



# Appendix B

## E-UTRA Band 13



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# 1 Effective (Isotropic) Radiated Power

## 1.1. Test Result

### ANT1:

Band	Bandwidth	Modulation	Channel	RB Configuration	Conducted Power(dBm)	ERP (dBm)	Limit (dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	22.84	17.99	34.77	PASS
Band13	5MHz	QPSK	23205	1RB#12	22.73	17.88	34.77	PASS
Band13	5MHz	QPSK	23205	1RB#24	22.86	18.01	34.77	PASS
Band13	5MHz	QPSK	23205	12RB#13	21.86	17.01	34.77	PASS
Band13	5MHz	QPSK	23205	12RB#0	21.95	17.10	34.77	PASS
Band13	5MHz	QPSK	23205	12RB#6	21.94	17.09	34.77	PASS
Band13	5MHz	QPSK	23205	25RB#0	21.90	17.05	34.77	PASS
Band13	5MHz	QPSK	23230	1RB#0	22.81	17.96	34.77	PASS
Band13	5MHz	QPSK	23230	1RB#24	22.74	17.89	34.77	PASS
Band13	5MHz	QPSK	23230	1RB#12	22.74	17.89	34.77	PASS
Band13	5MHz	QPSK	23230	12RB#0	21.95	17.10	34.77	PASS
Band13	5MHz	QPSK	23230	12RB#13	21.84	16.99	34.77	PASS
Band13	5MHz	QPSK	23230	12RB#6	21.86	17.01	34.77	PASS
Band13	5MHz	QPSK	23230	25RB#0	21.89	17.04	34.77	PASS
Band13	5MHz	QPSK	23255	1RB#12	22.74	17.89	34.77	PASS
Band13	5MHz	QPSK	23255	1RB#24	22.85	18.00	34.77	PASS
Band13	5MHz	QPSK	23255	1RB#0	22.77	17.92	34.77	PASS
Band13	5MHz	QPSK	23255	12RB#0	21.87	17.02	34.77	PASS
Band13	5MHz	QPSK	23255	12RB#6	21.89	17.04	34.77	PASS
Band13	5MHz	QPSK	23255	12RB#13	21.86	17.01	34.77	PASS
Band13	5MHz	QPSK	23255	25RB#0	21.83	16.98	34.77	PASS
Band13	5MHz	16QAM	23205	1RB#24	22.05	17.20	34.77	PASS
Band13	5MHz	16QAM	23205	1RB#0	21.95	17.10	34.77	PASS
Band13	5MHz	16QAM	23205	1RB#12	22.08	17.23	34.77	PASS
Band13	5MHz	16QAM	23205	12RB#13	20.92	16.07	34.77	PASS
Band13	5MHz	16QAM	23205	12RB#6	20.96	16.11	34.77	PASS
Band13	5MHz	16QAM	23205	12RB#0	20.94	16.09	34.77	PASS



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Band13	5MHz	16QAM	23205	25RB#0	21.02	16.17	34.77	PASS
Band13	5MHz	16QAM	23230	1RB#0	21.94	17.09	34.77	PASS
Band13	5MHz	16QAM	23230	1RB#12	22.46	17.61	34.77	PASS
Band13	5MHz	16QAM	23230	1RB#24	22.39	17.54	34.77	PASS
Band13	5MHz	16QAM	23230	12RB#0	20.98	16.13	34.77	PASS
Band13	5MHz	16QAM	23230	12RB#6	20.89	16.04	34.77	PASS
Band13	5MHz	16QAM	23230	12RB#13	20.94	16.09	34.77	PASS
Band13	5MHz	16QAM	23230	25RB#0	20.84	15.99	34.77	PASS
Band13	5MHz	16QAM	23255	1RB#0	22.42	17.57	34.77	PASS
Band13	5MHz	16QAM	23255	1RB#12	22.00	17.15	34.77	PASS
Band13	5MHz	16QAM	23255	1RB#24	22.04	17.19	34.77	PASS
Band13	5MHz	16QAM	23255	12RB#0	20.97	16.12	34.77	PASS
Band13	5MHz	16QAM	23255	12RB#6	20.83	15.98	34.77	PASS
Band13	5MHz	16QAM	23255	12RB#13	20.91	16.06	34.77	PASS
Band13	5MHz	16QAM	23255	25RB#0	20.78	15.93	34.77	PASS
Band13	5MHz	64QAM	23205	1RB#24	20.89	16.04	34.77	PASS
Band13	5MHz	64QAM	23205	1RB#12	20.95	16.10	34.77	PASS
Band13	5MHz	64QAM	23205	1RB#0	20.74	15.89	34.77	PASS
Band13	5MHz	64QAM	23205	12RB#0	20.07	15.22	34.77	PASS
Band13	5MHz	64QAM	23205	12RB#6	19.99	15.14	34.77	PASS
Band13	5MHz	64QAM	23205	12RB#13	20.04	15.19	34.77	PASS
Band13	5MHz	64QAM	23205	25RB#0	19.98	15.13	34.77	PASS
Band13	5MHz	64QAM	23230	1RB#0	20.87	16.02	34.77	PASS
Band13	5MHz	64QAM	23230	1RB#24	20.81	15.96	34.77	PASS
Band13	5MHz	64QAM	23230	1RB#12	20.97	16.12	34.77	PASS
Band13	5MHz	64QAM	23230	12RB#6	19.98	15.13	34.77	PASS
Band13	5MHz	64QAM	23230	12RB#0	20.00	15.15	34.77	PASS
Band13	5MHz	64QAM	23230	12RB#13	20.05	15.20	34.77	PASS
Band13	5MHz	64QAM	23230	25RB#0	20.06	15.21	34.77	PASS
Band13	5MHz	64QAM	23255	1RB#12	20.99	16.14	34.77	PASS
Band13	5MHz	64QAM	23255	1RB#24	20.96	16.11	34.77	PASS
Band13	5MHz	64QAM	23255	1RB#0	20.75	15.90	34.77	PASS
Band13	5MHz	64QAM	23255	12RB#13	20.07	15.22	34.77	PASS



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Band13	5MHz	64QAM	23255	12RB#0	20.01	15.16	34.77	PASS
Band13	5MHz	64QAM	23255	12RB#6	19.97	15.12	34.77	PASS
Band13	5MHz	64QAM	23255	25RB#0	20.08	15.23	34.77	PASS
Band13	10MHz	QPSK	23230	1RB#0	22.76	17.91	34.77	PASS
Band13	10MHz	QPSK	23230	1RB#24	22.68	17.83	34.77	PASS
Band13	10MHz	QPSK	23230	1RB#49	22.74	17.89	34.77	PASS
Band13	10MHz	QPSK	23230	25RB#12	21.88	17.03	34.77	PASS
Band13	10MHz	QPSK	23230	25RB#25	21.92	17.07	34.77	PASS
Band13	10MHz	QPSK	23230	25RB#0	21.85	17.00	34.77	PASS
Band13	10MHz	QPSK	23230	50RB#0	21.85	17.00	34.77	PASS
Band13	10MHz	16QAM	23230	1RB#49	22.14	17.29	34.77	PASS
Band13	10MHz	16QAM	23230	1RB#0	22.24	17.39	34.77	PASS
Band13	10MHz	16QAM	23230	1RB#24	21.94	17.09	34.77	PASS
Band13	10MHz	16QAM	23230	25RB#12	20.96	16.11	34.77	PASS
Band13	10MHz	16QAM	23230	25RB#0	20.72	15.87	34.77	PASS
Band13	10MHz	16QAM	23230	25RB#25	20.85	16.00	34.77	PASS
Band13	10MHz	16QAM	23230	50RB#0	20.87	16.02	34.77	PASS
Band13	10MHz	64QAM	23230	1RB#49	20.74	15.89	34.77	PASS
Band13	10MHz	64QAM	23230	1RB#24	20.95	16.10	34.77	PASS
Band13	10MHz	64QAM	23230	1RB#0	20.85	16.00	34.77	PASS
Band13	10MHz	64QAM	23230	25RB#12	20.02	15.17	34.77	PASS
Band13	10MHz	64QAM	23230	25RB#0	20.05	15.20	34.77	PASS
Band13	10MHz	64QAM	23230	25RB#25	19.94	15.09	34.77	PASS
Band13	10MHz	64QAM	23230	50RB#0	20.00	15.15	34.77	PASS



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**ANT0:**

Band	Bandwidth	Modulation	Channel	RB Configuration	Conducted Power(dBm)	ERP (dBm)	Limit (dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	22.52	13.47	34.77	PASS
Band13	5MHz	QPSK	23205	1RB#12	22.54	13.49	34.77	PASS
Band13	5MHz	QPSK	23205	1RB#24	22.60	13.55	34.77	PASS
Band13	5MHz	QPSK	23205	12RB#13	21.56	12.51	34.77	PASS
Band13	5MHz	QPSK	23205	12RB#0	21.66	12.61	34.77	PASS
Band13	5MHz	QPSK	23205	12RB#6	21.67	12.62	34.77	PASS
Band13	5MHz	QPSK	23205	25RB#0	21.71	12.66	34.77	PASS
Band13	5MHz	QPSK	23230	1RB#0	22.56	13.51	34.77	PASS
Band13	5MHz	QPSK	23230	1RB#24	22.62	13.57	34.77	PASS
Band13	5MHz	QPSK	23230	1RB#12	22.58	13.53	34.77	PASS
Band13	5MHz	QPSK	23230	12RB#0	21.69	12.64	34.77	PASS
Band13	5MHz	QPSK	23230	12RB#13	21.62	12.57	34.77	PASS
Band13	5MHz	QPSK	23230	12RB#6	21.65	12.60	34.77	PASS
Band13	5MHz	QPSK	23230	25RB#0	21.69	12.64	34.77	PASS
Band13	5MHz	QPSK	23255	1RB#12	22.51	13.46	34.77	PASS
Band13	5MHz	QPSK	23255	1RB#24	22.62	13.57	34.77	PASS
Band13	5MHz	QPSK	23255	1RB#0	22.60	13.55	34.77	PASS
Band13	5MHz	QPSK	23255	12RB#0	21.69	12.64	34.77	PASS
Band13	5MHz	QPSK	23255	12RB#6	21.66	12.61	34.77	PASS
Band13	5MHz	QPSK	23255	12RB#13	21.67	12.62	34.77	PASS
Band13	5MHz	QPSK	23255	25RB#0	21.68	12.63	34.77	PASS
Band13	5MHz	16QAM	23205	1RB#24	21.81	12.76	34.77	PASS
Band13	5MHz	16QAM	23205	1RB#0	22.12	13.07	34.77	PASS
Band13	5MHz	16QAM	23205	1RB#12	21.88	12.83	34.77	PASS
Band13	5MHz	16QAM	23205	12RB#13	20.62	11.57	34.77	PASS
Band13	5MHz	16QAM	23205	12RB#6	20.76	11.71	34.77	PASS
Band13	5MHz	16QAM	23205	12RB#0	20.75	11.70	34.77	PASS
Band13	5MHz	16QAM	23205	25RB#0	20.61	11.56	34.77	PASS
Band13	5MHz	16QAM	23230	1RB#0	21.96	12.91	34.77	PASS
Band13	5MHz	16QAM	23230	1RB#12	21.92	12.87	34.77	PASS
Band13	5MHz	16QAM	23230	1RB#24	21.81	12.76	34.77	PASS



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Band13	5MHz	16QAM	23230	12RB#0	20.73	11.68	34.77	PASS
Band13	5MHz	16QAM	23230	12RB#6	20.69	11.64	34.77	PASS
Band13	5MHz	16QAM	23230	12RB#13	20.75	11.70	34.77	PASS
Band13	5MHz	16QAM	23230	25RB#0	20.62	11.57	34.77	PASS
Band13	5MHz	16QAM	23255	1RB#0	22.11	13.06	34.77	PASS
Band13	5MHz	16QAM	23255	1RB#12	21.88	12.83	34.77	PASS
Band13	5MHz	16QAM	23255	1RB#24	22.17	13.12	34.77	PASS
Band13	5MHz	16QAM	23255	12RB#0	20.68	11.63	34.77	PASS
Band13	5MHz	16QAM	23255	12RB#6	20.60	11.55	34.77	PASS
Band13	5MHz	16QAM	23255	12RB#13	20.65	11.60	34.77	PASS
Band13	5MHz	16QAM	23255	25RB#0	20.70	11.65	34.77	PASS
Band13	5MHz	64QAM	23205	1RB#24	20.77	11.72	34.77	PASS
Band13	5MHz	64QAM	23205	1RB#12	20.80	11.75	34.77	PASS
Band13	5MHz	64QAM	23205	1RB#0	20.74	11.69	34.77	PASS
Band13	5MHz	64QAM	23205	12RB#0	20.11	11.06	34.77	PASS
Band13	5MHz	64QAM	23205	12RB#6	20.11	11.06	34.77	PASS
Band13	5MHz	64QAM	23205	12RB#13	20.03	10.98	34.77	PASS
Band13	5MHz	64QAM	23205	25RB#0	20.04	10.99	34.77	PASS
Band13	5MHz	64QAM	23230	1RB#0	20.79	11.74	34.77	PASS
Band13	5MHz	64QAM	23230	1RB#24	20.59	11.54	34.77	PASS
Band13	5MHz	64QAM	23230	1RB#12	20.72	11.67	34.77	PASS
Band13	5MHz	64QAM	23230	12RB#6	20.05	11.00	34.77	PASS
Band13	5MHz	64QAM	23230	12RB#0	20.03	10.98	34.77	PASS
Band13	5MHz	64QAM	23230	12RB#13	20.11	11.06	34.77	PASS
Band13	5MHz	64QAM	23230	25RB#0	20.00	10.95	34.77	PASS
Band13	5MHz	64QAM	23255	1RB#12	20.71	11.66	34.77	PASS
Band13	5MHz	64QAM	23255	1RB#24	20.71	11.66	34.77	PASS
Band13	5MHz	64QAM	23255	1RB#0	20.63	11.58	34.77	PASS
Band13	5MHz	64QAM	23255	12RB#13	20.03	10.98	34.77	PASS
Band13	5MHz	64QAM	23255	12RB#0	20.04	10.99	34.77	PASS
Band13	5MHz	64QAM	23255	12RB#6	20.08	11.03	34.77	PASS
Band13	5MHz	64QAM	23255	25RB#0	20.06	11.01	34.77	PASS
Band13	10MHz	QPSK	23230	1RB#0	22.54	13.49	34.77	PASS



