

5. OCCUPIED BANDWIDTH

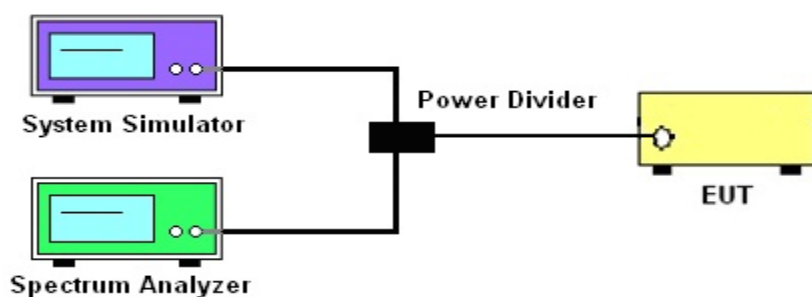
5.1 DESCRIPTION OF OCCUPIED BANDWIDTH MEASUREMENT

5.1.1 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.

5.1.2 TEST SETUP



5.1.3 TEST PROCEDURES

1. The testing follows FCC KDB 971168 D01 v03r01 Section 4.2 and 4.3.
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	20M
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



5.1.4 MEASUREMENT RESULT

LTE Band 2 Bandwidth [MHz]							
BW [MHz]	Mode	Lowest		Middle		Highest	
		99% BW	26dB BW	99% BW	26dB BW	99% BW	26dB BW
1.4	QPSK	1.0945	1.303	1.1007	1.289	1.093	1.292
1.4	16-QAM	1.098	1.31	1.0891	1.271	1.094	1.28
3	QPSK	2.675	2.838	2.681	2.857	2.6755	2.865
3	16-QAM	2.672	2.855	2.6736	2.864	2.677	2.851
5	QPSK	4.53	5.174	4.514	5.183	4.5084	5.222
5	16-QAM	4.5385	5.199	4.511	5.151	4.532	5.195
10	QPSK	8.937	9.79	8.945	9.853	8.954	9.915
10	16-QAM	8.933	9.706	8.948	9.815	8.948	9.782
15	QPSK	13.457	14.98	13.494	15.11	13.522	15.08
15	16-QAM	13.49	14.93	13.498	15.05	13.522	15.03
20	QPSK	17.913	19.46	17.962	19.54	17.943	19.52
20	16-QAM	17.964	19.5	17.941	19.67	17.956	19.58
LTE Band 4 Bandwidth [MHz]							
BW [MHz]	Mode	Lowest		Middle		Highest	
		99% BW	26dB BW	99% BW	26dB BW	99% BW	26dB BW
1.4	QPSK	1.029	1.282	1.096	1.301	1.102	1.275
1.4	16-QAM	1.0929	1.289	1.0965	1.304	1.092	1.276
3	QPSK	2.681	2.859	2.6755	2.862	2.674	2.856
3	16-QAM	2.674	2.86	2.676	2.853	2.671	2.856
5	QPSK	4.502	5.165	4.527	5.172	4.514	5.186
5	16-QAM	4.5339	5.183	4.529	5.209	4.511	5.141
10	QPSK	8.9238	9.714	8.946	9.861	8.953	9.944
10	16-QAM	8.942	9.656	8.9398	9.848	8.949	9.796
15	QPSK	13.449	14.96	13.493	14.97	13.501	15.13
15	16-QAM	13.476	15	13.494	14.96	13.491	14.98
20	QPSK	17.895	19.47	17.939	19.85	17.938	19.34
20	16-QAM	17.96	19.58	17.926	19.6	17.927	19.59
LTE Band 5 Bandwidth [MHz]							
BW [MHz]	Mode	Lowest		Middle		Highest	
		99% BW	26dB BW	99% BW	26dB BW	99% BW	26dB BW
1.4	QPSK	1.0968	1.303	1.1031	1.281	1.0909	1.282
1.4	16-QAM	1.0988	1.304	1.0928	1.277	1.095	1.29
3	QPSK	2.675	2.851	2.679	2.861	2.679	2.862
3	16-QAM	2.672	2.853	2.673	2.861	2.675	2.857
5	QPSK	4.518	5.178	4.515	5.163	4.532	5.156
5	16-QAM	4.517	5.136	4.53	5.216	4.53	5.216
10	QPSK	8.936	9.801	8.9413	9.882	8.963	9.926
10	16-QAM	8.951	9.757	8.948	9.815	8.946	9.799



LTE Band 7 Bandwidth [MHz]							
BW [MHz]	Mode	Lowest		Middle		Highest	
		99% BW	26dB BW	99% BW	26dB BW	99% BW	26dB BW
5	QPSK	4.536	5.199	4.5221	5.207	4.5118	5.165
5	16-QAM	4.545	5.272	4.5122	5.175	4.534	5.217
10	QPSK	8.927	9.793	8.9535	9.872	8.968	9.932
10	16-QAM	8.933	9.807	8.955	9.837	8.96	9.896
15	QPSK	13.433	14.87	13.488	15.1	13.549	15.51
15	16-QAM	13.481	15.33	13.497	15.04	13.534	15.06
20	QPSK	17.903	19.67	17.923	19.42	17.914	19.49
20	16-QAM	17.897	19.56	17.916	19.66	17.981	19.65
LTE Band 12 Bandwidth [MHz]							
BW [MHz]	Mode	Lowest		Middle		Highest	
		99% BW	26dB BW	99% BW	26dB BW	99% BW	26dB BW
1.4	QPSK	1.096	1.305	1.099	1.278	1.091	1.281
1.4	16-QAM	1.0992	1.31	1.094	1.278	1.0947	1.31
3	QPSK	2.676	2.842	2.68	2.87	2.678	2.861
3	16-QAM	2.6736	2.853	2.6738	2.856	2.676	2.856
5	QPSK	4.524	5.199	4.521	5.191	4.52	5.165
5	16-QAM	4.536	5.217	4.538	5.22	4.519	5.166
10	QPSK	8.9413	9.812	8.943	9.799	8.972	9.89
10	16-QAM	8.949	9.811	8.942	9.783	8.964	9.845
LTE Band 17 Bandwidth [MHz]							
BW [MHz]	Mode	Lowest		Middle		Highest	
		99% BW	26dB BW	99% BW	26dB BW	99% BW	26dB BW
5	QPSK	4.514	5.165	4.5145	5.2	4.528	5.19
5	16-QAM	4.5362	5.152	4.543	5.201	4.519	5.143
10	QPSK	8.946	9.786	8.96	9.899	8.971	9.939
10	16-QAM	8.951	9.78	8.958	9.795	8.952	9.877
LTE Band 66 Bandwidth [MHz]							
BW [MHz]	Mode	Lowest		Middle		Highest	
		99% BW	26dB BW	99% BW	26dB BW	99% BW	26dB BW
1.4	QPSK	1.093	1.307	1.1026	1.283	1.0904	1.288
1.4	16-QAM	1.098	1.305	1.086	1.276	1.094	1.289
3	QPSK	2.681	2.856	2.678	2.863	2.675	2.852
3	16-QAM	2.6732	2.868	2.6757	2.851	2.67	2.856
5	QPSK	4.522	5.184	4.518	5.176	4.514	5.426
5	16-QAM	4.537	5.219	5.5141	5.159	4.541	5.19
10	QPSK	8.925	9.782	8.946	9.82	8.954	9.854
10	16-QAM	8.939	9.692	8.94	9.819	8.942	9.809
15	QPSK	13.449	14.93	13.491	15.08	13.49	14.95
15	16-QAM	13.484	15	13.494	14.95	13.496	14.84
20	QPSK	17.894	19.4	17.948	19.84	17.92	19.4
20	16-QAM	17.944	19.6	17.942	19.5	17.948	19.43

Note: Test chart See Appendix A



6. CONDUCTED BAND EDGE

6.1 DESCRIPTION OF CONDUCTED BAND EDGE MEASUREMENT

6.1.1 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 $P(\text{Watts})$ 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 $P(\text{Watts})$ 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 $P(\text{Watts})$ 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.

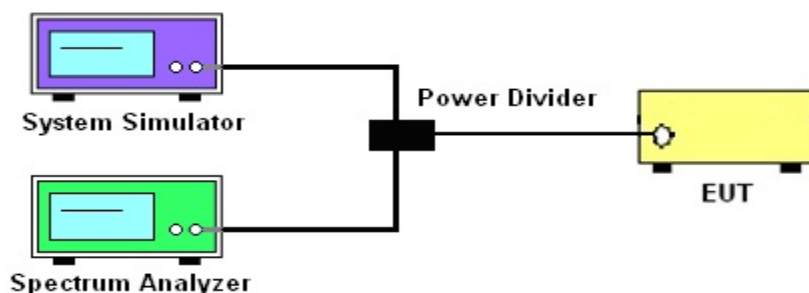
4. §27.53(m)(4)

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 that $43 + 10 \log (P)$ 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 $P(\text{Watts})$ 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.

6.1.2 TEST SETUP



6.1.3 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:
 $= P(W) - [55 + 10\log(P)]$ (dB)
 $= [30 + 10\log(P)]$ (dBm) - $[55 + 10\log(P)]$ (dB)
 $= -25$ dBm.

