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# Appendix B

**E-UTRA BAND 12** 

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# 1. Effective (Isotropic) Radiated Power

#### 1.1.Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Result (dBm)	ERP (dBm)	Limit (dBm)	Verdict
Band12	1.4MHz	QPSK	23017	1RB#0	23.04	19.59	34.77	PASS
Band12	1.4MHz	QPSK	23017	1RB#2	23.19	19.74	34.77	PASS
Band12	1.4MHz	QPSK	23017	1RB#5	23.20	19.75	34.77	PASS
Band12	1.4MHz	QPSK	23017	3RB#0	23.29	19.84	34.77	PASS
Band12	1.4MHz	QPSK	23017	3RB#1	23.38	19.93	34.77	PASS
Band12	1.4MHz	QPSK	23017	3RB#3	23.35	19.90	34.77	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	22.14	18.69	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#0	23.31	19.86	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#2	23.37	19.92	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#5	22.96	19.51	34.77	PASS
Band12	1.4MHz	QPSK	23095	3RB#0	23.33	19.88	34.77	PASS
Band12	1.4MHz	QPSK	23095	3RB#1	23.53	20.08	34.77	PASS
Band12	1.4MHz	QPSK	23095	3RB#3	23.28	19.83	34.77	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	22.36	18.91	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	23.15	19.70	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#2	23.23	19.78	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#5	23.08	19.63	34.77	PASS
Band12	1.4MHz	QPSK	23173	3RB#0	23.19	19.74	34.77	PASS
Band12	1.4MHz	QPSK	23173	3RB#1	23.44	19.99	34.77	PASS
Band12	1.4MHz	QPSK	23173	3RB#3	23.29	19.84	34.77	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	22.27	18.82	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	21.61	18.16	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#2	21.86	18.41	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#5	21.64	18.19	34.77	PASS
Band12	1.4MHz	16QAM	23017	3RB#0	22.37	18.92	34.77	PASS
Band12	1.4MHz	16QAM	23017	3RB#1	22.43	18.98	34.77	PASS
Band12	1.4MHz	16QAM	23017	3RB#3	22.17	18.72	34.77	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	21.33	17.88	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#0	22.33	18.88	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#2	22.04	18.59	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#5	21.81	18.36	34.77	PASS
Band12	1.4MHz	16QAM	23095	3RB#0	22.63	19.18	34.77	PASS
Band12	1.4MHz	16QAM	23095	3RB#1	22.48	19.03	34.77	PASS
Band12	1.4MHz	16QAM	23095	3RB#3	22.52	19.07	34.77	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	21.37	17.92	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	21.84	18.39	34.77	PASS



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D140	4 4841.1-	400414	00470	400//0	04.05	40.50	04.77	DAGO
Band12	1.4MHz	16QAM	23173	1RB#2	21.95	18.50	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#5	21.76	18.31	34.77	PASS
Band12	1.4MHz	16QAM	23173	3RB#0	22.16	18.71	34.77	PASS
Band12	1.4MHz	16QAM	23173	3RB#1	22.28	18.83	34.77	PASS
Band12	1.4MHz	16QAM	23173	3RB#3	22.46	19.01	34.77	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	21.28	17.83	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#0	23.50	20.05	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#8	23.55	20.10	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#14	23.69	20.24	34.77	PASS
Band12	3MHz	QPSK	23025	8RB#0	22.12	18.67	34.77	PASS
Band12	3MHz	QPSK	23025	8RB#4	22.60	19.15	34.77	PASS
Band12	3MHz	QPSK	23025	8RB#7	22.48	19.03	34.77	PASS
Band12	3MHz	QPSK	23025	15RB#0	22.35	18.90	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#0	23.61	20.16	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#8	23.01	19.56	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#14	23.09	19.64	34.77	PASS
Band12	3MHz	QPSK	23095	8RB#0	22.54	19.09	34.77	PASS
Band12	3MHz	QPSK	23095	8RB#4	22.20	18.75	34.77	PASS
Band12	3MHz	QPSK	23095	8RB#7	22.23	18.78	34.77	PASS
Band12	3MHz	QPSK	23095	15RB#0	22.51	19.06	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#0	23.55	20.10	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#8	23.07	19.62	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#14	23.17	19.72	34.77	PASS
Band12	3MHz	QPSK	23165	8RB#0	22.51 19.06	19.06	34.77	PASS
Band12	3MHz	QPSK	23165	8RB#4	22.21	18.76	34.77	PASS
Band12	3MHz	QPSK	23165	8RB#7	22.19	18.74	34.77	PASS
Band12	3MHz	QPSK	23165	15RB#0	22.35	18.90	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#0	21.83	18.38	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#8	22.26	18.81	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#14	22.06	18.61	34.77	PASS
Band12	3MHz	16QAM	23025	8RB#0	21.21	17.76	34.77	PASS
Band12	3MHz	16QAM	23025	8RB#4	21.20	17.75	34.77	PASS
Band12	3MHz	16QAM	23025	8RB#7	21.14	17.69	34.77	PASS
Band12	3MHz	16QAM	23025	15RB#0	21.53	18.08	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#0	21.88	18.43	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#8	21.97	18.52	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#14	21.97	18.52	34.77	PASS
Band12	3MHz	16QAM	23095	8RB#0	21.34	17.89	34.77	PASS
Band12	3MHz	16QAM	23095	8RB#4	21.26	17.81	34.77	PASS
Band12	3MHz	16QAM	23095	8RB#7	21.60	18.15	34.77	PASS
Band12	3MHz	16QAM	23095	15RB#0	21.30	17.85	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#0	21.95	18.50	34.77	PASS
Dallu IZ	SIVITZ	IOQAW	23105	IND#U	∠1.90	10.50	34.11	FASS

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Dond10	2MH=	16001	22465	4DD#0	22.40	10.72	24.77	DACC
Band12	3MHz	16QAM	23165	1RB#8	22.18	18.73	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#14	21.90	18.45	34.77	PASS
Band12	3MHz	16QAM	23165	8RB#0	21.08	17.63	34.77	PASS
Band12	3MHz	16QAM	23165	8RB#4	21.24	17.79	34.77	PASS
Band12	3MHz	16QAM	23165	8RB#7	21.15	17.70	34.77	PASS
Band12	3MHz	16QAM	23165	15RB#0	21.30	17.85	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#0	23.33	19.88	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#12	23.79	20.34	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#24	23.58	20.13	34.77	PASS
Band12	5MHz	QPSK	23035	12RB#0	22.18	18.73	34.77	PASS
Band12	5MHz	QPSK	23035	12RB#6	22.61	19.16	34.77	PASS
Band12	5MHz	QPSK	23035	12RB#13	22.54	19.09	34.77	PASS
Band12	5MHz	QPSK	23035	25RB#0	22.47	19.02	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#0	23.74	20.29	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#12	22.85	19.40	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#24	23.19	19.74	34.77	PASS
Band12	5MHz	QPSK	23095	12RB#0	22.58	19.13	34.77	PASS
Band12	5MHz	QPSK	23095	12RB#6	22.20	18.75	34.77	PASS
Band12	5MHz	QPSK	23095	12RB#13	22.23	18.78	34.77	PASS
Band12	5MHz	QPSK	23095	25RB#0	22.51	19.06	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#0	23.28	19.83	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#12	23.40	19.95	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#24	22.77	19.32	34.77	PASS
Band12	5MHz	QPSK	23155	12RB#0	22.49	19.04	34.77	PASS
Band12	5MHz	QPSK	23155	12RB#6	22.58	19.13	34.77	PASS
Band12	5MHz	QPSK	23155	12RB#13	22.24	18.79	34.77	PASS
Band12	5MHz	QPSK	23155	25RB#0	22.42	18.97	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#0	22.23	18.78	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#12	22.15	18.70	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#24	21.85	18.40	34.77	PASS
Band12	5MHz	16QAM	23035	12RB#0	21.41	17.96	34.77	PASS
Band12	5MHz	16QAM	23035	12RB#6	21.46	18.01	34.77	PASS
Band12	5MHz	16QAM	23035	12RB#13	21.40	17.95	34.77	PASS
Band12	5MHz	16QAM	23035	25RB#0	21.59	18.14	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#0	21.63	18.18	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#12	22.45	19.00	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#24	21.70	18.25	34.77	PASS
Band12	5MHz	16QAM	23095	12RB#0	21.49	18.04	34.77	PASS
Band12	5MHz	16QAM	23095	12RB#6	21.28	17.83	34.77	PASS
Band12	5MHz	16QAM	23095	12RB#13	21.14	17.69	34.77	PASS
Band12	5MHz	16QAM	23095	25RB#0	21.35	17.90	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#0	22.37	18.92	34.77	PASS

