



Modulation	RB		Channel	Result					Conclusion
				S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
	Size	Offset							
QPSK	1	0	Lowest	9.2	2.56	10.60	17.24	Horizontal	Pass
	1	0	Middle	9.54	2.67	10.65	17.52	Horizontal	Pass
	1	0	Highest	9.12	2.72	10.70	17.10	Horizontal	Pass
	1	0	Lowest	10.54	2.56	10.60	18.58	Vertical	Pass
	1	0	Middle	10.84	2.67	10.65	18.82	Vertical	Pass
	1	0	Highest	10.54	2.72	10.70	18.52	Vertical	Pass
16QAM	1	0	Lowest	8.93	2.56	10.60	16.97	Horizontal	Pass
	1	0	Middle	9.23	2.67	10.65	17.21	Horizontal	Pass
	1	0	Highest	8.77	2.72	10.70	16.75	Horizontal	Pass
	1	0	Lowest	10.36	2.56	10.60	18.40	Vertical	Pass
	1	0	Middle	10.53	2.67	10.65	18.51	Vertical	Pass
	1	0	Highest	10.14	2.72	10.70	18.12	Vertical	Pass
Limit	EIRP<2W=33dBm								

Modulation	RB		Channel	Result					Conclusion
				S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
	Size	Offset							
QPSK	1	0	Lowest	9.47	2.56	10.60	17.51	Horizontal	Pass
	1	0	Middle	9.7	2.67	10.65	17.68	Horizontal	Pass
	1	0	Highest	9.59	2.72	10.70	17.57	Horizontal	Pass
	1	0	Lowest	10.94	2.56	10.60	18.98	Vertical	Pass
	1	0	Middle	11.16	2.67	10.65	19.14	Vertical	Pass
	1	0	Highest	11.07	2.72	10.70	19.05	Vertical	Pass
16QAM	1	0	Lowest	9.25	2.56	10.60	17.29	Horizontal	Pass
	1	0	Middle	9.48	2.67	10.65	17.46	Horizontal	Pass
	1	0	Highest	9.57	2.72	10.70	17.55	Horizontal	Pass
	1	0	Lowest	10.73	2.56	10.60	18.77	Vertical	Pass
	1	0	Middle	10.91	2.67	10.65	18.89	Vertical	Pass
	1	0	Highest	10.98	2.72	10.70	18.96	Vertical	Pass
Limit	EIRP<2W=33dBm								



Radiated Power (EIRP) for LTE Band 12 / 1.4M								
Modulation	RB		Channel	Result				Conclusion
	Size	Offset		S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	
QPSK	1	0	Lowest	15.37	1.21	6.40	20.56	Horizontal Pass
	1	0	Middle	15.33	1.22	6.40	20.51	Horizontal Pass
	1	0	Highest	14.57	1.23	6.40	19.74	Horizontal Pass
	1	0	Lowest	16.7	1.21	6.40	21.89	Vertical Pass
	1	0	Middle	16.64	1.22	6.40	21.82	Vertical Pass
	1	0	Highest	15.92	1.23	6.40	21.09	Vertical Pass
16QAM	1	0	Lowest	15.18	1.21	6.40	20.37	Horizontal Pass
	1	0	Middle	14.96	1.22	6.40	20.14	Horizontal Pass
	1	0	Highest	14.45	1.23	6.40	19.62	Horizontal Pass
	1	0	Lowest	16.49	1.21	6.40	21.68	Vertical Pass
	1	0	Middle	16.44	1.22	6.40	21.62	Vertical Pass
	1	0	Highest	15.8	1.23	6.40	20.97	Vertical Pass
Limit	EIRP<2W=33dBm							

Radiated Power (EIRP) for LTE Band 12 / 3M								
Modulation	RB		Channel	Result				Conclusion
	Size	Offset		S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	
QPSK	1	0	Lowest	14.08	1.21	6.40	19.27	Horizontal Pass
	1	0	Middle	13.84	1.22	6.40	19.02	Horizontal Pass
	1	0	Highest	13.58	1.23	6.40	18.75	Horizontal Pass
	1	0	Lowest	15.47	1.21	6.40	20.66	Vertical Pass
	1	0	Middle	15.22	1.22	6.40	20.40	Vertical Pass
	1	0	Highest	15.06	1.23	6.40	20.23	Vertical Pass
16QAM	1	0	Lowest	13.83	1.21	6.40	19.02	Horizontal Pass
	1	0	Middle	13.47	1.22	6.40	18.65	Horizontal Pass
	1	0	Highest	13.5	1.23	6.40	18.67	Horizontal Pass
	1	0	Lowest	15.27	1.21	6.40	20.46	Vertical Pass
	1	0	Middle	14.96	1.22	6.40	20.14	Vertical Pass
	1	0	Highest	14.87	1.23	6.40	20.04	Vertical Pass
Limit	EIRP<2W=33dBm							



Modulation	RB		Channel	Result					Conclusion
				S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
	Size	Offset							
QPSK	1	0	Lowest	14.77	1.21	6.40	19.96	Horizontal	Pass
	1	0	Middle	15.03	1.22	6.40	20.21	Horizontal	Pass
	1	0	Highest	15.12	1.23	6.40	20.29	Horizontal	Pass
	1	0	Lowest	16.23	1.21	6.40	21.42	Vertical	Pass
	1	0	Middle	16.41	1.22	6.40	21.59	Vertical	Pass
	1	0	Highest	16.42	1.23	6.40	21.59	Vertical	Pass
16QAM	1	0	Lowest	14.45	1.21	6.40	19.64	Horizontal	Pass
	1	0	Middle	14.61	1.22	6.40	19.79	Horizontal	Pass
	1	0	Highest	14.8	1.23	6.40	19.97	Horizontal	Pass
	1	0	Lowest	15.91	1.21	6.40	21.10	Vertical	Pass
	1	0	Middle	16.01	1.22	6.40	21.19	Vertical	Pass
	1	0	Highest	16.26	1.23	6.40	21.43	Vertical	Pass
Limit	ERP<3W=34.77dBm								

Modulation	RB		Channel	Result					Conclusion
				S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
	Size	Offset							
QPSK	1	0	Lowest	15.86	1.21	6.40	21.05	Horizontal	Pass
	1	0	Middle	15.74	1.22	6.40	20.92	Horizontal	Pass
	1	0	Highest	15.53	1.23	6.40	20.70	Horizontal	Pass
	1	0	Lowest	17.19	1.21	6.40	22.38	Vertical	Pass
	1	0	Middle	17.04	1.22	6.40	22.22	Vertical	Pass
	1	0	Highest	16.93	1.23	6.40	22.10	Vertical	Pass
16QAM	1	0	Lowest	15.46	1.21	6.40	20.65	Horizontal	Pass
	1	0	Middle	15.59	1.22	6.40	20.77	Horizontal	Pass
	1	0	Highest	15.05	1.23	6.40	20.22	Horizontal	Pass
	1	0	Lowest	16.85	1.21	6.40	22.04	Vertical	Pass
	1	0	Middle	16.9	1.22	6.40	22.08	Vertical	Pass
	1	0	Highest	16.53	1.23	6.40	21.70	Vertical	Pass
Limit	ERP<3W=34.77dBm								



Modulation	RB		Channel	Result					Conclusion
				S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
	Size	Offset							
QPSK	1	0	Lowest	14.64	1.21	6.40	19.83	Horizontal	Pass
	1	0	Middle	14.45	1.22	6.40	19.63	Horizontal	Pass
	1	0	Highest	14.45	1.23	6.40	19.62	Horizontal	Pass
	1	0	Lowest	16	1.21	6.40	21.19	Vertical	Pass
	1	0	Middle	15.75	1.22	6.40	20.93	Vertical	Pass
	1	0	Highest	15.91	1.23	6.40	21.08	Vertical	Pass
16QAM	1	0	Lowest	14.41	1.21	6.40	19.60	Horizontal	Pass
	1	0	Middle	13.96	1.22	6.40	19.14	Horizontal	Pass
	1	0	Highest	14.14	1.23	6.40	19.31	Horizontal	Pass
	1	0	Lowest	15.79	1.21	6.40	20.98	Vertical	Pass
	1	0	Middle	15.46	1.22	6.40	20.64	Vertical	Pass
	1	0	Highest	15.6	1.23	6.40	20.77	Vertical	Pass
Limit	ERP<3W=34.77dBm								

