

Appendix B.3

E-UTRA Band 5

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	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	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
Wideband Radio Communication Tester	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]	$U = \pm 0.37 \text{ dB}$
Bandwidth	Magnitude [%]	$U = \pm 0.2\%$
Band Edge Compliance	Disturbance Power [dBm]	$U = \pm 2.0 \text{ dB}$
Spurious Emissions, Conducted	Disturbance Power [dBm]	$U = \pm 2.0 \text{ dB}$
Frequency Stability	Frequency Accuracy [ppm]	$U = \pm 0.24 \text{ ppm}$

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	22.75	19.1	38.45	PASS
Band5	1.4MHz	QPSK	20407	1RB#2	22.91	19.26	38.45	PASS
Band5	1.4MHz	QPSK	20407	1RB#5	22.70	19.05	38.45	PASS
Band5	1.4MHz	QPSK	20407	3RB#0	23.06	19.41	38.45	PASS
Band5	1.4MHz	QPSK	20407	3RB#1	23.03	19.38	38.45	PASS
Band5	1.4MHz	QPSK	20407	3RB#3	23.07	19.42	38.45	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	22.04	18.39	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#0	22.94	19.29	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#2	23.10	19.45	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#5	22.87	19.22	38.45	PASS
Band5	1.4MHz	QPSK	20525	3RB#0	23.11	19.46	38.45	PASS
Band5	1.4MHz	QPSK	20525	3RB#1	23.24	19.59	38.45	PASS
Band5	1.4MHz	QPSK	20525	3RB#3	22.93	19.28	38.45	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	22.07	18.42	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#0	22.77	19.12	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#2	23.05	19.4	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#5	22.77	19.12	38.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#0	23.16	19.51	38.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#1	23.12	19.47	38.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#3	23.04	19.39	38.45	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	22.02	18.37	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#0	21.57	17.92	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#2	21.75	18.1	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#5	21.57	17.92	38.45	PASS
Band5	1.4MHz	16QAM	20407	3RB#0	22.16	18.51	38.45	PASS
Band5	1.4MHz	16QAM	20407	3RB#1	22.15	18.5	38.45	PASS
Band5	1.4MHz	16QAM	20407	3RB#3	22.17	18.52	38.45	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	20.92	17.27	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#0	21.60	17.95	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#2	21.51	17.86	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#5	21.60	17.95	38.45	PASS
Band5	1.4MHz	16QAM	20525	3RB#0	22.18	18.53	38.45	PASS
Band5	1.4MHz	16QAM	20525	3RB#1	22.12	18.47	38.45	PASS
Band5	1.4MHz	16QAM	20525	3RB#3	22.21	18.56	38.45	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	21.04	17.39	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#0	21.66	18.01	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#2	21.74	18.09	38.45	PASS

Band5	1.4MHz	16QAM	20643	1RB#5	21.60	17.95	38.45	PASS
Band5	1.4MHz	16QAM	20643	3RB#0	22.28	18.63	38.45	PASS
Band5	1.4MHz	16QAM	20643	3RB#1	22.12	18.47	38.45	PASS
Band5	1.4MHz	16QAM	20643	3RB#3	22.15	18.5	38.45	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	21.17	17.52	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#0	23.06	19.41	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#8	22.96	19.31	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#14	22.88	19.23	38.45	PASS
Band5	3MHz	QPSK	20415	8RB#0	22.09	18.44	38.45	PASS
Band5	3MHz	QPSK	20415	8RB#4	21.99	18.34	38.45	PASS
Band5	3MHz	QPSK	20415	8RB#7	21.95	18.3	38.45	PASS
Band5	3MHz	QPSK	20415	15RB#0	22.08	18.43	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#0	23.21	19.56	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#8	22.69	19.04	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#14	22.98	19.33	38.45	PASS
Band5	3MHz	QPSK	20525	8RB#0	22.01	18.36	38.45	PASS
Band5	3MHz	QPSK	20525	8RB#4	22.01	18.36	38.45	PASS
Band5	3MHz	QPSK	20525	8RB#7	22.02	18.37	38.45	PASS
Band5	3MHz	QPSK	20525	15RB#0	21.97	18.32	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#0	22.93	19.28	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#8	23.04	19.39	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#14	23.00	19.35	38.45	PASS
Band5	3MHz	QPSK	20635	8RB#0	21.94	18.29	38.45	PASS
Band5	3MHz	QPSK	20635	8RB#4	22.06	18.41	38.45	PASS
Band5	3MHz	QPSK	20635	8RB#7	21.96	18.31	38.45	PASS
Band5	3MHz	QPSK	20635	15RB#0	21.99	18.34	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#0	21.72	18.07	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#8	21.53	17.88	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#14	21.53	17.88	38.45	PASS
Band5	3MHz	16QAM	20415	8RB#0	21.21	17.56	38.45	PASS
Band5	3MHz	16QAM	20415	8RB#4	20.95	17.3	38.45	PASS
Band5	3MHz	16QAM	20415	8RB#7	20.91	17.26	38.45	PASS
Band5	3MHz	16QAM	20415	15RB#0	21.06	17.41	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#0	21.63	17.98	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#8	21.56	17.91	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#14	21.51	17.86	38.45	PASS
Band5	3MHz	16QAM	20525	8RB#0	21.16	17.51	38.45	PASS
Band5	3MHz	16QAM	20525	8RB#4	20.87	17.22	38.45	PASS
Band5	3MHz	16QAM	20525	8RB#7	20.98	17.33	38.45	PASS
Band5	3MHz	16QAM	20525	15RB#0	21.12	17.47	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#0	21.66	18.01	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#8	21.63	17.98	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#14	21.70	18.05	38.45	PASS
Band5	3MHz	16QAM	20635	8RB#0	20.73	17.08	38.45	PASS

Band5	3MHz	16QAM	20635	8RB#4	20.82	17.17	38.45	PASS
Band5	3MHz	16QAM	20635	8RB#7	20.83	17.18	38.45	PASS
Band5	3MHz	16QAM	20635	15RB#0	21.13	17.48	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#0	23.03	19.38	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#12	22.82	19.17	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#24	23.19	19.54	38.45	PASS
Band5	5MHz	QPSK	20425	12RB#0	22.03	18.38	38.45	PASS
Band5	5MHz	QPSK	20425	12RB#6	21.91	18.26	38.45	PASS
Band5	5MHz	QPSK	20425	12RB#13	22.08	18.43	38.45	PASS
Band5	5MHz	QPSK	20425	25RB#0	22.04	18.39	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#0	22.90	19.25	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#12	22.86	19.21	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#24	22.65	19	38.45	PASS
Band5	5MHz	QPSK	20525	12RB#0	22.01	18.36	38.45	PASS
Band5	5MHz	QPSK	20525	12RB#6	21.97	18.32	38.45	PASS
Band5	5MHz	QPSK	20525	12RB#13	22.03	18.38	38.45	PASS
Band5	5MHz	QPSK	20525	25RB#0	22.06	18.41	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#0	22.81	19.16	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#12	23.25	19.6	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#24	22.90	19.25	38.45	PASS
Band5	5MHz	QPSK	20625	12RB#0	21.94	18.29	38.45	PASS
Band5	5MHz	QPSK	20625	12RB#6	22.08	18.43	38.45	PASS
Band5	5MHz	QPSK	20625	12RB#13	22.05	18.4	38.45	PASS
Band5	5MHz	QPSK	20625	25RB#0	21.94	18.29	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#0	21.66	18.01	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#12	22.09	18.44	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#24	21.68	18.03	38.45	PASS
Band5	5MHz	16QAM	20425	12RB#0	21.00	17.35	38.45	PASS
Band5	5MHz	16QAM	20425	12RB#6	20.94	17.29	38.45	PASS
Band5	5MHz	16QAM	20425	12RB#13	20.92	17.27	38.45	PASS
Band5	5MHz	16QAM	20425	25RB#0	21.01	17.36	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#0	21.48	17.83	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#12	21.91	18.26	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#24	21.46	17.81	38.45	PASS
Band5	5MHz	16QAM	20525	12RB#0	20.99	17.34	38.45	PASS
Band5	5MHz	16QAM	20525	12RB#6	20.91	17.26	38.45	PASS
Band5	5MHz	16QAM	20525	12RB#13	20.97	17.32	38.45	PASS
Band5	5MHz	16QAM	20525	25RB#0	21.02	17.37	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#0	21.63	17.98	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#12	21.90	18.25	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#24	21.60	17.95	38.45	PASS
Band5	5MHz	16QAM	20625	12RB#0	20.85	17.2	38.45	PASS
Band5	5MHz	16QAM	20625	12RB#6	20.93	17.28	38.45	PASS
Band5	5MHz	16QAM	20625	12RB#13	20.87	17.22	38.45	PASS

Band5	5MHz	16QAM	20625	25RB#0	20.98	17.33	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#0	22.97	19.32	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#24	23.15	19.5	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#49	23.16	19.51	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#0	22.02	18.37	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#12	22.10	18.45	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#25	22.17	18.52	38.45	PASS
Band5	10MHz	QPSK	20450	50RB#0	22.13	18.48	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#0	22.81	19.16	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#24	23.15	19.5	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#49	22.55	18.9	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#0	22.32	18.67	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#12	22.16	18.51	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#25	21.92	18.27	38.45	PASS
Band5	10MHz	QPSK	20525	50RB#0	22.07	18.42	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#0	22.88	19.23	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#24	22.78	19.13	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#49	23.22	19.57	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#0	21.97	18.32	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#12	22.03	18.38	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#25	22.17	18.52	38.45	PASS
Band5	10MHz	QPSK	20600	50RB#0	21.96	18.31	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#0	21.73	18.08	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#24	21.69	18.04	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#49	21.69	18.04	38.45	PASS
Band5	10MHz	16QAM	20450	25RB#0	21.02	17.37	38.45	PASS
Band5	10MHz	16QAM	20450	25RB#12	21.03	17.38	38.45	PASS
Band5	10MHz	16QAM	20450	25RB#25	21.07	17.42	38.45	PASS
Band5	10MHz	16QAM	20450	50RB#0	21.13	17.48	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#0	21.66	18.01	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#24	21.80	18.15	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#49	21.80	18.15	38.45	PASS
Band5	10MHz	16QAM	20525	25RB#0	21.05	17.4	38.45	PASS
Band5	10MHz	16QAM	20525	25RB#12	21.06	17.41	38.45	PASS
Band5	10MHz	16QAM	20525	25RB#25	21.07	17.42	38.45	PASS
Band5	10MHz	16QAM	20525	50RB#0	21.03	17.38	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#0	21.85	18.2	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#24	21.73	18.08	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#49	21.59	17.94	38.45	PASS
Band5	10MHz	16QAM	20600	25RB#0	20.93	17.28	38.45	PASS
Band5	10MHz	16QAM	20600	25RB#12	21.02	17.37	38.45	PASS
Band5	10MHz	16QAM	20600	25RB#25	20.87	17.22	38.45	PASS
Band5	10MHz	16QAM	20600	50RB#0	20.95	17.3	38.45	PASS

Remark:

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

$$\text{ERP [dBm]} = \text{Conducted Power [dBm]} + \text{Gain [dBd]}$$

$$\text{EIRP [dBm]} = \text{Conducted Power [dBm]} + \text{Gain [dBi]}$$

4. Peak-to-Average Ratio(CCDF)

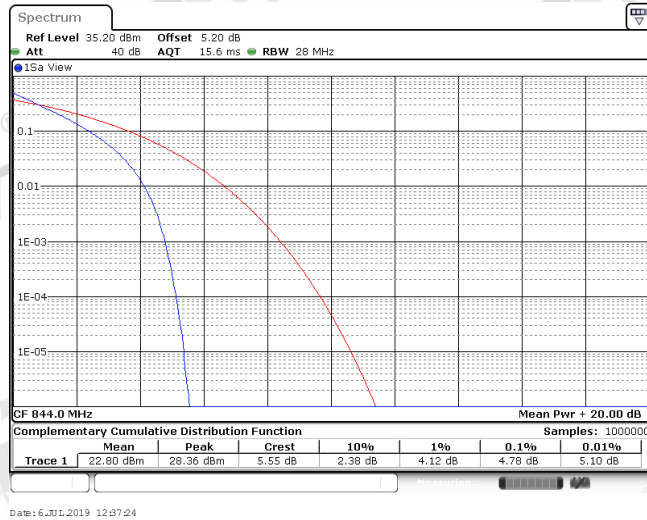
4.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band5	10MHz	QPSK	20450	50RB#0	5.01	13	PASS
Band5	10MHz	QPSK	20525	50RB#0	4.70	13	PASS
Band5	10MHz	QPSK	20600	50RB#0	4.78	13	PASS
Band5	10MHz	16QAM	20450	50RB#0	5.86	13	PASS
Band5	10MHz	16QAM	20525	50RB#0	5.59	13	PASS
Band5	10MHz	16QAM	20600	50RB#0	5.57	13	PASS

