



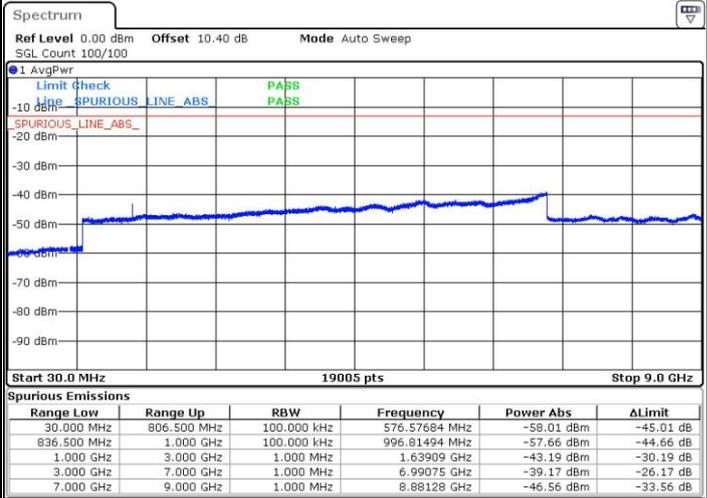
LTE Band 26 / 5MHz

Highest Channel / QPSK



Date: 30.JUL.2019 10:02:26

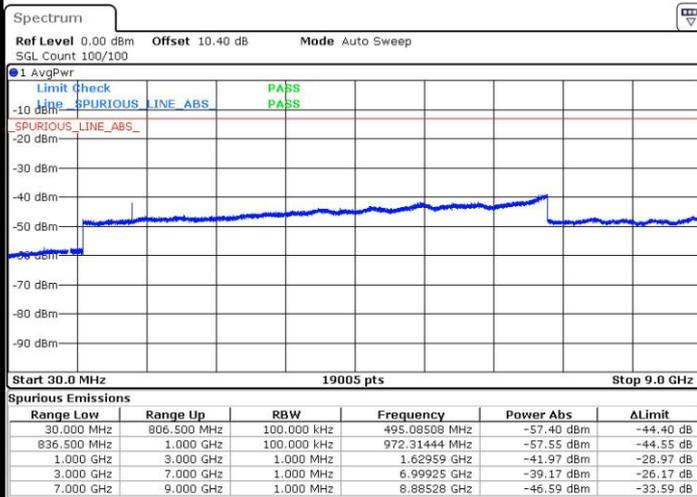
Highest Channel / 16QAM



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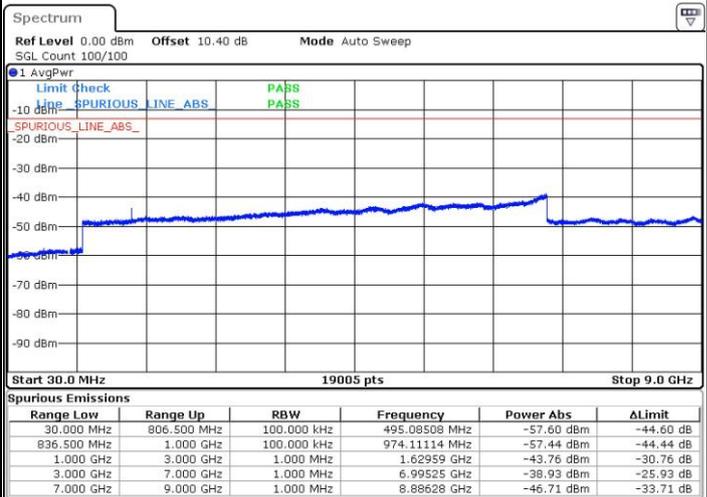
LTE Band 26 / 10MHz

