ELECTROMAGNETIC EMISSION COMPLIANCE REPORT FOR LOW-POWER, NON-LICENSED TRANSMITTER

Test Report No.	**: OT-204-RWD-031**
AGR No.	**: A202A-218**
Applicant	**: C&A Marketing Inc.**
Address	**: 114 Tived Lane East, Edison, New Jersey, 08837, United States**
Manufacturer	**: C&A Marketing Inc.**
Address	**: 114 Tived Lane East, Edison, New Jersey, 08837, United States**
Type of Equipment	**: KODAK STEP INSTANT MOBILE PHOTO PRINTER**
FCC ID.	**: 2AD2W-RODMP20**
Model Name	**: RODMP20**
Serial number	**: N/A**
Total page of Report	**: 76 pages (including this page)**
Date of Incoming	**: March 09, 2020**
Date of issue	**: April 01, 2020**

SUMMARY

The equipment complies with the regulation; ***FCC PART 15 SUBPART C Section 15.247***

This test report only contains the result of a single test of the sample supplied for the examination.

It is not a generally valid assessment of the features of the respective products of the mass-production.

Reviewed by: Tae-Ho, Kim / Senior Manager, ONETECH Corp.

Approved by: Ki-Hong, Nam / General Manager, ONETECH Corp.

ONETECH Corp.: 43-14, Jinsaegol-gil, Chowol-eup, Gwangju-si, Gyeonggi-do, 12735, Korea (TEL: 82-31-799-9500, FAX: 82-31-799-9599)

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ONETECH Corp.: 43-14, Jinsaegol-gil, Chowol-eup, Gwangju-si, Gyeonggi-do, 12735, Korea (TEL: 82-31-799-9500, FAX: 82-31-799-9599)

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Revision History

Rev. No.	Issue Report No.	Issued Date	Revisions	Section Affected
0	OT-204-RWD-031	April 01, 2020	Initial Release	All

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1. VERIFICATION OF COMPLIANCE

Applicant : C&A Marketing Inc.

Address : 114 Tived Lane East, Edison, New Jersey, 08837, United States

Contact Person : Chaim, Piekarski / Chief Executive Officer

Telephone No. : +8482442000

FCC ID : 2AD2W-RODMP20

Model Name : RODMP20

Brand Name : -

Serial Number : N/A

Date : April 01, 2020

EQUIPMENT CLASS	DSS – PART 15 SPREAD SPECTRUM TRANSMITTER
E.U.T. DESCRIPTION	KODAK STEP INSTANT MOBILE PHOTO PRINTER
THIS REPORT CONCERNS	Original Grant
MEASUREMENT PROCEDURES	ANSI C63.10: 2013
TYPE OF EQUIPMENT TESTED	Pre-Production
KIND OF EQUIPMENT AUTHORIZATION REQUESTED	Certification
EQUIPMENT WILL BE OPERATED UNDER FCC RULES PART(S)	FCC PART 15 SUBPART C Section 15.247 KDB 558074 D01 15.247 Meas Guidance v05r02
Modifications on the Equipment to Achieve Compliance	None
Final Test was Conducted On	3 m, Semi Anechoic Chamber

-. The above equipment was tested by ONETECH Corp. for compliance with the requirement set forth in the FCC Rules and Regulations. This said equipment in the configuration described in this report, shows the maximum emission levels emanating from equipment are within the compliance requirements.

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2. TEST SUMMARY

2.1 Test items and results

SECTION	TEST ITEMS	RESULTS
15.247 (a) (1)	Carrier Frequency Separation	Met the Limit / PASS
15.247 (a) (1) (iii)	Minimum Number of Hopping Channels	Met the Limit / PASS
15.247 (a) (1) (iii)	Average Time of Occupancy	Met the Limit / PASS
15.247 (b) (1)	Maximum Peak Conducted Output Power	Met the Limit / PASS
15.247 (d)	100 kHz Bandwidth Outside the Frequency Band	Met the Limit / PASS
15.247 (d)	Radiated Emission which fall in the Restricted Band	Met the Limit / PASS
15.209	Radiated Emission Limits, General Requirement	Met the Limit / PASS
15.207	Conducted Limits	N/A (See Note)
15.203	Antenna Requirement	Met requirement / PASS

Note: This test is not performed because the EUT is wireless function does not work while charging mode.

2.2 Additions, deviations, exclusions from standards

No additions, deviations or exclusions have been made from standard.

2.3 Related Submittal(s) / Grant(s)

Original submittal only

2.4 Purpose of the test

To determine whether the equipment under test fulfills the requirements of the regulation stated in FCC PART 15 SUBPART C Section 15.247.

2.5 Test Methodology

Both conducted and radiated testing was performed according to the procedures in ANSI C63.10: 2013. Radiated testing was performed at a distance of 3 m from EUT to the antenna.

2.6 Test Facility

The Onetech Corp. has been designated to perform equipment testing in compliance with ISO/IEC 17025.

The Electromagnetic compatibility measurement facilities are located at 43-14, Jinsaegol-gil, Chowol-eup, Gwangju-si, Gyeonggi-do, 12735, Korea

-. Site Filing:

VCCI (Voluntary Control Council for Interference) – Registration No. R-4112/ C-14617/ G-10666 / T-1842

IC (Industry Canada) – Registration No. Site# 3736A-3

-. Site Accreditation:

KOLAS (Korea Laboratory Accreditation Scheme) - Accreditation NO. KT085

FCC (Federal Communications Commission) - Accreditation No. KR0013

RRA (Radio Research Agency) – Designation No. KR0013

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3. GENERAL INFORMATION

3.1 Product Description

The C&A Marketing Inc., Model RODMP20 (referred to as the EUT in this report) is a KODAK STEP INSTANT MOBILE PHOTO PRINTER. The product specification described herein was obtained from product data sheet or user's manual.

DEVICE TYPE	KODAK STEP INSTANT MOBILE PHOTO PRINTER	
Temperature Range	5 °C ~ 40 °C	
OPERATING FREQUENCY	2 402 MHz ~ 2 480 MHz	
MODULATION TYPE	GFSK for 1Mbps, π/4-DQPSK for 2Mbps, 8-DPSK for 3Mbps	
RF OUTPUT POWER	1 Mbps	6.25 dBm
	2 Mbps	4.80 dBm
	3 Mbps	5.16 dBm
ANTENNA TYPE	Chip Antenna	
ANTENNA GAIN	1.80 dBi	
List of each Osc. or crystal Freq.(Freq. >= 1 MHz)	24 MHz	

3.2 Alternative type(s)/model(s); also covered by this test report.

-. None

4. EUT MODIFICATIONS

-. None

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5. SYSTEM TEST CONFIGURATION

5.1 Justification

This device was configured for testing in a typical way as a normal customer is supposed to be used. During the test, the following components were installed inside of the EUT.

DEVICE TYPE	MANUFACTURER	MODEL/PART NUMBER	FCC ID
Main Board	N/A	ZIP1.2 V2.0	N/A
Motor	N/A	N/A	N/A
Battery	EVE Energy Co., Ltd	P0562-LF	N/A

5.2 Peripheral equipment

Defined as equipment needed for correct operation of the EUT, but not considered as tested:

Model	Manufacturer	Description	Connected to
RODMP20	C&A Marketing Inc.	KODAK STEP INSTANT MOBILE PHOTO PRINTER (EUT)	-
TC-3000C	TESCOM	BLUETOOTH TESTER	EUT

5.3 Mode of operation during the test

For the testing, software used to control the EUT for staying in continuous transmitting is programmed.

For final testing, the EUT was set at 2 402 MHz, 2 441 MHz, and 2 480 MHz to get a maximum emission levels from the EUT. The EUT was moved throughout the XY, XZ, and YZ planes and the worst case is “XZ” axis, but the worst data was recorded in this report.

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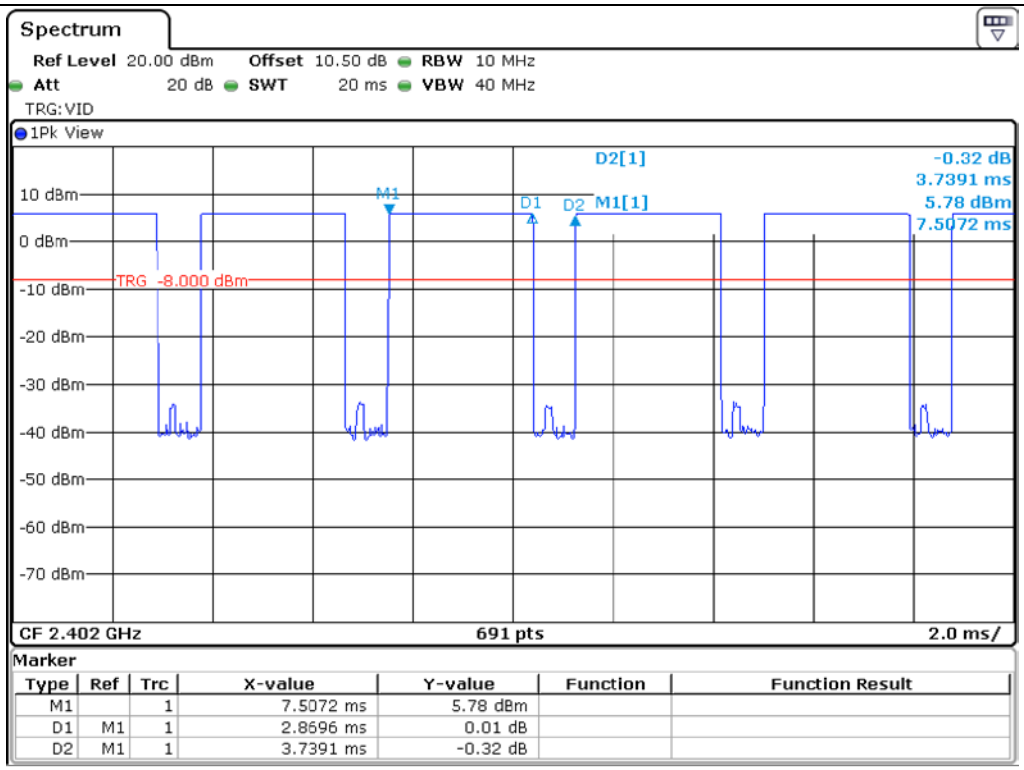
-. Duty Cycle

Mode	Tx On Time [ms]	Tx Off Time [ms]	Duty Cycle [%]	Correction Factor [dB]
Bluetooth [1 Mbps]	2.87	0.87	76.75	1.15
Bluetooth [2 Mbps]	2.90	0.84	77.52	1.11
Bluetooth [3 Mbps]	2.90	0.87	76.92	1.14

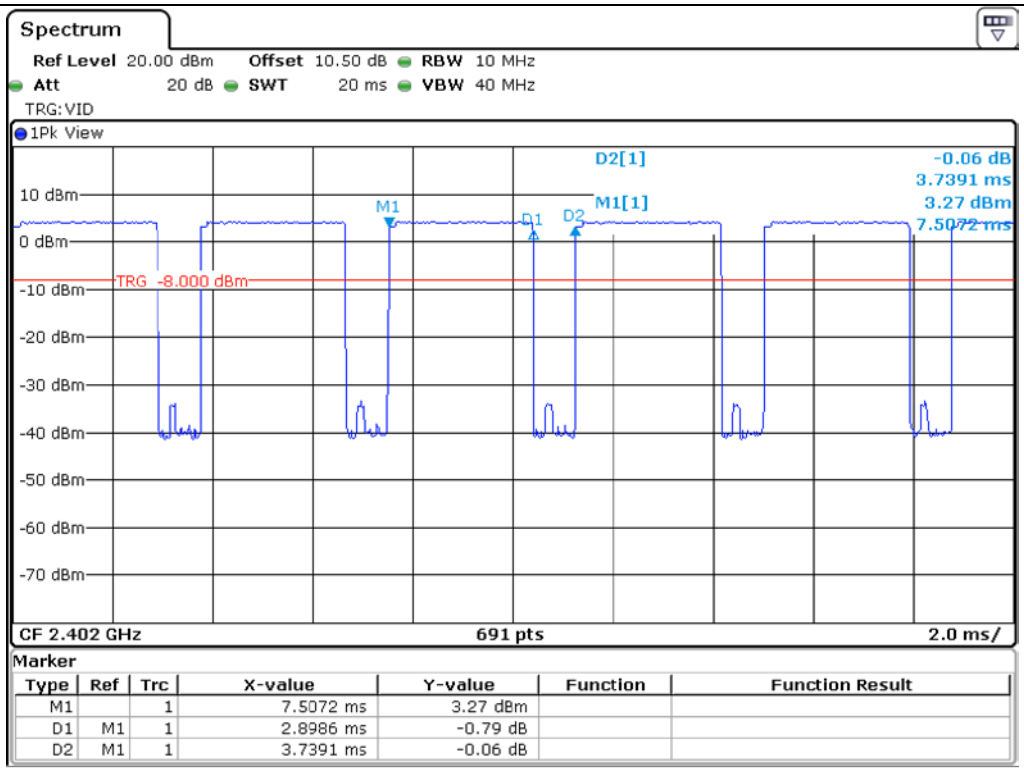
Note – Duty Cycle : (Tx On Time / (Tx On Time + Tx Off Time)) * 100

Correction Factor : 10 * Log(1 / (Duty Cycle / 100))

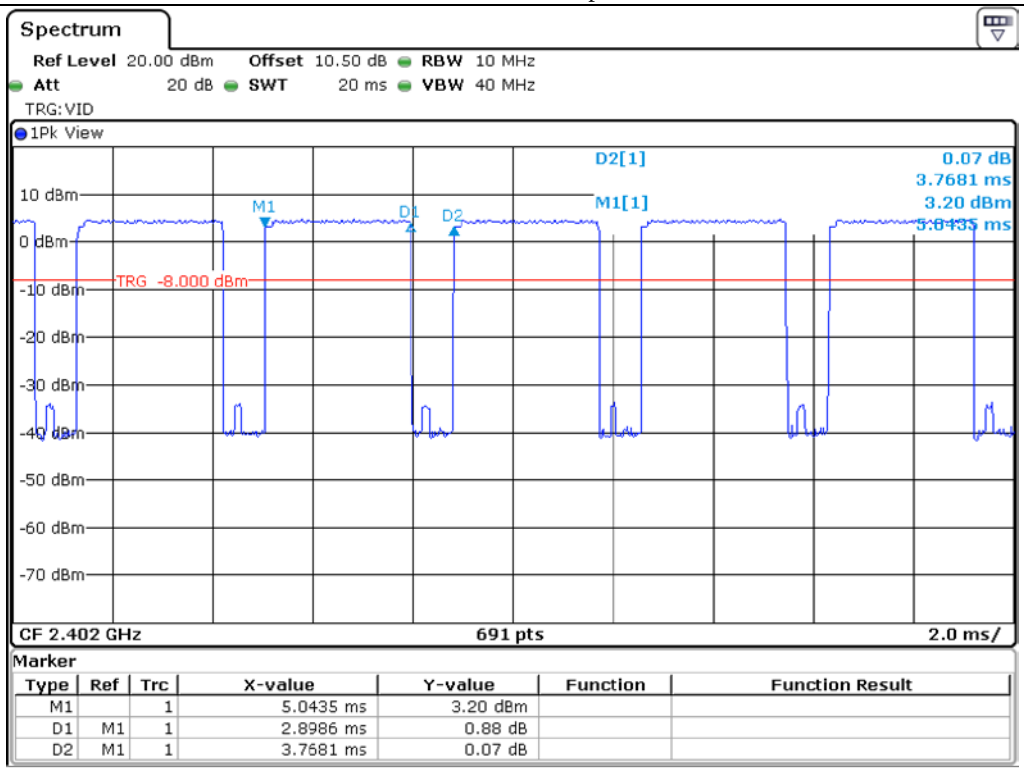
-. Test Plot



Bluetooth_1 Mbps



Bluetooth_2 Mbps



Bluetooth_3 Mbps

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5.4 Configuration of Test System

Line Conducted Test: This test is not performed because the EUT is wireless function does not work while charging Mode

Radiated Emission Test: Preliminary radiated emissions test were conducted using the procedure in ANSI C63.10: 2013 to determine the worse operating conditions. Final radiated emission tests were conducted at 3 meter Semi Anechoic Chamber.

The turntable was rotated through 360 degrees and the EUT was tested by positioned three orthogonal planes to obtain the highest reading on the field strength meter. Once maximum reading was determined, the search antenna was raised and lowered in both vertical and horizontal polarization.

5.5 Antenna Requirement

For intentional device, according to section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

Antenna Construction:

The antenna of the EUT is a Chip Antenna on the main board in the EUT, so no consideration of replacement by the user.

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6. PRELIMINARY TEST

6.1 AC Power line Conducted Emissions Tests

During Preliminary Test, the following operating mode was investigated.

Operation Mode	The Worse operating condition (Please check one only)
This test is not performed because the EUT is wireless function does not work while charging Mode	

6.2 General Radiated Emissions Tests

During Preliminary Test, the following operating mode was investigated.

Operation Mode	The Worse operating condition (Please check one only)
Transmitting Mode	X

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7. MINIMUM 20 dB BANDWIDTH

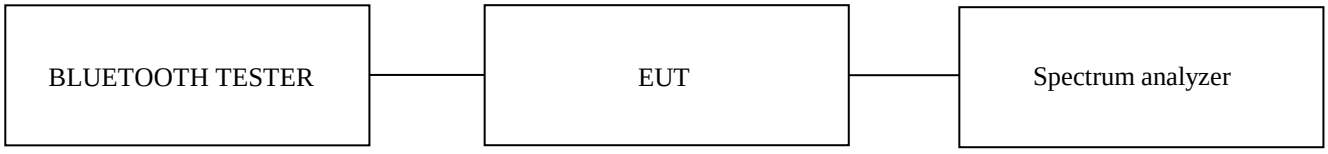
7.1 Operating environment

Temperature : 23 °C

Relative humidity : 45 % R.H.

7.2 Test set-up

The antenna output of the EUT was connected to the spectrum analyzer. The resolution bandwidth is set to 10 kHz, and peak detection was used. The 20 dB bandwidth is defined as the total spectrum over which the power is higher than the peak power minus 20 dB.



7.3 Test equipment used

	Model Number	Manufacturer	Description	Serial Number	Last Cal.
■ -	FSV40	Rohde & Schwarz	Signal Analyzer	101009	Feb. 21, 2020 (1Y)
■ -	TC-3000C	TESCOM	BLUETOOTH TESTER	3000C000634	Feb. 19, 2020 (1Y)

All test equipment used is calibrated on a regular basis.

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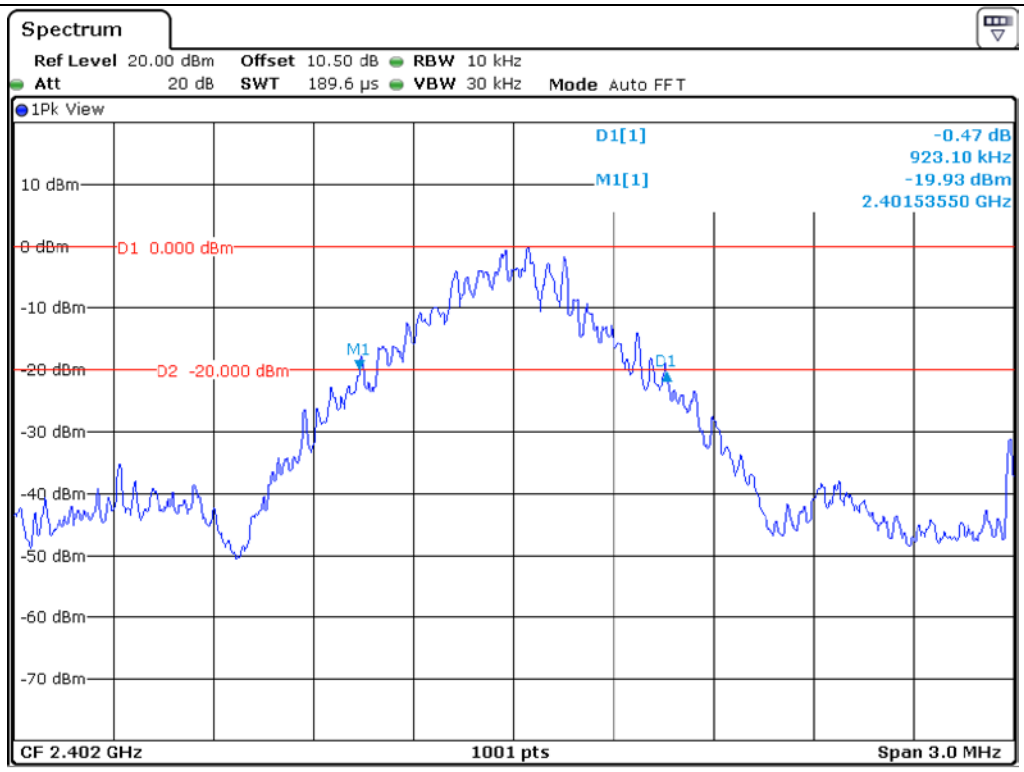
7.4 Test data for 1 Mbps

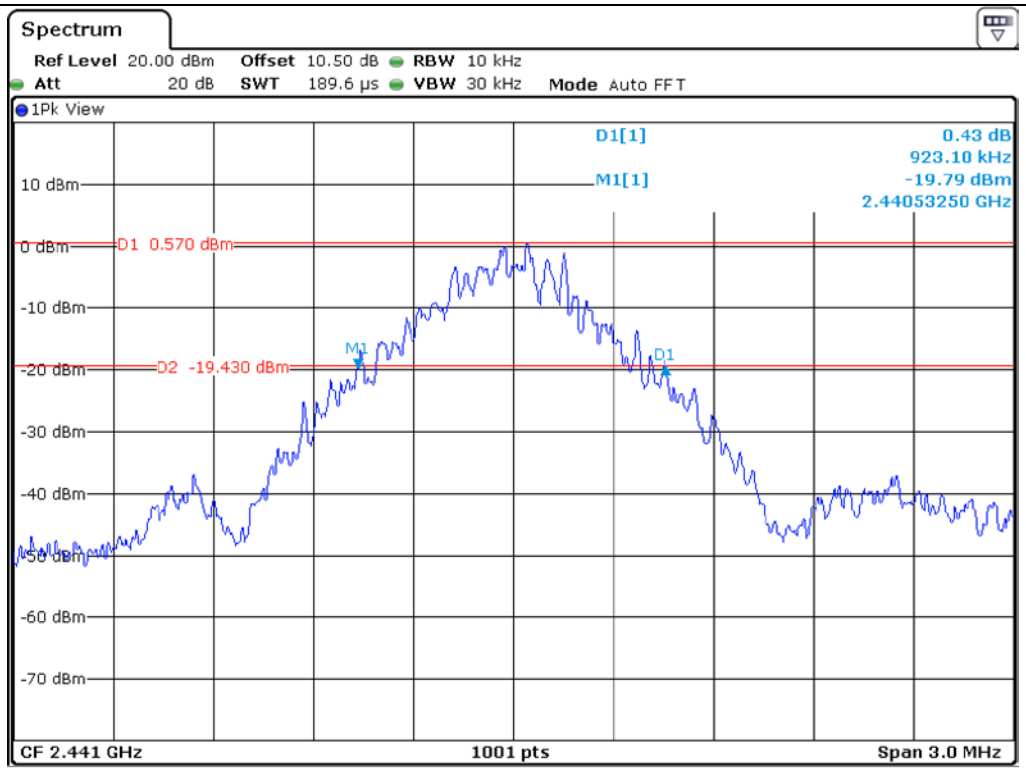
-. Test Date : March 23, 2020 ~ March 27, 2020

CHANNEL	FREQUENCY (MHz)	20 dB Bandwidth (kHz)
Low	2 402.00	923.10
Middle	2 441.00	923.10
High	2 480.00	923.10

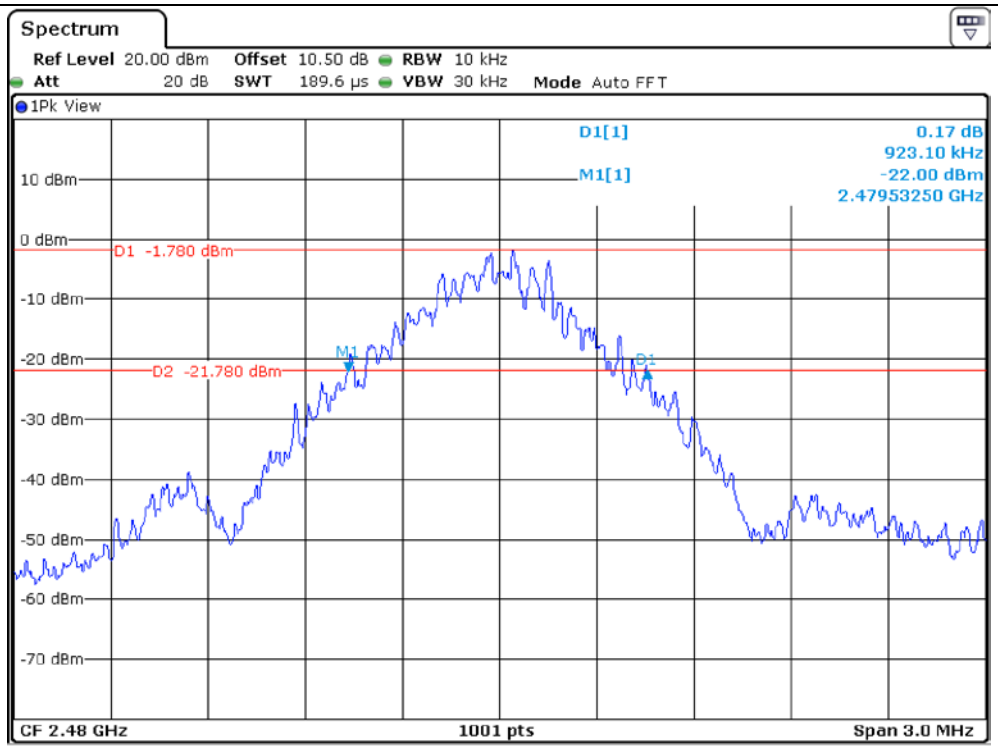
Tested by: Hyung-Kwon, Oh / Manager



Low Channel



Middle Channel



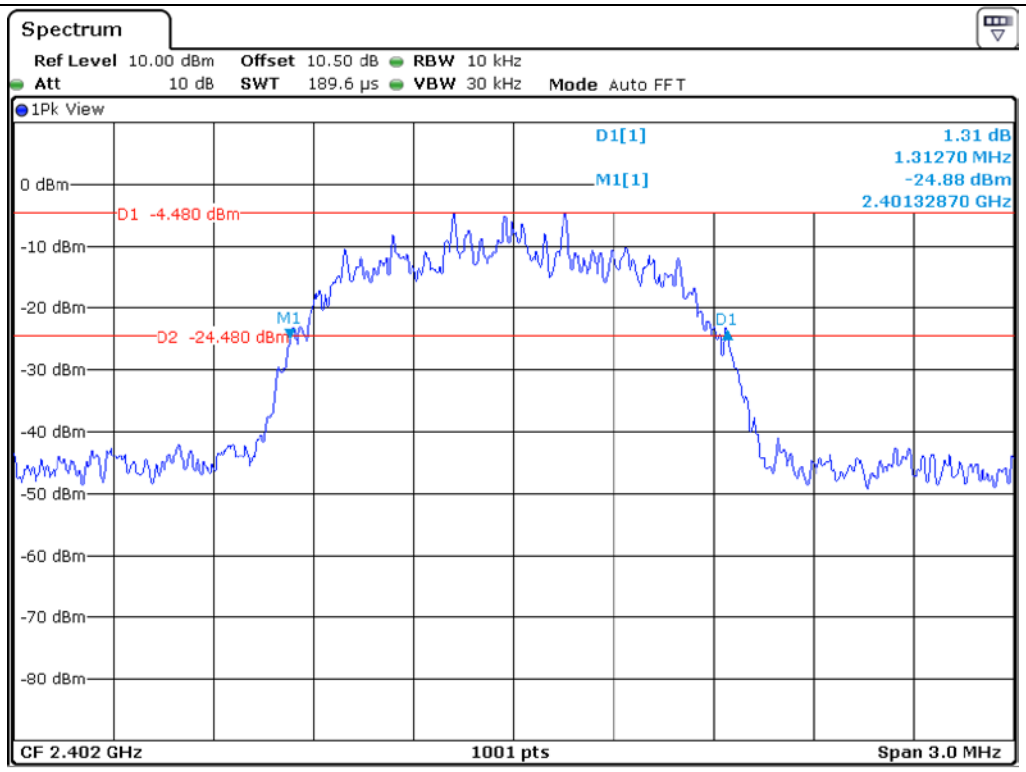
High Channel

7.5 Test data for 2 Mbps

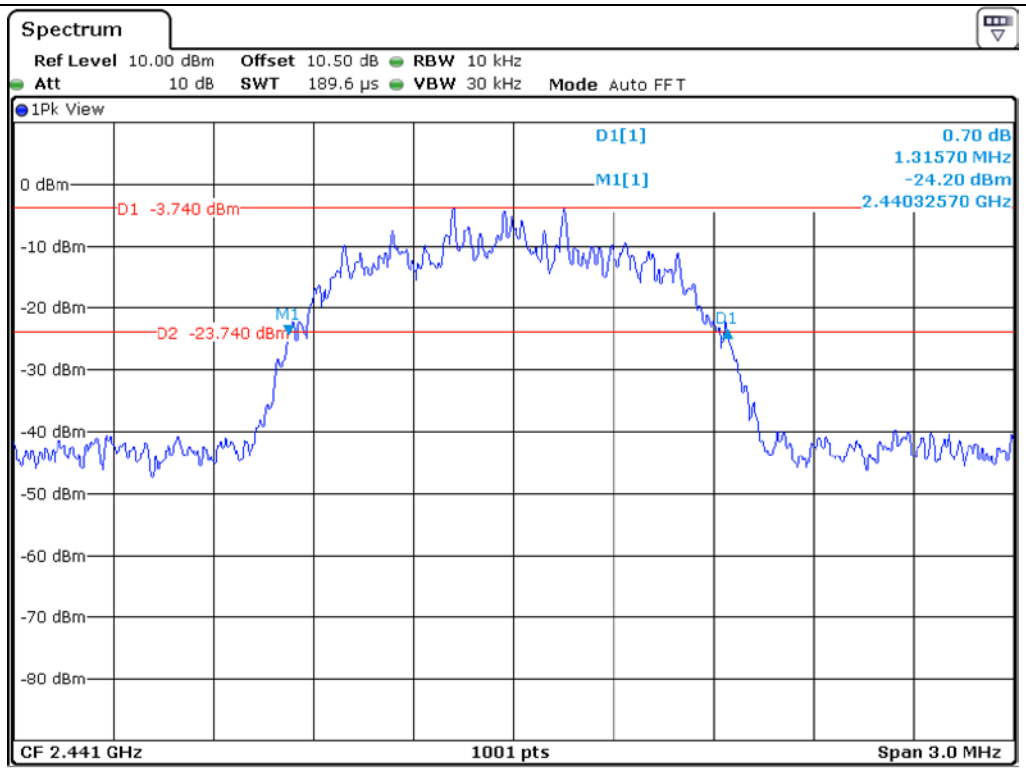
-. Test Date : March 23, 2020 ~ March 27, 2020

