9.3.2. TX ABOVE 1 GHz IN THE 2.4 GHz BAND: 4-18 GHz

HARMONICS AND SPURIOUS EMISSIONS, LOW CHANNEL, TABULAR DATA

The following measurements include an antenna gain of:

AG Chain 1 (dBi)	AG Chain 2 (dBi)	AG Chain 3 (dBi)	AG Chain 4 (dBi)	AG Chain 5 (dBi)	AG Chain 6 (dBi)	AG Chain 7 (dBi)	AG Chain 8 (dBi)
19.7	19.9	20	20.2	20.2	20.1	19.9	19.6

Frequency (MHz)		Meter PK Reading Chain 1 (dBm)	Meter PK Reading Chain 2 (dBm)	Meter PK Reading Chain 3 (dBm)	Meter PK Reading Chain 4 (dBm)	Meter PK Reading Chain 5 (dBm)	Meter PK Reading Chain 6 (dBm)	Meter PK Reading Chain 7 (dBm)	Meter PK Reading Chain 8 (dBm)	PK EIRP (dBm)	PK E-field Limit (dBm)	PK E-field Margin (dB)
Enter SA Value here		-71.24	-71.986	-71.222	-71.579	-71.49	-71.43	-71.233	-71.352			
4000-18000	FILTER	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8			
	CBL1	1.414	1.414	1.414	1.414	1.414	1.414	1.414	1.414			
	CBL2	1.475	1.475	1.475	1.475	1.475	1.475	1.475	1.475			
Final Value		-66.551	-67.297	-66.533	-66.89	-66.801	-66.741	-66.544	-66.663	-37.76	-21.2	-16.56

Frequency (MHz)		Meter AVG Reading Chain 1	Meter AVG Reading Chain 2	Meter AVG Reading Chain 3	Meter AVG Reading Chain 4	Meter AVG Reading Chain 5	Meter AVG Reading Chain 6	Meter AVG Reading Chain 7 (dBm)	Meter AVG Reading Chain 8	AVG EIRP (dBm)	AVG E-field Limit (dBm)	AVG E-field Margin (dB)
Enter SA Value here		-81.794	-82.065	-81.771	-81.842	-81.429	-81.924	-81.823	-81.861			
4000-18000	FILTER	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8			
	CBL1	1.414	1.414	1.414	1.414	1.414	1.414	1.414	1.414			
	CBL2	1.475	1.475	1.475	1.475	1.475	1.475	1.475	1.475			
	DCCF	0.68	0	0	0	0.67	0.67	0.68	0.68			
Final Value		-76.425	-77.376	-77.082	-77.153	-76.07	-76.565	-76.454	-76.492	-47.70	-41.2	-6.50

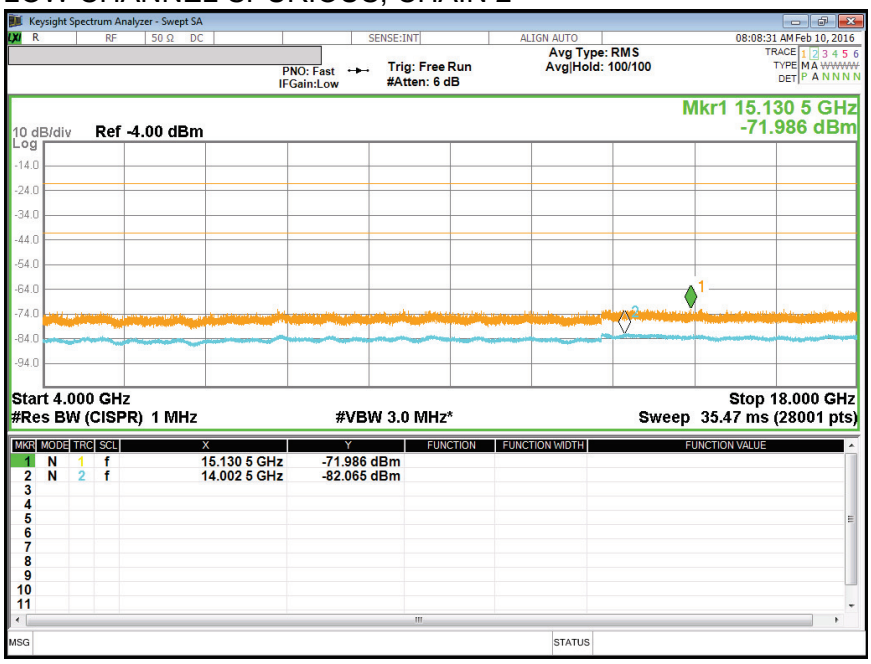
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HARMONICS AND SPURIOUS EMISSIONS, LOW CHANNEL

LOW CHANNEL SPURIOUS, CHAIN 1



LOW CHANNEL SPURIOUS, CHAIN 2



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LOW CHANNEL SPURIOUS, CHAIN 3



LOW CHANNEL SPURIOUS, CHAIN 4

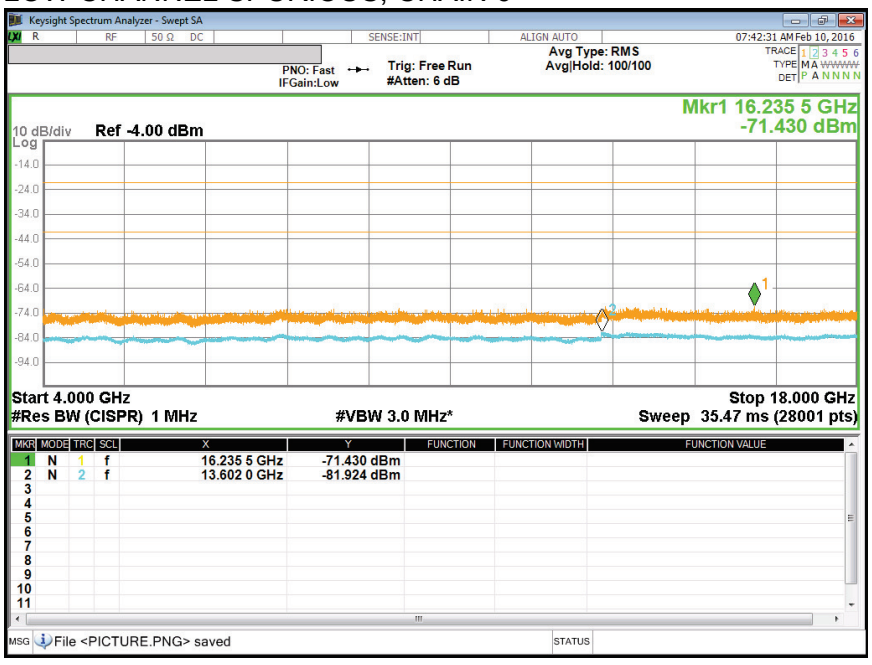


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LOW CHANNEL SPURIOUS, CHAIN 5

