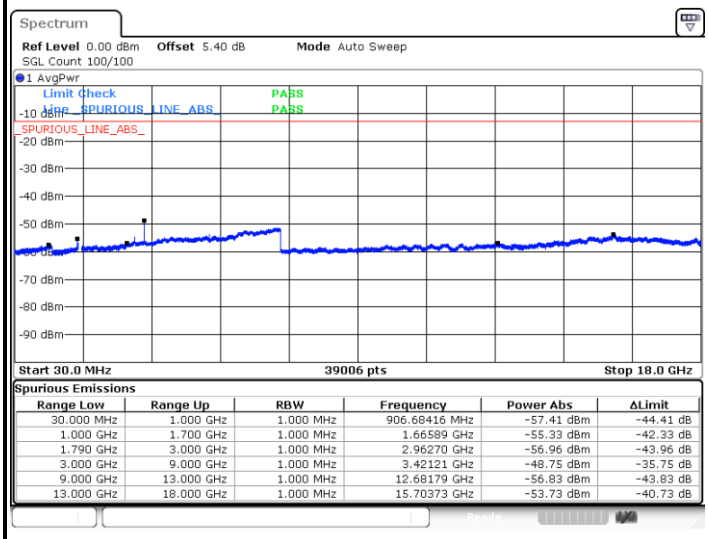
LTE Band 66 / 10MHz

Lowest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	906.68416 MHz	-57.41 dBm	-44.41 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.66589 GHz	-55.33 dBm	-42.33 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.96270 GHz	-56.96 dBm	-43.96 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.42121 GHz	-48.75 dBm	-35.75 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.68179 GHz	-56.83 dBm	-43.83 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.70373 GHz	-53.73 dBm	-40.73 dB

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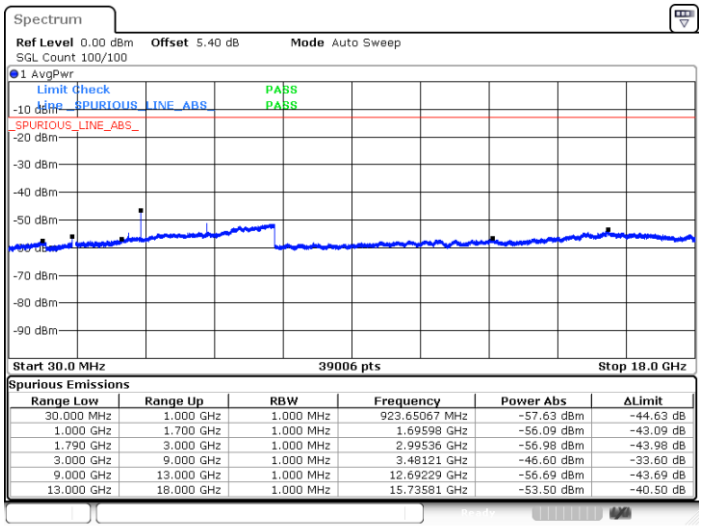
Middle Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	923.65067 MHz	-57.63 dBm	-44.63 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69598 GHz	-56.09 dBm	-43.09 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.99536 GHz	-56.98 dBm	-43.98 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.48121 GHz	-46.60 dBm	-33.60 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.69229 GHz	-56.69 dBm	-43.69 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.73581 GHz	-53.50 dBm	-40.50 dB

