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Plot 7-419. Radiated Spurious Plot 18GHz – 26.5GHz V (Band 30)

OPERATING FREQUENCY: 2307.50 MHz
CHANNEL: 27685
MODULATION SIGNAL: QPSK
BANDWIDTH: 5.0 MHz
DISTANCE: 3 meters
LIMIT: -40 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
4615.00	H	-	-	-70.83	9.00	-61.83	-21.8
6922.50	H	-	-	-70.20	11.04	-59.16	-19.2
9230.00	H	-	-	-67.67	12.49	-55.18	-15.2

Table 7-73. Radiated Spurious Data (Band 30 – Low Channel)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device		Page 302 of 373

OPERATING FREQUENCY: 2310.00 MHz
 CHANNEL: 27710
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 5.0 MHz
 DISTANCE: 3 meters
 LIMIT: -40 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
4620.00	V	-	-	-70.59	9.01	-61.58	-21.6
6930.00	V	-	-	-70.18	11.05	-59.13	-19.1
9240.00	V	-	-	-67.60	12.48	-55.12	-15.1

Table 7-74. Radiated Spurious Data (Band 30 – Mid Channel)

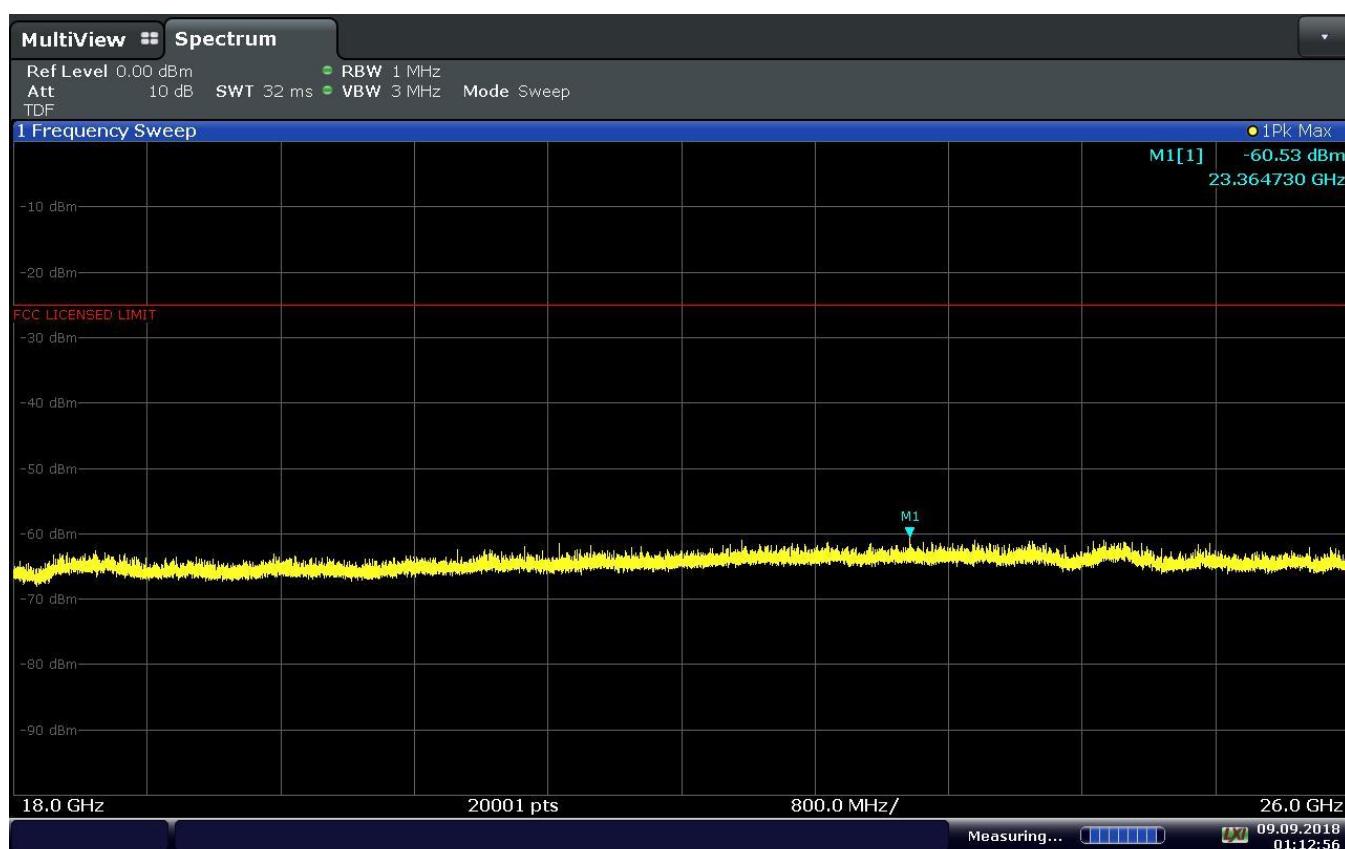
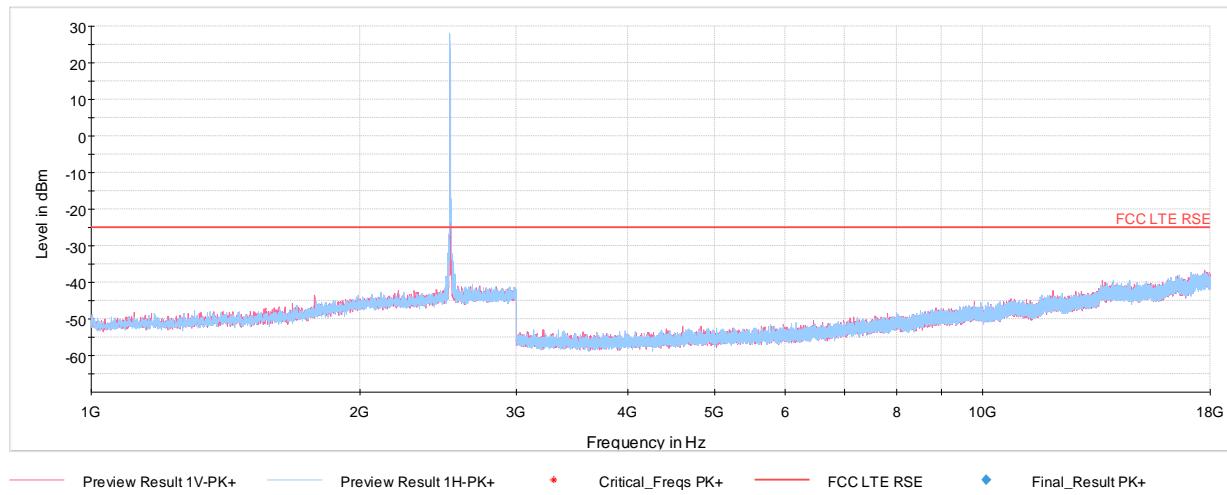
OPERATING FREQUENCY: 2312.50 MHz
 CHANNEL: 27735
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 5.0 MHz
 DISTANCE: 3 meters
 LIMIT: -40 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
4625.00	V	-	-	-72.31	9.02	-63.29	-23.3
6937.50	V	-	-	-71.85	11.05	-60.80	-20.8
9250.00	V	-	-	-69.65	12.48	-57.17	-17.2

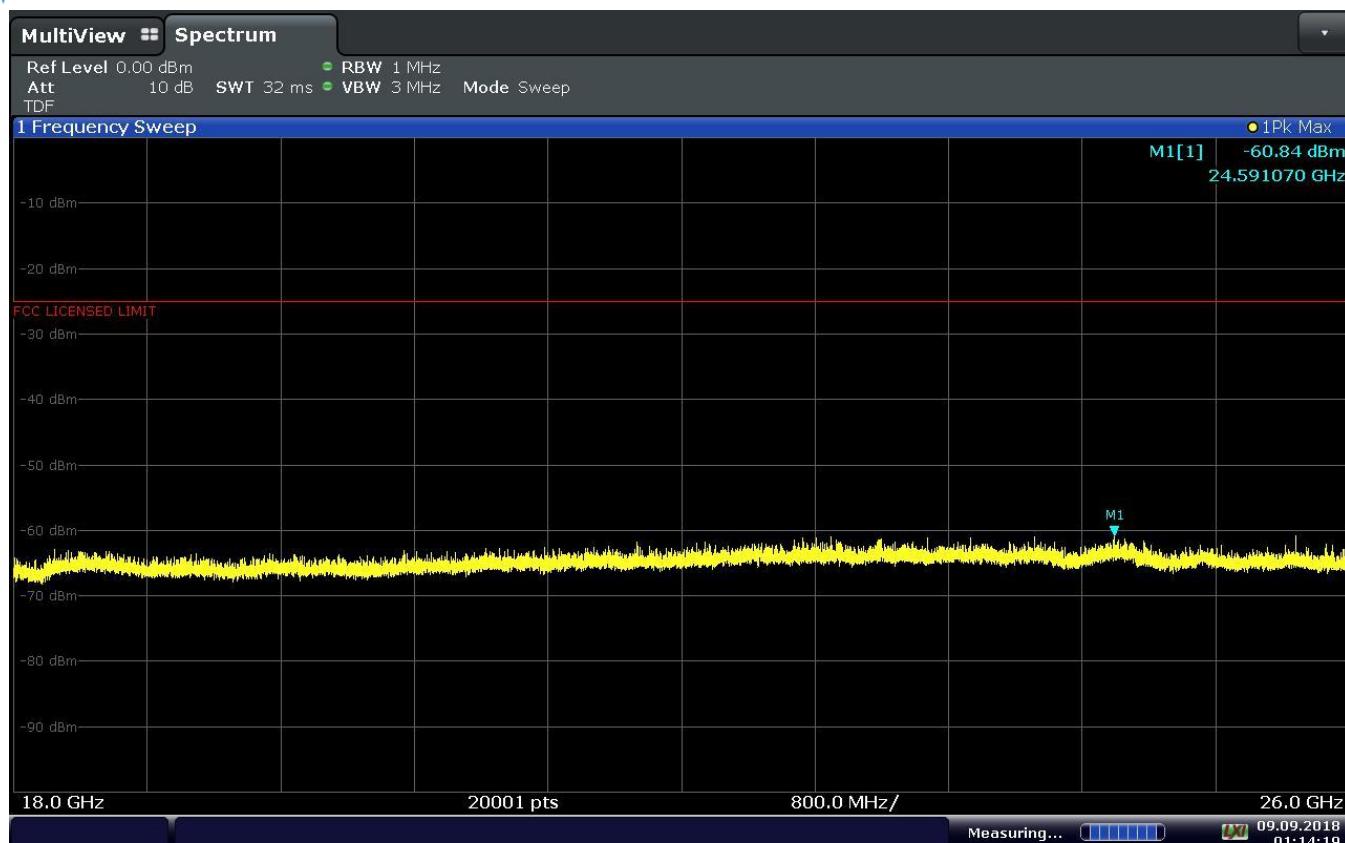
Table 7-75. Radiated Spurious Data (Band 30 – High Channel)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device		Page 303 of 373

Band 7



FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device	Page 304 of 373



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Plot 7-422. Radiated Spurious Plot 18GHz – 26.5GHz V (Band 7)

OPERATING FREQUENCY: 2510.00 MHz
CHANNEL: 20850
MODULATION SIGNAL: QPSK
BANDWIDTH: 20.0 MHz
DISTANCE: 3 meters
LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5020.00	V	-	-	-72.66	9.79	-62.87	-37.9
7530.00	V	-	-	-71.18	11.68	-59.50	-34.5
10040.00	V	-	-	-69.22	12.21	-57.01	-32.0

Table 7-76. Radiated Spurious Data (Band 7 – Low Channel)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device			Page 305 of 373

OPERATING FREQUENCY: 2535.00 MHz
 CHANNEL: 21100
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5070.00	V	-	-	-72.85	9.82	-63.03	-38.0
7605.00	V	-	-	-71.20	11.72	-59.47	-34.5
10140.00	V	-	-	-68.71	12.21	-56.51	-31.5

Table 7-77. Radiated Spurious Data (Band 7 – Mid Channel)

