



# Appendix B

## E-UTRA Band 5



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# 1 Effective (Isotropic) Radiated Power

## 1.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Conducted Power(dBm)	ERP (dBm)	Limit (dBm)	Verdict
Band5	1.4MHz	QPSK	20407	1RB#0	21.36	17.42	38.45	PASS
Band5	1.4MHz	QPSK	20407	1RB#2	21.48	17.54	38.45	PASS
Band5	1.4MHz	QPSK	20407	1RB#5	21.37	17.43	38.45	PASS
Band5	1.4MHz	QPSK	20407	3RB#0	21.52	17.58	38.45	PASS
Band5	1.4MHz	QPSK	20407	3RB#2	21.62	17.68	38.45	PASS
Band5	1.4MHz	QPSK	20407	3RB#3	21.55	17.61	38.45	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	20.49	16.55	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#0	21.30	17.36	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#2	21.45	17.51	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#5	21.38	17.44	38.45	PASS
Band5	1.4MHz	QPSK	20525	3RB#0	21.47	17.53	38.45	PASS
Band5	1.4MHz	QPSK	20525	3RB#2	21.39	17.45	38.45	PASS
Band5	1.4MHz	QPSK	20525	3RB#3	21.43	17.49	38.45	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	20.57	16.63	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#0	21.34	17.40	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#2	21.46	17.52	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#5	21.31	17.37	38.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#0	21.43	17.49	38.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#2	21.46	17.52	38.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#3	21.39	17.45	38.45	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	20.40	16.46	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#0	20.76	16.82	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#2	20.83	16.89	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#5	20.74	16.80	38.45	PASS
Band5	1.4MHz	16QAM	20407	3RB#0	20.39	16.45	38.45	PASS
Band5	1.4MHz	16QAM	20407	3RB#2	20.47	16.53	38.45	PASS
Band5	1.4MHz	16QAM	20407	3RB#3	20.50	16.56	38.45	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	19.65	15.71	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#0	20.56	16.62	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#2	20.67	16.73	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#5	20.62	16.68	38.45	PASS
Band5	1.4MHz	16QAM	20525	3RB#0	20.45	16.51	38.45	PASS
Band5	1.4MHz	16QAM	20525	3RB#2	20.27	16.33	38.45	PASS
Band5	1.4MHz	16QAM	20525	3RB#3	20.43	16.49	38.45	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	19.49	15.55	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#0	20.72	16.78	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#2	20.75	16.81	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#5	20.71	16.77	38.45	PASS



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Band5	1.4MHz	16QAM	20643	3RB#0	20.29	16.35	38.45	PASS
Band5	1.4MHz	16QAM	20643	3RB#2	20.37	16.43	38.45	PASS
Band5	1.4MHz	16QAM	20643	3RB#3	20.30	16.36	38.45	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	19.63	15.69	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#0	21.40	17.46	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#7	21.61	17.67	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#14	21.37	17.43	38.45	PASS
Band5	3MHz	QPSK	20415	15RB#0	20.46	16.52	38.45	PASS
Band5	3MHz	QPSK	20415	8RB#0	20.43	16.49	38.45	PASS
Band5	3MHz	QPSK	20415	8RB#7	20.45	16.51	38.45	PASS
Band5	3MHz	QPSK	20415	15RB#0	20.47	16.53	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#0	21.49	17.55	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#7	21.60	17.66	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#14	21.39	17.45	38.45	PASS
Band5	3MHz	QPSK	20525	15RB#0	20.43	16.49	38.45	PASS
Band5	3MHz	QPSK	20525	8RB#0	20.48	16.54	38.45	PASS
Band5	3MHz	QPSK	20525	8RB#7	20.52	16.58	38.45	PASS
Band5	3MHz	QPSK	20525	15RB#0	20.45	16.51	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#0	21.37	17.43	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#7	21.55	17.61	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#14	21.28	17.34	38.45	PASS
Band5	3MHz	QPSK	20635	15RB#0	20.44	16.50	38.45	PASS
Band5	3MHz	QPSK	20635	8RB#0	20.48	16.54	38.45	PASS
Band5	3MHz	QPSK	20635	8RB#7	20.38	16.44	38.45	PASS
Band5	3MHz	QPSK	20635	15RB#0	20.39	16.45	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#0	20.57	16.63	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#7	20.62	16.68	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#14	20.86	16.92	38.45	PASS
Band5	3MHz	16QAM	20415	15RB#0	19.52	15.58	38.45	PASS
Band5	3MHz	16QAM	20415	8RB#0	19.65	15.71	38.45	PASS
Band5	3MHz	16QAM	20415	8RB#7	19.53	15.59	38.45	PASS
Band5	3MHz	16QAM	20415	15RB#0	19.35	15.41	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#0	20.81	16.87	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#7	20.88	16.94	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#14	20.88	16.94	38.45	PASS
Band5	3MHz	16QAM	20525	15RB#0	19.38	15.44	38.45	PASS
Band5	3MHz	16QAM	20525	8RB#0	19.40	15.46	38.45	PASS
Band5	3MHz	16QAM	20525	8RB#7	19.54	15.60	38.45	PASS
Band5	3MHz	16QAM	20525	15RB#0	19.28	15.34	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#0	20.75	16.81	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#7	21.01	17.07	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#14	20.64	16.70	38.45	PASS
Band5	3MHz	16QAM	20635	15RB#0	19.39	15.45	38.45	PASS
Band5	3MHz	16QAM	20635	8RB#0	19.53	15.59	38.45	PASS
Band5	3MHz	16QAM	20635	8RB#7	19.29	15.35	38.45	PASS
Band5	3MHz	16QAM	20635	15RB#0	19.37	15.43	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#0	21.18	17.24	38.45	PASS



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Band5	5MHz	QPSK	20425	1RB#13	21.49	17.55	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#24	21.31	17.37	38.45	PASS
Band5	5MHz	QPSK	20425	12RB#0	20.45	16.51	38.45	PASS
Band5	5MHz	QPSK	20425	12RB#6	20.50	16.56	38.45	PASS
Band5	5MHz	QPSK	20425	12RB#13	20.45	16.51	38.45	PASS
Band5	5MHz	QPSK	20425	25RB#0	20.48	16.54	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#0	21.30	17.36	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#13	21.43	17.49	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#24	21.28	17.34	38.45	PASS
Band5	5MHz	QPSK	20525	12RB#0	20.44	16.50	38.45	PASS
Band5	5MHz	QPSK	20525	12RB#6	20.46	16.52	38.45	PASS
Band5	5MHz	QPSK	20525	12RB#13	20.36	16.42	38.45	PASS
Band5	5MHz	QPSK	20525	25RB#0	20.42	16.48	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#0	21.33	17.39	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#13	21.42	17.48	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#24	21.36	17.42	38.45	PASS
Band5	5MHz	QPSK	20625	12RB#0	20.35	16.41	38.45	PASS
Band5	5MHz	QPSK	20625	12RB#6	20.49	16.55	38.45	PASS
Band5	5MHz	QPSK	20625	12RB#13	20.34	16.40	38.45	PASS
Band5	5MHz	QPSK	20625	25RB#0	20.40	16.46	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#0	20.30	16.36	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#13	20.48	16.54	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#24	20.61	16.67	38.45	PASS
Band5	5MHz	16QAM	20425	12RB#0	19.50	15.56	38.45	PASS
Band5	5MHz	16QAM	20425	12RB#6	19.61	15.67	38.45	PASS
Band5	5MHz	16QAM	20425	12RB#13	19.47	15.53	38.45	PASS
Band5	5MHz	16QAM	20425	25RB#0	19.50	15.56	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#0	20.51	16.57	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#13	20.87	16.93	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#24	20.71	16.77	38.45	PASS
Band5	5MHz	16QAM	20525	12RB#0	19.37	15.43	38.45	PASS
Band5	5MHz	16QAM	20525	12RB#6	19.52	15.58	38.45	PASS
Band5	5MHz	16QAM	20525	12RB#13	19.35	15.41	38.45	PASS
Band5	5MHz	16QAM	20525	25RB#0	19.43	15.49	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#0	20.58	16.64	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#13	20.63	16.69	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#24	20.47	16.53	38.45	PASS
Band5	5MHz	16QAM	20625	12RB#0	19.46	15.52	38.45	PASS
Band5	5MHz	16QAM	20625	12RB#6	19.52	15.58	38.45	PASS
Band5	5MHz	16QAM	20625	12RB#13	19.42	15.48	38.45	PASS
Band5	5MHz	16QAM	20625	25RB#0	19.31	15.37	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#0	21.51	17.57	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#25	21.64	17.70	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#49	21.56	17.62	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#0	20.52	16.58	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#13	20.48	16.54	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#25	20.57	16.63	38.45	PASS



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Band5	10MHz	QPSK	20450	50RB#0	20.51	16.57	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#0	21.34	17.40	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#25	21.46	17.52	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#49	21.37	17.43	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#0	20.41	16.47	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#13	20.50	16.56	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#25	20.44	16.50	38.45	PASS
Band5	10MHz	QPSK	20525	50RB#0	20.43	16.49	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#0	21.37	17.43	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#25	21.48	17.54	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#49	21.45	17.51	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#0	20.56	16.62	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#13	20.50	16.56	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#25	20.46	16.52	38.45	PASS
Band5	10MHz	QPSK	20600	50RB#0	20.53	16.59	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#0	20.39	16.45	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#25	20.73	16.79	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#49	20.96	17.02	38.45	PASS
Band5	10MHz	16QAM	20450	25RB#0	19.54	15.60	38.45	PASS
Band5	10MHz	16QAM	20450	25RB#13	19.53	15.59	38.45	PASS
Band5	10MHz	16QAM	20450	25RB#25	19.58	15.64	38.45	PASS
Band5	10MHz	16QAM	20450	50RB#0	19.45	15.51	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#0	20.69	16.75	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#25	21.07	17.13	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#49	20.61	16.67	38.45	PASS
Band5	10MHz	16QAM	20525	25RB#0	19.53	15.59	38.45	PASS
Band5	10MHz	16QAM	20525	25RB#13	19.45	15.51	38.45	PASS
Band5	10MHz	16QAM	20525	25RB#25	19.53	15.59	38.45	PASS
Band5	10MHz	16QAM	20525	50RB#0	19.48	15.54	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#0	20.55	16.61	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#25	20.60	16.66	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#49	20.84	16.90	38.45	PASS
Band5	10MHz	16QAM	20600	25RB#0	19.56	15.62	38.45	PASS
Band5	10MHz	16QAM	20600	25RB#13	19.42	15.48	38.45	PASS
Band5	10MHz	16QAM	20600	25RB#25	19.49	15.55	38.45	PASS
Band5	10MHz	16QAM	20600	50RB#0	19.43	15.49	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]



