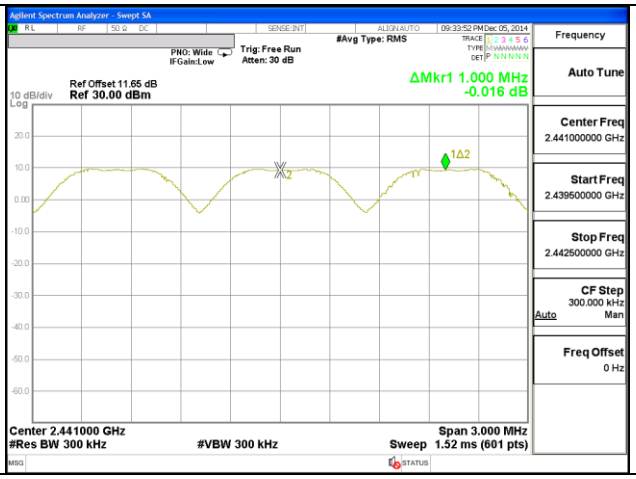
Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

TEST PROCEDURE

DA 00-705: The transmitter output is connected to a spectrum analyzer. The RBW is set to 300 kHz and the VBW is set to 300 kHz. The sweep time is coupled.

RESULTS

HOPPING FREQUENCY SEPARATION PLOT



NOTE: Hopping Frequency Separation is 1 MHz

8.4. NUMBER OF HOPPING CHANNELS

LIMIT

FCC §15.247 (a) (1) (iii)

Frequency hopping systems in the 2400 – 2483.5 MHz band shall use at least 15 non-overlapping channels.

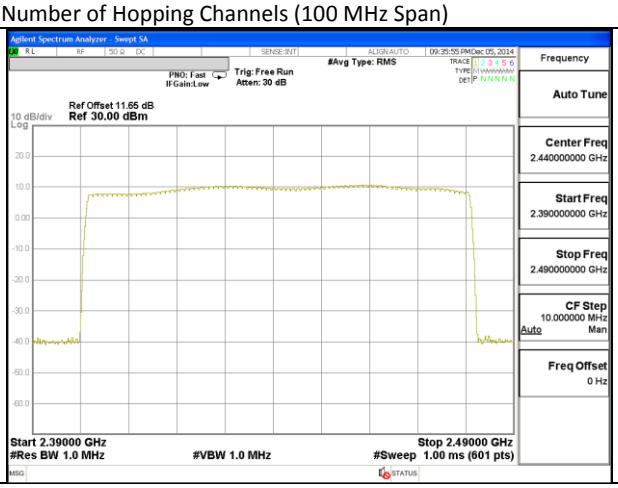
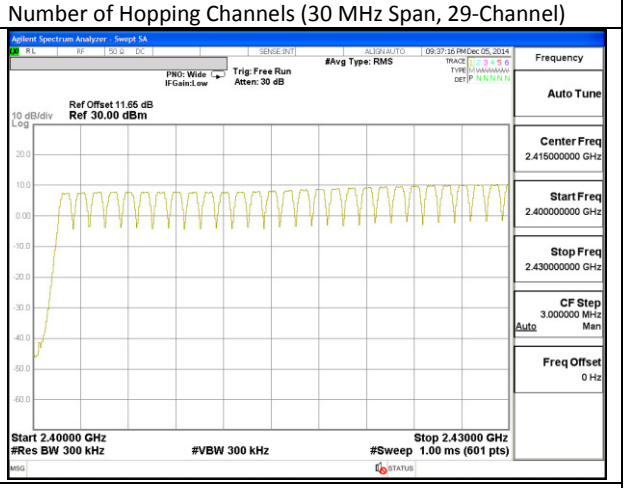
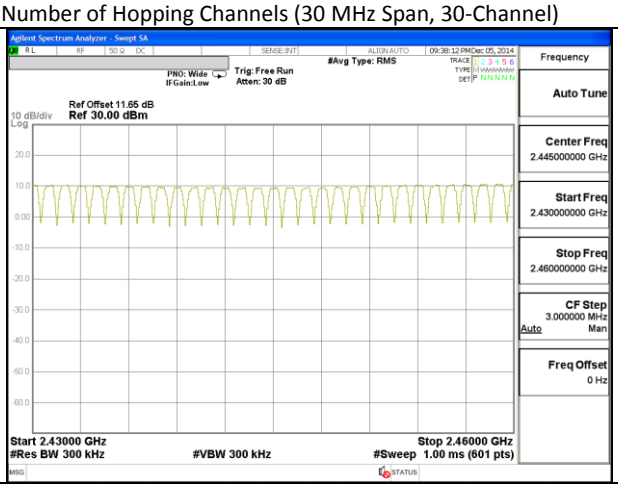
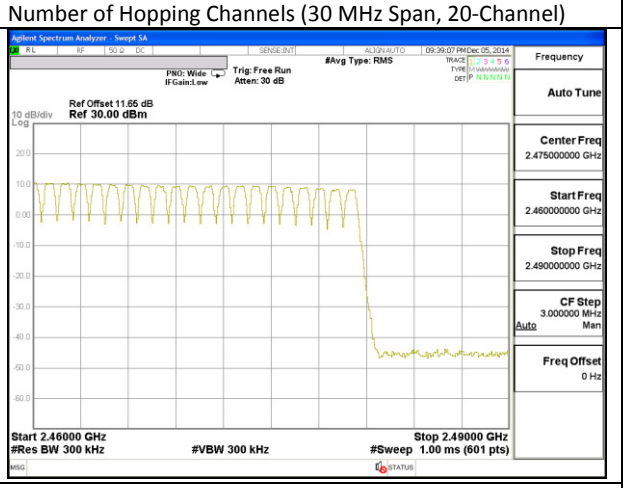
TEST PROCEDURE

DA 00-705: The transmitter output is connected to a spectrum analyzer. The span is set to cover the entire authorized band, in either a single sweep or in multiple contiguous sweeps. The RBW is set to a maximum of 1 % of the span. The analyzer is set to Max Hold.

RESULTS

Normal Mode: 79 Channels observed.

NUMBER OF HOPPING CHANNELS

Number of Hopping Channels (100 MHz Span)	Number of Hopping Channels (30 MHz Span, 29-Channel)
	
Number of Hopping Channels (30 MHz Span, 30-Channel)	**Number of Hopping Channels (30 MHz Span, 20-Channel)**
	
NOTE:	

8.5. AVERAGE TIME OF OCCUPANCY

LIMIT

FCC §15.247 (a) (1) (iii)

The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The span is set to 0 Hz, centered on a single, selected hopping channel. The width of a single pulse is measured in a fast scan. The number of pulses is measured in a 3.16 second scan, to enable resolution of each occurrence.

The average time of occupancy in the specified 31.6 second period (79 channels * 0.4 s) is equal to 10 * (# of pulses in 3.16 s) * pulse width.

For AFH mode, the average time of occupancy in the specified 8 second period (20 channels * 0.4 seconds) is equal to 10 * (# of pulses in 0.8 s) * pulse width.

RESULTS

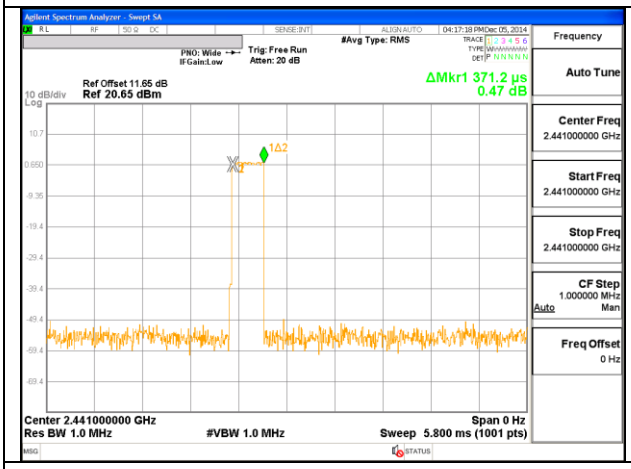
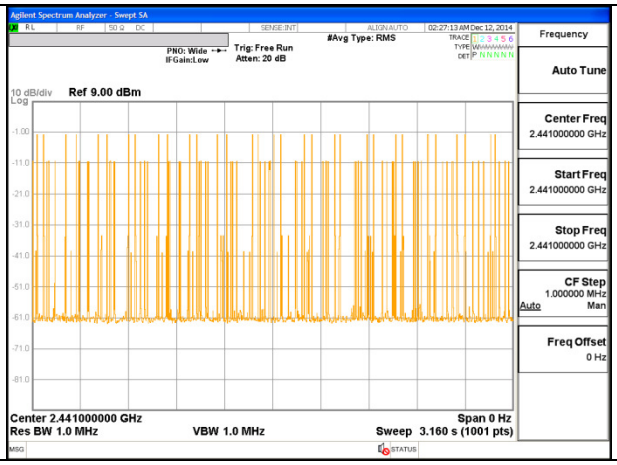
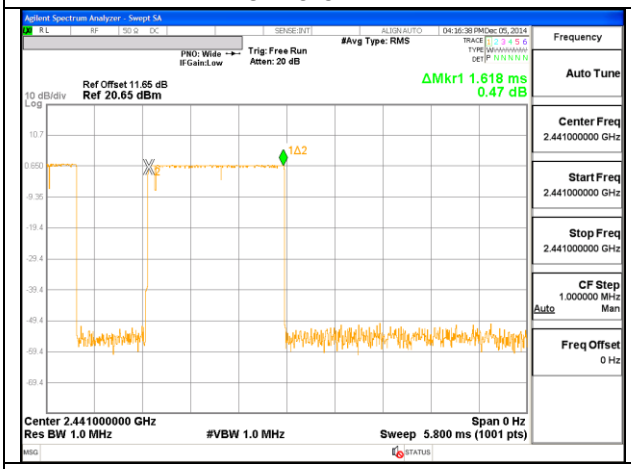
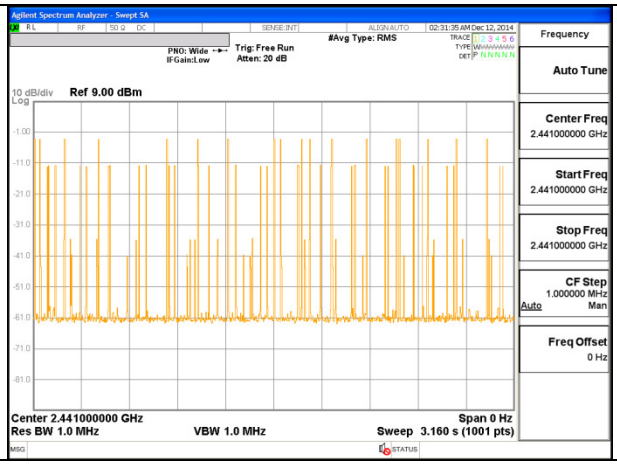
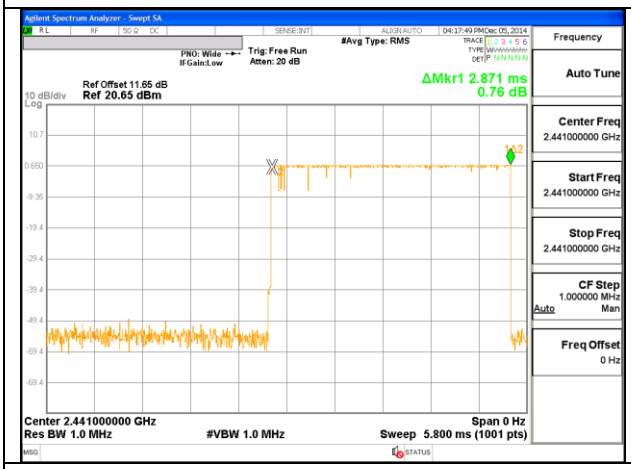
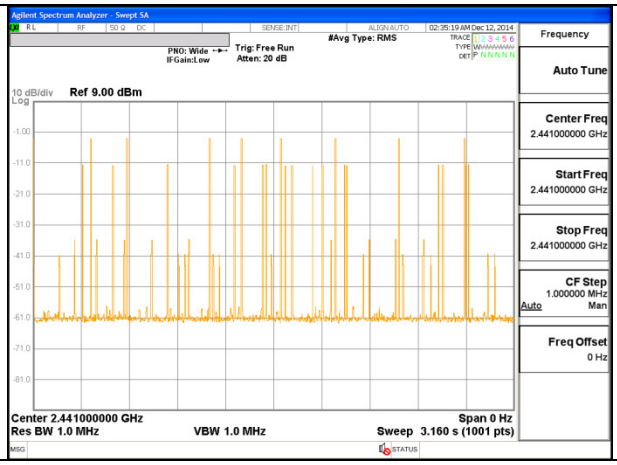
AVERAGE TIME OF OCCUPANCY

DH Packet	Pulse Width (msec)	Number of Pulses in 3.16 seconds	Average Time of Occupancy (sec)	Limit (sec)	Margin (sec)
GFSK Normal Mode					
DH1	0.371	31	0.1151	0.4	-0.285
DH3	1.618	18	0.2912	0.4	-0.109
DH5	2.871	8	0.2297	0.4	-0.170

DH Packet	Pulse Width (sec)	Number of Pulses in 0.8 seconds	Average Time of Occupancy (sec)	Limit (sec)	Margin (sec)
GFSK AFH Mode					
DH1	0.371	7.75	0.02877	0.4	-0.3712
DH3	1.618	4.5	0.07281	0.4	-0.3272
DH5	2.871	2	0.05742	0.4	-0.3426

NOTE: --

PULSE WIDTH AND NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD PLOTS

DH1 - PULSE WIDTH	DH1 - NUMBER OF PULSES
	
DH3 - PULSE WIDTH	DH3 - NUMBER OF PULSES
	
DH5 - PULSE WIDTH	DH5 - NUMBER OF PULSES
	

NOTE:

8.6. OUTPUT POWER

LIMIT

§15.247 (b) (1)

The maximum antenna gain is less than 6 dBi, therefore the limit is 21 dBm.

TEST PROCEDURE

DA 00-705: The transmitter output is connected to a spectrum analyzer the analyzer bandwidth is set to a value greater than the 20 dB bandwidth of the EUT.

