

Annex for FCC LTE Band 17

Test Report No. :CTL2203279012-WF10

Appendix A RF Output Power

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band17	5MHz	QPSK	23755	1RB#0	25.01	PASS
Band17	5MHz	QPSK	23755	1RB#12	25.11	PASS
Band17	5MHz	QPSK	23755	1RB#24	25.04	PASS
Band17	5MHz	QPSK	23755	12RB#0	24.00	PASS
Band17	5MHz	QPSK	23755	12RB#6	23.98	PASS
Band17	5MHz	QPSK	23755	12RB#13	24.21	PASS
Band17	5MHz	QPSK	23755	25RB#0	24.10	PASS
Band17	5MHz	QPSK	23790	1RB#0	25.05	PASS
Band17	5MHz	QPSK	23790	1RB#12	25.12	PASS
Band17	5MHz	QPSK	23790	1RB#24	25.03	PASS
Band17	5MHz	QPSK	23790	12RB#0	24.04	PASS
Band17	5MHz	QPSK	23790	12RB#6	24.07	PASS
Band17	5MHz	QPSK	23790	12RB#13	23.94	PASS
Band17	5MHz	QPSK	23790	25RB#0	23.98	PASS
Band17	5MHz	QPSK	23825	1RB#0	25.04	PASS
Band17	5MHz	QPSK	23825	1RB#12	25.19	PASS
Band17	5MHz	QPSK	23825	1RB#24	25.10	PASS
Band17	5MHz	QPSK	23825	12RB#0	24.18	PASS
Band17	5MHz	QPSK	23825	12RB#6	24.22	PASS
Band17	5MHz	QPSK	23825	12RB#13	24.12	PASS
Band17	5MHz	QPSK	23825	25RB#0	24.14	PASS
Band17	5MHz	16QAM	23755	1RB#0	24.04	PASS
Band17	5MHz	16QAM	23755	1RB#12	24.09	PASS
Band17	5MHz	16QAM	23755	1RB#24	24.04	PASS
Band17	5MHz	16QAM	23755	12RB#0	22.96	PASS
Band17	5MHz	16QAM	23755	12RB#6	22.97	PASS
Band17	5MHz	16QAM	23755	12RB#13	23.17	PASS
Band17	5MHz	16QAM	23755	25RB#0	23.01	PASS
Band17	5MHz	16QAM	23790	1RB#0	23.89	PASS
Band17	5MHz	16QAM	23790	1RB#12	24.01	PASS
Band17	5MHz	16QAM	23790	1RB#24	23.89	PASS
Band17	5MHz	16QAM	23790	12RB#0	23.05	PASS
Band17	5MHz	16QAM	23790	12RB#6	23.05	PASS
Band17	5MHz	16QAM	23790	12RB#13	22.87	PASS
Band17	5MHz	16QAM	23790	25RB#0	22.97	PASS
Band17	5MHz	16QAM	23825	1RB#0	23.99	PASS

Band17	5MHz	16QAM	23825	1RB#12	24.10	PASS
Band17	5MHz	16QAM	23825	1RB#24	23.92	PASS
Band17	5MHz	16QAM	23825	12RB#0	23.16	PASS
Band17	5MHz	16QAM	23825	12RB#6	23.15	PASS
Band17	5MHz	16QAM	23825	12RB#13	23.05	PASS
Band17	5MHz	16QAM	23825	25RB#0	23.13	PASS
Band17	10MHz	QPSK	23780	1RB#0	25.03	PASS
Band17	10MHz	QPSK	23780	1RB#24	25.17	PASS
Band17	10MHz	QPSK	23780	1RB#49	25.07	PASS
Band17	10MHz	QPSK	23780	25RB#0	23.87	PASS
Band17	10MHz	QPSK	23780	25RB#12	23.89	PASS
Band17	10MHz	QPSK	23780	25RB#25	23.83	PASS
Band17	10MHz	QPSK	23780	50RB#0	23.92	PASS
Band17	10MHz	QPSK	23790	1RB#0	25.11	PASS
Band17	10MHz	QPSK	23790	1RB#24	25.12	PASS
Band17	10MHz	QPSK	23790	1RB#49	25.17	PASS
Band17	10MHz	QPSK	23790	25RB#0	23.98	PASS
Band17	10MHz	QPSK	23790	25RB#12	23.97	PASS
Band17	10MHz	QPSK	23790	25RB#25	23.89	PASS
Band17	10MHz	QPSK	23790	50RB#0	23.95	PASS
Band17	10MHz	QPSK	23800	1RB#0	25.07	PASS
Band17	10MHz	QPSK	23800	1RB#24	25.18	PASS
Band17	10MHz	QPSK	23800	1RB#49	25.07	PASS
Band17	10MHz	QPSK	23800	25RB#0	24.14	PASS
Band17	10MHz	QPSK	23800	25RB#12	24.11	PASS
Band17	10MHz	QPSK	23800	25RB#25	24.06	PASS
Band17	10MHz	QPSK	23800	50RB#0	24.12	PASS
Band17	10MHz	16QAM	23780	1RB#0	24.04	PASS
Band17	10MHz	16QAM	23780	1RB#24	24.21	PASS
Band17	10MHz	16QAM	23780	1RB#49	24.07	PASS
Band17	10MHz	16QAM	23780	25RB#0	22.87	PASS
Band17	10MHz	16QAM	23780	25RB#12	22.89	PASS
Band17	10MHz	16QAM	23780	25RB#25	22.74	PASS
Band17	10MHz	16QAM	23780	50RB#0	22.86	PASS
Band17	10MHz	16QAM	23790	1RB#0	23.88	PASS
Band17	10MHz	16QAM	23790	1RB#24	23.92	PASS
Band17	10MHz	16QAM	23790	1RB#49	23.88	PASS
Band17	10MHz	16QAM	23790	25RB#0	22.94	PASS
Band17	10MHz	16QAM	23790	25RB#12	22.94	PASS
Band17	10MHz	16QAM	23790	25RB#25	22.91	PASS
Band17	10MHz	16QAM	23790	50RB#0	22.95	PASS
Band17	10MHz	16QAM	23800	1RB#0	23.79	PASS
Band17	10MHz	16QAM	23800	1RB#24	24.03	PASS
Band17	10MHz	16QAM	23800	1RB#49	23.81	PASS
Band17	10MHz	16QAM	23800	25RB#0	23.09	PASS
Band17	10MHz	16QAM	23800	25RB#12	23.13	PASS

Band17	10MHz	16QAM	23800	25RB#25	23.04	PASS
Band17	10MHz	16QAM	23800	50RB#0	23.07	PASS

Appendix B Max Effective Radiated Power

Test Result

LTE Band 17								
Antenna Gain(dBi)		1.25						
ERP Limit(W)		3.00						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Output Power (dBm)	ERP (dBm)	ERP (W)	99% BW (KHz)	Emission Designator
5.0	QPSK	706.5	713.5	25.19	24.29	0.26853	4525.3	4M53G7D
	16QAM			24.01	23.11	0.20464	4555.2	4M56W7D
10.0	QPSK	709	711	25.18	24.28	0.26792	9005.2	9M01G7D
	16QAM			24.21	23.31	0.21429	8992.1	8M99W7D

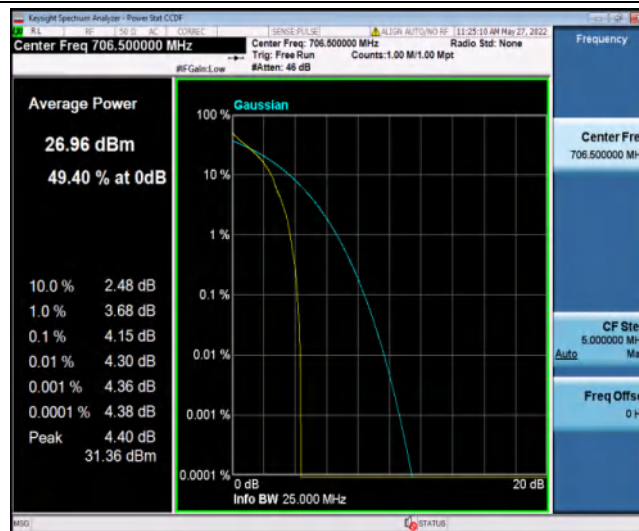
Note: ERP= Conducted Output Power + Antenna Gain-2.15

Appendix C Peak-to-Average Ratio(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band17	5MHz	QPSK	23755	1RB#0	4.15	13	PASS
Band17	5MHz	QPSK	23755	25RB#0	4.78	13	PASS
Band17	5MHz	QPSK	23790	1RB#0	3.78	13	PASS
Band17	5MHz	QPSK	23790	25RB#0	4.81	13	PASS
Band17	5MHz	QPSK	23825	1RB#0	3.94	13	PASS
Band17	5MHz	QPSK	23825	25RB#0	4.78	13	PASS
Band17	5MHz	16QAM	23755	1RB#0	4.90	13	PASS
Band17	5MHz	16QAM	23755	25RB#0	5.61	13	PASS
Band17	5MHz	16QAM	23790	1RB#0	4.61	13	PASS
Band17	5MHz	16QAM	23790	25RB#0	5.66	13	PASS
Band17	5MHz	16QAM	23825	1RB#0	4.79	13	PASS
Band17	5MHz	16QAM	23825	25RB#0	5.66	13	PASS
Band17	10MHz	QPSK	23780	1RB#0	4.05	13	PASS
Band17	10MHz	QPSK	23780	50RB#0	4.91	13	PASS
Band17	10MHz	QPSK	23790	1RB#0	3.88	13	PASS
Band17	10MHz	QPSK	23790	50RB#0	4.87	13	PASS
Band17	10MHz	QPSK	23800	1RB#0	3.75	13	PASS
Band17	10MHz	QPSK	23800	50RB#0	4.87	13	PASS
Band17	10MHz	16QAM	23780	1RB#0	4.95	13	PASS
Band17	10MHz	16QAM	23780	50RB#0	5.76	13	PASS
Band17	10MHz	16QAM	23790	1RB#0	4.92	13	PASS
Band17	10MHz	16QAM	23790	50RB#0	5.75	13	PASS
Band17	10MHz	16QAM	23800	1RB#0	4.93	13	PASS
Band17	10MHz	16QAM	23800	50RB#0	5.73	13	PASS

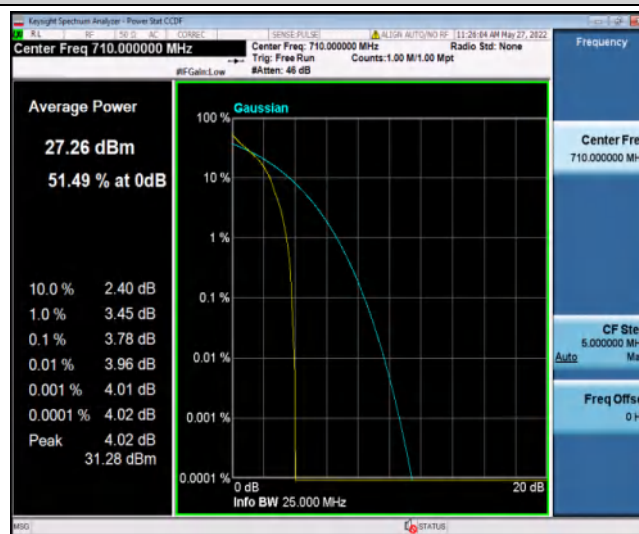
Test Graphs



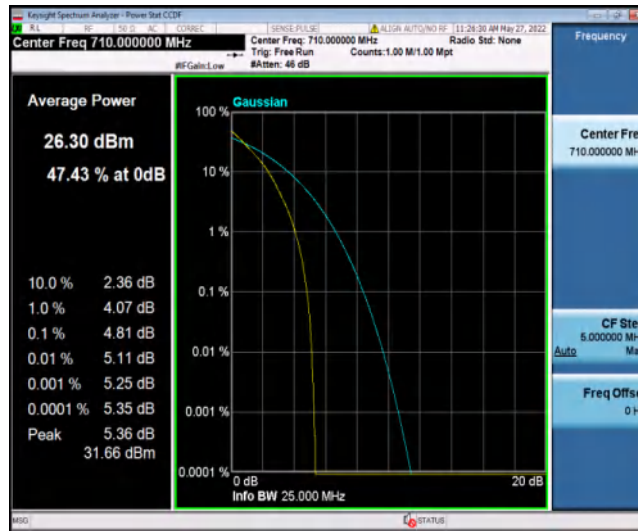
Band17-5MHz-QPSK-23755-1RB#0



Band17-5MHz-QPSK-23755-25RB#0



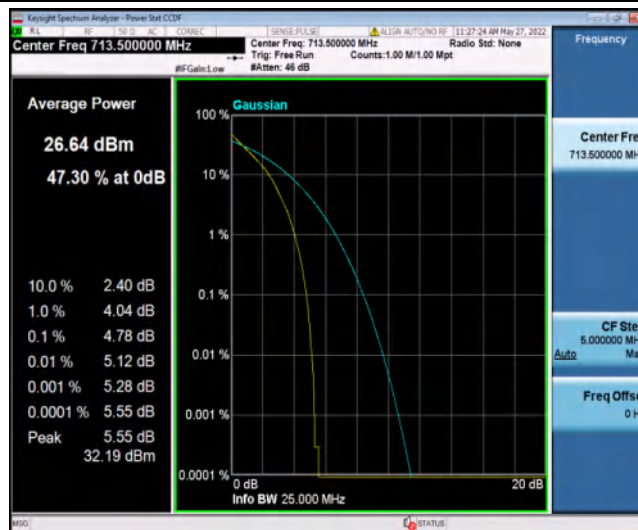
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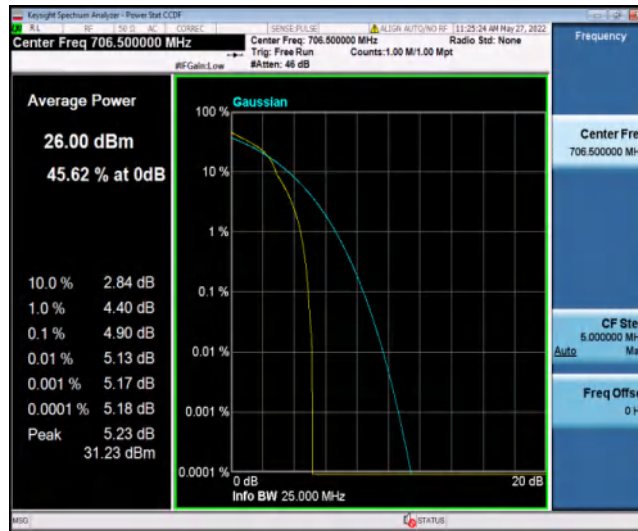
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Band17-5MHz-QPSK-23825-1RB#0



