



# Spot Check Evaluation

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## 1. Introduction Section

The original model (FCC ID: PY7-35228S) and the variant model (FCC ID: PY7-22032B) 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 PY7-22032B 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: PY7-22032B).



## 2. Difference Section

The original model (FCC ID: PY7-35228S) and the variant model (FCC ID: PY7-22032B) has identical PCB layout, antenna, SW implementation for Bluetooth/Wi-Fi/NFC/GPS. The details of similarity and difference can be found in the Operating Description.

Cellular transmitter RF components are different in PY7-22032B, to support capability for different cellular bands.

The product specification is outlined in the following table:

FCC ID		PY7-35228S	PY7-22032B
Wireless Tech	Mode	Frequency (MHz)	
GSM	GSM Voice GPRS (GMSK) EDGE (8PSK)	Multi-Slot Class 12 DTM: No	850/1900
UMTS	AMR/RCM12.2Kbps HSDPA/HSUPA/DC-HSDPA	B5/B2	B5/B2/B4
LTE (FDD)	QPSK 16QAM	B5/B2/B7/B41	B5/B2//B4/B7/B12/B13/B17
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	PY7-22032B Worst Result	Difference (dB)
Average Conducted Power (dBm)	802.11b	16.98	16.74	0.24
	802.11g	14.99	14.91	0.08
	11n HT20	14.99	14.90	0.09
	BT (1Mbps)	7.00	6.97	0.03
	BT (2Mbps)	4.99	4.96	0.03
	BT (3Mbps)	5.00	4.93	0.07
	BT-LE	-0.19	-0.02	-0.17
	11a, 5.2GHz	12.85	12.80	0.05
	11n HT20, 5.2GHz	10.73	10.67	0.06
	11n HT40, 5.2GHz	10.83	10.81	0.02
	11a, 5.3GHz	12.75	12.72	0.03
	11n HT20, 5.3GHz	10.72	10.71	0.01
	11n HT40, 5.3GHz	10.74	10.72	0.02
	11a, 5.5GHz	12.76	12.73	0.03
	11n HT20, 5.5GHz	10.71	10.68	0.03
	11n HT40, 5.5GHz	10.68	10.63	0.05
	11a, 5.8GHz	12.96	12.94	0.02
	11n HT20, 5.8GHz	10.98	10.74	0.24
	11n HT40, 5.8GHz	10.94	10.89	0.05
	S/N of test sample	WUJ01Q223V	WUJ01Q2DMX	
Test date	2017/08/28~2017/09/15	2017/08/23~2017/09/14		
Peak Radiated Spurious Emission (Band Edge) (dBuV/m)	802.11b	52.72	52.91	-0.19
	802.11n-HT20	65.79	65.63	0.16
	BT (3Mbps)	45.26	44.22	1.04
	BT-LE	51.91	50.8	1.11
	11n HT40, 5.2GHz	51.10	50.43	0.67
	11n HT20, 5.3GHz	50.77	50.25	0.52
	11n HT40, 5.5GHz	65.18	65.15	0.03
	11n HT20, 5.8GHz	49.78	48.87	0.91
	S/N of test sample	WUJ01Q2211	WUJ01Q2CD7	
	Test date	2017/08/28~2017/09/15	2017/08/29~2017/09/05	
Average Radiated Spurious Emission (Band Edge) (dBuV/m)	802.11b	43.13	43.41	-0.28
	802.11n-HT20	50.77	50.73	0.04
	BT (3Mbps)	20.47	19.43	1.04
	BT-LE	41.97	41.98	-0.01
	11n HT40, 5.2GHz	42.87	44.47	-1.6
	11n HT20, 5.3GHz	42.30	42.36	-0.06
	S/N of test sample	WUJ01Q2211	WUJ01Q2CD7	
Test date	2017/08/28~2017/09/15	2017/08/29~2017/09/05		
Peak Radiated Spurious Emission (Harmonic) (dBuV/m)	802.11b	49.44	48.68	0.76
	802.11n-HT20	44.17	44.01	0.16
	BT (3Mbps)	42.52	41.92	0.60
	BT-LE	42.92	41.61	1.31
	11n HT40, 5.2GHz	60.29	59.02	1.27
	11n HT20, 5.3GHz	59.66	59.23	0.43
	11n HT40, 5.5GHz	60.64	61.61	-0.97
	11n HT20, 5.8GHz	63.67	62.02	1.65
S/N of test sample	WUJ01Q2211	WUJ01Q2CD7		
Test date	2017/08/28~2017/09/15	2017/08/29~2017/09/05		



Test Item	Mode	PY7-35228S Worst Result	PY7-22032B Worst Result	Difference (dB)
Average Radiated Spurious Emission (Harmonic) (dBuV/m)	11n HT40, 5.2GHz	50.99	50.67	0.32
	11n HT20, 5.3GHz	50.96	50.21	0.75
	S/N of test sample	WUJ01Q2211	WUJ01Q2CD7	
	Test date	2017/08/28~2017/09/15	2017/08/29~2017/09/05	
NFC (dBuV/m)	RSE (30MHz to1GHz)	34.80	36.81	-2.01
	S/N of test sample	WUJ01Q22BN	WUJ01Q2CD7	
	Test date	2017/08/24~2017/08/25	2017/08/26	

**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	PY7-22032B	Part 15C (FR782113B, FR782113C)
	DSS	Bluetooth	2400~2483.5	PY7-35228S	Original Grant	FCC RF Test Report	PY7-22032B	Part 15C (FR782113A)
	DXX	NFC	13.56	PY7-35228S	Original Grant	FCC RF Test Report	PY7-22032B	Part 15C (FR782113D)
15E	NII	Wi-Fi	5150~5250 5250~5350 5470~5725 5725~5850	PY7-35228S	Original Grant	FCC RF Test Report	PY7-22032B	Part 15E (FR782113E, FR782113F)
		DFS	5470~5725	PY7-35228S	Original Grant	FCC RF Test Report	PY7-22032B	Part 15E (FZ782113)





## Appendix A. Spot Check Test Result

### 1.1 Conducted power

#### <2.4GHz WLAN>

2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-35228S Average power (dBm)	FCC ID PY7-22032B Average power (dBm)
	802.11b		CH 1	2412	1Mbps	17	16.93
CH 6			2437	16.98			16.72
CH 11			2462	16.96			16.68
802.11g		CH 1	2412	6Mbps	15	14.99	14.91
		CH 6	2437			14.98	14.89
		CH 11	2462			14.80	14.78
802.11n-HT20		CH 1	2412	MCS0	15	14.99	14.90
		CH 6	2437			14.98	14.88
		CH 11	2462			14.84	14.83

#### <Bluetooth>

Mode	Channel	Frequency (MHz)	Tune-Up Limit	FCC ID PY7-35228S Average power (dBm)	FCC ID PY7-22032B Average power (dBm)
Bluetooth (1Mbps)	CH 00	2402	7	6.32	6.05
	CH 39	2441		7.00	6.97
	CH 78	2480		6.74	6.49
Bluetooth (2Mbps)	CH 00	2402	5	3.96	3.46
	CH 39	2441		4.99	4.96
	CH 78	2480		4.61	3.99
Bluetooth (3Mbps)	CH 00	2402	5	3.96	3.41
	CH 39	2441		5.00	4.93
	CH 78	2480		4.66	3.96
BLE (GFSK)	CH 00	2402	0	-1.62	-1.62
	CH 19	2440		-0.19	-0.02
	CH 39	2480		-1.58	-1.25



