LTE Band 41 / 10MHz Middle Channel / QPSK Middle Channel / 16QAM **—** Spectrum Spectrum Ref Level 0.00 dBm Offset 7.72 dB Mode Auto Sweep Ref Level 0.00 dBm Offset 7.72 dB Mode Auto Sweep Count 100/100 Count 100/100 10 dSme -20 dBm -20 dBm LINE\_ABS SPURIOUS SPURIOU: -60 dBm -60 dBm 70 dBn -70 dBm 80 dBm -80 dBm -90 dBm 90 dBm-Start 30.0 MH; Stop 27.0 GH: Start 30.0 MHz 56008 27.0 GHz rious Emission Spurious Emissions Power Abs
-51.05 dBm
-51.10 dBm
-50.12 dBm
-45.49 dBm
-48.67 dBm
-47.60 dBm
-45.19 dBm
-45.30 dBm RBW

1.000 MHz
1.000 MHz ΔLimit
-26.03 dB
-26.10 dB
-25.37 dB
-20.24 dB
-23.48 dB
-22.63 dB RBW 1.000 MHz 1.000 MHz 1.000 MHz Range Low 30,000 MH: Range Up Frequency 881.60763 MHz Power Abs -51.03 dBn Range Low 30,000 MHz ΔLimit ΔLimit
-26.05 dB
-26.10 dB
-25.12 dB
-20.49 dB
-23.67 dB
-22.60 dB
-20.19 dB
-20.30 dB -51.03 dBm -51.10 dBm -50.37 dBm -45.24 dBm -48.48 dBm -47.63 dBm 1.000 GHz 2.510 GHz 3.000 GHz 7.000 GHz 10.000 GHz 14.000 GHz 1.000 GHz 2.510 GHz 3.000 GHz 7.000 GHz 2.15682 GHz 2.98591 GHz 2.31664 GHz 2.98917 GHz 1.000 GHz 2.695 GHz 2.98591 GHZ 6.84716 GHZ 7.04649 GHZ 12.42280 GHZ 16.63477 GHZ 19.84795 GHZ 3.000 GHz 7.000 GHz 10.000 GHz 14.000 GHz 18.000 GHz 6.98372 GHz 7.03107 GHz 12.38566 GHz .000 MHz 3.000 GHz 10.000 GHz 14.000 GHz 10.000 GHz .000 MH: 18.000 GHz 27.000 GHz -45.10 dBm -45.33 dBm -20.10 dB -20.33 dB 18.000 GHz 27.000 GHz .000 MHz .000 MHz 16.64676 GHz 19.86723 GHz 18.000 GHz ate: 9.APR.2019 11:43:04 Date: 9.APR.2019 11:43:56 **Highest Channel / QPSK Highest Channel / 16QAM** Spectrum Spectrum Ref Level 0.00 dBm Offset 7.72 dB Mode Auto Sweep Ref Level 0.00 dBm Offset 7.72 dB Mode Auto Sweep Count 100/100 GL Count 100/100 1 AvgPwr Limit Check -10 d&me 10 dame -20 dBm -20 dBm \_LINE\_ABS \_LINE\_ABS SPURIOUS SPURIOUS 40 dBm 40 dBm -60 dBm 70 dBm 70 dBm -80 dBm -80 dBm 90 dBm 90 dBm Stop 27.0 GHz Start 30.0 MHz 56008 pts Stop 27.0 GHz Start 30.0 MHz 56008 pts Spurious Emissions ırious Emission Durious Emissic Range Low 30.000 MHz 1.000 GHz 2.695 GHz 3.000 GHz 7.000 GHz 10.000 GHz 14.000 GHz Power Abs
-50.79 dBm
-51.21 dBm
-50.23 dBm
-45.45 dBm
-48.63 dBm
-47.63 dBm
-45.03 dBm
-45.38 dBm 1.000 GHz 2.510 GHz 3.000 GHz 7.000 GHz 10.000 GHz 14.000 GHz 18.000 GHz 27.000 GHz Range Low 30.000 MHz Range Up -25.79 dB -26.21 dB -25.23 dB -20.45 dB -23.63 dB -22.63 dB -20.03 dB -20.38 dB -25.75 dB -26.09 dB -25.27 dB -20.39 dB -23.46 dB -22.70 dB -20.26 dB -20.38 dB Date: 9.APR.2019 11:47:12 Date: 9.APR.2019 11:46:25

Sporton International (Kunshan) Inc.

