



**FCC PART 15 SUBPART C
ISED RSS-247 ISSUE 2**

CERTIFICATION TEST REPORT

For

Videoconferencing Endpoint

MODEL: HUAWEI Bar 500

FCC ID: QIS-BAR500

IC: 6369A-BAR500

REPORT NUMBER: 4788832561.1-3

ISSUE DATE: January 16, 2019

Prepared for

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Revision History

Rev.	Issue Date	Revisions	Revised By
--	01/16/2019	Initial Issue	



Summary of Test Results			
Clause	Test Items	FCC/IC Rules	Test Results
1	6dB Bandwidth and 99% Bandwidth	FCC 15.247 (a) (2) RSS-247 Clause 5.2 (a)	PASS
2	Conducted Output Power	FCC 15.247 (b) (3) RSS-247 Clause 5.4 (e)	PASS
3	Power Spectral Density	FCC 15.247 (e) RSS-247 Clause 5.2 (b)	PASS
4	Conducted Bandedge and Spurious Emission	FCC 15.247 (d) RSS-247 Clause 5.5	PASS
5	Radiated Bandedge and Spurious Emission	FCC 15.247 (d) FCC 15.209 FCC 15.205 RSS-247 Clause 5.5 RSS-GEN Clause 8.9	PASS
6	Conducted Emission Test For AC Power Port	FCC 15.207 RSS-GEN Clause 8.8	PASS
7	Antenna Requirement	FCC 15.203 RSS-GEN Clause 8.3	PASS



TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS	6
2. TEST METHODOLOGY	7
3. FACILITIES AND ACCREDITATION	7
4. CALIBRATION AND UNCERTAINTY	8
4.1. MEASURING INSTRUMENT CALIBRATION	8
4.2. MEASUREMENT UNCERTAINTY	8
5. EQUIPMENT UNDER TEST	9
5.1. DESCRIPTION OF EUT	9
5.2. MAXIMUM OUTPUT POWER	9
5.3. CHANNEL LIST	9
5.4. TEST CHANNEL CONFIGURATION	10
5.5. DESCRIPTION OF AVAILABLE ANTENNAS	11
5.6. WORST-CASE CONFIGURATIONS	12
DESCRIPTION OF TEST SETUP	13
6. MEASURING INSTRUMENT AND SOFTWARE USED	14
7. MEASUREMENT METHODS	15
8. ANTENNA PORT TEST RESULTS	16
8.1. ON TIME AND DUTY CYCLE	16
8.2. 6 dB DTS BANDWIDTH AND 99% BANDWIDTH	19
8.2.1. 802.11b MODE	20
8.2.2. 802.11g MODE	26
8.2.3. 802.11n HT20 MODE	32
8.3. Maximum conducted (Average and Peak) output power	38
8.4. POWER SPECTRAL DENSITY	41
8.4.1. 802.11b	43
8.4.2. 802.11g	49
8.4.3. 802.11n HT20	55
8.1. CONDUCTED BANDEDGE AND SPURIOUS EMISSIONS	61
8.1.1. 802.11b MODE	62
9. RADIATED TEST RESULTS	100
9.1.1. LIMITS	100
9.1.2. TEST SETUP AND PROCEDURE	102
9.1.3. TEST ENVIRONMENT	105
9.1.4. RESULTS	105



9.2.	<i>RESTRICTED BANDEDGE</i>	106
9.2.1.	802.11b MODE	106
9.2.2.	802.11g MODE	129
9.2.3.	802.11n HT20 MODE	159
9.3.	<i>SPURIOUS EMISSIONS For 2.4G(1~18GHz)</i>	175
9.3.1.	802.11b MODE	175
9.3.2.	802.11g MODE	205
9.3.3.	802.11n HT20 MODE	245
9.4.	<i>SPURIOUS EMISSIONS (18~26GHz)</i>	265
9.4.1.	802.11n20 MODE	265
9.6	<i>SPURIOUS EMISSIONS (26~40GHz)</i>	267
9.4.2.	802.11n20 MODE	267
9.5.	<i>SPURIOUS EMISSIONS (30M ~ 1 GHz)</i>	269
9.5.1.	802.11n20 MODE	269
9.6.	<i>SPURIOUS EMISSIONS BELOW 30M</i>	271
9.6.1.	802.11n20 MODE	271
10.	AC POWER LINE CONDUCTED EMISSIONS	277
11.	ANTENNA REQUIREMENTS	280



1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name: HUAWEI TECHNOLOGIES CO., LTD.
Address: Administration Building, Huawei Technologies Co., Ltd.
Bantian, Longgang District, Shenzhen, P.R. China, 518129

Manufacturer Information

Company Name: HUAWEI TECHNOLOGIES CO., LTD.
Address: Administration Building, Huawei Technologies Co., Ltd.
Bantian, Longgang District, Shenzhen, P.R. China, 518129

EUT Name: Videoconferencing Endpoint

Model: HUAWEI Bar 500

Sample Status: Normal

Brand: HUAWEI

Sample Received: Dec.24, 2018

Date of Tested: Dec.26, 2018 ~ Jan.14, 2019

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC Part 15 Subpart C	PASS
ISED RSS-247 Issue 2	PASS
ISED RSS-GEN Issue 5	PASS

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2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC CFR 47 Part 2, FCC CFR 47 Part 15, KDB558074 D01 DTS Meas Guidance v05, KDB414788 D01 Radiated Test Site v01, ANSI C63.10-2013 and KDB 662911 D01 Multiple Transmitter Output v02r01.

3. FACILITIES AND ACCREDITATION

Accreditation Certificate	A2LA (Certificate No.: 4102.01) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA. FCC (FCC Designation No.: CN1187) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. Has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules IC(Company No.: 21320) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with ISED. The Company Number is 21320. VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with VCCI, the Membership No. is 3793. Facility Name: Chamber D, the VCCI registration No. is G-20019 and R-20004 Shielding Room B , the VCCI registration No. is C-20012 and T-20011
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Note 1: All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China

Note 2: The test anechoic chamber in UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.



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 recognize national standards.

4.2. MEASUREMENT UNCERTAINTY

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

Test Item	Uncertainty
Uncertainty for Conduction emission test	2.90dB
Uncertainty for Radiation Emission test(include Fundamental emission) (9KHz-30MHz)	2.2dB
Uncertainty for Radiation Emission test(include Fundamental emission) (30MHz-1GHz)	4.52dB
Uncertainty for Radiation Emission test (1GHz to 26GHz)(include Fundamental emission)	5.04dB(1-6GHz)
	5.30dB (6GHz-18Gz)
	5.23dB (18GHz-26Gz)
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	



5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

EUT Name	Videoconferencing Endpoint
Model Name	HUAWEI Bar 500
Band Name	HUAWEI
Power Rate (AC/DC POWER ADAPTER)	Input:100-240Vac,50/60 Hz,2.5A Output:19Vdc; 7.89A (Input: 100-176V) Output:19Vdc; 9.5A (Input: 176-240V)

5.2. MAXIMUM OUTPUT POWER

Number of Transmit Chains (NTX)	IEE Std. 802.11	Frequency (MHz)	Channel Number	Max PK Conducted Power (dBm)
1	IEEE 802.11b	2412-2472	1-13[13]	14.67
1	IEEE 802.11g	2412-2472	1-13[13]	20.35
2	IEEE 802.11n HT20	2412-2472	1-13[13]	20.25

5.3. CHANNEL LIST

Channel List for 802.11b/g/n (20 MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	5	2432	9	2452	13	2472
2	2417	6	2437	10	2457		
3	2422	7	2442	11	2462		
4	2427	8	2447	12	2467		



5.4. TEST CHANNEL CONFIGURATION

Test Mode	Test Channel	Frequency
WiFi TX(802.11b)	CH 01, CH 06, CH 11, CH 12,CH13	2412MHz, 2437MHz, 2462MHz, 2467MHz,2472MHz
WiFi TX(802.11g)	CH 01, CH 06, CH 11, CH 12,CH13	2412MHz, 2437MHz, 2462MHz, 2467MHz,2472MHz
WiFi TX(802.11n VHT20)	CH 01, CH 06, CH 11, CH 12,CH13	2412MHz, 2437MHz, 2462MHz, 2467MHz,2472MHz



5.5. DESCRIPTION OF AVAILABLE ANTENNAS

Antenna manufacturer: NIPPO

Chain Ant.	Frequency (MHz)	Max Antenna Gain (dBi)	Antenna Type
0	2412-2472	4.65	Dipole Antenna
1	2412-2472	5.55	Dipole Antenna

Antenna manufacturer: Amphenol

Chain Ant.	Frequency (MHz)	Max Antenna Gain (dBi)	Antenna Type
0	2412-2472	4.50	Dipole Antenna
1	2412-2472	4.10	Dipole Antenna

Test Mode	Transmit and Receive Mode	Description
IEEE 802.11b	☒1TX, 1RX	Chain 1 or Chain 2 can be used as transmitting/receiving antenna.
IEEE 802.11g	☒1TX, 1RX	Chain 1 or Chain 2 can be used as transmitting/receiving antenna.
IEEE 802.11n HT20	☒2TX, 2RX	Chain 1 and Chain 2 can be used as transmitting/receiving antenna.

Directional gain				
Mode	Frequency (MHz)	Max Antenna Gain (dBi)	For power measurements Directional gain Gain (dBi)	For power spectral density (PSD) measurements Gain (dBi)
SISO	2412-2472	5.55	4.7	4.7
CDD 2TX HT20MHz	2412-2472	5.55	4.7	8.55

Note : Directional gain = GANT + Array Gain

For power spectral density (PSD) measurements on all devices,

Array Gain = $10 \log(N_{ANT}/N_{SS})$ dB.

For power measurements on IEEE 802.11 devices, 1,2

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;

Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT} ;

Array Gain = $5 \log(N_{ANT}/N_{SS})$ dB or 3 dB, whichever is less, for 20-MHz channel widths with $N_{ANT} \geq 5$.

Note: The antenna of the EUT is provided by two manufacturers. The antenna types of the two manufacturers are the same, NIPPO antenna gain is greater, So the NIPPO antenna is selected for the test.

5.6. WORST-CASE CONFIGURATIONS

The Worse Case Power Setting Parameter under 2400 ~ 2483.5MHz Band							
Test Software		adb					
Modulation Mode	Transmit Chain	Test Channel					
		NCB: 20MHz					
		CH 1	CH 6	CH 11	CH 12	CH 13	
802.11b	0&1	14	14.5	14.5	14	10.5	
802.11g	0&1	14	14	13	9	5.5	
802.11n HT20	0&1	12	12	12	9	5.5	

IEE Std. 802.11	Modulation Technology	Modulation Type	Data Rate (Mbps)	Worst Case (Mbps)
b	DSSS	CCK	11/5.5/2/1	1
g	OFDM	BPSK, QPSK, 16QAM, 64QAM	54/48/36/24/18/12/9/6	6
n HT20	OFDM	BPSK, QPSK, 16QAM, 64QAM	(MCS0~MCS9)	MCS0

Remarks: EUT support for SISO and CDD MIMO Transmission, only 802.11n supports CDD MIMO Mode, SISO mode sets the same power level as MIMO mode, so MIMO mode is the worst case.



DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Item	Equipment	Brand Name	Model Name	P/N
1	Laptop	ThinkPad	T460S	SL10K24796 JS
2	Highpass Filter	Wi	WHKX10-2700-3000-18000-40SS	23
3	Band Reject Filter	Wainwright	WRCJV8-2350-2400-2483.5-2533.5-40SS	4

Note: Item 2 and Item 3 only use for radiated test.

I/O CABLES

Cable No	Port	Connector Type	Shield	Cable Length(m)	Remarks
1	RJ45	RJ45	Yes	5	/

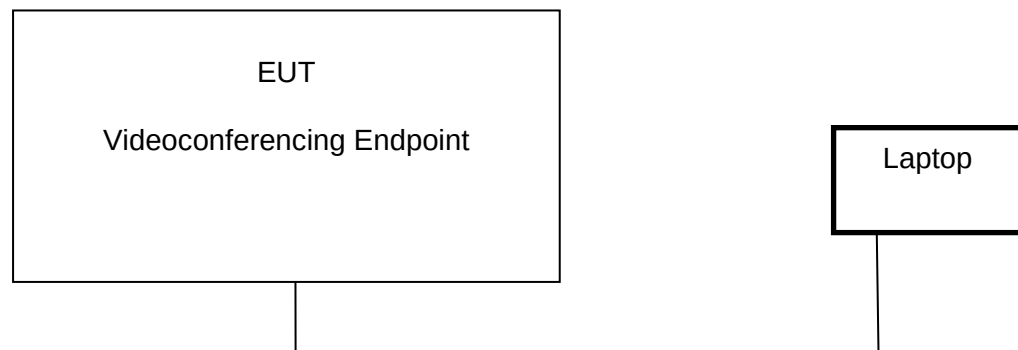
ACCESSORY

Item	Accessory	Brand Name	Model Name	Description
1	POWER ADPTER	HUAWEI	HW-190950T0D	Input: 100-240Vac, 50/60 Hz, 2.5A Output: 19Vdc; 7.89A (Input: 100-176V) Output: 19Vdc; 9.5A (Input: 176-240V)

TEST SETUP

The EUT can work in engineering mode with the inside software.

SETUP DIAGRAM FOR TESTS





6. MEASURING INSTRUMENT AND SOFTWARE USED

Conducted Emissions						
Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
☒	EMI Test Receiver	R&S	ESR3	101961	Dec.10,2018	Dec.09,2019
☒	Two-Line V-Network	R&S	ENV216	101983	Dec.10,2018	Dec.09,2019
Software						
Used	Description		Manufacturer	Name		Version
☒	Test Software for Conducted disturbance		UL	Antenna port		Ver. 7.2
Radiated Emissions						
Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
☒	MXE EMI Receiver	KESIGHT	N9038A	MY56400036	Dec.10,2018	Dec.09,2019
☒	Hybrid Log Periodic Antenna	TDK	HLP-3003C	130960	Sep.17, 2018	Sep.16, 2021
☒	Preamplifier	HP	8447D	2944A09099	Dec.10,2018	Dec.09,2019
☒	EMI Measurement Receiver	R&S	ESR26	101377	Dec.10,2018	Dec.09,2019
☒	Horn Antenna	TDK	HRN-0118	130939	Sep.17, 2018	Sep.16, 2021
☒	High Gain Horn Antenna	Schwarzbeck	BBHA-9170	691	Sep.17, 2018	Sep.16, 2021
☒	Preamplifier	TDK	PA-02-0118	TRS-305-00066	Dec.10,2018	Dec.09,2019
☒	Preamplifier	TDK	PA-02-2	TRS-307-00003	Dec.10,2018	Dec.09,2019
☒	Preamplifier	TDK	PA-02-3	TRS-308-00002	Dec.10,2018	Dec.09,2019
☒	Loop antenna	Schwarzbeck	1519B	00008	Mar. 26, 2016	Mar. 26, 2019
Software						
Used	Description		Manufacturer	Name		Version
☒	Test Software for Radiated disturbance		Farad	EZ-EMC		Ver. UL-3A1
Other instruments						
Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
☒	Spectrum Analyzer	Keysight	N9030A	MY55410512	Dec.10,2018	Dec.09,2019
☒	Power Sensor	Keysight	U2021XA	MY57030004	Dec.10,2018	Dec.09,2019



7. MEASUREMENT METHODS

No.	Test Item	KDB Name	Section
1	6dB Bandwidth	KDB 558074 D01 DTS Meas Guidance v05	8.2
2	Peak& Average Output Power	KDB 558074 D01 DTS Meas Guidance v05	8.3.1.3/8.3.2.3
3	Power Spectral Density	KDB 558074 D01 DTS Meas Guidance v05	8.4
4	Out-of-band emissions in non-restricted bands	KDB 558074 D01 DTS Meas Guidance v05	8.5
5	Out-of-band emissions in restricted bands	KDB 558074 D01 DTS Meas Guidance v05	8.6
6	Band-edge	KDB 558074 D01 DTS Meas Guidance v05	8.7
7	Conducted Emission Test For AC Power Port	ANSI C63.10-2013	6.2



8. ANTENNA PORT TEST RESULTS

8.1. ON TIME AND DUTY CYCLE

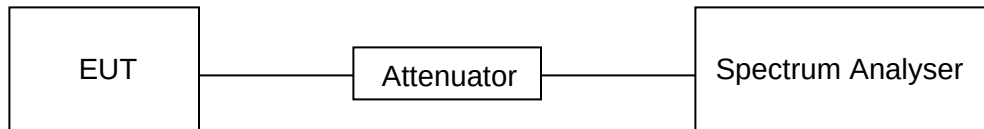
LIMITS

None; for reporting purposes only

PROCEDURE

KDB 558074 Zero-Span Spectrum Analyzer Method

TEST SETUP



TEST ENVIRONMENT

Temperature	23.4°C	Relative Humidity	56%
Atmosphere Pressure	101kPa	Test Voltage	AC 120V

RESULTS

Chain 0

Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (KHz)	Final setting For VBW (KHz)
11b	8.603	8.705	0.9883	98.83	0.05	0.12	200
11g	1.421	1.527	0.9306	93.06	0.31	0.70	1
11n H20	1.330	1.437	0.9255	92.55	0.34	0.75	1

Note:

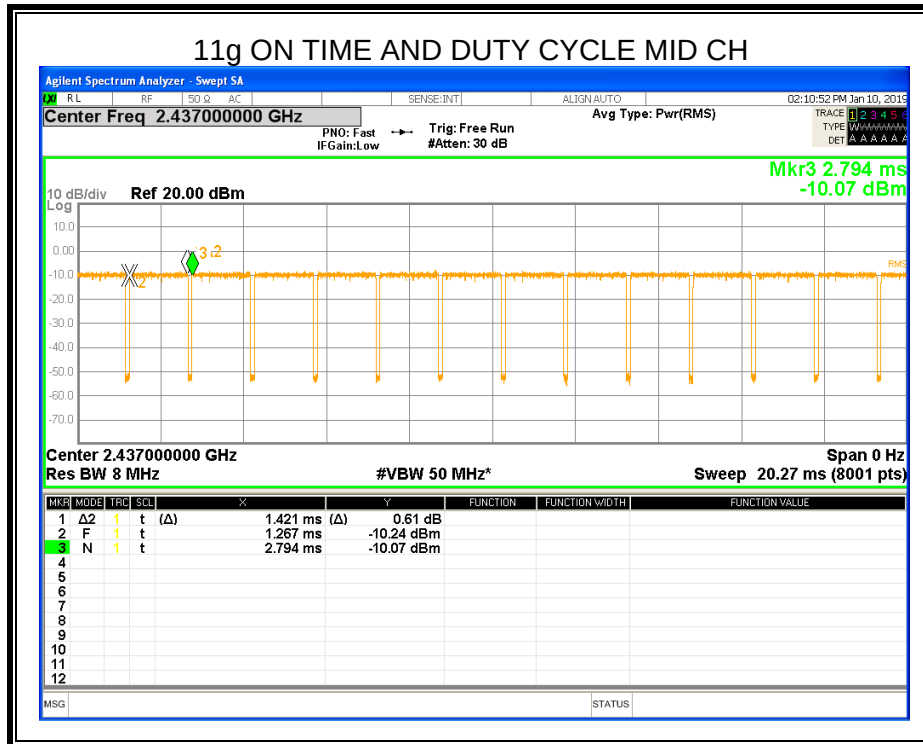
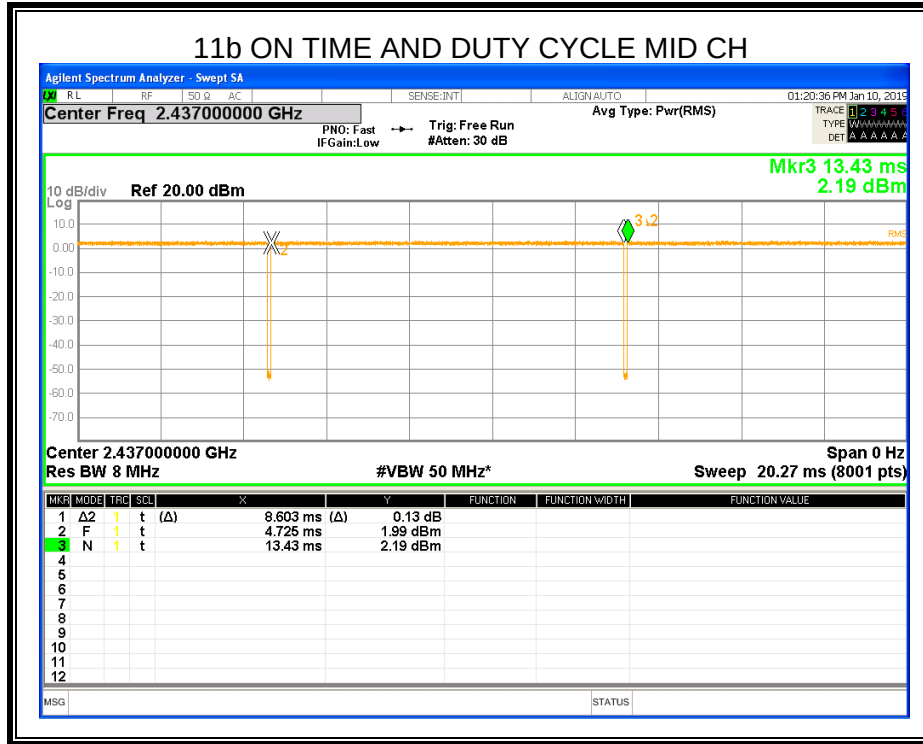
Duty Cycle Correction Factor=10log (1/x).

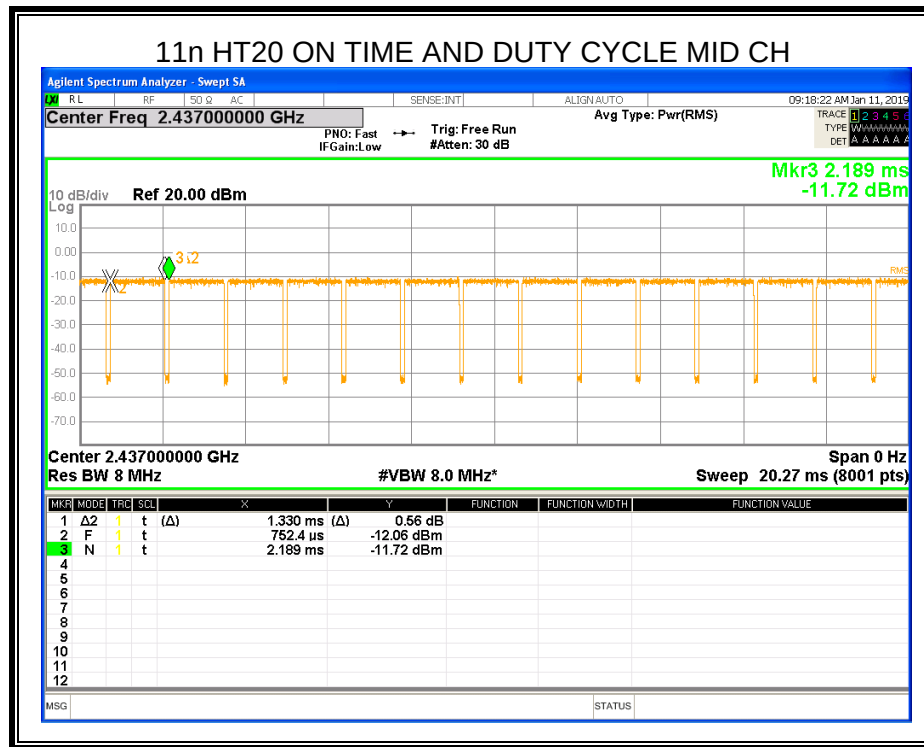
Where: x is Duty Cycle (Linear)

Where: T is On Time

If that calculated VBW is not available on the analyzer then the next higher value should be used.

Chain 0 and Chain 1 has the same duty cycle, only Chain 0 data show here.







8.2. 6 dB DTS BANDWIDTH AND 99% BANDWIDTH

LIMITS

FCC Part15 (15.247) Subpart C RSS-247 ISSUE 2			
Section	Test Item	Limit	Frequency Range (MHz)
FCC 15.247(a)(2) RSS-247 5.1 (a)	6 dB Bandwidth	$\geq 500\text{KHz}$	2400-2483.5
RSS-Gen Clause 6.6	99% Bandwidth	For reporting purposes only.	2400-2483.5

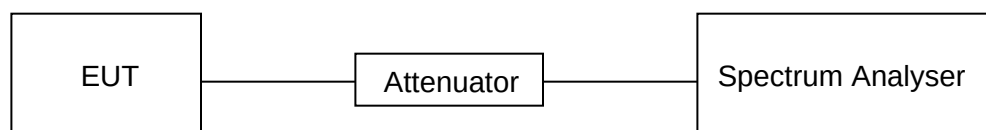
TEST PROCEDURE

Connect the UUT to the spectrum analyser and use the following settings:

Center Frequency	The centre frequency of the channel under test
Detector	Peak
RBW	For 6dB Bandwidth :100K For 99% Occupied Bandwidth :1% to 5% of the occupied bandwidth
VBW	For 6dB Bandwidth : $\geq 3 \times \text{RBW}$ For 99% Occupied Bandwidth : approximately $3 \times \text{RBW}$
Trace	Max hold
Sweep	Auto couple

Allow the trace to stabilize and measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB and 99% relative to the maximum level measured in the fundamental emission.

TEST SETUP





TEST ENVIRONMENT

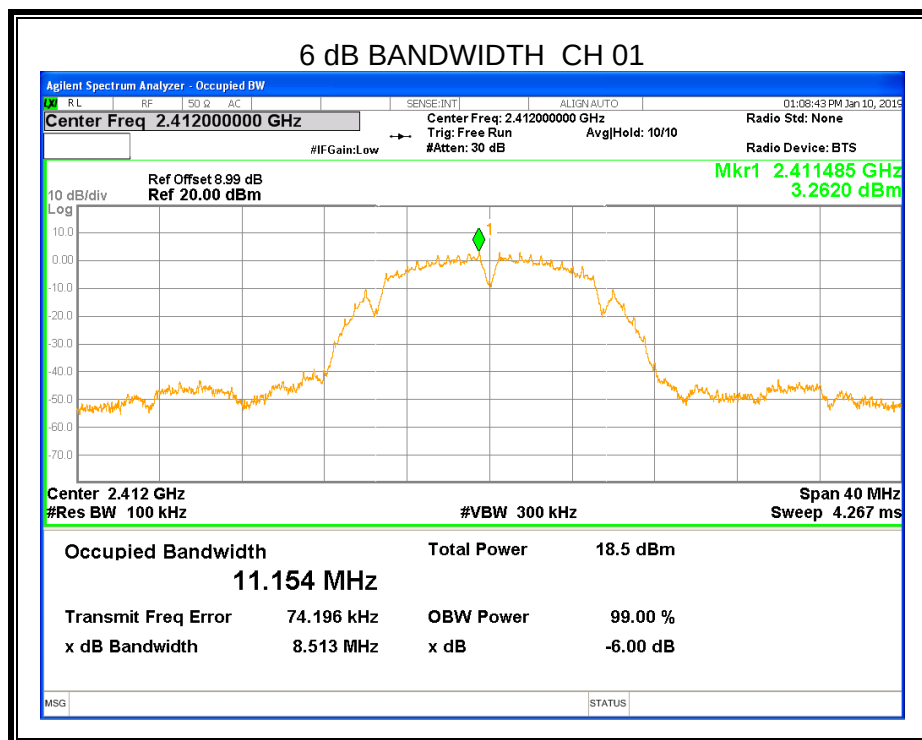
Temperature	23.4°C	Relative Humidity	56%
Atmosphere Pressure	101kPa	Test Voltage	AC 120V

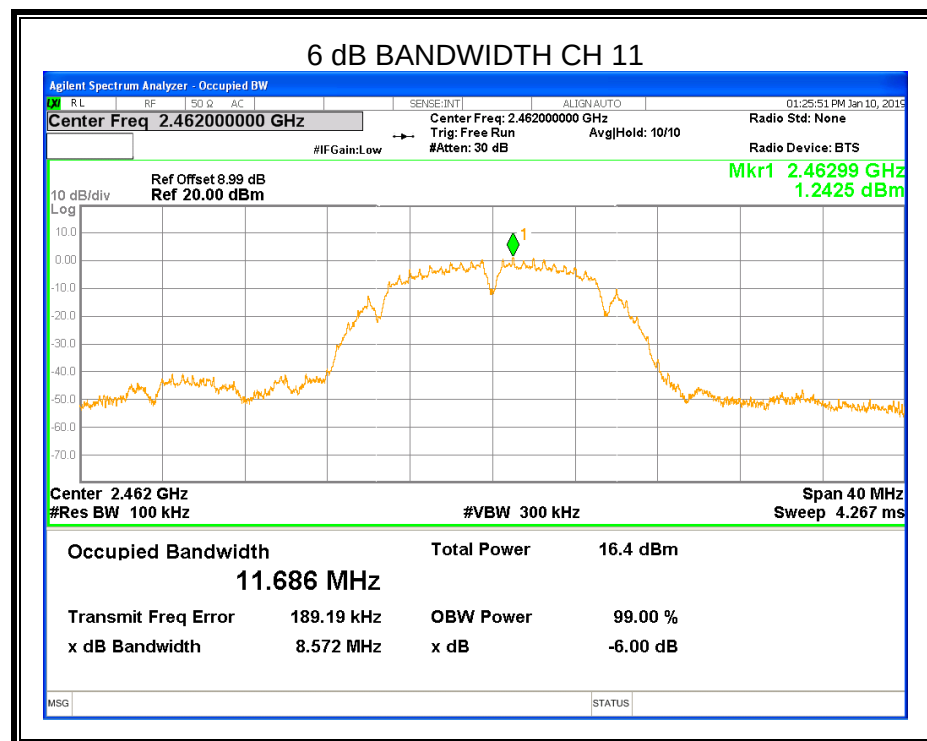
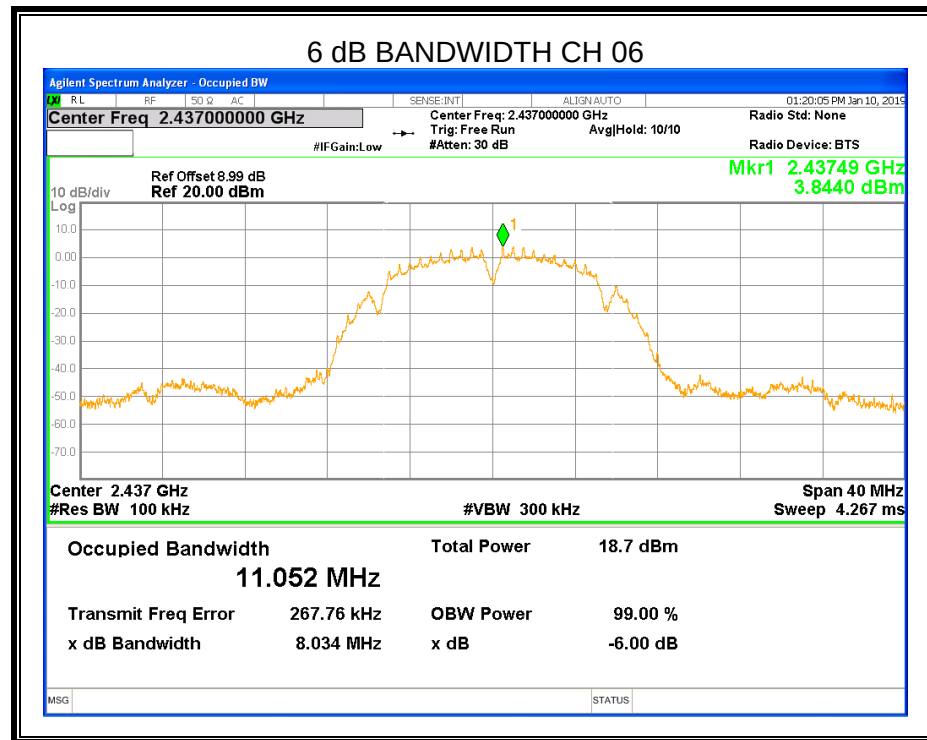
RESULTS

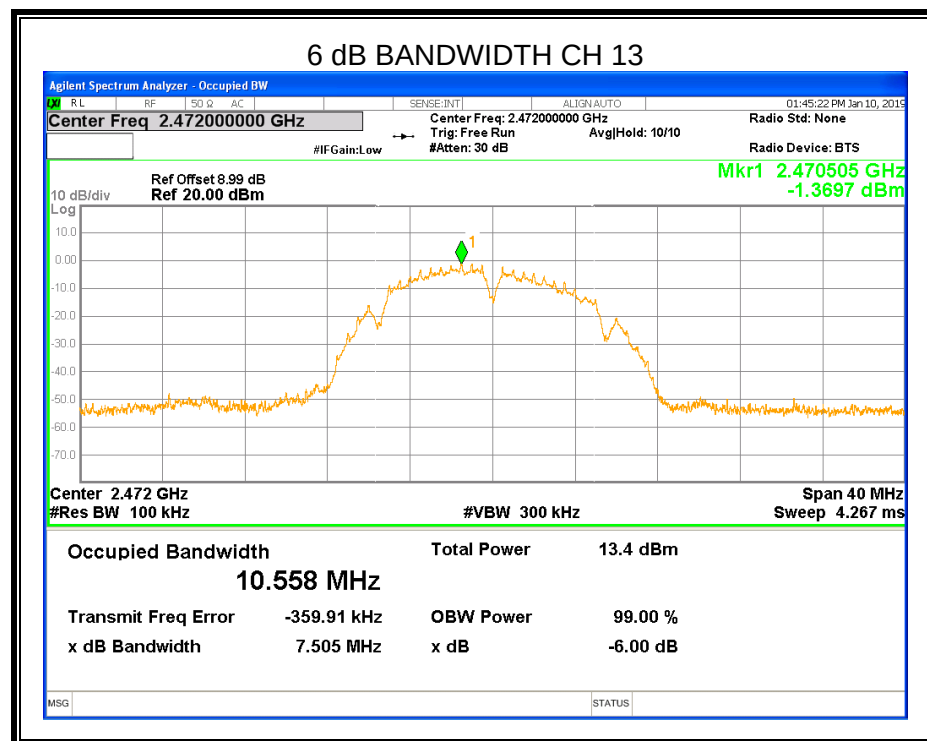
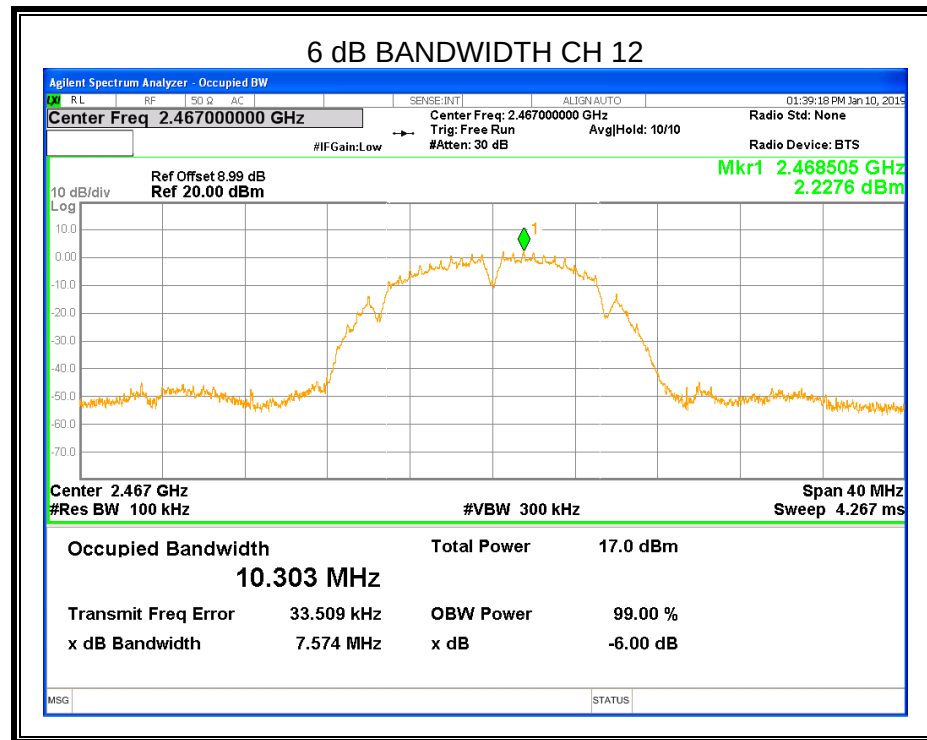
Chain 0 (WORST-CASE CONFIGURATION)

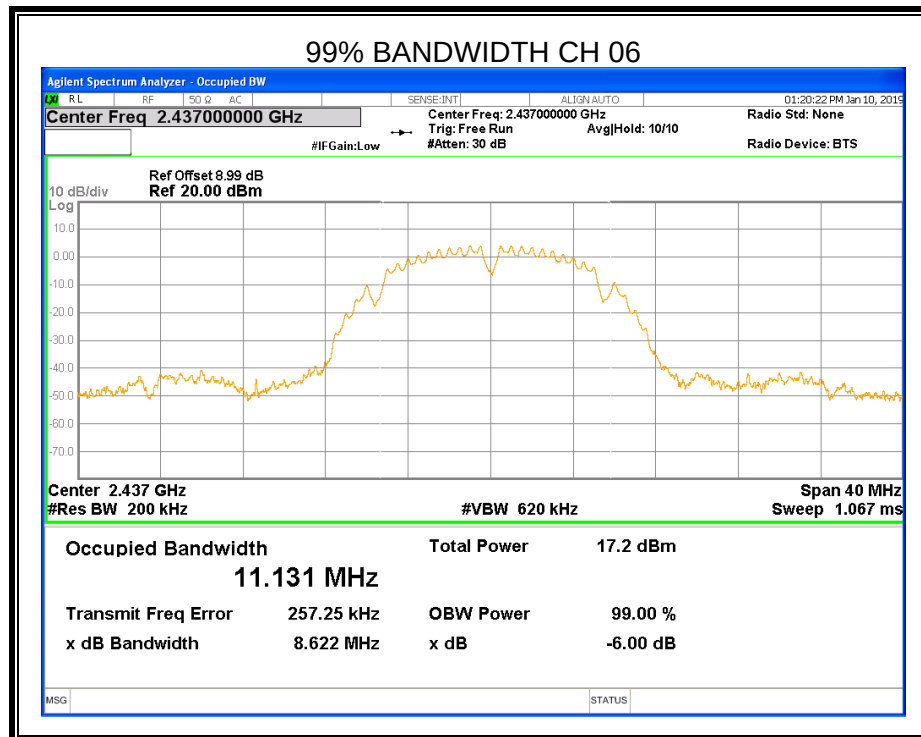
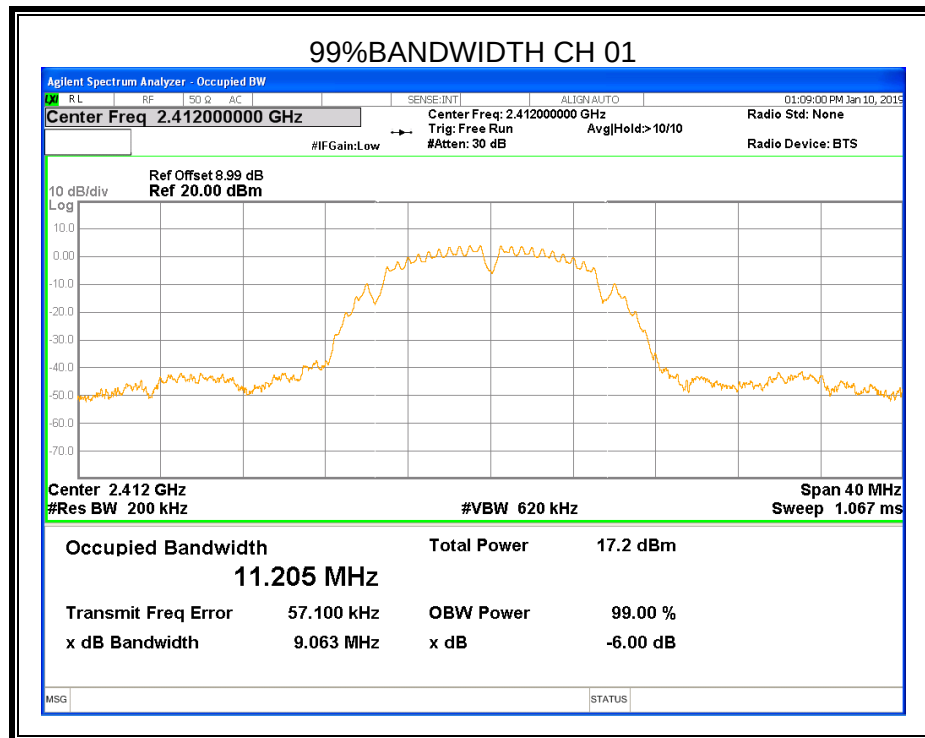
8.2.1. 802.11b MODE

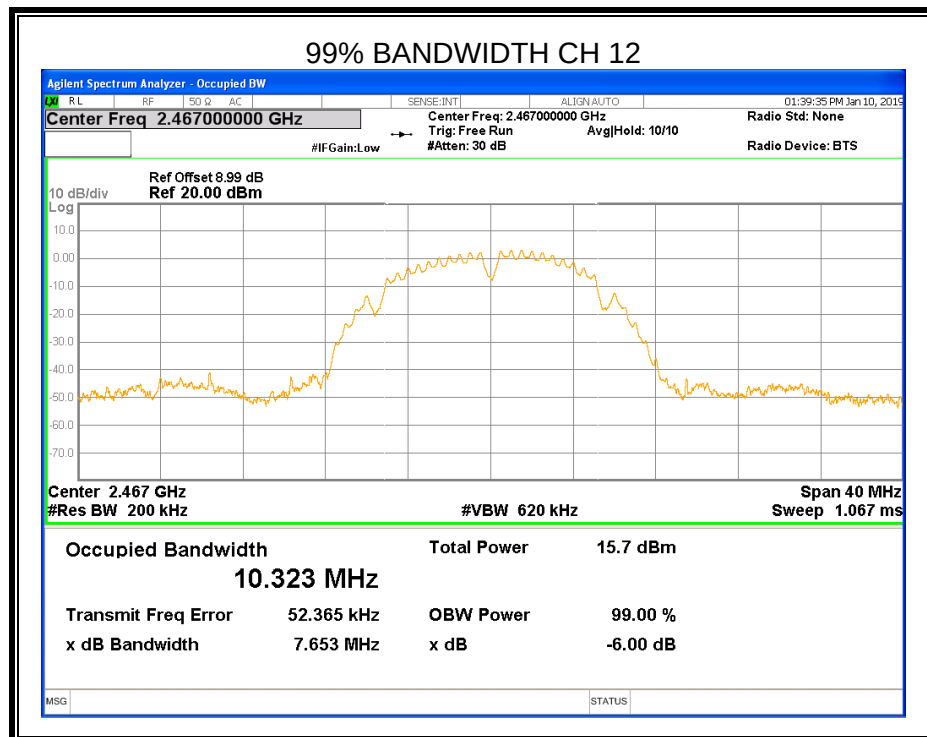
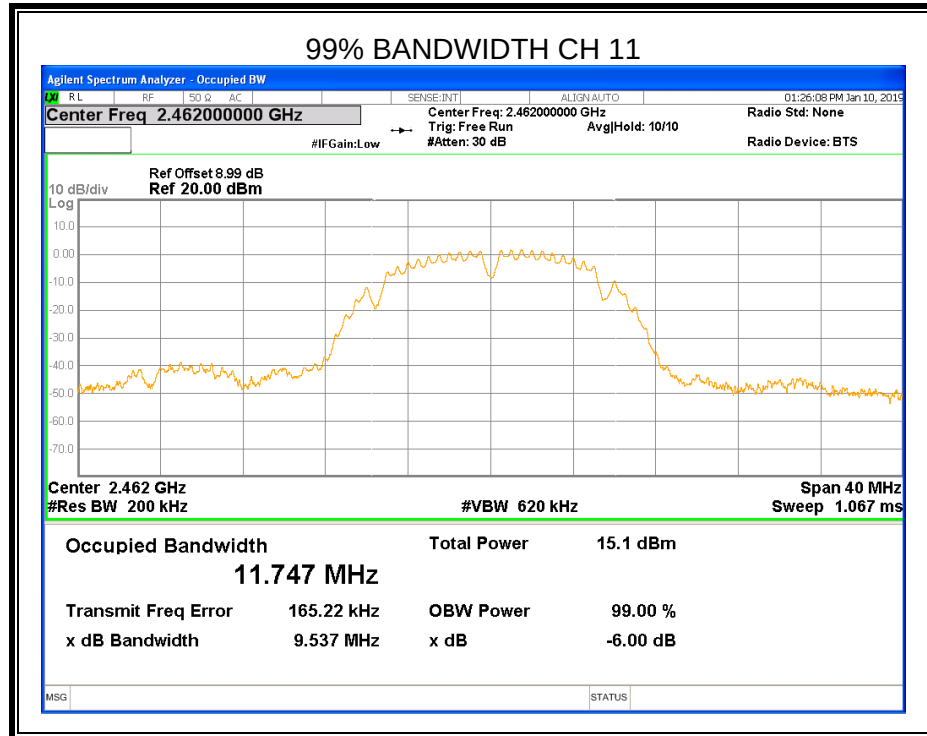
Channel	6dB bandwidth (MHz)	99% bandwidth (MHz)	Limit (kHz)	Result
01	8.513	11.205	≥ 500	Pass
06	8.034	11.131	≥ 500	Pass
11	8.572	11.747	≥ 500	Pass
12	7.574	10.323	≥ 500	Pass
13	7.505	10.511	≥ 500	Pass

