Spot Check Evaluation

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1190

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REVISION HISTORY

VERSION	DESCRIPTION	ISSUED DATE
Rev. 01	Initial issue of report	Nov. 07, 2017

1. Introduction Section

The original model (FCC ID: PY7-48140L) and the variant model (FCC ID: PY7-78553D) 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 PY7-78553D references the test data of PY7-48140L

The original model (FCC ID: PY7-48140L) and the variant model (FCC ID: PY7-78553D) has identical PCB layout, antenna, SW implementation for GSM/WCDMA/LTE. Based on their similarity, the FCC Part 22, 24, 27 (equipment class: PCE) test data issued test data of PY7-78553D references the test data of PY7-48140L

The applicant takes full responsibility that the test data as referenced in this report represent compliance for this FCC ID (FCC ID: PY7-78553D).

2. Difference Section

The original model (FCC ID: PY7-48140L) and the variant model (FCC ID: PY7-78553D) 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.

The original model (FCC ID: PY7-48140L) and the variant model (FCC ID: PY7-78553D) has identical PCB layout, antenna, SW implementation for GSM/WCDMA/LTE. The details of similarity and difference can be found in the Operating Description.

Cellular transmitter RF components are different in PY7-78553D, to support capability for different cellular bands.

The product specification is outlined in the following table:

FCC ID			**PY7-48140L**	**PY7-78553D**
Wireless Tech	**Mode**		**Frequency (MHz)**	
GSM	GSM Voice GPRS (GMSK) EDGE (8PSK)	Multi-Slot Class 33 DTM: Yes	850/1900	850/1900
UMTS	AMR/RCM12.2Kbps HSDPA/HSUPA/DC-HSDPA		B5/B2	B5/B2
LTE (FDD)	QPSK/16QAM/64QAM		B5/B2/B7/B41	B5/B2/B7
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	PY7-48140L Worst Result	PY7-78553D Worst Result	Difference (dB)
Average Conducted Power (dBm)	802.11b	16.48	16.43	0.05
	802.11g	13.42	13.31	0.11
	11n HT20	12.91	12.75	0.16
	11ac VHT20	12.93	12.74	0.19
	BT (1Mbps)	9.72	9.64	0.08
	BT (2Mbps)	6.31	6.35	-0.04
	BT (3Mbps)	6.27	6.30	-0.03
	BT-LE(1Mbps)	-0.01	-0.25	0.24
	BT-LE(2Mbps)	-0.03	-0.18	0.15
	11a, 5.2GHz	14.94	14.84	0.1
	11n HT20, 5.2GHz	13.85	13.87	-0.02
	11n HT40, 5.2GHz	12.65	12.84	0.05
	11n VHT20, 5.2GHz	13.92	13.84	0.08
	11n VHT40, 5.2GHz	12.73	12.81	0.17
	11n VHT80, 5.2GHz	11.56	11.95	0.03
	11a, 5.3GHz	14.75	14.52	0.23
	11n HT20, 5.3GHz	13.89	13.93	-0.04
	11n HT40, 5.3GHz	12.50	12.59	-0.09
	11n VHT20, 5.3GHz	13.98	13.89	0.09
	11n VHT40, 5.3GHz	12.59	12.58	0.01
	11n VHT80, 5.3GHz	11.53	11.71	0.18
	11a, 5.5GHz	14.94	14.93	0.01
	11n HT20, 5.5GHz	13.85	13.92	-0.07
	11n HT40, 5.5GHz	12.82	12.89	-0.07
	11n VHT20, 5.5GHz	13.94	13.90	0.04
	11n VHT40, 5.5GHz	12.87	12.75	0.12
	11n VHT80, 5.5GHz	11.71	11.70	-0.02
	11a, 5.8GHz	13.85	13.83	0.02
	11n HT20, 5.8GHz	13.90	13.89	0.01
	11n HT40, 5.8GHz	12.96	12.90	0.06
	11n VHT20, 5.8GHz	13.99	13.75	0.24
	11n VHT40, 5.8GHz	12.97	12.82	0.15
	11n VHT80, 5.8GHz	11.67	11.66	0.01
	S/N of test sample	RQ3005X7GH	CQ30000180 RQ3005ZXJ1	
	Test date	2017/09/25~2017/10/26	2017/09/27~2017/10/31	
	GSM 850 (GPRS)	33.24	33.45	-0.21
	GSM 850 (EDGE)	27.00	26.73	0.27
	GSM1900(GPRS)	30.48	30.29	0.19
	GSM1900(EDGE)	26.49	25.79	0.70
	UMTS B2 (RMC 12.2Kbps)	24.00	24.00	0.00
	UMTS B5 (RMC 12.2Kbps)	24.50	24.50	0.00
	LTE B2 (FDD - QPSK)	23.93	23.95	-0.02
	LTE B5 (FDD - QPSK)	24.24	24.26	-0.02
	LTE B7 (FDD - QPSK)	24.34	23.93	0.41
	S/N of test sample	RQ3005X591	CQ3000017K	
	Test date	2017/06/27~2017/08/20	2017/10/31	

Test Item	Mode	PY7-48140L Worst Result	PY7-78553D Worst Result	Difference (dB)
Peak Radiated Spurious Emission (Band Edge) (dBuV/m)	802.11b	54.93	53.69	1.24
	802.11ac-VHT20	58.80	57.42	1.38
	BT (1Mbps)	47.92	50.04	-2.12
	BT-LE(1Mbps)	52.06	52.36	-0.3
	802.11ac, 5.2GHz	57.73	58.30	-0.57
	802.11ac, 5.3GHz	56.48	57.11	-0.63
	802.11ac, 5.5GHz	56.91	54.70	2.21
	802.11ac, 5.8GHz	51.95	50.69	1.26
	S/N of test sample	CQ300000QK CQ300000QJ	CQ3000016P CQ300005AJ	
	Test date	2017/09/27~2017/10/15		
Average Radiated Spurious Emission (Band Edge) (dBuV/m)	802.11b	47.65	45.01	2.64
	802.11ac-VHT20	49.07	47.59	1.48
	BT (1Mbps)	23.13	25.25	-2.12
	BT-LE(1Mbps)	44.14	43.93	0.21
	802.11ac, 5.2GHz	50.64	51.00	-0.36
	802.11ac, 5.3GHz	50.71	50.55	0.16
	802.11ac, 5.5GHz	49.81	46.95	2.86
	S/N of test sample	CQ300000QK CQ300000QJ	CQ3000016P CQ300005AJ	
	Test date			
Peak Radiated Spurious Emission (Harmonic) (dBuV/m)	802.11b	45.09	44.28	0.81
	802.11ac-VHT20	44.59	44.15	0.44
	BT (1Mbps)	42.92	43.73	-0.81
	BT-LE(1Mbps)	43.56	43.82	-0.26
	802.11ac, 5.2GHz	46.72	46.05	0.67
	802.11ac, 5.3GHz	45.48	44.80	0.68
	802.11ac, 5.5GHz	44.28	42.58	1.70
	802.11ac, 5.8GHz	50.60	48.74	1.86
	S/N of test sample	CQ300000QK CQ300000QJ	CQ3000016P CQ300005AJ	
	Test date			
NFC (dBuV/m)	RSE (30MHz to1GHz)	33.73	32.66	1.07
	S/N of test sample	CQ300000QJ	CQ300005AJ	
	Test date	2017/10/12	2017/10/20	

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 1dB, 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

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	PY7-48140L	Original Grant	FCC RF Test Report	PY7-78553D	Part 15C (FR762713-01B, FR762713-01C)
	DSS	Bluetooth	2400~2483.5	PY7-48140L	Original Grant	FCC RF Test Report	PY7-78553D	Part 15C (FR762713-01A)
	DXX	NFC	13.56	PY7-48140L	Original Grant	FCC RF Test Report	PY7-78553D	Part 15C (FR762713-01D)
15E	NII	Wi-Fi	5150~5250 5250~5350 5470~5725 5725~5850	PY7-48140L	Original Grant	FCC RF Test Report	PY7-78553D	Part 15E (FR762713-01E, FR762713-01F)
		DFS	5470~5725	PY7-48140L	Original Grant	FCC RF Test Report	PY7-78553D	Part 15E (FZ762713-01)
Part 22.24.27	PCE	GSM WCDMA	GSM/GPRS(EDGE) 850 GSM/GPRS(EDGE) 1900 WCDMA Band 2 WCDMA Band 5	PY7-48140L	Original Grant	FCC RF Test Report	PY7-78553D	Part 22.24.27 (FG762713-01A)
Part 22.24.27	PCE	LTE	LTE B2/B5/B7	PY7-48140L	Original Grant	FCC RF Test Report	PY7-78553D	Part 22.24.27 (FG762713-01B)