Middle Channel / QPSK



Date: 30.JUL.2019 10:04:59

Middle Channel / 16QAM



Date: 30.JUL.2019 10:05:52



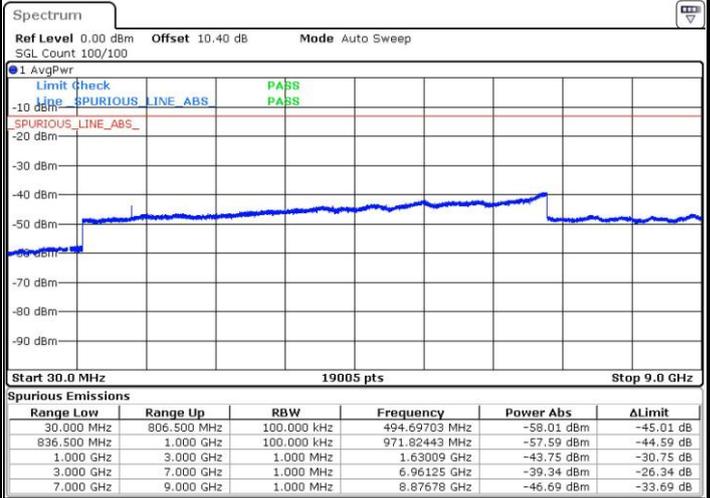
LTE Band 26 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



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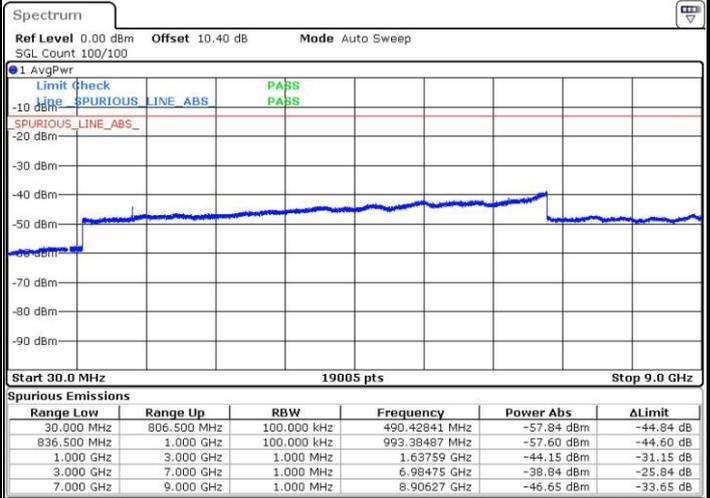
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LTE Band 26 / 1.4MHz

Lowest Channel / 64QAM

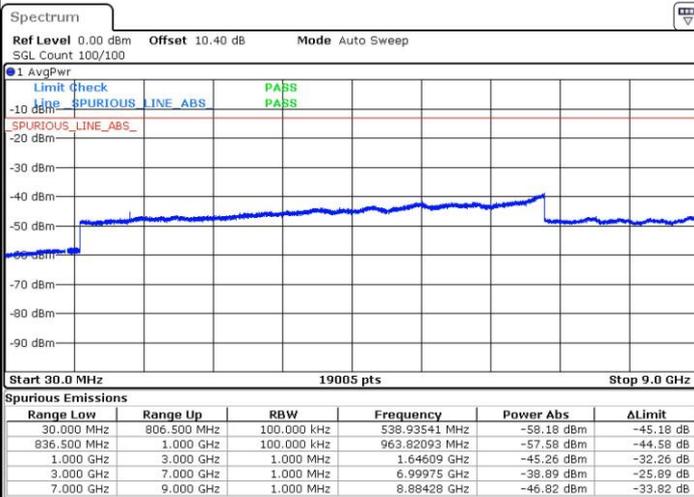
Middle Channel / 64QAM



Date: 30.JUL.2019 09:45:25

Date: 30.JUL.2019 09:46:42

Highest Channel / 64QAM



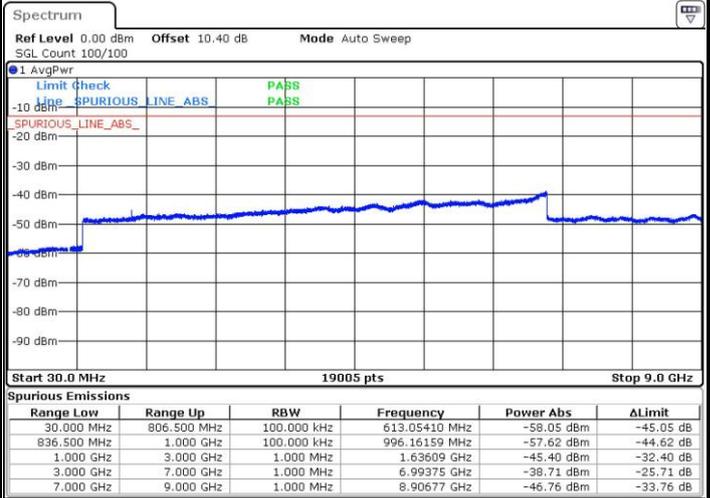
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LTE Band 26 / 3MHz