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Band13	10MHz	QPSK	23230	1RB#24	22.55	13.50	34.77	PASS
Band13	10MHz	QPSK	23230	1RB#49	22.47	13.42	34.77	PASS
Band13	10MHz	QPSK	23230	25RB#12	21.65	12.60	34.77	PASS
Band13	10MHz	QPSK	23230	25RB#25	21.68	12.63	34.77	PASS
Band13	10MHz	QPSK	23230	25RB#0	21.71	12.66	34.77	PASS
Band13	10MHz	QPSK	23230	50RB#0	21.59	12.54	34.77	PASS
Band13	10MHz	16QAM	23230	1RB#49	22.23	13.18	34.77	PASS
Band13	10MHz	16QAM	23230	1RB#0	21.80	12.75	34.77	PASS
Band13	10MHz	16QAM	23230	1RB#24	22.18	13.13	34.77	PASS
Band13	10MHz	16QAM	23230	25RB#12	20.64	11.59	34.77	PASS
Band13	10MHz	16QAM	23230	25RB#0	20.55	11.50	34.77	PASS
Band13	10MHz	16QAM	23230	25RB#25	20.59	11.54	34.77	PASS
Band13	10MHz	16QAM	23230	50RB#0	20.69	11.64	34.77	PASS
Band13	10MHz	64QAM	23230	1RB#49	20.62	11.57	34.77	PASS
Band13	10MHz	64QAM	23230	1RB#24	20.56	11.51	34.77	PASS
Band13	10MHz	64QAM	23230	1RB#0	20.79	11.74	34.77	PASS
Band13	10MHz	64QAM	23230	25RB#12	20.07	11.02	34.77	PASS
Band13	10MHz	64QAM	23230	25RB#0	20.12	11.07	34.77	PASS
Band13	10MHz	64QAM	23230	25RB#25	20.03	10.98	34.77	PASS
Band13	10MHz	64QAM	23230	50RB#0	20.11	11.06	34.77	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]



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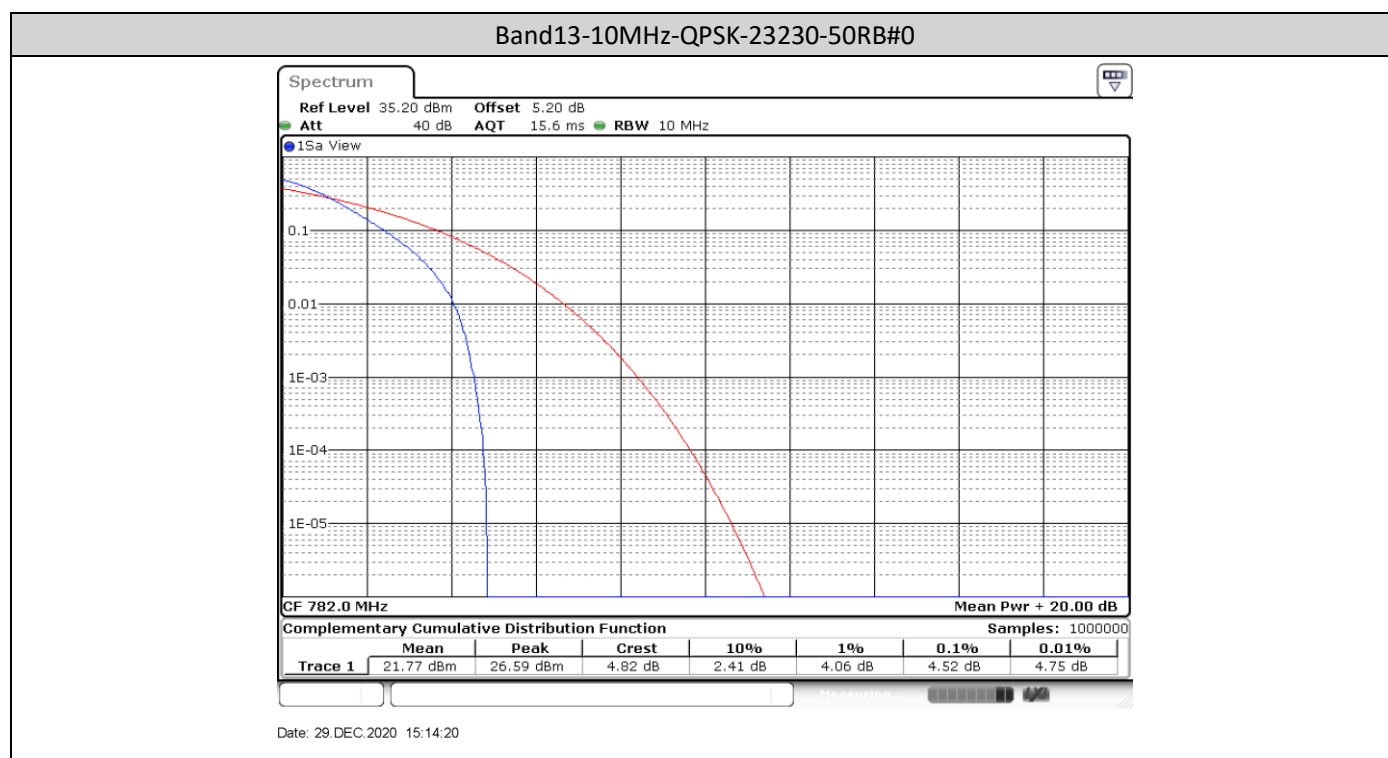


## 2. Peak-to-Average Ratio (CCDF)

## 2.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band13	10MHz	QPSK	23230	50RB#0	4.52	13	PASS
Band13	10MHz	64QAM	23230	50RB#0	5.80	13	PASS
Band13	10MHz	16QAM	23230	50RB#0	5.77	13	PASS

## 2.2. Test Plots



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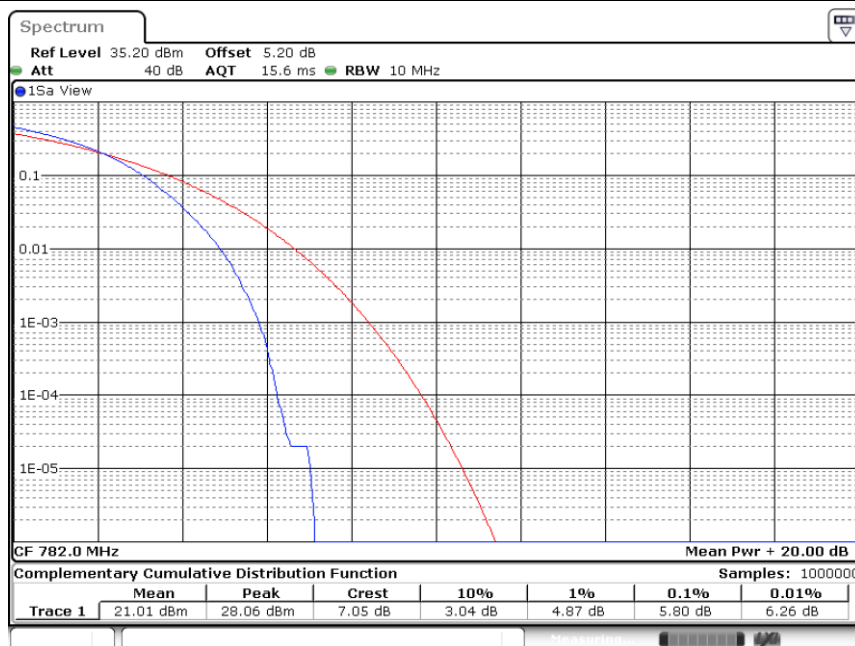
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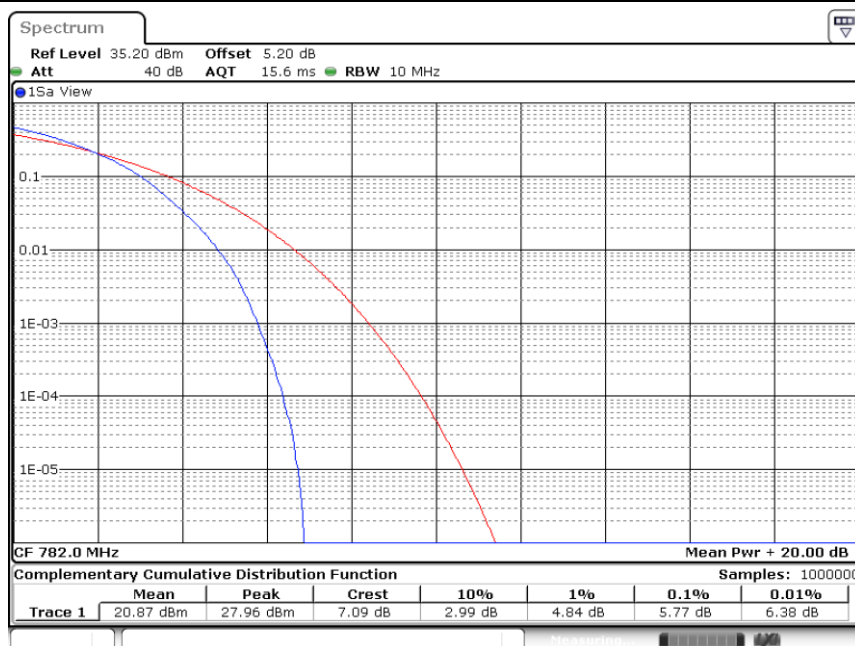


Band13-10MHz-64QAM-23230-50RB#0



Date: 29.DEC.2020 15:25:12

Band13-10MHz-16QAM-23230-50RB#0



Date: 29.DEC.2020 15:14:31



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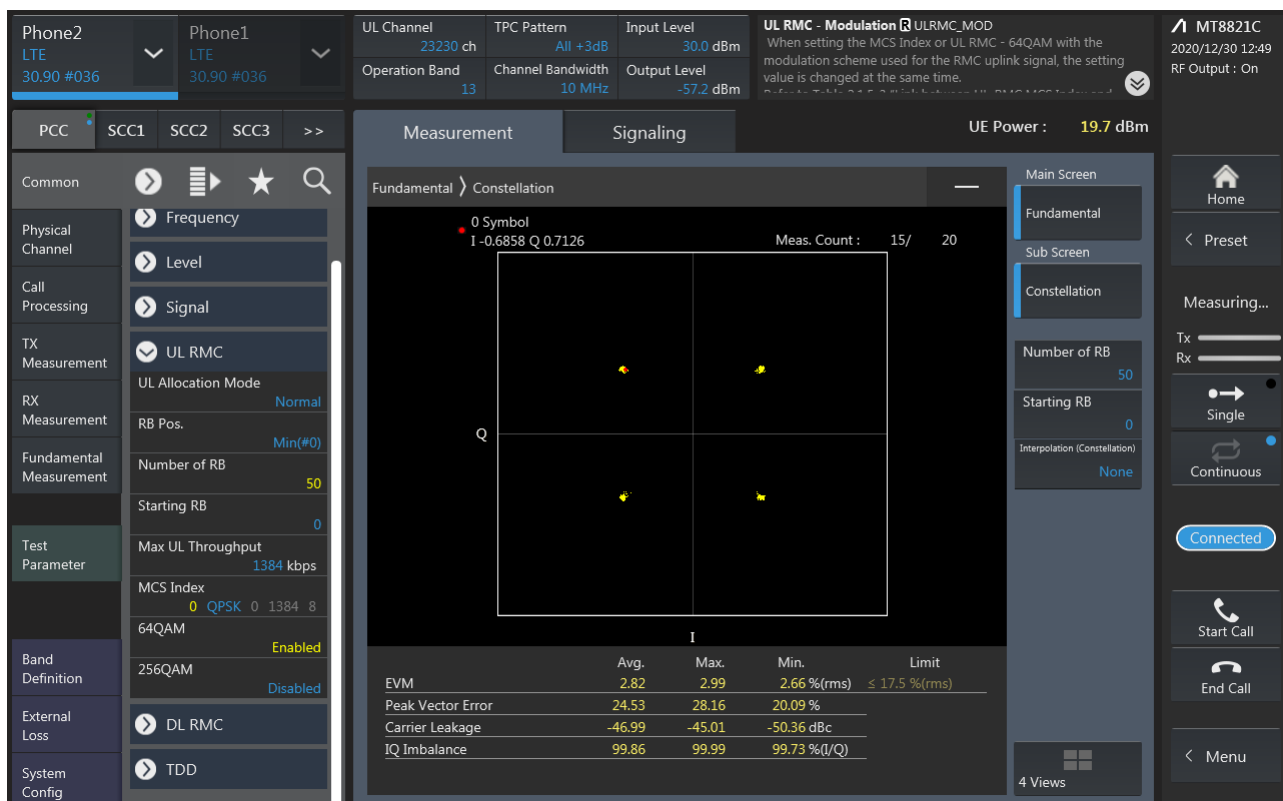
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### 3. Modulation Characteristics

