



FCC CO-LOCATION RADIO TEST REPORT

FCC ID : A4R-H2E
Equipment : Interactive internet streaming device
Model Name : H2E
Applicant : Google LLC
1600 Amphitheatre Parkway,
Mountain View, California, 94043 USA
Standard : FCC Part 15 Subpart E §15.407

The product was received on Jun. 06, 2019 and testing was started from Jul. 05, 2019 and completed on Aug. 05, 2019. 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
FR960638G	01	Initial issue of report	Sep. 03, 2019
FR960638G	02	Revise the description of EUT supported radio to 802.15.4.	Sep. 20, 2019



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.407(b)	Unwanted Emissions	Pass	Under limit 2.05 dB at 5458.000 MHz
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: Ann Lee



1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Interactive internet streaming device
Model Name	H2E
FCC ID	A4R-H2E
EUT supports Radios application	WLAN 11a/b/g/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE 802.15.4
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer.

EUT Information List	
No.	S/N
#1	96190EXBSZZ2SU

1.2 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx/Rx Frequency Range	WLAN 802.11b: 2412 MHz ~ 2472 MHz WLAN 802.11a: 5180 MHz ~ 5240 MHz; 5260 MHz ~ 5320 MHz; 5500 MHz ~ 5720 MHz; 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz 802.15.4: 2405 MHz ~ 2475 MHz
Antenna Type / Gain	Bluetooth : PIFA Antenna with gain 1.50 dBi 802.15.4: Dipole Antenna with gain 5.18 dBi <2412 MHz ~ 2472 MHz> Ant. 1 : PIFA Antenna with gain 1.50 dBi Ant. 2 : PIFA Antenna with gain 2.39 dBi <5180 MHz ~ 5240 MHz> Ant. 2 : PIFA Antenna with gain 3.65 dBi Ant. 3 : Dipole Antenna with gain 7.48 dBi <5745 MHz ~ 5825 MHz> Ant. 2 : PIFA Antenna with gain 4.88 dBi Ant. 3 : Dipole Antenna with gain 5.48 dBi
Type of Modulation	Bluetooth LE : GFSK 802.15.4 : O-QPSK 802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11a : 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 662911 D01 Multiple Transmitter Output v02r01.
- ♦ FCC KDB 414788 D01 Radiated Test Site v01r01.
- ♦ 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. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.



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).

2.1 Carrier Frequency and Channel

2405-2475 MHz 802.15.4			
Channel		Freq. (MHz)	
18		2440	

2400-2483.5 MHz Bluetooth – LE 1Mbps		2400-2483.5 MHz 802.11b	
Channel	Freq. (MHz)	Channel	Freq. (MHz)
19	2440	06	2437

5150-5250 MHz 802.11a		5725-5850 MHz 802.11a	
Channel	Freq. (MHz)	Channel	Freq. (MHz)
40	5200	157	5785

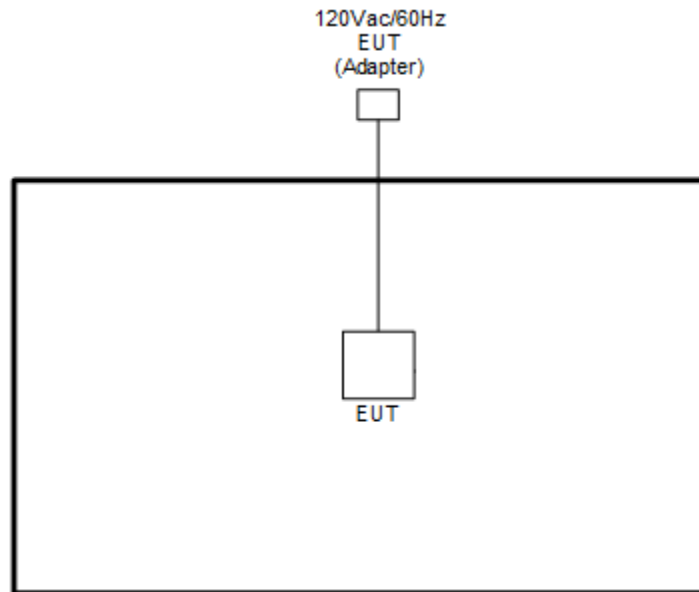
2.2 Test Mode

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

<Co-Location>

Modulation	Data Rate
Bluetooth – LE + 802.11a	1Mbps + 6Mbps
802.15.4 + 802.11a	250KHz + 6Mbps
802.11b + 802.11a	1Mbps + 6Mbps

2.3 Connection Diagram of Test System



2.4 EUT Operation Test Setup

The RF test items, utility "QRCT4_ 4.0.00064" 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.

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

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

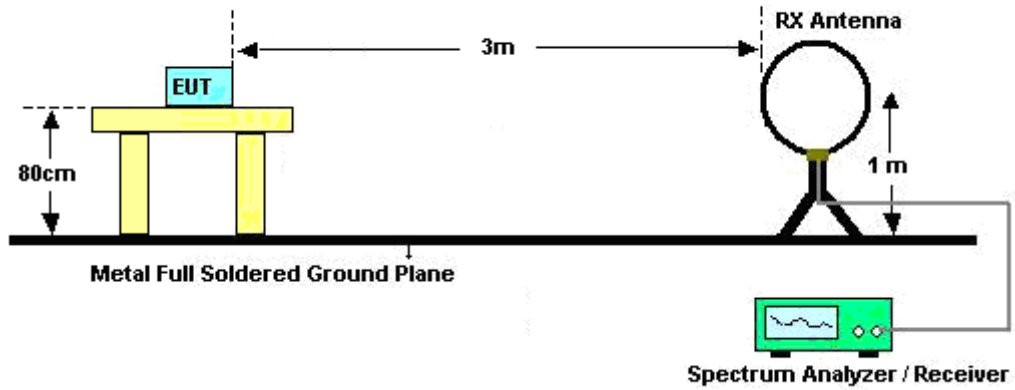
See list of measuring equipment of this test report.

3.1.3 Test Procedures

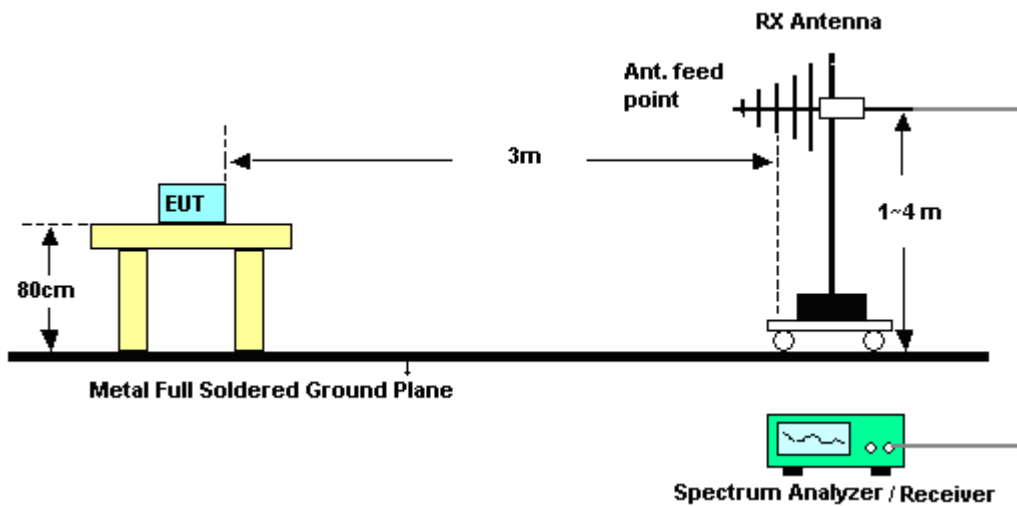
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section G) Unwanted emissions measurement.
 - (1) Procedure for Unwanted Emissions Measurements Below 1000MHz
 - RBW = 120 kHz
 - VBW = 300 kHz
 - Detector = Peak
 - Trace mode = max hold
 - (2) Procedure for Peak 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

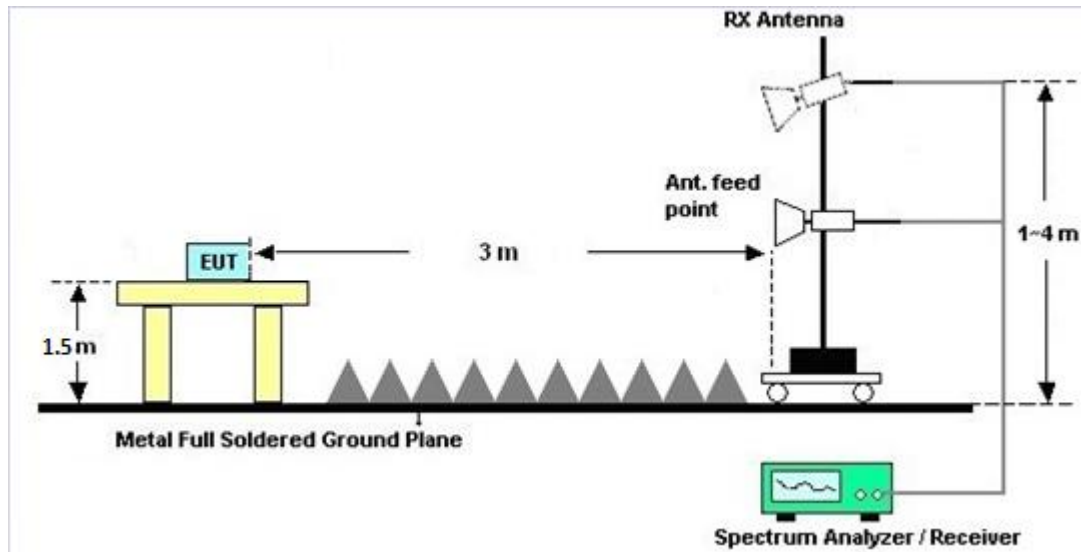
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



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 & 00800N1D01N-06	35419 & 03	30MHz~1GHz	Apr. 30, 2019	Jul. 05, 2019~ Aug. 05, 2019	Apr. 29, 2020	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Dec. 02, 2018	Jul. 05, 2019~ Aug. 05, 2019	Dec. 03, 2019	Radiation (03CH07-HY)
EMI Test Receiver	Agilent	N9038A(MXE)	MY53290053	20Hz~26.5GHz	Jan. 23, 2019	Jul. 05, 2019~ Aug. 05, 2019	Jan. 22, 2020	Radiation (03CH07-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Jan. 11, 2019	Jul. 05, 2019~ Aug. 05, 2019	Jan. 10, 2020	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-00101 800-30-10P	1590075	1GHz~18GHz	Apr. 24, 2019	Jul. 05, 2019~ Aug. 05, 2019	Apr. 23, 2020	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz~1GHz	May 20, 2019	Jul. 05, 2019~ Aug. 05, 2019	May 19, 2020	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1GHz~26.5GHz	Nov. 02, 2018	Jul. 05, 2019~ Aug. 05, 2019	Nov. 01, 2019	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24971/4, MY28655/4	9kHz~30MHz	Feb. 26, 2019	Jul. 05, 2019~ Aug. 05, 2019	Feb. 25, 2020	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4, MY24971/4, MY15682/4	30MHz~1GHz	Feb. 26, 2019	Jul. 05, 2019~ Aug. 05, 2019	Feb. 25, 2020	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4, MY24971/4, MY15682/4	1GHz~18GHz	Feb. 26, 2019	Jul. 05, 2019~ Aug. 05, 2019	Feb. 25, 2020	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2858/2	18GHz~40GHz	Feb. 26, 2019	Jul. 05, 2019~ Aug. 05, 2019	Feb. 25, 2020	Radiation (03CH07-HY)
Antenna Mast	Max-Full	MFA520BS	N/A	1m~4m	N/A	Jul. 05, 2019~ Aug. 05, 2019	N/A	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	Jul. 05, 2019~ Aug. 05, 2019	N/A	Radiation (03CH07-HY)
Preamplifier	MITEQ	TTA1840-35-H G	1871923	18GHz~40GHz, VSWR : 2.5:1 max	N/A	Jul. 05, 2019~ Aug. 05, 2019	N/A	Radiation (03CH07-HY)
Spectrum Analyzer	Keysight	N9010A	MY54200485	10Hz~44GHz	Nov. 02, 2018	Jul. 05, 2019~ Aug. 05, 2019	Nov. 01, 2019	Radiation (03CH07-HY)
Software	Audix	E3 6.2009-8-24	80504004656 H	N/A	N/A	Jul. 05, 2019~ Aug. 05, 2019	N/A	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA917025 1	18GHz~40GHz	Nov. 20, 2018	Jul. 05, 2019~ Aug. 05, 2019	Nov. 19, 2019	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% ($U = 2Uc(y)$)	5.7
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.5
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Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.2
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Appendix A. Radiated Spurious Emission

Test Engineer :	Jesse Wang, Stan Hsieh and Ken Wu	Temperature :	24~26°C
		Relative Humidity :	52~60%

2.4GHz 2440MHz + 5GHz 5200MHz

BLE(1M)_Tx_Ch19+11a_Tx_Ch40 (Band Edge @ 3m)

BLE+WIFI Ant.	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)
BLE(1M) CH19 2440MHz		2377.49	55.27	-18.73	74	40.61	31.93	17.67	34.94	199	38	P	H
		2384.8	45.42	-8.58	54	30.69	31.93	17.74	34.94	199	38	A	H
	*	2440	104.1	-	-	89.07	32.2	17.79	34.96	199	38	P	H
	*	2440	103.5	-	-	88.47	32.2	17.79	34.96	199	38	A	H
		2493.488	54.05	-19.95	74	38.99	32.2	17.84	34.98	199	38	P	H
		2491.992	45.68	-8.32	54	30.62	32.2	17.84	34.98	199	38	A	H
		2386.33	55.21	-18.79	74	40.41	32	17.74	34.94	100	88	P	V
		2314.08	45.55	-8.45	54	31.09	31.8	17.59	34.93	100	88	A	V
	*	2440	105.14	-	-	90.11	32.2	17.79	34.96	100	88	P	V
	*	2440	104.6	-	-	89.57	32.2	17.79	34.96	100	88	A	V
		2485.48	54.44	-19.56	74	39.37	32.2	17.84	34.97	100	88	P	V
		2497.448	45.57	-8.43	54	30.51	32.2	17.84	34.98	100	88	A	V



BLE+WIFI Ant. 1 2+3	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)
802.11a CH 40 5200MHz		5150	59.77	-14.23	74	49.23	34.3	11.29	35.05	100	324	P	H
		5150	49.57	-4.43	54	39.03	34.3	11.29	35.05	100	324	A	H
	*	5200	121.85	-	-	111.26	34.3	11.34	35.05	100	324	P	H
	*	5200	113.46	-	-	102.87	34.3	11.34	35.05	100	324	A	H
		5400.08	51.75	-22.25	74	40.68	34.6	11.53	35.06	100	324	P	H
		5359.76	42.88	-11.12	54	32.04	34.4	11.49	35.05	100	324	A	H
		5149.5	53.83	-20.17	74	43.29	34.3	11.29	35.05	400	279	P	V
		5150	45.98	-8.02	54	35.44	34.3	11.29	35.05	400	279	A	V
	*	5200	120.69	-	-	110.1	34.3	11.34	35.05	400	279	P	V
	*	5200	111.85	-	-	101.26	34.3	11.34	35.05	400	279	A	V
		5444.6	49.74	-24.26	74	38.57	34.67	11.56	35.06	400	279	P	V
		5365.08	41.29	-12.71	54	30.38	34.47	11.49	35.05	400	279	A	V
	Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.											