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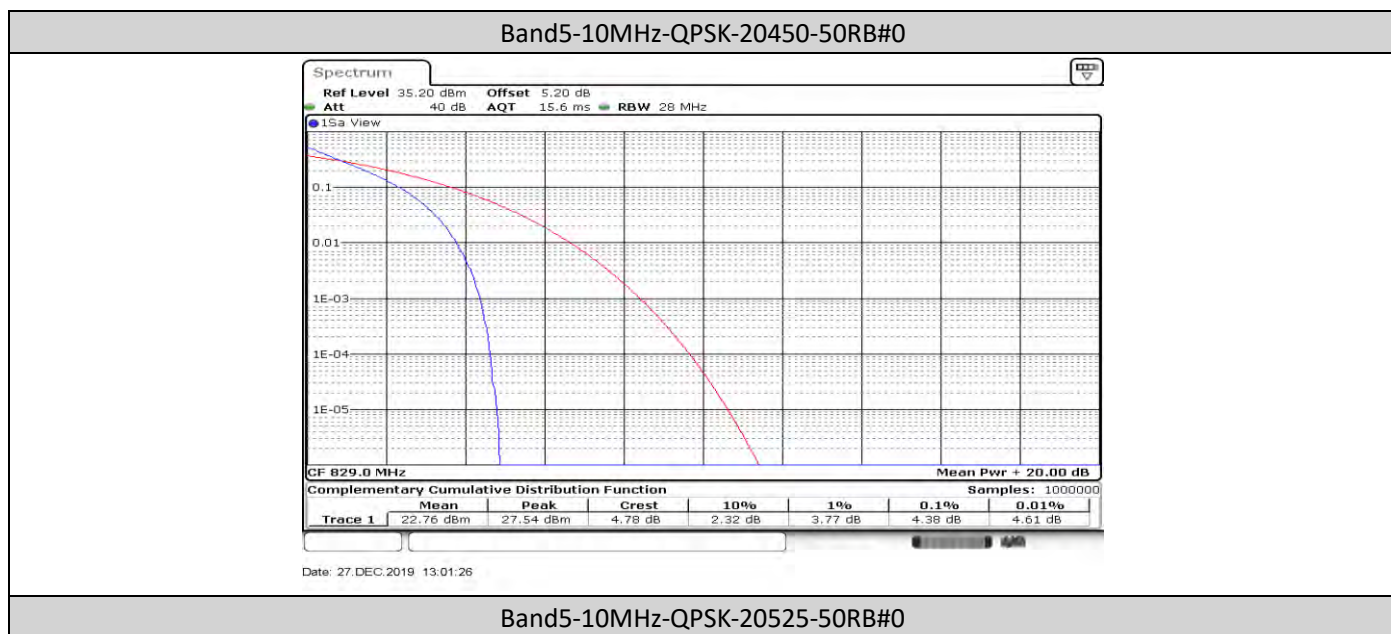


## 2. Peak-to-Average Ratio (CCDF)

### 2.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band5	10MHz	QPSK	20450	50RB#0	4.38	13	PASS
Band5	10MHz	QPSK	20525	50RB#0	4.70	13	PASS
Band5	10MHz	QPSK	20600	50RB#0	4.20	13	PASS
Band5	10MHz	16QAM	20450	50RB#0	5.25	13	PASS
Band5	10MHz	16QAM	20525	50RB#0	5.48	13	PASS
Band5	10MHz	16QAM	20600	50RB#0	5.01	13	PASS

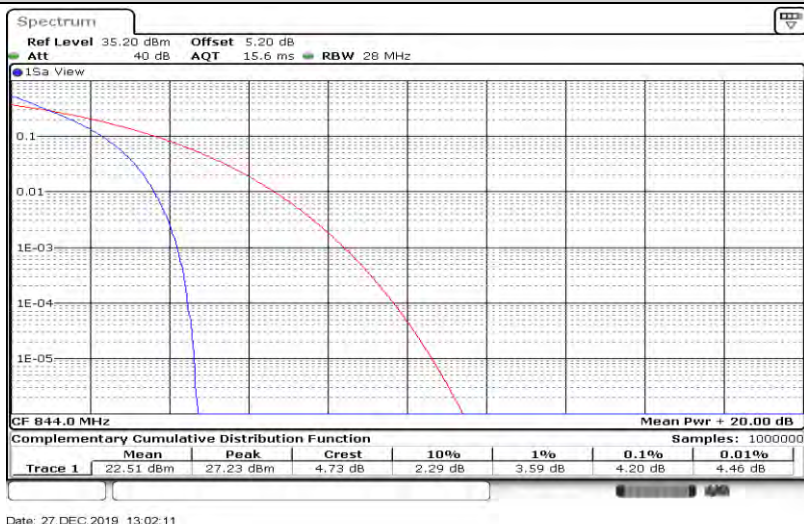
### 2.2. Test Plots







Band5-10MHz-QPSK-20600-50RB#0



Band5-10MHz-16QAM-20450-50RB#0



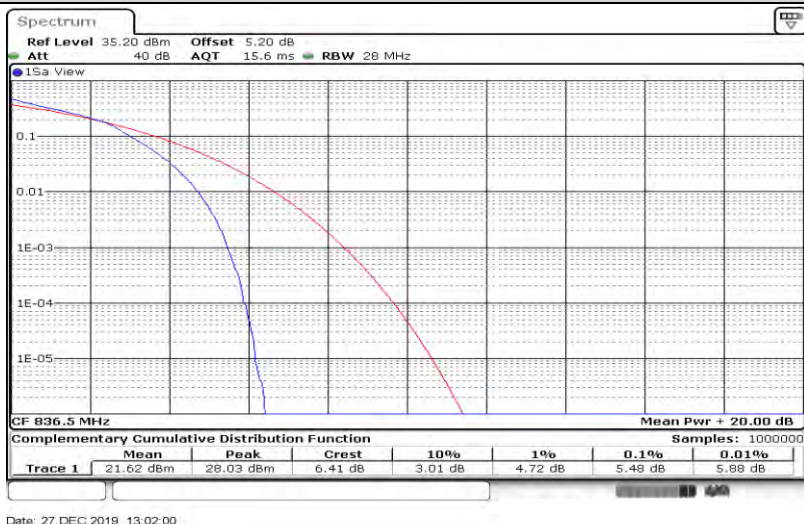
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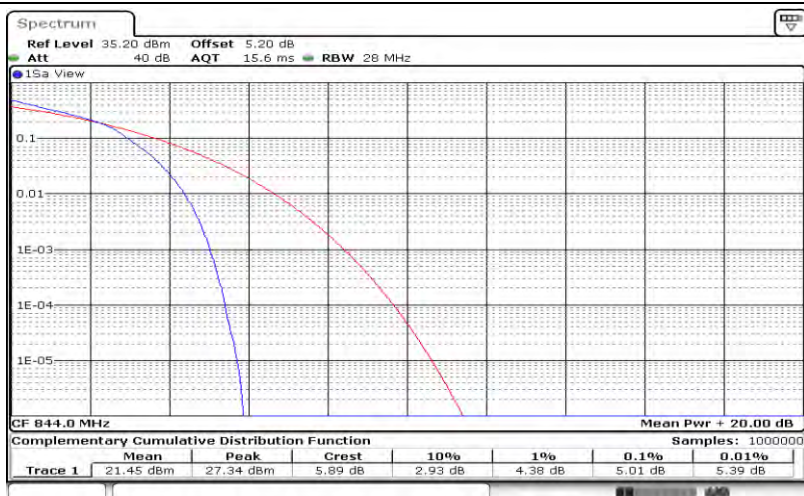


