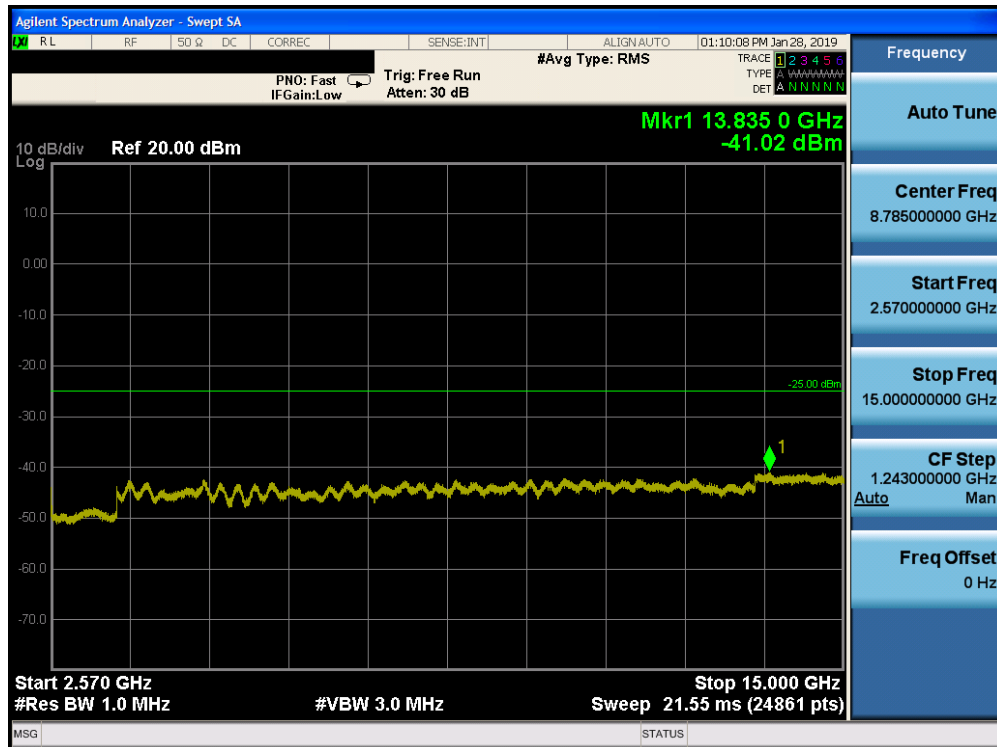
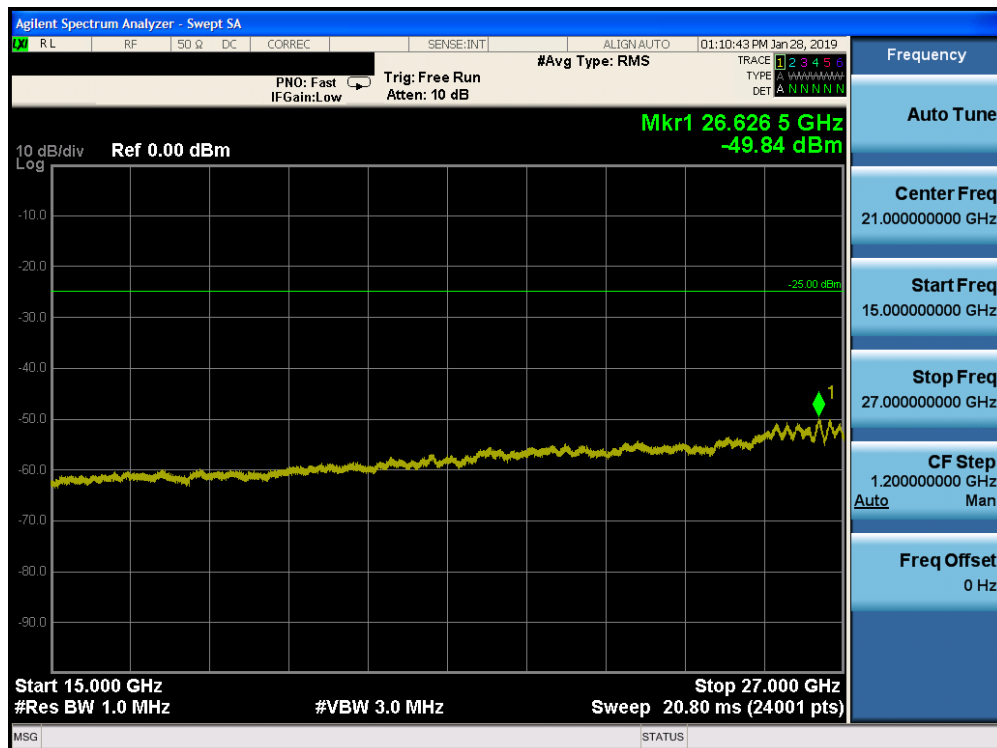