Modulation	RB		Channel	Result					Conclusion
				S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
	Size	Offset							
QPSK	1	0	Middle	14.7	1.22	6.40	19.88	Horizontal	Pass
	1	0		16.05	1.22	6.40	21.23	Vertical	Pass
16QAM	1	0	Middle	14.74	1.22	6.40	19.92	Horizontal	Pass
	1	0	Middle	16.19	1.22	6.40	21.37	Vertical	Pass
Limit	ERP<3W=34.77dBm								



Modulation	RB		Channel	Result					Conclusion
				S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
	Size	Offset							
QPSK	1	0	Lowest	14.47	1.21	6.40	19.66	Horizontal	Pass
	1	0	Middle	14.71	1.22	6.40	19.89	Horizontal	Pass
	1	0	Highest	14.45	1.23	6.40	19.62	Horizontal	Pass
	1	0	Lowest	15.86	1.21	6.40	21.05	Vertical	Pass
	1	0	Middle	16.06	1.22	6.40	21.24	Vertical	Pass
	1	0	Highest	15.86	1.23	6.40	21.03	Vertical	Pass
16QAM	1	0	Lowest	14.22	1.21	6.40	19.41	Horizontal	Pass
	1	0	Middle	14.49	1.22	6.40	19.67	Horizontal	Pass
	1	0	Highest	14.11	1.23	6.40	19.28	Horizontal	Pass
	1	0	Lowest	15.7	1.21	6.40	20.89	Vertical	Pass
	1	0	Middle	15.89	1.22	6.40	21.07	Vertical	Pass
	1	0	Highest	15.5	1.23	6.40	20.67	Vertical	Pass
Limit	ERP<3W=34.77dBm								

Modulation	RB		Channel	Result					Conclusion
				S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
	Size	Offset							
QPSK	1	0	Lowest	14.74	1.21	6.40	19.93	Horizontal	Pass
	1	0	Middle	14.97	1.22	6.40	20.15	Horizontal	Pass
	1	0	Highest	14.82	1.23	6.40	19.99	Horizontal	Pass
	1	0	Lowest	16.16	1.21	6.40	21.35	Vertical	Pass
	1	0	Middle	16.38	1.22	6.40	21.56	Vertical	Pass
	1	0	Highest	16.21	1.23	6.40	21.38	Vertical	Pass
16QAM	1	0	Lowest	14.44	1.21	6.40	19.63	Horizontal	Pass
	1	0	Middle	14.73	1.22	6.40	19.91	Horizontal	Pass
	1	0	Highest	14.58	1.23	6.40	19.75	Horizontal	Pass
	1	0	Lowest	15.88	1.21	6.40	21.07	Vertical	Pass
	1	0	Middle	16.06	1.22	6.40	21.24	Vertical	Pass
	1	0	Highest	16.05	1.23	6.40	21.22	Vertical	Pass
Limit	ERP<3W=34.77dBm								



Modulation	RB		Channel	Result					Conclusion
				S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
	Size	Offset							
QPSK	1	0	Lowest	12.39	2.37	10.40	20.42	Horizontal	Pass
	1	0	Middle	12.25	2.39	10.42	20.28	Horizontal	Pass
	1	0	Highest	12.41	2.40	10.44	20.45	Horizontal	Pass
	1	0	Lowest	13.88	2.37	10.40	21.91	Vertical	Pass
	1	0	Middle	13.74	2.39	10.42	21.77	Vertical	Pass
	1	0	Highest	13.79	2.40	10.44	21.83	Vertical	Pass
16QAM	1	0	Lowest	12.28	2.37	10.40	20.31	Horizontal	Pass
	1	0	Middle	12.04	2.39	10.42	20.07	Horizontal	Pass
	1	0	Highest	12.11	2.40	10.44	20.15	Horizontal	Pass
	1	0	Lowest	13.72	2.37	10.40	21.75	Vertical	Pass
	1	0	Middle	13.47	2.39	10.42	21.50	Vertical	Pass
	1	0	Highest	13.48	2.40	10.44	21.52	Vertical	Pass
Limit	EIRP<2W=33dBm								

Modulation	RB		Channel	Result					Conclusion
				S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
	Size	Offset							
QPSK	1	0	Lowest	12.05	2.37	10.40	20.08	Horizontal	Pass
	1	0	Middle	12.04	2.39	10.42	20.07	Horizontal	Pass
	1	0	Highest	12.06	2.40	10.44	20.10	Horizontal	Pass
	1	0	Lowest	13.48	2.37	10.40	21.51	Vertical	Pass
	1	0	Middle	13.51	2.39	10.42	21.54	Vertical	Pass
	1	0	Highest	13.42	2.40	10.44	21.46	Vertical	Pass
16QAM	1	0	Lowest	11.87	2.37	10.40	19.90	Horizontal	Pass
	1	0	Middle	11.89	2.39	10.42	19.92	Horizontal	Pass
	1	0	Highest	11.76	2.40	10.44	19.80	Horizontal	Pass
	1	0	Lowest	13.25	2.37	10.40	21.28	Vertical	Pass
	1	0	Middle	13.39	2.39	10.42	21.42	Vertical	Pass
	1	0	Highest	13.12	2.40	10.44	21.16	Vertical	Pass
Limit	EIRP<2W=33dBm								



Modulation	RB		Channel	Result					Conclusion
				S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
	Size	Offset		Lowest	11.98	2.37	10.40	20.01	Horizontal
QPSK	1	0	Middle	11.64	2.39	10.42	19.67	Horizontal	Pass
	1	0	Highest	11.96	2.40	10.44	20.00	Horizontal	Pass
	1	0	Lowest	13.4	2.37	10.40	21.43	Vertical	Pass
	1	0	Middle	13.08	2.39	10.42	21.11	Vertical	Pass
	1	0	Highest	13.29	2.40	10.44	21.33	Vertical	Pass
	1	0	Lowest	11.56	2.37	10.40	19.59	Horizontal	Pass
16QAM	1	0	Middle	11.41	2.39	10.42	19.44	Horizontal	Pass
	1	0	Highest	11.63	2.40	10.44	19.67	Horizontal	Pass
	1	0	Lowest	13.03	2.37	10.40	21.06	Vertical	Pass
	1	0	Middle	12.8	2.39	10.42	20.83	Vertical	Pass
	1	0	Highest	13.03	2.40	10.44	21.07	Vertical	Pass
	Limit			EIRP<2W=33dBm					

Modulation	RB		Channel	Result					Conclusion
				S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
	Size	Offset		Lowest	11.85	2.37	10.40	19.88	Horizontal
QPSK	1	0	Middle	11.88	2.39	10.42	19.91	Horizontal	Pass
	1	0	Highest	12.17	2.40	10.44	20.21	Horizontal	Pass
	1	0	Lowest	13.35	2.37	10.40	21.38	Vertical	Pass
	1	0	Middle	13.32	2.39	10.42	21.35	Vertical	Pass
	1	0	Highest	13.5	2.40	10.44	21.54	Vertical	Pass
	1	0	Lowest	11.54	2.37	10.40	19.57	Horizontal	Pass
16QAM	1	0	Middle	11.55	2.39	10.42	19.58	Horizontal	Pass
	1	0	Highest	11.74	2.40	10.44	19.78	Horizontal	Pass
	1	0	Lowest	13	2.37	10.40	21.03	Vertical	Pass
	1	0	Middle	13.03	2.39	10.42	21.06	Vertical	Pass
	1	0	Highest	13.16	2.40	10.44	21.20	Vertical	Pass
	Limit			EIRP<2W=33dBm					



Modulation	RB		Channel	Result					Conclusion
				S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
	Size	Offset							
QPSK	1	0	Lowest	11.74	2.37	10.40	19.77	Horizontal	Pass
	1	0	Middle	11.89	2.39	10.42	19.92	Horizontal	Pass
	1	0	Highest	11.59	2.40	10.44	19.63	Horizontal	Pass
	1	0	Lowest	13.21	2.37	10.40	21.24	Vertical	Pass
	1	0	Middle	13.25	2.39	10.42	21.28	Vertical	Pass
	1	0	Highest	13.08	2.40	10.44	21.12	Vertical	Pass
16QAM	1	0	Lowest	11.5	2.37	10.40	19.53	Horizontal	Pass
	1	0	Middle	11.61	2.39	10.42	19.64	Horizontal	Pass
	1	0	Highest	11.41	2.40	10.44	19.45	Horizontal	Pass
	1	0	Lowest	12.9	2.37	10.40	20.93	Vertical	Pass
	1	0	Middle	12.99	2.39	10.42	21.02	Vertical	Pass
	1	0	Highest	12.75	2.40	10.44	20.79	Vertical	Pass
Limit	EIRP<2W=33dBm								

