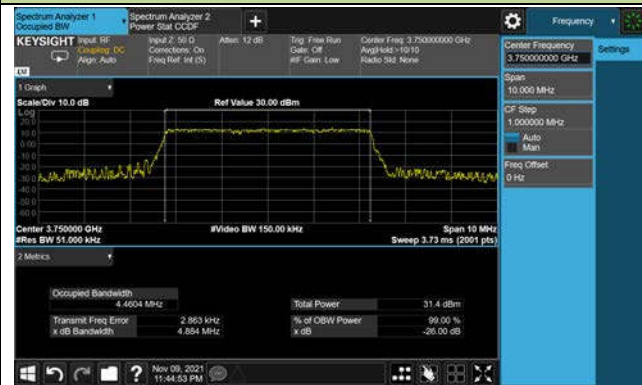


99% Bandwidth - QPSK

5MHz Channel Bandwidth



10MHz Channel Bandwidth



15MHz Channel Bandwidth

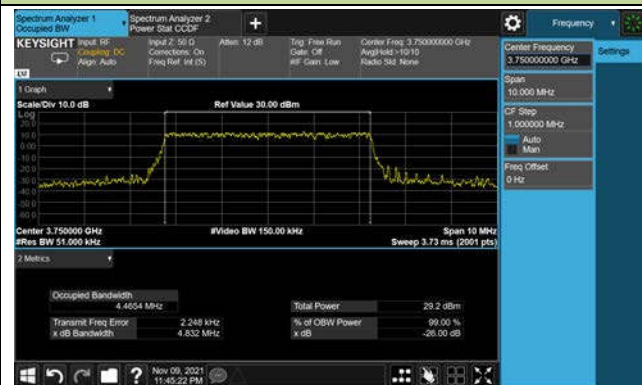


20MHz Channel Bandwidth

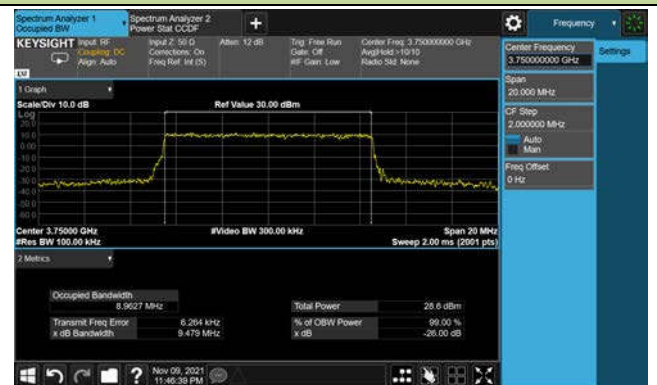


99% Bandwidth - 16QAM

5MHz Channel Bandwidth



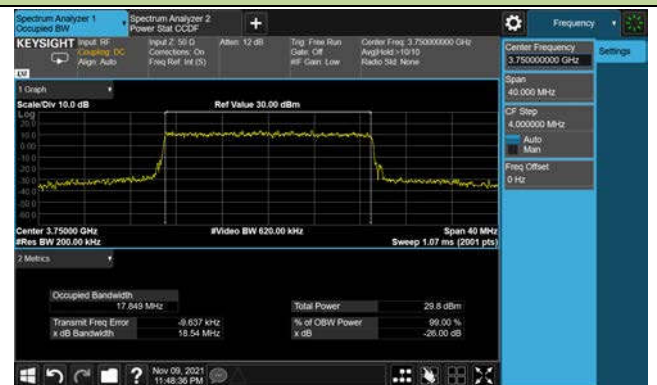
10MHz Channel Bandwidth



15MHz Channel Bandwidth



20MHz Channel Bandwidth



Product	LTE Module	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/11/05
Test Band	LTE Band 71		

Channel	Frequency (MHz)	Bandwidth (MHz)	99% Bandwidth (MHz)
QPSK			
133297	680.5	5	4.48
		10	8.95
		15	13.40
		20	17.84
16QAM			
133297	680.5	5	4.47
		10	8.96
		15	13.40
		20	17.89

99% Bandwidth - QPSK

5MHz Channel Bandwidth



10MHz Channel Bandwidth



15MHz Channel Bandwidth



20MHz Channel Bandwidth

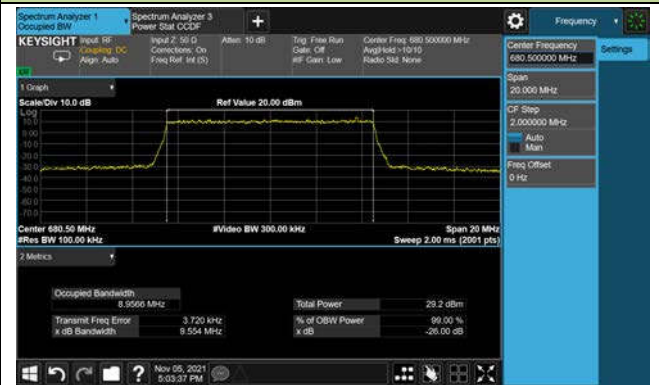


99% Bandwidth - 16QAM

5MHz Channel Bandwidth



10MHz Channel Bandwidth



15MHz Channel Bandwidth



20MHz Channel Bandwidth



5.3. Frequency Stability Measurement

5.3.1. Test Limit

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

5.3.2. Test Procedure

ANSI C63.26-2015 - Section 5.6

5.3.3. Test Setting

Frequency Stability Under Temperature Variations:

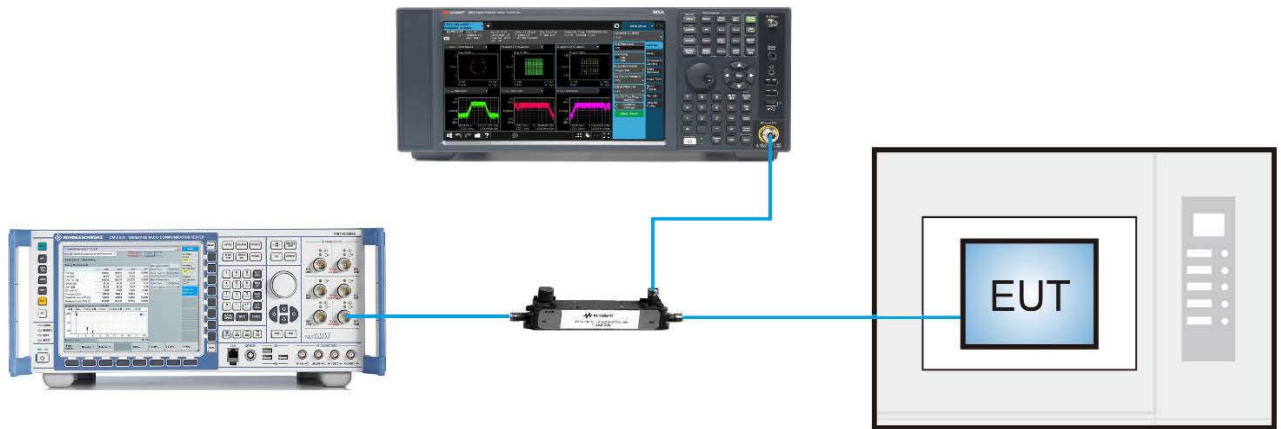
The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to highest. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C decreased per stage until the lowest temperature reached.

Frequency Stability Under Voltage Variations:

Set chamber temperature to 20°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.

Reduce the input voltage to specify extreme voltage variation ($\pm 15\%$) and endpoint, record the maximum frequency change.

5.3.4. Test Setup



5.3.5. Test Result

Product	LTE Module	Test Site	SIP-TR1
Test Engineer	Candy Luo	Test Date	2021/11/11
Test Band	LTE Band 2/25		

Power (Vdc)	Temp (°C)	Frequency Tolerance (ppm)
3.8	- 30	-0.0077
	- 20	-0.0096
	- 10	-0.0093
	0	-0.0083
	+ 10	-0.0086
	+ 20	-0.0068
	+ 30	-0.0075
	+ 40	-0.0095
	+ 50	-0.0025
4.4	+ 20	-0.0061
3.135	+ 20	-0.0085

Product	LTE Module	Test Site	SIP-TR1
Test Engineer	Candy Luo	Test Date	2021/11/11
Test Band	LTE Band 4/66		

Power (Vdc)	Temp (°C)	Frequency Tolerance (ppm)
3.8	- 30	-0.0060
	- 20	-0.0087
	- 10	-0.0066
	0	-0.0046
	+ 10	-0.0074
	+ 20	0.0063
	+ 30	-0.0059
	+ 40	-0.0052
	+ 50	-0.0019
4.4	+ 20	0.0077
3.135	+ 20	0.0072

Product	LTE Module	Test Site	SIP-TR1
Test Engineer	Candy Luo	Test Date	2021/11/11
Test Band	LTE Band 5/26		

Power (Vdc)	Temp (°C)	Frequency Tolerance (ppm)
3.8	- 30	-0.0102
	- 20	-0.0088
	- 10	-0.0096
	0	-0.0106
	+ 10	-0.0100
	+ 20	-0.0112
	+ 30	-0.0111
	+ 40	-0.0100
	+ 50	-0.0015
4.4	+ 20	-0.0104
3.135	+ 20	-0.0107

Product	LTE Module	Test Site	SIP-TR1
Test Engineer	Candy Luo	Test Date	2021/11/11
Test Band	LTE Band 7		

Power (Vdc)	Temp (°C)	Frequency Tolerance (ppm)
3.3	- 30	0.0063
	- 20	0.0054
	- 10	0.0055
	0	0.0054
	+ 10	-0.0049
	+ 20	0.0056
	+ 30	-0.0041
	+ 40	-0.0052
	+ 50	0.0031
3.8	+ 20	0.0048
3.14	+ 20	-0.0043

Product	LTE Module	Test Site	SIP-TR1
Test Engineer	Candy Luo	Test Date	2021/11/11
Test Band	LTE Band 12		

Power (Vdc)	Temp (°C)	Frequency Tolerance (ppm)
3.8	- 30	-0.0123
	- 20	-0.0061
	- 10	-0.0172
	0	0.0081
	+ 10	-0.0124
	+ 20	-0.0119
	+ 30	-0.0133
	+ 40	-0.0106
	+ 50	-0.0074
4.4	+ 20	-0.0103
3.135	+ 20	0.0093

Product	LTE Module	Test Site	SIP-TR1
Test Engineer	Candy Luo	Test Date	2021/11/11
Test Band	LTE Band 13		

