



LTE Band 17 (QPSK) / 710MHz / BW5M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	11.95	0.017	2.5ppm	PASS
40		30.09	0.042		
30		32.62	0.046		
20		18.90	0.027		
10		12.85	0.018		
0		26.14	0.037		
-10		25.87	0.004		
-20		14.46	0.020		
-30		18.22	0.026		
20	Maximum Voltage	16.91	0.024		
20	BEP	15.42	0.022		

LTE Band 17 (QPSK) / 710MHz / BW10M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	12.18	0.017	2.5ppm	PASS
40		14.12	0.020		
30		23.31	0.033		
20		21.54	0.030		
10		19.08	0.027		
0		16.74	0.024		
-10		24.42	0.003		
-20		24.13	0.034		
-30		13.61	0.019		
20	Maximum Voltage	20.83	0.029		
20	BEP	24.69	0.035		



LTE Band 25 (QPSK) / 1882.5MHz / BW10M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	12.59	0.007	2.5ppm	PASS
40		34.14	0.018		
30		29.69	0.016		
20		35.22	0.019		
10		20.44	0.011		
0		31.93	0.017		
-10		16.24	0.009		
-20		29.93	0.016		
-30		24.48	0.013		
20	Maximum Voltage	31.79	0.017		
20	BEP	34.60	0.018		

LTE Band 25 (QPSK) / 1882.5MHz / BW20M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	32.59	0.017	2.5ppm	PASS
40		22.65	0.012		
30		21.66	0.012		
20		11.92	0.006		
10		13.20	0.007		
0		18.31	0.010		
-10		36.20	0.019		
-20		15.23	0.008		
-30		21.43	0.011		
20	Maximum Voltage	14.74	0.008		
20	BEP	19.56	0.010		



LTE Band 26-Part 90 (QPSK) / 819MHz / BW5M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	21.95	0.013	2.5ppm	PASS
40		20.39	0.012		
30		22.49	0.013		
20		29.33	0.017		
10		24.39	0.014		
0		17.07	0.010		
-10		36.02	0.021		
-20		32.05	0.018		
-30		15.25	0.009		
20	Maximum Voltage	27.88	0.016		
20	BEP	36.41	0.021		

LTE Band 26-Part 90 (QPSK) / 819MHz / BW10M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	22.58	0.013	2.5ppm	PASS
40		36.28	0.021		
30		15.14	0.009		
20		22.50	0.013		
10		15.78	0.009		
0		16.23	0.009		
-10		14.62	0.008		
-20		22.25	0.013		
-30		16.82	0.010		
20	Maximum Voltage	15.96	0.009		
20	BEP	28.54	0.016		



LTE Band 26-Part 22 (QPSK) / 836.5MHz / BW10M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	19.78	0.011	2.5ppm	PASS
40		28.44	0.016		
30		20.56	0.012		
20		25.75	0.015		
10		29.87	0.017		
0		15.88	0.009		
-10		26.65	0.015		
-20		15.66	0.009		
-30		32.50	0.019		
20	Maximum Voltage	33.15	0.019		
20	BEP	29.83	0.017		

LTE Band 26-Part 22 (QPSK) / 836.5MHz / BW20M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	15.30	0.009	2.5ppm	PASS
40		18.49	0.011		
30		13.56	0.008		
20		21.96	0.013		
10		24.58	0.014		
0		33.57	0.019		
-10		16.13	0.009		
-20		34.98	0.020		
-30		24.03	0.014		
20	Maximum Voltage	12.65	0.007		
20	BEP	16.06	0.009		

5.5 SPURIOUS EMISSIONS AT ANTENNA TERMINALS

TEST OVERVIEW

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:

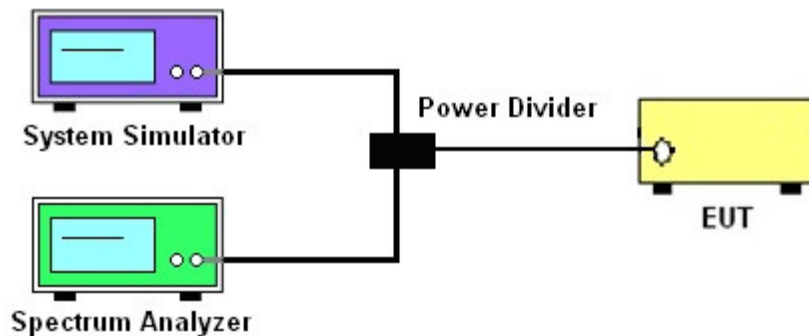
The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $55 + 10 \log (P)$ dB.