Lowest Channel / 64QAM

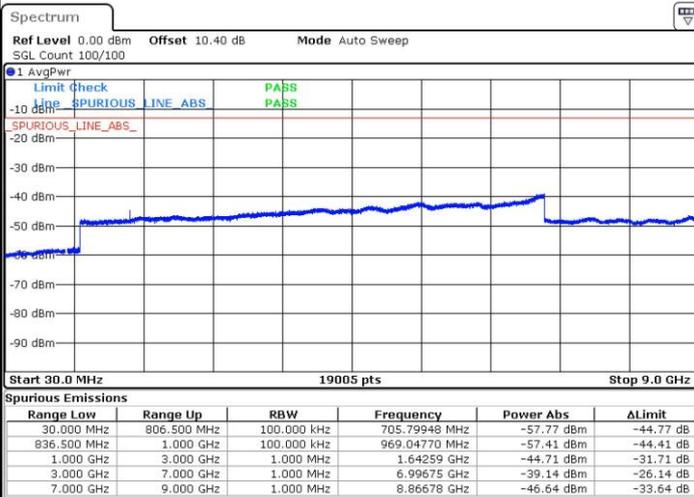
Middle Channel / 64QAM



Date: 30.JUL.2019 09:26:06

Date: 30.JUL.2019 09:27:23

Highest Channel / 64QAM



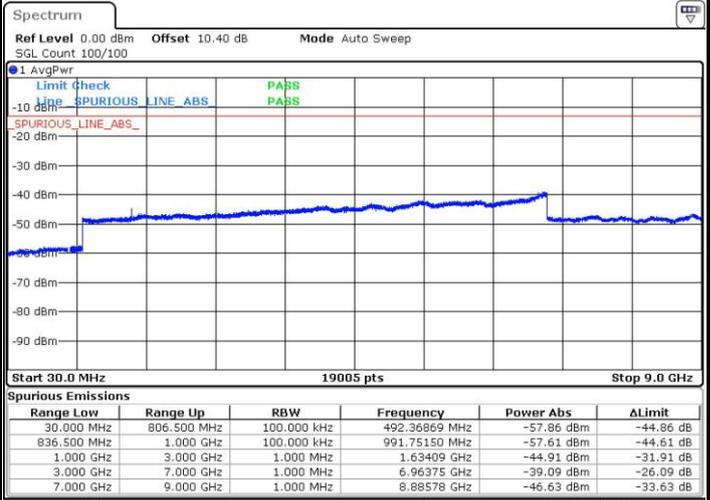
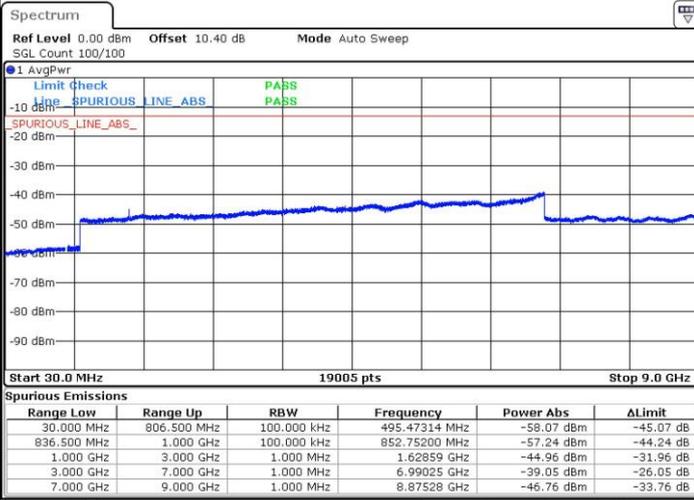
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LTE Band 26 / 5MHz

