RADIO TEST REPORT

For

MODEL NO.: 1855
FCC ID: C3K1855
IC ID: 3048A-1855

Test Report No. R-TR516-FCCISED-BT-2
Issue Date: July 15, 2019

FCC CFR47 Part 15 Subpart C
Innovation, Science and Economic Development
Canada RSS-247 Issue 2

Prepared by
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A2LA ACCREDITED
TESTING CERT #3472.01

1 Record of Revisions

Revision	Date	Section	Page(s)	Summary of Changes	Author/Revised By:
1.0	5/24/2019	All	All	Version 1.0	Vishwas Narayan
2.0	07/15/2019	5.1	9	Included note on USB charging cable for radiated measurements	Daniel Salinas

Table of Contents

Test Report Attestation

Microsoft Corporation
Model: 1855
FCC ID: C3K1855
IC ID: 3048A-1855

Applicable Standards

Specification	Test Result
FCC 47CFR Rule Parts 15.207, 15.209, 15.247	Pass
Innovation, Science and Economic Development Canada RSS-247 Issue 2, RSS-GEN Issue 5	Pass

Microsoft EMC Laboratory attests that the product model identified in this report has been tested to and meets the requirements identified in the above standards. The test results in this report solely pertains to the specific sample tested, under the conditions and operating modes as provided by the customer.

This report shall not be used to claim product certification, approval, or endorsement by A2LA or any agency of any Government. Reproduction, duplication or publication of extracts from this test report is prohibited and requires prior written approval of Microsoft EMC Laboratory.

This report replaces previously issued report R-TR516-FCCISED-BT-1 issued 05/24/2019.

Written By: Vishwas Narayan

Radio Test Engineer

Reviewed/ Issued By: Daniel Salinas

RF Compliance Lab Manager

2 Deviations from Standards

None.

3 Facilities and Accreditations

3.1 Test Facility

All test facilities used to collect the test data are located at
Microsoft EMC Laboratory,
17760 NE 67th Ct,
Redmond WA, 98052, USA

3.2 Accreditations

The lab is established and follows procedures as outlined in IEC/ISO 17025 and A2LA accreditation requirements.
A2LA Accredited Testing Certificate Number: 3472.01
FCC Registration Number: US1141
IC Site Registration Numbers: 3048A-3, 3048A-4

3.3 Test Equipment

The site and related equipment are constructed in conformance with the requirements of ANSI C63.4:2014 and other equivalent applicable standards.
Test site requirements for measurements above 1 GHz are in accordance with ANSI C63.4:2014.
ANSI C63.10:2013 and the appropriate KDB test methods were followed.

4 Measurement Uncertainty

The following measurement uncertainty levels have been estimated for tests performed on the product, as specified in ETSI TR 100 028. This represents an expanded uncertainty expressed at 95% confidence level using a coverage factor k=2. These levels are for reference only and not included to determine product compliance.
Expanded uncertainty calculations are available upon request.

Test item	Uncertainty	Unit
Radiated disturbance (30 MHz to 1 GHz)	5.99	dB
Radiated disturbance (1 GHz to 18 GHz)	5.12	dB
Radiated disturbance (18 GHz to 26.5 GHz)	4.86	dB
Conducted Disturbance at Mains Port	3.31	dB
Uncertainty for Conducted Power test	1.277	dB
Uncertainty for Conducted Spurious emission test	2.742	dB
Uncertainty for Bandwidth test	4.98	kHz
Uncertainty for DC power test	0.05	%
Uncertainty for test site temperature	0.5	ºC
Uncertainty for test site Humidity	3	%
Uncertainty for time	0.189	%

5 Product Description

Company Name:	Microsoft Corporation
Address:	One Microsoft Way
City, State, Zip:	Redmond, WA 98052-6399
Customer Contact:	Chaitrali Limaye
Functional Description of the EUT:	Radio transceiver device with IEEE 802.11a/b/g/n/ac MIMO radio supporting 20/40/80MHz bandwidths, Bluetooth 5.0.
Model:	1855
FCC ID:	C3K1855
IC ID:	3048A-1855
Radio under test:	BT (2402- 2480 MHz) Ch. 0-78
Modulation(s):	GFSK, π/4-DQPSK, 8PSK
Antenna Information:	Integral Antenna. **Manufacturer declared max Antenna Gain in 2.4GHz band of operation:** 3.90 dBi
EUT Classification:	FHSS
Equipment Design State:	Prototype/Production Equivalent – EV3
Equipment Condition:	Good
Test Sample Details:	**RF Conducted Test Sample** S/N: A24964030112844A, Internal ID: R-516-122718-01 **RF Radiated Test Sample** S/N:900054391556, Internal ID: R-516-050219-10 S/N:900218190956, Internal ID: R-516-040919-05 S/N:900128190956, Internal ID: R-516-042219-06 S/N:900216390956, Internal ID: R-516-042219-07

5.1 Test Configurations

Test software “QRCT” (V4.0.00123) provided by the customer was used to program the EUT to transmit continuously.

The device can operate in GFSK, π/4DQPSK and 8DPSK modulations and all modes were tested and included in this report. Channel numbers 0, 39 and 78 were used as Low, Mid and High Channels, respectively.

All radiated testing reported was performed with the USB charging cord connected as these results were worst case.

5.2 Environmental Conditions

Ambient air temperature of the test site was within the range of 10 ºC to 40 ºC (50 ºF to 104 ºF) unless the EUT specified testing over a different temperature range. Humidity levels were in the range of 10% to 90% relative humidity. Testing conditions were within tolerance and any deviations required from the EUT are reported.

5.3 Antenna Requirements

The antennas are permanently attached and there are no provisions for connection to an external antenna.

5.4 Equipment Modifications

No modifications were made during testing.

5.5 Dates of Testing

Testing was performed on February 15th - May 15th, 2019.

6 Test Results Summary

Test Description	FCC Rule Part ISED Rule Part	Limit	Test Result (Pass/Fail)
Duty Cycle	Reporting & Measurements	Reporting & Measurements Purposes only	N/A
20dB Bandwidth	15.247 (a)(1)(ii) RSS-247 [5.1]	For reporting purposes only.	Pass
Output Power	15.247 (a)(1)/(b)(1) RSS-247 [5.4]	< 125 mW – Conducted < 500 mW - EIRP	Pass
Channel Spacing	15.247 (a)(1) RSS-247 [5.1]	2/3 of 20dB BW or 25 kHz	Pass
Number of Hopping Frequencies	15.247 (a)(1)(iii) RSS-247 [5.1]	> 15 channels	Pass
Dwell Time	15.247 (a)(1)(iii) RSS-247 [5.1]	< 0.4 sec in 31.6 sec period	Pass
Conducted Band Edge/Spurious Emissions	15.247 (d) RSS-247 [5.5]	At least 20dBc	Pass
Radiated Spurious Emissions/ Restricted Band Emissions	15.205, 15.209 RSS-247 [5.5] RSS-Gen [8.9]	FCC CFR 47 15.209 limits RSS-Gen [8.9]	Pass
AC Powerline Conducted Emissions	15.207 RSS-Gen [8.8]	FCC CFR 47 15.207 limits RSS-Gen [8.8]	Pass

7 Test Equipment List

Equipment used for Radiated and Conducted Measurements				
Manufacturer	**Description**	**Model #**	**Asset #**	**Calibration Due**
Rohde & Schwarz	EMI Test Receiver	ESU40	RF-192	4/10/2020
Rohde & Schwarz	EMI Test Receiver	ESU40	RF-248	4/11/2020
Rohde & Schwarz	EMI Test Receiver	ESU40	RF-229	4/10/2020
Keysight	Spectrum Analyzer	N9010A	EMC-1213	11/8/2019
Sunol Sciences	Antenna - Broadband Hybrid	JB6	EMC-639	8/17/2019
ETS-Lindgren	Antenna	3117-PA	EMC-858	10/8/2019
ETS-Lindgren	Antenna	3117-PA	RF-139	6/1/2019
ETS-Lindgren	Antenna – Standard Gain	3160-09	RF-179	7/30/2019
Rohde & Schwarz	Custom Filter Bank+PreAmp	SFUNIT RX	RF-322	12/4/2019
Rohde & Schwarz	Custom Filter Bank+PreAmp	SFUNIT RX	RF-323	11/29/2019
Rohde & Schwarz	Pre-Amp	TS-PR26	RF-199	11/29/2019
Rohde & Schwarz	Switch and Control Unit	OSP130	RF-569	7/23/2019
Rohde & Schwarz	Switch and Control Unit	OSP130	RF-018	12/4/2019
Rohde & Schwarz	Switch and Control Unit	OSP130	RF-249	11/29/2019
Rohde & Schwarz	Switch and Control Unit	OSP150	RF-019	12/4/2019
Rohde & Schwarz	Switch and Control Unit	OSP150	RF-250	11/29/2019
Murata	RF Cable	MXJA01JA1000	RF-828	N/A
Micro-Coax	RF Cable	UTI Flex	RF-359	N/A
Micro-Coax	RF Cable	UTI Flex	RF-354	N/A
Huber & Suhner	RF Cable	SucoFlex 100	RF-452	N/A
Huber & Suhner	RF Cable	SucoFlex 100	RF-350	N/A

Manufacturer	Description	Model #	Asset #	Calibration Due
Huber & Suhner	RF Cable	SucoFlex 102A	RF-269	N/A
Huber & Suhner	RF Cable	SucoFlex 106A	RF-599	N/A
PCE	Climate Meter	PCE-THB 40	EMC-1207	9/28/2019
PCE	Climate Meter	PCE-THB 40	EMC-1206	9/28/2019
Madge Tech	THP Monitor	PRHT Temp 2000	EMC-170	10/18/2019
Micro-Coax	RF Cable	UTI Flex	RF-647	N/A
Micro-Coax	RF Cable	UTI Flex	RF-646	N/A
Micro-Coax	RF Cable	UFA210A-Q-2755-3005GU	EMC-648	N/A
Micro-Coax	RF Cable	UFA0311-1-0787-50U50U	EMC-351	N/A
Teledyne	RF Cable	57500	EMC-1025	N/A
Micro-Coax	RF Cable	UFC142A	RF-274	N/A
Pasternack	Attenuator	PE7004-6	EMC-950	8/17/2019
Pasternack	Attenuator	PE7087-6	RF-801	N/A
Rohde & Schwarz	Software	EMC-32 V10.01.00	RF-464	N/A

Equipment used for AC Line Conducted Emissions Measurement				
Manufacturer	**Description**	**Model #**	**Asset #**	**Calibration Due**
Rohde & Schwarz	EMI Test Receiver	ESU	RF-604	12/26/2019
Teseq	EUT LISN	NNB 51	EMC-057	6/7/2019
Micro-Coax	RF Cable	UFA210A-1-1800-50U50U	EMC-367	N/A
ETS-Lindgren	TILE SW	Version 7.2.5.7	EMC-985	N/A
PCE	THP Monitor	PCE THB 40	EMC-1208	9/28/2019
Fluke	Multimeter	87V	EMC-650	7/30/2019
Chroma	AC Power source	61602	EMC-055	N/A

Note: Items with Calibration Due data marked as N/A are characterized before test, where applicable.