Appendix A. Spot Check Test Result

1.1 Conducted power

<2.4GHz WLAN>

	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-48140L Average power (dBm)	FCC ID PY7-78553D Average power (dBm)
2.4GHz WLAN	802.11b	CH 1	2412	1Mbps	17	16.48	16.43
		CH 6	2437			16.21	16.09
		CH 11	2462			16.19	16.01
	802.11g	CH 1	2412	6Mbps	13.5	13.42	13.31
		CH 6	2437			13.28	13.27
		CH 11	2462			13.40	13.26
	802.11n-HT20	CH 1	2412	MCS0	13	12.79	12.75
		CH 6	2437			12.69	12.65
		CH 11	2462			12.91	12.75
	802.11ac-VHT20	CH 1	2412	MCS0	13	12.83	12.73
		CH 6	2437			12.74	12.58
		CH 11	2462			12.93	12.74

<Bluetooth>

Mode	Channel	Frequency (MHz)	Tune-Up Limit	FCC ID PY7-48140L Average power (dBm)	FCC ID PY7-78553D Average power (dBm)
Bluetooth (1Mbps)	CH 00	2402	10.5	9.72	9.35
	CH 39	2441		8.70	8.97
	CH 78	2480		8.67	9.64
Bluetooth (2Mbps)	CH 00	2402	7	6.31	5.92
	CH 39	2441		5.34	5.69
	CH 78	2480		5.40	6.35
Bluetooth (3Mbps)	CH 00	2402	7	6.27	5.93
	CH 39	2441		5.36	5.70
	CH 78	2480		5.42	6.30
BLE (GFSK) (1Mbps)	CH 00	2402	0	-1.66	-2.44
	CH 19	2440		-1.69	-2.25
	CH 39	2480		-0.01	-0.25
BLE (GFSK) (2Mbps)	CH 00	2402	0	-1.70	-2.40
	CH 19	2440		-1.72	-2.24
	CH 39	2480		-0.03	-0.18

<5GHz WLAN>

	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-48140L Average power (dBm)	FCC ID PY7-78553D Average power (dBm)
5.2GHz WLAN	802.11a	CH 36	5180	6Mbps	15	14.94	14.84
		CH 44	5220			14.88	14.81
		CH 48	5240			14.84	14.75
	802.11n-HT20	CH 36	5180	MCS0	14	13.85	13.87
		CH 44	5220			13.65	13.77
		CH 48	5240			13.67	13.77
	802.11n-HT40	CH 38	5190	MCS0	13	12.89	12.84
		CH 46	5230			12.63	12.72
	802.11ac-VHT20	CH 36	5180	MCS0	14	13.92	13.84
		CH 44	5220			13.74	13.67
		CH 48	5240			13.71	13.68
	802.11ac-VHT40	CH 38	5190	MCS0	13	12.98	12.81
		CH 46	5230			12.71	12.70
	802.11ac-VHT80	CH 42	5210	MCS0	12	11.98	11.95
	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-48140L Average power (dBm)	FCC ID PY7-78553D Average power (dBm)
5.3GHz WLAN	802.11a	CH 52	5260	6Mbps	15	14.70	14.51
		CH 60	5300			14.67	14.52
		CH 64	5320			14.75	14.51
	802.11n-HT20	CH 52	5260	MCS0	14	13.86	13.93
		CH 60	5300			13.81	13.90
		CH 64	5320			13.89	13.82
	802.11n-HT40	CH 54	5270	MCS0	13	12.50	12.56
		CH 62	5310			12.50	12.59
	802.11ac-VHT20	CH 52	5260	MCS0	14	13.93	13.83
		CH 60	5300			13.90	13.89
		CH 64	5320			13.98	13.81

5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-48140L Average power (dBm)	FCC ID PY7-78553D Average power (dBm)
	802.11ac-VHT40	CH 54	5270	MCS0	13	12.56	12.55
		CH 62	5310			12.59	12.58
	802.11ac-VHT80	CH 58	5290	MCS0	12	11.89	11.71
5.5GHz WLAN	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-48140L Average power (dBm)	FCC ID PY7-78553D Average power (dBm)
	802.11a	CH 100	5500	6Mbps	15	14.94	14.93
		CH 116	5580			14.81	14.75
		CH 140	5700		14	13.86	13.53
		CH144	5720			13.78	13.53
	802.11n-HT20	CH 100	5500	MCS0	14	13.85	13.92
		CH 116	5580			13.70	13.76
		CH 140	5700			13.77	13.88
		CH144	5720			13.76	13.75
	802.11n-HT40	CH 102	5510	MCS0	13	12.82	12.89
		CH 126	5630			12.79	12.82
		CH 134	5670			12.71	12.74
		CH142	5710			12.66	12.65
	802.11ac-VHT20	CH 100	5500	MCS0	14	13.94	13.90
		CH 116	5580			13.76	13.74
		CH 140	5700			13.87	13.86
		CH144	5720			13.83	13.64
	802.11ac-VHT40	CH 102	5510	MCS0	13	12.87	12.75
		CH 126	5630			12.80	12.75
		CH 134	5670			12.74	12.73
		CH142	5710			12.75	12.61
	802.11ac-VHT80	CH106	5530	MCS0	12	11.68	11.66
		CH122	5610			11.70	11.68
		CH138	5690			11.71	11.70

	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-48140L Average power (dBm)	FCC ID PY7-78553D Average power (dBm)
5.8GHz WLAN	802.11a	CH 149	5745	MCS0	14	13.85	13.83
		CH 157	5785			13.83	13.81
		CH 165	5825			13.58	13.68
	802.11n-HT20	CH 149	5745	MCS0	14	13.90	13.89
		CH 157	5785			13.82	13.80
		CH 165	5825			13.80	13.79
	802.11n-HT40	CH 151	5755	MCS0	13	12.87	12.86
		CH 159	5795			12.96	12.90
	802.11ac-VHT20	CH 149	5745	MCS0	14	13.99	13.74
		CH 157	5785			13.87	13.75
		CH 165	5825			13.87	13.68
	802.11ac-VHT40	CH 151	5755	MCS0	13	12.94	12.82
		CH 159	5795			12.97	12.79
	802.11ac-VHT80	CH155	5775	MCS0	12	11.67	11.66

1.2 Radiated Spurious Emission

2.4GHz BT/WLAN

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PY7-48140L						FCC ID PY7-78553D					
				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(1Mbps)	CH 78	2480	P	2483.56	47.92	74	7440	42.92	74	2483.52	50.04	74	7440	43.73	74
			A	2483.56	23.13	54	-	-	-	2483.52	25.25	54	-	-	-
BLE(1Mbps)	CH 39	2480	P	2499.32	52.06	74	7440	43.56	74	2487.44	52.36	74	7440	43.82	74
			A	2489.4	44.14	54	-	-	-	2492.4	43.93	54	-	-	-
802.11b	CH 11	2462	P	2483.56	54.93	74	7386	45.09	74	2487.68	53.69	74	7386	44.28	74
			A	2485.92	47.65	54	-	-	-	2487.76	45.01	54	-	-	-
802.11ac VHT20	CH 11	2462	P	2483.56	58.8	74	7386	44.59	74	2484.04	57.42	74	7386	44.15	74
			A	2483.56	49.07	54	-	-	-	2483.72	47.59	54	-	-	-

5.2GHz WLAN

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PY7-48140L						FCC ID PY7-78553D					
				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)
802.11ac VHT80	CH 42	5210	P	5145.34	57.73	74	10420	46.72	74	5149.24	58.3	74	10420	46.05	74
			A	5147.94	50.64	54	-	-	-	5148.72	51	54	-	-	-