**<5GHz WLAN>**

	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-35228S	FCC ID PY7-22032B
						Average power (dBm)	Average power (dBm)
5.2GHz WLAN	802.11a	CH 36	5180	6Mbps	13	12.85	12.80
		CH 44	5220			12.79	12.62
		CH 48	5240			12.55	12.53
	802.11n-HT20	CH 36	5180	MCS0	11	10.73	10.67
		CH 44	5220			10.70	10.66
		CH 48	5240			10.68	10.66
	802.11n-HT40	CH 38	5190	MCS0	11	10.83	10.81
		CH 46	5230			10.81	10.78
	5.3GHz WLAN	802.11a	CH 52	5260	6Mbps	13	12.53
CH 60			5300	12.65			12.58
CH 64			5320	12.75			12.72
802.11n-HT20		CH 52	5260	MCS0	11	10.58	10.56
		CH 60	5300			10.65	10.61
		CH 64	5320			10.72	10.71
802.11n-HT40		CH 54	5270	MCS0	11	10.74	10.72
		CH 62	5310			10.73	10.71
5.5GHz WLAN		802.11a	CH 100	5500	6Mbps	13	12.76
	CH 116		5580	12.74			12.72
	CH 140		5700	12.59			12.54
	CH144		5720	12.58			12.57
	802.11n-HT20	CH 100	5500	MCS0	11	10.71	10.68
		CH 116	5580			10.67	10.64
		CH 140	5700			10.62	10.56
		CH144	5720			10.58	10.56



5.5GHz WLAN	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-35228S Average power (dBm)	FCC ID PY7-22032B Average power (dBm)
	802.11n-HT40		CH 102	5510	MCS0	11	10.68
CH 126			5630	10.66			10.63
CH 134			5670	10.63			10.61
CH142			5710	10.61			10.56
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-35228S Average power (dBm)	FCC ID PY7-22032B Average power (dBm)
	802.11a	CH 149	5745	MCS0	13	12.96	12.94
CH 157		5785	12.95			12.72	
CH 165		5825	12.91			12.89	
802.11n-HT20		CH 149	5745	MCS0	11	10.98	10.74
		CH 157	5785			10.84	10.71
		CH 165	5825			10.80	10.51
802.11n-HT40		CH 151	5755	MCS0	11	10.94	10.89
		CH 159	5795			10.93	10.82



## 1.2 Radiated Spurious Emission

### 2.4GHz BT/WLAN

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PM-1103-BV						FCC ID PY7-22032B					
				Band edge			Harmonic			Band edge			Harmonic		
				Frequency	Level	Limit	Frequency	Level	Limit	Frequency	Level	Limit	Frequency	Level	Limit
				(MHz)	(dBuV/m)	(dBuV/m)	(MHz)	(dBuV/m)	(dBuV/m)	(MHz)	(dBuV/m)	(dBuV/m)	(MHz)	(dBuV/m)	(dBuV/m)
BT(3Mbps)	CH 78	2480	P	2483.56	45.26	74	7440	42.52	74	2483.84	44.22	74	7440	41.92	74
			A	2483.56	20.47	54	-	-	-	2483.84	19.43	54	-	-	-
BLE	CH 39	2480	P	2486.16	51.91	74	7440	42.92	74	2492	50.8	74	7440	41.61	74
			A	2493.08	41.97	54	-	-	-	2495.72	41.98	54	-	-	-
802.11b	CH 11	2462	P	2483.88	52.72	74	4924	49.44	74	2485.76	52.91	74	4924	48.68	74
			A	2483.52	43.13	54	-	-	-	2483.52	43.41	54	-	-	-
802.11n-HT20	CH 11	2462	P	2483.64	65.79	74	4924	44.17	74	2484.2	65.63	74	4924	44.01	74
			A	2483.52	50.77	54	-	-	-	2483.64	50.73	54	-	-	-

### 5.2GHz WLAN

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PM-1103-BV						FCC ID PY7-22032B					
				Band edge			Harmonic			Band edge			Harmonic		
				Frequency	Level	Limit	Frequency	Level	Limit	Frequency	Level	Limit	Frequency	Level	Limit
				(MHz)	(dBuV/m)	(dBuV/m)	(MHz)	(dBuV/m)	(dBuV/m)	(MHz)	(dBuV/m)	(dBuV/m)	(MHz)	(dBuV/m)	(dBuV/m)
802.11n-HT40	CH 46	5230	P	5149.5	51.1	74	15690	60.29	74	5145.34	50.43	74	15690	59.02	74
			A	5149.24	42.87	54	15690	50.99	54	5149.24	44.47	54	15690	50.67	54



**5.3GHz WLAN**

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PM-1103-BV						FCC ID PY7-22032B					
				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	5350.72	50.25	74	15960	59.23	74
			A	5350.72	42.3	54	15960	50.96	54	5352.8	42.36	54	15960	50.21	54

**5.5GHz WLAN**

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PM-1103-BV						FCC ID PY7-22032B					
				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	65.15	68.2	16530	61.61	68.2

