



Spot Check Evaluation

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1. Introduction Section

The original model (FCC ID: PY7-84773W) and the variant model (FCC ID: PY7-33681M) 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 PY7-33681M references the test data of PY7-84773W

The applicant takes full responsibility that the test data as referenced in this report represent compliance for this FCC ID (FCC ID: PY7-33681M).



2. Difference Section

The original model (FCC ID: PY7-84773W) and the variant model (FCC ID: PY7-33681M) 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 PY7-33681M, to support capability for different cellular bands.

The product specification is outlined in the following table:

FCC ID		PY7-84773W	PY7-33681M
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	B5/B7/B41
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	PY7-84773W Worst Result	PY7-33681M Worst Result	Difference (dB)
Average Conducted Power (dBm)	802.11b	16.41	16.49	-0.08
	802.11g	14.81	15.00	-0.19
	11n HT20	13.89	13.75	0.14
	BT (1Mbps)	6.34	6.36	-0.02
	BT (2Mbps)	4.27	4.40	-0.13
	BT (3Mbps)	4.18	4.39	-0.21
	BT-LE	-0.29	-0.75	0.46
	11a, 5.2GHz	14.87	14.99	-0.12
	11n HT20, 5.2GHz	14.99	14.98	0.01
	11n HT40, 5.2GHz	12.44	12.46	-0.02
	11a, 5.3GHz	14.99	14.64	0.35
	11n HT20, 5.3GHz	14.90	14.85	0.05
	11n HT40, 5.3GHz	12.38	12.37	0.01
	11a, 5.5GHz	14.96	14.98	-0.02
	11n HT20, 5.5GHz	14.99	14.93	0.06
	11n HT40, 5.5GHz	12.48	12.47	0.01
	11a, 5.8GHz	14.98	14.81	0.17
	11n HT20, 5.8GHz	14.82	14.80	0.02
	11n HT40, 5.8GHz	11.44	11.48	-0.04
	S/N of test sample	RQ3002HXPA RQ3002J3KX	RQ3002H6B5 RQ3002JHUB	
Test date	2016/10/6 – 2016/11/28	2016/10/6 – 2016/11/25		
Peak Radiated Spurious Emission (Band Edge) (dBuV/m)	802.11b	57.13	55.90	1.23
	802.11g	66.00	65.33	0.67
	BT (3Mbps)	51.99	50.73	1.26
	BT-LE	54.35	56.70	-2.35
	11n HT40, 5.2GHz	60.08	60.27	-0.19
	11n HT40, 5.3GHz	63.27	61.51	1.76
	11n HT20, 5.5GHz	66.53	64.03	2.5
	11a, 5.8GHz	61.36	61.41	-0.05
	S/N of test sample	RQ3002HWLU RQ3002J3KX	RQ3002H6B5 RQ3002JHUB	
	Test date	2016/10/6~2016/11/28	2016/10/15~2016/11/28	
Average Radiated Spurious Emission (Band Edge) (dBuV/m)	802.11b	45.39	44.24	1.15
	802.11g	50.26	48.04	2.22
	BT (3Mbps)	27.21	25.95	1.26
	BT-LE	43.64	45.75	-2.11
	11n HT40, 5.2GHz	50.65	49.48	1.17
	11n HT40, 5.3GHz	51.00	50.35	0.65
	11n HT20, 5.5GHz	50.69	50.83	-0.14
	S/N of test sample	RQ3002HWLU RQ3002J3KX	RQ3002H6B5 RQ3002JHUB	
Test date	2016/10/6~2016/11/28	2016/10/15 ~2016/11/28		



Peak Radiated Spurious Emission (Harmonic) (dBuV/m)	802.11b	46.54	46.99	-0.45
	802.11g	42.82	44.79	-1.97
	BT (3Mbps)	42.23	42.16	0.07
	BT-LE	44.02	44.07	-0.05
	11n HT40, 5.2GHz	46.48	46.38	0.1
	11n HT40, 5.3GHz	47.06	47.61	-0.55
	11n HT20, 5.5GHz	56.76	56.12	0.64
	11a, 5.8GHz	53.55	51.61	1.94
	S/N of test sample	RQ3002HWLU RQ3002J3KX	RQ3002H6B5 RQ3002JHUB	
Test date	2016/10/6~2016/11/28	2016/10/15~2016/11/28		
Average Radiated Spurious Emission (Harmonic) (dBuV/m)	11n HT20, 5.5GHz	41.35	41.45	-0.1
	S/N of test sample	RQ3002HWLU	RQ3002JHUB	
	Test date	2016/10/8	2016/11/24	
NFC (dBuV/m)	RSE (9kHz to 30MHz)	41.11	39.06	2.05
	S/N of test sample	RQ3002HXP8	RQ3002H6B5	
	Test date	2016/11/8~2016/11/11	2016/11/09~2016/11/11	

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-HT20 5.5GHz (CH140).

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



4. Reference detail Section

Rule Part	Equipment Class	Wireless Technology	Frequency Band (MHz)	Reference FCC ID	Type Grant/Permissive Change	Reference Report Title	Reference Application	Reference Report Sections
15C	DTS	Bluetooth – LE Wii-Fi	2400~2483.5	PY7-84773W	Original Grant	FCC RF Test Report	PY7-33681M	Part 15C (FR692208-01B, FR692208-01C)
	DSS	Bluetooth	2400~2483.5	PY7-84773W	Original Grant	FCC RF Test Report	PY7-33681M	Part 15C (FR692208-01A)
	DXX	NFC	13.56	PY7-84773W	Original Grant	FCC RF Test Report	PY7-33681M	Part 15C (FR692208-01D)
15E	NII	Wi-Fi	5150~5250 5250~5350 5470~5725 5725~5850	PY7-84773W	Original Grant	FCC RF Test Report	PY7-33681M	Part 15E (FR692208-01E, FR692208-01F, FZ692208-01)



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 PY7-84773W	FCC ID PY7-33681M
						Average power (dBm)	Average power (dBm)
	802.11b	CH 1	2412	1Mbps	16.5	16.36	16.49
		CH 6	2437			16.41	16.35
		CH 11	2462			16.27	16.20
	802.11g	CH 1	2412	6Mbps	14.0	13.88	13.87
		CH 6	2437		15.0	14.63	14.94
		CH 11	2462		14.81	15.00	
	802.11n-HT20	CH 1	2412	MCS0	13.5	13.04	13.39
		CH 6	2437			13.42	13.48
		CH 11	2462			14.0	13.89

