

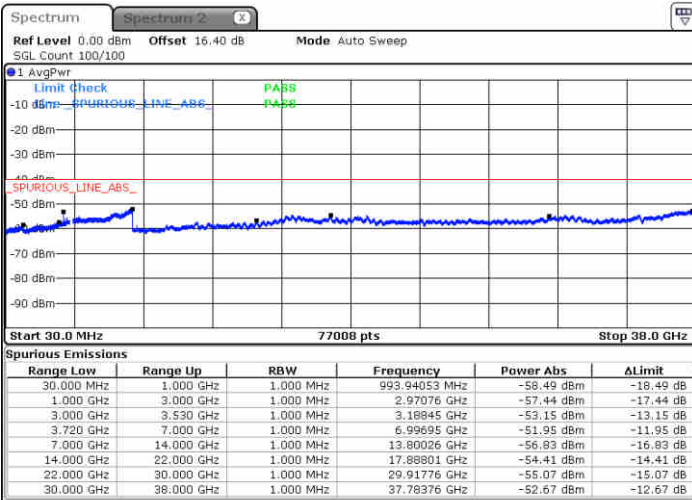


LTE Band 48 / 15MHz

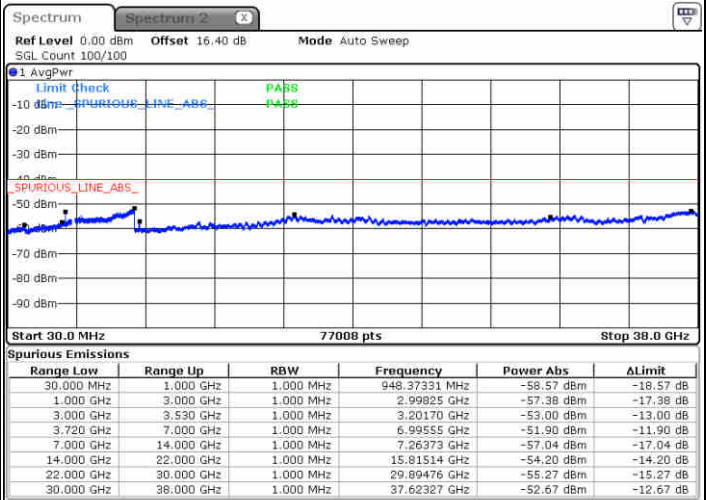
64QAM

Middle Channel / 1RB0

Middle Channel / 1RBmax



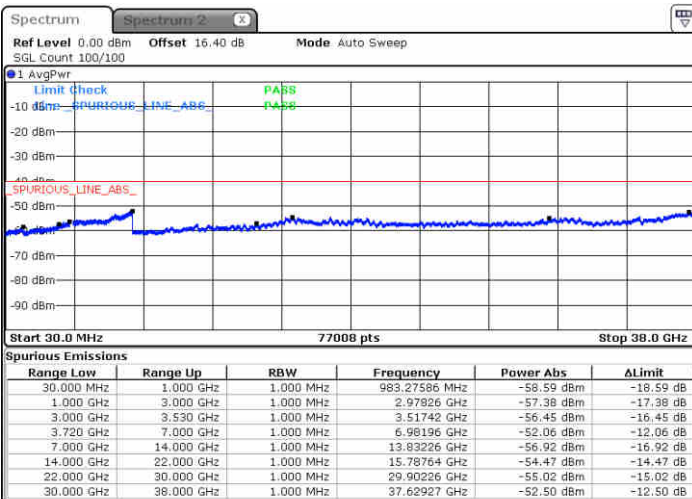
Date: 23 JUN 2020 20:24:42



Date: 23 JUN 2020 20:44:59

Middle Channel / FullIRB

N/A



Date: 23 JUN 2020 20:34:54

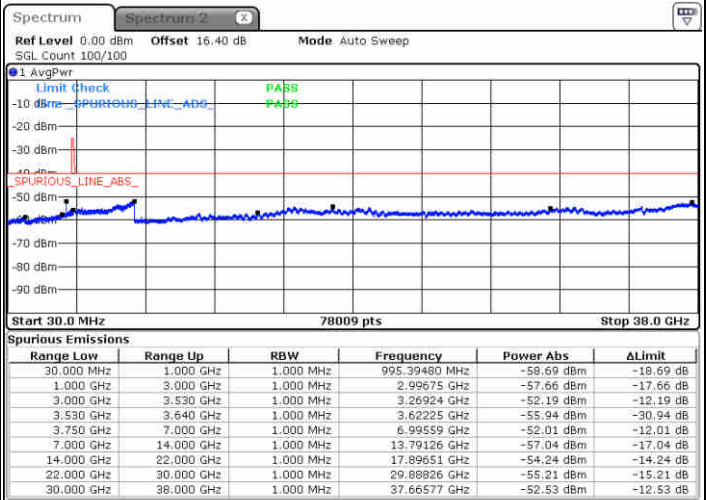
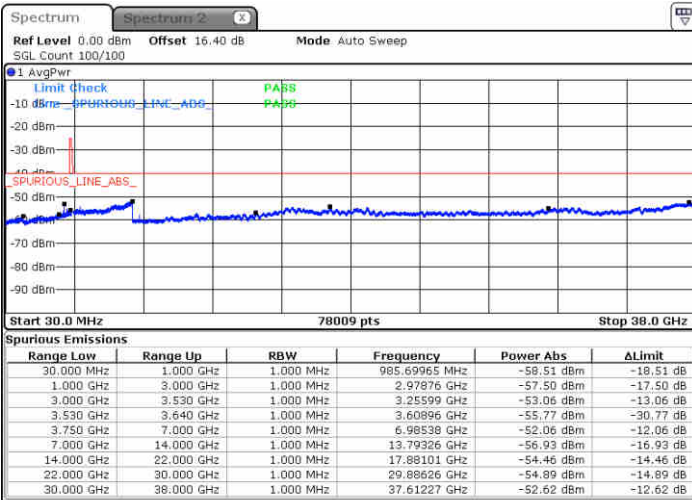