**5.8GHz WLAN**

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PM-1103-BV						FCC ID PY7-22032B					
				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	5928.2	48.87	68.2	17355	62.02	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	92.5	-	-	83.94	27.24	4.51	33.17	100	106	P	H
	*	2480	91.6	-	-	83.04	27.24	4.51	33.17	100	106	A	H
		2490.52	50.8	-23.2	74	42.16	27.3	4.53	33.17	100	106	P	H
		2497.24	41.88	-12.12	54	33.23	27.3	4.53	33.16	100	106	A	H
													H
													H
	*	2480	91.82	-	-	83.26	27.24	4.51	33.17	373	47	P	V
	*	2480	90.91	-	-	82.35	27.24	4.51	33.17	373	47	A	V
		2492	50.8	-23.2	74	42.15	27.3	4.53	33.16	373	47	P	V
		2495.72	41.98	-12.02	54	33.33	27.3	4.53	33.16	373	47	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	37.7	-36.3	74	56.1	32.42	6.86	58.14	100	0	P	H
		7440	41.61	-32.39	74	54.61	37.32	8.5	59.17	100	0	P	H
													H
													H
		4960	39.55	-34.45	74	57.95	32.42	6.86	58.14	100	0	P	V
		7440	40.2	-33.8	74	53.2	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	100.16	-	-	101.58	27.24	4.51	33.17	100	79	P	H	
	*	2480	75.37	-	-							A	H	
		2483.84	44.22	-29.78	74	45.62	27.24	4.53	33.17	100	79	P	H	
		2483.84	19.43	-34.57	54							A	H	
													H	
													H	
	*	2480	96.91	-	-	98.33	27.24	4.51	33.17	329	47	P	V	
	*	2480	72.12	-	-								A	V
		2484.04	43.28	-30.72	74	44.68	27.24	4.53	33.17	329	47	P	V	
		2484.04	18.49	-35.51	54							A	V	
													V	
													V	
Remark	3. No other spurious found. 4. 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	39.36	-34.64	74	57.76	32.42	6.86	58.14	100	0	P	H
		4960	14.57	-39.43	54							A	H
		7440	41.92	-32.08	74	54.92	37.32	8.5	59.17	100	0	P	H
		7440	17.13	-36.87	54							A	H
		4960	38.21	-35.79	74	56.61	32.42	6.86	58.14	100	0	P	V
		4960	13.42	-40.58	54							A	V
		7440	41.51	-32.49	74	54.51	37.32	8.5	59.17	100	0	P	V
		7440	16.72	-37.28	54							A	V
Remark	3. No other spurious found. 4. 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	105.62	-	-	97.14	27.18	4.5	33.18	100	150	P	H
	*	2462	102.46	-	-	93.98	27.18	4.5	33.18	100	150	A	H
		2485.76	52.91	-21.09	74	44.33	27.24	4.53	33.17	100	150	P	H
		2483.52	42.77	-11.23	54	34.19	27.24	4.53	33.17	100	150	A	H
													H
													H
	*	2462	107.97	-	-	99.49	27.18	4.5	33.18	154	98	P	V
	*	2462	104.78	-	-	96.3	27.18	4.5	33.18	154	98	A	V
		2484.48	52.82	-21.18	74	44.24	27.24	4.53	33.17	154	98	P	V
		2483.52	43.41	-10.59	54	34.83	27.24	4.53	33.17	154	98	A	V
													V
													V
Remark	5. No other spurious found. 6. 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	46.12	-27.88	74	64.67	32.33	6.83	58.18	100	0	P	H	
		7386	42.4	-31.6	74	55.56	37.15	8.48	59.14	100	0	P	H	
													H	
													H	
			4924	48.68	-25.32	74	67.23	32.33	6.83	58.18	100	0	P	V
			7386	41.54	-32.46	74	54.7	37.15	8.48	59.14	100	0	P	V
														V
														V
<b>Remark</b>	5. No other spurious found. 6. 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 )	
802.11n HT20 CH 11 2462MHz	*	2462	104.6	-	-	96.12	27.18	4.5	33.18	100	146	P	H	
	*	2462	97.57	-	-	89.09	27.18	4.5	33.18	100	146	A	H	
		2484.12	63.49	-10.51	74	54.91	27.24	4.53	33.17	100	146	P	H	
		2483.52	49.94	-4.06	54	41.36	27.24	4.53	33.17	100	146	A	H	
													H	
														H
	*	2462	107.61	-	-	99.13	27.18	4.5	33.18	142	76	P	V	
	*	2462	100.02	-	-	91.54	27.18	4.5	33.18	142	76	A	V	
		2484.2	65.63	-8.37	74	57.05	27.24	4.53	33.17	142	76	P	V	
		2483.64	50.73	-3.27	54	42.15	27.24	4.53	33.17	142	76	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 )	
802.11n HT20 CH 11 2462MHz		4924	41.48	-32.52	74	60.03	32.33	6.83	58.18	100	0	P	H	
		7386	42.26	-31.74	74	55.42	37.15	8.48	59.14	100	0	P	H	
													H	
													H	
			4924	44.01	-29.99	74	62.56	32.33	6.83	58.18	100	0	P	V
			7386	41.95	-32.05	74	55.11	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 )
802.11n HT40 CH 46 5230MHz		5145.34	50.43	-23.57	74	43.86	32.5	6.61	32.54	100	237	P	H
		5149.24	44.47	-9.53	54	37.9	32.5	6.61	32.54	100	237	A	H
	*	5230	104.19	-	-	97.56	32.5	6.67	32.54	100	237	P	H
	*	5230	97.23	-	-	90.6	32.5	6.67	32.54	100	237	A	H
		5402.6	48.54	-25.46	74	41.77	32.5	6.82	32.55	100	237	P	H
		5373.76	41.38	-12.62	54	34.64	32.5	6.79	32.55	100	237	A	H
		5142.22	49.15	-24.85	74	42.59	32.5	6.6	32.54	392	98	P	V
		5084.5	41.39	-12.61	54	34.86	32.5	6.56	32.53	392	98	A	V
	*	5230	102	-	-	95.37	32.5	6.67	32.54	392	98	P	V
	*	5230	95.28	-	-	88.65	32.5	6.67	32.54	392	98	A	V
		5352.76	47.22	-26.78	74	40.49	32.5	6.77	32.54	392	98	P	V
	5380.48	40.65	-13.35	54	33.9	32.5	6.8	32.55	392	98	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	45.16	-28.84	74	60.59	38.95	10.28	65.2	100	0	P	H	
		15690	59.02	-14.98	74	70.44	38.42	13.74	64.32	100	254	P	H	
		15690	50.67	-3.33	54	62.09	38.42	13.74	64.32	100	254	A	H	
													H	
			10460	46.88	-27.12	74	62.31	38.95	10.28	65.2	100	0	P	V
			15690	56.68	-17.32	74	68.1	38.42	13.74	64.32	107	76	P	V
			15690	48.68	-5.32	54	60.1	38.42	13.74	64.32	107	76	A	V
													V	
<b>Remark</b>	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 )	
802.11n HT20 CH 64 5320MHz	*	5320	102.95	-	-	96.25	32.5	6.74	32.54	100	114	P	H	
	*	5320	95.81	-	-	89.11	32.5	6.74	32.54	100	114	A	H	
		5350.72	50.25	-23.75	74	43.52	32.5	6.77	32.54	100	114	P	H	
		5352.8	42.36	-11.64	54	35.63	32.5	6.77	32.54	100	114	A	H	
													H	
														H
	*	5320	101.5	-	-	94.8	32.5	6.74	32.54	324	84	P	V	
	*	5320	93.21	-	-	86.51	32.5	6.74	32.54	324	84	A	V	
		5352.96	48.28	-25.72	74	41.55	32.5	6.77	32.54	324	84	P	V	
		5350.88	40.54	-13.46	54	33.81	32.5	6.77	32.54	324	84	A	V	
														V
													V	
<b>Remark</b>	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	44.92	-29.08	74	59.96	39.41	10.19	65.17	100	0	P	H	
		15960	57.74	-16.26	74	69.64	38.31	13.99	64.92	100	256	P	H	
		15960	48.83	-5.17	54	60.73	38.31	13.99	64.92	100	256	A	H	
													H	
			10640	44.91	-29.09	74	59.95	39.41	10.19	65.17	100	0	P	V
			15960	59.23	-14.77	74	71.13	38.31	13.99	64.92	112	73	P	V
			15960	50.21	-3.79	54	62.11	38.31	13.99	64.92	112	73	A	V
													V	
<b>Remark</b>	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		5457.8	58.25	-15.75	74	51.44	32.5	6.86	32.55	100	220	P	H
		5469	65.15	-3.05	68.2	58.33	32.5	6.87	32.55	100	220	P	H
		5459.2	50.26	-3.74	54	43.45	32.5	6.86	32.55	100	220	A	H
	*	5510	102.38	-	-	95.55	32.5	6.89	32.56	100	220	P	H
	*	5510	95.24	-	-	88.41	32.5	6.89	32.56	100	220	A	H
		5730.35	48.06	-20.14	68.2	40.82	32.86	7.03	32.65	100	220	P	H
		5459.9	55.14	-18.86	74	48.33	32.5	6.86	32.55	396	89	P	V
		5468.65	61.53	-6.67	68.2	54.71	32.5	6.87	32.55	396	89	P	V
		5459.9	44.32	-9.68	54	37.51	32.5	6.86	32.55	396	89	A	V
	*	5510	99.03	-	-	92.2	32.5	6.89	32.56	396	89	P	V
	*	5510	92.93	-	-	86.1	32.5	6.89	32.56	396	89	A	V
		5726.255	47.39	-20.81	68.2	40.14	32.86	7.03	32.64	396	89	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 )	
802.11n HT40 CH 102 5510MHz		11020	46.04	-27.96	74	60.11	40.46	10.06	65.11	100	0	P	H	
		16530	61.61	-6.59	68.2	73.02	39	13.97	65.07	100	0	P	H	
													H	
													H	
			11020	46.51	-27.49	74	60.58	40.46	10.06	65.11	100	0	P	V
			16530	57.88	-10.32	68.2	69.29	39	13.97	65.07	100	0	P	V
														V
														V
<b>Remark</b>	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 )
		5635	47.23	-20.97	68.2	40.15	32.72	6.97	32.61	278	20	P	H
		5687.6	47.82	-48.23	96.05	40.64	32.8	7.01	32.63	278	20	P	H
		5706.2	47.46	-59.48	106.94	40.25	32.83	7.02	32.64	278	20	P	H
		5724.2	47.7	-72.68	120.38	40.45	32.86	7.03	32.64	278	20	P	H
	*	5785	102.02	-	-	94.68	32.94	7.07	32.67	278	20	P	H
	*	5785	95.49	-	-	88.15	32.94	7.07	32.67	278	20	A	H
		5853.8	49.28	-64.26	113.54	41.79	33.08	7.1	32.69	278	20	P	H
		5869.6	49.79	-56.92	106.71	42.3	33.08	7.11	32.7	278	20	P	H
		5892	48.91	-43.67	92.58	41.37	33.13	7.12	32.71	278	20	P	H
		5948.4	48.32	-19.88	68.2	40.69	33.22	7.14	32.73	278	20	P	H
													H
		5644.4	47.48	-20.72	68.2	40.4	32.72	6.97	32.61	241	354	P	V
		5697.6	49.26	-54.17	103.43	42.08	32.8	7.01	32.63	241	354	P	V
		5713	49.65	-59.19	108.84	42.44	32.83	7.02	32.64	241	354	P	V
		5722	49.67	-65.69	115.36	42.42	32.86	7.03	32.64	241	354	P	V
	*	5785	105.08	-	-	97.74	32.94	7.07	32.67	241	354	P	V
	*	5785	98.62	-	-	91.28	32.94	7.07	32.67	241	354	A	V
		5853.4	50.05	-64.4	114.45	42.59	33.05	7.1	32.69	241	354	P	V
		5865	52.28	-55.72	108	44.79	33.08	7.11	32.7	241	354	P	V
		5879.4	50.47	-51.46	101.93	42.94	33.11	7.12	32.7	241	354	P	V
		5928.2	48.87	-19.33	68.2	41.27	33.19	7.13	32.72	241	354	P	V
													V
													V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



