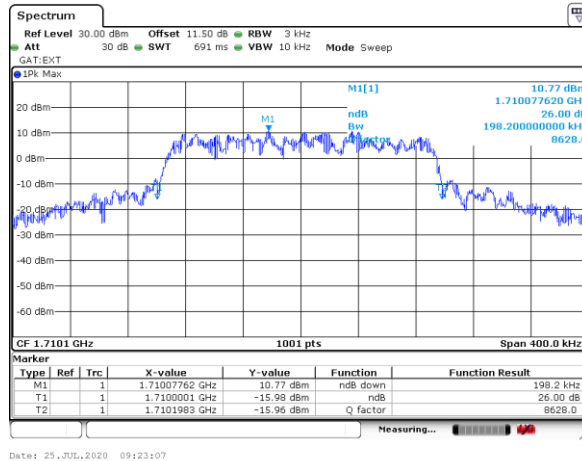


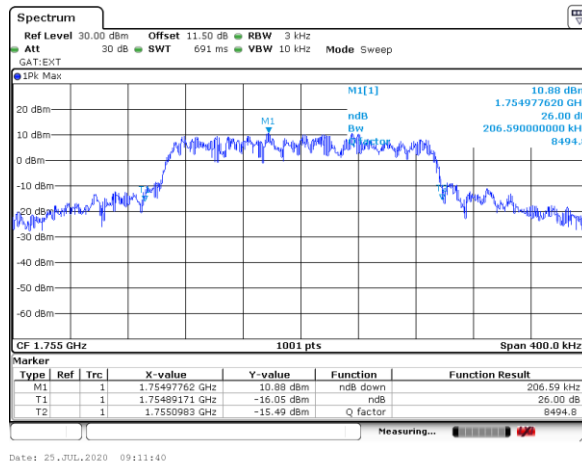


LTE Band 66

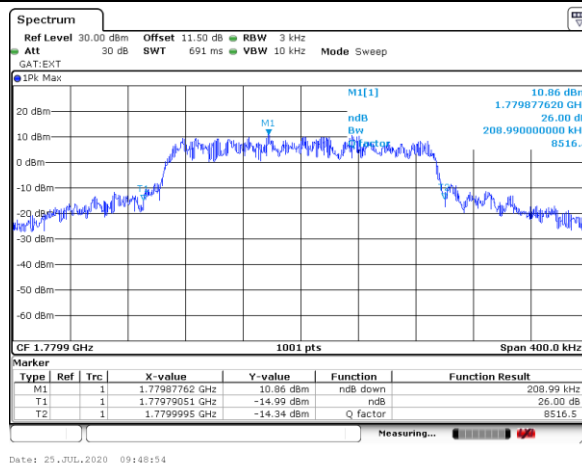
Lowest Channel / 15kHz / QPSK



Middle Channel / 15kHz / QPSK



Highest Channel / 15kHz / QPSK



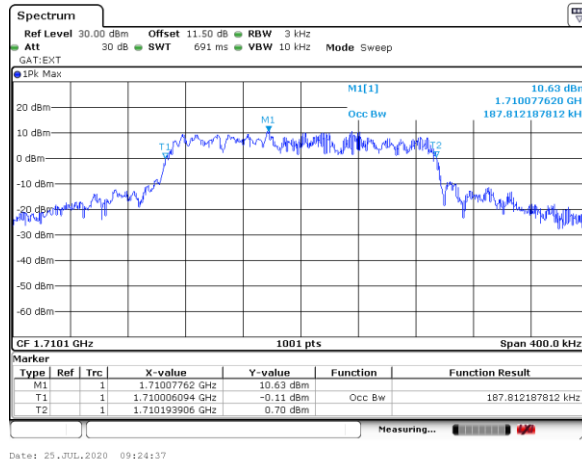
**Occupied Bandwidth**

Mode	LTE Band 66 : OB(kHz)
Subcarrier Spacing	15k
Mod.	QPSK
Lowest CH	187.81
Middle CH	187.41
Highest CH	187.41

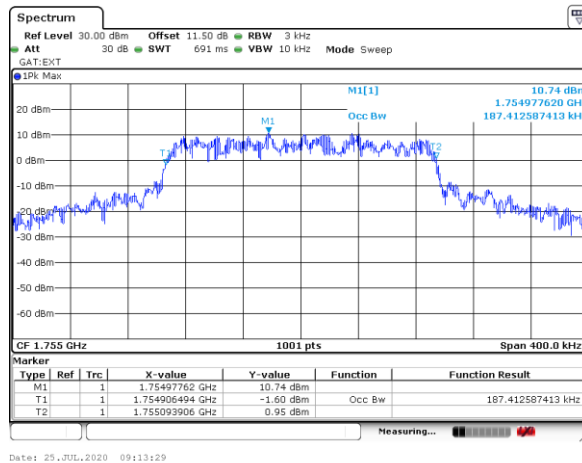


LTE Band 66

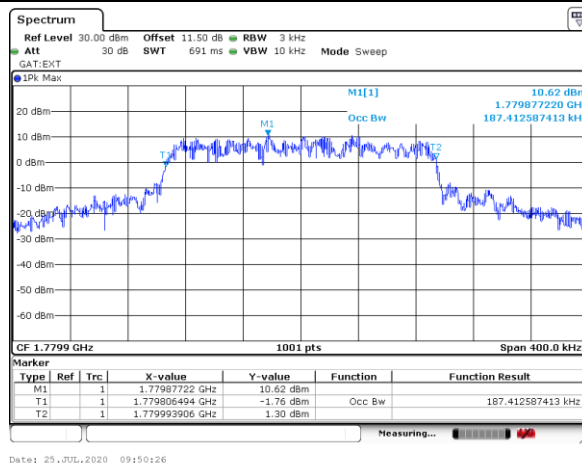
Lowest Channel / 15kHz / QPSK

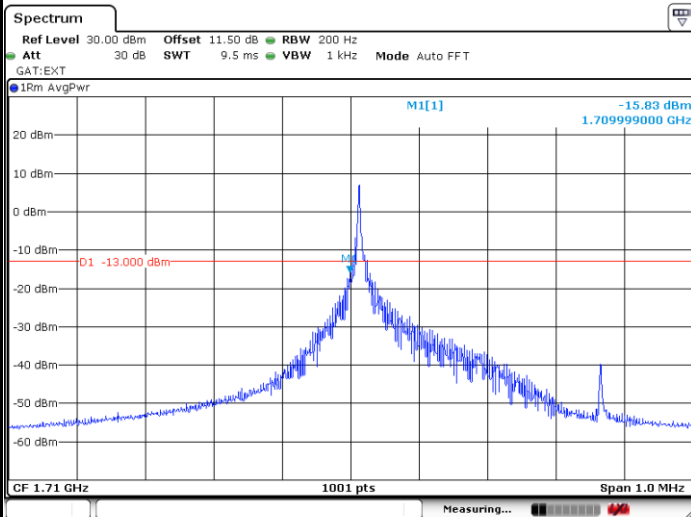
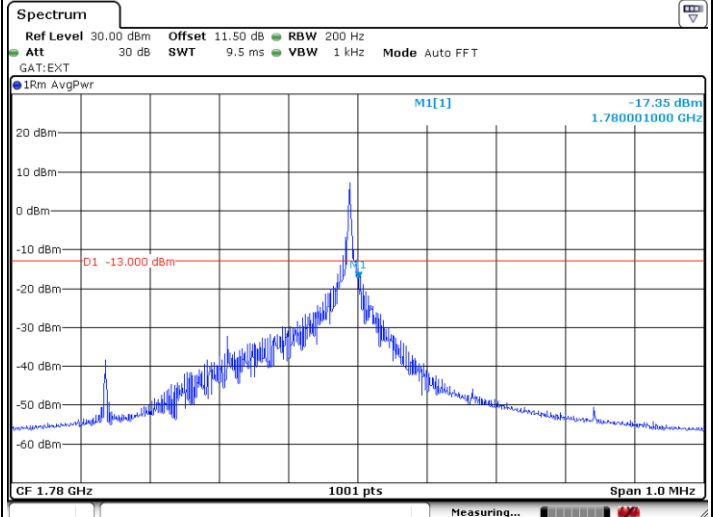
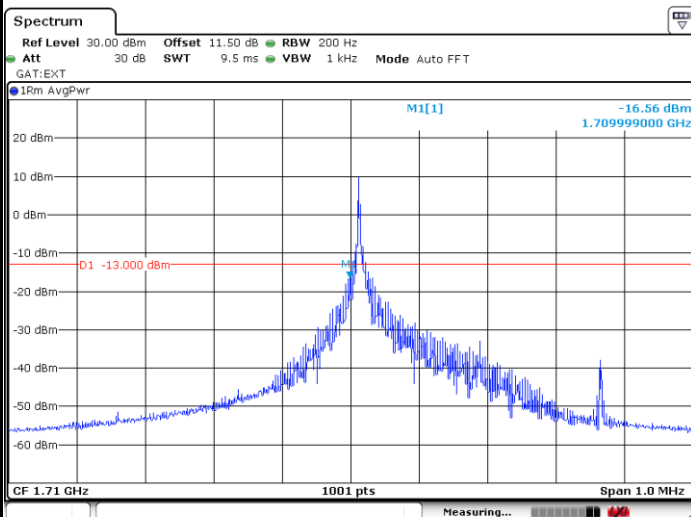
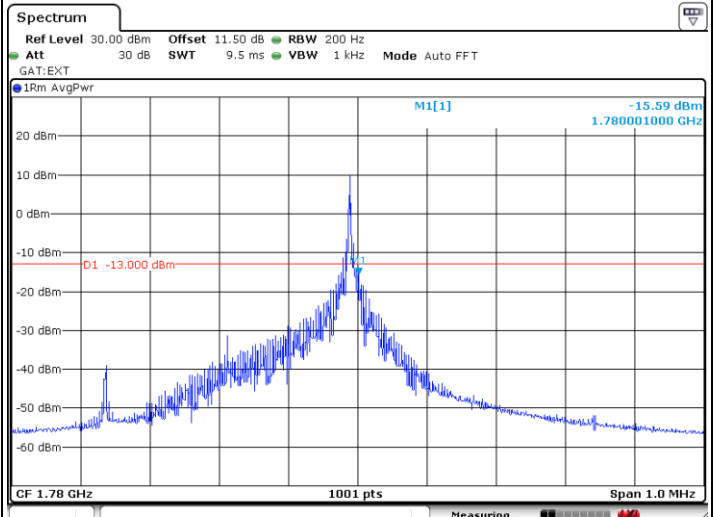