Plot 7-416. Conducted Spurious Plot (Band 7 – 20.0MHz QPSK – PCC 1/99 SCC 1/0 – Mid Channel)



Plot 7-417. Conducted Spurious Plot (Band 7 – 20.0MHz QPSK – PCC 1/99 SCC 1/0 – Mid Channel)

FCC ID: BCGA2153	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 255 of 363

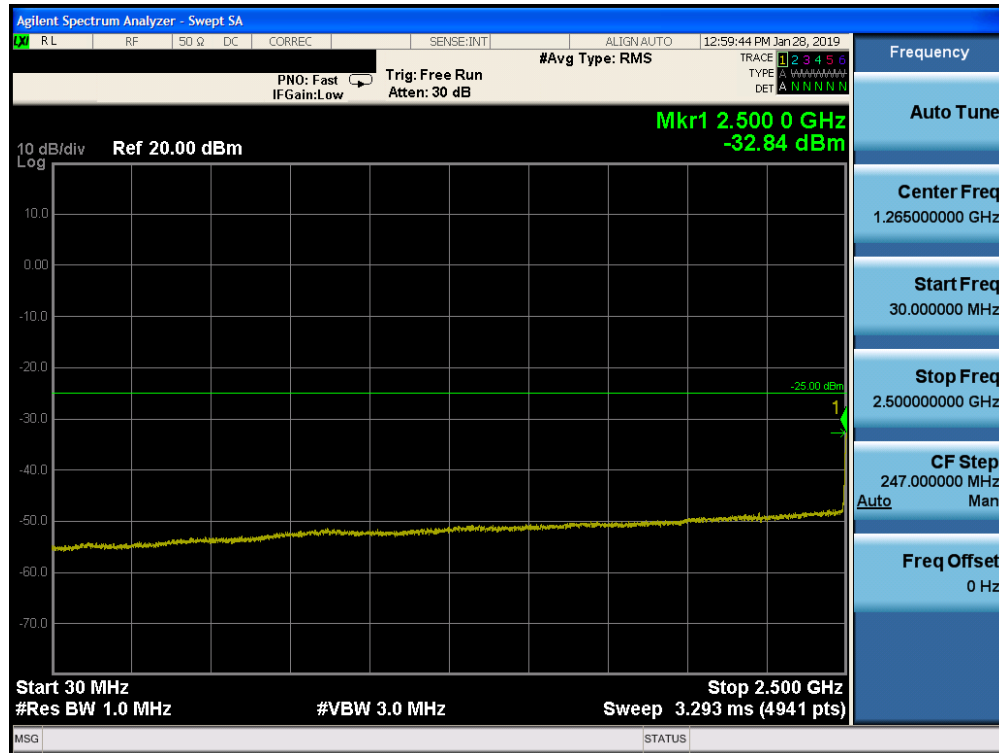


Table 7-418. Conducted Spurious Plot (Band 7 – 20.0MHz QPSK – PCC 100/0 SCC 100/0 – Mid Channel)