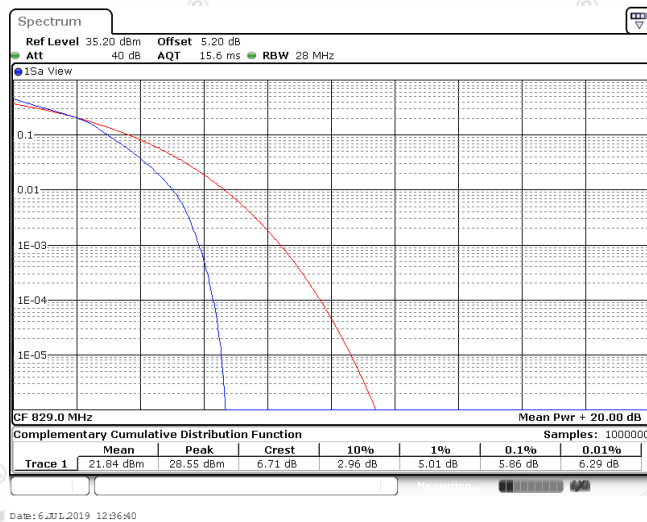
4.2. Test Plots



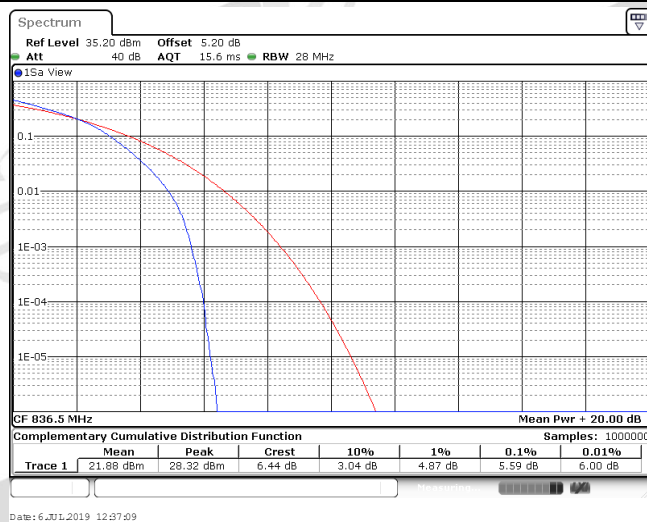
Band5_10MHz_QPSK_20600_50RB#0

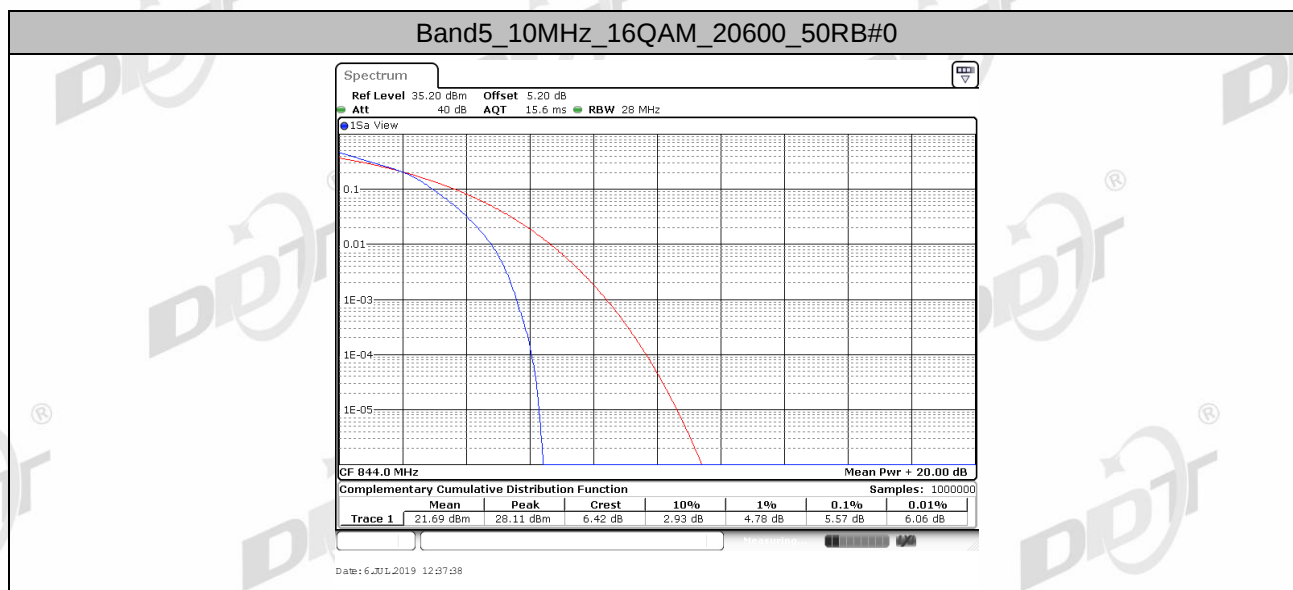


Band5_10MHz_16QAM_20450_50RB#0



Band5_10MHz_16QAM_20525_50RB#0



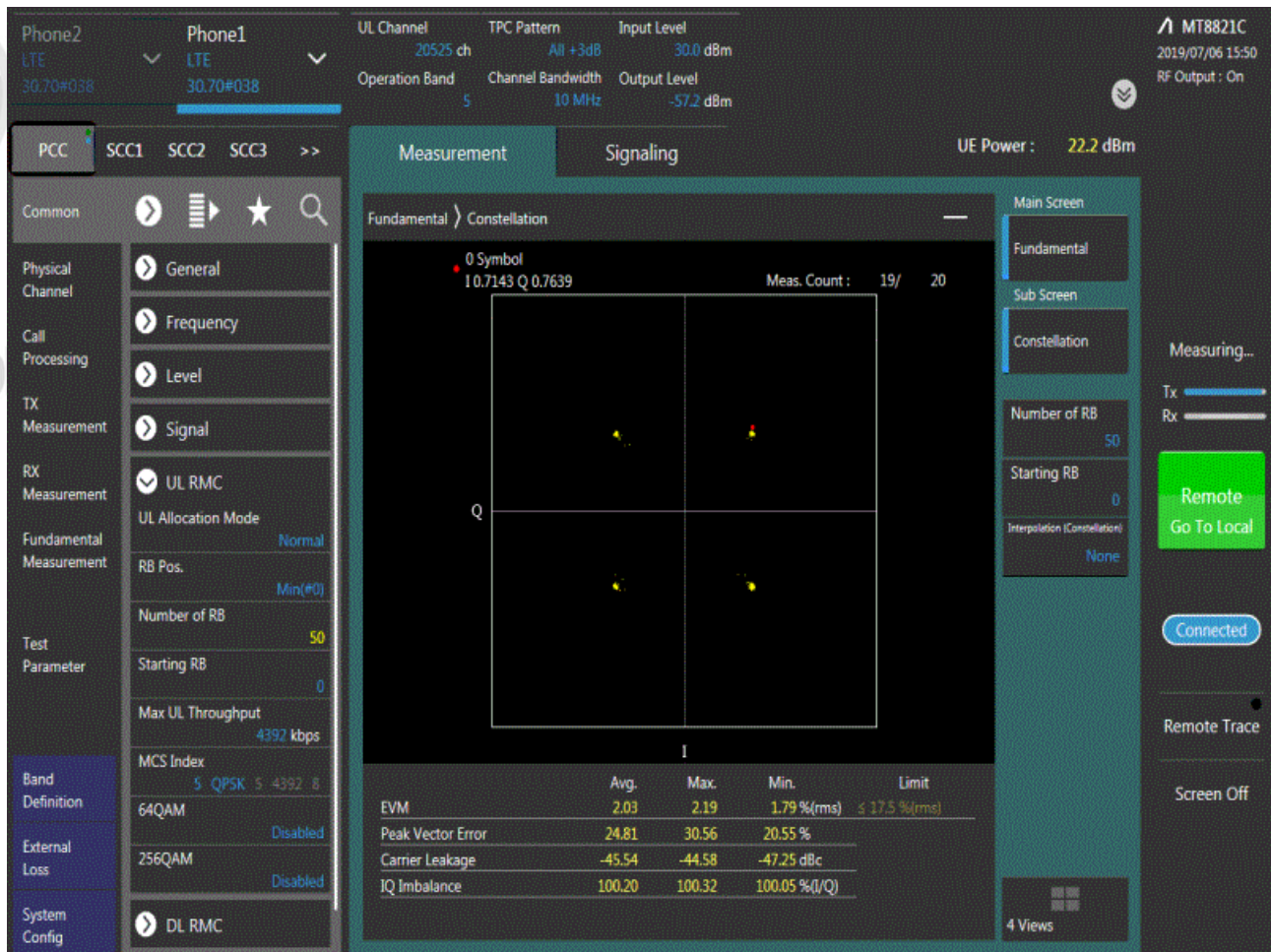


5. Modulation Characteristics

5.1. Test BAND = LTE Band 5

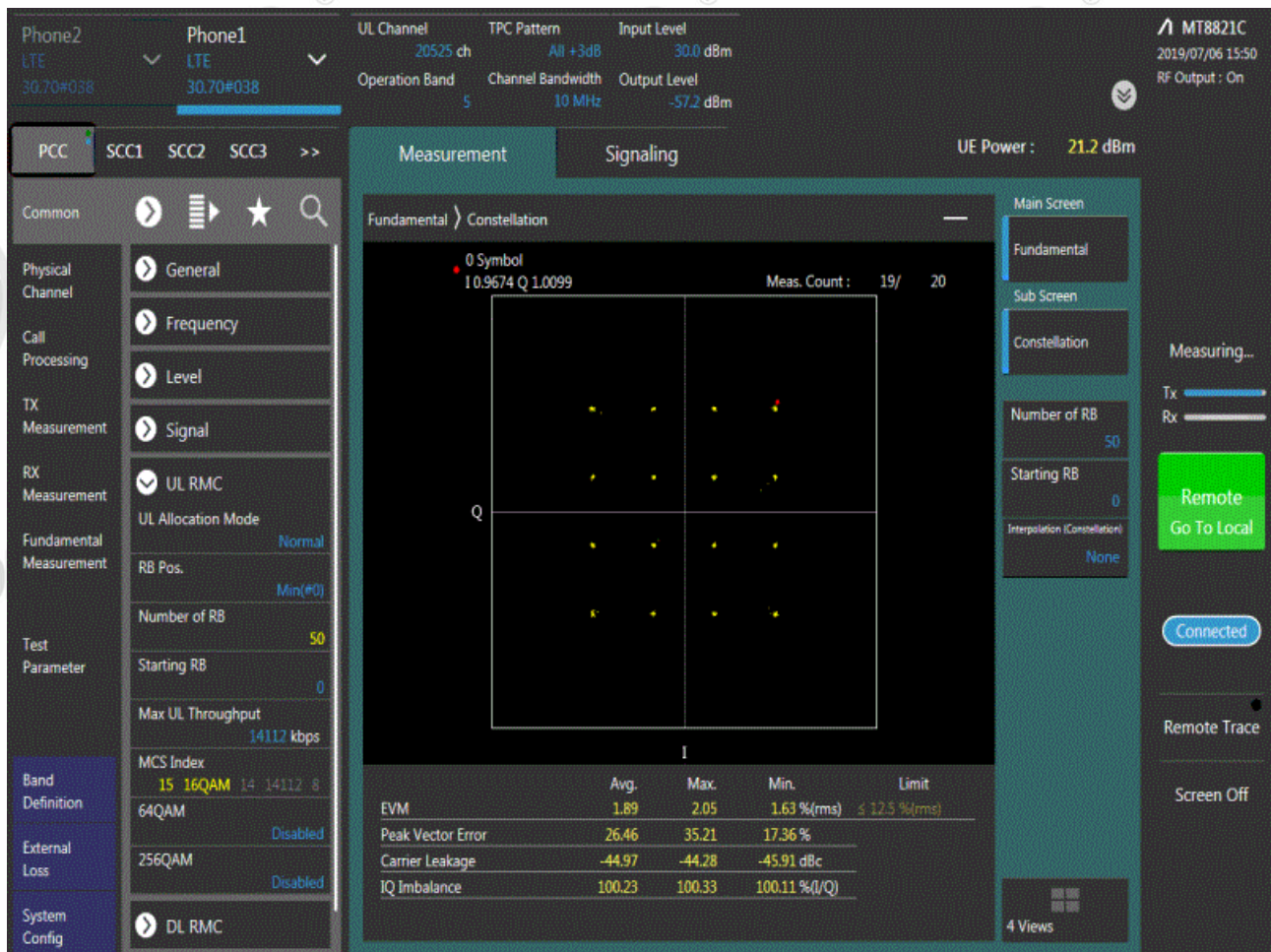
5.2. Test Mode = LTE /TM1 10MHz

5.2.1. Test Channel = MCH



5.3. Test Mode = LTE /TM2 10MHz

5.3.1. Test Channel = MCH



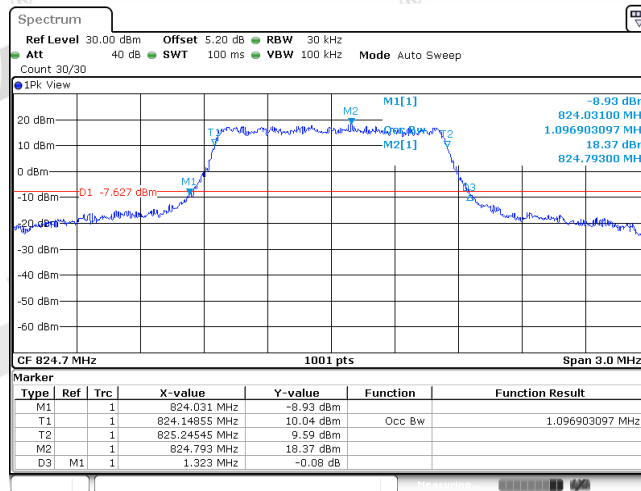
6. 26dB Bandwidth and Occupied Bandwidth