LTE Band 48 / 15MHz

64QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax

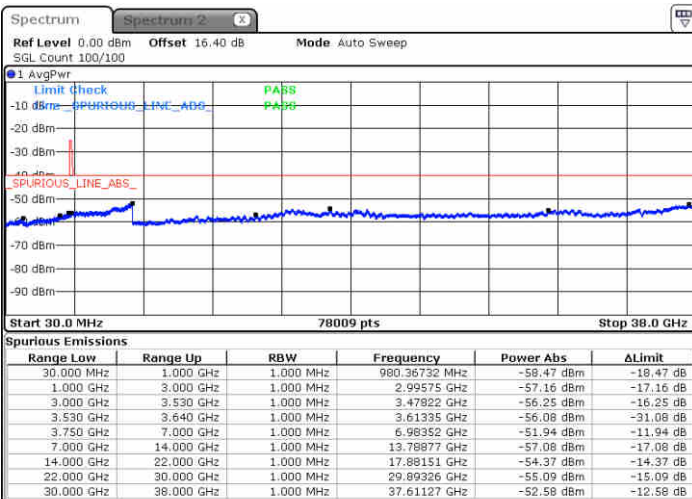


Date: 23 JUN 2020 20:30:24

Date: 23 JUN 2020 20:50:35

Highest Channel / FullIRB

N/A



Date: 23 JUN 2020 20:40:30

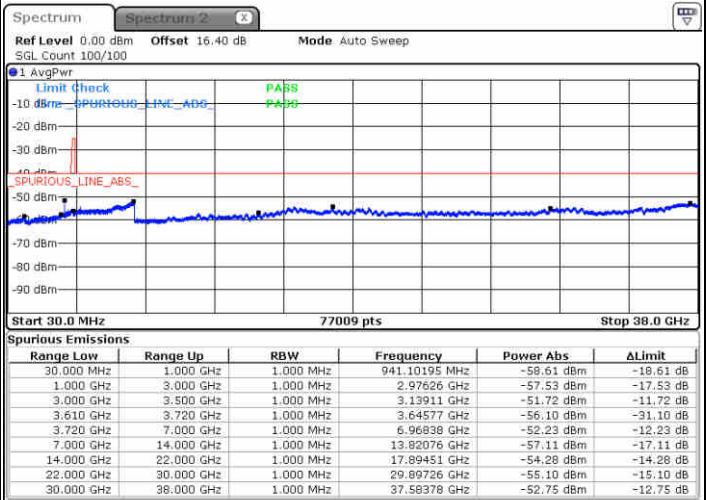
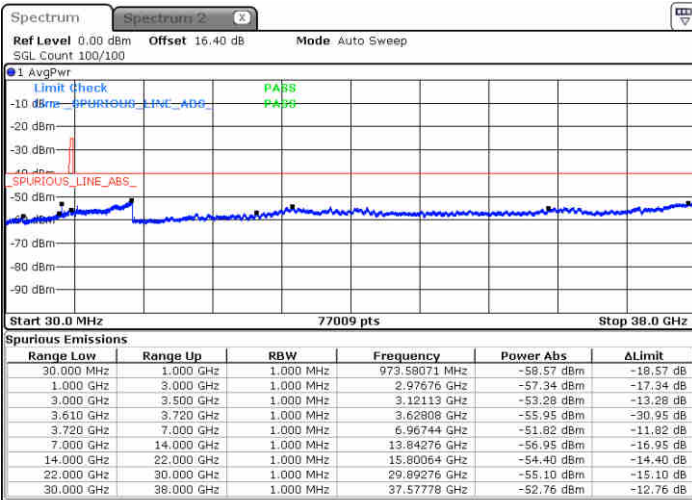