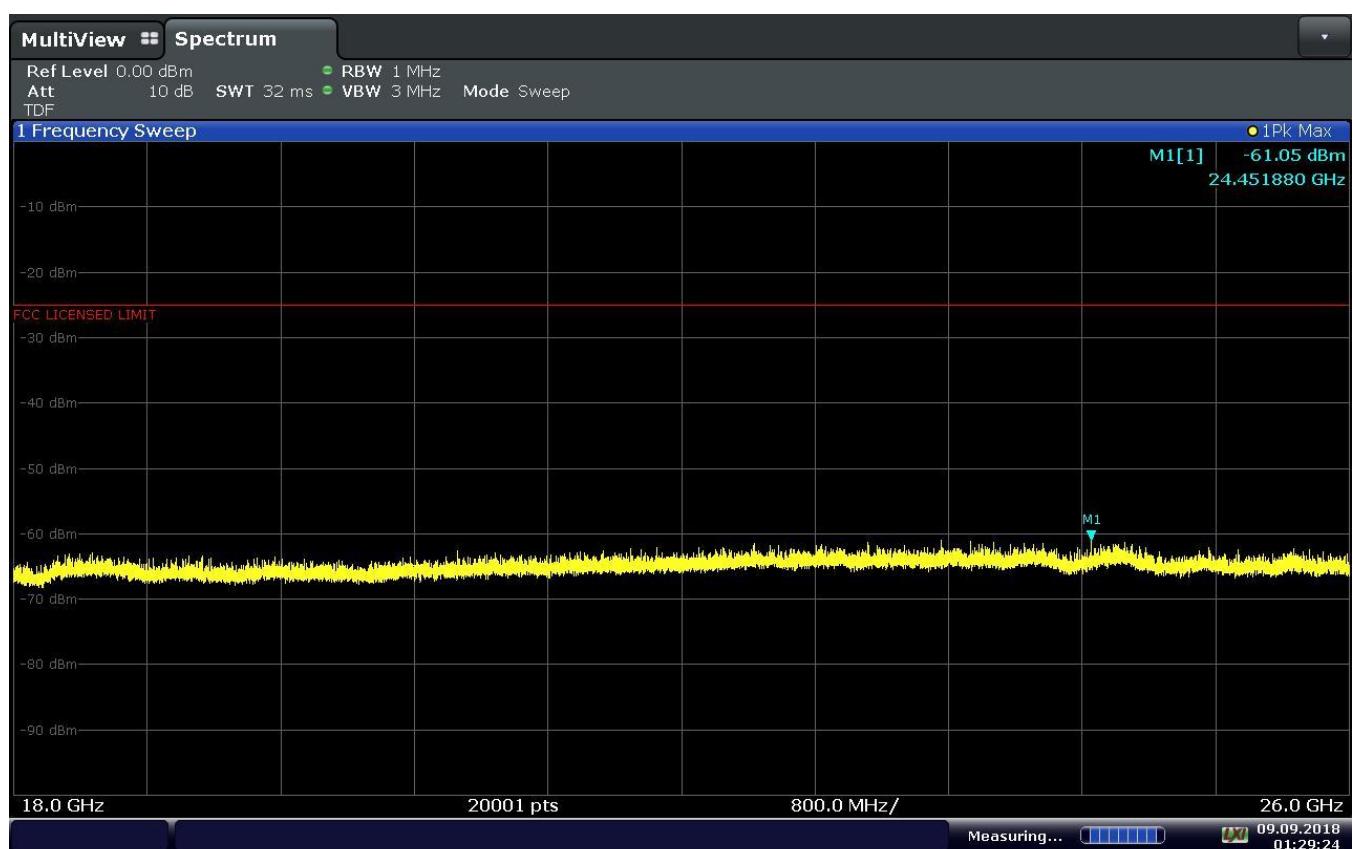
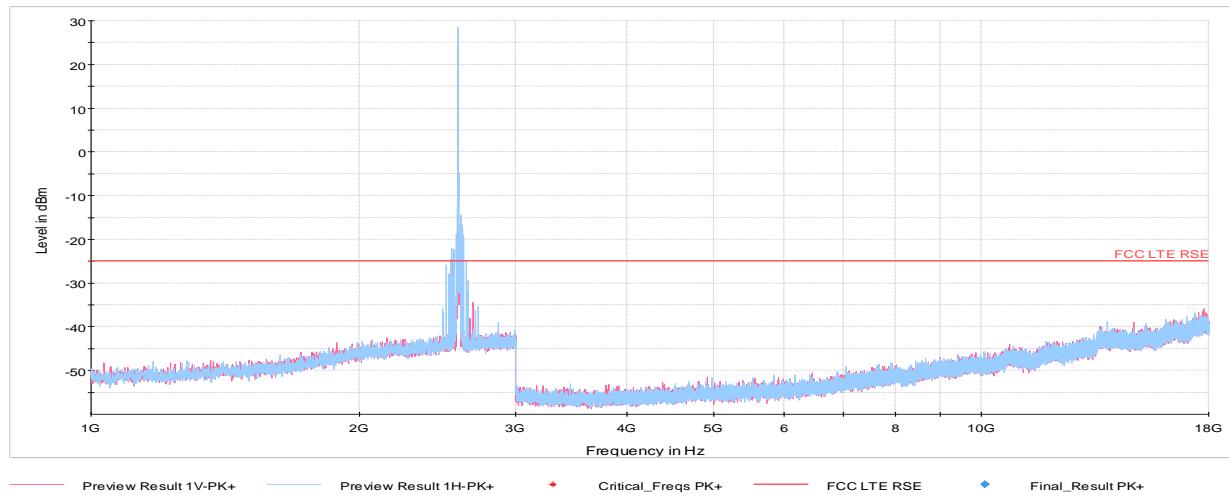
OPERATING FREQUENCY: 2560.00 MHz
 CHANNEL: 21350
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5120.00	V	-	-	-72.69	9.81	-62.89	-37.9
7680.00	V	-	-	-71.07	11.78	-59.29	-34.3
10240.00	V	-	-	-68.97	12.21	-56.76	-31.8

Table 7-78. Radiated Spurious Data (Band 7 – High Channel)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device		Page 306 of 373

Band 41



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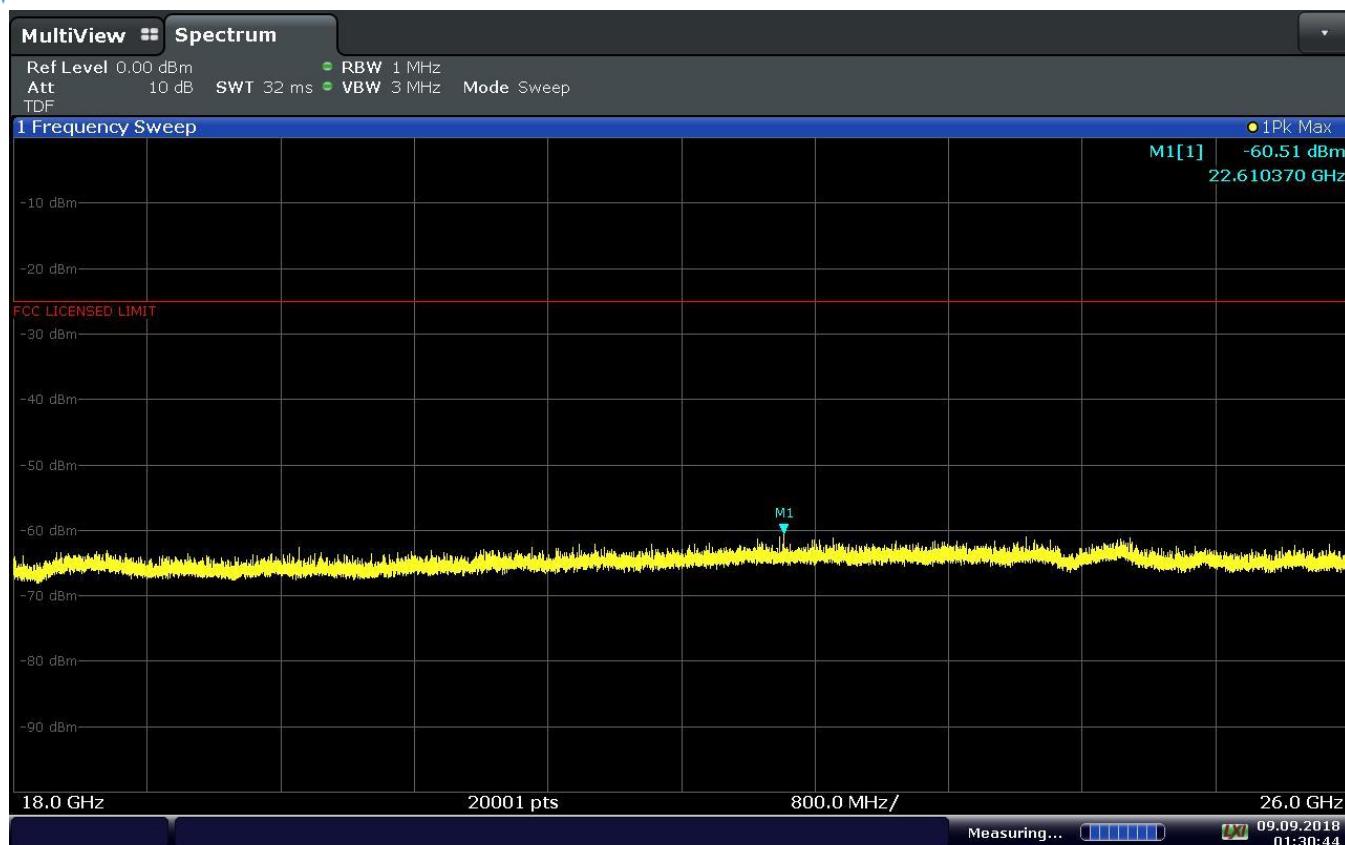
Plot 7-424. Radiated Spurious Plot 18GHz – 26.5GHz H (Band 41)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device	Page 307 of 373

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Plot 7-425. Radiated Spurious Plot 18GHz – 26.5GHz H (Band 41)

OPERATING FREQUENCY: 2506.00 MHz
 CHANNEL: 39750
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5012.00	V	-	-	-60.29	8.62	-51.68	-26.7
7518.00	H	-	-	-57.72	9.40	-48.31	-23.3
10024.00	V	-	-	-55.48	9.65	-45.83	-20.8

Table 7-79. Radiated Spurious Data (Band 41 – Low Channel)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device	Page 308 of 373

OPERATING FREQUENCY: 2593.00 MHz
 CHANNEL: 40620
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5186.00	V	-	-	-59.53	8.91	-50.61	-25.6
7779.00	H	-	-	-57.61	9.39	-48.22	-23.2
10372.00	H	-	-	-54.47	9.35	-45.12	-20.1

Table 7-80. Radiated Spurious Data (Band 41 – Mid Channel)

OPERATING FREQUENCY: 2680.00 MHz
 CHANNEL: 41490
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5360.00	V	-	-	-60.68	9.02	-51.66	-26.7
8040.00	V	-	-	-57.41	9.47	-47.94	-22.9
10720.00	V	-	-	-52.80	9.07	-43.74	-18.7

Table 7-81. Radiated Spurious Data (Band 41 – High Channel)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device		Page 309 of 373

7.8.3 ANT 1 (Port B) Radiated Spurious Emissions Measurements Band 12/17

OPERATING FREQUENCY: 704.00 MHz
 CHANNEL: 23060
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 10.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1408.00	V	-	-	-71.78	3.81	-67.98	-55.0
2112.00	V	-	-	-67.94	3.67	-64.28	-51.3
2816.00	V	-	-	-68.57	5.31	-63.25	-50.3

Table 7-82. Radiated Spurious Data (Band 12/17 – Low Channel)

OPERATING FREQUENCY: 707.50 MHz
 CHANNEL: 23095
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 10.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1415.00	V	-	-	-71.61	3.86	-67.74	-54.7
2122.50	V	110	72	-65.53	3.71	-61.82	-48.8
2830.00	V	-	-	-68.55	5.39	-63.16	-50.2

Table 7-83. Radiated Spurious Data (Band 12/17 – Mid Channel)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device	Page 310 of 373

OPERATING FREQUENCY: 711.00 MHz
 CHANNEL: 23130
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 10.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1422.00	V	293	354	-71.56	3.92	-67.64	-54.6
2133.00	V	362	69	-65.97	3.75	-62.22	-49.2
2844.00	V	-	-	-68.68	5.47	-63.21	-50.2

Table 7-84. Radiated Spurious Data (Band 12/17 – High Channel)

FCC ID: BCGA1895	 MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device	Page 311 of 373	

Band 13

OPERATING FREQUENCY: 779.50 MHz
 CHANNEL: 23205
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 5.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
2338.50	V	-	-	-68.03	4.13	-63.90	-50.9
3118.00	V	-	-	-69.21	6.13	-63.08	-50.1
3897.50	V	-	-	-70.04	7.56	-62.47	-49.5

Table 7-85. Radiated Spurious Data (Band 13 – Low Channel)

OPERATING FREQUENCY: 782.00 MHz
 CHANNEL: 23230
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 5.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
2346.00	V	-	-	-68.20	4.16	-64.04	-51.0
3128.00	V	-	-	-69.08	6.17	-62.91	-49.9
3910.00	V	-	-	-69.98	7.55	-62.43	-49.4

Table 7-86. Radiated Spurious Data (Band 13 – Mid Channel)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device	Page 312 of 373

OPERATING FREQUENCY: 784.50 MHz
CHANNEL: 23255
MODULATION SIGNAL: QPSK
BANDWIDTH: 5.0 MHz
DISTANCE: 3 meters
LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
2353.50	V	-	-	-68.01	4.18	-63.83	-50.8
3138.00	V	-	-	-69.37	6.20	-63.17	-50.2
3922.50	V	-	-	-70.07	7.53	-62.54	-49.5

Table 7-87. Radiated Spurious Data (Band 13 – High Channel)

MODULATION SIGNAL: QPSK
BANDWIDTH: 5.00 MHz
DISTANCE: 3 meters
NARROWBAND EMISSION LIMIT: -50 dBm
WIDEBAND EMISSION LIMIT: -40 dBm/MHz

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1559.00	V	-	-	-71.48	4.18	-67.30	-27.3
1564.00	V	-	-	-71.39	4.20	-67.19	-27.2
1569.00	V	-	-	-71.46	4.22	-67.24	-27.2

Table 7-88. Radiated Spurious Data (Band 13 – 1559-1610MHz Band)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Band 26/5

OPERATING FREQUENCY: 829.00 MHz
 CHANNEL: 20450
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 10.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1658.00	H	-	-	-71.87	4.40	-67.47	-54.5
2487.00	H	-	-	-67.12	4.17	-62.95	-49.9
3316.00	H	-	-	-68.75	6.47	-62.28	-49.3

Table 7-89. Radiated Spurious Data (Band 26/5- Low Channel)

OPERATING FREQUENCY: 836.50 MHz
 CHANNEL: 20525
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 10.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1673.00	H	-	-	-71.39	4.37	-67.02	-54.0
2509.50	H	-	-	-67.28	4.21	-63.07	-50.1
3346.00	H	-	-	-68.98	6.42	-62.56	-49.6

Table 7-90. Radiated Spurious Data (Band 26/5- Mid Channel)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device	Page 314 of 373

OPERATING FREQUENCY: 844.00 MHz
 CHANNEL: 20600
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 10.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1688.00	H	-	-	-70.95	4.35	-66.60	-53.6
2532.00	H	-	-	-67.53	4.36	-63.16	-50.2
3376.00	H	-	-	-69.44	6.49	-62.95	-49.9

Table 7-91. Radiated Spurious Data (Band 26/5– High Channel)

FCC ID: BCGA1895	 MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
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7.8.4 ANT 2b (Port B) Radiated Spurious Emissions Measurements

Band 66/4

OPERATING FREQUENCY: 1720.00 MHz
 CHANNEL: 132072
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3440.00	V	-	-	-69.39	7.57	-61.82	-48.8
5160.00	V	-	-	-70.75	9.78	-60.98	-48.0
6880.00	V	-	-	-69.85	11.00	-58.85	-45.8

Table 7-92. Radiated Spurious Data (Band 66/4– Low Channel)