BLE(1M)_Tx_Ch19+11a_Tx_Ch40 (Harmonic @ 3m)

BLE+WIFI Ant. 1 2+3	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)	
BLE(1M) CH19 2440MHz + 802.11a CH 40 5200MHz		4880	50.96	-23.04	74	40.46	34.13	11.42	35.05	100	0	P	H	
		4880	40.79	-13.21	54	30.29	34.13	11.42	35.05	100	0	A	H	
		7320	43.5	-30.5	74	51.97	35.63	14.21	58.31	100	0	P	H	
		10400	51.94	-16.26	68.2	56.67	37.4	17.43	59.56	100	0	P	H	
		15600	49.92	-24.08	74	45.98	40.2	20.37	56.63	100	0	P	H	
			4880	51.12	-22.88	74	40.62	34.13	11.42	35.05	100	0	P	V
			4880	41.03	-12.97	54	30.53	34.13	11.42	35.05	100	0	A	V
			7320	43.71	-30.29	74	52.18	35.63	14.21	58.31	100	0	P	V
			10400	51.75	-16.45	68.2	56.48	37.4	17.43	59.56	100	0	P	V
			15600	49.91	-24.09	74	45.97	40.2	20.37	56.63	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



2.4GHz 2440MHz + 5GHz 5785MHz

BLE(1M)_Tx_Ch19+11a_Tx_Ch157 (Band Edge @ 3m)

BLE	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
BLE(1M) CH19 2440MHz		2388.54	54.15	-19.85	74	39.35	32	17.74	34.94	199	38	P	H
		2385.48	45.48	-8.52	54	30.75	31.93	17.74	34.94	199	38	A	H
	*	2440	104.15	-	-	89.12	32.2	17.79	34.96	199	38	P	H
	*	2440	103.62	-	-	88.59	32.2	17.79	34.96	199	38	A	H
		2497.888	54.07	-19.93	74	39.01	32.2	17.84	34.98	199	38	P	H
		2489.264	45.53	-8.47	54	30.46	32.2	17.84	34.97	199	38	A	H
		2314.59	54.38	-19.62	74	39.92	31.8	17.59	34.93	100	88	P	V
		2388.54	45.67	-8.33	54	30.87	32	17.74	34.94	100	88	A	V
	*	2440	105.19	-	-	90.16	32.2	17.79	34.96	100	88	P	V
	*	2440	104.62	-	-	89.59	32.2	17.79	34.96	100	88	A	V
		2498.064	54.44	-19.56	74	39.38	32.2	17.84	34.98	100	88	P	V
		2500	45.69	-8.31	54	30.63	32.2	17.84	34.98	100	88	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



WIFI Ant. 2+3	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)
		5625	57.7	-10.5	68.2	46.32	34.73	11.73	35.08	200	335	P	H
		5668.8	57.01	-25.14	82.15	45.57	34.75	11.78	35.09	200	335	P	H
		5712.2	61.08	-47.54	108.62	49.48	34.87	11.83	35.1	200	335	P	H
		5723.4	55.09	-63.46	118.55	43.53	34.83	11.83	35.1	200	335	P	H
		5458	62.16	-11.84	74	50.96	34.7	11.56	35.06	239	310	P	H
		5458	51.95	-2.05	54	40.75	34.7	11.56	35.06	239	310	A	H
	*	5785	120.95	-	-	109.26	34.87	11.93	35.11	200	335	P	H
	*	5785	112.52	-	-	100.83	34.87	11.93	35.11	200	335	A	H
		5852	53.58	-64.06	117.64	41.92	34.8	11.98	35.12	200	335	P	H
		5859.2	52.82	-56.8	109.62	41.09	34.87	11.98	35.12	200	335	P	H
		5878.2	52.15	-50.67	102.82	40.32	34.93	12.02	35.12	200	335	P	H
802.11a		5944.4	50.43	-17.77	68.2	38.45	35	12.11	35.13	200	335	P	H
CH 157		5649.4	55.98	-12.22	68.2	44.66	34.67	11.73	35.08	234	0	P	V
5785MHz		5667.6	56.05	-25.21	81.26	44.61	34.75	11.78	35.09	234	0	P	V
		5702.2	55.01	-50.81	105.82	43.4	34.87	11.83	35.09	234	0	P	V
		5723.2	54.84	-63.26	118.1	43.28	34.83	11.83	35.1	234	0	P	V
	*	5785	117.74	-	-	106.05	34.87	11.93	35.11	234	0	P	V
	*	5785	109.72	-	-	98.03	34.87	11.93	35.11	234	0	A	V
		5851.8	51.47	-66.63	118.1	39.81	34.8	11.98	35.12	234	0	P	V
		5869.2	51.13	-55.69	106.82	39.36	34.87	12.02	35.12	234	0	P	V
		5875.2	51.35	-53.7	105.05	39.52	34.93	12.02	35.12	234	0	P	V
		5941	49.62	-18.58	68.2	37.64	35	12.11	35.13	234	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



BLE(1M)_Tx_Ch19+11a_Tx_Ch157 (Harmonic @ 3m)

BLE+WIFI Ant. 1/ 2+3	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)	
BLE(1M) CH19 2440MHz + 802.11a CH 157 5785MHz		4880	51.2	-22.8	74	40.7	34.13	11.42	35.05	100	0	P	H	
		4880	41.05	-12.95	54	30.55	34.13	11.42	35.05	100	0	A	H	
		7320	42.97	-31.03	74	51.44	35.63	14.21	58.31	100	0	P	H	
		11570	48.39	-25.61	74	49.69	38.17	17.89	57.36	100	0	P	H	
		17355	52.97	-15.23	68.2	45.42	41.55	21.94	55.94	100	0	P	H	
			4880	51.69	-22.31	74	41.19	34.13	11.42	35.05	100	0	P	V
			4880	41.37	-12.63	54	30.87	34.13	11.42	35.05	100	0	A	V
			7320	43.46	-30.54	74	51.93	35.63	14.21	58.31	100	0	P	V
			11570	49.9	-24.1	74	51.2	38.17	17.89	57.36	100	0	P	V
			17355	52.19	-16.01	68.2	44.64	41.55	21.94	55.94	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



2.4GHz 2440MHz + 5GHz 5200MHz

802.15.4_Tx_Ch18+11a_Tx_Ch40 (Band Edge @ 3m)

802.15.4+WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
3/ 2+3		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.15.4 CH18 2440MHz		2349.62	55.15	-18.85	74	40.63	31.8	17.66	34.94	312	159	P	H
		2373.98	44.85	-9.15	54	30.19	31.93	17.67	34.94	312	159	A	H
	*	2440	116.95	-	-	101.92	32.2	17.79	34.96	312	159	P	H
	*	2440	115.21	-	-	100.18	32.2	17.79	34.96	312	159	A	H
		2499.65	54.94	-19.06	74	39.88	32.2	17.84	34.98	312	159	P	H
		2492.72	45.02	-8.98	54	29.96	32.2	17.84	34.98	312	159	A	H
		2310.42	54.89	-19.11	74	40.42	31.8	17.59	34.92	400	52	P	V
		2389.66	44.96	-9.04	54	30.16	32	17.74	34.94	400	52	A	V
	*	2440	114.98	-	-	99.95	32.2	17.79	34.96	400	52	P	V
	*	2440	113.14	-	-	98.11	32.2	17.79	34.96	400	52	A	V
		2492.72	55.67	-18.33	74	40.61	32.2	17.84	34.98	400	52	P	V
		2484.88	45.19	-8.81	54	30.12	32.2	17.84	34.97	400	52	A	V
802.11a CH 40 5200MHz		5149.24	59.98	-14.02	74	49.44	34.3	11.29	35.05	100	324	P	H
		5150	49.57	-4.43	54	39.03	34.3	11.29	35.05	100	324	A	H
	*	5200	121.89	-	-	111.3	34.3	11.34	35.05	100	324	P	H
	*	5200	113.39	-	-	102.8	34.3	11.34	35.05	100	324	A	H
		5364.24	52.68	-21.32	74	41.77	34.47	11.49	35.05	100	324	P	H
		5358.92	42.77	-11.23	54	31.93	34.4	11.49	35.05	100	324	A	H
		5150	54.99	-19.01	74	44.45	34.3	11.29	35.05	400	279	P	V
		5150	45.92	-8.08	54	35.38	34.3	11.29	35.05	400	279	A	V
	*	5200	120.79	-	-	110.2	34.3	11.34	35.05	400	279	P	V
	*	5200	111.89	-	-	101.3	34.3	11.34	35.05	400	279	A	V
		5358.92	49.72	-24.28	74	38.88	34.4	11.49	35.05	400	279	P	V
		5360.04	41.1	-12.9	54	30.26	34.4	11.49	35.05	400	279	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



802.15.4_Tx_Ch18+11a_Tx_Ch40 (Harmonic @ 3m)

802.15.4+WIFI Ant. 3/ 2+3	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)	
802.15.4 CH18 2440MHz + 802.11a CH 40 5200MHz		4880	51.07	-22.93	74	40.57	34.13	11.42	35.05	100	0	P	H	
		4880	40.8	-13.2	54	30.3	34.13	11.42	35.05	100	0	A	H	
		7320	44.01	-29.99	74	52.48	35.63	14.21	58.31	100	0	P	H	
		10400	49.58	-18.62	68.2	54.31	37.4	17.43	59.56	100	0	P	H	
		15600	49.31	-24.69	74	45.37	40.2	20.37	56.63	100	0	P	H	
			4880	51.45	-22.55	74	40.95	34.13	11.42	35.05	100	0	P	V
			4880	41.37	-12.63	54	30.87	34.13	11.42	35.05	100	0	A	V
			7320	43.33	-30.67	74	51.8	35.63	14.21	58.31	100	0	P	V
			10400	50.95	-17.25	68.2	55.68	37.4	17.43	59.56	100	0	P	V
			15600	49.81	-24.19	74	45.87	40.2	20.37	56.63	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



2.4GHz 2440MHz + 5GHz 5785MHz

802.15.4_Tx_Ch18+11a_Tx_Ch157 (Band Edge @ 3m)

802.15.4	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
3		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.15.4 CH18 2440MHz		2328.48	54.7	-19.3	74	40.24	31.8	17.59	34.93	276	158	P	H
		2389.66	44.85	-9.15	54	30.05	32	17.74	34.94	276	158	A	H
	*	2440	116.97	-	-	101.94	32.2	17.79	34.96	276	158	P	H
	*	2440	115.37	-	-	100.34	32.2	17.79	34.96	276	158	A	H
		2487.05	54.62	-19.38	74	39.55	32.2	17.84	34.97	276	158	P	H
		2483.69	45.03	-8.97	54	29.96	32.2	17.84	34.97	276	158	A	H
		2385.18	54.25	-19.75	74	39.52	31.93	17.74	34.94	358	299	P	V
		2387.28	44.72	-9.28	54	29.92	32	17.74	34.94	358	299	A	V
	*	2440	112.16	-	-	97.13	32.2	17.79	34.96	358	299	P	V
	*	2440	110.48	-	-	95.45	32.2	17.79	34.96	358	299	A	V
		2498.18	54.47	-19.53	74	39.41	32.2	17.84	34.98	358	299	P	V
		2498.81	44.82	-9.18	54	29.76	32.2	17.84	34.98	358	299	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



WIFI Ant. 2+3	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)
802.11a CH 157 5785MHz		5618.8	55.24	-12.96	68.2	43.91	34.73	11.68	35.08	192	335	P	H
		5664.2	55.35	-23.39	78.74	44.06	34.6	11.78	35.09	192	335	P	H
		5708.4	54.98	-52.57	107.55	43.38	34.87	11.83	35.1	192	335	P	H
		5721	53.96	-59.12	113.08	42.4	34.83	11.83	35.1	192	335	P	H
		5458	60.68	-13.32	74	49.48	34.7	11.56	35.06	227	308	P	H
		5458	50.22	-3.78	54	39.02	34.7	11.56	35.06	227	308	A	H
	*	5785	121.39	-	-	109.7	34.87	11.93	35.11	192	335	P	H
	*	5785	112.89	-	-	101.2	34.87	11.93	35.11	192	335	A	H
		5850.6	50.39	-70.44	120.83	38.73	34.8	11.98	35.12	192	335	P	H
		5872.6	52.19	-53.68	105.87	40.36	34.93	12.02	35.12	192	335	P	H
		5916.4	52.35	-22.19	74.54	40.41	35	12.07	35.13	192	335	P	H
		5931.4	50.91	-17.29	68.2	38.97	35	12.07	35.13	192	335	P	H
		5602	54.38	-13.82	68.2	42.98	34.8	11.68	35.08	276	356	P	V
		5668.8	55.18	-26.97	82.15	43.74	34.75	11.78	35.09	276	356	P	V
		5702.2	55.46	-50.36	105.82	43.85	34.87	11.83	35.09	276	356	P	V
		5720	53.31	-57.49	110.8	41.75	34.83	11.83	35.1	276	356	P	V
	*	5785	118.29	-	-	106.6	34.87	11.93	35.11	276	356	P	V
	*	5785	109.75	-	-	98.06	34.87	11.93	35.11	276	356	A	V
		5854.4	49.58	-62.59	112.17	37.85	34.87	11.98	35.12	276	356	P	V
		5870.8	51.59	-54.78	106.37	39.76	34.93	12.02	35.12	276	356	P	V
	5887.4	50.62	-45.37	95.99	38.79	34.93	12.02	35.12	276	356	P	V	
	5945.8	49.71	-18.49	68.2	37.73	35	12.11	35.13	276	356	P	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



802.15.4_Tx_Ch18+11a_Tx_Ch157 (Harmonic @ 3m)

802.15.4+WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.	
Ant. 3 2+3		(MHz)	(dBµV/m)	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg. (P/A)	(H/V)	
				(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)			
802.15.4 CH18 2440MHz + 802.11a CH 157 5785MHz		4880	51.31	-22.69	74	40.81	34.13	11.42	35.05	100	0	P	H	
		4880	41.03	-12.97	54	30.53	34.13	11.42	35.05	100	0	A	H	
		7320	44.43	-29.57	74	52.9	35.63	14.21	58.31	100	0	P	H	
		11570	49.47	-24.53	74	50.77	38.17	17.89	57.36	100	0	P	H	
		17355	52.94	-15.26	68.2	45.39	41.55	21.94	55.94	100	0	P	H	
			4880	50.66	-23.34	74	40.16	34.13	11.42	35.05	100	0	P	V
			4880	40.6	-13.4	54	30.1	34.13	11.42	35.05	100	0	A	V
			7320	44.8	-29.2	74	53.27	35.63	14.21	58.31	100	0	P	V
			11570	49.72	-24.28	74	51.02	38.17	17.89	57.36	100	0	P	V
			17355	53.94	-14.26	68.2	46.39	41.55	21.94	55.94	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



