Spot Check Evaluation

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REVISION HISTORY

VERSION	DESCRIPTION	ISSUED DATE
Rev. 01	Initial issue of report	Nov. 15, 2017
Rev. 02	Add Average power table in page 12 and 13.	Nov. 23, 2017

1. Introduction Section

The original model (FCC ID: PY7-08608T) and the variant model (FCC ID: PY7-57442Z) has identical PCB layout, antenna, SW implementation for Bluetooth/Wi-Fi/NFC/GPS. Based on their similarity, the FCC Part 15C (equipment class: DTS, DSS, DXX) and Part 15E (equipment class: NII) test data issued test data of PY7-57442Z references the test data of PY7-08608T

The applicant takes full responsibility that the test data as referenced in this report represent compliance for this FCC ID (FCC ID: PY7-57442Z).

2. Difference Section

The original model (FCC ID: PY7-08608T) and the variant model (FCC ID: PY7-57442Z) has identical PCB layout, antenna, SW implementation for Bluetooth/Wi-Fi/NFC/GPS. The details of similarity and difference can be found in the Operating Description.

Cellular transmitter RF components are different in PY7-57442Z, to support capability for different cellular bands.

The product specification is outlined in the following table:

FCC ID			PY7-08608T	PY7-57442Z
Wireless Tech	**Mode**		**Frequency (MHz)**	
GSM	GSM Voice GPRS (GMSK) EDGE (8PSK)	Multi-Slot Class 12 DTM: No	850/1900	850/1900
UMTS	AMR/RCM12.2Kbps HSDPA/HSUPA/DC-HSDPA		B5/B2	B5/B2/B4
LTE (FDD)	QPSK/16QAM/64QAM		B2/B5/B7/B41	B2/B4/B5/B7/B12/B13/B17/B25/B66
Wi-Fi	11b/11g/11n(HT20)/11ac(VHT20)		2412-2462	
	11a/11n(HT20)/11n(HT40)/ 11ac(VHT20)/ 11ac(VHT40)/ 11ac(VHT80)		5180-5240 5260-5320 5500-5720 5745-5825	
Bluetooth	V5.0 LE		2402-2480 MHz	
NFC	ASK		13.56 MHz	

3. Spot Check Verification Data Section

Summary of the spot check:

Test Item	Mode	PY7-08608T Worst Result	PY7-57442Z Worst Result	Difference (dB)
Average Conducted Power (dBm)	802.11b	15.98	15.95	0.03
	802.11g	13.99	13.95	0.04
	11n HT20	13.99	13.83	0.16
	11n HT40	13.96	13.85	0.11
	BT (1Mbps)	9.69	10.42	-0.73
	BT (2Mbps)	6.57	6.97	-0.4
	BT (3Mbps)	6.50	6.99	-0.49
	BT-LE(1Mbps)	1.16	0.72	0.44
	BT-LE(2Mbps)	1.08	0.71	0.37
	11a, 5.2GHz	16.99	16.88	0.11
	11n HT20, 5.2GHz	13.90	13.90	0.00
	11n HT40, 5.2GHz	12.96	12.84	0.12
	11ac VHT20, 5.2GHz	13.99	13.87	0.12
	11ac VHT40, 5.2GHz	12.97	12.83	0.14
	11ac VHT80, 5.2GHz	11.77	11.69	0.08
	11a, 5.3GHz	16.94	16.83	0.11
	11n HT20, 5.3GHz	13.74	13.76	-0.02
	11n HT40, 5.3GHz	12.87	12.79	0.08
	11ac VHT20, 5.3GHz	13.97	13.73	0.24
	11ac VHT40, 5.3GHz	12.96	12.74	0.22
	11ac VHT80, 5.3GHz	11.74	11.87	-0.13
	11a, 5.5GHz	16.84	16.79	0.05
	11n HT20, 5.5GHz	13.68	13.95	-0.27
	11n HT40, 5.5GHz	12.66	12.89	-0.23
	11ac VHT20, 5.5GHz	13.99	13.92	0.07
	11ac VHT40, 5.5GHz	12.69	12.86	-0.17
	11ac VHT80, 5.5GHz	11.79	11.93	-0.14
	11a, 5.8GHz	16.82	16.75	0.07
	11n HT20, 5.8GHz	13.82	13.85	-0.03
	11n HT40, 5.8GHz	12.75	12.79	-0.04
	11ac VHT20, 5.8GHz	14.00	13.82	0.18
	11ac VHT40, 5.8GHz	12.77	12.76	0.01
	11ac VHT80, 5.8GHz	11.82	11.92	-0.01
	S/N of test sample	RQ3005UYBC	CQ300000HS RQ3005VAJR	
	Test date	2017/08/10~2017/08/25	2017/09/14~2017/1024	

Test Item	Mode	PY7-08608T Worst Result	PY7-57442Z Worst Result	Difference (dB)
Peak Radiated Spurious Emission (Band Edge) (dBuV/m)	802.11b	52.45	52.06	0.39
	802.11ac VHT20	53.75	54.14	-0.39
	BT (2Mbps)	45.04	42.97	2.07
	BT-LE(2Mbps)	51.35	52.06	-0.71
	802.11a, 5.2GHz	55.61	54.86	0.75
	802.11a, 5.3GHz	54.99	57.93	-2.94
	802.11a, 5.5GHz	61.27	62.67	-1.40
	802.11a, 5.8GHz	49.82	50.26	-0.44
	S/N of test sample	RQ3005VVKR CQ300000EW	CQ300004PQ	
	Test date	2017/09/11~2017/09/29	2017/10/13~2017/10/24	
Average Radiated Spurious Emission (Band Edge) (dBuV/m)	802.11b	41.08	41.06	0.02
	802.11ac VHT20	44.26	43.82	0.44
	BT (2Mbps)	20.28	18.21	2.07
	BT-LE(2Mbps)	44.12	44.12	0.00
	802.11a, 5.2GHz	43.55	43.69	-0.14
	802.11a, 5.3GHz	43.83	44.70	-0.87
	802.11a, 5.5GHz	47.94	49.20	-1.26
	S/N of test sample	RQ3005VVKR CQ300000EW	CQ300004PQ	
	Test date	2017/09/11~2017/09/29	2017/10/13~2017/10/24	
Peak Radiated Spurious Emission (Harmonic) (dBuV/m)	802.11b	48.06	49.99	-1.93
	802.11ac VHT20	39.90	39.73	0.17
	BT (2Mbps)	43.34	43.52	-0.18
	BT-LE(2Mbps)	43.63	43.25	0.38
	802.11a, 5.2GHz	47.98	48.07	-0.09
	802.11a, 5.3GHz	47.89	48.00	-0.11
	802.11a, 5.5GHz	59.45	62.35	-2.9
	802.11a, 5.8GHz	54.35	57.25	-2.9
	S/N of test sample	RQ3005VVKR CQ300000EW	CQ300004PQ	
	Test date	2017/09/11~2017/09/29	2017/10/13~2017/10/24	
Average Radiated Spurious Emission (Harmonic) (dBuV/m)	802.11a, 5.5GHz	43.85	46.70	-2.85
	S/N of test sample	CQ300000EW	CQ300004PQ	
	Test date	2017/09/19~2017/09/29	2017/10/13~2017/10/24	
NFC (dBuV/m)	RSE (30MHz to1GHz)	36.67	35.04	-1.63
	S/N of test sample	CQ300001B3	CQ300004NQ	
	Test date	2017/09/20	2017/10/24	

Conclusion:

Radiated spurious emission test against the variant model for non-cellular part based on the worst-case condition from the original model was performed in this filing to demonstrate the test data from original model remains representative for the variant model.

Based on the spot check test result (power levels measured are within 0.5dB, and the worst case of RSE spot check verification based on the worst condition from the original model is within 3dB, and are compliance with the limits), the test data from the original model is representative for the variant model.

The unwanted, harmonics, radiated spurious emission is reported peak measurement only due to spurious lower than 20dB than the limit, 74dBuv/m, without further reporting the average measurement except for the 802.11a, 5.5GHz CH140

The detail test results can be found in this document, Appendix A, hereafter.

