Appendix B.4

E-UTRA Band 5

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1. Main Test Instruments

RE in Chamber					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date (yyyy-mm-dd)	Cal.Due date (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	2018/413	2021/412
Horn Antenna (15-40GHz)	Schwarzbeck	BBHA 9170	SEM003-15	2017/10/17	2020/10/16
Amplifier (0.1-1300MHz)	HP	8447D	SEM005-02	2018/9/2	2019/9/2
Low Noise Amplifier (100MHz-18GHz)	Black Diamond Series	BDLNA-0118-352810	SEM005-05	2018/9/2	2019/9/2
Pre-Amplifier (0.1-26.5GHz)	Compliance Directions Systems Inc.	PAP-0126	EMC2063	2018/10/20	2019/10/19
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	2018/7/12	2019/7/11
Wideband Radio CommunicationTeste	Anristu	MT8821C	6201462742	2019/4/3	2020/4/3
Wideband Radio CommunicationTester	Rohde & Schwarz	CMW500	W005-02	2019/1/13	2020/1/12

RF conducted test					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date (yyyy-mm-dd)	Cal.Due date (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	2018/7/12	2019/7/11
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 CommunicationTeste	Anristu	MT8821C	6201462742	2019/3/2	2020/3/1
Wideband Radio CommunicationTester	Rohde & Schwarz	CMW500	W005-02	2018/11/2	2019/11/1

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 =±0.37 dB
Bandwidth	Magnitude [%]	U =± 0.2%
Band Edge Compliance	Disturbance Power [dBm]	U = ±2.0 dB
Spurious Emissions, Conducted	Disturbance Power [dBm]	U = ±2.0 dB
Frequency Stability	Frequency Accuracy [ppm]	U = ±0.24 ppm

3. Effective (Isotropic) Radiated Power

3.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Conducted Power(dBm)	ERP (dBm)	Limit (dBm)	Verdict
Band5	1.4MHz	QPSK	20407	1RB#0	22.50	24.35	38.45	PASS
Band5	1.4MHz	QPSK	20407	1RB#2	22.85	24.70	38.45	PASS
Band5	1.4MHz	QPSK	20407	1RB#5	22.75	24.60	38.45	PASS
Band5	1.4MHz	QPSK	20407	3RB#0	22.86	24.71	38.45	PASS
Band5	1.4MHz	QPSK	20407	3RB#1	22.97	24.82	38.45	PASS
Band5	1.4MHz	QPSK	20407	3RB#3	22.74	24.59	38.45	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	21.87	23.72	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#0	23.09	24.94	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#2	23.18	25.03	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#5	23.05	24.90	38.45	PASS
Band5	1.4MHz	QPSK	20525	3RB#0	23.09	24.94	38.45	PASS
Band5	1.4MHz	QPSK	20525	3RB#1	23.18	25.03	38.45	PASS
Band5	1.4MHz	QPSK	20525	3RB#3	23.18	25.03	38.45	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	22.21	24.06	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#0	23.16	25.01	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#2	23.33	25.18	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#5	23.25	25.10	38.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#0	23.13	24.98	38.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#1	23.04	24.89	38.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#3	23.06	24.91	38.45	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	22.19	24.04	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#0	22.03	23.88	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#2	22.14	23.99	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#5	21.89	23.74	38.45	PASS
Band5	1.4MHz	16QAM	20407	3RB#0	22.04	23.89	38.45	PASS
Band5	1.4MHz	16QAM	20407	3RB#1	21.97	23.82	38.45	PASS
Band5	1.4MHz	16QAM	20407	3RB#3	21.93	23.78	38.45	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	20.88	22.73	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#0	22.45	24.30	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#2	22.38	24.23	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#5	22.39	24.24	38.45	PASS
Band5	1.4MHz	16QAM	20525	3RB#0	22.28	24.13	38.45	PASS
Band5	1.4MHz	16QAM	20525	3RB#1	22.32	24.17	38.45	PASS
Band5	1.4MHz	16QAM	20525	3RB#3	22.15	24.00	38.45	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	21.26	23.11	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#0	22.31	24.16	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#2	22.28	24.13	38.45	PASS

Band5	1.4MHz	16QAM	20643	1RB#5	22.38	24.23	38.45	PASS
Band5	1.4MHz	16QAM	20643	3RB#0	22.24	24.09	38.45	PASS
Band5	1.4MHz	16QAM	20643	3RB#1	22.34	24.19	38.45	PASS
Band5	1.4MHz	16QAM	20643	3RB#3	22.20	24.05	38.45	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	21.34	23.19	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#0	22.85	24.70	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#8	22.84	24.69	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#14	22.69	24.54	38.45	PASS
Band5	3MHz	QPSK	20415	8RB#0	21.77	23.62	38.45	PASS
Band5	3MHz	QPSK	20415	8RB#4	21.89	23.74	38.45	PASS
Band5	3MHz	QPSK	20415	8RB#7	21.87	23.72	38.45	PASS
Band5	3MHz	QPSK	20415	15RB#0	21.81	23.66	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#0	23.20	25.05	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#8	23.14	24.99	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#14	23.15	25.00	38.45	PASS
Band5	3MHz	QPSK	20525	8RB#0	22.21	24.06	38.45	PASS
Band5	3MHz	QPSK	20525	8RB#4	22.20	24.05	38.45	PASS
Band5	3MHz	QPSK	20525	8RB#7	22.23	24.08	38.45	PASS
Band5	3MHz	QPSK	20525	15RB#0	22.27	24.12	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#0	23.47	25.32	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#8	23.36	25.21	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#14	23.32	25.17	38.45	PASS
Band5	3MHz	QPSK	20635	8RB#0	22.35	24.20	38.45	PASS
Band5	3MHz	QPSK	20635	8RB#4	22.31	24.16	38.45	PASS
Band5	3MHz	QPSK	20635	8RB#7	22.28	24.13	38.45	PASS
Band5	3MHz	QPSK	20635	15RB#0	22.28	24.13	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#0	22.20	24.05	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#8	21.94	23.79	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#14	21.94	23.79	38.45	PASS
Band5	3MHz	16QAM	20415	8RB#0	20.95	22.80	38.45	PASS
Band5	3MHz	16QAM	20415	8RB#4	20.93	22.78	38.45	PASS
Band5	3MHz	16QAM	20415	8RB#7	20.87	22.72	38.45	PASS
Band5	3MHz	16QAM	20415	15RB#0	20.86	22.71	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#0	22.52	24.37	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#8	22.43	24.28	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#14	22.55	24.40	38.45	PASS
Band5	3MHz	16QAM	20525	8RB#0	21.32	23.17	38.45	PASS
Band5	3MHz	16QAM	20525	8RB#4	21.22	23.07	38.45	PASS
Band5	3MHz	16QAM	20525	8RB#7	21.33	23.18	38.45	PASS
Band5	3MHz	16QAM	20525	15RB#0	21.22	23.07	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#0	22.62	24.47	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#8	22.47	24.32	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#14	22.62	24.47	38.45	PASS
Band5	3MHz	16QAM	20635	8RB#0	21.38	23.23	38.45	PASS

Band5	3MHz	16QAM	20635	8RB#4	21.38	23.23	38.45	PASS
Band5	3MHz	16QAM	20635	8RB#7	21.37	23.22	38.45	PASS
Band5	3MHz	16QAM	20635	15RB#0	21.36	23.21	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#0	22.87	24.72	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#12	22.92	24.77	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#24	22.93	24.78	38.45	PASS
Band5	5MHz	QPSK	20425	12RB#0	21.94	23.79	38.45	PASS
Band5	5MHz	QPSK	20425	12RB#6	21.81	23.66	38.45	PASS
Band5	5MHz	QPSK	20425	12RB#13	21.79	23.64	38.45	PASS
Band5	5MHz	QPSK	20425	25RB#0	21.90	23.75	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#0	23.33	25.18	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#12	23.34	25.19	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#24	23.17	25.02	38.45	PASS
Band5	5MHz	QPSK	20525	12RB#0	22.28	24.13	38.45	PASS
Band5	5MHz	QPSK	20525	12RB#6	22.29	24.14	38.45	PASS
Band5	5MHz	QPSK	20525	12RB#13	22.26	24.11	38.45	PASS
Band5	5MHz	QPSK	20525	25RB#0	22.39	24.24	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#0	23.39	25.24	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#12	23.38	25.23	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#24	23.28	25.13	38.45	PASS
Band5	5MHz	QPSK	20625	12RB#0	22.31	24.16	38.45	PASS
Band5	5MHz	QPSK	20625	12RB#6	22.37	24.22	38.45	PASS
Band5	5MHz	QPSK	20625	12RB#13	22.38	24.23	38.45	PASS
Band5	5MHz	QPSK	20625	25RB#0	22.30	24.15	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#0	22.15	24.00	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#12	22.04	23.89	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#24	22.20	24.05	38.45	PASS
Band5	5MHz	16QAM	20425	12RB#0	21.04	22.89	38.45	PASS
Band5	5MHz	16QAM	20425	12RB#6	20.89	22.74	38.45	PASS
Band5	5MHz	16QAM	20425	12RB#13	20.89	22.74	38.45	PASS
Band5	5MHz	16QAM	20425	25RB#0	20.96	22.81	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#0	22.61	24.46	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#12	22.67	24.52	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#24	22.62	24.47	38.45	PASS
Band5	5MHz	16QAM	20525	12RB#0	21.33	23.18	38.45	PASS
Band5	5MHz	16QAM	20525	12RB#6	21.30	23.15	38.45	PASS
Band5	5MHz	16QAM	20525	12RB#13	21.34	23.19	38.45	PASS
Band5	5MHz	16QAM	20525	25RB#0	21.28	23.13	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#0	22.72	24.57	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#12	22.48	24.33	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#24	22.49	24.34	38.45	PASS
Band5	5MHz	16QAM	20625	12RB#0	21.40	23.25	38.45	PASS
Band5	5MHz	16QAM	20625	12RB#6	21.41	23.26	38.45	PASS
Band5	5MHz	16QAM	20625	12RB#13	21.39	23.24	38.45	PASS

Band5	5MHz	16QAM	20625	25RB#0	21.36	23.21	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#0	23.08	24.93	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#24	23.32	25.17	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#49	22.96	24.81	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#0	21.96	23.81	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#12	21.96	23.81	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#25	22.06	23.91	38.45	PASS
Band5	10MHz	QPSK	20450	50RB#0	22.07	23.92	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#0	23.45	25.30	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#24	23.57	25.42	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#49	22.22	24.07	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#0	22.71	24.56	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#12	22.38	24.23	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#25	21.97	23.82	38.45	PASS
Band5	10MHz	QPSK	20525	50RB#0	22.28	24.13	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#0	23.63	25.48	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#24	23.55	25.40	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#49	23.03	24.88	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#0	22.70	24.55	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#12	22.56	24.41	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#25	22.51	24.36	38.45	PASS
Band5	10MHz	QPSK	20600	50RB#0	22.60	24.45	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#0	22.43	24.28	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#24	22.15	24.00	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#49	22.60	24.45	38.45	PASS
Band5	10MHz	16QAM	20450	25RB#0	20.93	22.78	38.45	PASS
Band5	10MHz	16QAM	20450	25RB#12	21.00	22.85	38.45	PASS
Band5	10MHz	16QAM	20450	25RB#25	21.04	22.89	38.45	PASS
Band5	10MHz	16QAM	20450	50RB#0	21.04	22.89	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#0	22.72	24.57	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#24	22.43	24.28	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#49	22.86	24.71	38.45	PASS
Band5	10MHz	16QAM	20525	25RB#0	21.21	23.06	38.45	PASS
Band5	10MHz	16QAM	20525	25RB#12	21.30	23.15	38.45	PASS
Band5	10MHz	16QAM	20525	25RB#25	21.30	23.15	38.45	PASS
Band5	10MHz	16QAM	20525	50RB#0	21.42	23.27	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#0	22.96	24.81	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#24	22.66	24.51	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#49	23.31	25.16	38.45	PASS
Band5	10MHz	16QAM	20600	25RB#0	21.41	23.26	38.45	PASS
Band5	10MHz	16QAM	20600	25RB#12	21.54	23.39	38.45	PASS
Band5	10MHz	16QAM	20600	25RB#25	21.59	23.44	38.45	PASS
Band5	10MHz	16QAM	20600	50RB#0	21.55	23.40	38.45	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]

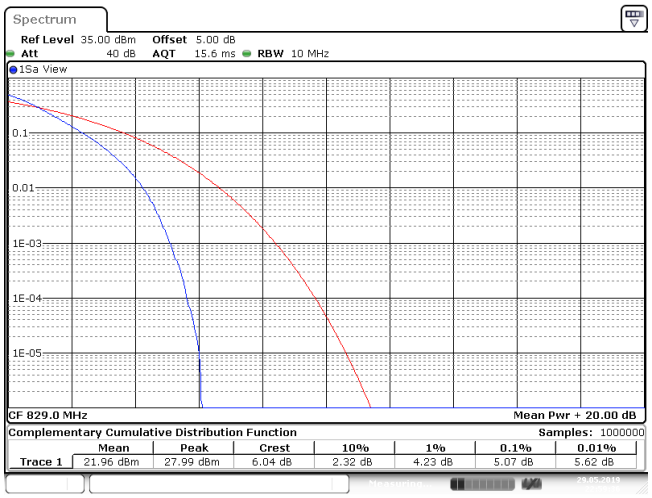
4. Peak-to-Average Ratio(CCDF)