2.4GHz 2440MHz + 5GHz 5200MHz

11b_Tx_Ch06+11a_Tx_Ch40 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2/ 2+3		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
11b CH06 2437MHz		2389.94	56.76	-17.24	74	41.97	32	17.74	34.95	197	46	P	H
		2389.94	47.35	-6.65	54	32.56	32	17.74	34.95	197	46	A	H
	*	2437	114.66	-	-	99.63	32.2	17.79	34.96	197	46	P	H
	*	2437	111.53	-	-	96.5	32.2	17.79	34.96	197	46	A	H
		2495.59	57.32	-16.68	74	42.26	32.2	17.84	34.98	197	46	P	H
		2484.04	46.42	-7.58	54	31.35	32.2	17.84	34.97	197	46	A	H
		2383.92	58.78	-15.22	74	44.05	31.93	17.74	34.94	100	86	P	V
		2389.94	48.74	-5.26	54	33.95	32	17.74	34.95	100	86	A	V
	*	2437	115.48	-	-	100.45	32.2	17.79	34.96	100	86	P	V
	*	2437	112.42	-	-	97.39	32.2	17.79	34.96	100	86	A	V
		2495.1	56.39	-17.61	74	41.33	32.2	17.84	34.98	100	86	P	V
		2484.11	45.83	-8.17	54	30.76	32.2	17.84	34.97	100	86	A	V
802.11a CH 40 5200MHz		5150	58.53	-15.47	74	47.99	34.3	11.29	35.05	100	327	P	H
		5150	49.95	-4.05	54	39.41	34.3	11.29	35.05	100	327	A	H
	*	5200	121.92	-	-	111.33	34.3	11.34	35.05	100	327	P	H
	*	5200	113.99	-	-	103.4	34.3	11.34	35.05	100	327	A	H
		5354.44	51.56	-22.44	74	40.72	34.4	11.49	35.05	100	327	P	H
		5360.04	43.23	-10.77	54	32.39	34.4	11.49	35.05	100	327	A	H
		5150	54.87	-19.13	74	44.33	34.3	11.29	35.05	400	278	P	V
		5150	46.32	-7.68	54	35.78	34.3	11.29	35.05	400	278	A	V
	*	5200	120.69	-	-	110.1	34.3	11.34	35.05	400	278	P	V
	*	5200	112.94	-	-	102.35	34.3	11.34	35.05	400	278	A	V
		5432.84	50.76	-23.24	74	39.59	34.67	11.56	35.06	400	278	P	V
		5354.72	41.61	-12.39	54	30.77	34.4	11.49	35.05	400	278	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



11b_Tx_Ch06+11a_Tx_Ch40 (Harmonic @ 3m)

WIFI Ant. 1+2 2+3	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)	
11b CH06 2437MHz + 802.11a CH 40 5200MHz		4874	51.52	-22.48	74	41.02	34.13	11.42	35.05	100	0	P	H	
		4874	41.5	-12.5	54	31	34.13	11.42	35.05	100	0	A	H	
		7311	44.68	-29.32	74	53.07	35.7	14.21	58.3	100	0	P	H	
		10400	50.9	-17.3	68.2	55.63	37.4	17.43	59.56	100	0	P	H	
		15600	49.97	-24.03	74	46.03	40.2	20.37	56.63	100	0	P	H	
			4874	52.18	-21.82	74	42.11	34.13	10.99	35.05	100	0	P	V
			4874	41.23	-12.77	54	31.16	34.13	10.99	35.05	100	0	A	V
			7311	45.23	-28.77	74	53.62	35.7	14.21	58.3	100	0	P	V
			10400	52.3	-15.9	68.2	57.03	37.4	17.43	59.56	100	0	P	V
			15600	49.89	-24.11	74	45.95	40.2	20.37	56.63	100	0	P	V
	Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2440MHz + 5GHz 5785MHz

11b_Tx_Ch06+11a_Tx_Ch157 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
11b CH06 2437MHz		2389.94	57.54	-16.46	74	42.75	32	17.74	34.95	197	46	P	H
		2389.94	47.63	-6.37	54	32.84	32	17.74	34.95	197	46	A	H
	*	2437	113.19	-	-	98.16	32.2	17.79	34.96	197	46	P	H
	*	2437	110.07	-	-	95.04	32.2	17.79	34.96	197	46	A	H
		2488.38	55.71	-18.29	74	40.64	32.2	17.84	34.97	197	46	P	H
		2484.6	45.44	-8.56	54	30.37	32.2	17.84	34.97	197	46	A	H
		2389.52	59.19	-14.81	74	44.39	32	17.74	34.94	100	86	P	V
		2389.94	49.16	-4.84	54	34.37	32	17.74	34.95	100	86	A	V
	*	2437	114.99	-	-	99.96	32.2	17.79	34.96	100	86	P	V
	*	2437	112.04	-	-	97.01	32.2	17.79	34.96	100	86	A	V
		2499.86	56.92	-17.08	74	41.86	32.2	17.84	34.98	100	86	P	V
		2495.94	46.36	-7.64	54	31.3	32.2	17.84	34.98	100	86	A	V
Remark	<ol style="list-style-type: none"> No other spurious found. All results are PASS against Peak and Average limit line. 												



WIFI Ant. 2+3	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)
802.11a CH 157 5785MHz		5621.6	55.82	-12.38	68.2	44.44	34.73	11.73	35.08	192	335	P	H
		5669	56.29	-26.01	82.3	44.85	34.75	11.78	35.09	192	335	P	H
		5702.4	56.32	-49.55	105.87	44.71	34.87	11.83	35.09	192	335	P	H
		5723.2	54.71	-63.39	118.1	43.15	34.83	11.83	35.1	192	335	P	H
		5458	61.06	-12.94	74	49.86	34.7	11.56	35.06	227	308	P	H
		5458	51.14	-2.86	54	39.94	34.7	11.56	35.06	227	308	A	H
	*	5785	120.89	-	-	109.2	34.87	11.93	35.11	192	335	P	H
	*	5785	112.69	-	-	101	34.87	11.93	35.11	192	335	A	H
		5853.4	53.01	-61.44	114.45	41.35	34.8	11.98	35.12	192	335	P	H
		5858.8	52.67	-57.06	109.73	40.94	34.87	11.98	35.12	192	335	P	H
		5880.4	51.55	-49.64	101.19	39.72	34.93	12.02	35.12	192	335	P	H
		5946	51	-17.2	68.2	39.02	35	12.11	35.13	192	335	P	H
		5649.2	56.66	-11.54	68.2	45.34	34.67	11.73	35.08	276	356	P	V
		5667.2	56.94	-24.02	80.96	45.5	34.75	11.78	35.09	276	356	P	V
		5701	55.69	-49.79	105.48	44.08	34.87	11.83	35.09	276	356	P	V
		5724	55.49	-64.43	119.92	43.93	34.83	11.83	35.1	276	356	P	V
		5458	60.78	-13.22	74	49.58	34.7	11.56	35.06	216	159	P	V
		5458	51	-3	54	39.8	34.7	11.56	35.06	216	159	A	V
	*	5785	118.77	-	-	107.08	34.87	11.93	35.11	276	356	P	V
	*	5785	109.99	-	-	98.3	34.87	11.93	35.11	276	356	A	V
	5854.6	50.98	-60.73	111.71	39.25	34.87	11.98	35.12	276	356	P	V	
	5859.8	51.99	-57.46	109.45	40.26	34.87	11.98	35.12	276	356	P	V	
	5922.8	50.99	-18.83	69.82	39.05	35	12.07	35.13	276	356	P	V	
	5927.2	50.38	-17.82	68.2	38.44	35	12.07	35.13	276	356	P	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



11b_Tx_Ch06+11a_Tx_Ch157 (Harmonic @ 3m)

WIFI Ant. 1+2 2+3	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)	
11b CH06 2437MHz + 802.11a CH 157 5785MHz		4874	51.59	-22.41	74	41.09	34.13	11.42	35.05	100	0	P	H	
		4874	41.4	-12.6	54	30.9	34.13	11.42	35.05	100	0	A	H	
		7311	45.88	-28.12	74	54.27	35.7	14.21	58.3	100	0	P	H	
		11570	49.3	-24.7	74	50.6	38.17	17.89	57.36	100	0	P	H	
		17355	53.74	-14.46	68.2	46.19	41.55	21.94	55.94	100	0	P	H	
			4874	51.44	-22.56	74	40.94	34.13	11.42	35.05	100	0	P	V
			4874	41.3	-12.7	54	30.8	34.13	11.42	35.05	100	0	A	V
			7311	45.41	-28.59	74	53.8	35.7	14.21	58.3	100	0	P	V
			11570	49.88	-24.12	74	51.18	38.17	17.89	57.36	100	0	P	V
			17355	52.9	-15.3	68.2	45.35	41.55	21.94	55.94	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



Emission below 1GHz

BLE(1M)_Tx_Ch19+11a_Tx_Ch40 (LF)

BLE+WIFI Ant. 1 2+3	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)	
BLE(1M) CH19 2440MHz + 802.11a CH 40 5200MHz LF		72.39	23.94	-16.06	40	39.79	12.59	1.55	29.99	-	-	P	H	
		163.92	26.92	-16.58	43.5	38.6	16.15	2.07	29.9	-	-	P	H	
		233.31	33.13	-12.87	46	43.96	16.57	2.42	29.82	-	-	P	H	
		398	35.03	-10.97	46	40.15	21.6	3.07	29.79	100	0	P	H	
		466.6	28.8	-17.2	46	31.92	23.27	3.41	29.8	-	-	P	H	
		958.7	33.71	-12.29	46	26.67	30.8	4.74	28.5	-	-	P	H	
														H
														H
														H
														H
			30.27	29.74	-10.26	40	33.93	24.6	1.19	29.98	100	0	P	V
			161.22	24.32	-19.18	43.5	35.68	16.47	2.07	29.9	-	-	P	V
			233.31	29.38	-16.62	46	40.21	16.57	2.42	29.82	-	-	P	V
			388.9	32.1	-13.9	46	37.55	21.27	3.07	29.79	-	-	P	V
			855.8	32.84	-13.16	46	28.54	28.91	4.48	29.09	-	-	P	V
			955.9	33.85	-12.15	46	26.95	30.69	4.74	28.53	-	-	P	V
														V
														V
													V	
													V	
													V	
													V	
Remark	1. No other spurious found. 2. All results are PASS against limit line.													



BLE(1M)_Tx_Ch19+11a_Tx_Ch157 (LF)

BLE+WIFI Ant. 1 2+3	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)	
BLE(1M) CH19 2440MHz + 802.11a CH 157 5785MHz LF		31.62	22.42	-17.58	40	27.63	23.58	1.19	29.98	-	-	P	H	
		161.76	24.7	-18.8	43.5	36.17	16.36	2.07	29.9	-	-	P	H	
		233.31	33.8	-12.2	46	44.63	16.57	2.42	29.82	-	-	P	H	
		382.6	34.08	-11.92	46	39.74	21.05	3.07	29.78	-	-	P	H	
		916.7	32.68	-13.32	46	27.73	29.08	4.68	28.81	-	-	P	H	
		953.8	34.11	-11.89	46	27.37	30.54	4.74	28.54	100	0	P	H	
														H
														H
														H
														H
			30	25.47	-14.53	40	29.66	24.6	1.19	29.98	-	-	P	V
			162.3	22.97	-20.53	43.5	34.44	16.36	2.07	29.9	-	-	P	V
			233.31	28.99	-17.01	46	39.82	16.57	2.42	29.82	-	-	P	V
			388.9	31.31	-14.69	46	36.76	21.27	3.07	29.79	-	-	P	V
			869.1	32.76	-13.24	46	28.2	28.97	4.63	29.04	-	-	P	V
			956.6	34.41	-11.59	46	27.5	30.69	4.74	28.52	100	0	P	V
														V
														V
													V	
													V	
													V	
Remark	1. No other spurious found. 2. All results are PASS against limit line.													



802.15.4_Tx_Ch18+11a_Tx_Ch40 (LF)

802.15.4+WIFI Ant. 1 2+3	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)
		30.54	22.94	-17.06	40	27.64	24.09	1.19	29.98	-	-	P	H
		154.47	25.36	-18.14	43.5	36.35	16.85	2.07	29.91	-	-	P	H
		233.31	35.42	-10.58	46	46.25	16.57	2.42	29.82	100	0	P	H
		398	35.13	-10.87	46	40.25	21.6	3.07	29.79	-	-	P	H
		910.4	31.95	-14.05	46	27.17	28.96	4.68	28.86	-	-	P	H
		954.5	34.27	-11.73	46	27.47	30.59	4.74	28.53	-	-	P	H
													H
													H
													H
													H
802.15.4 CH18 2440MHz + 802.11a CH 40 5200MHz LF		30	31.19	-8.81	40	35.38	24.6	1.19	29.98	100	0	P	V
		34.86	29.35	-10.65	40	36.08	22.06	1.19	29.98	-	-	P	V
		233.31	30.33	-15.67	46	41.16	16.57	2.42	29.82	-	-	P	V
		388.9	33.19	-12.81	46	38.64	21.27	3.07	29.79	-	-	P	V
		910.4	32.88	-13.12	46	28.1	28.96	4.68	28.86	-	-	P	V
		958	34.08	-11.92	46	27.04	30.8	4.74	28.5	-	-	P	V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



802.15.4_Tx_Ch18+11a_Tx_Ch157 (LF)

802.15.4+WIFI Ant. 1 2+3	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)	
802.15.4 CH18 2440MHz + 802.11a CH 157 5785MHz LF		30	22.85	-17.15	40	27.04	24.6	1.19	29.98	-	-	P	H	
		48.9	21.81	-18.19	40	35.54	15.07	1.19	29.99	-	-	P	H	
		125.31	25.86	-17.64	43.5	36.3	17.69	1.83	29.96	-	-	P	H	
		400.1	33.32	-12.68	46	38.33	21.71	3.07	29.79	-	-	P	H	
		876.1	32.47	-13.53	46	27.92	28.93	4.63	29.01	-	-	P	H	
		951.7	33.94	-12.06	46	27.31	30.44	4.74	28.55	100	0	P	H	
														H
														H
														H
														H
			30	28.69	-11.31	40	32.88	24.6	1.19	29.98	100	0	P	V
			38.37	24.81	-15.19	40	33.72	19.88	1.19	29.98	-	-	P	V
			51.06	23.39	-16.61	40	38.33	13.86	1.19	29.99	-	-	P	V
			385.4	32.9	-13.1	46	38.5	21.12	3.07	29.79	-	-	P	V
			855.1	32.06	-13.94	46	27.76	28.91	4.48	29.09	-	-	P	V
			953.8	34.03	-11.97	46	27.29	30.54	4.74	28.54	-	-	P	V
														V
														V
													V	
													V	
Remark	1. No other spurious found. 2. All results are PASS against limit line.													



11b_Tx_Ch06+11a_Tx_Ch40 (LF)

WIFI Ant. 1+2 2+3	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)	
11b CH06 2437MHz + 802.11a CH 40 5200MHz LF		30.81	22.57	-17.43	40	27.27	24.09	1.19	29.98	-	-	P	H	
		52.14	19.34	-20.66	40	34.68	13.46	1.19	29.99	-	-	P	H	
		124.5	26.2	-17.3	43.5	36.69	17.64	1.83	29.96	-	-	P	H	
		400.1	33.93	-12.07	46	38.94	21.71	3.07	29.79	-	-	P	H	
		869.1	32.26	-13.74	46	27.7	28.97	4.63	29.04	-	-	P	H	
		948.2	34	-12	46	27.56	30.28	4.74	28.58	100	0	P	H	
														H
														H
														H
			30	32.39	-7.61	40	36.58	24.6	1.19	29.98	100	0	P	V
			36.21	26.9	-13.1	40	34.18	21.51	1.19	29.98	-	-	P	V
			50.79	23.72	-16.28	40	38.27	14.25	1.19	29.99	-	-	P	V
			382.6	32.87	-13.13	46	38.53	21.05	3.07	29.78	-	-	P	V
			851.6	32.43	-13.57	46	28.24	28.81	4.48	29.1	-	-	P	V
			941.9	33.74	-12.26	46	27.71	29.92	4.74	28.63	-	-	P	V
														V
													V	
													V	
													V	
Remark	1. No other spurious found. 2. All results are PASS against limit line.													