Modulation	RB		Channel	Result					Conclusion
				S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
	Size	Offset							
QPSK	1	0	Lowest	12.78	2.37	10.40	20.81	Horizontal	Pass
	1	0	Middle	12.6	2.39	10.42	20.63	Horizontal	Pass
	1	0	Highest	12.54	2.40	10.44	20.58	Horizontal	Pass
	1	0	Lowest	14.12	2.37	10.40	22.15	Vertical	Pass
	1	0	Middle	14.05	2.39	10.42	22.08	Vertical	Pass
	1	0	Highest	13.88	2.40	10.44	21.92	Vertical	Pass
16QAM	1	0	Lowest	12.57	2.37	10.40	20.60	Horizontal	Pass
	1	0	Middle	12.3	2.39	10.42	20.33	Horizontal	Pass
	1	0	Highest	12.2	2.40	10.44	20.24	Horizontal	Pass
	1	0	Lowest	13.92	2.37	10.40	21.95	Vertical	Pass
	1	0	Middle	13.78	2.39	10.42	21.81	Vertical	Pass
	1	0	Highest	13.67	2.40	10.44	21.71	Vertical	Pass
Limit	EIRP<2W=33dBm								



Modulation	RB		Channel	Result					Conclusion
				S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
	Size	Offset							
QPSK	1	0	Middle	11.53	2.36	10.16	19.33	Horizontal	Pass
	1	0	Highest	11.9	2.37	10.22	19.75	Horizontal	Pass
	1	0	Middle	13.01	2.36	10.16	20.81	Vertical	Pass
	1	0	Highest	13.2	2.37	10.22	21.05	Vertical	Pass
16QAM	1	0	Middle	11.42	2.36	10.16	19.22	Horizontal	Pass
	1	0	Highest	11.54	2.37	10.22	19.39	Horizontal	Pass
	1	0	Middle	12.76	2.36	10.16	20.56	Vertical	Pass
	1	0	Highest	12.94	2.37	10.22	20.79	Vertical	Pass
Limit	EIRP<1W=30dBm								

Modulation	RB		Channel	Result					Conclusion
				S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
	Size	Offset							
QPSK	1	0	Middle	12.39	2.36	10.16	20.19	Horizontal	Pass
	1	0	Highest	12.44	2.37	10.22	20.29	Horizontal	Pass
	1	0	Middle	13.83	2.36	10.16	21.63	Vertical	Pass
	1	0	Highest	13.91	2.37	10.22	21.76	Vertical	Pass
16QAM	1	0	Middle	12.16	2.36	10.16	19.96	Horizontal	Pass
	1	0	Highest	12.29	2.37	10.22	20.14	Horizontal	Pass
	1	0	Middle	13.51	2.36	10.16	21.31	Vertical	Pass
	1	0	Highest	13.69	2.37	10.22	21.54	Vertical	Pass
Limit	EIRP<1W=30dBm								

Modulation	RB		Channel	Result					Conclusion
				S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
	Size	Offset							
QPSK	1	0	Middle	12.27	2.36	10.16	20.07	Horizontal	Pass
	1	0	Highest	12.03	2.37	10.22	19.88	Horizontal	Pass
	1	0	Middle	13.77	2.36	10.16	21.57	Vertical	Pass
	1	0	Highest	13.47	2.37	10.22	21.32	Vertical	Pass
16QAM	1	0	Middle	12.32	2.36	10.16	20.12	Horizontal	Pass
	1	0	Highest	12.03	2.37	10.22	19.88	Horizontal	Pass
	1	0	Middle	13.69	2.36	10.16	21.49	Vertical	Pass
	1	0	Highest	13.33	2.37	10.22	21.18	Vertical	Pass
Limit	EIRP<1W=30dBm								



Radiated Power (EIRP) for LTE Band 26 / 10M									
Modulation	RB		Channel	Result					Conclusion
				S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
QPSK	1	0	Middle	12.51	2.36	10.16	20.31	Horizontal	Pass
	1	0	Highest	12.56	2.37	10.22	20.41	Horizontal	Pass
	1	0	Middle	13.85	2.36	10.16	21.65	Vertical	Pass
	1	0	Highest	14.03	2.37	10.22	21.88	Vertical	Pass
16QAM	1	0	Middle	12.18	2.36	10.16	19.98	Horizontal	Pass
	1	0	Highest	12.29	2.37	10.22	20.14	Horizontal	Pass
	1	0	Middle	13.63	2.36	10.16	21.43	Vertical	Pass
	1	0	Highest	13.69	2.37	10.22	21.54	Vertical	Pass
Limit	EIRP<1W=30dBm								

Radiated Power (EIRP) for LTE Band 26 / 15M									
Modulation	RB		Channel	Result					Conclusion
				S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
QPSK	1	0	Middle	12.85	2.36	10.16	20.65	Horizontal	Pass
	1	0	Highest	12.8	2.37	10.22	20.65	Horizontal	Pass
	1	0	Middle	14.26	2.36	10.16	22.06	Vertical	Pass
	1	0	Highest	14.25	2.37	10.22	22.10	Vertical	Pass
16QAM	1	0	Middle	12.4	2.36	10.16	20.20	Horizontal	Pass
	1	0	Highest	12.6	2.37	10.22	20.45	Horizontal	Pass
	1	0	Middle	13.87	2.36	10.16	21.67	Vertical	Pass
	1	0	Highest	13.99	2.37	10.22	21.84	Vertical	Pass
Limit	EIRP<1W=30dBm								



Radiated Power (EIRP) for LTE Band 26(Part 90) / 1.4M									
Modulation	RB		Channel	Result					Conclusion
				S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
	Size	Offset		11.84	2.35	10.13	19.62	Horizontal	Pass
QPSK	1	0	Lowest	13.34	2.35	10.13	21.12	Vertical	Pass
16QAM	1	0	Lowest	11.74	2.35	10.13	19.52	Horizontal	Pass
16QAM	1	0	Lowest	13.12	2.35	10.13	20.90	Vertical	Pass
Limit	EIRP<100W=50dBm								

Radiated Power (EIRP) for LTE Band 26(Part 90) / 3M									
Modulation	RB		Channel	Result					Conclusion
				S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
	Size	Offset		12.37	2.35	10.13	20.15	Horizontal	Pass
QPSK	1	0	Lowest	13.78	2.35	10.13	21.56	Vertical	Pass
16QAM	1	0	Lowest	12.2	2.35	10.13	19.98	Horizontal	Pass
16QAM	1	0	Lowest	13.57	2.35	10.13	21.35	Vertical	Pass
Limit	EIRP<100W=50dBm								

Radiated Power (EIRP) for LTE Band 26(Part 90) / 5M									
Modulation	RB		Channel	Result					Conclusion
				S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
	Size	Offset		12.2	2.35	10.13	19.98	Horizontal	Pass
QPSK	1	0	Lowest	13.69	2.35	10.13	21.47	Vertical	Pass
16QAM	1	0	Lowest	12.13	2.35	10.13	19.91	Horizontal	Pass
16QAM	1	0	Lowest	13.6	2.35	10.13	21.38	Vertical	Pass
Limit	EIRP<100W=50dBm								

Radiated Power (EIRP) for LTE Band 26(Part 90) / 10M									
Modulation	RB		Channel	Result					Conclusion
				S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
	Size	Offset		12.55	2.35	10.13	20.33	Horizontal	Pass
QPSK	1	0	Lowest	13.98	2.35	10.13	21.76	Vertical	Pass
16QAM	1	0	Lowest	12.45	2.35	10.13	20.23	Horizontal	Pass
16QAM	1	0	Lowest	13.84	2.35	10.13	21.62	Vertical	Pass
Limit	EIRP<100W=50dBm								



Modulation	RB		Channel	Result					Conclusion
				S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
	Size	Offset							
QPSK	1	0	Lowest	9.45	2.56	10.60	17.49	Horizontal	Pass
	1	0	Middle	9.63	2.67	10.65	17.61	Horizontal	Pass
	1	0	Highest	9.8	2.72	10.70	17.78	Horizontal	Pass
	1	0	Lowest	10.94	2.56	10.60	18.98	Vertical	Pass
	1	0	Middle	11.13	2.67	10.65	19.11	Vertical	Pass
	1	0	Highest	11.14	2.72	10.70	19.12	Vertical	Pass
16QAM	1	0	Lowest	9.37	2.56	10.60	17.41	Horizontal	Pass
	1	0	Middle	9.4	2.67	10.65	17.38	Horizontal	Pass
	1	0	Highest	9.51	2.72	10.70	17.49	Horizontal	Pass
	1	0	Lowest	10.67	2.56	10.60	18.71	Vertical	Pass
	1	0	Middle	10.73	2.67	10.65	18.71	Vertical	Pass
	1	0	Highest	10.94	2.72	10.70	18.92	Vertical	Pass
Limit	EIRP<2W=33dBm								

