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. 01, 2017
Rev. 02	Add NII information for DFS in section 4.	Nov. 03, 2017

1. Introduction Section

The original model (FCC ID: PY7-35228S) and the variant model (FCC ID: PY7-87507S) 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 PY7-87507S references the test data of PY7-35228S.

The original model (FCC ID: PY7-35228S) and the variant model (FCC ID: PY7-87507S) 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 PY7-87507S references the test data of PY7-35228S

The applicant takes full responsibility that the test data as referenced in this report represent compliance for this FCC ID (FCC ID: PY7-87507S).

2. Difference Section

The original model (FCC ID: PY7-35228S) and the variant model (FCC ID: PY7-87507S) 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: PY7-35228S) and the variant model (FCC ID: PY7-87507S) 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 PY7-87507S, to support capability for different cellular bands.

The product specification is outlined in the following table:

FCC ID			PY7-35228S	PY7-87507S
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
LTE (FDD)	QPSK 16QAM		B5/B2/B7/B41	B5/B2/B7
Wi-Fi	11b/11g/11n(HT20)		2412-2462	
	11a/11n(HT20)/11n(HT40)		5180-5240 5260-5320 5500-5720 5745-5825 *5600-5650 notched	
Bluetooth	V4.2 LE		2402-2480 MHz	
NFC	ASK		13.56 MHz	

3. Spot Check Verification Data Section

Summary of the spot check:

Test Item	Mode	PY7-35228S Worst Result	PY7-87507S Worst Result	Difference (dB)
Average Conducted Power (dBm)	802.11b	16.98	16.80	0.18
	802.11g	14.99	14.87	0.12
	11n HT20	14.99	14.88	0.11
	BT (1Mbps)	7.00	6.98	0.02
	BT (2Mbps)	4.99	4.98	0.01
	BT (3Mbps)	5.00	4.99	0.01
	BT-LE	-0.19	-0.03	-0.16
	11a, 5.2GHz	12.85	12.67	0.18
	11n HT20, 5.2GHz	10.73	10.71	0.02
	11n HT40, 5.2GHz	10.83	10.78	0.05
	11a, 5.3GHz	12.75	12.74	0.01
	11n HT20, 5.3GHz	10.72	10.70	0.02
	11n HT40, 5.3GHz	10.74	10.70	0.04
	11a, 5.5GHz	12.76	12.73	0.03
	11n HT20, 5.5GHz	10.71	10.70	0.01
	11n HT40, 5.5GHz	10.68	10.66	0.02
	11a, 5.8GHz	12.96	12.94	0.02
	11n HT20, 5.8GHz	10.98	10.97	0.01
	11n HT40, 5.8GHz	10.94	10.84	0.10
	S/N of test sample	WUJ01Q223V	WUJ01Q22RY	
	Test date	2017/08/24~2017/09/14	2017/08/23~2017/09/14	
	GSM 850 (GPRS)	33.59	33.99	-0.04
	GSM 850 (EDGE)	27.78	27.86	-0.08
	GSM1900(GPRS)	30.60	30.69	-0.09
	GSM1900(EDGE)	26.66	26.62	0.04
	UMTS B2 (RMC 12.2Kbps)	22.42	22.39	0.03
	UMTS B5 (RMC 12.2Kbps)	24.76	24.89	-0.13
	LTE B2 (FDD - QPSK)	22.22	22.25	-0.03
	LTE B5 (FDD - QPSK)	25.00	24.76	0.24
	LTE B7 (FDD - QPSK)	22.80	22.80	0.00
	S/N of test sample	WUJ01Q2Q5R	WUJ01Q22N7	
	Test date	2017/08/30	2017/08/30	
Peak Radiated Spurious Emission (Band Edge) (dBuV/m)	802.11b	52.72	53.88	-1.16
	802.11n-HT20	65.79	63.49	2.3
	BT (3Mbps)	45.26	42.89	2.37
	BT-LE	51.91	51.35	0.56
	11n HT40, 5.2GHz	51.10	50.11	0.99
	11n HT20, 5.3GHz	50.77	48.18	2.59
	11n HT40, 5.5GHz	65.18	65.01	0.17
	11n HT20, 5.8GHz	49.78	49.55	0.23
	S/N of test sample	WUJ01Q2211	WUJ01Q23X7	
	Test date	2017/08/28~2017/09/15	2017/08/23~2017/09/05	

Test Item	Mode	PY7-35228S Worst Result	PY7-87507S Worst Result	Difference (dB)
Average Radiated Spurious Emission (Band Edge) (dBuV/m)	802.11b	43.13	43.79	-0.66
	802.11n-HT20	50.77	50.69	0.08
	BT (3Mbps)	20.47	18.10	2.37
	BT-LE	41.97	41.72	0.25
	11n HT40, 5.2GHz	42.87	42.46	0.41
	11n HT20, 5.3GHz	42.30	40.35	1.95
	S/N of test sample	WUJ01Q2211	WUJ01Q23X7	
	Test date	2017/08/28~2017/09/15	2017/08/23~2017/09/05	
Peak Radiated Spurious Emission (Harmonic) (dBuV/m)	802.11b	49.44	48.83	0.61
	802.11n-HT20	44.17	43.09	1.08
	BT (3Mbps)	42.52	41.59	0.93
	BT-LE	42.92	40.35	2.57
	11n HT40, 5.2GHz	60.29	58.04	2.25
	11n HT20, 5.3GHz	59.66	59.05	0.61
	11n HT40, 5.5GHz	60.64	60.05	0.59
	11n HT20, 5.8GHz	63.67	62.89	0.78
	S/N of test sample	WUJ01Q2211	WUJ01Q23X7	
	Test date	2017/08/28~2017/09/15	2017/08/23~2017/09/05	
Average Radiated Spurious Emission (Harmonic) (dBuV/m)	11n HT40, 5.2GHz	50.99	50.16	0.83
	11n HT20, 5.3GHz	50.96	49.12	1.84
	S/N of test sample	WUJ01Q2211	WUJ01Q23X7	
	Test date	2017/08/28~2017/09/15	2017/08/23~2017/09/05	
NFC (dBuV/m)	RSE (30MHz to1GHz)	34.80	36.44	-1.64
	S/N of test sample	WUJ01Q22BN	WUJ01Q23X7	
	Test date	2017/08/24~2017/08/25	2017/08/31	

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 802.11n-HT40 5.2GHz CH46 and 802.11n-HT20 5.3GHz CH64.

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	PY7-35228S	Original Grant	FCC RF Test Report	PY7-87507S	Part 15C (FR782113B, FR782113C)
	DSS	Bluetooth	2400~2483.5	PY7-35228S	Original Grant	FCC RF Test Report	PY7-87507S	Part 15C (FR782113A)
	DXX	NFC	13.56	PY7-35228S	Original Grant	FCC RF Test Report	PY7-87507S	Part 15C (FR782113D)
15E	NII	Wi-Fi	5150~5250 5250~5350 5470~5725 5725~5850	PY7-35228S	Original Grant	FCC RF Test Report	PY7-87507S	Part 15E (FR782113E, FR782113F)
		DFS	5470~5725	PY7-35228S	Original Grant	FCC RF Test Report	PY7-87507S	Part 15E (FZ782113)
Part 22.24.27	PCE	GSM WCDMA	GSM/GPRS(EDGE) 850 GSM/GPRS(EDGE) 1900 WCDMA Band 2 WCDMA Band 5	PY7-35228S	Original Grant	FCC RF Test Report	PY7-87507S	Part 22.24.27 (FG782113A)
Part 22.24.27	PCE	LTE	LTE B2/B5/B7	PY7-35228S	Original Grant	FCC RF Test Report	PY7-87507S	Part 22.24.27 (FG782113B)