CHANNEL	FREQUENCY (MHz)	20 dB Bandwidth (kHz)
Low	2 402.00	1 312.70
Middle	2 441.00	1 315.70
High	2 480.00	1 312.70

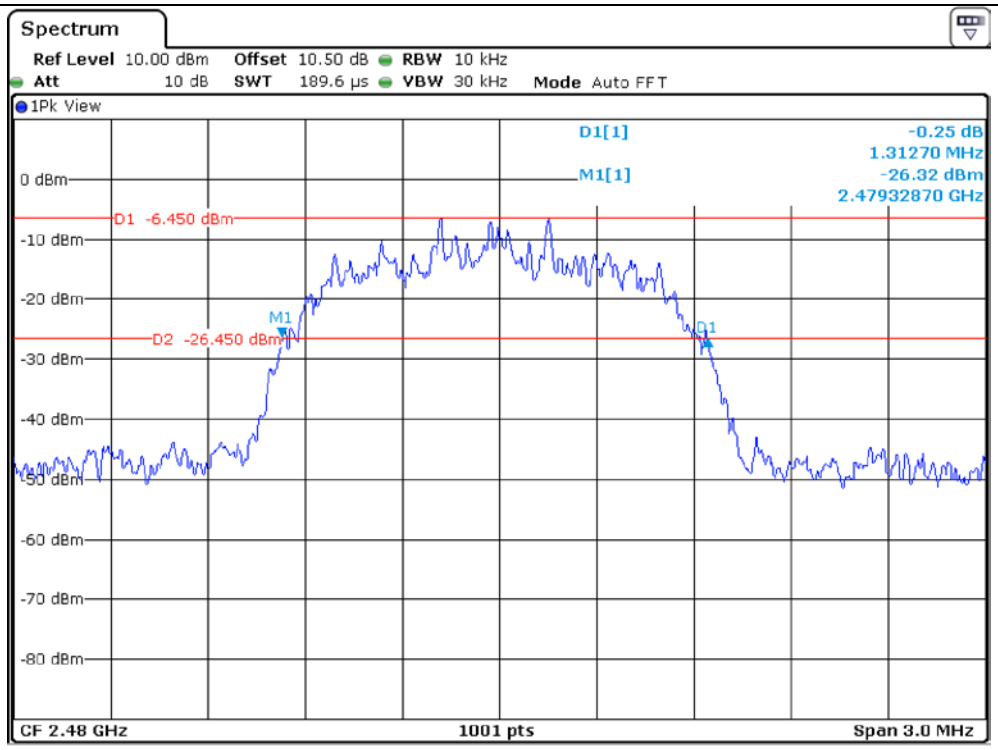
Tested by: Hyung-Kwon, Oh / Manager



Low Channel



Middle Channel



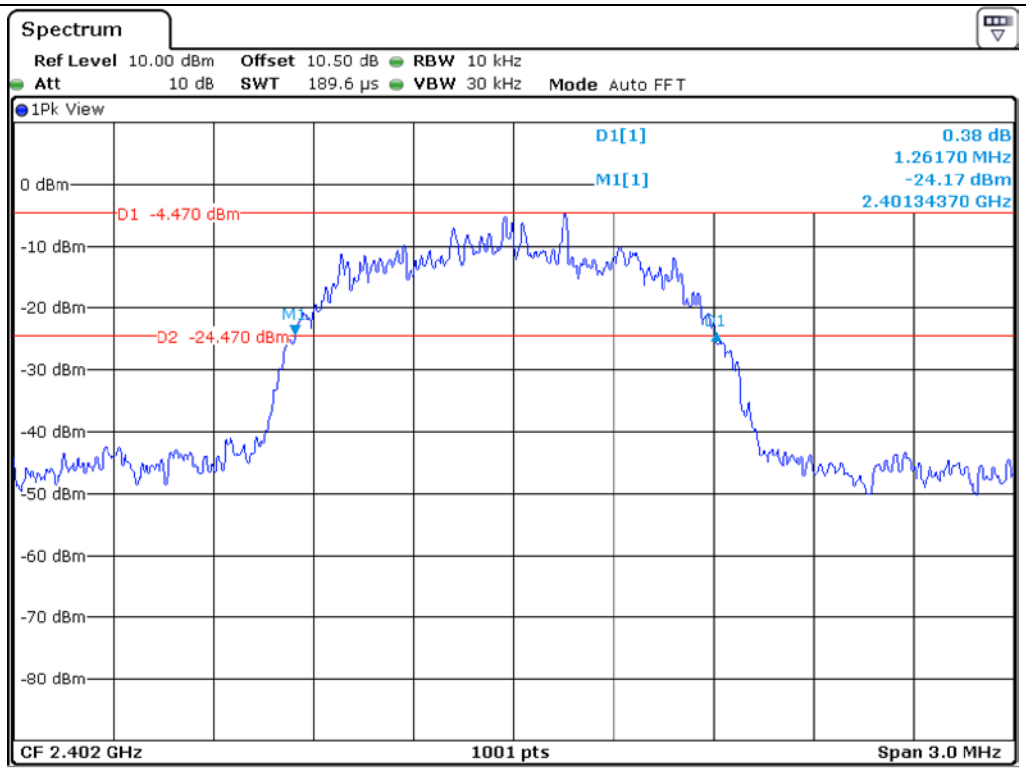
High Channel

7.6 Test data for 3 Mbps

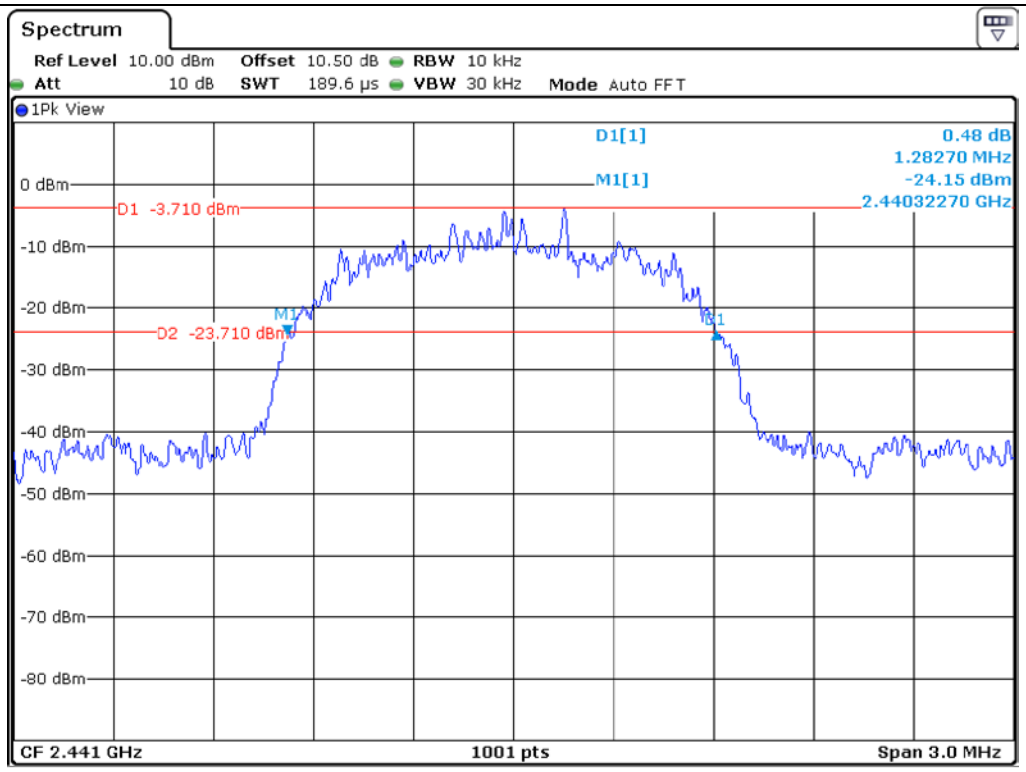
-. Test Date : March 23, 2020 ~ March 27, 2020

CHANNEL	FREQUENCY (MHz)	20 dB Bandwidth (kHz)
Low	2 402.00	1 261.70
Middle	2 441.00	1 282.70
High	2 480.00	1 264.70

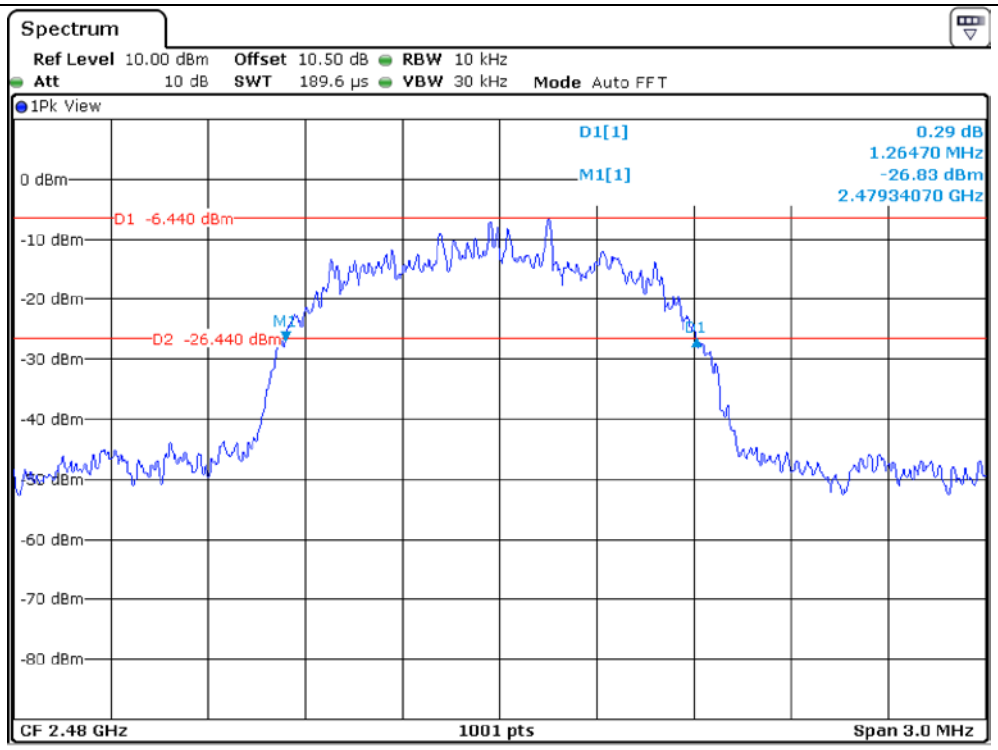
Tested by: Hyung-Kwon, Oh / Manager



Low Channel



Middle Channel



High Channel

8. HOPPING FREQUENCY SEPARATION

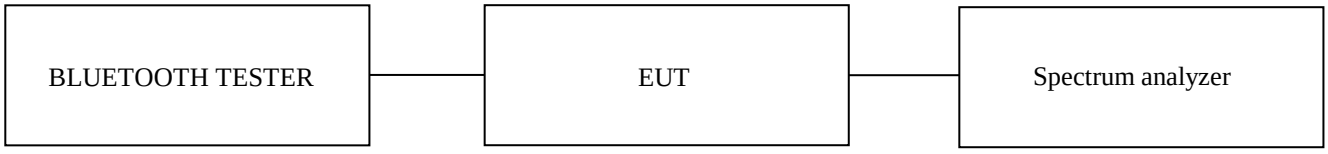
8.1 Operating environment

Temperature : 23 °C

Relative humidity : 45 % R.H.

8.2 Test set-up

The antenna output of the EUT was connected to the spectrum analyzer. The frequency span is set to 5 MHz. The analyzer is set to peak hold then a pseudo-random hopping sequence of the transmitter is captured. The mark delta function was used to measure the frequency separation between two adjacent hopping channels.



8.3 Test equipment used

	Model Number	Manufacturer	Description	Serial Number	Last Cal.
■ -	FSV40	Rohde & Schwarz	Signal Analyzer	101009	Feb. 21, 2020 (1Y)
■ -	TC-3000C	TESCOM	BLUETOOTH TESTER	3000C000634	Feb. 19, 2020 (1Y)

All test equipment used is calibrated on a regular basis.

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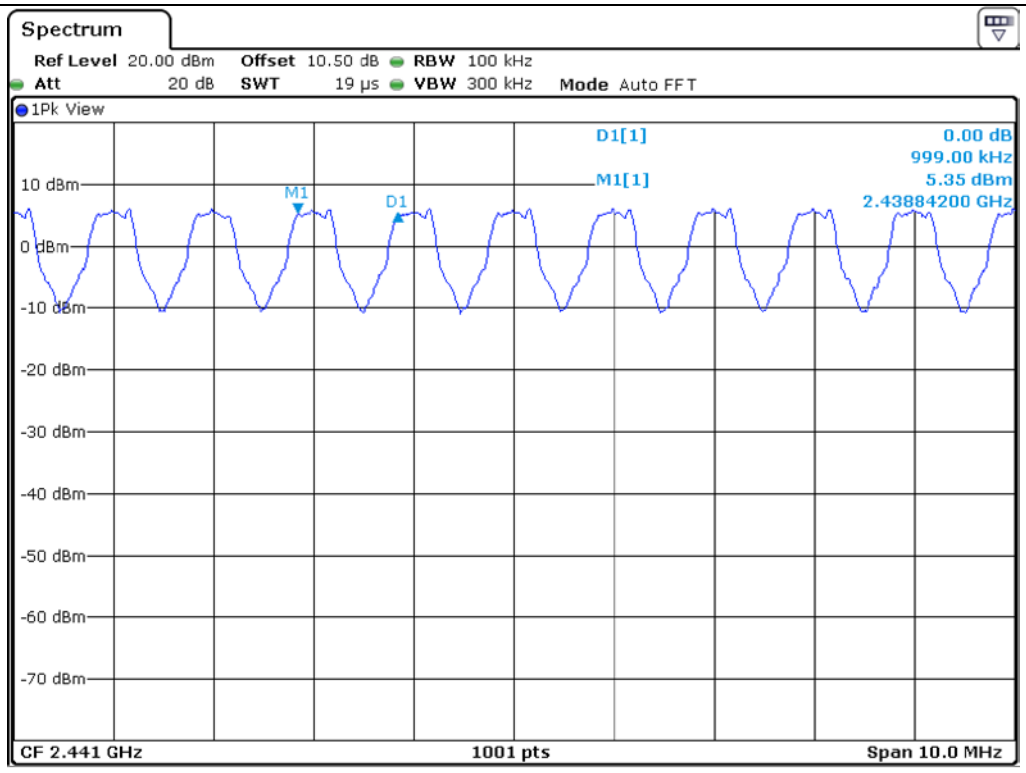
8.4 Test data for 1 Mbps

-. Test Date : March 23, 2020 ~ March 27, 2020

-. Test Result : Pass

MEASURED VLAUE (kHz)	20 dB Bandwidth (kHz)	LIMIT
999.00	923.10	Separated by a minimum of 25 kHz

Tested by: Hyung-Kwon, Oh / Manager



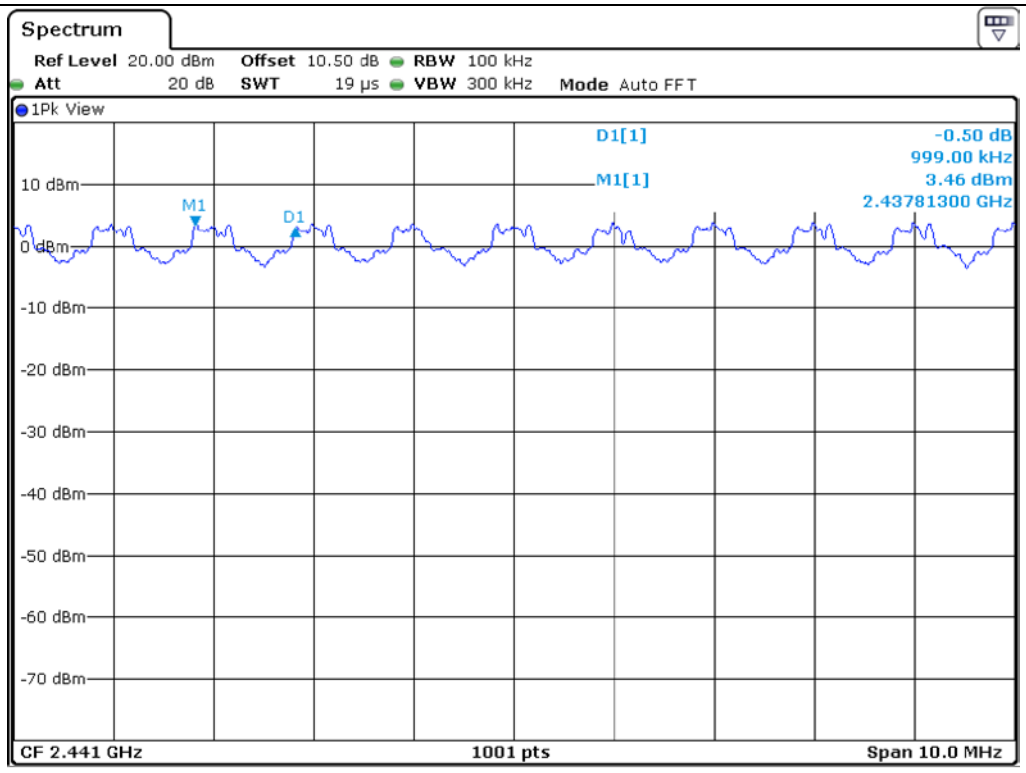
8.5 Test data for 2 Mbps

-. Test Date : March 23, 2020 ~ March 27, 2020

-. Test Result : Pass

MEASURED VLAUE (kHz)	20 dB Bandwidth (kHz)	LIMIT
999.00	1 315.70	Separated by a minimum of 877.133 3 kHz

Tested by: Hyung-Kwon, Oh / Manager



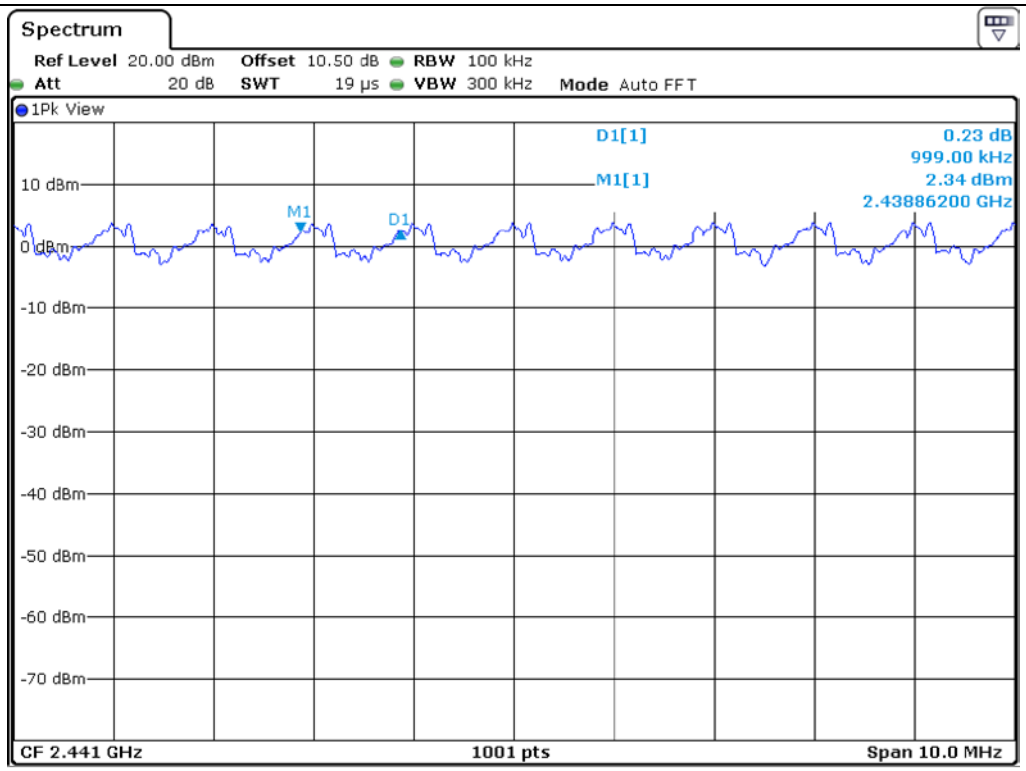
8.6 Test data for 3 Mbps

-. Test Date : March 23, 2020 ~ March 27, 2020

-. Test Result : Pass

MEASURED VLAUE (kHz)	20 dB Bandwidth (kHz)	LIMIT
999.00	1 282.70	Separated by a minimum of 855.133 3 kHz

Tested by: Hyung-Kwon, Oh / Manager



9. NUMBER OF HOPPING CHANNELS

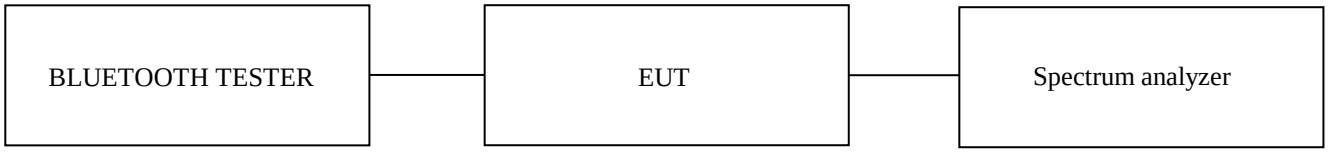
9.1 Operating environment

Temperature : 23 °C

Relative humidity : 45 % R.H.

9.2 Test set-up

The antenna output of the EUT was connected to the spectrum analyzer. The frequency span is set to 100 MHz and the resolution bandwidth is set to 100 kHz. The analyzer is set to peak hold and then complete pseudo-random hopping sequence of the transmitter is captured.



9.3 Test equipment used

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■ -	TC-3000C	TESCOM	BLUETOOTH TESTER	3000C000634	Feb. 19, 2020 (1Y)

All test equipment used is calibrated on a regular basis.

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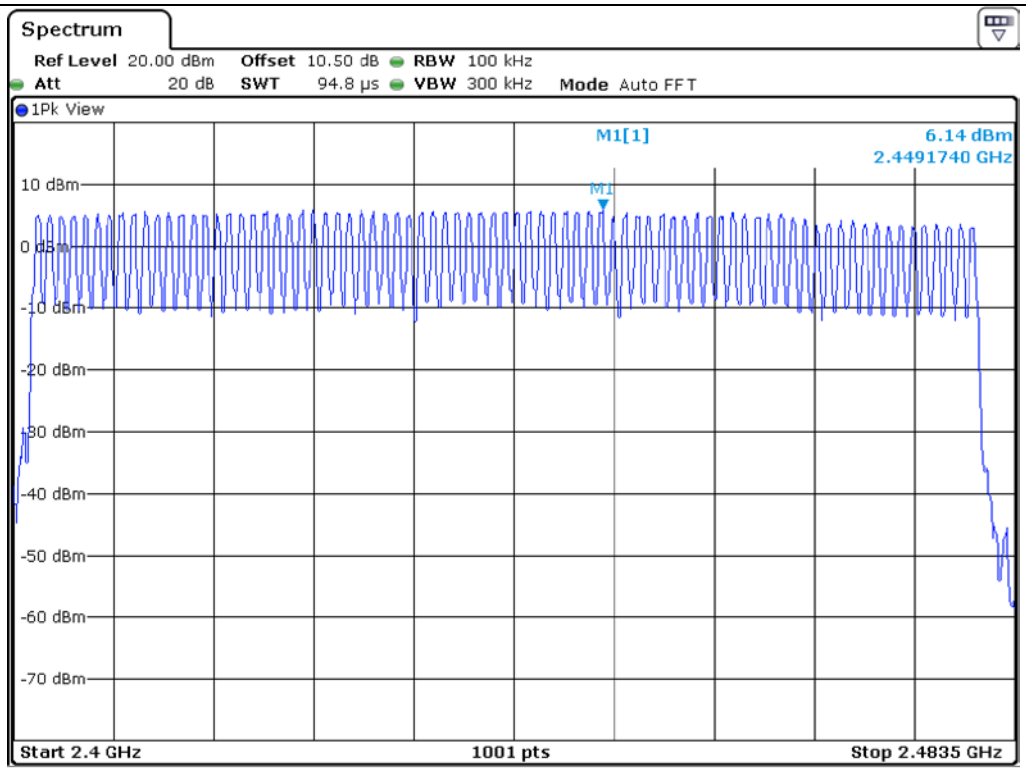
9.4 Test data for 1 Mbps

-. Test Date : March 23, 2020 ~ March 27, 2020

-. Test Result : Pass

Data Transfer Rate	Measured value (Number)	Limit (Number)	Margin (Number)
1 Mbps	79	Minimum of 15	64