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D = 114.0	584L-	400414	00455	4DD#40	00.00	40.04	04.77	DAGO
Band12	5MHz	16QAM	23155	1RB#12	22.29	18.84	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#24	22.23	18.78	34.77	PASS
Band12	5MHz	16QAM	23155	12RB#0	21.29	17.84	34.77	PASS
Band12	5MHz	16QAM	23155	12RB#6	21.41	17.96	34.77	PASS
Band12	5MHz	16QAM	23155	12RB#13	21.34	17.89	34.77	PASS
Band12	5MHz	16QAM	23155	25RB#0	21.46	18.01	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#0	23.32	19.87	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#24	23.84	20.39	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#49	22.18	18.73	34.77	PASS
Band12	10MHz	QPSK	23060	25RB#0	23.01	19.56	34.77	PASS
Band12	10MHz	QPSK	23060	25RB#12	22.39	18.94	34.77	PASS
Band12	10MHz	QPSK	23060	25RB#25	22.06	18.61	34.77	PASS
Band12	10MHz	QPSK	23060	50RB#0	22.58	19.13	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#0	23.77	20.32	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#24	22.54	19.09	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#49	23.26	19.81	34.77	PASS
Band12	10MHz	QPSK	23095	25RB#0	22.63	19.18	34.77	PASS
Band12	10MHz	QPSK	23095	25RB#12	22.06	18.61	34.77	PASS
Band12	10MHz	QPSK	23095	25RB#25	22.21	18.76	34.77	PASS
Band12	10MHz	QPSK	23095	50RB#0	22.50	19.05	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#0	23.53	20.08	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#24	23.26	19.81	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#49	23.16	19.71	34.77	PASS
Band12	10MHz	QPSK	23130	25RB#0	22.49	19.04	34.77	PASS
Band12	10MHz	QPSK	23130	25RB#12	22.43	18.98	34.77	PASS
Band12	10MHz	QPSK	23130	25RB#25	22.52	19.07	34.77	PASS
Band12	10MHz	QPSK	23130	50RB#0	22.27	18.82	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#0	21.69	18.24	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#24	22.38	18.93	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#49	21.90	18.45	34.77	PASS
Band12	10MHz	16QAM	23060	25RB#0	21.54	18.09	34.77	PASS
Band12	10MHz	16QAM	23060	25RB#12	21.44	17.99	34.77	PASS
Band12	10MHz	16QAM	23060	25RB#25	21.50	18.05	34.77	PASS
Band12	10MHz	16QAM	23060	50RB#0	21.61	18.16	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#0	22.35	18.90	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#24	22.35	18.90	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#49	22.34	18.89	34.77	PASS
Band12	10MHz	16QAM	23095	25RB#0	21.54	18.09	34.77	PASS
Band12	10MHz	16QAM	23095	25RB#12	21.32	17.87	34.77	PASS
Band12	10MHz	16QAM	23095	25RB#25	21.31	17.86	34.77	PASS
Band12	10MHz	16QAM	23095	50RB#0	21.41	17.96	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#0	21.93	18.48	34.77	PASS

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Band12	10MHz	16QAM	23130	1RB#24	22.01	18.56	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#49	21.70	18.25	34.77	PASS
Band12	10MHz	16QAM	23130	25RB#0	21.46	18.01	34.77	PASS
Band12	10MHz	16QAM	23130	25RB#12	21.46	18.01	34.77	PASS
Band12	10MHz	16QAM	23130	25RB#25	21.12	17.67	34.77	PASS
Band12	10MHz	16QAM	23130	50RB#0	21.42	17.97	34.77	PASS

#### Remark:

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

ERP [dBm] = SGP [dBm] - Cable Loss [dB] + Gain [dBd]

EIRP [dBm] = SGP [dBm] - Cable Loss [dB] + Gain [dBi]

b: SGP=Signal Generator Level

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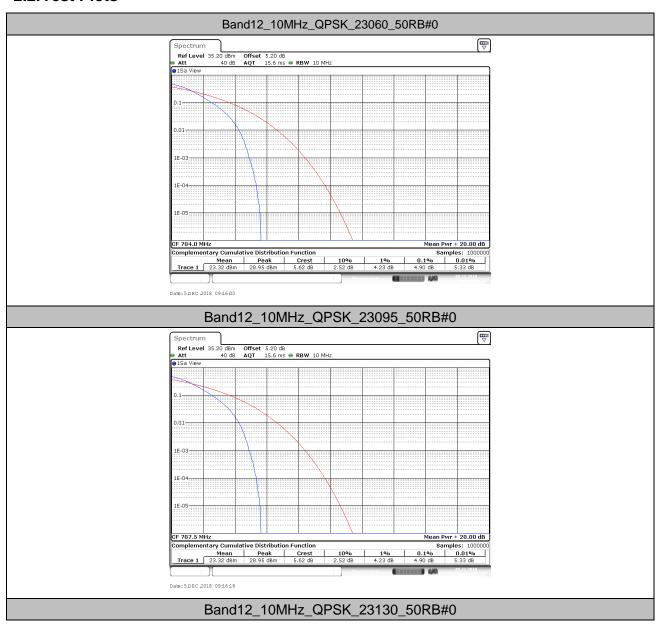
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## 2. Peak-to-Average Ratio(CCDF)

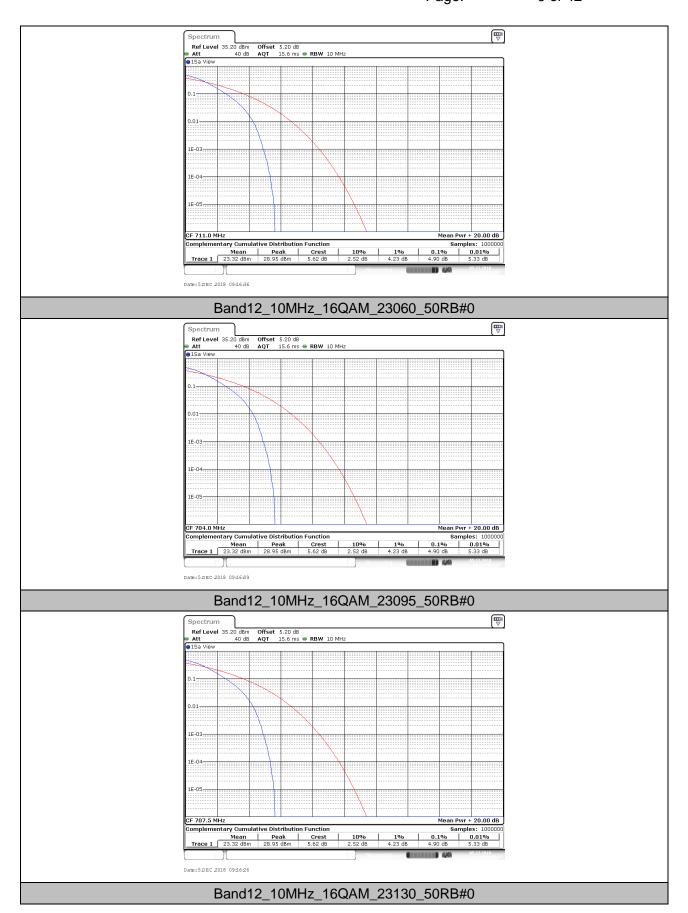
#### 2.1.Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band12	10MHz	QPSK	23060	50RB#0	4.90	13	PASS
Band12	10MHz	QPSK	23095	50RB#0	4.90	13	PASS
Band12	10MHz	QPSK	23130	50RB#0	4.90	13	PASS
Band12	10MHz	16QAM	23060	50RB#0	4.90	13	PASS
Band12	10MHz	16QAM	23095	50RB#0	4.90	13	PASS
Band12	10MHz	16QAM	23130	50RB#0	4.90	13	PASS

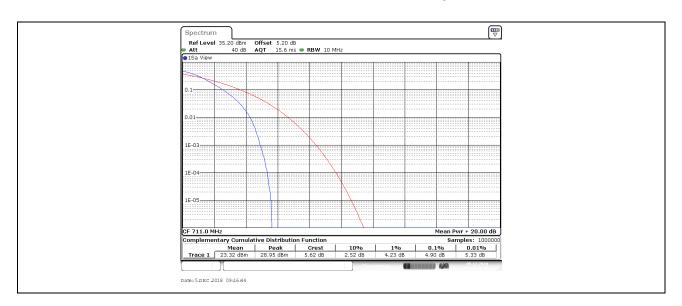
#### 2.2. Test Plots



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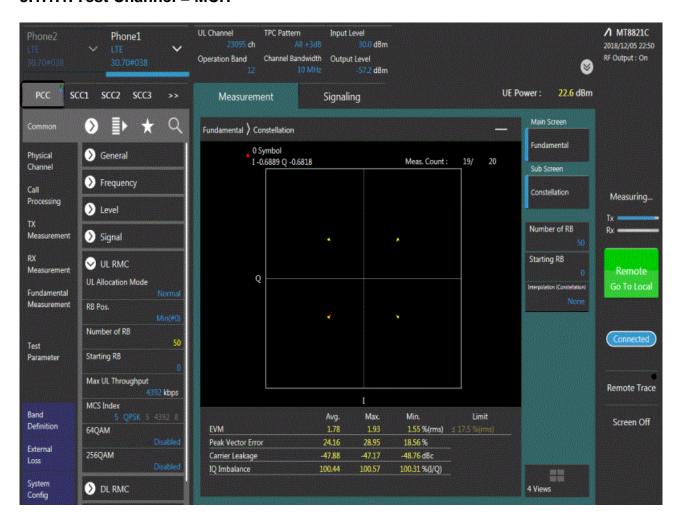
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## 3. Modulation Characteristics