Lowest Channel / 64QAM

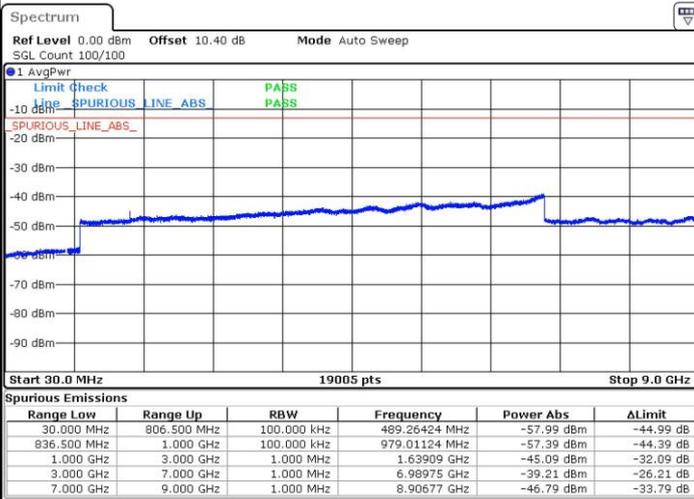
Middle Channel / 64QAM



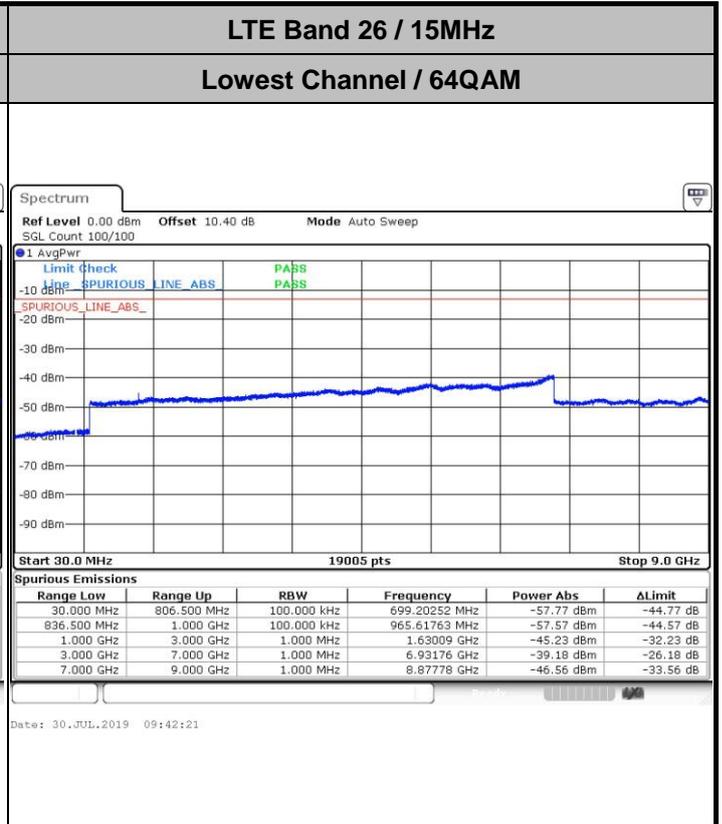
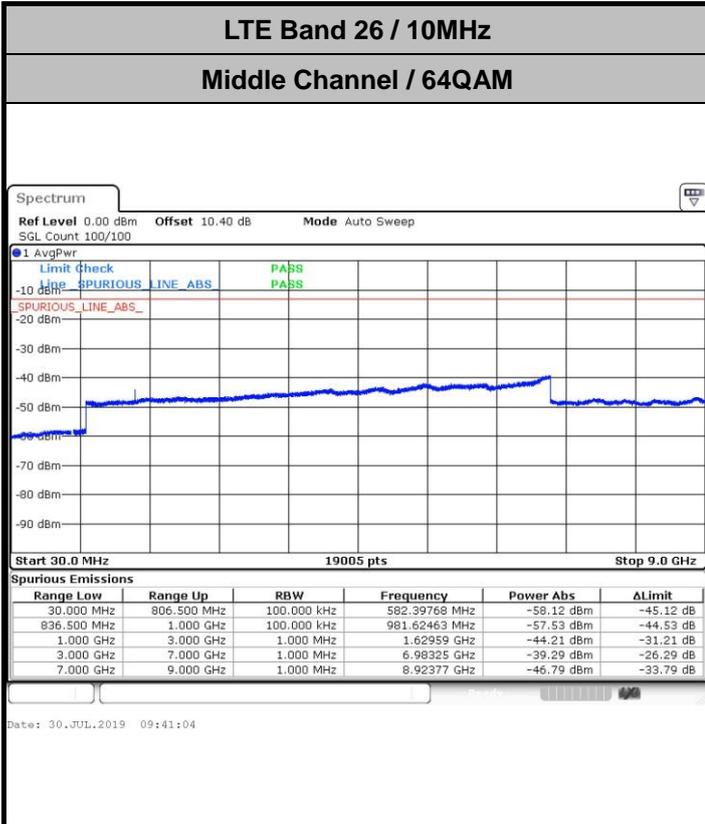
Date: 30.JUL.2019 09:37:14