Band5-10MHz-16QAM-20525-50RB#0



Band5-10MHz-16QAM-20600-50RB#0





Date: 27.DEC.2019 13:02:22

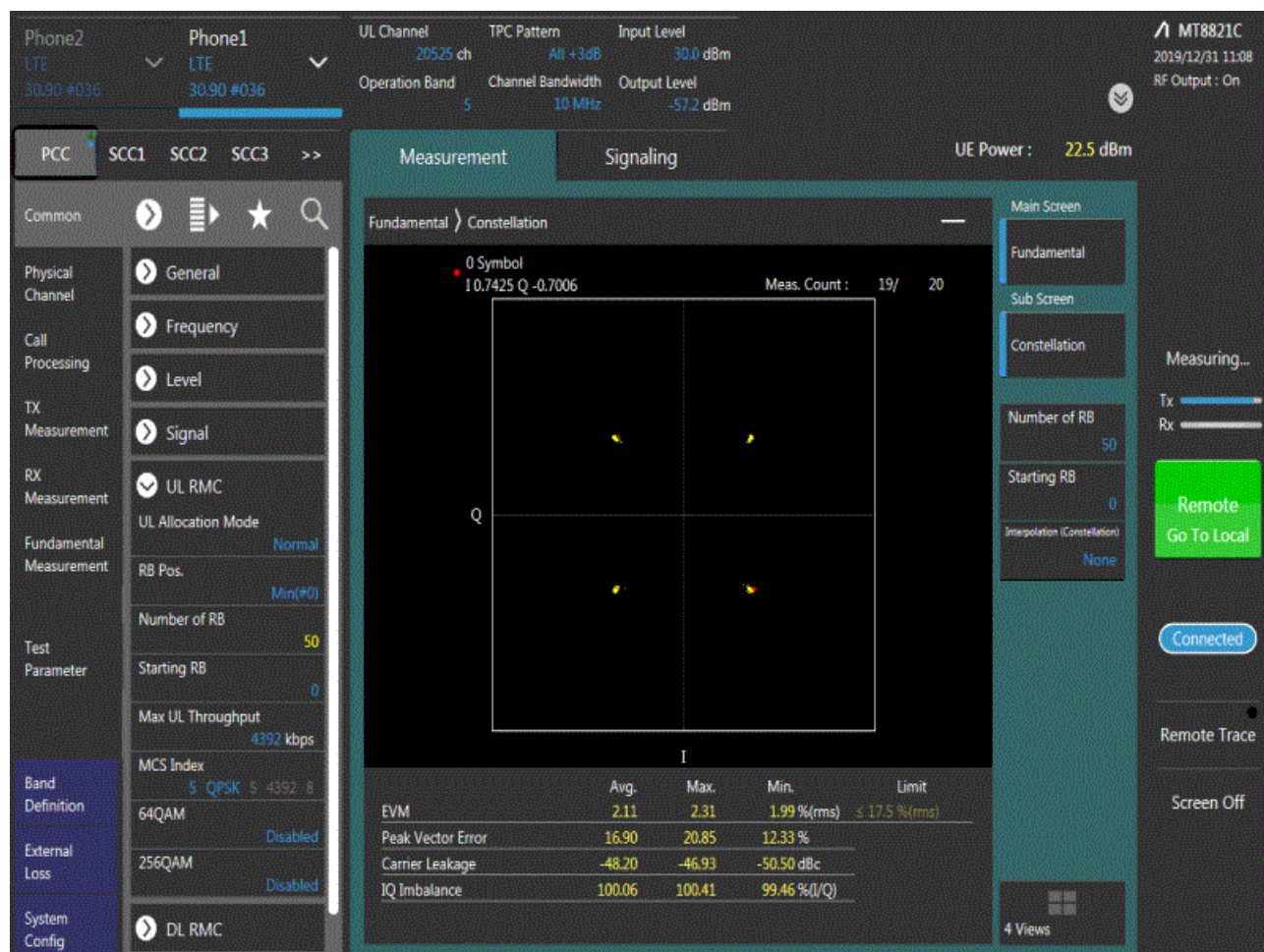




### 3. Modulation Characteristics

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

##### 3.1.1. Test Channel = MCH

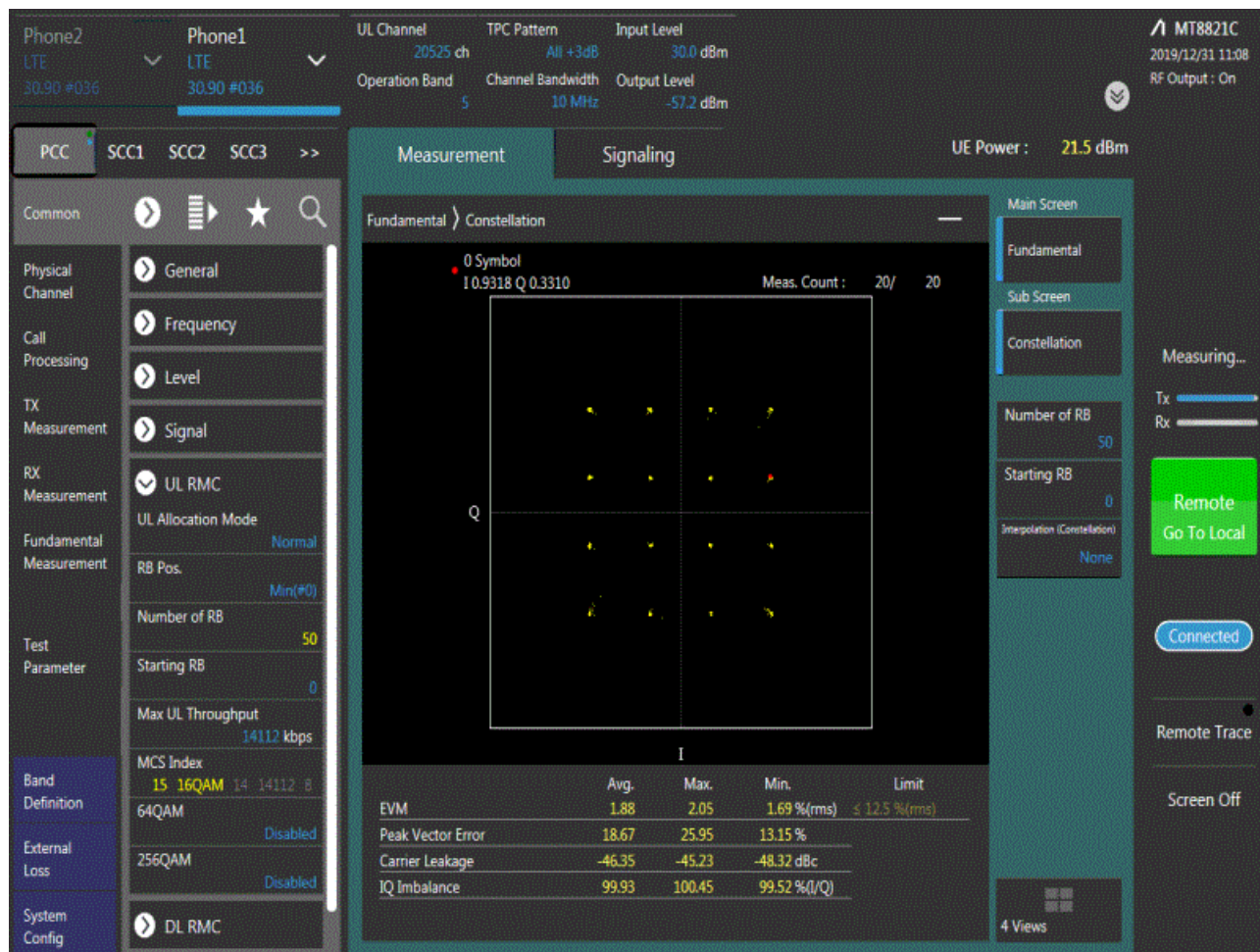






### 3.2. Test Mode = LTE /TM2 10MHz

#### 3.2.1. Test Channel = MCH





## 4. 26dB Bandwidth and Occupied Bandwidth

### 4.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band5	1.4MHz	QPSK	20407	6RB#0	1.094	1.299	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	1.091	1.287	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	1.094	1.323	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	1.091	1.266	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	1.091	1.287	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	1.094	1.314	PASS
Band5	3MHz	QPSK	20415	15RB#0	2.685	2.892	PASS
Band5	3MHz	QPSK	20525	15RB#0	2.691	2.898	PASS
Band5	3MHz	QPSK	20635	15RB#0	2.697	2.976	PASS
Band5	3MHz	16QAM	20415	15RB#0	2.685	2.916	PASS
Band5	3MHz	16QAM	20525	15RB#0	2.673	2.880	PASS
Band5	3MHz	16QAM	20635	15RB#0	2.679	2.880	PASS
Band5	5MHz	QPSK	20425	25RB#0	4.486	4.890	PASS
Band5	5MHz	QPSK	20525	25RB#0	4.476	4.750	PASS
Band5	5MHz	QPSK	20625	25RB#0	4.486	4.820	PASS
Band5	5MHz	16QAM	20425	25RB#0	4.476	4.760	PASS
Band5	5MHz	16QAM	20525	25RB#0	4.466	4.760	PASS
Band5	5MHz	16QAM	20625	25RB#0	4.486	4.840	PASS
Band5	10MHz	QPSK	20450	50RB#0	8.951	9.680	PASS
Band5	10MHz	QPSK	20525	50RB#0	8.951	9.540	PASS
Band5	10MHz	QPSK	20600	50RB#0	8.951	9.480	PASS
Band5	10MHz	16QAM	20450	50RB#0	8.951	9.520	PASS
Band5	10MHz	16QAM	20525	50RB#0	8.951	9.420	PASS
Band5	10MHz	16QAM	20600	50RB#0	8.971	9.380	PASS