<Bluetooth>

Mode	Channel	Frequency (MHz)	Tune-Up Limit	FCC ID PY7-84773W Average power (dBm)	FCC ID PY7-33681M Average power (dBm)
Bluetooth (1Mbps)	CH 00	2402	6.75	5.74	5.69
	CH 39	2441		6.34	6.36
	CH 78	2480		4.59	5.62
Bluetooth (2Mbps)	CH 00	2402	6.75	3.34	3.34
	CH 39	2441		4.27	4.40
	CH 78	2480		2.19	3.33
Bluetooth (3Mbps)	CH 00	2402	6.75	3.31	3.35
	CH 39	2441		4.18	4.39
	CH 78	2480		2.11	3.32
BLE (GFSK)	CH 00	2402	0.0	-1.98	-2.32
	CH 19	2440		-0.29	-0.75
	CH 39	2480		-1.93	-2.47



<5GHz WLAN>

5.2GHz WLAN	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-84773W Average power (dBm)	FCC ID PY7-33681M Average power (dBm)	
	802.11a	CH 36	5180	6Mbps	15.0	14.87	14.99	
CH 44						5220	14.85	14.70
CH 48						5240	14.84	14.98
802.11n-HT20	CH 36	5180	MCS0	15.0	14.99	14.68		
					CH 44	5220	14.90	14.98
					CH 48	5240	14.89	14.74
802.11n-HT40	CH 38	5190	MCS0	12.5	12.44	12.46		
					CH 46	5230	12.42	12.03

5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-84773W Average power (dBm)	FCC ID PY7-33681M Average power (dBm)	
	802.11a	CH 52	5260	6Mbps	15.0	14.99	14.52	
CH 60						5300	14.80	14.64
CH 64						5320	14.76	14.50
802.11n-HT20	CH 52	5260	MCS0	15.0	14.90	14.85		
					CH 60	5300	14.84	14.52
					CH 64	5320	14.81	14.68
802.11n-HT40	CH 54	5270	MCS0	12.5	12.38	12.16		
					CH 62	5310	12.34	12.37

5.5GHz WLAN	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-84773W Average power (dBm)	FCC ID PY7-33681M Average power (dBm)	
	802.11a	CH 100	5500	6Mbps	15.0	14.95	14.93	
CH 116						5580	14.96	14.56
CH 140						5700	14.82	14.98
802.11n-HT20	CH 100	5500	MCS0	15.0	14.99	14.57		
					CH 116	5580	14.97	14.67
					CH 140	5700	14.83	14.93
802.11n-HT40	CH 102	5510	MCS0	12.5	12.48	12.47		
					CH 126	5630	12.43	12.44
					CH 134	5670	12.29	12.36



5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-84773W	FCC ID PY7-33681M
						Average power (dBm)	Average power (dBm)
802.11a	802.11a	CH 149	5745	MCS0	15.0	14.98	14.78
		CH 157	5785			14.91	14.64
		CH 165	5825			14.90	14.81
802.11n-HT20	802.11n-HT20	CH 149	5745	MCS0	15.0	14.82	14.80
		CH 157	5785			14.80	14.59
		CH 165	5825		14.5	14.37	14.49
802.11n-HT40	802.11n-HT40	CH 151	5755	MCS0	11.5	11.44	11.48
		CH 159	5795			11.41	11.38



1.2 Radiated Spurious Emission

2.4GHz BT/WLAN

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PY7-84773W						FCC ID PY7-33681M					
				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 39	2441	P	2486.77	51.99	74	7323	42.23	74	2378.6	50.73
			A	2486.77	27.21	54	X	X	X	2378.6	25.95	54	X	X	X
BLE	CH 19	2440	P	2352.14	54.35	74	7320	44.02	74	2497.2	56.7	74	7320	44.07;	74
			A	2494.47	43.64	54	X	X	X	2490.83	45.75	54	X	X	X
802.11b	CH 1	2412	P	2354.205	57.13	74	4824	46.54	74	2383.815	55.9	74	4824	46.99	74
			A	2390	45.39	54	X	X	X	2390	44.24	54	X	X	X
802.11g	CH 1	2412	P	2389.8	66	74	4824	42.82	74	2389.905	65.33	74	4824	44.79	74
			A	2389.905	50.26	54	X	X	X	2390	48.04	54	X	X	X

5.2GHz WLAN

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PY7-84773W						FCC ID PY7-33681M					
				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 38	5190	P	5147.94	60.08	74	10380	46.48	74	5411.52	60.27
			A	5150	50.65	54	X	X	X	5149.24	49.48	54	X	X	X



5.3GHz WLAN

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PY7-84773W						FCC ID PY7-33681M					
				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 62	5310	P	5352.72	63.27	74	10620	47.06	74	5353.2	61.51	74	15930	47.61	74
			A	5350.08	51	54	X	X	X	5350.08	50.35	54	X	X	X

5.5GHz WLAN

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PY7-84773W						FCC ID PY7-33681M					
				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 140	5700	P	5727.64	66.53	74	17100	56.76	74	5725.32	64.03	74	17100	56.12	74
			A	5725	50.69	54	17100	41.35	54	5725.16	50.83	54	17100	41.45	54

5.8GHz WLAN

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PY7-84773W						FCC ID PY7-33681M					
				Band edge			Harmonic			Band edge			Harmonic		
				Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)
802.11a	CH 157	5785	P	5946.6	61.36	68.2	17355	53.55	68.2	5933.4	61.41	68.3	17355	51.61	68.3
			-	X	X	X	X	X	X	X	X	X	X	X	X



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 19 2440MHz		2386.86	56.04	-17.96	74	53.02	27.06	7.45	31.49	144	311	P	H
		2384.9	45.44	-8.56	54	42.43	27.05	7.45	31.49	144	311	A	H
	*	2440	94.81	-	-	91.58	27.22	7.49	31.48	144	311	P	H
	*	2440	93.67	-	-	90.44	27.22	7.49	31.48	144	311	A	H
		2497.2	56.7	-17.3	74	53.24	27.39	7.53	31.46	144	311	P	H
		2490.83	45.75	-8.25	54	42.32	27.37	7.53	31.47	144	311	A	H
		2342.34	55.86	-18.14	74	53.06	26.93	7.37	31.5	380	126	P	V
		2357.32	45.51	-8.49	54	42.67	26.97	7.37	31.5	380	126	A	V
	*	2440	90.77	-	-	87.54	27.22	7.49	31.48	380	126	P	V
	*	2440	89.7	-	-	86.47	27.22	7.49	31.48	380	126	A	V
		2488.94	56.24	-17.76	74	52.81	27.37	7.53	31.47	380	126	P	V
		2486.07	45.54	-8.46	54	42.12	27.36	7.53	31.47	380	126	A	V