Date: 30.JUL.2019 09:38:31

Highest Channel / 64QAM



Date: 30.JUL.2019 09:39:47





Frequency Stability

Test Conditions		LTE Band 26 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0073	PASS
40	Normal Voltage	0.0016	
30	Normal Voltage	0.0010	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0048	
0	Normal Voltage	0.0010	
-10	Normal Voltage	0.0046	
-20	Normal Voltage	0.0049	
-30	Normal Voltage	0.0053	
20	Maximum Voltage	0.0063	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0048	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.65 V. ; Maximum Voltage =4.25 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Test Conditions		LTE Band 26 (QPSK) / Low Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 15MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0056	PASS
40	Normal Voltage	0.0002	
30	Normal Voltage	0.0005	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0019	
0	Normal Voltage	0.0007	
-10	Normal Voltage	0.0005	
-20	Normal Voltage	0.0001	
-30	Normal Voltage	0.0011	
20	Maximum Voltage	0.0017	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0044	

**Note:**

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.65 V. ; Maximum Voltage =4.25 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## Appendix B. Test Results of ERP and Radiated Test

### ERP

LTE Band 26 / 1.4MHz (GT - LC = -3.5 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	3	23.20	0.2089	17.55	0.0569
Middle		1	3	23.32	0.2148	17.67	0.0585
Highest		1	3	23.07	0.2028	17.42	0.0552
Lowest	16QAM	1	3	22.22	0.1667	16.57	0.0454
Middle		1	3	21.81	0.1517	16.16	0.0413
Highest		1	3	21.93	0.1560	16.28	0.0425
Lowest	64QAM	1	3	21.05	0.1274	15.40	0.0347
Middle		1	3	21.18	0.1312	15.53	0.0357
Highest		1	3	20.76	0.1191	15.11	0.0324
Limit	ERP < 100W			Result		PASS	

LTE Band 26 / 3MHz (GT - LC = -3.5 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	8	23.29	0.2133	17.64	0.0581
Middle		1	8	23.33	0.2153	17.68	0.0586
Highest		1	8	23.13	0.2056	17.48	0.0560
Lowest	16QAM	1	0	21.85	0.1531	16.20	0.0417
Middle		1	0	21.93	0.1560	16.28	0.0425
Highest		1	0	22.13	0.1633	16.48	0.0445
Lowest	64QAM	1	0	20.83	0.1211	15.18	0.0330
Middle		1	0	21.41	0.1384	15.76	0.0377
Highest		1	0	20.41	0.1099	14.76	0.0299
Limit	ERP < 100W			Result		PASS	

LTE Band 26 / 5MHz (GT - LC = -3.5 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	24	23.21	0.2094	17.56	0.0570
Middle		1	24	23.29	0.2133	17.64	0.0581
Highest		1	24	23.10	0.2042	17.45	0.0556
Lowest	16QAM	1	24	21.63	0.1455	15.98	0.0396
Middle		1	24	21.85	0.1531	16.20	0.0417
Highest		1	24	22.09	0.1618	16.44	0.0441
Lowest	64QAM	1	12	21.01	0.1262	15.36	0.0344
Middle		1	12	21.3	0.1349	15.65	0.0367
Highest		1	12	20.96	0.1247	15.31	0.0340
Limit	ERP < 100W			Result		PASS	