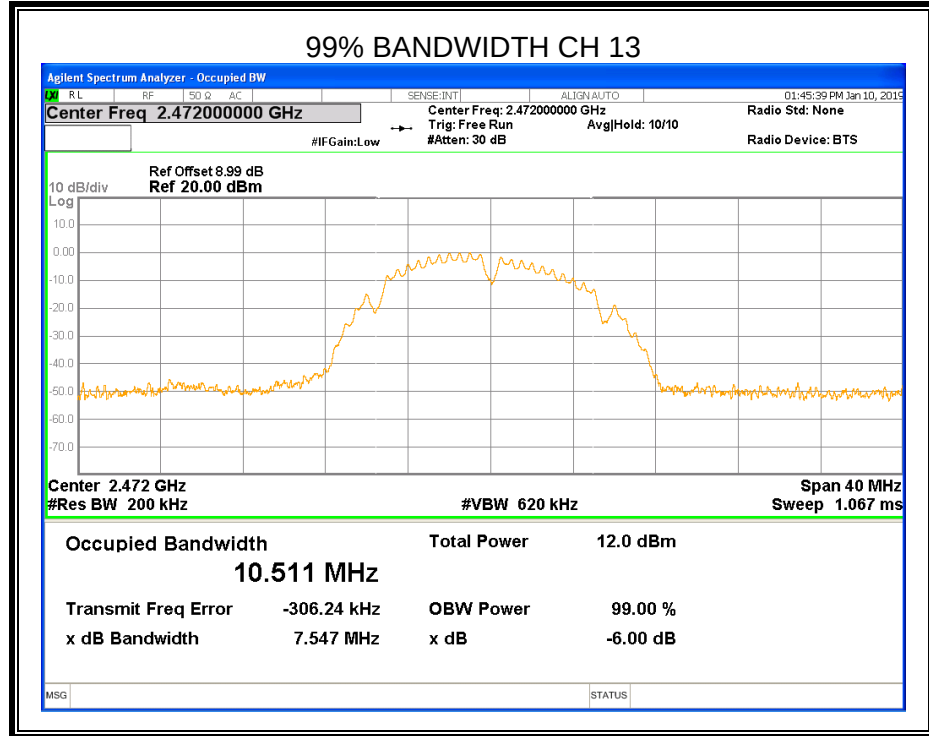








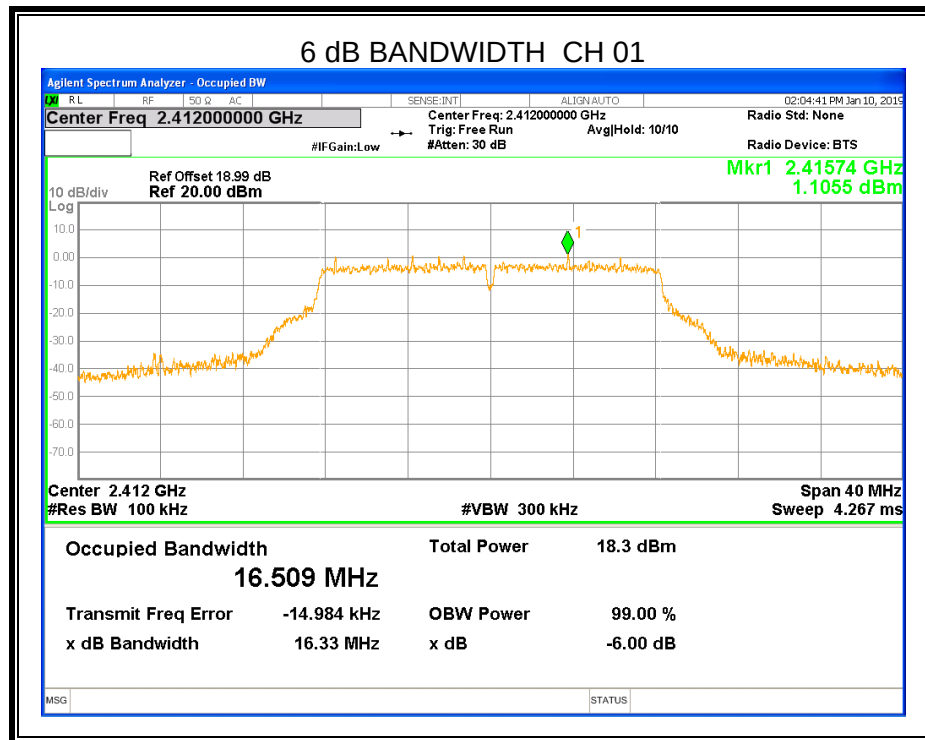


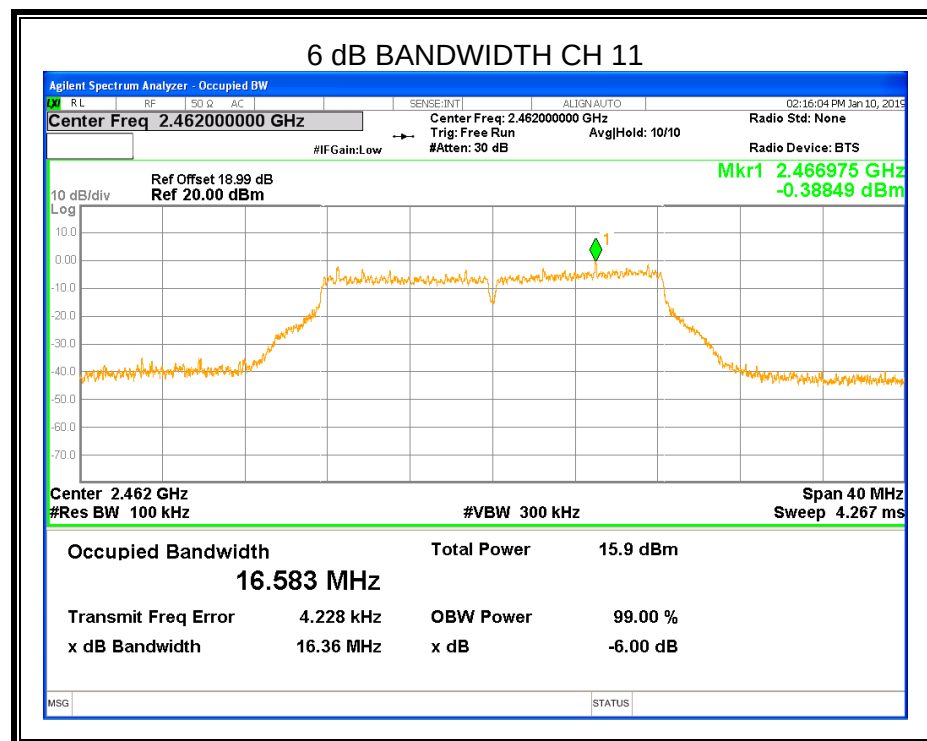
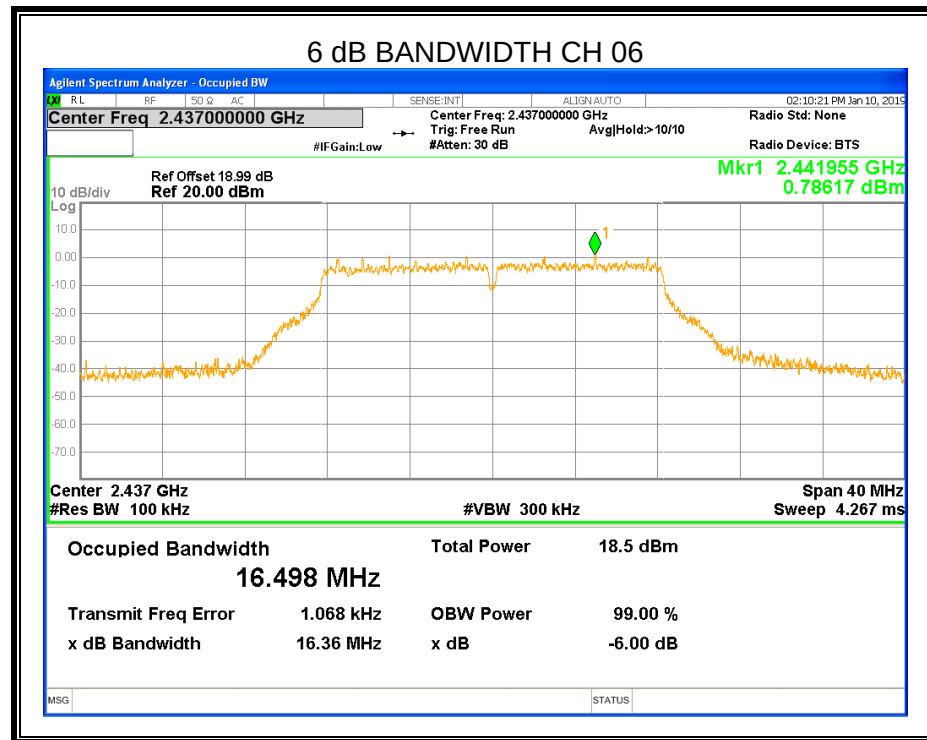


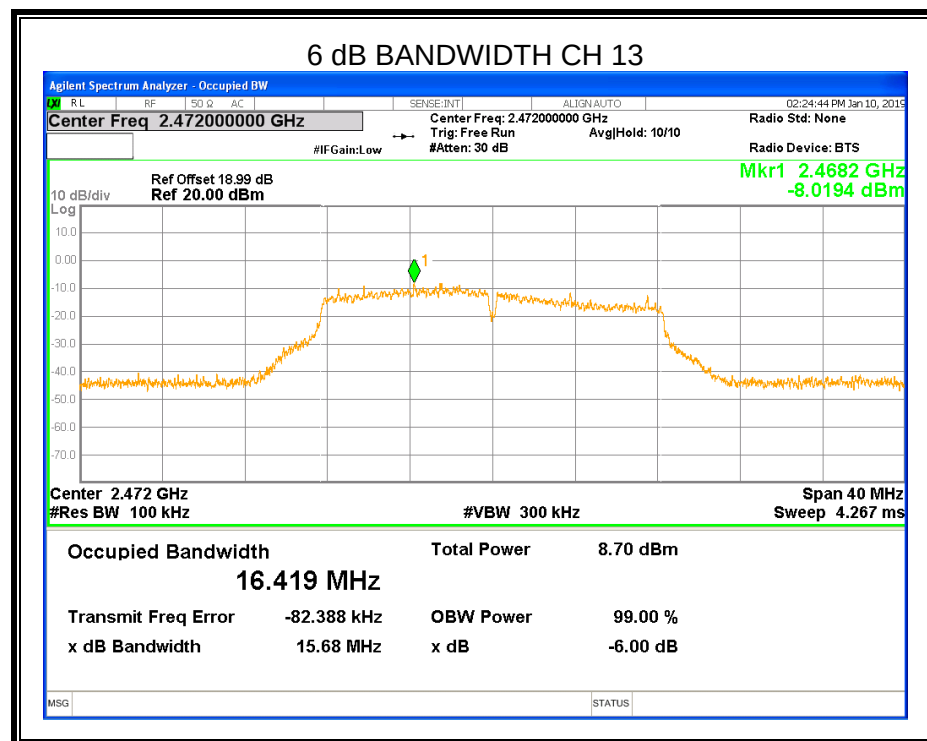
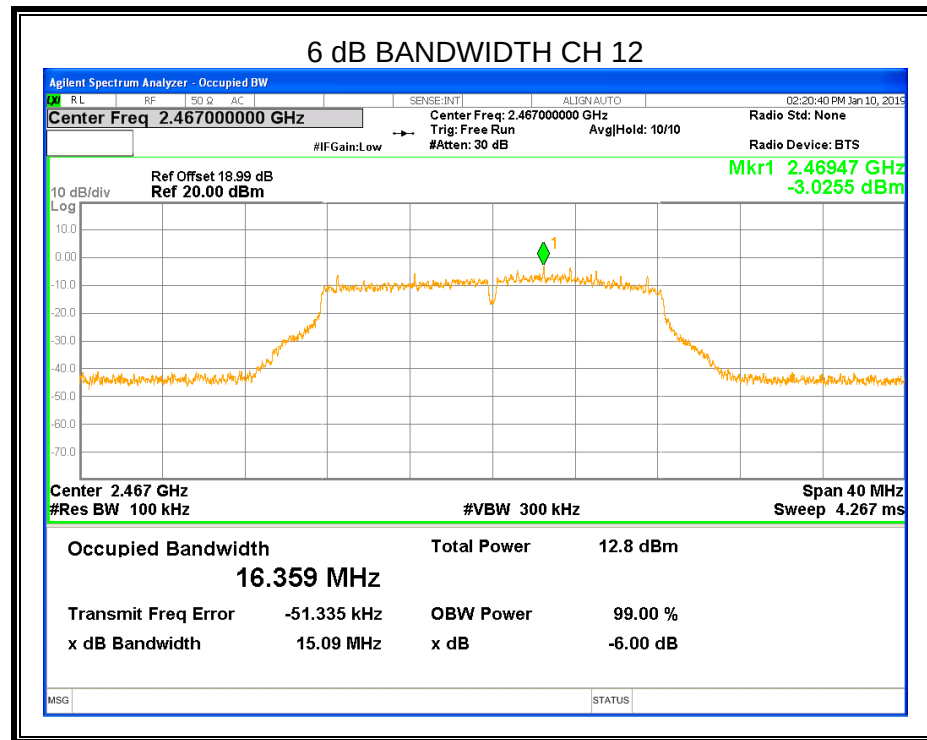


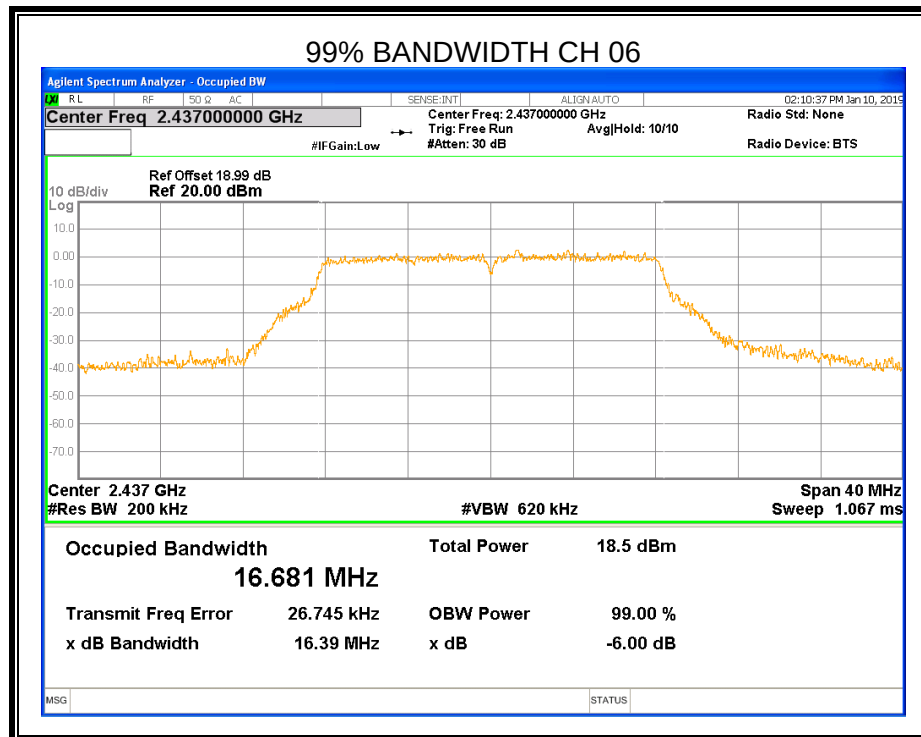
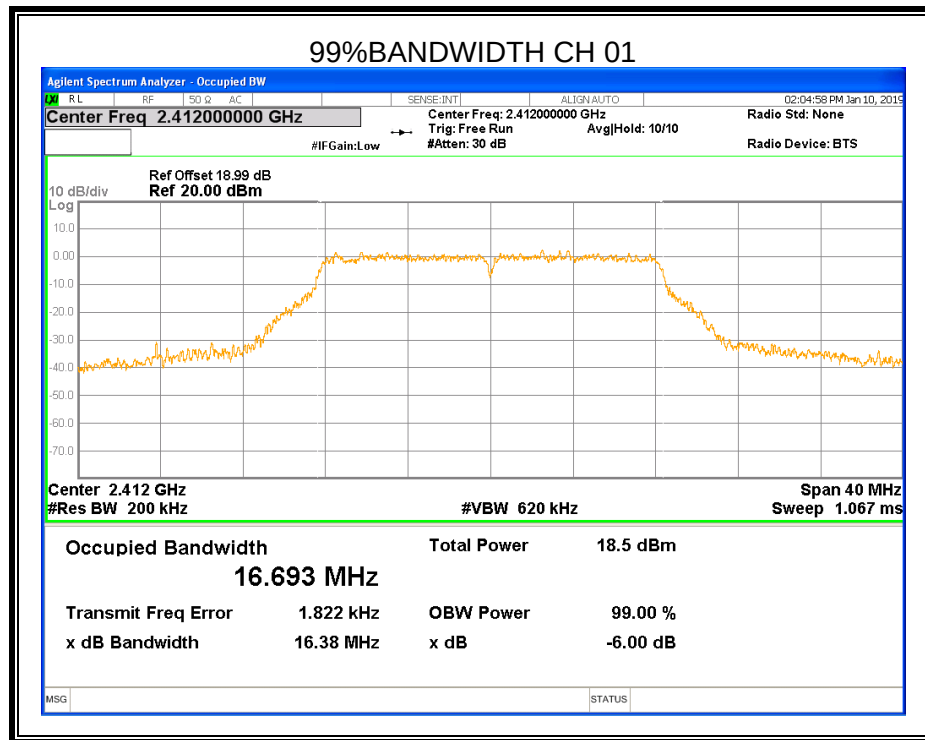
8.2.2. 802.11g MODE

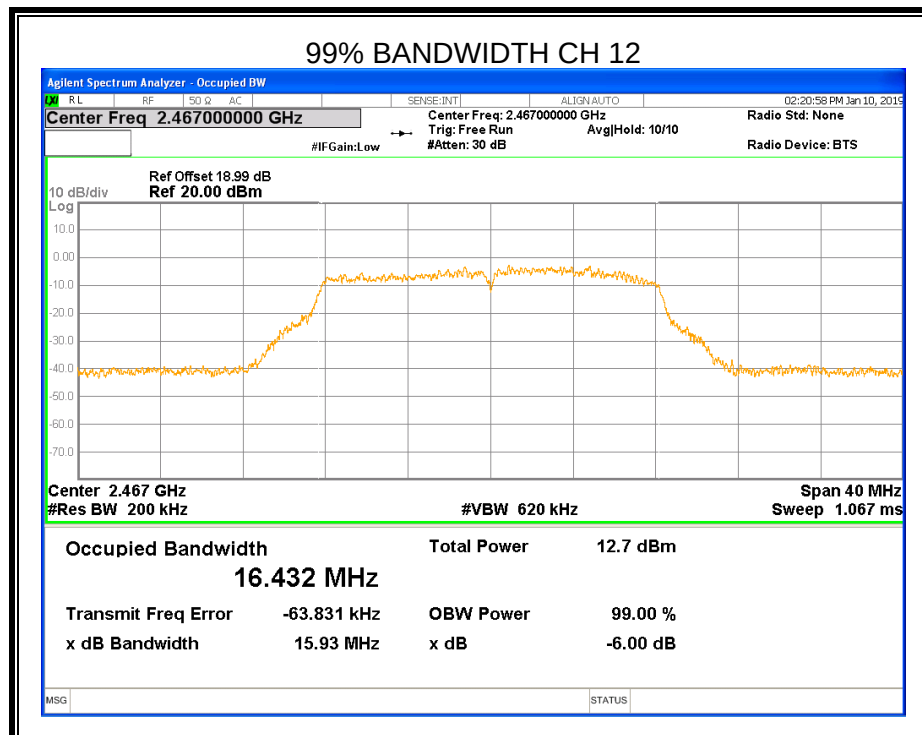
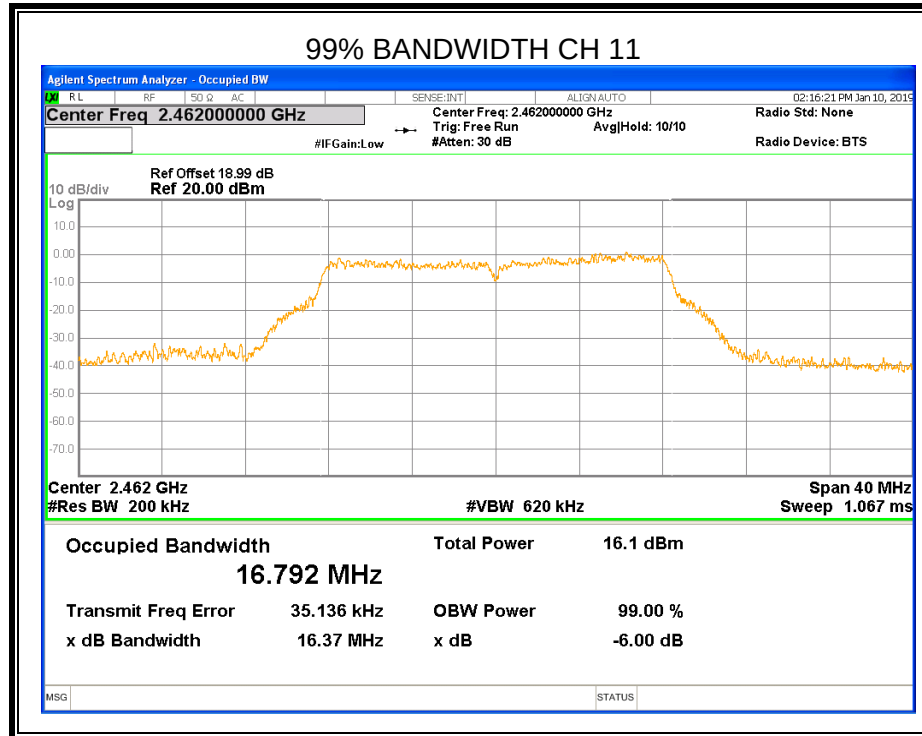
Channel	6dB bandwidth (MHz)	99% bandwidth (MHz)	Limit (kHz)	Result
01	16.33	16.693	≥ 500	Pass
06	16.36	16.681	≥ 500	Pass
11	16.36	16.792	≥ 500	Pass
12	15.09	16.432	≥ 500	Pass
13	15.68	16.490	≥ 500	Pass

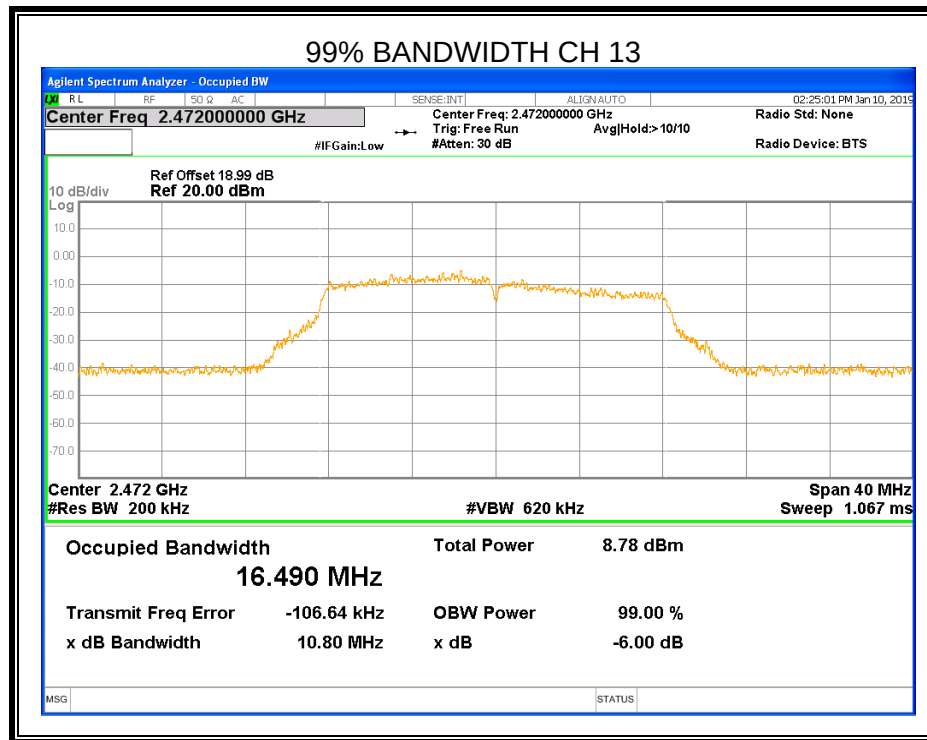








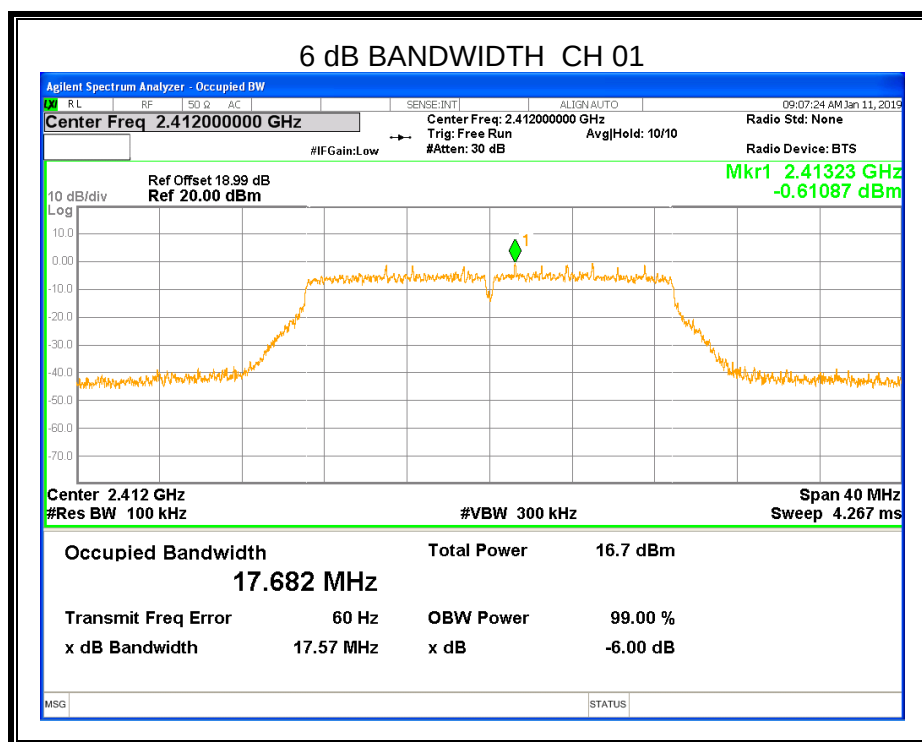


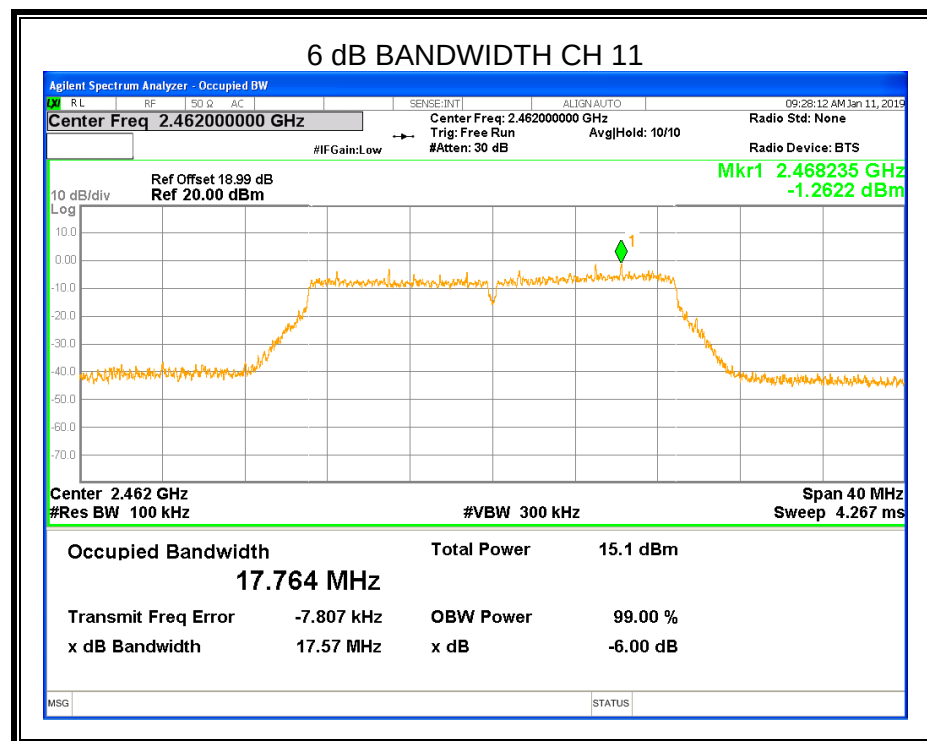
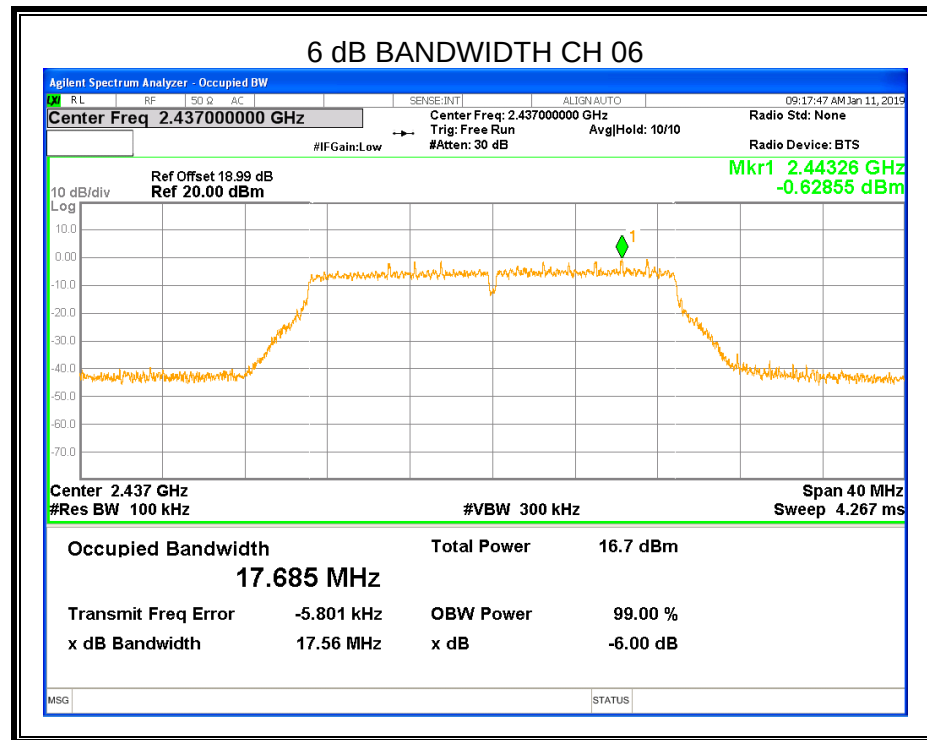


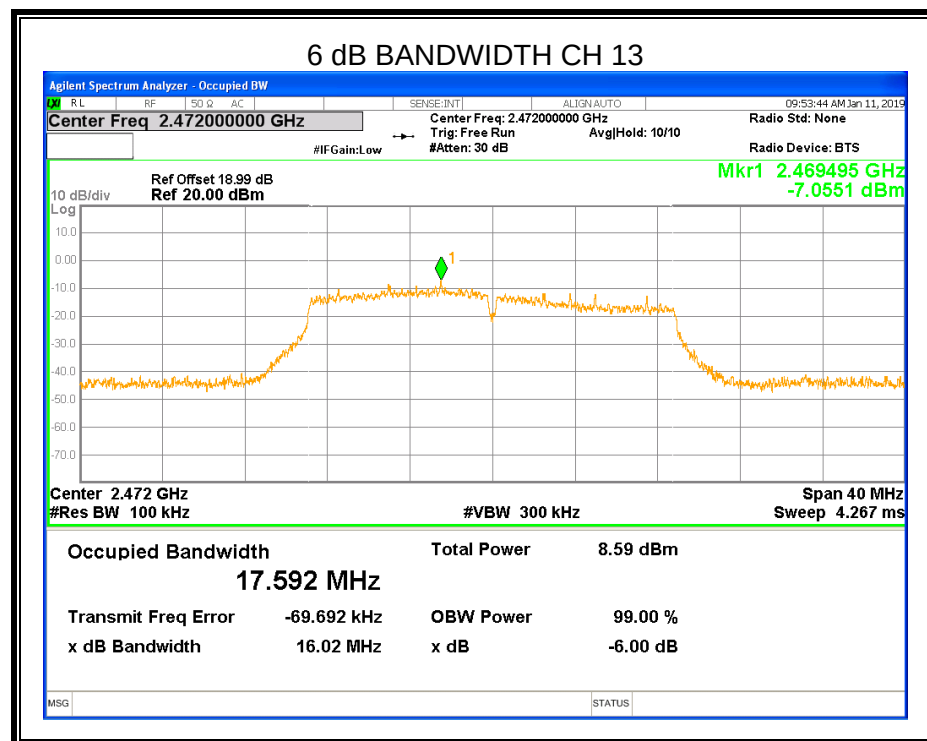
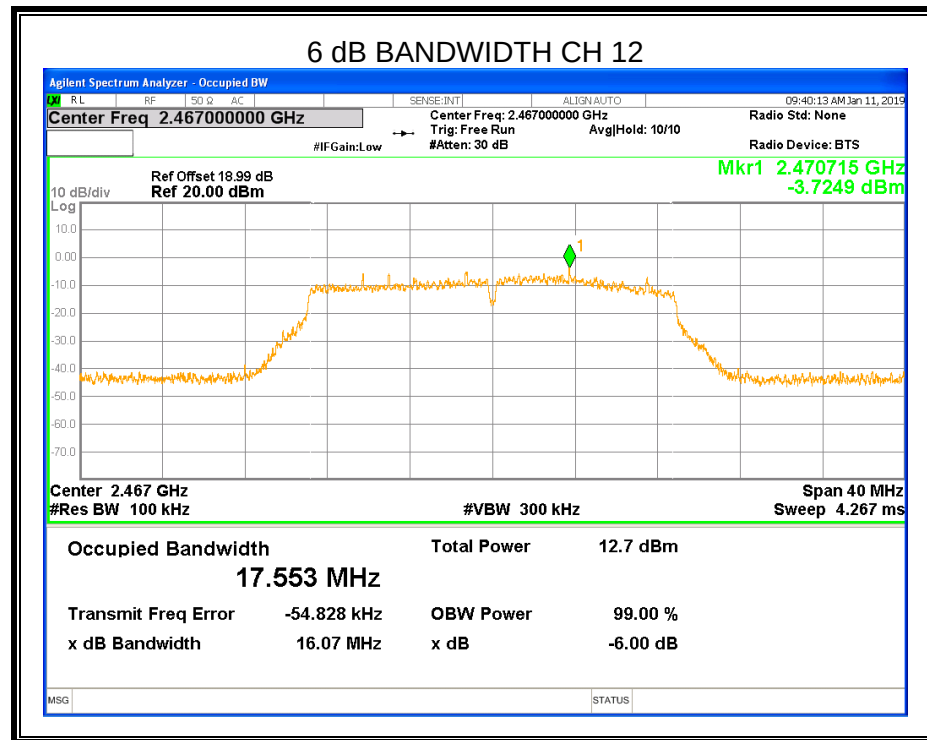


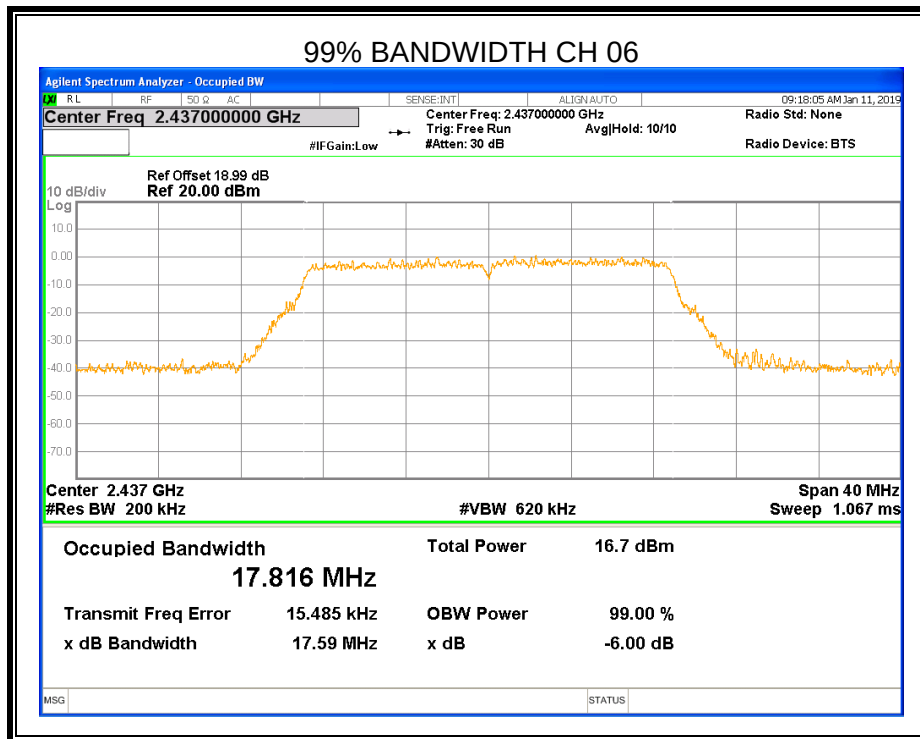
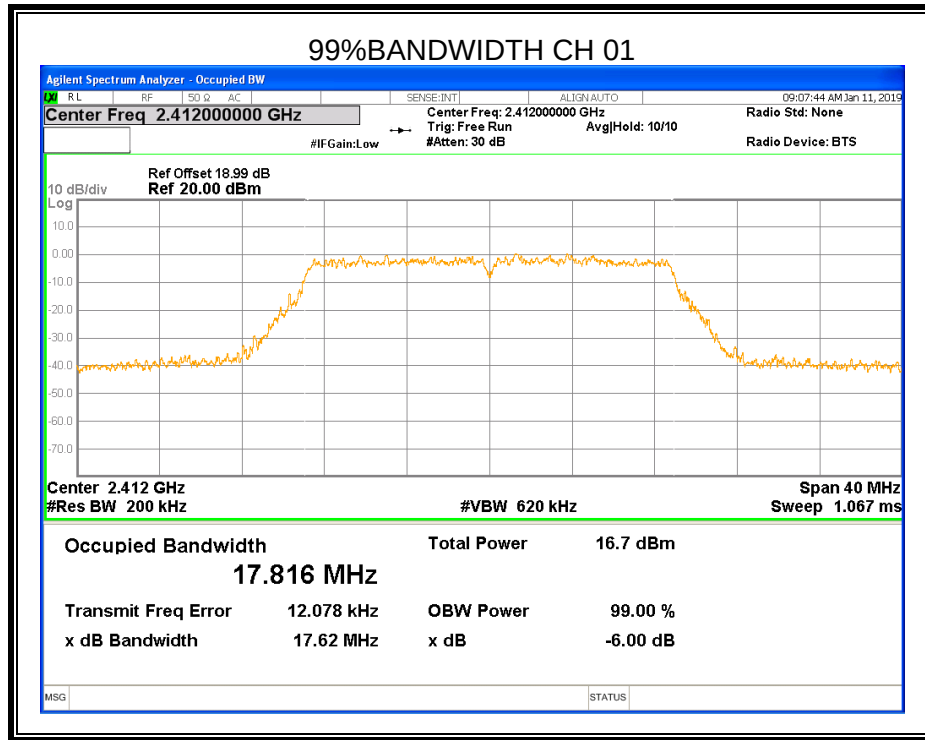
8.2.3. 802.11n HT20 MODE

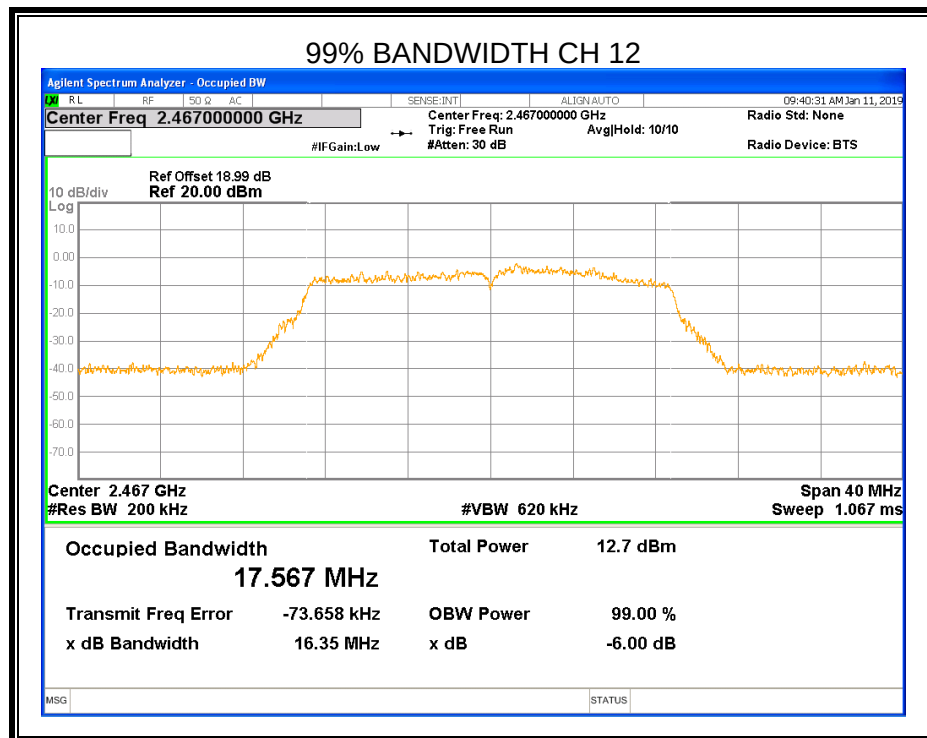
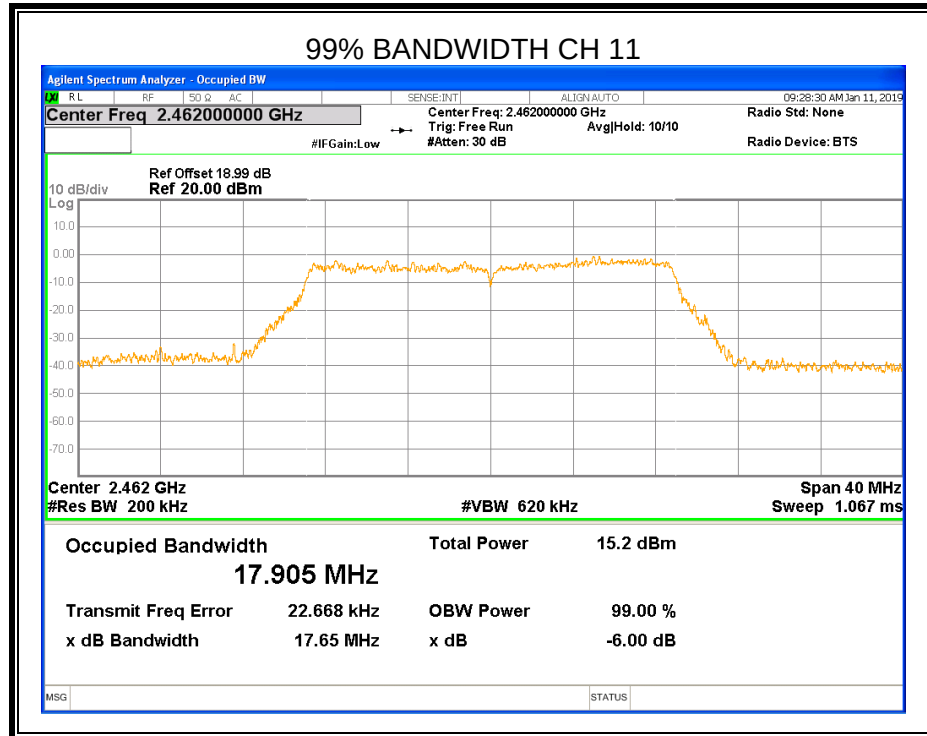
Channel	6dB bandwidth (MHz)	99% bandwidth (MHz)	Limit (kHz)	Result
01	17.57	17.816	≥ 500	Pass
06	17.56	17.816	≥ 500	Pass
11	17.57	17.905	≥ 500	Pass
12	16.07	17.567	≥ 500	Pass
13	16.02	17.679	≥ 500	Pass

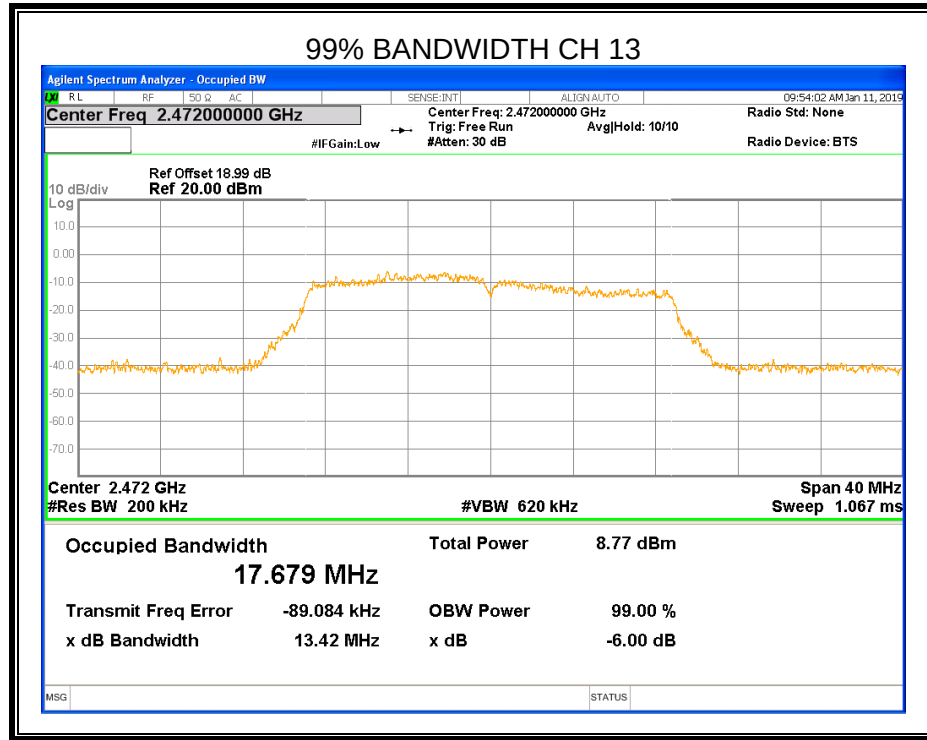














8.3. Maximum conducted (Average and Peak) output power

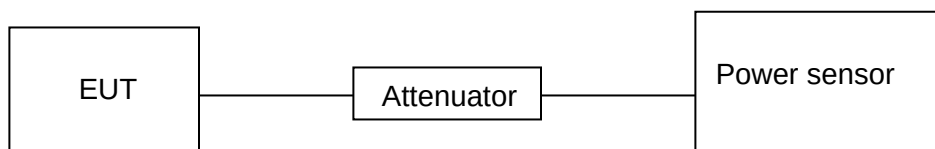
LIMITS

FCC Part15 (15.247) Subpart C RSS-247 ISSUE 2			
Section	Test Item	Limit	Frequency Range (MHz)
FCC 15.247(b)(3) RSS-247 5.4 (e)	Conducted Output Power	1 watt or 30dBm (See Note 1/2)	2400-2483.5
Note:	1. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi. 2. Limit=30dBm – (Directional gain -6)dBi Directional gain: Please refer to the description in section 5.4.		