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 19 2440MHz		4880	38.9	-35.1	74	53.83	32.28	10.89	58.1	100	0	P	H
		7320	43.52	-30.48	74	51.44	37	14.18	59.1	100	0	P	H
		4880	38.91	-35.09	74	53.84	32.28	10.89	58.1	100	0	P	V
		7320	44.07	-29.93	74	51.99	37	14.18	59.1	100	0	P	V

Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												
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2.4GHz 2400~2483.5MHz

BT(3M) (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 39 2441MHz		2378.6	50.73	-23.27	74	47.84	27.01	7.37	31.49	392	156	P	H
		2378.6	25.95	-28.05	54	-	-	-	-	-	-	A	H
	*	2441	99.97	-	-	96.77	27.18	7.49	31.47	392	156	P	H
	*	2441	75.19	-	-	-	-	-	-	-	-	A	H
		2492.16	50.5	-23.5	74	47.13	27.3	7.53	31.46	392	156	P	H
		2492.16	25.72	-28.28	54	-	-	-	-	-	-	A	H
		2327.92	50.41	-23.59	74	47.73	26.89	7.3	31.51	383	102	P	V
		2327.92	25.63	-28.37	54	-	-	-	-	-	-	A	V
	*	2441	98.07	-	-	94.87	27.18	7.49	31.47	383	102	P	V
	*	2441	73.29	-	-	-	-	-	-	-	-	A	V
		2488.31	50.45	-23.55	74	47.09	27.3	7.53	31.47	383	102	P	V
		2488.31	25.67	-28.33	54	-	-	-	-	-	-	A	V

BT(3M) (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 39 2441MHz		4884	37.5	-36.5	74	53.38	31.33	10.89	58.1	100	0	P	H
		4884	12.72	-41.28	54	-	-	-	-	-	-	A	H
		7320	42.16	-31.84	74	50.96	36.12	14.18	59.1	100	0	P	H
		7320	17.38	-36.62	54	-	-	-	-	-	-	A	H
		4882	37.67	-36.33	74	53.55	31.33	10.89	58.1	100	0	P	V
		4882	12.89	-41.11	54	-	-	-	-	-	-	A	V
		7320	41.9	-32.1	74	50.7	36.12	14.18	59.1	100	0	P	V
		7320	17.12	-36.88	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 01 2412MHz		2383.815	55.9	-18.1	74	52.89	27.05	7.45	31.49	302	223	P	H
		2390	43.88	-10.12	54	40.85	27.07	7.45	31.49	302	223	A	H
	*	2412	101.66	-	-	98.56	27.14	7.45	31.49	302	223	P	H
	*	2412	96.94	-	-	93.84	27.14	7.45	31.49	302	223	A	H
		2345.175	55.73	-18.27	74	52.92	26.94	7.37	31.5	290	256	P	V
		2390	44.24	-9.76	54	41.21	27.07	7.45	31.49	290	256	A	V
	*	2412	105.36	-	-	102.26	27.14	7.45	31.49	290	256	P	V
	*	2412	100.7	-	-	97.6	27.14	7.45	31.49	290	256	A	V

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 01 2412MHz		4824	45.96	-28.04	74	61.18	32.18	10.74	58.14	100	0	P	H
		4824	46.99	-27.01	74	62.21	32.18	10.74	58.14	100	0	P	V

Remark	1.	No other spurious found.											
	2.	All results are PASS against Peak and Average limit line.											



2.4GHz 2400~2483.5MHz

WIFI 802.11g (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)
802.11g CH 01 2412MHz		2348.745	57.09	-16.91	74	54.27	26.95	7.37	31.5	348	175	P	H
		2390	45.9	-8.1	54	42.87	27.07	7.45	31.49	348	175	A	H
	*	2412	99.39	-	-	96.29	27.14	7.45	31.49	348	175	P	H
	*	2412	90.1	-	-	87	27.14	7.45	31.49	348	175	A	H
		2389.905	65.33	-8.67	74	62.3	27.07	7.45	31.49	290	255	P	V
		2390	48.04	-5.96	54	45.01	27.07	7.45	31.49	290	255	A	V
	*	2412	105.12	-	-	102.02	27.14	7.45	31.49	290	255	P	V
	*	2412	95.3	-	-	92.2	27.14	7.45	31.49	290	255	A	V

WIFI 802.11g (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)
802.11g CH 01 2412MHz		4824	43.77	-30.23	74	58.99	32.18	10.74	58.14	100	0	P	H
		4824	44.79	-29.21	74	60.01	32.18	10.74	58.14	100	0	P	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 38 5190MHz		5149.24	60.01	-13.99	74	48.1	31.65	11.21	30.95	100	310	P	H
		5149.24	49.48	-4.52	54	37.57	31.65	11.21	30.95	100	310	A	H
	*	5190	98.94	-	-	87.03	31.68	11.18	30.95	100	310	P	H
	*	5190	88.13	-	-	76.22	31.68	11.18	30.95	100	310	A	H
		5411.52	60.27	-13.73	74	47.7	31.92	11.6	30.95	100	310	P	H
		5410.56	48.86	-5.14	54	36.31	31.9	11.6	30.95	100	310	A	H
		5149.5	58.55	-15.45	74	46.64	31.65	11.21	30.95	100	294	P	V
		5147.42	48.86	-5.14	54	36.95	31.65	11.21	30.95	100	294	A	V
	*	5190	97.24	-	-	85.33	31.68	11.18	30.95	100	294	P	V
	*	5190	86.29	-	-	74.38	31.68	11.18	30.95	100	294	A	V
		5426.16	59.37	-14.63	74	46.76	31.92	11.64	30.95	100	294	P	V
		5448	48.92	-5.08	54	36.28	31.95	11.64	30.95	100	294	A	V

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 38 5190MHz		10380	46.38	-27.62	74	47.07	39.61	17.13	57.43	100	0	P	H
		15570	45.92	-28.08	74	44.52	38.22	21.64	58.46	100	0	P	H
		10380	46.17	-27.83	74	46.86	39.61	17.13	57.43	100	0	P	V
		15570	45.81	-28.19	74	44.41	38.22	21.64	58.46	100	0	P	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 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 62 5310MHz		5023.14	58.43	-15.57	74	46.54	31.53	11.31	30.95	320	332	P	H
		5046.02	48.16	-5.84	54	36.25	31.55	11.31	30.95	320	332	A	H
	*	5310	99.77	-	-	87.47	31.82	11.43	30.95	320	332	P	H
	*	5310	88.7	-	-	76.4	31.82	11.43	30.95	320	332	A	H
		5353.2	61.51	-12.49	74	49.09	31.85	11.52	30.95	320	332	P	H
		5350.08	50.35	-3.65	54	37.93	31.85	11.52	30.95	320	332	A	H
		5107.64	59.1	-14.9	74	47.19	31.62	11.24	30.95	130	350	P	V
		5104	48.27	-5.73	54	36.38	31.6	11.24	30.95	130	350	A	V
	*	5310	95.57	-	-	83.27	31.82	11.43	30.95	130	350	P	V
	*	5310	86.54	-	-	74.24	31.82	11.43	30.95	130	350	A	V
		5415.6	59.09	-14.91	74	46.52	31.92	11.6	30.95	130	350	P	V
		5351.52	49.09	-4.91	54	36.67	31.85	11.52	30.95	130	350	A	V

