



SGS-CSTC Standards Technical Services Co., Ltd.

Guangzhou Branch

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Mode:a; Polarization:Horizontal; Modulation:n; bandwidth:20MHz; Channel:High

Freq	Read	Antenna	Cable	Preamp	Limit	Over	Pol/Phase	
	Level	Factor	Loss	Factor	Line	Limit		
	MHz	dBm	dB/m	dB	dBm	dBm	dB	
1	2905.33	43.42	27.76	4.85	37.13	38.90	54.00 -15.10	HORIZONTAL
2	2905.33	48.54	27.76	4.85	37.13	44.02	74.00 -29.98	HORIZONTAL
3	3768.51	38.84	28.87	7.71	36.92	38.50	54.00 -15.50	HORIZONTAL
4	3768.51	44.61	28.87	7.71	36.92	44.27	74.00 -29.73	HORIZONTAL
5	4924.72	40.80	31.01	7.49	36.95	42.35	54.00 -11.65	HORIZONTAL
6	4924.72	46.88	31.01	7.49	36.95	48.43	74.00 -25.57	HORIZONTAL
7	7386.02	38.99	35.85	7.42	36.92	45.34	54.00 -8.66	HORIZONTAL
8	7386.02	43.65	35.85	7.42	36.92	50.00	74.00 -24.00	HORIZONTAL
9	9848.18	38.44	37.82	8.46	37.09	47.63	54.00 -6.37	HORIZONTAL
10	9848.18	45.15	37.82	8.46	37.09	54.34	74.00 -19.66	HORIZONTAL
11	12310.75	34.40	39.03	11.10	36.97	47.56	54.00 -6.44	HORIZONTAL
12	12310.75	45.34	39.03	11.10	36.97	58.50	74.00 -15.50	HORIZONTAL

Mode:a; Polarization:Vertical; Modulation:n; bandwidth:20MHz; Channel:High

Freq	Read	Antenna	Cable	Preamp	Limit	Over	Pol/Phase	
	Level	Factor	Loss	Factor	Line	Limit		
	MHz	dBm	dB/m	dB	dBm	dBm	dB	
1	2905.33	40.03	27.76	4.85	37.13	35.51	54.00 -18.49	VERTICAL
2	2905.33	46.71	27.76	4.85	37.13	42.19	74.00 -31.81	VERTICAL
3	3347.37	41.27	27.90	5.57	36.98	37.76	54.00 -16.24	VERTICAL
4	3347.37	48.23	27.90	5.57	36.98	44.72	74.00 -29.28	VERTICAL
5	4924.49	38.36	31.01	7.49	36.95	39.91	54.00 -14.09	VERTICAL
6	4924.49	46.52	31.01	7.49	36.95	48.07	74.00 -25.93	VERTICAL
7	7386.98	36.35	35.85	7.42	36.92	42.70	54.00 -11.30	VERTICAL
8	7386.98	43.71	35.85	7.42	36.92	50.06	74.00 -23.94	VERTICAL
9	9848.40	37.53	37.82	8.46	37.09	46.72	54.00 -7.28	VERTICAL
10	9848.40	44.36	37.82	8.46	37.09	53.55	74.00 -20.45	VERTICAL
11	12310.53	35.18	39.03	11.10	36.97	48.34	54.00 -5.66	VERTICAL
12	12310.53	42.62	39.03	11.10	36.97	55.78	74.00 -18.22	VERTICAL



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Mode:a; Polarization:Horizontal; Modulation:n; bandwidth:40MHz; Channel:Low

Freq	Read	Antenna	Cable	Preamp	Limit	Over	Pol/Phase
	Level	Factor	Loss	Factor	Line	Limit	
	MHz	dBm	dB/m	dB	dBm	dBm	dB
1	51.30	43.49	12.93	0.60	24.90	32.12	40.00 -7.88 HORIZONTAL
2	68.87	35.47	10.90	0.71	25.50	21.58	40.00 -18.42 HORIZONTAL
3	101.64	50.65	9.71	0.85	27.19	34.02	43.50 -9.48 HORIZONTAL
4	155.91	38.29	13.36	1.24	28.11	24.78	43.50 -18.72 HORIZONTAL
5	197.89	51.89	11.30	1.20	28.35	36.04	43.50 -7.46 HORIZONTAL
6	250.30	46.57	12.57	1.61	29.14	31.61	46.00 -14.39 HORIZONTAL

Mode:a; Polarization:Horizontal; Modulation:n; bandwidth:40MHz; Channel:Low

Freq	Read	Antenna	Cable	Preamp	Limit	Over	Pol/Phase
	Level	Factor	Loss	Factor	Line	Limit	
	MHz	dBm	dB/m	dB	dBm	dBm	dB
1	2905.33	42.72	27.76	4.85	37.13	38.20	54.00 -15.80 HORIZONTAL
2	2905.33	50.10	27.76	4.85	37.13	45.58	74.00 -28.42 HORIZONTAL
3	3703.72	38.02	28.52	7.24	36.93	36.85	54.00 -17.15 HORIZONTAL
4	3703.72	44.78	28.52	7.24	36.93	43.61	74.00 -30.39 HORIZONTAL
5	4844.77	38.81	30.88	6.31	36.94	39.06	54.00 -14.94 HORIZONTAL
6	4844.77	45.35	30.88	6.31	36.94	45.60	74.00 -28.40 HORIZONTAL
7	7266.88	36.88	35.60	7.36	36.92	42.92	54.00 -11.08 HORIZONTAL
8	7266.88	43.41	35.60	7.36	36.92	49.45	74.00 -24.55 HORIZONTAL
9	9688.69	36.45	37.61	8.25	37.08	45.23	54.00 -8.77 HORIZONTAL
10	9688.69	44.71	37.61	8.25	37.08	53.49	74.00 -20.51 HORIZONTAL
11	12110.75	35.66	39.37	10.82	37.12	48.73	54.00 -5.27 HORIZONTAL
12	12110.75	44.60	39.37	10.82	37.12	57.67	74.00 -16.33 HORIZONTAL



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Mode:a; Polarization:Vertical; Modulation:n; bandwidth:40MHz; Channel:Low

Freq	Read	Antenna	Cable	Preamp	Limit	Over	Pol/Phase
	Level	Factor	Loss	Factor	Line	Limit	
	MHz	dBm	dB/m	dB	dBm	dBm	dB
1	55.61	43.59	12.49	0.59	25.10	31.57	40.00 -8.43 VERTICAL
2	66.50	43.74	11.18	0.68	25.44	30.16	40.00 -9.84 VERTICAL
3	98.83	52.86	9.46	0.85	27.10	36.07	43.50 -7.43 VERTICAL
4	183.20	47.14	12.52	1.32	28.11	32.87	43.50 -10.63 VERTICAL
5	218.31	49.87	11.49	1.02	28.70	33.68	46.00 -12.32 VERTICAL
6	355.43	41.15	15.59	1.99	29.52	29.21	46.00 -16.79 VERTICAL

Mode:a; Polarization:Vertical; Modulation:n; bandwidth:40MHz; Channel:Low

Freq	Read	Antenna	Cable	Preamp	Limit	Over	Pol/Phase
	Level	Factor	Loss	Factor	Line	Limit	
	MHz	dBm	dB/m	dB	dBm	dBm	dB
1	2939.12	43.20	27.82	4.77	37.10	38.69	54.00 -15.31 VERTICAL
2	2939.12	47.32	27.82	4.77	37.10	42.81	74.00 -31.19 VERTICAL
3	3289.82	40.26	27.90	5.72	36.99	36.89	54.00 -17.11 VERTICAL
4	3289.82	46.26	27.90	5.72	36.99	42.89	74.00 -31.11 VERTICAL
5	4844.24	40.39	30.88	6.31	36.94	40.64	54.00 -13.36 VERTICAL
6	4844.24	44.53	30.88	6.31	36.94	44.78	74.00 -29.22 VERTICAL
7	7266.21	37.94	35.60	7.36	36.92	43.98	54.00 -10.02 VERTICAL
8	7266.21	42.18	35.60	7.36	36.92	48.22	74.00 -25.78 VERTICAL
9	9688.91	37.32	37.61	8.25	37.08	46.10	54.00 -7.90 VERTICAL
10	9688.91	43.48	37.61	8.25	37.08	52.26	74.00 -21.74 VERTICAL
11	12110.74	34.32	39.37	10.82	37.12	47.39	54.00 -6.61 VERTICAL
12	12110.74	44.46	39.37	10.82	37.12	57.53	74.00 -16.47 VERTICAL

Mode:a; Polarization:Horizontal; Modulation:n; bandwidth:40MHz; Channel:middle

Freq	Read	Antenna	Cable	Preamp	Limit	Over	Pol/Phase	
	Level	Factor	Loss	Factor	Line	Limit		
	MHz	dBm	dB/m	dB	dBm	dBm	dB	
1	3159.36	40.23	27.90	5.76	37.02	36.87	54.00 -17.13	HORIZONTAL
2	3159.36	46.20	27.90	5.76	37.02	42.84	74.00 -31.16	HORIZONTAL
3	3969.77	40.14	29.44	7.32	36.90	40.00	54.00 -14.00	HORIZONTAL
4	3969.77	45.47	29.44	7.32	36.90	45.33	74.00 -28.67	HORIZONTAL
5	4884.55	42.20	30.95	6.86	36.95	43.06	54.00 -10.94	HORIZONTAL
6	4884.55	48.29	30.95	6.86	36.95	49.15	74.00 -24.85	HORIZONTAL
7	7326.02	38.88	35.74	7.39	36.92	45.09	54.00 -8.91	HORIZONTAL
8	7326.02	43.87	35.74	7.39	36.92	50.08	74.00 -23.92	HORIZONTAL
9	9768.76	38.95	37.74	8.37	37.09	47.97	54.00 -6.03	HORIZONTAL
10	9768.76	46.63	37.74	8.37	37.09	55.65	74.00 -18.35	HORIZONTAL
11	12210.96	34.30	39.21	10.98	37.06	47.43	54.00 -6.57	HORIZONTAL
12	12210.96	42.73	39.21	10.98	37.06	55.86	74.00 -18.14	HORIZONTAL

Mode:a; Polarization:Vertical; Modulation:n; bandwidth:40MHz; Channel:middle

Freq	Read	Antenna	Cable	Preamp	Limit	Over	Pol/Phase	
	Level	Factor	Loss	Factor	Line	Limit		
	MHz	dBm	dB/m	dB	dBm	dBm	dB	
1	2905.33	40.78	27.76	4.85	37.13	36.26	54.00 -17.74	VERTICAL
2	2905.33	46.72	27.76	4.85	37.13	42.20	74.00 -31.80	VERTICAL
3	3901.52	38.61	29.30	7.56	36.91	38.56	54.00 -15.44	VERTICAL
4	3901.52	45.86	29.30	7.56	36.91	45.81	74.00 -28.19	VERTICAL
5	4884.05	40.77	30.95	6.86	36.95	41.63	54.00 -12.37	VERTICAL
6	4884.05	46.77	30.95	6.86	36.95	47.63	74.00 -26.37	VERTICAL
7	7326.03	37.98	35.74	7.39	36.92	44.19	54.00 -9.81	VERTICAL
8	7326.03	43.20	35.74	7.39	36.92	49.41	74.00 -24.59	VERTICAL
9	9768.92	38.11	37.74	8.37	37.09	47.13	54.00 -6.87	VERTICAL
10	9768.92	45.25	37.74	8.37	37.09	54.27	74.00 -19.73	VERTICAL
11	12210.15	35.57	39.21	10.98	37.06	48.70	54.00 -5.30	VERTICAL
12	12210.15	42.15	39.21	10.98	37.06	55.28	74.00 -18.72	VERTICAL

Mode:a; Polarization:Horizontal; Modulation:n; bandwidth:40MHz; Channel:High

Freq	Read	Antenna	Cable	Preamp	Limit	Over	Pol/Phase	
	Level	Factor	Loss	Factor	Line	Limit		
	MHz	dBm	dB/m	dB	dBm	dBm	dB	
1	2905.33	42.33	27.76	4.85	37.13	37.81	54.00 -16.19	HORIZONTAL
2	2905.33	49.07	27.76	4.85	37.13	44.55	74.00 -29.45	HORIZONTAL
3	3768.51	38.12	28.87	7.71	36.92	37.78	54.00 -16.22	HORIZONTAL
4	3768.51	44.36	28.87	7.71	36.92	44.02	74.00 -29.98	HORIZONTAL
5	4904.31	38.30	30.97	7.07	36.95	39.39	54.00 -14.61	HORIZONTAL
6	4904.31	46.22	30.97	7.07	36.95	47.31	74.00 -26.69	HORIZONTAL
7	7356.17	37.33	35.78	7.40	36.92	43.59	54.00 -10.41	HORIZONTAL
8	7356.17	43.13	35.78	7.40	36.92	49.39	74.00 -24.61	HORIZONTAL
9	9806.15	37.89	37.79	8.41	37.09	47.00	54.00 -7.00	HORIZONTAL
10	9806.15	44.97	37.79	8.41	37.09	54.08	74.00 -19.92	HORIZONTAL
11	12260.71	32.78	39.15	11.02	37.03	45.92	54.00 -8.08	HORIZONTAL
12	12260.71	43.74	39.15	11.02	37.03	56.88	74.00 -17.12	HORIZONTAL

Mode:a; Polarization:Vertical; Modulation:n; bandwidth:40MHz; Channel:High

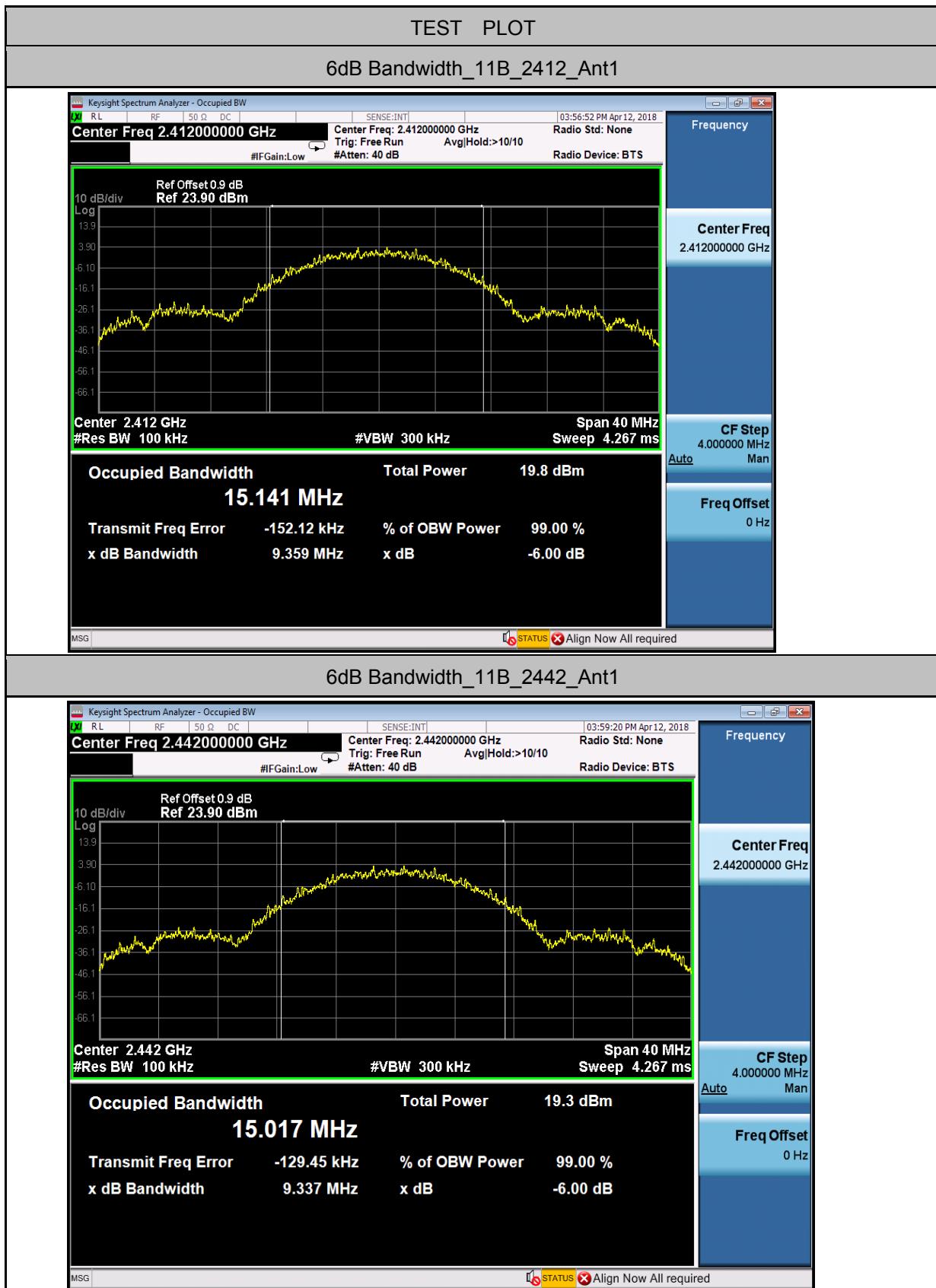
Freq	Read	Antenna	Cable	Preamp	Limit	Over	Pol/Phase	
	Level	Factor	Loss	Factor	Line	Limit		
	MHz	dBm	dB/m	dB	dBm	dBm	dB	
1	2782.06	40.00	27.46	4.71	37.25	34.92	54.00 -19.08	VERTICAL
2	2782.06	45.96	27.46	4.71	37.25	40.88	74.00 -33.12	VERTICAL
3	3347.37	42.31	27.90	5.57	36.98	38.80	54.00 -15.20	VERTICAL
4	3347.37	48.38	27.90	5.57	36.98	44.87	74.00 -29.13	VERTICAL
5	4904.28	40.16	30.97	7.07	36.95	41.25	54.00 -12.75	VERTICAL
6	4904.28	43.73	30.97	7.07	36.95	44.82	74.00 -29.18	VERTICAL
7	7356.64	39.47	35.78	7.40	36.92	45.73	54.00 -8.27	VERTICAL
8	7356.64	44.75	35.78	7.40	36.92	51.01	74.00 -22.99	VERTICAL
9	9806.25	38.53	37.79	8.41	37.09	47.64	54.00 -6.36	VERTICAL
10	9806.25	43.38	37.79	8.41	37.09	52.49	74.00 -21.51	VERTICAL
11	12260.13	35.47	39.15	11.02	37.03	48.61	54.00 -5.39	VERTICAL
12	12260.13	44.22	39.15	11.02	37.03	57.36	74.00 -16.64	VERTICAL