### 4.2. Test Plots

Band5-1.4MHz-QPSK-20407-6RB#0-1.094

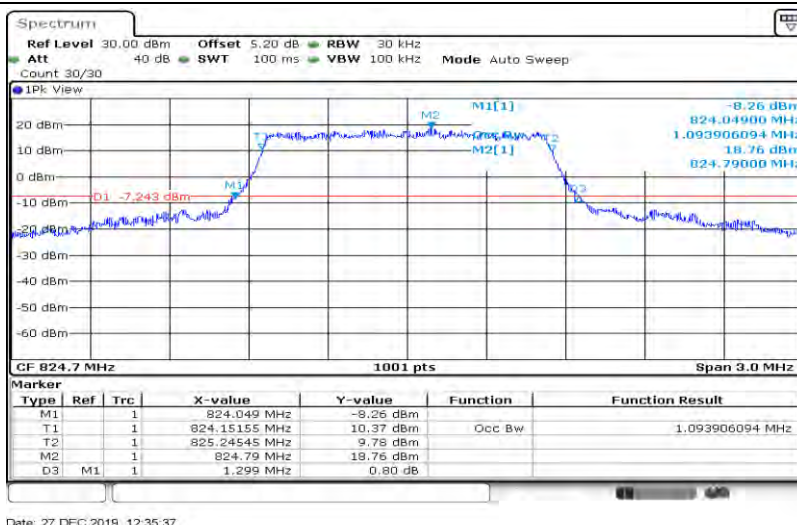


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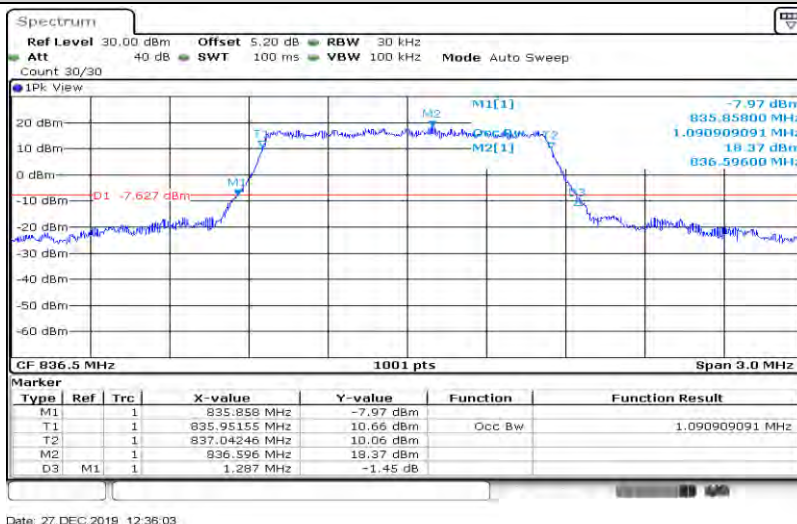
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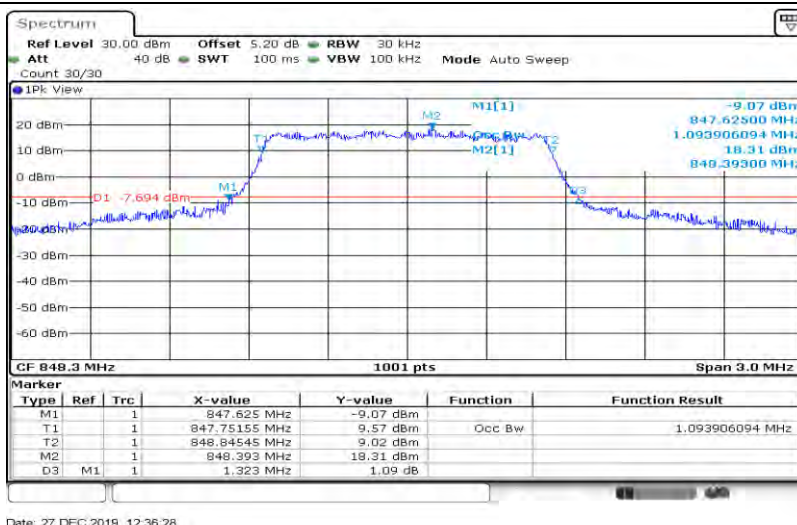
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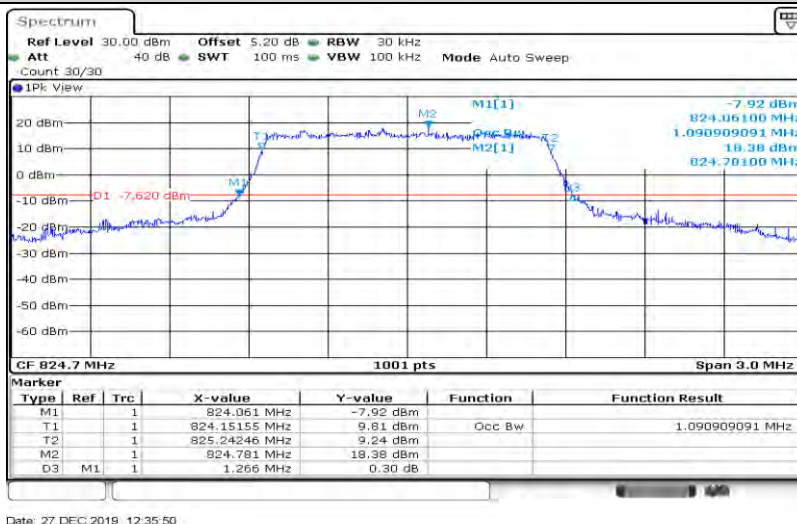
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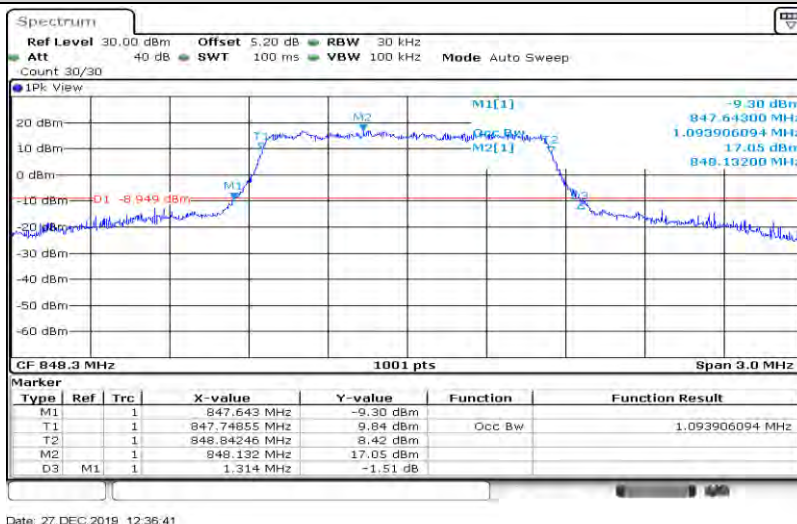


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Band5-1.4MHz-16QAM-20643-6RB#0-1.094

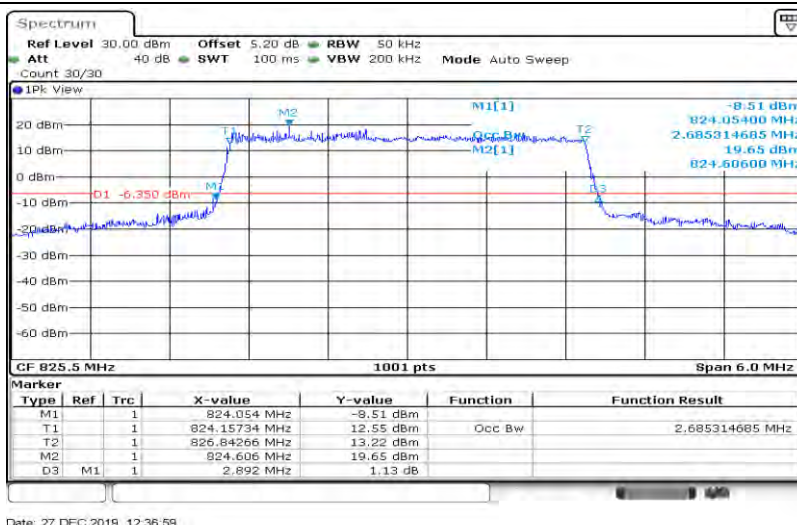


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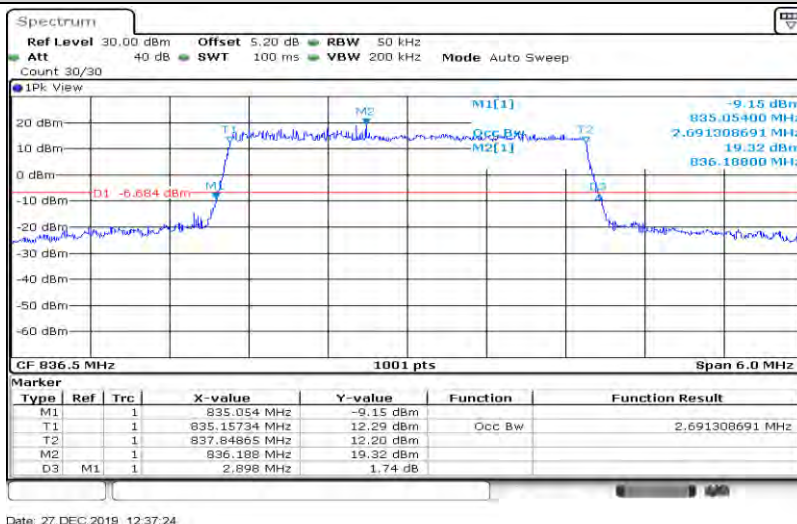


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Band5-3MHz-QPSK-20525-15RB#0-2.691



Band5-3MHz-QPSK-20635-15RB#0-2.697



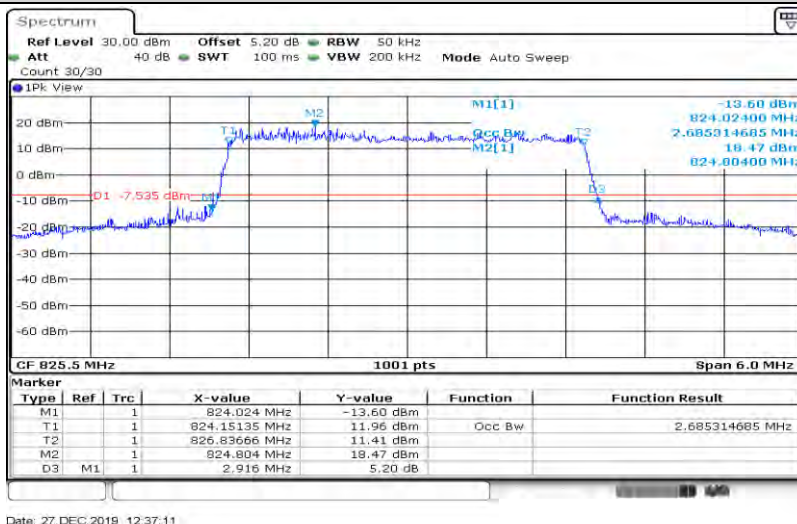
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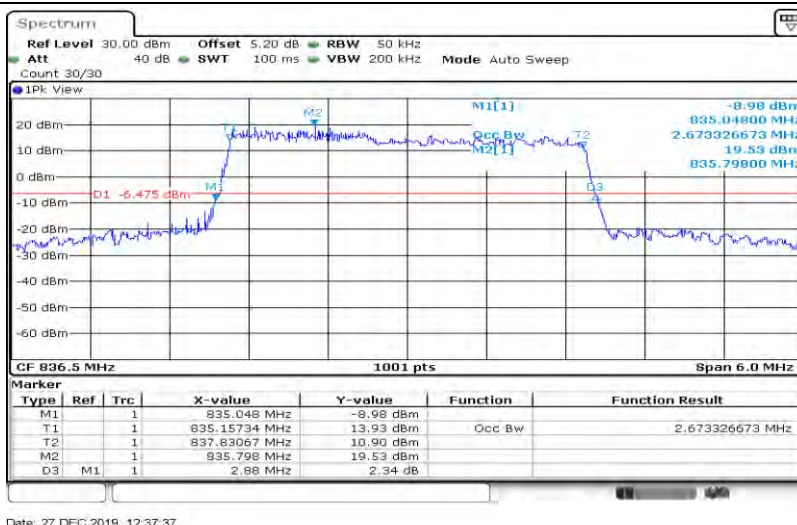


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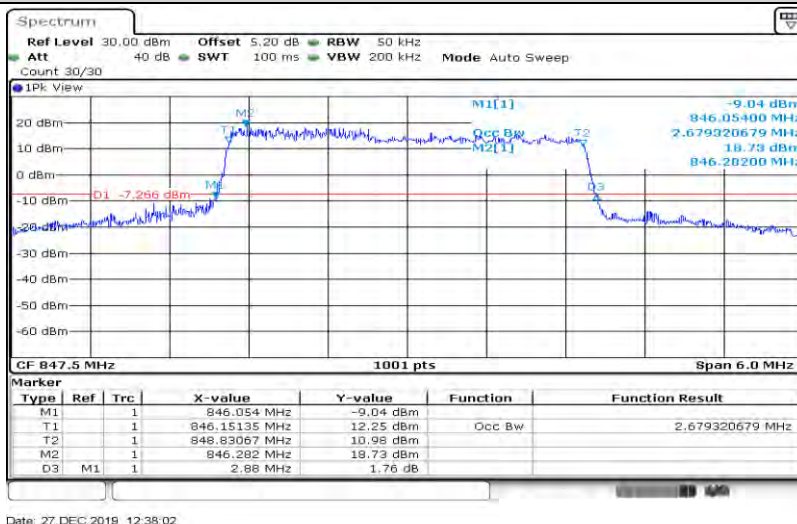