5.3GHz WLAN

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PY7-48140L						FCC ID PY7-78553D					
				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
802.11ac VHT40	CH 62	5310	P	5352	56.48	74	10620	45.48	74	5350.8	57.11	74	10620	44.8	74
			A	5350.8	50.71	54	-	-	-	5350.08	50.55	54	-	-	-

5.5GHz WLAN

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PY7-48140L						FCC ID PY7-78553D					
				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)
802.11ac VHT80	CH 106	5530	P	5456.08	56.91	74	16590	44.28	68.2	5458.24	54.7	74	16590	42.58	68.2
			A	5458.72	49.81	54	-	-	-	5458.24	46.95	54	-	-	-

5.8GHz WLAN

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PY7-48140L						FCC ID PY7-78553D					
				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)
802.11ac VHT40	CH 151	5755	P	5949	51.95	68.2	17265	50.6	68.2	5947.6	50.69	68.2	17265	48.74	68.2

2.4GHz 2400~2483.5MHz

BT (1M) (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	103.18	-	-	102.08	27.15	4.92	30.97	235	234	P	H
	*	2480	78.39	-	-	-	-	-	-	-	-	A	H
		2483.52	50.04	-23.96	74	48.93	27.15	4.93	30.97	235	234	P	H
		2483.52	25.25	-28.75	54	-	-	-	-	-	-	A	H
													H
													H
	*	2480	100.97	-	-	99.87	27.15	4.92	30.97	303	82	P	V
	*	2480	76.18	-	-	-	-	-	-	-	-	A	V
		2483.52	48.95	-25.05	74	47.84	27.15	4.93	30.97	303	82	P	V
		2483.52	24.16	-29.84	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 (1M) (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	40.89	-33.11	74	58.11	31.75	7.59	57.05	100	0	P	H
		4960	16.1	-37.9	54	-	-	-	-	-	-	A	H
		7440	43.06	-30.94	74	54.42	36.41	9.21	57.44	100	0	P	H
		7440	18.27	-35.73	54	-	-	-	-	-	-	A	H
		4960	39.1	-34.9	74	56.32	31.75	7.59	57.05	100	0	P	V
		4960	14.31	-39.69	54	-	-	-	-	-	-	A	V
		7440	43.73	-30.27	74	55.09	36.41	9.21	57.44	100	0	P	V
		7440	18.94	-35.06	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 1Mbps (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 39 2480MHz	*	2480	91.75	-	-	80.72	27.15	4.92	30.97	147	150	P	H
	*	2480	91.47	-	-	80.44	27.15	4.92	30.97	147	150	A	H
		2487.44	52.36	-21.64	74	41.32	27.15	4.93	30.97	147	150	P	H
		2492.4	43.93	-10.07	54	32.83	27.2	4.93	30.96	147	150	A	H
													H
													H
	*	2480	91.11	-	-	80.08	27.15	4.92	30.97	186	253	P	V
	*	2480	90.86	-	-	79.83	27.15	4.92	30.97	186	253	A	V
		2488.24	51.13	-22.87	74	40.03	27.2	4.93	30.96	186	253	P	V
		2494.88	43.88	-10.12	54	32.78	27.2	4.93	30.96	186	253	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

BLE 1Mbps (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 39 2480MHz		4960	39.13	-34.87	74	56.35	31.75	7.59	57.05	100	0	P	H
		7440	43.51	-30.49	74	54.87	36.41	9.21	57.44	100	0	P	H
													H
													H
		4960	40.17	-33.83	74	57.39	31.75	7.59	57.05	100	0	P	V
		7440	43.82	-30.18	74	55.18	36.41	9.21	57.44	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	106.77	-	-	95.81	27.1	4.9	30.97	160	181	P	H
	*	2462	103.54	-	-	92.58	27.1	4.9	30.97	160	181	A	H
		2487.68	53.69	-20.31	74	42.59	27.2	4.93	30.96	160	181	P	H
		2487.76	45.01	-8.99	54	33.91	27.2	4.93	30.96	160	181	A	H
													H
													H
	*	2462	104.33	-	-	93.37	27.1	4.9	30.97	100	118	P	V
	*	2462	101.09	-	-	90.13	27.1	4.9	30.97	100	118	A	V
		2488.92	53.56	-20.44	74	42.46	27.2	4.93	30.96	100	118	P	V
		2487.8	43.68	-10.32	54	32.58	27.2	4.93	30.96	100	118	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	41.08	-32.92	74	58.46	31.7	7.52	57.1	100	0	P	H
		7386	44.28	-29.72	74	55.73	36.31	9.18	57.38	100	0	P	H
													H
													H
		4924	41.75	-32.25	74	59.13	31.7	7.52	57.1	100	0	P	V
		7386	44.1	-29.9	74	55.55	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)
	*	2462	103.3	-	-	92.34	27.1	4.9	30.97	113	179	P	H
	*	2462	95.68	-	-	84.72	27.1	4.9	30.97	113	179	A	H
		2484.04	57.42	-16.58	74	46.38	27.15	4.93	30.97	113	179	P	H
		2483.72	47.59	-6.41	54	36.55	27.15	4.93	30.97	113	179	A	H
802.11ac													H
VHT20													H
CH 11	*	2462	100.74	-	-	89.78	27.1	4.9	30.97	100	120	P	V
2462MHz	*	2462	93.46	-	-	82.5	27.1	4.9	30.97	100	120	A	V
		2484.84	55.07	-18.93	74	44.03	27.15	4.93	30.97	100	120	P	V
		2483.52	46.1	-7.9	54	35.06	27.15	4.93	30.97	100	120	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)
		4924	39.08	-34.92	74	56.46	31.7	7.52	57.1	100	0	P	H
		7386	44.15	-29.85	74	55.6	36.31	9.18	57.38	100	0	P	H
802.11ac													H
VHT20													H
CH 11		4924	38.6	-35.4	74	55.98	31.7	7.52	57.1	100	0	P	V
2462MHz		7386	44.08	-29.92	74	55.53	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.												