6.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band5	1.4MHz	QPSK	20407	6RB#0	1.097	1.323	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	1.091	1.287	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	1.094	1.290	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	1.091	1.302	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	1.088	1.284	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	1.091	1.287	PASS
Band5	3MHz	QPSK	20415	15RB#0	2.703	3.006	PASS
Band5	3MHz	QPSK	20525	15RB#0	2.691	2.994	PASS
Band5	3MHz	QPSK	20635	15RB#0	2.697	2.982	PASS
Band5	3MHz	16QAM	20415	15RB#0	2.685	2.976	PASS
Band5	3MHz	16QAM	20525	15RB#0	2.685	2.964	PASS
Band5	3MHz	16QAM	20635	15RB#0	2.685	2.982	PASS
Band5	5MHz	QPSK	20425	25RB#0	4.476	4.940	PASS
Band5	5MHz	QPSK	20525	25RB#0	4.466	4.910	PASS
Band5	5MHz	QPSK	20625	25RB#0	4.466	4.930	PASS
Band5	5MHz	16QAM	20425	25RB#0	4.476	4.970	PASS
Band5	5MHz	16QAM	20525	25RB#0	4.476	4.960	PASS
Band5	5MHz	16QAM	20625	25RB#0	4.486	4.970	PASS
Band5	10MHz	QPSK	20450	50RB#0	8.931	9.800	PASS
Band5	10MHz	QPSK	20525	50RB#0	8.891	9.680	PASS
Band5	10MHz	QPSK	20600	50RB#0	8.931	9.780	PASS
Band5	10MHz	16QAM	20450	50RB#0	8.951	9.800	PASS
Band5	10MHz	16QAM	20525	50RB#0	8.911	9.660	PASS
Band5	10MHz	16QAM	20600	50RB#0	8.951	9.780	PASS