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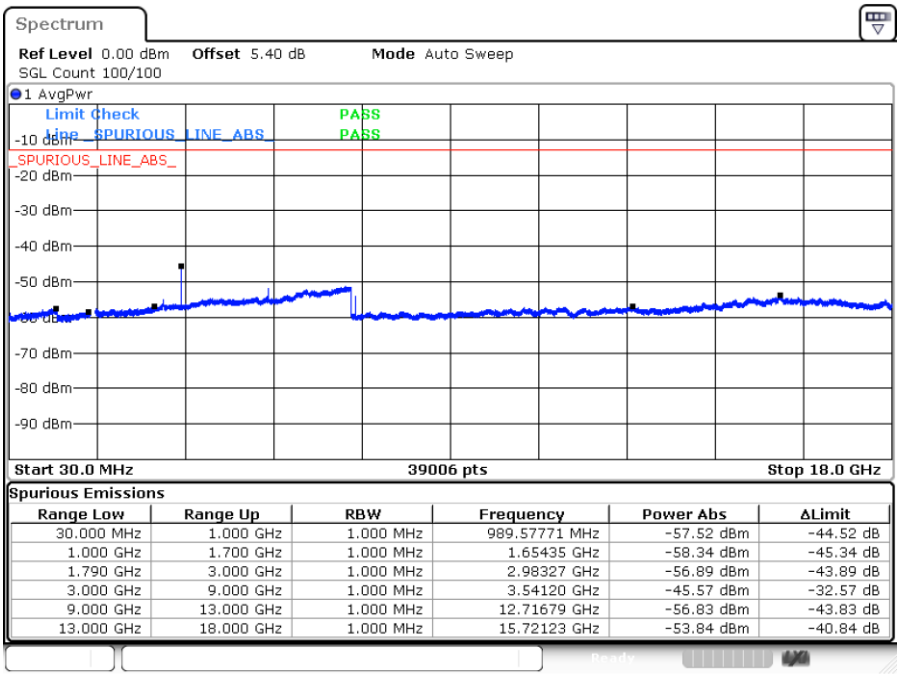
Highest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	989.57771 MHz	-57.52 dBm	-44.52 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.65435 GHz	-58.34 dBm	-45.34 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.98327 GHz	-56.89 dBm	-43.89 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.54120 GHz	-45.57 dBm	-32.57 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.71679 GHz	-56.83 dBm	-43.83 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.72123 GHz	-53.84 dBm	-40.84 dB

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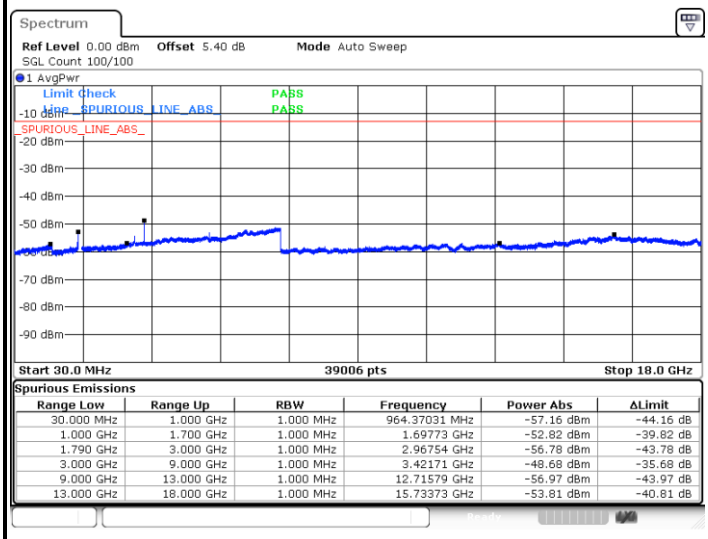
LTE Band 66 / 15MHz

Lowest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	964.37031 MHz	-57.16 dBm	-44.16 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69773 GHz	-52.82 dBm	-39.82 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.96754 GHz	-56.78 dBm	-43.78 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.42171 GHz	-48.68 dBm	-35.68 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.71579 GHz	-56.97 dBm	-43.97 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.73373 GHz	-53.81 dBm	-40.81 dB

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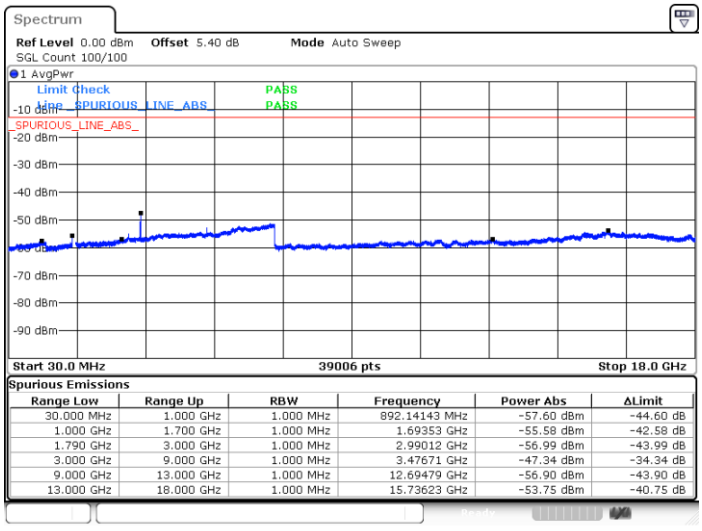
Middle Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	892.14143 MHz	-57.60 dBm	-44.60 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69353 GHz	-55.58 dBm	-42.58 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.99012 GHz	-56.99 dBm	-43.99 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.47671 GHz	-47.34 dBm	-34.34 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.69479 GHz	-56.90 dBm	-43.90 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.73623 GHz	-53.75 dBm	-40.75 dB