8 Test Site Description

8.1 Radiated Emissions Test Site

Radiated measurements are performed in a 3m semi-anechoic chamber, which meets NSA requirements for the frequency range of 30MHz to 1000MHz. For measurements above 1 GHz, absorbers are laid out on the ground plane between the receiving antenna and the EUT to meet Site VSWR requirements in accordance with ANSI C63.4:2014.

8.1.1 Radiated Measurements in 30 MHz - 1000 MHz

The EUT is positioned on a turntable at a height of 80cm using a non-conducting table. A linearly polarized broadband antenna is positioned at 3m from the EUT periphery. The turntable is rotated 360 degrees and the antenna height varied from 1m to 4m to determine the highest emissions. This is repeated for both horizontal and vertical polarizations of the measurement antenna. All possible orientations of the EUT were investigated for emissions and the flat orientation was identified as the worst-case configuration.

8.1.2 Radiated Measurements above 1GHz

The EUT is positioned on a Turntable at a height of 1.5m. A Linearly polarized antenna is positioned at 3m from the EUT periphery. Guidelines in ANSI C63.10:2013 were followed with respect to maximizing the emissions. The measurement antenna is set at a fixed 1.5m height while the turntable is rotated 360 degrees and the EUT elevation angle is varied from 0 to 150 degrees in 30 degree increments to determine the highest emissions. This is repeated for both horizontal and vertical Polarizations of the Measurement Antenna. Measurements above 18GHz were performed at a 3m distance. Near field scanning is performed to identify frequencies above 1 GHz.

8.2 Antenna port conducted measurements

All antenna port conducted measurements were performed on a bench-top setup consisting of a spectrum analyzer, power meter (as necessary), splitters/combiners (as necessary), attenuators, and pre-characterized RF cables.

The correction factors between the EUT and the spectrum analyzer were added internally in the analyzer settings, where applicable. The plots displayed account for these correction factors.

8.3 Test Setup Diagrams

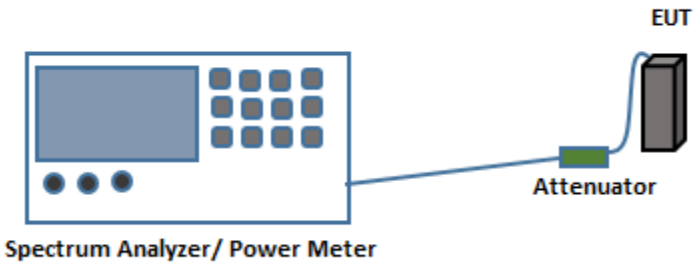


Fig.1. Test Setup for Antenna port conducted measurements

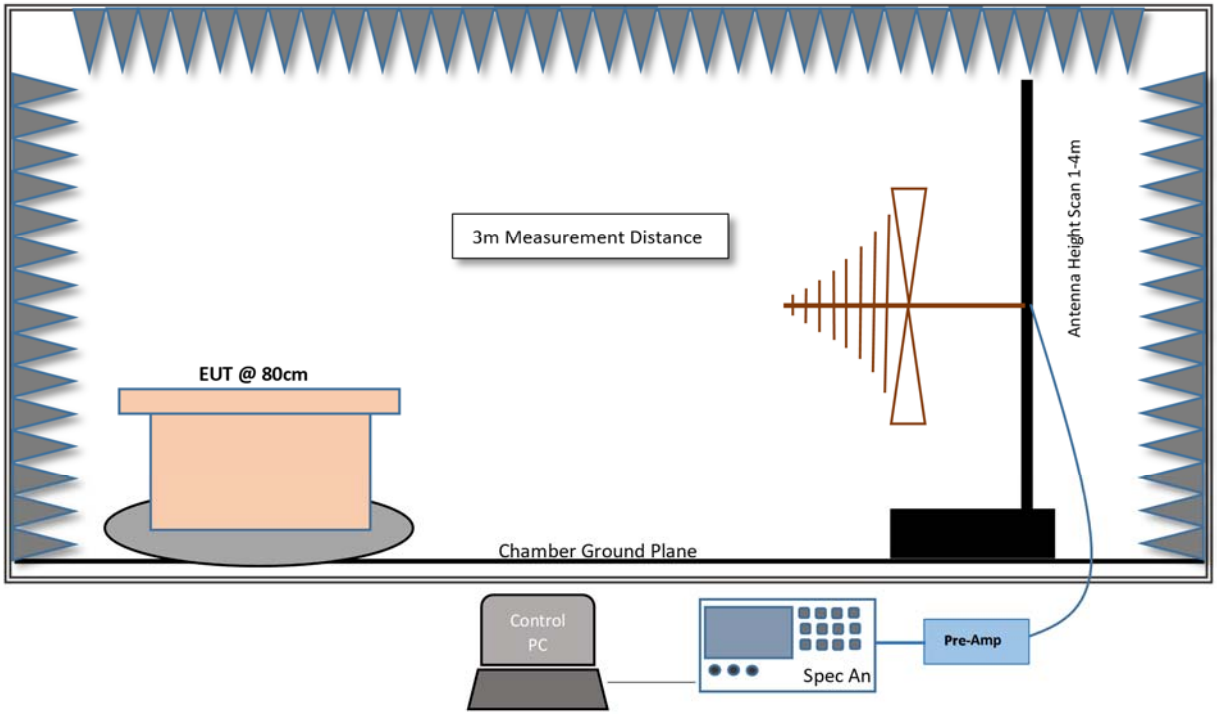


Fig.2. Test Setup for Radiated measurements in 30MHz- 1GHz Range

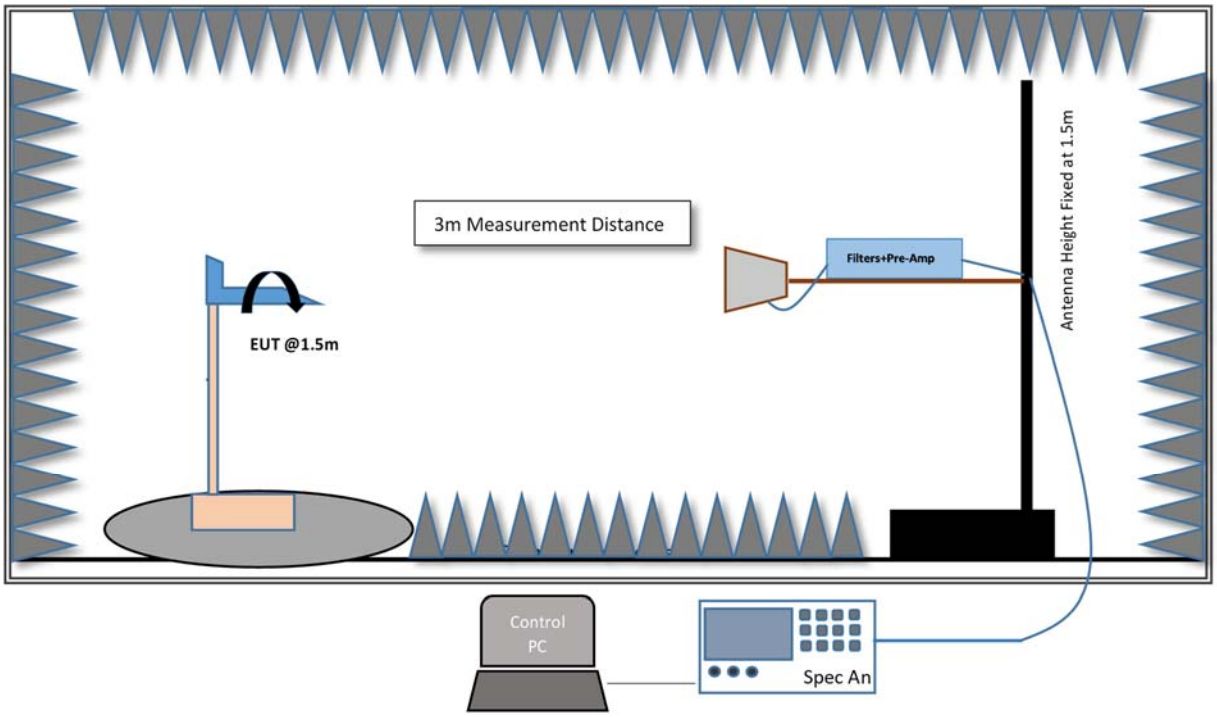


Fig.3. Test Setup for Radiated measurements in 1GHz- 18GHz Range

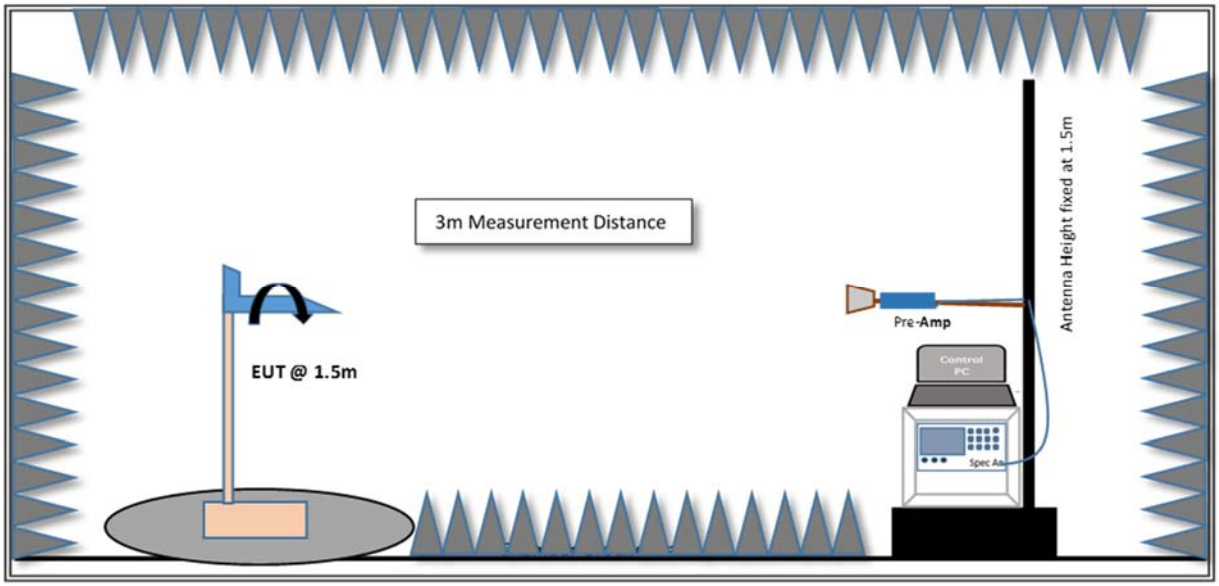


Fig.4. Test Setup for Radiated measurements >18GHz

9 Test Results- Conducted

9.1 Duty Cycle

9.1.1 Test Requirement:

Reporting and measurement purposes only.

9.1.2 Test Method:

Measurements were performed according to the procedure defined in ANSI C63.10:2013.

Spectrum Analyzer Settings:
RBW ≥ Occupied Bandwidth if possible; otherwise, set RBW to the largest available value
VBW ≥ RBW ≥ Signal Period
Detector = Peak
Span = 0 Hz
Sweep points > 100

Sample Calculations:
Duty Cycle (%) = $[(T_{on}) / (T_{on} + T_{off})] * 100$
If duty cycle >98% then the correction factor is 0, else the correction factor is calculated as follows.
Duty Cycle Correction Factor = 10 log*(1/DC) =10 log (1/0.92) =0.362dB.

