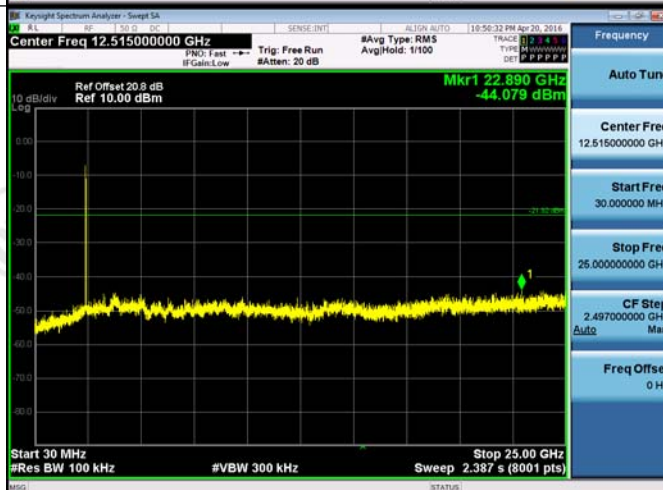


11G_Ant1_LCH_Graphs

Pref/11G/LCH



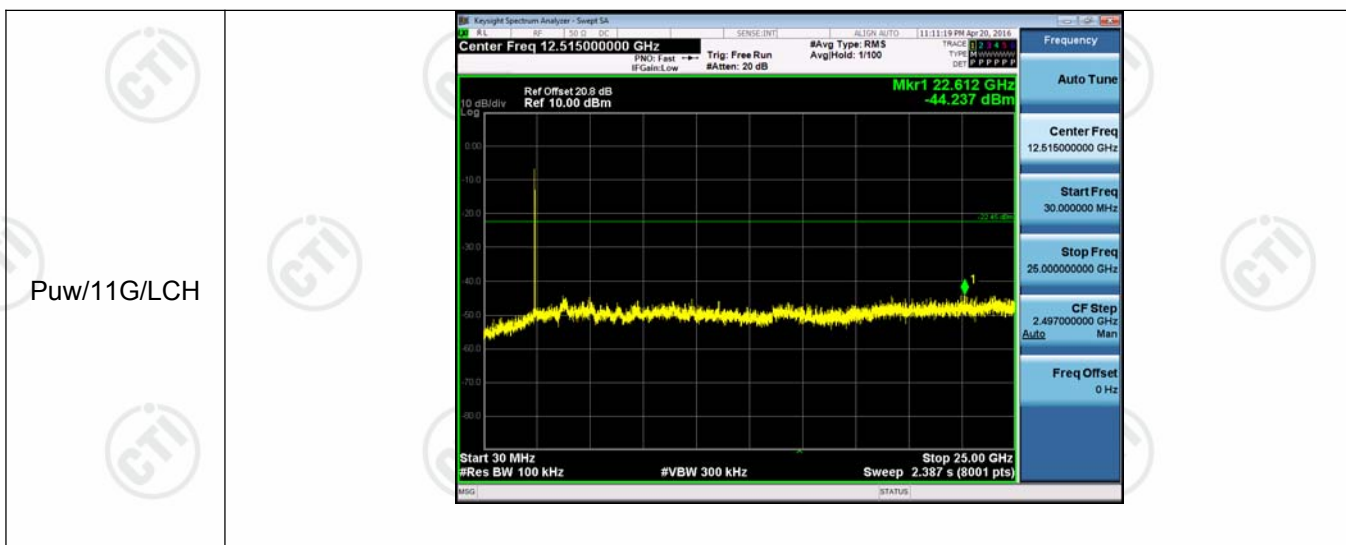
Puw/11G/LCH

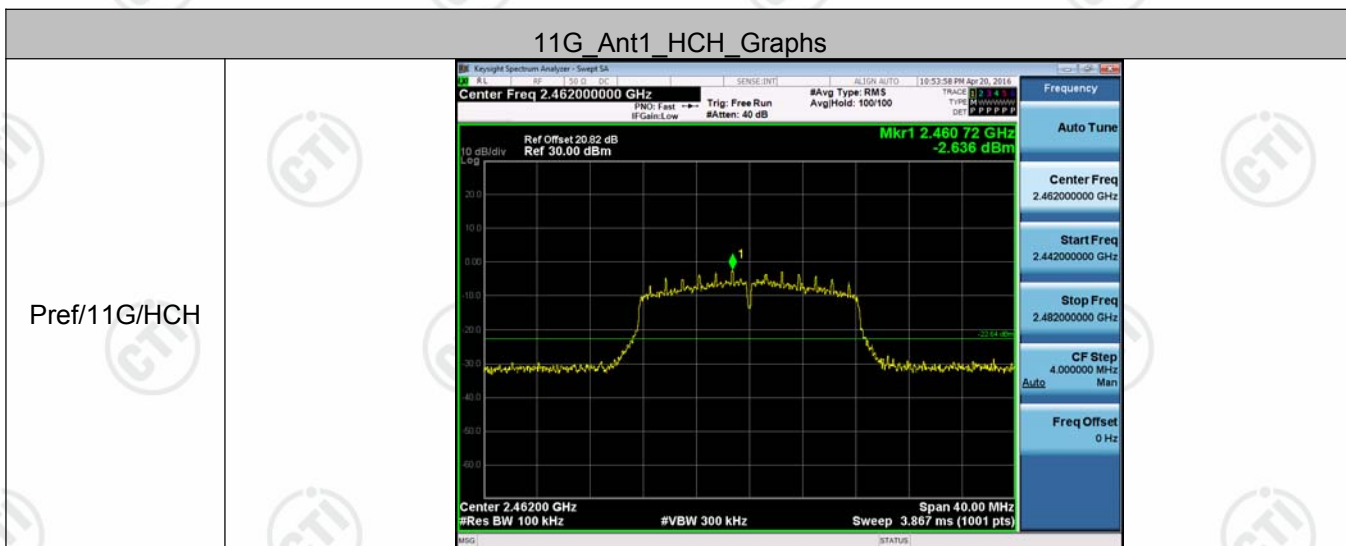


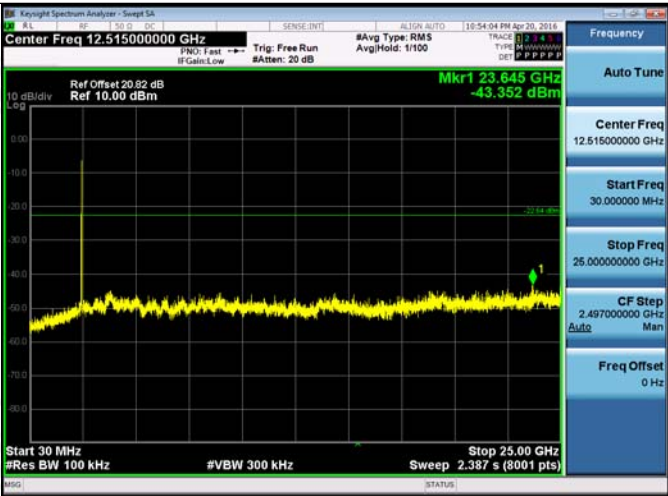
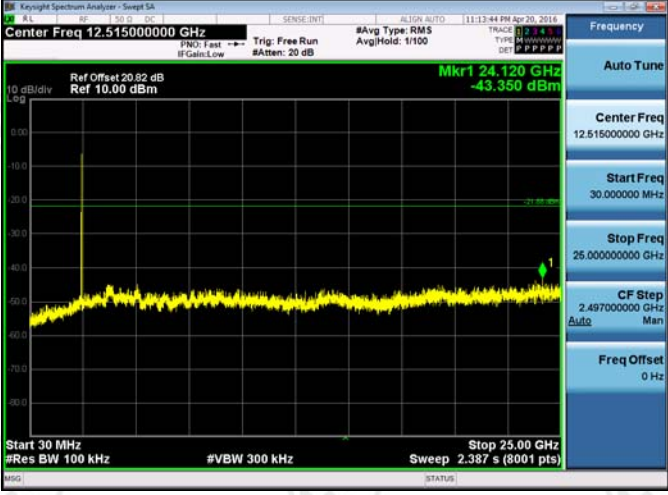
11G_Ant2_LCH_Graphs

Pref/11G/LCH



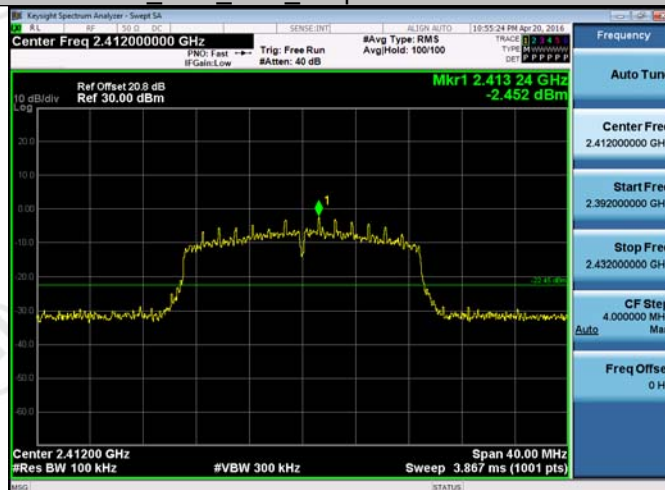




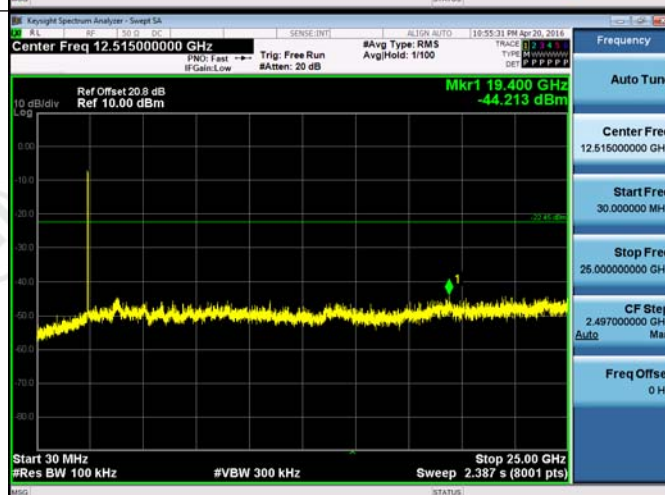
Puw/11G/HCH	
11G_Ant2_HCH_Graphs	
Pref/11G/HCH	
Puw/11G/HCH	