Middle Channel / 15kHz / QPSK



Highest Channel / 15kHz / QPSK

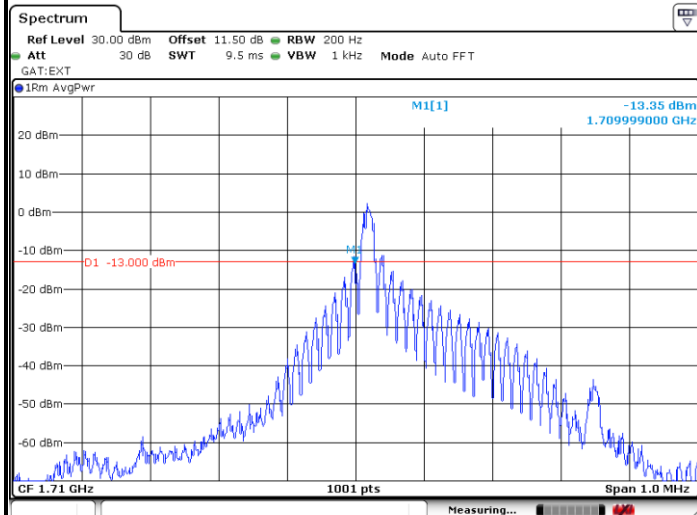


**Conducted Band Edge****LTE Band 66 / 3.75kHz / BPSK****Lowest Band Edge / 1 T****Highest Band Edge / 1 T****LTE Band 66 / 3.75kHz / QPSK****Lowest Band Edge / 1 T****Highest Band Edge / 1 T**