TEST PROCEDURE

Place the EUT on the table and set it in the transmitting mode.
Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the Power sensor.
Measure peak power each channel.
Peak Detector use for Peak result.
AVG Detector use for AVG result.

TEST SETUP



TEST ENVIRONMENT

Temperature	23.4°C	Relative Humidity	56%
Atmosphere Pressure	101kPa	Test Voltage	AC 120V



RESULTS

Maximum Conducted AVG Outpower

Mode: SISO for 802.11b and 802.11g, MIMO CDD for 802.11n						
Mode	Channel	Chain	Maximum Conducted AVG Outpower [dBm]		Limit [dBm]	Verdict
			Single	Total		
802.11b	01	0	12.01		30	PASS
		1	12.55			
	06	0	12.01		30	PASS
		1	12.27			
	11	0	9.78		30	PASS
		1	11.95			
	12	0	10.49		30	PASS
		1	11.14			
	13	0	6.89		30	PASS
		1	7.08			
802.11g	01	0	12.52		30	PASS
		1	13.17			
	06	0	12.60		30	PASS
		1	12.84			
	11	0	10.15		30	PASS
		1	11.61			
	12	0	6.87		30	PASS
		1	7.29			
	13	0	2.94		30	PASS
		1	3.06			
802.11n HT20	01	0	10.65	13.98	30	PASS
		1	11.26			
	06	0	10.73	14.03	30	PASS
		1	11.30			
	11	0	9.30	13.15	30	PASS
		1	10.84			
	12	0	6.75	10.08	30	PASS
		1	7.37			
	13	0	2.75	5.84	30	PASS
		1	2.90			

Note: All the modulation and antennas had been tested, but only the worst data recorded in the report.



Maximum Conducted Peak Outpower

Mode: SISO for 802.11b and 802.11g, MIMO CDD for 802.11n						
Mode	Channel	Chain	Maximum Conducted Peak Outpower [dBm]		Limit [dBm]	Verdict
			Single	Total		
802.11b	01	0	14.14		30	PASS
		1	14.67			
	06	0	14.01		30	PASS
		1	14.35			
	11	0	11.96		30	PASS
		1	14.10			
	12	0	12.48		30	PASS
		1	13.23			
	13	0	8.83		30	PASS
		1	9.17			
802.11g	01	0	19.47		30	PASS
		1	20.35			
	06	0	19.56		30	PASS
		1	19.78			
	11	0	17.07		30	PASS
		1	18.74			
	12	0	13.86		30	PASS
		1	14.29			
	13	0	9.88		30	PASS
		1	9.97			
802.11n HT20	01	0	18.28	22.39	30	PASS
		1	20.25			
	06	0	18.37	22.41	30	PASS
		1	20.23			
	11	0	16.82	21.53	30	PASS
		1	19.74			
	12	0	14.28	18.35	30	PASS
		1	16.19			
	13	0	10.34	13.95	30	PASS
		1	11.46			

Note: All the modulation and antennas had been tested, but only the worst data recorded in the report.



8.4. POWER SPECTRAL DENSITY

LIMITS

FCC Part15 (15.247) Subpart C RSS-247 ISSUE 2			
Section	Test Item	Limit	Frequency Range (MHz)
FCC §15.247 (e) RSS-247 5.2 (b)	Power Spectral Density	8 dBm in any 3 kHz band	2400-2483.5
Note:	1. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi. 2. Limit=8dBm – (Directional gain -6)dBi Directional gain: Please refer to the description in section 5.4.		

TEST PROCEDURE

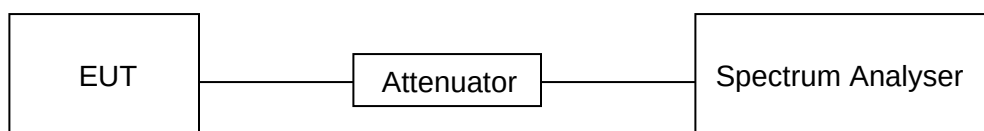
Connect the UUT to the spectrum analyser and use the following settings:

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	$3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
VBW	$\geq 3 \times \text{RBW}$
Span	$1.5 \times \text{DTS bandwidth}$
Trace	Max hold
Sweep time	Auto couple.

Allow trace to fully stabilize and use the peak marker function to determine the maximum amplitude level within the RBW.

If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

TEST SETUP





TEST ENVIRONMENT

Temperature	23.4°C	Relative Humidity	56%
Atmosphere Pressure	101kPa	Test Voltage	AC 120V

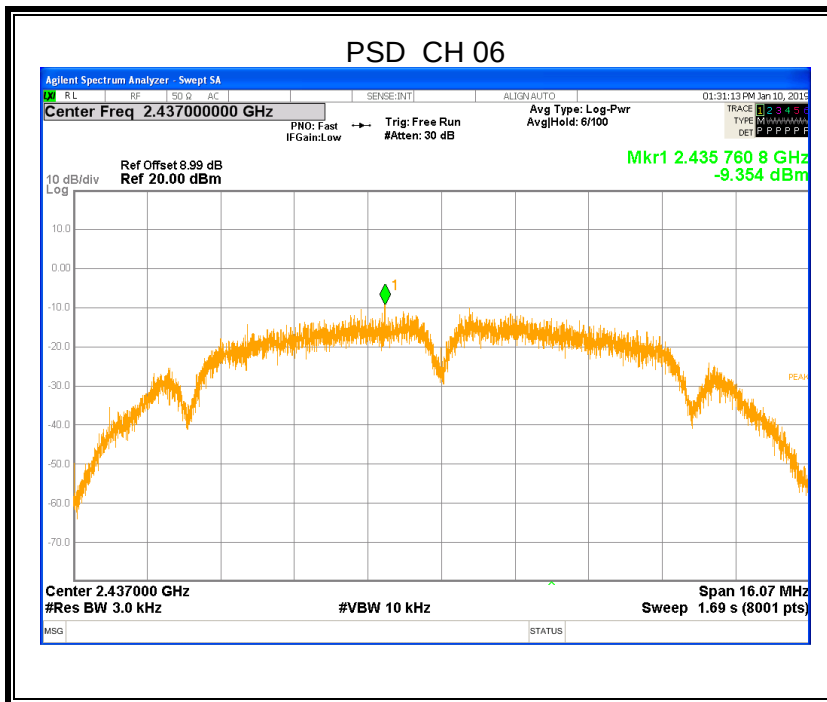
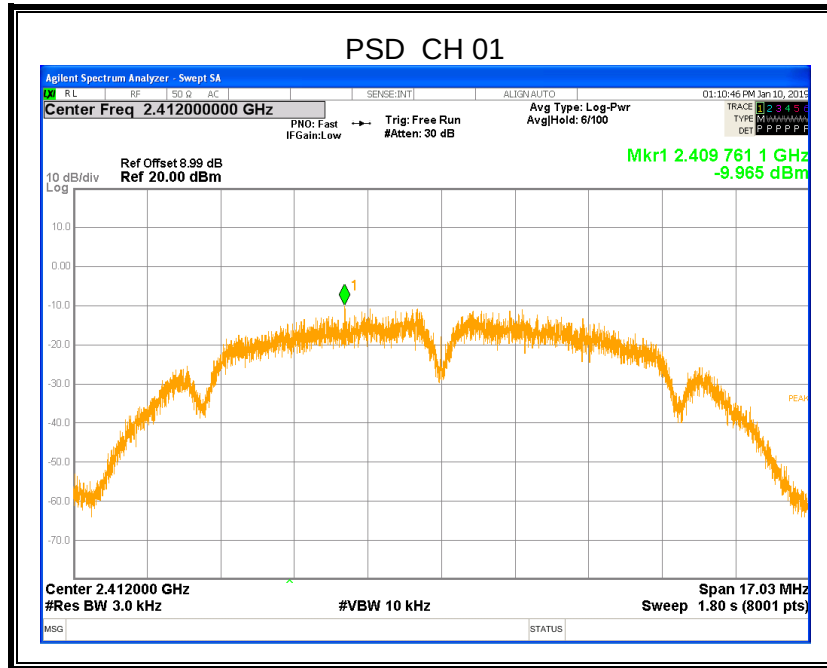
RESULTS

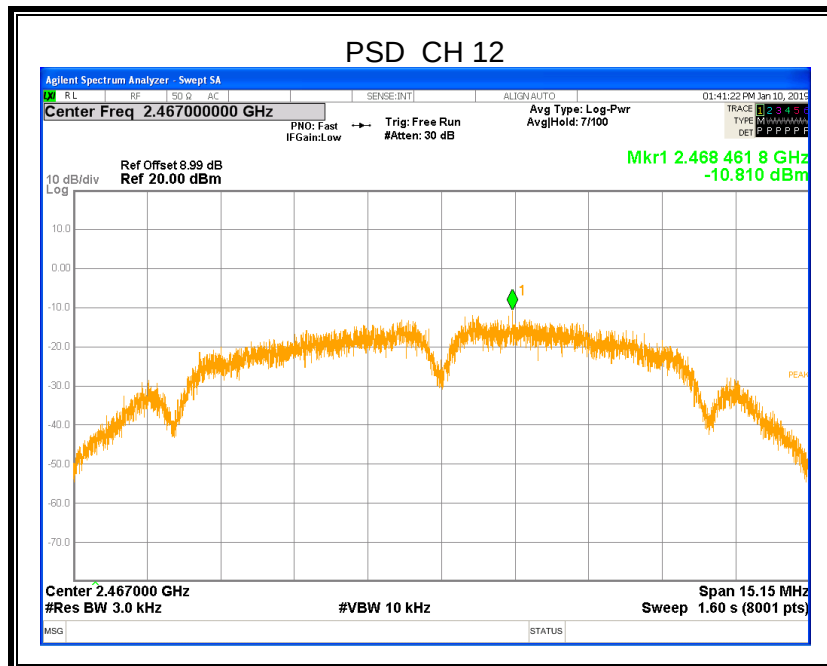
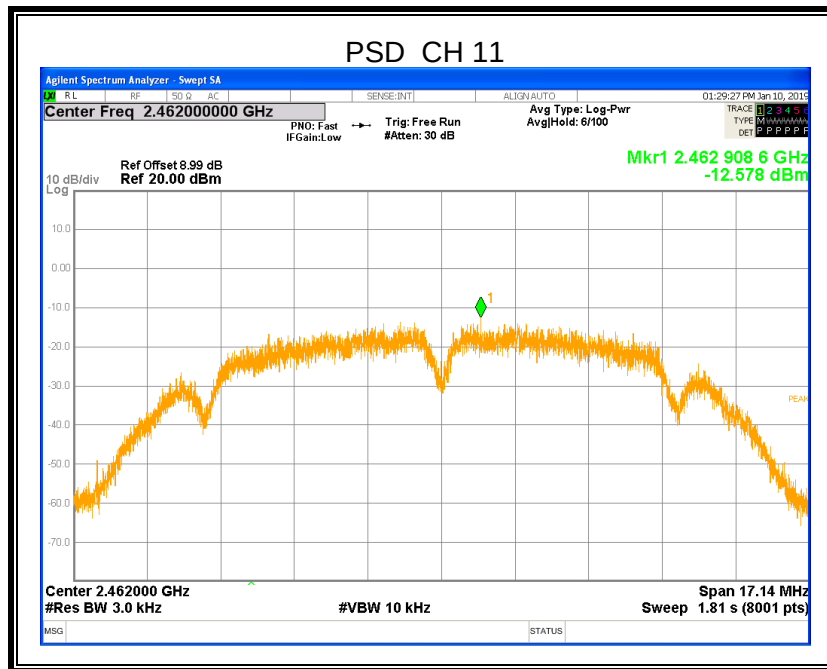
Mode: SISO for 802.11b and 802.11g, MIMO CDD for 802.11n						
Mode	Channel	Chain	Meas.Level [dBm/3kHz]	Total [dBm/3kHz]	Limit (dBm/3KHz)	Verdict
802.11b	01	0	-9.965		8	PASS
		1	-10.365			
	06	0	-9.354		8	PASS
		1	-10.190			
	11	0	-12.578		8	PASS
		1	-10.411			
	12	0	-10.810		8	PASS
		1	-11.244			
	13	0	-14.503		8	PASS
		1	-15.122			
802.11g	01	0	-12.820		8	PASS
		1	-11.140			
	06	0	-13.245		8	PASS
		1	-12.966			
	11	0	-15.667		8	PASS
		1	-13.452			
	12	0	-17.651		8	PASS
		1	-17.779			
	13	0	-20.452		8	PASS
		1	-21.252			
802.11n HT20	01	0	-14.927	-11.869	5.45	PASS
		1	-14.832			
	06	0	-15.006	-11.587	5.45	PASS
		1	-14.224			
	11	0	-13.717	-10.537	5.45	PASS
		1	-13.384			
	12	0	-17.627	-14.413	5.45	PASS
		1	-17.228			
	13	0	-20.848	-17.831	5.45	PASS
		1	-20.835			

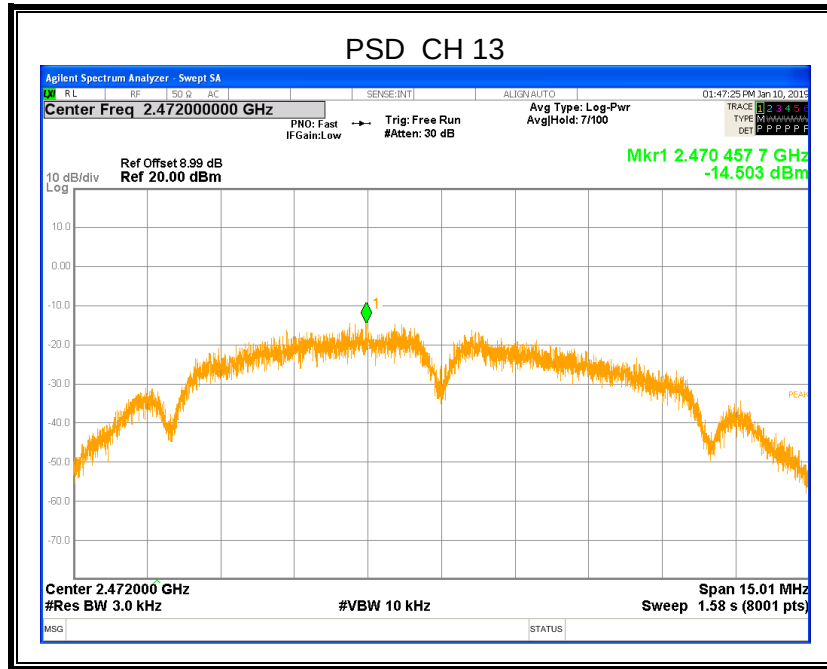


8.4.1. 802.11b

Chain 0

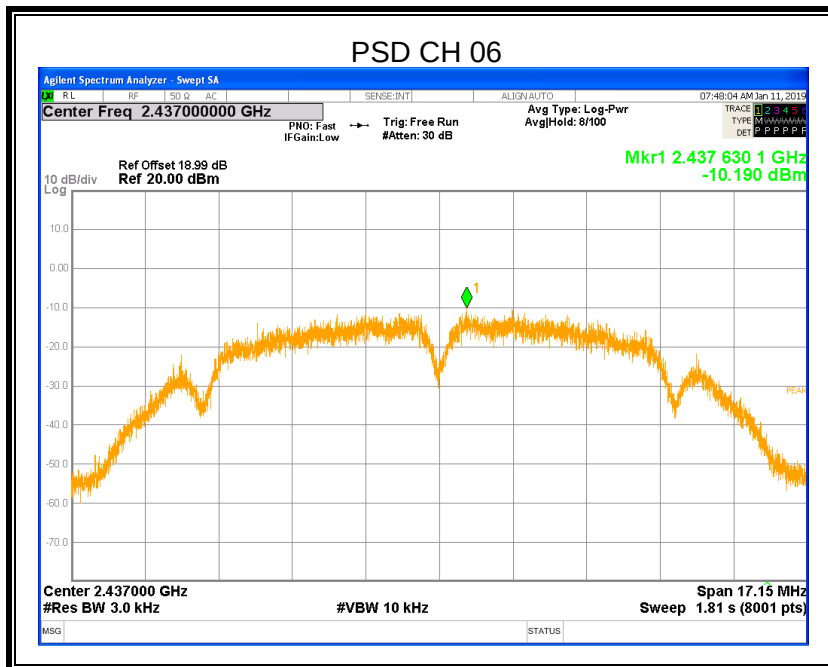
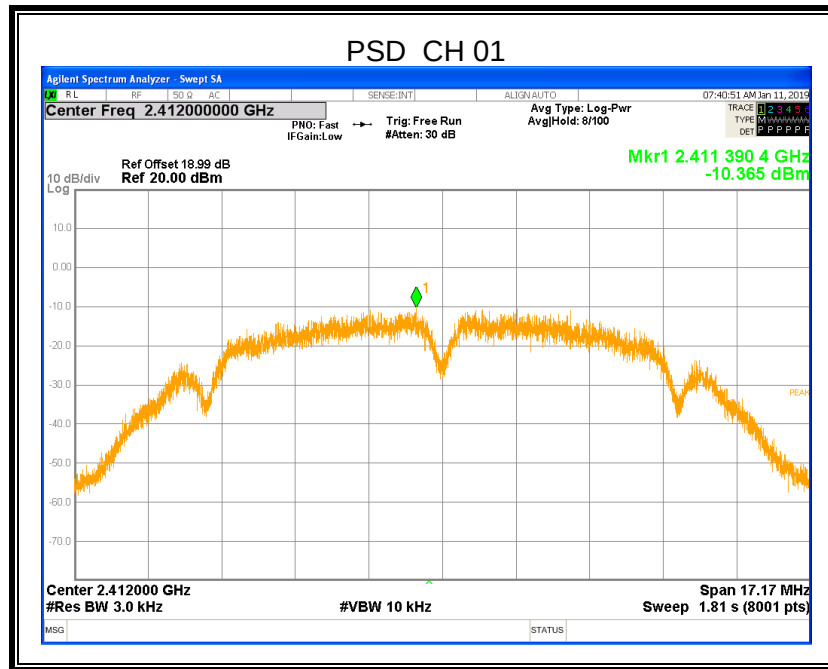


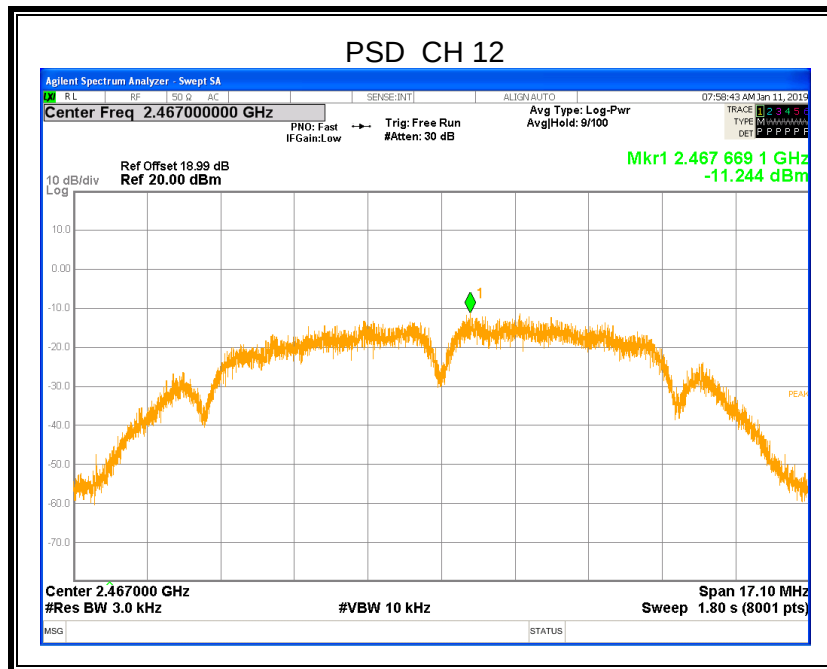
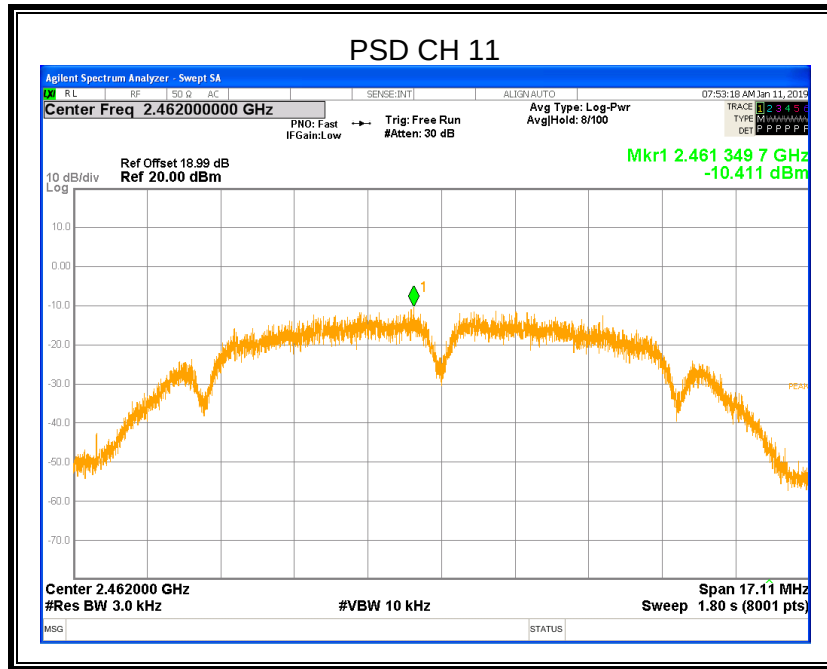


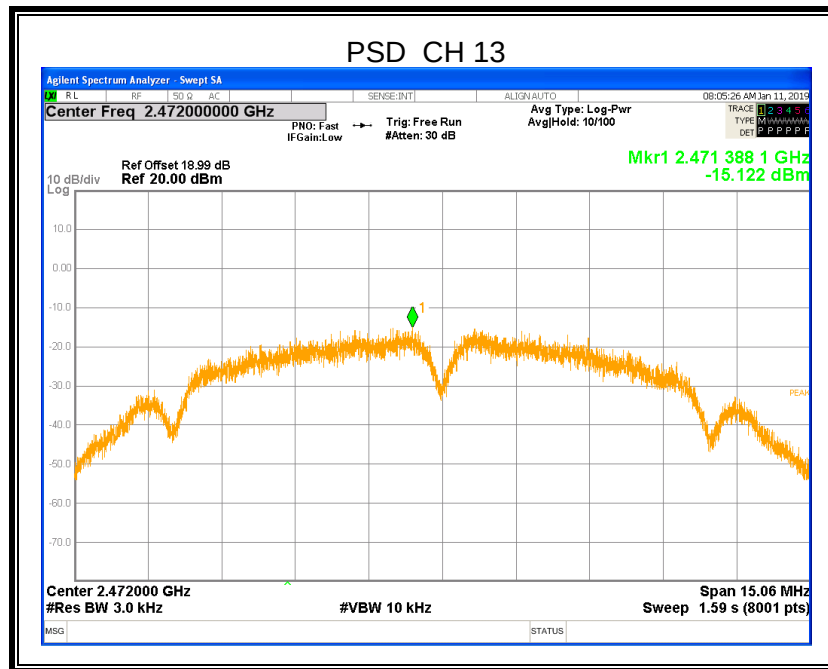
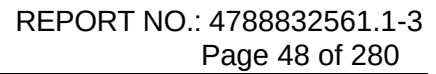




Chain 1



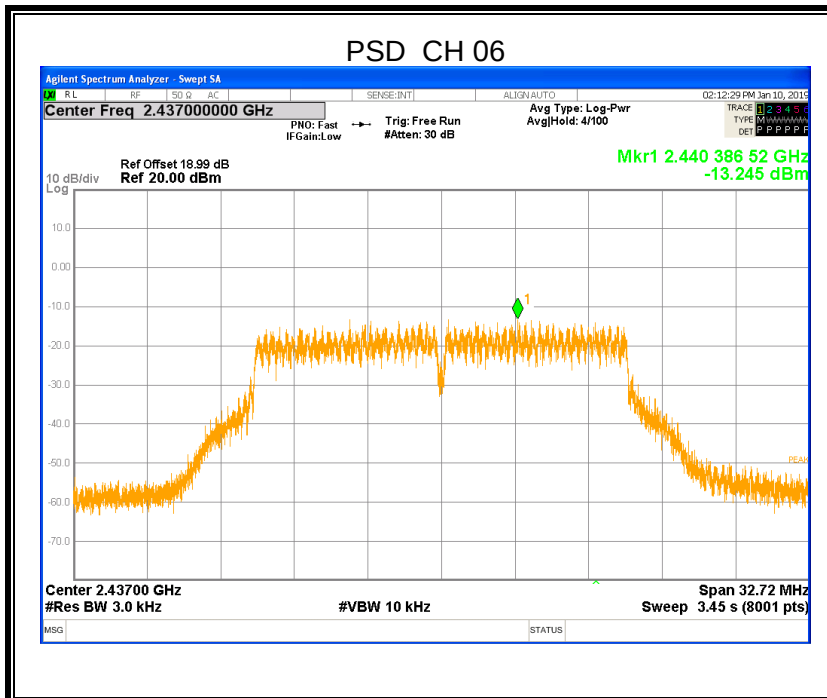
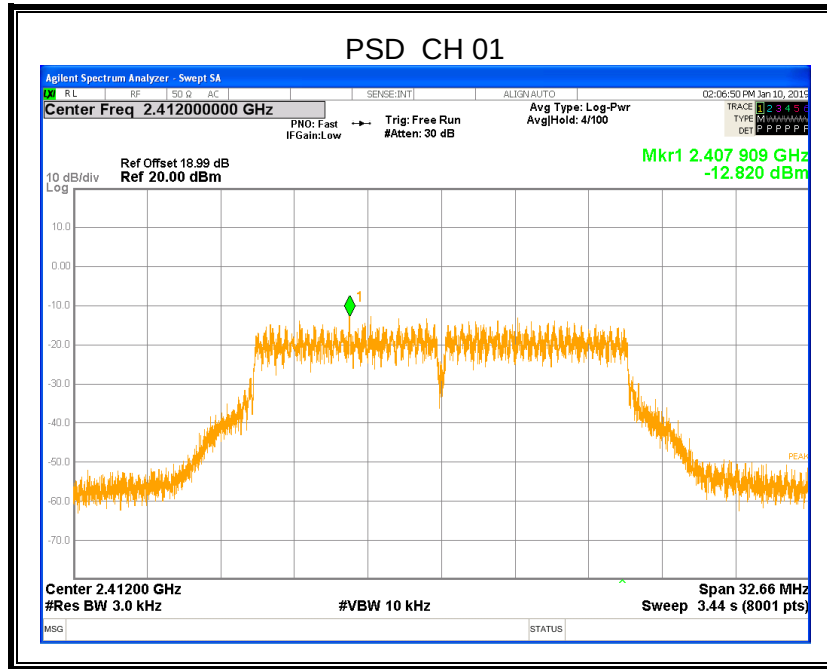


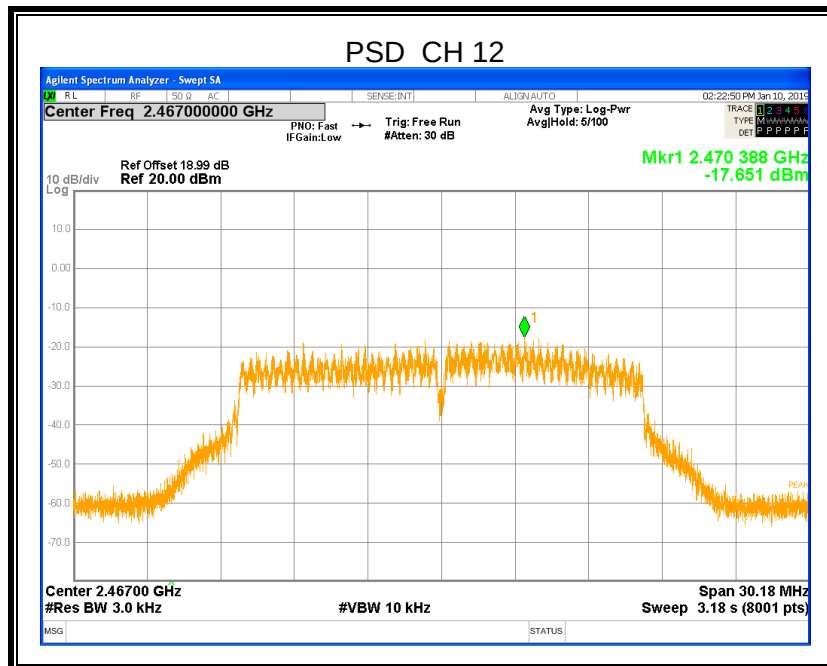
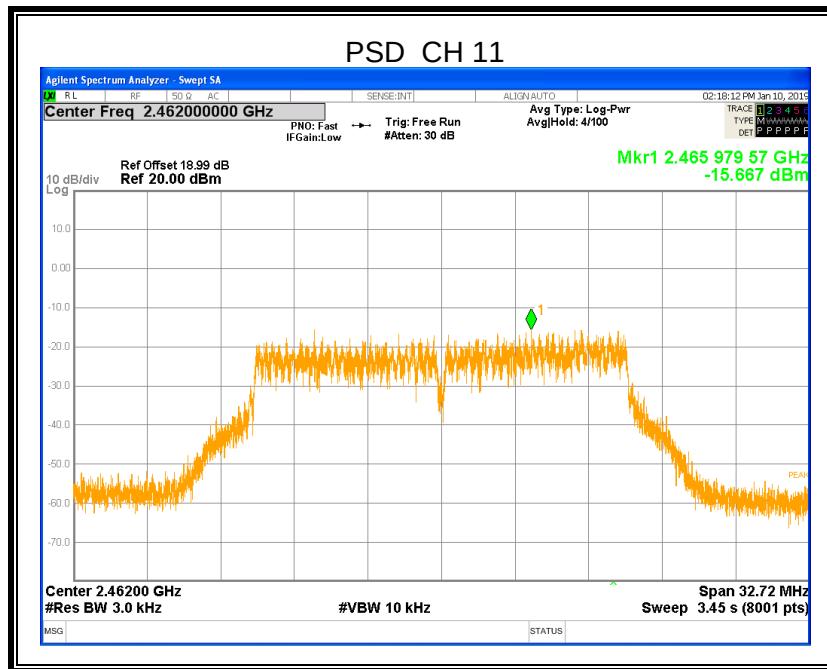


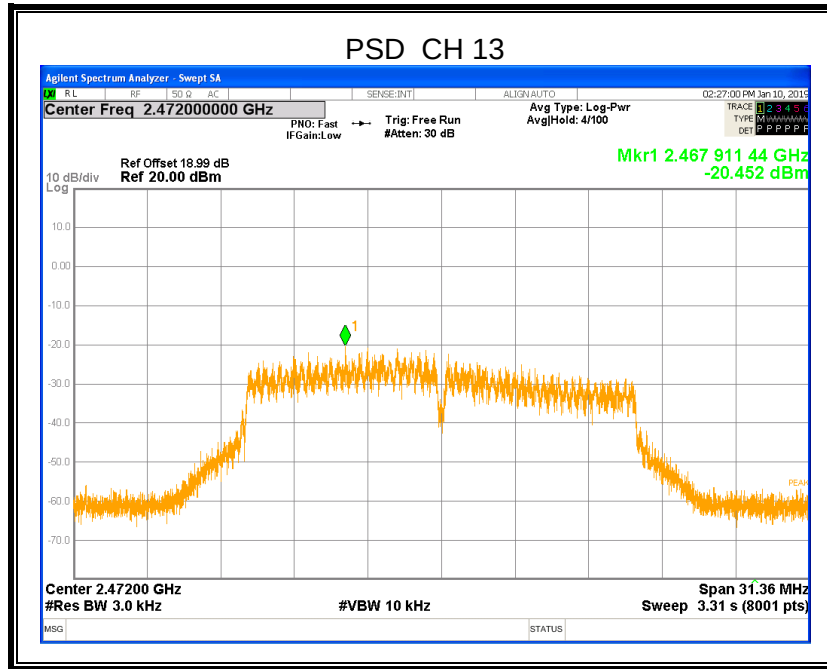


8.4.2. 802.11g

Chain 0

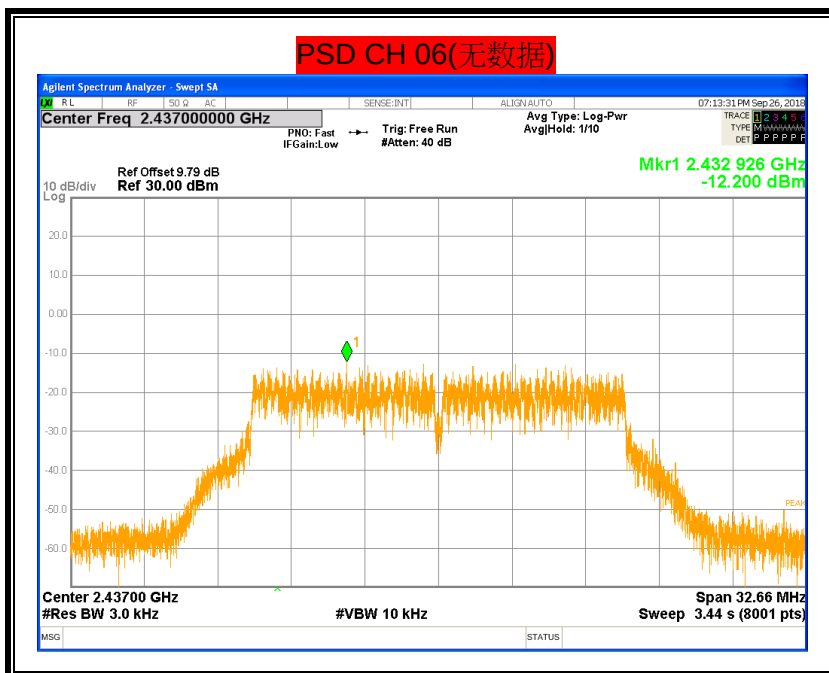
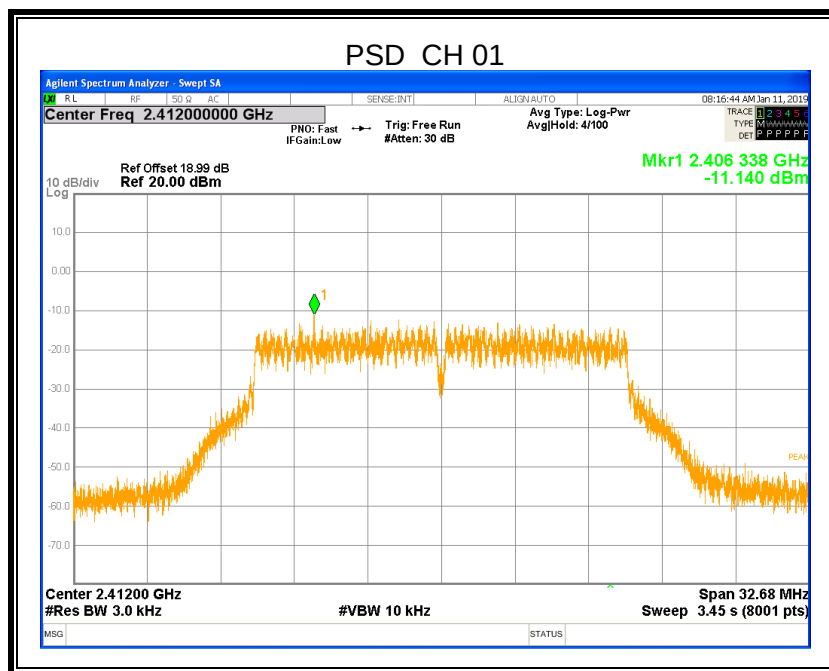


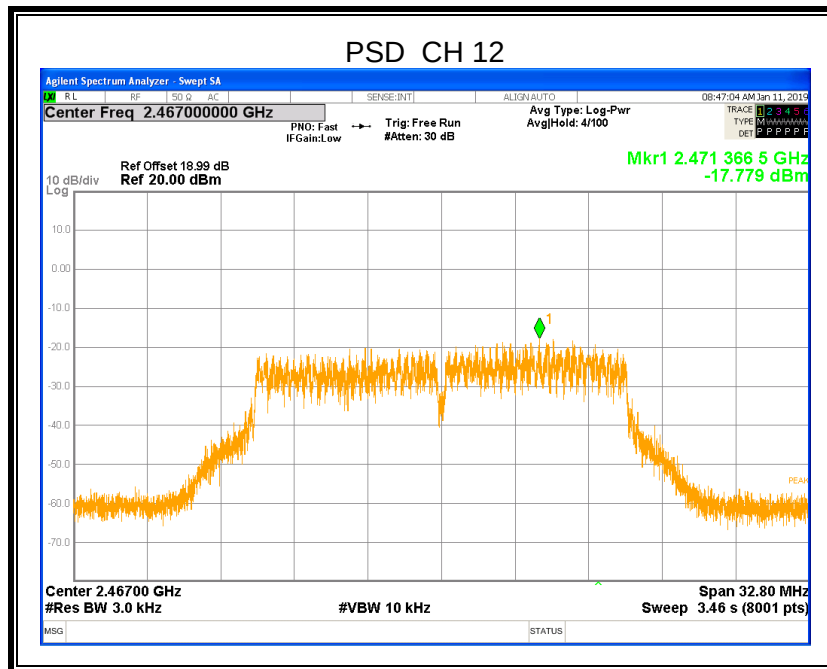
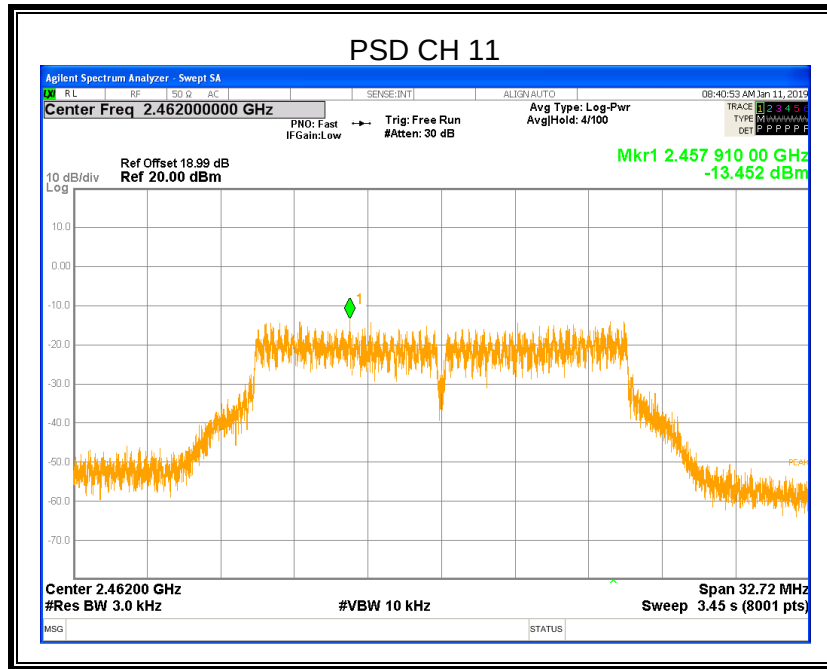


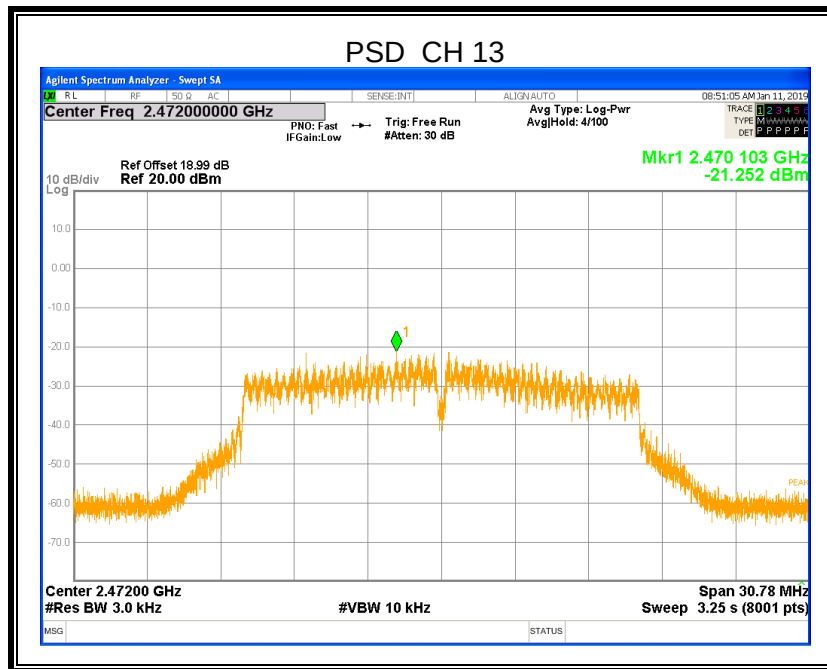




Chain 1



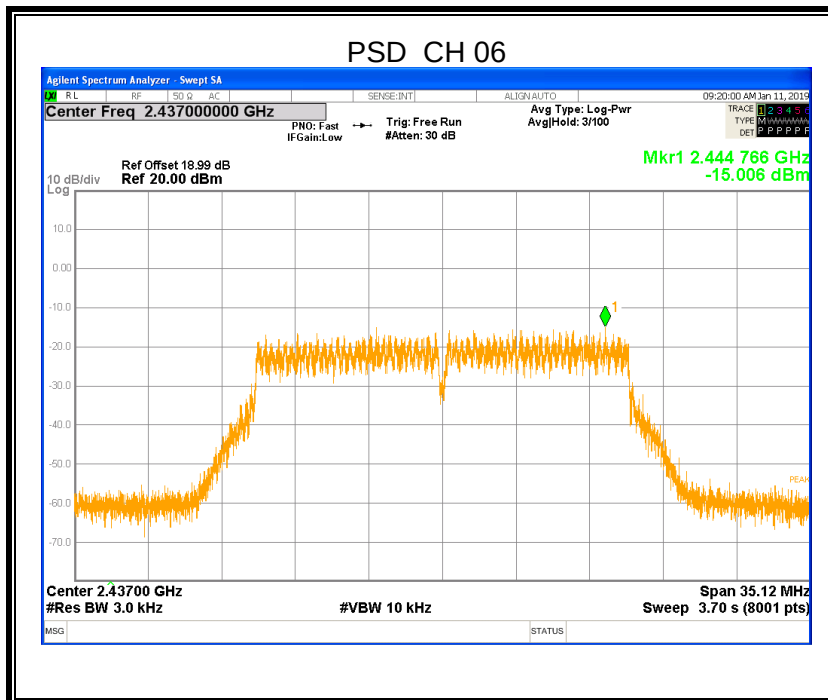
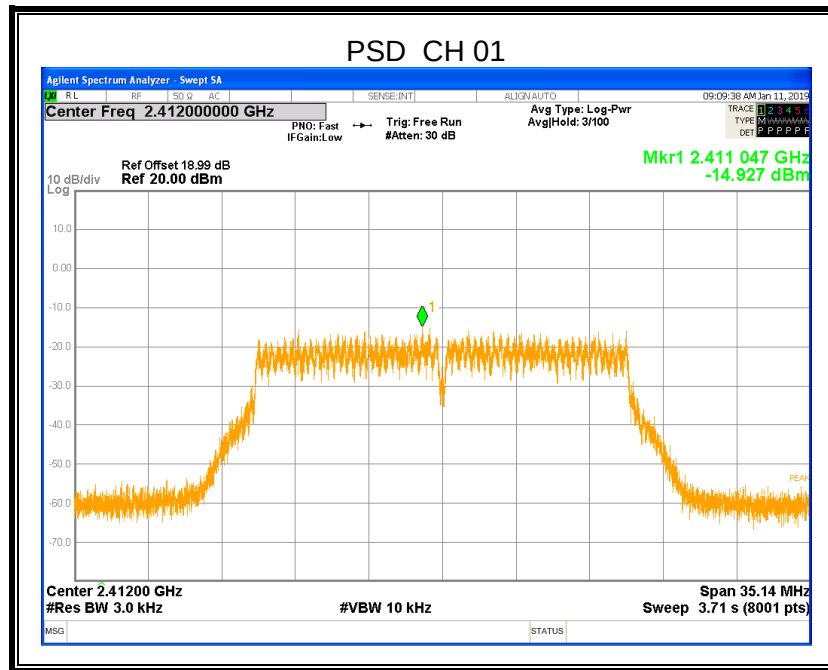


