

Modulation Type: 802.11n (HT20)

Low channel: 2412 MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB μ V)	AV reading (dB μ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB μ V/m)	AV limit (dB μ V/m)	Margin (dB)
					Peak (dB μ V/m)	AV (dB μ V/m)			
4824	H	49.07	---	0.75	49.82	---	74	54	-4.18
7236	H	40.60	---	9.87	50.47	---	74	54	-3.53
---	H	---	---	---	---	---	---	---	---
4824	V	47.59	---	0.75	48.34	---	74	54	-5.66
7236	V	40.24	---	9.87	50.11	---	74	54	-3.89
---	V	---	---	---	---	---	---	---	---

Middle channel: 2437MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB μ V)	AV reading (dB μ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB μ V/m)	AV limit (dB μ V/m)	Margin (dB)
					Peak (dB μ V/m)	AV (dB μ V/m)			
4874	H	47.29	---	0.97	48.26	---	74	54	-5.74
7311	H	40.47	---	9.83	50.3	---	74	54	-3.70
---	H	---	---	---	---	---	---	---	---
4874	V	47.42	---	0.97	48.39	---	74	54	-5.61
7311	V	40.03	---	9.83	49.86	---	74	54	-4.14
---	V	---	---	---	---	---	---	---	---

High channel: 2462 MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB μ V)	AV reading (dB μ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB μ V/m)	AV limit (dB μ V/m)	Margin (dB)
					Peak (dB μ V/m)	AV (dB μ V/m)			
4924	H	48.16	---	1.18	49.34	---	74	54	-4.66
7386	H	40.64	---	10.07	50.71	---	74	54	-3.29
---	H	---	---	---	---	---	---	---	---
4924	V	47.00	---	1.18	48.18	---	74	54	-5.82
7386	V	40.28	---	10.07	50.35	---	74	54	-3.65
---	V	---	---	---	---	---	---	---	---

Note:

1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss – Pre-amplifier
2. Margin (dB) = Emission Level (Peak) (dB μ V/m)-Average limit (dB μ V/m)
3. The emission levels of other frequencies are very lower than the limit and not show in test report.
4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 25GHz.
5. Data of measurement shown “---”in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.

Modulation Type: 802.11n (HT40)

Low channel: 2422 MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB μ V)	AV reading (dB μ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB μ V/m)	AV limit (dB μ V/m)	Margin (dB)
					Peak (dB μ V/m)	AV (dB μ V/m)			
4844.00	H	50.06	---	-3.94	46.12	---	74.00	54.00	-7.88
7266.00	H	45.37	---	0.52	45.89	---	74.00	54.00	-8.11
---	H	---	---	---	---	---	---	---	---
4844.00	V	50.34	---	-3.94	46.40	---	74.00	54.00	-7.60
7266.00	V	45.65	---	0.52	46.17	---	74.00	54.00	-7.83
---	V	---	---	---	---	---	---	---	---

Middle channel: 2437MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB μ V)	AV reading (dB μ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB μ V/m)	AV limit (dB μ V/m)	Margin (dB)
					Peak (dB μ V/m)	AV (dB μ V/m)			
4874.00	H	50.29	---	-3.98	46.31	---	74.00	54.00	-7.69
7311.00	H	45.97	---	0.57	46.54	---	74.00	54.00	-7.46
---	H	---	---	---	---	---	---	---	---
4874.00	V	49.09	---	-3.98	45.11	---	74.00	54.00	-8.89
7311.00	V	44.01	---	0.57	44.58	---	74.00	54.00	-9.42
---	V	---	---	---	---	---	---	---	---

High channel: 2452 MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB μ V)	AV reading (dB μ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB μ V/m)	AV limit (dB μ V/m)	Margin (dB)
					Peak (dB μ V/m)	AV (dB μ V/m)			
4904.00	H	50.22	---	-3.98	46.24	---	74.00	54.00	-7.76
7356.00	H	45.19	---	0.57	45.76	---	74.00	54.00	-8.24
---	H	---	---	---	---	---	---	---	---
4904.00	V	49.92	---	-3.98	45.94	---	74.00	54.00	-8.06
7356.00	V	44.68	---	0.57	45.25	---	74.00	54.00	-8.75
---	V	---	---	---	---	---	---	---	---

Note:

6. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss – Pre-amplifier
7. Margin (dB) = Emission Level (Peak) (dB μ V/m)-Average limit (dB μ V/m)
8. The emission levels of other frequencies are very lower than the limit and not show in test report.
9. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 25GHz.
10. Data of measurement shown “---”in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.

*******END OF REPORT*******

Appendix A: Test Result of Conducted Test Conducted Average Output Power

Result Table

Mode	Channel	Meas.Level [dBm]	Av.Power [dBm]	Verdict
11B	LCH	17.04	17.06	PASS
11B	MCH	15.88	15.9	PASS
11B	HCH	15.17	15.19	PASS
11G	LCH	12.97	13.1	PASS
11G	MCH	13.94	14.07	PASS
11G	HCH	11.47	11.6	PASS
11N20SISO	LCH	13.02	13.15	PASS
11N20SISO	MCH	13.94	14.07	PASS
11N20SISO	HCH	11.47	11.6	PASS
11N40SISO	LCH	11.11	11.36	PASS
11N40SISO	MCH	13.71	13.98	PASS
11N40SISO	HCH	10.28	10.53	PASS

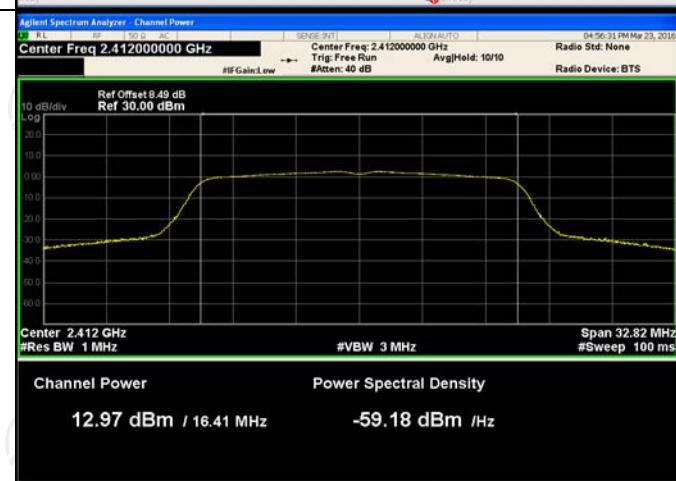
Test Graph



11B/HCH



11G/LCH



11G/MCH



11G/HCH



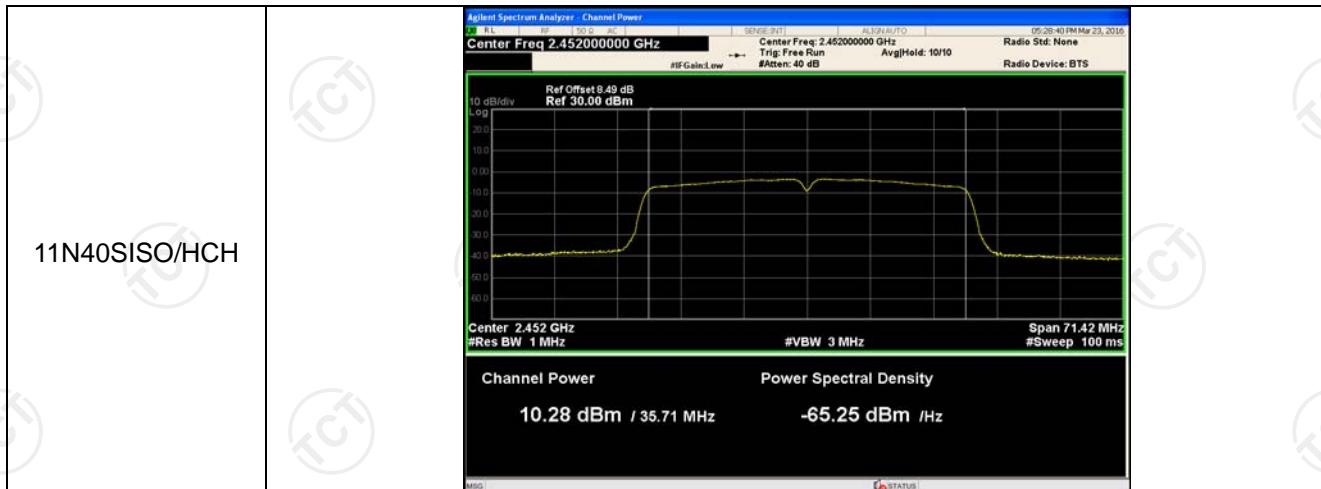
11N20SISO/LCH



11N20SISO/MCH



11N20SISO/HCH	<p>Agilent Spectrum Analyzer - Channel Power Center Freq: 2.462000000 GHz Ref Offset 8.49 dB Ref 30.00 dBm 10 dB/div Log Center 2.462 GHz #Res BW 1 MHz #VBW 3 MHz Span 35.08 MHz #Sweep 100 ms</p> <table border="1"> <thead> <tr> <th>Channel Power</th> <th>Power Spectral Density</th> </tr> </thead> <tbody> <tr> <td>11.47 dBm / 17.54 MHz</td> <td>-60.97 dBm /Hz</td> </tr> </tbody> </table>	Channel Power	Power Spectral Density	11.47 dBm / 17.54 MHz	-60.97 dBm /Hz
Channel Power	Power Spectral Density				
11.47 dBm / 17.54 MHz	-60.97 dBm /Hz				
11N40SISO/LCH	<p>Agilent Spectrum Analyzer - Channel Power Center Freq: 2.422000000 GHz Ref Offset 8.49 dB Ref 30.00 dBm 10 dB/div Log Center 2.422 GHz #Res BW 1 MHz #VBW 3 MHz Span 71.6 MHz #Sweep 100 ms</p> <table border="1"> <thead> <tr> <th>Channel Power</th> <th>Power Spectral Density</th> </tr> </thead> <tbody> <tr> <td>11.11 dBm / 35.8 MHz</td> <td>-64.43 dBm /Hz</td> </tr> </tbody> </table>	Channel Power	Power Spectral Density	11.11 dBm / 35.8 MHz	-64.43 dBm /Hz
Channel Power	Power Spectral Density				
11.11 dBm / 35.8 MHz	-64.43 dBm /Hz				
11N40SISO/MCH	<p>Agilent Spectrum Analyzer - Channel Power Center Freq: 2.437000000 GHz Ref Offset 8.49 dB Ref 30.00 dBm 10 dB/div Log Center 2.437 GHz #Res BW 1 MHz #VBW 3 MHz Span 71.79 MHz #Sweep 100 ms</p> <table border="1"> <thead> <tr> <th>Channel Power</th> <th>Power Spectral Density</th> </tr> </thead> <tbody> <tr> <td>13.71 dBm / 35.89 MHz</td> <td>-61.84 dBm /Hz</td> </tr> </tbody> </table>	Channel Power	Power Spectral Density	13.71 dBm / 35.89 MHz	-61.84 dBm /Hz
Channel Power	Power Spectral Density				
13.71 dBm / 35.89 MHz	-61.84 dBm /Hz				

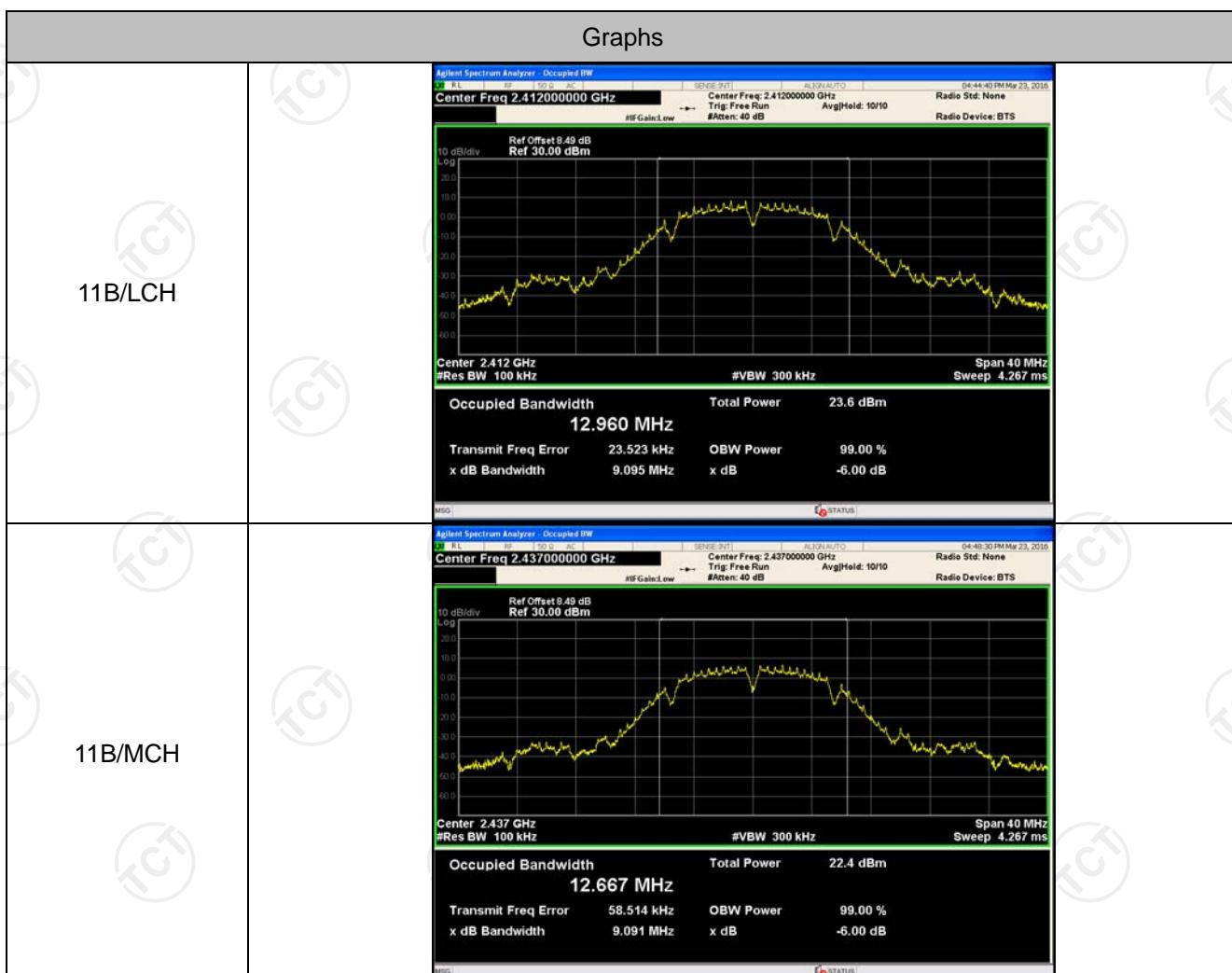


6dB Occupied Bandwidth

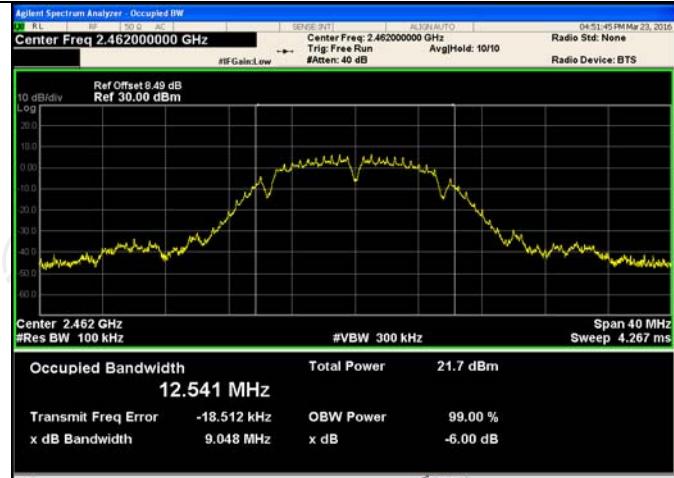
Result Table

Mode	Channel	6dB Bandwidth [MHz]	99% OBW [MHz]	Verdict
11B	LCH	9.095	12.960	PASS
11B	MCH	9.091	12.667	PASS
11B	HCH	9.048	12.541	PASS
11G	LCH	15.39	16.412	PASS
11G	MCH	14.29	16.423	PASS
11G	HCH	15.54	16.377	PASS
11N20SISO	LCH	16.91	17.564	PASS
11N20SISO	MCH	15.08	17.566	PASS
11N20SISO	HCH	15.27	17.541	PASS
11N40SISO	LCH	35.14	35.802	PASS
11N40SISO	MCH	35.07	35.893	PASS
11N40SISO	HCH	35.08	35.711	PASS