TEL: 86-512-57900158 FAX: 86-512-57900958 FCC ID: 2AJOTTA-1191 Page Number : A44 of A52
Report Issued Date : Apr. 30, 2019
Report Version : Rev. 01

Report Template No.: BU5-FGLTE Version 2.0

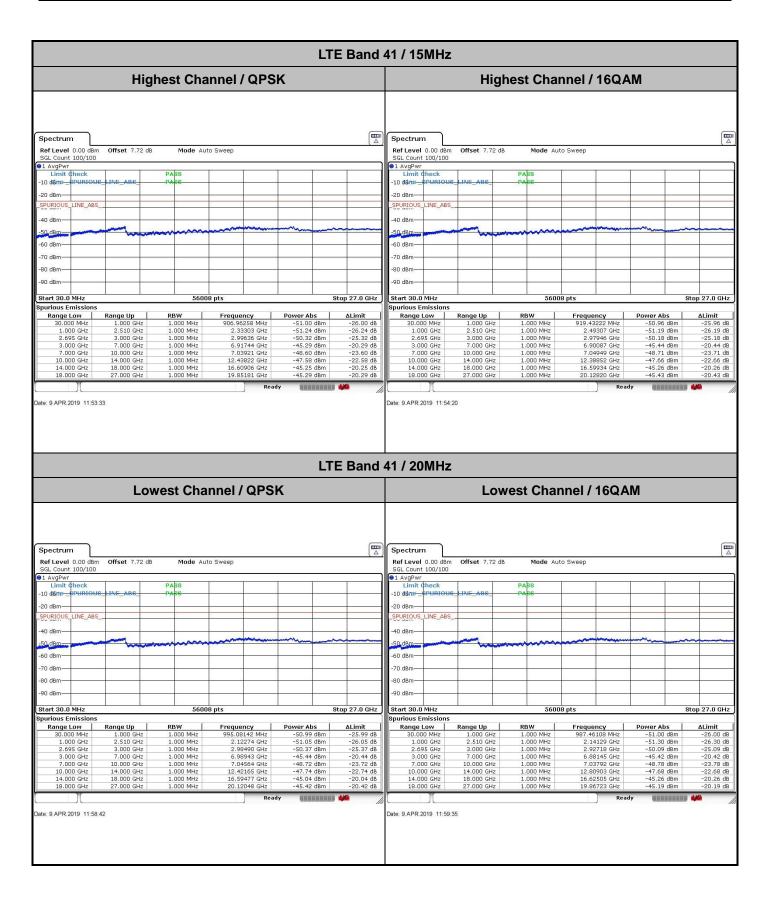
LTE Band 41 / 15MHz **Lowest Channel / QPSK Lowest Channel / 16QAM —** Spectrum Spectrum Ref Level 0.00 dBm Offset 7.72 dB Mode Auto Sweep Ref Level 0.00 dBm Offset 7.72 dB Mode Auto Sweep Count 100/100 Count 100/100 10 d&me -20 dBm -20 dBm LINE\_ABS SPURIOUS SPURIOUS -60 dBm -60 dBm 70 dBn -70 dBm 80 dBm -80 dBm -90 dBm -90 dBm-Start 30.0 MH; 560 Stop 27.0 GH: Start 30.0 MHz 56008 27.0 GHz urious Emission Spurious Emissions RBW