OPERATING FREQUENCY: 1745.00 MHz
 CHANNEL: 132322
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3490.00	V	-	-	-69.95	7.66	-62.29	-49.3
5235.00	V	-	-	-70.66	9.74	-60.92	-47.9
6980.00	V	-	-	-69.61	11.07	-58.54	-45.5

Table 7-93. Radiated Spurious Data (Band 66/4– Mid Channel)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device		Page 316 of 373

OPERATING FREQUENCY: 1770.00 MHz
 CHANNEL: 132572
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3540.00	V	-	-	-69.55	7.68	-61.87	-48.9
5310.00	V	-	-	-70.26	9.78	-60.48	-47.5
7080.00	V	-	-	-69.64	11.11	-58.54	-45.5

Table 7-94. Radiated Spurious Data (Band 66/4- High Channel)

FCC ID: BCGA1895	 MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device	Page 317 of 373	

Band 25/2

OPERATING FREQUENCY: 1860.00 MHz
CHANNEL: 26140
MODULATION SIGNAL: QPSK
BANDWIDTH: 20.0 MHz
DISTANCE: 3 meters
LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3720.00	H	-	-	-69.35	7.23	-62.12	-49.1
5580.00	H	-	-	-69.44	9.14	-60.30	-47.3
7440.00	H	-	-	-67.16	9.38	-57.78	-44.8

Table 7-95. Radiated Spurious Data (Band 25/2- Low Channel)

OPERATING FREQUENCY: 1882.50 MHz
CHANNEL: 26365
MODULATION SIGNAL: QPSK
BANDWIDTH: 20.0 MHz
DISTANCE: 3 meters
LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3765.00	H	-	-	-69.25	7.26	-61.99	-49.0
5647.50	H	-	-	-69.49	9.24	-60.25	-47.2
7530.00	H	-	-	-66.77	9.39	-57.38	-44.4

Table 7-96. Radiated Spurious Data (Band 25/2- Mid Channel)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device		Page 318 of 373

OPERATING FREQUENCY: 1905.00 MHz
 CHANNEL: 26590
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3810.00	H	-	-	-69.20	7.35	-61.85	-48.8
5715.00	H	-	-	-69.33	9.26	-60.07	-47.1
7620.00	H	-	-	-65.87	9.36	-56.51	-43.5

Table 7-97. Radiated Spurious Data (Band 25/2– High Channel)

FCC ID: BCGA1895	 MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device	Page 319 of 373	

Band 30

OPERATING FREQUENCY: 2307.50 MHz
 CHANNEL: 27685
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 5.0 MHz
 DISTANCE: 3 meters
 LIMIT: -40 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
4615.00	V	-	-	-70.17	9.00	-61.17	-21.2
6922.50	V	-	-	-69.72	11.04	-58.68	-18.7
9230.00	V	-	-	-67.54	12.49	-55.05	-15.0

Table 7-98. Radiated Spurious Data (Band 30 – Low Channel)

OPERATING FREQUENCY: 2310.00 MHz
 CHANNEL: 27710
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 5.0 MHz
 DISTANCE: 3 meters
 LIMIT: -40 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
4620.00	V	-	-	-70.31	9.01	-61.30	-21.3
6930.00	V	-	-	-69.57	11.05	-58.52	-18.5
9240.00	V	-	-	-67.36	12.48	-54.88	-14.9

Table 7-99. Radiated Spurious Data (Band 30 – Mid Channel)

FCC ID: BCGA1895	 MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device

OPERATING FREQUENCY: 2312.50 MHz
 CHANNEL: 27735
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 5.0 MHz
 DISTANCE: 3 meters
 LIMIT: -40 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
4625.00	V	-	-	-70.28	9.02	-61.26	-21.3
6937.50	V	-	-	-69.58	11.05	-58.53	-18.5
9250.00	V	-	-	-67.91	12.48	-55.43	-15.4

Table 7-100. Radiated Spurious Data (Band 30 – High Channel)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device	Page 321 of 373	

Band 7

OPERATING FREQUENCY: 2510.00 MHz
 CHANNEL: 20850
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5020.00	V	-	-	-72.76	9.79	-62.97	-38.0
7530.00	V	-	-	-71.18	11.68	-59.50	-34.5
10040.00	V	-	-	-68.86	12.21	-56.65	-31.7

Table 7-101. Radiated Spurious Data (Band 7 – Low Channel)

OPERATING FREQUENCY: 2535.00 MHz
 CHANNEL: 21100
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5070.00	V	-	-	-70.52	9.82	-60.70	-35.7
7605.00	V	-	-	-69.05	11.72	-57.32	-32.3
10140.00	V	-	-	-66.79	12.21	-54.59	-29.6

Table 7-102. Radiated Spurious Data (Band 7 – Mid Channel)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device		Page 322 of 373

OPERATING FREQUENCY: 2560.00 MHz
 CHANNEL: 21350
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5120.00	V	-	-	-70.39	9.81	-60.59	-35.6
7680.00	V	-	-	-69.30	11.78	-57.52	-32.5
10240.00	V	-	-	-66.72	12.21	-54.51	-29.5

Table 7-103. Radiated Spurious Data (Band 7 – High Channel)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device	Page 323 of 373	

Band 41

OPERATING FREQUENCY: 2506.00 MHz
 CHANNEL: 39750
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5012.00	H	-	-	-60.35	8.62	-51.74	-26.7
7518.00	H	-	-	-57.62	9.40	-48.21	-23.2
10024.00	H	-	-	-55.90	9.65	-46.25	-21.3

Table 7-104. Radiated Spurious Data (Band 41 – Low Channel)

OPERATING FREQUENCY: 2593.00 MHz
 CHANNEL: 40620
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5186.00	H	-	-	-60.48	8.91	-51.56	-26.6
7779.00	H	-	-	-57.88	9.39	-48.49	-23.5
10372.00	H	-	-	-55.40	9.35	-46.05	-21.1

Table 7-105. Radiated Spurious Data (Band 41 – Mid Channel)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device	Page 324 of 373

OPERATING FREQUENCY: 2680.00 MHz
 CHANNEL: 41490
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5360.00	H	-	-	-60.39	9.02	-51.37	-26.4
8040.00	H	-	-	-57.74	9.47	-48.27	-23.3
10720.00	H	-	-	-52.64	9.07	-43.58	-18.6

Table 7-106. Radiated Spurious Data (Band 41 – High Channel)

FCC ID: BCGA1895	 MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device	Page 325 of 373	

7.8.5 ANT 4a (Port C) Radiated Spurious Emissions Measurements Band 66/4

OPERATING FREQUENCY: 1720.00 MHz
 CHANNEL: 132072
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3440.00	V	-	-	-69.50	7.57	-61.93	-48.9
5160.00	V	-	-	-70.75	9.78	-60.98	-48.0
6880.00	V	-	-	-69.89	11.00	-58.89	-45.9

Table 7-107. Radiated Spurious Data (Band 66/4- Low Channel)

OPERATING FREQUENCY: 1745.00 MHz
 CHANNEL: 132322
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3490.00	V	-	-	-62.30	7.66	-62.30	-49.3
5235.00	V	-	-	-61.04	9.74	-61.04	-48.0
6980.00	V	-	-	-58.39	11.07	-58.39	-45.4

Table 7-108. Radiated Spurious Data (Band 66/4- Mid Channel)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device		Page 326 of 373

OPERATING FREQUENCY: 1770.00 MHz
 CHANNEL: 132572
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3540.00	V	-	-	-61.99	7.68	-61.99	-49.0
5310.00	V	-	-	-60.28	9.78	-60.28	-47.3
7080.00	V	-	-	-58.23	11.11	-58.23	-45.2

Table 7-109. Radiated Spurious Data (Band 66/4– High Channel)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device		Page 327 of 373

Band 25/2

OPERATING FREQUENCY: 1860.00 MHz
 CHANNEL: 26140
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3720.00	H	-	-	-69.25	7.23	-62.02	-49.0
5580.00	H	-	-	-69.54	9.14	-60.40	-47.4
7440.00	H	-	-	-66.93	9.38	-57.55	-44.5

Table 7-110. Radiated Spurious Data (Band 25/2– Low Channel)

OPERATING FREQUENCY: 1882.50 MHz
 CHANNEL: 26365
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3765.00	V	-	-	-70.96	7.26	-63.70	-50.7
5647.50	V	-	-	-71.51	9.24	-62.27	-49.3
7530.00	V	-	-	-69.53	9.39	-60.14	-47.1

Table 7-111. Radiated Spurious Data (Band 25/2– Mid Channel)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device		Page 328 of 373

OPERATING FREQUENCY: 1905.00 MHz
 CHANNEL: 26590
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3810.00	H	-	-	-69.41	7.35	-62.06	-49.1
5715.00	H	-	-	-69.13	9.26	-59.87	-46.9
7620.00	H	-	-	-67.04	9.36	-57.68	-44.7

Table 7-112. Radiated Spurious Data (Band 25/2- High Channel)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device		Page 329 of 373

Band 30

OPERATING FREQUENCY: 2307.50 MHz
 CHANNEL: 27685
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 5.0 MHz
 DISTANCE: 3 meters
 LIMIT: -40 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
4615.00	V	-	-	-70.47	9.00	-61.47	-21.5
6922.50	V	-	-	-69.92	11.04	-58.88	-18.9
9230.00	V	-	-	-67.56	12.49	-55.07	-15.1

Table 7-113. Radiated Spurious Data (Band 30 – Low Channel)

OPERATING FREQUENCY: 2310.00 MHz
 CHANNEL: 27710
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 5.0 MHz
 DISTANCE: 3 meters
 LIMIT: -40 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
4620.00	V	-	-	-70.24	9.01	-61.23	-21.2
6930.00	V	-	-	-69.73	11.05	-58.68	-18.7
9240.00	V	-	-	-67.48	12.48	-55.00	-15.0

Table 7-114. Radiated Spurious Data (Band 30 – Mid Channel)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device	Page 330 of 373

OPERATING FREQUENCY: 2312.50 MHz
 CHANNEL: 27735
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 5.0 MHz
 DISTANCE: 3 meters
 LIMIT: -40 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
4625.00	V	-	-	-70.39	9.02	-61.37	-21.4
6937.50	V	-	-	-69.64	11.05	-58.59	-18.6
9250.00	V	-	-	-67.57	12.48	-55.09	-15.1

Table 7-115. Radiated Spurious Data (Band 30 – High Channel)

FCC ID: BCGA1895	 MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device	Page 331 of 373	

Band 7

OPERATING FREQUENCY: 2510.00 MHz
 CHANNEL: 20850
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5020.00	V	-	-	-70.63	9.79	-60.84	-35.8
7530.00	V	-	-	-69.01	11.68	-57.33	-32.3
10040.00	V	-	-	-67.26	12.21	-55.05	-30.1

Table 7-116. Radiated Spurious Data (Band 7 – Low Channel)

OPERATING FREQUENCY: 2535.00 MHz
 CHANNEL: 21100
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5070.00	V	-	-	-70.94	9.82	-61.12	-36.1
7605.00	V	-	-	-69.17	11.72	-57.44	-32.4
10140.00	V	-	-	-67.10	12.21	-54.90	-29.9

Table 7-117. Radiated Spurious Data (Band 7 – Mid Channel)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device			Page 332 of 373

OPERATING FREQUENCY: 2560.00 MHz
CHANNEL: 21350
MODULATION SIGNAL: QPSK
BANDWIDTH: 20.0 MHz
DISTANCE: 3 meters
LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5120.00	V	-	-	-70.96	9.81	-61.16	-36.2
7680.00	V	-	-	-69.22	11.78	-57.44	-32.4
10240.00	V	-	-	-66.93	12.21	-54.72	-29.7

Table 7-118. Radiated Spurious Data (Band 7 – High Channel)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device		Page 333 of 373

Band 41

OPERATING FREQUENCY: 2506.00 MHz
 CHANNEL: 39750
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5012.00	H	-	-	-69.28	8.62	-60.67	-35.7
7518.00	H	-	-	-66.64	9.40	-57.23	-32.2
10024.00	H	-	-	-64.45	9.65	-54.80	-29.8

Table 7-119. Radiated Spurious Data (Band 41 – Low Channel)

OPERATING FREQUENCY: 2593.00 MHz
 CHANNEL: 40620
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5186.00	H	-	-	-69.66	8.91	-60.74	-35.7
7779.00	H	-	-	-66.70	9.39	-57.31	-32.3
10372.00	H	-	-	-63.88	9.35	-54.53	-29.5

Table 7-120. Radiated Spurious Data (Band 41 – Mid Channel)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device	Page 334 of 373

OPERATING FREQUENCY: 2680.00 MHz
 CHANNEL: 41490
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5360.00	H	-	-	-69.64	9.02	-60.62	-35.6
8040.00	H	-	-	-66.28	9.47	-56.81	-31.8
10720.00	H	-	-	-62.25	9.07	-53.19	-28.2

Table 7-121. Radiated Spurious Data (Band 41 – High Channel)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device	Page 335 of 373	

7.8.6 ANT 2a (Port D) Radiated Spurious Emissions Measurements Band 66/4

OPERATING FREQUENCY: 1720.00 MHz
 CHANNEL: 132072
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3440.00	V	-	-	-69.35	7.57	-61.78	-48.8
5160.00	V	-	-	-70.96	9.78	-61.18	-48.2
6880.00	V	-	-	-69.79	11.00	-58.79	-45.8

Table 7-122. Radiated Spurious Data (Band 66/4– Low Channel)

OPERATING FREQUENCY: 1745.00 MHz
 CHANNEL: 132322
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3490.00	V	-	-	-69.86	7.66	-62.20	-49.2
5235.00	V	-	-	-70.83	9.74	-61.09	-48.1
6980.00	V	-	-	-69.51	11.07	-58.44	-45.4

Table 7-123. Radiated Spurious Data (Band 66/4– Mid Channel)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device			Page 336 of 373

OPERATING FREQUENCY: 1770.00 MHz
 CHANNEL: 132572
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3540.00	V	-	-	-69.57	7.68	-61.89	-48.9
5310.00	V	-	-	-70.16	9.78	-60.38	-47.4
7080.00	V	-	-	-69.38	11.11	-58.27	-45.3

Table 7-124. Radiated Spurious Data (Band 66/4- High Channel)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device		Page 337 of 373