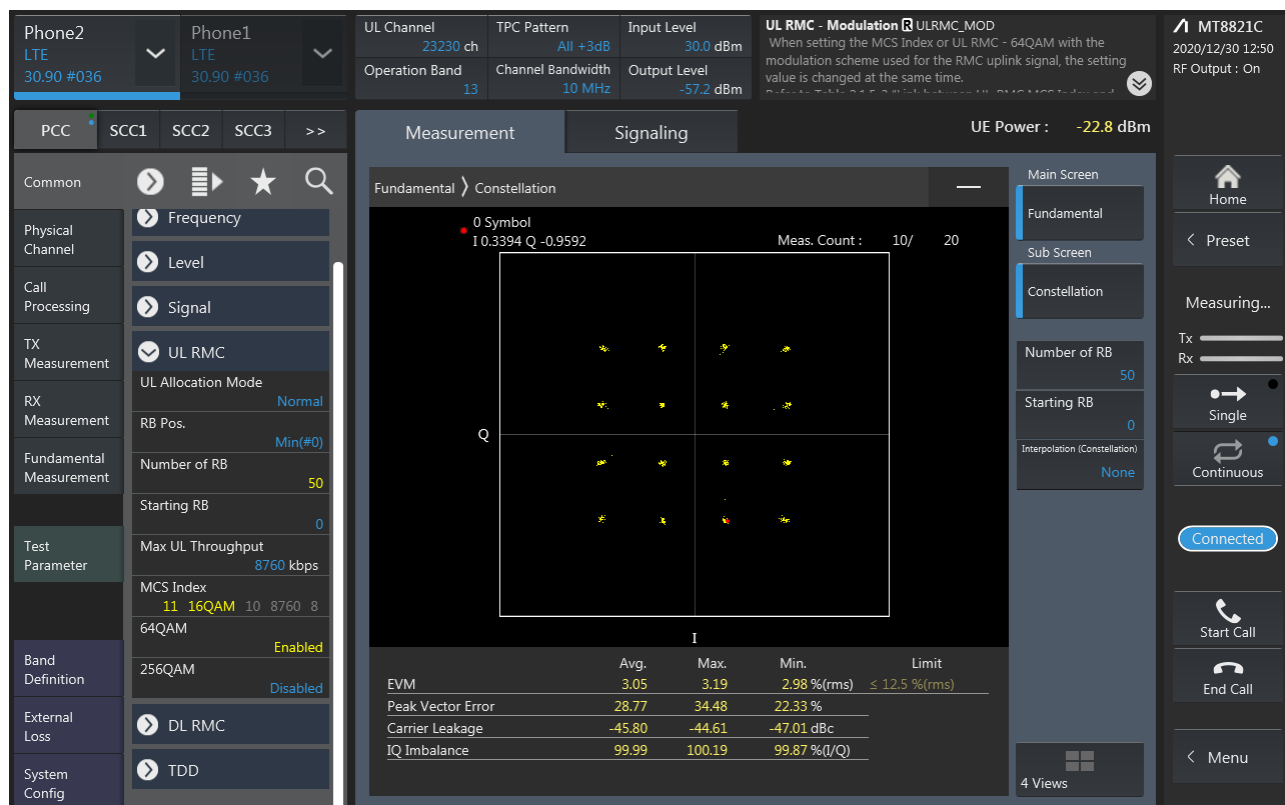
#### 3.1. Test Mode = LTE /TM1 10MHz

##### 3.1.1. Test Channel = MCH



## 3.2. Test Mode = LTE /TM2 10MHz

### 3.2.1. Test Channel = MCH



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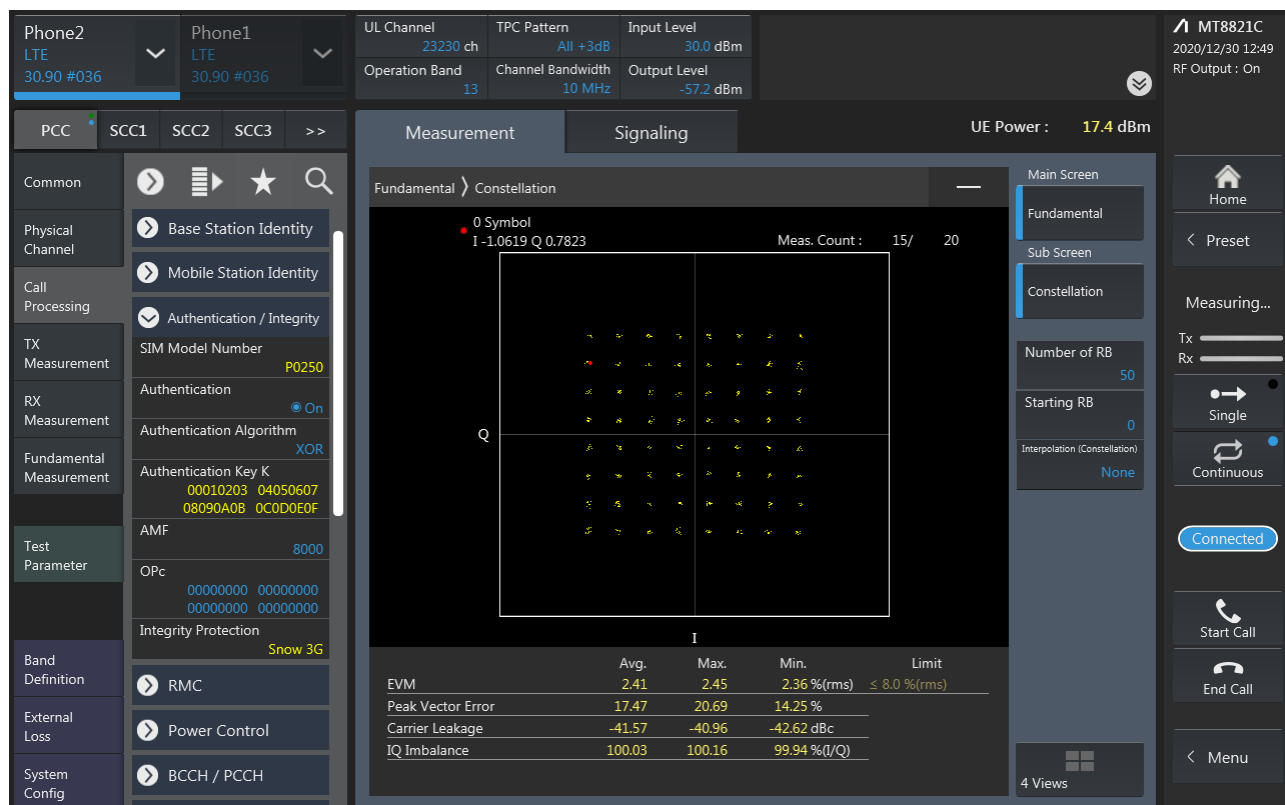
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### 3.3. Test Mode = LTE /TM3 10MHz

#### 3.3.1. Test Channel = MCH





## 4. 26dB Bandwidth and Occupied Bandwidth

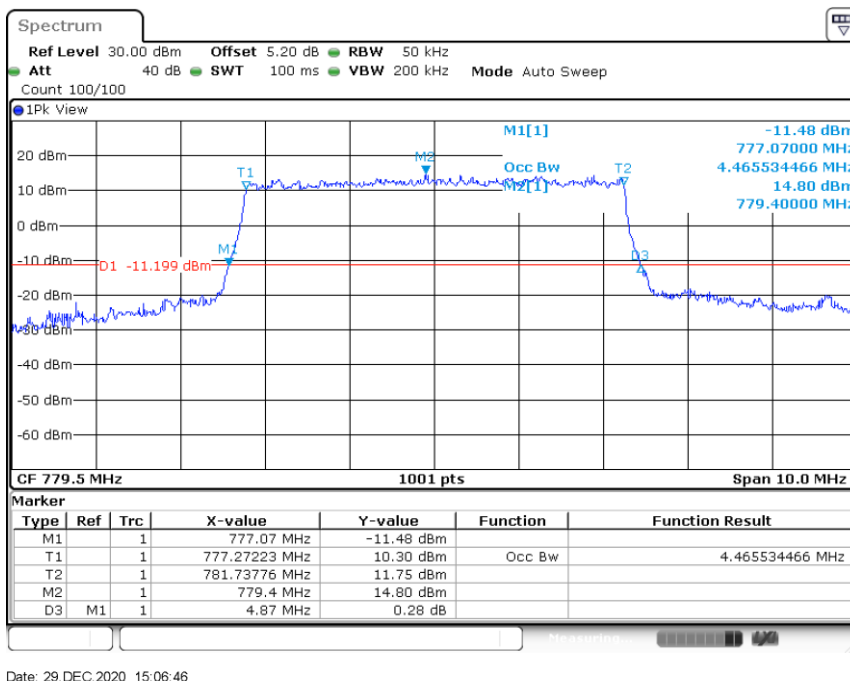
### 4.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	4.466	4.870	PASS
Band13	5MHz	QPSK	23230	25RB#0	4.476	4.880	PASS
Band13	5MHz	QPSK	23255	25RB#0	4.476	4.890	PASS
Band13	5MHz	64QAM	23205	25RB#0	4.466	4.920	PASS
Band13	5MHz	64QAM	23230	25RB#0	4.466	4.910	PASS
Band13	5MHz	64QAM	23255	25RB#0	4.476	4.910	PASS
Band13	5MHz	16QAM	23205	25RB#0	4.486	4.920	PASS
Band13	5MHz	16QAM	23230	25RB#0	4.496	4.900	PASS
Band13	5MHz	16QAM	23255	25RB#0	4.496	5.690	PASS
Band13	10MHz	QPSK	23230	50RB#0	8.911	9.640	PASS
Band13	10MHz	64QAM	23230	50RB#0	8.891	9.700	PASS
Band13	10MHz	16QAM	23230	50RB#0	8.911	9.660	PASS

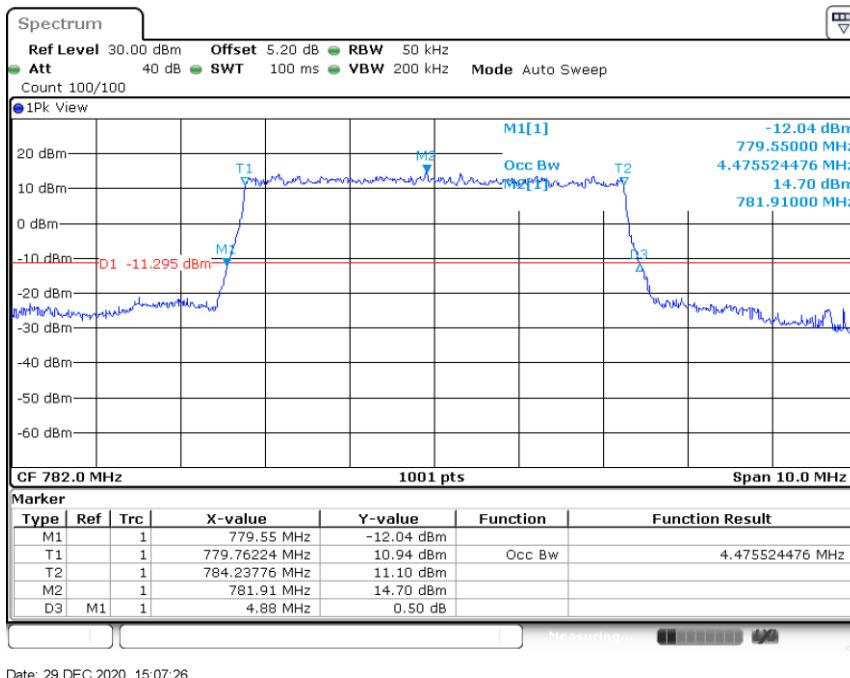


## 4.2. Test Plots

Band13-5MHz-QPSK-23205-25RB#0-4.466



Band13-5MHz-QPSK-23230-25RB#0-4.476



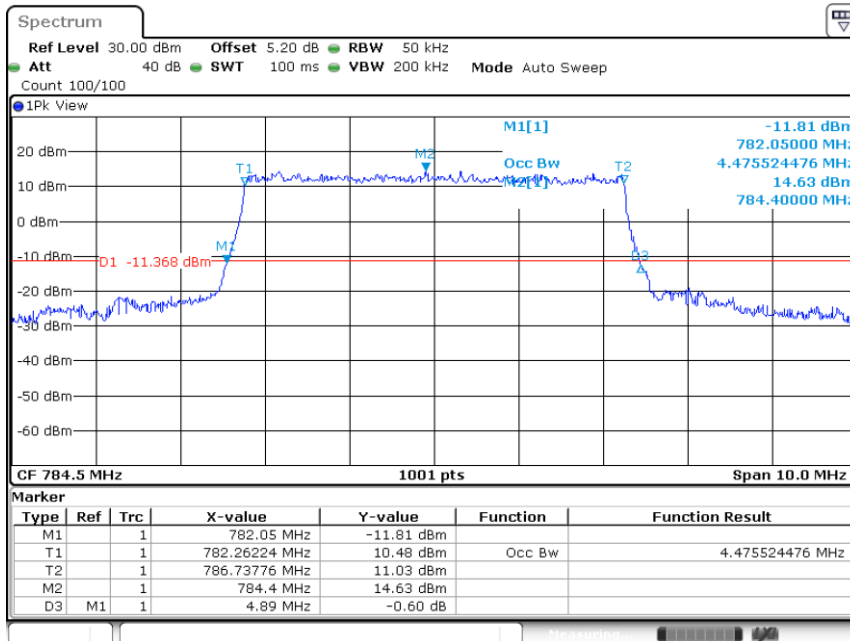
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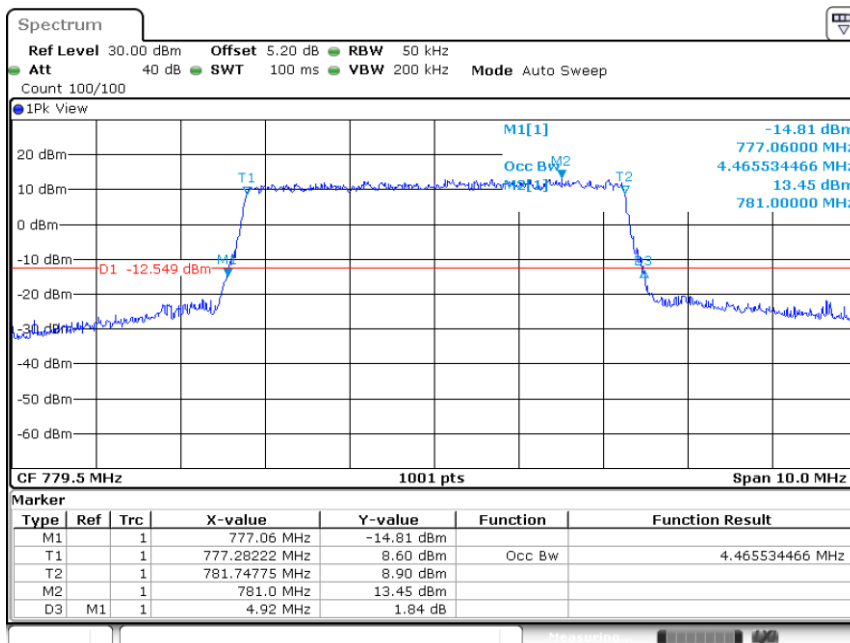