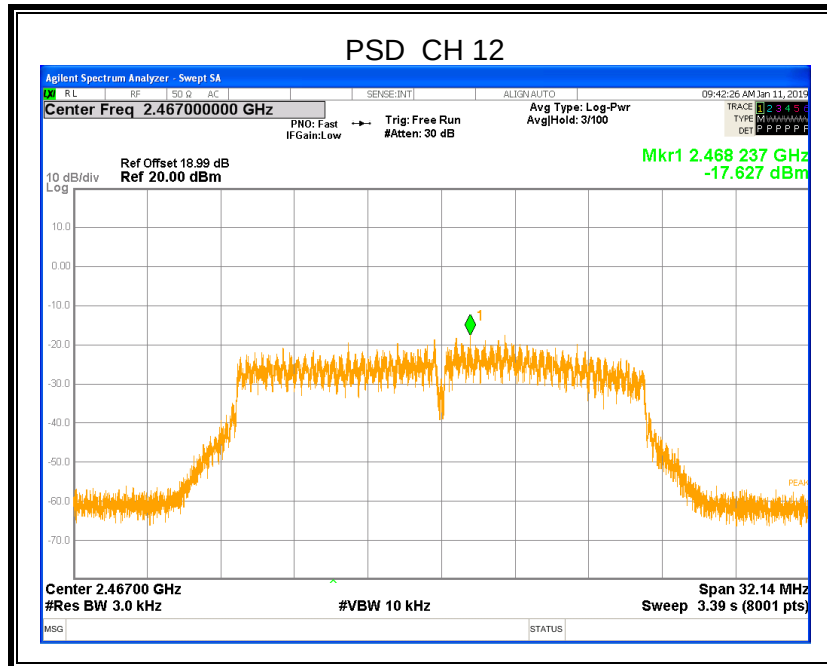
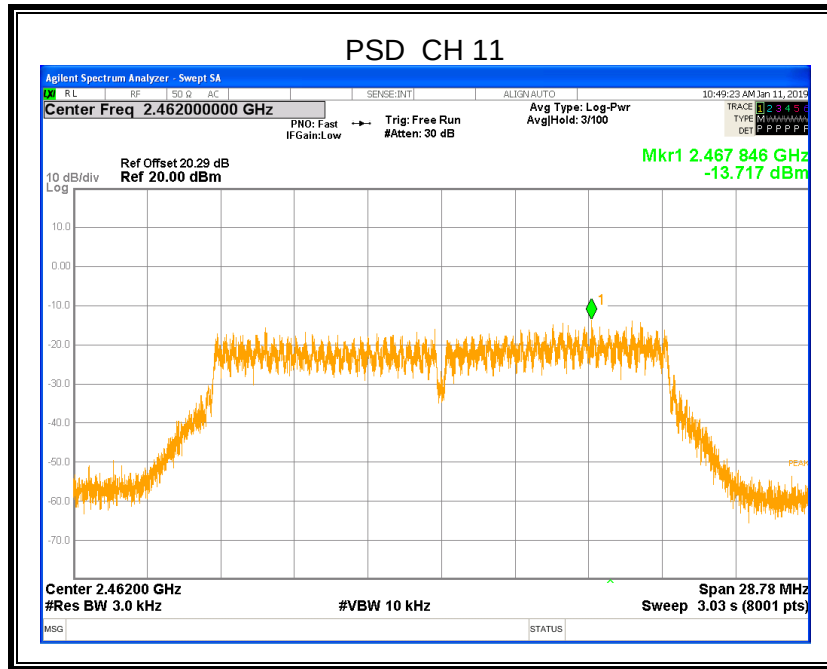


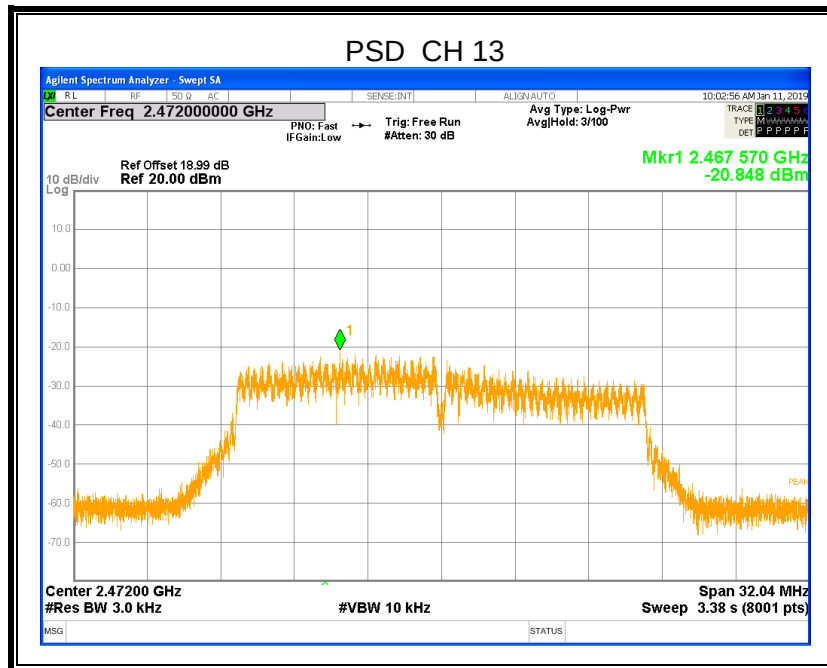


8.4.3. 802.11n HT20

Chain 0

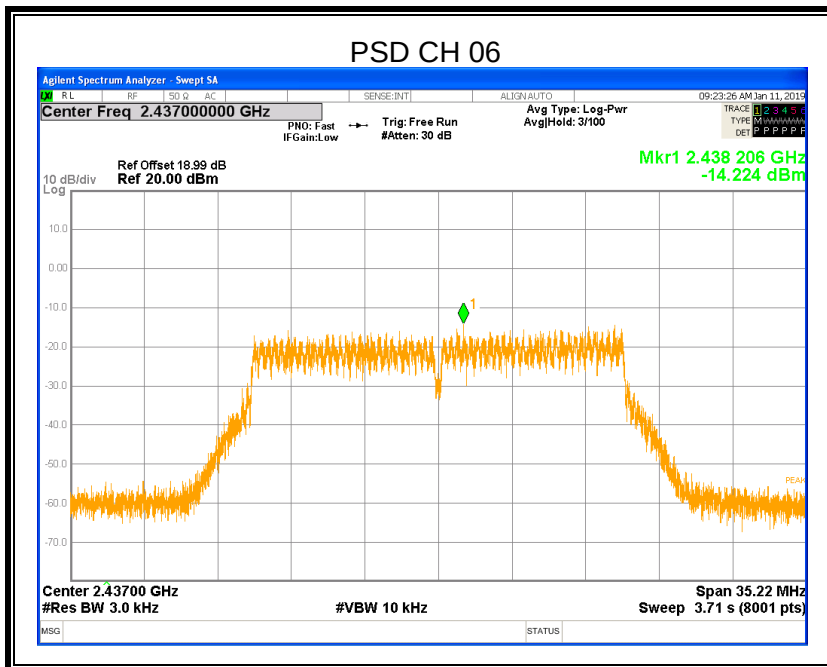
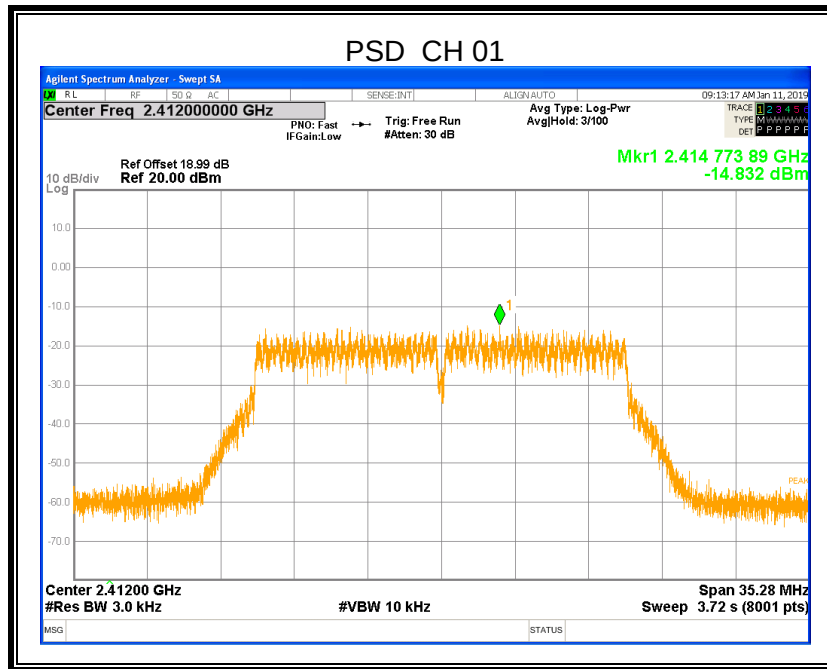


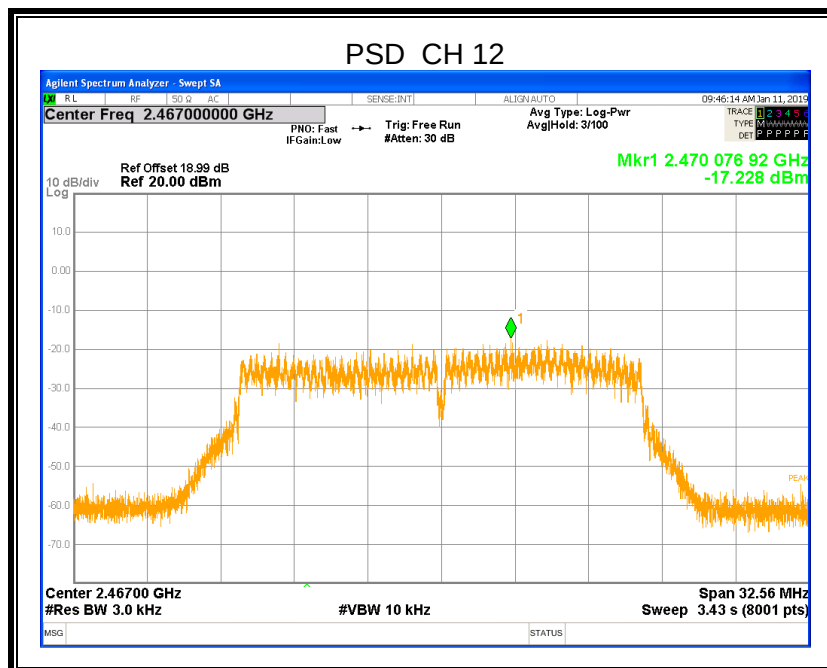
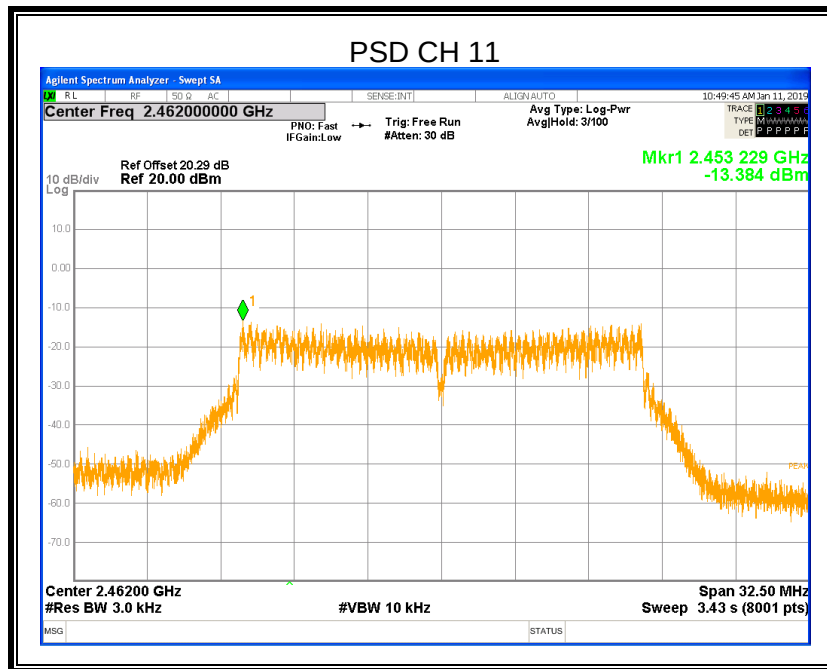


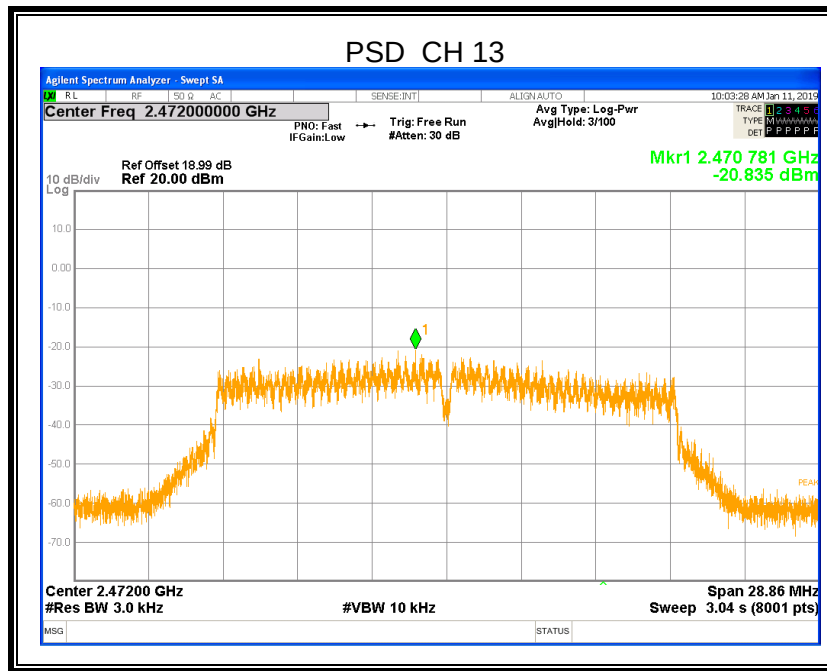




Chain 1









8.1. CONDUCTED BANDEDGE AND SPURIOUS EMISSIONS

LIMITS

FCC Part15 (15.247) Subpart C RSS-247 ISSUE 2		
Section	Test Item	Limit
FCC §15.247 (d) RSS-247 5.5	Conducted Bandedge and Spurious Emissions	at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power

TEST PROCEDURE

Connect the UUT to the spectrum analyser and use the following settings:

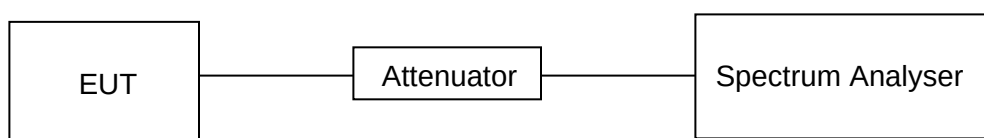
Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	100K
VBW	$\geq 3 \times \text{RBW}$
Span	1.5 x DTS bandwidth
Trace	Max hold
Sweep time	Auto couple.

Use the peak marker function to determine the maximum PSD level.

Span	Set the center frequency and span to encompass frequency range to be measured
Detector	Peak
RBW	100K
VBW	$\geq 3 \times \text{RBW}$
measurement points	$\geq \text{span}/\text{RBW}$
Trace	Max hold
Sweep time	Auto couple.

Use the peak marker function to determine the maximum amplitude level.

TEST SETUP





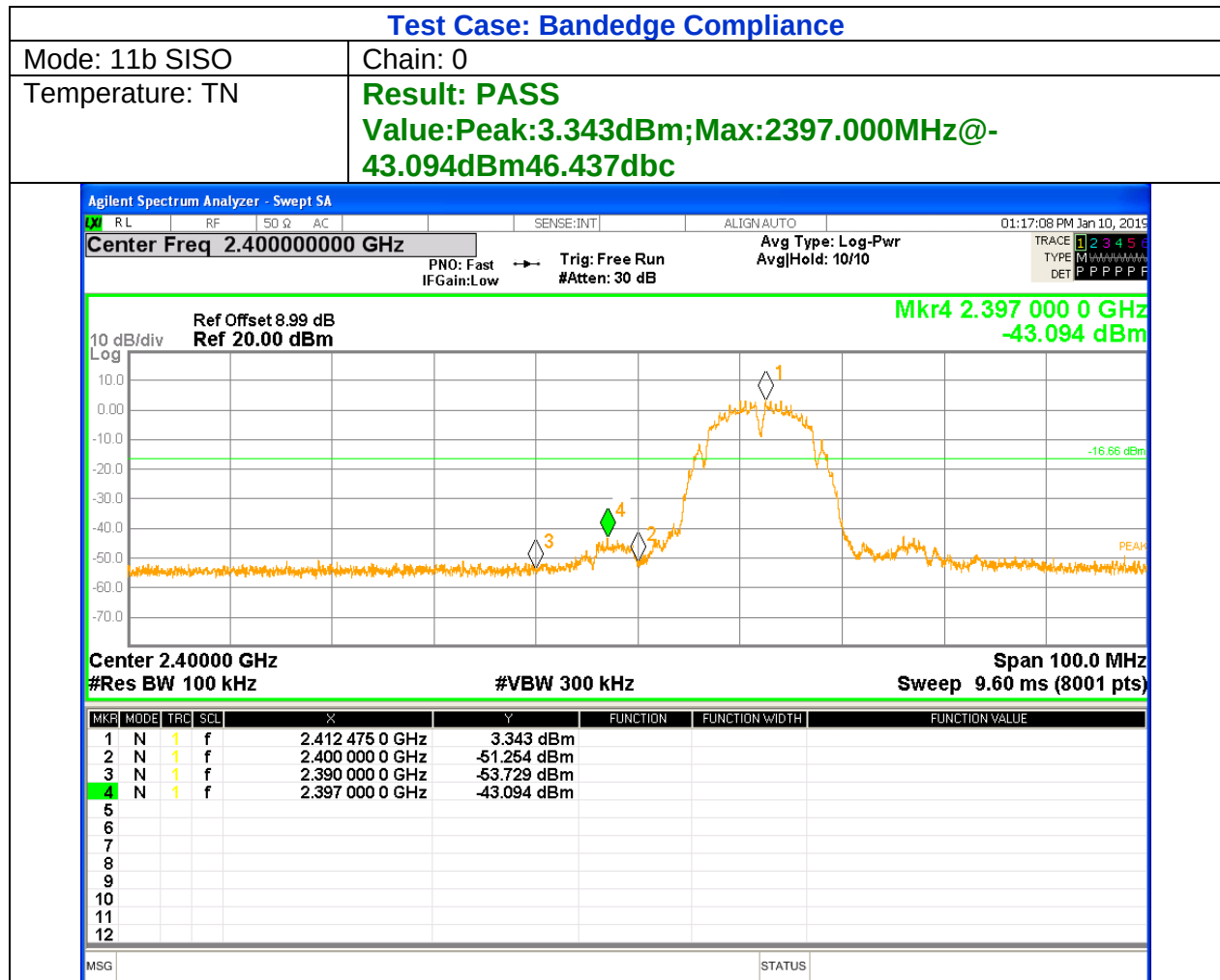
TEST ENVIRONMENT

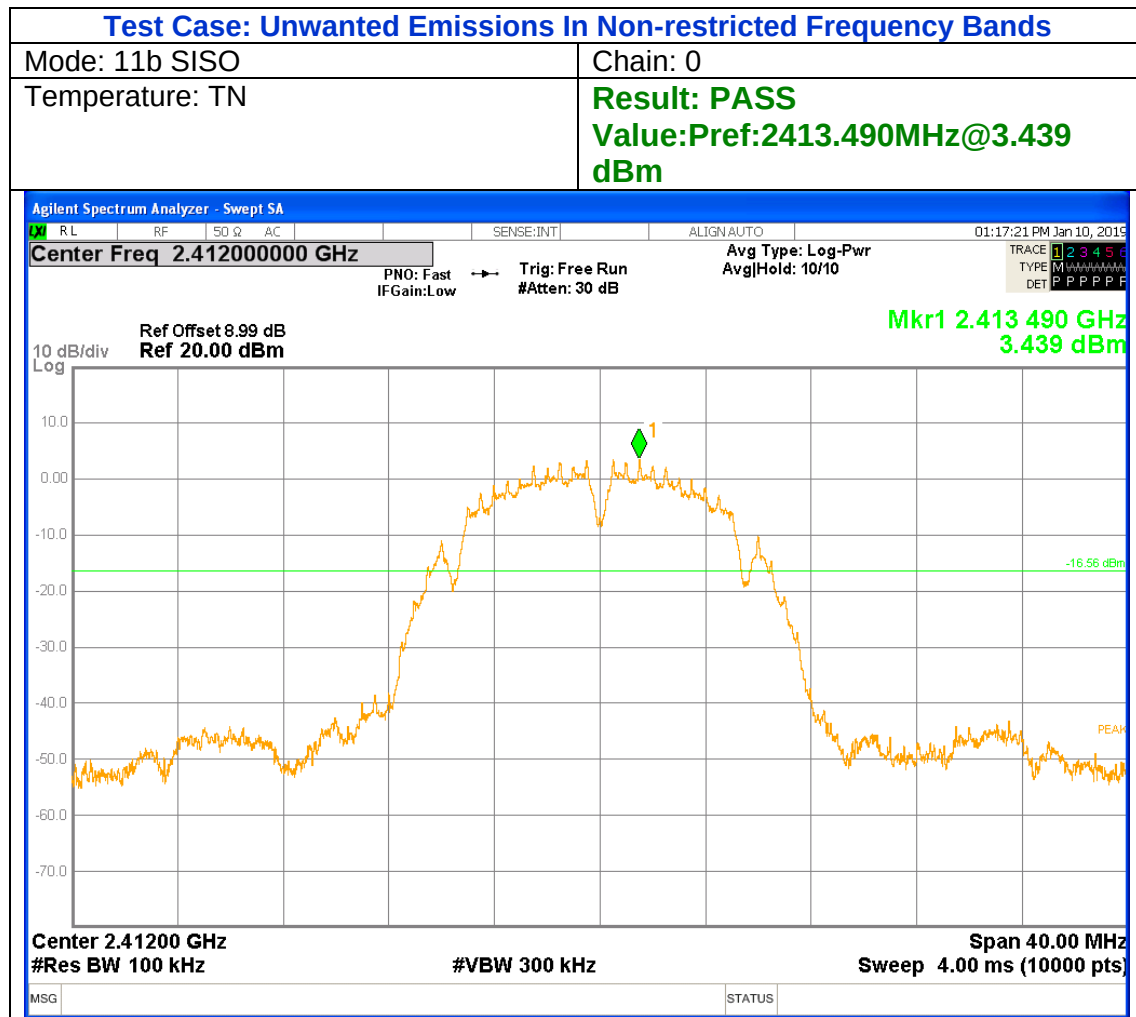
Temperature	23.4°C	Relative Humidity	56%
Atmosphere Pressure	101kPa	Test Voltage	AC 120V

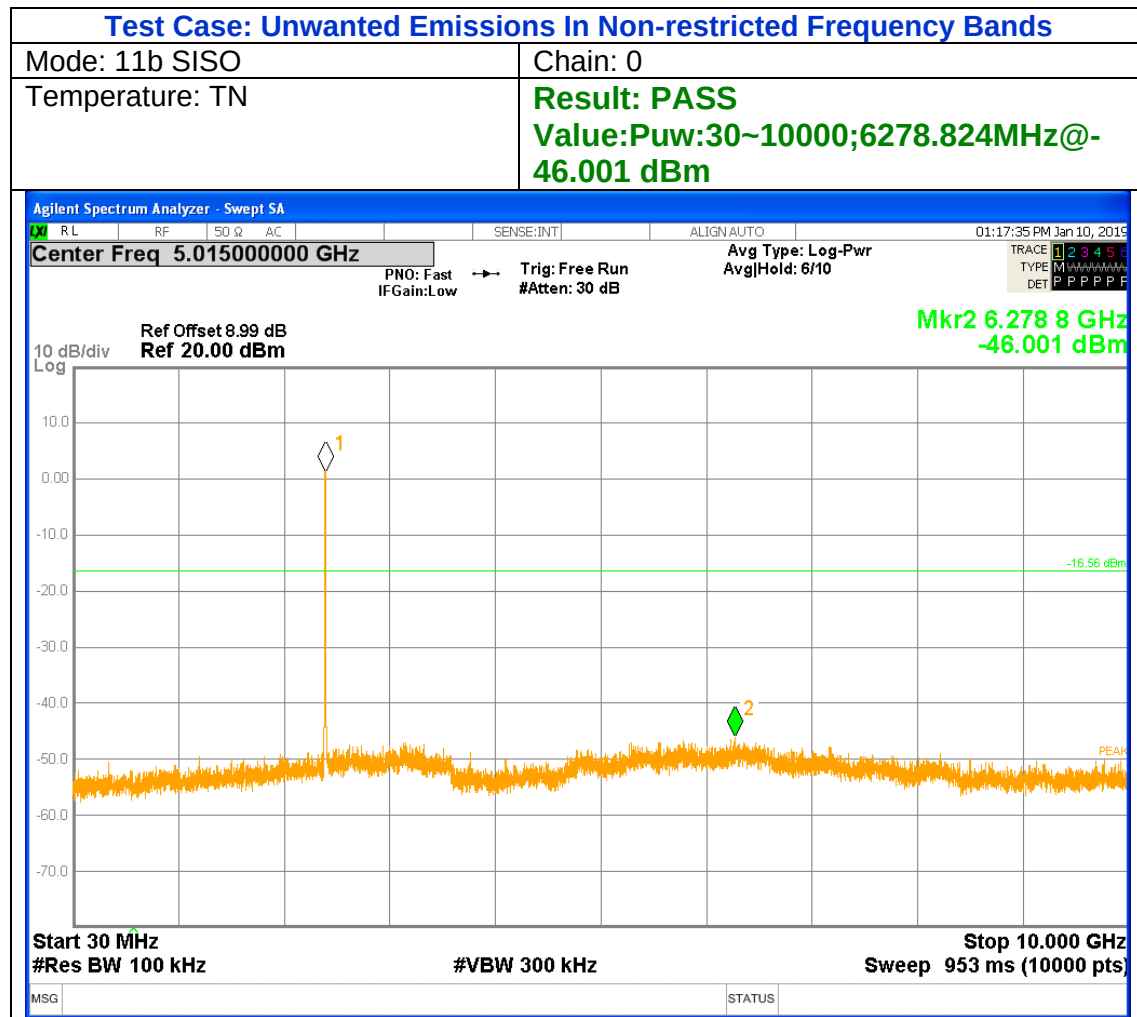
RESULTS

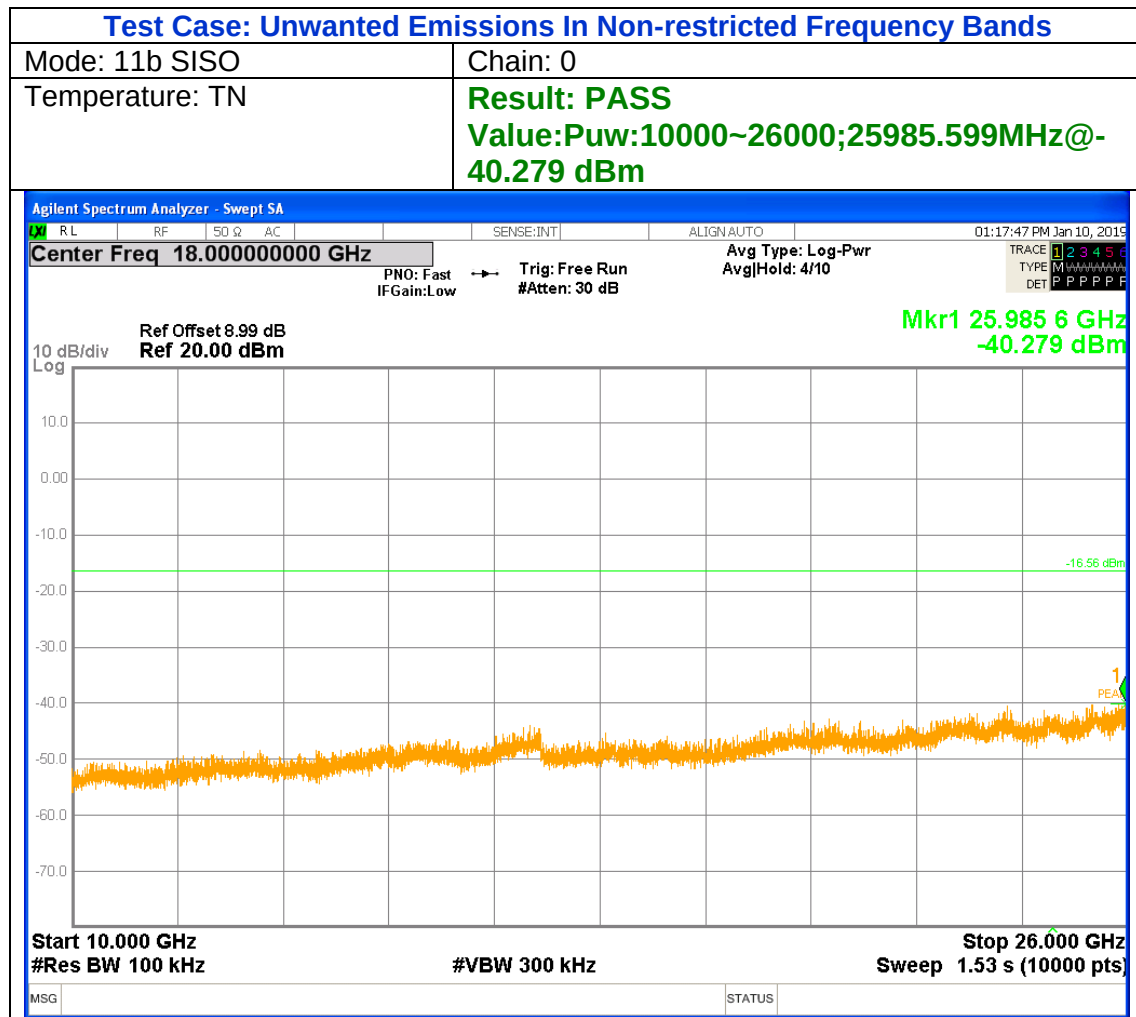
8.1.1. 802.11b MODE

Low Channel 01







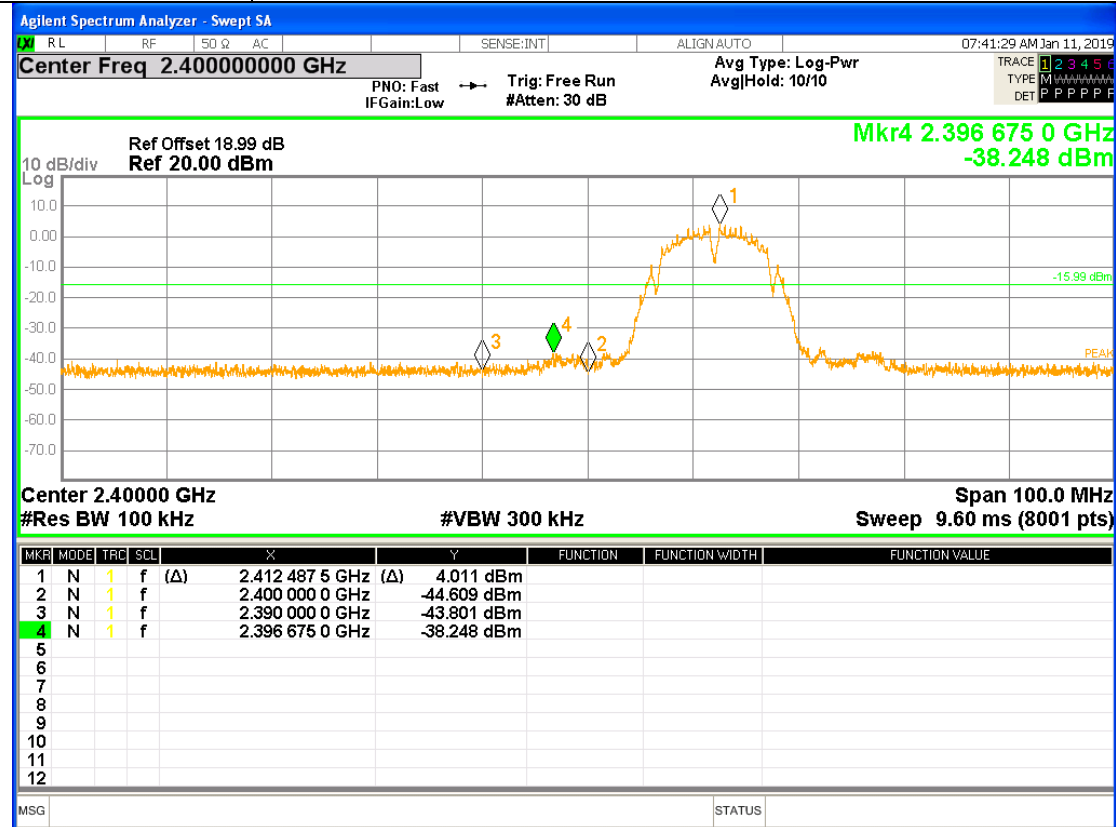


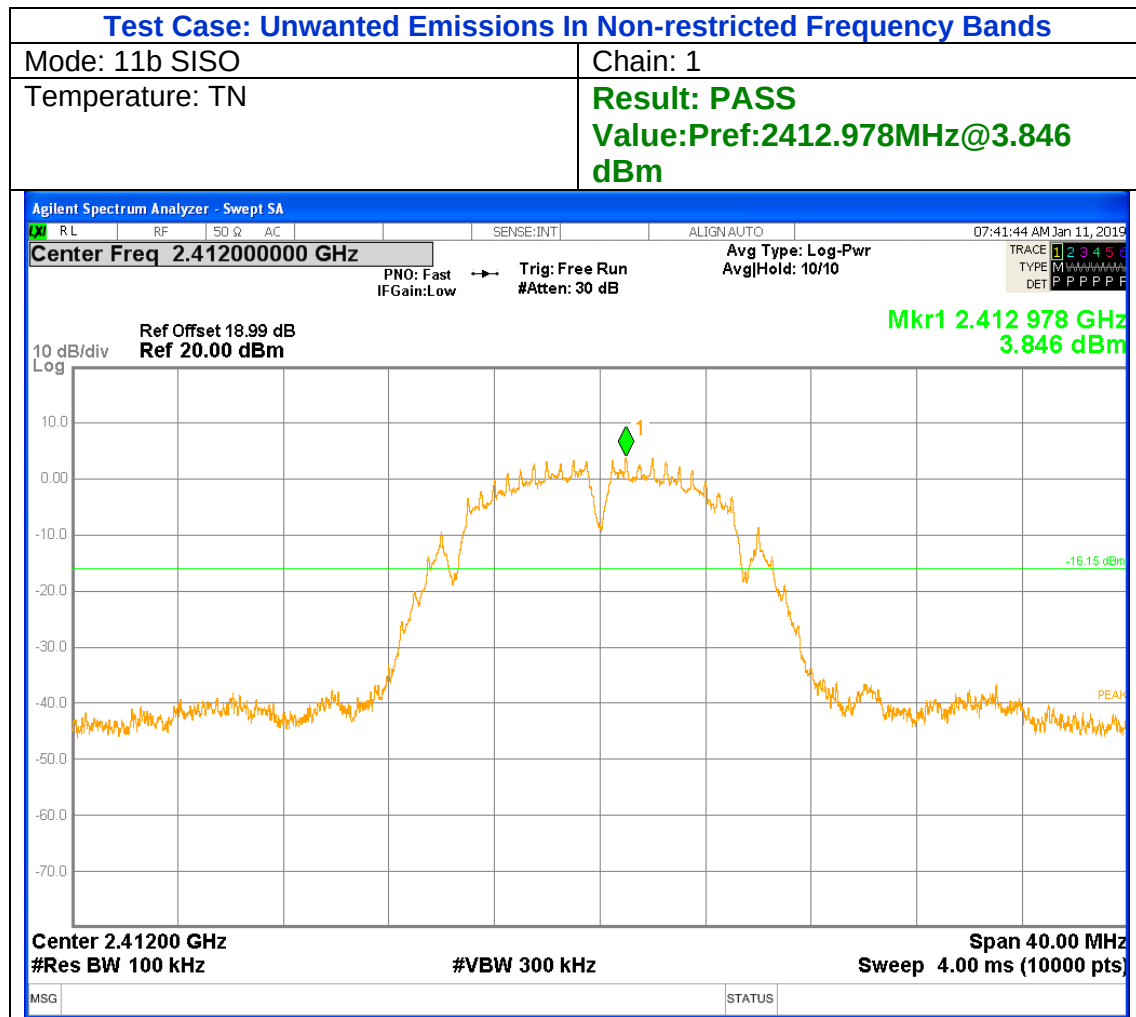
**Test Case: Bandedge Compliance**

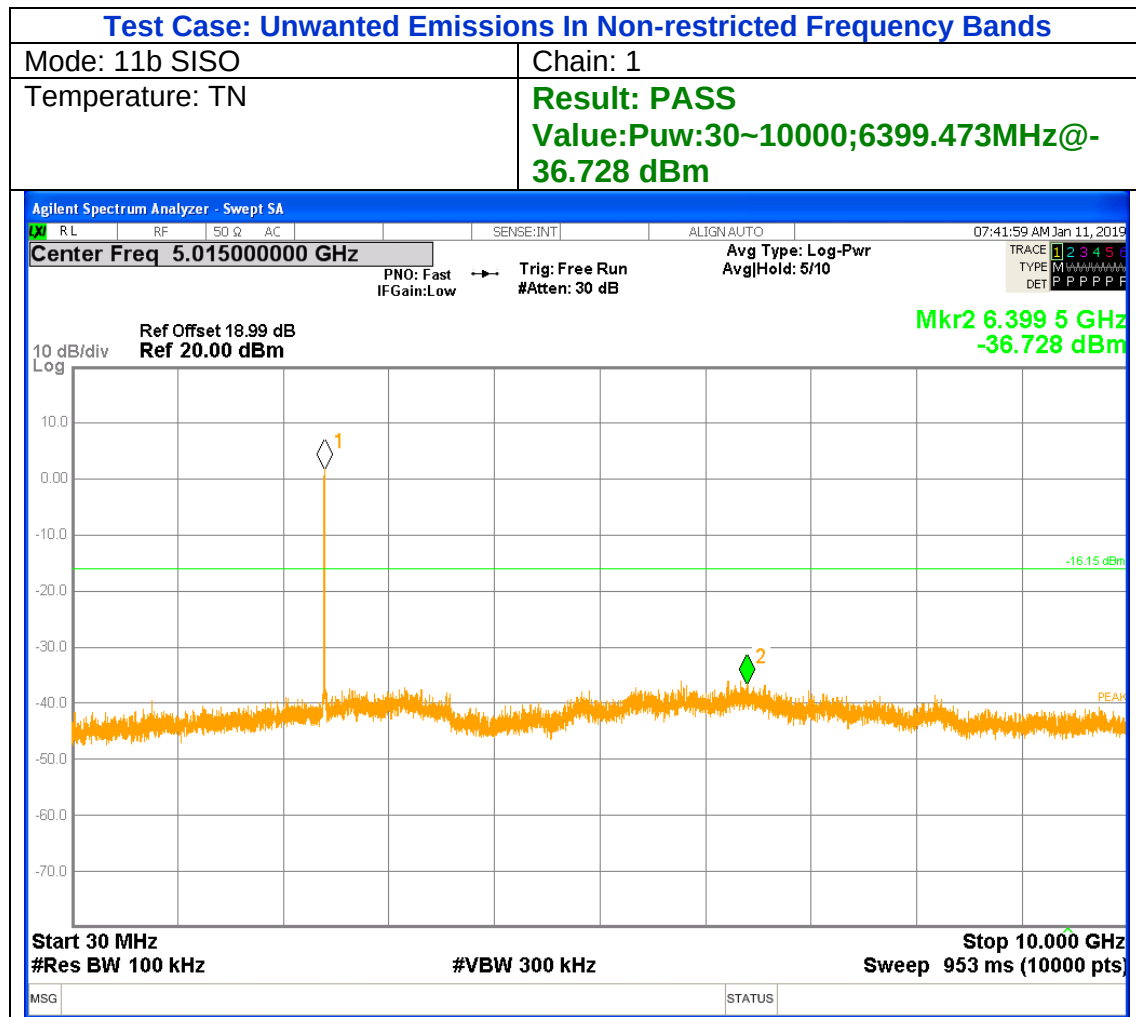
Mode: 11b SISO

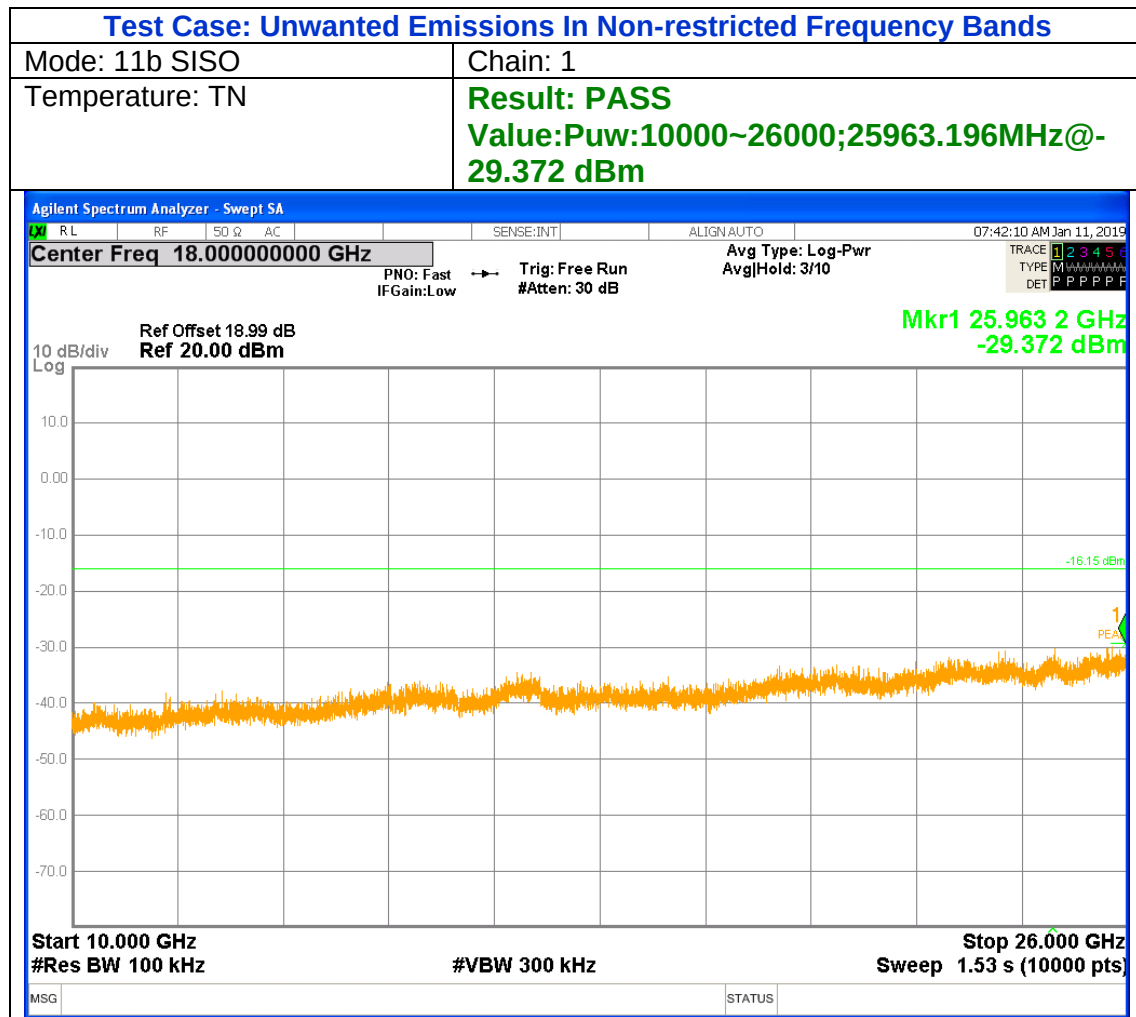
Chain: 1

Temperature: TN

Result: PASS**Value: Peak: 4.011 dBm; Max: 2396.675 MHz @ -38.248 dBm 42.259 dbc**