Appendix A. Spot Check Test Result

1.1 Conducted power

<2.4GHz WLAN>

	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-35228S Average power (dBm)	FCC ID PY7-87507S Average power (dBm)
2.4GHz WLAN	802.11b	CH 1	2412	1Mbps	17	16.93	16.80
		CH 6	2437			16.98	16.70
		CH 11	2462			16.96	16.64
	802.11g	CH 1	2412	6Mbps	15	14.99	14.87
		CH 6	2437			14.98	14.83
		CH 11	2462			14.80	14.79
	802.11n-HT20	CH 1	2412	MCS0	15	14.99	14.88
		CH 6	2437			14.98	14.83
		CH 11	2462			14.84	14.81

<Bluetooth>

Mode	Channel	Frequency (MHz)	Tune-Up Limit	FCC ID PY7-35228S Average power (dBm)	FCC ID PY7-87507S Average power (dBm)
Bluetooth (1Mbps)	CH 00	2402	7	6.32	6.15
	CH 39	2441		7.39	6.98
	CH 78	2480		6.74	6.73
Bluetooth (2Mbps)	CH 00	2402	5	3.96	3.86
	CH 39	2441		5.19	4.98
	CH 78	2480		4.61	4.56
Bluetooth (3Mbps)	CH 00	2402	5	3.96	3.81
	CH 39	2441		5.21	4.99
	CH 78	2480		4.66	4.52
BLE (GFSK)	CH 00	2402	0	-1.62	-0.76
	CH 19	2440		-0.19	-0.03
	CH 39	2480		-1.58	-0.43

<5GHz WLAN>

	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-35228S Average power (dBm)	FCC ID PY7-87507S Average power (dBm)
5.2GHz WLAN	802.11a	CH 36	5180	6Mbps	13	12.85	12.67
		CH 44	5220			12.79	12.65
		CH 48	5240			12.55	12.54
	802.11n-HT20	CH 36	5180	MCS0	11	10.73	10.71
		CH 44	5220			10.70	10.68
		CH 48	5240			10.68	10.65
	802.11n-HT40	CH 38	5190	MCS0	11	10.83	10.78
		CH 46	5230			10.81	10.76
	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-35228S Average power (dBm)	FCC ID PY7-87507S Average power (dBm)
5.3GHz WLAN	802.11a	CH 52	5260	6Mbps	13	12.53	12.51
		CH 60	5300			12.65	12.50
		CH 64	5320			12.75	12.74
	802.11n-HT20	CH 52	5260	MCS0	11	10.58	10.53
		CH 60	5300			10.65	10.63
		CH 64	5320			10.72	10.70
	802.11n-HT40	CH 54	5270	MCS0	11	10.74	10.52
		CH 62	5310			10.73	10.70
	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-35228S Average power (dBm)	FCC ID PY7-87507S Average power (dBm)
5.5GHz WLAN	802.11a	CH 100	5500	6Mbps	13	12.76	12.73
		CH 116	5580			12.74	12.72
		CH 140	5700			12.59	12.57
		CH144	5720			12.58	12.56
	802.11n-HT20	CH 100	5500	MCS0	11	10.71	10.70
		CH 116	5580			10.67	10.60
		CH 140	5700			10.62	10.56
		CH144	5720			10.58	10.57

	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-35228S Average power (dBm)	FCC ID PY7-87507S Average power (dBm)
5.5GHz WLAN	802.11n-HT40	CH 102	5510	MCS0	11	10.68	10.66
		CH 126	5630			10.66	10.60
		CH 134	5670			10.63	10.58
		CH142	5710			10.61	10.57
	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-35228S Average power (dBm)	FCC ID PY7-87507S Average power (dBm)
5.8GHz WLAN	802.11a	CH 149	5745	MCS0	13	12.96	12.94
		CH 157	5785			12.95	12.79
		CH 165	5825			12.91	12.73
	802.11n-HT20	CH 149	5745	MCS0	11	10.98	10.97
		CH 157	5785			10.84	10.83
		CH 165	5825			10.80	10.78
	802.11n-HT40	CH 151	5755	MCS0	11	10.94	10.84
		CH 159	5795			10.93	10.74

1.2 Radiated Spurious Emission

2.4GHz BT/WLAN

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PY7-35228S						FCC ID PY7-87507S					
				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(3Mbps)	CH 78	2480	P	2483.56	45.26	74	7440	42.52	74	2484.88	42.89	74	7440	41.59	74
			A	2483.56	20.47	54	-	-	-	2484.88	18.1	54	-	-	-
BLE	CH 39	2480	P	2486.16	51.91	74	7440	42.92	74	2496.92	51.35	74	7440	40.35	74
			A	2493.08	41.97	54	-	-	-	2492.04	41.72	54	-	-	-
802.11b	CH 11	2462	P	2483.88	52.72	74	4924	49.44	74	2484.88	53.88	74	4924	48.83	74
			A	2483.52	43.13	54	-	-	-	2484.24	43.79	54	-	-	-
802.11n-HT20	CH 11	2462	P	2483.64	65.79	74	4924	44.17	74	2483.56	63.49	74	4924	43.09	74
			A	2483.52	50.77	54	-	-	-	2483.52	50.69	54			-

5.2GHz WLAN

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PY7-35228S						FCC ID PY7-87507S					
				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)
802.11n-HT40	CH 46	5230	P	5149.5	51.1	74	15690	60.29	74	5148.46	50.11	74	15690	58.04	74
			A	5149.24	42.87	54	15690	50.99	54	5148.72	42.46	54	15690	50.16	54

5.3GHz WLAN

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PY7-35228S						FCC ID PY7-87507S					
				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)
802.11n-HT20	CH 64	5320	P	5352.16	50.77	74	15960	59.66	74	5363.36	48.18	74	15960	59.05	74
			A	5350.72	42.3	54	15960	50.96	54	5350.4	40.35	54	15960	49.12	54

5.5GHz WLAN

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PY7-35228S						FCC ID PY7-87507S					
				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)
802.11n-HT40	CH 102	5510	P	5470	65.18	68.2	16530	60.64	68.2	5469.76	65.01	68.2	16530	60.05	68.2

5.8GHz WLAN

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PY7-35228S						FCC ID PY7-87507S					
				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)
802.11n-HT40	CH 157	5825	P	5934.8	49.78	68.2	17355	63.67	68.2	5937.2	49.55	68.2	17358	62.89	68.2

1.3 Raw Data

2.4GHz 2400~2483.5MHz

BLE (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	94.23	-	-	85.67	27.24	4.51	33.17	123	92	P	H
	*	2480	92.8	-	-	84.24	27.24	4.51	33.17	123	92	A	H
		2496.92	51.35	-22.65	74	42.7	27.3	4.53	33.16	123	92	P	H
		2492.04	41.72	-12.28	54	33.07	27.3	4.53	33.16	123	92	A	H
													H
													H
	*	2480	91.76	-	-	83.2	27.24	4.51	33.17	307	33	P	V
	*	2480	91.34	-	-	82.78	27.24	4.51	33.17	307	33	A	V
		2499.76	51.14	-22.86	74	42.49	27.3	4.53	33.16	307	33	P	V
		2486.88	42.11	-11.89	54	33.53	27.24	4.53	33.17	307	33	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 (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	37.12	-36.88	74	55.52	32.42	6.86	58.14	100	0	P	H
		7440	39.1	-34.9	74	52.1	37.32	8.5	59.17	100	0	P	H
													H
													H
		4960	38.07	-35.93	74	56.47	32.42	6.86	58.14	100	0	P	V
		7440	40.35	-33.65	74	53.35	37.32	8.5	59.17	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 (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	99.84	-	-	101.26	27.24	4.51	33.17	100	76	P	H
	*	2480	75.05	-	-							A	H
		2484.88	42.89	-31.11	74	44.29	27.24	4.53	33.17	100	76	P	H
		2484.88	18.1	-35.9	54							A	H
													H
													H
	*	2480	97.46	-	-	98.88	27.24	4.51	33.17	367	49	P	V
	*	2480	72.67	-	-							A	V
		2483.72	42.26	-31.74	74	43.66	27.24	4.53	33.17	367	49	P	V
		2483.72	17.47	-36.53	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 (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	39.27	-34.73	74	57.67	32.42	6.86	58.14	100	0	P	H
		4960	14.48	-39.52	54							A	H
		7440	41.33	-32.67	74	54.33	37.32	8.5	59.17	100	0	P	H
		7440	16.54	-37.46	54							A	H
		4960	37.73	-36.27	74	56.13	32.42	6.86	58.14	100	0	P	V
		4960	12.94	-41.06	54							A	V
		7440	41.59	-32.41	74	54.59	37.32	8.5	59.17	100	0	P	V
		7440	16.8	-37.2	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

