

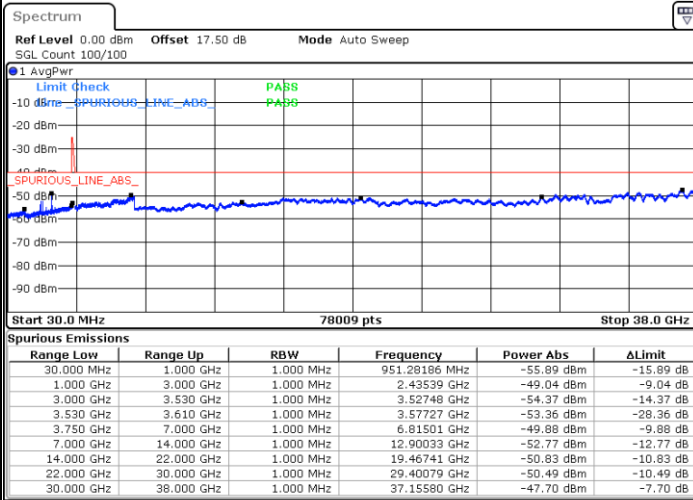


LTE Band 48C / 20MHz+20MHz

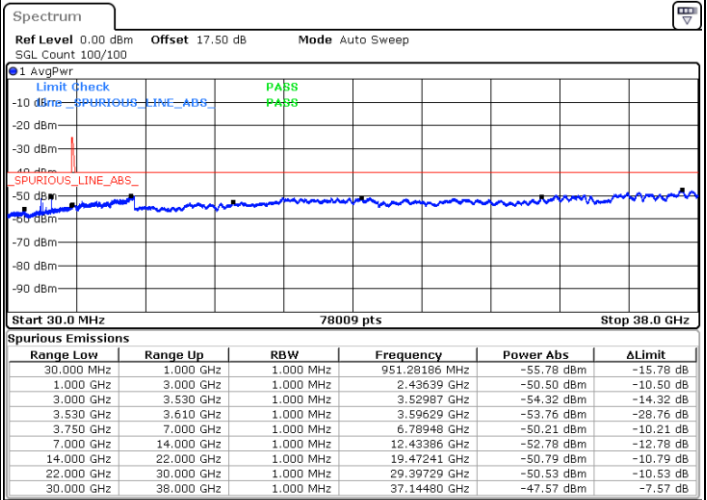
64QAM

Highest Channel / 1RB0 and 1RB99

Highest Channel / 1RB99 and 1RB0



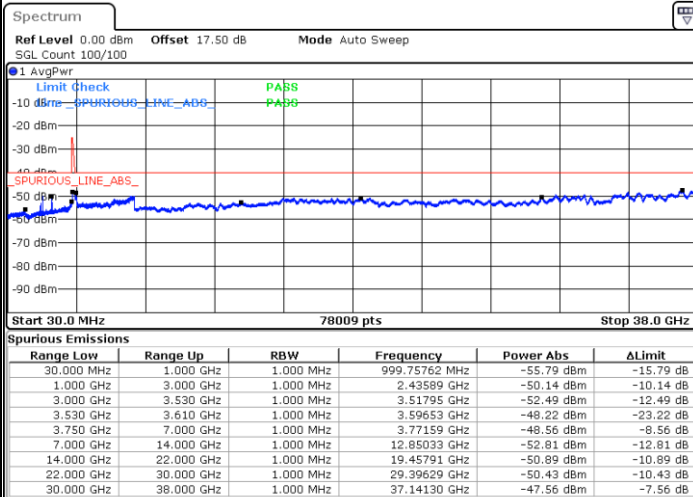
Date: 21 FEB 2020 17:28:54



Date: 21 FEB 2020 17:27:42

Highest Channel / FullIRB

N/A



Date: 21 FEB 2020 17:34:58



Appendix B. Test Results of EIRP and Radiated Test

EIRP

<Reporting Only>

LTE Band 48 / 5MHz (Average) (GT - LC = -2 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	12	22.90	0.1950	20.90	0.1230
Middle		1	12	22.73	0.1875	20.73	0.1183
Highest		1	12	22.37	0.1726	20.37	0.1089
Lowest	16QAM	1	12	21.93	0.1560	19.93	0.0984
Middle		1	12	21.74	0.1493	19.74	0.0942
Highest		1	12	21.37	0.1371	19.37	0.0865
Lowest	64QAM	1	24	20.49	0.1119	18.49	0.0706
Middle		1	24	20.31	0.1074	18.31	0.0678
Highest		1	24	20.28	0.1067	18.28	0.0673

LTE Band 48 / 10MHz (Average) (GT - LC = -2 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	25	22.91	0.1954	20.91	0.1233
Middle		1	25	22.71	0.1866	20.71	0.1178
Highest		1	25	22.35	0.1718	20.35	0.1084
Lowest	16QAM	1	25	22.08	0.1614	20.08	0.1019
Middle		1	25	21.83	0.1524	19.83	0.0962
Highest		1	25	21.49	0.1409	19.49	0.0889
Lowest	64QAM	1	25	20.88	0.1225	18.88	0.0773
Middle		1	25	20.57	0.1140	18.57	0.0719
Highest		1	25	20.31	0.1074	18.31	0.0678

LTE Band 48 / 15MHz (Average) (GT - LC = -2 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	74	22.88	0.1941	20.88	0.1225