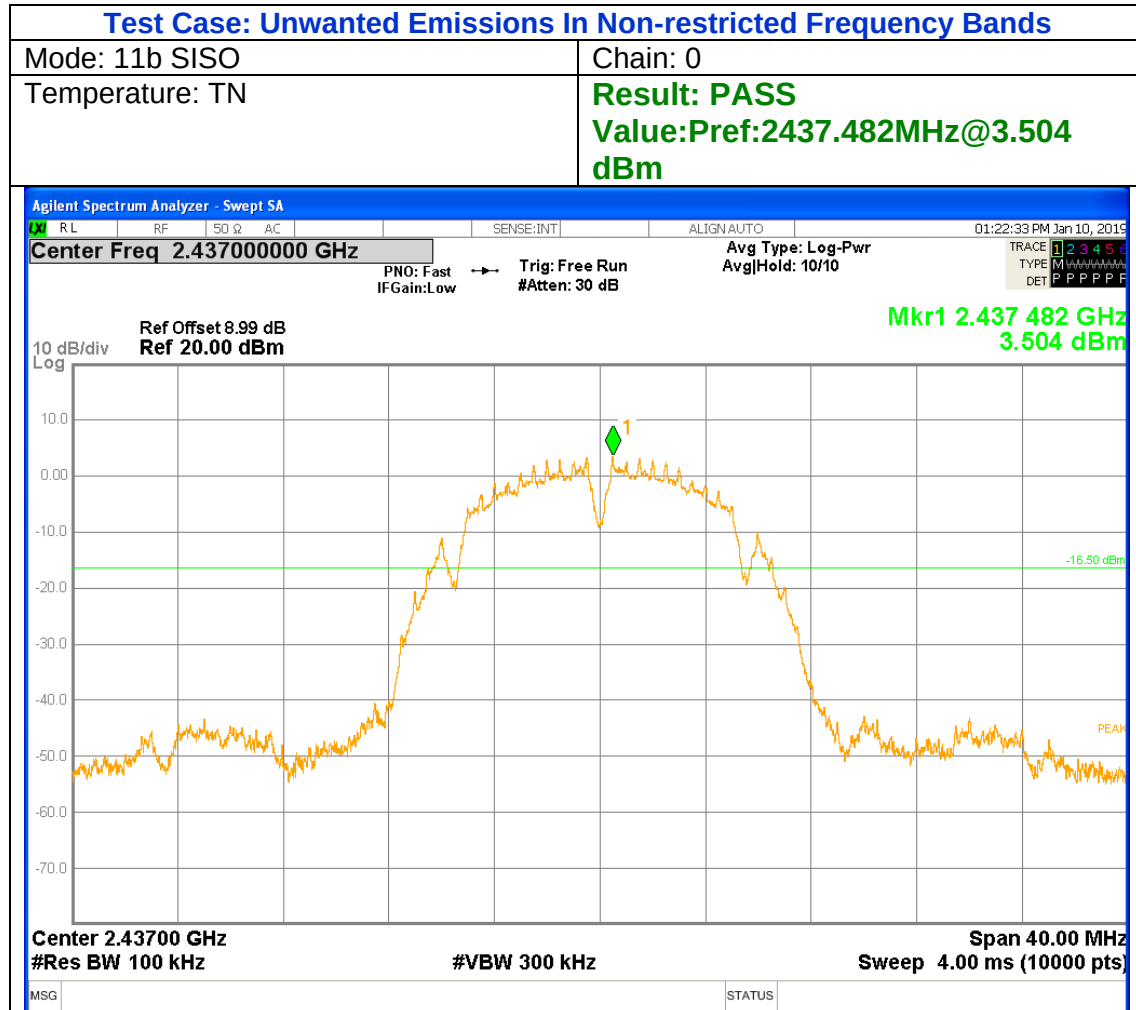


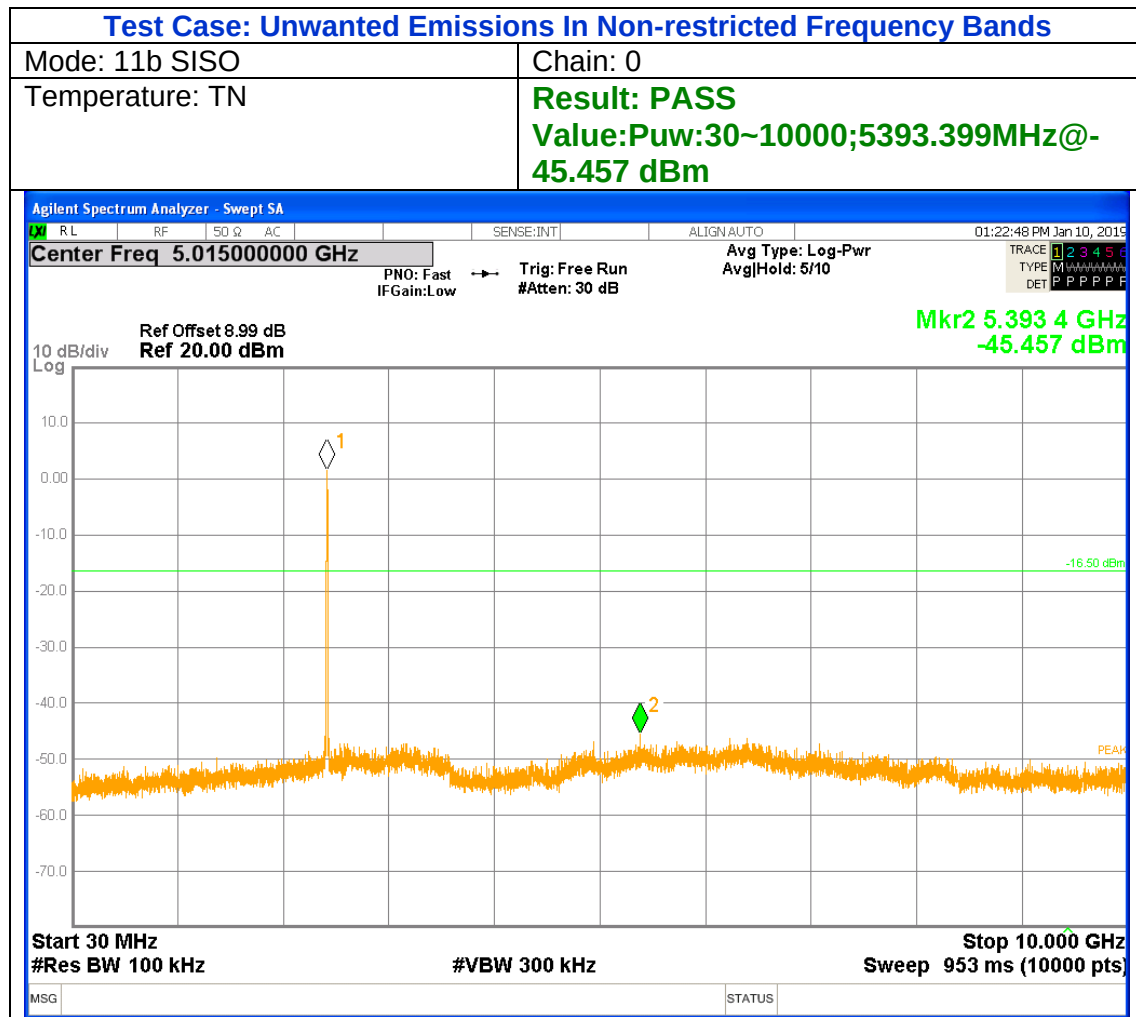


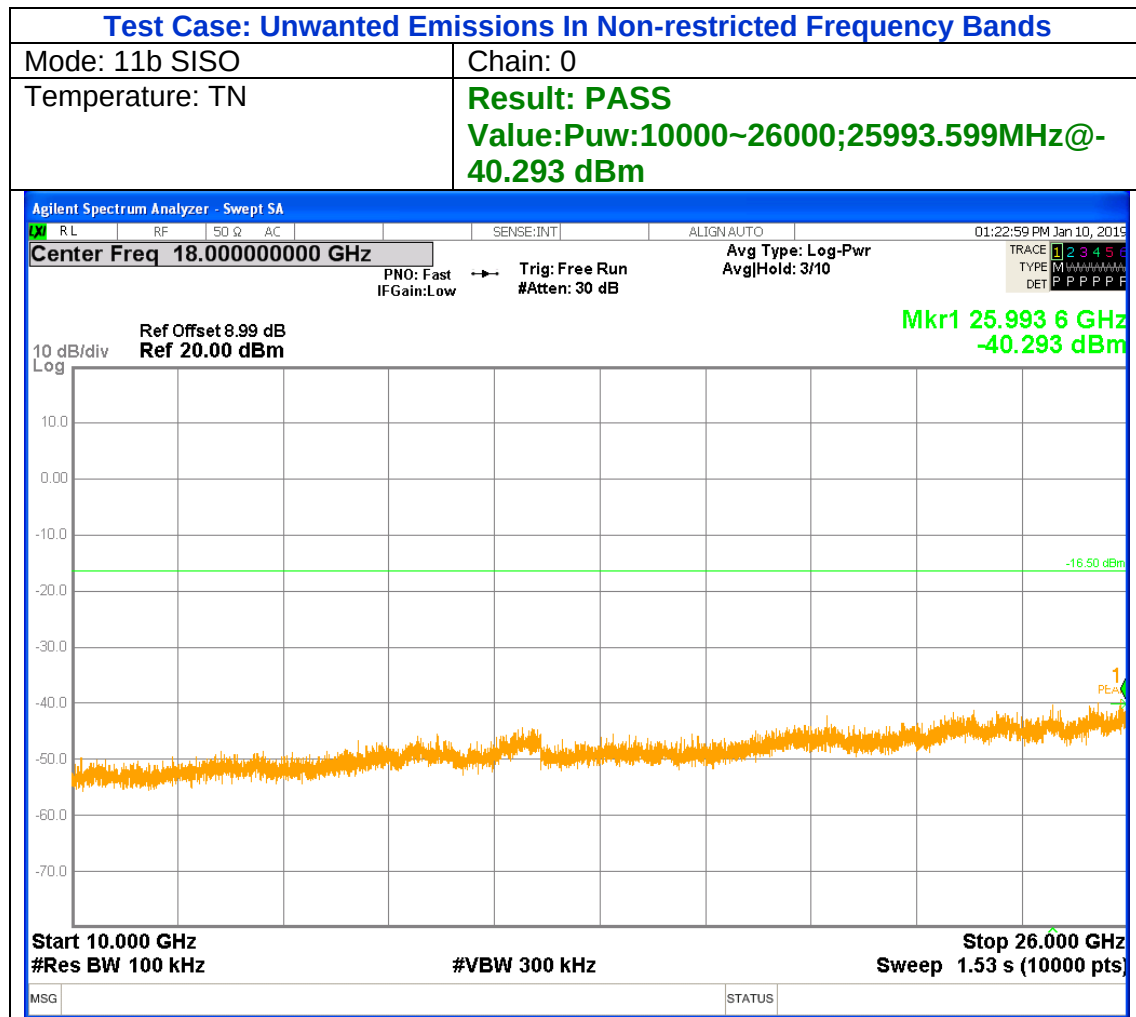


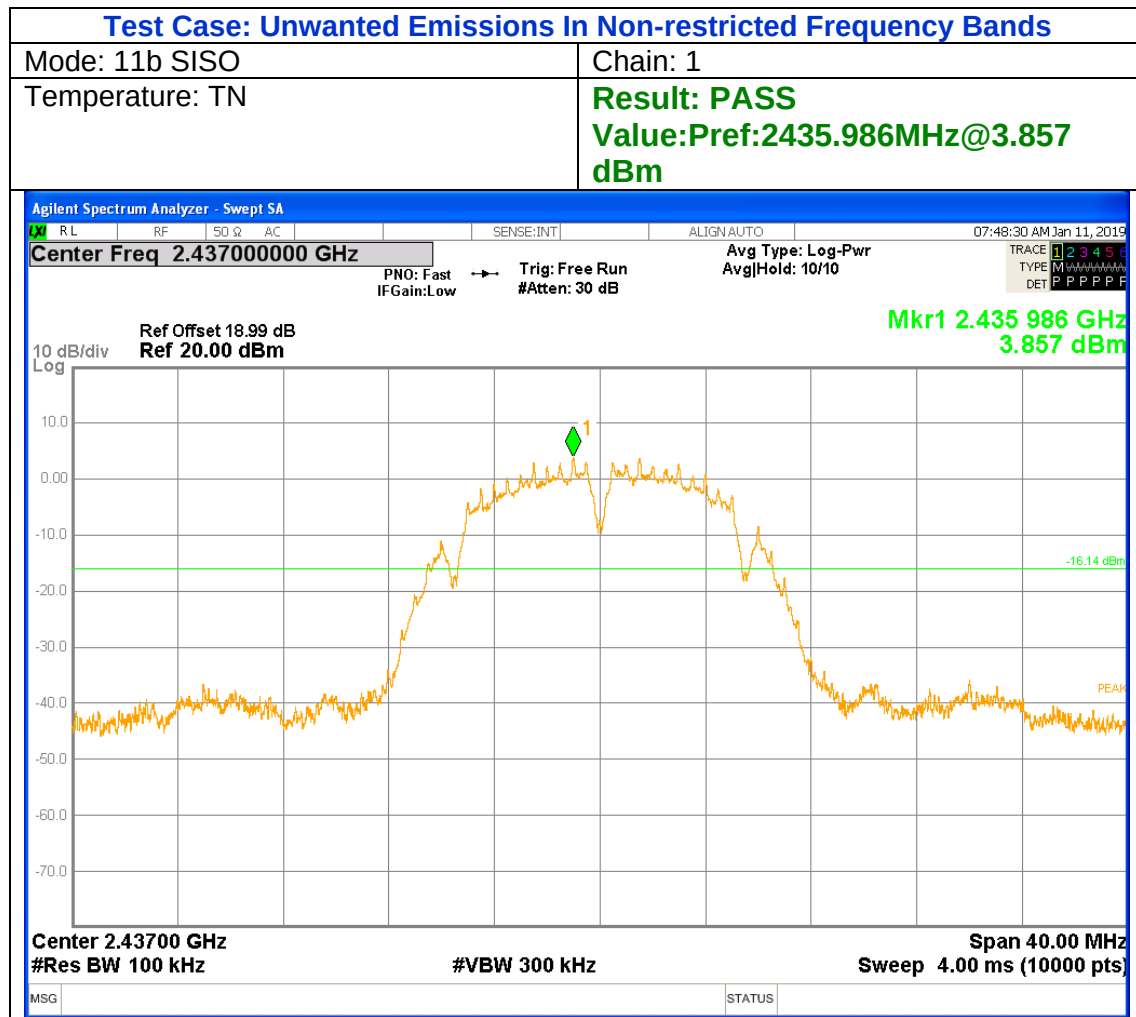


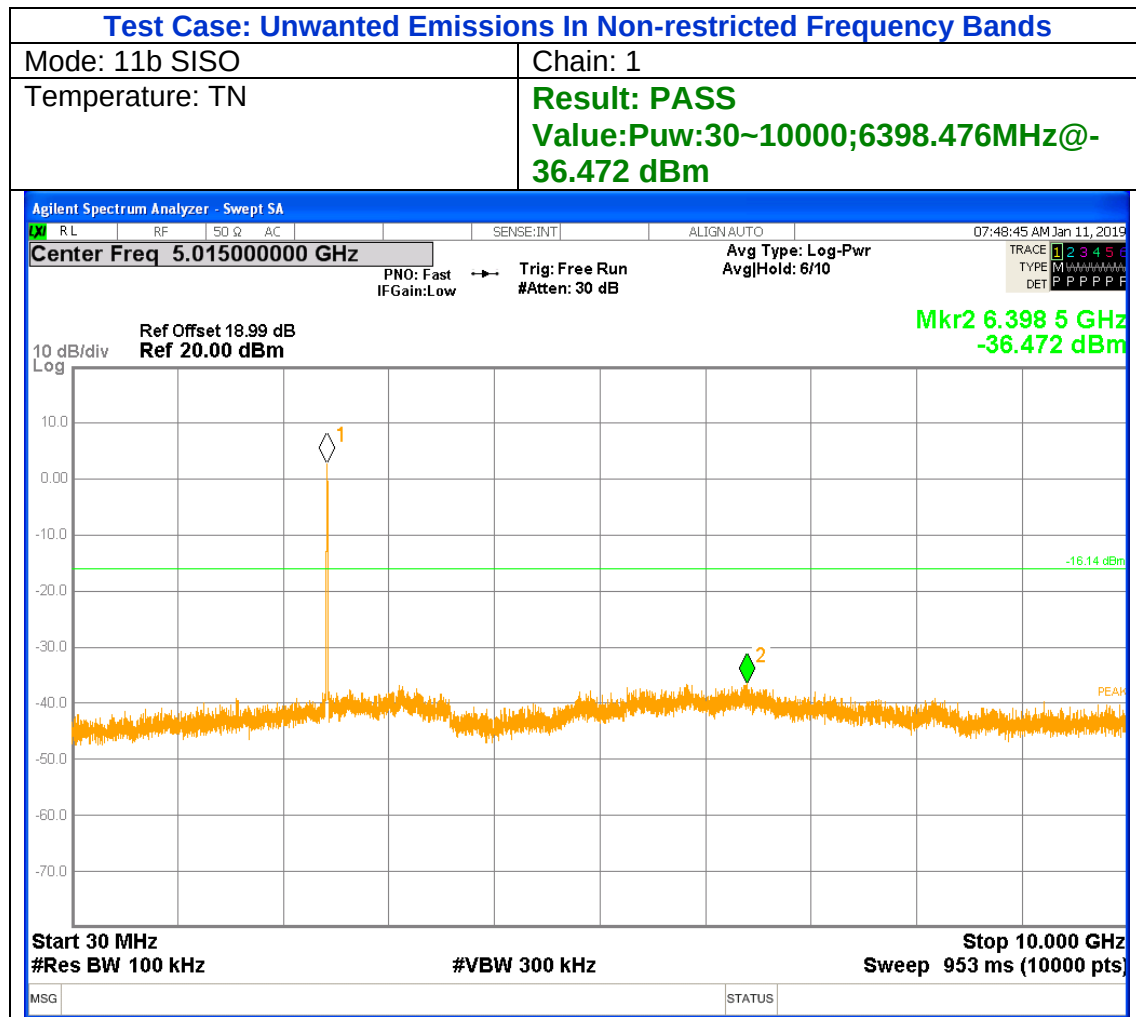
Middle Channel 06

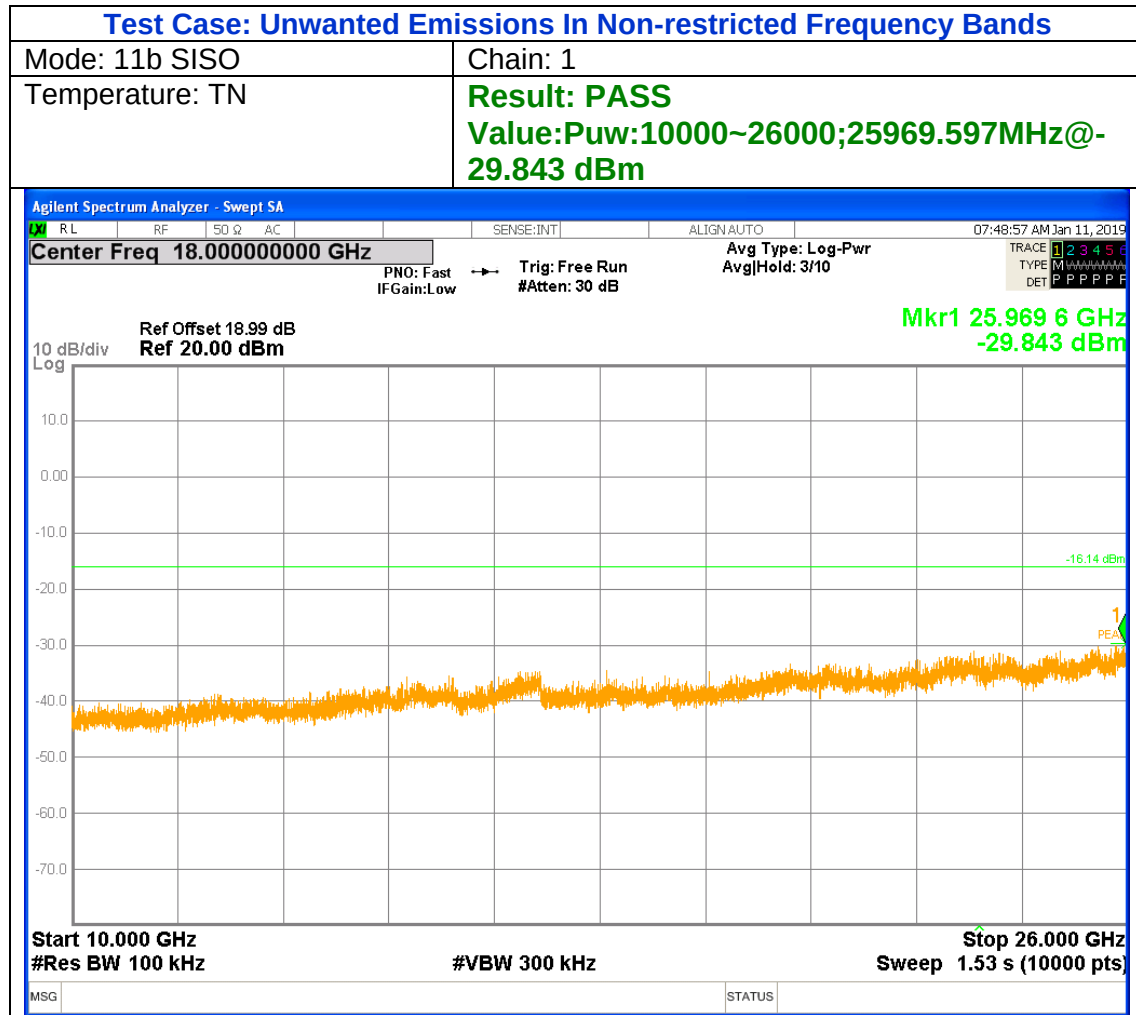














High Channel 11

Test Case: Bandedge Compliance

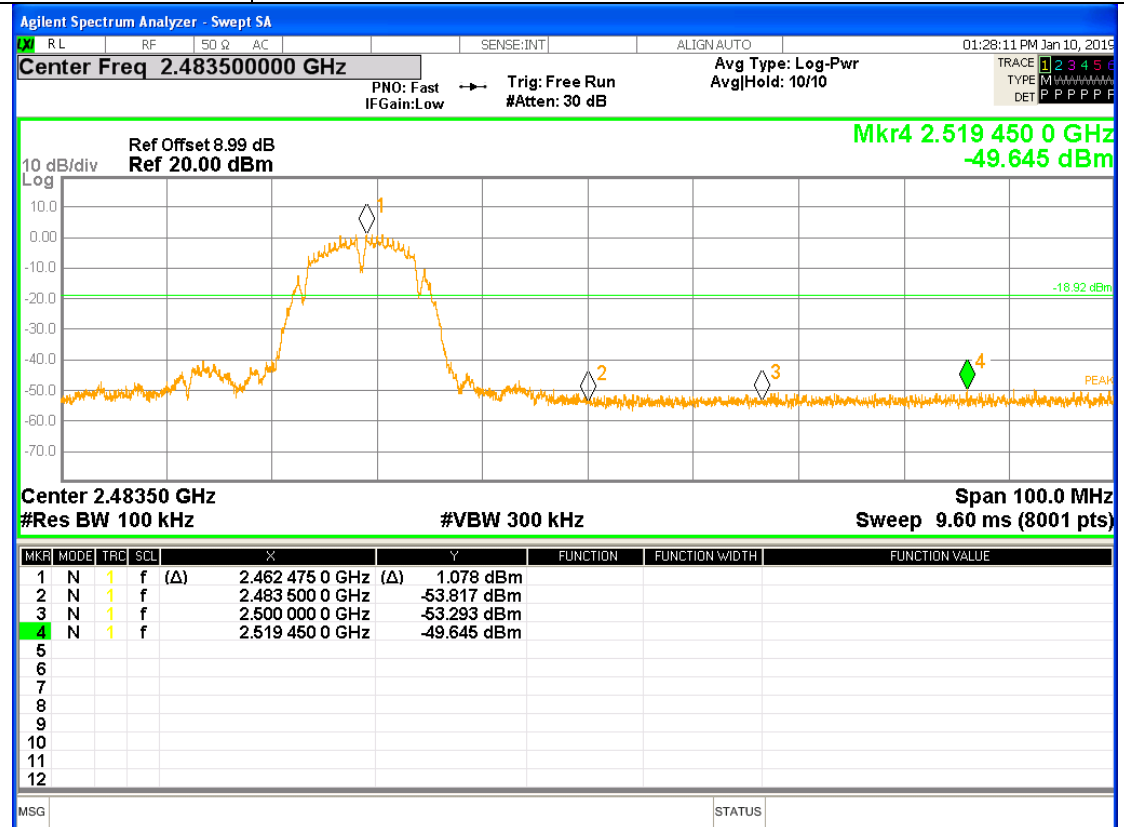
Mode: 11b SISO

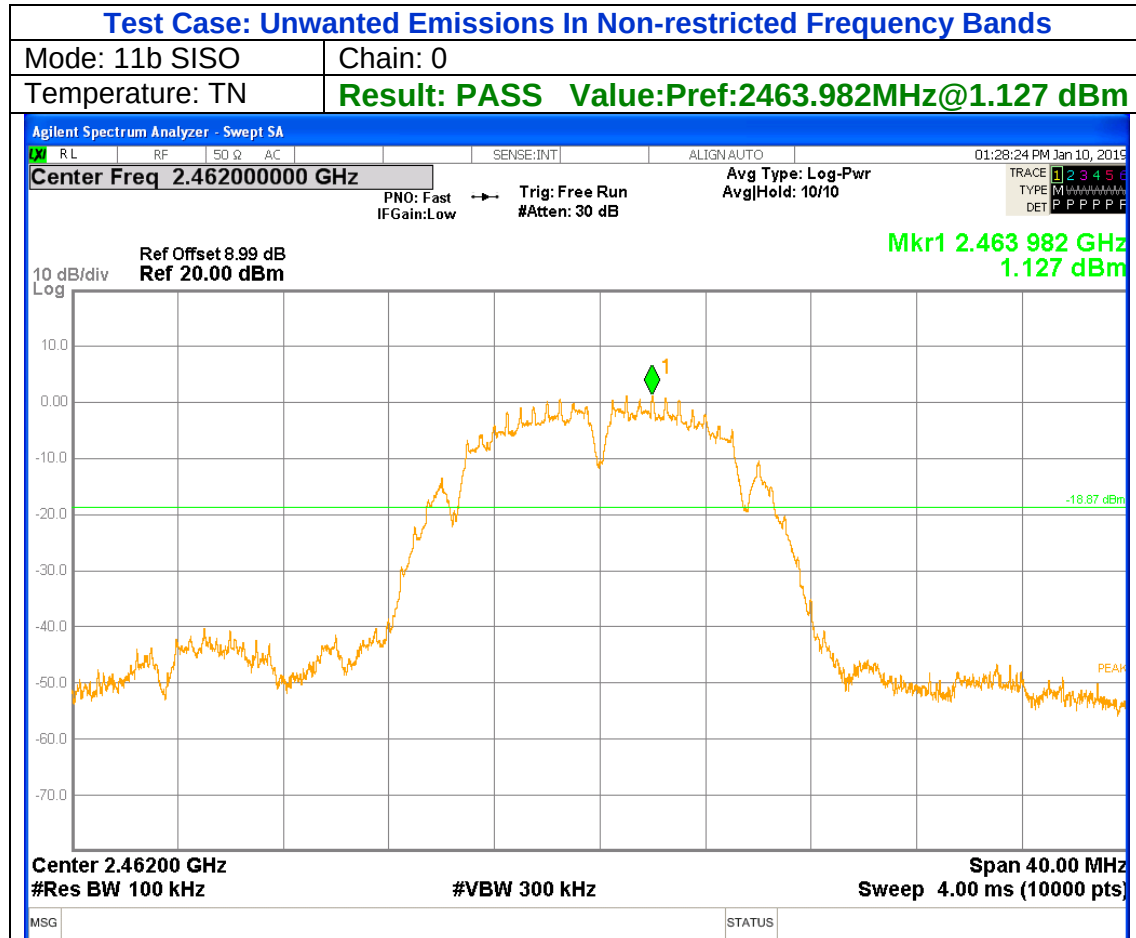
Chain: 0

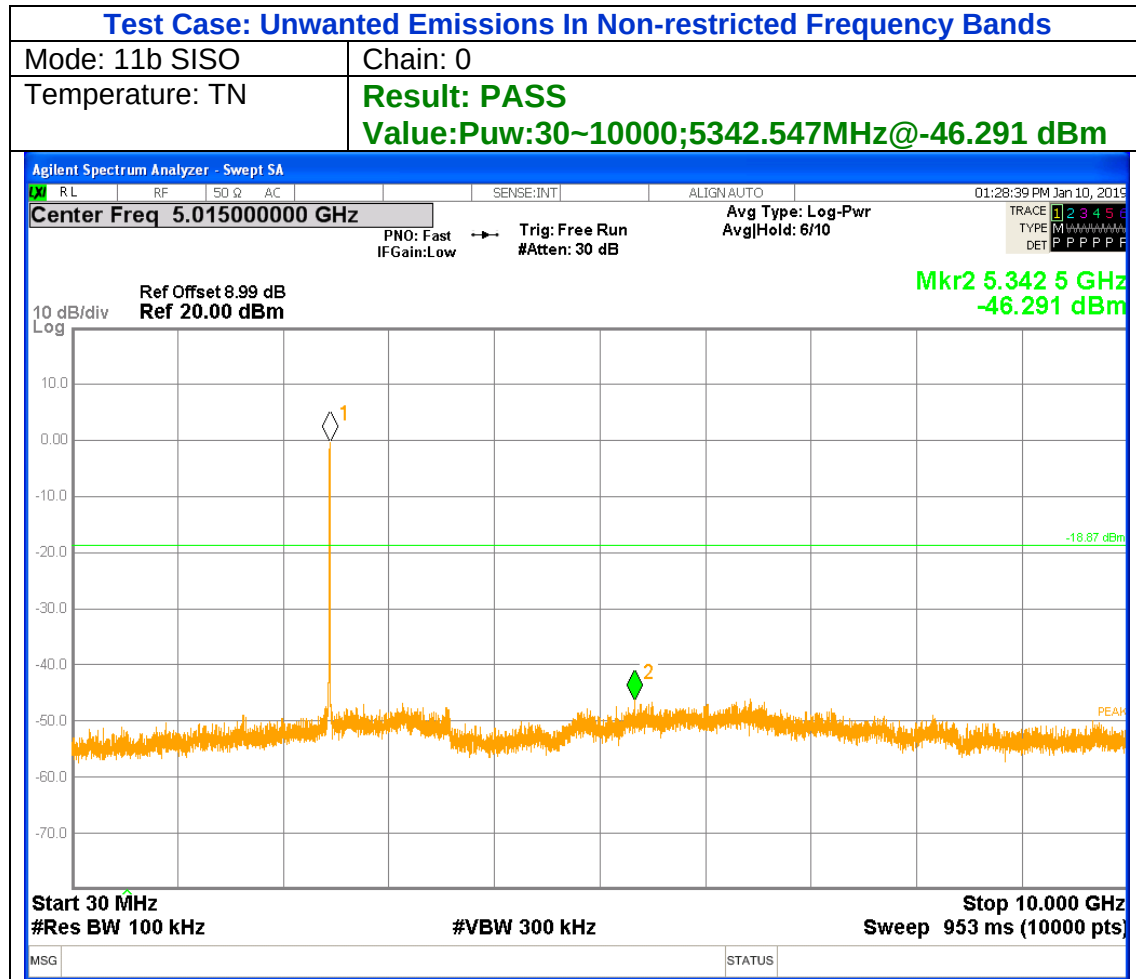
Temperature: TN

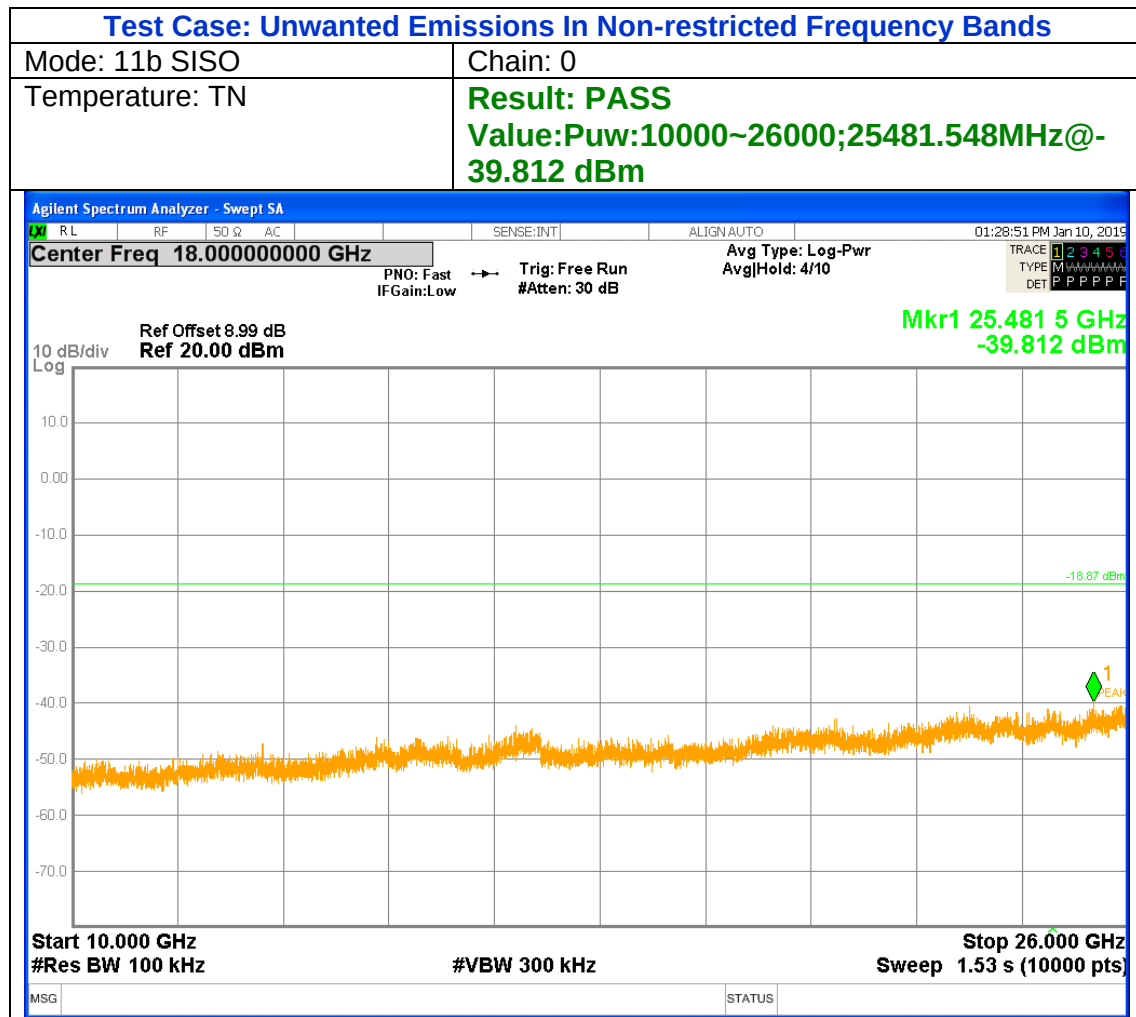
Result: PASS

Value: Peak: 1.078 dBm; Max: 2519.450 MHz @ -49.645 dBm 50.723 dbc







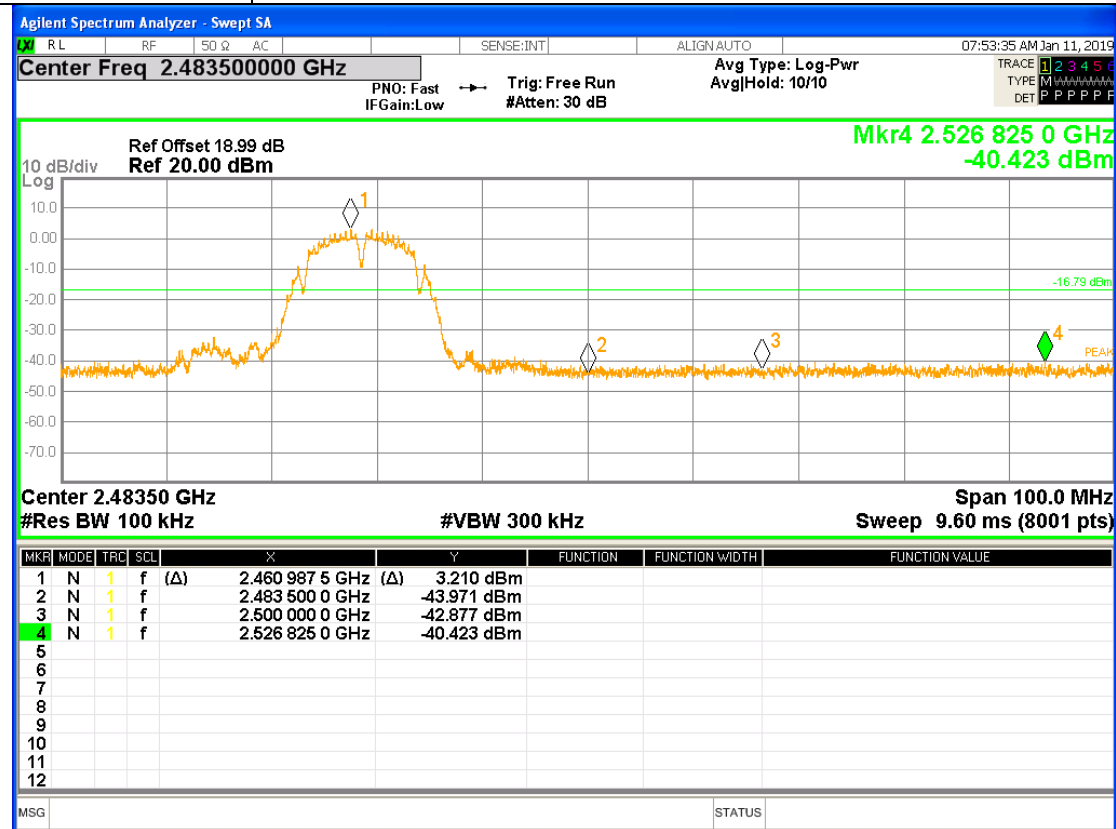


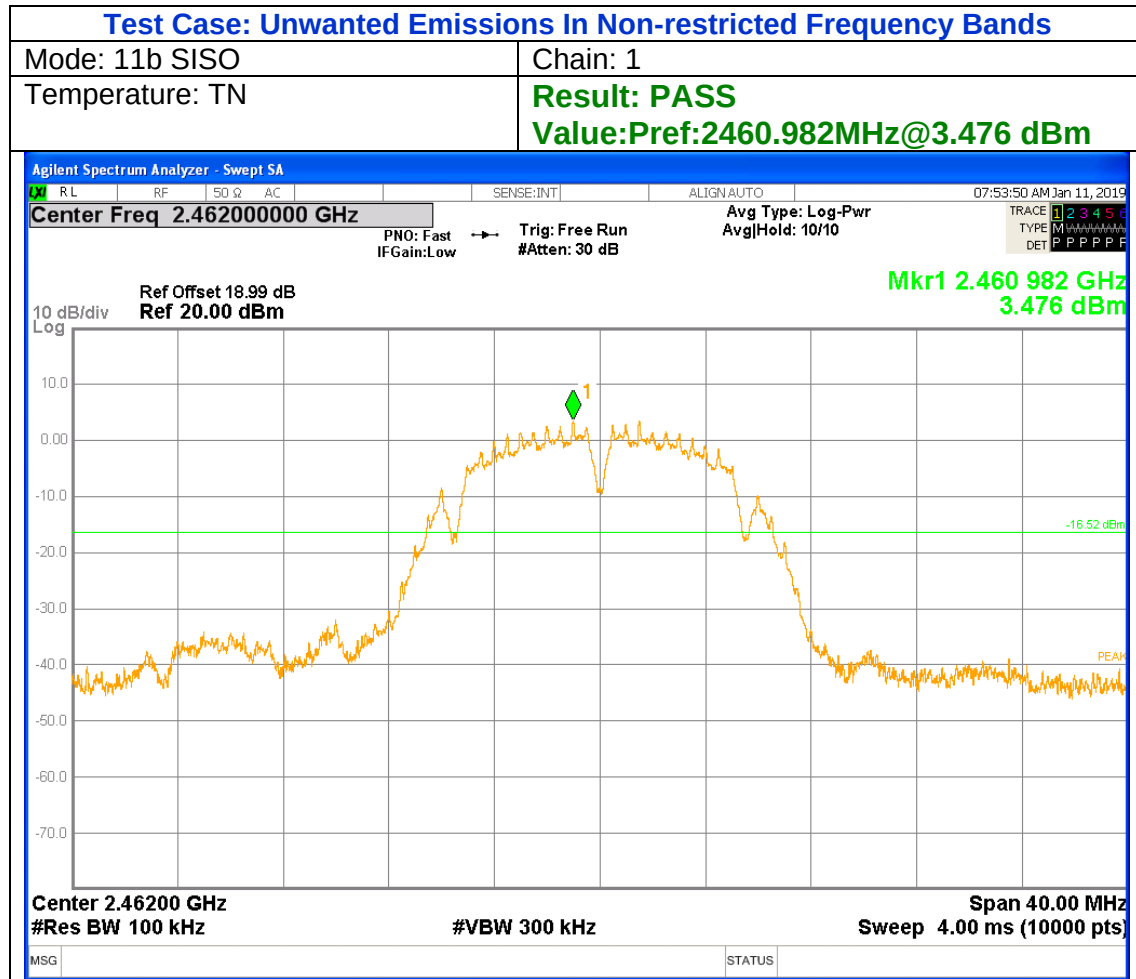
**Test Case: Bandedge Compliance**

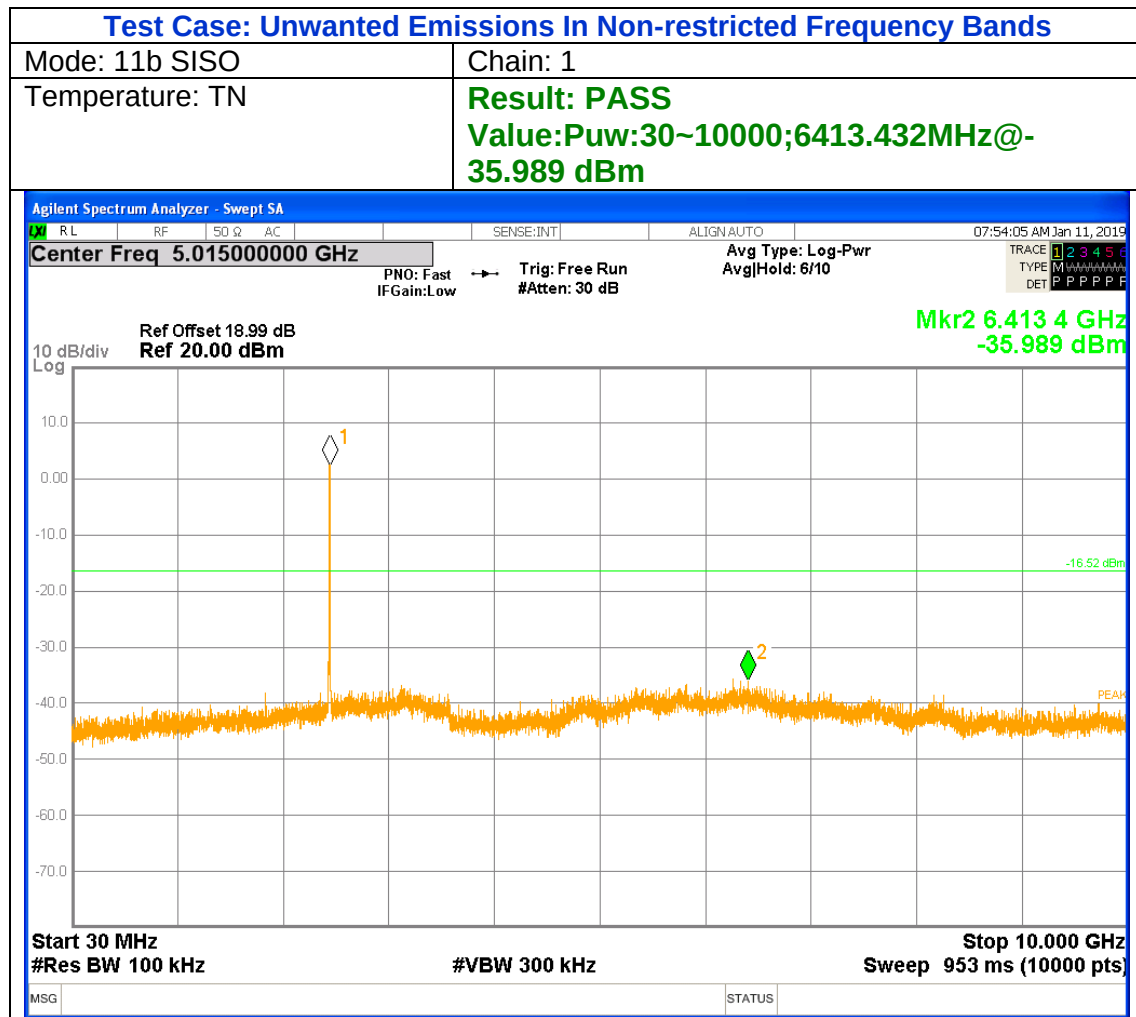
Mode: 11b SISO

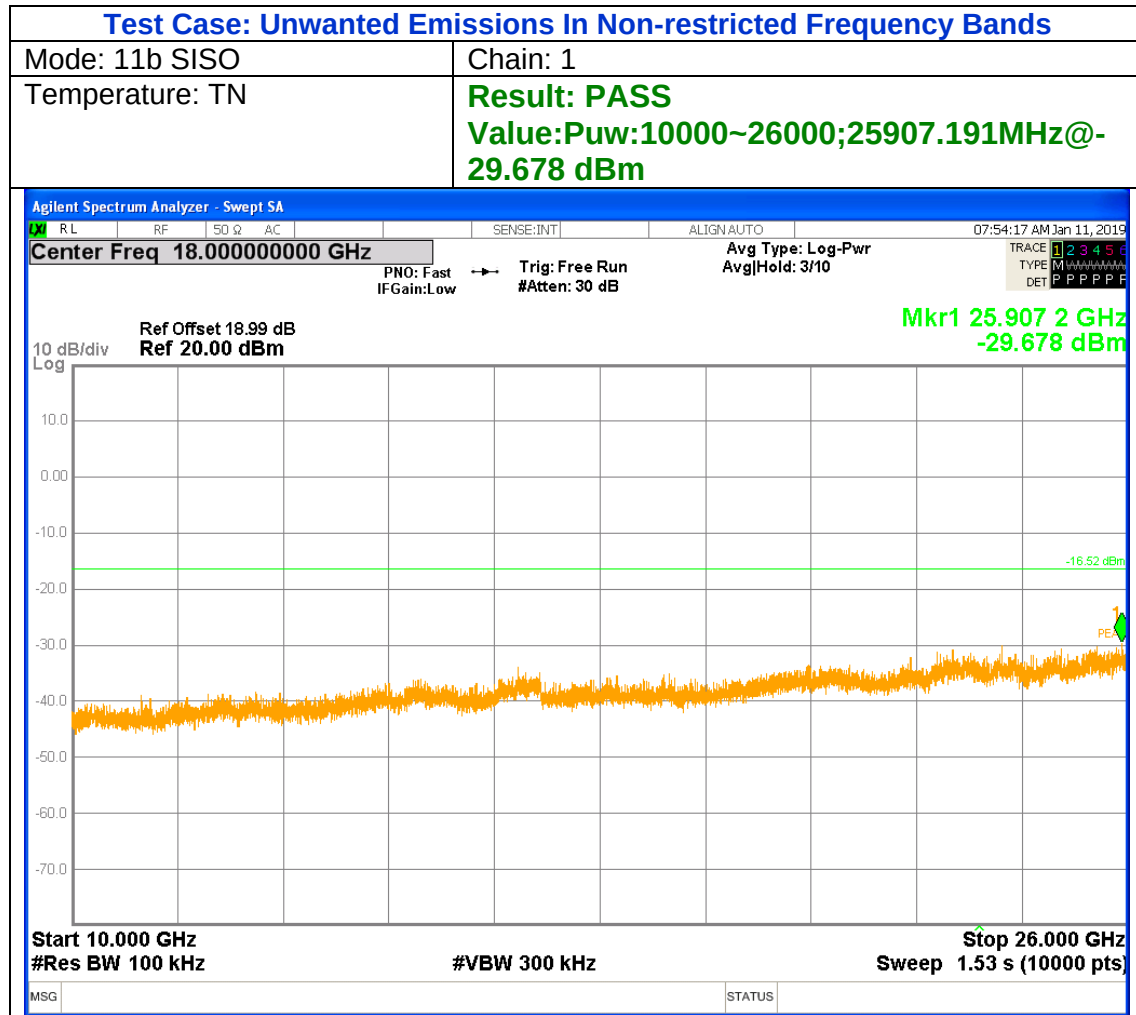
Chain: 1

Temperature: TN

Result: PASS**Value: Peak: 3.210 dBm; Max: 2526.825 MHz @ -40.423 dBm 43.633 dbc**









