



FCC CO-LOCATION RADIO TEST REPORT

FCC ID : 2AUQI-7436
Equipment : HDMI Digital Media Receiver
Model Name : S3L46N
Applicant : PROJECT 710 L.L.C.
101 Merritt 7 Corporate Park, 3rd floor
Norwalk, CT 06851
United States
Standard : FCC Part 15 Subpart E §15.407

The product was received on Mar. 30, 2020 and testing was started from Apr. 12, 2020 and completed on Jun. 10, 2020. We, SPORTON INTERNATIONAL INC., EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Louis Wu

Approved by: Louis Wu

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



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History of this test report

Report No.	Version	Description	Issued Date
FR020402-01F	01	Initial issue of report	Jun. 23, 2020

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)
3.1	15.407(b)	Unwanted Emissions	Pass
3.2	15.203 15.407(a)	Antenna Requirement	Pass

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Wii Chang

Report Producer: Cindy Liu

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	HDMI Digital Media Receiver
Model Name	S3L46N
FCC ID	2AUQI-7436
EUT supports Radios application	WLAN 11b/g/n HT20 WLAN 11a/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE

1.2 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx/Rx Frequency Range	2400 MHz ~ 2483.5 MHz 5260 MHz ~ 5320 MHz
Antenna Type / Gain	<Bluetooth – LE> PCB Inv F type Antenna with gain 3.85 dBi <2412 MHz ~ 2472 MHz> Ant. 1: PCB Inv F type Antenna with gain 3.85 dBi Ant. 2: PCB Inv F type Antenna with gain 4.53 dBi <5260 MHz ~ 5320 MHz> Ant. 1: PCB Inv F type Antenna with gain 5.12 dBi Ant. 2: PCB Inv F type Antenna with gain 5.52 dBi
Type of Modulation	Bluetooth LE : GFSK 802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11a/g : OFDM (BPSK / QPSK / 16QAM / 64QAM)

1.3 Modification of EUT

No modifications are made to the EUT during all test items.

1.4 Testing Location

Test Site	SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978
Test Site No.	Sporton Site No.
	03CH07-HY

Note: The test site complies with ANSI C63.4 2014 requirement.

FCC designation No.: TW1190

1.5 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ FCC Part 15 Subpart E
- ♦ FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
- ♦ FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v05r02
- ♦ FCC KDB 414788 D01 Radiated Test Site v01r01.
- ♦ FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ♦ ANSI C63.10-2013

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. The TAF code is not including all the FCC KDB listed without accreditation.

2 Test Configuration of Equipment Under Test

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z, and HDMI Extender Cable. The worst cases (EUT without HDMI Extender Cable and X plane) were recorded in this report.

2.1 Carrier Frequency and Channel

2400-2483.5 MHz			
802.11b		802.11g	
Channel	Freq. (MHz)	Channel	Freq. (MHz)
5	2432	5	2432
6	2437	6	2437

2400-2483.5 MHz Bluetooth-LE (1Mbps)	
Channel	Freq. (MHz)
7	2416
38	2478
39	2480

5250-5350 MHz 802.11a	
Channel	Freq. (MHz)
60	5300

2.2 Test Mode

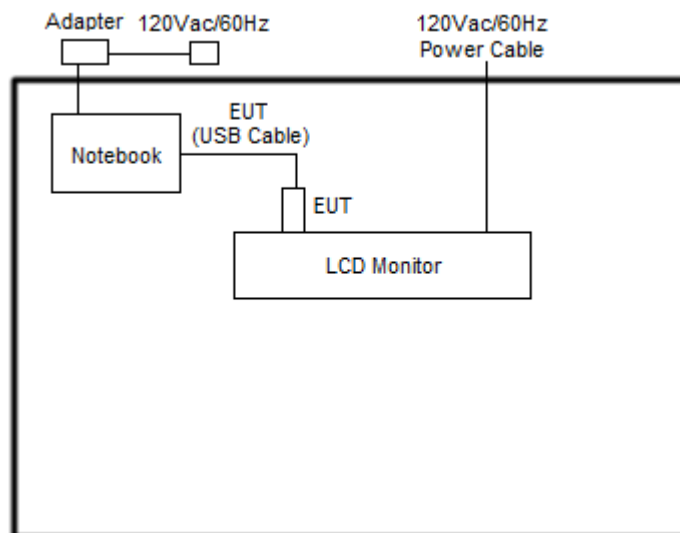
Final test modes are considering the modulation and worse data rates as below table.

<Co-Location>

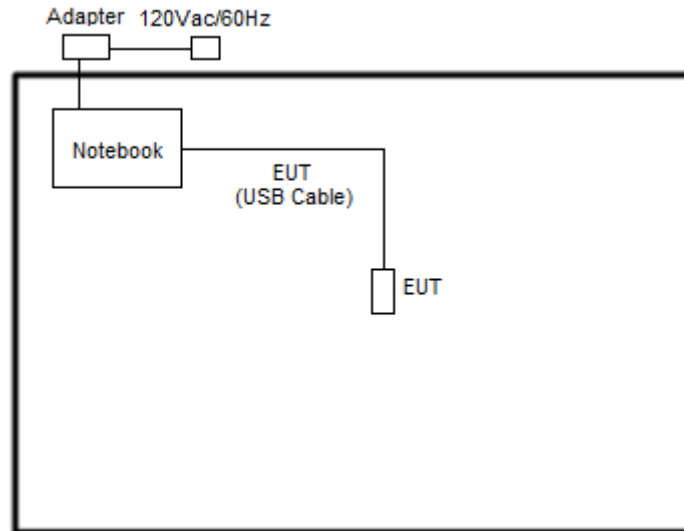
Modulation	Data Rate
Bluetooth - LE + 2.4GHz 802.11b for Ant. 1	1Mbps + 1Mbps
Bluetooth - LE + 2.4GHz 802.11b for Ant. 1	1Mbps + 1Mbps
Bluetooth - LE + 2.4GHz 802.11b for Ant. 1	1Mbps + 1Mbps
Bluetooth - LE + 2.4GHz 802.11g for Ant. 1	1Mbps + 6Mbps
Bluetooth - LE + 2.4GHz 802.11g for Ant. 1	1Mbps + 6Mbps
Bluetooth - LE + 5GHz 802.11a for MIMO Ant. 0+1	1Mbps + 6Mbps

2.3 Connection Diagram of Test System

<EUT without HDMI Extender>



<X Plane>



2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Notebook	DELL	P79G	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
2.	LCD Monitor	DELL	P2715Qt	FCC DoC	Shielded, 1.6 m	Unshielded, 1.8 m

2.5 EUT Operation Test Setup

The RF test items, utility “Compliance v1.0.0.71” was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

3 Test Result

3.1 Unwanted Emissions Measurement

This section is to measure unwanted emissions through radiated measurement for band edge spurious emissions and out of band emissions measurement.

3.1.1 Limit of Unwanted Emissions

- (1) Unwanted spurious emissions fallen in restricted bands shall comply with the general field strength limits as below table:

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
Above 960	500	3

Note: The following formula is used to convert the EIRP to field strength.

$$E = \frac{1000000\sqrt{30P}}{3} \mu\text{V/m, where P is the eirp (Watts)}$$

EIRP (dBm)	Field Strength at 3m (dBμV/m)
- 27	68.3

- (2) KDB789033 D02 v02r01 G)2)c)

- (i) Sections 15.407(b)(1-3) specifies the unwanted emissions limit for the U-NII-1 and U-NII-2 bands. As specified, emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz.
- (ii) Section 15.407(b)(4) specifies the unwanted emissions limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). The emission limits are based on the use of a peak detector.

3.1.2 Measuring Instruments

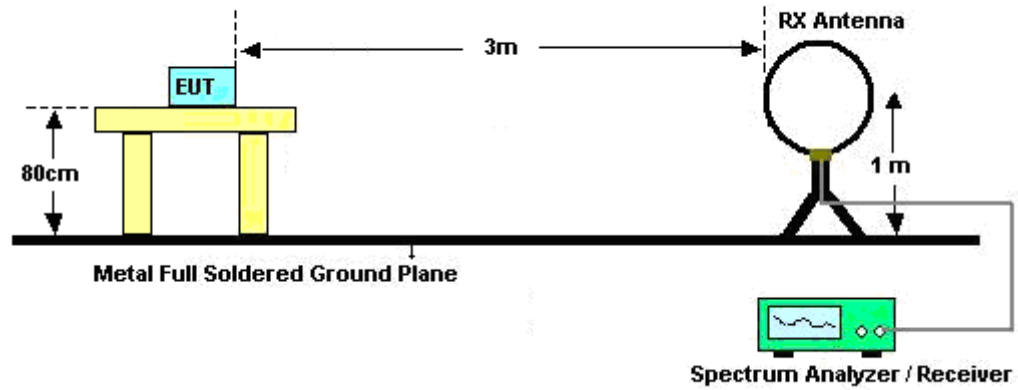
See list of measuring equipment of this test report.

3.1.3 Test Procedures

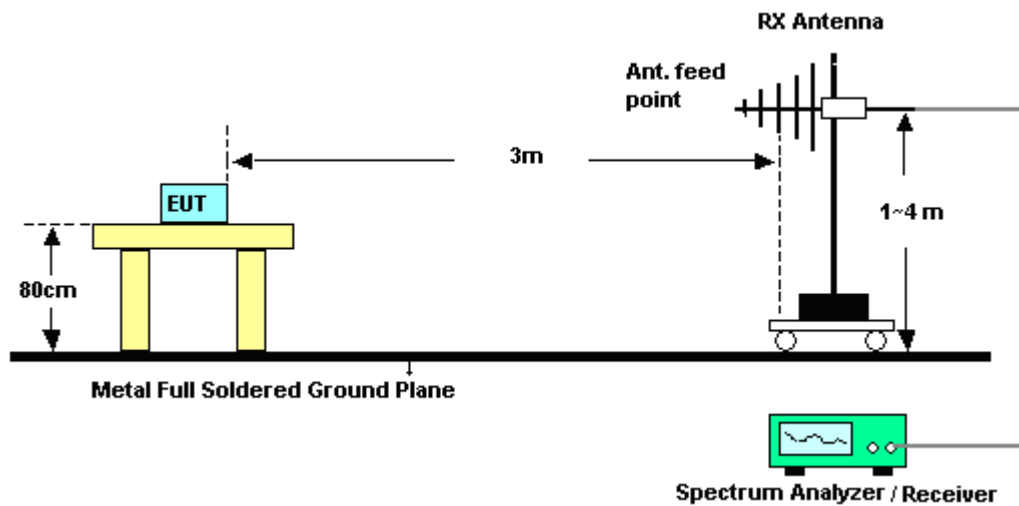
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
Section G) Unwanted emissions measurement.
(1) Procedure for Unwanted Emissions Measurements Below 1000MHz
 - RBW = 120 kHz
 - VBW = 300 kHz
 - Detector = Peak
 - Trace mode = max hold
(2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz
 - RBW = 1 MHz
 - VBW $\geq$ 3 MHz
 - Detector = Peak
 - Sweep time = auto
 - Trace mode = max hold
(3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz
 - RBW = 1 MHz
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - VBW $\geq$ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