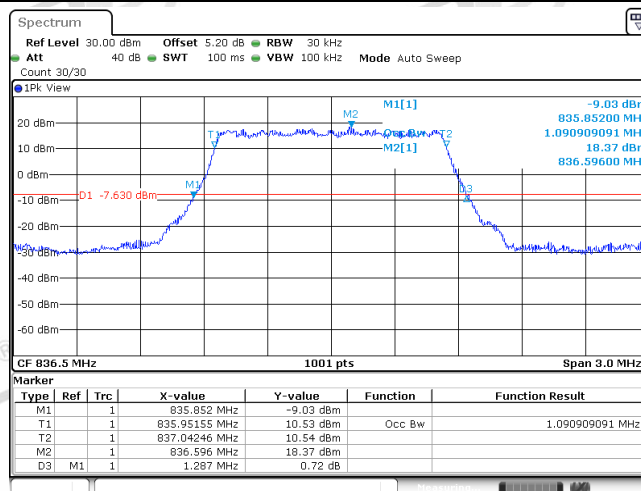
6.2. Test Plots

Band5_1.4MHz_QPSK_20407_6RB#0



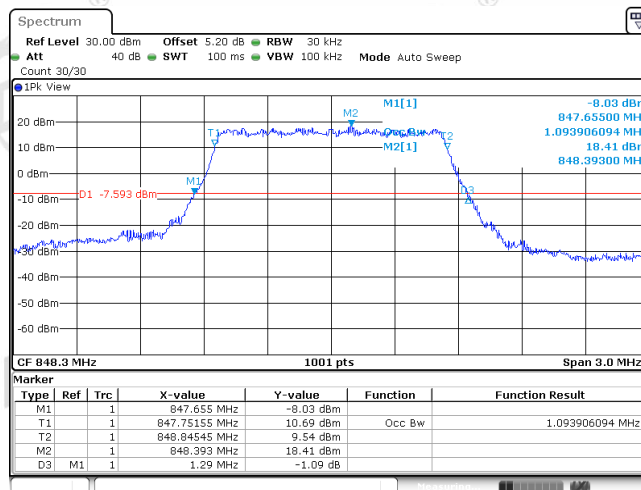
Date: 6 JUL 2019 12:07:04

Band5_1.4MHz_QPSK_20525_6RB#0



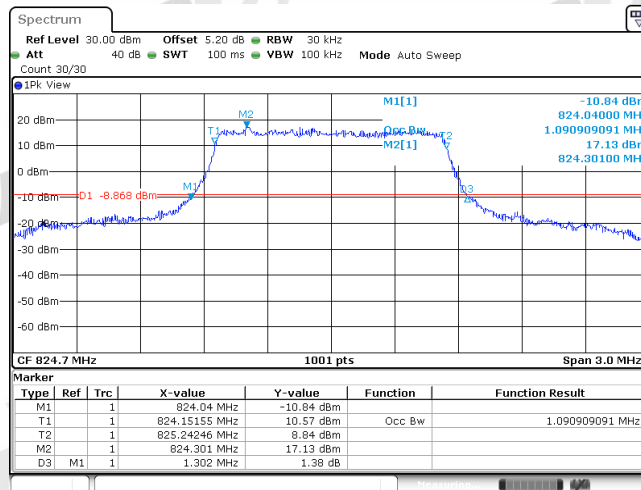
Date: 6 JUL 2019 12:07:36

Band5_1.4MHz_QPSK_20643_6RB#0



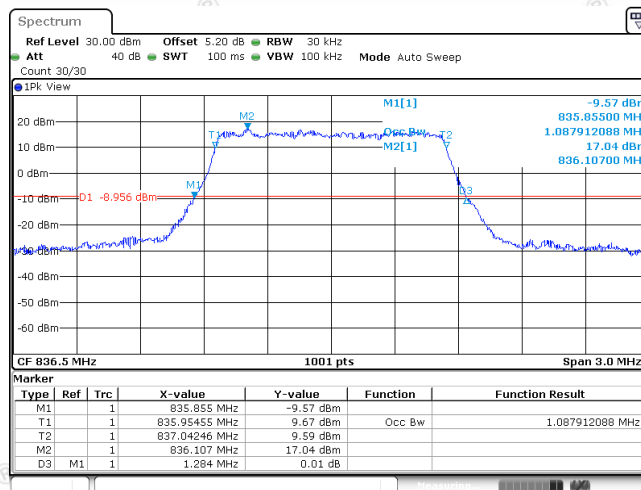
Date: 6 JUL 2019 12:08:08

Band5_1.4MHz_16QAM_20407_6RB#0



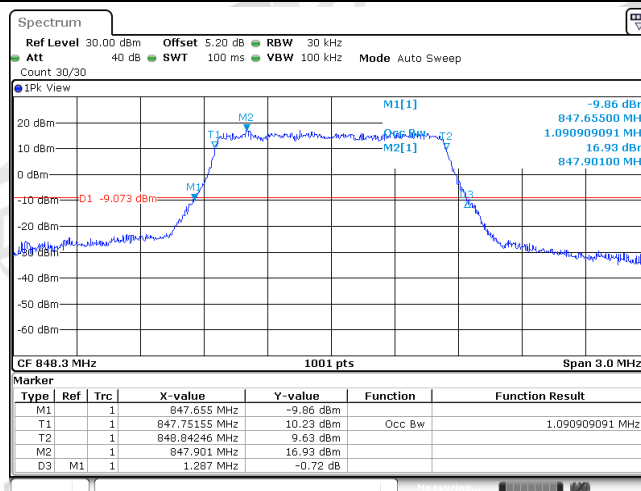
Date: 6 JUL 2019 12:07:20

Band5_1.4MHz_16QAM_20525_6RB#0



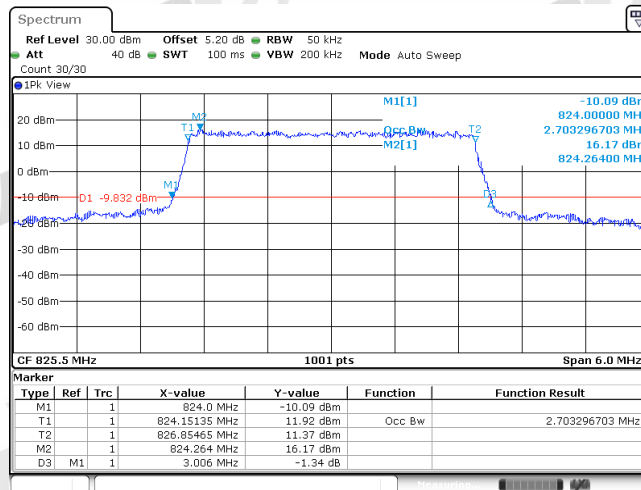
Date: 6 JUL 2019 12:07:52

Band5_1.4MHz_16QAM_20643_6RB#0



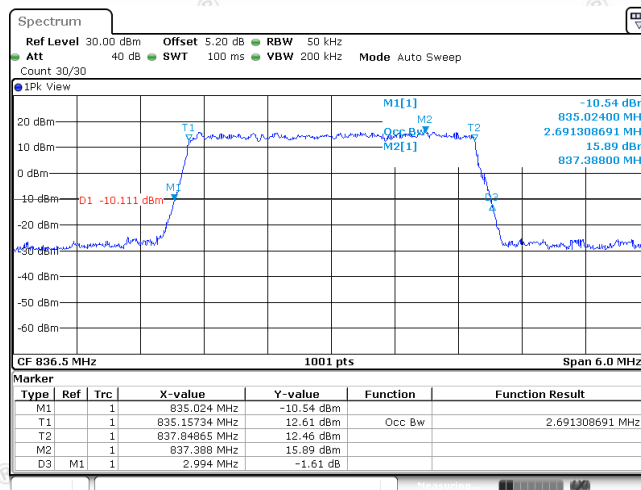
Date: 6 JUL 2019 12:08:24

Band5_3MHz_QPSK_20415_15RB#0



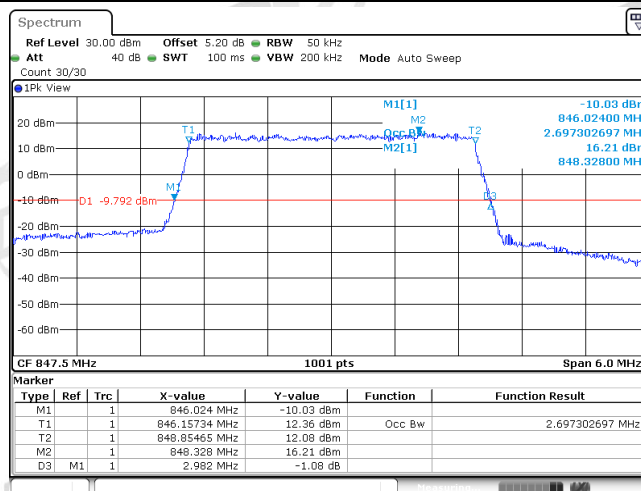
Date: 6 JUL 2019 12:08:45

Band5_3MHz_QPSK_20525_15RB#0



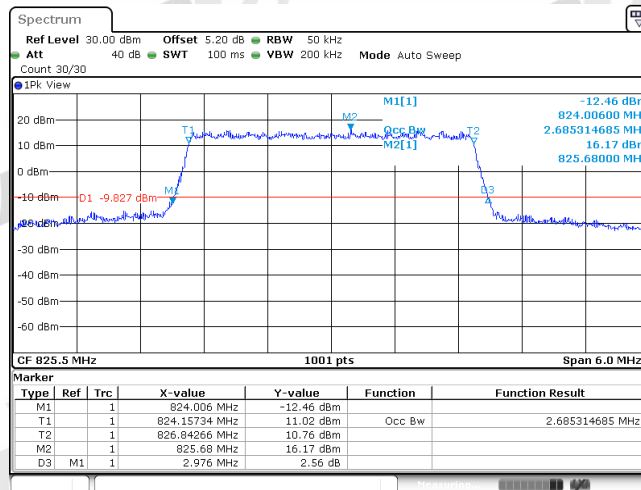
Date: 6 JUL 2019 12:09:17

Band5_3MHz_QPSK_20635_15RB#0



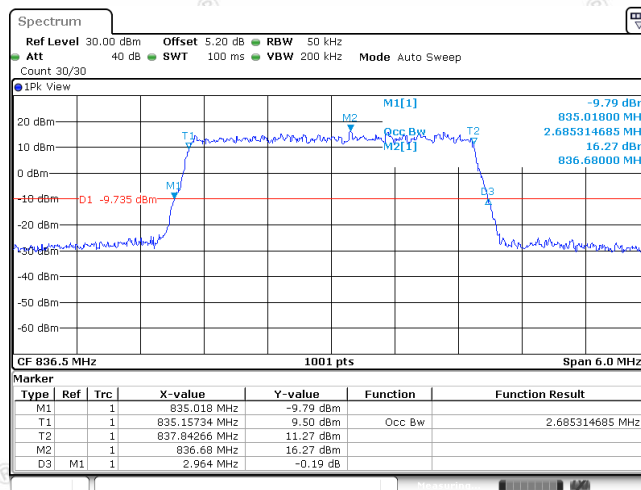
Date: 6 JUL 2019 12:09:48

Band5_3MHz_16QAM_20415_15RB#0



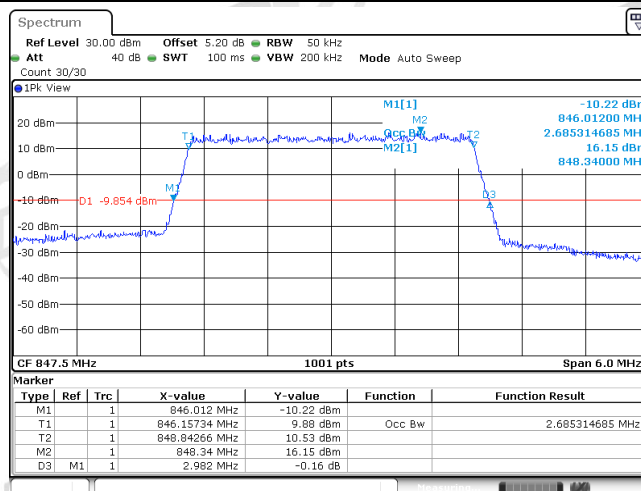
Date: 6 JUL 2019 12:09:00

Band5_3MHz_16QAM_20525_15RB#0



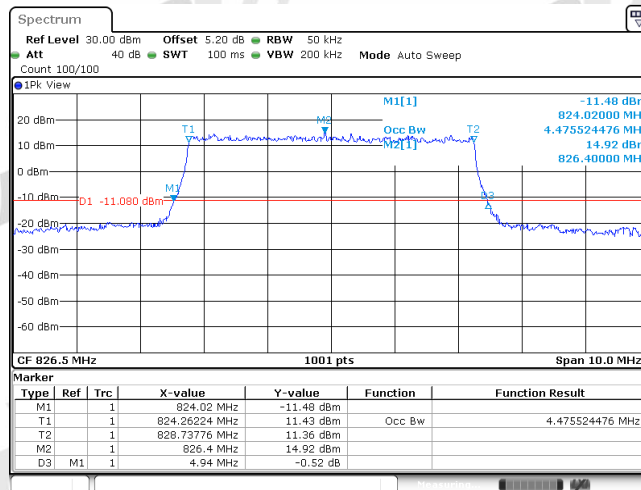
Date: 6 JUL 2019 12:09:32

Band5_3MHz_16QAM_20635_15RB#0