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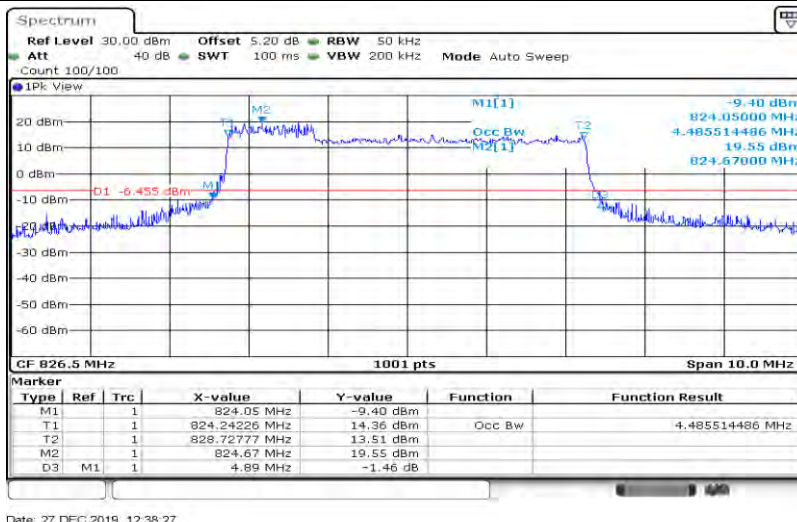


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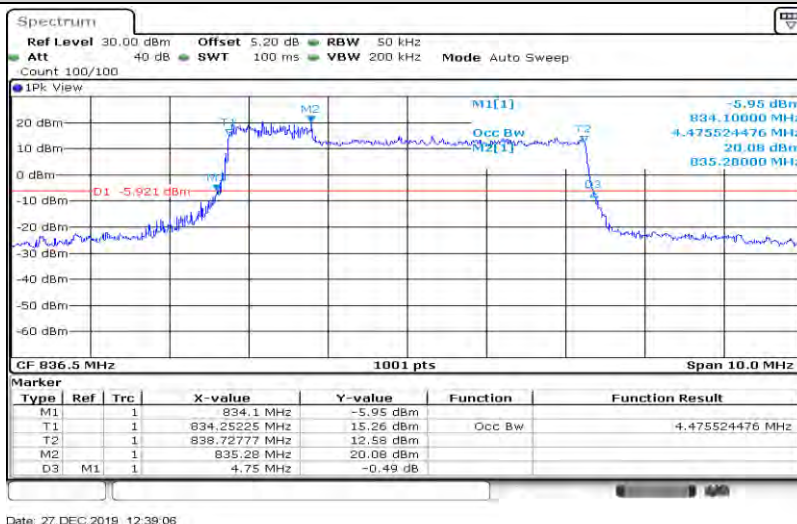


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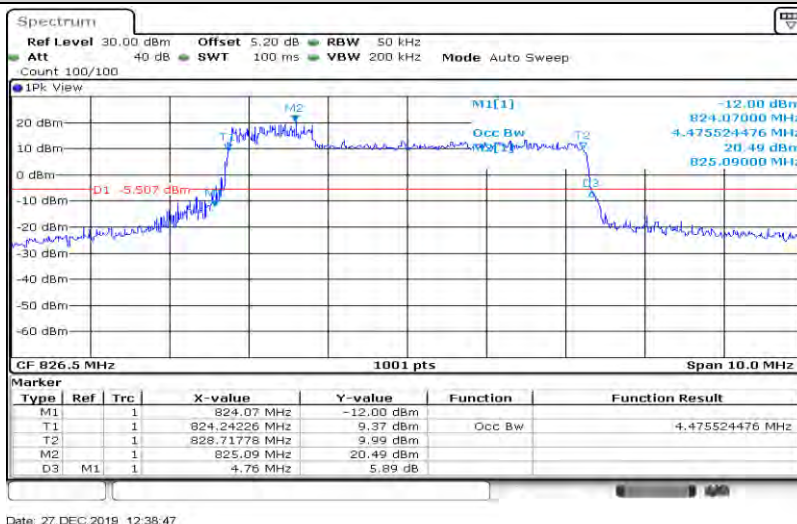


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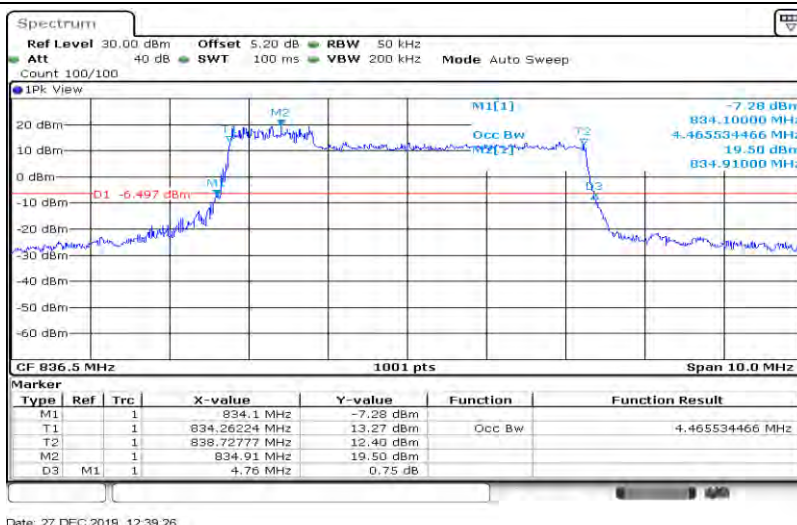


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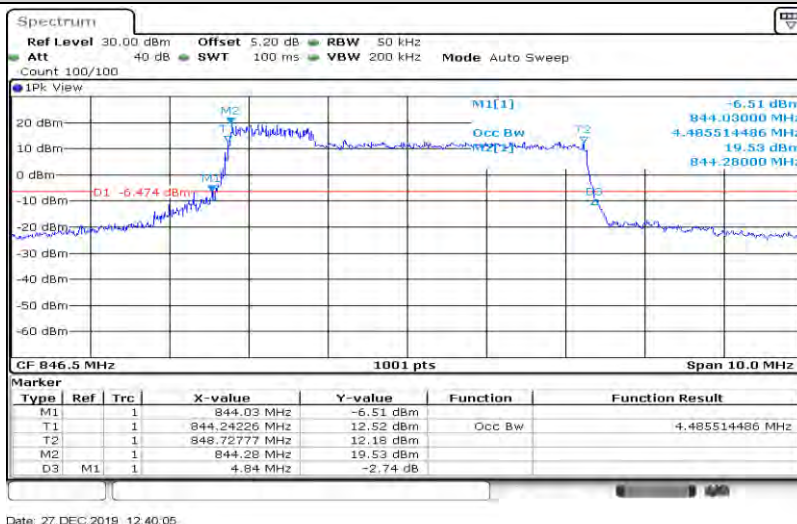


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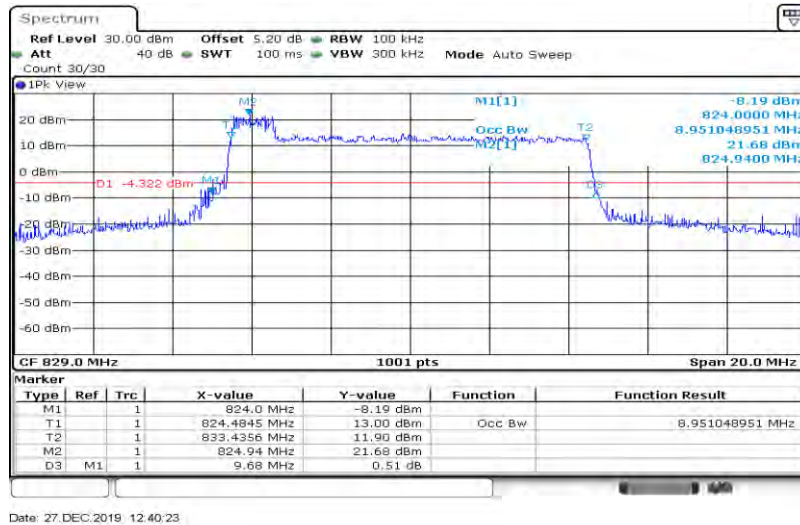


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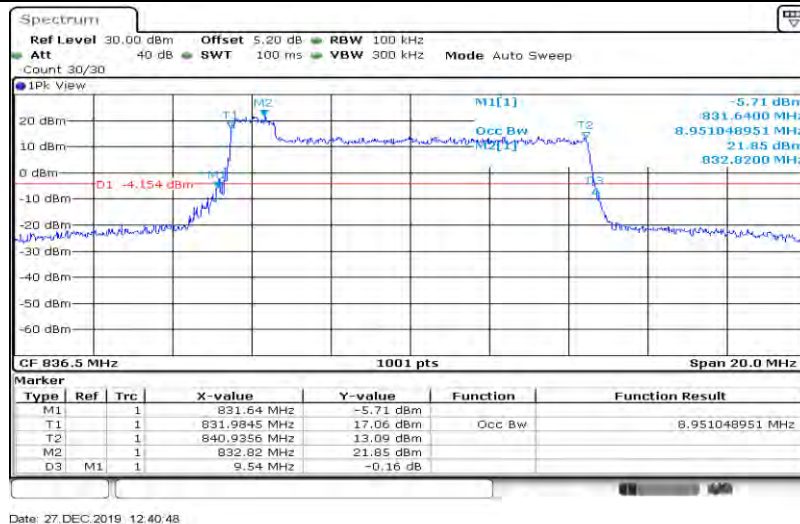


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Band5-10MHz-QPSK-20525-50RB#0-8.951