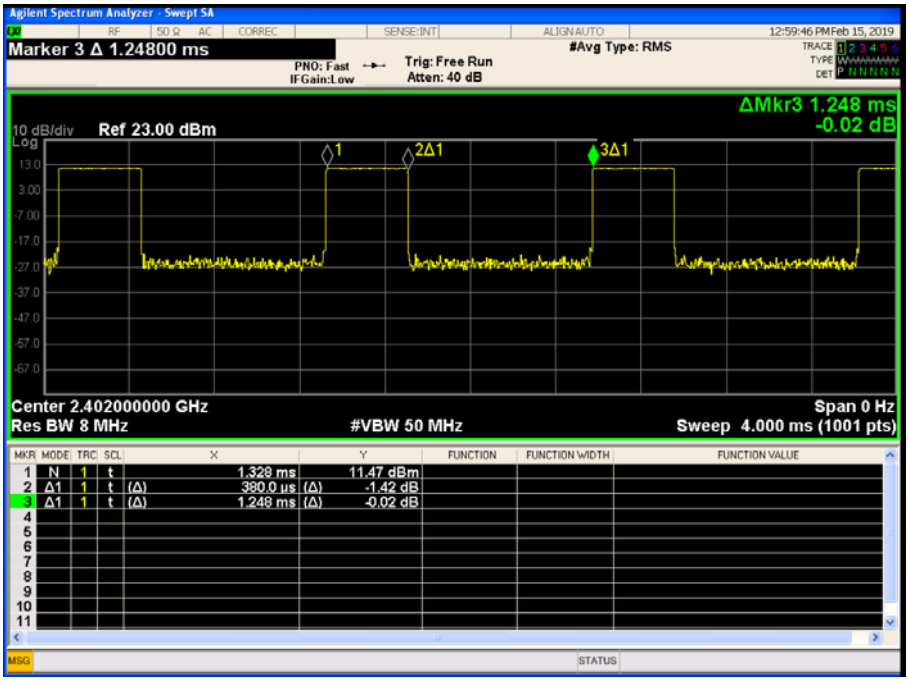
9.1.3 Limits:

Reporting and measurement purposes only.

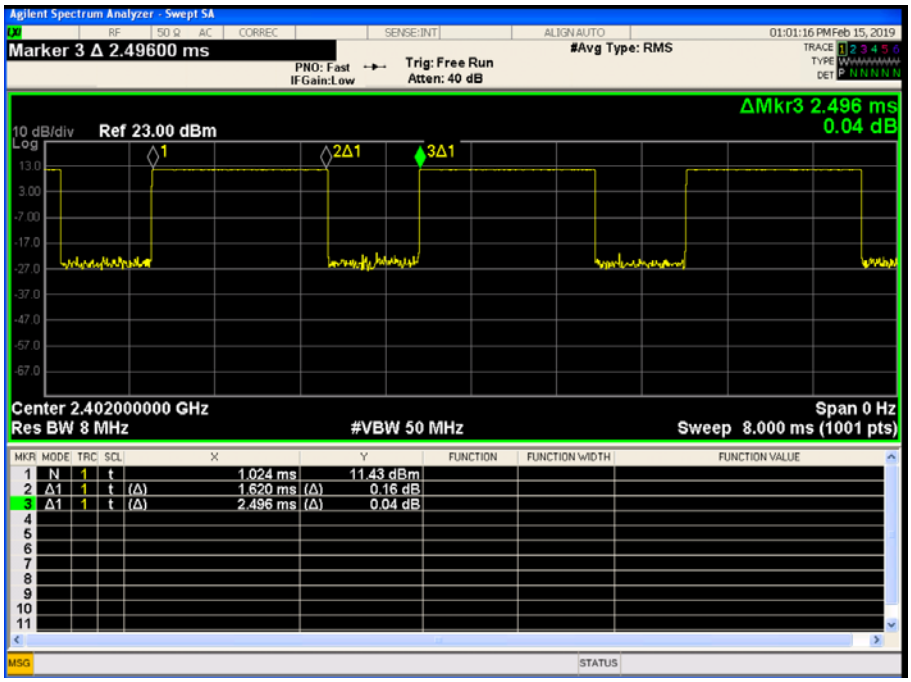
9.1.4 Test Results:

Frequency	Data Rate	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)
2402	1-DH1	0.38	1.25	30.45	5.16
2402	1-DH3	1.62	2.49	64.90	1.88
2402	1-DH5	2.86	3.72	76.88	1.14

9.1.5 Test Data:



Plot 9-1. Duty Cycle (Ch. 0, 1-DH1)



Plot 9-2. Duty Cycle (Ch. 0, 1-DH3)

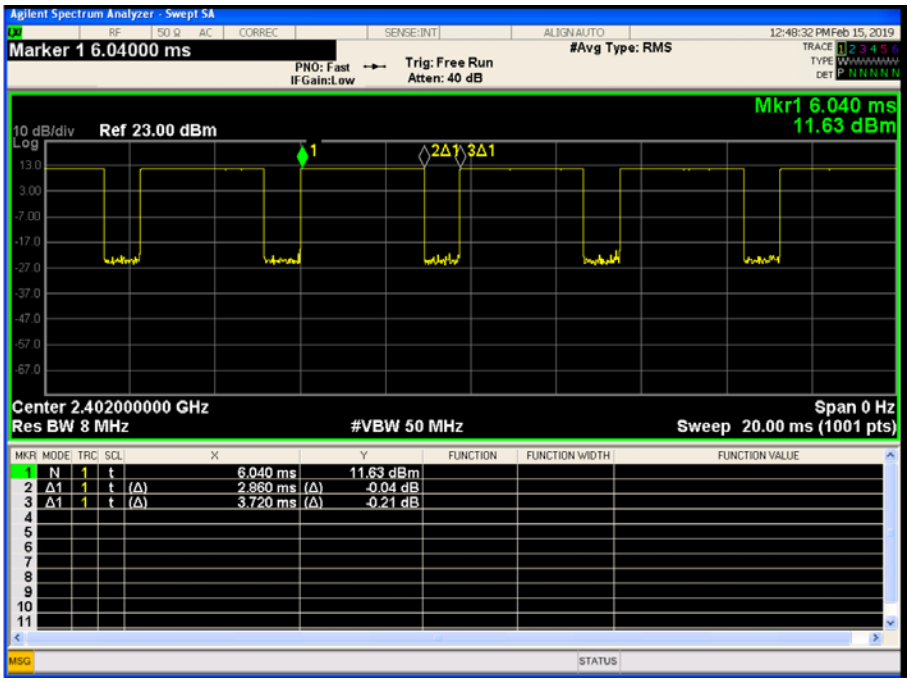


Figure 9-3 Duty Cycle (Ch. 0, 1-DH5)

9.2 20dB and 99% Occupied Bandwidth

9.2.1 Test Requirement:

FCC CFR 47 Rule Part 15.247 (a)(1)(iii)

ISED RSS-247 [5.1]

9.2.2 Test Method:

Measurements were performed according to the procedure defined in ANSI C63.10:2013 Section 7.8.

Spectrum analyzer settings:
The x dB (-20dB) function on the spectrum analyzer was used to measure 20dB BW with the settings below:
Span = approximately 2 to 3 times the 20 dB or 99% Occupied bandwidth, centered on a hopping channel
RBW ≥ 1 to 5 % of the 20-dB bandwidth
VBW ≥ 3x RBW
Sweep = Auto
Detector function = Peak
Trace = Max Hold
The internal function of the spectrum analyzer is used to measure the 99% bandwidth.

Sample Calculations:
Corrected Amplitude: Amplitude (Analyzer level) + CL (Cable losses) = -25 dBm + 5 dB = -20dBm.

9.2.3 Limits:

N/A- Reporting Purposes only.

9.2.4 Test Results:

Frequency (MHz)	Mode	Data Rate (Mbps)	Channel No.	20 dB Bandwidth (MHz)	Occupied Bandwidth (MHz)
2402	1-DH5	1	0	0.934	0.848
2441	1-DH5	1	39	0.941	0.859
2480	1-DH5	1	78	0.949	0.849
2402	2-DH5	2	0	1.278	1.174
2441	2-DH5	2	39	1.281	1.177
2480	2-DH5	2	78	1.285	1.175
2402	3-DH5	3	0	1.291	1.177
2441	3-DH5	3	39	1.289	1.174
2480	3-DH5	3	78	1.284	1.181

9.2.5 Test Data:

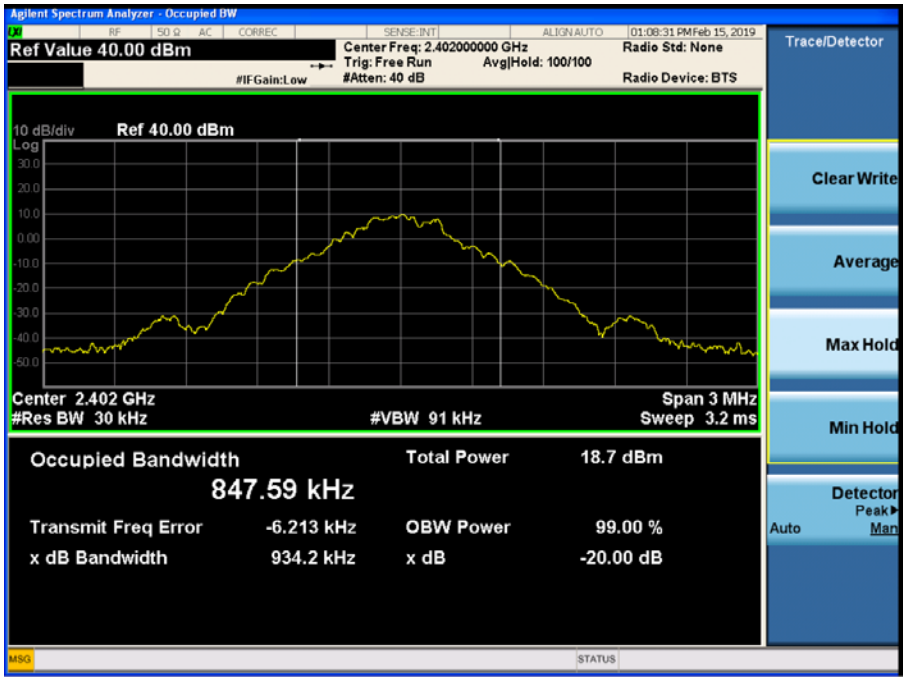


Figure 9-4 20dB Bandwidth (Ch. 0, 1-DH5)