4. Reference detail Section

Rule Part	Equipment Class	Wireless Technology	Frequency Band (MHz)	Reference FCC ID	Type Grant/Permissive Change	Reference Report Title	Reference Application	Reference Report Sections
15C	DTS	Bluetooth – LE Wii-Fi	2400~2483.5	PY7-08608T	Original Grant	FCC RF Test Report	PY7-57442Z	Part 15C (FR760710-01B, FR760710-01C)
	DSS	Bluetooth	2400~2483.5	PY7-08608T	Original Grant	FCC RF Test Report	PY7-57442Z	Part 15C (FR760710-01A)
	DXX	NFC	13.56	PY7-08608T	Original Grant	FCC RF Test Report	PY7-57442Z	Part 15C (FR760710-01D)
15E	NII	Wi-Fi	5150~5250 5250~5350 5470~5725 5725~5850	PY7-08608T	Original Grant	FCC RF Test Report	PY7-57442Z	Part 15E (FR760710-01E, FR760710-01F)
		DFS	5470~5725	PY7-08608T	Original Grant	FCC RF Test Report	PY7-57442Z	Part 15E (FZ760710-01)

Appendix A. Spot Check Test Result

1.1 Conducted power

<2.4GHz WLAN>

	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-08608T Average power (dBm)	FCC ID PY7-57442Z Average power (dBm)
2.4GHz WLAN	802.11b	CH 1	2412	1Mbps	16	15.98	15.83
		CH 6	2437			15.81	15.90
		CH 11	2462			15.92	15.95
	802.11g	CH 1	2412	6Mbps	14	13.81	13.78
		CH 6	2437			13.64	13.87
		CH 11	2462			13.99	13.95
	802.11n-HT20	CH 1	2412	MCS0	14	13.98	13.62
		CH 6	2437			13.99	13.82
		CH 11	2462			13.93	13.83
	802.11ac-VHT20	CH 1	2412	MCS0	14	13.96	13.85
		CH 6	2437			13.93	13.56
		CH 11	2462			13.91	13.76

<Bluetooth>					
Mode	Channel	Frequency (MHz)	Tune-Up Limit	FCC ID PY7-08608T Average power (dBm)	FCC ID PY7-57442Z Average power (dBm)
Bluetooth (1Mbps)	CH 00	2402	10.5	9.69	10.42
	CH 39	2441		8.94	9.36
	CH 78	2480		9.16	9.66
Bluetooth (2Mbps)	CH 00	2402	7	6.57	6.97
	CH 39	2441		5.85	6.09
	CH 78	2480		6.14	6.70
Bluetooth (3Mbps)	CH 00	2402	7	6.50	6.99
	CH 39	2441		5.79	6.17
	CH 78	2480		6.03	6.77
BLE (GFSK) (1Mbps)	CH 00	2402	1.5	0.83	0.19
	CH 19	2440		0.68	0.05
	CH 39	2480		1.16	0.72
BLE (GFSK) (2Mbps)	CH 00	2402	1.5	0.68	0.12
	CH 19	2440		0.61	0.04
	CH 39	2480		1.08	0.71

<For PY7-08608T >

Channel	Frequency	Bluetooth RF Output Peak Power		
		Data Rate / Modulation		
		GFSK	π/4-DQPSK	8-DPSK
		1Mbps	2Mbps	3Mbps
Ch00	2402MHz	**9.93** dBm	8.88 dBm	9.29 dBm
Ch39	2441MHz	9.22 dBm	8.21 dBm	8.65 dBm
Ch78	2480MHz	9.39 dBm	8.09 dBm	8.78 dBm

Channel	Frequency	Bluetooth RF Output Average Power		
		Data Rate / Modulation		
		GFSK	π/4-DQPSK	8-DPSK
		1Mbps	2Mbps	3Mbps
Ch00	2402MHz	**9.69** dBm	6.57 dBm	6.50 dBm
Ch39	2441MHz	8.94 **dBm**	5.85 dBm	5.79 dBm
Ch78	2480MHz	9.16 dBm	6.14 dBm	6.03 dBm

Channel	Frequency	Bluetooth – LE RF Output Peak Power	
		Data Rate / Modulation	
		GFSK	
		1Mbps	2Mbps
Ch00	2402MHz	2.21 dBm	2.27 dBm
Ch19	2440MHz	2.11 dBm	2.27 dBm
Ch39	2480MHz	2.43 dBm	**2.48** dBm

Channel	Frequency	Bluetooth – LE RF Output Average Power	
		Data Rate / Modulation	
		GFSK	
		1Mbps	2Mbps
Ch00	2402MHz	0.83 dBm	0.68 dBm
Ch19	2440MHz	0.68 dBm	0.61 dBm
Ch39	2480MHz	**1.16** dBm	1.08 dBm

<For PY7-57442Z>

Channel	Frequency	Bluetooth RF Output Peak Power		
		Data Rate / Modulation		
		GFSK	π/4-DQPSK	8-DPSK
		1Mbps	2Mbps	3Mbps
Ch00	2402MHz	**10.63** dBm	9.58 dBm	9.96 dBm
Ch39	2441MHz	9.66 dBm	8.65 dBm	8.94 dBm
Ch78	2480MHz	9.86 dBm	9.03 dBm	9.35 dBm

Channel	Frequency	Bluetooth RF Output Average Power		
		Data Rate / Modulation		
		GFSK	π/4-DQPSK	8-DPSK
		1Mbps	2Mbps	3Mbps
Ch00	2402MHz	**10.42** dBm	6.97 dBm	6.99 dBm
Ch39	2441MHz	9.36 dBm	6.09 dBm	6.17 dBm
Ch78	2480MHz	9.66 dBm	6.70 dBm	6.77 dBm

Channel	Frequency	Bluetooth – LE RF Output Peak Power	
		Data Rate / Modulation	
		GFSK	
		1Mbps	2Mbps
Ch00	2402MHz	1.55 dBm	1.63 dBm
Ch19	2440MHz	1.47 dBm	1.51 dBm
Ch39	2480MHz	**2.14** dBm	2.01 dBm

Channel	Frequency	Bluetooth – LE RF Output Average Power	
		Data Rate / Modulation	
		GFSK	
		1Mbps	2Mbps
Ch00	2402MHz	0.19 dBm	0.12 dBm
Ch19	2440MHz	0.05 dBm	0.04 dBm
Ch39	2480MHz	**0.72** dBm	0.71 dBm

<5GHz WLAN>

	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-08608T Average power (dBm)	FCC ID PY7-57442Z Average power (dBm)
5.2GHz WLAN	802.11a	CH 36	5180	6Mbps	17	16.99	16.88
		CH 44	5220			16.74	16.85
		CH 48	5240			16.55	16.84
	802.11n-HT20	CH 36	5180	MCS0	14	13.90	13.90
		CH 44	5220			13.69	13.72
		CH 48	5240			13.61	13.70
	802.11n-HT40	CH 38	5190	MCS0	13	12.96	12.84
		CH 46	5230			12.91	12.71
	802.11ac-VHT20	CH 36	5180	MCS0	14	13.92	13.87
		CH 44	5220			13.99	13.69
		CH 48	5240			13.98	13.67
	802.11ac-VHT40	CH 38	5190	MCS0	13	12.97	12.83
		CH 46	5230			12.92	12.69
	802.11ac-VHT80	CH 42	5210	MCS0	12	11.77	11.69

	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-08608T Average power (dBm)	FCC ID PY7-57442Z Average power (dBm)
5.3GHz WLAN	802.11a	CH 52	5260	6Mbps	17	16.51	16.78
		CH 60	5300			16.74	16.80
		CH 64	5320			16.94	16.83
	802.11n-HT20	CH 52	5260	MCS0	14	13.65	13.71
		CH 60	5300			13.74	13.73
		CH 64	5320			13.64	13.76
	802.11n-HT40	CH 54	5270	MCS0	13	12.87	12.79
		CH 62	5310			12.66	12.70
	802.11ac-VHT20	CH 52	5260	MCS0	14	13.97	13.68
		CH 60	5300			13.76	13.70
		CH 64	5320			13.66	13.73
	802.11ac-VHT40	CH 54	5270	MCS0	13	12.94	12.74
		CH 62	5310			12.96	12.69
	802.11ac-VHT80	CH58	5290	MCS0	12	11.74	11.87