11b_Tx_Ch06+11a_Tx_Ch157 (LF)

WIFI Ant. 1+2 2+3	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)	
11b CH06 2437MHz + 802.11a CH 157 5785MHz LF		30	22.83	-17.17	40	27.02	24.6	1.19	29.98	-	-	P	H	
		51.6	19.66	-20.34	40	34.6	13.86	1.19	29.99	-	-	P	H	
		123.96	26.67	-16.83	43.5	37.16	17.64	1.83	29.96	-	-	P	H	
		401.5	34.93	-11.07	46	39.89	21.76	3.07	29.79	100	0	P	H	
		846.7	32.25	-13.75	46	28.21	28.68	4.48	29.12	-	-	P	H	
		951	33.66	-12.34	46	27.08	30.39	4.74	28.55	-	-	P	H	
														H
														H
														H
														H
			30	32.4	-7.6	40	36.59	24.6	1.19	29.98	100	0	P	V
			38.1	28.6	-11.4	40	36.97	20.42	1.19	29.98	-	-	P	V
			50.79	25.67	-14.33	40	40.22	14.25	1.19	29.99	-	-	P	V
			385.4	34.02	-11.98	46	39.62	21.12	3.07	29.79	-	-	P	V
			871.9	32.62	-13.38	46	28.07	28.95	4.63	29.03	-	-	P	V
			952.4	34.46	-11.54	46	27.78	30.49	4.74	28.55	-	-	P	V
													V	
													V	
													V	
													V	
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:

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(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

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

For Peak Limit @ 2390MHz:

- 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)
- Over Limit(dB)
= Level(dBμV/m) – Limit Line(dBμV/m)
= 55.45(dBμV/m) – 74(dBμV/m)
= -18.55(dB)

For Average Limit @ 2390MHz:

- 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)
- 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 Plots

Test Engineer :	Jesse Wang, Stan Hsieh and Ken Wu	Temperature :	24~26°C
		Relative Humidity :	52~60%

Note symbol

-L	Low channel location
-R	High channel location

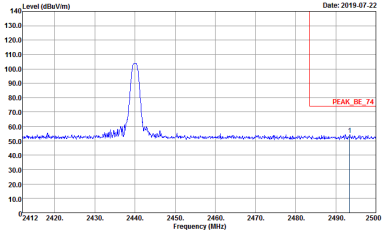
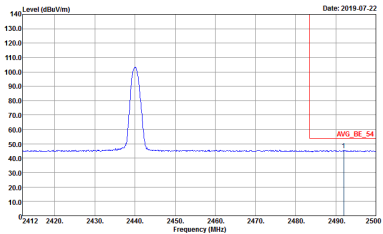


2.4GHz 2400~2483.5MHz+Band 1 - 5150~5250MHz

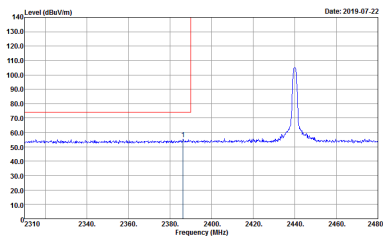
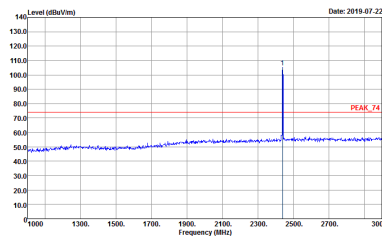
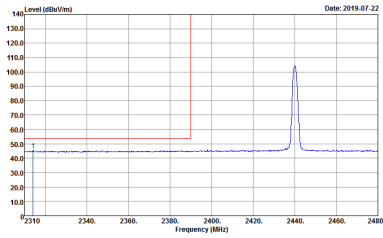
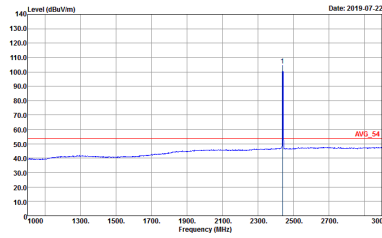
BLE(1M)_Tx_Ch19+11a_Tx_Ch40 (Band Edge @ 3m)

BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BLE CH19 2440MHz - L	
1	Horizontal	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 44 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : Default / 25</p>	<p>Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 44 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : Default / 25</p>
Avg.	<p>Site : 03CH07-HY Condition : AVG_BE_34 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 44 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : Default / 25</p>	<p>Site : 03CH07-HY Condition : AVG_34 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 44 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : Default / 25</p>

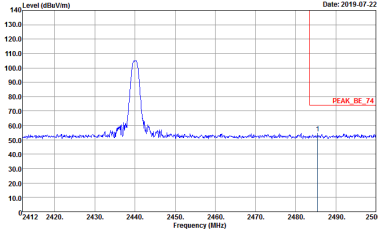
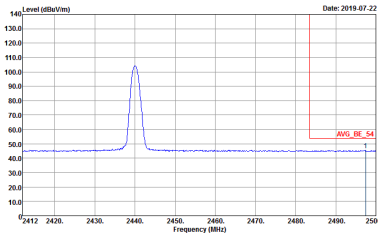


BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BLE CH19 2440MHz - R	
1	Horizontal	Fundamental
<p>Peak</p>	 <p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 960638 Mode : 44 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : Default / 25</p>	<p>Left blank</p>
<p>Avg.</p>	 <p>Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3.000kHz SWT:Auto Detector : Peak Project : 960638 Mode : 44 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : Default / 25</p>	<p>Left blank</p>

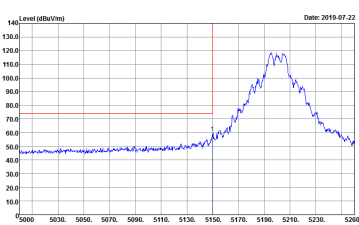
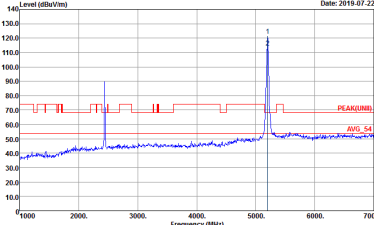
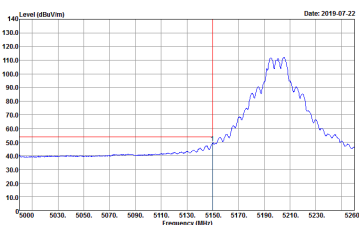


BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BLE CH19 2440MHz - L	
1	Vertical	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL Detector : Peak Project : 960638 Mode : 44 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : Default / 25</p>	 <p>Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL Detector : Peak Project : 960638 Mode : 44 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : Default / 25</p>
Avg.	 <p>Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL Detector : Peak Project : 960638 Mode : 44 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : Default / 25</p>	 <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL Detector : Peak Project : 960638 Mode : 44 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : Default / 25</p>



BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BLE CH19 2440MHz - R	
1	Vertical	Fundamental
<p>Peak</p>	 <p>Date: 2019-07-22</p> <pre> Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 960638 Mode : 44 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : Default / 25 </pre>	<p>Left blank</p>
<p>Avg.</p>	 <p>Date: 2019-07-22</p> <pre> Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3.000kHz SWT:Auto Detector : Peak Project : 960638 Mode : 44 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : Default / 25 </pre>	<p>Left blank</p>

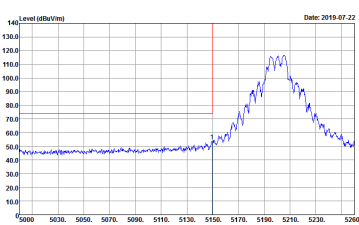
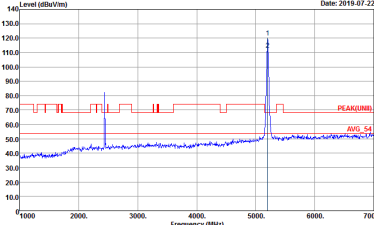
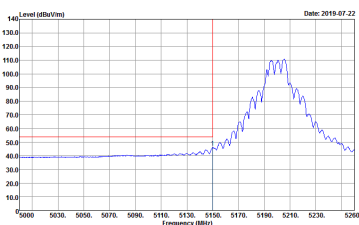


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH40 5200MHz - L	
2+3	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWF:Auto Detector : Peak Project : 960638 Mode : 44 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : Default / 25</p>	 <p>Site : 03CH07-HY Condition : PEAK(FUN) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWF:Auto Detector : Peak Project : 960638 Mode : 44 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : Default / 25</p>
Avg.	 <p>Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWF:Auto Detector : Peak Project : 960638 Mode : 44 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : Default / 25</p>	Left blank



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH40 5200MHz - R	
2+3	Horizontal	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 44 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : Default / 25</p>	Left blank
Avg.	<p>Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 44 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : Default / 25</p>	Left blank



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH40 5200MHz - L	
2+3	Vertical	Fundamental
<p>Peak</p>	 <p>Date: 2019-07-22</p> <pre> Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL Detector : Peak Project : 960638 Mode : 44 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : Default / 25 </pre>	 <p>Date: 2019-07-22</p> <pre> Site : 03CH07-HY Condition : PEAK(UNI) 3m HF_ANT_00075962 VERTICAL Detector : Peak Project : 960638 Mode : 44 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : Default / 25 </pre>
<p>Avg.</p>	 <p>Date: 2019-07-22</p> <pre> Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL Detector : Peak Project : 960638 Mode : 44 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : Default / 25 </pre>	<p>Left blank</p>



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH40 5200MHz - R	
2+3	Vertical	Fundamental
<p>Peak</p>	<p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 960638 Mode : 44 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : Default / 25</p>	<p>Left blank</p>
<p>Avg.</p>	<p>Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Detector : Peak Project : 960638 Mode : 44 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : Default / 25</p>	<p>Left blank</p>

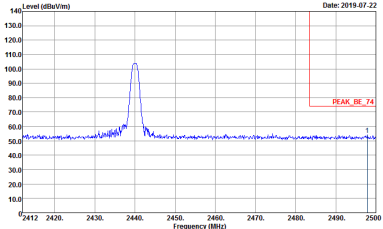
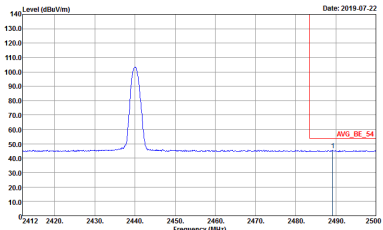


2.4GHz 2400~2483.5MHz+Band 4 - 5725~5850MHz

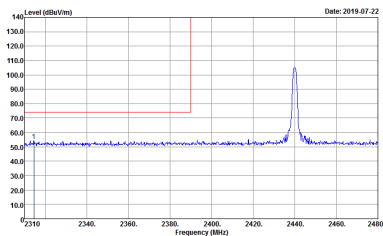
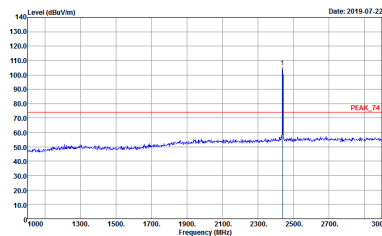
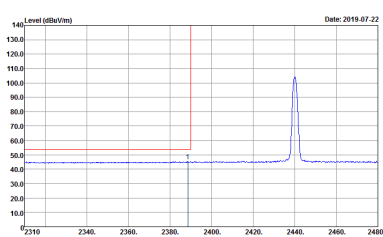
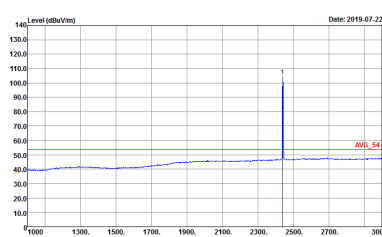
BLE(1M)_Tx_Ch19+11a_Tx_Ch157 (Band Edge @ 3m)

BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BLE CH19 2440MHz - L	
1	Horizontal	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 45 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : Default / 21</p>	<p>Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 45 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : Default / 21</p>
Avg.	<p>Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 45 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : Default / 21</p>	<p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 45 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : Default / 21</p>

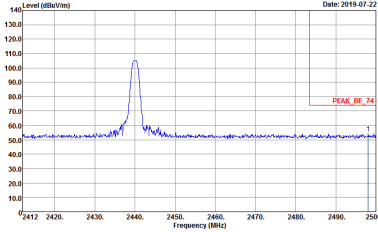
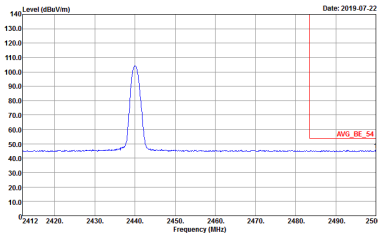


BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BLE CH19 2440MHz - R	
1	Horizontal	Fundamental
<p>Peak</p>	 <p>Date: 2019-07-22</p> <pre> Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 960638 Mode : 45 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : Default / 21 </pre>	<p>Left blank</p>
<p>Avg.</p>	 <p>Date: 2019-07-22</p> <pre> Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3.000kHz SWT:Auto Detector : Peak Project : 960638 Mode : 45 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : Default / 21 </pre>	<p>Left blank</p>



BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BLE CH19 2440MHz - L	
1	Vertical	Fundamental
Peak	 <p>Date: 2019-07-22</p> <p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 960638 Mode : 45 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : Default / 21</p>	 <p>Date: 2019-07-22</p> <p>Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 960638 Mode : 45 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : Default / 21</p>
Avg.	 <p>Date: 2019-07-22</p> <p>Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3.000kHz SWT:Auto Detector : Peak Project : 960638 Mode : 45 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : Default / 21</p>	 <p>Date: 2019-07-22</p> <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3.000kHz SWT:Auto Detector : Peak Project : 960638 Mode : 45 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : Default / 21</p>



BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BLE CH19 2440MHz - R	
1	Vertical	Fundamental
<p>Peak</p>	 <p>Date: 2019-07-22</p> <pre> Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 960638 Mode : 45 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : Default / 21 </pre>	<p>Left blank</p>
<p>Avg.</p>	 <p>Date: 2019-07-22</p> <pre> Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3.000kHz SWT:Auto Detector : Peak Project : 960638 Mode : 45 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : Default / 21 </pre>	<p>Left blank</p>



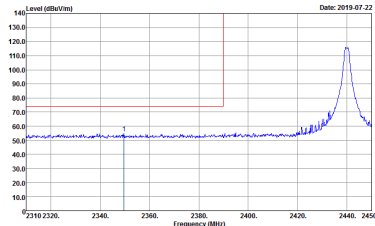
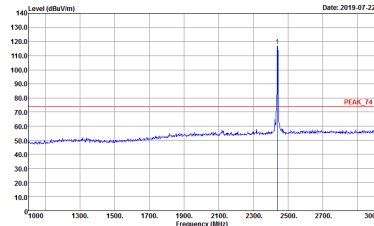
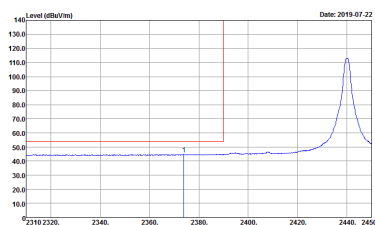
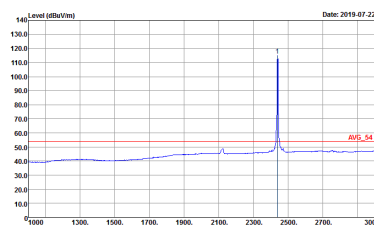
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
2+3	Horizontal	Fundamental
<p>Peak</p>	<p>Date: 2019-07-22 PEAK_BE(B4)_16.24</p> <p>Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 45 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : Default / 21</p>	<p>Date: 2019-07-22</p> <p>Site : 03CH07-HY Condition : PEAK(UNI) 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 45 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : Default / 21</p>
<p>Peak</p>	<p>Date: 2019-07-22</p> <p>Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 45 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : Default / 21</p>	<p>Left blank</p>