3.1.Test BAND = LTE BAND12

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

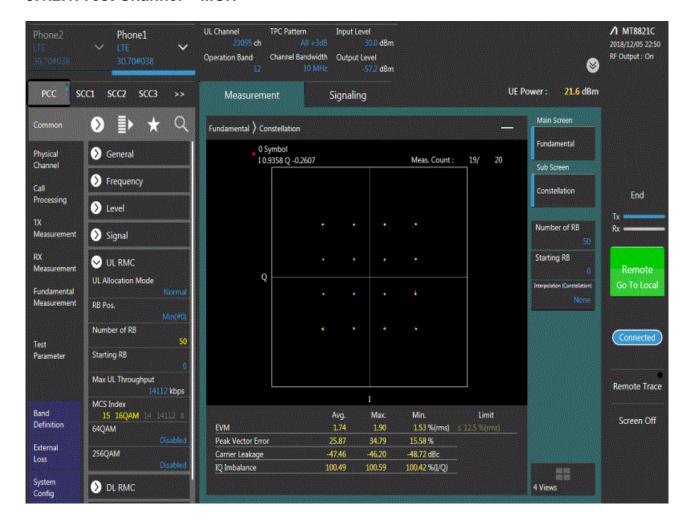
#### 3.1.1.1. Test Channel = MCH



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

#### 3.1.2.1. Test Channel = MCH



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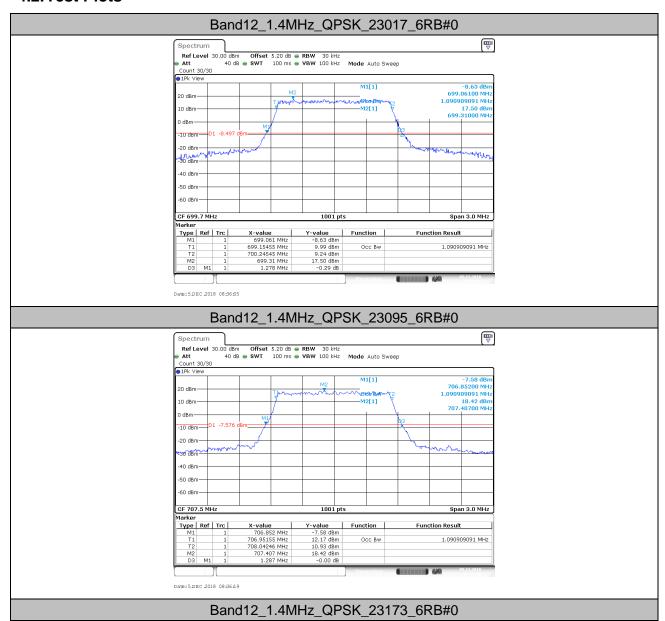
## 4. 26dB Bandwidth and Occupied Bandwidth

#### 4.1.Test Result

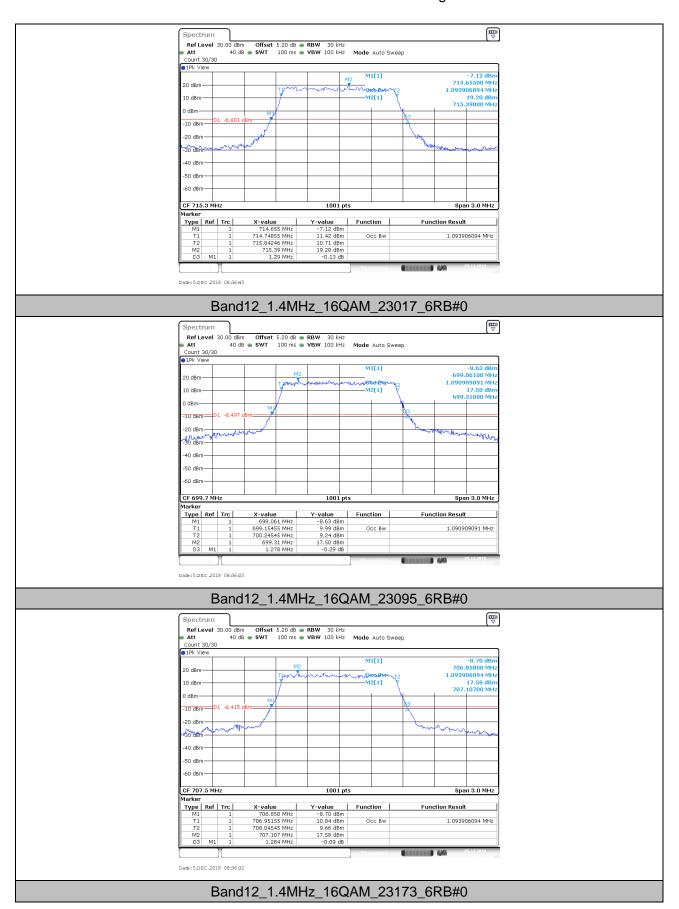
DAND	Do and width	Madulation	Channal	RB	Occupied	26dB	Vandiat				
BAND	Bandwidth	Modulation	Channel	Configuration	Bandwidth	Bandwidth	Verdict				
					(MHz)	(MHz)					
Band12	1.4MHz	QPSK	23017	6RB#0	1.091	1.278	PASS				
Band12	1.4MHz	QPSK	23095	6RB#0	1.091	1.287	PASS				
Band12	1.4MHz	QPSK	23173	6RB#0	1.094	1.290	PASS				
Band12	1.4MHz	16QAM	23017	6RB#0	1.091	1.278	PASS				
Band12	1.4MHz	16QAM	23095	6RB#0	1.094	1.284	PASS				
Band12	1.4MHz	16QAM	23173	6RB#0	1.091	1.275	PASS				
Band12	3MHz	QPSK	23025	15RB#0	2.691	2.976	PASS				
Band12	3MHz	QPSK	23095	15RB#0	2.697	2.988	PASS				
Band12	3MHz	QPSK	23165	15RB#0	2.697	2.982	PASS				
Band12	3MHz	16QAM	23025	15RB#0	2.679	2.958	PASS				
Band12	3MHz	16QAM	23095	15RB#0	2.685	2.982	PASS				
Band12	3MHz	16QAM	23165	15RB#0	2.685	2.976	PASS				
Band12	5MHz	QPSK	23035	25RB#0	4.466	4.900	PASS				
Band12	5MHz	QPSK	23095	25RB#0	4.476	4.950	PASS				
Band12	5MHz	QPSK	23155	25RB#0	4.466	4.900	PASS				
Band12	5MHz	16QAM	23035	25RB#0	4.476	4.910	PASS				
Band12	5MHz	16QAM	23095	25RB#0	4.486	4.970	PASS				
Band12	5MHz	16QAM	23155	25RB#0	4.476	4.910	PASS				
Band12	10MHz	QPSK	23060	50RB#0	8.891	9.640	PASS				
Band12	10MHz	QPSK	23095	50RB#0	8.931	9.780	PASS				
Band12	10MHz	QPSK	23130	50RB#0	8.891	9.600	PASS				
Band12	10MHz	16QAM	23060	50RB#0	8.911	9.700	PASS				
Band12	10MHz	16QAM	23095	50RB#0	8.951	9.840	PASS				
Band12	10MHz	16QAM	23130	50RB#0	8.911	9.580	PASS				

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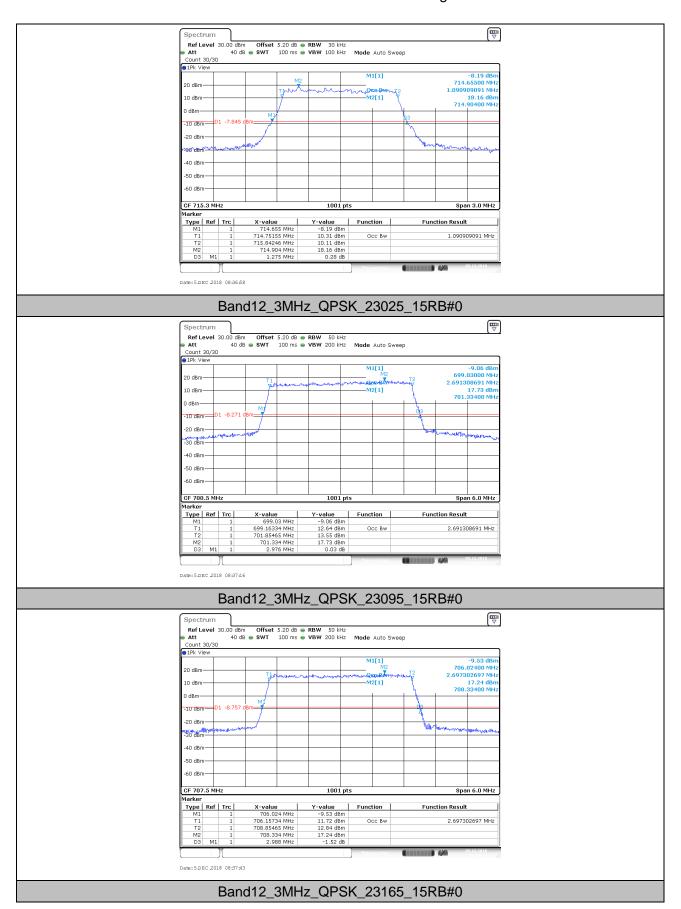
#### 4.2. Test Plots