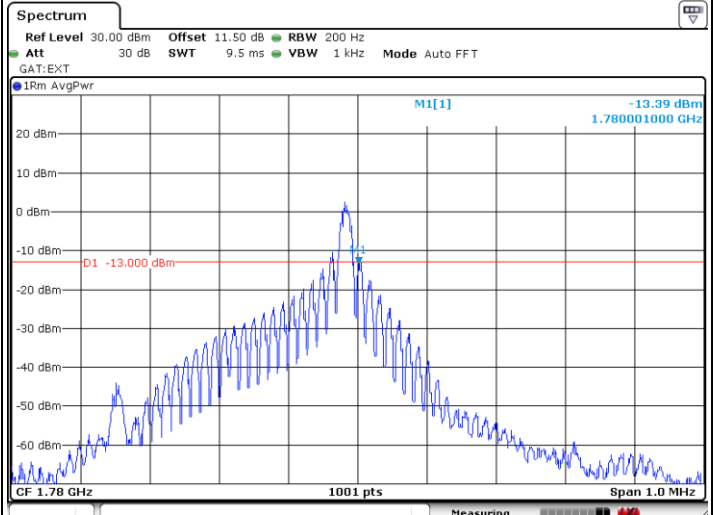
LTE Band 66 / 15kHz / BPSK

Lowest Band Edge / 1 T



Date: 25.JUL.2020 09:28:22

Highest Band Edge / 1 T

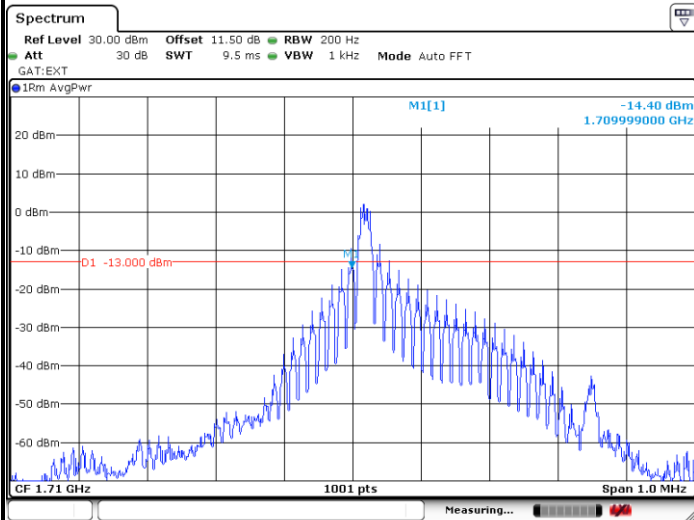


Date: 25.JUL.2020 09:44:28

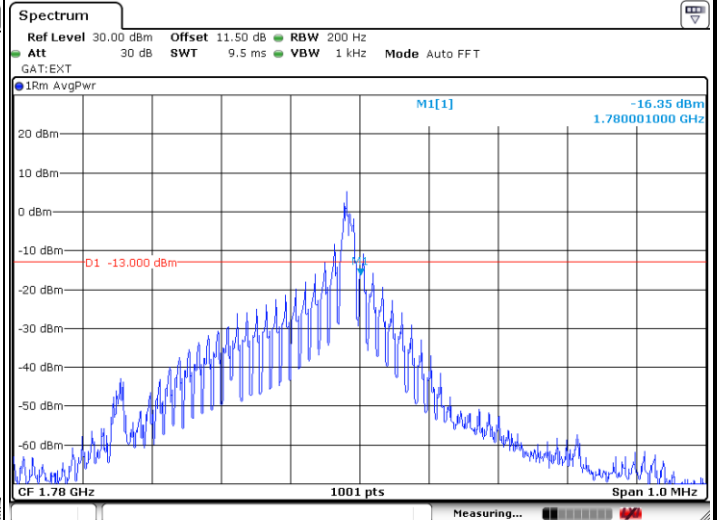


LTE Band 66 / 15kHz / QPSK

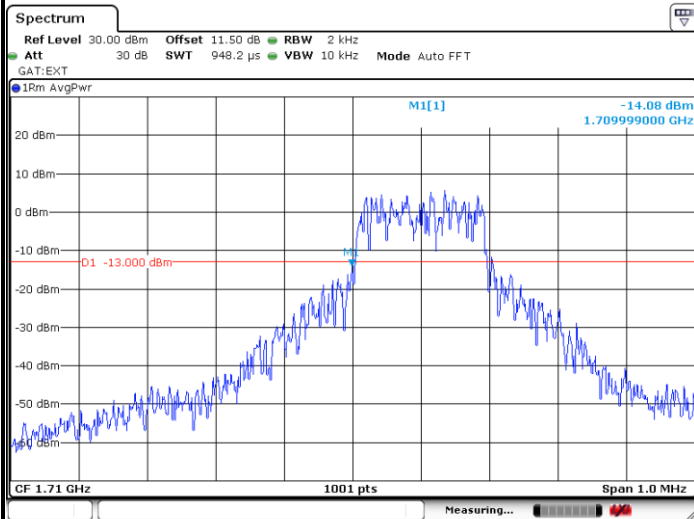
Lowest Band Edge / 1 T



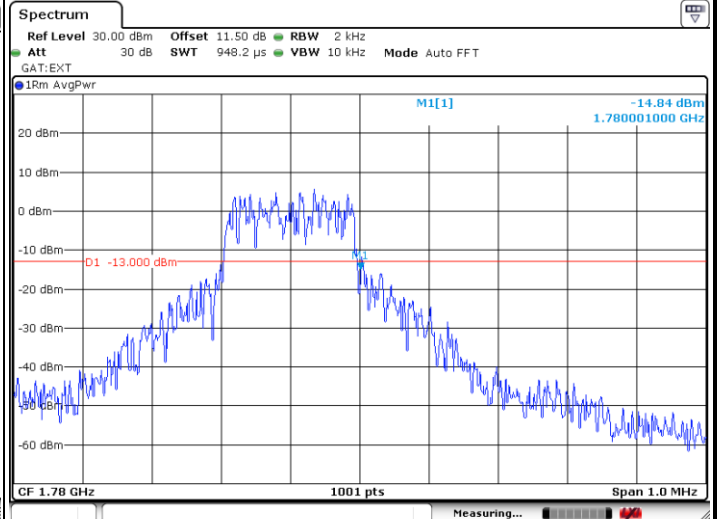
Highest Band Edge / 1 T



Lowest Band Edge / Full T



Highest Band Edge / Full T

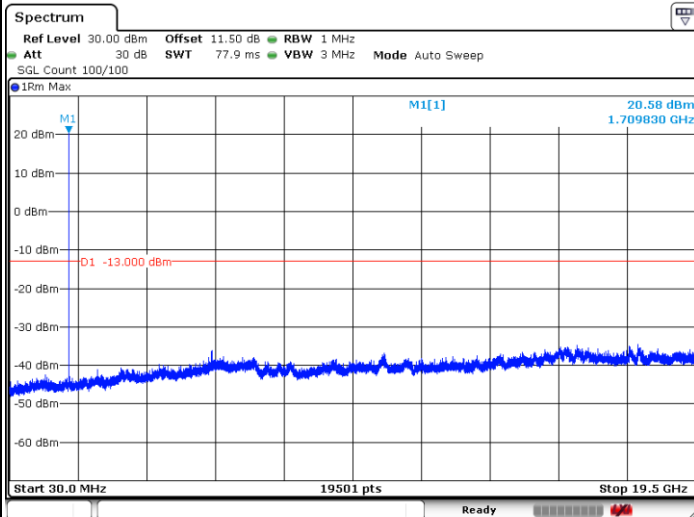




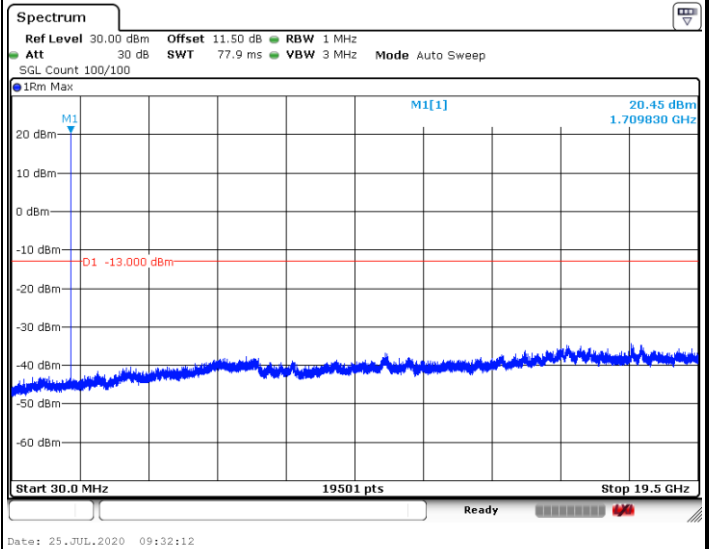
Conducted Spurious Emission

LTE Band 66 / 3.75kHz

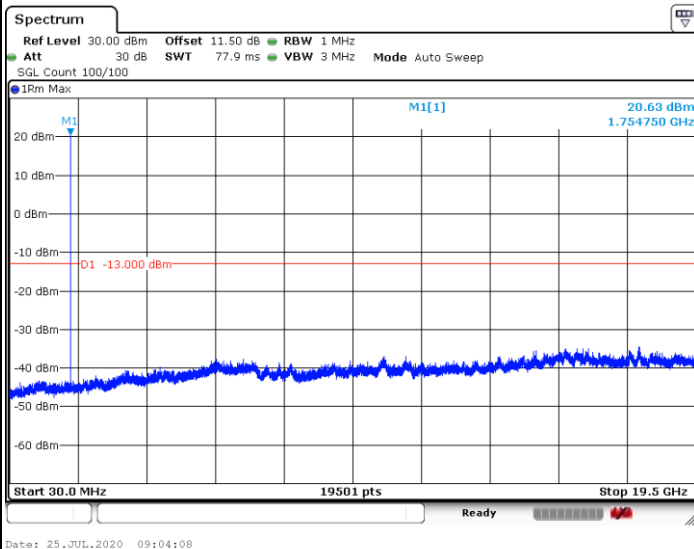
Lowest Channel / BPSK



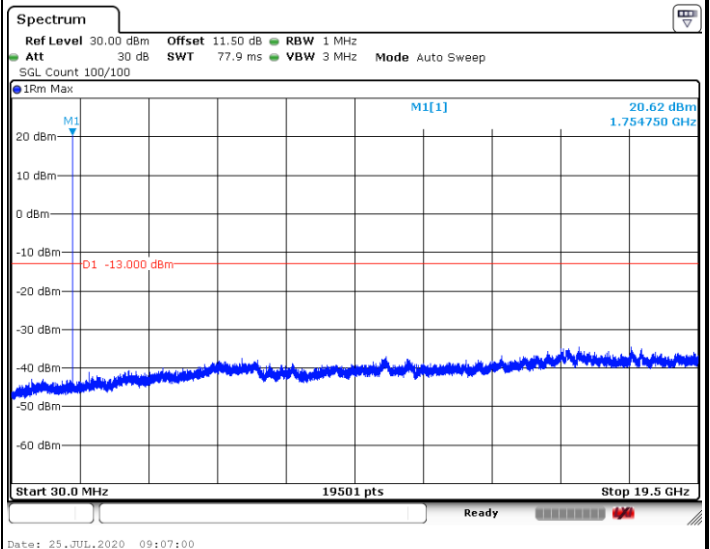
Lowest Channel / QPSK



Middle Channel / BPSK



Middle Channel / QPSK

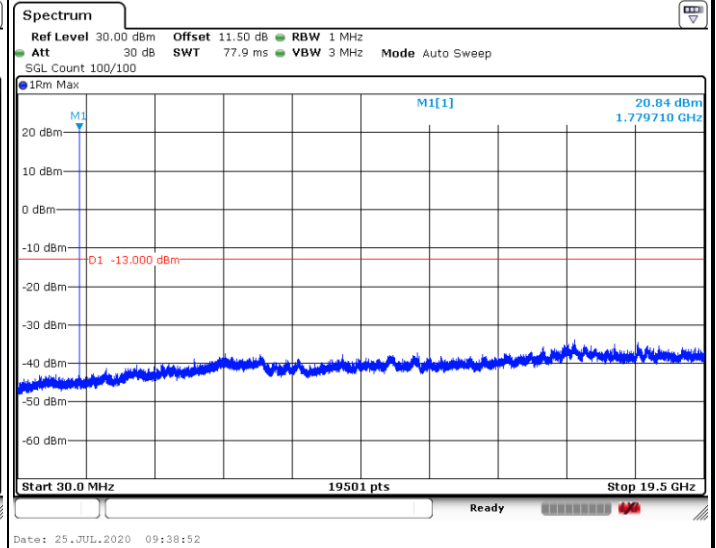
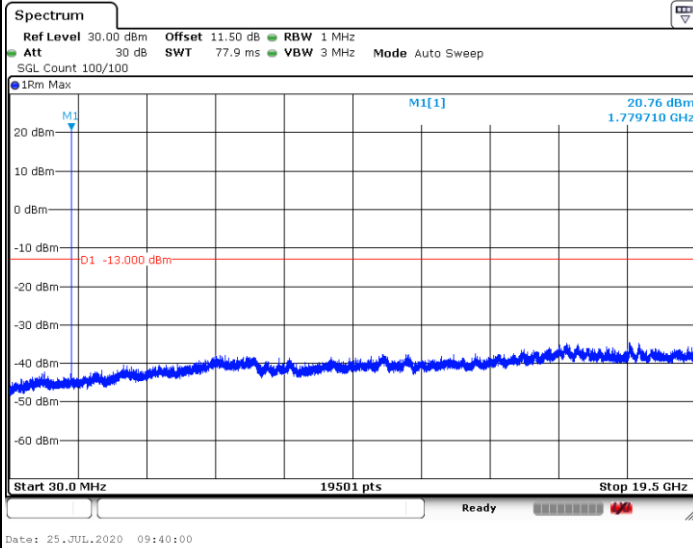