**Band 4 5725~5850MHz**

**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 157 5785MHz		11570	55.98	-18.02	74	70.58	39.28	10.98	65.37	206	321	P	H	
		11570	47.05	-6.95	54	61.65	39.28	10.98	65.37	206	321	A	H	
		17355	62.02	-6.18	68.2	69.9	41.52	14.08	64.11	100	0	P	H	
													H	
			11570	49.97	-24.03	74	64.57	39.28	10.98	65.37	100	0	P	V
			17355	60.06	-8.14	68.2	67.94	41.52	14.08	64.11	100	0	P	V
														V
														V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



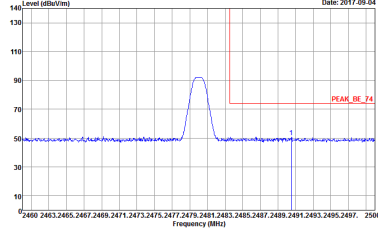
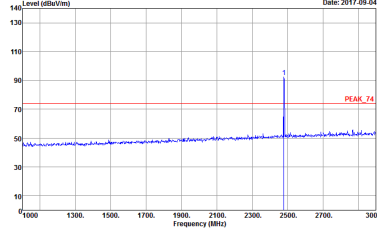
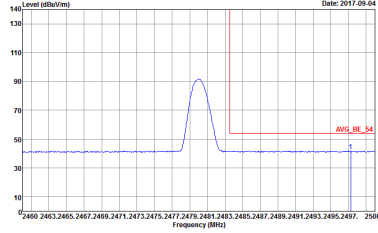
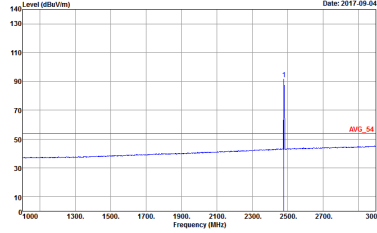
**Note symbol**

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



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	 <p>Level (dBµV/m) vs Frequency (MHz) plot showing a peak at 2480 MHz. The y-axis ranges from 10 to 140 dBµV/m, and the x-axis ranges from 2400 to 2500 MHz. A red line indicates the peak level at approximately 135 dBµV/m.</p> <p>Site : 03CH10-HY            Condition : PEAK_BE_74 3m HORN 91200-HF HORIZONTAL            RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 3</p>	 <p>Level (dBµV/m) vs Frequency (MHz) plot showing a peak at 2480 MHz. The y-axis ranges from 10 to 140 dBµV/m, and the x-axis ranges from 1900 to 3000 MHz. A red line indicates the peak level at approximately 135 dBµV/m.</p> <p>Site : 03CH10-HY            Condition : PEAK_74 3m HORN 91200-HF HORIZONTAL            RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 3</p>
Avg.	 <p>Level (dBµV/m) vs Frequency (MHz) plot showing an average level at 2480 MHz. The y-axis ranges from 10 to 140 dBµV/m, and the x-axis ranges from 2400 to 2500 MHz. A red line indicates the average level at approximately 135 dBµV/m.</p> <p>Site : 03CH10-HY            Condition : AVG_BE_54 3m HORN 91200-HF HORIZONTAL            RBW:1000.000KHz VBW:3000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 3</p>	 <p>Level (dBµV/m) vs Frequency (MHz) plot showing an average level at 2480 MHz. The y-axis ranges from 10 to 140 dBµV/m, and the x-axis ranges from 1900 to 3000 MHz. A red line indicates the average level at approximately 135 dBµV/m.</p> <p>Site : 03CH10-HY            Condition : AVG_54 3m HORN 91200-HF HORIZONTAL            RBW:1000.000KHz VBW:3000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 3</p>



BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BLE CH39 2480MHz	
1	Vertical	Fundamental
Peak	<p>Site : 03CH10-IHY            Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL            RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 3</p>	<p>Site : 03CH10-IHY            Condition : PEAK_74 3m HORN 9120D-HF VERTICAL            RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 3</p>
Avg.	<p>Site : 03CH10-IHY            Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL            RBW:1000.000KHz VBW:3.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 3</p>	<p>Site : 03CH10-IHY            Condition : AVG_54 3m HORN 9120D-HF VERTICAL            RBW:1000.000KHz VBW:3.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 3</p>





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

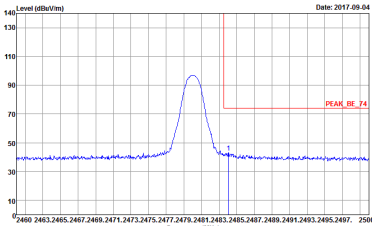
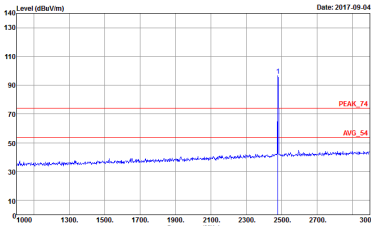
BLE	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	BLE CH39 2480MHz	
1	Horizontal	Vertical
<p><b>Peak</b></p>	<p>Site : 03CH10-HY Condition : PEAK_74 3m HORN_9170_40G_0584 HORIZONTAL Detector : Peak Project : 782204 Mode : 3</p>	<p>Site : 03CH10-HY Condition : PEAK_74 3m HORN_9170_40G_0584 VERTICAL Detector : Peak Project : 782204 Mode : 3</p>