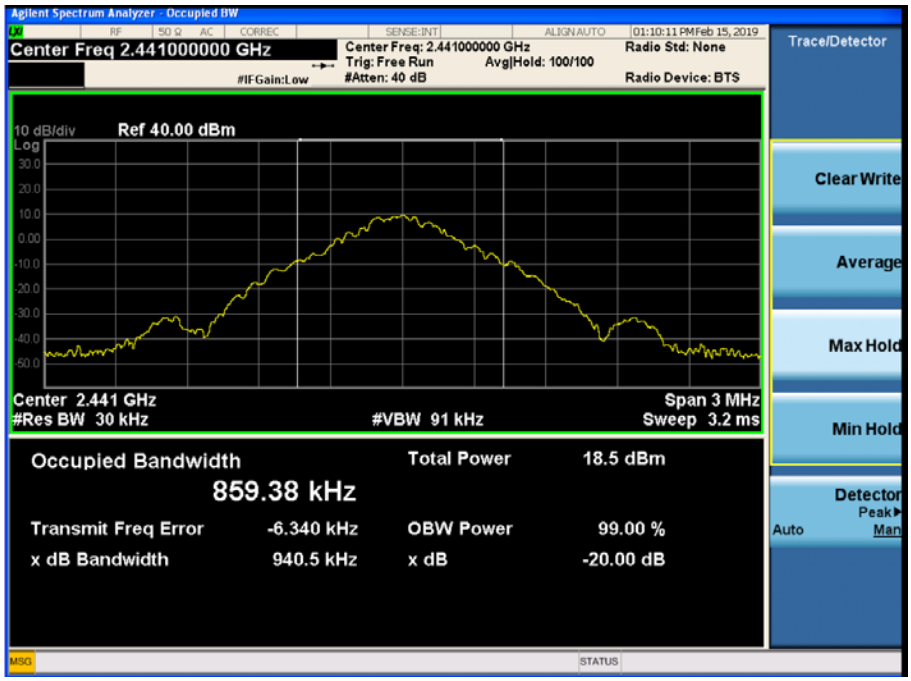


Figure 9-5 20dB Bandwidth (Ch. 39, 1-DH5)

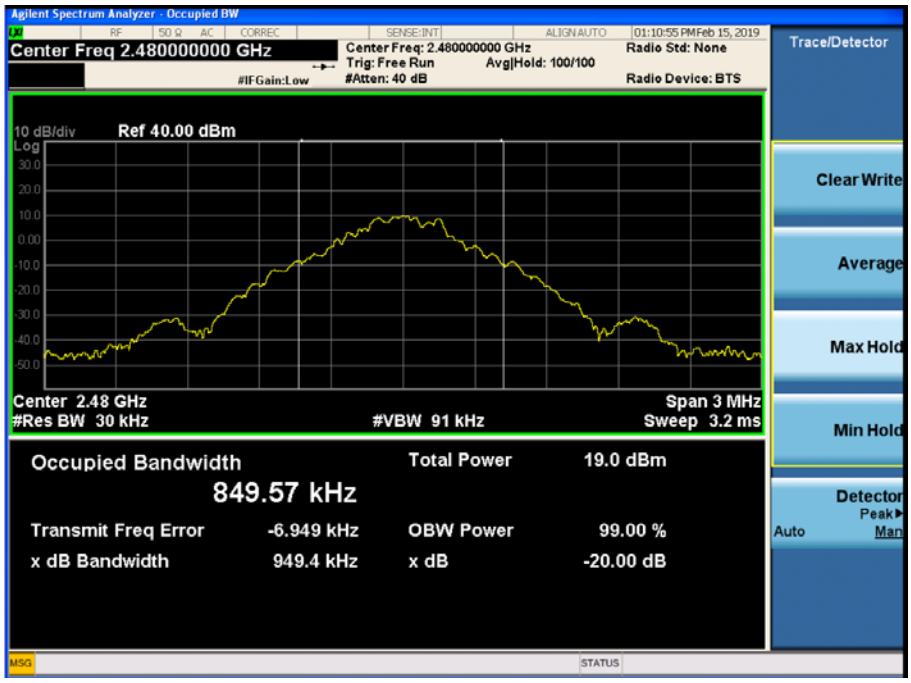


Figure 9-6 20dB Bandwidth (Ch. 78, 1-DH5)

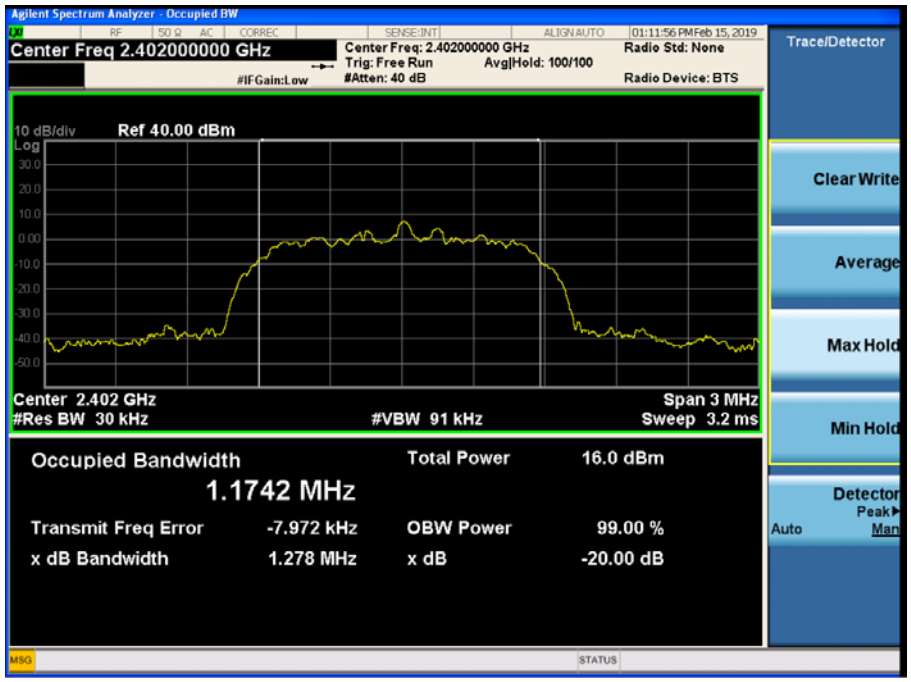


Figure 9-7 20dB Bandwidth (Ch. 0, 2-DH5)

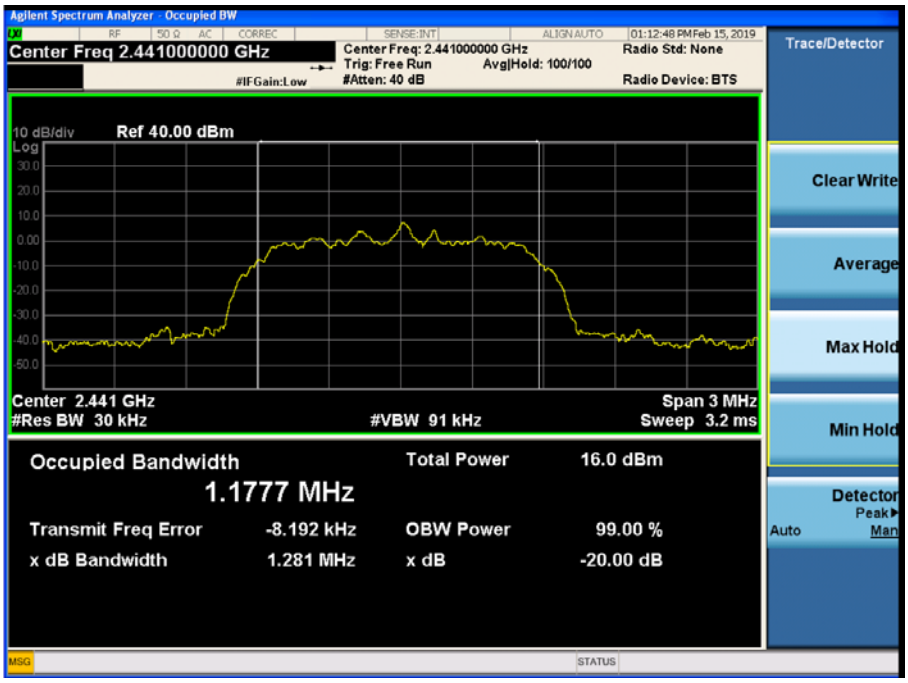


Figure 9-8 20dB Bandwidth (Ch. 39, 2-DH5)

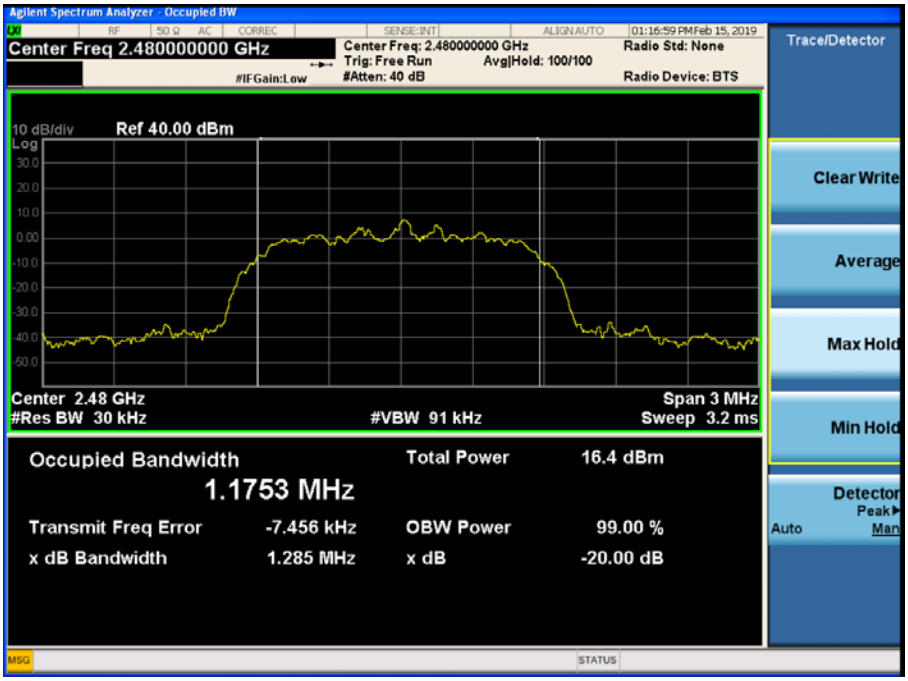


Figure 9-9 20dB Bandwidth (Ch. 78, 2-DH5)

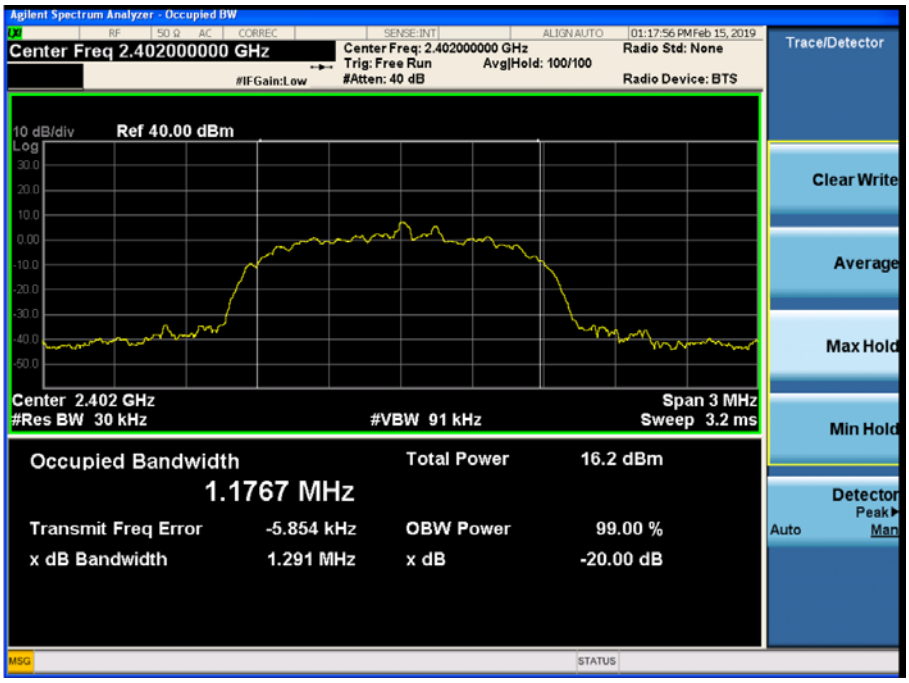


Figure 9-10 20dB Bandwidth (Ch. 0, 3-DH5)