LTE Band 66 / 3.75kHz

Highest Channel / BPSK

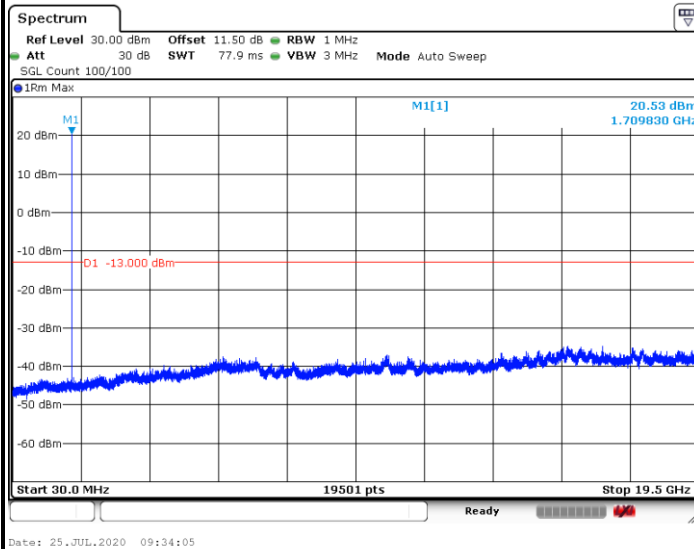
Highest Channel / QPSK



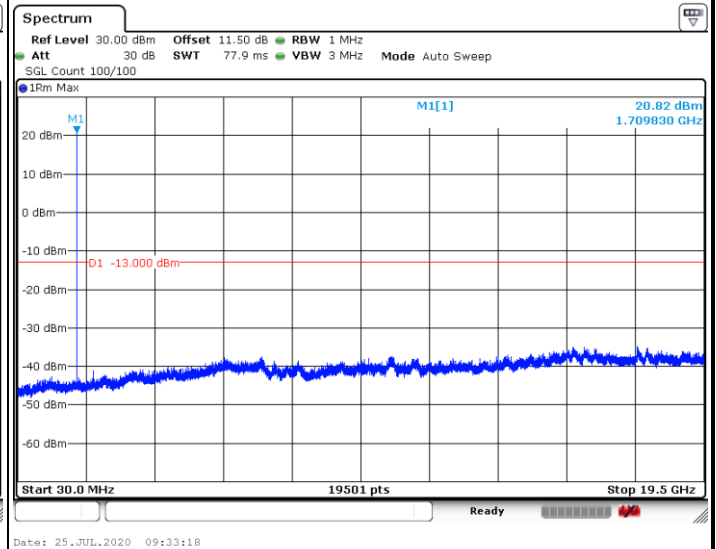


LTE Band 66 / 15kHz

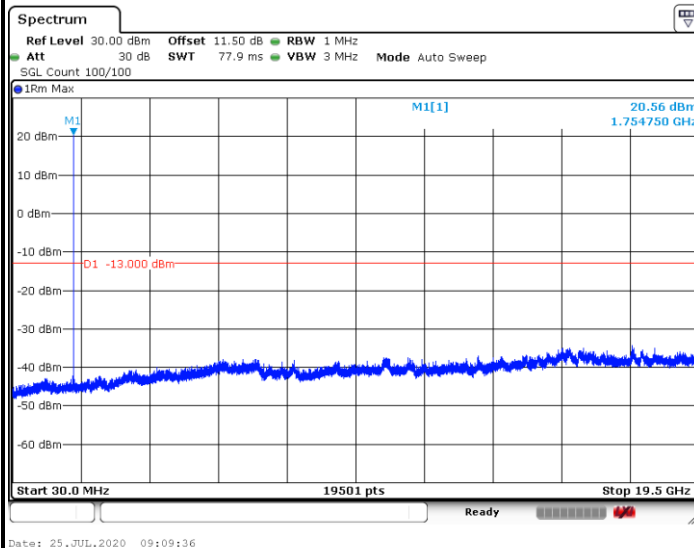
Lowest Channel / BPSK



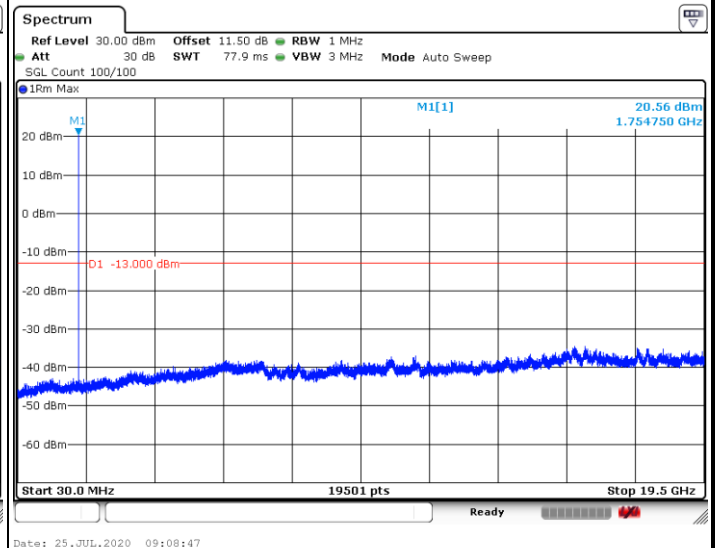
Lowest Channel / QPSK



Middle Channel / BPSK



Middle Channel / QPSK

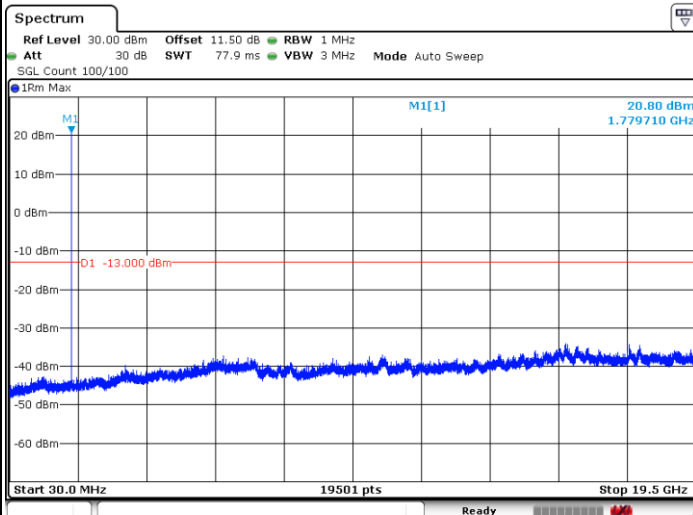




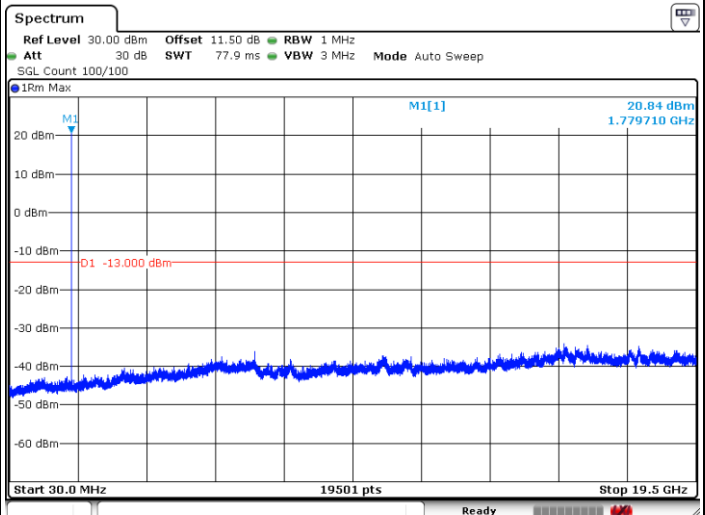
LTE Band 66 / 15kHz

Highest Channel / BPSK

Highest Channel / QPSK



Date: 25.JUL.2020 09:37:03



Date: 25.JUL.2020 09:37:53

Frequency Stability

Test Conditions		LTE Band 66 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 15kHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0088	PASS
40	Normal Voltage	0.0006	
30	Normal Voltage	0.0046	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0102	
0	Normal Voltage	0.0008	
-10	Normal Voltage	0.0105	
-20	Normal Voltage	0.0000	
-30	Normal Voltage	0.0011	
20	Maximum Voltage	0.0105	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0095	