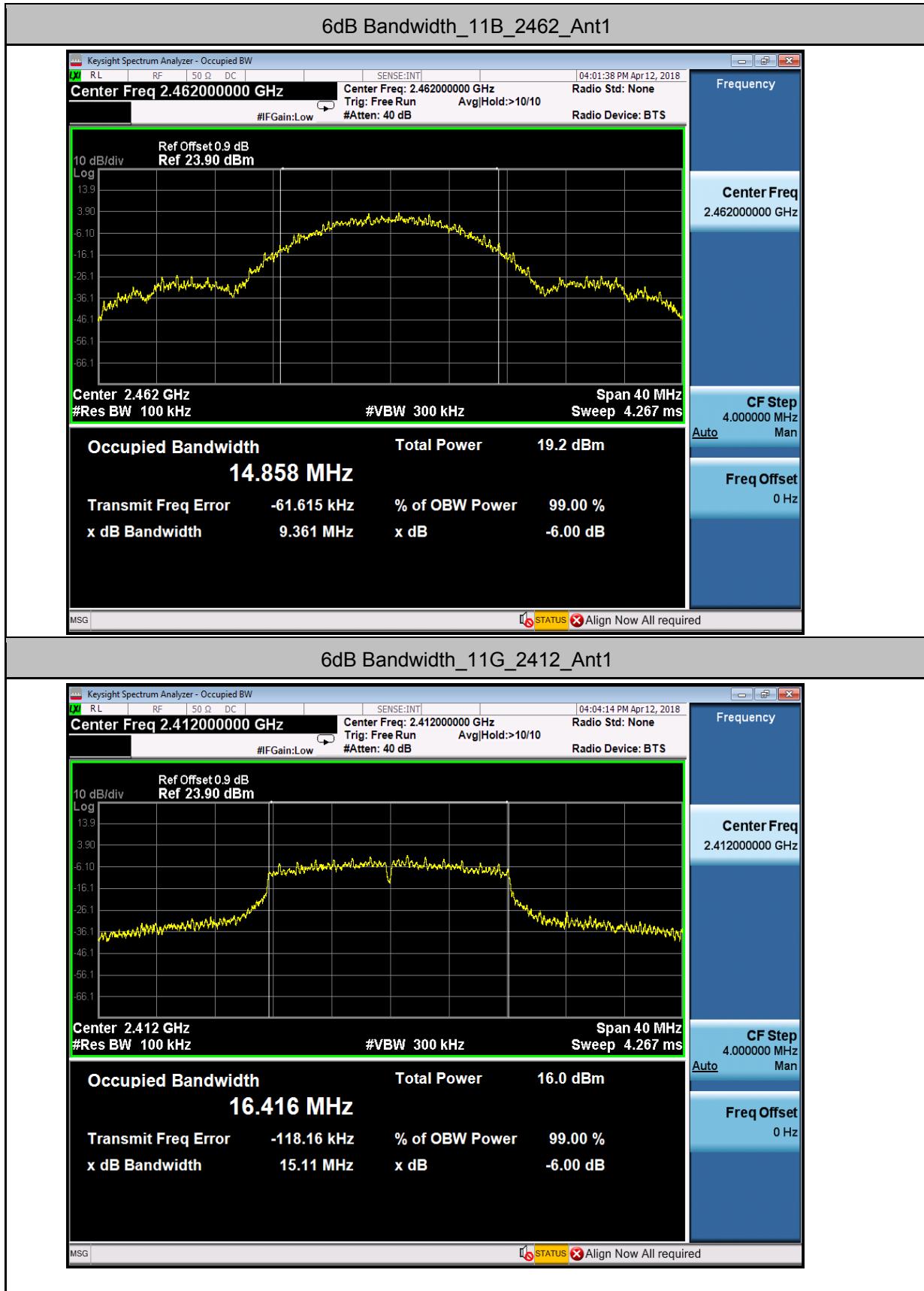
8 Appendix

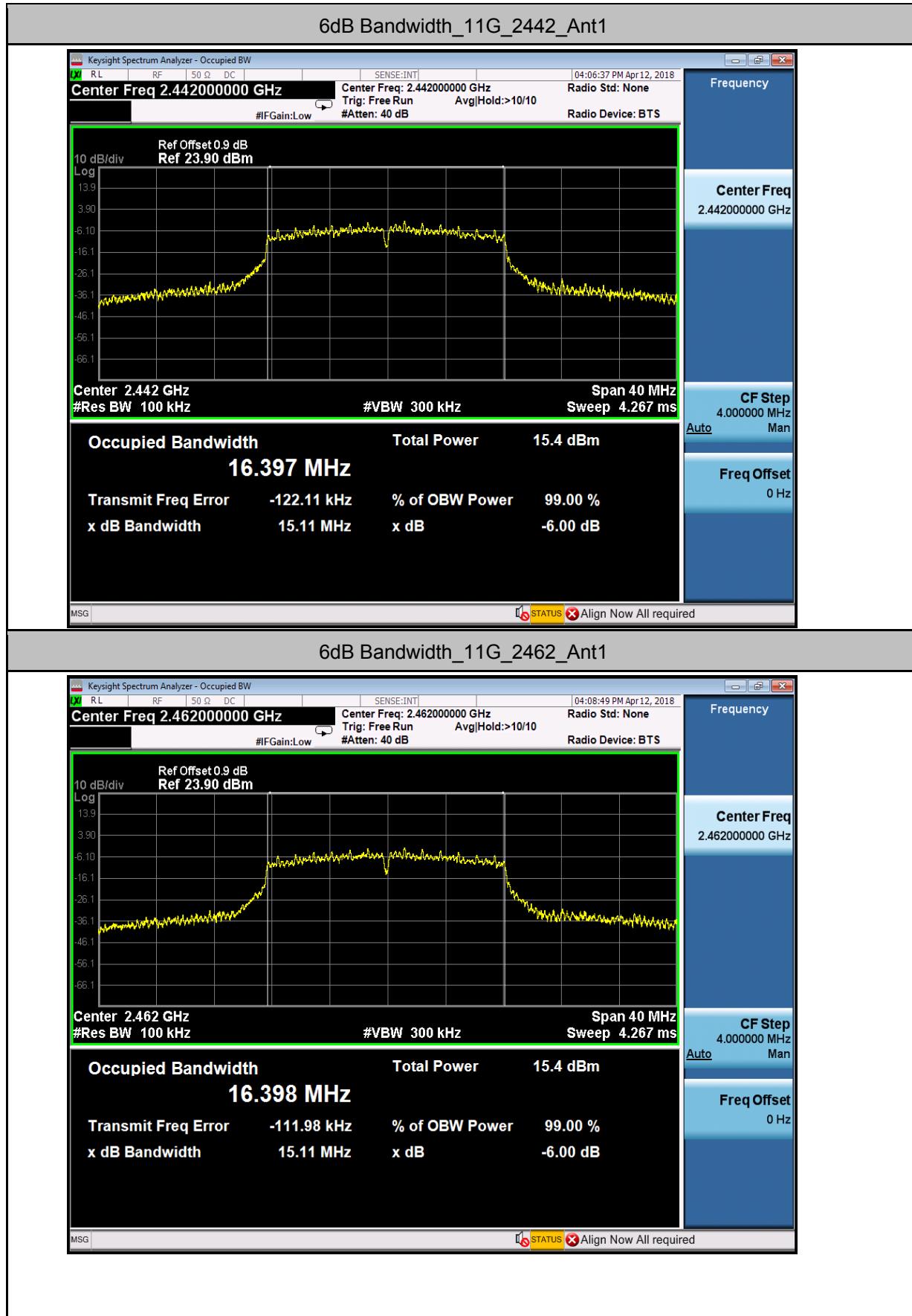
8.1 Appendix 15.247

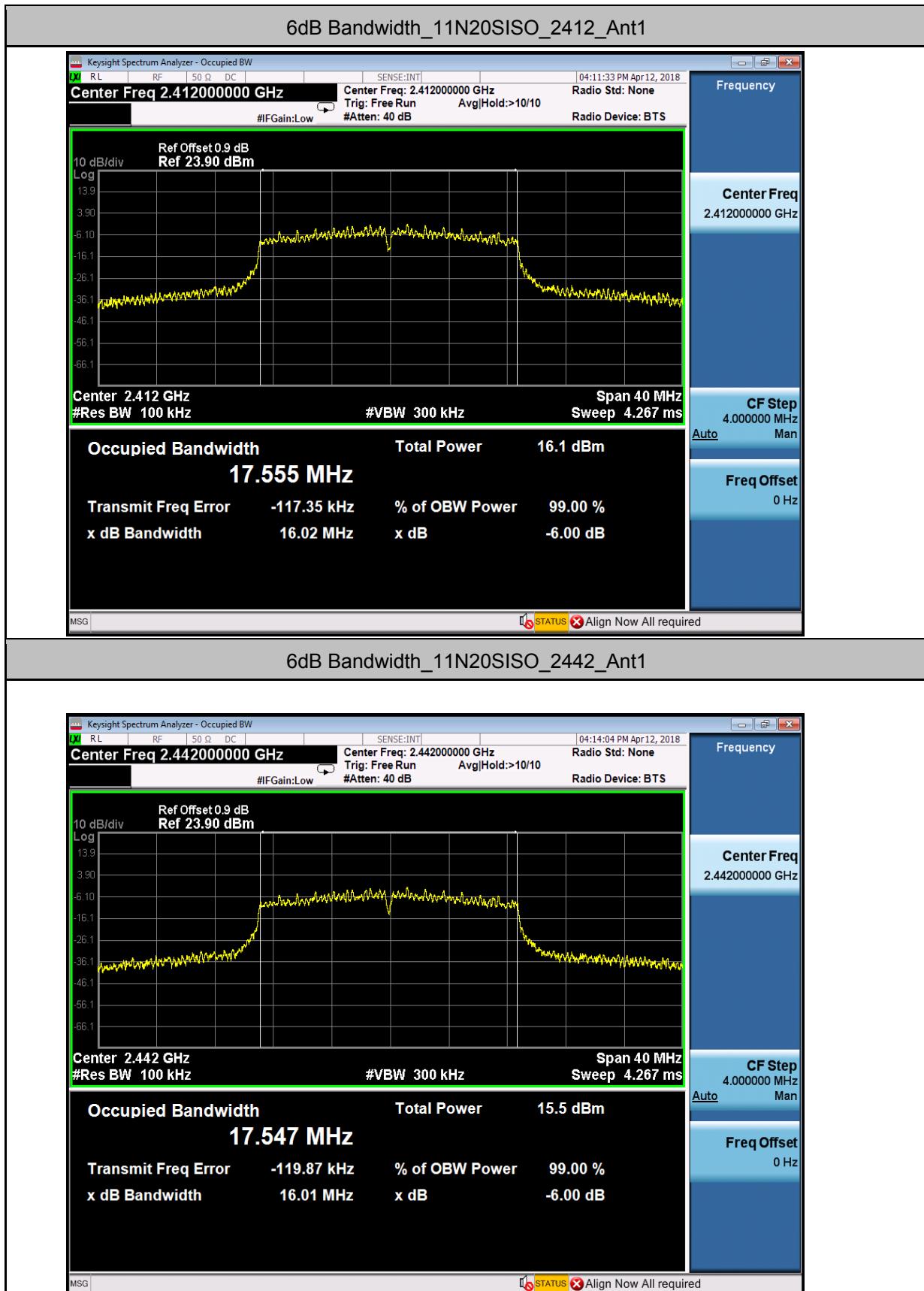
1.6dB Bandwidth

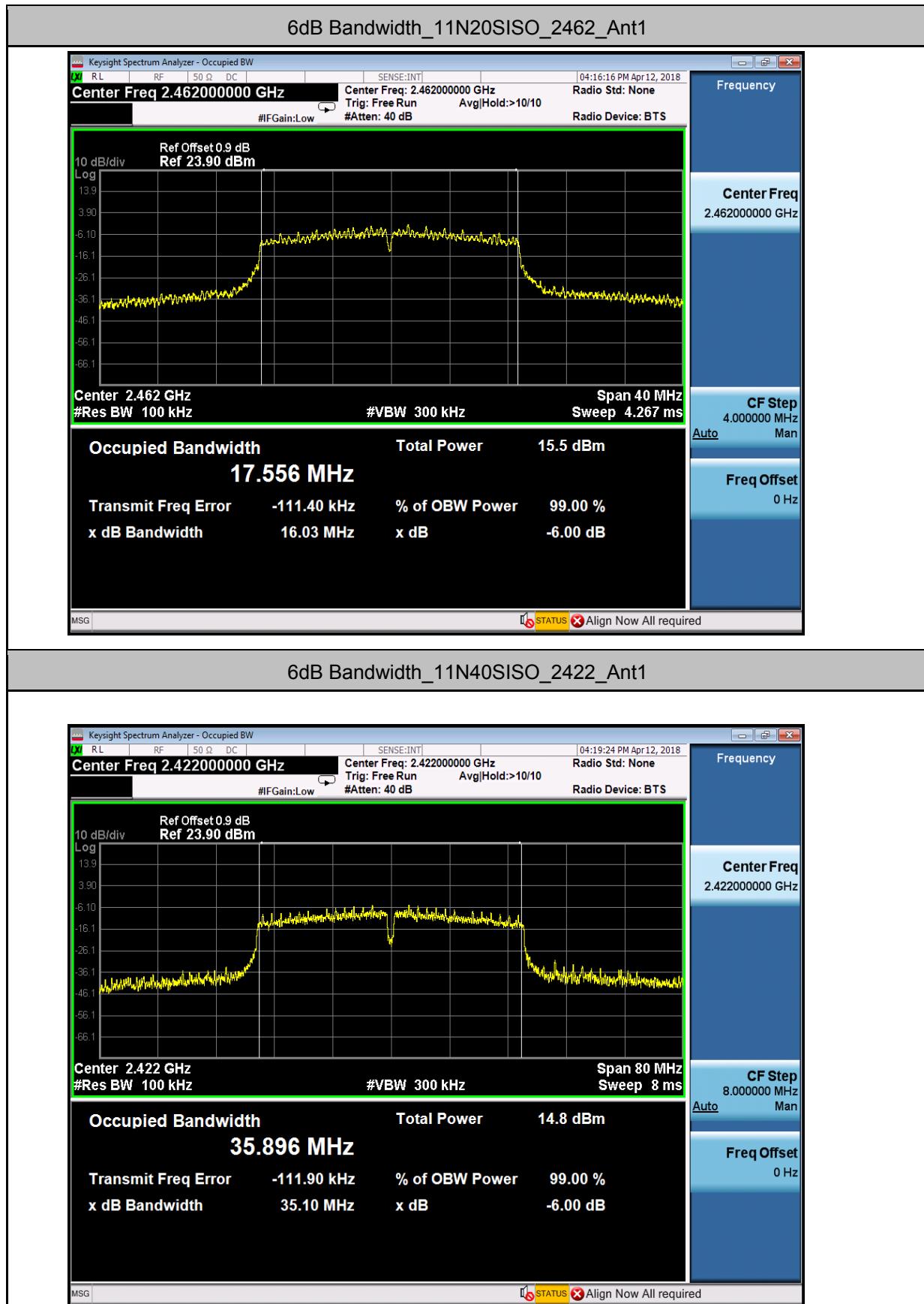
Test Mode	Test Channel	Ant	OBW[MHz]	EBW[MHz]	Limit	Verdict
11B	2412	Ant1	15.141	9.359	0.5	PASS
11B	2442	Ant1	15.018	9.337	0.5	PASS
11B	2462	Ant1	14.859	9.361	0.5	PASS
11G	2412	Ant1	16.417	15.11	0.5	PASS
11G	2442	Ant1	16.397	15.11	0.5	PASS
11G	2462	Ant1	16.398	15.11	0.5	PASS
11N20SISO	2412	Ant1	17.555	16.01	0.5	PASS
11N20SISO	2442	Ant1	17.547	16.01	0.5	PASS
11N20SISO	2462	Ant1	17.556	16.03	0.5	PASS
11N40SISO	2422	Ant1	35.897	35.11	0.5	PASS
11N40SISO	2442	Ant1	35.913	35.11	0.5	PASS
11N40SISO	2452	Ant1	35.939	35.11	0.5	PASS

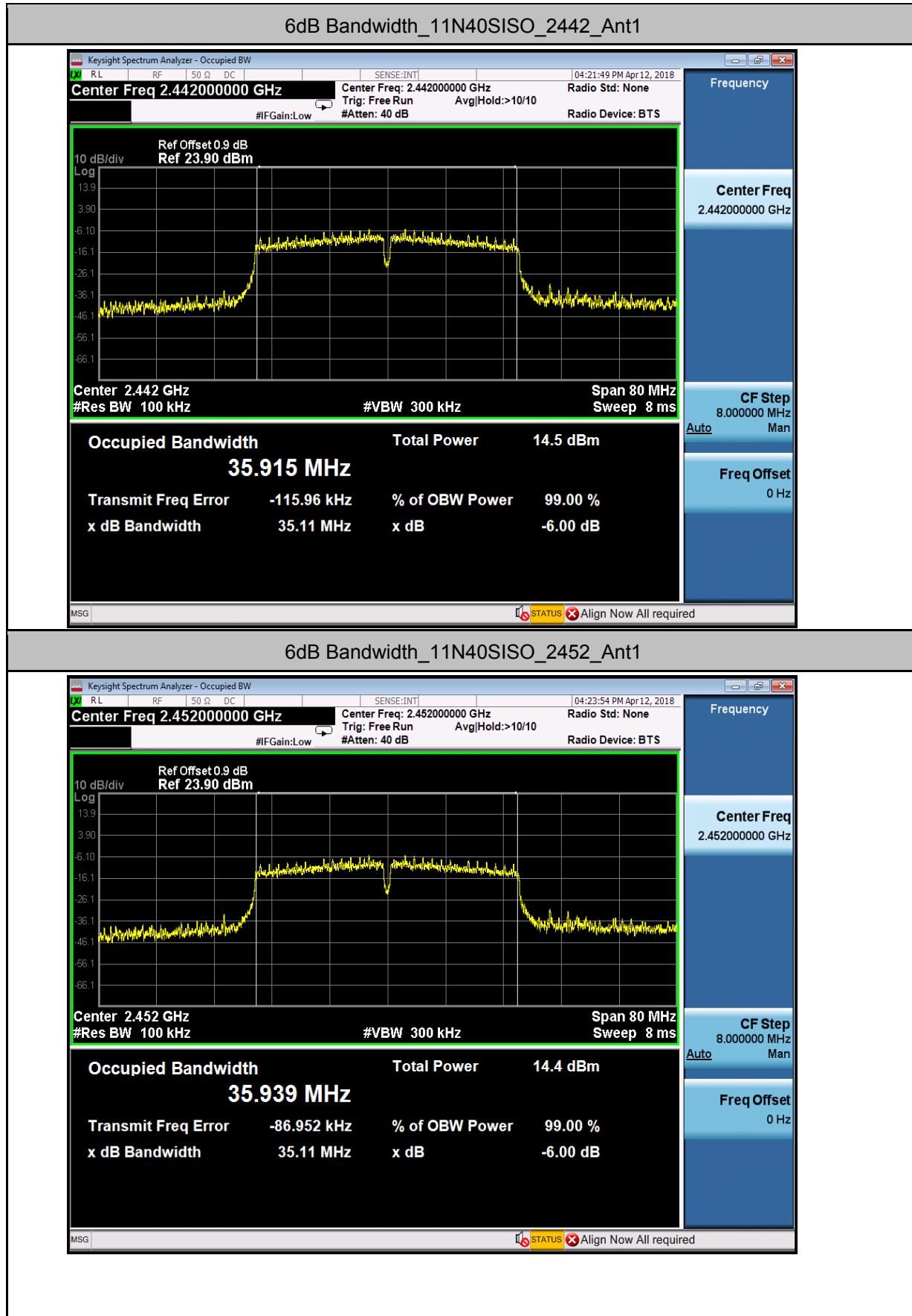












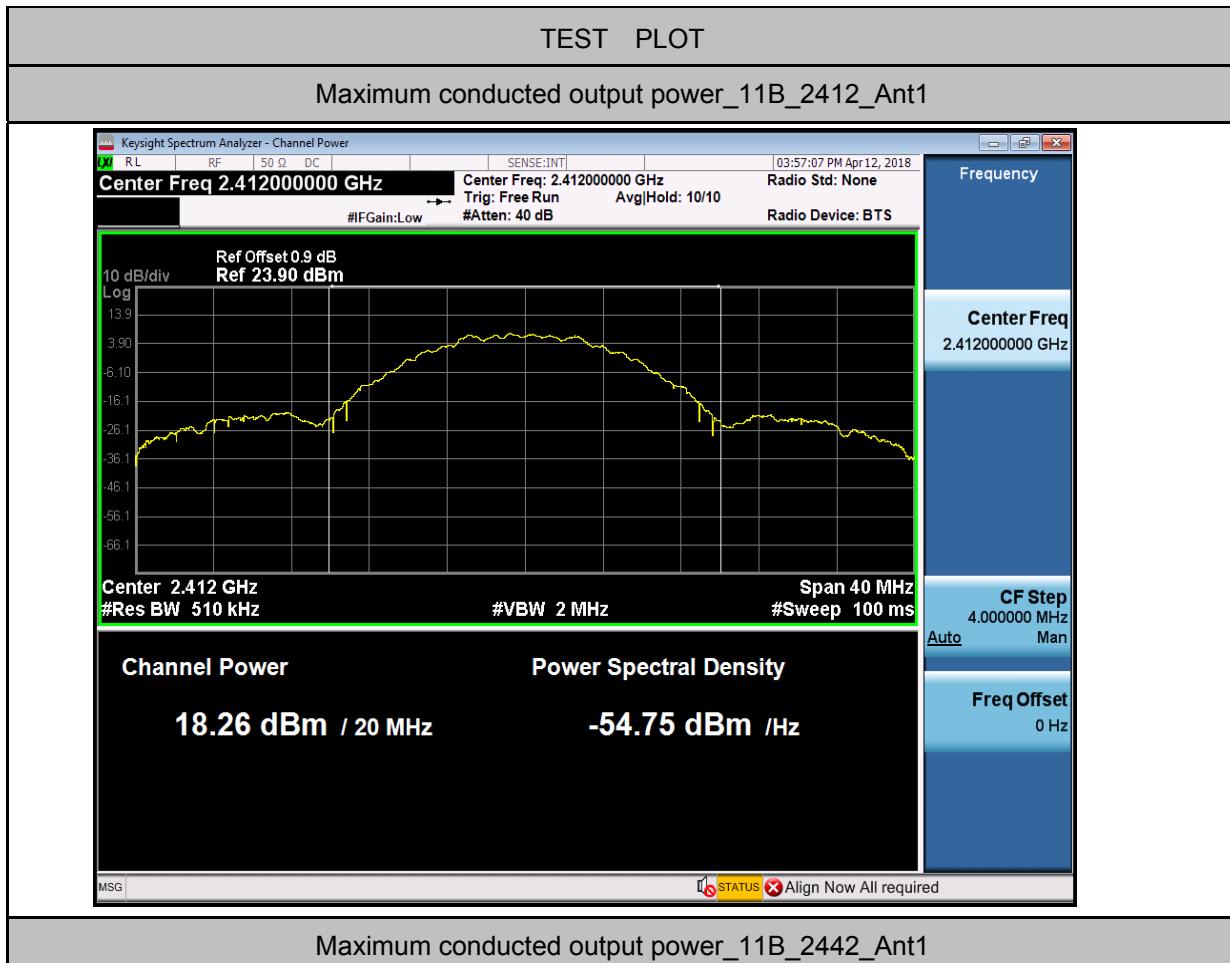


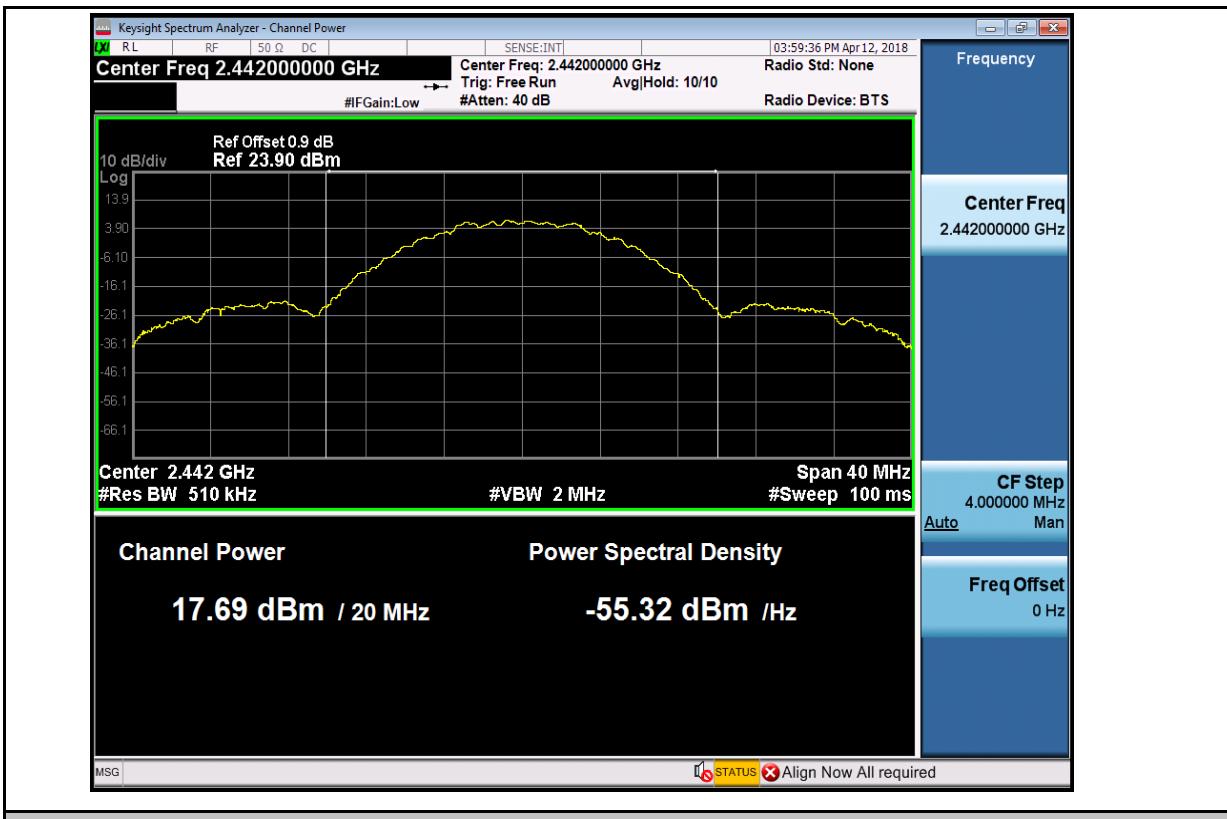
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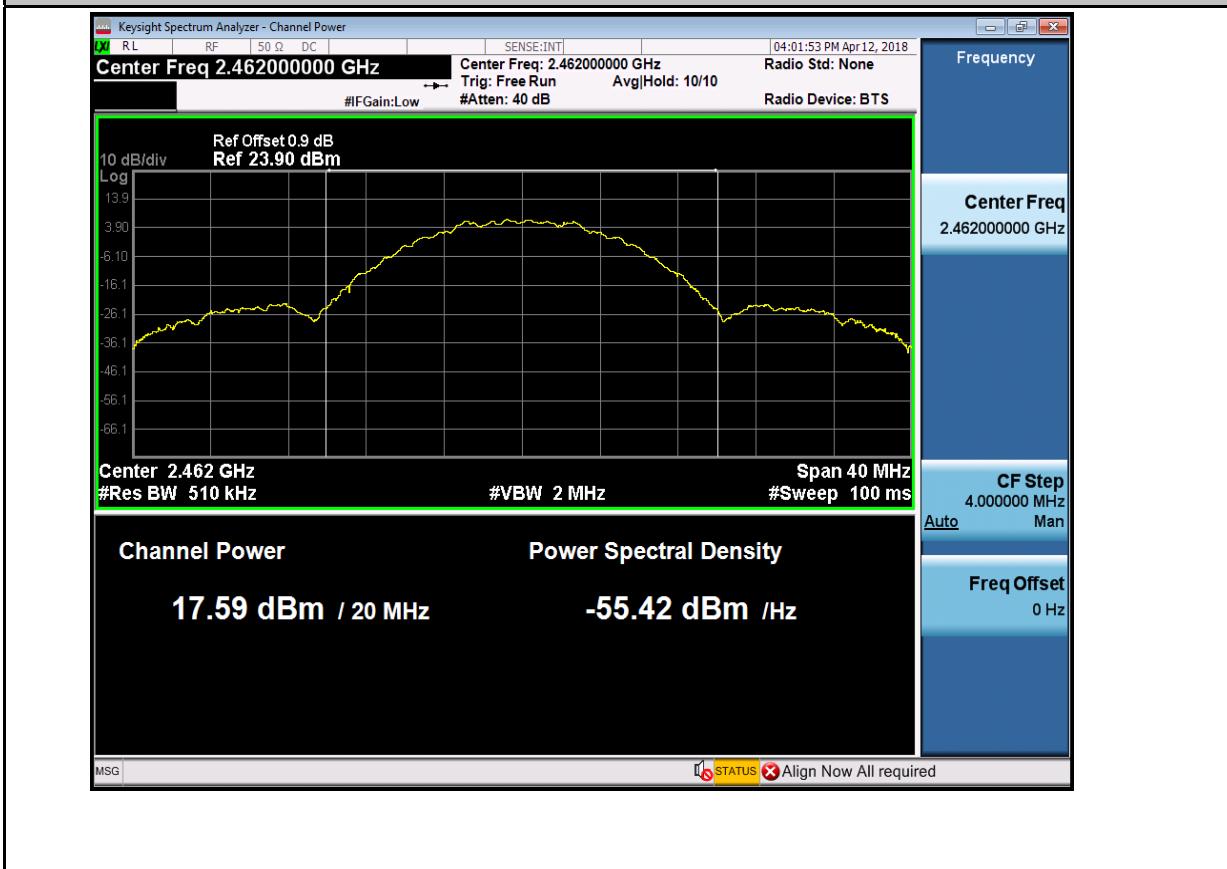
2. Maximum conducted output power

