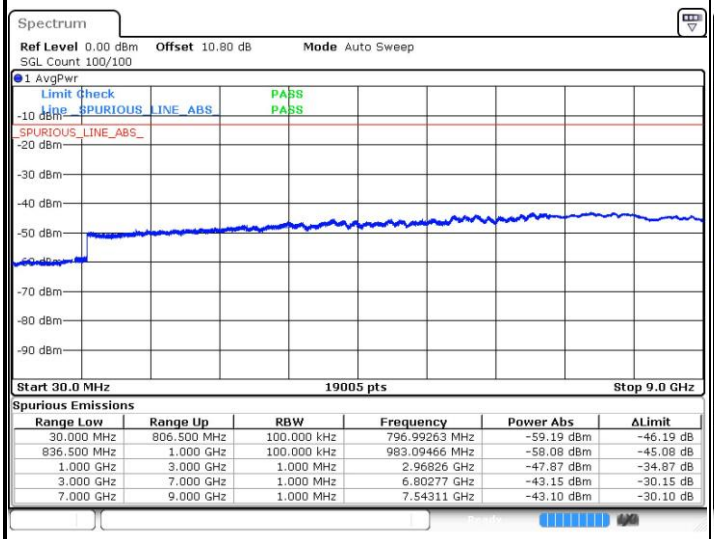
LTE Band 26 / 3MHz

Lowest Channel / 64QAM



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	806.500 MHz	100.000 kHz	796.99263 MHz	-59.19 dBm	-46.19 dB
836.500 MHz	1.000 GHz	100.000 kHz	983.09466 MHz	-58.08 dBm	-45.08 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.96826 GHz	-47.87 dBm	-34.87 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.80277 GHz	-43.15 dBm	-30.15 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.54311 GHz	-43.10 dBm	-30.10 dB

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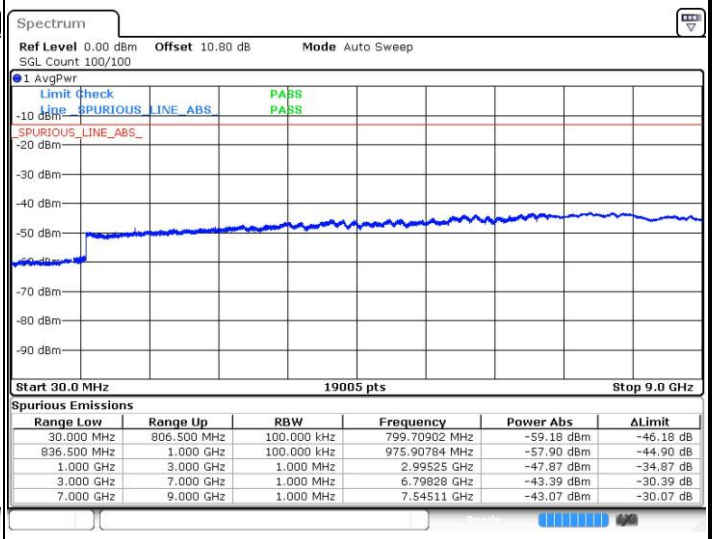
Middle Channel / 64QAM



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	806.500 MHz	100.000 kHz	799.70902 MHz	-59.18 dBm	-46.18 dB
836.500 MHz	1.000 GHz	100.000 kHz	975.90784 MHz	-57.90 dBm	-44.90 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.99525 GHz	-47.87 dBm	-34.87 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.79828 GHz	-43.39 dBm	-30.39 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.54511 GHz	-43.07 dBm	-30.07 dB

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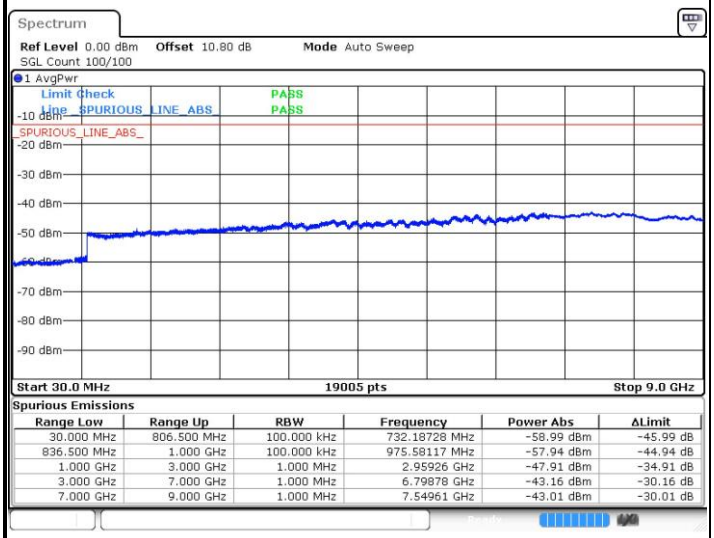
Highest Channel / 64QAM