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	<p>Site : 03CH10-HY Condition : PEAK_BE_74 3m HORN 91200-1F HORIZ ONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 782204 Mode : 1</p>	<p>Site : 03CH10-HY Condition : PEAK_74 3m HORN 91200-1F HORIZ ONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 782204 Mode : 1</p>



<b>BT</b>	<b>2.4GHz 2400~2483.5MHz Band Edge @ 3m</b>	
<b>ANT</b>	<b>BT CH78 2480MHz</b>	
<b>1</b>	<b>Vertical</b>	<b>Fundamental</b>
<b>Peak</b>	 <p>Site : 03CH10-HY          Condition : PEAK_BE_74 3m HORN 91200-HF VERTICAL          RBW:1000.000KHz VBW:3000.000KHz SWT:Auto          Detector : Peak          Project : 782204          Mode : 1</p>	 <p>Site : 03CH10-HY          Condition : PEAK_74 3m HORN 91200-HF VERTICAL          RBW:1000.000KHz VBW:3000.000KHz SWT:Auto          Detector : Peak          Project : 782204          Mode : 1</p>



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

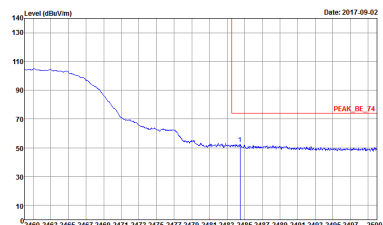
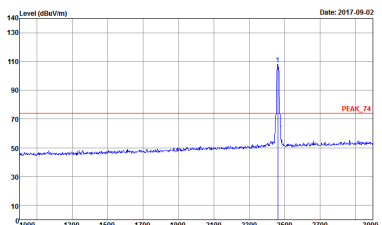
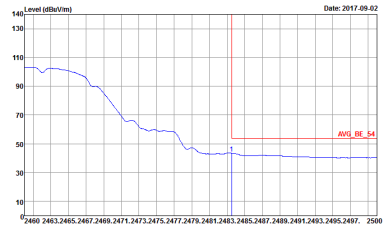
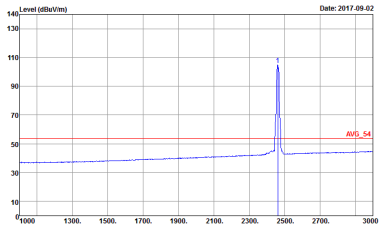
<b>BT</b>	<b>2.4GHz 2400~2483.5MHz Harmonic @ 3m</b>	
<b>ANT</b>	<b>BT CH78 2480MHz</b>	
<b>1</b>	<b>Horizontal</b>	<b>Vertical</b>
<b>Peak Avg.</b>	<p>Site : 03CH10-HY Condition : PEAK_74 3m HORN_9170_40G_0584 HORIZONTAL Detector : Peak Project : 782204 Mode : 1</p>	<p>Site : 03CH10-HY Condition : PEAK_74 3m HORN_9170_40G_0584 VERTICAL Detector : Peak Project : 782204 Mode : 1</p>



**2.4GHz 2400~2483.5MHz**  
**WIFI 802.11b (Band Edge @ 3m)**

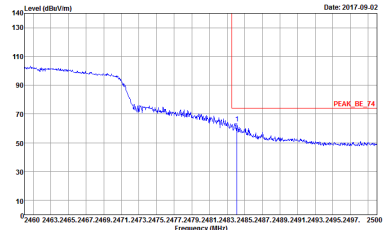
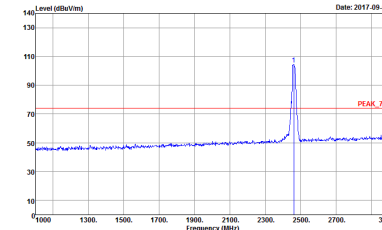
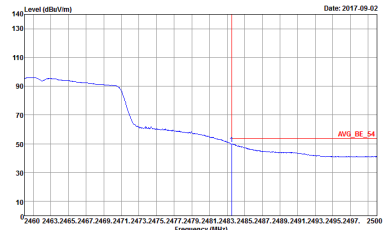
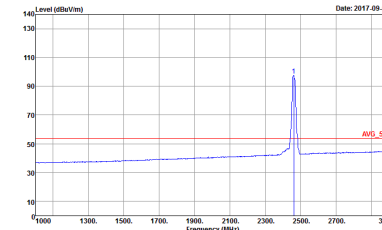
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
1	Horizontal	Fundamental
<b>Peak</b>	<p>Level (dBu/m) vs Frequency (MHz) graph. Date: 2017-09-02. The y-axis ranges from 10 to 140 dBu/m, and the x-axis ranges from 2400 to 2500 MHz. A blue line shows the signal level, which drops from ~100 dBu/m at 2400 MHz to ~50 dBu/m at 2462 MHz. A sharp peak is visible at 2462 MHz, reaching ~130 dBu/m. A red box highlights the peak area, labeled 'PEAK_BE_74'.</p> <p>Site : 03CH10-HY            Condition : PEAK_BE_74 3m HORN 91200-HF HORIZONTAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : -5</p>	<p>Level (dBu/m) vs Frequency (MHz) graph. Date: 2017-09-02. The y-axis ranges from 10 to 140 dBu/m, and the x-axis ranges from 1900 to 3000 MHz. A blue line shows the signal level, which is flat at ~50 dBu/m until 2462 MHz, where a sharp peak reaches ~130 dBu/m. A red box highlights the peak area, labeled 'PEAK_74'.</p> <p>Site : 03CH10-HY            Condition : PEAK_74 3m HORN 91200-HF HORIZONTAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : -5</p>
<b>Avg.</b>	<p>Level (dBu/m) vs Frequency (MHz) graph. Date: 2017-09-02. The y-axis ranges from 10 to 140 dBu/m, and the x-axis ranges from 2400 to 2500 MHz. A blue line shows the signal level, which drops from ~100 dBu/m at 2400 MHz to ~50 dBu/m at 2462 MHz. A sharp peak is visible at 2462 MHz, reaching ~130 dBu/m. A red box highlights the peak area, labeled 'AVG_BE_54'.</p> <p>Site : 03CH10-HY            Condition : AVG_BE_54 3m HORN 91200-HF HORIZONTAL            : RBW:1000.000KHz VBW:0.010KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : -5</p>	<p>Level (dBu/m) vs Frequency (MHz) graph. Date: 2017-09-02. The y-axis ranges from 10 to 140 dBu/m, and the x-axis ranges from 1900 to 3000 MHz. A blue line shows the signal level, which is flat at ~50 dBu/m until 2462 MHz, where a sharp peak reaches ~130 dBu/m. A red box highlights the peak area, labeled 'AVG_54'.</p> <p>Site : 03CH10-HY            Condition : AVG_54 3m HORN 91200-HF HORIZONTAL            : RBW:1000.000KHz VBW:0.010KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : -5</p>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
1	Vertical	Fundamental
Peak	 <p>Date: 2017-09-02</p> <p>Site : 03CH10-IHY            Condition : PEAK_BE_74 3m HORN 91200-HF VERTICAL            RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 5</p>	 <p>Date: 2017-09-02</p> <p>Site : 03CH10-IHY            Condition : PEAK_74 3m HORN 91200-HF VERTICAL            RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 5</p>
Avg.	 <p>Date: 2017-09-02</p> <p>Site : 03CH10-IHY            Condition : AVG_BE_54 3m HORN 91200-HF VERTICAL            RBW:1000.000KHz VBW:0.010KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 5</p>	 <p>Date: 2017-09-02</p> <p>Site : 03CH10-IHY            Condition : AVG_54 3m HORN 91200-HF VERTICAL            RBW:1000.000KHz VBW:0.010KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 5</p>