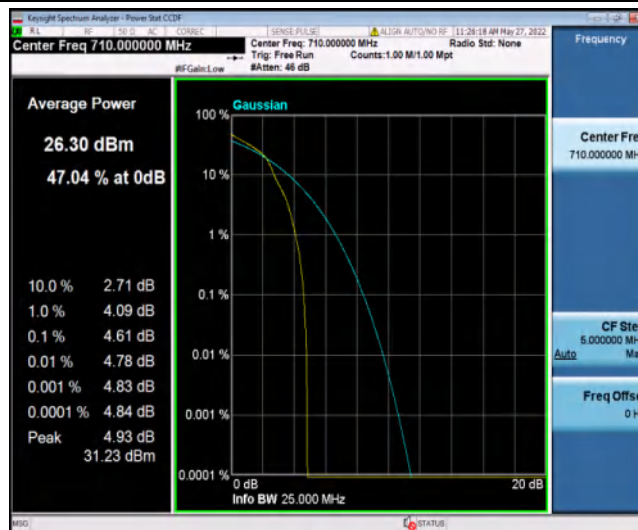
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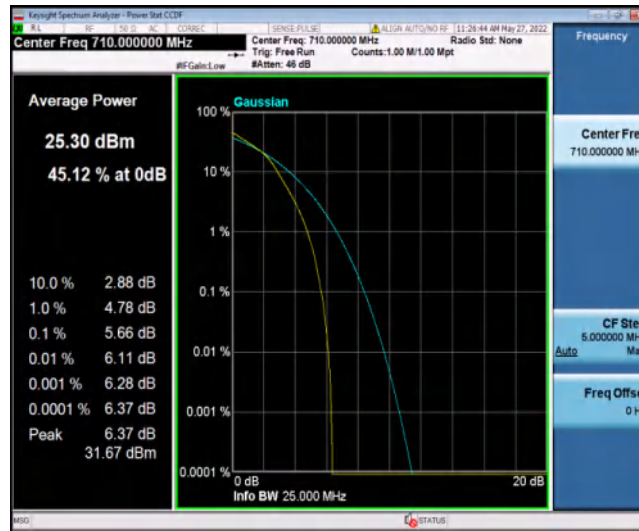
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Band17-5MHz-16QAM-23755-25RB#0



Band17-5MHz-16QAM-23790-1RB#0



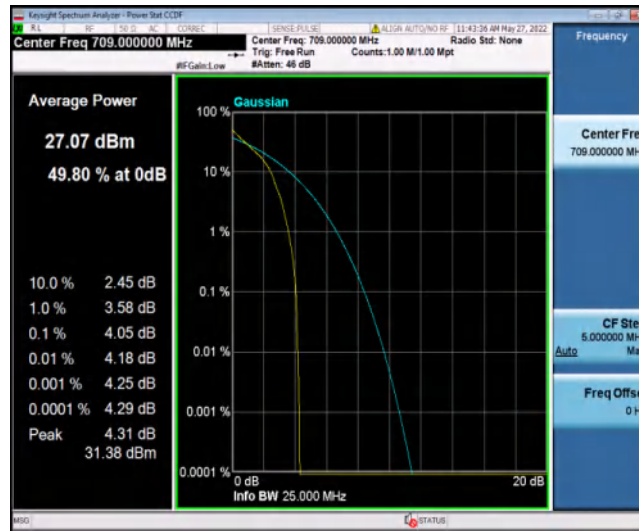
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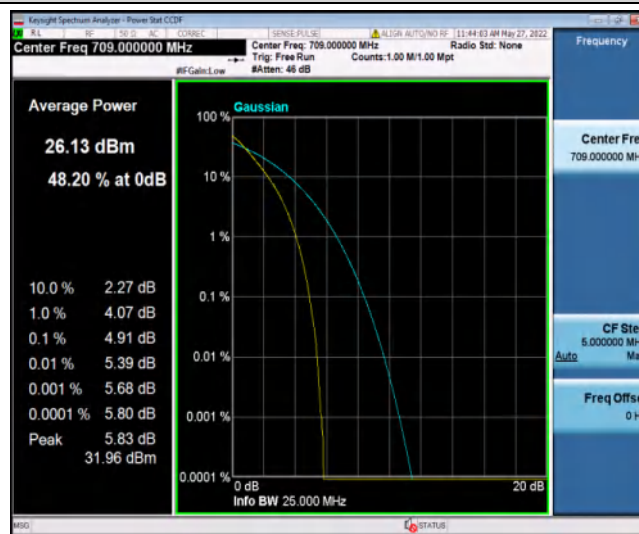
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Band17-5MHz-16QAM-23825-25RB#0



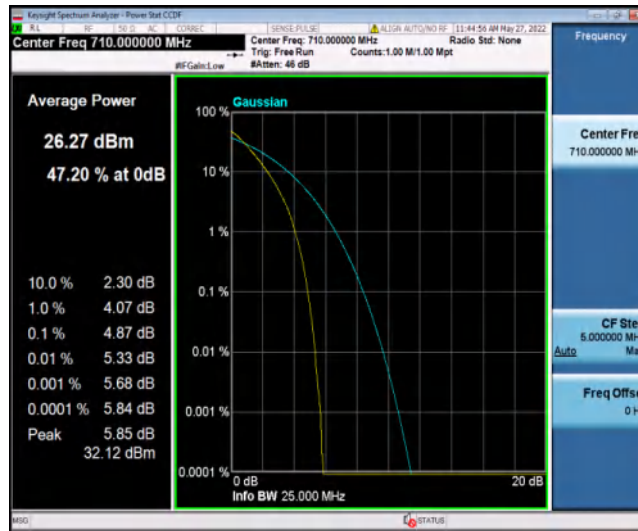
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Band17-10MHz-QPSK-23780-50RB#0



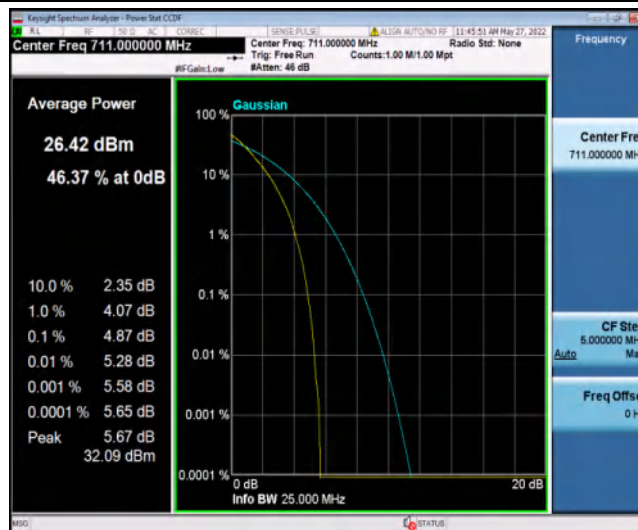
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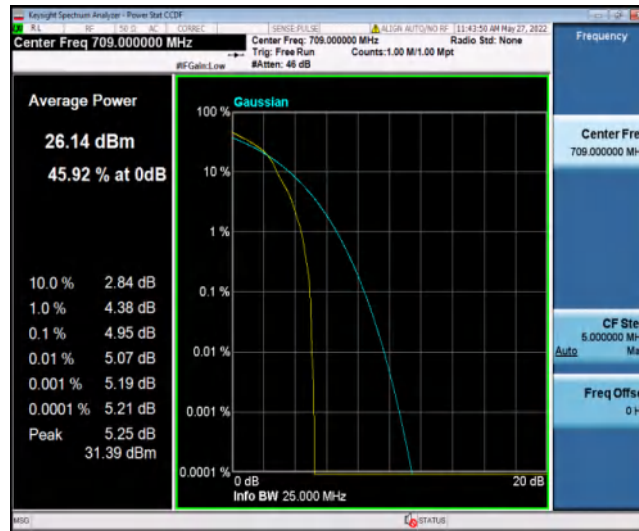
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Band17-10MHz-QPSK-23800-1RB#0



Band17-10MHz-QPSK-23800-50RB#0



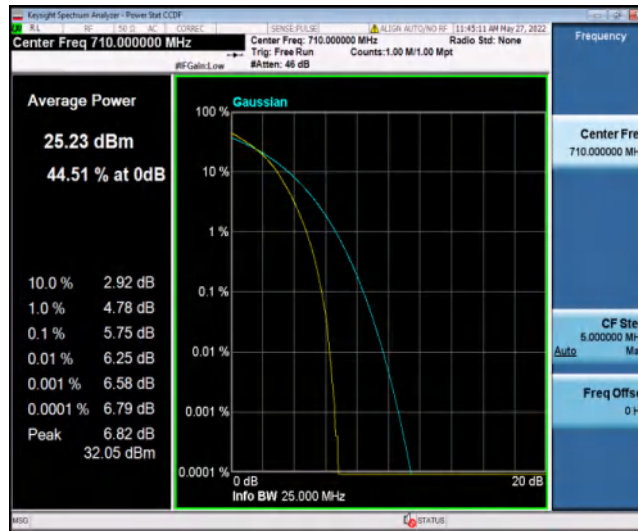
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Band17-10MHz-16QAM-23780-50RB#0



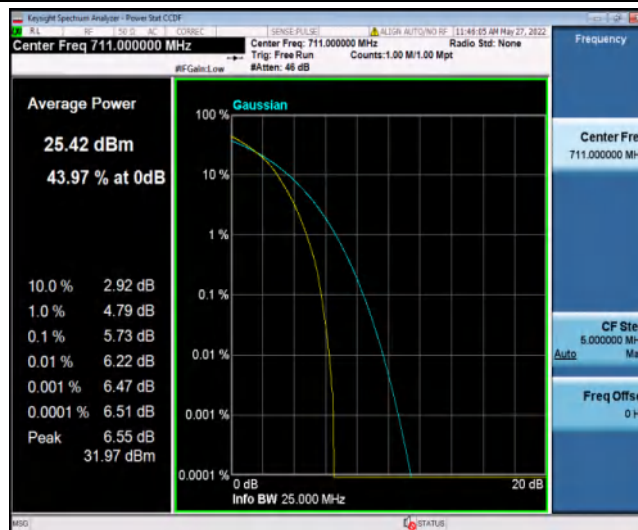
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Band17-10MHz-16QAM-23790-50RB#0