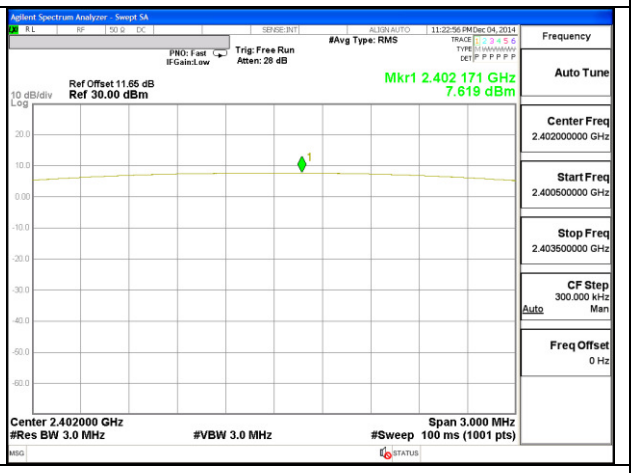
RESULTS

GFSK OUTPUT POWER PLOTS AND TABLE

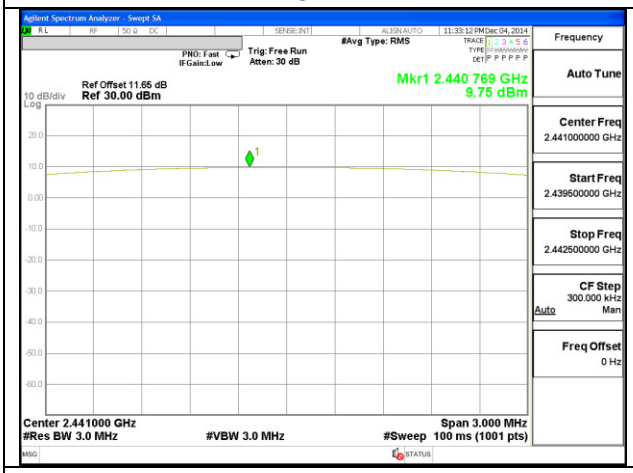
BASIC DATA RATE GFSK TEST RESULT TABLE

Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Margin (dB)
Low	2402	7.62	21	-13.38
Middle	2441	9.75	21	-11.25
High	2480	8.43	21	-12.57
Worst		9.75		-11.25

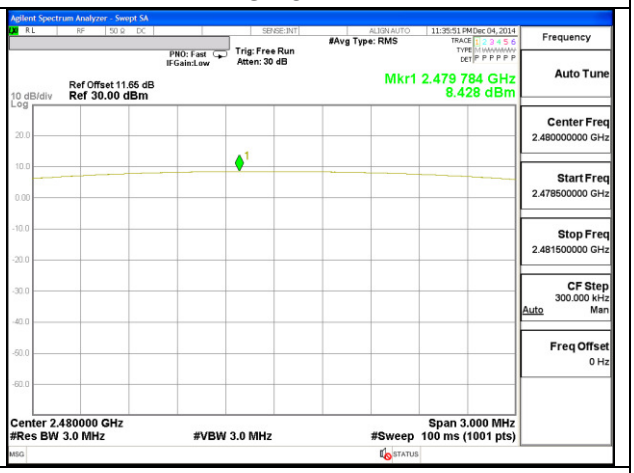
LOW CHANNEL



MID CHANNEL



HIGH CHANNEL



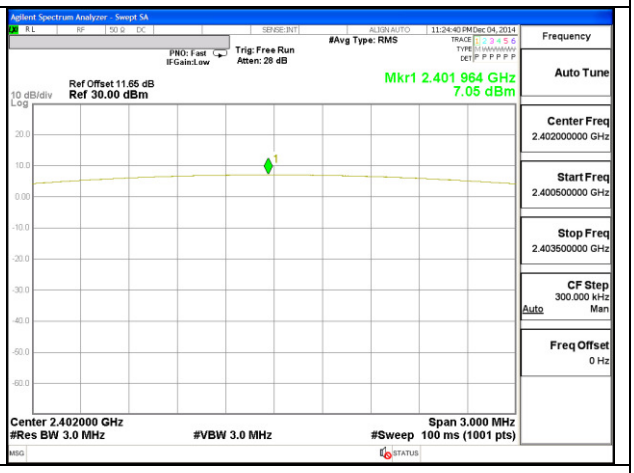
NOTE:

8DPSK OUTPUT POWER PLOTS AND TABLE

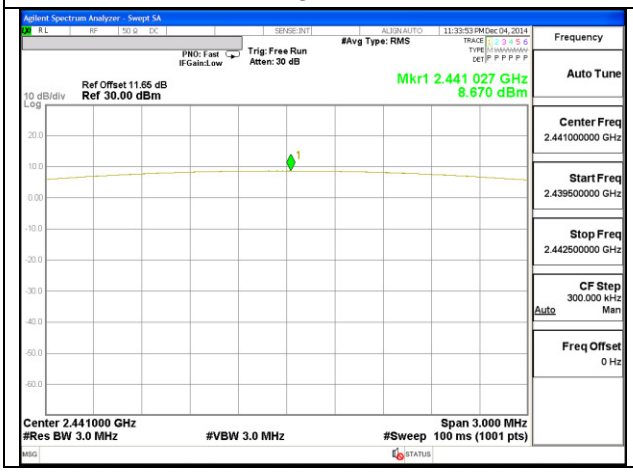
ENHANCED DATA RATE 8DPSK TEST RESULT TABLE

Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Margin (dB)
Low	2402	7.05	21	-13.95
Middle	2441	8.67	21	-12.33
High	2480	7.55	21	-13.45
Worst		8.67		-12.33

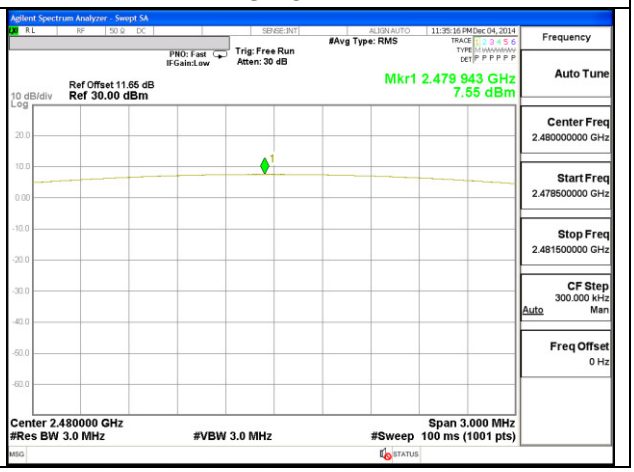
LOW CHANNEL



MID CHANNEL



HIGH CHANNEL



8.7. AVERAGE POWER

LIMIT

None; for reporting purposes only.

TEST PROCEDURE

DA 00-705: The transmitter output is connected to a power meter.

The cable assembly insertion loss of 10.7 dB (including 10 dB pad and 0.7 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

BASIC DATA RATE GFSK

Channel	Frequency (MHz)	Average Power (dBm)
Low	2402	7.61
Middle	2441	9.75
High	2480	8.43
Worst		9.75

ENHANCED DATA RATE 8DPSK

Channel	Frequency (MHz)	Average Power (dBm)
Low	2402	7.05
Middle	2441	8.67
High	2480	7.55
Worst		8.67

NOTE: --

8.8. CONDUCTED SPURIOUS EMISSIONS

LIMITS

FCC §15.247 (d)

Limit = -20 dBc

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.

The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels.

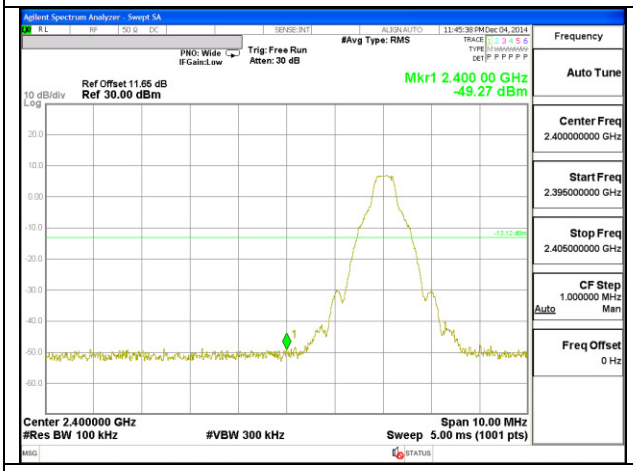
The bandedges at 2.4 and 2.4835 GHz are investigated with the transmitter set to the normal hopping mode.

RESULTS

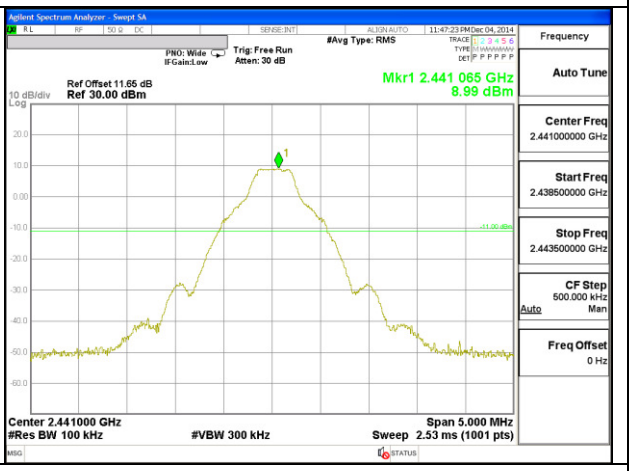
BASIC DATA RATE GFSK MODULATION NON-HOPPING MODE

GFSK - BANDEDGE AND SPURIOUS EMISSIONS PLOTS

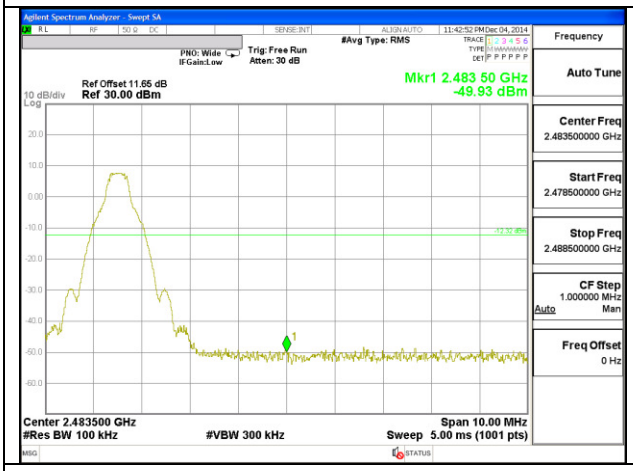
LOW CHANNEL BANDEDGE



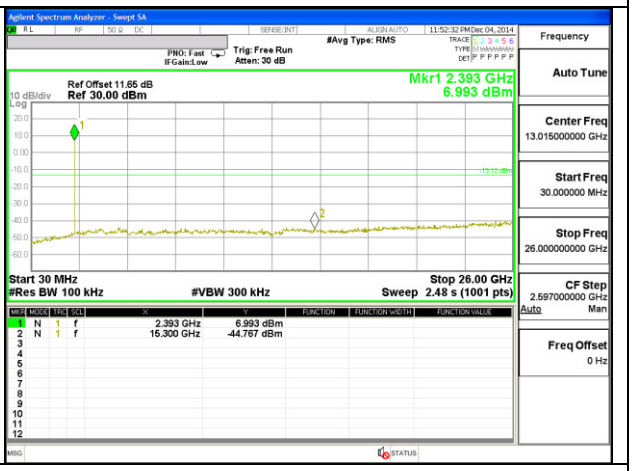
MID CHANNEL REFERENCE



HIGH CHANNEL BANDEDGE

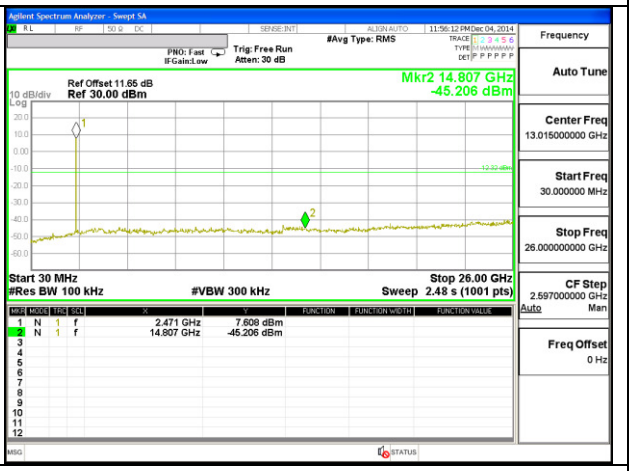


LOW CHANNEL SPURIOUS



MID CHANNEL SPURIOUS

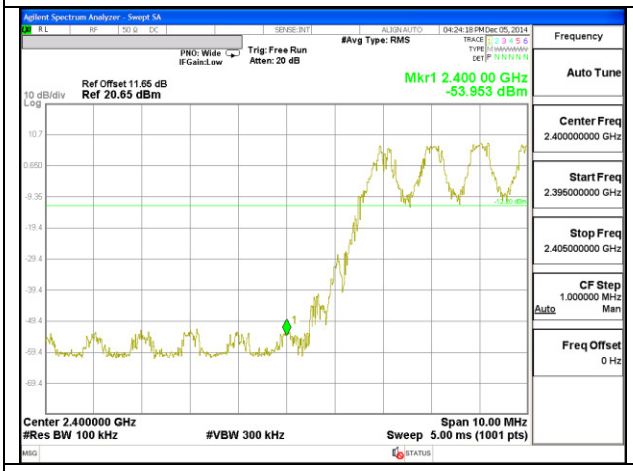
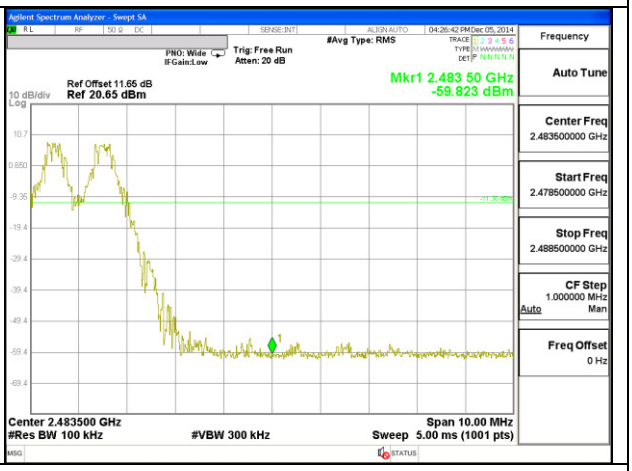
HIGH CHANNEL SPURIOUS



NOTE:

BASIC DATA RATE WITH GFSK HOPPING MODE

GFSK – BANDEDGE PLOTS

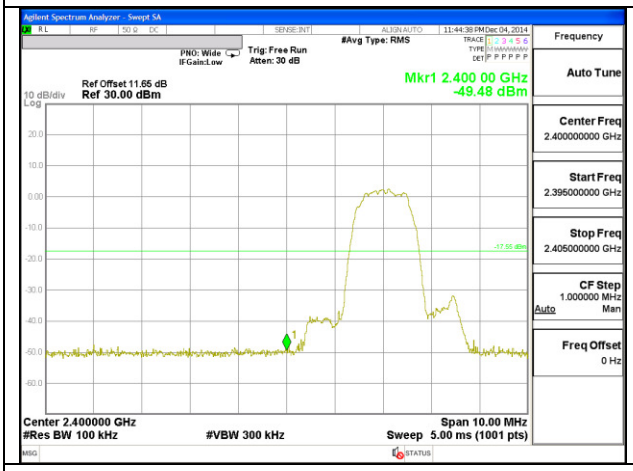
LOW CHANNEL BANDEDGE	HIGH CHANNEL BANDEDGE
	

NOTE:

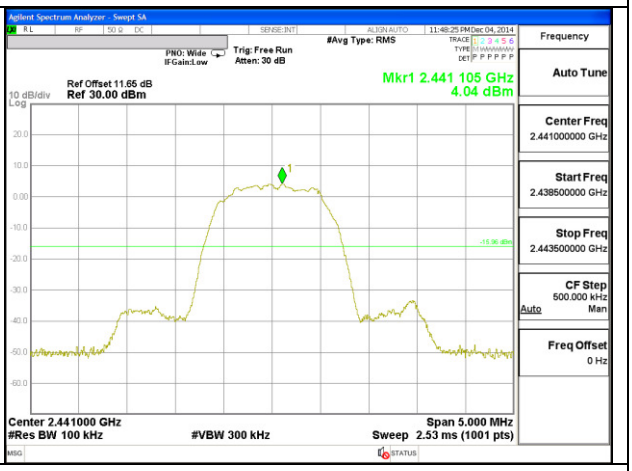
ENHANCED DATA RATE 8DPSK MODULATION NON-HOPPING MODE

8DPSK - BANDEDGE AND SPURIOUS EMISSIONS PLOTS

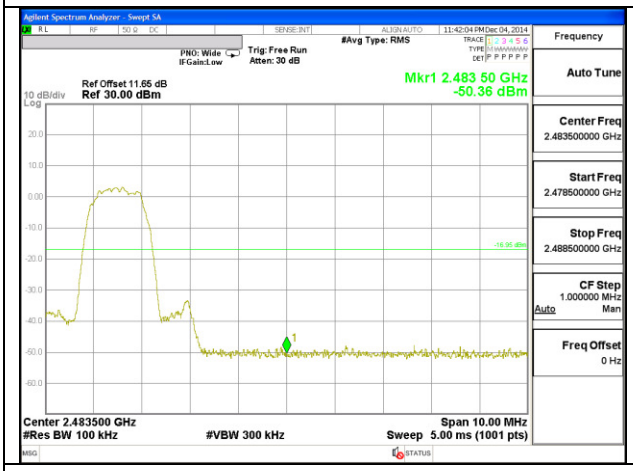
LOW CHANNEL BANDEDGE



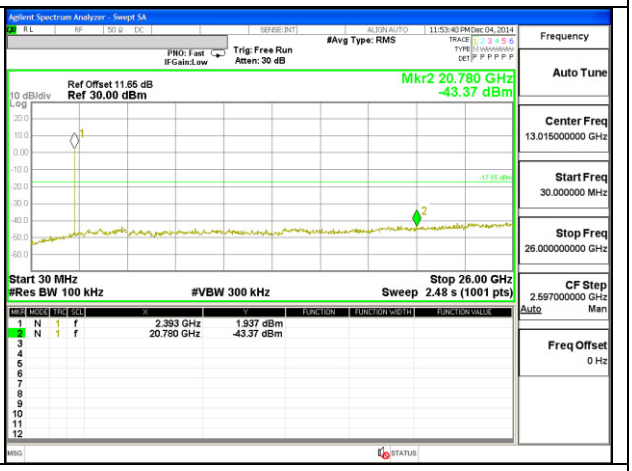
MID CHANNEL REFERENCE



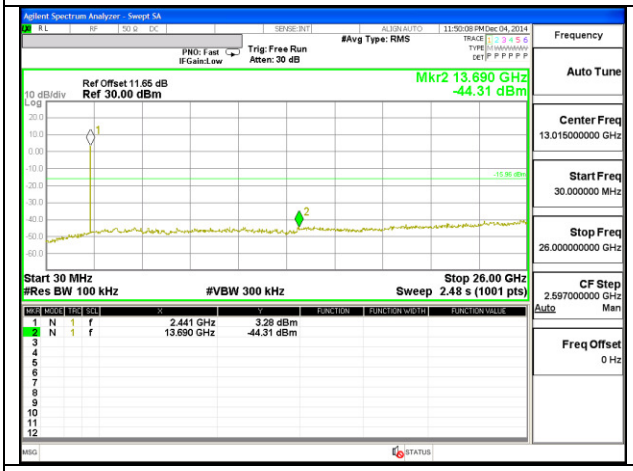
HIGH CHANNEL BANDEDGE



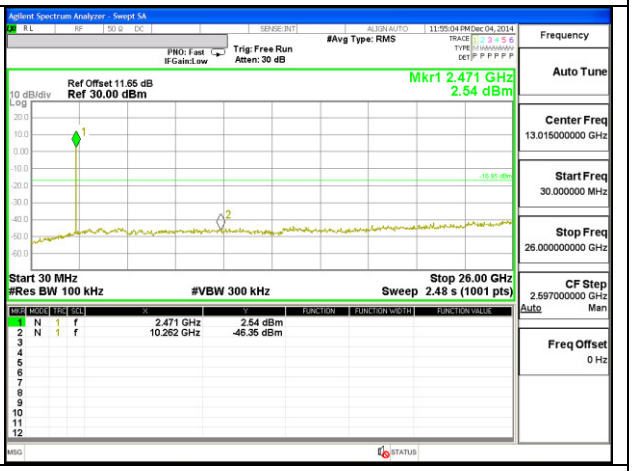
LOW CHANNEL SPURIOUS



MID CHANNEL SPURIOUS



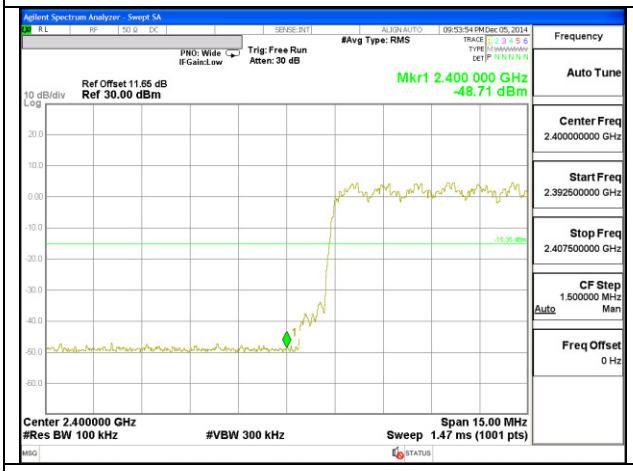
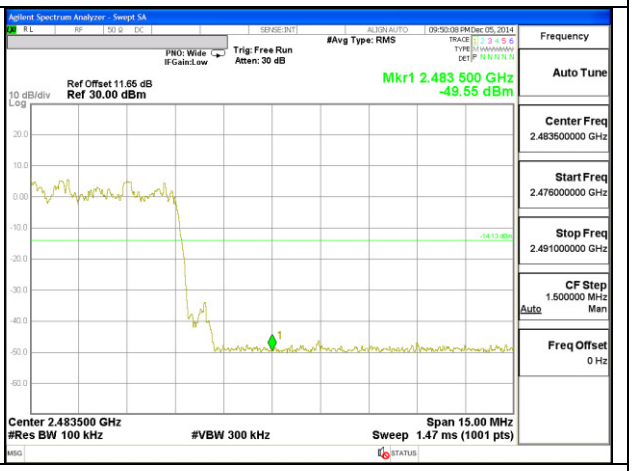
HIGH CHANNEL SPURIOUS



NOTE:

ENHANCED DATA RATE WITH 8DPSK HOPPING MODE

8DPSK – BANDEDGE PLOTS

LOW CHANNEL BANDEDGE	HIGH CHANNEL BANDEDGE
	

NOTE:

9. RADIATED TEST RESULTS

9.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for below 1GHz and 150cm for above 1GHz. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For band edge measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 1 MHz for peak measurements and 1/T (on time) for average measurement. GFSK = 1/T = 1 / 0.00289S = 346 Hz and 8PSK = 1/T = 1/0.00107s = 934 Hz.

The spectrum from 1GHzHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in the 2.4 GHz band.

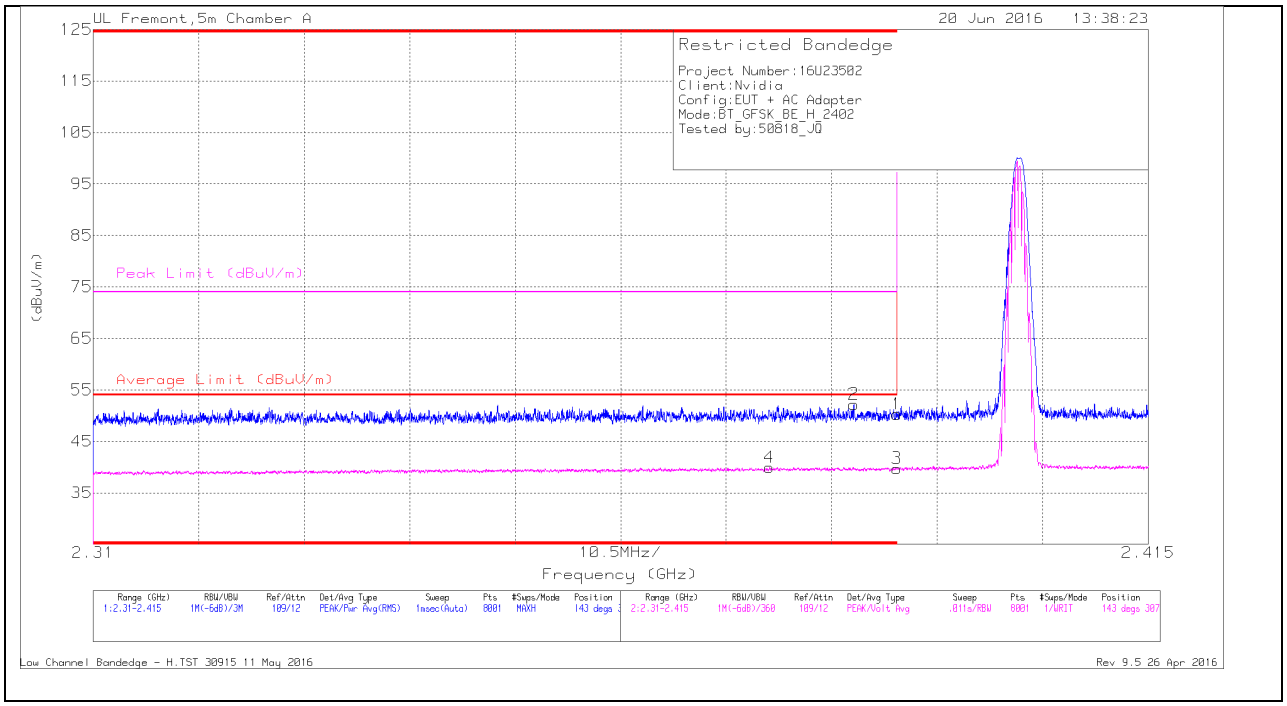
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

9.2. TRANSMITTER ABOVE 1 GHz

9.2.1. BASIC DATA RATE GFSK MODULATION

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

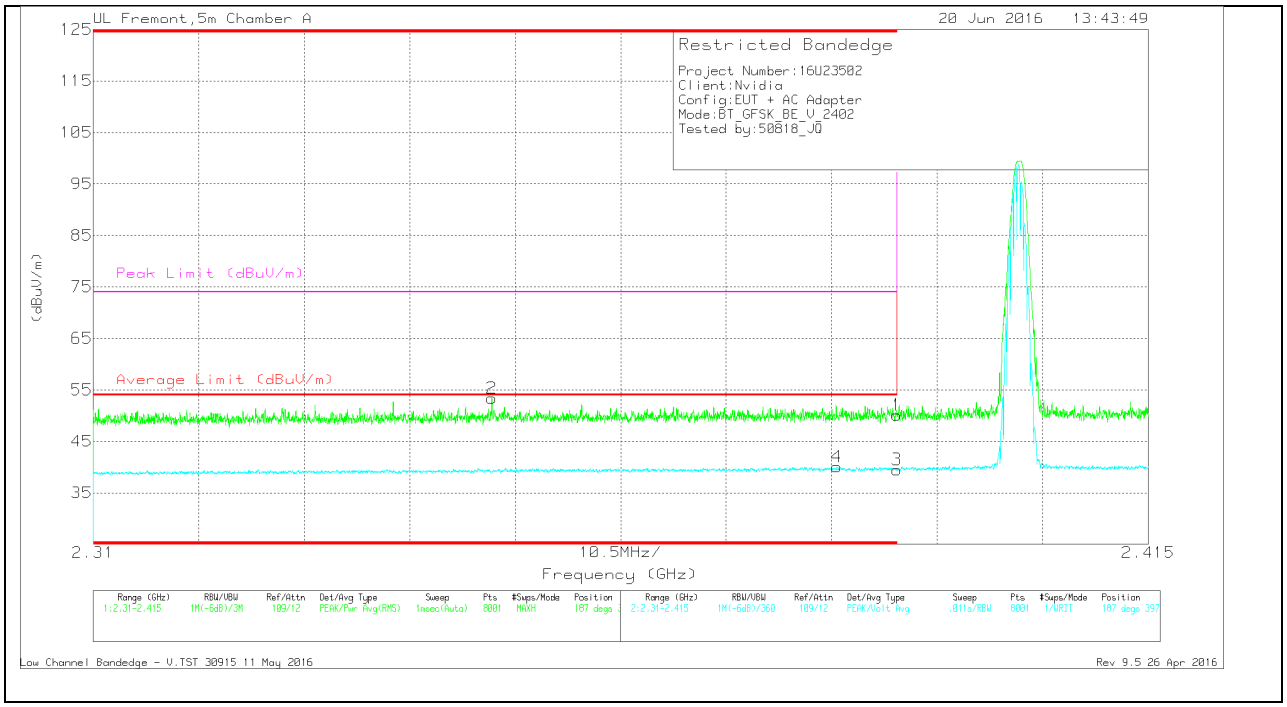
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (db/m)	Amp/Cbl/Fltr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	36.17	Pk	32.3	-18.2	50.27	-	-	74	-23.73	143	307	H
2	* 2.386	38.21	Pk	32.2	-18.2	52.21	-	-	74	-21.79	143	307	H
3	* 2.39	25.63	VA1T	32.3	-18.2	39.73	54	-14.27	-	-	143	307	H
4	* 2.377	25.95	VA1T	32.2	-18.2	39.95	54	-14.05	-	-	143	307	H

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (db/m)	Amp/Cbl/Fltr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	36	Pk	32.3	-18.2	50.1	-	-	74	-23.9	187	397	V
2	* 2.35	39.55	Pk	32	-18.2	53.35	-	-	74	-20.65	187	397	V
3	* 2.39	25.4	VA1T	32.3	-18.2	39.5	54	-14.5	-	-	187	397	V
4	* 2.384	26.05	VA1T	32.2	-18.2	40.05	54	-13.95	-	-	187	397	V