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	109.35	-	-	100.87	27.18	4.5	33.18	105	93	P	H
	*	2462	106.18	-	-	97.7	27.18	4.5	33.18	105	93	A	H
		2484.88	53.88	-20.12	74	45.3	27.24	4.53	33.17	105	93	P	H
		2484.24	43.79	-10.21	54	35.21	27.24	4.53	33.17	105	93	A	H
													H
													H
	*	2462	106.7	-	-	98.22	27.18	4.5	33.18	334	59	P	V
	*	2462	103.83	-	-	95.35	27.18	4.5	33.18	334	59	A	V
		2485.36	51.76	-22.24	74	43.18	27.24	4.53	33.17	334	59	P	V
		2484.52	41.95	-12.05	54	33.37	27.24	4.53	33.17	334	59	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	48.83	-25.17	74	67.38	32.33	6.83	58.18	100	0	P	H
		7386	41.73	-32.27	74	54.89	37.15	8.48	59.14	100	0	P	H
													H
													H
		4924	47.09	-26.91	74	65.64	32.33	6.83	58.18	100	0	P	V
		7386	41.08	-32.92	74	54.24	37.15	8.48	59.14	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 802.11n HT20 (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	107.01	-	-	98.53	27.18	4.5	33.18	100	77	P	H
	*	2462	99.75	-	-	91.27	27.18	4.5	33.18	100	77	A	H
		2484.36	63.28	-10.72	74	54.7	27.24	4.53	33.17	100	77	P	H
		2483.52	50.69	-3.31	54	42.11	27.24	4.53	33.17	100	77	A	H
802.11n													H
HT20													H
CH 11	*	2462	106.14	-	-	97.66	27.18	4.5	33.18	337	57	P	V
2462MHz	*	2462	98.62	-	-	90.14	27.18	4.5	33.18	337	57	A	V
		2483.56	63.49	-10.51	74	54.91	27.24	4.53	33.17	337	57	P	V
		2483.56	49.21	-4.79	54	40.63	27.24	4.53	33.17	337	57	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 802.11n HT20 (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	43.09	-30.91	74	61.64	32.33	6.83	58.18	100	0	P	H
		7386	40.68	-33.32	74	53.84	37.15	8.48	59.14	100	0	P	H
802.11n													H
HT20													H
CH 11		4924	41.26	-32.74	74	59.81	32.33	6.83	58.18	100	0	P	V
2462MHz		7386	40.92	-33.08	74	54.08	37.15	8.48	59.14	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 802.11n HT40 (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)
		5148.46	50.11	-23.89	74	43.54	32.5	6.61	32.54	100	239	P	H
		5148.72	42.46	-11.54	54	35.89	32.5	6.61	32.54	100	239	A	H
	*	5230	101.91	-	-	95.28	32.5	6.67	32.54	100	239	P	H
	*	5230	94.66	-	-	88.03	32.5	6.67	32.54	100	239	A	H
802.11n		5412.96	47.76	-26.24	74	40.98	32.5	6.83	32.55	100	239	P	H
HT40		5381.32	40.46	-13.54	54	33.71	32.5	6.8	32.55	100	239	A	H
CH 46		5080.6	48.51	-25.49	74	41.98	32.5	6.56	32.53	333	99	P	V
5230MHz		5082.68	40.04	-13.96	54	33.51	32.5	6.56	32.53	333	99	A	V
	*	5230	99.12	-	-	92.49	32.5	6.67	32.54	333	99	P	V
	*	5230	92.18	-	-	85.55	32.5	6.67	32.54	333	99	A	V
		5355.84	48.18	-25.82	74	41.45	32.5	6.77	32.54	333	99	P	V
		5379.36	40.11	-13.89	54	33.36	32.5	6.8	32.55	333	99	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11n HT40 (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)
802.11n HT40 CH 46 5230MHz		10460	45.68	-28.32	74	61.11	38.95	10.28	65.2	100	0	P	H
		15690	58.04	-15.96	74	69.46	38.42	13.74	64.32	100	118	P	H
		15690	50.16	-3.84	54	61.58	38.42	13.74	64.32	100	118	A	H
													H
		10460	45.08	-28.92	74	60.51	38.95	10.28	65.2	100	0	P	V
		15690	56.94	-17.06	74	68.36	38.42	13.74	64.32	108	75	P	V
		15690	47.94	-6.06	54	59.36	38.42	13.74	64.32	108	75	A	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 - 5250~5350MHz

WIFI 802.11n HT20 (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)
	*	5320	100.39	-	-	93.69	32.5	6.74	32.54	106	239	P	H
	*	5320	92.86	-	-	86.16	32.5	6.74	32.54	106	239	A	H
		5363.36	48.18	-25.82	74	41.43	32.5	6.79	32.54	106	239	P	H
		5350.4	40.35	-13.65	54	33.62	32.5	6.77	32.54	106	239	A	H
802.11n													H
HT20													H
CH 64	*	5320	99.04	-	-	92.34	32.5	6.74	32.54	340	97	P	V
5320MHz	*	5320	90.41	-	-	83.71	32.5	6.74	32.54	340	97	A	V
		5372.32	46.74	-27.26	74	39.99	32.5	6.79	32.54	340	97	P	V
		5351.2	39.35	-14.65	54	32.62	32.5	6.77	32.54	340	97	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 802.11n HT20 (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)
802.11n HT20 CH 64 5320MHz		10640	45.12	-28.88	74	60.16	39.41	10.19	65.17	100	0	P	H
		15960	55.86	-18.14	74	67.76	38.31	13.99	64.92	100	132	P	H
		15960	45.27	-8.73	54	57.17	38.31	13.99	64.92	100	132	A	H
													H
		10640	44.9	-29.1	74	59.94	39.41	10.19	65.17	100	0	P	V
		15960	59.05	-14.95	74	70.95	38.31	13.99	64.92	105	72	P	V
		15960	49.12	-4.88	54	61.02	38.31	13.99	64.92	105	72	A	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11n HT40 (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)
802.11n HT40 CH 102 5510MHz		5459.2	58.18	-15.82	74	51.37	32.5	6.86	32.55	100	224	P	H
		5469.76	65.01	-3.19	68.2	58.19	32.5	6.87	32.55	100	224	P	H
		5459.92	49.48	-4.52	54	42.67	32.5	6.86	32.55	100	224	A	H
	*	5510	102.06	-	-	95.23	32.5	6.89	32.56	100	224	P	H
	*	5510	94.91	-	-	88.08	32.5	6.89	32.56	100	224	A	H
		5749.565	47.32	-20.88	68.2	40.04	32.89	7.04	32.65	100	224	P	H
		5456.08	51.05	-22.95	74	44.24	32.5	6.86	32.55	100	60	P	V
		5468.56	62.76	-5.44	68.2	55.94	32.5	6.87	32.55	100	60	P	V
		5459.92	46.85	-7.15	54	40.04	32.5	6.86	32.55	100	60	A	V
	*	5510	99.6	-	-	92.77	32.5	6.89	32.56	100	60	P	V
	*	5510	92.33	-	-	85.5	32.5	6.89	32.56	100	60	A	V
		5759.96	48.81	-19.39	68.2	41.5	32.91	7.06	32.66	100	60	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11n HT40 (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)
		11020	45.98	-28.02	74	60.05	40.46	10.06	65.11	100	0	P	H
		16530	60.05	-8.15	68.2	71.46	39	13.97	65.07	100	0	P	H
802.11n													H
HT40													H
CH 102		11020	47.07	-26.93	74	61.14	40.46	10.06	65.11	100	0	P	V
5510MHz		16530	57.1	-11.1	68.2	68.51	39	13.97	65.07	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 802.11n HT20 (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)
		5622.8	47.58	-20.62	68.2	40.53	32.69	6.96	32.6	279	29	P	H
		5695.2	47.05	-54.61	101.66	39.87	32.8	7.01	32.63	279	29	P	H
		5714.4	48.72	-60.51	109.23	41.51	32.83	7.02	32.64	279	29	P	H
		5723	47.14	-70.5	117.64	39.89	32.86	7.03	32.64	279	29	P	H
	*	5785	102.5	-	-	95.16	32.94	7.07	32.67	279	29	P	H
	*	5785	96	-	-	88.66	32.94	7.07	32.67	279	29	A	H
		5853.6	47.9	-66.09	113.99	40.41	33.08	7.1	32.69	279	29	P	H
		5857.6	49.28	-60.79	110.07	41.79	33.08	7.1	32.69	279	29	P	H
		5890.6	50.35	-43.27	93.62	42.81	33.13	7.12	32.71	279	29	P	H
		5938	48.57	-19.63	68.2	40.97	33.19	7.14	32.73	279	29	P	H
802.11n													H
HT20													H
CH 157		5637.6	47.17	-21.03	68.2	40.09	32.72	6.97	32.61	254	354	P	V
5785MHz		5670.6	49.28	-34.2	83.48	42.12	32.78	7	32.62	254	354	P	V
		5713.4	49.01	-59.94	108.95	41.8	32.83	7.02	32.64	254	354	P	V
		5723.4	50.09	-68.46	118.55	42.84	32.86	7.03	32.64	254	354	P	V
	*	5785	106.32	-	-	98.98	32.94	7.07	32.67	254	354	P	V
	*	5785	99.01	-	-	91.67	32.94	7.07	32.67	254	354	A	V
		5850.4	50.78	-70.51	121.29	43.32	33.05	7.1	32.69	254	354	P	V
		5865.4	51.13	-56.76	107.89	43.64	33.08	7.11	32.7	254	354	P	V
		5883.6	50.28	-48.53	98.81	42.76	33.11	7.12	32.71	254	354	P	V
		5937.2	49.55	-18.65	68.2	41.95	33.19	7.14	32.73	254	354	P	V
													V
													V