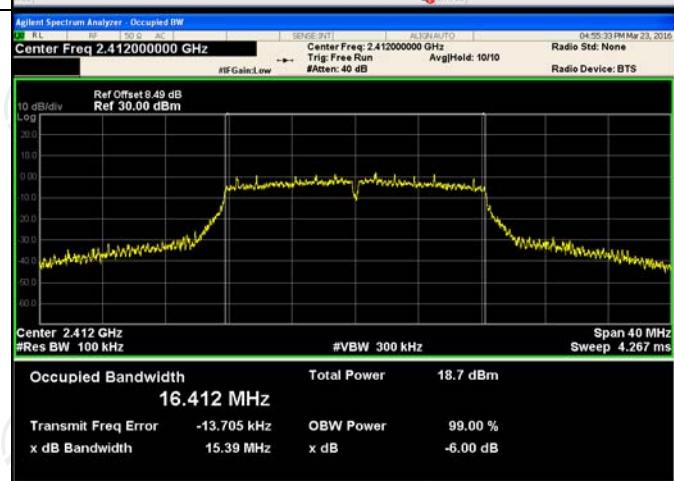
Test Graph



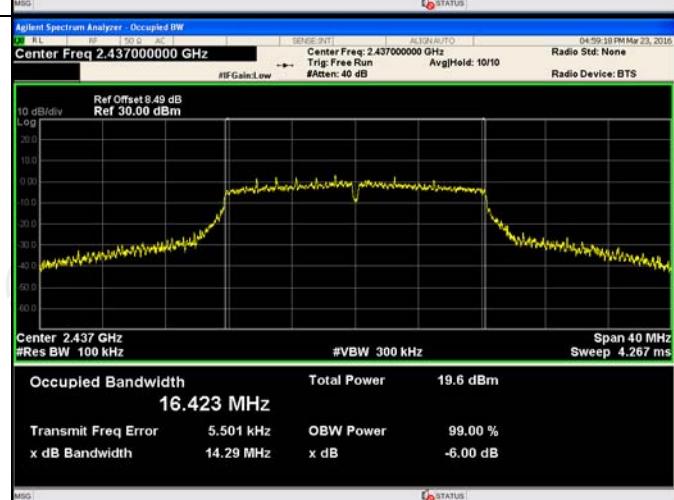
11B/HCH



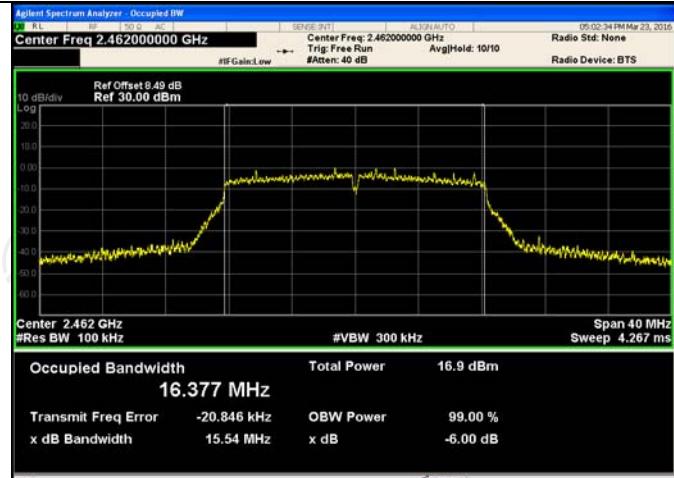
11G/LCH



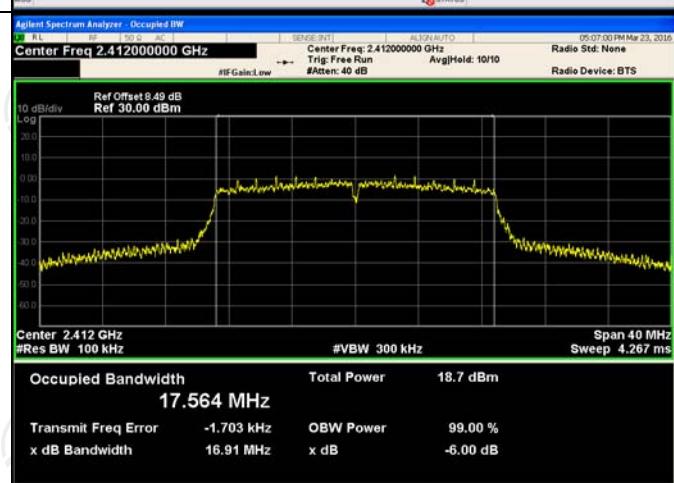
11G/MCH



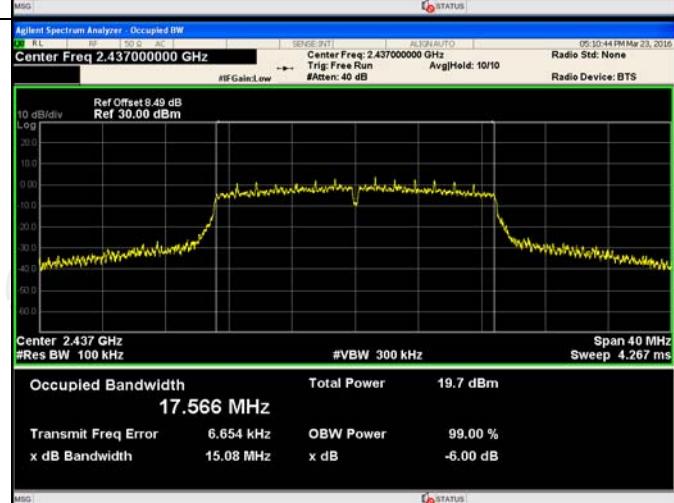
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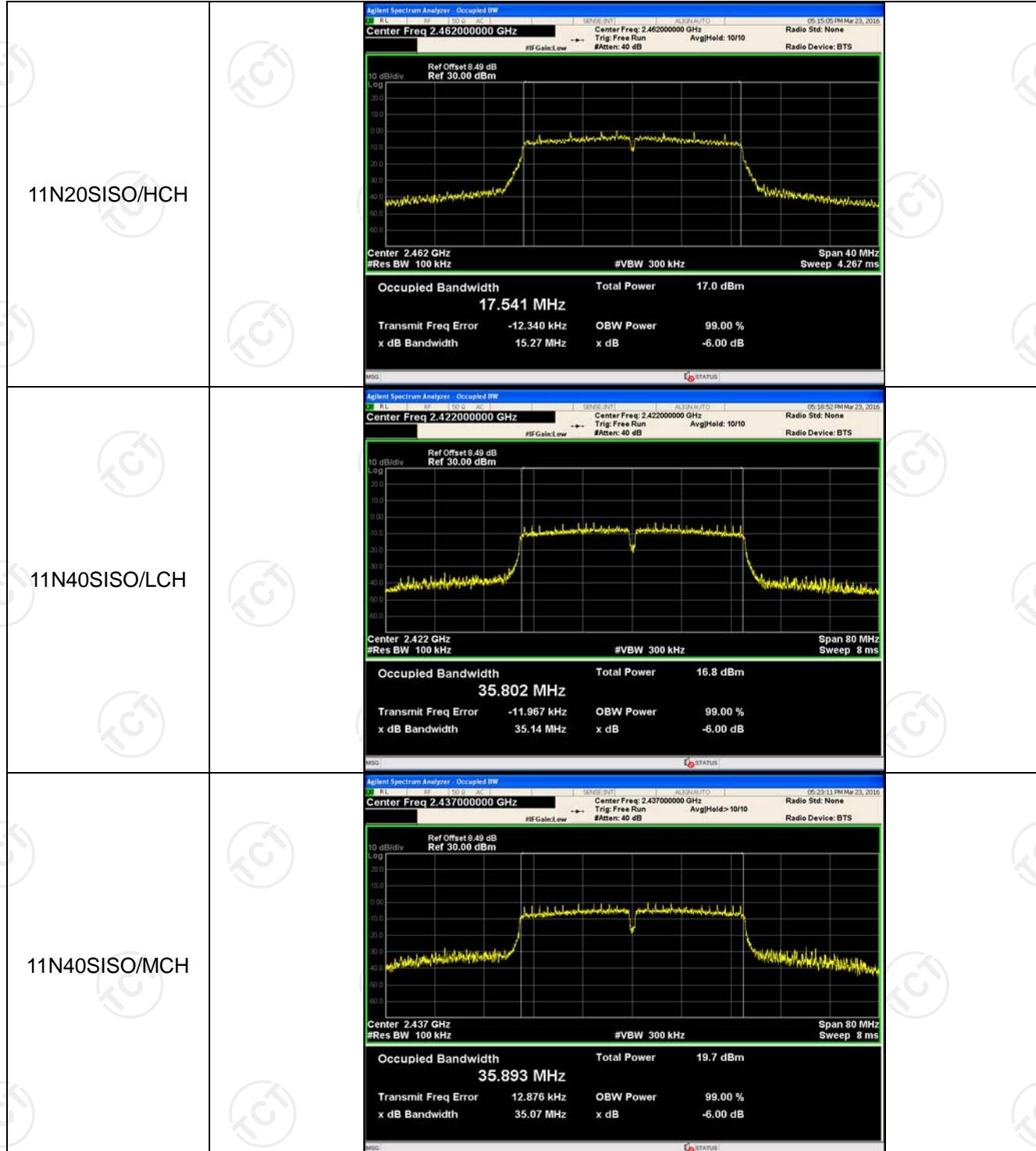


11N20SISO/LCH

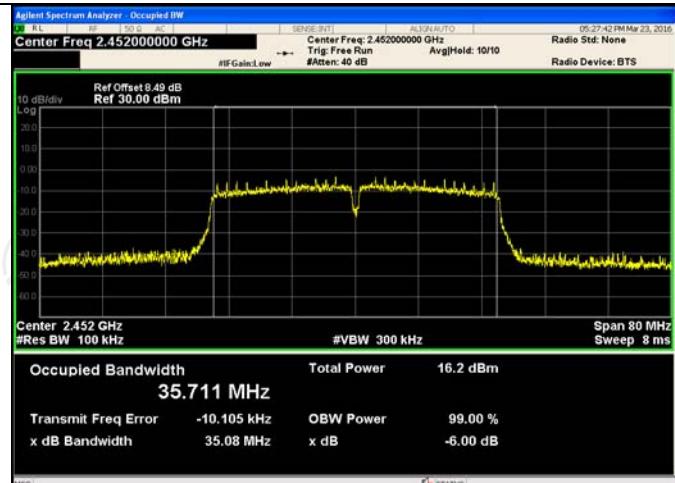


11N20SISO/MCH





11N40SISO/HCH

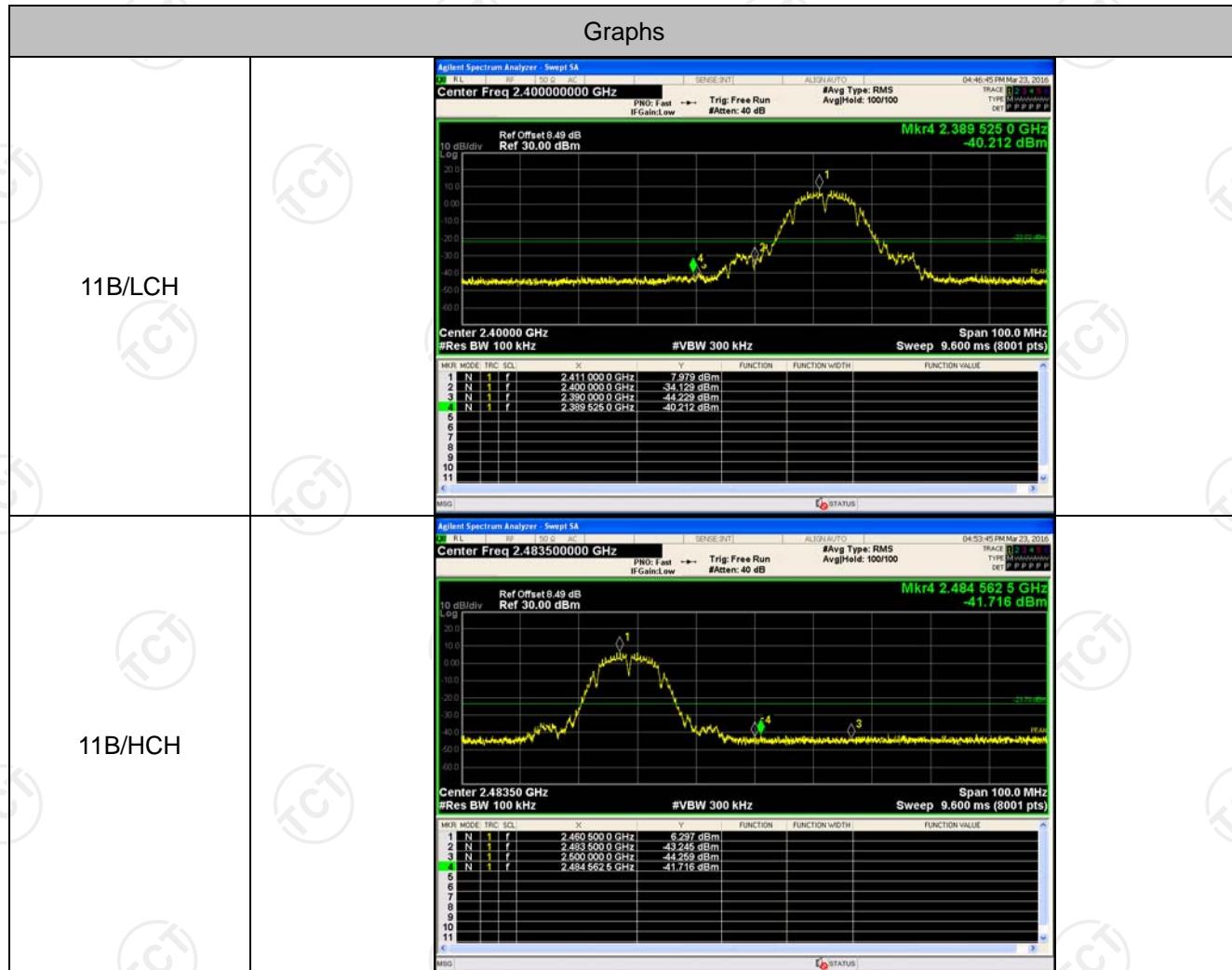


Band-edge for RF Conducted Emissions

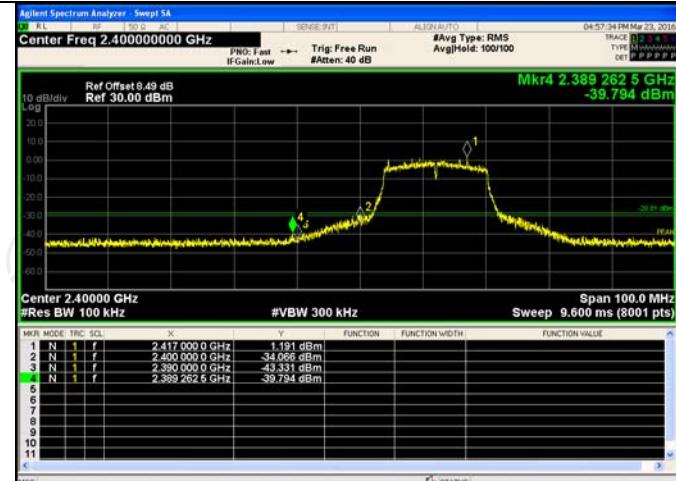
Result Table

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
11B	LCH	7.979	-40.212	-22.02	PASS
11B	HCH	6.297	-41.716	-23.7	PASS
11G	LCH	1.191	-39.794	-28.81	PASS
11G	HCH	0.706	-40.776	-29.29	PASS
11N20SISO	LCH	2.309	-38.777	-27.69	PASS
11N20SISO	HCH	0.860	-40.977	-29.14	PASS
11N40SISO	LCH	-3.018	-36.024	-33.02	PASS
11N40SISO	HCH	-3.037	-38.968	-33.04	PASS

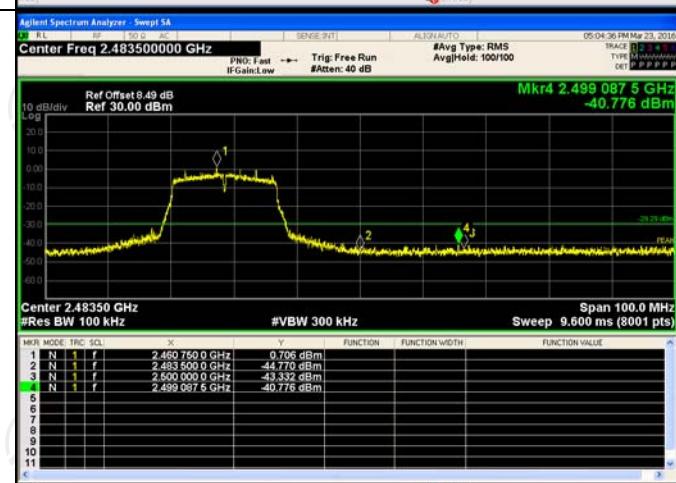
Test Graph



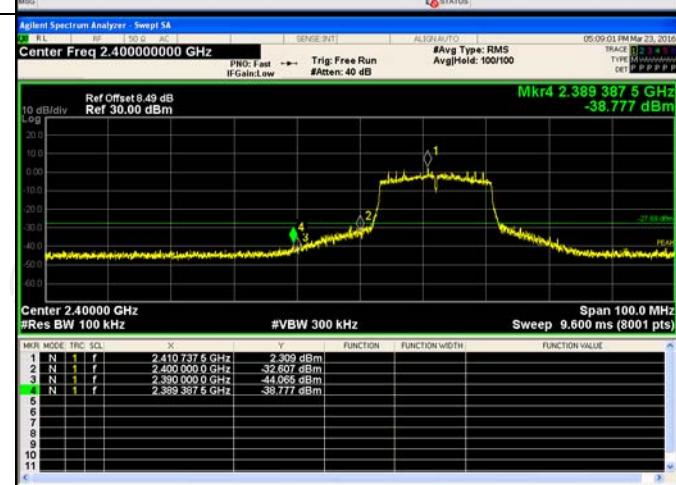
11G/LCH



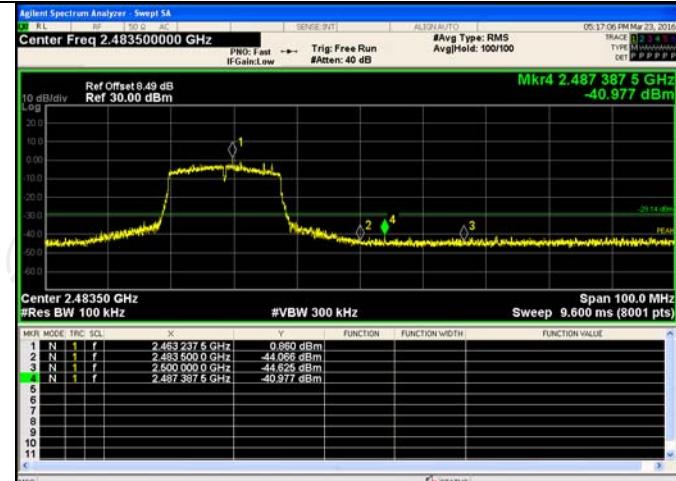
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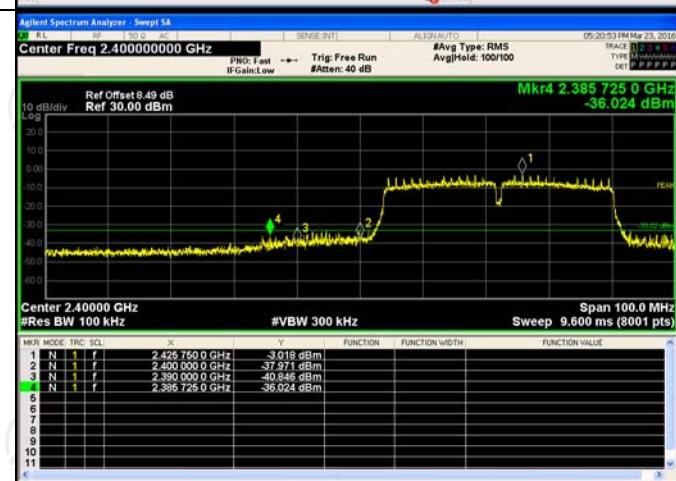
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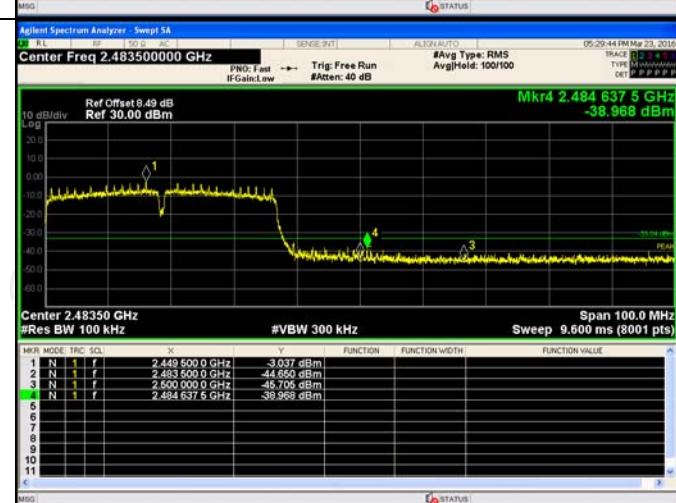
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11N40SISO/LCH



