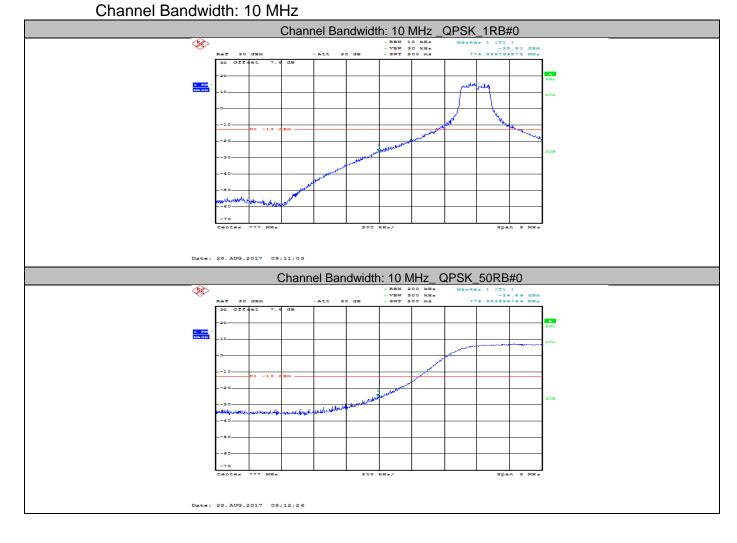
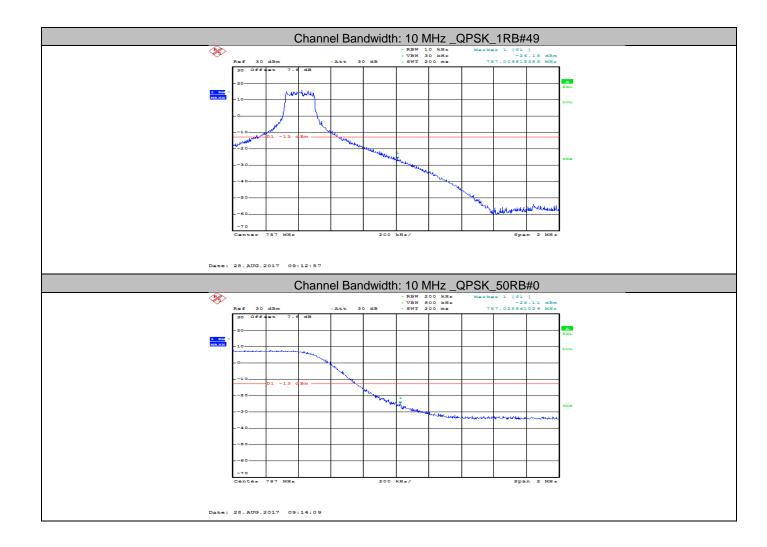
Band edge measurement LTE Band 13 Test Mode = QPSK /TM4



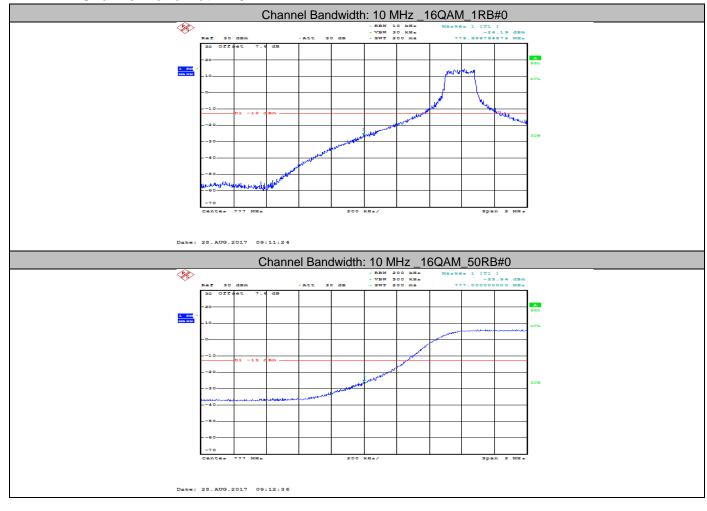
Report No.: WT178004541 Page 521 of 674



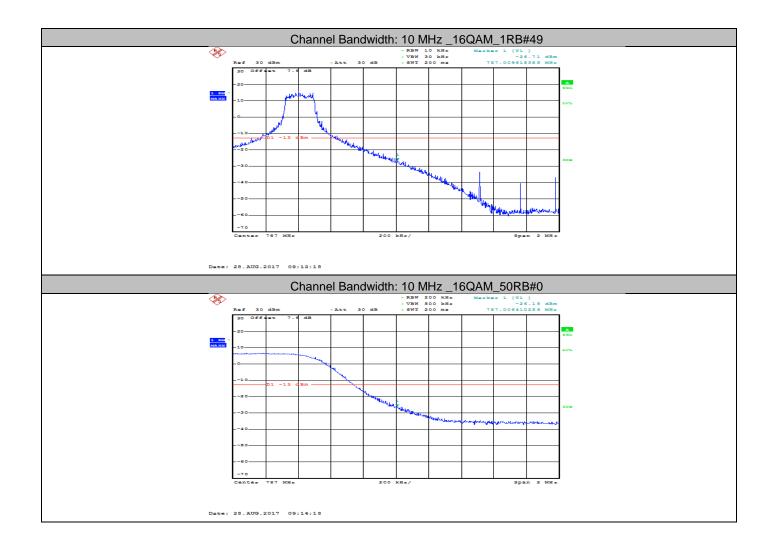
Report No.: WT178004541 Page 522 of 674

Band edge measurement LTE Band 13

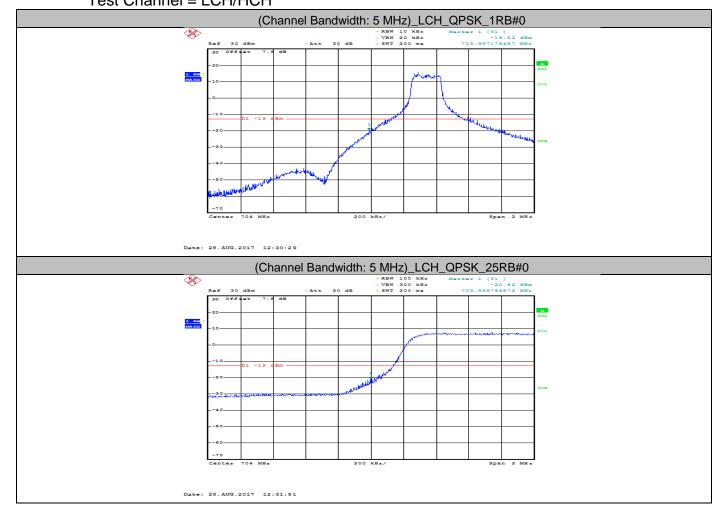
Test Mode = 16QAM /TM5 Channel Bandwidth: 10 MHz



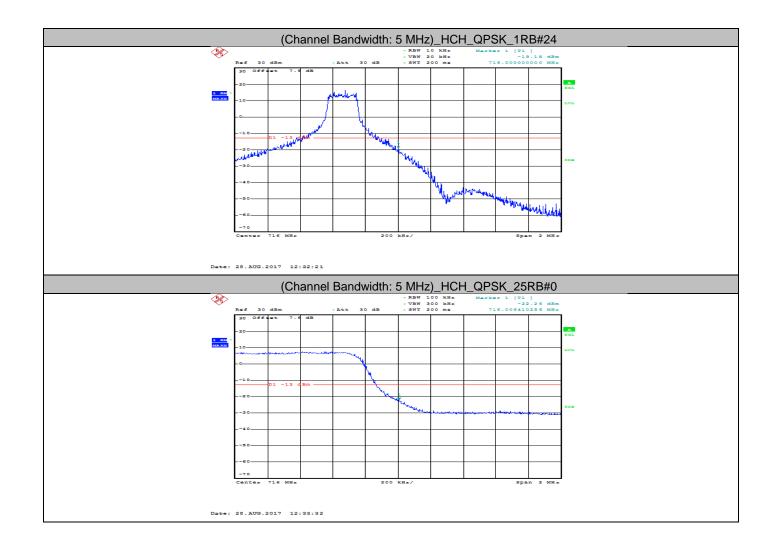
Report No.: WT178004541 Page 523 of 674



Band edge measurement LTE Band 17 Test Mode = QPSK /TM4 Channel Bandwidth: 5 MHz Test Channel = LCH/HCH

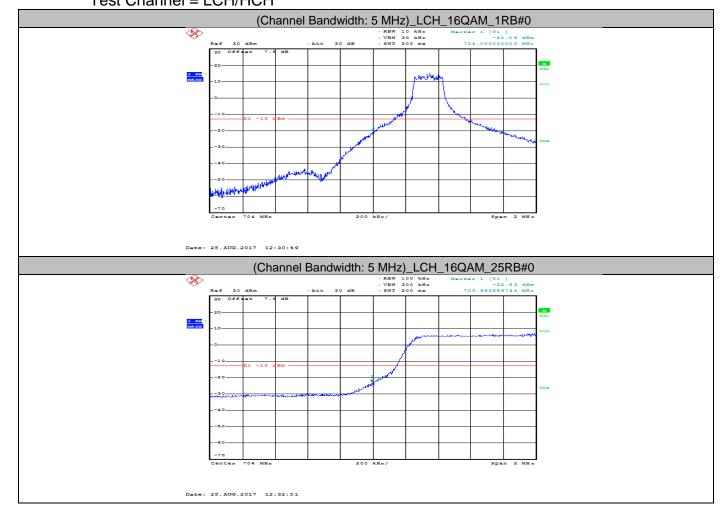


Report No.: WT178004541 Page 525 of 674

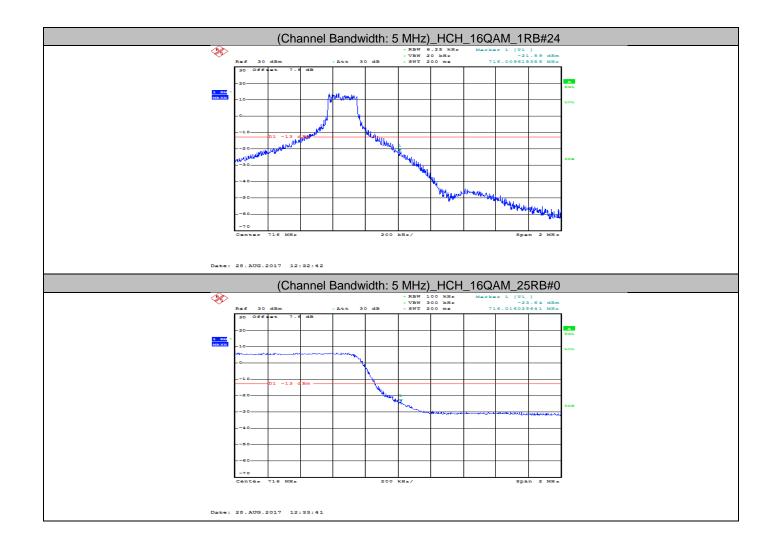


Report No.: WT178004541 Page 526 of 674

Band edge measurement LTE Band 17 Test Mode = 16QAM /TM5 Channel Bandwidth: 5 MHz Test Channel = LCH/HCH

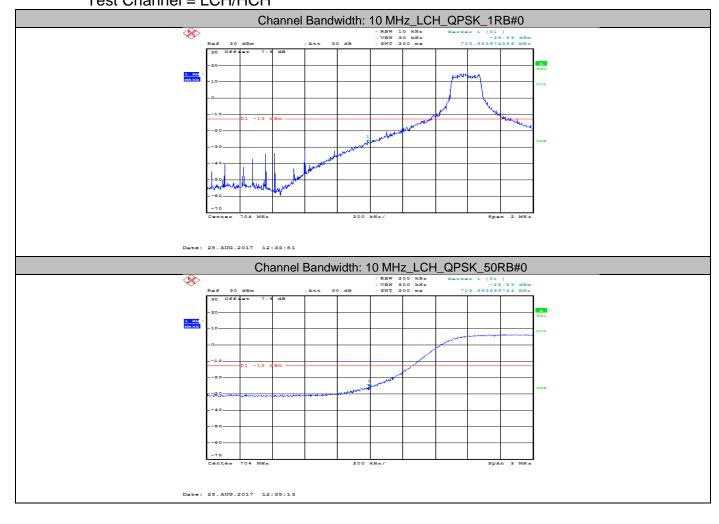


Report No.: WT178004541 Page 527 of 674

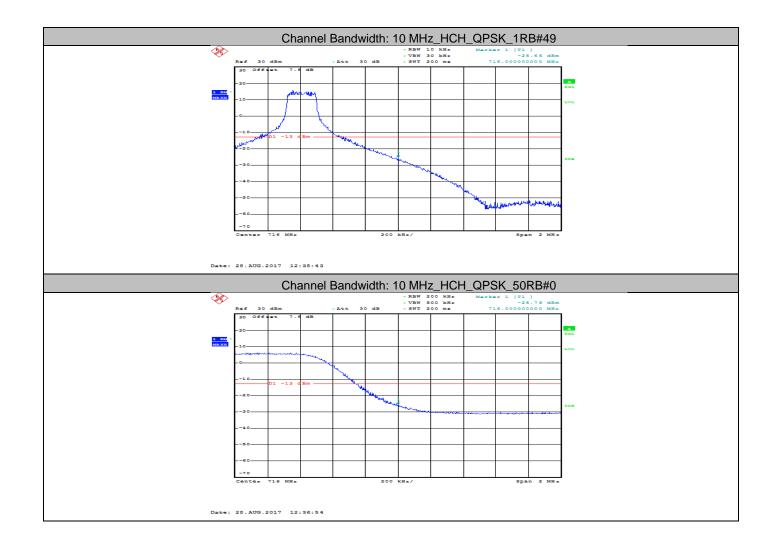


Report No.: WT178004541 Page 528 of 674

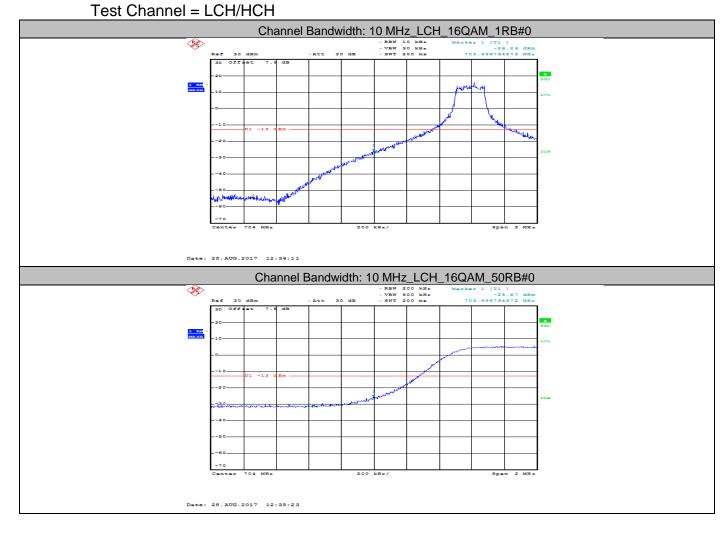
Band edge measurement LTE Band 17 Test Mode = QPSK /TM4 Channel Bandwidth: 10 MHz Test Channel = LCH/HCH



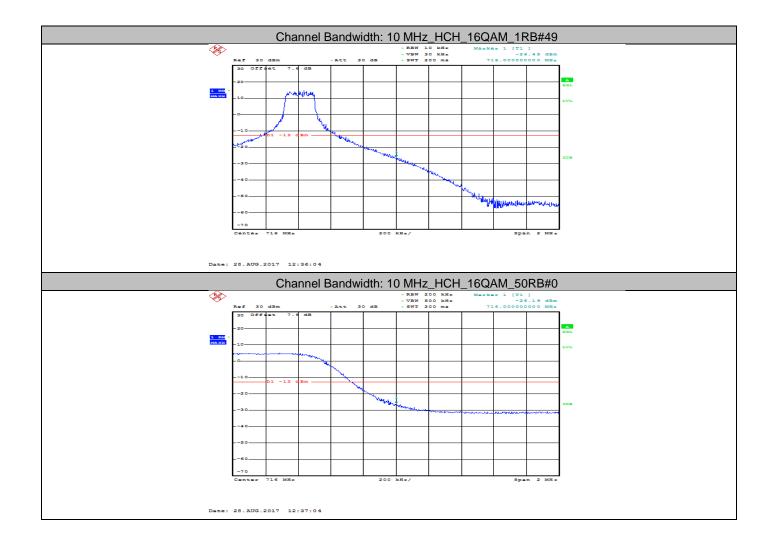
Report No.: WT178004541 Page 529 of 674



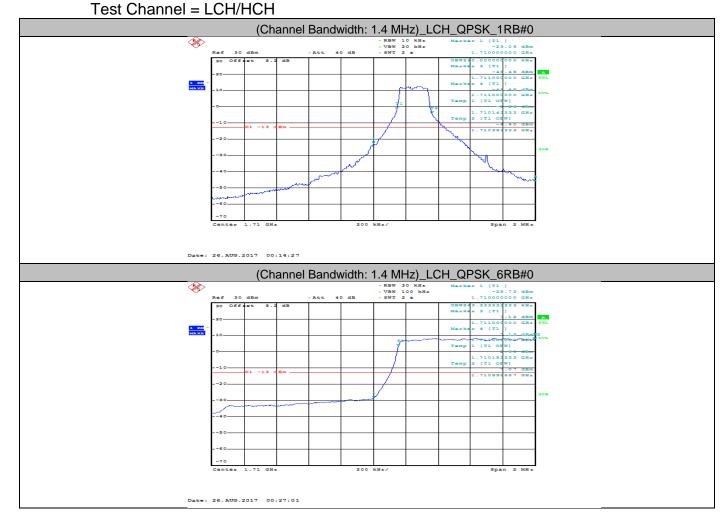
Band edge measurement LTE Band 17 Test Mode = 16QAM /TM5 Channel Bandwidth: 10 MHz