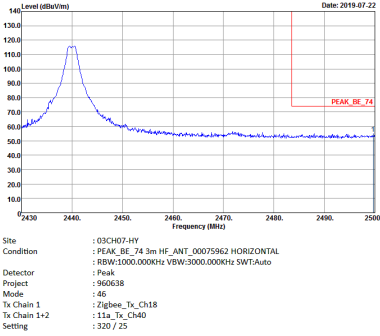
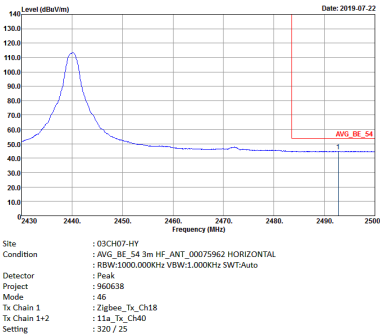
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
2+3	Vertical	Fundamental
<p>Peak</p>	<p>Date: 2019-07-22 PEAK (dBm/100MHz): 130.0</p> <p>Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL Detector : Peak Project : 960638 Mode : 45 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : Default / 21</p>	<p>Date: 2019-07-22 PEAK (dBm/100MHz): 130.0</p> <p>Site : 03CH07-HY Condition : PEAK(FUN)I 3m HF_ANT_00075962 VERTICAL Detector : Peak Project : 960638 Mode : 45 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : Default / 21</p>
<p>Peak</p>	<p>Date: 2019-07-22 PEAK (dBm/100MHz): 130.0</p> <p>Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL Detector : Peak Project : 960638 Mode : 45 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : Default / 21</p>	<p>Left blank</p>



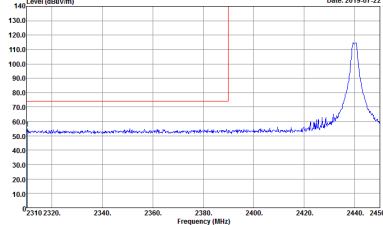
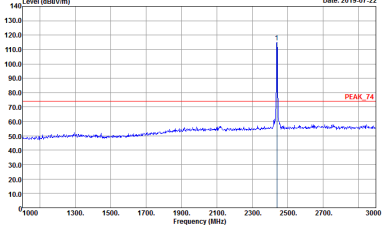
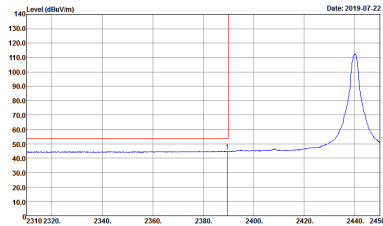
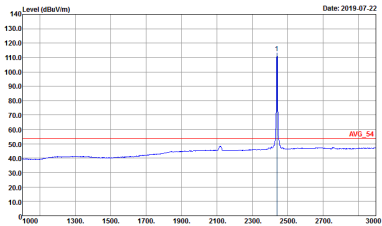
2.4GHz 2400~2483.5MHz+Band 1 - 5150~5250MHz
 802.15.4_Tx_Ch18+11a_Tx_Ch40 (Band Edge @ 3m)

802.15.4	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.15.4 CH18 2440MHz - L	
3	Horizontal	Fundamental
<p>Peak</p>	 <p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HE_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 46 Tx Chain 1 : Zigbee_Tx_Ch18 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 320 / 25</p>	 <p>Site : 03CH07-HY Condition : PEAK_74 3m HE_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 46 Tx Chain 1 : Zigbee_Tx_Ch18 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 320 / 25</p>
<p>Avg.</p>	 <p>Site : 03CH07-HY Condition : AVG_BE_54 3m HE_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 46 Tx Chain 1 : Zigbee_Tx_Ch18 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 320 / 25</p>	 <p>Site : 03CH07-HY Condition : AVG_54 3m HE_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 46 Tx Chain 1 : Zigbee_Tx_Ch18 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 320 / 25</p>

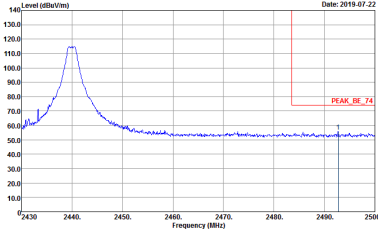
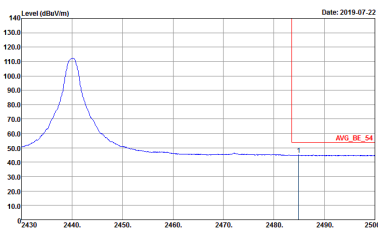


802.15.4	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.15.4 CH18 2440MHz - R	
3	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 46 Tx Chain 1 : Zigbee_Tx_CH18 Tx Chain 1+2 : 11a_Tx_CH40 Setting : 320 / 25</p>	Left blank
Avg.	 <p>Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 46 Tx Chain 1 : Zigbee_Tx_CH18 Tx Chain 1+2 : 11a_Tx_CH40 Setting : 320 / 25</p>	Left blank

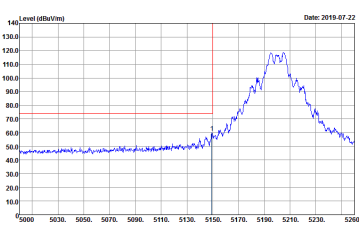
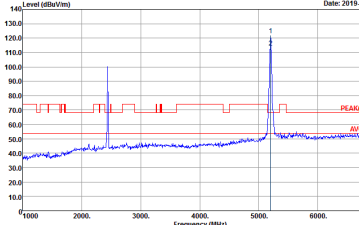
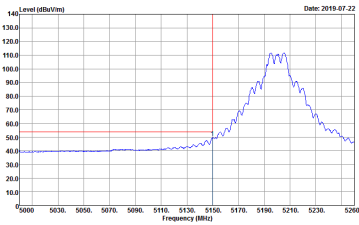


802.15.4	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.15.4 CH18 2440MHz - L	
3	Vertical	Fundamental
Peak	 <p>Date: 2019-07-22</p> <pre> Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 960638 Mode : 46 Tx Chain 1 : Zigbee_Tx_Ch18 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 320 / 25 </pre>	 <p>Date: 2019-07-22</p> <pre> Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 960638 Mode : 46 Tx Chain 1 : Zigbee_Tx_Ch18 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 320 / 25 </pre>
Avg.	 <p>Date: 2019-07-22</p> <pre> Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Detector : Peak Project : 960638 Mode : 46 Tx Chain 1 : Zigbee_Tx_Ch18 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 320 / 25 </pre>	 <p>Date: 2019-07-22</p> <pre> Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Detector : Peak Project : 960638 Mode : 46 Tx Chain 1 : Zigbee_Tx_Ch18 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 320 / 25 </pre>

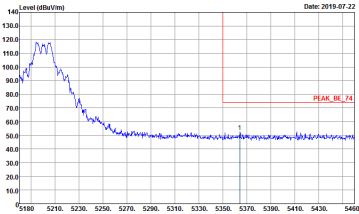
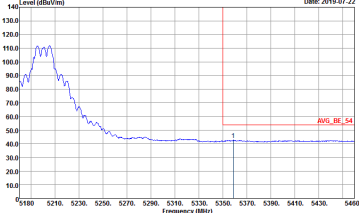


802.15.4	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.15.4 CH18 2440MHz - R	
3	Vertical	Fundamental
Peak	 <p>Date: 2019-07-22</p> <pre> Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWFAuto Detector : Peak Project : 960638 Mode : 46 Tx Chain 1 : Zlgbee_Tx_CH18 Tx Chain 1+2 : 11a_Tx_CH40 Setting : 320 / 25 </pre>	Left blank
Avg.	 <p>Date: 2019-07-22</p> <pre> Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWFAuto Detector : Peak Project : 960638 Mode : 46 Tx Chain 1 : Zlgbee_Tx_CH18 Tx Chain 1+2 : 11a_Tx_CH40 Setting : 320 / 25 </pre>	Left blank

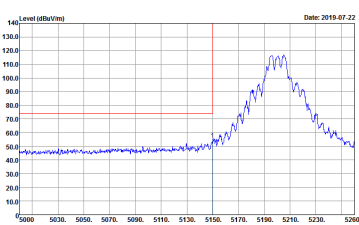
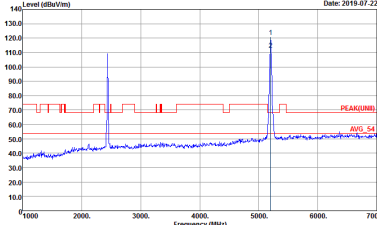
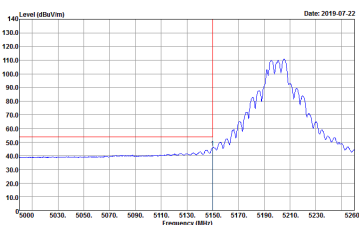


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH40 5200MHz - L	
2+3	Horizontal	Fundamental
<p>Peak</p>	 <p>Date: 2019-07-22</p> <p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 46 Tx Chain 1 : Zigbee Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 320 / 25</p>	 <p>Date: 2019-07-22</p> <p>Site : 03CH07-HY Condition : PEAK(UNI) 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 46 Tx Chain 1 : Zigbee Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 320 / 25</p>
<p>Avg.</p>	 <p>Date: 2019-07-22</p> <p>Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 46 Tx Chain 1 : Zigbee Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 320 / 25</p>	<p>Left blank</p>

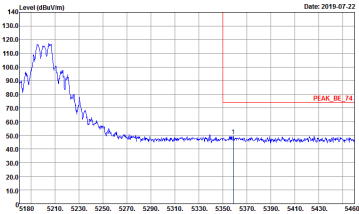
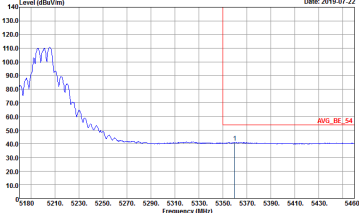


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH40 5200MHz - R	
2+3	Horizontal	Fundamental
<p>Peak</p>	 <p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 46 Tx Chain 1 : Zigbee Tx Chain 1+2 : 11a_Tx_CH40 Setting : 320 / 25</p>	<p>Left blank</p>
<p>Avg.</p>	 <p>Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 46 Tx Chain 1 : Zigbee Tx Chain 1+2 : 11a_Tx_CH40 Setting : 320 / 25</p>	<p>Left blank</p>



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH40 5200MHz - L	
2+3	Vertical	Fundamental
<p>Peak</p>	 <p>Date: 2019-07-22</p> <pre> Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL Detector : Peak Project : 960638 Mode : 46 Tx Chain 1 : Zigbee Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 320 / 25 </pre>	 <p>Date: 2019-07-22</p> <pre> Site : 03CH07-HY Condition : PEAK(UNI) 3m HF_ANT_00075962 VERTICAL Detector : Peak Project : 960638 Mode : 46 Tx Chain 1 : Zigbee Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 320 / 25 </pre>
<p>Avg.</p>	 <p>Date: 2019-07-22</p> <pre> Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL Detector : Peak Project : 960638 Mode : 46 Tx Chain 1 : Zigbee Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 320 / 25 </pre>	<p>Left blank</p>

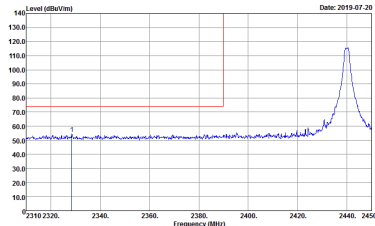
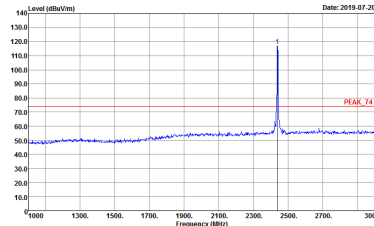
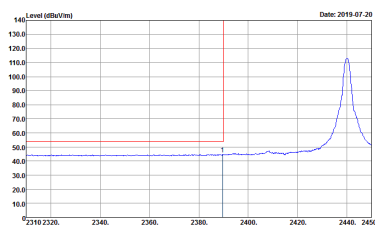
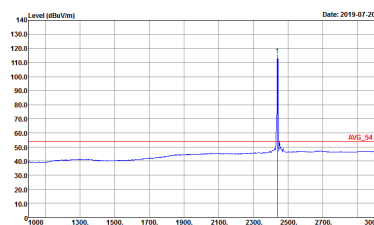


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH40 5200MHz - R	
2+3	Vertical	Fundamental
<p>Peak</p>	 <p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 960638 Mode : 46 Tx Chain 1 : Zigbee Tx Chain 1+2 : 11a_Tx_CH40 Setting : 320 / 25</p>	<p>Left blank</p>
<p>Avg.</p>	 <p>Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWF:Auto Detector : Peak Project : 960638 Mode : 46 Tx Chain 1 : Zigbee Tx Chain 1+2 : 11a_Tx_CH40 Setting : 320 / 25</p>	<p>Left blank</p>

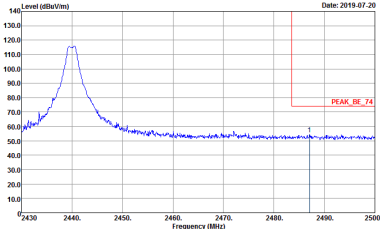
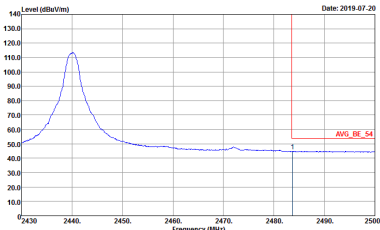


2.4GHz 2400~2483.5MHz+Band 4 - 5725~5850MHz

802.15.4_Tx_Ch18+11a_Tx_Ch157 (Band Edge @ 3m)

802.15.4	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.15.4 CH18 2440MHz - L	
3	Horizontal	Fundamental
<p>Peak</p>	 <p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HE_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 47 Tx Chain 1 : Zigbee_Tx_Ch18 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 320 / 21</p>	 <p>Site : 03CH07-HY Condition : PEAK_74 3m HE_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 47 Tx Chain 1 : Zigbee_Tx_Ch18 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 320 / 21</p>
<p>Avg.</p>	 <p>Site : 03CH07-HY Condition : AVG_BE_54 3m HE_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 47 Tx Chain 1 : Zigbee_Tx_Ch18 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 320 / 21</p>	 <p>Site : 03CH07-HY Condition : AVG_54 3m HE_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 47 Tx Chain 1 : Zigbee_Tx_Ch18 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 320 / 21</p>

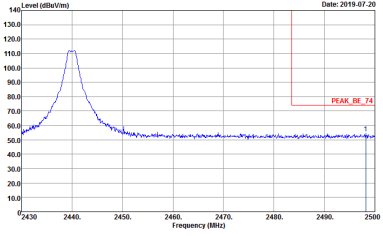
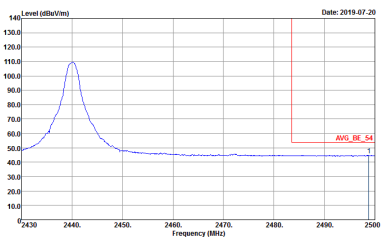


802.15.4	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.15.4 CH18 2440MHz - R	
3	Horizontal	Fundamental
<p>Peak</p>	 <p>Date: 2019-07-20</p> <pre> Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWF:Auto Detector : Peak Project : 960638 Mode : 47 Tx Chain 1 : ZigBee_Tx_CH18 Tx Chain 1+2 : 11a_Tx_CH157 Setting : 320 / 21 </pre>	<p>Left blank</p>
<p>Avg.</p>	 <p>Date: 2019-07-20</p> <pre> Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWF:Auto Detector : Peak Project : 960638 Mode : 47 Tx Chain 1 : ZigBee_Tx_CH18 Tx Chain 1+2 : 11a_Tx_CH157 Setting : 320 / 21 </pre>	<p>Left blank</p>



802.15.4	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.15.4 CH18 2440MHz - L	
3	Vertical	Fundamental
Peak	<p>Date: 2019-07-20</p> <pre> Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 960638 Mode : 47 Tx Chain 1 : Zigbee_Tx_Ch18 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 320 / 21 </pre>	<p>Date: 2019-07-20</p> <pre> Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 960638 Mode : 47 Tx Chain 1 : Zigbee_Tx_Ch18 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 320 / 21 </pre>
Avg.	<p>Date: 2019-07-20</p> <pre> Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Detector : Peak Project : 960638 Mode : 47 Tx Chain 1 : Zigbee_Tx_Ch18 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 320 / 21 </pre>	<p>Date: 2019-07-20</p> <pre> Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Detector : Peak Project : 960638 Mode : 47 Tx Chain 1 : Zigbee_Tx_Ch18 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 320 / 21 </pre>