4.1. Test Result

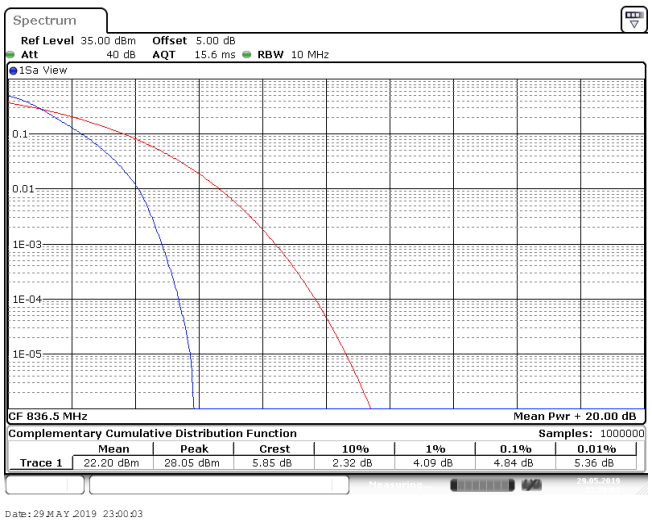
BAND	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band5	10MHz	QPSK	20450	50RB#0	5.07	13	PASS
Band5	10MHz	QPSK	20525	50RB#0	4.84	13	PASS
Band5	10MHz	QPSK	20600	50RB#0	4.75	13	PASS
Band5	10MHz	16QAM	20450	50RB#0	6.00	13	PASS
Band5	10MHz	16QAM	20525	50RB#0	5.86	13	PASS
Band5	10MHz	16QAM	20600	50RB#0	5.74	13	PASS