LTE Band 48 / 20MHz

64QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax

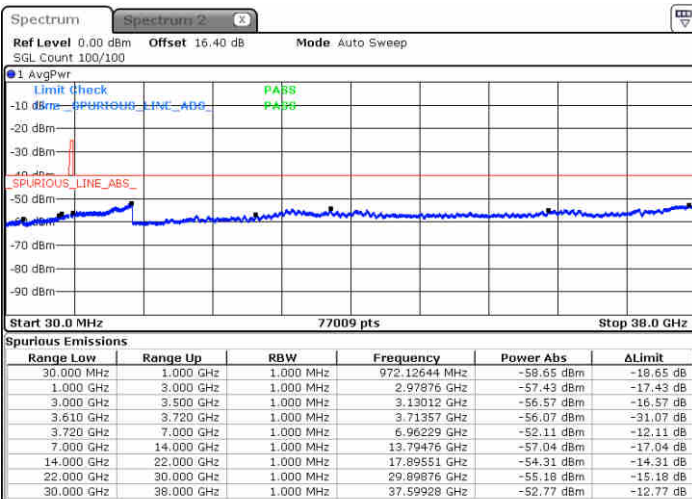


Date: 23 JUN 2020 21:01:49

Date: 23 JUN 2020 21:11:58

Lowest Channel / FullIRB

N/A



Date: 23 JUN 2020 20:51:43

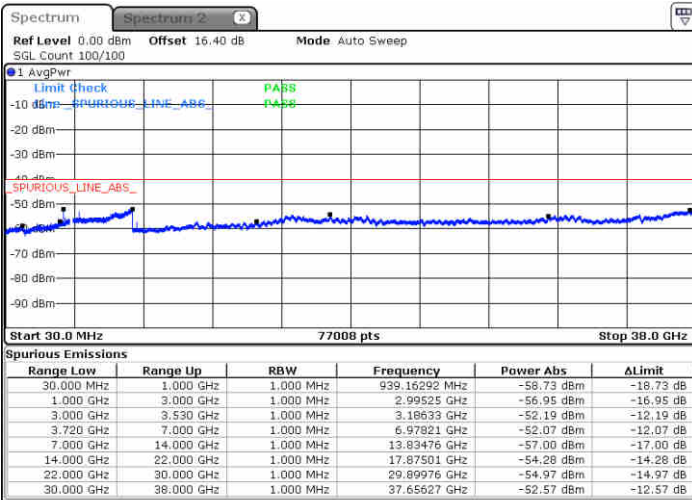


LTE Band 48 / 20MHz

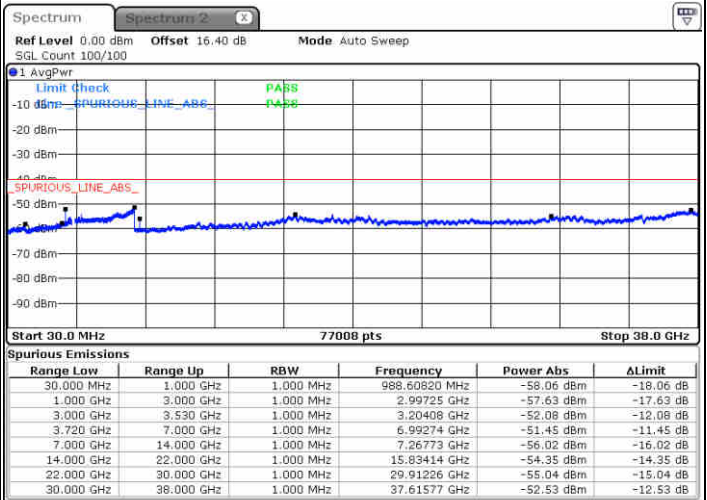
64QAM

Middle Channel / 1RB0

Middle Channel / 1RBmax



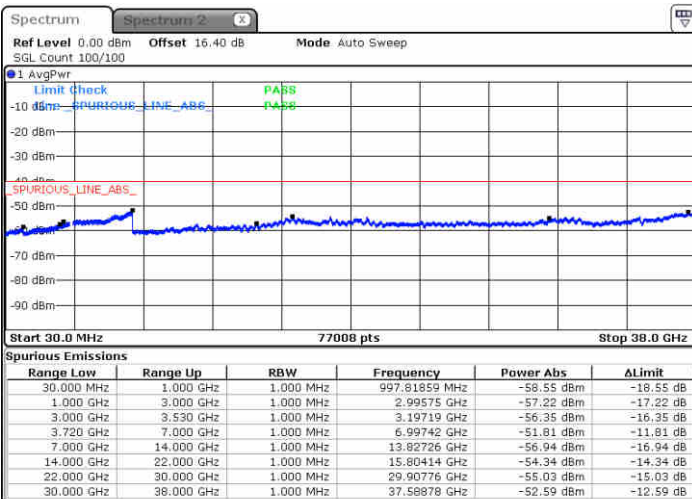
Date: 23 JUN 2020 21:07:27



Date: 23 JUN 2020 21:17:35

Middle Channel / FullIRB

N/A



Date: 23 JUN 2020 20:57:19

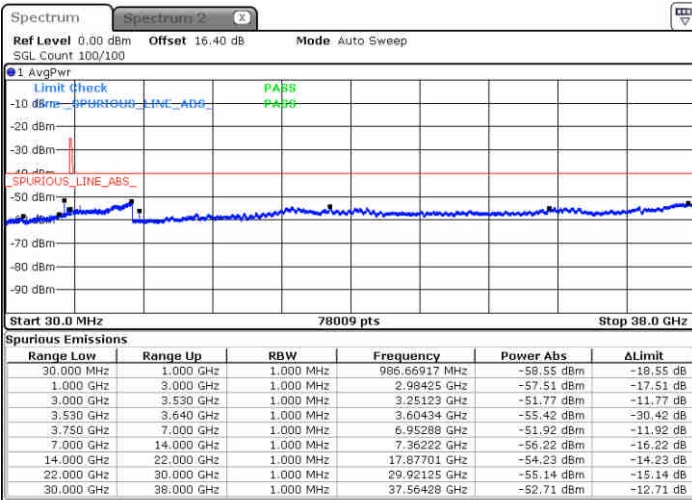


LTE Band 48 / 20MHz

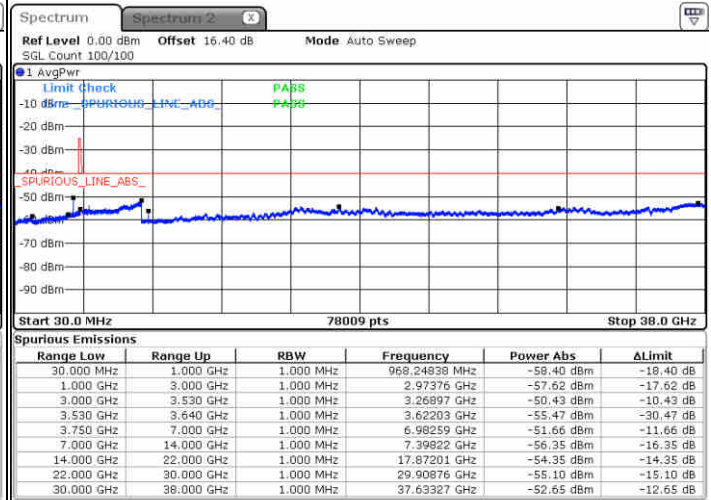
64QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax



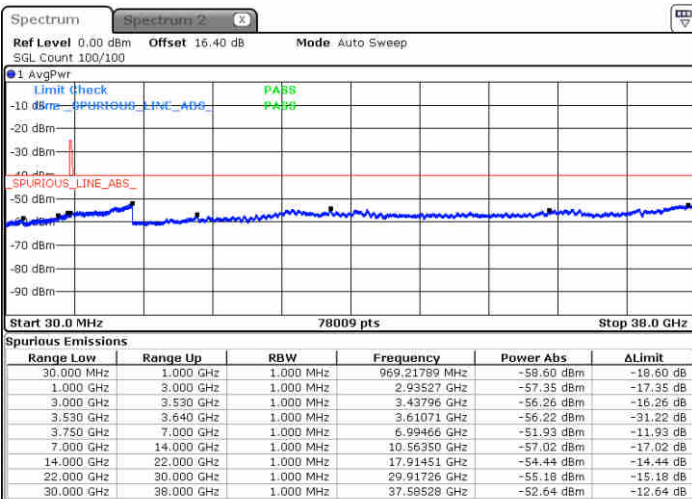
Date: 23 JUN 2020 21:08:34



Date: 23 JUN 2020 21:18:42

Highest Channel / FullIRB

N/A



Date: 23 JUN 2020 20:58:26



Frequency Stability

Test Conditions		LTE Band 48 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0046	PASS
40	Normal Voltage	0.0051	
30	Normal Voltage	0.0063	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0047	
0	Normal Voltage	0.0053	
-10	Normal Voltage	0.0049	
-20	Normal Voltage	0.0041	
-30	Normal Voltage	0.0048	
20	Maximum Voltage	0.0017	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0048	

Note:

1. Normal Voltage =12 V. ; Battery End Point (BEP) =10.8 V. ; Maximum Voltage =13.2 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



## Appendix B. Test Results of EIRP and Radiated Test

### EIRP

<Reporting Only>

<Internal Antenna>

LTE Band 48 / 5MHz (Average) (GT - LC = 5.1 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	12	16.77	0.0475	21.87	0.1538
Middle		1	12	16.93	0.0493	22.03	0.1596
Highest		1	12	16.26	0.0423	21.36	0.1368
Lowest	16QAM	1	12	17.38	0.0547	22.48	0.1770
Middle		1	12	17.45	0.0556	22.55	0.1799
Highest		1	12	16.75	0.0473	21.85	0.1531
Lowest	64QAM	1	12	17.10	0.0513	22.20	0.1660
Middle		1	12	17.18	0.0522	22.28	0.1690
Highest		1	12	16.56	0.0453	21.66	0.1466

LTE Band 48 / 10MHz (Average) (GT - LC = 5.1 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	25	16.86	0.0485	21.96	0.1570
Middle		1	25	17.03	0.0505	22.13	0.1633
Highest		1	25	16.40	0.0437	21.50	0.1413
Lowest	16QAM	1	25	17.45	0.0556	22.55	0.1799
Middle		1	25	17.56	0.0570	22.66	0.1845
Highest		1	25	16.99	0.0500	22.09	0.1618
Lowest	64QAM	1	25	17.06	0.0508	22.16	0.1644
Middle		1	25	17.17	0.0521	22.27	0.1687
Highest		1	25	16.57	0.0454	21.67	0.1469

LTE Band 48 / 15MHz (Average) (GT - LC = 5.1 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	37	16.83	0.0482	21.93	0.1560
Middle		1	37	16.91	0.0491	22.01	0.1589
Highest		1	37	16.38	0.0435	21.48	0.1406
Lowest	16QAM	1	37	17.40	0.0550	22.50	0.1778
Middle		1	37	17.47	0.0558	22.57	0.1807
Highest		1	37	16.87	0.0486	21.97	0.1574
Lowest	64QAM	1	37	16.87	0.0486	21.97	0.1574
Middle		1	37	16.92	0.0492	22.02	0.1592
Highest		1	37	16.37	0.0434	21.47	0.1403





LTE Band 48 / 20MHz (Average) (GT - LC = 5.1 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	99	17.38	0.0547	22.48	0.1770
Middle		1	99	17.38	0.0547	22.48	0.1770
Highest		1	99	16.87	0.0486	21.97	0.1574
Lowest	16QAM	1	99	17.87	0.0612	22.97	0.1982
Middle		1	99	17.86	0.0611	22.96	0.1977
Highest		1	99	17.41	0.0551	22.51	0.1782
Lowest	64QAM	1	99	17.73	0.0593	22.83	0.1919
Middle		1	99	17.68	0.0586	22.78	0.1897
Highest		1	99	17.19	0.0524	22.29	0.1694





**EIRP Power**

LTE Band 48 / Conducted Power (dBm/10MHz)									
BW	1.4MHz			3MHz			5MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	-	-	-	-	-	-	16.77	17.38	17.10
Middle CH	-	-	-	-	-	-	16.93	17.45	17.18
Highest CH	-	-	-	-	-	-	16.26	16.75	16.56
LTE Band 48 / Conducted Power (dBm/10MHz)									
BW	10MHz			15MHz			20MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	16.86	17.45	17.06	16.83	17.40	16.87	17.38	17.87	17.73
Middle CH	17.03	17.56	17.17	16.91	17.47	16.92	17.38	17.86	17.68
Highest CH	16.40	16.99	16.57	16.38	16.87	16.37	16.87	17.41	17.19