Test Mode	Test Channel	Ant	Power[dBm]	Limit[dBm]	Verdict
11B	2412	Ant1	18.26	30	PASS
11B	2442	Ant1	17.69	30	PASS
11B	2462	Ant1	17.59	30	PASS
11G	2412	Ant1	16.58	30	PASS
11G	2442	Ant1	15.95	30	PASS
11G	2462	Ant1	15.89	30	PASS
11N20SISO	2412	Ant1	16.58	30	PASS
11N20SISO	2442	Ant1	16.07	30	PASS
11N20SISO	2462	Ant1	16.14	30	PASS
11N40SISO	2422	Ant1	15.3	30	PASS
11N40SISO	2442	Ant1	15.05	30	PASS
11N40SISO	2452	Ant1	14.98	30	PASS

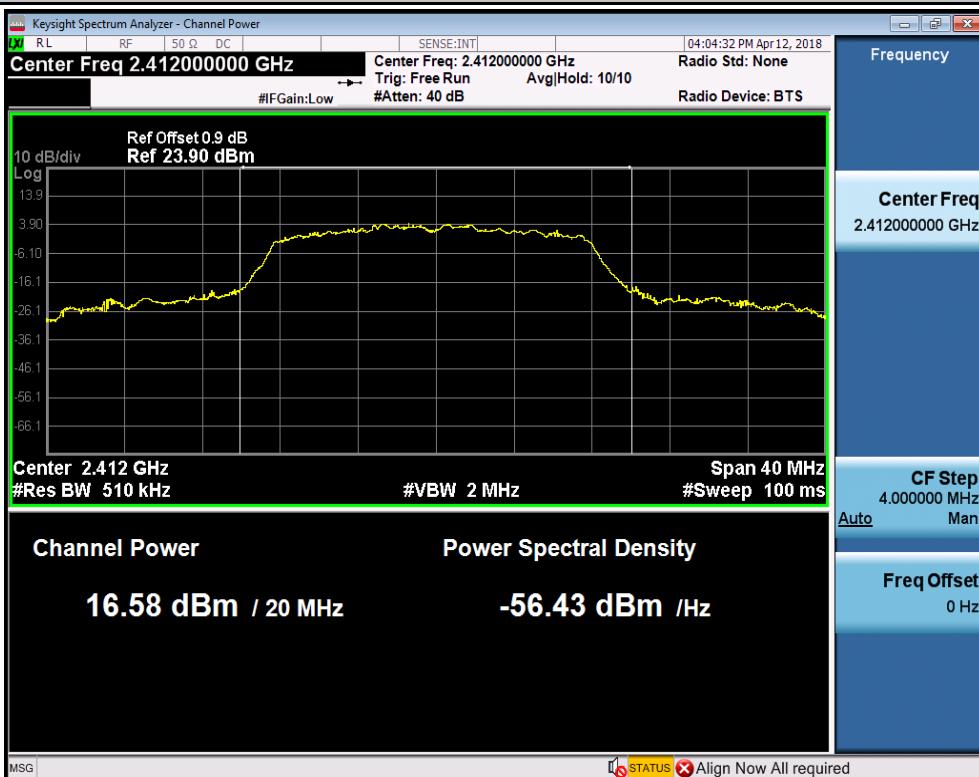




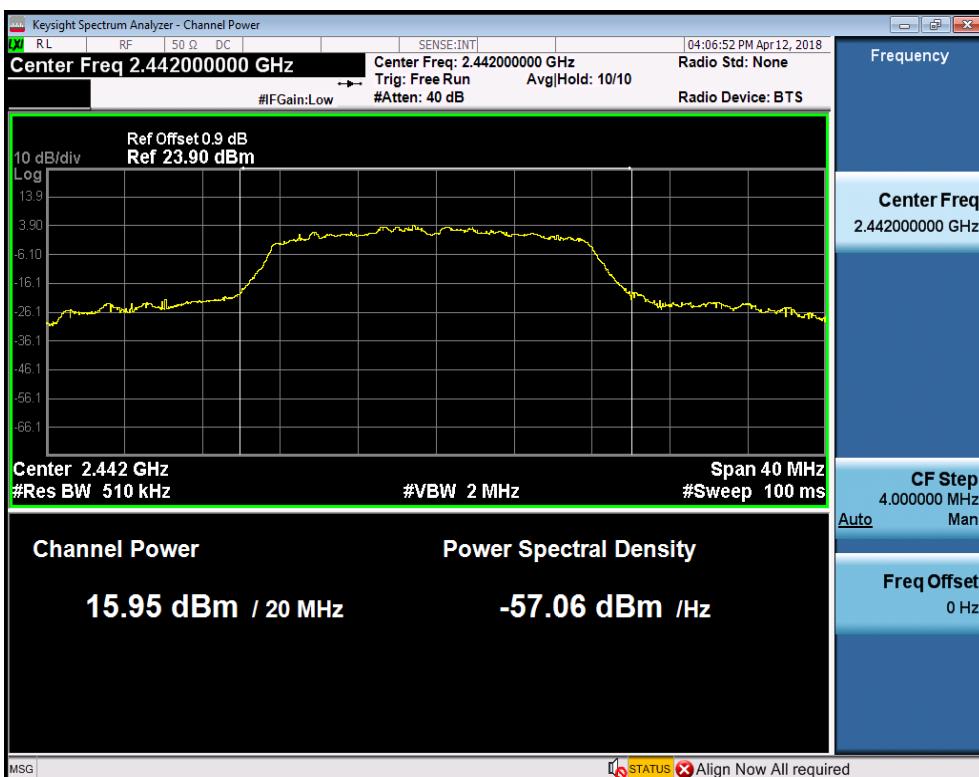
Maximum conducted output power_11B_2462_Ant1



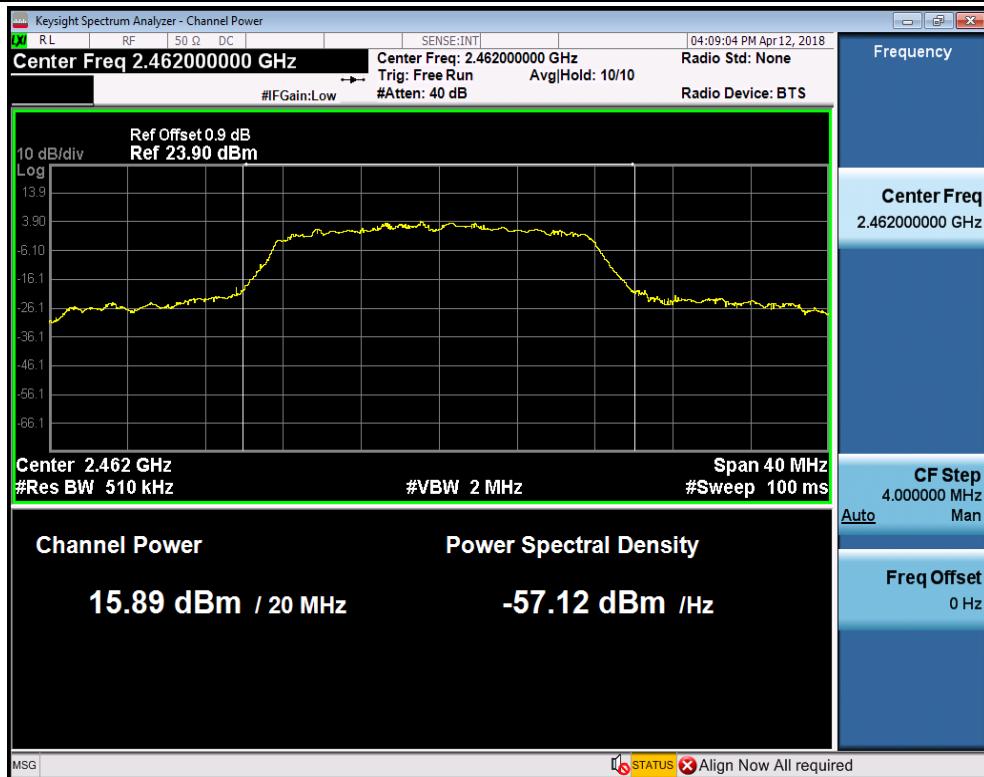
Maximum conducted output power_11G_2412_Ant1



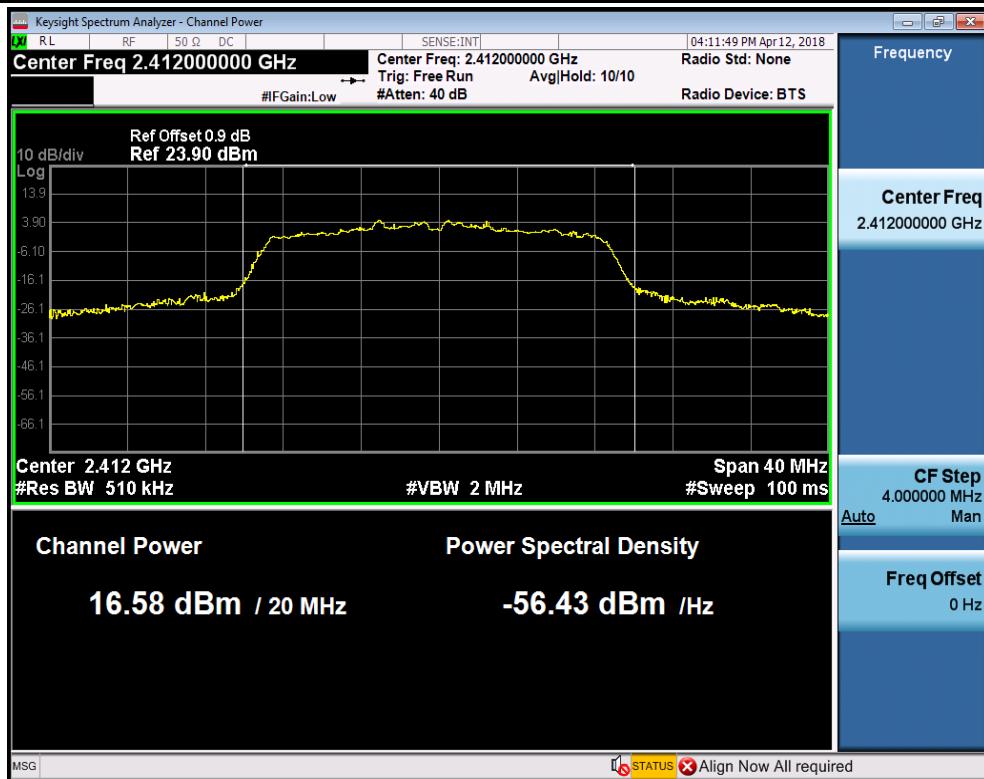
Maximum conducted output power_11G_2442_Ant1



Maximum conducted output power_11G_2462_Ant1



Maximum conducted output power_11N20SISO_2412_Ant1



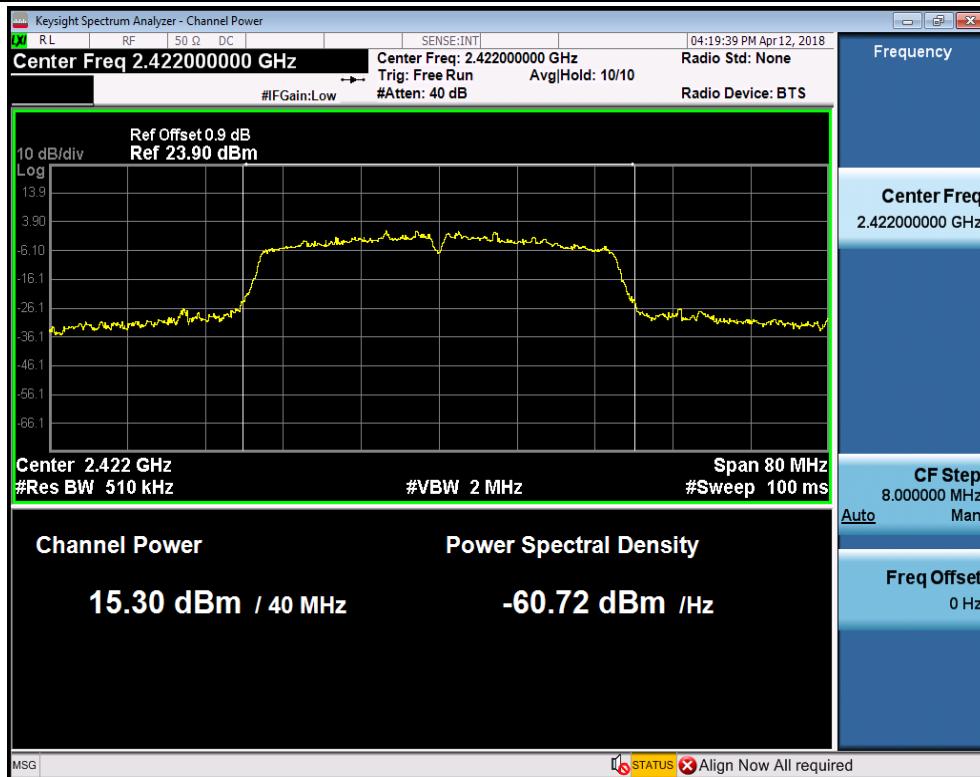
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Maximum conducted output power_11N20SISO_2462_Ant1

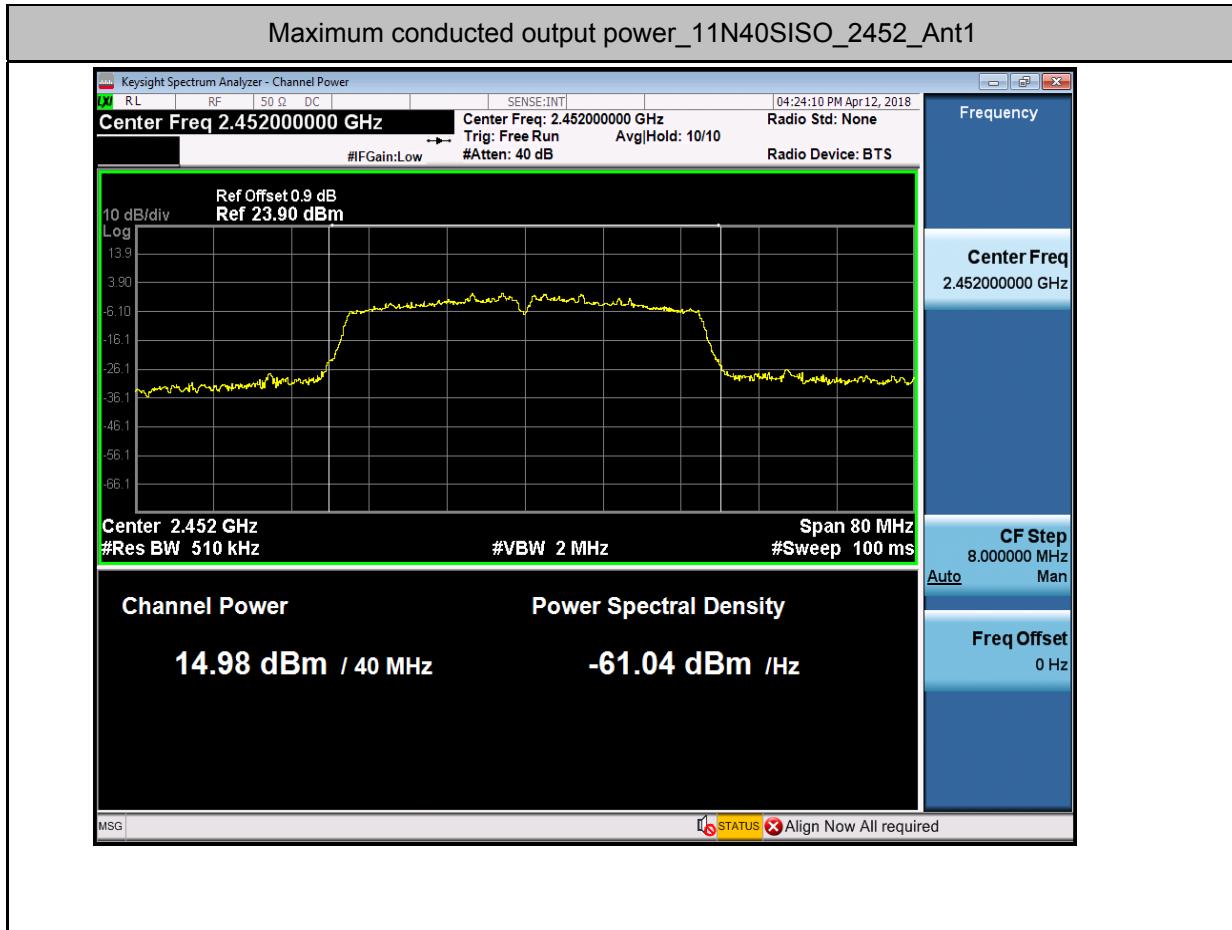


Maximum conducted output power_11N40SISO_2422_Ant1



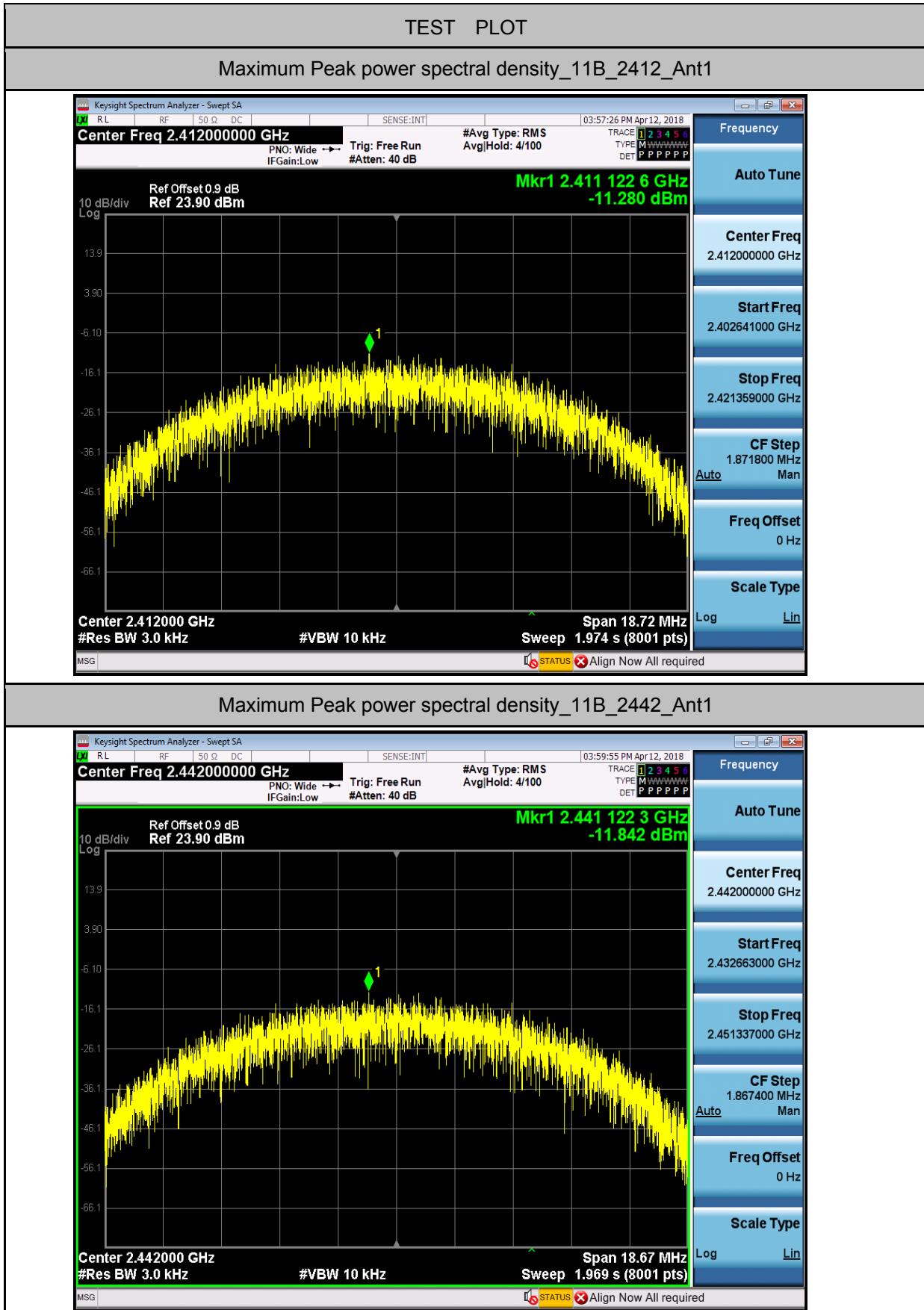
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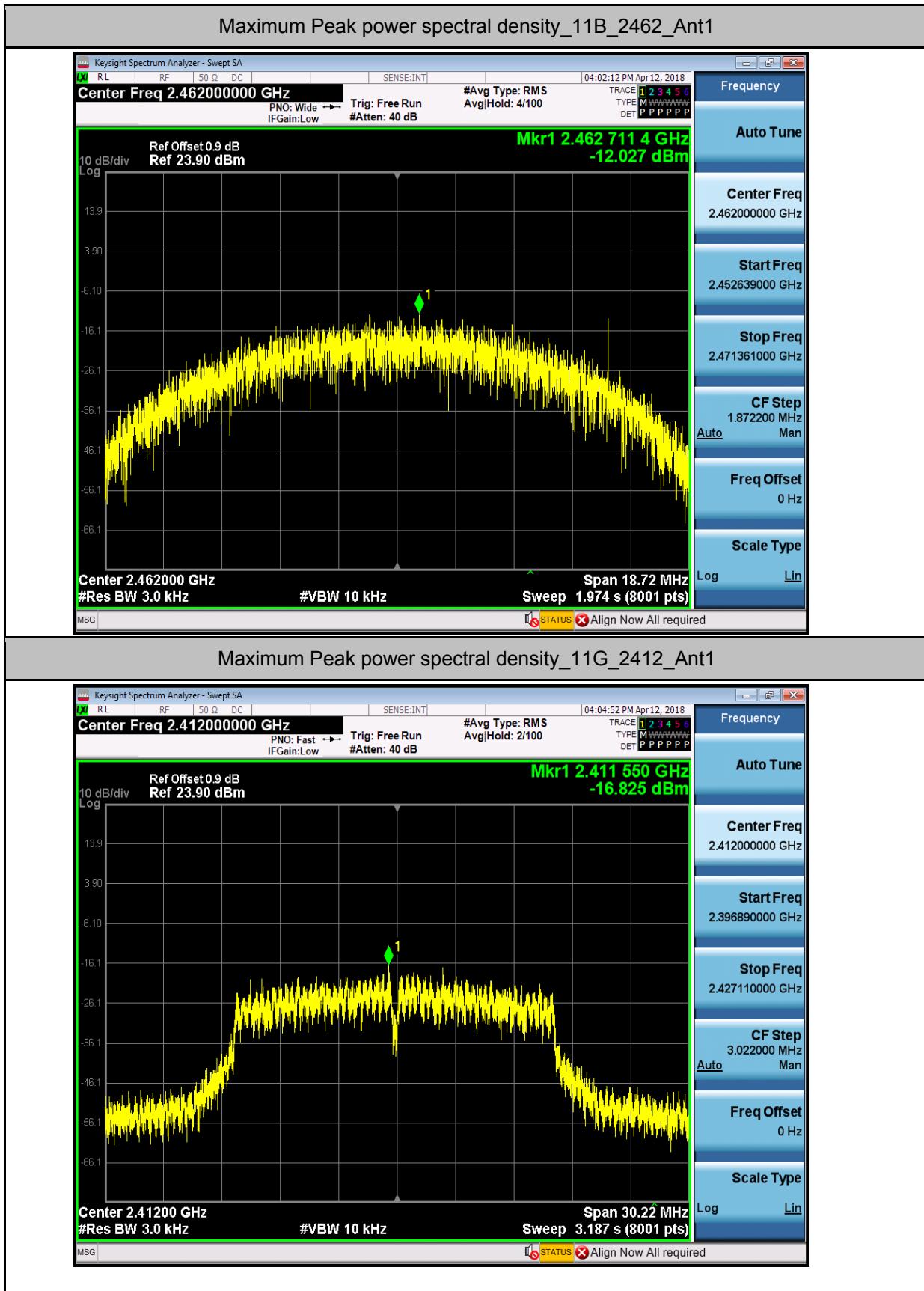