3.1.4 Test Setup

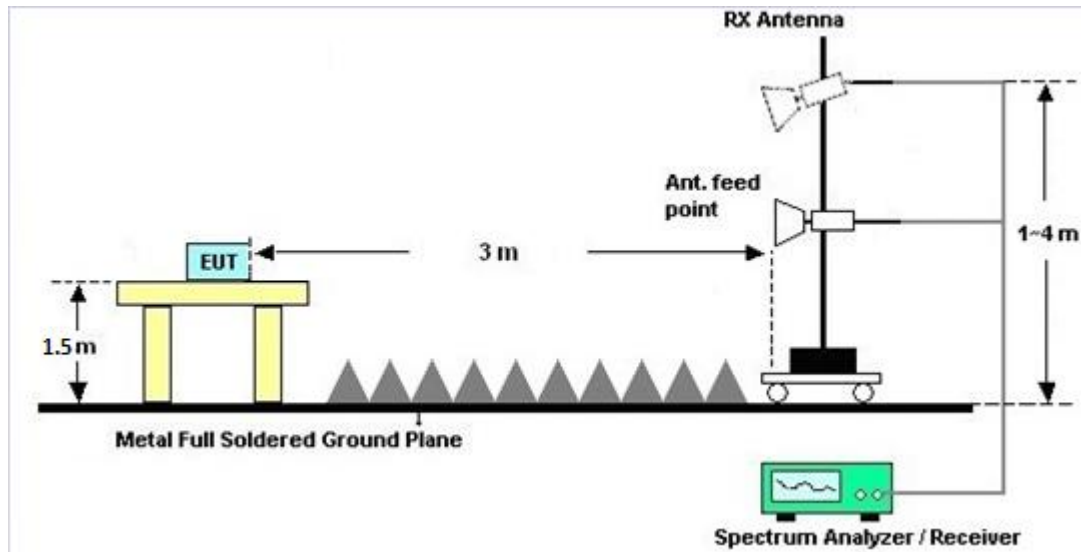
For radiated emissions below 30MHz



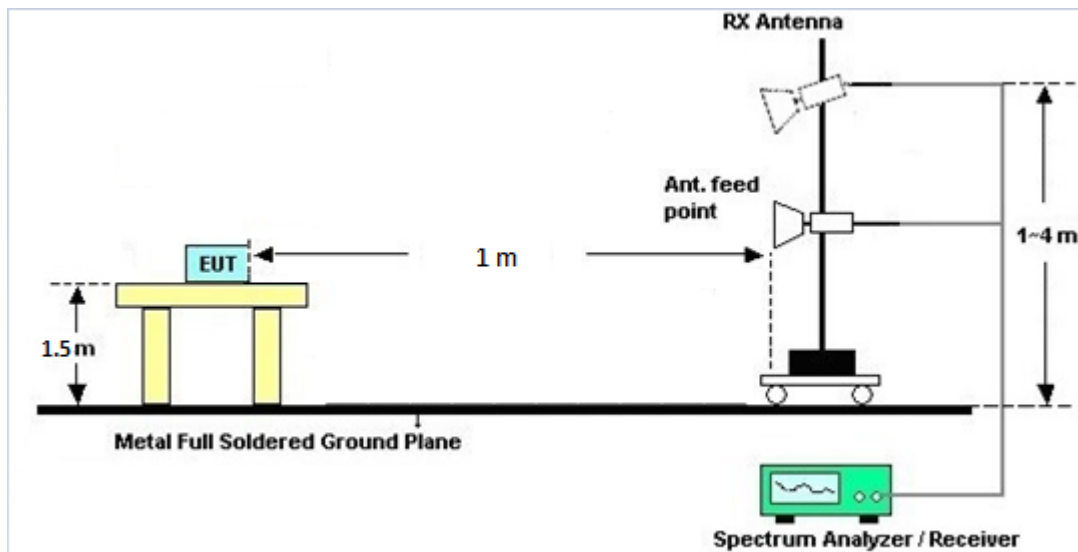
For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



For radiated emissions above 18GHz



**3.1.5 Test Results of Radiated Spurious Emissions (9 kHz ~ 30 MHz)**

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.

3.1.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix A and B.

3.1.7 Duty Cycle

Please refer to Appendix C.

3.1.8 Test Result of Radiated Spurious Emissions (30MHz ~ 10th Harmonic)

Please refer to Appendix A and B.



3.2 Antenna Requirements

3.2.1 Standard Applicable

If transmitting antenna directional gain is greater than 6 dBi, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.2.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.2.3 Antenna Gain

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D 01N-06	35419 & 03	30MHz~1GHz	Apr. 30, 2019	Apr. 12, 2020 ~ Apr. 28, 2020	Apr. 29, 2020	Radiation (03CH07-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D 01N-06	35419 & 03	30MHz~1GHz	Apr. 29, 2020	Apr. 29, 2020 ~ June. 10, 2020	Apr. 28, 2021	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Dec. 06, 2019	Apr. 12, 2020 ~ Jun. 10, 2020	Dec. 05, 2020	Radiation (03CH07-HY)
EMI Test Receiver	Agilent	N9038A(M XE)	MY53290053	20Hz~26.5GHz	Jan. 18, 2020	Apr. 12, 2020 ~ Jun. 10, 2020	Jan. 17, 2021	Radiation (03CH07-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Dec. 26, 2019	Apr. 12, 2020 ~ Jun. 10, 2020	Dec. 25, 2020	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-0 0101800-3 0-10P	1590075	1GHz~18GHz	Apr. 24, 2019	Apr. 12, 2020 ~ Apr. 22, 2020	Apr. 23, 2020	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-0 0101800-3 0-10P	1590075	1GHz~18GHz	Apr. 23, 2020	Apr. 23, 2020 ~ Jun. 10, 2020	Apr. 22, 2021	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz~1GHz	May 20, 2019	Apr. 12, 2020 ~ May 18, 2020	May 19, 2020	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz~1GHz	May 19, 2020	May 19, 2020 ~ Jun. 10, 2020	May 18, 2021	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1GHz~26.5GHz	Nov. 01, 2019	Apr. 12, 2020 ~ Jun. 10, 2020	Oct. 31, 2020	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLE X 102	MY2858/2,801 606/2	18GHz~40GHz	Feb. 25, 2020	Apr. 12, 2020 ~ Jun. 10, 2020	Feb. 24, 2021	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLE X 104	MY24971/4, MY28655/4	9kHz~30MHz	Feb. 25, 2020	Apr. 12, 2020 ~ Jun. 10, 2020	Feb. 24, 2021	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLE X 104	MY28655/4, MY24971/4, MY15682/4	30MHz~1GHz	Feb. 25, 2020	Apr. 12, 2020 ~ Jun. 10, 2020	Feb. 24, 2021	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLE X 104	MY28655/4, MY24971/4, MY15682/4	1GHz~18GHz	Feb. 25, 2020	Apr. 12, 2020 ~ Jun. 10, 2020	Feb. 24, 2021	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLE X 102	801606/2	9KHz ~ 40GHz	N/A	Apr. 12, 2020 ~ Jun. 10, 2020	N/A	Radiation (03CH07-HY)
Controller	ChainTek	Chaintek 3000	N/A	Control Turn table	N/A	Apr. 12, 2020 ~ Jun. 10, 2020	N/A	Radiation (03CH07-HY)
Controller	Max-Full	MF7802	MF780208368	Control Ant Mast	N/A	Apr. 12, 2020 ~ Jun. 10, 2020	N/A	Radiation (03CH07-HY)



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Antenna Mast	Max-Full	MFA520BS	N/A	1m~4m	N/A	Apr. 12, 2020 ~ Jun. 10, 2020	N/A	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	Apr. 12, 2020 ~ Jun. 10, 2020	N/A	Radiation (03CH07-HY)
USB Data Logger	TECPEL	TR-32	HE17XB2495	N/A	N/A	Apr. 12, 2020 ~ Jun. 10, 2020	N/A	Radiation (03CH07-HY)
Spectrum Analyzer	Keysight	N9010A	MY54200486	10Hz~44GHz	Oct. 28, 2019	Apr. 12, 2020 ~ Jun. 10, 2020	Oct. 27, 2020	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	BBHA9170584	18GHz~40GHz	Dec. 10, 2019	Apr. 12, 2020 ~ Jun. 10, 2020	Dec. 09, 2020	Radiation (03CH07-HY)
Software	Audix	E3 6.2009-8-2 4	N/A	N/A	N/A	Apr. 12, 2020 ~ Jun. 10, 2020	N/A	Radiation (03CH07-HY)
Preamplifier	EMEC	EM18G40 G	060715	18GHz~40GHz	Dec. 13, 2019	Apr. 12, 2020 ~ Jun. 10, 2020	Dec. 12, 2020	Radiation (03CH07-HY)



5 Uncertainty of Evaluation

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.6
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.2
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Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.3
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Appendix A. Radiated Spurious Emission

Test Engineer :	Jesse Wang, Stan Hsieh and Ken Wu	Temperature :	21~23°C
		Relative Humidity :	55~57%

<EUT without HDMI Extender Cable>

2.4GHz 2400~2483.5MHz (Band Edge @ 3m)

Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
Simultaneously		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
Mode 1 Ant 1 11b Ch05 + Ant 0 BLE 1M Ch39		2384.34	56.8	-17.2	74	42.23	31.83	17.97	35.23	192	36	P	H
		2383.92	49.3	-4.7	54	34.73	31.83	17.97	35.23	192	36	A	H
	*	2432	107.17	-	-	92.45	31.93	18.05	35.26	192	36	P	H
	*	2432	104.22	-	-	89.5	31.93	18.05	35.26	192	36	A	H
		2487.68	53.58	-20.42	74	38.64	32.1	18.13	35.29	192	36	P	H
		2483.5	43.94	-10.06	54	29.04	32.07	18.12	35.29	192	36	A	H
		2384.34	56.57	-17.43	74	42	31.83	17.97	35.23	220	299	P	V
		2384.06	49.77	-4.23	54	35.2	31.83	17.97	35.23	220	299	A	V
	*	2432	108.56	-	-	93.84	31.93	18.05	35.26	220	299	P	V
	*	2432	105.42	-	-	90.7	31.93	18.05	35.26	220	299	A	V
		2494.47	54.9	-19.1	74	39.96	32.1	18.14	35.3	220	299	P	V
		2483.5	45.93	-8.07	54	31.03	32.07	18.12	35.29	220	299	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



BLE (Band Edge @ 3m)

	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
Simultaneously		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
Mode 1 Ant 1 11b Ch05 + Ant 0 BLE 1M Ch39		2384.29	56.53	-17.47	74	41.96	31.83	17.97	35.23	333	318	P	H
		2384.12	51.69	-2.31	54	37.12	31.83	17.97	35.23	333	318	A	H
	*	2480	100.37	-	-	85.47	32.07	18.12	35.29	333	318	P	H
	*	2480	99.88	-	-	84.98	32.07	18.12	35.29	333	318	A	H
		2483.72	53.79	-20.21	74	38.89	32.07	18.12	35.29	333	318	P	H
		2483.544	45.46	-8.54	54	30.56	32.07	18.12	35.29	333	318	A	H
		2383.95	56.64	-17.36	74	42.07	31.83	17.97	35.23	220	305	P	V
		2383.95	51.73	-2.27	54	37.16	31.83	17.97	35.23	220	305	A	V
	*	2480	101.56	-	-	86.66	32.07	18.12	35.29	220	305	P	V
	*	2480	100.97	-	-	86.07	32.07	18.12	35.29	220	305	A	V
		2483.72	54.28	-19.72	74	39.38	32.07	18.12	35.29	220	305	P	V
		2483.544	47.15	-6.85	54	32.25	32.07	18.12	35.29	220	305	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

**2.4GHz 2400~2483.5MHz (Harmonic @ 3m)**

Ant. Simultaneously	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
Mode 1 Ant 1 11b Ch05 + Ant 0 BLE 1M Ch39		2384	58.26	-15.74	74	43.69	31.83	17.97	35.23	100	360	P	H
		2384	53.25	-0.75	54	38.68	31.83	17.97	35.23	100	360	A	H
		2384	57.61	-16.39	74	43.04	31.83	17.97	35.23	231	301	P	V
		2384	53.14	-0.86	54	38.57	31.83	17.97	35.23	231	301	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz (Band Edge @ 3m)

	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
Simultaneously		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
Mode 2 Ant 1 11b Ch06 + Ant 0 BLE 1M Ch07		2369.67	53.99	-20.01	74	39.43	31.83	17.95	35.22	194	34	P	H
		2390	44.13	-9.87	54	29.58	31.8	17.98	35.23	194	34	A	H
	*	2437	107.35	-	-	92.56	32	18.05	35.26	194	34	P	H
	*	2437	104.2	-	-	89.41	32	18.05	35.26	194	34	A	H
		2491.464	54.55	-19.45	74	39.61	32.1	18.13	35.29	194	34	P	H
		2487.504	43.07	-10.93	54	28.13	32.1	18.13	35.29	194	34	A	H
		2328.87	53.39	-20.61	74	38.85	31.87	17.87	35.2	196	298	P	V
		2390	43.56	-10.44	54	29.01	31.8	17.98	35.23	196	298	A	V
	*	2437	108.78	-	-	93.99	32	18.05	35.26	196	298	P	V
	*	2437	105.64	-	-	90.85	32	18.05	35.26	196	298	A	V
		2486.712	53.94	-20.06	74	39.03	32.07	18.13	35.29	196	298	P	V
		2491.64	43.31	-10.69	54	28.37	32.1	18.13	35.29	196	298	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



BLE (Band Edge @ 3m)

	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
Simultaneously		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
Mode 2 Ant 1 11b Ch06 + Ant 0 BLE 1M Ch07		2390	54.96	-19.04	74	40.41	31.8	17.98	35.23	321	318	P	H
		2390	48.4	-5.6	54	33.85	31.8	17.98	35.23	321	318	A	H
	*	2416	101.99	-	-	87.35	31.87	18.02	35.25	321	318	P	H
	*	2416	101.28	-	-	86.64	31.87	18.02	35.25	321	318	A	H
		2488.032	53.76	-20.24	74	38.82	32.1	18.13	35.29	321	318	P	H
		2490.408	44.79	-9.21	54	29.85	32.1	18.13	35.29	321	318	A	H
		2389.05	54.22	-19.78	74	39.67	31.8	17.98	35.23	222	323	P	V
		2390	47.03	-6.97	54	32.48	31.8	17.98	35.23	222	323	A	V
	*	2416	99.58	-	-	84.94	31.87	18.02	35.25	222	323	P	V
	*	2416	99.01	-	-	84.37	31.87	18.02	35.25	222	323	A	V
		2486.096	53.72	-20.28	74	38.82	32.07	18.12	35.29	222	323	P	V
		2494.896	45.09	-8.91	54	30.15	32.1	18.14	35.3	222	323	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz (Harmonic @ 3m)