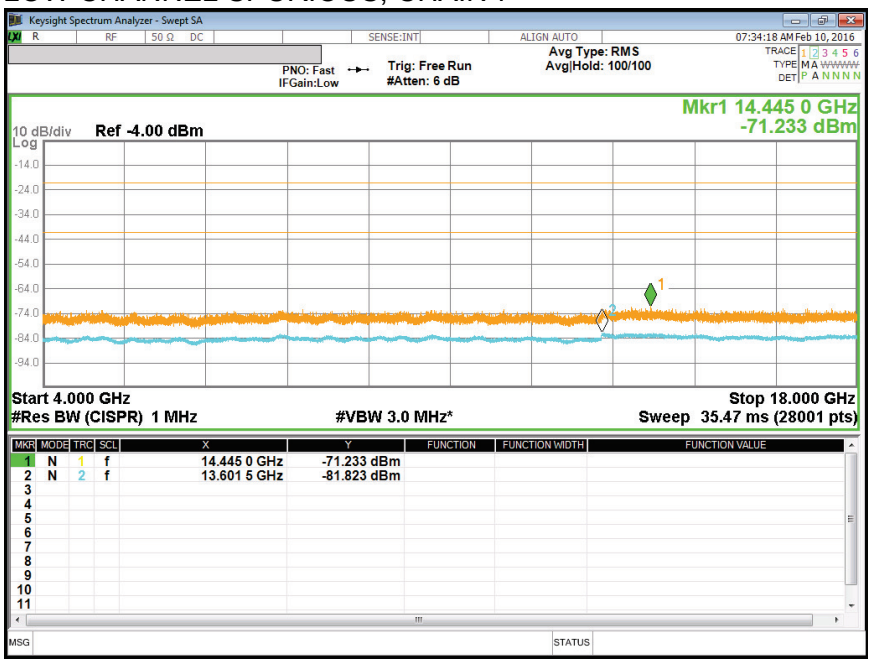


LOW CHANNEL SPURIOUS, CHAIN 6



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LOW CHANNEL SPURIOUS, CHAIN 7



LOW CHANNEL SPURIOUS, CHAIN 8



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HARMONICS AND SPURIOUS EMISSIONS, MID CHANNEL, TABULAR DATA

The following measurements include an antenna gain of:

AG Chain 1 (dBi)	AG Chain 2 (dBi)	AG Chain 3 (dBi)	AG Chain 4 (dBi)	AG Chain 5 (dBi)	AG Chain 6 (dBi)	AG Chain 7 (dBi)	AG Chain 8 (dBi)
19.7	19.9	20	20.2	20.2	20.1	19.9	19.6

Frequency (MHz)		Meter PK Reading Chain 1 (dBm)	Meter PK Reading Chain 2 (dBm)	Meter PK Reading Chain 3 (dBm)	Meter PK Reading Chain 4 (dBm)	Meter PK Reading Chain 5 (dBm)	Meter PK Reading Chain 6 (dBm)	Meter PK Reading Chain 7 (dBm)	Meter PK Reading Chain 8 (dBm)	PK EIRP (dBm)	PK E-field Limit (dBm)	PK E-field Margin (dB)
Enter SA Value here		-71.568	-71.649	-71.176	-71.415	-71.454	-71.43	-70.921	-71.131			
4000-18000	FILTER	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8			
	CBL1	1.414	1.414	1.414	1.414	1.414	1.414	1.414	1.414			
	CBL2	1.475	1.475	1.475	1.475	1.475	1.475	1.475	1.475			
Final Value		-68.354	-68.435	-67.962	-68.201	-68.24	-68.216	-67.707	-67.917	-39.14	-21.2	-17.94

Frequency (MHz)		Meter AVG Reading Chain 1	Meter AVG Reading Chain 2	Meter AVG Reading Chain 3	Meter AVG Reading Chain 4	Meter AVG Reading Chain 5	Meter AVG Reading Chain 6	Meter AVG Reading Chain 7 (dBm)	Meter AVG Reading Chain 8	AVG EIRP (dBm)	AVG E-field Limit (dBm)	AVG E-field Margin (dB)
Enter SA Value here		-81.817	-81.818	-81.778	-81.679	-81.882	-81.924	-81.902	-81.93			
4000-18000	FILTER	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8			
	CBL1	1.414	1.414	1.414	1.414	1.414	1.414	1.414	1.414			
	CBL2	1.475	1.475	1.475	1.475	1.475	1.475	1.475	1.475			
	DCCF	0.68	0	0	0	0.67	0.67	0.68	0.68			
Final Value		-76.448	-77.129	-77.089	-76.99	-76.523	-76.565	-76.533	-76.561	-47.74	-41.2	-6.54

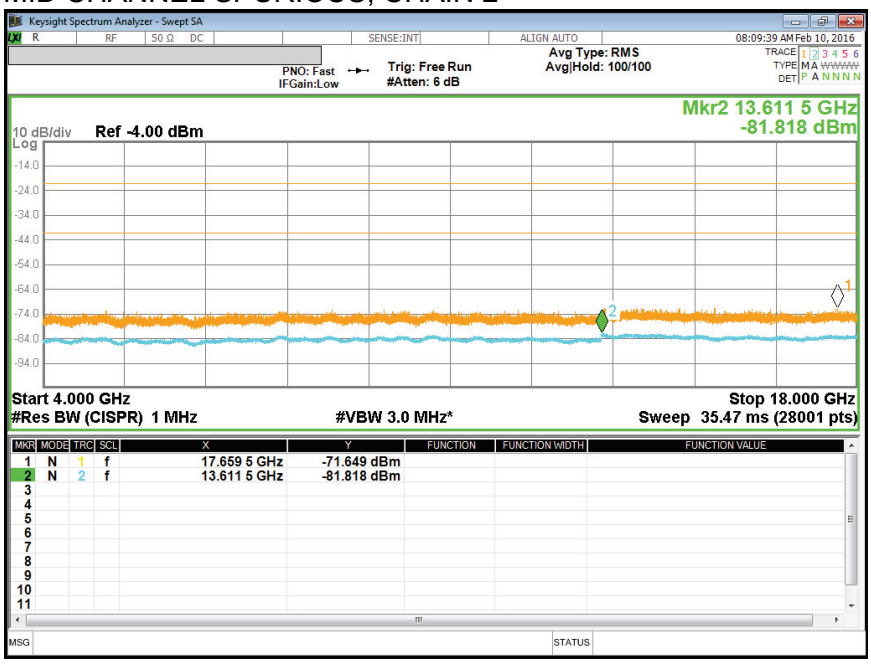
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HARMONICS AND SPURIOUS EMISSIONS, MID CHANNEL