Band17-10MHz-16QAM-23800-1RB#0



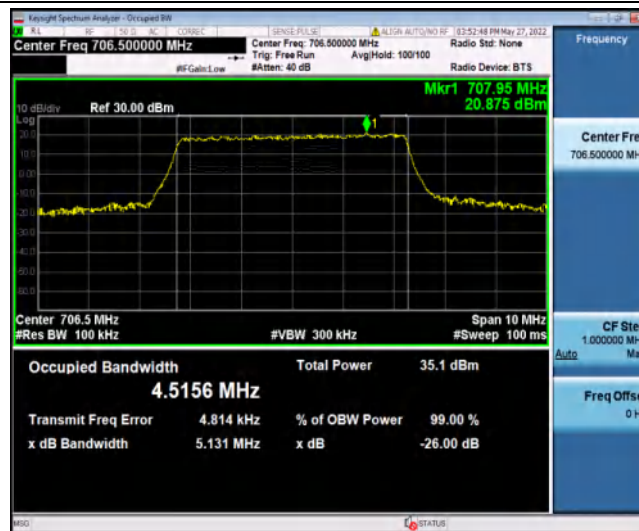
Band17-10MHz-16QAM-23800-50RB#0

Appendix D : 26dB Bandwidth and Occupied Bandwidth

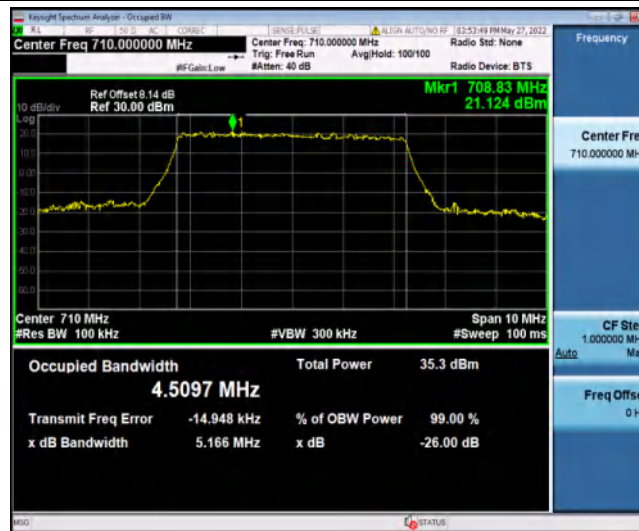
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band17	5MHz	QPSK	23755	25RB#0	4.5156	4.516	PASS
Band17	5MHz	QPSK	23790	25RB#0	4.5097	4.510	PASS
Band17	5MHz	QPSK	23825	25RB#0	4.5253	4.525	PASS
Band17	5MHz	16QAM	23755	25RB#0	4.5291	4.529	PASS
Band17	5MHz	16QAM	23790	25RB#0	4.5080	4.508	PASS
Band17	5MHz	16QAM	23825	25RB#0	4.5552	4.555	PASS
Band17	10MHz	QPSK	23780	50RB#0	8.9494	8.949	PASS
Band17	10MHz	QPSK	23790	50RB#0	8.9936	8.994	PASS
Band17	10MHz	QPSK	23800	50RB#0	9.0052	9.005	PASS
Band17	10MHz	16QAM	23780	50RB#0	8.9441	8.944	PASS
Band17	10MHz	16QAM	23790	50RB#0	8.9799	8.980	PASS
Band17	10MHz	16QAM	23800	50RB#0	8.9921	8.992	PASS

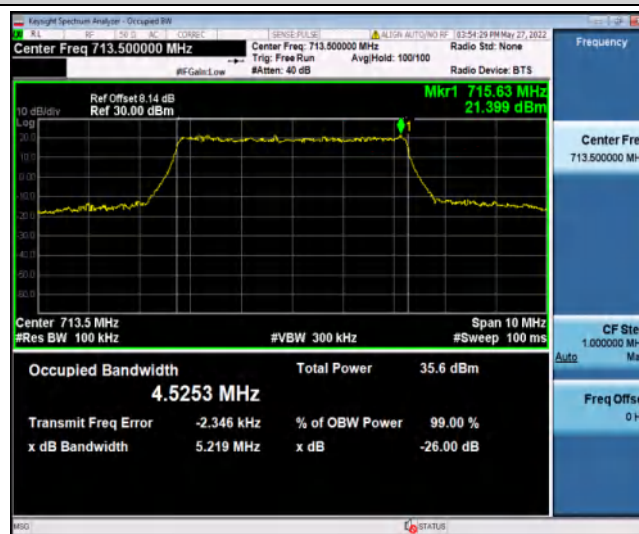
Test Graphs



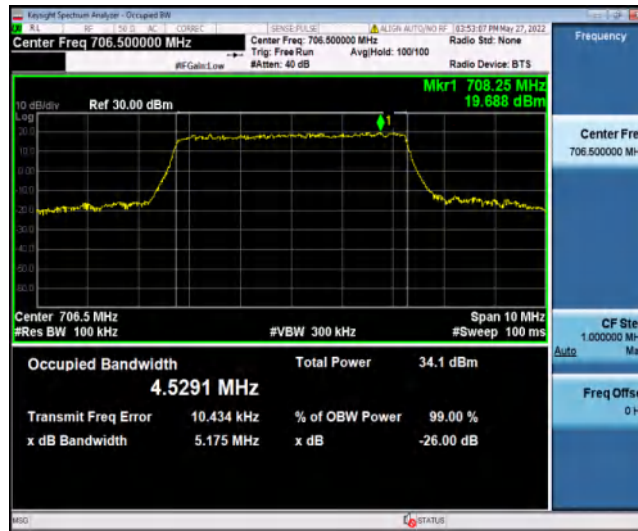
Band17-5MHz-QPSK-23755-25RB#0-4.5156



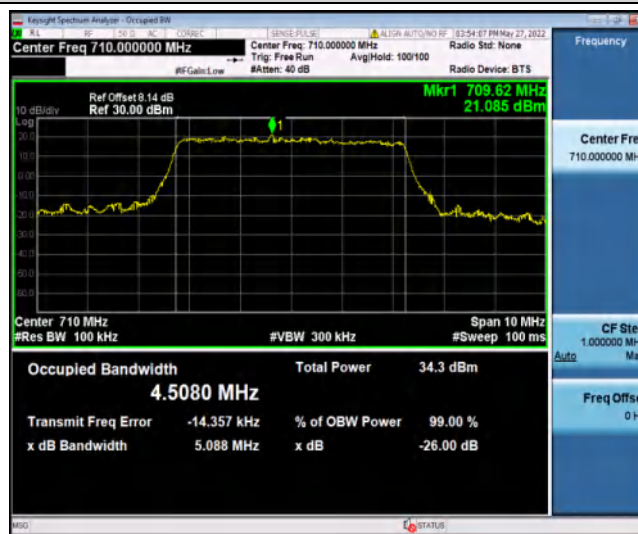
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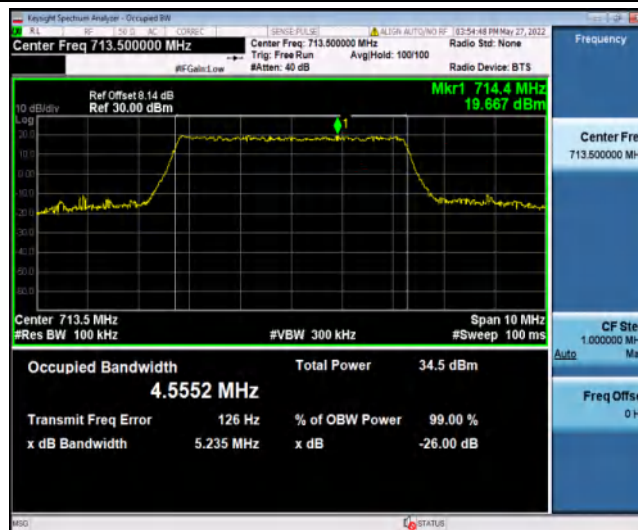
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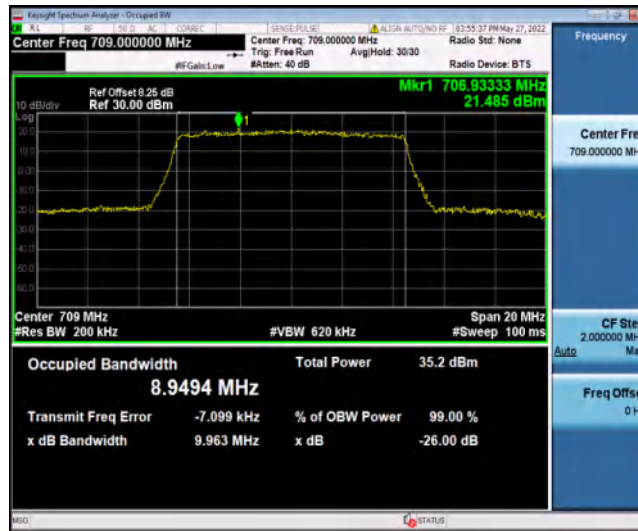
Band17-5MHz-16QAM-23755-25RB#0-4.5291



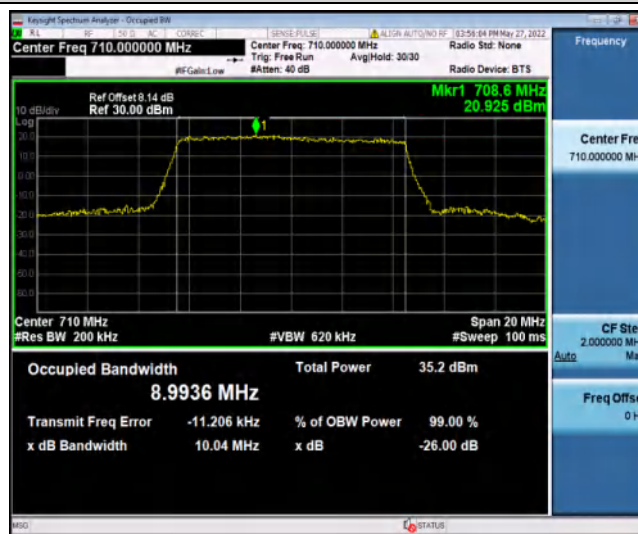
Band17-5MHz-16QAM-23790-25RB#0-4.5080



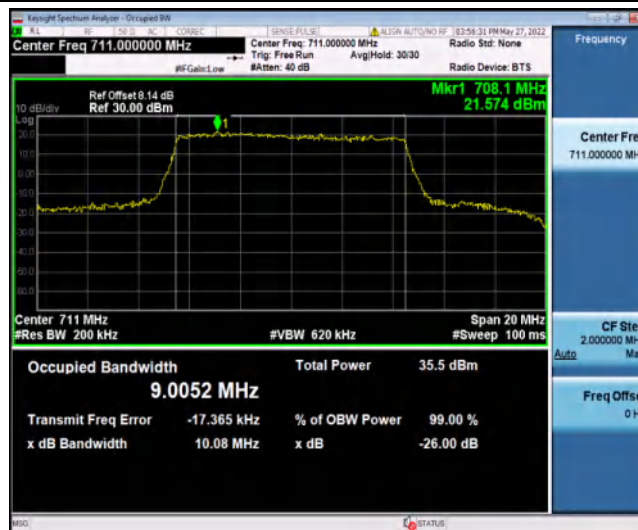
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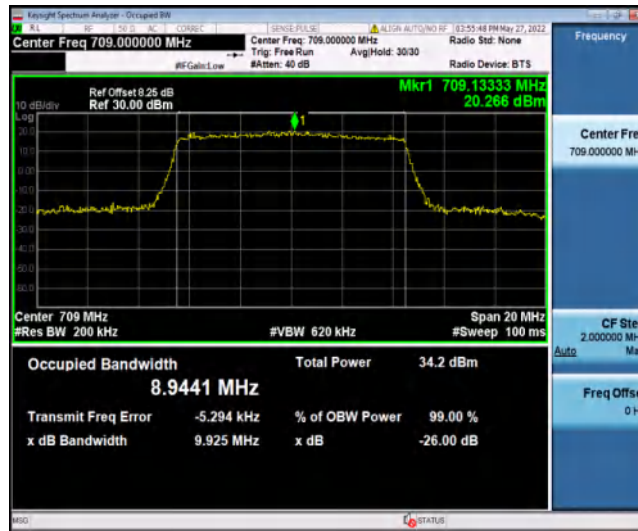
Band17-10MHz-QPSK-23780-50RB#0-8.9494



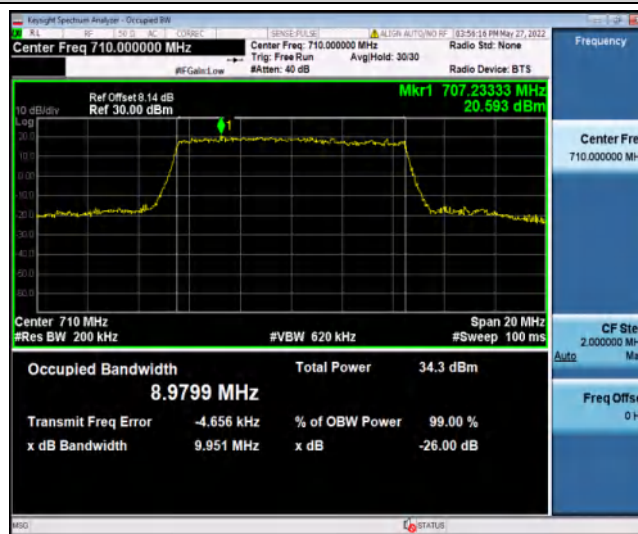
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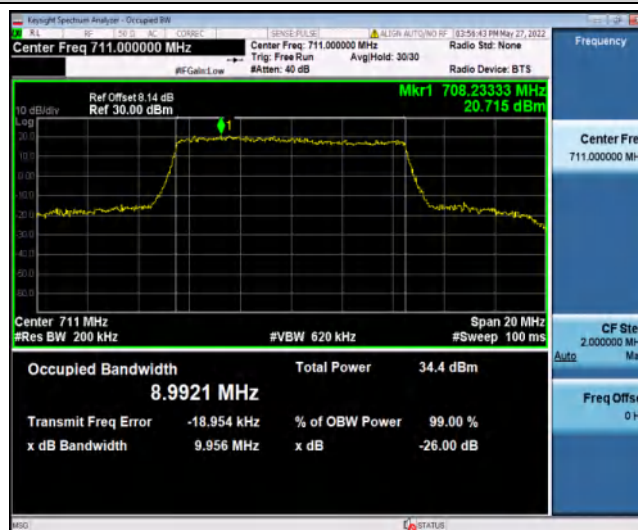
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Band17-10MHz-16QAM-23780-50RB#0-8.9441