11N20SISO_Ant1_LCH_Graphs

Pref/11N20SISO/LCH

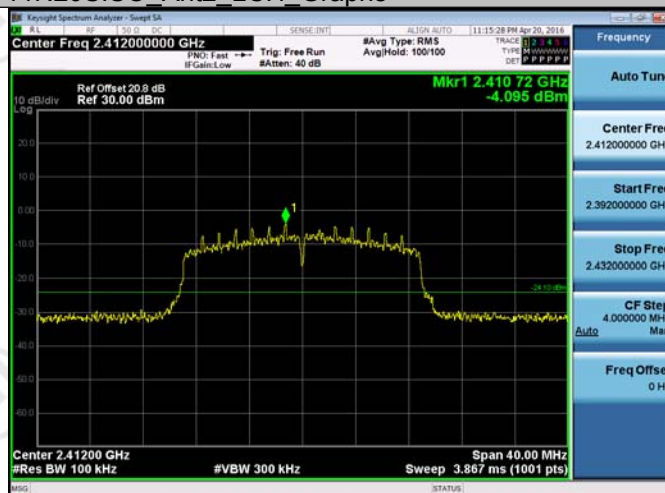


Puw/11N20SISO/LCH

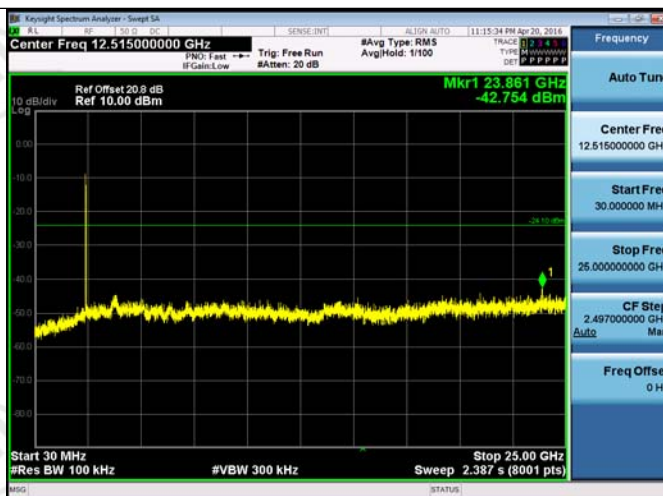


11N20SISO_Ant2_LCH_Graphs

Pref/11N20SISO/LCH

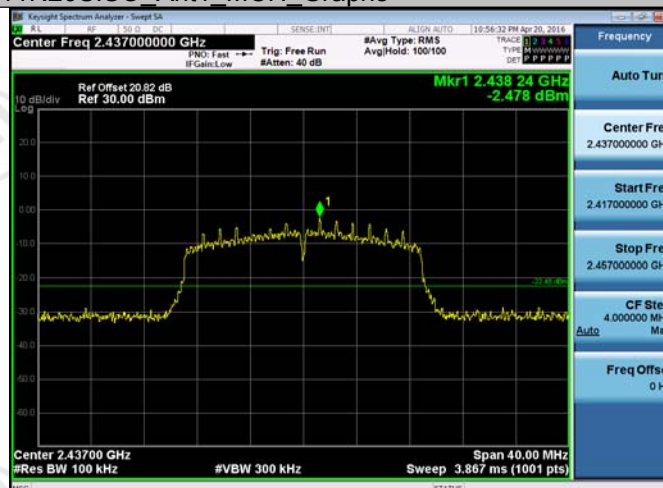


Puw/11N20SISO/LCH

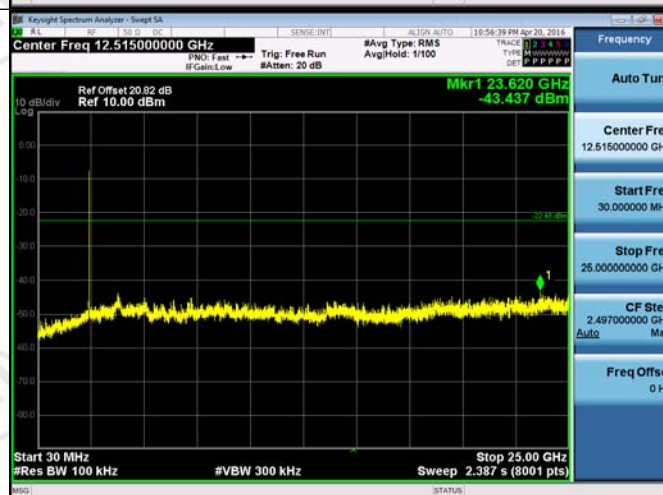


11N20SISO_Ant1_MCH_Graphs

Pref/11N20SISO/MCH



Puw/11N20SISO/MCH

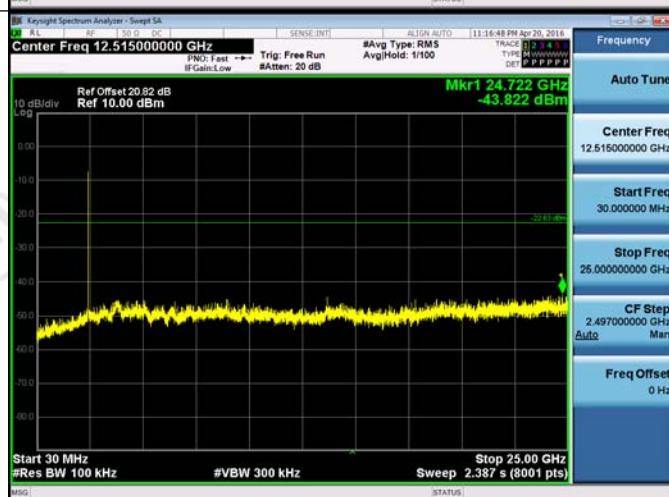


11N20SISO_Ant2_MCH_Graphs

Pref/11N20SISO/MCH

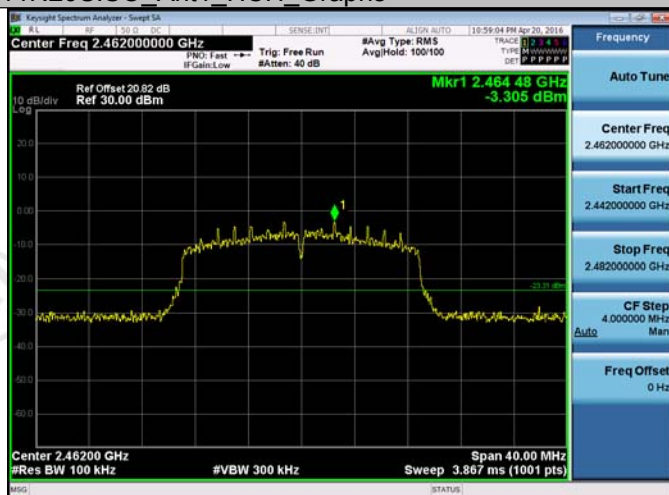


Puw/11N20SISO/MCH

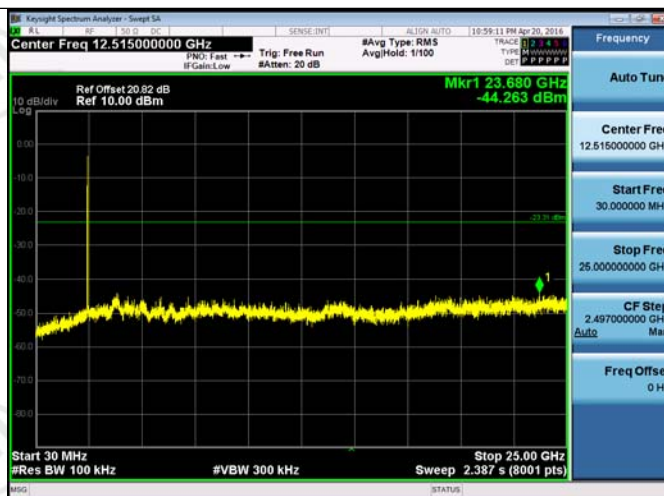


11N20SISO_Ant1_HCH_Graphs

Pref/11N20SISO/HCH

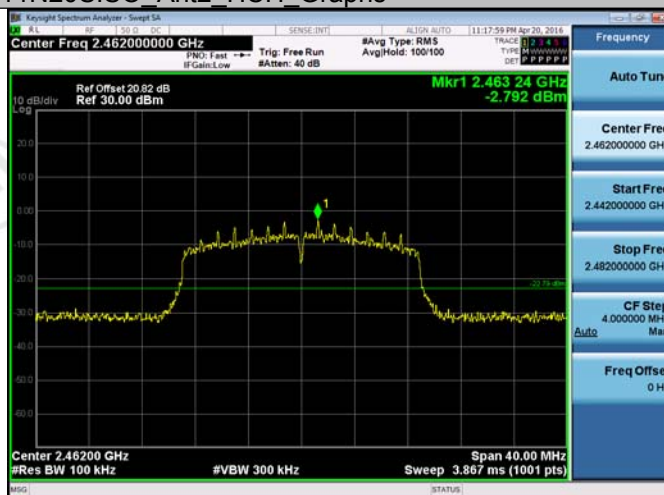


Puw/11N20SISO/HCH

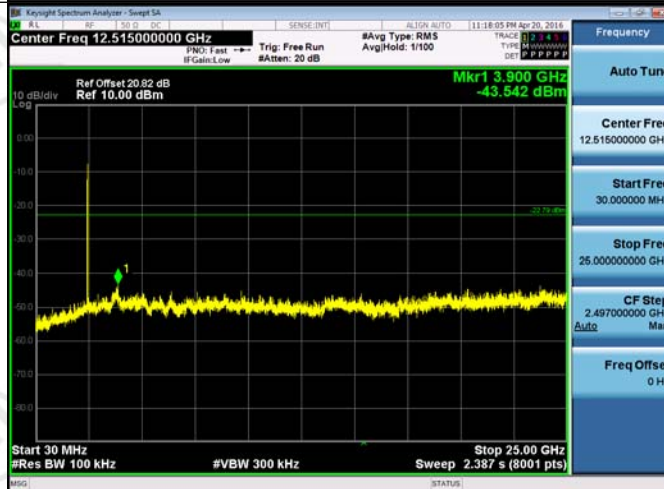


11N20SISO_Ant2_HCH_Graphs

Pref/11N20SISO/HCH

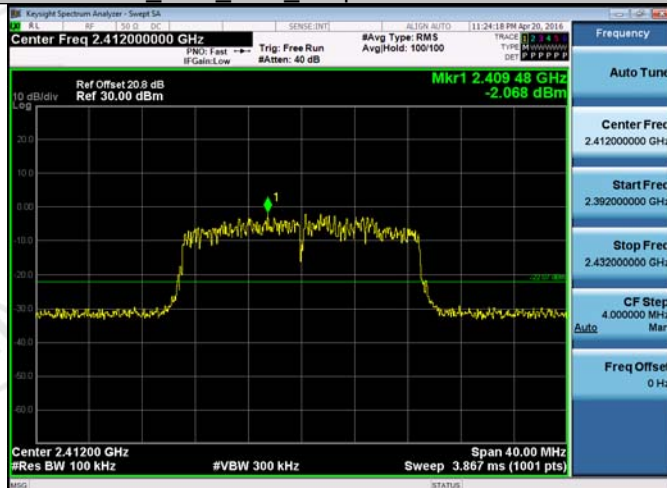


Puw/11N20SISO/HCH

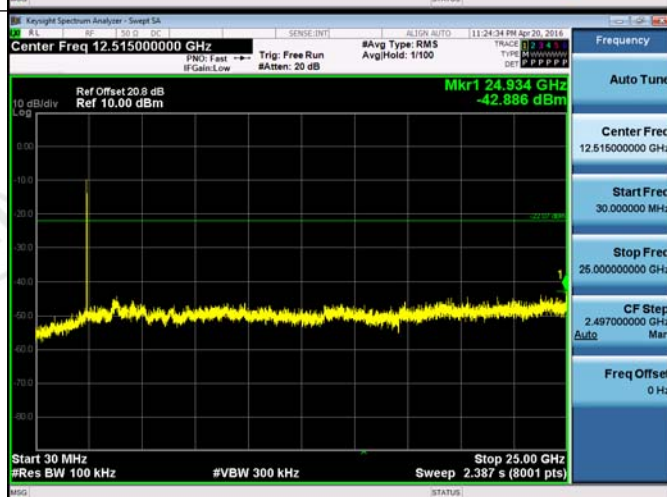


11N20MIMO_Ant1_LCH_Graphs

Pref/11N20MIMO/LCH

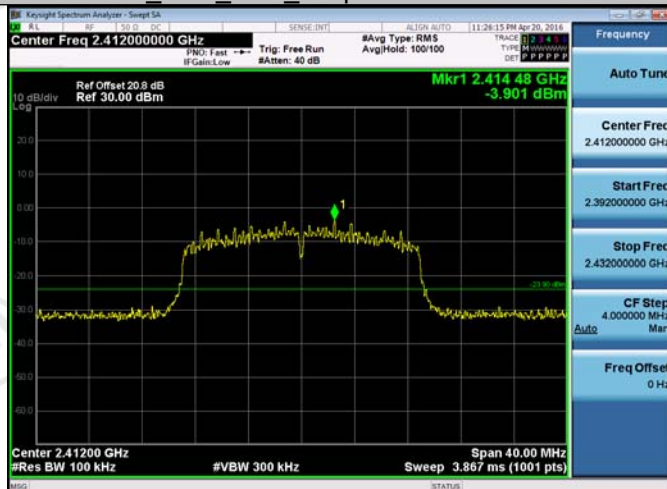


Puw/11N20MIMO/LCH

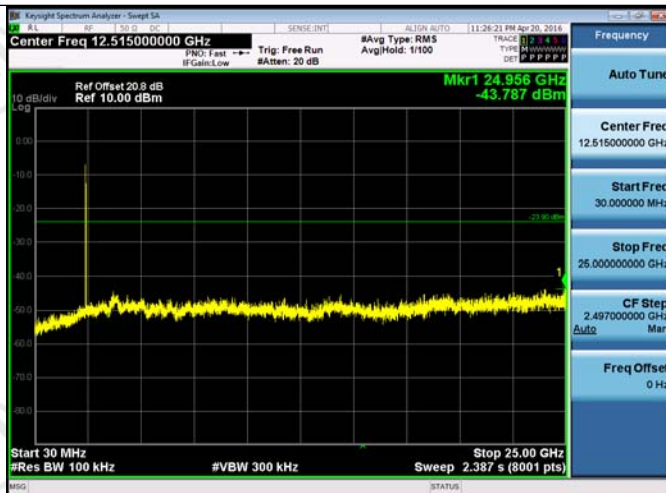


11N20MIMO_Ant2_LCH_Graphs

Pref/11N20MIMO/LCH

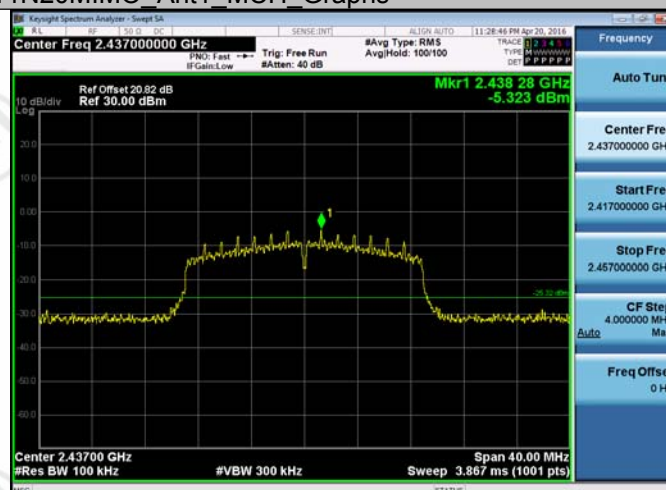


Puw/11N20MIMO/LCH

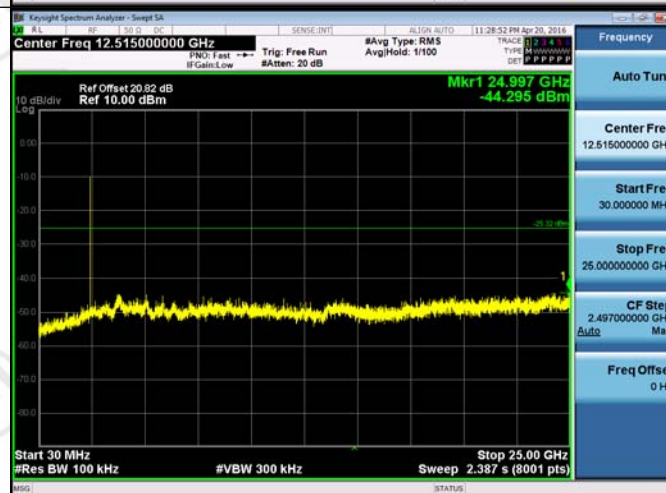


11N20MIMO_Ant1_MCH Graphs

Pref/11N20MIMO/MCH

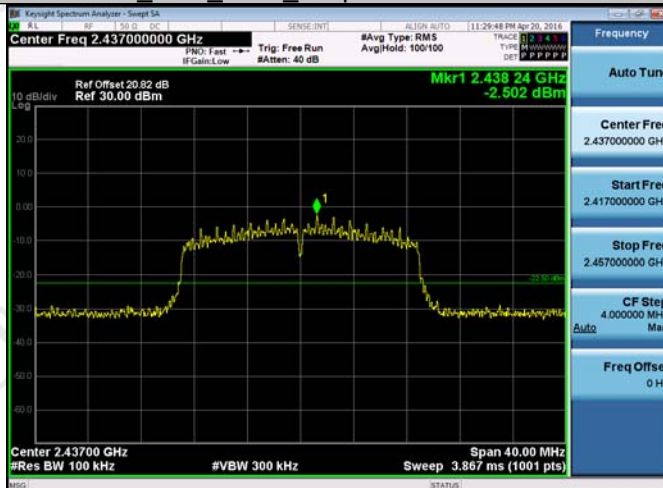


