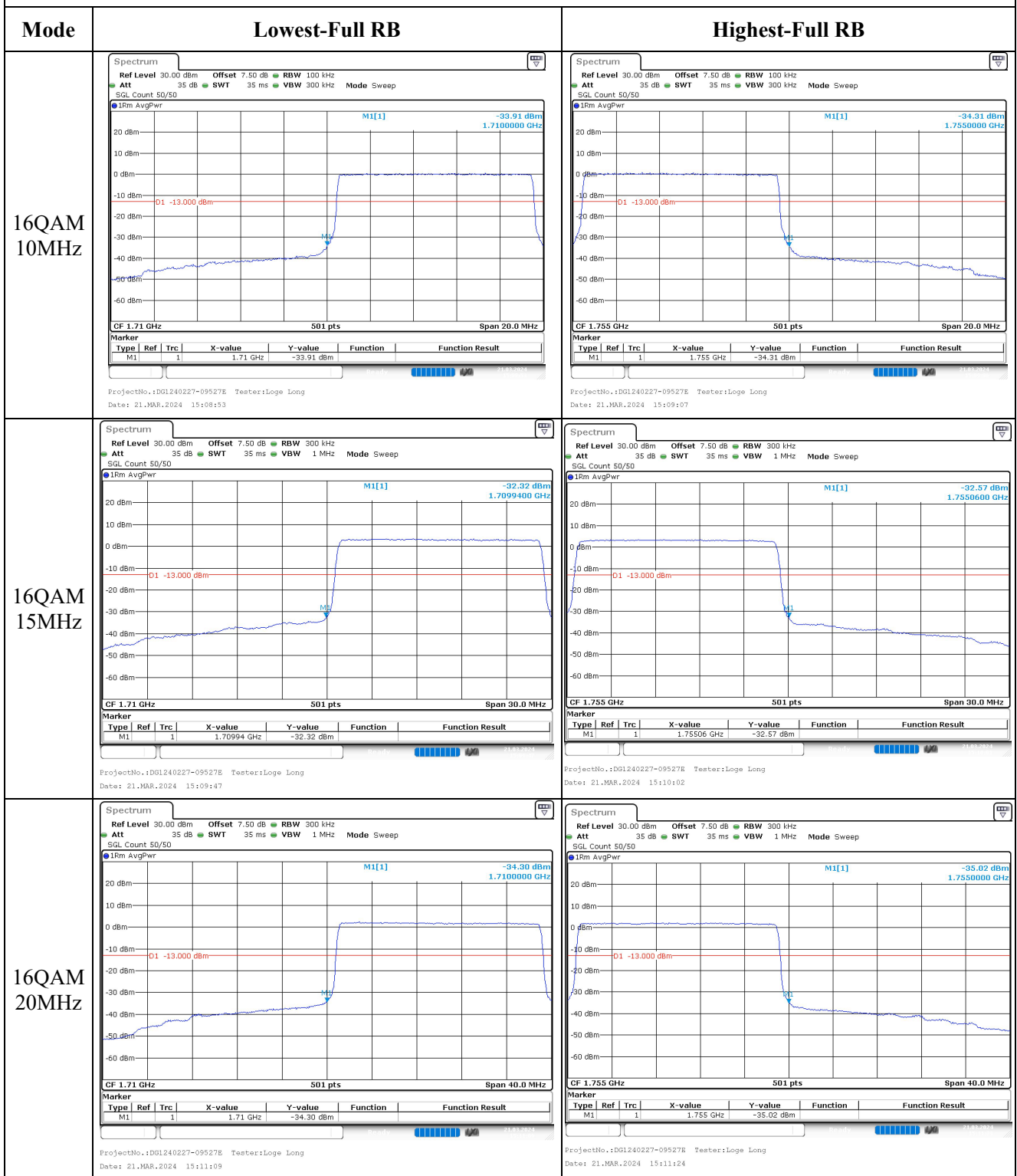


Out of band emission, Band Edge



Out of band emission, Band Edge

Mode	Lowest-RB 1#0	Highest-RB 1#Max
QPSK 1.4MHz	<p>ProjectNo.:DG1240227-09527E Tester:Loge Long Date: 21.MAR.2024 22:32:29</p>	<p>ProjectNo.:DG1240227-09527E Tester:Loge Long Date: 21.MAR.2024 22:35:53</p>
QPSK 3MHz	<p>ProjectNo.:DG1240227-09527E Tester:Loge Long Date: 21.MAR.2024 22:37:25</p>	<p>ProjectNo.:DG1240227-09527E Tester:Loge Long Date: 21.MAR.2024 22:43:10</p>
QPSK 5MHz	<p>ProjectNo.:DG1240227-09527E Tester:Loge Long Date: 21.MAR.2024 22:48:57</p>	<p>ProjectNo.:DG1240227-09527E Tester:Loge Long Date: 21.MAR.2024 22:49:58</p>