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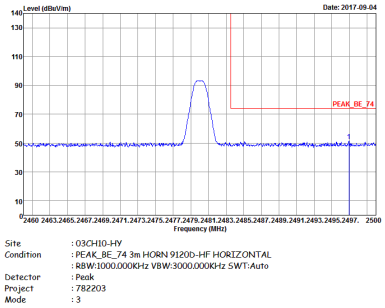
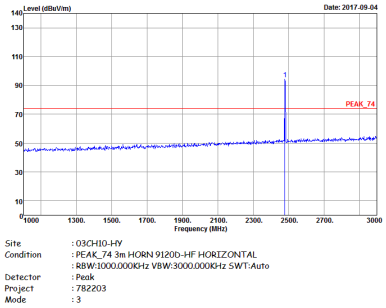
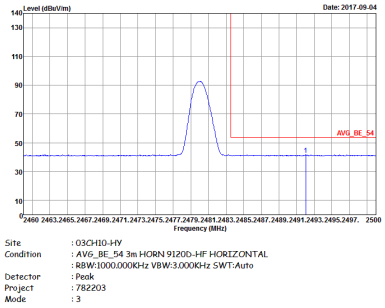
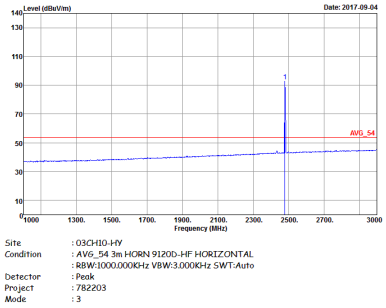
WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11570	47.26	-26.74	74	61.86	39.28	10.98	65.37	100	0	P	H
		17358	62.89	-5.31	68.2	70.77	41.52	14.08	64.11	100	0	P	H
802.11n													H
HT20													H
CH 157		11570	46.15	-27.85	74	60.75	39.28	10.98	65.37	100	0	P	V
5785MHz		17355	56.3	-11.9	68.2	64.18	41.52	14.08	64.11	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

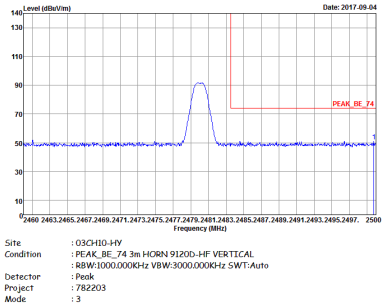
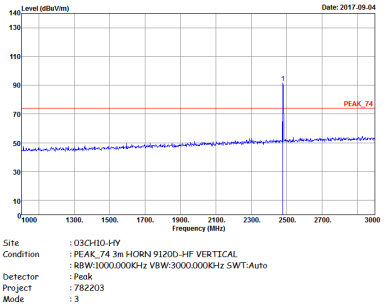
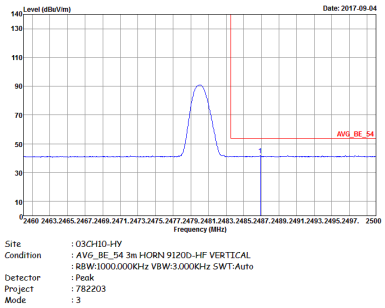
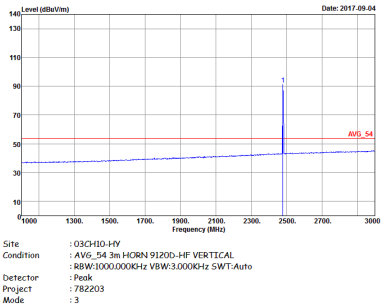
Note symbol

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

2.4GHz 2400~2483.5MHz

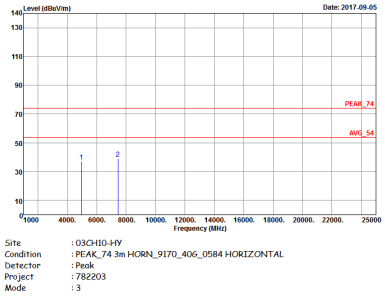
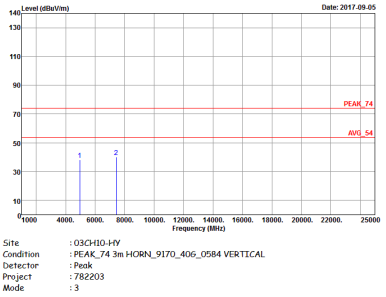
BLE (Band Edge @ 3m)

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

BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BLE CH39 2480MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH10-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 782203 Mode : 3	 Site : 03CH10-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 782203 Mode : 3
Avg.	 Site : 03CH10-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 782203 Mode : 3	 Site : 03CH10-HY Condition : AVG_54 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 782203 Mode : 3

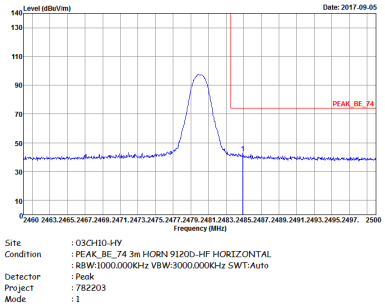
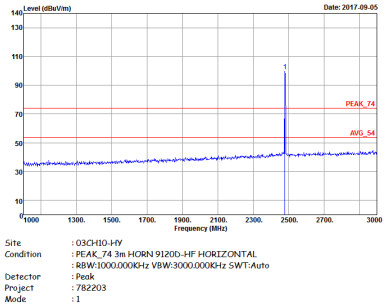
2.4GHz 2400~2483.5MHz