Note:

1. Normal Voltage =3.6 V. ; Battery End Point (BEP) =3.3 V. ; Maximum Voltage =3.7 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

**Appendix B. Test Results of ERP/EIRP and Radiated Test****ERP/EIRP**

LTE NB1 Band 2 / 3.75KHz (Average) (GT - LC = 3.06 dB)						
Channel	Mode	Tones	Conducted		EIRP	
			Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	BPSK	1T/0	22.43	0.1750	25.49	0.3540
Middle			22.34	0.1714	25.40	0.3467
Highest			22.27	0.1687	25.33	0.3412
Lowest	QPSK	1T/0	22.49	0.1774	25.55	0.3589
Middle			22.38	0.1730	25.44	0.3499
Highest			22.25	0.1679	25.31	0.3396
Limit	EIRP < 2W		Result		PASS	

LTE NB1 Band 2 / 15KHz (Average) (GT - LC = 3.06 dB)						
Channel	Mode	Tones	Conducted		EIRP	
			Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	BPSK	1T/0	22.44	0.1754	25.50	0.3548
Middle			22.33	0.1710	25.39	0.3459
Highest			22.25	0.1679	25.31	0.3396
Lowest	QPSK	1T/11	22.45	0.1758	25.51	0.3556
Middle			22.35	0.1718	25.41	0.3475
Highest			22.20	0.1660	25.26	0.3357
Limit	EIRP < 2W		Result		PASS	

LTE NB1 Band 25 / 3.75KHz (Average) (GT - LC = 3.06 dB)						
Channel	Mode	Tones	Conducted		EIRP	
			Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	BPSK	1T/0	22.63	0.1832	25.69	0.3707
Middle			22.62	0.1828	25.68	0.3698
Highest			22.19	0.1656	25.25	0.3350
Lowest	QPSK	1T/47	22.62	0.1828	25.68	0.3698
Middle			22.50	0.1778	25.56	0.3597
Highest			22.13	0.1633	25.19	0.3304
Limit	EIRP < 2W		Result		PASS	

LTE NB1 Band 25 / 15KHz (Average) (GT - LC = 3.06 dB)						
Channel	Mode	Tones	Conducted		EIRP	
			Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	BPSK	1T/0	22.56	0.1803	25.62	0.3648
Middle			22.61	0.1824	25.67	0.3690
Highest			22.13	0.1633	25.19	0.3304
Lowest	QPSK	1T/11	22.59	0.1816	25.65	0.3673
Middle			22.59	0.1816	25.65	0.3673
Highest			22.12	0.1629	25.18	0.3296
Limit			Result		PASS	



LTE NB1 Band 4 / 3.75KHz (Average) (GT - LC = 2.24 dB)						
Channel	Mode	Tones	Conducted		EIRP	
			Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	BPSK	1T/0	22.80	0.1905	25.04	0.3192
Middle			22.84	0.1923	25.08	0.3221
Highest			22.78	0.1897	25.02	0.3177
Lowest	QPSK	1T/0	22.85	0.1928	25.09	0.3228
Middle			22.89	0.1945	25.13	0.3258
Highest			22.76	0.1888	25.00	0.3162
Limit	EIRP < 1W		Result		PASS	

LTE NB1 Band 4 / 15KHz (Average) (GT - LC = 2.24 dB)						
Channel	Mode	Tones	Conducted		EIRP	
			Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	BPSK	1T/0	22.84	0.1923	25.08	0.3221
Middle			22.84	0.1923	25.08	0.3221
Highest			22.80	0.1905	25.04	0.3192
Lowest	QPSK	1T/0	22.86	0.1932	25.10	0.3236
Middle			22.85	0.1928	25.09	0.3228
Highest			22.82	0.1914	25.06	0.3206
Limit	EIRP < 1W		Result		PASS	

LTE NB1 Band 5 / 3.75KHz (Average) (GT - LC = 0.28 dB)						
Channel	Mode	Tones	Conducted		ERP	
			Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	BPSK	1T/0	22.93	0.1963	21.06	0.1276
Middle			22.76	0.1888	20.89	0.1227
Highest			22.61	0.1824	20.74	0.1186
Lowest	QPSK	1T/0	22.92	0.1959	21.05	0.1274
Middle			22.74	0.1879	20.87	0.1222
Highest			22.64	0.1837	20.77	0.1194
Limit	ERP < 7W		Result		PASS	

LTE NB1 Band 5 / 15KHz (Average) (GT - LC = 0.28 dB)						
Channel	Mode	Tones	Conducted		ERP	
			Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	BPSK	1T/0	22.84	0.1923	20.97	0.1250
Middle			22.73	0.1875	20.86	0.1219
Highest			22.62	0.1828	20.75	0.1189
Lowest	QPSK	1T/11	22.88	0.1941	21.01	0.1262
Middle			22.88	0.1941	21.01	0.1262
Highest			22.62	0.1828	20.75	0.1189
Limit	ERP < 7W		Result		PASS	



LTE NB1 Band 12 / 3.75KHz (Average) (Average) (GT - LC = 0.84 dB)						
Channel	Mode	Tones	Conducted		ERP	
			Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	BPSK	1T/47	22.83	0.1919	21.52	0.1419
Middle			22.75	0.1884	21.44	0.1393
Highest			22.72	0.1871	21.41	0.1384
Lowest	QPSK	1T/47	22.82	0.1914	21.51	0.1416
Middle			22.82	0.1914	21.51	0.1416
Highest			22.73	0.1875	21.42	0.1387
Limit	ERP < 3W		Result		PASS	

LTE NB1 Band 12 / 15KHz (Average) (Average) (GT - LC = 0.84 dB)						
Channel	Mode	Tones	Conducted		ERP	
			Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	BPSK	1T/0	22.99	0.1991	21.68	0.1472
Middle			22.70	0.1862	21.39	0.1377
Highest			22.84	0.1923	21.53	0.1422
Lowest	QPSK	1T/0	23.00	0.1995	21.69	0.1476
Middle			22.71	0.1866	21.40	0.1380
Highest			22.84	0.1923	21.53	0.1422
Limit	ERP < 3W		Result		PASS	

LTE NB1 Band 13 / 3.75KHz (Average) (Average) (GT - LC = 1.25 dB)						
Channel	Mode	Tones	Conducted		ERP	
			Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	BPSK	1T/0	23.00	0.1995	22.10	0.1622
Middle			22.94	0.1968	22.04	0.1600
Highest			22.99	0.1991	22.09	0.1618
Lowest	QPSK	1T/0	22.95	0.1972	22.05	0.1603
Middle			22.97	0.1982	22.07	0.1611
Highest			22.99	0.1991	22.09	0.1618
Limit	ERP < 3W		Result		PASS	

LTE NB1 Band 13 / 15KHz (Average) (Average) (GT - LC = 1.25 dB)						
Channel	Mode	Tones	Conducted		ERP	
			Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	BPSK	1T/11	22.99	0.1991	22.09	-
Middle			22.92	0.1959	22.02	0.1592
Highest			22.87	0.1936	21.97	-
Lowest	QPSK	1T/0	22.96	0.1977	22.06	-
Middle			22.96	0.1977	22.06	0.1607
Highest			22.87	0.1936	21.97	-
Limit	ERP < 3W		Result		PASS	