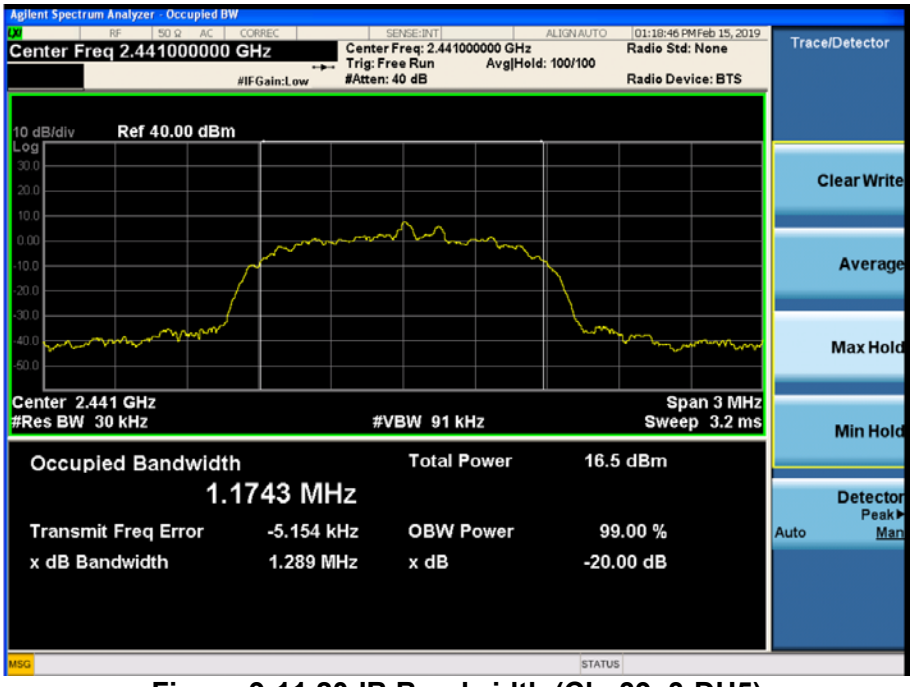


Figure 9-11 20dB Bandwidth (Ch. 39, 3-DH5)

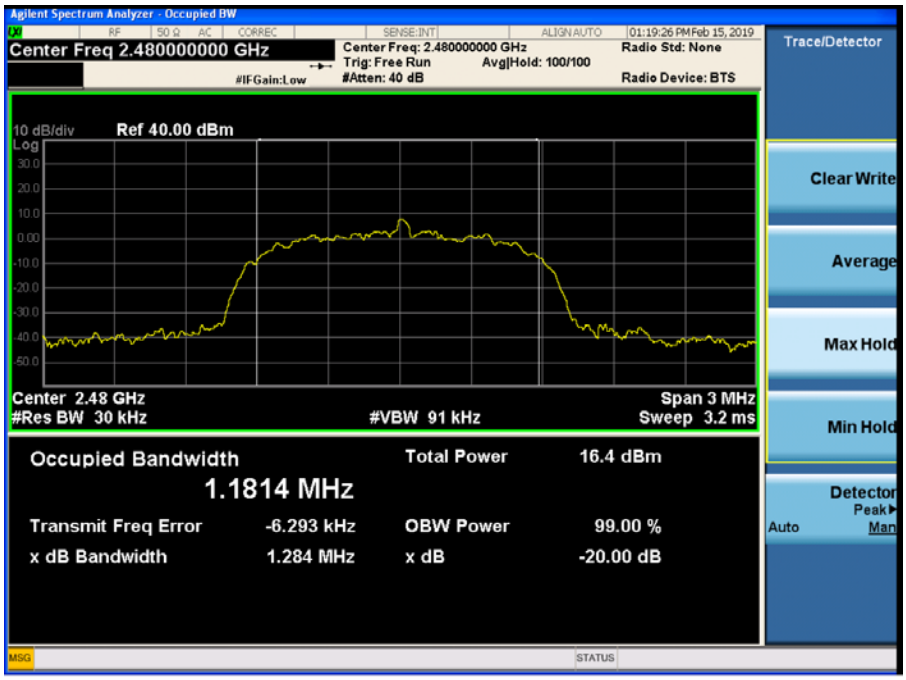


Figure 9-12 20dB Bandwidth (Ch. 78, 3-DH5)

9.3 Output Power

9.3.1 Test Requirement:

FCC CFR 47 Rule Part 15.247 (b)(1)

ISED RSS-247 [5.4]

9.3.2 Test Method:

Measurements were performed according to the procedure defined in ANSI C63.10:2013 Section 7.8.

Spectrum analyzer settings:

Peak Power Measurements:
Span = approximately 5 times the 20 dB bandwidth, centered on a hopping channel= 5MHz
RBW > the 20 dB bandwidth of the emission being measured= 2MHz
VBW ≥ 3 x RBW= 6MHz
Sweep = Auto
Detector function = Peak
Trace = Max Hold
The trace was allowed to stabilize. A Marker was set to the peak of the emission. The indicated level is the peak output power.

Sample Calculations:
Effective Isotropic Radiated Power (EIRP): Amplitude (Analyzer level) + CL (Cable losses) + Antenna Gain = -25 dBm + 5 dB +3 dBi = -17dBm.

9.3.3 Limits:

15.247/RSS-247: 1 Watt (30dBm), if ≥ 75 non-overlapping channels.

Additionally, for EDR modes and devices with ≤ 75 non-overlapping channels (AFH), 21dBm conducted.

RSS-247: 4 W (36dBm) EIRP.

Additionally, for EDR modes and devices with ≤ 75 non-overlapping channels (AFH), 27dBm EIRP.

9.3.4 Test Results:

Frequency (MHz)	Mode	Data Rate (Mbps)	Channel No.	Cond. Peak Power (dBm)	Cond. Limit (dBm)	Margin (dB)	Results
2402	1-DH5	1	0	11.58	21	-9.42	Pass
2441	1-DH5	1	39	11.80	21	-9.20	Pass
2480	1-DH5	1	78	12.07	21	-8.93	Pass
2402	2-DH5	2	0	10.75	21	-10.25	Pass
2441	2-DH5	2	39	11.01	21	-9.99	Pass
2480	2-DH5	2	78	11.32	21	-9.68	Pass
2402	3-DH5	3	0	11.23	21	-9.77	Pass
2441	3-DH5	3	39	11.44	21	-9.56	Pass
2480	3-DH5	3	78	11.72	21	-9.28	Pass

Frequency (MHz)	Mode	Channel No.	Cond. Peak Power (dBm)	Ant. Gain (dBi)	EIRP (dBm)	ISED EIRP Limit (dBm)	Margin (dB)	Results
2402	1-DH5	0	11.58	3.900	15.48	27	-11.52	Pass
2441	1-DH5	39	11.80	3.900	15.70	27	-11.30	Pass
2480	1-DH5	78	12.07	3.900	15.97	27	-11.03	Pass
2402	2-DH5	0	10.75	3.900	14.65	27	-12.35	Pass
2441	2-DH5	39	11.01	3.900	14.91	27	-12.09	Pass
2480	2-DH5	78	11.32	3.900	15.22	27	-11.78	Pass
2402	3-DH5	0	11.23	3.900	15.13	27	-11.87	Pass
2441	3-DH5	39	11.44	3.900	15.34	27	-11.66	Pass
2480	3-DH5	78	11.72	3.900	15.62	27	-11.38	Pass

9.3.5 Test Data:

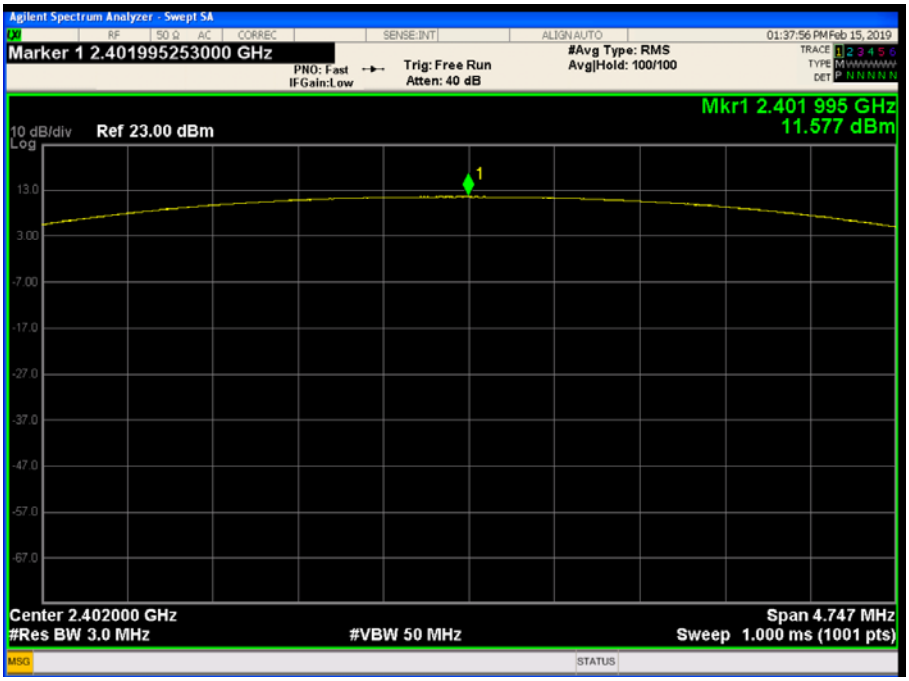


Figure 9-13 Peak Power (Ch. 0, 1-DH5)

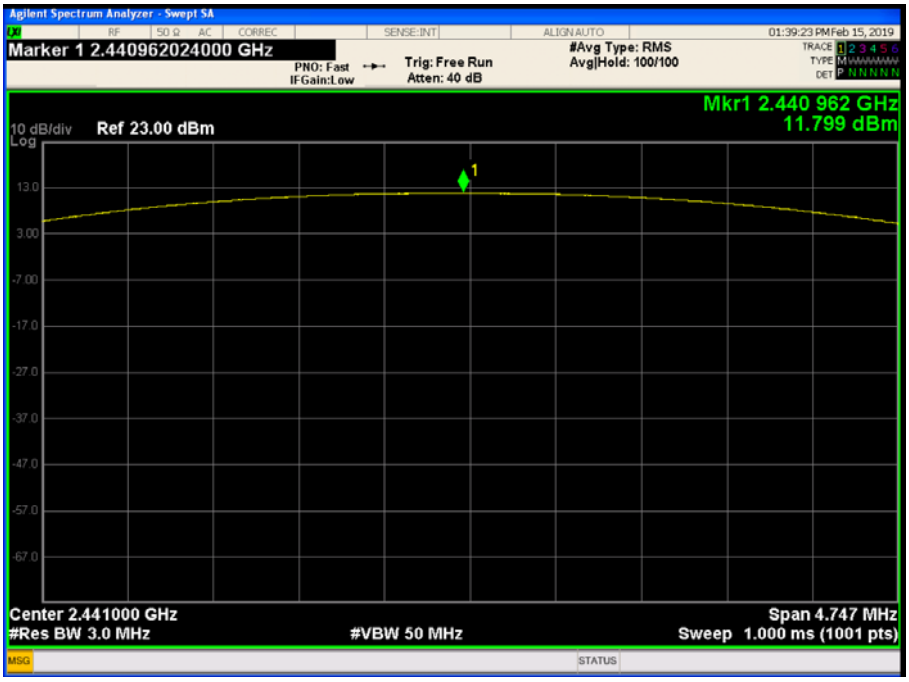


Figure 9-14 Peak Power (Ch. 39, 1-DH5)