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

TEST PROCEDURE

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 the spectrum analyzer and system simulator via a power divider.
3. The RF output of EUT was connected to the spectrum analyzer by an RF cable and attenuator. The path loss was compensated to the results for each measurement.
4. The middle channel for the highest RF power within the transmitting frequency was measured.
5. The conducted spurious emission for the whole frequency range was taken.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
7. 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)
 $= -13\text{dBm}$.

TEST SETUP



TEST RESULT

Note: The test data please reference to attachment “STS2502323W07_Appendix LTE”.



5.6 BAND EDGE

TEST OVERVIEW

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 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 $P(\text{Watts})$ 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.

TEST PROCEDURE

1. The testing FCC KDB 971168 D01 v03r01 Section 6.0 and ANSI C63.26-2015-Section 5.7
 2. Start and stop frequency were set such that the band edge would be placed in the center of the Plot.
 3. The EUT was connected to the spectrum analyzer and system simulator via a power divider.
 4. The RF output of EUT was connected to the spectrum analyzer by an RF cable and attenuator.
- The path loss was compensated to the results for each measurement.
5. The band edges of low and high channels for the highest RF powers were measured.
 6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

7. The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)

$$= P(W) - [43 + 10\log(P)] \text{ (dB)}$$

$$= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$$

$$= -13\text{dBm}.$$

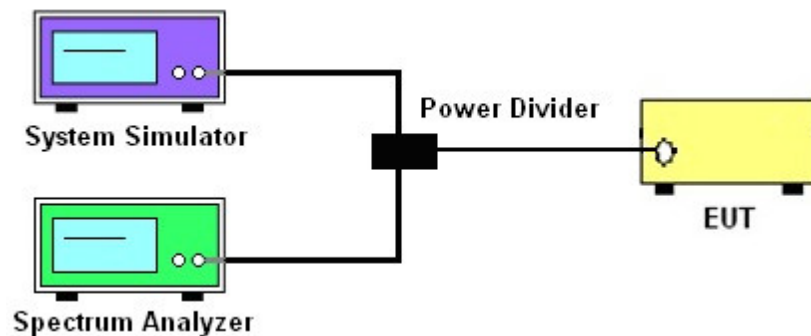
Band 7:

$$= P(W) - [55 + 10\log(P)] \text{ (dB)}$$

$$= [30 + 10\log(P)] \text{ (dBm)} - [55 + 10\log(P)] \text{ (dB)}$$

$$= -25\text{dBm}.$$

TEST SETUP



TEST RESULT

Note: The test data please reference to attachment "STS2502323W07_Appendix LTE".



5.7 FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT

TEST OVERVIEW

Radiated spurious emissions measurements are performed using the substitution method described in ANSI C63.26-2015 with the EUT transmitting into an integral antenna. Measurements on signals operating below 1GHz are performed using horizontally and vertically polarized tuned dipole antennas. Measurements on signals operating above 1GHz are performed using vertically and horizontally polarized horn antennas. All measurements are performed as peak measurements while the EUT is operating at maximum power and at the appropriate frequencies.

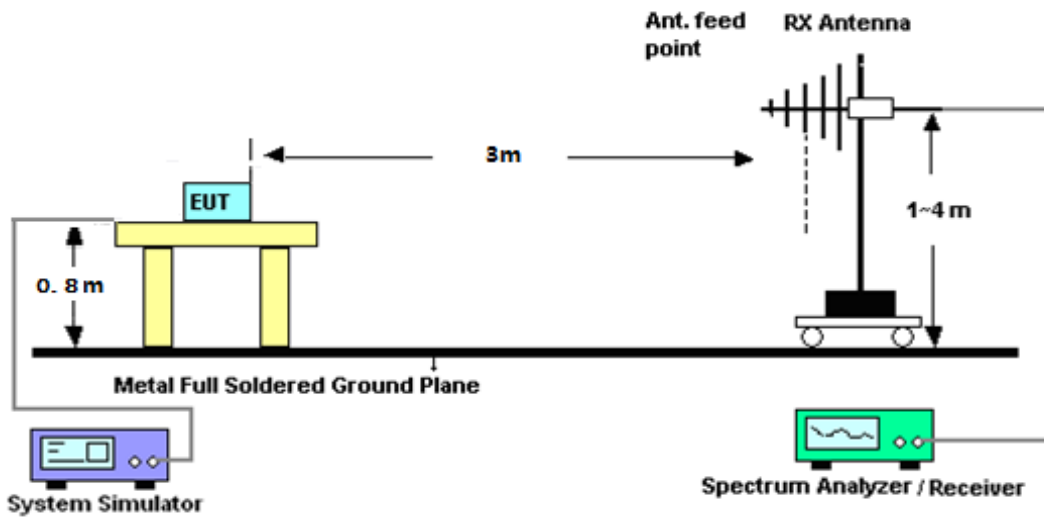
It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