LTE NB1 Band 17 / 3.75KHz (Average) (Average) (GT - LC = 0.84 dB)						
Channel	Mode	Tones	Conducted		ERP	
			Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	BPSK	1T/0	22.99	0.1991	21.68	0.1472
Middle			22.86	0.1932	21.55	0.1429
Highest			22.96	0.1977	21.65	0.1462
Lowest	QPSK	1T/0	22.98	0.1986	21.67	0.1469
Middle			22.98	0.1986	21.67	0.1469
Highest			22.96	0.1977	21.65	0.1462
Limit	ERP < 3W		Result		PASS	

LTE NB1 Band 17 / 15KHz (Average) (Average) (GT - LC = 0.84 dB)						
Channel	Mode	Tones	Conducted		ERP	
			Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	BPSK	1T/0	22.97	0.1982	21.66	0.1466
Middle			22.94	0.1968	21.63	0.1455
Highest			22.97	0.1982	21.66	0.1466
Lowest	QPSK	1T/0	22.99	0.1991	21.68	0.1472
Middle			22.89	0.1945	21.58	0.1439
Highest			22.99	0.1991	21.68	0.1472
Limit	ERP < 3W		Result		PASS	

LTE NB1 Band 26 / 3.75KHz (Average) (Average) (GT - LC = 0.59 dB)						
Channel	Mode	Tones	Conducted		ERP	
			Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	BPSK	1T/0	22.99	0.1991	21.43	0.1390
Middle			22.86	0.1932	21.30	0.1349
Highest			22.72	0.1871	21.16	0.1306
Lowest	QPSK	1T/0	23.00	0.1995	21.44	0.1393
Middle			22.90	0.1950	21.34	0.1361
Highest			22.71	0.1866	21.15	0.1303
Limit	ERP < 7W		Result		PASS	

LTE NB1 Band 26 / 15KHz (Average) (Average) (GT - LC = 0.59 dB)						
Channel	Mode	Tones	Conducted		ERP	
			Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	BPSK	1T/0	22.97	0.1982	21.41	0.1384
Middle			22.80	0.1905	21.24	0.1330
Highest			22.72	0.1871	21.16	0.1306
Lowest	QPSK	1T/0	22.99	0.1991	21.43	0.1390
Middle			22.78	0.1897	21.22	0.1324
Highest			22.71	0.1866	21.15	0.1303
Limit	ERP < 7W		Result		PASS	



LTE NB1 Band 66 / 3.75KHz (Average) (Average) (GT - LC = 2.38 dB)						
Channel	Mode	Tones	Conducted		EIRP	
			Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	BPSK	1T/0	22.88	0.1941	25.26	0.3357
Middle			22.89	0.1945	25.27	0.3365
Highest			22.74	0.1879	25.12	0.3251
Lowest	QPSK	1T/47	22.82	0.1914	25.20	0.3311
Middle			22.90	0.1950	25.28	0.3373
Highest			22.71	0.1866	25.09	0.3228
Limit	EIRP < 1W		Result		PASS	

LTE NB1 Band 66 / 15KHz (Average) (Average) (GT - LC = 2.38 dB)						
Channel	Mode	Tones	Conducted		EIRP	
			Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	BPSK	1T/0	22.92	0.1959	25.30	0.3388
Middle			22.88	0.1941	25.26	0.3357
Highest			22.79	0.1901	25.17	0.3289
Lowest	QPSK	1T/0	22.95	0.1972	25.33	0.3412
Middle			22.92	0.1959	25.30	0.3388
Highest			22.80	0.1905	25.18	0.3296
Limit	EIRP < 1W		Result		PASS	

**LTE NB IOT Band 4**

LTE NB IOT Band 4 / 15Khz / BPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3427	-54.40	-13	-41.40	-73.5	-64.77	1.81	12.18	H
	5135	-47.48	-13	-34.48	-70.89	-57.30	2.30	12.13	H
	6850	-44.61	-13	-31.61	-70.81	-53.29	2.37	11.05	H
									H
									H
									H
	3427	-51.64	-13	-38.64	-71.36	-62.01	1.81	12.18	V
	5135	-40.98	-13	-27.98	-64.96	-50.80	2.30	12.13	V
	6850	-40.87	-13	-27.87	-67.63	-49.55	2.37	11.05	V
									V
									V
									V
Middle	3462	-55.95	-13	-42.95	-75.38	-66.40	1.84	12.29	H
	5198	-46.46	-13	-33.46	-69.92	-56.32	2.28	12.14	H
	6927	-45.44	-13	-32.44	-71.88	-54.02	2.40	10.97	H
									H
									H
									H
	3462	-52.68	-13	-39.68	-72.64	-63.13	1.84	12.29	V
	5198	-39.98	-13	-26.98	-63.99	-49.84	2.28	12.14	V
	6927	-40.28	-13	-27.28	-67.33	-48.86	2.40	10.97	V
									V
									V
									V



LTE NB IOT Band 4 / 15Khz / BPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Highest	3504	-54.73	-13	-41.73	-74.53	-65.26	1.87	12.40	H
	5254	-43.88	-13	-30.88	-67.38	-53.77	2.26	12.15	H
	7011	-44.26	-13	-31.26	-70.99	-52.73	2.41	10.88	H
									H
									H
									H
	3504	-52.33	-13	-39.33	-72.58	-62.86	1.87	12.40	V
	5254	-39.92	-13	-26.92	-63.96	-49.81	2.26	12.15	V
	7011	-41.83	-13	-28.83	-69.21	-50.30	2.41	10.88	V
									V
									V
									V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

**LTE NB IOT Band 66**

LTE NB IOT Band 66 / 15KHz / BPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3427	-51.69	-13	-38.69	-70.79	-62.06	1.81	12.18	H
	5135	-41.22	-13	-28.22	-64.63	-51.04	2.30	12.13	H
	6850	-41.25	-13	-28.25	-67.45	-49.93	2.37	11.05	H
									H
									H
									H
									H
	3427	-52.79	-13	-39.79	-72.51	-63.16	1.81	12.18	V
	5135	-44.63	-13	-31.63	-68.61	-54.45	2.30	12.13	V
	6850	-45.98	-13	-32.98	-72.74	-54.66	2.37	11.05	V
									V
									V
									V
									V
Middle	3490	-52.08	-13	-39.08	-71.76	-62.59	1.86	12.37	H
	5233	-40.86	-13	-27.86	-64.35	-50.74	2.26	12.15	H
	6983	-42.56	-13	-29.56	-69.18	-51.06	2.41	10.92	H
									H
									H
									H
									H
	3490	-53.81	-13	-40.81	-73.96	-64.32	1.86	12.37	V
	5233	-45.73	-13	-32.73	-69.76	-55.61	2.26	12.15	V
	6983	-44.46	-13	-31.46	-71.74	-52.96	2.41	10.92	V
									V
									V
									V
									V



LTE NB IOT Band 66 / 15Khz / BPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Highest	3553	-54.76	-13	-41.76	-74.81	-65.23	1.90	12.37	H
	5331	-42.35	-13	-29.35	-65.92	-52.29	2.22	12.17	H
	7109	-43.51	-13	-30.51	-70.79	-51.86	2.35	10.70	H
									H
									H
									H
									H
	3553	-51.24	-13	-38.24	-71.8	-61.71	1.90	12.37	V
	5331	-44.76	-13	-31.76	-68.85	-54.70	2.22	12.17	V
	7109	-46.28	-13	-33.28	-74.07	-54.63	2.35	10.70	V
									V
									V
									V
									V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

**LTE NB IOT Band 25**

LTE NB IOT Band 25 / 15Khz / BPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3707	-53.00	-13	-40.00	-73.55	-63.30	1.98	12.28	H
	5555	-46.05	-13	-33.05	-69.62	-56.18	2.14	12.28	H
	7410	-45.02	-13	-32.02	-73.1	-53.01	2.17	10.16	H
									H
									H
									H
									H
	3707	-50.04	-13	-37.04	-71.12	-60.34	1.98	12.28	V
	5555	-42.19	-13	-29.19	-66.38	-52.32	2.14	12.28	V
	7410	-45.47	-13	-32.47	-73.51	-53.46	2.17	10.16	V
									V
									V
									V
									V
Middle	3763	-51.73	-13	-38.73	-72.42	-61.97	2.01	12.24	H
	5639	-44.42	-13	-31.42	-68.08	-54.69	2.12	12.39	H
	7522	-44.08	-13	-31.08	-71.86	-52.04	2.11	10.08	H
									H
									H
									H
									H
	3763	-49.10	-13	-36.10	-70.29	-59.34	2.01	12.24	V
	5639	-41.94	-13	-28.94	-66.22	-52.21	2.12	12.39	V
	7522	-44.50	-13	-31.50	-72.18	-52.46	2.11	10.08	V
									V
									V
									V
									V