	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-08608T Average power (dBm)	FCC ID PY7-57442Z Average power (dBm)
5.5GHz WLAN	802.11a	CH 100	5500	6Mbps	17	16.84	16.79
		CH 116	5580			16.55	16.68
		CH 140	5700			16.54	16.63
		CH144	5720			16.60	16.61
	802.11n-HT20	CH 100	5500	MCS0	14	13.68	13.95
		CH 116	5580			13.58	13.81
		CH 140	5700			13.62	13.74
		CH144	5720			13.51	13.65
	802.11n-HT40	CH 102	5510	MCS0	13	12.64	12.89
		CH 126	5630			12.61	12.85
		CH 134	5670			12.61	12.65
		CH142	5710			12.66	12.63
	802.11ac-VHT20	CH 100	5500	MCS0	14	13.70	13.92
		CH 116	5580			13.87	13.78
		CH 140	5700			13.54	13.71
		CH144	5720			13.99	13.62
	802.11ac-VHT40	CH 102	5510	MCS0	13	12.69	12.86
		CH 126	5630			12.64	12.84
		CH 134	5670			12.66	12.64
		CH142	5710			12.68	12.56
	802.11ac-VHT80	CH106	5530	MCS0	12	11.79	11.83
		CH122	5610			11.58	11.93
		CH138	5690			11.56	11.63

	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-08608T Average power (dBm)	FCC ID PY7-57442Z Average power (dBm)
5.8GHz WLAN	802.11a	CH 149	5745	MCS0	17	16.69	16.75
		CH 157	5785			16.80	16.61
		CH 165	5825			16.82	16.60
	802.11n-HT20	CH 149	5745	MCS0	14	13.80	13.85
		CH 157	5785			13.82	13.83
		CH 165	5825			13.50	13.60
	802.11n-HT40	CH 151	5755	MCS0	13	12.75	12.79
		CH 159	5795			12.56	12.62
	802.11ac-VHT20	CH 149	5745	MCS0	14	13.82	13.82
		CH 157	5785			14.00	13.80
		CH 165	5825			13.53	13.57
	802.11ac-VHT40	CH 151	5755	MCS0	13	12.77	12.76
		CH 159	5795			12.58	12.56
	802.11ac-VHT80	CH155	5775	MCS0	12	11.82	11.92

1.2 Radiated Spurious Emission

2.4GHz BT/WLAN

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PY7-08608T						FCC ID PY7-57442Z					
				Band edge			Harmonic			Band edge			Harmonic		
				Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)
BT(2Mbps)	CH 78	2480	P	2483.68	45.04	74	7440	43.34	74	2483.76	42.97	74	7440	43.52	74
			A	2483.68	20.28	54	-	-	-	2483.76	18.21	54	-	-	-
BLE(2Mbps)	CH 19	2440	P	2496.64	51.35	74	7320	43.63	74	2487.68	51.19	74	7320	43.25	74
			A	2485.79	44.12	54	-	-	-	2493.28	44.12	54	-	-	-
802.11b	CH 11	2462	P	2486.04	52.45	74	7386	48.06	74	2499.72	52.06	74	7386	49.99	74
			A	2483.52	41.08	54	-	-	-	2484.04	41.06	54	-	-	-
802.11ac-VHT20	CH 1	2412	P	2389.905	53.75	74	4824	39.9	74	2390	54.14	74	4824	39.73	74
			A	2390	44.26	54	-	-	-	2389.905	43.82	54	-	-	-

5.2GHz WLAN

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PY7-08608T						FCC ID PY7-57442Z					
				Band edge			Harmonic			Band edge			Harmonic		
				Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)
802.11a	CH 48	5240	P	5447.4	55.61	74	10480	47.98	74	5033.02	54.86	74	10480	47.95	74
			A	5351.08	43.55	54	-	-	-	5458.6	43.69	54	-	-	-

5.3GHz WLAN

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PY7-08608T						FCC ID PY7-57442Z					
				Band edge			Harmonic			Band edge			Harmonic		
				Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Frequency (MHz)	Level (dBuV/m)	Limit	Frequency (MHz)	Level (dBuV/m)	Limit
802.11a	CH 64	5320	P	5357.76	54.99	74	10640	47.89	74	5353.44	57.93	74	10640	48	74
			A	5358.24	43.83	54	-	-	-	5354.08	44.7	54	-	-	-

5.5GHz WLAN

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PY7-08608T						FCC ID PY7-57442Z					
				Band edge			Harmonic			Band edge			Harmonic		
				Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)
802.11a	CH 140	5700	P	5725.08	61.27	74	17100	59.45	74	5725.08	62.67	74	17100	62.35	74
			A	5725.08	47.94	54	17100	43.85	54	5725.08	49.2	54	7600	46.7	54

5.8GHz WLAN

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PY7-08608T						FCC ID PY7-57442Z					
				Band edge			Harmonic			Band edge			Harmonic		
				Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)
802.11a	CH 149	5745	P	5644.6	49.82	68.2	17235	54.35	68.2	5629.6	49.3	68.2	17235	57.25	68.2

2.4GHz 2400~2483.5MHz

BT (2M) (Band Edge @ 3m)

BT	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
BT CH 78 2480MHz	*	2480	97.41	-	-	96.31	27.15	4.92	30.97	107	250	P	H
	*	2480	72.65	-	-	-	-	-	-	-	-	A	H
		2484.04	42.69	-31.31	74	41.58	27.15	4.93	30.97	107	250	P	H
		2484.04	17.93	-36.07	54	-	-	-	-	-	-	A	H
													H
													H
	*	2480	96.48	-	-	95.38	27.15	4.92	30.97	106	97	P	V
	*	2480	71.72	-	-	-	-	-	-	-	-	A	V
		2483.76	42.97	-31.03	74	41.86	27.15	4.93	30.97	106	97	P	V
		2483.76	18.21	-35.79	54	-	-	-	-	-	-	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

BT (2M) (Harmonic @ 3m)

BT	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
BT CH 78 2480MHz		4960	39.19	-34.81	74	56.41	31.75	7.59	57.05	100	0	P	H
		4960	14.43	-39.57	54	-	-	-	-	-	-	A	H
		7440	43.07	-30.93	74	54.43	36.41	9.21	57.44	100	0	P	H
		7440	18.31	-35.69	54	-	-	-	-	-	-	A	H
		4960	38.46	-35.54	74	55.68	31.75	7.59	57.05	100	0	P	V
		4960	13.7	-40.3	54	-	-	-	-	-	-	A	V
		7440	43.52	-30.48	74	54.88	36.41	9.21	57.44	100	0	P	V
		7440	18.76	-35.24	54	-	-	-	-	-	-	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

BLE 2Mbps (Band Edge @ 3m)

BLE	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
BLE CH 19 2440MHz		2385.88	52.06	-21.94	74	41.4	26.89	4.83	30.99	283	220	P	H
		2368.38	43.68	-10.32	54	33.15	26.79	4.8	30.99	283	220	A	H
	*	2440	85.89	-	-	75.01	27.04	4.88	30.97	283	220	P	H
	*	2440	84.64	-	-	73.76	27.04	4.88	30.97	283	220	A	H
		2499.65	51.44	-22.56	74	40.34	27.2	4.93	30.96	283	220	P	H
		2489.15	43.85	-10.15	54	32.75	27.2	4.93	30.96	283	220	A	H
		2367.54	51.63	-22.37	74	41.1	26.79	4.8	30.99	272	280	P	V
		2379.72	43.82	-10.18	54	33.21	26.84	4.83	30.99	272	280	A	V
	*	2440	87.94	-	-	77.06	27.04	4.88	30.97	272	280	P	V
	*	2440	86.64	-	-	75.76	27.04	4.88	30.97	272	280	A	V
		2487.68	51.19	-22.81	74	40.09	27.2	4.93	30.96	272	280	P	V
		2493.28	44.12	-9.88	54	33.02	27.2	4.93	30.96	272	280	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

BLE 2Mbps (Harmonic @ 3m)