Tested by: Hyung-Kwon, Oh / Manager



Total number of hopping channel: 28+30+21 = 79

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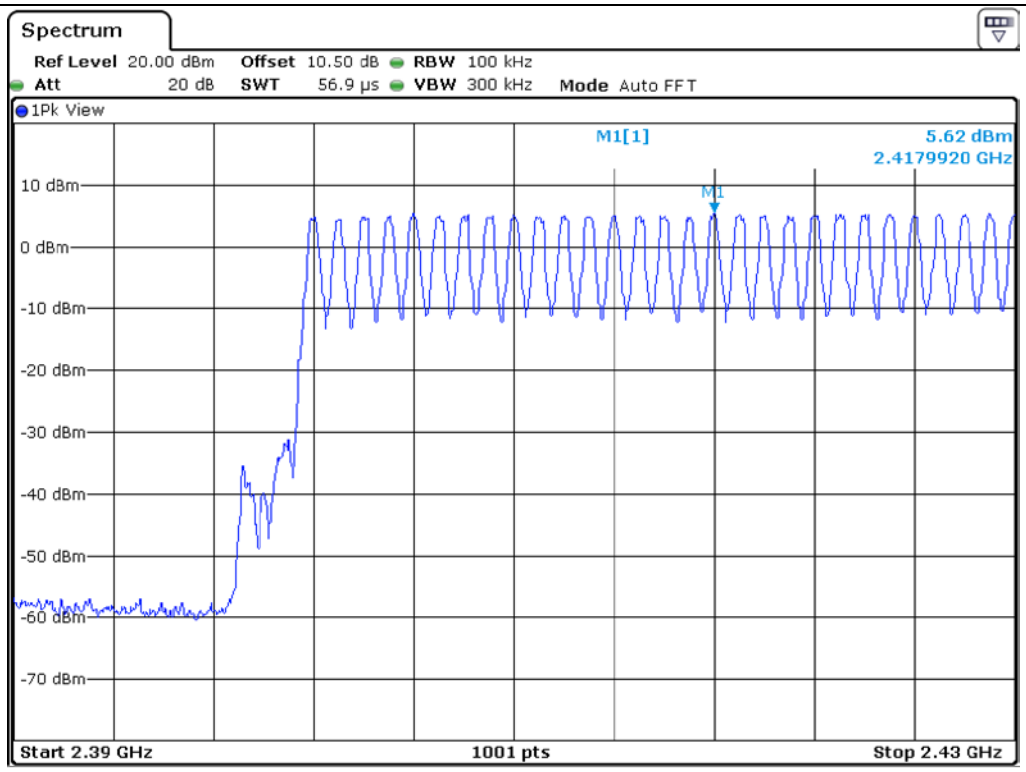
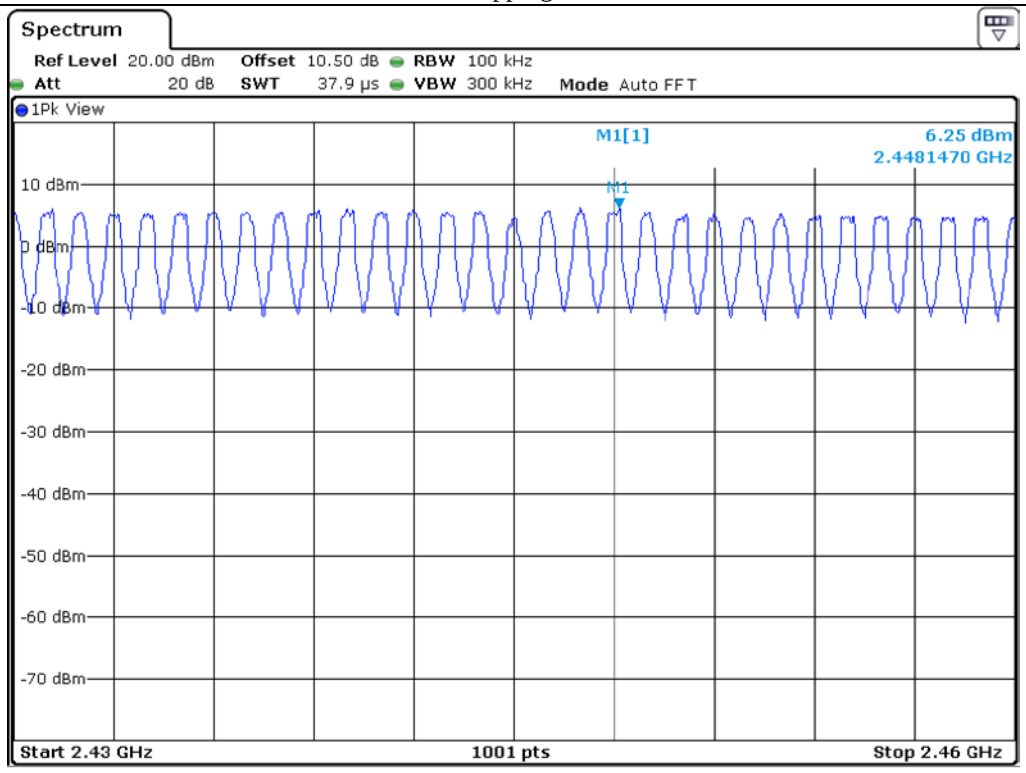
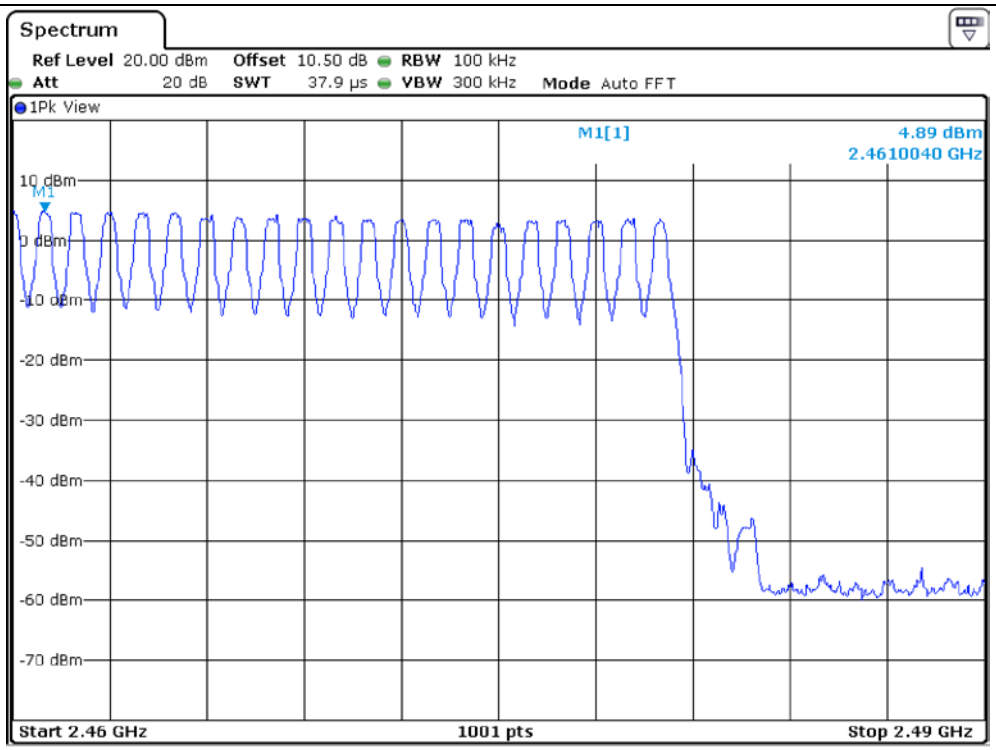


Number of hopping channel: 28



Number of hopping channel: 30



Number of hopping channel: 21

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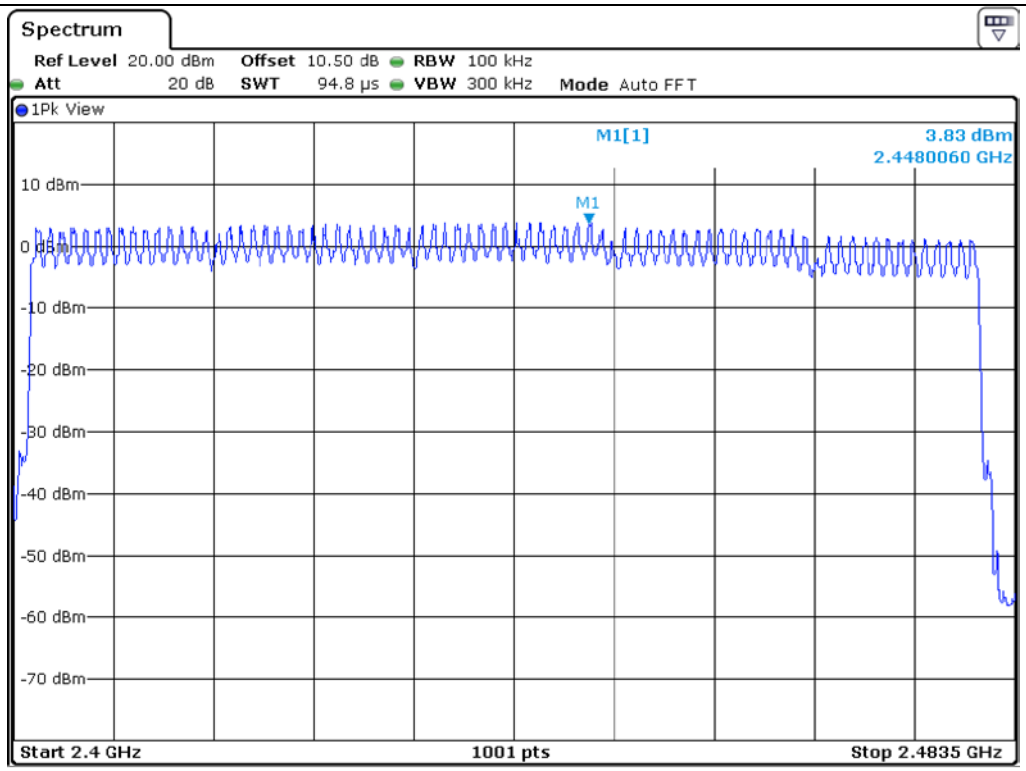
9.5 Test data for 2 Mbps

-. Test Date : March 23, 2020 ~ March 27, 2020

-. Test Result : Pass

Data Transfer Rate	Measured value (Number)	Limit (Number)	Margin (Number)
2 Mbps	79	Minimum of 15	64

Tested by: Hyung-Kwon, Oh / Manager



Total number of hopping channel: 28+30+21 = 79

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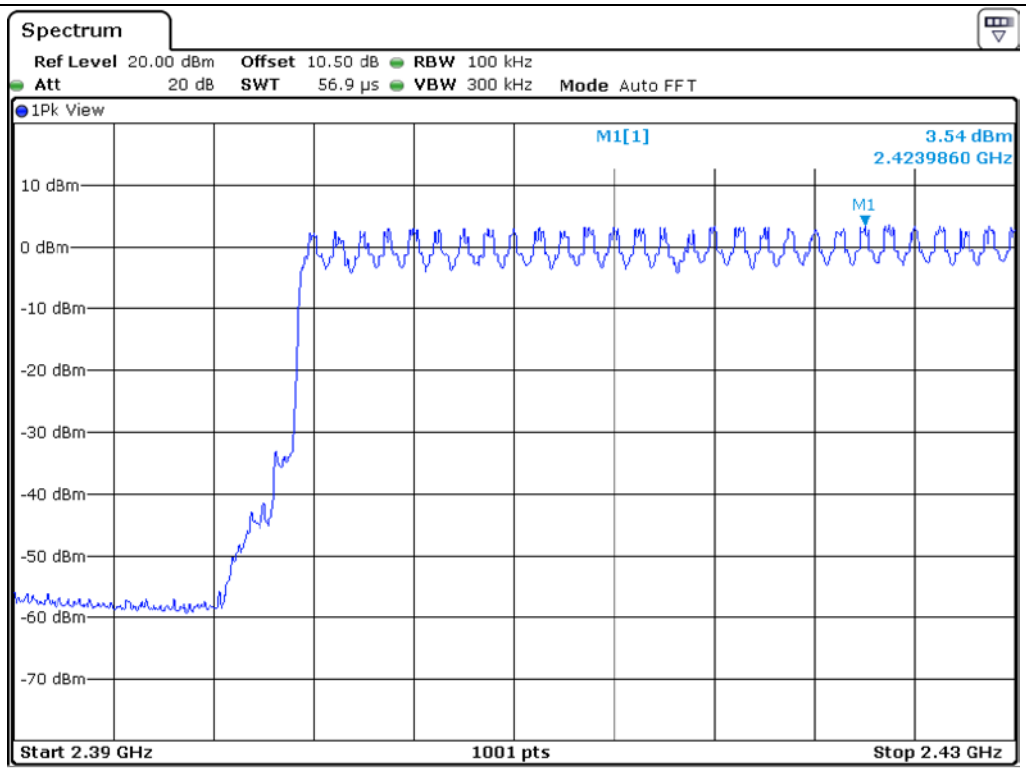
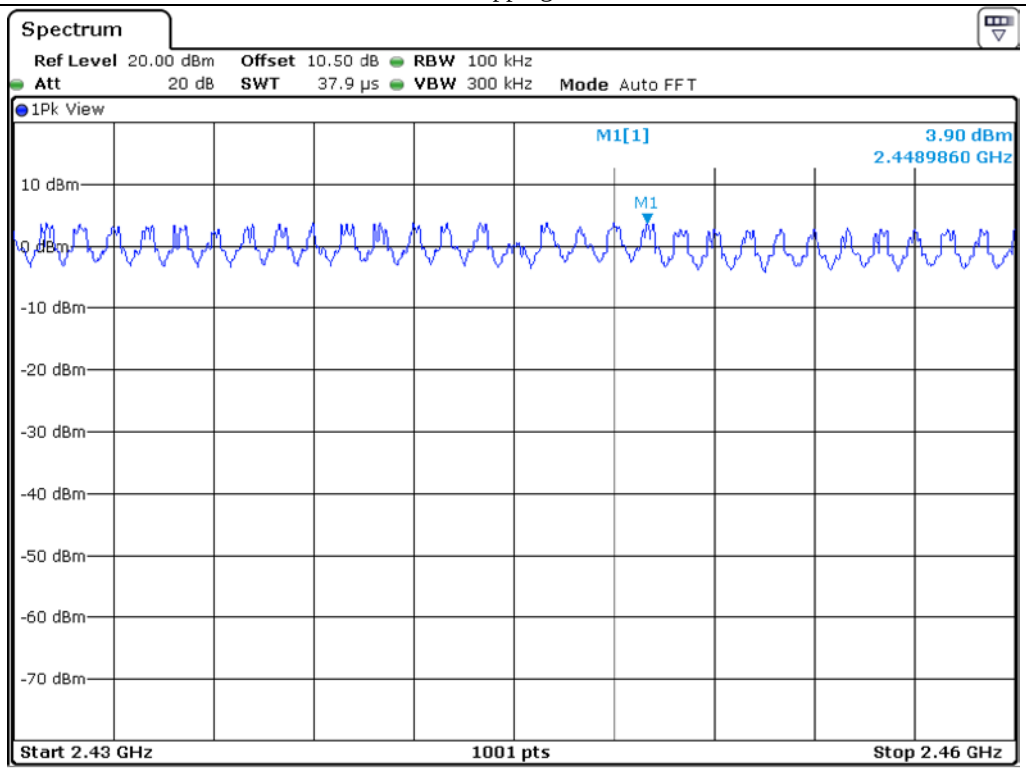
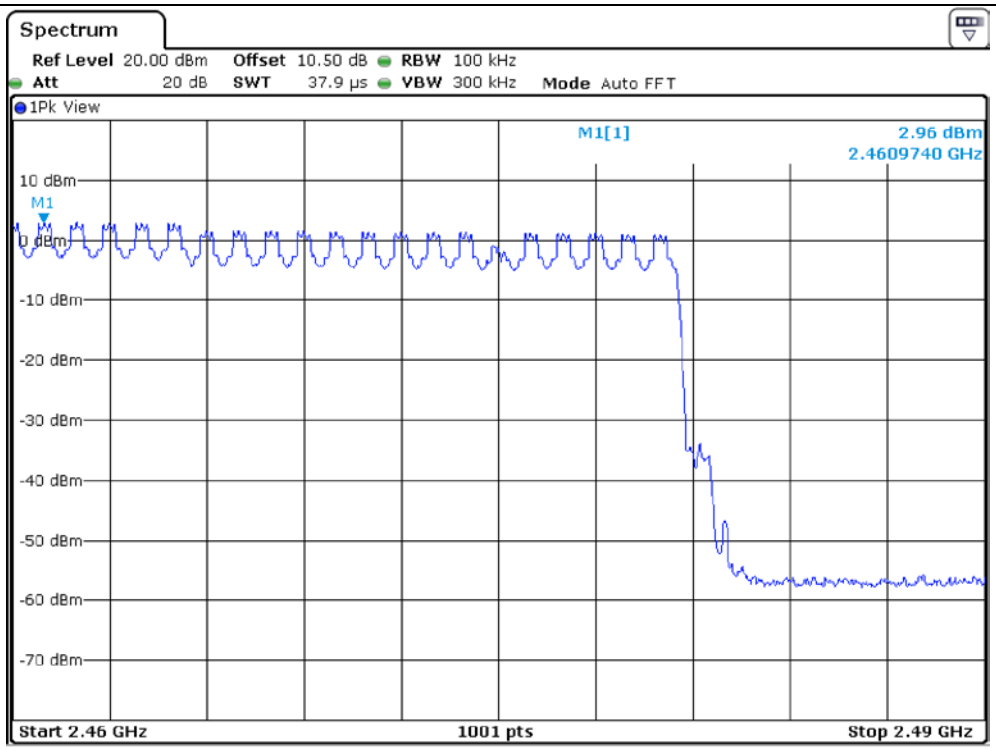


Number of hopping channel: 28



Number of hopping channel: 30



Number of hopping channel: 21

ONETECH Corp.: 43-14, Jinsaegol-gil, Chowol-eup, Gwangju-si, Gyeonggi-do, 12735, Korea (TEL: 82-31-799-9500, FAX: 82-31-799-9599)

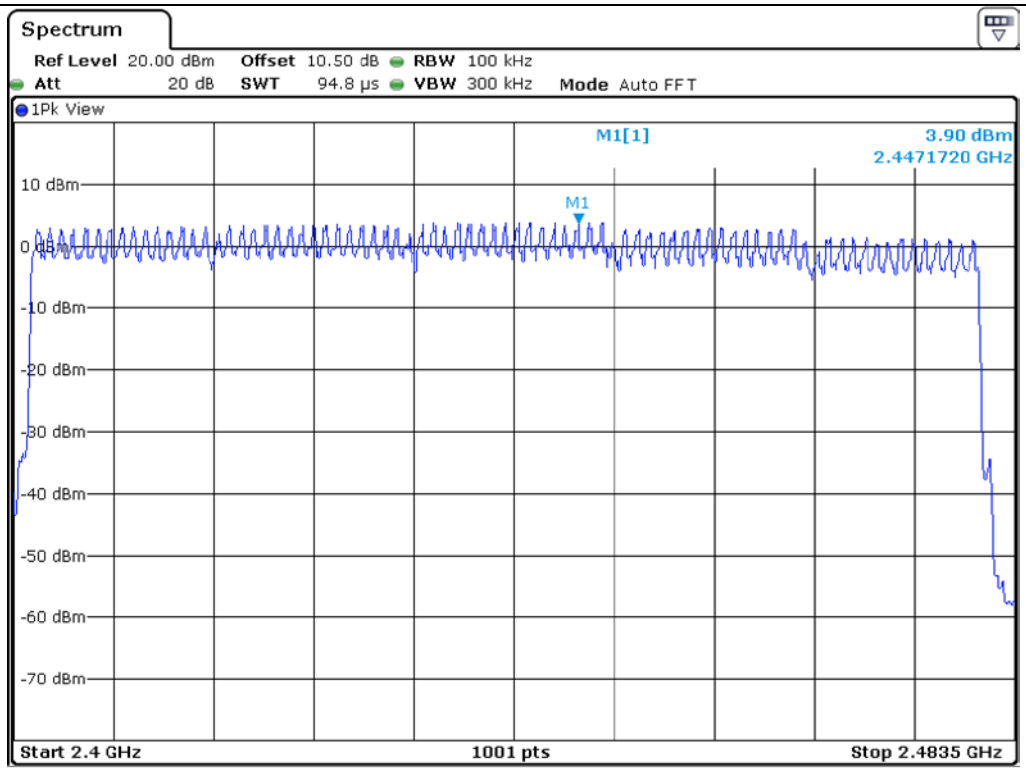
9.6 Test data for 3 Mbps

-. Test Date : March 23, 2020 ~ March 27, 2020

-. Test Result : Pass

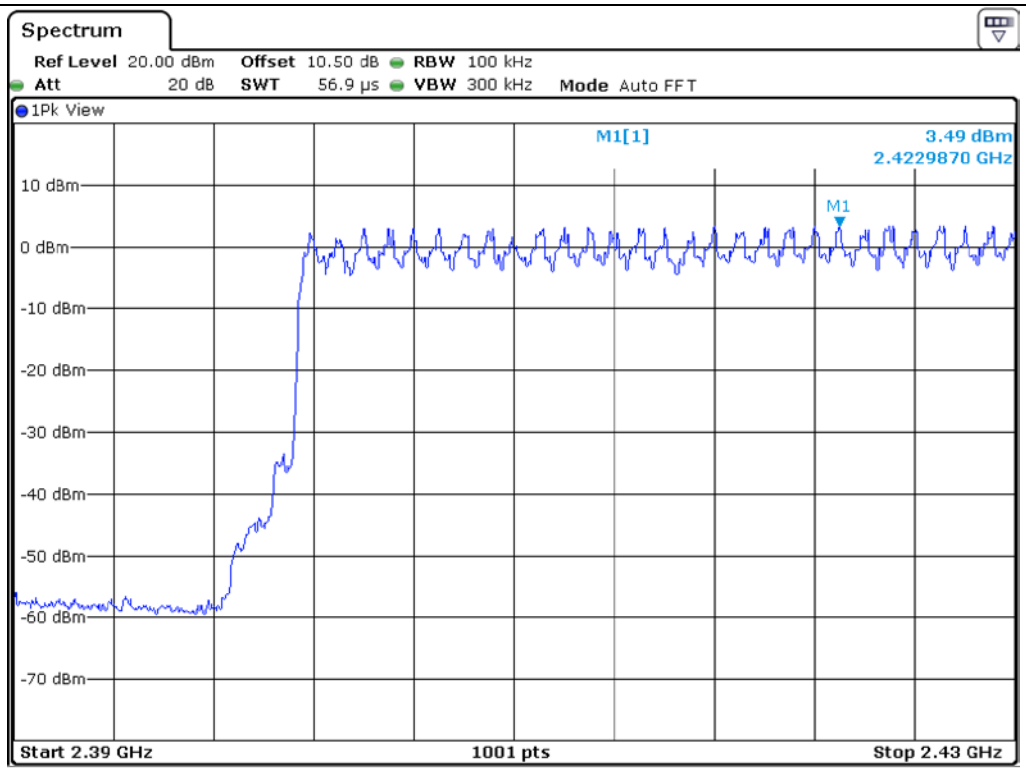
Data Transfer Rate	Measured value (Number)	Limit (Number)	Margin (Number)
3 Mbps	79	Minimum of 15	64

Tested by: Hyung-Kwon, Oh / Manager

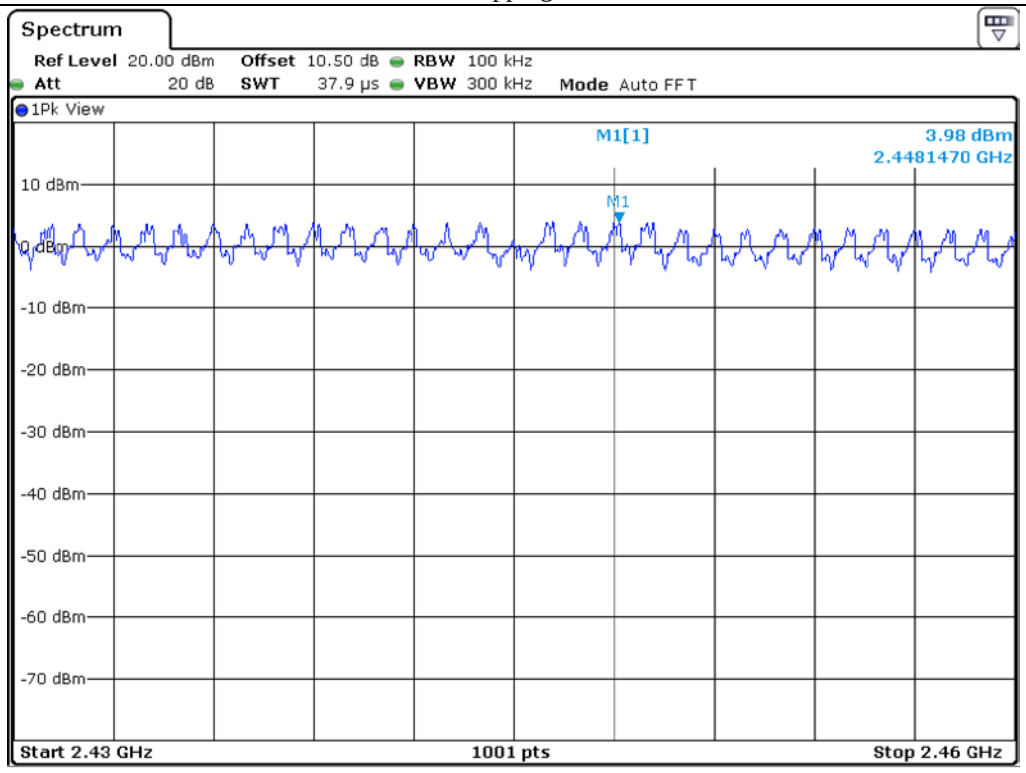


Total number of hopping channel: 28+30+21 = 79

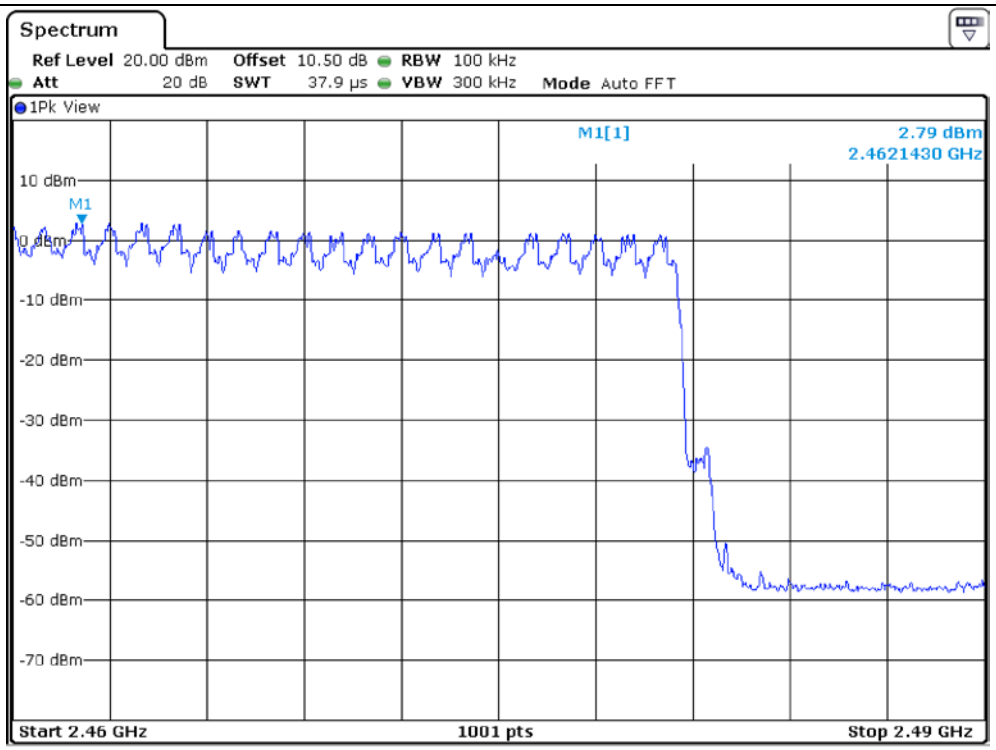
ONETECH Corp.: 43-14, Jinsaegol-gil, Chowol-eup, Gwangju-si, Gyeonggi-do, 12735, Korea (TEL: 82-31-799-9500, FAX: 82-31-799-9599)



Number of hopping channel: 28



Number of hopping channel: 30



Number of hopping channel: 21

ONETECH Corp.: 43-14, Jinsaegol-gil, Chowol-eup, Gwangju-si, Gyeonggi-do, 12735, Korea (TEL: 82-31-799-9500, FAX: 82-31-799-9599)

10. TIME OF OCCUPANCY

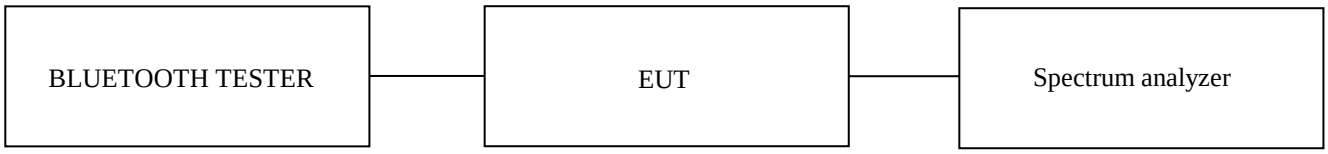
10.1 Operating environment

Temperature : 23 °C

Relative humidity : 45 % R.H.

10.2 Test set-up

The antenna output of the EUT was connected to the spectrum analyzer. The transmitter is set to operate in its normal frequency hopping mode. The center frequency of the spectrum analyzer is set to one of hopping channels near the center of the operating band and span is set to zero Hz. The sweep time is set to display one complete pulse. The mark delta function is used to measure the duration of the pulses.



10.3 Test equipment used

	Model Number	Manufacturer	Description	Serial Number	Last Cal.
■ -	FSV40	Rohde & Schwarz	Signal Analyzer	101009	Feb. 21, 2020 (1Y)
■ -	TC-3000C	TESCOM	BLUETOOTH TESTER	3000C000634	Feb. 19, 2020 (1Y)

All test equipment used is calibrated on a regular basis.

ONETECH Corp.: 43-14, Jinsaegol-gil, Chowol-eup, Gwangju-si, Gyeonggi-do, 12735, Korea (TEL: 82-31-799-9500, FAX: 82-31-799-9599)

10.4 Test data for 1 Mbps

-. Test Date : March 23, 2020 ~ March 27, 2020

The system makes worst case 1 600 hops per second or 1 time slot has a length of 625 μs with 79 channels.

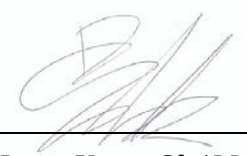
For DH1 packet type, the EUT needs 1 time slot for transmitting and 1 time slot for receiving and for DH3 packet type, the EUT needs 3 times slots for transmitting and 1 time slot for receiving, and DH5 packet needs 5 times slots for transmitting and 1 time slot for receiving. So The EUT has each channel for 10.13 times per second (= 1 600/2/79) for DH1, and 5.06 times (= 1 600/4/79) for DH3, and 3.38 times (= 1 600/6/79) for DH5.