LTE NB IOT Band 25 / 15Khz / BPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Highest	3826	-46.62	-13	-33.62	-67.43	-56.78	2.04	12.20	H
	5737	-43.61	-13	-30.61	-67.73	-54.04	2.10	12.53	H
	7648	-45.08	-13	-32.08	-72.4	-53.50	2.11	10.53	H
									H
									H
									H
									H
	3826	-43.66	-13	-30.66	-64.94	-53.82	2.04	12.20	V
	5737	-39.60	-13	-26.60	-64.26	-50.03	2.10	12.53	V
	7648	-46.00	-13	-33.00	-73.37	-54.42	2.11	10.53	V
									V
									V
									V
									V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

**LTE NB IOT Band 12**

LTE NB IOT Band 12 / 15Khz / BPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1408	-45.69	-13	-32.69	-59.96	-50.17	1.15	7.78	H
	2112	-45.18	-13	-32.18	-62.21	-51.84	1.38	10.19	H
	2816	-48.68	-13	-35.68	-66.49	-55.83	1.45	10.75	H
	3520	-53.18	-13	-40.18	-72.38	-61.54	1.88	12.39	H
	4224	-26.24	-13	-13.24	-46.69	-34.13	2.06	12.10	H
									H
									H
	1408	-44.34	-13	-31.34	-58.07	-48.82	1.15	7.78	V
	2112	-51.79	-13	-38.79	-69.10	-58.45	1.38	10.19	V
	2816	-45.75	-13	-32.75	-63.98	-52.90	1.45	10.75	V
	3520	-52.62	-13	-39.62	-72.30	-60.98	1.88	12.39	V
	4224	-27.61	-13	-14.61	-48.75	-35.50	2.06	12.10	V
									V
									V
Middle	1416	-48.16	-13	-35.16	-62.41	-52.67	1.15	7.81	H
	2120	-45.49	-13	-32.49	-62.65	-52.16	1.38	10.20	H
	2832	-54.40	-13	-41.40	-72.26	-61.56	1.45	10.77	H
	3536	-55.47	-13	-42.47	-74.78	-63.81	1.89	12.38	H
	4248	-30.72	-13	-17.72	-51.31	-38.62	2.05	12.10	H
									H
									H
	1416	-52.31	-13	-39.31	-66.03	-56.82	1.15	7.81	V
	2120	-50.59	-13	-37.59	-68.06	-57.26	1.38	10.20	V
	2832	-54.98	-13	-41.98	-73.26	-62.14	1.45	10.77	V
	3536	-53.19	-13	-40.19	-72.99	-61.53	1.89	12.38	V
	4248	-26.44	-13	-13.44	-47.73	-34.34	2.05	12.10	V
									V
									V



LTE NB IOT Band 12 / 15Khz / BPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Highest	1432	-39.62	-13	-26.62	-53.90	-44.20	1.16	7.89	H
	2144	-44.86	-13	-31.86	-62.32	-51.54	1.38	10.22	H
	2864	-43.02	-13	-30.02	-60.83	-50.21	1.45	10.79	H
	3576	-51.07	-13	-38.07	-70.58	-59.36	1.91	12.35	H
	4296	-32.89	-13	-19.89	-53.59	-40.80	2.04	12.10	H
									H
									H
	1432	-44.40	-13	-31.40	-58.20	-48.98	1.16	7.89	V
	2144	-40.98	-13	-27.98	-58.80	-47.66	1.38	10.22	V
	2864	-42.20	-13	-29.20	-60.45	-49.39	1.45	10.79	V
	3576	-45.30	-13	-32.30	-65.35	-53.59	1.91	12.35	V
	4296	-31.76	-13	-18.76	-53.17	-39.67	2.04	12.10	V
									V
									V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

**LTE NB IOT Band 13**

LTE NB IOT Band 13 / 15Khz / BPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1554	-53.04	-13	-40.04	-66.34	-58.10	1.19	8.41	H
	2332	-55.50	-13	-42.50	-72.97	-62.30	1.41	10.37	H
	3109	-45.01	-13	-32.01	-63.83	-52.54	1.55	11.23	H
	3886	-53.44	-13	-40.44	-73.84	-61.39	2.07	12.17	H
	4664	-50.40	-13	-37.40	-72.54	-58.25	2.10	12.10	H
									H
									H
	1554	-60.01	-13.00	-47.01	-73.09	-65.07	1.19	8.41	V
	2332	-57.17	-13	-44.17	-75.18	-63.97	1.41	10.37	V
	3109	-49.39	-13	-36.39	-68.48	-56.92	1.55	11.23	V
	3886	-50.88	-13	-37.88	-71.73	-58.83	2.07	12.17	V
	4664	-50.20	-13	-37.20	-73.01	-58.05	2.10	12.10	V
									V
									V
Middle	1559	-58.14	-42.15	-15.99	-71.44	-63.22	1.19	8.42	H
	2339	-53.90	-13	-40.90	-71.33	-60.71	1.41	10.37	H
	3119	-46.29	-13	-33.29	-65.15	-53.84	1.56	11.26	H
	3899	-52.72	-13	-39.72	-73.14	-60.65	2.08	12.16	H
	4679	-51.26	-13	-38.26	-73.42	-59.10	2.11	12.10	H
									H
									H
	1559	-59.84	-42.15	-17.69	-72.84	-64.92	1.19	8.42	V
	2339	-55.70	-13	-42.70	-73.66	-62.51	1.41	10.37	V
	3119	-47.65	-13	-34.65	-66.76	-55.20	1.56	11.26	V
	3899	-51.22	-13	-38.22	-72.08	-59.15	2.08	12.16	V
	4679	-48.85	-13	-35.85	-71.69	-56.69	2.11	12.10	V
									V
									V



LTE NB IOT Band 13 / 15Khz / BPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Highest	1564	-53.56	-42.15	-11.41	-66.77	-58.66	1.19	8.44	H
	2347	-54.52	-13	-41.52	-71.88	-61.33	1.42	10.38	H
	3129	-42.27	-13	-29.27	-61.15	-49.84	1.57	11.29	H
	3911	-52.69	-13	-39.69	-73.12	-60.61	2.08	12.15	H
	4694	-49.74	-13	-36.74	-71.96	-57.57	2.12	12.10	H
									H
									H
	1564	-58.74	-42.15	-16.59	-71.74	-63.84	1.19	8.44	V
	2347	-57.22	-13	-44.22	-75.12	-64.03	1.42	10.38	V
	3129	-45.19	-13	-32.19	-64.31	-52.76	1.57	11.29	V
	3911	-51.44	-13	-38.44	-72.31	-59.36	2.08	12.15	V
	4694	-49.89	-13	-36.89	-72.77	-57.72	2.12	12.10	V
									V
									V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

**LTE NB IOT Band 2**

LTE NB IOT Band 2 / 15Khz / BPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3721	-51.65	-13	-38.65	-72.24	-61.93	1.98	12.27	H
	5583	-45.72	-13	-32.72	-69.22	-55.90	2.14	12.32	H
	7438	-44.65	-13	-31.65	-72.69	-52.61	2.15	10.11	H
									H
									H
									H
									H
	3721	-44.50	-13	-31.50	-69.61	-54.78	1.98	12.27	V
	5583	-42.84	-13	-29.84	-66.99	-53.02	2.14	12.32	V
	7438	-45.28	-13	-32.28	-73.24	-53.24	2.15	10.11	V
									V
									V
									V
									V
Middle	3742	-51.64	-13	-38.64	-72.28	-61.90	2.00	12.25	H
	5611	-45.84	-13	-32.84	-69.36	-56.07	2.13	12.36	H
	7480	-44.03	-13	-31.03	-72	-51.94	2.13	10.04	H
									H
									H
									H
									H
	3742	-48.75	-13	-35.75	-69.9	-59.01	2.00	12.25	V
	5611	-40.67	-13	-27.67	-64.84	-50.90	2.13	12.36	V
	7487	-44.34	-13	-31.34	-72.19	-52.24	2.12	10.02	V
									V
									V
									V
									V