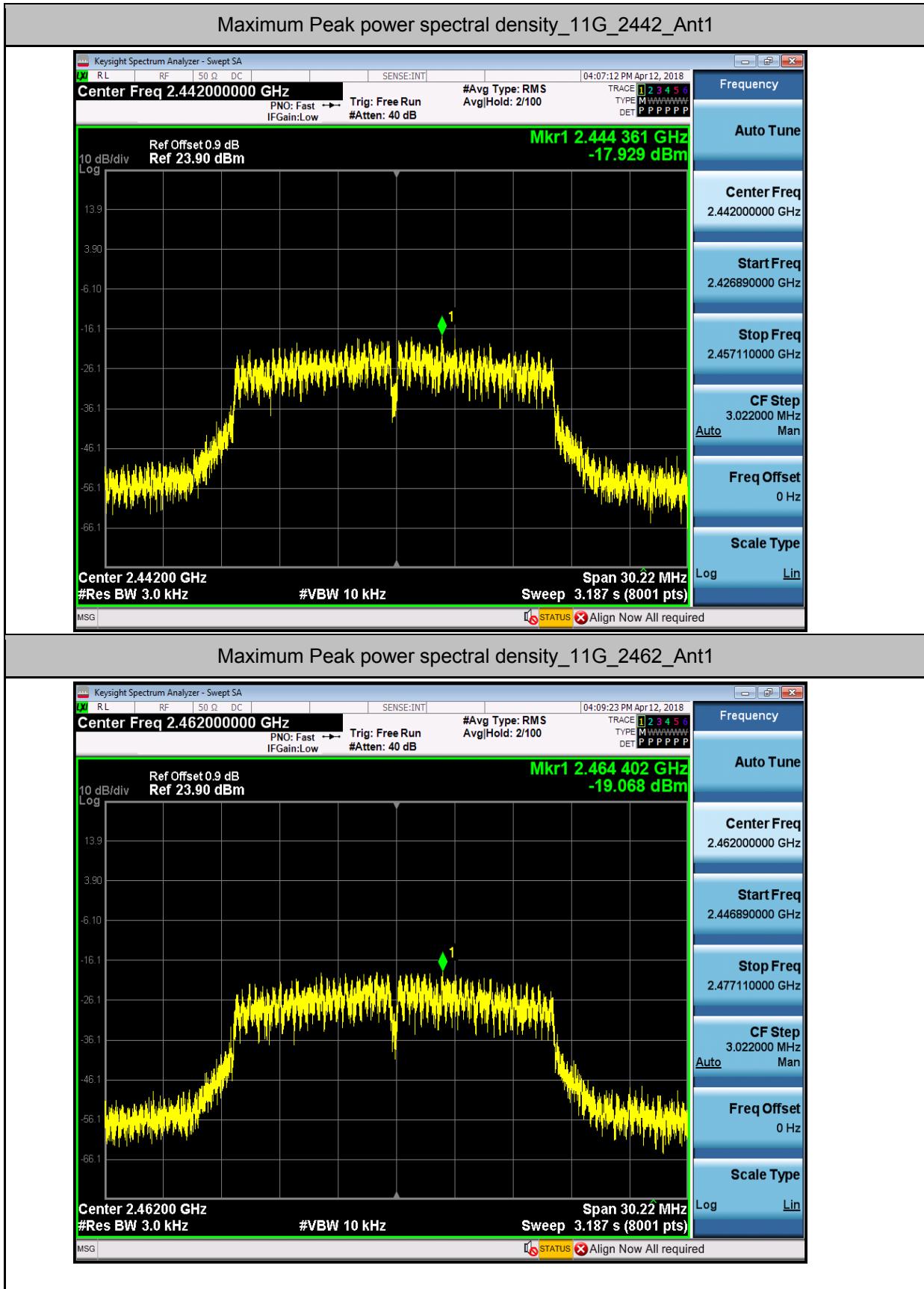


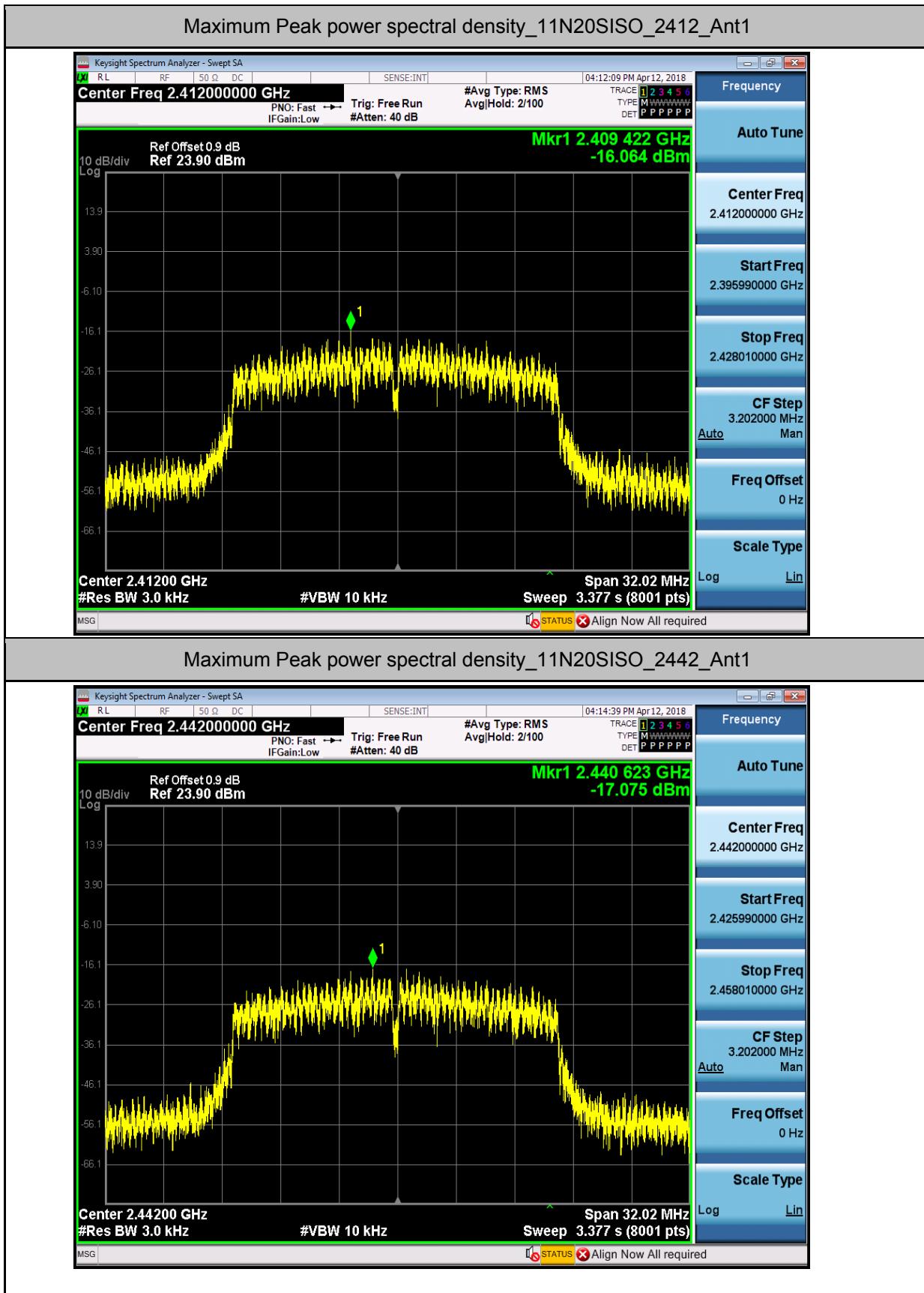
3. Maximum Peak power spectral density

Test Mode	Test Channel	Ant	Result	Limit[dBm/3kHz]	Verdict
11B	2412	Ant1	-11.28	8.00	PASS
11B	2442	Ant1	-11.842	8.00	PASS
11B	2462	Ant1	-12.027	8.00	PASS
11G	2412	Ant1	-16.825	8.00	PASS
11G	2442	Ant1	-17.929	8.00	PASS
11G	2462	Ant1	-19.068	8.00	PASS
11N20SISO	2412	Ant1	-16.064	8.00	PASS
11N20SISO	2442	Ant1	-17.075	8.00	PASS
11N20SISO	2462	Ant1	-17.348	8.00	PASS
11N40SISO	2422	Ant1	-20.037	8.00	PASS
11N40SISO	2442	Ant1	-21.848	8.00	PASS
11N40SISO	2452	Ant1	-21.776	8.00	PASS

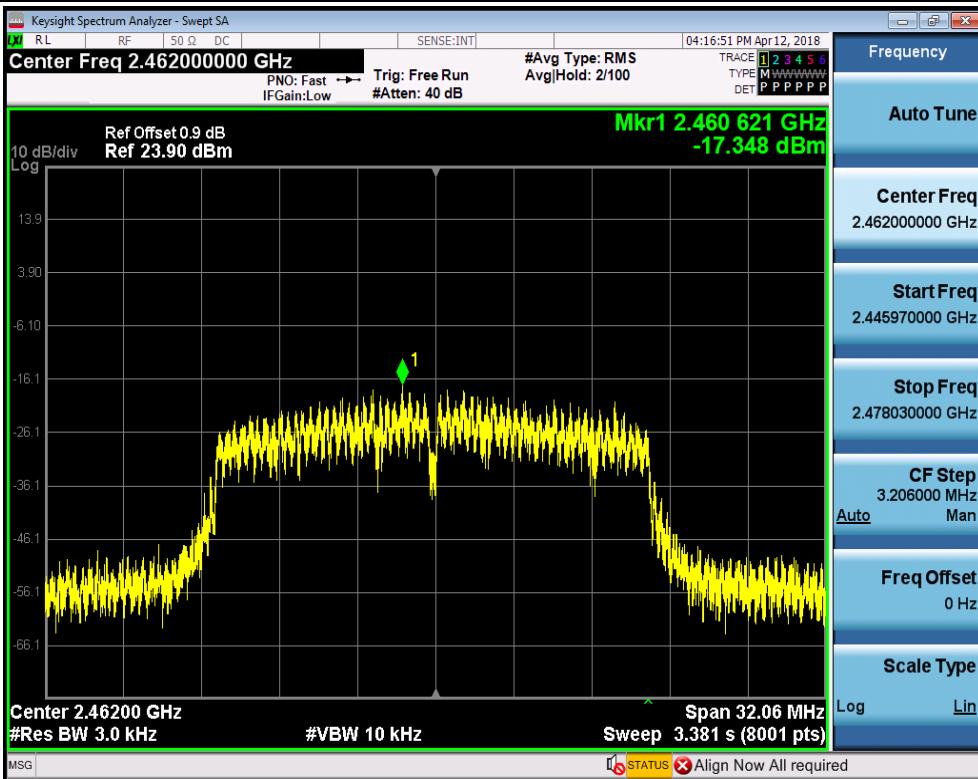




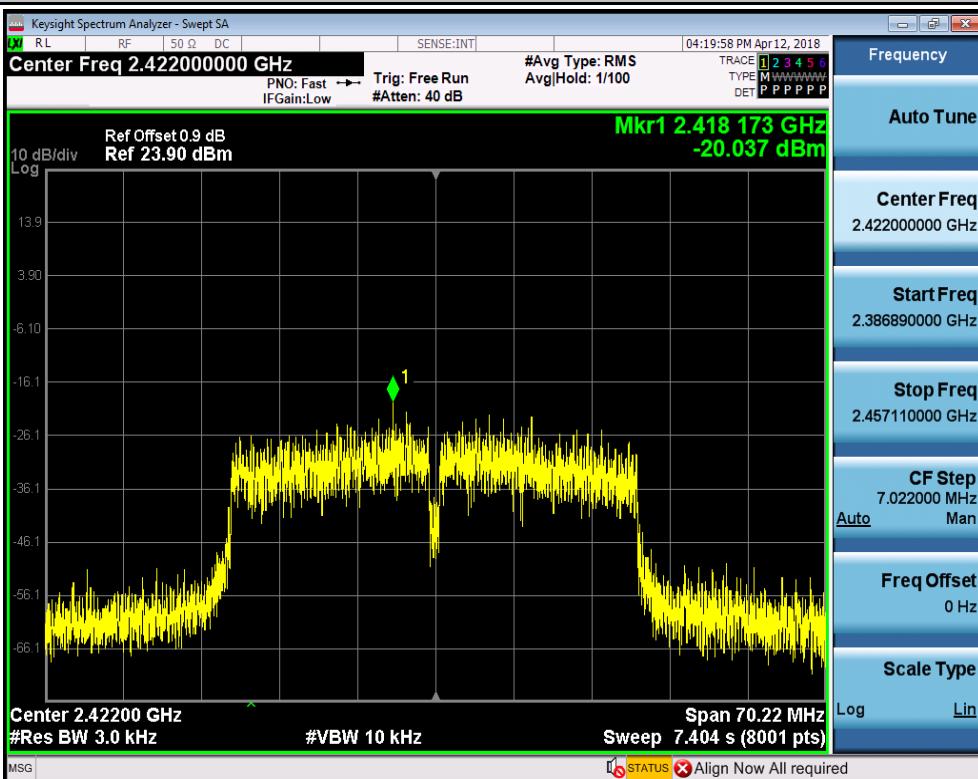


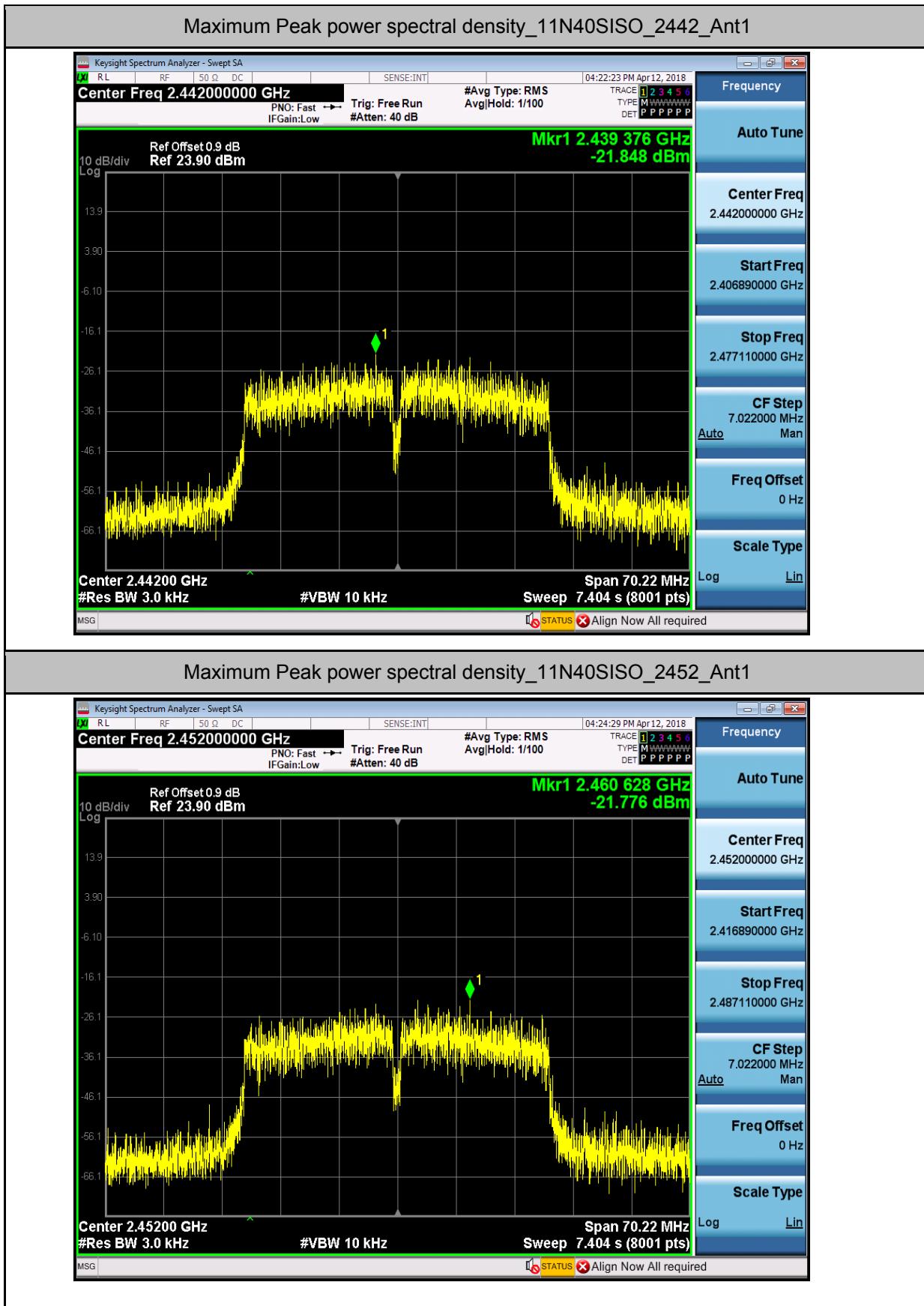


Maximum Peak power spectral density_11N20SISO_2462_Ant1



Maximum Peak power spectral density_11N40SISO_2422_Ant1







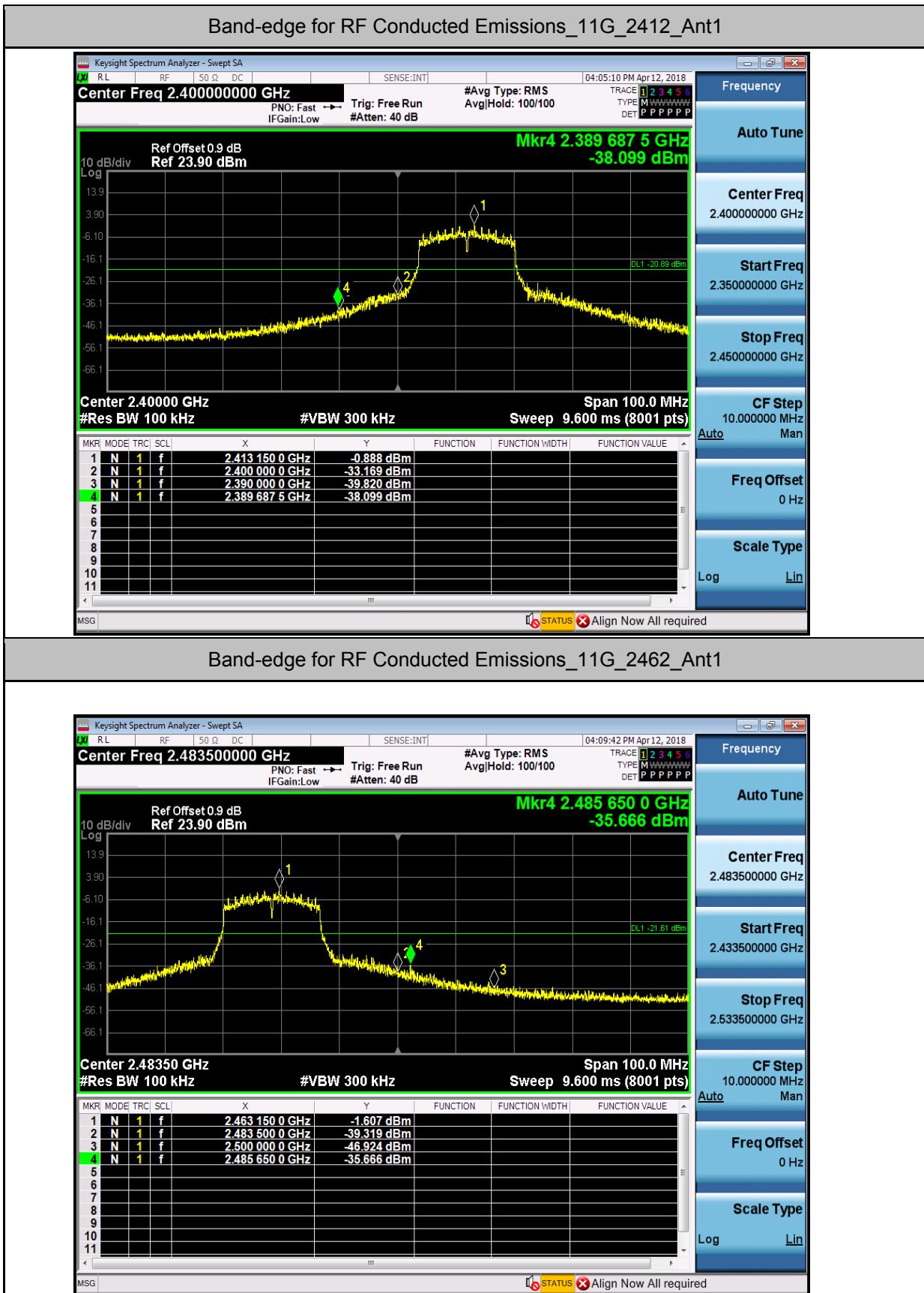
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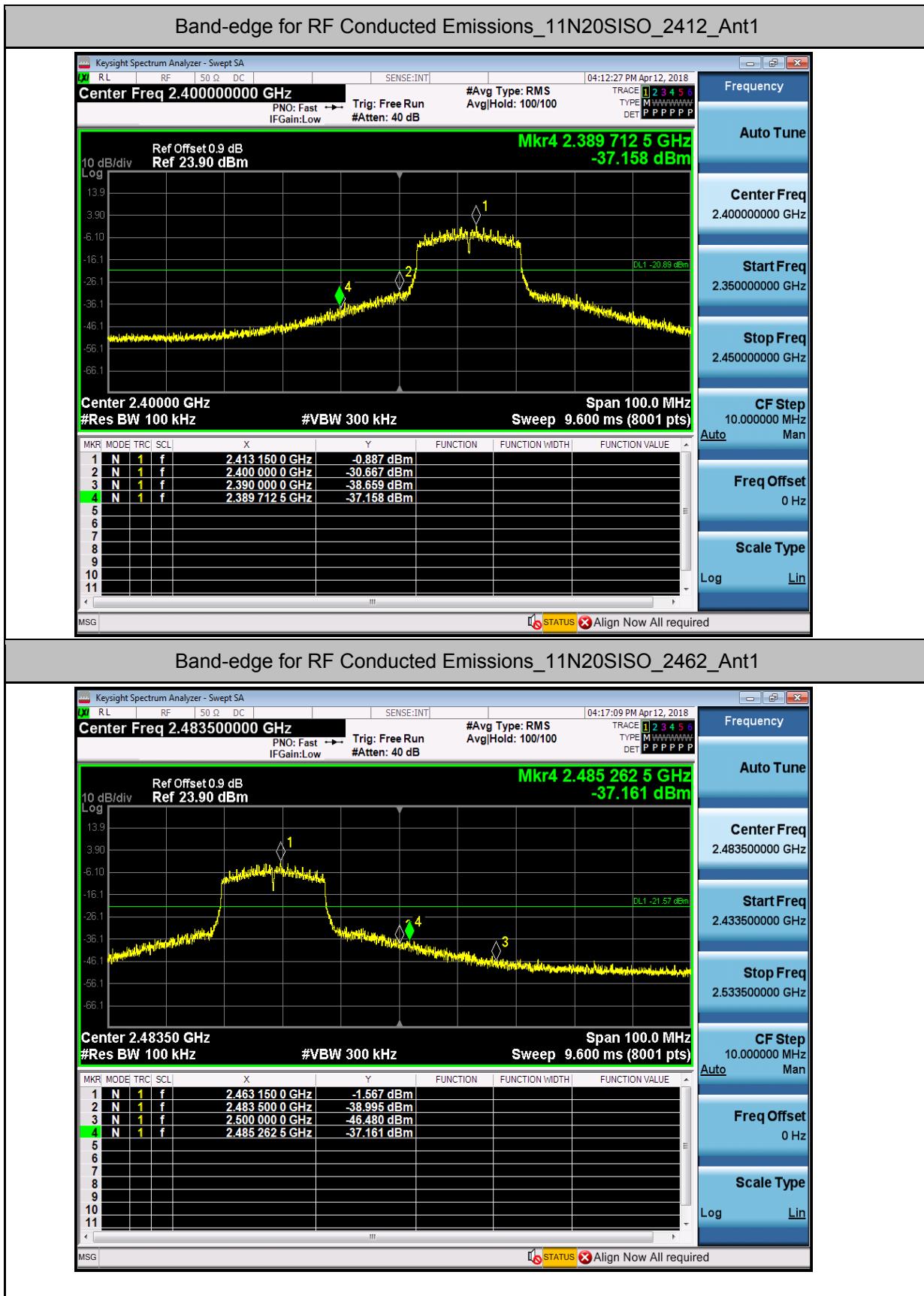
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4.Band-edge for RF Conducted Emissions