Power (Vdc)	Temp (°C)	Frequency Tolerance (ppm)
3.8	- 30	-0.0115
	- 20	-0.0079
	- 10	-0.0073
	0	-0.0040
	+ 10	-0.0071
	+ 20	0.0044
	+ 30	-0.0092
	+ 40	-0.0118
	+ 50	-0.0060
4.4	+ 20	-0.0083
3.135	+ 20	-0.0105

Product	LTE Module	Test Site	SIP-TR1
Test Engineer	Candy Luo	Test Date	2021/11/11
Test Band	LTE Band 17		

Power (Vdc)	Temp (°C)	Frequency Tolerance (ppm)
3.8	- 30	-0.0151
	- 20	0.0119
	- 10	0.0084
	0	0.0149
	+ 10	0.0089
	+ 20	0.0148
	+ 30	-0.0077
	+ 40	-0.0123
	+ 50	0.0082
4.4	+ 20	0.0116
3.135	+ 20	0.0156

Product	LTE Module	Test Site	SIP-TR1
Test Engineer	Candy Luo	Test Date	2021/11/11
Test Band	LTE Band 41_HPUE		

Power (Vdc)	Temp (°C)	Frequency Tolerance (ppm)
3.8	- 30	0.0102
	- 20	0.0079
	- 10	0.0066
	0	0.0060
	+ 10	0.0066
	+ 20	0.0053
	+ 30	0.0055
	+ 40	0.0060
	+ 50	0.0043
4.4	+ 20	0.0054
3.135	+ 20	-0.0039

Product	LTE Module	Test Site	SIP-TR1
Test Engineer	Candy Luo	Test Date	2021/11/11
Test Band	LTE Band 42		

Power (Vdc)	Temp (°C)	Frequency Tolerance (ppm)
3.8	- 30	-0.0036
	- 20	-0.0032
	- 10	-0.0030
	0	-0.0027
	+ 10	0.0045
	+ 20	-0.0030
	+ 30	-0.0035
	+ 40	-0.0044
	+ 50	0.0019
4.4	+ 20	-0.0027
3.135	+ 20	-0.0037

Product	LTE Module	Test Site	SIP-TR1
Test Engineer	Candy Luo	Test Date	2021/11/11
Test Band	LTE Band 43		

Power (Vdc)	Temp (°C)	Frequency Tolerance (ppm)
3.8	- 30	-0.0025
	- 20	0.0028
	- 10	0.0021
	0	-0.0024
	+ 10	0.0018
	+ 20	0.0024
	+ 30	-0.0021
	+ 40	-0.0028
	+ 50	0.0034
4.4	+ 20	0.0026
3.135	+ 20	-0.0022

Product	LTE Module	Test Site	SIP-TR1
Test Engineer	Candy Luo	Test Date	2021/11/11
Test Band	LTE Band 71		

Power (Vdc)	Temp (°C)	Frequency Tolerance (ppm)
3.8	- 30	-0.0095
	- 20	-0.0100
	- 10	0.0100
	0	0.0077
	+ 10	0.0082
	+ 20	0.0072
	+ 30	-0.0091
	+ 40	-0.0061
	+ 50	-0.0074
4.4	+ 20	-0.0056
3.135	+ 20	-0.0063

5.4. Equivalent Isotropically Radiated Power Measurement

5.4.1. Test Limit

Band 5/26:

The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

Band 12, 13, 17

Control stations and mobile stations transmitting in the 746-757 MHz, 776-788 MHz, and 805-806 MHz bands are limited to 30 watts ERP.

Control and mobile stations in the 698-746 MHz band are limited to 30 watts ERP.

Band 71

Fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP.

Band 2/25, 7, 41:

Mobile and portable stations are limited to 2 watts EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

Band 4/66:

Fixed, mobile stations operating in the 1710-1755 MHz band and mobile in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP.

Band 42, 43:

Mobile and portable stations are limited to 1 Watt EIRP.

5.4.2. Test Procedure

ANSI C63.26-2015 - Section 5.2

5.4.3. Test Setting

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter.

The relevant equation for determining the maximum ERP or EIRP from the measured RF output power is given in Equation (1) as follows:

$$\text{ERP or EIRP} = P_{\text{Meas}} + G_T$$

where

ERP or EIRP effective radiated power or equivalent isotropically radiated power, respectively

(expressed in the same units as P_{Meas} , e.g., dBm or dBW)

P_{Meas} measured transmitter output power or PSD, in dBm or dBW

G_T gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP)

$\text{ERP} = \text{EIRP} - 2.15$

5.4.4. Test Setup



5.4.5. Test Result

Product	LTE Module	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/11/09
Test Band	LTE Band 2/25		

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK							
26047	1850.70	1.4	1	0	22.45	25.08	< 33.01
26365	1882.50				22.13	24.76	< 33.01
26683	1914.30				22.21	24.84	< 33.01
26047	1850.70	1.4	1	2	22.49	25.12	< 33.01
26365	1882.50				22.23	24.86	< 33.01
26683	1914.30				22.35	24.98	< 33.01
26047	1850.70	1.4	1	6	22.47	25.10	< 33.01
26365	1882.50				22.18	24.81	< 33.01
26683	1914.30				22.30	24.93	< 33.01
26047	1850.70	1.4	6	0	21.58	24.21	< 33.01
26365	1882.50				21.14	23.77	< 33.01
26683	1914.30				21.31	23.94	< 33.01
26055	1851.50	3	1	0	22.50	25.13	< 33.01
26365	1882.50				22.26	24.89	< 33.01
26675	1913.50				22.34	24.97	< 33.01
26055	1851.50	3	1	7	22.55	25.18	< 33.01
26365	1882.50				22.19	24.82	< 33.01
26675	1913.50				22.42	25.05	< 33.01
26055	1851.50	3	1	14	22.60	25.23	< 33.01
26365	1882.50				22.18	24.81	< 33.01
26675	1913.50				22.30	24.93	< 33.01
26055	1851.50	3	15	0	21.67	24.30	< 33.01
26365	1882.50				21.28	23.91	< 33.01
26675	1913.50				21.35	23.98	< 33.01

Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK							
26065	1852.50	5	1	0	22.72	25.35	< 33.01
26365	1882.50				22.21	24.84	< 33.01
26665	1912.50				22.41	25.04	< 33.01
26065	1852.50	5	1	12	22.64	25.27	< 33.01
26365	1882.50				22.31	24.94	< 33.01
26665	1912.50				22.54	25.17	< 33.01
26065	1852.50	5	1	24	22.66	25.29	< 33.01
26365	1882.50				22.28	24.91	< 33.01
26665	1912.50				22.36	24.99	< 33.01
26065	1852.50	5	25	0	21.61	24.24	< 33.01
26365	1882.50				21.27	23.90	< 33.01
26665	1912.50				21.36	23.99	< 33.01
16390	1855.00	10	1	0	22.53	25.16	< 33.01
26365	1882.50				22.27	24.90	< 33.01
26640	1910.00				22.30	24.93	< 33.01
16390	1855.00	10	1	24	22.51	25.14	< 33.01
26365	1882.50				22.23	24.86	< 33.01
26640	1910.00				22.30	24.93	< 33.01
16390	1855.00	10	1	49	22.34	24.97	< 33.01
26365	1882.50				22.28	24.91	< 33.01
26640	1910.00				22.36	24.99	< 33.01
16390	1855.00	10	50	0	21.40	24.03	< 33.01
26365	1882.50				21.29	23.92	< 33.01
26640	1910.00				21.31	23.94	< 33.01
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)							

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK							
26115	1857.50	15	1	0	22.50	25.13	< 33.01
26365	1882.50				22.34	24.97	< 33.01
26615	1907.50				22.26	24.89	< 33.01
26115	1857.50	15	1	37	22.40	25.03	< 33.01
26365	1882.50				22.27	24.90	< 33.01
26615	1907.50				22.26	24.89	< 33.01
26115	1857.50	15	1	74	22.36	24.99	< 33.01
26365	1882.50				22.26	24.89	< 33.01
26615	1907.50				22.31	24.94	< 33.01
26115	1857.50	15	75	0	21.41	24.04	< 33.01
26365	1882.50				21.29	23.92	< 33.01
26615	1907.50				21.37	24.00	< 33.01
26140	1860.00	20	1	0	22.60	25.23	< 33.01
26365	1882.50				22.31	24.94	< 33.01
26590	1905.00				22.22	24.85	< 33.01
26140	1860.00	20	1	49	22.48	25.11	< 33.01
26365	1882.50				22.19	24.82	< 33.01
26590	1905.00				22.35	24.98	< 33.01
26140	1860.00	20	1	99	22.43	25.06	< 33.01
26365	1882.50				22.17	24.80	< 33.01
26590	1905.00				22.41	25.04	< 33.01
26140	1860.00	20	100	0	21.53	24.16	< 33.01
26365	1882.50				21.36	23.99	< 33.01
26590	1905.00				21.36	23.99	< 33.01

Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
16QAM							
26047	1850.70	1.4	1	0	21.32	23.95	< 33.01
26365	1882.50				21.32	23.95	< 33.01
26683	1914.30				21.07	23.70	< 33.01
26047	1850.70	1.4	1	2	21.37	24.00	< 33.01
26365	1882.50				21.37	24.00	< 33.01
26683	1914.30				21.11	23.74	< 33.01
26047	1850.70	1.4	1	6	21.33	23.96	< 33.01
26365	1882.50				21.29	23.92	< 33.01
26683	1914.30				21.11	23.74	< 33.01
26047	1850.70	1.4	6	0	20.54	23.17	< 33.01
26365	1882.50				20.26	22.89	< 33.01
26683	1914.30				20.35	22.98	< 33.01
26055	1851.50	3	1	0	21.62	24.25	< 33.01
26365	1882.50				21.30	23.93	< 33.01
26675	1913.50				21.74	24.37	< 33.01
26055	1851.50	3	1	7	21.61	24.24	< 33.01
26365	1882.50				21.00	23.63	< 33.01
26675	1913.50				21.76	24.39	< 33.01
26055	1851.50	3	1	14	21.95	24.58	< 33.01
26365	1882.50				21.35	23.98	< 33.01
26675	1913.50				21.15	23.78	< 33.01
26055	1851.50	3	15	0	20.75	23.38	< 33.01
26365	1882.50				20.30	22.93	< 33.01
26675	1913.50				20.32	22.95	< 33.01

Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
16QAM							
26065	1852.50	5	1	0	21.91	24.54	< 33.01
26365	1882.50				21.27	23.90	< 33.01
26665	1912.50				21.15	23.78	< 33.01
26065	1852.50	5	1	12	22.07	24.70	< 33.01
26365	1882.50				21.36	23.99	< 33.01
26665	1912.50				21.20	23.83	< 33.01
26065	1852.50	5	1	24	21.94	24.57	< 33.01
26365	1882.50				21.30	23.93	< 33.01
26665	1912.50				21.13	23.76	< 33.01
26065	1852.50	5	25	0	20.50	23.13	< 33.01
26365	1882.50				20.30	22.93	< 33.01
26665	1912.50				20.38	23.01	< 33.01
16390	1855.00	10	1	0	22.00	24.63	< 33.01
26365	1882.50				21.43	24.06	< 33.01
26640	1910.00				21.15	23.78	< 33.01
16390	1855.00	10	1	24	21.96	24.59	< 33.01
26365	1882.50				21.45	24.08	< 33.01
26640	1910.00				21.00	23.63	< 33.01
16390	1855.00	10	1	49	21.76	24.39	< 33.01
26365	1882.50				21.33	23.96	< 33.01
26640	1910.00				21.15	23.78	< 33.01
16390	1855.00	10	50	0	20.45	23.08	< 33.01
26365	1882.50				20.29	22.92	< 33.01
26640	1910.00				20.40	23.03	< 33.01
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)							

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
16QAM							
26115	1857.50	15	1	0	21.64	24.27	< 33.01
26365	1882.50				21.40	24.03	< 33.01
26615	1907.50				21.74	24.37	< 33.01
26115	1857.50	15	1	37	21.60	24.23	< 33.01
26365	1882.50				21.33	23.96	< 33.01
26615	1907.50				21.71	24.34	< 33.01
26115	1857.50	15	1	74	21.45	24.08	< 33.01
26365	1882.50				21.43	24.06	< 33.01
26615	1907.50				21.78	24.41	< 33.01
26115	1857.50	15	75	0	20.53	23.16	< 33.01
26365	1882.50				20.33	22.96	< 33.01
26615	1907.50				20.39	23.02	< 33.01
26140	1860.00	20	1	0	21.92	24.55	< 33.01
26365	1882.50				21.54	24.17	< 33.01
26590	1905.00				21.80	24.43	< 33.01
26140	1860.00	20	1	49	21.70	24.33	< 33.01
26365	1882.50				21.46	24.09	< 33.01
26590	1905.00				21.79	24.42	< 33.01
26140	1860.00	20	1	99	21.75	24.38	< 33.01
26365	1882.50				21.35	23.98	< 33.01
26590	1905.00				21.89	24.52	< 33.01
26140	1860.00	20	100	0	20.51	23.14	< 33.01
26365	1882.50				20.35	22.98	< 33.01
26590	1905.00				20.35	22.98	< 33.01

Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)

Product	LTE Module	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/11/09
Test Band	LTE Band 4/66		

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK							
131979	1710.70	1.4	1	0	22.55	25.41	< 30.00
132322	1745.00				22.63	25.49	< 30.00
132665	1779.30				22.37	25.23	< 30.00
131979	1710.70	1.4	1	2	22.54	25.40	< 30.00
132322	1745.00				22.63	25.49	< 30.00
132665	1779.30				22.45	25.31	< 30.00
131979	1710.70	1.4	1	6	22.53	25.39	< 30.00
132322	1745.00				22.56	25.42	< 30.00
132665	1779.30				22.38	25.24	< 30.00
131979	1710.70	1.4	6	0	21.57	24.43	< 30.00
132322	1745.00				21.70	24.56	< 30.00
132665	1779.30				21.38	24.24	< 30.00
131987	1711.50	3	1	0	22.60	25.46	< 30.00
132322	1745.00				22.71	25.57	< 30.00
132657	1778.50				22.52	25.38	< 30.00
131987	1711.50	3	1	7	22.57	25.43	< 30.00
132322	1745.00				22.63	25.49	< 30.00
132657	1778.50				22.44	25.30	< 30.00
131987	1711.50	3	1	14	22.59	25.45	< 30.00
132322	1745.00				22.61	25.47	< 30.00
132657	1778.50				22.35	25.21	< 30.00
131987	1711.50	3	15	0	21.67	24.53	< 30.00
132322	1745.00				21.80	24.66	< 30.00
132657	1778.50				21.52	24.38	< 30.00

Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK							
131997	1712.50	5	1	0	22.66	25.52	< 30.00
132322	1745.00				22.76	25.62	< 30.00
132647	1777.50				22.40	25.26	< 30.00
131997	1712.50	5	1	12	22.73	25.59	< 30.00
132322	1745.00				22.82	25.68	< 30.00
132647	1777.50				22.55	25.41	< 30.00
131997	1712.50	5	1	24	22.61	25.47	< 30.00
132322	1745.00				22.69	25.55	< 30.00
132647	1777.50				22.51	25.37	< 30.00
131997	1712.50	5	25	0	21.65	24.51	< 30.00
132322	1745.00				21.82	24.68	< 30.00
132647	1777.50				21.51	24.37	< 30.00
132022	1715.00	10	1	0	22.58	25.44	< 30.00
132322	1745.00				22.72	25.58	< 30.00
132622	1775.00				22.49	25.35	< 30.00
132022	1715.00	10	1	24	22.65	25.51	< 30.00
132322	1745.00				22.70	25.56	< 30.00
132622	1775.00				22.47	25.33	< 30.00
132022	1715.00	10	1	49	22.58	25.44	< 30.00
132322	1745.00				22.64	25.50	< 30.00
132622	1775.00				22.38	25.24	< 30.00
132022	1715.00	10	50	0	21.71	24.57	< 30.00
132322	1745.00				21.80	24.66	< 30.00
132622	1775.00				21.51	24.37	< 30.00
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)							