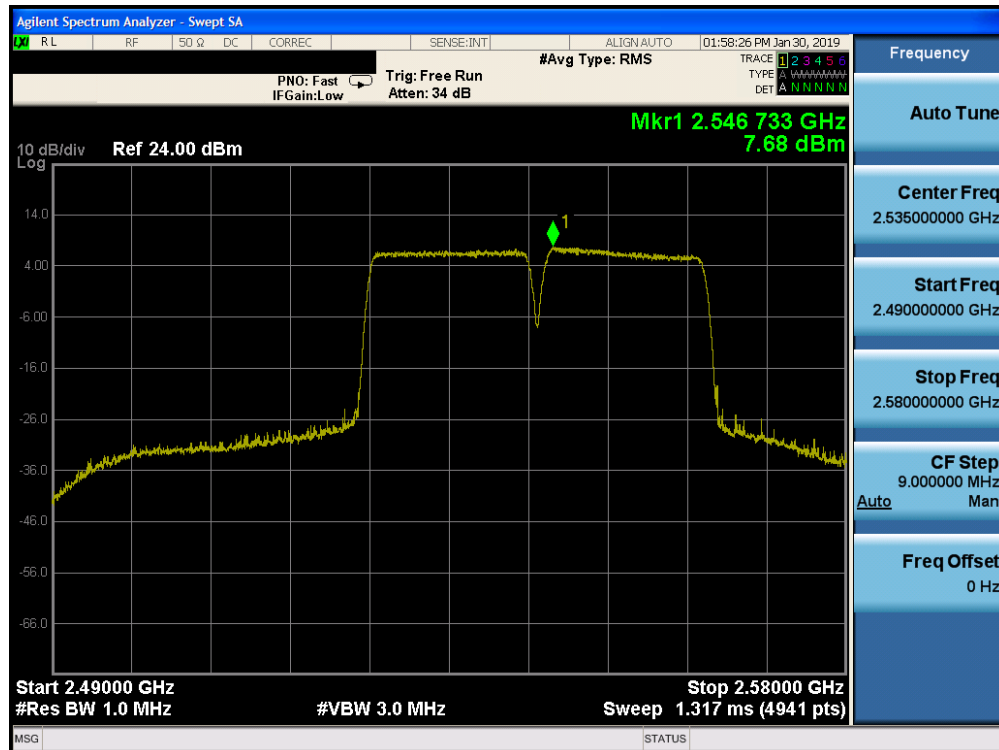


Table 7-419. Conducted Spurious Plot (Band 7 – 20.0MHz QPSK – PCC 100/0 SCC 100/0 – Mid Channel)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 256 of 363

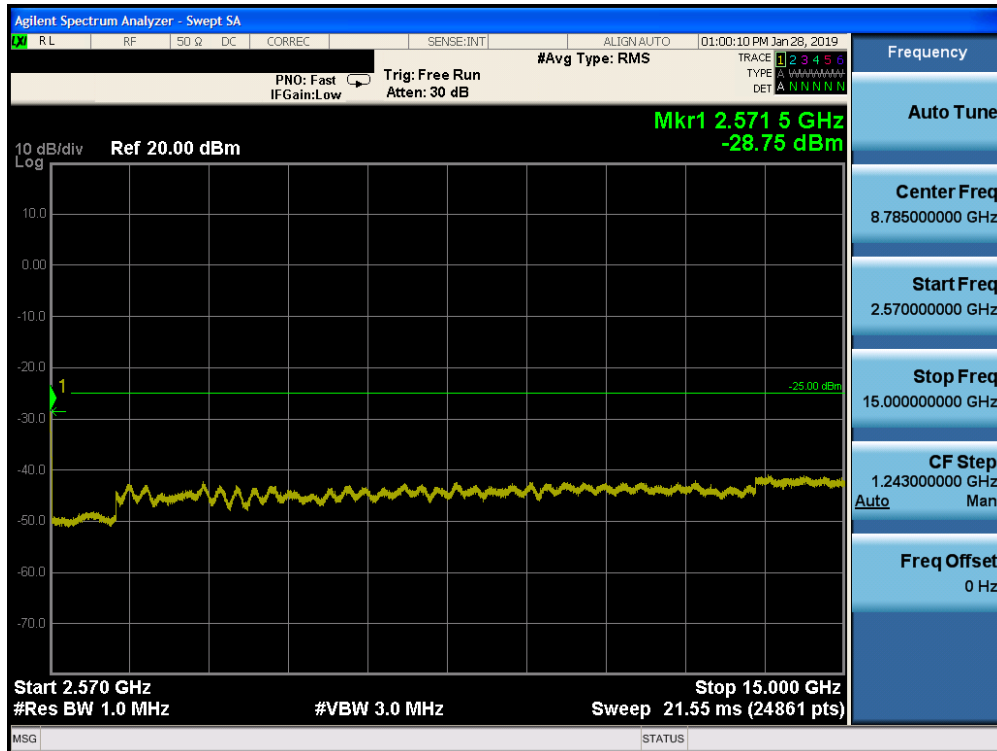


Table 7-420. Conducted Spurious Plot (Band 7 – 20.0MHz QPSK – PCC 100/0 SCC 100/0 – Mid Channel)