802.15.4	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.15.4 CH18 2440MHz - R	
3	Vertical	Fundamental
Peak	 <p>Date: 2019-07-20</p> <pre> Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWFAuto Detector : Peak Project : 960638 Mode : 47 Tx Chain 1 : Zigbee_Tx_CH18 Tx Chain 1+2 : 11a_Tx_CH157 Setting : 320 / 21 </pre>	Left blank
Avg.	 <p>Date: 2019-07-20</p> <pre> Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWFAuto Detector : Peak Project : 960638 Mode : 47 Tx Chain 1 : Zigbee_Tx_CH18 Tx Chain 1+2 : 11a_Tx_CH157 Setting : 320 / 21 </pre>	Left blank



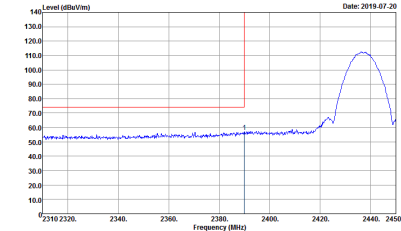
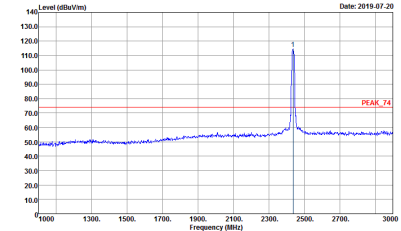
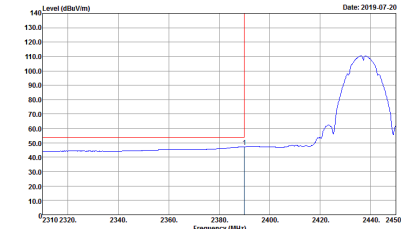
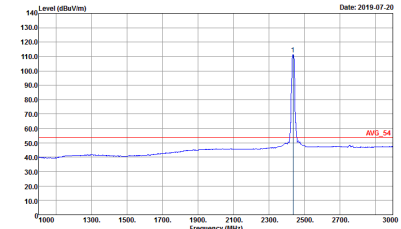
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
2+3	Horizontal	Fundamental
<p>Peak</p>	<p>Date: 2019-07-20 PEAK_BE(B4)_16.24</p> <pre> Site : 03CH07-HY Condition : PEAK_BE(B4)_16.24 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 47 Tx Chain 1 : Zigbee Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 320 / 21 </pre>	<p>Date: 2019-07-20 PEAK(FUN)1</p> <pre> Site : 03CH07-HY Condition : PEAK(FUN)1 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 47 Tx Chain 1 : Zigbee Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 320 / 21 </pre>
<p>Peak</p>	<p>Date: 2019-07-20 PEAK_BE(B4)_16.24</p> <pre> Site : 03CH07-HY Condition : PEAK_BE(B4)_16.24 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 47 Tx Chain 1 : Zigbee Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 320 / 21 </pre>	<p>Left blank</p>



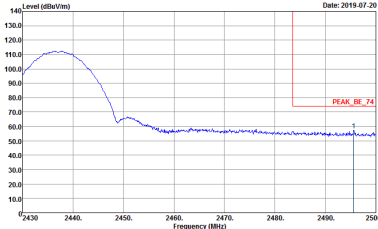
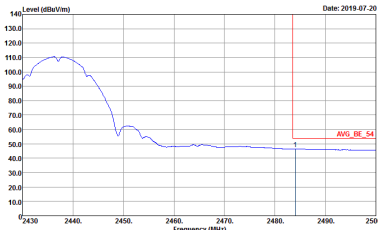
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
2+3	Vertical	Fundamental
Peak	<p>Date: 2019-07-20 PEAK (RE(B4), 14.24)</p> <p>Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL Detector : Peak Project : 960638 Mode : 47 Tx Chain 1 : Zigbee Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 320 / 21</p>	<p>Date: 2019-07-20 PEAK (UNJ)</p> <p>Site : 03CH07-HY Condition : PEAK(UNJ) 3m HF_ANT_00075962 VERTICAL Detector : Peak Project : 960638 Mode : 47 Tx Chain 1 : Zigbee Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 320 / 21</p>
Peak	<p>Date: 2019-07-20 PEAK (RE(B4), 14.24)</p> <p>Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL Detector : Peak Project : 960638 Mode : 47 Tx Chain 1 : Zigbee Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 320 / 21</p>	Left blank



2.4GHz 2400~2483.5MHz+Band 1 - 5150~5250MHz
 11b_Tx_Ch06+11a_Tx_Ch40 (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
1+2	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 49 Tx Chain 1 : 11b_Tx_Ch06 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 23 / 25</p>	 <p>Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 49 Tx Chain 1 : 11b_Tx_Ch06 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 23 / 25</p>
	 <p>Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 49 Tx Chain 1 : 11b_Tx_Ch06 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 23 / 25</p>	 <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 49 Tx Chain 1 : 11b_Tx_Ch06 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 23 / 25</p>
Avg.		

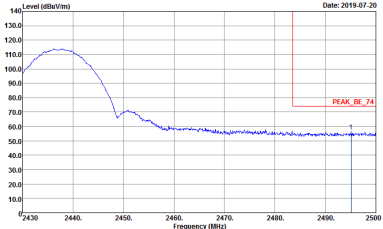
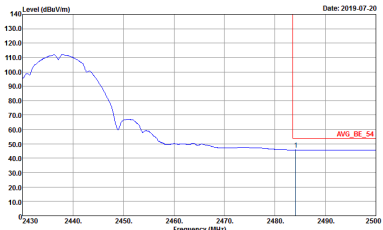


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
1+2	Horizontal	Fundamental
<p>Peak</p>	 <p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 960638 Mode : 49 Tx Chain 1 : 11a_Tx_Ch06 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 23 / 25</p>	<p>Left blank</p>
<p>Avg.</p>	 <p>Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto Detector : Peak Project : 960638 Mode : 49 Tx Chain 1 : 11a_Tx_Ch06 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 23 / 25</p>	<p>Left blank</p>

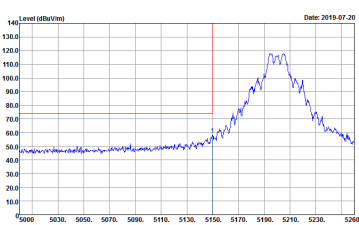
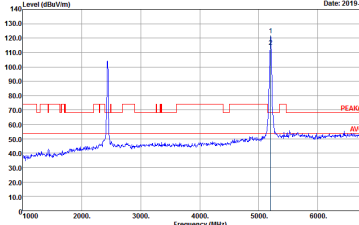
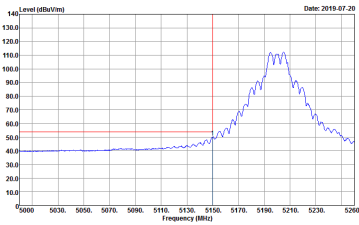


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
1+2	Vertical	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto Detector : Peak Project : 960638 Mode : 49 Tx Chain 1 : 11b_Tx_Ch06 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 23 / 25</p>	<p>Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto Detector : Peak Project : 960638 Mode : 49 Tx Chain 1 : 11b_Tx_Ch06 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 23 / 25</p>
Avg.	<p>Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWTAuto Detector : Peak Project : 960638 Mode : 49 Tx Chain 1 : 11b_Tx_Ch06 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 23 / 25</p>	<p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWTAuto Detector : Peak Project : 960638 Mode : 49 Tx Chain 1 : 11b_Tx_Ch06 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 23 / 25</p>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
1+2	Vertical	Fundamental
<p>Peak</p>	 <p>Date: 2019-07-20</p> <pre> Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 960638 Mode : 49 Tx Chain 1 : 11b_Tx_Ch06 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 23 / 25 </pre>	<p>Left blank</p>
<p>Avg.</p>	 <p>Date: 2019-07-20</p> <pre> Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto Detector : Peak Project : 960638 Mode : 49 Tx Chain 1 : 11b_Tx_Ch06 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 23 / 25 </pre>	<p>Left blank</p>

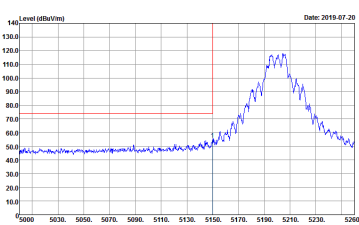
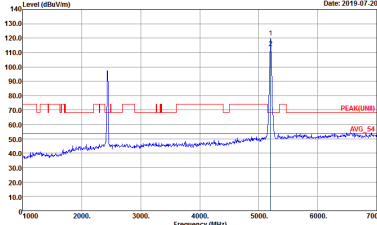
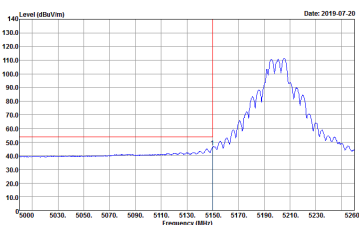


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH40 5200MHz - L	
2+3	Horizontal	Fundamental
<p>Peak</p>	 <p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 48 Tx Chain 1 : 119_Tx_CH06 Tx Chain 1+2 : 11a_Tx_CH40 Setting : 23 / 25</p>	 <p>Site : 03CH07-HY Condition : PEAK(UNI) 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 48 Tx Chain 1 : 119_Tx_CH06 Tx Chain 1+2 : 11a_Tx_CH40 Setting : 23 / 25</p>
<p>Avg.</p>	 <p>Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 48 Tx Chain 1 : 119_Tx_CH06 Tx Chain 1+2 : 11a_Tx_CH40 Setting : 23 / 25</p>	<p>Left blank</p>

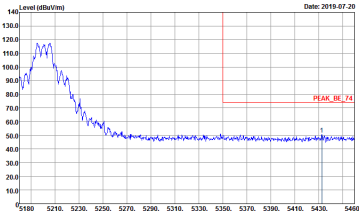
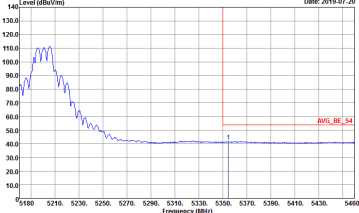


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH40 5200MHz - R	
2+3	Horizontal	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 48 Tx Chain 1 : 11b_Tx_CH06 Tx Chain 1+2 : 11a_Tx_CH40 Setting : 23 / 25</p>	Left blank
Avg.	<p>Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 48 Tx Chain 1 : 11b_Tx_CH06 Tx Chain 1+2 : 11a_Tx_CH40 Setting : 23 / 25</p>	Left blank



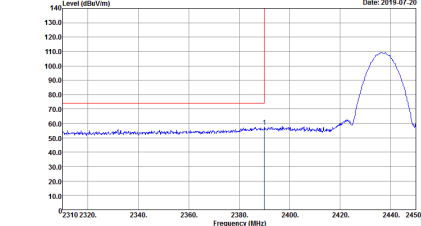
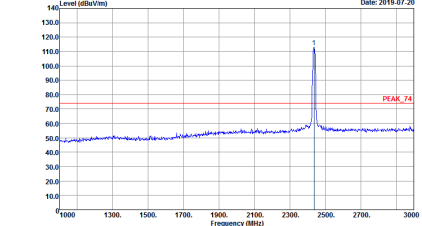
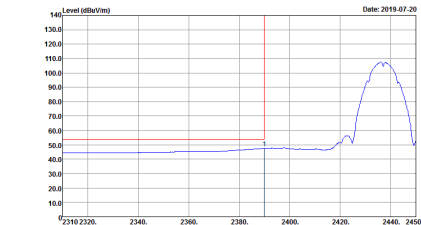
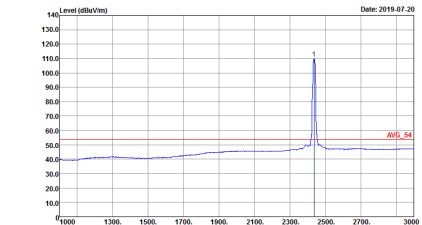
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH40 5200MHz - L	
2+3	Vertical	Fundamental
<p>Peak</p>	 <p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 960638 Mode : 48 Tx Chain 1 : 119_Tx_CH06 Tx Chain 1+2 : 11a_Tx_CH40 Setting : 23 / 25</p>	 <p>Site : 03CH07-HY Condition : PEAK(UNI) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 960638 Mode : 48 Tx Chain 1 : 119_Tx_CH06 Tx Chain 1+2 : 11a_Tx_CH40 Setting : 23 / 25</p>
<p>Avg.</p>	 <p>Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Detector : Peak Project : 960638 Mode : 48 Tx Chain 1 : 119_Tx_CH06 Tx Chain 1+2 : 11a_Tx_CH40 Setting : 23 / 25</p>	<p>Left blank</p>



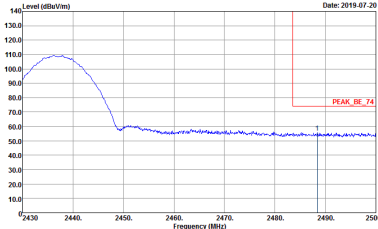
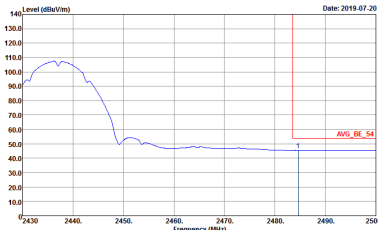
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH40 5200MHz - R	
2+3	Vertical	Fundamental
Peak	 <p>Date: 2019-07-20</p> <p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 960638 Mode : 48 Tx Chain 1 : 119_Tx_CH06 Tx Chain 1+2 : 11a_Tx_CH40 Setting : 23 / 25</p>	Left blank
Avg.	 <p>Date: 2019-07-20</p> <p>Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Detector : Peak Project : 960638 Mode : 48 Tx Chain 1 : 119_Tx_CH06 Tx Chain 1+2 : 11a_Tx_CH40 Setting : 23 / 25</p>	Left blank



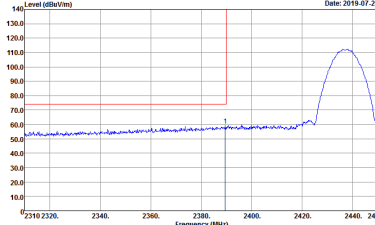
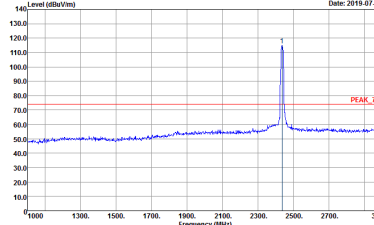
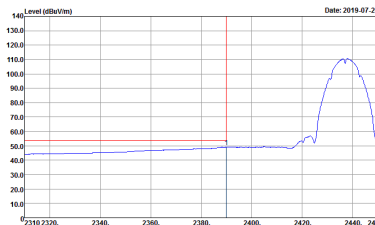
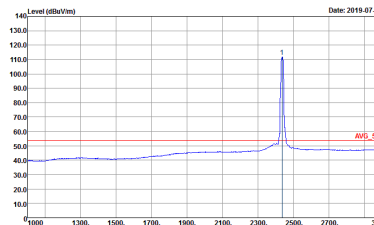
2.4GHz 2400~2483.5MHz+Band 4 - 5725~5850MHz
 11b_Tx_Ch06+11a_Tx_Ch157 (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
1+2	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 49 Tx Chain 1 : 11b_Tx_Ch06 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 23 / 21</p>	 <p>Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 49 Tx Chain 1 : 11b_Tx_Ch06 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 23 / 21</p>
Avg.	 <p>Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 49 Tx Chain 1 : 11b_Tx_Ch06 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 23 / 21</p>	 <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 960638 Mode : 49 Tx Chain 1 : 11b_Tx_Ch06 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 23 / 21</p>