1.000 MHz
1.000 MHz Power Abs -51.06 dBm -47.46 dBm -50.41 dBm -45.42 dBm -48.61 dBm -47.77 dBm ALimit
-26.06 dB
-22.46 dB
-25.41 dB
-20.42 dB
-23.61 dB
-22.77 dB
-20.25 dB
-20.22 dB 1.000 MHz 1.000 MHz 1.000 MHz 1.000 MHz 1.000 MHz Frequency 916.93829 MHz 2.50968 GHz 2.94827 GHz Frequency 891.99900 MHz 2.50860 GHz 2.99623 GHz Range Low 30,000 MH: Range Up Range Low 30,000 MHz ∆Limit -25.88 ΔLimit
-25.88 dB
-25.33 dB
-25.30 dB
-20.48 dB
-23.62 dB
-22.63 dB
-20.30 dB
-20.50 dB -50.88 dBm -50.33 dBm -50.30 dBm -45.48 dBm -48.62 dBm -47.63 dBm -45.30 dBm -45.50 dBm 1.000 GHz 2.510 GHz 3.000 GHz 7.000 GHz 10.000 GHz 14.000 GHz 1.000 GHz 2.510 GHz 3.000 GHz 7.000 GHz 1.000 GHz 2.695 GHz 3.000 GHz 7.000 GHz 10.000 GHz 14.000 GHz 18.000 GHz 3.000 GHz 6.98600 GHz 7.05592 GHz 6.90087 GH 7.04906 GHz 12.85131 GHz 16.62277 GHz 10.000 GHz 14.000 GHz 10.000 GHz .000 MH: 18.000 GHz 27.000 GHz 16.61248 GHz 19.85952 GHz -45.25 dBm -45.22 dBm 18.000 GHz 27.000 GHz .000 MHz .000 MHz 18.000 GHz ate: 9.APR.2019 11:48:24 Date: 9.APR.2019 11:49:14 Middle Channel / 16QAM Middle Channel / QPSK Spectrum Spectrum Ref Level 0.00 dBm Offset 7.72 dB Mode Auto Sweep Ref Level 0.00 dBm Offset 7.72 dB Mode Auto Sweep GL Count 100/100 GL Count 100/100 1 AvgPwr Limit check -10 d&me 10 dame -20 dBm -20 dBm \_LINE\_ABS \_LINE\_ABS SPURIOUS SPURIOUS 40 dBm 40 dBm -60 dBm 70 dBm 70 dBm -80 dBm -80 dBm 90 dBm 90 dBm Stop 27.0 GHz Start 30.0 MHz 56008 pts Stop 27.0 GHz Start 30.0 MHz 56008 pts Spurious Emissions rious Emission -50.91 dBm -51.15 dBm -51.43 dBm -45.54 dBm -48.69 dBm -47.64 dBm -45.10 dBm -45.36 dBm aurious Emissic Range Low 30.000 MHz 1.000 GHz 2.695 GHz 3.000 GHz 7.000 GHz 10.000 GHz 14.000 GHz Frequency 857.77675 MHz 1.78239 GHz 2.99963 GHz 6.88602 GHz 7.00493 GHz 11.94858 GHz 15.90287 GHz 19.86338 GHz ALimit
-25.91 dB
-26.15 dB
-25.43 dB
-20.54 dB
-23.69 dB
-22.64 dB
-20.10 dB
-20.36 dB 1.000 GHz 2.510 GHz 3.000 GHz 7.000 GHz 10.000 GHz 14.000 GHz 18.000 GHz 27.000 GHz Range Low 30.000 MHz Range Up ate: 9.APR.2019 11:52:34 Date: 9.APR.2019 11:51:44

Sporton International (Kunshan) Inc.

TEL: 86-512-57900158 FAX: 86-512-57900958 FCC ID: 2AJOTTA-1191 Page Number : A45 of A52
Report Issued Date : Apr. 30, 2019
Report Version : Rev. 01

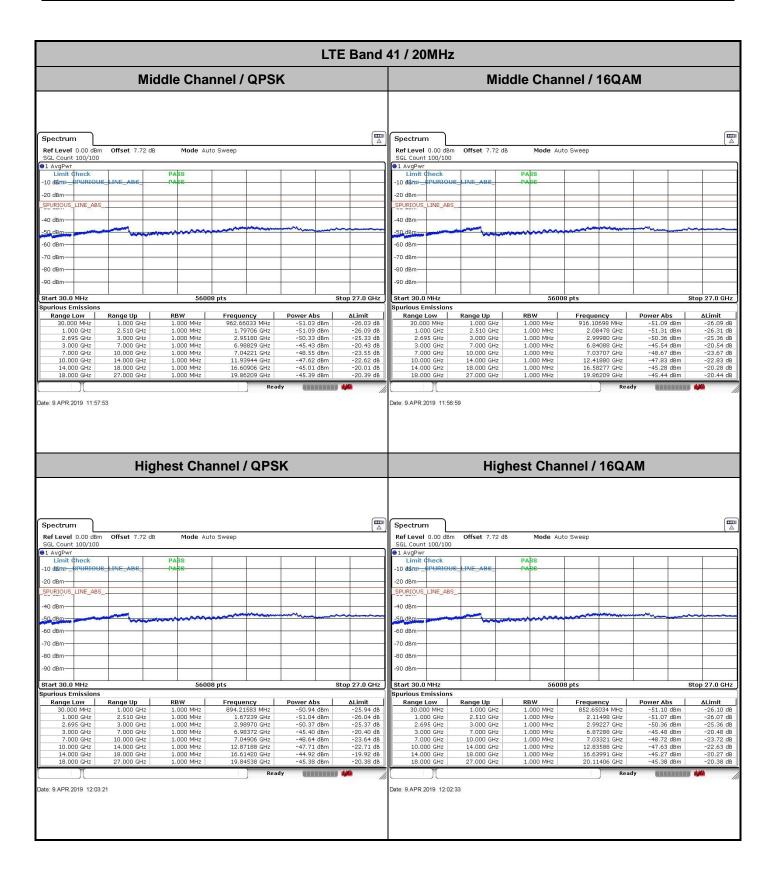
Report Template No.: BU5-FGLTE Version 2.0