Band13-5MHz-QPSK-23255-25RB#0-4.476



Date: 29.DEC.2020 15:08:06

Band13-5MHz-64QAM-23205-25RB#0-4.466



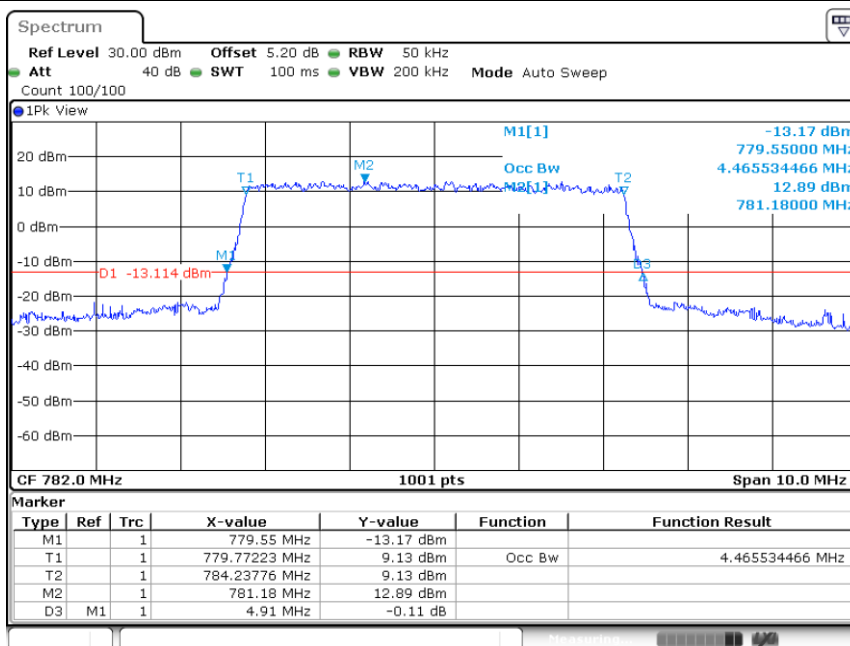
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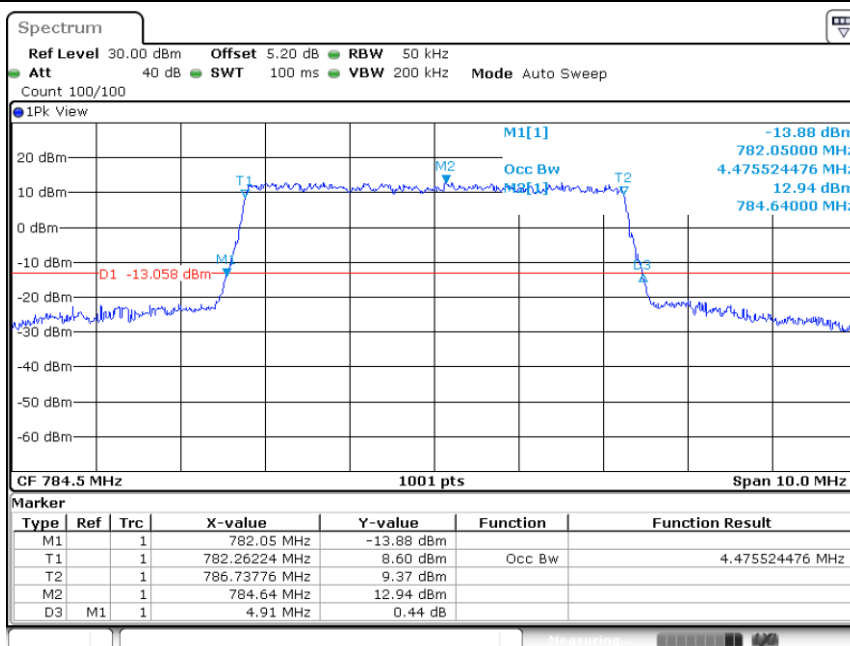


Band13-5MHz-64QAM-23230-25RB#0-4.466



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Band13-5MHz-64QAM-23255-25RB#0-4.476



Date: 29.DEC.2020 15:21:54



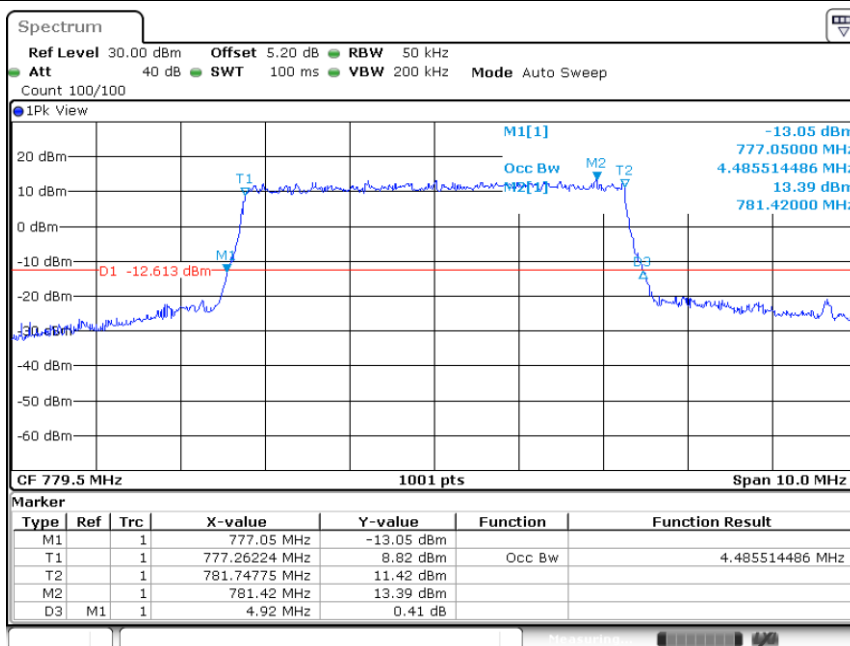
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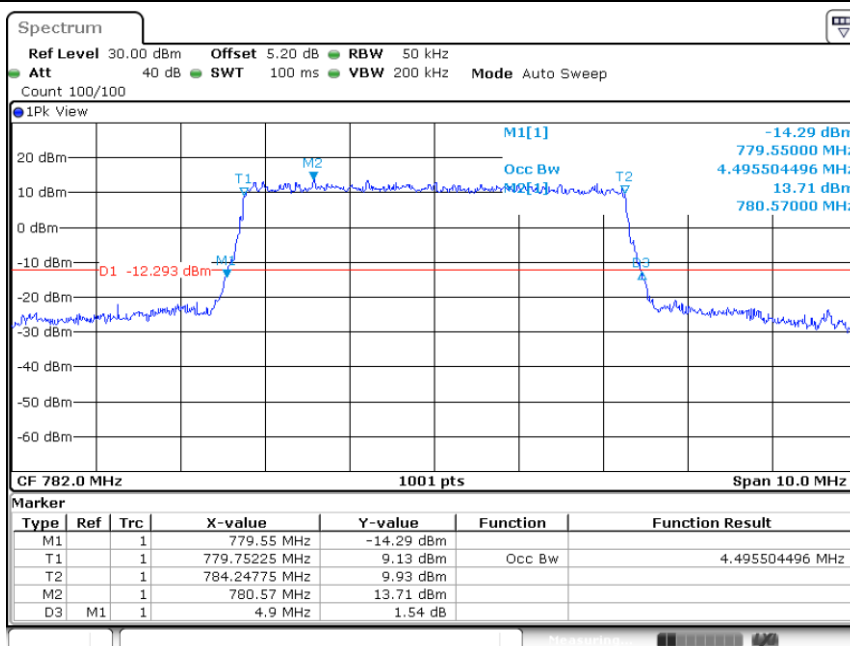


Band13-5MHz-16QAM-23205-25RB#0-4.486



Date: 29.DEC.2020 15:07:06

Band13-5MHz-16QAM-23230-25RB#0-4.496



Date: 29.DEC.2020 15:07:46



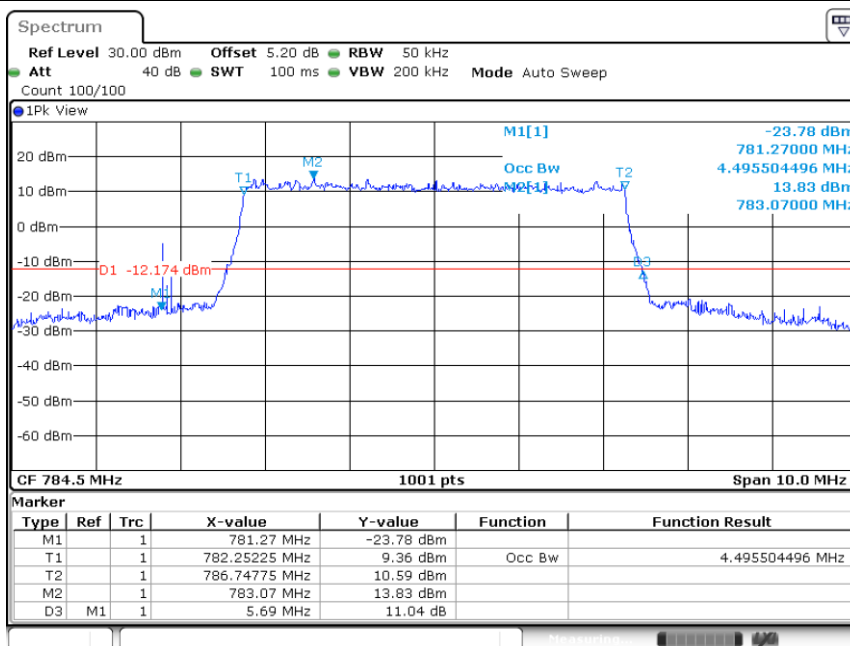
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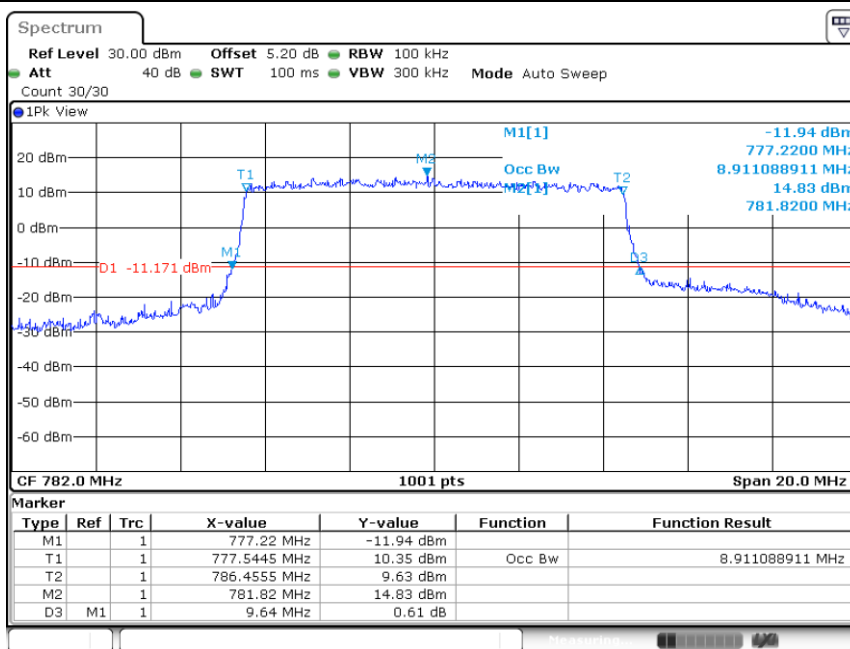


Band13-5MHz-16QAM-23255-25RB#0-4.496



Date: 29.DEC.2020 15:08:26

Band13-10MHz-QPSK-23230-50RB#0-8.911



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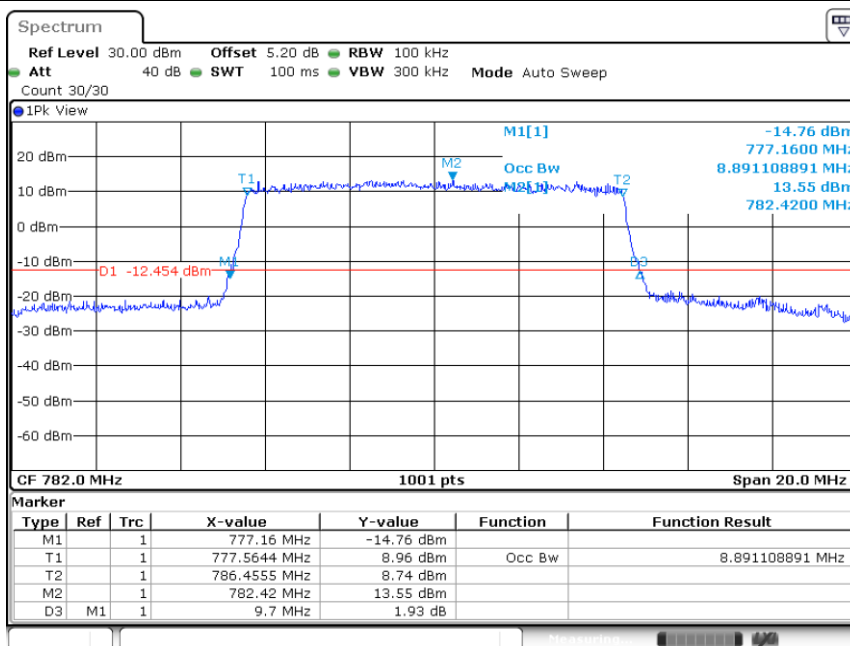
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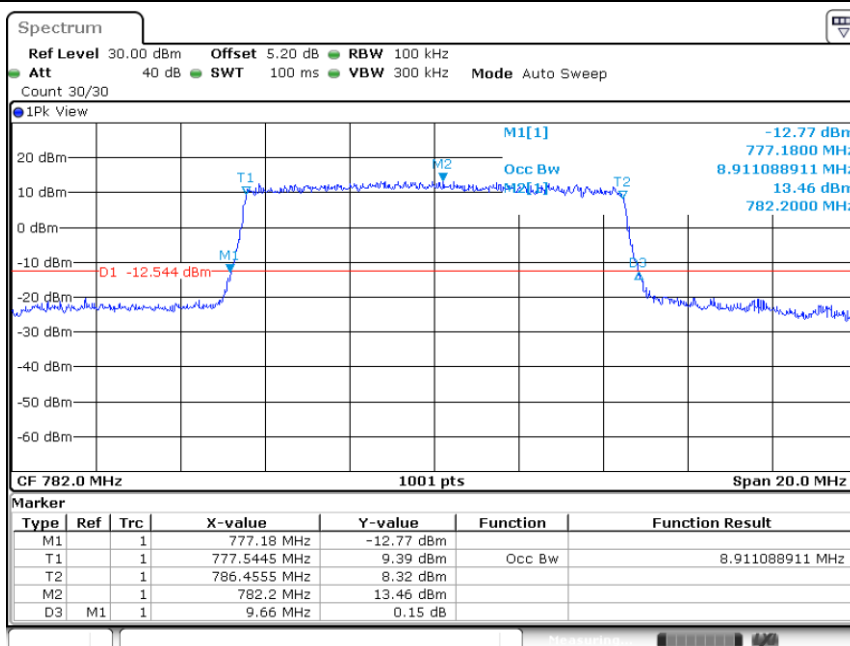