LTE NB IOT Band 2 / 15Khz / BPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Highest	3798	-49.37	-13	-36.37	-70.14	-59.57	2.02	12.22	H
	5702	-44.47	-13	-31.47	-68.42	-54.84	2.11	12.48	H
	7599	-46.88	-13	-33.88	-74.15	-55.12	2.11	10.36	H
									H
									H
									H
									H
	3798	-44.76	-13	-31.76	-66.02	-54.96	2.02	12.22	V
	5702	-40.12	-13	-27.12	-64.64	-50.49	2.11	12.48	V
	7599	-45.75	-13	-32.75	-73.05	-53.99	2.11	10.36	V
									V
									V
									V
									V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

**LTE NB IOT Band 5**

LTE NB IOT Band 5 / 15Khz / BPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1656	-71.34	-13	-58.34	-72.34	-76.75	1.23	8.79	H
	2488	-73.02	-13	-60.02	-74.02	-79.92	1.44	10.49	H
	3312	-65.64	-13	-52.64	-66.64	-73.61	1.72	11.84	H
	4144	-62.92	-13	-49.92	-63.92	-70.79	2.08	12.10	H
									H
									H
									H
	1656	-53.30	-13	-40.30	-66.16	-58.71	1.23	8.79	V
	2488	-52.43	-13	-39.43	-69.46	-59.33	1.44	10.49	V
	3312	-45.03	-13	-32.03	-63.97	-53.00	1.72	11.84	V
	4144	-46.12	-13	-33.12	-67.08	-53.99	2.08	12.10	V
									V
									V
									V
Middle	1672	-58.00	-13	-45.00	-71.02	-63.47	1.24	8.85	H
	2512	-56.52	-13	-43.52	-73.29	-63.44	1.44	10.51	H
	3344	-48.86	-13	-35.86	-67.16	-56.90	1.74	11.93	H
	4184	-44.55	-13	-31.55	-64.87	-52.43	2.07	12.10	H
									H
									H
									H
	1672	-53.12	-13	-40.12	-66.03	-58.59	1.24	8.85	V
	2512	-54.41	-13	-41.41	-71.37	-61.33	1.44	10.51	V
	3344	-46.64	-13	-33.64	-65.47	-54.68	1.74	11.93	V
	4184	-46.71	-13	-33.71	-67.69	-54.59	2.07	12.10	V
									V
									V
									V



LTE NB IOT Band 5 / 15Khz / BPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Highest	1688	-58.46	-13	-45.46	-71.52	-63.98	1.24	8.91	H
	2536	-54.07	-13	-41.07	-70.87	-61.01	1.44	10.53	H
	3376	-50.43	-13	-37.43	-68.54	-58.54	1.77	12.03	H
	4216	-45.39	-13	-32.39	-65.8	-53.28	2.06	12.10	H
									H
									H
									H
	1688	-52.95	-13	-39.95	-65.91	-58.47	1.24	8.91	V
	2536	-50.15	-13	-37.15	-67.15	-57.09	1.44	10.53	V
	3376	-47.49	-13	-34.49	-66.21	-55.60	1.77	12.03	V
	4216	-46.19	-13	-33.19	-67.28	-54.08	2.06	12.10	V
									V
									V
									V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

**LTE NB IOT Band 17**

LTE NB IOT Band 17 / 15Khz / BPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1416	-46.52	-13	-33.52	-60.77	-51.03	1.15	7.81	H
	2120	-45.85	-13	-32.85	-63.01	-52.52	1.38	10.20	H
	2824	-45.46	-13	-32.46	-63.29	-52.62	1.45	10.76	H
	3536	-52.42	-13	-39.42	-71.73	-60.76	1.89	12.38	H
	4240	-30.33	-13	-17.33	-50.88	-38.23	2.05	12.10	H
									H
									H
	1416	-49.79	-13	-36.79	-63.51	-54.30	1.15	7.81	V
	2120	-49.09	-13	-36.09	-66.56	-55.76	1.38	10.20	V
	2824	-48.79	-13	-35.79	-67.04	-55.95	1.45	10.76	V
	3536	-52.72	-13	-39.72	-72.52	-61.06	1.89	12.38	V
	4240	-25.68	-13	-12.68	-46.92	-33.58	2.05	12.10	V
									V
									V
Middle	1424	-47.18	-13	-34.18	-61.39	-51.73	1.15	7.85	H
	2128	-48.64	-13	-35.64	-65.94	-55.31	1.38	10.20	H
	2840	-46.91	-13	-33.91	-64.78	-54.08	1.45	10.77	H
	3552	-54.85	-13	-41.85	-74.27	-63.17	1.90	12.37	H
	4256	-30.37	-13	-17.37	-51.02	-38.27	2.05	12.10	H
									H
									H
	1424	-50.20	-13	-37.20	-63.91	-54.75	1.15	7.85	V
	2128	-50.13	-13	-37.13	-67.75	-56.80	1.38	10.20	V
	2840	-48.02	-13	-35.02	-66.31	-55.19	1.45	10.77	V
	3552	-53.06	-13	-40.06	-72.99	-61.38	1.90	12.37	V
	4256	-26.68	-13	-13.68	-48.03	-34.58	2.05	12.10	V
									V
									V



LTE NB IOT Band 17 / 15Khz / BPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Highest	1432	-38.71	-13	-25.71	-52.99	-43.29	1.16	7.89	H
	2144	-45.26	-13	-32.26	-62.72	-51.94	1.38	10.22	H
	2864	-42.11	-13	-29.11	-59.92	-49.30	1.45	10.79	H
	3576	-52.40	-13	-39.40	-71.91	-60.69	1.91	12.35	H
	4296	-33.13	-13	-20.13	-53.83	-41.04	2.04	12.10	H
									H
									H
	1432	-43.53	-13	-30.53	-57.33	-48.11	1.16	7.89	V
	2144	-37.67	-13	-24.67	-55.49	-44.35	1.38	10.22	V
	2864	-42.39	-13	-29.39	-60.64	-49.58	1.45	10.79	V
	3576	-44.46	-13	-31.46	-64.51	-52.75	1.91	12.35	V
	4296	-32.48	-13	-19.48	-53.89	-40.39	2.04	12.10	V
									V
									V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

**LTE NB IOT Band 26**

LTE NB IOT Band 26 / 15Khz / BPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-53.38	-13	-40.38	-66.31	-58.77	1.23	8.76	H
	2472	-51.31	-13	-38.31	-68.01	-58.20	1.44	10.48	H
	3296	-43.74	-13	-30.74	-62.29	-51.68	1.70	11.79	H
	4120	-45.23	-13	-32.23	-65.56	-53.09	2.09	12.10	H
									H
									H
									H
	1648	-58.64	-13	-45.64	-71.45	-64.03	1.23	8.76	V
	2472	-51.57	-13	-38.57	-68.56	-58.46	1.44	10.48	V
	3296	-44.92	-13	-31.92	-63.87	-52.86	1.70	11.79	V
	4120	-43.62	-13	-30.62	-64.52	-51.48	2.09	12.10	V
									V
									V
									V
Middle	1672	-58.88	-13	-45.88	-71.9	-64.35	1.24	8.85	H
	2512	-53.14	-13	-40.14	-69.91	-60.06	1.44	10.51	H
	3344	-49.97	-13	-36.97	-68.27	-58.01	1.74	11.93	H
	4184	-44.92	-13	-31.92	-65.24	-52.80	2.07	12.10	H
									H
									H
									H
	1672	-53.73	-13	-40.73	-66.64	-59.20	1.24	8.85	V
	2512	-51.27	-13	-38.27	-68.23	-58.19	1.44	10.51	V
	3344	-45.14	-13	-32.14	-63.97	-53.18	1.74	11.93	V
	4184	-47.52	-13	-34.52	-68.5	-55.40	2.07	12.10	V
									V
									V
									V



LTE NB IOT Band 26 / 15Khz / BPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Highest	1696	-51.15	-13	-38.15	-64.21	-56.70	1.24	8.94	H
	2544	-51.07	-13	-38.07	-67.76	-58.01	1.44	10.54	H
	3392	-50.05	-13	-37.05	-67.99	-58.19	1.78	12.08	H
	4240	-46.00	-13	-33.00	-66.39	-53.90	2.05	12.10	H
									H
									H
									H
	1696	-56.51	-13	-43.51	-69.48	-62.06	1.24	8.94	V
	2544	-51.02	-13	-38.02	-67.92	-57.96	1.44	10.54	V
	3392	-50.74	-13	-37.74	-69.33	-58.88	1.78	12.08	V
	4240	-44.79	-13	-31.79	-65.87	-52.69	2.05	12.10	V
									V
									V
									V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.