LTE Band 48 / EIRP Power (dBm/10MHz)									
BW	1.4MHz			3MHz			5MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	-	-	-	-	-	-	21.87	22.48	22.20
Middle CH	-	-	-	-	-	-	22.03	22.55	22.28
Highest CH	-	-	-	-	-	-	21.36	21.85	21.66
LTE Band 48 / EIRP Power (dBm/10MHz)									
BW	10MHz			15MHz			20MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	21.96	22.55	22.16	21.93	22.50	21.97	22.48	22.97	22.83
Middle CH	22.13	22.66	22.27	22.01	22.57	22.02	22.48	22.96	22.78
Highest CH	21.50	22.09	21.67	21.48	21.97	21.47	21.97	22.51	22.29
Antenna Gain	5.1 dBi								
Limit	23dBm / 10MHz								
Result	PASS								



**<External Antenna>**

LTE Band 48 / 5MHz (Average) (GT - LC = 3.5 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	12	16.60	0.0457	20.10	0.1023
Middle		1	12	16.91	0.0491	20.41	0.1099
Highest		1	12	16.71	0.0469	20.21	0.1050
Lowest	16QAM	1	12	17.21	0.0526	20.71	0.1178
Middle		1	12	17.52	0.0565	21.02	0.1265
Highest		1	12	17.28	0.0535	20.78	0.1197
Lowest	64QAM	1	12	17.00	0.0501	20.50	0.1122
Middle		1	12	17.22	0.0527	20.72	0.1180
Highest		1	12	17.11	0.0514	20.61	0.1151

LTE Band 48 / 10MHz (Average) (GT - LC = 3.5 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	25	16.60	0.0457	20.10	0.1023
Middle		1	25	16.95	0.0495	20.45	0.1109
Highest		1	25	16.81	0.0480	20.31	0.1074
Lowest	16QAM	1	25	17.24	0.0530	20.74	0.1186
Middle		1	25	17.46	0.0557	20.96	0.1247
Highest		1	25	17.37	0.0546	20.87	0.1222
Lowest	64QAM	1	25	16.99	0.0500	20.49	0.1119
Middle		1	25	17.19	0.0524	20.69	0.1172
Highest		1	25	17.19	0.0524	20.69	0.1172

LTE Band 48 / 15MHz (Average) (GT - LC = 3.5 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	37	16.50	0.0447	20.00	0.1000
Middle		1	37	16.85	0.0484	20.35	0.1084
Highest		1	37	16.70	0.0468	20.20	0.1047
Lowest	16QAM	1	37	17.12	0.0515	20.62	0.1153
Middle		1	37	17.33	0.0541	20.83	0.1211
Highest		1	37	17.21	0.0526	20.71	0.1178
Lowest	64QAM	1	37	16.90	0.0490	20.40	0.1096
Middle		1	37	17.09	0.0512	20.59	0.1146
Highest		1	37	17.02	0.0504	20.52	0.1127



LTE Band 48 / 20MHz (Average) (GT - LC = 3.5 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	99	17.00	0.0501	20.50	0.1122
Middle		1	99	17.26	0.0532	20.76	0.1191
Highest		1	99	17.26	0.0532	20.76	0.1191
Lowest	16QAM	1	99	17.69	0.0587	21.19	0.1315
Middle		1	99	17.79	0.0601	21.29	0.1346
Highest		1	99	17.80	0.0603	21.30	0.1349
Lowest	64QAM	1	99	17.36	0.0545	20.86	0.1219
Middle		1	99	17.67	0.0585	21.17	0.1309
Highest		1	99	17.61	0.0577	21.11	0.1291



LTE Band 48 / Conducted Power (dBm/10MHz)									
BW	1.4MHz			3MHz			5MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	-	-	-	-	-	-	16.60	17.21	17.00
Middle CH	-	-	-	-	-	-	16.91	17.52	17.22
Highest CH	-	-	-	-	-	-	16.71	17.28	17.11

LTE Band 48 / Conducted Power (dBm/10MHz)									
BW	10MHz			15MHz			20MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	16.60	17.24	16.99	16.50	17.12	16.90	17.00	17.69	17.36
Middle CH	16.95	17.46	17.19	16.85	17.33	17.09	17.26	17.79	17.67
Highest CH	16.81	17.37	17.19	16.70	17.21	17.02	17.26	17.80	17.61

LTE Band 48 / EIRP Power (dBm/10MHz)									
BW	1.4MHz			3MHz			5MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	-	-	-	-	-	-	20.10	20.71	20.50
Middle CH	-	-	-	-	-	-	20.41	21.02	20.72
Highest CH	-	-	-	-	-	-	20.21	20.78	20.61

LTE Band 48 / EIRP Power (dBm/10MHz)									
BW	10MHz			15MHz			20MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	20.10	20.74	20.49	20.00	20.62	20.40	20.50	21.19	20.86
Middle CH	20.45	20.96	20.69	20.35	20.83	20.59	20.76	21.29	21.17
Highest CH	20.31	20.87	20.69	20.20	20.71	20.52	20.76	21.30	21.11
Antenna Gain	3.5 dBi								
Limit	23dBm / 10MHz								
Result	PASS								



Radiated Spurious Emission

<Internal Antenna>

LTE Band 48

LTE Band 48 / 20MHz / 16QAM									
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	7138	-41.83	-40	-1.83	-43.95	-51.71	1.79	11.68	H
	10707	-48.19	-40	-8.19	-50.48	-56.59	2.50	10.90	H
	14276	-53.04	-40	-13.04	-60.16	-61.71	2.86	11.54	H
	21363	-50.90	-40	-10.90	-60.54	-67.00	2.30	18.40	H
	21413	-54.89	-40	-14.89	-76.46	-71.64	1.95	18.70	H
	24982	-52.92	-40	-12.92	-77.58	-69.11	2.08	18.27	H
	28551	-51.01	-40	-11.01	-76.5	-68.24	2.31	19.54	H
	7138	-45.66	-40	-5.66	-47.43	-55.54	1.79	11.68	V
	10707	-49.83	-40	-9.83	-51.88	-58.23	2.50	10.90	V
	14276	-54.32	-40	-14.32	-61.01	-62.99	2.86	11.54	V
	21363	-43.66	-40	-3.66	-65.27	-60.40	1.96	18.70	V
	21413	-55.06	-40	-15.06	-76.56	-71.81	1.95	18.70	V
	24982	-51.57	-40	-11.57	-77.38	-67.76	2.08	18.27	V
	28551	-49.86	-40	-9.86	-77.22	-67.09	2.31	19.54	V
Middle	7268	-40.42	-40	-0.42	-42.77	-50.03	1.86	11.47	H
	10902	-42.29	-40	-2.29	-44.63	-50.59	2.60	10.90	H
	14536	-54.14	-40	-14.14	-61.68	-62.40	2.86	11.12	H
	18170	-43.11	-40	-3.11	-61.28	-59.29	1.79	17.97	H
	21752	-53.90	-40	-13.90	-61.18	-70.00	2.30	18.40	H
	21803	-49.32	-40	-9.32	-70.94	-66.11	2.03	18.82	H
	25437	-52.09	-40	-12.09	-77.45	-68.84	2.16	18.91	H
	7268	-46.01	-40	-6.01	-48.13	-55.62	1.86	11.47	V
	10902	-48.87	-40	-8.87	-51.02	-57.17	2.60	10.90	V
	14536	-57.20	-40	-17.20	-63.72	-65.46	2.86	11.12	V
	18170	-50.10	-40	-10.10	-67.35	-66.28	1.79	17.97	V
	21752	-47.86	-40	-7.86	-69.42	-64.65	2.01	18.80	V
	21803	-51.30	-40	-11.30	-72.91	-68.09	2.03	18.82	V
	25437	-50.77	-40	-10.77	-77.45	-67.52	2.16	18.91	V