Band13-10MHz-64QAM-23230-50RB#0-8.891



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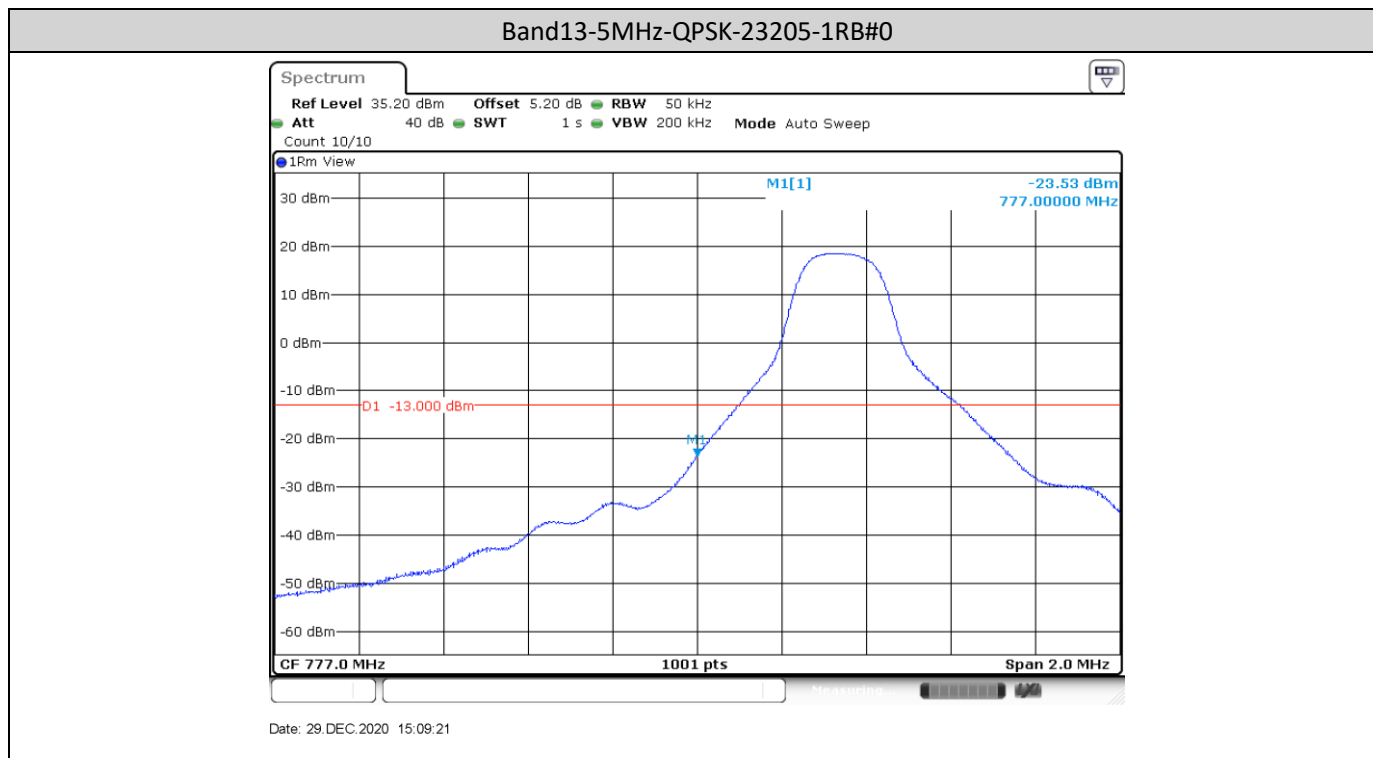
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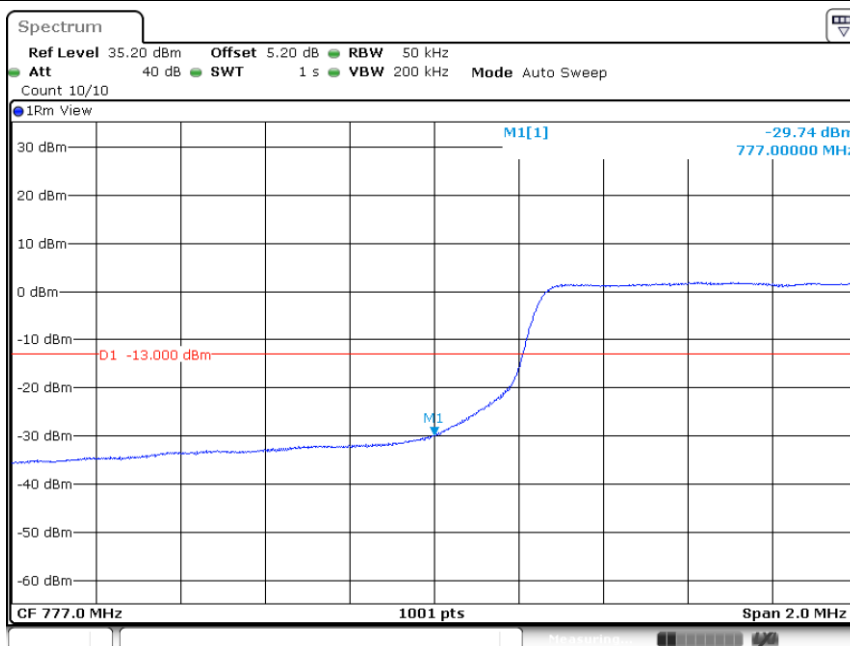
## 5. Band Edge Compliance

### 5.1. Test Plots



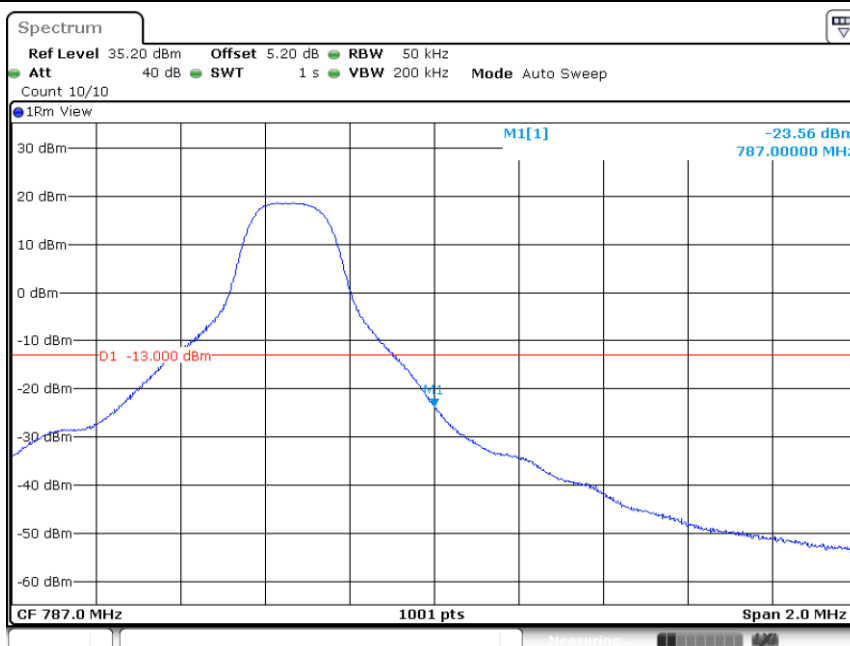


Band13-5MHz-QPSK-23205-25RB#0



Date: 29.DEC.2020 15:10:02

Band13-5MHz-QPSK-23255-1RB#24



Date: 29.DEC.2020 15:10:49



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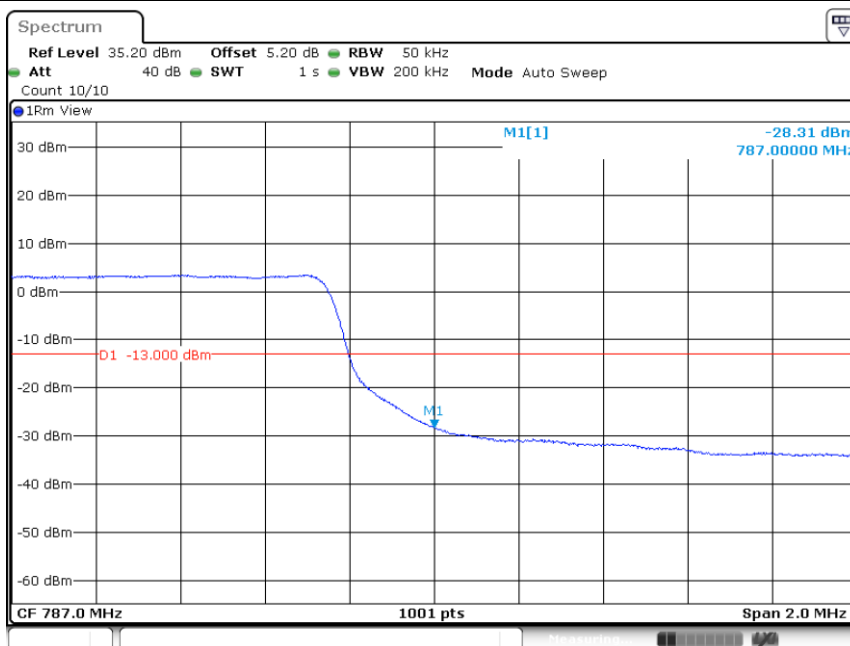
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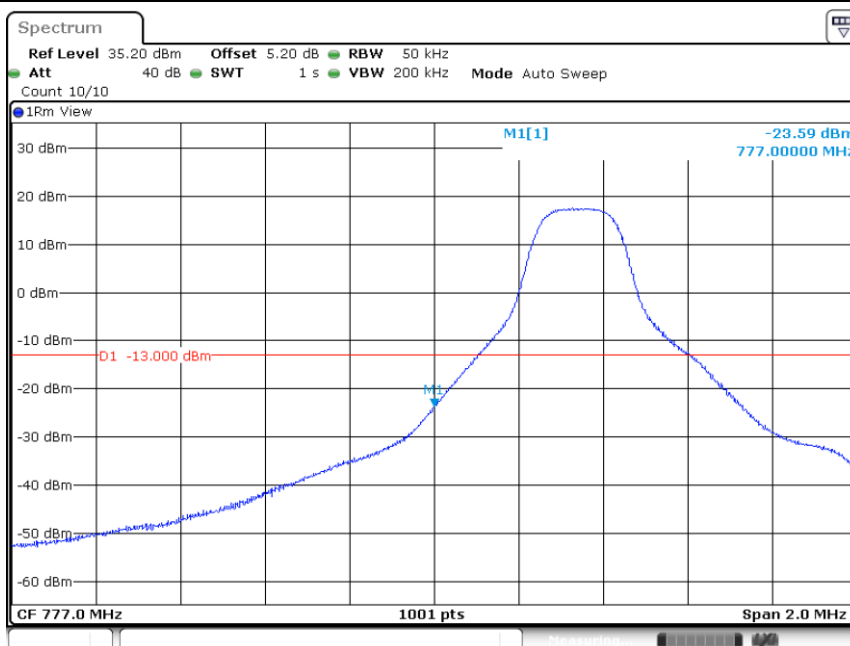


Band13-5MHz-QPSK-23255-25RB#0



Date: 29.DEC.2020 15:11:30

Band13-5MHz-64QAM-23205-1RB#0



Date: 29.DEC.2020 15:22:37



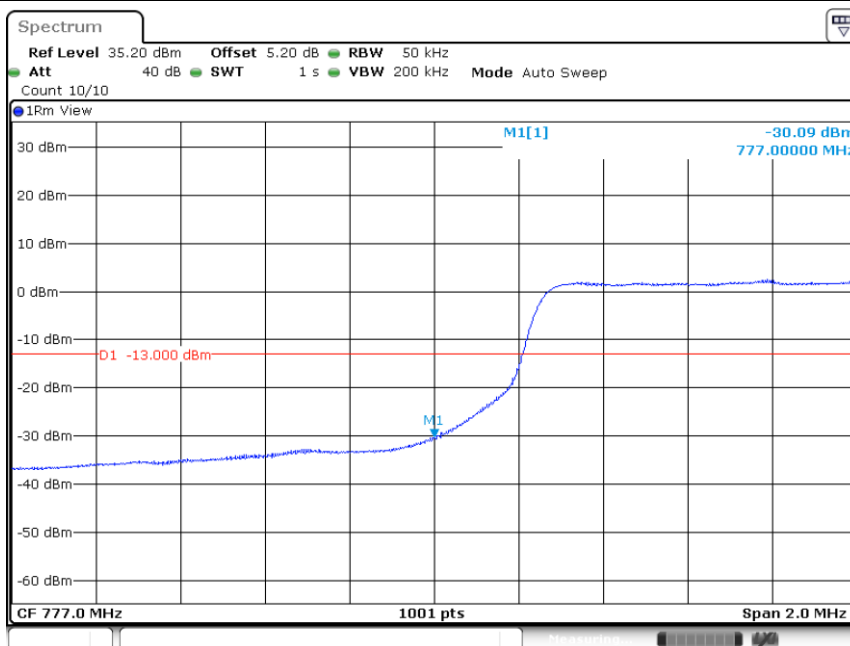
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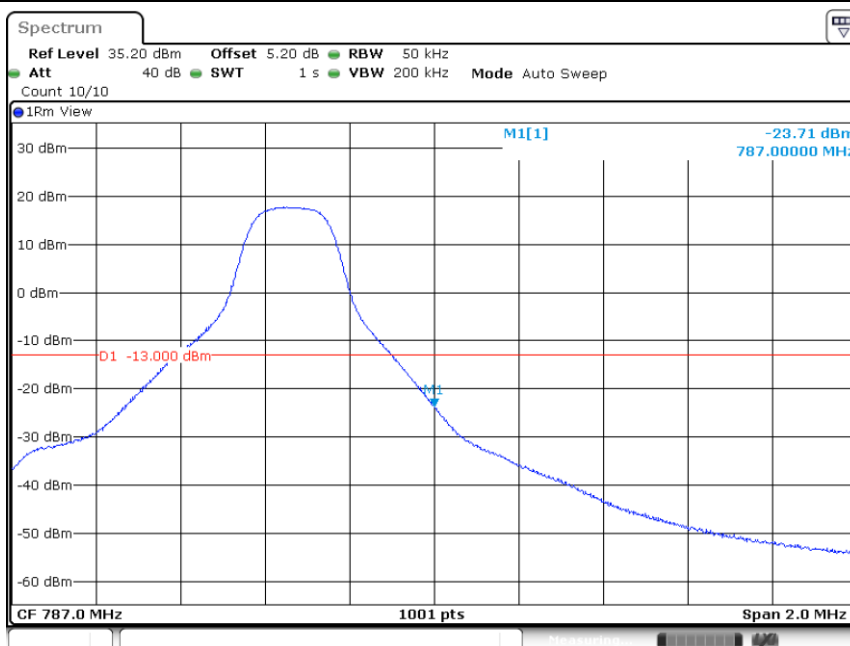