**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	
<b>1</b>	<b>Horizontal</b>	<b>Fundamental</b>
<b>Peak</b>	 <p>Level (dBu/m) vs Frequency (MHz) plot showing a peak at 2462 MHz. The y-axis ranges from 10 to 140 dBu/m, and the x-axis ranges from 2460 to 2500 MHz. A red vertical line marks the peak at 2462 MHz, with a label 'PEAK_BE_74'.</p> <p>Site : 03CH10-HY            Condition : PEAK_BE_74 3m HORN 91200-HF HORIZONTAL            RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 7</p>	 <p>Level (dBu/m) vs Frequency (MHz) plot showing a sharp peak at 2462 MHz. The y-axis ranges from 10 to 140 dBu/m, and the x-axis ranges from 2460 to 2500 MHz. A red vertical line marks the peak at 2462 MHz, with a label 'PEAK_74'.</p> <p>Site : 03CH10-HY            Condition : PEAK_74 3m HORN 91200-HF HORIZONTAL            RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 7</p>
<b>Avg.</b>	 <p>Level (dBu/m) vs Frequency (MHz) plot showing the average spectrum. The y-axis ranges from 10 to 140 dBu/m, and the x-axis ranges from 2460 to 2500 MHz. A red vertical line marks the peak at 2462 MHz, with a label 'AVG_BE_54'.</p> <p>Site : 03CH10-HY            Condition : AVG_BE_54 3m HORN 91200-HF HORIZONTAL            RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 7</p>	 <p>Level (dBu/m) vs Frequency (MHz) plot showing the average spectrum. The y-axis ranges from 10 to 140 dBu/m, and the x-axis ranges from 2460 to 2500 MHz. A red vertical line marks the peak at 2462 MHz, with a label 'AVG_54'.</p> <p>Site : 03CH10-HY            Condition : AVG_54 3m HORN 91200-HF HORIZONTAL            RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 7</p>



WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1	Vertical	Fundamental
Peak	<p>Site : 03CH10-IHY            Condition : PEAK_BE_74 3m HORN 91200-HF VERTICAL            RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 7</p>	<p>Site : 03CH10-IHY            Condition : PEAK_74 3m HORN 91200-HF VERTICAL            RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 7</p>
Avg.	<p>Site : 03CH10-IHY            Condition : AVG_BE_54 3m HORN 91200-HF VERTICAL            RBW:1000.000KHz VBW:1.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 7</p>	<p>Site : 03CH10-IHY            Condition : AVG_54 3m HORN 91200-HF VERTICAL            RBW:1000.000KHz VBW:1.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 7</p>





**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
<b>Peak</b>  <b>Avg.</b>	<p>Site : 03CH10-HY            Condition : PEAK_74 3m HORN_9170_40G_0584 HORIZONTAL            Detector : Peak            Project : 782204            Mode : 5</p>	<p>Site : 03CH10-HY            Condition : PEAK_74 3m HORN_9170_40G_0584 VERTICAL            Detector : Peak            Project : 782204            Mode : 5</p>



**2.4GHz 2400~2483.5MHz  
WIFI 802.11n HT20 (Harmonic @ 3m)**

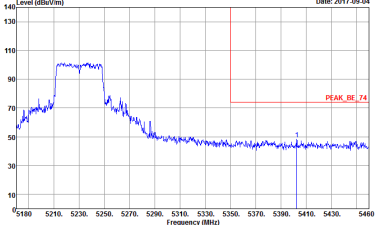
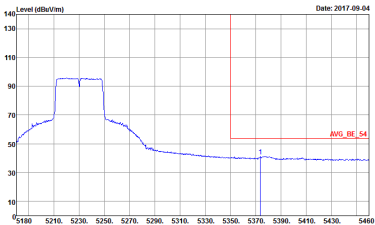
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1	Horizontal	Vertical
<b>Peak</b> <b>Avg.</b>	<p>Site : 03CH10-HY Condition : PEAK_74 3m HORN_9170_40G_0584 HORIZONTAL Detector : Peak Project : 782204 Mode : 7</p>	<p>Site : 03CH10-HY Condition : PEAK_74 3m HORN_9170_40G_0584 VERTICAL Detector : Peak Project : 782204 Mode : 7</p>



**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	
<b>1</b>	<b>Horizontal</b>	<b>Fundamental</b>
<b>Peak</b>	<p>Site : 03CH10-HY            Condition : PEAK_BE_74 3m HORN 91200-1HF HORIZONTAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 1</p>	<p>Site : 03CH10-HY            Condition : PEAK_74 3m HORN 91200-1HF HORIZONTAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 1</p>
<b>Avg.</b>	<p>Site : 03CH10-HY            Condition : AVG_BE_54 3m HORN 91200-1HF HORIZONTAL            : RBW:1000.000KHz VBW:3.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 1</p>	<b>Left blank</b>

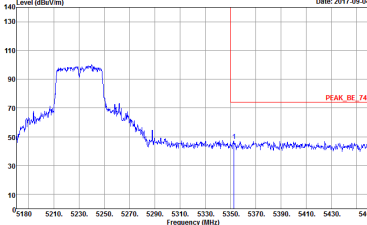
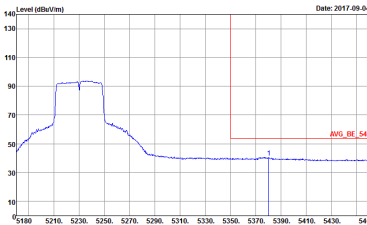


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1	Horizontal	Fundamental
<p><b>Peak</b></p>	 <p>Site : 03CH10-HY            Condition : PEAK_BE_74 3m HORN 91200-HF HORIZONTAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 1</p>	<p>Left blank</p>
<p><b>Avg.</b></p>	 <p>Site : 03CH10-HY            Condition : AVG_BE_54 3m HORN 91200-HF HORIZONTAL            : RBW:1000.000KHz VBW:3.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 1</p>	<p>Left blank</p>



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - L	
1	Vertical	Fundamental
Peak	<p>Site : 03CH10-HY            Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL            RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 1</p>	<p>Site : 03CH10-HY            Condition : PEAK_74 3m HORN 9120D-HF VERTICAL            RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 1</p>
Avg.	<p>Site : 03CH10-HY            Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL            RBW:1000.000KHz VBW:3.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 1</p>	Left blank



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1	Vertical	Fundamental
<p><b>Peak</b></p>	 <p>Site : 03CH10-HY            Condition : PEAK_BE_74 3m HORN 91200-HF VERTICAL            RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 1</p>	<p>Left blank</p>
<p><b>Avg.</b></p>	 <p>Site : 03CH10-HY            Condition : AVG_BE_54 3m HORN 91200-HF VERTICAL            RBW:1000.000KHz VBW:3.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 1</p>	<p>Left blank</p>