TEST PROCEDURE

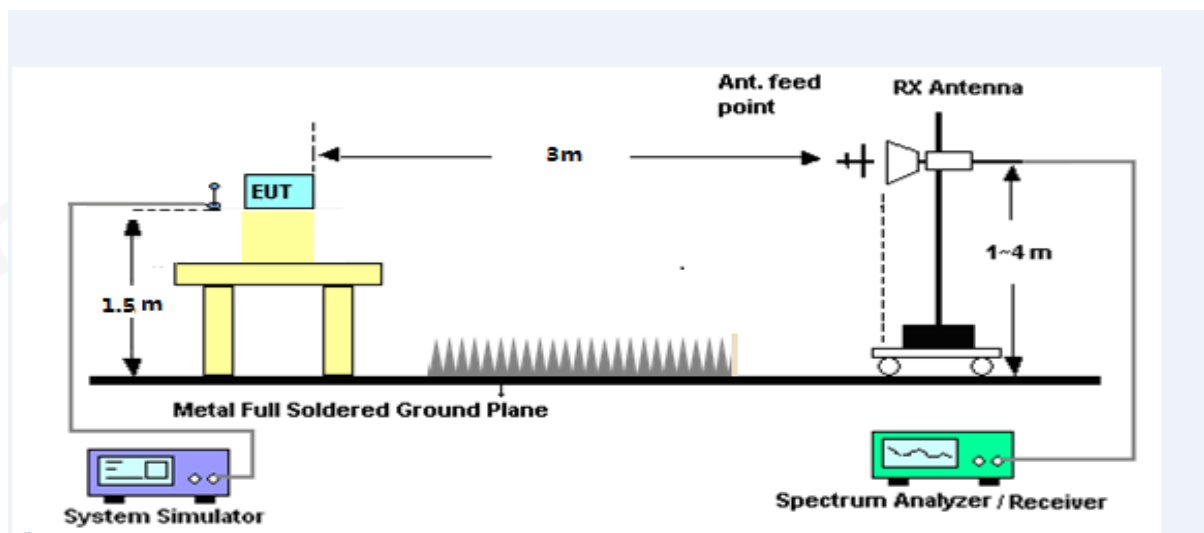
1. The testing FCC KDB 971168 D01 Section 5.8 and ANSI C63.26-2015-Section 5.5.
2. RBW = 100kHz for emissions below 1GHz and 1MHz for emissions above 1GHz
3. VBW $\geq 3 \times$ RBW
4. Span = 1.5 times the OBW
5. No. of sweep points $> 2 \times$ span/RBW
6. Detector = Peak
7. Trace mode = max hold
8. The trace was allowed to stabilize
9. Effective Isotropic Spurious Radiation was measured by substitution method according to TIA/EIA-603-D. The EUT was replaced by the substitution antenna at same location, and then a known power from S.G. was applied into the dipole antenna through a Tx cable, and then recorded the maximum Analyzer reading through raised and lowered the test antenna.
 $P_{Mea} = S.G \text{ Level} + \text{Ant-Cable loss}$; $\text{Margin} = P_{Mea} - \text{Limit}$.

TEST SETUP

For radiated test from 30MHz to 1GHz



For radiated test from above 1GHz



**TEST RESULT**

- Note:** (1) Spurious emissions which are attenuated by more than 20dB below the permissible value for frequency below 1000MHz.
- (2) Above 3.5GHz amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value
- (3) Test is divided into three directions, X/Y/Z. X pattern for the worst.