Out of band emission, Band Edge

Mode	Lowest-RB 1#0	Highest-RB 1#Max
QPSK 10MHz	<p>ProjectNo.:DG1240227-09527E Tester:Loge Long Date: 21.MAR.2024 22:51:05</p>	<p>ProjectNo.:DG1240227-09527E Tester:Loge Long Date: 21.MAR.2024 22:51:52</p>
QPSK 15MHz	<p>ProjectNo.:DG1240227-09527E Tester:Loge Long Date: 21.MAR.2024 22:54:25</p>	<p>ProjectNo.:DG1240227-09527E Tester:Loge Long Date: 21.MAR.2024 22:56:14</p>
QPSK 20MHz	<p>ProjectNo.:DG1240227-09527E Tester:Loge Long Date: 21.MAR.2024 22:58:35</p>	<p>ProjectNo.:DG1240227-09527E Tester:Loge Long Date: 21.MAR.2024 22:59:19</p>

Out of band emission, Band Edge

Mode	Lowest-RB 1#0	Highest-RB 1#Max
16QAM 1.4MHz	<p>ProjectNo.:DG1240227-09527E Tester:Loge Long Date: 21.MAR.2024 22:32:45</p>	<p>ProjectNo.:DG1240227-09527E Tester:Loge Long Date: 21.MAR.2024 22:36:14</p>
16QAM 3MHz	<p>ProjectNo.:DG1240227-09527E Tester:Loge Long Date: 21.MAR.2024 22:42:36</p>	<p>ProjectNo.:DG1240227-09527E Tester:Loge Long Date: 21.MAR.2024 22:45:14</p>
16QAM 5MHz	<p>ProjectNo.:DG1240227-09527E Tester:Loge Long Date: 21.MAR.2024 22:49:17</p>	<p>ProjectNo.:DG1240227-09527E Tester:Loge Long Date: 21.MAR.2024 22:50:18</p>

Out of band emission, Band Edge

Mode	Lowest-RB 1#0	Highest-RB 1#Max
16QAM 10MHz		
16QAM 15MHz		
16QAM 20MHz		

**5.7 Antenna Port Test Data and Results for LTE Band 5**

Serial Number:	2I25-7	Test Date:	2024/3/21
Test Site:	RF	Test Mode:	Transmitting
Tester:	Loge Long	Test Result:	Pass

<b>Environmental Conditions:</b>					
Temperature: (°C)	26.2	Relative Humidity: (%)	59	ATM Pressure: (kPa)	101.9

<b>Test Equipment List and Details:</b>					
Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Minl-Circuits	Coaxial Power Splitters & Combiner	ZFRSC-183-S+	SF448201614	2024/2/25	2025/2/24
R&S	Wideband Radio Communication Tester	CMW500	149216	2023/10/18	2024/10/17
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30173	2023/10/18	2024/10/17
All-sun	Clamp Meter	EM305A	8348897	2023/8/3	2024/8/2
TDK-Lambda	DC Power Supply	Z+60-14	F-08-EM038-1	N/A	N/A
yzjingcheng	Coaxial Cable	KTRFBU-141-50	41005011	2023/9/1	2024/8/31
Unknown	Coaxial Cable	C-SJ00-0010	C0010/01	2023/9/1	2024/8/31
R&S	Spectrum Analyzer	FSV40	101461	2023/11/27	2024/11/26

<b>Test Frequency For Each Mode:</b>			
Operation Bandwidth	Lowest Frequency (MHz)	Middle Frequency (MHz)	Highest Frequency (MHz)
1.4MHz	824.7	836.5	848.3
3MHz	825.5	836.5	847.5
5MHz	826.5	836.5	846.5
10MHz	829	836.5	844

**Test Data:**

<b>FCC§2.1046;§ 22.913 (a)</b>						
<b>RF Output Power:</b>						
Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum ERP (dBm)	ERP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
1.4MHz QPSK	RB1#0	23.29	23.3	23.22	18.55	38.45
	RB1#3	23.5	23.4	23.43		
	RB1#5	23.26	23.27	23.3		
	RB3#0	23.31	23.31	23.34		
	RB3#3	23.34	23.2	23.31		
	RB6#0	22.41	22.36	22.41		
1.4MHz 16QAM	RB1#0	22.27	22.22	22.37	17.6	38.45
	RB1#3	22.5	22.47	22.55		
	RB1#5	22.38	22.24	22.36		
	RB3#0	22.45	22.5	22.31		
	RB3#3	22.37	22.48	22.4		
	RB6#0	21.31	21.34	21.42		
3MHz QPSK	RB1#0	23.53	23.35	23.27	18.58	38.45
	RB1#8	23.5	23.22	23.29		
	RB1#14	23.49	23.26	23.32		
	RB6#0	22.4	22.29	22.32		
	RB6#9	22.48	22.29	22.29		
	RB15#0	22.44	22.3	22.31		
3MHz 16QAM	RB1#0	22.43	22.87	22.44	17.92	38.45
	RB1#8	22.42	22.83	22.38		
	RB1#14	22.41	22.8	22.43		
	RB6#0	21.34	21.35	21.28		
	RB6#9	21.34	21.3	21.32		
	RB15#0	21.41	21.32	21.2		
5MHz QPSK	RB1#0	23.33	23.28	23.18	18.43	38.45
	RB1#13	23.38	23.31	23.26		
	RB1#24	23.3	23.17	23.13		
	RB15#0	22.43	22.28	22.3		
	RB15#10	22.4	22.3	22.23		
	RB25#0	22.41	22.29	22.22		
5MHz 16QAM	RB1#0	22.44	22.09	22.43	17.56	38.45
	RB1#13	22.48	22.13	22.51		
	RB1#24	22.4	22.09	22.45		
	RB15#0	21.44	21.3	21.23		
	RB15#10	21.42	21.28	21.17		
	RB25#0	21.4	21.27	21.21		
10MHz QPSK	RB1#0	23.36	23.24	23.24	18.51	38.45
	RB1#25	23.46	23.38	23.4		
	RB1#49	23.25	23.21	23.26		