4.2. Test Plots

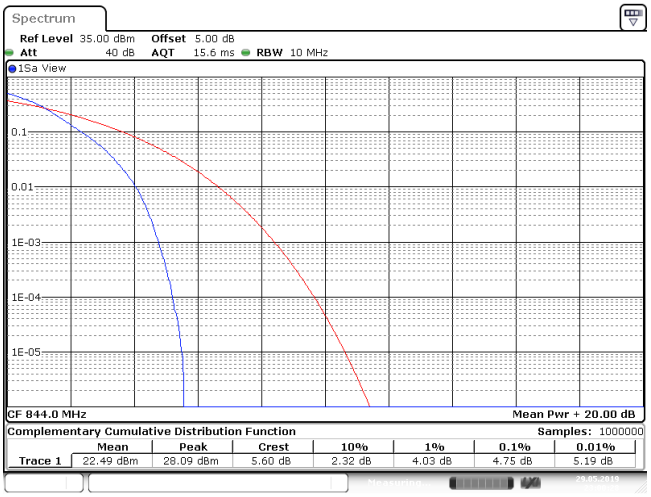
Band5_10MHz_QPSK_20450_50RB#0



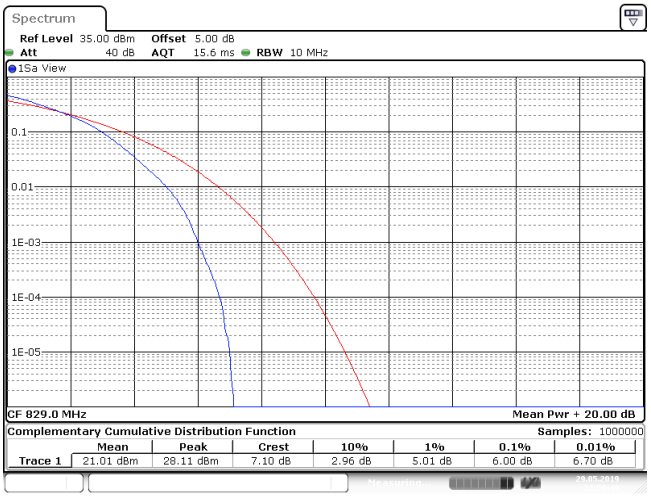
Band5_10MHz_QPSK_20525_50RB#0



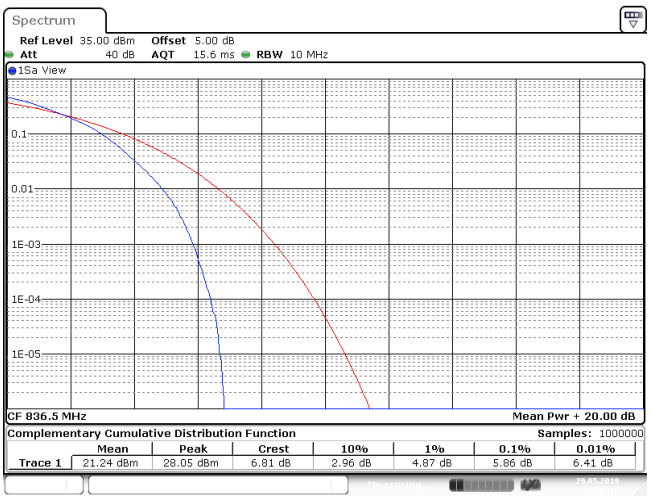
Band5_10MHz_QPSK_20600_50RB#0



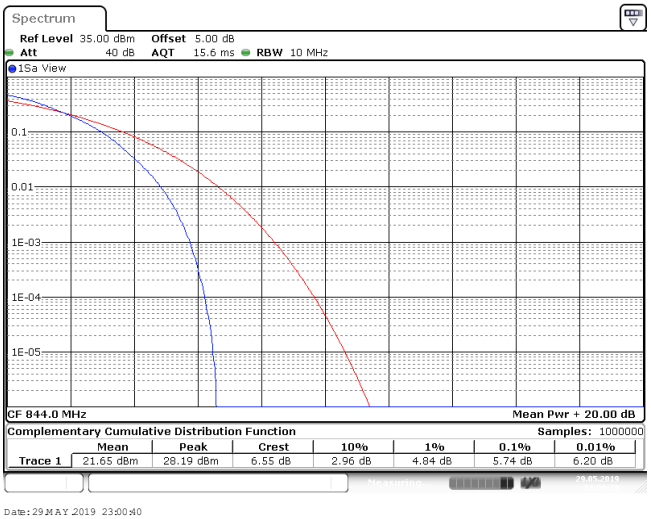
Band5_10MHz_16QAM_20450_50RB#0



Band5_10MHz_16QAM_20525_50RB#0



Band5_10MHz_16QAM_20600_50RB#0

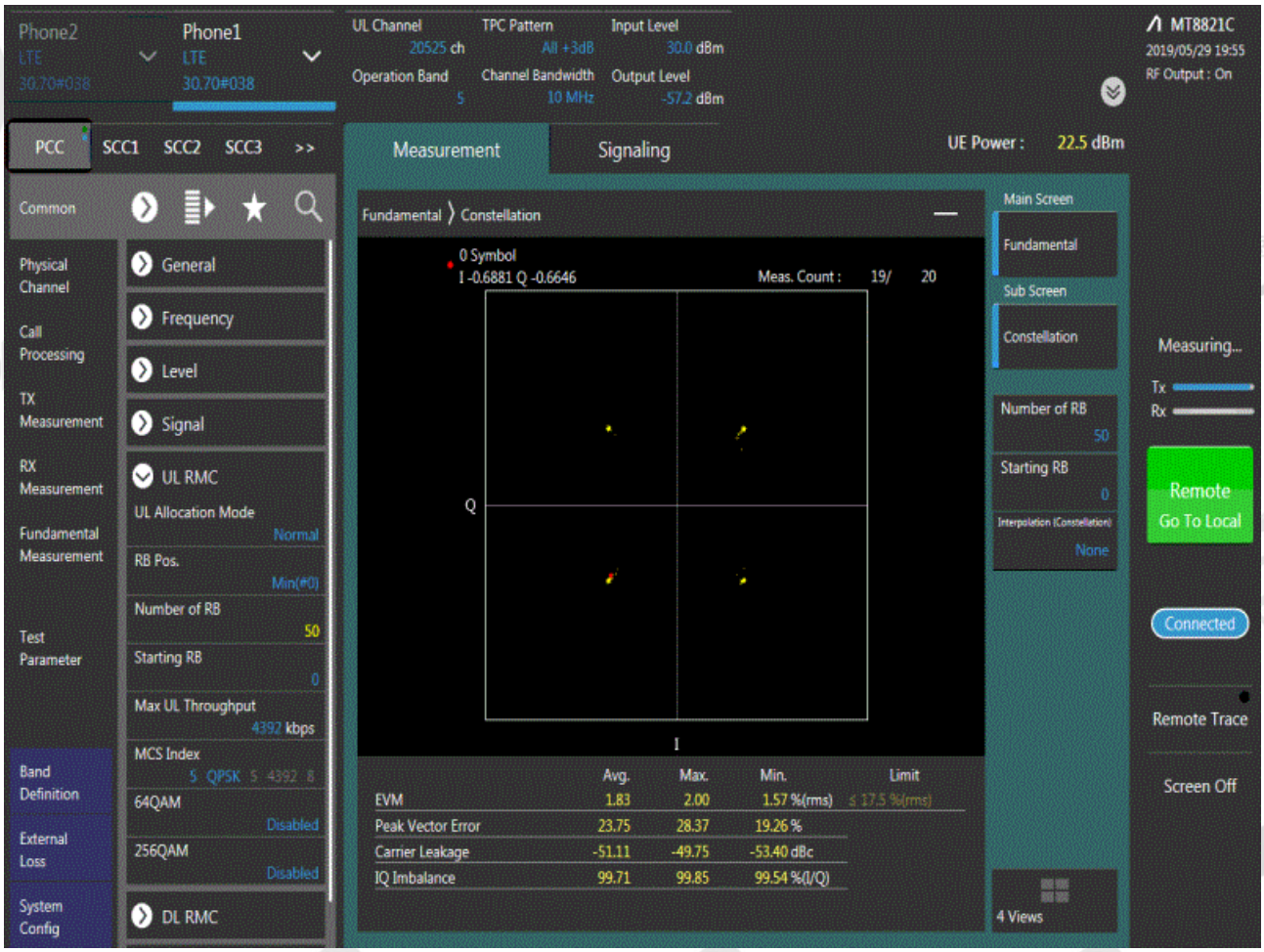


5. Modulation Characteristics

5.1. Test BAND = LTE Band 5

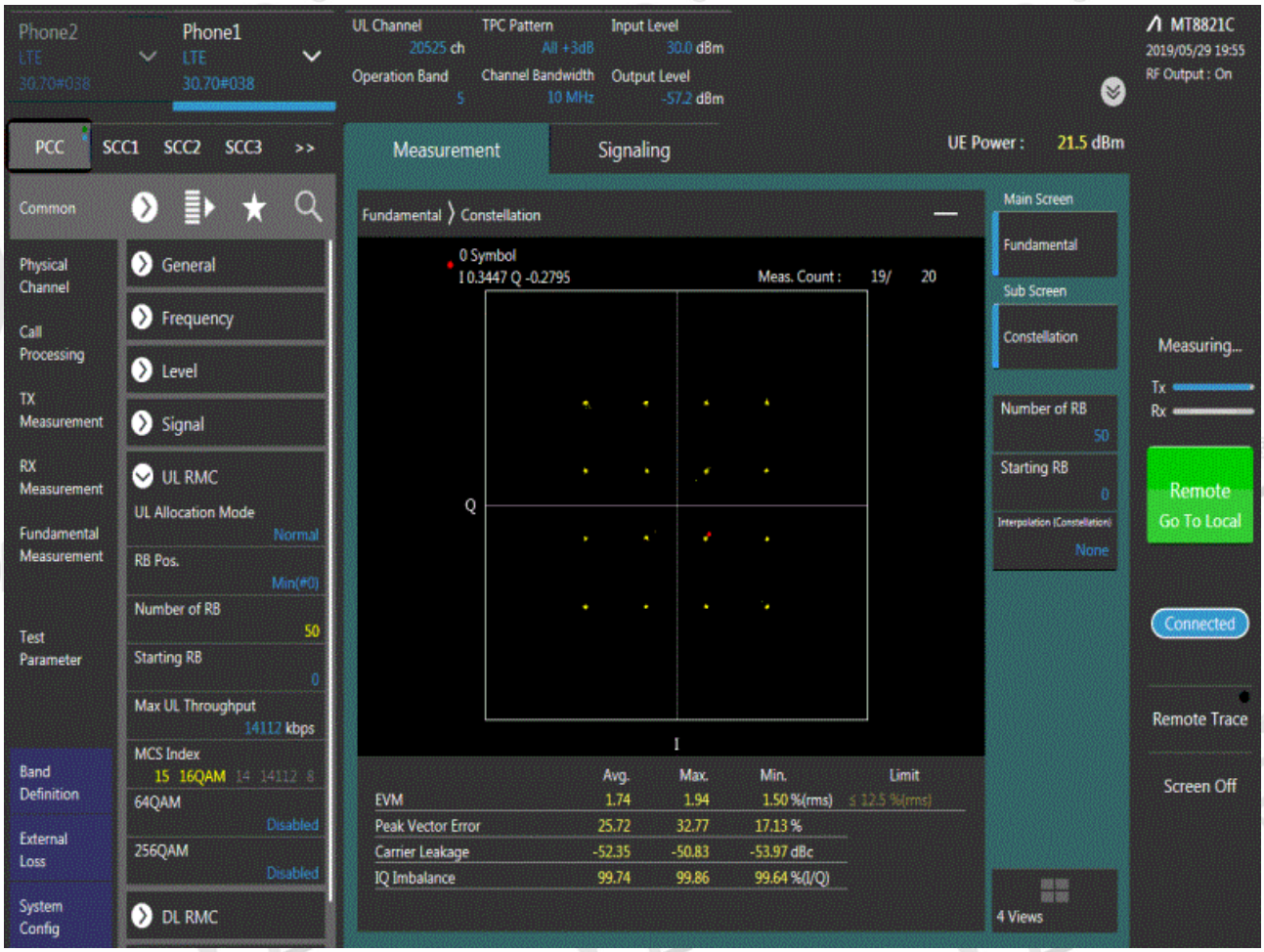
5.2. Test Mode = LTE /TM1 10MHz

5.2.1.Test Channel = MCH



5.3. Test Mode = LTE /TM2 10MHz

5.3.1.Test Channel = MCH



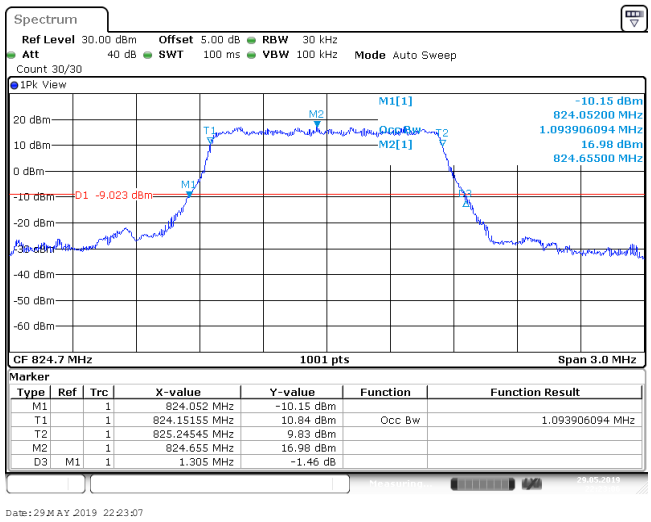
6. 26dB Bandwidth and Occupied Bandwidth

6.1. Test Result

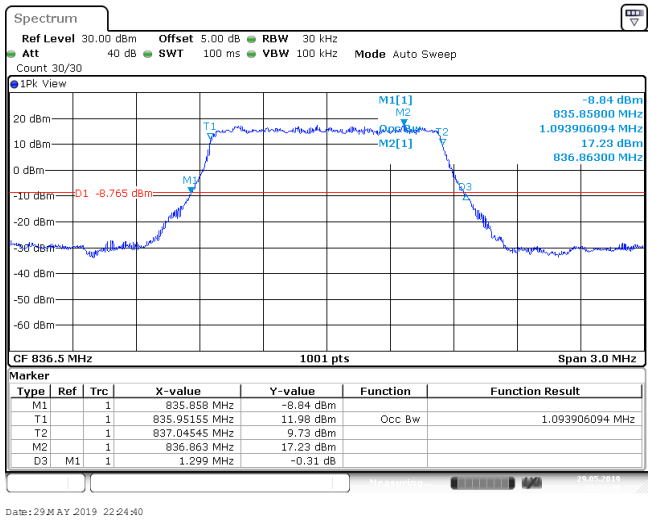
BAND	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band5	1.4MHz	QPSK	20407	6RB#0	1.094	1.305	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	1.094	1.299	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	1.097	1.323	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	1.100	1.308	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	1.097	1.305	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	1.100	1.314	PASS
Band5	3MHz	QPSK	20415	15RB#0	2.703	2.988	PASS
Band5	3MHz	QPSK	20525	15RB#0	2.703	2.982	PASS
Band5	3MHz	QPSK	20635	15RB#0	2.697	2.976	PASS
Band5	3MHz	16QAM	20415	15RB#0	2.691	2.988	PASS
Band5	3MHz	16QAM	20525	15RB#0	2.697	2.988	PASS
Band5	3MHz	16QAM	20635	15RB#0	2.691	2.994	PASS
Band5	5MHz	QPSK	20425	25RB#0	4.466	4.930	PASS
Band5	5MHz	QPSK	20525	25RB#0	4.486	4.920	PASS
Band5	5MHz	QPSK	20625	25RB#0	4.476	4.930	PASS
Band5	5MHz	16QAM	20425	25RB#0	4.476	4.990	PASS
Band5	5MHz	16QAM	20525	25RB#0	4.476	4.910	PASS
Band5	5MHz	16QAM	20625	25RB#0	4.466	4.840	PASS
Band5	10MHz	QPSK	20450	50RB#0	8.951	9.820	PASS
Band5	10MHz	QPSK	20525	50RB#0	8.931	9.620	PASS
Band5	10MHz	QPSK	20600	50RB#0	8.931	9.740	PASS
Band5	10MHz	16QAM	20450	50RB#0	8.951	9.720	PASS
Band5	10MHz	16QAM	20525	50RB#0	8.931	9.700	PASS
Band5	10MHz	16QAM	20600	50RB#0	8.911	9.660	PASS

6.2. Test Plots

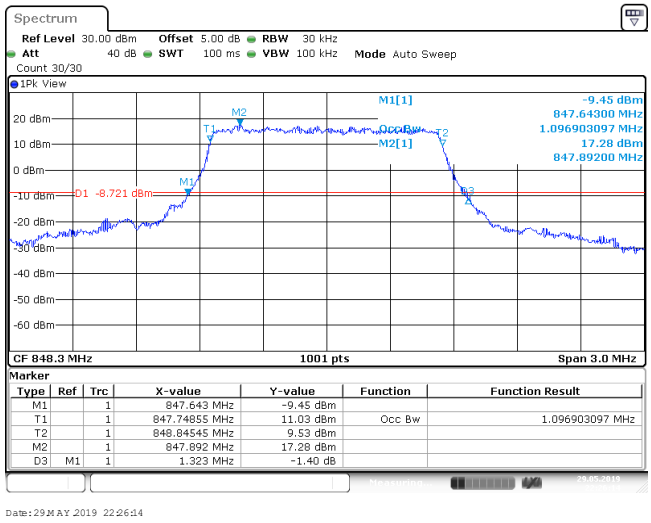
Band5_1.4MHz_QPSK_20407_6RB#0



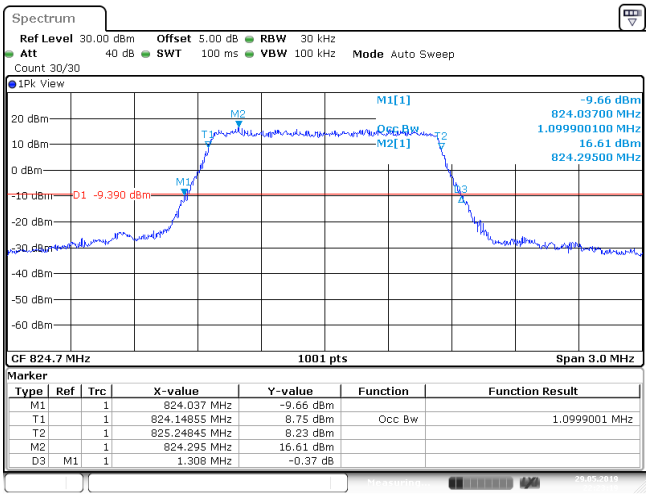
Band5_1.4MHz_QPSK_20525_6RB#0



Band5_1.4MHz_QPSK_20643_6RB#0



Band5_1.4MHz_16QAM_20407_6RB#0



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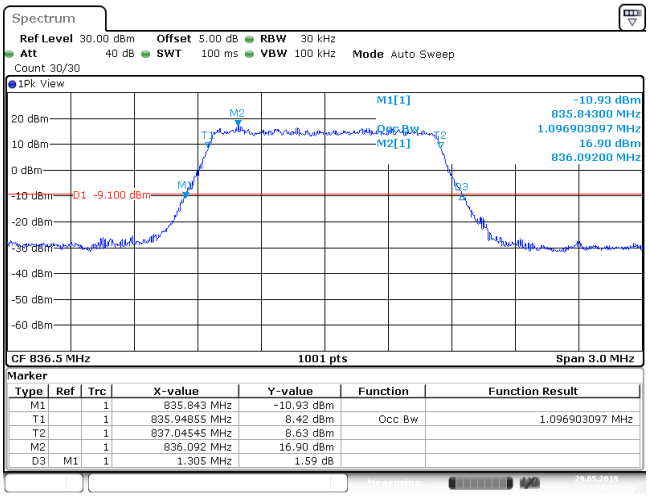

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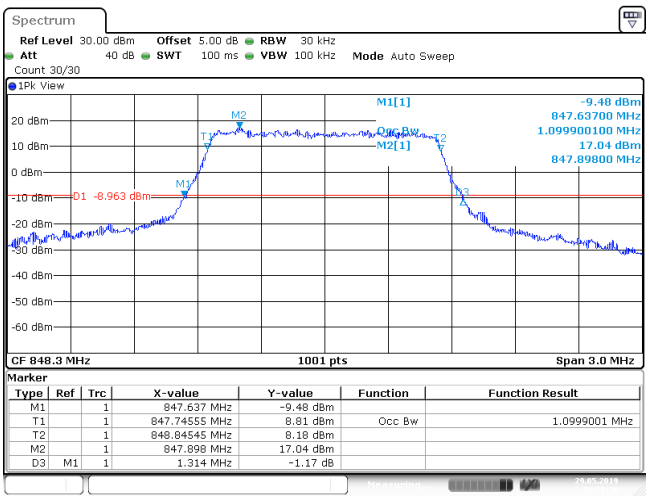
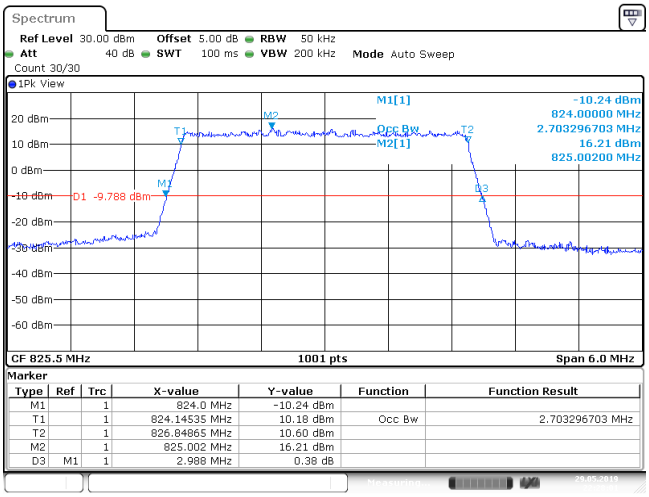


Band5_3MHz_QPSK_20415_15RB#0



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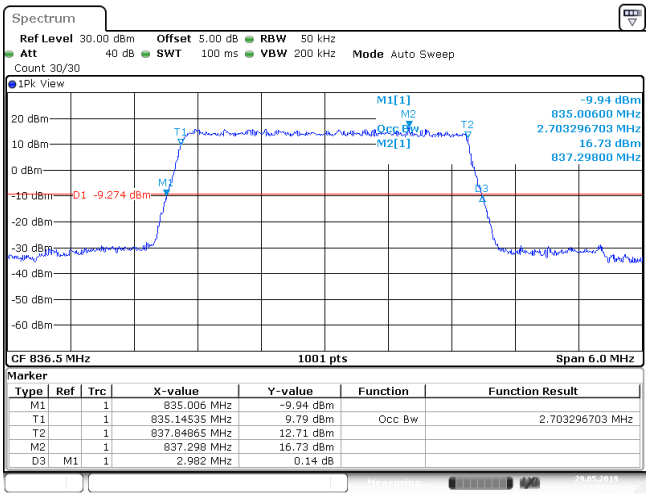
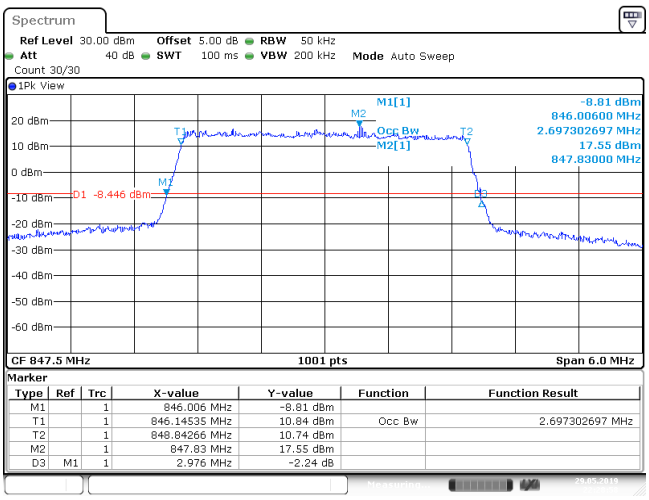
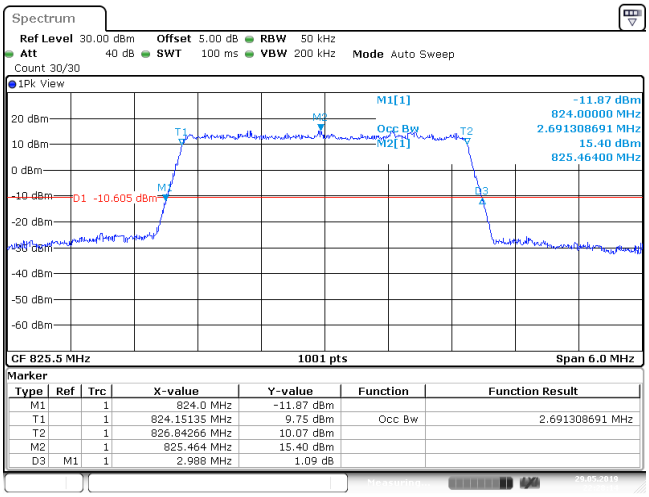