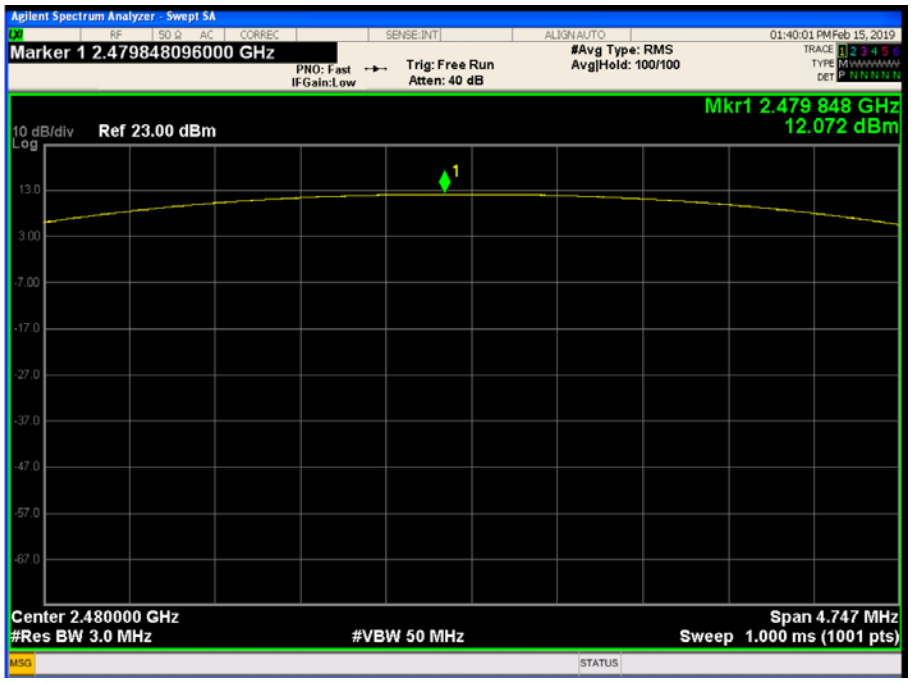


Figure 9-15 Peak Power (Ch. 78, 1-DH5)

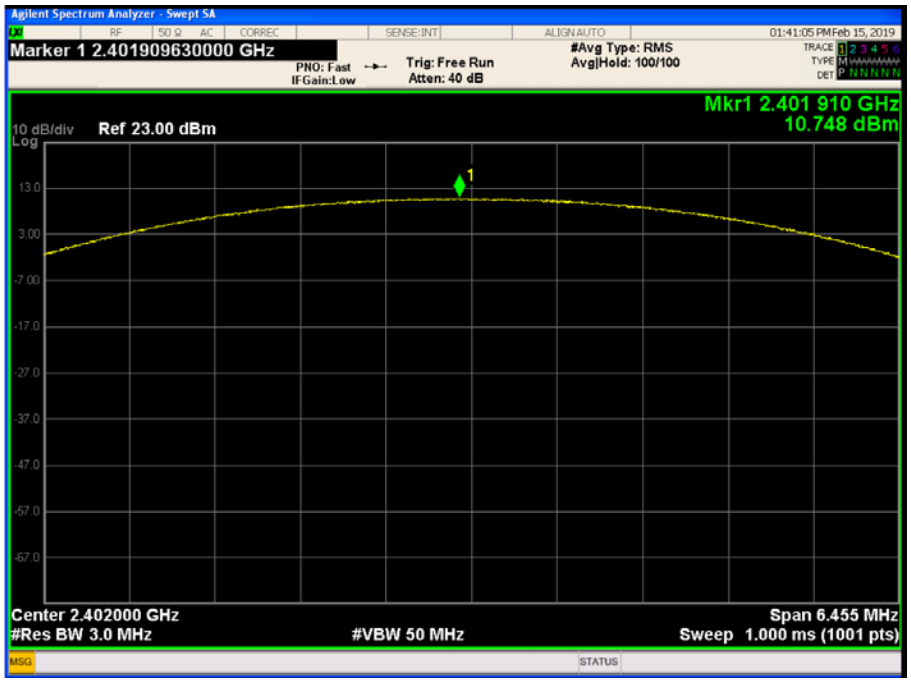


Figure 9-16 Peak Power (Ch. 0, 2-DH5)

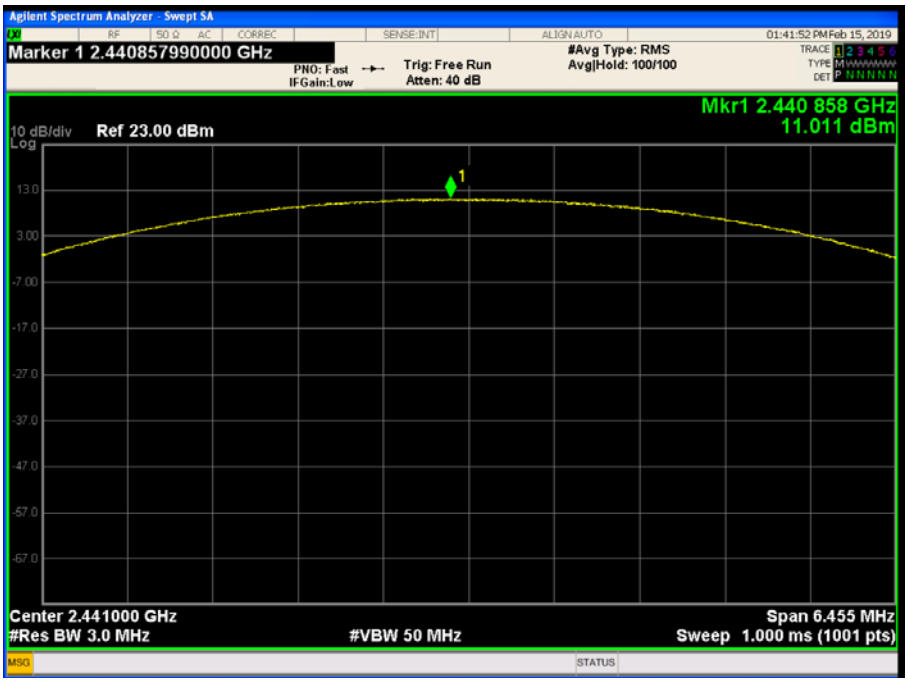


Figure 9-17 Peak Power (Ch. 39, 2-DH5)

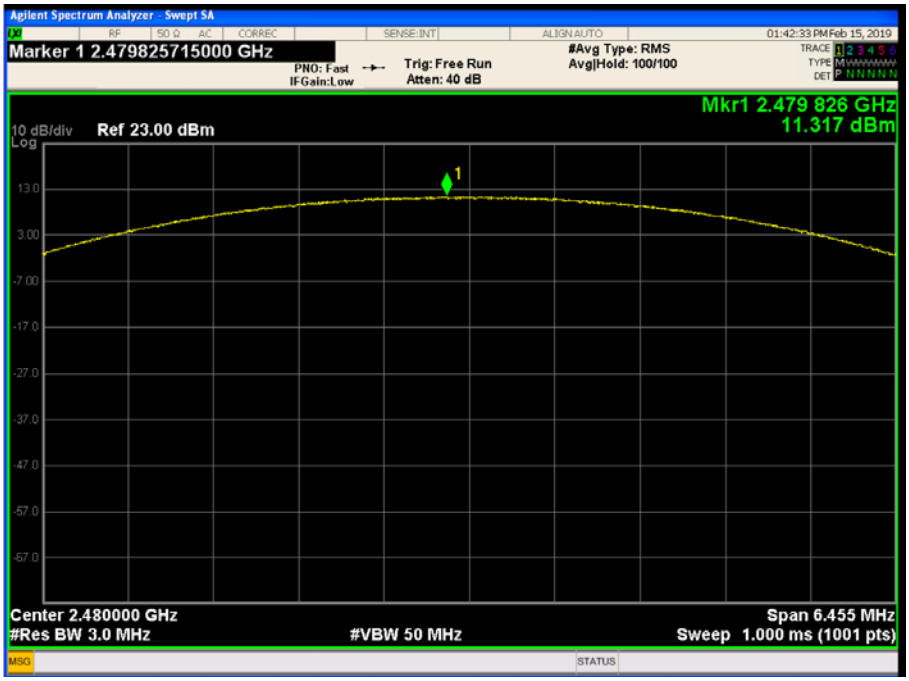


Figure 9-18 Peak Power (Ch. 78, 2-DH5)

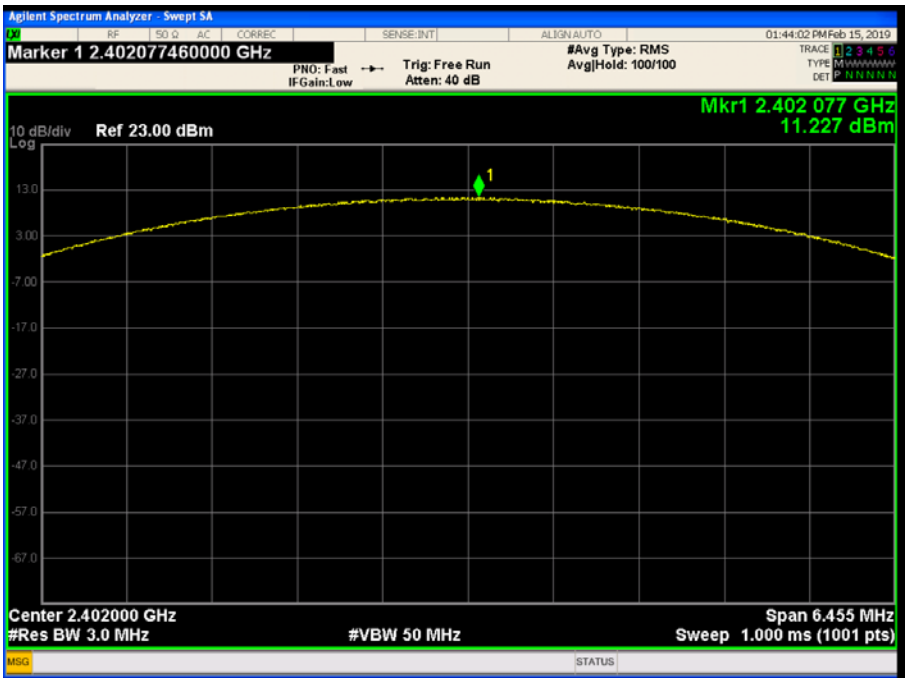


Figure 9-19 Peak Power (Ch. 0, 3-DH5)