10MHz 16QAM	RB25#0	22.39	22.29	22.37	18	38.45
	RB25#25	22.37	22.32	22.29		
	RB50#0	22.39	22.34	22.32		
	RB1#0	22.3	22.87	22.4		
	RB1#25	22.48	22.95	22.51		
	RB1#49	22.27	22.76	22.44		
	RB25#0	21.47	21.35	21.34		
	RB25#25	21.44	21.35	21.27		
	RB50#0	21.39	21.36	21.3		

Note:  
 ERP= Conducted Power(dBm) - Lc(dB) + Gr(dBd)  
 Gr(dBd)=Gr(dBi)-2.15

**Result: Pass**

Peak-to-average Ratio(PAR)					
Test Bandwidth & Modulation	Resource Block & RB offset	Peak-to-average Ratio(dB)			Limit (dB)
		Lowest Channel	Middle Channel	Highest Channel	
10MHz QPSK	RB1#0	4.35	5.48	4.32	13
	RB50#0	5.25	5.04	4.87	13
10MHz 16QAM	RB1#0	5.04	6.35	5.28	13
	RB50#0	6.12	5.91	5.8	13

**Result: Pass**

FCC §2.1049, §22.905:Occupied Bandwidth						
Operation Mode	99% Occupied Bandwidth (MHz)			26 dB Occupied Bandwidth (MHz)		
	Low Channel	Middle channel	High Channel	Low Channel	Middle Channel	High Channel
1.4MHz QPSK	1.096	1.102	1.096	1.308	1.296	1.296
1.4MHz 16QAM	1.09	1.096	1.096	1.284	1.308	1.32
3MHz QPSK	2.683	2.683	2.683	2.88	2.868	2.868
3MHz 16QAM	2.683	2.683	2.683	2.88	2.88	2.88
5MHz QPSK	4.531	4.511	4.531	5.22	5.2	5.22
5MHz 16QAM	4.551	4.551	4.531	5.18	5.24	5.18
10MHz QPSK	8.981	8.981	8.942	9.96	10	9.8
10MHz 16QAM	8.981	8.942	8.942	9.92	9.76	9.84

Note: Test was performed at full RB. The test plots please refer to the Plots of Occupied Bandwidth

FCC §2.1051, §22.917(a):Spurious Emissions at Antenna Terminal	
<b>Result:</b>	Pass, Test was performed at RB1#0, please refer to the test plots of Spurious Emissions at Antenna Terminal.

FCC §2.1051, §22.917(a):Out of band emission, Band Edge	
<b>Result:</b>	Pass, Please refer to the test plots of Out of band emission, Band Edge.



<b>FCC §2.1055, §22.355: Frequency Stability</b>					
Test Modulation:	10 MHz QPSK		Test Channel:	836.5	MHz
Test Item	Temperature (°C)	Voltage (V <sub>DC</sub> )	Frequency Error		Limit
			(Hz)	(ppm)	(ppm)
Frequency Stability vs. Temperature	-30	3.8	-4.62	-0.006	2.5
	-20	3.8	5.23	0.006	2.5
	-10	3.8	6.79	0.008	2.5
	0	3.8	7.8	0.009	2.5
	10	3.8	-9.44	-0.011	2.5
	20	3.8	9.89	0.012	2.5
	30	3.8	-8.99	-0.011	2.5
	40	3.8	-6.12	-0.007	2.5
Frequency Stability vs. Voltage	20	3.5	-6.04	-0.007	2.5
	20	4.35	6.84	0.008	2.5
				<b>Result:</b>	<b>Pass</b>

Test Modulation:	10 MHz 16QAM		Test Channel:	836.5	MHz
Test Item	Temperature (°C)	Voltage (V <sub>DC</sub> )	Frequency Error		Limit
			(Hz)	(ppm)	(ppm)
Frequency Stability vs. Temperature	-30	3.8	-6.44	-0.008	2.5
	-20	3.8	-7.53	-0.009	2.5
	-10	3.8	-7.8	-0.009	2.5
	0	3.8	8.82	0.011	2.5
	10	3.8	-7.19	-0.009	2.5
	20	3.8	6.69	0.008	2.5
	30	3.8	-7.11	-0.008	2.5
	40	3.8	-9.97	-0.012	2.5
Frequency Stability vs. Voltage	20	3.5	6.12	0.007	2.5
	20	4.35	7.05	0.008	2.5
				<b>Result:</b>	<b>Pass</b>