Band 25/2

OPERATING FREQUENCY: 1860.00 MHz
CHANNEL: 26140
MODULATION SIGNAL: QPSK
BANDWIDTH: 20.0 MHz
DISTANCE: 3 meters
LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3720.00	H	-	-	-69.52	7.23	-62.29	-49.3
5580.00	H	-	-	-69.39	9.14	-60.25	-47.3
7440.00	H	-	-	-67.18	9.38	-57.80	-44.8

Table 7-125. Radiated Spurious Data (Band 25/2– Low Channel)

OPERATING FREQUENCY: 1882.50 MHz
CHANNEL: 26365
MODULATION SIGNAL: QPSK
BANDWIDTH: 20.0 MHz
DISTANCE: 3 meters
LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3765.00	H	-	-	-69.28	7.26	-62.02	-49.0
5647.50	H	-	-	-69.46	9.24	-60.22	-47.2
7530.00	H	-	-	-66.61	9.39	-57.22	-44.2

Table 7-126. Radiated Spurious Data (Band 25/2– Mid Channel)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device			

OPERATING FREQUENCY: 1905.00 MHz
CHANNEL: 26590
MODULATION SIGNAL: QPSK
BANDWIDTH: 20.0 MHz
DISTANCE: 3 meters
LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3810.00	H	-	-	-69.23	7.35	-61.88	-48.9
5715.00	H	-	-	-69.04	9.26	-59.78	-46.8
7620.00	H	-	-	-67.18	9.36	-57.82	-44.8

Table 7-127. Radiated Spurious Data (Band 25/2– High Channel)

FCC ID: BCGA1895	 MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device	Page 339 of 373	

Band 30

OPERATING FREQUENCY: 2307.50 MHz
 CHANNEL: 27685
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 5.0 MHz
 DISTANCE: 3 meters
 LIMIT: -40 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
4615.00	H	-	-	-70.35	9.00	-61.35	-21.3
6922.50	H	-	-	-69.63	11.04	-58.59	-18.6
9230.00	H	-	-	-67.75	12.49	-55.26	-15.3

Table 7-128. Radiated Spurious Data (Band 30 – Low Channel)

OPERATING FREQUENCY: 2310.00 MHz
 CHANNEL: 27710
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 5.0 MHz
 DISTANCE: 3 meters
 LIMIT: -40 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
4620.00	H	-	-	-70.28	9.01	-61.27	-21.3
6930.00	H	-	-	-69.84	11.05	-58.79	-18.8
9240.00	H	-	-	-67.49	12.48	-55.01	-15.0

Table 7-129. Radiated Spurious Data (Band 30 – Mid Channel)

FCC ID: BCGA1895	 MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device

OPERATING FREQUENCY: 2312.50 MHz
 CHANNEL: 27735
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 5.0 MHz
 DISTANCE: 3 meters
 LIMIT: -40 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
4625.00	H	-	-	-70.18	9.02	-61.16	-21.2
6937.50	H	-	-	-69.87	11.05	-58.82	-18.8
9250.00	H	-	-	-67.79	12.48	-55.31	-15.3

Table 7-130. Radiated Spurious Data (Band 30 – High Channel)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device	Page 341 of 373

Band 7

OPERATING FREQUENCY: 2510.00 MHz
 CHANNEL: 20850
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5020.00	V	-	-	-70.53	9.79	-60.74	-35.7
7530.00	V	-	-	-68.91	11.68	-57.23	-32.2
10040.00	V	-	-	-67.22	12.21	-55.01	-30.0

Table 7-131. Radiated Spurious Data (Band 7 – Low Channel)

OPERATING FREQUENCY: 2535.00 MHz
 CHANNEL: 21100
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5070.00	V	-	-	-70.84	9.82	-61.02	-36.0
7605.00	V	-	-	-68.89	11.72	-57.16	-32.2
10140.00	V	-	-	-66.95	12.21	-54.75	-29.7

Table 7-132. Radiated Spurious Data (Band 7 – Mid Channel)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device			Page 342 of 373

OPERATING FREQUENCY: 2560.00 MHz
CHANNEL: 21350
MODULATION SIGNAL: QPSK
BANDWIDTH: 20.0 MHz
DISTANCE: 3 meters
LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5120.00	V	-	-	-70.87	9.81	-61.07	-36.1
7680.00	V	-	-	-69.29	11.78	-57.51	-32.5
10240.00	V	-	-	-66.95	12.21	-54.74	-29.7

Table 7-133. Radiated Spurious Data (Band 7 – High Channel)

FCC ID: BCGA1895	 MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device	Page 343 of 373	

Band 41

OPERATING FREQUENCY: 2506.00 MHz
CHANNEL: 39750
MODULATION SIGNAL: QPSK
BANDWIDTH: 20.0 MHz
DISTANCE: 3 meters
LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5012.00	H	-	-	-69.92	8.62	-61.31	-36.3
7518.00	H	-	-	-66.60	9.40	-57.19	-32.2
10024.00	H	-	-	-64.73	9.65	-55.08	-30.1

Table 7-134. Radiated Spurious Data (Band 41 – Low Channel)

OPERATING FREQUENCY: 2593.00 MHz
CHANNEL: 40620
MODULATION SIGNAL: QPSK
BANDWIDTH: 20.0 MHz
DISTANCE: 3 meters
LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5186.00	H	-	-	-70.83	8.91	-61.91	-36.9
7779.00	H	-	-	-66.91	9.39	-57.52	-32.5
10372.00	H	-	-	-63.34	9.35	-53.99	-29.0

Table 7-135. Radiated Spurious Data (Band 41 – Mid Channel)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device			

OPERATING FREQUENCY: 2680.00 MHz
CHANNEL: 41490
MODULATION SIGNAL: QPSK
BANDWIDTH: 20.0 MHz
DISTANCE: 3 meters
LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5360.00	H	-	-	-69.71	9.02	-60.69	-35.7
8040.00	H	-	-	-66.00	9.47	-56.53	-31.5
10720.00	H	-	-	-62.17	9.07	-53.11	-28.1

Table 7-136. Radiated Spurious Data (Band 41 – High Channel)

FCC ID: BCGA1895	 MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device	Page 345 of 373	

7.9 Uplink Carrier Aggregation Radiated Measurements

§2.1053, §27.53(m)

Test Overview

Radiated spurious emissions measurements are performed using the substitution method described in ANSI/TIA-603-D-2010 with the EUT transmitting into an integral antenna. Measurements on signals operating below 1GHz are performed using vertically and horizontally polarized tuned dipole antennas. Measurements on signals operating above 1GHz are performed using vertically and horizontally polarized broadband horn antennas. All measurements are performed as peak measurements while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies.

Test Procedures Used

KDB 971168 D01 v02r02 – Section 5.8

ANSI/TIA-603-D-2010 – Section 2.2.12

Test Settings

1. RBW = 100kHz for emissions below 1GHz and 1MHz for emissions above 1GHz
2. VBW $\geq 3 \times$ RBW
3. No. of sweep points $\geq 2 \times$ span / RBW
4. Detector = RMS
5. Trace mode = trace average for continuous emissions, max hold for pulse emissions
6. The trace was allowed to stabilize

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device	Page 346 of 373

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

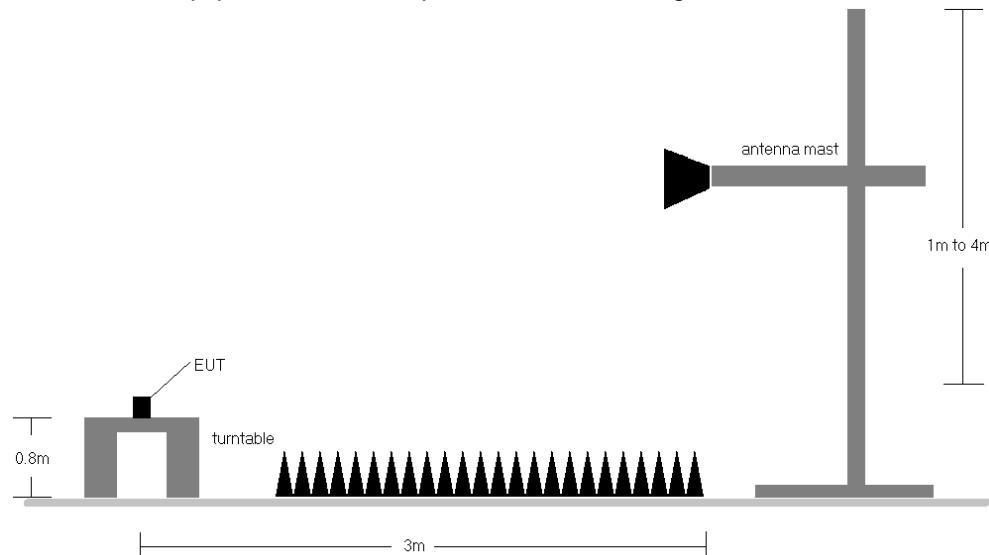
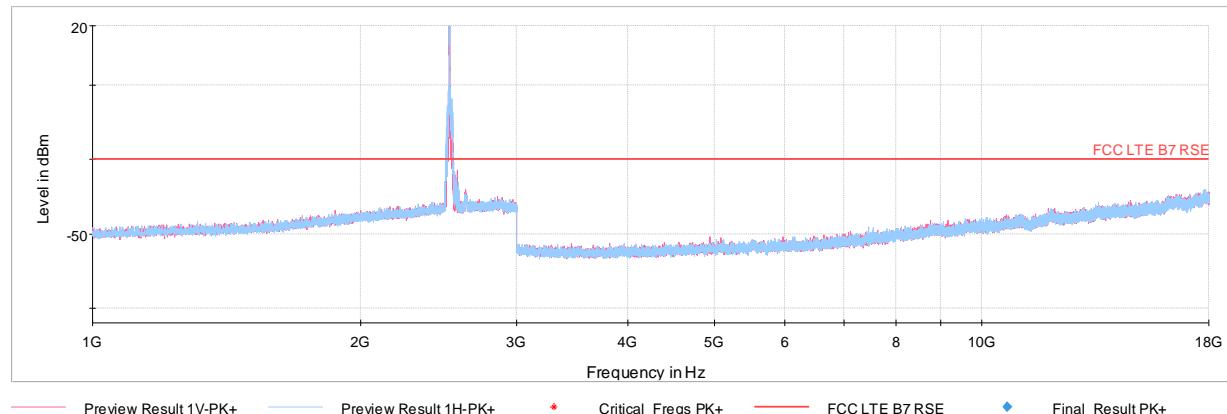


Figure 7-8. Test Instrument & Measurement Setup

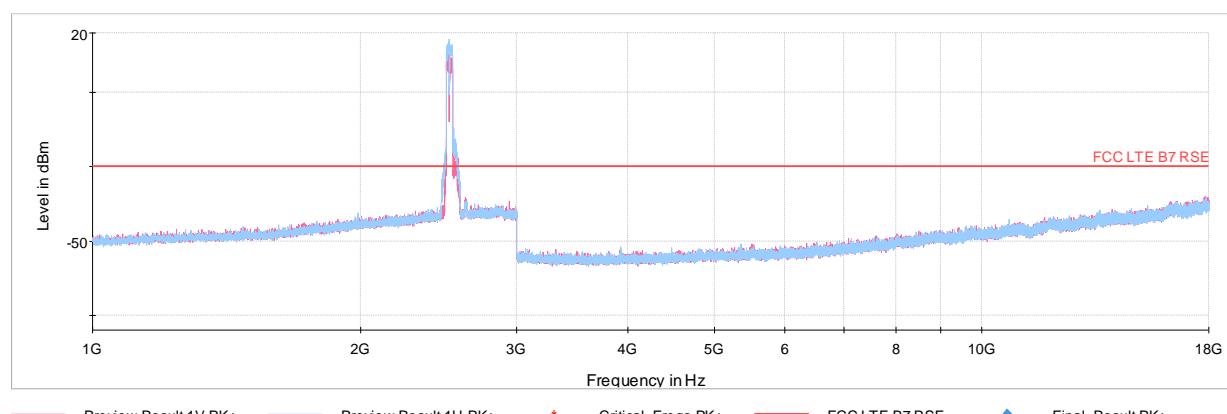
Test Notes

- 1) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The worst case emissions are reported with the EUT positioning, modulations, RB sizes and offsets, and channel bandwidth configurations shown in the tables below.
- 2) This unit was tested with its standard battery.
- 3) Radiated spurious emissions measurements were evaluated for the two contiguous channels using various combinations of RB size, RB offset, modulation, and channel bandwidth. The worst case (highest) emissions were found while operating with QPSK modulation with both carriers set to transmit using 1RB.
- 4) The spectrum is measured from 9kHz to the 10th harmonic of the fundamental frequency of the transmitter. The worst-case emissions are reported.
- 5) Emissions below 18GHz were measured at a 3 meter test distance while emissions above 18GHz were measured at a 1 meter test distance with the application of a distance correction factor.
- 6) No significant emissions were found as a result of two uplink carriers operating contiguously.