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK							
132047	1717.50	15	1	0	22.57	25.43	< 30.00
132322	1745.00				22.65	25.51	< 30.00
132597	1772.50				22.53	25.39	< 30.00
132047	1717.50	15	1	37	22.61	25.47	< 30.00
132322	1745.00				22.62	25.48	< 30.00
132597	1772.50				22.53	25.39	< 30.00
132047	1717.50	15	1	74	22.60	25.46	< 30.00
132322	1745.00				22.61	25.47	< 30.00
132597	1772.50				22.43	25.29	< 30.00
132047	1717.50	15	75	0	21.77	24.63	< 30.00
132322	1745.00				21.76	24.62	< 30.00
132597	1772.50				21.45	24.31	< 30.00
132072	1720.00	20	1	0	22.59	25.45	< 30.00
132322	1745.00				22.73	25.59	< 30.00
132572	1770.00				22.57	25.43	< 30.00
132072	1720.00	20	1	49	22.66	25.52	< 30.00
132322	1745.00				22.68	25.54	< 30.00
132572	1770.00				22.52	25.38	< 30.00
132072	1720.00	20	1	99	22.68	25.54	< 30.00
132322	1745.00				22.63	25.49	< 30.00
132572	1770.00				22.50	25.36	< 30.00
132072	1720.00	20	100	0	21.84	24.70	< 30.00
132322	1745.00				21.80	24.66	< 30.00
132572	1770.00				21.55	24.41	< 30.00
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)							

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
16QAM							
131979	1710.70	1.4	1	0	21.42	24.28	< 30.00
132322	1745.00				21.70	24.56	< 30.00
132665	1779.30				21.10	23.96	< 30.00
131979	1710.70	1.4	1	2	21.48	24.34	< 30.00
132322	1745.00				21.76	24.62	< 30.00
132665	1779.30				21.24	24.10	< 30.00
131979	1710.70	1.4	1	6	21.39	24.25	< 30.00
132322	1745.00				21.70	24.56	< 30.00
132665	1779.30				21.12	23.98	< 30.00
131979	1710.70	1.4	6	0	20.62	23.48	< 30.00
132322	1745.00				20.72	23.58	< 30.00
132665	1779.30				20.45	23.31	< 30.00
131987	1711.50	3	1	0	21.72	24.58	< 30.00
132322	1745.00				21.55	24.41	< 30.00
132657	1778.50				21.50	24.36	< 30.00
131987	1711.50	3	1	7	21.35	24.21	< 30.00
132322	1745.00				22.10	24.96	< 30.00
132657	1778.50				21.54	24.40	< 30.00
131987	1711.50	3	1	14	21.38	24.24	< 30.00
132322	1745.00				22.04	24.90	< 30.00
132657	1778.50				21.54	24.40	< 30.00
131987	1711.50	3	15	0	20.72	23.58	< 30.00
132322	1745.00				20.83	23.69	< 30.00
132657	1778.50				20.51	23.37	< 30.00
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)							

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
16QAM							
131997	1712.50	5	1	0	21.38	24.24	< 30.00
132322	1745.00				22.07	24.93	< 30.00
132647	1777.50				21.59	24.45	< 30.00
131997	1712.50	5	1	12	21.47	24.33	< 30.00
132322	1745.00				22.16	25.02	< 30.00
132647	1777.50				21.60	24.46	< 30.00
131997	1712.50	5	1	24	21.70	24.56	< 30.00
132322	1745.00				21.46	24.32	< 30.00
132647	1777.50				21.81	24.67	< 30.00
131997	1712.50	5	25	0	20.76	23.62	< 30.00
132322	1745.00				20.79	23.65	< 30.00
132647	1777.50				20.47	23.33	< 30.00
132022	1715.00	10	1	0	22.14	25.00	< 30.00
132322	1745.00				21.78	24.64	< 30.00
132622	1775.00				21.35	24.21	< 30.00
132022	1715.00	10	1	24	22.12	24.98	< 30.00
132322	1745.00				21.76	24.62	< 30.00
132622	1775.00				21.33	24.19	< 30.00
132022	1715.00	10	1	49	21.92	24.78	< 30.00
132322	1745.00				21.73	24.59	< 30.00
132622	1775.00				21.33	24.19	< 30.00
132022	1715.00	10	50	0	20.50	23.36	< 30.00
132322	1745.00				20.79	23.65	< 30.00
132622	1775.00				20.54	23.40	< 30.00
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)							

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
16QAM							
132047	1717.50	15	1	0	22.11	24.97	< 30.00
132322	1745.00				21.72	24.58	< 30.00
132597	1772.50				21.60	24.46	< 30.00
132047	1717.50	15	1	37	22.07	24.93	< 30.00
132322	1745.00				21.79	24.65	< 30.00
132597	1772.50				21.68	24.54	< 30.00
132047	1717.50	15	1	74	22.06	24.92	< 30.00
132322	1745.00				21.78	24.64	< 30.00
132597	1772.50				21.79	24.65	< 30.00
132047	1717.50	15	75	0	20.81	23.67	< 30.00
132322	1745.00				20.78	23.64	< 30.00
132597	1772.50				20.48	23.34	< 30.00
132072	1720.00	20	1	0	21.80	24.66	< 30.00
132322	1745.00				22.20	25.06	< 30.00
132572	1770.00				21.90	24.76	< 30.00
132072	1720.00	20	1	49	21.93	24.79	< 30.00
132322	1745.00				22.24	25.10	< 30.00
132572	1770.00				21.96	24.82	< 30.00
132072	1720.00	20	1	99	21.99	24.85	< 30.00
132322	1745.00				22.17	25.03	< 30.00
132572	1770.00				21.79	24.65	< 30.00
132072	1720.00	20	100	0	20.77	23.63	< 30.00
132322	1745.00				20.82	23.68	< 30.00
132572	1770.00				20.58	23.44	< 30.00
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)							