Ant. Simultaneously	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
Mode 2 Ant 1 11b Ch06 + Ant 0 BLE 1M Ch07		2389.905	56.06	-17.94	74	41.51	31.8	17.98	35.23	343	324	P	H
		2390	48.73	-5.27	54	34.18	31.8	17.98	35.23	343	324	A	H
		2389.905	53.76	-20.24	74	39.21	31.8	17.98	35.23	239	321	P	V
		2390	47.3	-6.7	54	32.75	31.8	17.98	35.23	239	321	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz (Harmonic @ 3m)

Ant. Simultaneously	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
Mode 3 Ant 1 11b Ch06 + Ant 0 BLE 1M Ch38		4874	49.55	-24.45	74	62.15	34.1	12.06	58.76	100	0	P	H
		4956	40.03	-33.97	74	52.18	34.23	12.18	58.56	100	0	P	H
		7311	51.31	-22.69	74	58.6	35.6	14.58	57.47	386	339	P	H
		7311	46.65	-7.35	54	53.94	35.6	14.58	57.47	386	339	A	H
		7434	40.96	-33.04	74	48.35	35.53	14.67	57.59	100	0	P	H
		4874	47.92	-26.08	74	60.52	34.1	12.06	58.76	100	0	P	V
		4956	41.28	-32.72	74	53.43	34.23	12.18	58.56	100	0	P	V
		7311	50.83	-23.17	74	58.12	35.6	14.58	57.47	298	290	P	V
		7311	45.5	-8.5	54	52.79	35.6	14.58	57.47	298	290	A	V
		7434	41.06	-32.94	74	48.45	35.53	14.67	57.59	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz (Band Edge @ 3m)

	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
Simultaneously		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
Mode 5 Ant 1 11g Ch05 + Ant 0 BLE 1M Ch39		2381.91	58.37	-15.63	74	43.8	31.83	7.97	35.23	195	40	P	H
		2386.33	47.13	-6.87	54	32.58	31.8	7.98	35.23	195	40	A	H
	*	2432	110.52	-	-	95.8	31.93	8.05	35.26	195	40	P	H
	*	2432	103.19	-	-	88.47	31.93	8.05	35.26	195	40	A	H
		2484.952	56.02	-17.98	74	41.12	32.07	8.12	35.29	195	40	P	H
		2483.544	45.88	-8.12	54	30.98	32.07	8.12	35.29	195	40	A	H
		2379.19	58.41	-15.59	74	43.85	31.83	7.96	35.23	195	301	P	V
		2383.44	46.94	-7.06	54	32.37	31.83	7.97	35.23	195	301	A	V
	*	2432	112.39	-	-	97.67	31.93	8.05	35.26	195	301	P	V
	*	2432	104.97	-	-	90.25	31.93	8.05	35.26	195	301	A	V
		2485.656	61.94	-12.06	74	47.04	32.07	8.12	35.29	195	301	P	V
		2483.544	49.09	-4.91	54	34.19	32.07	8.12	35.29	195	301	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



BLE (Band Edge @ 3m)

	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
Simultaneously		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
Mode 5 Ant 1 11g Ch05 + Ant 0 BLE 1M Ch39		2337.03	55.42	-18.58	74	40.84	31.9	7.89	35.2	185	322	P	H
		2388.37	47.3	-6.7	54	32.75	31.8	7.98	35.23	185	322	A	H
	*	2480	101.53	-	-	86.63	32.07	8.12	35.29	185	322	P	H
	*	2480	100.91	-	-	86.01	32.07	8.12	35.29	185	322	A	H
		2483.808	57.03	-16.97	74	42.13	32.07	8.12	35.29	185	322	P	H
		2484.336	48.6	-5.4	54	33.7	32.07	8.12	35.29	185	322	A	H
		2390	58.02	-15.98	74	43.47	31.8	7.98	35.23	195	307	P	V
		2380.55	49.54	-4.46	54	34.97	31.83	7.97	35.23	195	307	A	V
	*	2480	103.26	-	-	88.36	32.07	8.12	35.29	195	307	P	V
	*	2480	102.79	-	-	87.89	32.07	8.12	35.29	195	307	A	V
		2486.272	62.35	-11.65	74	47.44	32.07	8.13	35.29	195	307	P	V
		2483.984	53.11	-0.89	54	38.21	32.07	8.12	35.29	195	307	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

**2.4GHz 2400~2483.5MHz (Harmonic @ 3m)**

Ant. Simultaneously	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
Mode 5 Ant 1 11g Ch05 + Ant 0 BLE 1M Ch39		2384	62.38	-11.62	74	47.81	31.83	7.97	35.23	306	24	P	H
		2384	50.97	-3.03	54	36.4	31.83	7.97	35.23	306	24	A	H
		2384	61.17	-12.83	74	46.6	31.83	7.97	35.23	225	300	P	V
		2384	50.37	-3.63	54	35.8	31.83	7.97	35.23	225	300	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz (Band Edge @ 3m)

	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
Simultaneously		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
Mode 6 Ant 1 11g Ch06 + Ant 0 BLE 1M Ch07		2390	57.55	-16.45	74	43	31.8	7.98	35.23	196	41	P	H
		2390	47.32	-6.68	54	32.77	31.8	7.98	35.23	196	41	A	H
	*	2437	110.81	-	-	96.02	32	8.05	35.26	196	41	P	H
	*	2437	103.2	-	-	88.41	32	8.05	35.26	196	41	A	H
		2484.952	56.07	-17.93	74	41.17	32.07	8.12	35.29	196	41	P	H
		2484.072	44.92	-9.08	54	30.02	32.07	8.12	35.29	196	41	A	H
		2390	59.16	-14.84	74	44.61	31.8	7.98	35.23	225	301	P	V
		2389.9	48.35	-5.65	54	33.8	31.8	7.98	35.23	225	301	A	V
	*	2437	113.1	-	-	98.31	32	8.05	35.26	225	301	P	V
	*	2437	105.24	-	-	90.45	32	8.05	35.26	225	301	A	V
		2486.624	55.93	-18.07	74	41.02	32.07	8.13	35.29	225	301	P	V
		2483.896	45.92	-8.08	54	31.02	32.07	8.12	35.29	225	301	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



BLE (Band Edge @ 3m)

	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
Simultaneously		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
Mode 6 Ant 1 11g Ch06 + Ant 0 BLE 1M Ch07		2389.73	59.7	-14.3	74	45.15	31.8	7.98	35.23	352	322	P	H
		2389.73	52.15	-1.85	54	37.6	31.8	7.98	35.23	352	322	A	H
	*	2416	102.73	-	-	88.09	31.87	8.02	35.25	352	322	P	H
	*	2416	102.12	-	-	87.48	31.87	8.02	35.25	352	322	A	H
		2498.68	55.96	-18.04	74	41.02	32.1	8.14	35.3	352	322	P	H
		2486.8	46.4	-7.6	54	31.49	32.07	8.13	35.29	352	322	A	H
		2389.9	59.51	-14.49	74	44.96	31.8	7.98	35.23	213	316	P	V
		2389.73	52.19	-1.81	54	37.64	31.8	7.98	35.23	213	316	A	V
	*	2416	101.97	-	-	87.33	31.87	8.02	35.25	213	316	P	V
	*	2416	101.36	-	-	86.72	31.87	8.02	35.25	213	316	A	V
		2485.04	56.35	-17.65	74	41.45	32.07	8.12	35.29	213	316	P	V
		2483.544	47.59	-6.41	54	32.69	32.07	8.12	35.29	213	316	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

**2.4GHz 2400~2483.5MHz (Harmonic @ 3m)**

Ant. Simultaneously	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
Mode 6 Ant 1 11g Ch06 + Ant 0 BLE 1M Ch07		2390	60.65	-13.35	74	46.1	31.8	7.98	35.23	364	328	P	H
		2390	53.49	-0.51	54	38.94	31.8	7.98	35.23	364	328	A	H
		2390	58.76	-15.24	74	44.21	31.8	7.98	35.23	100	341	P	V
		2390	51.92	-2.08	54	37.37	31.8	7.98	35.23	100	341	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Emission below 1GHz

2.4GHz 2400~2483.5MHz (LF)

	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
Simultaneously		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
Mode 3 Ant 1 11b Ch06 + Ant 0 BLE 1M Ch38		206.85	35.79	-7.71	43.5	48.23	15.07	2.42	29.93	100	0	P	H
		216.3	35.06	-10.94	46	47.5	15.02	2.47	29.93	-	-	P	H
		236.82	34.82	-11.18	46	45.34	16.81	2.59	29.92	-	-	P	H
		718.6	31.06	-14.94	46	29.42	26.72	4.55	29.63	-	-	P	H
		902	33.01	-12.99	46	28.02	28.84	5.13	28.98	-	-	P	H
		948.9	33.2	-12.8	46	26.53	30.12	5.26	28.71	-	-	P	H
		31.08	33	-7	40	37.94	24.12	0.95	30.01	-	-	P	V
		41.61	32.6	-7.4	40	43.07	18.44	1.09	30	-	-	P	V
		63.48	33.16	-6.84	40	49.97	11.83	1.34	29.98	100	0	P	V
		717.9	30.59	-15.41	46	29.01	26.67	4.54	29.63	-	-	P	V
		873.3	31.46	-14.54	46	26.69	28.85	5.03	29.11	-	-	P	V
		936.3	33.33	-12.67	46	27.45	29.44	5.22	28.78	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

**Emission above 18GHz****2.4GHz 2400~2483.5MHz (SHF)**

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
Simultaneously		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
Mode 3													
Ant 1		24167	37.08	-36.92	74	44.09	39.76	6.59	53.36	150	0	P	H
11b Ch06													
+													
Ant 0		24195	37.29	-36.71	74	44.29	39.78	6.59	53.38	150	0	P	V
BLE 1M Ch38													
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



<X Plane>

2.4GHz 2400~2483.5MHz and Band 2 5250~5350MHz (Harmonic @ 3m)

Ant. Simultaneously	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
Mode 4 Ant 0+1 11a Ch60 + Ant 0 BLE 1M Ch38		4956	49.86	-24.14	74	39.72	34.23	11.37	35.46	100	0	P	H
		7434	42.56	-31.44	74	49.7	35.53	14.92	57.59	100	0	P	H
		10600	46.8	-27.2	74	50.32	37.6	17.76	58.88	100	0	P	H
		15900	47.58	-26.42	74	41.61	40.8	21.89	56.72	100	0	P	H
		4956	49.74	-24.26	74	39.6	34.23	11.37	35.46	100	0	P	V
		7434	42.03	-31.97	74	49.17	35.53	14.92	57.59	100	0	P	V
		10600	44.11	-29.89	74	47.63	37.6	17.76	58.88	100	0	P	V
		15900	47.26	-26.74	74	41.29	40.8	21.89	56.72	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Emission below 1GHz

2.4GHz 2400~2483.5MHz and Band 2 5250~5350MHz (LF)

Ant. Simultaneously	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
Mode 4 Ant 0+1 11a Ch60 + Ant 0 BLE 1M Ch38		55.38	33.45	-6.55	40	49.92	12.27	1.25	29.99	100	0	P	H
		214.68	35.44	-8.06	43.5	47.94	14.97	2.46	29.93	-	-	P	H
		237.63	37.29	-8.71	46	47.71	16.91	2.59	29.92	-	-	P	H
		719.3	32.61	-13.39	46	30.93	26.76	4.55	29.63	-	-	P	H
		855.1	31.17	-14.83	46	26.53	28.85	4.98	29.19	-	-	P	H
		951	33.09	-12.91	46	26.26	30.26	5.26	28.69	-	-	P	H
		31.08	32.4	-7.6	40	37.34	24.12	0.95	30.01	-	-	P	V
		59.43	31.36	-8.64	40	48.12	11.94	1.29	29.99	-	-	P	V
		63.48	33.39	-6.61	40	50.2	11.83	1.34	29.98	100	0	P	V
		724.2	30.99	-15.01	46	29.15	26.9	4.56	29.62	-	-	P	V
		854.4	31.63	-14.37	46	27.03	28.83	4.97	29.2	-	-	P	V
		951	33.08	-12.92	46	26.25	30.26	5.26	28.69	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

**Emission above 18GHz****2.4GHz 2400~2483.5MHz and Band 2 5250~5350MHz (SHF)**

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
Simultaneously		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
Mode 4													
Ant 0+1		39780	44.46	-29.54	74	42.99	44.1	12.02	54.65	150	0	P	H
11a Ch60													
+													
Ant 0		39824	44.65	-29.35	74	43.09	44.1	12.04	54.58	150	0	P	V
BLE 1M Ch38													
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



Note symbol

*	Fundamental Frequency which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is over limit line.
P/A	Peak or Average
H/V	Horizontal or Vertical

A calculation example for radiated spurious emission is shown as below:

	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
Simultaneously		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
CH 01													
2412MHz		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)
2. Level(dBμV/m) = Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
3. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)
 = Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
 = 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)
 = 55.45 (dBμV/m)
2. Over Limit(dB)
 = Level(dBμV/m) – Limit Line(dBμV/m)
 = 55.45(dBμV/m) – 74(dBμV/m)
 = -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)
 = Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
 = 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)
 = 43.54 (dBμV/m)
2. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)
 = 43.54(dBμV/m) – 54(dBμV/m)
 = -10.46(dB)

Both peak and average measured complies with the limit line, so test result is “PASS”.