Band13-5MHz-64QAM-23205-25RB#0



Date: 29.DEC.2020 15:22:57

Band13-5MHz-64QAM-23255-1RB#24



Date: 29.DEC.2020 15:23:22



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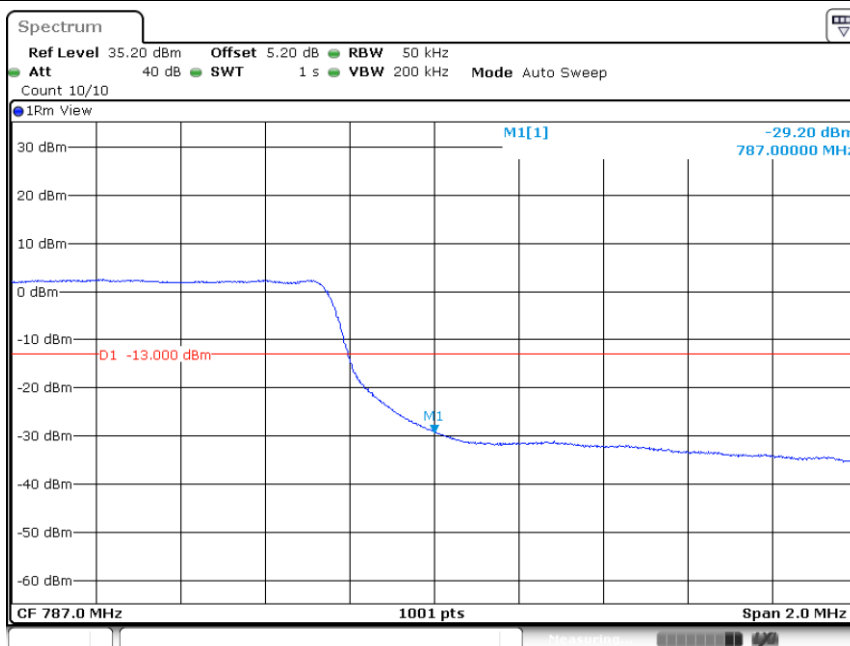
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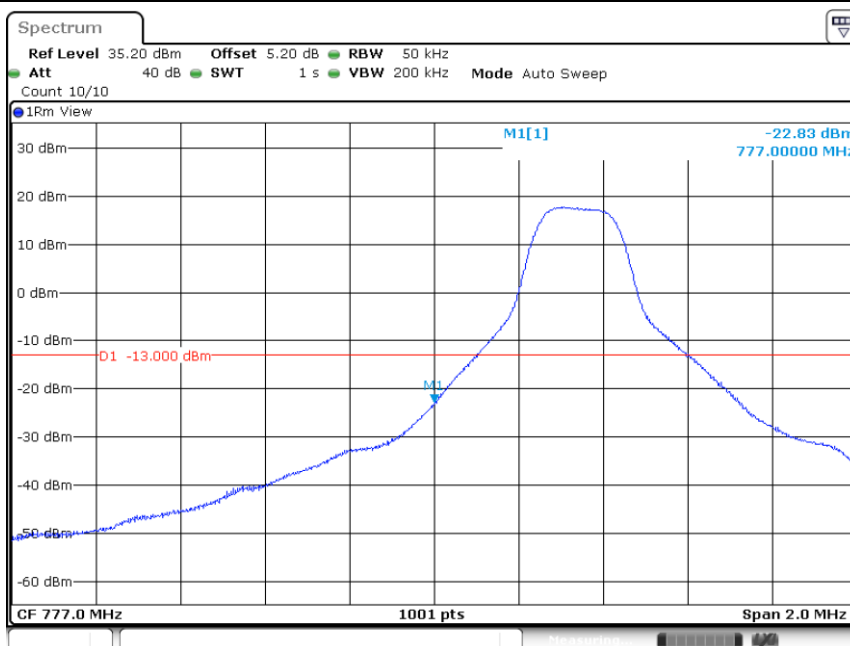


Band13-5MHz-64QAM-23255-25RB#0



Date: 29.DEC.2020 15:23:43

Band13-5MHz-16QAM-23205-1RB#0



Date: 29.DEC.2020 15:09:41



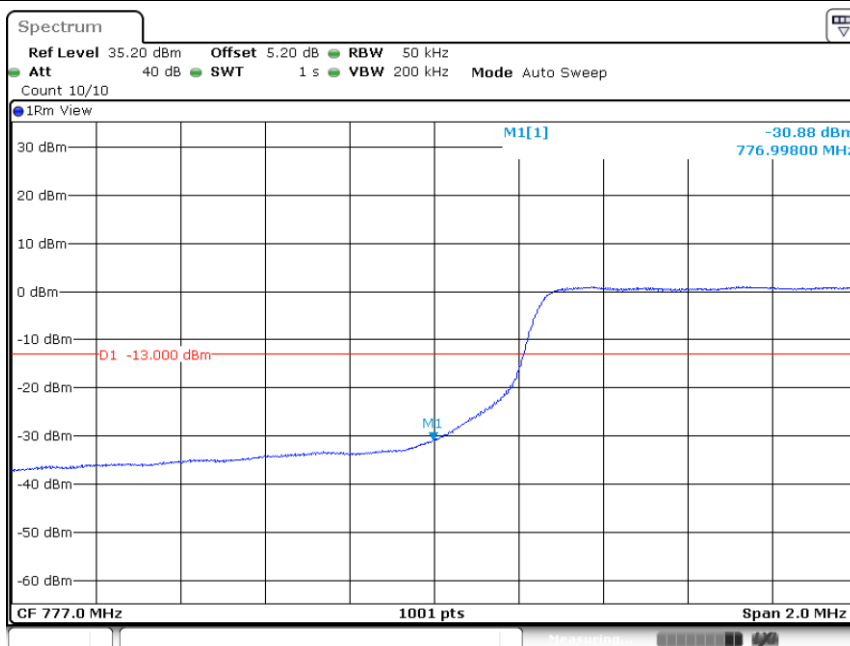
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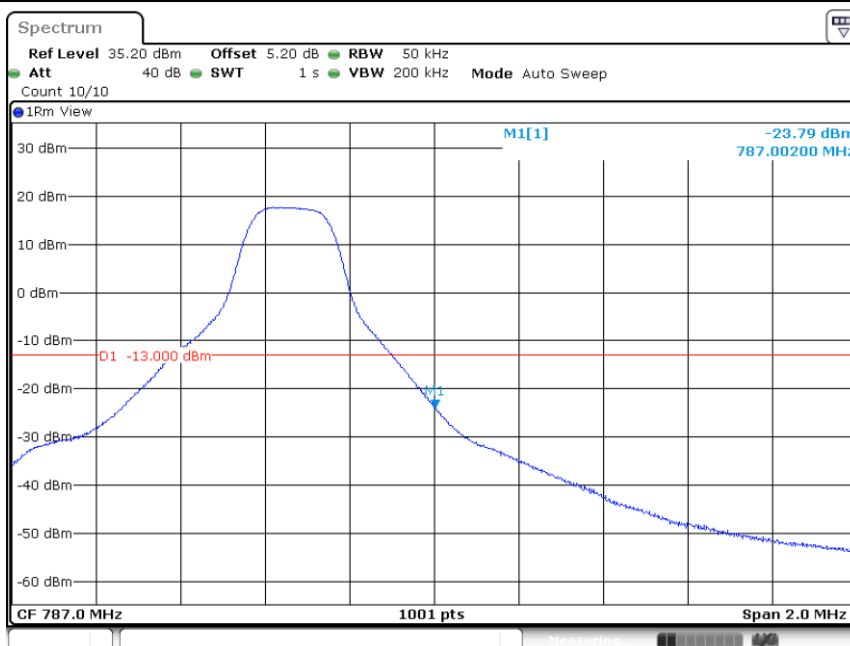