Band 1 - 5150~5250MHz

WIFI 802.11ac VHT80 (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 VHT80 CH 42 5210MHz		5147.42	57.29	-16.71	74	49.22	32.05	9.05	33.03	100	122	P	H
		5149.5	50.9	-3.1	54	42.83	32.05	9.05	33.03	100	122	A	H
	*	5210	95.79	-	-	87.61	32.12	9.09	33.03	100	122	P	H
	*	5210	87.7	-	-	79.52	32.12	9.09	33.03	100	122	A	H
		5384.4	49.08	-24.92	74	40.62	32.28	9.2	33.02	100	122	P	H
		5449.64	40.69	-13.31	54	32.07	32.35	9.29	33.02	100	122	A	H
		5149.24	58.3	-15.7	74	50.23	32.05	9.05	33.03	337	85	P	V
		5148.72	51	-3	54	42.93	32.05	9.05	33.03	337	85	P	V
	*	5210	97.67	-	-	89.49	32.12	9.09	33.03	337	85	P	V
	*	5210	89.46	-	-	81.28	32.12	9.09	33.03	337	85	A	V
		5351.36	49.31	-24.69	74	40.9	32.25	9.19	33.03	337	85	P	V
		5459.16	40.8	-13.2	54	32.18	32.35	9.29	33.02	337	85	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11ac VHT80 (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)
		10420	46.05	-27.95	74	56.67	38.48	14.67	64.08	100	0	P	H
		15630	44.45	-29.55	74	50.84	37.2	18.03	61.98	100	0	P	H
802.11ac													H
VHT80													H
CH 42		10420	45.34	-28.66	74	55.96	38.48	14.67	64.08	100	0	P	V
5210MHz		15630	45.35	-28.65	74	51.74	37.2	18.03	61.98	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 802.11ac VHT40 (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 VHT40 CH 62 5310MHz		5037.74	49.4	-24.6	74	41.52	31.95	8.97	33.04	100	122	P	H
		5106.76	41.51	-12.49	54	33.52	32.02	9.01	33.04	100	122	A	H
	*	5310	100.6	-	-	92.25	32.22	9.16	33.03	100	122	P	H
	*	5310	91.65	-	-	83.3	32.22	9.16	33.03	100	122	A	H
		5350.08	54.3	-19.7	74	45.89	32.25	9.19	33.03	100	122	P	H
		5352	47.88	-6.12	54	39.47	32.25	9.19	33.03	100	122	A	H
		5116.96	48.93	-25.07	74	40.92	32.02	9.03	33.04	326	80	P	V
		5091.12	41.44	-12.56	54	33.47	32	9.01	33.04	326	80	A	V
	*	5310	101.7	-	-	93.35	32.22	9.16	33.03	326	80	P	V
	*	5310	93.58	-	-	85.23	32.22	9.16	33.03	326	80	A	V
		5350.8	57.11	-16.89	74	48.7	32.25	9.19	33.03	326	80	P	V
		5350.08	50.55	-3.45	54	42.14	32.25	9.19	33.03	326	80	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11ac VHT40 (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)
		10620	44.18	-29.82	74	54.41	38.74	14.81	64.08	100	0	P	H
		15930	44.15	-29.85	74	50.31	36.15	18.28	60.86	100	0	P	H
802.11ac													H
VHT40													H
CH 62		10620	44.8	-29.2	74	55.03	38.74	14.81	64.08	100	0	P	V
5310MHz		15930	44.27	-29.73	74	50.43	36.15	18.28	60.86	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 802.11ac VHT80 (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)
		5455.12	53.2	-20.8	74	44.58	32.35	9.29	33.02	103	121	P	H
		5461.6	53.47	-14.73	68.2	44.85	32.35	9.29	33.02	103	121	P	H
		5457.52	45.37	-8.63	54	36.75	32.35	9.29	33.02	103	121	A	H
	*	5530	94.73	-	-	85.93	32.44	9.41	33.05	103	121	P	H
802.11ac	*	5530	86.1	-	-	77.3	32.44	9.41	33.05	103	121	A	H
VHT80		5728.46	50.32	-17.88	68.2	40.7	32.94	9.81	33.13	103	121	P	H
CH 106		5458.24	54.7	-19.3	74	46.08	32.35	9.29	33.02	303	81	P	V
5530MHz		5466.64	57.17	-11.03	68.2	48.53	32.37	9.29	33.02	303	81	P	V
		5458.24	46.95	-7.05	54	38.33	32.35	9.29	33.02	303	81	A	V
	*	5530	97.15	-	-	88.35	32.44	9.41	33.05	303	81	P	V
	*	5530	88.93	-	-	80.13	32.44	9.41	33.05	303	81	A	V
		5733.5	49.71	-18.49	68.2	40.04	32.94	9.88	33.15	303	81	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 5470~5725MHz

WIFI 802.11ac VHT80 (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)
		11060	46.27	-27.73	74	55.61	39.11	15.13	63.87	100	0	P	H
		16590	42.13	-26.07	68.2	47.96	37.76	18.81	62.7	100	0	P	H
802.11ac													H
VHT80													H
CH 106		11060	47.02	-26.98	74	56.36	39.11	15.13	63.87	100	0	P	V
5530MHz		16590	42.58	-25.62	68.2	48.41	37.76	18.81	62.7	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 - 5725~5850MHz

WIFI 802.11ac VHT40 (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)
		5616.2	50.01	-18.19	68.2	40.85	32.69	9.55	33.08	100	121	P	H
		5699.2	55.01	-49.6	104.61	45.52	32.86	9.75	33.12	100	121	P	H
		5719.2	64.64	-45.94	110.58	55.02	32.94	9.81	33.13	100	121	P	H
		5721	63.45	-49.63	113.08	53.83	32.94	9.81	33.13	100	121	P	H
	*	5755	103.46	-	-	93.71	33.02	9.88	33.15	100	121	P	H
	*	5755	95.06	-	-	85.31	33.02	9.88	33.15	100	121	A	H
		5854.2	50.25	-62.37	112.62	40.15	33.27	10.02	33.19	100	121	P	H
		5870.2	50.55	-55.99	106.54	40.47	33.27	10.02	33.21	100	121	P	H
		5906.8	50.28	-31.35	81.63	40.09	33.39	10.02	33.22	100	121	P	H
802.11ac		5947.6	50.69	-17.51	68.2	40.43	33.48	10.02	33.24	100	121	P	H
VHT40													H
CH 151		5623.8	50.04	-18.16	68.2	40.88	32.69	9.55	33.08	252	82	P	V
5755MHz		5697.4	51.44	-51.84	103.28	41.95	32.86	9.75	33.12	252	82	P	V
		5719.6	61.35	-49.34	110.69	51.73	32.94	9.81	33.13	252	82	P	V
		5724.8	64.32	-57.42	121.74	54.7	32.94	9.81	33.13	252	82	P	V
	*	5755	102.25	-	-	92.5	33.02	9.88	33.15	252	82	P	V
	*	5755	94.27	-	-	84.52	33.02	9.88	33.15	252	82	A	V
		5852	50.22	-67.42	117.64	40.16	33.23	10.02	33.19	252	82	P	V
		5856.8	49.17	-61.13	110.3	39.07	33.27	10.02	33.19	252	82	P	V
		5898	51.42	-36.72	88.14	41.27	33.35	10.02	33.22	252	82	P	V
		5936.2	50.65	-17.55	68.2	40.44	33.43	10.02	33.24	252	82	P	V
													V

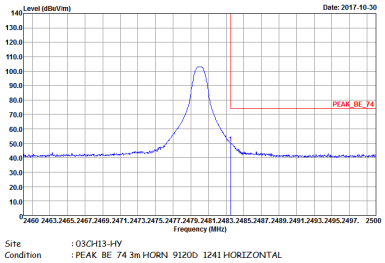
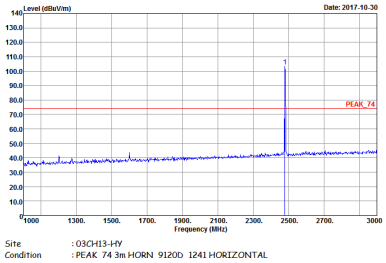
Band 4 5725~5850MHz

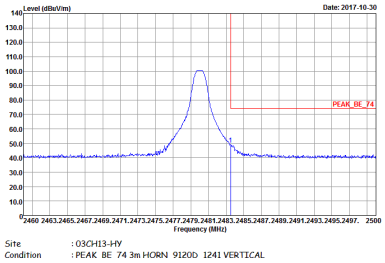
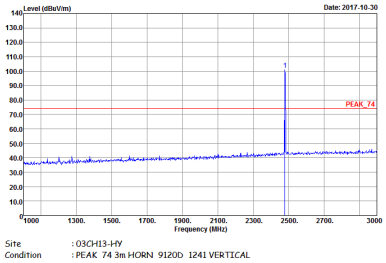
WIFI 802.11ac VHT40 (Harmonic @ 3m)

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)
		11510	46.25	-27.75	74	55.02	38.5	15.45	63	100	0	P	H
		17265	48.71	-19.49	68.2	49.18	40.74	19.26	60.83	100	0	P	H
802.11ac													H
VHT40													H
CH 151		11510	46.55	-27.45	74	55.32	38.5	15.45	63	100	0	P	V
5755MHz		17265	48.74	-19.46	68.2	49.21	40.74	19.26	60.83	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

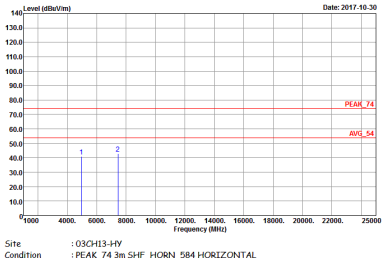
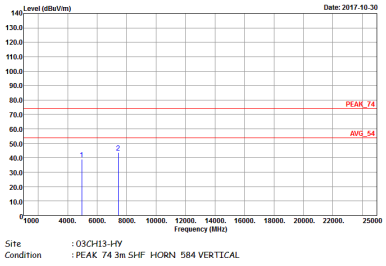
BT (1M) (Band Edge @ 3m)