11N40SISO/HCH

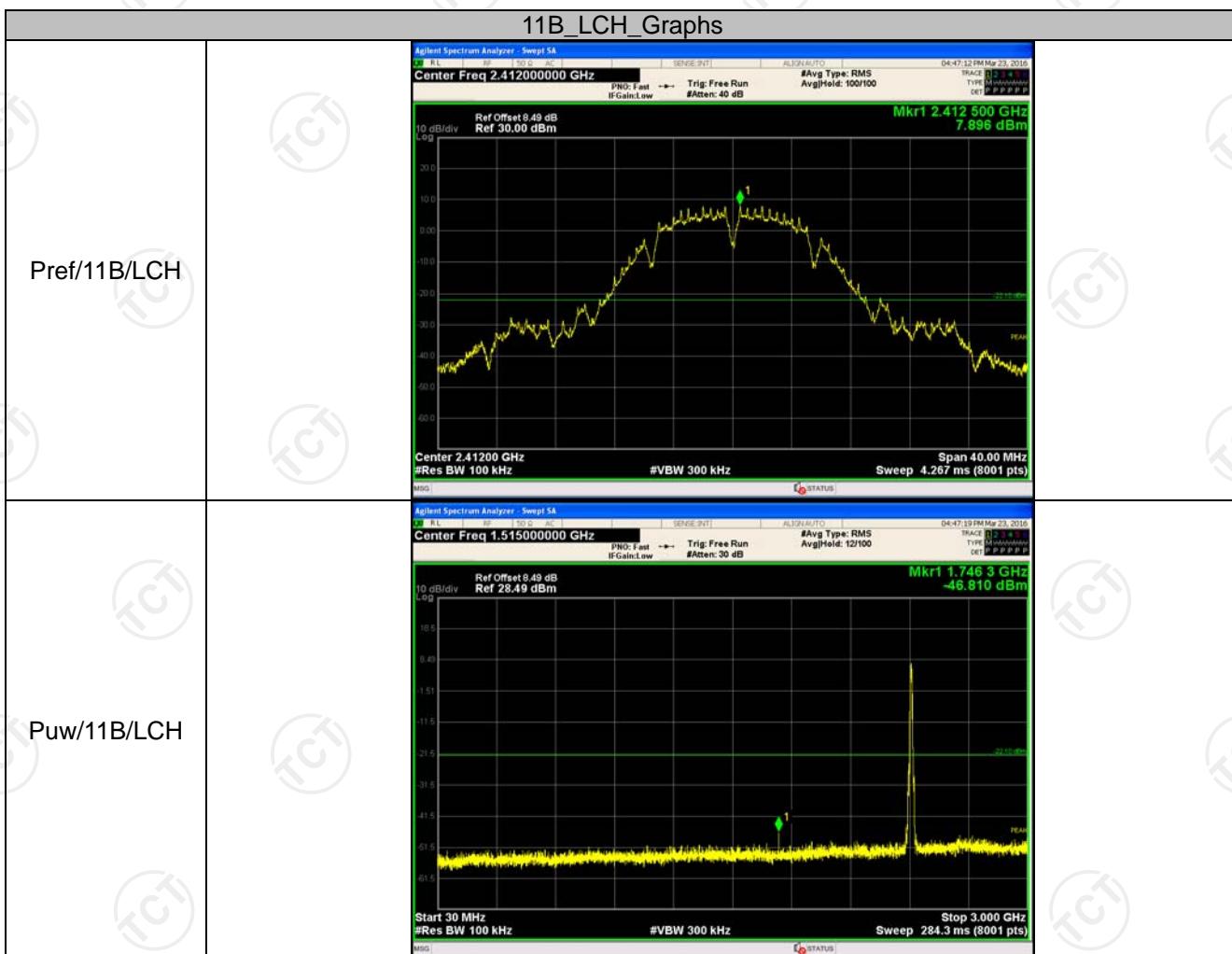


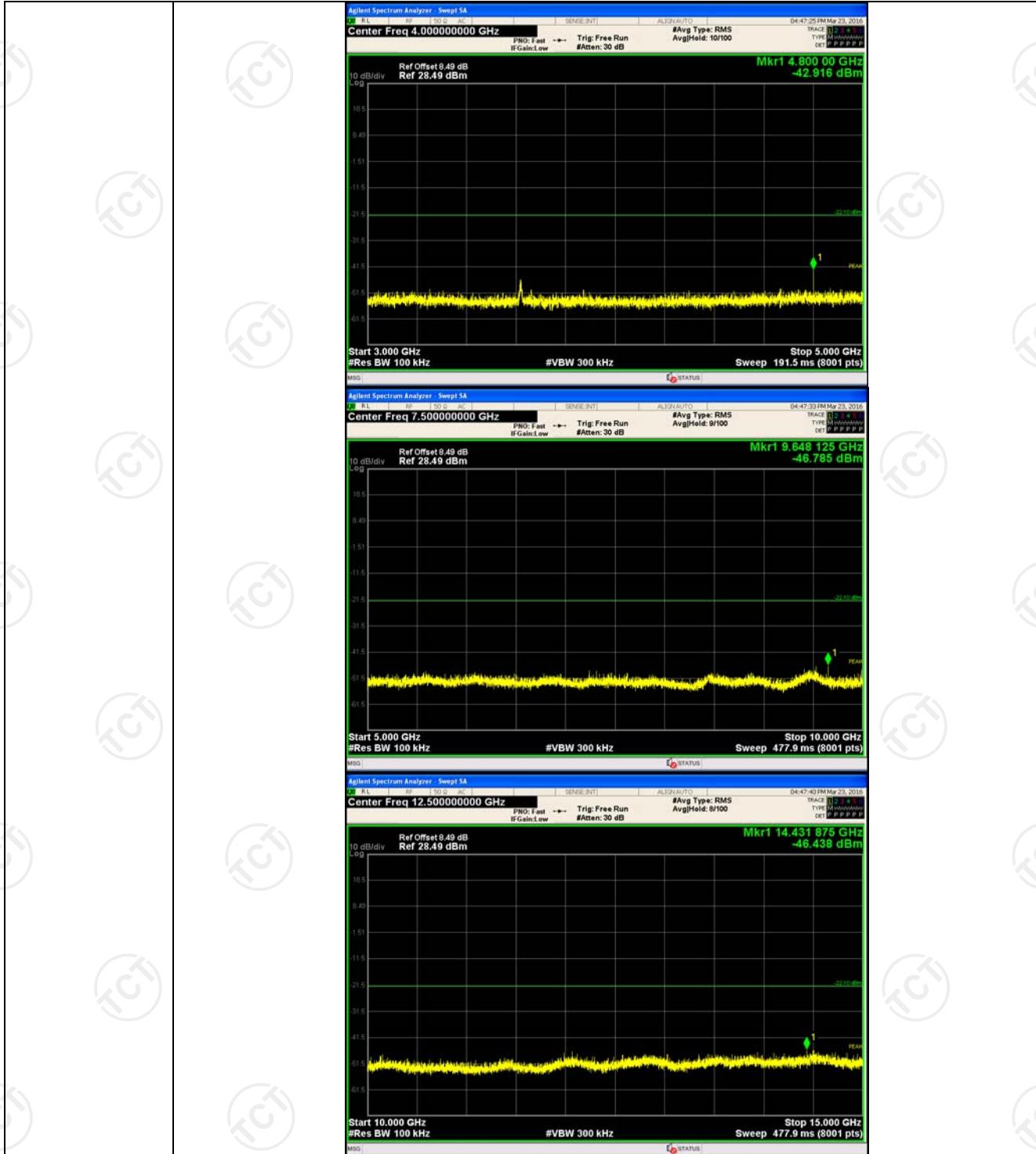
RF Conducted Spurious Emissions

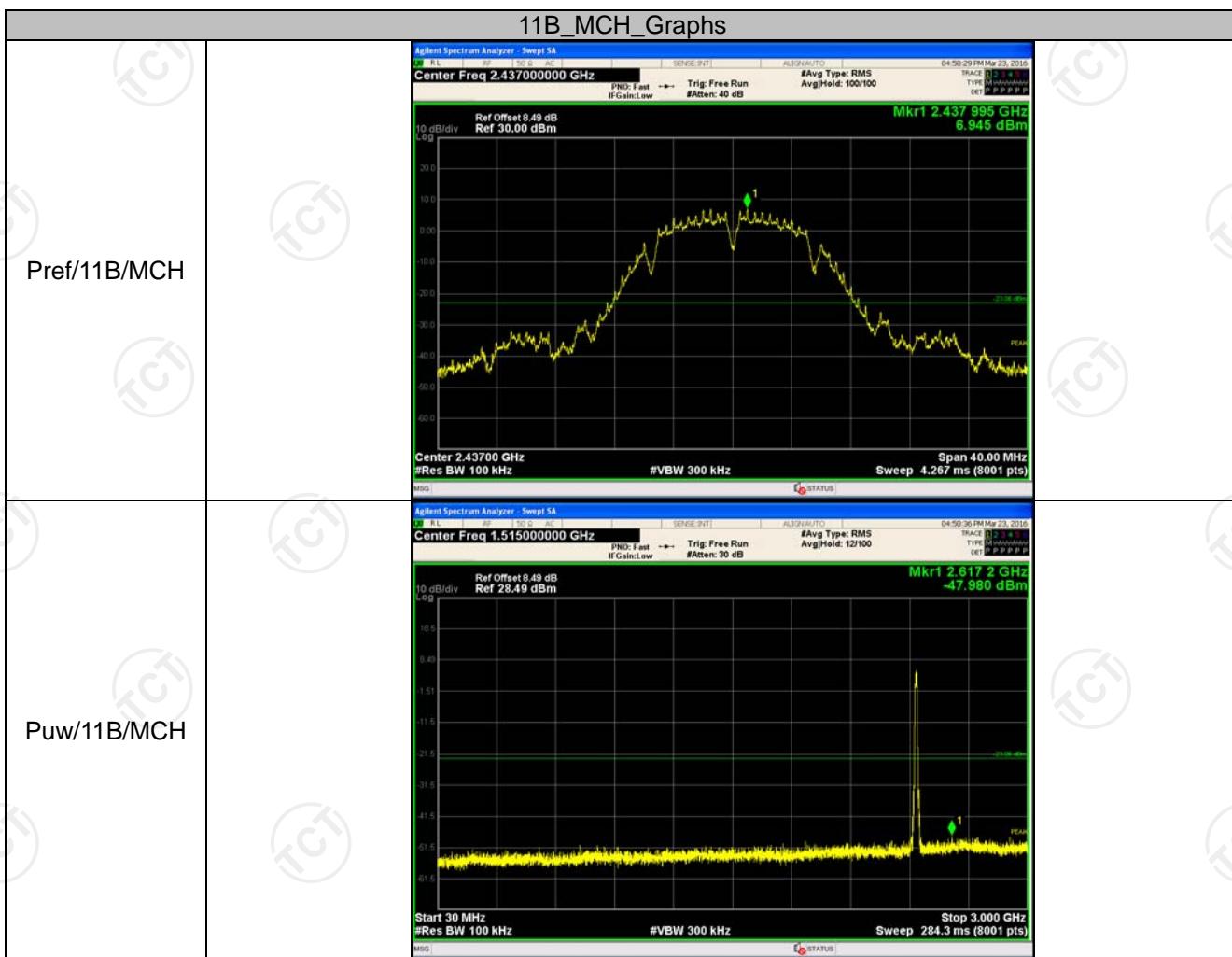
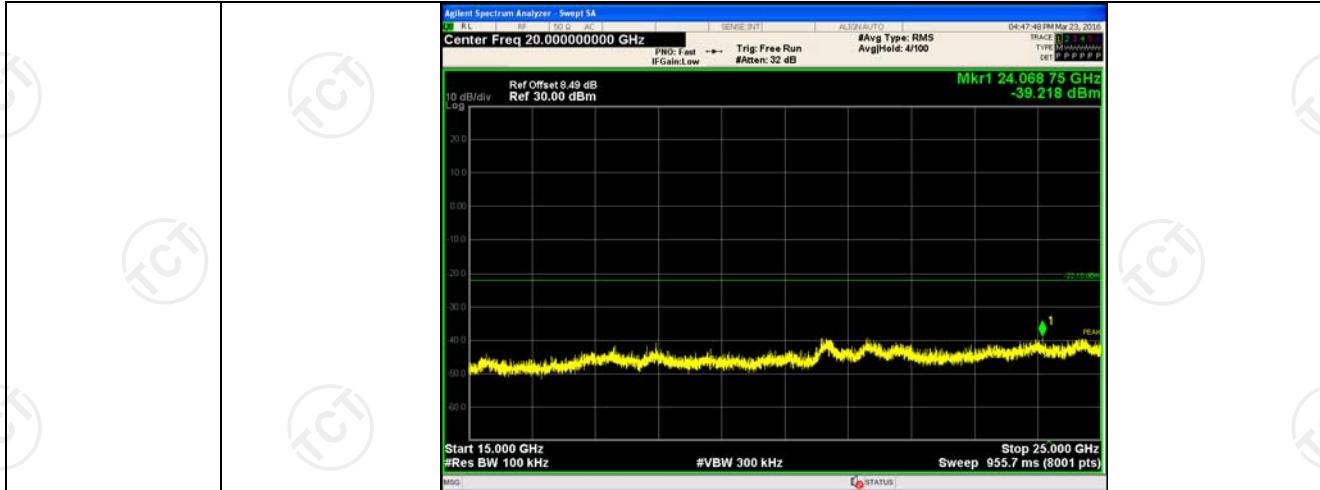
Result Table

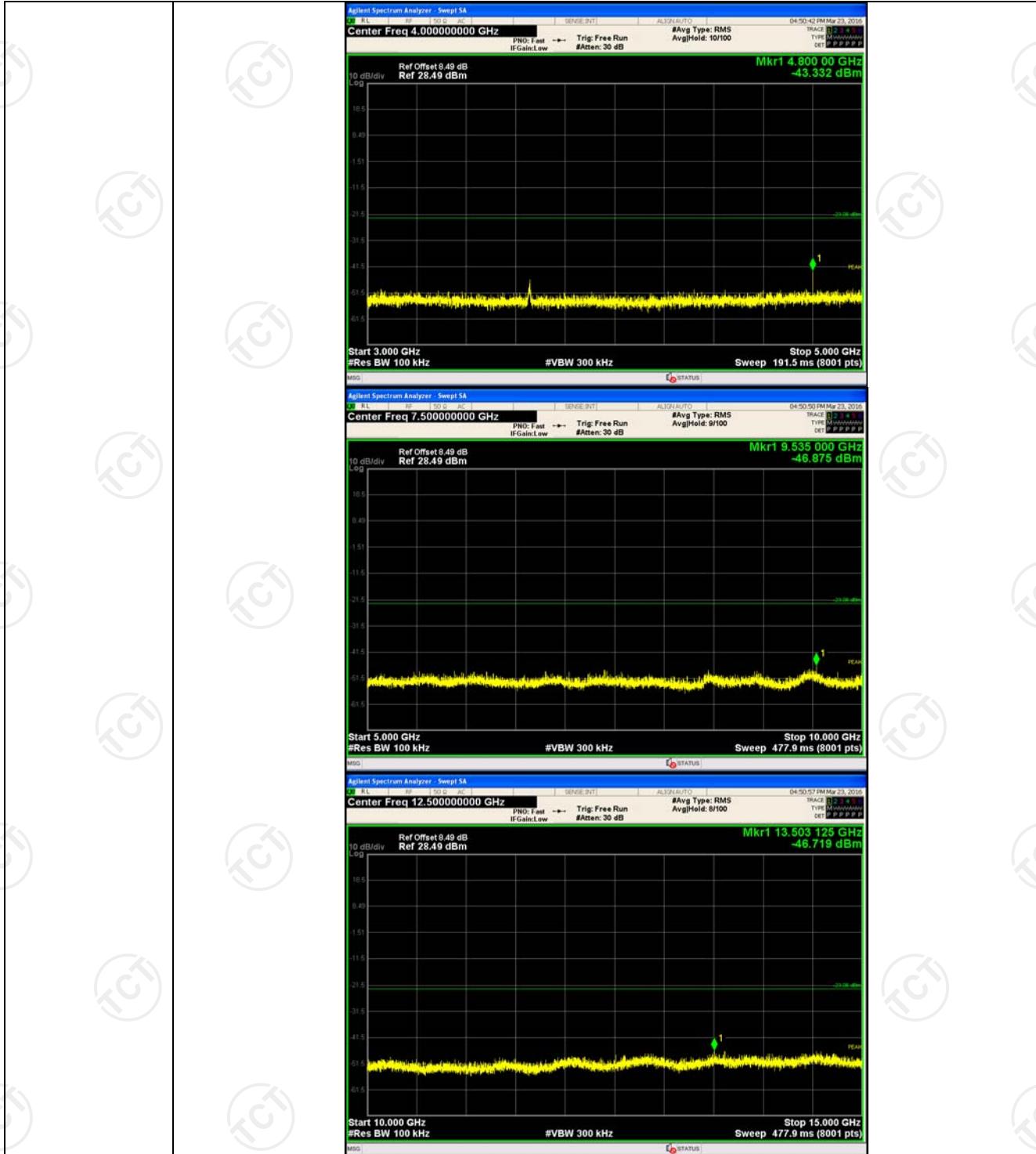
Mode	Channel	Pref [dBm]	Puw[dBm]	Verdict
11B	LCH	7.896	<Limit	PASS
11B	MCH	6.945	<Limit	PASS
11B	HCH	5.768	<Limit	PASS
11G	LCH	1.954	<Limit	PASS
11G	MCH	3.07	<Limit	PASS
11G	HCH	0.433	<Limit	PASS
11N20SISO	LCH	2.129	<Limit	PASS
11N20SISO	MCH	3.755	<Limit	PASS
11N20SISO	HCH	-0.505	<Limit	PASS
11N40SISO	LCH	-2.9	<Limit	PASS
11N40SISO	MCH	-0.129	<Limit	PASS
11N40SISO	HCH	-3.065	<Limit	PASS

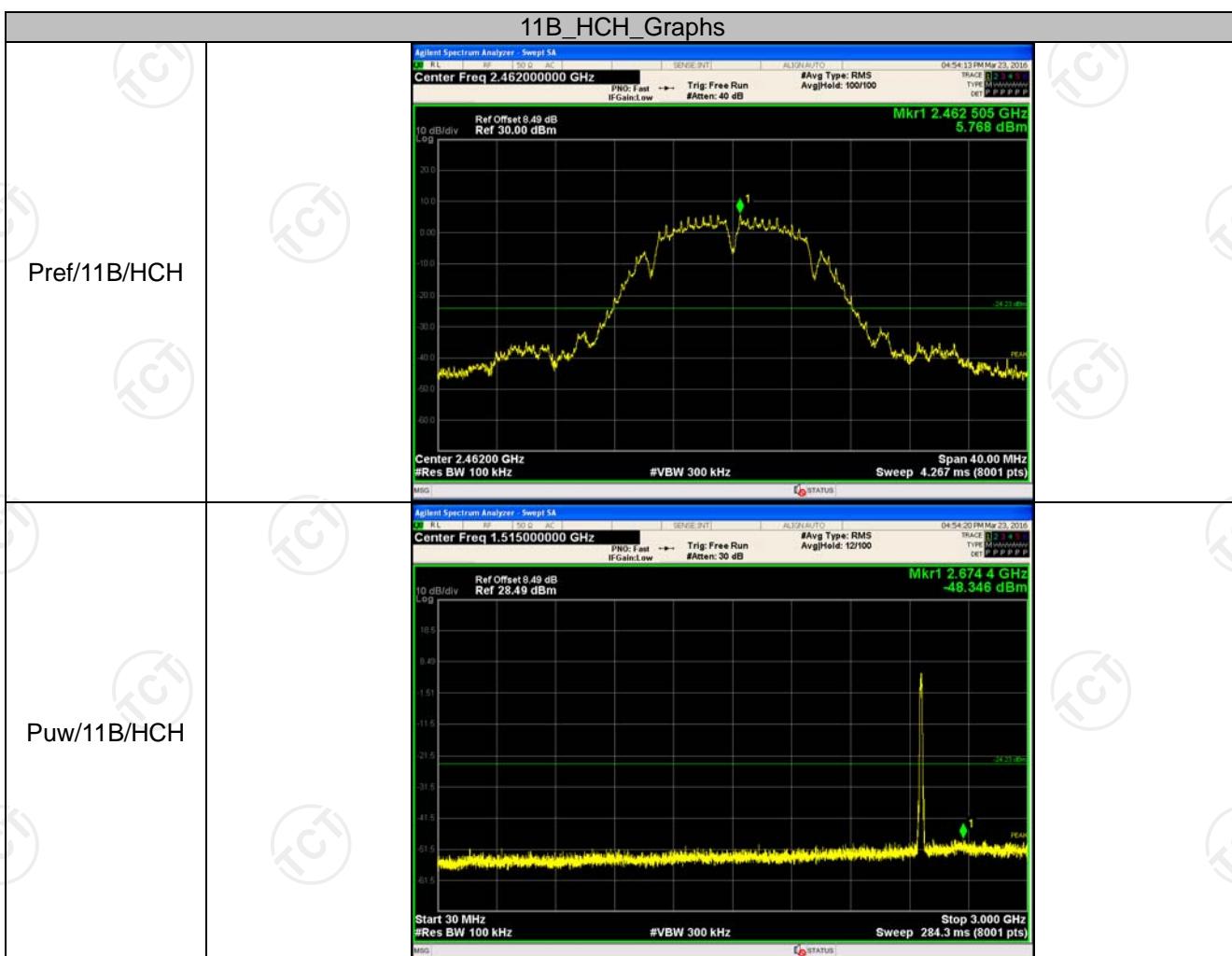
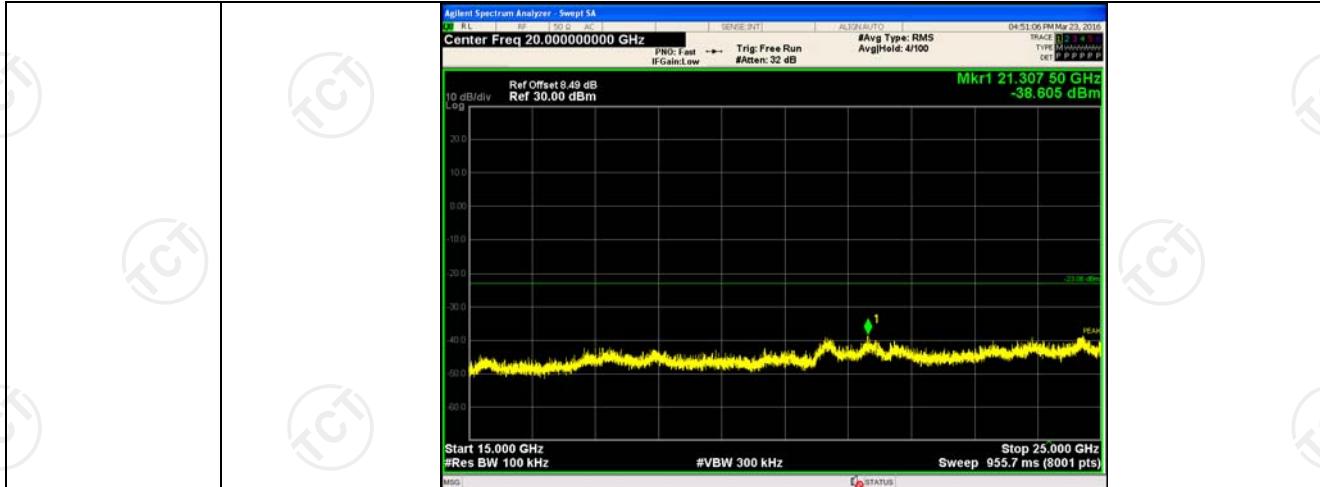
Test Graph