Middle		1	74	22.77	0.1892	20.77	0.1194
Highest		1	74	22.34	0.1714	20.34	0.1081
Lowest	16QAM	1	74	22.19	0.1656	20.19	0.1045
Middle		1	74	21.90	0.1549	19.90	0.0977
Highest		1	74	21.52	0.1419	19.52	0.0895
Lowest	64QAM	1	74	20.76	0.1191	18.76	0.0752
Middle		1	74	20.45	0.1109	18.45	0.0700
Highest		1	74	20.34	0.1081	18.34	0.0682



LTE Band 48 / 20MHz (Average) (GT - LC = -2 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	49	22.90	0.1950	20.90	0.1230
Middle		1	49	22.81	0.1910	20.81	0.1205
Highest		1	49	22.46	0.1762	20.46	0.1112
Lowest	16QAM	1	49	22.04	0.1600	20.04	0.1009
Middle		1	49	21.91	0.1552	19.91	0.0979
Highest		1	49	21.59	0.1442	19.59	0.0910
Lowest	64QAM	1	49	20.40	0.1096	18.40	0.0692
Middle		1	49	20.98	0.1253	18.98	0.0791
Highest		1	49	20.00	0.1000	18.00	0.0631



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	-	-	-	-	-	-	22.90	21.93	20.49
Middle CH	-	-	-	-	-	-	22.73	21.74	20.31
Highest CH	-	-	-	-	-	-	22.37	21.37	20.28

LTE Band 48 / Conducted Power (dBm/10MHz)									
BW	10MHz			15MHz			20MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	22.91	22.08	20.88	22.88	22.19	20.76	22.90	22.04	20.40
Middle CH	22.71	21.83	20.57	22.77	21.90	20.45	22.81	21.91	20.98
Highest CH	22.35	21.49	20.31	22.34	21.52	20.34	22.46	21.59	20.00

LTE Band 48 / EIRP Power (dBm/10MHz)									
BW	1.4MHz			3MHz			5MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	-	-	-	-	-	-	20.90	19.93	18.49
Middle CH	-	-	-	-	-	-	20.73	19.74	18.31
Highest CH	-	-	-	-	-	-	20.37	19.37	18.28