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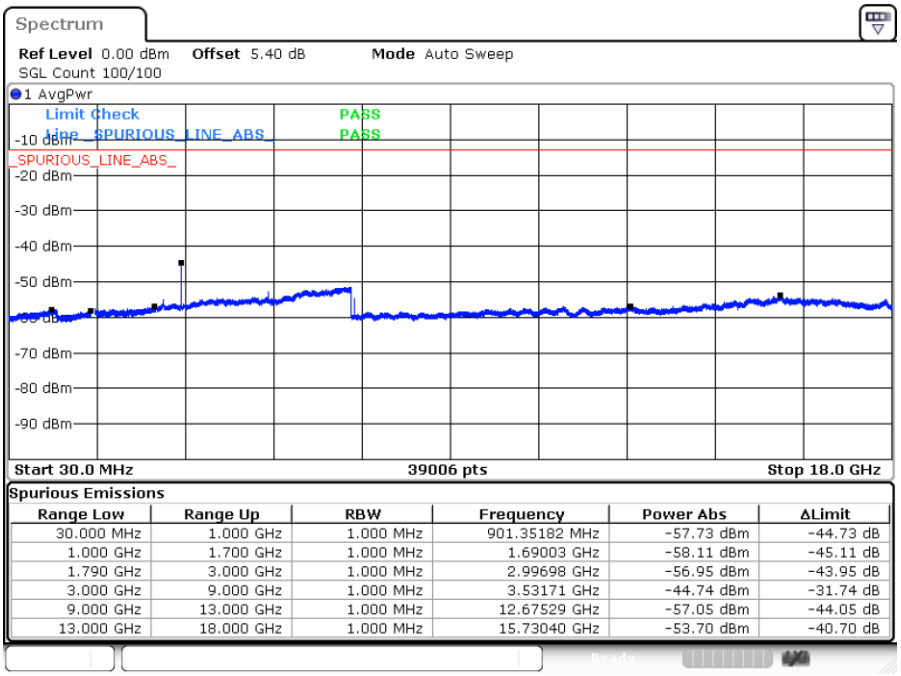
Highest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	901.35182 MHz	-57.73 dBm	-44.73 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69003 GHz	-58.11 dBm	-45.11 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.99698 GHz	-56.95 dBm	-43.95 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.53171 GHz	-44.74 dBm	-31.74 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.67529 GHz	-57.05 dBm	-44.05 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.73040 GHz	-53.70 dBm	-40.70 dB

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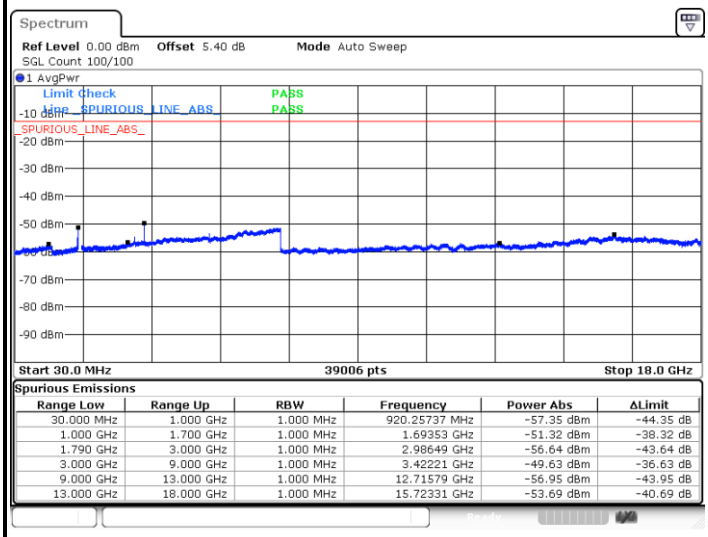
LTE Band 66 / 20MHz

Lowest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	920.25737 MHz	-57.35 dBm	-44.35 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69353 GHz	-51.32 dBm	-38.32 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.98649 GHz	-56.64 dBm	-43.64 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.42221 GHz	-49.63 dBm	-36.63 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.71579 GHz	-56.95 dBm	-43.95 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.72331 GHz	-53.69 dBm	-40.69 dB