	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

6.1.4 MEASUREMENT RESULT

Note: Test chart See Appendix B

7. CONDUCTED SPURIOUS EMISSION

7.1 DESCRIPTION OF CONDUCTED SPURIOUS EMISSION MEASUREMENT

7.1.1 MEASUREMENT METHOD

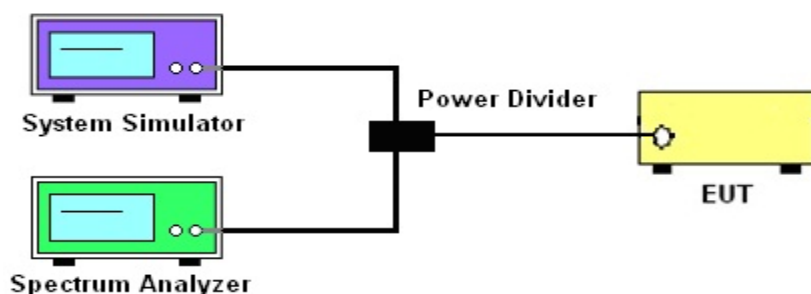
The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.

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.

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 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

7.1.4 TEST RESULTS

Note: Test chart See Appendix C

8. RADIATED SPURIOUS EMISSION

8.1 DESCRIPTION OF RADIATED SPURIOUS EMISSION

8.1.1 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.

8.1.2 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, $RSE = Rx (dBuV) + CL (dB) + SA (dB) + Gain (dBi) - 107 (dBuV \text{ to } dBm)$ The SA is calibrated using following setup.

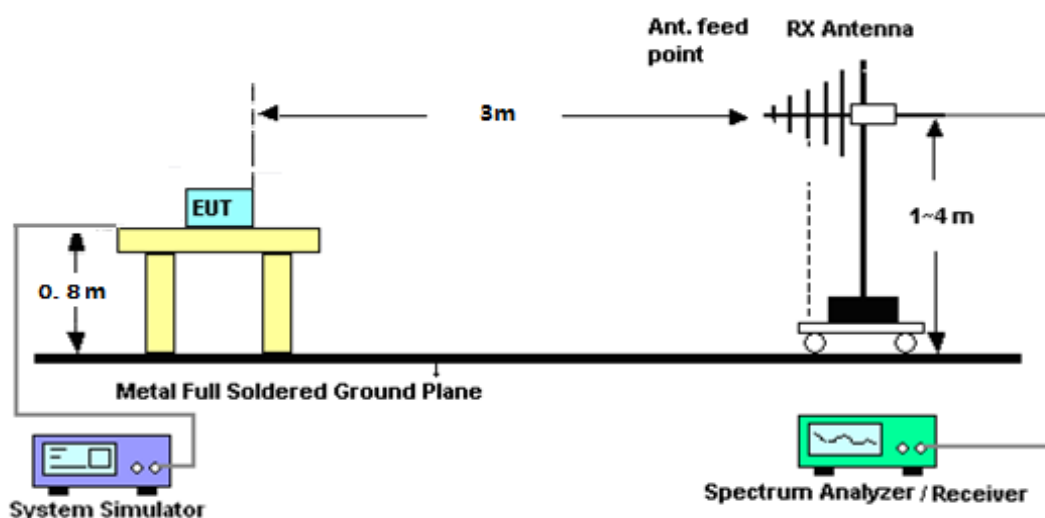
b) EUT was placed on 1.5 m non-conductive stand at a 3 m test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 m from the test item for emission measurements. The height of receiving antenna is 0.8m. The test setup refers to figure below. Detected emissions were 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.

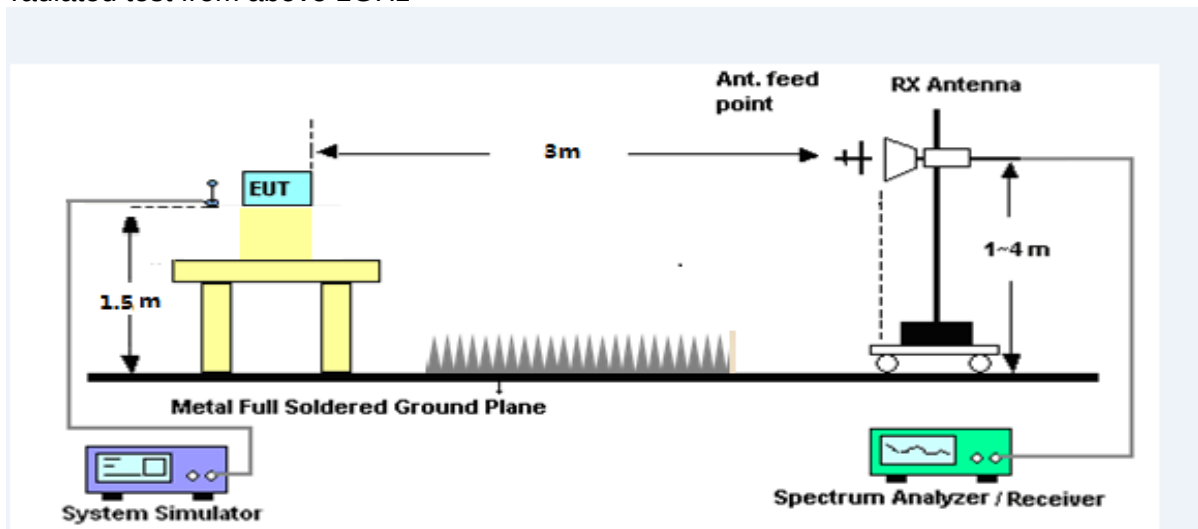
The substitution method is used. Substitution values at each frequency are measured before and saved to the test software. A "reference path loss" is established and the ARpl is the attenuation of "reference path loss", and including the gain of receive antenna, the gain of the preamplifier, the cable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



8.1.3 TEST PROCEDURES

1. The testing FCC KDB 971168 D01 Section 7 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.

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

For Band 7:

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

$P_{Mea} = S.G \text{ Level} + \text{Ant-Cable loss}$; $\text{Margin} = P_{Mea} - \text{Limit}$.



8.1.4 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 (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3701.05	-34.85	12.60	12.93	-35.18	-13.00	-22.18	H
5551.89	-35.11	13.10	17.11	-39.12	-13.00	-26.12	H
7402.50	-33.04	11.50	22.20	-43.74	-13.00	-30.74	H
3701.05	-34.80	12.60	12.93	-35.13	-13.00	-22.13	V
5551.89	-34.64	13.10	17.11	-38.65	-13.00	-25.65	V
7402.50	-33.10	11.50	22.20	-43.80	-13.00	-30.80	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 (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3760.06	-34.41	12.60	12.93	-34.74	-13.00	-21.74	H
5639.86	-34.40	13.10	17.11	-38.41	-13.00	-25.41	H
7520.06	-33.56	11.50	22.20	-44.26	-13.00	-31.26	H
3760.06	-35.96	12.60	12.93	-36.29	-13.00	-23.29	V
5639.86	-33.93	13.10	17.11	-37.94	-13.00	-24.94	V
7520.06	-31.89	11.50	22.20	-42.59	-13.00	-29.59	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 (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3818.28	-33.51	12.60	12.93	-33.84	-13.00	-20.84	H
5727.76	-35.11	13.10	17.11	-39.12	-13.00	-26.12	H
7636.85	-32.23	11.50	22.20	-42.93	-13.00	-29.93	H
3818.28	-34.99	12.60	12.93	-35.32	-13.00	-22.32	V
5727.76	-34.86	13.10	17.11	-38.87	-13.00	-25.87	V
7636.85	-32.15	11.50	22.20	-42.85	-13.00	-29.85	V



LTE Band 2 / 3MHz / 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)	
3702.93	-34.85	12.60	12.93	-35.18	-13.00	-22.18	H
5554.08	-34.79	13.10	17.11	-38.80	-13.00	-25.80	H
7405.76	-33.33	11.50	22.20	-44.03	-13.00	-31.03	H
3702.93	-35.53	12.60	12.93	-35.86	-13.00	-22.86	V
5554.08	-34.57	13.10	17.11	-38.58	-13.00	-25.58	V
7405.76	-32.08	11.50	22.20	-42.78	-13.00	-29.78	V
LTE Band 2 / 3MHz / 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)	
3759.86	-33.96	12.60	12.93	-34.29	-13.00	-21.29	H
5640.29	-34.71	13.10	17.11	-38.72	-13.00	-25.72	H
7520.28	-33.47	11.50	22.20	-44.17	-13.00	-31.17	H
3759.86	-35.54	12.60	12.93	-35.87	-13.00	-22.87	V
5640.29	-34.09	13.10	17.11	-38.10	-13.00	-25.10	V
7520.28	-32.81	11.50	22.20	-43.51	-13.00	-30.51	V
LTE Band 2 / 3MHz / 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)	
3816.95	-34.76	12.60	12.93	-35.09	-13.00	-22.09	H
5725.32	-34.03	13.10	17.11	-38.04	-13.00	-25.04	H
7634.06	-33.26	11.50	22.20	-43.96	-13.00	-30.96	H
3816.95	-35.26	12.60	12.93	-35.59	-13.00	-22.59	V
5725.32	-34.73	13.10	17.11	-38.74	-13.00	-25.74	V
7634.06	-31.88	11.50	22.20	-42.58	-13.00	-29.58	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)	
3705.21	-34.53	12.60	12.93	-34.86	-13.00	-21.86	H
5557.31	-34.20	13.10	17.11	-38.21	-13.00	-25.21	H
7409.81	-32.87	11.50	22.20	-43.57	-13.00	-30.57	H
3705.21	-35.82	12.60	12.93	-36.15	-13.00	-23.15	V
5557.31	-34.21	13.10	17.11	-38.22	-13.00	-25.22	V
7409.81	-32.32	11.50	22.20	-43.02	-13.00	-30.02	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)	
3760.10	-33.57	12.60	12.93	-33.90	-13.00	-20.90	H
5640.01	-35.48	13.10	17.11	-39.49	-13.00	-26.49	H
7520.14	-33.52	11.50	22.20	-44.22	-13.00	-31.22	H
3760.10	-35.34	12.60	12.93	-35.67	-13.00	-22.67	V
5640.01	-34.47	13.10	17.11	-38.48	-13.00	-25.48	V
7520.14	-32.01	11.50	22.20	-42.71	-13.00	-29.71	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)	
3814.94	-33.65	12.60	12.93	-33.98	-13.00	-20.98	H
5722.35	-34.71	13.10	17.11	-38.72	-13.00	-25.72	H
7630.03	-32.27	11.50	22.20	-42.97	-13.00	-29.97	H
3814.94	-35.66	12.60	12.93	-35.99	-13.00	-22.99	V
5722.35	-34.90	13.10	17.11	-38.91	-13.00	-25.91	V
7630.03	-32.30	11.50	22.20	-43.00	-13.00	-30.00	V