Sporton International (Kunshan) Inc.

TEL: 86-512-57900158 FAX: 86-512-57900958 FCC ID: 2AJOTTA-1191 Page Number : A46 of A52
Report Issued Date : Apr. 30, 2019
Report Version : Rev. 01

Report Template No.: BU5-FGLTE Version 2.0



Sporton International (Kunshan) Inc.

TEL: 86-512-57900158 FAX: 86-512-57900958 FCC ID: 2AJOTTA-1191 Page Number : A47 of A52
Report Issued Date : Apr. 30, 2019
Report Version : Rev. 01

Report Template No.: BU5-FGLTE Version 2.0

LTE Band 41 / 5MHz Lowest Channel / 64QAM Middle Channel / 64QAM **—** Spectrum Spectrum Ref Level 0.00 dBm Offset 7.72 dB Mode Auto Sweep Ref Level 0.00 dBm Offset 7.72 dB Mode Auto Sweep Count 100/100 Count 100/100 10 d&me -20 dBm -20 dBm SPURIOUS SPURIOU: -60 dBm -60 dBm 70 dBn -70 dBm -80 dBm -80 dBm -90 dBm -90 dBm-Start 30.0 MH; Stop 27.0 GHz Start 30.0 MHz 56008 27.0 GHz urious Emissions Spurious Emissions -50.82 dBm -51.20 dBm -51.20 dBm -50.36 dBm -45.43 dBm -48.47 dBm -47.70 dBm -45.27 dBm -45.39 dBm RBW

1.000 MHz
1.000 MHz 901.83617 MHz 2.10549 GHz 2.92104 GHz 6.85459 GHz 7.04692 GHz 12.45365 GHz Power Abs
-51.05 dBm
-51.10 dBm
-50.33 dBm
-45.35 dBm
-48.52 dBm
-47.54 dBm ΔLimit
-26.05 dB
-26.10 dB
-25.33 dB
-20.35 dB
-23.52 dB
-22.54 dB
-20.21 dB
-20.37 dB Range Up 1.000 GHz 2.510 GHz 3.000 GHz 7.000 GHz 1.000 MHz Range Up Frequency 795.15141 MHz 2.15013 GHz 2.84436 GHz Range Low 30,000 MHz Range Low 30.000 MH: ∆Limit ΔLimit
-25.82 dB
-26.20 dB
-25.36 dB
-20.43 dB
-23.47 dB
-22.70 dB
-20.27 dB
-20.39 dB 1.000 GHz 2.510 GHz 3.000 GHz 7.000 GHz 10.000 GHz 14.000 GHz 18.000 GHz 27.000 GHz 1.000 GHz 2.695 GHz 3.000 GHz 7.000 GHz 10.000 GHz 14.000 GHz 18.000 GHz 2.84436 GHZ 6.98315 GHZ 7.04735 GHZ 11.98514 GHZ 16.60449 GHZ 20.14362 GHZ 3.000 GHz 10.000 GHz 14.000 GHz 10.000 GHz 14.000 GHz 18.000 GHz -45.21 dBm -45.37 dBm 18.000 GHz 27.000 GHz .000 MHz .000 MHz Date: 9.APR.2019 11:30:04 Date: 9.APR.2019 11:31:01 **Highest Channel / 64QAM** Spectrum Ref Level 0.00 dBm Offset 7.72 dB Mode Auto Sweep GL Count 100/100 1 AvgPwr Limit Check -10 d&me -20 dBm \_LINE\_ABS SPURIOUS 40 dBm 70 dBm -80 dBm-90 dBm Stop 27.0 GHz Start 30.0 MHz 56008 pts rious Emission: Range Up

1.000 GHz
2.510 GHz
3.000 GHz
7.000 GHz
10.000 GHz
14.000 GHz
18.000 GHz
27.000 GHz ALimit
-26.08 dB
-26.02 dB
-25.21 dB
-20.56 dB
-23.54 dB
-22.64 dB
-20.18 dB
-20.40 dB Range Low 30.000 MHz ate: 9.APR.2019 11:36:17

Sporton International (Kunshan) Inc.