Band17-10MHz-16QAM-23790-50RB#0-8.9799



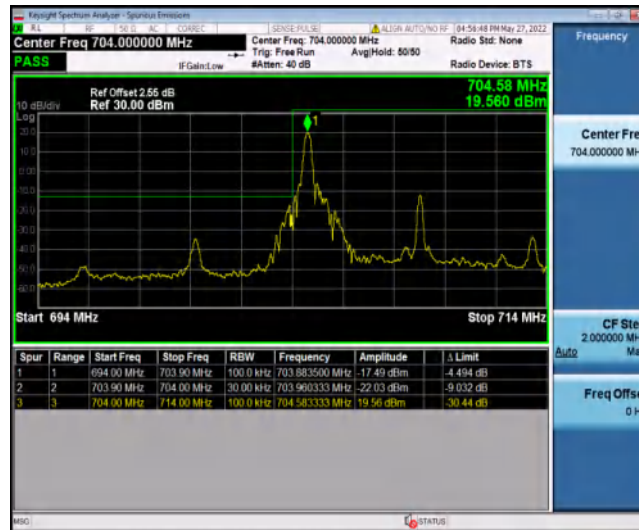
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Appendix E : Band Edge

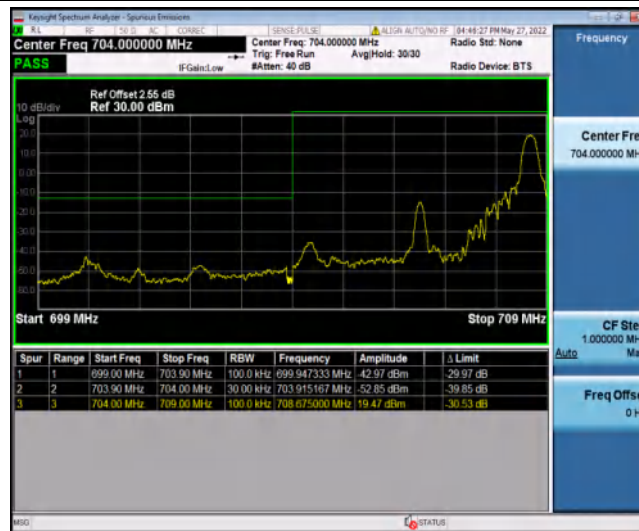
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band17	5MHz	QPSK	23755	1RB#0	-17.49,-22.03	PASS
Band17	5MHz	QPSK	23755	1RB#24	-42.97,-52.85	PASS
Band17	5MHz	QPSK	23755	25RB#0	-25.39,-28.36	PASS
Band17	5MHz	QPSK	23825	1RB#0	-50.32,-40.29	PASS
Band17	5MHz	QPSK	23825	1RB#24	-15.25,-14.79	PASS
Band17	5MHz	QPSK	23825	25RB#0	-26.19,-23.88	PASS
Band17	5MHz	16QAM	23755	1RB#0	-16.00,-16.91	PASS
Band17	5MHz	16QAM	23755	1RB#24	-43.16,-52.59	PASS
Band17	5MHz	16QAM	23755	25RB#0	-28.26,-30.67	PASS
Band17	5MHz	16QAM	23825	1RB#0	-51.15,-42.22	PASS
Band17	5MHz	16QAM	23825	1RB#24	-15.28,-15.64	PASS
Band17	5MHz	16QAM	23825	25RB#0	-27.64,-25.47	PASS
Band17	10MHz	QPSK	23780	1RB#0	-14.85,-14.53	PASS
Band17	10MHz	QPSK	23780	1RB#49	-45.36,-53.26	PASS
Band17	10MHz	QPSK	23780	50RB#0	-32.62,-35.63	PASS
Band17	10MHz	QPSK	23800	1RB#0	-53.59,-49.78	PASS
Band17	10MHz	QPSK	23800	1RB#49	-19.32,-17.34	PASS
Band17	10MHz	QPSK	23800	50RB#0	-34.37,-30.48	PASS
Band17	10MHz	16QAM	23780	1RB#0	-22.76,-22.14	PASS
Band17	10MHz	16QAM	23780	1RB#49	-44.83,-52.83	PASS
Band17	10MHz	16QAM	23780	50RB#0	-34.97,-37.80	PASS
Band17	10MHz	16QAM	23800	1RB#0	-53.95,-49.04	PASS
Band17	10MHz	16QAM	23800	1RB#49	-20.07,-16.01	PASS
Band17	10MHz	16QAM	23800	50RB#0	-36.38,-31.98	PASS

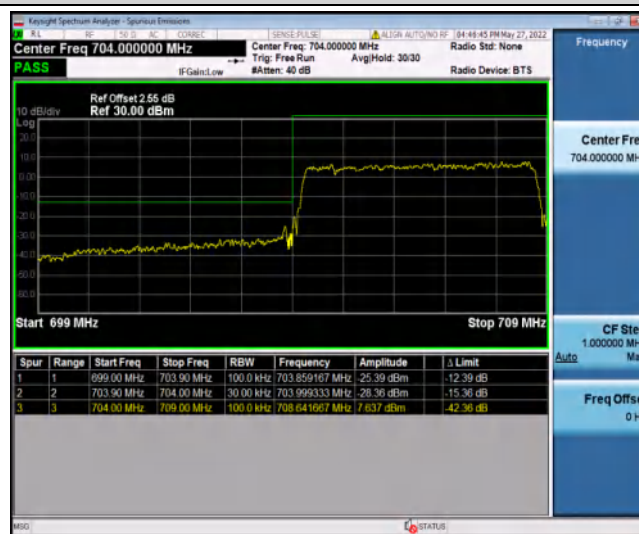
Test Graphs



Band17-5MHz-QPSK-23755-1RB#0



Band17-5MHz-QPSK-23755-1RB#24



Band17-5MHz-QPSK-23755-25RB#0



Band17-5MHz-QPSK-23825-1RB#0



Band17-5MHz-QPSK-23825-1RB#24



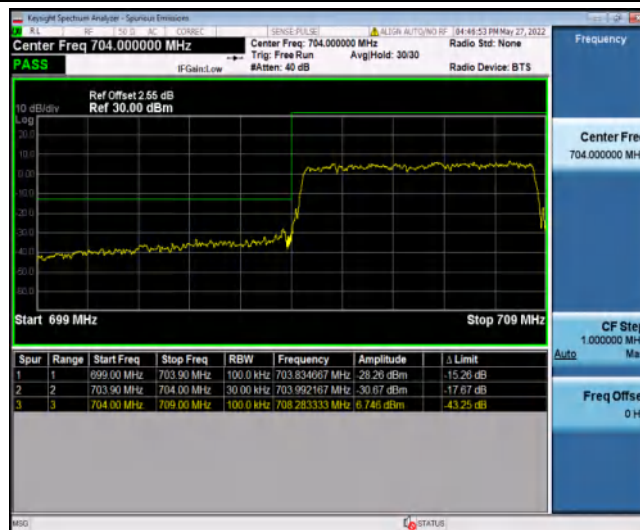
Band17-5MHz-QPSK-23825-25RB#0



Band17-5MHz-16QAM-23755-1RB#0



Band17-5MHz-16QAM-23755-1RB#24



Band17-5MHz-16QAM-23755-25RB#0



Band17-5MHz-16QAM-23825-1RB#0



Band17-5MHz-16QAM-23825-1RB#24



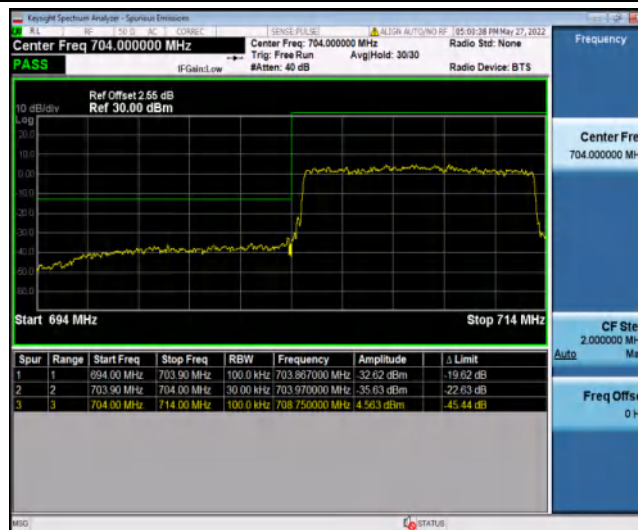
Band17-5MHz-16QAM-23825-25RB#0



Band17-10MHz-QPSK-23780-1RB#0



Band17-10MHz-QPSK-23780-1RB#49



Band17-10MHz-QPSK-23780-50RB#0



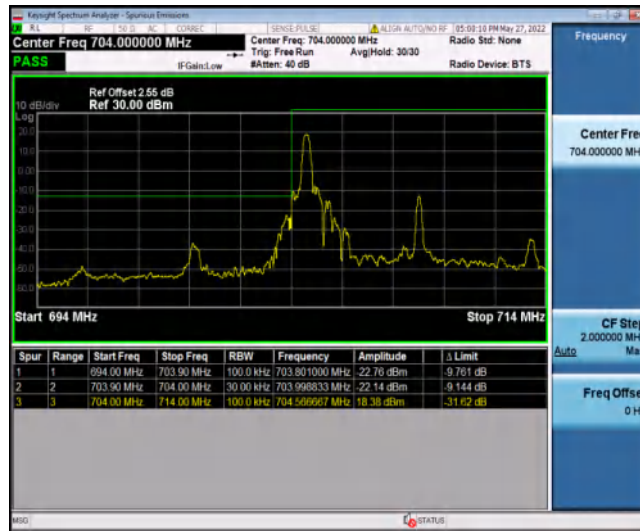
Band17-10MHz-QPSK-23800-1RB#0



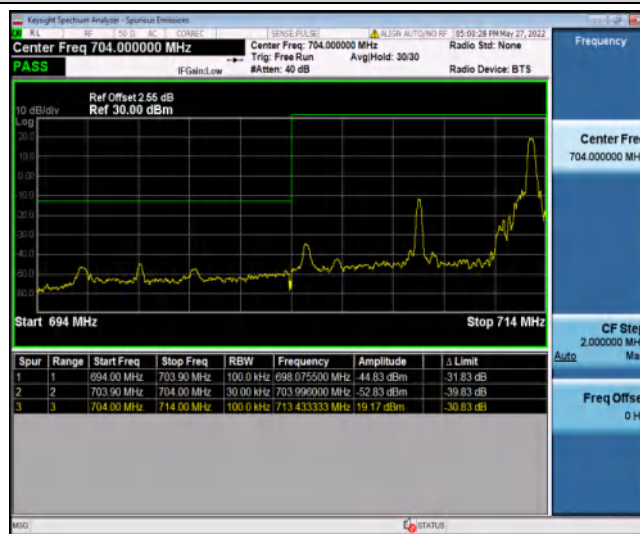
Band17-10MHz-QPSK-23800-1RB#49



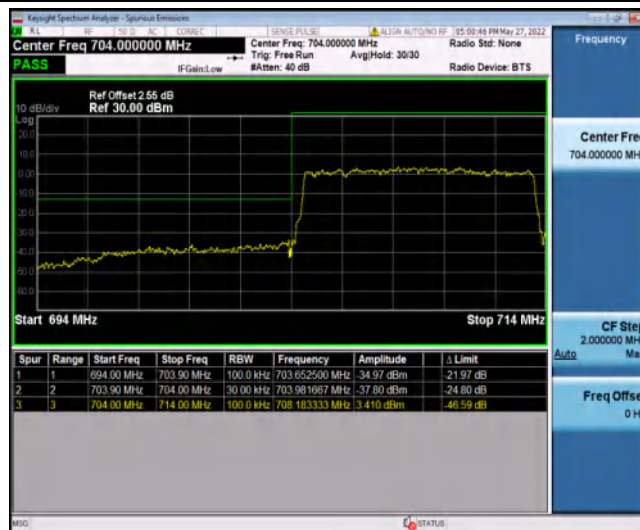
Band17-10MHz-QPSK-23800-50RB#0



Band17-10MHz-16QAM-23780-1RB#0



Band17-10MHz-16QAM-23780-1RB#49



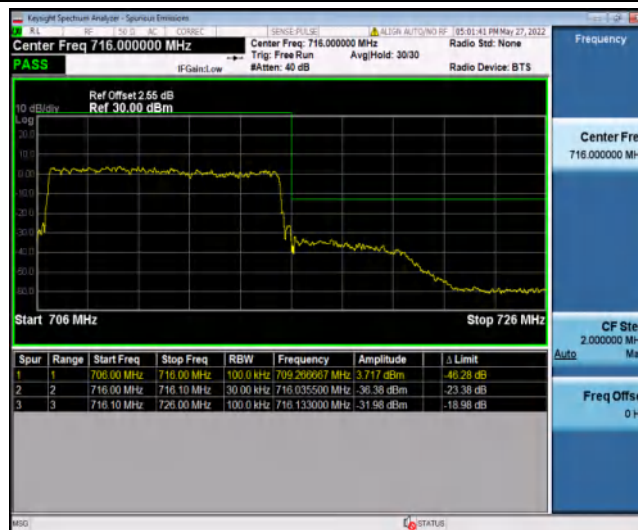
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Band17-10MHz-16QAM-23800-1RB#0