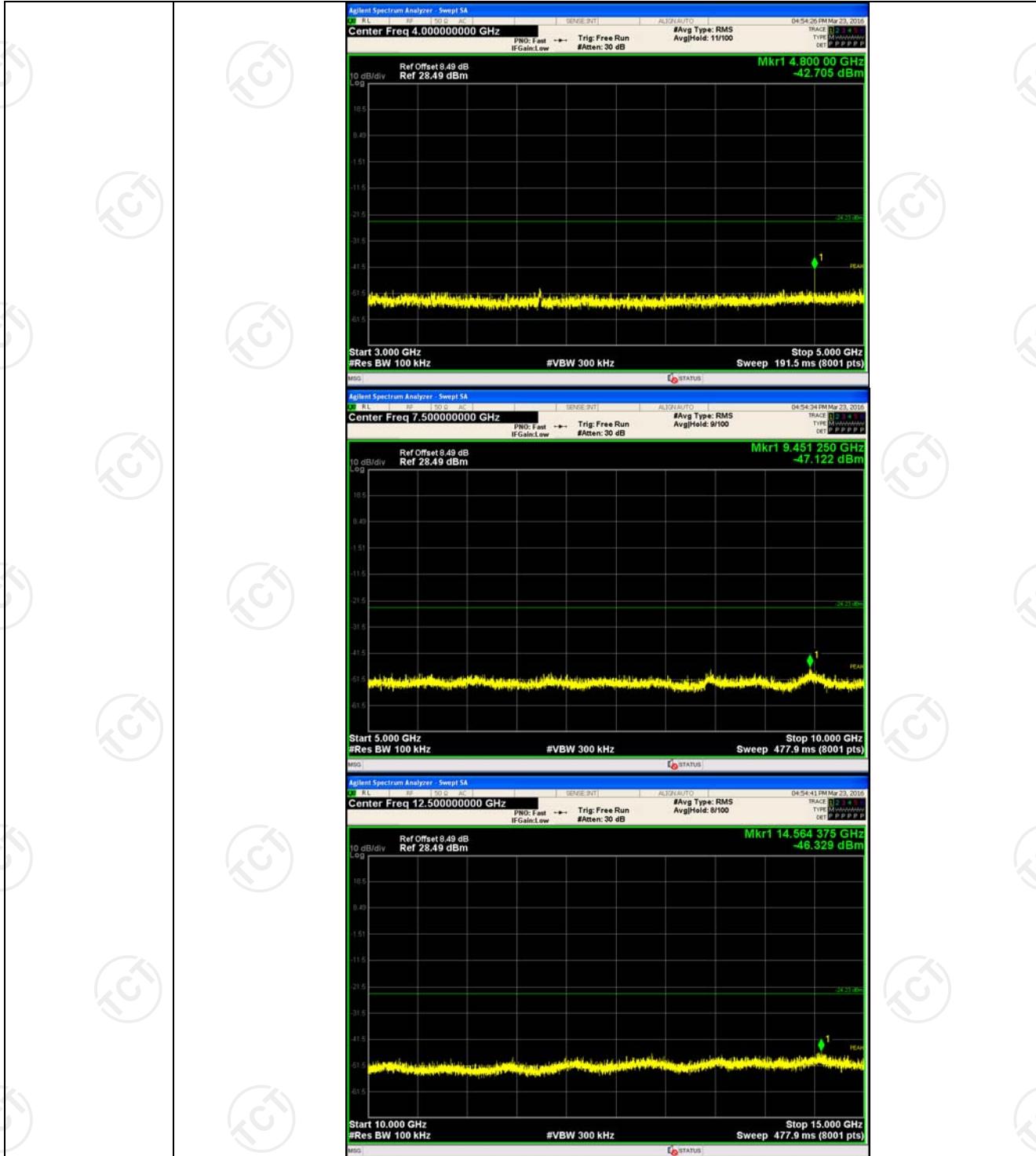


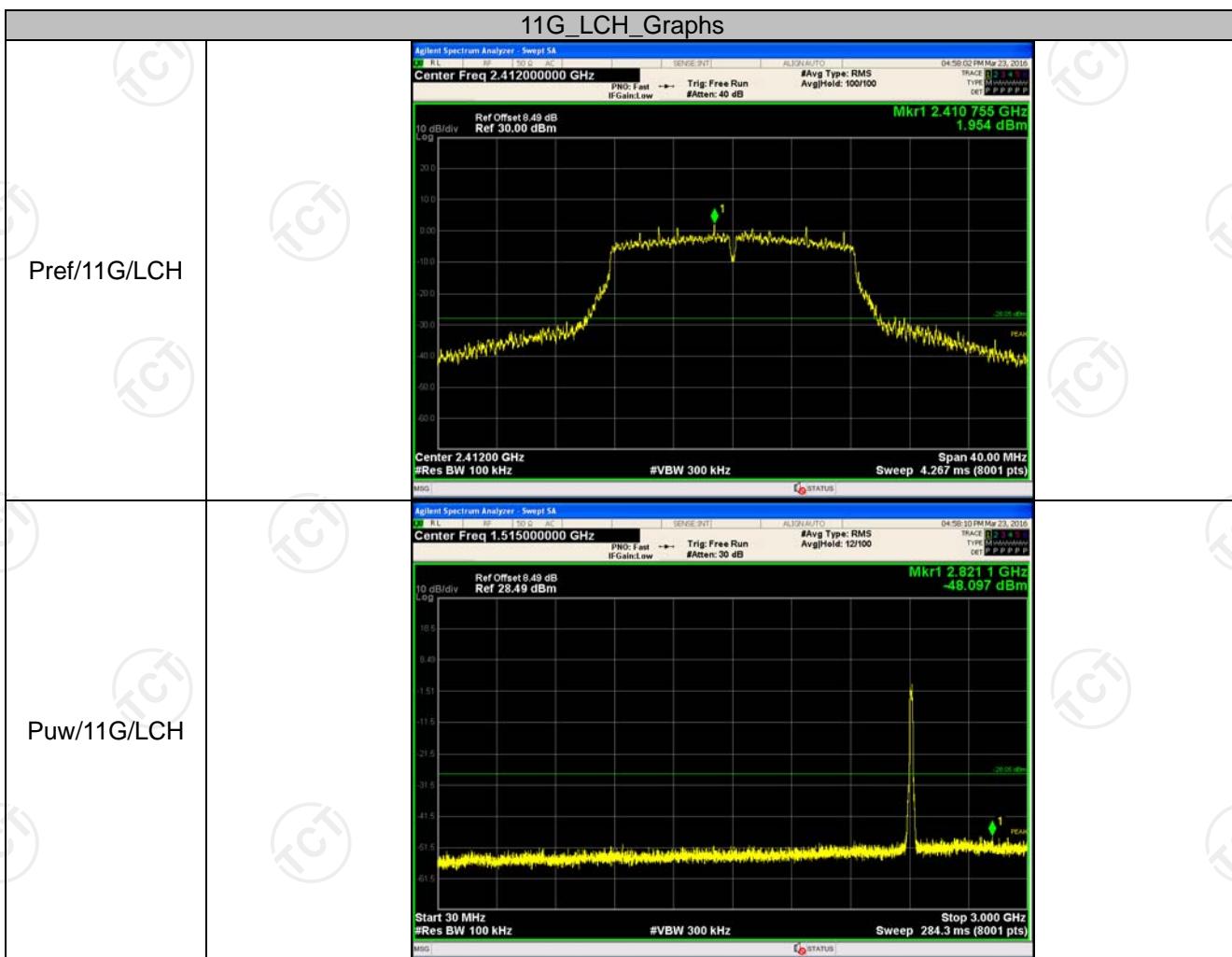
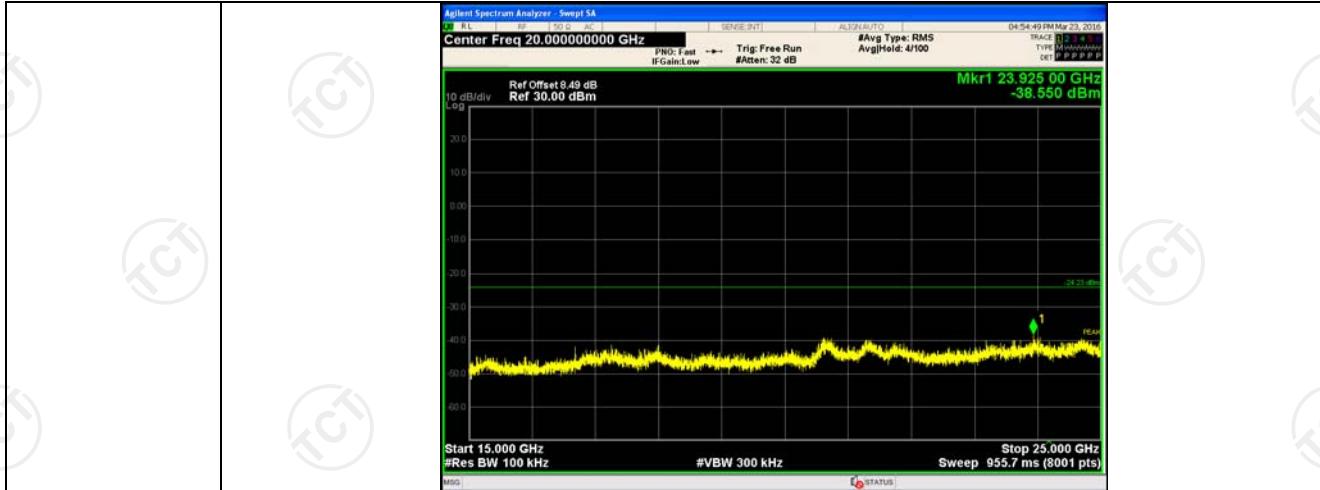


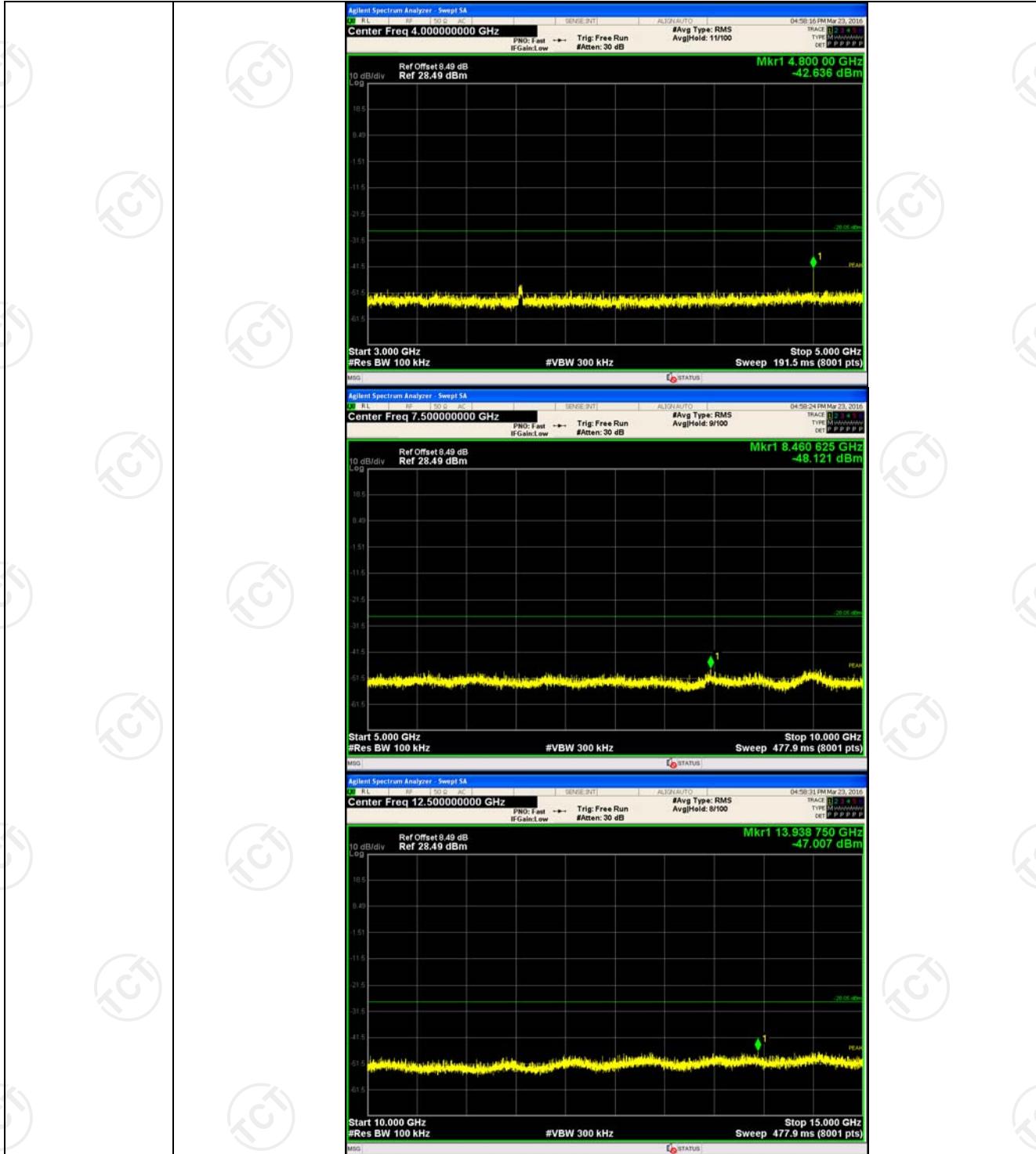


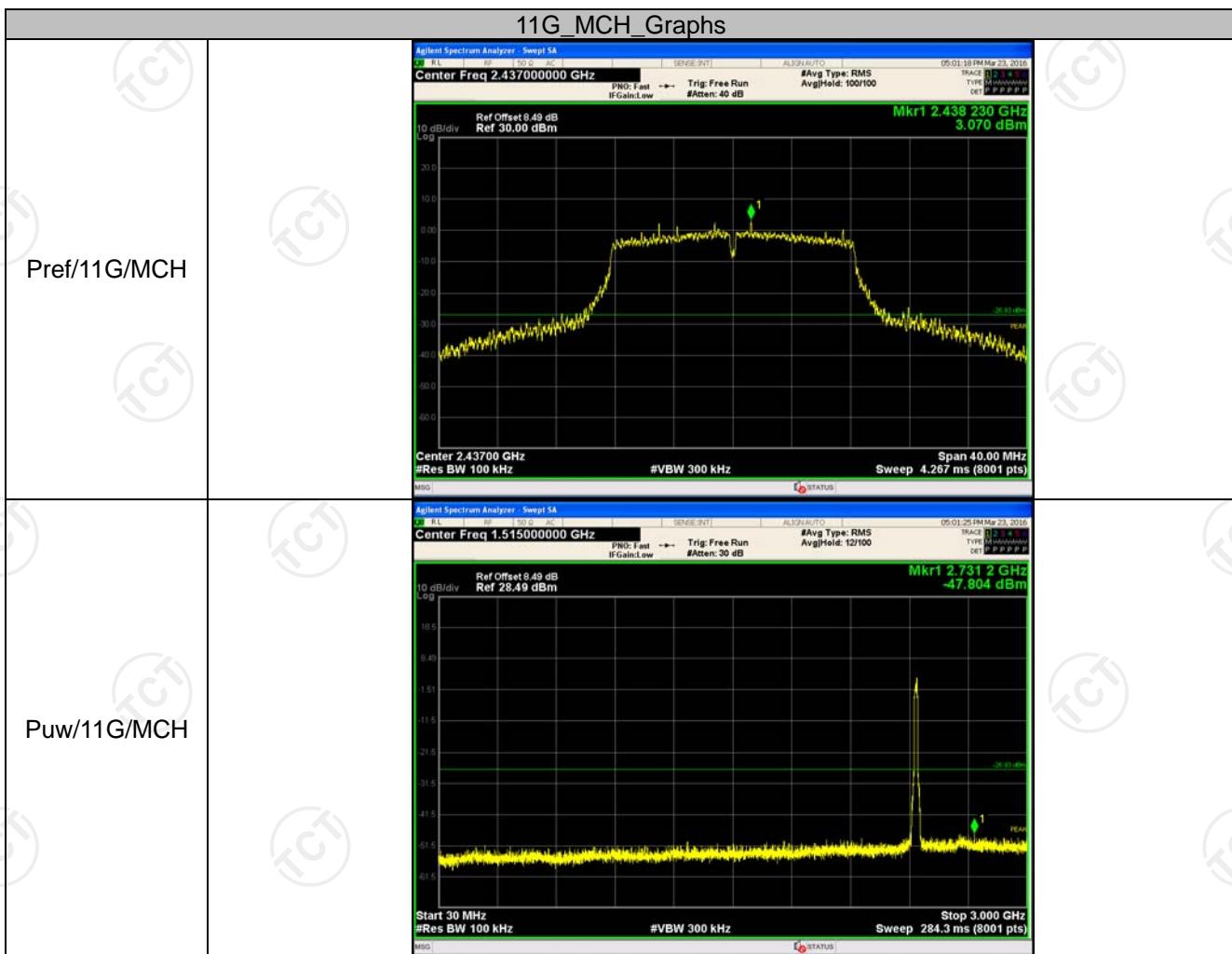
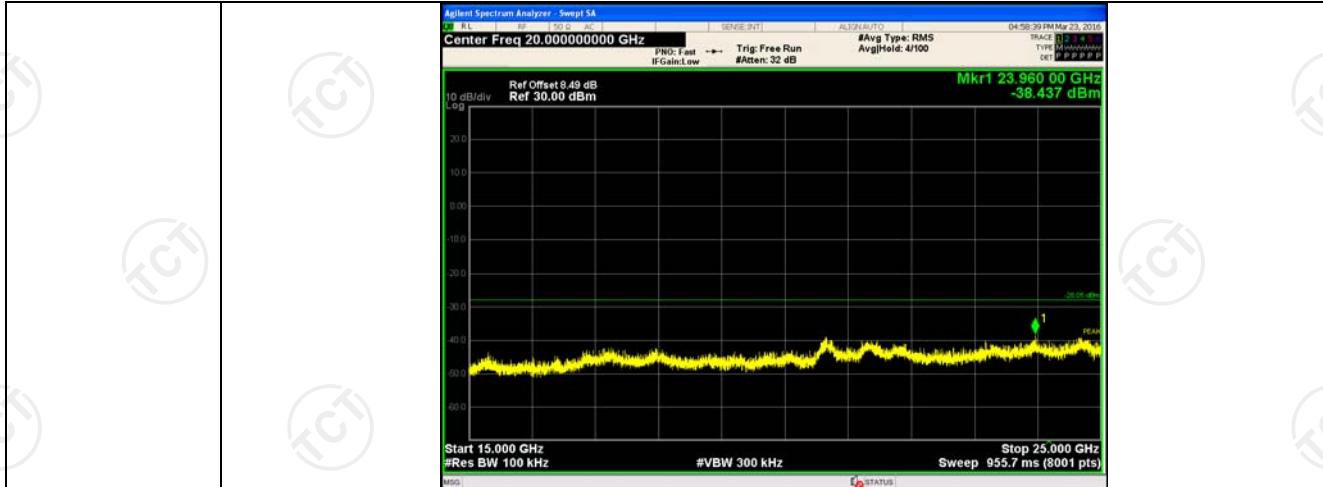


