

Appendix B

E-UTRA Band 41

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1. Main Test Instruments

RE in Chamber					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date	Cal. Due date
				(yyyy-mm-dd)	(yyyy-mm-dd)
3m Semi-Anechoic Chamber	AUDIX	N/A	SEM001-02	2018/3/13	2021/3/12
Spectrum Analyzer (20Hz-43GHz)	Rohde & Schwarz	FSU43	SEM004-08	2019/3/2	2020/3/1
BiConiLog Antenna (26-3000MHz)	ETS-Lindgren	3142C	SEM003-01	2017/6/27	2020/6/26
Horn Antenna (800MHz-18GHz)	Rohde & Schwarz	HF907	SEM003-07	2018/4/13	2021/4/12
Horn Antenna (15-40GHz)	Schwarzbeck	BBHA 9170	SEM003-15	2017/10/17	2020/10/16
Amplifier (0.1-1300MHz)	HP	8447D	SEM005-02	2019/7/14	2020/7/14
Low Noise Amplifier (100MHz-18GHz)	Black Diamond Series	BDLNA-0118-352810	SEM005-05	2019/7/14	2020/7/14
Pre-Amplifier (0.1-26.5GHz)	Compliance Directions Systems Inc.	PAP-0126	EMC2063	2019/9/20	2020/9/19
Pre-amplifier (26-40GHz)	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2019/3/2	2020/3/1
Band filter	N/A	N/A	N/A	N/A	N/A
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM026-01	2019/6/12	2020/6/11
Wideband Radio Communication Tester	Anristu	MT8821C	6201462742	2019/4/3	2020/4/3
Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	W005-02	2019/1/13	2020/1/12
RF conducted test					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date	Cal. Due date
				(yyyy-mm-dd)	(yyyy-mm-dd)
Dual Output Mobile Communication DC Source	Agilent Technologies Inc	66311B	W009-09	2018/11/2	2019/11/1
Signal Analyzer	Rohde & Schwarz	FSV	W005-02	2019/3/2	2020/3/1
Coaxial Cable	SGS	N/A	SEM031-01	2019/6/12	2020/6/11
Attenuator	Weinschel Associates	WA41	SEM021-09	N/A	N/A
Signal Generator	KEYSIGHT	N5173B	SEM006-05	2018/11/2	2019/11/1
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	HTC-1	W006-17	2018/11/2	2019/11/1
Temperature Chamber	GIANT FORCE	ICT-150-40-CP-AR	W027-03	2018/11/2	2019/11/1
Wideband Radio Communication Tester	Anristu	MT8821C	6201462742	2019/3/2	2020/3/1

2. Measurement Uncertainty

For a 95% confidence level ($k = 2$), the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO 17025 as following:

Test Item	Extended Uncertainty	Data
Transmit Output Power Data	Power [dBm]	$U = \pm 0.37$ dB
Bandwidth	Magnitude [%]	$U = \pm 0.2\%$
Band Edge Compliance	Disturbance Power [dBm]	$U = \pm 2.0$ dB
Spurious Emissions, Conducted	Disturbance Power [dBm]	$U = \pm 2.0$ dB
Frequency Stability	Frequency Accuracy [ppm]	$U = \pm 0.24$ ppm

3 Effective (Isotropic) Radiated Power

3.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Conducted Power(dBm)	EIRP (dBm)	Limit (dBm)	Verdict
Band41	5MHz	QPSK	39675	1RB#0	23.95	26.31	30.00	PASS
Band41	5MHz	QPSK	39675	1RB#12	24.01	26.37	30.00	PASS
Band41	5MHz	QPSK	39675	1RB#24	23.84	26.20	30.00	PASS
Band41	5MHz	QPSK	39675	12RB#0	23.60	25.96	30.00	PASS
Band41	5MHz	QPSK	39675	12RB#6	23.55	25.91	30.00	PASS
Band41	5MHz	QPSK	39675	12RB#13	23.47	25.83	30.00	PASS
Band41	5MHz	QPSK	39675	25RB#0	23.57	25.93	30.00	PASS
Band41	5MHz	QPSK	40620	1RB#0	23.99	26.35	30.00	PASS
Band41	5MHz	QPSK	40620	1RB#24	24.20	26.56	30.00	PASS
Band41	5MHz	QPSK	40620	1RB#12	24.04	26.40	30.00	PASS
Band41	5MHz	QPSK	40620	12RB#0	23.76	26.12	30.00	PASS
Band41	5MHz	QPSK	40620	12RB#6	23.80	26.16	30.00	PASS
Band41	5MHz	QPSK	40620	12RB#13	23.68	26.04	30.00	PASS
Band41	5MHz	QPSK	40620	25RB#0	23.81	26.17	30.00	PASS
Band41	5MHz	QPSK	41565	1RB#24	24.36	26.72	30.00	PASS
Band41	5MHz	QPSK	41565	1RB#0	24.41	26.77	30.00	PASS
Band41	5MHz	QPSK	41565	1RB#12	24.17	26.53	30.00	PASS
Band41	5MHz	QPSK	41565	12RB#0	23.92	26.28	30.00	PASS
Band41	5MHz	QPSK	41565	12RB#6	23.80	26.16	30.00	PASS
Band41	5MHz	QPSK	41565	12RB#13	23.87	26.23	30.00	PASS
Band41	5MHz	QPSK	41565	25RB#0	23.88	26.24	30.00	PASS
Band41	5MHz	16QAM	39675	1RB#0	23.42	25.78	30.00	PASS
Band41	5MHz	16QAM	39675	1RB#12	23.72	26.08	30.00	PASS
Band41	5MHz	16QAM	39675	1RB#24	23.50	25.86	30.00	PASS
Band41	5MHz	16QAM	39675	12RB#6	23.43	25.79	30.00	PASS
Band41	5MHz	16QAM	39675	12RB#0	23.51	25.87	30.00	PASS
Band41	5MHz	16QAM	39675	12RB#13	23.38	25.74	30.00	PASS
Band41	5MHz	16QAM	39675	25RB#0	23.36	25.72	30.00	PASS
Band41	5MHz	16QAM	40620	1RB#0	23.61	25.97	30.00	PASS
Band41	5MHz	16QAM	40620	1RB#12	23.85	26.21	30.00	PASS
Band41	5MHz	16QAM	40620	1RB#24	23.61	25.97	30.00	PASS
Band41	5MHz	16QAM	40620	12RB#13	23.62	25.98	30.00	PASS
Band41	5MHz	16QAM	40620	12RB#0	23.66	26.02	30.00	PASS
Band41	5MHz	16QAM	40620	12RB#6	23.49	25.85	30.00	PASS
Band41	5MHz	16QAM	40620	25RB#0	23.62	25.98	30.00	PASS
Band41	5MHz	16QAM	41565	1RB#12	23.67	26.03	30.00	PASS
Band41	5MHz	16QAM	41565	1RB#0	23.86	26.22	30.00	PASS
Band41	5MHz	16QAM	41565	1RB#24	23.61	25.97	30.00	PASS
Band41	5MHz	16QAM	41565	12RB#0	23.66	26.02	30.00	PASS
Band41	5MHz	16QAM	41565	12RB#6	23.60	25.96	30.00	PASS
Band41	5MHz	16QAM	41565	12RB#13	23.70	26.06	30.00	PASS
Band41	5MHz	16QAM	41565	25RB#0	23.55	25.91	30.00	PASS
Band41	10MHz	QPSK	39700	1RB#24	23.88	26.24	30.00	PASS
Band41	10MHz	QPSK	39700	1RB#49	23.93	26.29	30.00	PASS
Band41	10MHz	QPSK	39700	1RB#0	23.78	26.14	30.00	PASS

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Band41	10MHz	QPSK	39700	25RB#0	23.51	25.87	30.00	PASS
Band41	10MHz	QPSK	39700	25RB#12	23.53	25.89	30.00	PASS
Band41	10MHz	QPSK	39700	25RB#25	23.52	25.88	30.00	PASS
Band41	10MHz	QPSK	39700	50RB#0	23.48	25.84	30.00	PASS
Band41	10MHz	QPSK	40620	1RB#0	24.06	26.42	30.00	PASS
Band41	10MHz	QPSK	40620	1RB#49	24.31	26.67	30.00	PASS
Band41	10MHz	QPSK	40620	1RB#24	24.06	26.42	30.00	PASS
Band41	10MHz	QPSK	40620	25RB#25	23.84	26.20	30.00	PASS
Band41	10MHz	QPSK	40620	25RB#0	23.69	26.05	30.00	PASS
Band41	10MHz	QPSK	40620	25RB#12	23.71	26.07	30.00	PASS
Band41	10MHz	QPSK	40620	50RB#0	23.72	26.08	30.00	PASS
Band41	10MHz	QPSK	41540	1RB#24	24.22	26.58	30.00	PASS
Band41	10MHz	QPSK	41540	1RB#0	24.52	26.88	30.00	PASS
Band41	10MHz	QPSK	41540	1RB#49	24.20	26.56	30.00	PASS
Band41	10MHz	QPSK	41540	25RB#0	23.88	26.24	30.00	PASS
Band41	10MHz	QPSK	41540	25RB#25	23.84	26.20	30.00	PASS
Band41	10MHz	QPSK	41540	25RB#12	23.79	26.15	30.00	PASS
Band41	10MHz	QPSK	41540	50RB#0	23.84	26.20	30.00	PASS
Band41	10MHz	16QAM	39700	1RB#49	23.48	25.84	30.00	PASS
Band41	10MHz	16QAM	39700	1RB#0	23.73	26.09	30.00	PASS
Band41	10MHz	16QAM	39700	1RB#24	23.42	25.78	30.00	PASS
Band41	10MHz	16QAM	39700	25RB#25	23.42	25.78	30.00	PASS
Band41	10MHz	16QAM	39700	25RB#12	23.40	25.76	30.00	PASS
Band41	10MHz	16QAM	39700	25RB#0	23.46	25.82	30.00	PASS
Band41	10MHz	16QAM	39700	50RB#0	23.41	25.77	30.00	PASS
Band41	10MHz	16QAM	40620	1RB#49	23.58	25.94	30.00	PASS
Band41	10MHz	16QAM	40620	1RB#0	23.76	26.12	30.00	PASS
Band41	10MHz	16QAM	40620	1RB#24	23.65	26.01	30.00	PASS
Band41	10MHz	16QAM	40620	25RB#25	23.59	25.95	30.00	PASS
Band41	10MHz	16QAM	40620	25RB#0	23.59	25.95	30.00	PASS
Band41	10MHz	16QAM	40620	25RB#12	23.52	25.88	30.00	PASS
Band41	10MHz	16QAM	40620	50RB#0	23.63	25.99	30.00	PASS
Band41	10MHz	16QAM	41540	1RB#24	23.68	26.04	30.00	PASS
Band41	10MHz	16QAM	41540	1RB#0	23.92	26.28	30.00	PASS
Band41	10MHz	16QAM	41540	1RB#49	23.49	25.85	30.00	PASS
Band41	10MHz	16QAM	41540	25RB#0	23.50	25.86	30.00	PASS
Band41	10MHz	16QAM	41540	25RB#12	23.56	25.92	30.00	PASS
Band41	10MHz	16QAM	41540	25RB#25	23.66	26.02	30.00	PASS
Band41	10MHz	16QAM	41540	50RB#0	23.58	25.94	30.00	PASS
Band41	15MHz	QPSK	39725	1RB#0	23.90	26.26	30.00	PASS
Band41	15MHz	QPSK	39725	1RB#38	24.05	26.41	30.00	PASS
Band41	15MHz	QPSK	39725	1RB#74	23.89	26.25	30.00	PASS
Band41	15MHz	QPSK	39725	36RB#0	23.54	25.90	30.00	PASS
Band41	15MHz	QPSK	39725	36RB#18	23.61	25.97	30.00	PASS
Band41	15MHz	QPSK	39725	36RB#39	23.48	25.84	30.00	PASS
Band41	15MHz	QPSK	39725	75RB#0	23.60	25.96	30.00	PASS
Band41	15MHz	QPSK	40620	1RB#0	24.01	26.37	30.00	PASS
Band41	15MHz	QPSK	40620	1RB#74	24.22	26.58	30.00	PASS
Band41	15MHz	QPSK	40620	1RB#38	24.02	26.38	30.00	PASS
Band41	15MHz	QPSK	40620	36RB#0	23.84	26.20	30.00	PASS
Band41	15MHz	QPSK	40620	36RB#18	23.77	26.13	30.00	PASS
Band41	15MHz	QPSK	40620	36RB#39	23.66	26.02	30.00	PASS
Band41	15MHz	QPSK	40620	75RB#0	23.73	26.09	30.00	PASS

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Band41	15MHz	QPSK	41515	1RB#74	24.31	26.67	30.00	PASS
Band41	15MHz	QPSK	41515	1RB#0	24.43	26.79	30.00	PASS
Band41	15MHz	QPSK	41515	1RB#38	24.18	26.54	30.00	PASS
Band41	15MHz	QPSK	41515	36RB#0	23.88	26.24	30.00	PASS
Band41	15MHz	QPSK	41515	36RB#18	23.84	26.20	30.00	PASS
Band41	15MHz	QPSK	41515	36RB#39	23.87	26.23	30.00	PASS
Band41	15MHz	QPSK	41515	75RB#0	23.84	26.20	30.00	PASS
Band41	15MHz	16QAM	39725	1RB#0	23.39	25.75	30.00	PASS
Band41	15MHz	16QAM	39725	1RB#38	23.64	26.00	30.00	PASS
Band41	15MHz	16QAM	39725	1RB#74	23.40	25.76	30.00	PASS
Band41	15MHz	16QAM	39725	36RB#18	23.43	25.79	30.00	PASS
Band41	15MHz	16QAM	39725	36RB#0	23.44	25.80	30.00	PASS
Band41	15MHz	16QAM	39725	36RB#39	23.46	25.82	30.00	PASS
Band41	15MHz	16QAM	39725	75RB#0	23.37	25.73	30.00	PASS
Band41	15MHz	16QAM	40620	1RB#0	23.65	26.01	30.00	PASS
Band41	15MHz	16QAM	40620	1RB#38	23.79	26.15	30.00	PASS
Band41	15MHz	16QAM	40620	1RB#74	23.53	25.89	30.00	PASS
Band41	15MHz	16QAM	40620	36RB#39	23.57	25.93	30.00	PASS
Band41	15MHz	16QAM	40620	36RB#0	23.51	25.87	30.00	PASS
Band41	15MHz	16QAM	40620	36RB#18	23.53	25.89	30.00	PASS
Band41	15MHz	16QAM	40620	75RB#0	23.51	25.87	30.00	PASS
Band41	15MHz	16QAM	41515	1RB#38	23.68	26.04	30.00	PASS
Band41	15MHz	16QAM	41515	1RB#0	23.79	26.15	30.00	PASS
Band41	15MHz	16QAM	41515	1RB#74	23.55	25.91	30.00	PASS
Band41	15MHz	16QAM	41515	36RB#0	23.54	25.90	30.00	PASS
Band41	15MHz	16QAM	41515	36RB#18	23.67	26.03	30.00	PASS
Band41	15MHz	16QAM	41515	36RB#39	23.60	25.96	30.00	PASS
Band41	15MHz	16QAM	41515	75RB#0	23.56	25.92	30.00	PASS
Band41	20MHz	QPSK	39750	1RB#99	24.06	26.42	30.00	PASS
Band41	20MHz	QPSK	39750	1RB#49	24.18	26.54	30.00	PASS
Band41	20MHz	QPSK	39750	1RB#0	23.98	26.34	30.00	PASS
Band41	20MHz	QPSK	39750	50RB#0	23.76	26.12	30.00	PASS
Band41	20MHz	QPSK	39750	50RB#25	23.75	26.11	30.00	PASS
Band41	20MHz	QPSK	39750	50RB#50	23.70	26.06	30.00	PASS
Band41	20MHz	QPSK	39750	100RB#0	23.70	26.06	30.00	PASS
Band41	20MHz	QPSK	40620	1RB#0	24.21	26.57	30.00	PASS
Band41	20MHz	QPSK	40620	1RB#99	24.43	26.79	30.00	PASS
Band41	20MHz	QPSK	40620	1RB#49	24.25	26.61	30.00	PASS
Band41	20MHz	QPSK	40620	50RB#50	23.92	26.28	30.00	PASS
Band41	20MHz	QPSK	40620	50RB#0	23.91	26.27	30.00	PASS
Band41	20MHz	QPSK	40620	50RB#25	23.89	26.25	30.00	PASS
Band41	20MHz	QPSK	40620	100RB#0	23.89	26.25	30.00	PASS
Band41	20MHz	QPSK	41490	1RB#49	24.44	26.80	30.00	PASS
Band41	20MHz	QPSK	41490	1RB#0	24.62	26.98	30.00	PASS
Band41	20MHz	QPSK	41490	1RB#99	24.35	26.71	30.00	PASS
Band41	20MHz	QPSK	41490	50RB#0	24.10	26.46	30.00	PASS
Band41	20MHz	QPSK	41490	50RB#50	24.01	26.37	30.00	PASS
Band41	20MHz	QPSK	41490	50RB#25	24.03	26.39	30.00	PASS
Band41	20MHz	QPSK	41490	100RB#0	24.06	26.42	30.00	PASS
Band41	20MHz	16QAM	39750	1RB#99	23.62	25.98	30.00	PASS
Band41	20MHz	16QAM	39750	1RB#0	23.83	26.19	30.00	PASS
Band41	20MHz	16QAM	39750	1RB#49	23.64	26.00	30.00	PASS
Band41	20MHz	16QAM	39750	50RB#50	23.53	25.89	30.00	PASS