Modulation	RB		Channel	Result					Conclusion
				S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
	Size	Offset							
QPSK	1	0	Lowest	9.43	2.56	10.60	17.47	Horizontal	Pass
	1	0	Middle	9.54	2.67	10.65	17.52	Horizontal	Pass
	1	0	Highest	9.43	2.72	10.70	17.41	Horizontal	Pass
	1	0	Lowest	10.9	2.56	10.60	18.94	Vertical	Pass
	1	0	Middle	10.88	2.67	10.65	18.86	Vertical	Pass
	1	0	Highest	10.93	2.72	10.70	18.91	Vertical	Pass
16QAM	1	0	Lowest	9.19	2.56	10.60	17.23	Horizontal	Pass
	1	0	Middle	9.22	2.67	10.65	17.20	Horizontal	Pass
	1	0	Highest	9.49	2.72	10.70	17.47	Horizontal	Pass
	1	0	Lowest	10.68	2.56	10.60	18.72	Vertical	Pass
	1	0	Middle	10.58	2.67	10.65	18.56	Vertical	Pass
	1	0	Highest	10.81	2.72	10.70	18.79	Vertical	Pass
Limit	EIRP<2W=33dBm								



Modulation	RB		Channel	Result					Conclusion
				S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
	Size	Offset							
QPSK	1	0	Lowest	9.75	2.56	10.60	17.79	Horizontal	Pass
	1	0	Middle	9.89	2.67	10.65	17.87	Horizontal	Pass
	1	0	Highest	9.78	2.72	10.70	17.76	Horizontal	Pass
	1	0	Lowest	11.19	2.56	10.60	19.23	Vertical	Pass
	1	0	Middle	11.34	2.67	10.65	19.32	Vertical	Pass
	1	0	Highest	11.27	2.72	10.70	19.25	Vertical	Pass
16QAM	1	0	Lowest	9.46	2.56	10.60	17.50	Horizontal	Pass
	1	0	Middle	9.67	2.67	10.65	17.65	Horizontal	Pass
	1	0	Highest	9.51	2.72	10.70	17.49	Horizontal	Pass
	1	0	Lowest	10.83	2.56	10.60	18.87	Vertical	Pass
	1	0	Middle	11.08	2.67	10.65	19.06	Vertical	Pass
	1	0	Highest	10.94	2.72	10.70	18.92	Vertical	Pass
Limit	EIRP<2W=33dBm								

Modulation	RB		Channel	Result					Conclusion
				S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
	Size	Offset							
QPSK	1	0	Lowest	10.14	2.56	10.60	18.18	Horizontal	Pass
	1	0	Middle	10.11	2.67	10.65	18.09	Horizontal	Pass
	1	0	Highest	9.92	2.72	10.70	17.90	Horizontal	Pass
	1	0	Lowest	11.51	2.56	10.60	19.55	Vertical	Pass
	1	0	Middle	11.61	2.67	10.65	19.59	Vertical	Pass
	1	0	Highest	11.27	2.72	10.70	19.25	Vertical	Pass
16QAM	1	0	Lowest	9.92	2.56	10.60	17.96	Horizontal	Pass
	1	0	Middle	9.99	2.67	10.65	17.97	Horizontal	Pass
	1	0	Highest	9.77	2.72	10.70	17.75	Horizontal	Pass
	1	0	Lowest	11.37	2.56	10.60	19.41	Vertical	Pass
	1	0	Middle	11.33	2.67	10.65	19.31	Vertical	Pass
	1	0	Highest	11.14	2.72	10.70	19.12	Vertical	Pass
Limit	EIRP<2W=33dBm								



Modulation	RB		Channel	Result					Conclusion
				S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
	Size	Offset		Lowest	10.18	2.35	10.13	17.96	Horizontal
QPSK	1	0	Middle	10.41	2.36	10.16	18.21	Horizontal	Pass
	1	0	Highest	10.34	2.37	10.22	18.19	Horizontal	Pass
	1	0	Lowest	11.62	2.35	10.13	19.40	Vertical	Pass
	1	0	Middle	11.8	2.36	10.16	19.60	Vertical	Pass
	1	0	Highest	11.75	2.37	10.22	19.60	Vertical	Pass
	1	0	Lowest	10.11	2.35	10.13	17.89	Horizontal	Pass
16QAM	1	0	Middle	10.12	2.36	10.16	17.92	Horizontal	Pass
	1	0	Highest	9.87	2.37	10.22	17.72	Horizontal	Pass
	1	0	Lowest	11.53	2.35	10.13	19.31	Vertical	Pass
	1	0	Middle	11.54	2.36	10.16	19.34	Vertical	Pass
	1	0	Highest	11.35	2.37	10.22	19.20	Vertical	Pass
	Limit			EIRP<1W=30dBm					

Modulation	RB		Channel	Result					Conclusion
				S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
	Size	Offset		Lowest	11.27	2.35	10.13	19.05	Horizontal
QPSK	1	0	Middle	11.18	2.36	10.16	18.98	Horizontal	Pass
	1	0	Highest	11.04	2.37	10.22	18.89	Horizontal	Pass
	1	0	Lowest	12.66	2.35	10.13	20.44	Vertical	Pass
	1	0	Middle	12.58	2.36	10.16	20.38	Vertical	Pass
	1	0	Highest	12.44	2.37	10.22	20.29	Vertical	Pass
	1	0	Lowest	10.96	2.35	10.13	18.74	Horizontal	Pass
16QAM	1	0	Middle	10.99	2.36	10.16	18.79	Horizontal	Pass
	1	0	Highest	10.67	2.37	10.22	18.52	Horizontal	Pass
	1	0	Lowest	12.37	2.35	10.13	20.15	Vertical	Pass
	1	0	Middle	12.34	2.36	10.16	20.14	Vertical	Pass
	1	0	Highest	12.09	2.37	10.22	19.94	Vertical	Pass
	Limit			EIRP<1W=30dBm					



Modulation	RB		Channel	Result					Conclusion
				S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
	Size	Offset		Lowest	10.96	2.35	10.13	18.74	Horizontal
QPSK	1	0	Middle	10.93	2.36	10.16	18.73	Horizontal	Pass
	1	0	Highest	10.54	2.37	10.22	18.39	Horizontal	Pass
	1	0	Lowest	12.45	2.35	10.13	20.23	Vertical	Pass
	1	0	Middle	12.28	2.36	10.16	20.08	Vertical	Pass
	1	0	Highest	12.03	2.37	10.22	19.88	Vertical	Pass
	1	0	Lowest	10.85	2.35	10.13	18.63	Horizontal	Pass
16QAM	1	0	Middle	10.59	2.36	10.16	18.39	Horizontal	Pass
	1	0	Highest	10.42	2.37	10.22	18.27	Horizontal	Pass
	1	0	Lowest	12.16	2.35	10.13	19.94	Vertical	Pass
	1	0	Middle	12.04	2.36	10.16	19.84	Vertical	Pass
	1	0	Highest	11.73	2.37	10.22	19.58	Vertical	Pass
	Limit			EIRP<1W=30dBm					

Modulation	RB		Channel	Result					Conclusion
				S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
	Size	Offset		Lowest	10.78	2.35	10.13	18.56	Horizontal
QPSK	1	0	Middle	10.7	2.36	10.16	18.50	Horizontal	Pass
	1	0	Highest	10.62	2.37	10.22	18.47	Horizontal	Pass
	1	0	Lowest	12.11	2.35	10.13	19.89	Vertical	Pass
	1	0	Middle	12.18	2.36	10.16	19.98	Vertical	Pass
	1	0	Highest	12	2.37	10.22	19.85	Vertical	Pass
	1	0	Lowest	10.49	2.35	10.13	18.27	Horizontal	Pass
16QAM	1	0	Middle	10.3	2.36	10.16	18.10	Horizontal	Pass
	1	0	Highest	10.2	2.37	10.22	18.05	Horizontal	Pass
	1	0	Lowest	11.95	2.35	10.13	19.73	Vertical	Pass
	1	0	Middle	11.78	2.36	10.16	19.58	Vertical	Pass
	1	0	Highest	11.64	2.37	10.22	19.49	Vertical	Pass
	Limit			EIRP<1W=30dBm					