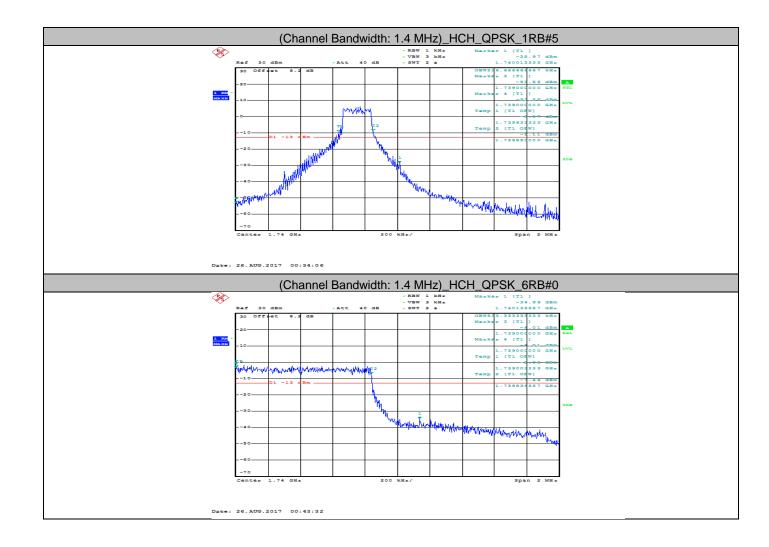
Report No.: WT178004541 Page 531 of 674



Band edge measurement LTE Band 66 Test Mode = QPSK /TM4 Channel Bandwidth: 1.4 MHz

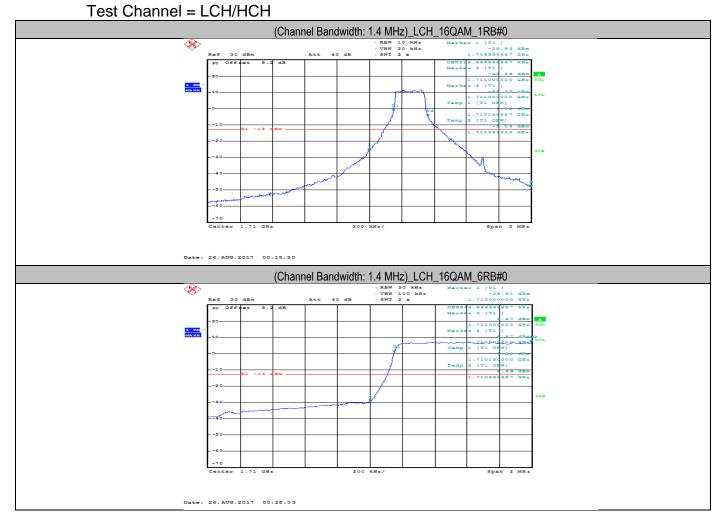


Report No.: WT178004541 Page 533 of 674

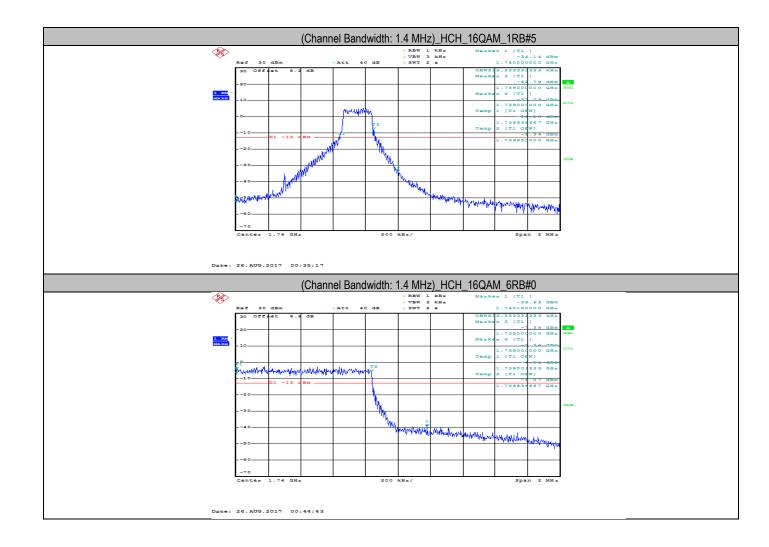


Report No.: WT178004541 Page 534 of 674

Band edge measurement LTE Band 66 Test Mode = 16QAM /TM5 Channel Bandwidth: 1.4 MHz

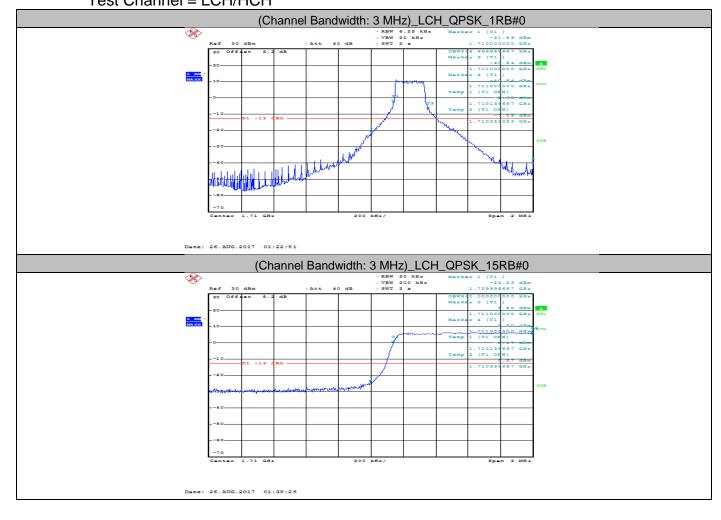


Report No.: WT178004541 Page 535 of 674

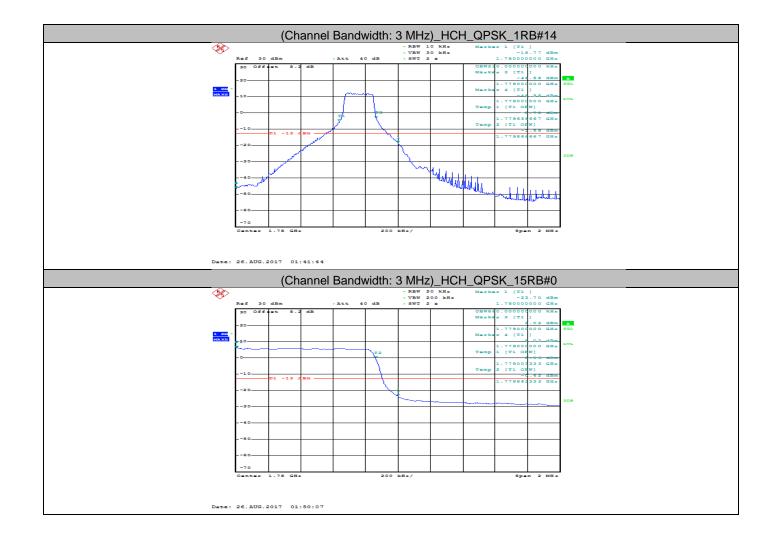


Report No.: WT178004541 Page 536 of 674

Band edge measurement LTE Band 66 Test Mode = QPSK /TM4 Channel Bandwidth: 3 MHz Test Channel = LCH/HCH

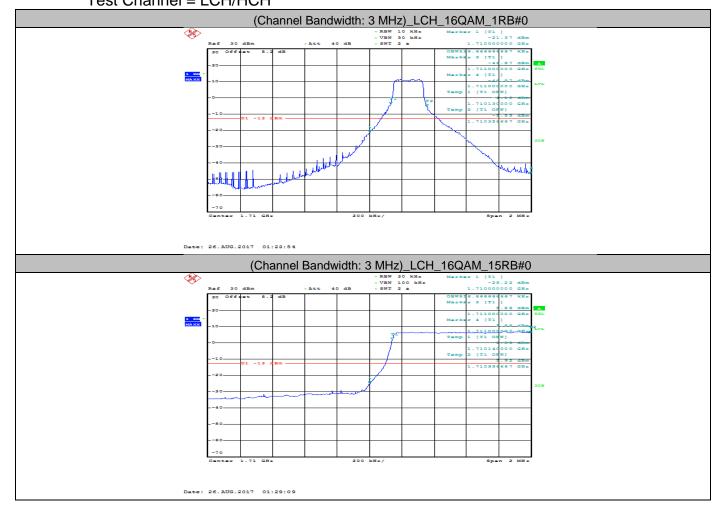


Report No.: WT178004541 Page 537 of 674

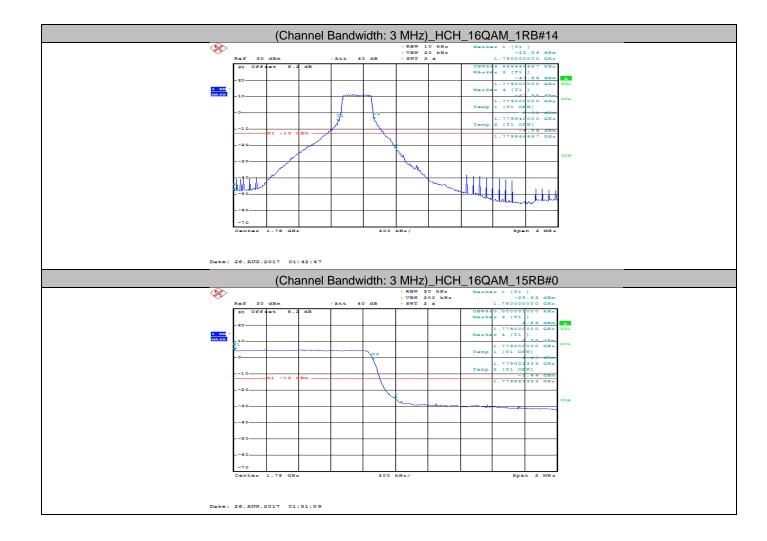


Report No.: WT178004541 Page 538 of 674

Band edge measurement LTE Band 66 Test Mode = 16QAM /TM5 Channel Bandwidth: 3 MHz Test Channel = LCH/HCH

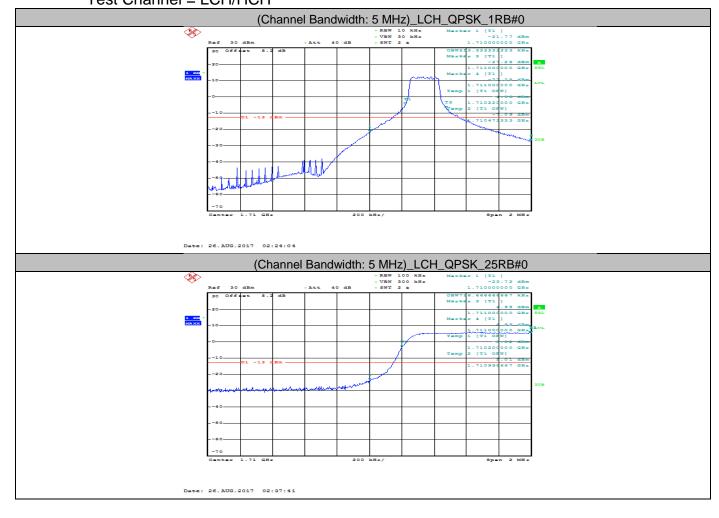


Report No.: WT178004541 Page 539 of 674

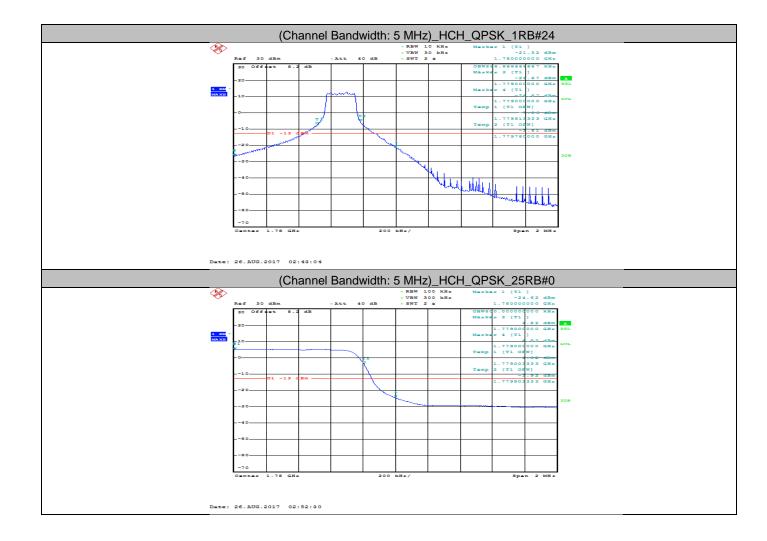


Report No.: WT178004541 Page 540 of 674

Band edge measurement LTE Band 66 Test Mode = QPSK /TM4 Channel Bandwidth: 5 MHz Test Channel = LCH/HCH

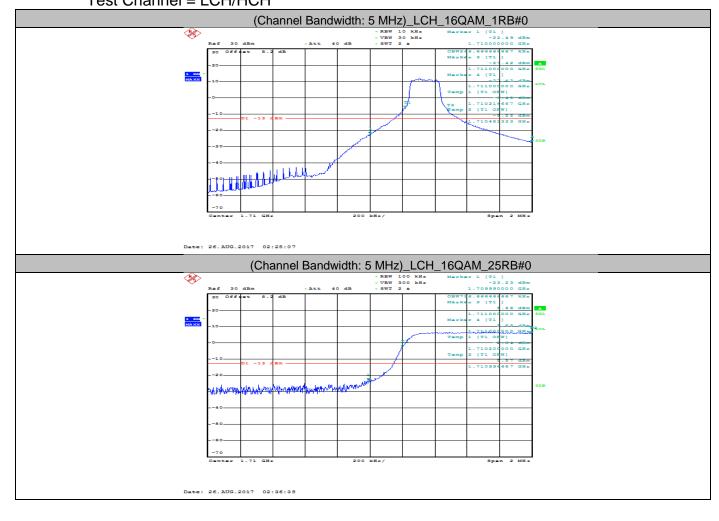


Report No.: WT178004541 Page 541 of 674

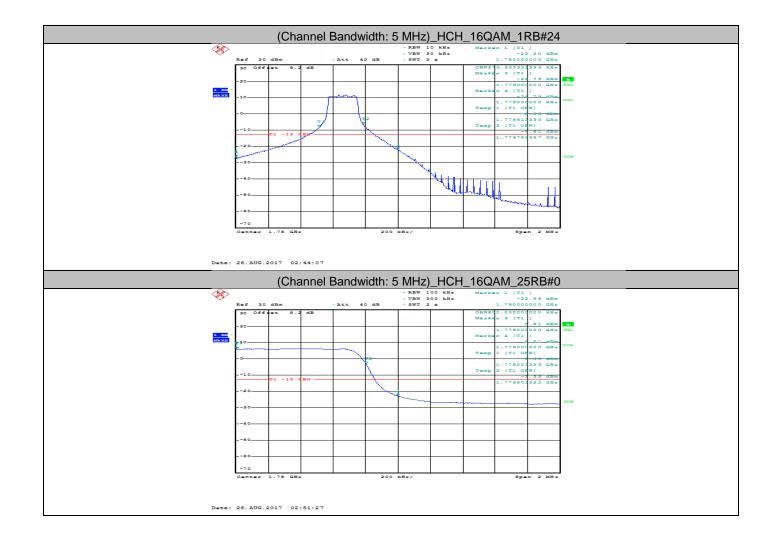


Report No.: WT178004541 Page 542 of 674

Band edge measurement LTE Band 66 Test Mode = 16QAM /TM5 Channel Bandwidth: 5 MHz Test Channel = LCH/HCH

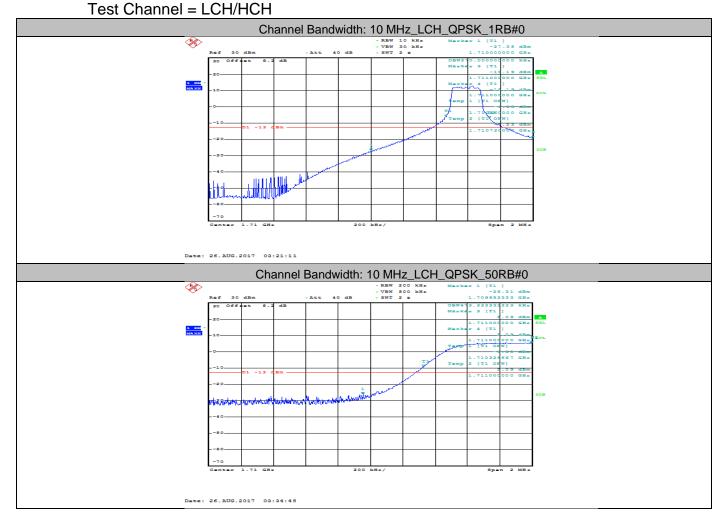


Report No.: WT178004541 Page 543 of 674

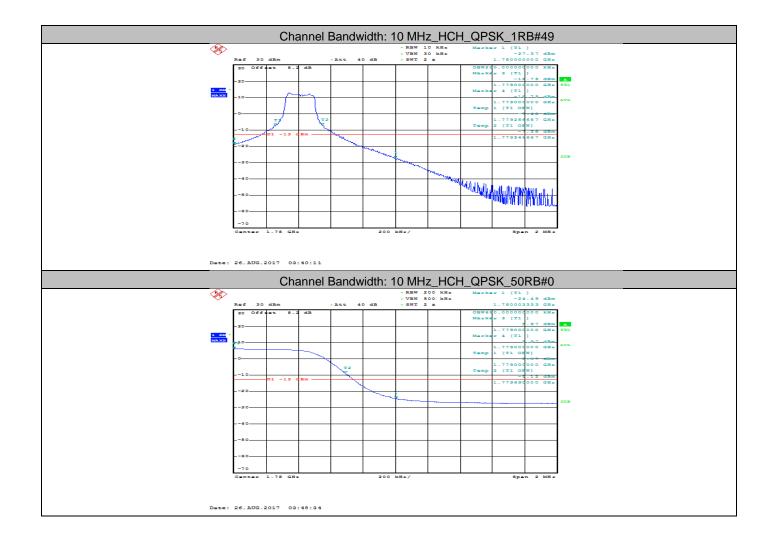


Report No.: WT178004541 Page 544 of 674

Band edge measurement LTE Band 66 Test Mode = QPSK /TM4 Channel Bandwidth: 10 MHz