Highest	7398	-40.83	-40	-0.83	-43.15	-50.16	1.93	11.26	H
	11097	-47.00	-40	-7.00	-49.61	-55.41	2.61	11.02	H
	14796	-53.43	-40	-13.43	-62.76	-62.44	2.93	11.95	H
	18495	-49.36	-40	-9.36	-67.73	-65.36	1.90	17.90	H
	22140	-53.80	-40	-13.80	-59.58	-70.00	2.30	18.50	H
	22193	-49.50	-40	-9.50	-72.12	-66.27	2.05	18.82	H
	25892	-50.80	-40	-10.80	-77.04	-67.91	1.97	19.08	H
	7398	-44.20	-40	-4.20	-46.36	-53.53	1.93	11.26	V
	11097	-50.67	-40	-10.67	-53.11	-59.08	2.61	11.02	V
	14796	-57.90	-40	-17.90	-65.33	-66.91	2.93	11.95	V
	18495	-51.30	-40	-11.30	-68.81	-67.30	1.90	17.90	V
	22140	-49.80	-40	-9.80	-63.14	-66.00	2.30	18.50	V
	22193	-51.81	-40	-11.81	-74.44	-68.58	2.05	18.82	V
	25892	-49.76	-40	-9.76	-77.11	-66.87	1.97	19.08	V

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



LTE Band 48 / 15MHz / 16QAM									
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	7128	-45.09	-40	-5.09	-47.18	-55.00	1.79	11.70	H
	10692	-49.92	-40	-9.92	-52.2	-58.33	2.49	10.90	H
	14257	-53.71	-40	-13.71	-60.81	-62.43	2.86	11.58	H
	21341	-49.90	-40	-9.90	-59.25	-66.00	2.30	18.40	H
	21385	-54.88	-40	-14.88	-76.52	-71.62	1.96	18.70	H
	24949	-52.97	-40	-12.97	-77.63	-69.11	2.07	18.22	H
	28513	-51.34	-40	-11.34	-76.85	-68.62	2.30	19.58	H
	7128	-49.41	-40	-9.41	-51.14	-59.32	1.79	11.70	V
	10692	-54.38	-40	-14.38	-56.42	-62.79	2.49	10.90	V
	14257	-55.93	-40	-15.93	-62.65	-64.65	2.86	11.58	V
	21341	-44.48	-40	-4.48	-66.13	-61.21	1.97	18.70	V
	21385	-54.95	-40	-14.95	-76.51	-71.69	1.96	18.70	V
	24949	-51.95	-40	-11.95	-77.78	-68.09	2.07	18.22	V
	28513	-49.04	-40	-9.04	-76.45	-66.32	2.30	19.58	V
Middle	7263	-41.48	-40	-1.48	-43.84	-51.10	1.86	11.48	H
	10895	-45.22	-40	-5.22	-47.56	-53.52	2.60	10.90	H
	14527	-54.89	-40	-14.89	-62.37	-63.12	2.86	11.09	H
	18158	-45.40	-40	-5.40	-63.56	-61.58	1.78	17.97	H
	21751	-50.90	-40	-10.90	-58.48	-67.00	2.30	18.40	H
	21790	-52.66	-40	-12.66	-74.27	-69.45	2.02	18.82	H
	25422	-51.73	-40	-11.73	-77.06	-68.46	2.16	18.89	H
	7263	-48.08	-40	-8.08	-50.2	-57.70	1.86	11.48	V
	10895	-50.66	-40	-10.66	-52.8	-58.96	2.60	10.90	V
	14527	-57.18	-40	-17.18	-63.66	-65.41	2.86	11.09	V
	18158	-53.58	-40	-13.58	-70.82	-69.76	1.78	17.97	V
	21751	-43.61	-40	-3.61	-65.17	-60.40	2.01	18.80	V
	21790	-55.02	-40	-15.02	-76.62	-71.81	2.02	18.82	V
	25422	-50.78	-40	-10.78	-77.42	-67.51	2.16	18.89	V





Highest	7398	-41.87	-40	-1.87	-44.19	-51.20	1.93	11.26	H
	11097	-49.07	-40	-9.07	-51.68	-57.48	2.61	11.02	H
	14796	-52.91	-40	-12.91	-62.26	-61.92	2.93	11.95	H
	18496	-51.07	-40	-11.07	-69.43	-67.07	1.90	17.90	H
	22151	-50.80	-40	-10.80	-57.47	-67.00	2.30	18.50	H
	22195	-50.95	-40	-10.95	-73.57	-67.72	2.05	18.82	H
	25894	-50.78	-40	-10.78	-77.02	-67.89	1.97	19.08	H
	7398	-46.47	-40	-6.47	-48.63	-55.80	1.93	11.26	V
	11097	-53.67	-40	-13.67	-56.11	-62.08	2.61	11.02	V
	14796	-58.04	-40	-18.04	-65.48	-67.05	2.93	11.95	V
	18496	-55.77	-40	-15.77	-73.27	-71.77	1.90	17.90	V
	22151	-48.80	-40	-8.80	-61.69	-65.00	2.30	18.50	V
	22195	-51.39	-40	-11.39	-74.03	-68.16	2.05	18.82	V
	25894	-49.69	-40	-9.69	-77.04	-66.80	1.97	19.08	V

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



LTE Band 48 / 10MHz / 16QAM									
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	7119	-41.43	-40	-1.43	-43.48	-51.36	1.78	11.71	H
	10678	-49.36	-40	-9.36	-51.64	-57.78	2.48	10.90	H
	14238	-54.11	-40	-14.11	-61.2	-62.87	2.87	11.63	H
	21330	-49.85	-40	-9.85	-58.95	-66.00	2.35	18.50	H
	21352	-54.79	-40	-14.79	-76.52	-71.52	1.97	18.70	H
	24915	-53.04	-40	-13.04	-77.7	-69.13	2.07	18.16	H
	28478	-51.10	-40	-11.10	-76.62	-68.39	2.30	19.59	H
	7119	-48.28	-40	-8.28	-49.96	-58.21	1.78	11.71	V
	10678	-51.28	-40	-11.28	-53.31	-59.70	2.48	10.90	V
	14238	-53.98	-40	-13.98	-60.72	-62.74	2.87	11.63	V
	21330	-48.85	-40	-8.85	-63.13	-65.00	2.35	18.50	V
	21352	-54.28	-40	-14.28	-75.91	-71.01	1.97	18.70	V
	24915	-52.20	-40	-12.20	-78.04	-68.29	2.07	18.16	V
	28478	-49.22	-40	-9.22	-76.62	-66.51	2.30	19.59	V
Middle	7259	-42.46	-40	-2.46	-44.83	-52.09	1.86	11.49	H
	10888	-48.07	-40	-8.07	-50.4	-56.38	2.59	10.90	H
	14518	-53.12	-40	-13.12	-60.55	-61.32	2.86	11.06	H
	18144	-44.64	-40	-4.64	-62.79	-60.83	1.78	17.97	H
	21751	-55.90	-40	-15.90	-63.15	-72.00	2.30	18.40	H
	21774	-50.98	-40	-10.98	-72.57	-67.77	2.02	18.81	H
	25403	-51.94	-40	-11.94	-77.25	-68.65	2.15	18.86	H
	7259	-47.24	-40	-7.24	-49.36	-56.87	1.86	11.49	V
	10888	-50.01	-40	-10.01	-52.15	-58.32	2.59	10.90	V
	14518	-58.01	-40	-18.01	-64.48	-66.21	2.86	11.06	V
	18144	-51.23	-40	-11.23	-68.47	-67.42	1.78	17.97	V
	21751	-48.23	-40	-8.23	-69.79	-65.02	2.01	18.80	V
	21774	-54.34	-40	-14.34	-75.92	-71.13	2.02	18.81	V
	25403	-50.08	-40	-10.08	-76.69	-66.79	2.15	18.86	V