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Band41	20MHz	16QAM	39750	50RB#25	23.59	25.95	30.00	PASS
Band41	20MHz	16QAM	39750	50RB#0	23.55	25.91	30.00	PASS
Band41	20MHz	16QAM	39750	100RB#0	23.54	25.90	30.00	PASS
Band41	20MHz	16QAM	40620	1RB#99	23.73	26.09	30.00	PASS
Band41	20MHz	16QAM	40620	1RB#0	23.94	26.30	30.00	PASS
Band41	20MHz	16QAM	40620	1RB#49	23.73	26.09	30.00	PASS
Band41	20MHz	16QAM	40620	50RB#50	23.76	26.12	30.00	PASS
Band41	20MHz	16QAM	40620	50RB#0	23.74	26.10	30.00	PASS
Band41	20MHz	16QAM	40620	50RB#25	23.72	26.08	30.00	PASS
Band41	20MHz	16QAM	40620	100RB#0	23.74	26.10	30.00	PASS
Band41	20MHz	16QAM	41490	1RB#49	23.88	26.24	30.00	PASS
Band41	20MHz	16QAM	41490	1RB#0	24.04	26.40	30.00	PASS
Band41	20MHz	16QAM	41490	1RB#99	23.74	26.10	30.00	PASS
Band41	20MHz	16QAM	41490	50RB#0	23.74	26.10	30.00	PASS
Band41	20MHz	16QAM	41490	50RB#25	23.81	26.17	30.00	PASS
Band41	20MHz	16QAM	41490	50RB#50	23.81	26.17	30.00	PASS
Band41	20MHz	16QAM	41490	100RB#0	23.80	26.16	30.00	PASS

Remark:

a: For getting the EIRP (Efficient Isotropic Radiated Power), the following formula should be taken to calculate it,

ERP [dBm] = Conducted Power [dBm] + Gain [dBd]

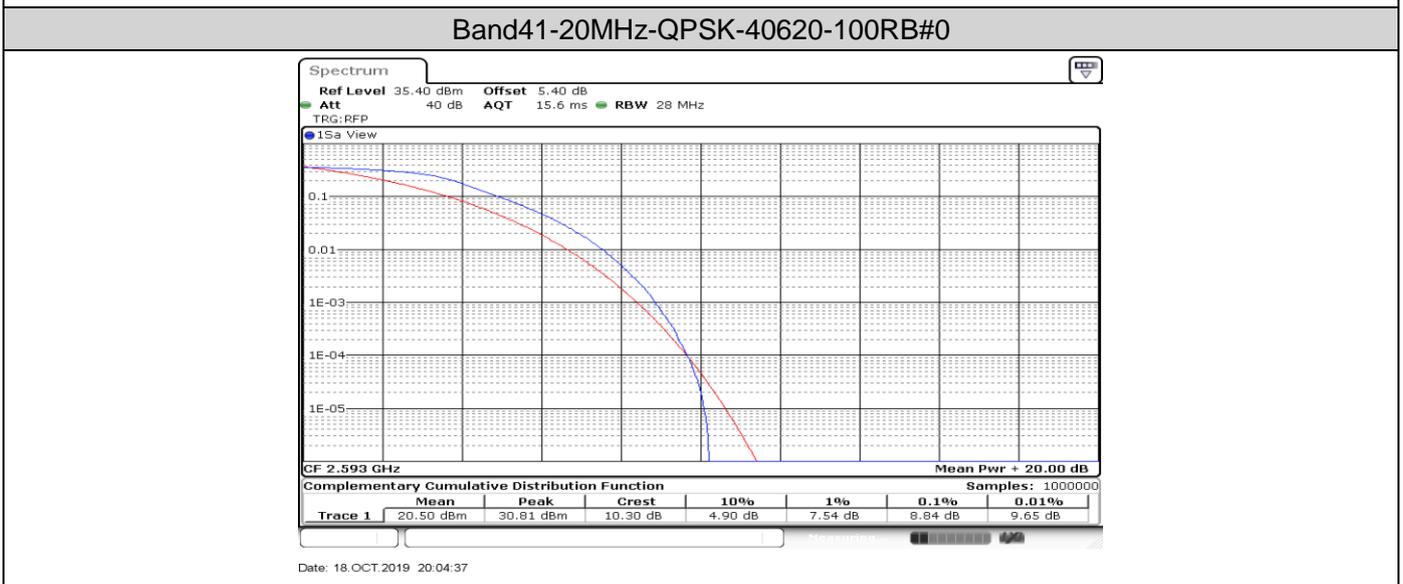
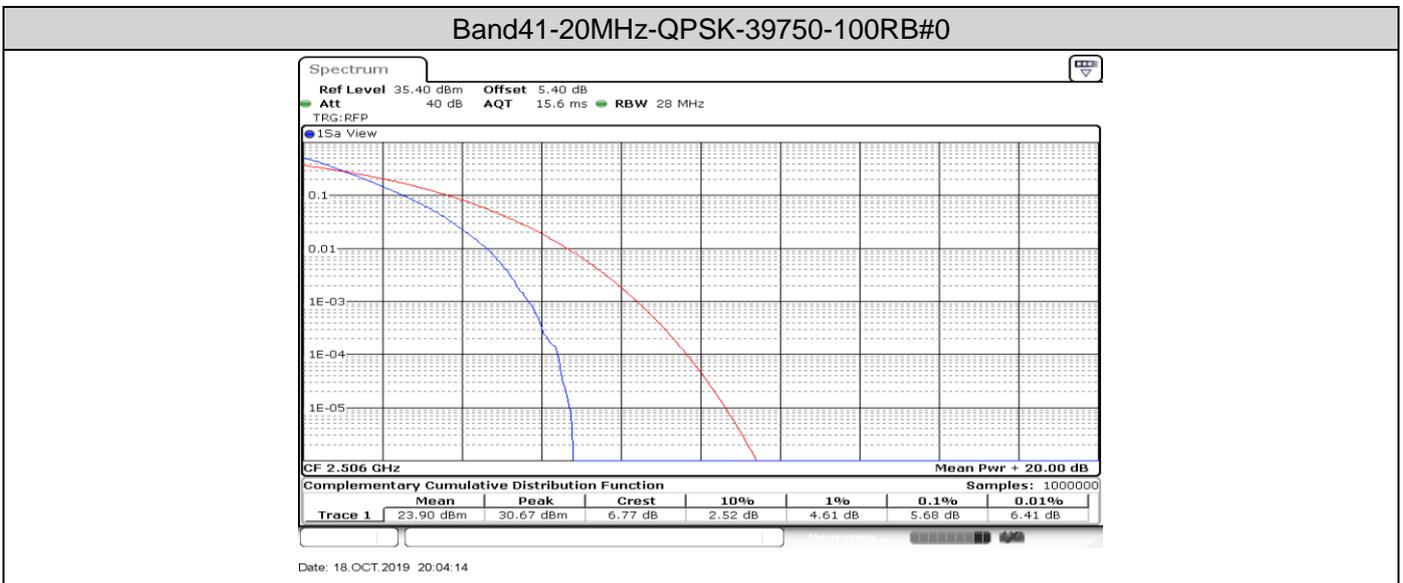
EIRP [dBm] = Conducted Power [dBm] + Gain [dBi]

4. Peak-to-Average Ratio (CCDF)

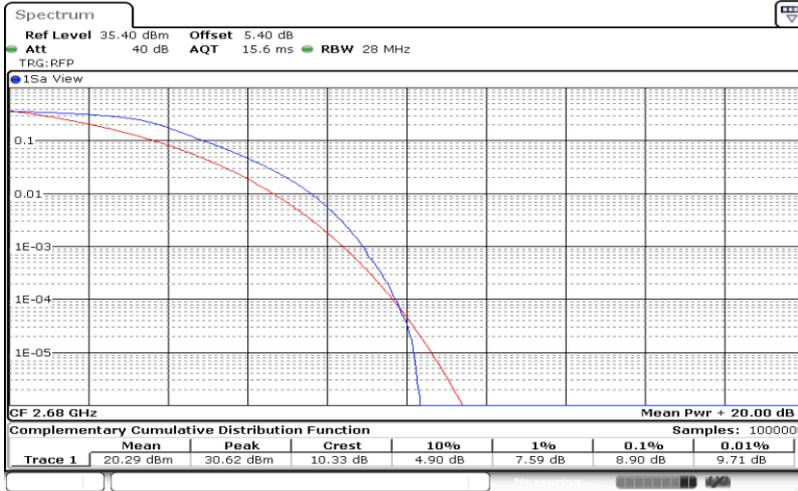
4.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band41	20MHz	QPSK	39750	100RB#0	5.68	13	PASS
Band41	20MHz	QPSK	40620	100RB#0	8.84	13	PASS
Band41	20MHz	QPSK	41490	100RB#0	8.90	13	PASS
Band41	20MHz	16QAM	39750	100RB#0	9.59	13	PASS
Band41	20MHz	16QAM	40620	100RB#0	9.54	13	PASS
Band41	20MHz	16QAM	41490	100RB#0	9.59	13	PASS