LTE Band 48 / EIRP Power (dBm/10MHz)									
BW	10MHz			15MHz			20MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	20.91	20.08	18.88	20.88	20.19	18.76	20.90	20.04	18.40
Middle CH	20.71	19.83	18.57	20.77	19.90	18.45	20.81	19.91	18.98
Highest CH	20.35	19.49	18.31	20.34	19.52	18.34	20.46	19.59	18.00
Antenna Gain	-2 dBi								
Limit	23dBm / 10MHz								
Result	PASS								



EIRP

<Reporting Only>

Reporting Only

LTE Band 48C_CA / 20 + 20 MHz (GT - LC = dB)									
Channel	Mode	PCC		SCC		Conducted		EIRP	
		RB		RB					
		Size	Offset	Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	1	0	20.78	0.1197	20.78	0.1197
Middle		1	0	1	0	20.73	0.1183	20.73	0.1183
Highest		1	0	1	0	20.99	0.1256	20.99	0.1256
Lowest	16QAM	1	0	1	0	20.77	0.1194	20.77	0.1194
Middle		1	0	1	0	20.71	0.1178	20.71	0.1178
Highest		1	0	1	0	20.94	0.1242	20.94	0.1242
Lowest	64QAM	1	0	1	0	20.71	0.1178	20.71	0.1178
Middle		1	0	1	0	20.72	0.1180	20.72	0.1180
Highest		1	0	1	0	20.88	0.1225	20.88	0.1225

LTE Band 48C_CA / 20 + 15 MHz (GT - LC = dB)									
Channel	Mode	PCC		SCC		Conducted		EIRP	
		RB		RB					
		Size	Offset	Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	100	0	75	0	20.62	0.1153	20.62	0.1153
Middle		100	0	75	0	20.74	0.1186	20.74	0.1186
Highest		100	0	75	0	20.89	0.1227	20.89	0.1227
Lowest	16QAM	100	0	75	0	20.58	0.1143	20.58	0.1143
Middle		100	0	75	0	20.72	0.1180	20.72	0.1180
Highest		100	0	75	0	20.88	0.1225	20.88	0.1225
Lowest	64QAM	100	0	75	0	20.71	0.1178	20.71	0.1178
Middle		100	0	75	0	20.71	0.1178	20.71	0.1178
Highest		100	0	75	0	20.88	0.1225	20.88	0.1225

LTE Band 48C_CA / 15 + 20 MHz (GT - LC = dB)									
Channel	Mode	PCC		SCC		Conducted		EIRP	
		RB		RB					
		Size	Offset	Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	75	0	100	0	20.83	0.1211	20.83	0.1211
Middle		75	0	100	0	20.82	0.1208	20.82	0.1208
Highest		75	0	100	0	20.86	0.1219	20.86	0.1219
Lowest	16QAM	75	0	100	0	20.77	0.1194	20.77	0.1194
Middle		75	0	100	0	20.64	0.1159	20.64	0.1159
Highest		75	0	100	0	20.85	0.1216	20.85	0.1216
Lowest	64QAM	75	0	100	0	20.72	0.1180	20.72	0.1180
Middle		75	0	100	0	20.69	0.1172	20.69	0.1172
Highest		75	0	100	0	20.80	0.1202	20.80	0.1202



LTE Band 48C_CA / 20 + 10 MHz (GT - LC = dB)									
Channel	Mode	PCC		SCC		Conducted		EIRP	
		RB		RB					
		Size	Offset	Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	100	0	50	0	20.69	0.1172	20.69	0.1172
Middle		100	0	50	0	20.65	0.1161	20.65	0.1161
Highest		100	0	50	0	20.87	0.1222	20.87	0.1222
Lowest	16QAM	100	0	50	0	20.58	0.1143	20.58	0.1143
Middle		100	0	50	0	20.57	0.1140	20.57	0.1140
Highest		100	0	50	0	20.84	0.1213	20.84	0.1213
Lowest	64QAM	100	0	50	0	20.68	0.1169	20.68	0.1169
Middle		100	0	50	0	20.64	0.1159	20.64	0.1159
Highest		100	0	50	0	20.86	0.1219	20.86	0.1219