Test Mode	Test Channel	Ant	Carrier Power[dBm]	Max. Spurious Level [dBm]	Limit [dBm]	Verdict
11B	2412	Ant1	4.009	-40.677	-15.99	PASS
11B	2462	Ant1	3.255	-44.133	-16.75	PASS
11G	2412	Ant1	-0.888	-38.099	-20.89	PASS
11G	2462	Ant1	-1.607	-35.666	-21.61	PASS
11N20SISO	2412	Ant1	-0.887	-37.158	-20.89	PASS
11N20SISO	2462	Ant1	-1.567	-37.161	-21.57	PASS
11N40SISO	2422	Ant1	-4.953	-37.054	-24.95	PASS
11N40SISO	2452	Ant1	-5.394	-34.699	-25.39	PASS









5.RF Conducted Spurious Emissions

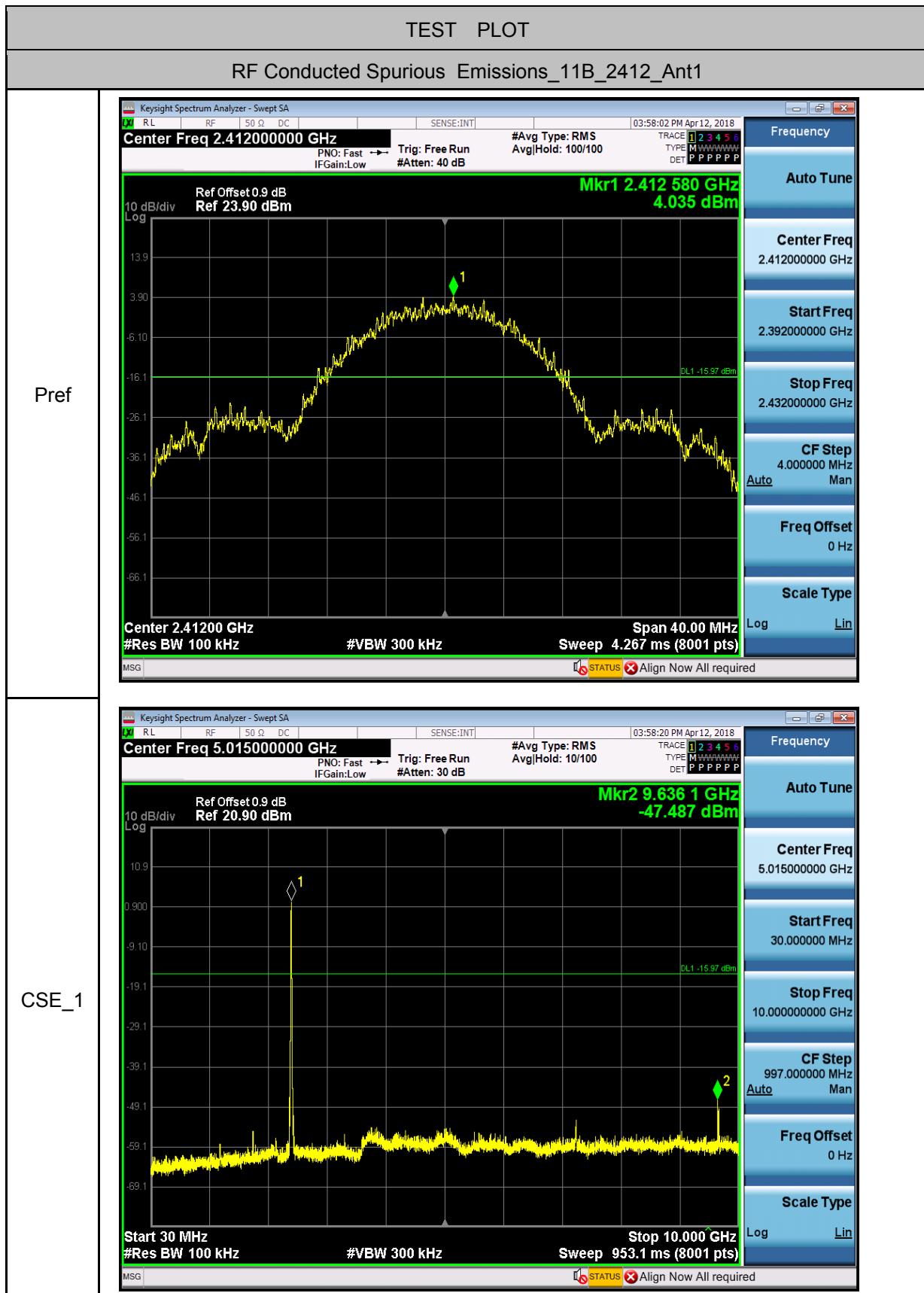
Test Mode	Test Channel	Ant	StartFre [MHz]	StopFre [MHz]	RBW [kHz]	VBW [kHz]	Pref[dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
11B	2412	Ant1	30	10000	100	300	4.035	-47.487	<-15.965	PASS
11B	2412	Ant1	10000	26000	100	300	4.035	-51.665	<-15.965	PASS
11B	2442	Ant1	30	10000	100	300	3.463	-50.470	<-16.537	PASS
11B	2442	Ant1	10000	26000	100	300	3.463	-51.181	<-16.537	PASS
11B	2462	Ant1	30	10000	100	300	3.328	-52.015	<-16.672	PASS
11B	2462	Ant1	10000	26000	100	300	3.328	-51.737	<-16.672	PASS
11G	2412	Ant1	30	10000	100	300	-0.982	-54.091	<-20.982	PASS
11G	2412	Ant1	10000	26000	100	300	-0.982	-52.361	<-20.982	PASS
11G	2442	Ant1	30	10000	100	300	-1.511	-54.103	<-21.511	PASS
11G	2442	Ant1	10000	26000	100	300	-1.511	-51.935	<-21.511	PASS
11G	2462	Ant1	30	10000	100	300	-1.659	-53.849	<-21.659	PASS
11G	2462	Ant1	10000	26000	100	300	-1.659	-52.643	<-21.659	PASS
11N20SISO	2412	Ant1	30	10000	100	300	-0.999	-47.041	<-20.999	PASS
11N20SISO	2412	Ant1	10000	26000	100	300	-0.999	-52.065	<-20.999	PASS
11N20SISO	2442	Ant1	30	10000	100	300	-1.652	-53.874	<-21.652	PASS
11N20SISO	2442	Ant1	10000	26000	100	300	-1.652	-52.155	<-21.652	PASS
11N20SISO	2462	Ant1	30	10000	100	300	-1.565	-54.235	<-21.565	PASS
11N20SISO	2462	Ant1	10000	26000	100	300	-1.565	-52.026	<-21.565	PASS
11N40SISO	2422	Ant1	30	10000	100	300	-4.951	-54.636	<-24.951	PASS

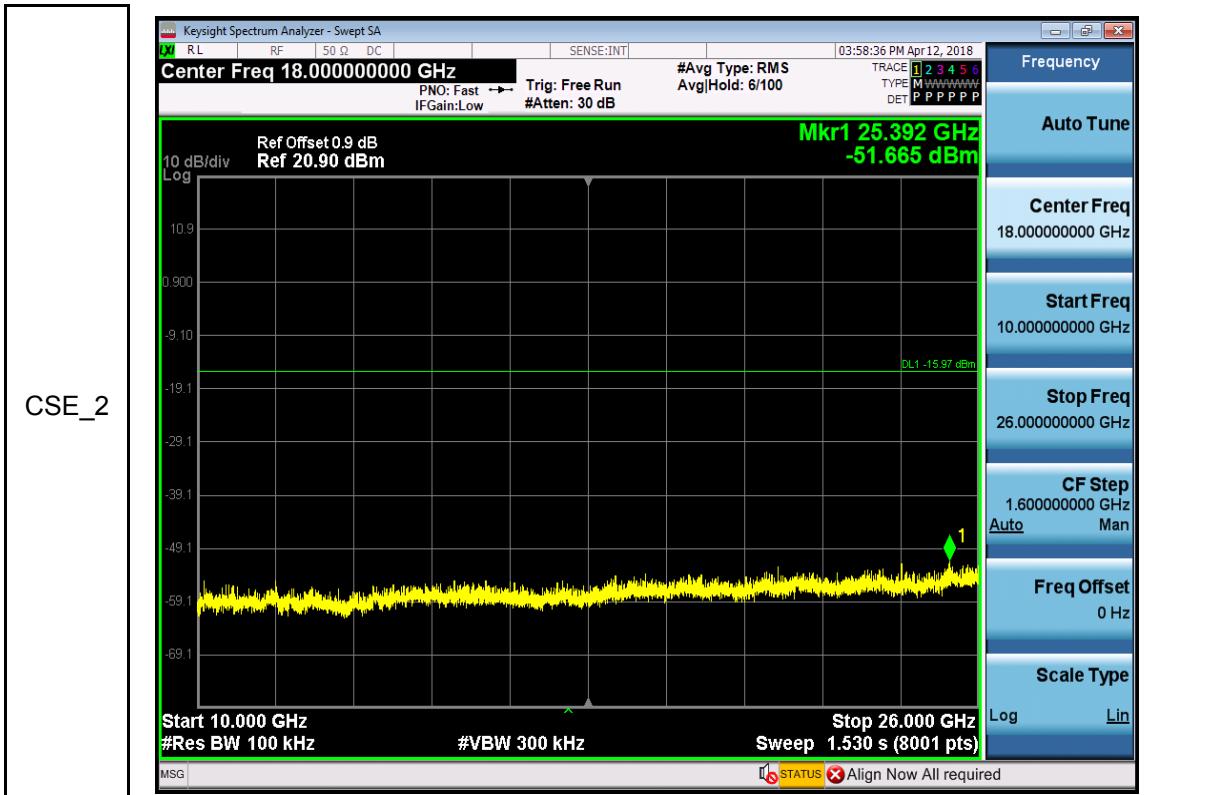
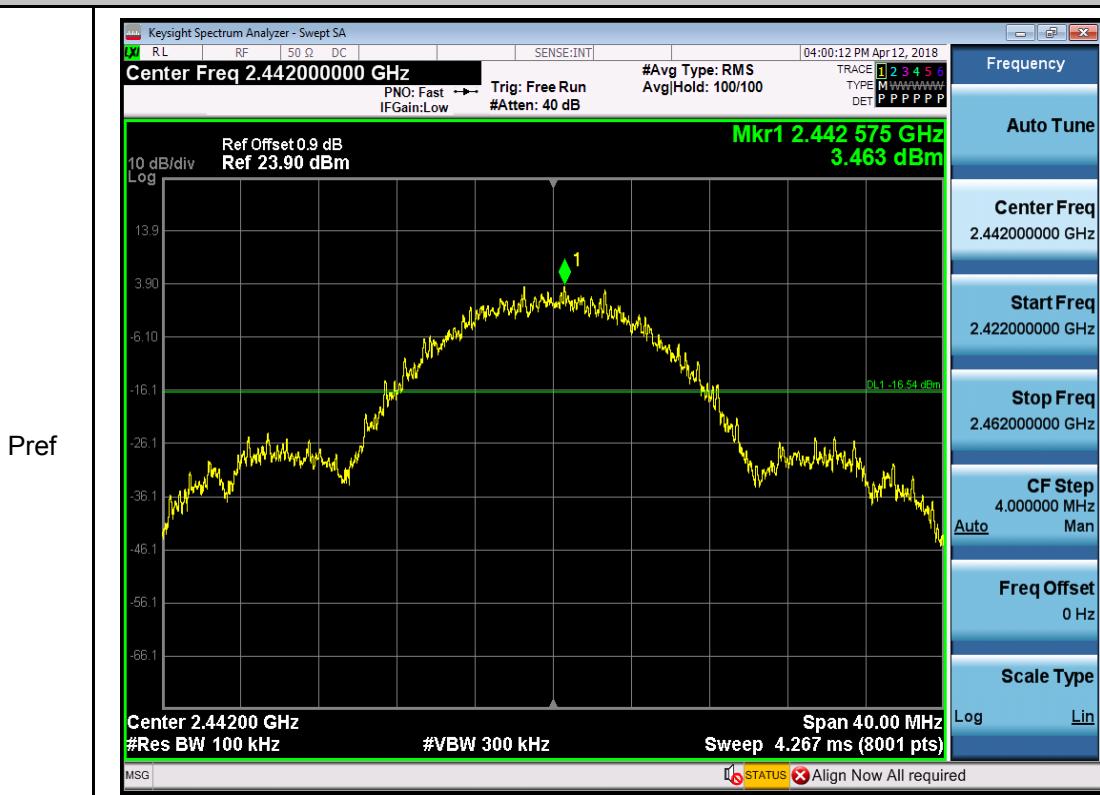


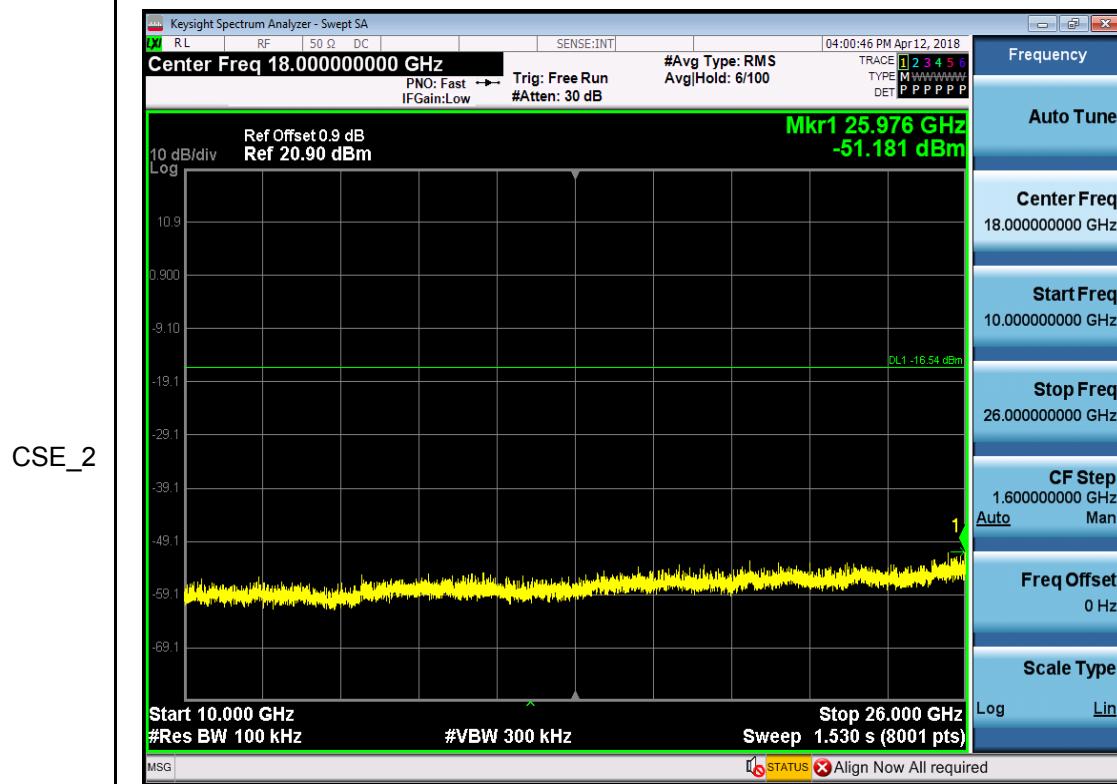
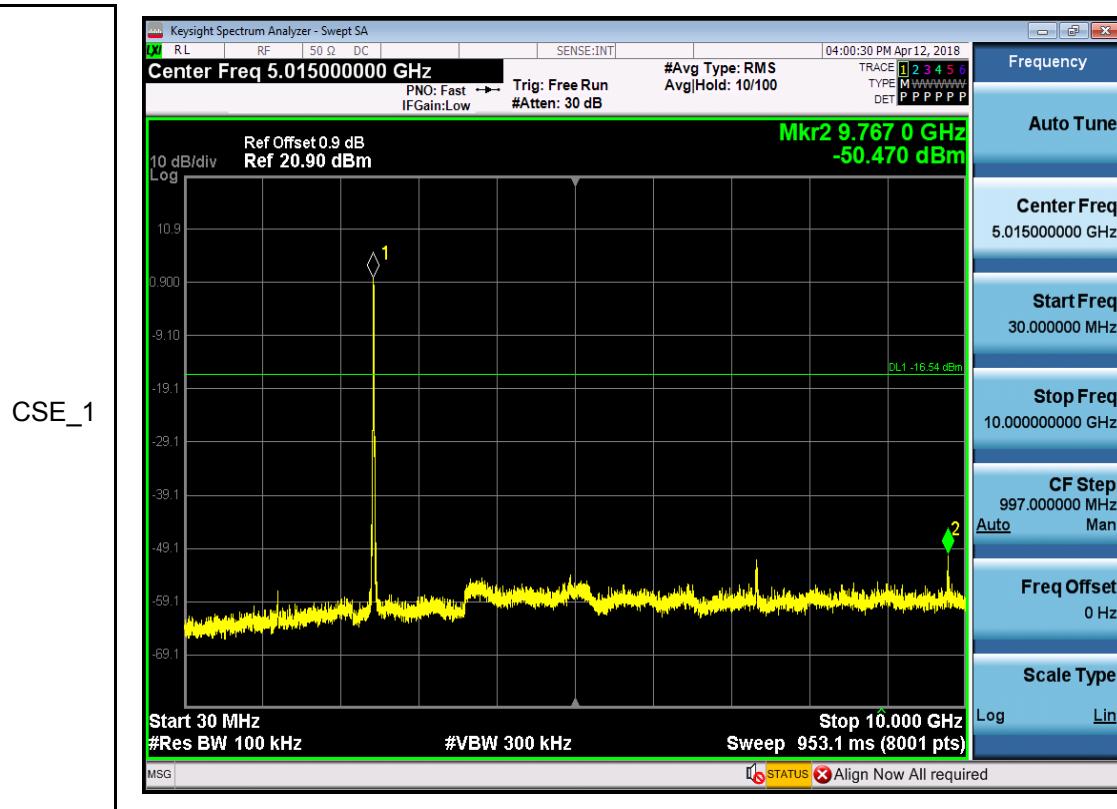
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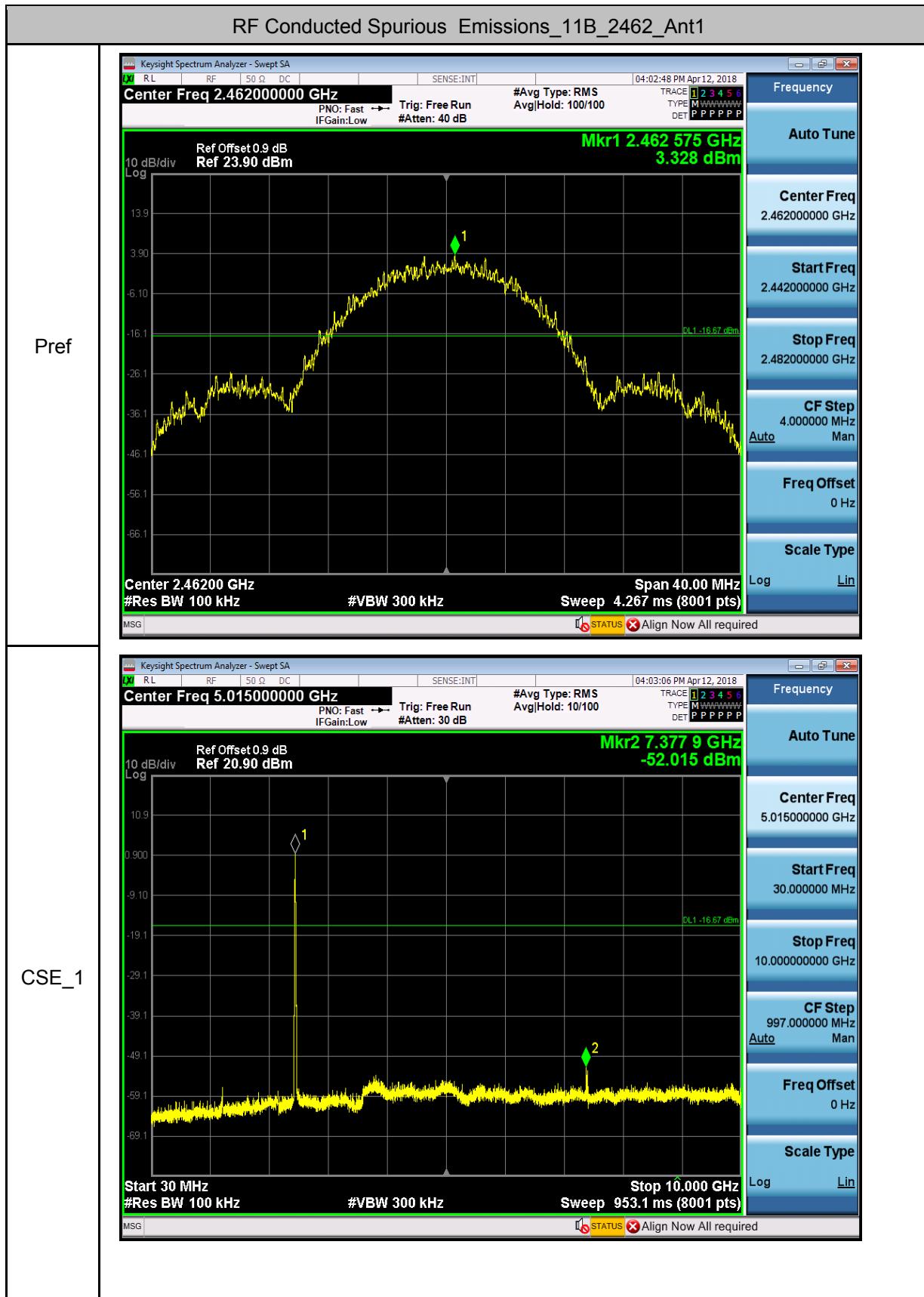
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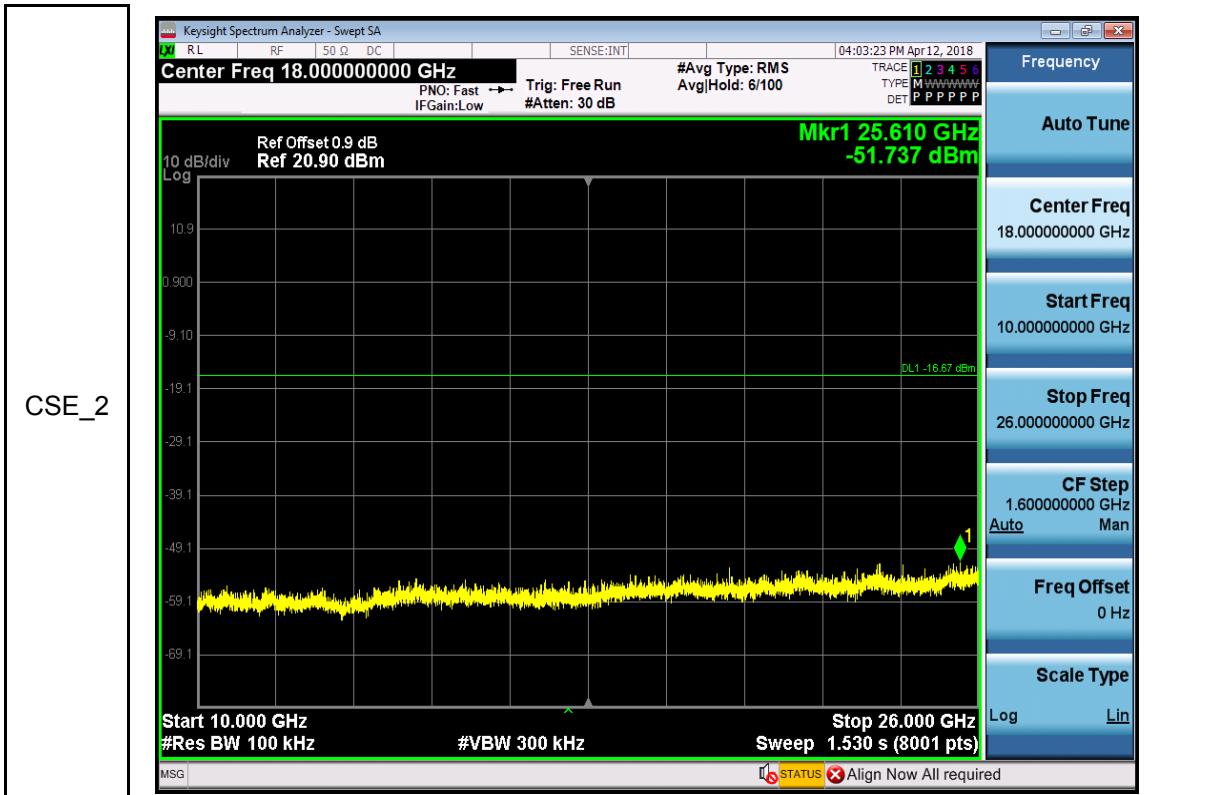
11N40SISO	2422	Ant1	10000	26000	100	300	-4.951	-51.882	<-24.951	PASS
11N40SISO	2442	Ant1	30	10000	100	300	-5.303	-53.713	<-25.303	PASS
11N40SISO	2442	Ant1	10000	26000	100	300	-5.303	-52.159	<-25.303	PASS
11N40SISO	2452	Ant1	30	10000	100	300	-5.454	-54.084	<-25.454	PASS
11N40SISO	2452	Ant1	10000	26000	100	300	-5.454	-51.336	<-25.454	PASS