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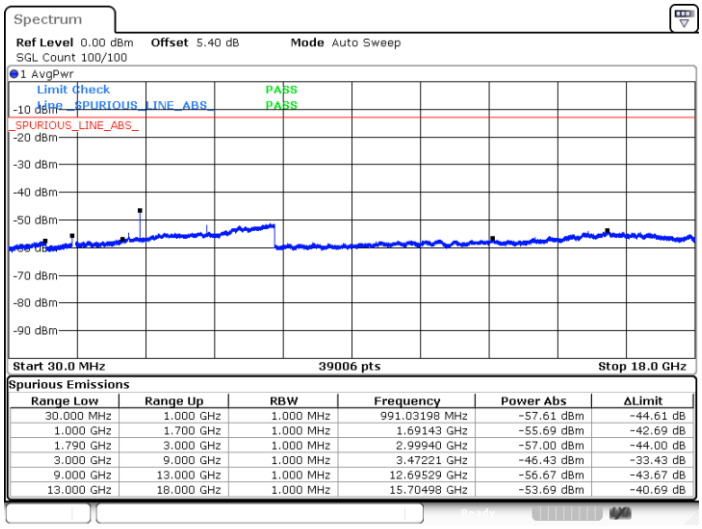
Middle Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	991.03198 MHz	-57.61 dBm	-44.61 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69143 GHz	-55.69 dBm	-42.69 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.99940 GHz	-57.00 dBm	-44.00 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.47221 GHz	-46.43 dBm	-33.43 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.69529 GHz	-56.67 dBm	-43.67 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.70498 GHz	-53.69 dBm	-40.69 dB

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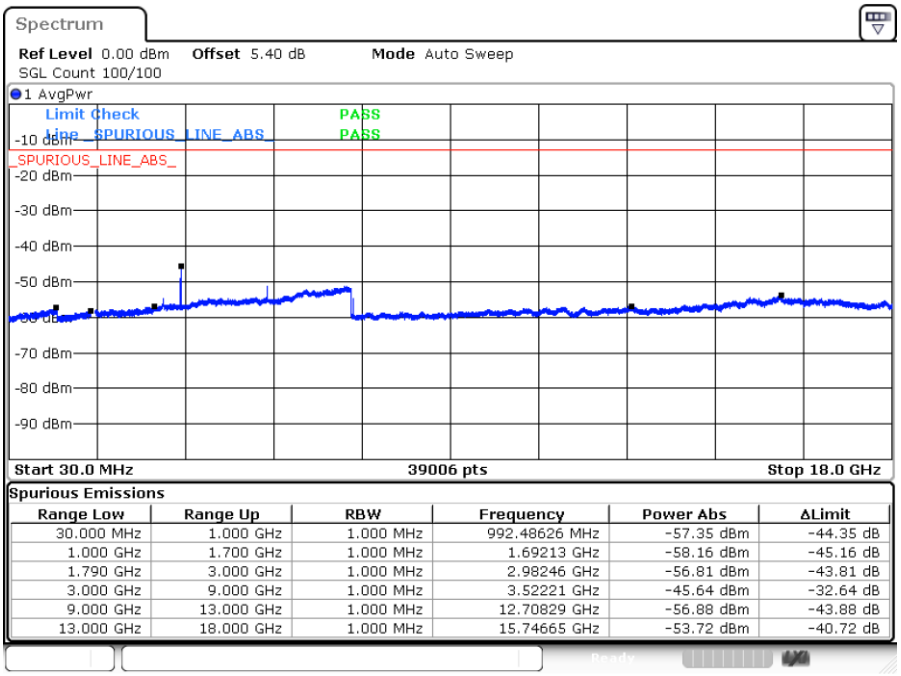
Highest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	992.48626 MHz	-57.35 dBm	-44.35 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69213 GHz	-58.16 dBm	-45.16 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.98246 GHz	-56.81 dBm	-43.81 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.52221 GHz	-45.64 dBm	-32.64 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.70829 GHz	-56.88 dBm	-43.88 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.74665 GHz	-53.72 dBm	-40.72 dB

Date: 22.NOV.2024 01:30:03

Frequency Stability

Test Conditions		LTE Band 66 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0017	PASS
40	Normal Voltage	0.0019	
30	Normal Voltage	0.0011	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0022	
0	Normal Voltage	0.0026	
-10	Normal Voltage	0.0021	
-20	Normal Voltage	0.0014	
-30	Normal Voltage	0.0044	
20	Maximum Voltage	0.0026	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0014	

Note:

1. Normal Voltage =4.0 V.；Battery End Point (BEP) =3.55 V.；Maximum Voltage =4.4 V.

2. Note: The frequency fundamental emissions stay within the authorized frequency block.

Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Jake	Temperature :	23~25℃
		Relative Humidity :	51~53%

Note: Pre-scanned harmonic for the different antenna combinations, we choose the worst antenna mode to perform final test.