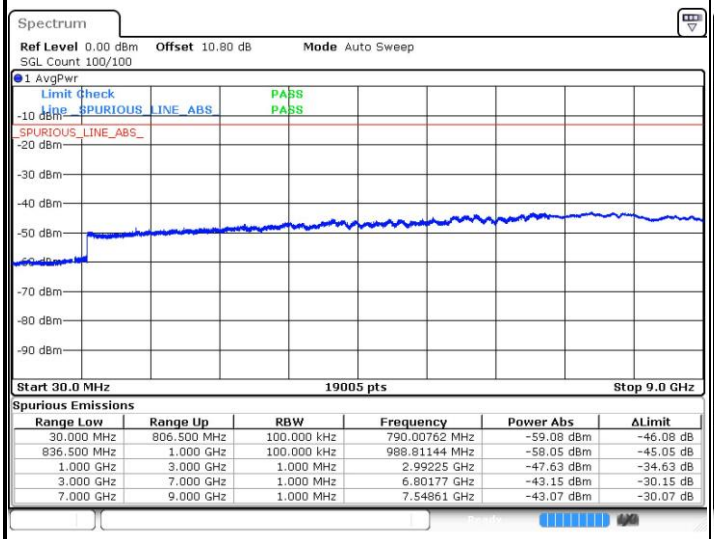
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	806.500 MHz	100.000 kHz	732.18728 MHz	-58.99 dBm	-45.99 dB
836.500 MHz	1.000 GHz	100.000 kHz	975.58117 MHz	-57.94 dBm	-44.94 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.95926 GHz	-47.91 dBm	-34.91 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.79878 GHz	-43.16 dBm	-30.16 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.54961 GHz	-43.01 dBm	-30.01 dB

Date: 8.APR.2019 07:36:00

LTE Band 26 / 5MHz

Lowest Channel / 64QAM



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	806.500 MHz	100.000 kHz	790.00762 MHz	-59.08 dBm	-46.08 dB
836.500 MHz	1.000 GHz	100.000 kHz	988.81144 MHz	-58.05 dBm	-45.05 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.99225 GHz	-47.63 dBm	-34.63 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.80177 GHz	-43.15 dBm	-30.15 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.54861 GHz	-43.07 dBm	-30.07 dB

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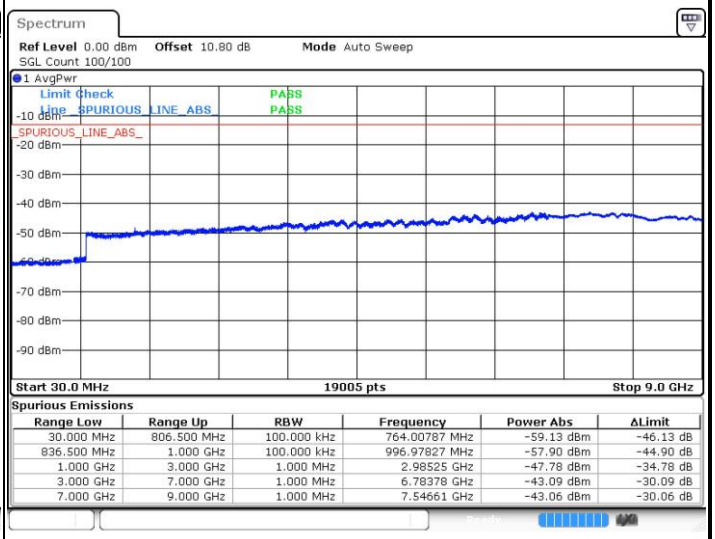
Middle Channel / 64QAM



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	806.500 MHz	100.000 kHz	764.00787 MHz	-59.13 dBm	-46.13 dB
836.500 MHz	1.000 GHz	100.000 kHz	996.97827 MHz	-57.90 dBm	-44.90 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.98525 GHz	-47.78 dBm	-34.78 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.78378 GHz	-43.09 dBm	-30.09 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.54661 GHz	-43.06 dBm	-30.06 dB