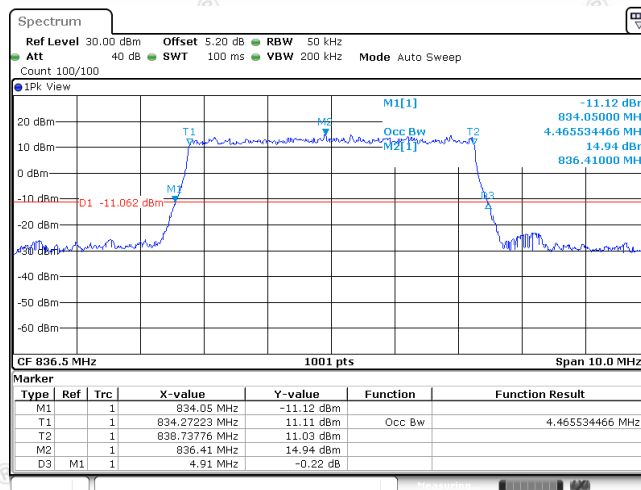
Date: 6 JUL 2019 12:10:04

Band5_5MHz_QPSK_20425_25RB#0



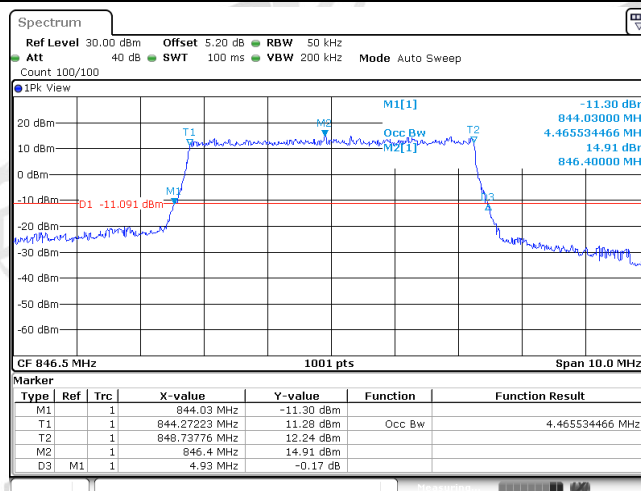
Date: 6 JUL 2019 12:40:31

Band5_5MHz_QPSK_20525_25RB#0



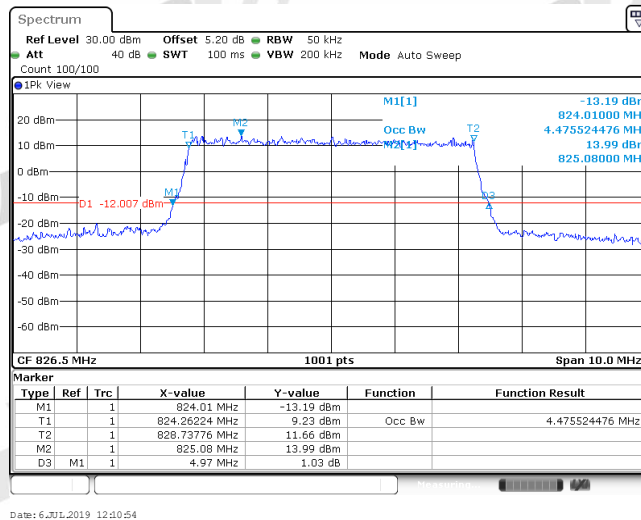
Date: 6 JUL 2019 12:41:17

Band5_5MHz_QPSK_20625_25RB#0

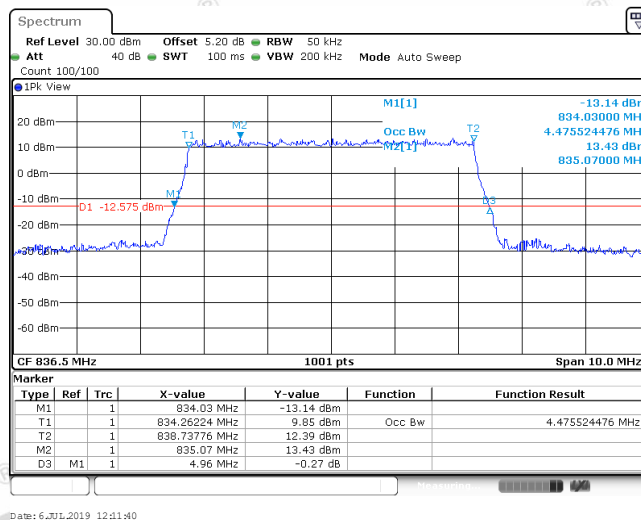


Date: 6 JUL 2019 12:42:03

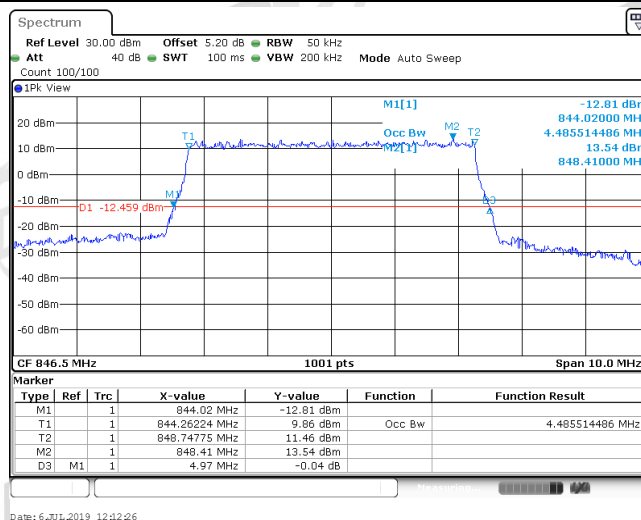
Band5_5MHz_16QAM_20425_25RB#0



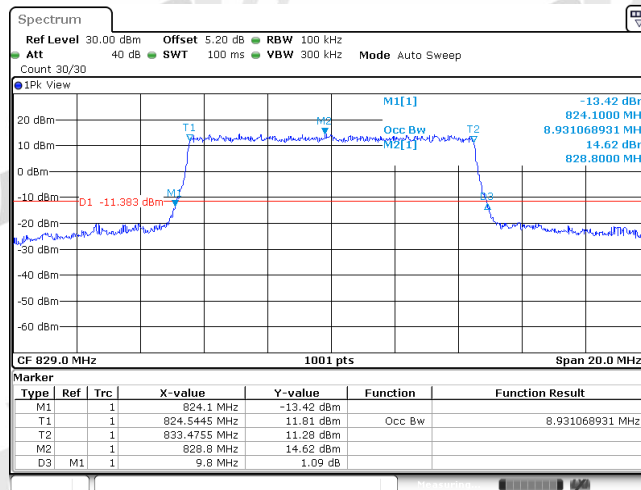
Band5_5MHz_16QAM_20525_25RB#0



Band5_5MHz_16QAM_20625_25RB#0

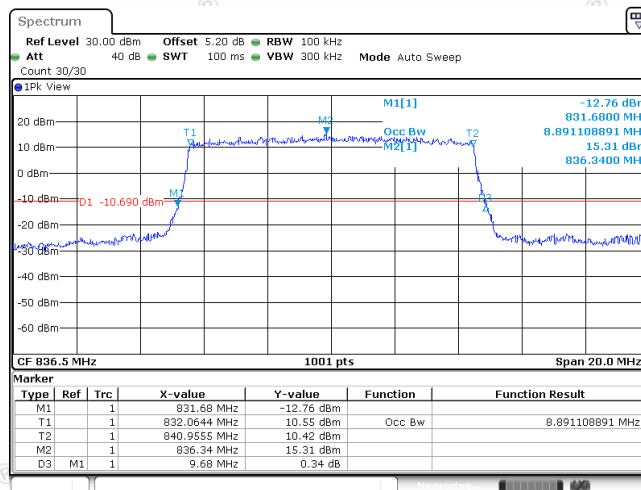


Band5_10MHz_QPSK_20450_50RB#0



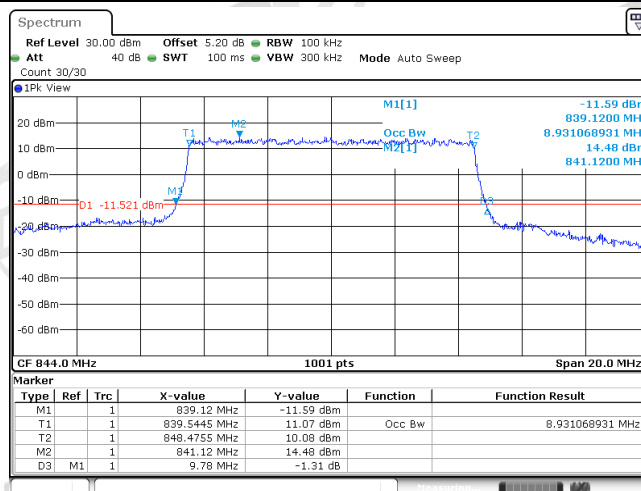
Date: 6 JUL 2019 12:12:46

Band5_10MHz_QPSK_20525_50RB#0



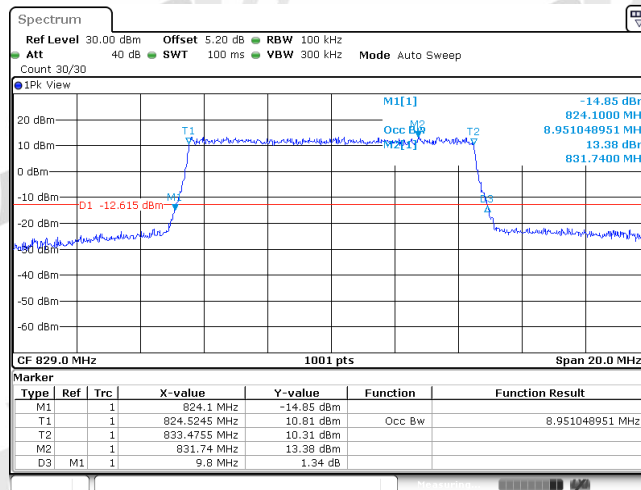
Date: 6 JUL 2019 12:13:18

Band5_10MHz_QPSK_20600_50RB#0



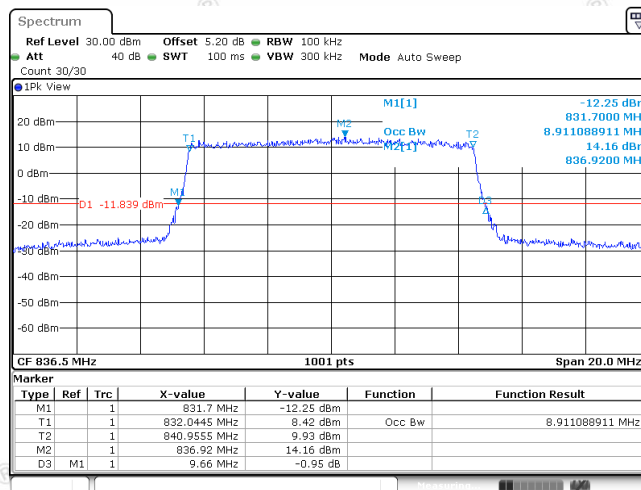
Date: 6 JUL 2019 12:13:50

Band5_10MHz_16QAM_20450_50RB#0



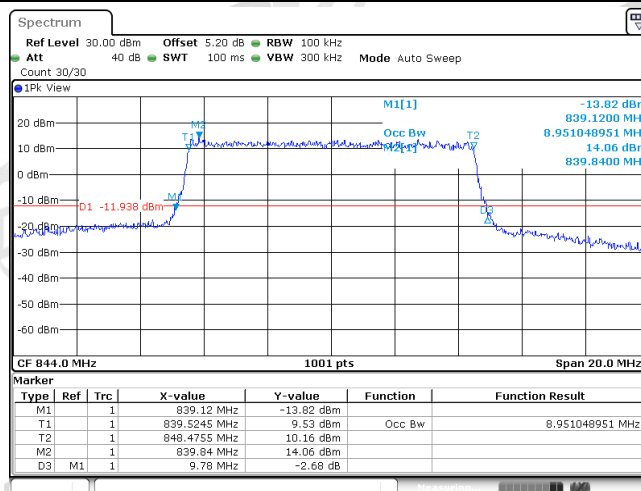
Date: 6 JUL 2019 12:13:02

Band5_10MHz_16QAM_20525_50RB#0



Date: 6 JUL 2019 12:13:34

Band5_10MHz_16QAM_20600_50RB#0



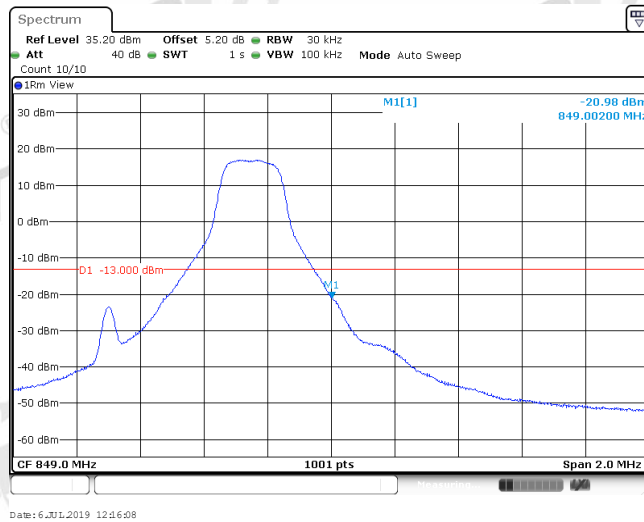
Date: 6 JUL 2019 12:14:06

7. Band Edge Compliance

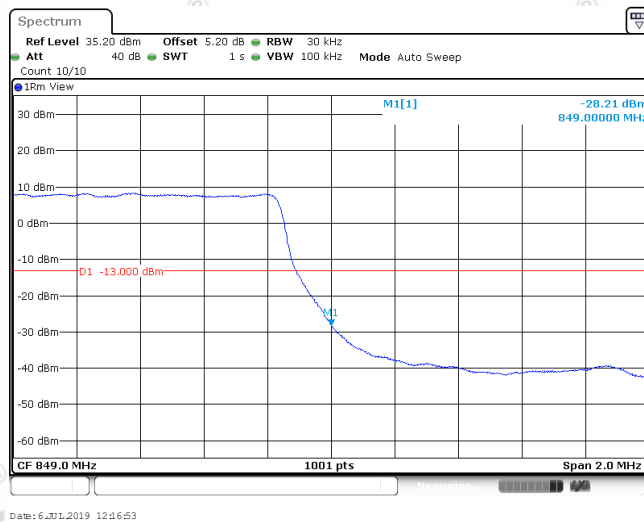
7.1. Test Plots