Product	LTE Module	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/11/09
Test Band	LTE Band 5/26		

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	ERP (dBm)	Limit (dBm)
QPSK							
26797	824.70	1.4	1	0	22.72	22.18	< 38.45
26915	836.50				22.81	22.27	< 38.45
27033	848.30				22.73	22.19	< 38.45
26797	824.70	1.4	1	2	22.74	22.20	< 38.45
26915	836.50				22.87	22.33	< 38.45
27033	848.30				22.71	22.17	< 38.45
26797	824.70	1.4	1	6	22.67	22.13	< 38.45
26915	836.50				22.82	22.28	< 38.45
27033	848.30				22.77	22.23	< 38.45
26797	824.70	1.4	6	0	22.75	22.21	< 38.45
26915	836.50				22.81	22.27	< 38.45
27033	848.30				22.79	22.25	< 38.45
26805	825.50	3	1	0	22.74	22.20	< 38.45
26915	836.50				22.76	22.22	< 38.45
27015	846.50				22.83	22.29	< 38.45
26805	825.50	3	1	7	22.67	22.13	< 38.45
26915	836.50				22.82	22.28	< 38.45
27015	846.50				22.85	22.31	< 38.45
26805	825.50	3	1	14	22.73	22.19	< 38.45
26915	836.50				22.78	22.24	< 38.45
27015	846.50				22.72	22.18	< 38.45
26805	825.50	3	15	0	21.76	21.22	< 38.45
26915	836.50				21.77	21.23	< 38.45
27015	846.50				21.90	21.36	< 38.45

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	ERP (dBm)	Limit (dBm)
QPSK							
26815	826.50	5	1	0	22.85	22.31	< 38.45
26915	836.50				22.80	22.26	< 38.45
27015	846.50				22.92	22.38	< 38.45
26815	826.50	5	1	12	22.85	22.31	< 38.45
26915	836.50				22.95	22.41	< 38.45
27015	846.50				22.90	22.36	< 38.45
26815	826.50	5	1	24	22.94	22.40	< 38.45
26915	836.50				22.83	22.29	< 38.45
27015	846.50				22.77	22.23	< 38.45
26815	826.50	5	25	0	21.90	21.36	< 38.45
26915	836.50				21.76	21.22	< 38.45
27015	846.50				21.91	21.37	< 38.45
26840	829.00	10	1	0	22.74	22.20	< 38.45
26915	836.50				22.80	22.26	< 38.45
26990	844.00				22.88	22.34	< 38.45
26840	829.00	10	1	24	22.81	22.27	< 38.45
26915	836.50				22.92	22.38	< 38.45
26990	844.00				22.91	22.37	< 38.45
26840	829.00	10	1	49	22.76	22.22	< 38.45
26915	836.50				22.84	22.30	< 38.45
26990	844.00				22.83	22.29	< 38.45
26840	829.00	10	50	0	21.90	21.36	< 38.45
26915	836.50				21.82	21.28	< 38.45
26990	844.00				21.85	21.31	< 38.45

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	ERP (dBm)	Limit (dBm)
QPSK							
26765	821.50	15	1	0	22.82	22.28	< 38.45
26915	836.50				22.83	22.29	< 38.45
26965	841.50				22.78	22.24	< 38.45
26765	821.50	15	1	37	22.83	22.29	< 38.45
26915	836.50				22.87	22.33	< 38.45
26965	841.50				22.76	22.22	< 38.45
26765	821.50	15	1	74	22.82	22.28	< 38.45
26915	836.50				22.90	22.36	< 38.45
26965	841.50				22.71	22.17	< 38.45
26765	821.50	15	75	0	21.80	21.26	< 38.45
26915	836.50				21.78	21.24	< 38.45
26965	841.50				21.85	21.31	< 38.45

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	ERP (dBm)	Limit (dBm)
16QAM							
26797	824.70	1.4	1	0	21.78	21.24	< 38.45
26915	836.50				21.56	21.02	< 38.45
27033	848.30				21.60	21.06	< 38.45
26797	824.70	1.4	1	2	21.88	21.34	< 38.45
26915	836.50				21.67	21.13	< 38.45
27033	848.30				21.77	21.23	< 38.45
26797	824.70	1.4	1	6	21.79	21.25	< 38.45
26915	836.50				21.59	21.05	< 38.45
27033	848.30				21.62	21.08	< 38.45
26797	824.70	1.4	6	0	21.77	21.23	< 38.45
26915	836.50				21.55	21.01	< 38.45
27033	848.30				21.69	21.15	< 38.45
26805	825.50	3	1	0	21.84	21.30	< 38.45
26915	836.50				21.51	20.97	< 38.45
27015	846.50				22.20	21.66	< 38.45
26805	825.50	3	1	7	21.82	21.28	< 38.45
26915	836.50				21.61	21.07	< 38.45
27015	846.50				22.21	21.67	< 38.45
26805	825.50	3	1	14	21.75	21.21	< 38.45
26915	836.50				21.50	20.96	< 38.45
27015	846.50				22.14	21.60	< 38.45
26805	825.50	3	15	0	20.74	20.20	< 38.45
26915	836.50				20.71	20.17	< 38.45
27015	846.50				20.85	20.31	< 38.45
Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15							