4.2. Test Plots

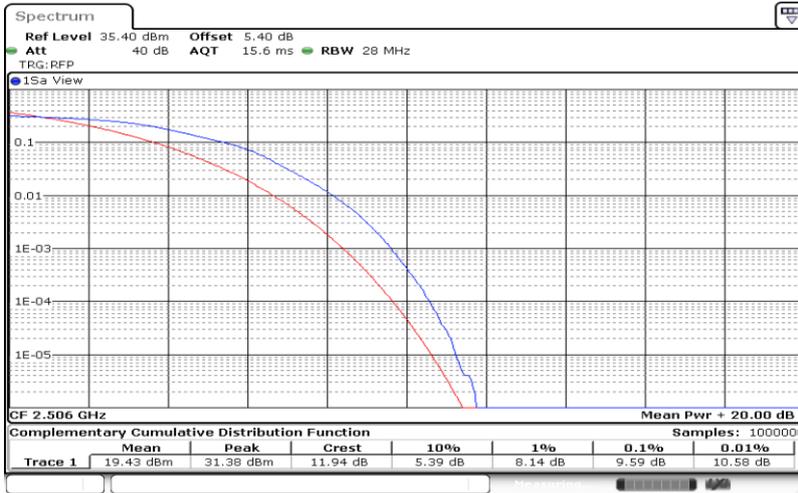


Band41-20MHz-QPSK-41490-100RB#0



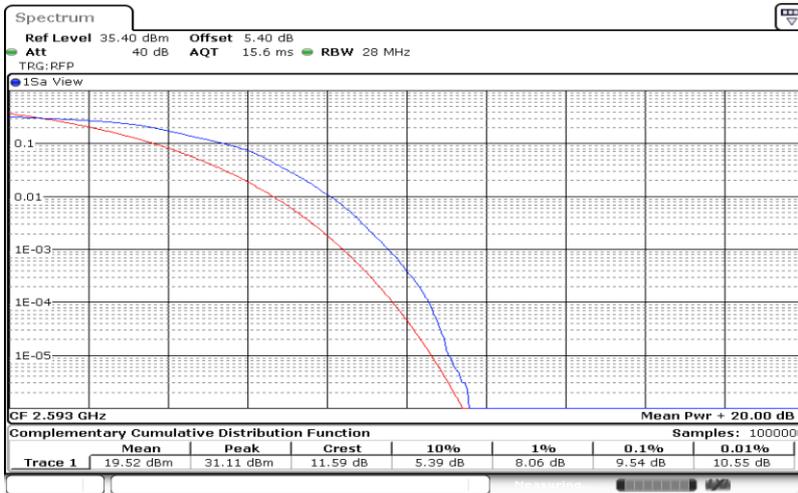
Date: 18.OCT.2019 20:05:00

Band41-20MHz-16QAM-39750-100RB#0



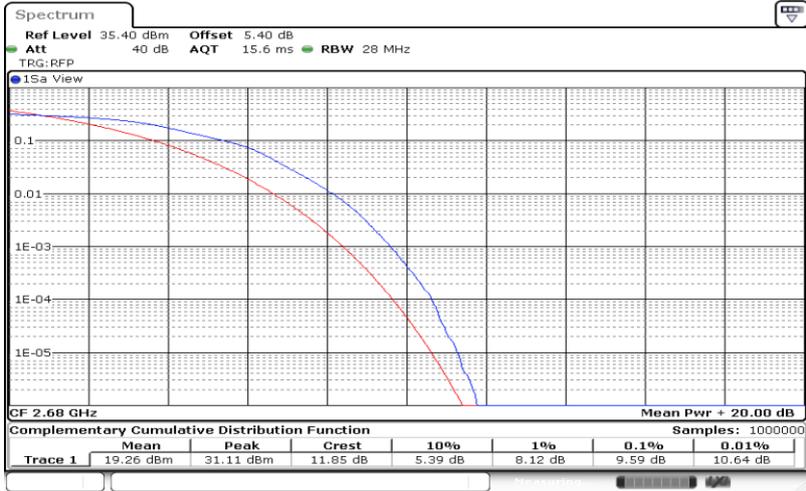
Date: 18.OCT.2019 20:04:26

Band41-20MHz-16QAM-40620-100RB#0



Date: 18.OCT.2019 20:04:49

Band41-20MHz-16QAM-41490-100RB#0

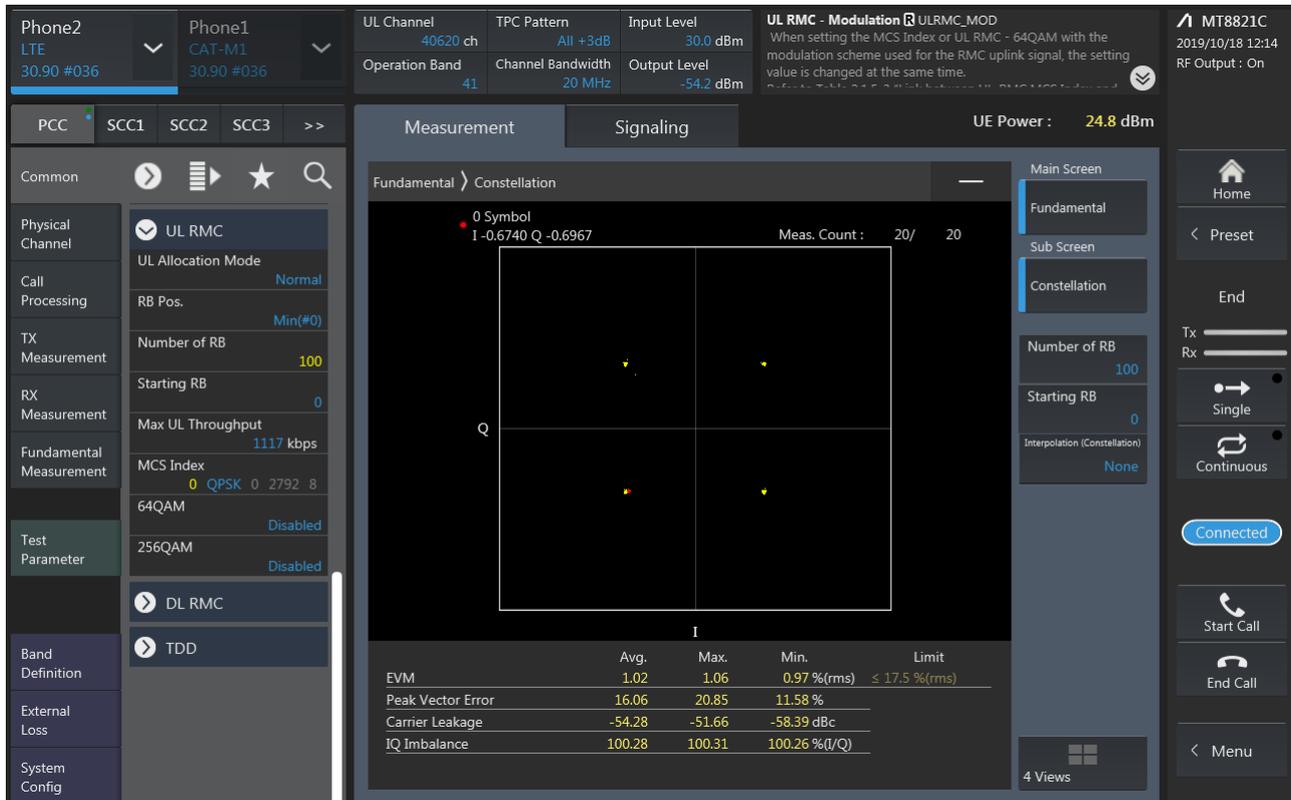


Date: 18.OCT.2019 20:05:12

5. Modulation Characteristics

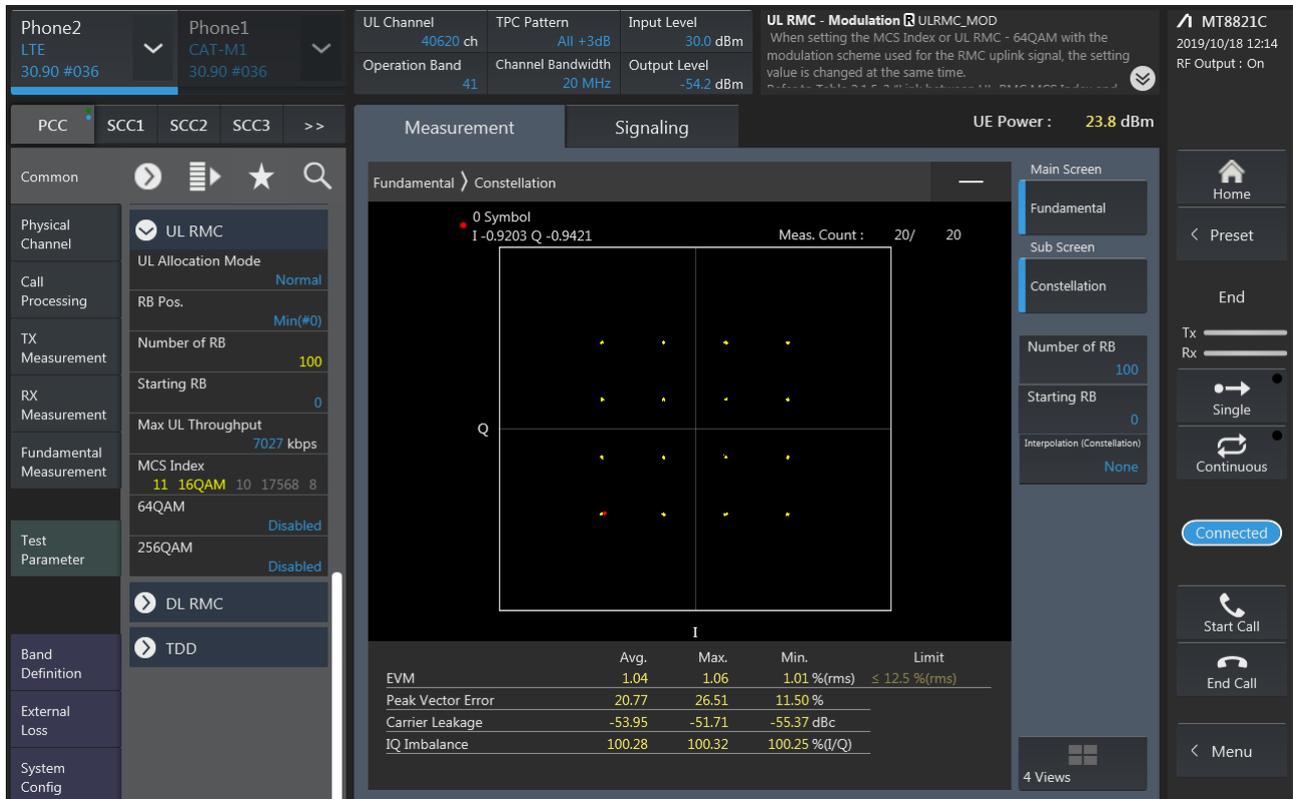
5.1. Test Mode = LTE /TM1 20MHz

5.1.1. Test Channel = MCH



5.2. Test Mode = LTE /TM2 20MHz

5.2.1. Test Channel = MCH



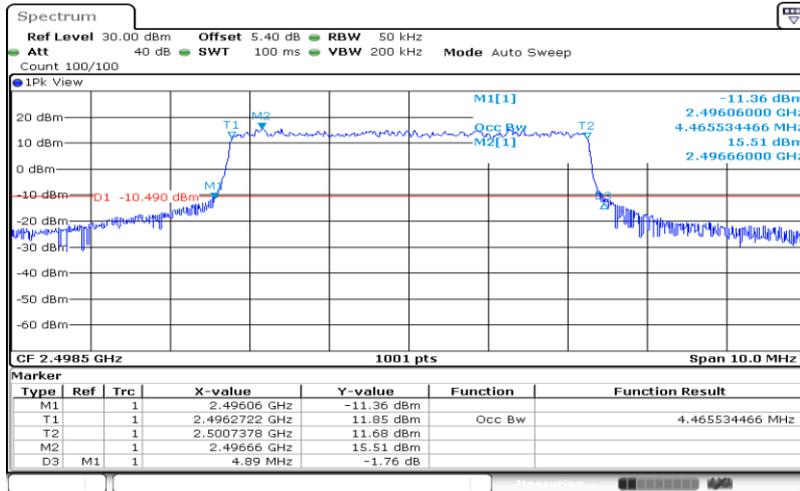
6. 26dB Bandwidth and Occupied Bandwidth

6.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band41	5MHz	QPSK	39675	25RB#0	4.466	4.890	PASS
Band41	5MHz	QPSK	40620	25RB#0	4.466	4.910	PASS
Band41	5MHz	QPSK	41565	25RB#0	4.466	4.870	PASS
Band41	5MHz	16QAM	39675	25RB#0	4.486	4.860	PASS
Band41	5MHz	16QAM	40620	25RB#0	4.476	4.850	PASS
Band41	5MHz	16QAM	41565	25RB#0	4.486	4.870	PASS
Band41	10MHz	QPSK	39700	50RB#0	8.911	9.740	PASS
Band41	10MHz	QPSK	40620	50RB#0	8.911	9.780	PASS
Band41	10MHz	QPSK	41540	50RB#0	8.911	9.860	PASS
Band41	10MHz	16QAM	39700	50RB#0	8.931	9.780	PASS
Band41	10MHz	16QAM	40620	50RB#0	8.931	9.620	PASS
Band41	10MHz	16QAM	41540	50RB#0	8.911	9.700	PASS
Band41	15MHz	QPSK	39725	75RB#0	13.487	16.380	PASS
Band41	15MHz	QPSK	40620	75RB#0	13.487	16.170	PASS
Band41	15MHz	QPSK	41515	75RB#0	13.516	16.230	PASS
Band41	15MHz	16QAM	39725	75RB#0	13.457	15.600	PASS
Band41	15MHz	16QAM	40620	75RB#0	13.457	15.930	PASS
Band41	15MHz	16QAM	41515	75RB#0	13.487	15.390	PASS
Band41	20MHz	QPSK	39750	100RB#0	17.902	20.200	PASS
Band41	20MHz	QPSK	40620	100RB#0	17.942	20.160	PASS
Band41	20MHz	QPSK	41490	100RB#0	17.902	20.200	PASS
Band41	20MHz	16QAM	39750	100RB#0	17.902	19.680	PASS
Band41	20MHz	16QAM	40620	100RB#0	17.902	19.840	PASS
Band41	20MHz	16QAM	41490	100RB#0	17.902	19.800	PASS

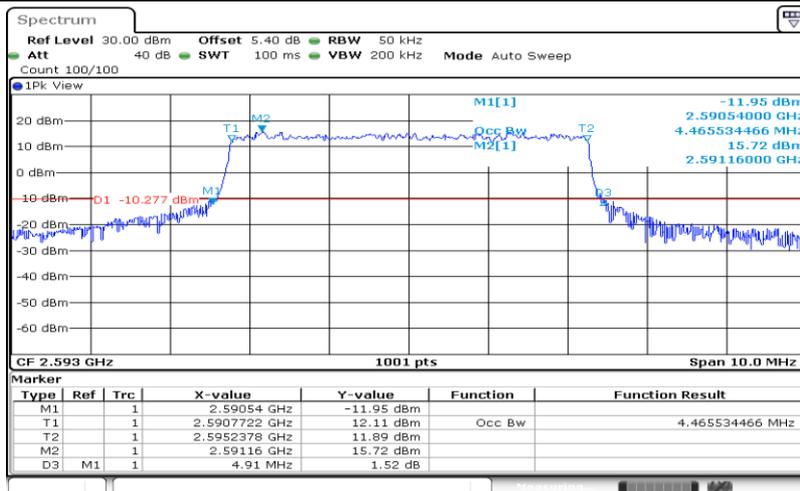
6.2. Test Plots

Band41-5MHz-QPSK-39675-25RB#0-4.466



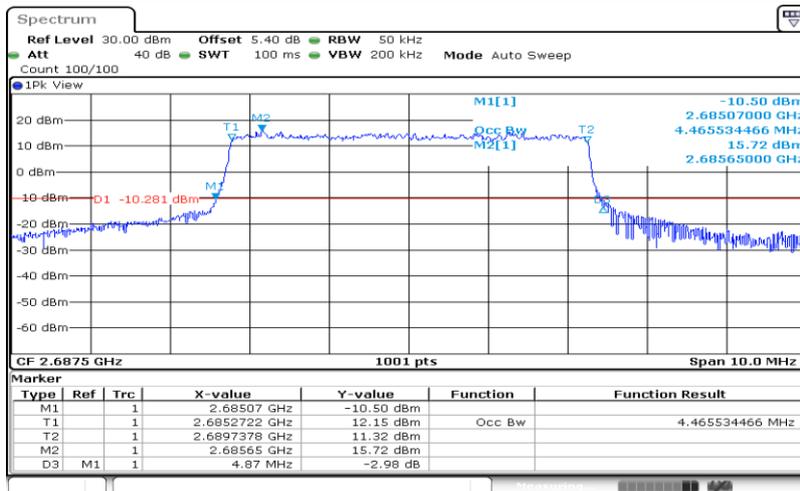
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Band41-5MHz-QPSK-40620-25RB#0-4.466



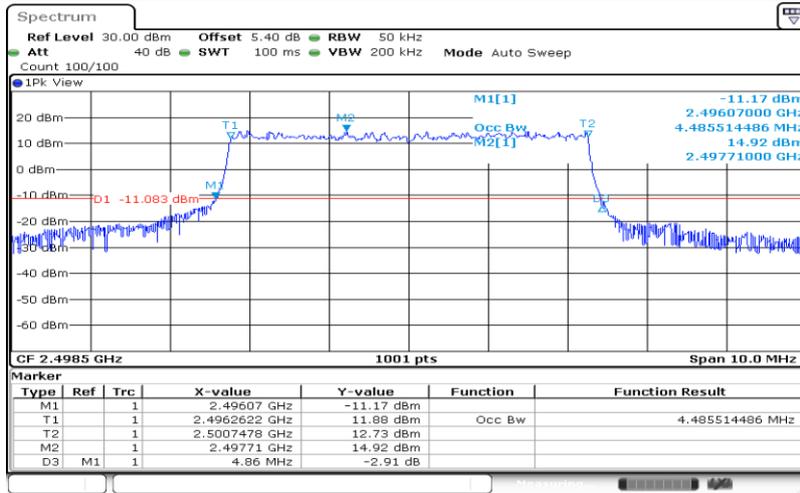
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Band41-5MHz-QPSK-41565-25RB#0-4.466



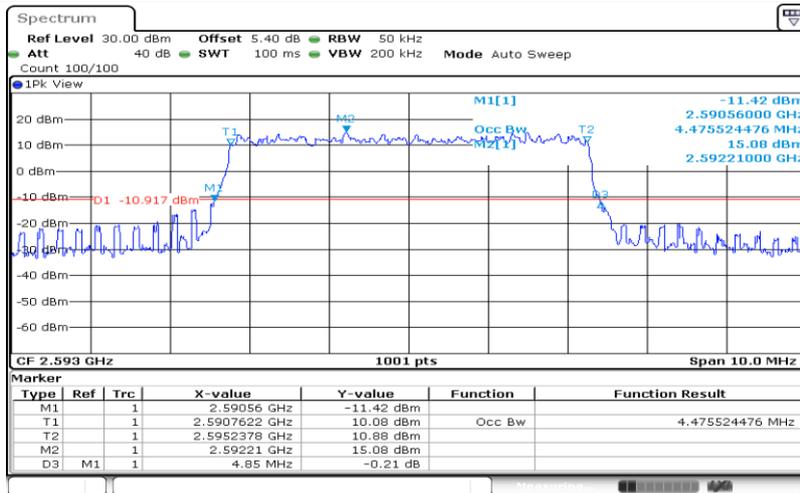
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Band41-5MHz-16QAM-39675-25RB#0-4.486



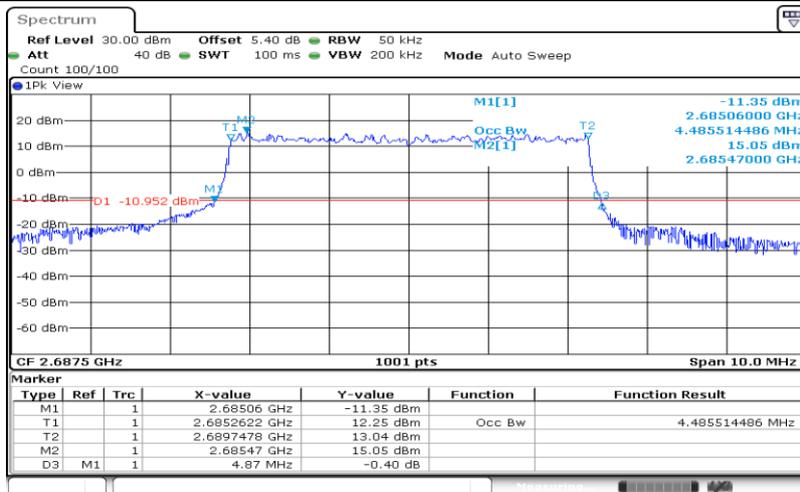
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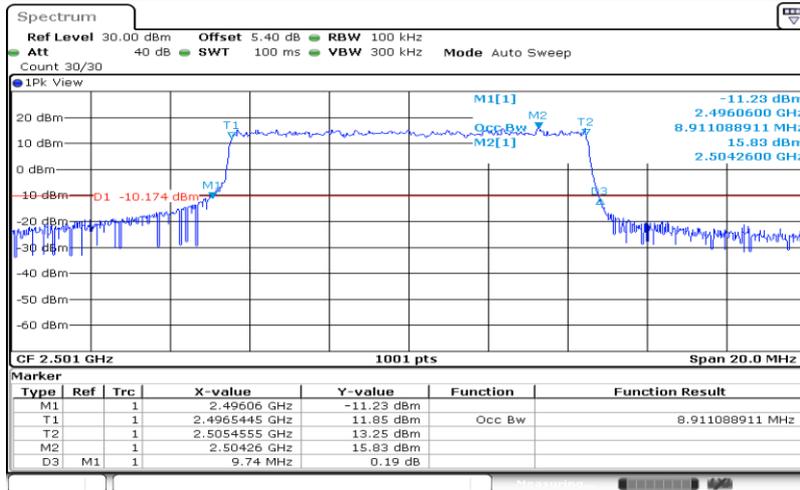
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Band41-5MHz-16QAM-41565-25RB#0-4.486



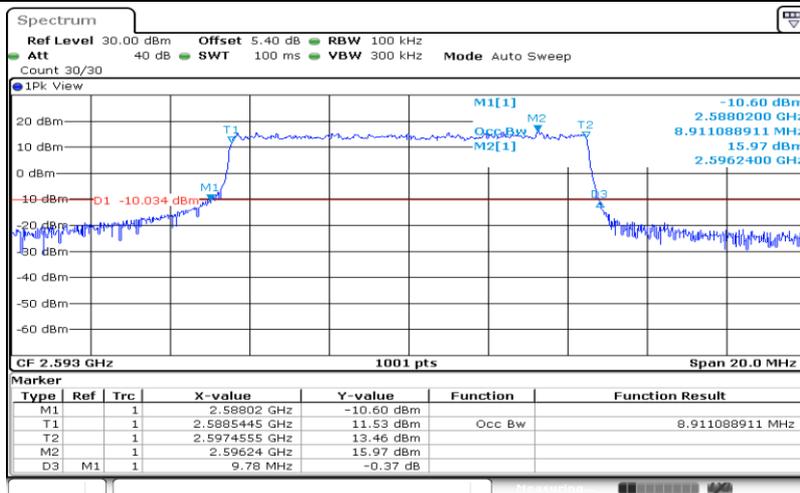
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Band41-10MHz-QPSK-39700-50RB#0-8.911