LTE Band 48C_CA / 10 + 20 MHz (GT - LC = dB)									
Channel	Mode	PCC		SCC		Conducted		EIRP	
		RB		RB					
		Size	Offset	Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	50	0	100	0	20.92	0.1236	20.92	0.1236
Middle		50	0	100	0	20.64	0.1159	20.64	0.1159
Highest		50	0	100	0	20.63	0.1156	20.63	0.1156
Lowest	16QAM	50	0	100	0	20.89	0.1227	20.89	0.1227
Middle		50	0	100	0	20.62	0.1153	20.62	0.1153
Highest		50	0	100	0	20.58	0.1143	20.58	0.1143
Lowest	64QAM	50	0	100	0	20.68	0.1169	20.68	0.1169
Middle		50	0	100	0	20.64	0.1159	20.64	0.1159
Highest		50	0	100	0	20.61	0.1151	20.61	0.1151

LTE Band 48C_CA / 20 + 5 MHz (GT - LC = dB)									
Channel	Mode	PCC		SCC		Conducted		EIRP	
		RB		RB					
		Size	Offset	Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	100	0	25	0	20.84	0.1213	20.84	0.1213
Middle		100	0	25	0	20.87	0.1222	20.87	0.1222
Highest		100	0	25	0	20.52	0.1127	20.52	0.1127
Lowest	16QAM	100	0	25	0	20.79	0.1199	20.79	0.1199
Middle		100	0	25	0	20.81	0.1205	20.81	0.1205
Highest		100	0	25	0	20.50	0.1122	20.50	0.1122
Lowest	64QAM	100	0	25	0	20.58	0.1143	20.58	0.1143
Middle		100	0	25	0	20.82	0.1208	20.82	0.1208
Highest		100	0	25	0	20.51	0.1125	20.51	0.1125



LTE Band 48C_CA / 5 + 20 MHz (GT - LC = dB)									
Channel	Mode	PCC		SCC		Conducted		EIRP	
		RB		RB					
		Size	Offset	Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	25	0	100	0	20.89	0.1227	20.89	0.1227
Middle		25	0	100	0	20.74	0.1186	20.74	0.1186
Highest		25	0	100	0	20.56	0.1138	20.56	0.1138
Lowest	16QAM	25	0	100	0	20.82	0.1208	20.82	0.1208
Middle		25	0	100	0	20.61	0.1151	20.61	0.1151
Highest		25	0	100	0	20.52	0.1127	20.52	0.1127
Lowest	64QAM	25	0	100	0	20.79	0.1199	20.79	0.1199
Middle		25	0	100	0	20.74	0.1186	20.74	0.1186
Highest		25	0	100	0	20.51	0.1125	20.51	0.1125



EIRP Power

LTE CA 48C / Conducted Power (dBm/10MHz)									
BW	25MHz			30MHz			35MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	20.89	20.82	20.79	20.92	20.89	20.68	20.83	20.77	20.72
Middle CH	20.87	20.81	20.82	20.65	20.62	20.64	20.82	20.72	20.71
Highest CH	20.56	20.52	20.51	20.87	20.84	20.86	20.89	20.88	20.88
LTE CA 48C / Conducted Power (dBm/10MHz)									
BW	40MHz			-			-		
Mod.	QPSK	16QAM	64QAM	-	-	-	-	-	-
Lowest CH	20.78	20.77	20.71	-	-	-	-	-	-
Middle CH	20.73	20.71	20.72	-	-	-	-	-	-
Highest CH	20.99	20.94	20.88	-	-	-	-	-	-