Band5_3MHz_QPSK_20635_15RB#0



Band5_3MHz_16QAM_20415_15RB#0



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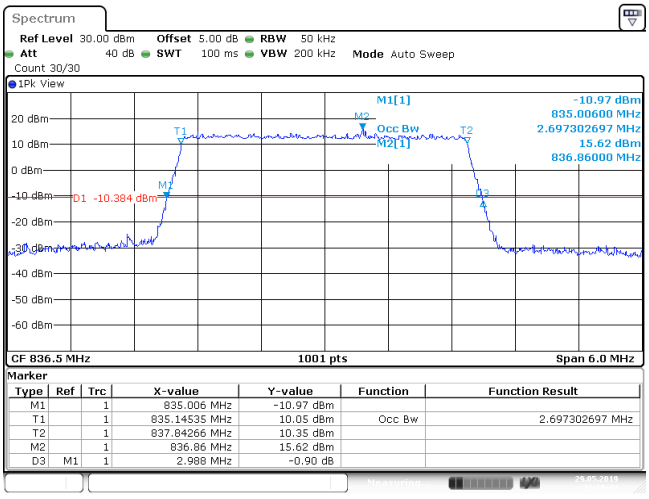
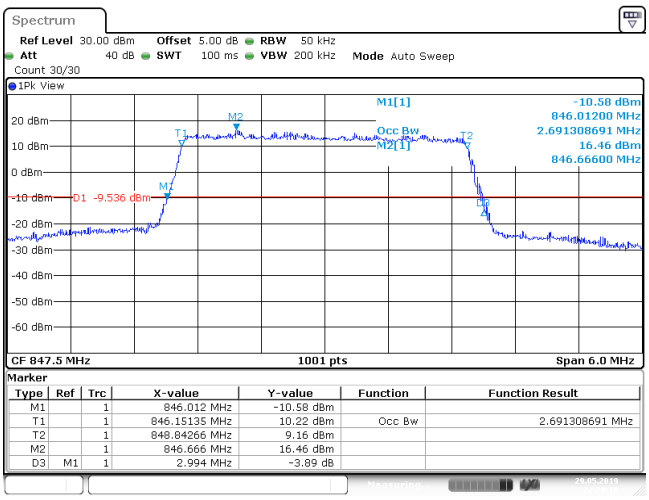
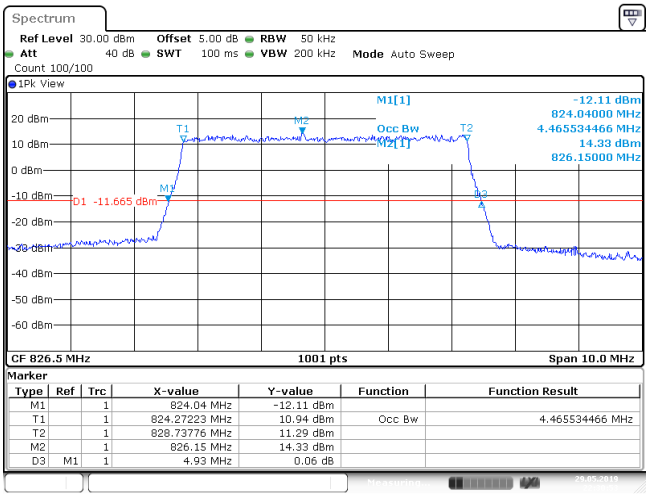


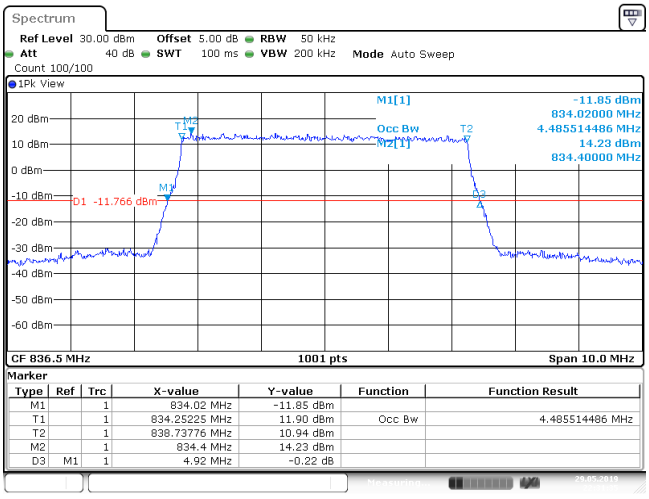
Band5_3MHz_16QAM_20635_15RB#0



Band5_5MHz_QPSK_20425_25RB#0



Band5_5MHz_QPSK_20525_25RB#0



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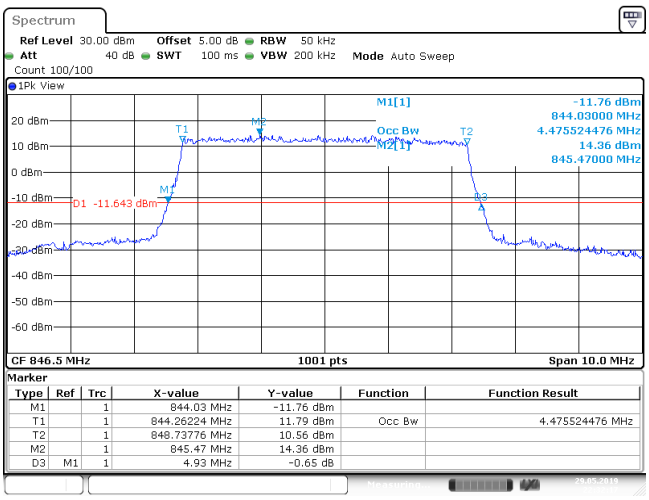

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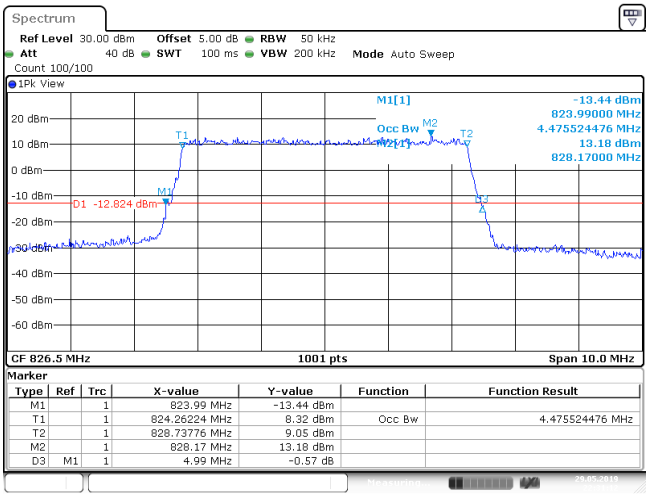

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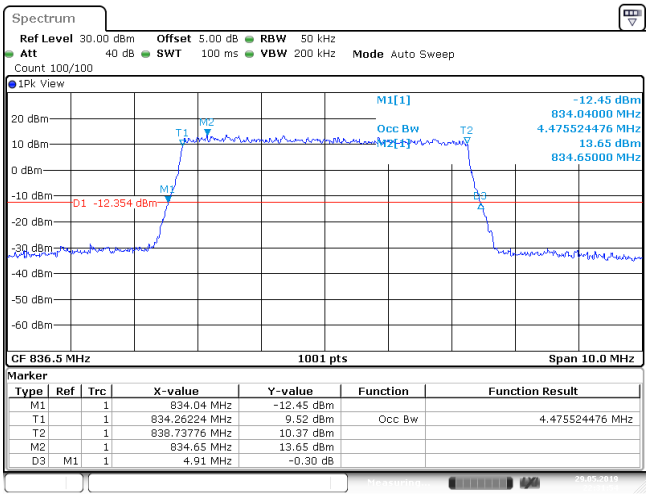

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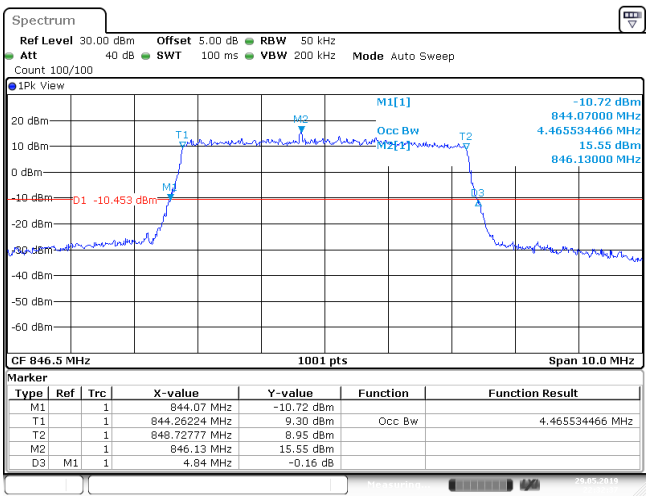
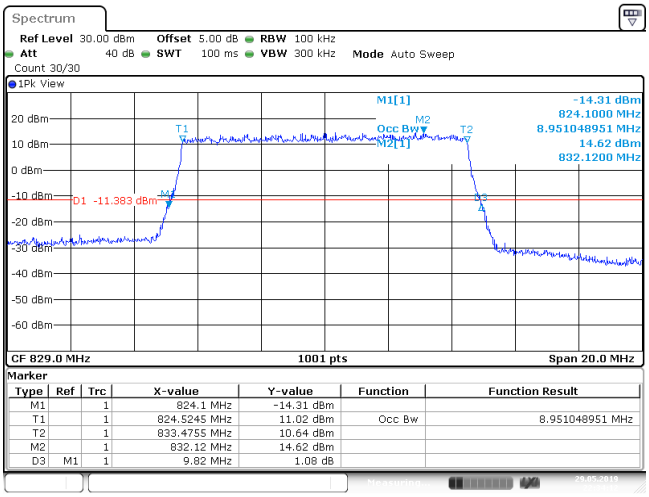
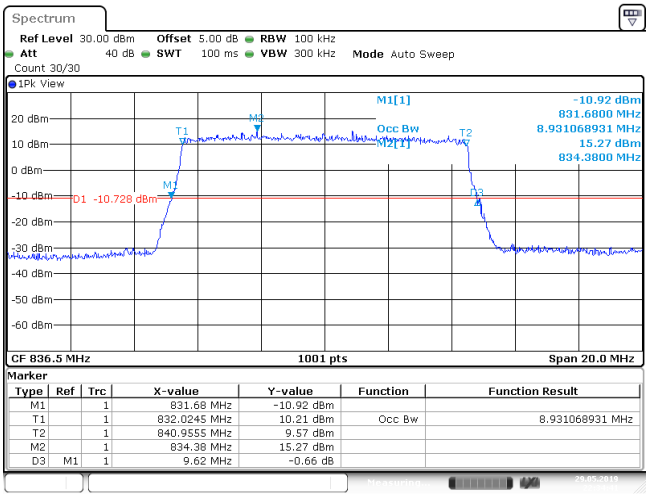