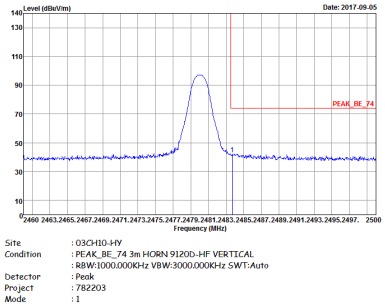
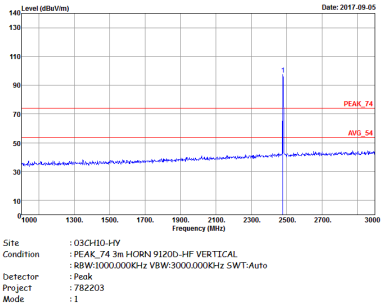
BLE (Harmonic @ 3m)

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

2.4GHz 2400~2483.5MHz

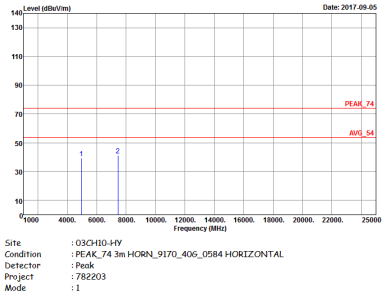
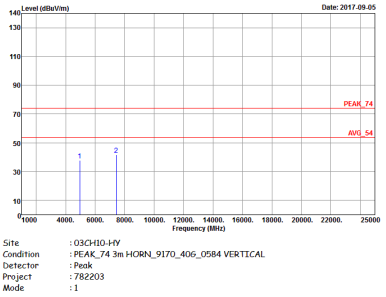
BT (Band Edge @ 3m)

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

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

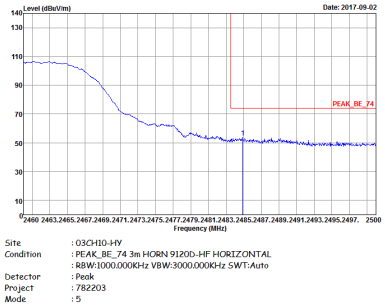
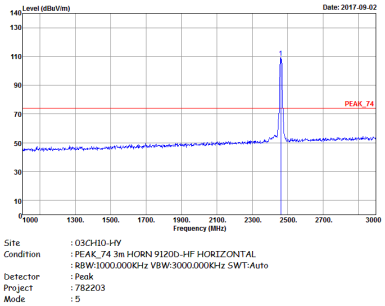
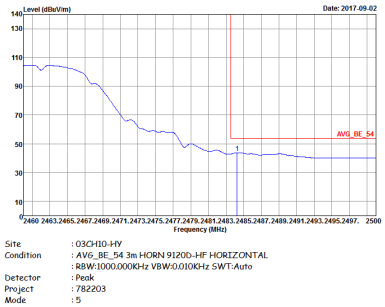
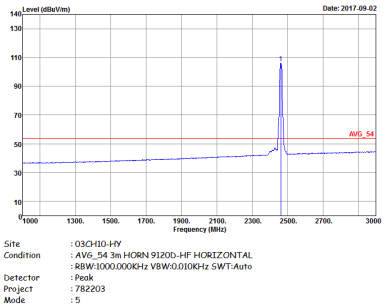
2.4GHz 2400~2483.5MHz

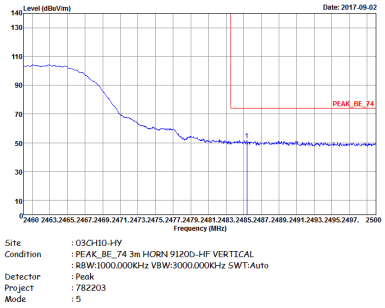
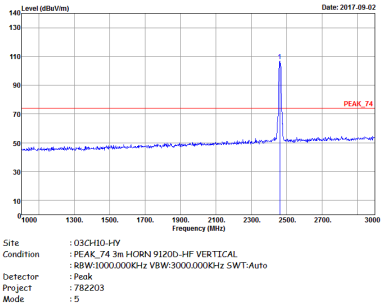
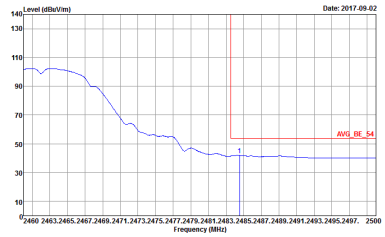
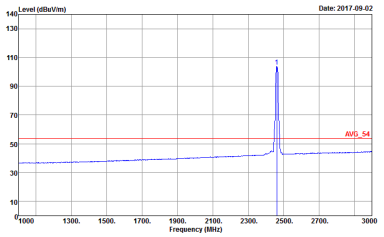
BT (Harmonic @ 3m)

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

2.4GHz 2400~2483.5MHz

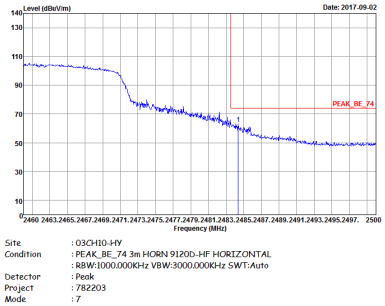
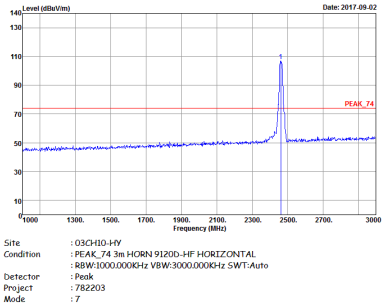
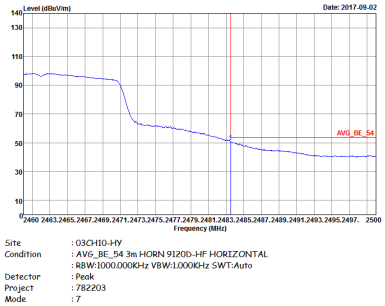
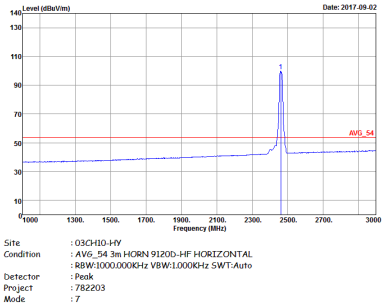
WIFI 802.11b (Band Edge @ 3m)

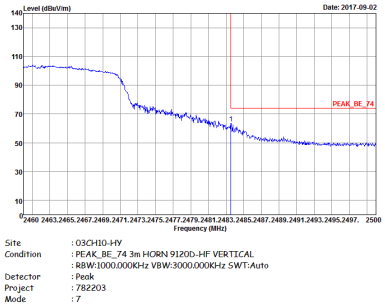
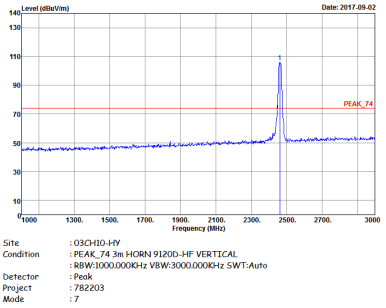
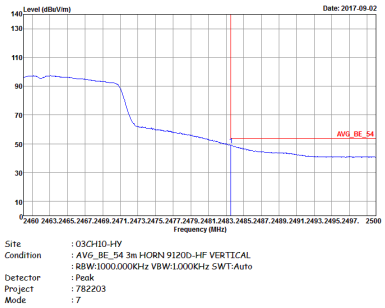
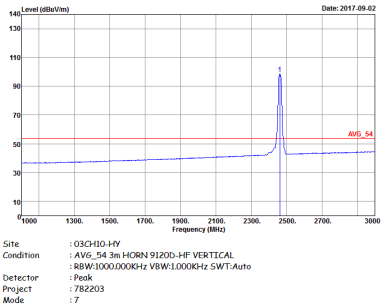
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
1	Horizontal	Fundamental
Peak		
Avg.		