MID CHANNEL SPURIOUS, CHAIN 1

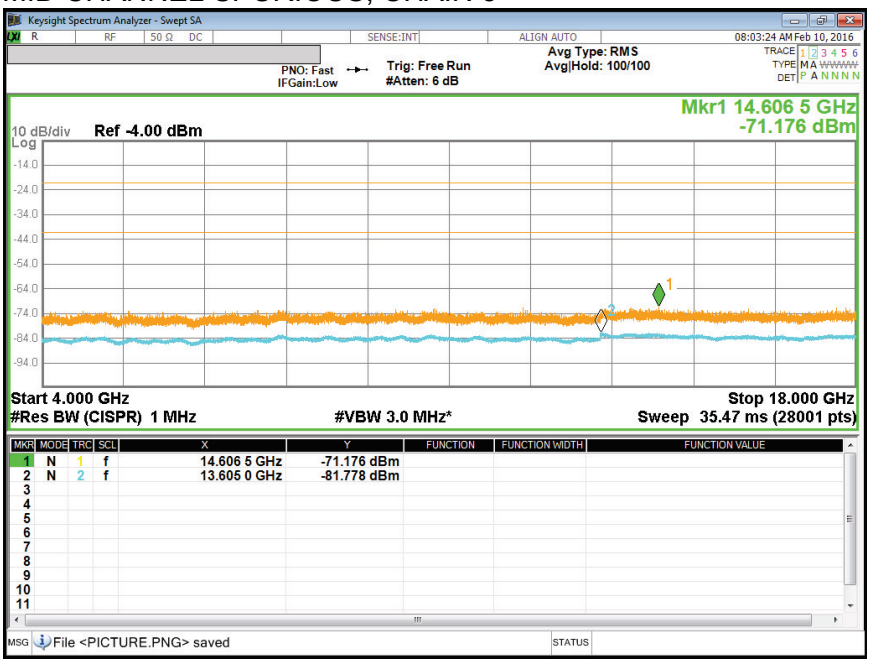


MID CHANNEL SPURIOUS, CHAIN 2

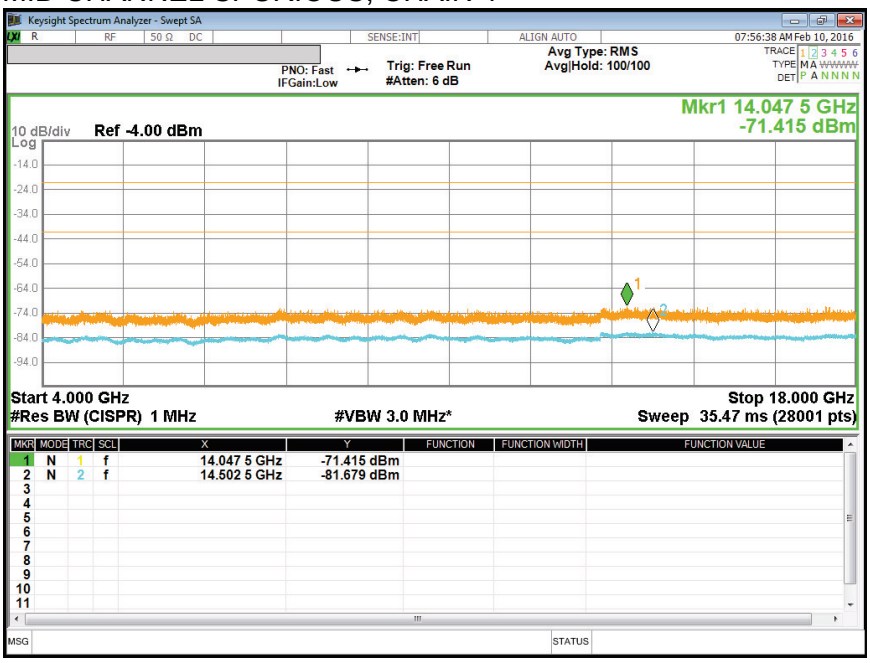


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MID CHANNEL SPURIOUS, CHAIN 3

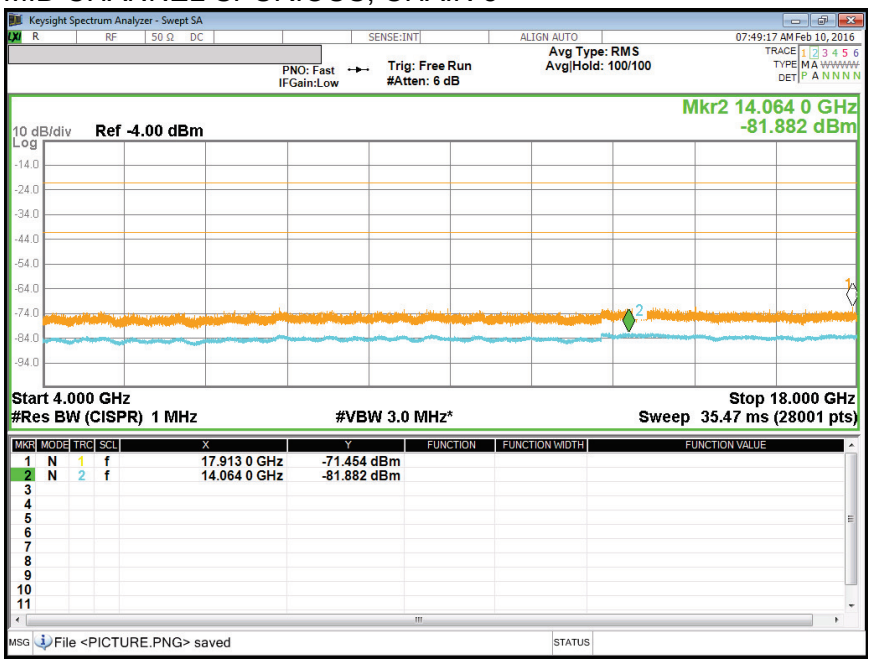


MID CHANNEL SPURIOUS, CHAIN 4

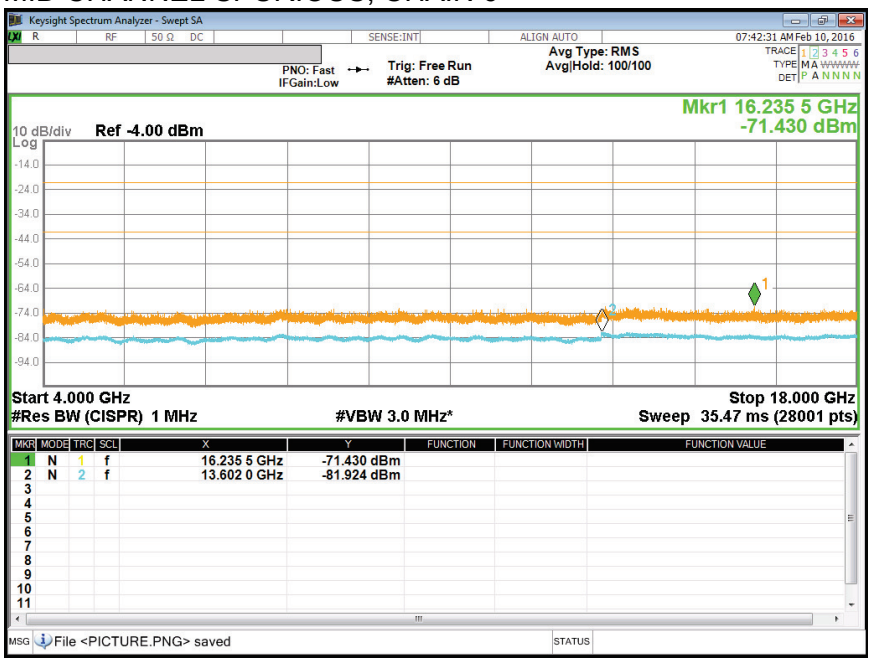


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MID CHANNEL SPURIOUS, CHAIN 5