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		

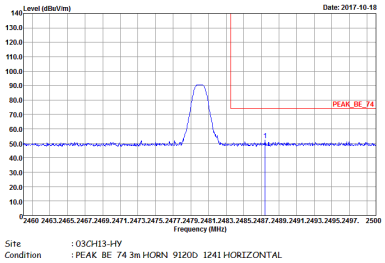
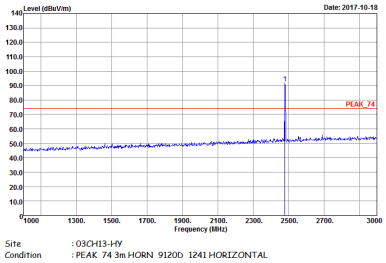
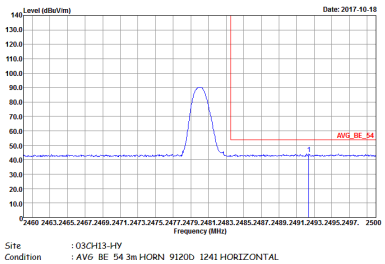
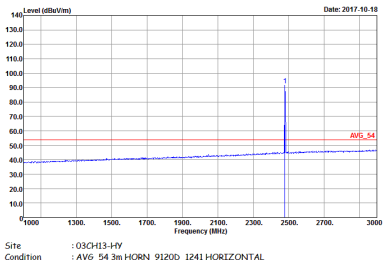
2.4GHz 2400~2483.5MHz

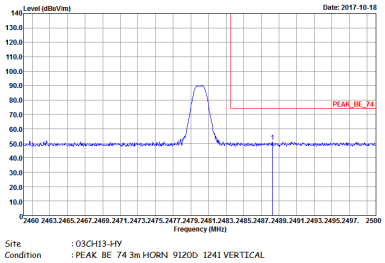
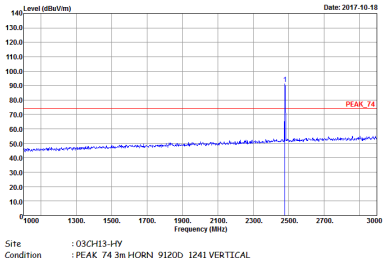
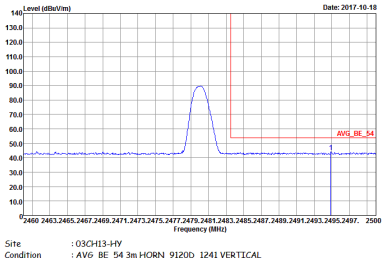
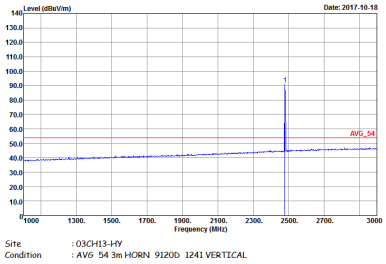
BT (1M) (Harmonic @ 3m)

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

2.4GHz 2400~2483.5MHz

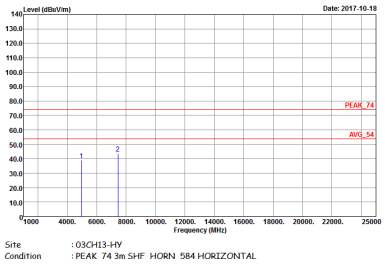
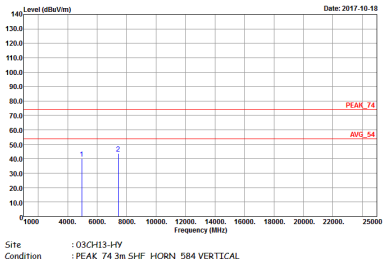
BLE 1Mbps (Band Edge @ 3m)

BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
	BLE CH39 2480MHz	
	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK BE 74 3m HORN 9120D 1241 HORIZONTAL	 Site : 03CH13-HY Condition : PEAK 74 3m HORN 9120D 1241 HORIZONTAL
Avg.	 Site : 03CH13-HY Condition : AVG BE 54 3m HORN 9120D 1241 HORIZONTAL	 Site : 03CH13-HY Condition : AVG 54 3m HORN 9120D 1241 HORIZONTAL

BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
	BLE CH39 2480MHz	
	Vertical	Fundamental
Peak		
Avg.		

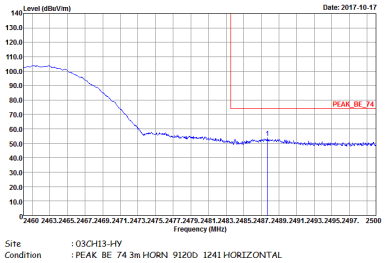
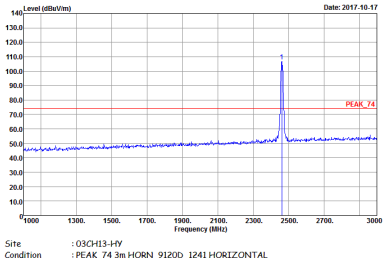
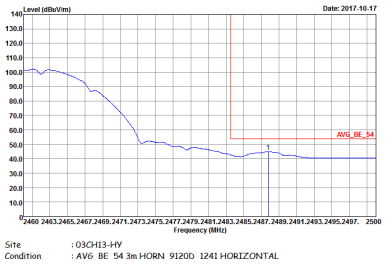
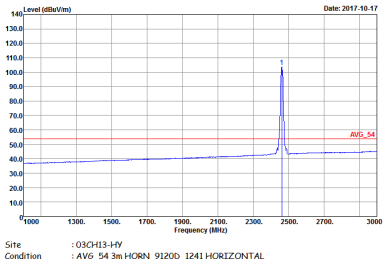
2.4GHz 2400~2483.5MHz

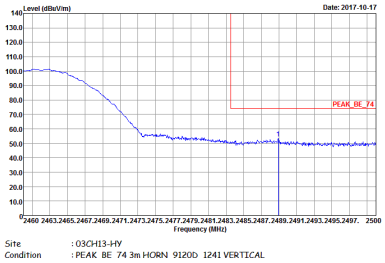
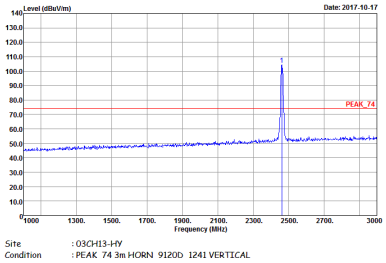
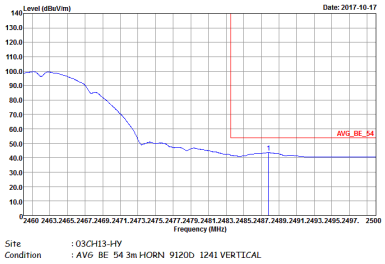
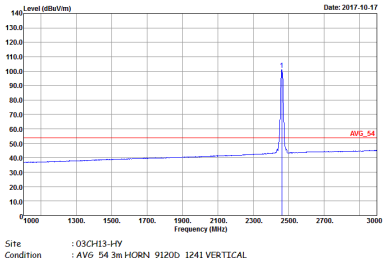
BLE 1Mbps (Harmonic @ 3m)

BLE	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
	BLE CH39 2480MHz	
	Horizontal	Vertical
Peak		

2.4GHz 2400~2483.5MHz

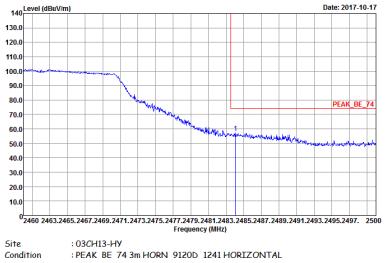
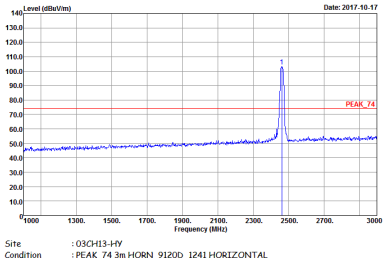
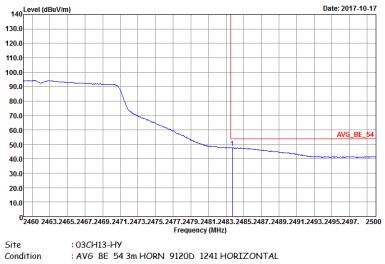
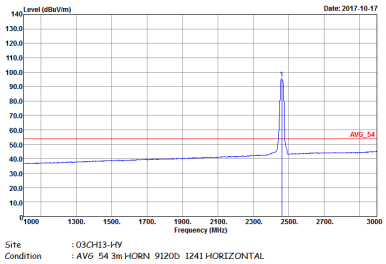
WIFI 802.11b (Band Edge @ 3m)