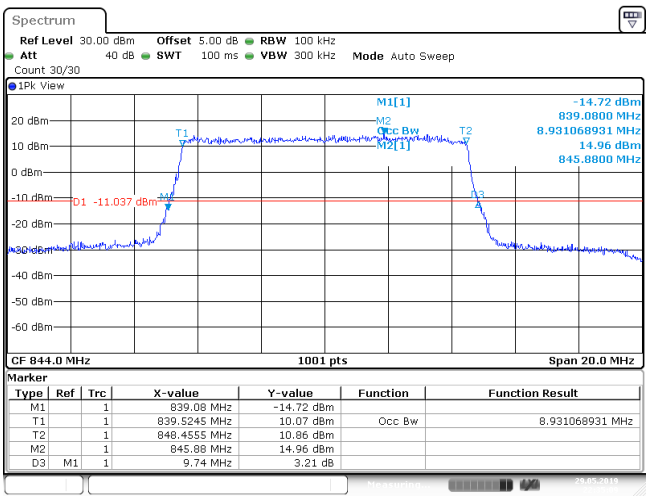
Band5_10MHz_QPSK_20450_50RB#0



Band5_10MHz_QPSK_20525_50RB#0



Band5_10MHz_QPSK_20600_50RB#0



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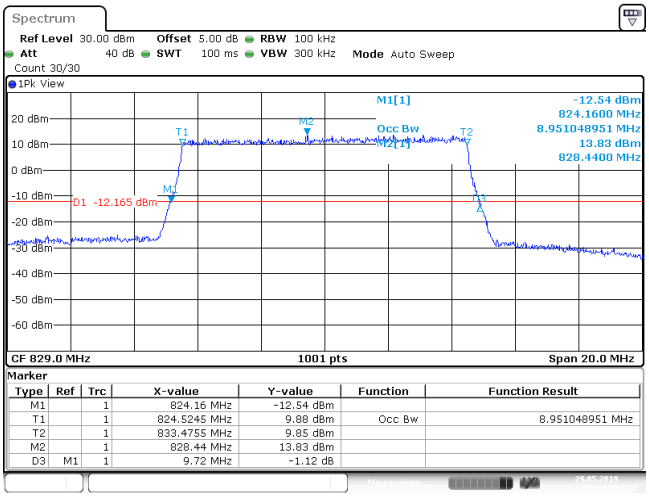
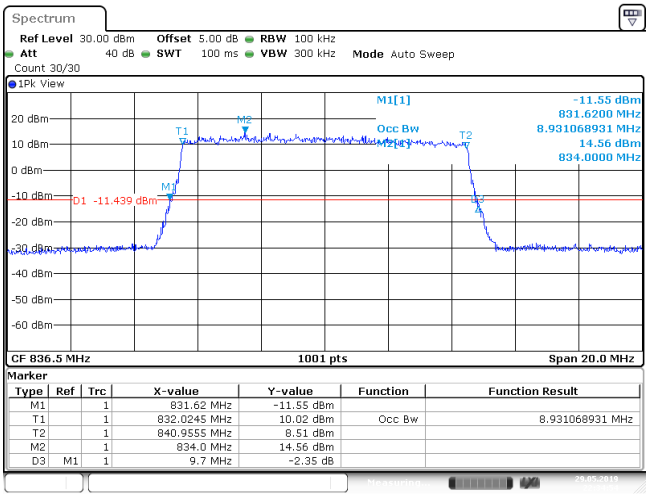
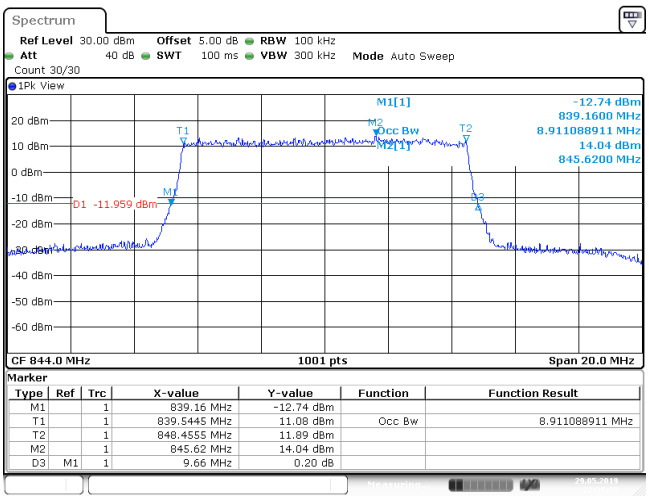


Band5_10MHz_16QAM_20525_50RB#0

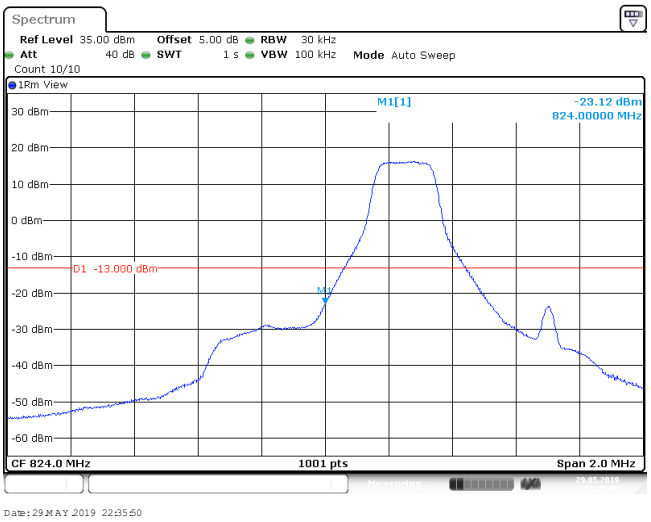
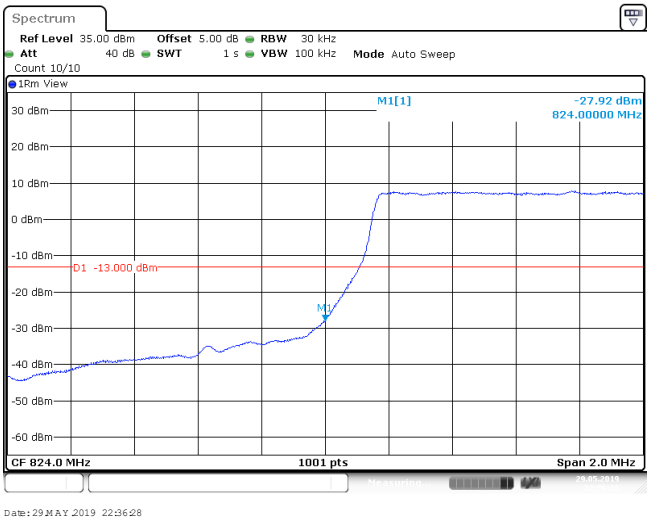


Band5_10MHz_16QAM_20600_50RB#0

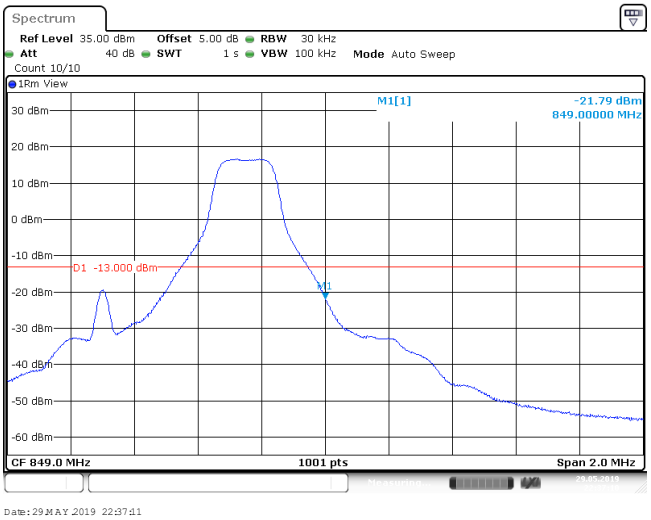


7. Band Edge Compliance

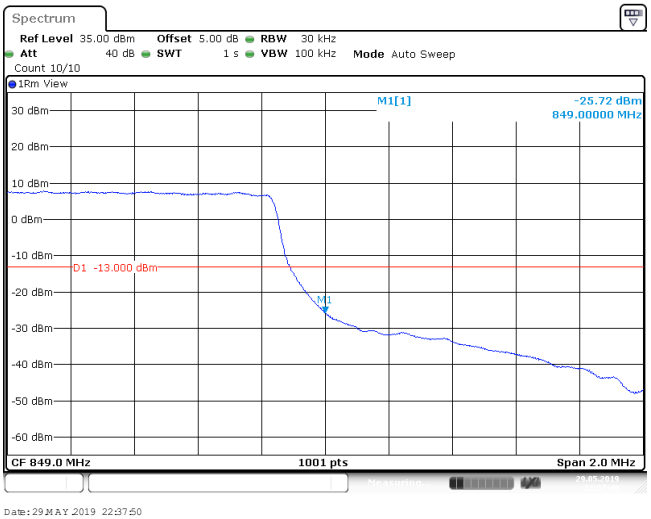
7.1. Test Plots

Band5_1.4MHz_QPSK_20407_1RB#0

Band5_1.4MHz_QPSK_20407_6RB#0


Band5_1.4MHz_QPSK_20643_1RB#5



Band5_1.4MHz_QPSK_20643_6RB#0



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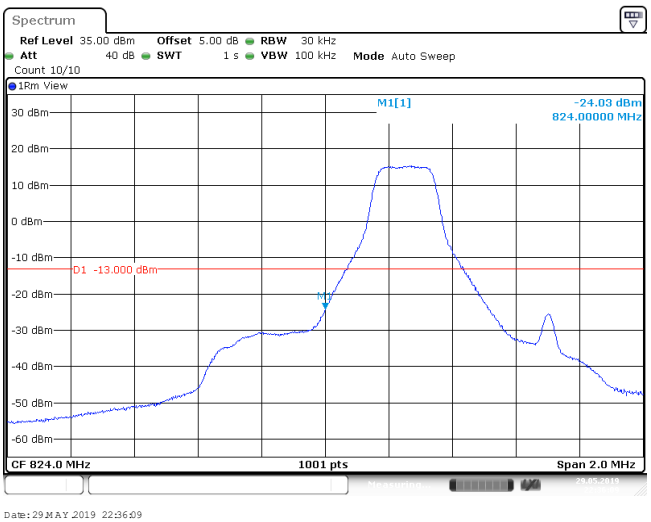

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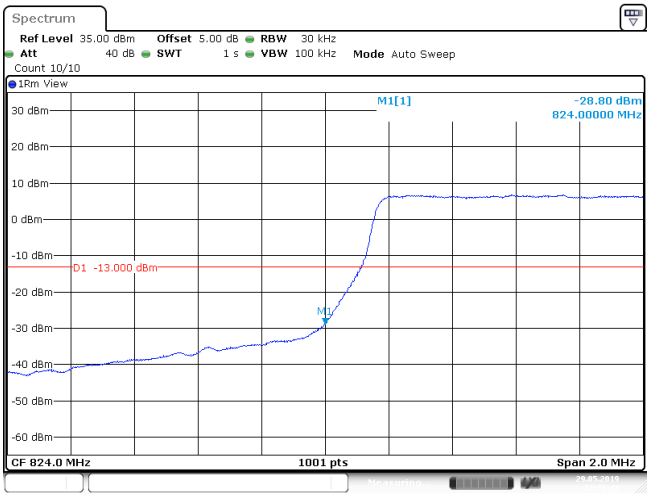

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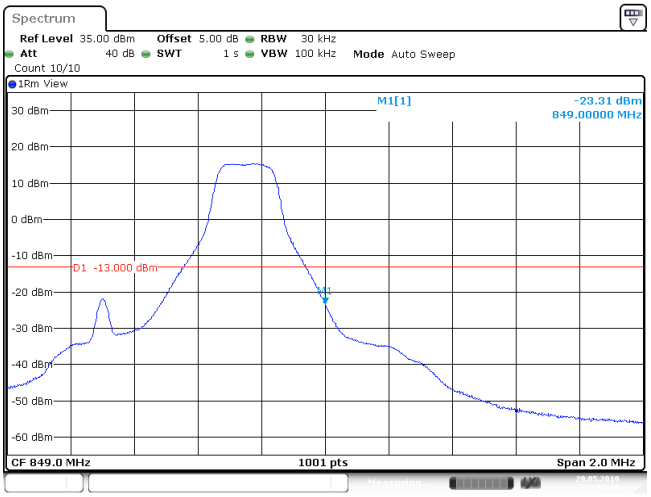

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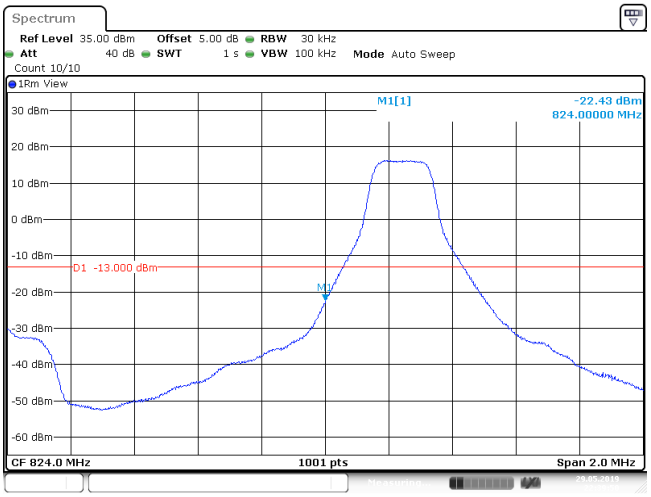
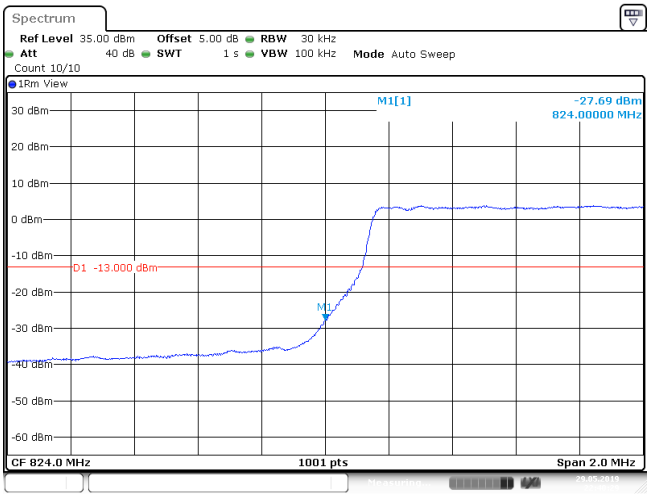
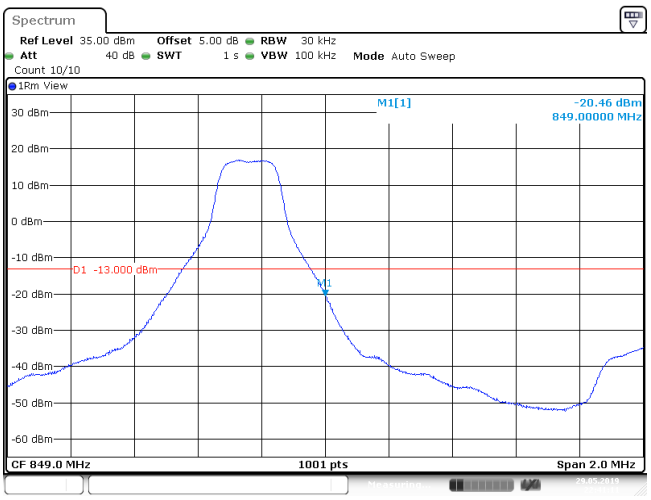
Band5_3MHz_QPSK_20415_1RB#0