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH10-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 782203 Mode : 5	 Site : 03CH10-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 782203 Mode : 5
Avg.	 Site : 03CH10-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 782203 Mode : 5	 Site : 03CH10-HY Condition : AVG_54 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 782203 Mode : 5

2.4GHz 2400~2483.5MHz

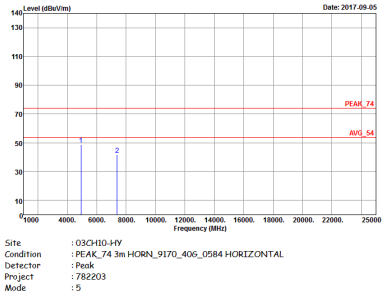
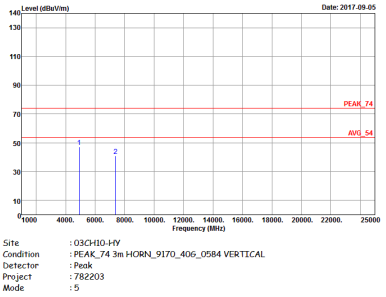
WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1	Horizontal	Fundamental
Peak		
Avg.		

WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH10-HY Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 782203 Mode : 7	 Site : 03CH10-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 782203 Mode : 7
Avg.	 Site : 03CH10-HY Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 782203 Mode : 7	 Site : 03CH10-HY Condition : AVG_54 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 782203 Mode : 7

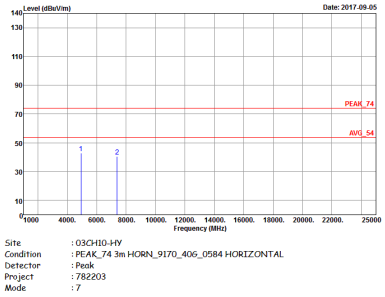
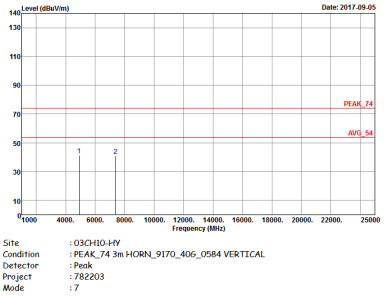
2.4GHz 2400~2483.5MHz

WIFI 802.11b (Harmonic @ 3m)

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

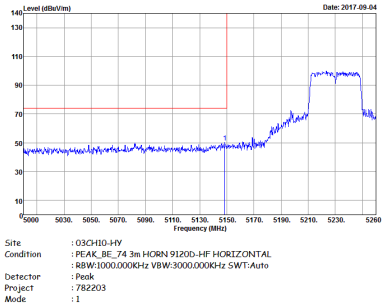
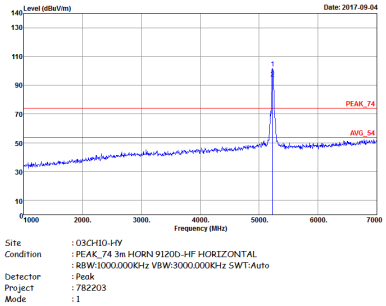
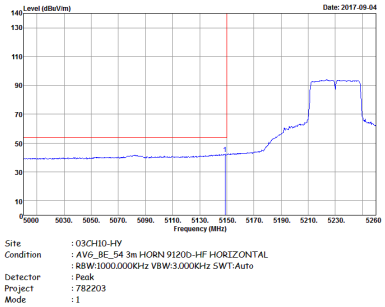
2.4GHz 2400~2483.5MHz

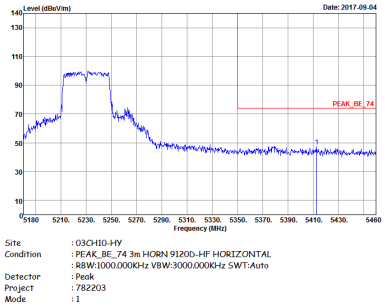
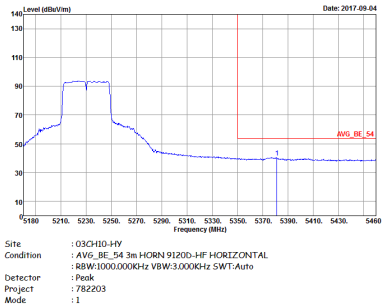
WIFI 802.11n HT20 (Harmonic @ 3m)

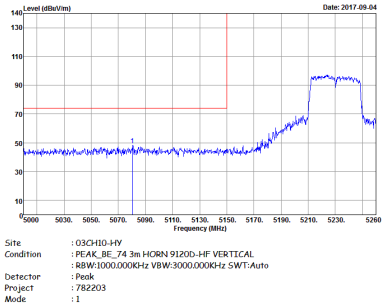
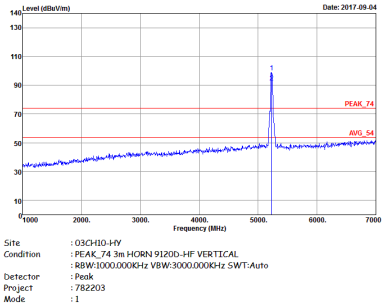
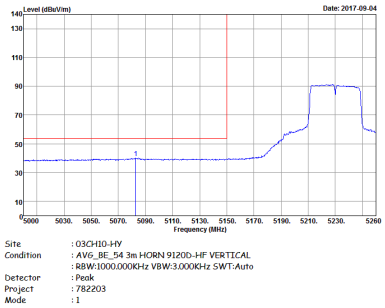
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1	Horizontal	Vertical
Peak Avg.		

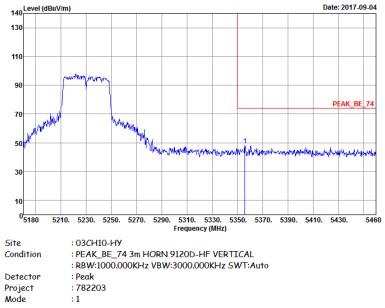
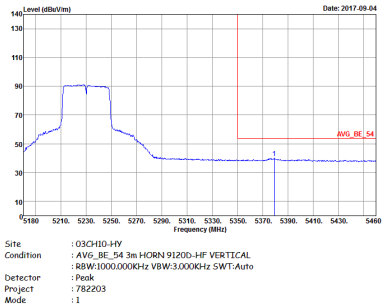
Band 1 - 5150~5250MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

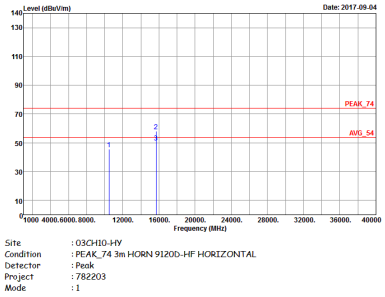
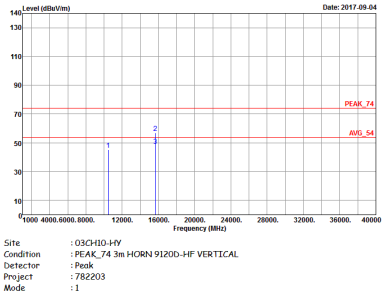
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