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 62 5310MHz		10620	46.5	-27.5	74	46.34	39.94	17.4	57.18	100	0	P	H
		15930	47.61	-26.39	74	45.66	37.78	21.91	57.74	100	0	P	H
		10620	47.15	-26.85	74	46.99	39.94	17.4	57.18	100	0	P	V
		15930	45.77	-28.23	74	43.82	37.78	21.91	57.74	100	0	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 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 140 5700MHz	*	5700	108.22	-	-	94.45	32.96	11.82	31.01	181	319	P	H
	*	5700	97.1	-	-	83.33	32.96	11.82	31.01	181	319	A	H
		5725.32	64.03	-9.97	74	50.18	33.03	11.84	31.02	181	319	P	H
		5725.16	50.83	-3.17	54	36.98	33.03	11.84	31.02	181	319	A	H
	*	5700	102.45	-	-	88.68	32.96	11.82	31.01	207	167	P	V
	*	5700	91.71	-	-	77.94	32.96	11.82	31.01	207	167	A	V
		5733.4	61.48	-12.52	74	47.62	33.05	11.84	31.03	207	167	P	V
		5725	49.7	-4.3	54	35.85	33.03	11.84	31.02	207	167	A	V

Band 3 - 5470~5725MHz

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 140 5700MHz		11400	47.87	-26.13	74	47.02	40.2	18.31	57.66	100	0	P	H
		17100	56.12	-17.88	74	48.17	41.62	22.99	56.66	169	49	P	H
		17100	41.45	-12.55	54	33.5	41.62	22.99	56.66	169	49	A	H
		11400	47.31	-26.69	74	46.46	40.2	18.31	57.66	100	0	P	V
		17100	55.82	-18.18	74	47.87	41.62	22.99	56.66	382	156	P	V
		17100	41.32	-12.68	54	33.37	41.62	22.99	56.66	382	156	A	V

Remark	1. No other spurious found.												
	2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 157 5785MHz		5633.8	60.12	-8.08	68.2	46.56	32.77	11.79	31	171	320	P	H
		5669.2	60.67	-21.78	82.45	46.99	32.87	11.82	31.01	171	320	P	H
		5712.4	61.44	-47.23	108.67	47.63	32.99	11.84	31.02	171	320	P	H
		5724.8	60.01	-61.73	121.74	46.16	33.03	11.84	31.02	171	320	P	H
	*	5785	105.7	-	-	91.67	33.2	11.88	31.05	171	320	P	H
	*	5785	96.66	-	-	82.63	33.2	11.88	31.05	171	320	A	H
		5855	60.38	-50.42	110.8	46.02	33.39	12.03	31.06	171	320	P	H
		5864.4	61.66	-46.51	108.17	47.14	33.42	12.17	31.07	171	320	P	H
		5913	61.84	-15.21	77.05	47.06	33.56	12.31	31.09	171	320	P	H
		5942.2	61.04	-7.16	68.2	46.04	33.64	12.45	31.09	171	320	P	H
		5601	60.52	-7.68	68.2	47.05	32.68	11.77	30.98	179	144	P	V
		5672.8	61.05	-24.06	85.11	47.36	32.88	11.82	31.01	179	144	P	V
		5709.6	60.35	-47.54	107.89	46.54	32.99	11.84	31.02	179	144	P	V
		5724.6	59.8	-61.49	121.29	45.95	33.03	11.84	31.02	179	144	P	V
	*	5785	103.54	-	-	89.51	33.2	11.88	31.05	179	144	P	V
	*	5785	92.61	-	-	78.58	33.2	11.88	31.05	179	144	A	V
		5853.6	59.68	-54.31	113.99	45.32	33.39	12.03	31.06	179	144	P	V
		5867.8	61.17	-46.04	107.21	46.64	33.43	12.17	31.07	179	144	P	V
		5898	61.67	-26.47	88.14	47.07	33.51	12.17	31.08	179	144	P	V
		5933.4	61.41	-6.79	68.2	46.58	33.61	12.31	31.09	179	144	P	V



Band 4 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 157 5785MHz		11570	46.9	-27.1	74	46.15	40.06	18.49	57.8	100	0	P	H
		17355	51.61	-16.59	68.2	43.74	42.18	23.25	57.56	100	0	P	H
		11570	46.46	-27.54	74	45.71	40.06	18.49	57.8	100	0	P	V
		17355	49.83	-18.37	68.2	41.96	42.18	23.25	57.56	100	0	P	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	Peak or Average
H/V	Horizontal or Vertical
-L	Low channel location
-R	High channel location



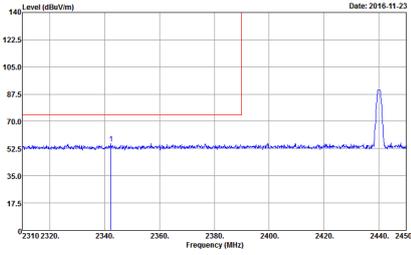
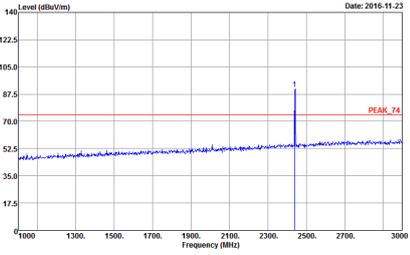
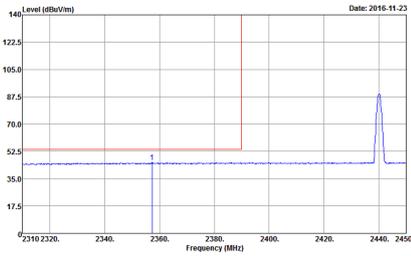
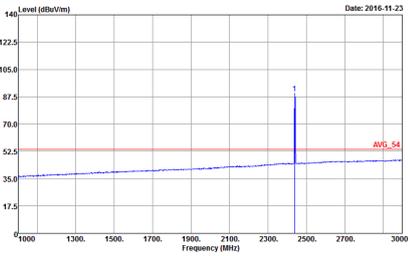
2.4GHz 2400~2483.5MHz
BLE (Band Edge @ 3m)

BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BLE CH19 2440MHz - L	
1	Horizontal	Fundamental
Peak	<p>Date: 2016-11-23</p> <p>Site Condition : 03CH12-HY : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL</p>	<p>Date: 2016-11-23</p> <p>Site Condition : 03CH12-HY : PEAK_74 3m HORN_9120D_1328 HORIZONTAL</p>
Avg.	<p>Date: 2016-11-23</p> <p>Site Condition : 03CH12-HY : AVG_BE_54 3m HORN_9120D_1328 HORIZONTAL</p>	<p>Date: 2016-11-23</p> <p>Site Condition : 03CH12-HY : AVG_54 3m HORN_9120D_1328 HORIZONTAL</p>

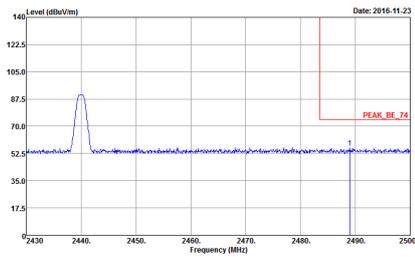
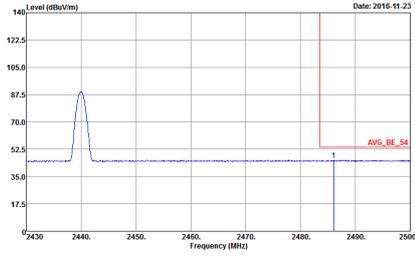


BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BLE CH19 2440MHz - R	
1	Horizontal	Fundamental
<p>Peak</p>		<p>Left blank</p>
<p>Avg.</p>		<p>Left blank</p>



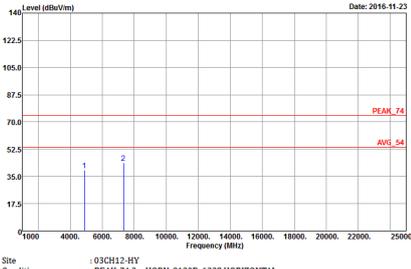
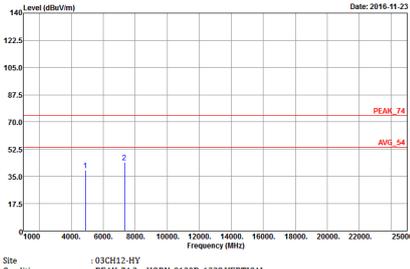
BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BLE CH19 2440MHz - L	
1	Vertical	Fundamental
Peak	 <p>Date: 2016-11-23</p> <p>Site Condition : 03CH12-HY : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL</p>	 <p>Date: 2016-11-23</p> <p>Site Condition : 03CH12-HY : PEAK_74 3m HORN_9120D_1328 VERTICAL</p>
Avg.	 <p>Date: 2016-11-23</p> <p>Site Condition : 03CH12-HY : AVG_BE_54 3m HORN_9120D_1328 VERTICAL</p>	 <p>Date: 2016-11-23</p> <p>Site Condition : 03CH12-HY : AVG_54 3m HORN_9120D_1328 VERTICAL</p>



BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BLE CH19 2440MHz - R	
1	Vertical	Fundamental
<p>Peak</p>	 <p>Site Condition : 03CH12-HY : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL</p>	<p>Left blank</p>
<p>Avg.</p>	 <p>Site Condition : 03CH12-HY : AVG_BE_54 3m HORN_9120D_1328 VERTICAL</p>	<p>Left blank</p>



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

BLE	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	BLE CH19 2440MHz	
1	Horizontal	Vertical
<p>Peak Avg.</p>	 <p>Date: 2016-11-23</p> <p>Site Condition : 03CH12-HY : PEAK_74 3m HORN_9120D_1328 HORIZONTAL</p>	 <p>Date: 2016-11-23</p> <p>Site Condition : 03CH12-HY : PEAK_74 3m HORN_9120D_1328 VERTICAL</p>



2.4GHz 2400~2483.5MHz
BT(3M) (Band Edge @ 3m)

BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BT CH39 2441MHz	
1	Horizontal	Fundamental
Peak	<p>Site Condition : 03CH12-HY : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL</p>	<p>Site Condition : 03CH12-HY : PEAK_74 3m HORN_9120D_1328 HORIZONTAL</p>
Peak	<p>Site Condition : 03CH12-HY : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL</p>	Left blank



BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BT CH39 2441MHz	
1	Vertical	Fundamental
<p>Peak</p>	<p>Date: 2016-10-18</p> <p>Site Condition : 03CH12-HY : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL</p>	<p>Date: 2016-10-18</p> <p>Site Condition : 03CH12-HY : PEAK_74 3m HORN_9120D_1328 VERTICAL</p>
<p>Peak</p>	<p>Date: 2016-10-18</p> <p>Site Condition : 03CH12-HY : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL</p>	<p>Left blank</p>



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

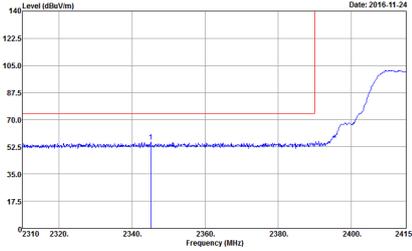
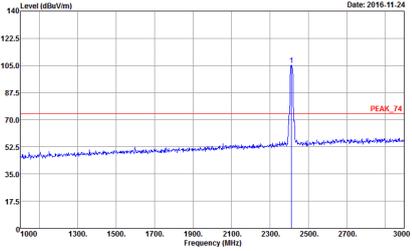
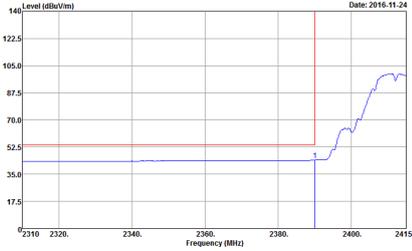
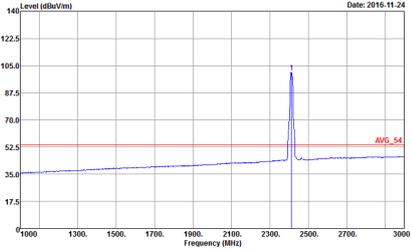
BT	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	BT CH39 2441MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site Condition : 03CH12-HY : PEAK_74 3m HORN_9120D_1328 HORIZONTAL</p>	<p>Site Condition : 03CH12-HY : PEAK_74 3m HORN_9120D_1328 VERTICAL</p>