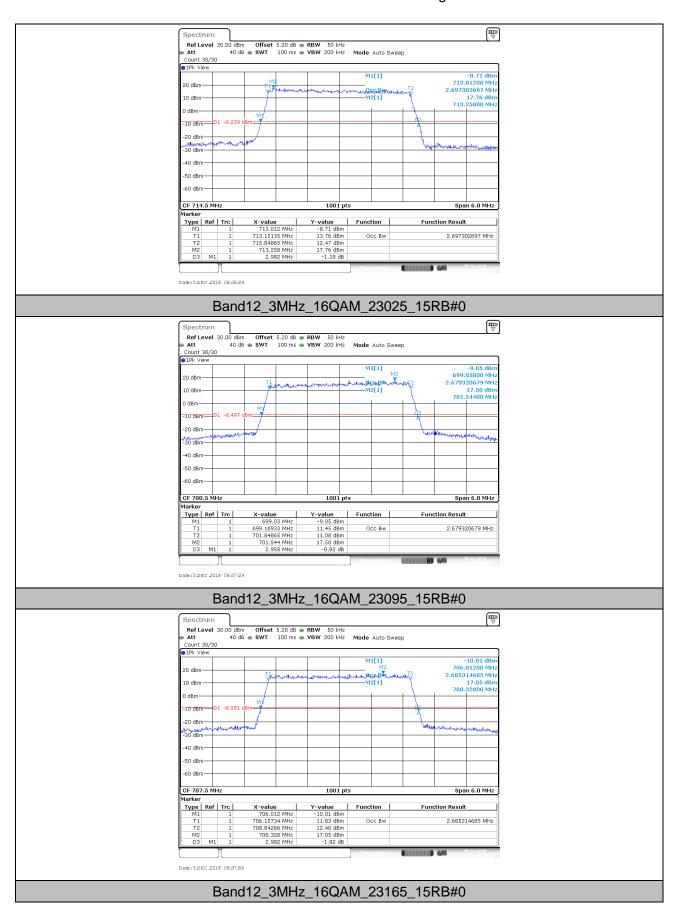
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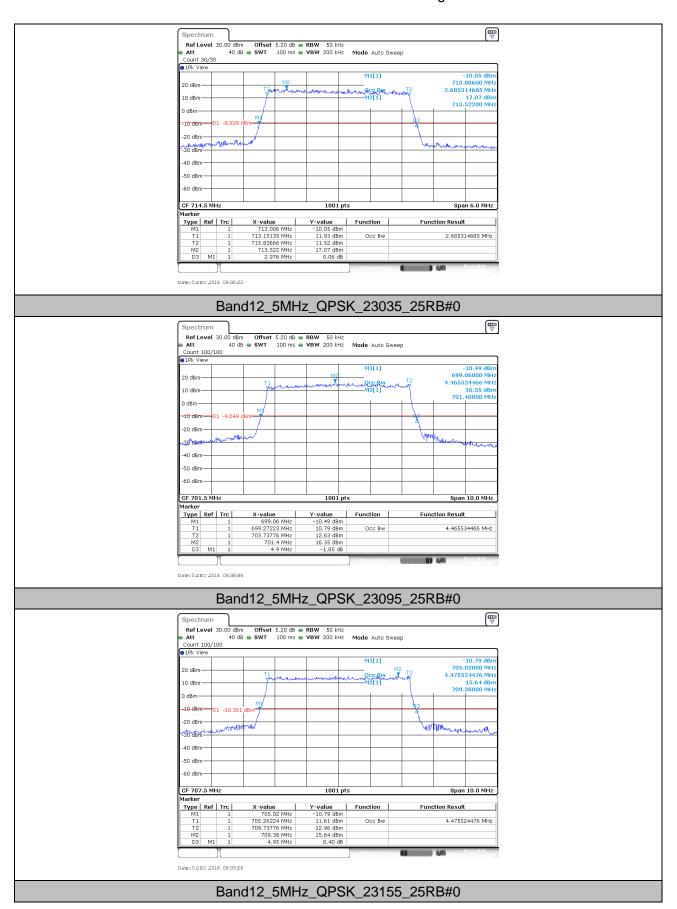
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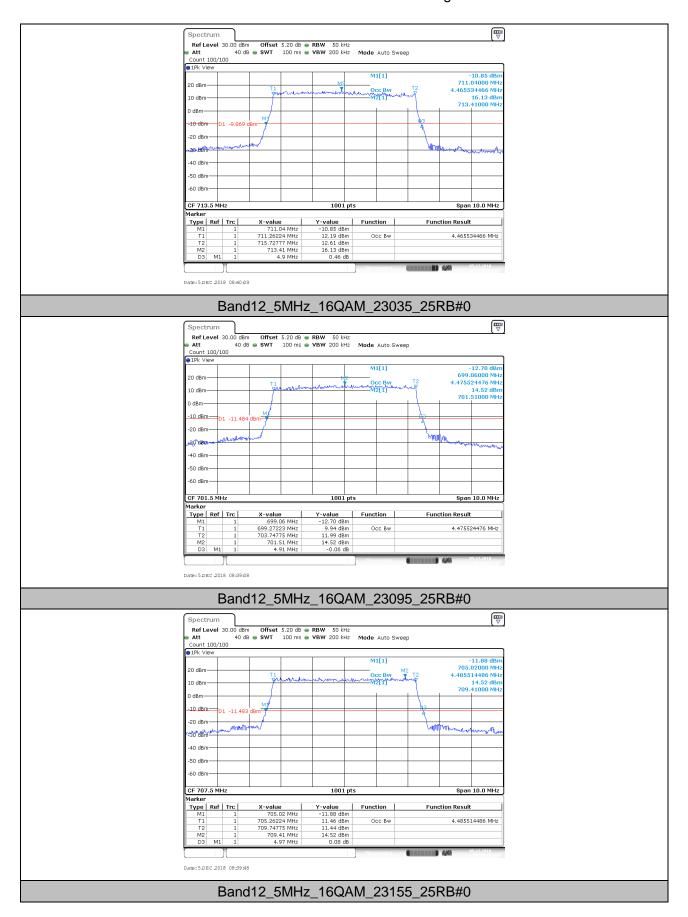
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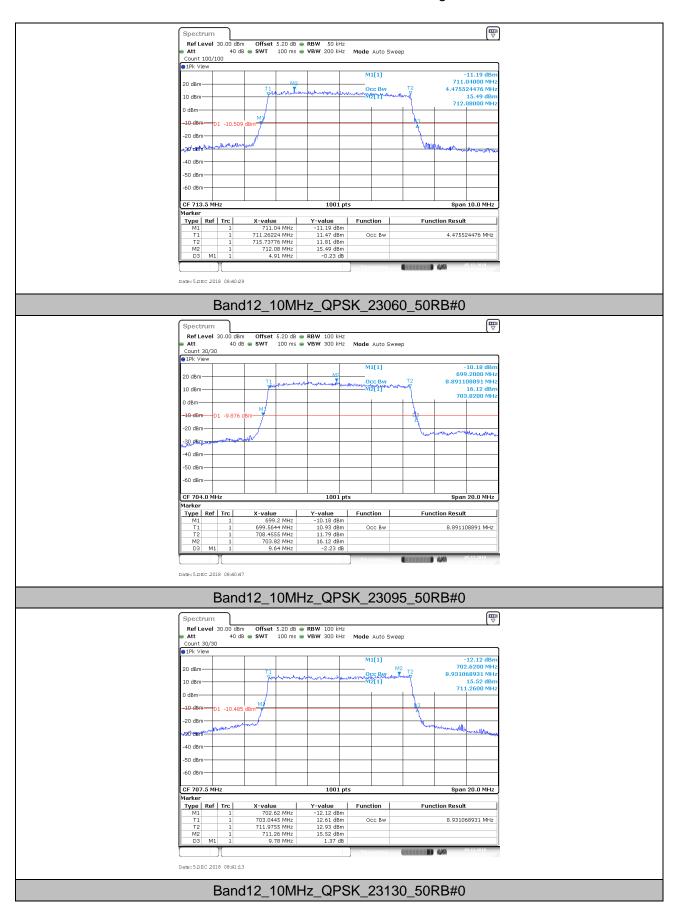
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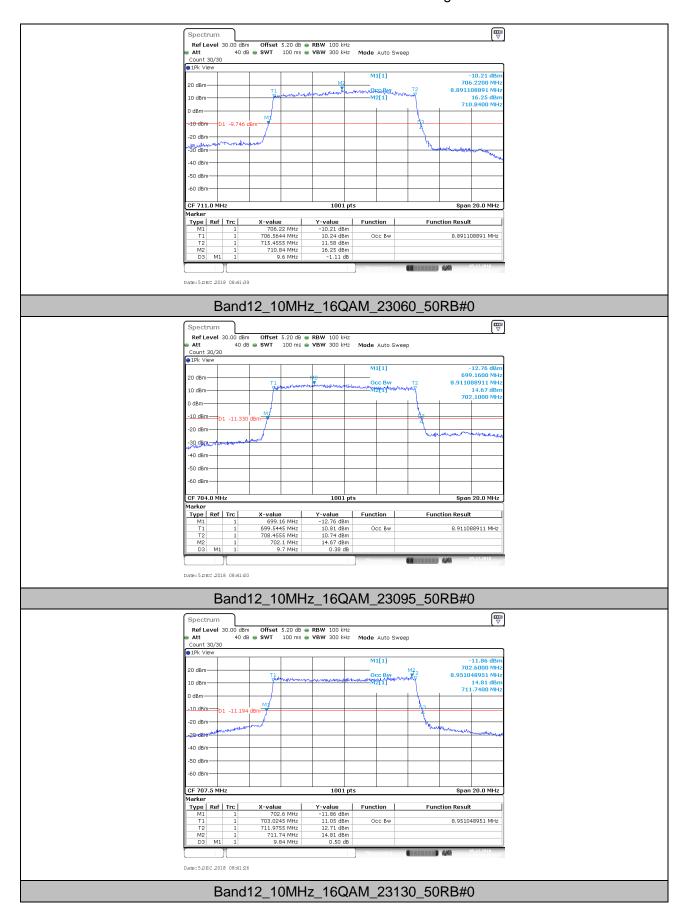
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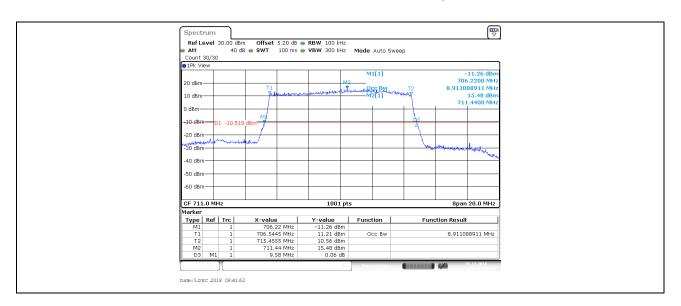
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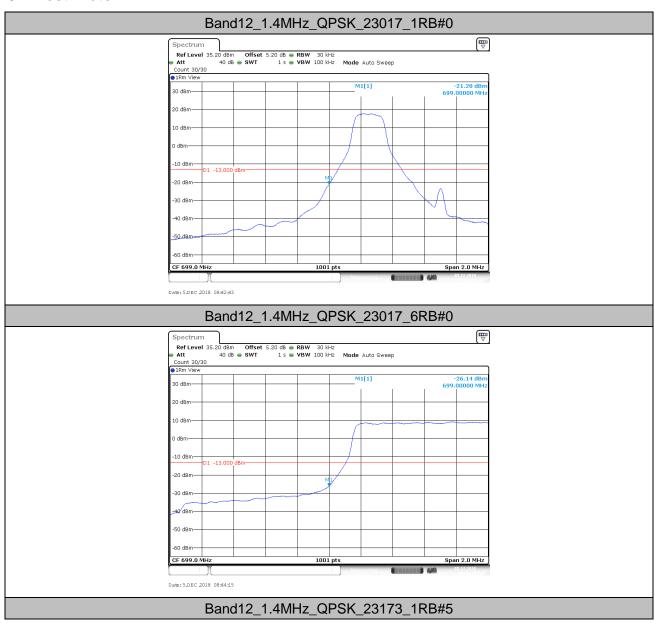
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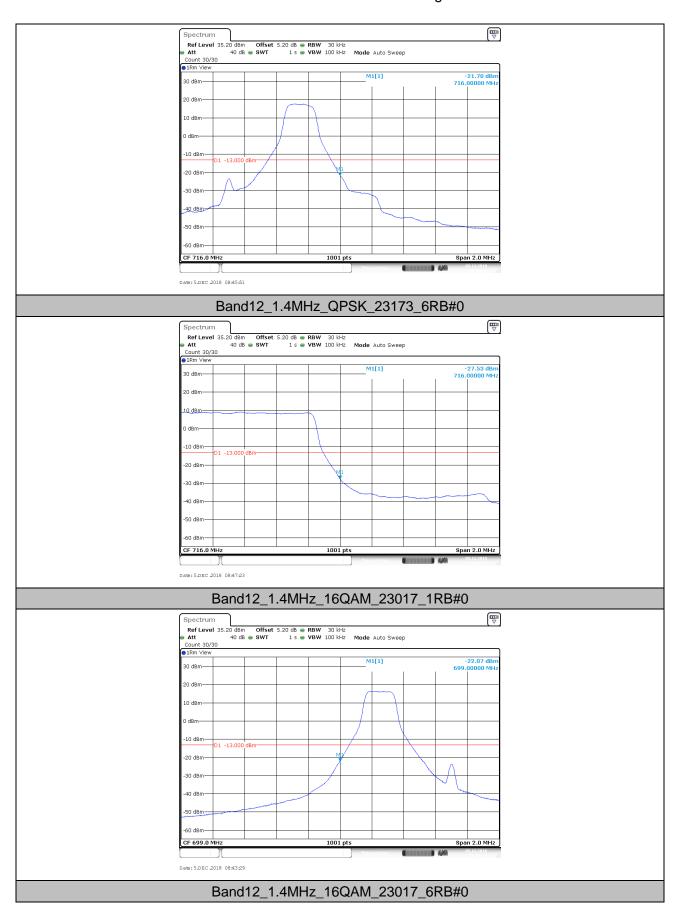
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## 5. Band Edge Compliance