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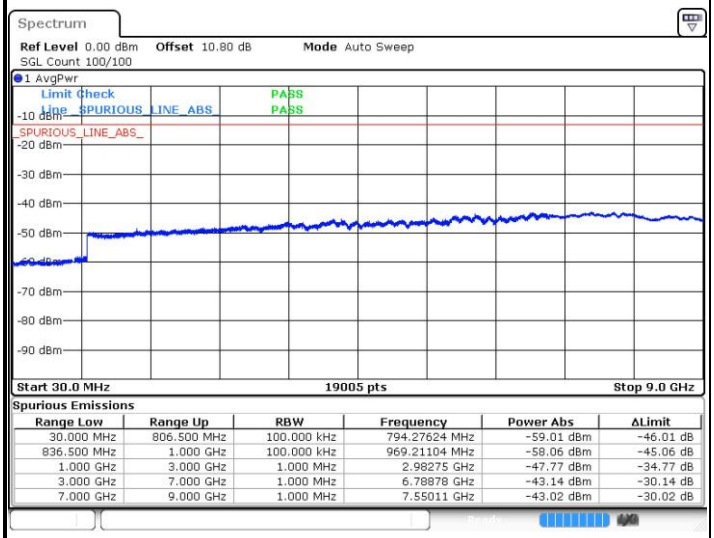
Highest Channel / 64QAM



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	806.500 MHz	100.000 kHz	794.27624 MHz	-59.01 dBm	-46.01 dB
836.500 MHz	1.000 GHz	100.000 kHz	969.21104 MHz	-58.06 dBm	-45.06 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.98275 GHz	-47.77 dBm	-34.77 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.78878 GHz	-43.14 dBm	-30.14 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.55011 GHz	-43.02 dBm	-30.02 dB

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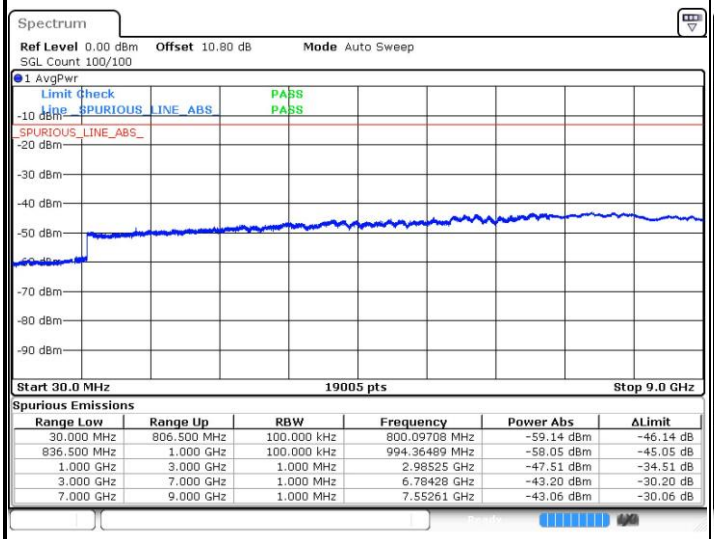
LTE Band 26 / 10MHz	LTE Band 26 / 15MHz
Middle Channel / 64QAM	**Lowest Channel / 64QAM**



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	806.500 MHz	100.000 kHz	800.09708 MHz	-59.14 dBm	-46.14 dB
836.500 MHz	1.000 GHz	100.000 kHz	994.36489 MHz	-58.05 dBm	-45.05 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.98525 GHz	-47.51 dBm	-34.51 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.78428 GHz	-43.20 dBm	-30.20 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.55261 GHz	-43.06 dBm	-30.06 dB

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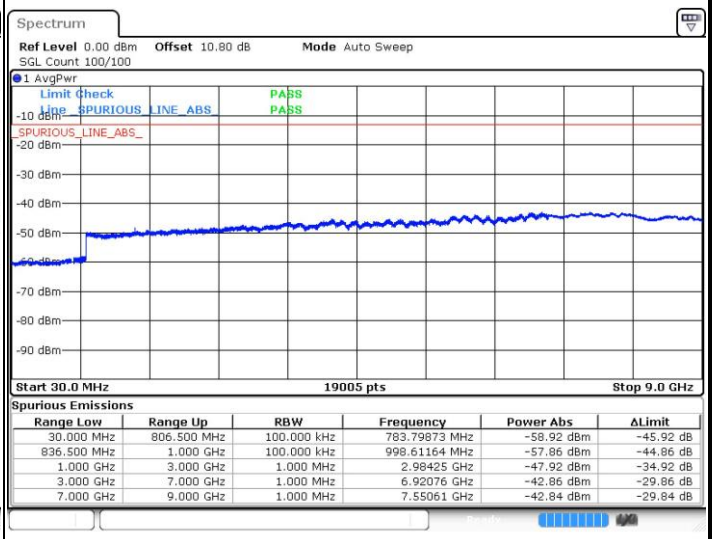

Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	806.500 MHz	100.000 kHz	783.79873 MHz	-58.92 dBm	-45.92 dB
836.500 MHz	1.000 GHz	100.000 kHz	998.61164 MHz	-57.86 dBm	-44.86 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.98425 GHz	-47.92 dBm	-34.92 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.92076 GHz	-42.86 dBm	-29.86 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.55061 GHz	-42.84 dBm	-29.84 dB

Date: 8.APR.2019 07:44:19

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	0.0028	PASS
40	Normal Voltage	0.0000	
30	Normal Voltage	0.0006	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0007	
0	Normal Voltage	0.0000	
-10	Normal Voltage	0.0010	
-20	Normal Voltage	0.0049	
-30	Normal Voltage	0.0001	
20	Maximum Voltage	0.0004	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0006	

Note:

1. Normal Voltage =3.85 V.；Battery End Point (BEP) =3.5 V.；Maximum Voltage =4.4 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	0.0028	PASS
40	Normal Voltage	0.0021	
30	Normal Voltage	0.0005	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0045	
0	Normal Voltage	0.0017	
-10	Normal Voltage	0.0004	
-20	Normal Voltage	0.0029	
-30	Normal Voltage	0.0006	
20	Maximum Voltage	0.0016	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0006	

Note:

1. Normal Voltage =3.85 V.；Battery End Point (BEP) =3.5 V.；Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

Appendix B. Test Results of ERP and Radiated Test

ERP

<Reporting Only for Ant. 0_C>

LTE Band 26 / 15MHz (Channel 26765) (GT - LC = 1.2 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	0	24.50	0.2818	23.55	0.2265
Middle		-	-	-	-	-	-
Highest		-	-	-	-	-	-
Lowest	16QAM	1	74	23.75	0.2371	22.80	0.1905
Middle		-	-	-	-	-	-
Highest		-	-	-	-	-	-
Lowest	64QAM	1	74	22.75	0.1884	21.80	0.1514
Middle		-	-	-	-	-	-
Highest		-	-	-	-	-	-
Limit	ERP < 7W			Result		PASS	

<Reporting Only for Ant. 1>

LTE Band 26 / 15MHz (Channel 26765) (GT - LC = -3.7 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	0	24.50	0.2818	18.65	0.0733
Middle		-	-	-	-	-	-
Highest		-	-	-	-	-	-
Lowest	16QAM	1	74	23.75	0.2371	17.90	0.0617
Middle		-	-	-	-	-	-
Highest		-	-	-	-	-	-
Lowest	64QAM	1	74	22.75	0.1884	16.90	0.0490
Middle		-	-	-	-	-	-
Highest		-	-	-	-	-	-
Limit	ERP < 7W			Result		PASS	

Radiated Spurious Emission

LTE Band 26

<For Ant. 0_C>

LTE Band 26 / 3MHz / 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	-57.15	-13	-44.15	-67.19	-62.69	0.91	8.60	H
	2447	-56.06	-13	-43.06	-70.38	-63.40	1.14	10.63	H
	3262	-55.24	-13	-42.24	-70.98	-63.70	1.32	11.93	H
									H
									H
									H
	1632	-55.85	-13	-42.85	-65.42	-61.39	0.91	8.60	V
	2447	-54.43	-13	-41.43	-68.85	-61.77	1.14	10.63	V
	3262	-54.75	-13	-41.75	-70.97	-63.21	1.32	11.93	V
									V
									V
									V
Middle	1640	-56.80	-13	-43.80	-66.89	-62.36	0.92	8.63	H
	2457	-55.88	-13	-42.88	-70.21	-63.23	1.14	10.64	H
	3280	-54.81	-13	-41.81	-70.51	-63.31	1.32	11.97	H
									H
									H
									H
	1640	-54.08	-13	-41.08	-63.63	-59.64	0.92	8.63	V
	2457	-53.91	-13	-40.91	-68.37	-61.26	1.14	10.64	V
	3280	-54.50	-13	-41.50	-70.67	-63.00	1.32	11.97	V
									V
									V
									V