High Channel 12

Test Case: Bandedge Compliance

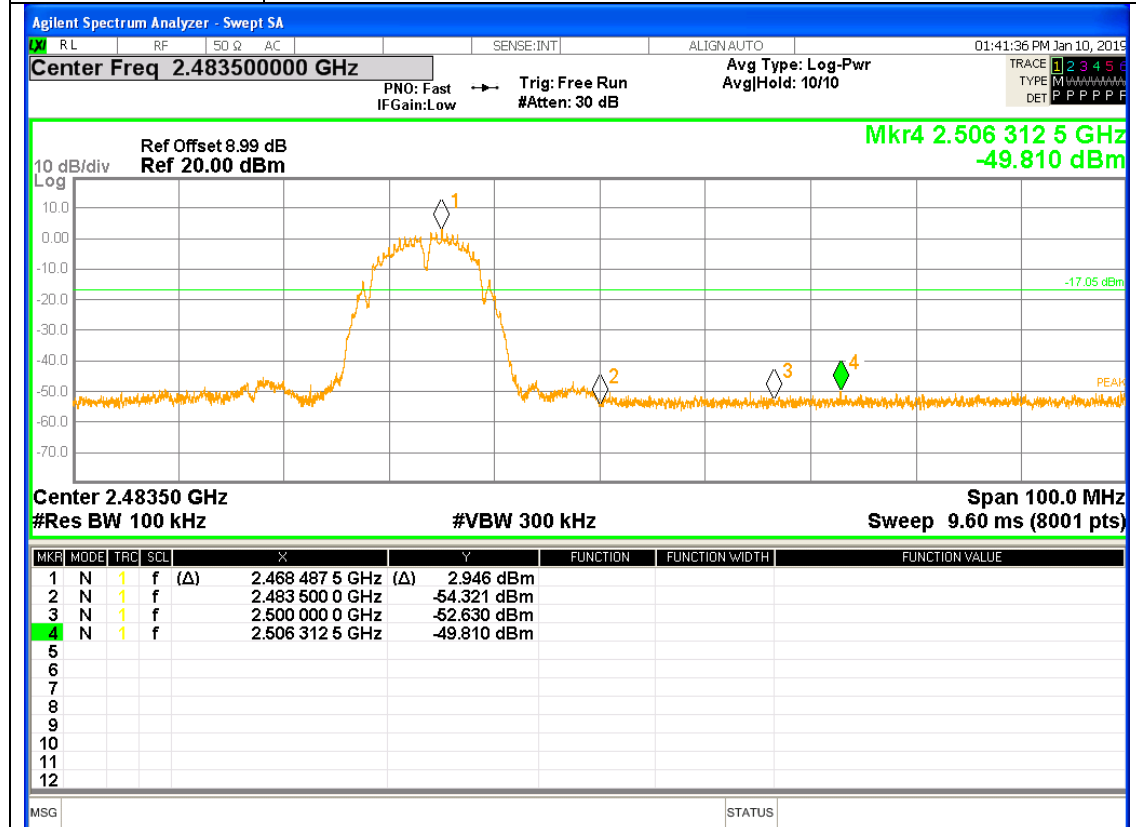
Mode: 11b SISO

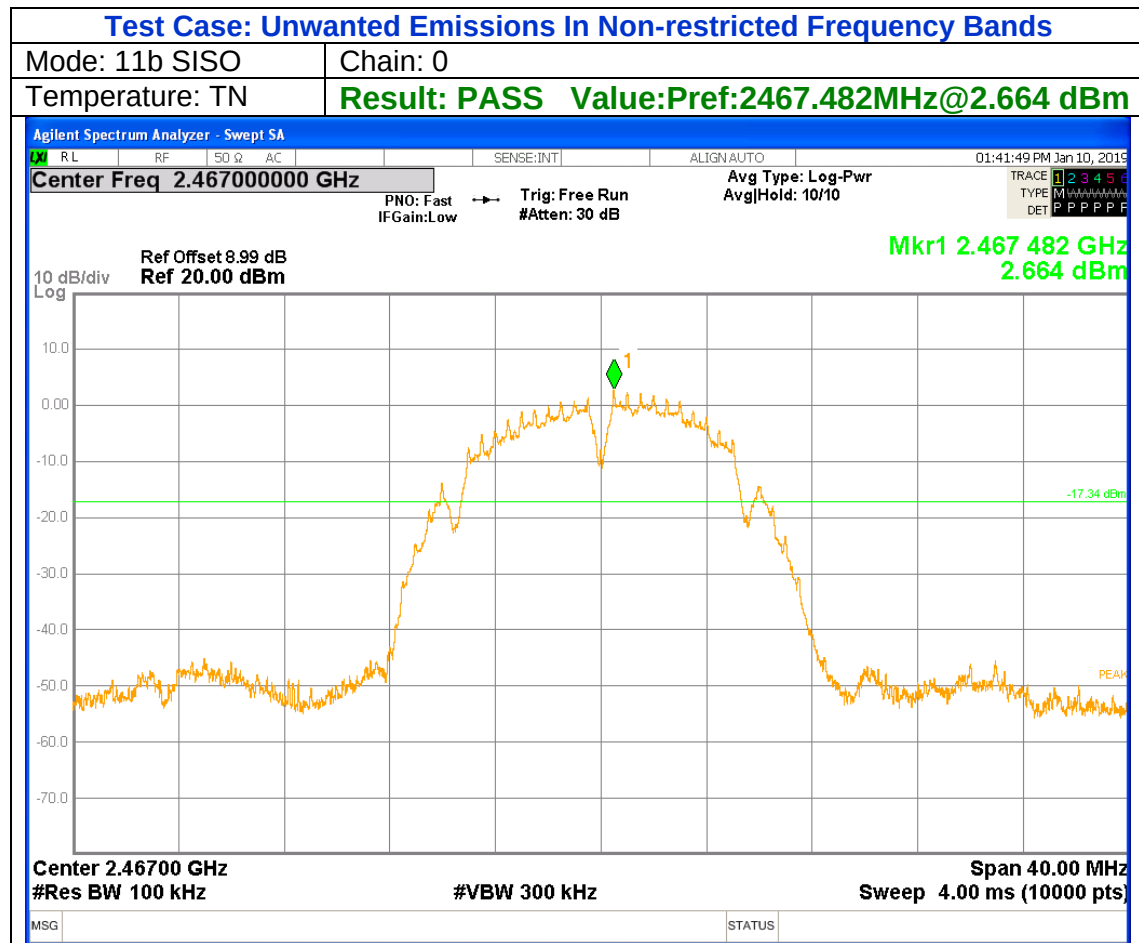
Chain: 0

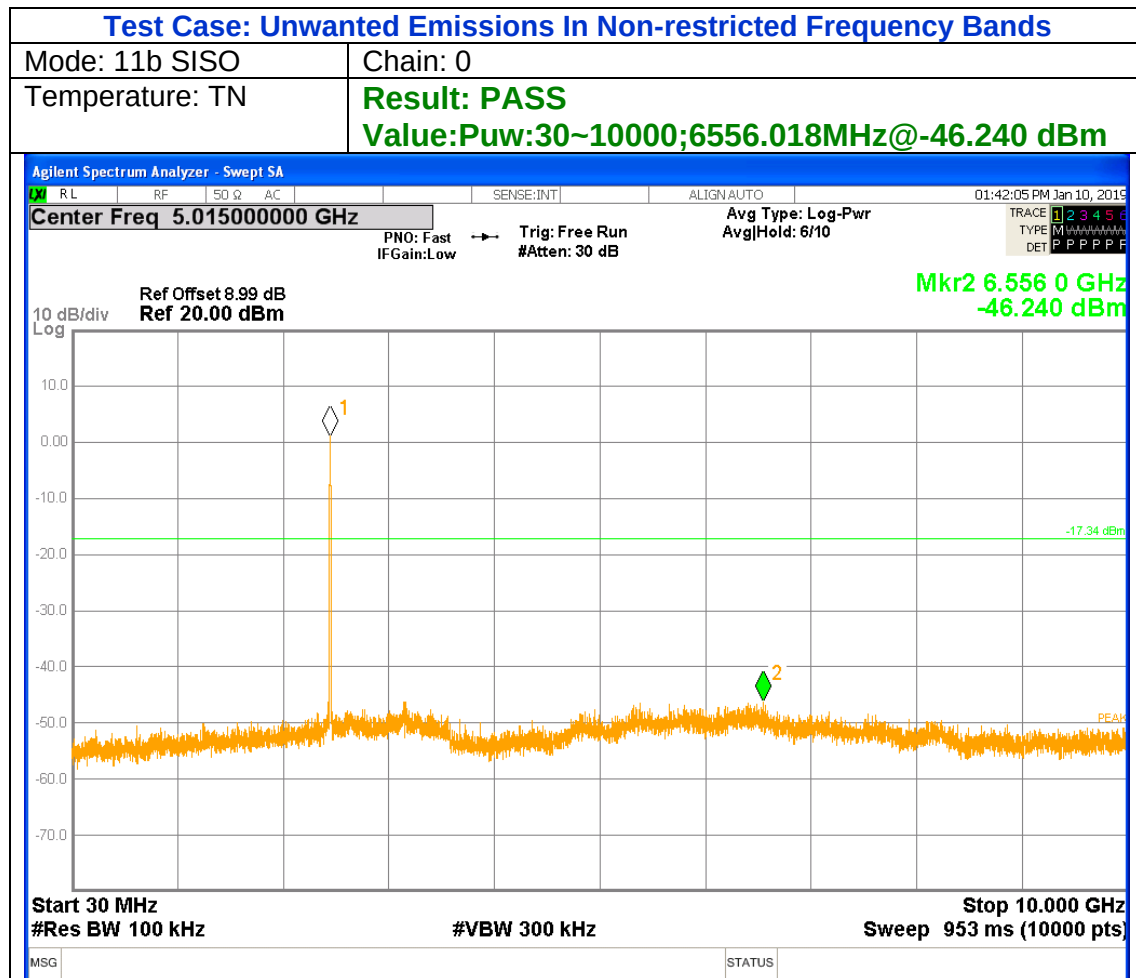
Temperature: TN

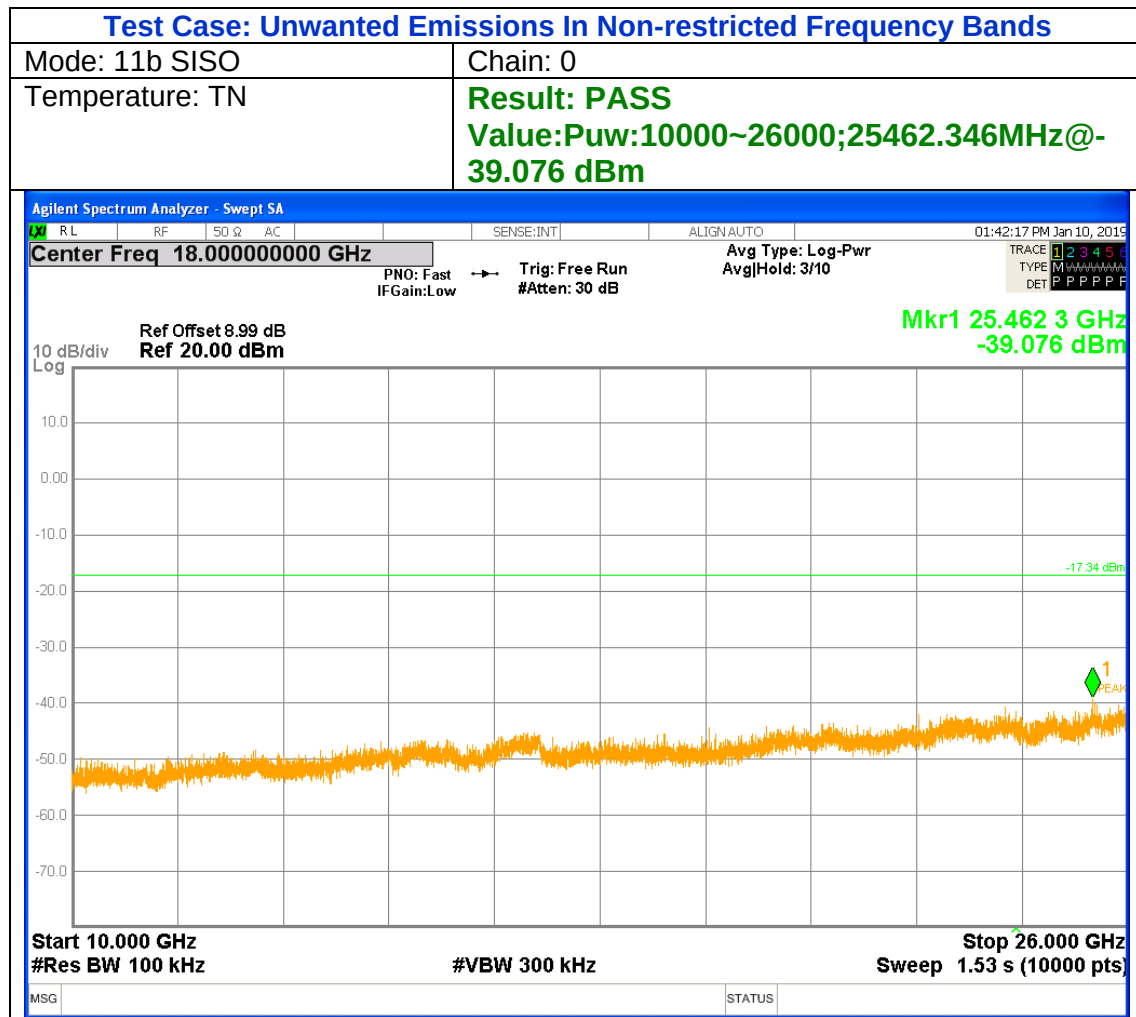
Result: PASS

Value: Peak: 2.946 dBm; Max: 2506.313 MHz @ -49.810 dBm 52.756 dbc







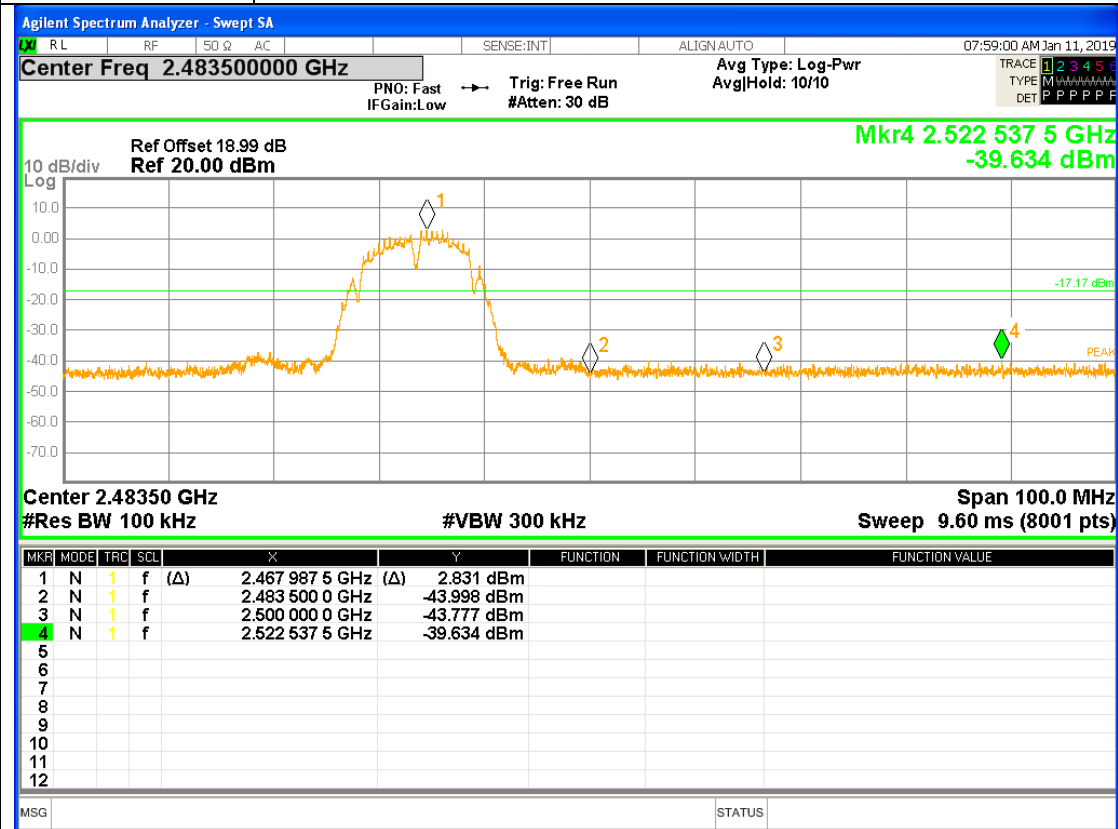


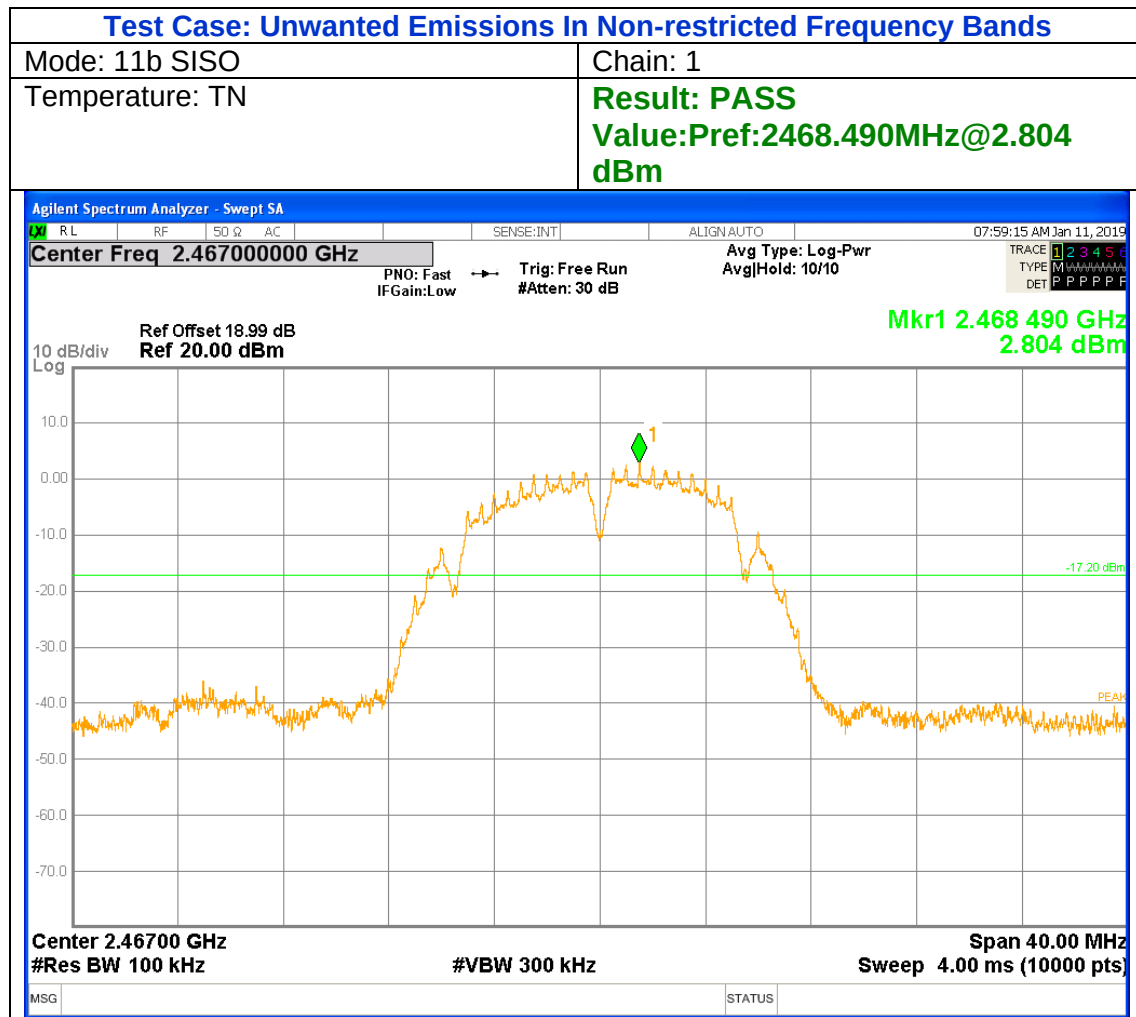
**Test Case: Bandedge Compliance**

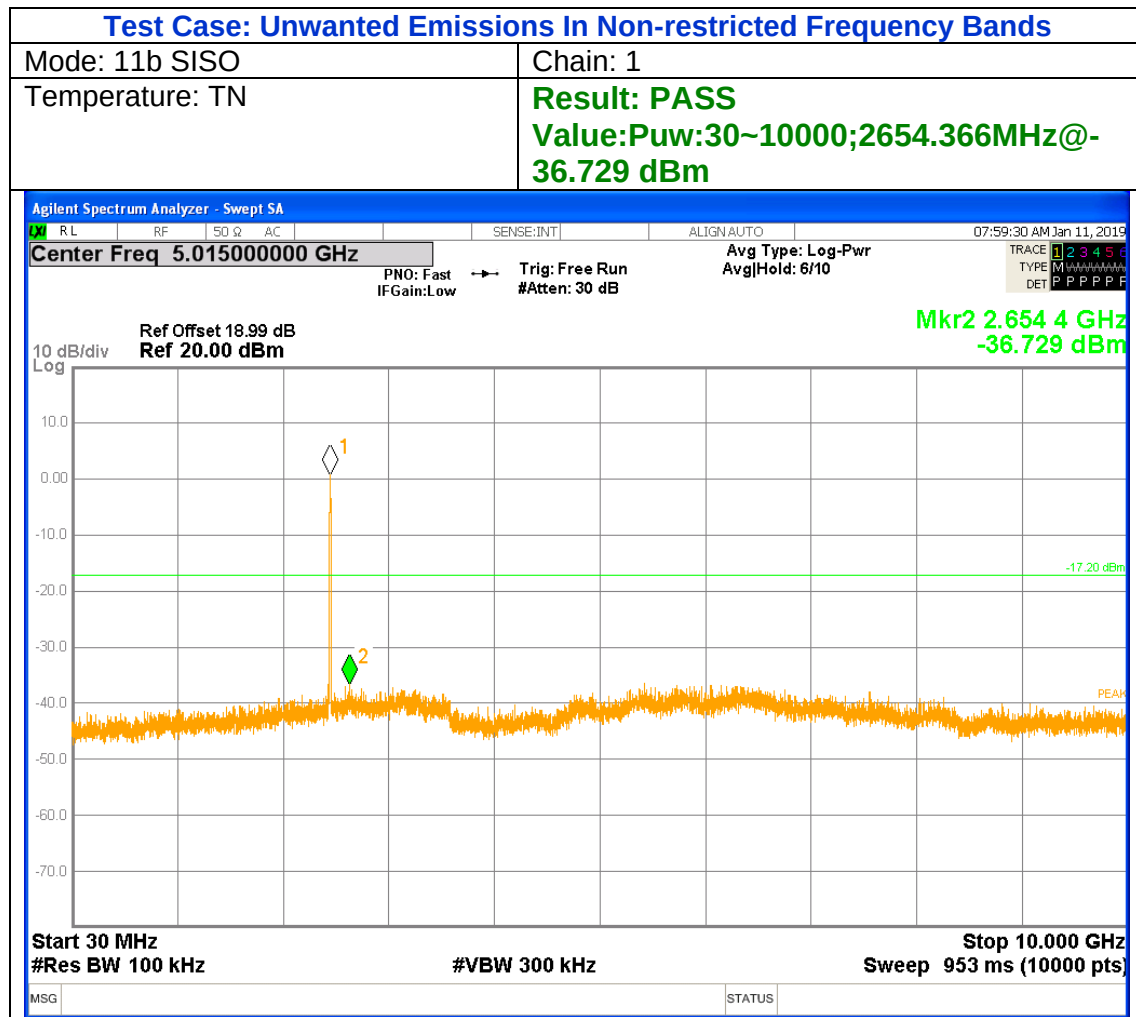
Mode: 11b SISO

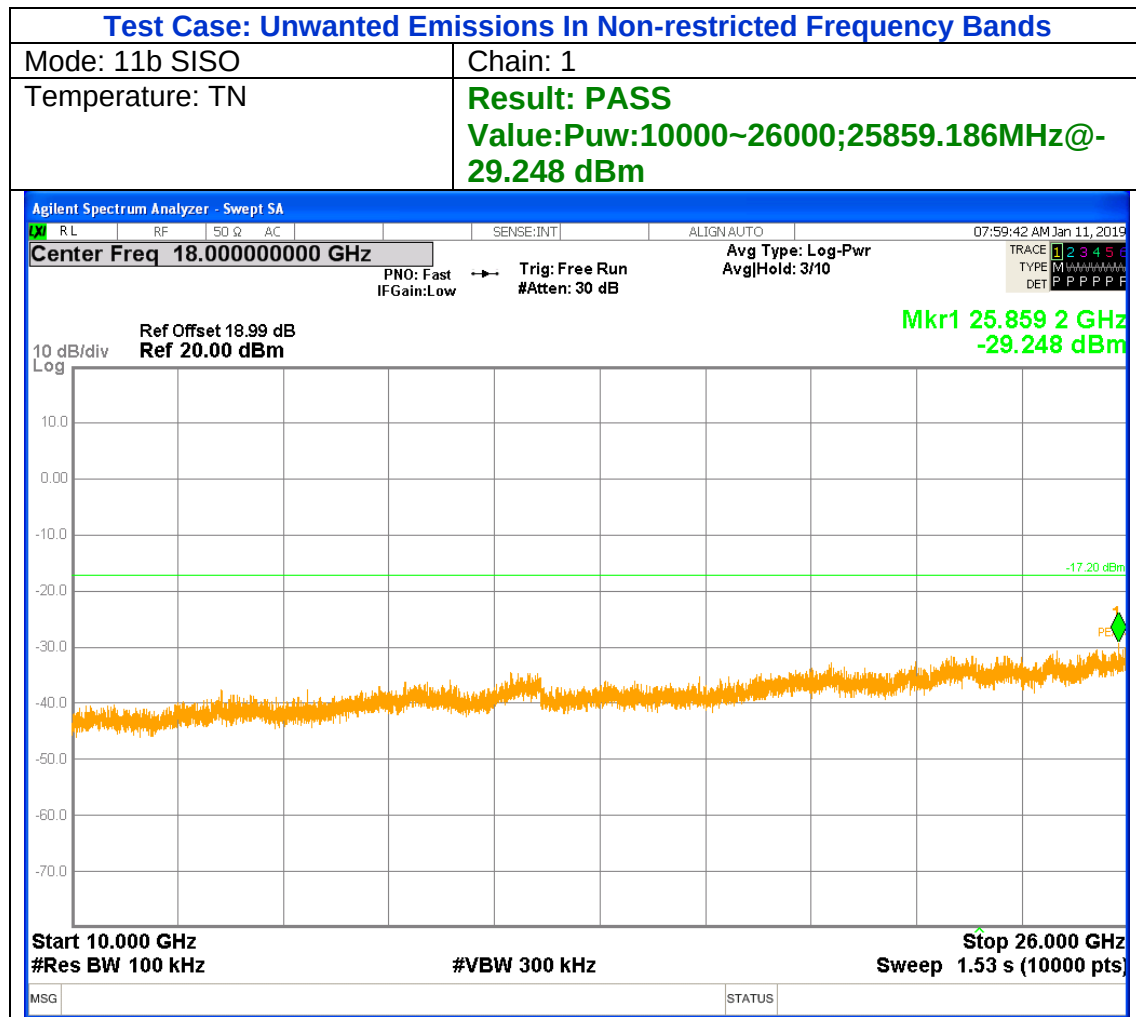
Chain: 1

Temperature: TN

Result: PASS**Value: Peak: 2.831 dBm; Max: 2522.538 MHz @ -39.634 dBm 42.465 dbc**









High Channel 13

Test Case: Bandedge Compliance

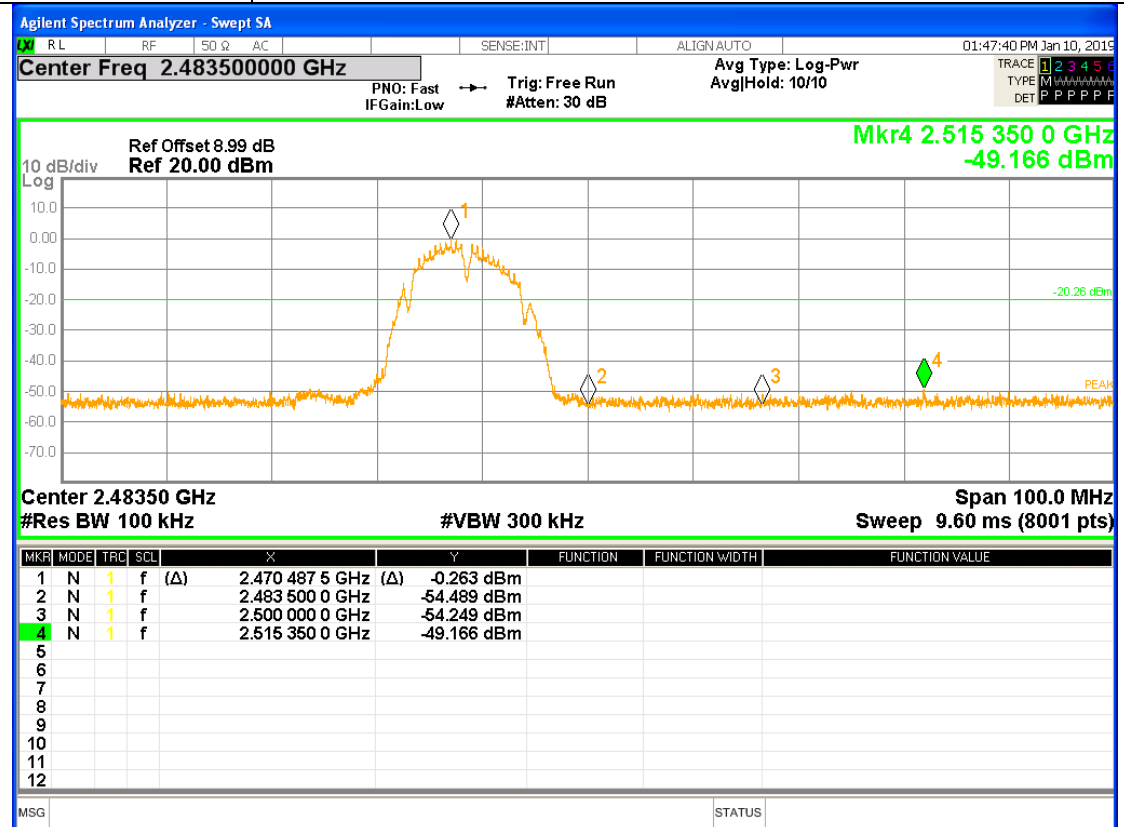
Mode: 11b SISO

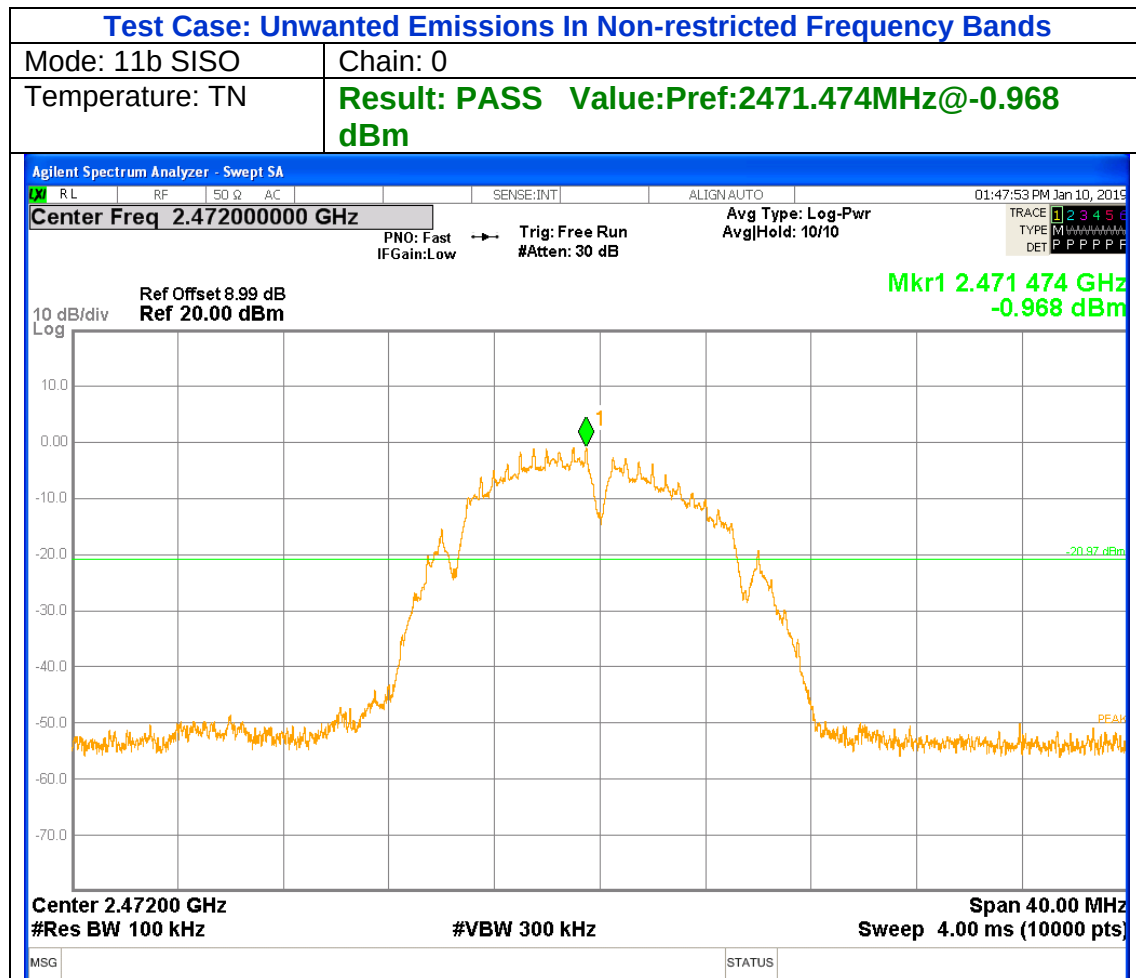
Chain: 0

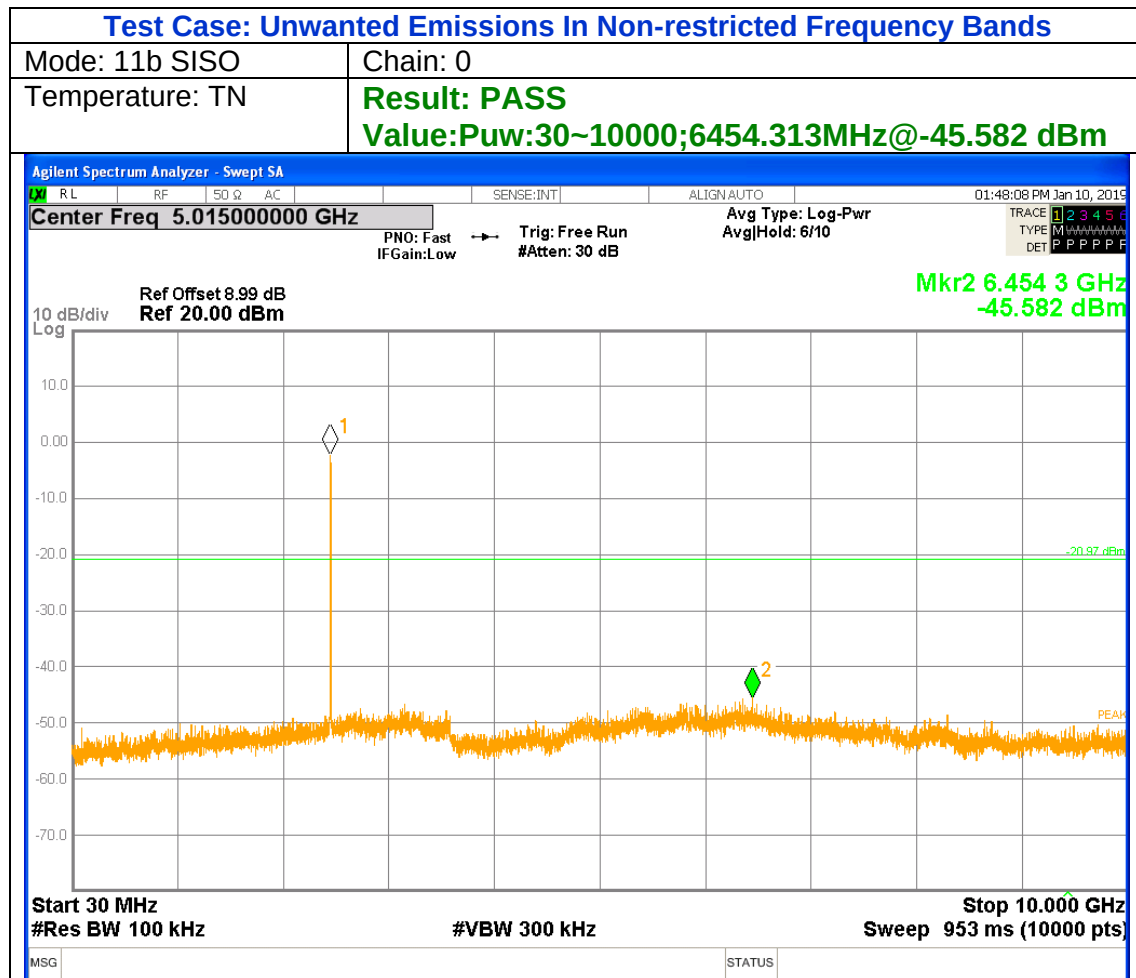
Temperature: TN

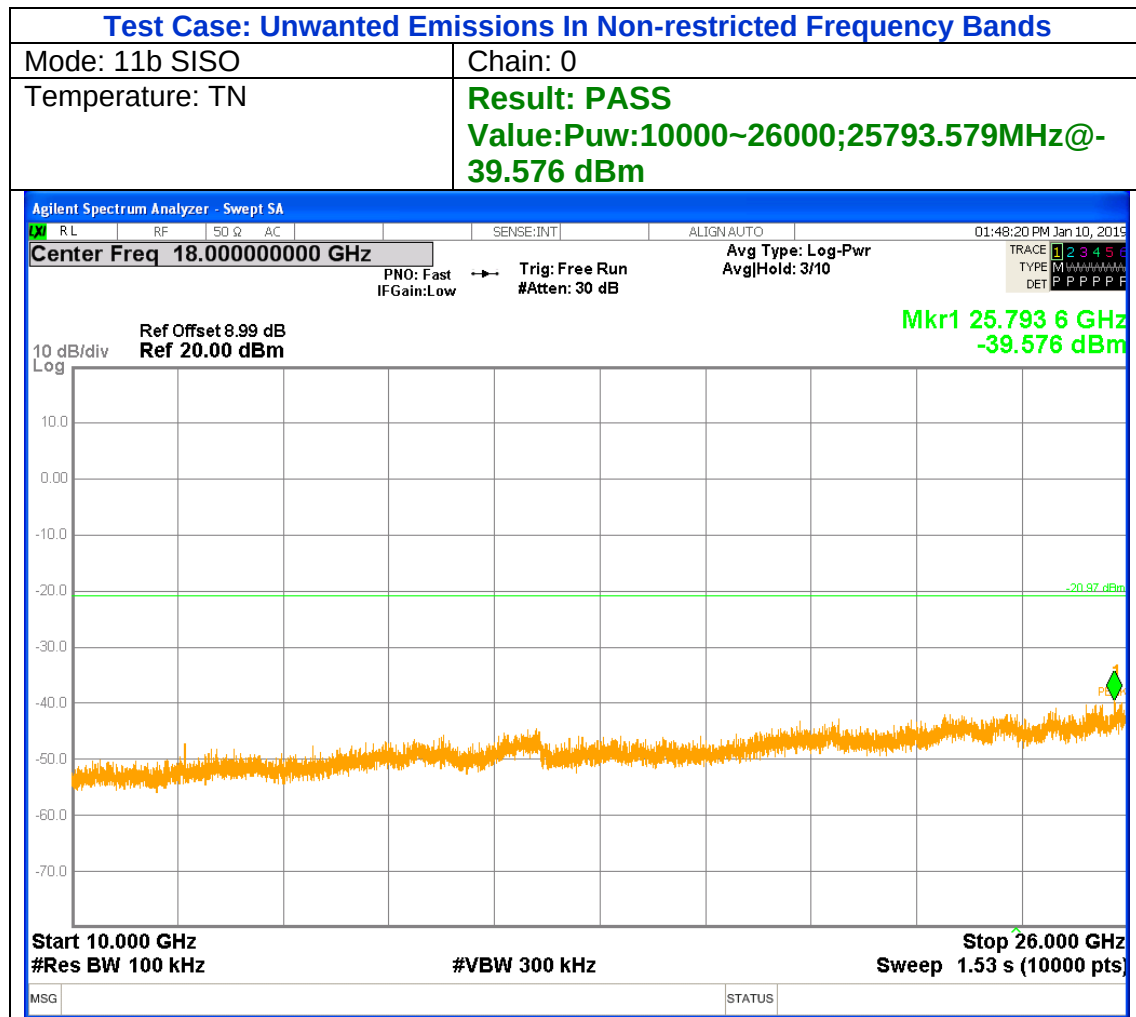
Result: PASS

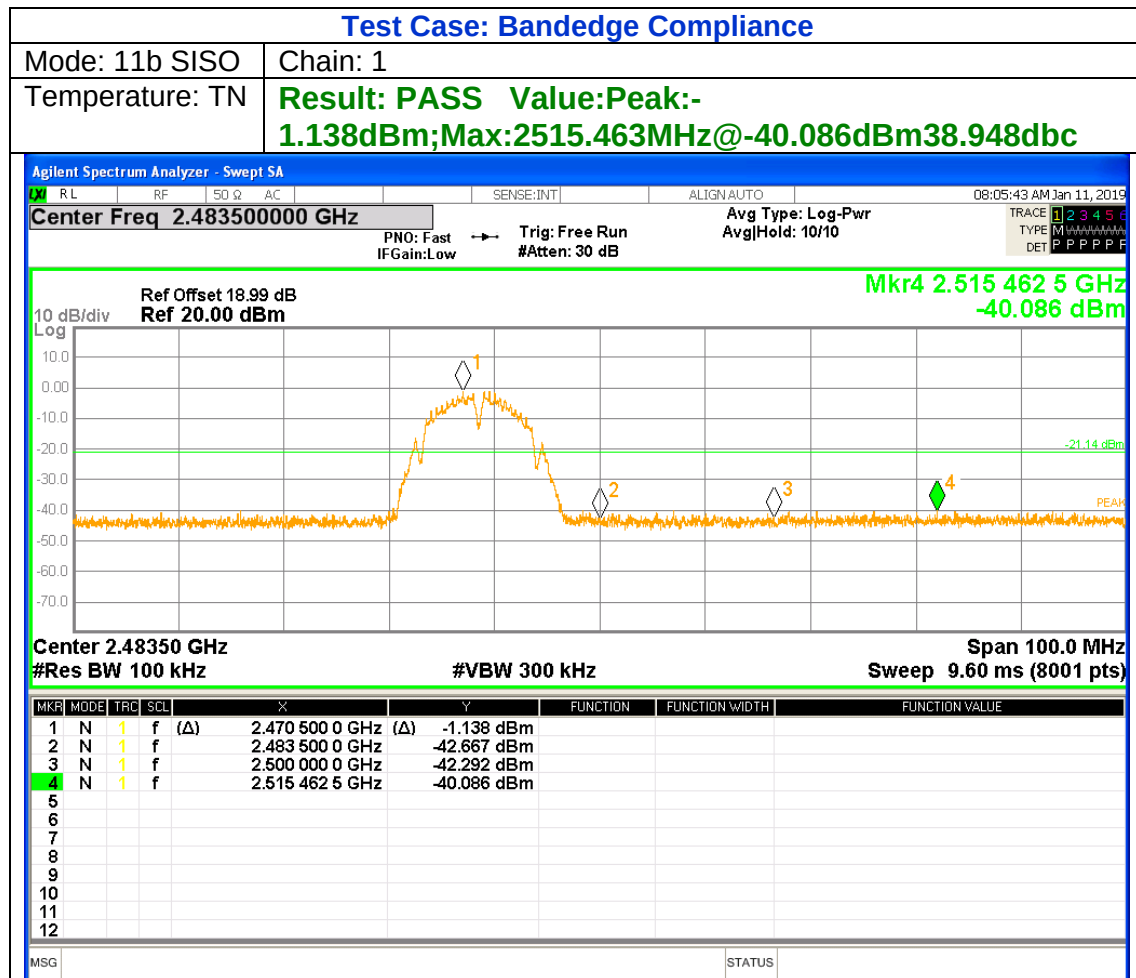
Value: Peak: -0.263 dBm; Max: 2515.350 MHz @ -49.166 dBm 48.903 dbc