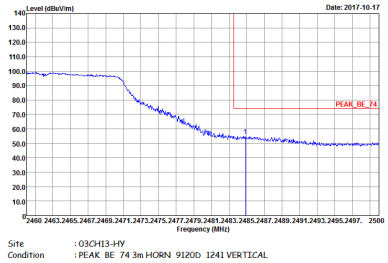
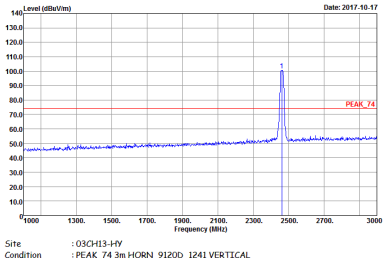
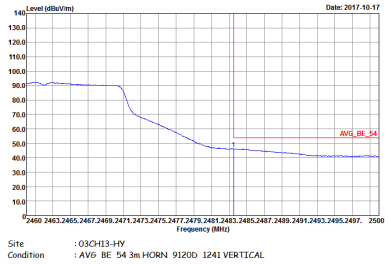
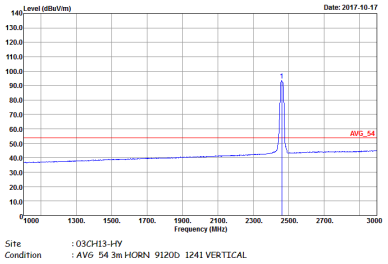
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
1	Horizontal	Fundamental
Peak		
Avg.		

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

2.4GHz 2400~2483.5MHz

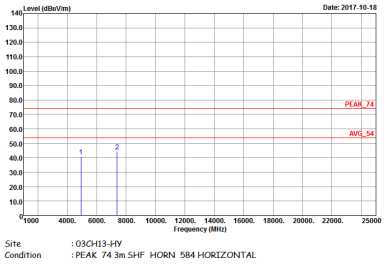
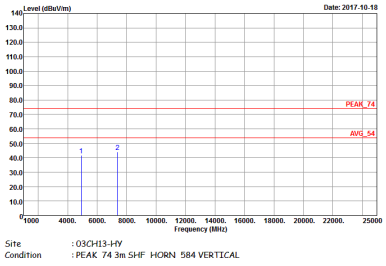
WIFI 802.11ac VHT20 (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ac VH20 CH11 2462MHz	
1	Horizontal	Fundamental
Peak		
Avg.		

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ac VH20 CH11 2462MHz	
1	Vertical	Fundamental
Peak		
Avg.		

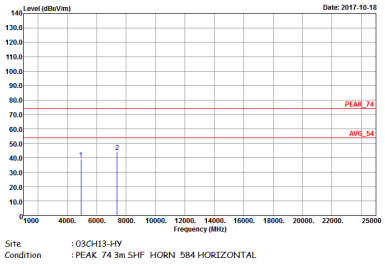
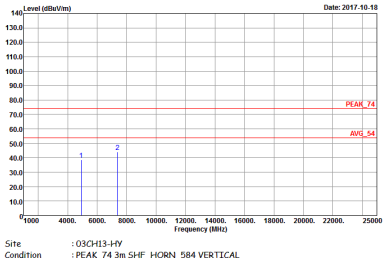
2.4GHz 2400~2483.5MHz

WIFI 802.11b (Harmonic @ 3m)

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

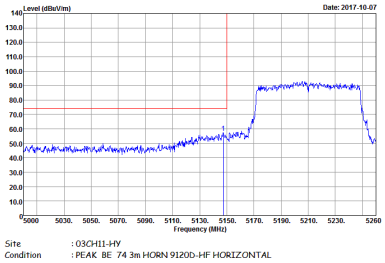
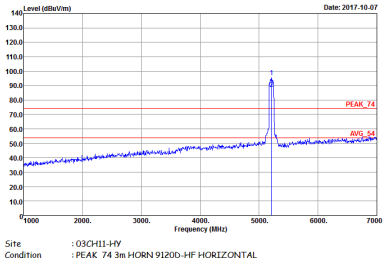
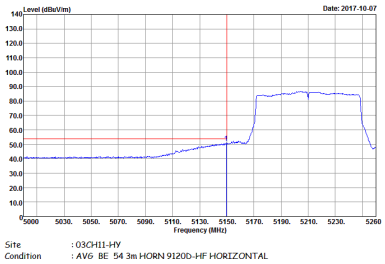
2.4GHz 2400~2483.5MHz

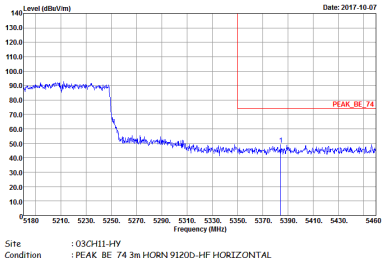
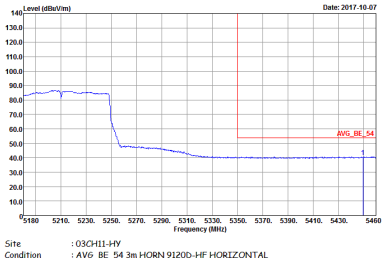
WIFI 802.11ac VHT20 (Harmonic @ 3m)

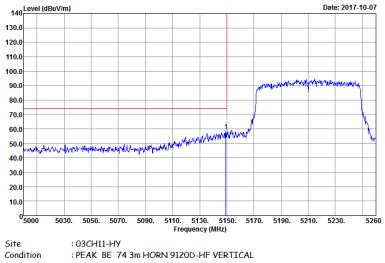
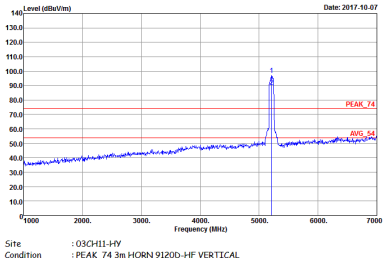
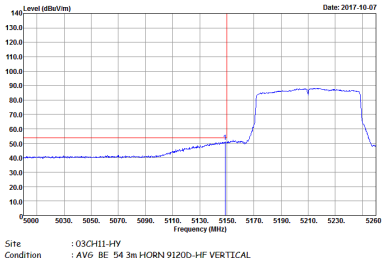
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH11 2462MHz	
1	Horizontal	Vertical
Peak Avg.		

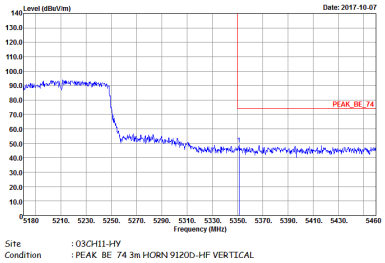
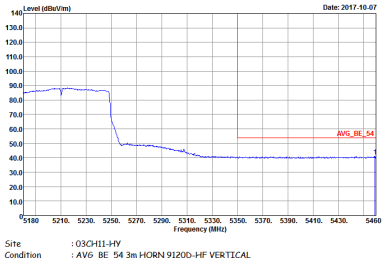
Band 1 - 5150~5250MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

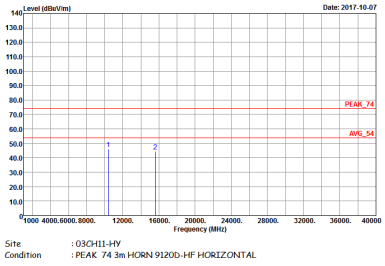
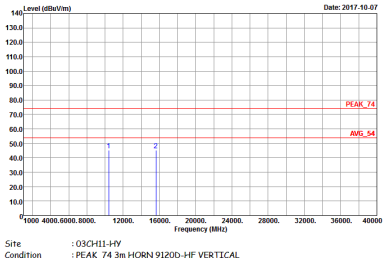
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