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
3701.31	-34.85	12.60	12.93	-35.18	-13.00	-22.18	H
5552.08	-35.45	13.10	17.11	-39.46	-13.00	-26.46	H
7402.73	-33.39	11.50	22.20	-44.09	-13.00	-31.09	H
3701.31	-35.85	12.60	12.93	-36.18	-13.00	-23.18	V
5552.08	-33.81	13.10	17.11	-37.82	-13.00	-24.82	V
7402.73	-32.82	11.50	22.20	-43.52	-13.00	-30.52	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
3759.86	-34.08	12.60	12.93	-34.41	-13.00	-21.41	H
5640.17	-34.69	13.10	17.11	-38.70	-13.00	-25.70	H
7520.11	-32.31	11.50	22.20	-43.01	-13.00	-30.01	H
3759.86	-35.59	12.60	12.93	-35.92	-13.00	-22.92	V
5640.17	-34.95	13.10	17.11	-38.96	-13.00	-25.96	V
7520.11	-32.44	11.50	22.20	-43.14	-13.00	-30.14	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
3818.44	-33.62	12.60	12.93	-33.95	-13.00	-20.95	H
5727.73	-34.98	13.10	17.11	-38.99	-13.00	-25.99	H
7637.13	-33.31	11.50	22.20	-44.01	-13.00	-31.01	H
3818.44	-35.41	12.60	12.93	-35.74	-13.00	-22.74	V
5727.73	-34.47	13.10	17.11	-38.48	-13.00	-25.48	V
7637.13	-32.67	11.50	22.20	-43.37	-13.00	-30.37	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 (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3703.29	-34.82	12.60	12.93	-35.15	-13.00	-22.15	H
5554.42	-34.43	13.10	17.11	-38.44	-13.00	-25.44	H
7405.70	-32.15	11.50	22.20	-42.85	-13.00	-29.85	H
3703.29	-35.05	12.60	12.93	-35.38	-13.00	-22.38	V
5554.42	-34.98	13.10	17.11	-38.99	-13.00	-25.99	V
7405.70	-32.64	11.50	22.20	-43.34	-13.00	-30.34	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 (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3760.05	-34.42	12.60	12.93	-34.75	-13.00	-21.75	H
5640.13	-35.24	13.10	17.11	-39.25	-13.00	-26.25	H
7520.17	-33.63	11.50	22.20	-44.33	-13.00	-31.33	H
3760.05	-35.37	12.60	12.93	-35.70	-13.00	-22.70	V
5640.13	-35.00	13.10	17.11	-39.01	-13.00	-26.01	V
7520.17	-32.40	11.50	22.20	-43.10	-13.00	-30.10	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 (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3817.02	-33.83	12.60	12.93	-34.16	-13.00	-21.16	H
5725.51	-34.11	13.10	17.11	-38.12	-13.00	-25.12	H
7634.02	-33.36	11.50	22.20	-44.06	-13.00	-31.06	H
3817.02	-35.62	12.60	12.93	-35.95	-13.00	-22.95	V
5725.51	-34.94	13.10	17.11	-38.95	-13.00	-25.95	V
7634.02	-32.57	11.50	22.20	-43.27	-13.00	-30.27	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 (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3705.18	-33.74	12.60	12.93	-34.07	-13.00	-21.07	H
5557.56	-34.70	13.10	17.11	-38.71	-13.00	-25.71	H
7409.96	-32.23	11.50	22.20	-42.93	-13.00	-29.93	H
3705.18	-34.78	12.60	12.93	-35.11	-13.00	-22.11	V
5557.56	-35.05	13.10	17.11	-39.06	-13.00	-26.06	V
7409.96	-32.67	11.50	22.20	-43.37	-13.00	-30.37	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 (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3760.04	-33.77	12.60	12.93	-34.10	-13.00	-21.10	H
5639.84	-35.23	13.10	17.11	-39.24	-13.00	-26.24	H
7520.21	-32.90	11.50	22.20	-43.60	-13.00	-30.60	H
3760.04	-35.81	12.60	12.93	-36.14	-13.00	-23.14	V
5639.84	-34.84	13.10	17.11	-38.85	-13.00	-25.85	V