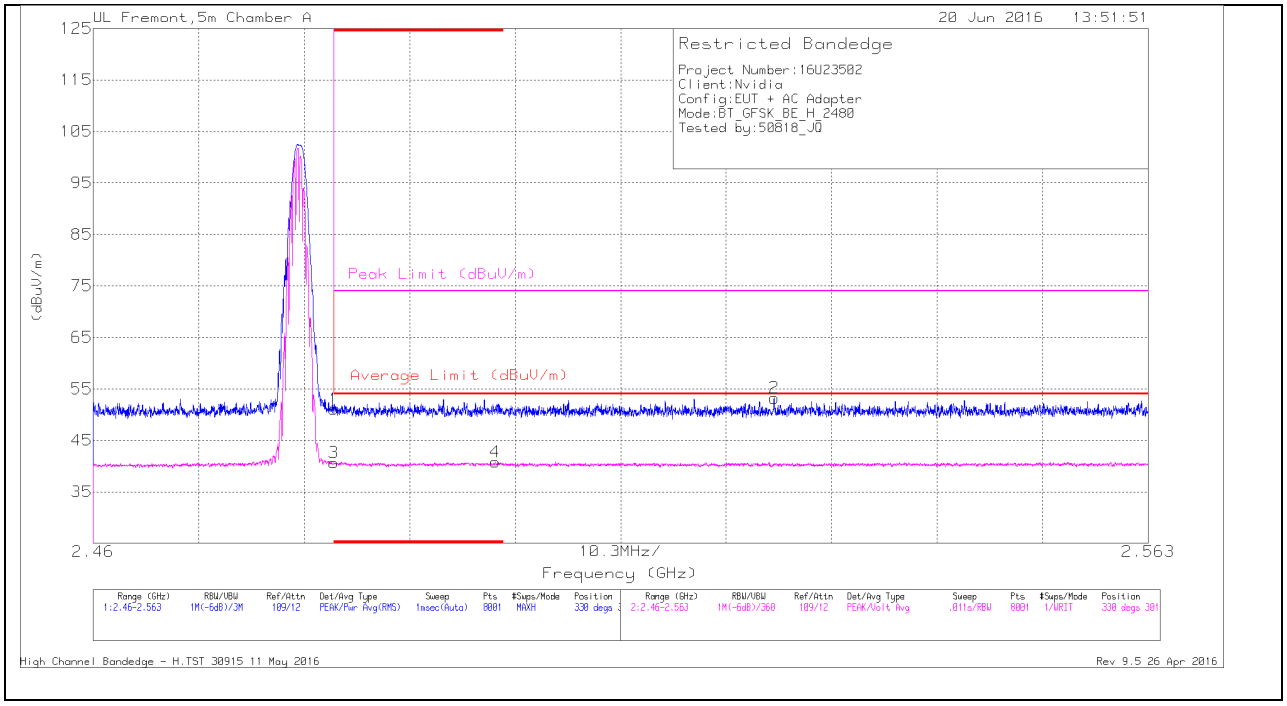
* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

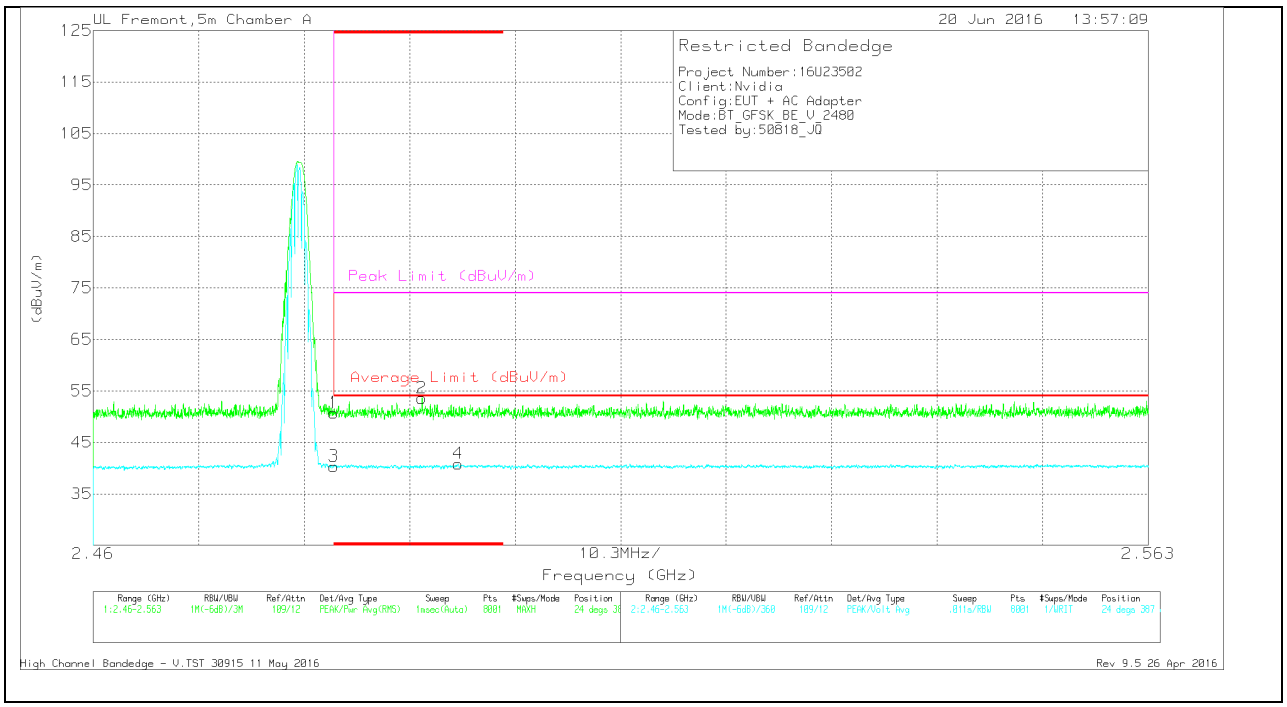
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (db/m)	Amp/Cbl/Fltr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	36.56	Pk	32.4	-17.9	51.06	-	-	74	-22.94	330	301	H
3	* 2.484	26.16	VA1T	32.4	-17.9	40.66	54	-13.34	-	-	330	301	H
4	* 2.499	26.17	VA1T	32.5	-17.9	40.77	54	-13.23	-	-	330	301	H
2	2.526	38.62	Pk	32.4	-17.8	53.22	-	-	74	-20.78	330	301	H

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (db/m)	Amp/Cbl/Fltr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	36.22	Pk	32.4	-17.9	50.72	-	-	74	-23.28	24	387	V
2	* 2.492	38.99	Pk	32.5	-17.9	53.59	-	-	74	-20.41	24	387	V
3	* 2.484	25.86	VA1T	32.4	-17.9	40.36	54	-13.64	-	-	24	387	V
4	* 2.496	26.26	VA1T	32.5	-17.9	40.86	54	-13.14	-	-	24	387	V

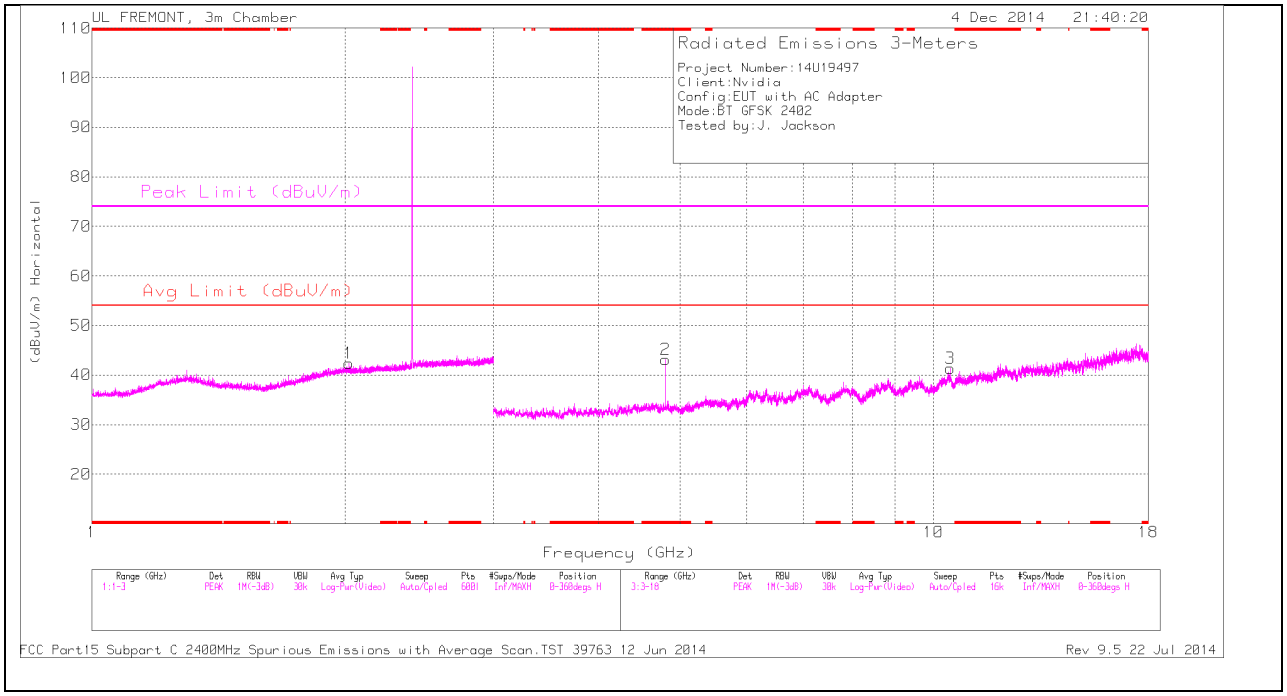
* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

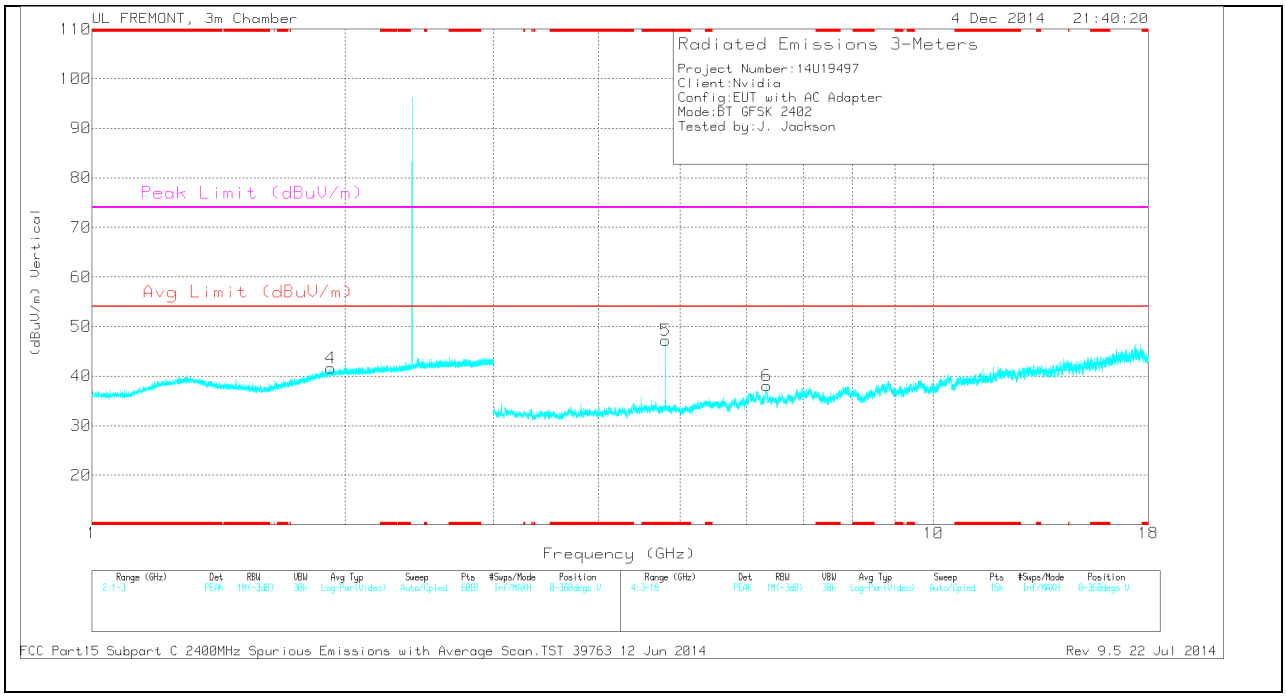
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 4.805	39.29	PK	34.1	-30.3	43.09	-	-	74	-30.91	0-360	200	H
5	* 4.804	43.37	PK	34.1	-30.3	47.17	-	-	74	-26.83	0-360	200	V
4	1.92	33.63	PK	31.3	-23.3	41.63	-	-	-	-	0-360	200	V
1	2.02	34	PK	31.6	-23.2	42.4	-	-	-	-	0-360	100	H
6	6.334	31.75	PK	35.4	-29.1	38.05	-	-	-	-	0-360	200	V
3	10.461	29.15	PK	37.4	-25.2	41.35	-	-	-	-	0-360	200	H

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

Avg - Video bandwidth < Resolution bandwidth

RADIATED EMISSIONS

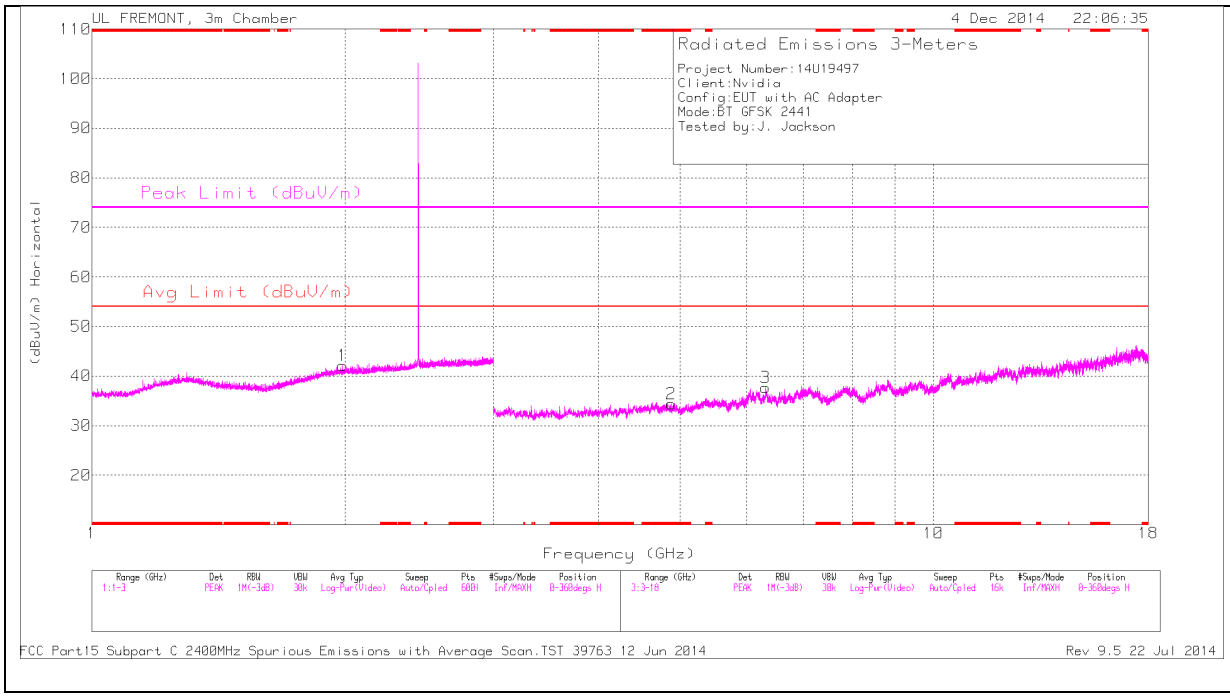
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.804	44.97	PK3	34.1	-30.3	48.77	-	-	74	-25.23	114	178	H
* 4.804	38.33	VB1T	34.1	-30.3	42.13	54	-11.87	-	-	114	178	H
* 4.804	47.34	PK3	34.1	-30.3	51.14	-	-	74	-22.86	132	214	V
* 4.804	42.43	VB1T	34.1	-30.3	46.23	54	-7.77	-	-	132	214	V