BLE	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
BLE CH 19 2440MHz		4880	38.99	-35.01	74	56.59	31.63	7.44	57.17	100	0	P	H
		7320	43.25	-30.75	74	54.75	36.19	9.14	57.29	100	0	P	H
													H
													H
		4880	38.5	-35.5	74	56.1	31.63	7.44	57.17	100	0	P	V
		7320	43.01	-30.99	74	54.51	36.19	9.14	57.29	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 11 2462MHz	*	2462	103.22	-	-	92.26	27.1	4.9	30.97	379	310	P	H
	*	2462	99.96	-	-	89	27.1	4.9	30.97	379	310	A	H
		2499.72	52.06	-21.94	74	40.96	27.2	4.93	30.96	379	310	P	H
		2484.04	41.06	-12.94	54	30.02	27.15	4.93	30.97	379	310	A	H
													H
													H
	*	2462	102.53	-	-	91.57	27.1	4.9	30.97	379	265	P	V
	*	2462	98.72	-	-	87.76	27.1	4.9	30.97	379	265	A	V
		2487.24	52.05	-21.95	74	41.01	27.15	4.93	30.97	379	265	P	V
		2483.76	40.98	-13.02	54	29.94	27.15	4.93	30.97	379	265	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 11 2462MHz		4924	38.86	-35.14	74	56.24	31.7	7.52	57.1	100	0	P	H
		7386	46.13	-27.87	74	57.58	36.31	9.18	57.38	100	0	P	H
													H
													H
		4924	40.92	-33.08	74	58.3	31.7	7.52	57.1	100	0	P	V
		7386	49.99	-24.01	74	61.44	36.31	9.18	57.38	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11ac VHT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 01 2412MHz		2389.275	52.45	-21.55	74	41.79	26.89	4.83	30.99	398	300	P	H
		2390	43.64	-10.36	54	32.98	26.89	4.83	30.99	398	300	A	H
	*	2412	100.63	-	-	89.88	26.94	4.87	30.99	398	300	P	H
	*	2412	92.47	-	-	81.72	26.94	4.87	30.99	398	300	A	H
													H
													H
		2390	54.14	-19.86	74	2390	26.89	4.83	30.99	400	265	P	V
		2389.905	43.82	-10.18	54	33.16	26.89	4.83	30.99	400	265	A	V
	*	2412	100.04	-	-	89.29	26.94	4.87	30.99	400	265	P	V
	*	2412	93.73	-	-	82.98	26.94	4.87	30.99	400	265	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11ac VHT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 01 2412MHz		4824	38.72	-35.28	74	56.56	31.56	7.33	57.24	100	0	P	H
													H
													H
													H
		4824	39.73	-34.27	74	57.57	31.56	7.33	57.24	100	0	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 - 5150~5250MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 48 5240MHz		5116.48	54.61	-19.39	74	47.11	32.48	5.97	30.95	119	118	P	H
		5144.82	43.43	-10.57	54	35.92	32.47	5.99	30.95	119	118	A	H
	*	5240	104.3	-	-	96.75	32.45	6.05	30.95	119	118	P	H
	*	5240	93.14	-	-	85.59	32.45	6.05	30.95	119	118	A	H
		5433.4	54.61	-19.39	74	46.96	32.41	6.19	30.95	119	118	P	H
		5396.44	43.48	-10.52	54	35.85	32.42	6.16	30.95	119	118	A	H
		5033.02	54.86	-19.14	74	47.42	32.49	5.9	30.95	117	18	P	V
		5148.72	43.43	-10.57	54	35.92	32.47	5.99	30.95	117	18	A	V
	*	5240	106.65	-	-	99.1	32.45	6.05	30.95	117	18	P	V
	*	5240	95.62	-	-	88.07	32.45	6.05	30.95	117	18	A	V
		5411.84	54.49	-19.51	74	46.86	32.42	6.16	30.95	117	18	P	V
		5458.6	43.69	-10.31	54	36.02	32.41	6.21	30.95	117	18	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 48 5240MHz		10480	47.95	-26.05	74	55.07	39.96	9.31	56.93	100	0	P	H
		15720	46.08	-27.92	74	52.75	38.84	11.56	57.81	100	0	P	H
													H
													H
		10480	48.07	-25.93	74	55.19	39.96	9.31	56.93	100	0	P	V
		15720	46.61	-27.39	74	53.28	38.84	11.56	57.81	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 - 5250~5350MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 64 5320MHz	*	5320	106.85	-	-	99.26	32.44	6.1	30.95	108	118	P	H
	*	5320	95.93	-	-	88.34	32.44	6.1	30.95	108	118	A	H
		5350.72	57.87	-16.13	74	50.27	32.43	6.12	30.95	108	118	P	H
		5354.08	44.7	-9.3	54	37.1	32.43	6.12	30.95	108	118	A	H
													H
													H
	*	5320	107.95	-	-	100.36	32.44	6.1	30.95	114	19	P	V
	*	5320	96.77	-	-	89.18	32.44	6.1	30.95	114	19	A	V
		5353.44	57.93	-16.07	74	50.33	32.43	6.12	30.95	114	19	P	V
		5350.72	44.59	-9.41	54	36.99	32.43	6.12	30.95	114	19	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 64 5320MHz		10640	47.16	-26.84	74	54.06	40.06	9.38	56.87	100	0	P	H
		15960	45.81	-28.19	74	52.59	38.12	11.66	57.28	100	0	P	H
													H
													H
		10640	48	-26	74	54.9	40.06	9.38	56.87	100	0	P	V
		15960	45.43	-28.57	74	52.21	38.12	11.66	57.28	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 140 5700MHz	*	5700	109.4	-	-	101.09	32.96	6.36	31.01	100	289	P	H
	*	5700	98.38	-	-	90.07	32.96	6.36	31.01	100	289	A	H
		5725.08	62.67	-11.33	74	54.29	33.03	6.37	31.02	100	289	P	H
		5725.08	49.2	-4.8	54	40.82	33.03	6.37	31.02	100	289	A	H
													H
													H
	*	5700	104.77	-	-	96.46	32.96	6.36	31.01	100	43	P	V
	*	5700	93.71	-	-	85.4	32.96	6.36	31.01	100	43	A	V
		5725.64	57.83	-16.17	74	49.45	33.03	6.37	31.02	100	43	P	V
		5725	46.24	-7.76	54	37.86	33.03	6.37	31.02	100	43	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 140 5700MHz		11400	47.1	-26.9	74	54.05	40.2	9.77	57.44	100	0	P	H
		17100	59.1	-14.9	74	61.14	41.62	11.99	56.3	204	24	P	H
		17100	43.63	-10.37	54	45.67	41.62	11.99	56.3	204	24	A	H
													H
		7600	51.68	-22.32	74	64.71	37.4	7.9	59.16	100	326	P	V
		7600	46.7	-7.3	54	59.73	37.4	7.9	59.16	100	326	A	V
		11400	47.54	-26.46	74	54.49	40.2	9.77	57.44	100	0	P	V
		17100	62.35	-11.65	74	64.39	41.62	11.99	56.3	110	23	P	V
		17100	45.57	-8.43	54	47.61	41.62	11.99	56.3	110	23	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 - 5725~5850MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 149 5745MHz		5640	50.26	-17.94	68.2	42.12	32.79	6.35	31	101	296	P	H
		5685.8	52.88	-41.84	94.72	44.61	32.92	6.36	31.01	101	296	P	H
		5720	57.04	-53.76	110.8	48.67	33.02	6.37	31.02	101	296	P	H
		5724.6	66.25	-55.04	121.29	57.87	33.03	6.37	31.02	101	296	P	H
	*	5745	107.88	-	-	99.45	33.09	6.37	31.03	101	296	P	H
	*	5745	96.85	-	-	88.42	33.09	6.37	31.03	101	296	A	H
													H
													H
		5629.6	49.3	-18.9	68.2	41.19	32.76	6.35	31	105	42	P	V
		5696.2	51.41	-50.99	102.4	43.11	32.95	6.36	31.01	105	42	P	V
		5718.4	52.53	-57.82	110.35	44.17	33.01	6.37	31.02	105	42	P	V
		5724.6	61.58	-59.71	121.29	53.2	33.03	6.37	31.02	105	42	P	V
	*	5745	103.39	-	-	94.96	33.09	6.37	31.03	105	42	P	V
	*	5745	92.43	-	-	84	33.09	6.37	31.03	105	42	A	V
													V
													V

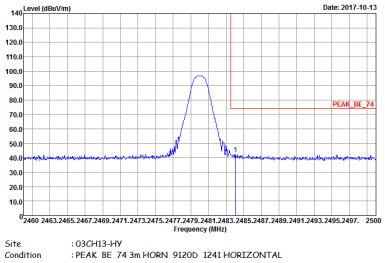
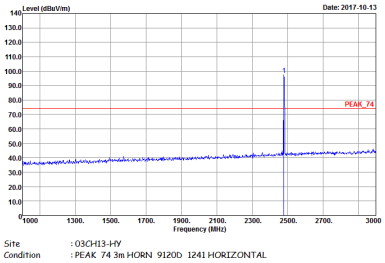
Band 4 5725~5850MHz