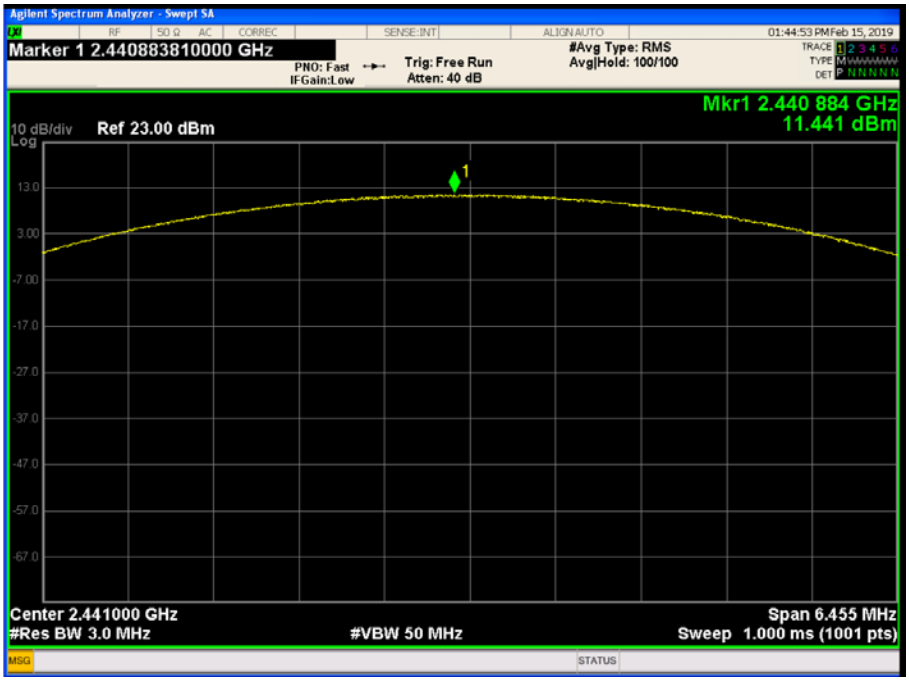


Figure 9-20 Peak Power (Ch. 39, 3-DH5)

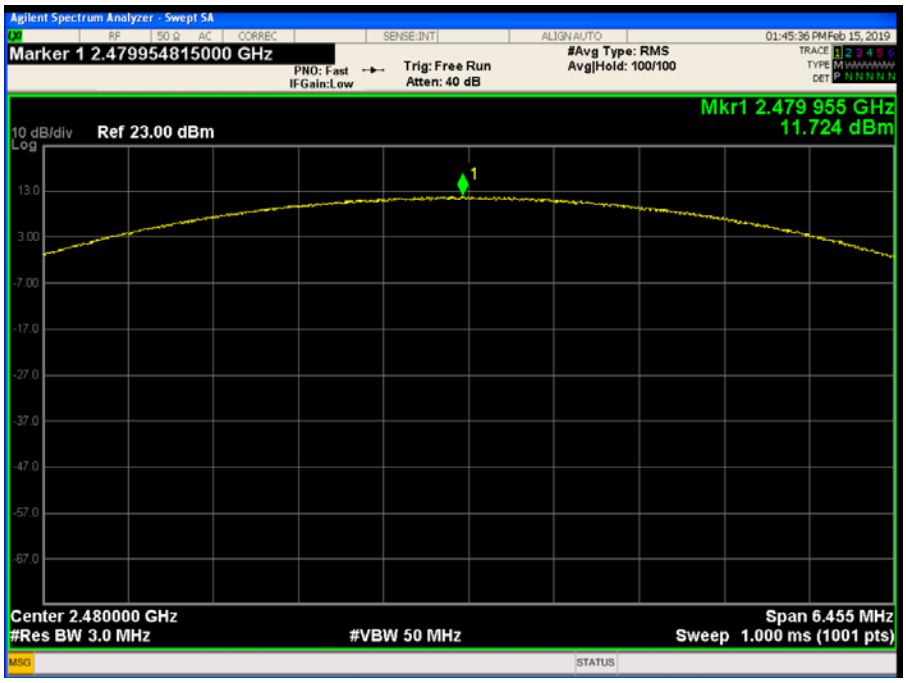


Figure 9-21 Peak Power (Ch. 78, 3-DH5)

9.4 Channel Spacing

9.4.1 Test Requirement:

FCC CFR 47 Rule Part 15.247 (a)(1)

ISED RSS-247 [5.1]

9.4.2 Test Method:

Measurements were performed according to the procedure defined in ANSI C63.10:2013 Section 7.8. The EUT was in pseudorandom hopping mode with the separation of two peaks measured using the delta marker.

Spectrum analyzer settings:
Span = wide enough to capture the peaks of two adjacent channels
Resolution (or IF) Bandwidth (RBW) = 300 kHz
Video (or Average) Bandwidth (VBW) ≥ RBW= 3 MHz
Sweep = Auto
Detector function = Peak
Trace = Max Hold
The trace(s) was allowed to stabilize. The marker-delta function was used to determine the separation between the peaks of the adjacent channels.

Sample Calculations:
Channel Separation: High Channel Frequency – Low Channel Frequency = 2441 MHz – 2440 MHz = 1 MHz.

9.4.3 Limits:

The channel carrier frequencies must be separated by 25kHz or the 20dB BW of the hopping channel whichever is greater. If the output power is less than 125mW, then the channel separation can be 2/3 of the 20dB bandwidth 623.33kHz or 25kHz whichever is greater.

9.4.4 Test Results:

Pass.
Minimum channel separation= 1.0 MHz in 1-DH5 Mode.

9.4.5 Test Data:

Figure 9-22 Channel Separation

9.5 Number of Hopping Frequencies

9.5.1 Test Requirement:

FCC CFR 47 Rule Part 15.247 (a)(1)(iii)

ISED RSS-247 [5.1]

9.5.2 Test Method:

Measurements were performed according to the procedure defined in ANSI C63.10:2013 Section 7.8. The EUT had its hopping function enabled.

Spectrum analyzer settings:

Span = the frequency band of operation
RBW < 30% of the OBW= 300 kHz
VBW ≥ RBW = 3 MHz
Sweep = Auto
Detector function = Peak
Trace = Max Hold
The trace was allowed to stabilize, and the number of channels was counted.

9.5.3 Limits:

The minimum number of hopping channels required is 15.

9.5.4 Test Results

Pass.
The EUT utilizes 79 hopping channels in BDR and EDR modes. In AFH mode, the EUT utilizes a minimum of 20 hopping channels.

9.5.5 Test Data:

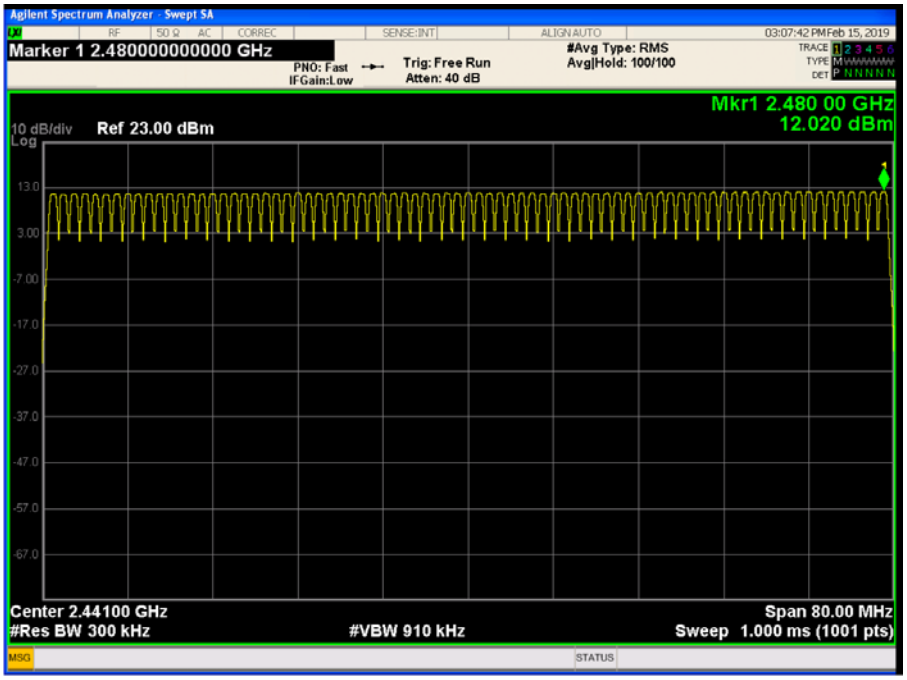


Figure 9-23 Number of Hopping Channels

9.6 Dwell Time

9.6.1 Test Requirement:

FCC CFR 47 Rule Part 15.247 (a)(1)(iii)

ISED RSS-247 [5.1]

9.6.2 Test Method:

Measurements were performed according to the procedure defined in ANSI C63.10:2013 American National Standard of Procedure for Compliance Testing of Unlicensed Wireless Devices, Section 7.8. The EUT had its hopping function enabled.

Spectrum analyzer settings:
Span = zero span, centered on a hopping channel
RBW = 100 kHz
VBW ≥ 3 x RBW= 300 kHz
Sweep = as necessary to capture the entire dwell time per hopping channel = 4ms
Detector function = Peak
Trace = Clear Write/ Trigger Mode

Dwell Time is measured with analyzer set to zero span at the middle channel and the trigger set to capture a burst.

Sample Calculations:
From the csv plot for 31.6s, total number of ON time is calculated.
Multiplying the ON time with time resolution (microseconds) and converting this to milliseconds provides the Accumulated dwell time.
Accumulated Dwell Time = (465*0.00079)*1000 = 397.381ms

9.6.3 Limits:

400 ms within 31.6s (400 ms × 79 Channels)

9.6.4 Test Results:

Pass.