Band5_3MHz_QPSK_20415_15RB#0

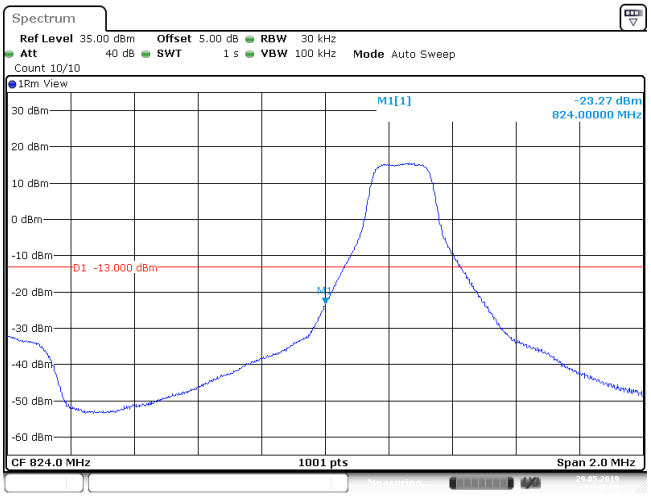


Band5_3MHz_QPSK_20635_1RB#14



Band5_3MHz_QPSK_20635_15RB#0

Band5_3MHz_16QAM_20415_1RB#0



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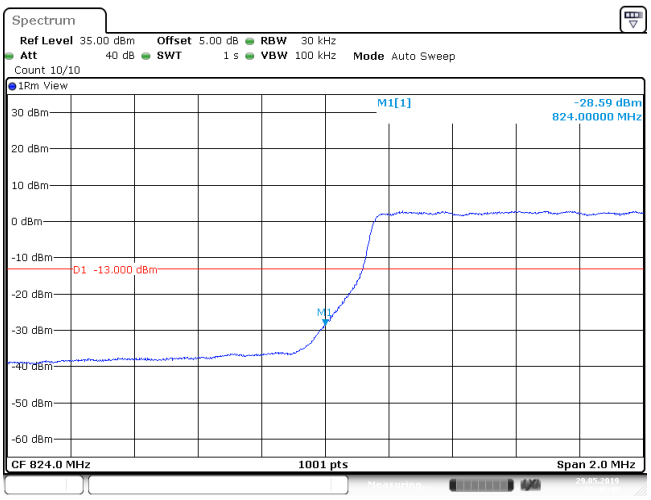
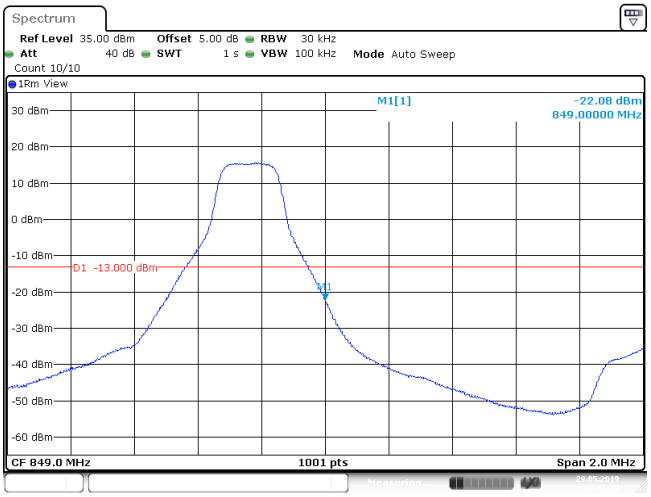
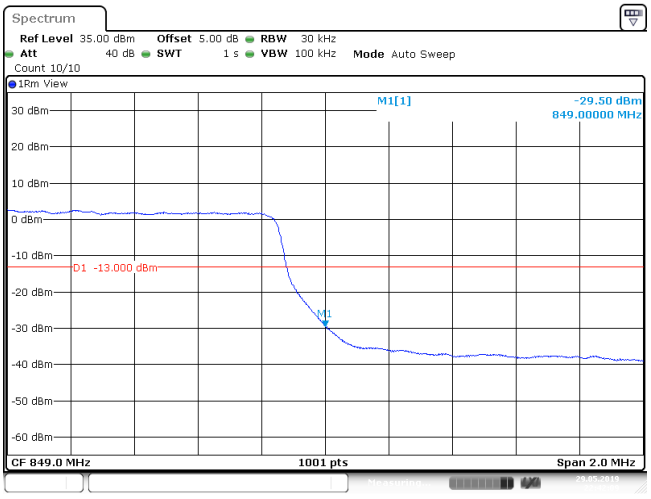


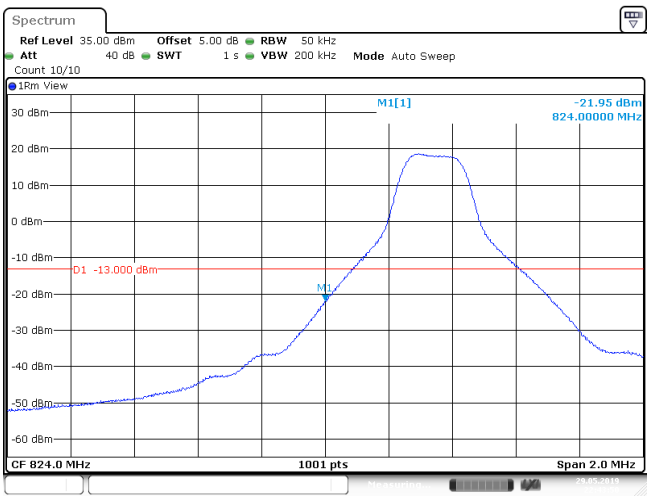
Band5_3MHz_16QAM_20635_1RB#14



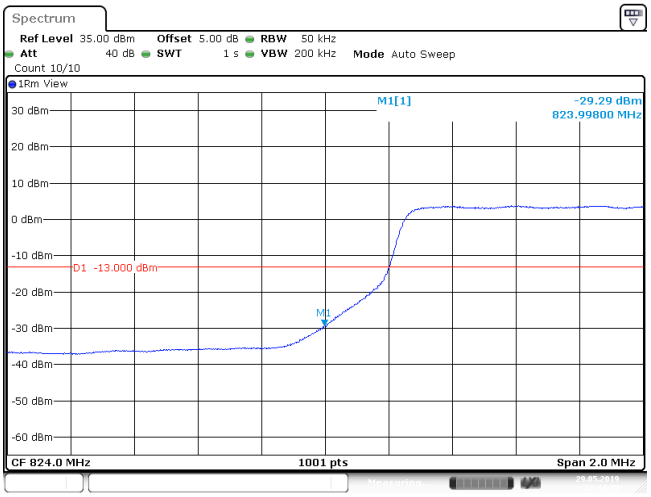
Band5_3MHz_16QAM_20635_15RB#0



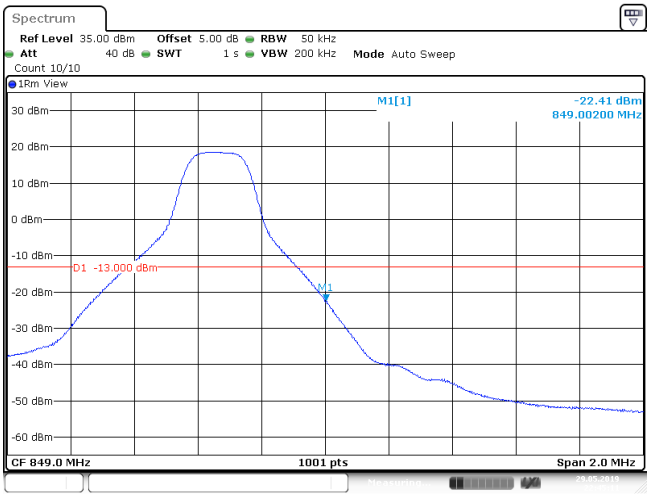
Band5_5MHz_QPSK_20425_1RB#0



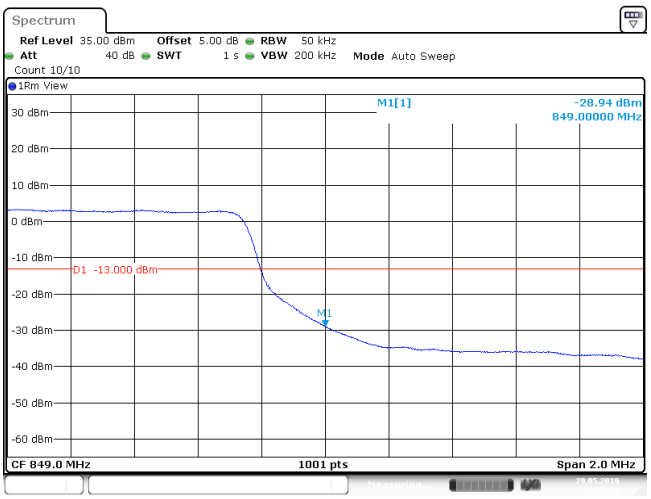
Band5_5MHz_QPSK_20425_25RB#0



Band5_5MHz_QPSK_20625_1RB#24



Band5_5MHz_QPSK_20625_25RB#0



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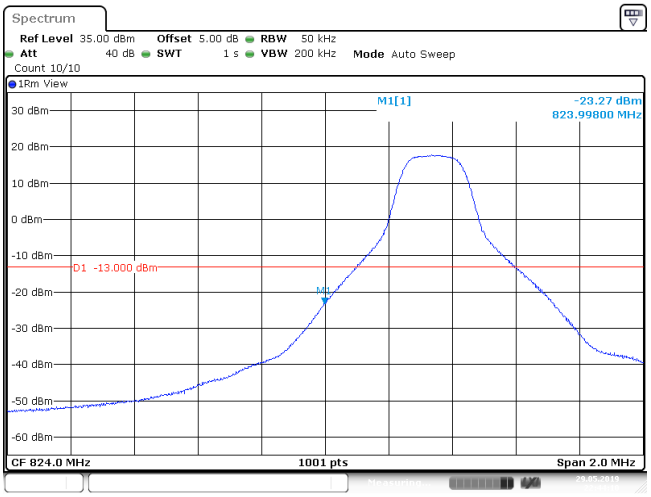

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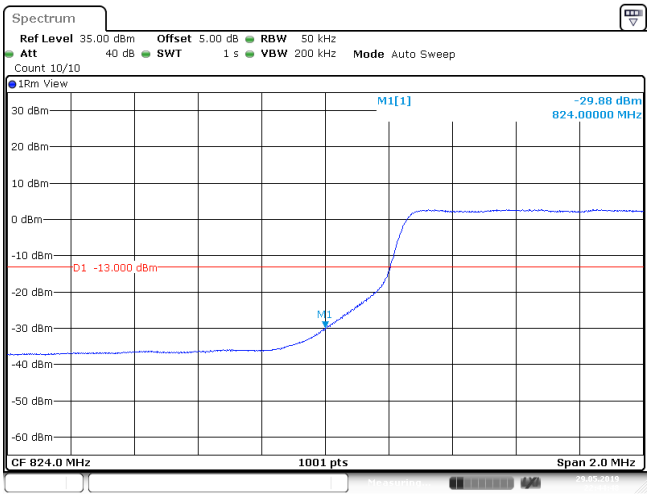

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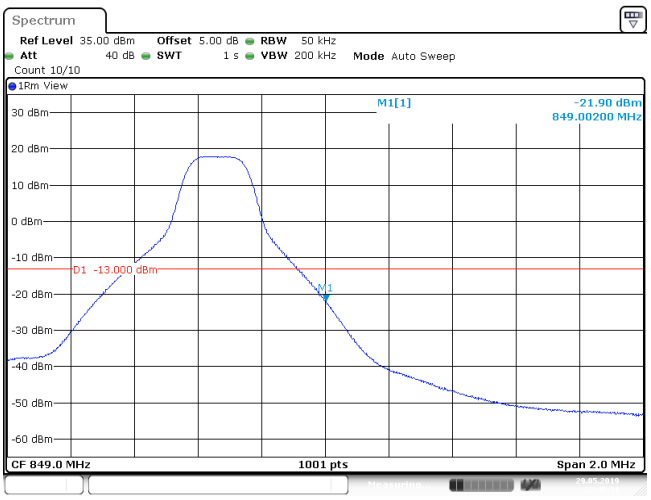