LTE Band 2 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3710.31	-34.26	12.60	12.93	-34.59	-13.00	-21.59	H
5565.39	-34.72	13.10	17.11	-38.73	-13.00	-25.73	H
7419.81	-32.41	11.50	22.20	-43.11	-13.00	-30.11	H
3710.31	-35.45	12.60	12.93	-35.78	-13.00	-22.78	V
5565.39	-33.86	13.10	17.11	-37.87	-13.00	-24.87	V
7419.81	-32.40	11.50	22.20	-43.10	-13.00	-30.10	V
LTE Band 2 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3760.05	-34.56	12.60	12.93	-34.89	-13.00	-21.89	H
5639.91	-35.09	13.10	17.11	-39.10	-13.00	-26.10	H
7520.27	-32.17	11.50	22.20	-42.87	-13.00	-29.87	H
3760.05	-35.39	12.60	12.93	-35.72	-13.00	-22.72	V
5639.91	-35.24	13.10	17.11	-39.25	-13.00	-26.25	V
7520.27	-32.19	11.50	22.20	-42.89	-13.00	-29.89	V
LTE Band 2 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3809.94	-34.32	12.60	12.93	-34.65	-13.00	-21.65	H
5714.85	-35.02	13.10	17.11	-39.03	-13.00	-26.03	H
7620.07	-32.53	11.50	22.20	-43.23	-13.00	-30.23	H
3809.94	-35.82	12.60	12.93	-36.15	-13.00	-23.15	V
5714.85	-34.98	13.10	17.11	-38.99	-13.00	-25.99	V
7620.07	-32.09	11.50	22.20	-42.79	-13.00	-29.79	V



LTE Band 2 / 15MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3715.00	-34.42	12.60	12.93	-34.75	-13.00	-21.75	H
5572.57	-35.14	13.10	17.11	-39.15	-13.00	-26.15	H
7430.64	-32.17	11.50	22.20	-42.87	-13.00	-29.87	H
3715.00	-35.61	12.60	12.93	-35.94	-13.00	-22.94	V
5572.57	-34.61	13.10	17.11	-38.62	-13.00	-25.62	V
7430.64	-32.22	11.50	22.20	-42.92	-13.00	-29.92	V
LTE Band 2 / 15MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3759.79	-33.46	12.60	12.93	-33.79	-13.00	-20.79	H
5640.22	-34.20	13.10	17.11	-38.21	-13.00	-25.21	H
7519.86	-32.54	11.50	22.20	-43.24	-13.00	-30.24	H
3759.79	-35.48	12.60	12.93	-35.81	-13.00	-22.81	V
5640.22	-35.03	13.10	17.11	-39.04	-13.00	-26.04	V
7519.86	-32.53	11.50	22.20	-43.23	-13.00	-30.23	V
LTE Band 2 / 15MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3805.10	-34.02	12.60	12.93	-34.35	-13.00	-21.35	H
5707.39	-34.50	13.10	17.11	-38.51	-13.00	-25.51	H
7609.96	-33.52	11.50	22.20	-44.22	-13.00	-31.22	H
3805.10	-34.53	12.60	12.93	-34.86	-13.00	-21.86	V
5707.39	-34.76	13.10	17.11	-38.77	-13.00	-25.77	V
7609.96	-31.77	11.50	22.20	-42.47	-13.00	-29.47	V



LTE Band 2 / 20MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3720.03	-34.51	12.60	12.93	-34.84	-13.00	-21.84	H
5580.54	-35.30	13.10	17.11	-39.31	-13.00	-26.31	H
7439.72	-32.77	11.50	22.20	-43.47	-13.00	-30.47	H
3720.03	-34.64	12.60	12.93	-34.97	-13.00	-21.97	V
5580.54	-33.89	13.10	17.11	-37.90	-13.00	-24.90	V
7439.72	-33.18	11.50	22.20	-43.88	-13.00	-30.88	V
LTE Band 2 / 20MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3759.94	-34.35	12.60	12.93	-34.68	-13.00	-21.68	H
5640.03	-35.00	13.10	17.11	-39.01	-13.00	-26.01	H
7520.04	-32.93	11.50	22.20	-43.63	-13.00	-30.63	H
3759.94	-34.81	12.60	12.93	-35.14	-13.00	-22.14	V
5640.03	-35.09	13.10	17.11	-39.10	-13.00	-26.10	V
7520.04	-32.80	11.50	22.20	-43.50	-13.00	-30.50	V
LTE Band 2 / 20MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3799.76	-34.41	12.60	12.93	-34.74	-13.00	-21.74	H
5700.17	-34.47	13.10	17.11	-38.48	-13.00	-25.48	H
7599.85	-32.38	11.50	22.20	-43.08	-13.00	-30.08	H
3799.76	-34.96	12.60	12.93	-35.29	-13.00	-22.29	V
5700.17	-34.83	13.10	17.11	-38.84	-13.00	-25.84	V
7599.85	-32.65	11.50	22.20	-43.35	-13.00	-30.35	V



LTE Band 4 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3420.90	-33.77	12.90	12.56	-33.43	-13.00	-20.43	H
5131.70	-34.94	13.10	16.32	-38.16	-13.00	-25.16	H
6842.82	-33.15	12.33	21.13	-41.95	-13.00	-28.95	H
3420.90	-34.67	12.90	12.56	-34.33	-13.00	-21.33	V
5131.70	-33.92	13.10	16.32	-37.14	-13.00	-24.14	V
6842.82	-32.50	12.33	21.13	-41.30	-13.00	-28.30	V
LTE Band 4 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3464.98	-34.23	12.90	12.56	-33.89	-13.00	-20.89	H
5196.76	-35.46	13.10	16.32	-38.68	-13.00	-25.68	H
6929.96	-33.40	12.33	21.13	-42.20	-13.00	-29.20	H
3464.98	-35.59	12.90	12.56	-35.25	-13.00	-22.25	V
5196.76	-34.50	13.10	16.32	-37.72	-13.00	-24.72	V
6929.96	-32.48	12.33	21.13	-41.28	-13.00	-28.28	V
LTE Band 4 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3508.26	-33.47	12.90	12.56	-33.13	-13.00	-20.13	H
5262.27	-35.24	13.10	16.32	-38.46	-13.00	-25.46	H
7015.42	-33.49	12.33	21.13	-42.29	-13.00	-29.29	H
3508.26	-35.79	12.90	12.56	-35.45	-13.00	-22.45	V
5262.27	-34.76	13.10	16.32	-37.98	-13.00	-24.98	V
7015.42	-31.72	12.33	21.13	-40.52	-13.00	-27.52	V



LTE Band 4 / 3MHz / 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)	
3423.71	-33.64	12.90	12.56	-33.30	-13.00	-20.30	H
5135.86	-34.89	13.10	16.32	-38.11	-13.00	-25.11	H
6848.52	-33.39	12.33	21.13	-42.19	-13.00	-29.19	H
3423.71	-34.91	12.90	12.56	-34.57	-13.00	-21.57	V
5135.86	-34.40	13.10	16.32	-37.62	-13.00	-24.62	V
6848.52	-32.38	12.33	21.13	-41.18	-13.00	-28.18	V
LTE Band 4 / 3MHz / 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)	
3464.69	-33.94	12.90	12.56	-33.60	-13.00	-20.60	H
5196.58	-34.25	13.10	16.32	-37.47	-13.00	-24.47	H
6929.84	-32.36	12.33	21.13	-41.16	-13.00	-28.16	H
3464.69	-35.18	12.90	12.56	-34.84	-13.00	-21.84	V
5196.58	-33.79	13.10	16.32	-37.01	-13.00	-24.01	V
6929.84	-32.66	12.33	21.13	-41.46	-13.00	-28.46	V
LTE Band 4 / 3MHz / 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)	
3506.34	-33.53	12.90	12.56	-33.19	-13.00	-20.19	H
5261.87	-35.10	13.10	16.32	-38.32	-13.00	-25.32	H
7012.38	-33.15	12.33	21.13	-41.95	-13.00	-28.95	H
3506.34	-34.71	12.90	12.56	-34.37	-13.00	-21.37	V
5261.87	-34.99	13.10	16.32	-38.21	-13.00	-25.21	V
7012.38	-32.10	12.33	21.13	-40.90	-13.00	-27.90	V