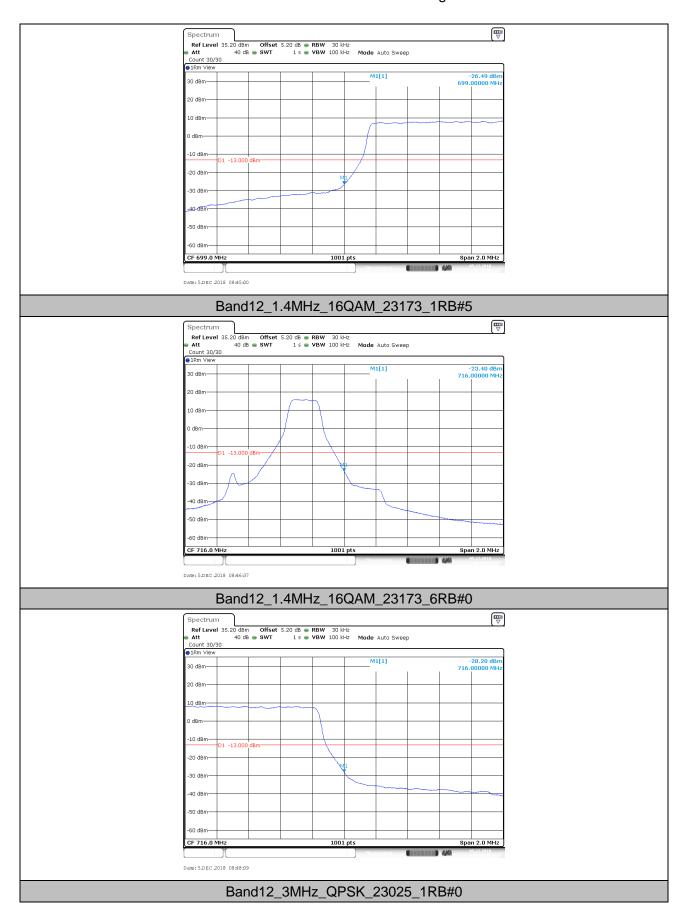
#### 5.1. Test Plots



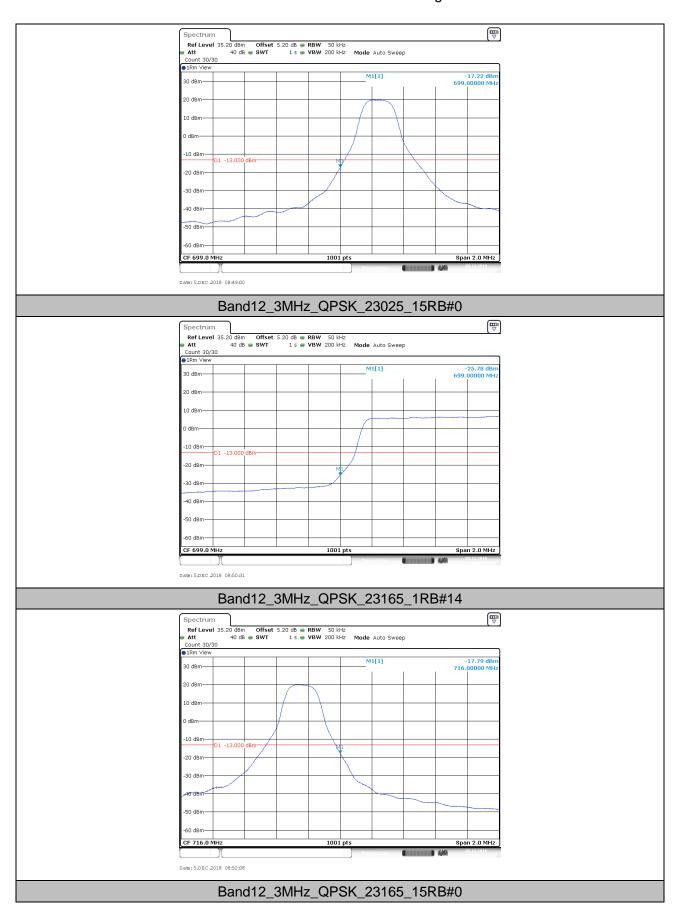
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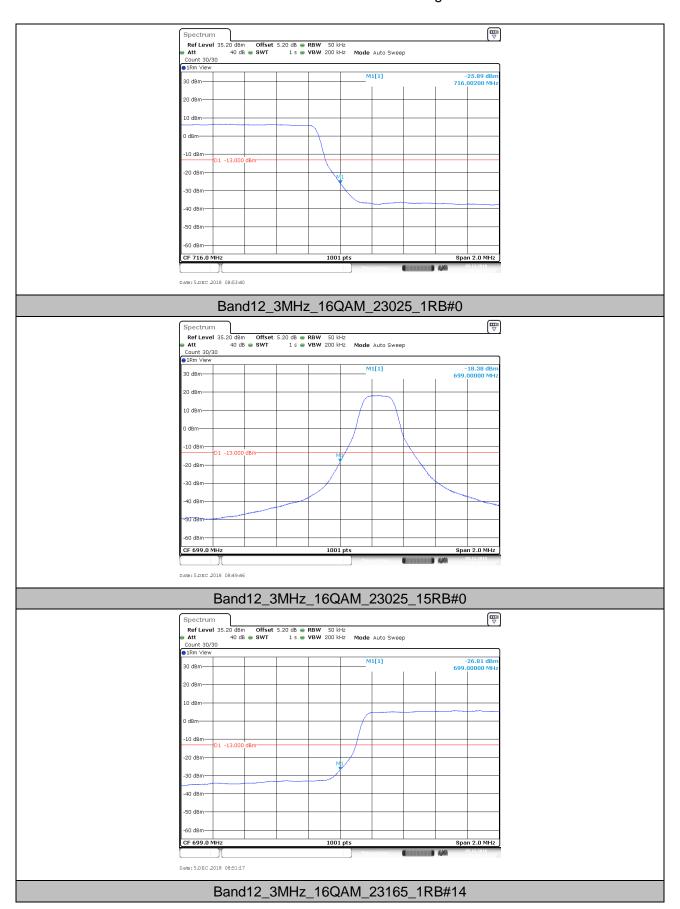
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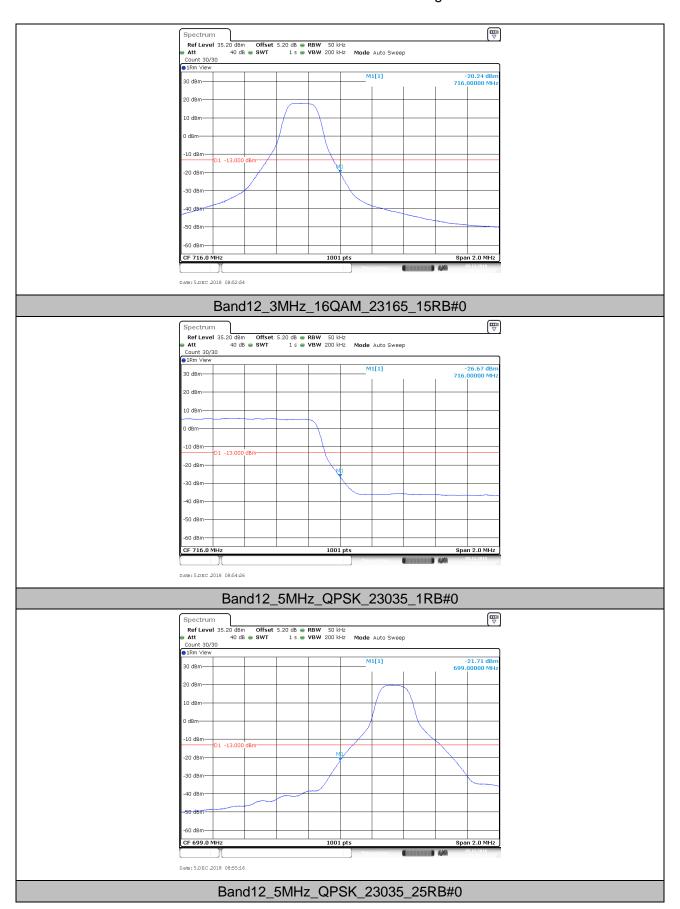
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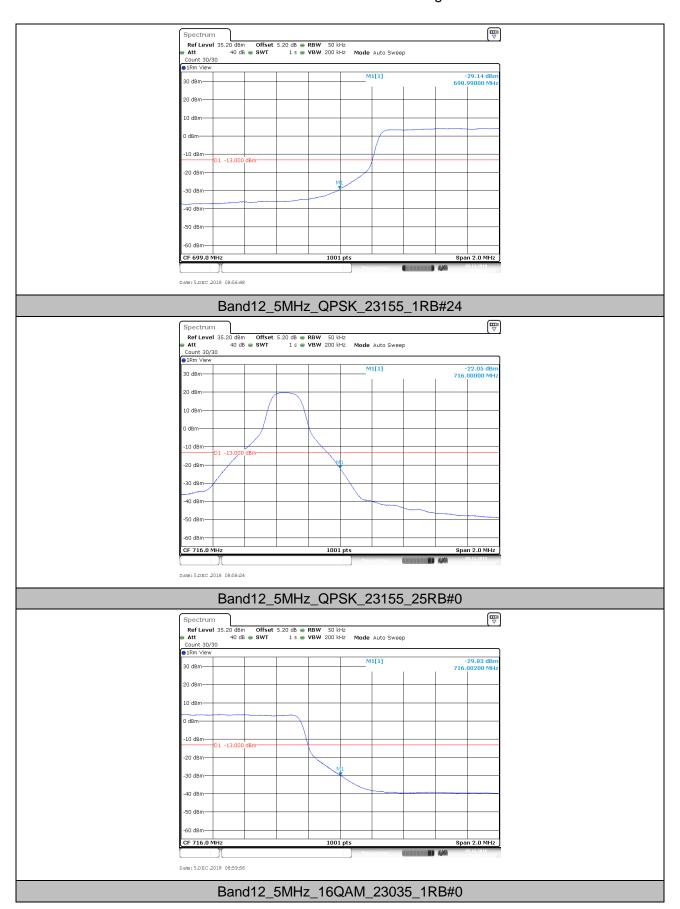
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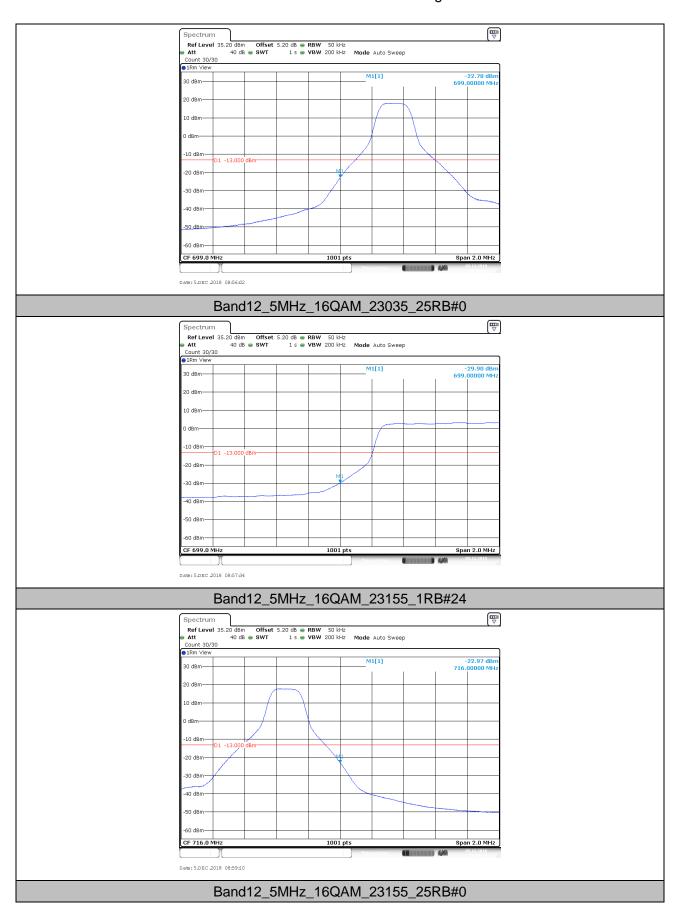