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

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
1	Horizontal	Fundamental
Peak	<p>Date: 2016-11-24</p> <p>Site Condition : 03CH12-HY : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL</p>	<p>Date: 2016-11-24</p> <p>Site Condition : 03CH12-HY : PEAK_74 3m HORN_9120D_1328 HORIZONTAL</p>
Avg.	<p>Date: 2016-11-24</p> <p>Site Condition : 03CH12-HY : AVG_BE_54 3m HORN_9120D_1328 HORIZONTAL</p>	<p>Date: 2016-11-24</p> <p>Site Condition : 03CH12-HY : AVG_54 3m HORN_9120D_1328 HORIZONTAL</p>



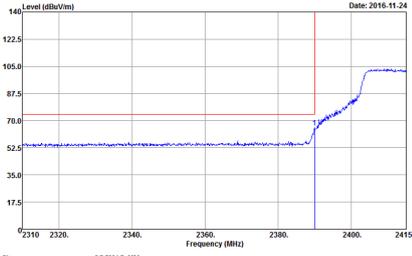
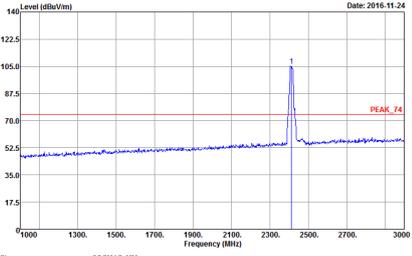
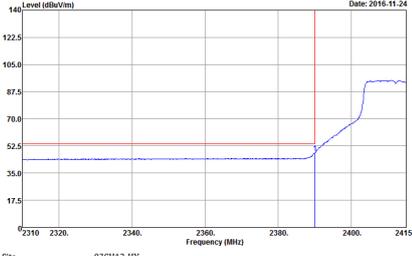
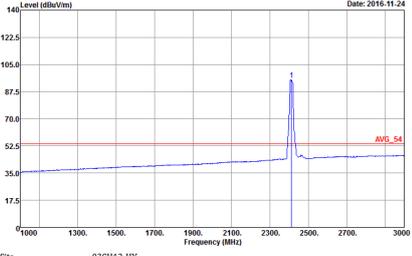
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
1	Vertical	Fundamental
Peak	 <p>Level (dBuV/m) vs Frequency (MHz) plot for Vertical Peak. The y-axis ranges from 0 to 140 dBuV/m, and the x-axis ranges from 2310 to 2415 MHz. A red horizontal line is at approximately 75 dBuV/m. A blue curve shows the spectrum, with a sharp peak at 2412 MHz. A vertical red line is at 2412 MHz. Date: 2016-11-24.</p> <p>Site Condition : 03CH12-HY : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL</p>	 <p>Level (dBuV/m) vs Frequency (MHz) plot for Fundamental Peak. The y-axis ranges from 0 to 140 dBuV/m, and the x-axis ranges from 1000 to 3000 MHz. A red horizontal line is at approximately 75 dBuV/m. A blue curve shows the spectrum, with a sharp peak at 2412 MHz. A vertical red line is at 2412 MHz. Date: 2016-11-24.</p> <p>Site Condition : 03CH12-HY : PEAK_74 3m HORN_9120D_1328 VERTICAL</p>
Avg.	 <p>Level (dBuV/m) vs Frequency (MHz) plot for Vertical Avg. The y-axis ranges from 0 to 140 dBuV/m, and the x-axis ranges from 2310 to 2415 MHz. A red horizontal line is at approximately 55 dBuV/m. A blue curve shows the spectrum, with a peak at 2412 MHz. A vertical red line is at 2412 MHz. Date: 2016-11-24.</p> <p>Site Condition : 03CH12-HY : AVG_BE_54 3m HORN_9120D_1328 VERTICAL</p>	 <p>Level (dBuV/m) vs Frequency (MHz) plot for Fundamental Avg. The y-axis ranges from 0 to 140 dBuV/m, and the x-axis ranges from 1000 to 3000 MHz. A red horizontal line is at approximately 55 dBuV/m. A blue curve shows the spectrum, with a peak at 2412 MHz. A vertical red line is at 2412 MHz. Date: 2016-11-24.</p> <p>Site Condition : 03CH12-HY : AVG_54 3m HORN_9120D_1328 VERTICAL</p>



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

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
1	Horizontal	Fundamental
Peak	<p>Date: 2016-11-24</p> <p>Site Condition : 03CH12-HY : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL</p>	<p>Date: 2016-11-24</p> <p>Site Condition : 03CH12-HY : PEAK_74 3m HORN_9120D_1328 HORIZONTAL</p>
Avg.	<p>Date: 2016-11-24</p> <p>Site Condition : 03CH12-HY : AVG_BE_54 3m HORN_9120D_1328 HORIZONTAL</p>	<p>Date: 2016-11-24</p> <p>Site Condition : 03CH12-HY : AVG_54 3m HORN_9120D_1328 HORIZONTAL</p>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
1	Vertical	Fundamental
Peak	 <p>Site Condition : 03CH12-HY : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL</p>	 <p>Site Condition : 03CH12-HY : PEAK_74 3m HORN_9120D_1328 VERTICAL</p>
Avg.	 <p>Site Condition : 03CH12-HY : AVG_BE_54 3m HORN_9120D_1328 VERTICAL</p>	 <p>Site Condition : 03CH12-HY : AVG_54 3m HORN_9120D_1328 VERTICAL</p>



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

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH01 2412MHz	
1	Horizontal	Vertical
<p>Peak Avg.</p>		



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

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



Band 1 - 5150~5250MHz
WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
1	Horizontal	Fundamental
Peak	<p align="center">Date: 2016-10-17</p> <p align="center">Site Condition : 03CH12-HY : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL</p>	<p align="center">Date: 2016-10-17</p> <p align="center">Site Condition : 03CH12-HY : PEAK_74 3m HORN_9120D_1328 HORIZONTAL</p>
Avg.	<p align="center">Date: 2016-10-17</p> <p align="center">Site Condition : 03CH12-HY : AVG_BE_54 3m HORN_9120D_1328 HORIZONTAL</p>	Left blank



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
1	Vertical	Fundamental
Peak	<p>Date: 2016-10-17</p> <p>Site Condition : 03CH12-HY : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL</p>	<p>Date: 2016-10-17</p> <p>Site Condition : 03CH12-HY : PEAK_74 3m HORN_9120D_1328 VERTICAL</p>
Avg.	<p>Date: 2016-10-17</p> <p>Site Condition : 03CH12-HY : AVG_BE_54 3m HORN_9120D_1328 VERTICAL</p>	Left blank