LTE Band 4 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3425.01	-34.17	12.90	12.56	-33.83	-13.00	-20.83	H
5136.87	-35.29	13.10	16.32	-38.51	-13.00	-25.51	H
6849.92	-32.54	12.33	21.13	-41.34	-13.00	-28.34	H
3425.01	-35.62	12.90	12.56	-35.28	-13.00	-22.28	V
5136.87	-34.38	13.10	16.32	-37.60	-13.00	-24.60	V
6849.92	-32.43	12.33	21.13	-41.23	-13.00	-28.23	V
LTE Band 4 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3464.44	-34.62	12.90	12.56	-34.28	-13.00	-21.28	H
5196.72	-34.20	13.10	16.32	-37.42	-13.00	-24.42	H
6929.97	-32.28	12.33	21.13	-41.08	-13.00	-28.08	H
3464.44	-35.81	12.90	12.56	-35.47	-13.00	-22.47	V
5196.72	-35.23	13.10	16.32	-38.45	-13.00	-25.45	V
6929.97	-32.43	12.33	21.13	-41.23	-13.00	-28.23	V
LTE Band 4 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3505.35	-34.11	12.90	12.56	-33.77	-13.00	-20.77	H
5256.80	-34.76	13.10	16.32	-37.98	-13.00	-24.98	H
7009.98	-32.83	12.33	21.13	-41.63	-13.00	-28.63	H
3505.35	-35.02	12.90	12.56	-34.68	-13.00	-21.68	V
5256.80	-34.92	13.10	16.32	-38.14	-13.00	-25.14	V
7009.98	-31.73	12.33	21.13	-40.53	-13.00	-27.53	V



LTE Band 4 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3430.12	-34.20	12.90	12.56	-33.86	-13.00	-20.86	H
5145.28	-34.22	13.10	16.32	-37.44	-13.00	-24.44	H
6860.18	-32.26	12.33	21.13	-41.06	-13.00	-28.06	H
3430.12	-34.99	12.90	12.56	-34.65	-13.00	-21.65	V
5145.28	-34.46	13.10	16.32	-37.68	-13.00	-24.68	V
6860.18	-32.63	12.33	21.13	-41.43	-13.00	-28.43	V
LTE Band 4 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3464.59	-34.16	12.90	12.56	-33.82	-13.00	-20.82	H
5196.51	-34.22	13.10	16.32	-37.44	-13.00	-24.44	H
6929.70	-33.49	12.33	21.13	-42.29	-13.00	-29.29	H
3464.59	-35.55	12.90	12.56	-35.21	-13.00	-22.21	V
5196.51	-34.72	13.10	16.32	-37.94	-13.00	-24.94	V
6929.70	-32.33	12.33	21.13	-41.13	-13.00	-28.13	V
LTE Band 4 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3500.39	-33.92	12.90	12.56	-33.58	-13.00	-20.58	H
5250.37	-34.35	13.10	16.32	-37.57	-13.00	-24.57	H
6999.96	-33.62	12.33	21.13	-42.42	-13.00	-29.42	H
3500.39	-35.87	12.90	12.56	-35.53	-13.00	-22.53	V
5250.37	-33.79	13.10	16.32	-37.01	-13.00	-24.01	V
6999.96	-31.94	12.33	21.13	-40.74	-13.00	-27.74	V



LTE Band 4 / 15MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3434.65	-34.83	12.90	12.56	-34.49	-13.00	-21.49	H
5152.27	-34.51	13.10	16.32	-37.73	-13.00	-24.73	H
6870.67	-32.68	12.33	21.13	-41.48	-13.00	-28.48	H
3434.65	-35.52	12.90	12.56	-35.18	-13.00	-22.18	V
5152.27	-34.99	13.10	16.32	-38.21	-13.00	-25.21	V
6870.67	-32.87	12.33	21.13	-41.67	-13.00	-28.67	V
LTE Band 4 / 15MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3464.77	-33.89	12.90	12.56	-33.55	-13.00	-20.55	H
5196.56	-35.16	13.10	16.32	-38.38	-13.00	-25.38	H
6929.87	-33.35	12.33	21.13	-42.15	-13.00	-29.15	H
3464.77	-35.83	12.90	12.56	-35.49	-13.00	-22.49	V
5196.56	-34.89	13.10	16.32	-38.11	-13.00	-25.11	V
6929.87	-31.98	12.33	21.13	-40.78	-13.00	-27.78	V
LTE Band 4 / 15MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3495.47	-34.00	12.90	12.56	-33.66	-13.00	-20.66	H
5242.05	-34.48	13.10	16.32	-37.70	-13.00	-24.70	H
6989.95	-33.61	12.33	21.13	-42.41	-13.00	-29.41	H
3495.47	-35.91	12.90	12.56	-35.57	-13.00	-22.57	V
5242.05	-34.95	13.10	16.32	-38.17	-13.00	-25.17	V
6989.95	-32.85	12.33	21.13	-41.65	-13.00	-28.65	V



LTE Band 4 / 20MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3440.22	-34.62	12.90	12.56	-34.28	-13.00	-21.28	H
5160.14	-34.53	13.10	16.32	-37.75	-13.00	-24.75	H
6880.71	-32.79	12.33	21.13	-41.59	-13.00	-28.59	H
3440.22	-34.63	12.90	12.56	-34.29	-13.00	-21.29	V
5160.14	-34.21	13.10	16.32	-37.43	-13.00	-24.43	V
6880.71	-32.70	12.33	21.13	-41.50	-13.00	-28.50	V
LTE Band 4 / 20MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3464.68	-34.18	12.90	12.56	-33.84	-13.00	-20.84	H
5196.62	-35.33	13.10	16.32	-38.55	-13.00	-25.55	H
6929.51	-32.58	12.33	21.13	-41.38	-13.00	-28.38	H
3464.68	-35.19	12.90	12.56	-34.85	-13.00	-21.85	V
5196.62	-34.29	13.10	16.32	-37.51	-13.00	-24.51	V
6929.51	-33.20	12.33	21.13	-42.00	-13.00	-29.00	V
LTE Band 4 / 20MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3490.24	-34.58	12.90	12.56	-34.24	-13.00	-21.24	H
5235.06	-34.25	13.10	16.32	-37.47	-13.00	-24.47	H
6979.59	-32.19	12.33	21.13	-40.99	-13.00	-27.99	H
3490.24	-34.67	12.90	12.56	-34.33	-13.00	-21.33	V
5235.06	-34.07	13.10	16.32	-37.29	-13.00	-24.29	V
6979.59	-32.98	12.33	21.13	-41.78	-13.00	-28.78	V



LTE Band 5 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1648.67	-34.87	9.56	9.72	-35.03	-13.00	-22.03	H
2473.36	-34.72	10.50	10.86	-35.08	-13.00	-22.08	H
3298.40	-32.46	12.78	11.57	-31.25	-13.00	-18.25	H
1648.67	-34.67	9.56	9.72	-34.83	-13.00	-21.83	V
2473.36	-35.24	10.50	10.86	-35.60	-13.00	-22.60	V
3298.40	-32.36	12.78	11.57	-31.15	-13.00	-18.15	V
LTE Band 5 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1672.56	-33.70	9.56	9.72	-33.86	-13.00	-20.86	H
2509.34	-35.37	10.50	10.86	-35.73	-13.00	-22.73	H
3345.41	-33.04	12.78	11.57	-31.83	-13.00	-18.83	H
1672.56	-35.47	9.56	9.72	-35.63	-13.00	-22.63	V
2509.34	-34.84	10.50	10.86	-35.20	-13.00	-22.20	V
3345.41	-33.12	12.78	11.57	-31.91	-13.00	-18.91	V
LTE Band 5 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1696.18	-34.04	9.56	9.72	-34.20	-13.00	-21.20	H
2544.41	-34.32	10.50	10.86	-34.68	-13.00	-21.68	H
3392.72	-32.92	12.78	11.57	-31.71	-13.00	-18.71	H
1696.18	-35.26	9.56	9.72	-35.42	-13.00	-22.42	V
2544.41	-35.22	10.50	10.86	-35.58	-13.00	-22.58	V
3392.72	-32.02	12.78	11.57	-30.81	-13.00	-17.81	V



LTE Band 5 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1650.09	-33.74	9.56	9.72	-33.90	-13.00	-20.90	H
2475.86	-35.42	10.50	10.86	-35.78	-13.00	-22.78	H
3301.22	-32.66	12.78	11.57	-31.45	-13.00	-18.45	H
1650.09	-35.46	9.56	9.72	-35.62	-13.00	-22.62	V
2475.86	-33.95	10.50	10.86	-34.31	-13.00	-21.31	V
3301.22	-32.64	12.78	11.57	-31.43	-13.00	-18.43	V
LTE Band 5 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1672.17	-34.09	9.56	9.72	-34.25	-13.00	-21.25	H
2508.78	-34.10	10.50	10.86	-34.46	-13.00	-21.46	H
3345.92	-33.44	12.78	11.57	-32.23	-13.00	-19.23	H
1672.17	-35.63	9.56	9.72	-35.79	-13.00	-22.79	V
2508.78	-34.38	10.50	10.86	-34.74	-13.00	-21.74	V
3345.92	-33.09	12.78	11.57	-31.88	-13.00	-18.88	V
LTE Band 5 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1694.49	-34.44	9.56	9.72	-34.60	-13.00	-21.60	H
2541.69	-34.54	10.50	10.86	-34.90	-13.00	-21.90	H
3389.20	-32.47	12.78	11.57	-31.26	-13.00	-18.26	H
1694.49	-34.57	9.56	9.72	-34.73	-13.00	-21.73	V
2541.69	-33.97	10.50	10.86	-34.33	-13.00	-21.33	V
3389.20	-32.05	12.78	11.57	-30.84	-13.00	-17.84	V