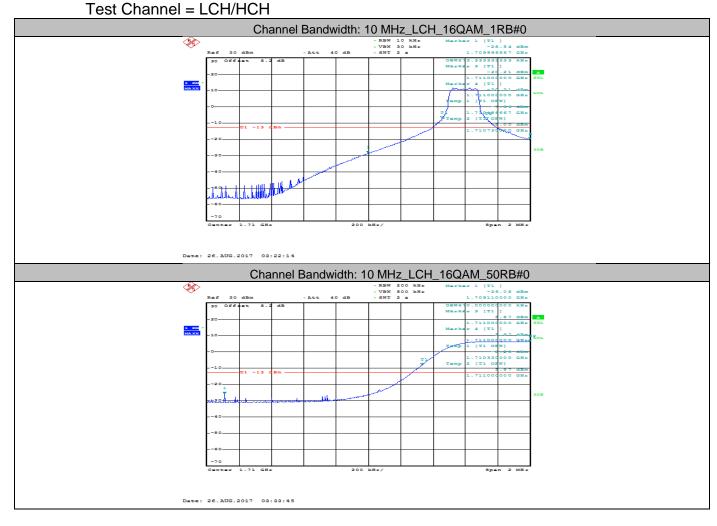


Report No.: WT178004541 Page 545 of 674

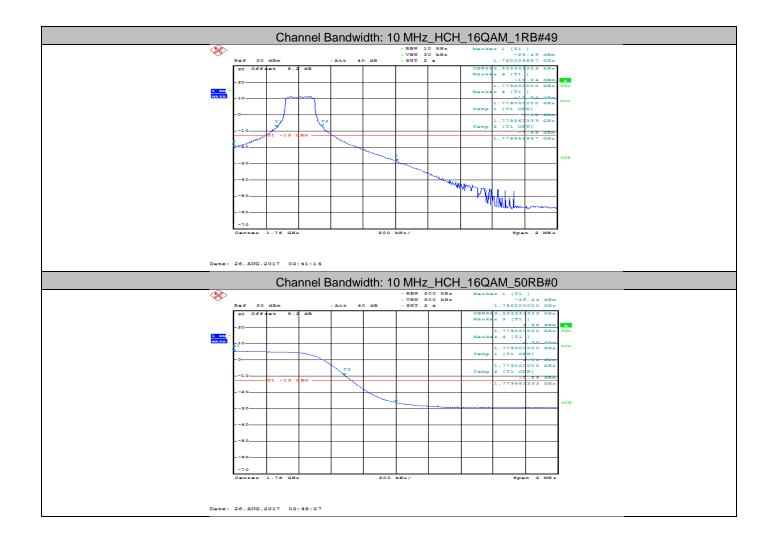


Report No.: WT178004541 Page 546 of 674

Band edge measurement LTE Band 66 Test Mode = 16QAM /TM5 Channel Bandwidth: 10 MHz

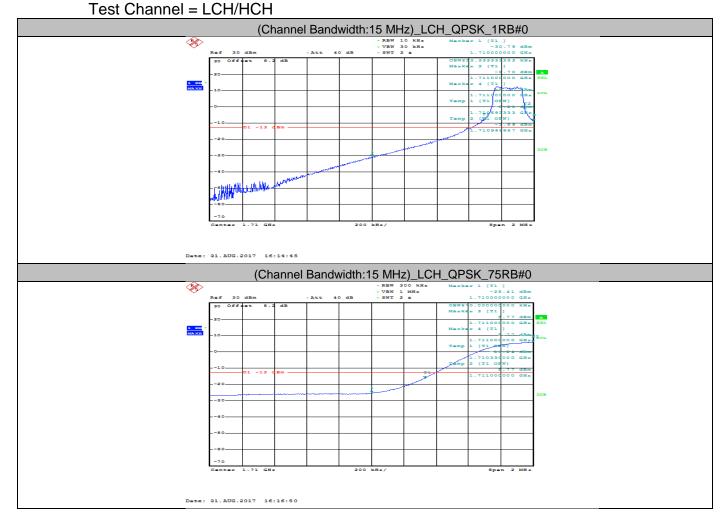


Report No.: WT178004541 Page 547 of 674

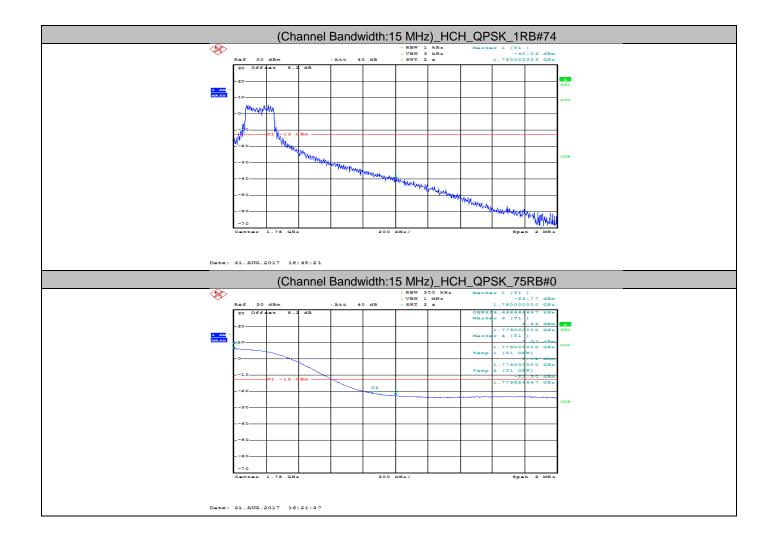


Report No.: WT178004541 Page 548 of 674

Band edge measurement LTE Band 66 Test Mode = QPSK /TM4 Channel Bandwidth: 15 MHz

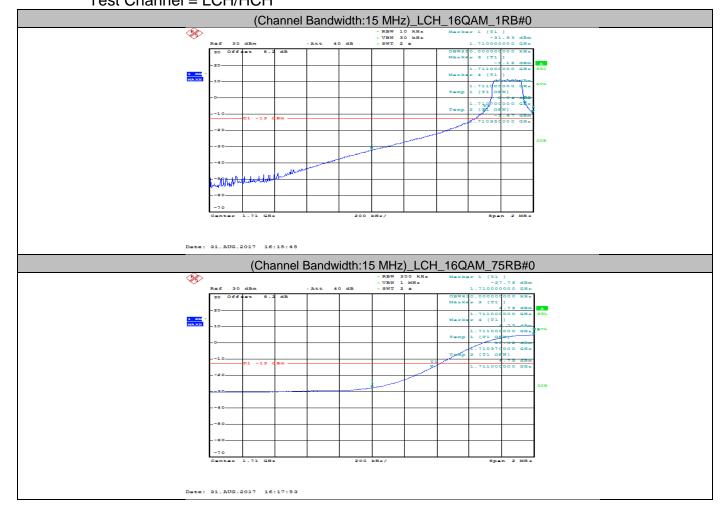


Report No.: WT178004541 Page 549 of 674

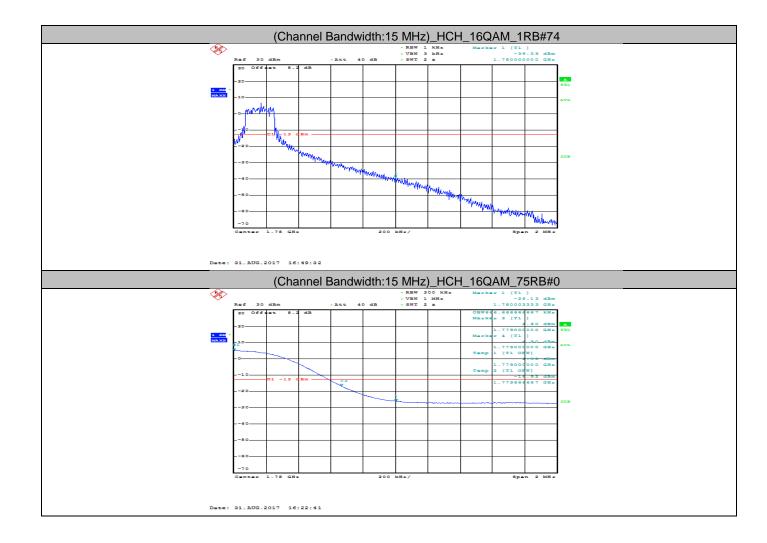


Report No.: WT178004541 Page 550 of 674

Band edge measurement LTE Band 66 Test Mode = 16QAM /TM5 Channel Bandwidth: 15 MHz Test Channel = LCH/HCH

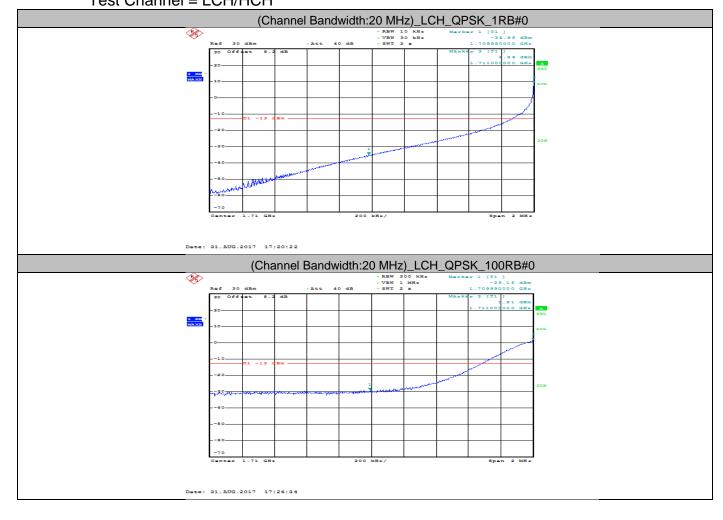


Report No.: WT178004541 Page 551 of 674

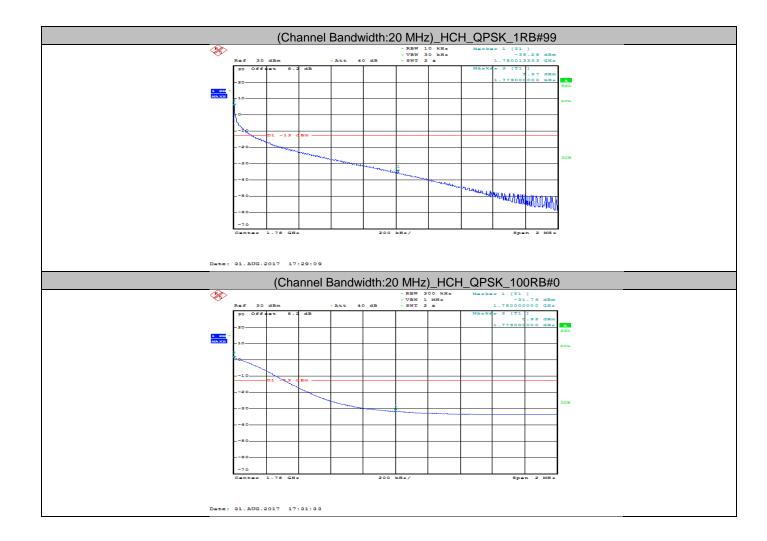


Report No.: WT178004541 Page 552 of 674

Band edge measurement LTE Band 66 Test Mode = QPSK /TM4 Channel Bandwidth: 20 MHz Test Channel = LCH/HCH



Report No.: WT178004541 Page 553 of 674

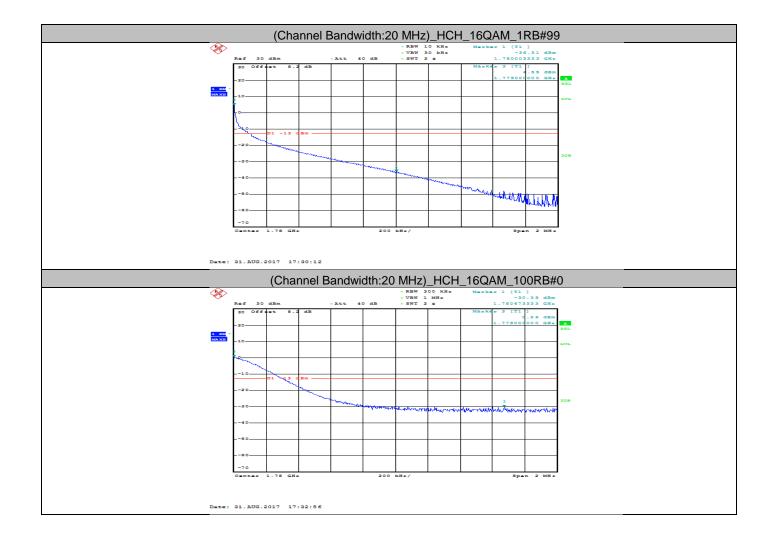


Report No.: WT178004541 Page 554 of 674

Band edge measurement LTE Band 66 Test Mode = 16QAM /TM5 Channel Bandwidth: 20 MHz



Report No.: WT178004541 Page 555 of 674



Report No.: WT178004541 Page 556 of 674

4.5. Spurious Emissions Radiated

4.5.1.Test Standard

FCC: CFR Part 2.1053, CFR Part 22.917, CFR Part 24.238, CFR Part 27

4.5.2.Test Limit

Measurements shall be made to detect spurious emissions that may be radiated directly from the cabinet, control circuits, power leads or intermediate circuit elements under normal conditions of installation and operation. Curves or equivalent data shall be supplied showing the magnitude of each harmonic and other spurious emission.

5.5.3 Limits:

(a) Out of band emissions. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.

For all power levels +30dBm to 0dBm, this becomes a constant specification of -13dBm.

5.5.3.1 FCC 22.917 Emission limitations for cellular equipment.

The rules in this section govern the spectral characteristics of emissions in the Cellular Radiotelephone Service.

(b) Measurement procedure. Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. In the 1MHz 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. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 100 kHz of 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

5.5.3.2 FCC 24.238 Emission limitations for Broadband PCS equipment.

The rules in this section govern the spectral characteristics of emissions in the Broadband Personal Communications Service.

(b) Measurement procedure. Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. 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. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 100 kHz of 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

§ 27.53 (h) For operations in the 1710–1755 MHz and 2110–2155 MHz bands, the

Report No.: WT178004541 Page 557 of 674

power of any

emission outside a licensee's frequency block shall be attenuated below the transmitter power

(P) by at least $43 + 10 \log 10(P) dB$.

The unwanted emission power shall be measured with a resolution bandwidth of at least 1% ofthe occupied bandwidth in the 1 MHz band immediately outside and adjacent to the channel edge of the equipment. Beyond the 1 MHz band immediately outside the channel edge of the equipment, a resolution bandwidth of 1 MHz shall be employed. A narrower resolution bandwidth is allowed to be used provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz or 1% of the occupied bandwidth as applicable.

The power of any unwanted emissions measured from the channel edge of the equipment shall be attenuated below the transmitter power, P (dBW), as follows:

- a. for base station and subscriber equipment, other than mobile subscriber equipment, the attenuation shall not be less than 43 + 10 Log10 (p), dB; and
- b. for mobile subscriber equipment, the attenuation shall not be less than 43 + 10 Log10
- (p), dB at the channel edges and 55 + 10 Log10 (p) at 5.5 MHz away and beyond the channel edges where p in (a) and (b) is the transmitter power measured in watts

4.5.3.Test Procedure

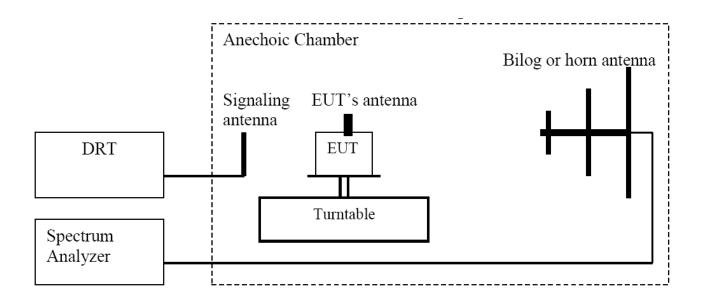
- 1. Connect the equipment as shown in the above diagram with the EUT's antenna in a horizontal orientation.
- 2. Adjust the settings of the Universal Radio Communication Tester (CMU) to set the EUT to its maximum power at the required channel.
- 3. Set the spectrum analyzer to measure peak hold with the required settings.
- 4. Place the measurement antenna in a horizontal orientation. Rotate the EUT 360 . Raise the measurement antenna at 1.5 meters increments and rotate the EUT 360 at maximize all emissions. Measure and record all spurious emissions (LVL) up to the tenth harmonic of the carrier frequency.
- 5. Replace the EUT with a horizontally polarized half wave dipole or known gain antenna. The center of the antenna should be at the same location as the center of the EUT's antenna.
- 6. Connect the antenna to a signal generator with known output power and record the path loss in dB (LOSS). LOSS = Generator Output Power (dBm) Analyzer reading (dBm).
- 7. Determine the level of spurious emissions using the following equation: Spurious (dBm) = LVL (dBm) + LOSS (dB):
- 8. Repeat steps 4, 5 and 6 with all antennas vertically polarized.
- 9. Determine the level of spurious emissions using the following equation: Spurious (dBm) = LVL (dBm) + LOSS (dB):
- 10. Measurements are to be performed with the EUT set to the low, middle and high channel of each frequency band.

(Note: Steps 5 and 6 above are performed prior to testing and LOSS is recorded by test software. Steps 3, 4 and 7 above are performed with test software.)