Band17-10MHz-16QAM-23800-1RB#49



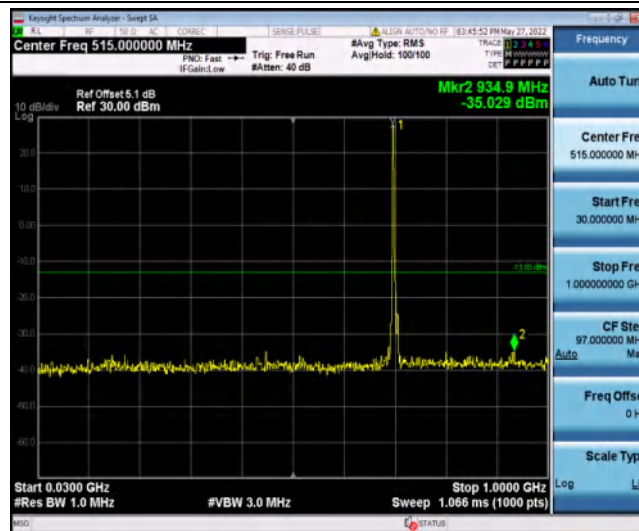
Band17-10MHz-16QAM-23800-50RB#0

Appendix F : Conducted Spurious Emission

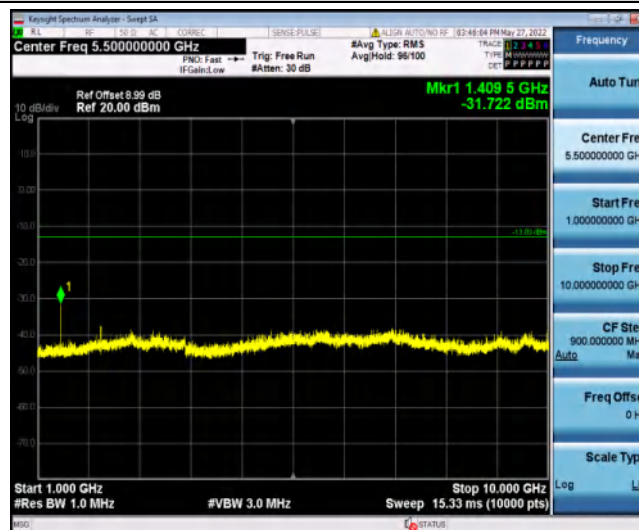
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band17	5MHz	QPSK	23755	1RB#0	Range1:30~1000MHz	-35.03	PASS
Band17	5MHz	QPSK	23755	1RB#0	Range2:1000~10000MHz	-31.72	PASS
Band17	5MHz	QPSK	23790	1RB#0	Range1:30~1000MHz	-35.29	PASS
Band17	5MHz	QPSK	23790	1RB#0	Range2:1000~10000MHz	-33.5	PASS
Band17	5MHz	QPSK	23825	1RB#0	Range1:30~1000MHz	-35.99	PASS
Band17	5MHz	QPSK	23825	1RB#0	Range2:1000~10000MHz	-34.51	PASS
Band17	5MHz	16QAM	23755	1RB#0	Range1:30~1000MHz	-35.78	PASS
Band17	5MHz	16QAM	23755	1RB#0	Range2:1000~10000MHz	-32.86	PASS
Band17	5MHz	16QAM	23790	1RB#0	Range1:30~1000MHz	-35.7	PASS
Band17	5MHz	16QAM	23790	1RB#0	Range2:1000~10000MHz	-33.53	PASS
Band17	5MHz	16QAM	23825	1RB#0	Range1:30~1000MHz	-35.74	PASS
Band17	5MHz	16QAM	23825	1RB#0	Range2:1000~10000MHz	-34.56	PASS
Band17	10MHz	QPSK	23780	1RB#0	Range1:30~1000MHz	-34.56	PASS
Band17	10MHz	QPSK	23780	1RB#0	Range2:1000~10000MHz	-31.55	PASS
Band17	10MHz	QPSK	23790	1RB#0	Range1:30~1000MHz	-35.67	PASS
Band17	10MHz	QPSK	23790	1RB#0	Range2:1000~10000MHz	-33.48	PASS
Band17	10MHz	QPSK	23800	1RB#0	Range1:30~1000MHz	-35.29	PASS
Band17	10MHz	QPSK	23800	1RB#0	Range2:1000~10000MHz	-33.86	PASS
Band17	10MHz	16QAM	23780	1RB#0	Range1:30~1000MHz	-35.8	PASS
Band17	10MHz	16QAM	23780	1RB#0	Range2:1000~10000MHz	-33.52	PASS
Band17	10MHz	16QAM	23790	1RB#0	Range1:30~1000MHz	-35.6	PASS
Band17	10MHz	16QAM	23790	1RB#0	Range2:1000~10000MHz	-33.3	PASS
Band17	10MHz	16QAM	23800	1RB#0	Range1:30~1000MHz	-35.22	PASS
Band17	10MHz	16QAM	23800	1RB#0	Range2:1000~10000MHz	-35.38	PASS

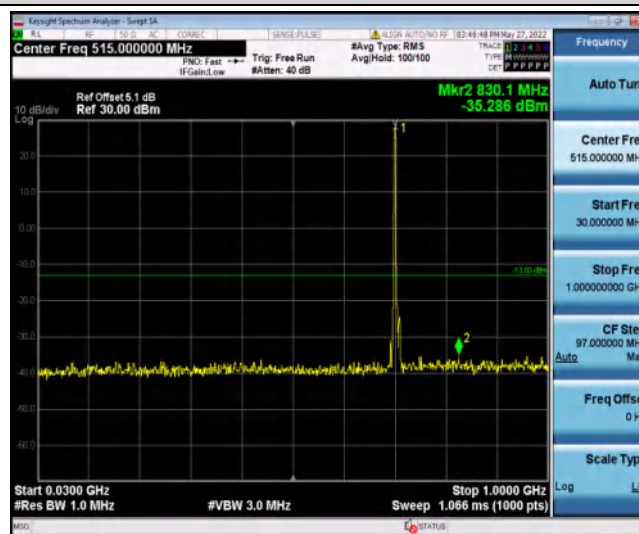
Test Graphs



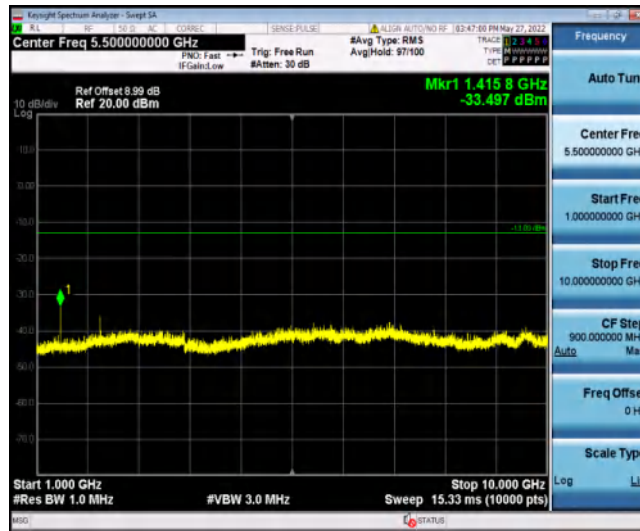
Band17-5MHz-QPSK-23755-1RB#0-Range1:30~1000MHz



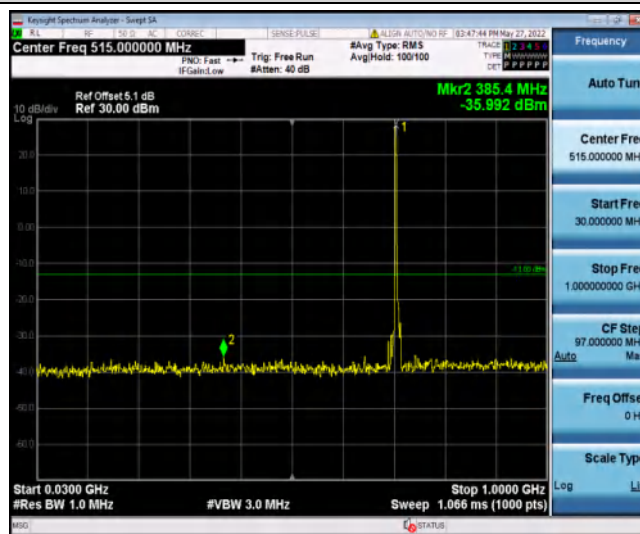
Band17-5MHz-QPSK-23755-1RB#0-Range2:1000~10000MHz



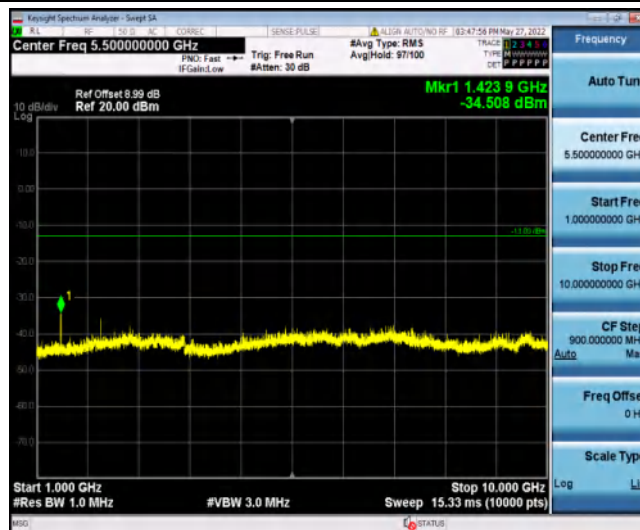
Band17-5MHz-QPSK-23790-1RB#0-Range1:30~1000MHz



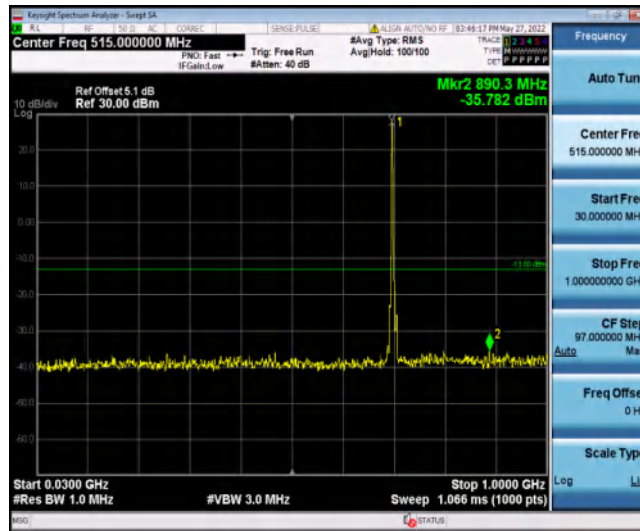
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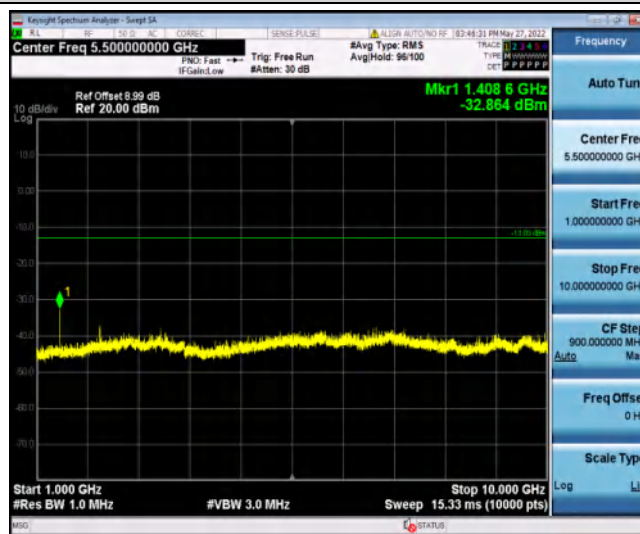
Band17-5MHz-QPSK-23825-1RB#0-Range1:30~1000MHz



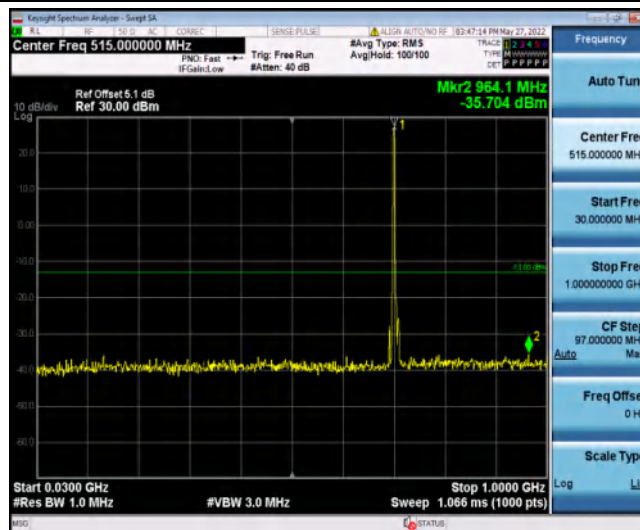
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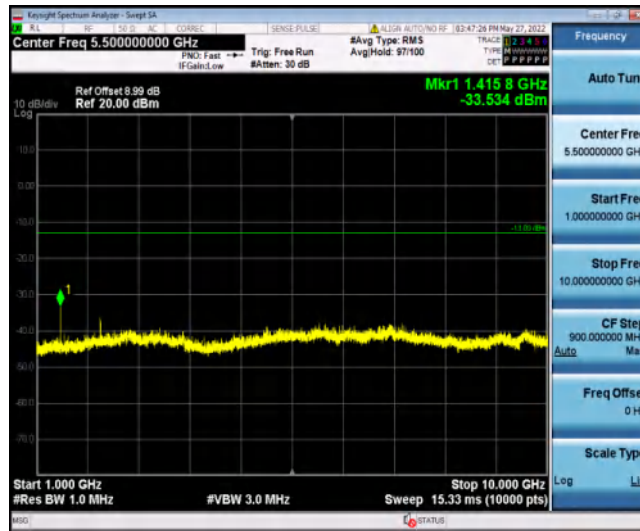
Band17-5MHz-16QAM-23755-1RB#0-Range1:30~1000MHz