LTE Band 5 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1652.25	-34.92	9.56	9.72	-35.08	-13.00	-22.08	H
2478.57	-34.03	10.50	10.86	-34.39	-13.00	-21.39	H
3305.60	-32.75	12.78	11.57	-31.54	-13.00	-18.54	H
1652.25	-35.09	9.56	9.72	-35.25	-13.00	-22.25	V
2478.57	-35.00	10.50	10.86	-35.36	-13.00	-22.36	V
3305.60	-33.14	12.78	11.57	-31.93	-13.00	-18.93	V
LTE Band 5 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1672.30	-34.54	9.56	9.72	-34.70	-13.00	-21.70	H
2509.02	-35.12	10.50	10.86	-35.48	-13.00	-22.48	H
3345.28	-33.22	12.78	11.57	-32.01	-13.00	-19.01	H
1672.30	-35.05	9.56	9.72	-35.21	-13.00	-22.21	V
2509.02	-34.91	10.50	10.86	-35.27	-13.00	-22.27	V
3345.28	-32.08	12.78	11.57	-30.87	-13.00	-17.87	V
LTE Band 5 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1692.54	-34.65	9.56	9.72	-34.81	-13.00	-21.81	H
2538.59	-34.94	10.50	10.86	-35.30	-13.00	-22.30	H
3385.73	-33.62	12.78	11.57	-32.41	-13.00	-19.41	H
1692.54	-34.56	9.56	9.72	-34.72	-13.00	-21.72	V
2538.59	-34.71	10.50	10.86	-35.07	-13.00	-22.07	V
3385.73	-33.03	12.78	11.57	-31.82	-13.00	-18.82	V



LTE Band 5 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1657.68	-34.24	9.56	9.72	-34.40	-13.00	-21.40	H
2486.13	-35.33	10.50	10.86	-35.69	-13.00	-22.69	H
3315.30	-33.24	12.78	11.57	-32.03	-13.00	-19.03	H
1657.68	-34.60	9.56	9.72	-34.76	-13.00	-21.76	V
2486.13	-34.07	10.50	10.86	-34.43	-13.00	-21.43	V
3315.30	-32.24	12.78	11.57	-31.03	-13.00	-18.03	V
LTE Band 5 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1672.15	-33.91	9.56	9.72	-34.07	-13.00	-21.07	H
2508.67	-34.81	10.50	10.86	-35.17	-13.00	-22.17	H
3345.38	-33.64	12.78	11.57	-32.43	-13.00	-19.43	H
1672.15	-35.95	9.56	9.72	-36.11	-13.00	-23.11	V
2508.67	-33.83	10.50	10.86	-34.19	-13.00	-21.19	V
3345.38	-31.91	12.78	11.57	-30.70	-13.00	-17.70	V
LTE Band 5 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1687.26	-33.65	9.56	9.72	-33.81	-13.00	-20.81	H
2531.36	-33.99	10.50	10.86	-34.35	-13.00	-21.35	H
3375.64	-32.39	12.78	11.57	-31.18	-13.00	-18.18	H
1687.26	-34.53	9.56	9.72	-34.69	-13.00	-21.69	V
2531.36	-35.12	10.50	10.86	-35.48	-13.00	-22.48	V
3375.64	-32.77	12.78	11.57	-31.56	-13.00	-18.56	V



LTE Band 7 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
5005.12	-34.67	12.66	15.86	-37.87	-25.00	-12.87	H
7507.72	-35.30	11.46	19.28	-43.12	-25.00	-18.12	H
10010.14	-32.21	12.79	23.19	-42.61	-25.00	-17.61	H
5005.12	-35.66	12.66	15.86	-38.86	-25.00	-13.86	V
7507.72	-34.68	11.46	19.28	-42.50	-25.00	-17.50	V
10010.14	-32.84	12.79	23.19	-43.24	-25.00	-18.24	V
LTE Band 7 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
5070.07	-33.81	12.72	15.86	-36.95	-25.00	-11.95	H
7604.76	-34.74	11.46	19.28	-42.56	-25.00	-17.56	H
10139.57	-32.28	12.09	23.19	-43.38	-25.00	-18.38	H
5070.07	-35.00	12.72	15.86	-38.14	-25.00	-13.14	V
7604.76	-35.04	11.46	19.28	-42.86	-25.00	-17.86	V
10139.57	-32.51	12.09	23.19	-43.61	-25.00	-18.61	V
LTE Band 7 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
5133.96	-34.00	12.76	15.86	-37.10	-25.00	-12.10	H
7701.44	-34.47	11.45	19.28	-42.30	-25.00	-17.30	H
10268.42	-32.16	12.28	23.19	-43.07	-25.00	-18.07	H
5133.96	-35.55	12.76	15.86	-38.65	-25.00	-13.65	V
7701.44	-34.09	11.45	19.28	-41.92	-25.00	-16.92	V
10268.42	-32.02	12.28	23.19	-42.93	-25.00	-17.93	V



LTE Band 7 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
5010.19	-33.80	12.66	15.86	-37.00	-25.00	-12.00	H
7515.55	-34.19	11.46	19.28	-42.01	-25.00	-17.01	H
10020.70	-33.34	12.79	23.19	-43.74	-25.00	-18.74	H
5010.19	-35.67	12.66	15.86	-38.87	-25.00	-13.87	V
7515.55	-35.16	11.46	19.28	-42.98	-25.00	-17.98	V
10020.70	-33.20	12.79	23.19	-43.60	-25.00	-18.60	V
LTE Band 7 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
5069.81	-34.37	12.72	15.86	-37.51	-25.00	-12.51	H
7604.77	-34.74	11.46	19.28	-42.56	-25.00	-17.56	H
10140.05	-33.46	12.09	23.19	-44.56	-25.00	-19.56	H
5069.81	-35.23	12.72	15.86	-38.37	-25.00	-13.37	V
7604.77	-34.96	11.46	19.28	-42.78	-25.00	-17.78	V
10140.05	-32.17	12.09	23.19	-43.27	-25.00	-18.27	V
LTE Band 7 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
5129.24	-33.61	12.76	15.86	-36.71	-25.00	-11.71	H
7693.96	-35.27	11.45	19.28	-43.10	-25.00	-18.10	H
10258.83	-33.42	12.28	23.19	-44.33	-25.00	-19.33	H
5129.24	-34.55	12.76	15.86	-37.65	-25.00	-12.65	V
7693.96	-34.21	11.45	19.28	-42.04	-25.00	-17.04	V
10258.83	-32.39	12.28	23.19	-43.30	-25.00	-18.30	V



LTE Band 7 / 15MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
5015.51	-34.56	12.66	15.86	-37.76	-25.00	-12.76	H
7523.90	-35.14	11.46	19.28	-42.96	-25.00	-17.96	H
10031.93	-33.47	12.79	23.19	-43.87	-25.00	-18.87	H
5015.51	-35.08	12.66	15.86	-38.28	-25.00	-13.28	V
7523.90	-34.07	11.46	19.28	-41.89	-25.00	-16.89	V
10031.93	-32.99	12.79	23.19	-43.39	-25.00	-18.39	V
LTE Band 7 / 15MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
5069.59	-33.55	12.72	15.86	-36.69	-25.00	-11.69	H
7604.93	-34.01	11.46	19.28	-41.83	-25.00	-16.83	H
10139.85	-32.18	12.09	23.19	-43.28	-25.00	-18.28	H
5069.59	-35.73	12.72	15.86	-38.87	-25.00	-13.87	V
7604.93	-34.51	11.46	19.28	-42.33	-25.00	-17.33	V
10139.85	-31.71	12.09	23.19	-42.81	-25.00	-17.81	V
LTE Band 7 / 15MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
5123.50	-34.79	12.76	15.86	-37.89	-25.00	-12.89	H
7523.67	-34.90	11.45	19.28	-42.73	-25.00	-17.73	H
10032.11	-32.22	12.28	23.19	-43.13	-25.00	-18.13	H
5123.50	-35.03	12.76	15.86	-38.13	-25.00	-13.13	V
7523.67	-33.90	11.45	19.28	-41.73	-25.00	-16.73	V
10032.11	-32.06	12.28	23.19	-42.97	-25.00	-17.97	V