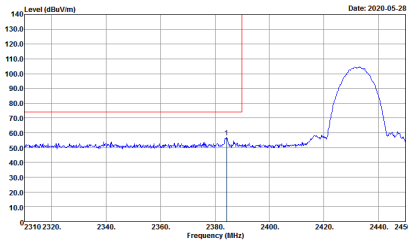
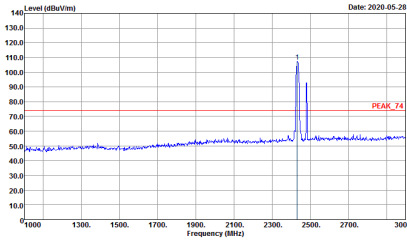
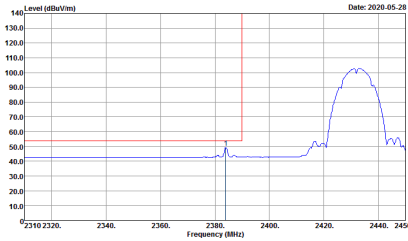
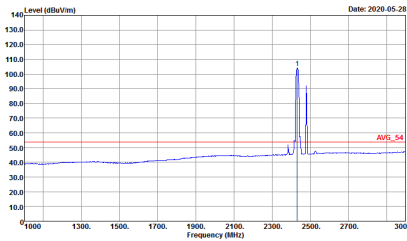
Appendix B. Radiated Spurious Emission

Test Engineer :	Jesse Wang, Stan Hsieh and Ken Wu	Temperature :	21~23°C
		Relative Humidity :	55~57%

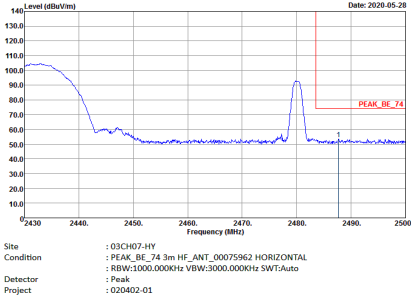
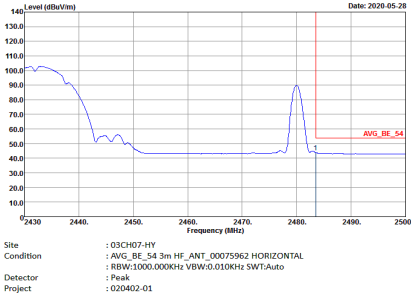
Note symbol

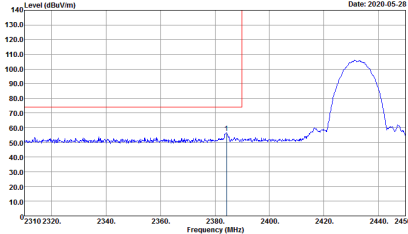
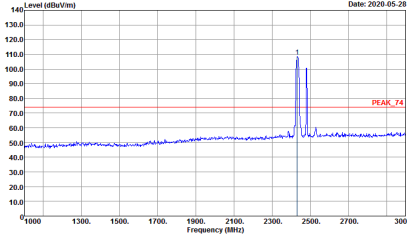
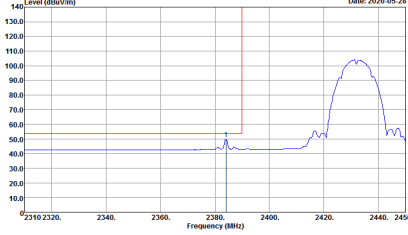
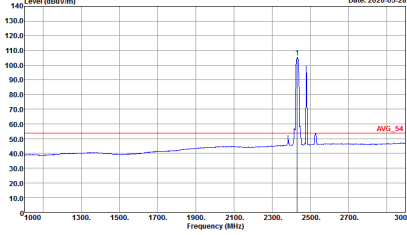
-L	Low channel location
-R	High channel location

<EUT without HDMI Extender Cable>
2.4GHz 2400~2483.5MHz (Band Edge @ 3m)

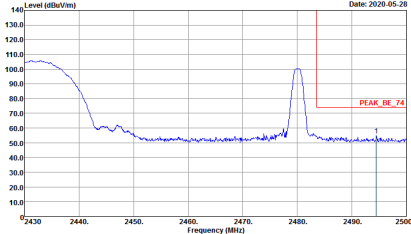
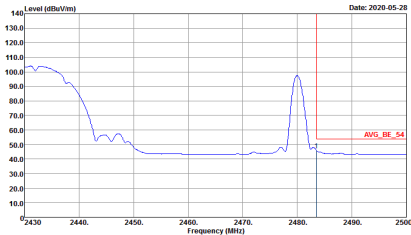
ANT	Mode 1: Ant 1 11b Ch05 + Ant 0 BLE 1M Ch39 - L	
Simultaneously	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 020402-01	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 020402-01
	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 020402-01	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 020402-01
Avg.		



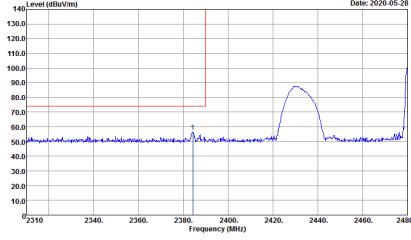
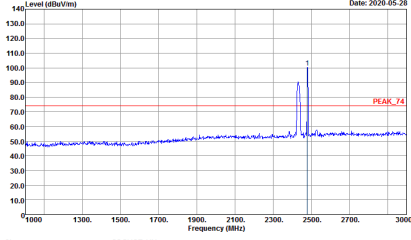
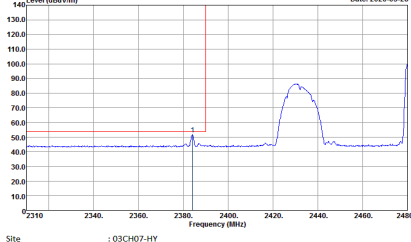
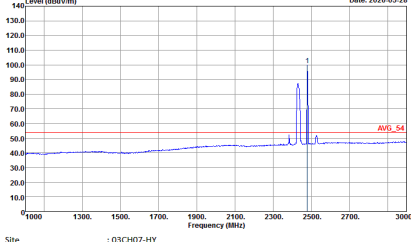
ANT	Mode 1: Ant 1 11b Ch05 + Ant 0 BLE 1M Ch39 - R	
Simultaneously	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

ANT	Mode 1: Ant 1 11b Ch05 + Ant 0 BLE 1M Ch39 - L	
Simultaneously	Vertical	Fundamental
Peak	 Date: 2020-05-28 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 020402-01	 Date: 2020-05-28 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 020402-01
Avg.	 Date: 2020-05-28 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto Detector : Peak Project : 020402-01	 Date: 2020-05-28 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto Detector : Peak Project : 020402-01

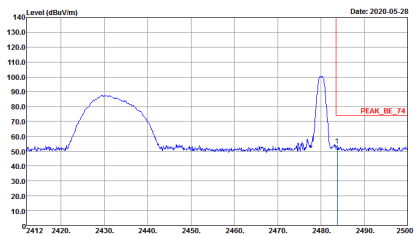
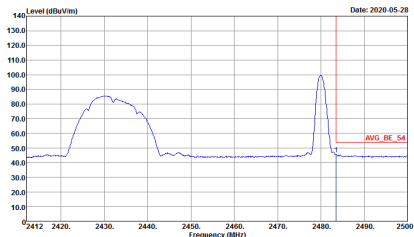


ANT		Mode 1: Ant 1 11b Ch05 + Ant 0 BLE 1M Ch39 - R	
Simultaneously	Vertical	Fundamental	
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 020402-01	Left blank	
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000kHz VBW:0.010kHz SWT:Auto Detector : Peak Project : 020402-01	Left blank	

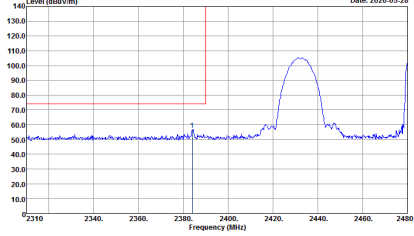
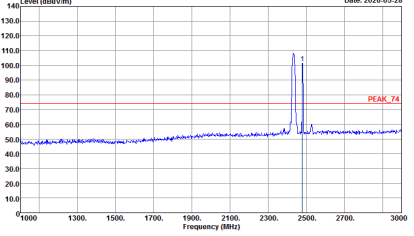
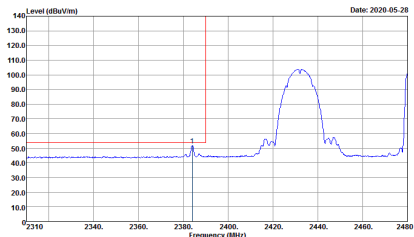
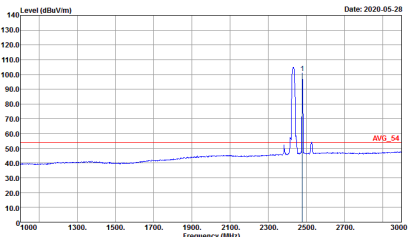
BLE (Band Edge @ 3m)

ANT	Mode 1: Ant 1 11b Ch05 + Ant 0 BLE 1M Ch39 - L	
Simultaneously	Horizontal	Fundamental
Peak	 Date: 2020-05-28 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 020402-01	 Date: 2020-05-28 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 020402-01
Avg.	 Date: 2020-05-28 Site : 03CH07-HY Condition : AVG_BE_S4 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Project : 020402-01	 Date: 2020-05-28 Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Project : 020402-01

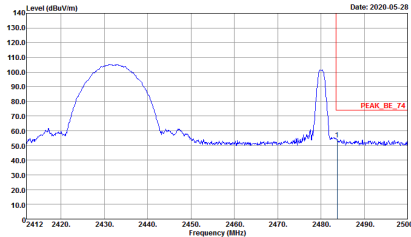
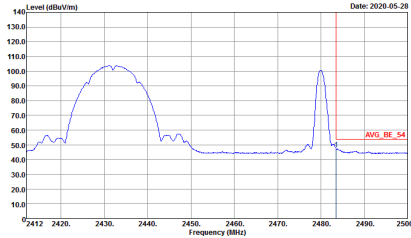


ANT	Mode 1: Ant 1 11b Ch05 + Ant 0 BLE 1M Ch39 - R	
Simultaneously	Horizontal	Fundamental
Peak	 Date: 2020-05-28 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 020402-01	Left blank
Avg.	 Date: 2020-05-28 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 020402-01	Left blank



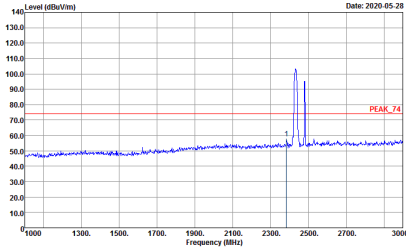
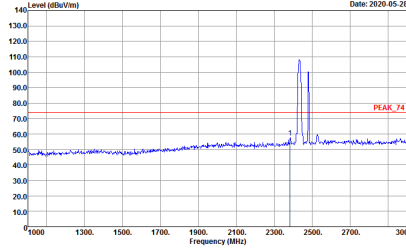
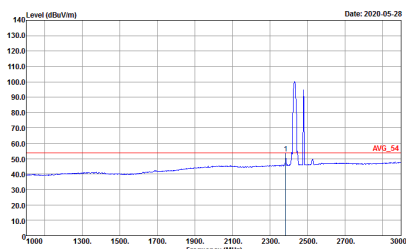
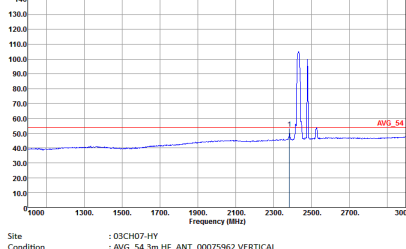
ANT	Mode 1: Ant 1 11b Ch05 + Ant 0 BLE 1M Ch39 - L	
Simultaneously	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 020402-01	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 020402-01
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000kHz VBW:3.000kHz SWT:Auto Detector : Peak Project : 020402-01	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000kHz VBW:3.000kHz SWT:Auto Detector : Peak Project : 020402-01