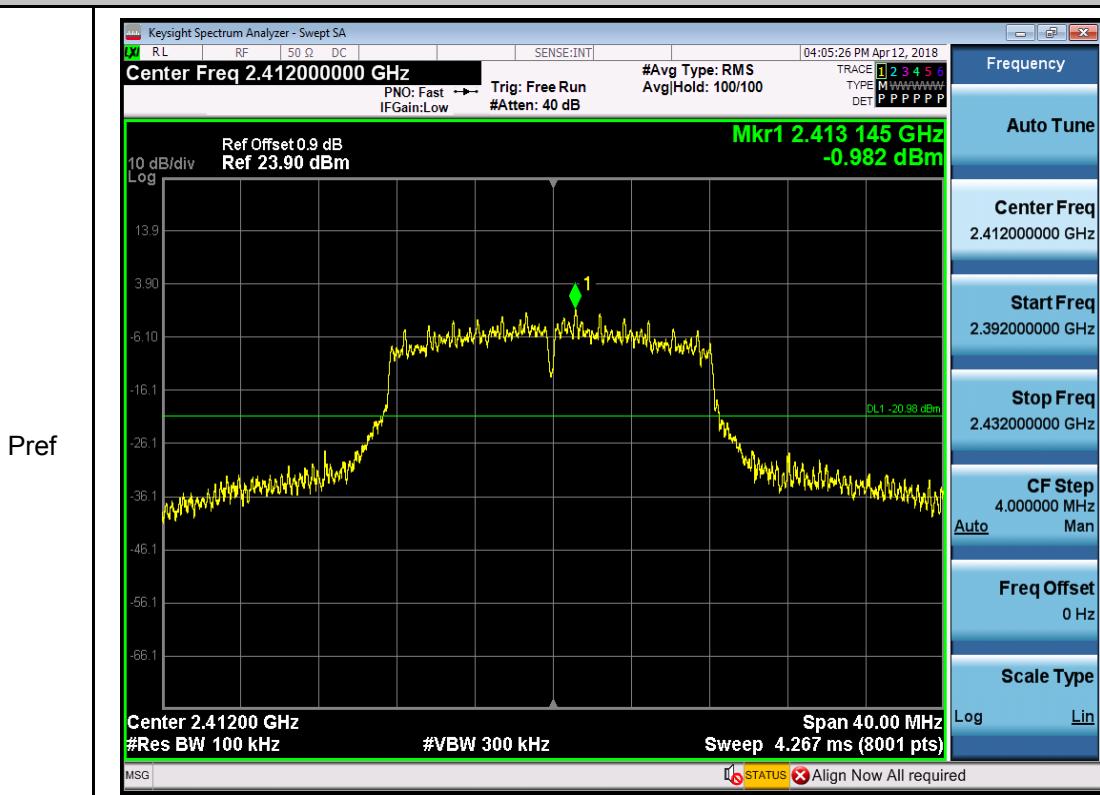

RF Conducted Spurious Emissions_11B_2442_Ant1


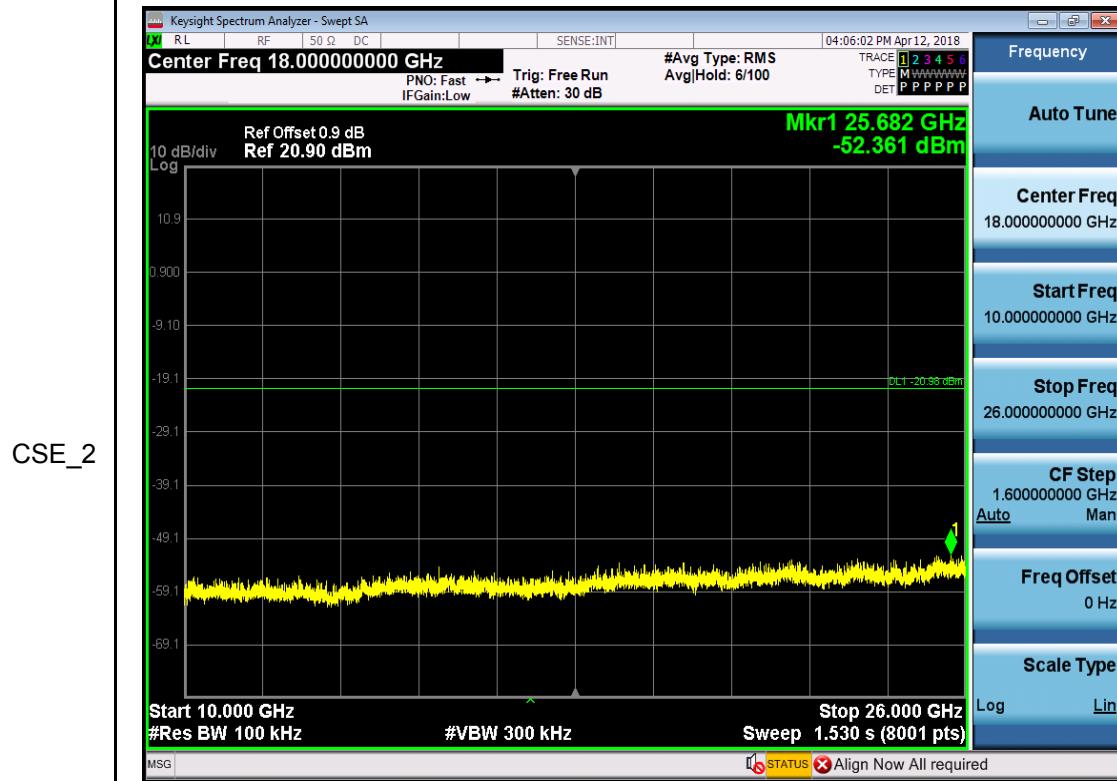
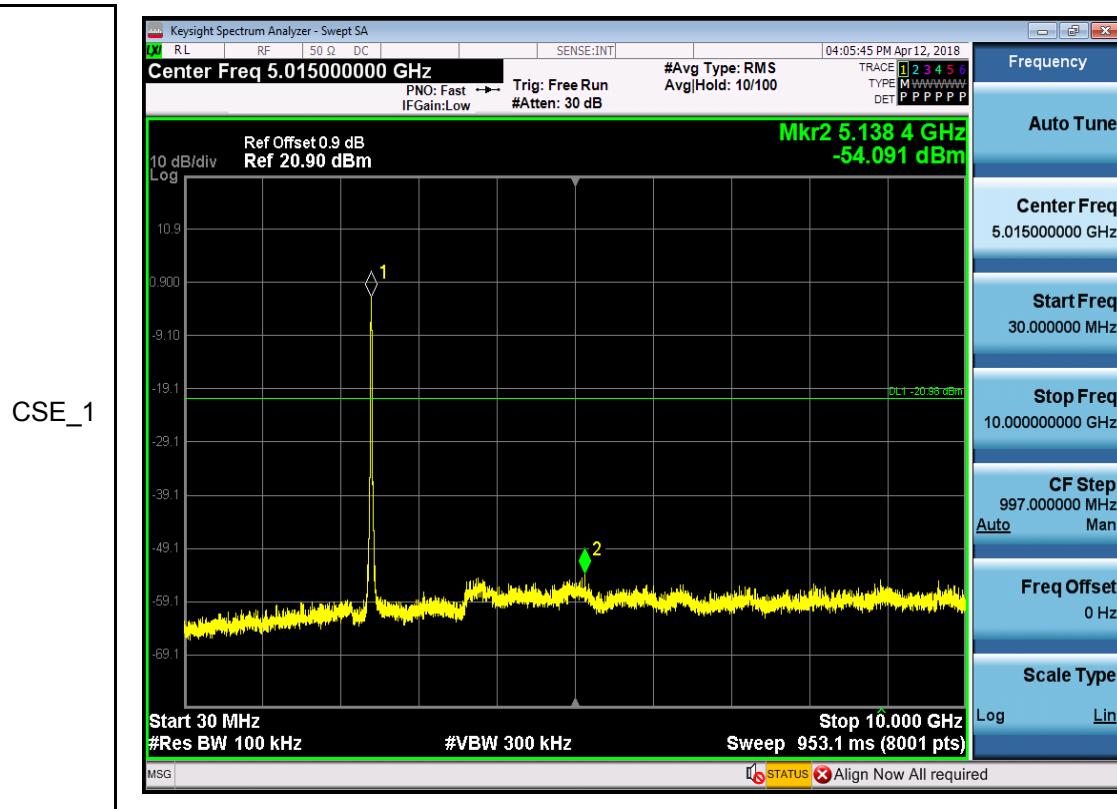


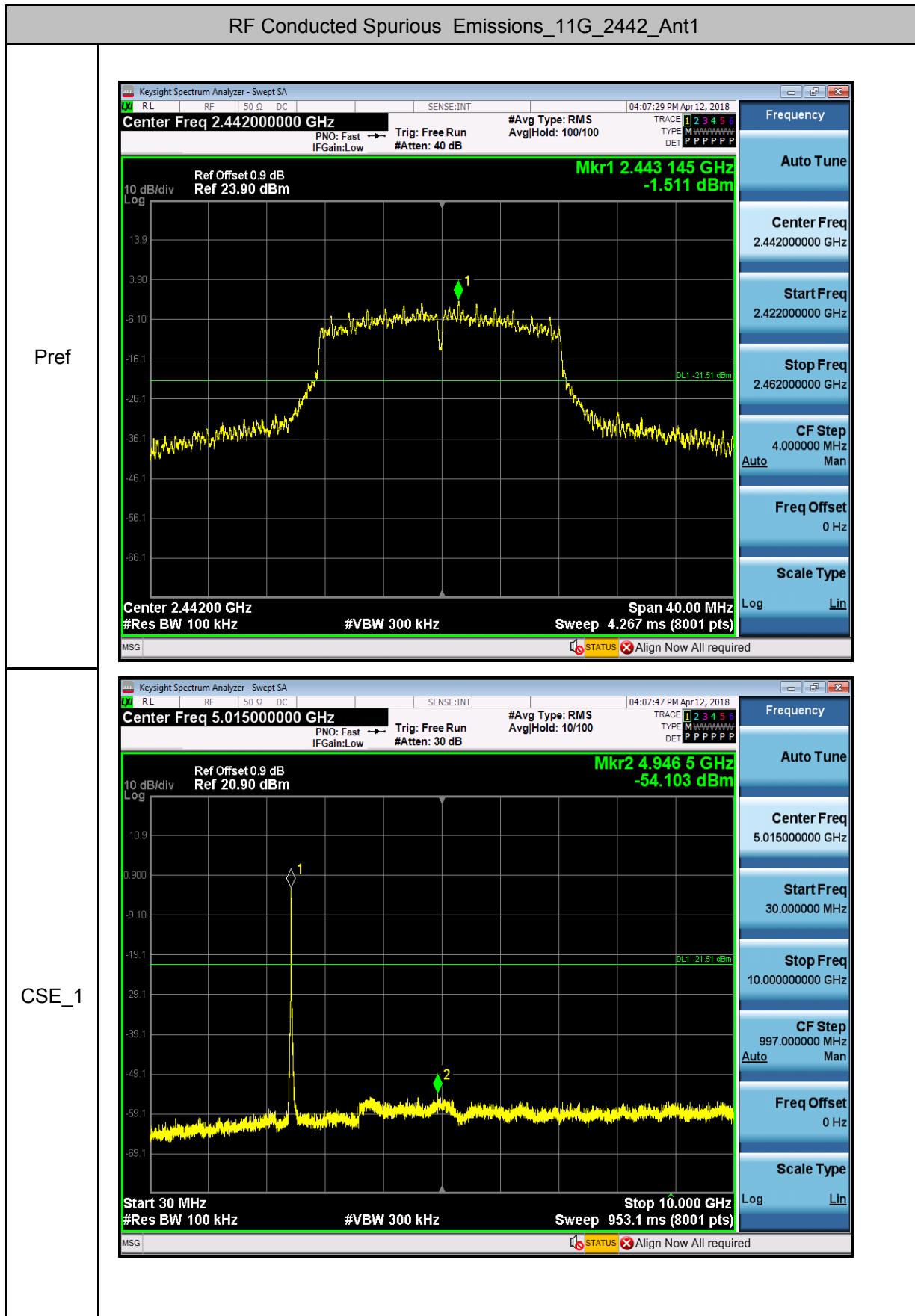


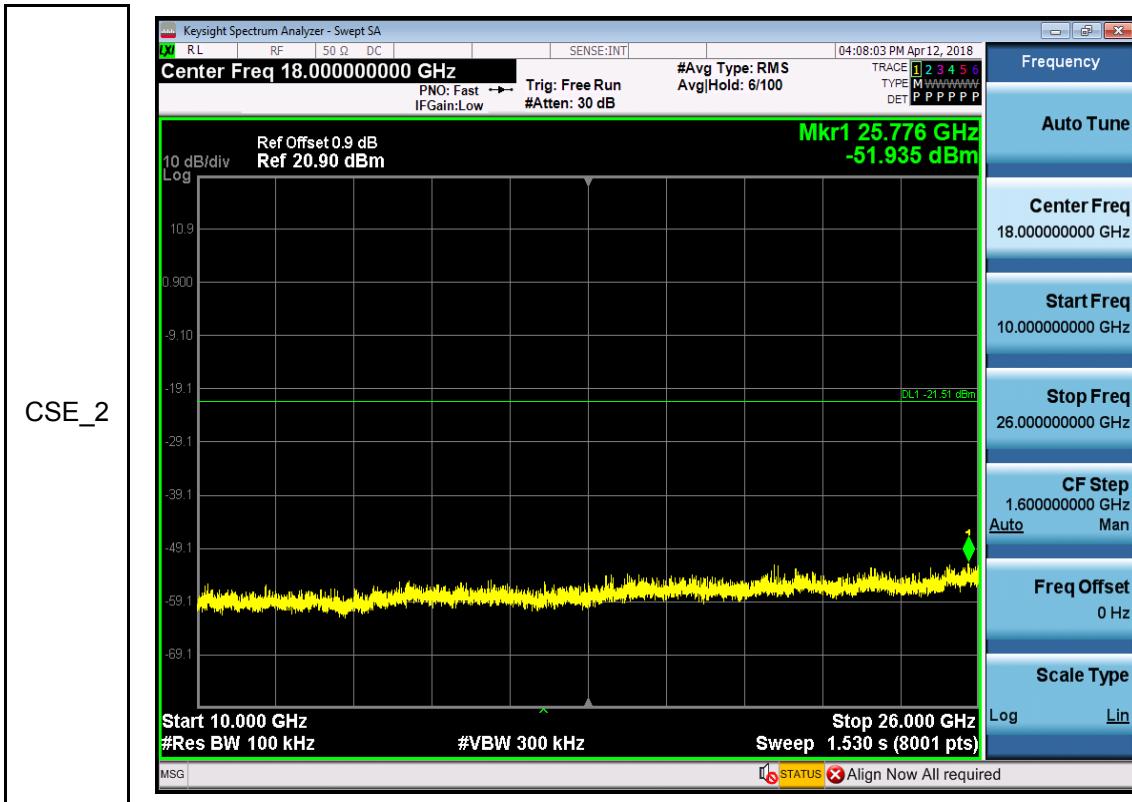


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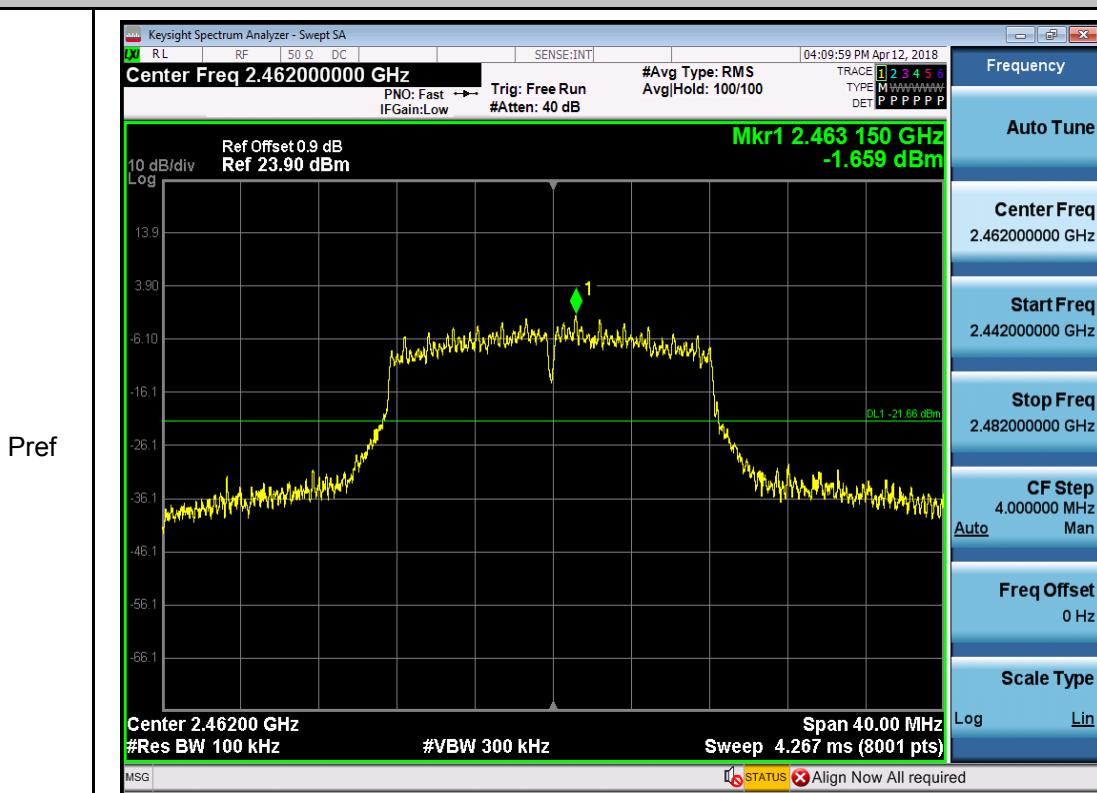