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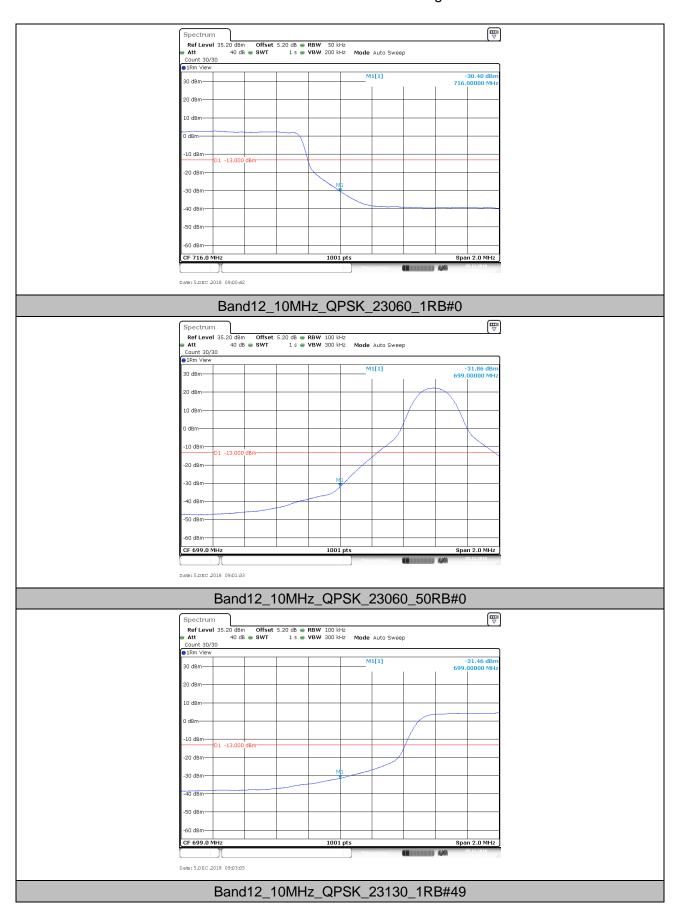
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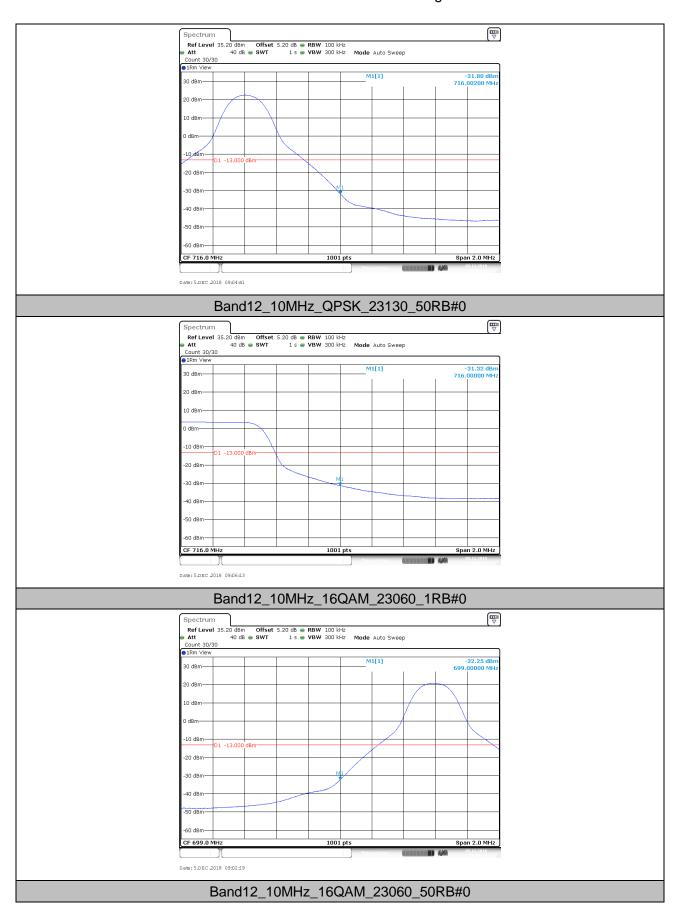
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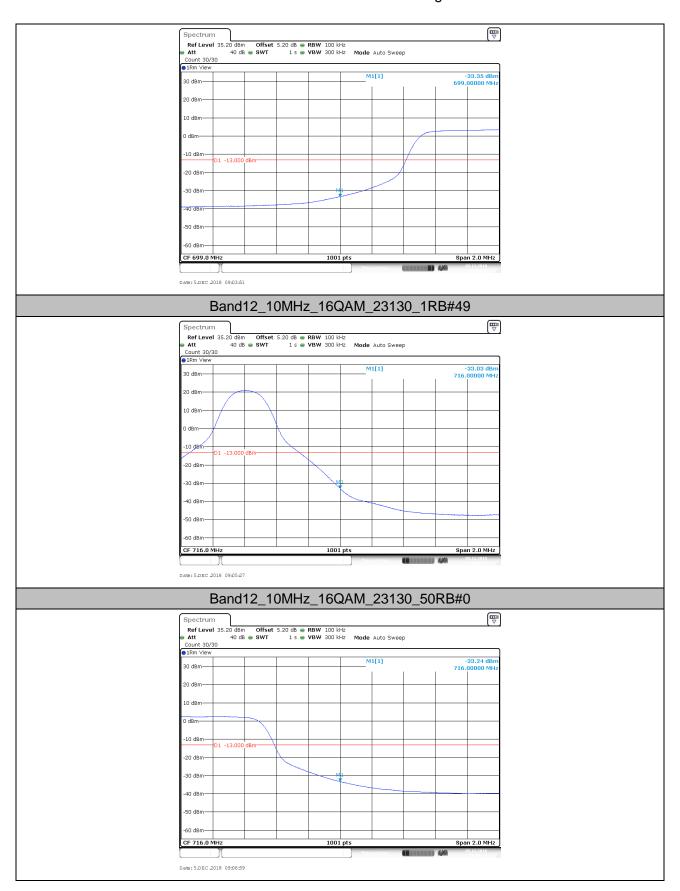
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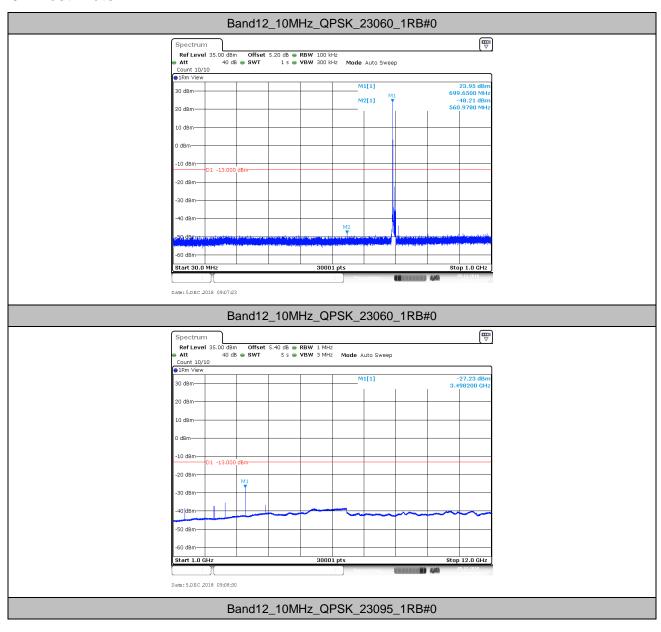
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## 6. Spurious Emission at Antenna Terminal