LTE Band 7 / 20MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
5020.97	-33.80	12.66	15.86	-37.00	-25.00	-12.00	H
7530.89	-34.29	11.46	19.28	-42.11	-25.00	-17.11	H
10258.88	-32.54	12.79	23.19	-42.94	-25.00	-17.94	H
5020.97	-35.55	12.66	15.86	-38.75	-25.00	-13.75	V
7530.89	-34.50	11.46	19.28	-42.32	-25.00	-17.32	V
10258.88	-31.83	12.79	23.19	-42.23	-25.00	-17.23	V
LTE Band 7 / 20MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
5069.90	-33.99	12.72	15.86	-37.13	-25.00	-12.13	H
7604.67	-34.98	11.46	19.28	-42.80	-25.00	-17.80	H
10139.69	-33.07	12.09	23.19	-44.17	-25.00	-19.17	H
5069.90	-35.52	12.72	15.86	-38.66	-25.00	-13.66	V
7604.67	-33.78	11.46	19.28	-41.60	-25.00	-16.60	V
10139.69	-32.75	12.09	23.19	-43.85	-25.00	-18.85	V
LTE Band 7 / 20MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
5118.96	-34.59	12.76	15.86	-37.69	-25.00	-12.69	H
7678.46	-34.86	11.45	19.28	-42.69	-25.00	-17.69	H
10237.72	-33.59	12.28	23.19	-44.50	-25.00	-19.50	H
5118.96	-35.20	12.76	15.86	-38.30	-25.00	-13.30	V
7678.46	-34.19	11.45	19.28	-42.02	-25.00	-17.02	V
10237.72	-32.81	12.28	23.19	-43.72	-25.00	-18.72	V



LTE Band 12 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1398.92	-34.22	8.17	9.34	-35.39	-13.00	-22.39	H
2098.92	-35.47	9.53	10.42	-36.36	-13.00	-23.36	H
2798.60	-32.49	11.27	11.12	-32.34	-13.00	-19.34	H
1398.92	-34.74	8.17	9.34	-35.91	-13.00	-22.91	V
2098.92	-35.07	9.53	10.42	-35.96	-13.00	-22.96	V
2798.60	-31.96	11.27	11.12	-31.81	-13.00	-18.81	V
LTE Band 12 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1414.55	-34.06	8.17	9.34	-35.23	-13.00	-22.23	H
2122.37	-34.56	9.53	10.42	-35.45	-13.00	-22.45	H
2829.63	-33.08	11.27	11.12	-32.93	-13.00	-19.93	H
1414.55	-35.74	8.17	9.34	-36.91	-13.00	-23.91	V
2122.37	-33.79	9.53	10.42	-34.68	-13.00	-21.68	V
2829.63	-32.06	11.27	11.12	-31.91	-13.00	-18.91	V
LTE Band 12 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1430.27	-34.43	8.17	9.34	-35.60	-13.00	-22.60	H
2145.46	-34.22	9.53	10.42	-35.11	-13.00	-22.11	H
2861.14	-32.87	11.27	11.12	-32.72	-13.00	-19.72	H
1430.27	-35.06	8.17	9.34	-36.23	-13.00	-23.23	V
2145.46	-34.36	9.53	10.42	-35.25	-13.00	-22.25	V
2861.14	-32.62	11.27	11.12	-32.47	-13.00	-19.47	V



LTE Band 12 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1400.79	-33.86	8.17	9.34	-35.03	-13.00	-22.03	H
2101.34	-34.56	9.53	10.42	-35.45	-13.00	-22.45	H
2801.73	-32.46	11.27	11.12	-32.31	-13.00	-19.31	H
1400.79	-34.63	8.17	9.34	-35.80	-13.00	-22.80	V
2101.34	-34.81	9.53	10.42	-35.70	-13.00	-22.70	V
2801.73	-32.85	11.27	11.12	-32.70	-13.00	-19.70	V
LTE Band 12 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1414.71	-33.67	8.17	9.34	-34.84	-13.00	-21.84	H
2122.35	-35.00	9.53	10.42	-35.89	-13.00	-22.89	H
2829.94	-33.00	11.27	11.12	-32.85	-13.00	-19.85	H
1414.71	-35.93	8.17	9.34	-37.10	-13.00	-24.10	V
2122.35	-33.76	9.53	10.42	-34.65	-13.00	-21.65	V
2829.94	-33.14	11.27	11.12	-32.99	-13.00	-19.99	V
LTE Band 12 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1428.76	-34.93	8.17	9.34	-36.10	-13.00	-23.10	H
2143.08	-35.48	9.53	10.42	-36.37	-13.00	-23.37	H
2857.58	-32.83	11.27	11.12	-32.68	-13.00	-19.68	H
1428.76	-35.54	8.17	9.34	-36.71	-13.00	-23.71	V
2143.08	-34.87	9.53	10.42	-35.76	-13.00	-22.76	V
2857.58	-31.76	11.27	11.12	-31.61	-13.00	-18.61	V



LTE Band 12 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1402.65	-33.63	8.17	9.34	-34.80	-13.00	-21.80	H
2104.47	-34.76	9.53	10.42	-35.65	-13.00	-22.65	H
2805.77	-33.47	11.27	11.12	-33.32	-13.00	-20.32	H
1402.65	-35.50	8.17	9.34	-36.67	-13.00	-23.67	V
2104.47	-35.18	9.53	10.42	-36.07	-13.00	-23.07	V
2805.77	-31.77	11.27	11.12	-31.62	-13.00	-18.62	V
LTE Band 12 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1414.75	-34.59	8.17	9.34	-35.76	-13.00	-22.76	H
2122.25	-34.75	9.53	10.42	-35.64	-13.00	-22.64	H
2829.88	-32.61	11.27	11.12	-32.46	-13.00	-19.46	H
1414.75	-35.66	8.17	9.34	-36.83	-13.00	-23.83	V
2122.25	-35.23	9.53	10.42	-36.12	-13.00	-23.12	V
2829.88	-32.02	11.27	11.12	-31.87	-13.00	-18.87	V
LTE Band 12 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1426.58	-34.18	8.17	9.34	-35.35	-13.00	-22.35	H
2140.18	-34.80	9.53	10.42	-35.69	-13.00	-22.69	H
2853.59	-32.93	11.27	11.12	-32.78	-13.00	-19.78	H
1426.58	-35.68	8.17	9.34	-36.85	-13.00	-23.85	V
2140.18	-34.84	9.53	10.42	-35.73	-13.00	-22.73	V
2853.59	-32.55	11.27	11.12	-32.40	-13.00	-19.40	V



LTE Band 12 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1407.57	-33.53	8.17	9.34	-34.70	-13.00	-21.70	H
2111.70	-34.29	9.53	10.42	-35.18	-13.00	-22.18	H
2815.57	-33.23	11.27	11.12	-33.08	-13.00	-20.08	H
1407.57	-34.72	8.17	9.34	-35.89	-13.00	-22.89	V
2111.70	-34.70	9.53	10.42	-35.59	-13.00	-22.59	V
2815.57	-32.07	11.27	11.12	-31.92	-13.00	-18.92	V
LTE Band 12 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1414.73	-34.20	8.17	9.34	-35.37	-13.00	-22.37	H
2122.42	-34.23	9.53	10.42	-35.12	-13.00	-22.12	H
2829.95	-32.61	11.27	11.12	-32.46	-13.00	-19.46	H
1414.73	-35.73	8.17	9.34	-36.90	-13.00	-23.90	V
2122.42	-34.49	9.53	10.42	-35.38	-13.00	-22.38	V
2829.95	-32.17	11.27	11.12	-32.02	-13.00	-19.02	V
LTE Band 12 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1421.54	-34.88	8.17	9.34	-36.05	-13.00	-23.05	H
2132.87	-35.19	9.53	10.42	-36.08	-13.00	-23.08	H
2843.61	-32.29	11.27	11.12	-32.14	-13.00	-19.14	H
1421.54	-34.58	8.17	9.34	-35.75	-13.00	-22.75	V
2132.87	-33.82	9.53	10.42	-34.71	-13.00	-21.71	V
2843.61	-32.26	11.27	11.12	-32.11	-13.00	-19.11	V



LTE Band 17 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1413.17	-33.75	8.17	9.34	-34.92	-13.00	-21.92	H
2120.63	-35.30	9.53	10.42	-36.19	-13.00	-23.19	H
2826.68	-33.12	11.27	11.12	-32.97	-13.00	-19.97	H
1413.17	-35.20	8.17	9.34	-36.37	-13.00	-23.37	V
2120.63	-33.76	9.53	10.42	-34.65	-13.00	-21.65	V
2826.68	-32.73	11.27	11.12	-32.58	-13.00	-19.58	V
LTE Band 17 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1419.82	-33.96	8.17	9.34	-35.13	-13.00	-22.13	H
2129.86	-34.75	9.53	10.42	-35.64	-13.00	-22.64	H
2839.90	-32.89	11.27	11.12	-32.74	-13.00	-19.74	H
1419.82	-35.52	8.17	9.34	-36.69	-13.00	-23.69	V
2129.86	-34.16	9.53	10.42	-35.05	-13.00	-22.05	V
2839.90	-33.08	11.27	11.12	-32.93	-13.00	-19.93	V
LTE Band 17 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1425.94	-34.75	8.17	9.34	-35.92	-13.00	-22.92	H
2139.57	-34.06	9.53	10.42	-34.95	-13.00	-21.95	H
2852.79	-32.79	11.27	11.12	-32.64	-13.00	-19.64	H
1425.94	-35.45	8.17	9.34	-36.62	-13.00	-23.62	V
2139.57	-34.75	9.53	10.42	-35.64	-13.00	-22.64	V
2852.79	-33.15	11.27	11.12	-33.00	-13.00	-20.00	V