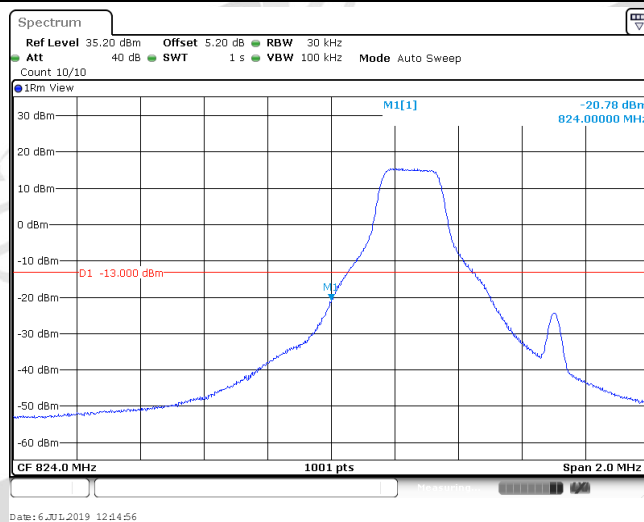
Band5_1.4MHz_QPSK_20643_1RB#5



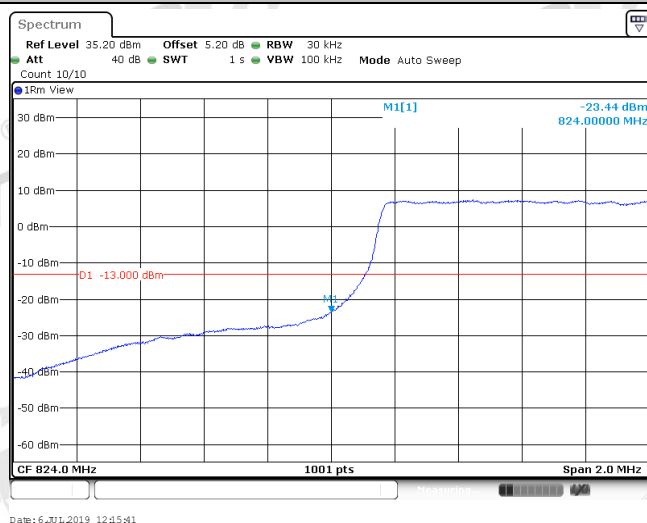
Band5_1.4MHz_QPSK_20643_6RB#0



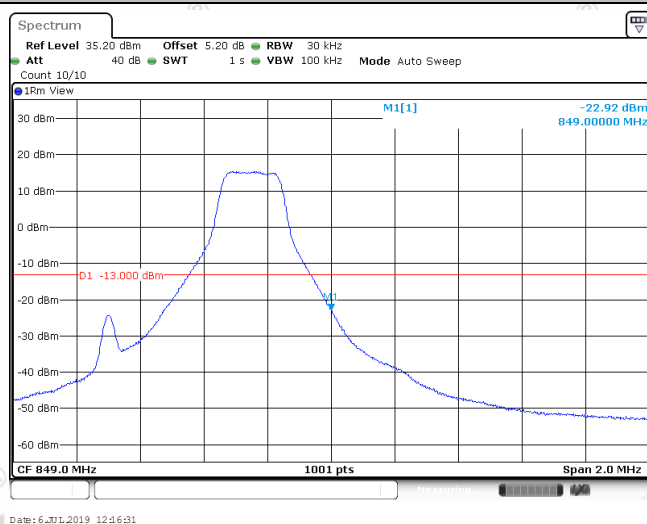
Band5_1.4MHz_16QAM_20407_1RB#0



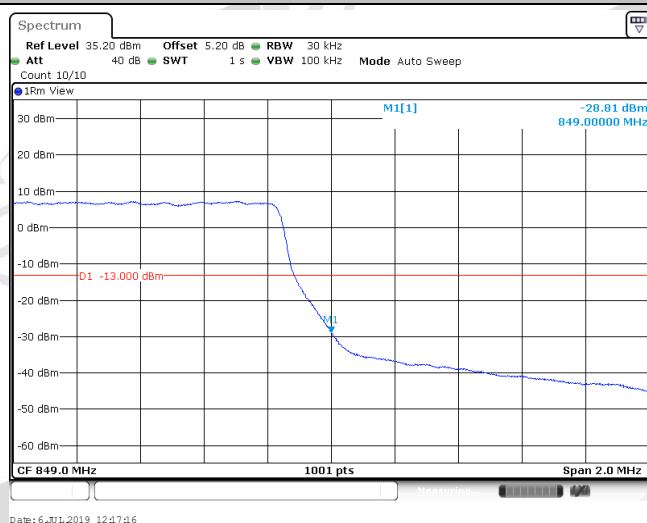
Band5_1.4MHz_16QAM_20407_6RB#0



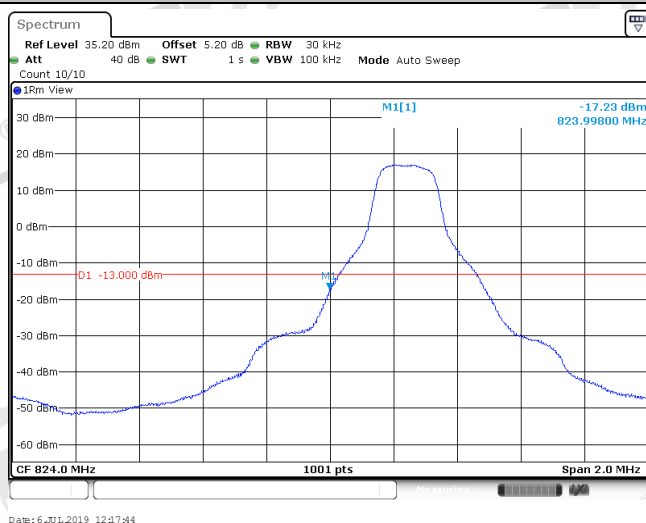
Band5_1.4MHz_16QAM_20643_1RB#5



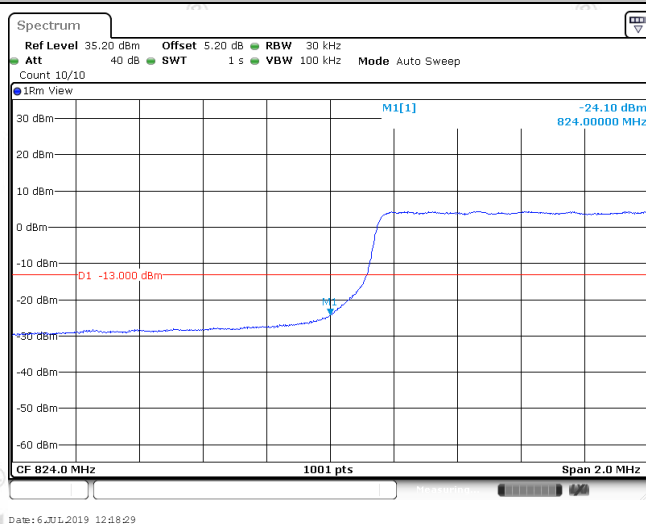
Band5_1.4MHz_16QAM_20643_6RB#0



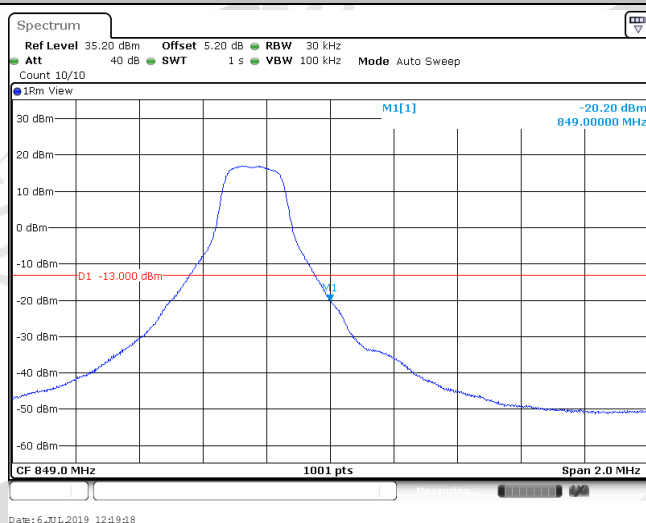
Band5_3MHz_QPSK_20415_1RB#0



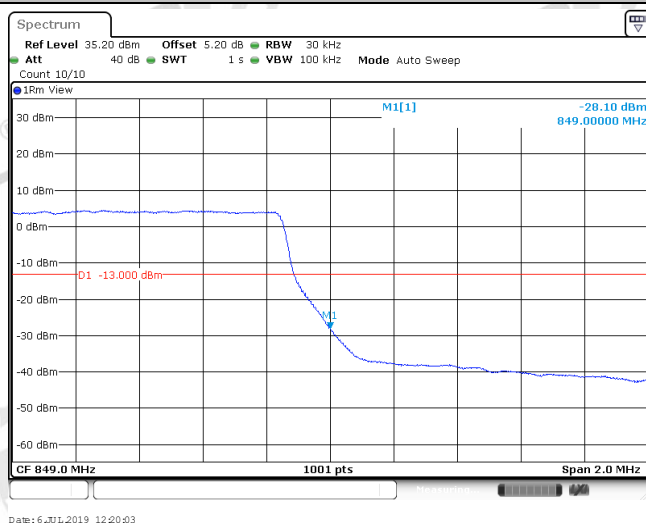
Band5_3MHz_QPSK_20415_15RB#0



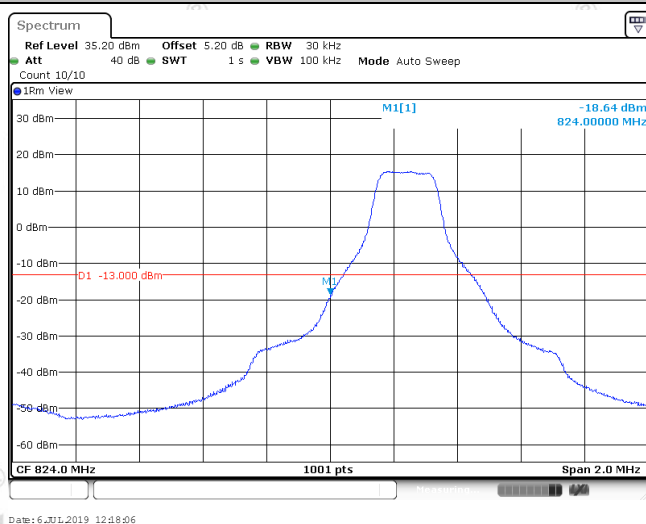
Band5_3MHz_QPSK_20635_1RB#14



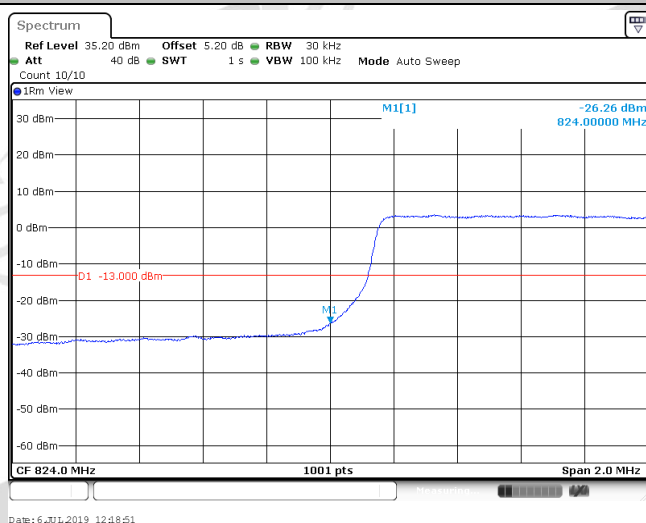
Band5_3MHz_QPSK_20635_15RB#0



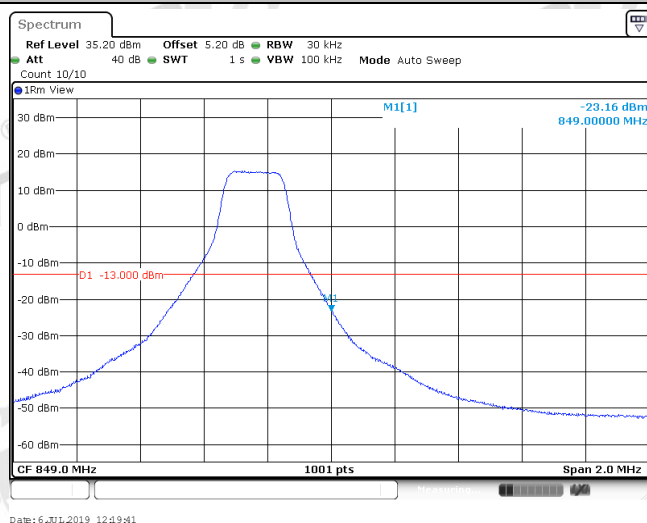
Band5_3MHz_16QAM_20415_1RB#0



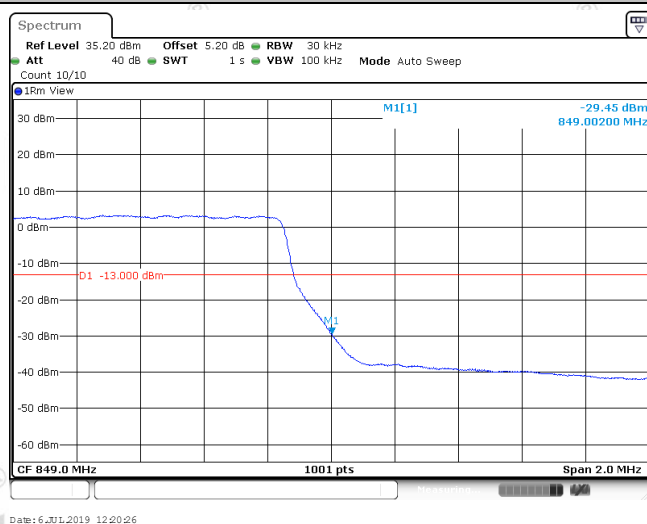
Band5_3MHz_16QAM_20415_15RB#0



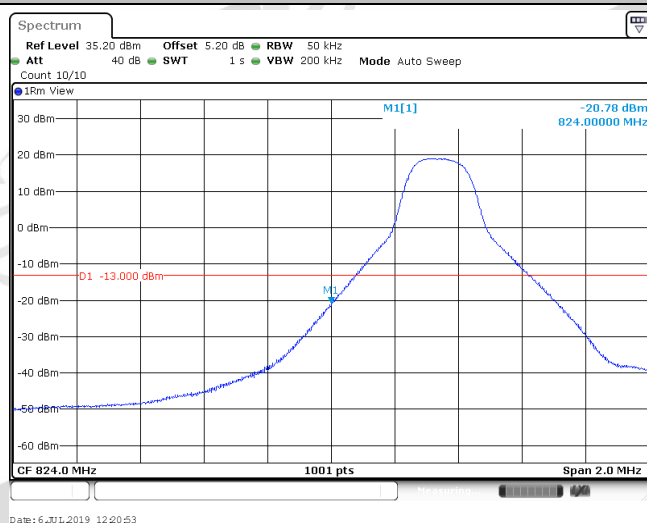
Band5_3MHz_16QAM_20635_1RB#14



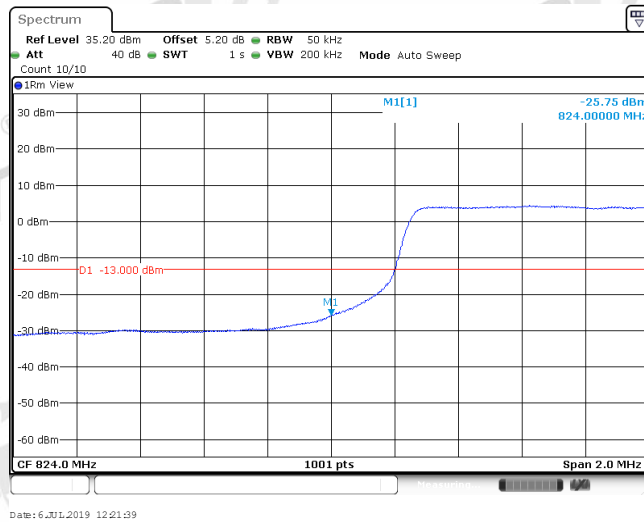
Band5_3MHz_16QAM_20635_15RB#0



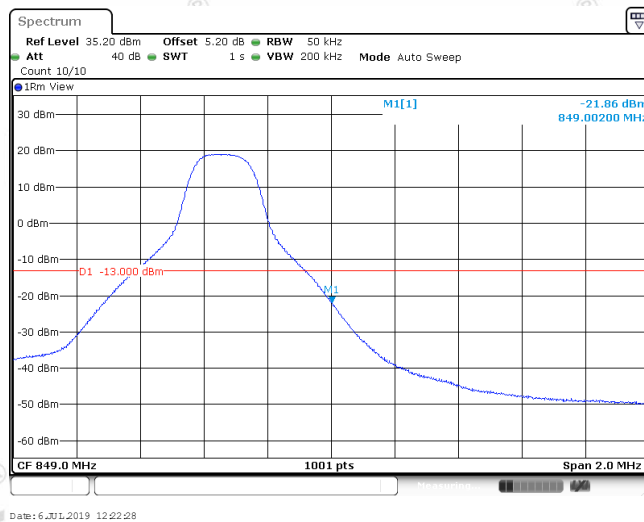
Band5_5MHz_QPSK_20425_1RB#0



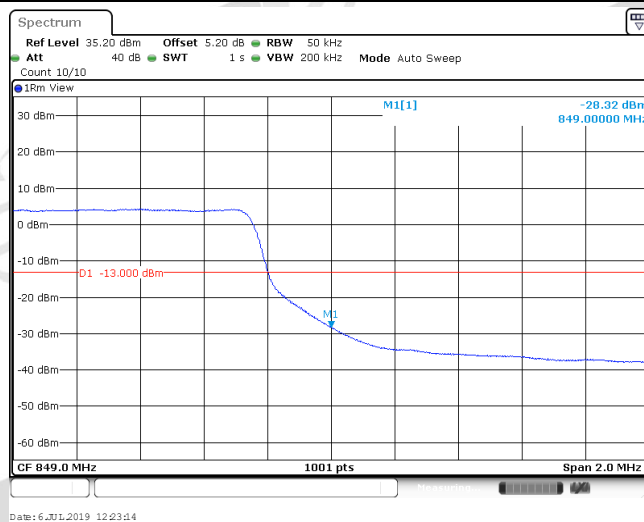
Band5_5MHz_QPSK_20425_25RB#0



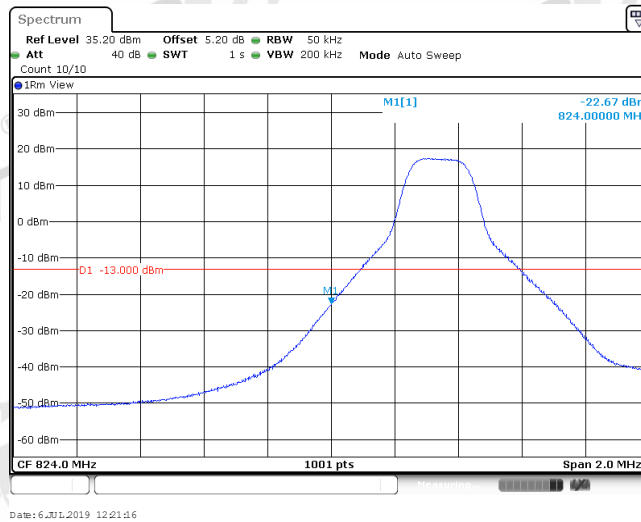