Packet Type	Pulse Time (ms)	Hops per second with channels	Period Time (ms)	Total Dwell Time (ms)	Limit (ms)	Test Result
DH1	0.377	10.13	31.60	120.68	400	PASS
DH3	1.640	5.06	31.60	262.23	400	
DH5	2.900	3.38	31.60	309.74	400	

Total dwell time is calculated as following.

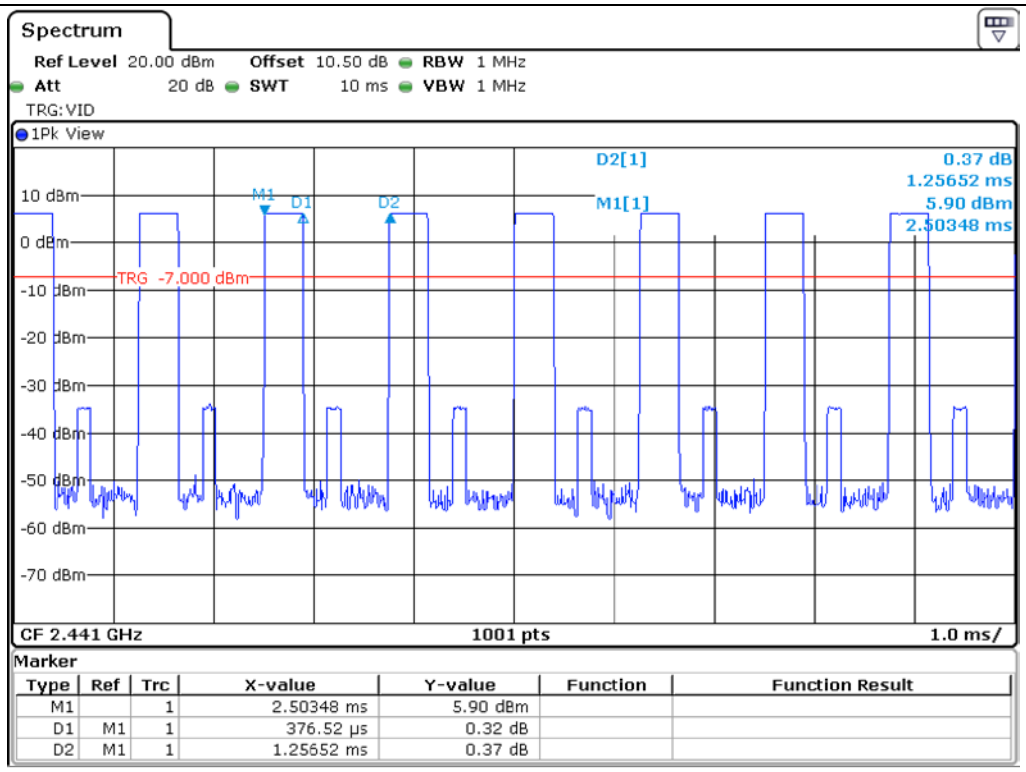
Total Dwell Time = Pulse time * Hops per second with channels * period time

Remark: See next page for an overview sweep performed with peak detector.

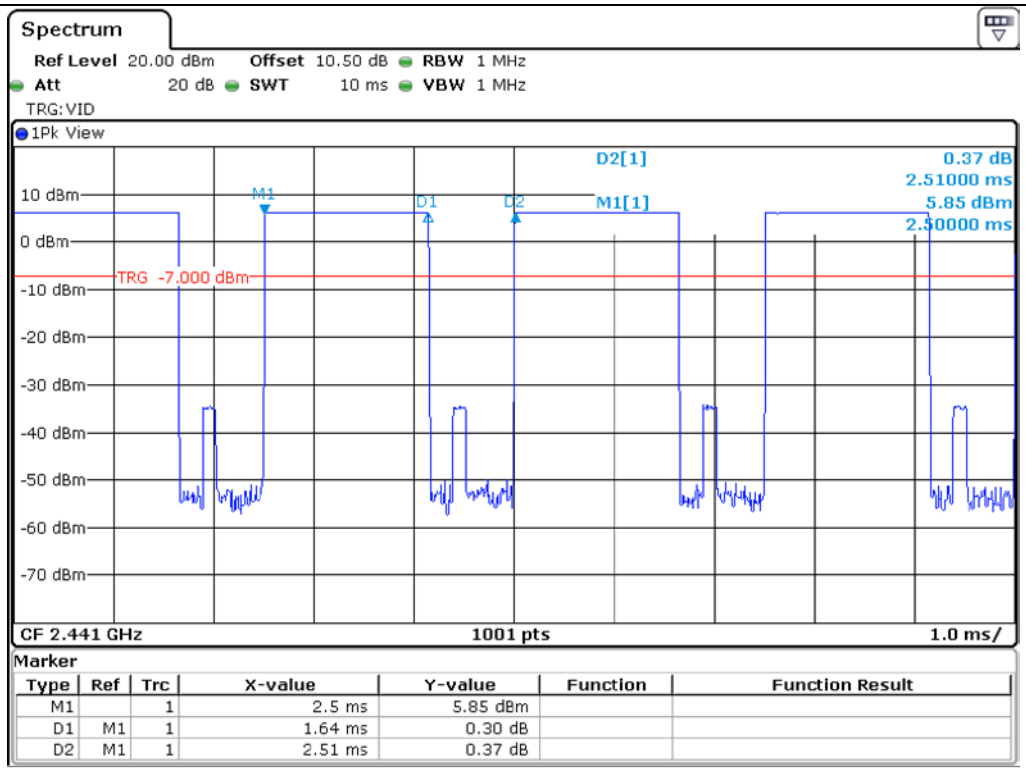


Tested by: Hyung-Kwon, Oh / Manager

ONETECH Corp.: 43-14, Jinsaegol-gil, Chowol-eup, Gwangju-si, Gyeonggi-do, 12735, Korea (TEL: 82-31-799-9500, FAX: 82-31-799-9599)

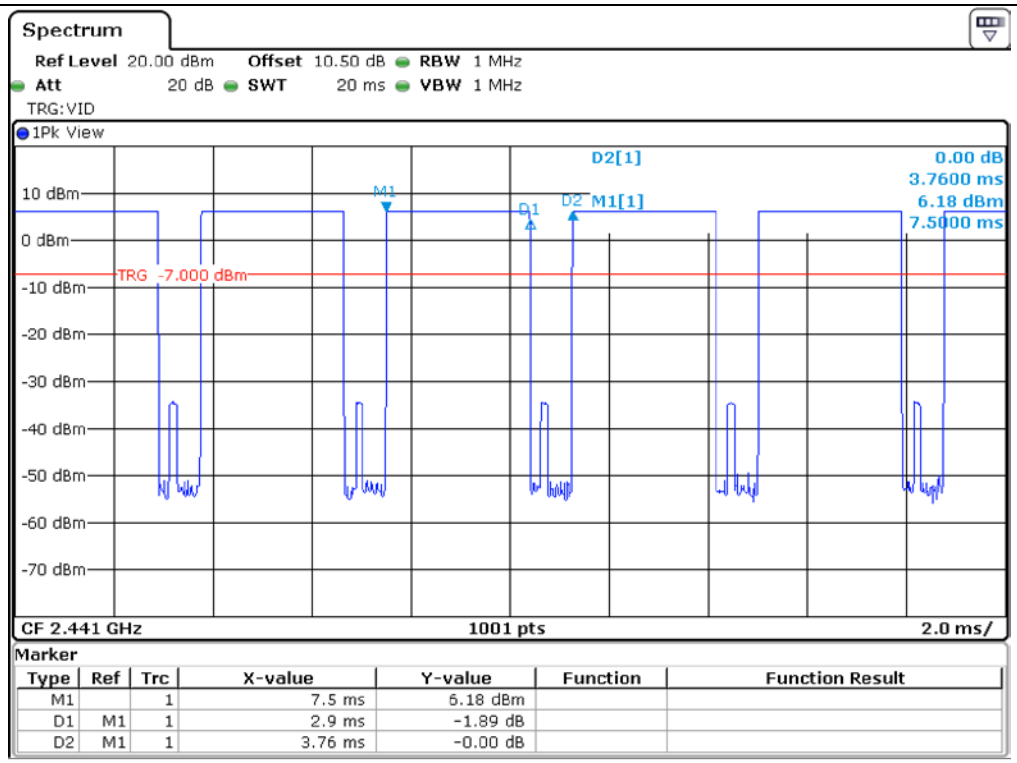


DH1



DH3

ONETECH Corp.: 43-14, Jinsaegol-gil, Chowol-eup, Gwangju-si, Gyeonggi-do, 12735, Korea (TEL: 82-31-799-9500, FAX: 82-31-799-9599)


Spectrum
Ref Level 20.00 dBm Offset 10.50 dB RBW 1 MHz
Att 20 dB SWT 20 ms VBW 1 MHz
TRG:VID
1Pk View
D2[1] 0.00 dB
3.7600 ms
M1[1] 6.18 dBm
7.5000 ms
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
TRG -7.000 dBm
M1
D1
D2
CF 2.441 GHz
1001 pts
2.0 ms/
Marker
Type Ref Trc X-value Y-value Function Function Result
M1 1 7.5 ms 6.18 dBm
D1 M1 1 2.9 ms -1.89 dB
D2 M1 1 3.76 ms -0.00 dB

DH5

10.5 Test data for 2 Mbps

-. Test Date : March 23, 2020 ~ March 27, 2020

The system makes worst case 1 600 hops per second or 1 time slot has a length of 625 μs with 79 channels.

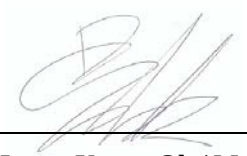
For DH1 packet type, the EUT needs 1 time slot for transmitting and 1 time slot for receiving and for DH3 packet type, the EUT needs 3 times slots for transmitting and 1 time slot for receiving, and DH5 packet needs 5 times slots for transmitting and 1 time slot for receiving. So The EUT has each channel for 10.13 times per second (= 1 600/2/79) for DH1, and 5.06 times (= 1 600/4/79) for DH3, and 3.38 times (= 1 600/6/79) for DH5.

Packet Type	Pulse Time (ms)	Hops per second with channels	Period Time (ms)	Total Dwell Time (ms)	Limit (ms)	Test Result
DH1	0.400	10.13	31.60	128.04	400	PASS
DH3	1.650	5.06	31.60	263.83	400	
DH5	2.900	3.38	31.60	309.74	400	

Total dwell time is calculated as following.

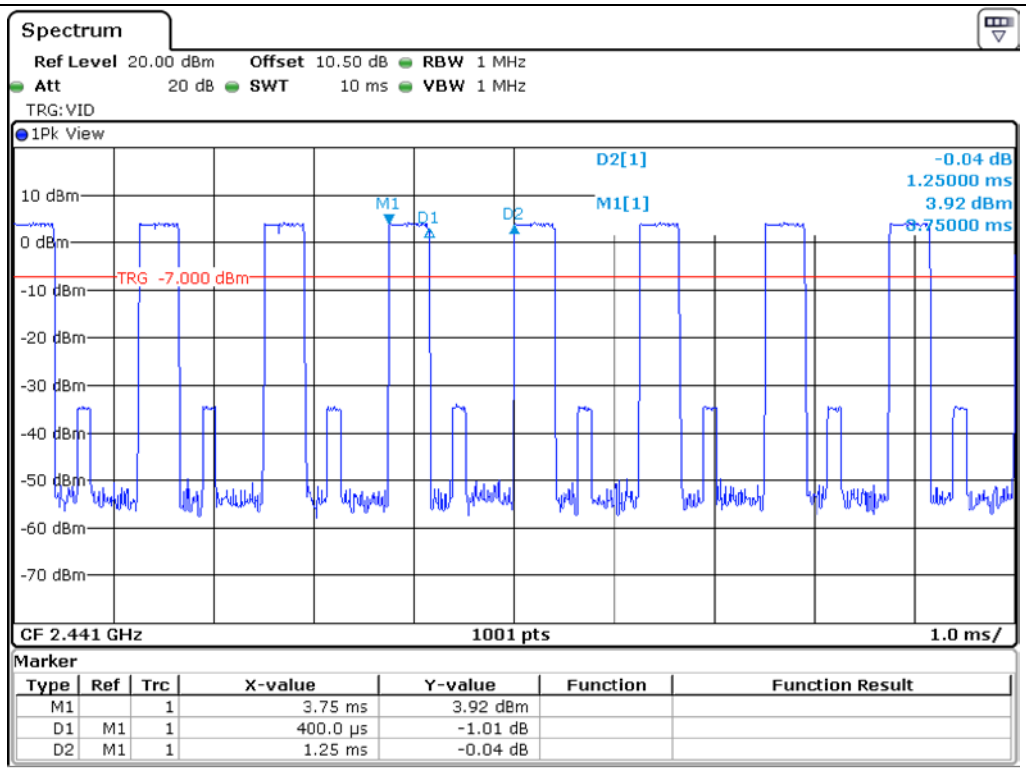
Total Dwell Time = Pulse time * Hops per second with channels * period time

Remark: See next page for an overview sweep performed with peak detector.

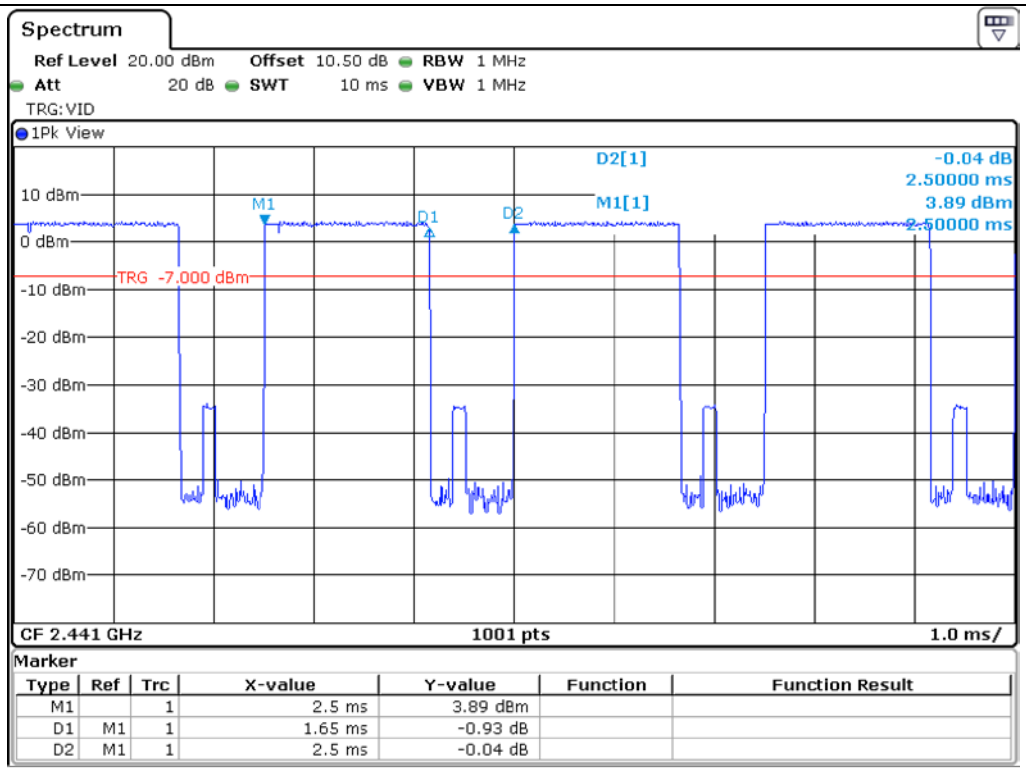


Tested by: Hyung-Kwon, Oh / Manager

ONETECH Corp.: 43-14, Jinsaegol-gil, Chowol-eup, Gwangju-si, Gyeonggi-do, 12735, Korea (TEL: 82-31-799-9500, FAX: 82-31-799-9599)

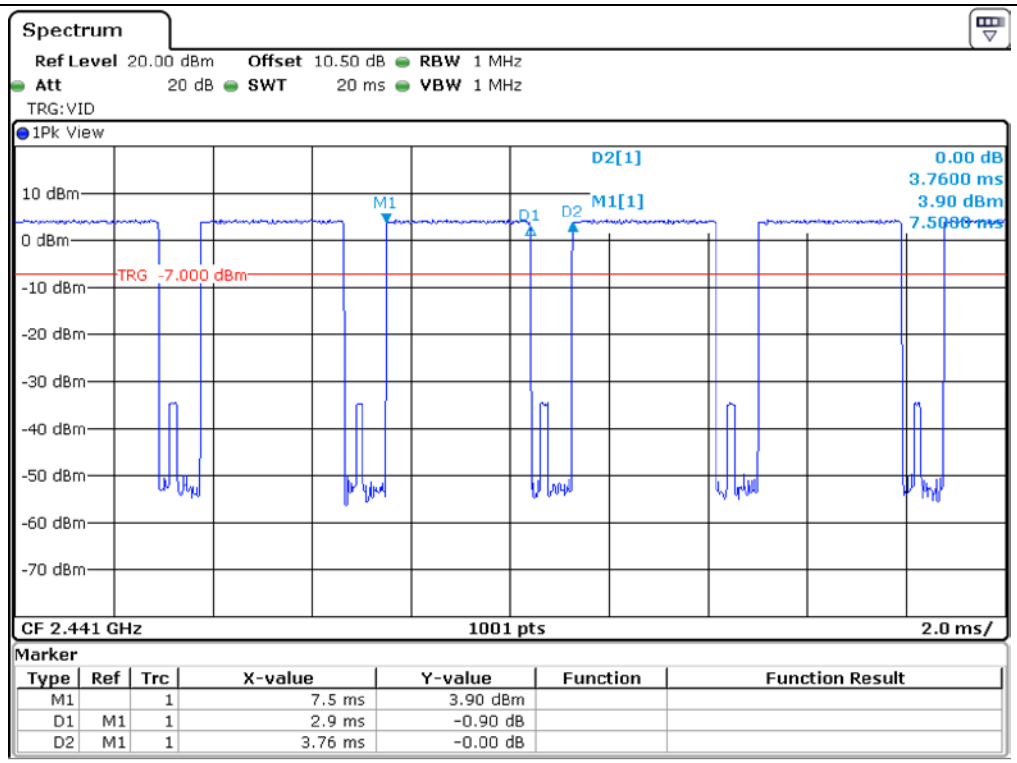


DH1



DH3

ONETECH Corp.: 43-14, Jinsaegol-gil, Chowol-eup, Gwangju-si, Gyeonggi-do, 12735, Korea (TEL: 82-31-799-9500, FAX: 82-31-799-9599)


Spectrum
Ref Level 20.00 dBm Offset 10.50 dB RBW 1 MHz
Att 20 dB SWT 20 ms VBW 1 MHz
TRG:VID
1Pk View
D2[1]
0.00 dB
3.7600 ms
M1[1]
3.90 dBm
7.5000 ms
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M1
D1
D2
TRG -7.000 dBm
CF 2.441 GHz
1001 pts
2.0 ms/
Marker
Type Ref Trc X-value Y-value Function Function Result
M1 1 7.5 ms 3.90 dBm
D1 M1 1 2.9 ms -0.90 dB
D2 M1 1 3.76 ms -0.00 dB

DH5

10.6 Test data for 3 Mbps

-. Test Date : March 23, 2020 ~ March 27, 2020

The system makes worst case 1 600 hops per second or 1 time slot has a length of 625 μs with 79 channels.

For DH1 packet type, the EUT needs 1 time slot for transmitting and 1 time slot for receiving and for DH3 packet type, the EUT needs 3 times slots for transmitting and 1 time slot for receiving, and DH5 packet needs 5 times slots for transmitting and 1 time slot for receiving. So The EUT has each channel for 10.13 times per second (= 1 600/2/79) for DH1, and 5.06 times (= 1 600/4/79) for DH3, and 3.38 times (= 1 600/6/79) for DH5.

Packet Type	Pulse Time (ms)	Hops per second with channels	Period Time (ms)	Total Dwell Time (ms)	Limit (ms)	Test Result
DH1	0.390	10.13	31.60	124.84	400	PASS
DH3	1.650	5.06	31.60	263.83	400	
DH5	2.900	3.38	31.60	309.74	400	

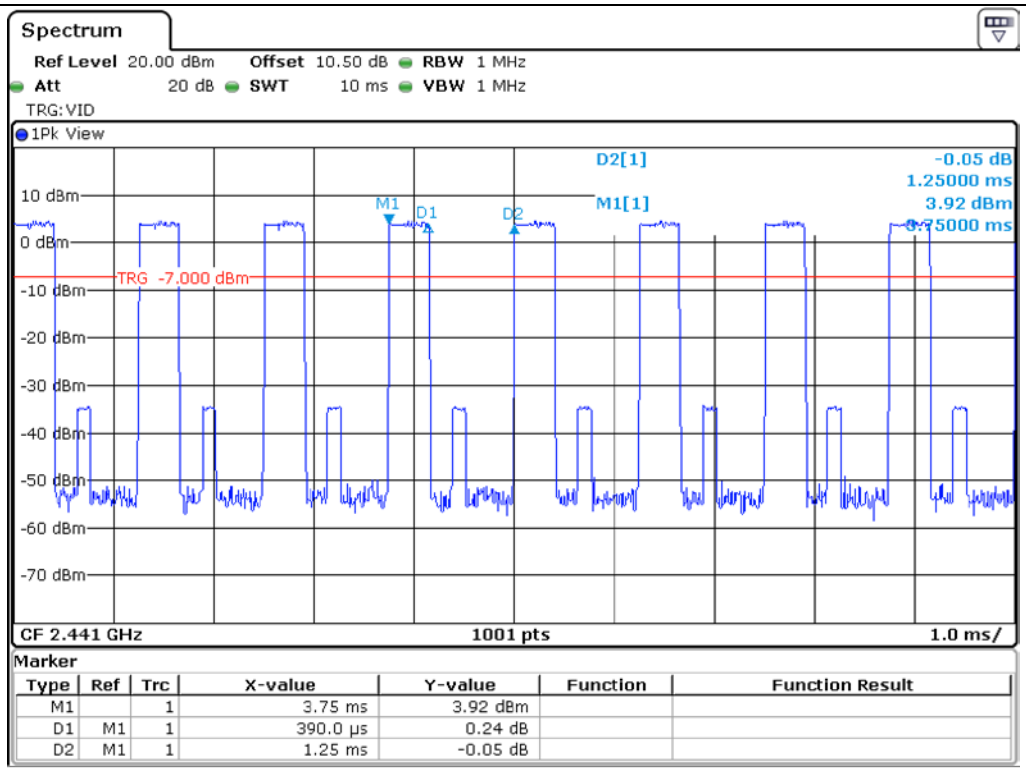
Total dwell time is calculated as following.

Total Dwell Time = Pulse time * Hops per second with channels * period time

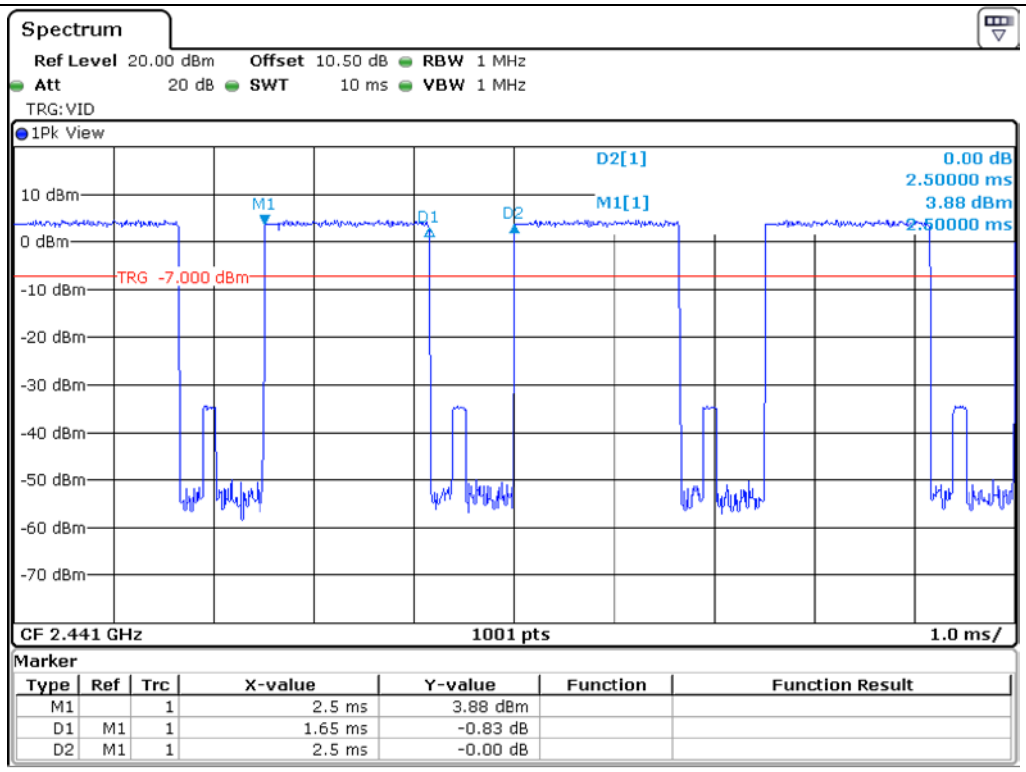
Remark: See next page for an overview sweep performed with peak detector.

Tested by: Hyung-Kwon, Oh / Manager

ONETECH Corp.: 43-14, Jinsaegol-gil, Chowol-eup, Gwangju-si, Gyeonggi-do, 12735, Korea (TEL: 82-31-799-9500, FAX: 82-31-799-9599)

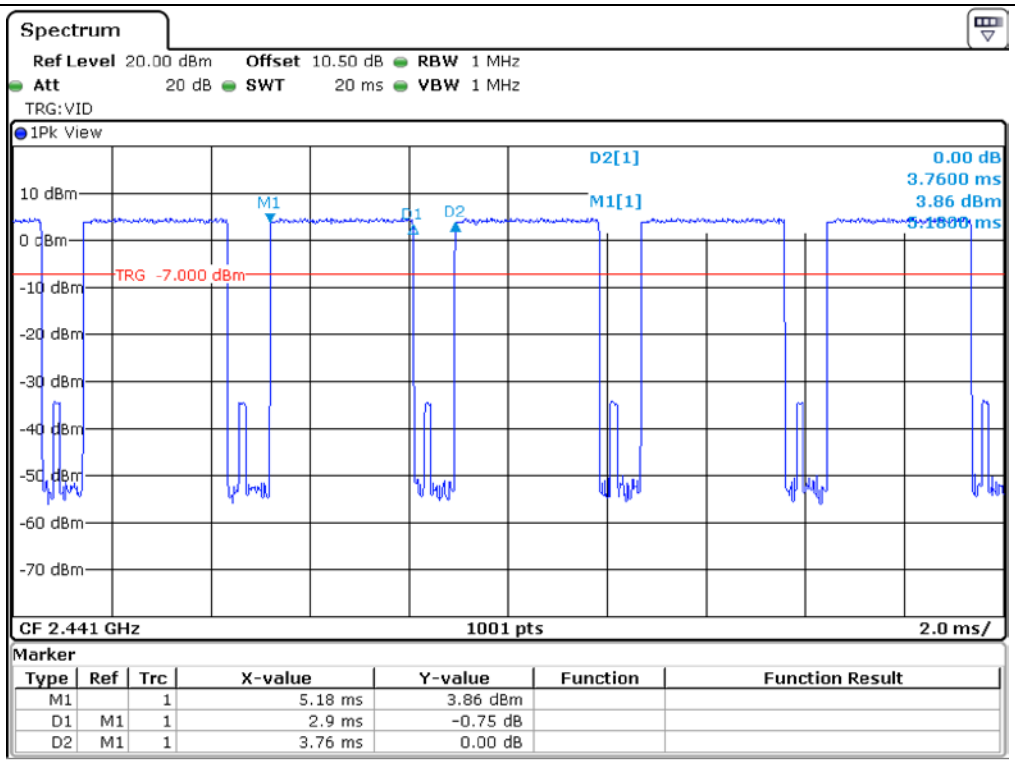


DH1



DH3

ONETECH Corp.: 43-14, Jinsaegol-gil, Chowol-eup, Gwangju-si, Gyeonggi-do, 12735, Korea (TEL: 82-31-799-9500, FAX: 82-31-799-9599)


Spectrum
Ref Level 20.00 dBm Offset 10.50 dB RBW 1 MHz
Att 20 dB SWT 20 ms VBW 1 MHz
TRG:VID
1Pk View
D2[1] 0.00 dB
3.7600 ms
M1[1] 3.86 dBm
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M1
D1
D2
TRG -7.000 dBm
CF 2.441 GHz
1001 pts
2.0 ms/
Marker
Type Ref Trc X-value Y-value Function Function Result
M1 1 5.18 ms 3.86 dBm
D1 M1 1 2.9 ms -0.75 dB
D2 M1 1 3.76 ms 0.00 dB

DH5

11. MAXIMUM PEAK OUTPUT POWER

11.1 Operating environment

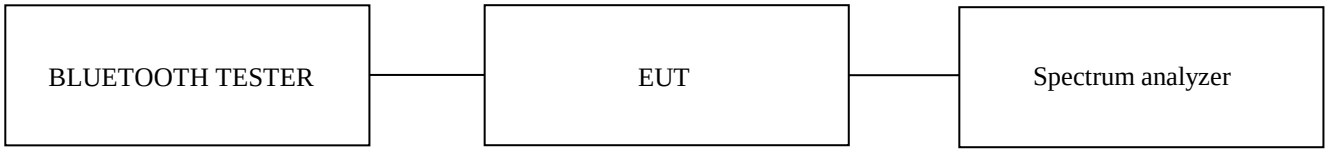
Temperature : 23 °C

Relative humidity : 45 % R.H.