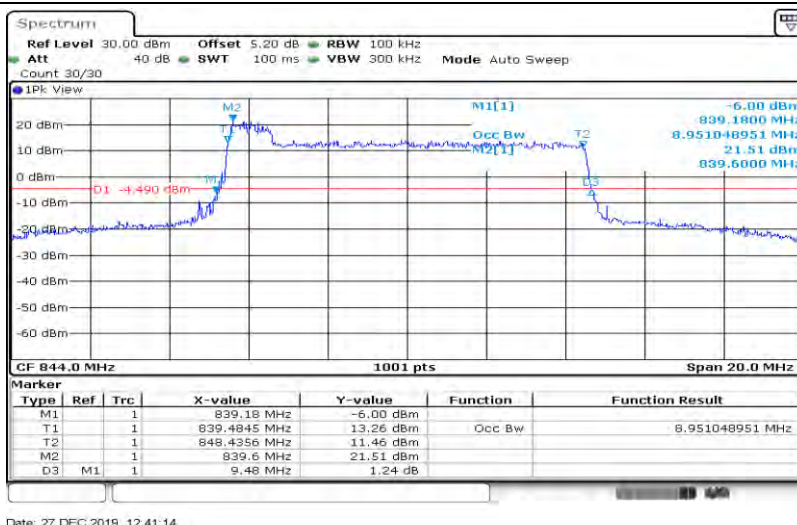
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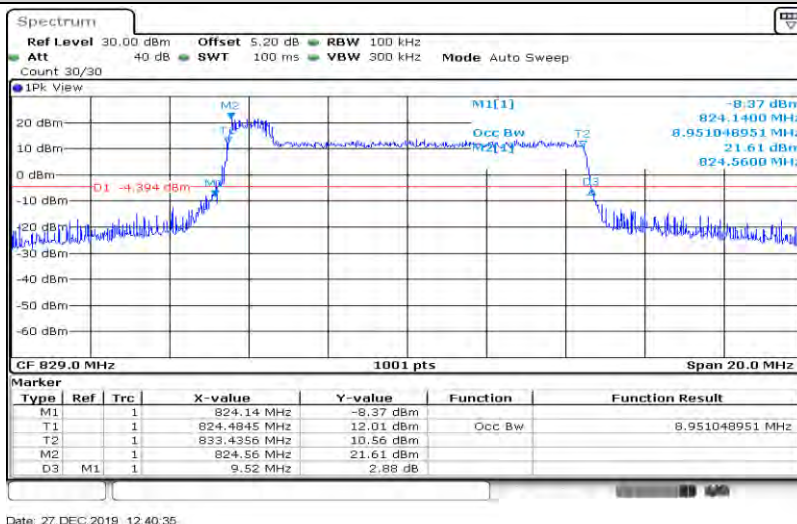
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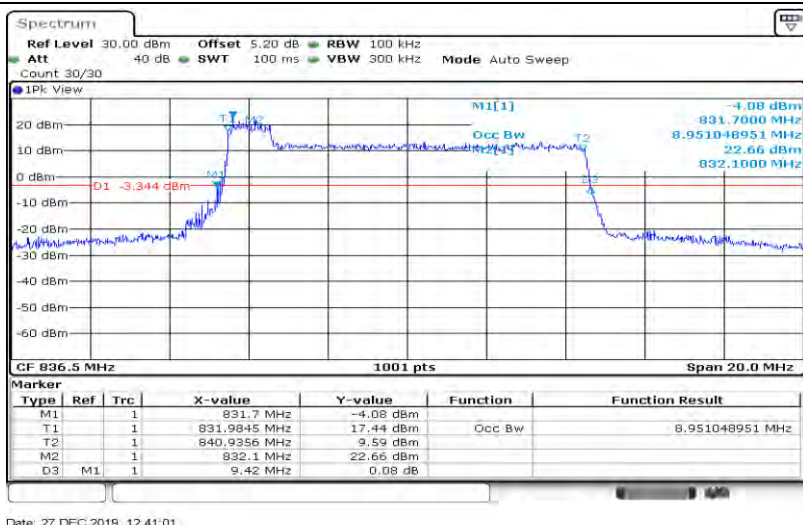


Band5-10MHz-16QAM-20450-50RB#0-8.951

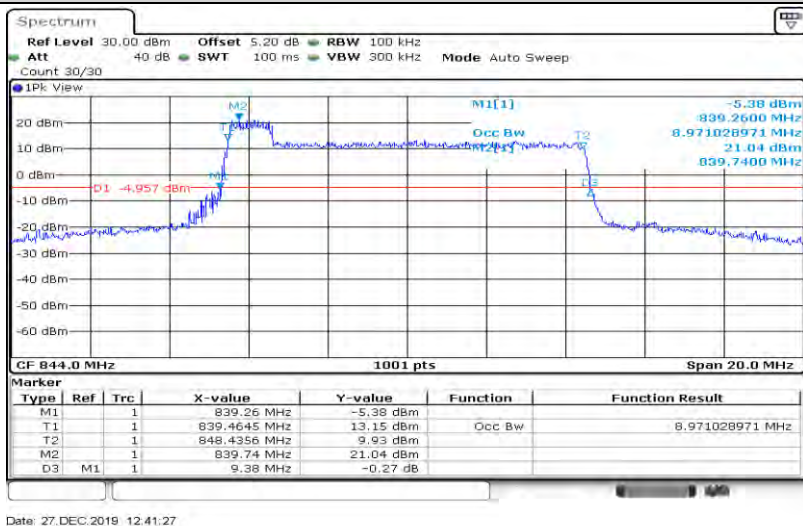


Band5-10MHz-16QAM-20525-50RB#0-8.951





## Band5-10MHz-16QAM-20600-50RB#0-8.971



## 5. Band Edge Compliance

### 5.1. Test Plots

Band5-1.4MHz-QPSK-20407-1RB#0



Band5-1.4MHz-QPSK-20407-6RB#0



Band5-1.4MHz-QPSK-20643-1RB#5



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Band5-1.4MHz-QPSK-20643-6RB#0



Band5-1.4MHz-16QAM-20407-1RB#0





Band5-1.4MHz-16QAM-20407-6RB#0



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Band5-1.4MHz-16QAM-20643-6RB#0



Band5-3MHz-QPSK-20415-1RB#0



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Band5-3MHz-QPSK-20415-15RB#0



Band5-3MHz-QPSK-20635-1RB#14



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Band5-3MHz-QPSK-20635-15RB#0



Band5-3MHz-16QAM-20415-1RB#0



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Band5-5MHz-QPSK-20425-25RB#0

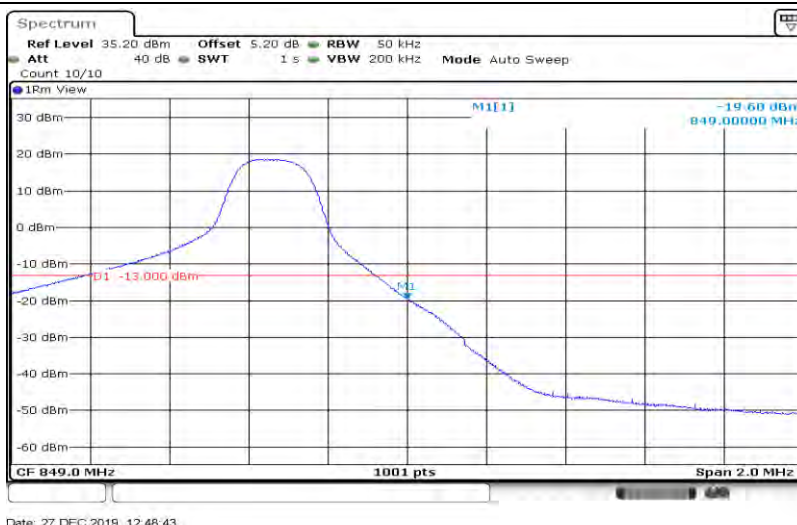


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Band5-5MHz-16QAM-20625-1RB#24





Band5-5MHz-16QAM-20625-25RB#0



Band5-10MHz-QPSK-20450-1RB#0





Band5-10MHz-QPSK-20450-50RB#0



Band5-10MHz-QPSK-20600-1RB#49



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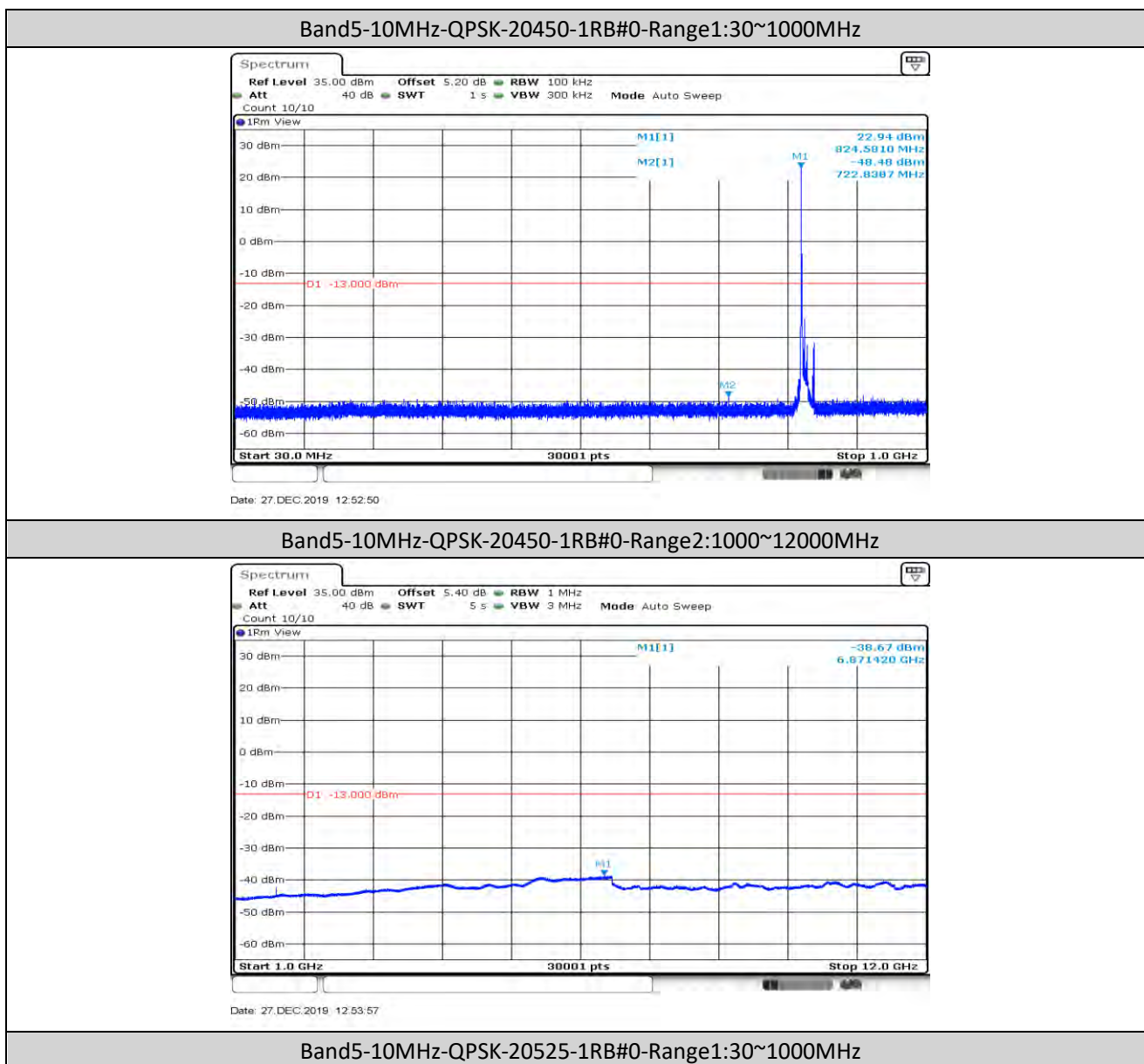


## 6. Spurious Emission at Antenna Terminal

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  $< RBW/2$  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.