LTE Band 17 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1418.12	-34.80	8.17	9.34	-35.97	-13.00	-22.97	H
2127.33	-35.09	9.53	10.42	-35.98	-13.00	-22.98	H
2836.63	-32.24	11.27	11.12	-32.09	-13.00	-19.09	H
1418.12	-35.38	8.17	9.34	-36.55	-13.00	-23.55	V
2127.33	-34.08	9.53	10.42	-34.97	-13.00	-21.97	V
2836.63	-31.74	11.27	11.12	-31.59	-13.00	-18.59	V
LTE Band 17 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1419.78	-34.35	8.17	9.34	-35.52	-13.00	-22.52	H
2129.91	-35.36	9.53	10.42	-36.25	-13.00	-23.25	H
2839.85	-32.77	11.27	11.12	-32.62	-13.00	-19.62	H
1419.78	-35.48	8.17	9.34	-36.65	-13.00	-23.65	V
2129.91	-35.19	9.53	10.42	-36.08	-13.00	-23.08	V
2839.85	-32.36	11.27	11.12	-32.21	-13.00	-19.21	V
LTE Band 17 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1421.02	-34.59	8.17	9.34	-35.76	-13.00	-22.76	H
2131.83	-34.46	9.53	10.42	-35.35	-13.00	-22.35	H
2842.60	-33.28	11.27	11.12	-33.13	-13.00	-20.13	H
1421.02	-35.63	8.17	9.34	-36.80	-13.00	-23.80	V
2131.83	-35.06	9.53	10.42	-35.95	-13.00	-22.95	V
2842.60	-32.11	11.27	11.12	-31.96	-13.00	-18.96	V



LTE Band 66 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3421.08	-34.43	12.90	12.56	-34.09	-13.00	-21.09	H
5131.85	-34.82	13.10	16.32	-38.04	-13.00	-25.04	H
6842.86	-33.50	12.33	21.13	-42.30	-13.00	-29.30	H
3421.08	-35.57	12.90	12.56	-35.23	-13.00	-22.23	V
5131.85	-34.08	13.10	16.32	-37.30	-13.00	-24.30	V
6842.86	-32.32	12.33	21.13	-41.12	-13.00	-28.12	V
LTE Band 66 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3490.11	-34.59	12.90	12.56	-34.25	-13.00	-21.25	H
5234.83	-35.11	13.10	16.32	-38.33	-13.00	-25.33	H
6979.87	-32.39	12.33	21.13	-41.19	-13.00	-28.19	H
3490.11	-35.41	12.90	12.56	-35.07	-13.00	-22.07	V
5234.83	-34.33	13.10	16.32	-37.55	-13.00	-24.55	V
6979.87	-32.67	12.33	21.13	-41.47	-13.00	-28.47	V
LTE Band 66 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3558.20	-34.24	12.90	12.56	-33.90	-13.00	-20.90	H
5336.89	-35.12	13.10	16.32	-38.34	-13.00	-25.34	H
7117.15	-32.67	12.33	21.13	-41.47	-13.00	-28.47	H
3558.20	-35.07	12.90	12.56	-34.73	-13.00	-21.73	V
5336.89	-34.75	13.10	16.32	-37.97	-13.00	-24.97	V
7117.15	-32.65	12.33	21.13	-41.45	-13.00	-28.45	V



LTE Band 66 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3423.10	-33.83	12.90	12.56	-33.49	-13.00	-20.49	H
5134.33	-34.44	13.10	16.32	-37.66	-13.00	-24.66	H
6845.84	-33.34	12.33	21.13	-42.14	-13.00	-29.14	H
3423.10	-35.73	12.90	12.56	-35.39	-13.00	-22.39	V
5134.33	-35.22	13.10	16.32	-38.44	-13.00	-25.44	V
6845.84	-32.52	12.33	21.13	-41.32	-13.00	-28.32	V
LTE Band 66 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3490.03	-33.48	12.90	12.56	-33.14	-13.00	-20.14	H
5234.83	-34.24	13.10	16.32	-37.46	-13.00	-24.46	H
6980.13	-32.31	12.33	21.13	-41.11	-13.00	-28.11	H
3490.03	-34.96	12.90	12.56	-34.62	-13.00	-21.62	V
5234.83	-35.03	13.10	16.32	-38.25	-13.00	-25.25	V
6980.13	-31.79	12.33	21.13	-40.59	-13.00	-27.59	V
LTE Band 66 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3556.73	-34.74	12.90	12.56	-34.40	-13.00	-21.40	H
5262.11	-34.82	13.10	16.32	-38.04	-13.00	-25.04	H
7114.12	-33.10	12.33	21.13	-41.90	-13.00	-28.90	H
3556.73	-35.63	12.90	12.56	-35.29	-13.00	-22.29	V
5262.11	-34.97	13.10	16.32	-38.19	-13.00	-25.19	V
7114.12	-31.83	12.33	21.13	-40.63	-13.00	-27.63	V



LTE Band 66 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3425.00	-33.70	12.90	12.56	-33.36	-13.00	-20.36	H
5137.10	-34.64	13.10	16.32	-37.86	-13.00	-24.86	H
6850.42	-33.08	12.33	21.13	-41.88	-13.00	-28.88	H
3425.00	-35.48	12.90	12.56	-35.14	-13.00	-22.14	V
5137.10	-34.58	13.10	16.32	-37.80	-13.00	-24.80	V
6850.42	-33.13	12.33	21.13	-41.93	-13.00	-28.93	V
LTE Band 66 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3489.84	-34.93	12.90	12.56	-34.59	-13.00	-21.59	H
5234.84	-35.03	13.10	16.32	-38.25	-13.00	-25.25	H
6980.03	-32.59	12.33	21.13	-41.39	-13.00	-28.39	H
3489.84	-35.02	12.90	12.56	-34.68	-13.00	-21.68	V
5234.84	-34.32	13.10	16.32	-37.54	-13.00	-24.54	V
6980.03	-32.24	12.33	21.13	-41.04	-13.00	-28.04	V
LTE Band 66 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3558.14	-33.96	12.90	12.56	-33.62	-13.00	-20.62	H
52354.04	-34.33	13.10	16.32	-37.55	-13.00	-24.55	H
7110.07	-33.13	12.33	21.13	-41.93	-13.00	-28.93	H
3558.14	-35.87	12.90	12.56	-35.53	-13.00	-22.53	V
52354.04	-34.74	13.10	16.32	-37.96	-13.00	-24.96	V
7110.07	-33.05	12.33	21.13	-41.85	-13.00	-28.85	V



LTE Band 66 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3430.02	-34.16	12.90	12.56	-33.82	-13.00	-20.82	H
5145.02	-34.01	13.10	16.32	-37.23	-13.00	-24.23	H
6880.19	-32.77	12.33	21.13	-41.57	-13.00	-28.57	H
3430.02	-35.36	12.90	12.56	-35.02	-13.00	-22.02	V
5145.02	-34.25	13.10	16.32	-37.47	-13.00	-24.47	V
6880.19	-32.23	12.33	21.13	-41.03	-13.00	-28.03	V
LTE Band 66 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3490.14	-34.23	12.90	12.56	-33.89	-13.00	-20.89	H
5235.11	-34.06	13.10	16.32	-37.28	-13.00	-24.28	H
6979.99	-32.77	12.33	21.13	-41.57	-13.00	-28.57	H
3490.14	-35.61	12.90	12.56	-35.27	-13.00	-22.27	V
5235.11	-34.86	13.10	16.32	-38.08	-13.00	-25.08	V
6979.99	-32.69	12.33	21.13	-41.49	-13.00	-28.49	V
LTE Band 66 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3550.75	-34.15	12.90	12.56	-33.81	-13.00	-20.81	H
5235.17	-35.16	13.10	16.32	-38.38	-13.00	-25.38	H
7100.25	-32.15	12.33	21.13	-40.95	-13.00	-27.95	H
3550.75	-34.99	12.90	12.56	-34.65	-13.00	-21.65	V
5235.17	-34.40	13.10	16.32	-37.62	-13.00	-24.62	V
7100.25	-32.07	12.33	21.13	-40.87	-13.00	-27.87	V



LTE Band 66 / 15MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3435.14	-33.66	12.90	12.56	-33.32	-13.00	-20.32	H
5152.52	-34.26	13.10	16.32	-37.48	-13.00	-24.48	H
6870.07	-32.40	12.33	21.13	-41.20	-13.00	-28.20	H
3435.14	-35.09	12.90	12.56	-34.75	-13.00	-21.75	V
5152.52	-34.14	13.10	16.32	-37.36	-13.00	-24.36	V
6870.07	-33.02	12.33	21.13	-41.82	-13.00	-28.82	V
LTE Band 66 / 15MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3489.80	-34.38	12.90	12.56	-34.04	-13.00	-21.04	H
5235.06	-34.63	13.10	16.32	-37.85	-13.00	-24.85	H
6980.30	-32.72	12.33	21.13	-41.52	-13.00	-28.52	H
3489.80	-34.87	12.90	12.56	-34.53	-13.00	-21.53	V
5235.06	-35.16	13.10	16.32	-38.38	-13.00	-25.38	V
6980.30	-32.44	12.33	21.13	-41.24	-13.00	-28.24	V
LTE Band 66 / 15MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3545.10	-34.05	12.90	12.56	-33.71	-13.00	-20.71	H
5332.39	-34.65	13.10	16.32	-37.87	-13.00	-24.87	H
7089.74	-33.02	12.33	21.13	-41.82	-13.00	-28.82	H
3545.10	-34.95	12.90	12.56	-34.61	-13.00	-21.61	V
5332.39	-34.69	13.10	16.32	-37.91	-13.00	-24.91	V
7089.74	-32.36	12.33	21.13	-41.16	-13.00	-28.16	V