MID CHANNEL SPURIOUS, CHAIN 6

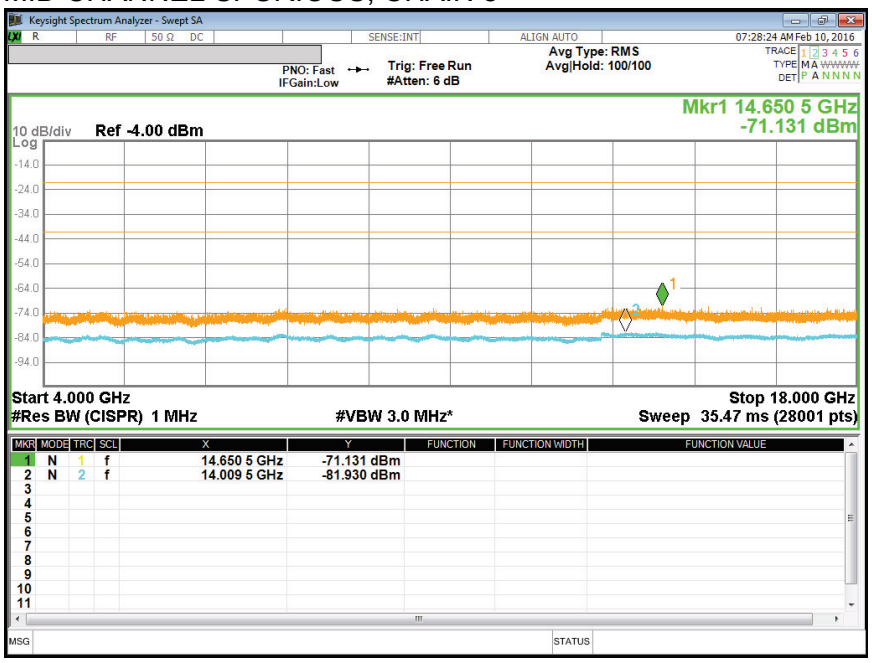


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MID CHANNEL SPURIOUS, CHAIN 7



MID CHANNEL SPURIOUS, CHAIN 8



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HARMONICS AND SPURIOUS EMISSIONS, HIGH CHANNEL, TABULAR DATA

The following measurements include an antenna gain of:

AG Chain 1 (dBi)	AG Chain 2 (dBi)	AG Chain 3 (dBi)	AG Chain 4 (dBi)	AG Chain 5 (dBi)	AG Chain 6 (dBi)	AG Chain 7 (dBi)	AG Chain 8 (dBi)
19.7	19.9	20	20.2	20.2	20.1	19.9	19.6

Frequency (MHz)		Meter PK Reading Chain 1 (dBm)	Meter PK Reading Chain 2 (dBm)	Meter PK Reading Chain 3 (dBm)	Meter PK Reading Chain 4 (dBm)	Meter PK Reading Chain 5 (dBm)	Meter PK Reading Chain 6 (dBm)	Meter PK Reading Chain 7 (dBm)	Meter PK Reading Chain 8 (dBm)	PK EIRP (dBm)	PK E-field Limit (dBm)	PK E-field Margin (dB)
Enter SA Value here		-71.435	-71.593	-70.855	-71.285	-71.519	-71.565	-71.616	-71.448			
4000-18000	FILTER	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8			
	CBL1	1.414	1.414	1.414	1.414	1.414	1.414	1.414	1.414			
	CBL2	1.475	1.475	1.475	1.475	1.475	1.475	1.475	1.475			
Final Value		-68.221	-68.379	-67.641	-68.071	-68.305	-68.351	-68.402	-68.234	-39.21	-21.2	-18.01

Frequency (MHz)		Meter AVG Reading Chain 1	Meter AVG Reading Chain 2	Meter AVG Reading Chain 3	Meter AVG Reading Chain 4	Meter AVG Reading Chain 5	Meter AVG Reading Chain 6	Meter AVG Reading Chain 7 (dBm)	Meter AVG Reading Chain 8	AVG EIRP (dBm)	AVG E-field Limit (dBm)	AVG E-field Margin (dB)
Enter SA Value here		-81.843	-81.693	-81.753	-81.756	-81.702	-81.807	-81.915	-81.673			
4000-18000	FILTER	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8			
	CBL1	1.414	1.414	1.414	1.414	1.414	1.414	1.414	1.414			
	CBL2	1.475	1.475	1.475	1.475	1.475	1.475	1.475	1.475			
	DCCF	0.68	0	0	0	0.67	0.67	0.68	0.68			
Final Value		-76.474	-77.004	-77.064	-77.067	-76.343	-76.448	-76.546	-76.304	-47.66	-41.2	-6.46

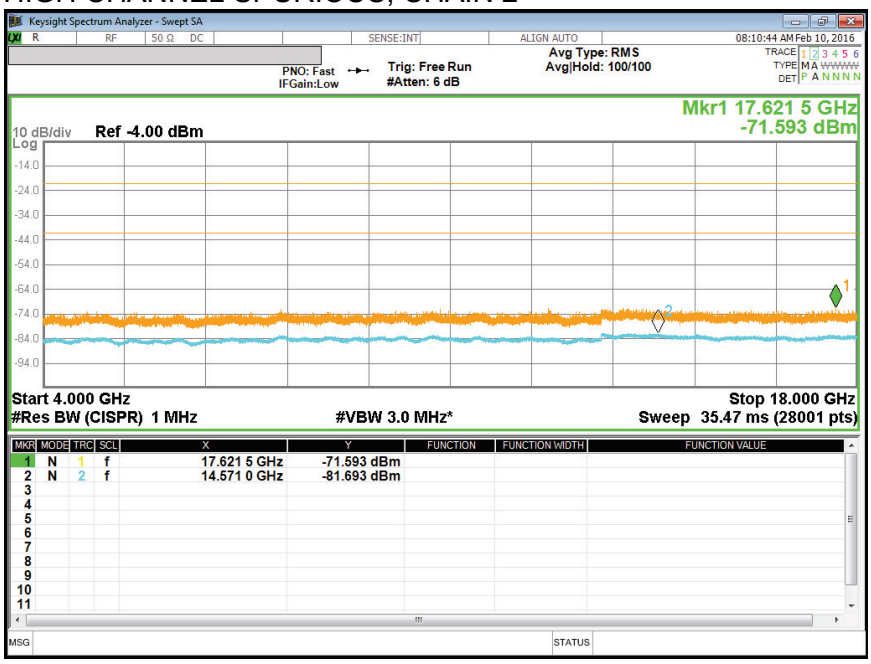
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HARMONICS AND SPURIOUS EMISSIONS, HIGH CHANNEL