11.2 Test set-up

The antenna output of the EUT was connected to the spectrum analyzer.

The resolution bandwidth is set to ≥ DTS Bandwidth, the video bandwidth is set to 3 times the resolution bandwidth.



11.3 Test equipment used

	Model Number	Manufacturer	Description	Serial Number	Last Cal.
■ -	FSV40	Rohde & Schwarz	Signal Analyzer	101009	Feb. 21, 2020 (1Y)
■ -	TC-3000C	TESCOM	BLUETOOTH TESTER	3000C000634	Feb. 19, 2020 (1Y)

All test equipment used is calibrated on a regular basis.

ONETECH Corp.: 43-14, Jinsaegol-gil, Chowol-eup, Gwangju-si, Gyeonggi-do, 12735, Korea (TEL: 82-31-799-9500, FAX: 82-31-799-9599)

11.4 Test data for 1 Mbps

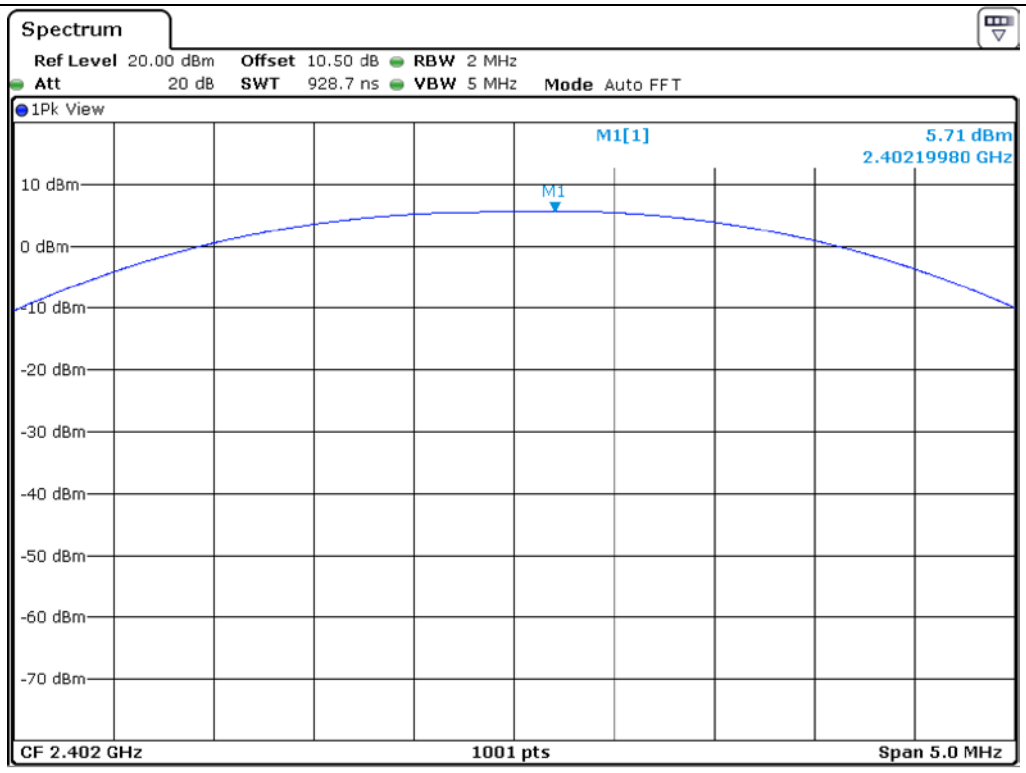
-. Test Date : March 23, 2020 ~ March 27, 2020

-. Test Result : Pass

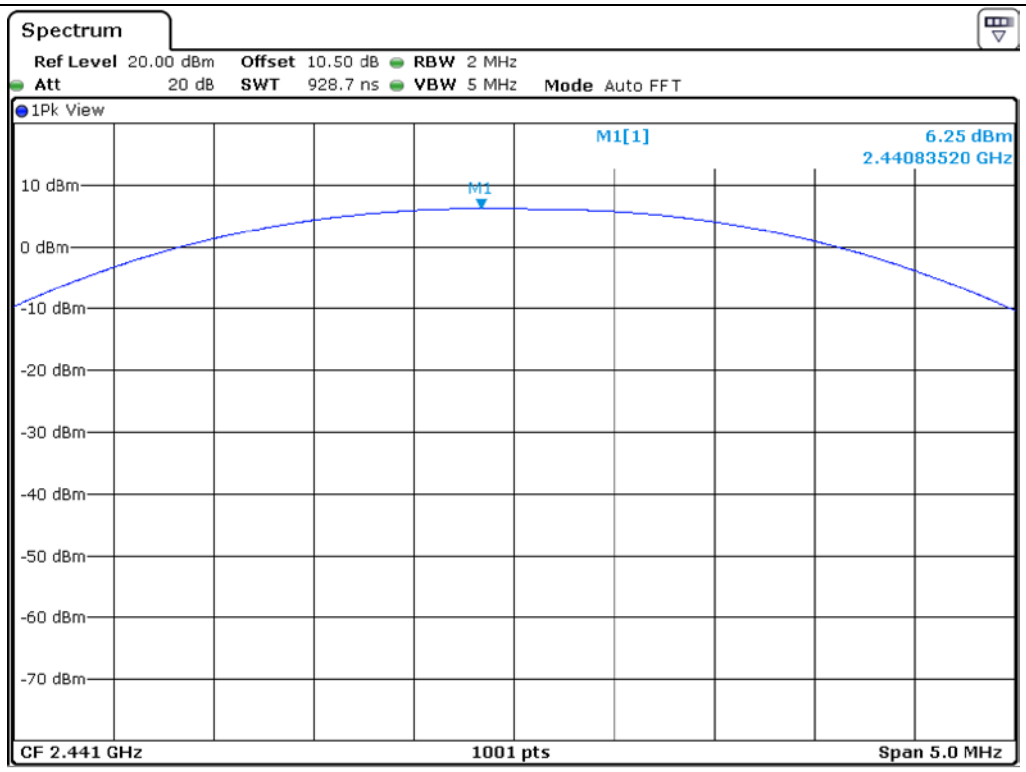
CHANNEL	FREQUENCY (MHz)	MEASURED VLAUE (dBm)	LIMIT (dBm)	MARGIN (dB)
LOW	2 402.00	5.71	30.00	24.29
MIDDLE	2 441.00	6.25	30.00	23.75
HIGH	2 480.00	3.87	30.00	26.13

Remark. Margin = Limit – Measured Value (=Receiver Reading + Cable Loss)

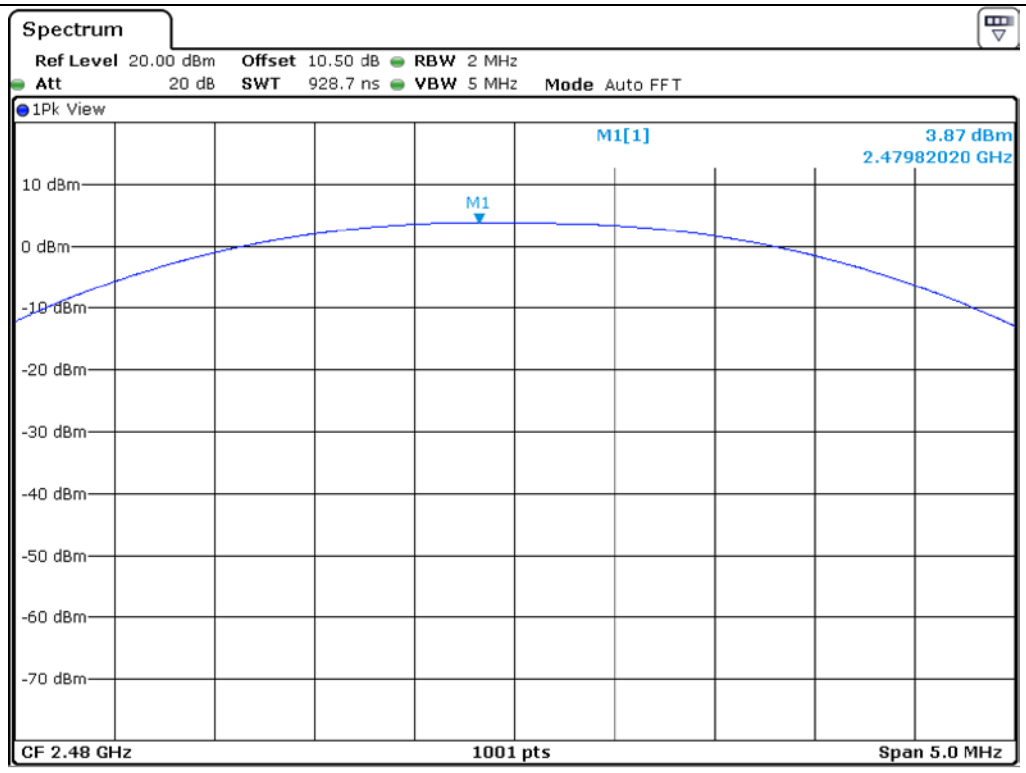
Tested by: Hyung-Kwon, Oh / Manager



Low Channel



Middle Channel



High Channel

11.5 Test data for 2 Mbps

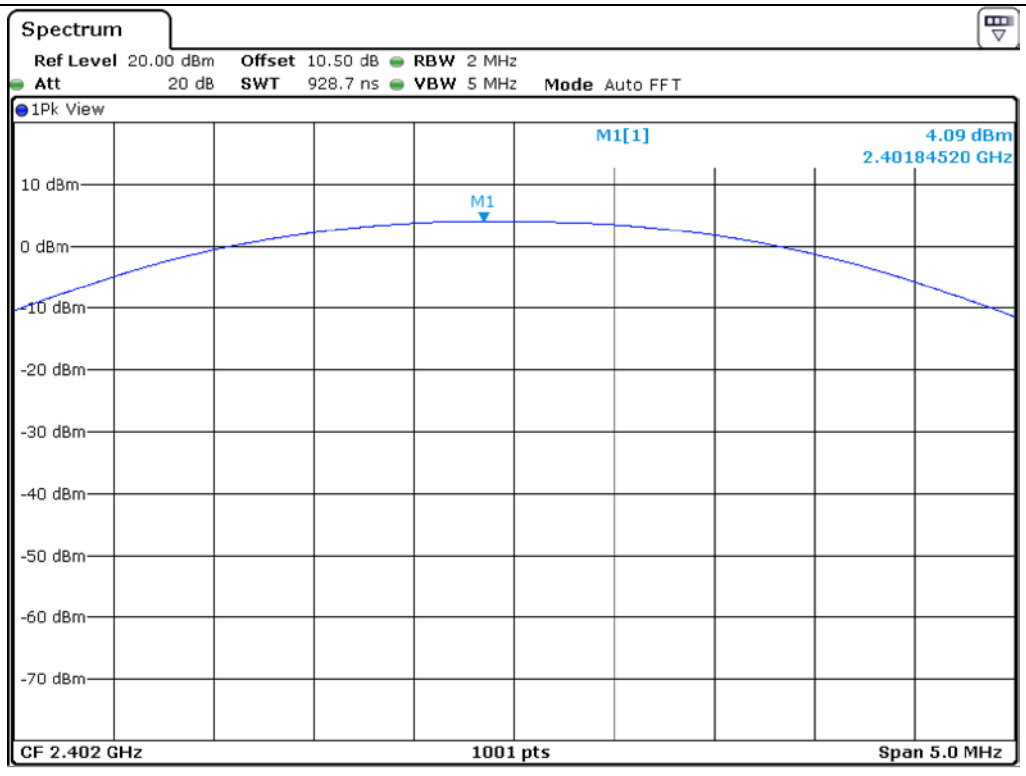
-. Test Date : March 23, 2020 ~ March 27, 2020

-. Test Result : Pass

CHANNEL	FREQUENCY (MHz)	MEASURED VLAUE (dBm)	LIMIT (dBm)	MARGIN (dB)
LOW	2 402.00	4.09	21.00	16.91
MIDDLE	2 441.00	4.80	21.00	16.20
HIGH	2 480.00	2.20	21.00	18.80

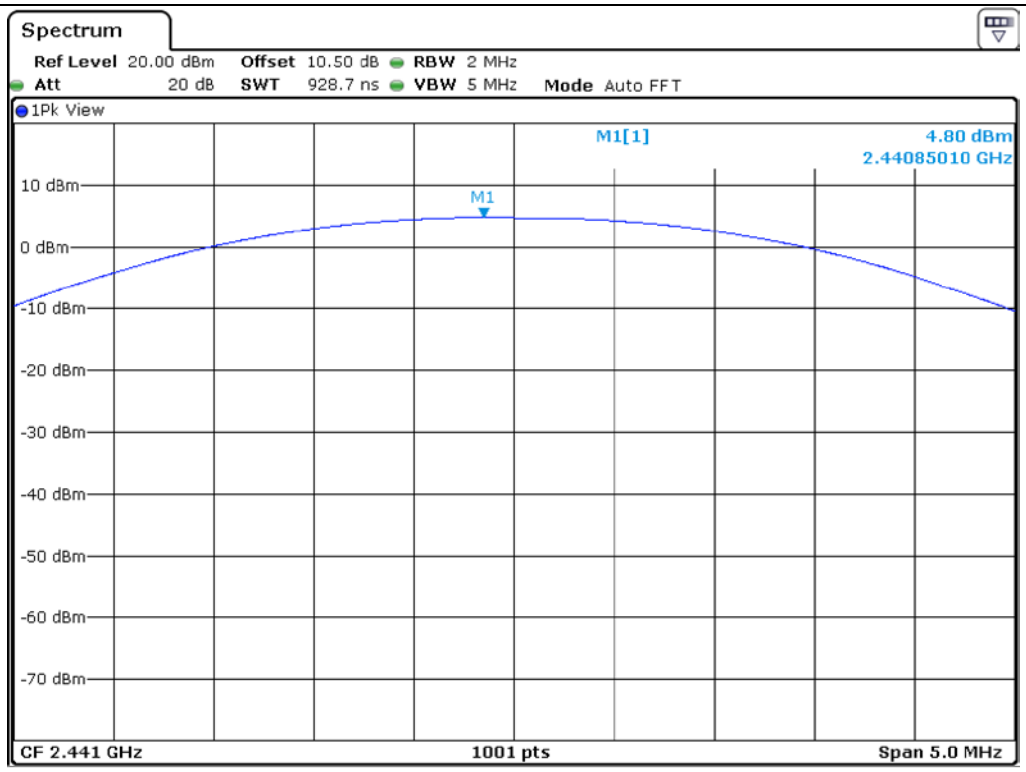
Remark. Margin = Limit – Measured Value (=Receiver Reading + Cable Loss)

Tested by: Hyung-Kwon, Oh / Manager

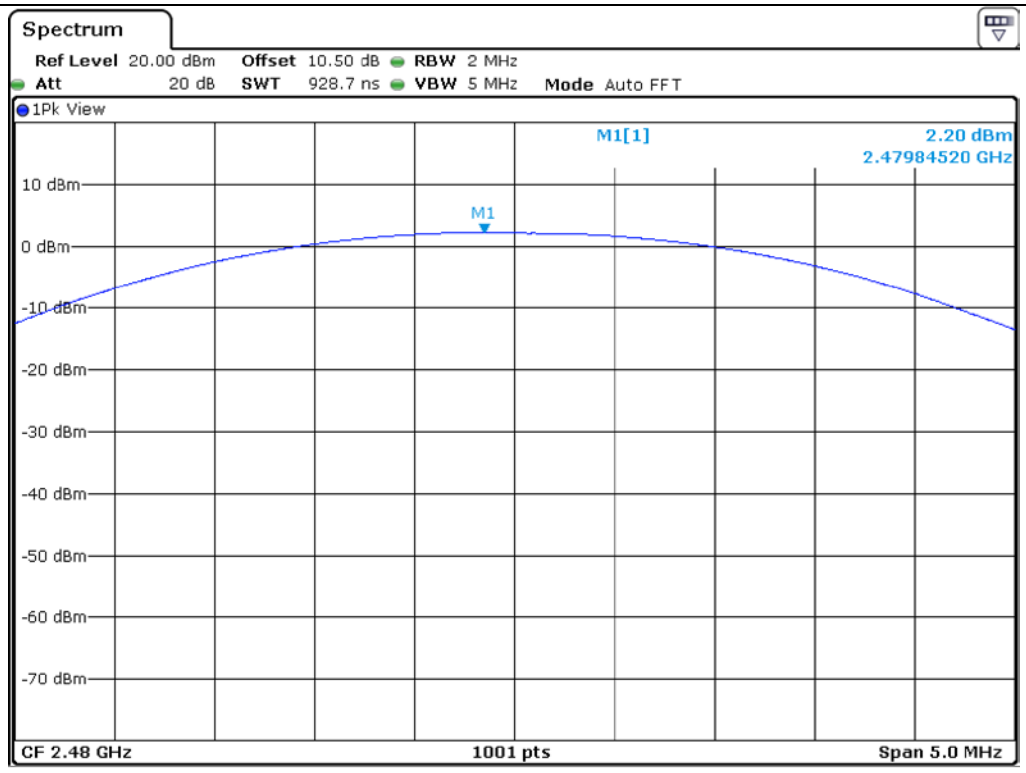


Low Channel

ONETECH Corp.: 43-14, Jinsaegol-gil, Chowol-eup, Gwangju-si, Gyeonggi-do, 12735, Korea (TEL: 82-31-799-9500, FAX: 82-31-799-9599)



Middle Channel



High Channel

11.6 Test data for 3 Mbps

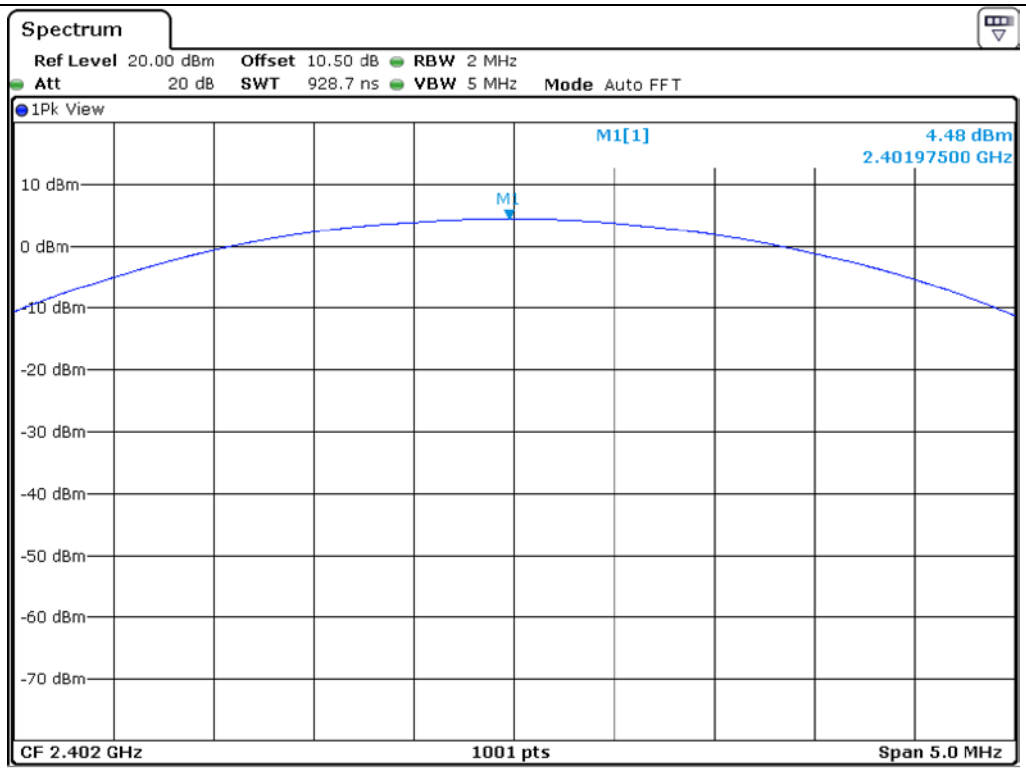
-. Test Date : March 23, 2020 ~ March 27, 2020

-. Test Result : Pass

CHANNEL	FREQUENCY (MHz)	MEASURED VLAUE (dBm)	LIMIT (dBm)	MARGIN (dB)
LOW	2 402.00	4.48	21.00	16.52
MIDDLE	2 441.00	5.16	21.00	15.84
HIGH	2 480.00	2.57	21.00	18.43

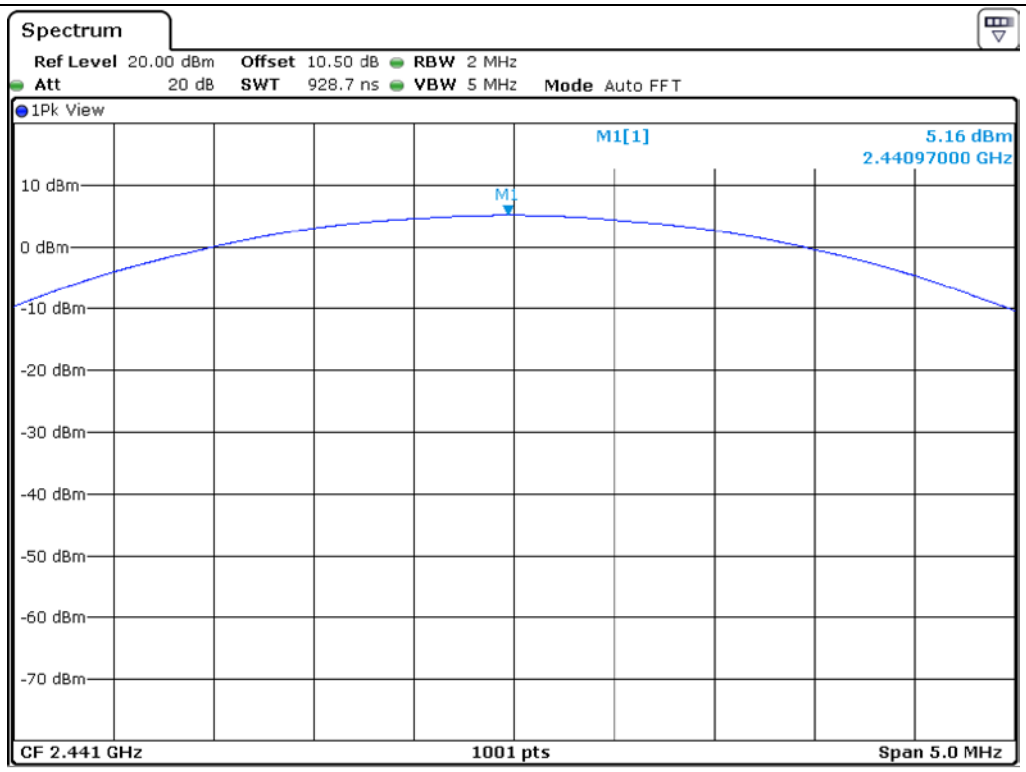
Remark. Margin = Limit – Measured Value (=Receiver Reading + Cable Loss)

Tested by: Hyung-Kwon, Oh / Manager

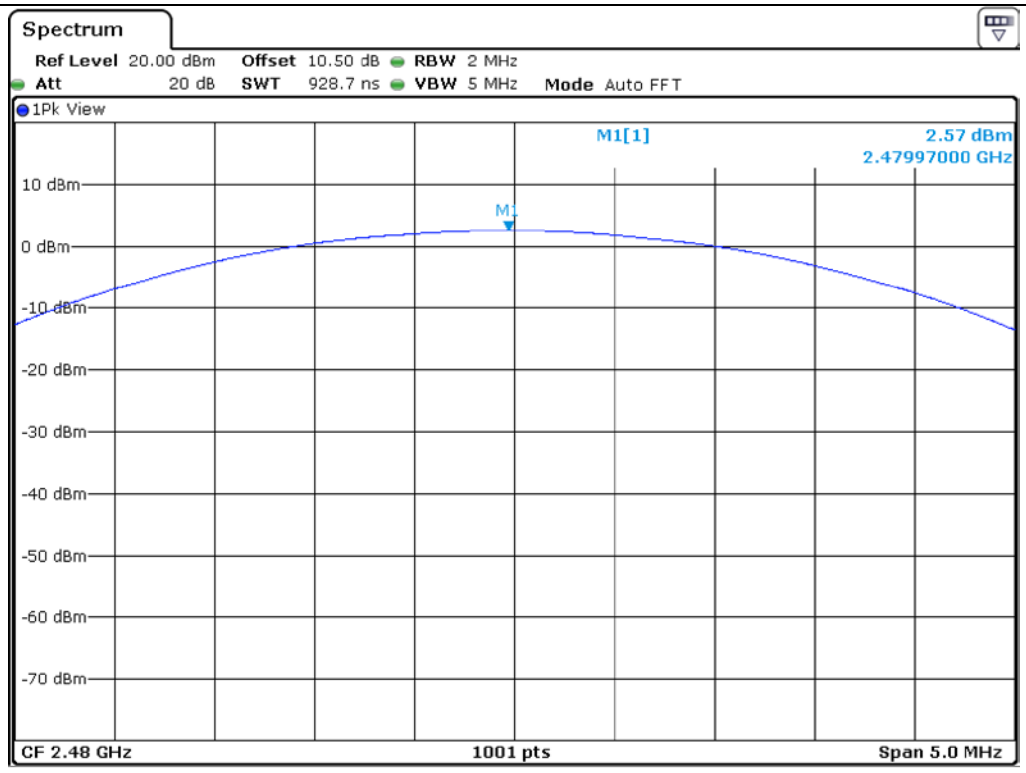


Low Channel

ONETECH Corp.: 43-14, Jinsaegol-gil, Chowol-eup, Gwangju-si, Gyeonggi-do, 12735, Korea (TEL: 82-31-799-9500, FAX: 82-31-799-9599)



Middle Channel



High Channel

12. 100 kHz BANDWIDTH OUTSIDE THE FREQUENCY BAND

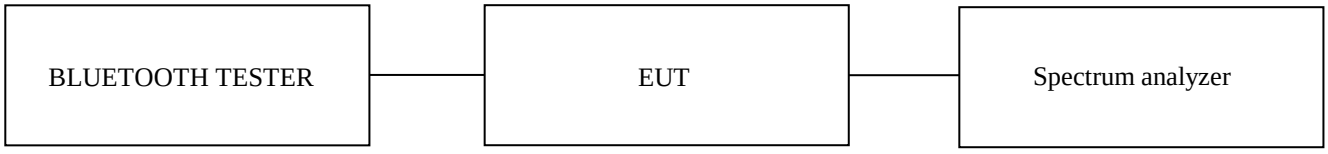
12.1 Operating environment

Temperature : 23 °C

Relative humidity : 45 % R.H.

12.2 Test set-up for conducted measurement

The antenna output of the EUT was connected to the spectrum analyzer. The resolution and video bandwidth is set to 100 kHz, and peak detection was used.



12.3 Test set-up for radiated measurement

The radiated emissions measurements were performed on the 3 m semi anechoic chamber. The EUT was placed on turntable approximately 1.5 m above the ground plane.

The frequency spectrum from 30 MHz to 26.5 GHz was scanned and maximum emission levels at each frequency recorded. The system was rotated 360°, and the antenna was varied in the height between 1.0 m and 4.0 m in order to determine the maximum emission levels. This procedure was performed for horizontal and vertical polarization of the receiving antenna.

12.4 Test equipment used

	Model Number	Manufacturer	Description	Serial Number	Last Cal.
■ -	FSV40	Rohde & Schwarz	Signal Analyzer	101009	Feb. 21, 2020 (1Y)
■ -	TC-3000C	TESCOM	BLUETOOTH TESTER	3000C000634	Feb. 19, 2020 (1Y)
■ -	ESW	Rohde & Schwarz	EMI Test Receiver	101851	Aug. 07, 2019 (1Y)
■ -	310N	Sonoma Instrument	Pre-Amplifier	312544	Mar. 16, 2020 (1Y)
■ -	BBV 9718 B	Schwarzbeck	Amplifier	00009	Mar. 16, 2020 (1Y)
■	SCU40A	Rohde & Schwarz	Signal Conditioning unit	100436	Feb. 20, 2020 (1Y)
■	SCU18	Rohde & Schwarz	Signal Conditioning unit	102266	Jul. 24, 2019(1Y)
■ -	DT3000-3t	Innco System	Turn Table	DT3000/093	N/A
■ -	MA-4000XPET	Innco System	Antenna Master	MA4000/509	N/A
■ -	VULB9163	Schwarzbeck	TRILOG Broadband Antenna	777	Apr. 13, 2018 (2Y)
■ -	BBHA9120D	Schwarzbeck	Horn Antenna	9120D-1366	Jul. 16, 2019 (1Y)
■ -	BBHA9170	Schwarzbeck	Horn Antenna	BBHA9170178	Jan. 07, 2020(1Y)

All test equipment used is calibrated on a regular basis.