Highest	7399	-40.48	-40	-0.48	-42.8	-49.81	1.94	11.26	H
	11098	-48.16	-40	-8.16	-50.77	-56.57	2.61	11.02	H
	14798	-52.61	-40	-12.61	-61.96	-61.63	2.93	11.95	H
	18499	-55.37	-40	-15.37	-73.74	-71.37	1.90	17.90	H
	22173	-50.80	-40	-10.80	-57.59	-67.00	2.30	18.50	H
	22195	-53.19	-40	-13.19	-75.82	-69.96	2.05	18.82	H
	25892	-51.12	-40	-11.12	-77.36	-68.23	1.97	19.08	H
	7399	-45.83	-40	-5.83	-47.99	-55.16	1.94	11.26	V
	11098	-51.20	-40	-11.20	-53.64	-59.61	2.61	11.02	V
	14798	-58.22	-40	-18.22	-65.66	-67.24	2.93	11.95	V
	18499	-55.12	-40	-15.12	-72.63	-71.12	1.90	17.90	V
	22173	-46.30	-40	-6.30	-59.72	-62.50	2.30	18.50	V
	22195	-51.69	-40	-11.69	-74.34	-68.46	2.05	18.82	V
	25892	-50.00	-40	-10.00	-77.35	-67.11	1.97	19.08	V

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



LTE Band 48 / 5MHz / 16QAM									
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	7110	-41.83	-40	-1.83	-43.85	-51.77	1.78	11.72	H
	10665	-48.18	-40	-8.18	-50.45	-56.60	2.48	10.90	H
	14218	-53.02	-40	-13.02	-60.09	-61.83	2.87	11.68	H
	21318	-50.35	-40	-10.35	-58.94	-66.50	2.35	18.50	H
	21330	-54.24	-40	-14.24	-76.03	-70.97	1.97	18.70	H
	24882	-52.88	-40	-12.88	-77.54	-68.92	2.07	18.11	H
	28434	-50.75	-40	-10.75	-76.27	-68.01	2.31	19.57	H
	7110	-48.59	-40	-8.59	-50.23	-58.53	1.78	11.72	V
	10665	-54.51	-40	-14.51	-56.53	-62.93	2.48	10.90	V
	14218	-55.45	-40	-15.45	-62.22	-64.26	2.87	11.68	V
	21318	-48.35	-40	-8.35	-62.53	-64.50	2.35	18.50	V
	21330	-54.74	-40	-14.74	-76.41	-71.47	1.97	18.70	V
	24882	-51.76	-40	-11.76	-77.62	-67.80	2.07	18.11	V
	28434	-49.25	-40	-9.25	-76.61	-66.51	2.31	19.57	V
Middle	7255	-42.08	-40	-2.08	-44.44	-51.71	1.86	11.49	H
	10880	-45.82	-40	-5.82	-48.16	-54.13	2.59	10.90	H
	14510	-53.99	-40	-13.99	-61.37	-62.17	2.85	11.03	H
	18133	-41.95	-40	-1.95	-60.1	-58.15	1.78	17.97	H
	21751	-50.90	-40	-10.90	-58.16	-67.00	2.30	18.40	H
	21762	-50.50	-40	-10.50	-72.08	-67.29	2.01	18.80	H
	25392	-51.69	-40	-11.69	-76.98	-68.39	2.15	18.85	H
	7255	-47.25	-40	-7.25	-49.37	-56.88	1.86	11.49	V
	10880	-47.41	-40	-7.41	-49.55	-55.72	2.59	10.90	V
	14510	-55.85	-40	-15.85	-62.29	-64.03	2.85	11.03	V
	18133	-52.93	-40	-12.93	-70.16	-69.13	1.78	17.97	V
	21751	-48.70	-40	-8.70	-74.64	-65.49	2.01	18.80	V
	21762	-53.07	-40	-13.07	-74.64	-69.86	2.01	18.80	V
25392	-50.78	-40	-10.78	-77.37	-67.48	2.15	18.85	V	



Highest	7400	-40.20	-40	-0.20	-42.52	-49.52	1.94	11.26	H
	11100	-44.53	-40	-4.53	-47.14	-52.94	2.61	11.02	H
	14797	-52.56	-40	-12.56	-61.91	-61.58	2.93	11.95	H
	18499	-47.10	-40	-7.10	-65.47	-63.10	1.90	17.90	H
	22184	-52.80	-40	-12.80	-59.87	-69.00	2.30	18.50	H
	22195	-51.21	-40	-11.21	-73.84	-67.98	2.05	18.82	H
	25892	-50.90	-40	-10.90	-77.14	-68.01	1.97	19.08	H
	7400	-44.88	-40	-4.88	-47.04	-54.20	1.94	11.26	V
	11100	-49.76	-40	-9.76	-52.21	-58.17	2.61	11.02	V
	14797	-56.88	-40	-16.88	-64.32	-65.90	2.93	11.95	V
	18499	-54.32	-40	-14.32	-71.83	-70.32	1.90	17.90	V
	22184	-44.80	-40	-4.80	-58.3	-61.00	2.30	18.50	V
	22195	-50.46	-40	-10.46	-73.11	-67.23	2.05	18.82	V
	25892	-49.72	-40	-9.72	-77.07	-66.83	1.97	19.08	V