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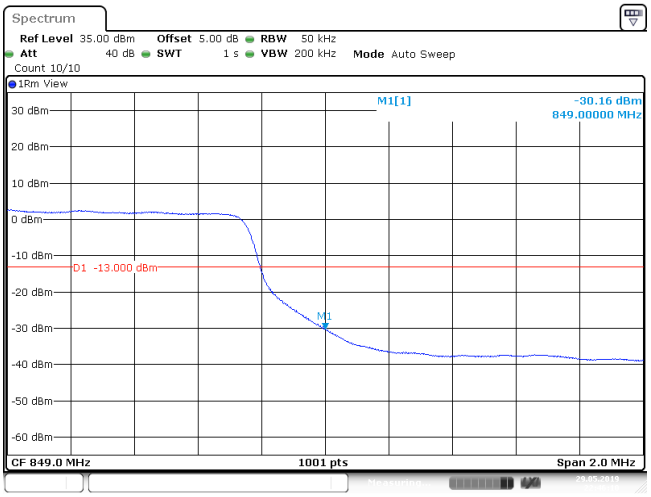
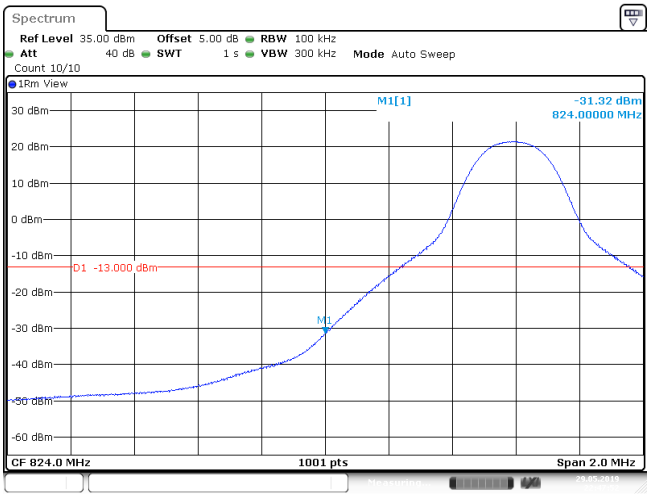
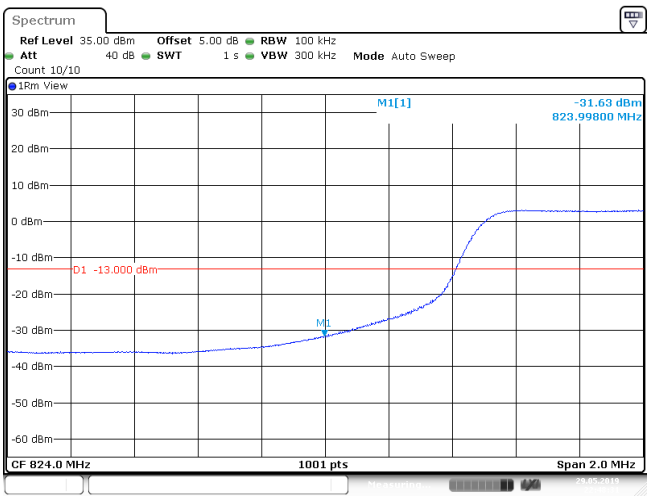


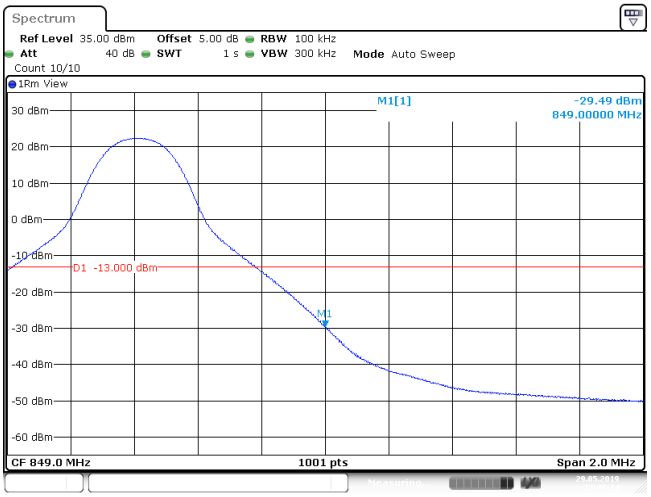
Band5_10MHz_QPSK_20450_1RB#0



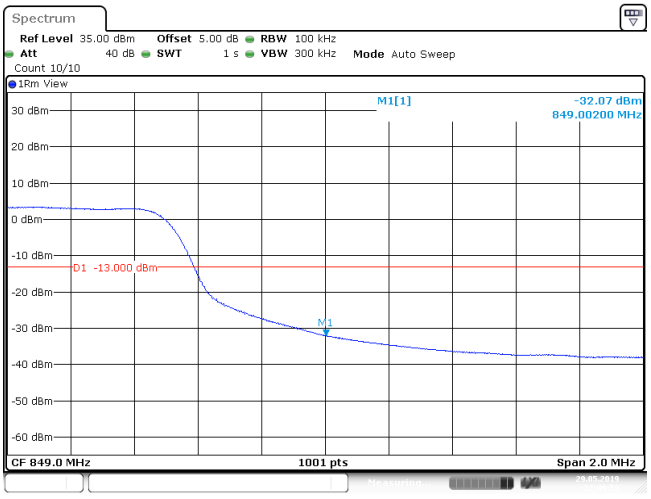
Band5_10MHz_QPSK_20450_50RB#0



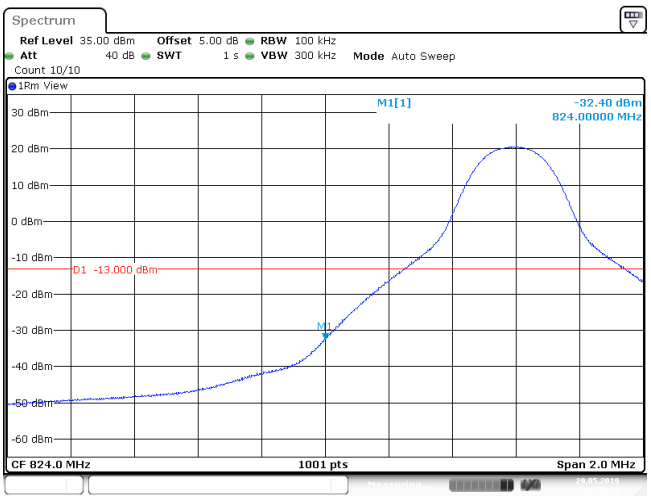
Band5_10MHz_QPSK_20600_1RB#49



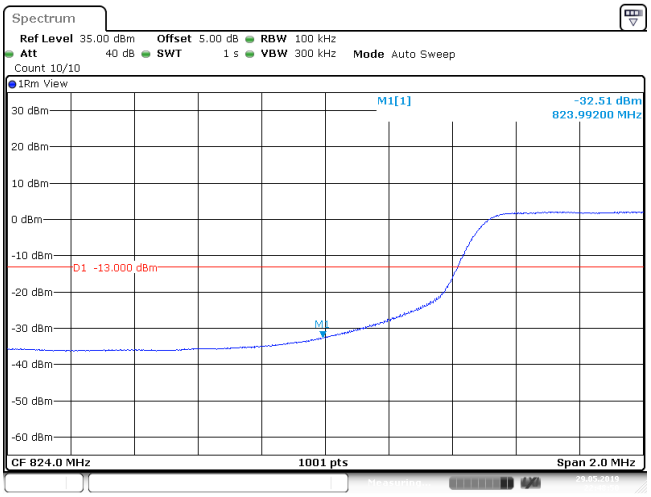
Band5_10MHz_QPSK_20600_50RB#0



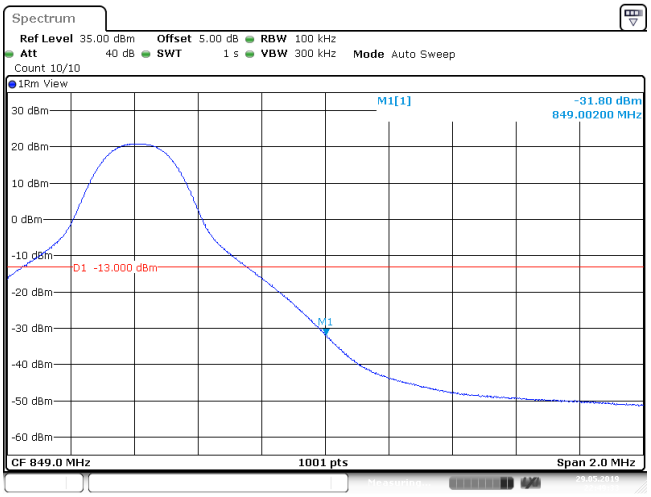
Band5_10MHz_16QAM_20450_1RB#0



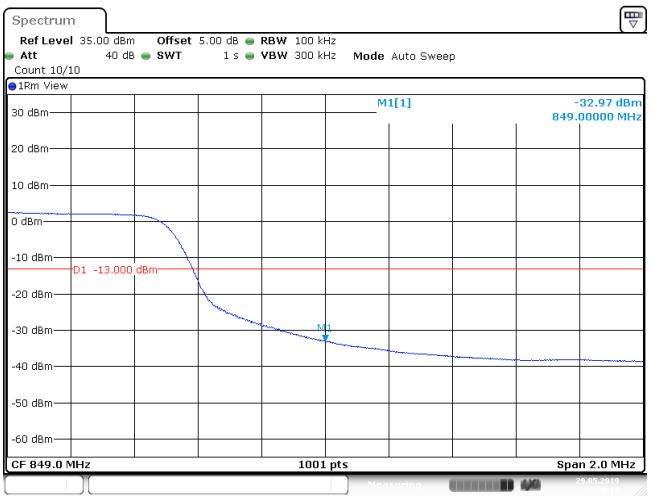
Band5_10MHz_16QAM_20450_50RB#0



Band5_10MHz_16QAM_20600_1RB#49



Band5_10MHz_16QAM_20600_50RB#0



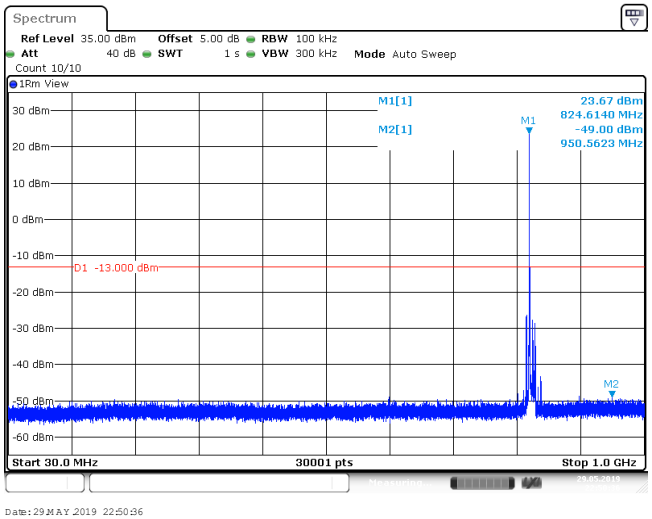
8. Spurious Emission at Antenna Terminal

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.

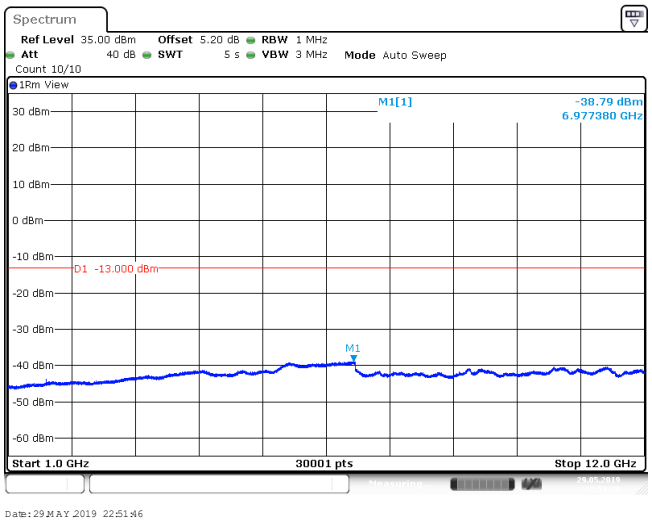
Remark2: only the worst case data displayed in this report.