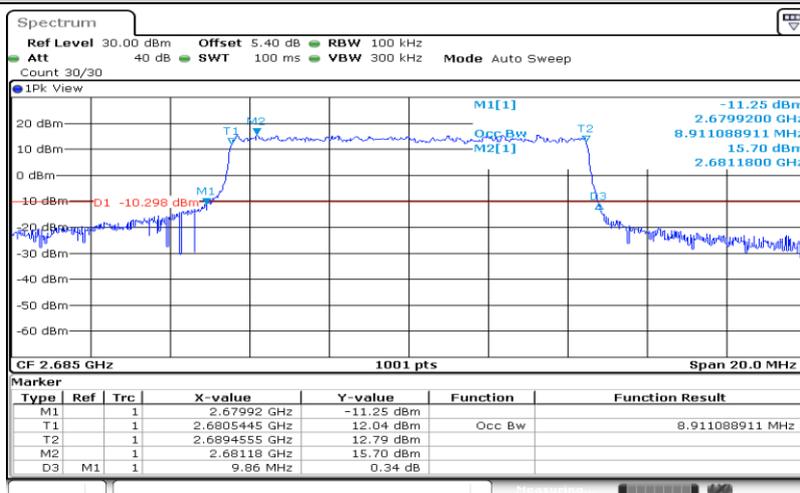
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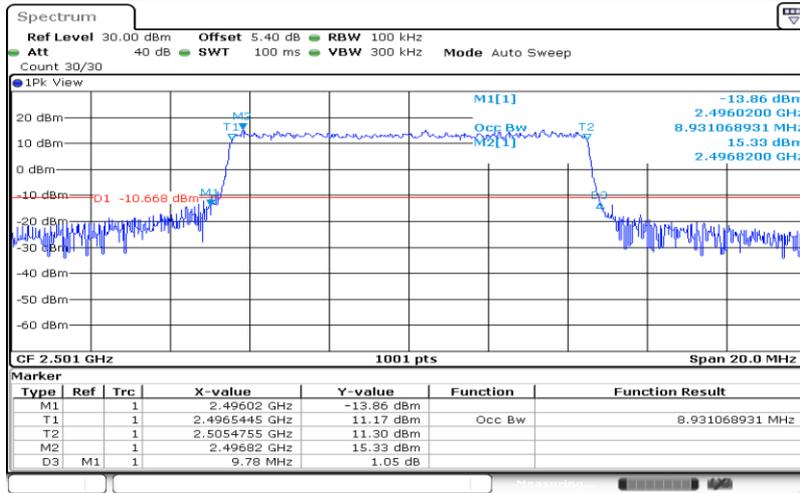
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Band41-10MHz-QPSK-41540-50RB#0-8.911

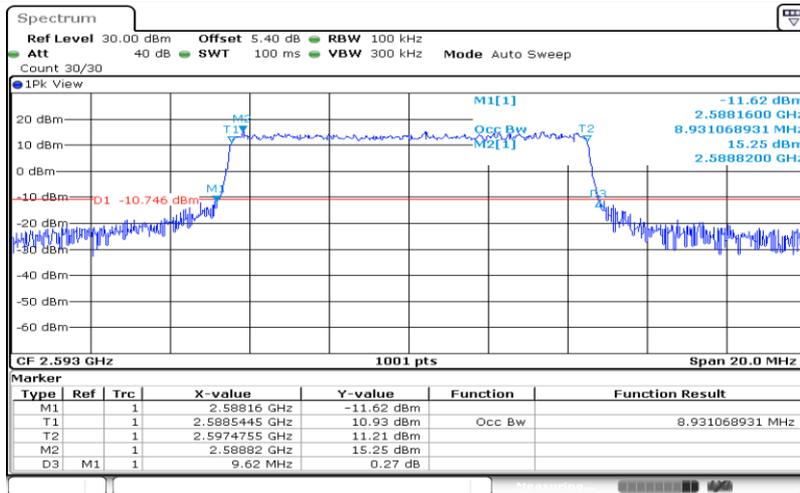


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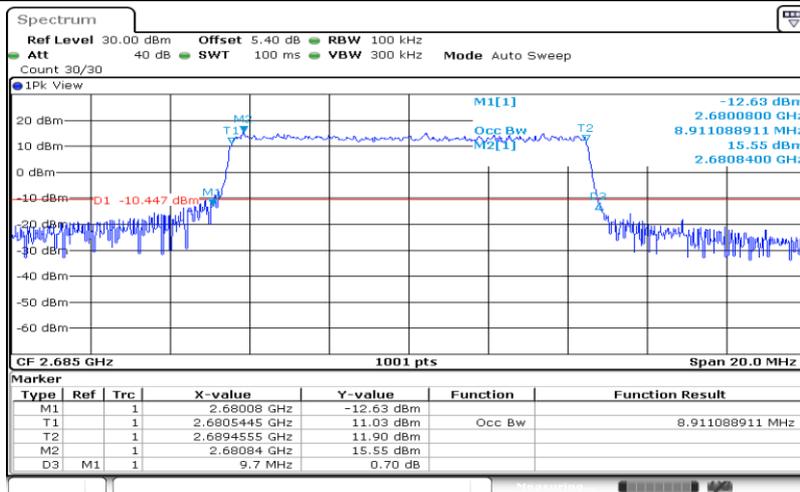
Band41-10MHz-16QAM-39700-50RB#0-8.931



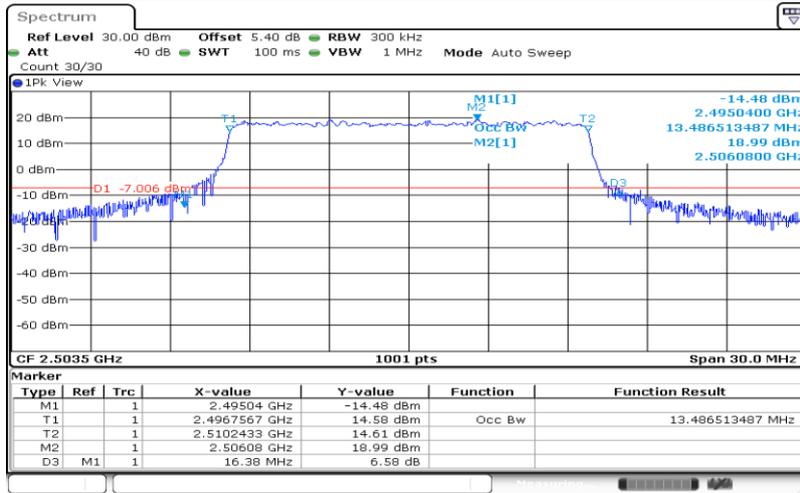
Band41-10MHz-16QAM-40620-50RB#0-8.931



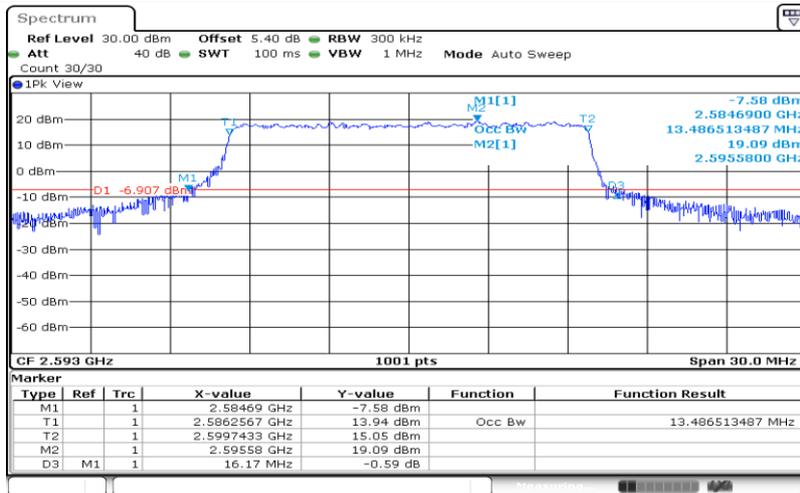
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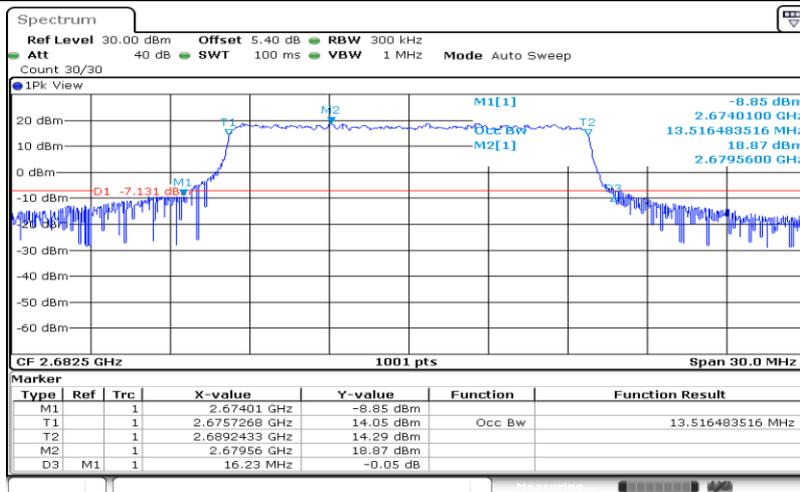
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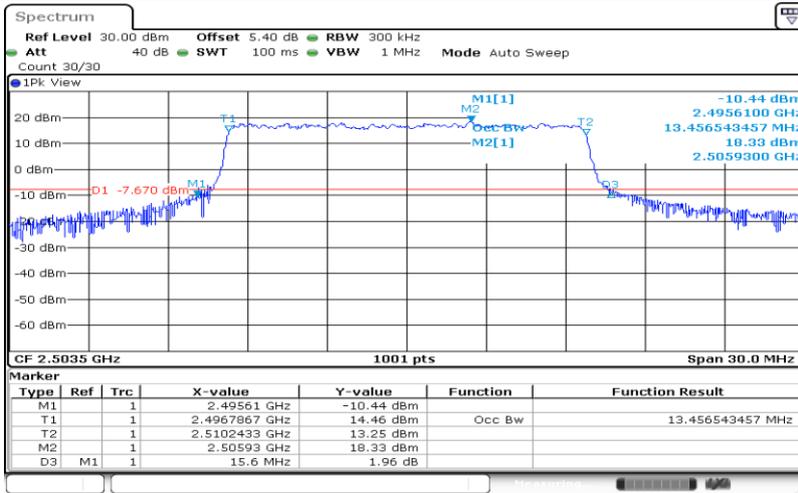
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Band41-15MHz-QPSK-41515-75RB#0-13.516

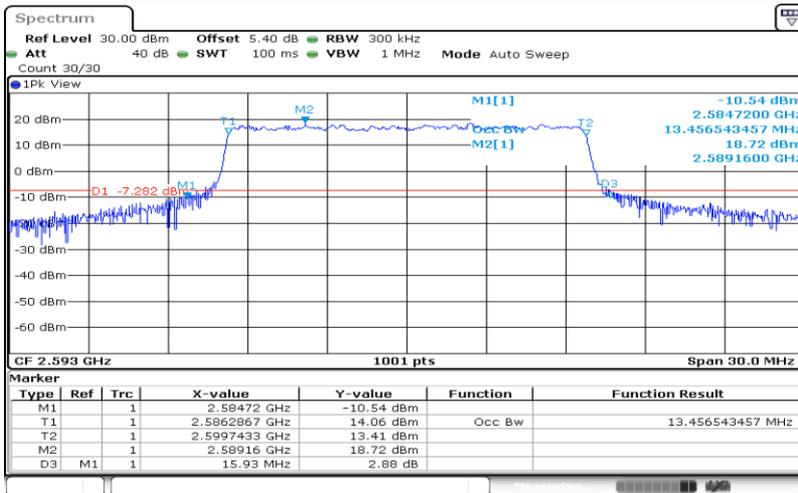


Band41-15MHz-16QAM-39725-75RB#0-13.457



Date: 18.OCT.2019 19:43:52

Band41-15MHz-16QAM-40620-75RB#0-13.457



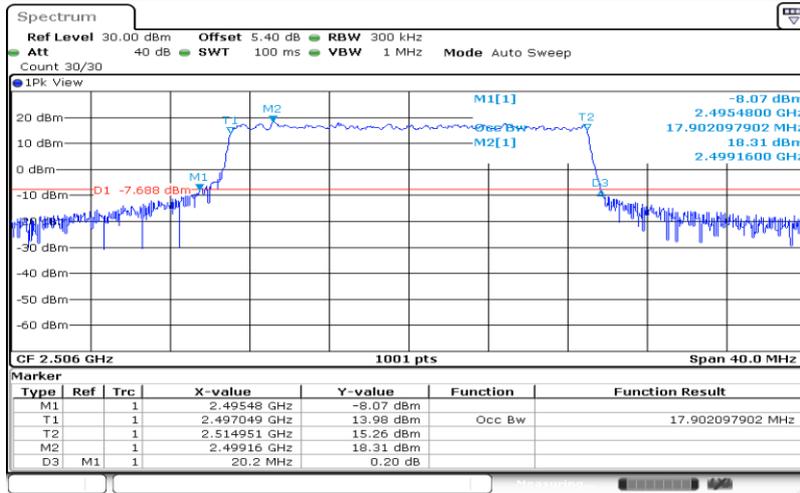
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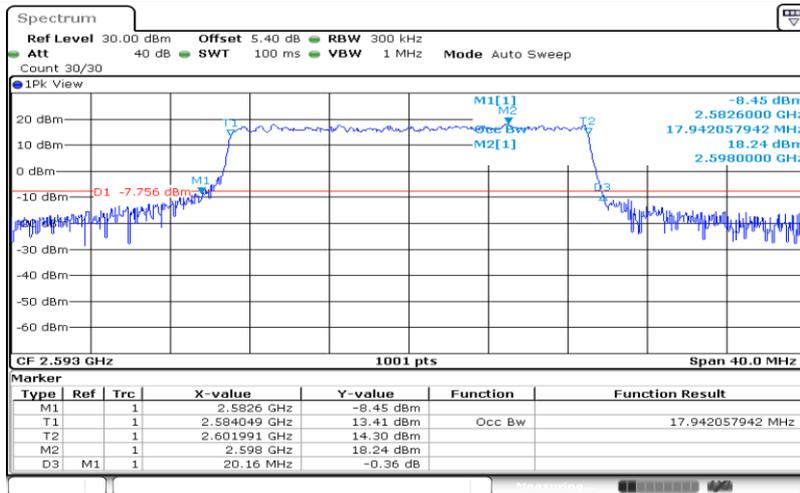


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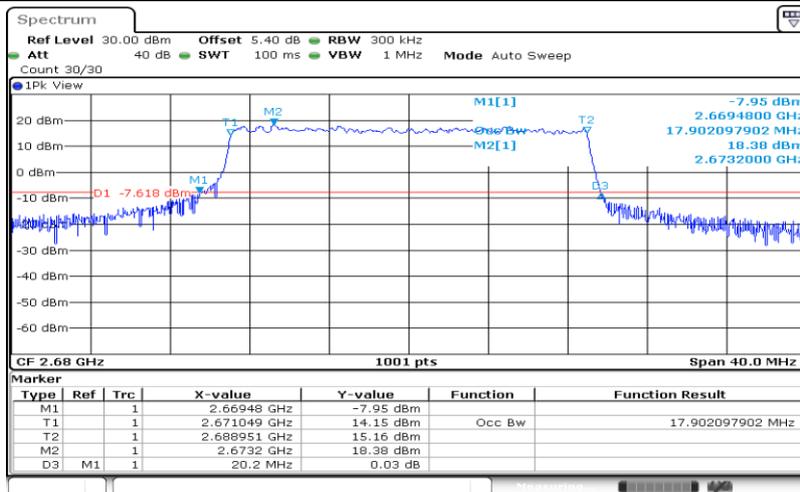
Band41-20MHz-QPSK-39750-100RB#0-17.902