Spectrum analyzer settings: RBW=VBW=1MHz

4.5.4.Test Setup

Report No.: WT178004541 Page 558 of 674



Report No.: WT178004541 Page 559 of 674

4.5.5.Test Data

Test Band = GSM850 Test Mode = GSM/TM1 Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBd]	dB	Level (ERP) [dBm]		[dBm]
1648.4	-1.97	0.9	6.77	40.6	-36.7	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = GSM850 Test Mode = GSM/TM1 Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBd]	dB	Level (ERP) [dBm]		[dBm]
1673.2	-1.17	0.9	6.77	40.6	-35.9	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = GSM850 Test Mode = GSM/TM1 Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBd]	dB	Level (ERP) [dBm]		[dBm]
1697.6	-1.97	0.9	6.77	40.6	-36.7	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 560 of 674

Test Band = GSM850 Test Mode = EDGE /TM2 Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBd]	dB	Level (ERP) [dBm]		[dBm]
1648.4	-2.77	0.9	6.77	40.6	-37.5	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = GSM850 Test Mode = EDGE /TM2 Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBd]	dB	Level (ERP) [dBm]		[dBm]
1673.2	-3.17	0.9	6.77	40.6	-37.9	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = GSM850 Test Mode = EDGE /TM2 Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBd]	dB	Level (ERP) [dBm]		[dBm]
1697.6	-3.37	0.9	6.77	40.6	-38.1	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 561 of 674

Test Band = WCDMA850 Test Mode = UMTS/TM3 Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBd]	dB	Level (ERP) [dBm]		[dBm]
1652.8	-6.47	0.9	6.77	40.6	-41.2	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = WCDMA850 Test Mode = UMTS/TM3 Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBd]	dB	Level (ERP) [dBm]		[dBm]
1672.8	-6.07	0.9	6.77	40.6	-40.8	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = WCDMA850 Test Mode = UMTS/TM3 Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBd]	dB	Level (ERP) [dBm]		[dBm]
1693.2	-7.57	0.9	6.77	40.6	-42.3	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 562 of 674

Test Band = GSM1900 Test Mode = GSM/TM1 Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3700.4	-5.63	4.6	9.53	39	-39.7	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = GSM1900 Test Mode = GSM/TM1 Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3760	-6.33	4.6	9.53	39	-40.4	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = GSM1900 Test Mode = GSM/TM1 Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3819.6	-6.73	4.6	9.53	39	-40.8	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 563 of 674

Test Band = GSM1900 Test Mode = EDGE /TM2 Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3700.4	-8.23	4.6	9.53	39	-42.3	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = GSM1900 Test Mode = EDGE /TM2 Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3760	-7.43	4.6	9.53	39	-41.5	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = GSM1900 Test Mode = EDGE /TM2 Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3819.6	-8.63	4.6	9.53	39	-42.7	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 564 of 674

Test Band = WCDMA1900 Test Mode = UMTS /TM3 Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3705	-7.83	4.6	9.53	39	-41.9	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = WCDMA1900 Test Mode = UMTS /TM3 Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3760	-6.63	4.6	9.53	39	-40.7	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = WCDMA1900 Test Mode = UMTS /TM3 Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3815.2	-7.53	4.6	9.53	39	-41.6	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 565 of 674

Test Band = WCDMA1700 Test Mode = UMTS /TM3 Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3424.8	-9.61	4.1	9.41	39	-43.3	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = WCDMA1700 Test Mode = UMTS /TM3 Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3465.2	-9.11	4.1	9.41	39	-42.8	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = WCDMA1700 Test Mode = UMTS /TM3 Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3505.2	-9.71	4.1	9.41	39	-43.4	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 566 of 674

Test Band = LTE Band 2
Test Mode = QPSK /TM4
Bandwidth=1.4MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3701.4	-7.53	4.6	9.53	39	-41.6	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 2
Test Mode = QPSK /TM4
Bandwidth=1.4MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3760	-8.53	4.6	9.53	39	-42.6	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 2
Test Mode = QPSK /TM4
Bandwidth=1.4MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3818.6	-8.03	4.6	9.53	39	-42.1	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 567 of 674

Test Band = LTE Band 2 Test Mode = 16QAM /TM5 Bandwidth=1.4MHz Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3701.4	-9.53	4.6	9.53	39	-43.6	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 2
Test Mode = 16QAM /TM5
Bandwidth=1.4MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3760	-7.83	4.6	9.53	39	-41.9	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 2
Test Mode = 16QAM /TM5
Bandwidth=1.4MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3818.6	-6.23	4.6	9.53	39	-40.3	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 568 of 674

Test Band = LTE Band 2
Test Mode = QPSK /TM4
Bandwidth=3MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3703	-7.73	4.6	9.53	39	-41.8	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 2
Test Mode = QPSK /TM4
Bandwidth=3MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3760	-10.53	4.6	9.53	39	-44.6	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 2
Test Mode = QPSK /TM4
Bandwidth=3MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3817	-9.53	4.6	9.53	39	-43.6	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 569 of 674

Test Band = LTE Band 2
Test Mode = 16QAM /TM5
Bandwidth=3MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3703	-7.73	4.6	9.53	39	-41.8	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 2
Test Mode = 16QAM /TM5
Bandwidth=3MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3760	-11.63	4.6	9.53	39	-45.7	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 2
Test Mode = 16QAM /TM5
Bandwidth=3MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3817	-10.03	4.6	9.53	39	-44.1	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 570 of 674

Test Band = LTE Band 2
Test Mode = QPSK /TM4
Bandwidth=5MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3705	-9.53	4.6	9.53	39	-43.6	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 2
Test Mode = QPSK /TM4
Bandwidth=5MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3760	-8.43	4.6	9.53	39	-42.5	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 2
Test Mode = QPSK /TM4
Bandwidth=5MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3815	-10.33	4.6	9.53	39	-44.4	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 571 of 674

Test Band = LTE Band 2
Test Mode = 16QAM /TM5
Bandwidth=5MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3705	-7.93	4.6	9.53	39	-42	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 2
Test Mode = 16QAM /TM5
Bandwidth=5MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3760	-7.63	4.6	9.53	39	-41.7	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 2
Test Mode = 16QAM /TM5
Bandwidth=5MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3815	-8.53	4.6	9.53	39	-42.6	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 572 of 674

Test Band = LTE Band 2
Test Mode = QPSK /TM4
Bandwidth=10MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3710	-9.23	4.6	9.53	39	-43.3	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 2
Test Mode = QPSK /TM4
Bandwidth=10MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3760	-8.43	4.6	9.53	39	-42.5	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 2
Test Mode = QPSK /TM4
Bandwidth=10MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3810	-9.13	4.6	9.53	39	-43.2	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 573 of 674

Test Band = LTE Band 2
Test Mode = 16QAM /TM5
Bandwidth=10MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3710	-7.03	4.6	9.53	39	-41.1	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 2
Test Mode = 16QAM /TM5
Bandwidth=10MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3760	-8.83	4.6	9.53	39	-42.9	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 2
Test Mode = 16QAM /TM5
Bandwidth=10MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3810	-10.13	4.6	9.53	39	-44.2	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 574 of 674

Test Band = LTE Band 2
Test Mode = QPSK /TM4
Bandwidth=15MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3715	-10.03	4.6	9.53	39	-44.1	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 2
Test Mode = QPSK /TM4
Bandwidth=15MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3760	-9.63	4.6	9.53	39	-43.7	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 2
Test Mode = QPSK /TM4
Bandwidth=15MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3805	-9.33	4.6	9.53	39	-43.4	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 575 of 674

Test Band = LTE Band 2
Test Mode = 16QAM /TM5
Bandwidth=15MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3715	-8.73	4.6	9.53	39	-42.8	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 2
Test Mode = 16QAM /TM5
Bandwidth=15MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3760	-8.83	4.6	9.53	39	-42.9	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 2
Test Mode = 16QAM /TM5
Bandwidth=15MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3805	-7.63	4.6	9.53	39	-41.7	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 576 of 674

Test Band = LTE Band 2
Test Mode = QPSK /TM4
Bandwidth=20MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3720	-9.43	4.6	9.53	39	-43.5	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 2
Test Mode = QPSK /TM4
Bandwidth=20MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3760	-8.63	4.6	9.53	39	-42.7	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 2
Test Mode = QPSK /TM4
Bandwidth=20MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3800	-7.33	4.6	9.53	39	-41.4	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 577 of 674

Test Band = LTE Band 2
Test Mode = 16QAM /TM5
Bandwidth=20MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3720	-9.13	4.6	9.53	39	-43.2	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 2
Test Mode = 16QAM /TM5
Bandwidth=20MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3760	-8.93	4.6	9.53	39	-43	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 2
Test Mode = 16QAM /TM5
Bandwidth=20MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3800	-7.63	4.6	9.53	39	-41.7	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 578 of 674

Test Band = LTE Band 4
Test Mode = QPSK /TM4
Bandwidth=1.4MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3421.4	-10.91	4.1	9.41	39	-44.6	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 4
Test Mode = QPSK /TM4
Bandwidth=1.4MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3465	-9.41	4.1	9.41	39	-43.1	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 4
Test Mode = QPSK /TM4
Bandwidth=1.4MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3508.6	-9.11	4.1	9.41	39	-42.8	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 579 of 674

Test Band = LTE Band 4
Test Mode = 16QAM /TM5
Bandwidth=1.4MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3421.4	-9.31	4.1	9.41	39	-43	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 4
Test Mode = 16QAM /TM5
Bandwidth=1.4MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3465	-9.81	4.1	9.41	39	-43.5	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 4
Test Mode = Q16QAM /TM5
Bandwidth=1.4MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3508.6	-8.71	4.1	9.41	39	-42.4	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 580 of 674

Test Band = LTE Band 4
Test Mode = QPSK /TM4
Bandwidth=3MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3423	-9.51	4.1	9.41	39	-43.2	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 4
Test Mode = QPSK /TM4
Bandwidth=3MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3465	-9.91	4.1	9.41	39	-43.6	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 4
Test Mode = QPSK /TM4
Bandwidth=3MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3507	-10.51	4.1	9.41	39	-44.2	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 581 of 674

Test Band = LTE Band 4
Test Mode = 16QAM /TM5
Bandwidth=3MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3423	-10.01	4.1	9.41	39	-43.7	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 4
Test Mode = 16QAM /TM5
Bandwidth=3MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3465	-10.81	4.1	9.41	39	-44.5	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 4
Test Mode = Q16QAM /TM5
Bandwidth=3MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3507	-9.21	4.1	9.41	39	-42.9	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 582 of 674

Test Band = LTE Band 4
Test Mode = QPSK /TM4
Bandwidth=5MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3425	-10.11	4.1	9.41	39	-43.8	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 4
Test Mode = QPSK /TM4
Bandwidth=5MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3465	-9.51	4.1	9.41	39	-43.2	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 4
Test Mode = QPSK /TM4
Bandwidth=5MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3505	-8.01	4.1	9.41	39	-41.7	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 583 of 674

Test Band = LTE Band 4
Test Mode = 16QAM /TM5
Bandwidth=5MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3425	-8.71	4.1	9.41	39	-42.4	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 4
Test Mode = 16QAM /TM5
Bandwidth=5MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3465	-7.61	4.1	9.41	39	-41.3	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 4
Test Mode = Q16QAM /TM5
Bandwidth=5MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3505	-9.91	4.1	9.41	39	-43.6	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 584 of 674

Test Band = LTE Band 4
Test Mode = QPSK /TM4
Bandwidth=10MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3430	-10.61	4.1	9.41	39	-44.3	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 4
Test Mode = QPSK /TM4
Bandwidth=10MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3465	-9.21	4.1	9.41	39	-42.9	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 4
Test Mode = QPSK /TM4
Bandwidth=10MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3500	-9.61	4.1	9.41	39	-43.3	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 585 of 674

Test Band = LTE Band 4
Test Mode = 16QAM /TM5
Bandwidth=10MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3430	-9.01	4.1	9.41	39	-42.7	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 4
Test Mode = 16QAM /TM5
Bandwidth=10MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3465	-11.41	4.1	9.41	39	-45.1	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 4
Test Mode = Q16QAM /TM5
Bandwidth=10MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3500	-9.51	4.1	9.41	39	-43.2	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 586 of 674

Test Band = LTE Band 4
Test Mode = QPSK /TM4
Bandwidth=15MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3435	-10.51	4.1	9.41	39	-44.2	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 4
Test Mode = QPSK /TM4
Bandwidth=15MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3465	-9.71	4.1	9.41	39	-43.4	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 4
Test Mode = QPSK /TM4
Bandwidth=15MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3495	-8.71	4.1	9.41	39	-42.4	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 587 of 674

Test Band = LTE Band 4
Test Mode = 16QAM /TM5
Bandwidth=15MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3435	-10.61	4.1	9.41	39	-44.3	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 4
Test Mode = 16QAM /TM5
Bandwidth=15MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3465	-10.11	4.1	9.41	39	-43.8	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 4
Test Mode = Q16QAM /TM5
Bandwidth=15MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3495	-9.01	4.1	9.41	39	-42.7	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 588 of 674

Test Band = LTE Band 4
Test Mode = QPSK /TM4
Bandwidth=20MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3440	-10.31	4.1	9.41	39	-44	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 4
Test Mode = QPSK /TM4
Bandwidth=20MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3465	-9.41	4.1	9.41	39	-43.1	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 4
Test Mode = QPSK /TM4
Bandwidth=20MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3490	-8.71	4.1	9.41	39	-42.4	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 589 of 674

Test Band = LTE Band 4
Test Mode = 16QAM /TM5
Bandwidth=20MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (ERP) [dBm]		[dBm]
3440	-9.41	4.1	9.41	39	-43.1	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 4
Test Mode = 16QAM /TM5
Bandwidth=20MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (ERP) [dBm]		[dBm]
3465	-8.01	4.1	9.41	39	-41.7	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 4
Test Mode = Q16QAM /TM5
Bandwidth=20MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (ERP) [dBm]		[dBm]
3490	-8.51	4.1	9.41	39	-42.2	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 590 of 674

Test Band = LTE Band 5
Test Mode = QPSK /TM4
Bandwidth=1.4MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1649.4	-10.07	0.9	6.77	40.6	-44.8	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 5
Test Mode = QPSK /TM4
Bandwidth=1.4MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1673	-9.27	0.9	6.77	40.6	-44	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 5
Test Mode = QPSK /TM4
Bandwidth=1.4MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1696.7	-7.97	0.9	6.77	40.6	-42.7	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 591 of 674

Test Band = LTE Band 5 Test Mode = 16QAM /TM5 Bandwidth=1.4MHz Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1649.4	-8.87	0.9	6.77	40.6	-43.6	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 5
Test Mode = 16QAM /TM5
Bandwidth=1.4MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1673	-7.37	0.9	6.77	40.6	-42.1	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 5
Test Mode = Q16QAM /TM5
Bandwidth=1.4MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1696.7	-8.67	0.9	6.77	40.6	-43.4	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 592 of 674

Test Band = LTE Band 5
Test Mode = QPSK /TM4
Bandwidth=3MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1651	-6.97	0.9	6.77	40.6	-41.7	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 5
Test Mode = QPSK /TM4
Bandwidth=3MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1673	-7.57	0.9	6.77	40.6	-42.3	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 5
Test Mode = QPSK /TM4
Bandwidth=3MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1695	-8.97	0.9	6.77	40.6	-43.7	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 593 of 674

Test Band = LTE Band 5
Test Mode = 16QAM /TM5
Bandwidth=3MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1651	-7.87	0.9	6.77	40.6	-42.6	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 5
Test Mode = 16QAM /TM5
Bandwidth=3MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1673	-6.67	0.9	6.77	40.6	-41.4	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 5
Test Mode = Q16QAM /TM5
Bandwidth=3MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1695	-8.77	0.9	6.77	40.6	-43.5	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 594 of 674

Test Band = LTE Band 5
Test Mode = QPSK /TM4
Bandwidth=5MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1653	-8.07	0.9	6.77	40.6	-42.8	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 5
Test Mode = QPSK /TM4
Bandwidth=5MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1673	-9.57	0.9	6.77	40.6	-44.3	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 5
Test Mode = QPSK /TM4
Bandwidth=5MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1693	-8.47	0.9	6.77	40.6	-43.2	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 595 of 674

Test Band = LTE Band 5
Test Mode = 16QAM /TM5
Bandwidth=5MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1653	-6.87	0.9	6.77	40.6	-41.6	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 5
Test Mode = 16QAM /TM5
Bandwidth=5MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1673	-7.67	0.9	6.77	40.6	-42.4	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 5
Test Mode = Q16QAM /TM5
Bandwidth=5MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1693	-8.87	0.9	6.77	40.6	-43.6	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 596 of 674

Test Band = LTE Band 5
Test Mode = QPSK /TM4
Bandwidth=10MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1658	-9.57	0.9	6.77	40.6	-44.3	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 5
Test Mode = QPSK /TM4
Bandwidth=10MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1673	-8.37	0.9	6.77	40.6	-43.1	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 5
Test Mode = QPSK /TM4
Bandwidth=10MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1688	-7.97	0.9	6.77	40.6	-42.7	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 597 of 674

Test Band = LTE Band 5
Test Mode = 16QAM /TM5
Bandwidth=10MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1693	-7.37	0.9	6.77	40.6	-42.1	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 5
Test Mode = 16QAM /TM5
Bandwidth=10MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1673	-8.87	0.9	6.77	40.6	-43.6	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 5
Test Mode = Q16QAM /TM5
Bandwidth=10MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1688	-9.47	0.9	6.77	40.6	-44.2	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 598 of 674

Test Band = LTE Band 7
Test Mode = QPSK /TM4
Bandwidth=5MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
5005	-2.68	6.32	10	38.5	-37.5	Horizontal	-25

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 7
Test Mode = QPSK /TM4
Bandwidth=5MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
5070	-1.38	6.32	10	38.5	-36.2	Horizontal	-25

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 7
Test Mode = QPSK /TM4
Bandwidth=5MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
5135	-2.68	6.32	10	38.5	-37.5	Horizontal	-25

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 599 of 674

Test Band = LTE Band 7
Test Mode = 16QAM /TM5
Bandwidth=5MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
5005	-3.48	6.32	10	38.5	-38.3	Horizontal	-25

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 7
Test Mode = 16QAM /TM5
Bandwidth=5MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
5070	-3.98	6.32	10	38.5	-38.8	Horizontal	-25

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 7
Test Mode = Q16QAM /TM5
Bandwidth=5MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
5135	-3.28	6.32	10	38.5	-38.1	Horizontal	-25

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 600 of 674

Test Band = LTE Band 7
Test Mode = QPSK /TM4
Bandwidth=10MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
5010	-2.88	6.32	10	38.5	-37.7	Horizontal	-25

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 7
Test Mode = QPSK /TM4
Bandwidth=10MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
5070	-2.28	6.32	10	38.5	-37.1	Horizontal	-25

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 7
Test Mode = QPSK /TM4
Bandwidth=10MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
5130	-1.98	6.32	10	38.5	-36.8	Horizontal	-25