Modulation	RB		Channel	Result					Conclusion
				S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
	Size	Offset							
QPSK	1	0	Lowest	10.51	2.35	10.13	18.29	Horizontal	Pass
	1	0	Middle	10.5	2.36	10.16	18.30	Horizontal	Pass
	1	0	Highest	10.16	2.37	10.22	18.01	Horizontal	Pass
	1	0	Lowest	11.85	2.35	10.13	19.63	Vertical	Pass
	1	0	Middle	11.87	2.36	10.16	19.67	Vertical	Pass
	1	0	Highest	11.54	2.37	10.22	19.39	Vertical	Pass
16QAM	1	0	Lowest	9.98	2.35	10.13	17.76	Horizontal	Pass
	1	0	Middle	10.23	2.36	10.16	18.03	Horizontal	Pass
	1	0	Highest	9.71	2.37	10.22	17.56	Horizontal	Pass
	1	0	Lowest	11.46	2.35	10.13	19.24	Vertical	Pass
	1	0	Middle	11.62	2.36	10.16	19.42	Vertical	Pass
	1	0	Highest	11.16	2.37	10.22	19.01	Vertical	Pass
Limit	EIRP<1W=30dBm								

Modulation	RB		Channel	Result					Conclusion
				S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
	Size	Offset							
QPSK	1	0	Lowest	11.47	2.35	10.13	19.25	Horizontal	Pass
	1	0	Middle	11.37	2.36	10.16	19.17	Horizontal	Pass
	1	0	Highest	11.26	2.37	10.22	19.11	Horizontal	Pass
	1	0	Lowest	12.91	2.35	10.13	20.69	Vertical	Pass
	1	0	Middle	12.71	2.36	10.16	20.51	Vertical	Pass
	1	0	Highest	12.59	2.37	10.22	20.44	Vertical	Pass
16QAM	1	0	Lowest	11.13	2.35	10.13	18.91	Horizontal	Pass
	1	0	Middle	11.16	2.36	10.16	18.96	Horizontal	Pass
	1	0	Highest	11.09	2.37	10.22	18.94	Horizontal	Pass
	1	0	Lowest	12.56	2.35	10.13	20.34	Vertical	Pass
	1	0	Middle	12.5	2.36	10.16	20.30	Vertical	Pass
	1	0	Highest	12.53	2.37	10.22	20.38	Vertical	Pass
Limit	EIRP<1W=30dBm								



6. OCCUPIED BANDWIDTH

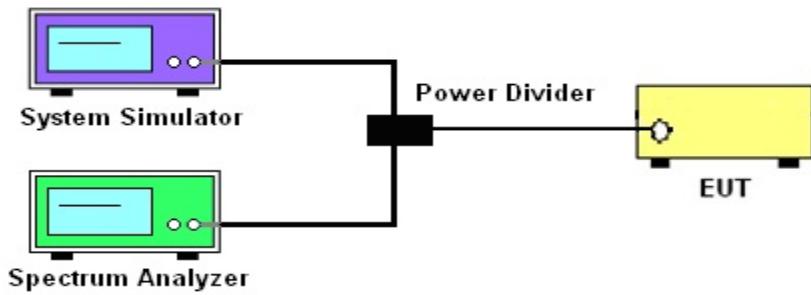
6.1 DESCRIPTION OF OCCUPIED BANDWIDTH MEASUREMENT

6.1.1 MEASUREMENT METHOD

1. The occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

2. The 26 db emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 db below the maximum in-band spectral density of the modulated signal. spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth equal to approximately 1.0% of the emission bandwidth.

6.1.2 TEST SETUP



6.1.3 TEST PROCEDURES

1. The testing follows FCC KDB 971168 D01 v03r01 Section 4.1.and 4.2
2. The EUT was connected to spectrum and system simulator via a power divider
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Set the test probe and measure the Occupied Bandwidth of the spectrum analyzer
5. Measure and record the Occupied Bandwidth from the Spectrum Analyzer.

	LTE					
	LTE BW	1.4M	3M	5M	10M	15M
Span	3MHz	6MHz	10MHz	20MHz	30MHz	40MHz
RBW	30kHz	30kHz	100kHz	100kHz	300kHz	300kHz
VBW	100kHz	100kHz	300kHz	300kHz	1000kHz	1000kHz
Detector	PK	PK	PK	PK	PK	PK
Trace	Max	Max	Max	Max	Max	Max
Sweep Count	Auto	Auto	Auto	Auto	Auto	Auto



6.1.4 MEASUREMENT RESULT

LTE Band 2 Bandwidth [MHz]							
BW [MHz]	Mod	Lowest		Middle		Highest	
		99% BW	26dB BW	99% BW	26dB BW	99% BW	26dB BW
1.4	QPSK	1.0967	1.278	1.092	1.283	1.0945	1.291
1.4	16-QAM	1.0946	1.281	1.098	1.309	1.09	1.275
3	QPSK	2.681	2.855	2.675	2.861	2.678	2.856
3	16-QAM	2.676	2.848	2.671	2.849	2.6734	2.863
5	QPSK	4.523	5.191	4.509	5.155	4.527	5.219
5	16-QAM	4.519	5.346	4.54	5.184	4.5385	5.36
10	QPSK	8.937	9.887	8.949	9.881	8.949	9.889
10	16-QAM	8.9436	9.729	8.9512	9.806	8.945	9.824
15	QPSK	13.473	14.99	13.527	15.01	13.478	15.27
15	16-QAM	13.471	14.95	13.516	14.99	13.505	14.98
20	QPSK	17.876	19.53	17.958	19.61	17.961	19.52
20	16-QAM	17.912	19.53	17.929	19.63	17.955	19.5
LTE Band 4 Bandwidth [MHz]							
BW [MHz]	Mod	Lowest		Middle		Highest	
		99% BW	26dB BW	99% BW	26dB BW	99% BW	26dB BW
1.4	QPSK	1.0864	1.277	1.0949	1.289	1.1004	1.283
1.4	16-QAM	1.094	1.287	1.099	1.308	1.0903	1.275
3	QPSK	2.681	2.859	2.675	2.86	2.6738	2.849
3	16-QAM	2.6713	2.859	2.675	2.84	2.672	2.856
5	QPSK	4.518	5.206	4.511	5.131	4.53	5.131
5	16-QAM	4.517	5.159	4.538	5.177	4.542	5.212
10	QPSK	8.945	9.843	8.958	9.931	8.941	9.759
10	16-QAM	8.949	9.812	8.952	9.807	8.944	9.761
15	QPSK	13.453	15.04	13.492	15.05	13.505	15.2
15	16-QAM	13.505	15	13.506	15.02	13.502	14.9
20	QPSK	17.754	18.64	17.942	19.54	17.922	19.48
20	16-QAM	17.947	19.57	17.926	19.57	17.915	19.5
LTE Band 5 Bandwidth [MHz]							
BW [MHz]	Mod	Lowest		Middle		Highest	
		99% BW	26dB BW	99% BW	26dB BW	99% BW	26dB BW
1.4	QPSK	1.0865	1.293	1.095	1.284	1.101	1.28
1.4	16-QAM	1.0944	1.284	1.0967	1.308	1.087	1.275
3	QPSK	2.674	2.859	2.677	2.846	2.676	2.861
3	16-QAM	2.672	2.854	2.671	2.864	2.674	2.849
5	QPSK	4.519	5.233	4.5057	5.127	4.533	5.185
5	16-QAM	4.5183	5.172	4.532	5.152	4.547	5.184
10	QPSK	8.956	9.871	8.94	9.851	8.974	9.846
10	16-QAM	8.961	9.856	8.935	9.773	8.956	9.887



LTE Band 7 Bandwidth [MHz]

BW [MHz]	Mod	Lowest		Middle		Highest	
		99% BW	26dB BW	99% BW	26dB BW	99% BW	26dB BW
5	QPSK	4.522	5.191	4.531	5.211	4.518	5.197
5	16-QAM	4.542	5.196	4.539	5.212	4.512	5.159
10	QPSK	8.934	9.819	8.948	9.891	8.96	9.816
10	16-QAM	8.936	9.675	8.948	9.795	8.937	9.819
15	QPSK	13.459	15.05	13.506	15.21	13.472	14.95
15	16-QAM	13.48	15.02	13.511	15.02	13.459	14.86
20	QPSK	17.893	19.4	17.959	19.66	17.859	19.33
20	16-QAM	17.951	19.61	17.94	19.62	17.845	19.38

LTE Band 12 Bandwidth [MHz]