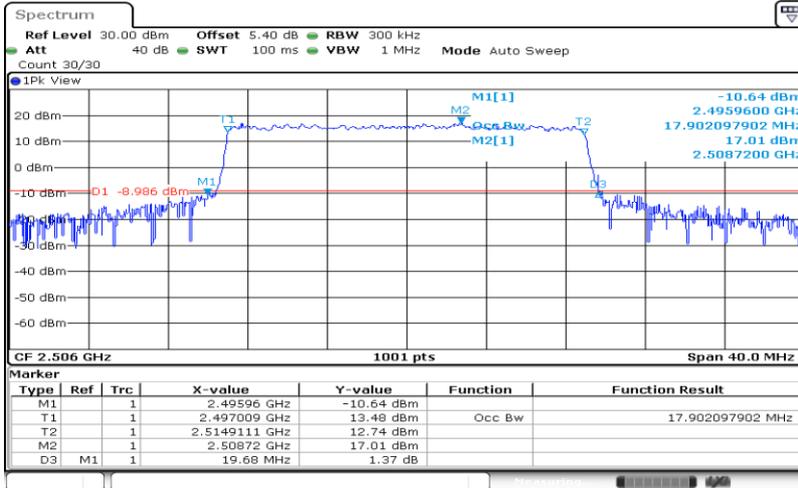
Band41-20MHz-QPSK-40620-100RB#0-17.942



Band41-20MHz-QPSK-41490-100RB#0-17.902

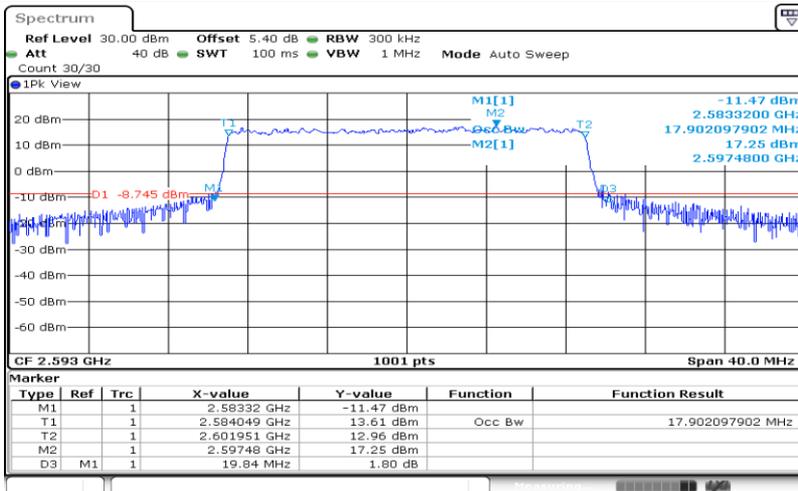


Band41-20MHz-16QAM-39750-100RB#0-17.902



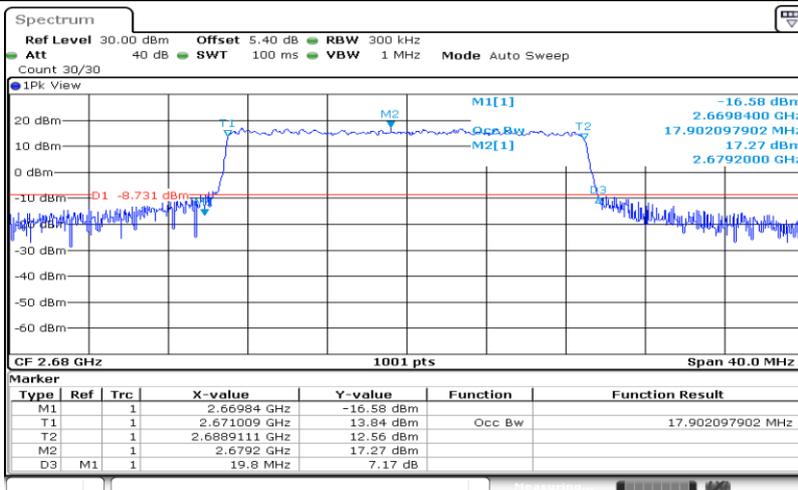
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Band41-20MHz-16QAM-40620-100RB#0-17.902



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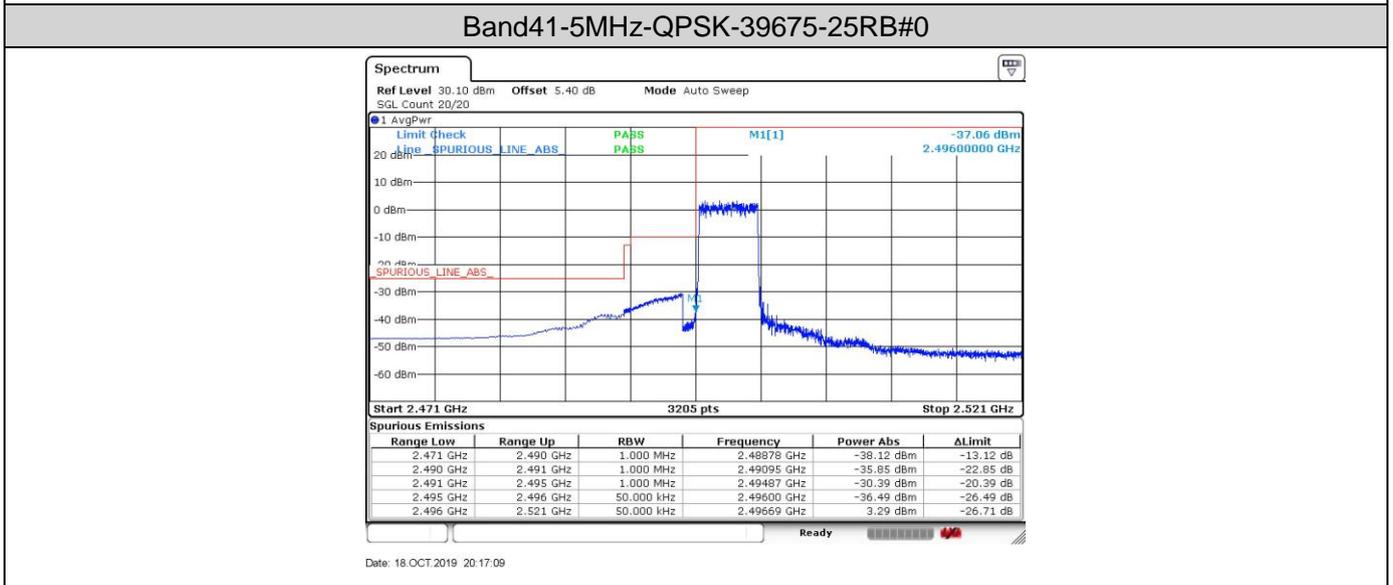
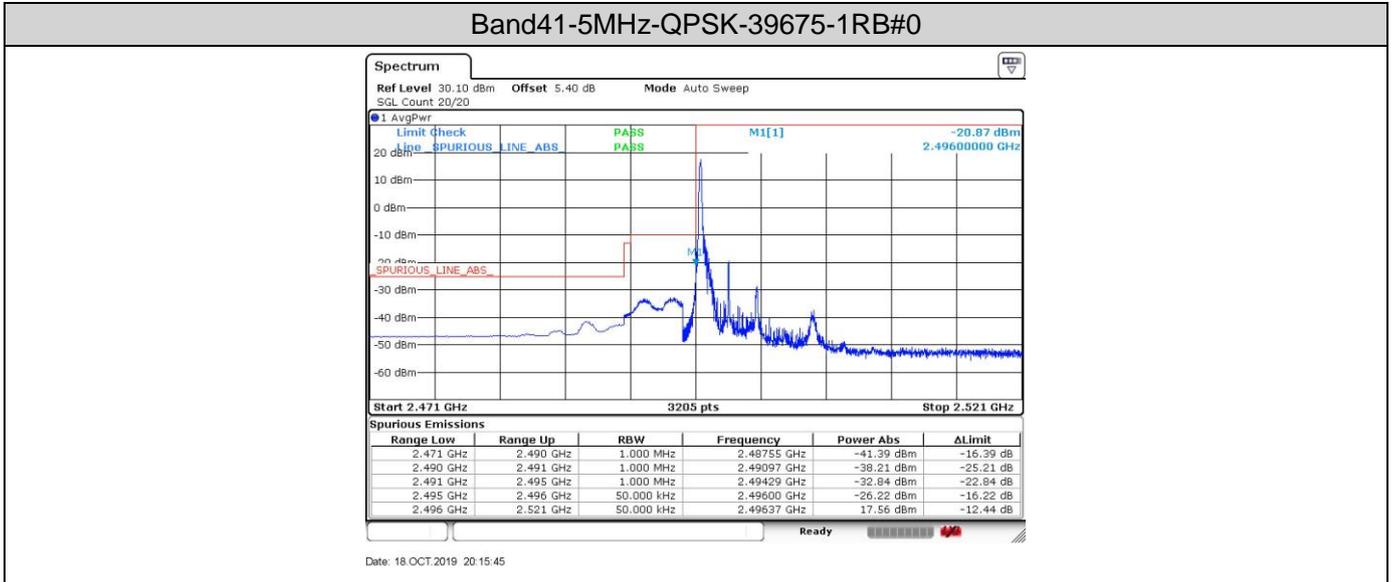
Band41-20MHz-16QAM-41490-100RB#0-17.902



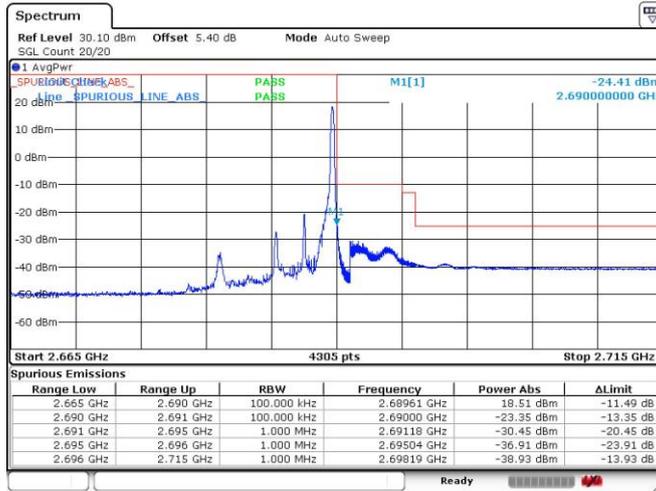
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7. Band Edge Compliance

7.1. Test Plots

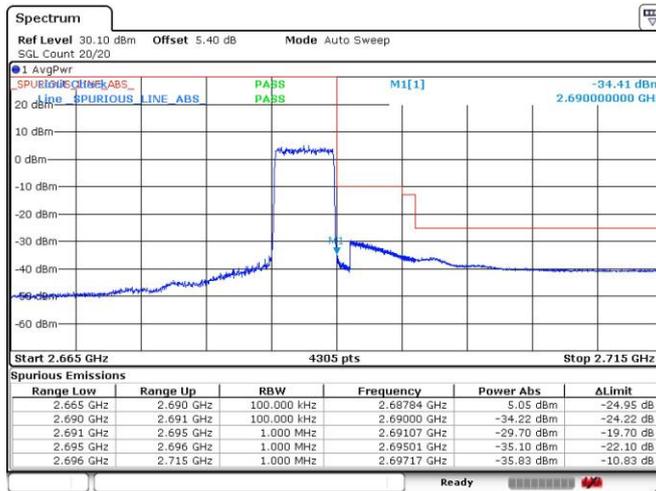


Band41-5MHz-QPSK-41565-1RB#24



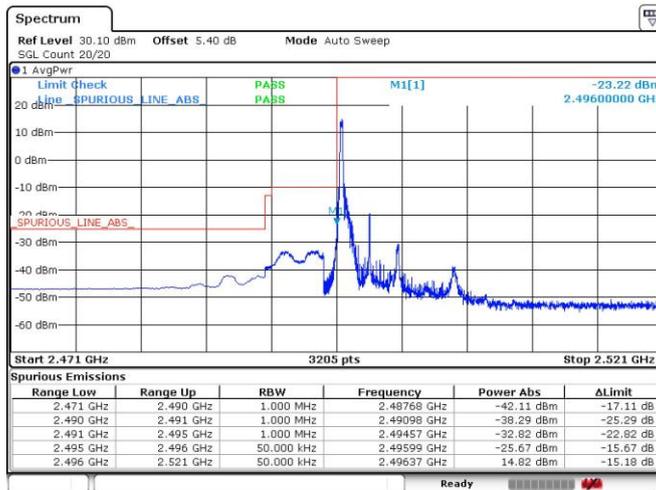
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Band41-5MHz-QPSK-41565-25RB#0