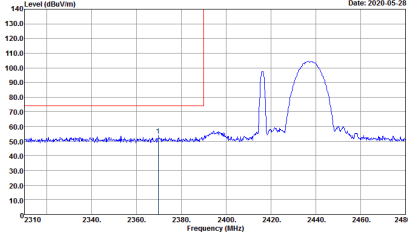
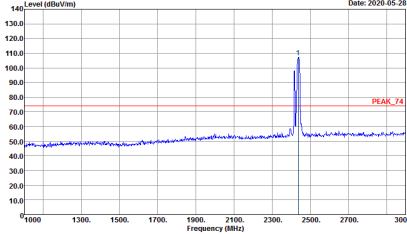
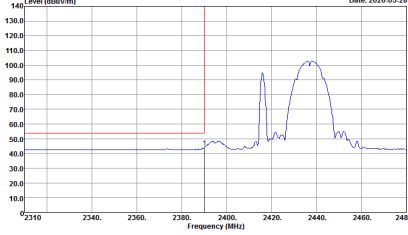
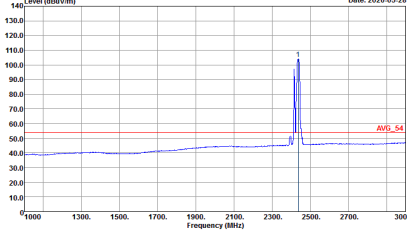
ANT	Mode 1: Ant 1 11b Ch05 + Ant 0 BLE 1M Ch39 - R	
Simultaneously	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : Peak : 020402-01	Left blank
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : Peak : 020402-01	Left blank



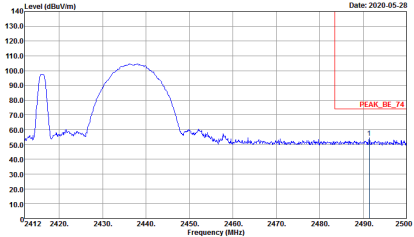
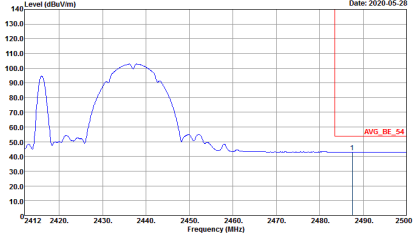
2.4GHz 2400~2483.5MHz (Harmonic @ 3m)

ANT	Mode 1: Ant 1 11b Ch05 + Ant 0 BLE 1M Ch39	
Simultaneously	Horizontal	Vertical
Peak	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Project : 020402-01	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Project : 020402-01
Avg.	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Project : Peak Project : 020402-01	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Project : Peak Project : 020402-01

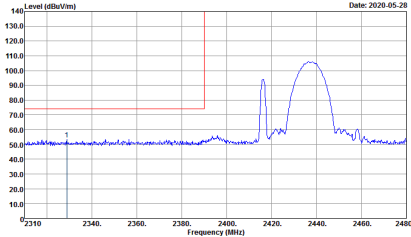
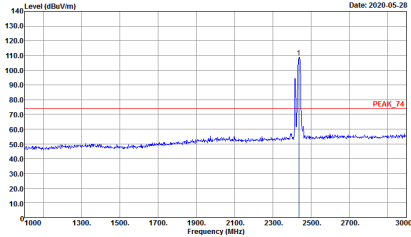
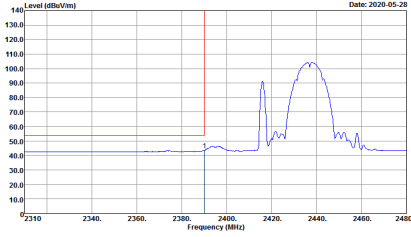
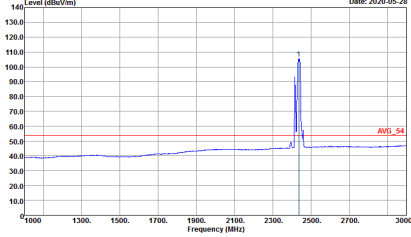
2.4GHz 2400~2483.5MHz (Band Edge @ 3m)

ANT	Mode 2: Ant 1 11b Ch06 + Ant 0 BLE 1M Ch07 - L	
Simultaneously	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:0.010kHz SWT:Auto Project : 020402-01	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:0.010kHz SWT:Auto Project : 020402-01

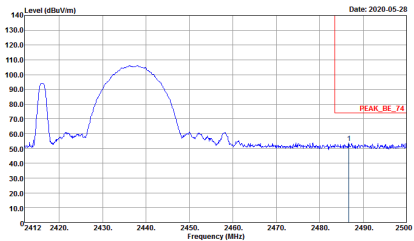
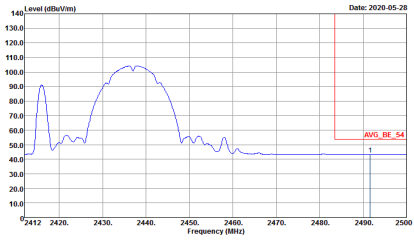


ANT	Mode 2: Ant 1 11b Ch06 + Ant 0 BLE 1M Ch07 - R	
Simultaneously	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 020402-01	Left blank
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL RBW:1000.000kHz VBW:0.010kHz SWT:Auto Detector : Peak Project : 020402-01	Left blank

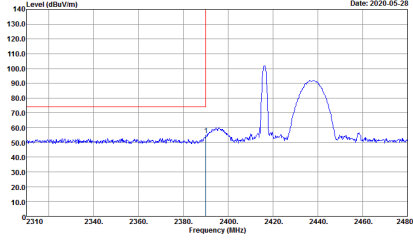
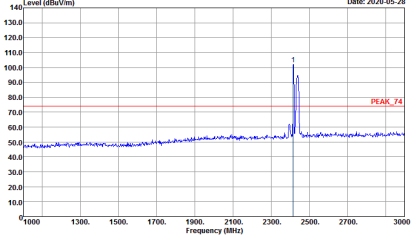
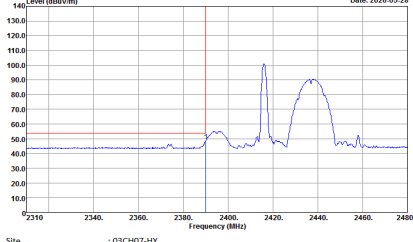
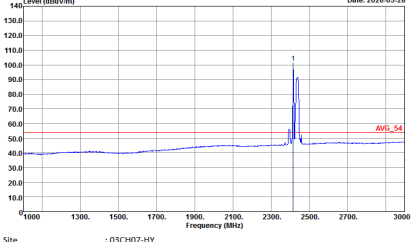


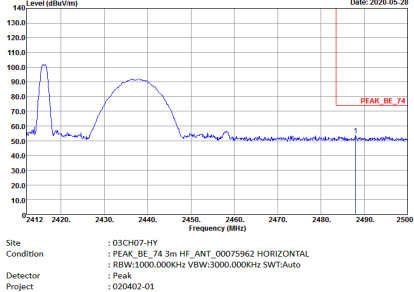
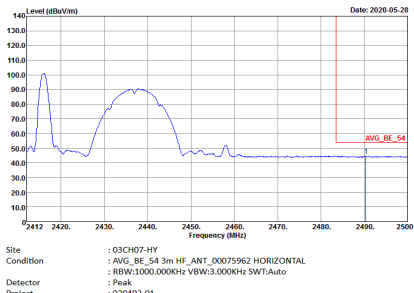
ANT	Mode 2: Ant 1 11b Ch06 + Ant 0 BLE 1M Ch07 - L	
Simultaneously	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 020402-01	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 020402-01
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000kHz VBW:0.010kHz SWT:Auto Detector : Peak Project : 020402-01	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000kHz VBW:0.010kHz SWT:Auto Detector : Peak Project : 020402-01

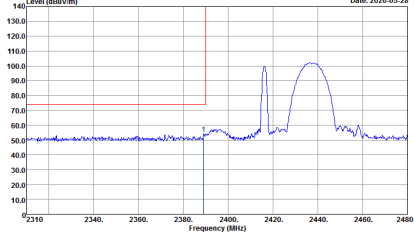
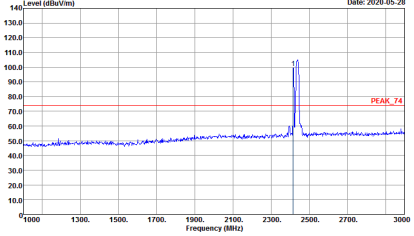
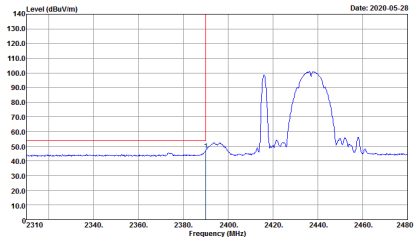
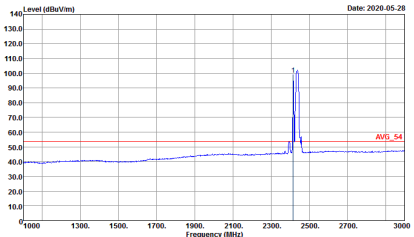


ANT	Mode 2: Ant 1 11b Ch06 + Ant 0 BLE 1M Ch07 - R	
Simultaneously	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_0007596Z VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 020402-01	Left blank
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_0007596Z VERTICAL RBW:1000.000kHz VBW:0.010kHz SWT:Auto Detector : Peak Project : 020402-01	Left blank

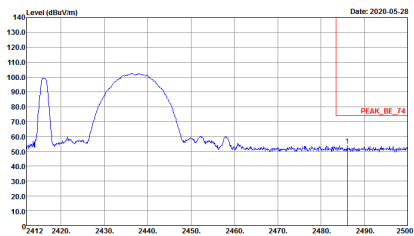
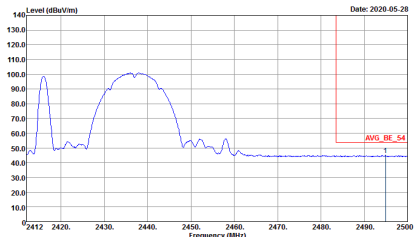
BLE (Band Edge @ 3m)

ANT	Mode 2: Ant 1 11b Ch06 + Ant 0 BLE 1M Ch07 - L	
Simultaneously	Horizontal	Fundamental
Peak	 Date: 2020-05-28 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak : 020402-01	 Date: 2020-05-28 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak : 020402-01
Avg.	 Date: 2020-05-28 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Project : Peak : 020402-01	 Date: 2020-05-28 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Project : Peak : 020402-01

ANT	Mode 2: Ant 1 11b Ch06 + Ant 0 BLE 2M Ch07 - R	
Simultaneously	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

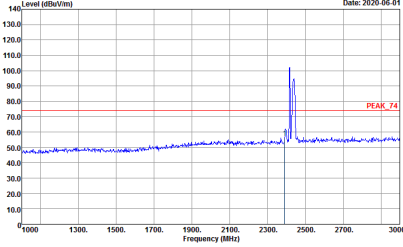
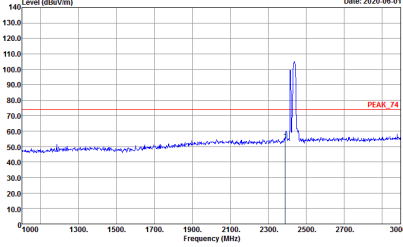
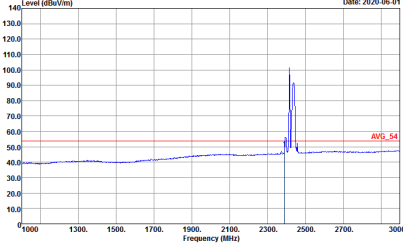
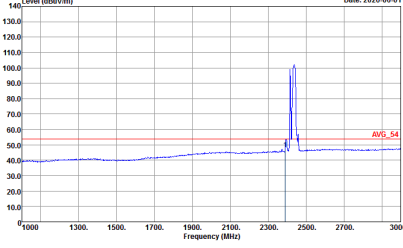
ANT	Mode 2: Ant 1 11b Ch06 + Ant 0 BLE 2M Ch07 - L	
Simultaneously	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL Detector : Peak Project : 020402-01	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL Detector : Peak Project : 020402-01
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL Detector : Peak Project : 020402-01	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL Detector : Peak Project : 020402-01



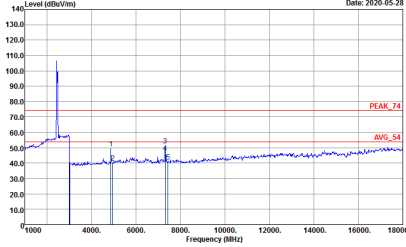
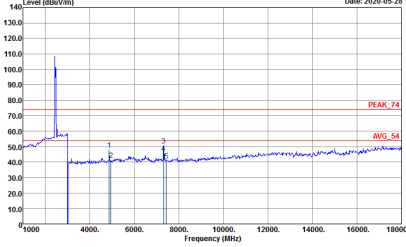
ANT	Mode 2: Ant 1 11b Ch06 + Ant 0 BLE 2M Ch07 - R	
Simultaneously	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 020402-01	Left blank
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000kHz VBW:3.000kHz SWT:Auto Detector : Peak Project : 020402-01	Left blank