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

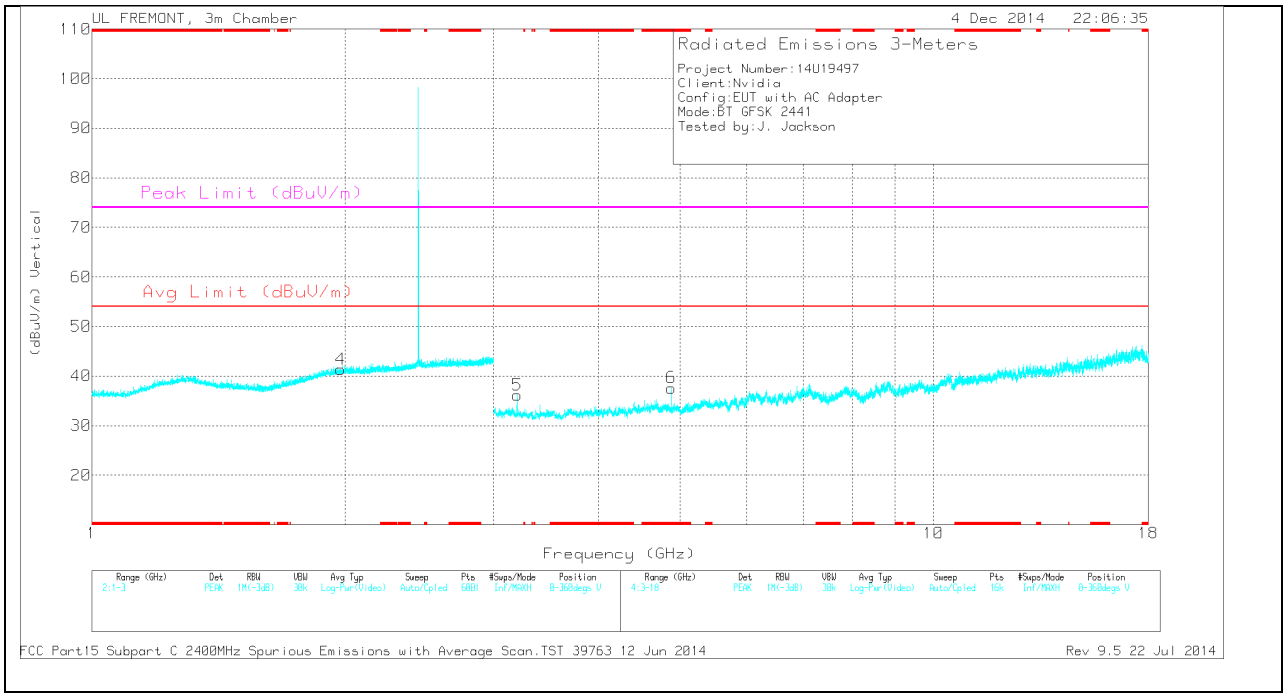
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

MID CHANNEL HORIZONTAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 4.882	30.49	PK	34	-30.1	34.39	-	-	74	-39.61	0-360	200	H
6	* 4.881	33.82	PK	34	-30.2	37.62	-	-	74	-36.38	0-360	200	V
4	1.974	33.03	PK	31.5	-23.2	41.33	-	-	-	-	0-360	200	V
1	1.986	33.86	PK	31.5	-23.2	42.16	-	-	-	-	0-360	100	H
5	3.2	34.41	PK	32.9	-31.2	36.11	-	-	-	-	0-360	200	V
3	6.314	31.8	PK	35.4	-29.5	37.7	-	-	-	-	0-360	200	H

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

Avg - Video bandwidth < Resolution bandwidth

RADIATED EMISSIONS

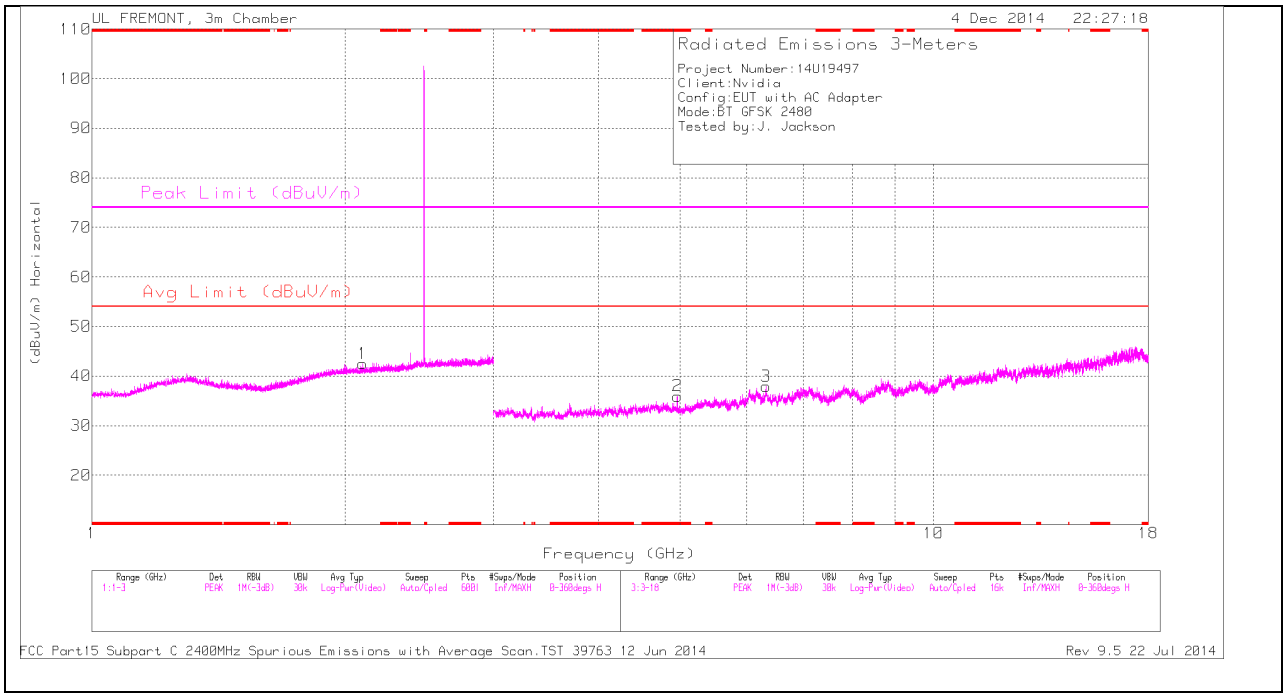
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.882	40.85	PK3	34	-30.1	44.75	-	-	74	-29.25	0	200	H
* 4.882	29.54	VB1T	34	-30.1	33.44	54	-20.56	-	-	0	200	H
* 4.882	42.62	PK3	34	-30.1	46.52	-	-	74	-27.48	144	149	V
* 4.882	34.1	VB1T	34	-30.1	38	54	-16	-	-	144	149	V

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

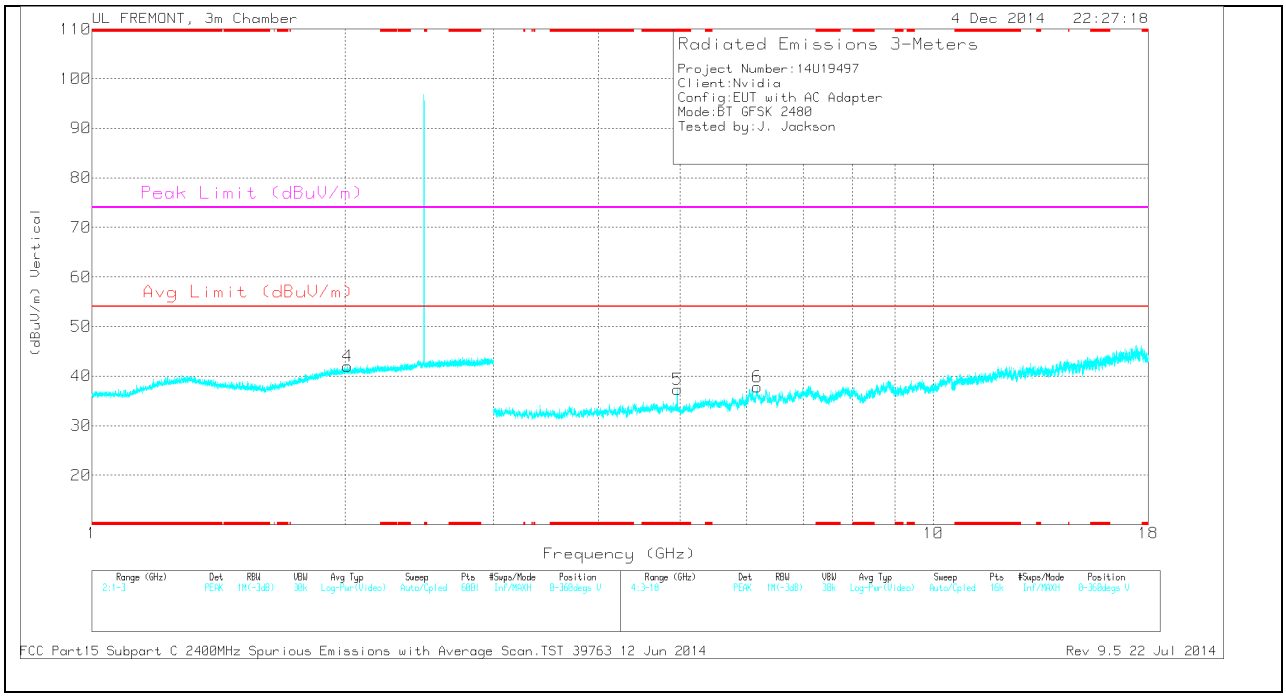
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit

HIGH CHANNEL HORIZONTAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 4.96	32.97	PK	34	-31	35.97	-	-	74	-38.03	0-360	200	H
5	* 4.96	34.34	PK	34	-31	37.34	-	-	74	-36.66	0-360	200	V
4	2.013	33.62	PK	31.6	-23.2	42.02	-	-	-	-	0-360	200	V
1	2.099	33.99	PK	31.5	-23	42.49	-	-	-	-	0-360	100	H
6	6.177	32.57	PK	35.3	-30.1	37.77	-	-	-	-	0-360	200	V
3	6.327	31.67	PK	35.4	-29.1	37.97	-	-	-	-	0-360	100	H

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

Avg - Video bandwidth < Resolution bandwidth

RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.959	41.78	PK3	34	-31	44.78	-	-	74	-29.22	133	296	H
* 4.96	31.31	VB1T	34	-31	34.31	54	-19.69	-	-	133	296	H
* 4.96	42.82	PK3	34	-31	45.82	-	-	74	-28.18	160	186	V
* 4.96	34.35	VB1T	34	-31	37.35	54	-16.65	-	-	160	186	V

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

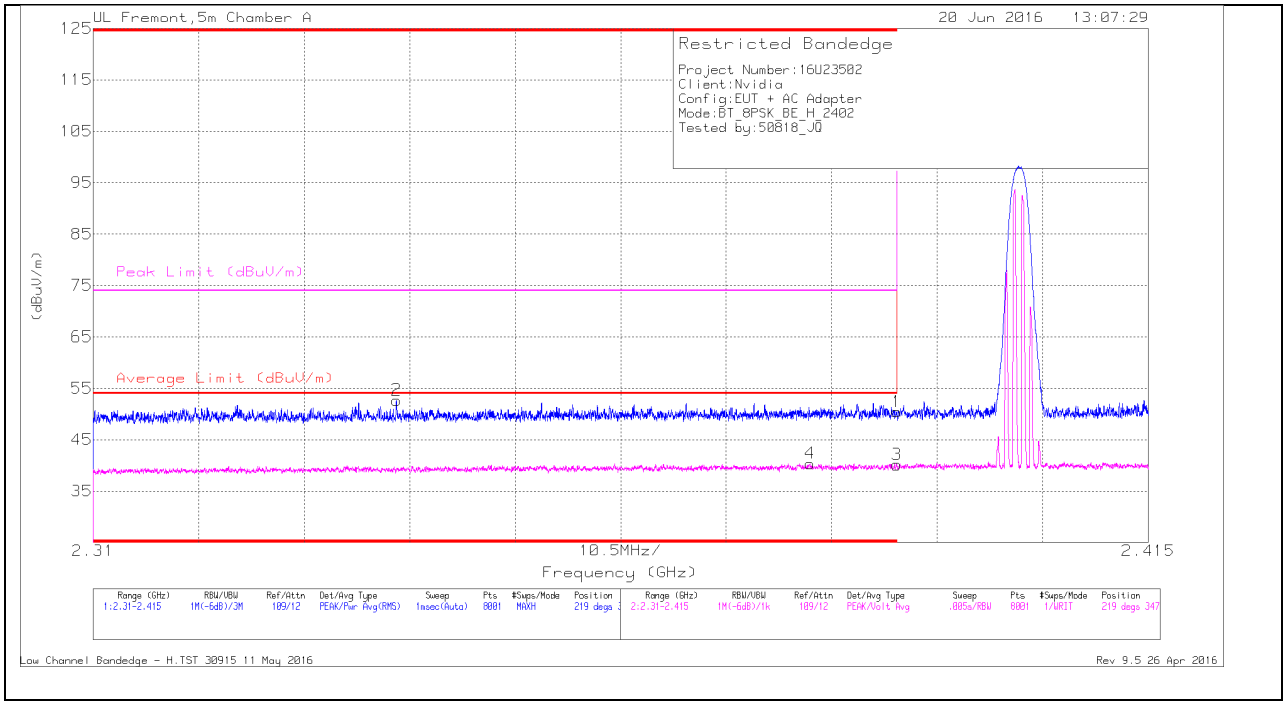
PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit

9.2.2. ENHANCED DATA RATE 8PSK MODULATION

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

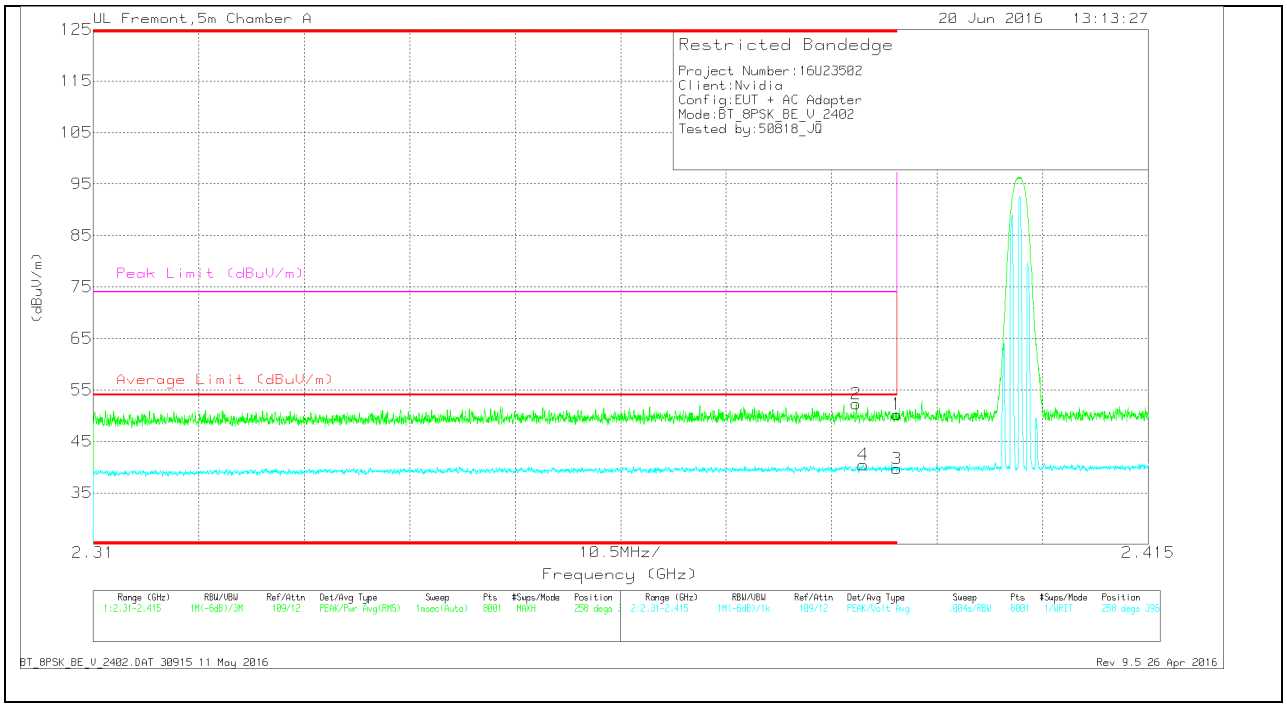
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (db/m)	Amp/Cbl/Fltr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	36.34	Pk	32.3	-18.2	50.44	-	-	74	-23.56	219	347	H
2	* 2.34	39	Pk	32	-18.3	52.7	-	-	74	-21.3	219	347	H
3	* 2.39	26.05	VA1T	32.3	-18.2	40.15	54	-13.85	-	-	219	347	H
4	* 2.381	26.37	VA1T	32.2	-18.2	40.37	54	-13.63	-	-	219	347	H