Band5_5MHz_QPSK_20625_1RB#24



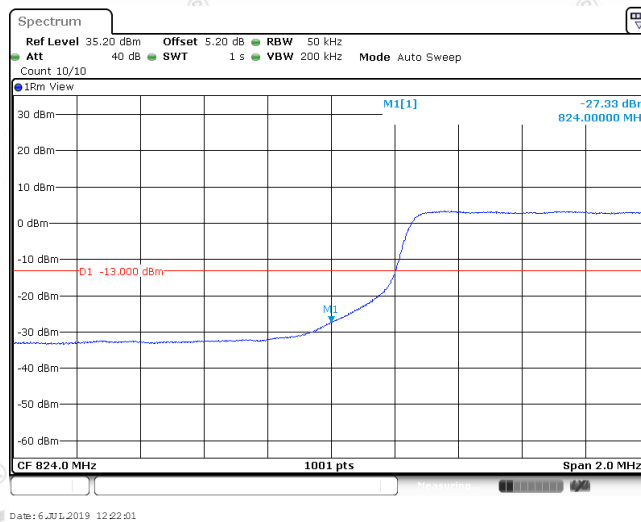
Band5_5MHz_QPSK_20625_25RB#0



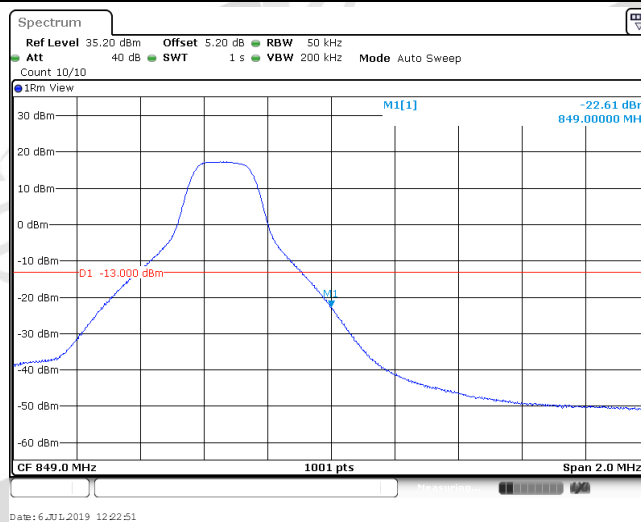
Band5_5MHz_16QAM_20425_1RB#0



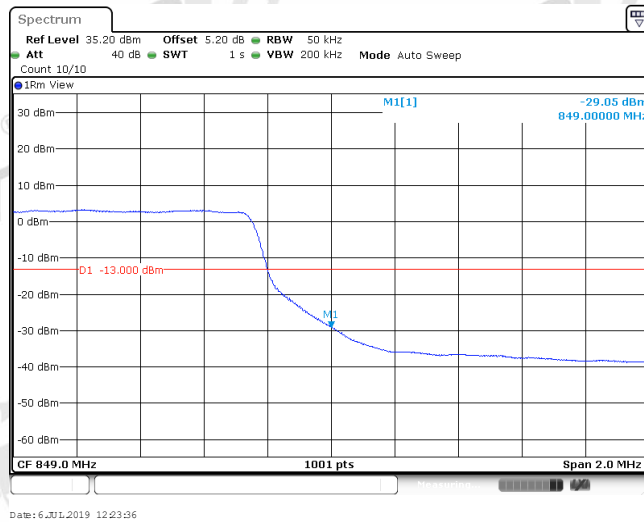
Band5_5MHz_16QAM_20425_25RB#0



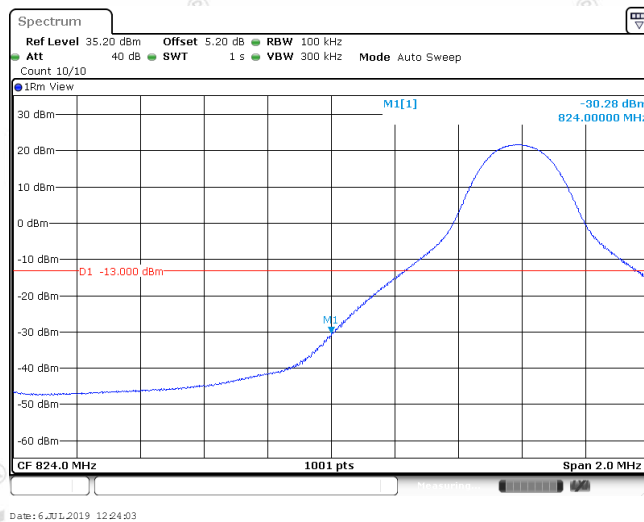
Band5_5MHz_16QAM_20625_1RB#24



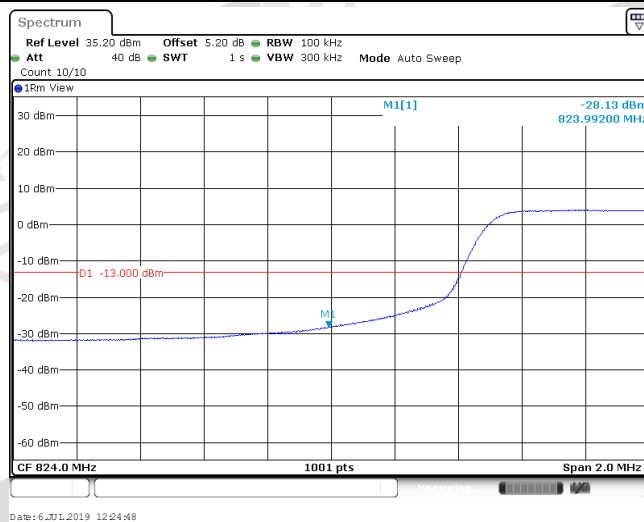
Band5_5MHz_16QAM_20625_25RB#0



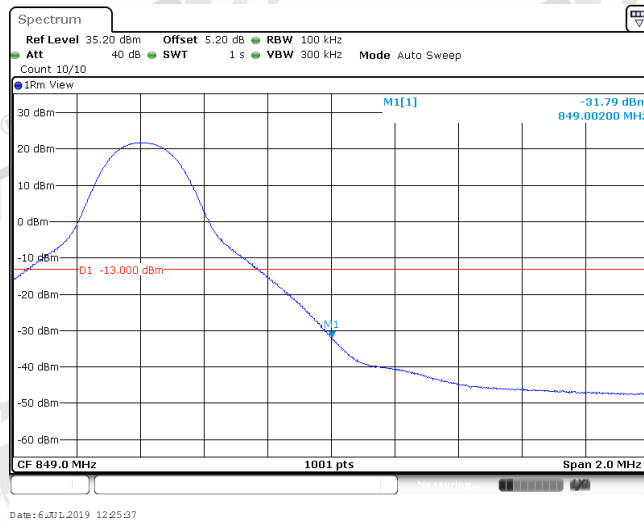
Band5_10MHz_QPSK_20450_1RB#0



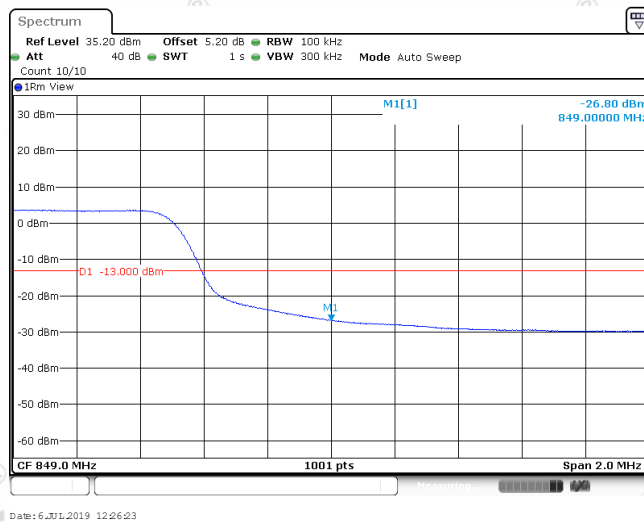
Band5_10MHz_QPSK_20450_50RB#0



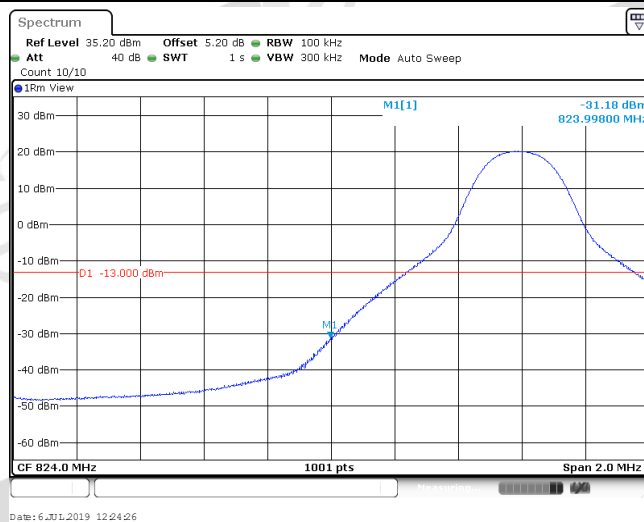
Band5_10MHz_QPSK_20600_1RB#49



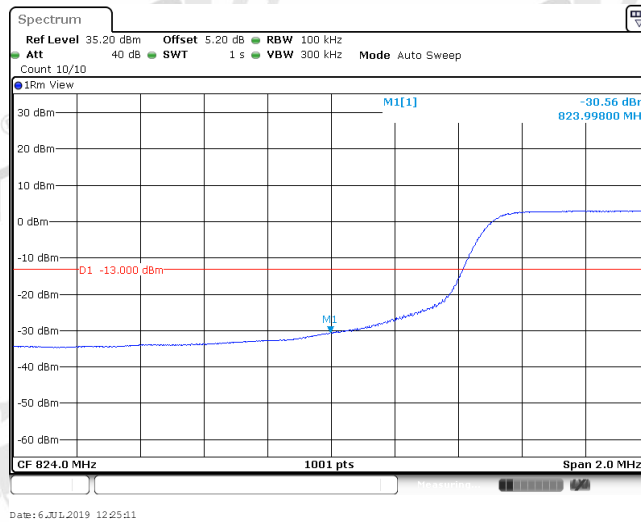
Band5_10MHz_QPSK_20600_50RB#0



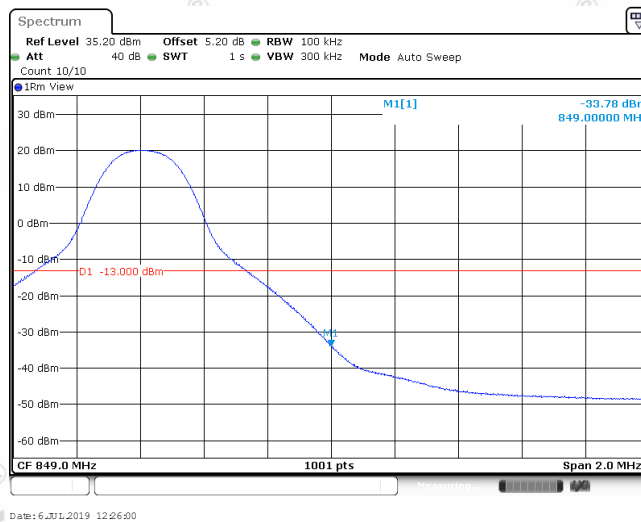
Band5_10MHz_16QAM_20450_1RB#0



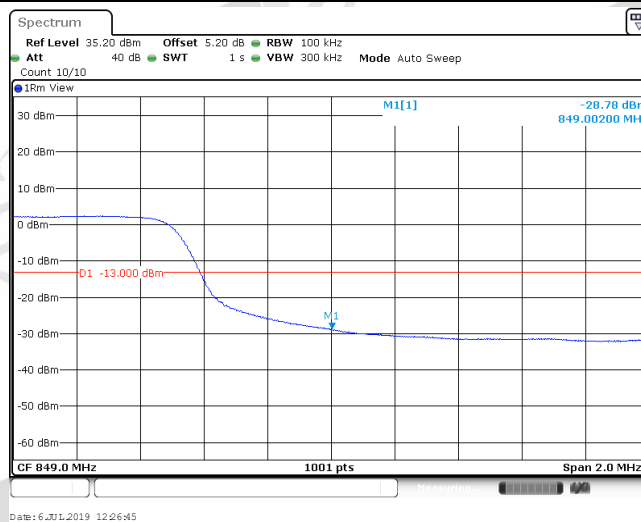
Band5_10MHz_16QAM_20450_50RB#0



Band5_10MHz_16QAM_20600_1RB#49



Band5_10MHz_16QAM_20600_50RB#0



8. Spurious Emission at Antenna Terminal

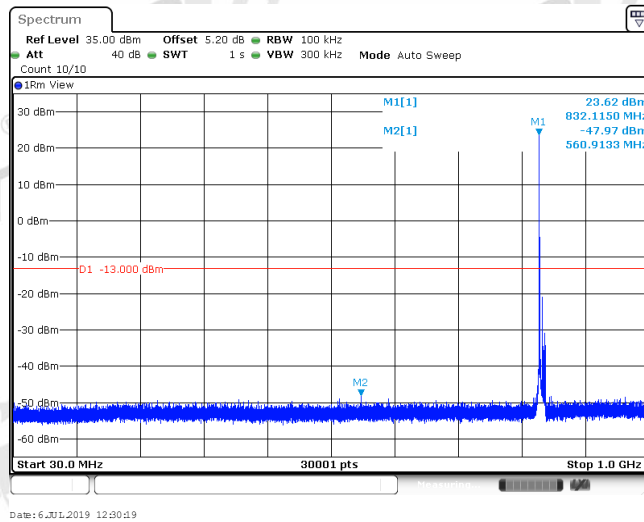
Remark1: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of $< RBW/2$ so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = $k * (\text{Span} / RBW)$ " 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.