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - 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 CH38 5190MHz	
1	Horizontal	Vertical
<p>Peak Avg.</p>	<p>Site Condition : :03CH12-HY : PEAK_74 3m HORN_9120D_1328 HORIZONTAL</p>	<p>Site Condition : :03CH12-HY : PEAK_74 3m HORN_9120D_1328 VERTICAL</p>



Band 2 - 5250~5350MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

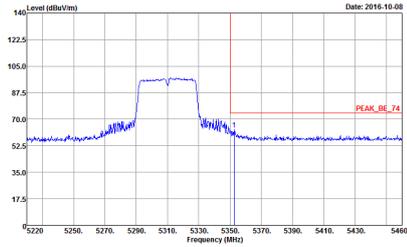
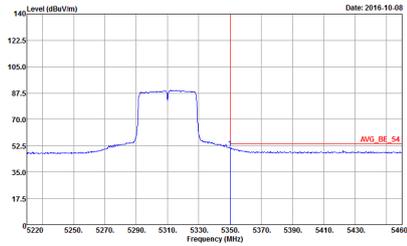


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank



WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - L	
1	Vertical	Fundamental
Peak	<p>Site Condition : 03CH12-HY : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL</p>	<p>Site Condition : 03CH12-HY : PEAK_74 3m HORN_9120D_1328 VERTICAL</p>
Avg.	<p>Site Condition : 03CH12-HY : AVG_BE_54 3m HORN_9120D_1328 VERTICAL</p>	Left blank



WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - R	
1	Vertical	Fundamental
Peak	 <p>Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL</p>	Left blank
Avg.	 <p>Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 HORIZONTAL</p>	Left blank



**Band 2 - 5250~5350MHz
WIFI 802.11 n HT40 (Harmonic @ 3m)**

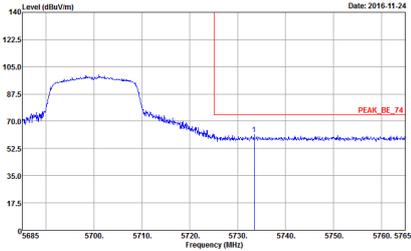
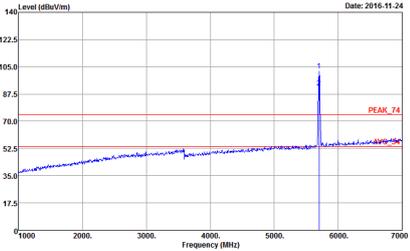
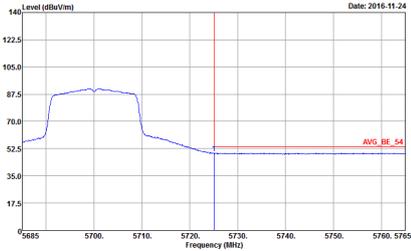
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT40 CH62 5310	
1	Horizontal	Vertical
<p>Peak Avg.</p>	<p>Site Condition : 03CH12-HY : PEAK_74 3m HORN_9120D_1328 HORIZONTAL</p>	<p>Site Condition : 03CH12-HY : PEAK_74 3m HORN_9120D_1328 VERTICAL</p>



Band 3 - 5470~5725MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
1	Horizontal	Fundamental
<p>Peak</p>	<p>Date: 2016-11-24</p> <p>Site Condition : 03CH12-HY : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL</p>	<p>Date: 2016-11-24</p> <p>Site Condition : 03CH12-HY : PEAK_74 3m HORN_9120D_1328 HORIZONTAL</p>
<p>Avg.</p>	<p>Date: 2016-11-24</p> <p>Site Condition : 03CH12-HY : AVG_BE_54 3m HORN_9120D_1328 HORIZONTAL</p>	<p align="center">Left blank</p>



WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
1	Vertical	Fundamental
Peak.	 <p>Date: 2016-11-24</p> <p>Site Condition : 03CH12-HY : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL</p>	 <p>Date: 2016-11-24</p> <p>Site Condition : 03CH12-HY : PEAK_74 3m HORN_9120D_1328 VERTICAL</p>
Avg.	 <p>Date: 2016-11-24</p> <p>Site Condition : 03CH12-HY : AVG_BE_54 3m HORN_9120D_1328 VERTICAL</p>	Left blank



**Band 3 - 5470~5725MHz
WIFI 802.11n HT20 (Harmonic @ 3m)**

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
1	Horizontal	Vertical
<p>Peak Avg.</p>		



Band 4 - 5725~5850MHz
WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
1	Horizontal	Fundamental
Peak	<p>Site Condition : 03CH12-HY : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL</p>	<p>Site Condition : 03CH12-HY : PEAK(UMBI) 3m HORN_9120D_1328 HORIZONTAL</p>
Peak	<p>Site Condition : 03CH12-HY : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL</p>	Left blank



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



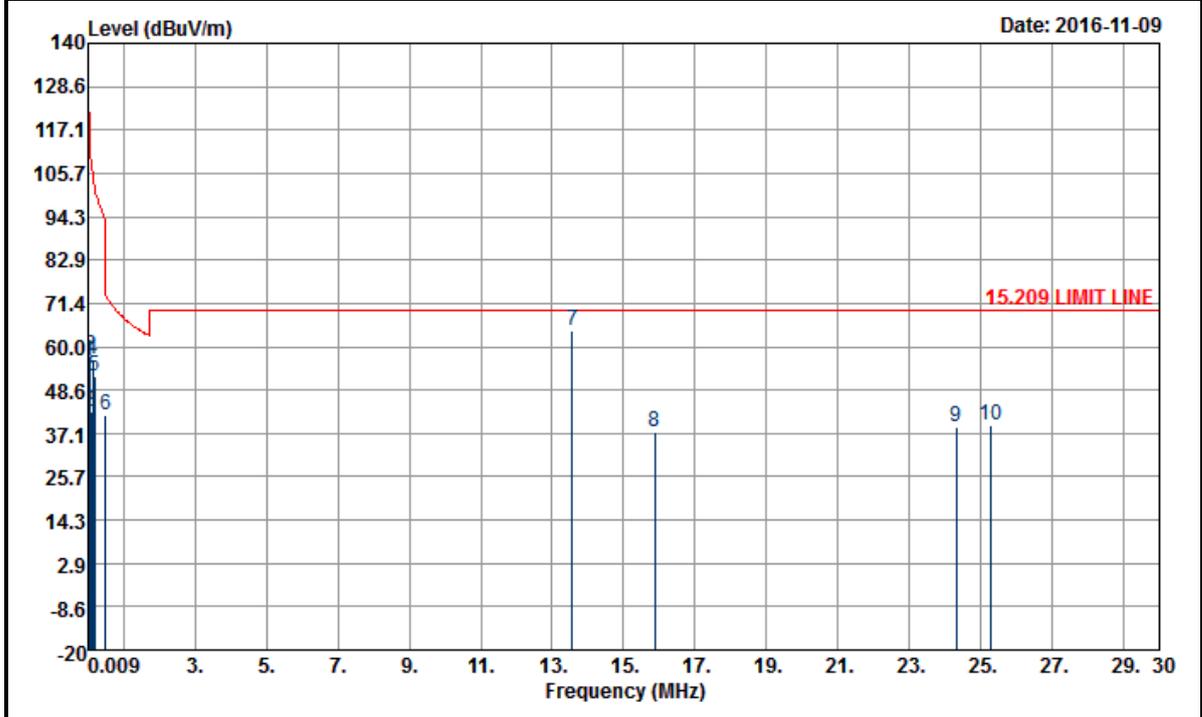
Band 4 - 5725~5850MHz
WIFI 802.11a (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH157 5785MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Horizontal spectrum plot showing Level (dBuV/m) vs Frequency (MHz) for Peak Avg. measurement. The plot shows a noisy signal around 70 dBuV/m with two peaks at approximately 12000 MHz and 18000 MHz. The date is 2016-11-24. Site Condition: : 03CH12-HY : PEAK(UNIT) 3m HORN_9120D_1328 HORIZONTAL.</p>	<p>Vertical spectrum plot showing Level (dBuV/m) vs Frequency (MHz) for Peak Avg. measurement. The plot shows a noisy signal around 70 dBuV/m with two peaks at approximately 12000 MHz and 18000 MHz. The date is 2016-11-24. Site Condition: : 03CH12-HY : PEAK(UNIT) 3m HORN_9120D_1328 VERTICAL.</p>