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (db/m)	Amp/Cbl/Fltr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	36.15	Pk	32.3	-18.2	50.25	-	-	74	-23.75	258	396	V
2	* 2.386	38.28	Pk	32.2	-18.2	52.28	-	-	74	-21.72	258	396	V
3	* 2.39	25.59	VA1T	32.3	-18.2	39.69	54	-14.31	-	-	258	396	V
4	* 2.387	26.36	VA1T	32.3	-18.2	40.46	54	-13.54	-	-	258	396	V

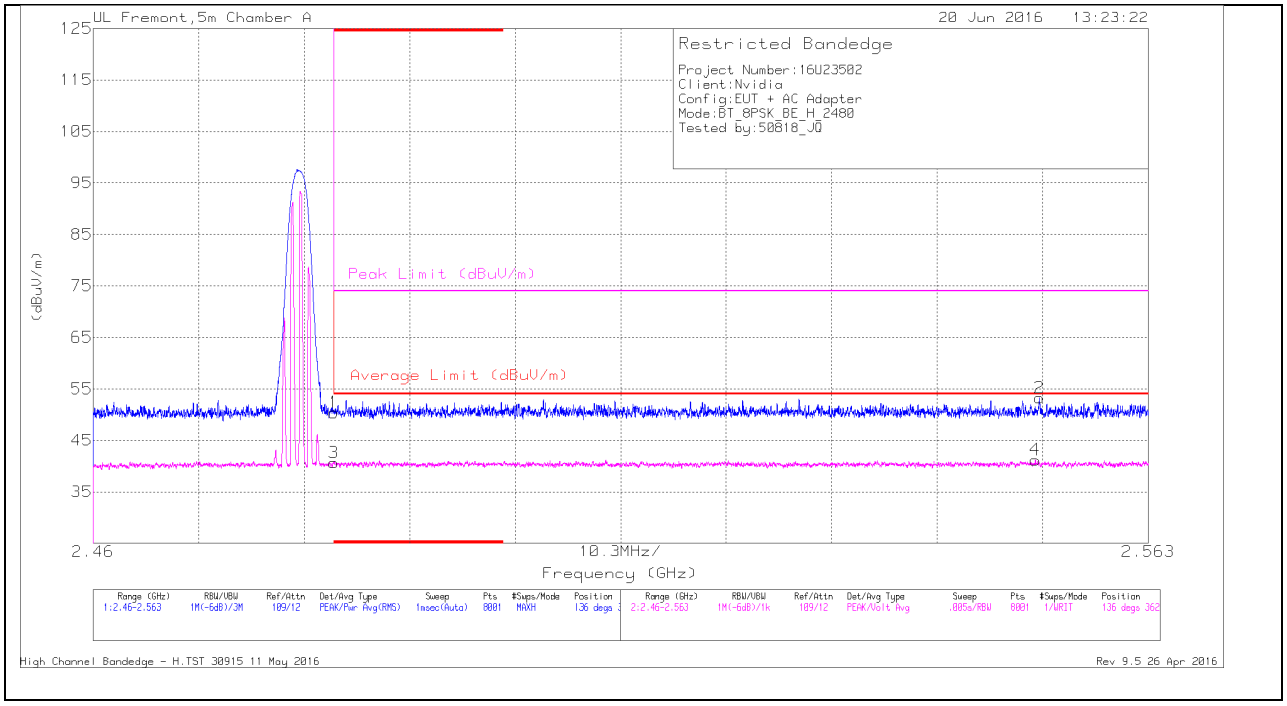
* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

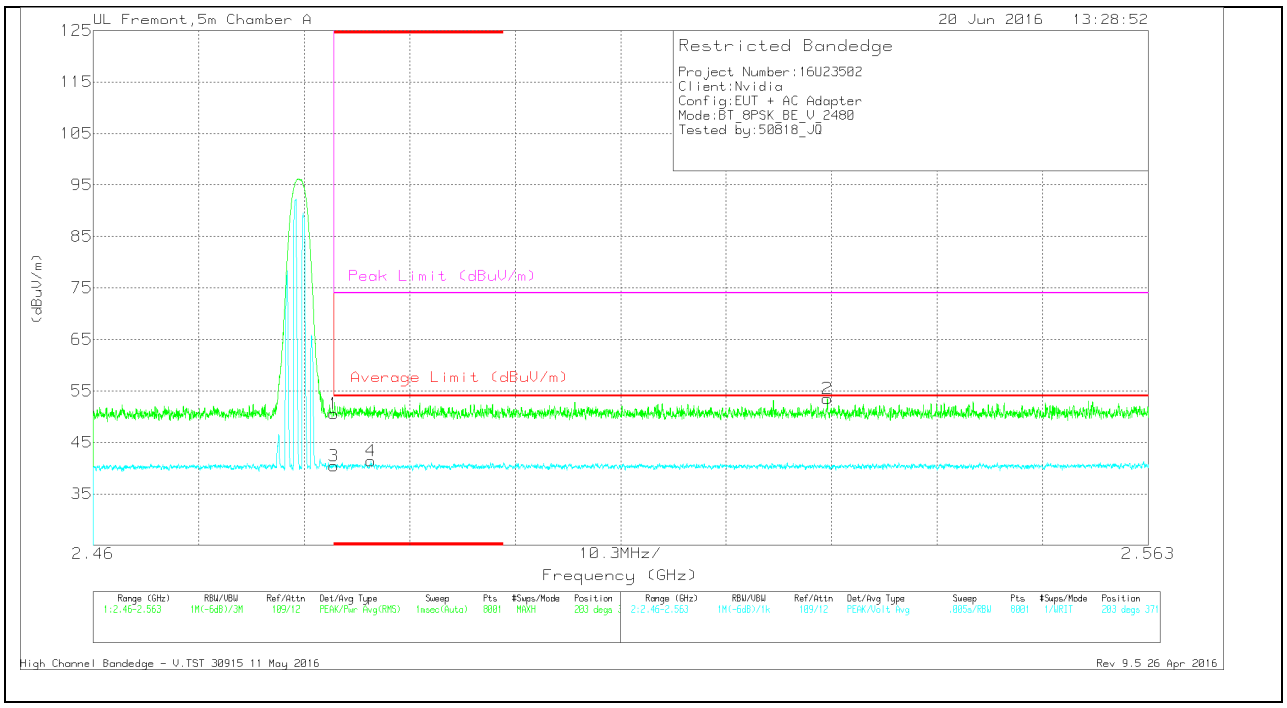
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (db/m)	Amp/Cbl/Fltr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	35.91	Pk	32.4	-17.9	50.41	-	-	74	-23.59	136	362	H
3	* 2.484	26.17	VA1T	32.4	-17.9	40.67	54	-13.33	-	-	136	362	H
2	2.552	38.63	Pk	32.4	-17.8	53.23	-	-	74	-20.77	136	362	H
4	2.552	26.61	VA1T	32.4	-17.8	41.21	54	-12.79	-	-	136	362	H

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (db/m)	Amp/Cbl/Fltr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	36.08	Pk	32.4	-17.9	50.58	-	-	74	-23.42	203	371	V
3	* 2.484	25.9	VA1T	32.4	-17.9	40.4	54	-13.6	-	-	203	371	V
4	* 2.487	26.78	VA1T	32.5	-17.9	41.38	54	-12.62	-	-	203	371	V
2	2.532	38.9	Pk	32.4	-17.8	53.5	-	-	74	-20.5	203	371	V

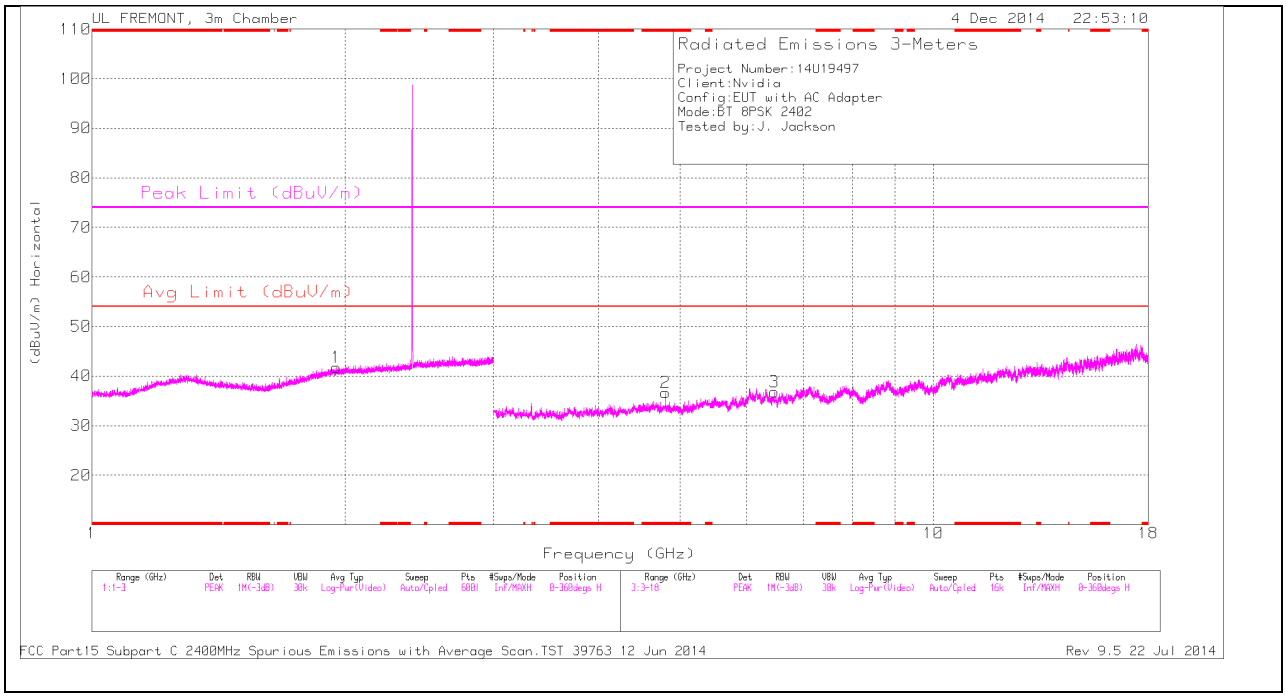
* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

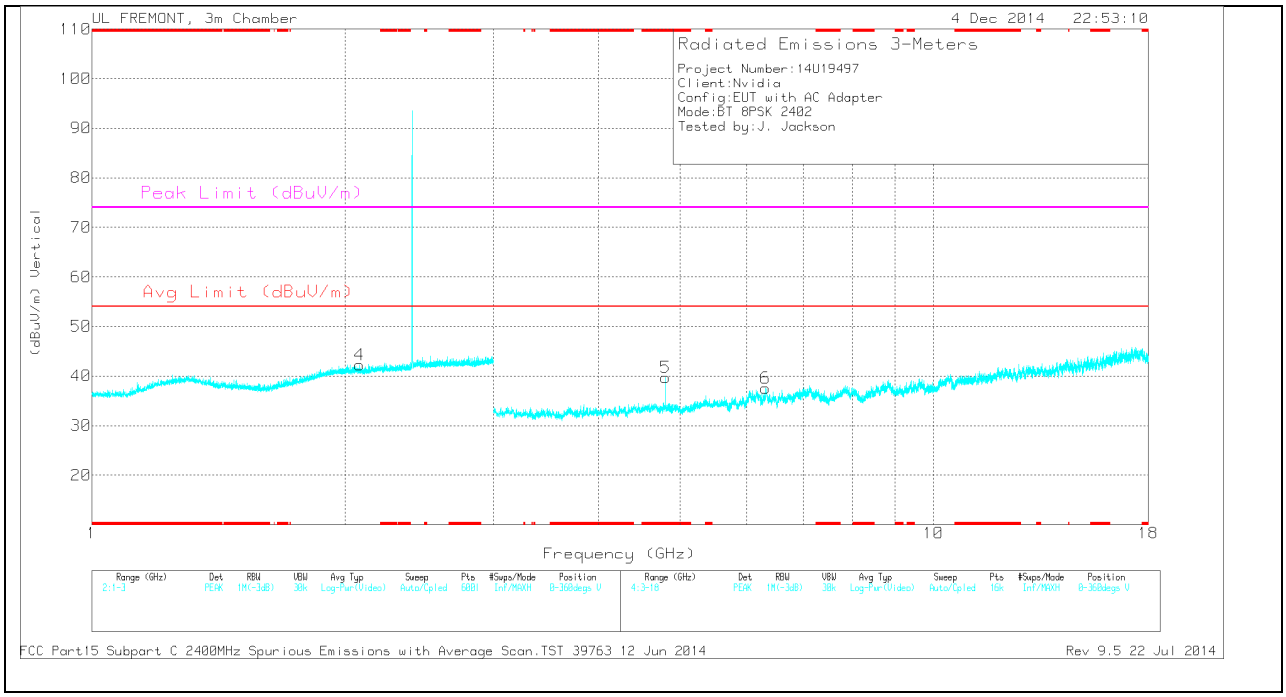
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 4.805	32.92	PK	34.1	-30.3	36.72	-	-	74	-37.28	0-360	200	H
5	* 4.805	35.86	PK	34.1	-30.3	39.66	-	-	74	-34.34	0-360	200	V
1	1.953	33.55	PK	31.4	-23.2	41.75	-	-	-	-	0-360	200	H
4	2.081	33.73	PK	31.5	-23	42.23	-	-	-	-	0-360	100	V
6	6.311	31.79	PK	35.4	-29.6	37.59	-	-	-	-	0-360	200	V
3	6.47	31.5	PK	35.5	-30.2	36.8	-	-	-	-	0-360	200	H