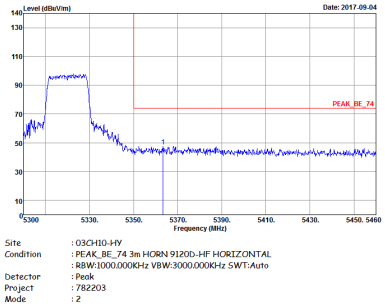
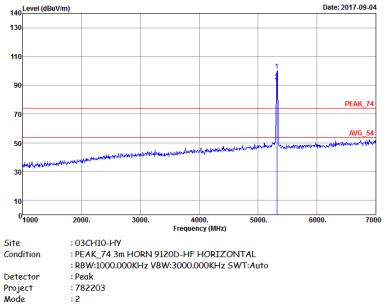
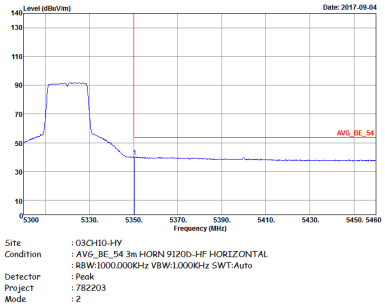
Band 1 - 5150~5250MHz

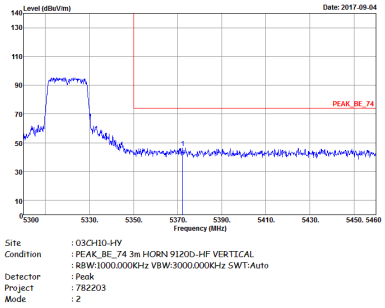
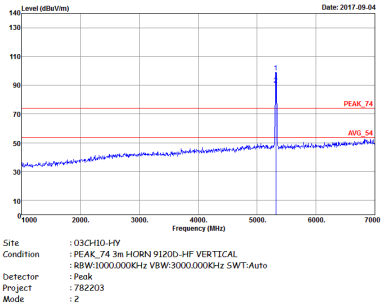
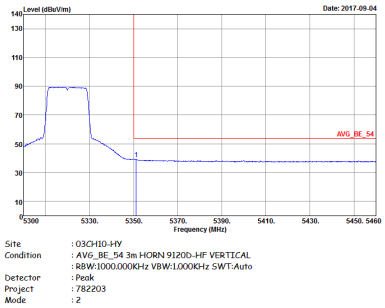
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT40 CH46 5230MHz	
1	Horizontal	Vertical
Peak Avg.		

Band 2 - 5250~5350MHz

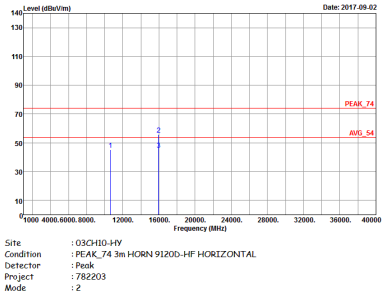
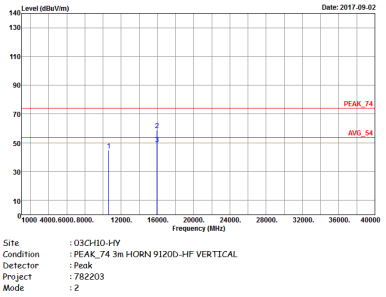
WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

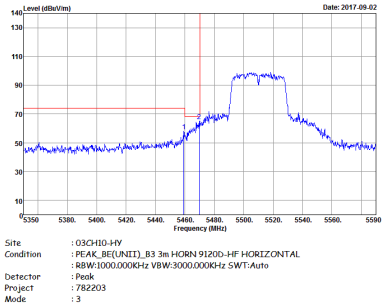
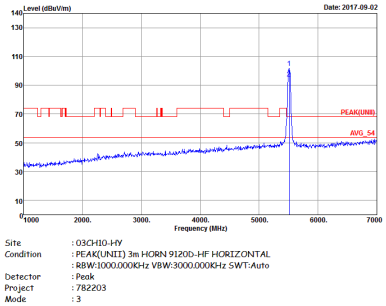
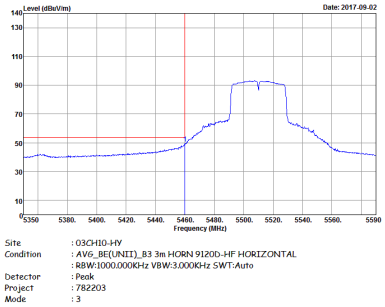
Band 2 - 5250~5350MHz

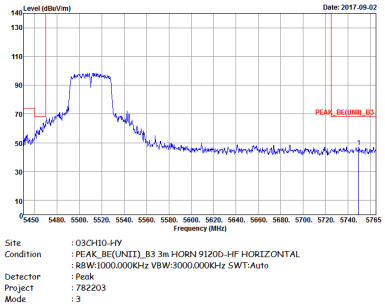
WIFI 802.11n HT20 (Harmonic @ 3m)

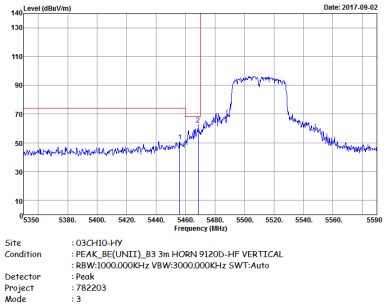
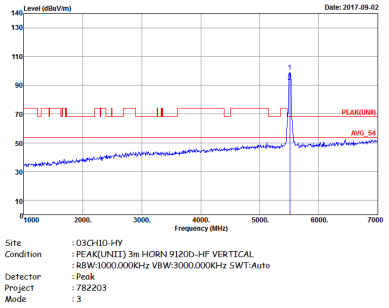
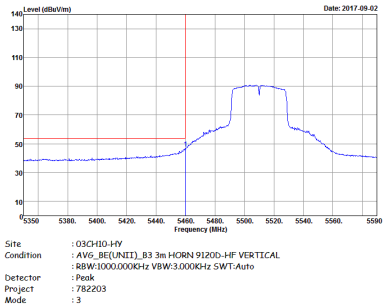
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1	Horizontal	Vertical
Peak Avg.		

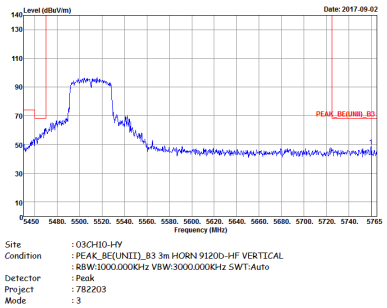
Band 3 - 5470~5725MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

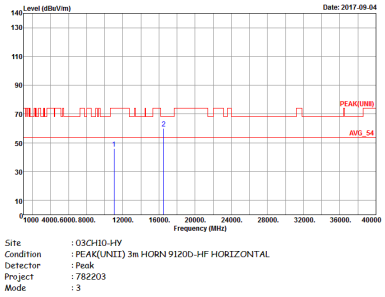
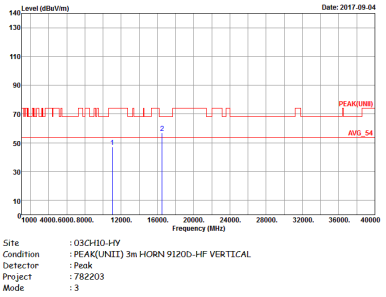
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.	Left blank	Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.	Left blank	Left blank

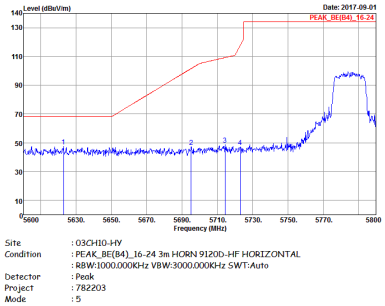
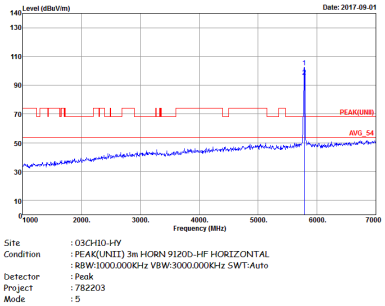
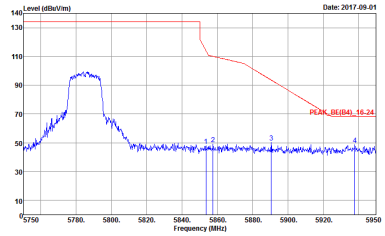
Band 3 - 5470~5725MHz