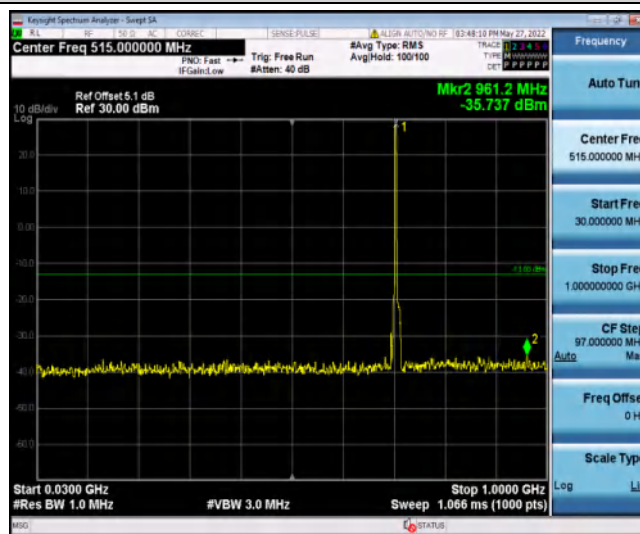
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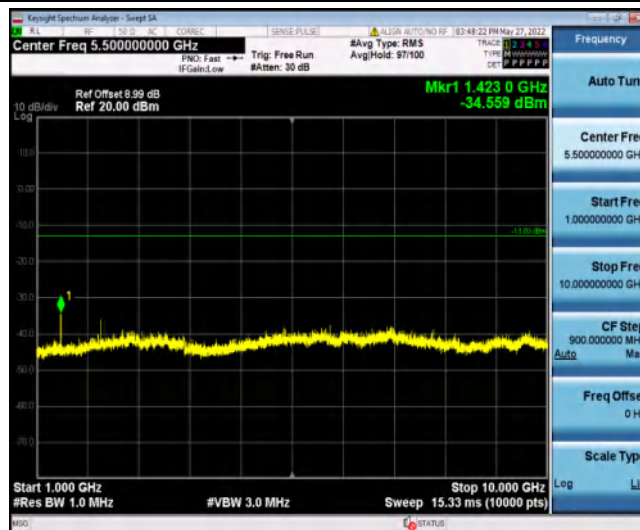
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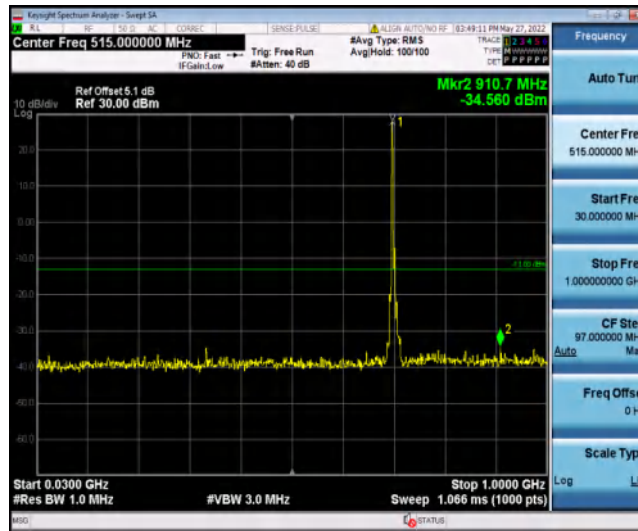
Band17-5MHz-16QAM-23790-1RB#0-Range2:1000~10000MHz



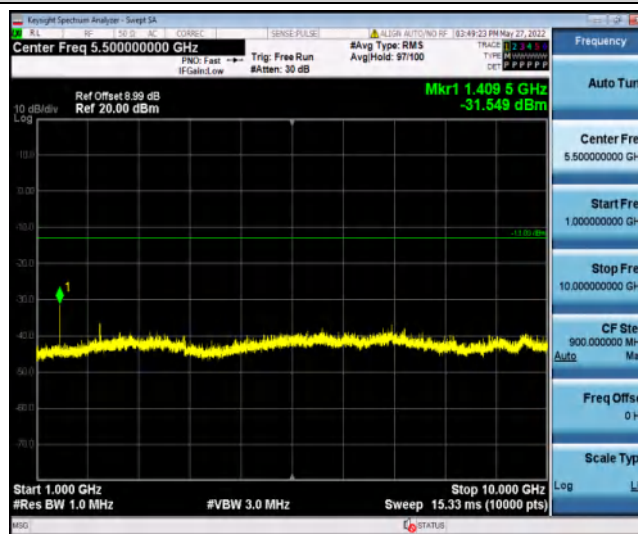
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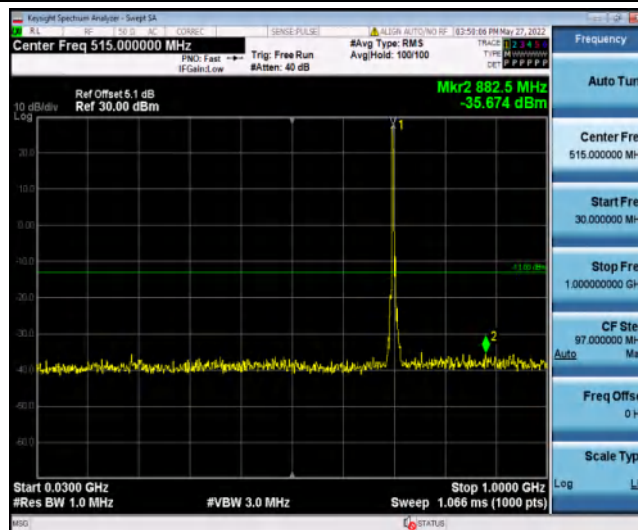
Band17-5MHz-16QAM-23825-1RB#0-Range2:1000~10000MHz



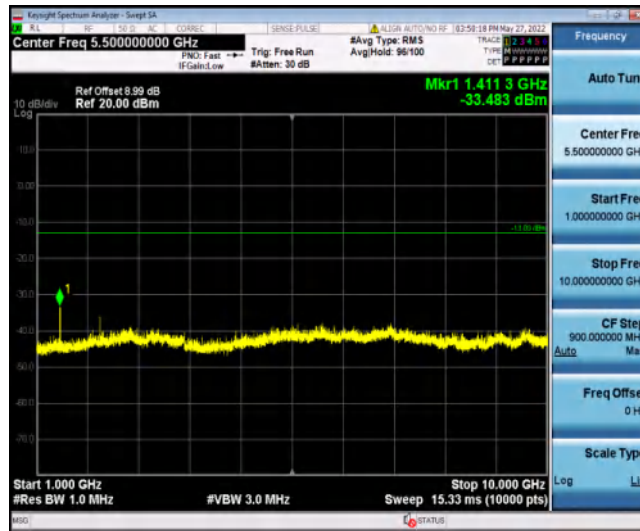
Band17-10MHz-QPSK-23780-1RB#0-Range1:30~1000MHz



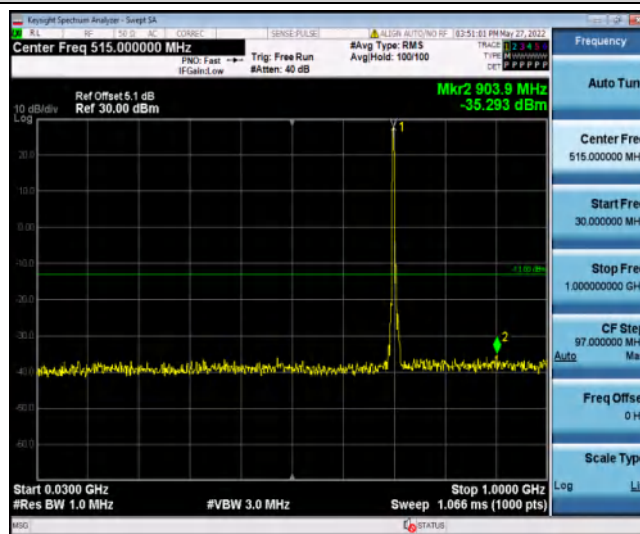
Band17-10MHz-QPSK-23780-1RB#0-Range2:1000~10000MHz



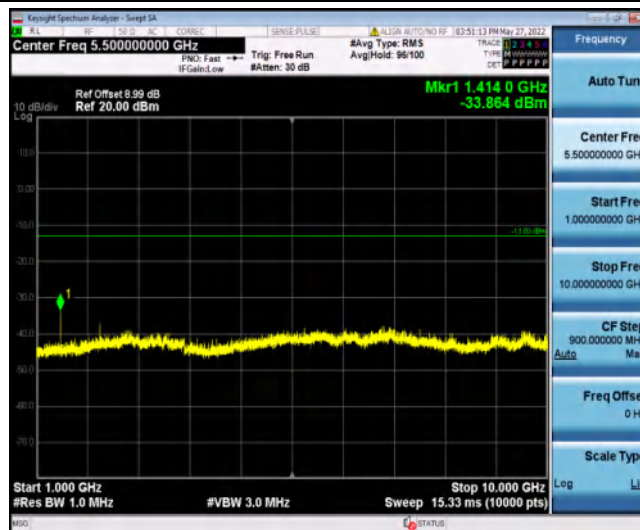
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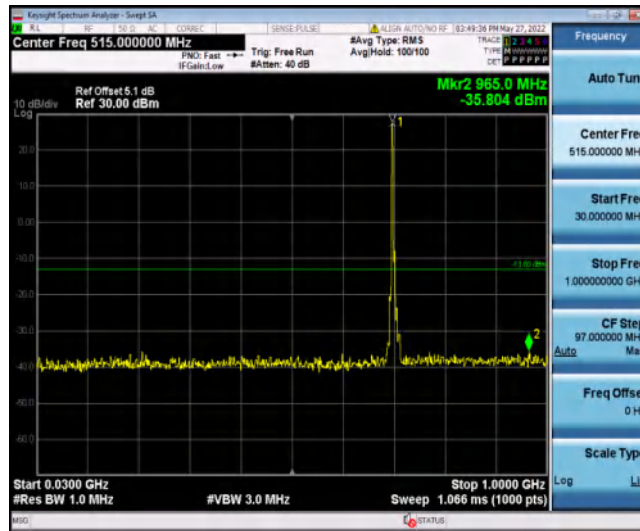
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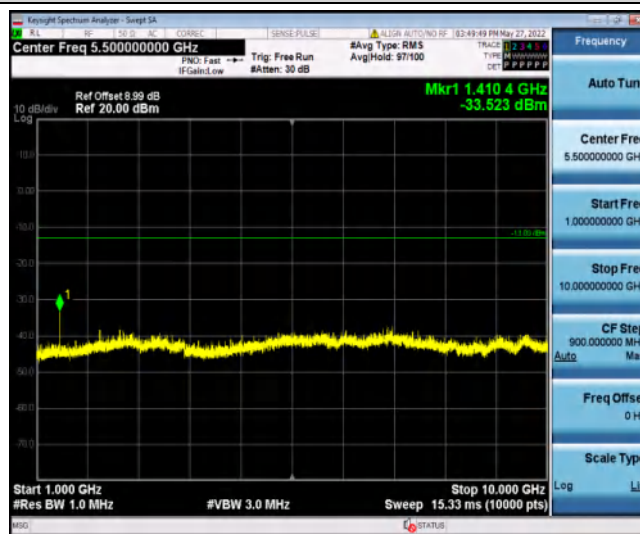
Band17-10MHz-QPSK-23800-1RB#0-Range1:30~1000MHz



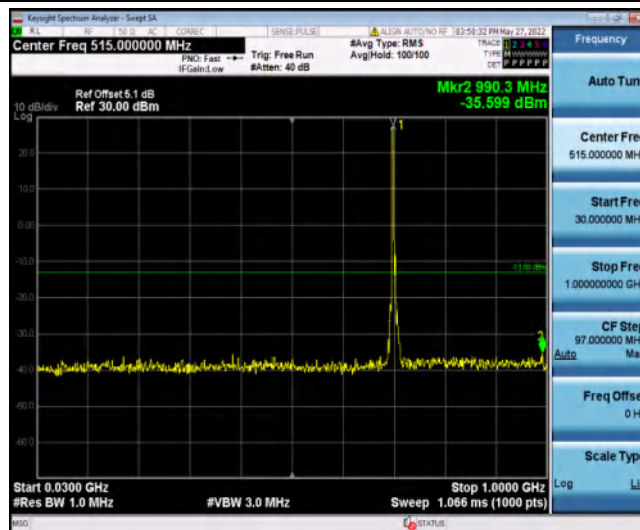
Band17-10MHz-QPSK-23800-1RB#0-Range2:1000~10000MHz