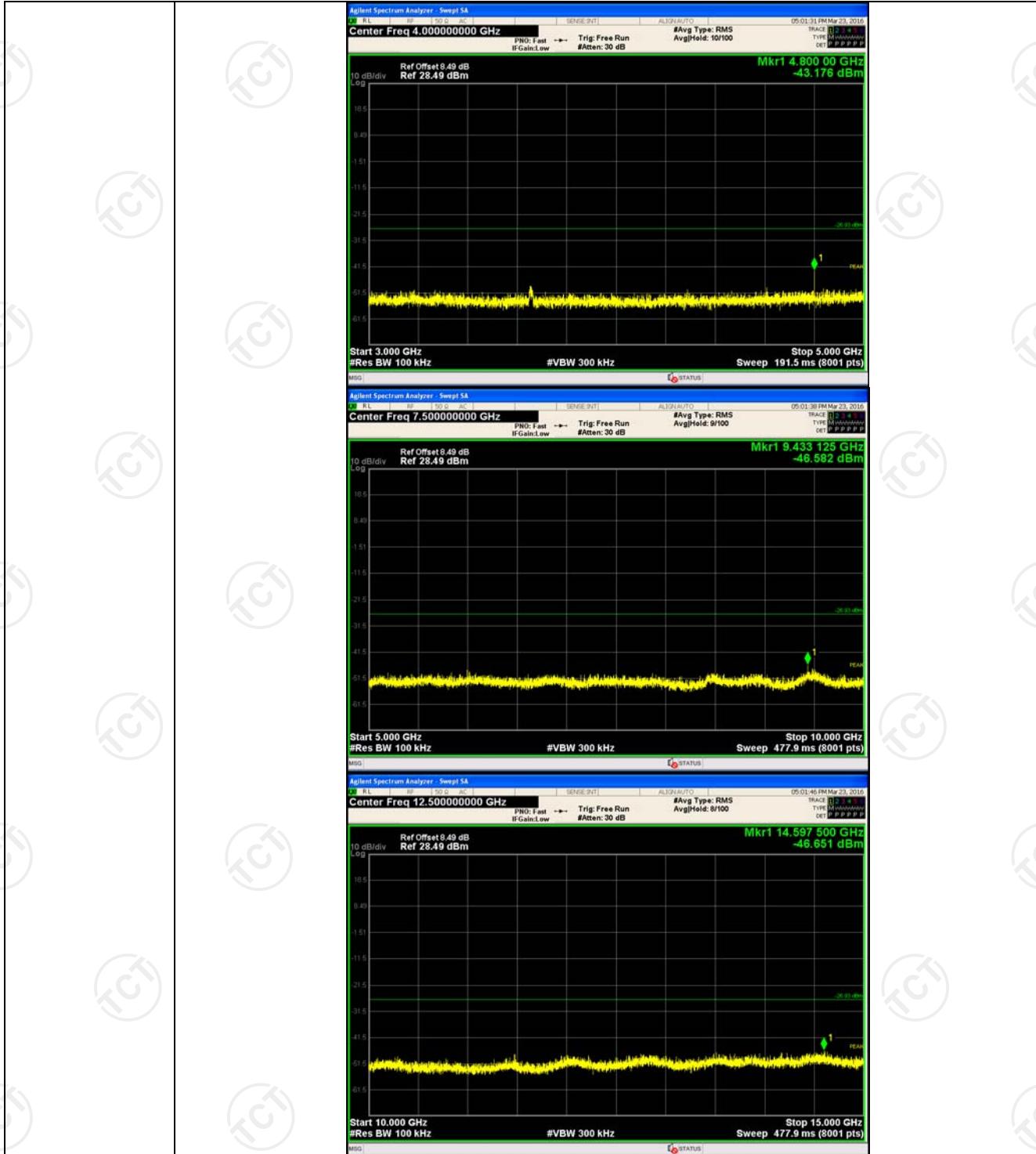


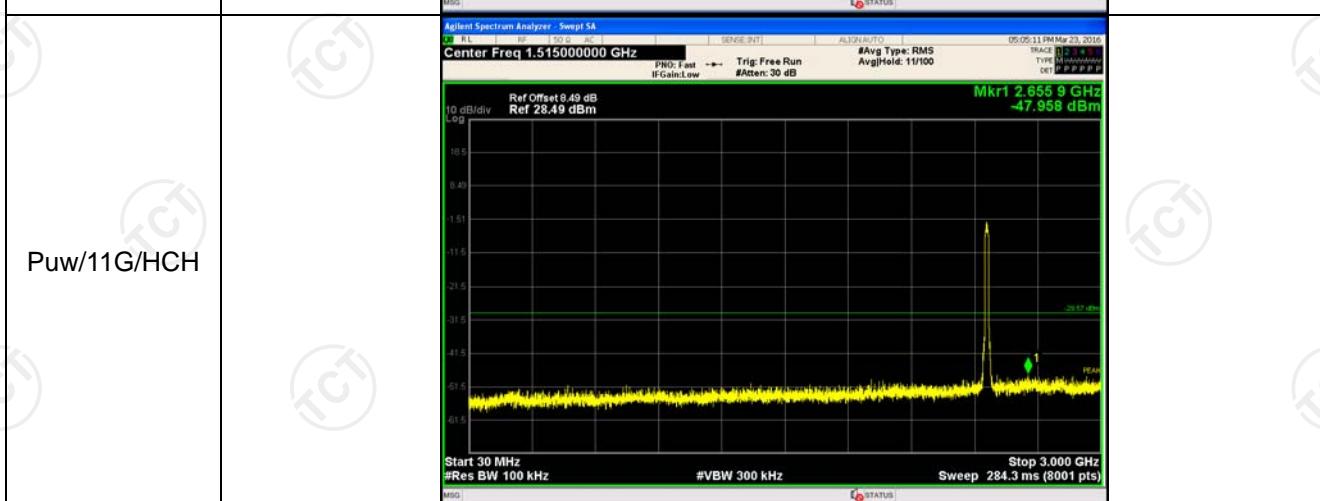
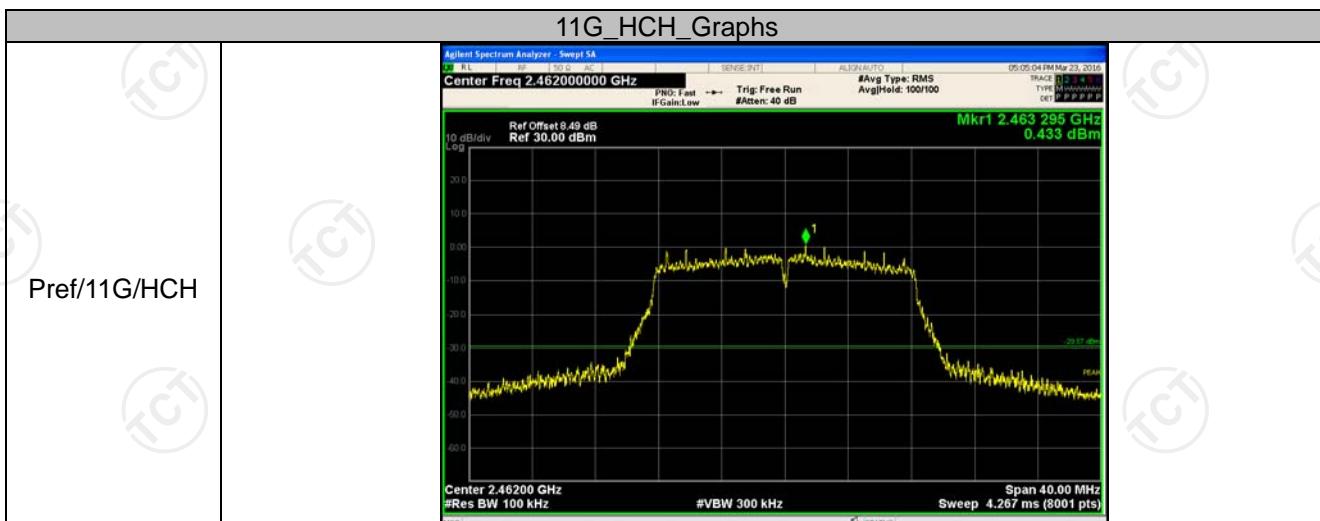
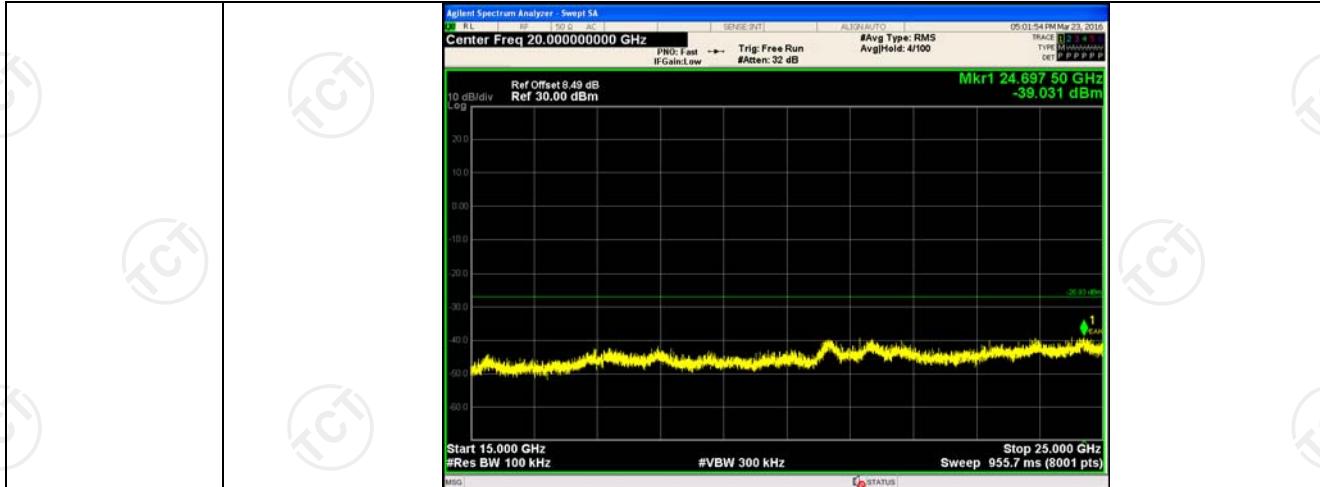


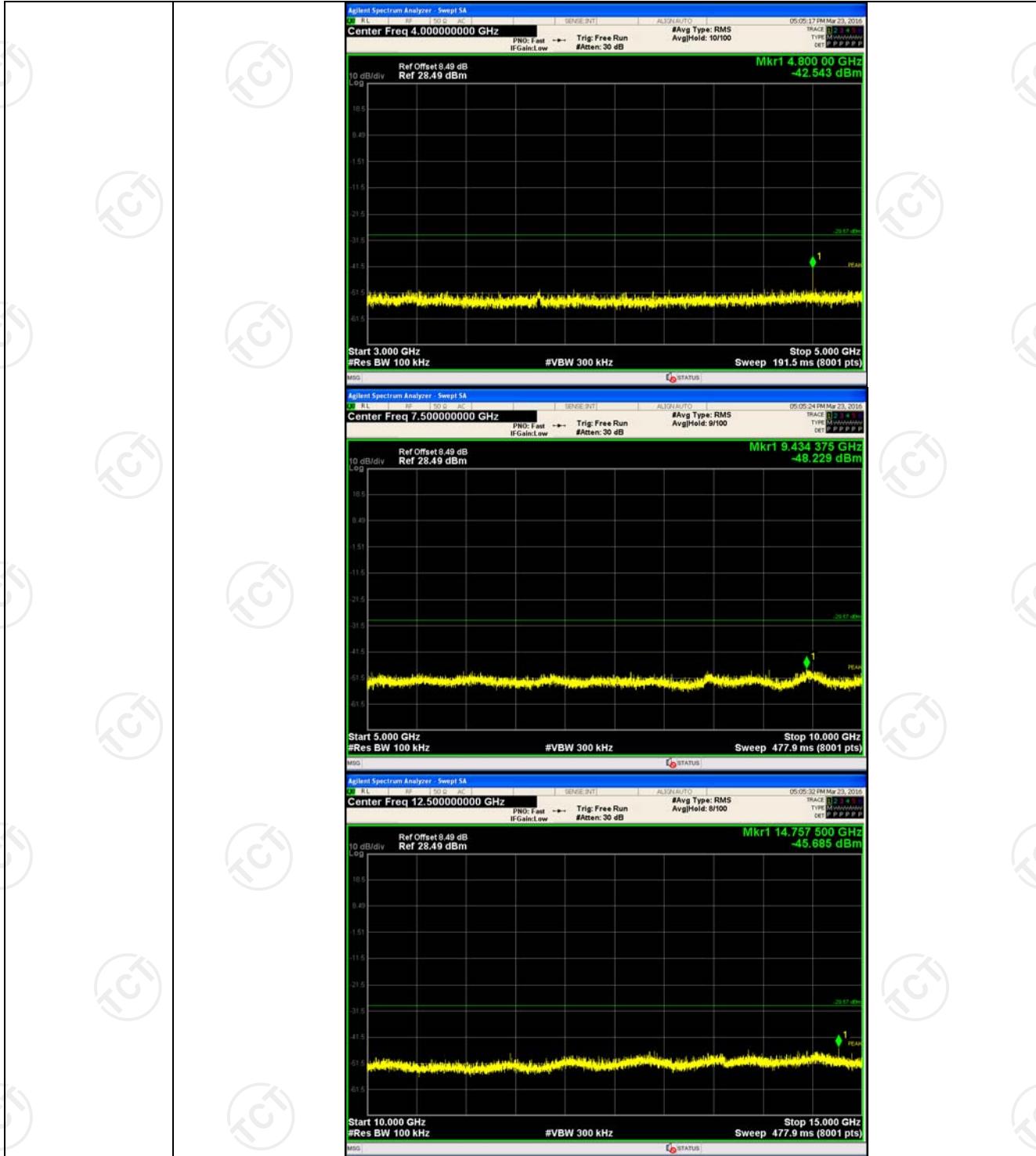


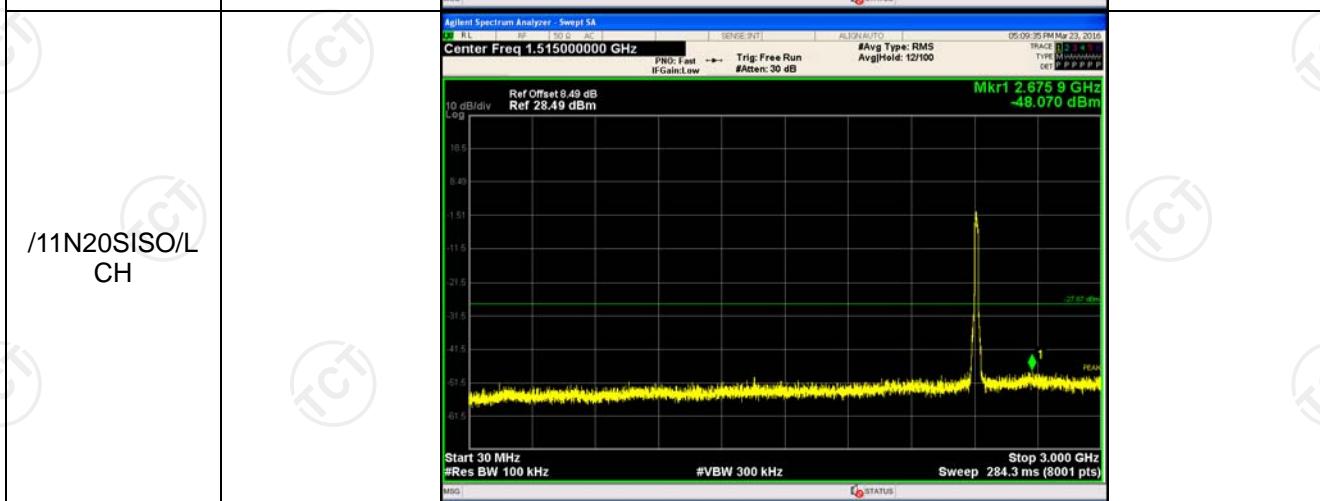
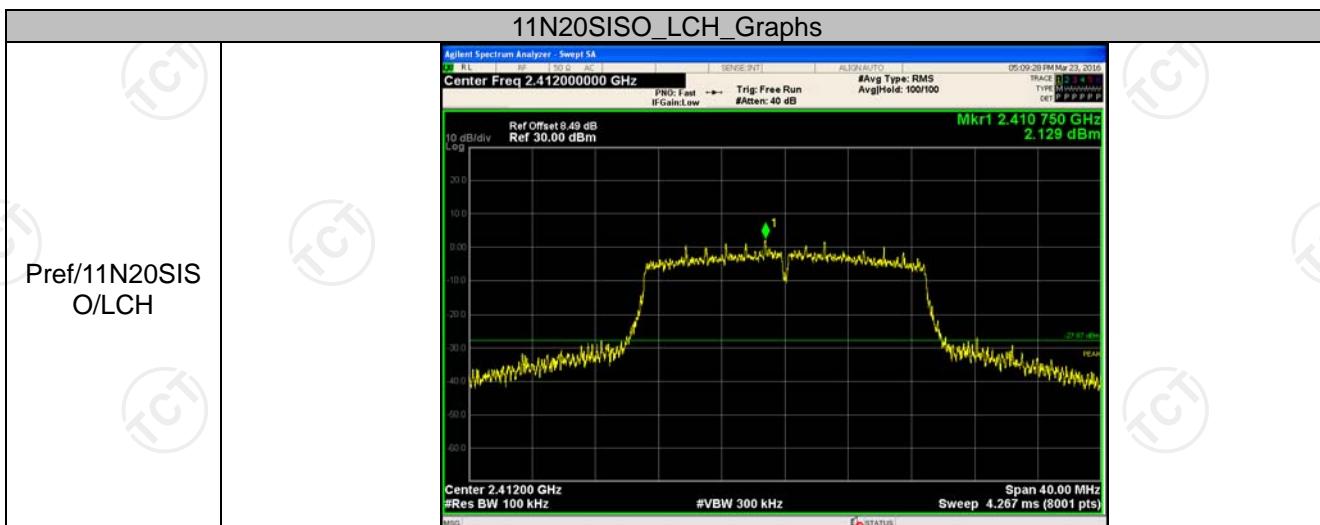
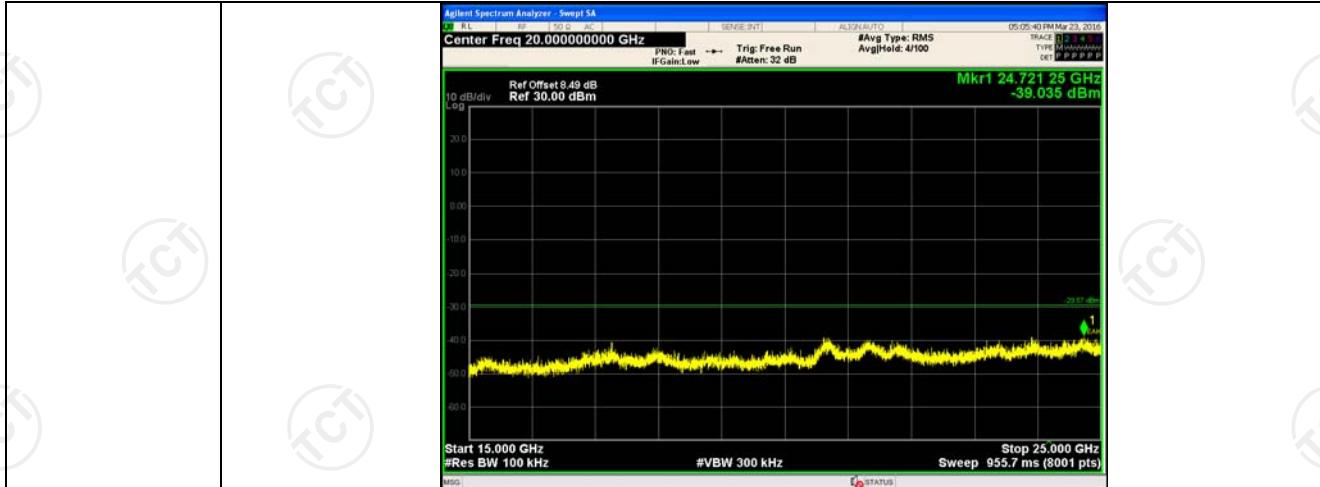


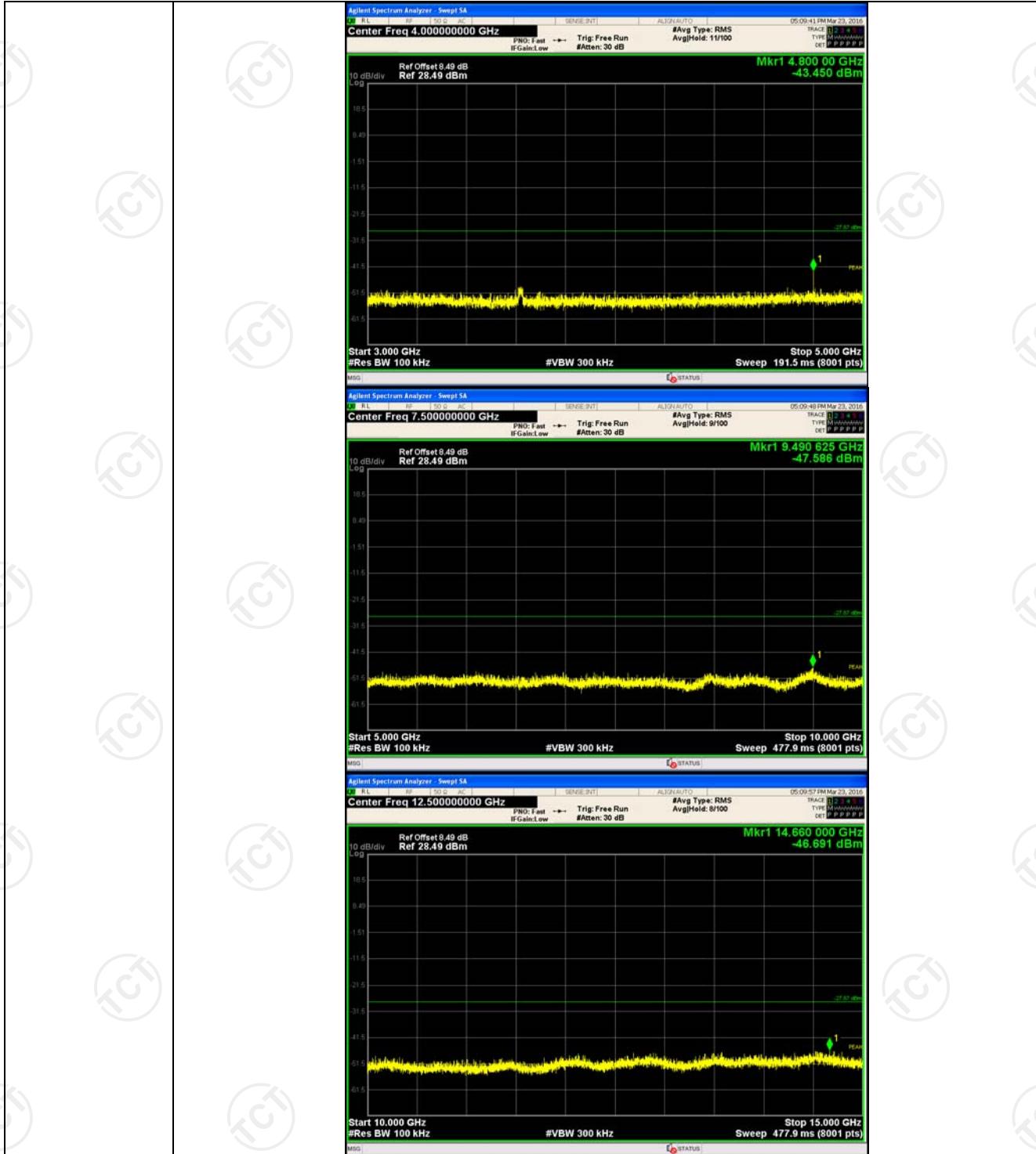


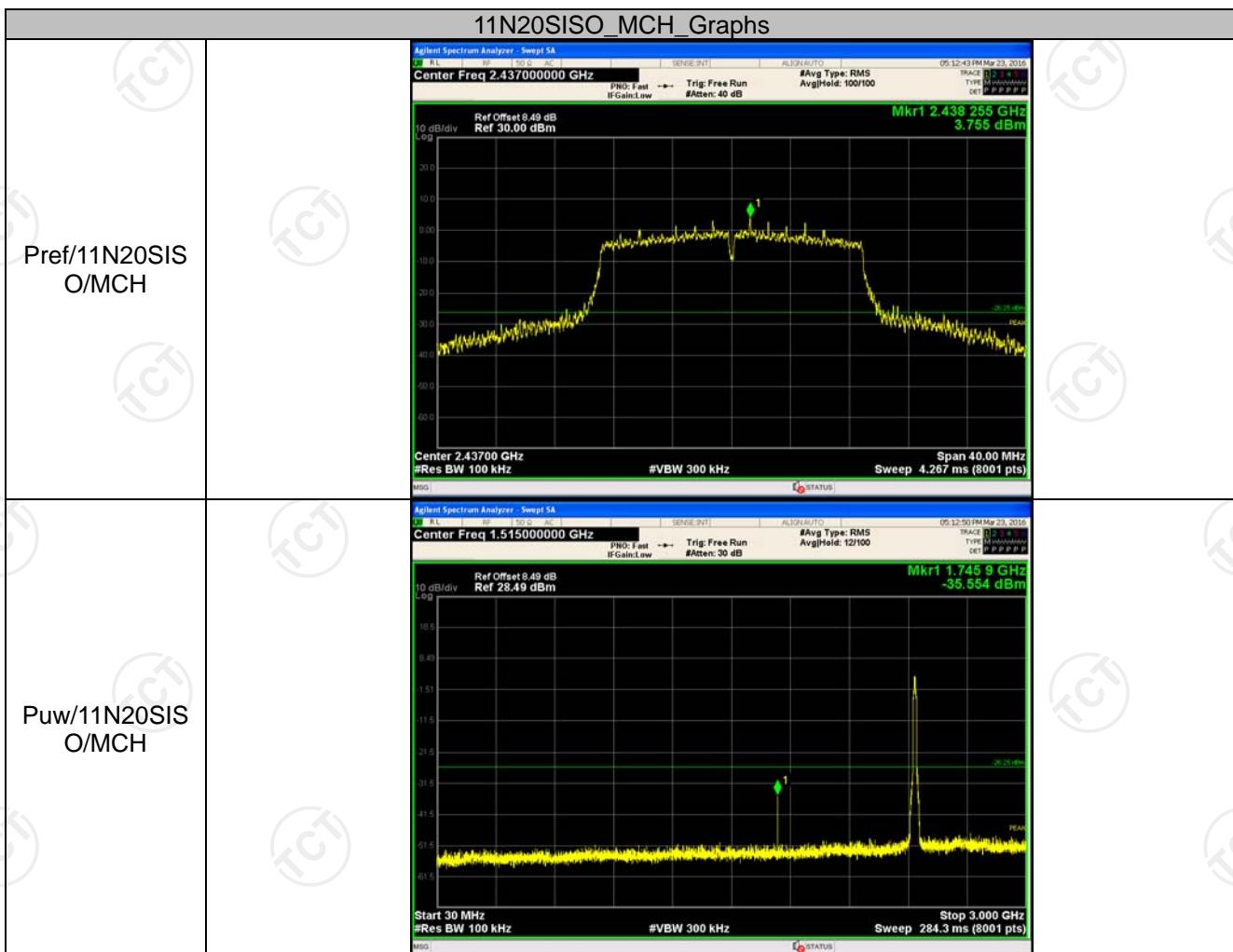
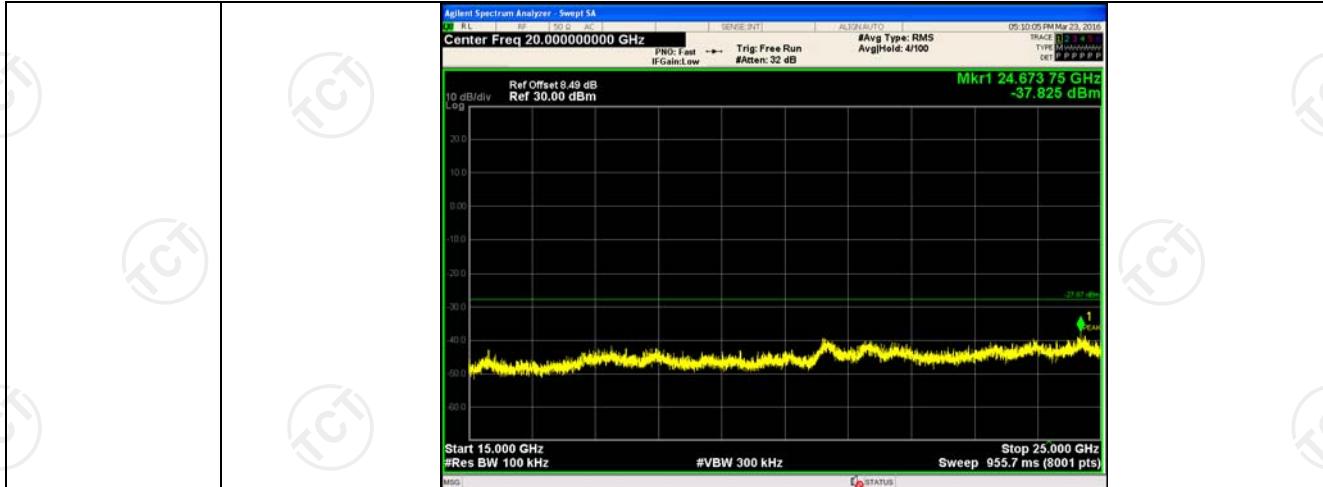