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 601 of 674

Test Band = LTE Band 7
Test Mode = 16QAM /TM5
Bandwidth=10MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
5010	-4.18	6.32	10	38.5	-39	Horizontal	-25

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 7
Test Mode = 16QAM /TM5
Bandwidth=10MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
5070	-4.58	6.32	10	38.5	-39.4	Horizontal	-25

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 7
Test Mode = Q16QAM /TM5
Bandwidth=10MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
5130	-3.98	6.32	10	38.5	-38.8	Horizontal	-25

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 602 of 674

Test Band = LTE Band 7
Test Mode = QPSK /TM4
Bandwidth=15MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
5015	-2.78	6.32	10	38.5	-37.6	Horizontal	-25

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 7
Test Mode = QPSK /TM4
Bandwidth=15MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
5070	-3.48	6.32	10	38.5	-38.3	Horizontal	-25

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 7
Test Mode = QPSK /TM4
Bandwidth=15MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
5125	-2.58	6.32	10	38.5	-37.4	Horizontal	-25

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 603 of 674

Test Band = LTE Band 7
Test Mode = 16QAM /TM5
Bandwidth=15MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
5015	-4.58	6.32	10	38.5	-39.4	Horizontal	-25

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 7
Test Mode = 16QAM /TM5
Bandwidth=15MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
5070	-3.58	6.32	10	38.5	-38.4	Horizontal	-25

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 7
Test Mode = Q16QAM /TM5
Bandwidth=15MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
5125	-4.88	6.32	10	38.5	-39.7	Horizontal	-25

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 604 of 674

Test Band = LTE Band 7
Test Mode = QPSK /TM4
Bandwidth=20MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
5020	-2.78	6.32	10	38.5	-37.6	Horizontal	-25

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 7
Test Mode = QPSK /TM4
Bandwidth=20MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
5070	-3.88	6.32	10	38.5	-38.7	Horizontal	-25

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 7
Test Mode = QPSK /TM4
Bandwidth=20MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
5120	-4.38	6.32	10	38.5	-39.2	Horizontal	-25

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 605 of 674

Test Band = LTE Band 7
Test Mode = 16QAM /TM5
Bandwidth=20MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
5020	-5.28	6.32	10	38.5	-40.1	Horizontal	-25

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 7
Test Mode = 16QAM /TM5
Bandwidth=20MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
5070	-4.38	6.32	10	38.5	-39.2	Horizontal	-25

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 7
Test Mode = Q16QAM /TM5
Bandwidth=20MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
5120	-4.08	6.32	10	38.5	-38.9	Horizontal	-25

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 606 of 674

Test Band = LTE Band 12 Test Mode = QPSK /TM4 Bandwidth=1.4MHz Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1399.4	-7.39	0.9	6.49	40.6	-42.4	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 12 Test Mode = QPSK /TM4 Bandwidth=1.4MHz Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1415	-6.69	0.9	6.49	40.6	-41.7	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 12 Test Mode = QPSK /TM4 Bandwidth=1.4MHz Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1430.6	-7.79	0.9	6.49	40.6	-42.8	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 607 of 674

Test Band = LTE Band 12 Test Mode = 16QAM /TM5 Bandwidth=1.4MHz Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1399.4	-8.49	0.9	6.49	40.6	-43.5	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 12 Test Mode = 16QAM /TM5 Bandwidth=1.4MHz Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1415	-8.39	0.9	6.49	40.6	-43.4	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 12
Test Mode = Q16QAM /TM5
Bandwidth=1.4MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1430.6	-8.99	0.9	6.49	40.6	-44	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 608 of 674

Test Band = LTE Band 12 Test Mode = QPSK /TM4 Bandwidth=3MHz Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1401	-8.99	0.9	6.49	40.6	-44	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 12 Test Mode = QPSK /TM4 Bandwidth=3MHz Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1415	-8.69	0.9	6.49	40.6	-43.7	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 12 Test Mode = QPSK /TM4 Bandwidth=3MHz Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1429	-9.79	0.9	6.49	40.6	-44.8	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 609 of 674

Test Band = LTE Band 12 Test Mode = 16QAM /TM5 Bandwidth=3MHz Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1401	-8.19	0.9	6.49	40.6	-43.2	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 12
Test Mode = 16QAM /TM5
Bandwidth=3MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1415	-10.09	0.9	6.49	40.6	-45.1	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 12 Test Mode = 16QAM /TM5 Bandwidth=3MHz Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1429	-9.49	0.9	6.49	40.6	-44.5	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 610 of 674

Test Band = LTE Band 12 Test Mode = QPSK /TM4 Bandwidth=5MHz Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1403	-7.59	0.9	6.49	40.6	-42.6	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 12 Test Mode = QPSK /TM4 Bandwidth=5MHz Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1415	-6.79	0.9	6.49	40.6	-41.8	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 12 Test Mode = QPSK /TM4 Bandwidth=5MHz Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1427	-8.29	0.9	6.49	40.6	-43.3	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 611 of 674

Test Band = LTE Band 12 Test Mode = 16QAM /TM5 Bandwidth=5MHz Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1403	-9.69	0.9	6.49	40.6	-44.7	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 12 Test Mode = 16QAM /TM5 Bandwidth=5MHz Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1415	-8.59	0.9	6.49	40.6	-43.6	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 12
Test Mode = Q16QAM /TM5
Bandwidth=5MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1427	-7.89	0.9	6.49	40.6	-42.9	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 612 of 674

Test Band = LTE Band 12 Test Mode = QPSK /TM4 Bandwidth=10MHz Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1408	-9.29	0.9	6.49	40.6	-44.3	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 12 Test Mode = QPSK /TM4 Bandwidth=10MHz Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1415	-6.79	0.9	6.49	40.6	-41.8	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 12 Test Mode = QPSK /TM4 Bandwidth=10MHz Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1422	-7.59	0.9	6.49	40.6	-42.6	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 613 of 674

Test Band = LTE Band 12
Test Mode = 16QAM /TM5
Bandwidth=10MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1408	-9.39	0.9	6.49	40.6	-44.4	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 12 Test Mode = 16QAM /TM5 Bandwidth=10MHz Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1415	-7.99	0.9	6.49	40.6	-43	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 12
Test Mode = Q16QAM /TM5
Bandwidth=10MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1422	-9.09	0.9	6.49	40.6	-44.1	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 614 of 674

Test Band = LTE Band 13 Test Mode = QPSK /TM4 Bandwidth=5MHz Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1559	-7.89	0.9	6.49	40.6	-42.9	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 13 Test Mode = QPSK /TM4 Bandwidth=5MHz Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1564	-8.69	0.9	6.49	40.6	-43.7	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 13 Test Mode = QPSK /TM4 Bandwidth=5MHz Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1569	-8.69	0.9	6.49	40.6	-43.7	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 615 of 674

Test Band = LTE Band 13
Test Mode = 16QAM /TM5
Bandwidth=5MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1559	-9.09	0.9	6.49	40.6	-44.1	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 13 Test Mode = 16QAM /TM5 Bandwidth=5MHz Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1564	-10.19	0.9	6.49	40.6	-45.2	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 13
Test Mode = Q16QAM /TM5
Bandwidth=5MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1569	-8.69	0.9	6.49	40.6	-43.7	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 616 of 674

Test Band = LTE Band 13 Test Mode = QPSK /TM4 Bandwidth=10MHz

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1564	-7.29	0.9	6.49	40.6	-42.3	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 13 Test Mode = 16QAM /TM5 Bandwidth=10MHz

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1564	-8.39	0.9	6.49	40.6	-43.4	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 617 of 674

Test Band = LTE Band 17 Test Mode = QPSK /TM4 Bandwidth=5MHz Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1413	-9.09	0.9	6.49	40.6	-44.1	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 17 Test Mode = QPSK /TM4 Bandwidth=5MHz Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1420	-8.49	0.9	6.49	40.6	-43.5	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 17 Test Mode = QPSK /TM4 Bandwidth=5MHz Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1427	-9.09	0.9	6.49	40.6	-44.1	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 618 of 674

Test Band = LTE Band 17
Test Mode = 16QAM /TM5
Bandwidth=5MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1413	-8.39	0.9	6.49	40.6	-43.4	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 17
Test Mode = 16QAM /TM5
Bandwidth=5MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1420	-7.39	0.9	6.49	40.6	-42.4	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 17
Test Mode = Q16QAM /TM5
Bandwidth=5MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1427	-9.79	0.9	6.49	40.6	-44.8	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 619 of 674

Test Band = LTE Band 17 Test Mode = QPSK /TM4 Bandwidth=10MHz Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1418	-7.19	0.9	6.49	40.6	-42.2	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 17 Test Mode = QPSK /TM4 Bandwidth=10MHz Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1420	-8.59	0.9	6.49	40.6	-43.6	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 17 Test Mode = QPSK /TM4 Bandwidth=10MHz Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1422	-9.79	0.9	6.49	40.6	-44.8	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 620 of 674

Test Band = LTE Band 17
Test Mode = 16QAM /TM5
Bandwidth=10MHz
Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1418	-7.39	0.9	6.49	40.6	-42.4	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 17
Test Mode = 16QAM /TM5
Bandwidth=10MHz
Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1420	-8.19	0.9	6.49	40.6	-43.2	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 17
Test Mode = Q16QAM /TM5
Bandwidth=10MHz
Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
1422	-9.09	0.9	6.49	40.6	-44.1	Vertical	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 621 of 674

Test Band = LTE Band 66 Test Mode = QPSK /TM4 Bandwidth=1.4MHz Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3421.4	-9.91	4.1	9.41	39	-43.6	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 66 Test Mode = QPSK /TM4 Bandwidth=1.4MHz Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3510	-9.11	4.1	9.41	39	-42.8	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 66 Test Mode = QPSK /TM4 Bandwidth=1.4MHz Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3558.6	-8.61	4.1	9.41	39	-42.3	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 622 of 674

Test Band = LTE Band 66 Test Mode = 16QAM /TM5 Bandwidth=1.4MHz Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3421.4	-10.31	4.1	9.41	39	-44	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 66 Test Mode = 16QAM /TM5 Bandwidth=1.4MHz Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3510	-10.21	4.1	9.41	39	-43.9	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 66 Test Mode = 16QAM /TM5 Bandwidth=1.4MHz Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3558.6	-10.91	4.1	9.41	39	-44.6	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 623 of 674

Test Band = LTE Band 66 Test Mode = QPSK /TM4 Bandwidth=3MHz Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3423	-9.81	4.1	9.41	39	-43.5	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 66 Test Mode = QPSK /TM4 Bandwidth=3MHz Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3510	-10.61	4.1	9.41	39	-44.3	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 66 Test Mode = QPSK /TM4 Bandwidth=3MHz Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3557	-11.01	4.1	9.41	39	-44.7	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 624 of 674

Test Band = LTE Band 66 Test Mode = 16QAM /TM5 Bandwidth=3MHz Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3423	-9.11	4.1	9.41	39	-42.8	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 66 Test Mode = 16QAM /TM5 Bandwidth=3MHz Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3510	-9.91	4.1	9.41	39	-43.6	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 66 Test Mode = 16QAM /TM5 Bandwidth=3MHz Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3557	-11.11	4.1	9.41	39	-44.8	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 625 of 674

Test Band = LTE Band 66 Test Mode = QPSK /TM4 Bandwidth=5MHz Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3425	-7.91	4.1	9.41	39	-41.6	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 66 Test Mode = QPSK /TM4 Bandwidth=5MHz Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3510	-9.41	4.1	9.41	39	-43.1	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 66 Test Mode = QPSK /TM4 Bandwidth=5MHz Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3555	-8.71	4.1	9.41	39	-42.4	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 626 of 674

Test Band = LTE Band 66 Test Mode = 16QAM /TM5 Bandwidth=5MHz Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3425	-9.91	4.1	9.41	39	-43.6	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 66 Test Mode = 16QAM /TM5 Bandwidth=5MHz Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3510	-10.31	4.1	9.41	39	-44	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 66 Test Mode = 16QAM /TM5 Bandwidth=5MHz Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3555	-11.11	4.1	9.41	39	-44.8	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 627 of 674

Test Band = LTE Band 66 Test Mode = QPSK /TM4 Bandwidth=10MHz Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3430	-9.41	4.1	9.41	39	-43.1	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 66 Test Mode = QPSK /TM4 Bandwidth=10MHz Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3510	-11.01	4.1	9.41	39	-44.7	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 66 Test Mode = QPSK /TM4 Bandwidth=10MHz Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3550	-9.21	4.1	9.41	39	-42.9	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 628 of 674

Test Band = LTE Band 66 Test Mode = 16QAM /TM5 Bandwidth=10MHz Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3430	-9.61	4.1	9.41	39	-43.3	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 66 Test Mode = 16QAM /TM5 Bandwidth=10MHz Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3510	-8.71	4.1	9.41	39	-42.4	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 66 Test Mode = 16QAM /TM5 Bandwidth=10MHz Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3550	-10.81	4.1	9.41	39	-44.5	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 629 of 674

Test Band = LTE Band 66 Test Mode = QPSK /TM4 Bandwidth=15MHz Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3435	-9.01	4.1	9.41	39	-42.7	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 66 Test Mode = QPSK /TM4 Bandwidth=15MHz Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3510	-10.21	4.1	9.41	39	-43.9	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 66 Test Mode = QPSK /TM4 Bandwidth=15MHz Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3545	-9.01	4.1	9.41	39	-42.7	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 630 of 674

Test Band = LTE Band 66 Test Mode = 16QAM /TM5 Bandwidth=15MHz Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3435	-11.41	4.1	9.41	39	-45.1	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 66 Test Mode = 16QAM /TM5 Bandwidth=15MHz Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3510	-10.51	4.1	9.41	39	-44.2	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 66 Test Mode = 16QAM /TM5 Bandwidth=15MHz Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3545	-11.01	4.1	9.41	39	-44.7	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 631 of 674

Test Band = LTE Band 66 Test Mode = QPSK /TM4 Bandwidth=20MHz Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3440	-9.21	4.1	9.41	39	-42.9	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 66 Test Mode = QPSK /TM4 Bandwidth=20MHz Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3510	-10.51	4.1	9.41	39	-44.2	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 66 Test Mode = QPSK /TM4 Bandwidth=20MHz Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3540	-9.81	4.1	9.41	39	-43.5	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 632 of 674

Test Band = LTE Band 66 Test Mode = 16QAM /TM5 Bandwidth=20MHz Test Channel = LCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3440	-10.91	4.1	9.41	39	-44.6	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 66 Test Mode = 16QAM /TM5 Bandwidth=20MHz Test Channel = MCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3510	-9.01	4.1	9.41	39	-42.7	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Test Band = LTE Band 66 Test Mode = 16QAM /TM5 Bandwidth=20MHz Test Channel = HCH

Freq.	SG. Level	Cable Loss	Antenna Gain	Preamp	Substitution	polarization	Limit
[MHz]	[dBm]	[dB]	[dBi]	dB	Level (EIRP) [dBm]		[dBm]
3540	-9.61	4.1	9.41	39	-43.3	Horizontal	-13

The emissions don't show in above result tables are more than 20dB below the limits Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

Report No.: WT178004541 Page 633 of 674

4.6. Frequency Stability

CFR 47 (FCC) part 2.1055, 22.355, 24.235 and 27.54

4.6.1.Test Limit

According to part 22.355, from 821MHz to 896MHz, for mobile device, the carrier frequency of each transmitter in the Public Mobile Services must be maintained within the tolerances 2.5ppm.

4.6.2.Test Procedure

GSM/WCDMA

In order to measure the carrier frequency under the condition of AFC lock, it is necessary to make measurements with the EUT in a "call mode". This is accomplished with the use of R&S CMU 200 Universal Radio Communication Tester.

- 1. Measure the carrier frequency at room temperature.
- 2. Subject the EUT to overnight soak at -30 $^{\circ}$ C.
- 3. With the EUT, powered via nominal voltage, connected to the CMU 200 and in a simulated call on mid channel (190 for GSM 850 & 4183 for WCDMA 850 & 661 for PCS1900 & 9400 for WCDMA 1900& 1413 for WCDMA 1700), measure the carrier frequency. These measurements should be made within 2 minutes of powering up the EUT, to prevent significant self-warming.
- 4. Repeat the above measurements at 10 C increments from -30 $^{\circ}$ C to +50 $^{\circ}$ C. Allow at least 1 1/2 hours at each temperature, un-powered, before making measurements.
- 5. Re-measure carrier frequency at room temperature with nominal voltage. Re-measure carrier frequency at low and high voltage. Pause at nominal voltage for 1 1/2 hours un-powered, to allow any self-heating to stabilize, before continuing.
- 6. Subject the EUT to overnight soak at +50 $^{\circ}$ C.
- 7. With the EUT, powered via nominal voltage, connected to the CMU 200 and in a simulated call on mid channel (190 for GSM 850 & 4183 for WCDMA 850 & 661 for PCS1900 & 9400 for WCDMA 1900 & 1413 for WCDMA 1700), measure the carrier frequency. These measurements should be made within 2 minutes of powering up the EUT, to prevent significant self-warming.
- 8. Repeat the above measurements at 10 $^{\circ}$ C increments from +50 $^{\circ}$ C to -30 $^{\circ}$ C. Allow at least 1 1/2 hours at each temperature, un-powered, before making measurements.
- 9. At all temperature levels hold the temperature to +/- 0.5 $\,^\circ\!\mathrm{C}\,$ during the measurement procedure.

LTE

- 1. The transmitter output (antenna port) was connected to the BS Simulator.
- 2. The BS simulator was used to set the TX channel and power level and modulate the TX signal with different bit patterns.
- 3. BS simulator used the frequency error function and measured the peak frequency error. Power must be removed when changingfrom one temperature to another or one voltage to another voltage. Power warm up is at least 15 min and power applied should perform before recording frequency error. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.
- 4. EUT is connected the external power supply to control the DC input power. The various Volts from the minimum 3.5 Volts to 4.35 Volts. Each step shall be record the frequency error rate.

Report No.: WT178004541 Page 634 of 674

- 5. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.
- 6. Extreme temperature rule is-30°C~50°C.

4.6.3.Test Setup

Connect the EUT to the Wireless Communication test set CMU200 or CMW 500 via the connector. Then measure the frequency error by the Wireless Communication test set CMU200/CMW 500. The EUT's output is matched with a 50 Ω load.