Puw/11N20MIMO/MCH

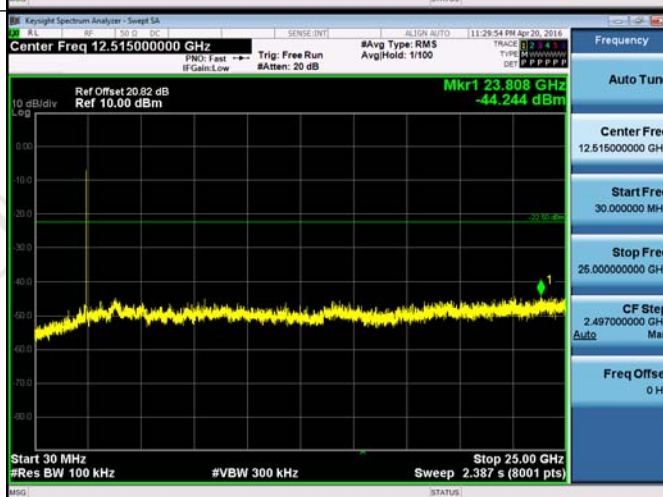


11N20MIMO_Ant2_MCH_Graphs

Pref/11N20MIMO/MCH

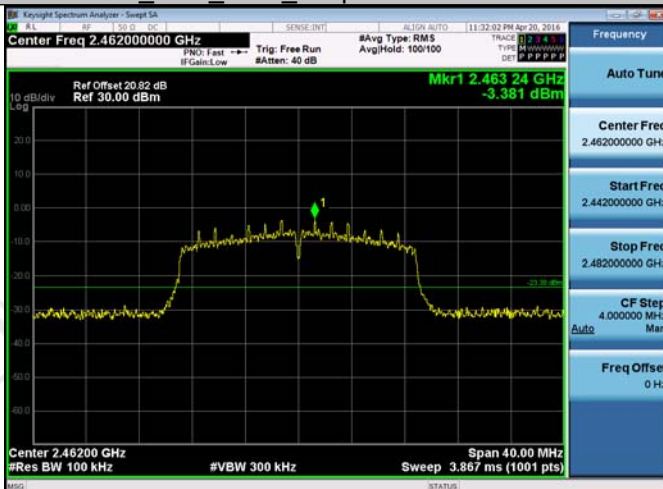


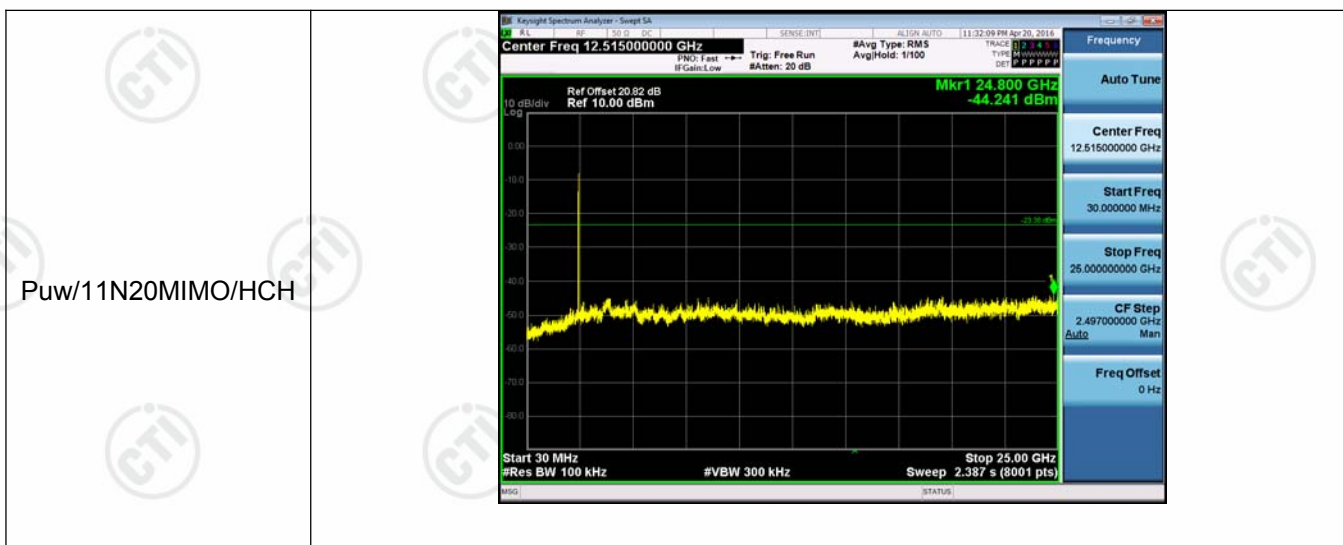
Puw/11N20MIMO/MCH



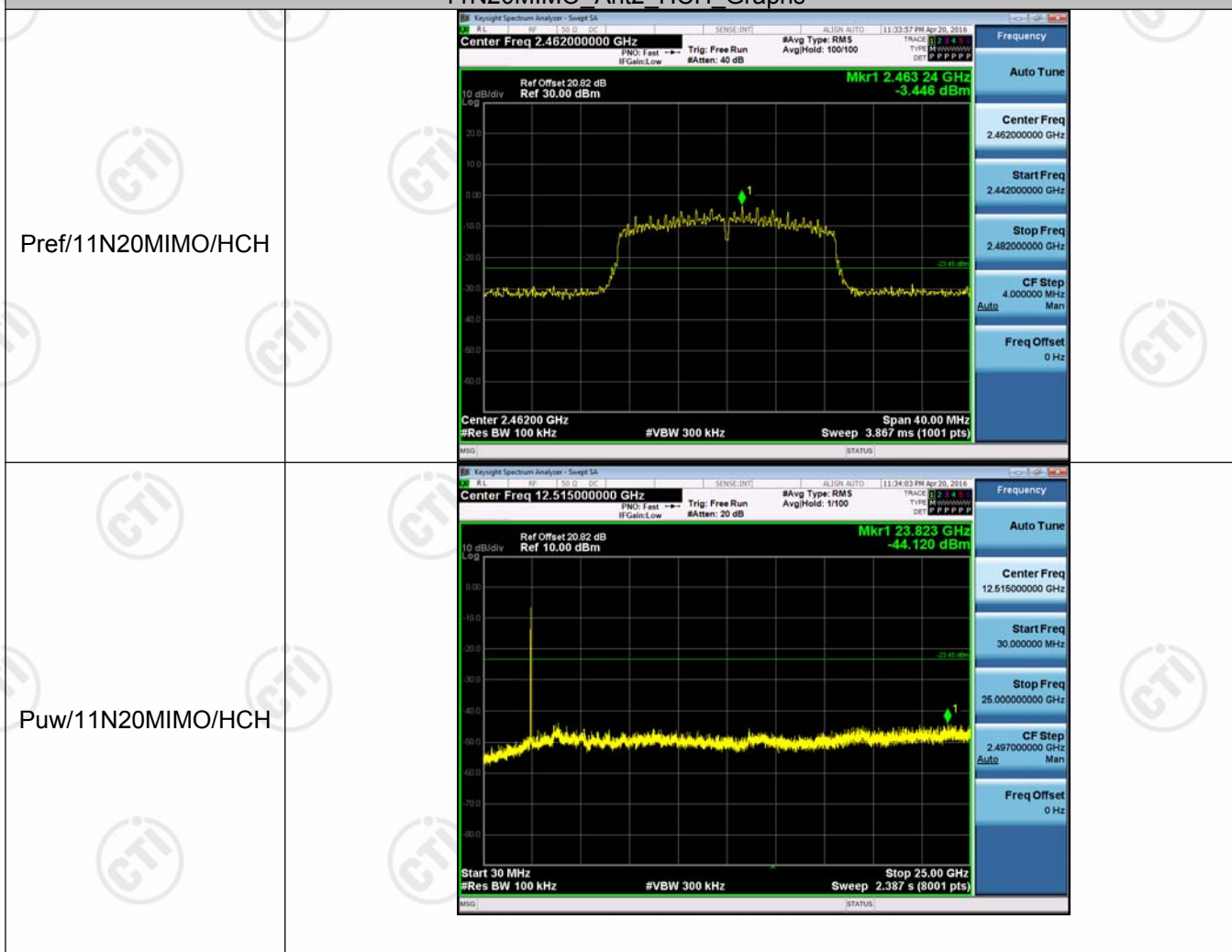
11N20MIMO_Ant1_HCH_Graphs

Pref/11N20MIMO/HCH



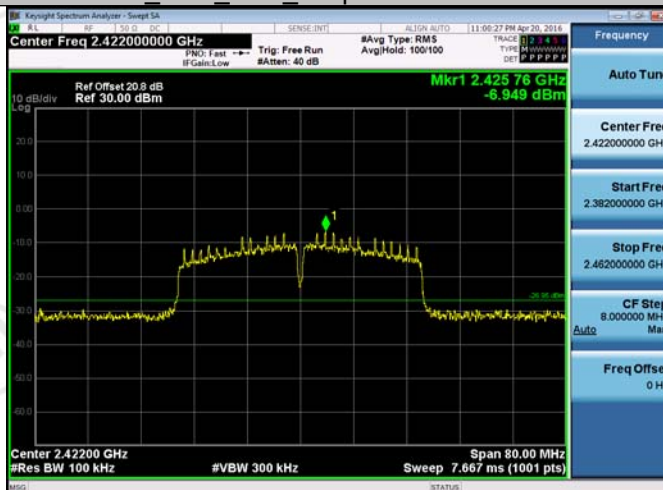


11N20MIMO_Ant2_HCH_Graphs

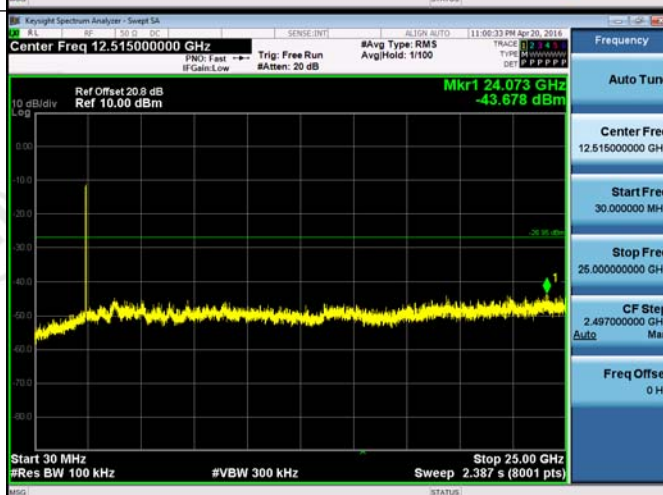


11N40SISO_Ant1_LCH_Graphs

Pref/11N40SISO/LCH



Puw/11N40SISO/LCH

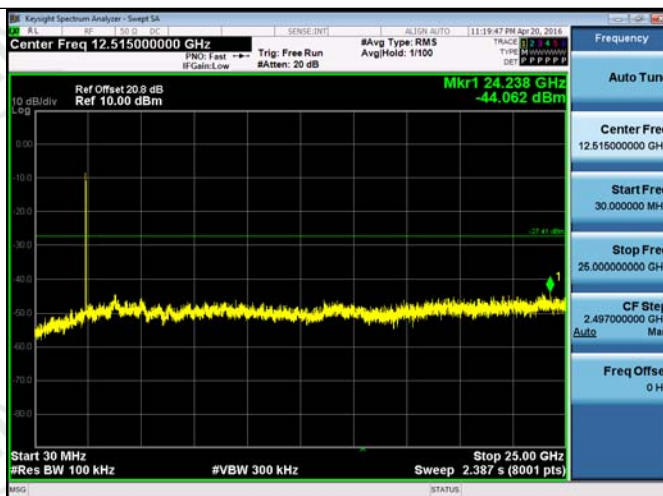


11N40SISO_Ant2_LCH_Graphs

Pref/11N40SISO/LCH

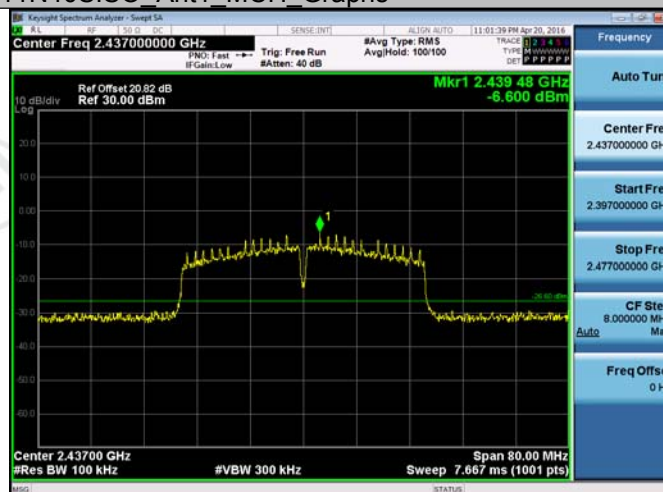


Puw/11N40SISO/LCH

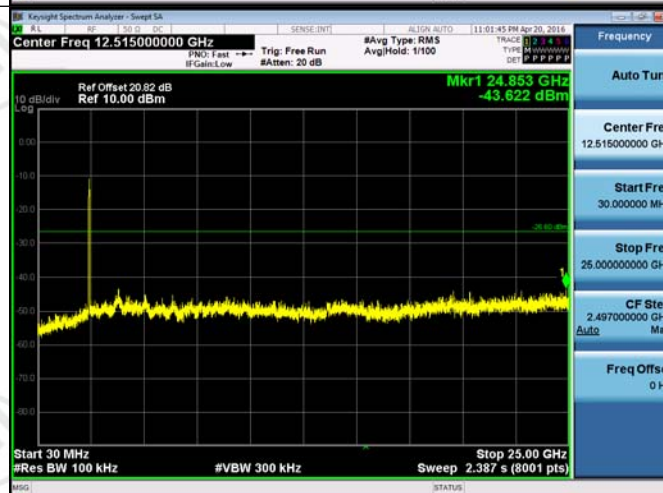


11N40SISO_Ant1_MCH_Graphs

Pref/11N40SISO/MCH

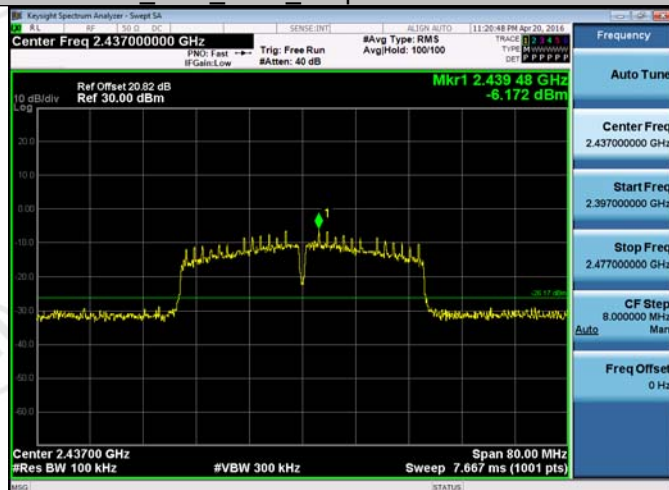


Puw/11N40SISO/MCH

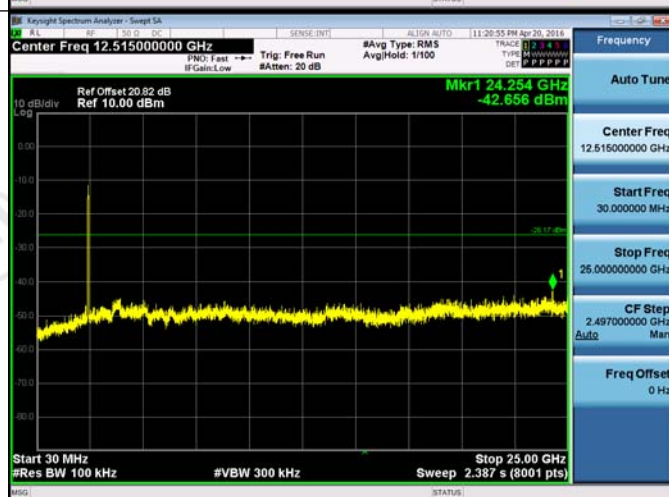


11N40SISO_Ant2_MCH_Graphs

Pref/11N40SISO/MCH



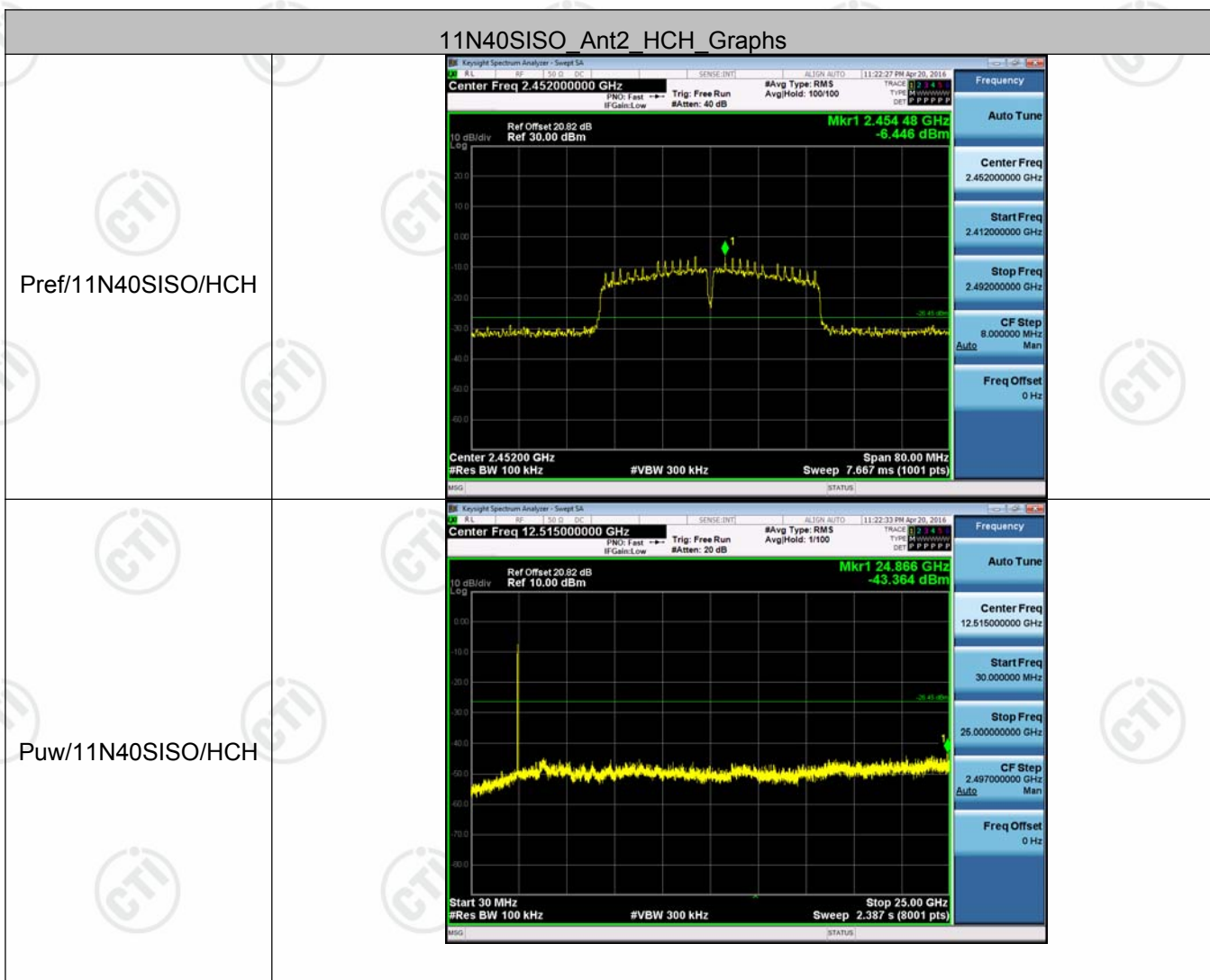
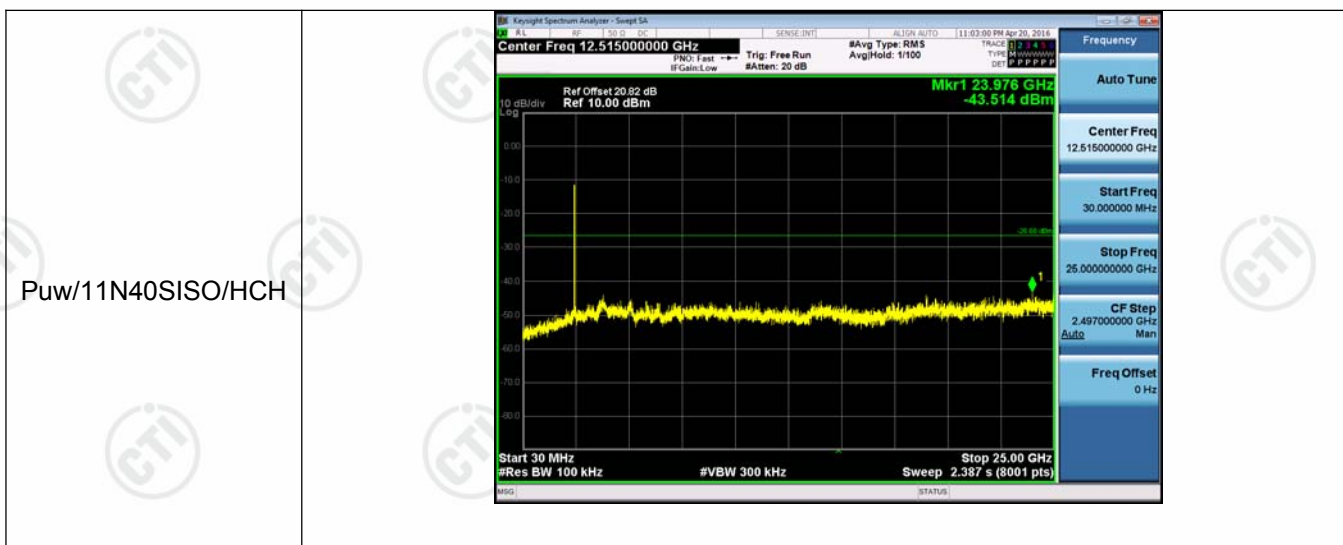
Puw/11N40SISO/MCH



11N40SISO_Ant1_HCH_Graphs

Pref/11N40SISO/HCH



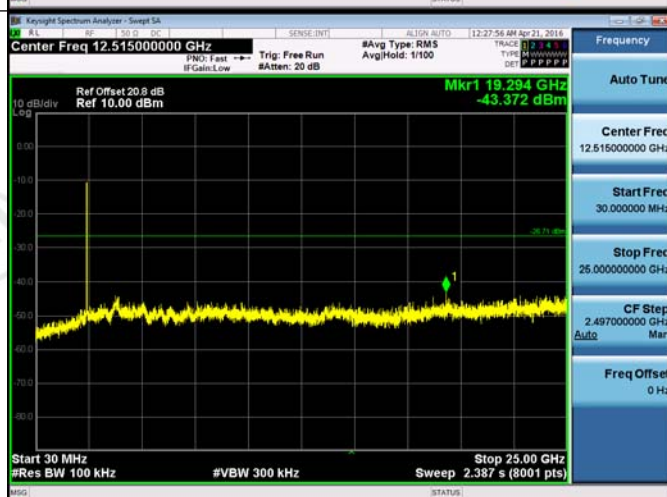


11N40MIMO_Ant1_LCH_Graphs

Pref/11N40MIMO/LCH

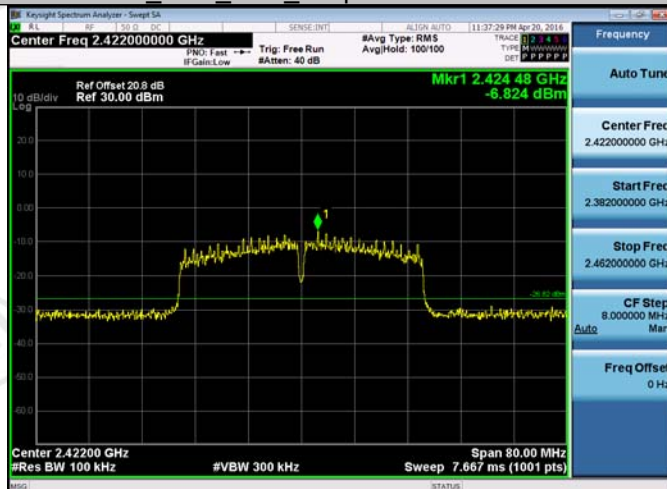


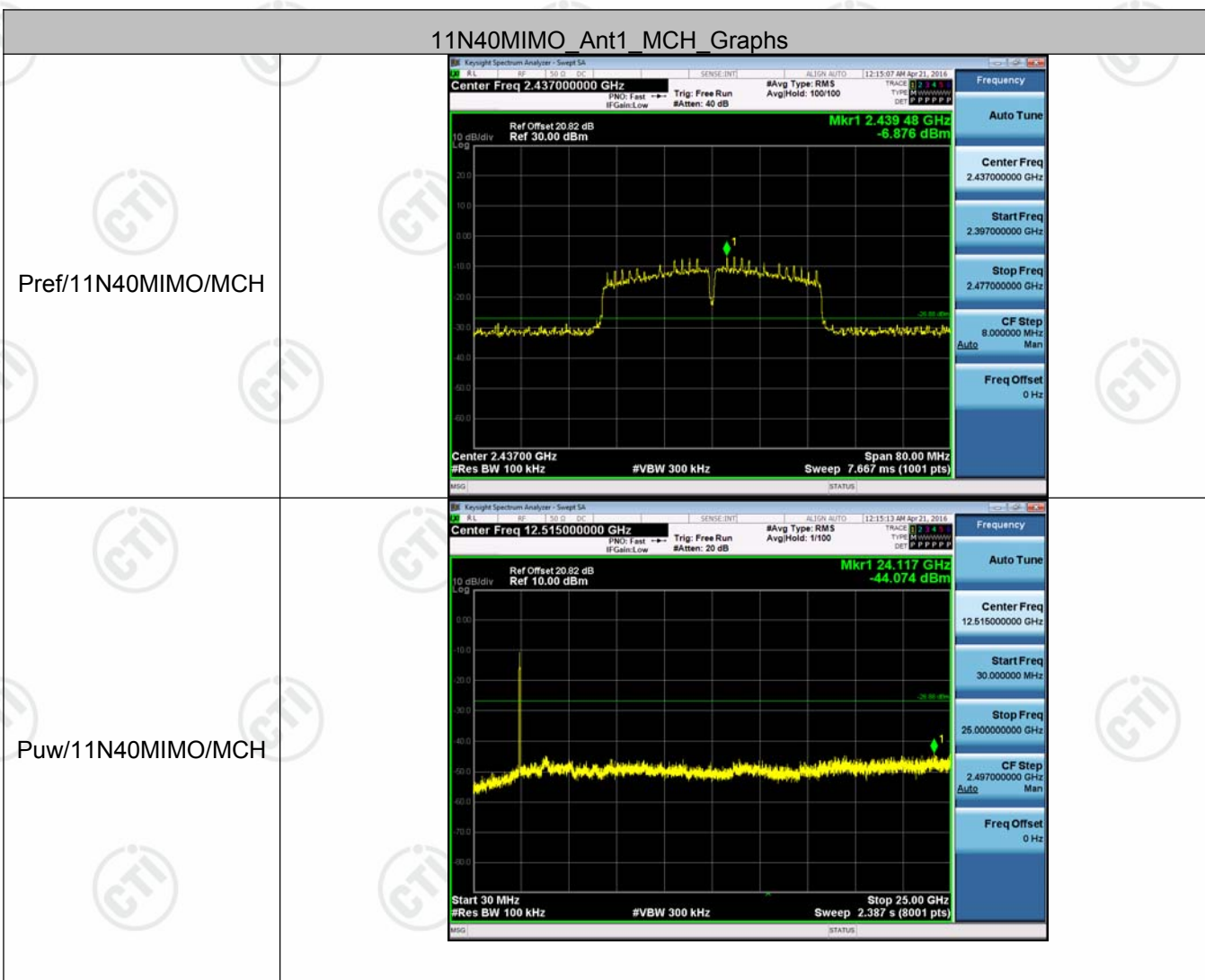
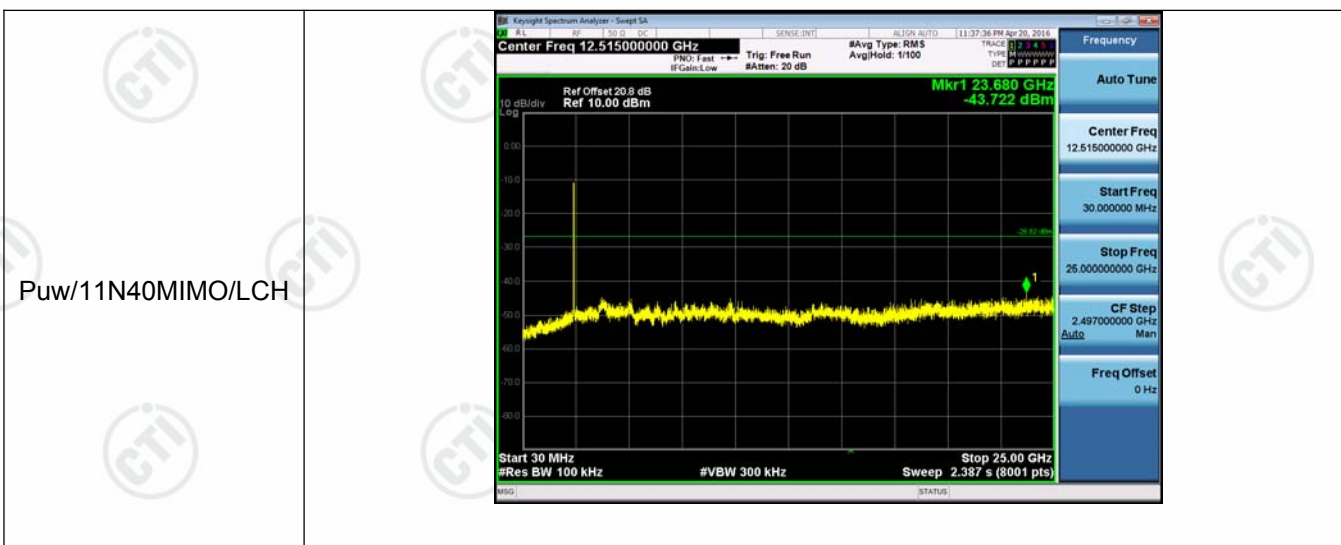
Puw/11N40MIMO/LCH