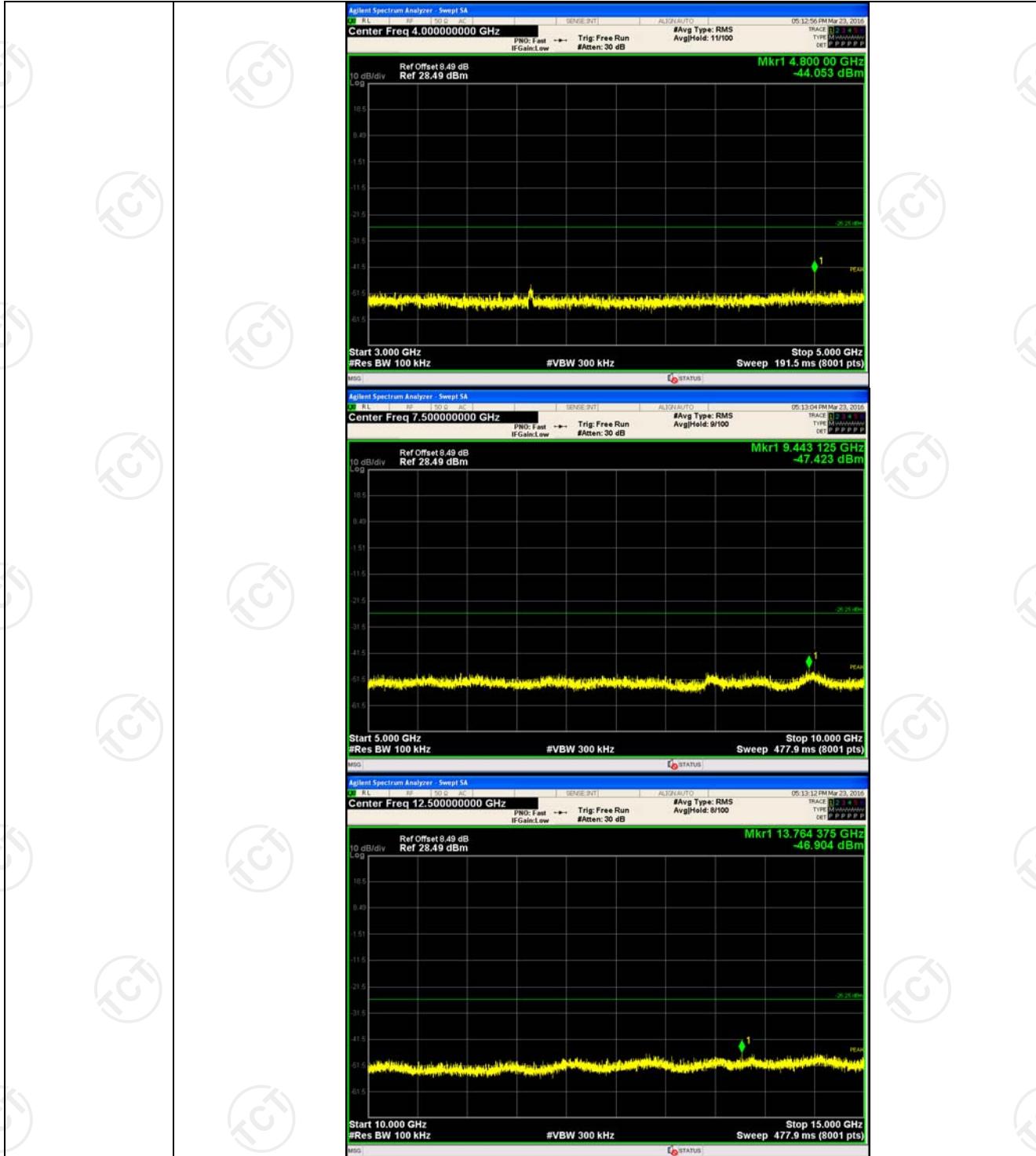


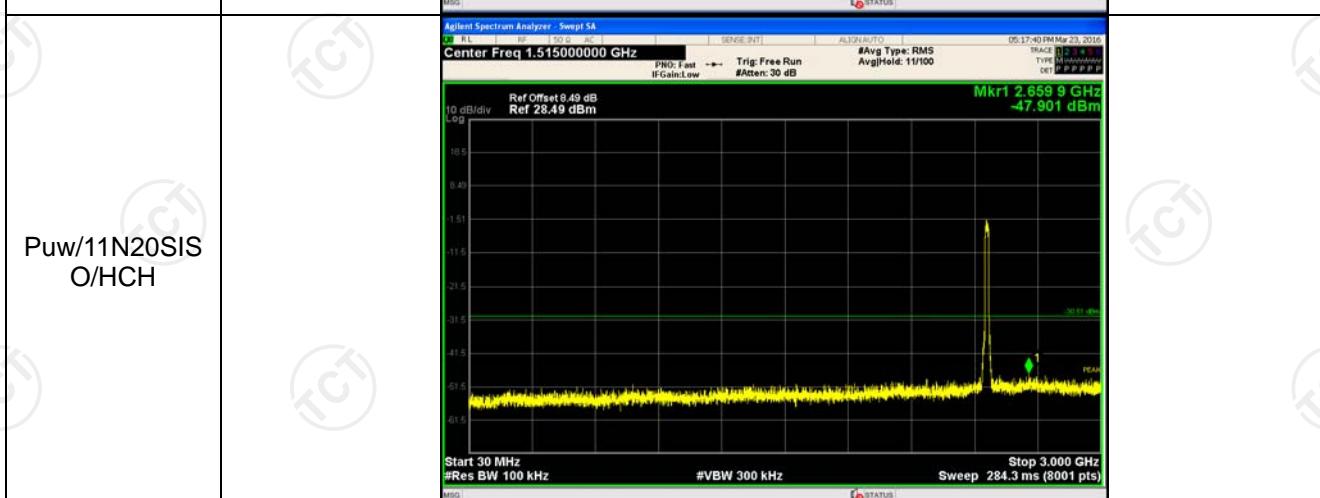
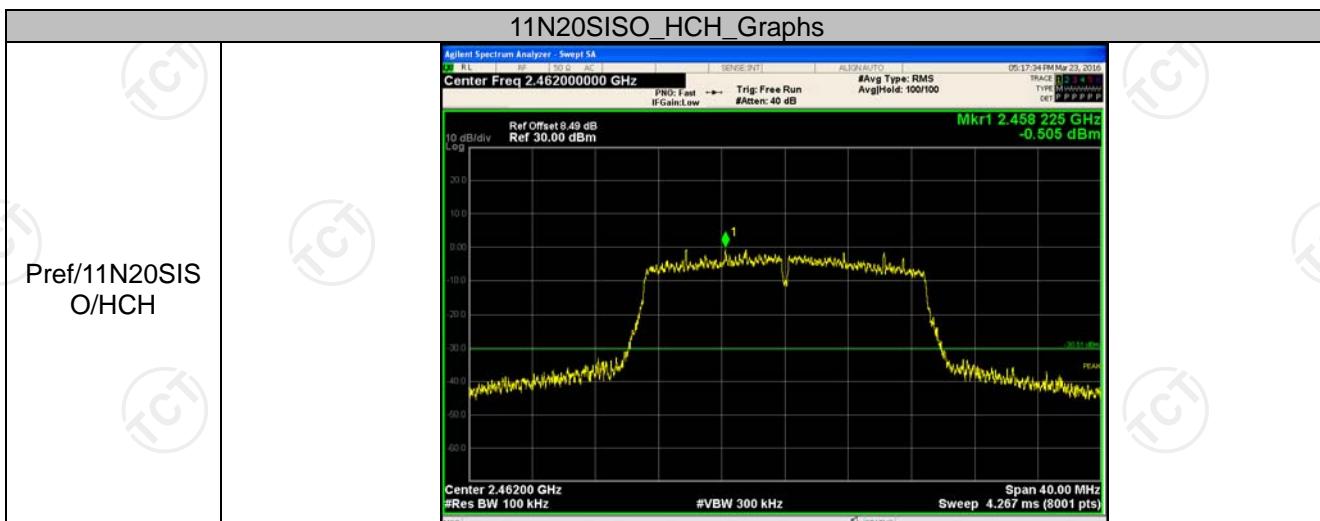
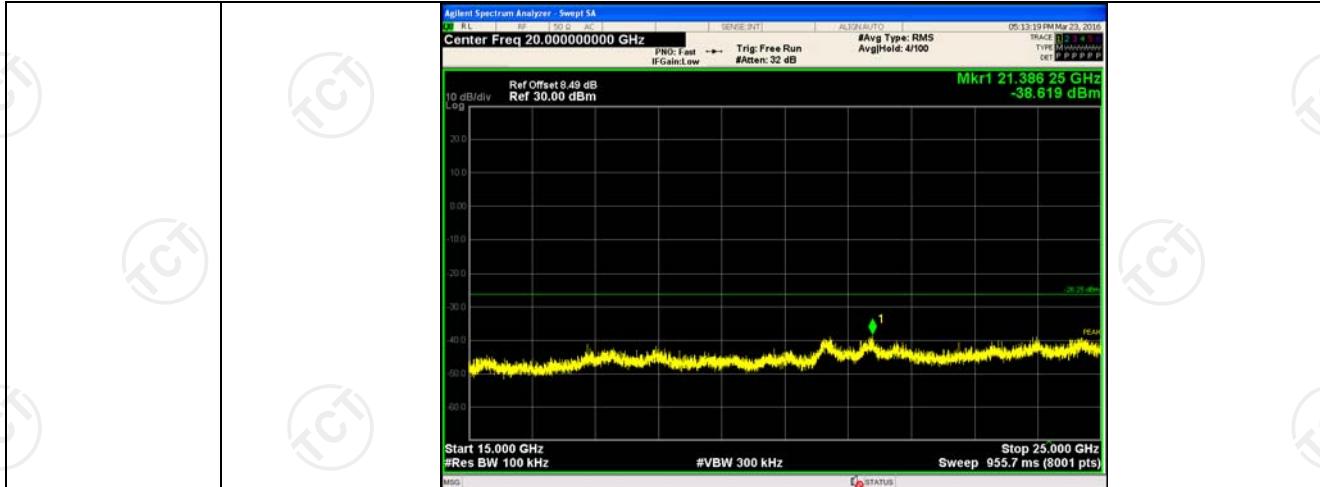


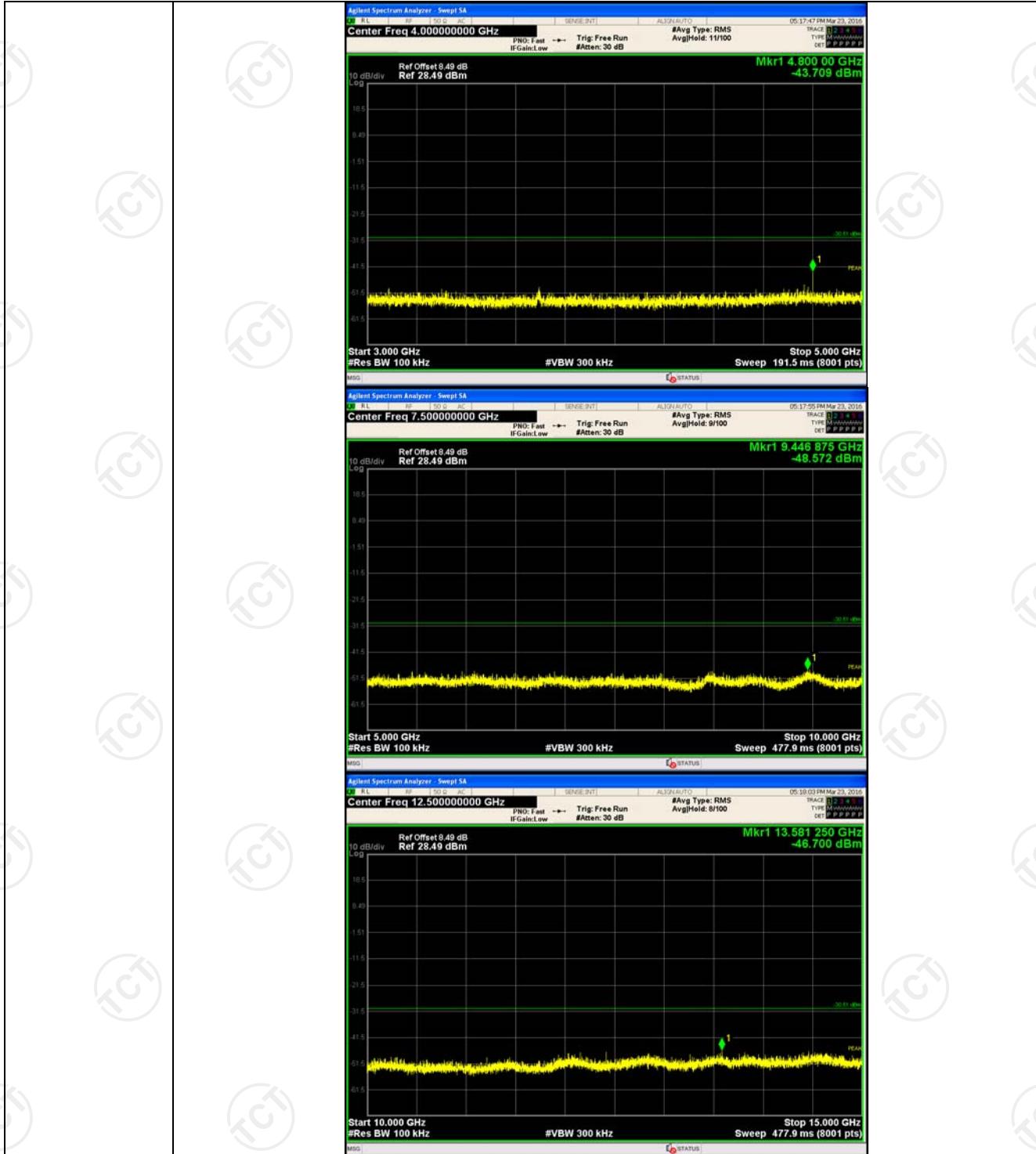


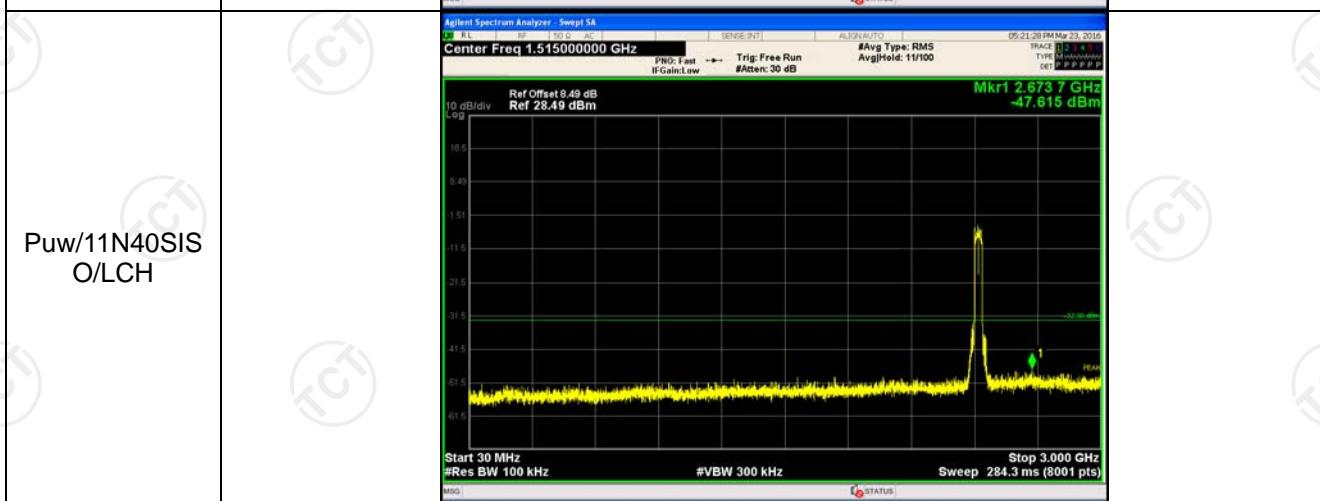
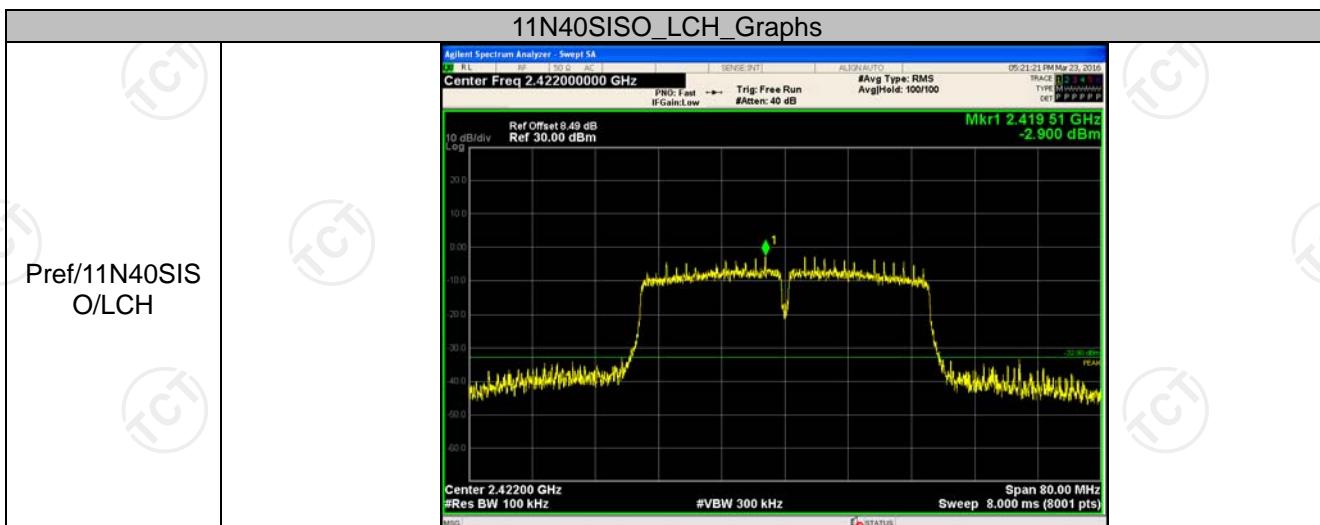
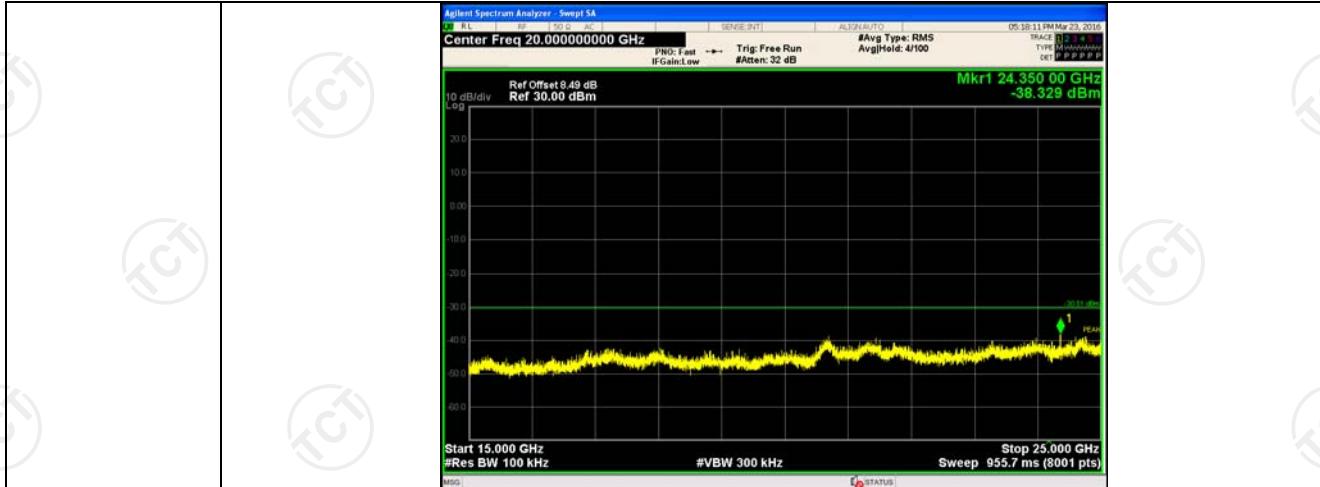