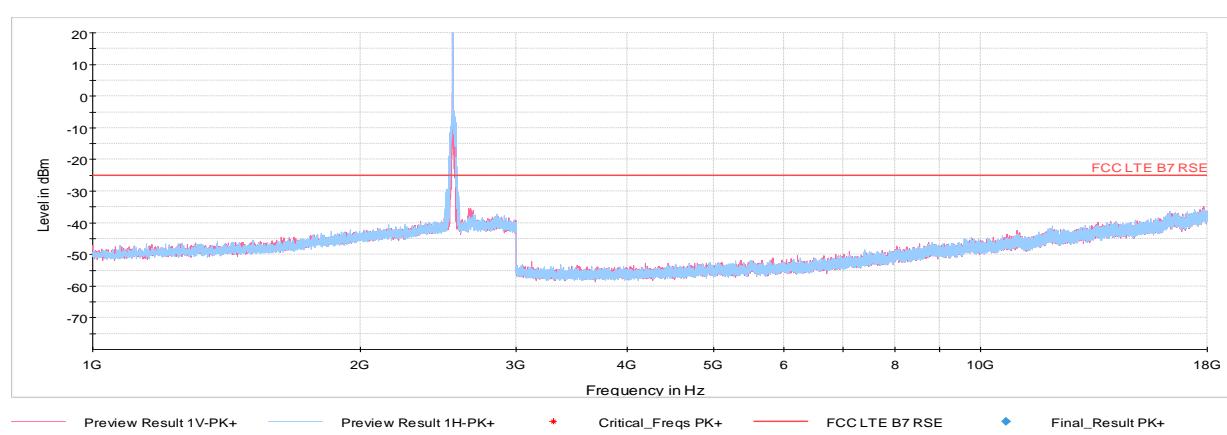
FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device		Page 347 of 373



Plot 7-137. Radiated Spurious Plot (ULCA B7 PCC: RB 1 Offset 99, SCC: RB 1 Offset 0 – Low Channel)

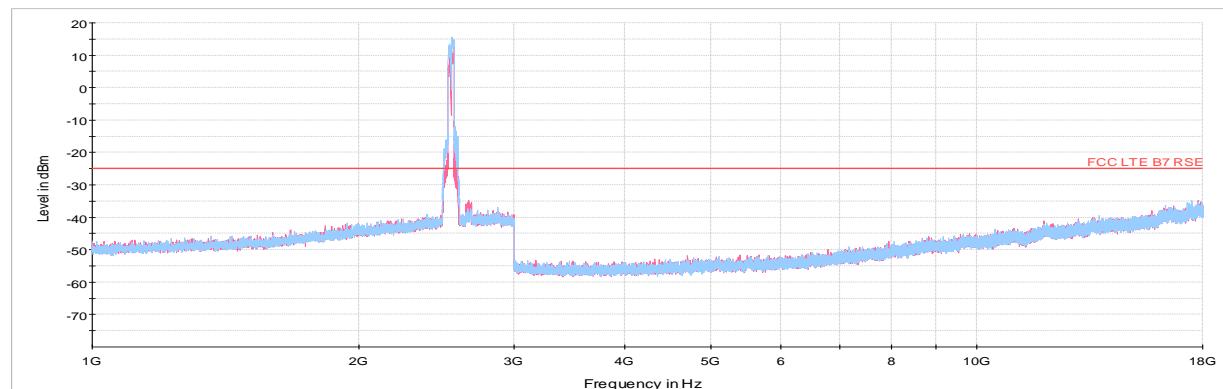


Plot 7-138. Radiated Spurious Plot (ULCA B7 PCC: RB 100 Offset 0, SCC: RB 100 Offset 0 – Low Channel)

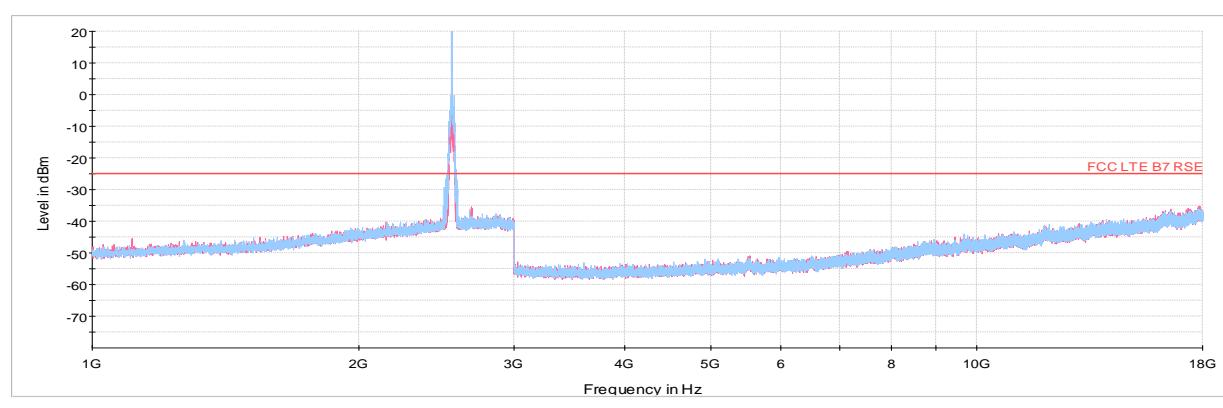


Plot 7-139. Radiated Spurious Plot (ULCA B7 PCC: RB 1 Offset 99, SCC: RB 1 Offset 0 – Mid Channel)

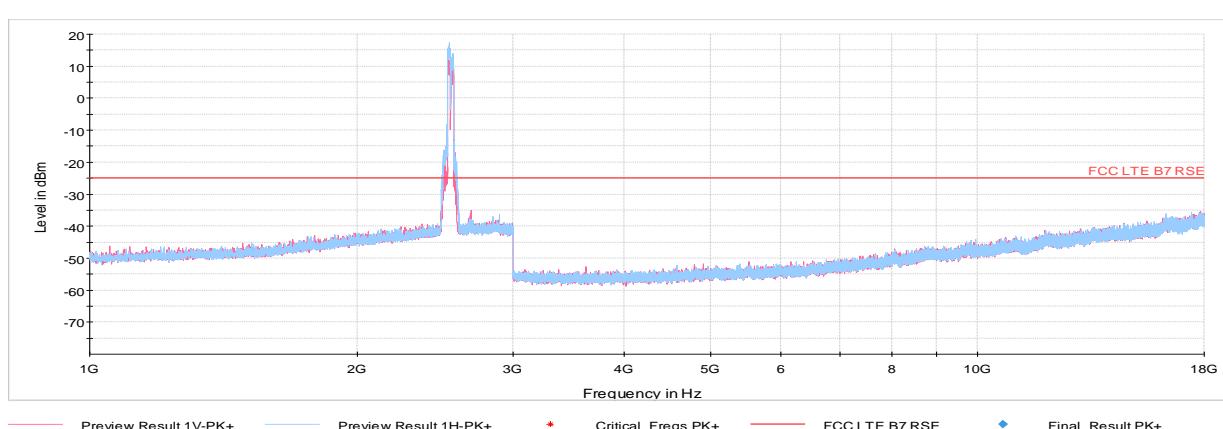
FCC ID: BCGA1895	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device	Page 348 of 373



Plot 7-140. Radiated Spurious Plot (ULCA B7 PCC: RB 100 Offset 0, SCC: RB 100 Offset 0 – Mid Channel)



Plot 7-141. Radiated Spurious Plot (ULCA B7 PCC: RB 1 Offset 99, SCC: RB 1 Offset 0 – High Channel)



Plot 7-142. Radiated Spurious Plot (ULCA B7 PCC: RB 100 Offset 0, SCC: RB 100 Offset 0 – High Channel)

FCC ID: BCGA1895	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device	Page 349 of 373

OPERATING FREQUENCY (PCC):	2510.00	MHz
OPERATING FREQUENCY (SCC):	2529.80	MHz
CHANNEL (PCC):	20850	
CHANNEL (SCC):	21048	
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	20.0	MHz
DISTANCE:	3	meters
LIMIT:	-25	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5020.00	H	-	-	-63.46	8.81	-54.64	-54.6
7530.00	H	-	-	-57.92	9.53	-48.39	-48.4
10040.00	H	-	-	-54.15	9.84	-44.32	-44.3

Table 7-143. Radiated Spurious Data (ULCA B7 PCC: RB 1 Offset 99, SCC: RB 1 Offset 0 – Low Channel)

OPERATING FREQUENCY (PCC):	2535.00	MHz
OPERATING FREQUENCY (SCC):	2554.80	MHz
CHANNEL (PCC):	21100	
CHANNEL (SCC):	21298	
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	20.0	MHz
DISTANCE:	3	meters
LIMIT:	-25	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5070.00	H	-	-	-64.73	8.89	-55.83	-55.8
7605.00	H	-	-	-60.43	9.55	-50.88	-50.9
10140.00	H	-	-	-57.09	9.89	-47.20	-47.2

Table 7-144. Radiated Spurious Data (ULCA B7 PCC: RB 1 Offset 99, SCC: RB 1 Offset 0 – Mid Channel))

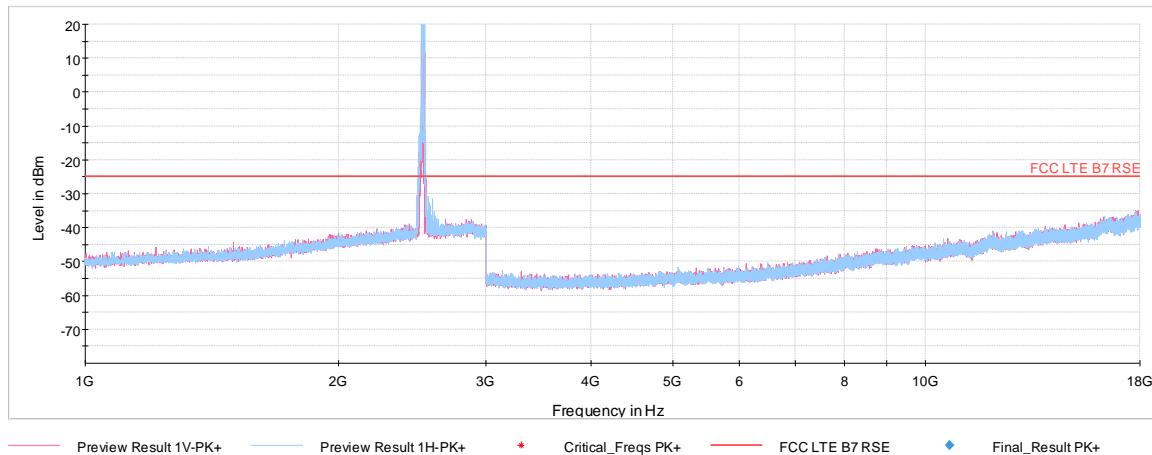
FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device	Page 350 of 373

OPERATING FREQUENCY (PCC): 2560.00 MHz
 OPERATING FREQUENCY (SCC): 2540.00 MHz
 CHANNEL (PCC): 21350
 CHANNEL (SCC): 21152
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -25 dBm

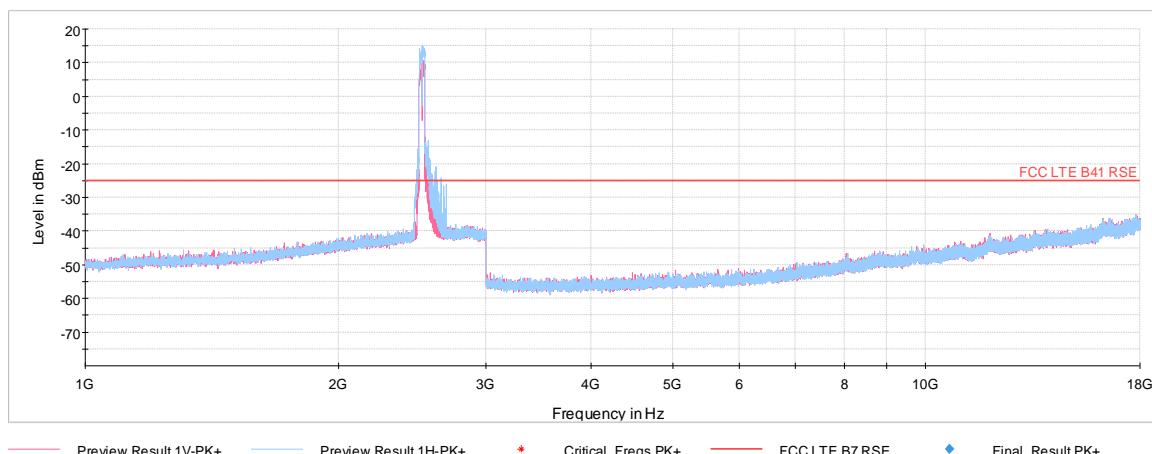
Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5120.00	H	-	-	-63.46	8.98	-54.48	-54.5
7680.00	H	-	-	-60.14	9.61	-50.53	-50.5
10240.00	H	-	-	-56.82	9.92	-46.90	-46.9

Table 7-145. Radiated Spurious Data (ULCA B7 PCC: RB 1 Offset 0, SCC: RB 1 Offset 99 – High Channel)

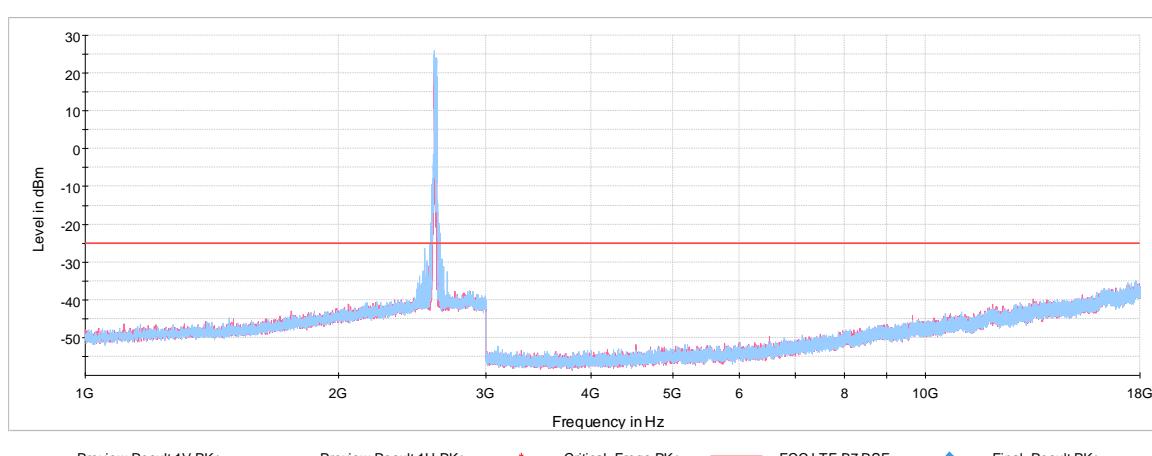
FCC ID: BCGA1895	 MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device	Page 351 of 373	



Plot 7-146. Radiated Spurious Plot (ULCA B41 PCC: RB 1 Offset 99, SCC: RB 1 Offset 0 – Low Channel)