**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
<b>Peak</b>  <b>Avg.</b>	<p>Site : 03CH10-HY          Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL          Detector : Peak          Project : 782204          Mode : 1</p>	<p>Site : 03CH10-HY          Condition : PEAK_74 3m HORN 9120D-HF VERTICAL          Detector : Peak          Project : 782204          Mode : 1</p>



**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	
<b>1</b>	<b>Horizontal</b>	<b>Fundamental</b>
<b>Peak</b>	<p>Site : 03CH10-HY            Condition : PEAK_BE_74 3m HORN 91200-HF HORIZONTAL            : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 2</p>	<p>Site : 03CH10-HY            Condition : PEAK_74 3m HORN 91200-HF HORIZONTAL            : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 2</p>
<b>Avg.</b>	<p>Site : 03CH10-HY            Condition : AVG_BE_54 3m HORN 91200-HF HORIZONTAL            : RBW:1000.000kHz VBW:1000kHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 2</p>	<b>Left blank</b>





WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1	Vertical	Fundamental
<b>Peak</b>	<p>Site : 03CH10-HY            Condition : PEAK_BE_74 3m HORN 9120D-HF VERTICAL            RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : Z</p>	<p>Site : 03CH10-HY            Condition : PEAK_74 3m HORN 9120D-HF VERTICAL            RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : Z</p>
<b>Avg.</b>	<p>Site : 03CH10-HY            Condition : AVG_BE_54 3m HORN 9120D-HF VERTICAL            RBW:1000.000KHz VBW:1.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : Z</p>	<b>Left blank</b>



**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
<b>Peak</b>  <b>Avg.</b>	<p>           Site : 03CH10-HY            Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL            Detector : Peak            Project : 782204            Mode : 2         </p>	<p>           Site : 03CH10-HY            Condition : PEAK_74 3m HORN 9120D-HF VERTICAL            Detector : Peak            Project : 782204            Mode : 2         </p>



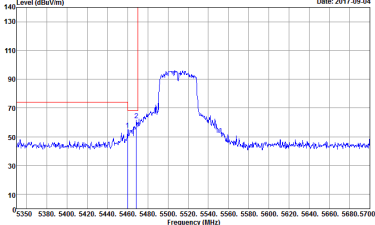
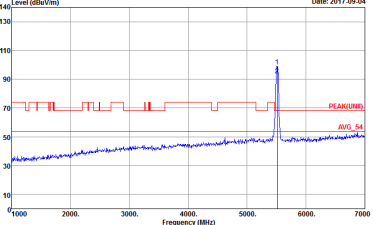
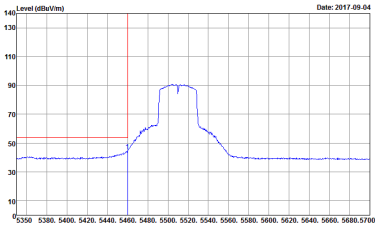
**Band 3 - 5470~5725MHz**  
**WIFI 802.11n HT40 (Band Edge @ 3m)**

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - L	
<b>1</b>	<b>Horizontal</b>	<b>Fundamental</b>
<b>Peak</b>	<p>Site : 03CH10-HY            Condition : PEAK_BE(UNIT)_83 3m HORN 9120D-HF HORIZONTAL            RBW:1000.000KHz VSW:3000.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 3</p>	<p>Site : 03CH10-HY            Condition : PEAK(UNIT) 3m HORN 9120D-HF HORIZONTAL            RBW:1000.000KHz VSW:3000.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 3</p>
<b>Avg.</b>	<p>Site : 03CH10-HY            Condition : AVG_BE(UNIT)_83 3m HORN 9120D-HF HORIZONTAL            RBW:1000.000KHz VSW:3.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 3</p>	<b>Left blank</b>



WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - R	
1	Horizontal	Fundamental
<b>Peak</b>	<p>Site : 03CH10-HY  Condition : PEAK_BE(UNIT1)_B3 3m HORN 9120D-HF HORIZONTAL  ResBW: 1000.000KHz VBW: 3000.000KHz SWT: Auto  Detector : Peak  Project : 782204  Mode : 3</p>	Left blank
<b>Avg.</b>	Left blank	Left blank



WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - L	
1	Vertical	Fundamental
<p><b>Peak</b></p>	 <p>Date: 2017-09-04</p> <p>Site : 03CH10-HY            Condition : PEAK_BE(UNIT1)_B3 3m HORN 9120D-HF VERTICAL            RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 3</p>	 <p>Date: 2017-09-04</p> <p>Site : 03CH10-HY            Condition : PEAK(UNIT1) 3m HORN 9120D-HF VERTICAL            RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 3</p>
<p><b>Avg.</b></p>	 <p>Date: 2017-09-04</p> <p>Site : 03CH10-HY            Condition : AVG_BE(UNIT1)_B3 3m HORN 9120D-HF VERTICAL            RBW:1000.000KHz VBW:3.000KHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 3</p>	<p><b>Left blank</b></p>



WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - R	
1	Vertical	Fundamental
Peak	<p>Site : 03CH10-HY            Condition : PEAK_BE(UNIT)_B3 3m HORN 91200-HF VERTICAL            Detector : Peak            Project : 782204            Mode : 3</p>	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
<b>Peak</b>  <b>Avg.</b>	<p>Site : 03CH10-HY          Condition : PEAK(UNIT) 3m HORN 9120D-HF HORIZONTAL          Detector : Peak          Project : 782204          Mode : 3</p>	<p>Site : 03CH10-HY          Condition : PEAK(UNIT) 3m HORN 9120D-HF VERTICAL          Detector : Peak          Project : 782204          Mode : 3</p>



**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	
<b>1</b>	<b>Horizontal</b>	<b>Fundamental</b>
<b>Peak</b>	<p>Site : 03CH10-HY            Condition : PEAK_BE(B4)_16-24 3m HORN 91200-HF HORIZONTAL            RBW:1000.000kHz VBW:3000.000kHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 5</p>	<p>Site : 03CH10-HY            Condition : PEAK(UNIT) 3m HORN 91200-HF HORIZONTAL            RBW:1000.000kHz VBW:3000.000kHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 5</p>
<b>Peak</b>	<p>Site : 03CH10-HY            Condition : PEAK_BE(B4)_16-24 3m HORN 91200-HF HORIZONTAL            RBW:1000.000kHz VBW:3000.000kHz SWT:Auto            Detector : Peak            Project : 782204            Mode : 5</p>	<b>Left blank</b>





WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
1	Vertical	Fundamental
<p><b>Peak</b></p>	<p>Site : 03CH10-HY            Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF VERTICAL            Detector : Peak            Project : 782204            Mode : 5</p>	<p>Site : 03CH10-HY            Condition : PEAK(UNIT) 3m HORN 9120D-HF VERTICAL            Detector : Peak            Project : 782204            Mode : 5</p>
<p><b>Peak</b></p>	<p>Site : 03CH10-HY            Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF VERTICAL            Detector : Peak            Project : 782204            Mode : 5</p>	<p><b>Left blank</b></p>