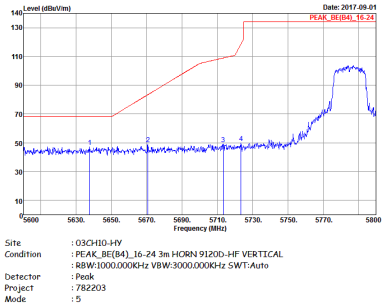
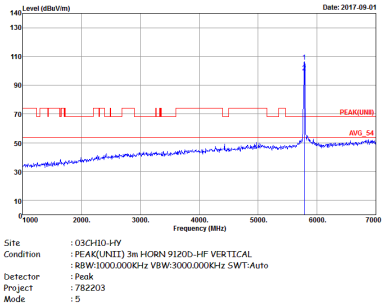
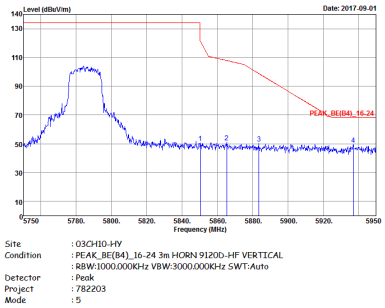
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT40 CH102 5510MHz	
1	Horizontal	Vertical
Peak Avg.		

Band 4 - 5725~5850MHz

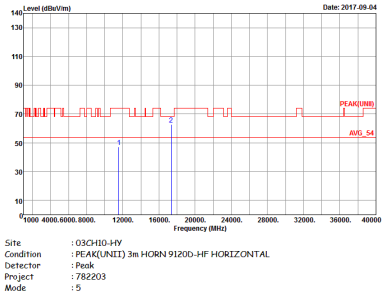
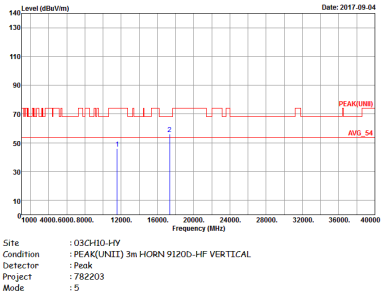
WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH10-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 782203 Mode : 5	 Site : 03CH10-HY Condition : PEAK(UNII) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 782203 Mode : 5
Peak	 Site : 03CH10-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 782203 Mode : 5	Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
1	Vertical	Fundamental
Peak		
Peak		Left blank

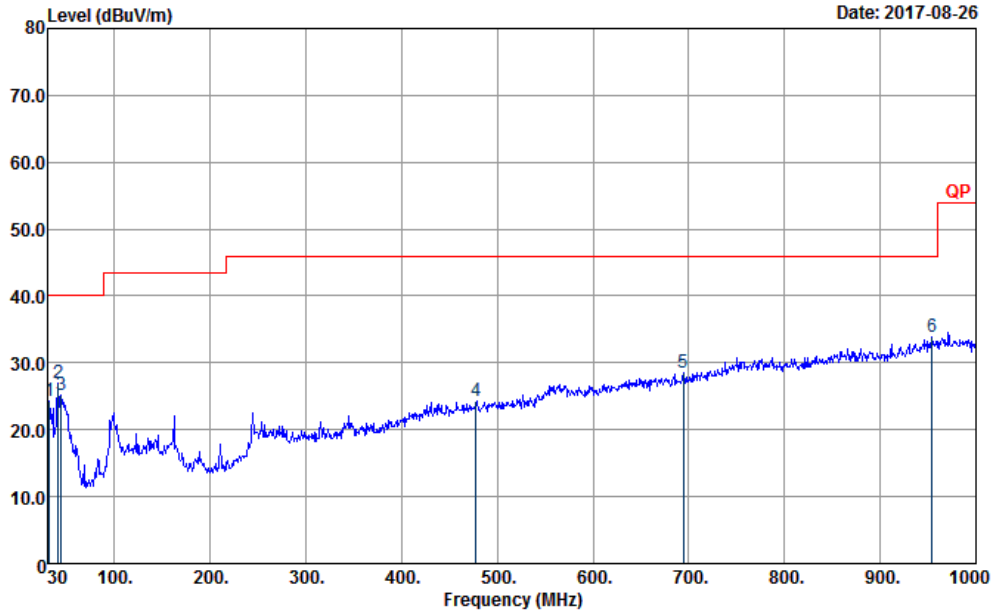
Band 4 - 5725~5850MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
1	Horizontal	Vertical
Peak Avg.		

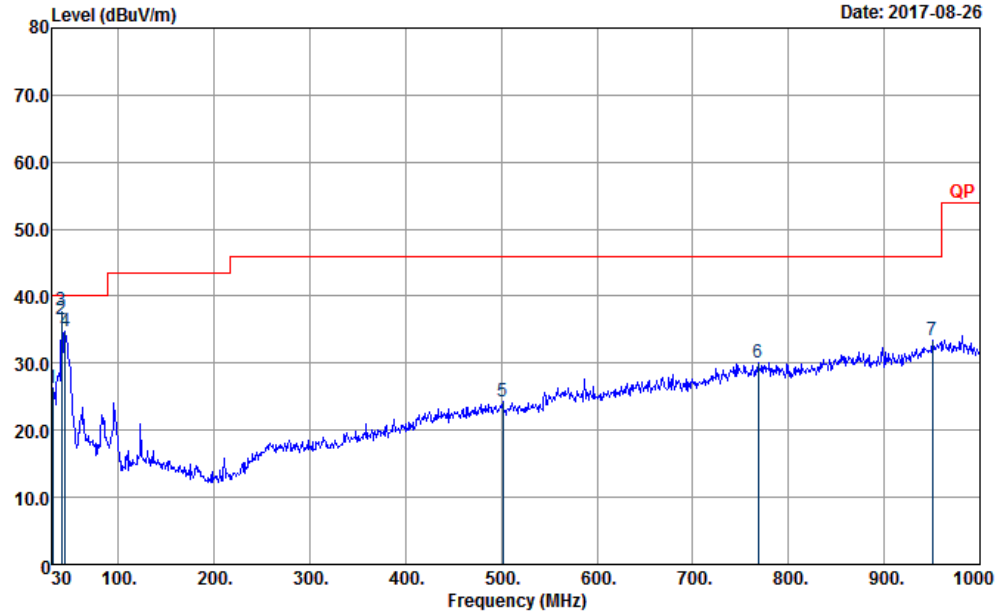
Results of Radiated Emissions (30MHz~1GHz)

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
31.62	24.33	-15.67	40	32.65	23.33	0.82	32.49			Peak
40.8	27.01	-12.99	40	39.84	18.83	0.82	32.49			Peak
44.31	25.21	-14.79	40	40.03	16.65	1.02	32.49			Peak
477.8	24.37	-21.63	46	30.2	23.72	2.77	32.37			Peak
694.1	28.54	-17.46	46	30.89	26.64	3.35	32.47			Peak
953.8	33.95	-12.05	46	30.1	30.94	3.9	31.16	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
30.81	26.31	-13.69	40	34.12	23.84	0.82	32.49			Peak
40.68	36.44	-3.56	40	49.27	18.83	0.82	32.49	100	271	QP
40.68	37.94	-2.06	40	50.77	18.83	0.82	32.49	100	271	Peak
44.58	34.66	-5.34	40	49.48	16.65	1.02	32.49			Peak
501.6	24.24	-21.76	46	29.73	24	2.84	32.38			Peak
768.3	30.19	-15.81	46	30.61	28.27	3.44	32.27			Peak
950.3	33.45	-12.55	46	29.84	30.82	3.82	31.2			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