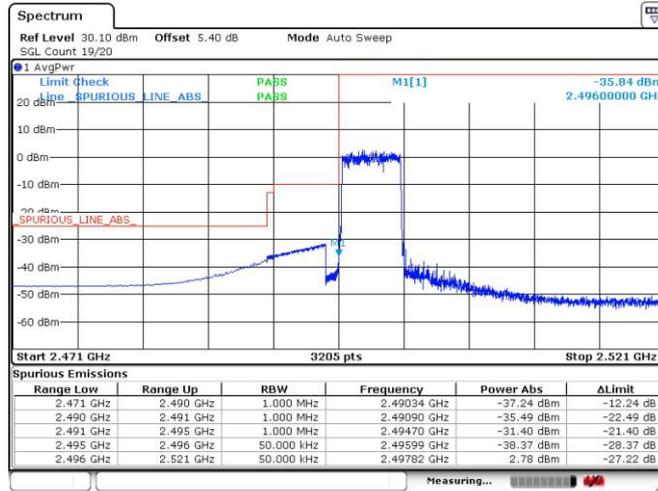
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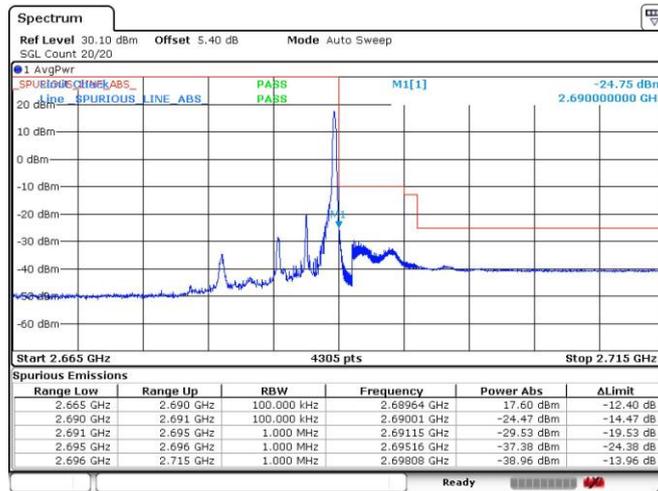
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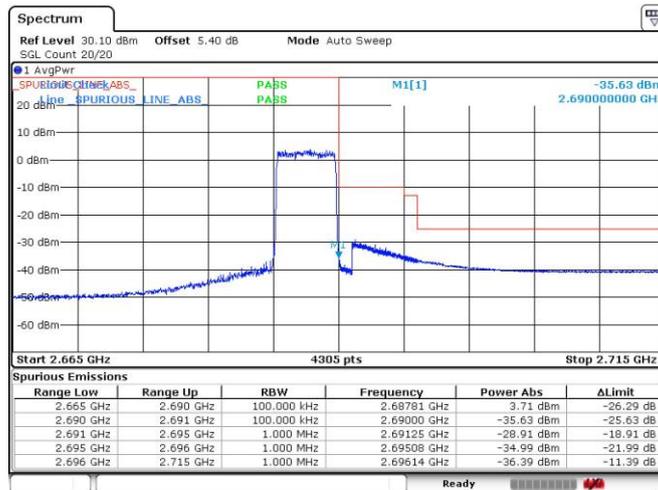
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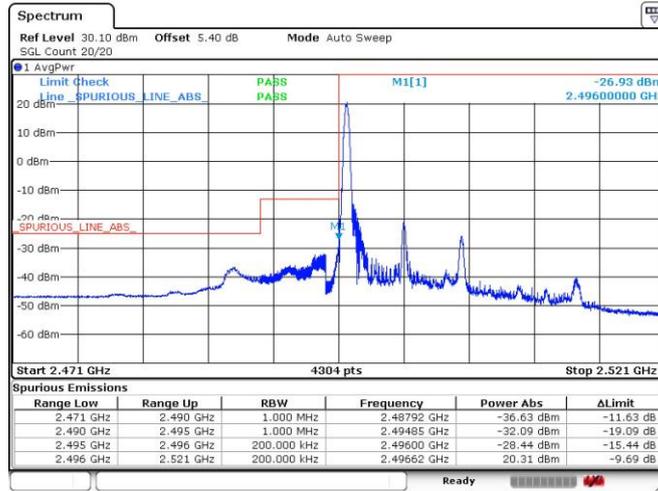
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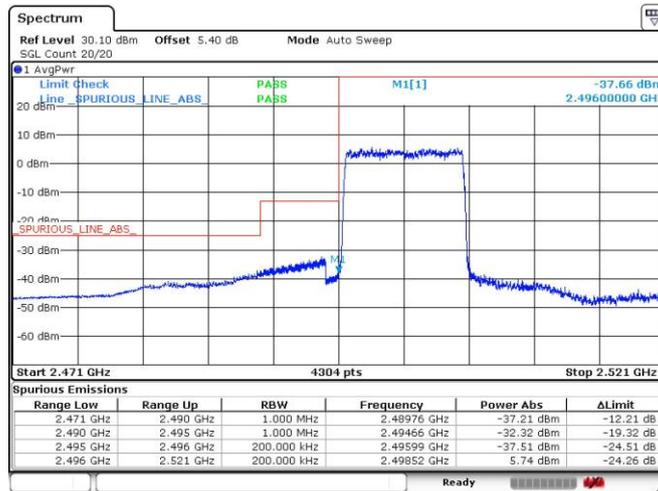
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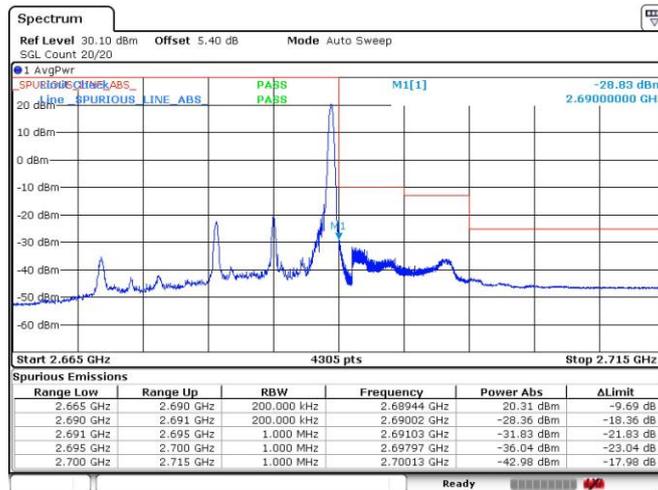
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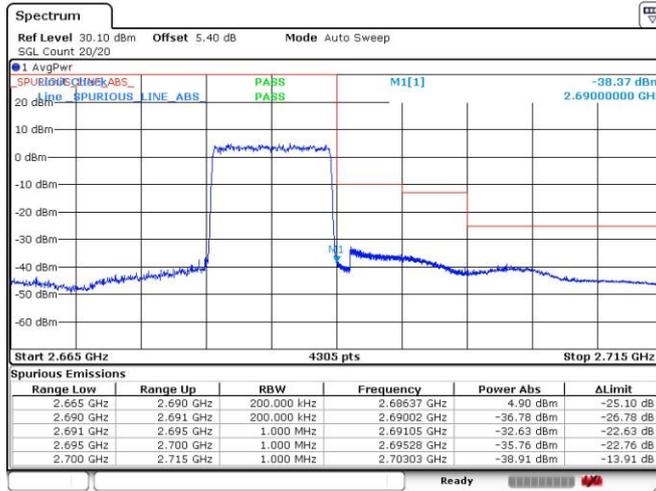
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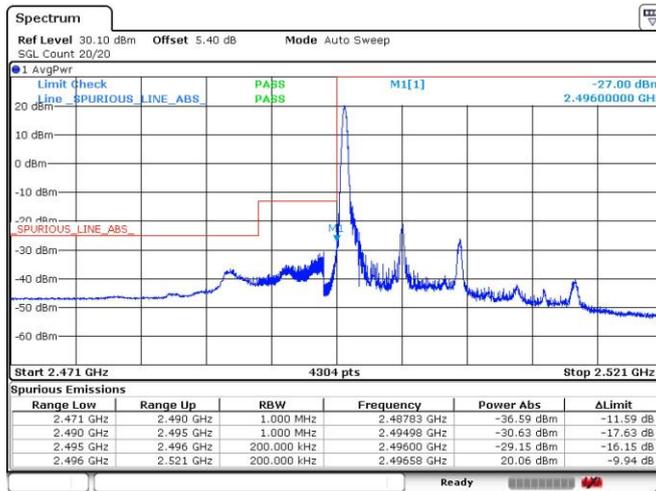
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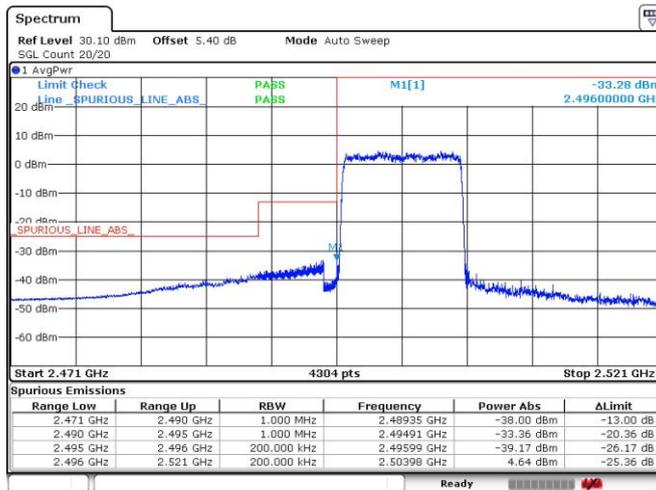
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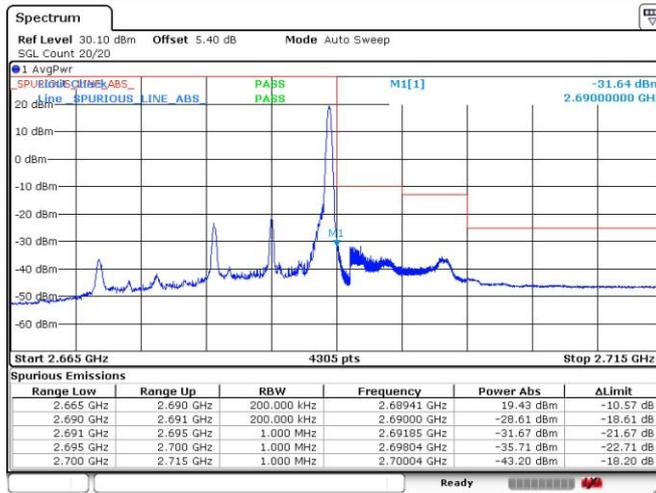
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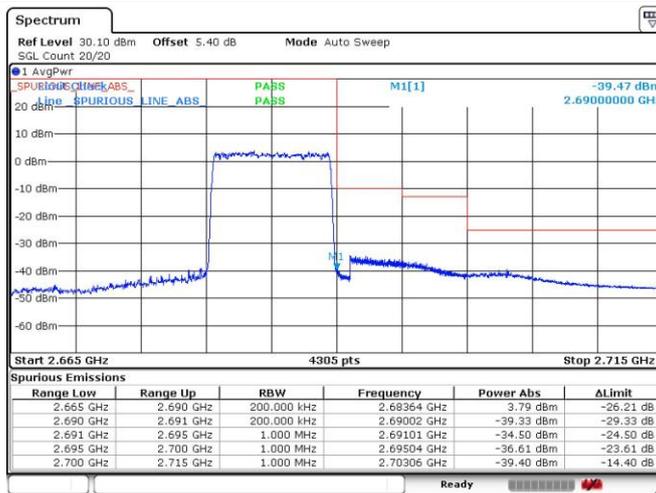
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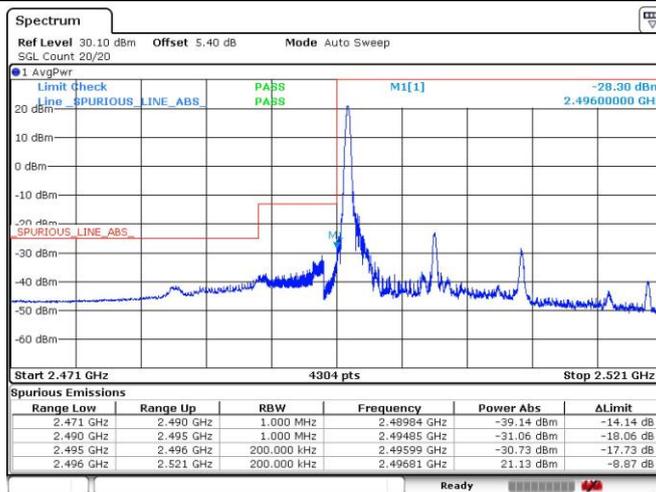
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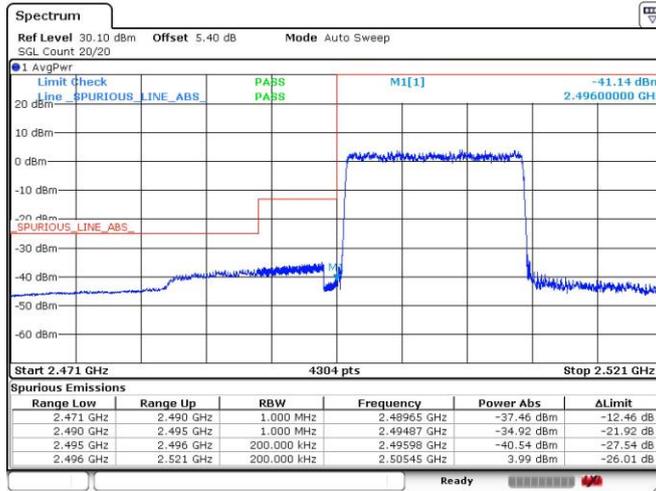
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Band41-15MHz-QPSK-39725-1RB#0



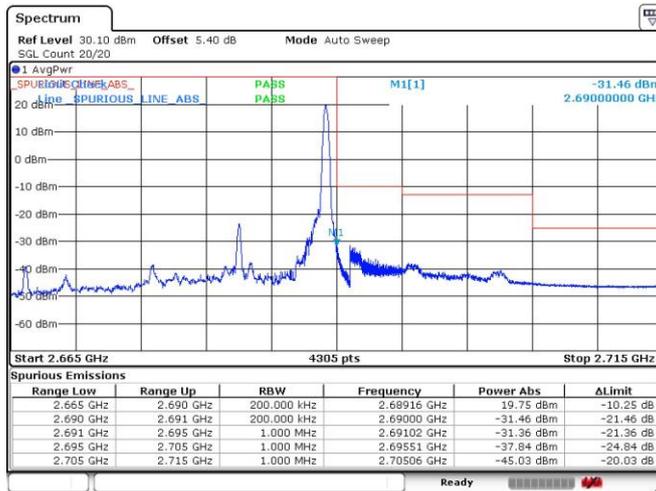
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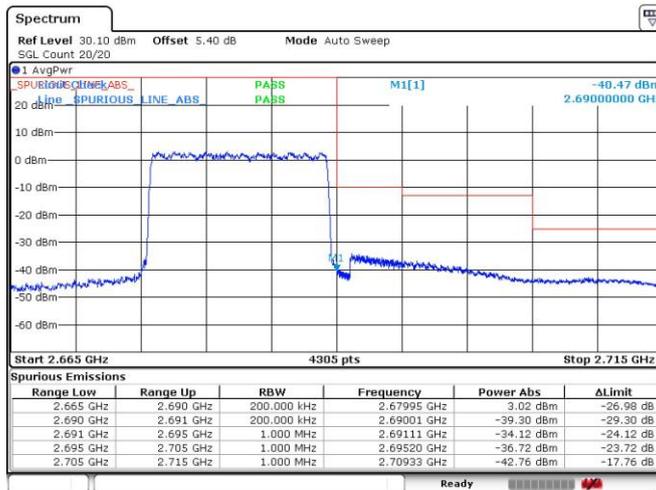
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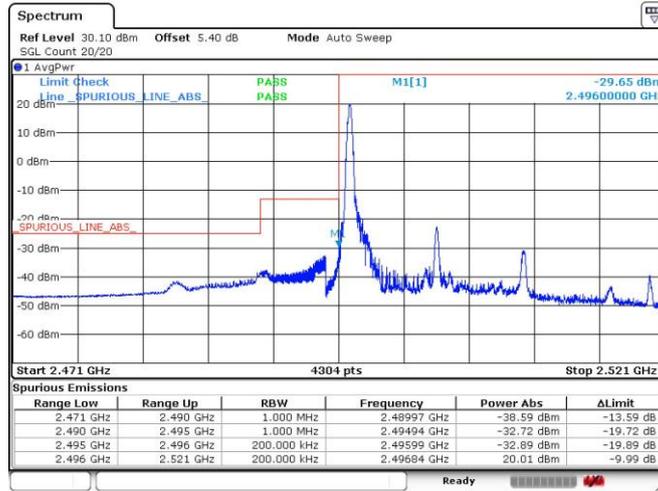
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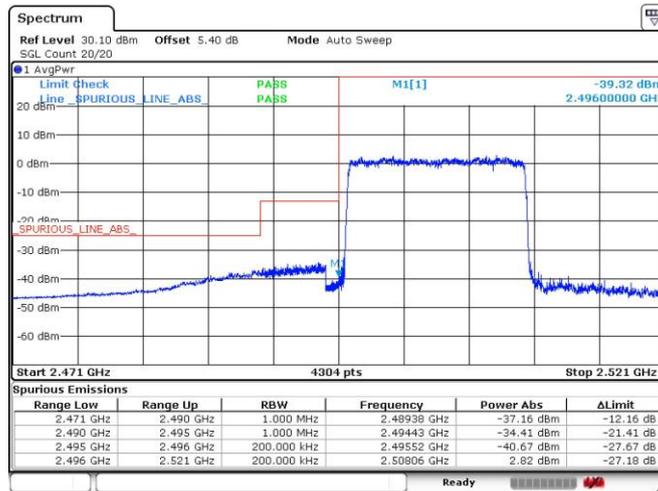
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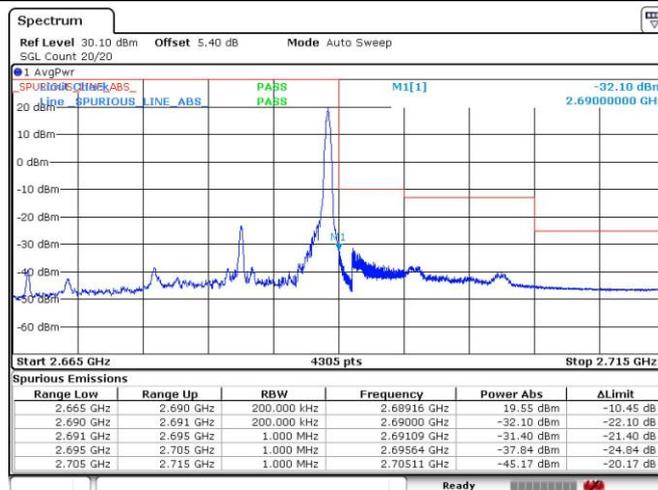
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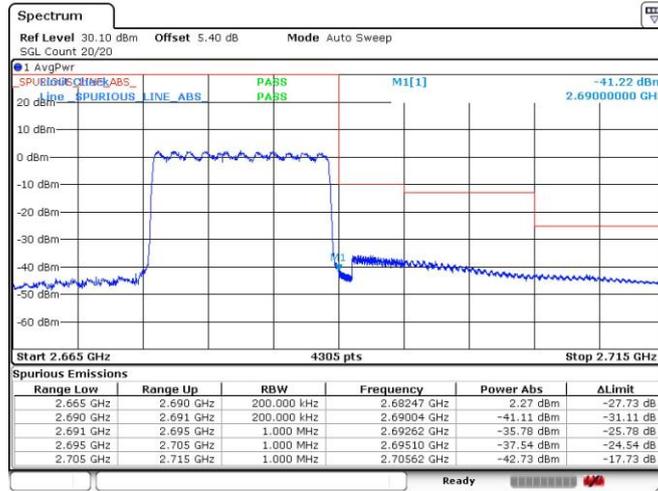
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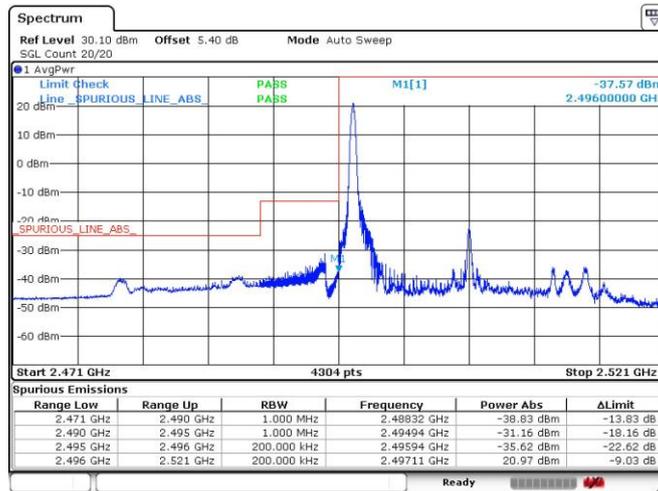
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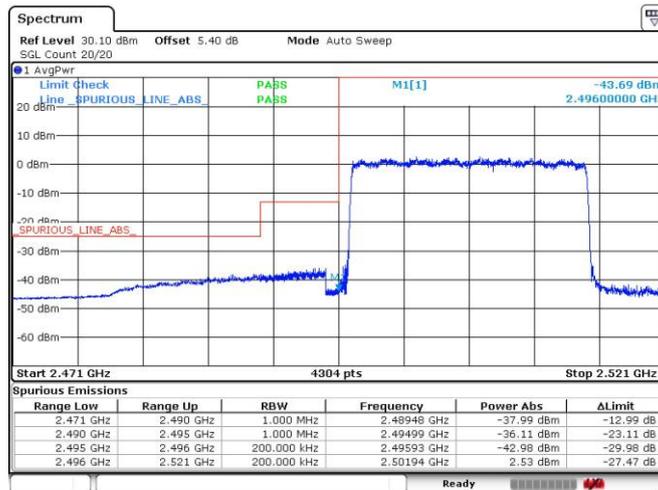
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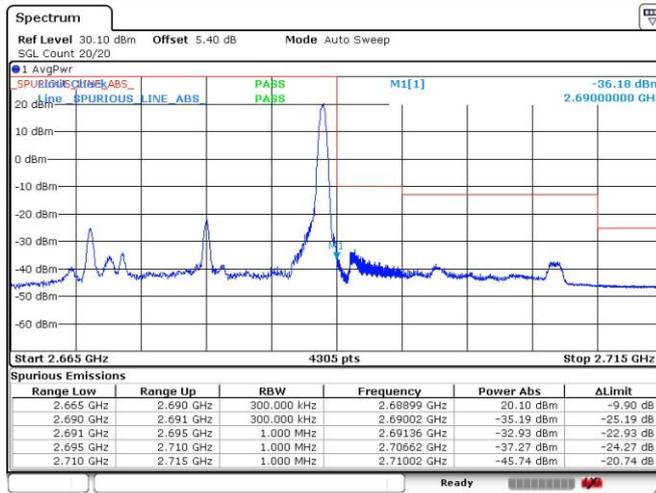
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Band41-20MHz-QPSK-39750-100RB#0