LTE Band 25 / 20MHz / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3705	-56.01	-13	-43.01	-68.27	2.64	14.90	H
	5550	-55.83	-13	-42.83	-67.69	2.94	14.80	H
	7410	-52.59	-13	-39.59	-62.36	3.39	13.16	H
	3705	-55.90	-13	-42.90	-68.16	2.64	14.90	V
	5550	-55.90	-13	-42.90	-67.76	2.94	14.80	V
	7410	-52.50	-13	-39.50	-62.27	3.39	13.16	V
Middle	3750	-55.78	-13	-42.78	-68.04	2.64	14.90	H
	5625	-54.52	-13	-41.52	-66.38	2.94	14.80	H
	7515	-52.35	-13	-39.35	-62.12	3.39	13.16	H
	3750	-55.33	-13	-42.33	-67.59	2.64	14.90	V
	5625	-55.06	-13	-42.06	-66.92	2.94	14.80	V
	7515	-52.11	-13	-39.11	-61.88	3.39	13.16	V
Highest	3795	-56.21	-13	-43.21	-68.47	2.64	14.90	H
	5685	-54.13	-13	-41.13	-65.99	2.94	14.80	H
	7590	-51.76	-13	-38.76	-61.53	3.39	13.16	H
	3795	-55.58	-13	-42.58	-67.84	2.64	14.90	V
	5685	-54.77	-13	-41.77	-66.63	2.94	14.80	V
	7590	-51.50	-13	-38.50	-61.27	3.39	13.16	V

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

LTE Band 26 / 15 MHz / QPSK								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-65.34	-13	-52.34	-72.31	1.58	10.70	H
	2472	-61.23	-13	-48.23	-69.48	2.102	12.50	H
	3232	-59.79	-13	-46.79	-68.68	2.856	13.90	H
	1648	-64.12	-13	-51.12	-71.09	1.58	10.70	V
	2472	-56.75	-13	-43.75	-65.00	2.10	12.50	V
	3232	-59.73	-13	-46.73	-68.62	2.86	13.90	V
Middle	1656	-64.39	-13	-51.39	-71.36	1.58	10.70	H
	2488	-61.03	-13	-48.03	-69.28	2.102	12.50	H
	3320	-59.66	-13	-46.66	-68.55	2.856	13.90	H
	1656	-63.54	-13	-50.54	-70.51	1.58	10.70	V
	2488	-59.52	-13	-46.52	-67.77	2.10	12.50	V
	3320	-59.91	-13	-46.91	-68.80	2.86	13.90	V
Highest	1648	-65.34	-13	-52.34	-72.31	1.58	10.70	H
	2472	-61.23	-13	-48.23	-69.48	2.102	12.50	H
	3232	-59.79	-13	-46.79	-68.68	2.856	13.90	H
	1648	-64.12	-13	-51.12	-71.09	1.58	10.70	V
	2472	-56.75	-13	-43.75	-65.00	2.10	12.50	V
	3232	-59.73	-13	-46.73	-68.62	2.86	13.90	V

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

LTE Band 66 / 20MHz / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3420	-57.65	-13	-44.65	-68.39	2.604	13.34	H
	5130	-54.59	-13	-41.59	-65.10	3.011	13.52	H
	6840	-54.81	-13	-41.81	-65.01	3.271	13.47	H
	3420	-57.50	-13	-44.50	-68.24	2.604	13.34	V
	5130	-54.53	-13	-41.53	-65.04	3.011	13.52	V
	6840	-54.84	-13	-41.84	-65.04	3.271	13.47	V
Middle	3465	-57.54	-13	-44.54	-68.28	2.604	13.34	H
	5205	-54.24	-13	-41.24	-64.75	3.011	13.52	H
	6945	-54.12	-13	-41.12	-64.32	3.271	13.47	H
	3465	-57.88	-13	-44.88	-68.62	2.604	13.34	V
	5205	-54.47	-13	-41.47	-64.98	3.011	13.52	V
	6945	-54.66	-13	-41.66	-64.86	3.271	13.47	V
Highest	3525	-57.28	-13	-44.28	-68.02	2.604	13.34	H
	5280	-55.90	-13	-42.90	-66.41	3.011	13.52	H
	7050	-54.06	-13	-41.06	-64.26	3.271	13.47	H
	3525	-57.29	-13	-44.29	-68.03	2.604	13.34	V
	5280	-55.60	-13	-42.60	-66.11	3.011	13.52	V
	7050	-53.55	-13	-40.55	-63.75	3.271	13.47	V

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