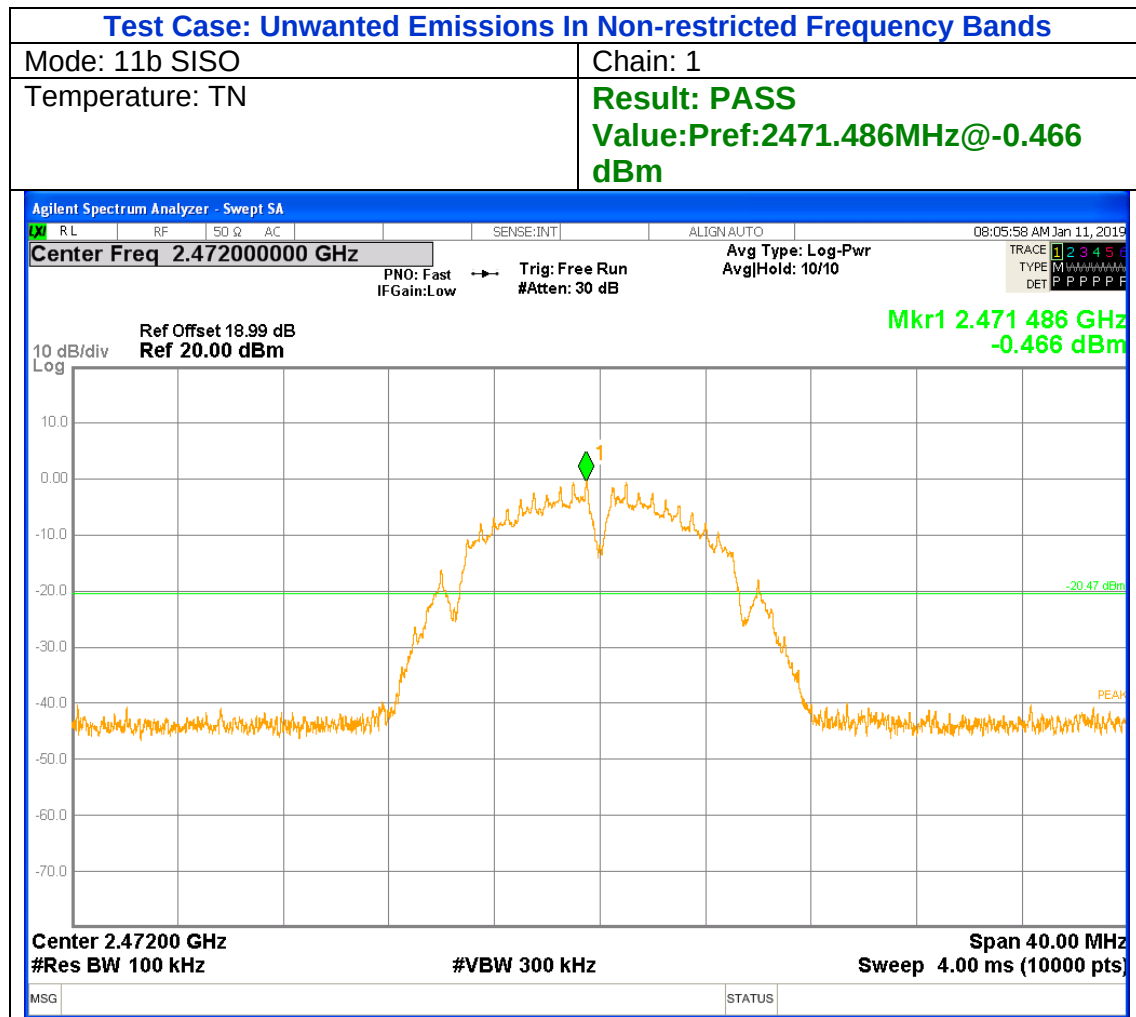


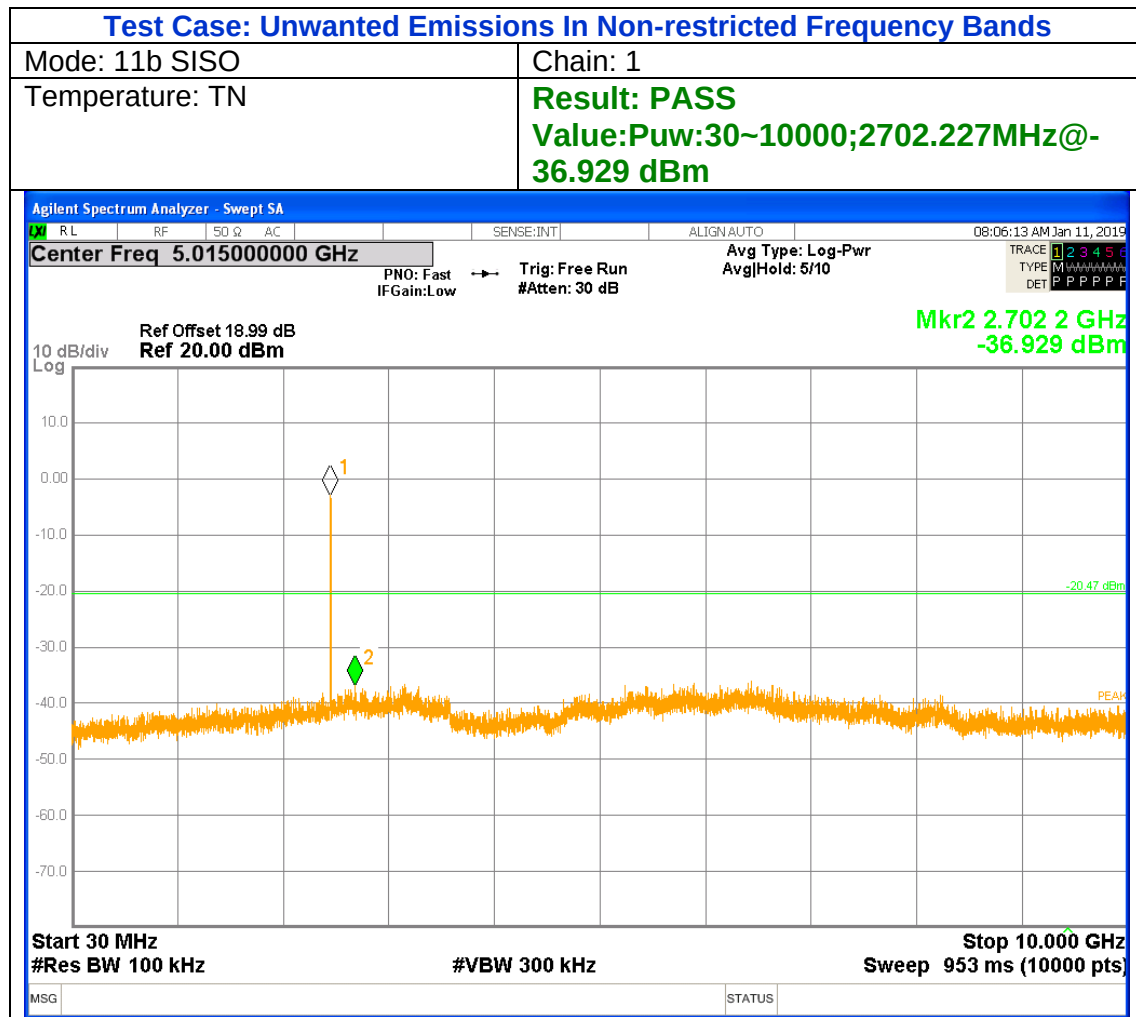


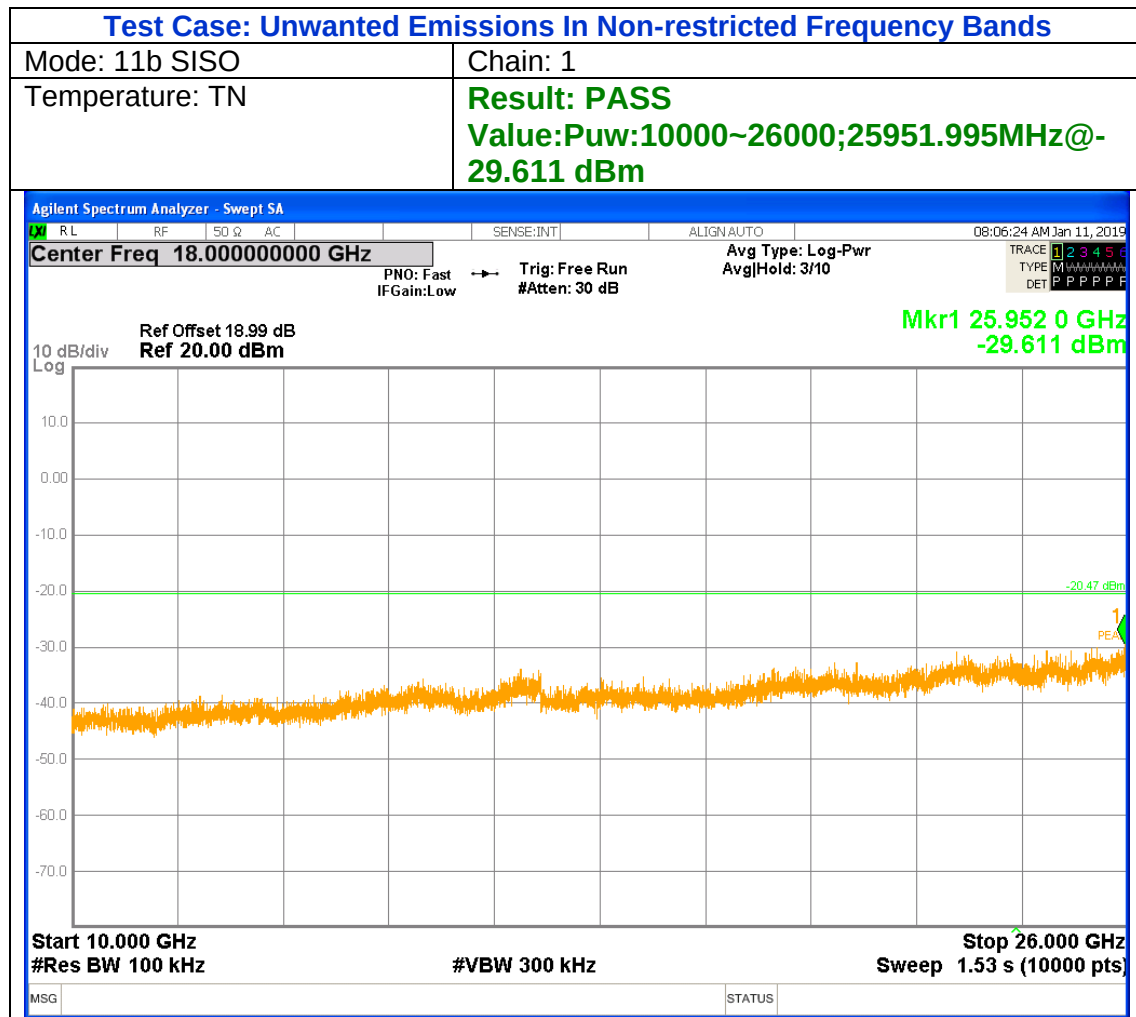














9. RADIATED TEST RESULTS

9.1.1. LIMITS

Please refer to FCC §15.205 and §15.209

Please refer to RSS-GEN Clause 8.9 (Transmitter)

Radiation Disturbance Test Limit for FCC (Class B)(9KHz-1GHz)

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
960~1000	500	3

Note: 1) At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

(2) At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). This paragraph (f) shall not apply to Access BPL devices operating below 30 MHz.



Radiation Disturbance Test Limit for FCC (Above 1G)

Frequency (MHz)	dB(uV/m) (at 3 meters)	
	Peak	Average
Above 1000	74	54

IC Restricted bands please refer to ISSED RSS-GEN Clause 8.10

FCC Restricted bands of operation:

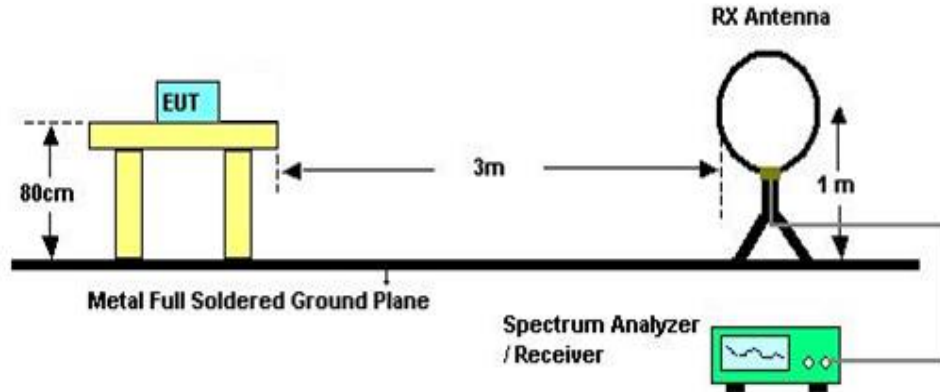
MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
¹ 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	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			

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

²Above 38.6c

9.1.2. TEST SETUP AND PROCEDURE

Below 30MHz

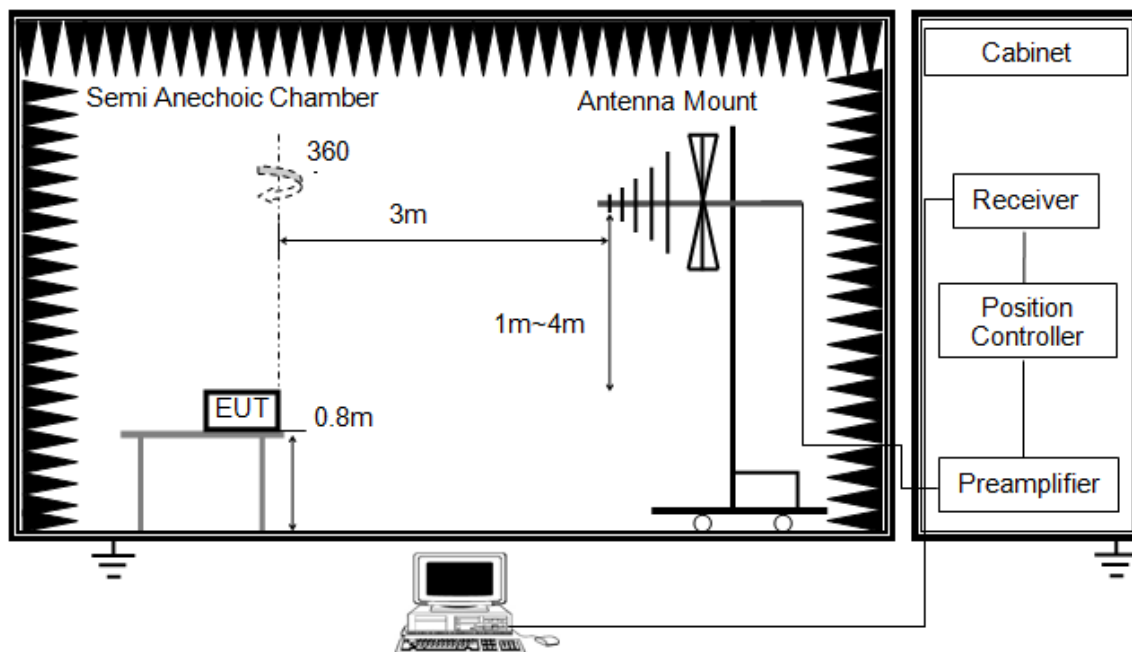


The setting of the spectrum analyser

RBW	200Hz (From 9kHz to 0.15MHz)/ 9KHz (From 0.15MHz to 30MHz)
VBW	200Hz (From 9kHz to 0.15MHz)/ 9KHz (From 0.15MHz to 30MHz)
Sweep	Auto
Detector	Peak/QP/ Average
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013
2. The EUT was arranged to its worst case and then turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 0.8 meter above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
6. For the actual test configuration, please refer to the related item in this test report (Photographs of the Test Configuration)

Below 1G

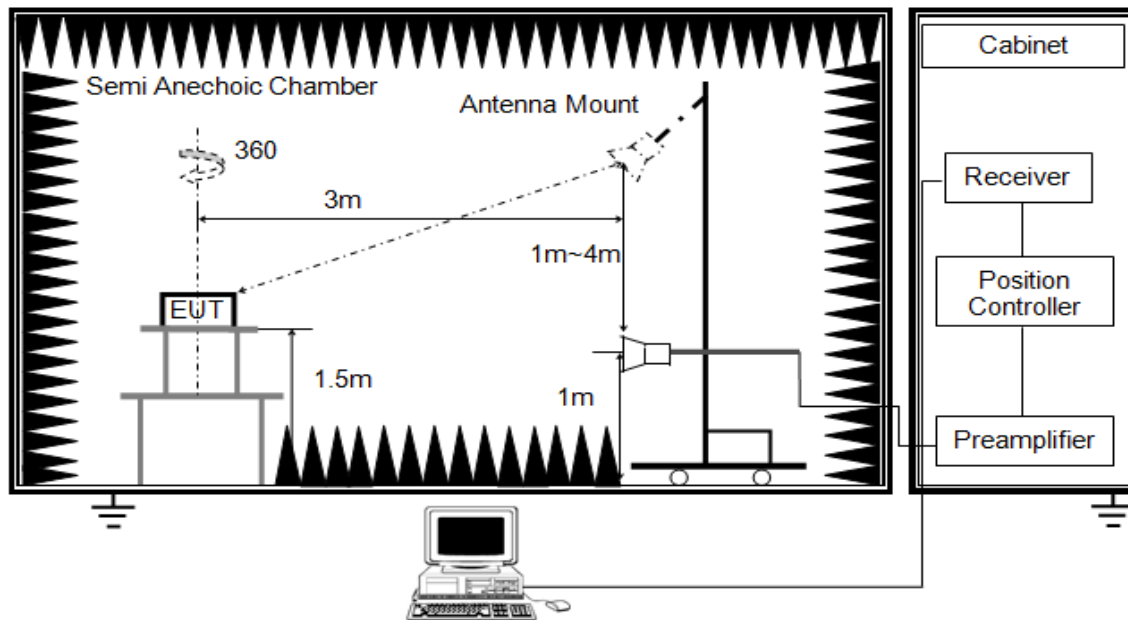


The setting of the spectrum analyser

RBW	120K
VBW	300K
Sweep	Auto
Detector	Peak/QP
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 0.8 meter above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
6. For the actual test configuration, please refer to the related Item in this test report (Photographs of the Test Configuration)

ABOVE 1G



The setting of the spectrum analyser

RBW	1M
VBW	PEAK: 3M AVG: see note 6
Sweep	Auto
Detector	Peak
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 1.5m above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. For measurement above 1GHz, the emission measurement will be measured by the peak detector. This peak level, once corrected, must comply with the limit specified in Section 15.209.
6. For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T video bandwidth with peak detector for average measurements.
7. For the actual test configuration, please refer to the related item in this test report (Photographs of the Test Configuration)



9.1.3. TEST ENVIRONMENT

Temperature	24.3°C	Relative Humidity	57%
Atmosphere Pressure	101kPa	Test Voltage	AC120V

9.1.4. RESULTS

Note 1: The EUT was fully exercised with external accessories during the test. In the case of multiple accessory external ports, an external accessory shall be connected to one of each type of port.

Note 2: The EUT was fully exercised with external accessories during the test. In the case of multiple accessory external ports, an external accessory shall be connected to one of each type of port.

Note 3: The chart shows Limits 74dBuV for Peak, 54dBuV for AVG, but Unwanted Emissions that fall Outside of the Restricted Bands is No limit for Peak, No limit for AVG For example, the frequency of 2000MHz did not fall on the Restricted Bands, although the Peak exceeds the 54dBuV limit value, but it is not necessary to read AVG. All test results are in compliance with the limits.



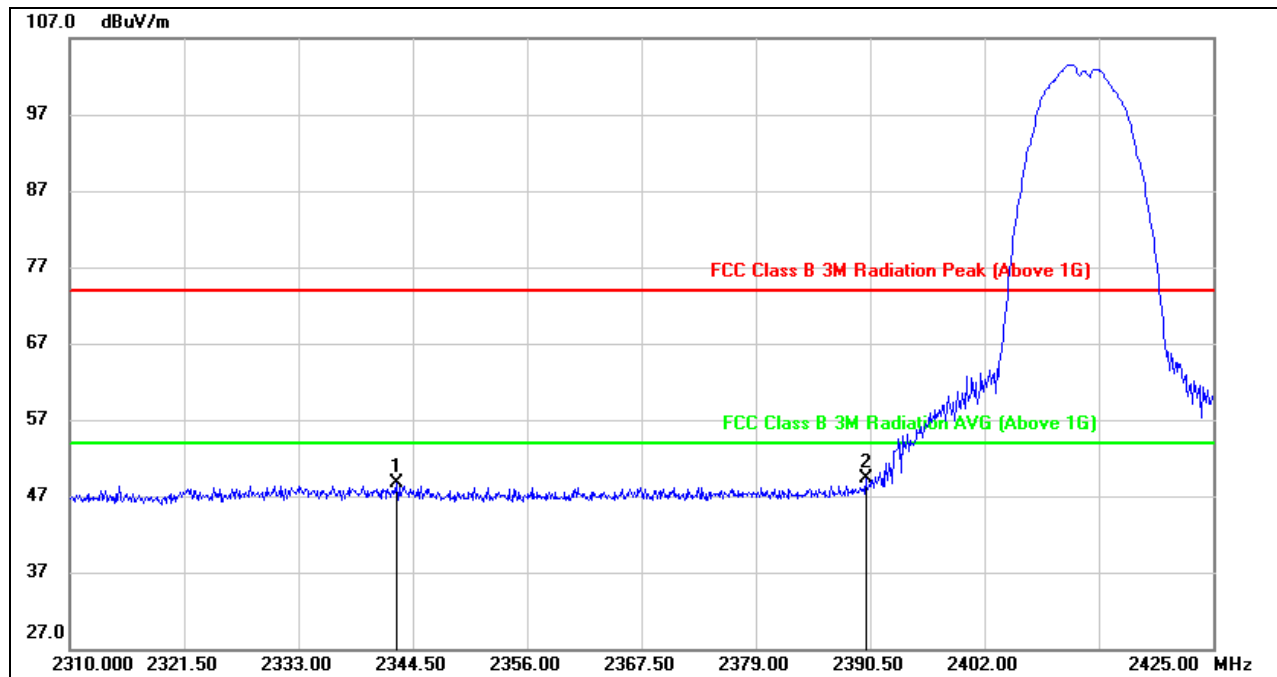
9.2. RESTRICTED BANDEDGE

9.2.1. 802.11b MODE

SISO CHAIN 0

RESTRICTED BANDEDGE (LOW CHANNEL 01, HORIZONTAL)

PRAK



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2342.890	15.82	32.79	48.61	74.00	-25.39	peak
2	2390.000	16.30	32.94	49.24	74.00	-24.76	peak

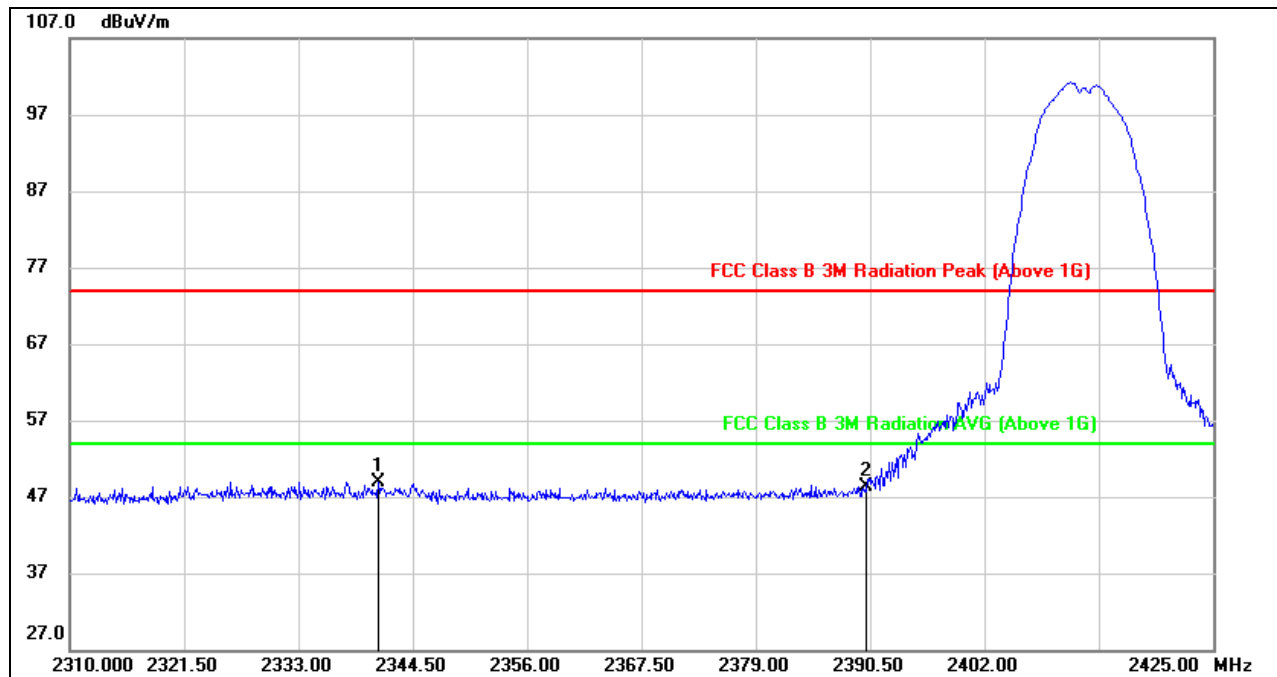
Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.





RESTRICTED BANDEDGE (LOW CHANNEL 01, VERTICAL)

PEAK



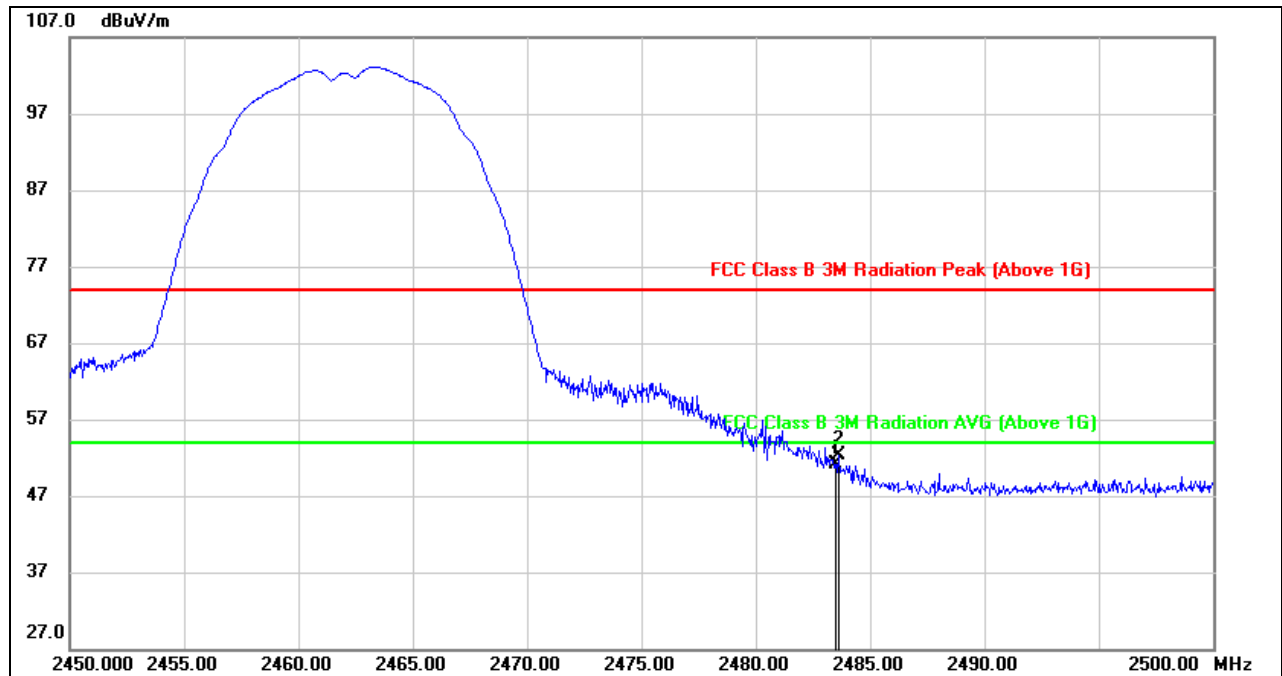
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2341.050	16.20	32.78	48.98	74.00	-25.02	peak
2	2390.000	15.44	32.94	48.38	74.00	-25.62	peak

- Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.



RESTRICTED BANDEDGE (CHANNEL11, HORIZONTAL)

PEAK



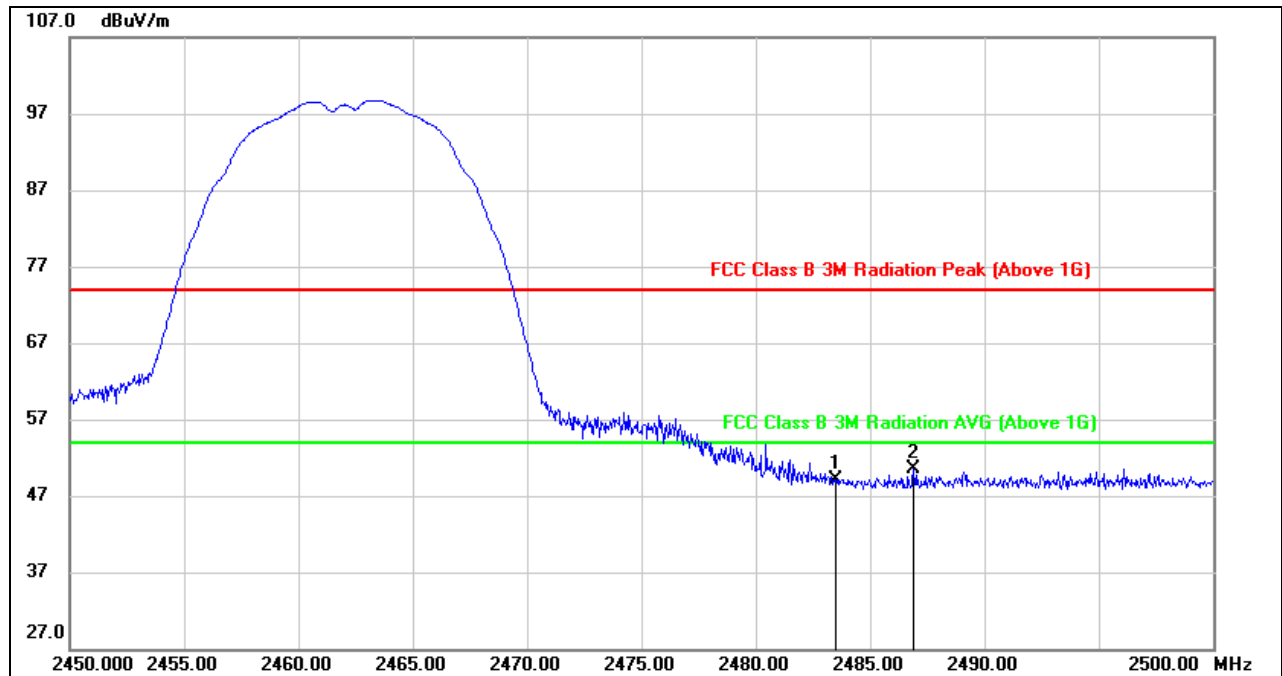
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	17.47	33.58	51.05	74.00	-22.95	peak
2	2483.600	18.65	33.58	52.23	74.00	-21.77	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.



RESTRICTED BANDEGE (CHANNEL11, VERTICAL)

PEAK



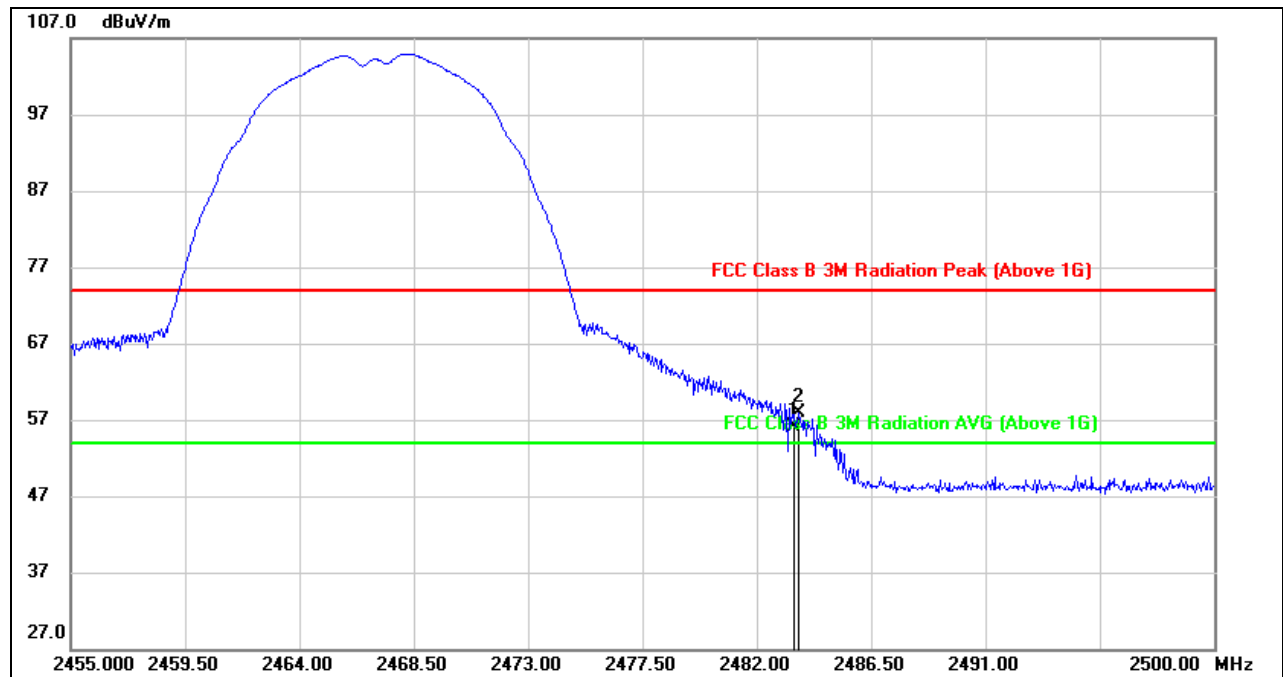
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	15.44	33.58	49.02	74.00	-24.98	peak
2	2486.900	16.81	33.61	50.42	74.00	-23.58	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.



RESTRICTED BANDEDGE (CHANNEL12, HORIZONTAL)

PEAK

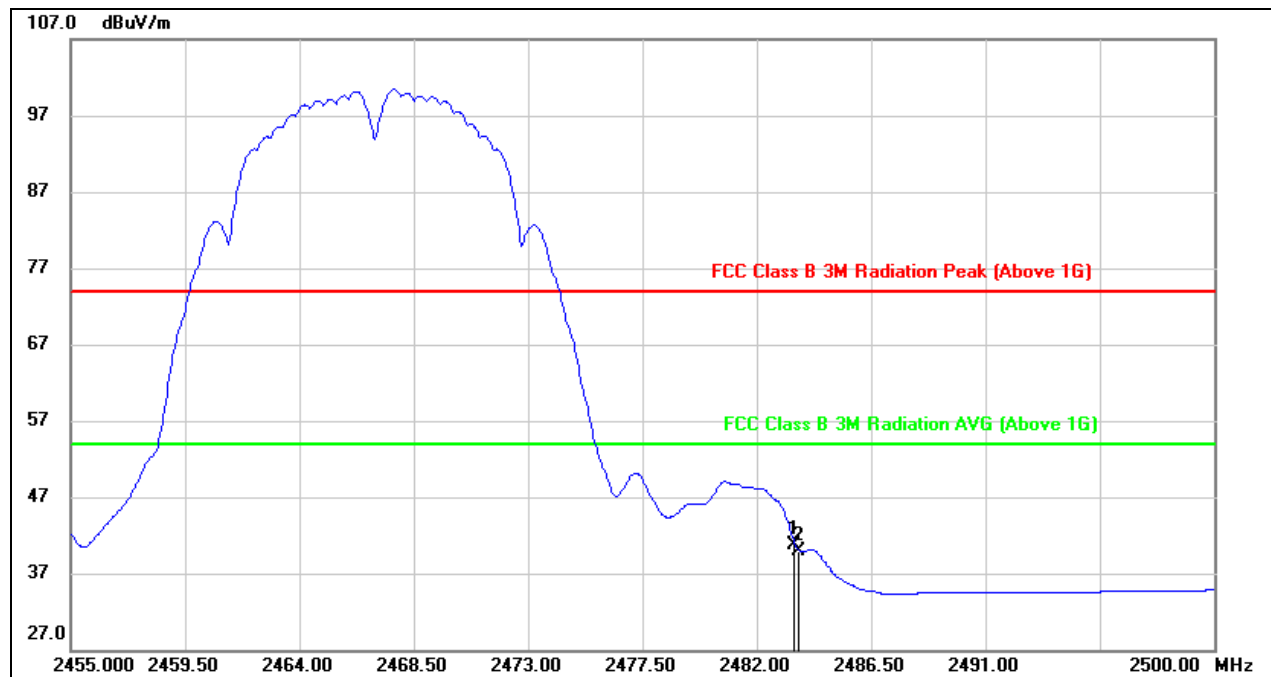


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	22.58	33.58	56.16	74.00	-17.84	peak
2	2483.665	24.30	33.58	57.88	74.00	-16.12	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.



AVERAGE



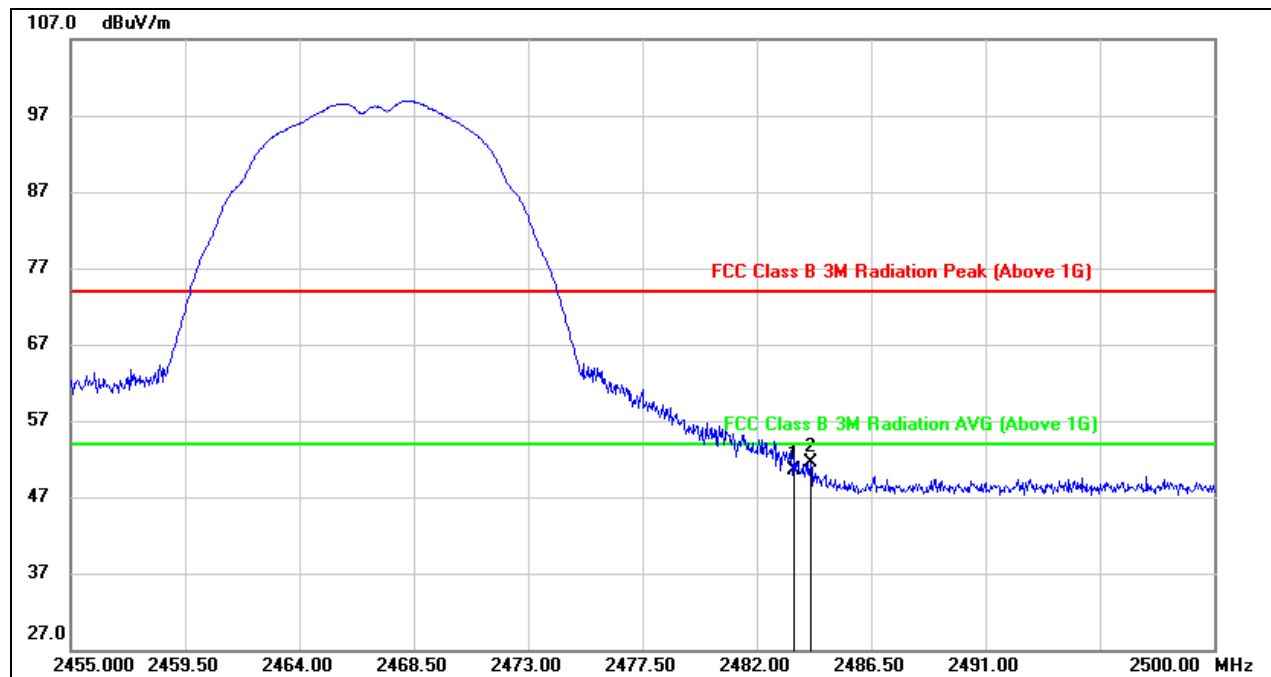
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	7.06	33.58	40.64	54.00	-13.36	AVG
2	2483.665	6.24	33.58	39.82	54.00	-14.18	AVG

- Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. AVG: $VBW=1/T_{on}$ where: t_{on} is transmit duration.
4. For transmit duration, please refer to clause 8.1.