HIGH CHANNEL SPURIOUS, CHAIN 1



HIGH CHANNEL SPURIOUS, CHAIN 2

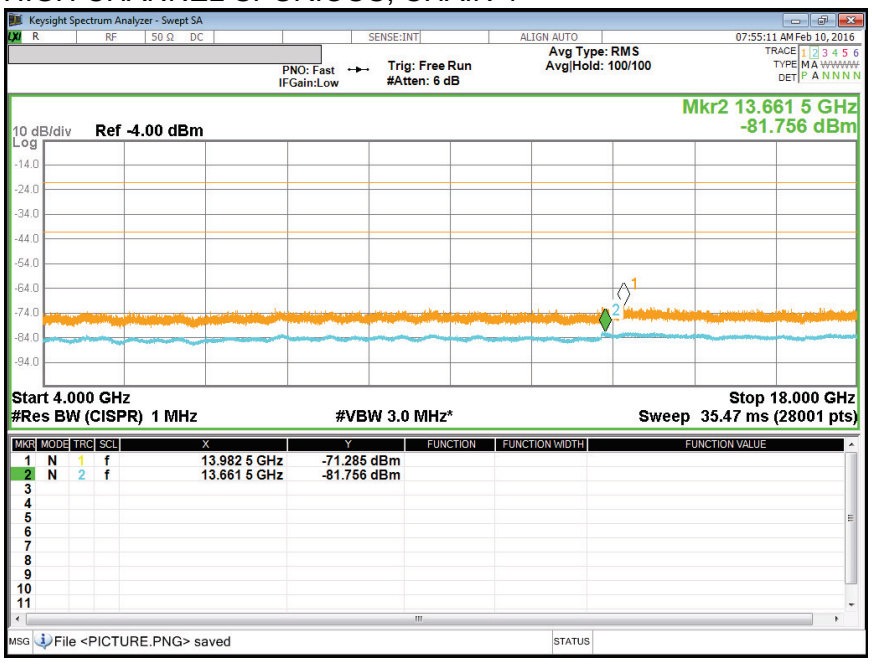


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HIGH CHANNEL SPURIOUS, CHAIN 3



HIGH CHANNEL SPURIOUS, CHAIN 4



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HIGH CHANNEL SPURIOUS, CHAIN 5

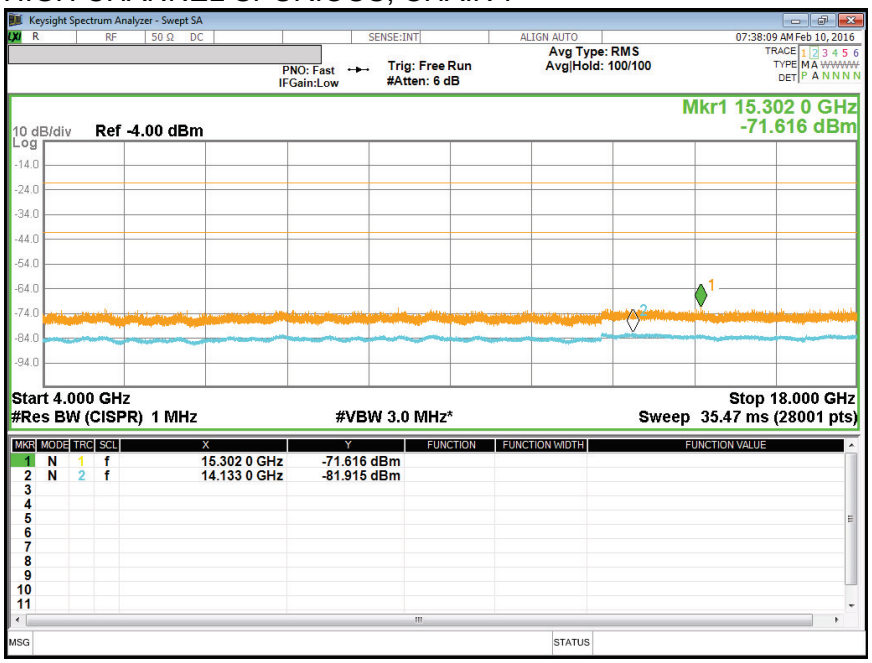


HIGH CHANNEL SPURIOUS, CHAIN 6



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HIGH CHANNEL SPURIOUS, CHAIN 7



HIGH CHANNEL SPURIOUS, CHAIN 8



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9.3.3. TX ABOVE 1 GHz IN THE 2.4 GHz BAND: 18-26 GHz

HARMONICS AND SPURIOUS EMISSIONS, LOW CHANNEL, TABULAR DATA

The following measurements include an antenna gain of:

AG Chain 1 (dBi)	AG Chain 2 (dBi)	AG Chain 3 (dBi)	AG Chain 4 (dBi)	AG Chain 5 (dBi)	AG Chain 6 (dBi)	AG Chain 7 (dBi)	AG Chain 8 (dBi)
19.7	19.9	20	20.2	20.2	20.1	19.9	19.6

Frequency (MHz)		Meter PK Reading Chain 1 (dBm)	Meter PK Reading Chain 2 (dBm)	Meter PK Reading Chain 3 (dBm)	Meter PK Reading Chain 4 (dBm)	Meter PK Reading Chain 5 (dBm)	Meter PK Reading Chain 6 (dBm)	Meter PK Reading Chain 7 (dBm)	Meter PK Reading Chain 8 (dBm)	PK EIRP (dBm)	PK E-field Limit (dBm)	PK E-field Margin (dB)
Enter SA Value here		-54.074	-54.412	-54.43	-54.004	-54.174	-54.327	-53.993	-54.472			
18000-26500	AMP	-27.445	-27.445	-27.445	-27.445	-27.445	-27.445	-27.445	-27.445			
	CBL1	1.773	1.773	1.773	1.773	1.773	1.773	1.773	1.773			
	CBL2	1.808	1.808	1.808	1.808	1.808	1.808	1.808	1.808			
Final Value		-77.938	-78.276	-78.294	-77.868	-78.038	-78.191	-77.857	-78.336	-49.11	-21.2	-27.91

Frequency (MHz)		Meter AVG Reading Chain 1	Meter AVG Reading Chain 2	Meter AVG Reading Chain 3	Meter AVG Reading Chain 4	Meter AVG Reading Chain 5	Meter AVG Reading Chain 6	Meter AVG Reading Chain 7 (dBm)	Meter AVG Reading Chain 8	AVG EIRP (dBm)	AVG E-field Limit (dBm)	AVG E-field Margin (dB)
Enter SA Value here		-64.484	-64.782	-64.693	-64.638	-64.53	-64.573	-64.538	-64.397			
18000-26500	AMP	-27.445	-27.445	-27.445	-27.445	-27.445	-27.445	-27.445	-27.445			
	CBL1	1.773	1.773	1.773	1.773	1.773	1.773	1.773	1.773			
	CBL2	1.808	1.808	1.808	1.808	1.808	1.808	1.808	1.808			
	DCCF	0.68	0	0	0	0.67	0.67	0.68	0.68			
Final Value		-87.668	-88.646	-88.557	-88.502	-87.724	-87.767	-87.722	-87.581	-59.02	-41.2	-17.82

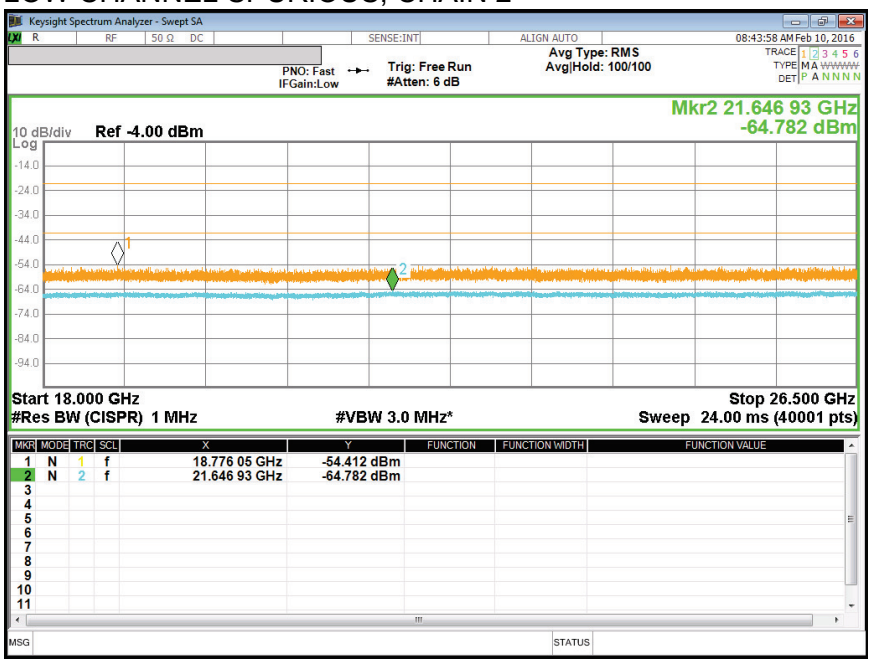
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HARMONICS AND SPURIOUS EMISSIONS, LOW CHANNEL