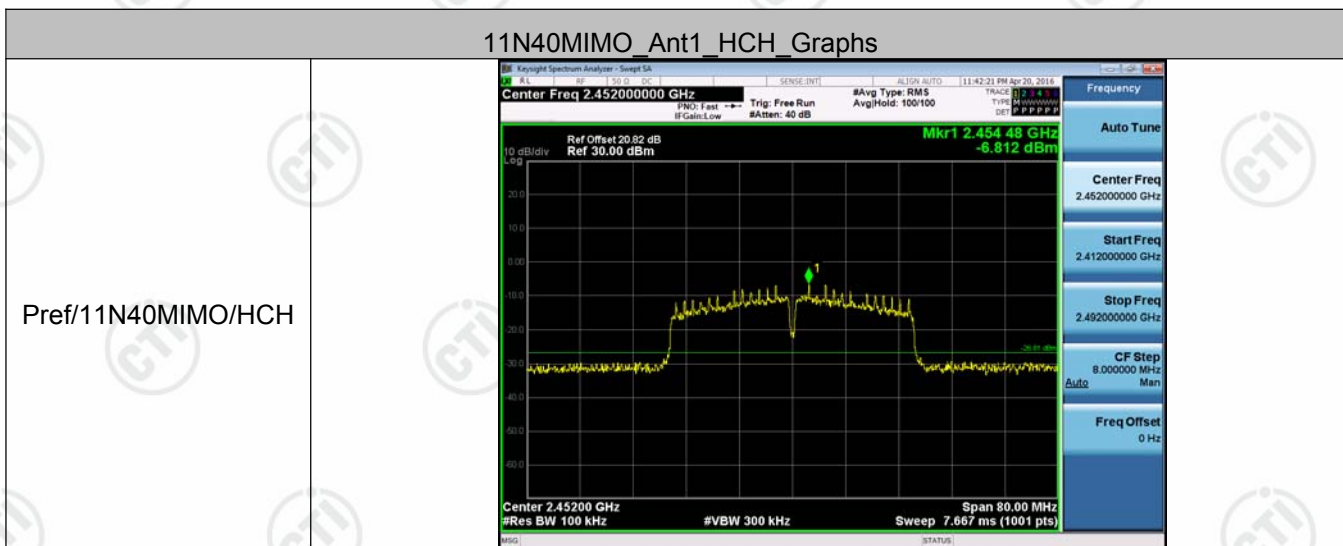
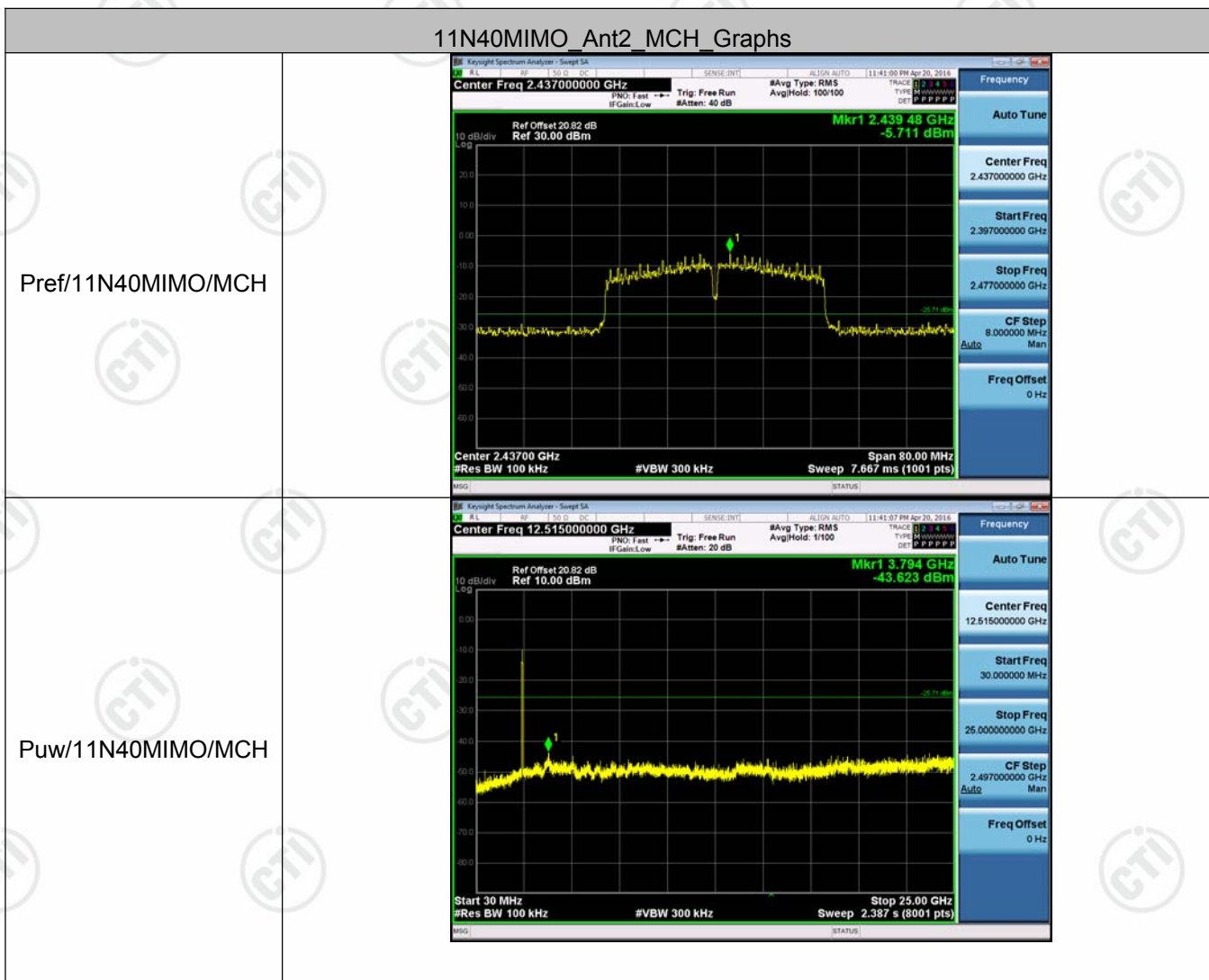


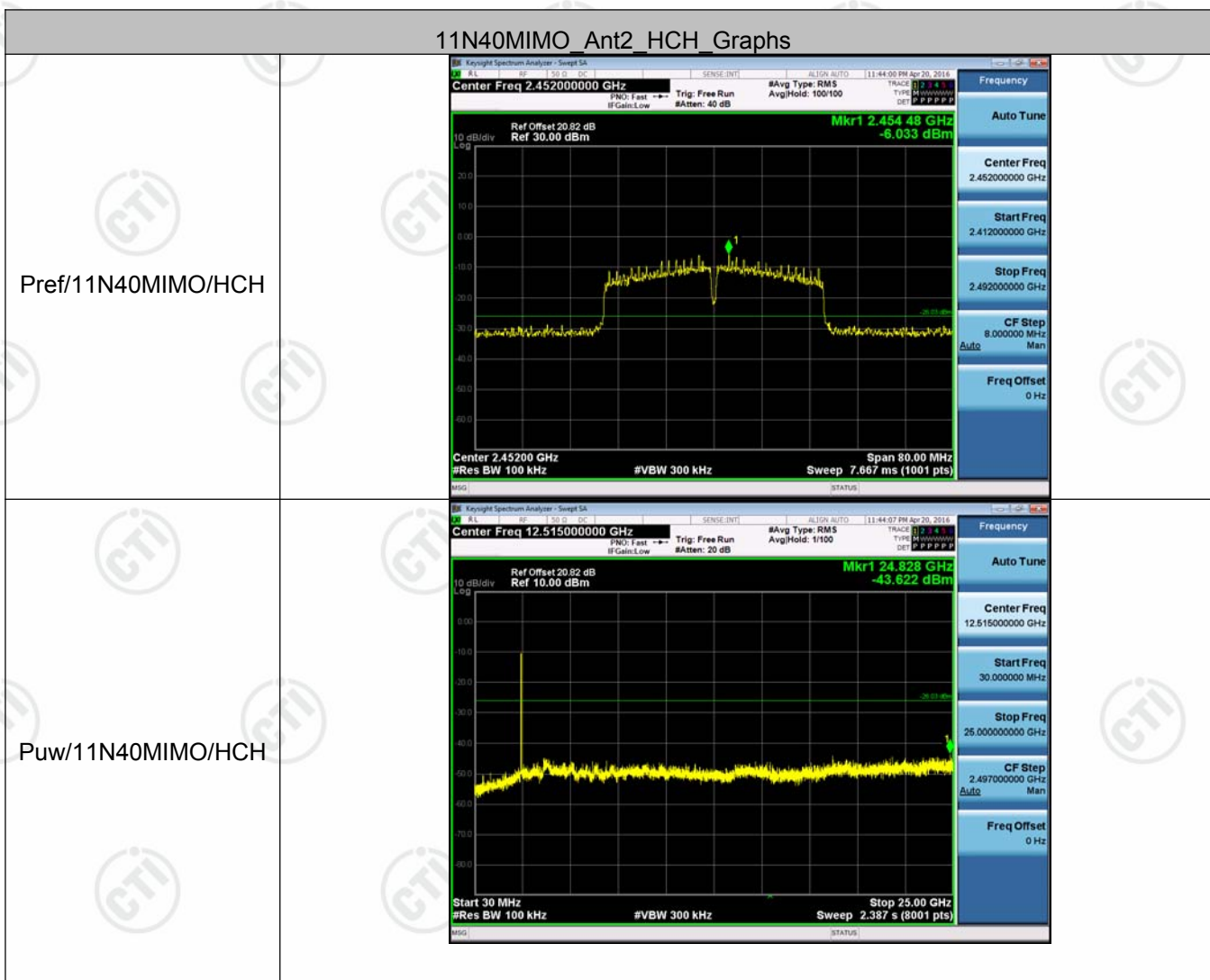
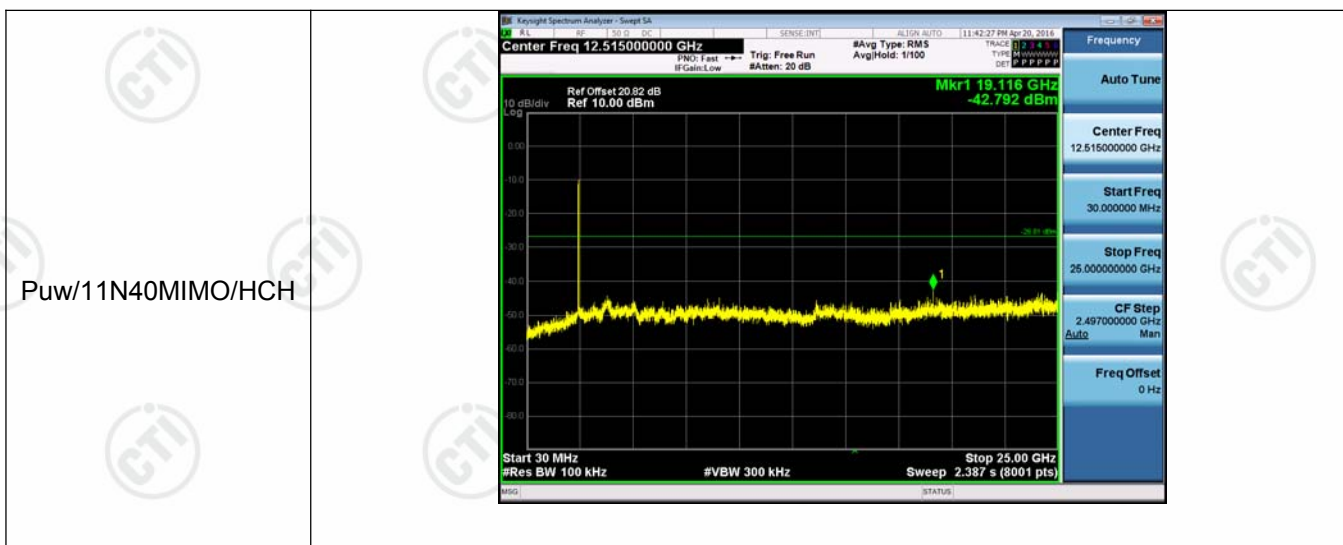
11N40MIMO_Ant2_LCH_Graphs

Pref/11N40MIMO/LCH







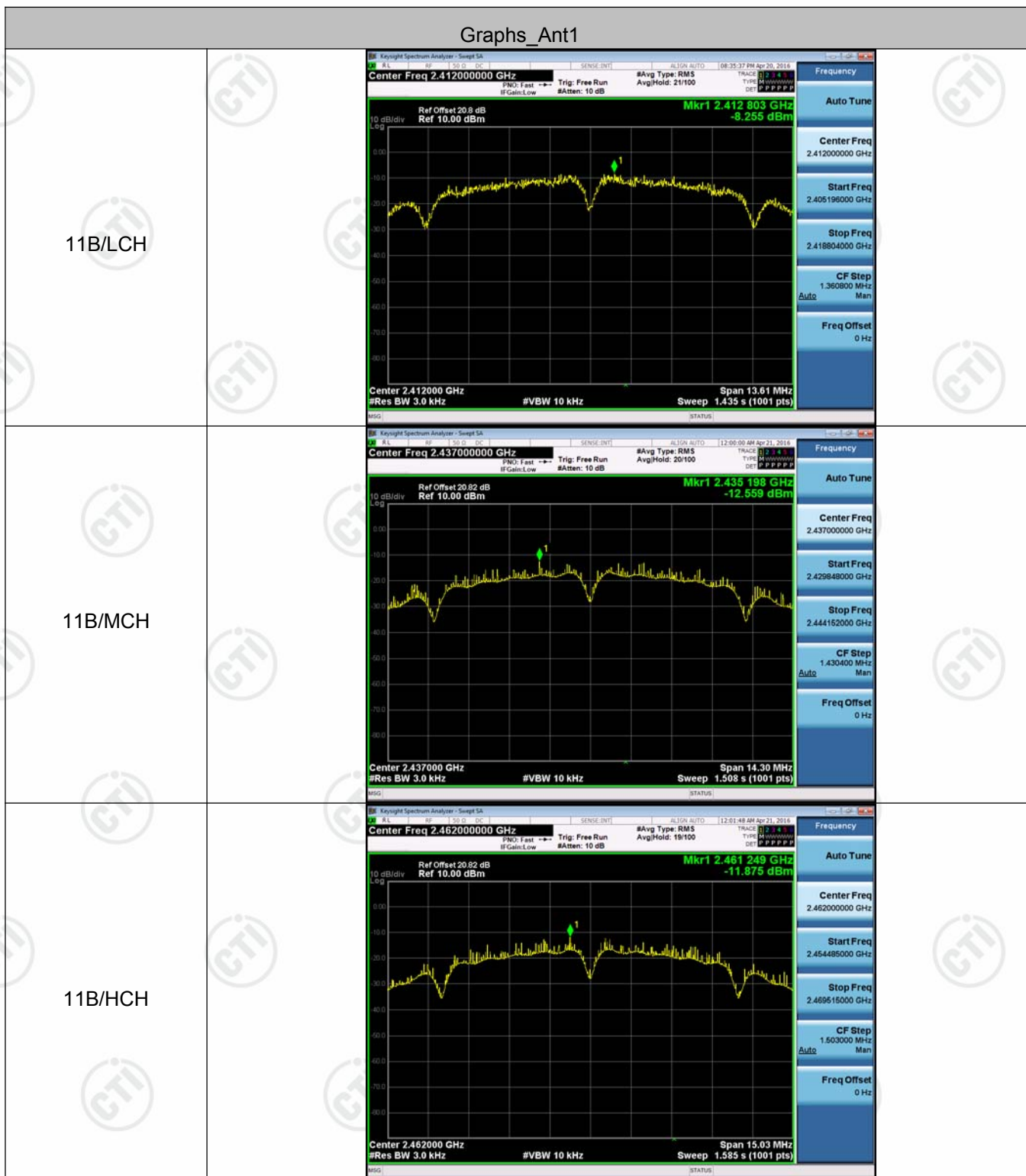


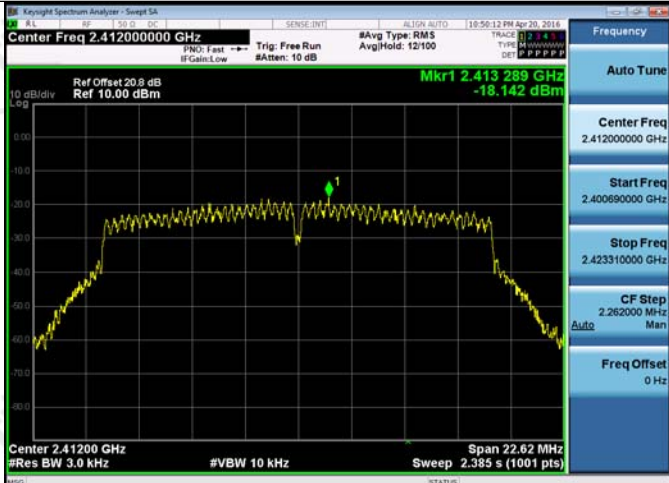
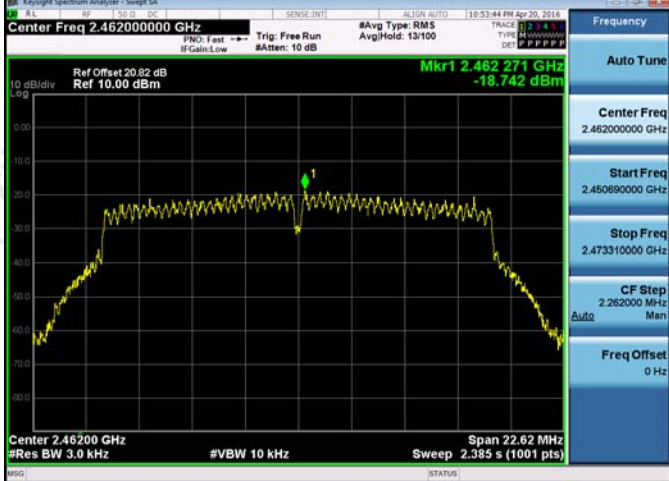
Appendix E): Power Spectral Density

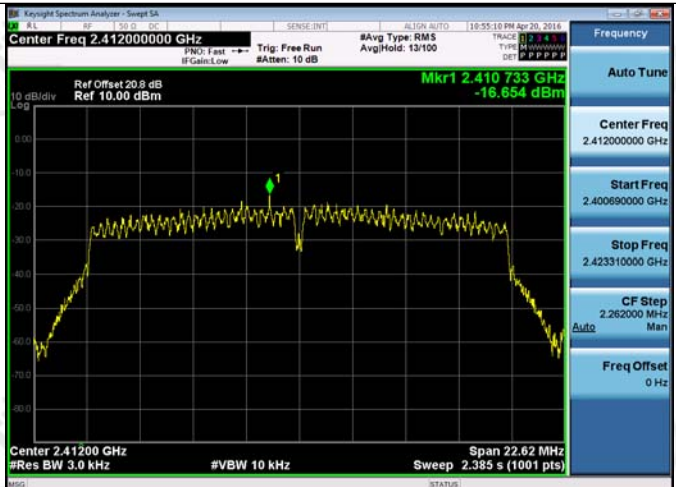
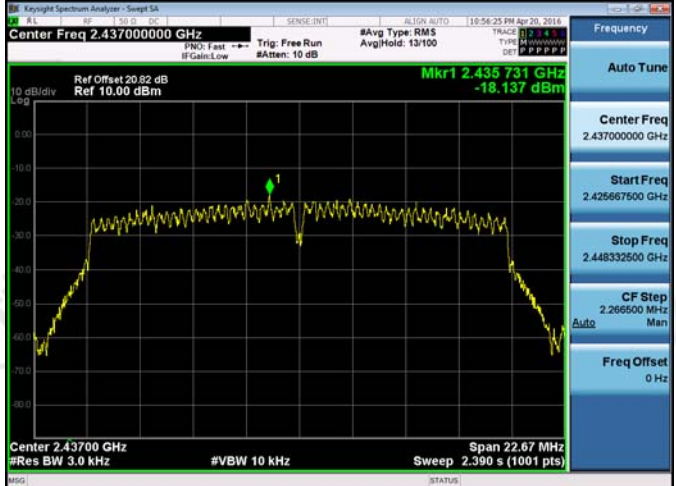
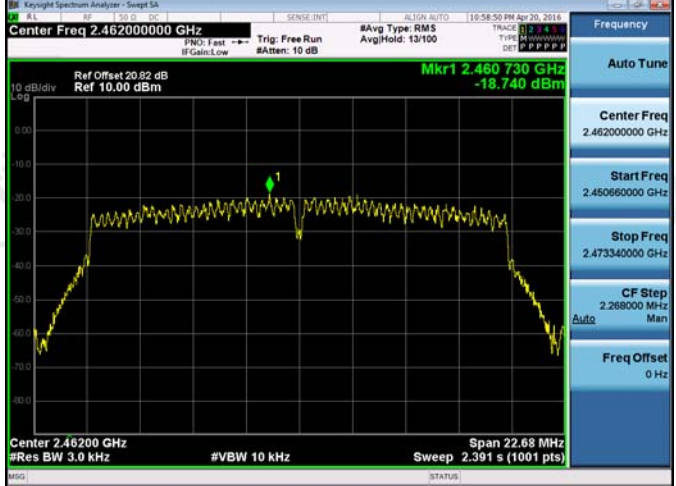
Result Table