7520.21	-32.96	11.50	22.20	-43.66	-13.00	-30.66	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 (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3815.14	-33.85	12.60	12.93	-34.18	-13.00	-21.18	H
5722.37	-35.43	13.10	17.11	-39.44	-13.00	-26.44	H
7630.17	-32.42	11.50	22.20	-43.12	-13.00	-30.12	H
3815.14	-35.85	12.60	12.93	-36.18	-13.00	-23.18	V
5722.37	-35.15	13.10	17.11	-39.16	-13.00	-26.16	V
7630.17	-33.00	11.50	22.20	-43.70	-13.00	-30.70	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
3710.46	-33.96	12.60	12.93	-34.29	-13.00	-21.29	H
5565.40	-34.98	13.10	17.11	-38.99	-13.00	-25.99	H
7419.96	-32.61	11.50	22.20	-43.31	-13.00	-30.31	H
3710.46	-34.69	12.60	12.93	-35.02	-13.00	-22.02	V
5565.40	-35.08	13.10	17.11	-39.09	-13.00	-26.09	V
7419.96	-33.04	11.50	22.20	-43.74	-13.00	-30.74	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
3760.26	-34.00	12.60	12.93	-34.33	-13.00	-21.33	H
5640.15	-34.17	13.10	17.11	-38.18	-13.00	-25.18	H
7520.05	-32.45	11.50	22.20	-43.15	-13.00	-30.15	H
3760.26	-34.71	12.60	12.93	-35.04	-13.00	-22.04	V
5640.15	-34.12	13.10	17.11	-38.13	-13.00	-25.13	V
7520.05	-32.07	11.50	22.20	-42.77	-13.00	-29.77	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
3810.35	-34.22	12.60	12.93	-34.55	-13.00	-21.55	H
5714.81	-34.99	13.10	17.11	-39.00	-13.00	-26.00	H
7620.01	-32.72	11.50	22.20	-43.42	-13.00	-30.42	H
3810.35	-35.35	12.60	12.93	-35.68	-13.00	-22.68	V
5714.81	-34.42	13.10	17.11	-38.43	-13.00	-25.43	V
7620.01	-32.93	11.50	22.20	-43.63	-13.00	-30.63	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
3715.15	-33.71	12.60	12.93	-34.04	-13.00	-21.04	H
5572.40	-34.27	13.10	17.11	-38.28	-13.00	-25.28	H
7430.84	-33.35	11.50	22.20	-44.05	-13.00	-31.05	H
3715.15	-35.04	12.60	12.93	-35.37	-13.00	-22.37	V
5572.40	-34.27	13.10	17.11	-38.28	-13.00	-25.28	V
7430.84	-32.91	11.50	22.20	-43.61	-13.00	-30.61	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
3759.80	-34.05	12.60	12.93	-34.38	-13.00	-21.38	H
5640.00	-34.70	13.10	17.11	-38.71	-13.00	-25.71	H
7520.10	-33.18	11.50	22.20	-43.88	-13.00	-30.88	H
3759.80	-34.90	12.60	12.93	-35.23	-13.00	-22.23	V
5640.00	-34.46	13.10	17.11	-38.47	-13.00	-25.47	V
7520.10	-32.67	11.50	22.20	-43.37	-13.00	-30.37	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
3804.92	-33.97	12.60	12.93	-34.30	-13.00	-21.30	H
5707.38	-34.96	13.10	17.11	-38.97	-13.00	-25.97	H
7609.95	-32.83	11.50	22.20	-43.53	-13.00	-30.53	H
3804.92	-35.87	12.60	12.93	-36.20	-13.00	-23.20	V
5707.38	-33.81	13.10	17.11	-37.82	-13.00	-24.82	V
7609.95	-32.35	11.50	22.20	-43.05	-13.00	-30.05	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
3720.18	-34.66	12.60	12.93	-34.99	-13.00	-21.99	H
5580.42	-34.50	13.10	17.11	-38.51	-13.00	-25.51	H
7440.05	-32.98	11.50	22.20	-43.68	-13.00	-30.68	H
3720.18	-34.98	12.60	12.93	-35.31	-13.00	-22.31	V
5580.42	-34.25	13.10	17.11	-38.26	-13.00	-25.26	V
7440.05	-33.11	11.50	22.20	-43.81	-13.00	-30.81	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
3760.09	-34.58	12.60	12.93	-34.91	-13.00	-21.91	H
5639.85	-35.33	13.10	17.11	-39.34	-13.00	-26.34	H