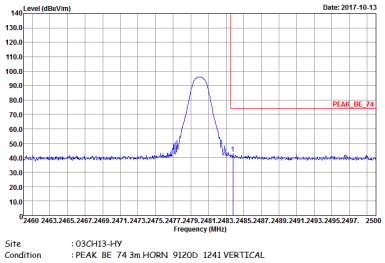
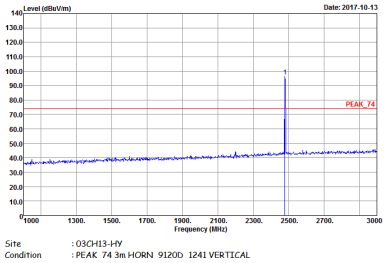
WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 149 5745MHz		11490	48.2	-25.8	74	55.24	40.2	9.82	57.57	100	0	P	H
		17235	49.91	-18.29	68.2	52.09	41.92	12.09	56.83	100	0	P	H
													H
													H
		11490	46.82	-27.18	74	53.86	40.2	9.82	57.57	100	0	P	V
		17235	57.25	-10.95	68.2	59.43	41.92	12.09	56.83	116	21	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

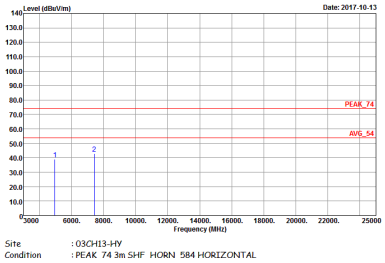
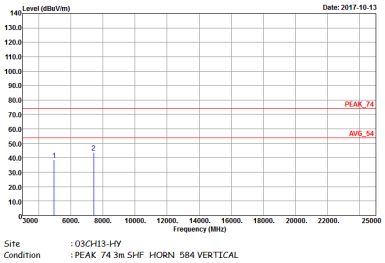
BT (2M) (Band Edge @ 3m)

BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
	BT CH78 2480MHz	
	Horizontal	Fundamental
Peak		

BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
	BT CH78 2480MHz	
	Vertical	Fundamental
Peak		

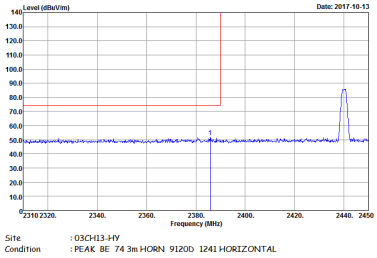
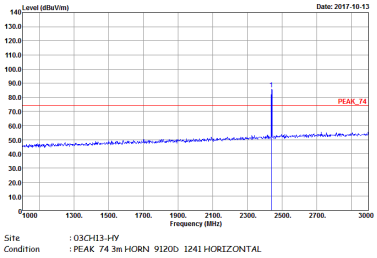
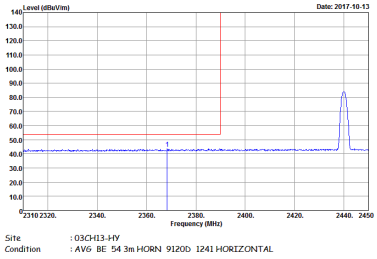
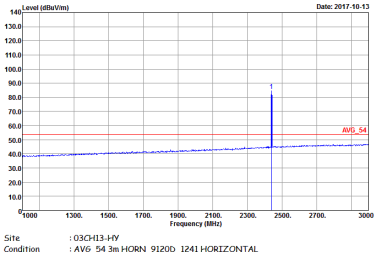
2.4GHz 2400~2483.5MHz

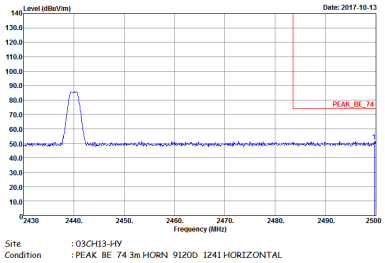
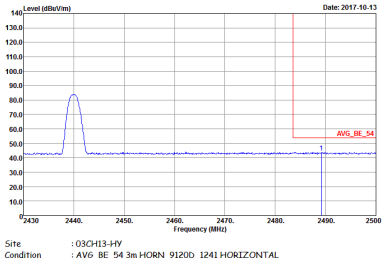
BT (2M) (Harmonic @ 3m)

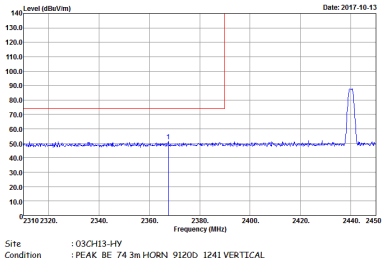
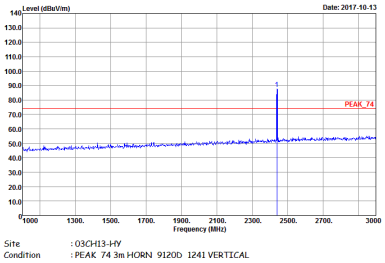
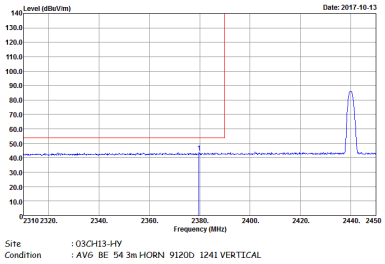
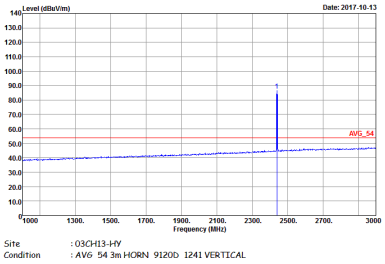
BT	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
	BT CH78 2480MHz	
	Horizontal	Vertical
Peak Avg.		

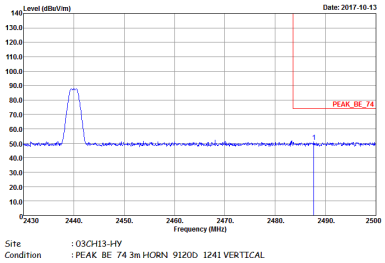
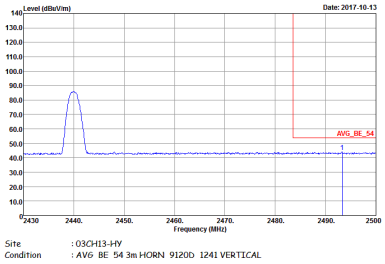
2.4GHz 2400~2483.5MHz

BLE 2Mbps (Band Edge @ 3m)

BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
	BLE CH19 2440MHz - L	
	Horizontal	Fundamental
Peak		
Avg.		

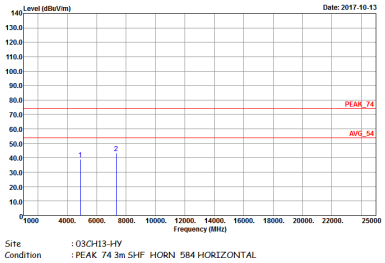
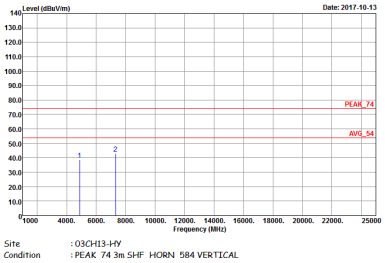
BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
	BLE CH19 2440MHz - R	
	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
	BLE CH19 2440MHz - L	
	Vertical	Fundamental
Peak		
Avg.		

BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
	BLE CH19 2440MHz - R	
	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

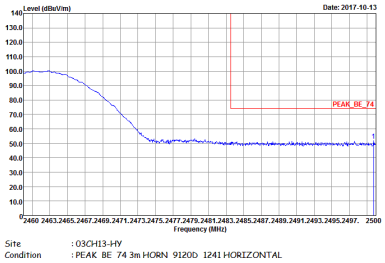
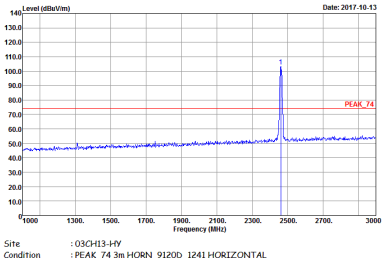
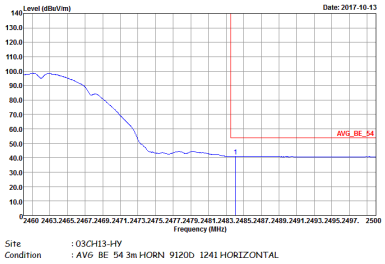
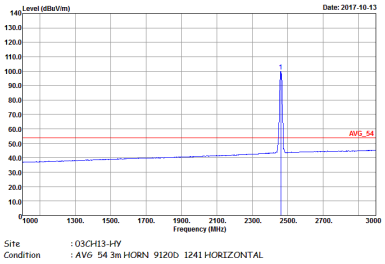
2.4GHz 2400~2483.5MHz

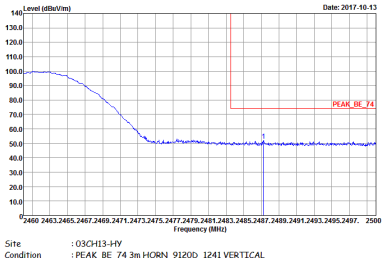
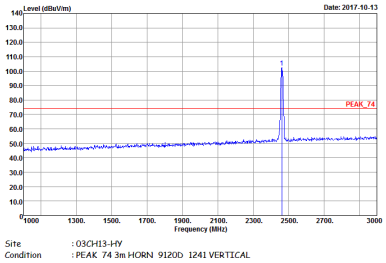
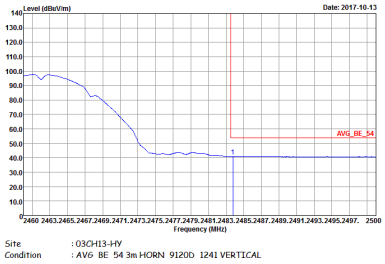
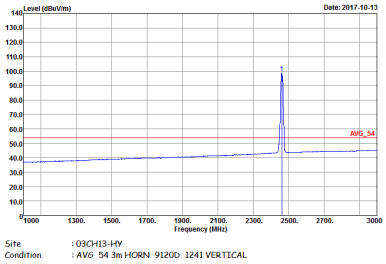
BLE 2Mbps (Harmonic @ 3m)

BLE	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
	BLE CH19 2440MHz	
	Horizontal	Vertical
Peak Avg.		

2.4GHz 2400~2483.5MHz

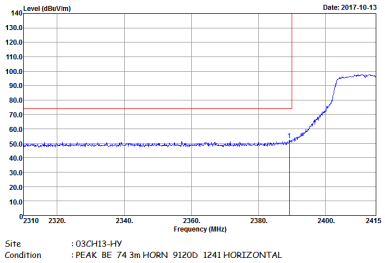
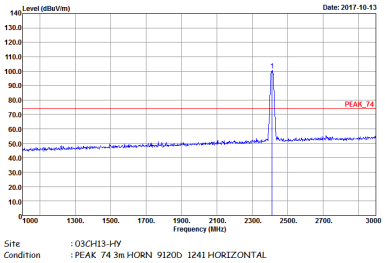
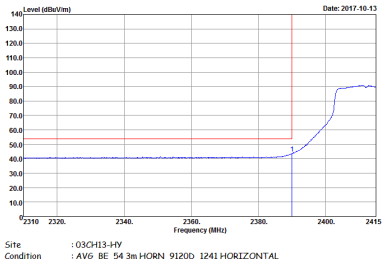
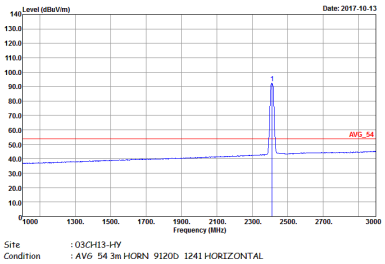
WIFI 802.11b (Band Edge @ 3m)

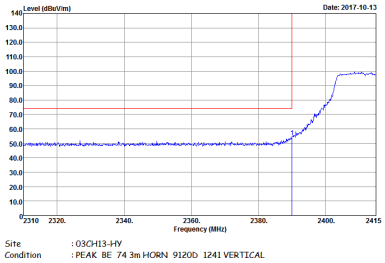
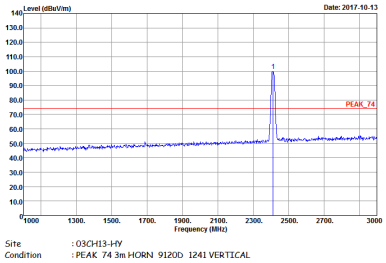
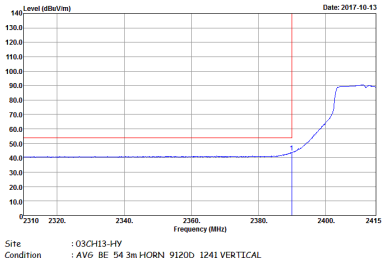
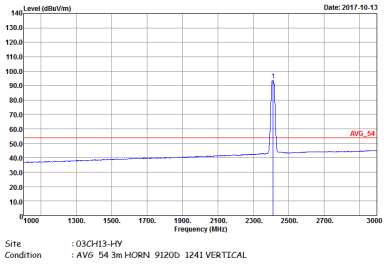
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
1	Horizontal	Fundamental
Peak		
Avg.		

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
1	Vertical	Fundamental
Peak		
Avg.		

2.4GHz 2400~2483.5MHz

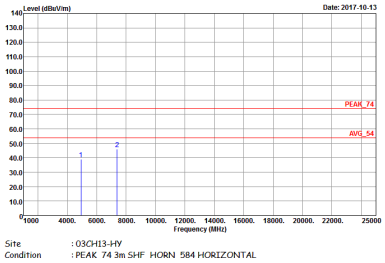
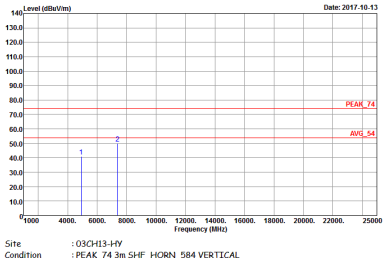
WIFI 802.11ac VHT20 (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH01 2412MHz	
1	Horizontal	Fundamental
Peak		
Avg.		

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH01 2412MHz	
1	Vertical	Fundamental
Peak		
Avg.		

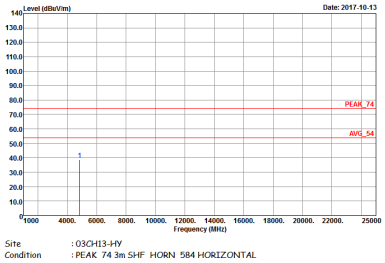
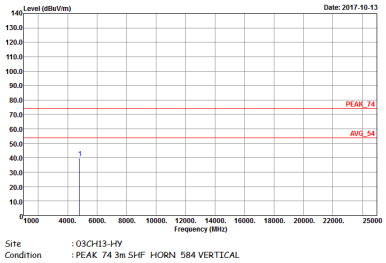
2.4GHz 2400~2483.5MHz

WIFI 802.11b (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH11 2462MHz	
1	Horizontal	Vertical
Peak Avg.		

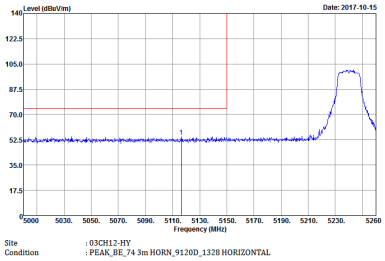
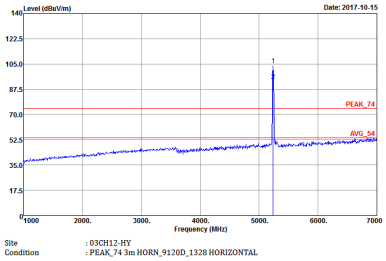
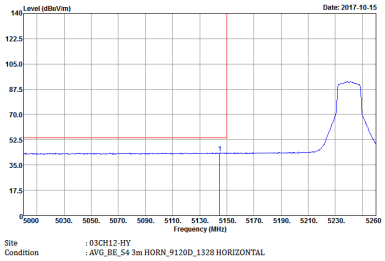
2.4GHz 2400~2483.5MHz

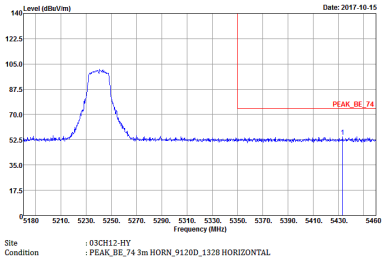
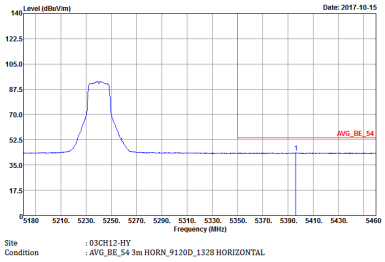
WIFI 802.11ac VHT20 (Harmonic @ 3m)