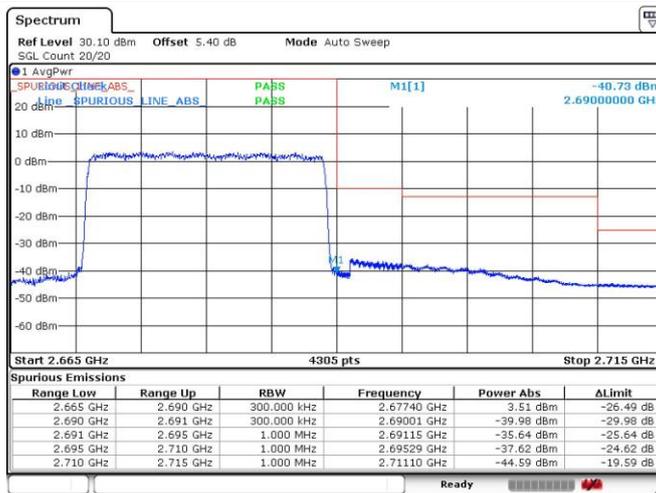
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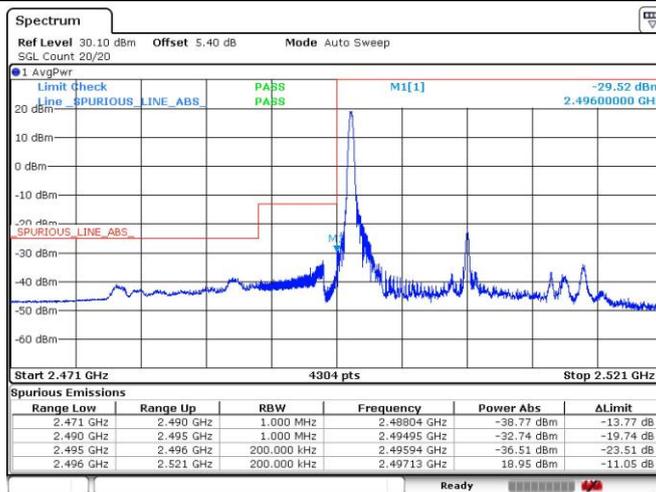
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Band41-20MHz-QPSK-41490-100RB#0



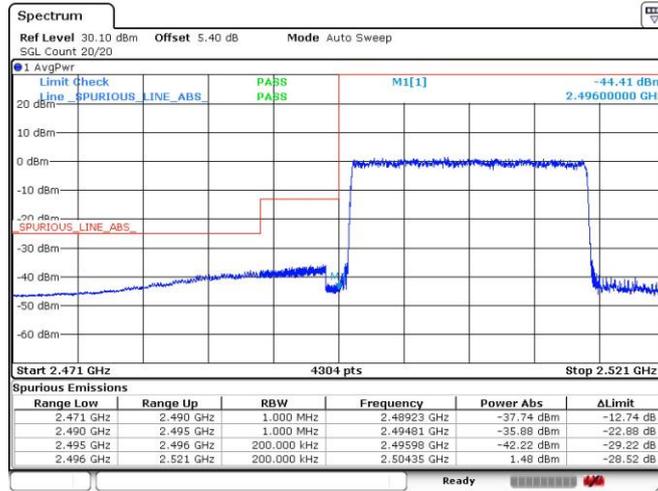
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Band41-20MHz-16QAM-39750-1RB#0



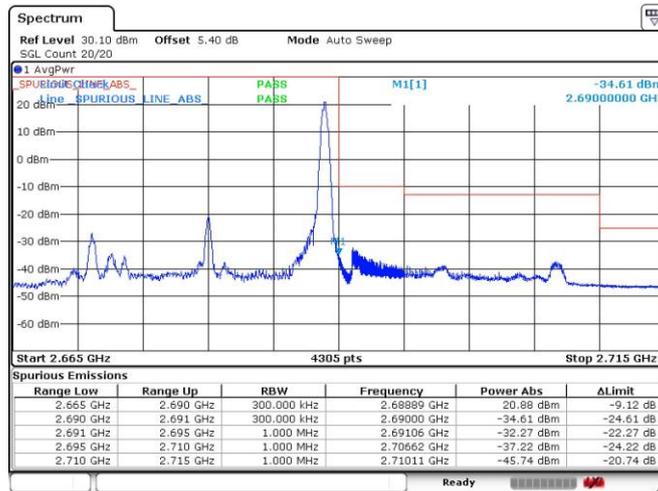
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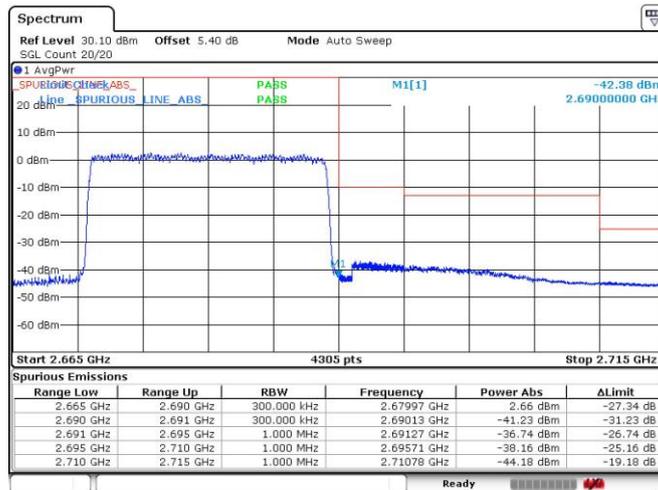
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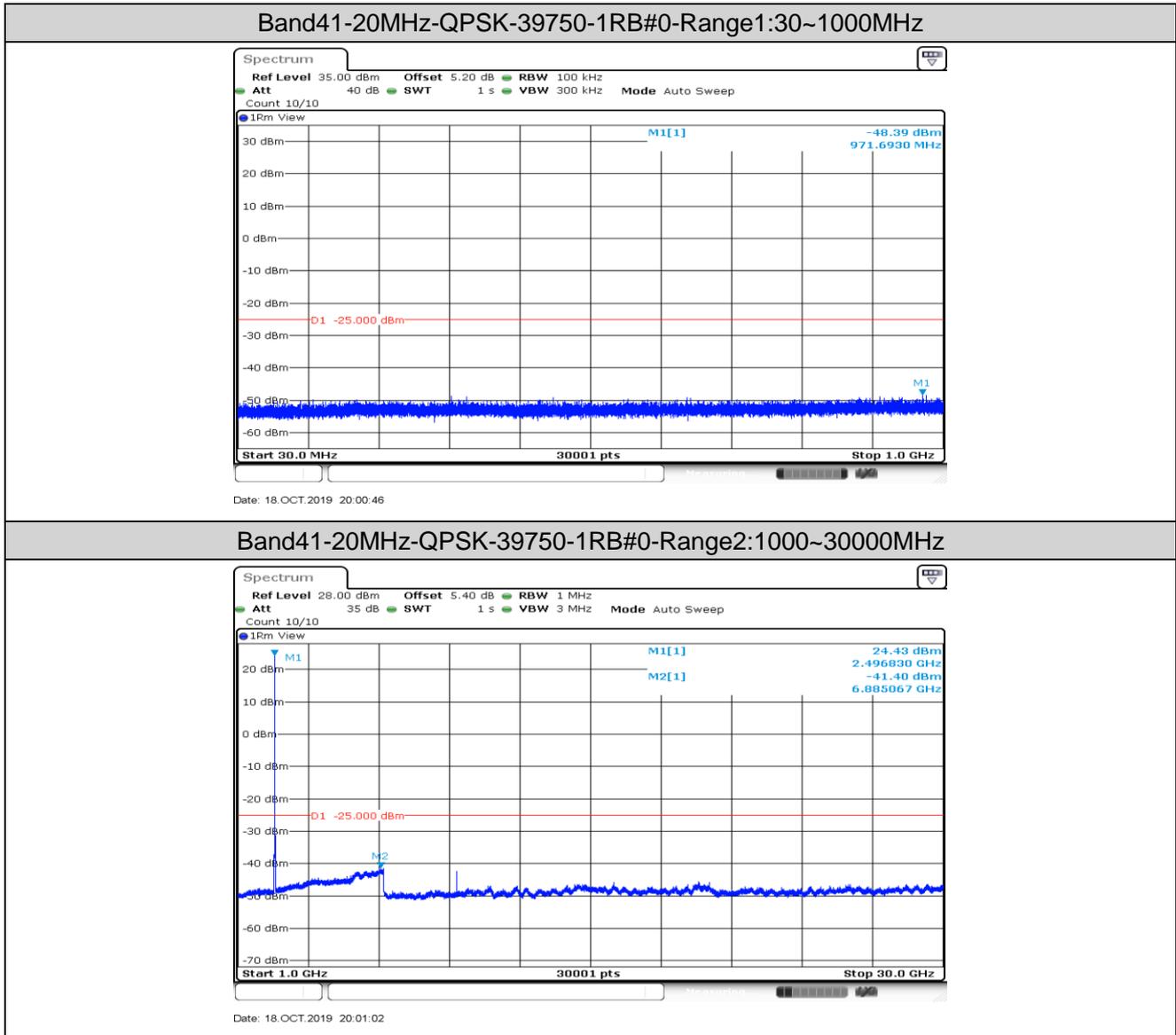
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8. Spurious Emission at Antenna Terminal

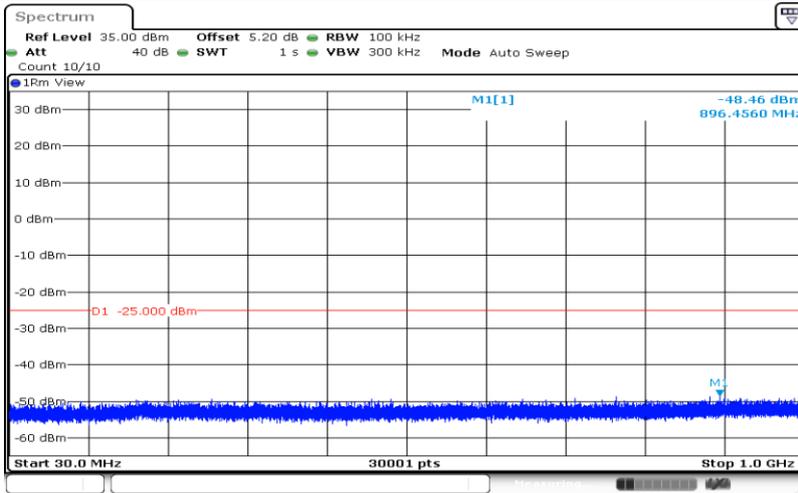
Remark1: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of $< RBW/2$ so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = $k * (Span / RBW)$ " with k between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

Remark2: only the worst case data displayed in this report.