LTE Band 26 / 10MHz (Channel 26740) (GT - LC = -3.5 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK						
Middle		1	25	23.30	0.2138	17.65	0.0582
Highest							
Lowest	16QAM						
Middle		1	25	22.15	0.1641	16.50	0.0447
Highest							
Lowest	64QAM						
Middle		1	0	21.11	0.1291	15.46	0.0352
Highest							
Limit	ERP < 100W			Result		PASS	

LTE Band 26 / 15MHz (Channel 26765) (GT - LC = -3.5 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	0	24.90	0.3090	19.25	0.0841
Middle		-	-	-	-	-	-
Highest		-	-	-	-	-	-
Lowest	16QAM	1	0	23.83	0.2415	18.18	0.0658
Middle		-	-	-	-	-	-
Highest		-	-	-	-	-	-
Lowest	64QAM	1	74	22.63	0.1832	16.98	0.0499
Middle		-	-	-	-	-	-
Highest		-	-	-	-	-	-
Limit	ERP < 100W			Result		PASS	



**Radiated Spurious Emission**

**LTE Band 26**

LTE Band 26 / 5MHz / QPSK									
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1640	-63.83	-13	-50.83	-74.53	-69.19	1.22	8.73	H
	2456	-60.89	-13	-47.89	-75.45	-67.77	1.43	10.46	H
	3272	-59.64	-13	-46.64	-75.85	-67.52	1.68	11.72	H
									H
									H
									H
	1640	-62.46	-13	-49.46	-73.03	-67.82	1.22	8.73	V
	2456	-60.09	-13	-47.09	-75	-66.97	1.43	10.46	V
	3272	-59.43	-13	-46.43	-75.97	-67.31	1.68	11.72	V
									V
									V
									V
Middle	1640	-64.34	-13	-51.34	-75.04	-69.70	1.22	8.73	H
	2464	-61.25	-13	-48.25	-75.8	-68.14	1.43	10.47	H
	3288	-59.65	-13	-46.65	-75.75	-67.57	1.70	11.76	H
									H
									H
									H
	1640	-61.59	-13	-48.59	-72.16	-66.95	1.22	8.73	V
	2464	-60.61	-13	-47.61	-75.48	-67.50	1.43	10.47	V
	3288	-59.13	-13	-46.13	-75.6	-67.05	1.70	11.76	V
									V
									V
									V



Highest	1648	-63.20	-13	-50.20	-73.92	-68.59	1.23	8.76	H
	2472	-61.27	-13	-48.27	-75.8	-68.16	1.44	10.48	H
	3296	-60.13	-13	-47.13	-76.18	-68.07	1.70	11.79	H
									H
									H
									H
									H
	1648	-61.81	-13	-48.81	-72.41	-67.20	1.23	8.76	V
	2472	-60.92	-13	-47.92	-75.74	-67.81	1.44	10.48	V
	3296	-59.73	-13	-46.73	-76.18	-67.67	1.70	11.79	V
									V
									V
									V
									V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



LTE Band 26 / 10MHz / QPSK									
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1640	-63.45	-13	-50.45	-74.15	-68.81	1.22	8.73	H
	2457	-61.00	-13	-48.00	-75.55	-67.88	1.43	10.47	H
	3280	-59.65	-13	-46.65	-75.8	-67.55	1.69	11.74	H
									H
									H
									H
									H
	1640	-62.63	-13	-49.63	-73.2	-67.99	1.22	8.73	V
	2457	-60.68	-13	-47.68	-75.58	-67.56	1.43	10.47	V
	3280	-59.49	-13	-46.49	-75.99	-67.39	1.69	11.74	V
									V
									V
									V
									V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



LTE Band 26 / 15MHz / QPSK									
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1632	-64.35	-13	-51.35	-75.03	-69.68	1.22	8.70	H
	2448	-63.92	-13	-50.92	-75.5	-70.80	1.43	10.46	H
	3256	-59.70	-13	-46.70	-76.01	-67.55	1.67	11.67	H
									H
									H
									H
									H
	1632	-63.34	-13	-50.34	-73.88	-68.67	1.22	8.70	V
	2448	-60.39	-13	-47.39	-75.35	-67.27	1.43	10.46	V
	3256	-59.27	-13	-46.27	-75.86	-67.12	1.67	11.67	V
									V
									V
									V
									V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.