BW [MHz]	Mod	Lowest		Middle		Highest	
		99% BW	26dB BW	99% BW	26dB BW	99% BW	26dB BW
1.4	QPSK	1.096	1.29	1.1	1.281	1.0924	1.281
1.4	16-QAM	1.1	1.306	1.09	1.275	1.093	1.278
3	QPSK	2.68	2.856	2.6757	2.866	2.6738	2.856
3	16-QAM	2.673	2.857	2.676	2.853	2.6713	2.852
5	QPSK	4.508	5.141	4.534	5.163	4.517	5.196
5	16-QAM	4.538	5.168	4.538	5.216	4.513	5.143
10	QPSK	8.932	9.774	8.958	9.907	8.936	9.826
10	16-QAM	8.942	9.733	8.946	9.849	8.9474	9.756

LTE Band 13 Bandwidth [MHz]

BW [MHz]	Mod	Lowest		Middle		Highest	
		99% BW	26dB BW	99% BW	26dB BW	99% BW	26dB BW
5	QPSK	4.5278	5.145	4.518	5.195	4.517	5.185
5	16-QAM	4.529	5.235	4.5179	5.125	4.536	5.211
10	QPSK			8.955	9.906		
10	16-QAM			8.935	9.693		

LTE Band 17 Bandwidth [MHz]

BW [MHz]	Mod	Lowest		Middle		Highest	
		99% BW	26dB BW	99% BW	26dB BW	99% BW	26dB BW
5	QPSK	4.515	5.172	4.531	5.168	4.5154	5.187
5	16-QAM	4.5389	5.252	4.5201	5.16	4.5376	5.154
10	QPSK	8.9613	10.02	8.9521	9.896	8.9568	9.924
10	16-QAM	8.9496	9.721	8.9527	9.824	8.9528	9.858

LTE Band 25 Bandwidth [MHz]

BW [MHz]	Mod	Lowest		Middle		Highest	
		99% BW	26dB BW	99% BW	26dB BW	99% BW	26dB BW
1.4	QPSK	1.098	1.304	1.105	1.305	1.0928	1.281
1.4	16-QAM	1.0927	1.285	1.096	1.304	1.0986	1.305
3	QPSK	2.683	2.854	2.677	2.866	2.672	2.856
3	16-QAM	2.677	2.866	2.677	2.85	2.67	2.849
5	QPSK	4.526	5.213	4.537	5.214	4.516	5.159
5	16-QAM	4.545	5.306	4.526	5.236	4.531	5.156
10	QPSK	8.94	9.977	8.962	10.07	8.921	9.659
10	16-QAM	8.962	10.57	8.953	9.836	8.931	9.722
15	QPSK	13.508	14.87	13.521	15.22	13.483	15
15	16-QAM	13.487	14.93	13.515	15.09	13.485	14.93
20	QPSK	17.855	19.35	17.925	19.66	17.943	19.7
20	16-QAM	17.897	19.38	17.942	19.77	17.906	19.46



LTE Band 26 Bandwidth [MHz]					
BW [MHz]	Mod	Middle		Highest	
		99% BW	26dB BW	99% BW	26dB BW
1.4	QPSK	1.102	1.276	1.0919	1.28
1.4	16-QAM	1.0901	1.273	1.0932	1.293
3	QPSK	2.6753	2.841	2.6777	2.857
3	16-QAM	2.6729	2.855	2.6699	2.848
5	QPSK	4.4847	4.931	4.5072	4.957
5	16-QAM	4.5098	4.936	4.5021	4.944
10	QPSK	8.9509	9.652	8.9604	9.551
10	16-QAM	8.9527	9.551	8.9441	9.576
15	QPSK	13.532	14.71	13.403	14.45
15	16-QAM	13.53	14.57	13.432	14.52

LTE Band 26(Part 90) Bandwidth [MHz]			
BW [MHz]	Mod	Lowest	
		99% BW	26dB BW
1.4	QPSK	1.0975	1.307
1.4	16-QAM	1.0993	1.308
3	QPSK	2.6799	2.872
3	16-QAM	2.6776	2.863
5	QPSK	4.5037	4.932
5	16-QAM	4.49	4.898
10	QPSK	8.9456	9.621
10	16-QAM	8.9370	9.515

LTE Band 41 Bandwidth [MHz]							
BW [MHz]	Mod	Lowest		Middle		Highest	
		99% BW	26dB BW	99% BW	26dB BW	99% BW	26dB BW
5	QPSK	4.495	5.098	4.492	4.936	4.509	4.863
5	16-QAM	4.494	4.991	4.488	5.178	4.495	5.145
10	QPSK	8.935	9.592	8.939	9.834	8.942	9.544
10	16-QAM	8.927	9.424	8.932	9.805	8.933	9.49
15	QPSK	13.463	14.91	13.437	15.17	13.506	14.98
15	16-QAM	13.464	14.79	13.492	15.25	13.498	15.76
20	QPSK	17.88	19.37	17.896	19.16	17.949	19.76
20	16-QAM	17.907	20.22	17.887	19.1	17.925	19.43

LTE Band 66 Bandwidth [MHz]							
BW [MHz]	Mod	Lowest		Middle		Highest	
		99% BW	26dB BW	99% BW	26dB BW	99% BW	26dB BW
1.4	QPSK	1.1031	1.283	1.0907	1.298	1.0931	1.29
1.4	16-QAM	1.0988	1.305	1.089	1.27	1.094	1.29
3	QPSK	2.68	2.85	2.678	2.863	2.675	2.853
3	16-QAM	2.673	2.859	2.6755	2.85	2.672	2.854
5	QPSK	4.5084	5.152	4.335	5.184	4.514	5.196
5	16-QAM	4.534	5.178	4.5423	5.226	4.513	5.151
10	QPSK	8.957	9.912	8.939	9.783	8.945	9.862
10	16-QAM	8.951	9.833	8.95	9.682	8.953	9.809
15	QPSK	13.45	15.01	13.484	15.07	13.53	15.08
15	16-QAM	13.495	15.02	13.5	14.97	13.506	14.98
20	QPSK	17.896	19.56	17.929	19.73	17.926	19.33
20	16-QAM	17.952	19.55	17.926	19.58	17.92	19.66

Note: Test chart See Appendix A



7. CONDUCTED BAND EDGE

7.1 DESCRIPTION OF CONDUCTED BAND EDGE MEASUREMENT

7.1.1 MEASUREMENT METHOD

1. §22.917(a)

For operations in the 824 – 849 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power P(Watts) in a 100kHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

2. §24.238 (a)

For operations in the 1850-1910 and 1930-1990 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power P(Watts) in a 1MHz bandwidth. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed

3. §27.53 (h)

For operations in the 1710 – 1755 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power P(Watts) in a 1 MHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

4. §27.53(m)(4)

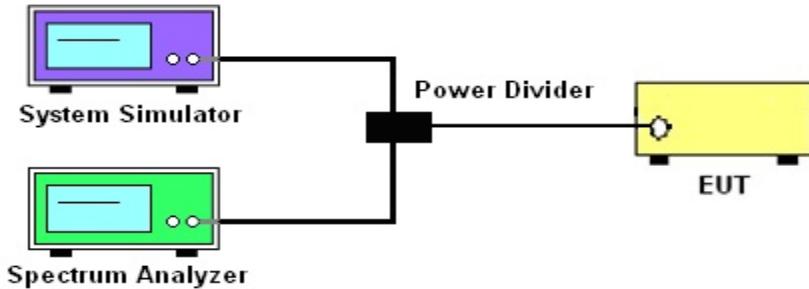
For operations in the 2500 MHz ~ 2570 MHz band this section, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

5. §27.53 (g)

For operations in the 698 -746 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power P(Watts) in a 100 kHz bandwidth. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.



7.1.2 TEST SETUP



7.1.3 TEST PROCEDURES

1. The testing FCC KDB 971168 D01 v03r01 Section 6.0. and ANSI C63.26 2015 Section 5.7.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The band edges of low and high channels for the highest RF powers were measured. Set RBW $\geq 1\%$ EBW in the 1MHz band immediately outside and adjacent to the band edge.
4. Set spectrum analyzer with RMS/AVG detector.
5. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
6. The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)
 $= P(W) - [43 + 10\log(P)]$ (dB)
 $= [30 + 10\log(P)]$ (dBm) - $[43 + 10\log(P)]$ (dB)
 $= -13$ dBm.