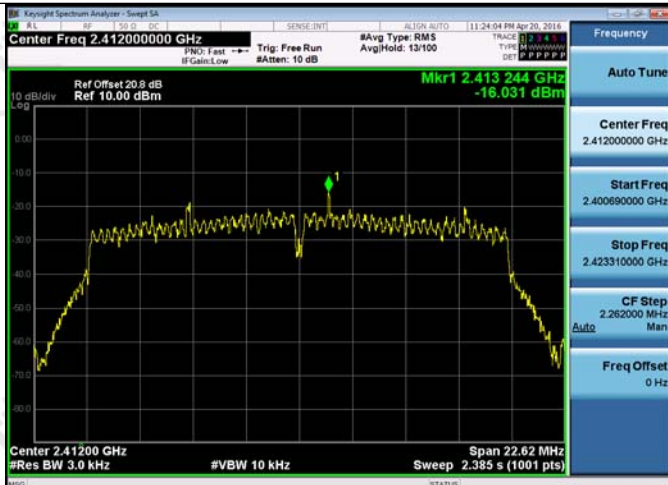
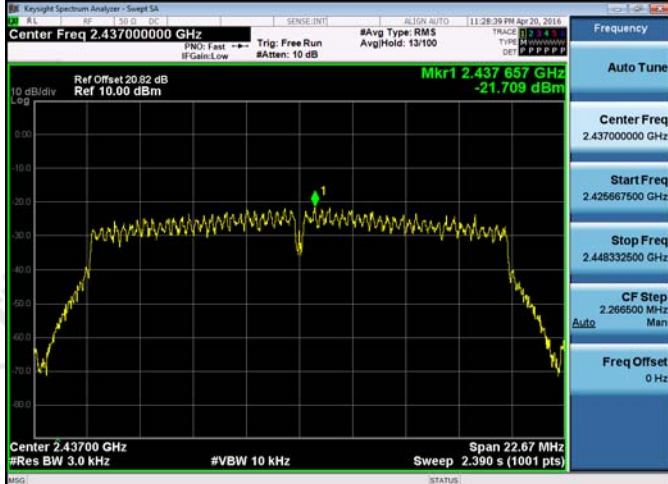
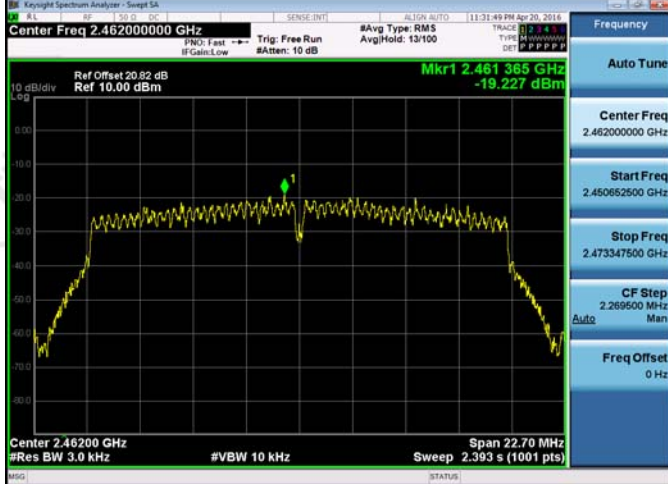
Mode	Antenna	Channel	Power Spectral Density [dBm]	Verdict
11B	Ant1	LCH	-8.255	PASS
11B	Ant2	LCH	-11.893	PASS
11B	Ant1	MCH	-12.559	PASS
11B	Ant2	MCH	-10.454	PASS
11B	Ant1	HCH	-11.875	PASS
11B	Ant2	HCH	-10.436	PASS
11G	Ant1	LCH	-18.142	PASS
11G	Ant2	LCH	-18.581	PASS
11G	Ant1	MCH	-18.241	PASS
11G	Ant2	MCH	-18.063	PASS
11G	Ant1	HCH	-18.742	PASS
11G	Ant2	HCH	-18.164	PASS
11N20SISO	Ant1	LCH	-16.654	PASS
11N20SISO	Ant2	LCH	-20.362	PASS
11N20SISO	Ant1	MCH	-18.137	PASS
11N20SISO	Ant2	MCH	-18.046	PASS
11N20SISO	Ant1	HCH	-18.740	PASS
11N20SISO	Ant2	HCH	-19.976	PASS
11N20MIMO	Ant1	LCH	-16.031	PASS
11N20MIMO	Ant2	LCH	-19.250	PASS
11N20MIMO	Ant1+2	LCH	-14.34	PASS
11N20MIMO	Ant1	MCH	-21.709	PASS
11N20MIMO	Ant2	MCH	-19.025	PASS
11N20MIMO	Ant1+2	MCH	-17.15	PASS
11N20MIMO	Ant1	HCH	-19.227	PASS
11N20MIMO	Ant2	HCH	-19.347	PASS
11N20MIMO	Ant1+2	HCH	-16.28	PASS
11N40SISO	Ant1	LCH	-22.834	PASS
11N40SISO	Ant2	LCH	-22.840	PASS
11N40SISO	Ant1	MCH	-22.879	PASS
11N40SISO	Ant2	MCH	-22.842	PASS
11N40SISO	Ant1	HCH	-22.392	PASS
11N40SISO	Ant2	HCH	-22.829	PASS
11N40MIMO	Ant1	LCH	-23.162	PASS
11N40MIMO	Ant2	LCH	-22.974	PASS
11N40MIMO	Ant1+2	LCH	-20.06	PASS
11N40MIMO	Ant1	MCH	-23.694	PASS
11N40MIMO	Ant2	MCH	-22.225	PASS
11N40MIMO	Ant1+2	MCH	-19.89	PASS
11N40MIMO	Ant1	HCH	-22.846	PASS
11N40MIMO	Ant2	HCH	-23.163	PASS
11N40MIMO	Ant1+2	HCH	-19.99	PASS

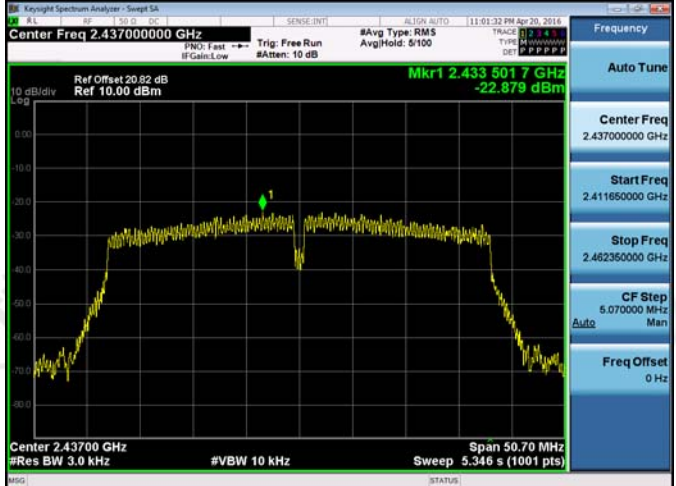
Test Graph

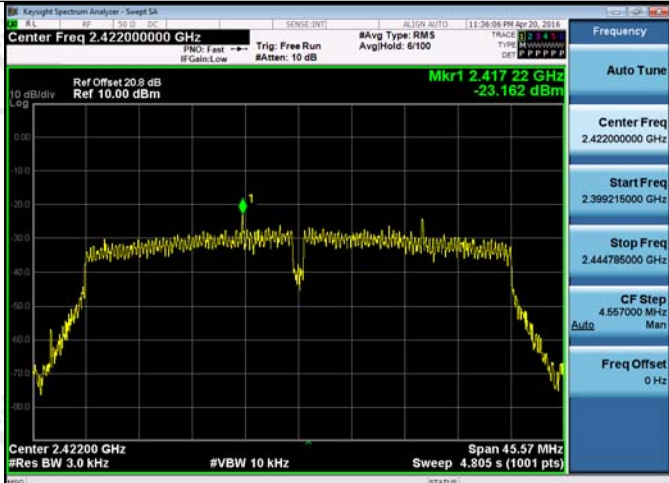
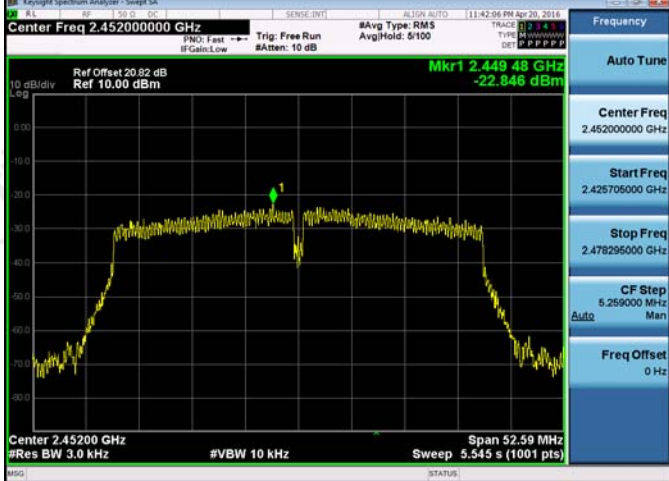


11G/LCH	
11G/MCH	
11G/HCH	

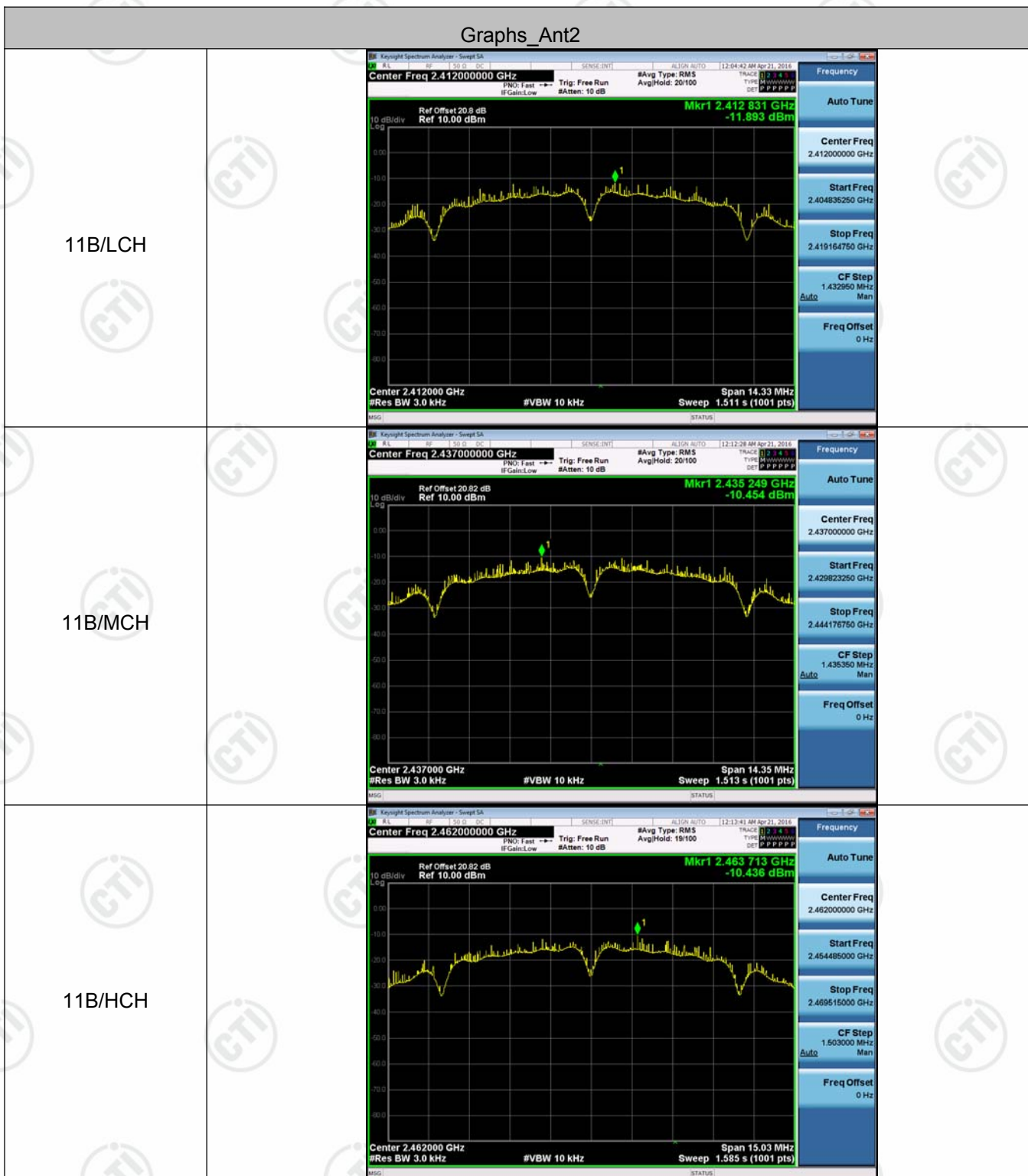
11N20SISO/LCH	 Center Freq 2.41200000 GHz Ref Offset 20.8 dB Ref 10.00 dBm Mkr1 2.410 733 GHz -16.654 dBm Center 2.41200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 22.62 MHz Sweep 2.385 s (1001 pts)
11N20SISO/MCH	 Center Freq 2.43700000 GHz Ref Offset 20.82 dB Ref 10.00 dBm Mkr1 2.435 731 GHz -18.137 dBm Center 2.43700 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 22.67 MHz Sweep 2.390 s (1001 pts)
11N20SISO/HCH	 Center Freq 2.46200000 GHz Ref Offset 20.82 dB Ref 10.00 dBm Mkr1 2.460 730 GHz -18.740 dBm Center 2.46200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 22.68 MHz Sweep 2.391 s (1001 pts)

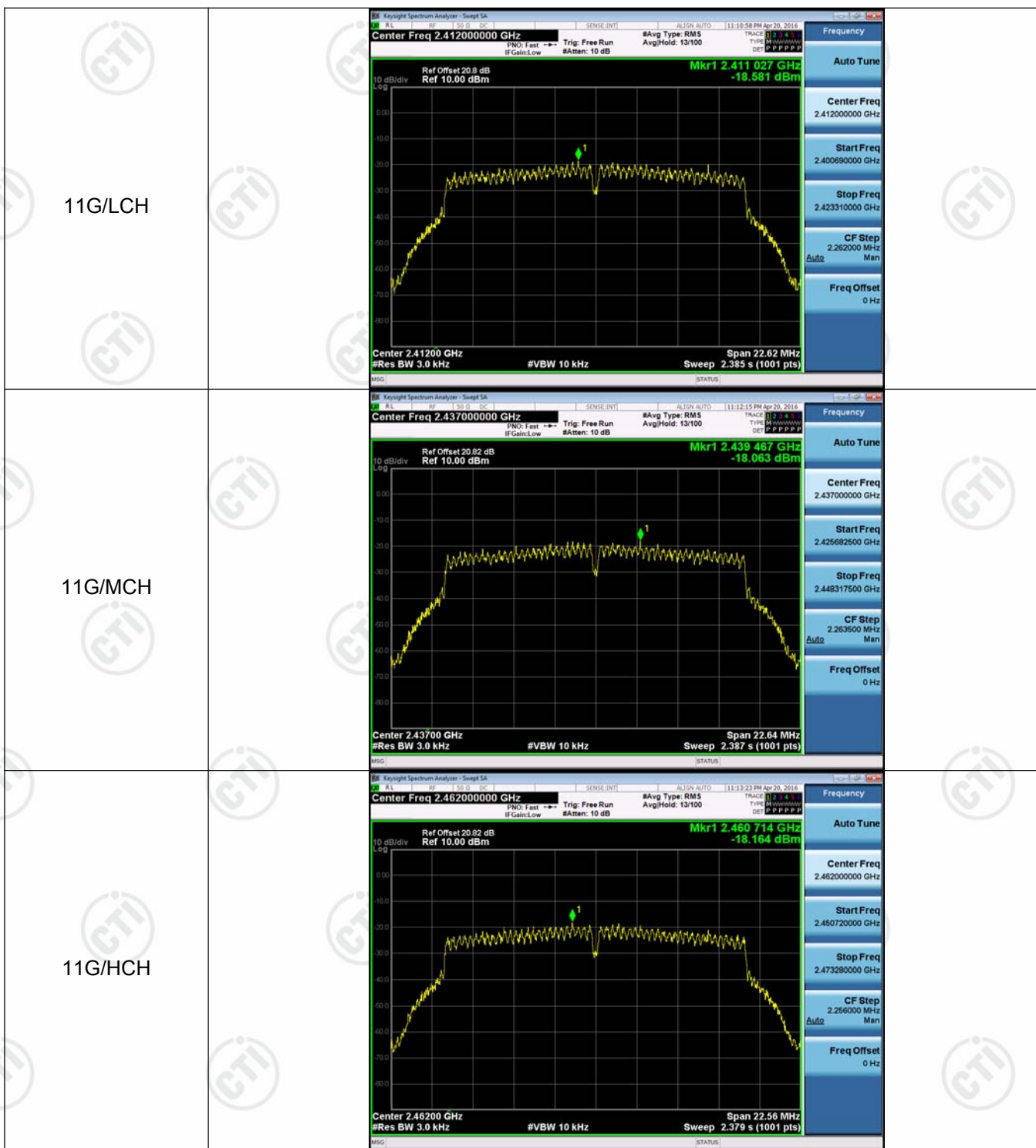
11N20MIMO/LCH	
11N20MIMO/MCH	
11N20MIMO/HCH	

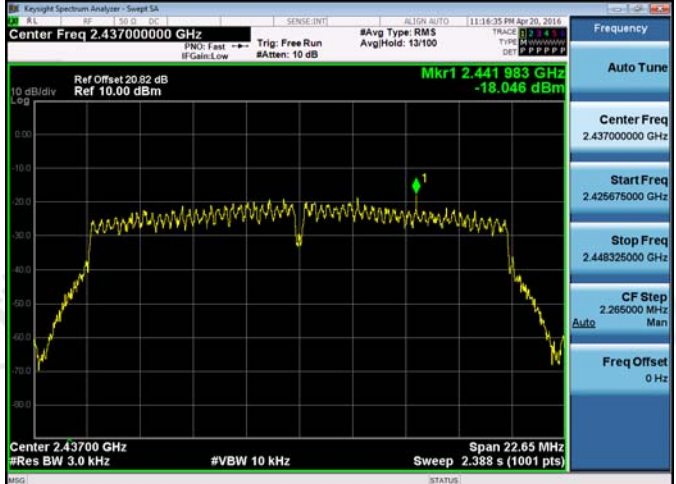
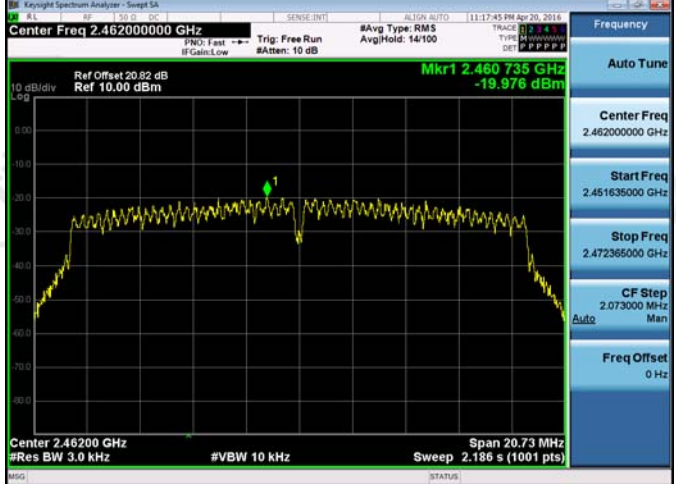
11N40SISO/LCH	
11N40SISO/MCH	
11N40SISO/HCH	

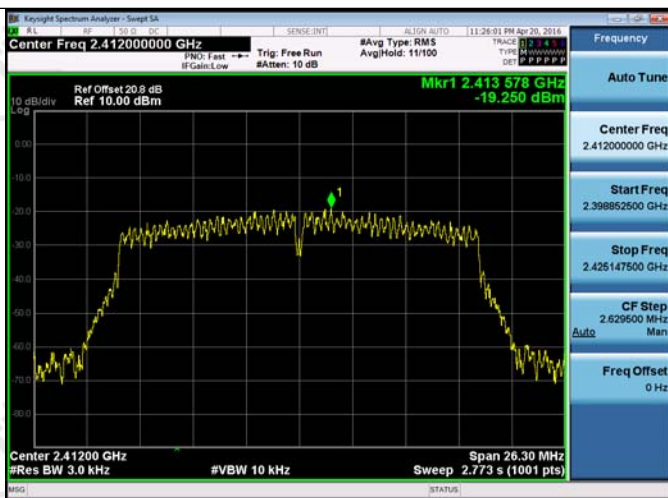
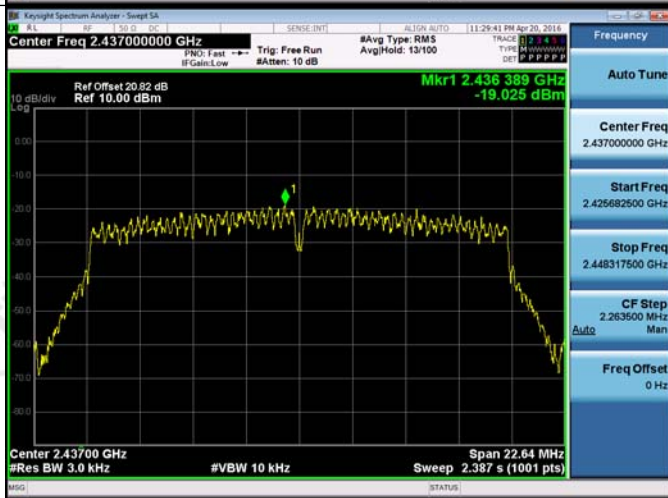
11N40MIMO/LCH	
11N40MIMO/MCH	
11N40MIMO/HCH	