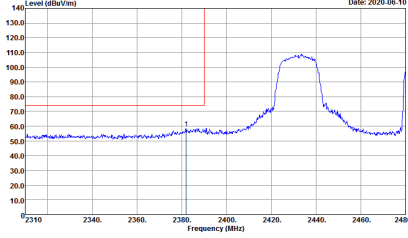
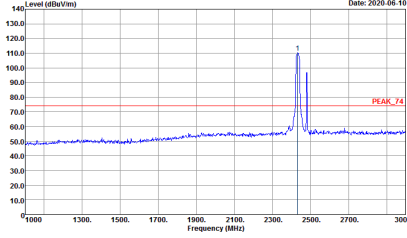
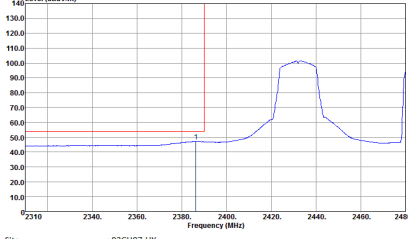
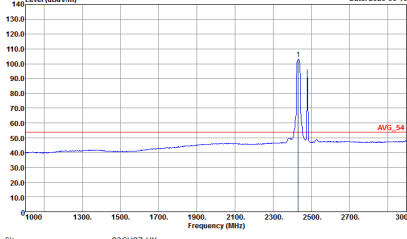
2.4GHz 2400~2483.5MHz (Harmonic @ 3m)

ANT	Mode 2: Ant 1 11b Ch06 + Ant 0 BLE 2M Ch07	
Simultaneously	Horizontal	Vertical
Peak	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 020402-01	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL Detector : Peak Project : 020402-01
Avg.	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 020402-01	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL Detector : Peak Project : 020402-01

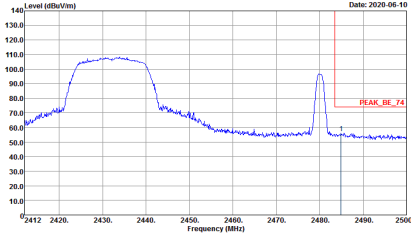
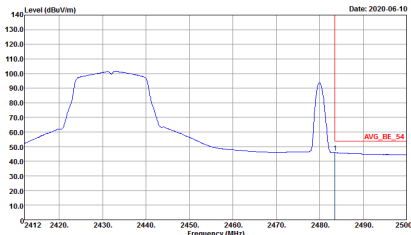
2.4GHz 2400~2483.5MHz (Harmonic @ 3m)

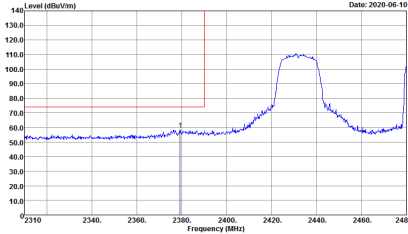
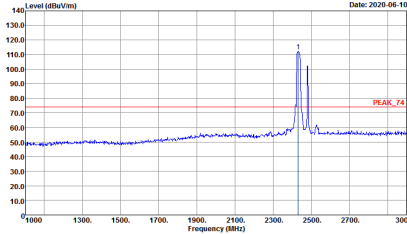
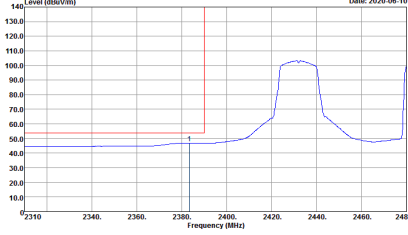
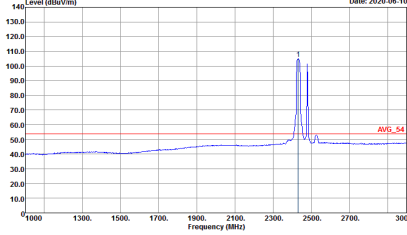
ANT	Mode 3 Ant 1 11b Ch06 + Ant 0 BLE 1M Ch38	
Simultaneously	Horizontal	Vertical
Peak Avg.	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 020402-01	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL Detector : Peak Project : 020402-01

2.4GHz 2400~2483.5MHz (Band Edge @ 3m)

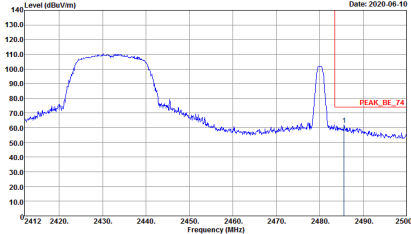
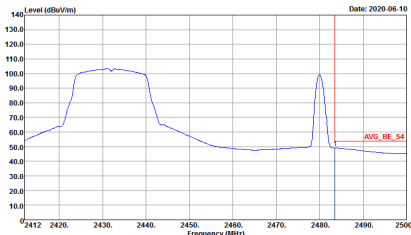
ANT	Mode 5: Ant 1 11g Ch05 + Ant 0 BLE 1M Ch39 - L	
Simultaneously	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak : 020402-01	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak : 020402-01
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Project : Avg. : 020402-01	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Project : Avg. : 020402-01



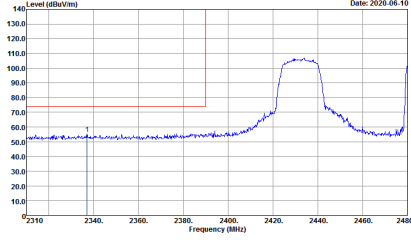
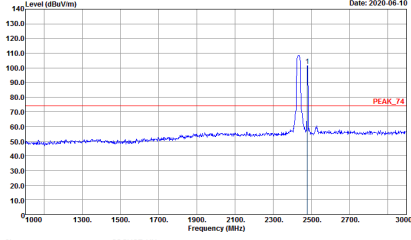
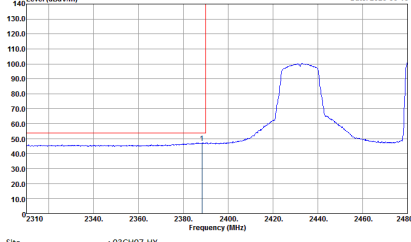
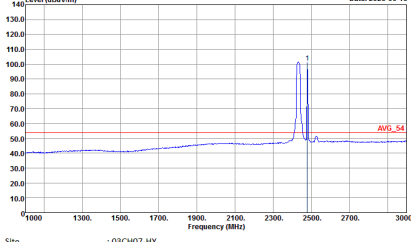
ANT	Mode 5: Ant 1 11g Ch05 + Ant 0 BLE 1M Ch39 - R	
Simultaneously	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 020402-01	Left blank
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL RBW:1000.000kHz VBW:0.050kHz SWT:Auto Detector : Peak Project : 020402-01	Left blank

ANT	Mode 5: Ant 1 11g Ch05 + Ant 0 BLE 1M Ch39 - L	
Simultaneously	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 020402-01	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 020402-01
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000kHz VBW:0.010kHz SWT:Auto Detector : Peak Project : 020402-01	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000kHz VBW:0.010kHz SWT:Auto Detector : Peak Project : 020402-01

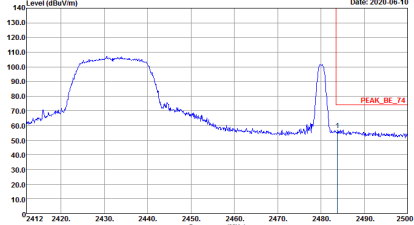
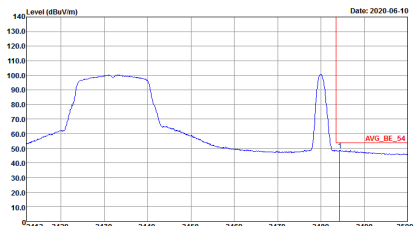


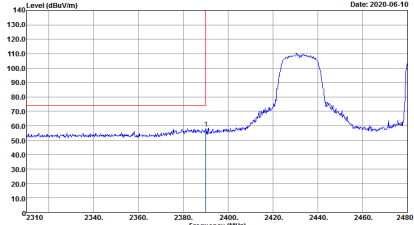
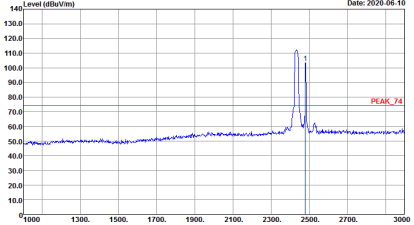
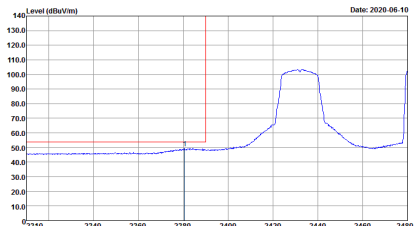
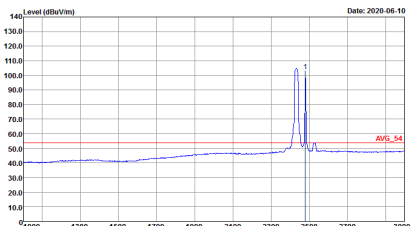
ANT	Mode 5: Ant 1 11g Ch05 + Ant 0 BLE 1M Ch39 - R	
Simultaneously	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 020402-01	Left blank
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000KHz VBW:0.050KHz SWT:Auto Detector : Peak Project : 020402-01	Left blank

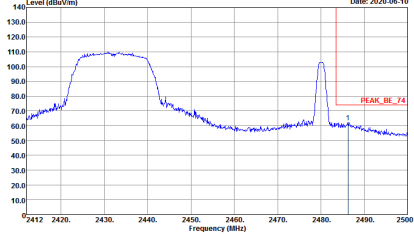
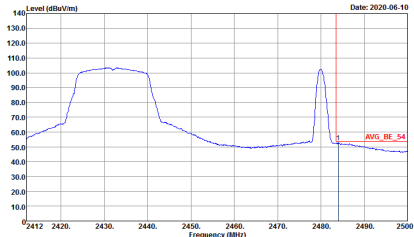
BLE (Band Edge @ 3m)

ANT	Mode 5: Ant 1 11g Ch05 + Ant 0 BLE 1M Ch39 - L	
Simultaneously	Horizontal	Fundamental
Peak	 Date: 2020-06-10 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01	 Date: 2020-06-10 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01
Avg.	 Date: 2020-06-10 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:3.000kHz SWT:Auto Project : 020402-01	 Date: 2020-06-10 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:3.000kHz SWT:Auto Project : 020402-01

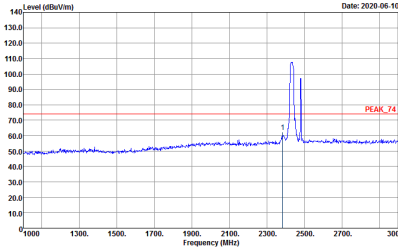
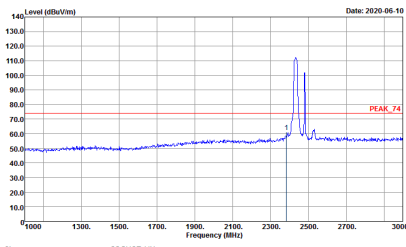
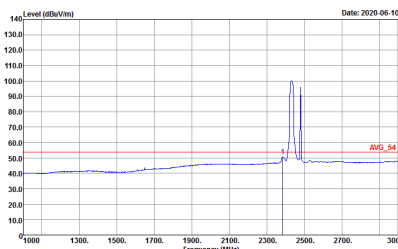
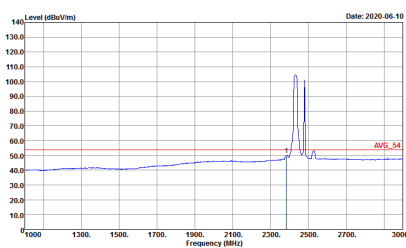


ANT	Mode 5: Ant 1 11g Ch05 + Ant 0 BLE 1M Ch39 - R	
Simultaneously	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 020402-01	Left blank
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL RBW:1000.000kHz VBW:3.000kHz SWT:Auto Detector : Peak Project : 020402-01	Left blank

ANT	Mode 5: Ant 1 11g Ch05 + Ant 0 BLE 1M Ch39 - L	
Simultaneously	Vertical	Fundamental
Peak	 Date: 2020-06-10 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : Peak : 020402-01	 Date: 2020-06-10 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : Peak : 020402-01
Avg.	 Date: 2020-06-10 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3.000kHz SWT:Auto Project : Peak : 020402-01	 Date: 2020-06-10 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3.000kHz SWT:Auto Project : Peak : 020402-01

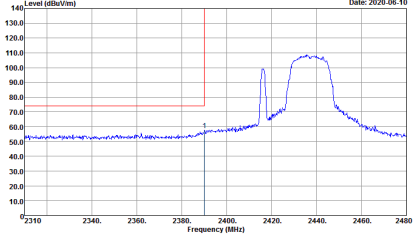
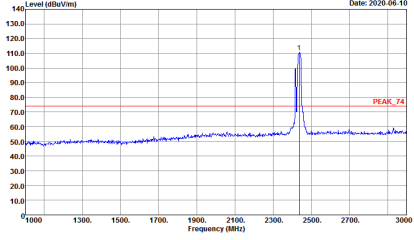
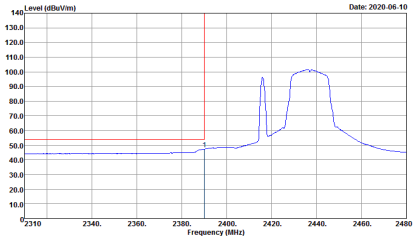
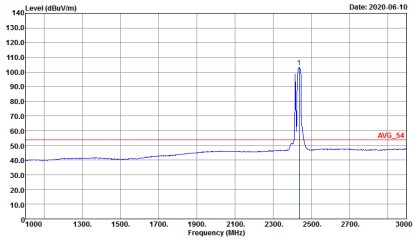
ANT	Mode 5: Ant 1 11g Ch05 + Ant 0 BLE 1M Ch39 - R	
Simultaneously	Vertical	Fundamental
Peak	 Date: 2020-06-10 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 020402-01	Left blank
Avg.	 Date: 2020-06-10 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3.000kHz SWT:Auto Detector : Peak Project : 020402-01	Left blank