Packet Type	Accumulated Dwell Time in 31.6 s period (ms)	Limit (ms)
1-DH1	367.381	400.000
1-DH3	395.033	400.000
1-DH5	364.220	400.000

9.6.5 Test Data:

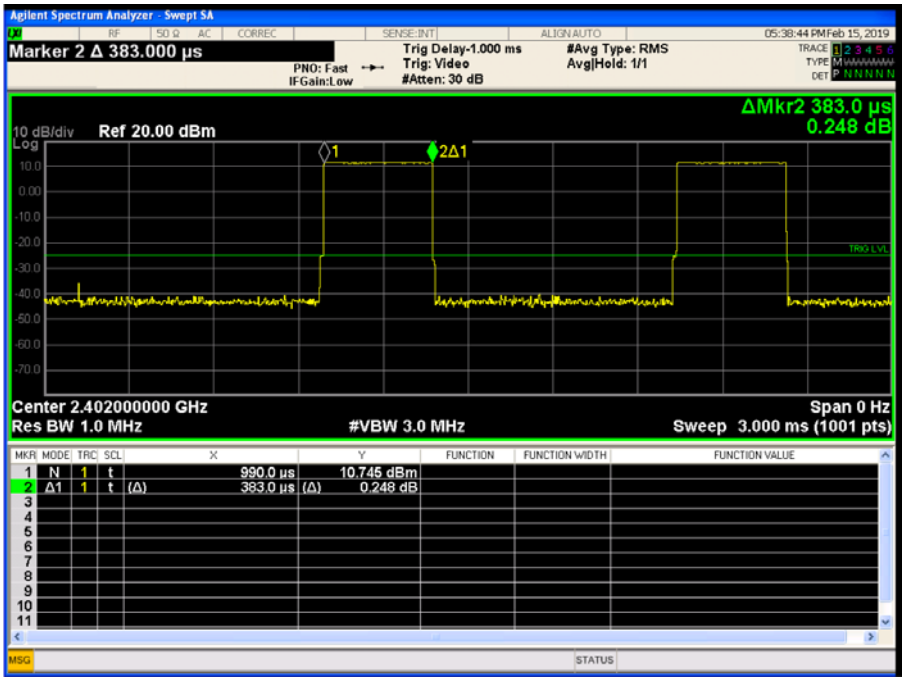


Figure 9-34 Dwell Time – DH1

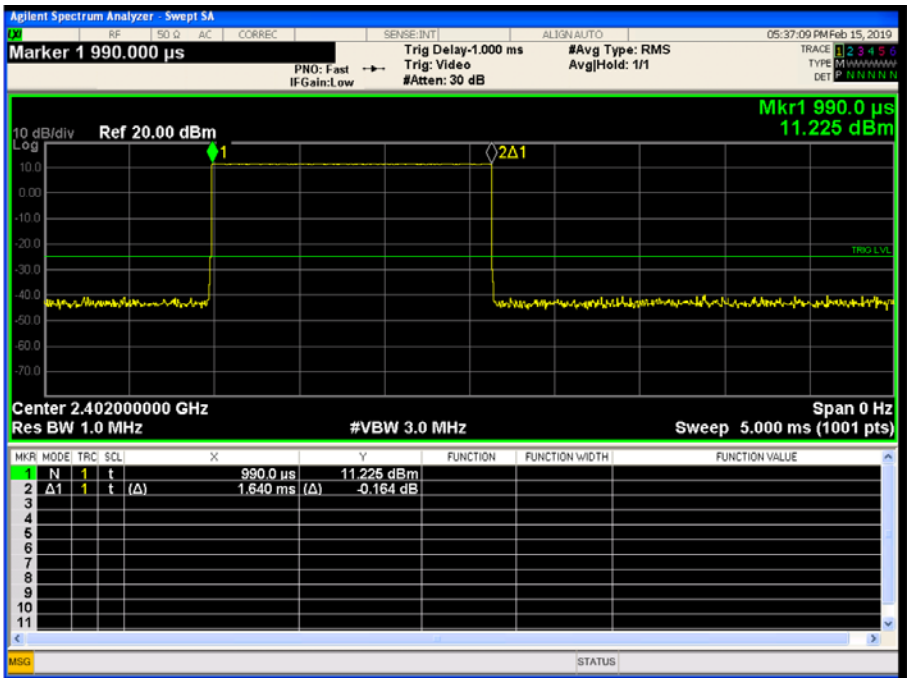


Figure 9-25 Dwell Time – DH3

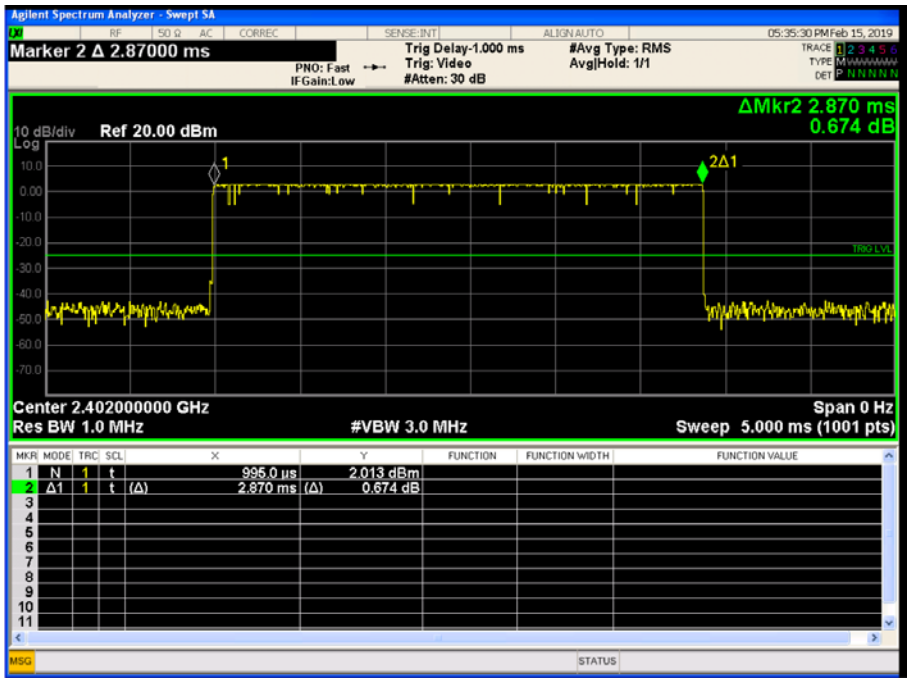


Figure 9-26 Dwell Time - DH5

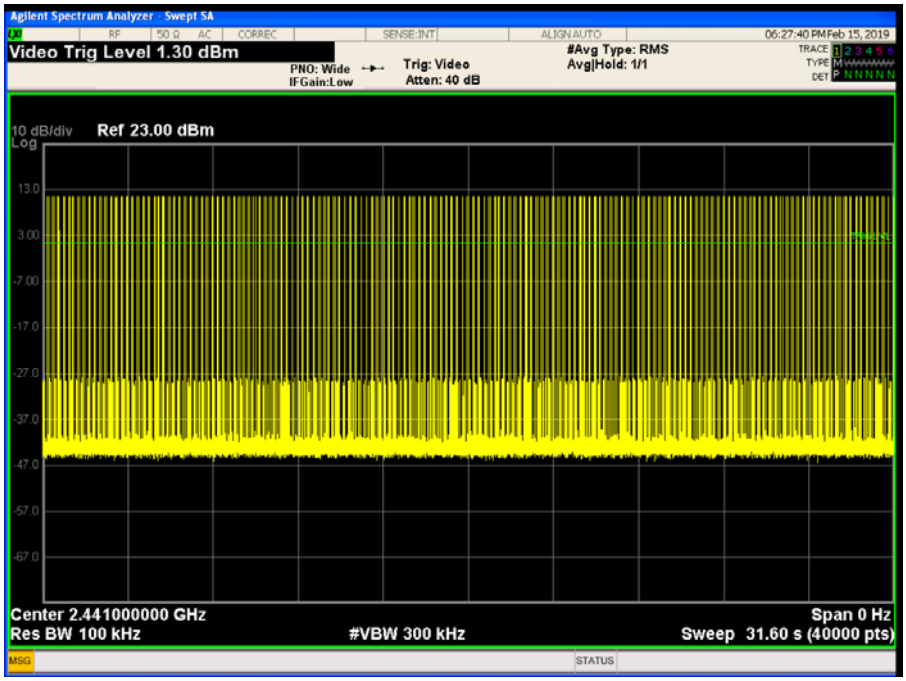


Figure 9-27 Time of Occupancy - DH1

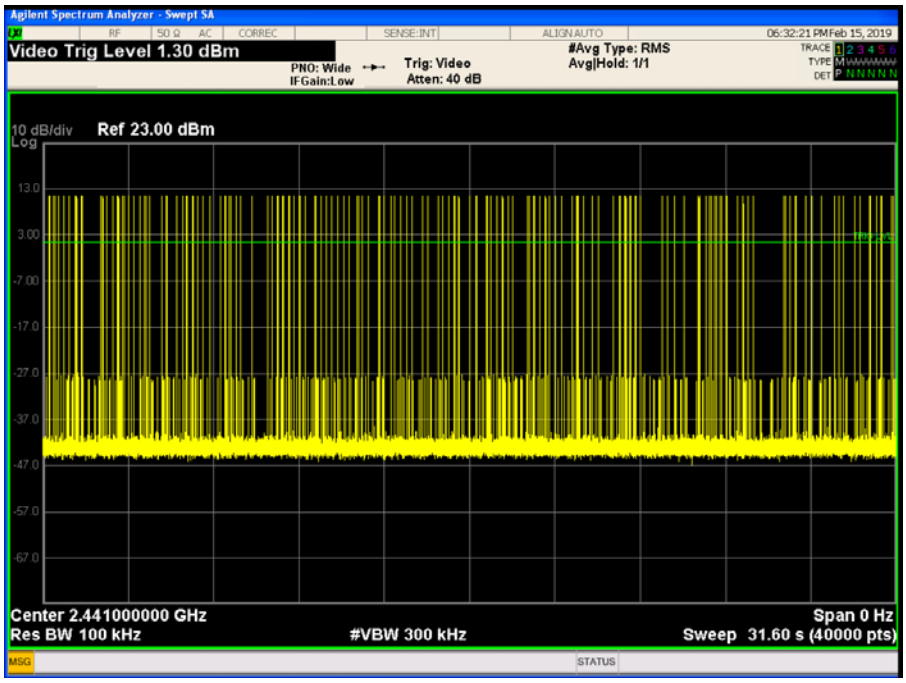


Figure 9-28 Time of Occupancy - DH3

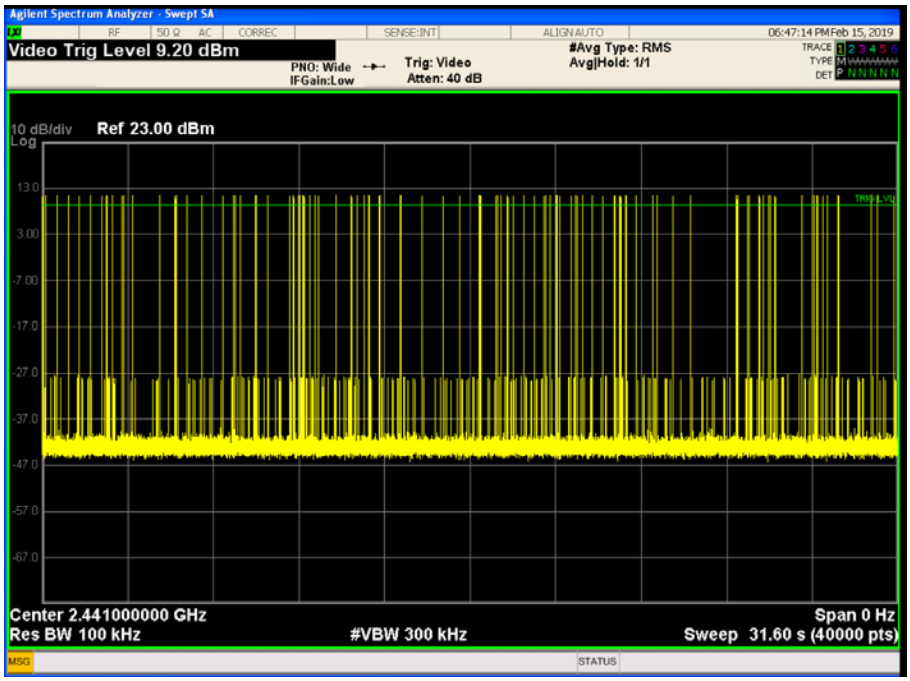


Figure 9-29 Time of Occupancy - DH5