7519.87	-33.39	11.50	22.20	-44.09	-13.00	-31.09	H
3760.09	-34.87	12.60	12.93	-35.20	-13.00	-22.20	V
5639.85	-34.88	13.10	17.11	-38.89	-13.00	-25.89	V
7519.87	-33.17	11.50	22.20	-43.87	-13.00	-30.87	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
3799.95	-34.22	12.60	12.93	-34.55	-13.00	-21.55	H
5699.99	-34.58	13.10	17.11	-38.59	-13.00	-25.59	H
7600.17	-33.05	11.50	22.20	-43.75	-13.00	-30.75	H
3799.95	-35.43	12.60	12.93	-35.76	-13.00	-22.76	V
5699.99	-35.14	13.10	17.11	-39.15	-13.00	-26.15	V
7600.17	-32.95	11.50	22.20	-43.65	-13.00	-30.65	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
3421.05	-34.28	12.90	12.56	-33.94	-13.00	-20.94	H
5131.92	-34.02	13.10	16.32	-37.24	-13.00	-24.24	H
6842.56	-33.12	12.33	21.13	-41.92	-13.00	-28.92	H
3421.05	-34.94	12.90	12.56	-34.60	-13.00	-21.60	V
5131.92	-35.10	13.10	16.32	-38.32	-13.00	-25.32	V
6842.56	-33.14	12.33	21.13	-41.94	-13.00	-28.94	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
3464.87	-34.89	12.90	12.56	-34.55	-13.00	-21.55	H
5196.80	-34.51	13.10	16.32	-37.73	-13.00	-24.73	H
6930.01	-32.90	12.33	21.13	-41.70	-13.00	-28.70	H
3464.87	-35.56	12.90	12.56	-35.22	-13.00	-22.22	V
5196.80	-34.94	13.10	16.32	-38.16	-13.00	-25.16	V
6930.01	-32.10	12.33	21.13	-40.90	-13.00	-27.90	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
3508.13	-34.80	12.90	12.56	-34.46	-13.00	-21.46	H
5262.32	-34.61	13.10	16.32	-37.83	-13.00	-24.83	H
7015.30	-32.41	12.33	21.13	-41.21	-13.00	-28.21	H
3508.13	-35.25	12.90	12.56	-34.91	-13.00	-21.91	V
5262.32	-34.19	13.10	16.32	-37.41	-13.00	-24.41	V
7015.30	-32.34	12.33	21.13	-41.14	-13.00	-28.14	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 (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3424.05	-34.45	12.90	12.56	-34.11	-13.00	-21.11	H
5135.83	-34.87	13.10	16.32	-38.09	-13.00	-25.09	H
6848.47	-33.54	12.33	21.13	-42.34	-13.00	-29.34	H
3424.05	-35.22	12.90	12.56	-34.88	-13.00	-21.88	V
5135.83	-35.20	13.10	16.32	-38.42	-13.00	-25.42	V
6848.47	-33.10	12.33	21.13	-41.90	-13.00	-28.90	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 (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3464.95	-33.46	12.90	12.56	-33.12	-13.00	-20.12	H
5196.72	-34.95	13.10	16.32	-38.17	-13.00	-25.17	H
6930.14	-32.23	12.33	21.13	-41.03	-13.00	-28.03	H
3464.95	-35.86	12.90	12.56	-35.52	-13.00	-22.52	V
5196.72	-34.77	13.10	16.32	-37.99	-13.00	-24.99	V
6930.14	-33.02	12.33	21.13	-41.82	-13.00	-28.82	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 (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3506.03	-34.27	12.90	12.56	-33.93	-13.00	-20.93	H
5261.70	-34.68	13.10	16.32	-37.90	-13.00	-24.90	H
7012.35	-32.74	12.33	21.13	-41.54	-13.00	-28.54	H
3506.03	-35.36	12.90	12.56	-35.02	-13.00	-22.02	V
5261.70	-35.00	13.10	16.32	-38.22	-13.00	-25.22	V
7012.35	-32.25	12.33	21.13	-41.05	-13.00	-28.05	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	-34.06	12.90	12.56	-33.72	-13.00	-20.72	H
5137.09	-34.83	13.10	16.32	-38.05	-13.00	-25.05	H
6849.68	-32.26	12.33	21.13	-41.06	-13.00	-28.06	H