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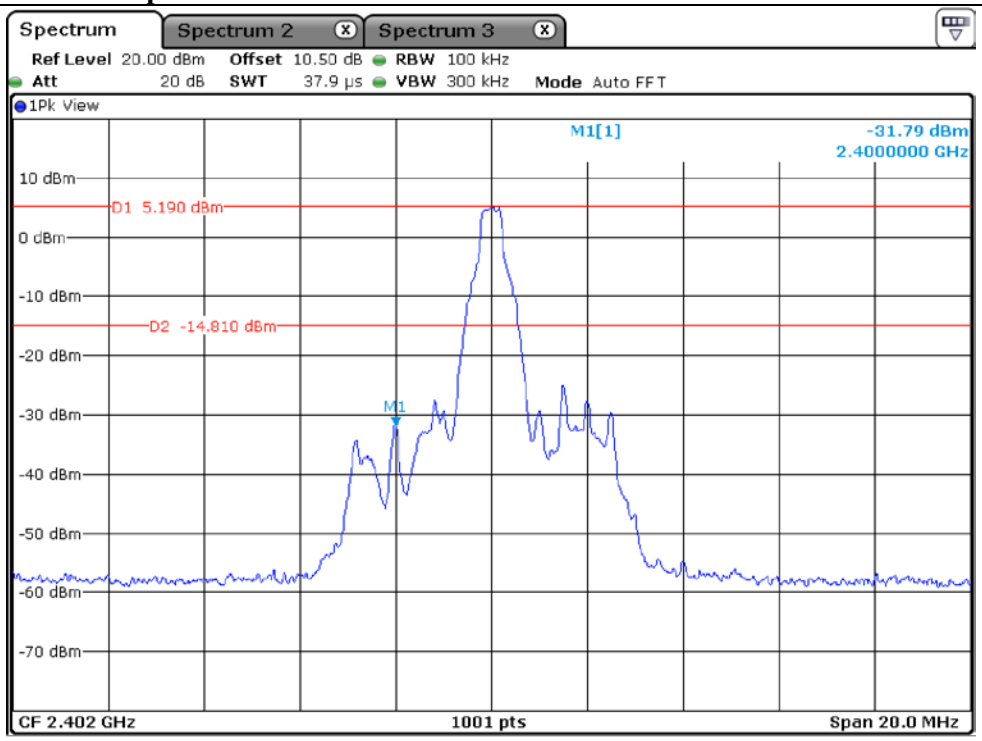
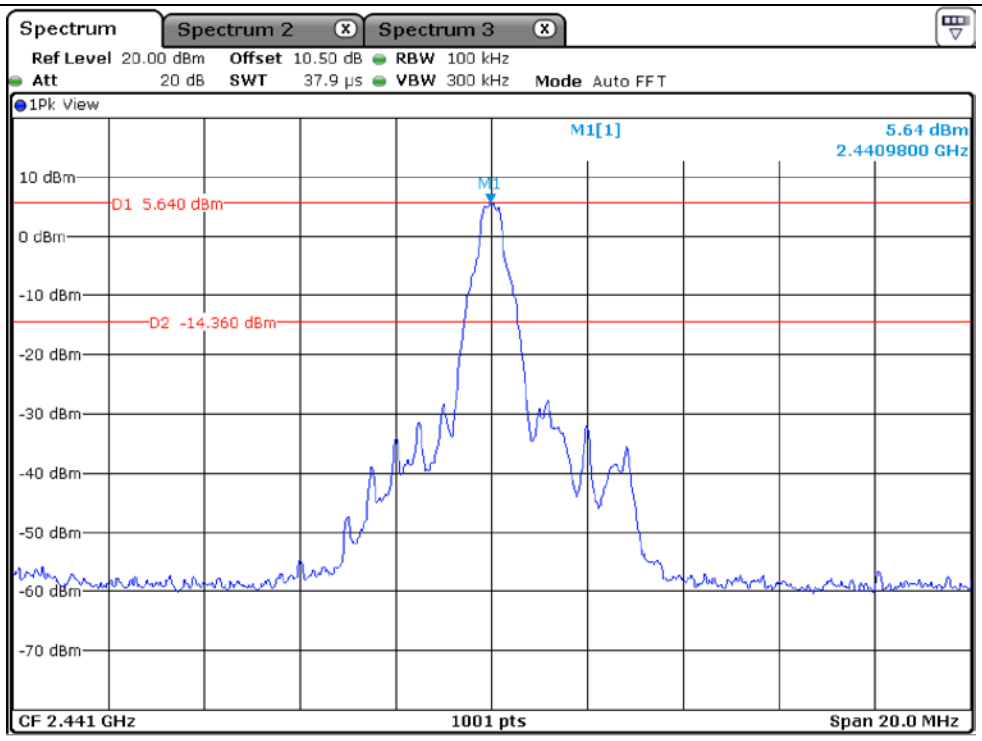
12.5 Test data for conducted emission