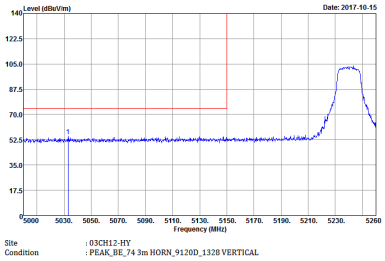
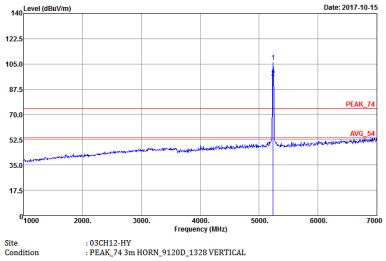
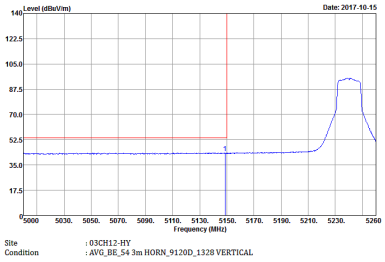
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH01 2412MHz	
1	Horizontal	Vertical
Peak Avg.		

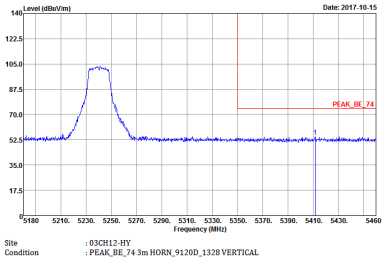
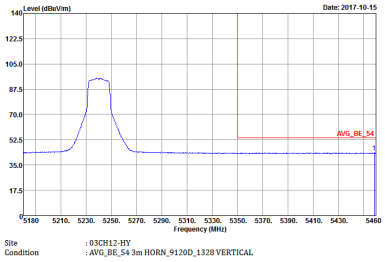
Band 1 - 5150~5250MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

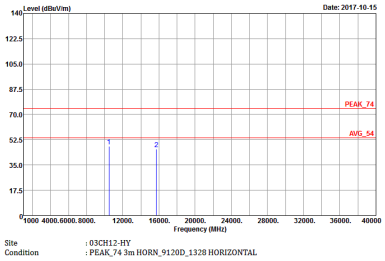
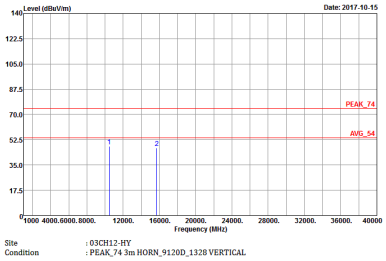
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

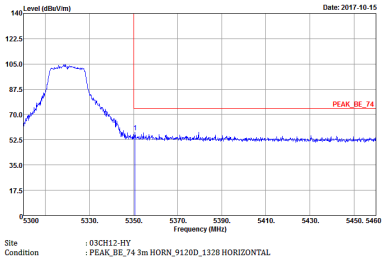
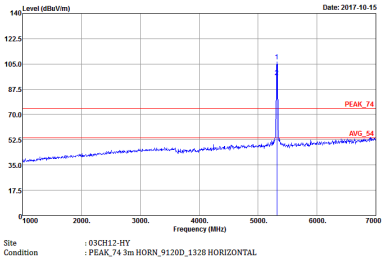
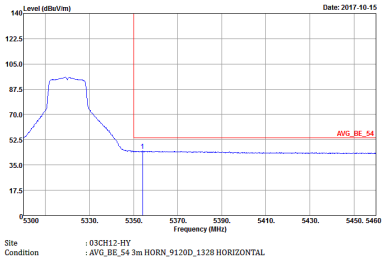
Band 1 - 5150~5250MHz

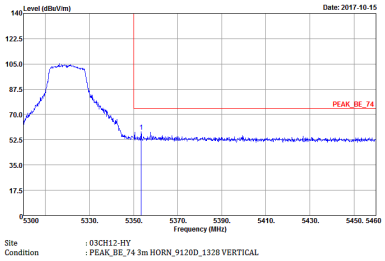
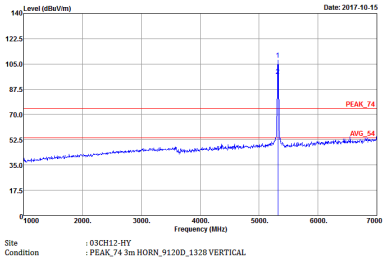
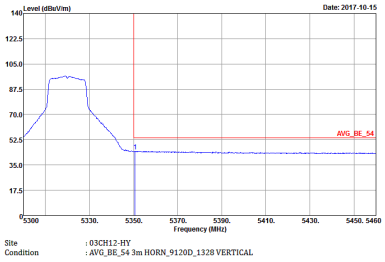
WIFI 802.11a (Harmonic @ 3m)

WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH48 5240MHz	
1	Horizontal	Vertical
Peak Avg.		

Band 2 - 5250~5350MHz

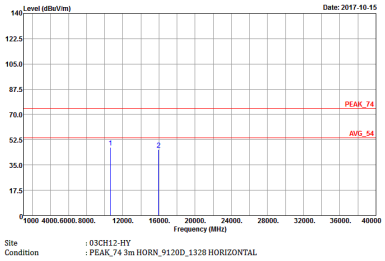
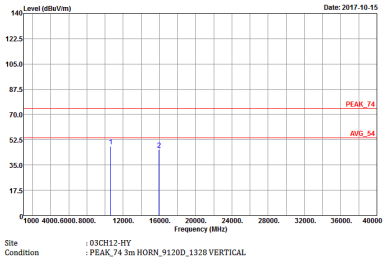
WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

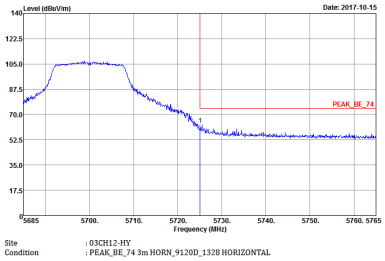
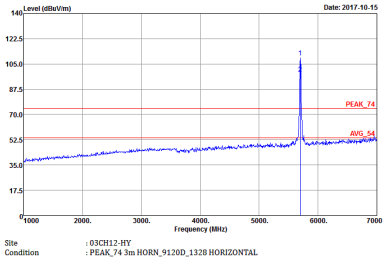
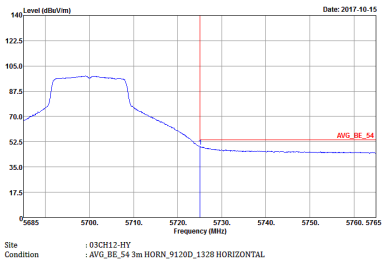
Band 2 - 5250~5350MHz

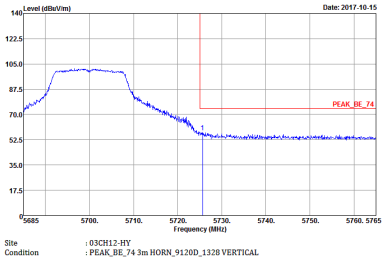
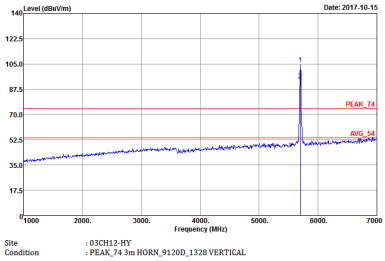
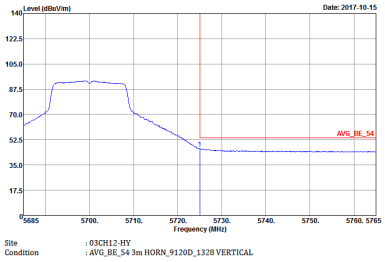
WIFI 802.11a (Harmonic @ 3m)

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH64 5320MHz	
1	Horizontal	Vertical
Peak Avg.		