4.6.4.Test Data

Measurement Results vs. Variation of Temperature—GSM850

Temperature	Nominal Frequency (MHz)	Measured Frequency Error(Hz)	Result
-30 °C	836.6	15.76	Pass
-20 °C	836.6	16.01	Pass
-10 °C	836.6	15.76	Pass
0 °C	836.6	17.18	Pass
+10 °C	836.6	16.08	Pass
+20 °C	836.6	14.59	Pass
+30 °C	836.6	15.05	Pass
+40 °C	836.6	13.37	Pass
+50 °C	836.6	15.63	Pass

Measurement Results vs. Variation of Voltage—GSM850

Voltage	Nominal Frequency (MHz)	Measured Frequency Error(Hz)	Result
3.5 V	836.6	15.69	Pass
3.8 V	836.6	15.05	Pass
4.35 V	836.6	14.53	Pass

Report No.: WT178004541 Page 635 of 674

Measurement Results vs. Variation of Temperature—EDGE850

Temperature	Nominal Frequency (MHz)	Measured Frequency Error(Hz)	Result
-30 °C	836.6	15.59	Pass
-20 °C	836.6	16.21	Pass
-10 °C	836.6	16.01	Pass
0 °C	836.6	15.63	Pass
+10 °C	836.6	16.01	Pass
+20 °C	836.6	16.24	Pass
+30 °C	836.6	15.50	Pass
+40 °C	836.6	16.50	Pass
+50 °C	836.6	16.30	Pass

Measurement Results vs. Variation of Voltage - EDGE850

Voltage	Nominal Frequency (MHz)	Measured Frequency Error(Hz)	Result
3.5 V	836.6	15.37	Pass
3.8 V	836.6	15.56	Pass
4.35 V	836.6	15.30	Pass

Report No.: WT178004541 Page 636 of 674

Measurement Results vs. Variation of Temperature—WCDMA850

Temperature	Nominal Frequency (MHz)	Measured Frequency Error(Hz)	Result
-30 °C	836.6	-1.14	Pass
-20 °C	836.6	-0.78	Pass
-10 °C	836.6	-1.51	Pass
0 °C	836.6	-0.38	Pass
+10 °C	836.6	-2.18	Pass
+20 °C	836.6	2.11	Pass
+30 °C	836.6	-1.14	Pass
+40 °C	836.6	2.09	Pass
+50 °C	836.6	0.75	Pass

Measurement Results vs. Variation of Voltage—WCDMA850

Voltage	Nominal Frequency (MHz)	Measured Frequency Error(Hz)	Result
3.5 V	836.6	-4.85	Pass
3.8 V	836.6	0.82	Pass
4.35 V	836.6	-3.02	Pass

Report No.: WT178004541 Page 637 of 674

Measurement Results vs. Variation of Temperature — GSM1900

Temperature	Nominal Frequency (MHz)	Measured Frequency Error(Hz)	Result
-30 °C	1880.0	34.22	Pass
-20 °C	1880.0	34.09	Pass
-10 °C	1880.0	32.22	Pass
0 °C	1880.0	34.42	Pass
+10 °C	1880.0	33.19	Pass
+20 °C	1880.0	35.19	Pass
+30 °C	1880.0	31.96	Pass
+40 °C	1880.0	33.90	Pass
+50 °C	1880.0	33.13	Pass

Measurement Results vs. Variation of Voltage — GSM1900

		<u> </u>	
Voltage	Nominal Frequency (MHz)	Measured Frequency Error(Hz)	Result
3.5 V	1880.0	35.13	Pass
3.8 V	1880.0	35.13	Pass
4.35 V	1880.0	31.19	Pass

Report No.: WT178004541 Page 638 of 674

Measurement Results vs. Variation of Temperature—EDGE1900

Temperature	Nominal Frequency (MHz)	Measured Frequency Error(Hz)	Result
-30 °C	1880.0	34.71	Pass
-20 °C	1880.0	34.48	Pass
-10 °C	1880.0	28.57	Pass
0 °C	1880.0	28.25	Pass
+10 °C	1880.0	29.06	Pass
+20 °C	1880.0	27.73	Pass
+30 °C	1880.0	30.90	Pass
+40 °C	1880.0	35.97	Pass
+50 °C	1880.0	34.74	Pass

Measurement Results vs. Variation of Voltage—EDGE1900

Voltage	Nominal Frequency (MHz)	Measured Frequency Error(Hz)	Result
3.5 V	1880.0	31.61	Pass
3.8 V	1880.0	32.12	Pass
4.35 V	1880.0	30.83	Pass

Report No.: WT178004541 Page 639 of 674

Measurement Results vs. Variation of Temperature—WCDMA1900

Temperature	Nominal Frequency (MHz)	Measured Frequency Error(Hz)	Result
-30 °C	1880.0	-5.40	Pass
-20 °C	1880.0	-0.40	Pass
-10 °C	1880.0	-4.43	Pass
0 °C	1880.0	1.17	Pass
+10 °C	1880.0	-1.89	Pass
+20 °C	1880.0	0.67	Pass
+30 °C	1880.0	0.52	Pass
+40 °C	1880.0	1.56	Pass
+50 °C	1880.0	1.24	Pass

Measurement Results vs. Variation of Voltage—WCDMA1900

Voltage	Nominal Frequency (MHz)	Measured Frequency Error(Hz)	Result
3.5 V	1880.0	-3.07	Pass
3.8 V	1880.0	4.93	Pass
4.35 V	1880.0	-1.10	Pass

Report No.: WT178004541 Page 640 of 674

Measurement Results vs. Variation of Temperature—WCDMA1700

Temperature	Nominal Frequency (MHz)	Measured Frequency Error(Hz)	Result
-30 °C	1732.6	1.22	Pass
-20 °C	1732.6	3.40	Pass
-10 °C	1732.6	0.17	Pass
0 °C	1732.6	2.88	Pass
+10 °C	1732.6	2.09	Pass
+20 °C	1732.6	-3.08	Pass
+30 °C	1732.6	4.70	Pass
+40 °C	1732.6	-0.37	Pass
+50 °C	1732.6	-0.87	Pass

Measurement Results vs. Variation of Voltage—WCDMA1700

Voltage	Nominal Frequency (MHz)	Measured Frequency Error(Hz)	Result
3.5 V	1732.6	-2.00	Pass
3.8 V	1732.6	2.09	Pass
4.35 V	1732.6	-5.91	Pass

Report No.: WT178004541 Page 641 of 674

Measurement Results vs. Variation of Voltage—LTE Band 2(1.4MHZ)

Modulation	Nominal Frequency (MHz)	Voltage [Vdc]	Measured Frequency Error(Hz)	Verdict
		3.5	-3.98	PASS
QPSK	1880	3.8	0.29	PASS
		4.35	0.00	PASS
		3.5	-1.47	PASS
16QAM	1880	3.8	-2.98	PASS
		4.35	-0.79	PASS

Measurement Results vs. Variation of Temperature—LTE Band 2(1.4MHZ)

Modulation	Nominal Frequency (MHz)	Temperature	Measured Frequency Error(Hz)	Verdict
	, ,	-30 °C	-1.03	PASS
		-20 °C	0.00	PASS
		-10 °C	-1.03	PASS
		0 °C	-2.60	PASS
QPSK	1880	+10 °C	-0.49	PASS
		+20 °C	-2.56	PASS
		+30 °C	0.59	PASS
		+40 °C	-0.24	PASS
		+50 °C	-2.30	PASS
		-30 °C	-2.86	PASS
		-20 °C	-0.26	PASS
		-10 °C	-1.87	PASS
		0 °C	-0.74	PASS
16QAM	1880	+10 °C	-1.63	PASS
		+20 °C	0.47	PASS
		+30 °C	-0.11	PASS
		+40 °C	0.64	PASS
		+50 °C	1.12	PASS

Report No.: WT178004541 Page 642 of 674

Measurement Results vs. Variation of Voltage—LTE Band 2(3MHZ)

Modulation	Nominal Frequency (MHz)	Voltage [Vdc]	Measured Frequency Error(Hz)	Verdict
		3.5	-2.92	PASS
QPSK	1880	3.8	-0.97	PASS
		4.35	-1.00	PASS
		3.5	0.77	PASS
16QAM	1880	3.8	0.89	PASS
		4.35	-0.72	PASS

Measurement Results vs. Variation of Temperature—LTE Band 2(3MHZ)

		uito voi variationi e	of remperature LTL D	ana 2(0111112)
Modulation	Nominal Frequency (MHz)	Temperature	Measured Frequency Error(Hz)	Verdict
	,	-30 °C	0.77	PASS
		-20 °C	-0.66	PASS
		-10 °C	-2.15	PASS
		0 °C	-2.20	PASS
QPSK	1880	+10 °C	-1.32	PASS
		+20 °C	-2.27	PASS
		+30 °C	-2.02	PASS
		+40 °C	-3.39	PASS
		+50 °C	-2.92	PASS
		-30 °C	-1.60	PASS
		-20 °C	-3.02	PASS
		-10 °C	-1.92	PASS
		0 °C	-2.15	PASS
16QAM	1880	+10 °C	-2.06	PASS
		+20 °C	1.14	PASS
		+30 °C	-1.30	PASS
		+40 °C	-0.23	PASS
		+50 °C	-2.93	PASS

Report No.: WT178004541 Page 643 of 674

Measurement Results vs. Variation of Voltage—LTE Band 2(5MHZ)

Modulation	Nominal Frequency (MHz)	Voltage [Vdc]	Measured Frequency Error(Hz)	Verdict
		3.5	0.93	PASS
QPSK	1880	3.8	-3.59	PASS
		4.35	4.91	PASS
		3.5	-1.23	PASS
16QAM	1880	3.8	-5.97	PASS
		4.35	3.22	PASS

Measurement Results vs. Variation of Temperature—LTE Band 2(5MHZ)

	Wicdourdment Resource vs. Variation of Temperature ETE Bana 2(0WH2)				
Modulation	Nominal Frequency (MHz)	Temperature	Measured Frequency Error(Hz)	Verdict	
	, ,	-30 °C	-0.82	PASS	
		-20 °C	-0.47	PASS	
		-10 °C	0.27	PASS	
		0 °C	-2.32	PASS	
QPSK	1880	+10 °C	-4.03	PASS	
		+20 °C	-4.99	PASS	
		+30 °C	-4.76	PASS	
		+40 °C	-3.98	PASS	
		+50 °C	3.65	PASS	
		-30 °C	-0.24	PASS	
		-20 °C	3.36	PASS	
		-10 °C	2.17	PASS	
		0 °C	-2.83	PASS	
16QAM	1880	+10 °C	-2.05	PASS	
		+20 °C	-0.90	PASS	
		+30 °C	-0.97	PASS	
		+40 °C	-6.49	PASS	
		+50 °C	-6.39	PASS	

Report No.: WT178004541 Page 644 of 674

Measurement Results vs. Variation of Voltage—LTE Band 2(10MHZ)

Modulation	Nominal Frequency (MHz)	Voltage [Vdc]	Measured Frequency Error(Hz)	Verdict
		3.5	-1.29	PASS
QPSK	1880	3.8	-1.90	PASS
		4.35	-2.10	PASS
		3.5	-0.26	PASS
16QAM	1880	3.8	-1.59	PASS
		4.35	0.00	PASS

Measurement Results vs. Variation of Temperature—LTE Band 2(10MHZ)

	oadardinoni rec	sallo voi variation	or romporator L	TE Dana 2 (TOMITIZ)
Modulation	Nominal Frequency (MHz)	Temperature	Measured Frequency Error(Hz)	Verdict
	, ,	-30 °C	-1.93	PASS
		-20 °C	0.06	PASS
		-10 °C	0.40	PASS
		0 °C	-0.67	PASS
QPSK	1880	+10 °C	-0.34	PASS
		+20 °C	-1.26	PASS
		+30 °C	-1.62	PASS
		+40 °C	-0.87	PASS
		+50 °C	-1.07	PASS
		-30 °C	-2.82	PASS
		-20 °C	-1.83	PASS
		-10 °C	-2.83	PASS
		0 °C	-0.74	PASS
16QAM	1880	+10 °C	-0.80	PASS
		+20 °C	-1.16	PASS
		+30 °C	0.44	PASS
		+40 °C	-1.47	PASS
		+50 °C	-2.76	PASS

Report No.: WT178004541 Page 645 of 674

Measurement Results vs. Variation of Voltage—LTE Band 2(15MHZ)

Modulation	Nominal Frequency (MHz)	Voltage [Vdc]	Measured Frequency Error(Hz)	Verdict
		3.5	-0.86	PASS
QPSK	1880	3.8	-0.41	PASS
		4.35	-0.90	PASS
		3.5	-0.26	PASS
16QAM	1880	3.8	-0.23	PASS
		4.35	-1.02	PASS

Measurement Results vs. Variation of Temperature—LTE Band 2(15MHZ)

	Wedsdrenie it results vs. variation of remperature LTE Band 2 (1611/12)				
Modulation	Nominal Frequency (MHz)	Temperature	Measured Frequency Error(Hz)	Verdict	
	,	-30 °C	-1.44	PASS	
		-20 °C	-1.86	PASS	
		-10 °C	-1.86	PASS	
		0 °C	-1.73	PASS	
QPSK	1880	+10 °C	-2.62	PASS	
		+20 °C	-1.66	PASS	
		+30 °C	-2.36	PASS	
		+40 °C	-2.62	PASS	
		+50 °C	-0.77	PASS	
		-30 °C	-1.49	PASS	
		-20 °C	-1.65	PASS	
		-10 °C	-1.36	PASS	
		0 °C	-1.96	PASS	
16QAM	1880	+10 °C	0.33	PASS	
		+20 °C	-0.27	PASS	
		+30 °C	-1.40	PASS	
		+40 °C	-0.11	PASS	
		+50 °C	-2.93	PASS	

Report No.: WT178004541 Page 646 of 674

Measurement Results vs. Variation of Voltage—LTE Band 2(20MHZ)

Modulation	Nominal Frequency (MHz)	Voltage [Vdc]	Measured Frequency Error(Hz)	Verdict
		3.5	2.52	PASS
QPSK	1880	3.8	-2.32	PASS
		4.35	-1.26	PASS
		3.5	2.62	PASS
16QAM	1880	3.8	-1.73	PASS
		4.35	-2.09	PASS

Measurement Results vs. Variation of Temperature—LTE Band 2(20MHZ)

Wedgerement Results vs. Variation of Temperature ETE Band 2(2014) 12)				
Modulation	Nominal Frequency (MHz)	Temperature	Measured Frequency Error(Hz)	Verdict
	, ,	-30 °C	2.09	PASS
		-20 °C	1.82	PASS
		-10 °C	2.12	PASS
		0 °C	2.72	PASS
QPSK	1880	+10 °C	-2.09	PASS
		+20 °C	-1.62	PASS
		+30 °C	-1.27	PASS
		+40 °C	-1.52	PASS
		+50 °C	-0.82	PASS
		-30 °C	-1.77	PASS
		-20 °C	-0.39	PASS
		-10 °C	-0.83	PASS
		0 °C	1.00	PASS
16QAM	1880	+10 °C	1.06	PASS
		+20 °C	1.96	PASS
		+30 °C	2.00	PASS
		+40 °C	-1.77	PASS
		+50 °C	-2.55	PASS

Report No.: WT178004541 Page 647 of 674

Measurement Results vs. Variation of Voltage—LTE Band 4(1.4MHZ)

Modulation	Nominal Frequency (MHz)	Voltage [Vdc]	Measured Frequency Error(Hz)	Verdict
		3.5	1.32	PASS
QPSK	1732.5	3.8	1.10	PASS
		4.35	-1.03	PASS
		3.5	0.63	PASS
16QAM	1732.5	3.8	2.89	PASS
		4.35	-0.50	PASS

Measurement Results vs. Variation of Temperature—LTE Band 4(1.4MHZ)

Measurement Results vs. Variation of Temperature—LTE Band 4(1.4MHZ)				
Modulation	Nominal Frequency	Temperature	Measured Frequency	Verdict
Woddiation	(MHz)	Temperature	Error(Hz)	verdict
		-30 °C	0.60	PASS
		-20 °C	1.06	PASS
		-10 °C	0.41	PASS
		0 °C	0.86	PASS
QPSK	1732.5	+10 °C	2.37	PASS
		+20 °C	1.27	PASS
		+30 °C	1.95	PASS
		+40 °C	2.52	PASS
		+50 °C	-0.19	PASS
		-30 °C	-0.27	PASS
		-20 °C	-4.21	PASS
		-10 °C	0.96	PASS
		0 °C	4.12	PASS
16QAM	1732.5	+10 °C	0.46	PASS
		+20 °C	1.49	PASS
		+30 °C	3.38	PASS
		+40 °C	1.02	PASS
		+50 °C	0.89	PASS

Report No.: WT178004541 Page 648 of 674

Measurement Results vs. Variation of Voltage—LTE Band 4(3MHZ)

Modulation	Nominal Frequency (MHz)	Voltage [Vdc]	Measured Frequency Error(Hz)	Verdict
		3.5	0.67	PASS
QPSK	1732.5	3.8	-0.10	PASS
		4.35	-2.22	PASS
		3.5	1.95	PASS
16QAM	1732.5	3.8	-0.84	PASS
		4.35	3.45	PASS

Measurement Results vs. Variation of Temperature—LTE Band 4(3MHZ)

Measurement Results vs. Variation of Temperature LTL Band 4(SWI12)				
Modulation	Nominal Frequency (MHz)	Temperature	Measured Frequency Error(Hz)	Verdict
	, ,	-30 °C	3.28	PASS
		-20 °C	0.86	PASS
		-10 °C	0.67	PASS
		0 °C	2.07	PASS
QPSK	1732.5	+10 °C	0.44	PASS
		+20 °C	-1.32	PASS
		+30 °C	1.19	PASS
		+40 °C	0.92	PASS
		+50 °C	2.46	PASS
		-30 °C	2.26	PASS
		-20 °C	-0.26	PASS
		-10 °C	1.32	PASS
		0 °C	1.65	PASS
16QAM	1732.5	+10 °C	0.72	PASS
		+20 °C	4.71	PASS
		+30 °C	2.05	PASS
		+40 °C	1.49	PASS
		+50 °C	-1.53	PASS

Report No.: WT178004541 Page 649 of 674

Measurement Results vs. Variation of Voltage—LTE Band 4(5MHZ)