Highest	1648	-57.05	-13	-44.05	-67.15	-62.64	0.92	8.66	H
	2468	-55.86	-13	-42.86	-70.18	-63.22	1.14	10.66	H
	3290	-55.05	-13	-42.05	-70.71	-63.57	1.32	12.00	H
									H
									H
									H
									H
	1648	-54.69	-13	-41.69	-64.25	-60.28	0.92	8.66	V
	2468	-52.97	-13	-39.97	-67.42	-60.33	1.14	10.66	V
	3290	-54.63	-13	-41.63	-70.75	-63.15	1.32	12.00	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	-55.95	-13	-42.95	-66.04	-61.51	0.92	8.63	H
	2457	-55.36	-13	-42.36	-69.69	-62.71	1.14	10.64	H
	3276	-54.76	-13	-41.76	-70.46	-63.25	1.32	11.96	H
									H
									H
									H
									H
	1640	-54.22	-13	-41.22	-63.77	-59.78	0.92	8.63	V
	2457	-52.96	-13	-39.96	-67.42	-60.31	1.14	10.64	V
	3276	-54.52	-13	-41.52	-70.69	-63.01	1.32	11.96	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)
	1632	-56.45	-13	-43.45	-66.49	-61.99	0.91	8.60	H
	2444	-56.28	-13	-43.28	-70.61	-63.61	1.14	10.62	H
	3256	-54.98	-13	-41.98	-70.72	-63.43	1.32	11.91	H
									H
									H
									H
									H
Lowest	1632	-54.62	-13	-41.62	-64.19	-60.16	0.91	8.60	V
	2448	-54.77	-13	-41.77	-69.2	-62.11	1.14	10.63	V
	3256	-54.76	-13	-41.76	-70.98	-63.21	1.32	11.91	V
									V
									V
									V
									V
									V

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

LTE Band 26

<For Ant. 1>

LTE Band 26 / 3MHz / 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	-52.80	-13	-39.80	-62.84	-58.34	0.91	8.60	H
	2447	-56.91	-13	-43.91	-71.23	-64.25	1.14	10.63	H
	3262	-55.81	-13	-42.81	-71.55	-64.27	1.32	11.93	H
									H
									H
									H
	1632	-52.32	-13	-39.32	-61.89	-57.86	0.91	8.60	V
	2447	-56.55	-13	-43.55	-70.97	-63.89	1.14	10.63	V
	3262	-55.38	-13	-42.38	-71.6	-63.84	1.32	11.93	V
									V
									V
									V
Middle	1640	-53.61	-13	-40.61	-63.7	-59.17	0.92	8.63	H
	2457	-56.90	-13	-43.90	-71.23	-64.25	1.14	10.64	H
	3280	-56.16	-13	-43.16	-71.86	-64.66	1.32	11.97	H
									H
									H
									H
	1640	-51.29	-13	-38.29	-60.84	-56.85	0.92	8.63	V
	2457	-56.36	-13	-43.36	-70.82	-63.71	1.14	10.64	V
	3280	-55.62	-13	-42.62	-71.79	-64.12	1.32	11.97	V
									V
									V
									V

Highest	1648	-52.77	-13	-39.77	-62.87	-58.36	0.92	8.66	H
	2468	-57.02	-13	-44.02	-71.34	-64.38	1.14	10.66	H
	3290	-56.09	-13	-43.09	-71.75	-64.61	1.32	12.00	H
									H
									H
									H
									H
	1648	-51.90	-13	-38.90	-61.46	-57.49	0.92	8.66	V
	2468	-56.45	-13	-43.45	-70.9	-63.81	1.14	10.66	V
	3290	-55.53	-13	-42.53	-71.65	-64.05	1.32	12.00	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	-53.36	-13	-40.36	-63.45	-58.92	0.92	8.63	H
	2457	-56.62	-13	-43.62	-70.95	-63.97	1.14	10.64	H
	3276	-56.24	-13	-43.24	-71.94	-64.73	1.32	11.96	H
									H
									H
									H
									H
	1640	-51.17	-13	-38.17	-60.72	-56.73	0.92	8.63	V
	2457	-56.63	-13	-43.63	-71.09	-63.98	1.14	10.64	V
	3276	-55.82	-13	-42.82	-71.99	-64.31	1.32	11.96	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)
	1632	-53.07	-13	-40.07	-63.11	-58.61	0.91	8.60	H
	2444	-56.86	-13	-43.86	-71.19	-64.19	1.14	10.62	H
	3259	-55.47	-13	-42.47	-71.21	-63.92	1.32	11.92	H
									H
									H
									H
									H
Lowest	1632	-52.26	-13	-39.26	-61.83	-57.80	0.91	8.60	V
	2444	-56.67	-13	-43.67	-71.1	-64.00	1.14	10.62	V
	3259	-55.00	-13	-42.00	-71.22	-63.45	1.32	11.92	V
									V
									V
									V
									V
									V

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