TEL: 86-512-57900158 FAX: 86-512-57900958 FCC ID: 2AJOTTA-1191 Page Number : A48 of A52
Report Issued Date : Apr. 30, 2019
Report Version : Rev. 01

Report Template No.: BU5-FGLTE Version 2.0

LTE Band 41 / 10MHz Lowest Channel / 64QAM Middle Channel / 64QAM **—** Spectrum Spectrum Ref Level 0.00 dBm Offset 7.72 dB Mode Auto Sweep Ref Level 0.00 dBm Offset 7.72 dB Mode Auto Sweep Count 100/100 Count 100/100 10 dame -20 dBm -20 dBm SPURIOUS SPURIOUS -60 dBm -60 dBm 70 dBn -70 dBm -80 dBm -80 dBm -90 dBm -90 dBm-Start 30.0 MH; 560 Stop 27.0 GHz Start 30.0 MHz 56008 27.0 GHz urious Emissions Spurious Emissions Power Abs
-51.13 dBm
-51.15 dBm
-50.34 dBm
-45.28 dBm
-48.63 dBm
-47.69 dBm
-45.24 dBm
-45.30 dBm -50.89 dBm -51.10 dBm -51.10 dBm -50.34 dBm -45.18 dBm -48.60 dBm -47.46 dBm -45.19 dBm -45.33 dBm RBW

1.000 MHz
1.000 MHz ΔLimit
-26.13 dB
-26.15 dB
-25.34 dB
-20.28 dB
-23.63 dB
-22.69 dB
-20.24 dB
-20.30 dB Range Up 1.000 GHz 2.510 GHz 3.000 GHz 7.000 GHz 1.000 MHz 1.000 MHz 1.000 MHz 1.000 MHz 1.000 MHz Frequency 892.27610 MHz 2.13762 GHz 2.96578 GHz 6.93972 GHz 7.03664 GHz 12.44965 GHz 16.64505 GHz 19.86723 GHz Range Up Frequency 926.22125 MHz 2.13525 GHz 2.93197 GHz Range Low 30,000 MHz Range Low 30.000 MH: ∆Limit ΔLimit
-25.89 dB
-26.10 dB
-25.34 dB
-20.18 dB
-23.60 dB
-22.46 dB
-20.19 dB
-20.33 dB 1.000 GHz 2.510 GHz 3.000 GHz 7.000 GHz 10.000 GHz 14.000 GHz 18.000 GHz 27.000 GHz 1.000 GHz 2.695 GHz 3.000 GHz 7.000 GHz 10.000 GHz 14.000 GHz 18.000 GHz 6.99400 GHz 7.05121 GHz 12.88387 GHz 3.000 GHz 10.000 GHz 14.000 GHz 10.000 GHz .000 MH 14.000 GHz 18.000 GHz 16.63362 GHz 19.86852 GHz 18.000 GHz 27.000 GHz .000 MHz .000 MHz Date: 9.APR.2019 11:38:17 Date: 9.APR.2019 11:44:43 **Highest Channel / 64QAM** Spectrum Ref Level 0.00 dBm Offset 7.72 dB Mode Auto Sweep GL Count 100/100 1 AvgPwr Limit Check -10 d&me -20 dBm SPURIOUS\_LINE\_ABS 40 dBm 70 dBm -80 dBm-90 dBm Stop 27.0 GHz Start 30.0 MHz 56008 pts rious Emission: Range Up

1.000 GHz
2.510 GHz
3.000 GHz
7.000 GHz
10.000 GHz
14.000 GHz
18.000 GHz
27.000 GHz ALimit
-26.04 dB
-26.23 dB
-25.23 dB
-20.46 dB
-23.38 dB
-22.55 dB
-20.14 dB
-20.46 dB Range Low 30.000 MHz Date: 9.APR.2019 11:45:35

Sporton International (Kunshan) Inc.