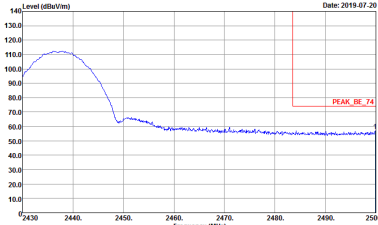
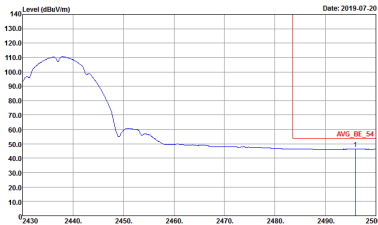


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
1+2	Horizontal	Fundamental
<p>Peak</p>	 <p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 960638 Mode : 49 Tx Chain 1 : 11a_Tx_Ch06 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 23 / 21</p>	<p>Left blank</p>
<p>Avg.</p>	 <p>Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto Detector : Peak Project : 960638 Mode : 49 Tx Chain 1 : 11a_Tx_Ch06 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 23 / 21</p>	<p>Left blank</p>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
1+2	Vertical	Fundamental
Peak	 <p>Date: 2019-07-20</p> <pre> Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto Detector : Peak Project : 960638 Mode : 49 Tx Chain 1 : 11b_Tx_Ch06 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 23 / 21 </pre>	 <p>Date: 2019-07-20</p> <pre> Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto Detector : Peak Project : 960638 Mode : 49 Tx Chain 1 : 11b_Tx_Ch06 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 23 / 21 </pre>
Avg.	 <p>Date: 2019-07-20</p> <pre> Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWTAuto Detector : Peak Project : 960638 Mode : 49 Tx Chain 1 : 11b_Tx_Ch06 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 23 / 21 </pre>	 <p>Date: 2019-07-20</p> <pre> Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWTAuto Detector : Peak Project : 960638 Mode : 49 Tx Chain 1 : 11b_Tx_Ch06 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 23 / 21 </pre>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
1+2	Vertical	Fundamental
<p>Peak</p>	 <p>Date: 2019-07-20</p> <pre> Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 960638 Mode : 49 Tx Chain 1 : 11a_Tx_Ch06 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 23 / 21 </pre>	<p>Left blank</p>
<p>Avg.</p>	 <p>Date: 2019-07-20</p> <pre> Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto Detector : Peak Project : 960638 Mode : 49 Tx Chain 1 : 11a_Tx_Ch06 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 23 / 21 </pre>	<p>Left blank</p>



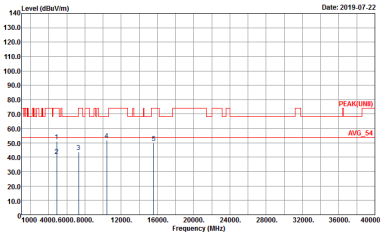
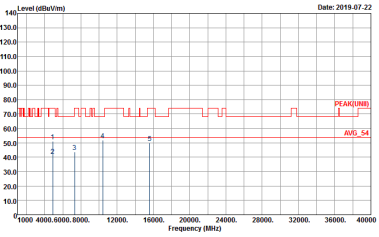
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
2+3	Horizontal	Fundamental
<p>Peak</p>	<p>Date: 2019-07-20 PEAK_BE(B4)_16.24</p> <pre> Site : 03CH07-HY Condition : PEAK_BE(B4)_16.24 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWF:Auto Project : Peak Mode : 960638 Tx Chain 1 : 48 Tx Chain 1+2 : 119_Tx_CH06 Setting : 11a_Tx_CH157 23 / 21 </pre>	<p>Date: 2019-07-20 PEAK(UNI)</p> <pre> Site : 03CH07-HY Condition : PEAK(UNI) 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWF:Auto Project : Peak Mode : 960638 Tx Chain 1 : 48 Tx Chain 1+2 : 119_Tx_CH06 Setting : 11a_Tx_CH157 23 / 21 </pre>
<p>Peak</p>	<p>Date: 2019-07-20 PEAK_BE(B4)_16.24</p> <pre> Site : 03CH07-HY Condition : PEAK_BE(B4)_16.24 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWF:Auto Project : Peak Mode : 960638 Tx Chain 1 : 48 Tx Chain 1+2 : 119_Tx_CH06 Setting : 11a_Tx_CH157 23 / 21 </pre>	<p>Left blank</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
2+3	Vertical	Fundamental
<p>Peak</p>	<p>Date: 2019-07-20 PEAK_BE(B4)_16.24</p> <p>Site : 03CH07-HY Condition : PEAK_BE(B4)_16.24 3m HF_ANT_00075962 VERTICAL Detector : Peak Project : 960638 Mode : 48 Tx Chain 1 : 119_Tx_CH06 Tx Chain 1+2 : 11a_Tx_CH157 Setting : 23 / 21</p>	<p>Date: 2019-07-20 PEAK(FUN)</p> <p>Site : 03CH07-HY Condition : PEAK(FUN) 3m HF_ANT_00075962 VERTICAL Detector : Peak Project : 960638 Mode : 48 Tx Chain 1 : 119_Tx_CH06 Tx Chain 1+2 : 11a_Tx_CH157 Setting : 23 / 21</p>
<p>Peak</p>	<p>Date: 2019-07-20 PEAK_BE(B4)_16.24</p> <p>Site : 03CH07-HY Condition : PEAK_BE(B4)_16.24 3m HF_ANT_00075962 VERTICAL Detector : Peak Project : 960638 Mode : 48 Tx Chain 1 : 119_Tx_CH06 Tx Chain 1+2 : 11a_Tx_CH157 Setting : 23 / 21</p>	<p>Left blank</p>



2.4GHz 2400~2483.5MHz+Band 1 - 5150~5250MHz
 BLE(1M)_Tx_Ch19+11a_Tx_Ch40 (Harmonic @ 3m)

WIFI	2.4GHz 2440 MHz+5GHz 5200MHz Harmonic @ 3m	
ANT	BLE(1M)_Tx_CH19+11a_Tx_Ch40 2440+5200MHz	
1/ 2+3	Horizontal	Vertical
Peak Avg.	 <p>Site : 03CH07-HY Condition : PEAK(LIM) 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 960638 Mode : 44 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : Default / 25</p>	 <p>Site : 03CH07-HY Condition : PEAK(LIM) 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 960638 Mode : 44 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : Default / 25</p>

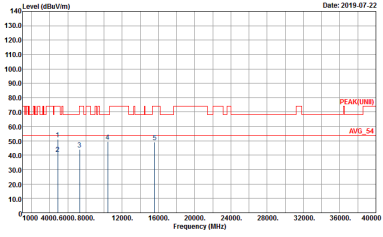
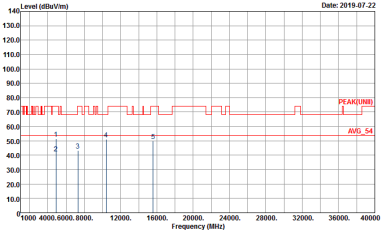


2.4GHz+5GHz 2400~2483.5MHz++Band 4 - 5725~5850MHz
 BLE(1M)_Tx_Ch19+11a_Tx_Ch157 (Harmonic @ 3m)

WIFI	2.4GHz 2440 MHz+5GHz 5785MHz Harmonic @ 3m	
ANT	BLE(1M)_Tx_CH19+11a_Tx_Ch157 2440+5785MHz	
1/ 2+3	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH07-4YY Condition : PEAK(LINI) 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 960638 Mode : 45 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : Default / 21</p>	<p>Site : 03CH07-4YY Condition : PEAK(LINI) 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 960638 Mode : 45 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : Default / 21</p>



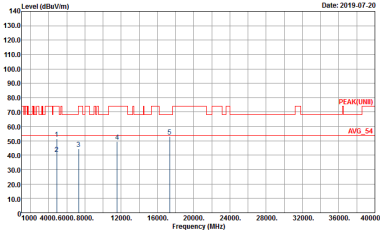
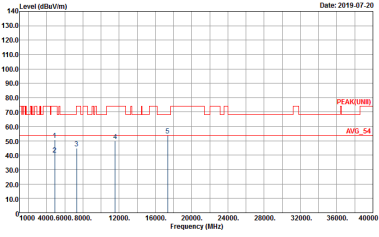
2.4GHz 2400~2483.5MHz+Band 1 - 5150~5250MHz
 802.15.4_Tx_Ch18+11a_Tx_Ch40 (Harmonic @ 3m)

WIFI	2.4GHz 2440 MHz+5GHz 5200MHz Harmonic @ 3m	
ANT	802.15.4_Tx_CH18+11a_Tx_Ch40 2440+5200MHz	
3/ 2+3	Horizontal	Vertical
Peak Avg.	 <p>Site : 03CH07-4HY Condition : PEAK(LINI) 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 960638 Mode : 46 Tx Chain 1 : Zigbee Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 320 / 25</p>	 <p>Site : 03CH07-4HY Condition : PEAK(LINI) 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 960638 Mode : 46 Tx Chain 1 : Zigbee Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 320 / 25</p>



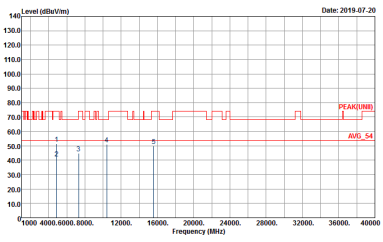
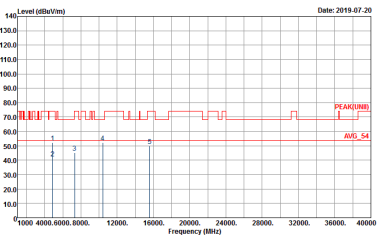
2.4GHz+5GHz 2400~2483.5MHz++Band 4 - 5725~5850MHz

802.15.4_Tx_Ch18+11a_Tx_Ch157 (Harmonic @ 3m)

WIFI	2.4GHz 2440 MHz+5GHz 5785MHz Harmonic @ 3m	
ANT	802.15.4_Tx_Ch18+11a_Tx_Ch157 2440+5785MHz	
3/ 2+3	Horizontal	Vertical
Peak Avg.	 <p>Site : 03CH07-AYY Condition : PEAK(LINI) 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 960638 Mode : 48 Tx Chain 1 : Zigbee_Tx_Ch18 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 320 / 21</p>	 <p>Site : 03CH07-AYY Condition : PEAK(LINI) 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 960638 Mode : 48 Tx Chain 1 : Zigbee_Tx_Ch18 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 320 / 21</p>



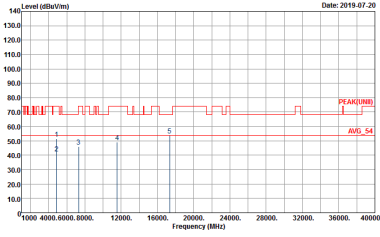
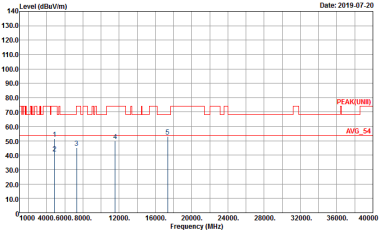
2.4GHz 2400~2483.5MHz+Band 1 - 5150~5250MHz
 11b_Tx_Ch06+11a_Tx_Ch40 (Harmonic @ 3m)

WIFI	2.4GHz 2437 MHz+5GHz 5200MHz Harmonic @ 3m	
ANT	11b_Tx_Ch06+11a_Tx_Ch40 2437+5200MHz	
1+2/ 2+3	Horizontal	Vertical
Peak Avg.	 <p>Site : 03CH07-HY Condition : PEAK(LINI) 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 960638 Mode : 48 Tx Chain 1 : 11b_Tx_Ch06 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 23 / 25</p>	 <p>Site : 03CH07-HY Condition : PEAK(LINI) 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 960638 Mode : 48 Tx Chain 1 : 11b_Tx_Ch06 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 23 / 25</p>



2.4GHz+5GHz 2400~2483.5MHz++Band 4 - 5725~5850MHz

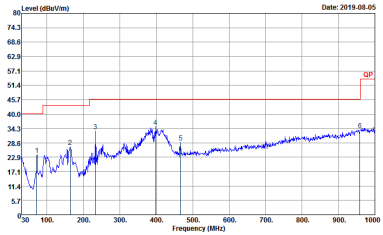
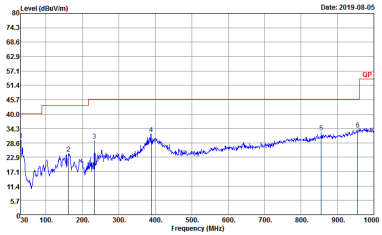
11b_Tx_Ch06+11a_Tx_Ch157 (Harmonic @ 3m)

WIFI	2.4GHz 2437 MHz+5GHz 5785MHz Harmonic @ 3m	
ANT	11b_Tx_Ch06+11a_Tx_Ch157 2437+5785MHz	
1+2/ 2+3	Horizontal	Vertical
Peak Avg.	 <p>Site : 03CH07-4Y Condition : PEAK(LINI) 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 960638 Mode : 48 Tx Chain 1 : 11b_Tx_Ch06 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 23 / 21</p>	 <p>Site : 03CH07-4Y Condition : PEAK(LINI) 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 960638 Mode : 48 Tx Chain 1 : 11b_Tx_Ch06 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 23 / 21</p>



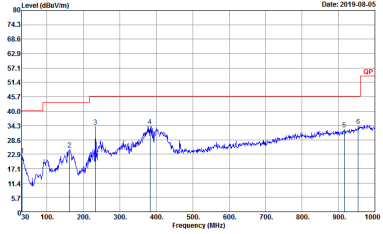
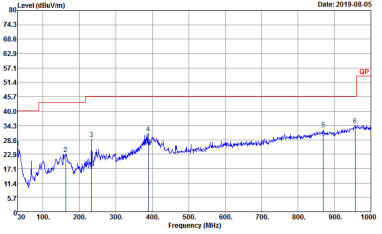
Emission below 1GHz

BLE(1M)_Tx_Ch19+11a_Tx_Ch40 (LF)

WIFI	2.4GHz 2440 MHz+5GHz 5200MHz	
ANT	BLE(1M)_Tx_Ch19+11a_Tx_Ch40 LF	
1/ 2+3	Horizontal	Vertical
QP / Peak	 <p>Site : 03CH07-HY Condition : QP 3m LF-ANT-35419(6) HORIZONTAL Detector : Peak Project : 960638 Mode : 44 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : Default / 25</p>	 <p>Site : 03CH07-HY Condition : QP 3m LF-ANT-35419(6) VERTICAL Detector : Peak Project : 960638 Mode : 44 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : Default / 25</p>

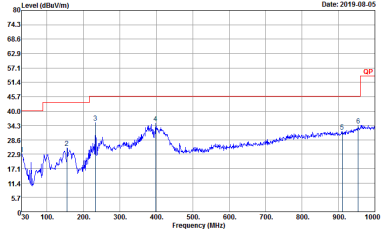
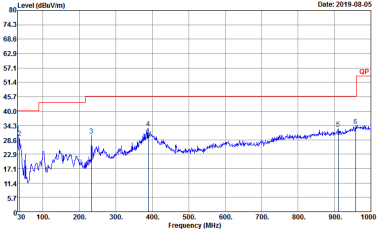


BLE(1M)_Tx_Ch19+11a_Tx_Ch157 (LF)