Modulation	Nominal Frequency (MHz)	Voltage [Vdc]	Measured Frequency Error(Hz)	Verdict
		3.5	0.21	PASS
QPSK	1732.5	3.8	-1.07	PASS
		4.35	-0.93	PASS
		3.5	0.29	PASS
16QAM	1732.5	3.8	-0.03	PASS
		4.35	0.10	PASS

Measurement Results vs. Variation of Temperature—LTE Band 4(5MHZ)

Modulation	Nominal Frequency (MHz)	Temperature	Measured Frequency Error(Hz)	Verdict
	, ,	-30 °C	0.13	PASS
		-20 °C	1.92	PASS
		-10 °C	1.14	PASS
		0 °C	-0.24	PASS
QPSK	1732.5	+10 °C	0.11	PASS
		+20 °C	-1.13	PASS
		+30 °C	-0.92	PASS
		+40 °C	-0.63	PASS
		+50 °C	-0.99	PASS
		-30 °C	-1.36	PASS
		-20 °C	-0.49	PASS
		-10 °C	-1.75	PASS
		0 °C	1.33	PASS
16QAM	1732.5	+10 °C	1.89	PASS
		+20 °C	2.98	PASS
		+30 °C	0.86	PASS
		+40 °C	1.30	PASS
		+50 °C	-0.50	PASS

Report No.: WT178004541 Page 650 of 674

Measurement Results vs. Variation of Voltage—LTE Band 4(10MHZ)

Modulation	Nominal Frequency (MHz)	Voltage [Vdc]	Measured Frequency Error(Hz)	Verdict
		3.5	-0.17	PASS
QPSK	1732.5	3.8	1.92	PASS
		4.35	-1.67	PASS
		3.5	-1.30	PASS
16QAM	1732.5	3.8	1.24	PASS
		4.35	-0.99	PASS

Measurement Results vs. Variation of Temperature—LTE Band 4(10MHZ)

		T	•	1 (10111112)
Modulation	Nominal Frequency (MHz)	Temperature	Measured Frequency Error(Hz)	Verdict
		-30 °C	-0.67	PASS
		-20 °C	0.14	PASS
		-10 °C	-0.69	PASS
		0 °C	-1.87	PASS
QPSK	1732.5	+10 °C	2.90	PASS
		+20 °C	3.40	PASS
		+30 °C	1.93	PASS
		+40 °C	2.75	PASS
		+50 °C	-1.60	PASS
		-30 °C	-1.02	PASS
		-20 °C	-0.63	PASS
		-10 °C	-1.46	PASS
		0 °C	-1.09	PASS
16QAM	1732.5	+10 °C	-1.14	PASS
		+20 °C	-2.02	PASS
		+30 °C	-1.10	PASS
		+40 °C	1.32	PASS
		+50 °C	1.60	PASS

Report No.: WT178004541 Page 651 of 674

Measurement Results vs. Variation of Voltage—LTE Band 4(15MHZ)

Modulation	Nominal Frequency (MHz)	Voltage [Vdc]	Measured Frequency Error(Hz)	Verdict
		3.5	-3.18	PASS
QPSK	1732.5	3.8	-0.26	PASS
		4.35	-0.20	PASS
		3.5	-2.23	PASS
16QAM	1732.5	3.8	-0.89	PASS
		4.35	0.34	PASS

Measurement Results vs. Variation of Temperature—LTE Band 4(15MHZ)

Modulation	Nominal Frequency (MHz)	Temperature	Measured Frequency Error(Hz)	Verdict
	, ,	-30 °C	-3.06	PASS
		-20 °C	-1.69	PASS
		-10 °C	-1.83	PASS
		0 °C	-2.40	PASS
QPSK	1732.5	+10 °C	0.27	PASS
		+20 °C	0.70	PASS
		+30 °C	0.44	PASS
		+40 °C	0.20	PASS
		+50 °C	-0.19	PASS
		-30 °C	0.57	PASS
		-20 °C	1.13	PASS
		-10 °C	1.44	PASS
		0 °C	-2.27	PASS
16QAM	1732.5	+10 °C	-2.68	PASS
		+20 °C	-1.69	PASS
		+30 °C	-1.27	PASS
		+40 °C	-0.09	PASS
		+50 °C	-0.54	PASS

Report No.: WT178004541 Page 652 of 674

Measurement Results vs. Variation of Voltage—LTE Band 4(20MHZ)

Modulation	Nominal Frequency (MHz)	Voltage [Vdc]	Measured Frequency Error(Hz)	Verdict
		3.5	-0.73	PASS
QPSK	1732.5	3.8	0.16	PASS
		4.35	-0.79	PASS
		3.5	0.33	PASS
16QAM	1732.5	3.8	0.84	PASS
		4.35	0.34	PASS

Measurement Results vs. Variation of Temperature—LTE Band 4(20MHZ)

inicacurement recounts vs. variation of reimperature. ETE band 4(2011/12)				
Modulation	Nominal Frequency (MHz)	Temperature	Measured Frequency Error(Hz)	Verdict
	, ,	-30 °C	-0.24	PASS
		-20 °C	0.09	PASS
		-10 °C	-0.53	PASS
		0 °C	-0.09	PASS
QPSK	1732.5	+10 °C	0.76	PASS
		+20 °C	2.10	PASS
		+30 °C	0.97	PASS
		+40 °C	0.74	PASS
		+50 °C	0.51	PASS
		-30 °C	0.09	PASS
		-20 °C	0.76	PASS
		-10 °C	-0.13	PASS
		0 °C	-0.36	PASS
16QAM	1732.5	+10 °C	-0.04	PASS
		+20 °C	-0.76	PASS
		+30 °C	-0.86	PASS
		+40 °C	0.89	PASS
		+50 °C	1.95	PASS

Report No.: WT178004541 Page 653 of 674

Measurement Results vs. Variation of Voltage—LTE Band 5(1.4MHZ)

Modulation	Nominal Frequency (MHz)	Voltage [Vdc]	Measured Frequency Error(Hz)	Verdict
		3.5	-2.49	PASS
QPSK	836.5	3.8	0.37	PASS
		4.35	1.59	PASS
		3.5	-2.10	PASS
16QAM	836.5	3.8	2.05	PASS
		4.35	-0.04	PASS

Measurement Results vs. Variation of Temperature—LTE Band 5(1.4MHZ)

Modulation	Nominal Frequency (MHz)	Temperature	Measured Frequency Error(Hz)	Verdict
	, ,	-30 °C	0.50	PASS
		-20 °C	-2.72	PASS
		-10 °C	-0.20	PASS
		0 °C	-2.36	PASS
QPSK	836.5	+10 °C	2.47	PASS
		+20 °C	-1.03	PASS
		+30 °C	0.73	PASS
		+40 °C	1.43	PASS
		+50 °C	-1.65	PASS
		-30 °C	1.89	PASS
		-20 °C	1.46	PASS
		-10 °C	-1.62	PASS
		0 °C	1.10	PASS
16QAM	836.5	+10 °C	-2.36	PASS
		+20 °C	-1.73	PASS
		+30 °C	1.19	PASS
		+40 °C	2.66	PASS
		+50 °C	1.17	PASS

Report No.: WT178004541 Page 654 of 674

Measurement Results vs. Variation of Voltage—LTE Band 5(3MHZ)

Modulation	Nominal Frequency (MHz)	Voltage [Vdc]	Measured Frequency Error(Hz)	Verdict
		3.5	0.69	PASS
QPSK	836.5	3.8	0.30	PASS
		4.35	-0.43	PASS
		3.5	-1.43	PASS
16QAM	836.5	3.8	1.87	PASS
		4.35	0.16	PASS

Measurement Results vs. Variation of Temperature—LTE Band 5(3MHZ)

Modulation	Nominal Frequency (MHz)	Temperature	Measured Frequency Error(Hz)	Verdict
	, ,	-30 °C	0.10	PASS
		-20 °C	0.13	PASS
		-10 °C	-1.97	PASS
		0 °C	0.31	PASS
QPSK	836.5	+10 °C	1.86	PASS
		+20 °C	0.69	PASS
		+30 °C	0.31	PASS
		+40 °C	1.29	PASS
		+50 °C	-1.60	PASS
		-30 °C	1.83	PASS
		-20 °C	-1.66	PASS
		-10 °C	1.80	PASS
		0 °C	1.13	PASS
16QAM	836.5	+10 °C	1.32	PASS
		+20 °C	-1.19	PASS
		+30 °C	1.59	PASS
		+40 °C	-2.36	PASS
		+50 °C	1.00	PASS

Report No.: WT178004541 Page 655 of 674

Measurement Results vs. Variation of Voltage—LTE Band 5(5MHZ)

Modulation	Nominal Frequency (MHz)	Voltage [Vdc]	Measured Frequency Error(Hz)	Verdict
		3.5	-0.19	PASS
QPSK	836.5	3.8	1.43	PASS
		4.35	3.72	PASS
		3.5	-2.65	PASS
16QAM	836.5	3.8	0.14	PASS
		4.35	1.02	PASS

Measurement Results vs. Variation of Temperature—LTE Band 5(5MHZ)

Modulation	Nominal Frequency (MHz)	Temperature	Measured Frequency Error(Hz)	Verdict
	, ,	-30 °C	-0.01	PASS
		-20 °C	-0.37	PASS
		-10 °C	-0.41	PASS
		0 °C	0.29	PASS
QPSK	836.5	+10 °C	1.69	PASS
		+20 °C	1.22	PASS
		+30 °C	1.37	PASS
		+40 °C	0.56	PASS
		+50 °C	-1.39	PASS
		-30 °C	0.66	PASS
		-20 °C	0.50	PASS
		-10 °C	1.47	PASS
		0 °C	-3.53	PASS
16QAM	836.5	+10 °C	-2.13	PASS
		+20 °C	-1.00	PASS
		+30 °C	0.33	PASS
		+40 °C	1.07	PASS
		+50 °C	-0.23	PASS

Report No.: WT178004541 Page 656 of 674

Measurement Results vs. Variation of Voltage—LTE Band 5(10MHZ)

Modulation	Nominal Frequency (MHz)	Voltage [Vdc]	Measured Frequency Error(Hz)	Verdict
		3.5	-1.04	PASS
QPSK	836.5	3.8	1.47	PASS
		4.35	-1.54	PASS
		3.5	0.82	PASS
16QAM	836.5	3.8	1.50	PASS
		4.35	-0.17	PASS

Measurement Results vs. Variation of Temperature—LTE Band 5(10MHZ)

	oadaronnont rec	dito vo. variation	or romporatoro i	TE Dana 3 (TOMITE)
Modulation	Nominal Frequency (MHz)	Temperature	Measured Frequency Error(Hz)	Verdict
	, ,	-30 °C	0.83	PASS
		-20 °C	-0.23	PASS
		-10 °C	-0.44	PASS
		0 °C	-0.30	PASS
QPSK	836.5	+10 °C	1.93	PASS
		+20 °C	2.19	PASS
		+30 °C	-0.46	PASS
		+40 °C	-1.03	PASS
		+50 °C	-1.56	PASS
		-30 °C	-0.11	PASS
		-20 °C	-0.33	PASS
		-10 °C	-0.36	PASS
		0 °C	-0.01	PASS
16QAM	836.5	+10 °C	-1.33	PASS
		+20 °C	-1.03	PASS
		+30 °C	-0.44	PASS
		+40 °C	1.10	PASS
		+50 °C	-0.21	PASS

Report No.: WT178004541 Page 657 of 674

Measurement Results vs. Variation of Voltage—LTE Band 7(5MHZ)

Modulation	Nominal Frequency (MHz)	Voltage [Vdc]	Measured Frequency Error(Hz)	Verdict
		3.5	3.26	PASS
QPSK	2535	3.8	3.55	PASS
		4.35	-2.27	PASS
		3.5	6.74	PASS
16QAM	2535	3.8	4.49	PASS
		4.35	-2.50	PASS

Measurement Results vs. Variation of Temperature—LTE Band 7(5MHZ)

IVI	easurement ites	sults vs. variation	or remperature i	LIL Dalid / (Sivil IZ)
Modulation	Nominal Frequency (MHz)	Temperature	Measured Frequency Error(Hz)	Verdict
	, ,	-30 °C	8.68	PASS
		-20 °C	5.55	PASS
		-10 °C	4.51	PASS
		0 °C	6.42	PASS
QPSK	2535	+10 °C	3.16	PASS
		+20 °C	3.66	PASS
		+30 °C	3.59	PASS
		+40 °C	4.36	PASS
		+50 °C	-0.24	PASS
		-30 °C	0.57	PASS
		-20 °C	-0.62	PASS
		-10 °C	-2.55	PASS
		0 °C	7.84	PASS
16QAM	2535	+10 °C	8.11	PASS
		+20 °C	4.09	PASS
		+30 °C	6.42	PASS
		+40 °C	3.18	PASS
		+50 °C	3.65	PASS

Report No.: WT178004541 Page 658 of 674

Measurement Results vs. Variation of Voltage—LTE Band 7(10MHZ)

Modulation	Nominal Frequency (MHz)	Voltage [Vdc]	Measured Frequency Error(Hz)	Verdict
		3.5	-0.60	PASS
QPSK	2535	3.8	2.86	PASS
		4.35	0.73	PASS
		3.5	-1.77	PASS
16QAM	2535	3.8	0.64	PASS
		4.35	0.44	PASS

Measurement Results vs. Variation of Temperature—LTE Band 7(10MHZ)

		T		<u> </u>
Modulation	Nominal Frequency (MHz)	Temperature	Measured Frequency Error(Hz)	Verdict
		-30 °C	0.11	PASS
		-20 °C	-1.73	PASS
		-10 °C	0.30	PASS
		0 °C	0.67	PASS
QPSK	2535	+10 °C	3.10	PASS
		+20 °C	1.57	PASS
		+30 °C	2.12	PASS
		+40 °C	-0.89	PASS
		+50 °C	2.26	PASS
		-30 °C	-0.19	PASS
		-20 °C	1.54	PASS
		-10 °C	0.57	PASS
		0 °C	0.43	PASS
16QAM	2535	+10 °C	-0.50	PASS
		+20 °C	-0.90	PASS
		+30 °C	-1.49	PASS
		+40 °C	1.02	PASS
		+50 °C	-0.46	PASS

Report No.: WT178004541 Page 659 of 674

Measurement Results vs. Variation of Voltage—LTE Band 7(15MHZ)

Modulation	Nominal Frequency (MHz)	Voltage [Vdc]	Measured Frequency Error(Hz)	Verdict
		3.5	-0.84	PASS
QPSK	2535	3.8	0.13	PASS
		4.35	1.66	PASS
		3.5	-0.50	PASS
16QAM	2535	3.8	0.09	PASS
		4.35	0.09	PASS

Measurement Results vs. Variation of Temperature—LTE Band 7(15MHZ)

	oadardinoni rec	sallo voi variation	or romporatoro L	TE Dana / (131VII 12)
Modulation	Nominal Frequency (MHz)	Temperature	Measured Frequency Error(Hz)	Verdict
	, ,	-30 °C	-0.34	PASS
		-20 °C	0.92	PASS
		-10 °C	-1.14	PASS
		0 °C	-0.24	PASS
QPSK	2535	+10 °C	-0.56	PASS
		+20 °C	0.14	PASS
		+30 °C	-0.86	PASS
		+40 °C	-1.02	PASS
		+50 °C	0.73	PASS
		-30 °C	-0.01	PASS
		-20 °C	0.49	PASS
		-10 °C	0.53	PASS
		0 °C	1.85	PASS
16QAM	2535	+10 °C	-1.63	PASS
		+20 °C	1.54	PASS
		+30 °C	-0.30	PASS
		+40 °C	-0.13	PASS
		+50 °C	0.66	PASS

Report No.: WT178004541 Page 660 of 674

Measurement Results vs. Variation of Voltage—LTE Band 7(20MHZ)

Modulation	Nominal Frequency (MHz)	Voltage [Vdc]	Measured Frequency Error(Hz)	Verdict
		3.5	3.08	PASS
QPSK	2535	3.8	0.09	PASS
		4.35	-3.73	PASS
		3.5	2.78	PASS
16QAM	2535	3.8	1.06	PASS
		4.35	-2.12	PASS

Measurement Results vs. Variation of Temperature—LTE Band 7(20MHZ)

	Wedderment Reduction of Temperature ETE Band ((2011)12)				
Modulation	Nominal Frequency (MHz)	Temperature	Measured Frequency Error(Hz)	Verdict	
	, ,	-30 °C	4.41	PASS	
		-20 °C	2.49	PASS	
		-10 °C	3.62	PASS	
		0 °C	2.55	PASS	
QPSK	2535	+10 °C	1.63	PASS	
		+20 °C	0.83	PASS	
		+30 °C	1.32	PASS	
		+40 °C	0.87	PASS	
		+50 °C	-3.22	PASS	
		-30 °C	-2.32	PASS	
		-20 °C	-1.72	PASS	
		-10 °C	-2.68	PASS	
		0 °C	4.09	PASS	
16QAM	2535	+10 °C	4.42	PASS	
		+20 °C	3.19	PASS	
		+30 °C	4.48	PASS	
		+40 °C	0.51	PASS	
		+50 °C	0.90	PASS	

Report No.: WT178004541 Page 661 of 674

Measurement Results vs. Variation of Voltage—LTE Band 12(1.4MHZ)

Modulation	Nominal Frequency (MHz)	Voltage [Vdc]	Measured Frequency Error(Hz)	Verdict
		3.5	-1.52	PASS
QPSK	707.5	3.8	0.17	PASS
		4.35	-0.10	PASS
		3.5	1.77	PASS
16QAM	707.5	3.8	-0.16	PASS
		4.35	-1.22	PASS

Measurement Results vs. Variation of Temperature—LTE Band 12(1.4MHZ)

Measurement Results vs. Variation of Temperature—LTE Band 12(1.4MHZ)				
Modulation	Nominal Frequency (MHz)	Temperature	Measured Frequency Error(Hz)	Verdict
		-30 °C	-0.97	PASS
		-20 °C	-2.03	PASS
		-10 °C	-1.93	PASS
		0 °C	-2.12	PASS
QPSK	707.5	+10 °C	-0.83	PASS
		+20 °C	-1.59	PASS
		+30 °C	2.22	PASS
		+40 °C	-0.37	PASS
		+50 °C	-0.83	PASS
		-30 °C	-1.07	PASS
		-20 °C	-1.49	PASS
		-10 °C	2.85	PASS
		0 °C	-1.17	PASS
16QAM	707.5	+10 °C	1.30	PASS
		+20 °C	-0.53	PASS
		+30 °C	-1.26	PASS
		+40 °C	2.10	PASS
		+50 °C	0.03	PASS