LOW CHANNEL SPURIOUS, CHAIN 1



LOW CHANNEL SPURIOUS, CHAIN 2



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LOW CHANNEL SPURIOUS, CHAIN 3



LOW CHANNEL SPURIOUS, CHAIN 4



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LOW CHANNEL SPURIOUS, CHAIN 5



LOW CHANNEL SPURIOUS, CHAIN 6



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LOW CHANNEL SPURIOUS, CHAIN 7



LOW CHANNEL SPURIOUS, CHAIN 8



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HARMONICS AND SPURIOUS EMISSIONS, MID CHANNEL, TABULAR DATA

The following measurements include an antenna gain of:

AG Chain 1 (dBi)	AG Chain 2 (dBi)	AG Chain 3 (dBi)	AG Chain 4 (dBi)	AG Chain 5 (dBi)	AG Chain 6 (dBi)	AG Chain 7 (dBi)	AG Chain 8 (dBi)
19.7	19.9	20	20.2	20.2	20.1	19.9	19.6

Frequency (MHz)		Meter PK Reading Chain 1 (dBm)	Meter PK Reading Chain 2 (dBm)	Meter PK Reading Chain 3 (dBm)	Meter PK Reading Chain 4 (dBm)	Meter PK Reading Chain 5 (dBm)	Meter PK Reading Chain 6 (dBm)	Meter PK Reading Chain 7 (dBm)	Meter PK Reading Chain 8 (dBm)	PK EIRP (dBm)	PK E-field Limit (dBm)	PK E-field Margin (dB)
Enter SA Value here		-53.973	-53.99	-54.009	-53.982	-54.036	-54.39	-54.393	-53.183			
18000-26500	AMP	-27.445	-27.445	-27.445	-27.445	-27.445	-27.445	-27.445	-27.445			
	CBL1	1.773	1.773	1.773	1.773	1.773	1.773	1.773	1.773			
	CBL2	1.808	1.808	1.808	1.808	1.808	1.808	1.808	1.808			
Final Value		-77.837	-77.854	-77.873	-77.846	-77.9	-78.254	-78.257	-77.047	-48.87	-21.2	-27.67

Frequency (MHz)		Meter AVG Reading Chain 1	Meter AVG Reading Chain 2	Meter AVG Reading Chain 3	Meter AVG Reading Chain 4	Meter AVG Reading Chain 5	Meter AVG Reading Chain 6	Meter AVG Reading Chain 7 (dBm)	Meter AVG Reading Chain 8	AVG EIRP (dBm)	AVG E-field Limit (dBm)	AVG E-field Margin (dB)
Enter SA Value here		-64.358	-64.62	-64.721	-64.425	-64.411	-64.715	-64.69	-64.472			
18000-26500	AMP	-27.445	-27.445	-27.445	-27.445	-27.445	-27.445	-27.445	-27.445			
	CBL1	1.773	1.773	1.773	1.773	1.773	1.773	1.773	1.773			
	CBL2	1.808	1.808	1.808	1.808	1.808	1.808	1.808	1.808			
	DCCF	0.68	0	0	0	0.67	0.67	0.68	0.68			
Final Value		-87.542	-88.484	-88.585	-88.289	-87.605	-87.909	-87.874	-87.656	-59.00	-41.2	-17.80

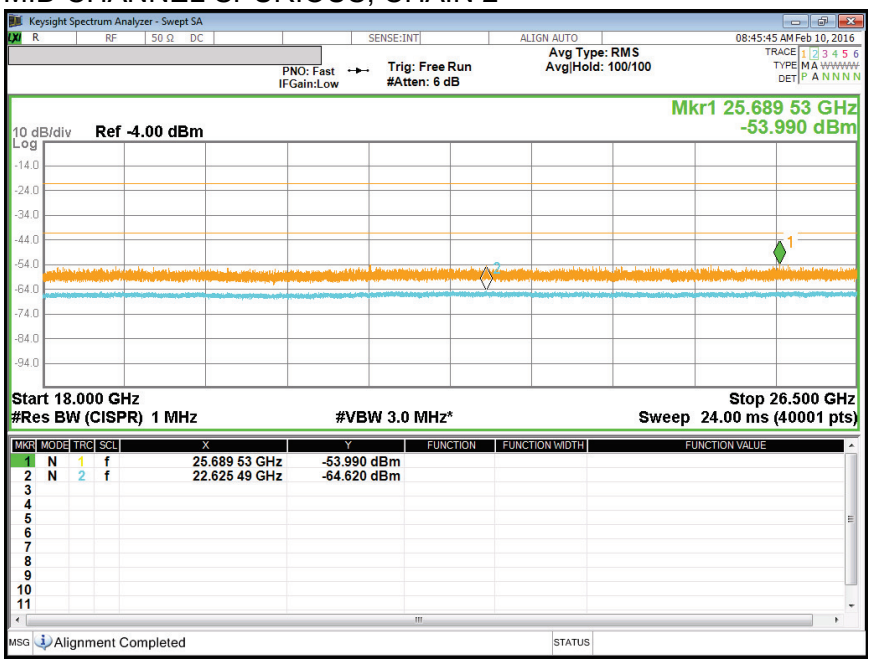
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HARMONICS AND SPURIOUS EMISSIONS, MID CHANNEL

MID CHANNEL SPURIOUS, CHAIN 1



MID CHANNEL SPURIOUS, CHAIN 2



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MID CHANNEL SPURIOUS, CHAIN 3



MID CHANNEL SPURIOUS, CHAIN 4



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MID CHANNEL SPURIOUS, CHAIN 5



MID CHANNEL SPURIOUS, CHAIN 6



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MID CHANNEL SPURIOUS, CHAIN 7



MID CHANNEL SPURIOUS, CHAIN 8



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HARMONICS AND SPURIOUS EMISSIONS, HIGH CHANNEL, TABULAR DATA

The following measurements include an antenna gain of:

AG Chain 1 (dBi)	AG Chain 2 (dBi)	AG Chain 3 (dBi)	AG Chain 4 (dBi)	AG Chain 5 (dBi)	AG Chain 6 (dBi)	AG Chain 7 (dBi)	AG Chain 8 (dBi)
19.7	19.9	20	20.2	20.2	20.1	19.9	19.6