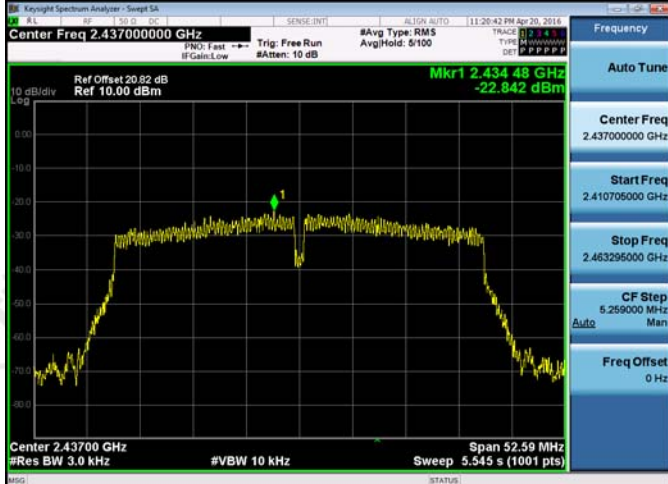
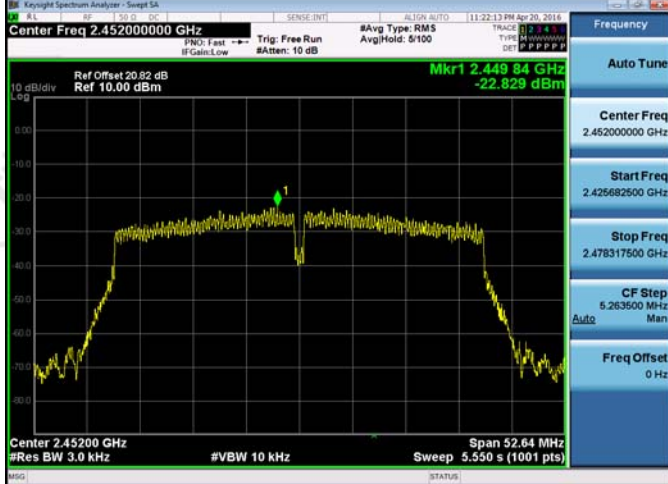
Graphs_Ant2

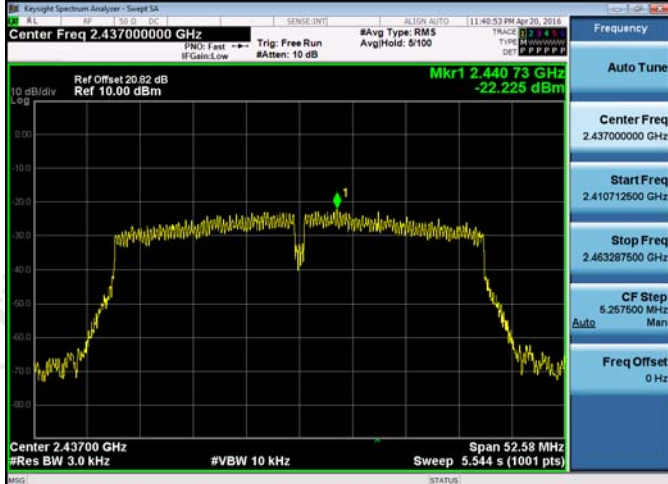




11N20SISO/LCH	 Key parameters from the screenshot: - Center Freq: 2.41200000 GHz - Mkr1: 2.412 271 GHz, -20.362 dBm - Span: 22.62 MHz - Res BW: 3.0 kHz - Ref Offset: 20.8 dB, Ref: 10.00 dBm
11N20SISO/MCH	 Key parameters from the screenshot: - Center Freq: 2.43700000 GHz - Mkr1: 2.441 983 GHz, -18.046 dBm - Span: 22.65 MHz - Res BW: 3.0 kHz - Ref Offset: 20.82 dB, Ref: 10.00 dBm
11N20SISO/HCH	 Key parameters from the screenshot: - Center Freq: 2.46200000 GHz - Mkr1: 2.460 735 GHz, -19.976 dBm - Span: 20.73 MHz - Res BW: 3.0 kHz - Ref Offset: 20.82 dB, Ref: 10.00 dBm

11N20MIMO/LCH	
11N20MIMO/MCH	
11N20MIMO/HCH	

11N40SISO/LCH	
11N40SISO/MCH	
11N40SISO/HCH	

11N40MIMO/LCH	 Key parameters from the screenshot: - Center Freq: 2.42200000 GHz - Span: 52.58 MHz - Ref Offset: 20.8 dB - Ref: 10.00 dBm - Mkr1: 2.424 52 GHz, -22.974 dBm #Res BW: 3.0 kHz #VBW: 10 kHz - Sweep: 5.544 s (1001 pts)
11N40MIMO/MCH	 Key parameters from the screenshot: - Center Freq: 2.43700000 GHz - Span: 52.58 MHz - Ref Offset: 20.82 dB - Ref: 10.00 dBm - Mkr1: 2.440 73 GHz, -22.225 dBm #Res BW: 3.0 kHz #VBW: 10 kHz - Sweep: 5.544 s (1001 pts)
11N40MIMO/HCH	 Key parameters from the screenshot: - Center Freq: 2.45200000 GHz - Span: 52.58 MHz - Ref Offset: 20.82 dB - Ref: 10.00 dBm - Mkr1: 2.448 53 GHz, -23.163 dBm #Res BW: 3.0 kHz #VBW: 10 kHz - Sweep: 5.544 s (1001 pts)

Appendix F): Antenna Requirement

15.203 requirement:

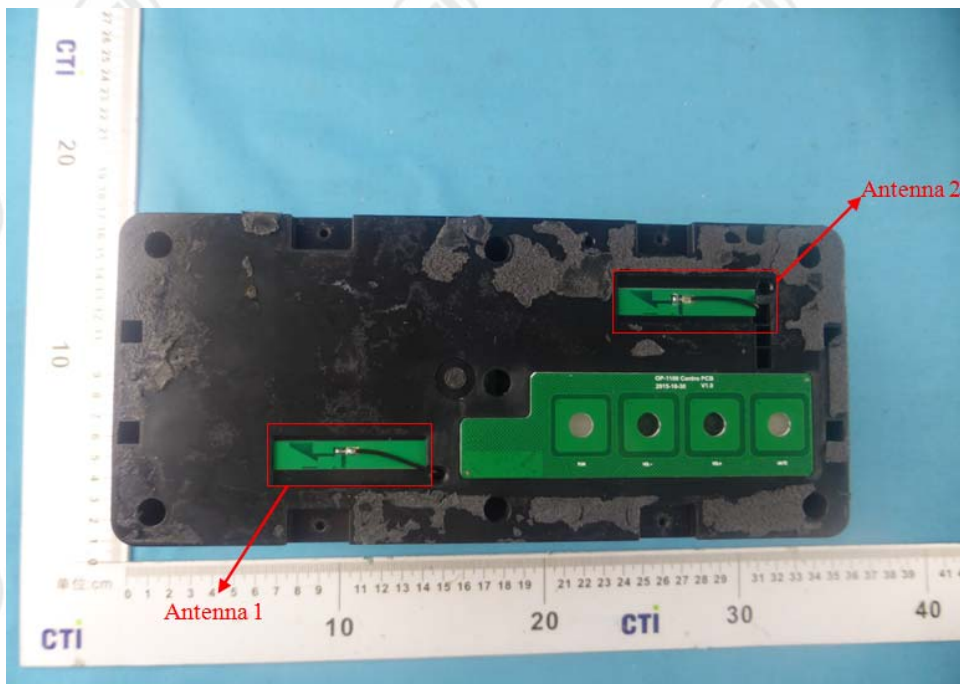
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

15.247(b) (4) requirement:

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

EUT Antenna:

The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is 3dBi.



Appendix G): AC Power Line Conducted Emission

Test Procedure:	Test frequency range :150KHz-30MHz 1)The mains terminal disturbance voltage test was conducted in a shielded room. 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a $50\Omega/50\mu\text{H} + 5\Omega$ linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded. 3)The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane, 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2. 5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.															
Limit:	<table border="1"> <thead> <tr> <th rowspan="2">Frequency range (MHz)</th><th colspan="2">Limit (dBμV)</th></tr> <tr> <th>Quasi-peak</th><th>Average</th></tr> </thead> <tbody> <tr> <td>0.15-0.5</td><td>66 to 56*</td><td>56 to 46*</td></tr> <tr> <td>0.5-5</td><td>56</td><td>46</td></tr> <tr> <td>5-30</td><td>60</td><td>50</td></tr> </tbody> </table> * The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz. NOTE : The lower limit is applicable at the transition frequency		Frequency range (MHz)	Limit (dB μ V)		Quasi-peak	Average	0.15-0.5	66 to 56*	56 to 46*	0.5-5	56	46	5-30	60	50
Frequency range (MHz)	Limit (dB μ V)															
	Quasi-peak	Average														
0.15-0.5	66 to 56*	56 to 46*														
0.5-5	56	46														
5-30	60	50														

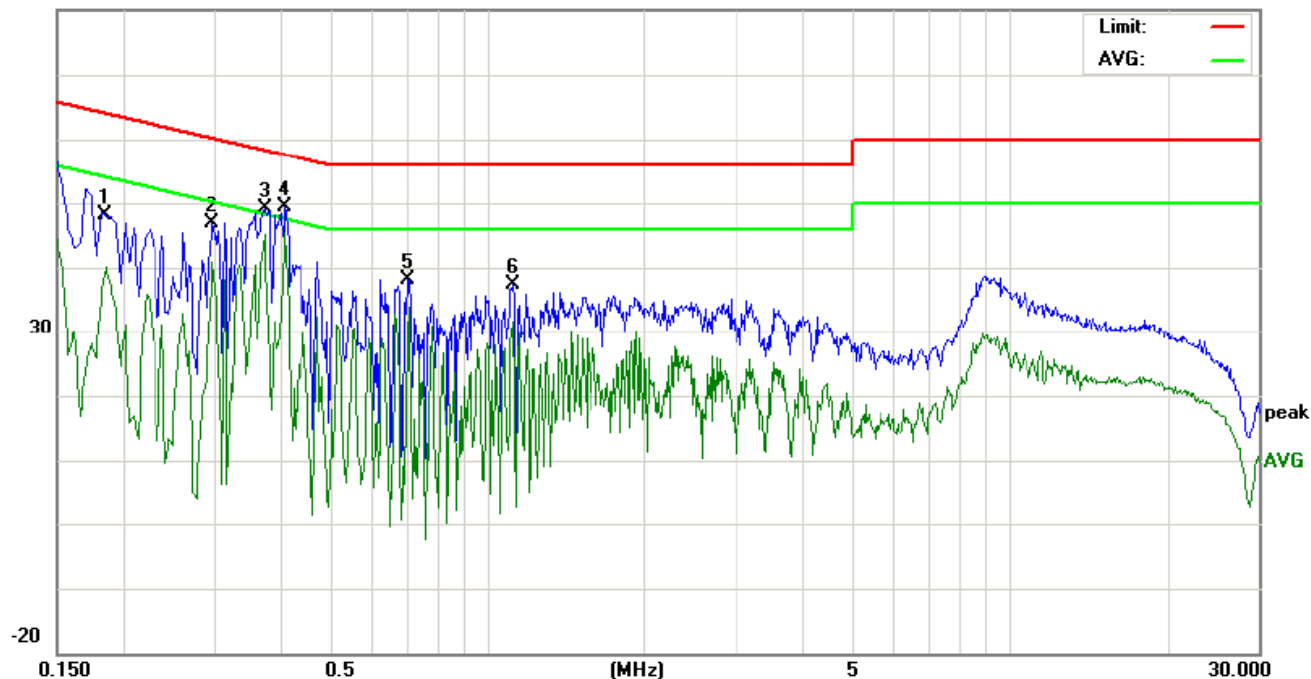
Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector.

Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

Live line:

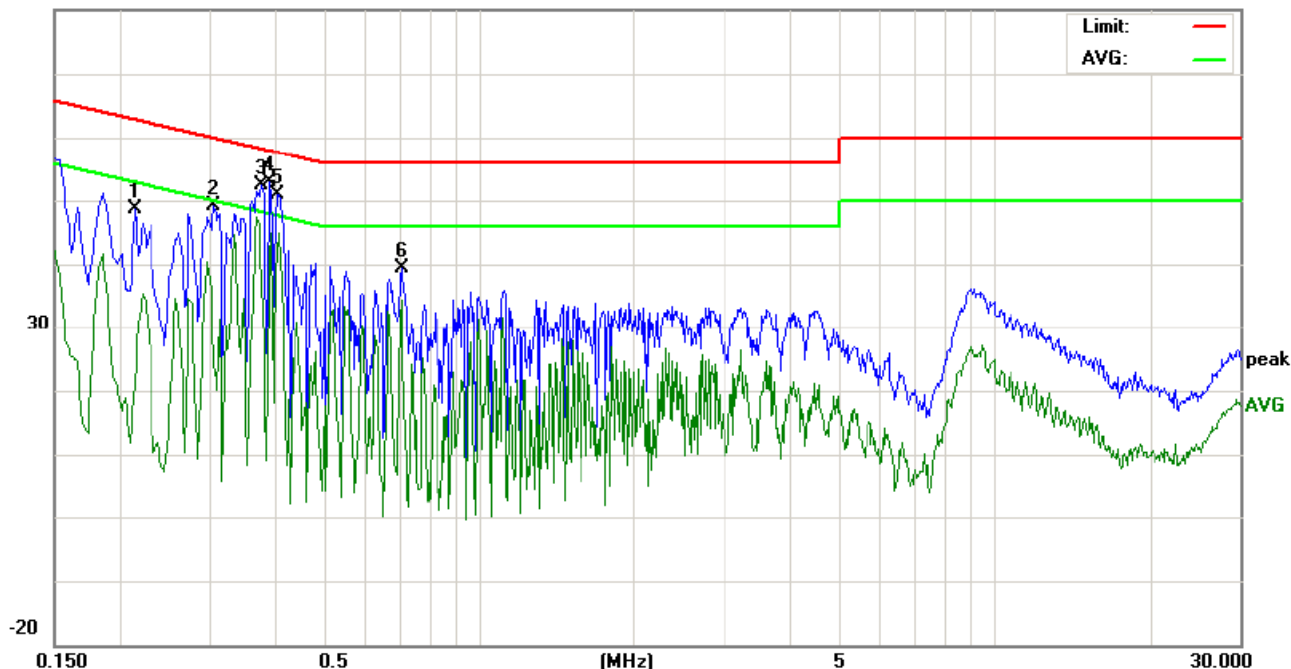
80.0 dBuV



No.	Freq. MHz	Reading_Level (dBuV)			Correct Factor dB	Measurement (dBuV)			Limit (dBuV)		Margin (dB)		P/F	Comment
		Peak	QP	AVG		peak	QP	AVG	QP	AVG	QP	AVG		
1	0.1860	38.08		30.42	9.80	47.88		40.22	64.21	54.21	-16.33	-13.99	P	
2	0.2980	36.98		31.11	9.80	46.78		40.91	60.30	50.30	-13.52	-9.39	P	
3	0.3740	39.22	38.73	34.59	9.87	49.09	48.60	44.46	58.41	48.41	-9.81	-3.95	P	
4	0.4105	39.51	37.76	32.85	9.90	49.41	47.66	42.75	57.64	47.64	-9.98	-4.89	P	
5	0.7060	28.14		24.01	9.90	38.04		33.91	56.00	46.00	-17.96	-12.09	P	
6	1.1180	27.34		21.68	10.00	37.34		31.68	56.00	46.00	-18.66	-14.32	P	

Neutral line:

80.0 dBuV



No.	Freq. MHz	Reading_Level (dBuV)			Correct Factor dB	Measurement (dBuV)			Limit (dBuV)		Margin (dB)		P/F	Comment
		Peak	QP	AVG		peak	QP	AVG	QP	AVG	QP	AVG		
1	0.2140	38.92		11.21	9.80	48.72		21.01	63.04	53.04	-14.32	-32.03	P	
2	0.3060	39.30		14.45	9.81	49.11		24.26	60.08	50.08	-10.97	-25.82	P	
3	0.3780	42.41		27.18	9.88	52.29		37.06	58.32	48.32	-6.03	-11.26	P	
4	0.3899	43.02		26.86	9.89	52.91		36.75	58.06	48.06	-5.15	-11.31	P	
5	0.4060	40.96		33.08	9.90	50.86		42.98	57.73	47.73	-6.87	-4.75	P	
6	0.7060	29.47		24.47	9.90	39.37		34.37	56.00	46.00	-16.63	-11.63	P	

Notes:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level = Receiver Reading + LISN Factor + Cable Loss.

Appendix H): Restricted bands around fundamental frequency (Radiated)

Receiver Setup:	Frequency	Detector	RBW	VBW	Remark
	30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak
	Above 1GHz	Peak	1MHz	3MHz	Peak
		Peak	1MHz	10Hz	Average
Test Procedure:	Below 1GHz test procedure as below: The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable was turned from 0 degrees to 360 degrees to find the maximum reading. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel Above 1GHz test procedure as below: Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber change form table 0.8 meter to 1.5 meter(Above 18GHz the distance is 1 meter and table is 1.5 meter). Test the EUT in the lowest channel , the Highest channel The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is worse case. Repeat above procedures until all frequencies measured was complete.				
Limit:	Frequency	Limit (dBμV/m @3m)		Remark	
	30MHz-88MHz	40.0		Quasi-peak Value	
	88MHz-216MHz	43.5		Quasi-peak Value	
	216MHz-960MHz	46.0		Quasi-peak Value	
	960MHz-1GHz	54.0		Quasi-peak Value	
	Above 1GHz	54.0		Average Value	
		74.0		Peak Value	

Test plot as follows:
Antenna1:

Worse case mode:		802.11b (11Mbps)								
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Premap Factor (dB)	Read Level (dBμV)	Level (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Antenna Polaxis	Remark	Test channel
2390.00	32.53	4.28	37.21	47.18	46.78	74	-27.22	H	PK	Lowest
2390.00	32.53	4.28	37.21	47.45	47.05	74	-26.95	V	PK	Lowest
2483.50	32.71	4.51	37.19	45.73	45.76	74	-28.24	H	PK	Highest
2483.50	32.71	4.51	37.19	47.17	47.20	74	-26.80	V	PK	Highest

Worse case mode:		802.11g (6Mbps)								
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Premap Factor (dB)	Read Level (dBμV)	Level (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Antenna Polaxis	Remark	Test channel
2390.00	32.53	4.28	37.21	61.07	60.67	74	-13.33	H	PK	Lowest
2390.00	32.53	4.28	37.21	42.53	44.95	54	-9.05	H	AV	Lowest
2390.00	32.53	4.28	37.21	64.31	63.91	74	-10.09	V	PK	Lowest
2390.00	32.53	4.28	37.21	44.14	46.56	54	-7.44	V	AV	Lowest
2483.50	32.71	4.51	37.19	61.91	61.94	74	-12.06	H	PK	Highest
2483.50	32.71	4.51	37.19	43.59	46.40	54	-7.60	H	AV	Highest
2483.50	32.71	4.51	37.19	57.13	59.94	74	-14.06	V	PK	Highest
2483.50	32.71	4.51	37.19	41.59	44.40	54	-9.60	V	AV	Highest

Worse case mode:		802.11n(HT20) (6.5Mbps)								
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Premap Factor (dB)	Read Level (dBμV)	Level (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Antenna Polaxis	Remark	Test channel
2390.00	32.53	4.28	37.21	65.87	65.47	74	-8.53	H	PK	Lowest
2390.00	32.53	4.28	37.21	44.83	47.25	54	-6.75	H	AV	Lowest
2390.00	32.53	4.28	37.21	65.92	65.52	74	-8.48	V	PK	Lowest
2390.00	32.53	4.28	37.21	45.31	47.73	54	-6.27	V	AV	Lowest
2483.50	32.71	4.51	37.19	67.48	67.51	74	-6.49	H	PK	Highest
2483.50	32.71	4.51	37.19	47.03	49.84	54	-4.16	H	AV	Highest
2483.50	32.71	4.51	37.19	67.61	67.64	74	-6.36	V	PK	Highest
2483.50	32.71	4.51	37.19	46.66	49.47	54	-4.53	V	AV	Highest