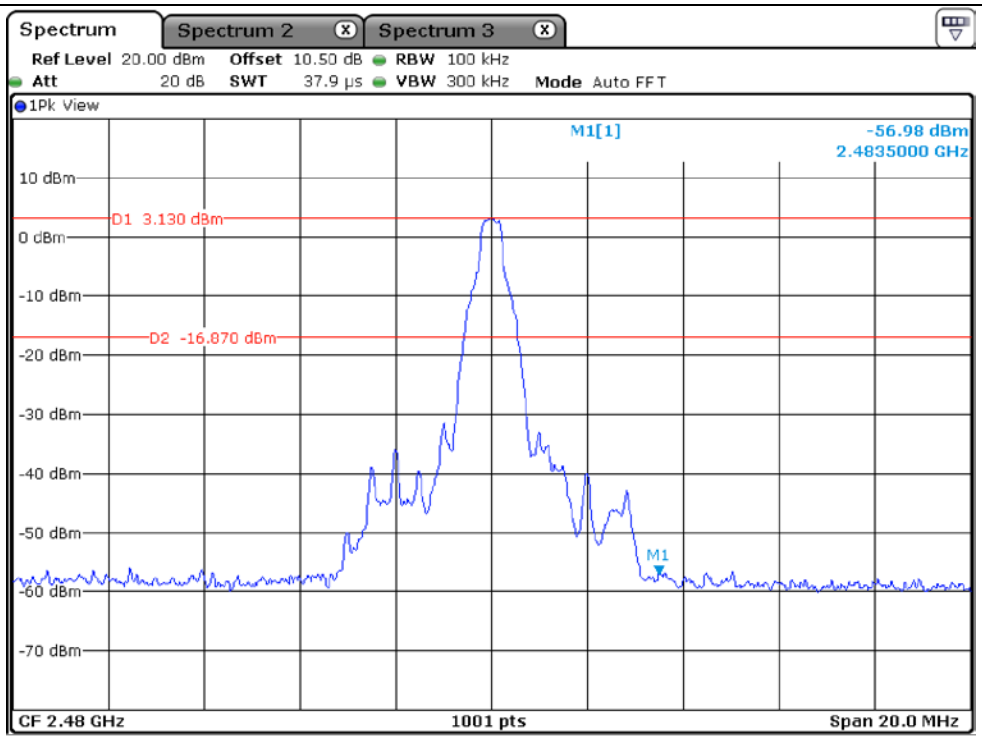
12.5.1 Test data for 1 Mbps



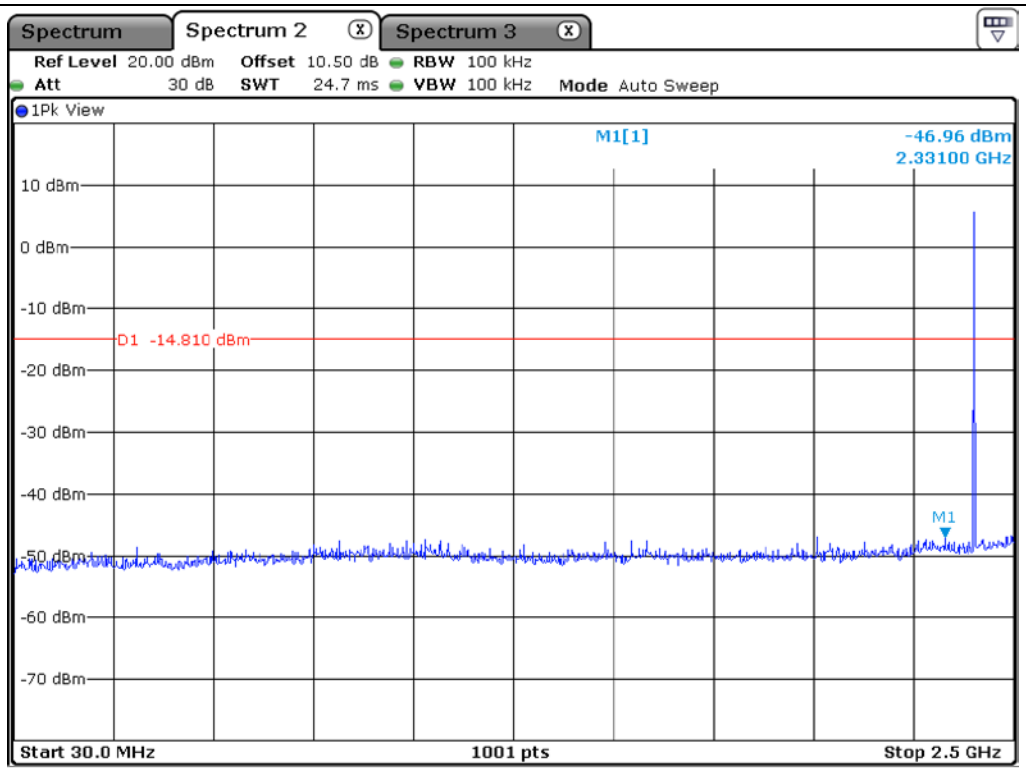
Low Channel



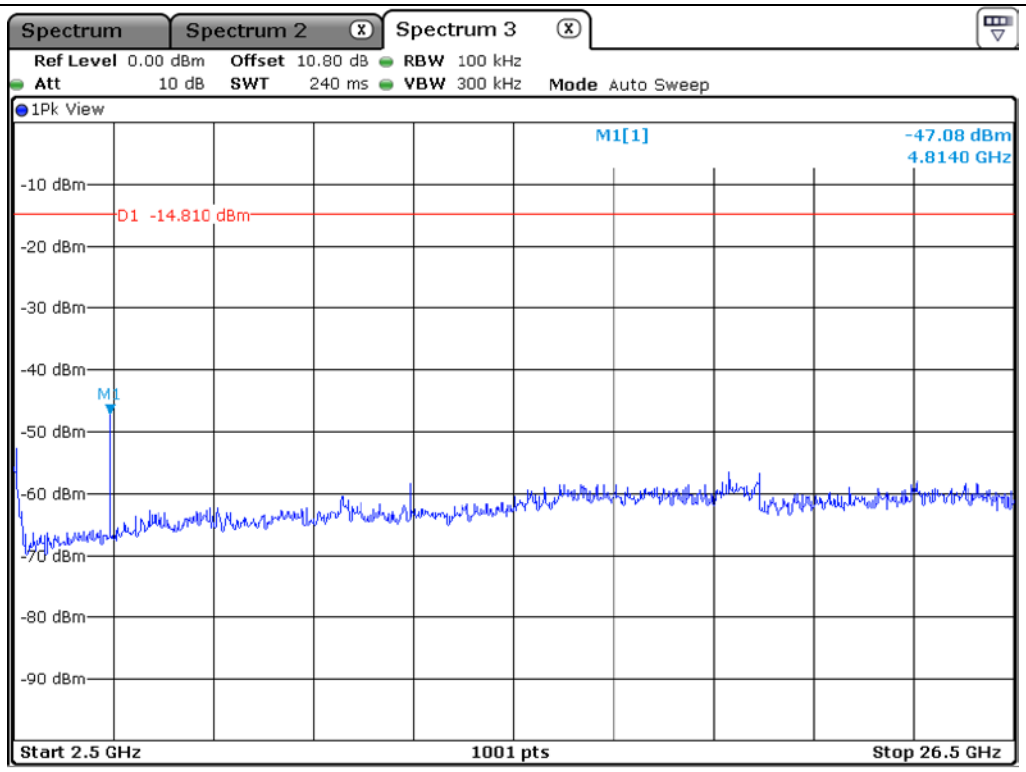
Middle Channel



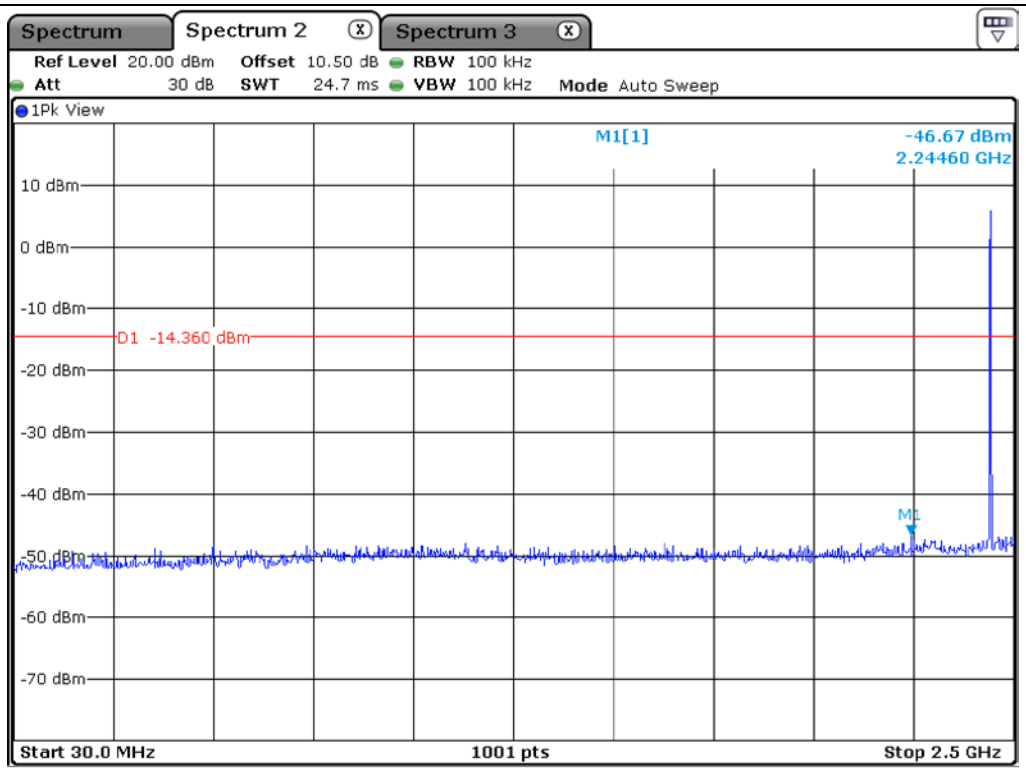
High Channel



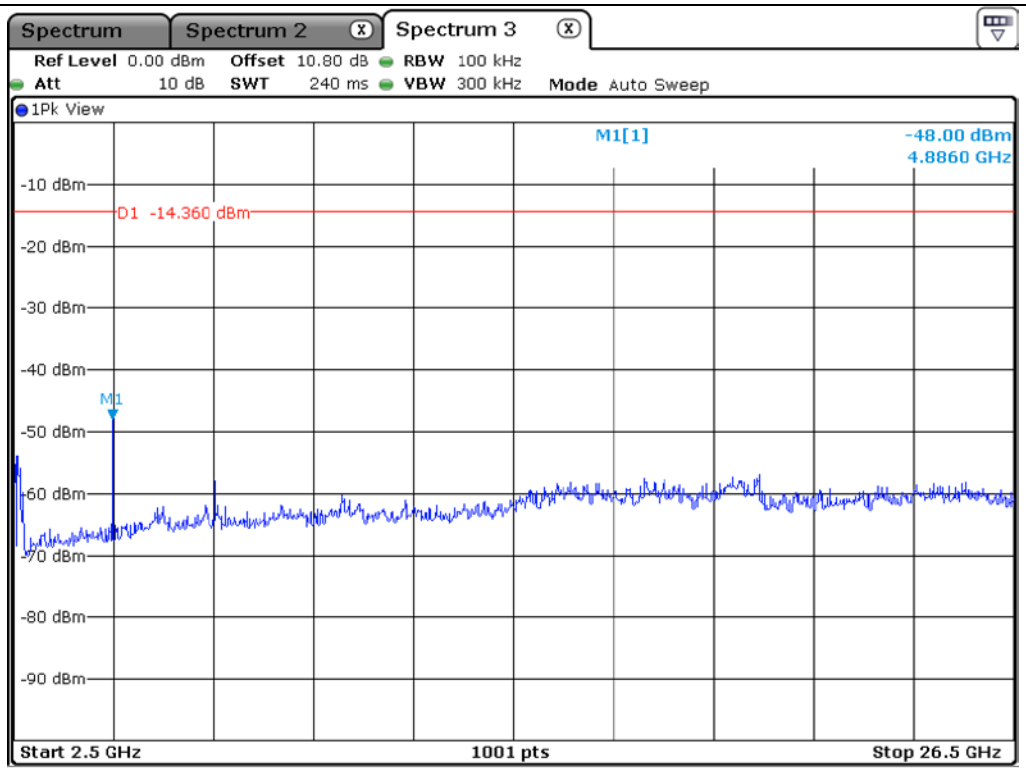
Low Channel



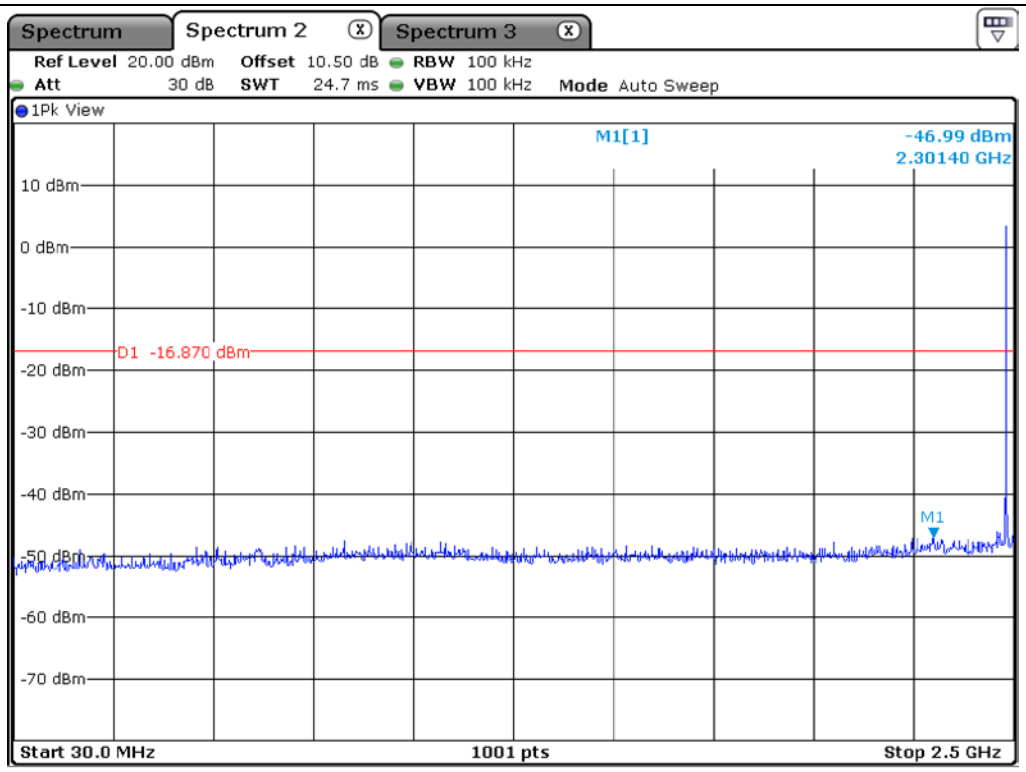
Low Channel



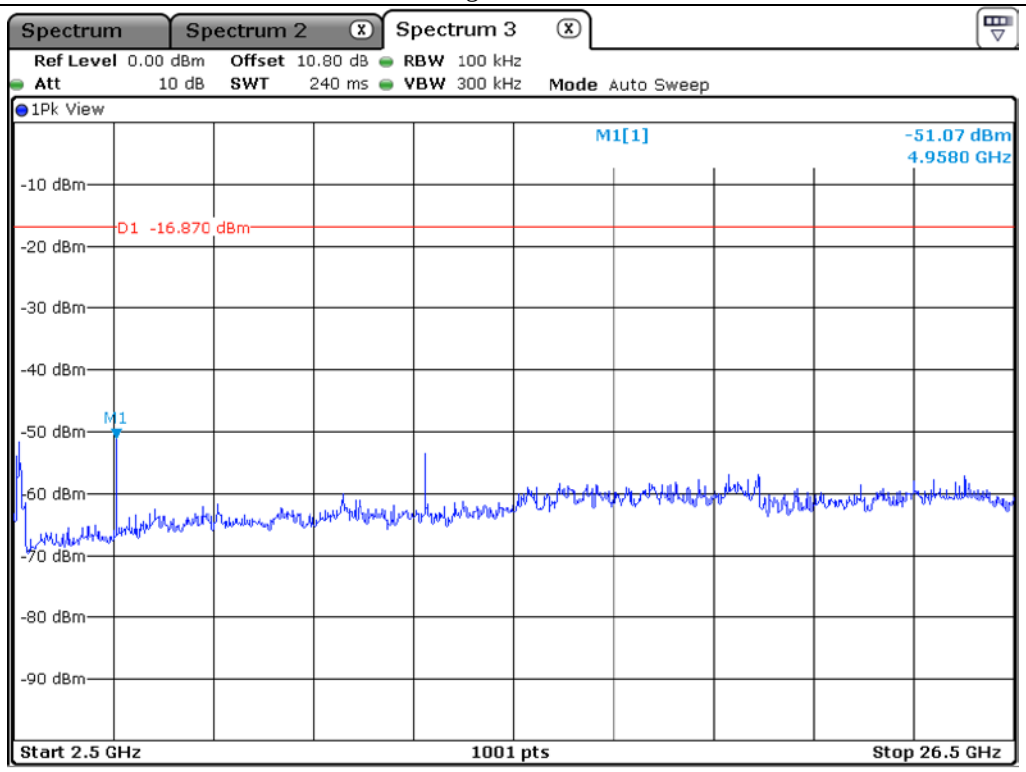
Middle Channel



Middle Channel

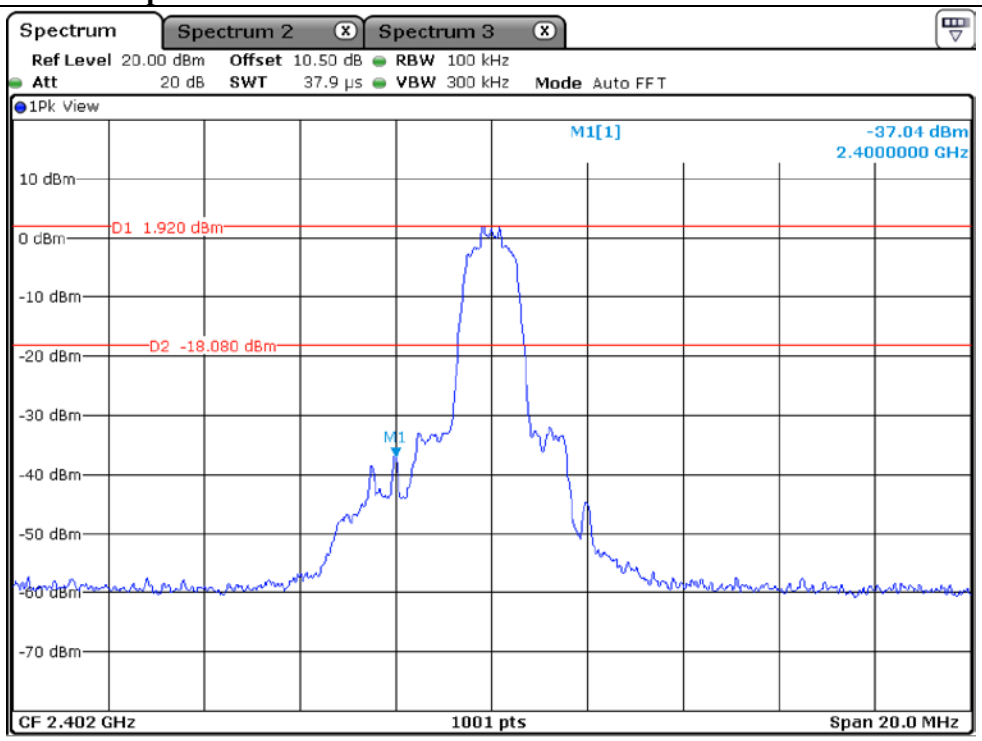


High Channel

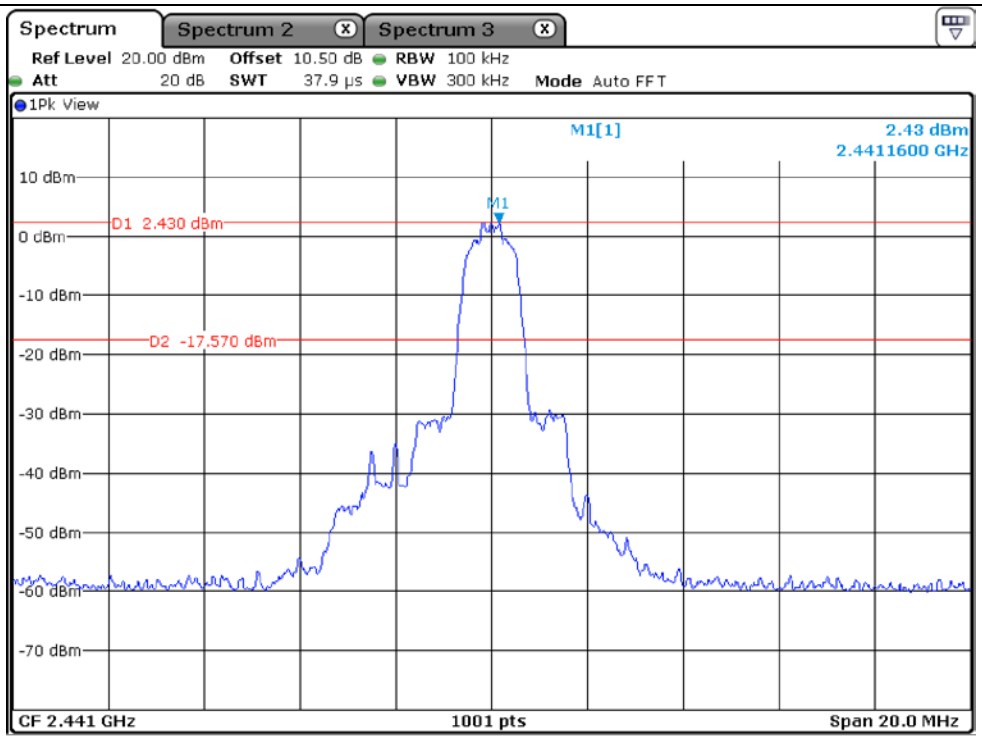


High Channel

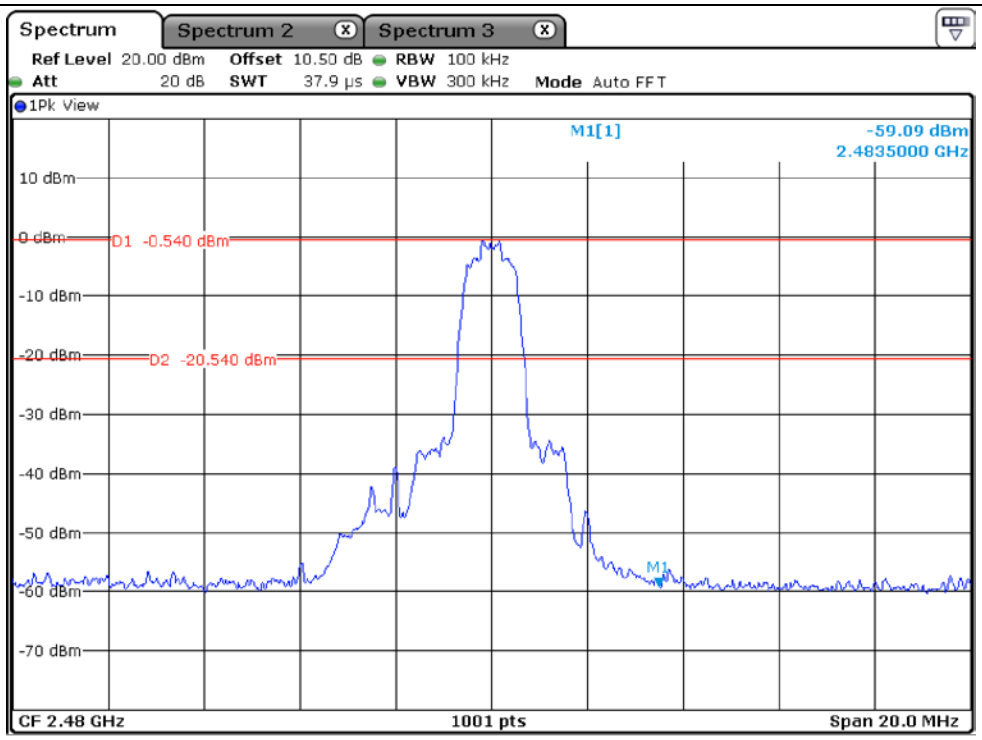
12.5.2 Test data for 2 Mbps



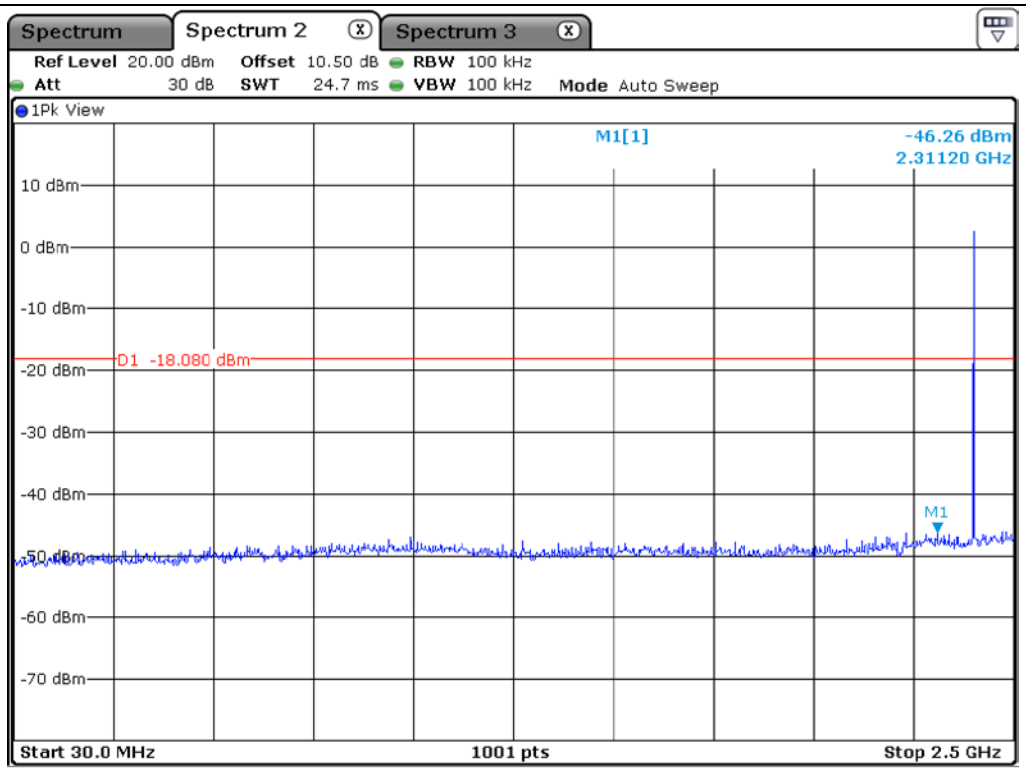
Low Channel



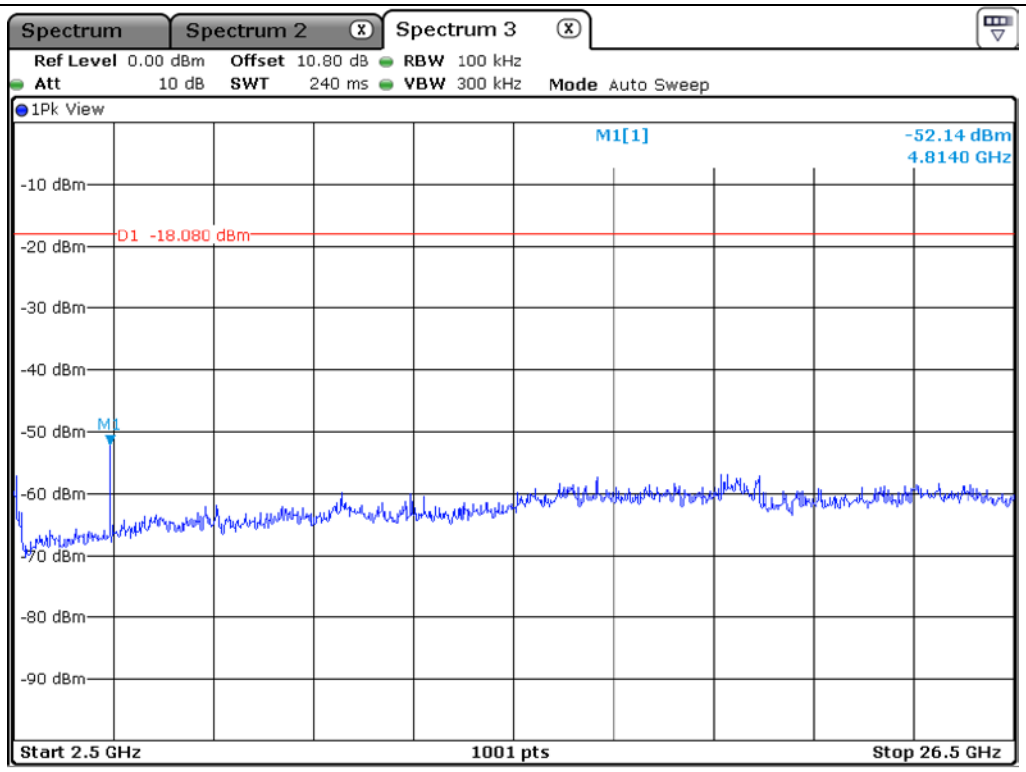
Middle Channel



High Channel



Low Channel



Low Channel

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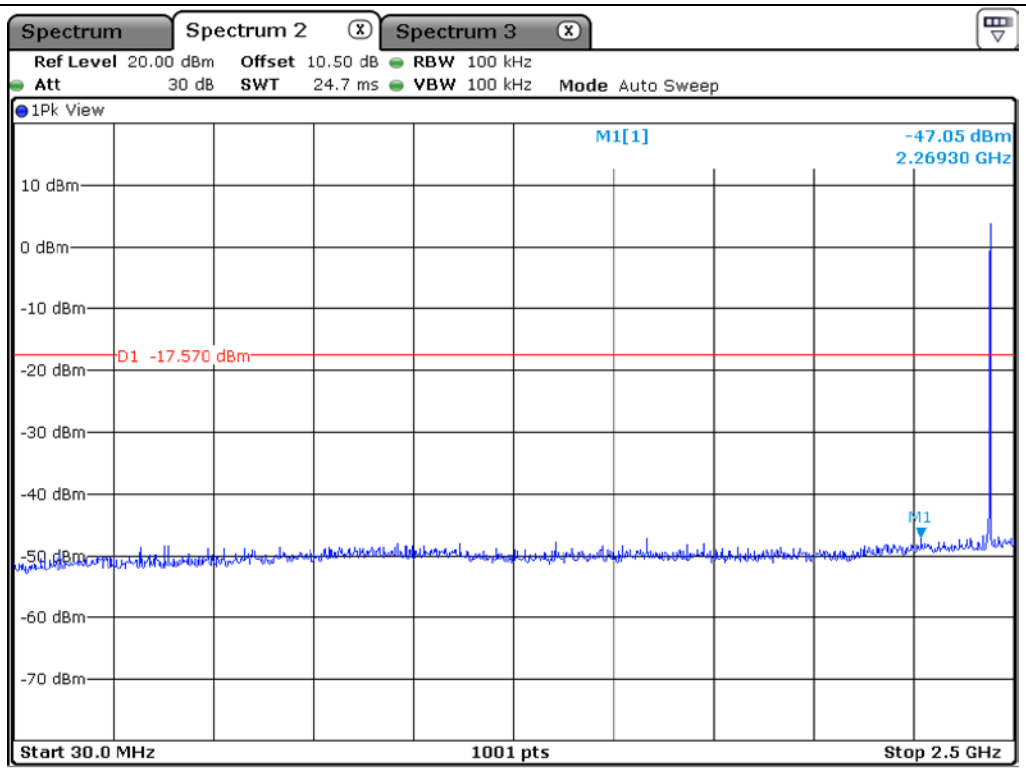
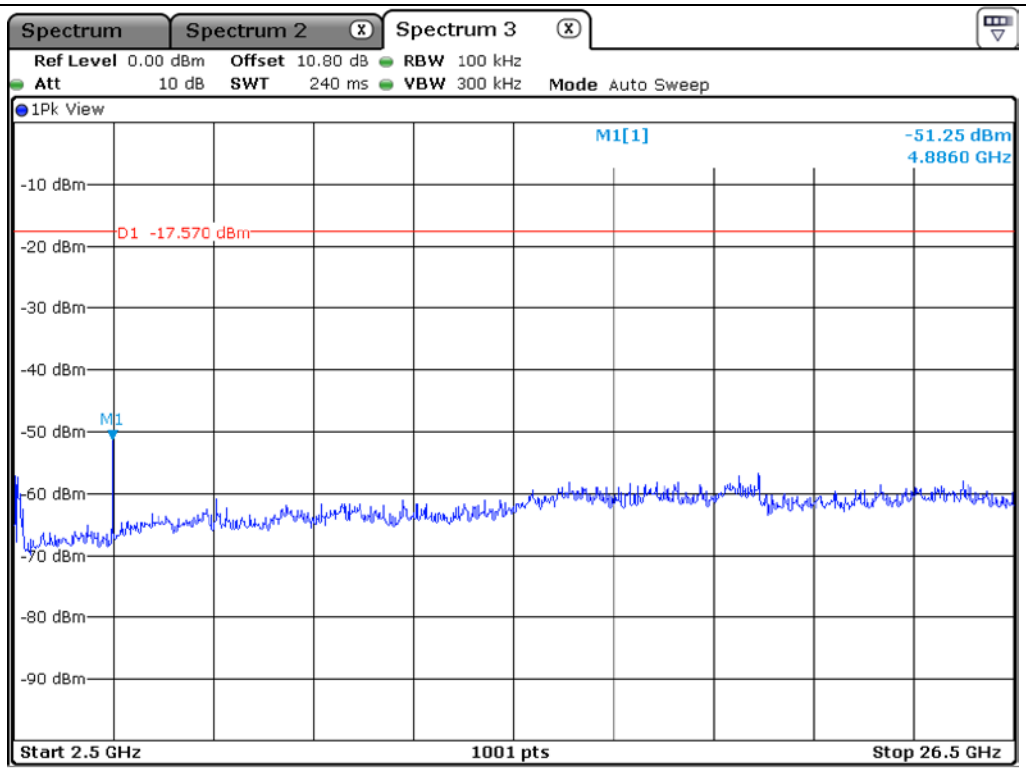
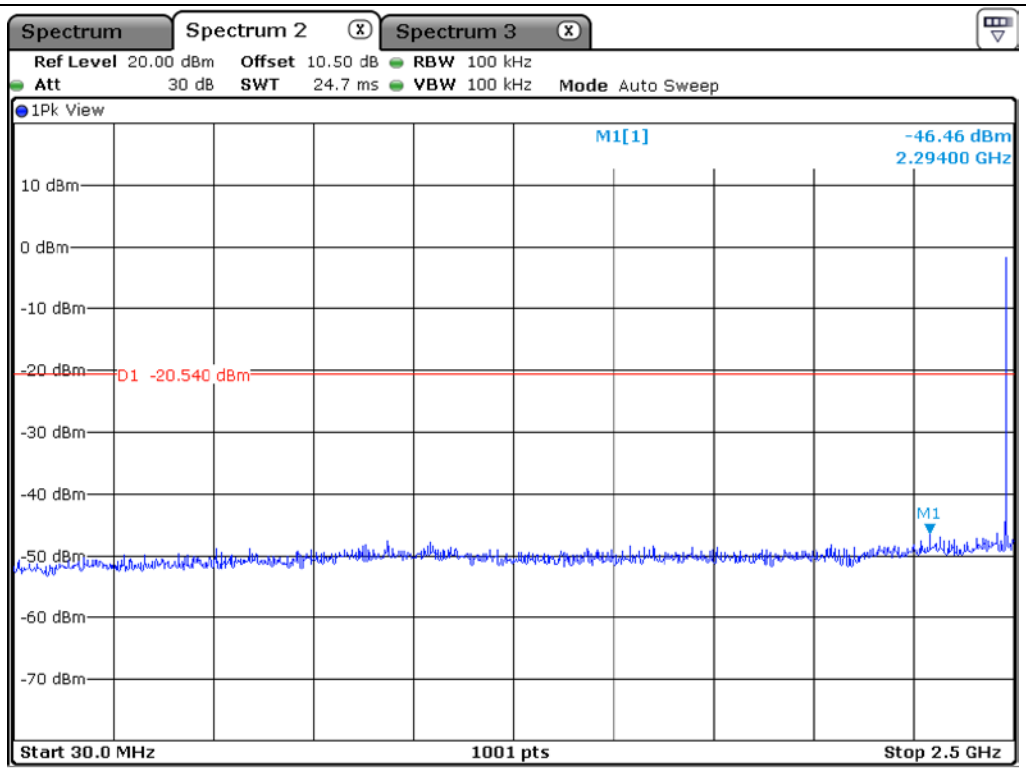


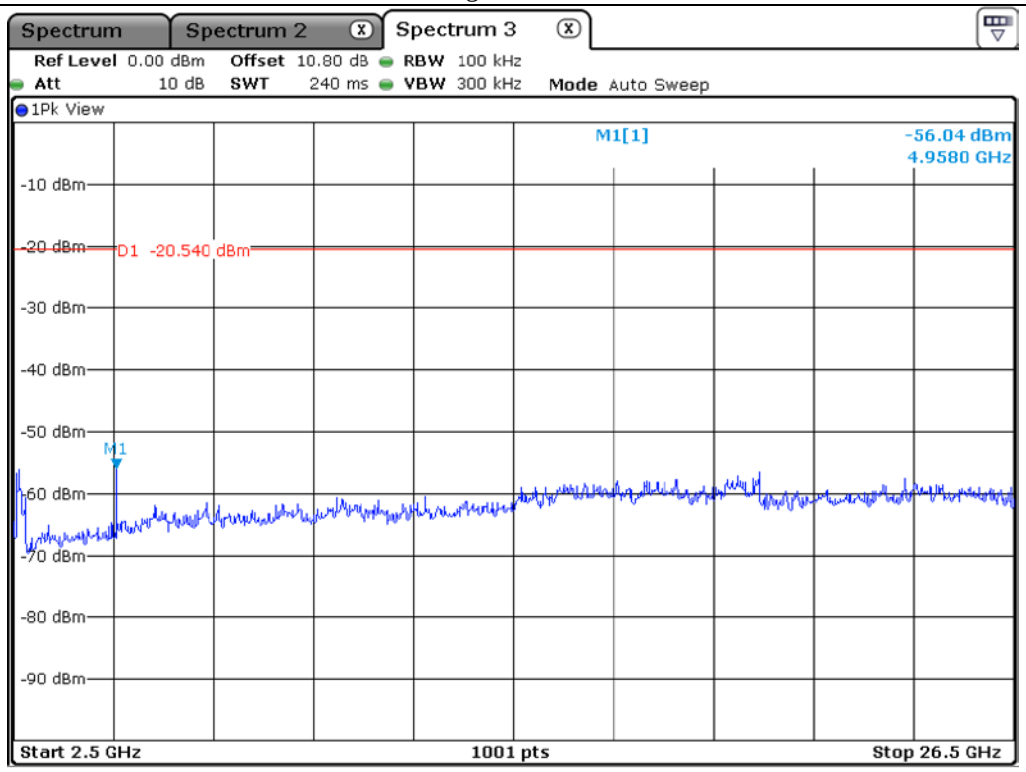
Middle Channel



Middle Channel

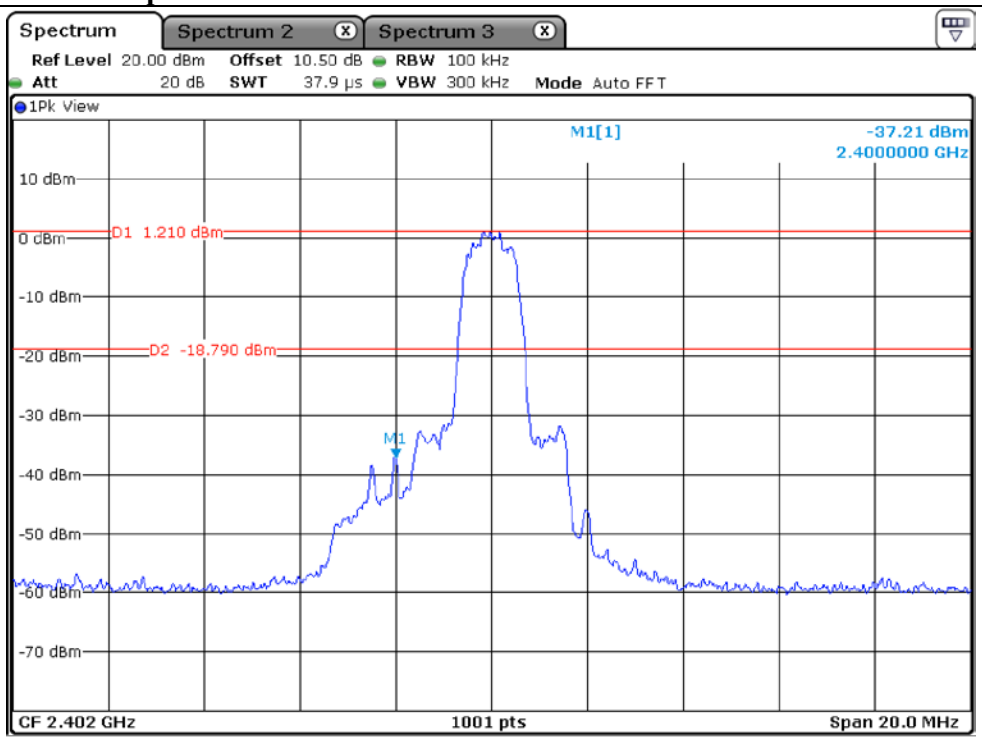


High Channel

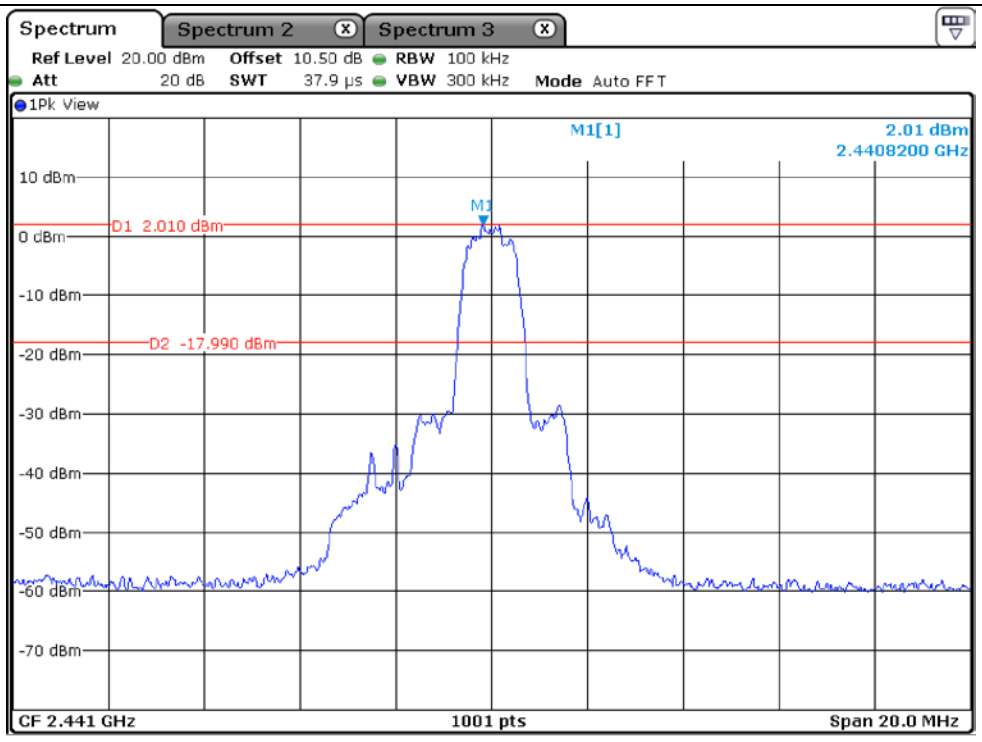


High Channel

12.5.3 Test data for 3 Mbps



Low Channel



Middle Channel

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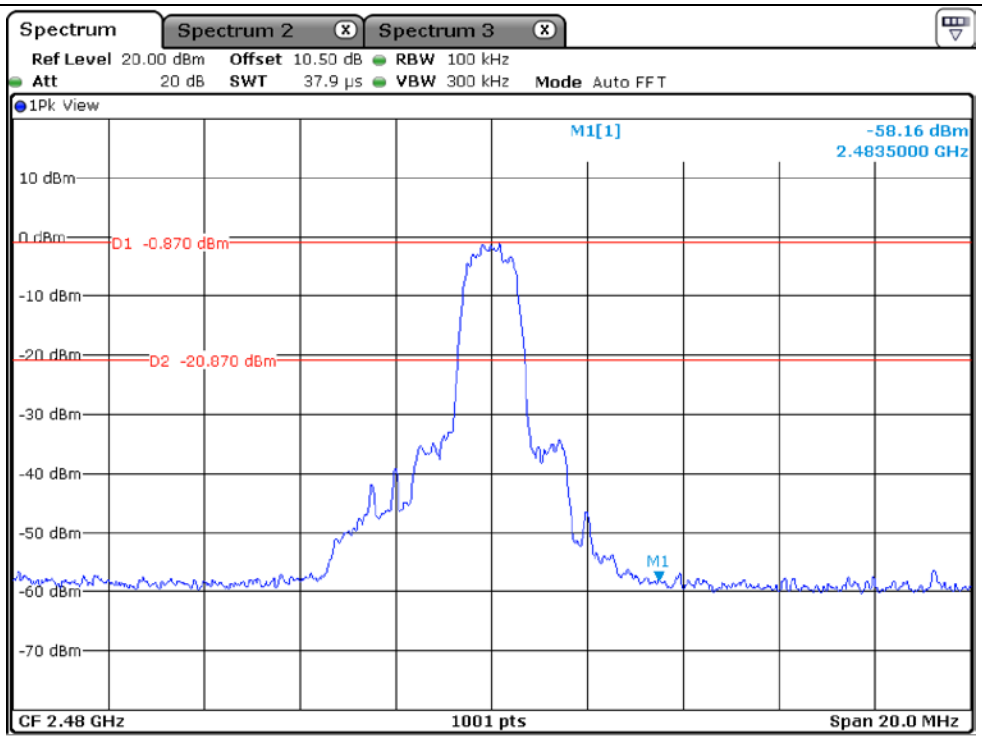
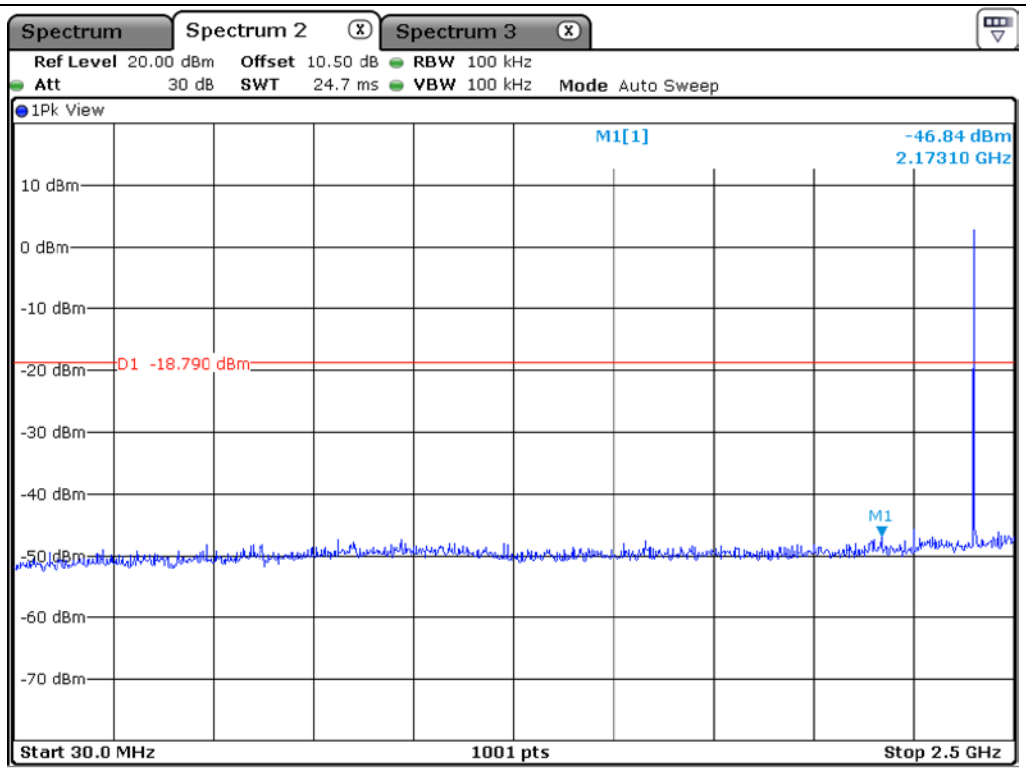
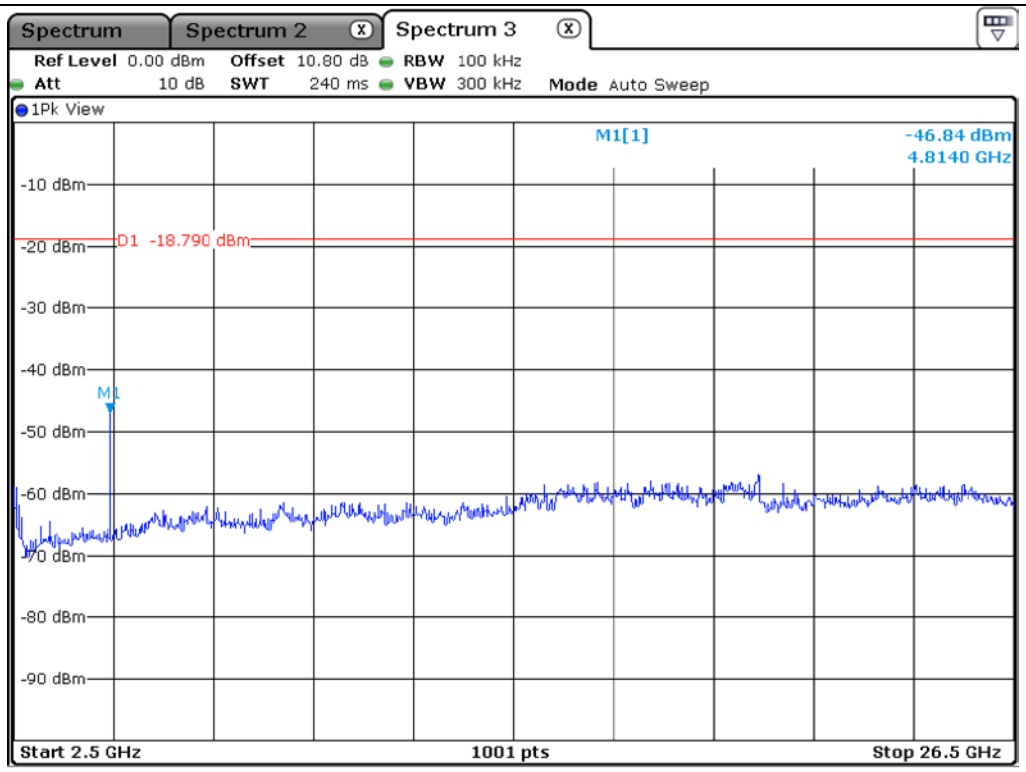