2.4GHz 2400~2483.5MHz (Harmonic @ 3m)

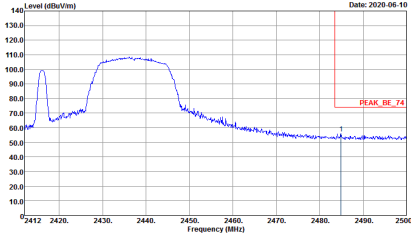
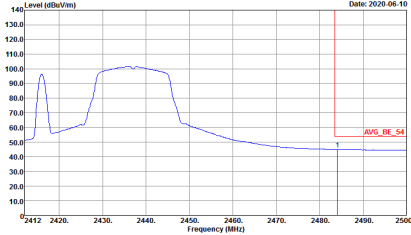
ANT	Mode 5: Ant 1 11g Ch05 + Ant 0 BLE 1M Ch39	
Simultaneously	Horizontal	Vertical
Peak	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VSW:3000.000KHz SWT:Auto Project : Peak Project : 020402-01	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VSW:3000.000KHz SWT:Auto Project : Peak Project : 020402-01
Avg.	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VSW:3.000KHz SWT:Auto Project : Peak Project : 020402-01	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VSW:3.000KHz SWT:Auto Project : Peak Project : 020402-01

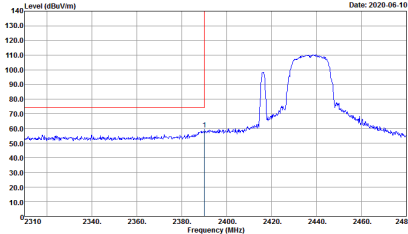
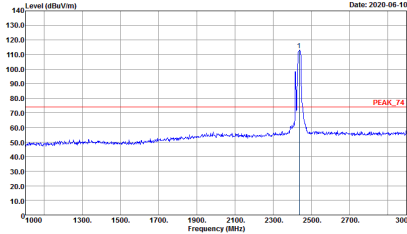
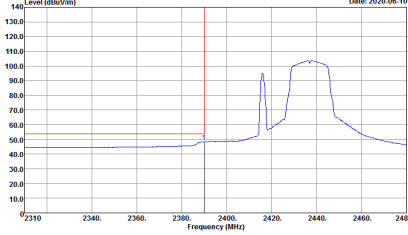
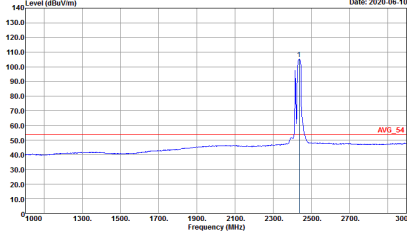


2.4GHz 2400~2483.5MHz (Band Edge @ 3m)

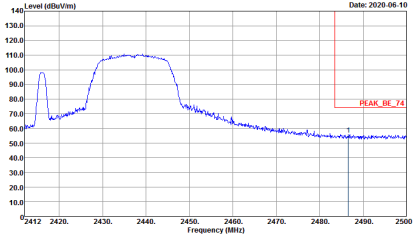
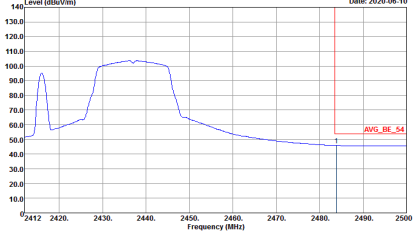
ANT	Mode 6: Ant 1 11g Ch06 + Ant 0 BLE 1M Ch07 - L	
Simultaneously	Horizontal	Fundamental
Peak	 Level (dBuV/m) Frequency (MHz) Date: 2020-06-10 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 020402-01	 Level (dBuV/m) Frequency (MHz) Date: 2020-06-10 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 020402-01
Avg.	 Level (dBuV/m) Frequency (MHz) Date: 2020-06-10 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Project : 020402-01	 Level (dBuV/m) Frequency (MHz) Date: 2020-06-10 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Project : 020402-01



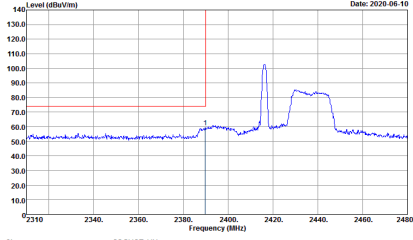
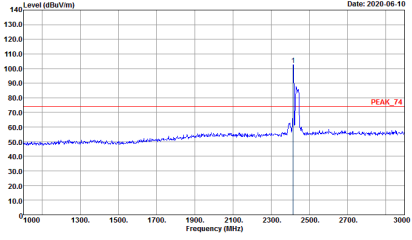
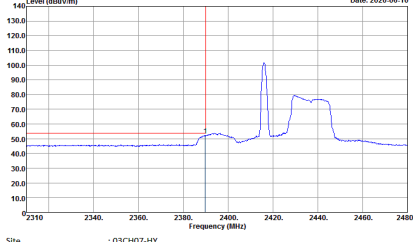
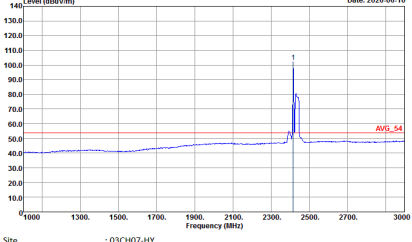
ANT	Mode 6: Ant 1 11g Ch06 + Ant 0 BLE 1M Ch07 - R	
Simultaneously	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 020402-01	Left blank
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL RBW:1000.000kHz VBW:0.050kHz SWT:Auto Detector : Peak Project : 020402-01	Left blank

ANT	Mode 6: Ant 1 11g Ch06 + Ant 0 BLE 1M Ch07 - L	
Simultaneously	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 020402-01	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 020402-01
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000kHz VBW:0.010kHz SWT:Auto Detector : Peak Project : 020402-01	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000kHz VBW:0.010kHz SWT:Auto Detector : Peak Project : 020402-01

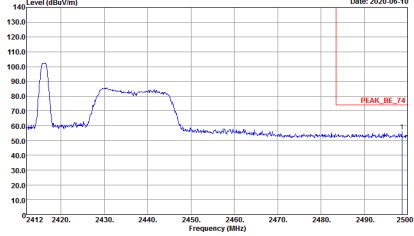
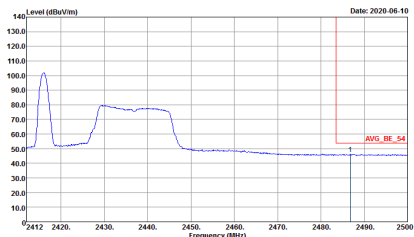


ANT	Mode 6: Ant 1 11g Ch06 + Ant 0 BLE 1M Ch07 - R	
Simultaneously	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 020402-01	Left blank
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000kHz VBW:0.050kHz SWT:Auto Detector : Peak Project : 020402-01	Left blank

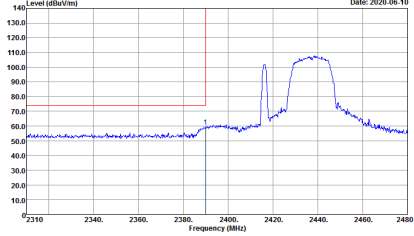
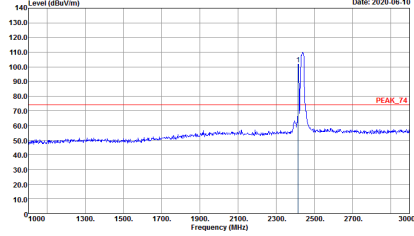
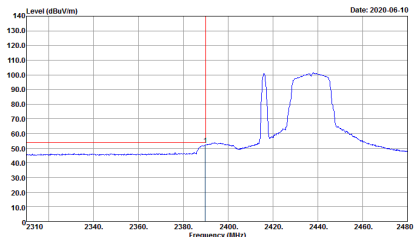
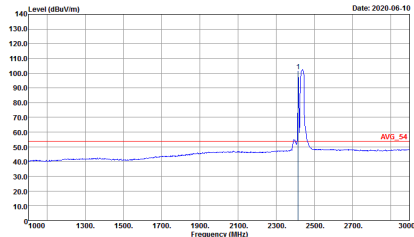
BLE (Band Edge @ 3m)

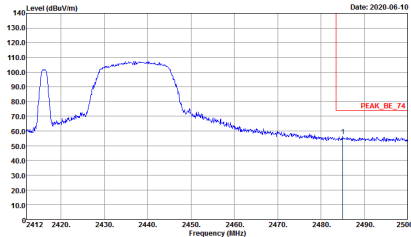
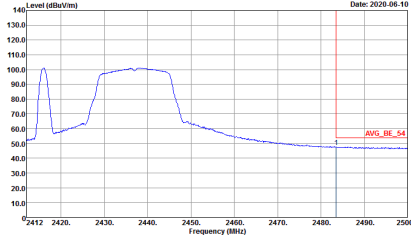
ANT	Mode 6: Ant 1 11g Ch06 + Ant 0 BLE 1M Ch07 - L	
Simultaneously	Horizontal	Fundamental
Peak	 Date: 2020-06-10 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : Peak : 020402-01	 Date: 2020-06-10 Site : 03CH07-HY Condition : PEAK_74 5m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : Peak : 020402-01
Avg.	 Date: 2020-06-10 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:3.000kHz SWT:Auto Project : Peak : 020402-01	 Date: 2020-06-10 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:3.000kHz SWT:Auto Project : Peak : 020402-01



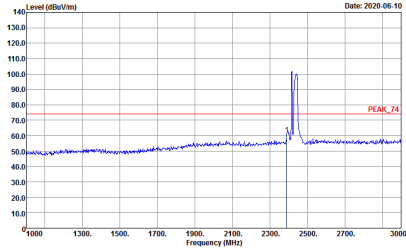
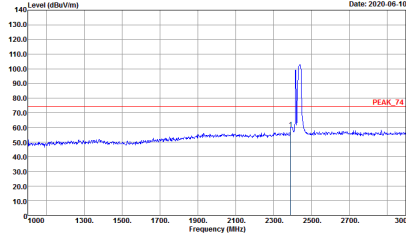
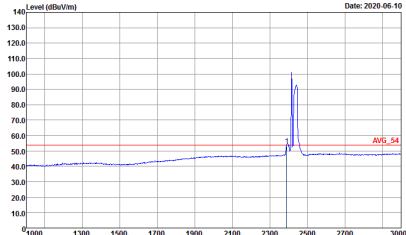
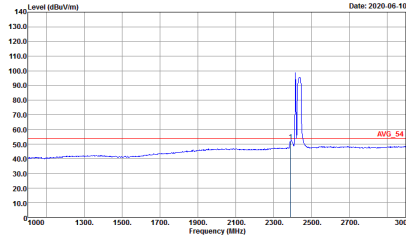
ANT	Mode 6: Ant 1 11g Ch06 + Ant 0 BLE 2M Ch07 - R	
Simultaneously	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 020402-01	Left blank
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL RBW:1000.000kHz VBW:3.000kHz SWT:Auto Detector : Peak Project : 020402-01	Left blank



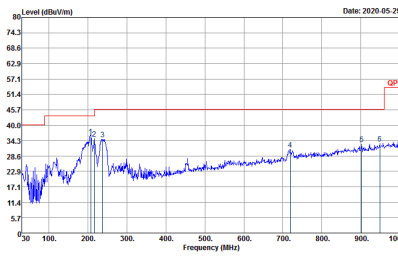
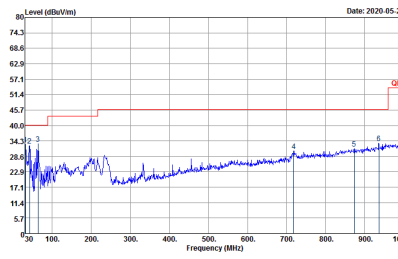
ANT	Mode 6: Ant 1 11g Ch06 + Ant 0 BLE 2M Ch07 - L	
Simultaneously	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 020402-01	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 020402-01
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000kHz VBW:3.000kHz SWT:Auto Detector : Peak Project : 020402-01	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000kHz VBW:3.000kHz SWT:Auto Detector : Peak Project : 020402-01

ANT	Mode 6: Ant 1 11g Ch06 + Ant 0 BLE 2M Ch07 - R	
Simultaneously	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 020402-01	Left blank
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL RBW:1000.000kHz VBW:3.000kHz SWT:Auto Detector : Peak Project : 020402-01	Left blank