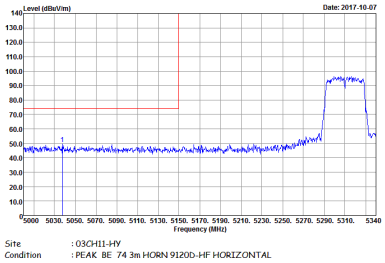
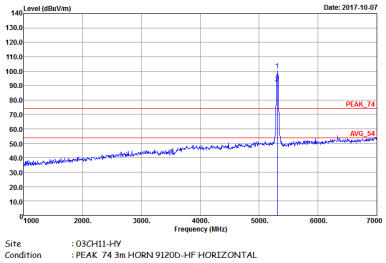
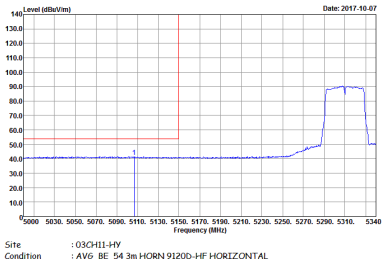
Band 1 - 5150~5250MHz

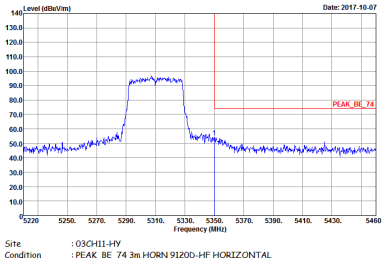
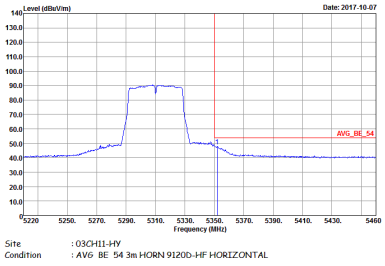
WIFI 802.11ac VHT80 (Harmonic @ 3m)

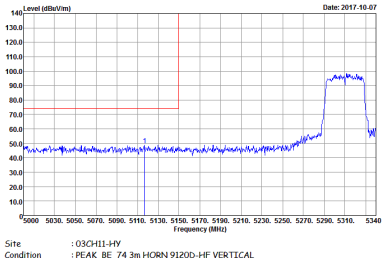
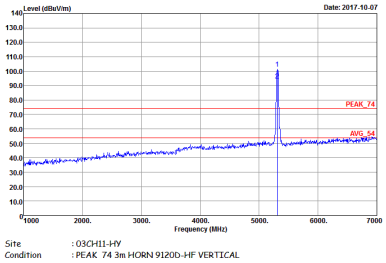
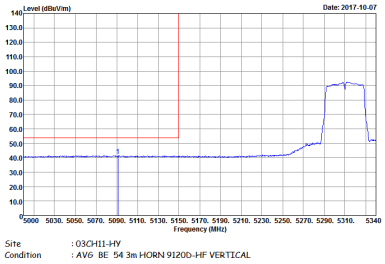
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz	
1	Horizontal	Vertical
Peak Avg.		

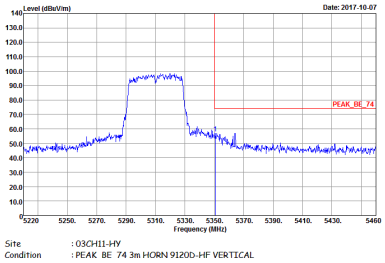
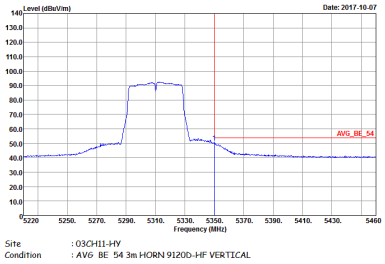
Band 2 - 5250~5350MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH62 5310 MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

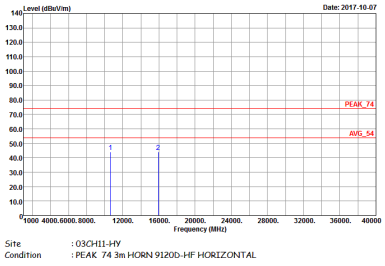
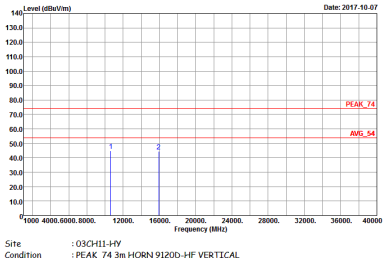
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH62 5310 MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH62 5310 MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH62 5310 MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

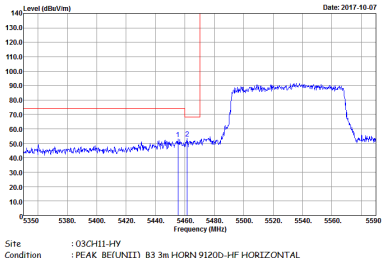
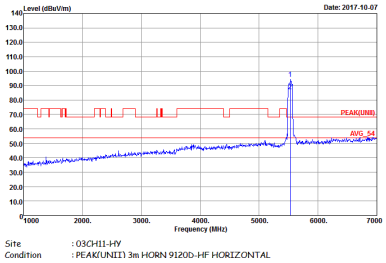
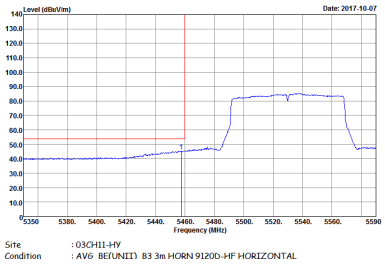
Band 2 - 5250~5350MHz

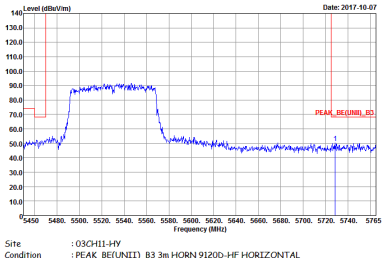
WIFI 802.11ac VHT40 (Harmonic @ 3m)

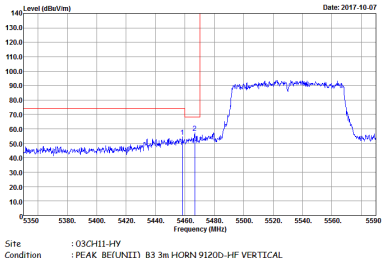
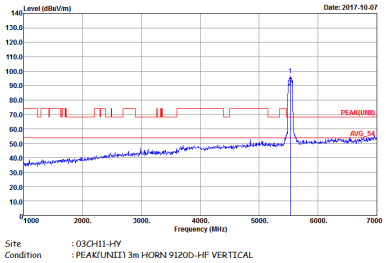
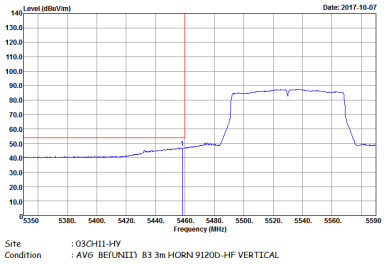
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH62 5310 MHz	
1	Horizontal	Vertical
Peak Avg.		

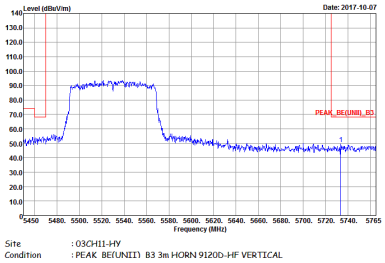
Band 3 - 5470~5725MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

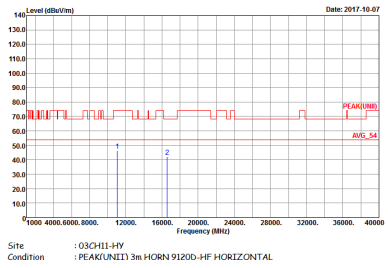
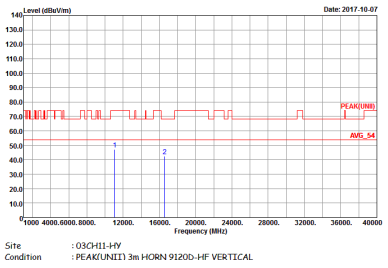
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - R	
1	Horizontal	Fundamental
Peak		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - R	
1	Vertical	Fundamental
Peak		Left blank