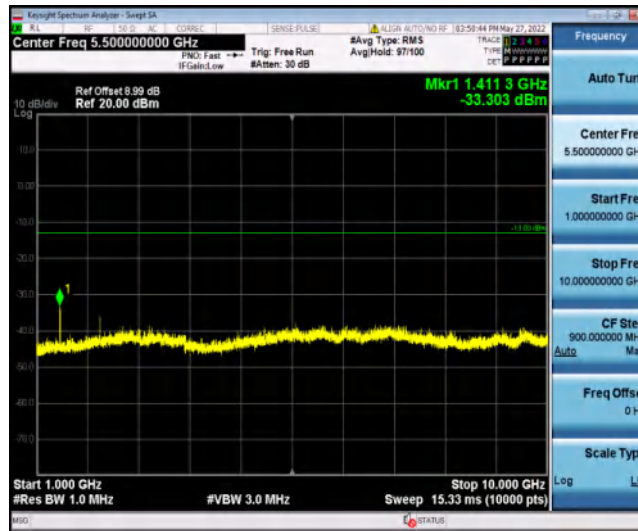
Band17-10MHz-16QAM-23780-1RB#0-Range1:30~1000MHz



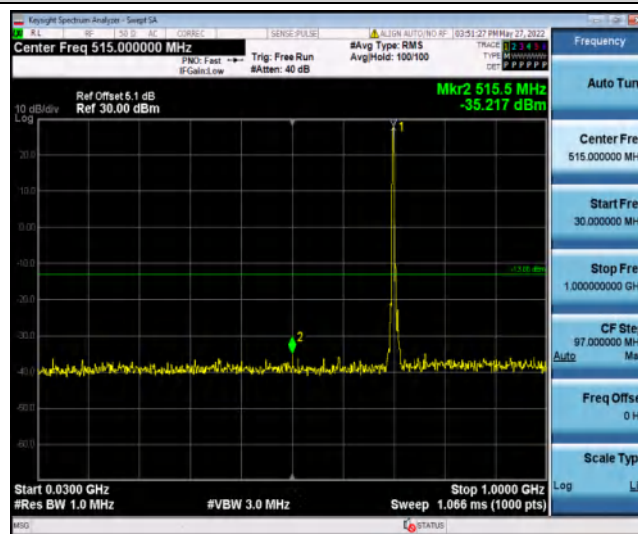
Band17-10MHz-16QAM-23780-1RB#0-Range2:1000~10000MHz



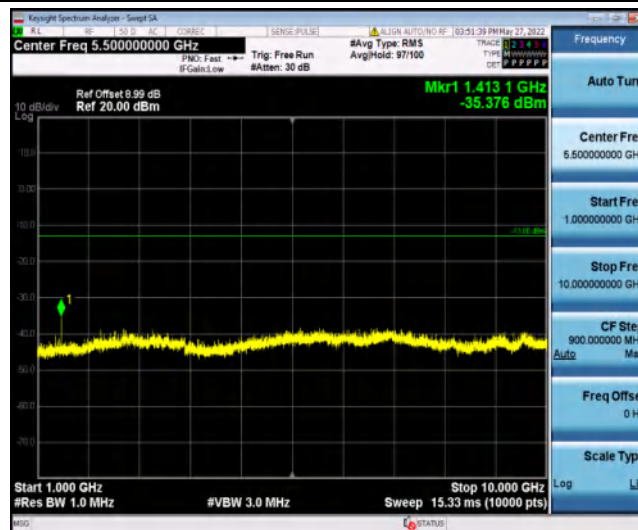
Band17-10MHz-16QAM-23790-1RB#0-Range1:30~1000MHz



Band17-10MHz-16QAM-23790-1RB#0-Range2:1000~10000MHz



Band17-10MHz-16QAM-23800-1RB#0-Range1:30~1000MHz



Band17-10MHz-16QAM-23800-1RB#0-Range2:1000~10000MHz

Appendix G Radiated Spurious Emission

Test Result

LTE FDD Band 17_Channel Bandwidth 5MHz_QPSK_ Low Channel

Frequency (MHz)	P _{Mea} (dBm)	Antenna Factor (dB)	Cable Loss (dB)	Amplifier Factor (dB)	Correction Factor(dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1413.00	-44.58	25.57	5.84	35.86	-4.45	-49.03	-13	36.03	H
2119.50	-46.63	28.05	6.31	35.38	-1.02	-47.65	-13	34.65	H
1413.00	-44.93	25.57	5.84	35.86	-4.45	-49.38	-13	36.38	V
2119.50	-46.70	28.05	6.31	35.38	-1.02	-47.72	-13	34.72	V

Note: 1. Correction Factor= Antenna Factor+ Cable Loss-Amplifier Factor

2. EIRP=P_{Mea}+Correction Factor

3. Margin= Limit-EIRP

LTE FDD Band 17_Channel Bandwidth 5MHz_QPSK_ Middle Channel

Frequency (MHz)	P _{Mea} (dBm)	Antenna Factor (dB)	Cable Loss (dB)	Amplifier Factor (dB)	Correction Factor(dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1420.00	-49.79	25.57	5.95	35.85	-4.33	-54.12	-13	41.12	H
2130.00	-49.40	28.04	6.31	35.39	-1.04	-50.44	-13	37.44	H
1420.00	-45.85	25.57	5.95	35.85	-4.33	-50.18	-13	37.18	V
2130.00	-48.31	28.04	6.31	35.39	-1.04	-49.35	-13	36.35	V

Note: 1. Correction Factor= Antenna Factor+ Cable Loss-Amplifier Factor

2. EIRP=P_{Mea}+Correction Factor

3. Margin= Limit-EIRP

LTE FDD Band 17_Channel Bandwidth 5MHz_QPSK_ High Channel

Frequency (MHz)	P _{Mea} (dBm)	Antenna Factor (dB)	Cable Loss (dB)	Amplifier Factor (dB)	Correction Factor(dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1427.00	-46.88	25.58	6.07	35.85	-4.20	-51.08	-13	38.08	H
2140.50	-47.44	28.02	6.31	35.39	-1.05	-48.49	-13	35.49	H
1427.00	-45.42	25.58	6.07	35.85	-4.20	-49.62	-13	36.62	V
2140.50	-46.16	28.02	6.31	35.39	-1.05	-47.21	-13	34.21	V

Note: 1. Correction Factor= Antenna Factor+ Cable Loss-Amplifier Factor

2. EIRP=P_{Mea}+Correction Factor

3. Margin= Limit-EIRP

LTE FDD Band 17_Channel Bandwidth 10MHz_QPSK_ Low Channel

Frequency (MHz)	P _{Mea} (dBm)	Antenna Factor (dB)	Cable Loss (dB)	Amplifier Factor (dB)	Correction Factor(dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1418.00	-44.79	25.57	5.92	35.85	-4.36	-49.15	-13	36.15	H
2127.00	-50.56	28.04	6.31	35.39	-1.03	-51.59	-13	38.59	H
1418.00	-44.66	25.57	5.92	35.85	-4.36	-49.02	-13	36.02	V
2127.00	-47.25	28.04	6.31	35.39	-1.03	-48.28	-13	35.28	V

Note: 1. Correction Factor= Antenna Factor+ Cable Loss-Amplifier Factor

2. EIRP=P_{Mea}+Correction Factor

3. Margin= Limit-EIRP

LTE FDD Band 17_Channel Bandwidth 10MHz_QPSK_ Middle Channel

Frequency (MHz)	P _{Mea} (dBm)	Antenna Factor (dB)	Cable Loss (dB)	Amplifier Factor (dB)	Correction Factor(dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1420.00	-46.07	25.57	5.95	35.85	-4.33	-50.40	-13	37.40	H
2130.00	-48.49	28.04	6.31	35.39	-1.04	-49.53	-13	36.53	H
1420.00	-44.58	25.57	5.95	35.85	-4.33	-48.91	-13	35.91	V
2130.00	-47.77	28.04	6.31	35.39	-1.04	-48.81	-13	35.81	V

Note: 1. Correction Factor= Antenna Factor+ Cable Loss-Amplifier Factor

2. EIRP=P_{Mea}+Correction Factor

3. Margin= Limit-EIRP

LTE FDD Band 17_Channel Bandwidth 10MHz_QPSK_ High Channel

Frequency (MHz)	P _{Mea} (dBm)	Antenna Factor (dB)	Cable Loss (dB)	Amplifier Factor (dB)	Correction Factor(dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1422.00	-43.97	25.58	5.99	35.85	-4.29	-48.26	-13	35.26	H
2133.00	-46.08	28.03	6.31	35.39	-1.04	-47.12	-13	34.12	H
1422.00	-45.21	25.58	5.99	35.85	-4.29	-49.50	-13	36.50	V
2133.00	-48.25	28.03	6.31	35.39	-1.04	-49.29	-13	36.29	V

Note: 1. Correction Factor= Antenna Factor+ Cable Loss-Amplifier Factor

2. EIRP=P_{Mea}+Correction Factor

3. Margin= Limit-EIRP

Appendix H : Frequency Stability

Test Result

Voltage										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band17	5MHz	QPSK	23755	25RB#0	VL	NT	-10.04	-0.014211	±2.5	PASS
Band17	5MHz	QPSK	23755	25RB#0	VN	NT	-11.16	-0.015796	±2.5	PASS
Band17	5MHz	QPSK	23755	25RB#0	VH	NT	-11.32	-0.016023	±2.5	PASS
Band17	5MHz	QPSK	23790	25RB#0	VL	NT	-7.21	-0.010155	±2.5	PASS
Band17	5MHz	QPSK	23790	25RB#0	VN	NT	-6.54	-0.009211	±2.5	PASS
Band17	5MHz	QPSK	23790	25RB#0	VH	NT	-7.41	-0.010437	±2.5	PASS
Band17	5MHz	QPSK	23825	25RB#0	VL	NT	-8.35	-0.011703	±2.5	PASS
Band17	5MHz	QPSK	23825	25RB#0	VN	NT	-3.76	-0.005270	±2.5	PASS
Band17	5MHz	QPSK	23825	25RB#0	VH	NT	-9.68	-0.013567	±2.5	PASS
Band17	5MHz	16QAM	23755	25RB#0	VL	NT	-2.73	-0.003864	±2.5	PASS
Band17	5MHz	16QAM	23755	25RB#0	VN	NT	-3.72	-0.005265	±2.5	PASS
Band17	5MHz	16QAM	23755	25RB#0	VH	NT	-7.75	-0.010970	±2.5	PASS
Band17	5MHz	16QAM	23790	25RB#0	VL	NT	-7.02	-0.009887	±2.5	PASS
Band17	5MHz	16QAM	23790	25RB#0	VN	NT	-3.86	-0.005437	±2.5	PASS
Band17	5MHz	16QAM	23790	25RB#0	VH	NT	-3.38	-0.004761	±2.5	PASS
Band17	5MHz	16QAM	23825	25RB#0	VL	NT	-8.64	-0.012109	±2.5	PASS
Band17	5MHz	16QAM	23825	25RB#0	VN	NT	-8.01	-0.011226	±2.5	PASS
Band17	5MHz	16QAM	23825	25RB#0	VH	NT	-4.85	-0.006797	±2.5	PASS
Band17	10MHz	QPSK	23780	50RB#0	VL	NT	-12.06	-0.017010	±2.5	PASS
Band17	10MHz	QPSK	23780	50RB#0	VN	NT	-9.48	-0.013371	±2.5	PASS
Band17	10MHz	QPSK	23780	50RB#0	VH	NT	-6.19	-0.008731	±2.5	PASS
Band17	10MHz	QPSK	23790	50RB#0	VL	NT	-3.78	-0.005324	±2.5	PASS
Band17	10MHz	QPSK	23790	50RB#0	VN	NT	-5.51	-0.007761	±2.5	PASS
Band17	10MHz	QPSK	23790	50RB#0	VH	NT	-6.04	-0.008507	±2.5	PASS
Band17	10MHz	QPSK	23800	50RB#0	VL	NT	-7.51	-0.010563	±2.5	PASS
Band17	10MHz	QPSK	23800	50RB#0	VN	NT	-4.81	-0.006765	±2.5	PASS
Band17	10MHz	QPSK	23800	50RB#0	VH	NT	-8.73	-0.012278	±2.5	PASS
Band17	10MHz	16QAM	23780	50RB#0	VL	NT	-9.07	-0.012793	±2.5	PASS
Band17	10MHz	16QAM	23780	50RB#0	VN	NT	-9.27	-0.013075	±2.5	PASS
Band17	10MHz	16QAM	23780	50RB#0	VH	NT	-12.72	-0.017941	±2.5	PASS
Band17	10MHz	16QAM	23790	50RB#0	VL	NT	-5.69	-0.008014	±2.5	PASS
Band17	10MHz	16QAM	23790	50RB#0	VN	NT	-2.89	-0.004070	±2.5	PASS
Band17	10MHz	16QAM	23790	50RB#0	VH	NT	-7.54	-0.010620	±2.5	PASS
Band17	10MHz	16QAM	23800	50RB#0	VL	NT	-4.96	-0.006976	±2.5	PASS
Band17	10MHz	16QAM	23800	50RB#0	VN	NT	-6.47	-0.009100	±2.5	PASS
Band17	10MHz	16QAM	23800	50RB#0	VH	NT	-7.90	-0.011111	±2.5	PASS