LTE Band 66 / 20MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3440.24	-33.76	12.90	12.56	-33.42	-13.00	-20.42	H
5160.16	-34.72	13.10	16.32	-37.94	-13.00	-24.94	H
6879.95	-32.95	12.33	21.13	-41.75	-13.00	-28.75	H
3440.24	-34.59	12.90	12.56	-34.25	-13.00	-21.25	V
5160.16	-34.40	13.10	16.32	-37.62	-13.00	-24.62	V
6879.95	-33.13	12.33	21.13	-41.93	-13.00	-28.93	V
LTE Band 66 / 20MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3489.79	-34.13	12.90	12.56	-33.79	-13.00	-20.79	H
5235.03	-35.20	13.10	16.32	-38.42	-13.00	-25.42	H
6980.17	-32.48	12.33	21.13	-41.28	-13.00	-28.28	H
3489.79	-35.87	12.90	12.56	-35.53	-13.00	-22.53	V
5235.03	-34.73	13.10	16.32	-37.95	-13.00	-24.95	V
6980.17	-31.75	12.33	21.13	-40.55	-13.00	-27.55	V
LTE Band 66 / 20MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3540.19	-34.51	12.90	12.56	-34.17	-13.00	-21.17	H
5310.05	-34.70	13.10	16.32	-37.92	-13.00	-24.92	H
7080.73	-32.57	12.33	21.13	-41.37	-13.00	-28.37	H
3540.19	-34.83	12.90	12.56	-34.49	-13.00	-21.49	V
5310.05	-33.91	13.10	16.32	-37.13	-13.00	-24.13	V
7080.73	-32.93	12.33	21.13	-41.73	-13.00	-28.73	V

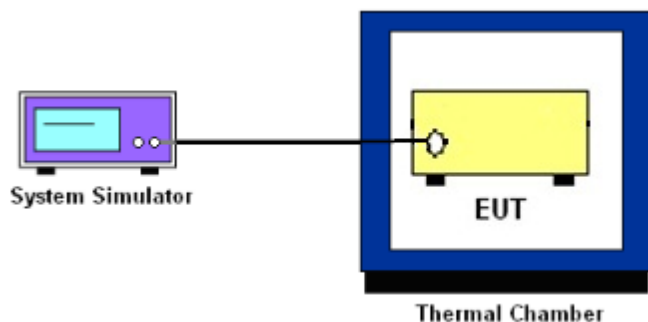
9. FREQUENCY STABILITY

9.1 DESCRIPTION OF FREQUENCY STABILITY MEASUREMENT

10.1.1 MEASUREMENT METHOD

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within $\pm 0.00025\%$ ($\pm 2.5\text{ppm}$) of the center frequency.

9.1.2 TEST SETUP



9.1.3 TEST PROCEDURES FOR TEMPERATURE VARIATION

1. The EUT was set up in the thermal chamber and connected with the system simulator.
2. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
3. With power OFF, the temperature was raised in 10°C step up to 50°C . The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

9.1.4 TEST PROCEDURES FOR VOLTAGE VARIATION

1. The testing follows FCC KDB 971168 D01v01r03 Section 9.
2. The EUT was placed in a temperature chamber at $25 \pm 5^{\circ}\text{C}$ and connected with the system simulator.
3. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.
4. The variation in frequency was measured for the worst case.



9.1.5 TEST RESULTS

LTE Band 2 (QPSK) / 1880MHz / BW10M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	34.55	0.018	2.5ppm	PASS
40		34.89	0.019		
30		20.18	0.011		
20		12.16	0.006		
10		16.50	0.009		
0		20.86	0.011		
-10		13.54	0.007		
-20		27.16	0.014		
-30		30.19	0.016		
20	Maximum Voltage	12.02	0.006		
20	BEP	20.97	0.011		

LTE Band 2 (QPSK) / 1880MHz / BW20M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	22.62	0.012	2.5ppm	PASS
40		21.87	0.012		
30		23.20	0.012		
20		35.29	0.019		
10		21.02	0.011		
0		24.32	0.013		
-10		30.30	0.016		
-20		32.48	0.017		
-30		35.35	0.019		
20	Maximum Voltage	13.88	0.007		
20	BEP	14.19	0.008		



LTE Band 4 (QPSK) / 1733MHz / BW10M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	23.26	0.013	2.5ppm	PASS
40		34.94	0.020		
30		26.03	0.015		
20		29.27	0.017		
10		24.25	0.014		
0		34.03	0.020		
-10		18.27	0.011		
-20		14.38	0.008		
-30		34.46	0.020		
20	Maximum Voltage	21.59	0.012		
20	BEP	15.21	0.009		

LTE Band 4 (QPSK) / 1733MHz / BW20M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	19.91	0.011	2.5ppm	PASS
40		16.12	0.009		
30		17.16	0.010		
20		19.80	0.011		
10		35.55	0.021		
0		32.06	0.018		
-10		17.35	0.010		
-20		29.60	0.017		
-30		15.08	0.009		
20	Maximum Voltage	24.50	0.014		
20	BEP	16.12	0.009		



LTE Band 5 (QPSK) / 836.5MHz / BW5M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	33.19	0.047	2.5ppm	PASS
40		26.14	0.037		
30		28.03	0.039		
20		28.89	0.041		
10		26.55	0.037		
0		22.54	0.032		
-10		34.17	0.005		
-20		20.02	0.028		
-30		27.57	0.039		
20	Maximum Voltage	26.11	0.037		
20	BEP	16.74	0.024		

LTE Band 5 (QPSK) / 836.5MHz / BW10M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	11.89	0.017	2.5ppm	PASS
40		22.38	0.032		
30		28.00	0.039		
20		29.67	0.042		
10		28.45	0.040		
0		15.04	0.021		
-10		35.52	0.005		
-20		19.77	0.028		
-30		21.52	0.030		
20	Maximum Voltage	12.32	0.017		
20	BEP	24.07	0.034		



LTE Band 7 (QPSK) / 2535MHz / BW10M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	20.77	0.008	2.5ppm	PASS
40		17.68	0.007		
30		28.03	0.011		
20		20.68	0.008		
10		21.47	0.008		
0		25.26	0.010		
-10		24.65	0.010		
-20		27.11	0.011		
-30		28.61	0.011		
20	Maximum Voltage	13.15	0.005		
20	BEP	28.64	0.011		

LTE Band 7 (QPSK) / 2535MHz / BW20M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	33.50	0.013	2.5ppm	PASS
40		25.81	0.010		
30		33.20	0.013		
20		25.99	0.010		
10		24.66	0.010		
0		32.93	0.013		
-10		26.75	0.011		
-20		17.16	0.007		
-30		20.42	0.008		
20	Maximum Voltage	19.58	0.008		
20	BEP	15.00	0.006		



LTE Band 12 (QPSK) / 707.5MHz / BW5M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	17.89	0.025	2.5ppm	PASS
40		13.27	0.019		
30		19.65	0.028		
20		27.38	0.039		
10		36.26	0.051		
0		34.34	0.048		
-10		12.54	0.002		
-20		16.40	0.023		
-30		32.85	0.046		
20	Maximum Voltage	36.29	0.051		
20	BEP	35.21	0.050		

LTE Band 12 (QPSK) / 707.5MHz / BW10M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	29.13	0.041	2.5ppm	PASS
40		11.85	0.017		
30		32.76	0.046		
20		21.32	0.030		
10		15.06	0.021		
0		28.69	0.040		
-10		23.45	0.003		
-20		30.70	0.043		
-30		17.70	0.025		
20	Maximum Voltage	20.87	0.029		
20	BEP	35.65	0.050		



LTE Band 17 (QPSK) / 710MHz / BW5M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	29.37	0.041	2.5ppm	PASS
40		22.35	0.031		
30		28.05	0.040		
20		11.82	0.017		
10		27.33	0.038		
0		33.61	0.047		
-10		28.24	0.004		
-20		36.40	0.051		
-30		14.43	0.020		
20	Maximum Voltage	33.80	0.048		
20	BEP	33.85	0.048		

LTE Band 17 (QPSK) / 710MHz / BW10M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	19.77	0.028	2.5ppm	PASS
40		33.08	0.047		
30		36.44	0.051		
20		21.65	0.030		
10		28.68	0.040		
0		29.08	0.041		
-10		24.84	0.003		
-20		26.40	0.037		
-30		18.86	0.027		
20	Maximum Voltage	30.73	0.043		
20	BEP	28.36	0.040		



LTE Band 66 (QPSK) / 1745MHz / BW10M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	30.59	0.018	2.5ppm	PASS
40		31.71	0.018		
30		18.38	0.011		
20		25.33	0.015		
10		28.09	0.016		
0		12.65	0.007		
-10		27.32	0.016		
-20		12.32	0.007		
-30		17.28	0.010		
20	Maximum Voltage	32.98	0.019		
20	BEP	30.72	0.018		

LTE Band 66 (QPSK) / 1745MHz / BW20M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	26.80	0.015	2.5ppm	PASS
40		32.51	0.019		
30		20.67	0.012		
20		21.17	0.012		
10		34.90	0.020		
0		23.66	0.014		
-10		19.24	0.011		
-20		24.91	0.014		
-30		16.49	0.010		
20	Maximum Voltage	29.74	0.017		
20	BEP	29.87	0.017		



APPENDIX-PHOTOS OF TEST SETUP

Note: See test photos in setup photo document for the actual connections between Product and support equipment.

*****END OF THE REPORT*****