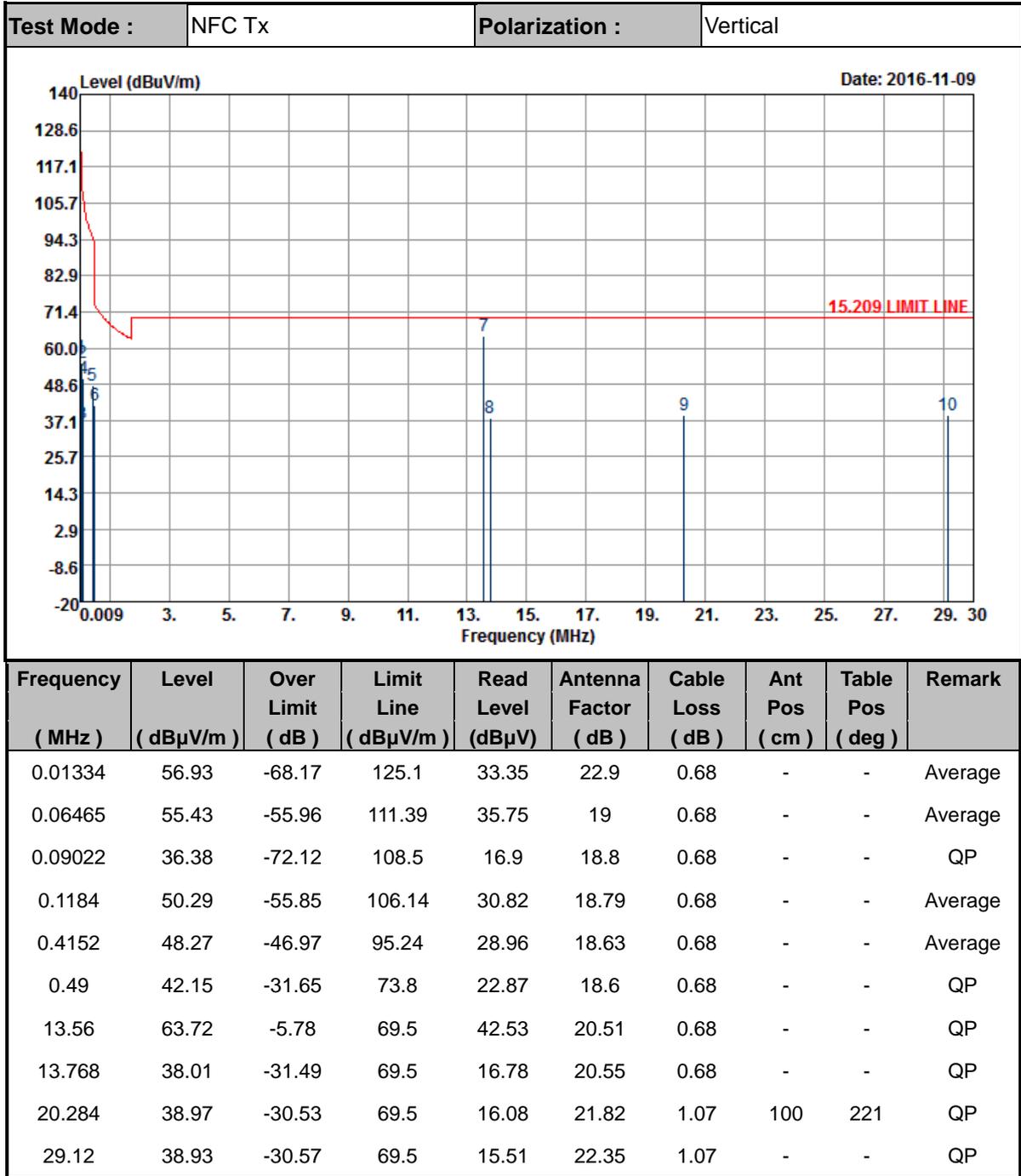


Results of Radiated Emissions (9 kHz~30MHz)

Test Mode :	NFC Tx	Polarization :	Horizontal
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Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
0.01323	56.28	-68.89	125.17	32.7	22.9	0.68	-	-	Average
0.06465	57.33	-54.06	111.39	37.65	19	0.68	-	-	Average
0.09414	42.9	-65.23	108.13	23.42	18.8	0.68	-	-	QP
0.12928	56.72	-48.65	105.37	37.25	18.79	0.68	-	-	Average
0.1925	52.42	-49.5	101.92	32.98	18.76	0.68	-	-	Average
0.49751	42.14	-31.53	73.67	22.86	18.6	0.68	-	-	QP
13.56	64.13	-5.37	69.5	42.94	20.51	0.68	-	-	QP
15.88	37.34	-32.16	69.5	15.69	20.97	0.68	-	-	QP
24.307	38.65	-30.85	69.5	15.52	22.06	1.07	-	-	QP
25.28	39.06	-30.44	69.5	15.87	22.12	1.07	100	97	QP



End of this report