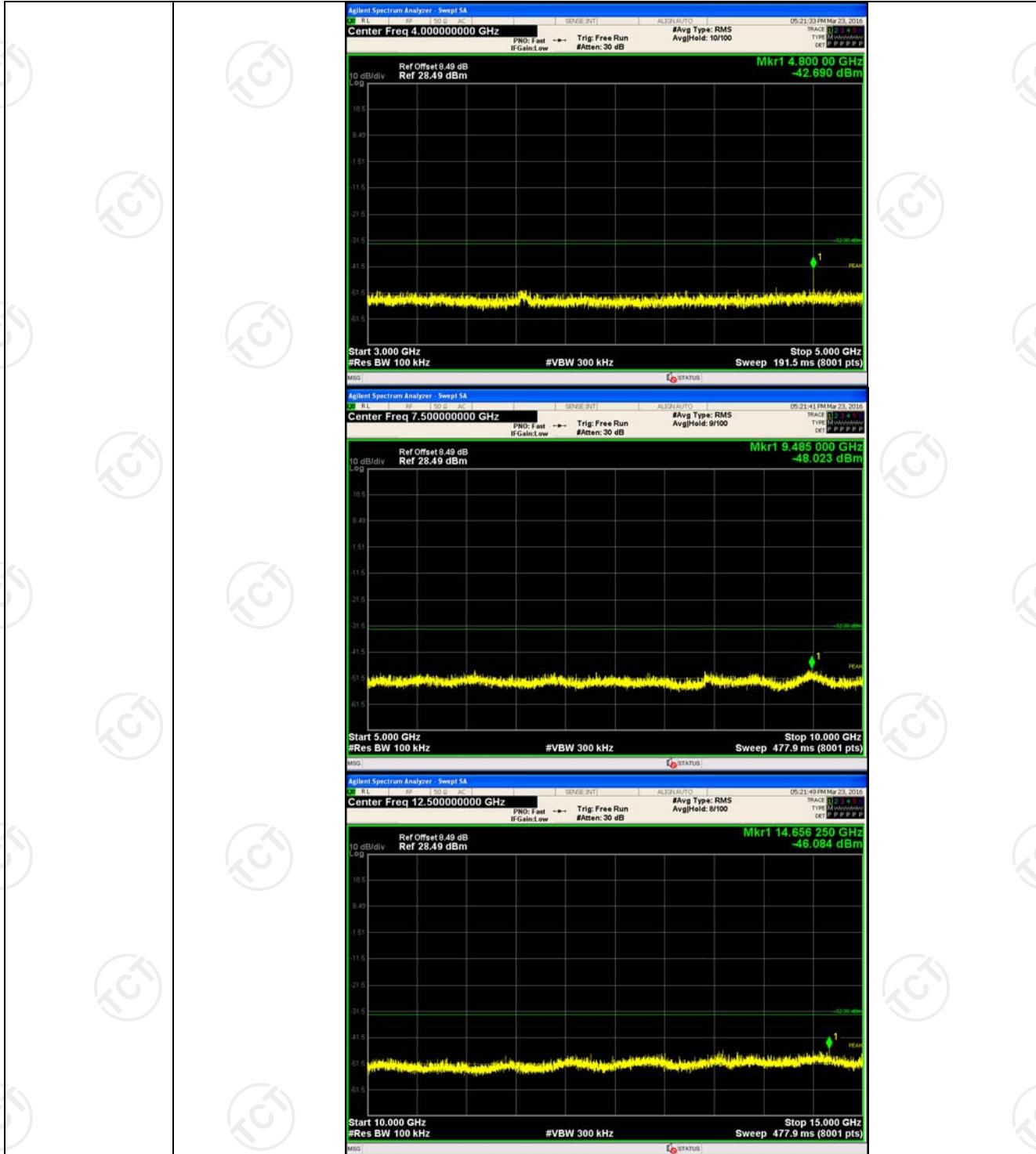


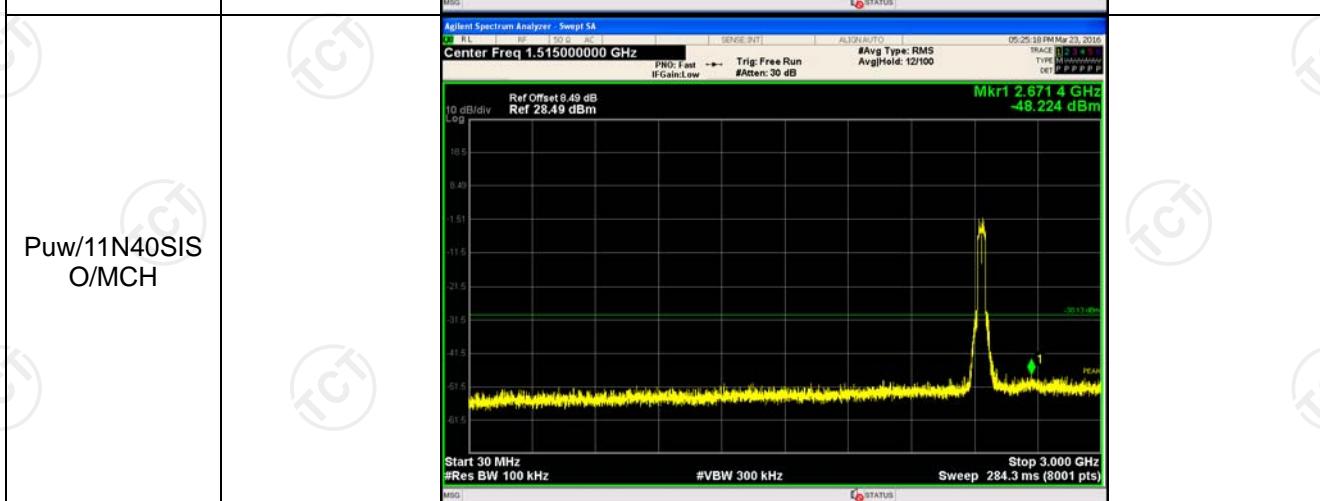
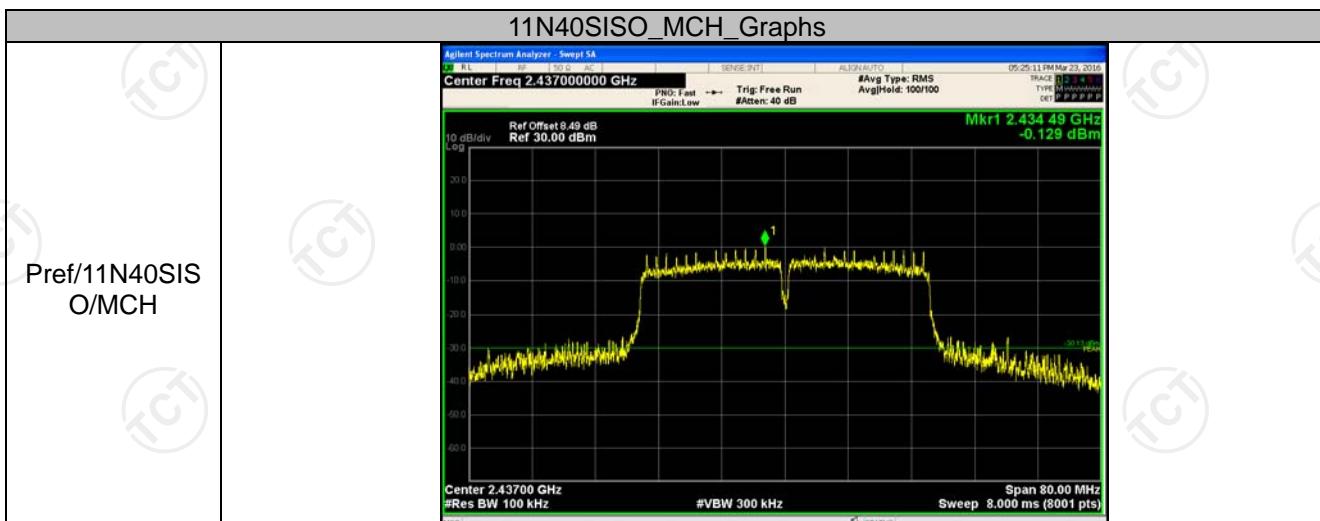
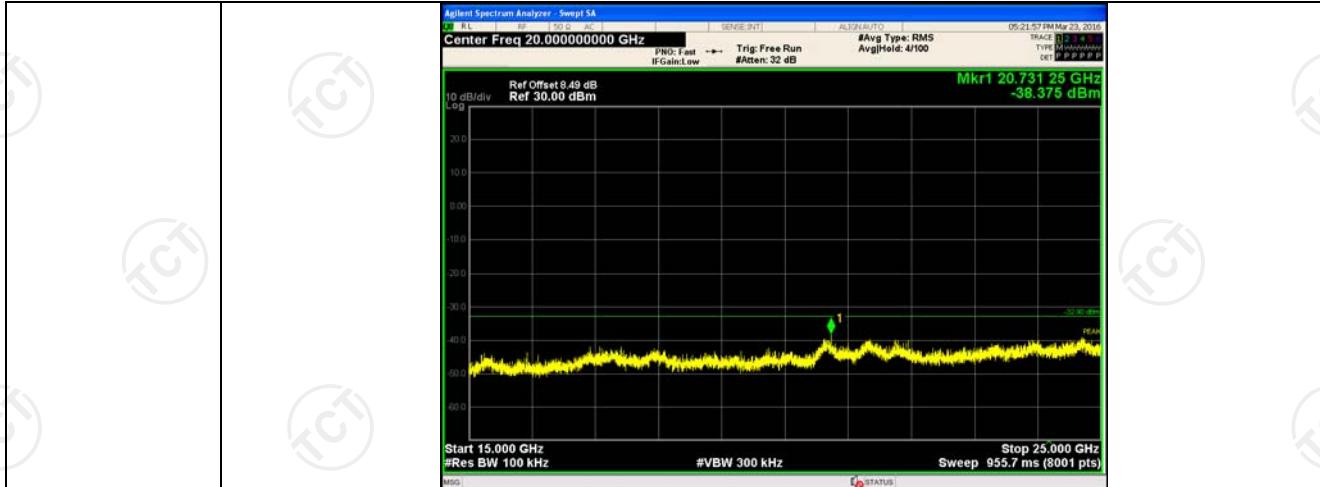


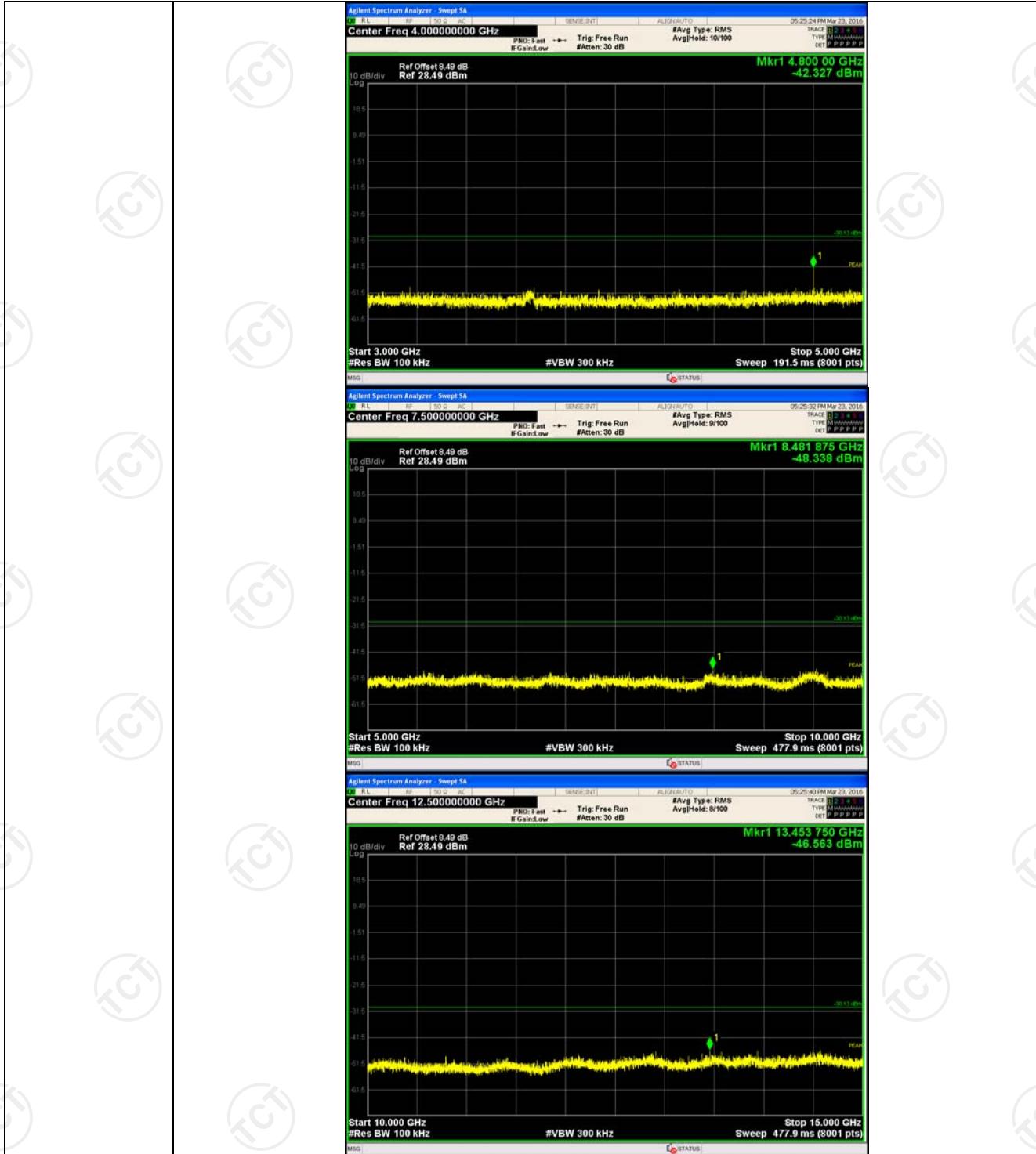


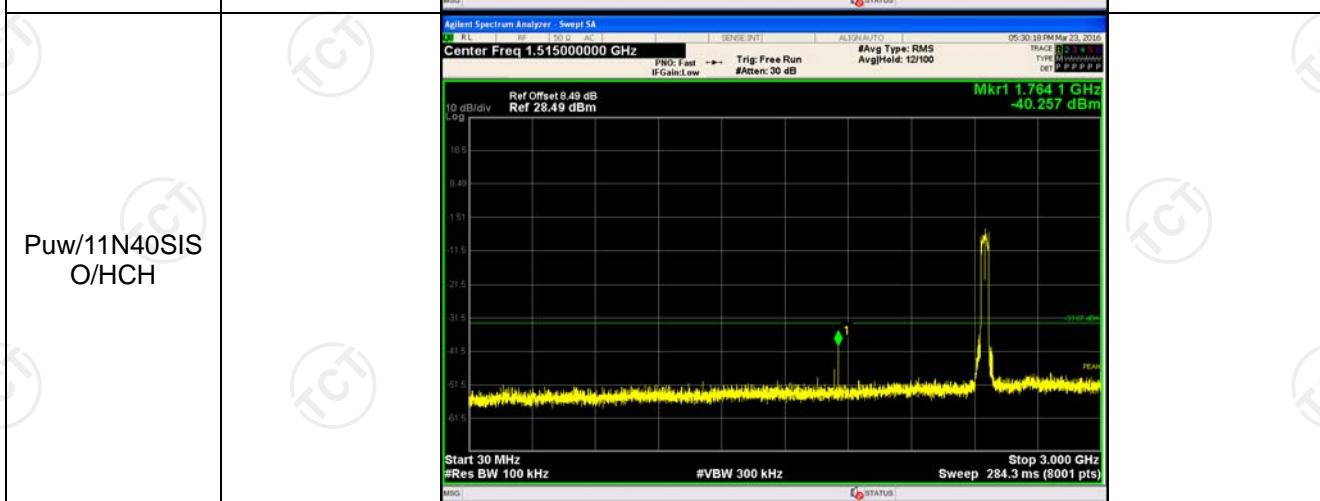
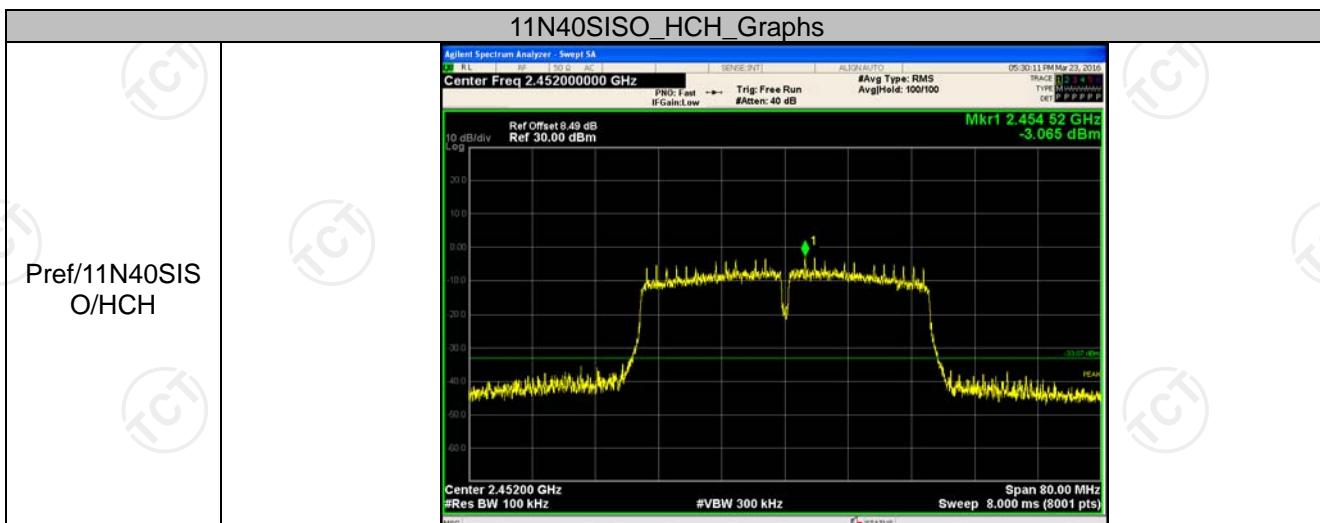
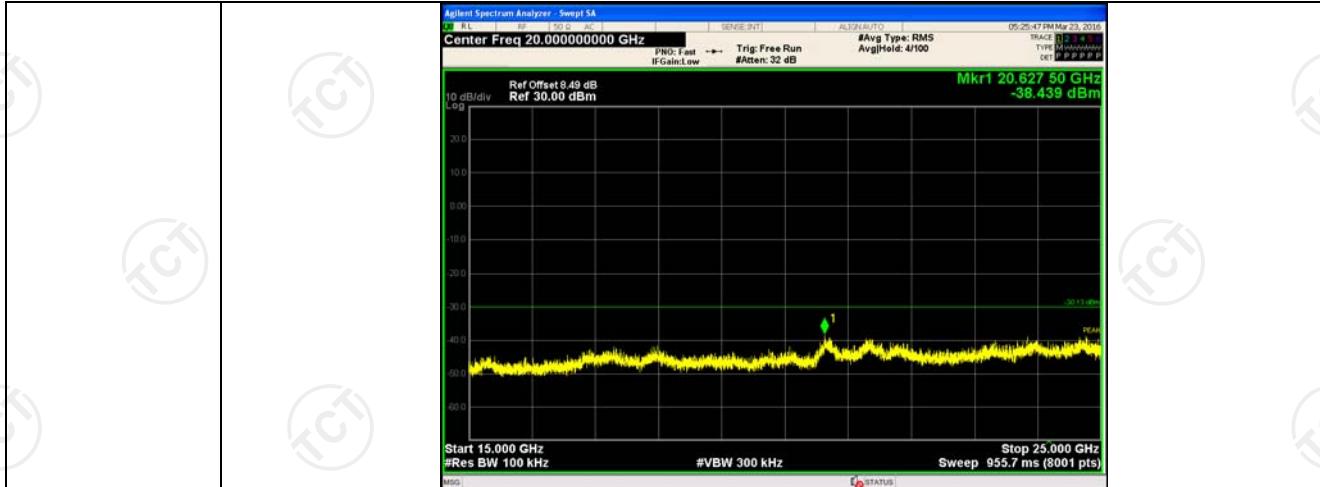