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



<External Antenna>

LTE Band 48 / 20MHz / 16QAM									
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	7138	-40.63	-40	-0.63	-42.75	-50.51	1.79	11.68	H
	10707	-44.66	-40	-4.66	-46.95	-53.06	2.50	10.90	H
	14276	-52.15	-40	-12.15	-59.27	-60.82	2.86	11.54	H
	21363	-53.90	-40	-13.90	-63.09	-70.00	2.30	18.40	H
	21407	-54.92	-40	-14.92	-76.5	-71.67	1.95	18.70	H
	24982	-52.89	-40	-12.89	-77.55	-69.08	2.08	18.27	H
	28551	-51.16	-40	-11.16	-76.65	-68.39	2.31	19.54	H
	7138	-46.70	-40	-6.70	-48.47	-56.58	1.79	11.68	V
	10707	-48.04	-40	-8.04	-50.09	-56.44	2.50	10.90	V
	14276	-53.11	-40	-13.11	-59.8	-61.78	2.86	11.54	V
	21363	-46.81	-40	-6.81	-68.42	-63.55	1.96	18.70	V
	21407	-54.91	-40	-14.91	-76.41	-71.66	1.95	18.70	V
	24982	-51.43	-40	-11.43	-77.24	-67.62	2.08	18.27	V
	28551	-49.46	-40	-9.46	-76.82	-66.69	2.31	19.54	V
Middle	7268	-40.28	-40	-0.28	-42.63	-49.89	1.86	11.47	H
	10902	-41.78	-40	-1.78	-44.12	-50.08	2.60	10.90	H
	14536	-49.56	-40	-9.56	-57.1	-57.82	2.86	11.12	H
	18167	-53.36	-40	-13.36	-71.52	-69.54	1.79	17.97	H
	21751	-55.90	-40	-15.90	-62.97	-72.00	2.30	18.40	H
	21803	-55.15	-40	-15.15	-76.77	-71.94	2.03	18.82	H
	25437	-52.10	-40	-12.10	-77.46	-68.85	2.16	18.91	H
	7268	-44.55	-40	-4.55	-46.67	-54.16	1.86	11.47	V
	10902	-46.19	-40	-6.19	-48.34	-54.49	2.60	10.90	V
	14536	-56.71	-40	-16.71	-63.23	-64.97	2.86	11.12	V
	18167	-52.93	-40	-12.93	-70.18	-69.11	1.79	17.97	V
	21751	-51.92	-40	-11.92	-73.48	-68.71	2.01	18.80	V
	21803	-53.01	-40	-13.01	-74.62	-69.80	2.03	18.82	V
	25437	-50.65	-40	-10.65	-77.33	-67.40	2.16	18.91	V



Highest	7398	-40.85	-40	-0.85	-43.17	-50.18	1.93	11.26	H
	11097	-42.92	-40	-2.92	-45.53	-51.33	2.61	11.02	H
	14796	-51.73	-40	-11.73	-61.06	-60.74	2.93	11.95	H
	18499	-55.41	-40	-15.41	-73.78	-71.41	1.90	17.90	H
	22140	-55.30	-40	-15.30	-61.86	-71.50	2.30	18.50	H
	22193	-53.68	-40	-13.68	-76.3	-70.45	2.05	18.82	H
	25892	-50.83	-40	-10.83	-77.07	-67.94	1.97	19.08	H
	7398	-44.61	-40	-4.61	-46.77	-53.94	1.93	11.26	V
	11097	-50.92	-40	-10.92	-53.36	-59.33	2.61	11.02	V
	14796	-57.59	-40	-17.59	-65.02	-66.60	2.93	11.95	V
	18499	-53.71	-40	-13.71	-71.22	-69.71	1.90	17.90	V
	22140	-51.50	-40	-11.50	-64.7	-67.70	2.30	18.50	V
	22193	-52.47	-40	-12.47	-75.1	-69.24	2.05	18.82	V
	25892	-49.89	-40	-9.89	-77.24	-67.00	1.97	19.08	V

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





LTE Band 48 / 15MHz / 16QAM									
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	7128	-43.89	-40	-3.89	-45.98	-53.80	1.79	11.70	H
	10692	-48.71	-40	-8.71	-50.99	-57.12	2.49	10.90	H
	14257	-52.00	-40	-12.00	-59.1	-60.72	2.86	11.58	H
	21341	-53.20	-40	-13.20	-62.86	-69.30	2.30	18.40	H
	21385	-54.96	-40	-14.96	-76.6	-71.70	1.96	18.70	H
	24948	-53.04	-40	-13.04	-77.7	-69.18	2.07	18.22	H
	28513	-50.90	-40	-10.90	-76.41	-68.18	2.30	19.58	H
	7128	-48.88	-40	-8.88	-50.61	-58.79	1.79	11.70	V
	10692	-51.87	-40	-11.87	-53.91	-60.28	2.49	10.90	V
	14257	-55.38	-40	-15.38	-62.1	-64.10	2.86	11.58	V
	21341	-46.19	-40	-6.19	-67.84	-62.92	1.97	18.70	V
	21385	-55.26	-40	-15.26	-76.82	-72.00	1.96	18.70	V
	24948	-51.95	-40	-11.95	-77.78	-68.09	2.07	18.22	V
	28513	-49.51	-40	-9.51	-76.92	-66.79	2.30	19.58	V
Middle	7263	-42.45	-40	-2.45	-44.81	-52.07	1.86	11.48	H
	10895	-47.14	-40	-7.14	-49.48	-55.44	2.60	10.90	H
	14527	-54.51	-40	-14.51	-61.99	-62.74	2.86	11.09	H
	18155	-45.28	-40	-5.28	-63.43	-61.47	1.78	17.97	H
	21751	-43.27	-40	-3.27	-64.84	-60.06	2.01	18.80	H
	21790	-54.27	-40	-14.27	-75.88	-71.06	2.02	18.82	H
	25425	-52.40	-40	-12.40	-77.75	-69.14	2.16	18.90	H
	7263	-47.45	-40	-7.45	-49.57	-57.07	1.86	11.48	V
	10895	-51.61	-40	-11.61	-53.75	-59.91	2.60	10.90	V
	14527	-57.36	-40	-17.36	-63.84	-65.59	2.86	11.09	V
	18155	-54.32	-40	-14.32	-71.56	-70.51	1.78	17.97	V
	21751	-45.80	-40	-5.80	-67.36	-62.59	2.01	18.80	V
	21790	-53.84	-40	-13.84	-75.44	-70.63	2.02	18.82	V
	25425	-51.18	-40	-11.18	-77.84	-67.92	2.16	18.90	V



Highest	7398	-41.60	-40	-1.60	-43.92	-50.93	1.93	11.26	H
	11097	-47.13	-40	-7.13	-49.74	-55.54	2.61	11.02	H
	14797	-52.19	-40	-12.19	-61.54	-61.21	2.93	11.95	H
	18499	-50.03	-40	-10.03	-68.4	-66.03	1.90	17.90	H
	22151	-54.80	-40	-14.80	-61.23	-71.00	2.30	18.50	H
	22195	-52.89	-40	-12.89	-75.51	-69.66	2.05	18.82	H
	25892	-51.09	-40	-11.09	-77.33	-68.20	1.97	19.08	H
	7398	-46.94	-40	-6.94	-49.1	-56.27	1.93	11.26	V
	11097	-51.31	-40	-11.31	-53.75	-59.72	2.61	11.02	V
	14797	-57.90	-40	-17.90	-65.34	-66.92	2.93	11.95	V
	18499	-55.95	-40	-15.95	-73.45	-71.95	1.90	17.90	V
	22151	-44.04	-40	-4.04	-66.49	-60.82	2.06	18.84	V
	22195	-53.54	-40	-13.54	-76.18	-70.31	2.05	18.82	V
	25892	-50.16	-40	-10.16	-77.51	-67.27	1.97	19.08	V