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	ERP (dBm)	Limit (dBm)
16QAM							
26815	826.50	5	1	0	22.07	21.53	< 38.45
26915	836.50				21.92	21.38	< 38.45
27015	846.50				21.64	21.10	< 38.45
26815	826.50	5	1	12	22.20	21.66	< 38.45
26915	836.50				21.99	21.45	< 38.45
27015	846.50				21.69	21.15	< 38.45
26815	826.50	5	1	24	22.11	21.57	< 38.45
26915	836.50				21.97	21.43	< 38.45
27015	846.50				21.53	20.99	< 38.45
26815	826.50	5	25	0	20.87	20.33	< 38.45
26915	836.50				20.67	20.13	< 38.45
27015	846.50				20.88	20.34	< 38.45
26840	829.00	10	1	0	21.89	21.35	< 38.45
26915	836.50				21.57	21.03	< 38.45
26990	844.00				22.22	21.68	< 38.45
26840	829.00	10	1	24	21.97	21.43	< 38.45
26915	836.50				21.60	21.06	< 38.45
26990	844.00				22.34	21.80	< 38.45
26840	829.00	10	1	49	21.47	20.93	< 38.45
26915	836.50				22.13	21.59	< 38.45
26990	844.00				21.98	21.44	< 38.45
26840	829.00	10	50	0	20.89	20.35	< 38.45
26915	836.50				20.82	20.28	< 38.45
26990	844.00				20.82	20.28	< 38.45

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	ERP (dBm)	Limit (dBm)
16QAM							
26765	821.50	15	1	0	22.17	21.63	< 38.45
26915	836.50				21.88	21.34	< 38.45
26965	841.50				21.80	21.26	< 38.45
26765	821.50	15	1	37	22.25	21.71	< 38.45
26915	836.50				21.93	21.39	< 38.45
26965	841.50				21.92	21.38	< 38.45
26765	821.50	15	1	74	22.06	21.52	< 38.45
26915	836.50				22.29	21.75	< 38.45
26965	841.50				21.92	21.38	< 38.45
26765	821.50	15	75	0	20.89	20.35	< 38.45
26915	836.50				20.85	20.31	< 38.45
26965	841.50				20.85	20.31	< 38.45

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

Product	LTE Module	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/11/09
Test Band	LTE Band 7		

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK							
20775	2502.50	5	1	0	23.05	24.12	< 33.01
21100	2535.00				22.75	23.82	< 33.01
21425	2567.50				22.75	23.82	< 33.01
20775	2502.50	5	1	12	23.12	24.19	< 33.01
21100	2535.00				22.82	23.89	< 33.01
21425	2567.50				22.83	23.90	< 33.01
20775	2502.50	5	1	24	23.13	24.20	< 33.01
21100	2535.00				22.80	23.87	< 33.01
21425	2567.50				22.75	23.82	< 33.01
20775	2502.50	5	25	0	22.10	23.17	< 33.01
21100	2535.00				22.01	23.08	< 33.01
21425	2567.50				21.89	22.96	< 33.01
20800	2505.00	10	1	0	23.04	24.11	< 33.01
21100	2535.00				22.98	24.05	< 33.01
21400	2565.00				22.64	23.71	< 33.01
20800	2505.00	10	1	24	23.08	24.15	< 33.01
21100	2535.00				22.95	24.02	< 33.01
21400	2565.00				22.72	23.79	< 33.01
20800	2505.00	10	1	49	23.02	24.09	< 33.01
21100	2535.00				22.96	24.03	< 33.01
21400	2565.00				22.72	23.79	< 33.01
20800	2505.00	10	50	0	22.02	23.09	< 33.01
21100	2535.00				21.95	23.02	< 33.01
21400	2565.00				21.82	22.89	< 33.01

Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK							
20825	2507.50	15	1	0	23.13	24.20	< 33.01
21100	2535.00				22.88	23.95	< 33.01
21375	2562.50				22.87	23.94	< 33.01
20825	2507.50	15	1	37	23.12	24.19	< 33.01
21100	2535.00				23.01	24.08	< 33.01
21375	2562.50				22.76	23.83	< 33.01
20825	2507.50	15	1	74	23.08	24.15	< 33.01
21100	2535.00				23.00	24.07	< 33.01
21375	2562.50				22.76	23.83	< 33.01
20825	2507.50	15	75	0	21.98	23.05	< 33.01
21100	2535.00				21.90	22.97	< 33.01
21375	2562.50				21.90	22.97	< 33.01
20850	2510.00	20	1	0	23.08	24.15	< 33.01
21100	2535.00				22.96	24.03	< 33.01
21350	2560.00				22.77	23.84	< 33.01
20850	2510.00	20	1	49	23.05	24.12	< 33.01
21100	2535.00				22.89	23.96	< 33.01
21350	2560.00				22.70	23.77	< 33.01
20850	2510.00	20	1	99	23.03	24.10	< 33.01
21100	2535.00				22.88	23.95	< 33.01
21350	2560.00				22.83	23.90	< 33.01
20850	2510.00	20	100	0	22.06	23.13	< 33.01
21100	2535.00				21.97	23.04	< 33.01
21350	2560.00				21.91	22.98	< 33.01
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)							