8.1. Test Plots

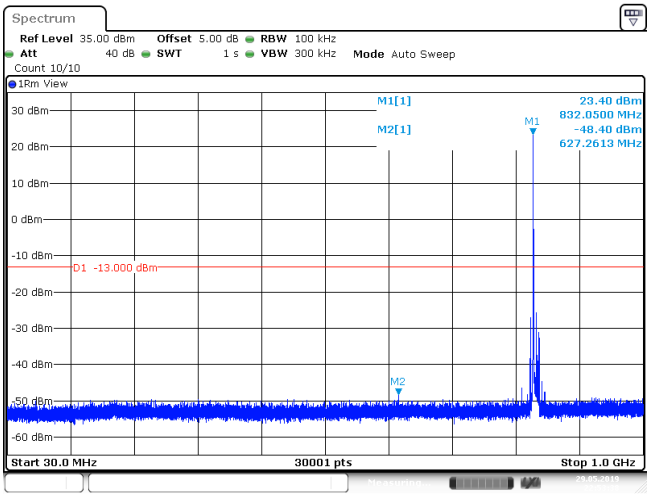
Band5_10MHz_QPSK_20450_1RB#0



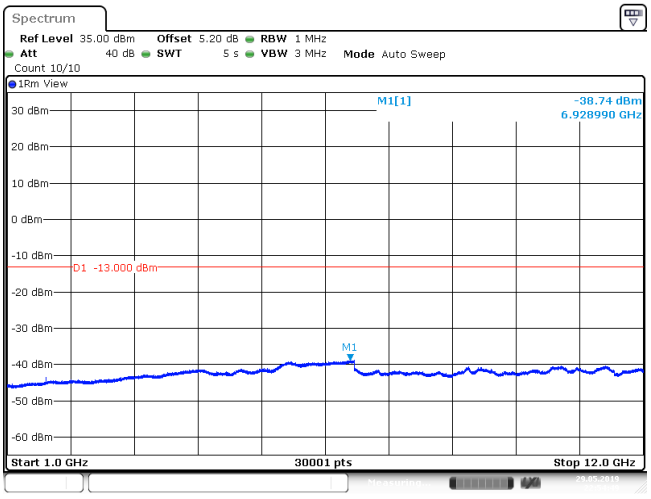
Band5_10MHz_QPSK_20450_1RB#0



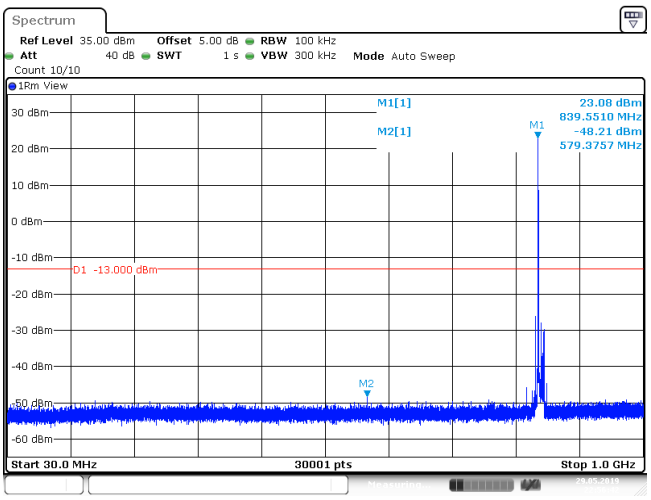
Band5_10MHz_QPSK_20525_1RB#0



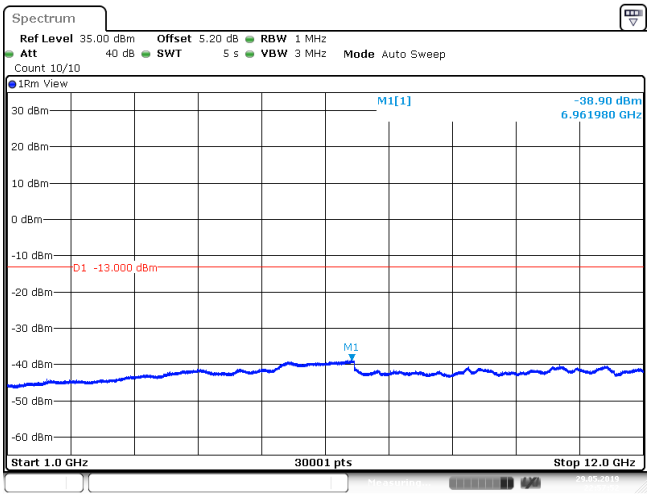
Band5_10MHz_QPSK_20525_1RB#0



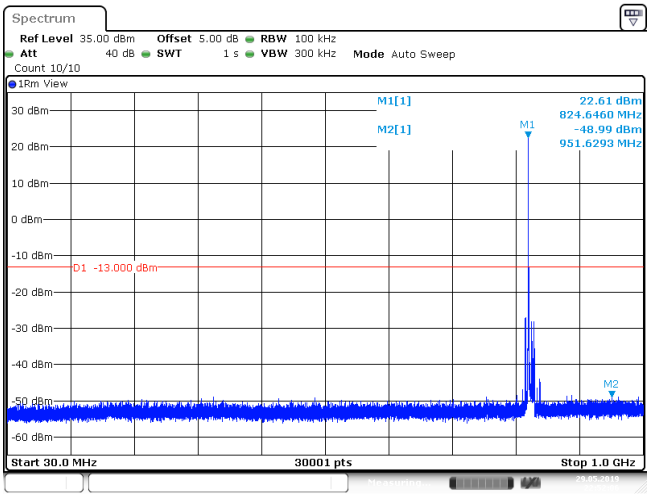
Band5_10MHz_QPSK_20600_1RB#0



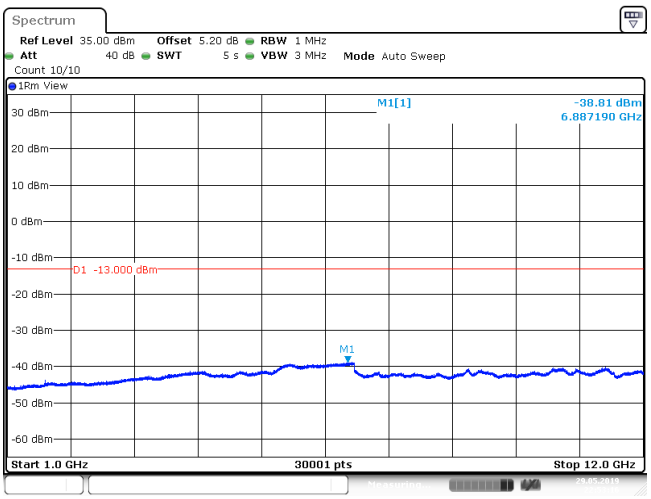
Band5_10MHz_QPSK_20600_1RB#0

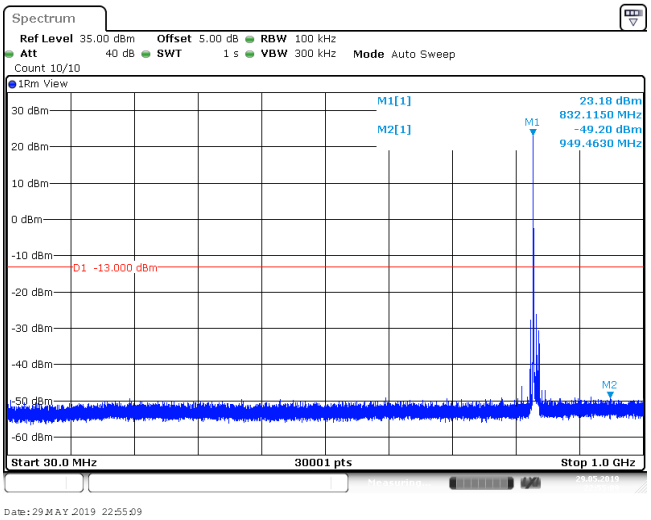


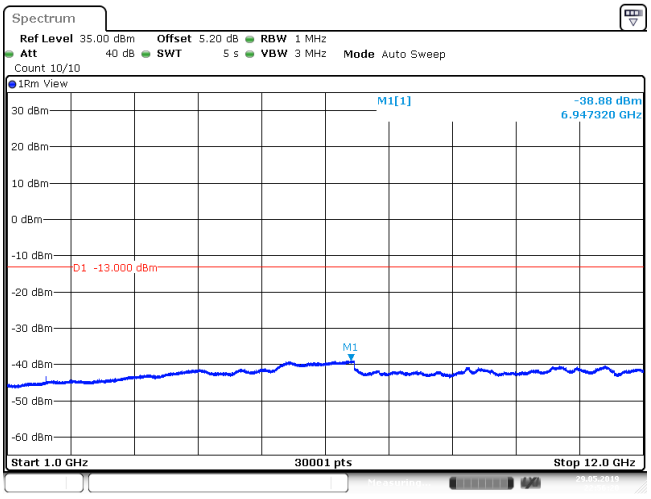
Band5_10MHz_16QAM_20450_1RB#0

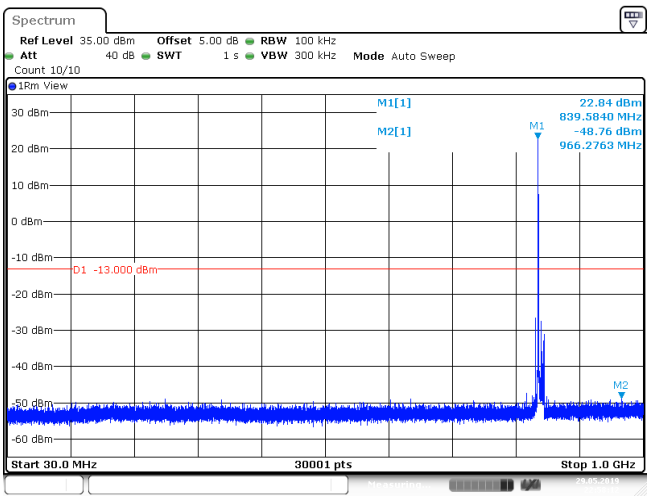


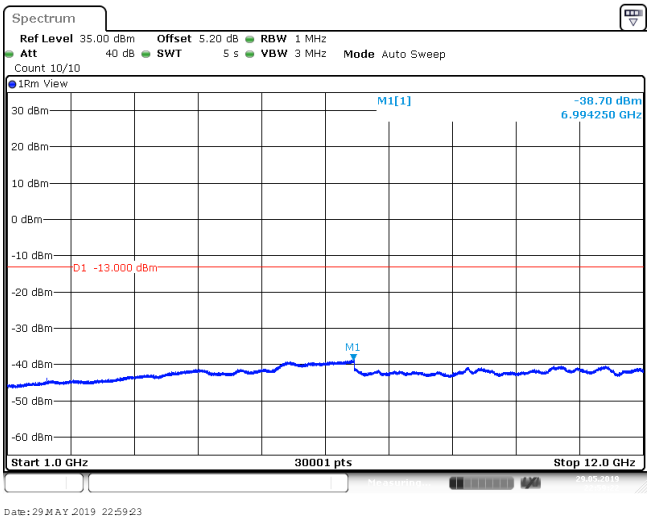
Band5_10MHz_16QAM_20450_1RB#0



Band5_10MHz_16QAM_20525_1RB#0


Band5_10MHz_16QAM_20525_1RB#0


Band5_10MHz_16QAM_20600_1RB#0


Band5_10MHz_16QAM_20600_1RB#0


9. Frequency Stability

9.1. Frequency Vs Voltage

Voltage										
BAND	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band5	10MHz	QPSK	20450	50RB#0	VL	NT	0.60	0.000724	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	VN	NT	0.40	0.000483	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	VH	NT	-0.50	-0.000603	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VL	NT	-1.30	-0.001554	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VN	NT	0.20	0.000239	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VH	NT	-0.40	-0.000478	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VL	NT	-0.60	-0.000711	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VN	NT	-1.00	-0.001185	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VH	NT	-2.00	-0.002370	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VL	NT	0.20	0.000241	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VN	NT	0.30	0.000362	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VH	NT	-0.90	-0.001086	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VL	NT	-1.40	-0.001674	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VN	NT	-1.60	-0.001913	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VH	NT	0.50	0.000598	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VL	NT	-0.90	-0.001066	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VN	NT	-1.10	-0.001303	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VH	NT	0.50	0.000592	±2.5	PASS

9.2. Frequency Vs Temperature

Temperature										
BAND	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band5	10MHz	QPSK	20450	50RB#0	NV	-30	0.20	0.000241	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	-20	0.90	0.001086	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	0	-1.30	-0.001568	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	10	-0.70	-0.000844	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	20	-1.00	-0.001206	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	30	-1.90	-0.002292	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	40	-1.70	-0.002051	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	50	-1.50	-0.001809	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	-30	-2.30	-0.002750	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	-20	0.90	0.001076	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	0	-0.50	-0.000598	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	10	-1.70	-0.002032	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	20	-1.90	-0.002271	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	30	0.30	0.000359	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	40	0.40	0.000478	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	50	-1.90	-0.002271	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	-30	-2.60	-0.003081	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	-20	-1.10	-0.001303	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	0	0.30	0.000355	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	10	-1.20	-0.001422	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	20	-0.50	-0.000592	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	30	0.10	0.000118	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	40	-1.70	-0.002014	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	50	-0.10	-0.000118	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	-30	1.00	0.001206	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	-20	0.10	0.000121	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	0	0.00	0.000000	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	10	-0.70	-0.000844	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	20	-1.50	-0.001809	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	30	-1.30	-0.001568	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	40	-0.90	-0.001086	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	50	0.40	0.000483	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	-30	0.20	0.000239	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	-20	-0.90	-0.001076	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	0	0.50	0.000598	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	10	0.10	0.000120	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	20	-2.20	-0.002630	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	30	0.40	0.000478	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	40	-0.60	-0.000717	±2.5	PASS

Band5	10MHz	16QAM	20525	50RB#0	NV	50	-0.50	-0.000598	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	-30	-0.10	-0.000118	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	-20	-0.40	-0.000474	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	0	-0.20	-0.000237	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	10	-0.70	-0.000829	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	20	-0.70	-0.000829	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	30	1.00	0.001185	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	40	-1.00	-0.001185	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	50	-1.70	-0.002014	±2.5	PASS

The End