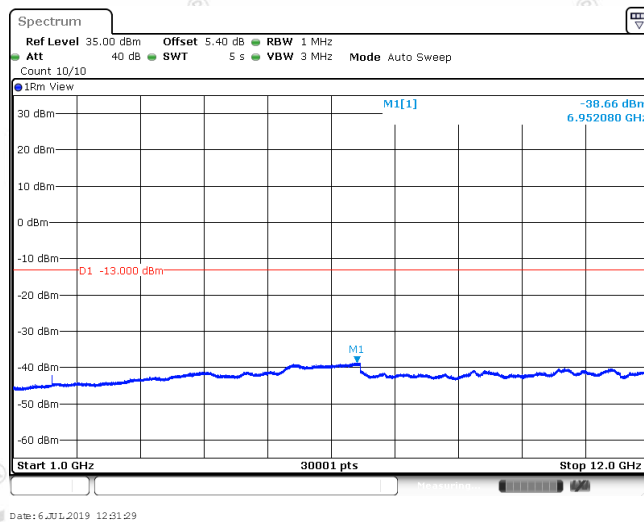
8.1. Test Plots



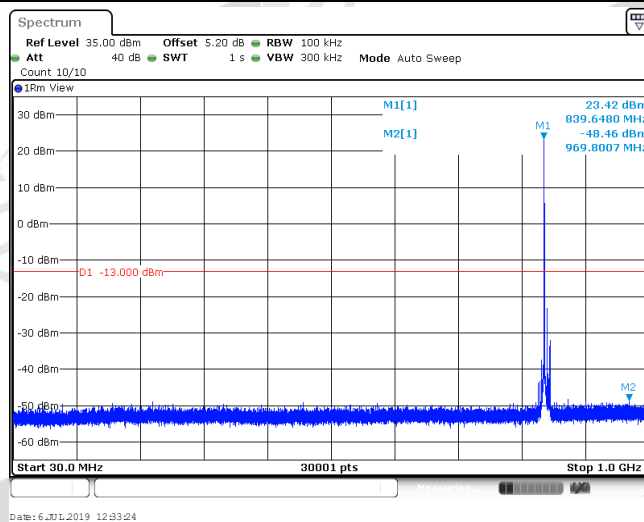
Band5_10MHz_QPSK_20525_1RB#0



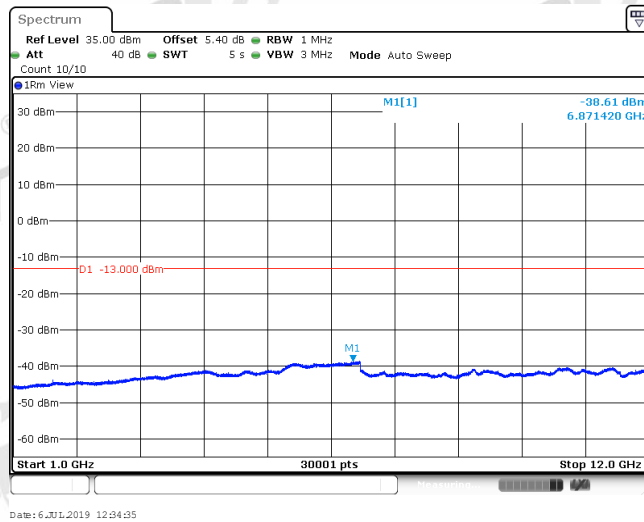
Band5_10MHz_QPSK_20525_1RB#0



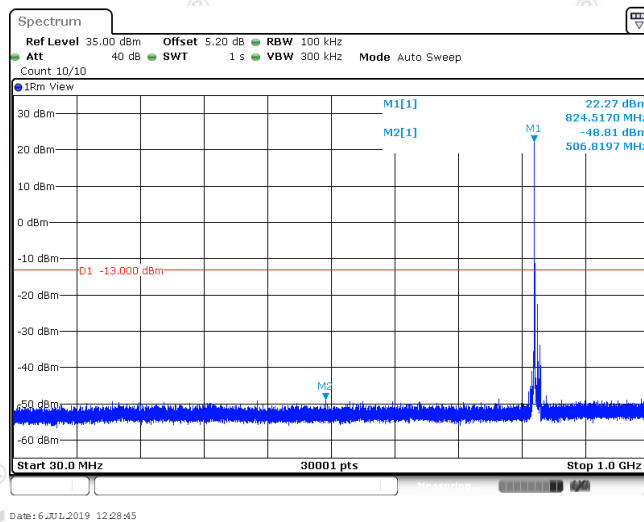
Band5_10MHz_QPSK_20600_1RB#0



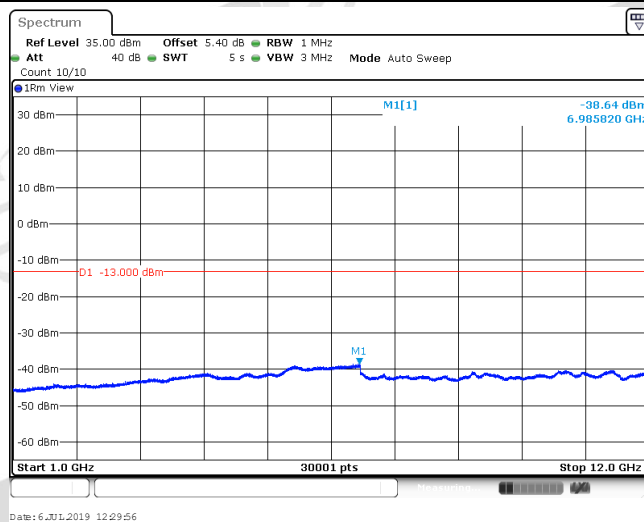
Band5_10MHz_QPSK_20600_1RB#0



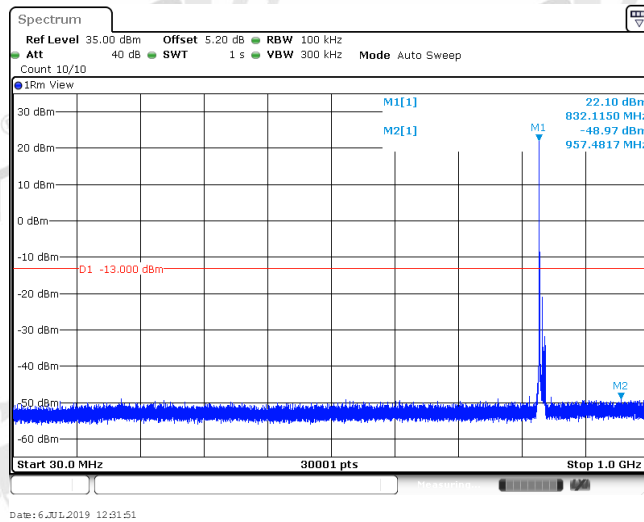
Band5_10MHz_16QAM_20450_1RB#0



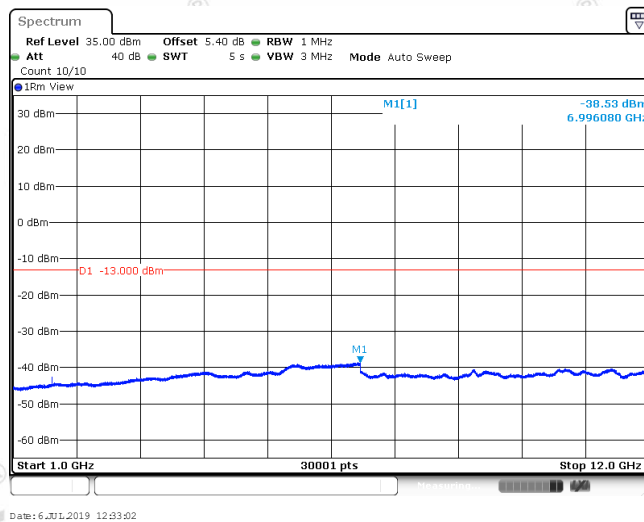
Band5_10MHz_16QAM_20450_1RB#0



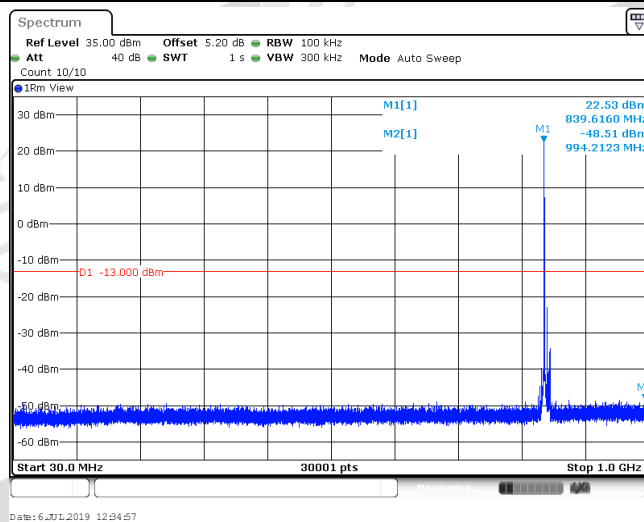
Band5_10MHz_16QAM_20525_1RB#0

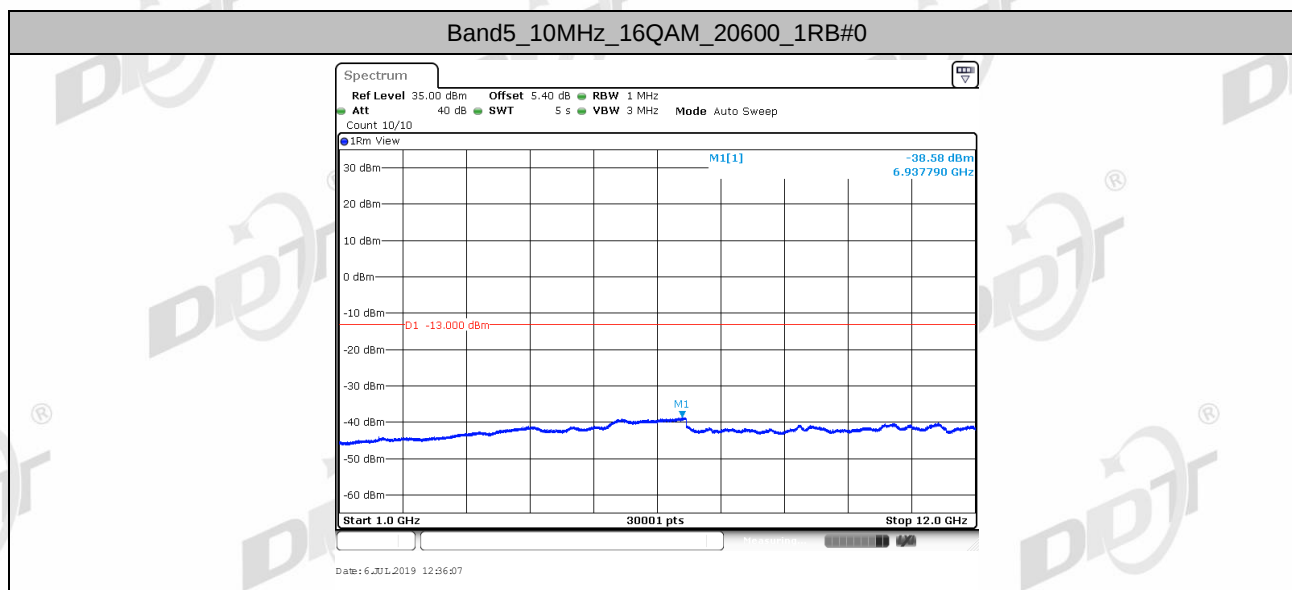


Band5_10MHz_16QAM_20525_1RB#0



Band5_10MHz_16QAM_20600_1RB#0





9. Frequency Stability

9.1. Frequency Vs Voltage

Voltage										
BAND	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band5	10MHz	QPSK	20450	50RB#0	VL	NT	-0.20	-0.000241	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	VN	NT	-0.60	-0.000724	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	VH	NT	-1.10	-0.001327	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VL	NT	-0.60	-0.000717	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VN	NT	-1.70	-0.002032	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VH	NT	-0.60	-0.000717	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VL	NT	0.10	0.000118	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VN	NT	-0.10	-0.000118	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VH	NT	-1.20	-0.001422	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VL	NT	-1.60	-0.001930	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VN	NT	-2.20	-0.002654	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VH	NT	-0.70	-0.000844	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VL	NT	-0.30	-0.000359	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VN	NT	-1.30	-0.001554	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VH	NT	-0.30	-0.000359	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VL	NT	-0.60	-0.000711	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VN	NT	0.20	0.000237	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VH	NT	0.70	0.000829	±2.5	PASS

9.2. Frequency Vs Temperature

Temperature										
BAND	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band5	10MHz	QPSK	20450	50RB#0	NV	-30	-0.60	-0.000724	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	-20	0.00	0.000000	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	0	-0.10	-0.000121	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	10	-0.40	-0.000483	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	20	-0.70	-0.000844	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	30	-1.20	-0.001448	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	40	-0.60	-0.000724	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	50	-0.90	-0.001086	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	-30	-0.40	-0.000478	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	-20	-0.80	-0.000956	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	0	-1.30	-0.001554	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	10	-1.90	-0.002271	±2.5	PASS

Band5	10MHz	QPSK	20525	50RB#0	NV	20	-1.40	-0.001674	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	30	-0.60	-0.000717	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	40	0.10	0.000120	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	50	-0.40	-0.000478	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	-30	-0.90	-0.001066	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	-20	0.40	0.000474	±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	-0.90	-0.001066	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	20	-0.10	-0.000118	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	30	-2.30	-0.002725	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	40	-0.60	-0.000711	±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	-0.80	-0.000965	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	-20	0.30	0.000362	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	0	-0.20	-0.000241	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	10	-0.80	-0.000965	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	20	-0.30	-0.000362	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	30	-1.20	-0.001448	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	40	-0.30	-0.000362	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	50	0.50	0.000603	±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	-20	-0.70	-0.000837	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	0	-1.40	-0.001674	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	10	-1.80	-0.002152	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	20	0.70	0.000837	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	30	0.70	0.000837	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	40	-1.40	-0.001674	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	50	-0.90	-0.001076	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	-30	0.60	0.000711	±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	-0.30	-0.000355	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	10	0.40	0.000474	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	20	-0.60	-0.000711	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	30	-2.10	-0.002488	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	40	0.00	0.000000	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	50	-1.00	-0.001185	±2.5	PASS

The End