Band 3 - 5470~5725MHz

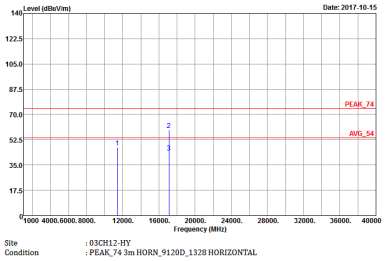
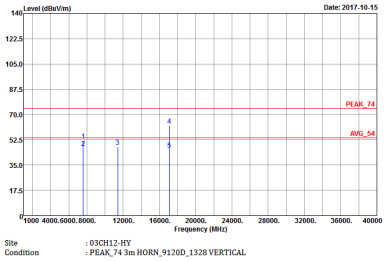
WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH140 5700MHz	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH140 5700MHz	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

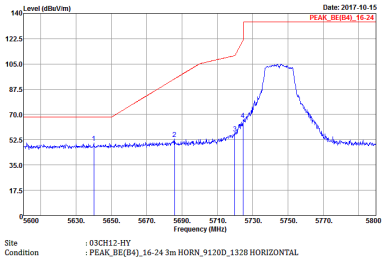
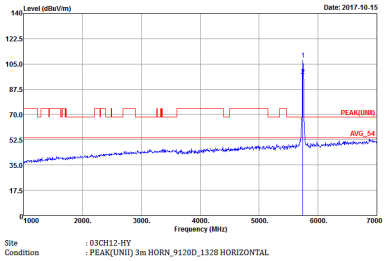
Band 3 - 5470~5725MHz

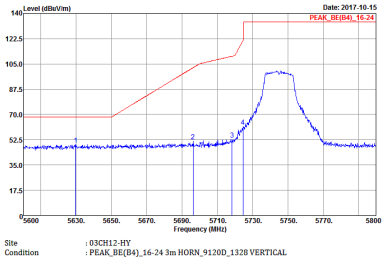
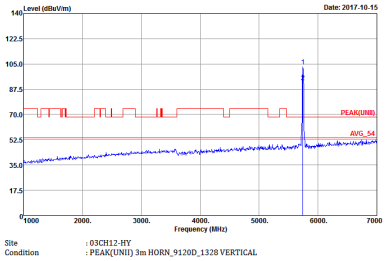
WIFI 802.11a (Harmonic @ 3m)

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH140 5700MHz	
1	Horizontal	Vertical
Peak Avg.		

Band 4 - 5725~5850MHz

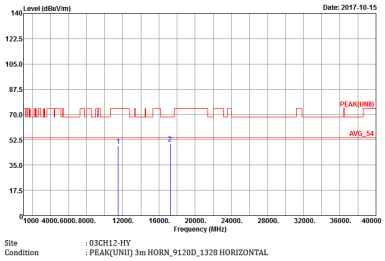
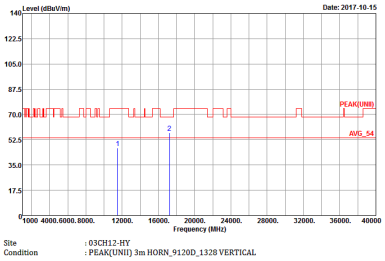
WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
1	Horizontal	Fundamental
Peak		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
1	Vertical	Fundamental
Peak		

Band 4 - 5725~5850MHz

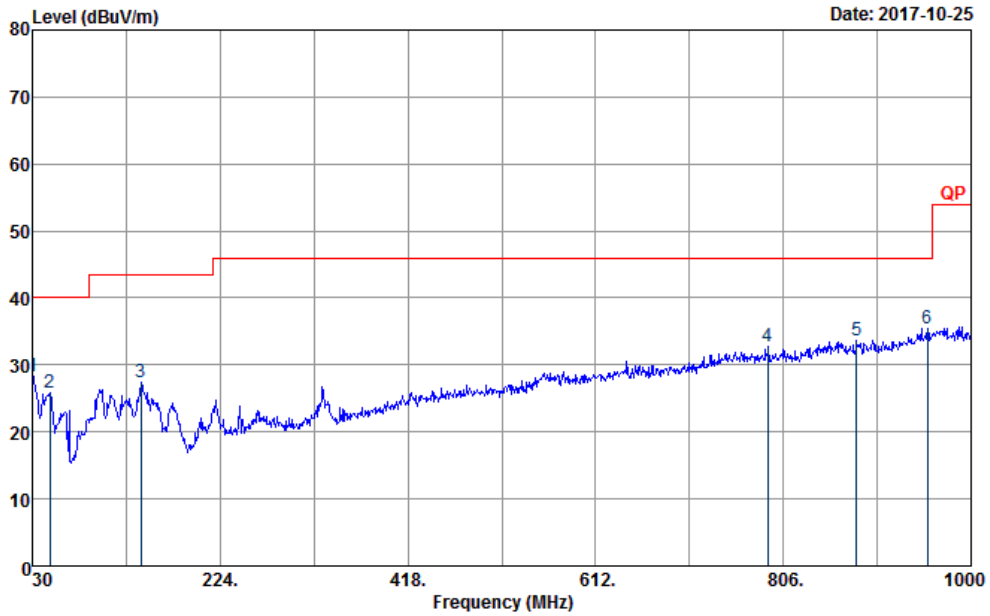
WIFI 802.11a (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH149 5745MHz	
1	Horizontal	Vertical
Peak Avg.		

NFC

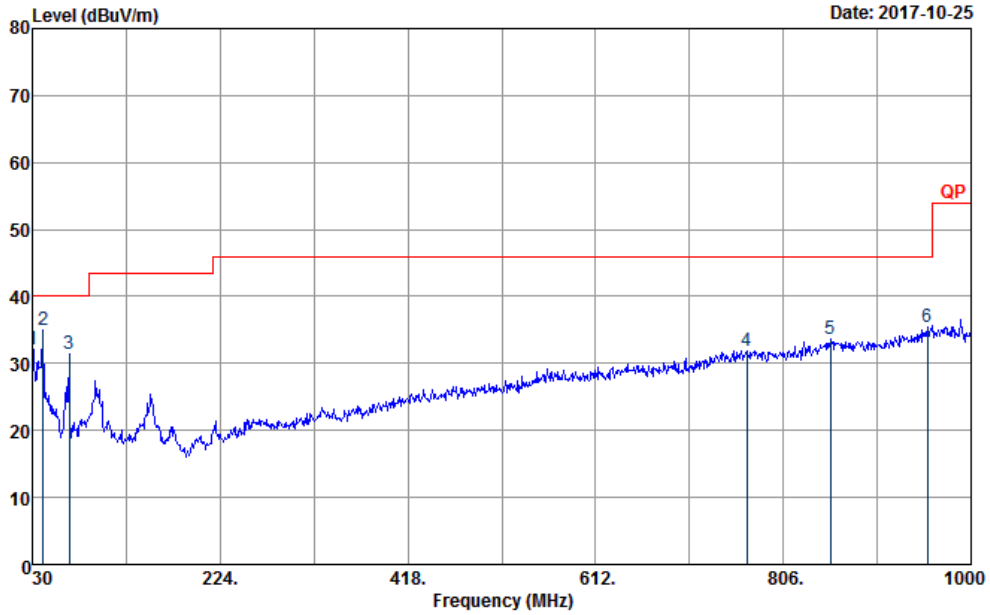
Results of Radiated Spurious Emissions (30MHz~1GHz)

Test Mode :	NFC Tx	Polarization :	Horizontal



Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
30.27	28.23	-11.77	40	33.15	24.72	1.71	31.35	-	-	Peak
47.82	25.76	-14.24	40	40.22	15.41	1.71	31.58	-	-	Peak
142.05	27.48	-16.02	43.5	39.15	17.22	2.62	31.51	-	-	Peak
790	32.75	-13.25	46	30.38	27.99	4.98	30.6	-	-	Peak
881.7	33.75	-12.25	46	29.99	29.02	5.27	30.53	-	-	Peak
955.2	35.34	-10.66	46	29.69	30.76	5.4	30.51	100	0	Peak

Test Mode :	NFC Tx	Polarization :	Vertical



Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
30.27	32	-8	40	36.92	24.72	1.71	31.35	-	-	Peak
40.8	35.04	-4.96	40	45.97	18.85	1.71	31.49	100	0	Peak
67.8	31.38	-8.62	40	48.79	12.07	2.11	31.59	-	-	Peak
768.3	31.88	-14.12	46	29.59	28.03	4.88	30.62	-	-	Peak
854.4	33.55	-12.45	46	29.89	29.01	5.2	30.55	-	-	Peak
955.2	35.34	-10.66	46	29.69	30.76	5.4	30.51	-	-	Peak

Note:

1. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
2. Emission level (dBμV/m) = 20 log Emission level (μV/m).
3. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor= Level.

End of this report