3425.01	-35.01	12.90	12.56	-34.67	-13.00	-21.67	V
5137.09	-34.30	13.10	16.32	-37.52	-13.00	-24.52	V
6849.68	-32.77	12.33	21.13	-41.57	-13.00	-28.57	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
3464.52	-34.13	12.90	12.56	-33.79	-13.00	-20.79	H
5196.78	-34.37	13.10	16.32	-37.59	-13.00	-24.59	H
6930.02	-32.41	12.33	21.13	-41.21	-13.00	-28.21	H
3464.52	-35.09	12.90	12.56	-34.75	-13.00	-21.75	V
5196.78	-35.18	13.10	16.32	-38.40	-13.00	-25.40	V
6930.02	-32.21	12.33	21.13	-41.01	-13.00	-28.01	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
3505.22	-34.64	12.90	12.56	-34.30	-13.00	-21.30	H
5257.08	-34.22	13.10	16.32	-37.44	-13.00	-24.44	H
7010.04	-32.54	12.33	21.13	-41.34	-13.00	-28.34	H
3505.22	-35.43	12.90	12.56	-35.09	-13.00	-22.09	V
5257.08	-35.10	13.10	16.32	-38.32	-13.00	-25.32	V
7010.04	-32.34	12.33	21.13	-41.14	-13.00	-28.14	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
3429.96	-34.04	12.90	12.56	-33.70	-13.00	-20.70	H
5145.05	-34.89	13.10	16.32	-38.11	-13.00	-25.11	H
6860.30	-33.09	12.33	21.13	-41.89	-13.00	-28.89	H
3429.96	-35.42	12.90	12.56	-35.08	-13.00	-22.08	V
5145.05	-34.53	13.10	16.32	-37.75	-13.00	-24.75	V
6860.30	-32.11	12.33	21.13	-40.91	-13.00	-27.91	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
3464.44	-34.41	12.90	12.56	-34.07	-13.00	-21.07	H
5196.85	-34.74	13.10	16.32	-37.96	-13.00	-24.96	H
6929.47	-32.30	12.33	21.13	-41.10	-13.00	-28.10	H
3464.44	-35.90	12.90	12.56	-35.56	-13.00	-22.56	V
5196.85	-34.06	13.10	16.32	-37.28	-13.00	-24.28	V
6929.47	-33.07	12.33	21.13	-41.87	-13.00	-28.87	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
3500.22	-34.91	12.90	12.56	-34.57	-13.00	-21.57	H
5250.44	-35.04	13.10	16.32	-38.26	-13.00	-25.26	H
7000.13	-33.55	12.33	21.13	-42.35	-13.00	-29.35	H
3500.22	-35.82	12.90	12.56	-35.48	-13.00	-22.48	V
5250.44	-35.14	13.10	16.32	-38.36	-13.00	-25.36	V
7000.13	-32.46	12.33	21.13	-41.26	-13.00	-28.26	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
3434.94	-34.02	12.90	12.56	-33.68	-13.00	-20.68	H
5152.44	-34.25	13.10	16.32	-37.47	-13.00	-24.47	H
6870.49	-33.33	12.33	21.13	-42.13	-13.00	-29.13	H
3434.94	-35.10	12.90	12.56	-34.76	-13.00	-21.76	V
5152.44	-34.98	13.10	16.32	-38.20	-13.00	-25.20	V
6870.49	-32.66	12.33	21.13	-41.46	-13.00	-28.46	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
3464.96	-34.71	12.90	12.56	-34.37	-13.00	-21.37	H
5196.35	-34.91	13.10	16.32	-38.13	-13.00	-25.13	H
6929.84	-32.88	12.33	21.13	-41.68	-13.00	-28.68	H
3464.96	-34.61	12.90	12.56	-34.27	-13.00	-21.27	V
5196.35	-35.13	13.10	16.32	-38.35	-13.00	-25.35	V
6929.84	-32.07	12.33	21.13	-40.87	-13.00	-27.87	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
3495.28	-34.70	12.90	12.56	-34.36	-13.00	-21.36	H
5242.00	-35.31	13.10	16.32	-38.53	-13.00	-25.53	H
6990.13	-32.88	12.33	21.13	-41.68	-13.00	-28.68	H
3495.28	-35.22	12.90	12.56	-34.88	-13.00	-21.88	V
5242.00	-34.40	13.10	16.32	-37.62	-13.00	-24.62	V
6990.13	-32.12	12.33	21.13	-40.92	-13.00	-27.92	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
3440.07	-33.62	12.90	12.56	-33.28	-13.00	-20.28	H