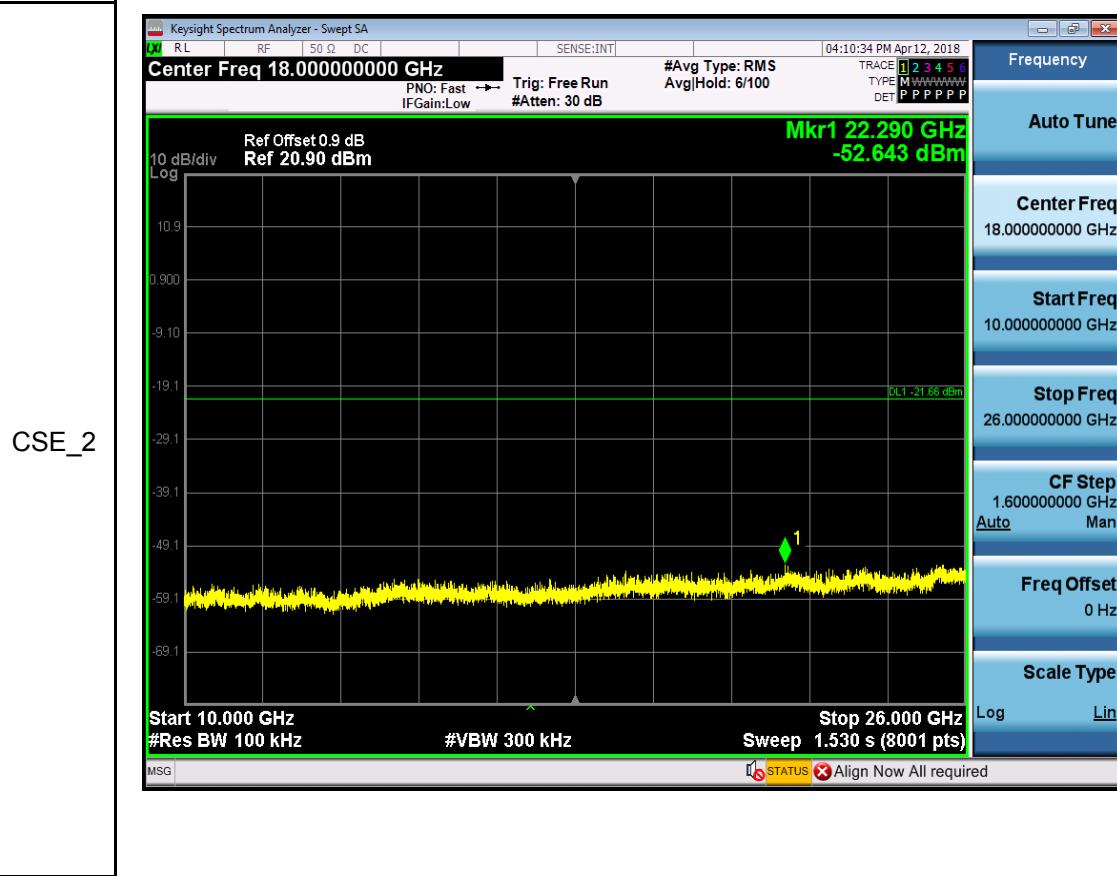
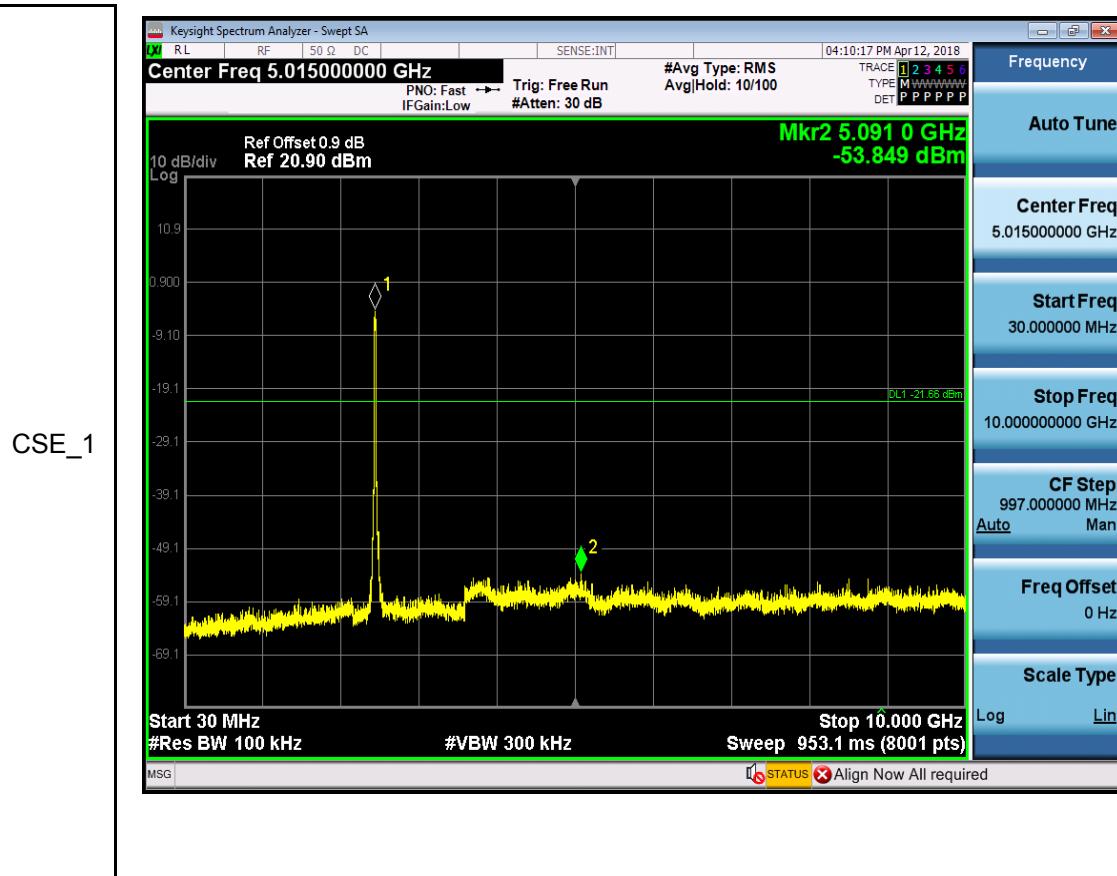


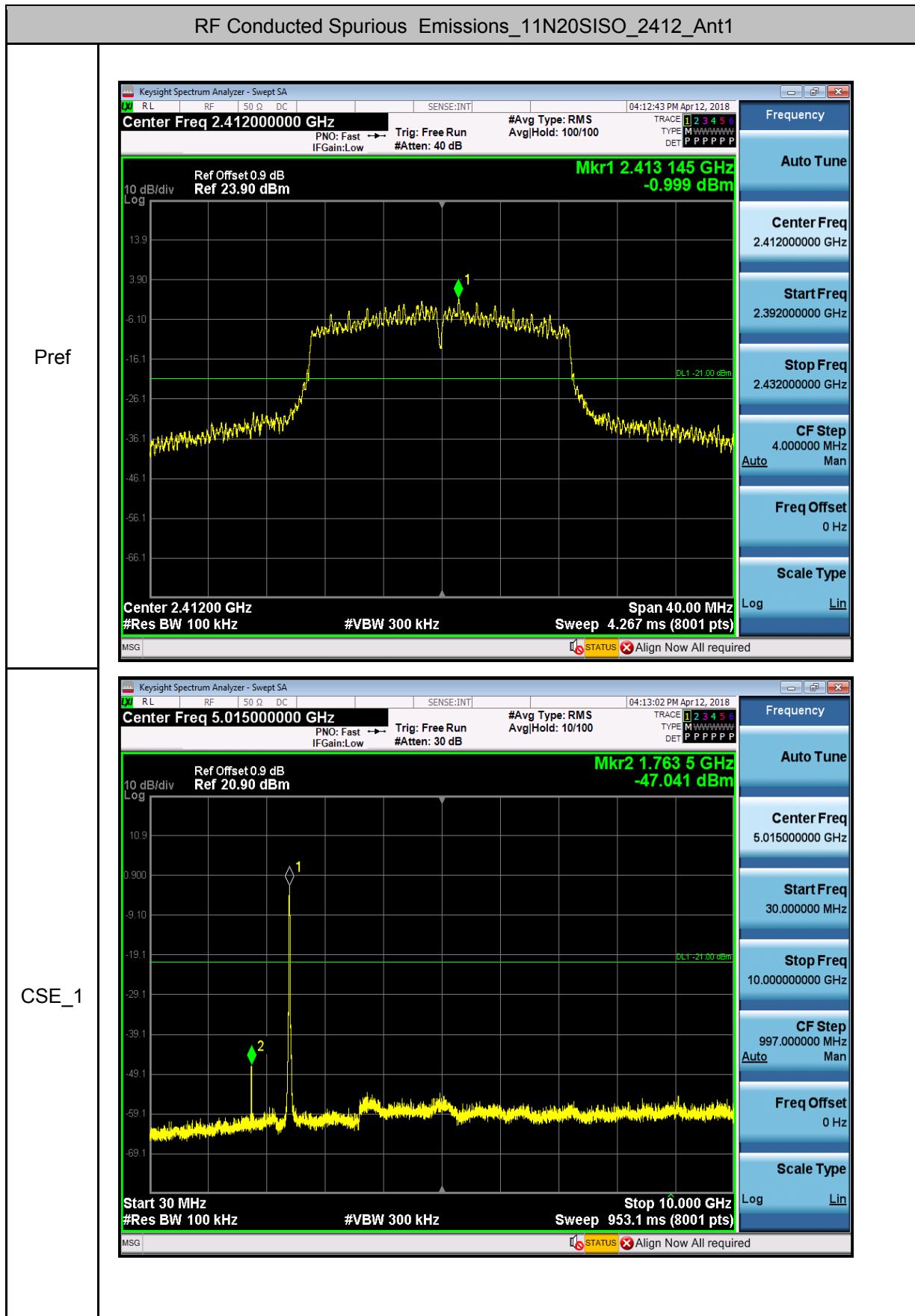


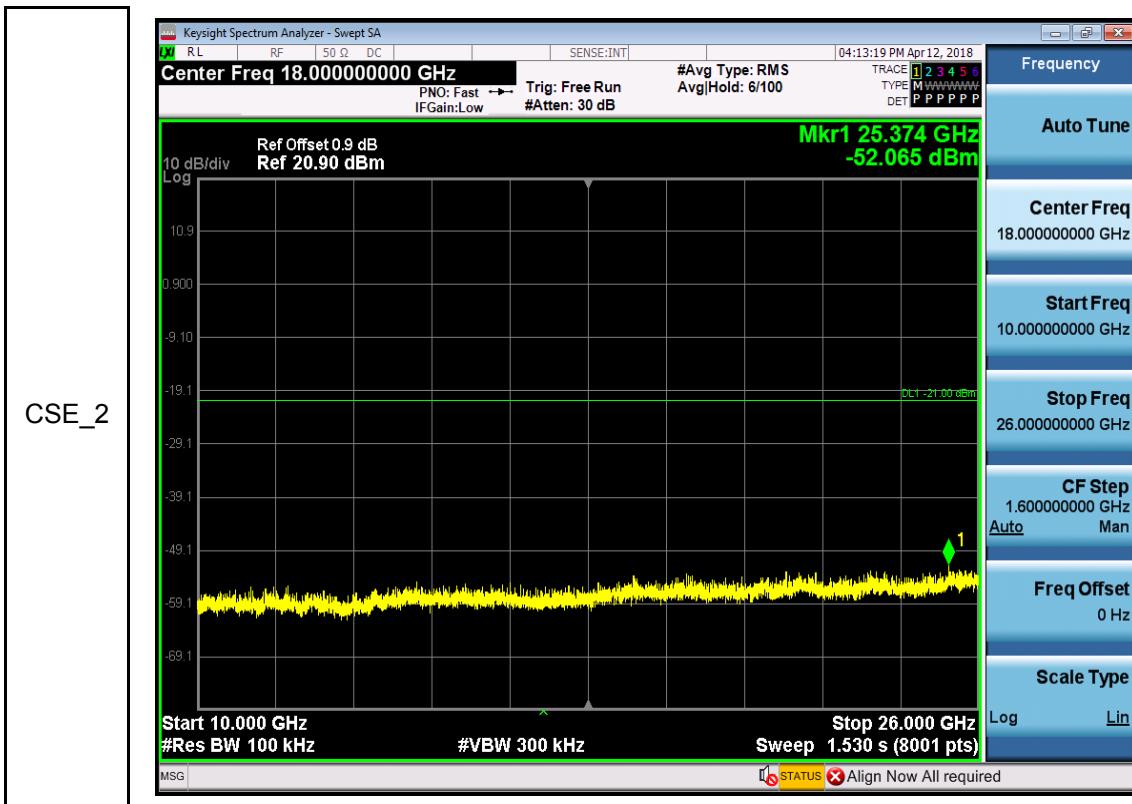


RF Conducted Spurious Emissions_11G_2462_Ant1

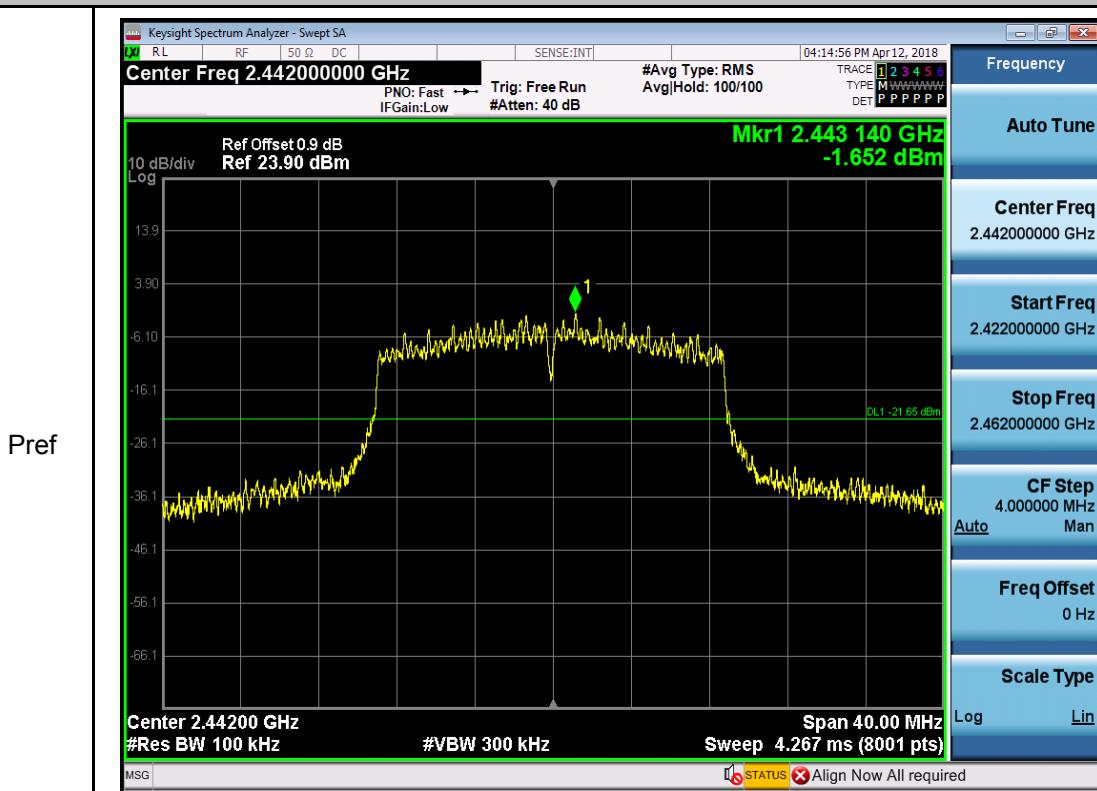


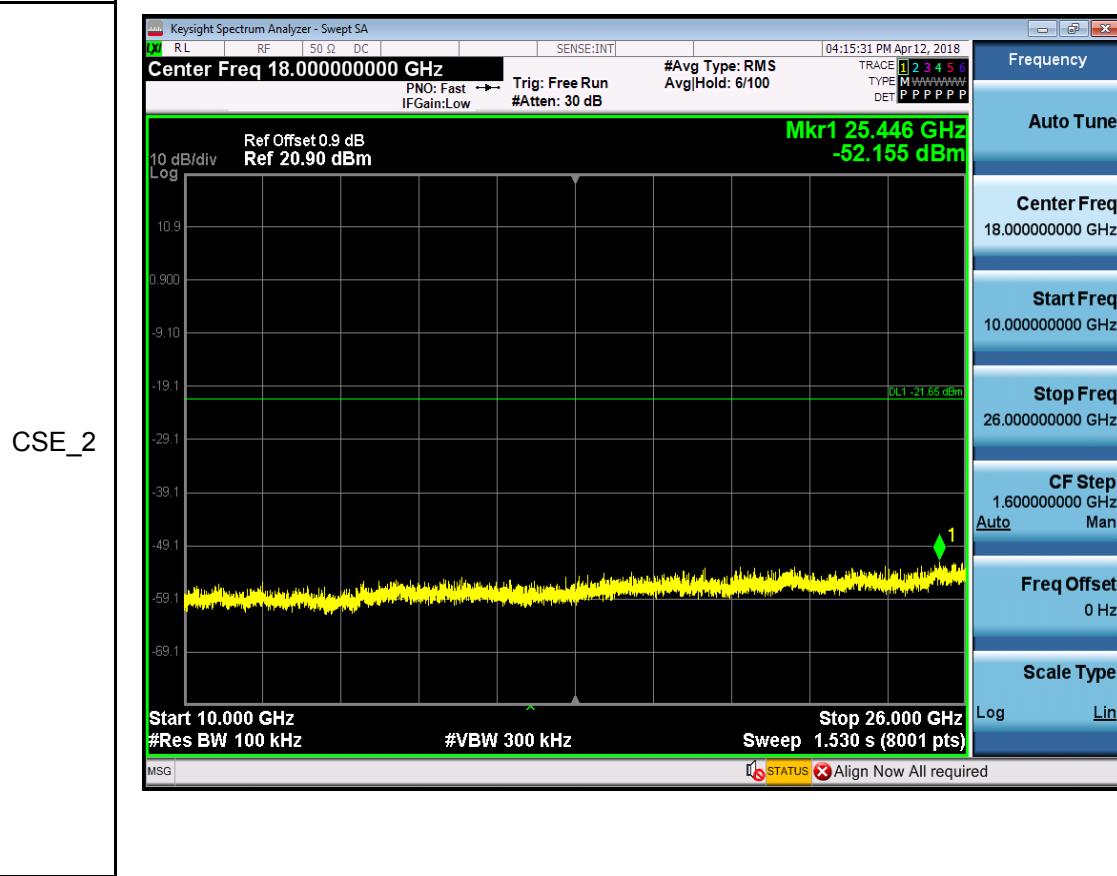
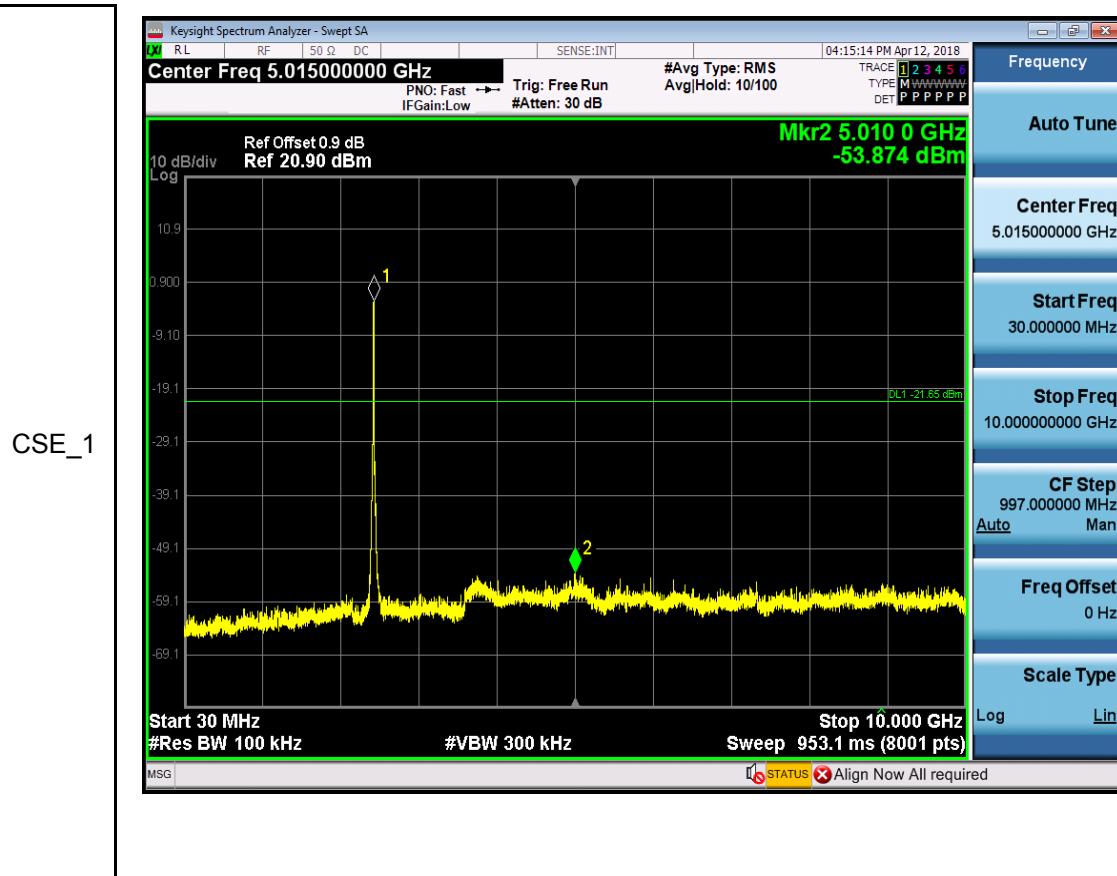