Worse case mode:		802.11n(HT40) (13.5Mbps)								
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Premap Factor (dB)	Read Level (dBμV)	Level (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Antenna Polaxis	Remark	Test channel
2390.00	32.53	4.28	37.21	65.18	67.60	74	-6.40	H	PK	Lowest
2390.00	32.53	4.28	37.21	47.13	49.55	54	-4.45	H	AV	Lowest
2390.00	32.53	4.28	37.21	66.18	68.60	74	-5.40	V	PK	Lowest
2390.00	32.53	4.28	37.21	47.13	49.55	54	-4.45	V	AV	Lowest
2483.50	32.71	4.51	37.19	68.27	68.30	74	-5.70	H	PK	Highest
2483.50	32.71	4.51	37.19	46.25	49.06	54	-4.94	H	AV	Highest
2483.50	32.71	4.51	37.19	61.05	63.86	74	-3.15	V	PK	Highest
2483.50	32.71	4.51	37.19	46.09	48.90	54	-5.10	V	AV	Highest

Antenna2:

Worse case mode:		802.11b (11Mbps)								
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Premap Factor (dB)	Read Level (dBμV)	Level (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Antenna Polaxis	Remark	Test channel
2390.00	32.53	4.28	37.21	47.22	46.82	74	-27.18	H	PK	Lowest
2390.00	32.53	4.28	37.21	48.04	47.64	74	-26.36	V	PK	Lowest
2483.50	32.71	4.51	37.19	48.59	48.62	74	-25.38	H	PK	Highest
2483.50	32.71	4.51	37.19	49.35	49.38	74	-24.62	V	PK	Highest

Worse case mode:		802.11g (6Mbps)								
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Premap Factor (dB)	Read Level (dBμV)	Level (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Antenna Polaxis	Remark	Test channel
2390.00	32.53	4.28	37.21	57.81	57.41	74	-16.59	H	PK	Lowest
2390.00	32.53	4.28	37.21	40.63	43.05	54	-10.95	H	AV	Lowest
2390.00	32.53	4.28	37.21	59.20	58.80	74	-15.20	V	PK	Lowest
2390.00	32.53	4.28	37.21	39.19	41.61	54	-12.39	V	AV	Lowest
2483.50	32.71	4.51	37.19	63.90	63.93	74	-10.07	H	PK	Highest
2483.50	32.71	4.51	37.19	44.22	47.03	54	-6.97	H	AV	Highest
2483.50	32.71	4.51	37.19	65.19	65.22	74	-8.78	V	PK	Highest
2483.50	32.71	4.51	37.19	45.37	48.18	54	-5.82	V	AV	Highest

Worse case mode:		802.11n(HT20) (6.5Mbps)								
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Premap Factor (dB)	Read Level (dBμV)	Level (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Antenna Polaxis	Remark	Test channel
2390.00	32.53	4.28	37.21	62.52	62.12	74	-11.88	H	PK	Lowest
2390.00	32.53	4.28	37.21	42.66	45.08	54	-8.92	H	AV	Lowest
2390.00	32.53	4.28	37.21	61.34	60.94	74	-13.06	V	PK	Lowest
2390.00	32.53	4.28	37.21	41.05	43.47	54	-10.53	V	AV	Lowest
2483.50	32.71	4.51	37.19	67.26	67.29	74	-6.71	H	PK	Highest
2483.50	32.71	4.51	37.19	45.33	48.14	54	-5.86	H	AV	Highest
2483.50	32.71	4.51	37.19	68.71	68.74	74	-5.26	V	PK	Highest
2483.50	32.71	4.51	37.19	47.49	50.3	54	-3.70	V	AV	Highest

Worse case mode:		802.11n(HT40) (13.5Mbps)								
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Premap Factor (dB)	Read Level (dBμV)	Level (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Antenna Polaxis	Remark	Test channel
2390.00	32.53	4.28	37.21	65.57	65.17	74	-8.83	H	PK	Lowest
2390.00	32.53	4.28	37.21	43.97	46.39	54	-7.61	H	AV	Lowest
2390.00	32.53	4.28	37.21	65.71	65.31	74	-8.69	V	PK	Lowest
2390.00	32.53	4.28	37.21	43.53	45.95	54	-8.05	V	AV	Lowest
2483.50	32.71	4.51	37.19	66.68	66.71	74	-7.29	H	PK	Highest
2483.50	32.71	4.51	37.19	45.10	47.91	54	-6.09	H	AV	Highest
2483.50	32.71	4.51	37.19	69.77	69.80	74	-4.20	V	PK	Highest
2483.50	32.71	4.51	37.19	46.94	49.75	54	-4.25	V	AV	Highest

Antenna 1+Antenna 2 : Keeping MIMO TX mode

Worse case mode:		802.11n(HT20) (6.5Mbps)								
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Premap Factor (dB)	Read Level (dBμV)	Level (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Antenna Polaxis	Remark	Test channel
2390.00	32.53	4.28	37.21	68.57	67.17	74	-5.83	H	PK	Lowest
2390.00	32.53	4.28	37.21	47.72	50.14	54	-3.86	H	AV	Lowest
2390.00	32.53	4.28	37.21	69.29	68.89	74	-5.11	V	PK	Lowest
2390.00	32.53	4.28	37.21	47.36	49.78	54	-4.22	V	AV	Lowest
2483.50	32.71	4.51	37.19	64.32	67.13	74	-6.87	H	PK	Highest
2483.50	32.71	4.51	37.19	45.76	48.57	54	-5.43	H	AV	Highest
2483.50	32.71	4.51	37.19	58.99	61.80	74	-12.20	V	PK	Highest
2483.50	32.71	4.51	37.19	47.11	49.92	54	-4.08	V	AV	Highest

Worse case mode:		802.11n(HT40) (13.5Mbps)								
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preampl Factor (dB)	Read Level (dBμV)	Level (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Antenna Polaxis	Remark	Test channel
2390.00	32.53	4.28	37.21	65.37	67.79	74	-6.21	H	PK	Lowest
2390.00	32.53	4.28	37.21	47.54	49.96	54	-4.04	H	AV	Lowest
2390.00	32.53	4.28	37.21	62.81	65.23	74	-8.77	V	PK	Lowest
2390.00	32.53	4.28	37.21	47.41	49.83	54	-4.17	V	AV	Lowest
2483.50	32.71	4.51	37.19	61.28	64.09	74	-9.91	H	PK	Highest
2483.50	32.71	4.51	37.19	45.39	48.20	54	-5.80	H	AV	Highest
2483.50	32.71	4.51	37.19	64.05	66.86	74	-7.14	V	PK	Highest
2483.50	32.71	4.51	37.19	47.35	50.16	54	-3.84	V	AV	Highest

Note:

1) Through Pre-scan transmitting mode with all kind of modulation and data rate, find the 11Mbps of rate is the worst case of 802.11b; 6Mbps of rate is the worst case of 802.11g; 6.5Mbps of rate is the worst case of 802.11n(HT20) ; 13.5Mbps of rate is the worst case of 802.11n(HT40),and then Only the worst case is recorded in the report.

2) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading - Correct Factor

Correct Factor = Preamplifier Factor- Antenna Factor-Cable Factor

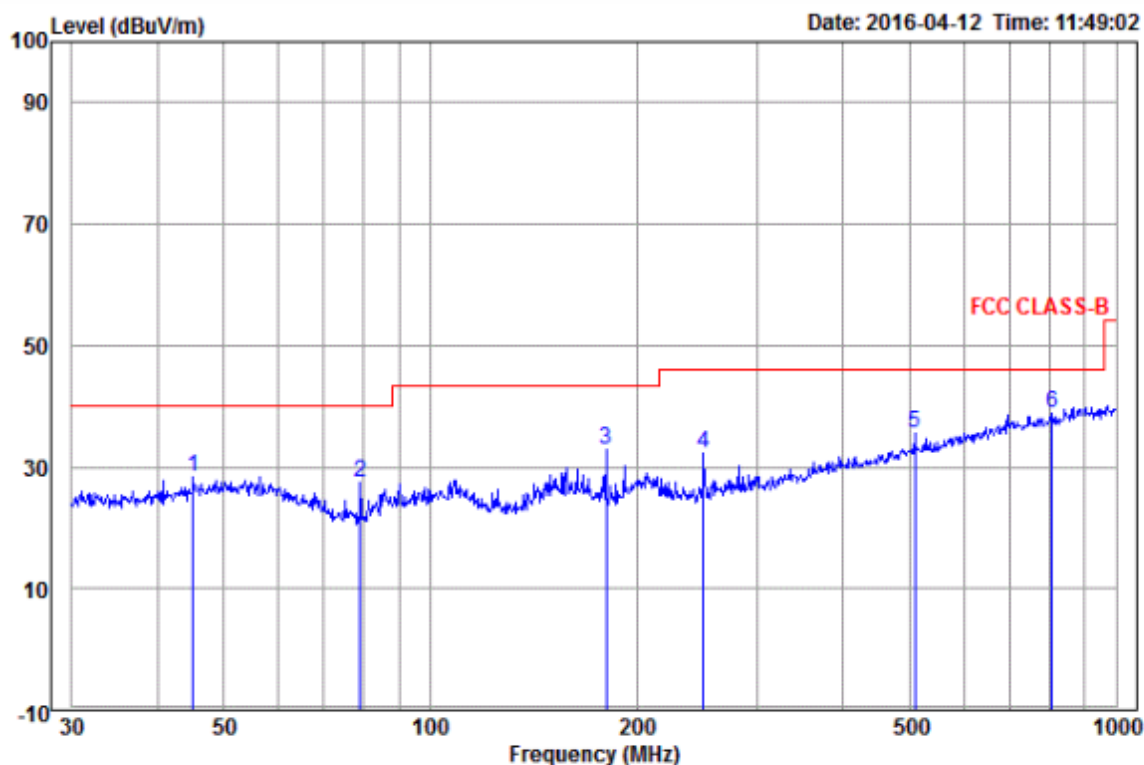
Appendix I): Radiated Spurious Emissions

Receiver Setup:	Frequency	Detector	RBW	VBW	Remark
	0.009MHz-0.090MHz	Peak	10kHz	30kHz	Peak
	0.009MHz-0.090MHz	Average	10kHz	30kHz	Average
	0.090MHz-0.110MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
	0.110MHz-0.490MHz	Peak	10kHz	30kHz	Peak
	0.110MHz-0.490MHz	Average	10kHz	30kHz	Average
	0.490MHz -30MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
	30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak
	Above 1GHz	Peak	1MHz	3MHz	Peak
Test Procedure:	Above 1GHz	Peak	1MHz	10Hz	Average
	Below 1GHz test procedure as below: The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable was turned from 0 degrees to 360 degrees to find the maximum reading. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. Above 1GHz test procedure as below: Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change form table 0.8 meter to 1.5 meter(Above 18GHz the distance is 1 meter and table is 1.5 meter).. Test the EUT in the lowest channel ,the middle channel ,the Highest channel The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is worse case. Repeat above procedures until all frequencies measured was complete.				
Limit:	Frequency	Field strength (microvolt/meter)	Limit (dBμV/m)	Remark	Measurement distance (m)
	0.009MHz-0.490MHz	2400/F(kHz)	-	-	300
	0.490MHz-1.705MHz	24000/F(kHz)	-	-	30
	1.705MHz-30MHz	30	-	-	30
	30MHz-88MHz	100	40.0	Quasi-peak	3
	88MHz-216MHz	150	43.5	Quasi-peak	3
	216MHz-960MHz	200	46.0	Quasi-peak	3
	960MHz-1GHz	500	54.0	Quasi-peak	3
	Above 1GHz	500	54.0	Average	3
Note: 15.35(b), Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device.					

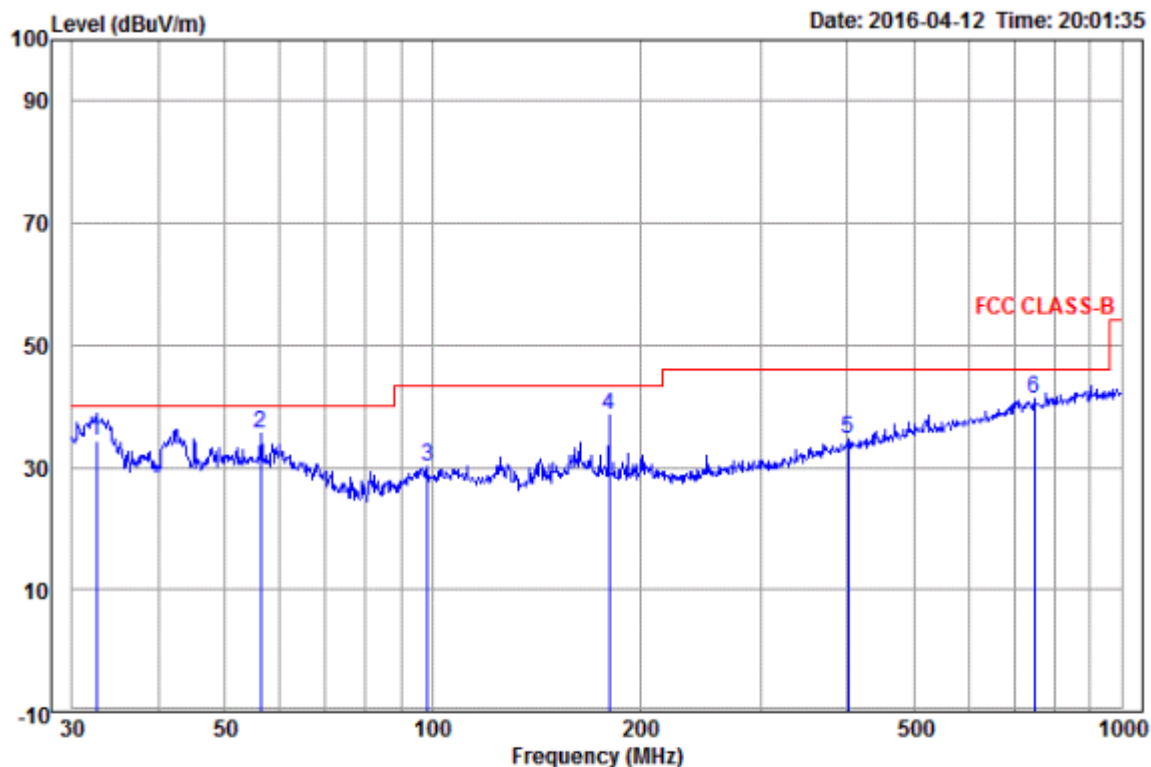
Radiated Spurious Emissions test Data:

Radiated Emission below 1GHz

30MHz~1GHz (QP)



	Freq	Ant Factor	Cable Loss	Read Level	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	45.058	14.68	0.99	12.63	28.30	40.00	-11.70	Horizontal
2	78.965	8.78	1.56	17.24	27.58	40.00	-12.42	Horizontal
3	180.649	10.93	1.99	20.09	33.01	43.50	-10.49	Horizontal
4	250.301	12.41	2.35	17.47	32.23	46.00	-13.77	Horizontal
5	508.258	18.43	3.14	14.09	35.66	46.00	-10.34	Horizontal
6 pp	807.429	21.65	3.88	13.20	38.73	46.00	-7.27	Horizontal



	Ant Freq	Cable Factor	Cable Loss	Read Level	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	32.520	12.98	1.00	20.50	34.48	40.00	-5.52	Vertical
2	56.395	14.24	1.42	19.87	35.53	40.00	-4.47	Vertical
3	98.487	12.91	1.57	15.76	30.24	43.50	-13.26	Vertical
4	180.649	10.93	1.99	25.49	38.41	43.50	-5.09	Vertical
5	401.839	16.33	2.81	15.57	34.71	46.00	-11.29	Vertical
6	747.483	20.99	4.00	16.20	41.19	46.00	-4.81	Vertical

Transmitter Emission above 1GHz
Antenna 1

Test mode:		802.11b(11Mbps)		Test Frequency:		2412MHz			
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Level (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Result	Antenna Polaxis
1457.523	30.79	2.79	34.71	43.43	42.30	74	-31.70	PASS	H
3607.257	33.09	5.50	34.56	42.60	46.63	74	-27.37	PASS	H
4824.000	34.73	5.10	34.35	38.19	43.67	74	-30.33	PASS	H
5821.207	35.77	7.03	34.30	41.57	50.07	74	-23.93	PASS	H
7236.000	36.42	6.69	34.90	41.27	49.48	74	-24.52	PASS	H
9648.000	37.93	7.70	35.07	39.75	50.31	74	-23.69	PASS	H
1424.511	30.72	2.76	34.74	44.43	43.17	74	-30.83	PASS	V
3607.257	33.09	5.50	34.56	42.60	46.63	74	-27.37	PASS	V
4824.000	34.73	5.10	34.35	40.19	45.67	74	-28.33	PASS	V
5821.207	35.77	7.03	34.30	41.57	50.07	74	-23.93	PASS	V
7236.000	36.42	6.69	34.90	41.27	49.48	74	-24.52	PASS	V
9648.000	37.93	7.70	35.07	39.65	50.21	74	-23.79	PASS	V

Test mode:		802.11b(11Mbps)		Test Frequency:		2437MHz			
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Level (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Result	Antenna Polaxis
1617.862	31.09	2.93	34.58	43.32	42.76	74	-31.24	PASS	H
3625.669	33.07	5.50	34.57	42.71	46.71	74	-27.29	PASS	H
4874.000	34.84	5.09	34.33	43.20	48.80	74	-25.20	PASS	H
5806.408	35.76	7.00	34.30	41.87	50.33	74	-23.67	PASS	H
7311.000	36.43	6.76	34.90	41.99	50.28	74	-23.72	PASS	H
9748.000	38.03	7.61	35.05	38.18	48.77	74	-25.23	PASS	H
1406.496	30.68	2.74	34.76	43.48	42.14	74	-31.86	PASS	V
3616.451	33.08	5.50	34.56	41.95	45.97	74	-28.03	PASS	V
4874.000	34.84	5.09	34.33	43.21	48.81	74	-25.19	PASS	V
5910.798	35.83	7.23	34.30	40.64	49.40	74	-24.60	PASS	V
7311.000	36.43	6.76	34.90	42.31	50.60	74	-23.40	PASS	V
9748.000	38.03	7.61	35.05	39.87	50.46	74	-23.54	PASS	V

Test mode:		802.11b(11Mbps)		Test Frequency:		2462MHz			
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Level (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Result	Antenna Polaxis
1630.264	31.11	2.94	34.57	43.58	43.06	74	-30.94	PASS	H
3738.129	32.99	5.48	34.58	42.13	46.02	74	-27.98	PASS	H
4924.000	34.94	5.07	34.32	39.97	45.66	74	-28.34	PASS	H
6001.768	35.90	7.43	34.30	40.54	49.57	74	-24.43	PASS	H
7386.000	36.44	6.83	34.90	40.85	49.22	74	-24.78	PASS	H
9848.000	38.14	7.53	35.03	39.97	50.61	74	-23.39	PASS	H
1450.122	30.77	2.78	34.72	44.61	43.44	74	-30.56	PASS	V
3786.010	32.95	5.47	34.58	41.64	45.48	74	-28.52	PASS	V
4924.000	34.94	5.07	34.32	42.76	48.45	74	-25.55	PASS	V
5821.207	35.77	7.03	34.30	41.28	49.78	74	-24.22	PASS	V
7386.000	36.44	6.83	34.90	42.25	50.62	74	-23.38	PASS	V
9848.000	38.14	7.53	35.03	39.57	50.21	74	-23.79	PASS	V

Test mode:		802.11g(6Mbps)		Test Frequency:		2412MHz			
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Level (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Result	Antenna Polaxis
1204.210	30.24	2.52	34.96	44.58	42.38	74	-31.62	PASS	H
3625.669	33.07	5.50	34.57	42.57	46.57	74	-27.43	PASS	H
4824.000	34.73	5.10	34.35	40.13	45.61	74	-28.39	PASS	H
5880.782	35.81	7.17	34.30	41.12	49.80	74	-24.20	PASS	H
7236.000	36.42	6.69	34.90	40.21	48.42	74	-25.58	PASS	H
9648.000	37.93	7.70	35.07	39.46	50.02	74	-23.98	PASS	H
1410.080	30.69	2.74	34.75	43.99	42.67	74	-31.33	PASS	V
3625.669	33.07	5.50	34.57	42.57	46.57	74	-27.43	PASS	V
4824.000	34.73	5.10	34.35	42.84	48.32	74	-25.68	PASS	V
5880.782	35.81	7.17	34.30	41.12	49.80	74	-24.20	PASS	V
7236.000	36.42	6.69	34.90	41.49	49.70	74	-24.30	PASS	V
9648.000	37.93	7.70	35.07	40.06	50.62	74	-23.38	PASS	V