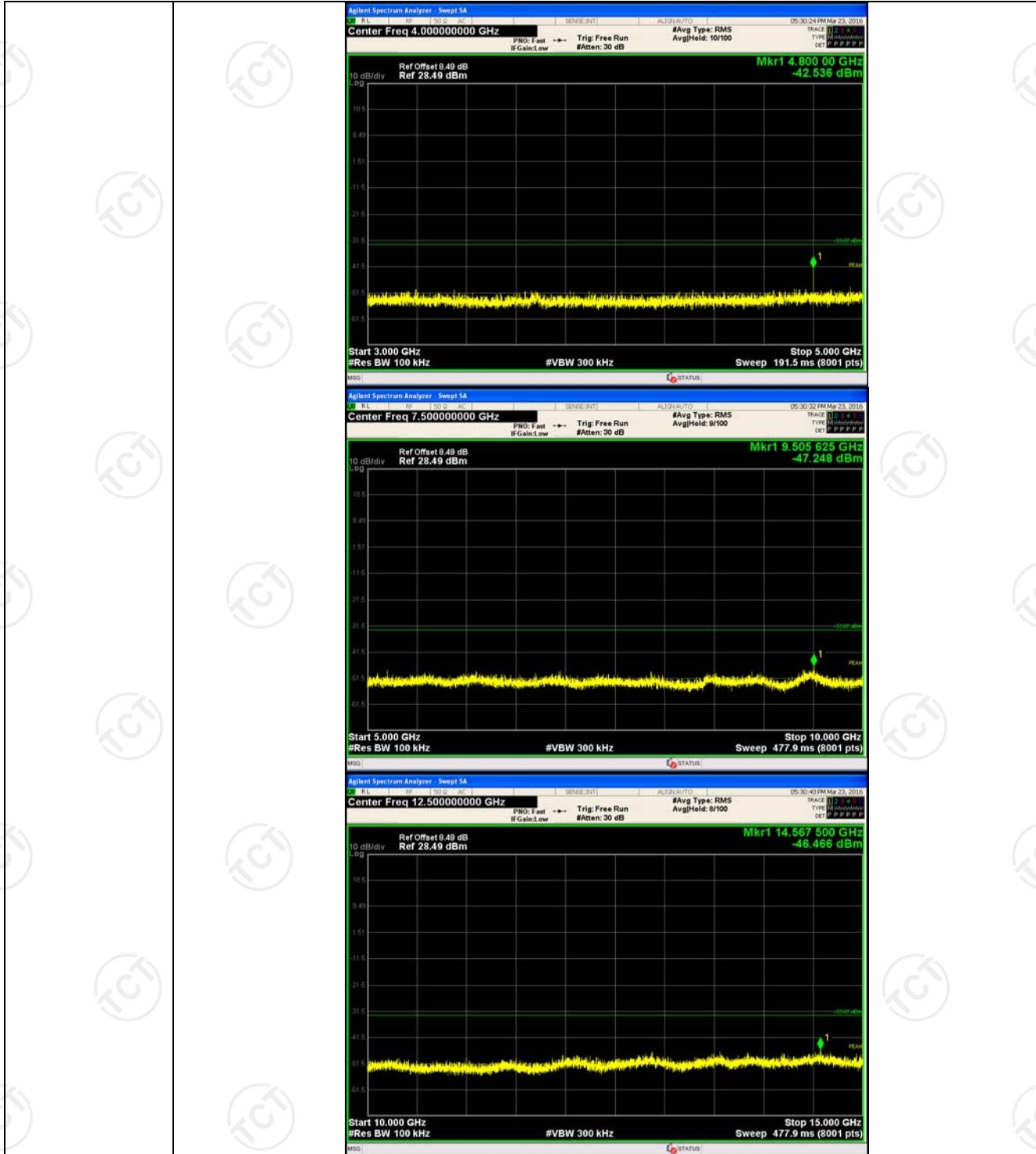


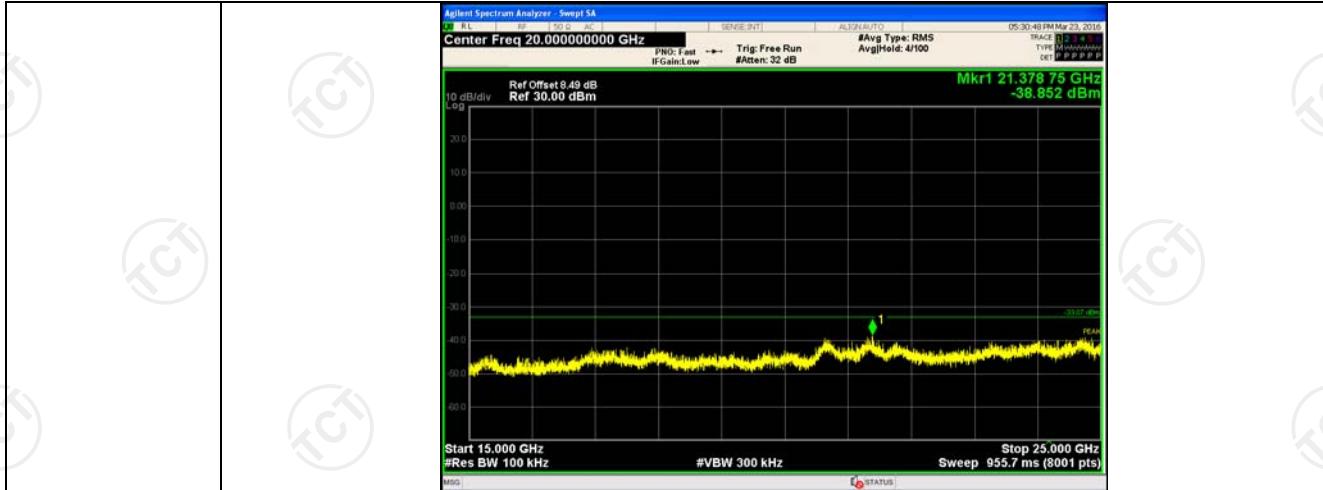










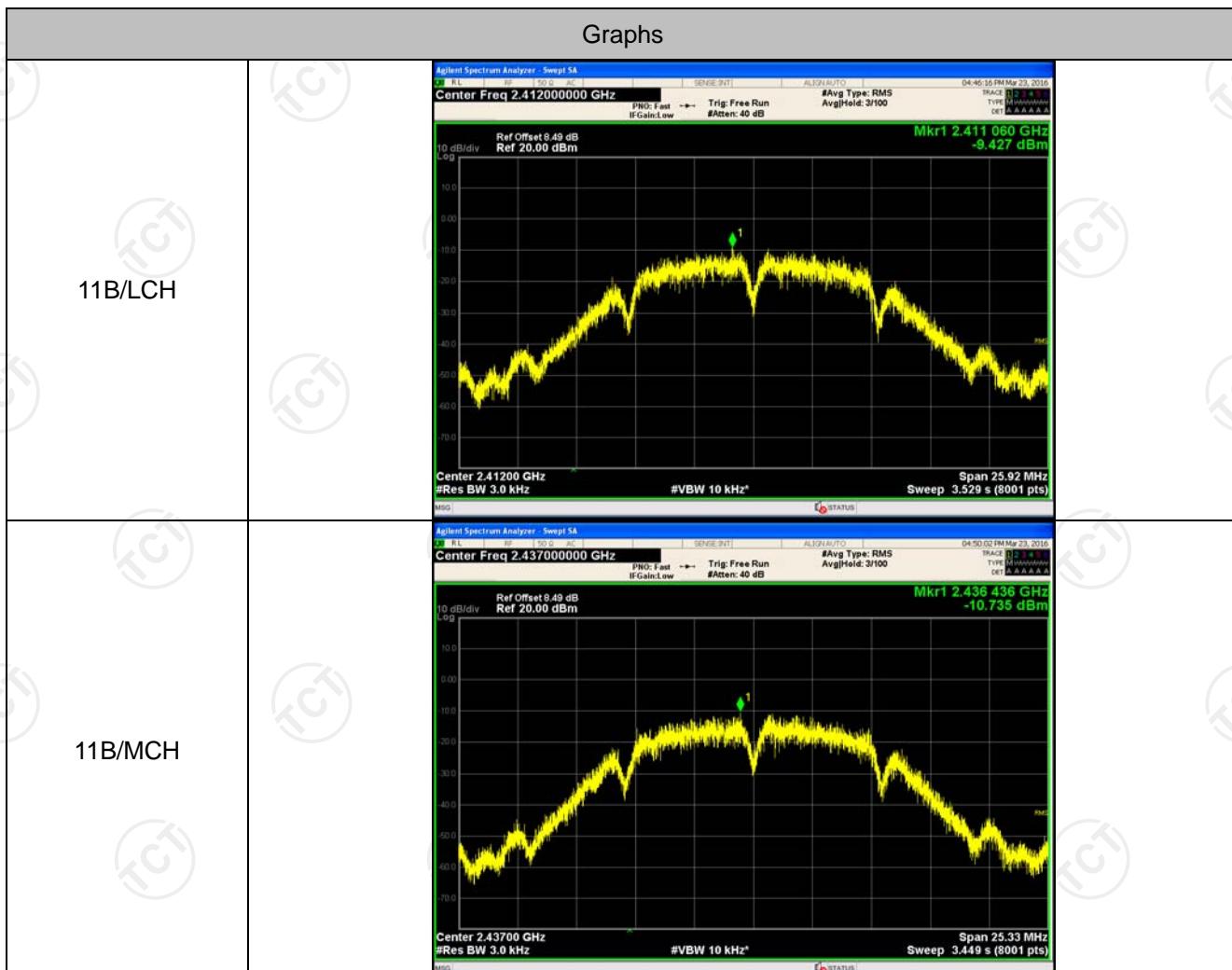


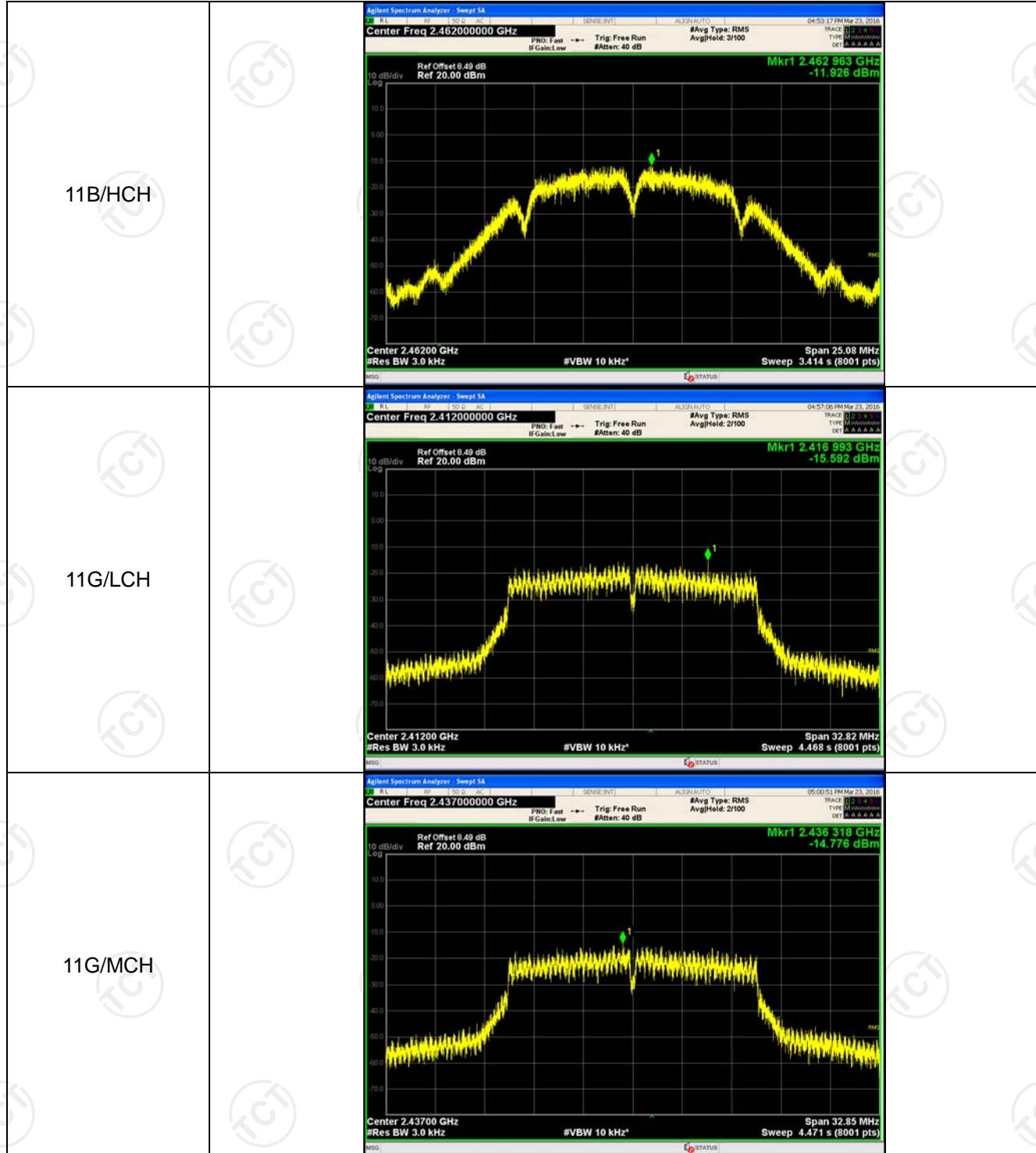
Power Spectral Density

Result Table

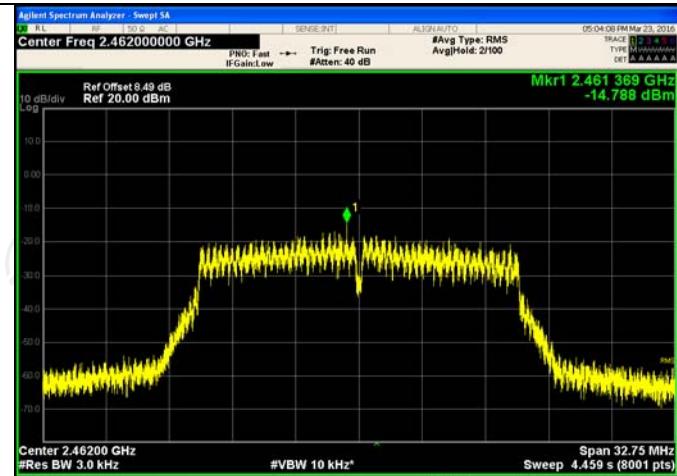
Mode	Channel	Meas.Level [dBm]	Av.PSD [dBm]	Verdict
11B	LCH	-9.427	-9.410	PASS
11B	MCH	-10.735	-10.717	PASS
11B	HCH	-11.926	-11.909	PASS
11G	LCH	-15.592	-15.459	PASS
11G	MCH	-14.776	-14.651	PASS
11G	HCH	-14.788	-14.663	PASS
11N20SISO	LCH	-16.795	-16.661	PASS
11N20SISO	MCH	-15.182	-15.048	PASS
11N20SISO	HCH	-16.447	-16.313	PASS
11N40SISO	LCH	-23.869	-23.620	PASS
11N40SISO	MCH	-20.960	-20.695	PASS
11N40SISO	HCH	-23.830	-23.581	PASS

Test Graph

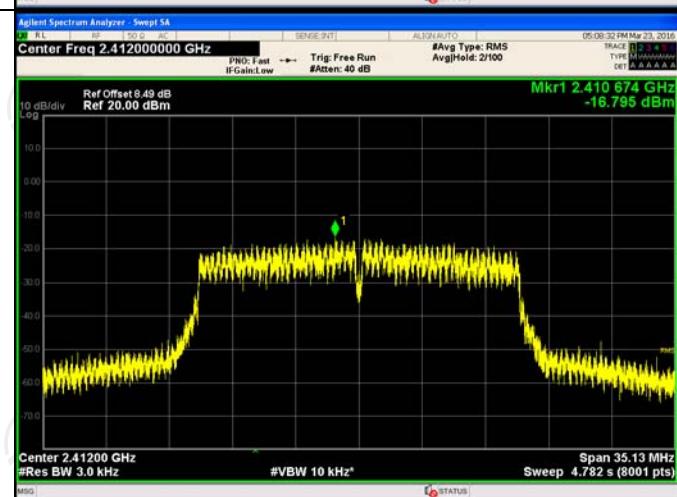




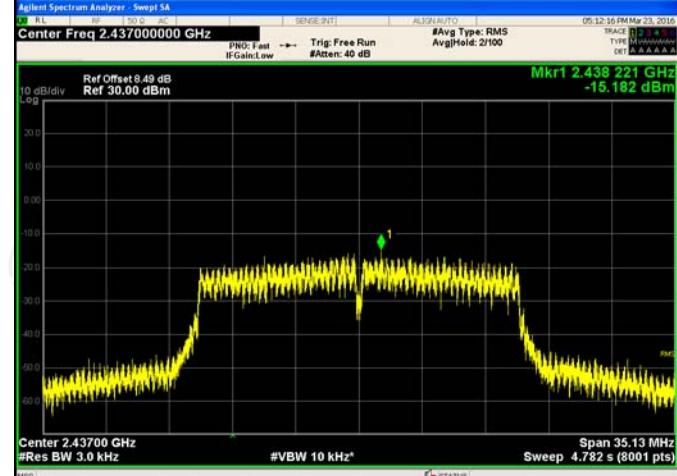
11G/HCH

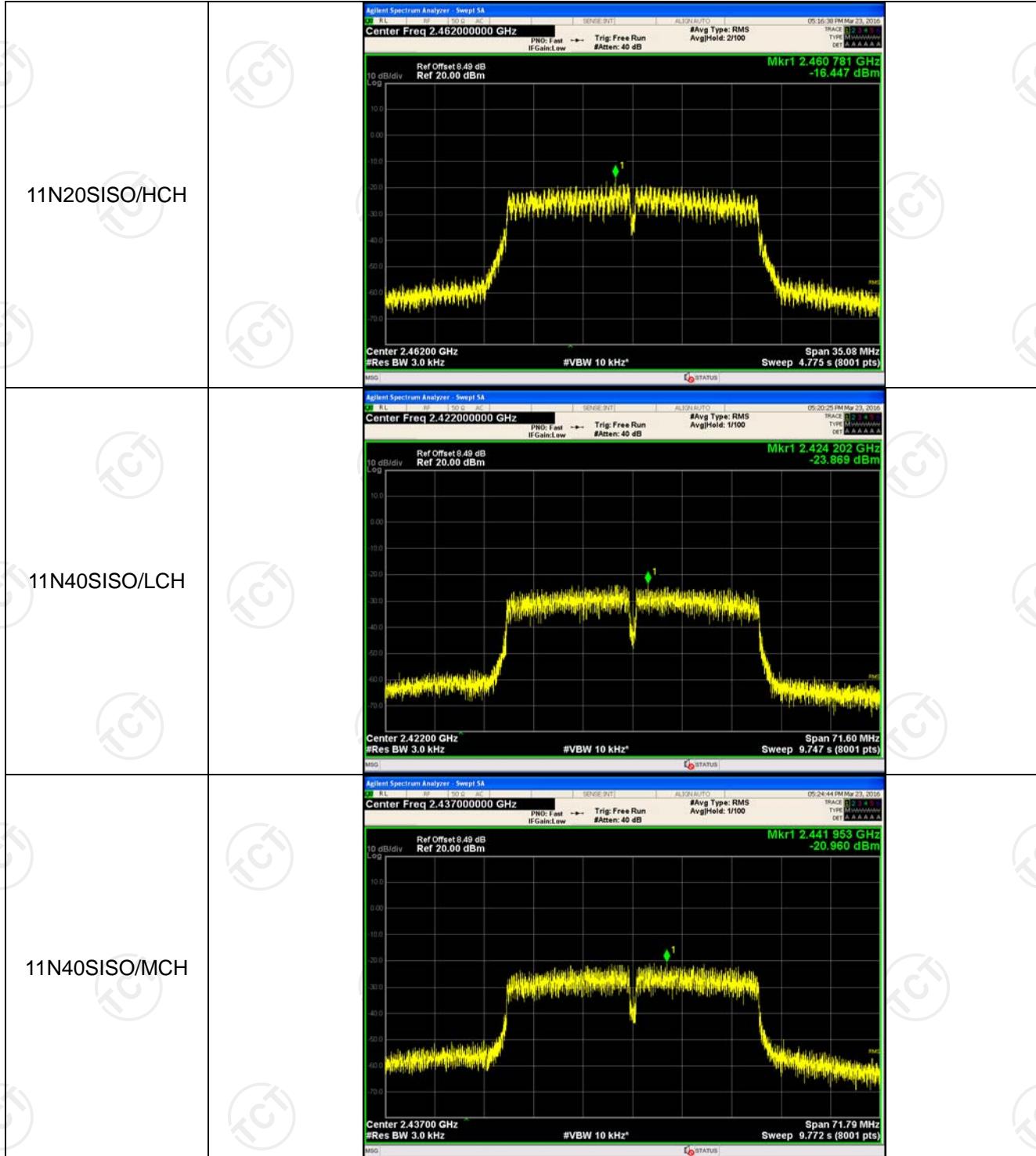


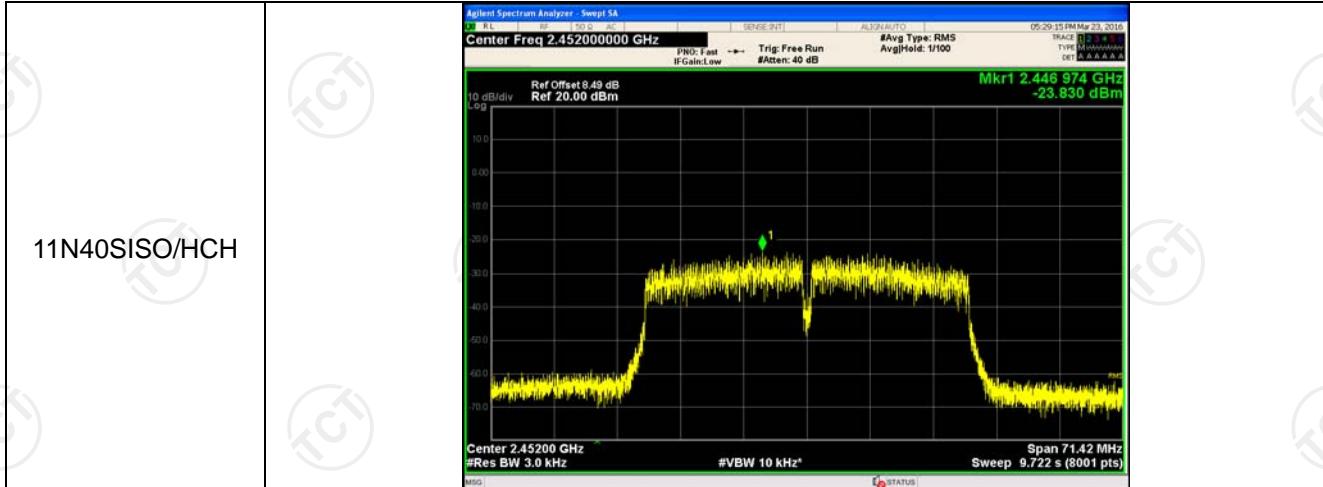
11N20SISO/LCH



11N20SISO/MCH







Appendix B: Photographs of Test Setup

Refer to test report TCT160308E005

Appendix C: Photographs of EUT

Refer to test report TCT160308E005