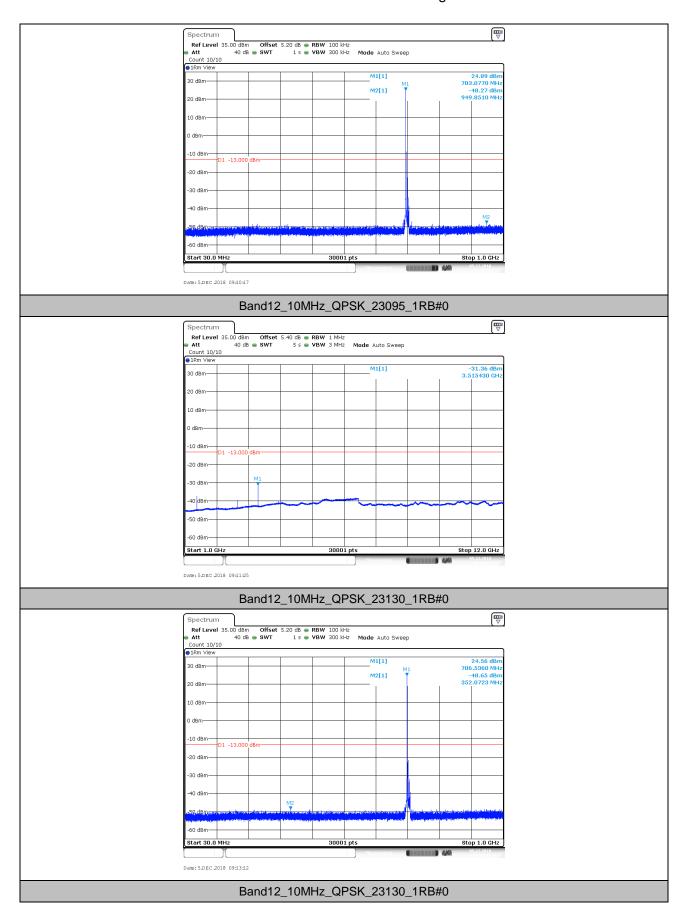
Remark1: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of < RBW/2 so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = k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