Test mode:		802.11g(6Mbps)		Test Frequency:		2437MHz			
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Level (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Result	Antenna Polaxis
1198.095	30.22	2.51	34.97	43.99	41.75	74	-32.25	PASS	H
1634.419	31.12	2.95	34.56	44.18	43.69	74	-30.31	PASS	H
3625.669	33.07	5.50	34.57	42.22	46.22	74	-27.78	PASS	H
4874.000	34.84	5.09	34.33	39.70	45.30	74	-28.70	PASS	H
7311.000	36.43	6.76	34.90	41.99	50.28	74	-23.72	PASS	H
9748.000	38.03	7.61	35.05	40.19	50.78	74	-23.22	PASS	H
1450.122	30.77	2.78	34.72	42.45	41.28	74	-32.72	PASS	V
3757.208	32.97	5.48	34.58	41.12	44.99	74	-29.01	PASS	V
4874.000	34.84	5.09	34.33	36.61	42.21	74	-31.79	PASS	V
5821.207	35.77	7.03	34.30	40.02	48.52	74	-25.48	PASS	V
7311.000	36.43	6.76	34.90	40.24	48.53	74	-25.47	PASS	V
9748.000	38.03	7.61	35.05	38.29	48.88	74	-25.12	PASS	V

Test mode:		802.11g(6Mbps)		Test Frequency:		2462MHz			
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Level (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Result	Antenna Polaxis
1420.890	30.71	2.75	34.74	43.03	41.75	74	-32.25	PASS	H
3757.208	32.97	5.48	34.58	41.42	45.29	74	-28.71	PASS	H
4924.000	34.94	5.07	34.32	39.51	45.20	74	-28.80	PASS	H
5940.967	35.86	7.30	34.30	40.98	49.84	74	-24.16	PASS	H
7386.000	36.44	6.83	34.90	40.96	49.33	74	-24.67	PASS	H
9848.000	38.14	7.53	35.03	40.16	50.80	74	-23.20	PASS	H
1420.890	30.71	2.75	34.74	43.45	42.17	74	-31.83	PASS	V
3738.129	32.99	5.48	34.58	42.69	46.58	74	-27.42	PASS	V
4924.000	34.94	5.07	34.32	38.84	44.53	74	-29.47	PASS	V
5925.863	35.85	7.27	34.30	40.45	49.27	74	-24.73	PASS	V
7386.000	36.44	6.83	34.90	41.25	49.62	74	-24.38	PASS	V
9848.000	38.14	7.53	35.03	39.85	50.49	74	-23.51	PASS	V

Test mode:		802.11n(HT20)(6.5Mbps)		Test Frequency:		2412MHz			
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Level (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Result	Antenna Polaxis
1439.090	30.75	2.77	34.73	43.31	42.10	74	-31.90	PASS	H
4107.316	33.07	5.39	34.56	41.74	45.64	74	-28.36	PASS	H
4824.000	34.73	5.10	34.35	40.39	45.87	74	-28.13	PASS	H
5925.863	35.85	7.27	34.30	40.84	49.66	74	-24.34	PASS	H
7236.000	36.42	6.69	34.90	41.79	50.00	74	-24.00	PASS	H
9648.000	37.93	7.70	35.07	39.28	49.84	74	-24.16	PASS	H
1207.279	30.24	2.52	34.96	44.35	42.15	74	-31.85	PASS	V
1856.261	31.48	3.13	34.40	43.53	43.74	74	-30.26	PASS	V
4824.000	34.73	5.10	34.35	43.14	48.62	74	-25.38	PASS	V
5925.863	35.85	7.27	34.30	40.81	49.63	74	-24.37	PASS	V
7236.000	36.42	6.69	34.90	42.24	50.45	74	-23.55	PASS	V
9648.000	37.93	7.70	35.07	37.71	48.27	74	-25.73	PASS	V

Test mode:		802.11n(HT20)(6.5Mbps)		Test Frequency:		2437MHz			
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Level (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Result	Antenna Polaxis
1198.095	30.22	2.51	34.97	44.55	42.31	74	-31.69	PASS	H
3625.669	33.07	5.50	34.57	42.20	46.20	74	-27.80	PASS	H
4874.000	34.84	5.09	34.33	38.58	44.18	74	-29.82	PASS	H
5940.967	35.86	7.30	34.30	40.85	49.71	74	-24.29	PASS	H
7311.000	36.43	6.76	34.90	42.05	50.34	74	-23.66	PASS	H
9748.000	38.03	7.61	35.05	39.85	50.44	74	-23.56	PASS	H
1216.534	30.27	2.53	34.95	43.68	41.53	74	-32.47	PASS	V
3719.146	33.00	5.49	34.57	42.02	45.94	74	-28.06	PASS	V
4874.000	34.84	5.09	34.33	40.34	45.94	74	-28.06	PASS	V
5956.109	35.87	7.33	34.30	40.53	49.43	74	-24.57	PASS	V
7311.000	36.43	6.76	34.90	41.70	49.99	74	-24.01	PASS	V
9748.000	38.03	7.61	35.05	39.29	49.88	74	-24.12	PASS	V

Test mode:		802.11n(HT20)(6.5Mbps)		Test Frequency:		2462MHz			
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Level (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Result	Antenna Polaxis
1461.238	30.79	2.79	34.71	44.47	43.34	74	-30.66	PASS	H
3728.625	33.00	5.48	34.58	42.53	46.43	74	-27.57	PASS	H
4924.000	34.94	5.07	34.32	39.67	45.36	74	-28.64	PASS	H
5910.798	35.83	7.23	34.30	40.66	49.42	74	-24.58	PASS	H
7386.000	36.44	6.83	34.90	39.95	48.32	74	-25.68	PASS	H
9848.000	38.14	7.53	35.03	39.85	50.49	74	-23.51	PASS	H
1417.277	30.71	2.75	34.75	43.65	42.36	74	-31.64	PASS	V
3766.785	32.97	5.48	34.58	42.66	46.53	74	-27.47	PASS	V
4924.000	34.94	5.07	34.32	39.7	45.39	74	-28.61	PASS	V
5986.509	35.89	7.40	34.30	40.43	49.42	74	-24.58	PASS	V
7386.000	36.44	6.83	34.90	39.64	48.01	74	-25.99	PASS	V
9848.000	38.14	7.53	35.03	39.36	50.00	74	-24.00	PASS	V

Test mode:		802.11n(HT40)(13.5Mbps)		Test Frequency:		2422MHz			
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Level (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Result	Antenna Polaxis
1406.496	30.68	2.74	34.76	43.80	42.46	74	-31.54	PASS	H
3747.656	32.98	5.48	34.58	42.52	46.40	74	-27.60	PASS	H
4844.000	34.77	5.10	34.34	39.32	44.85	74	-29.15	PASS	H
6283.164	36.05	7.14	34.48	41.62	50.33	74	-23.67	PASS	H
7266.000	36.43	6.72	34.90	39.64	47.89	74	-26.11	PASS	H
9688.000	37.97	7.66	35.06	39.92	50.49	74	-23.51	PASS	H
1399.353	30.67	2.73	34.76	43.14	41.78	74	-32.22	PASS	V
3634.910	33.07	5.50	34.57	41.73	45.73	74	-28.27	PASS	V
4844.000	34.77	5.10	34.34	40.52	46.05	74	-27.95	PASS	V
6001.768	35.90	7.43	34.30	40.05	49.08	74	-24.92	PASS	V
7266.000	36.43	6.72	34.90	40.80	49.05	74	-24.95	PASS	V
9688.000	37.97	7.66	35.06	39.96	50.53	74	-23.47	PASS	V

Test mode:		802.11n(HT40)(13.5Mbps)		Test Frequency:		2437MHz			
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Level (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Result	Antenna Polaxis
1621.985	31.10	2.94	34.57	43.10	42.57	74	-31.43	PASS	H
4086.459	33.02	5.40	34.57	42.21	46.06	74	-27.94	PASS	H
4874.000	34.84	5.09	34.33	38.86	44.46	74	-29.54	PASS	H
5895.771	35.82	7.20	34.30	41.29	50.01	74	-23.99	PASS	H
7311.000	36.43	6.76	34.90	40.00	48.29	74	-25.71	PASS	H
9748.000	38.03	7.61	35.05	40.15	50.74	74	-23.26	PASS	H
1395.796	30.66	2.73	34.77	43.48	42.10	74	-31.90	PASS	V
3625.669	33.07	5.50	34.57	42.93	46.93	74	-27.07	PASS	V
4874.000	34.84	5.09	34.33	39.71	45.31	74	-28.69	PASS	V
5821.207	35.77	7.03	34.30	40.92	49.42	74	-24.58	PASS	V
7311.000	36.43	6.76	34.90	41.77	50.06	74	-23.94	PASS	V
9748.000	38.03	7.61	35.05	39.76	50.35	74	-23.65	PASS	V

Test mode:		802.11n(HT40)(13.5Mbps)		Test Frequency:		2452MHz			
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Level (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Result	Antenna Polaxis
1442.758	30.76	2.77	34.72	43.36	42.17	74	-31.83	PASS	H
3728.625	33.00	5.48	34.58	42.38	46.28	74	-27.72	PASS	H
4904.000	34.90	5.07	34.33	37.94	43.58	74	-30.42	PASS	H
5910.798	35.83	7.23	34.30	40.52	49.28	74	-24.72	PASS	H
7356.000	36.44	6.80	34.90	39.91	48.25	74	-25.75	PASS	H
9808.000	38.10	7.56	35.04	40.29	50.91	74	-23.09	PASS	H
1210.356	30.25	2.53	34.95	44.76	42.59	74	-31.41	PASS	V
1634.419	31.12	2.95	34.56	43.21	42.72	74	-31.28	PASS	V
3786.010	32.95	5.47	34.58	42.42	46.26	74	-27.74	PASS	V
4904.000	34.90	5.07	34.33	39.01	44.65	74	-29.35	PASS	V
7356.000	36.44	6.80	34.90	39.69	48.03	74	-25.97	PASS	V
9808.000	38.10	7.56	35.04	40.23	50.85	74	-23.15	PASS	V

Antenna 2

Test mode:		802.11b(11Mbps)		Test Frequency:		2412MHz			
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Level (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Result	Antenna Polaxis
1446.435	30.77	2.78	34.72	43.25	42.08	74	-31.92	PASS	H
3757.208	32.97	5.48	34.58	42.96	46.83	74	-27.17	PASS	H
4824.000	34.73	5.10	34.35	44.62	50.10	74	-23.90	PASS	H
5762.235	35.72	6.90	34.30	41.70	50.02	74	-23.98	PASS	H
7236.000	36.42	6.69	34.90	40.51	48.72	74	-25.28	PASS	H
9648.000	37.93	7.70	35.07	39.42	49.98	74	-24.02	PASS	H
1417.277	30.71	2.75	34.75	43.73	42.44	74	-31.56	PASS	V
3757.208	32.97	5.48	34.58	41.95	45.82	74	-28.18	PASS	V
4824.000	34.73	5.10	34.35	45.03	50.51	74	-23.49	PASS	V
5940.967	35.86	7.30	34.30	39.90	48.76	74	-25.24	PASS	V
7236.000	36.42	6.69	34.90	40.27	48.48	74	-25.52	PASS	V
9648.000	37.93	7.70	35.07	40.02	50.58	74	-23.42	PASS	V

Test mode:		802.11b(11Mbps)		Test Frequency:		2437MHz			
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Level (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Result	Antenna Polaxis
1410.080	30.69	2.74	34.75	43.05	41.73	74	-32.27	PASS	H
3625.669	33.07	5.50	34.57	43.30	47.30	74	-26.70	PASS	H
4874.000	34.84	5.09	34.33	42.52	48.12	74	-25.88	PASS	H
5971.290	35.88	7.37	34.30	41.03	49.98	74	-24.02	PASS	H
7311.000	36.43	6.76	34.90	40.71	49.00	74	-25.00	PASS	H
9748.000	38.03	7.61	35.05	39.58	50.17	74	-23.83	PASS	H
1195.049	30.21	2.51	34.97	44.07	41.82	74	-32.18	PASS	V
4096.875	33.05	5.40	34.57	41.94	45.82	74	-28.18	PASS	V
4874.000	34.84	5.09	34.33	43.33	48.93	74	-25.07	PASS	V
6047.776	35.93	7.38	34.33	40.26	49.24	74	-24.76	PASS	V
7311.000	36.43	6.76	34.90	41.07	49.36	74	-24.64	PASS	V
9748.000	38.03	7.61	35.05	39.79	50.38	74	-23.62	PASS	V

Test mode:		802.11b(11Mbps)		Test Frequency:		2462MHz			
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Level (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Result	Antenna Polaxis
1601.472	31.06	2.92	34.59	43.96	43.35	74	-30.65	PASS	H
3634.910	33.07	5.50	34.57	42.38	46.38	74	-27.62	PASS	H
4924.000	34.94	5.07	34.32	39.48	45.17	74	-28.83	PASS	H
5895.771	35.82	7.20	34.30	40.74	49.46	74	-24.54	PASS	H
7386.000	36.44	6.83	34.90	39.87	48.24	74	-25.76	PASS	H
9848.000	38.14	7.53	35.03	40.10	50.74	74	-23.26	PASS	H
1207.279	30.24	2.52	34.96	44.06	41.86	74	-32.14	PASS	V
3747.656	32.98	5.48	34.58	42.19	46.07	74	-27.93	PASS	V
4924.000	34.94	5.07	34.32	42.60	48.29	74	-25.71	PASS	V
5791.646	35.74	6.97	34.30	41.22	49.63	74	-24.37	PASS	V
7326.000	36.43	6.77	34.90	39.66	47.96	74	-26.04	PASS	V
9848.000	38.14	7.53	35.03	40.15	50.79	74	-23.21	PASS	V

Test mode:		802.11g(6Mbps)		Test Frequency:		2412MHz			
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Level (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Result	Antenna Polaxis
1185.958	30.19	2.50	34.98	44.96	42.67	74	-31.33	PASS	H
1842.139	31.46	3.11	34.41	43.83	43.99	74	-30.01	PASS	H
4824.000	34.73	5.10	34.35	41.54	47.02	74	-26.98	PASS	H
5895.771	35.82	7.20	34.30	41.04	49.76	74	-24.24	PASS	H
7236.000	36.42	6.69	34.90	40.40	48.61	74	-25.39	PASS	H
9648.000	37.93	7.70	35.07	39.20	49.76	74	-24.24	PASS	H
1613.749	31.08	2.93	34.58	43.24	42.67	74	-31.33	PASS	V
3616.451	33.08	5.50	34.56	42.62	46.64	74	-27.36	PASS	V
4824.000	34.73	5.10	34.35	42.29	47.77	74	-26.23	PASS	V
5925.863	35.85	7.27	34.30	40.49	49.31	74	-24.69	PASS	V
7236.000	36.42	6.69	34.90	41.43	49.64	74	-24.36	PASS	V
9648.000	37.93	7.70	35.07	39.22	49.78	74	-24.22	PASS	V

Test mode:		802.11g(6Mbps)		Test Frequency:		2437MHz			
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Level (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Result	Antenna Polaxis
1450.122	30.77	2.78	34.72	43.86	42.69	74	-31.31	PASS	H
3607.257	33.09	5.50	34.56	42.46	46.49	74	-27.51	PASS	H
4874.000	34.84	5.09	34.33	39.12	44.72	74	-29.28	PASS	H
5791.646	35.74	6.97	34.30	41.06	49.47	74	-24.53	PASS	H
7311.000	36.43	6.76	34.90	40.38	48.67	74	-25.33	PASS	H
9748.000	38.03	7.61	35.05	39.87	50.46	74	-23.54	PASS	H
1646.948	31.14	2.96	34.55	43.29	42.84	74	-31.16	PASS	V
3616.451	33.08	5.50	34.56	42.26	46.28	74	-27.72	PASS	V
4874.000	34.84	5.09	34.33	40.81	46.41	74	-27.59	PASS	V
5791.646	35.74	6.97	34.30	41.01	49.42	74	-24.58	PASS	V
7311.000	36.43	6.76	34.90	40.94	49.23	74	-24.77	PASS	V
9748.000	38.03	7.61	35.05	39.48	50.07	74	-23.93	PASS	V

Test mode:		802.11g(6Mbps)		Test Frequency:		2462MHz			
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Level (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Result	Antenna Polaxis
1388.708	30.65	2.72	34.77	44.09	42.69	74	-31.31	PASS	H
4107.316	33.07	5.39	34.56	41.64	45.54	74	-28.46	PASS	H
4924.000	34.94	5.07	34.32	39.49	45.18	74	-28.82	PASS	H
5850.919	35.79	7.10	34.30	40.28	48.87	74	-25.13	PASS	H
7386.000	36.44	6.83	34.90	40.15	48.52	74	-25.48	PASS	H
9848.000	38.14	7.53	35.03	39.68	50.32	74	-23.68	PASS	H
1201.149	30.23	2.52	34.96	44.08	41.87	74	-32.13	PASS	V
3634.910	33.07	5.50	34.57	42.13	46.13	74	-27.87	PASS	V
4924.000	34.94	5.07	34.32	39.63	45.32	74	-28.68	PASS	V
6001.768	35.9	7.43	34.30	40.77	49.80	74	-24.20	PASS	V
7386.000	36.44	6.83	34.90	39.68	48.05	74	-25.95	PASS	V
9848.000	38.14	7.53	35.03	40.16	50.80	74	-23.20	PASS	V

Test mode:		802.11n(HT20)(6.5Mbps)		Test Frequency:		2412MHz			
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Level (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Result	Antenna Polaxis
1424.511	30.72	2.76	34.74	43.25	41.99	74	-32.01	PASS	H
3766.785	32.97	5.48	34.58	41.68	45.55	74	-28.45	PASS	H
4824.000	34.73	5.10	34.35	40.62	46.10	74	-27.90	PASS	H
5821.207	35.77	7.03	34.30	41.94	50.44	74	-23.56	PASS	H
7236.000	36.42	6.69	34.90	39.95	48.16	74	-25.84	PASS	H
9648.000	37.93	7.70	35.07	39.28	49.84	74	-24.16	PASS	H
1621.985	31.10	2.94	34.57	43.26	42.73	74	-31.27	PASS	V
3625.669	33.07	5.50	34.57	42.50	46.50	74	-27.50	PASS	V
4824.000	34.73	5.10	34.35	41.37	46.85	74	-27.15	PASS	V
5910.798	35.83	7.23	34.30	40.31	49.07	74	-24.93	PASS	V
7236.000	36.42	6.69	34.90	40.41	48.62	74	-25.38	PASS	V
9648.000	37.93	7.70	35.07	38.84	49.40	74	-24.60	PASS	V

Test mode:		802.11n(HT20)(6.5Mbps)		Test Frequency:		2437MHz			
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Level (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Result	Antenna Polaxis
1450.122	30.77	2.78	34.72	42.83	41.66	74	-32.34	PASS	H
3747.656	32.98	5.48	34.58	41.71	45.59	74	-28.41	PASS	H
4874.000	34.84	5.09	34.33	39.44	45.04	74	-28.96	PASS	H
6156.505	35.98	7.27	34.40	40.65	49.50	74	-24.50	PASS	H
7311.000	36.43	6.76	34.90	40.34	48.63	74	-25.37	PASS	H
9748.000	38.03	7.61	35.05	39.17	49.76	74	-24.24	PASS	H
1399.353	30.67	2.73	34.76	43.72	42.36	74	-31.64	PASS	V
4096.875	33.05	5.40	34.57	41.93	45.81	74	-28.19	PASS	V
4874.000	34.84	5.09	34.33	40.74	46.34	74	-27.66	PASS	V
5791.646	35.74	6.97	34.30	42.16	50.57	74	-23.43	PASS	V
7311.000	36.43	6.76	34.90	42.50	50.79	74	-23.21	PASS	V
9748.000	38.03	7.61	35.05	39.90	50.49	74	-23.51	PASS	V