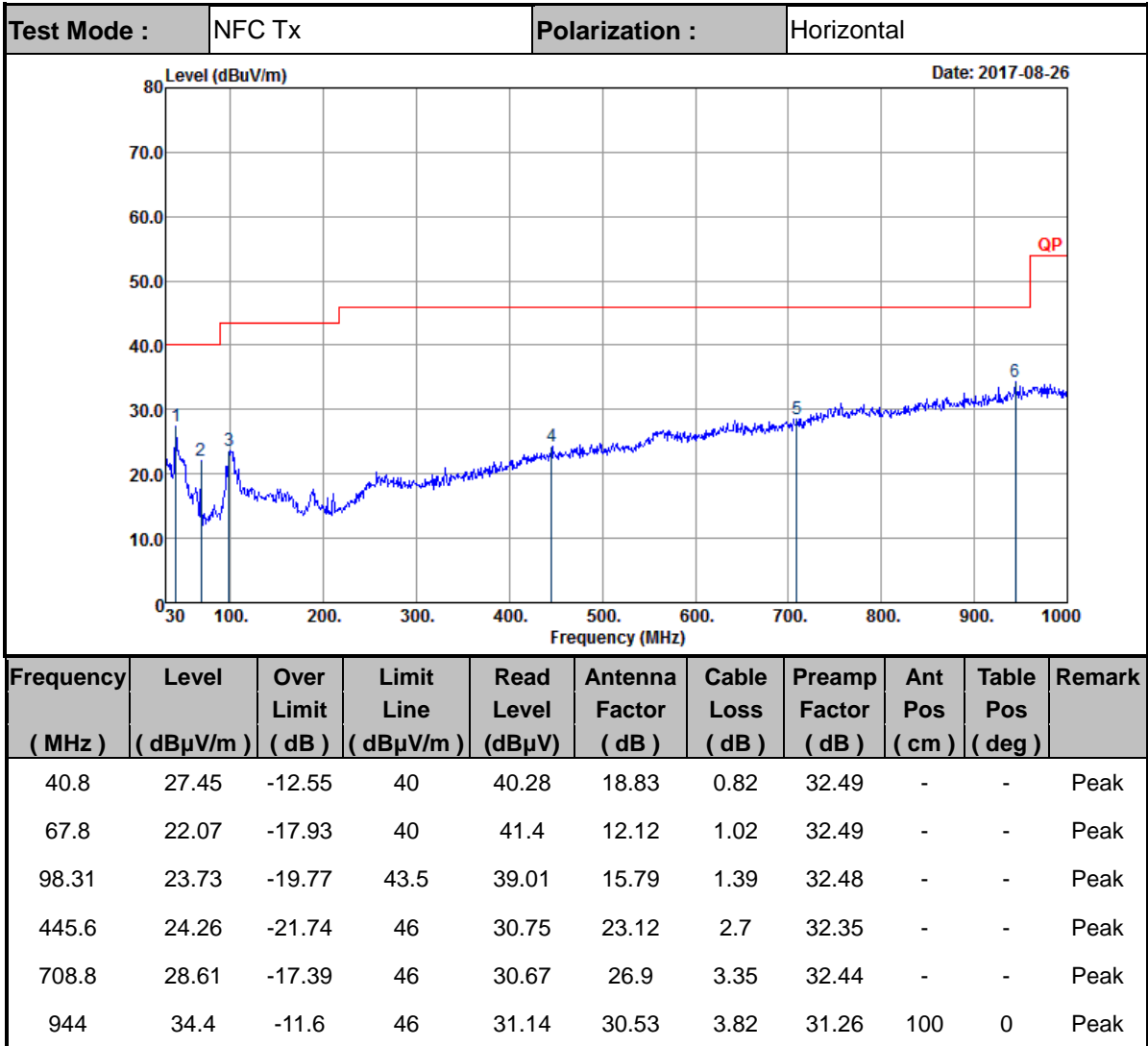


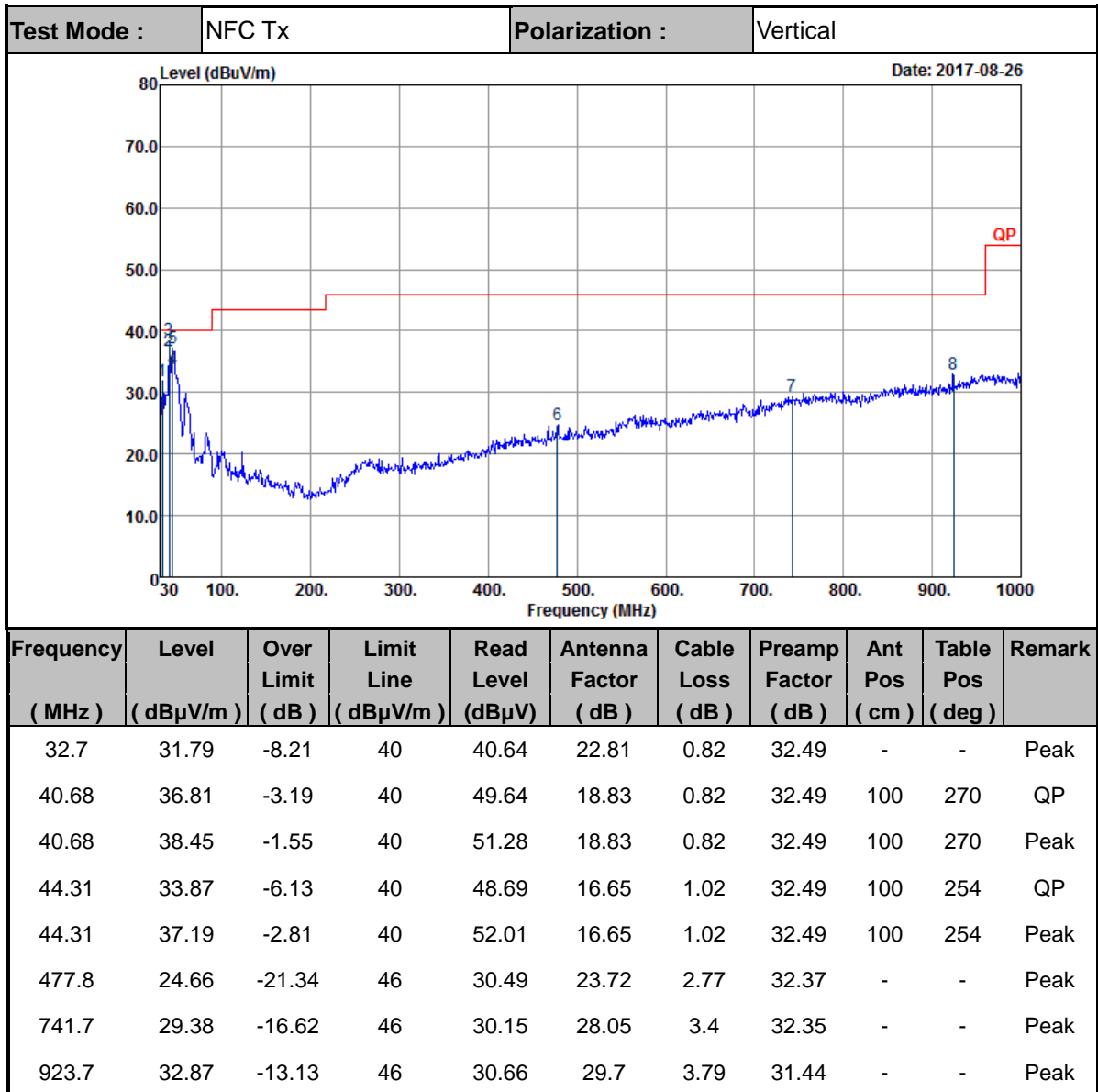
**Band 4 - 5725~5850MHz  
WIFI 802.11n HT20 (Harmonic @ 3m)**

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



Results of Radiated Emissions (30MHz~1GHz)





**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