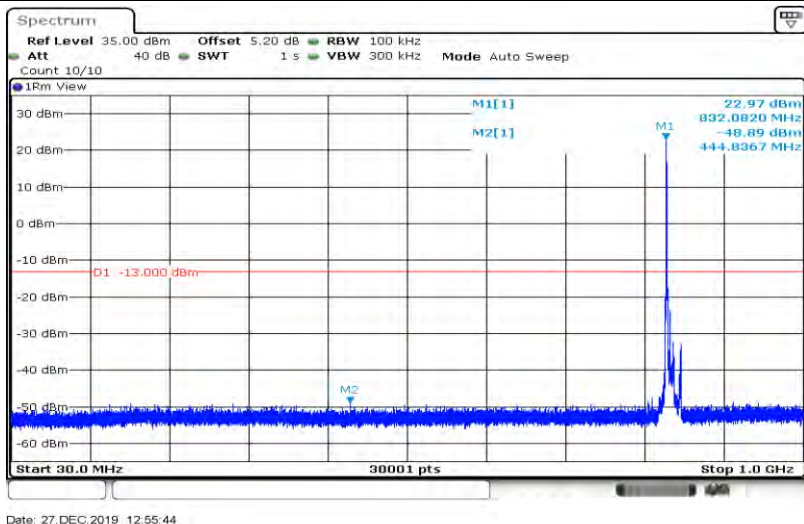
Remark2: only the worst case data displayed in this report.

### 6.1. Test Plots

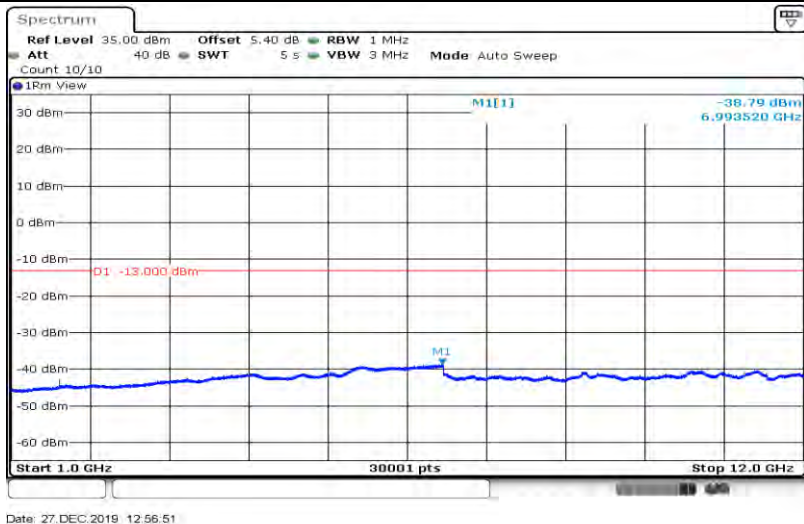


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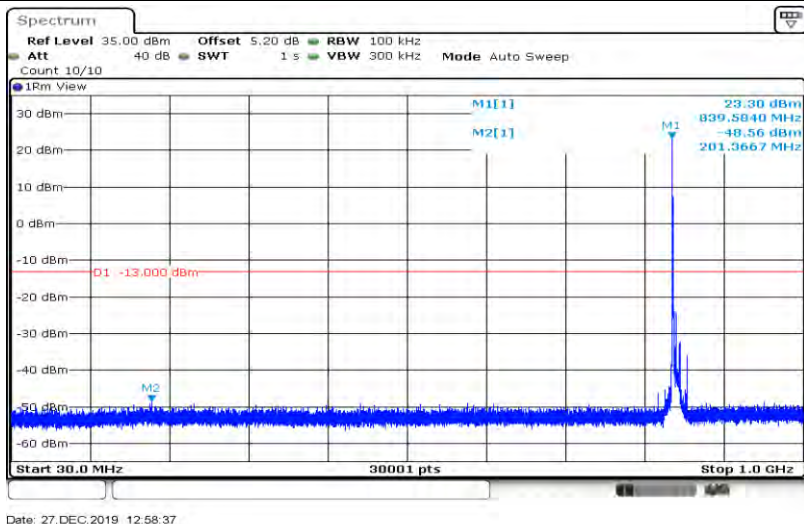


Band5-10MHz-QPSK-20600-1RB#0-Range1:30~1000MHz

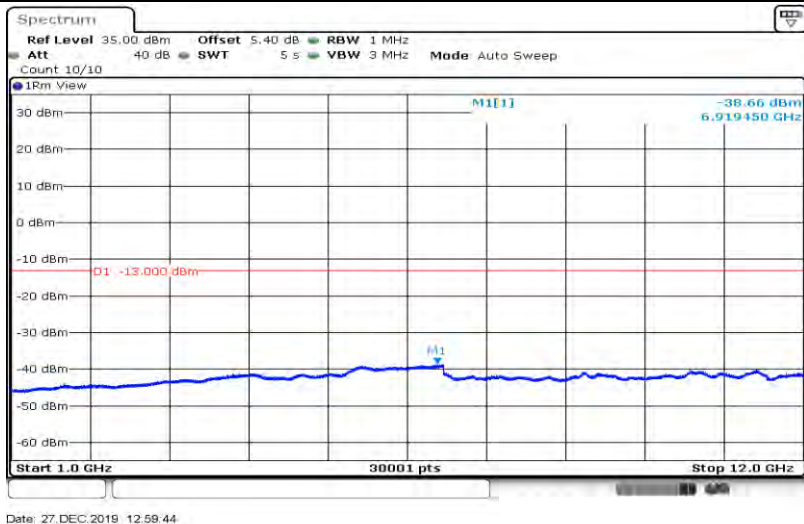


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**Band5-10MHz-QPSK-20600-1RB#0-Range2:1000~12000MHz**



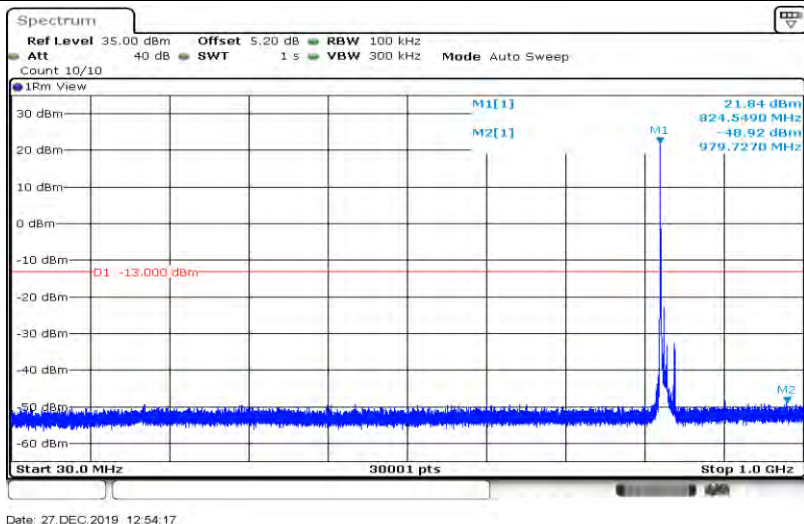
**Band5-10MHz-16QAM-20450-1RB#0-Range1:30~1000MHz**



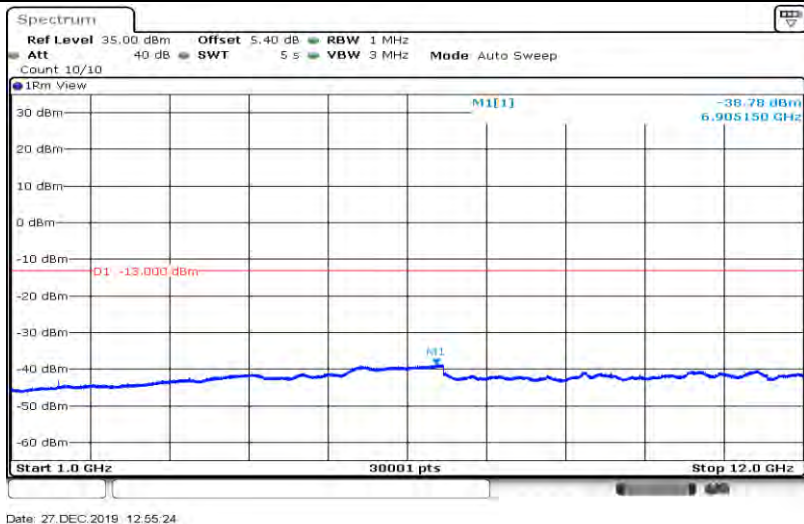
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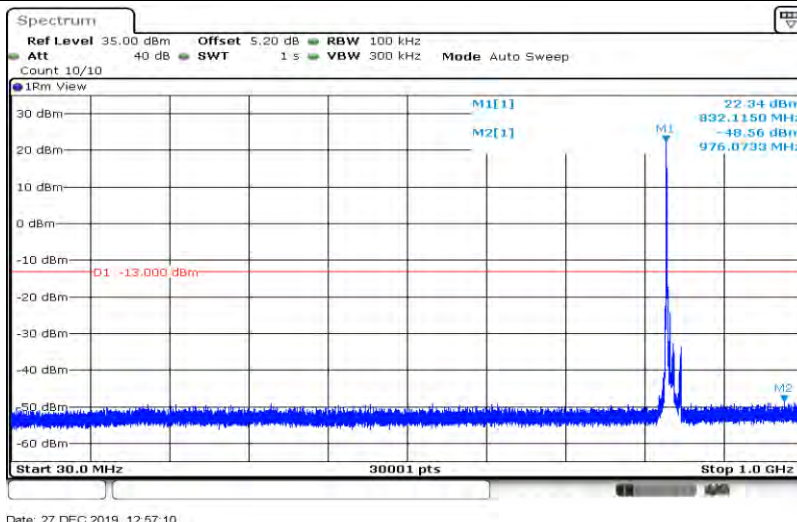