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

Avg - Video bandwidth < Resolution bandwidth

RADIATED EMISSIONS

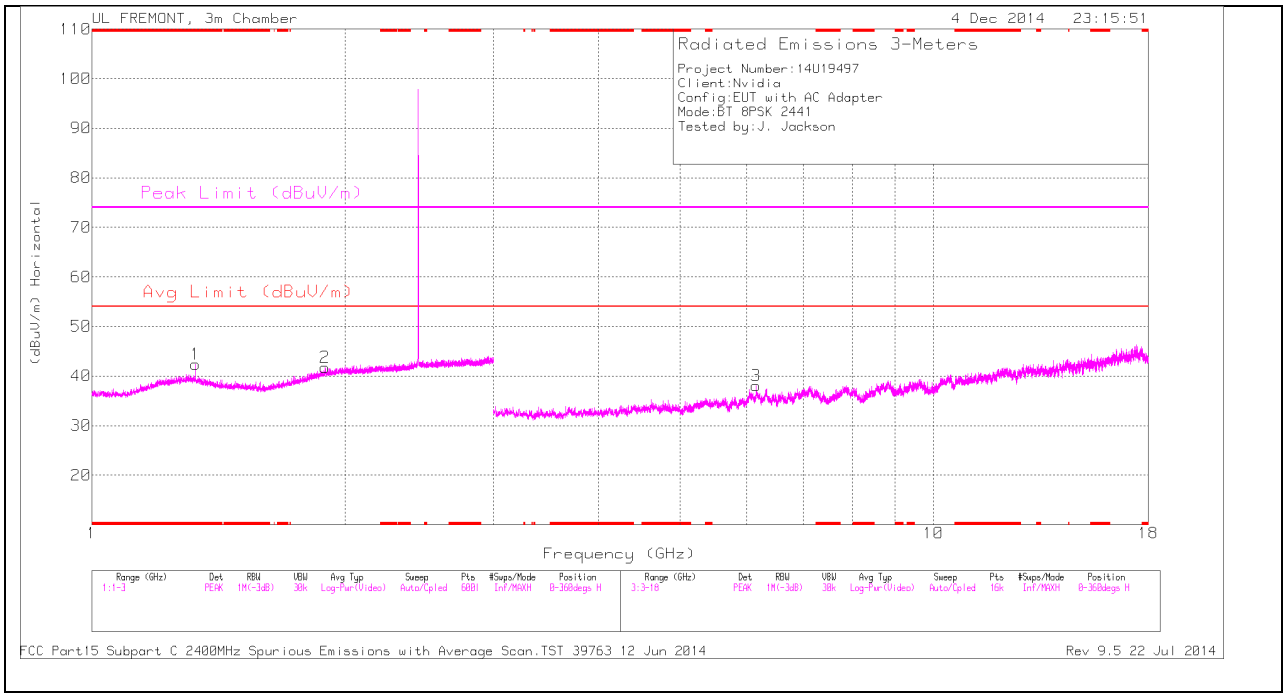
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.804	43.52	PK3	34.1	-30.3	47.32	-	-	74	-26.68	283	353	H
* 4.804	33.53	VB1T	34.1	-30.3	37.33	54	-16.67	-	-	283	353	H
* 4.804	45.4	PK3	34.1	-30.3	49.2	-	-	74	-24.8	141	152	V
* 4.804	36.25	VB1T	34.1	-30.3	40.05	54	-13.95	-	-	141	152	V

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

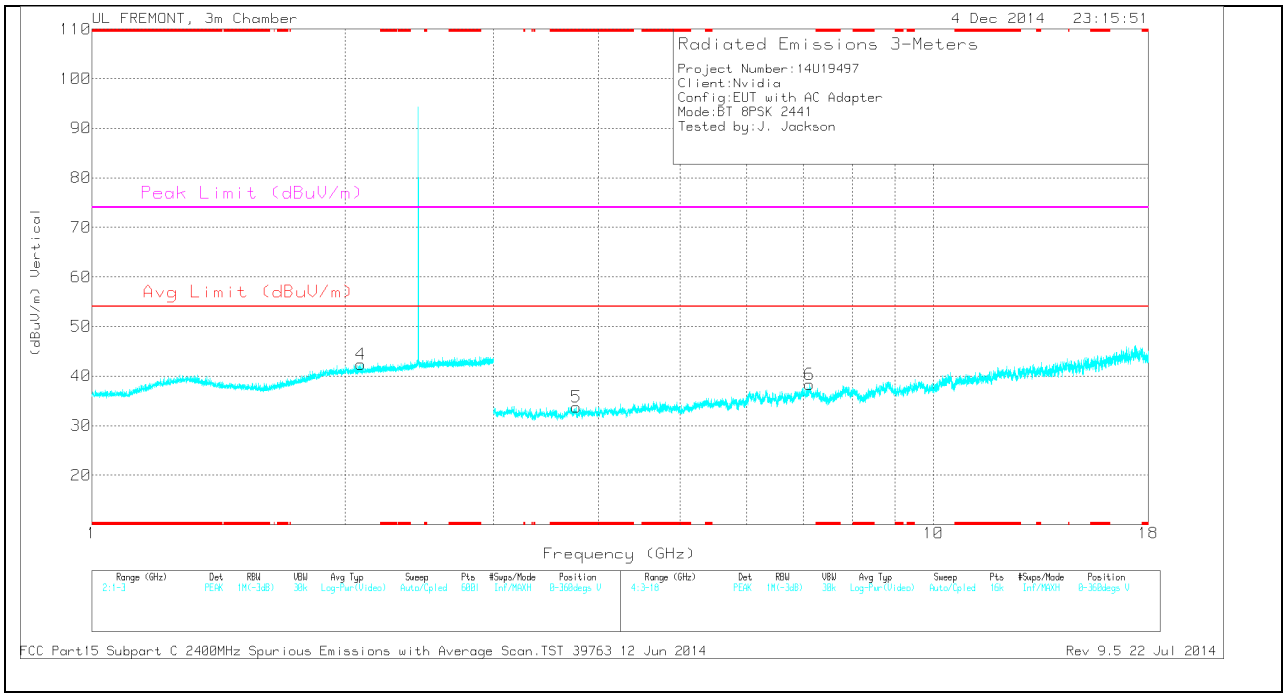
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit

MID CHANNEL HORIZONTAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.328	36.31	PK	29.9	-23.8	42.41	-	-	74	-31.59	0-360	100	H
5	* 3.761	31.81	PK	33.2	-31.3	33.71	-	-	74	-40.29	0-360	100	V
2	1.891	33.95	PK	31.1	-23.3	41.75	-	-	-	-	0-360	200	H
4	2.087	34.01	PK	31.5	-23.1	42.41	-	-	-	-	0-360	200	V
3	6.156	32.43	PK	35.3	-29.7	38.03	-	-	-	-	0-360	100	H
6	7.117	30.67	PK	35.6	-28	38.27	-	-	-	-	0-360	100	V

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

Avg - Video bandwidth < Resolution bandwidth

RADIATED EMISSIONS

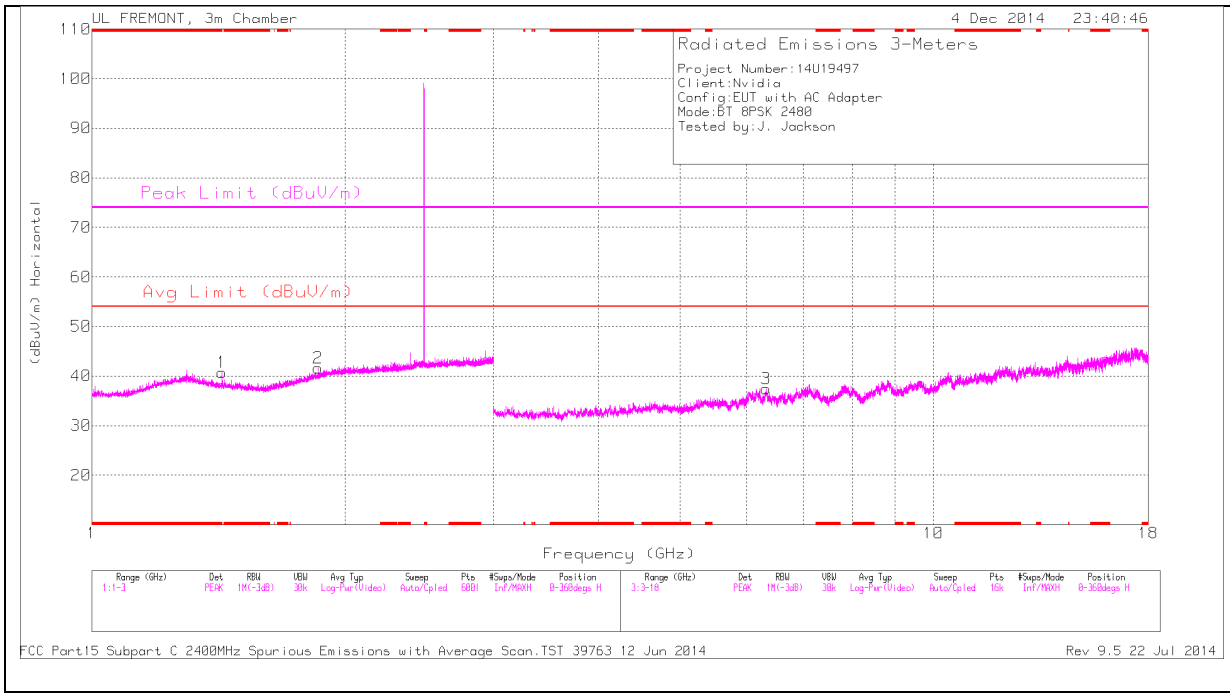
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.327	43.02	PK3	29.9	-23.8	49.12	-	-	74	-24.88	235	100	H
* 1.329	30.58	VB1T	29.9	-23.8	36.68	54	-17.32	-	-	235	100	H
* 3.76	40.47	PK3	33.2	-31.3	42.37	-	-	74	-31.63	235	100	V
* 3.759	28.12	VB1T	33.2	-31.3	30.02	54	-23.98	-	-	235	100	V

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

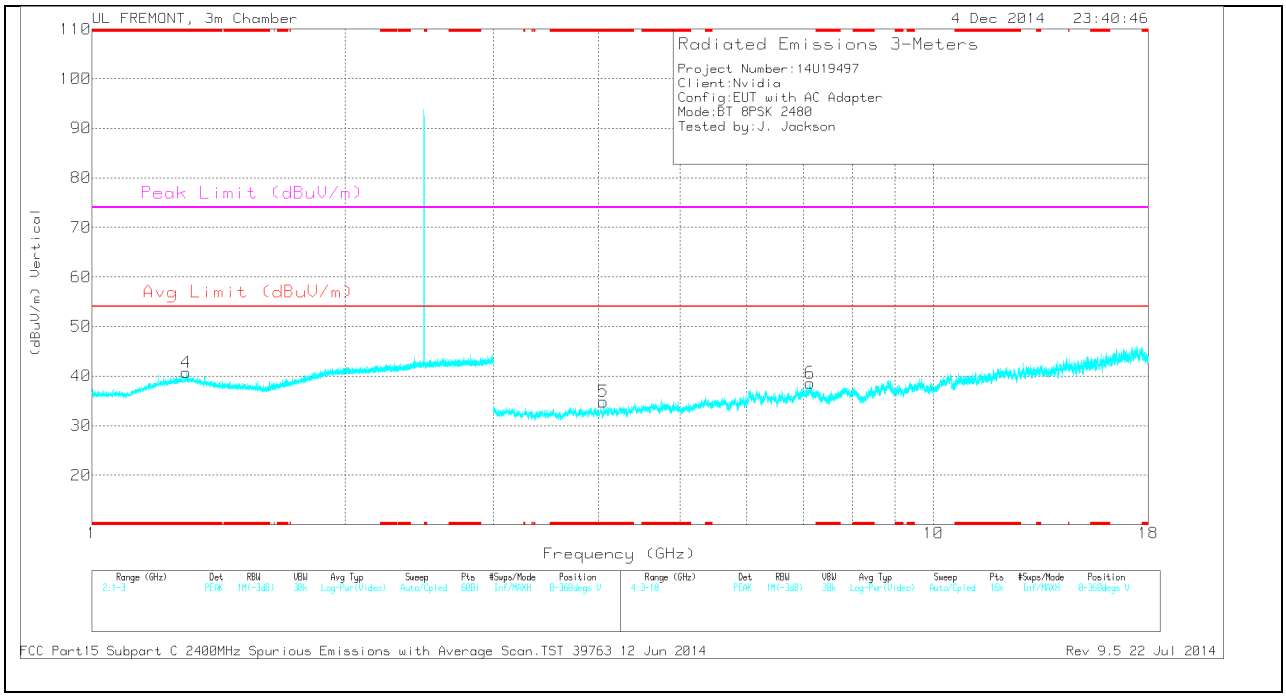
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit

HIGH CHANNEL HORIZONTAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 1.295	34.3	PK	30.2	-23.8	40.7	-	-	74	-33.3	0-360	200	V
5	* 4.056	32.63	PK	33.4	-31.2	34.83	-	-	74	-39.17	0-360	200	V
1	1.428	35.56	PK	28.9	-23.7	40.76	-	-	-	-	0-360	100	H
2	1.857	34.07	PK	30.8	-23.3	41.57	-	-	-	-	0-360	200	H
3	6.327	31.15	PK	35.4	-29.1	37.45	-	-	-	-	0-360	200	H
6	7.131	31.03	PK	35.6	-28	38.63	-	-	-	-	0-360	100	V

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

Avg - Video bandwidth < Resolution bandwidth

RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.295	43.1	PK3	30.2	-23.8	49.5	-	-	74	-24.5	0	200	V
* 1.296	30.67	VB1T	30.2	-23.8	37.07	54	-16.93	-	-	0	200	V
* 4.055	40.84	PK3	33.4	-31.2	43.04	-	-	74	-30.96	0	200	V
* 4.057	28.37	VB1T	33.4	-31.3	30.47	54	-23.53	-	-	0	200	V