Temperature										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band17	5MHz	QPSK	23755	25RB#0	NV	-30	-8.10	-0.011465	±2.5	PASS

Band17	5MHz	QPSK	23755	25RB#0	NV	-20	-6.94	-0.009823	±2.5	PASS
Band17	5MHz	QPSK	23755	25RB#0	NV	-10	-12.19	-0.017254	±2.5	PASS
Band17	5MHz	QPSK	23755	25RB#0	NV	0	-10.23	-0.014480	±2.5	PASS
Band17	5MHz	QPSK	23755	25RB#0	NV	10	-11.46	-0.016221	±2.5	PASS
Band17	5MHz	QPSK	23755	25RB#0	NV	20	-11.36	-0.016079	±2.5	PASS
Band17	5MHz	QPSK	23755	25RB#0	NV	30	-9.06	-0.012824	±2.5	PASS
Band17	5MHz	QPSK	23755	25RB#0	NV	40	-3.39	-0.004798	±2.5	PASS
Band17	5MHz	QPSK	23755	25RB#0	NV	50	-5.12	-0.007247	±2.5	PASS
Band17	5MHz	QPSK	23790	25RB#0	NV	-30	-6.49	-0.009141	±2.5	PASS
Band17	5MHz	QPSK	23790	25RB#0	NV	-20	-10.14	-0.014282	±2.5	PASS
Band17	5MHz	QPSK	23790	25RB#0	NV	-10	-7.22	-0.010169	±2.5	PASS
Band17	5MHz	QPSK	23790	25RB#0	NV	0	-11.10	-0.015634	±2.5	PASS
Band17	5MHz	QPSK	23790	25RB#0	NV	10	-6.71	-0.009451	±2.5	PASS
Band17	5MHz	QPSK	23790	25RB#0	NV	20	-7.70	-0.010845	±2.5	PASS
Band17	5MHz	QPSK	23790	25RB#0	NV	30	-5.44	-0.007662	±2.5	PASS
Band17	5MHz	QPSK	23790	25RB#0	NV	40	-3.92	-0.005521	±2.5	PASS
Band17	5MHz	QPSK	23790	25RB#0	NV	50	-5.79	-0.008155	±2.5	PASS
Band17	5MHz	QPSK	23825	25RB#0	NV	-30	-10.71	-0.015011	±2.5	PASS
Band17	5MHz	QPSK	23825	25RB#0	NV	-20	-5.01	-0.007022	±2.5	PASS
Band17	5MHz	QPSK	23825	25RB#0	NV	-10	-4.88	-0.006840	±2.5	PASS
Band17	5MHz	QPSK	23825	25RB#0	NV	0	-10.69	-0.014982	±2.5	PASS
Band17	5MHz	QPSK	23825	25RB#0	NV	10	-8.11	-0.011367	±2.5	PASS
Band17	5MHz	QPSK	23825	25RB#0	NV	20	-10.91	-0.015291	±2.5	PASS
Band17	5MHz	QPSK	23825	25RB#0	NV	30	-6.32	-0.008858	±2.5	PASS
Band17	5MHz	QPSK	23825	25RB#0	NV	40	-6.55	-0.009180	±2.5	PASS
Band17	5MHz	QPSK	23825	25RB#0	NV	50	-5.59	-0.007835	±2.5	PASS
Band17	5MHz	16QAM	23755	25RB#0	NV	-30	-7.50	-0.010616	±2.5	PASS
Band17	5MHz	16QAM	23755	25RB#0	NV	-20	-7.64	-0.010814	±2.5	PASS
Band17	5MHz	16QAM	23755	25RB#0	NV	-10	-5.02	-0.007105	±2.5	PASS
Band17	5MHz	16QAM	23755	25RB#0	NV	0	-4.75	-0.006723	±2.5	PASS
Band17	5MHz	16QAM	23755	25RB#0	NV	10	-2.72	-0.003850	±2.5	PASS
Band17	5MHz	16QAM	23755	25RB#0	NV	20	-4.71	-0.006667	±2.5	PASS
Band17	5MHz	16QAM	23755	25RB#0	NV	30	-8.30	-0.011748	±2.5	PASS
Band17	5MHz	16QAM	23755	25RB#0	NV	40	-9.28	-0.013135	±2.5	PASS
Band17	5MHz	16QAM	23755	25RB#0	NV	50	-9.43	-0.013347	±2.5	PASS
Band17	5MHz	16QAM	23790	25RB#0	NV	-30	4.42	0.006225	±2.5	PASS
Band17	5MHz	16QAM	23790	25RB#0	NV	-20	-6.24	-0.008789	±2.5	PASS
Band17	5MHz	16QAM	23790	25RB#0	NV	-10	-3.02	-0.004254	±2.5	PASS
Band17	5MHz	16QAM	23790	25RB#0	NV	0	-11.70	-0.016479	±2.5	PASS
Band17	5MHz	16QAM	23790	25RB#0	NV	10	-11.57	-0.016296	±2.5	PASS
Band17	5MHz	16QAM	23790	25RB#0	NV	20	-7.77	-0.010944	±2.5	PASS
Band17	5MHz	16QAM	23790	25RB#0	NV	30	-10.73	-0.015113	±2.5	PASS
Band17	5MHz	16QAM	23790	25RB#0	NV	40	-8.55	-0.012042	±2.5	PASS
Band17	5MHz	16QAM	23790	25RB#0	NV	50	-5.59	-0.007873	±2.5	PASS
Band17	5MHz	16QAM	23825	25RB#0	NV	-30	-9.57	-0.013413	±2.5	PASS

Band17	5MHz	16QAM	23825	25RB#0	NV	-20	-9.34	-0.013090	±2.5	PASS
Band17	5MHz	16QAM	23825	25RB#0	NV	-10	-9.17	-0.012852	±2.5	PASS
Band17	5MHz	16QAM	23825	25RB#0	NV	0	-9.17	-0.012852	±2.5	PASS
Band17	5MHz	16QAM	23825	25RB#0	NV	10	-8.14	-0.011409	±2.5	PASS
Band17	5MHz	16QAM	23825	25RB#0	NV	20	-9.38	-0.013146	±2.5	PASS
Band17	5MHz	16QAM	23825	25RB#0	NV	30	-9.56	-0.013399	±2.5	PASS
Band17	5MHz	16QAM	23825	25RB#0	NV	40	-5.35	-0.007498	±2.5	PASS
Band17	5MHz	16QAM	23825	25RB#0	NV	50	-9.00	-0.012614	±2.5	PASS
Band17	10MHz	QPSK	23780	50RB#0	NV	-30	-5.69	-0.008025	±2.5	PASS
Band17	10MHz	QPSK	23780	50RB#0	NV	-20	-8.78	-0.012384	±2.5	PASS
Band17	10MHz	QPSK	23780	50RB#0	NV	-10	-4.73	-0.006671	±2.5	PASS
Band17	10MHz	QPSK	23780	50RB#0	NV	0	-4.69	-0.006615	±2.5	PASS
Band17	10MHz	QPSK	23780	50RB#0	NV	10	-3.91	-0.005515	±2.5	PASS
Band17	10MHz	QPSK	23780	50RB#0	NV	20	-3.85	-0.005430	±2.5	PASS
Band17	10MHz	QPSK	23780	50RB#0	NV	30	-8.70	-0.012271	±2.5	PASS
Band17	10MHz	QPSK	23780	50RB#0	NV	40	-11.44	-0.016135	±2.5	PASS
Band17	10MHz	QPSK	23780	50RB#0	NV	50	-8.48	-0.011961	±2.5	PASS
Band17	10MHz	QPSK	23790	50RB#0	NV	-30	-6.84	-0.009634	±2.5	PASS
Band17	10MHz	QPSK	23790	50RB#0	NV	-20	-9.30	-0.013099	±2.5	PASS
Band17	10MHz	QPSK	23790	50RB#0	NV	-10	-9.81	-0.013817	±2.5	PASS
Band17	10MHz	QPSK	23790	50RB#0	NV	0	-6.44	-0.009070	±2.5	PASS
Band17	10MHz	QPSK	23790	50RB#0	NV	10	-6.79	-0.009563	±2.5	PASS
Band17	10MHz	QPSK	23790	50RB#0	NV	20	-6.67	-0.009394	±2.5	PASS
Band17	10MHz	QPSK	23790	50RB#0	NV	30	-6.52	-0.009183	±2.5	PASS
Band17	10MHz	QPSK	23790	50RB#0	NV	40	-7.05	-0.009930	±2.5	PASS
Band17	10MHz	QPSK	23790	50RB#0	NV	50	-7.45	-0.010493	±2.5	PASS
Band17	10MHz	QPSK	23800	50RB#0	NV	-30	-9.23	-0.012982	±2.5	PASS
Band17	10MHz	QPSK	23800	50RB#0	NV	-20	-10.81	-0.015204	±2.5	PASS
Band17	10MHz	QPSK	23800	50RB#0	NV	-10	-8.71	-0.012250	±2.5	PASS
Band17	10MHz	QPSK	23800	50RB#0	NV	0	-10.79	-0.015176	±2.5	PASS
Band17	10MHz	QPSK	23800	50RB#0	NV	10	-10.59	-0.014895	±2.5	PASS
Band17	10MHz	QPSK	23800	50RB#0	NV	20	-10.73	-0.015091	±2.5	PASS
Band17	10MHz	QPSK	23800	50RB#0	NV	30	-7.52	-0.010577	±2.5	PASS
Band17	10MHz	QPSK	23800	50RB#0	NV	40	-7.61	-0.010703	±2.5	PASS
Band17	10MHz	QPSK	23800	50RB#0	NV	50	-8.30	-0.011674	±2.5	PASS
Band17	10MHz	16QAM	23780	50RB#0	NV	-30	-7.12	-0.010042	±2.5	PASS
Band17	10MHz	16QAM	23780	50RB#0	NV	-20	-9.36	-0.013202	±2.5	PASS
Band17	10MHz	16QAM	23780	50RB#0	NV	-10	-6.24	-0.008801	±2.5	PASS
Band17	10MHz	16QAM	23780	50RB#0	NV	0	-5.59	-0.007884	±2.5	PASS
Band17	10MHz	16QAM	23780	50RB#0	NV	10	-6.68	-0.009422	±2.5	PASS
Band17	10MHz	16QAM	23780	50RB#0	NV	20	-3.76	-0.005303	±2.5	PASS
Band17	10MHz	16QAM	23780	50RB#0	NV	30	-6.42	-0.009055	±2.5	PASS
Band17	10MHz	16QAM	23780	50RB#0	NV	40	-6.51	-0.009182	±2.5	PASS
Band17	10MHz	16QAM	23780	50RB#0	NV	50	-7.00	-0.009873	±2.5	PASS
Band17	10MHz	16QAM	23790	50RB#0	NV	-30	-6.74	-0.009493	±2.5	PASS

Band17	10MHz	16QAM	23790	50RB#0	NV	-20	-3.43	-0.004831	±2.5	PASS
Band17	10MHz	16QAM	23790	50RB#0	NV	-10	-3.45	-0.004859	±2.5	PASS
Band17	10MHz	16QAM	23790	50RB#0	NV	0	-6.68	-0.009408	±2.5	PASS
Band17	10MHz	16QAM	23790	50RB#0	NV	10	-9.83	-0.013845	±2.5	PASS
Band17	10MHz	16QAM	23790	50RB#0	NV	20	-9.38	-0.013211	±2.5	PASS
Band17	10MHz	16QAM	23790	50RB#0	NV	30	-7.22	-0.010169	±2.5	PASS
Band17	10MHz	16QAM	23790	50RB#0	NV	40	-4.16	-0.005859	±2.5	PASS
Band17	10MHz	16QAM	23790	50RB#0	NV	50	-5.92	-0.008338	±2.5	PASS
Band17	10MHz	16QAM	23800	50RB#0	NV	-30	-7.00	-0.009845	±2.5	PASS
Band17	10MHz	16QAM	23800	50RB#0	NV	-20	-9.68	-0.013615	±2.5	PASS
Band17	10MHz	16QAM	23800	50RB#0	NV	-10	-7.55	-0.010619	±2.5	PASS
Band17	10MHz	16QAM	23800	50RB#0	NV	0	-6.07	-0.008537	±2.5	PASS
Band17	10MHz	16QAM	23800	50RB#0	NV	10	-8.47	-0.011913	±2.5	PASS
Band17	10MHz	16QAM	23800	50RB#0	NV	20	-9.31	-0.013094	±2.5	PASS
Band17	10MHz	16QAM	23800	50RB#0	NV	30	-5.35	-0.007525	±2.5	PASS
Band17	10MHz	16QAM	23800	50RB#0	NV	40	-7.64	-0.010745	±2.5	PASS
Band17	10MHz	16QAM	23800	50RB#0	NV	50	-3.72	-0.005232	±2.5	PASS

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