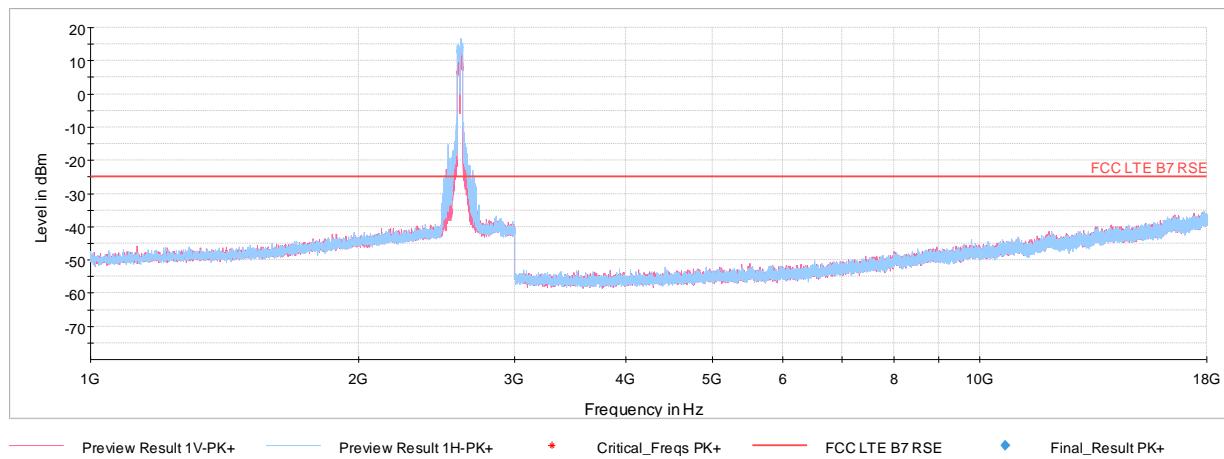


Plot 7-147. Radiated Spurious Plot (ULCA B41 PCC: RB 100 Offset 0, SCC: RB 100 Offset 0 – Low Channel)

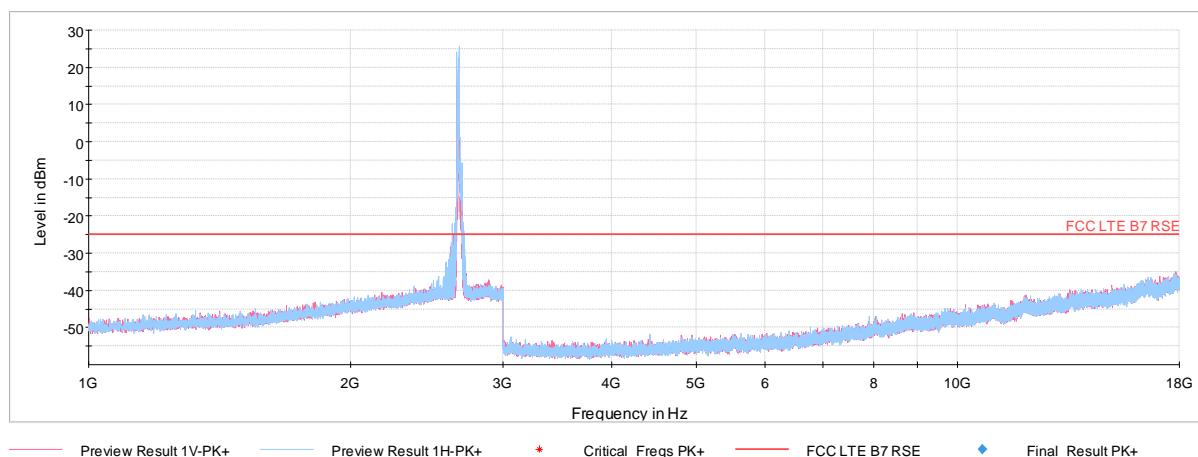


Plot 7-148. Radiated Spurious Plot (ULCA B41 PCC: RB 1 Offset 99, SCC: RB 1 Offset 0 – Mid Channel)

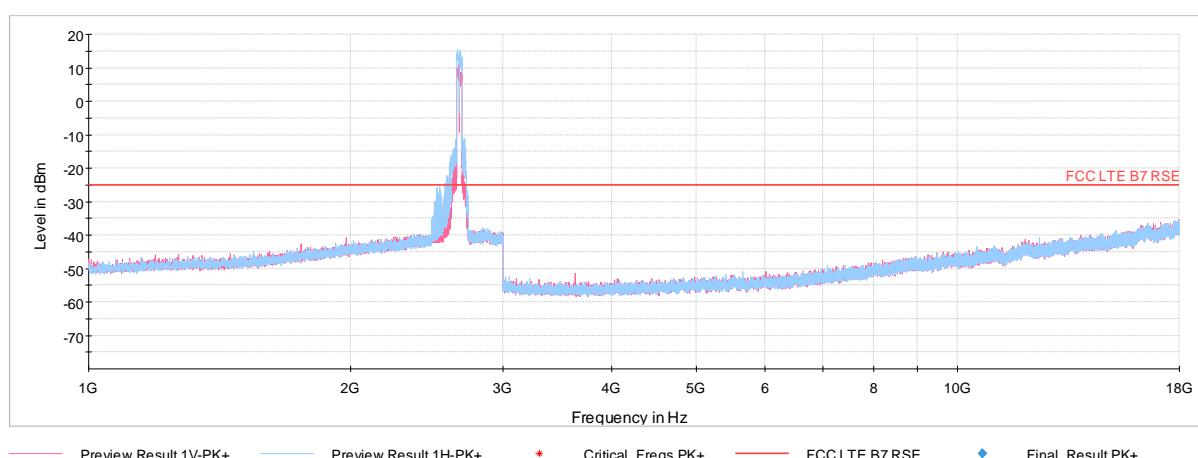
FCC ID: BCGA1895	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device		Page 352 of 373



Plot 7-149. Radiated Spurious Plot (ULCA B41 PCC: RB 100 Offset 0, SCC: RB 100 Offset 0 – Mid Channel)



Plot 7-150. Radiated Spurious Plot (ULCA B41 PCC: RB 1 Offset 99, SCC: RB 1 Offset 0 – High Channel)



Plot 7-151. Radiated Spurious Plot (ULCA B41 PCC: RB 100 Offset 0, SCC: RB 100 Offset 0 – High Channel)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device	Page 353 of 373	

OPERATING FREQUENCY (PCC):	2506.00	MHz
OPERATING FREQUENCY (SCC):	2525.80	MHz
CHANNEL (PCC):	39750	
CHANNEL (SCC):	39948	
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	20.0	MHz
DISTANCE:	3	meters
LIMIT:	-25	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5012.00	H	-	-	-51.32	8.81	-42.51	-42.5
7518.00	H	-	-	-47.44	9.53	-37.91	-37.9
10024.00	H	-	-	-43.96	9.84	-34.12	-34.1

Table 7-152. Radiated Spurious Data (ULCA B41 PCC: RB 1 Offset 99, SCC: RB 1 Offset 0 – Low Channel)

OPERATING FREQUENCY (PCC):	2593.00	MHz
OPERATING FREQUENCY (SCC):	2612.80	MHz
CHANNEL (PCC):	40620	
CHANNEL (SCC):	40818	
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	20.0	MHz
DISTANCE:	3	meters
LIMIT:	-25	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5186.00	H	-	-	-51.85	9.10	-42.75	-42.7
7779.00	H	-	-	-49.41	9.68	-39.72	-39.7
10372.00	H	-	-	-46.18	9.88	-36.30	-36.3

Table 7-153. Radiated Spurious Data (ULCA B41 PCC: RB 1 Offset 99, SCC: RB 1 Offset 0 – Mid Channel))

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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OPERATING FREQUENCY (PCC):	2680.00	MHz
OPERATING FREQUENCY (SCC):	2660.20	MHz
CHANNEL (PCC):	41490	
CHANNEL (SCC):	41292	
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	20.0	MHz
DISTANCE:	3	meters
LIMIT:	-25	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5360.00	H	-	-	-62.33	8.98	-53.35	-53.4
8040.00	H	-	-	-58.66	9.61	-49.05	-49.0
10720.00	H	-	-	-54.66	9.92	-44.74	-44.7

Table 7-154. Radiated Spurious Data (ULCA B41 PCC: RB 1 Offset 0, SCC: RB 1 Offset 99 – High Channel)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device	Page 355 of 373

7.10 Frequency Stability / Temperature Variation

Test Overview and Limit

Frequency stability testing is performed in accordance with the guidelines of ANSI/TIA-603-E-2016. The frequency stability of the transmitter is measured by:

- a.) **Temperature:** The temperature is varied from -30°C to +50°C in 10°C increments using an environmental chamber.
- b.) **Primary Supply Voltage:** The primary supply voltage is varied from 85% to 115% of the nominal value for non hand-carried battery and AC powered equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

For Part 22, the frequency stability of the transmitter shall be maintained within $\pm 0.00025\%$ (± 2.5 ppm) of the center frequency. For Part 24, Part 27, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test Procedure Used

ANSI/TIA-603-E-2016

Test Settings

1. The carrier frequency of the transmitter is measured at room temperature (20°C to provide a reference).
2. The equipment is turned on in a "standby" condition for fifteen minutes before applying power to the transmitter. Measurement of the carrier frequency of the transmitter is made within one minute after applying power to the transmitter.
3. Frequency measurements are made at 10°C intervals ranging from -30°C to +50°C. A period of at least one half-hour is provided to allow stabilization of the equipment at each temperature level.

Test Setup

The EUT was connected via an RF cable to a spectrum analyzer with the EUT placed inside an environmental chamber.

Test Notes

None

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Band 12/17 Frequency Stability Measurements

OPERATING FREQUENCY: 707,500,000 Hz
 CHANNEL: 23095
 REFERENCE VOLTAGE: 3.80 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	- 30	707,500,005	5	0.0000007
100 %		- 20	707,500,003	3	0.0000005
100 %		- 10	707,500,006	6	0.0000008
100 %		0	707,500,005	5	0.0000007
100 %		+ 10	707,500,004	4	0.0000006
100 %		+ 20	707,500,005	5	0.0000007
100 %		+ 30	707,500,006	6	0.0000008
100 %		+ 40	707,500,005	5	0.0000007
100 %		+ 50	707,500,006	6	0.0000008
BATT. ENDPOINT	3.40	+ 20	707,500,008	8	0.0000011

Table 7-155. Frequency Stability Data (Band 12/17)

Note:

Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Band 12/17 Frequency Stability Measurements

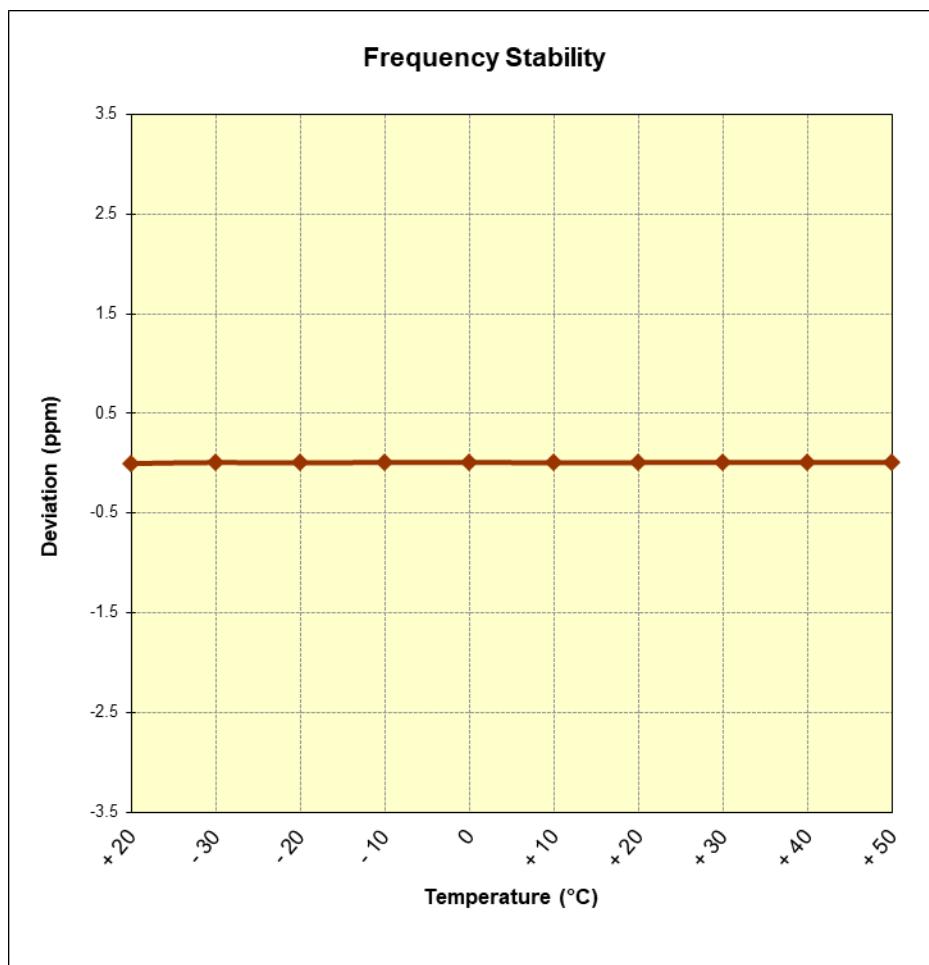


Figure 7-9. Frequency Stability Graph (Band 12/17)

FCC ID: BCGA1895		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Band 13 Frequency Stability Measurements

OPERATING FREQUENCY: 782,000,000 Hz
 CHANNEL: 23230
 REFERENCE VOLTAGE: 3.80 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	- 30	782,000,006	6	0.0000007
100 %		- 20	782,000,006	6	0.0000008
100 %		- 10	782,000,005	5	0.0000006
100 %		0	782,000,004	4	0.0000006
100 %		+ 10	782,000,005	5	0.0000007
100 %		+ 20	782,000,006	6	0.0000007
100 %		+ 30	782,000,006	6	0.0000008
100 %		+ 40	782,000,007	7	0.0000008
100 %		+ 50	782,000,006	6	0.0000008
BATT. ENDPOINT	3.40	+ 20	782,000,006	6	0.0000007

Table 7-156. Frequency Stability Data (Band 13)

Note:

Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

FCC ID: BCGA1895		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Band 13 Frequency Stability Measurements