Frequency (MHz)		Meter PK Reading Chain 1 (dBm)	Meter PK Reading Chain 2 (dBm)	Meter PK Reading Chain 3 (dBm)	Meter PK Reading Chain 4 (dBm)	Meter PK Reading Chain 5 (dBm)	Meter PK Reading Chain 6 (dBm)	Meter PK Reading Chain 7 (dBm)	Meter PK Reading Chain 8 (dBm)	PK EIRP (dBm)	PK E-field Limit (dBm)	PK E-field Margin (dB)
Enter SA Value here		-53.856	-54.479	-54.623	-53.686	-54.307	-54.456	-53.951	-54.131			
18000-26500	AMP	-27.445	-27.445	-27.445	-27.445	-27.445	-27.445	-27.445	-27.445			
	CBL1	1.773	1.773	1.773	1.773	1.773	1.773	1.773	1.773			
	CBL2	1.808	1.808	1.808	1.808	1.808	1.808	1.808	1.808			
Final Value		-77.72	-78.343	-78.487	-77.55	-78.171	-78.32	-77.815	-77.995	-49.05	-21.2	-27.85

Frequency (MHz)		Meter AVG Reading Chain 1	Meter AVG Reading Chain 2	Meter AVG Reading Chain 3	Meter AVG Reading Chain 4	Meter AVG Reading Chain 5	Meter AVG Reading Chain 6	Meter AVG Reading Chain 7 (dBm)	Meter AVG Reading Chain 8	AVG EIRP (dBm)	AVG E-field Limit (dBm)	AVG E-field Margin (dB)
Enter SA Value here		-64.441	-64.573	-64.772	-64.717	-64.808	-64.637	-64.594	-64.355			
18000-26500	AMP	-27.445	-27.445	-27.445	-27.445	-27.445	-27.445	-27.445	-27.445			
	CBL1	1.773	1.773	1.773	1.773	1.773	1.773	1.773	1.773			
	CBL2	1.808	1.808	1.808	1.808	1.808	1.808	1.808	1.808			
	DCCF	0.68	0	0	0	0.67	0.67	0.68	0.68			
Final Value		-87.625	-88.437	-88.636	-88.581	-88.002	-87.831	-87.778	-87.539	-59.06	-41.2	-17.86

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HARMONICS AND SPURIOUS EMISSIONS, HIGH CHANNEL

HIGH CHANNEL SPURIOUS, CHAIN 1



HIGH CHANNEL SPURIOUS, CHAIN 2



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HIGH CHANNEL SPURIOUS, CHAIN 3



HIGH CHANNEL SPURIOUS, CHAIN 4



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HIGH CHANNEL SPURIOUS, CHAIN 5



HIGH CHANNEL SPURIOUS, CHAIN 6



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HIGH CHANNEL SPURIOUS, CHAIN 7



HIGH CHANNEL SPURIOUS, CHAIN 8



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9.3.4. TX BELOW 1 GHz IN THE 2.4 GHz BAND: 30-1000 MHz

RESULTS – 30-1000 MHz, WORST CASE

HARMONICS AND SPURIOUS EMISSIONS, WORST-CASE TABULAR DATA

The following measurements include the 4.7 dB ground reflection factor and an antenna gain of:

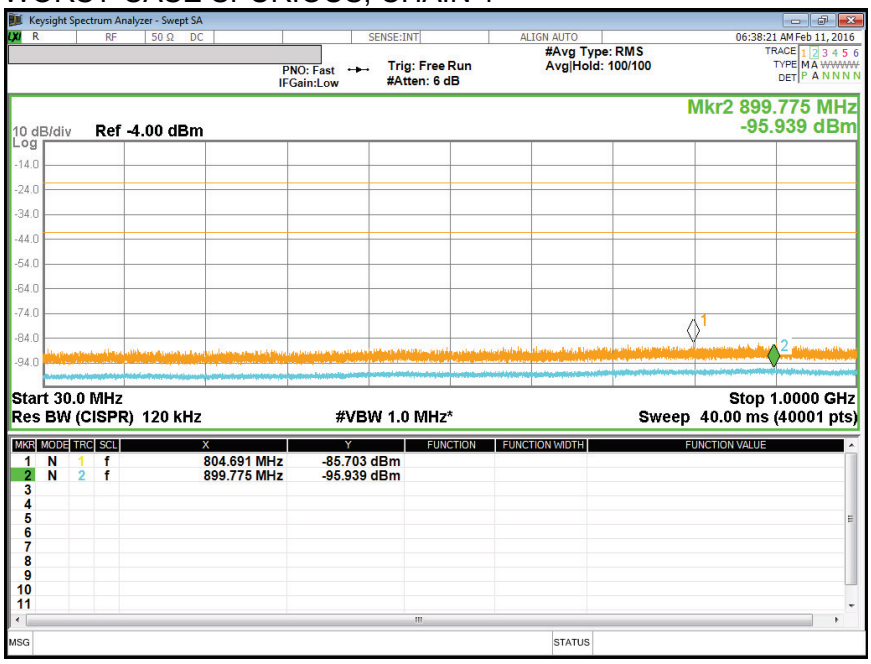
AG Chain 1 (dBi)	AG Chain 2 (dBi)	AG Chain 3 (dBi)	AG Chain 4 (dBi)	AG Chain 5 (dBi)	AG Chain 6 (dBi)	AG Chain 7 (dBi)	AG Chain 8 (dBi)
19.7	19.9	20	20.2	20.2	20.1	19.9	19.6

Frequency (MHz)		Meter PK Reading Chain 1 (dBm)	Meter PK Reading Chain 2 (dBm)	Meter PK Reading Chain 3 (dBm)	Meter PK Reading Chain 4 (dBm)	Meter PK Reading Chain 5 (dBm)	Meter PK Reading Chain 6 (dBm)	Meter PK Reading Chain 7 (dBm)	Meter PK Reading Chain 8 (dBm)	PK EIRP (dBm)	PK E-field Limit (dBm)	PK E-field Margin (dB)
Enter SA Value here		-85.703	-85.784	-85.787	-85.204	-86.064	-85.703	-86.2	-86.414			
30-1000	FILTER	1.782	1.782	1.782	1.782	1.782	1.782	1.782	1.782			
	CBL1	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213			
	CBL2	0.211	0.211	0.211	0.211	0.211	0.211	0.211	0.211			
Final Value		-83.497	-83.578	-83.581	-82.998	-83.858	-83.497	-83.994	-84.208	-49.94	-21.2	-28.74