Band13-5MHz-16QAM-23205-25RB#0



Date: 29.DEC.2020 15:10:24

Band13-5MHz-16QAM-23255-1RB#24

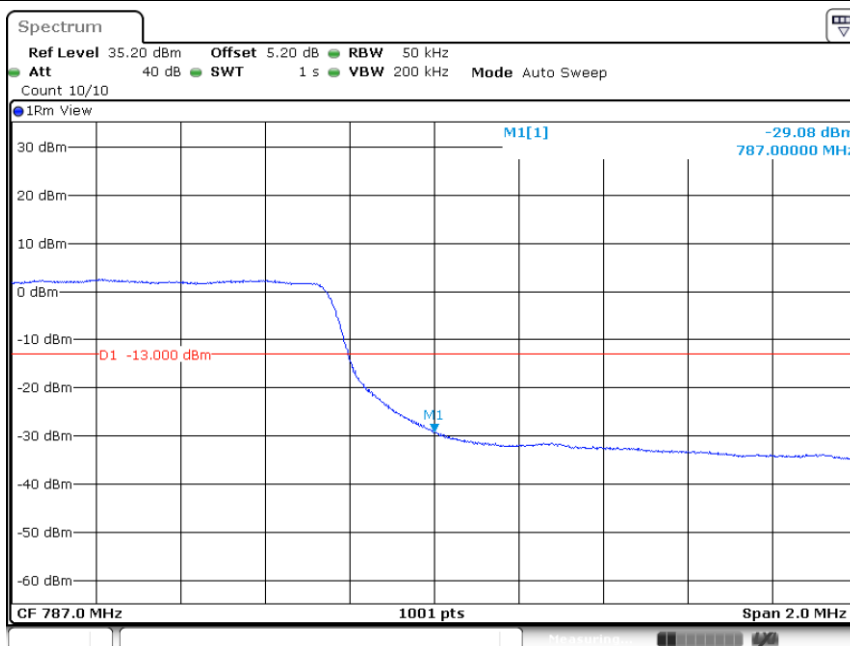


Date: 29.DEC.2020 15:11:09



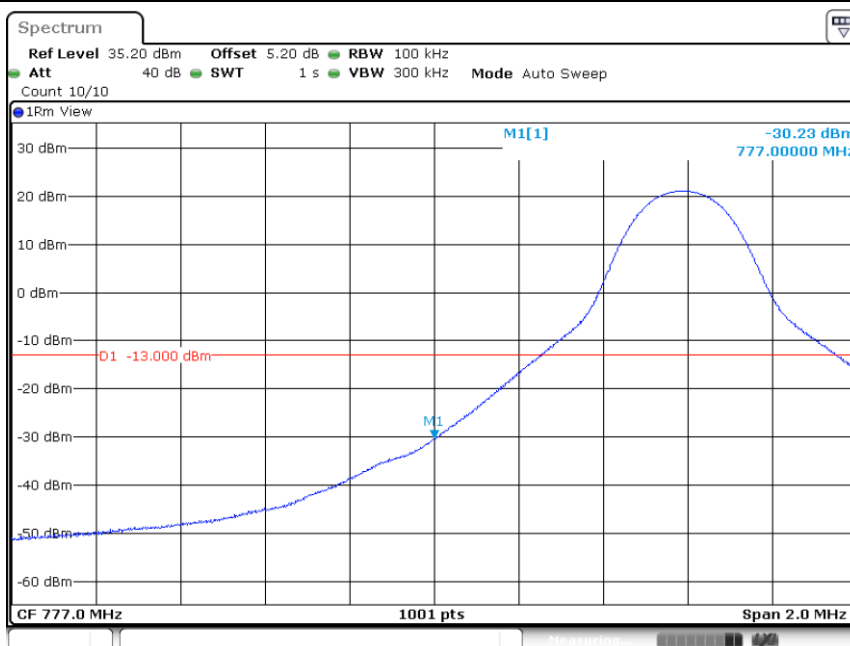


Band13-5MHz-16QAM-23255-25RB#0



Date: 29.DEC.2020 15:11:50

Band13-10MHz-QPSK-23230\_Left-1RB#0



Date: 29.DEC.2020 15:12:15



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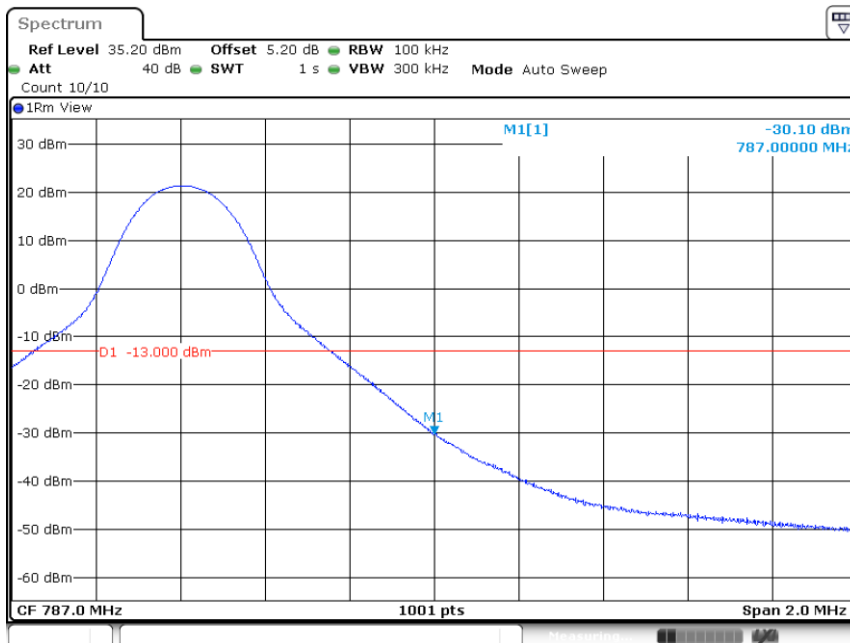
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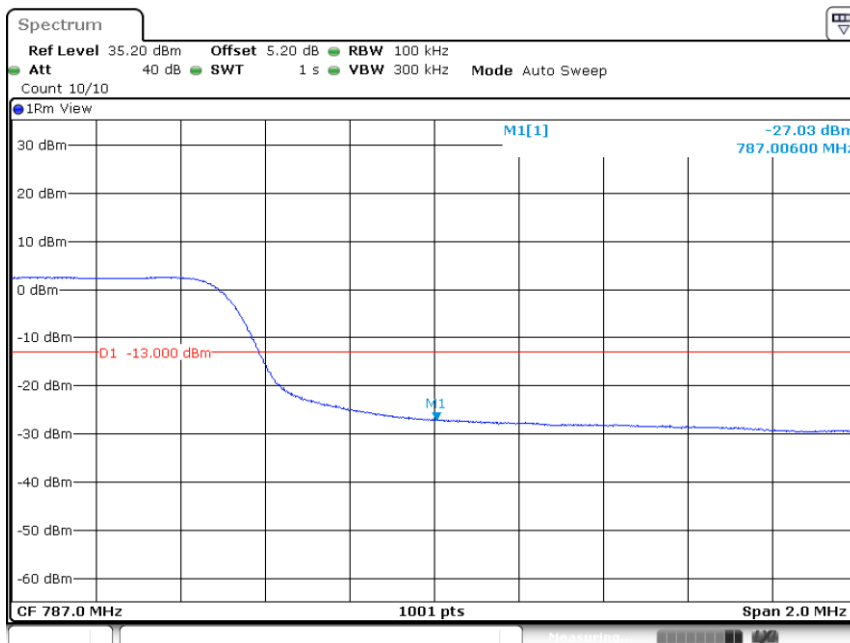


Band13-10MHz-QPSK-23230\_Right-1RB#49



Date: 29.DEC.2020 15:13:01

Band13-10MHz-QPSK-23230\_Right-50RB#0



Date: 29.DEC.2020 15:13:43



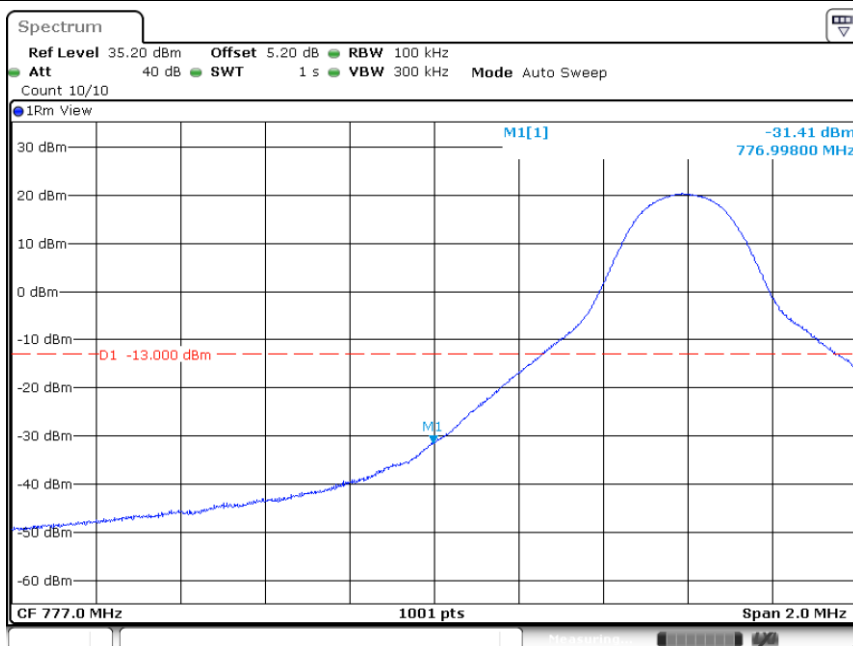
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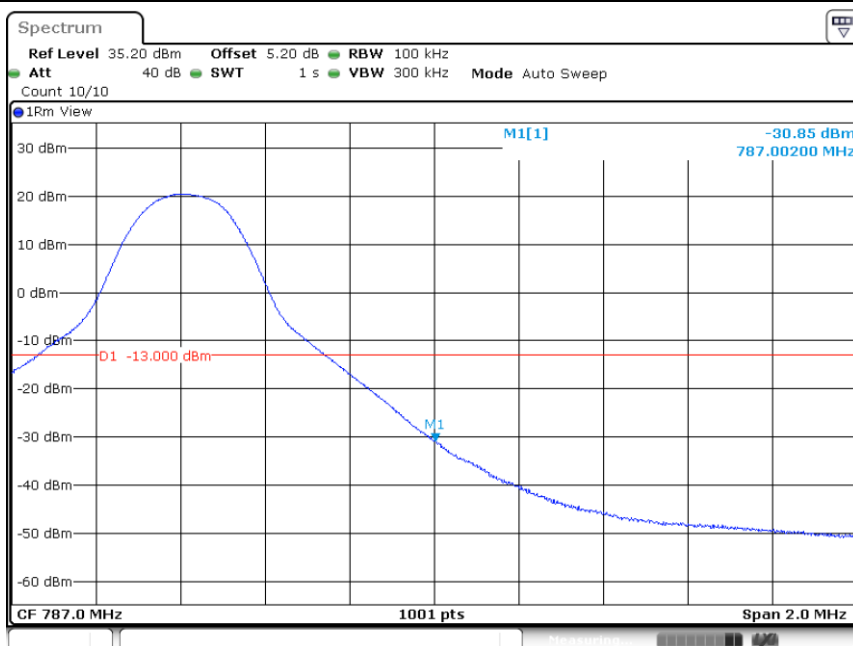


Band13-10MHz-64QAM-23230 Left-1RB#0



Date: 29.DEC.2020 15:24:12

Band13-10MHz-64QAM-23230 Right-1RB#49



Date: 29.DEC.2020 15:24:37



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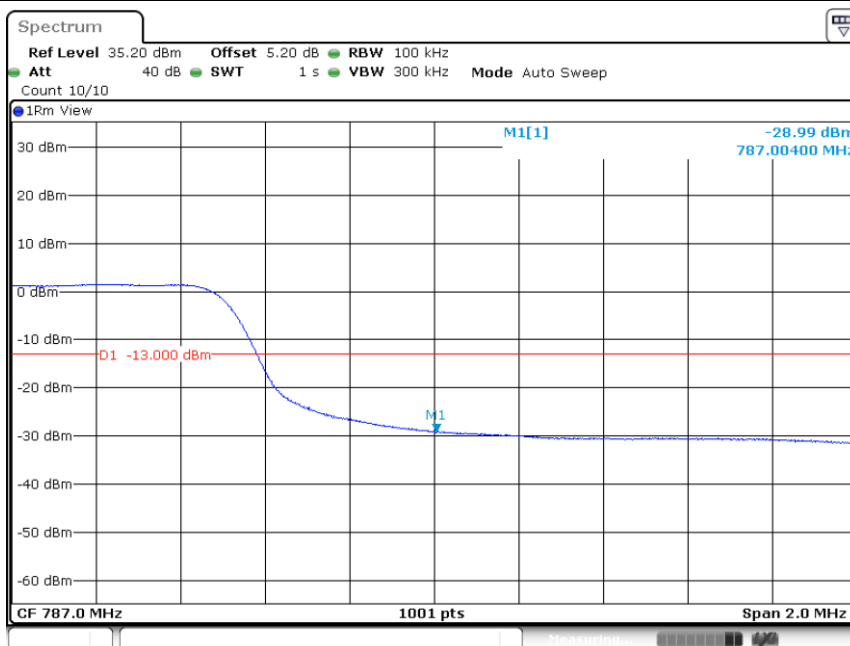
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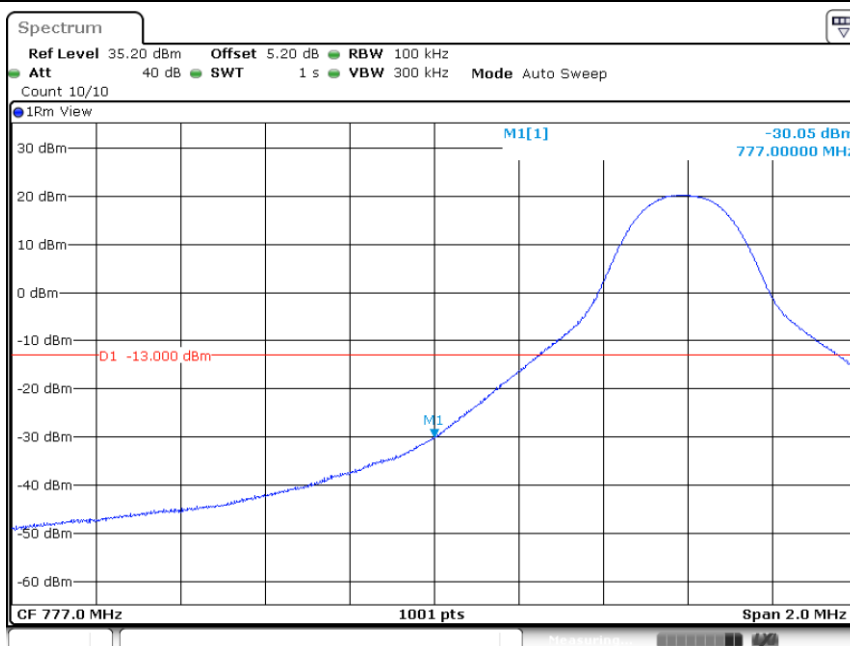


Band13-10MHz-64QAM-23230\_Right-50RB#0



Date: 29.DEC.2020 15:24:57

Band13-10MHz-16QAM-23230\_Left-1RB#0



Date: 29.DEC.2020 15:12:36



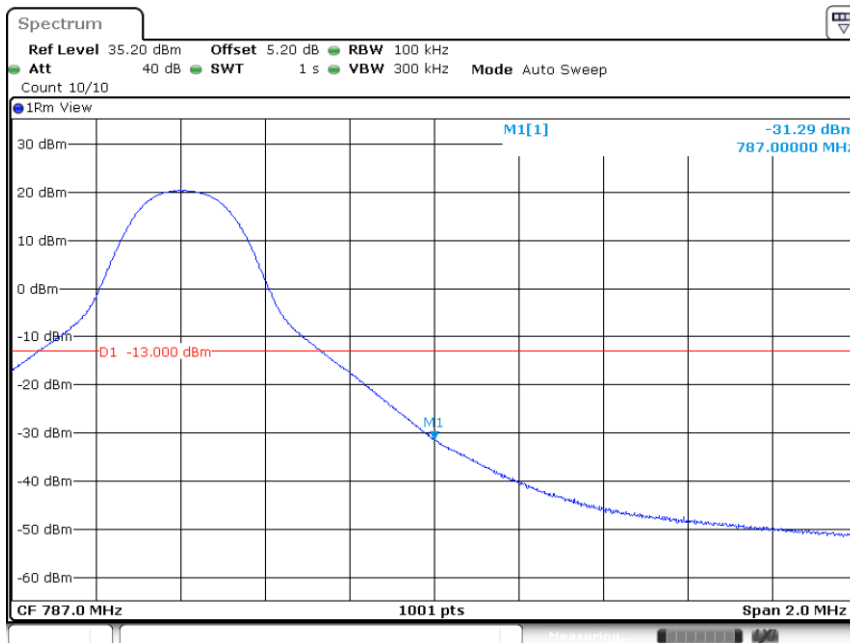
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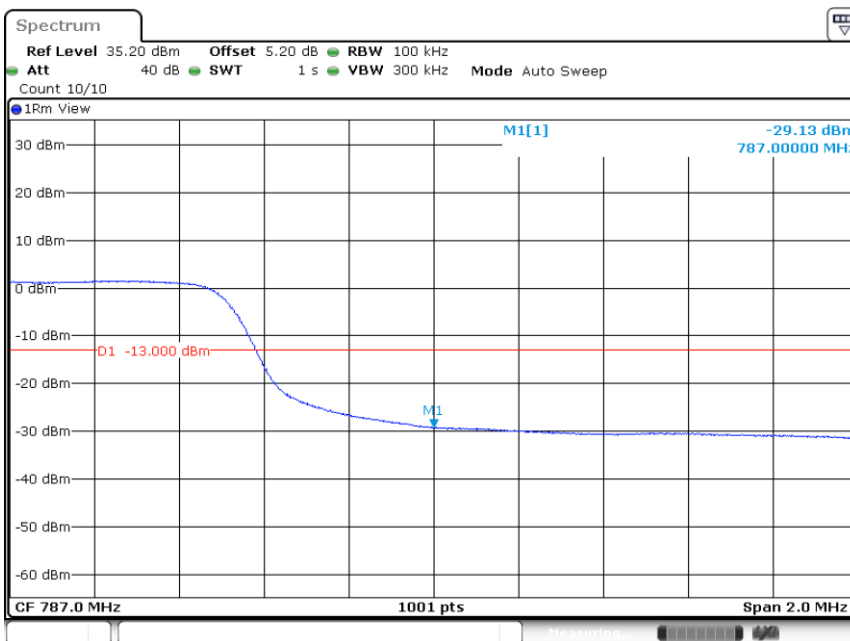