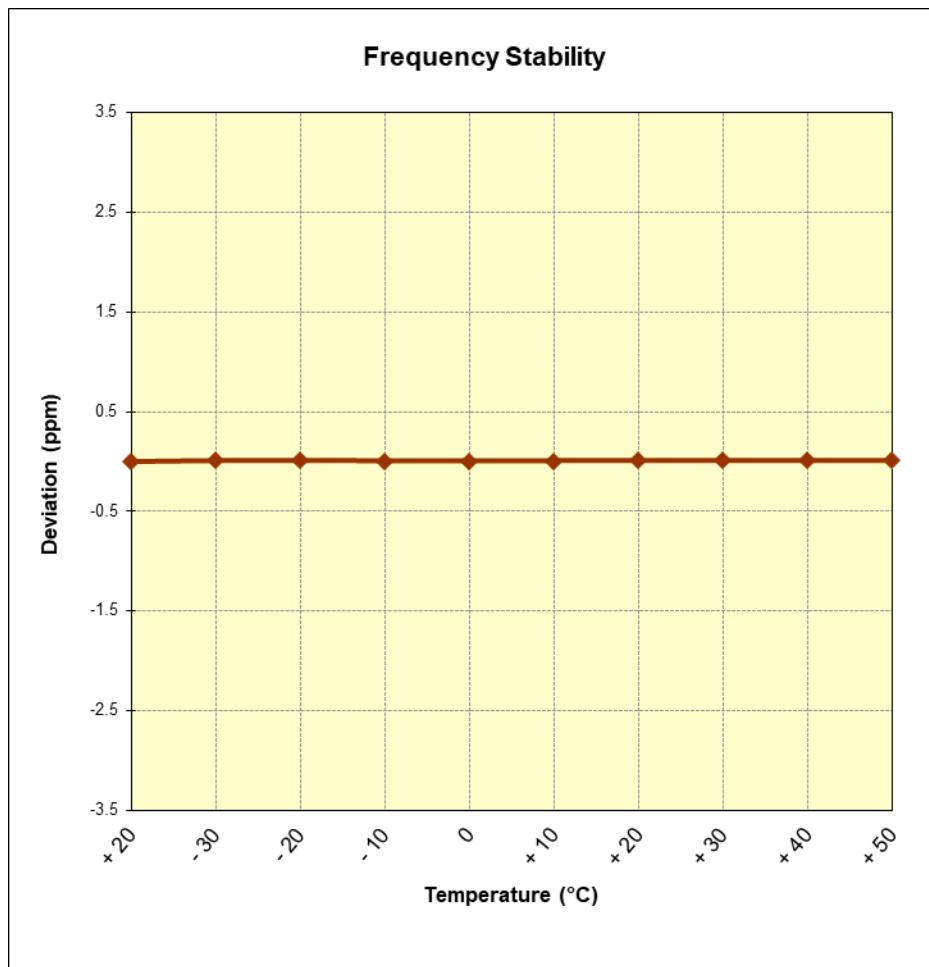


Figure 7-10. Frequency Stability Graph (Band 13)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device	Page 360 of 373	

Band 26/5 Frequency Stability Measurements

OPERATING FREQUENCY: 831,500,000 Hz
 CHANNEL: 26865
 REFERENCE VOLTAGE: 3.80 VDC
 DEVIATION LIMIT: ± 0.00025 % or 2.5 ppm

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	- 30	831,500,005	5	0.0000005
100 %		- 20	831,500,005	5	0.0000006
100 %		- 10	831,500,006	6	0.0000007
100 %		0	831,500,007	7	0.0000008
100 %		+ 10	831,500,006	6	0.0000007
100 %		+ 20	831,500,005	5	0.0000006
100 %		+ 30	831,500,006	6	0.0000007
100 %		+ 40	831,500,005	5	0.0000006
100 %		+ 50	831,500,005	5	0.0000006
BATT. ENDPOINT	3.40	+ 20	831,500,006	6	0.0000007

Table 7-157. Frequency Stability Data (Band 26/5)

FCC ID: BCGA1895		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Band 26/5 Frequency Stability Measurements

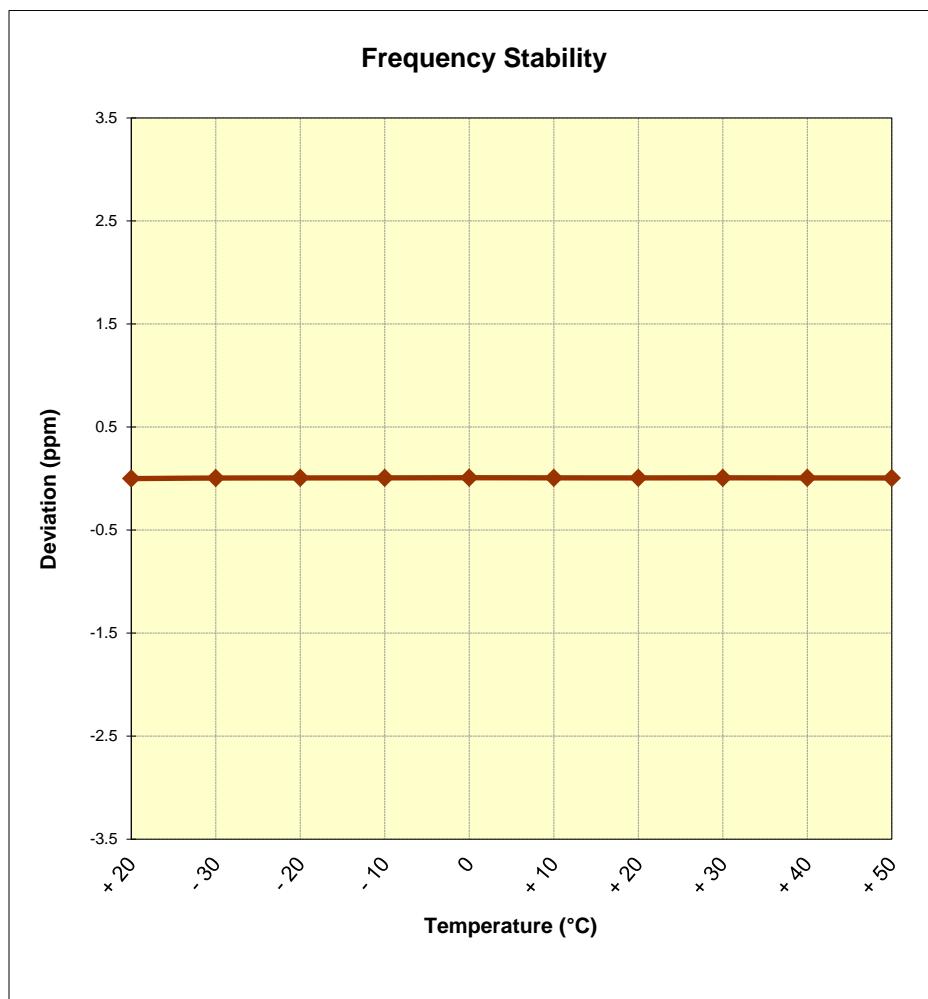


Figure 7-11. Frequency Stability Graph (Band 26/5)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device	Page 362 of 373	

Band 66/4 Frequency Stability Measurements

OPERATING FREQUENCY: 1,745,000,000 Hz
 CHANNEL: 132322
 REFERENCE VOLTAGE: 3.80 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	- 30	1,745,000,004	4	0.0000002
100 %		- 20	1,745,000,010	10	0.0000006
100 %		- 10	1,745,000,012	12	0.0000007
100 %		0	1,745,000,007	7	0.0000004
100 %		+ 10	1,745,000,006	6	0.0000003
100 %		+ 20	1,745,000,007	7	0.0000004
100 %		+ 30	1,745,000,011	11	0.0000006
100 %		+ 40	1,745,000,005	5	0.0000003
100 %		+ 50	1,745,000,024	24	0.0000014
BATT. ENDPOINT	3.40	+ 20	1,745,000,005	5	0.0000003

Table 7-158. Frequency Stability Data (Band 66/4)

Note:

Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

FCC ID: BCGA1895		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Band 66/4 Frequency Stability Measurements

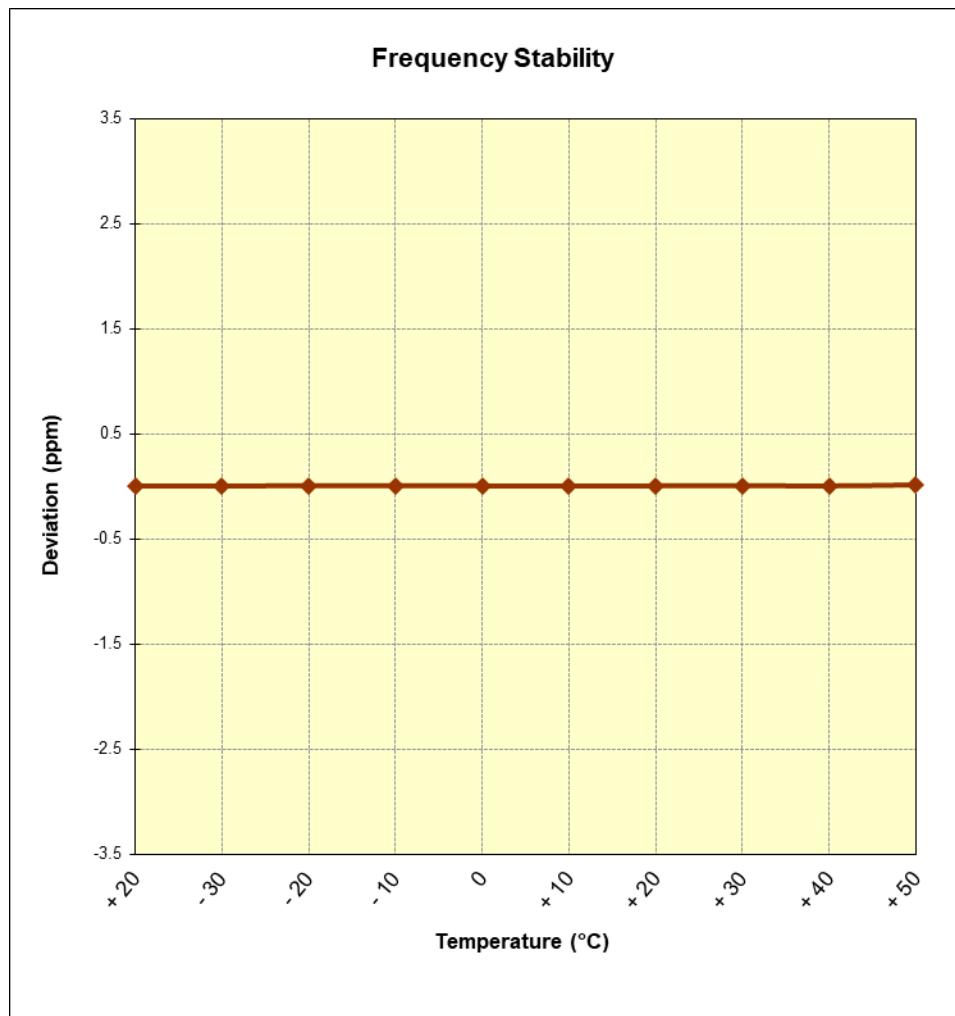


Figure 7-12. Frequency Stability Graph (Band 66/4)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device	Page 364 of 373	

Band 25/2 Frequency Stability Measurements

OPERATING FREQUENCY: 1,882,500,000 Hz
 CHANNEL: 26365
 REFERENCE VOLTAGE: 3.80 VDC
 DEVIATION LIMIT: ± 0.00025 % or 2.5 ppm

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	- 30	1,882,500,010	10	0.0000005
100 %		- 20	1,882,500,010	10	0.0000005
100 %		- 10	1,882,500,008	8	0.0000004
100 %		0	1,882,500,010	10	0.0000005
100 %		+ 10	1,882,500,007	7	0.0000004
100 %		+ 20	1,882,500,010	10	0.0000005
100 %		+ 30	1,882,500,008	8	0.0000004
100 %		+ 40	1,882,500,011	11	0.0000006
100 %		+ 50	1,882,500,018	18	0.0000010
BATT. ENDPOINT	3.40	+ 20	1,882,500,013	13	0.0000007

Table 7-159. Frequency Stability Data (Band 25/2)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Band 25/2 Frequency Stability Measurements

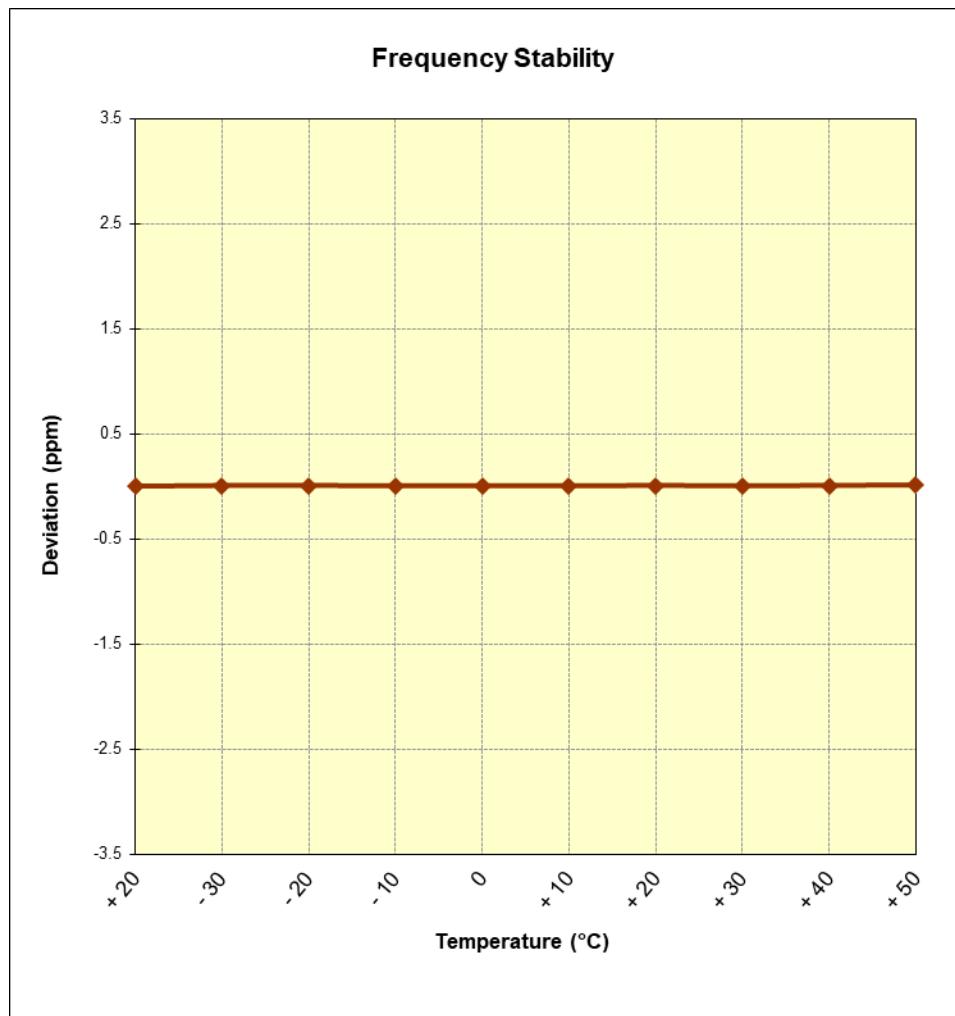


Figure 7-13. Frequency Stability Graph (Band 25/2)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Band 30 Frequency Stability Measurements