TEL: 86-512-57900158 FAX: 86-512-57900958 FCC ID: 2AJOTTA-1191 Page Number : A49 of A52
Report Issued Date : Apr. 30, 2019
Report Version : Rev. 01

Report Template No.: BU5-FGLTE Version 2.0

LTE Band 41 / 15MHz Lowest Channel / 64QAM Middle Channel / 64QAM **—** Spectrum Spectrum Ref Level 0.00 dBm Offset 7.72 dB Mode Auto Sweep Ref Level 0.00 dBm Offset 7.72 dB Mode Auto Sweep Count 100/100 Count 100/100 10 dame -20 dBm -20 dBm SPURIOUS SPURIOUS -60 dBm -60 dBm 70 dBn -70 dBm -80 dBm -80 dBm -90 dBm -90 dBm-Start 30.0 MH; 560 Stop 27.0 GHz Start 30.0 MHz 56008 p 27.0 GHz urious Emissions Spurious Emissions RBW

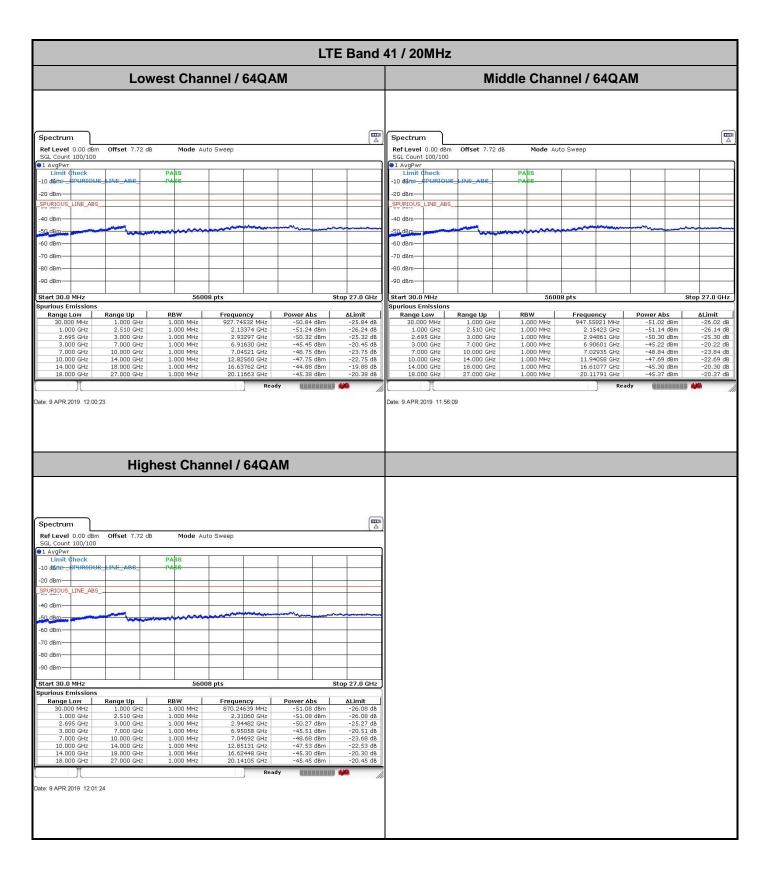
1.000 MHz
1.000 MHz Power Abs
-50.91 dBm
-51.02 dBm
-50.35 dBm
-45.27 dBm
-48.43 dBm
-47.64 dBm ΔLimit
-25.91 dB
-26.02 dB
-25.35 dB
-20.27 dB
-23.43 dB
-22.64 dB
-20.21 dB
-20.42 dB Range Up 1.000 GHz 2.510 GHz 3.000 GHz 7.000 GHz 1.000 MHz ΔLimit
-26.01 dB
-26.28 dB
-25.28 dB
-20.47 dB
-23.50 dB
-22.59 dB
-20.18 dB
-20.41 dB Range Up 893.66162 MHz 2.12080 GHz 2.93951 GHz 6.91744 GHz Range Low 30,000 MHz Range Low 30.000 MH: 1.000 GHz 2.510 GHz 3.000 GHz 7.000 GHz 10.000 GHz 14.000 GHz 18.000 GHz 27.000 GHz 1.000 GHz 2.695 GHz 2.50968 GHz 2.98050 GHz 2.98050 GHz 6.99286 GHz 7.05078 GHz 12.40623 GHz 16.62505 GHz 19.86980 GHz 3.000 GHz 7.000 GHz 10.000 GHz 14.000 GHz 18.000 GHz 3.000 GHz 7.04392 GHz 12.83188 GHz 16.61248 GHz 19.86338 GHz 10.000 GHz 14.000 GHz 10.000 GHz 14.000 GHz 18.000 GHz -45.21 dBm -45.42 dBm 18.000 GHz 27.000 GHz .000 MHz .000 MHz Date: 9.APR.2019 11:50:05 Date: 9.APR.2019 11:50:57 **Highest Channel / 64QAM** Spectrum Ref Level 0.00 dBm Offset 7.72 dB Mode Auto Sweep GL Count 100/100 1 AvgPwr Limit Check -10 d&me -20 dBm \_LINE\_ABS SPURIOUS 40 dBm 70 dBm -80 dBm-90 dBm Stop 27.0 GHz Start 30.0 MHz 56008 pts rious Emission: Range Up