WIFI	2.4GHz 2440 MHz+5GHz 5785MHz	
ANT	BLE(1M)_Tx_Ch19+11a_Tx_Ch157	
1/ 2+3	Horizontal	Vertical
QP / Peak	 <p>Site : 03CH07-HY Condition : QP 3m LF-ANT-35419(6) HORIZONTAL Detector : Peak Project : 960638 Mode : 45 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : Default / 21</p>	 <p>Site : 03CH07-HY Condition : QP 3m LF-ANT-35419(6) VERTICAL Detector : Peak Project : 960638 Mode : 45 Tx Chain 1 : BLE_Tx_Ch19 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : Default / 21</p>

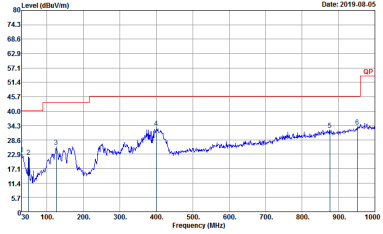
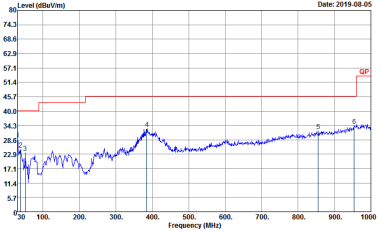


802.15.4_Tx_Ch18+11a_Tx_Ch40 (LF)

WIFI	2.4GHz 2440 MHz+5GHz 5200MHz	
ANT	802.15.4_Tx_Ch18+11a_Tx_Ch40	
3/ 2+3	Horizontal	Vertical
QP / Peak	 <p>Site : 03CH07-HY Condition : QP 3m LF-ANT-35419(G) HORIZONTAL Detector : Peak Project : 960638 Mode : 4G Tx Chain 1 : Zigbee Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 320 / 25</p>	 <p>Site : 03CH07-HY Condition : QP 3m LF-ANT-35419(G) VERTICAL Detector : Peak Project : 960638 Mode : 4G Tx Chain 1 : Zigbee Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 320 / 25</p>



802.15.4_Tx_Ch18+11a_Tx_Ch157 (LF)

WIFI	2.4GHz 2440 MHz+5GHz 5785MHz	
ANT	802.15.4_Tx_Ch18+11a_Tx_Ch157 LF	
3/ 2+3	Horizontal	Vertical
QP / Peak	 <p> Site : 03CH07-HY Condition : QP 3m LF-ANT-35419(6) HORIZONTAL Detector : Peak Project : 960638 Mode : 47 Tx Chain 1 : Zigbee Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 320 / 21 </p>	 <p> Site : 03CH07-HY Condition : QP 3m LF-ANT-35419(6) VERTICAL Detector : Peak Project : 960638 Mode : 47 Tx Chain 1 : Zigbee Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 320 / 21 </p>

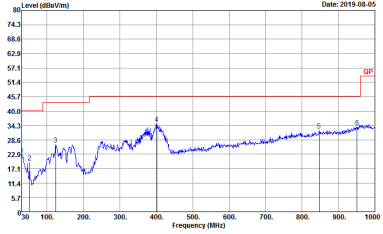
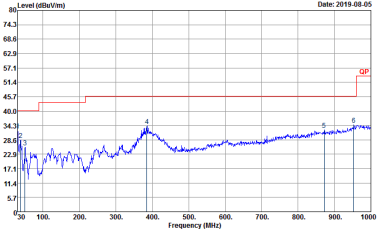


11b_Tx_Ch06+11a_Tx_Ch40 (LF)

WIFI	2.4GHz 2437 MHz+5GHz 5200MHz	
ANT	11b_Tx_Ch06+11a_Tx_Ch40	
1+2/ 2+3	Horizontal	Vertical
QP / Peak	<p>Site : 03CH07-HY Condition : QP 3m LF-ANT-35419(6) HORIZONTAL Detector : Peak Project : 960638 Mode : 48 Tx Chain 1 : 11b_Tx_Ch06 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 23/25</p>	<p>Site : 03CH07-HY Condition : QP 3m LF-ANT-35419(6) VERTICAL Detector : Peak Project : 960638 Mode : 48 Tx Chain 1 : 11b_Tx_Ch06 Tx Chain 1+2 : 11a_Tx_Ch40 Setting : 23/25</p>



11b_Tx_Ch06+11a_Tx_Ch157 (LF)

WIFI	2.4GHz 2437 MHz+5GHz 5785MHz	
ANT	11b_Tx_Ch06+11a_Tx_Ch157 LF	
1+2/ 2+3	Horizontal	Vertical
QP / Peak	 <p> Site : 03CH07-HY Condition : QP 3m LF-ANT-35419(6) HORIZONTAL Detector : Peak Project : 960638 Mode : 49 Tx Chain 1 : 11b_Tx_Ch06 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 23/21 </p>	 <p> Site : 03CH07-HY Condition : QP 3m LF-ANT-35419(6) VERTICAL Detector : Peak Project : 960638 Mode : 49 Tx Chain 1 : 11b_Tx_Ch06 Tx Chain 1+2 : 11a_Tx_Ch157 Setting : 23/21 </p>



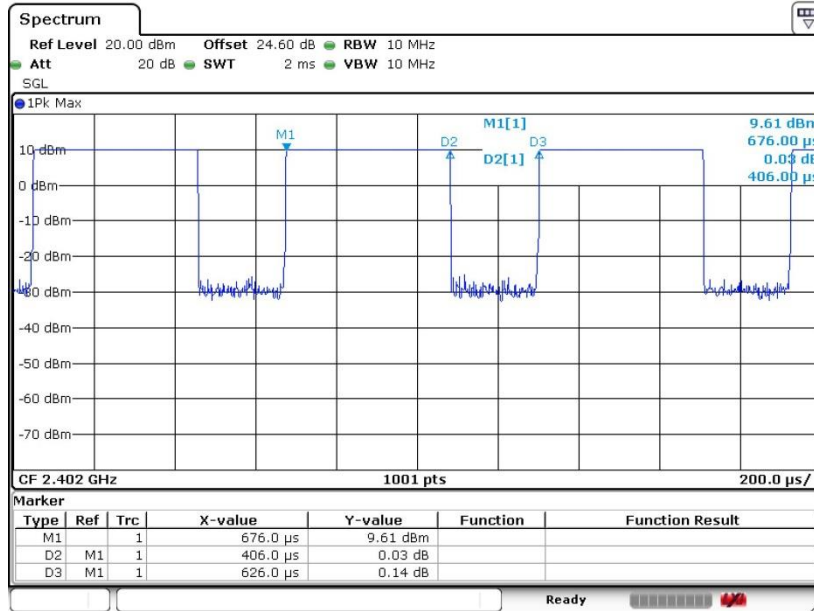
Appendix C. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting	Duty Factor(dB)
1	Bluetooth –LE for 1Mbps	64.86	406	2.46	3kHz	1.88
3	802.15.4	14.04	2245	0.45	1kHz	8.53
1+2	2.4GHz 802.11b for Ant 1	98.90	-	-	10Hz	0.00
1+2	2.4GHz 802.11b for Ant 2	98.55	-	-	10Hz	0.06
2+3	5GHz 802.11a for Ant 2	97.12	2020	0.50	1kHz	0.13
2+3	5GHz 802.11a for Ant 3	97.12	2025	0.49	1kHz	0.13



<Ant. 1>

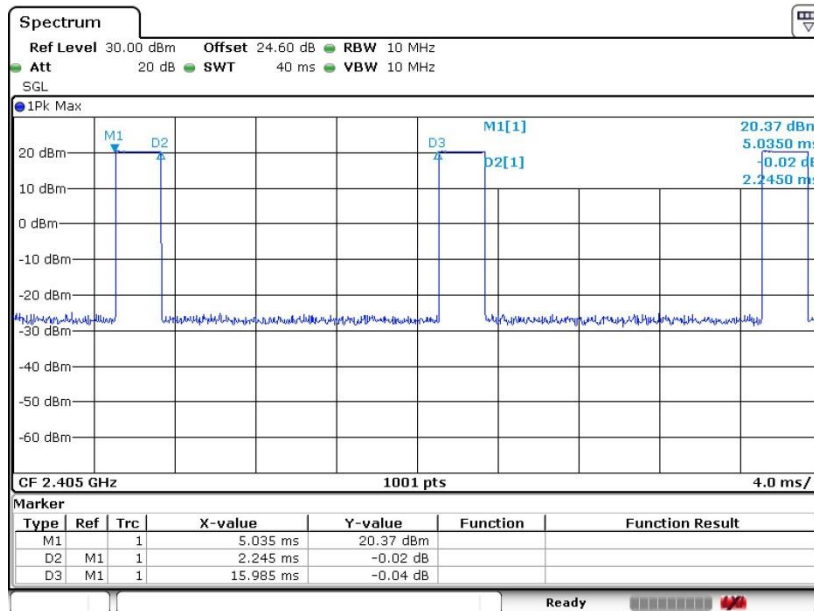
Bluetooth – LE for 1Mbps



Date: 12.JUL.2019 15:50:50

<Ant. 3>

802.15.4

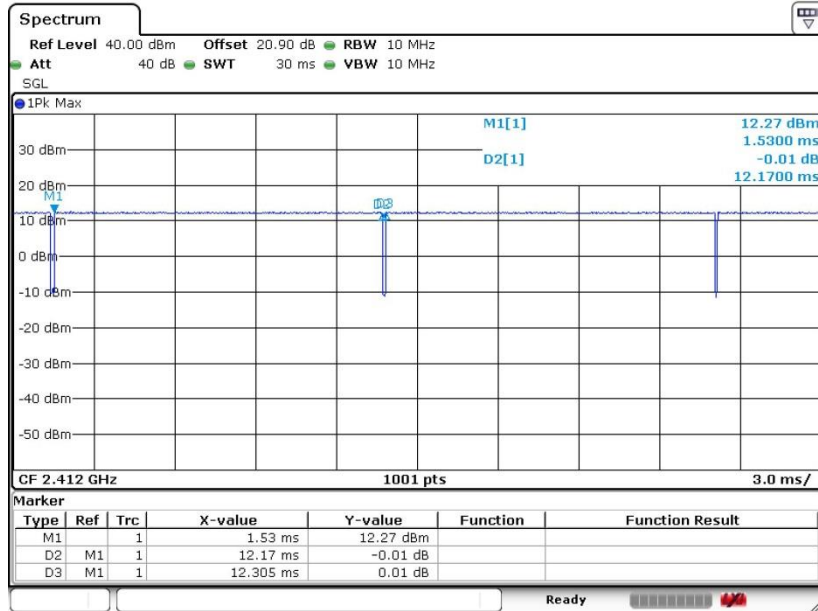


Date: 12.JUL.2019 16:33:52



MIMO <Ant. 1>

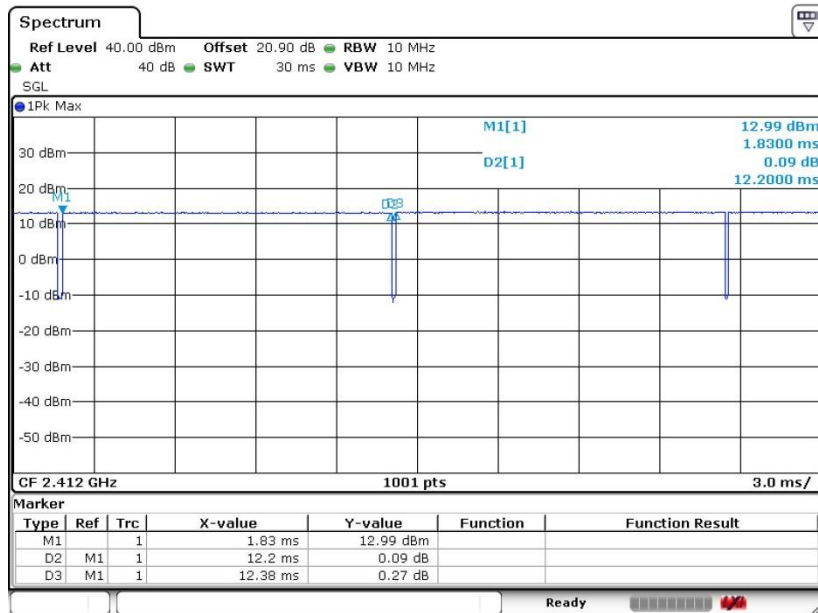
2.4GHz 802.11b



Date: 16.JUL.2019 20:21:01

MIMO <Ant. 2>

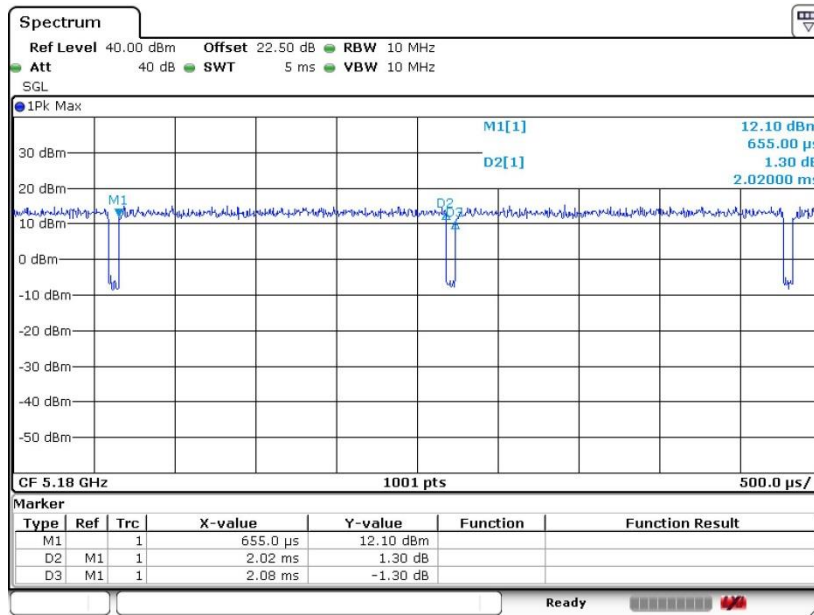
2.4GHz 802.11b



Date: 16.JUL.2019 20:22:01



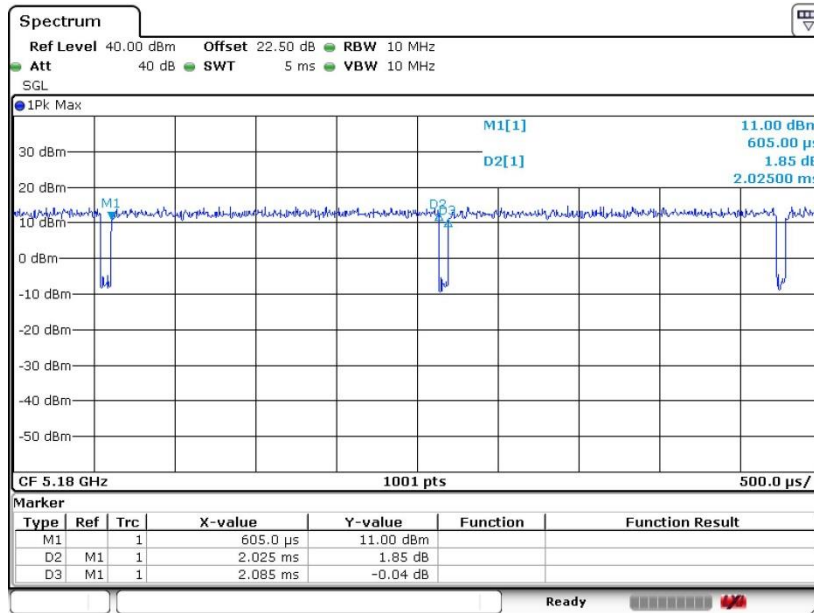
5GHz 802.11a



Date: 16.JUL.2019 21:26:34

MIMO <Ant. 3>

5GHz 802.11a



Date: 16.JUL.2019 21:27:45

—THE END—