2.4GHz 2400~2483.5MHz (Harmonic @ 3m)

ANT	Mode 6: Ant 1 11g Ch06 + Ant 0 BLE 2M Ch07	
Simultaneously	Horizontal	Vertical
Peak	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VSW:3000.000KHz SWT:Auto Project : Peak Project : 020402-01	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VSW:3000.000KHz SWT:Auto Project : Peak Project : 020402-01
Avg.	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VSW:3.000KHz SWT:Auto Project : Peak Project : 020402-01	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VSW:3.000KHz SWT:Auto Project : Peak Project : 020402-01

Emission below 1GHz
2.4GHz 2400~2483.5MHz (LF)

ANT	Mode 3: Ant 1 11b Ch06 + Ant 0 BLE 1M Ch38	
Simultaneously	Horizontal	Vertical
QP / Peak	 Site : 03CH07-HY Condition : QP 3m LF-ANT-35419(6) HORIZONTAL Detector : Peak Project : 020402-01	 Site : 03CH07-HY Condition : QP 3m LF-ANT-35419(6) VERTICAL Detector : Peak Project : 020402-01



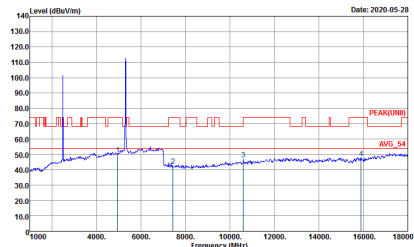
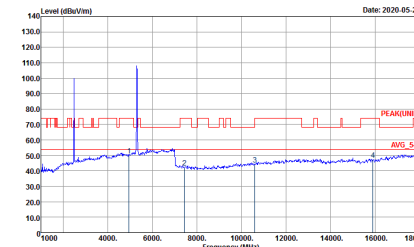
Emission above 18GHz
2.4GHz 2400~2483.5MHz (SHF)

ANT	Mode 3: Ant 1 11b Ch06 + Ant 0 BLE 1M Ch38	
Simultaneously	Horizontal	Vertical
Peak Avg.	Level (dBuV/m) Date: 2020-05-29 Frequency (MHz) Site : 03CH07-HY Condition : PEAK_74 1m SHF-EHF_9170584 HORIZONTAL Detector : Peak Project : 020402-01	Level (dBuV/m) Date: 2020-05-29 Frequency (MHz) Site : 03CH07-HY Condition : PEAK_74 1m SHF-EHF_9170584 VERTICAL Detector : Peak Project : 020402-01



<X Plane>

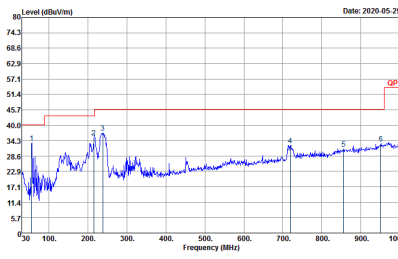
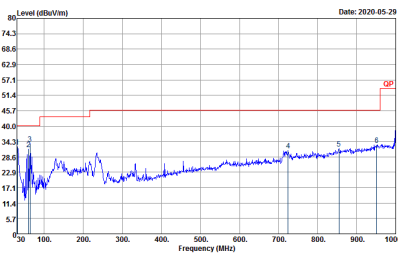
2.4GHz 2400~2483.5MHz and Band 2 5250~5350MHz (Harmonic @ 3m)

ANT	Mode 4 Ant 0+1 11a Ch60 + Ant 0 BLE 1M Ch38	
Simultaneously	Horizontal	Vertical
Peak Avg.	 Site : 03CH07-HY Condition : PEAK(UNII) 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 020402-01	 Site : 03CH07-HY Condition : PEAK(UNII) 3m HF_ANT_00075962 VERTICAL Detector : Peak Project : 020402-01



Emission below 1GHz

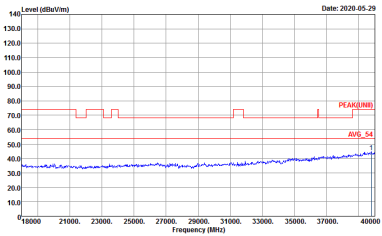
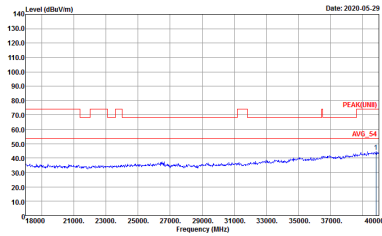
2.4GHz 2400~2483.5MHz and Band 2 5250~5350MHz (LF)

ANT	Mode 4: Ant 0+1 11a Ch60 + Ant 0 BLE 1M Ch38	
Simultaneously	Horizontal	Vertical
QP / Peak	 Site : 03CH07-HY Condition : QP 3m LF-ANT-35419(6) HORIZONTAL Detector : Peak Project : 020402-01	 Site : 03CH07-HY Condition : QP 3m LF-ANT-35419(6) VERTICAL Detector : Peak Project : 020402-01



Emission above 18GHz

2.4GHz 2400~2483.5MHz and Band 2 5250~5350MHz (SHF)

ANT	Mode 4: Ant 0+1 11a Ch60 +Ant 0 BLE 1M Ch38	
Simultaneously	Horizontal	Vertical
Peak Avg.	 Site : 03CH07-HY Condition : PEAK(UNI) 1m SHF-EHF_9170584 HORIZONTAL Detector : Peak Project : 020402-01	 Site : 03CH07-HY Condition : PEAK(UNI) 1m SHF-EHF_9170584 VERTICAL Detector : Peak Project : 020402-01

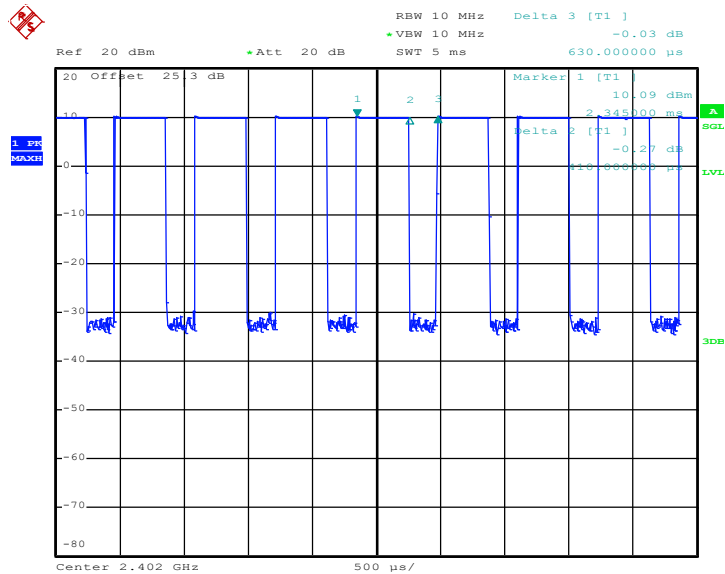


Appendix C. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting	Duty Factor(dB)
1	Bluetooth – LE for 1Mbps	65.07	410	2.44	3kHz	1.87
1	802.11b	100.00	-	-	10Hz	0.00
1	802.11g	100.00	-	-	10Hz	0.00
0+1	802.11a for Ant. 0	100.00	-	-	10Hz	0.00
0+1	802.11a for Ant. 1	100.00	-	-	10Hz	0.00



Bluetooth – LE for 1Mbps

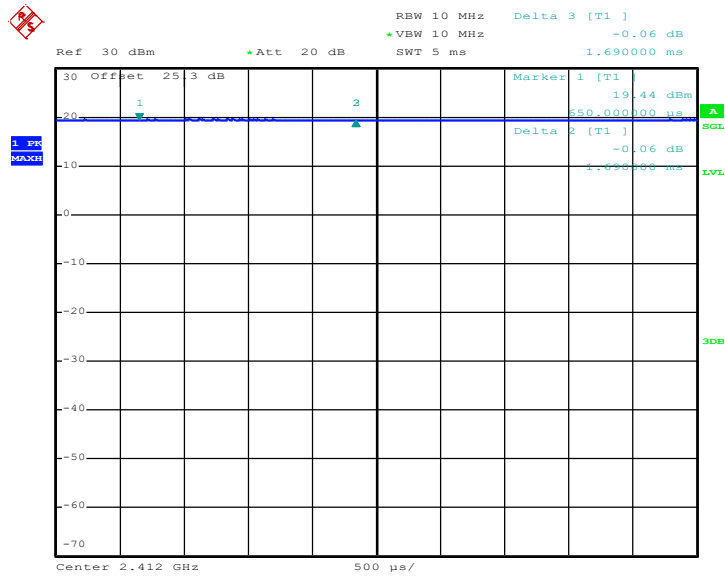


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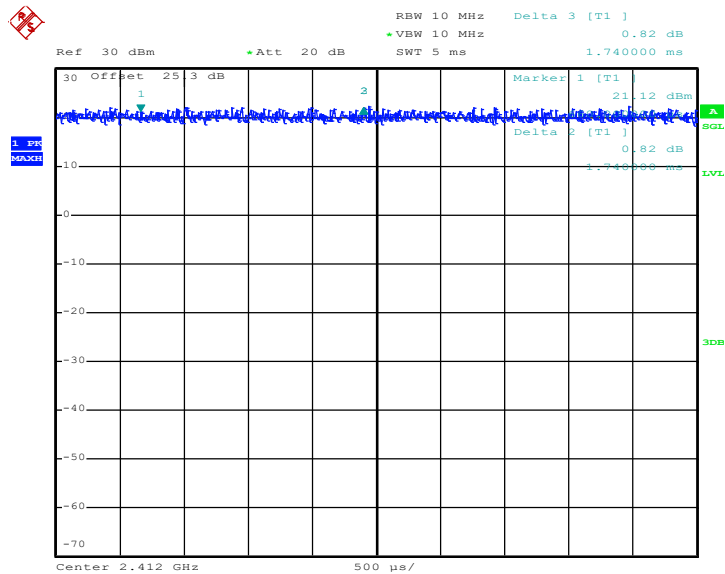
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802.11b



Date: 10.APR.2020 15:44:29

802.11g

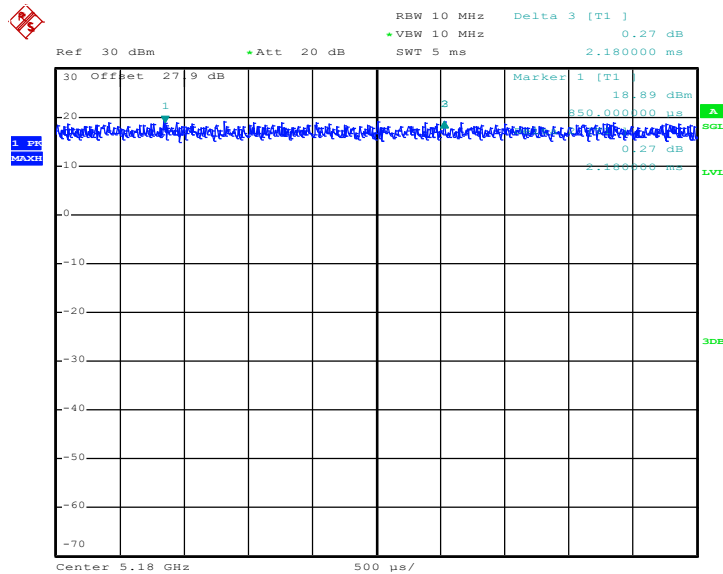


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MIMO <Ant. 0>

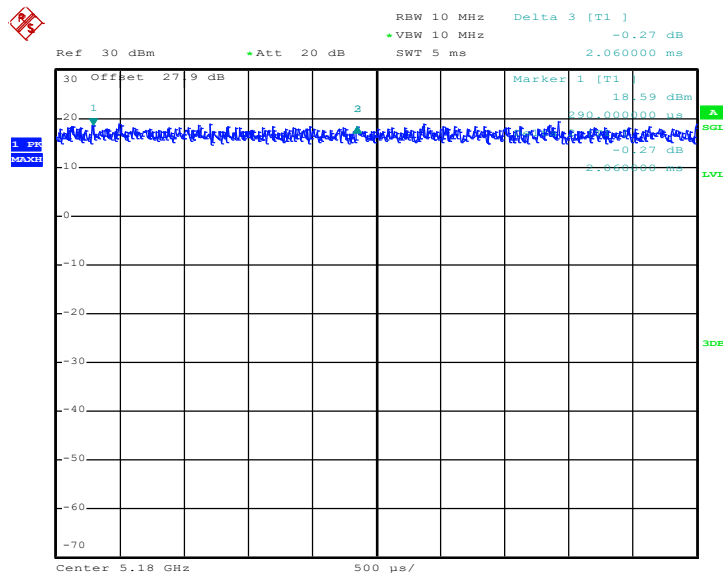
802.11a



Date: 13.APR.2020 09:32:50

MIMO <Ant. 1>

802.11a



Date: 13.APR.2020 09:37:29

—THE END—