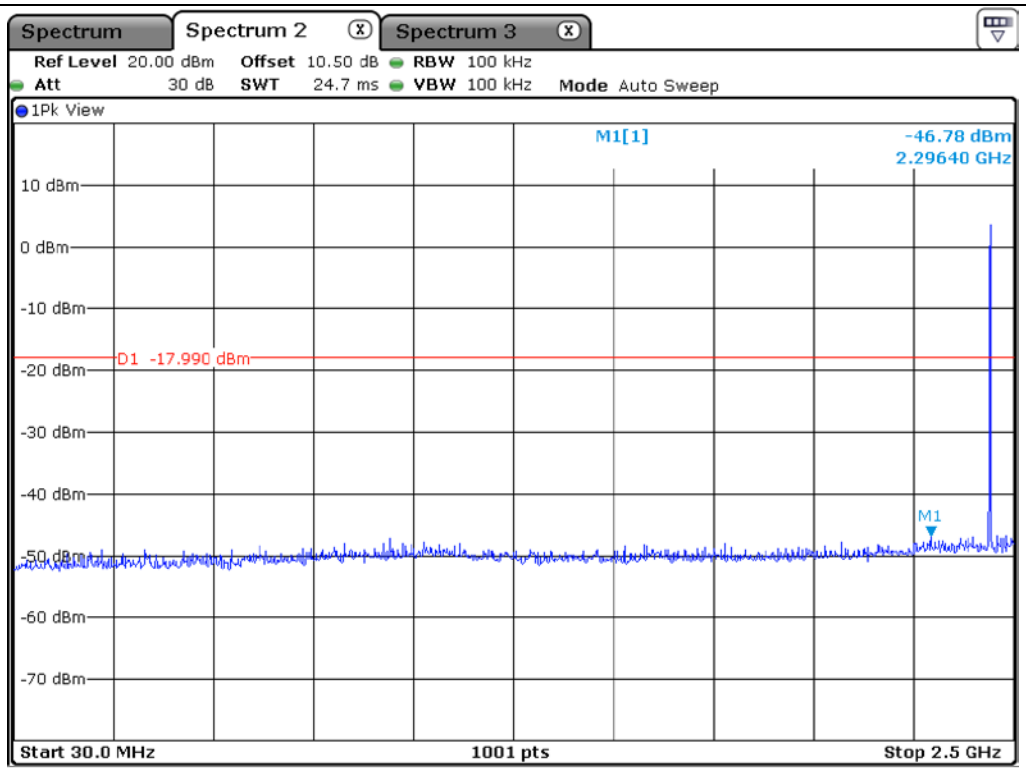
High Channel



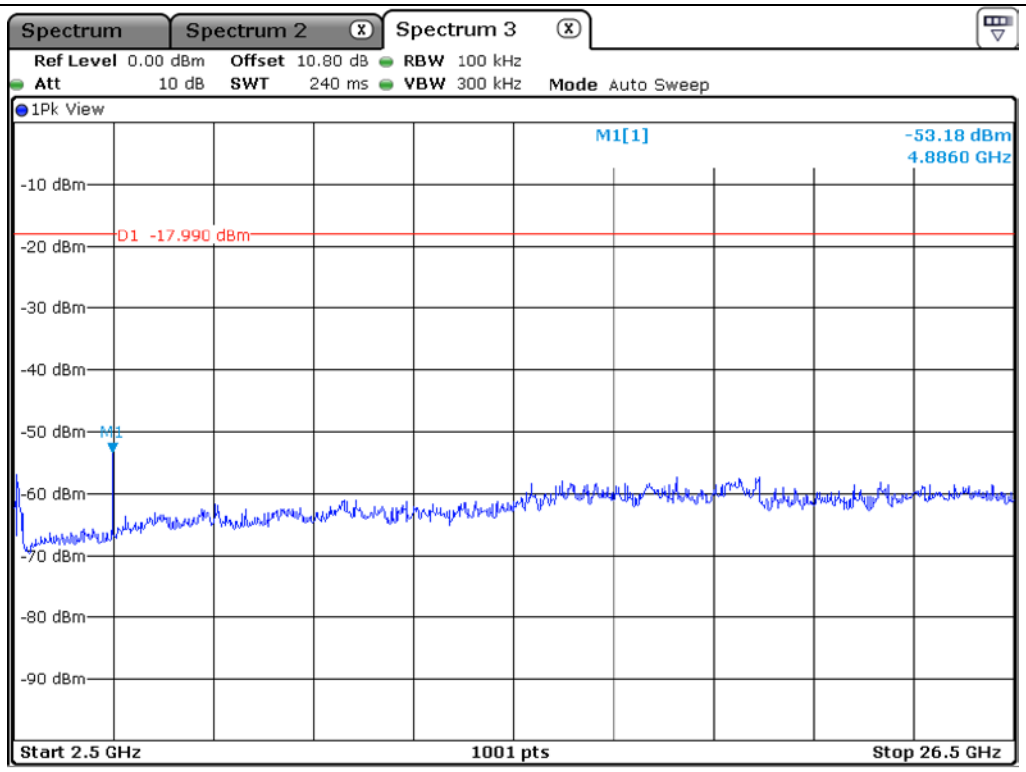
Low Channel



Low Channel



Middle Channel



Middle Channel

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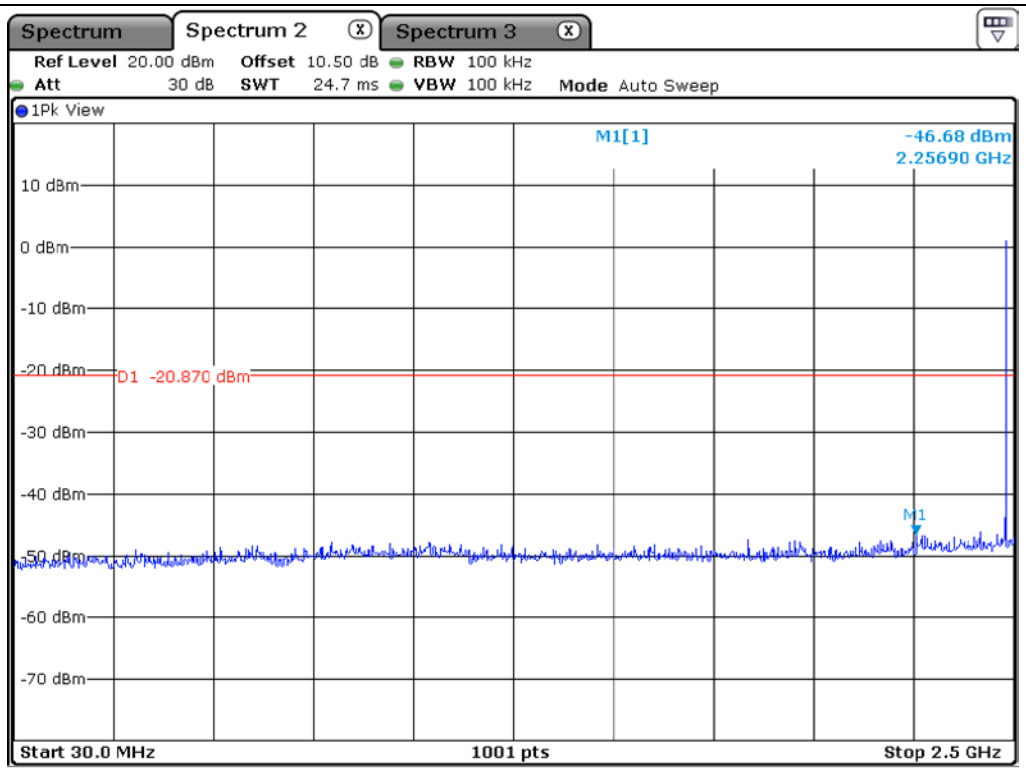
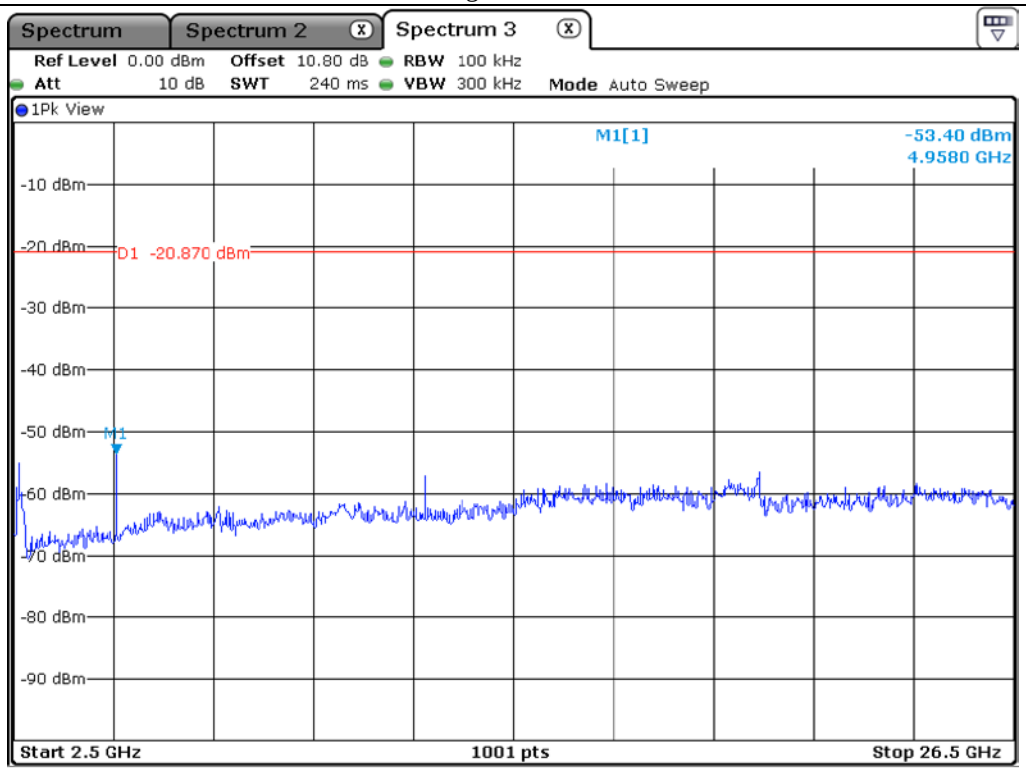


High Channel



High Channel

12.6 Test data for Transmitting mode radiated emission

12.6.1 Radiated Emission which fall in the Restricted Band

12.6.1.1 Test data for 1 Mbps

-. Test Date : March 23, 2020 ~ March 27, 2020

-. Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode
1 MHz and RMS Detector for Average Mode

-. Video bandwidth : 3 MHz for Peak and Average Mode

-. Measurement distance : 3 m

-. Duty Cycle : 76.75 %

-. Result : PASSED

Frequency (GHz)	Reading (dBµV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	C.F (dB)	Total (dBµV/m)	Limits (dBµV/m)	Margin (dB)
Test Data for Low Channel									
2 347.363	12.69	Peak	H	26.90	3.07	-	42.66	74.00	31.34
2 375.974	2.39	Average	H	26.90	3.07	1.15	33.51	54.00	20.49
2 386.124	12.98	Peak	V	26.90	3.07	-	42.95	74.00	31.05
2 383.167	1.47	Average	V	26.90	3.07	1.15	32.59	54.00	21.41
Test Data for High Channel									
2 483.508	16.45	Peak	H	26.60	3.16	-	46.21	74.00	27.79
2 483.508	6.46	Average	H	26.60	3.16	1.15	37.37	54.00	16.63
2 483.508	13.15	Peak	V	26.60	3.16	-	42.91	74.00	31.09
2 483.508	1.87	Average	V	26.60	3.16	1.15	32.78	54.00	21.22

Tabulated test data for Restricted Band

Remark: “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBµV/m) - Total Level (dBµV/m)

Total Level = Reading + Antenna Factor + Cable Loss + Correction Factor

Tested by: Hyung-Kwon, Oh / Manager

ONETECH Corp.: 43-14, Jinsaegol-gil, Chowol-eup, Gwangju-si, Gyeonggi-do, 12735, Korea (TEL: 82-31-799-9500, FAX: 82-31-799-9599)

12.6.1.2 Test data for 2 Mbps

-. Test Date : March 23, 2020 ~ March 27, 2020

-. Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode

1 MHz and RMS Detector for Average Mode

-. Video bandwidth : 3 MHz for Peak and Average Mode

-. Measurement distance : 3 m

-. Duty Cycle : 77.52 %

-. Result : PASSED

Frequency (GHz)	Reading (dBµV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	C.F (dB)	Total (dBµV/m)	Limits (dBµV/m)	Margin (dB)
Test Data for Low Channel									
2 382.128	13.33	Peak	H	26.90	3.07	-	43.30	74.00	30.70
2 375.974	1.68	Average	H	26.90	3.07	1.11	32.76	54.00	21.24
2 388.122	13.05	Peak	V	26.90	3.07	-	43.02	74.00	30.98
2 383.167	1.50	Average	V	26.90	3.07	1.11	32.58	54.00	21.42
Test Data for High Channel									
2 489.261	13.01	Peak	H	26.60	3.16	-	42.77	74.00	31.23
2 483.508	2.55	Average	H	26.60	3.16	1.11	33.42	54.00	20.58
2 490.761	13.09	Peak	V	26.60	3.16	-	42.85	74.00	31.15
2 483.508	1.12	Average	V	26.60	3.16	1.11	31.99	54.00	22.01

Tabulated test data for Restricted Band

Remark: “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBµV/m) - Total Level (dBµV/m)

Total Level = Reading + Antenna Factor + Cable Loss + Correction Factor

Tested by: Hyung-Kwon, Oh / Manager

ONETECH Corp.: 43-14, Jinsaegol-gil, Chowol-eup, Gwangju-si, Gyeonggi-do, 12735, Korea (TEL: 82-31-799-9500, FAX: 82-31-799-9599)

12.6.1.3 Test data for 3 Mbps

-. Test Date : March 23, 2020 ~ March 27, 2020

-. Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode

1 MHz and RMS Detector for Average Mode

-. Video bandwidth : 3 MHz for Peak and Average Mode

-. Measurement distance : 3 m

-. Duty Cycle : 76.92 %

-. Result : PASSED

Frequency (GHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	C.F (dB)	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Test Data for Low Channel									
2 373.736	12.80	Peak	H	26.90	3.07	-	42.77	74.00	31.23
2 375.574	1.84	Average	H	26.90	3.07	1.14	32.95	54.00	21.05
2 356.234	13.16	Peak	V	26.90	3.07	-	43.13	74.00	30.87
2 385.405	1.58	Average	V	26.90	3.07	1.14	32.69	54.00	21.31
Test Data for High Channel									
2 483.508	13.43	Peak	H	26.60	3.16	-	43.19	74.00	30.81
2 483.508	2.56	Average	H	26.60	3.16	1.14	33.46	54.00	20.54
2 493.547	13.30	Peak	V	26.60	3.16	-	43.06	74.00	30.94
2 483.953	1.27	Average	V	26.60	3.16	1.14	32.17	54.00	21.83

Tabulated test data for Restricted Band

Remark: “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBμV/m) - Total Level (dBμV/m)

Total Level = Reading + Antenna Factor + Cable Loss + Correction Factor

Tested by: Hyung-Kwon, Oh / Manager

ONETECH Corp.: 43-14, Jinsaegol-gil, Chowol-eup, Gwangju-si, Gyeonggi-do, 12735, Korea (TEL: 82-31-799-9500, FAX: 82-31-799-9599)

12.6.2 Spurious & Harmonic Radiated Emission above 1 GHz

12.6.2.1 Test data for 1 Mbps

-. Test Date : March 23, 2020 ~ March 27, 2020

-. Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode for the emissions fall in restricted band,
1 MHz and RMS Detector for Average Mode for the emissions fall in restricted band
100 kHz for Peak Mode for the emissions outside restricted band

-. Video bandwidth : 3 MHz for Peak and Average Mode

-. Frequency range : 1 GHz ~ 26.5 GHz

-. Measurement distance : 3 m

-. Duty Cycle : 76.75 %

-. Result : PASSED

Frequency (GHz)	Reading (dBµV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	C.F (dB)	Total (dBµV/m)	Limits (dBµV/m)	Margin (dB)
Test Data for Low Channel									
4 804.000	15.19	Peak	H	28.20	4.85	-	48.24	74.00	25.76
4 804.000	4.57	Average	H	28.20	4.85	1.15	38.77	54.00	15.23
4 804.000	15.47	Peak	V	28.20	4.85	-	48.52	74.00	25.48
4 804.000	5.24	Average	V	28.20	4.85	1.15	39.44	54.00	14.56
Test Data for Middle Channel									
4 882.000	15.54	Peak	H	28.30	4.91	-	48.75	74.00	25.25
4 882.000	4.71	Average	H	28.30	4.91	1.15	39.07	54.00	14.93
4 882.000	15.17	Peak	V	28.30	4.91	-	48.38	74.00	25.62
4 882.000	5.36	Average	V	28.30	4.91	1.15	39.72	54.00	14.28
Test Data for High Channel									
4 960.000	15.82	Peak	H	28.60	5.04	-	49.46	74.00	24.54
4 960.000	4.78	Average	H	28.60	5.04	1.15	39.57	54.00	14.43
4 960.000	15.60	Peak	V	28.60	5.04	-	49.24	74.00	24.76
4 960.000	5.33	Average	V	28.60	5.04	1.15	40.12	54.00	13.88

Tabulated test data for Restricted Band

Remark: “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBµV/m) - Total Level (dBµV/m)

Total Level = Reading + Antenna Factor + Cable Loss + Correction Factor

Tested by: Hyung-Kwon, Oh / Manager

ONETECH Corp.: 43-14, Jinsaegol-gil, Chowol-eup, Gwangju-si, Gyeonggi-do, 12735, Korea (TEL: 82-31-799-9500, FAX: 82-31-799-9599)

12.6.2.2 Test data for 2 Mbps

-. Test Date : March 23, 2020 ~ March 27, 2020

-. Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode for the emissions fall in restricted band,
1 MHz and RMS Detector for Average Mode for the emissions fall in restricted band
100 kHz for Peak Mode for the emissions outside restricted band

-. Video bandwidth : 3 MHz for Peak and Average Mode

-. Frequency range : 1 GHz ~ 26.5 GHz

-. Measurement distance : 3 m

-. Duty Cycle : 77.52 %

-. Result : PASSED

Frequency (GHz)	Reading (dBµV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	C.F (dB)	Total (dBµV/m)	Limits (dBµV/m)	Margin (dB)
Test Data for Low Channel									
4 804.000	15.86	Peak	H	28.20	4.85	-	48.91	74.00	25.09
4 804.000	4.43	Average	H	28.20	4.85	1.11	38.59	54.00	15.41
4 804.000	15.94	Peak	V	28.20	4.85	-	48.99	74.00	25.01
4 804.000	5.59	Average	V	28.20	4.85	1.11	39.75	54.00	14.25
Test Data for Middle Channel									
4 882.000	15.60	Peak	H	28.30	4.91	-	48.81	74.00	25.19
4 882.000	4.28	Average	H	28.30	4.91	1.11	38.60	54.00	15.40
4 882.000	15.51	Peak	V	28.30	4.91	-	48.72	74.00	25.28
4 882.000	5.90	Average	V	28.30	4.91	1.11	40.22	54.00	13.78
Test Data for High Channel									
4 960.000	15.90	Peak	H	28.60	5.04	-	49.54	74.00	24.46
4 960.000	4.81	Average	H	28.60	5.04	1.11	39.56	54.00	14.44
4 960.000	15.45	Peak	V	28.60	5.04	-	49.09	74.00	24.91
4 960.000	5.80	Average	V	28.60	5.04	1.11	40.55	54.00	13.45

Tabulated test data for Restricted Band

Remark: “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBµV/m) - Total Level (dBµV/m)

Total Level = Reading + Antenna Factor + Cable Loss + Correction Factor

Tested by: Hyung-Kwon, Oh / Manager

ONETECH Corp.: 43-14, Jinsaegol-gil, Chowol-eup, Gwangju-si, Gyeonggi-do, 12735, Korea (TEL: 82-31-799-9500, FAX: 82-31-799-9599)

12.6.2.3 Test data for 3 Mbps

-. Test Date : March 23, 2020 ~ March 27, 2020

-. Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode for the emissions fall in restricted band,
1 MHz and RMS Detector for Average Mode for the emissions fall in restricted band
100 kHz for Peak Mode for the emissions outside restricted band

-. Video bandwidth : 3 MHz for Peak and Average Mode

-. Frequency range : 1 GHz ~ 26.5 GHz

-. Measurement distance : 3 m

-. Duty Cycle : 76.92 %

-. Result : PASSED

Frequency (GHz)	Reading (dBµV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	C.F (dB)	Total (dBµV/m)	Limits (dBµV/m)	Margin (dB)
Test Data for Low Channel									
4 804.000	15.48	Peak	H	28.20	4.85	-	48.53	74.00	25.47
4 804.000	4.50	Average	H	28.20	4.85	1.14	38.69	54.00	15.31
4 804.000	15.50	Peak	V	28.20	4.85	-	48.55	74.00	25.45
4 804.000	5.10	Average	V	28.20	4.85	1.14	39.29	54.00	14.71
Test Data for Middle Channel									
4 882.000	15.06	Peak	H	28.30	4.91	-	48.27	74.00	25.73
4 882.000	4.25	Average	H	28.30	4.91	1.14	38.60	54.00	15.40
4 882.000	15.80	Peak	V	28.30	4.91	-	49.01	74.00	24.99
4 882.000	5.12	Average	V	28.30	4.91	1.14	39.47	54.00	14.53
Test Data for High Channel									
4 960.000	15.73	Peak	H	28.60	5.04	-	49.37	74.00	24.63
4 960.000	4.06	Average	H	28.60	5.04	1.14	38.84	54.00	15.16
4 960.000	15.29	Peak	V	28.60	5.04	-	48.93	74.00	25.07
4 960.000	5.87	Average	V	28.60	5.04	1.14	40.65	54.00	13.35

Tabulated test data for Restricted Band

Remark: “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBµV/m) - Total Level (dBµV/m)

Total Level = Reading + Antenna Factor + Cable Loss + Correction Factor

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13. RADIATED EMISSION TEST

13.1 Operating environment

Temperature : 23 °C

Relative humidity : 45 % R.H.

13.2 Test set-up

The radiated emissions measurements were on the 3 m semi anechoic chamber. The EUT and other support equipment were placed on a non-conductive turntable above the ground plane. The interconnecting cables from outside test site were inserted into ferrite clamps at the point where the cables reach the turntable.

The frequency spectrum from 30 MHz to 26.5 GHz was scanned and emission levels maximized at each frequency recorded. The system was rotated 360°, and the antenna was varied in height between 1.0 m and 4.0 m in order to determine the maximum emission levels. This procedure was performed for both horizontal and vertical polarization of the receiving antenna.

13.3 Test equipment used

	Model Number	Manufacturer	Description	Serial Number	Last Cal.
■ -	FSV40	Rohde & Schwarz	Signal Analyzer	101009	Feb. 21, 2020 (1Y)
■ -	TC-3000C	TESCOM	BLUETOOTH TESTER	3000C000634	Feb. 19, 2020 (1Y)
■ -	ESW	Rohde & Schwarz	EMI Test Receiver	101851	Aug. 07, 2019 (1Y)
■ -	310N	Sonoma Instrument	Pre-Amplifier	312544	Mar. 16, 2020 (1Y)
■ -	BBV 9718 B	Schwarzbeck	Amplifier	00009	Mar. 16, 2020 (1Y)
■	SCU40A	Rohde & Schwarz	Signal Conditioning unit	100436	Feb. 20, 2020 (1Y)
■	SCU18	Rohde & Schwarz	Signal Conditioning unit	102266	Jul. 24, 2019(1Y)
■ -	DT3000-3t	Innco System	Turn Table	DT3000/093	N/A
■ -	MA-4000XPET	Innco System	Antenna Master	MA4000/509	N/A
■ -	VULB9163	Schwarzbeck	TRILOG Broadband Antenna	777	Apr. 13, 2018 (2Y)
■ -	BBHA9120D	Schwarzbeck	Horn Antenna	9120D-1366	Jul. 16, 2019 (1Y)
■ -	BBHA9170	Schwarzbeck	Horn Antenna	BBHA9170178	Jan. 07, 2020(1Y)

All test equipment used is calibrated on a regular basis.

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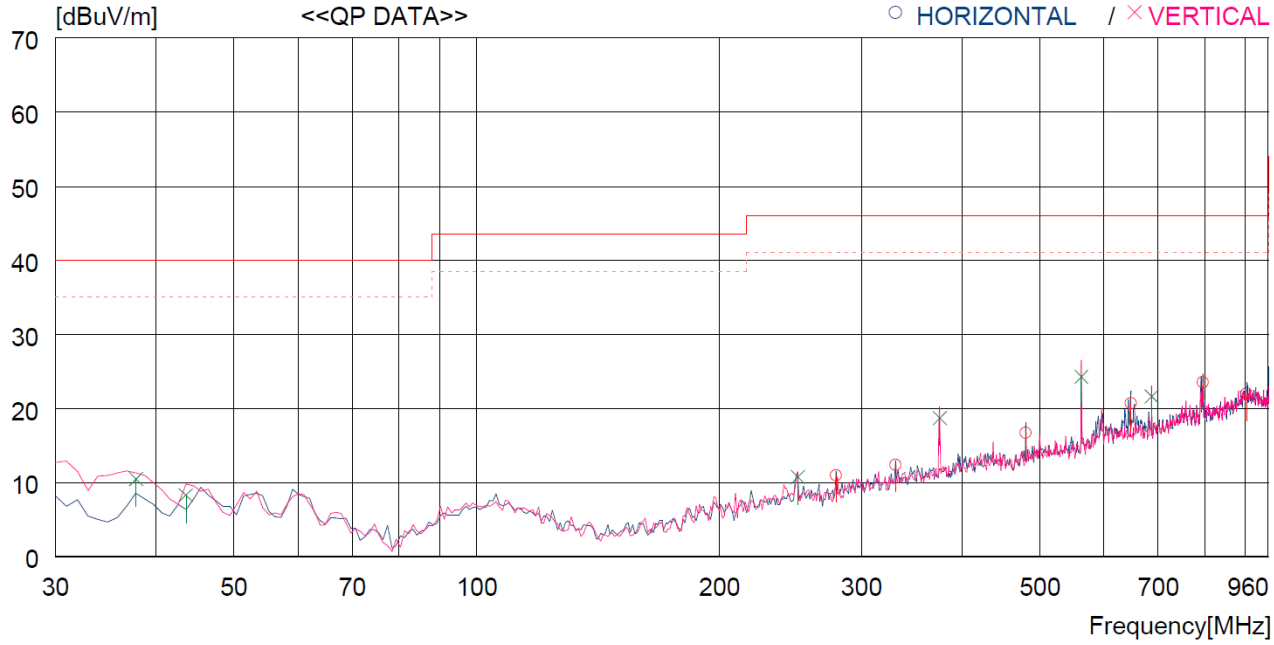
13.4 Test data for 30 MHz ~ 960 MHz

-. Test Date : March 23, 2020 ~ March 27, 2020

-. Resolution bandwidth : 120 kHz

-. Frequency range : 30 MHz ~ 1 000 MHz

-. Measurement distance : 3 m



No.	FREQ	READING QP	ANT FACTOR	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	[dBuV]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal ------										
1	279.290	27.0	13.1	3.9	33.0	11.0	46.0	35.0	400	345
2	330.700	26.9	14.3	4.2	33.0	12.4	46.0	33.6	400	208
3	480.081	27.8	17.0	5.1	33.2	16.7	46.0	29.3	100	62
4	647.887	28.5	19.7	5.8	33.3	20.7	46.0	25.3	200	0
5	796.292	28.8	21.2	6.6	33.1	23.5	46.0	22.5	300	359
6	902.989	24.5	22.8	7.1	32.4	22.0	46.0	24.0	200	0
----- Vertical ------										
7	37.760	28.3	13.8	1.5	33.1	10.5	40.0	29.5	400	359
8	43.580	25.5	14.4	1.5	33.1	8.3	40.0	31.7	400	359
9	250.190	27.2	12.7	3.7	32.9	10.7	46.0	35.3	200	268
10	375.320	31.9	15.3	4.5	33.0	18.7	46.0	27.3	100	0
11	562.529	33.3	18.8	5.5	33.3	24.3	46.0	21.7	100	0
12	687.655	28.9	20.0	6.0	33.3	21.6	46.0	24.4	200	268

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13.5 Test data for Below 30 MHz

-. Test Date : March 23, 2020 ~ March 27, 2020

-. Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)

-. Frequency range : 9 kHz ~ 30 MHz

-. Measurement distance : 3 m

Frequency (MHz)	Reading (dBµV)	Ant. Pol. (H/V)	Ant. Factor (dB/m)	Cable Loss	Amp Gain	Emission Level(dBµV/m)	Limits (dBµV/m)	Margin (dB)
It was not observed any emissions from the EUT.								

13.6 Test data for above 1 GHz

-. Test Date : March 23, 2020 ~ March 27, 2020

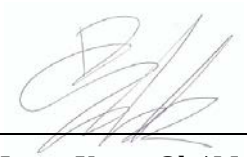
-. Resolution bandwidth : 1 MHz for Peak and Average Mode

-. Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode

-. Frequency range : 1 GHz ~ 26.5 GHz

-. Measurement distance : 3 m

Frequency (MHz)	Reading (dBµV)	Ant. Pol. (H/V)	Ant. Factor (dB/m)	Cable Loss	Amp Gain	Emission Level(dBµV/m)	Limits (dBµV/m)	Margin (dB)
It was not observed any emissions from the EUT.								



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