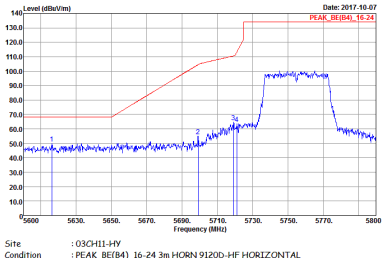
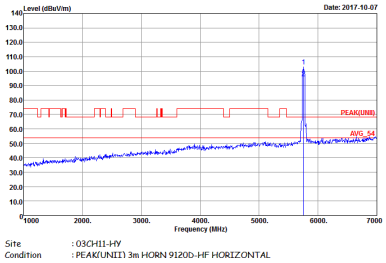
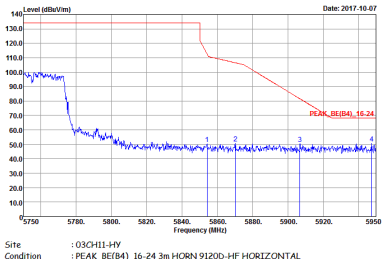
Band 3 - 5470~5725MHz

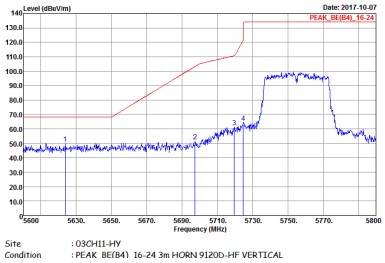
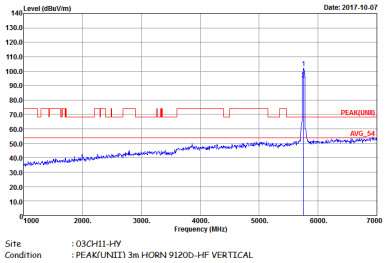
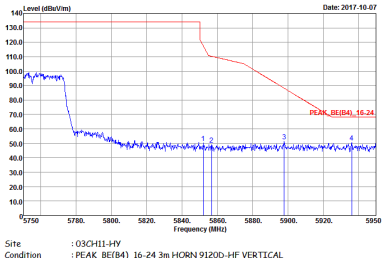
WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz	
1	Horizontal	Vertical
Peak Avg.		

Band 4 - 5725~5850MHz

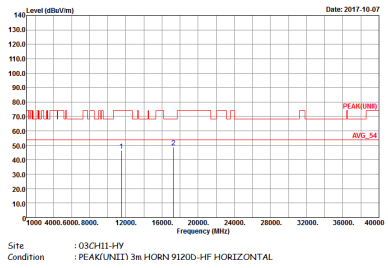
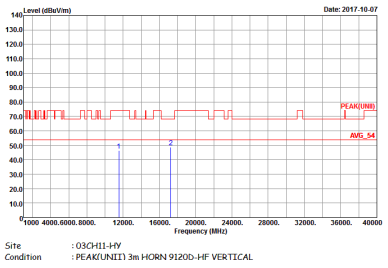
WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
1	Horizontal	Fundamental
Peak		
Peak		Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
1	Vertical	Fundamental
Peak		
Peak		Left blank

Band 4 - 5725~5850MHz

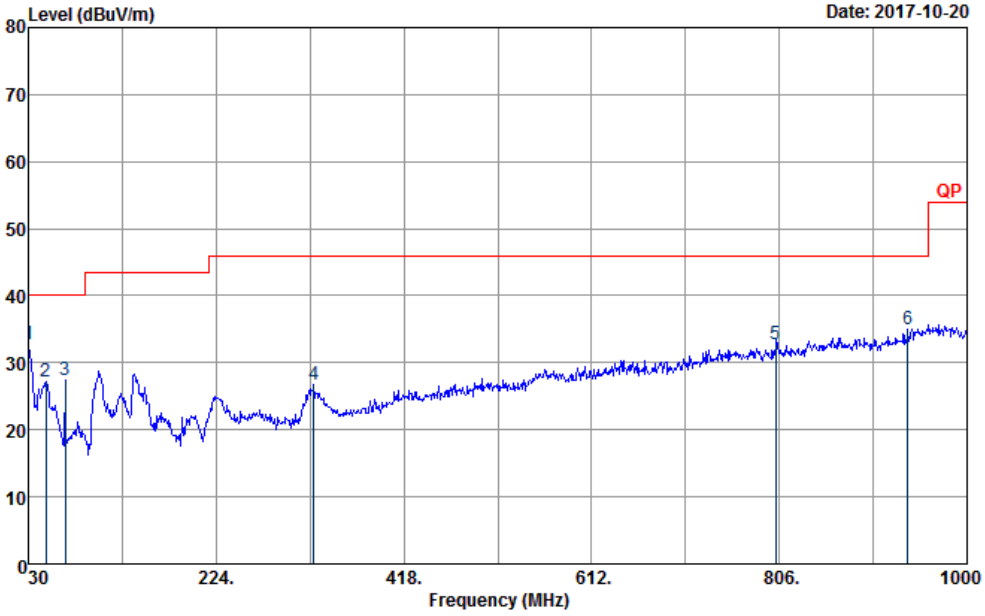
WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
1	Horizontal	Vertical
Peak Avg.		

NFC

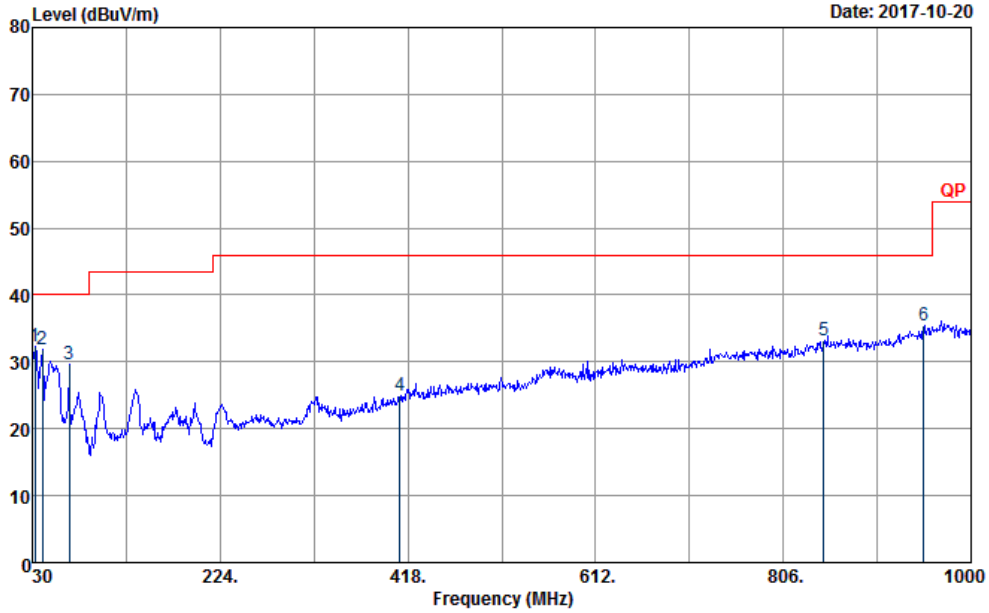
Results of Radiated Spurious Emissions (30MHz~1GHz)

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	32.66	-7.34	40	37.58	24.72	1.71	31.35	100	0	Peak
48.09	27.18	-12.82	40	42.06	14.99	1.71	31.58	-	-	Peak
67.8	27.37	-12.63	40	44.78	12.07	2.11	31.59	-	-	Peak
325.2	26.73	-19.27	46	35.04	19.52	3.43	31.26	-	-	Peak
801.9	32.66	-13.34	46	30.35	27.92	4.98	30.59	-	-	Peak
938.4	34.99	-11.01	46	30.26	29.92	5.33	30.52	-	-	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
32.7	32.2	-7.8	40	38.72	23.16	1.71	31.39	100	0	Peak
40.53	31.93	-8.07	40	42.86	18.85	1.71	31.49	-	-	Peak
67.8	29.53	-10.47	40	46.94	12.07	2.11	31.59	-	-	Peak
409.9	24.98	-21.02	46	30.15	22.13	3.82	31.12	-	-	Peak
848.1	33.17	-12.83	46	29.65	28.88	5.2	30.56	-	-	Peak
951	35.51	-10.49	46	30.1	30.52	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