5160.07	-35.30	13.10	16.32	-38.52	-13.00	-25.52	H
6880.81	-33.38	12.33	21.13	-42.18	-13.00	-29.18	H
3440.07	-34.97	12.90	12.56	-34.63	-13.00	-21.63	V
5160.07	-35.09	13.10	16.32	-38.31	-13.00	-25.31	V
6880.81	-31.84	12.33	21.13	-40.64	-13.00	-27.64	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
3464.66	-33.98	12.90	12.56	-33.64	-13.00	-20.64	H
5196.40	-35.09	13.10	16.32	-38.31	-13.00	-25.31	H
6929.58	-33.64	12.33	21.13	-42.44	-13.00	-29.44	H
3464.66	-34.84	12.90	12.56	-34.50	-13.00	-21.50	V
5196.40	-34.03	13.10	16.32	-37.25	-13.00	-24.25	V
6929.58	-32.65	12.33	21.13	-41.45	-13.00	-28.45	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
3490.35	-34.37	12.90	12.56	-34.03	-13.00	-21.03	H
5235.07	-34.52	13.10	16.32	-37.74	-13.00	-24.74	H
6979.69	-32.48	12.33	21.13	-41.28	-13.00	-28.28	H
3490.35	-35.97	12.90	12.56	-35.63	-13.00	-22.63	V
5235.07	-34.68	13.10	16.32	-37.90	-13.00	-24.90	V
6979.69	-32.06	12.33	21.13	-40.86	-13.00	-27.86	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
1648.76	-34.38	9.56	9.72	-34.54	-13.00	-21.54	H
2473.77	-34.01	10.50	10.86	-34.37	-13.00	-21.37	H
3298.59	-33.14	12.78	11.57	-31.93	-13.00	-18.93	H
1648.76	-34.55	9.56	9.72	-34.71	-13.00	-21.71	V
2473.77	-34.07	10.50	10.86	-34.43	-13.00	-21.43	V
3298.59	-32.83	12.78	11.57	-31.62	-13.00	-18.62	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
1672.65	-34.75	9.56	9.72	-34.91	-13.00	-21.91	H
2509.36	-34.87	10.50	10.86	-35.23	-13.00	-22.23	H
3345.59	-32.92	12.78	11.57	-31.71	-13.00	-18.71	H
1672.65	-35.25	9.56	9.72	-35.41	-13.00	-22.41	V
2509.36	-34.37	10.50	10.86	-34.73	-13.00	-21.73	V
3345.59	-31.84	12.78	11.57	-30.63	-13.00	-17.63	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
1696.33	-34.84	9.56	9.72	-35.00	-13.00	-22.00	H
2544.50	-34.15	10.50	10.86	-34.51	-13.00	-21.51	H
3393.02	-32.59	12.78	11.57	-31.38	-13.00	-18.38	H
1696.33	-35.24	9.56	9.72	-35.40	-13.00	-22.40	V
2544.50	-35.13	10.50	10.86	-35.49	-13.00	-22.49	V
3393.02	-32.21	12.78	11.57	-31.00	-13.00	-18.00	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
1650.28	-34.51	9.56	9.72	-34.67	-13.00	-21.67	H
2476.18	-35.22	10.50	10.86	-35.58	-13.00	-22.58	H
3301.23	-33.41	12.78	11.57	-32.20	-13.00	-19.20	H
1650.28	-35.13	9.56	9.72	-35.29	-13.00	-22.29	V
2476.18	-34.63	10.50	10.86	-34.99	-13.00	-21.99	V
3301.23	-31.80	12.78	11.57	-30.59	-13.00	-17.59	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
1672.51	-34.18	9.56	9.72	-34.34	-13.00	-21.34	H
2508.99	-34.44	10.50	10.86	-34.80	-13.00	-21.80	H
3345.96	-33.30	12.78	11.57	-32.09	-13.00	-19.09	H
1672.51	-35.42	9.56	9.72	-35.58	-13.00	-22.58	V
2508.99	-34.88	10.50	10.86	-35.24	-13.00	-22.24	V
3345.96	-32.84	12.78	11.57	-31.63	-13.00	-18.63	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
1694.42	-34.71	9.56	9.72	-34.87	-13.00	-21.87	H
2541.82	-34.23	10.50	10.86	-34.59	-13.00	-21.59	H
3389.51	-32.40	12.78	11.57	-31.19	-13.00	-18.19	H
1694.42	-35.09	9.56	9.72	-35.25	-13.00	-22.25	V
2541.82	-34.94	10.50	10.86	-35.30	-13.00	-22.30	V
3389.51	-32.32	12.78	11.57	-31.11	-13.00	-18.11	V