Band13-10MHz-16QAM-23230\_Right-1RB#49



Date: 29.DEC.2020 15:13:22

Band13-10MHz-16QAM-23230\_Right-50RB#0



Date: 29.DEC.2020 15:14:04



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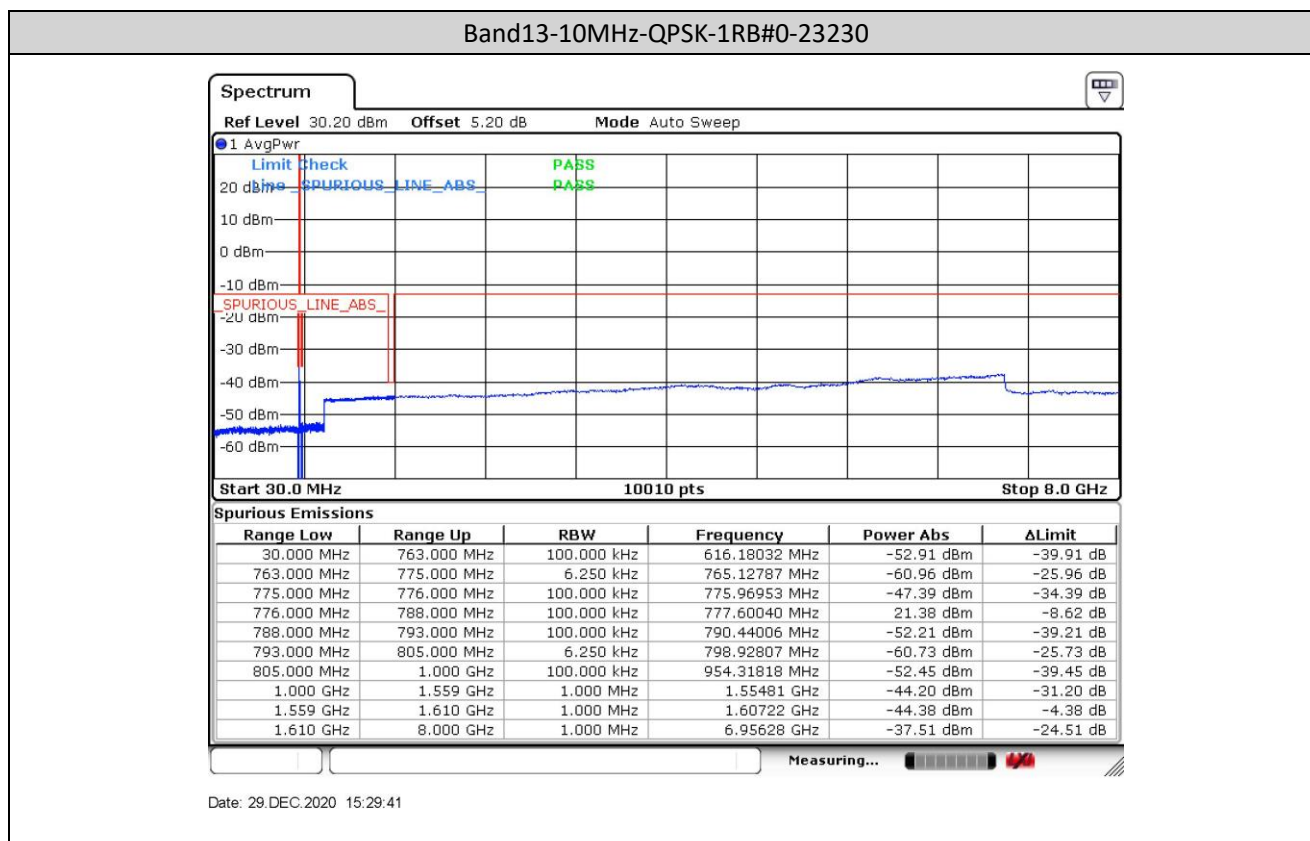
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## 6. Spurious Emission at Antenna Terminal

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  $< \text{RBW}/2$  so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points =  $k * (\text{Span} / \text{RBW})$ " with  $k$  between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

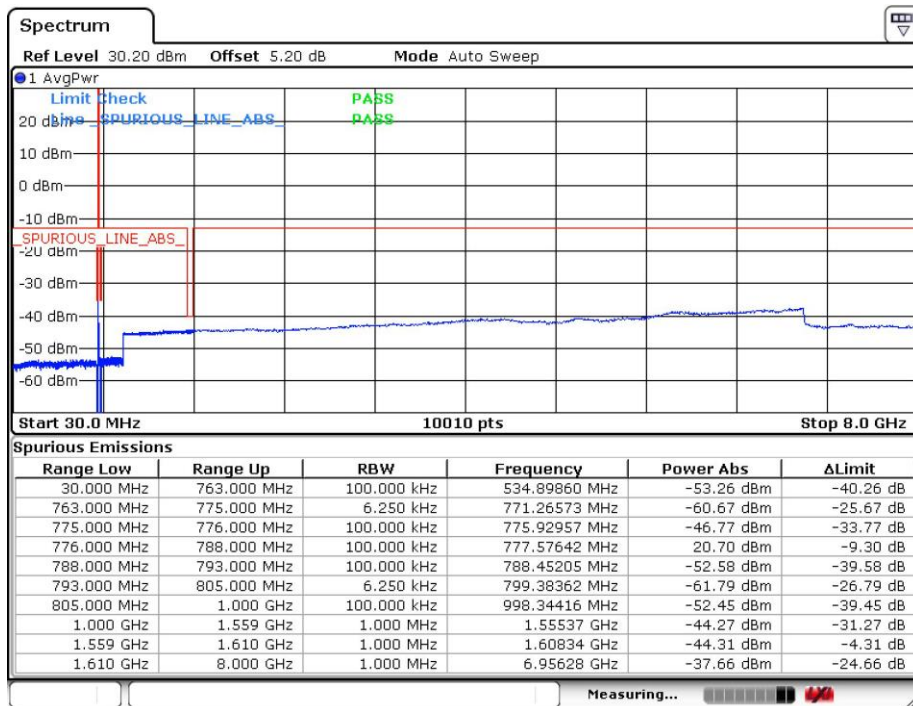
Remark2: only the worst case data displayed in this report.

### 6.1. Test Plots





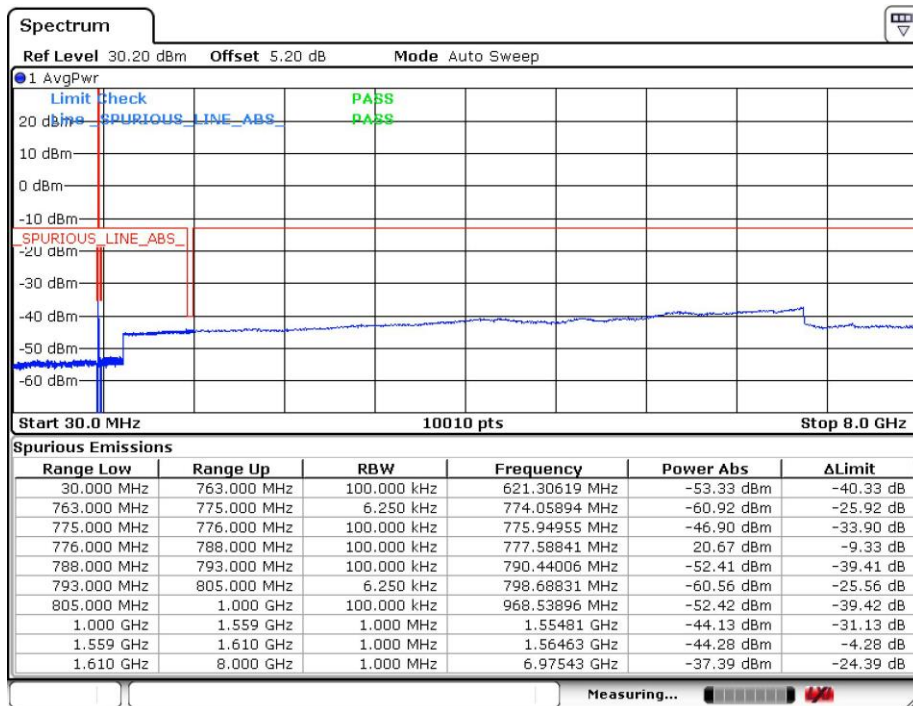
## Band13-10MHz-16QAM-1RB#0-23230



Date: 29.DEC.2020 15:29:57



## Band13-10MHz-64QAM-1RB#0-23230



Date: 29.DEC.2020 15:30:08

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## 7. Field Strength of Spurious Radiation

### 7.1. Test Mode =LTE/TM1 10MHz(ANT1)

#### 7.1.1. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Height [cm]	Angle [°]	Polarization
63.180000	-79.99	-13.00	66.99	162	343	Vertical
104.246667	-81.80	-13.00	68.80	158	279	Vertical
330.580000	-83.34	-13.00	70.34	272	297	Vertical
1555.000000	-64.61	-13.00	51.61	188	189	Vertical
2332.500000	-58.31	-13.00	45.31	247	138	Vertical
4303.087500	-65.59	-13.00	52.59	286	122	Vertical
57.113333	-75.05	-13.00	62.05	214	88	Horizontal
159.406667	-83.14	-13.00	70.14	226	127	Horizontal
324.140000	-83.63	-13.00	70.63	222	155	Horizontal
1555.500000	-65.06	-13.00	52.06	266	135	Horizontal
1581.000000	-65.40	-40.00	25.40	278	0	Horizontal
2665.500000	-57.60	-13.00	44.60	177	78	Horizontal

### 7.2. Test Mode =LTE/TM1 10MHz(ANT0)

#### 7.2.1. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Height [cm]	Angle [°]	Polarization
62.993333	-80.04	-13.00	67.04	185	11	Vertical
124.966667	-83.18	-13.00	70.18	175	180	Vertical
343.366667	-83.27	-13.00	70.27	223	85	Vertical
1584.500000	-65.56	-40.00	25.56	198	103	Vertical
2332.500000	-57.71	-13.00	44.71	284	6	Vertical
4343.062500	-65.70	-13.00	52.70	284	13	Vertical
63.086667	-75.16	-13.00	62.16	156	66	Horizontal
90.573333	-82.32	-13.00	69.32	203	158	Horizontal
300.993333	-83.31	-13.00	70.31	179	180	Horizontal
1455.000000	-65.79	-13.00	52.79	210	1	Horizontal



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2332.500000	-56.66	-13.00	43.66	176	152	Horizontal
4393.275000	-65.41	-13.00	52.41	183	154	Horizontal

Remark:

- 1 According to 971168 D01 Power Meas License Digital Systems, The amplitudes of unwanted emissions that are attenuated more than 20 dB below the applicable limit are not required to be reported.
- 2 The disturbance below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the worst case data displayed in this report.
- 3 all modulation and all Bandwidth had been tested, but only the worst case data displayed in this report.







## 8. Frequency Stability

### 8.1. Frequency Vs Voltage

Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band13	10MHz	QPSK	23230	50RB#0	VL	NT	1.90	0.002430	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	VN	NT	-4.30	-0.005499	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	VH	NT	-2.10	-0.002685	±2.5	PASS
Band13	10MHz	64QAM	23230	50RB#0	VL	NT	-3.60	-0.004604	±2.5	PASS
Band13	10MHz	64QAM	23230	50RB#0	VN	NT	0.60	0.000767	±2.5	PASS
Band13	10MHz	64QAM	23230	50RB#0	VH	NT	-0.10	-0.000128	±2.5	PASS
Band13	10MHz	16QAM	23230	50RB#0	VL	NT	-3.90	-0.004987	±2.5	PASS
Band13	10MHz	16QAM	23230	50RB#0	VN	NT	-5.90	-0.007545	±2.5	PASS
Band13	10MHz	16QAM	23230	50RB#0	VH	NT	-1.20	-0.001535	±2.5	PASS

### 8.2. Frequency Vs Temperature

Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band13	10MHz	QPSK	23230	50RB#0	NV	-30	-5.20	-0.006650	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	-20	2.30	0.002941	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	-10	2.10	0.002685	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	0	1.90	0.002430	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	10	1.60	0.002046	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	20	-2.90	-0.003708	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	30	0.10	0.000128	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	40	2.60	0.003325	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	50	2.50	0.003197	±2.5	PASS
Band13	10MHz	64QAM	23230	50RB#0	NV	-30	-3.90	-0.004987	±2.5	PASS
Band13	10MHz	64QAM	23230	50RB#0	NV	-20	1.70	0.002174	±2.5	PASS
Band13	10MHz	64QAM	23230	50RB#0	NV	0	-1.20	-0.001535	±2.5	PASS
Band13	10MHz	64QAM	23230	50RB#0	NV	10	-3.70	-0.004731	±2.5	PASS
Band13	10MHz	64QAM	23230	50RB#0	NV	20	0.80	0.001023	±2.5	PASS
Band13	10MHz	64QAM	23230	50RB#0	NV	30	0.30	0.000384	±2.5	PASS
Band13	10MHz	64QAM	23230	50RB#0	NV	40	-2.20	-0.002813	±2.5	PASS
Band13	10MHz	64QAM	23230	50RB#0	NV	50	-4.30	-0.005499	±2.5	PASS
Band13	10MHz	16QAM	23230	50RB#0	NV	-30	1.60	0.002046	±2.5	PASS



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Band13	10MHz	16QAM	23230	50RB#0	NV	-20	3.50	0.004476	±2.5	PASS
Band13	10MHz	16QAM	23230	50RB#0	NV	-10	-2.50	-0.003197	±2.5	PASS
Band13	10MHz	16QAM	23230	50RB#0	NV	0	-0.80	-0.001023	±2.5	PASS
Band13	10MHz	16QAM	23230	50RB#0	NV	10	1.50	0.001918	±2.5	PASS
Band13	10MHz	16QAM	23230	50RB#0	NV	20	0.20	0.000256	±2.5	PASS
Band13	10MHz	16QAM	23230	50RB#0	NV	30	-4.80	-0.006138	±2.5	PASS
Band13	10MHz	16QAM	23230	50RB#0	NV	40	-3.30	-0.004220	±2.5	PASS
Band13	10MHz	16QAM	23230	50RB#0	NV	50	-1.50	-0.001918	±2.5	PASS



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