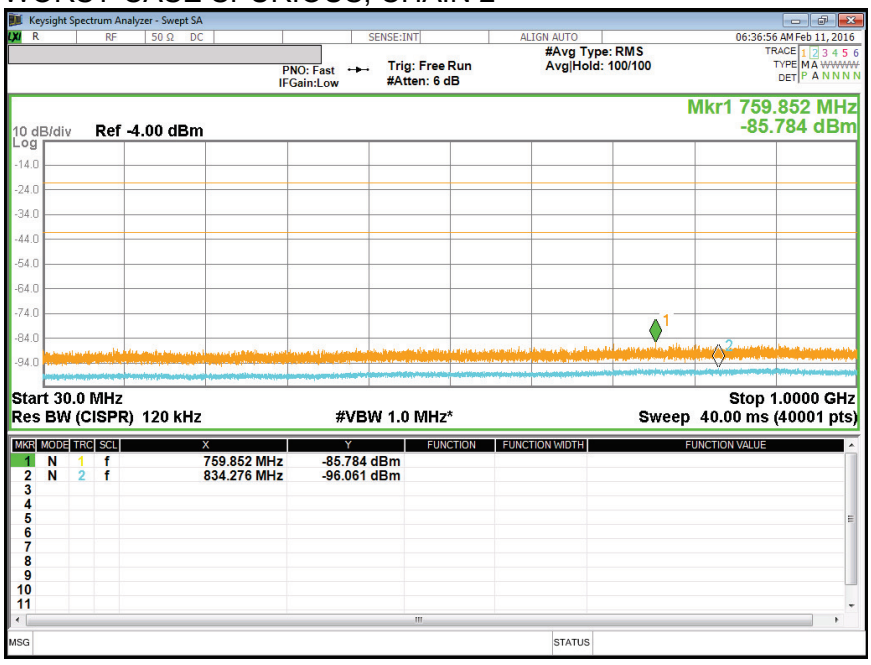
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HARMONICS AND SPURIOUS EMISSIONS, WORST-CASE, PLOTS

WORST-CASE SPURIOUS, CHAIN 1



WORST-CASE SPURIOUS, CHAIN 2

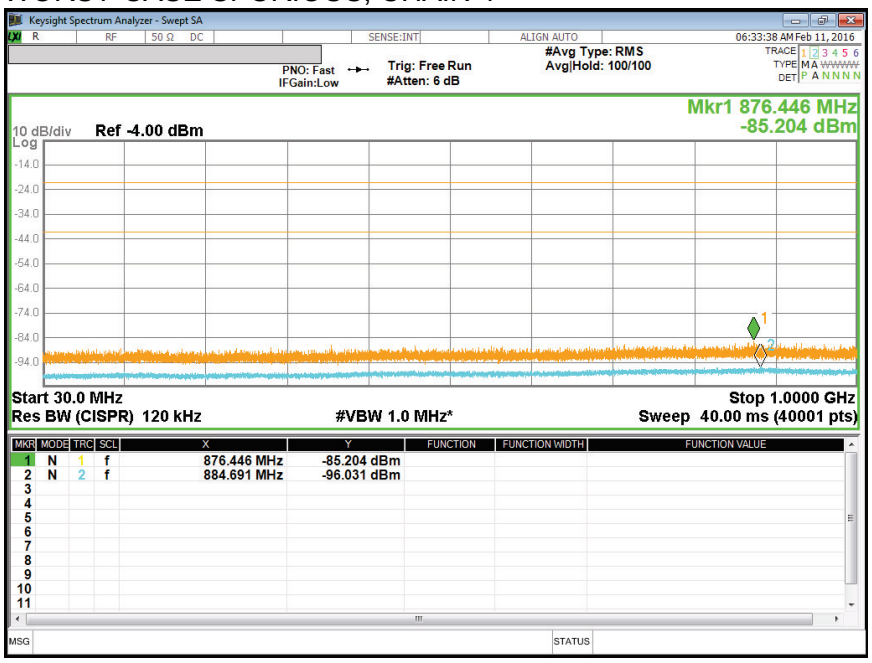


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WORST-CASE SPURIOUS, CHAIN 3



WORST-CASE SPURIOUS, CHAIN 4

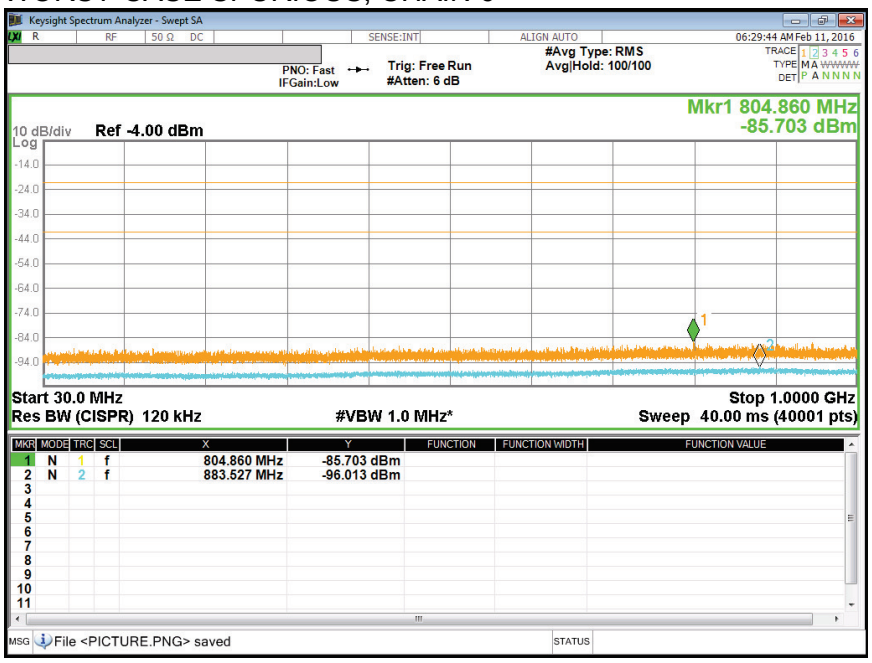


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WORST-CASE SPURIOUS, CHAIN 5



WORST-CASE SPURIOUS, CHAIN 6

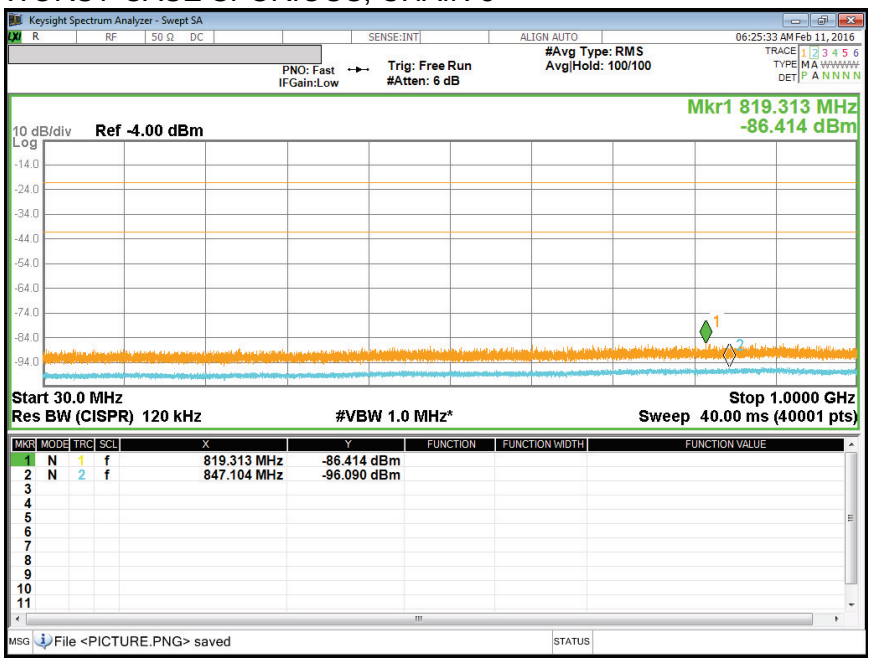


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WORST-CASE SPURIOUS, CHAIN 7



WORST-CASE SPURIOUS, CHAIN 8



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