Report No.: WT178004541 Page 662 of 674

Measurement Results vs. Variation of Voltage—LTE Band 12(3MHZ)

Modulation	Nominal Frequency (MHz)	Voltage [Vdc]	Measured Frequency Error(Hz)	Verdict
		3.5	-2.20	PASS
QPSK	707.5	3.8	-3.12	PASS
		4.35	-4.19	PASS
		3.5	-0.49	PASS
16QAM	707.5	3.8	0.97	PASS
		4.35	0.01	PASS

Measurement Results vs. Variation of Temperature—LTE Band 12(3MHZ)

1410		and vo. variation c	i remperature LTL be	and re(ormine)
Modulation	Nominal Frequency (MHz)	Temperature	Measured Frequency Error(Hz)	Verdict
	, ,	-30 °C	0.87	PASS
		-20 °C	-2.56	PASS
		-10 °C	-0.54	PASS
		0 °C	-0.14	PASS
QPSK	707.5	+10 °C	0.70	PASS
		+20 °C	0.83	PASS
		+30 °C	-3.32	PASS
		+40 °C	0.43	PASS
		+50 °C	-0.87	PASS
		-30 °C	-0.67	PASS
		-20 °C	-1.56	PASS
		-10 °C	-1.83	PASS
		0 °C	-3.00	PASS
16QAM	707.5	+10 °C	-0.10	PASS
		+20 °C	-2.35	PASS
		+30 °C	-0.60	PASS
		+40 °C	-0.09	PASS
		+50 °C	1.13	PASS

Report No.: WT178004541 Page 663 of 674

Measurement Results vs. Variation of Voltage—LTE Band 12(5MHZ)

Modulation	Nominal Frequency (MHz)	Voltage [Vdc]	Measured Frequency Error(Hz)	Verdict
		3.5	-2.73	PASS
QPSK	707.5	3.8	1.27	PASS
		4.35	-2.57	PASS
		3.5	0.87	PASS
16QAM	707.5	3.8	-1.40	PASS
		4.35	-1.40	PASS

Measurement Results vs. Variation of Temperature—LTE Band 12(5MHZ)

			•	= 12 Bana 12(0111112)
Modulation	Nominal Frequency (MHz)	Temperature	Measured Frequency Error(Hz)	Verdict
	, ,	-30 °C	-2.62	PASS
		-20 °C	-0.13	PASS
		-10 °C	-0.56	PASS
		0 °C	0.11	PASS
QPSK	707.5	+10 °C	1.56	PASS
		+20 °C	0.89	PASS
		+30 °C	-2.50	PASS
		+40 °C	-0.47	PASS
		+50 °C	-0.76	PASS
		-30 °C	-0.19	PASS
		-20 °C	-0.76	PASS
		-10 °C	-0.82	PASS
		0 °C	-2.86	PASS
16QAM	707.5	+10 °C	-2.35	PASS
		+20 °C	-2.78	PASS
		+30 °C	0.76	PASS
		+40 °C	-2.07	PASS
		+50 °C	-1.73	PASS

Report No.: WT178004541 Page 664 of 674

Measurement Results vs. Variation of Voltage—LTE Band 12(10MHZ)

Modulation	Nominal Frequency (MHz)	Voltage [Vdc]	Measured Frequency Error(Hz)	Verdict
		3.5	-0.70	PASS
QPSK	707.5	3.8	-0.06	PASS
		4.35	0.36	PASS
		3.5	1.00	PASS
16QAM	707.5	3.8	-0.11	PASS
		4.35	0.09	PASS

Measurement Results vs. Variation of Temperature—LTE Band 12(10MHZ)

Measurement Results vs. Variation of Temperature—LTE Band 12(10MHZ)				
Modulation	Nominal Frequency (MHz)	Temperature	Measured Frequency Error(Hz)	Verdict
		-30 °C	0.49	PASS
		-20 °C	-1.46	PASS
		-10 °C	-0.93	PASS
		0 °C	0.00	PASS
QPSK	707.5	+10 °C	-0.77	PASS
		+20 °C	0.14	PASS
		+30 °C	-1.00	PASS
		+40 °C	-0.92	PASS
		+50 °C	1.12	PASS
		-30 °C	-0.67	PASS
		-20 °C	-1.09	PASS
		-10 °C	-0.66	PASS
		0 °C	-1.12	PASS
16QAM	707.5	+10 °C	-1.80	PASS
		+20 °C	-0.14	PASS
		+30 °C	-2.50	PASS
		+40 °C	0.67	PASS
		+50 °C	-1.59	PASS

Report No.: WT178004541 Page 665 of 674

Measurement Results vs. Variation of Voltage—LTE Band 13(5MHZ)

Modulation	Nominal Frequency (MHz)	Voltage [Vdc]	Measured Frequency Error(Hz)	Verdict
		3.5	1.90	PASS
QPSK	782	3.8	-1.33	PASS
		4.35	-1.93	PASS
		3.5	0.39	PASS
16QAM	782	3.8	1.87	PASS
		4.35	1.34	PASS

Measurement Results vs. Variation of Temperature—LTE Band 13(5MHZ)

			T	, ,
Modulation	Nominal Frequency (MHz)	Temperature	Measured Frequency Error(Hz)	Verdict
		-30 °C	1.47	PASS
		-20 °C	0.96	PASS
		-10 °C	-1.37	PASS
		0 °C	-1.46	PASS
QPSK	782	+10 °C	-1.46	PASS
		+20 °C	-2.20	PASS
		+30 °C	-1.46	PASS
		+40 °C	-1.99	PASS
		+50 °C	-1.93	PASS
		-30 °C	-2.85	PASS
		-20 °C	-3.09	PASS
		-10 °C	-3.00	PASS
		0 °C	-0.14	PASS
16QAM	782	+10 °C	-0.36	PASS
		+20 °C	0.04	PASS
		+30 °C	2.00	PASS
		+40 °C	-1.10	PASS
		+50 °C	-1.16	PASS

Report No.: WT178004541 Page 666 of 674

Measurement Results vs. Variation of Voltage—LTE Band 13(10MHZ)

Modulation	Nominal Frequency (MHz)	Voltage [Vdc]	Measured Frequency Error(Hz)	Verdict
		3.5	2.12	PASS
QPSK	782	3.8	-0.54	PASS
		4.35	1.09	PASS
		3.5	-0.77	PASS
16QAM	782	3.8	0.57	PASS
		4.35	1.73	PASS

Measurement Results vs. Variation of Temperature—LTE Band 13(10MHZ)

Measurement Results vs. Variation of Temperature—LTE Band 13(10MHZ)				
Modulation	Nominal Frequency (MHz)	Temperature	Measured Frequency Error(Hz)	Verdict
		-30 °C	1.27	PASS
		-20 °C	1.82	PASS
		-10 °C	0.00	PASS
		0 °C	-0.84	PASS
QPSK	782	+10 °C	0.49	PASS
		+20 °C	0.79	PASS
		+30 °C	0.69	PASS
		+40 °C	1.10	PASS
		+50 °C	-0.59	PASS
		-30 °C	1.50	PASS
		-20 °C	0.60	PASS
		-10 °C	-1.33	PASS
		0 °C	1.06	PASS
16QAM	782	+10 °C	0.41	PASS
		+20 °C	0.31	PASS
		+30 °C	1.10	PASS
		+40 °C	-0.90	PASS
		+50 °C	1.63	PASS

Report No.: WT178004541 Page 667 of 674

Measurement Results vs. Variation of Voltage—LTE Band 17(5MHZ)

Modulation	Nominal Frequency (MHz)	Voltage [Vdc]	Measured Frequency Error(Hz)	Verdict
		3.5	0.83	PASS
QPSK	710	3.8	2.16	PASS
		4.35	-0.60	PASS
		3.5	-0.20	PASS
16QAM	710	3.8	-1.80	PASS
		4.35	-0.83	PASS

Measurement Results vs. Variation of Temperature—LTE Band 17(5MHZ)

Wedderent Reduction of Temperature ETE Band 17 (OWITE)				
Modulation	Nominal Frequency (MHz)	Temperature	Measured Frequency Error(Hz)	Verdict
	, ,	-30 °C	-0.64	PASS
		-20 °C	-0.74	PASS
		-10 °C	-1.06	PASS
		0 °C	-1.33	PASS
QPSK	710	+10 °C	-0.30	PASS
		+20 °C	-2.37	PASS
		+30 °C	1.50	PASS
		+40 °C	0.97	PASS
		+50 °C	-1.69	PASS
		-30 °C	-1.80	PASS
		-20 °C	-1.87	PASS
		-10 °C	-1.99	PASS
		0 °C	0.01	PASS
16QAM	710	+10 °C	0.14	PASS
		+20 °C	0.00	PASS
		+30 °C	0.64	PASS
		+40 °C	-1.80	PASS
		+50 °C	1.57	PASS

Report No.: WT178004541 Page 668 of 674

Measurement Results vs. Variation of Voltage—LTE Band 66(1.4MHZ)

Modulation	Nominal Frequency (MHz)	Voltage [Vdc]	Measured Frequency Error(Hz)	Verdict
		3.5	-113.07	PASS
QPSK	1755	3.8	-118.80	PASS
		4.35	-58.24	PASS
		3.5	-116.90	PASS
16QAM	1755	3.8	-118.40	PASS
		4.35	-116.14	PASS

Measurement Results vs. Variation of Temperature—LTE Band 66 (1.4MHZ)

Modulation	Nominal Frequency (MHz)	Temperature	Measured Frequency Error(Hz)	Verdict
		-30 °C	-91.34	PASS
		-20 °C	-95.07	PASS
		-10 °C	-93.34	PASS
		0 °C	-92.64	PASS
QPSK	1755	+10 °C	-95.27	PASS
		+20 °C	-91.24	PASS
		+30 °C	-116.94	PASS
		+40 °C	-124.65	PASS
		+50 °C	-69.55	PASS
		-30 °C	-124.54	PASS
		-20 °C	-125.47	PASS
		-10 °C	-124.25	PASS
		0 °C	-81.34	PASS
16QAM	1755	+10 °C	-82.55	PASS
		+20 °C	-75.33	PASS
		+30 °C	-83.67	PASS
		+40 °C	-84.07	PASS
		+50 °C	-80.18	PASS

Report No.: WT178004541 Page 669 of 674

Measurement Results vs. Variation of Voltage—LTE Band 66 (3MHZ)

Modulation	Nominal Frequency (MHz)	Voltage [Vdc]	Measured Frequency Error(Hz)	Verdict
QPSK	1755	3.5	-126.39	PASS
		3.8	-81.67	PASS
		4.35	-124.61	PASS
		3.5	-125.21	PASS
16QAM	1755	3.8	-123.40	PASS
		4.35	-123.28	PASS

Measurement Results vs. Variation of Temperature—LTE Band 66 (3MHZ)

ineasurement results vs. variation of remperature ETE band oo (Sini 12)					
Modulation	Nominal Frequency (MHz)	Temperature	Measured Frequency Error(Hz)	Verdict	
	, ,	-30 °C	-95.83	PASS	
		-20 °C	-94.69	PASS	
		-10 °C	-92.91	PASS	
		0 °C	-91.74	PASS	
QPSK	1755	+10 °C	-94.56	PASS	
		+20 °C	-94.10	PASS	
		+30 °C	-80.88	PASS	
		+40 °C	-80.57	PASS	
		+50 °C	-80.94	PASS	
		-30 °C	-79.41	PASS	
		-20 °C	-81.01	PASS	
		-10 °C	-81.44	PASS	
		0 °C	-94.10	PASS	
16QAM	1755	+10 °C	-92.97	PASS	
		+20 °C	-92.91	PASS	
		+30 °C	-92.90	PASS	
		+40 °C	-93.98	PASS	
		+50 °C	-93.94	PASS	

Report No.: WT178004541 Page 670 of 674

Measurement Results vs. Variation of Voltage—LTE Band 66 (5MHZ)

Modulation	Nominal Frequency (MHz)	Voltage [Vdc]	Measured Frequency Error(Hz)	Verdict
QPSK	1755	3.5	-97.55	PASS
		3.8	-95.10	PASS
		4.35	-95.63	PASS
		3.5	-94.14	PASS
16QAM	1755	3.8	-95.37	PASS
		4.35	-93.28	PASS

Measurement Results vs. Variation of Temperature—LTE Band 66(5MHZ)

	oacaronnoni rec	Jako vo: Variation	or romporatoro E	TE Dana 00(51vii 12)
Modulation	Nominal Frequency (MHz)	Temperature	Measured Frequency Error(Hz)	Verdict
	, ,	-30 °C	-83.90	PASS
		-20 °C	-84.27	PASS
		-10 °C	-81.73	PASS
		0 °C	-84.41	PASS
QPSK	1755	+10 °C	-83.60	PASS
		+20 °C	-82.96	PASS
		+30 °C	-93.48	PASS
		+40 °C	-94.50	PASS
		+50 °C	-95.23	PASS
		-30 °C	-94.34	PASS
		-20 °C	-93.73	PASS
		-10 °C	-93.07	PASS
		0 °C	-97.93	PASS
16QAM	1755	+10 °C	-96.67	PASS
		+20 °C	-97.56	PASS
		+30 °C	-96.96	PASS
		+40 °C	-95.44	PASS
		+50 °C	-98.05	PASS

Report No.: WT178004541 Page 671 of 674

Measurement Results vs. Variation of Voltage—LTE Band 66(10MHZ)

Modulation	Nominal Frequency (MHz)	Voltage [Vdc]	Measured Frequency Error(Hz)	Verdict
	1755	3.5	-81.57	PASS
QPSK		3.8	-82.07	PASS
		4.35	-82.00	PASS
16QAM	1755	3.5	-80.31	PASS
		3.8	-82.07	PASS
		4.35	-82.35	PASS

Measurement Results vs. Variation of Temperature—LTE Band 4(10MHZ)

	oadardinoni rec	Jane vo. variation	or romporatoro L	TE Dana + (TOMITE)
Modulation	Nominal Frequency (MHz)	Temperature	Measured Frequency Error(Hz)	Verdict
		-30 °C	-93.57	PASS
		-20 °C	-94.16	PASS
		-10 °C	-93.66	PASS
		0 °C	-92.68	PASS
QPSK	1755	+10 °C	-94.00	PASS
		+20 °C	-94.01	PASS
		+30 °C	-97.40	PASS
		+40 °C	-97.60	PASS
		+50 °C	-96.96	PASS
		-30 °C	-97.90	PASS
		-20 °C	-96.75	PASS
		-10 °C	-96.30	PASS
		0 °C	-94.11	PASS
16QAM	1755	+10 °C	-94.40	PASS
		+20 °C	-93.60	PASS
		+30 °C	-94.18	PASS
		+40 °C	-94.37	PASS
		+50 °C	-92.28	PASS

Report No.: WT178004541 Page 672 of 674

Measurement Results vs. Variation of Voltage—LTE Band 66(15MHZ)

Modulation	Nominal Frequency (MHz)	Voltage [Vdc]	Measured Frequency Error(Hz)	Verdict
	1755	3.5	-101.90	PASS
QPSK		3.8	-81.71	PASS
		4.35	-79.39	PASS
		3.5	-81.50	PASS
16QAM	1755	3.8	-79.26	PASS
		4.35	-82.50	PASS

Measurement Results vs. Variation of Temperature—LTE Band 66(15MHZ)

Measurement Results vs. variation of Temperature—LTE Band 66(15MHZ)				
Modulation	Nominal Frequency (MHz)	Temperature	Measured Frequency Error(Hz)	Verdict
	, ,	-30 °C	-98.33	PASS
		-20 °C	-97.27	PASS
		-10 °C	-95.29	PASS
		0 °C	-95.99	PASS
QPSK	1755	+10 °C	-94.91	PASS
		+20 °C	-94.34	PASS
		+30 °C	-81.28	PASS
		+40 °C	-92.54	PASS
		+50 °C	-91.82	PASS
		-30 °C	-91.57	PASS
		-20 °C	-91.34	PASS
		-10 °C	-94.30	PASS
		0 °C	-99.33	PASS
16QAM	1755	+10 °C	-96.12	PASS
		+20 °C	-98.28	PASS
		+30 °C	-94.96	PASS
		+40 °C	-93.88	PASS
		+50 °C	-96.26	PASS

Report No.: WT178004541 Page 673 of 674

Measurement Results vs. Variation of Voltage—LTE Band 66(20MHZ)

Modulation	Nominal Frequency (MHz)	Voltage [Vdc]	Measured Frequency Error(Hz)	Verdict
	1755	3.5	-99.38	PASS
QPSK		3.8	-91.77	PASS
		4.35	-102.54	PASS
		3.5	-102.91	PASS
16QAM	1755	3.8	-99.98	PASS
		4.35	-101.32	PASS

Measurement Results vs. Variation of Temperature—LTE Band 66(20MHZ)

Measurement Results vs. Variation of Temperature—LTE Band 66(20MHZ)					
Modulation	Nominal Frequency (MHz)	Temperature	Measured Frequency Error(Hz)	Verdict	
		-30 °C	-91.57	PASS	
		-20 °C	-91.82	PASS	
		-10 °C	-92.12	PASS	
		0 °C	-88.48	PASS	
QPSK	1755	+10 °C	-91.25	PASS	
		+20 °C	-92.88	PASS	
		+30 °C	-96.56	PASS	
		+40 °C	-96.95	PASS	
		+50 °C	-95.23	PASS	
		-30 °C	-94.73	PASS	
		-20 °C	-95.40	PASS	
		-10 °C	-96.93	PASS	
		0 °C	-97.10	PASS	
16QAM	1755	+10 °C	-94.10	PASS	
		+20 °C	-98.35	PASS	
		+30 °C	-95.66	PASS	
		+40 °C	-96.06	PASS	
		+50 °C	-96.06	PASS	

Report No.: WT178004541 Page 674 of 674