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



LTE Band 48 / 10MHz / 16QAM									
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	7119	-43.64	-40	-3.64	-45.69	-53.57	1.78	11.71	H
	10678	-49.90	-40	-9.90	-52.18	-58.32	2.48	10.90	H
	14238	-51.77	-40	-11.77	-58.86	-60.53	2.87	11.63	H
	21330	-51.08	-40	-11.08	-62.96	-67.81	1.97	18.70	H
	21352	-41.17	-40	-1.17	-76.56	-57.90	1.97	18.70	H
	24916	-54.83	-40	-14.83	-77.67	-70.92	2.07	18.17	H
	28475	-53.01	-40	-13.01	-76.61	-70.30	2.31	19.59	H
	7119	-51.81	-40	-11.81	-52.81	-61.74	1.78	11.71	V
	10678	-53.57	-40	-13.57	-54.57	-61.99	2.48	10.90	V
	14238	-60.17	-40	-20.17	-55.43	-68.93	2.87	11.63	V
	21330	-45.71	-40	-5.71	-67.38	-62.44	1.97	18.70	V
	21352	-55.10	-40	-15.10	-76.72	-71.83	1.97	18.70	V
	24916	-52.17	-40	-12.17	-78.01	-68.26	2.07	18.17	V
	28475	-49.20	-40	-9.20	-76.6	-66.49	2.31	19.59	V
Middle	7259	-40.56	-40	-0.56	-42.93	-50.19	1.86	11.49	H
	10888	-44.23	-40	-4.23	-46.56	-52.54	2.59	10.90	H
	14518	-54.86	-40	-14.86	-62.29	-63.06	2.86	11.06	H
	18144	-45.58	-40	-5.58	-63.73	-61.77	1.78	17.97	H
	21751	-54.70	-40	-14.70	-61.5	-70.80	2.30	18.40	H
	21776	-54.25	-40	-14.25	-75.85	-71.04	2.02	18.81	H
	25406	-52.16	-40	-12.16	-77.47	-68.88	2.15	18.87	H
	7259	-47.95	-40	-7.95	-50.07	-57.58	1.86	11.49	V
	10888	-48.73	-40	-8.73	-50.87	-57.04	2.59	10.90	V
	14518	-57.04	-40	-17.04	-63.51	-65.24	2.86	11.06	V
	18144	-53.60	-40	-13.60	-70.83	-69.79	1.78	17.97	V
	21751	-51.31	-40	-11.31	-72.87	-68.10	2.01	18.80	V
	21776	-53.58	-40	-13.58	-75.17	-70.37	2.02	18.81	V
	25406	-50.75	-40	-10.75	-77.36	-67.47	2.15	18.87	V



Highest	7399	-41.89	-40	-1.89	-44.21	-51.22	1.94	11.26	H
	11098	-47.34	-40	-7.34	-49.95	-55.75	2.61	11.02	H
	14798	-53.73	-40	-13.73	-63.08	-62.75	2.93	11.95	H
	18500	-48.40	-40	-8.40	-66.77	-64.40	1.90	17.90	H
	22174	-55.90	-40	-15.90	-62.5	-72.10	2.30	18.50	H
	22196	-50.55	-40	-10.55	-73.18	-67.32	2.05	18.82	H
	25892	-51.22	-40	-11.22	-77.46	-68.33	1.97	19.08	H
	7399	-44.24	-40	-4.24	-46.4	-53.57	1.94	11.26	V
	11098	-52.62	-40	-12.62	-55.06	-61.03	2.61	11.02	V
	14798	-57.79	-40	-17.79	-65.23	-66.81	2.93	11.95	V
	18500	-55.25	-40	-15.25	-72.75	-71.25	1.90	17.90	V
	22174	-52.80	-40	-12.80	-65.44	-69.00	2.30	18.50	V
	22196	-53.46	-40	-13.46	-76.11	-70.23	2.05	18.82	V
	25892	-50.28	-40	-10.28	-77.63	-67.39	1.97	19.08	V

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



LTE Band 48 / 5MHz / 16QAM									
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	7110	-40.58	-40	-0.58	-42.6	-50.52	1.78	11.72	H
	10665	-47.38	-40	-7.38	-49.65	-55.80	2.48	10.90	H
	14218	-52.84	-40	-12.84	-59.91	-61.65	2.87	11.68	H
	21318	-52.85	-40	-12.85	-61.46	-69.00	2.35	18.50	H
	21330	-54.18	-40	-14.18	-75.97	-70.91	1.97	18.70	H
	24883	-53.43	-40	-13.43	-78.09	-69.47	2.07	18.11	H
	28437	-51.11	-40	-11.11	-76.63	-68.37	2.31	19.57	H
	7110	-49.64	-40	-9.64	-51.28	-59.58	1.78	11.72	V
	10665	-51.07	-40	-11.07	-53.09	-59.49	2.48	10.90	V
	14218	-53.34	-40	-13.34	-60.11	-62.15	2.87	11.68	V
	21318	-49.61	-40	-9.61	-71.31	-66.33	1.98	18.70	V
	21330	-54.24	-40	-14.24	-75.91	-70.97	1.97	18.70	V
	24883	-52.09	-40	-12.09	-77.95	-68.13	2.07	18.11	V
	28437	-49.48	-40	-9.48	-76.84	-66.74	2.31	19.57	V
Middle	7255	-41.38	-40	-1.38	-43.74	-51.01	1.86	11.49	H
	10880	-44.72	-40	-4.72	-47.06	-53.03	2.59	10.90	H
	14510	-55.36	-40	-15.36	-62.74	-63.54	2.85	11.03	H
	18133	-47.72	-40	-7.72	-65.87	-63.92	1.78	17.97	H
	21751	-56.40	-40	-16.40	-63.22	-72.50	2.30	18.40	H
	21763	-53.27	-40	-13.27	-74.85	-70.06	2.01	18.81	H
	25390	-51.98	-40	-11.98	-77.27	-68.68	2.15	18.85	H
	7255	-47.48	-40	-7.48	-49.6	-57.11	1.86	11.49	V
	10880	-48.03	-40	-8.03	-50.17	-56.34	2.59	10.90	V
	14510	-57.50	-40	-17.50	-63.94	-65.68	2.85	11.03	V
	18133	-54.40	-40	-14.40	-71.62	-70.60	1.78	17.97	V
	21751	-50.09	-40	-10.09	-71.65	-66.88	2.01	18.80	V
	21763	-52.13	-40	-12.13	-73.7	-68.92	2.01	18.81	V
	25390	-50.93	-40	-10.93	-77.52	-67.63	2.15	18.85	V



Highest	7400	-41.44	-40	-1.44	-43.76	-50.76	1.94	11.26	H
	11100	-43.35	-40	-3.35	-45.96	-51.76	2.61	11.02	H
	14797	-51.96	-40	-11.96	-61.31	-60.98	2.93	11.95	H
	18500	-48.14	-40	-8.14	-66.51	-64.14	1.90	17.90	H
	22185	-54.80	-40	-14.80	-61.21	-71.00	2.30	18.50	H
	22198	-51.62	-40	-11.62	-74.26	-68.39	2.05	18.82	H
	25892	-50.93	-40	-10.93	-77.17	-68.04	1.97	19.08	H
	7400	-42.71	-40	-2.71	-44.87	-52.03	1.94	11.26	V
	11100	-48.86	-40	-8.86	-51.31	-57.27	2.61	11.02	V
	14797	-57.84	-40	-17.84	-65.28	-66.86	2.93	11.95	V
	18500	-55.51	-40	-15.51	-73.02	-71.51	1.90	17.90	V
	22185	-50.10	-40	-10.10	-63.29	-66.30	2.30	18.50	V
	22198	-52.37	-40	-12.37	-75.02	-69.14	2.05	18.82	V
	25892	-49.93	-40	-9.93	-77.28	-67.04	1.97	19.08	V

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