LTE CA 48C / EIRP Power (dBm/10MHz)									
BW	25MHz			30MHz			35MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	20.89	20.82	20.79	20.92	20.89	20.68	20.83	20.77	20.72
Middle CH	20.87	20.81	20.82	20.65	20.62	20.64	20.82	20.72	20.71
Highest CH	20.56	20.52	20.51	20.87	20.84	20.86	20.89	20.88	20.88
LTE CA 48C / EIRP Power (dBm/10MHz)									
BW	40MHz			-			-		
Mod.	QPSK	16QAM	64QAM	-	-	-	-	-	-
Lowest CH	20.78	20.77	20.71	-	-	-	-	-	-
Middle CH	20.73	20.71	20.72	-	-	-	-	-	-
Highest CH	20.99	20.94	20.88	-	-	-	-	-	-
Antenna Gain	dBi								
Limit	23dBm / 10MHz								
Result	PASS								

**Radiated Spurious Emission****LTE Band 48**

LTE Band 48 / 20MHz / QPSK									
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	7120	-46.30	-40	-6.30	-48.35	-56.22	1.78	11.71	H
	10680	-55.61	-40	-15.61	-57.89	-64.03	2.48	10.90	H
	14239	-55.28	-40	-15.28	-62.36	-64.04	2.87	11.63	H
	21359	-53.32	-40	-13.32	-75.04	-70.05	1.97	18.70	H
	24919	-52.33	-40	-12.33	-76.99	-68.43	2.07	18.17	H
	28479	-51.93	-40	-11.93	-77.45	-69.22	2.30	19.59	H
	7120	-47.76	-40	-7.76	-49.44	-57.68	1.78	11.71	V
	10679	-55.86	-40	-15.86	-57.9	-64.28	2.48	10.90	V
	14239	-56.36	-40	-16.36	-63.1	-65.12	2.87	11.63	V
	21359	-54.06	-40	-14.06	-75.68	-70.79	1.97	18.70	V
	24919	-51.15	-40	-11.15	-76.99	-67.25	2.07	18.17	V
	28479	-49.48	-40	-9.48	-76.88	-66.77	2.30	19.59	V
Middle	7250	-50.93	-40	-10.93	-53.29	-60.58	1.86	11.50	H
	10875	-52.42	-40	-12.42	-54.75	-60.74	2.59	10.90	H
	14498	-57.07	-40	-17.07	-64.37	-65.22	2.85	11.00	H
	18122	-54.36	-40	-14.36	-72.5	-70.56	1.77	17.98	H
	21749	-53.89	-40	-13.89	-75.46	-70.68	2.01	18.80	H
	25374	-52.06	-40	-12.06	-77.31	-68.74	2.15	18.82	H
	7250	-50.37	-40	-10.37	-52.48	-60.02	1.86	11.50	V
	10875	-51.21	-40	-11.21	-53.34	-59.53	2.59	10.90	V
	14498	-58.00	-40	-18.00	-64.4	-66.15	2.85	11.00	V
	18122	-55.91	-40	-15.91	-73.13	-72.11	1.77	17.98	V
	21749	-53.64	-40	-13.64	-75.2	-70.43	2.01	18.80	V
	25374	-50.47	-40	-10.47	-77.01	-67.15	2.15	18.82	V



LTE Band 48 / 20MHz / QPSK									
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	7380	-53.95	-40	-13.95	-56.27	-63.32	1.93	11.29	H
	11069	-53.11	-40	-13.11	-55.65	-61.47	2.62	10.98	H
	14760	-55.75	-40	-15.75	-64.84	-64.66	2.92	11.83	H
	18449	-55.17	-40	-15.17	-73.51	-71.20	1.88	17.91	H
	22139	-52.59	-40	-12.59	-74.98	-69.37	2.06	18.84	H
	25829	-51.01	-40	-11.01	-77.12	-68.08	2.00	19.07	H
									H
	7380	-52.33	-40	-12.33	-54.48	-61.70	1.93	11.29	V
	11069	-52.15	-40	-12.15	-54.52	-60.51	2.62	10.98	V
	14760	-57.45	-40	-17.45	-64.76	-66.36	2.92	11.83	V
	18449	-56.25	-40	-16.25	-73.72	-72.28	1.88	17.91	V
	22139	-52.70	-40	-12.70	-75.1	-69.48	2.06	18.84	V
	25829	-49.56	-40	-9.56	-76.82	-66.63	2.00	19.07	V
									V