Band5-10MHz-16QAM-20450-1RB#0-Range2:1000~12000MHz

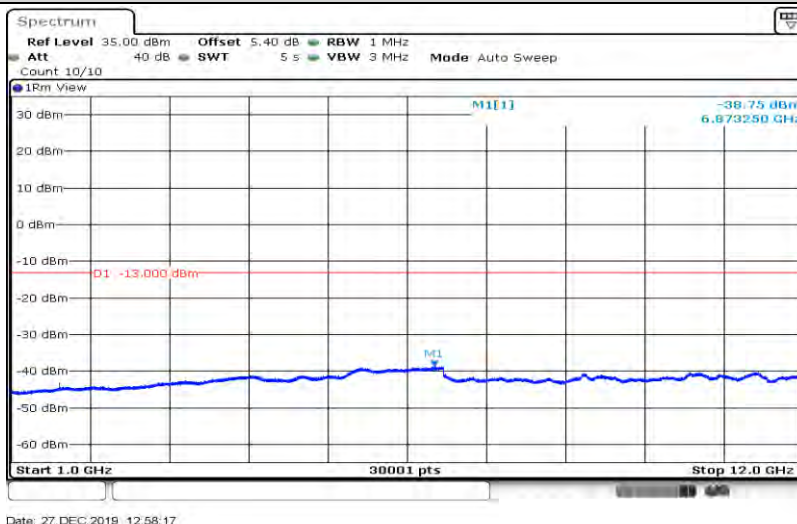


Band5-10MHz-16QAM-20525-1RB#0-Range1:30~1000MHz





**Band5-10MHz-16QAM-20525-1RB#0-Range2:1000~12000MHz**

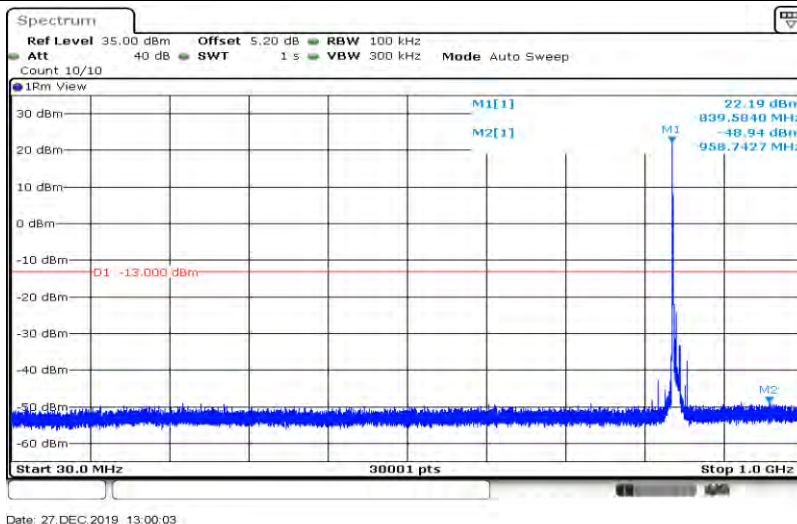


**Band5-10MHz-16QAM-20600-1RB#0-Range1:30~1000MHz**

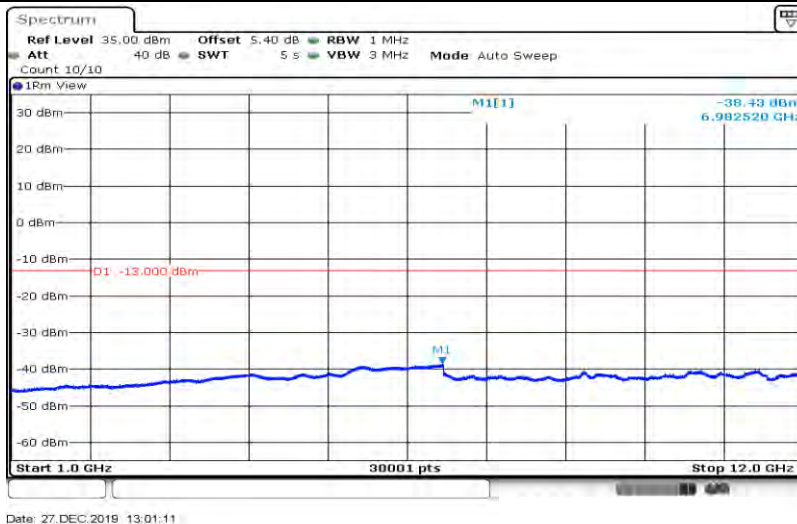


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**Band5-10MHz-16QAM-20600-1RB#0-Range2:1000~12000MHz**



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## 7. Field Strength of Spurious Radiation

### 7.1. Test Mode =LTE/TM1

#### 7.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
108.8649	-62.54	-13.00	49.54	Vertical
1648.9298	-60.60	-13.00	47.60	Vertical
4122.6374	-51.92	-13.00	38.92	Vertical
4947.8649	-45.90	-13.00	32.90	Vertical
5772.2924	-59.33	-13.00	46.33	Vertical
7421.3474	-54.56	-13.00	41.56	Vertical
42.7561	-62.64	-13.00	49.64	Horizontal
1648.9298	-57.97	-13.00	44.97	Horizontal
2417.4835	-44.25	-13.00	31.25	Horizontal
4123.0374	-51.21	-13.00	38.21	Horizontal
4947.6649	-46.47	-13.00	33.47	Horizontal
5772.2924	-49.88	-13.00	36.88	Horizontal

#### 7.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
114.0547	-62.19	-13.00	49.19	Vertical
1664.1328	-60.71	-13.00	47.71	Vertical
4160.4387	-53.35	-13.00	40.35	Vertical
4992.4664	-46.51	-13.00	33.51	Vertical
5824.6942	-60.44	-13.00	47.44	Vertical
8805.3935	-55.24	-13.00	42.24	Vertical
42.8531	-61.89	-13.00	48.89	Horizontal
1664.1328	-59.08	-13.00	46.08	Horizontal
4160.6387	-49.96	-13.00	36.96	Horizontal
4992.4664	-46.53	-13.00	33.53	Horizontal
5824.8942	-51.15	-13.00	38.15	Horizontal
6656.9219	-53.03	-13.00	40.03	Horizontal



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### 7.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
109.8835	-62.65	-13.00	49.65	Vertical
1678.9358	-59.18	-13.00	46.18	Vertical
3358.2119	-60.97	-13.00	47.97	Vertical
4198.0399	-50.27	-13.00	37.27	Vertical
5037.4679	-45.38	-13.00	32.38	Vertical
5877.0959	-56.95	-13.00	43.95	Vertical
41.9801	-63.07	-13.00	50.07	Horizontal
1679.3359	-58.32	-13.00	45.32	Horizontal
3358.4119	-59.30	-13.00	46.30	Horizontal
4197.8399	-48.62	-13.00	35.62	Horizontal
5037.4679	-46.24	-13.00	33.24	Horizontal
5877.2959	-49.25	-13.00	36.25	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.



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## 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
Band5	10MHz	QPSK	20450	50RB#0	VL	NT	-4.40	-0.005308	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	VN	NT	-1.70	-0.002051	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	VH	NT	-8.10	-0.009771	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VL	NT	-5.50	-0.006575	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VN	NT	-5.10	-0.006097	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VH	NT	-9.80	-0.011715	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VL	NT	-2.80	-0.003318	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VN	NT	-6.20	-0.007346	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VH	NT	-8.00	-0.009479	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VL	NT	-2.80	-0.003378	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VN	NT	-3.40	-0.004101	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VH	NT	-3.00	-0.003619	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VL	NT	-5.60	-0.006695	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VN	NT	-8.40	-0.010042	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VH	NT	-1.80	-0.002152	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VL	NT	-6.40	-0.007583	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VN	NT	-3.90	-0.004621	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VH	NT	-6.80	-0.008057	±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
Band5	10MHz	QPSK	20450	50RB#0	NV	-30	-3.10	-0.003739	±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	-9.70	-0.011701	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	10	-9.30	-0.011218	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	20	-2.20	-0.002654	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	30	-6.20	-0.007479	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	40	-8.00	-0.009650	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	50	-8.10	-0.009771	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	-30	-6.70	-0.008010	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	-20	-2.70	-0.003228	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	0	-2.40	-0.002869	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	10	-2.10	-0.002510	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	20	-1.70	-0.002032	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	30	-1.00	-0.001195	±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	-6.50	-0.007770	±2.5	PASS



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Band5	10MHz	QPSK	20600	50RB#0	NV	-30	-5.50	-0.006517	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	-20	-1.70	-0.002014	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	0	-7.30	-0.008649	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	10	-11.80	-0.013981	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	20	-2.60	-0.003081	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	30	-5.20	-0.006161	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	40	-4.30	-0.005095	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	50	-3.80	-0.004502	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	-30	-6.40	-0.007720	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	-20	-11.10	-0.013390	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	0	-12.20	-0.014717	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	10	-6.80	-0.008203	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	20	-7.90	-0.009530	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	30	-5.90	-0.007117	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	40	-10.70	-0.012907	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	50	-4.40	-0.005308	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	-30	-7.00	-0.008368	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	-20	-5.90	-0.007053	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	0	-3.60	-0.004304	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	10	-8.90	-0.010640	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	20	-0.30	-0.000359	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	30	-6.40	-0.007651	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	40	-6.30	-0.007531	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	50	-1.50	-0.001793	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	-30	-4.00	-0.004739	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	-20	-3.70	-0.004384	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	0	-4.90	-0.005806	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	10	-8.80	-0.010427	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	20	-2.20	-0.002607	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	30	-4.80	-0.005687	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	40	-5.50	-0.006517	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	50	-6.60	-0.007820	±2.5	PASS



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