OPERATING FREQUENCY: 2,310,000,000 Hz
 CHANNEL: 27710
 REFERENCE VOLTAGE: 3.80 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	- 30	2,310,000,008	8	0.0000003
100 %		- 20	2,310,000,007	7	0.0000003
100 %		- 10	2,310,000,008	8	0.0000003
100 %		0	2,310,000,007	7	0.0000003
100 %		+ 10	2,310,000,006	6	0.0000002
100 %		+ 20	2,310,000,012	12	0.0000005
100 %		+ 30	2,310,000,006	6	0.0000003
100 %		+ 40	2,310,000,006	6	0.0000002
100 %		+ 50	2,310,000,014	14	0.0000006
BATT. ENDPOINT	3.40	+ 20	2,310,000,024	24	0.0000010

Table 7-160. Frequency Stability Data (Band 30)

Note:

Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

FCC ID: BCGA1895	 MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device

Band 30 Frequency Stability Measurements

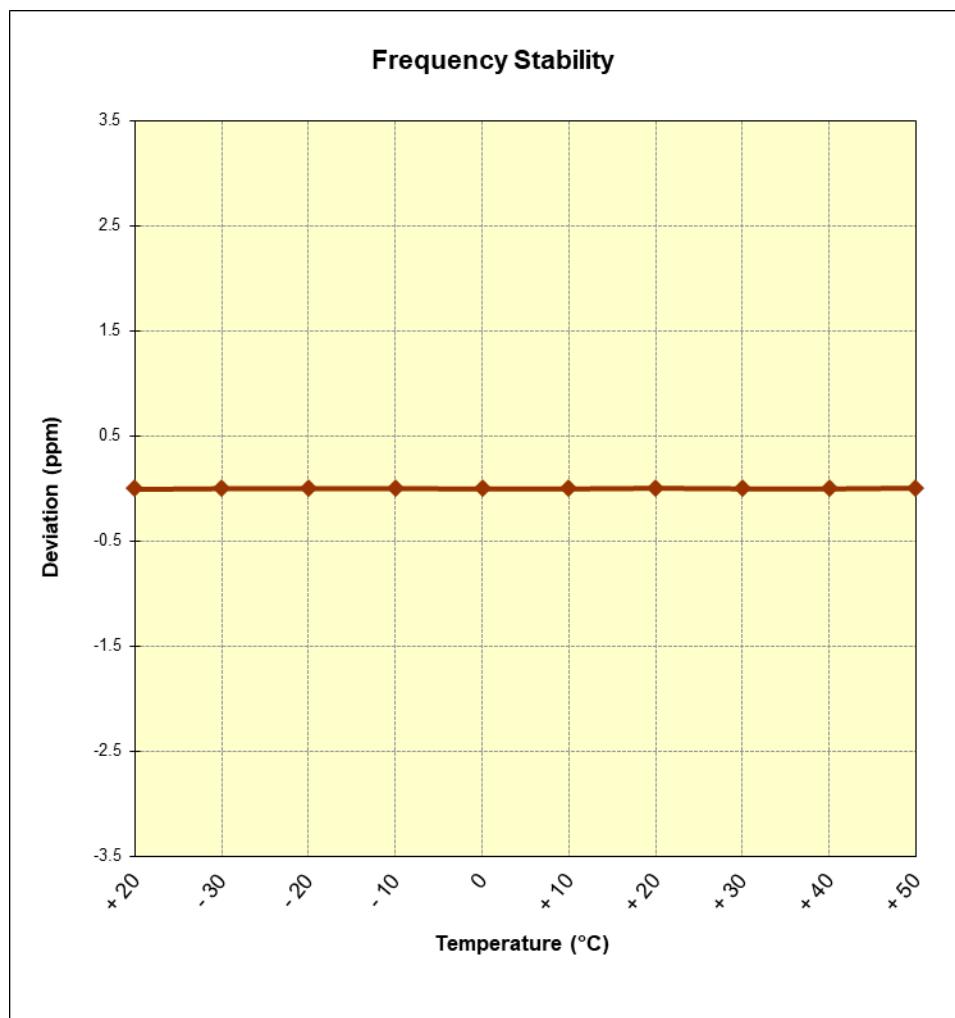


Figure 7-14. Frequency Stability Graph (Band 30)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Band 7 Frequency Stability Measurements

OPERATING FREQUENCY: 2,535,000,000 Hz
 CHANNEL: 21100
 REFERENCE VOLTAGE: 3.80 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	- 30	2,535,000,004	4	0.0000001
100 %		- 20	2,535,000,002	2	0.0000001
100 %		- 10	2,535,000,009	9	0.0000004
100 %		0	2,535,000,014	14	0.0000005
100 %		+ 10	2,535,000,004	4	0.0000001
100 %		+ 20	2,535,000,010	10	0.0000004
100 %		+ 30	2,535,000,002	2	0.0000001
100 %		+ 40	2,535,000,009	9	0.0000003
100 %		+ 50	2,535,000,002	2	0.0000001
BATT. ENDPOINT	3.40	+ 20	2,535,000,021	21	0.0000008

Table 7-161. Frequency Stability Data (Band 7)

Note:

Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

FCC ID: BCGA1895	 MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device

Band 7 Frequency Stability Measurements

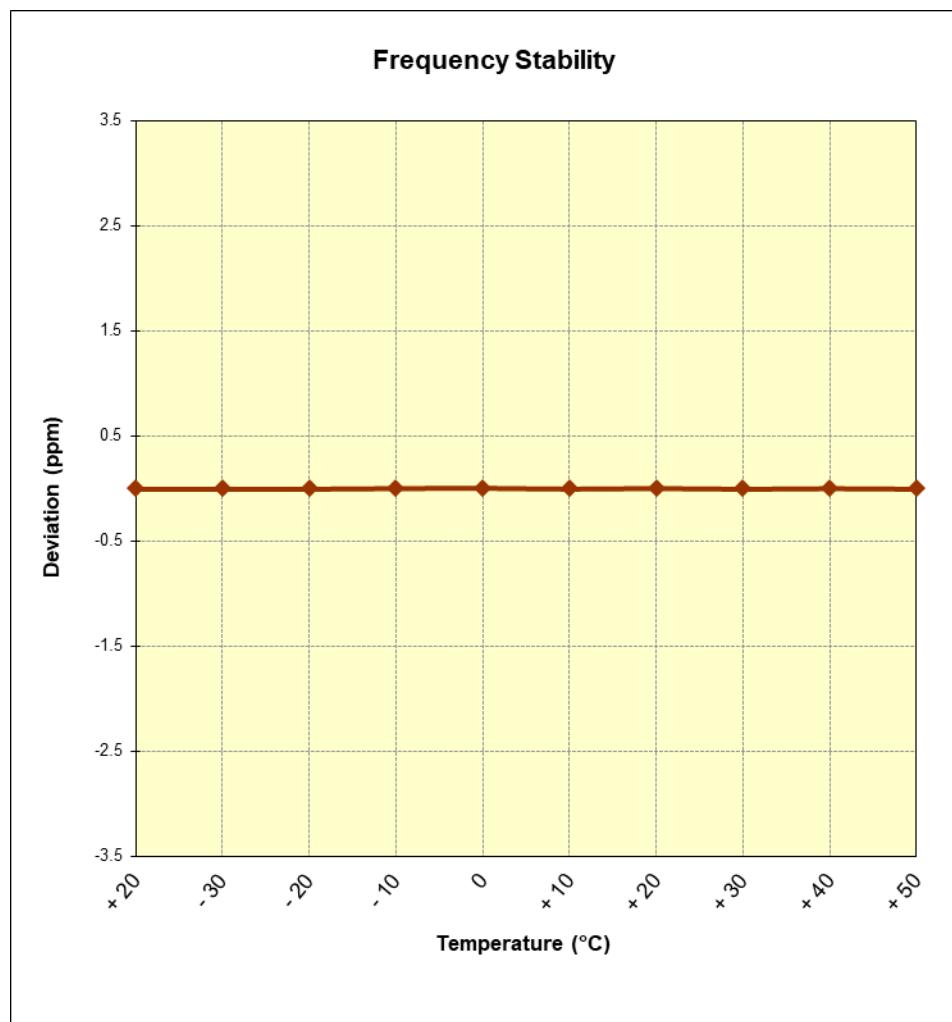


Figure 7-15. Frequency Stability Graph (Band 7)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Band 41 Frequency Stability Measurements

OPERATING FREQUENCY: 2,593,000,000 Hz
 CHANNEL: 40620
 REFERENCE VOLTAGE: 3.80 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	- 30	2,593,000,008	8	0.0000003
100 %		- 20	2,593,000,007	7	0.0000003
100 %		- 10	2,593,000,010	10	0.0000004
100 %		0	2,593,000,015	15	0.0000006
100 %		+ 10	2,593,000,000	0	0.0000000
100 %		+ 20	2,593,000,009	9	0.0000004
100 %		+ 30	2,593,000,005	5	0.0000002
100 %		+ 40	2,593,000,006	6	0.0000002
100 %		+ 50	2,593,000,010	10	0.0000004
BATT. ENDPOINT	3.40	+ 20	2,593,000,014	14	0.0000005

Table 7-162. Frequency Stability Data (Band 41)

Note:

Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Band 41 Frequency Stability Measurements

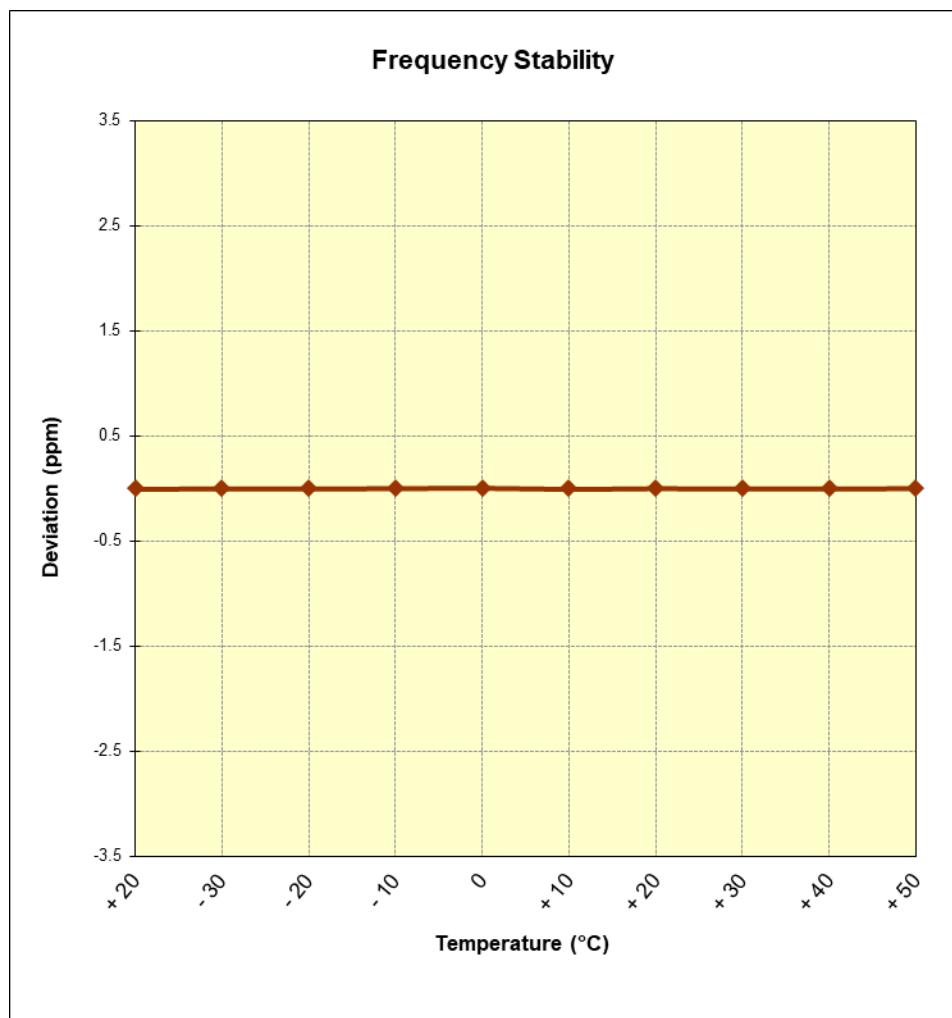


Figure 7-16. Frequency Stability Graph (Band 41)

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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8.0 CONCLUSION

The data collected relate only to the item(s) tested and show that the **Apple Inc. Tablet Device** **FCC ID: BCGA1895** complies with all the requirements of Part 22, 24, & 27 of the FCC Rules for LTE operation only.

FCC ID: BCGA1895	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220014-03-R1.BCG	Test Dates: 7/31-10/18/2018	EUT Type: Tablet Device		Page 373 of 373