RESTRICTED BANDEGE (CHANNEL12, VERTICAL)

PEAK



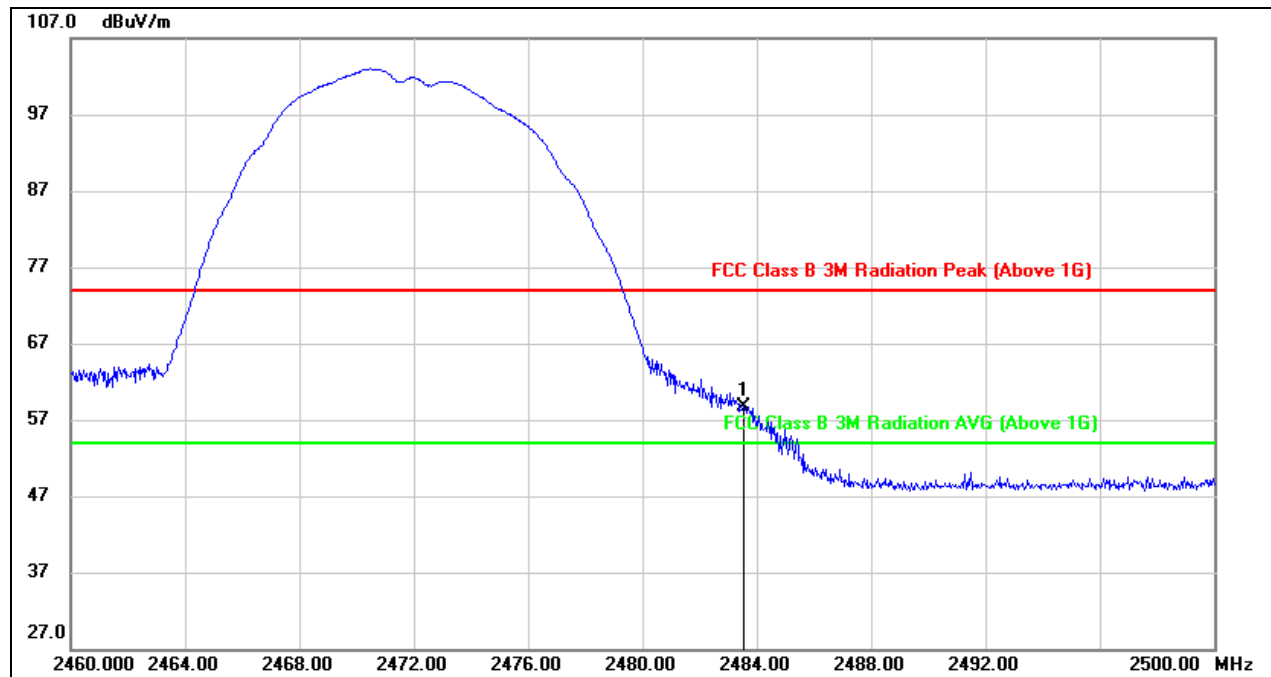
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	16.85	33.58	50.43	74.00	-23.57	peak
2	2484.115	17.91	33.58	51.49	74.00	-22.51	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.



RESTRICTED BANDEDGE (HIGH CHANNEL 13, HORIZONTAL)

PEAK

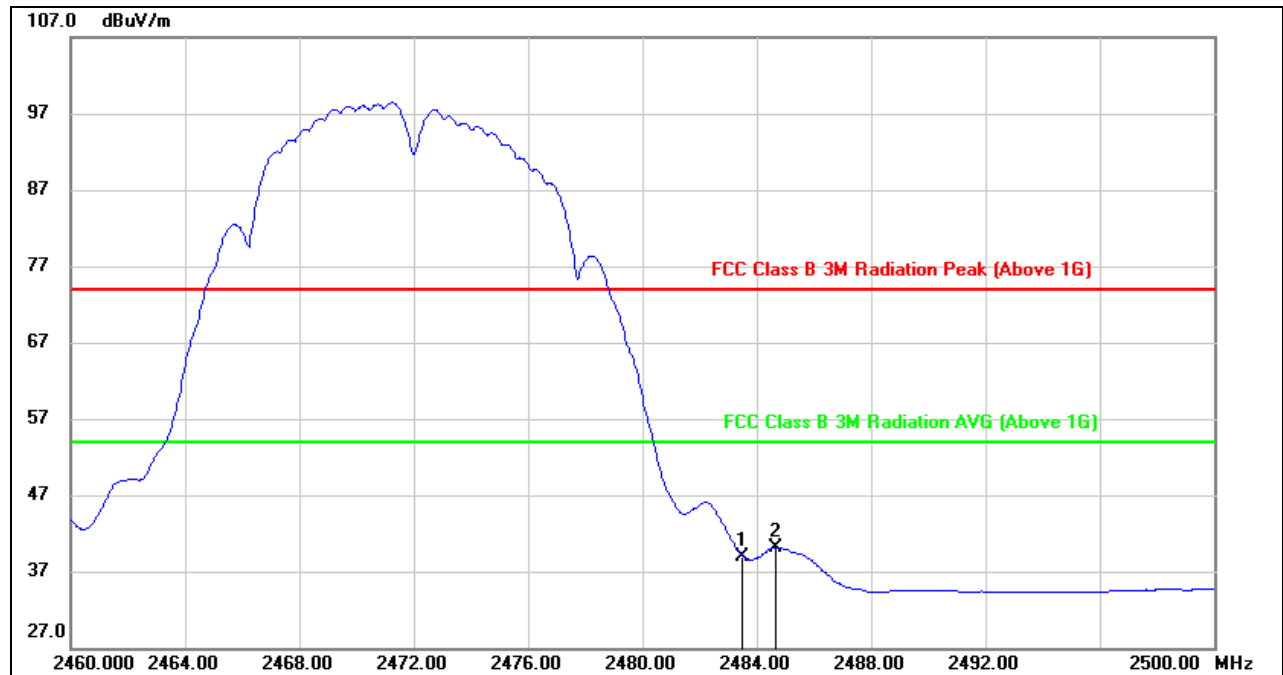


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	25.22	33.58	58.80	74.00	-15.20	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.



AVERAGE



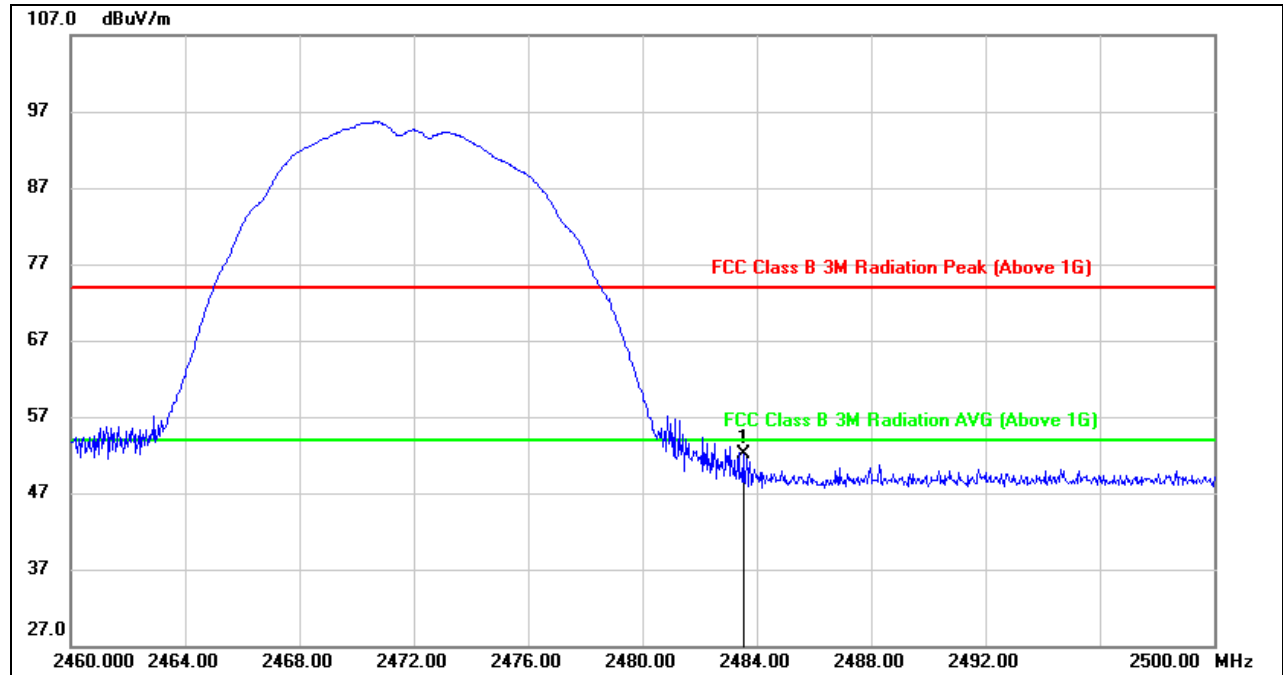
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	5.37	33.58	38.95	54.00	-15.05	AVG
2	2484.680	6.52	33.59	40.11	54.00	-13.89	AVG

- Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. AVG: $VBW=1/Ton$ where: ton is transmit duration.
4. For transmit duration, please refer to clause 8.1.



RESTRICTED BANDEDGE (HIGH CHANNEL 13, VERTICAL)

PEAK



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	18.43	33.58	52.01	74.00	-21.99	peak

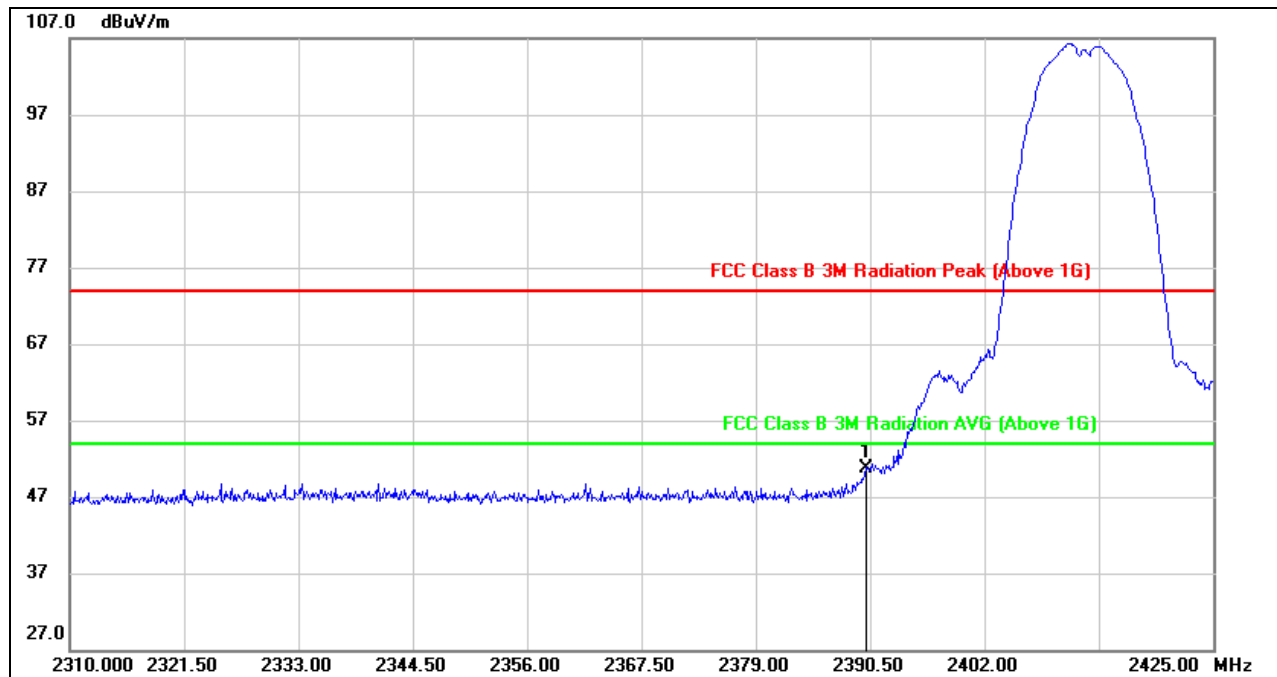
- Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.



SISO CHAIN 1

RESTRICTED BANDEDGE (LOW CHANNEL 01, HORIZONTAL)

PRAK



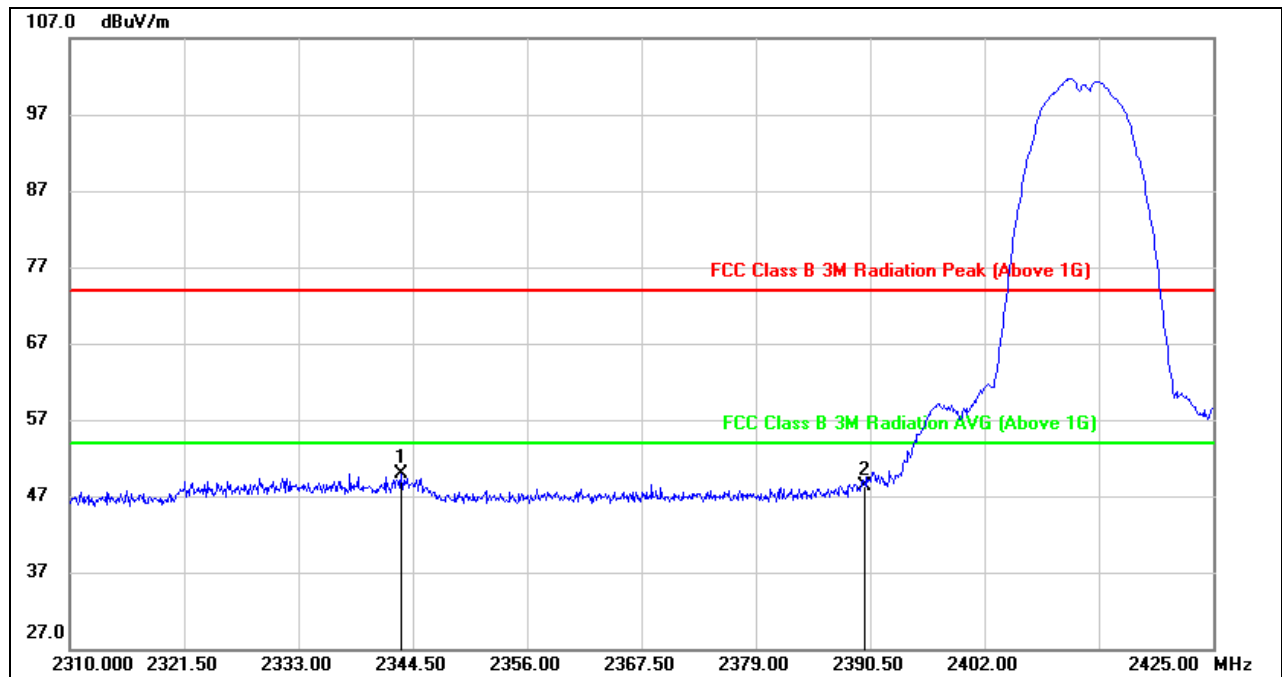
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.000	17.86	32.94	50.80	74.00	-23.20	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.



RESTRICTED BANDEDGE (LOW CHANNEL 01, VERTICAL)

PEAK



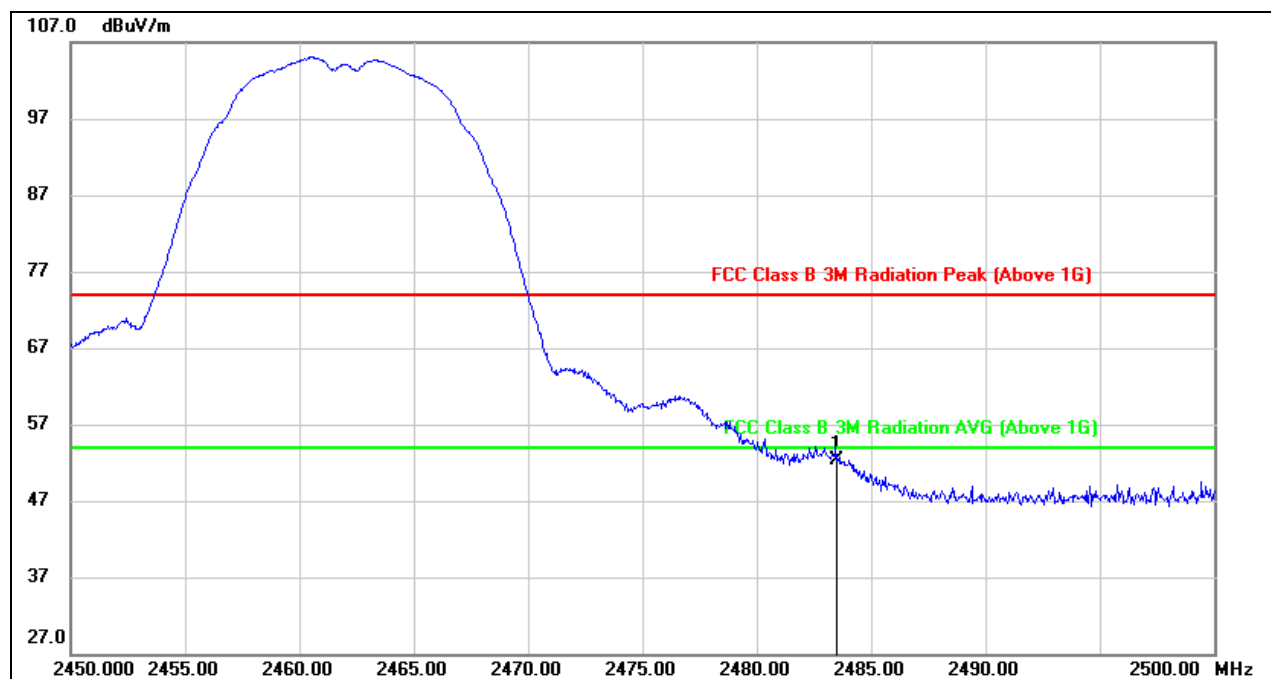
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2343.350	17.16	32.79	49.95	74.00	-24.05	peak
2	2390.000	15.42	32.94	48.36	74.00	-25.64	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.



RESTRICTED BANDEDGE (CHANNEL11, HORIZONTAL)

PEAK



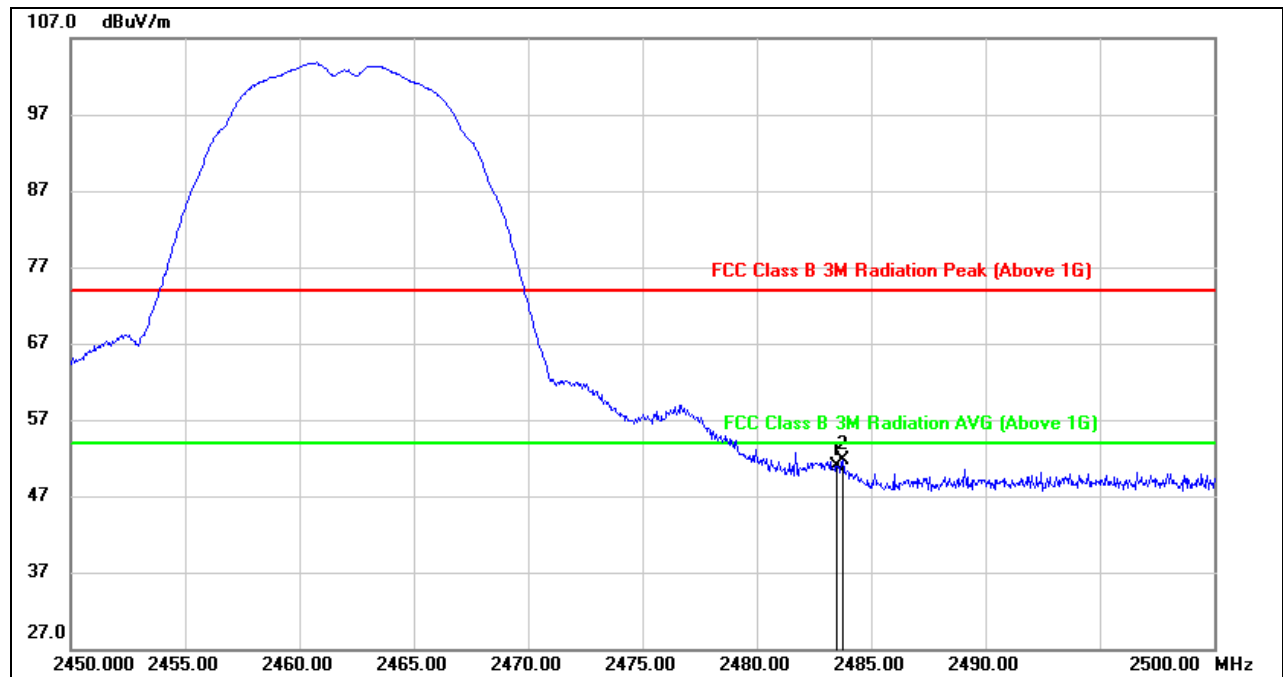
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	18.70	33.58	52.28	74.00	-21.72	peak

- Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.



RESTRICTED BANDEDGE (CHANNEL11, VERTICAL)

PEAK



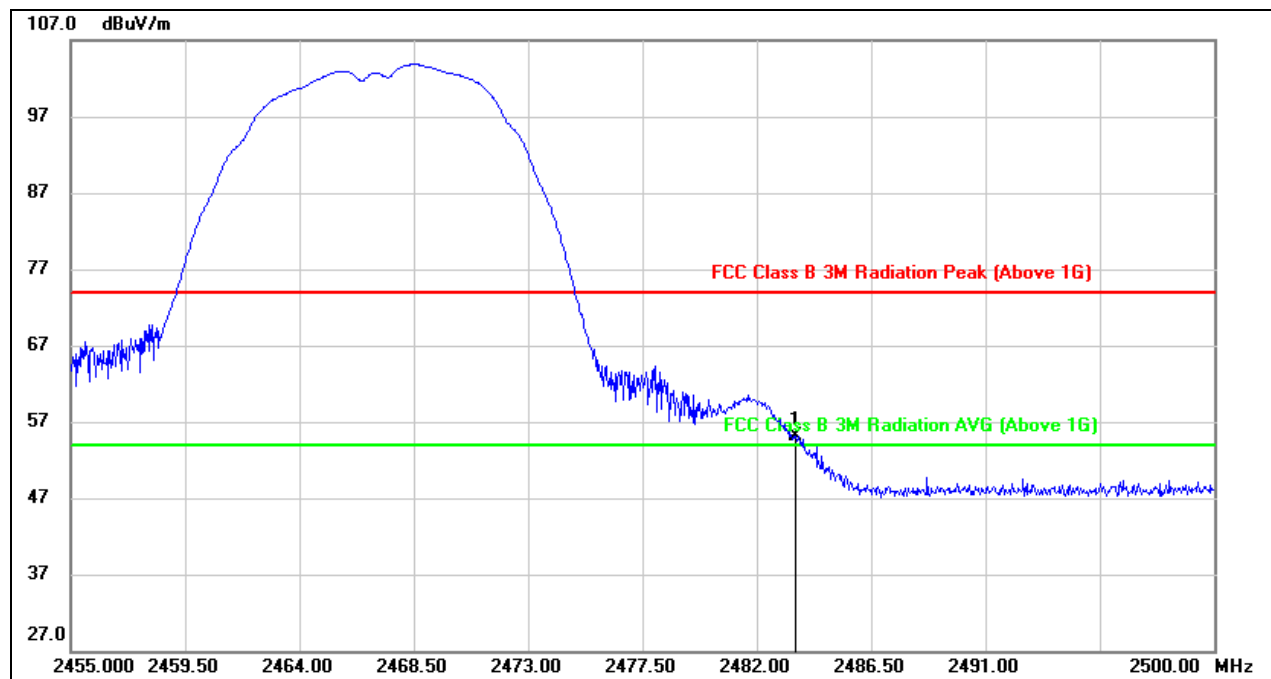
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	17.33	33.58	50.91	74.00	-23.09	peak
2	2483.750	18.04	33.58	51.62	74.00	-22.38	peak

- Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.



RESTRICTED BANDEDGE (CHANNEL12, HORIZONTAL)

PEAK

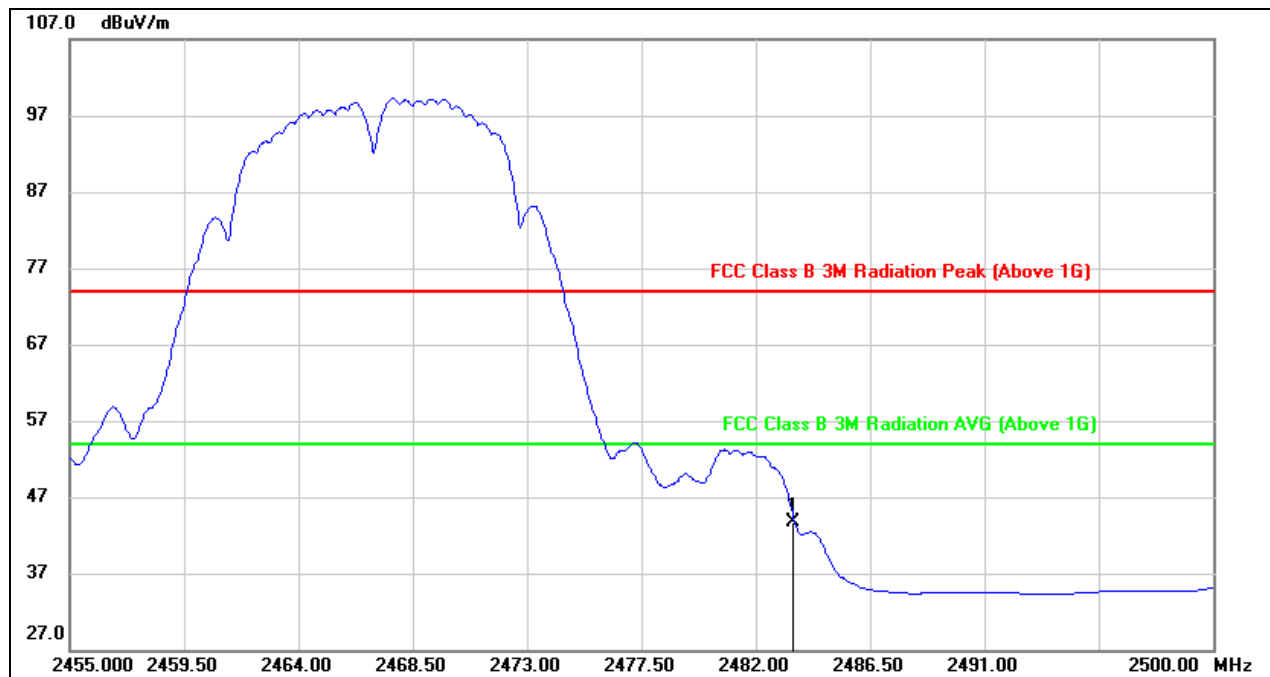


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	21.43	33.58	55.01	74.00	-18.99	peak

- Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.



AVERAGE



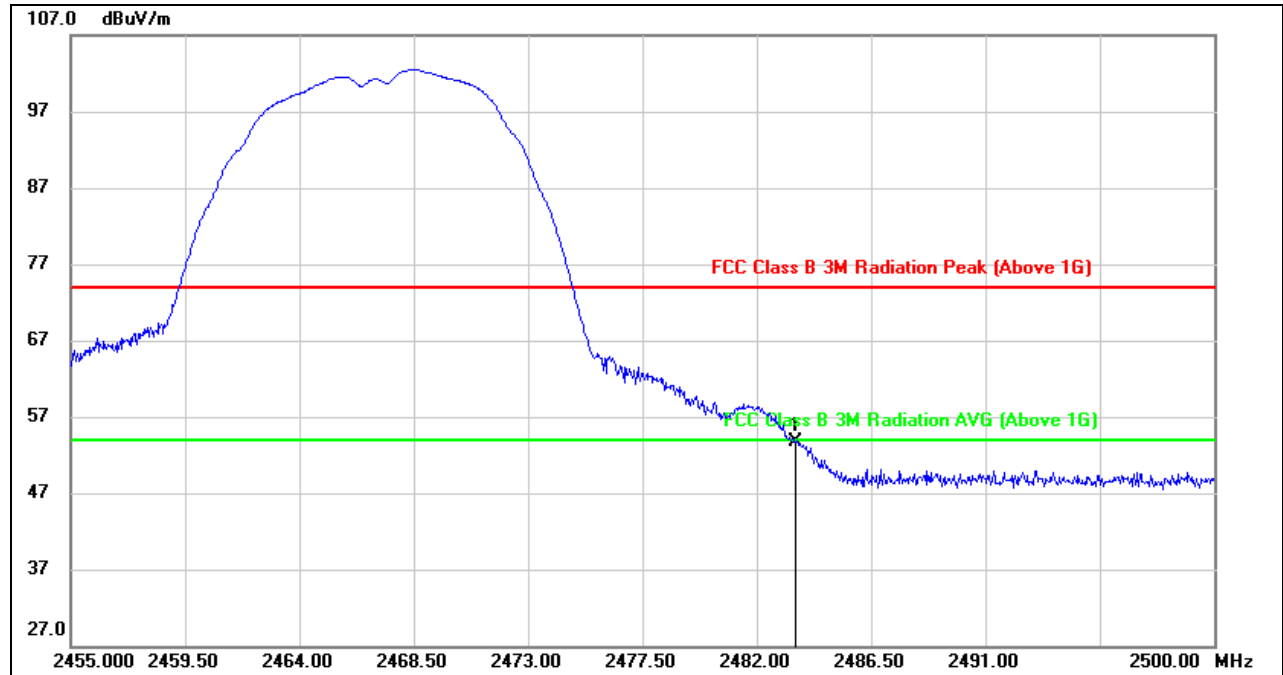
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	10.17	33.58	43.75	54.00	-10.25	AVG

- Note:
1. Measurement = Reading Level + Correct Factor.
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 3. AVG: $VBW=1/Ton$ where: ton is transmit duration.
 4. For transmit duration, please refer to clause 8.1.



RESTRICTED BANDEGE (CHANNEL12, VERTICAL)

PEAK

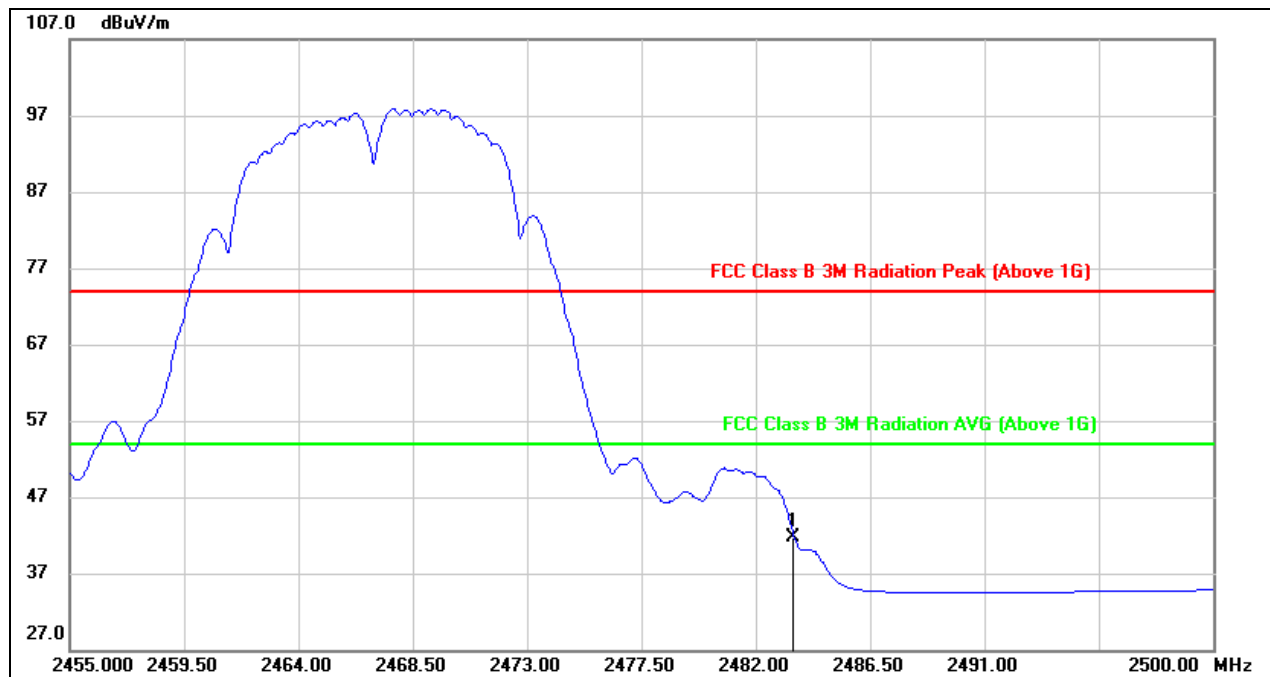


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	20.19	33.58	53.77	74.00	-20.23	peak

- Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.



AVERAGE



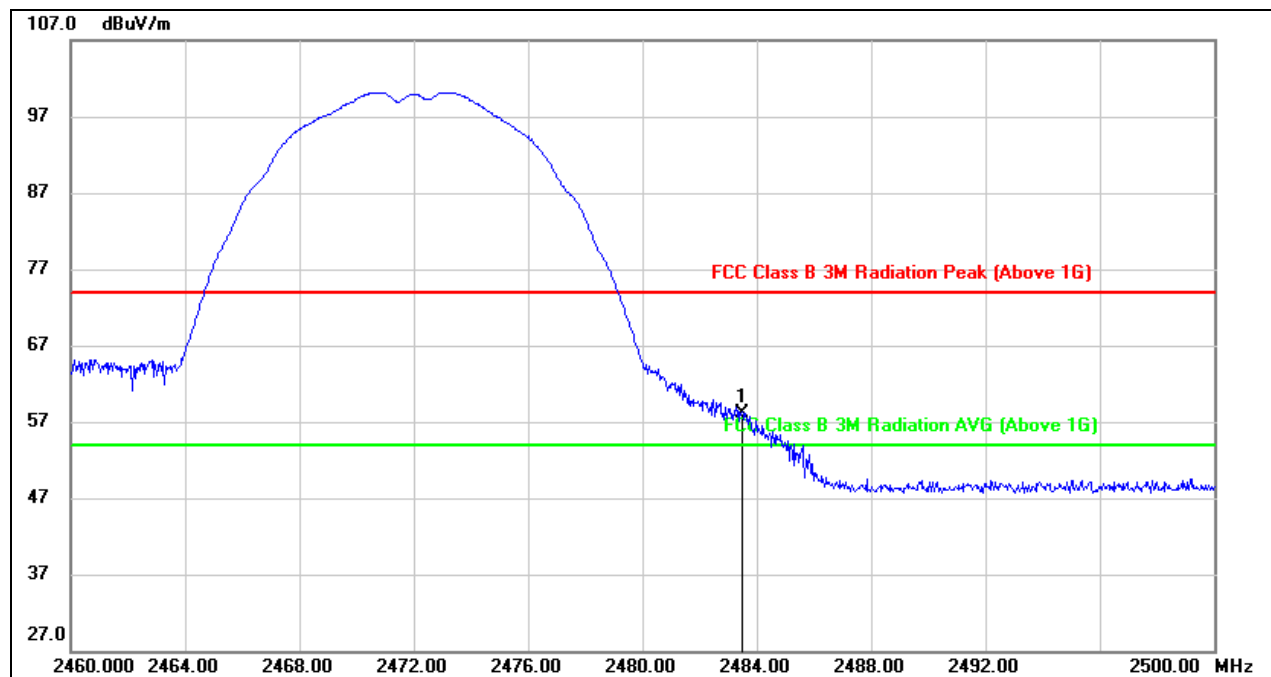
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	8.07	33.58	41.65	54.00	-12.35	AVG

- Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. AVG: $VBW=1/Ton$ where: ton is transmit duration.
4. For transmit duration, please refer to clause 8.1.



RESTRICTED BANDEDGE (HIGH CHANNEL 13, HORIZONTAL)

PEAK

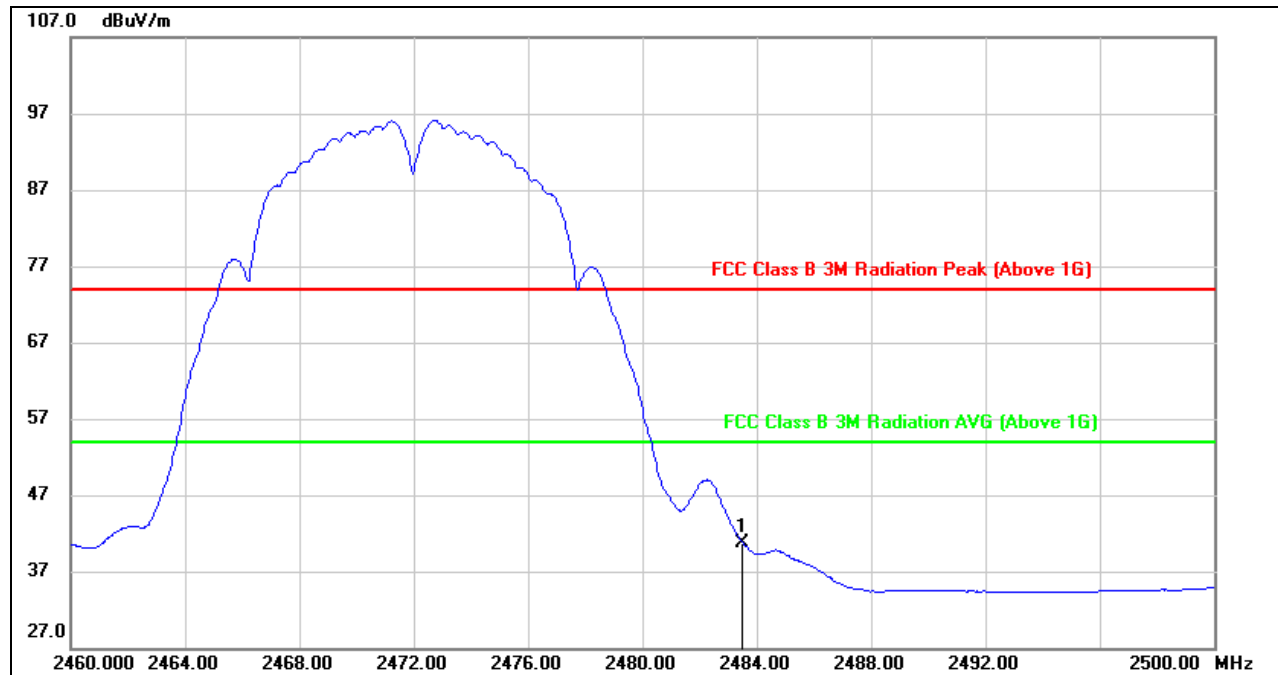


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	24.55	33.58	58.13	74.00	-15.87	peak

- Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.



AVERAGE



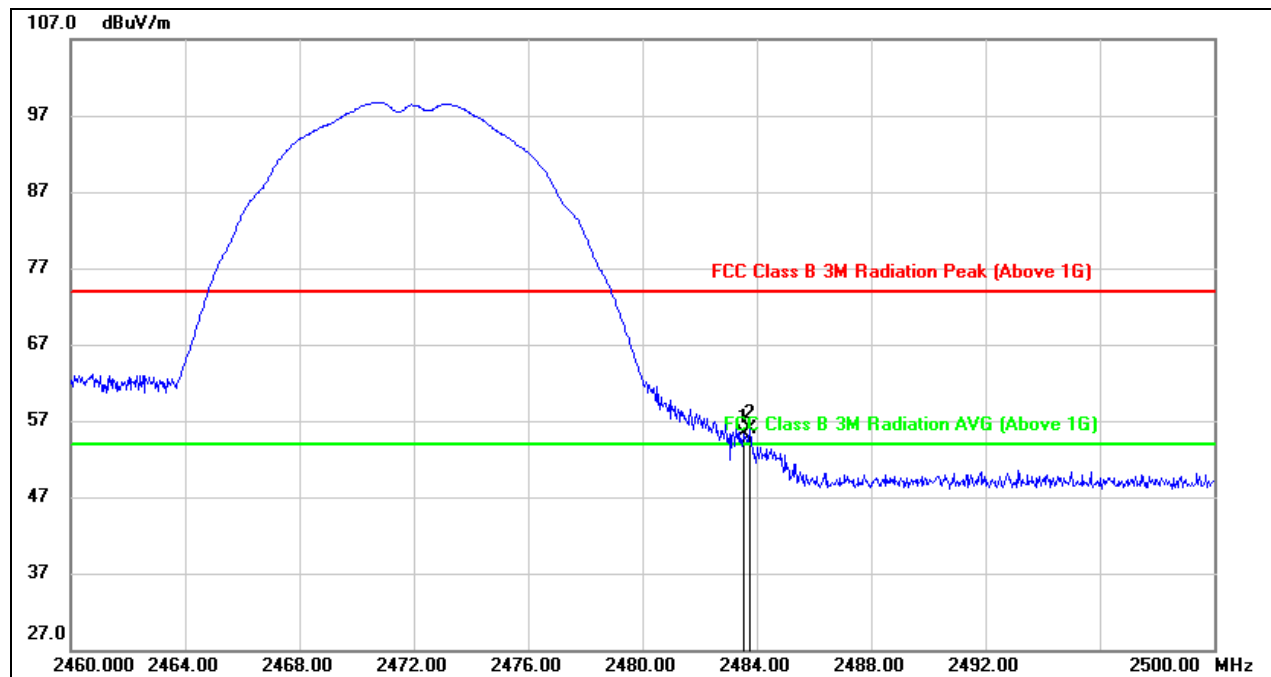
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	7.18	33.58	40.76	54.00	-13.24	AVG

- Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. AVG: $VBW=1/Ton$ where: ton is transmit duration.
4. For transmit duration, please refer to clause 8.1.



RESTRICTED BANDEDGE (HIGH CHANNEL 13, VERTICAL)

PEAK

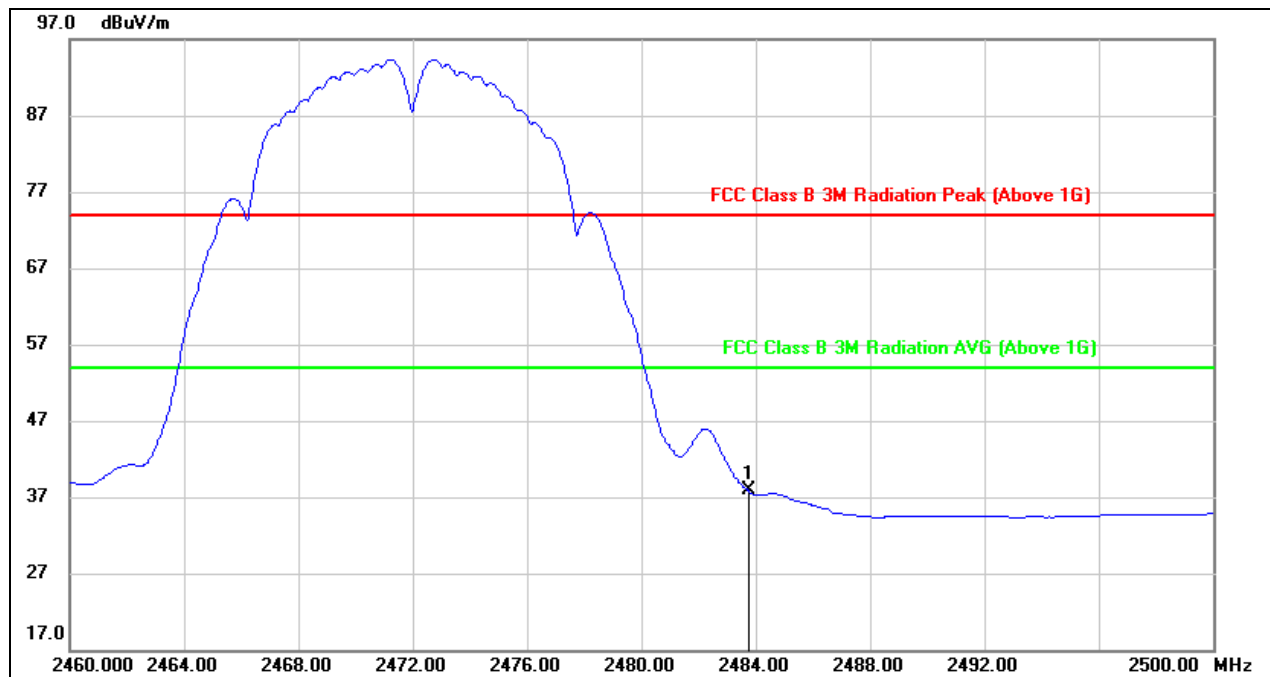


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	21.74	33.58	55.32	74.00	-18.68	peak
2	2483.760	22.29	33.58	55.87	74.00	-18.13	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.



AVERAGE



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.760	4.26	33.58	37.84	54.00	-16.16	AVG

- Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. AVG: $VBW=1/Ton$ where: ton is transmit duration.
4. For transmit duration, please refer to clause 8.1.