8.1. Test Plots

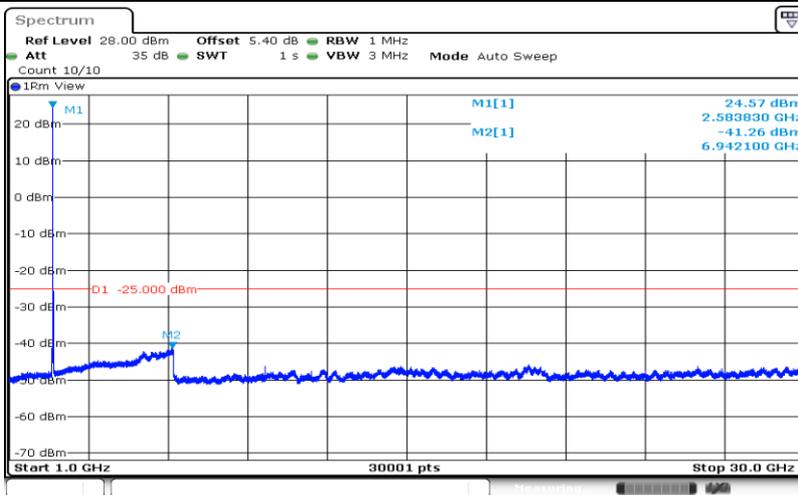


Band41-20MHz-QPSK-40620-1RB#0-Range1:30~1000MHz



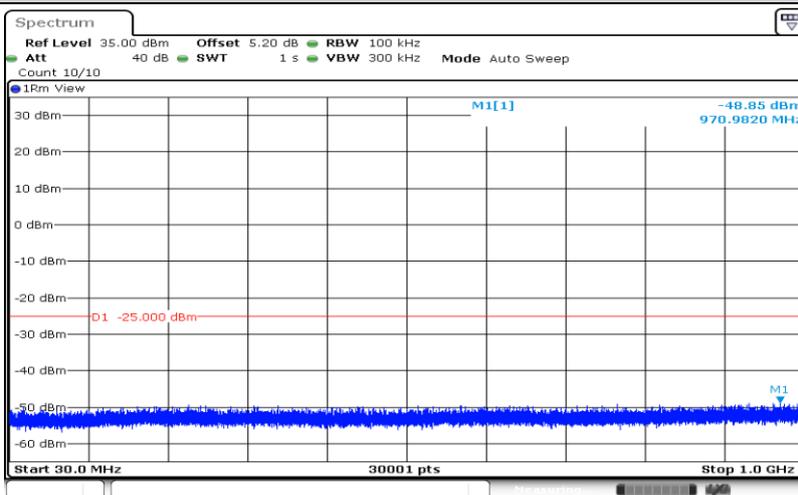
Date: 18.OCT.2019 20:01:56

Band41-20MHz-QPSK-40620-1RB#0-Range2:1000~30000MHz



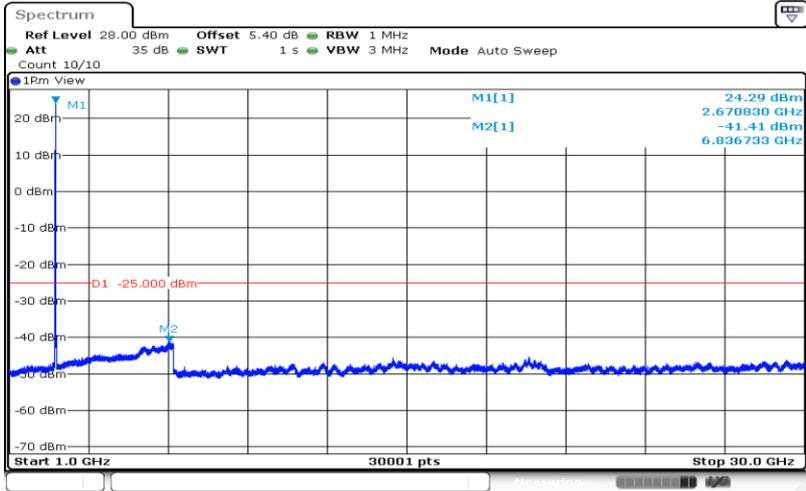
Date: 18.OCT.2019 20:02:13

Band41-20MHz-QPSK-41490-1RB#0-Range1:30~1000MHz



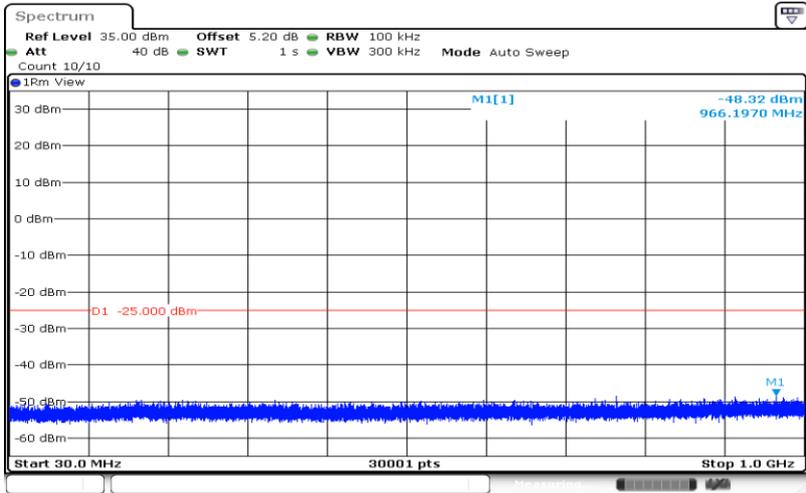
Date: 18.OCT.2019 20:03:07

Band41-20MHz-QPSK-41490-1RB#0-Range2:1000~30000MHz



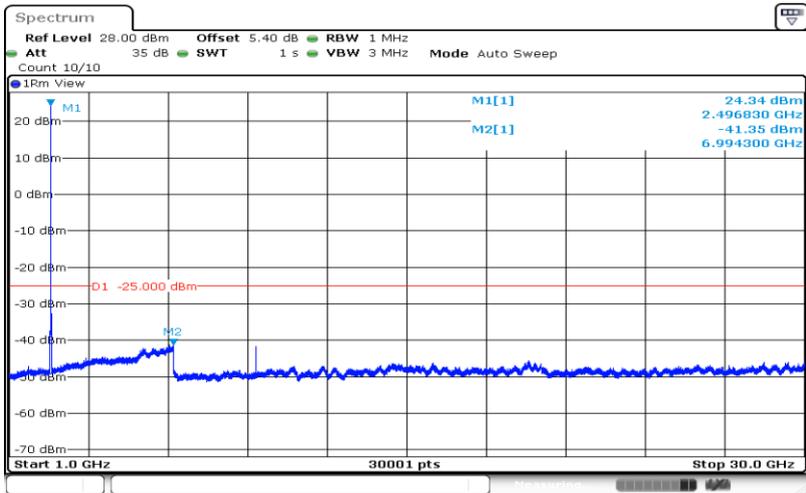
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Band41-20MHz-16QAM-39750-1RB#0-Range1:30~1000MHz



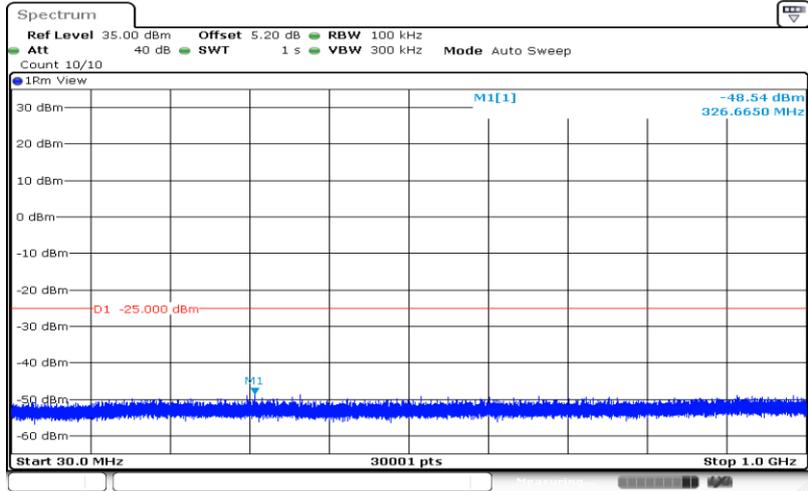
Date: 18.OCT.2019 20:01:21

Band41-20MHz-16QAM-39750-1RB#0-Range2:1000~30000MHz



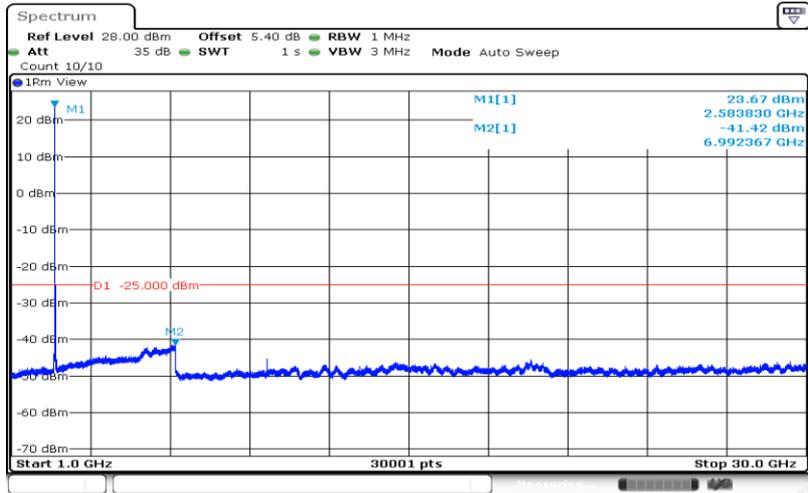
Date: 18.OCT.2019 20:01:37

Band41-20MHz-16QAM-40620-1RB#0-Range1:30~1000MHz



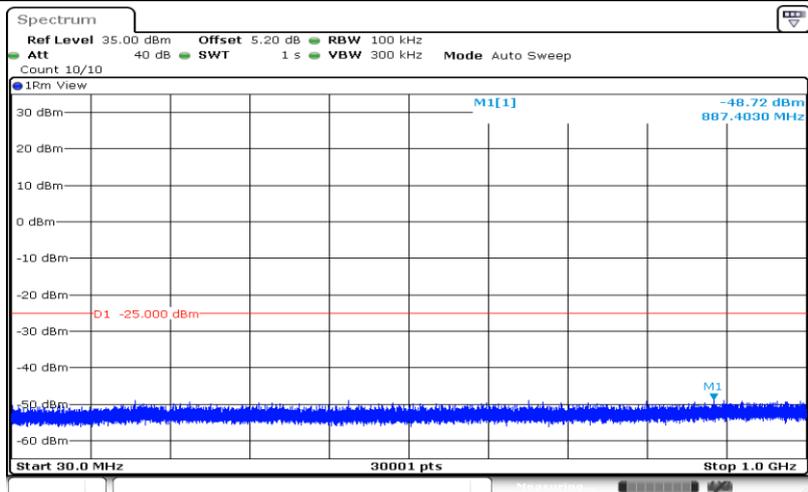
Date: 18.OCT.2019 20:02:31

Band41-20MHz-16QAM-40620-1RB#0-Range2:1000~30000MHz



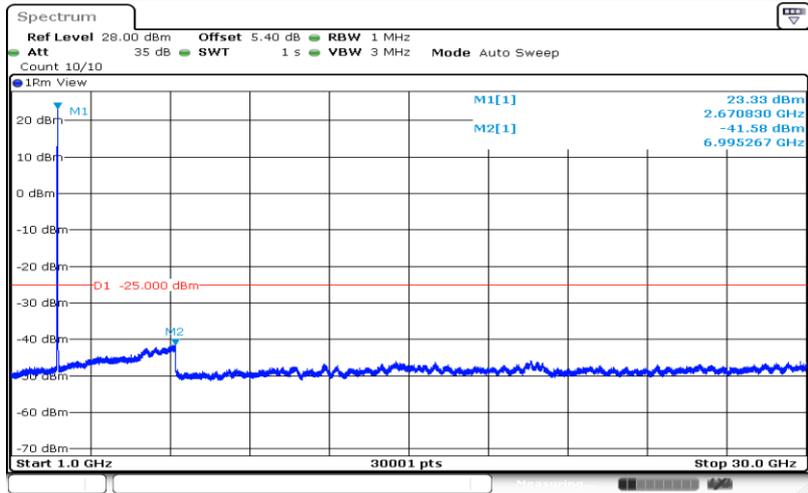
Date: 18.OCT.2019 20:02:48

Band41-20MHz-16QAM-41490-1RB#0-Range1:30~1000MHz



Date: 18.OCT.2019 20:03:42

Band41-20MHz-16QAM-41490-1RB#0-Range2:1000~30000MHz



Date: 18.OCT.2019 20:03:58

9. Frequency Stability

9.1. Frequency Vs Voltage

Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band41	20MHz	QPSK	39750	100RB#0	VL	NT	2.60	0.001038	±2.5	PASS
Band41	20MHz	QPSK	39750	100RB#0	VN	NT	3.30	0.001317	±2.5	PASS
Band41	20MHz	QPSK	39750	100RB#0	VH	NT	-10.30	-0.004110	±2.5	PASS
Band41	20MHz	QPSK	40620	100RB#0	VL	NT	0.40	0.000154	±2.5	PASS
Band41	20MHz	QPSK	40620	100RB#0	VN	NT	-1.70	-0.000656	±2.5	PASS
Band41	20MHz	QPSK	40620	100RB#0	VH	NT	-6.80	-0.002622	±2.5	PASS
Band41	20MHz	QPSK	41490	100RB#0	VL	NT	-3.90	-0.001455	±2.5	PASS
Band41	20MHz	QPSK	41490	100RB#0	VN	NT	-0.10	-0.000037	±2.5	PASS
Band41	20MHz	QPSK	41490	100RB#0	VH	NT	-0.40	-0.000149	±2.5	PASS
Band41	20MHz	16QAM	39750	100RB#0	VL	NT	-4.20	-0.001676	±2.5	PASS
Band41	20MHz	16QAM	39750	100RB#0	VN	NT	-0.20	-0.000080	±2.5	PASS
Band41	20MHz	16QAM	39750	100RB#0	VH	NT	-6.90	-0.002753	±2.5	PASS
Band41	20MHz	16QAM	40620	100RB#0	VL	NT	-10.10	-0.003895	±2.5	PASS
Band41	20MHz	16QAM	40620	100RB#0	VN	NT	-3.10	-0.001196	±2.5	PASS
Band41	20MHz	16QAM	40620	100RB#0	VH	NT	-16.60	-0.006402	±2.5	PASS
Band41	20MHz	16QAM	41490	100RB#0	VL	NT	-9.90	-0.003694	±2.5	PASS
Band41	20MHz	16QAM	41490	100RB#0	VN	NT	-10.30	-0.003843	±2.5	PASS
Band41	20MHz	16QAM	41490	100RB#0	VH	NT	-6.60	-0.002463	±2.5	PASS

9.2. Frequency Vs Temperature

Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band41	20MHz	QPSK	39750	100RB#0	NV	-30	-1.90	-0.000758	±2.5	PASS
Band41	20MHz	QPSK	39750	100RB#0	NV	-20	-0.40	-0.000160	±2.5	PASS
Band41	20MHz	QPSK	39750	100RB#0	NV	0	2.60	0.001038	±2.5	PASS
Band41	20MHz	QPSK	39750	100RB#0	NV	10	-8.40	-0.003352	±2.5	PASS
Band41	20MHz	QPSK	39750	100RB#0	NV	20	-8.90	-0.003551	±2.5	PASS
Band41	20MHz	QPSK	39750	100RB#0	NV	30	-1.70	-0.000678	±2.5	PASS
Band41	20MHz	QPSK	39750	100RB#0	NV	40	-0.90	-0.000359	±2.5	PASS
Band41	20MHz	QPSK	39750	100RB#0	NV	50	-4.90	-0.001955	±2.5	PASS
Band41	20MHz	QPSK	40620	100RB#0	NV	-30	-6.50	-0.002507	±2.5	PASS
Band41	20MHz	QPSK	40620	100RB#0	NV	-20	-5.00	-0.001928	±2.5	PASS
Band41	20MHz	QPSK	40620	100RB#0	NV	0	-13.00	-0.005013	±2.5	PASS
Band41	20MHz	QPSK	40620	100RB#0	NV	10	-13.40	-0.005168	±2.5	PASS
Band41	20MHz	QPSK	40620	100RB#0	NV	20	-13.00	-0.005013	±2.5	PASS
Band41	20MHz	QPSK	40620	100RB#0	NV	30	-4.50	-0.001735	±2.5	PASS
Band41	20MHz	QPSK	40620	100RB#0	NV	40	-14.30	-0.005515	±2.5	PASS
Band41	20MHz	QPSK	40620	100RB#0	NV	50	-14.50	-0.005592	±2.5	PASS
Band41	20MHz	QPSK	41490	100RB#0	NV	-30	5.10	0.001903	±2.5	PASS
Band41	20MHz	QPSK	41490	100RB#0	NV	-20	-10.60	-0.003955	±2.5	PASS
Band41	20MHz	QPSK	41490	100RB#0	NV	0	-3.80	-0.001418	±2.5	PASS
Band41	20MHz	QPSK	41490	100RB#0	NV	10	-11.00	-0.004104	±2.5	PASS
Band41	20MHz	QPSK	41490	100RB#0	NV	20	-14.00	-0.005224	±2.5	PASS
Band41	20MHz	QPSK	41490	100RB#0	NV	30	-0.90	-0.000336	±2.5	PASS
Band41	20MHz	QPSK	41490	100RB#0	NV	40	-5.70	-0.002127	±2.5	PASS

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Band41	20MHz	QPSK	41490	100RB#0	NV	50	-4.70	-0.001754	±2.5	PASS
Band41	20MHz	16QAM	39750	100RB#0	NV	-30	-1.10	-0.000439	±2.5	PASS
Band41	20MHz	16QAM	39750	100RB#0	NV	-20	-6.80	-0.002713	±2.5	PASS
Band41	20MHz	16QAM	39750	100RB#0	NV	0	-3.40	-0.001357	±2.5	PASS
Band41	20MHz	16QAM	39750	100RB#0	NV	10	-0.80	-0.000319	±2.5	PASS
Band41	20MHz	16QAM	39750	100RB#0	NV	20	-7.60	-0.003033	±2.5	PASS
Band41	20MHz	16QAM	39750	100RB#0	NV	30	3.00	0.001197	±2.5	PASS
Band41	20MHz	16QAM	39750	100RB#0	NV	40	-0.10	-0.000040	±2.5	PASS
Band41	20MHz	16QAM	39750	100RB#0	NV	50	-13.90	-0.005547	±2.5	PASS
Band41	20MHz	16QAM	40620	100RB#0	NV	-30	-17.30	-0.006672	±2.5	PASS
Band41	20MHz	16QAM	40620	100RB#0	NV	-20	-2.40	-0.000926	±2.5	PASS
Band41	20MHz	16QAM	40620	100RB#0	NV	0	-1.70	-0.000656	±2.5	PASS
Band41	20MHz	16QAM	40620	100RB#0	NV	10	-14.50	-0.005592	±2.5	PASS
Band41	20MHz	16QAM	40620	100RB#0	NV	20	-1.20	-0.000463	±2.5	PASS
Band41	20MHz	16QAM	40620	100RB#0	NV	30	-12.50	-0.004821	±2.5	PASS
Band41	20MHz	16QAM	40620	100RB#0	NV	40	-11.20	-0.004319	±2.5	PASS
Band41	20MHz	16QAM	40620	100RB#0	NV	50	-10.00	-0.003857	±2.5	PASS
Band41	20MHz	16QAM	41490	100RB#0	NV	-30	-12.70	-0.004739	±2.5	PASS
Band41	20MHz	16QAM	41490	100RB#0	NV	-20	-0.20	-0.000075	±2.5	PASS
Band41	20MHz	16QAM	41490	100RB#0	NV	0	-1.00	-0.000373	±2.5	PASS
Band41	20MHz	16QAM	41490	100RB#0	NV	10	-0.40	-0.000149	±2.5	PASS
Band41	20MHz	16QAM	41490	100RB#0	NV	20	-6.40	-0.002388	±2.5	PASS
Band41	20MHz	16QAM	41490	100RB#0	NV	30	-2.80	-0.001045	±2.5	PASS
Band41	20MHz	16QAM	41490	100RB#0	NV	40	-15.10	-0.005634	±2.5	PASS
Band41	20MHz	16QAM	41490	100RB#0	NV	50	0.60	0.000224	±2.5	PASS

The End