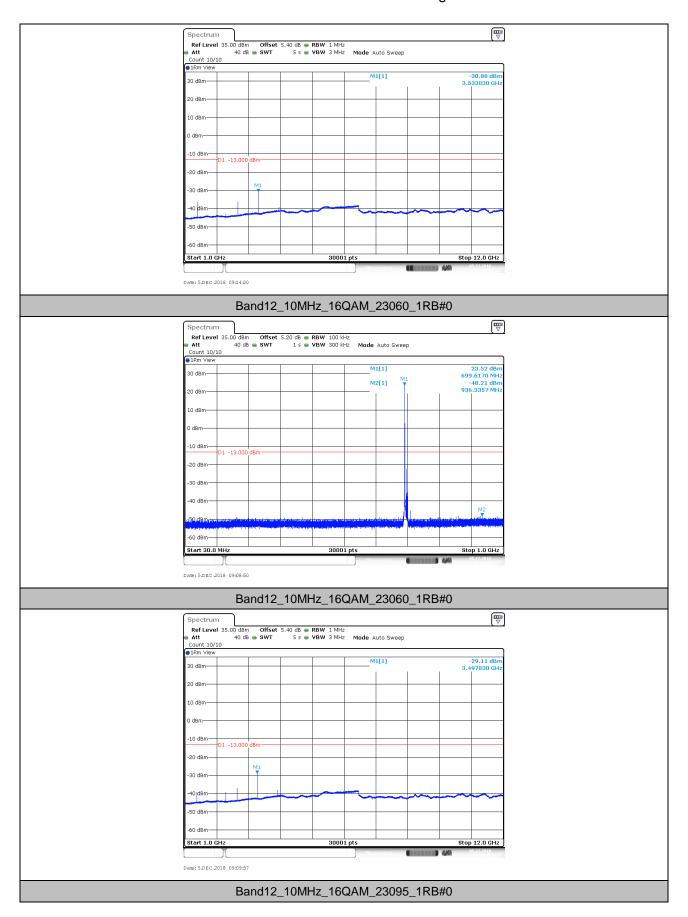
#### 6.1. Test Plots



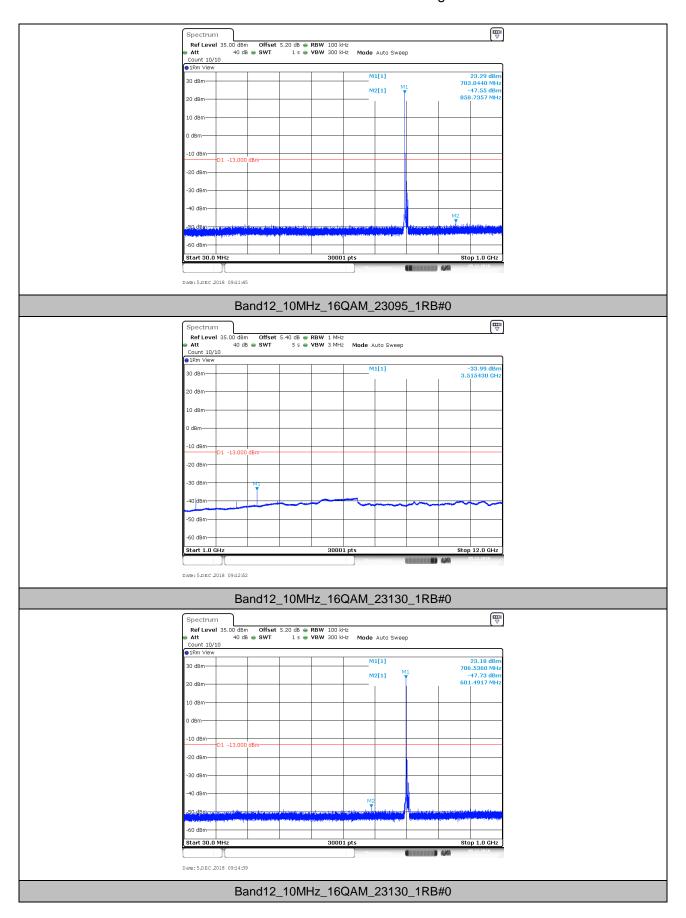
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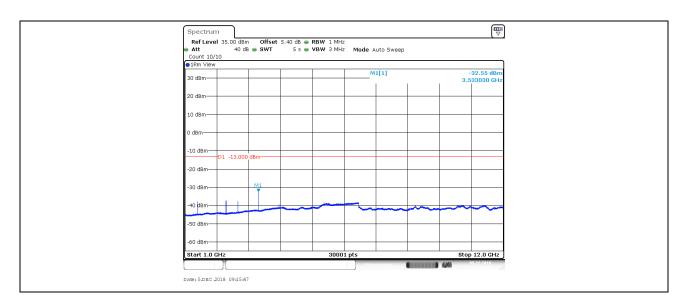
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## 7. Field Strength of Spurious Radiation

### 7.1. Test BAND = LTE BAND 12

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

### 7.1.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
1399.000000	-56.11	-13.00	43.11	Vertical
2099.000000	-58.15	-13.00	45.15	Vertical
2798.500000	-50.93	-13.00	37.93	Vertical
3497.737500	-53.79	-13.00	40.79	Vertical
4197.300000	-56.04	-13.00	43.04	Vertical
4896.862500	-62.63	-13.00	49.63	Vertical
1399.000000	-61.37	-13.00	48.37	Horizontal
2099.000000	-58.70	-13.00	45.70	Horizontal
2798.500000	-50.37	-13.00	37.37	Horizontal
3497.737500	-49.97	-13.00	36.97	Horizontal
4197.300000	-54.69	-13.00	41.69	Horizontal
4896.862500	-64.01	-13.00	51.01	Horizontal

### 7.1.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
1406.000000	-46.81	-13.00	33.81	Vertical
2109.500000	-57.65	-13.00	44.65	Vertical
2812.500000	-49.63	-13.00	36.63	Vertical
3515.287500	-57.49	-13.00	44.49	Vertical
4218.262500	-59.71	-13.00	46.71	Vertical
4921.237500	-61.41	-13.00	48.41	Vertical
1406.000000	-50.70	-13.00	37.70	Horizontal
2109.500000	-58.64	-13.00	45.64	Horizontal
2812.500000	-50.14	-13.00	37.14	Horizontal
3515.287500	-53.67	-13.00	40.67	Horizontal
4218.262500	-59.10	-13.00	46.10	Horizontal
4921.237500	-63.48	-13.00	50.48	Horizontal

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#### 7.1.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
1413.000000	-45.13	-13.00	32.13	Vertical
2120.000000	-53.93	-13.00	40.93	Vertical
2826.500000	-46.88	-13.00	33.88	Vertical
3532.837500	-53.04	-13.00	40.04	Vertical
4239.225000	-56.04	-13.00	43.04	Vertical
4946.100000	-60.63	-13.00	47.63	Vertical
1413.000000	-50.46	-13.00	37.46	Horizontal
2120.000000	-56.59	-13.00	43.59	Horizontal
2826.500000	-46.53	-13.00	33.53	Horizontal
3532.837500	-50.17	-13.00	37.17	Horizontal
4239.225000	-55.22	-13.00	42.22	Horizontal
4946.100000	-62.75	-13.00	49.75	Horizontal

#### Remark:

- 1) 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 had been displayed.
- 2) We have tested all modulation and all Bandwidth, but only the worst case data presented in this report.

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## 8. Frequency Stability

### 8.1. Frequency Vs Voltage

				\	Voltage					
BAND	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band12	10MHz	QPSK	23060	50RB#0	VL	NT	0.40	0.000568	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	VN	NT	1.80	0.002557	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	VH	NT	1.10	0.001563	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	VL	NT	0.60	0.000848	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	VN	NT	0.80	0.001131	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	VH	NT	0.60	0.000848	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	VL	NT	0.50	0.000703	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	VN	NT	0.20	0.000281	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	VH	NT	-0.70	-0.000985	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	VL	NT	1.10	0.001563	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	VN	NT	-0.20	-0.000284	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	VH	NT	0.50	0.000710	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	VL	NT	0.30	0.000424	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	VN	NT	-0.20	-0.000283	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	VH	NT	0.00	0.000000	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	VL	NT	0.00	0.000000	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	VN	NT	-1.50	-0.002110	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	VH	NT	-0.60	-0.000844	±2.5	PASS

### 8.2. Frequency Vs Temperature

	-										
Temperature											
BAND	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict	
Band12	10MHz	QPSK	23060	50RB#0	NV	-30	0.90	0.001278	±2.5	PASS	
Band12	10MHz	QPSK	23060	50RB#0	NV	-20	0.40	0.000568	±2.5	PASS	
Band12	10MHz	QPSK	23060	50RB#0	NV	0	2.00	0.002841	±2.5	PASS	
Band12	10MHz	QPSK	23060	50RB#0	NV	10	1.20	0.001705	±2.5	PASS	
Band12	10MHz	QPSK	23060	50RB#0	NV	20	0.60	0.000852	±2.5	PASS	
Band12	10MHz	QPSK	23060	50RB#0	NV	30	0.60	0.000852	±2.5	PASS	
Band12	10MHz	QPSK	23060	50RB#0	NV	40	1.70	0.002415	±2.5	PASS	
Band12	10MHz	QPSK	23060	50RB#0	NV	50	2.30	0.003267	±2.5	PASS	
Band12	10MHz	QPSK	23095	50RB#0	NV	-30	0.70	0.000989	±2.5	PASS	
Band12	10MHz	QPSK	23095	50RB#0	NV	-20	0.00	0.000000	±2.5	PASS	
Band12	10MHz	QPSK	23095	50RB#0	NV	0	0.90	0.001272	±2.5	PASS	
Band12	10MHz	QPSK	23095	50RB#0	NV	10	-0.20	-0.000283	±2.5	PASS	
Band12	10MHz	QPSK	23095	50RB#0	NV	20	0.70	0.000989	±2.5	PASS	
Band12	10MHz	QPSK	23095	50RB#0	NV	30	1.20	0.001696	±2.5	PASS	
Band12	10MHz	QPSK	23095	50RB#0	NV	40	1.80	0.002544	±2.5	PASS	
Band12	10MHz	QPSK	23095	50RB#0	NV	50	1.00	0.001413	±2.5	PASS	
Band12	10MHz	QPSK	23130	50RB#0	NV	-30	-0.10	-0.000141	±2.5	PASS	
Band12	10MHz	QPSK	23130	50RB#0	NV	-20	1.00	0.001406	±2.5	PASS	
Band12	10MHz	QPSK	23130	50RB#0	NV	0	0.20	0.000281	±2.5	PASS	
Band12	10MHz	QPSK	23130	50RB#0	NV	10	0.00	0.000000	±2.5	PASS	



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Band12	10MHz	QPSK	23130	50RB#0	NV	20	0.50	0.000703	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	30	-1.50	-0.002110	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	40	-1.80	-0.002532	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	50	-0.40	-0.000563	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	-30	1.00	0.001420	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	-20	0.10	0.000142	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	0	1.30	0.001847	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	10	0.00	0.000000	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	20	1.10	0.001563	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	30	-0.40	-0.000568	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	40	0.10	0.000142	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	50	0.60	0.000852	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	-30	1.70	0.002403	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	-20	-0.10	-0.000141	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	0	-0.60	-0.000848	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	10	0.80	0.001131	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	20	-0.30	-0.000424	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	30	-0.30	-0.000424	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	40	0.60	0.000848	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	50	1.20	0.001696	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	-30	-2.30	-0.003235	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	-20	-0.20	-0.000281	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	0	-0.60	-0.000844	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	10	-0.30	-0.000422	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	20	-1.20	-0.001688	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	30	-1.60	-0.002250	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	40	-0.90	-0.001266	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	50	-0.10	-0.000141	±2.5	PASS

The End