1.000 GHz
2.510 GHz
3.000 GHz
7.000 GHz
10.000 GHz
14.000 GHz
18.000 GHz
27.000 GHz Frequency 304 43965 MHz Range Low 30.000 MHz -25.79 dB -26.21 dB -25.17 dB -20.48 dB -23.79 dB -22.68 dB -20.18 dB -20.35 dB Date: 9.APR.2019 11:55:10

Sporton International (Kunshan) Inc.

TEL: 86-512-57900158 FAX: 86-512-57900958 FCC ID: 2AJOTTA-1191 Page Number : A50 of A52
Report Issued Date : Apr. 30, 2019
Report Version : Rev. 01

Report Template No.: BU5-FGLTE Version 2.0



Sporton International (Kunshan) Inc.

TEL: 86-512-57900158 FAX: 86-512-57900958 FCC ID: 2AJOTTA-1191 Page Number : A51 of A52
Report Issued Date : Apr. 30, 2019
Report Version : Rev. 01

Report Template No.: BU5-FGLTE Version 2.0

## Frequency Stability

Test Conditions		LTE Band 41 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0001	
40	Normal Voltage	0.0020	
30	Normal Voltage	0.0003	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0010	
0	Normal Voltage	0.0016	
-10	Normal Voltage	0.0004	PASS
-20	Normal Voltage	0.0002	
-30	Normal Voltage	0.0014	
20	Maximum Voltage	0.0008	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0018	

## Note:

- 1. Normal Voltage =4 V.; Battery End Point (BEP) =3.6 V.; Maximum Voltage =4.35 V.
- 2. Note: The frequency fundamental emissions stay within the authorized frequency block.

Sporton International (Kunshan) Inc.

TEL: 86-512-57900158 FAX: 86-512-57900958 FCC ID: 2AJOTTA-1191 Page Number : A52 of A52
Report Issued Date : Apr. 30, 2019
Report Version : Rev. 01

Report No.: FG930509-03B

Report Template No.: BU5-FGLTE Version 2.0

## **Appendix B. Test Results of Radiated Test**

## Radiated Spurious Emission

LTE Band 41 / 20MHz / QPSK / RB Size 1 Offset 0										
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)		
Middle	5172	-61.03	-25	-36.03	-71.24	3.03	13.24	Н		
	7756	-51.08	-25	-26.08	-60.53	3.56	13.01	Н		
	10340	-56.53	-25	-31.53	-66.05	3.92	13.44	Н		
	12930	-39.34	-25	-14.34	-49.26	4.44	14.36	Н		
	15520	-48.34	-25	-23.34	-58.71	4.77	15.14	Н		
	5172	-62.31	-25	-37.31	-72.52	3.03	13.24	V		
	7760	-51.82	-25	-26.82	-61.27	3.56	13.01	V		
	10340	-59.13	-25	-34.13	-68.65	3.92	13.44	V		
	12930	-41.63	-25	-16.63	-51.55	4.44	14.36	V		
	15520	-44.89	-25	-19.89	-55.26	4.77	15.14	V		

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

Sporton International (Kunshan) Inc.

TEL: 86-512-57900158 FAX: 86-512-57900958 FCC ID: 2AJOTTA-1191 Page Number : B1 of B1
Report Issued Date : Apr. 30, 2019
Report Version : Rev. 01

Report No.: FG930509-03B

Report Template No.: BU5-FGLTE Version 2.0