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

**LTE CA 48C**

LTE Band 48CA / 20MHz+20MHz / QPSK									
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	7140	-58.94	-40	-18.94	-61.07	-68.82	1.80	11.68	H
	10705	-59.11	-40	-19.11	-61.4	-67.51	2.50	10.90	H
	14279	-56.23	-40	-16.23	-63.34	-64.90	2.86	11.53	H
	21418	-53.54	-40	-13.54	-75.1	-70.29	1.95	18.70	H
	24981	-51.46	-40	-11.46	-76.12	-67.65	2.08	18.27	H
	28556	-51.05	-40	-11.05	-76.53	-68.27	2.31	19.53	H
	7140	-59.14	-40	-19.14	-60.92	-69.02	1.80	11.68	V
	10705	-59.75	-40	-19.75	-61.8	-68.15	2.50	10.90	V
	14279	-57.22	-40	-17.22	-63.9	-65.89	2.86	11.53	V
	21418	-53.74	-40	-13.74	-75.23	-70.49	1.95	18.70	V
	24981	-50.94	-40	-10.94	-76.75	-67.13	2.08	18.27	V
	28556	-49.60	-40	-9.60	-76.95	-66.82	2.31	19.53	V
Middle	7250	-58.89	-40	-18.89	-61.25	-68.54	1.86	11.50	H
	10870	-58.78	-40	-18.78	-61.11	-67.10	2.58	10.90	H
	14498	-58.01	-40	-18.01	-65.31	-66.16	2.85	11.00	H
	18122	-54.66	-40	-14.66	-72.8	-70.86	1.77	17.98	H
	21740	-53.69	-40	-13.69	-75.25	-70.48	2.01	18.80	H
	25370	-51.47	-40	-11.47	-76.72	-68.14	2.15	18.82	H
	7250	-59.33	-40	-19.33	-61.44	-68.98	1.86	11.50	V
	10870	-59.08	-40	-19.08	-61.21	-67.40	2.58	10.90	V
	14498	-58.89	-40	-18.89	-65.3	-67.04	2.85	11.00	V
	18122	-55.77	-40	-15.77	-72.99	-71.97	1.77	17.98	V
	21740	-54.29	-40	-14.29	-75.84	-71.08	2.01	18.80	V
	25370	-50.91	-40	-10.91	-77.45	-67.58	2.15	18.82	V



LTE Band 48CA / 20MHz+20MHz / QPSK									
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	7360	-48.19	-40	-8.19	-50.53	-57.60	1.91	11.32	H
	11035	-54.11	-40	-14.11	-56.56	-62.42	2.64	10.94	H
	14718	-54.89	-40	-14.89	-63.68	-63.68	2.91	11.70	H
	18399	-54.93	-40	-14.93	-73.24	-70.98	1.87	17.92	H
	22073	-52.49	-40	-12.49	-74.61	-69.28	2.08	18.87	H
	25758	-51.14	-40	-11.14	-77.11	-68.16	2.04	19.05	H
									H
	7360	-50.03	-40	-10.03	-52.18	-59.44	1.91	11.32	V
	11035	-52.44	-40	-12.44	-54.72	-60.75	2.64	10.94	V
	14718	-57.18	-40	-17.18	-64.33	-65.97	2.91	11.70	V
	18399	-56.15	-40	-16.15	-73.58	-72.20	1.87	17.92	V
	22073	-52.95	-40	-12.95	-75.07	-69.74	2.08	18.87	V
	25758	-50.20	-40	-10.20	-77.36	-67.22	2.04	19.05	V
									V

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