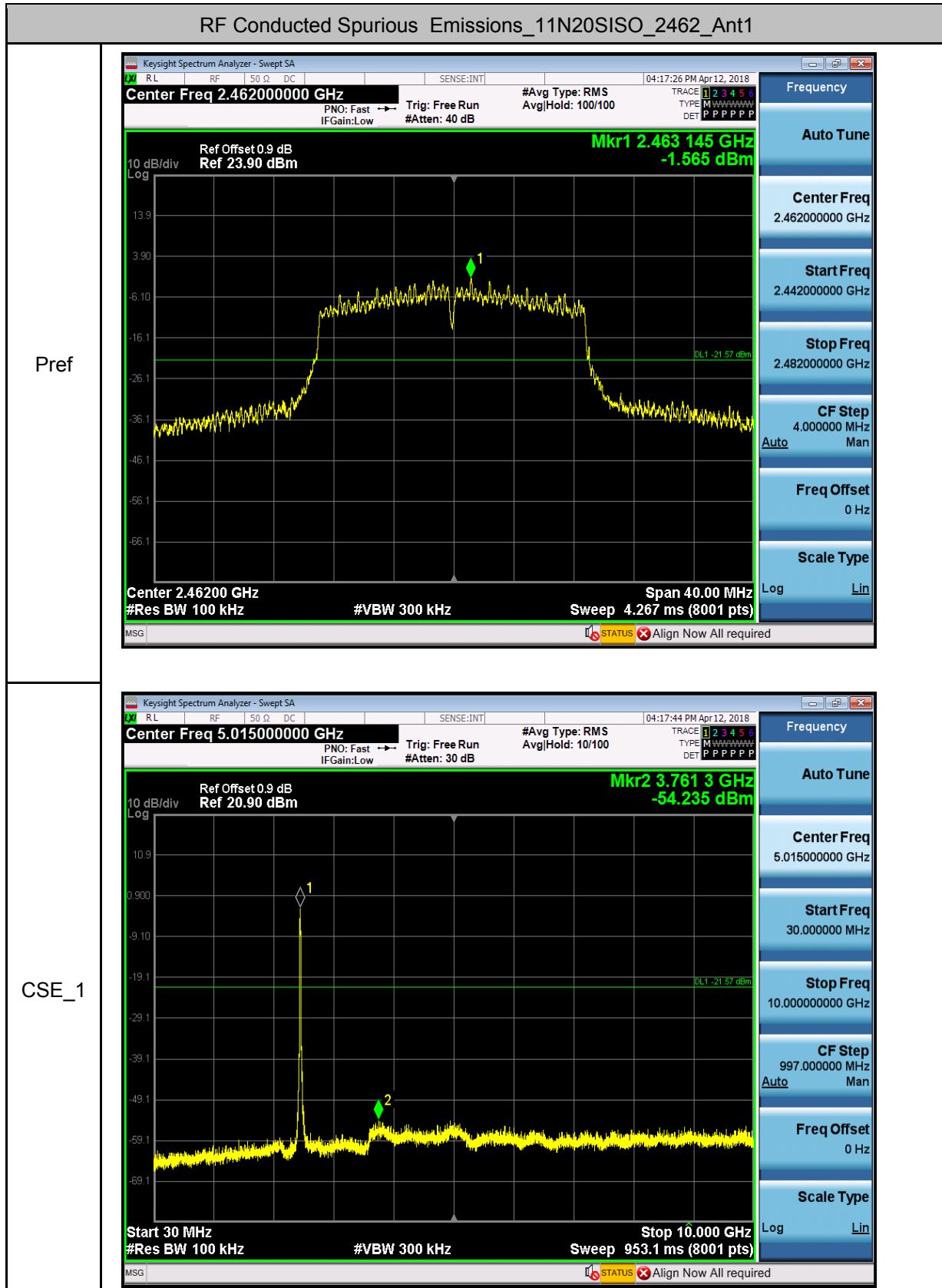


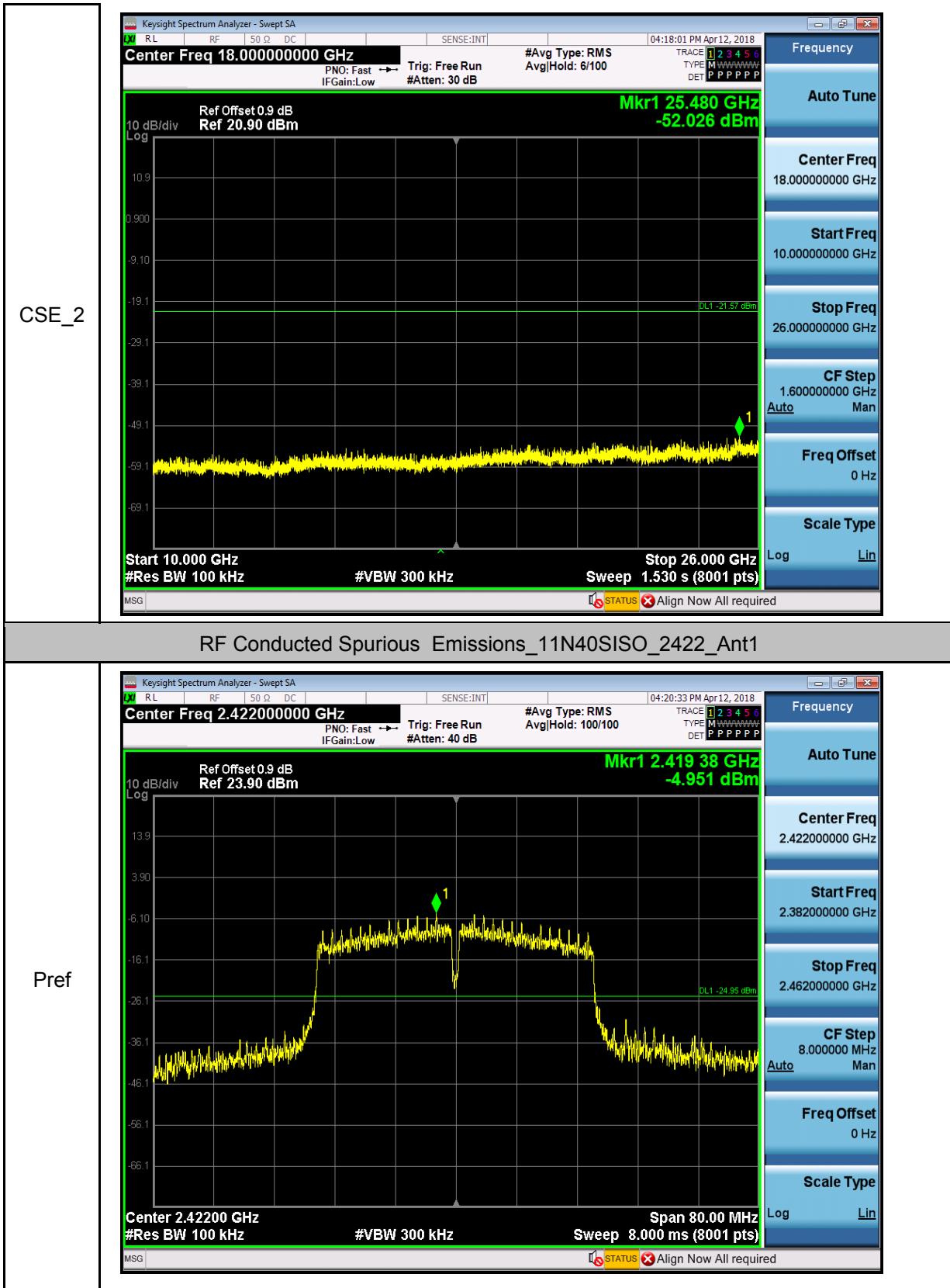


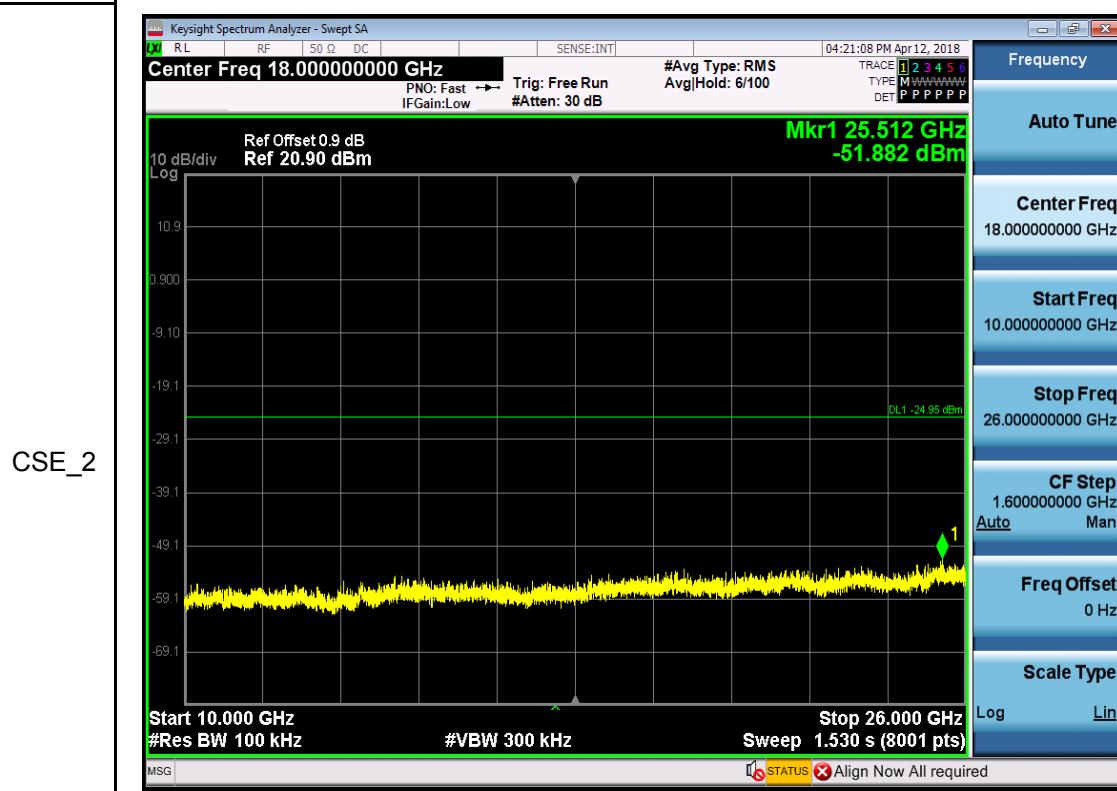
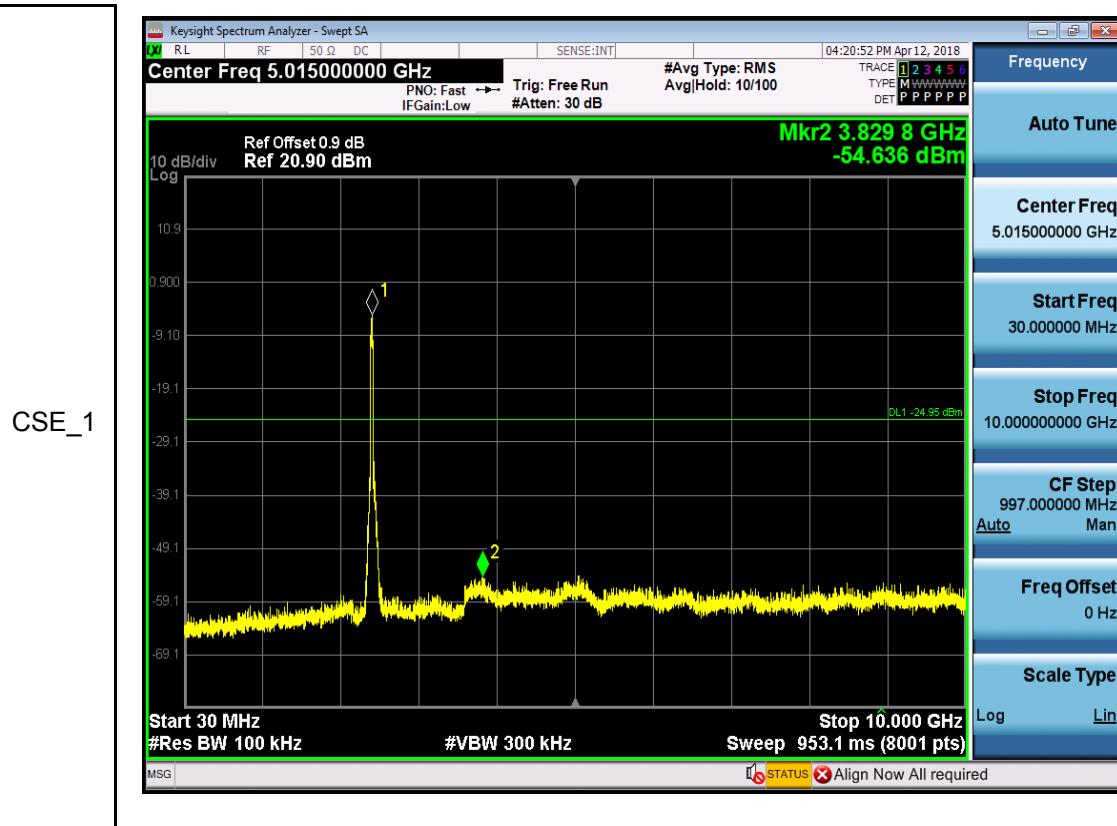
RF Conducted Spurious Emissions_11N20SISO_2442_Ant1

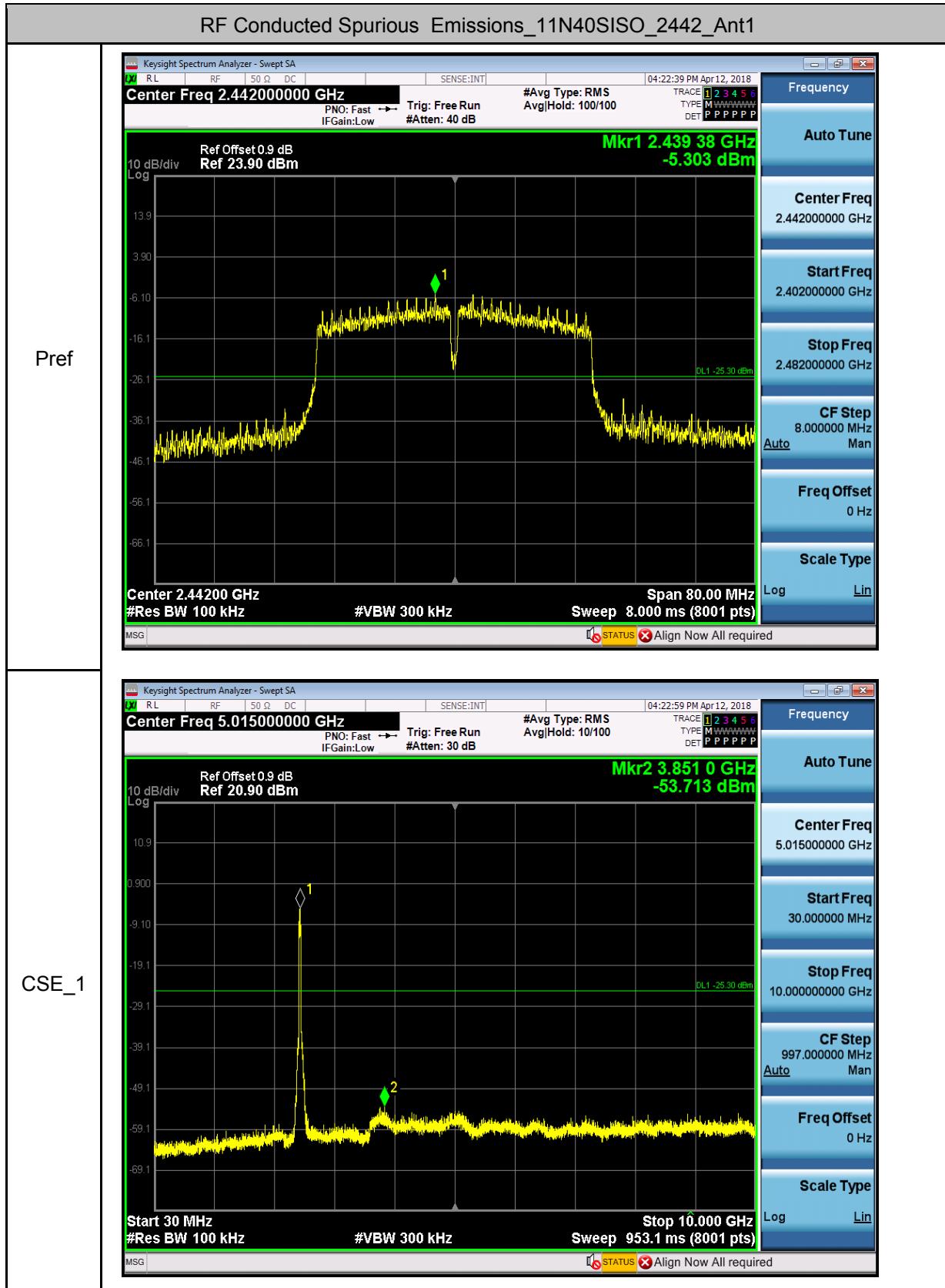


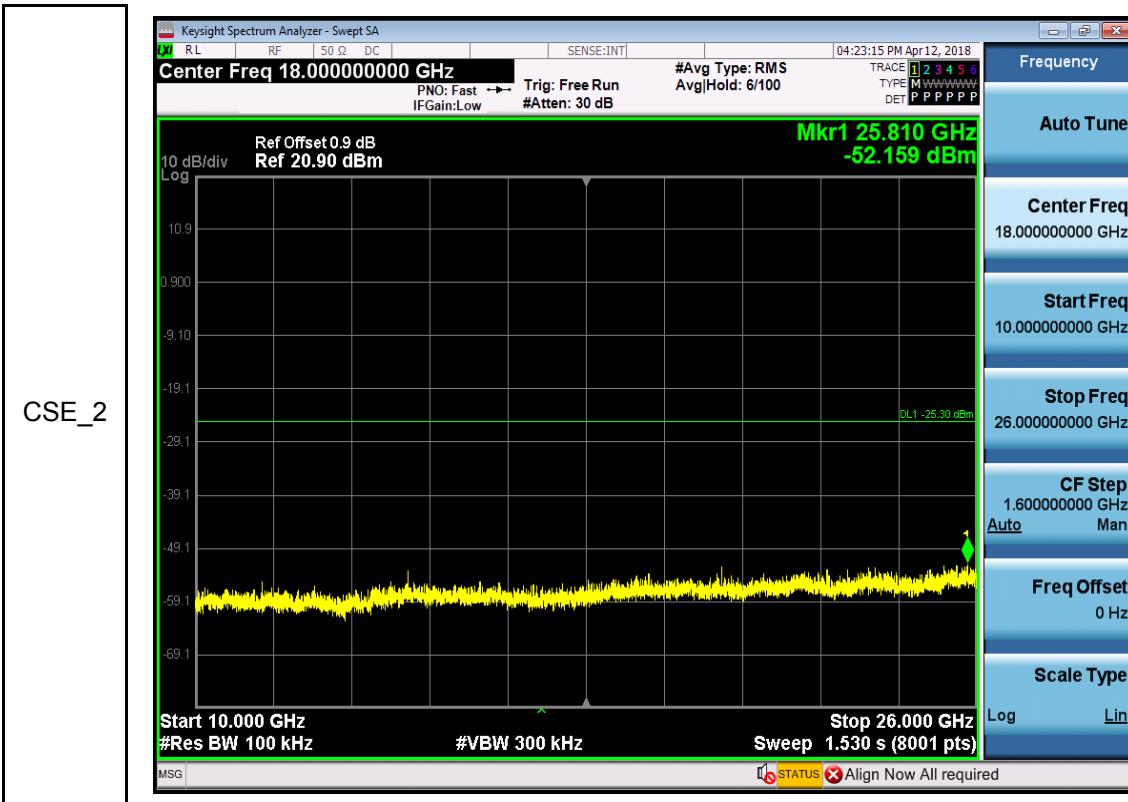




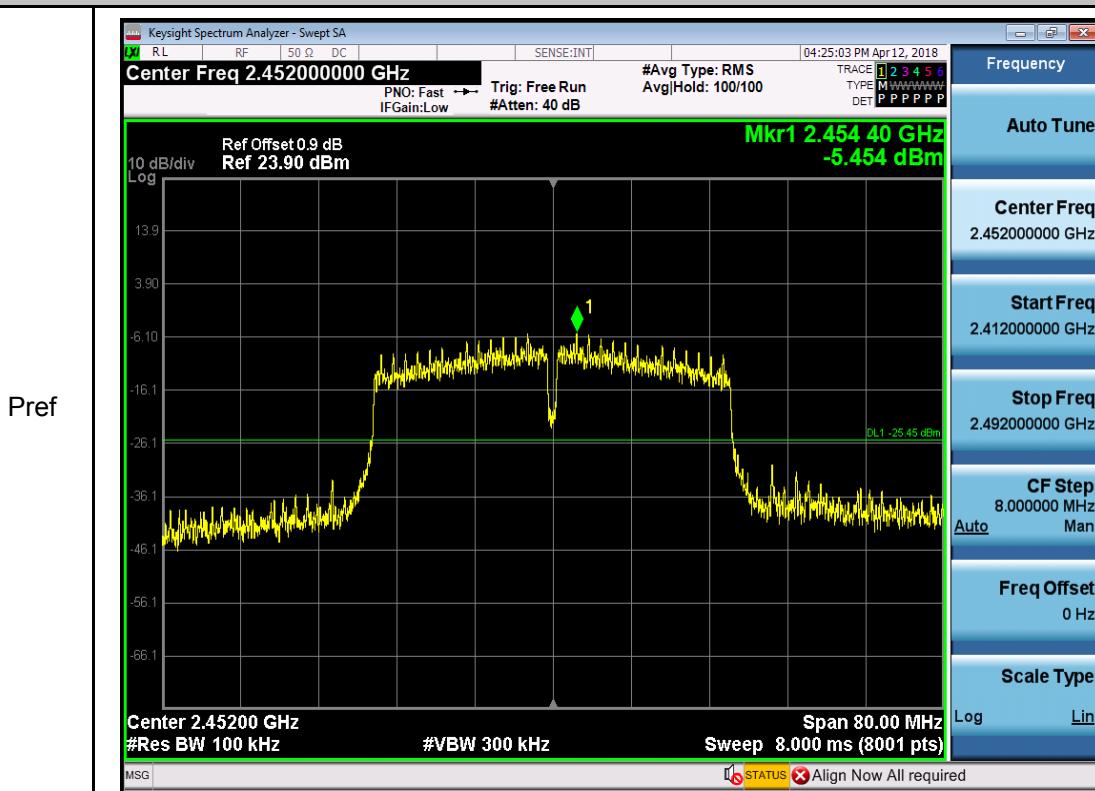


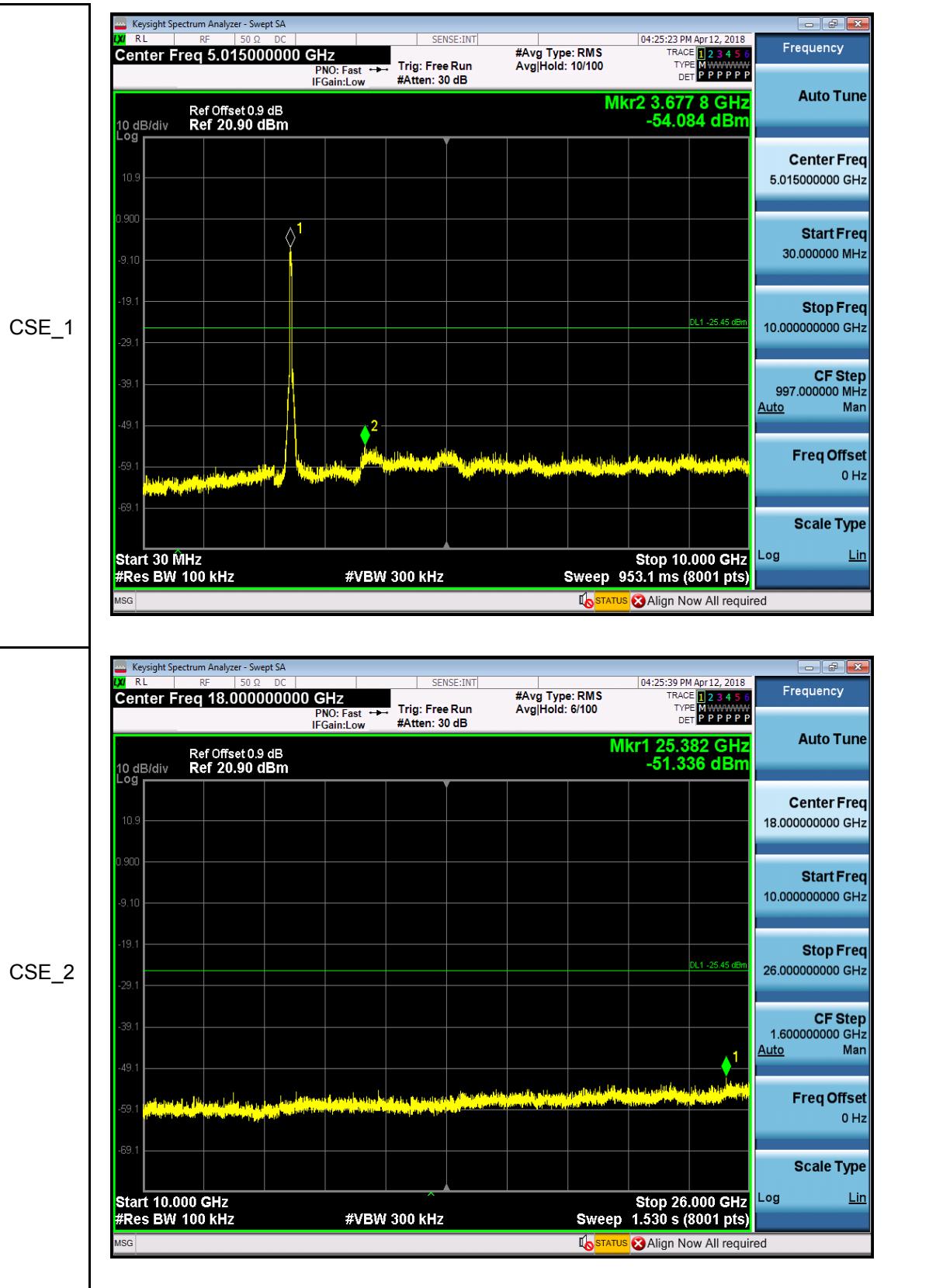






RF Conducted Spurious Emissions_11N40SISO_2452_Ant1





--End of Report--