Band 7:

$$\begin{aligned} &= P(W) - [55 + 10\log(P)] \text{ (dB)} \\ &= [30 + 10\log(P)] \text{ (dBm)} - [55 + 10\log(P)] \text{ (dB)} \\ &= -25 \text{ dBm.} \end{aligned}$$

	LTE					
LTE BW	1.4M	3M	5M	10M	15M	20M
Span	12MHz	13MHz	15MHz	20MHz	25MHz	30MHz
RBW	30kHz	30kHz	100kHz	100kHz	300kHz	300kHz
VBW	100kHz	100kHz	300kHz	300kHz	1000kHz	1000kHz
Detector	RMS	RMS	RMS	RMS	RMS	RMS
Trace	Max	Max	Max	Max	Max	Max
Sweep Count	Auto	Auto	Auto	Auto	Auto	Auto

7.1.4 MEASUREMENT RESULT

Note: Test chart See Appendix B

8. CONDUCTED SPURIOUS EMISSION

8.1 DESCRIPTION OF CONDUCTED SPURIOUS EMISSION MEASUREMENT

8.1.1 MEASUREMENT METHOD

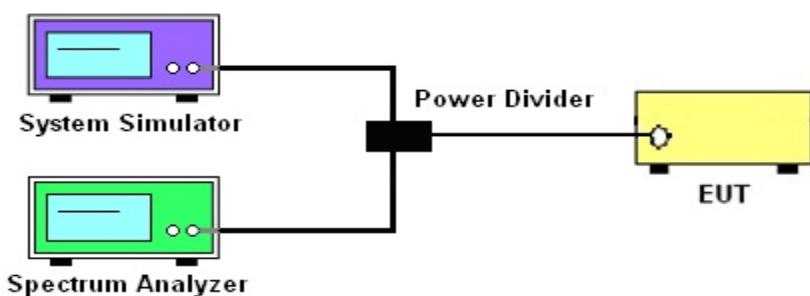
The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $43 + 10 \log(P)$ dB.

For Band 7:

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $55 + 10 \log(P)$ dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

8.1.2 TEST SETUP



8.1.3 TEST PROCEDURES

1. The testing FCC KDB 971168 D01 v03r01 Section 6.0. and ANSI C63.26 2015 Section 5.7.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement
4. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
5. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
6. The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)
 $= P(W) - [43 + 10\log(P)] \text{ (dB)} = [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$
 $= -13 \text{ dBm}$.

For Band 7: $P(W) - [43 + 10\log(P)] \text{ (dB)} = -25 \text{ dBm}$

LTE						
LTE BW	1.4M	3M	5M	10M	15M	20M
Span	Auto	Auto	Auto	Auto	Auto	Auto
RBW	1000kHz	1000kHz	1000kHz	1000kHz	1000kHz	1000kHz
VBW	3000kHz	3000kHz	3000kHz	3000kHz	3000kHz	3000kHz
Detector	PK	PK	PK	PK	PK	PK
Trace	Max	Max	Max	Max	Max	Max

8.1.4 TEST RESULTS

Note: Test chart See Appendix C

9. RADIATED SPURIOUS EMISSION

9.1 DESCRIPTION OF RADIATED SPURIOUS EMISSION

9.1.1 MEASUREMENT METHOD

The radiated spurious emission was measured by substitution method according to ANSI C63.26 2015. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB. For Band 7 The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $55 + 10 \log (P)$ dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

9.1.2 TEST SETUP

The procedure of radiated spurious emissions is as follows:

a) Pre-calibration With pre-calibration method, the Radiated Spurious Emissions(RSE) is calculated as, $RSE = Rx (\text{dBuV}) + CL (\text{dB}) + SA (\text{dB}) + Gain (\text{dBi}) - 107$ (dBuV to dBm) The SA is calibrated using following setup.

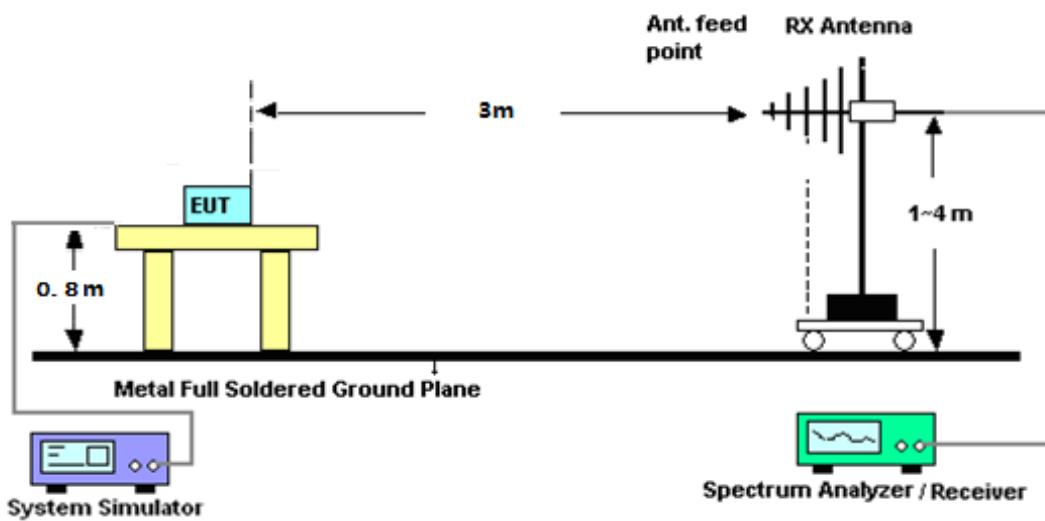
b) EUT was placed on 1.5 m non-conductive stand at a 3 m test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 m from the test item for emission measurements. The height of receiving antenna is 0.8m. The test setup refers to figure below. Detected emissions were maximized at each frequency by rotating the test item and adjusting the receiving antenna polarization. The radiated emission measurements of all non-harmonic and harmonics of the transmit frequency through the 10th harmonic measured with peak detector and 1MHz bandwidth.

Radiated emissions measurements were made only at the upper, middle, and lower carrier frequencies. It was decided that measurements at these three carrier frequencies would be sufficient to demonstrate compliance with emissions limits because it was seen that all the significant spurs occur well outside the band and no radiation was seen from a carrier in one block of any band into any of the other blocks.

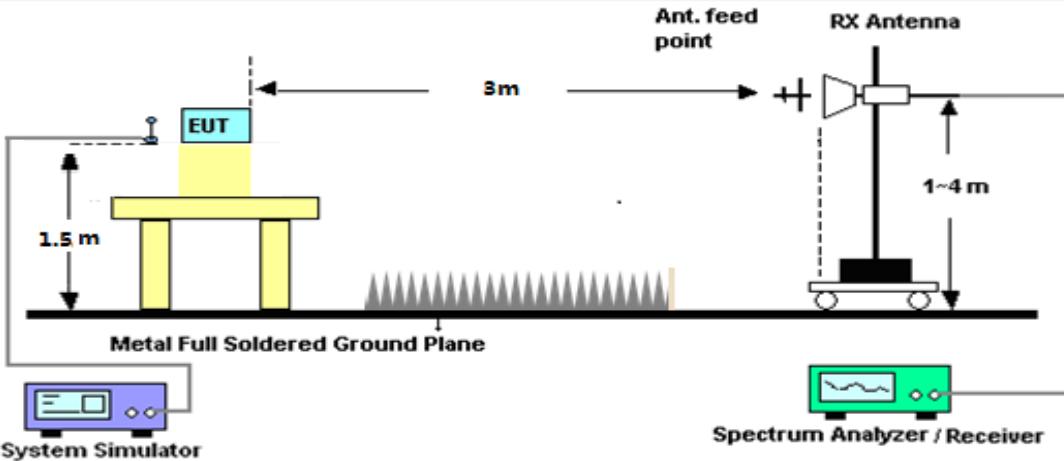
The substitution method is used. Substitution values at each frequency are measured before and saved to the test software. A "reference path loss" is established and the ARpl is the attenuation of "reference path loss", and including the gain of receive antenna, the gain of the preamplifier, the cable loss and the air loss. The measurement results are obtained as described below:

Power=PMea+ARpl

For radiated test from 30MHz to 1GHz



For radiated test from above 1GHz



9.1.3 TEST PROCEDURES

1. The testing FCC KDB 971168 D01 Section 5.8 and ANSI C63.26 2015 Section 5.5.
2. The EUT was placed on a rotatable wooden table with 1.5 meter above ground.
3. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
7. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
8. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
9. Taking the record of output power at antenna port.
10. Repeat step 7 to step 8 for another polarization.

11. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

$$\begin{aligned}
 &\text{The limit line is derived from } 43 + 10\log(P)\text{dB below the transmitter power } P(\text{Watts}) \\
 &= P(\text{W}) - [43 + 10\log(P)] \text{ (dB)} \\
 &= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)} \\
 &= -13\text{dBm}
 \end{aligned}$$

For Band 7:

$$\begin{aligned}
 &\text{The limit line is derived from } 55 + 10\log(P)\text{dB below the transmitter power } P(\text{Watts}) \\
 &= [30 + 10\log(P)] \text{ (dBm)} - [55 + 10\log(P)] \text{ (dB)} \\
 &= -25\text{dBm}
 \end{aligned}$$

$$\text{EIRP (dBm)} = \text{S.G. Power} - \text{Tx Cable Loss} + \text{Tx Antenna Gain}$$

$$\text{ERP (dBm)} = \text{EIRP} - 2.15$$



9.1.4 TEST RESULTS

LTE Band 2 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea	Limit	Margin	Polarity
				(dBm)	(dBm)	(dBm)	
3701.33	-34.56	12.60	12.93	-34.89	-13.00	-21.89	H
5552.16	-34.60	13.10	17.11	-38.61	-13.00	-25.61	H
7402.79	-32.79	11.50	22.20	-43.49	-13.00	-30.49	H
3701.33	-35.79	12.60	12.93	-36.12	-13.00	-23.12	V
5552.16	-35.05	13.10	17.11	-39.06	-13.00	-26.06	V
7402.79	-32.10	11.50	22.20	-42.80	-13.00	-29.80	V
LTE Band 2 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea	Limit	Margin	Polarity
				(dBm)	(dBm)	(dBm)	
3760.19	-33.77	12.60	12.93	-34.10	-13.00	-21.10	H
5640.13	-35.27	13.10	17.11	-39.28	-13.00	-26.28	H
7520.18	-33.17	11.50	22.20	-43.87	-13.00	-30.87	H
3760.19	-35.26	12.60	12.93	-35.59	-13.00	-22.59	V
5640.13	-34.73	13.10	17.11	-38.74	-13.00	-25.74	V
7520.18	-32.47	11.50	22.20	-43.17	-13.00	-30.17	V
LTE Band 2 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea	Limit	Margin	Polarity
				(dBm)	(dBm)	(dBm)	
3818.48	-34.34	12.60	12.93	-34.67	-13.00	-21.67	H
5727.89	-34.11	13.10	17.11	-38.12	-13.00	-25.12	H
7637.01	-32.67	11.50	22.20	-43.37	-13.00	-30.37	H
3818.48	-35.17	12.60	12.93	-35.50	-13.00	-22.50	V
5727.89	-33.79	13.10	17.11	-37.80	-13.00	-24.80	V
7637.01	-33.09	11.50	22.20	-43.79	-13.00	-30.79	V



LTE Band 2 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Leve (dBm)	Ant(dBi)	Loss	PMea	Limit	Margin	Polarity
				(dBm)	(dBm)	(dBm)	
3703.47	-33.73	12.60	12.93	-34.06	-13.00	-21.06	H
5554.36	-34.70	13.10	17.11	-38.71	-13.00	-25.71	H
7406.57	-32.56	11.50	22.20	-43.26	-13.00	-30.26	H
3703.47	-34.64	12.60	12.93	-34.97	-13.00	-21.97	V
5554.36	-34.93	13.10	17.11	-38.94	-13.00	-25.94	V
7406.57	-32.88	11.50	22.20	-43.58	-13.00	-30.58	V
LTE Band 2 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Leve (dBm)	Ant(dBi)	Loss	PMea	Limit	Margin	Polarity
				(dBm)	(dBm)	(dBm)	
3760.18	-33.75	12.60	12.93	-34.08	-13.00	-21.08	H
5640.29	-35.47	13.10	17.11	-39.48	-13.00	-26.48	H
7520.27	-33.19	11.50	22.20	-43.89	-13.00	-30.89	H
3760.18	-35.61	12.60	12.93	-35.94	-13.00	-22.94	V
5640.29	-35.12	13.10	17.11	-39.13	-13.00	-26.13	V
7520.27	-32.71	11.50	22.20	-43.41	-13.00	-30.41	V
LTE Band 2 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Leve (dBm)	Ant(dBi)	Loss	PMea	Limit	Margin	Polarity
				(dBm)	(dBm)	(dBm)	
3816.72	-34.08	12.60	12.93	-34.41	-13.00	-21.41	H
5724.86	-34.72	13.10	17.11	-38.73	-13.00	-25.73	H
7633.38	-33.58	11.50	22.20	-44.28	-13.00	-31.28	H
3816.72	-35.21	12.60	12.93	-35.54	-13.00	-22.54	V
5724.86	-34.93	13.10	17.11	-38.94	-13.00	-25.94	V
7633.38	-33.21	11.50	22.20	-43.91	-13.00	-30.91	V



LTE Band 2 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea	Limit	Margin	Polarity
				(dBm)	(dBm)	(dBm)	
3705.05	-34.19	12.60	12.93	-34.52	-13.00	-21.52	H
5557.86	-35.22	13.10	17.11	-39.23	-13.00	-26.23	H
7410.74	-33.11	11.50	22.20	-43.81	-13.00	-30.81	H
3705.05	-35.05	12.60	12.93	-35.38	-13.00	-22.38	V
5557.86	-34.79	13.10	17.11	-38.80	-13.00	-25.80	V
7410.74	-33.21	11.50	22.20	-43.91	-13.00	-30.91	V
LTE Band 2 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea	Limit	Margin	Polarity
				(dBm)	(dBm)	(dBm)	
3760.20	-33.96	12.60	12.93	-34.29	-13.00	-21.29	H
5640.22	-34.64	13.10	17.11	-38.65	-13.00	-25.65	H
7520.21	-32.62	11.50	22.20	-43.32	-13.00	-30.32	H
3760.20	-34.75	12.60	12.93	-35.08	-13.00	-22.08	V
5640.22	-33.90	13.10	17.11	-37.91	-13.00	-24.91	V
7520.21	-32.64	11.50	22.20	-43.34	-13.00	-30.34	V
LTE Band 2 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea	Limit	Margin	Polarity
				(dBm)	(dBm)	(dBm)	
3814.32	-34.59	12.60	12.93	-34.92	-13.00	-21.92	H
5721.40	-35.01	13.10	17.11	-39.02	-13.00	-26.02	H
7628.41	-32.76	11.50	22.20	-43.46	-13.00	-30.46	H
3814.32	-35.76	12.60	12.93	-36.09	-13.00	-23.09	V
5721.40	-34.32	13.10	17.11	-38.33	-13.00	-25.33	V
7628.41	-32.10	11.50	22.20	-42.80	-13.00	-29.80	V



LTE Band 2 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Leve (dBm)	Ant(dBi)	Loss	PMea	Limit	Margin	Polarity
				(dBm)	(dBm)	(dBm)	
3710.30	-33.54	12.60	12.93	-33.87	-13.00	-20.87	H
5565.56	-34.75	13.10	17.11	-38.76	-13.00	-25.76	H
7421.08	-33.54	11.50	22.20	-44.24	-13.00	-31.24	H
3710.30	-34.99	12.60	12.93	-35.32	-13.00	-22.32	V
5565.56	-34.88	13.10	17.11	-38.89	-13.00	-25.89	V
7421.08	-32.41	11.50	22.20	-43.11	-13.00	-30.11	V
LTE Band 2 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Leve (dBm)	Ant(dBi)	Loss	PMea	Limit	Margin	Polarity
				(dBm)	(dBm)	(dBm)	
3759.91	-33.96	12.60	12.93	-34.29	-13.00	-21.29	H
5640.03	-35.09	13.10	17.11	-39.10	-13.00	-26.10	H
7520.28	-32.53	11.50	22.20	-43.23	-13.00	-30.23	H
3759.91	-35.85	12.60	12.93	-36.18	-13.00	-23.18	V
5640.03	-34.55	13.10	17.11	-38.56	-13.00	-25.56	V
7520.28	-31.75	11.50	22.20	-42.45	-13.00	-29.45	V
LTE Band 2 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Leve (dBm)	Ant(dBi)	Loss	PMea	Limit	Margin	Polarity
				(dBm)	(dBm)	(dBm)	
3809.33	-33.62	12.60	12.93	-33.95	-13.00	-20.95	H
5713.62	-34.35	13.10	17.11	-38.36	-13.00	-25.36	H
7617.88	-32.47	11.50	22.20	-43.17	-13.00	-30.17	H
3809.33	-35.14	12.60	12.93	-35.47	-13.00	-22.47	V
5713.62	-35.16	13.10	17.11	-39.17	-13.00	-26.17	V
7617.88	-33.06	11.50	22.20	-43.76	-13.00	-30.76	V