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

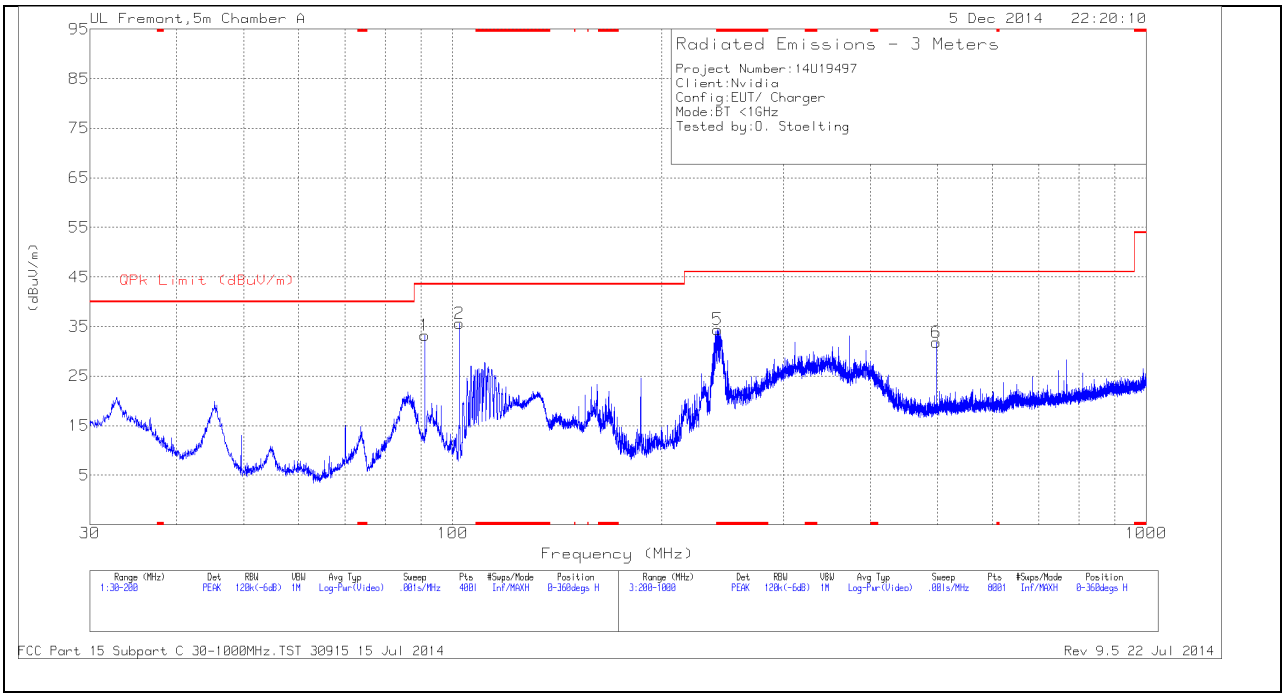
PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit

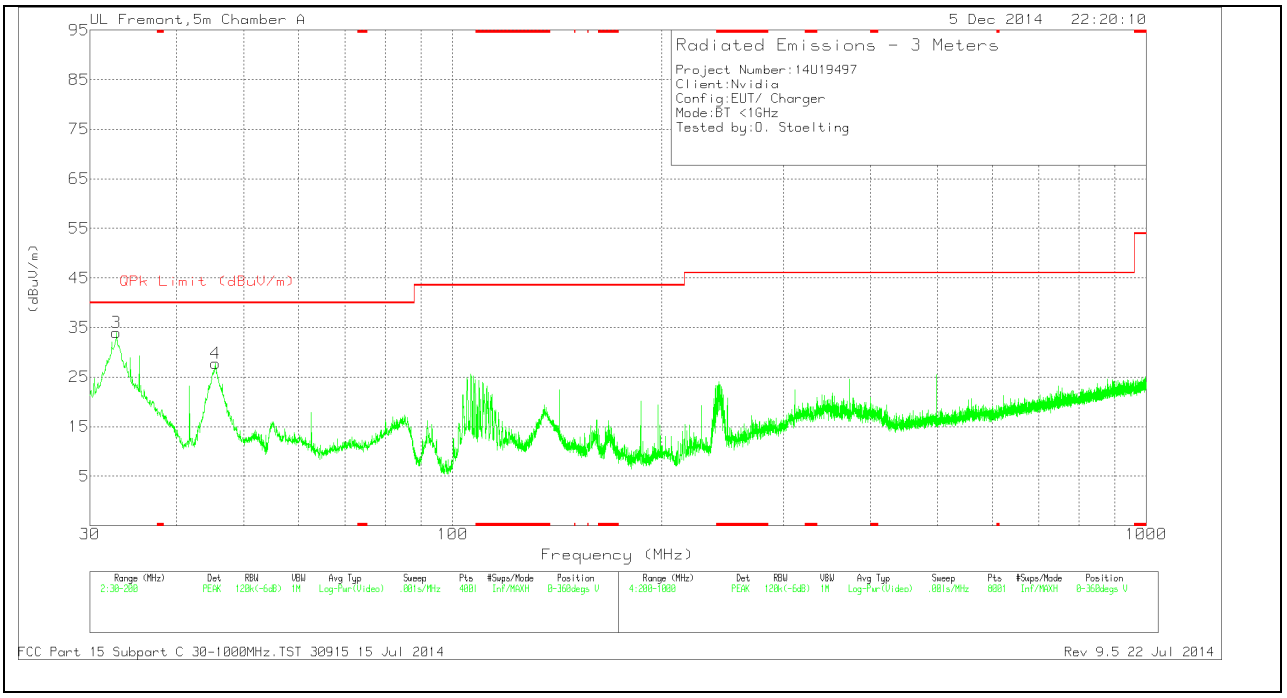
9.3. WORST-CASE BELOW 1 GHz

GFSK SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)

HORIZONTAL PLOT



VERTICAL PLOT



BELOW 1 GHz TABLE

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T130 (dB/m)	Amp/Cbl (dB/m)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5	* 241.1	52.62	PK	11.5	-29.7	34.42	46.02	-11.6	0-360	200	H
3	32.7625	45.94	PK	19.2	-31.2	33.94	40	-6.06	0-360	101	V
4	45.5125	48.61	PK	10.3	-31.1	27.81	40	-12.19	0-360	101	V
1	91.2	55.93	PK	7.9	-30.6	33.23	43.52	-10.29	0-360	300	H
2	102.25	55.69	PK	10.4	-30.5	35.59	43.52	-7.93	0-360	300	H
6	498	43.01	PK	17.6	-28.8	31.81	46.02	-14.21	0-360	200	H

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

Pk - Peak detector

10. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	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.

TEST PROCEDURE

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.4.

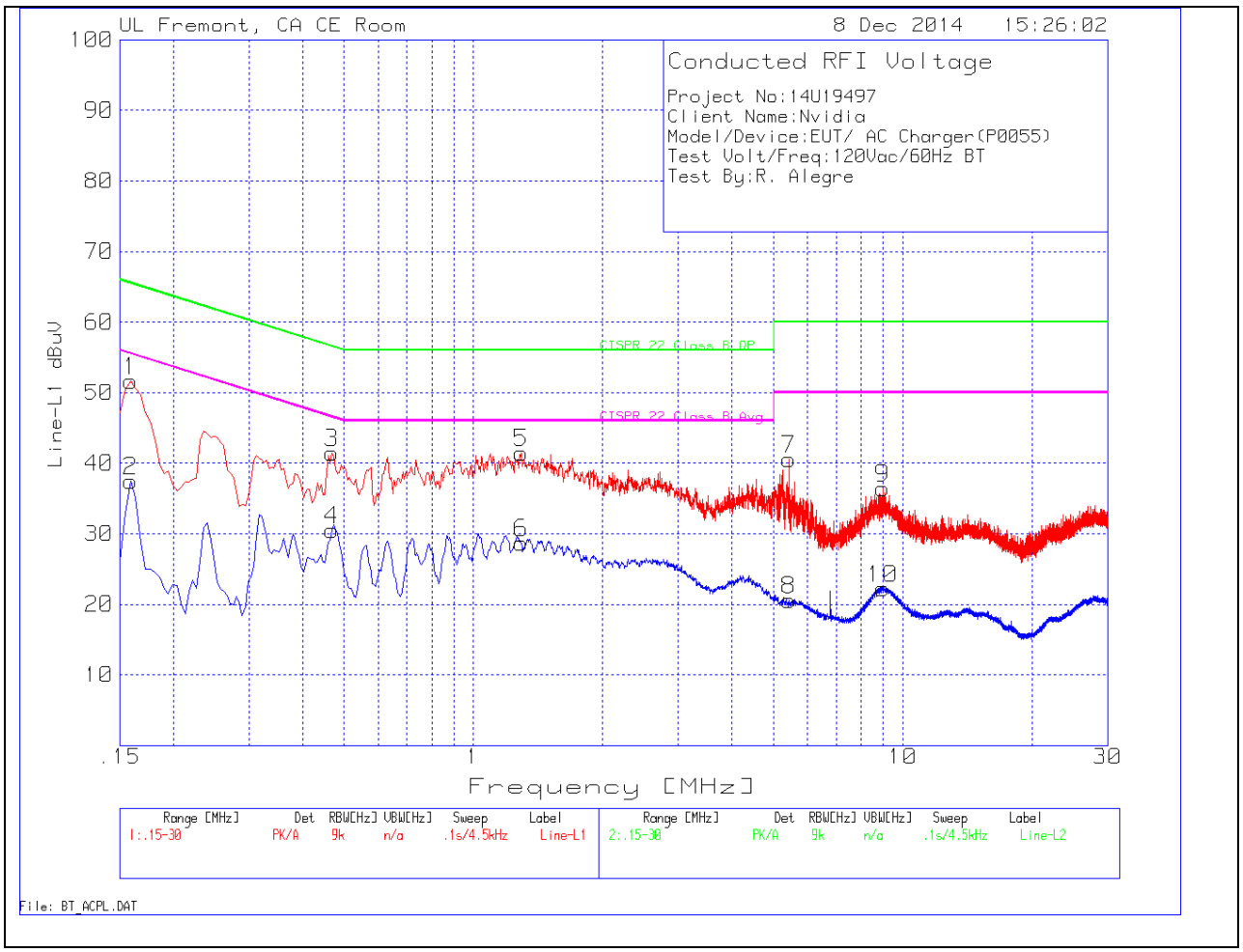
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

Line conducted data is recorded for both NEUTRAL and HOT lines.

RESULTS

6 WORST EMISSIONS

LINE 1 PLOT



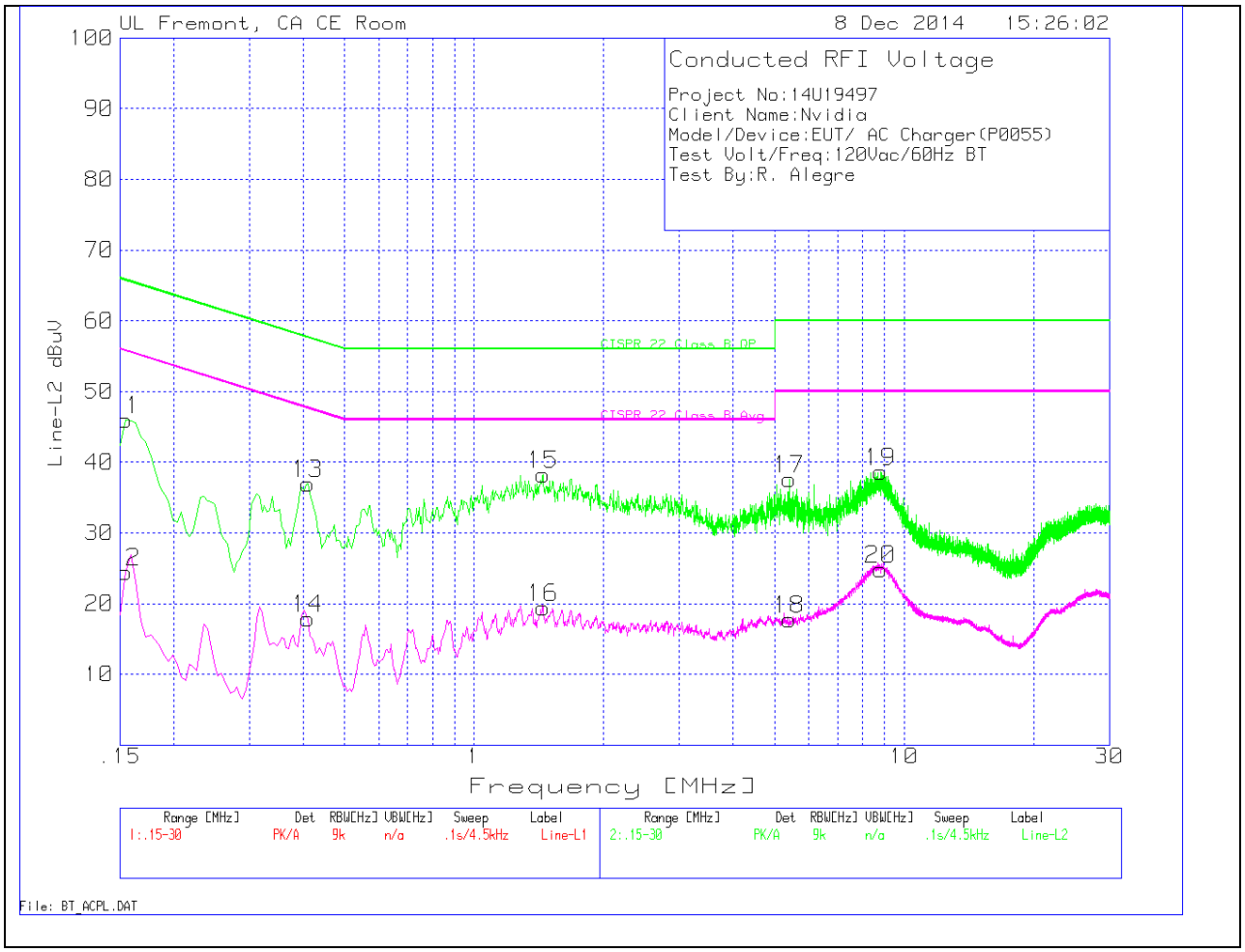
LINE 1 RESULTS

Line-L1 .15 - 30MHz

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	T24 IL L1 (dB)	LC Cables 1&3 (dB)	Corrected Reading dBuV	CISPR 22 Class B QP	Margin to Limit (dB)	CISPR 22 Class B Avg	Margin to Limit (dB)
1	.159	50.33	PK	1.3	0	51.63	65.5	-13.87	-	-
2	.159	36.21	Av	1.3	0	37.51	-	-	55.5	-17.99
3	.4695	41.01	PK	.4	0	41.41	56.5	-15.09	-	-
4	.4695	30.06	Av	.4	0	30.46	-	-	46.5	-16.04
5	1.293	41.13	PK	.2	.1	41.43	56	-14.57	-	-
6	1.293	28.36	Av	.2	.1	28.66	-	-	46	-17.34
7	5.424	40.24	PK	.2	.1	40.54	60	-19.46	-	-
8	5.424	20.32	Av	.2	.1	20.62	-	-	50	-29.38
9	8.979	36.1	PK	.2	.1	36.4	60	-23.6	-	-
10	8.979	21.9	Av	.2	.1	22.2	-	-	50	-27.8

LINE 2 PLOT



LINE 2 RESULTS

Line-L2 .15 - 30MHz

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	T24 IL L2 (dB)	LC Cables 2&3 (dB)	Corrected Reading dBuV	CISPR 22 Class B QP	Margin to Limit (dB)	CISPR 22 Class B Avg	Margin to Limit (dB)
11	.1545	44.62	PK	1.4	0	46.02	65.8	-19.78	-	-
12	.1545	23.04	Av	1.4	0	24.44	-	-	55.8	-31.36
13	.411	36.52	PK	.4	0	36.92	57.6	-20.68	-	-
14	.411	17.5	Av	.4	0	17.9	-	-	47.6	-29.7
15	1.446	38	PK	.2	.1	38.3	56	-17.7	-	-
16	1.446	19.17	Av	.2	.1	19.47	-	-	46	-26.53
17	5.415	37.32	PK	.2	.1	37.62	60	-22.38	-	-
18	5.415	17.5	Av	.2	.1	17.8	-	-	50	-32.2
19	8.826	38.28	PK	.2	.1	38.58	60	-21.42	-	-
20	8.826	24.49	Av	.2	.1	24.79	-	-	50	-25.21

PK - Peak detector

Av - average detection