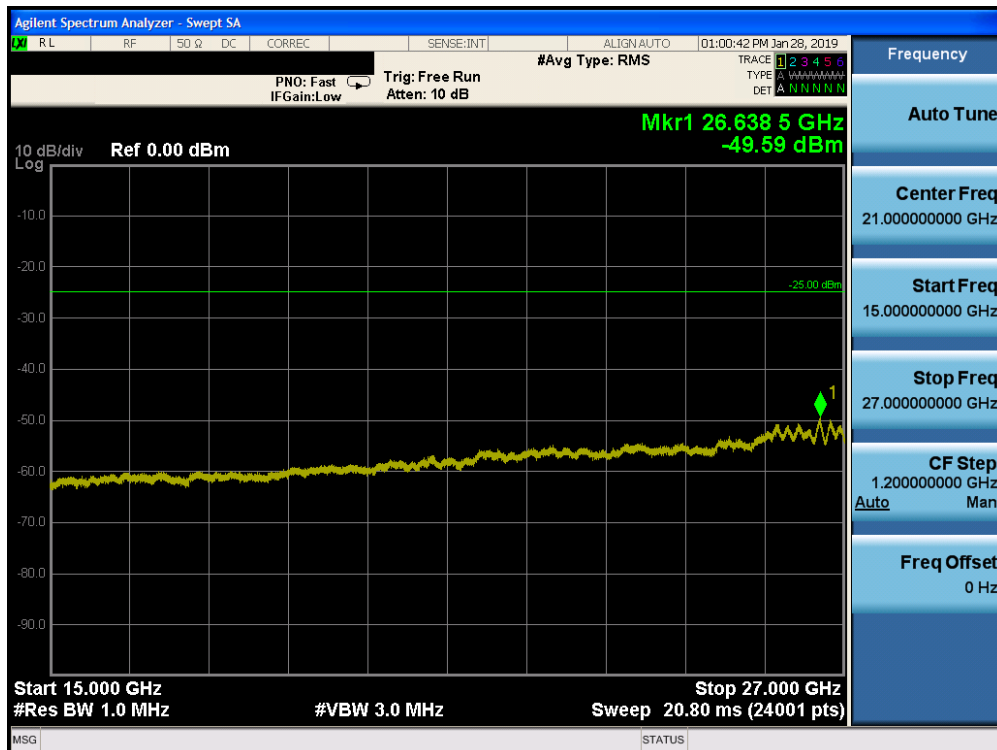


Table 7-421. Conducted Spurious Plot (Band 7 – 20.0MHz QPSK – PCC 100/0 SCC 100/0 – Mid Channel)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 257 of 363

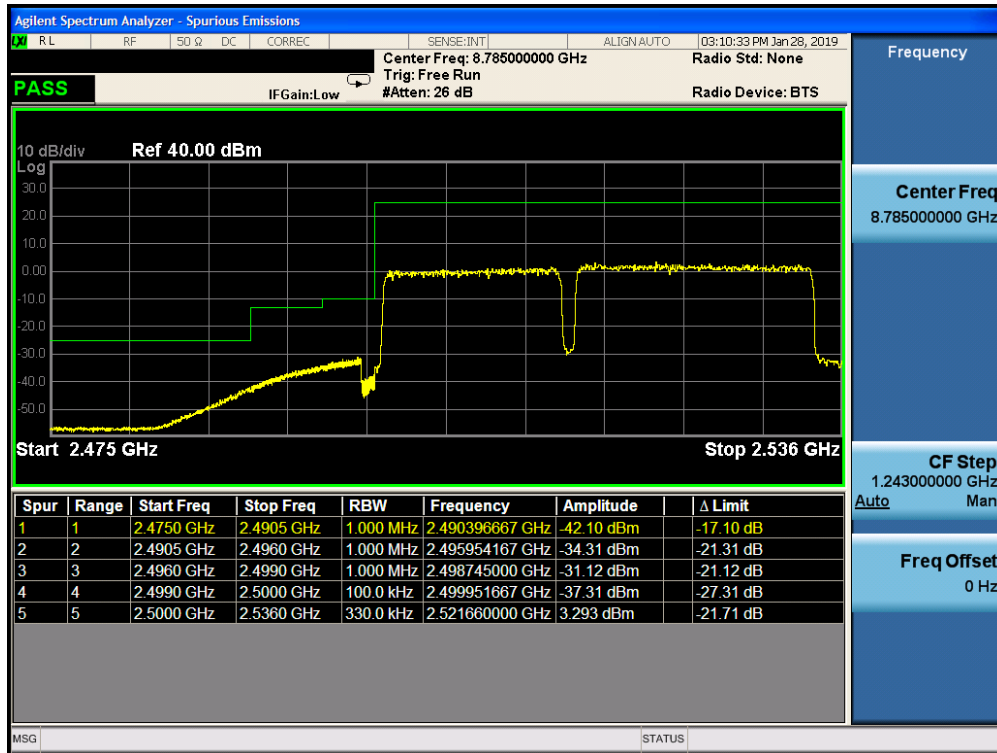


Table 7-422. Lower ACP Plot (Band 7 QPSK – PCC:15 MHz SCC:20 MHz – Full RB)

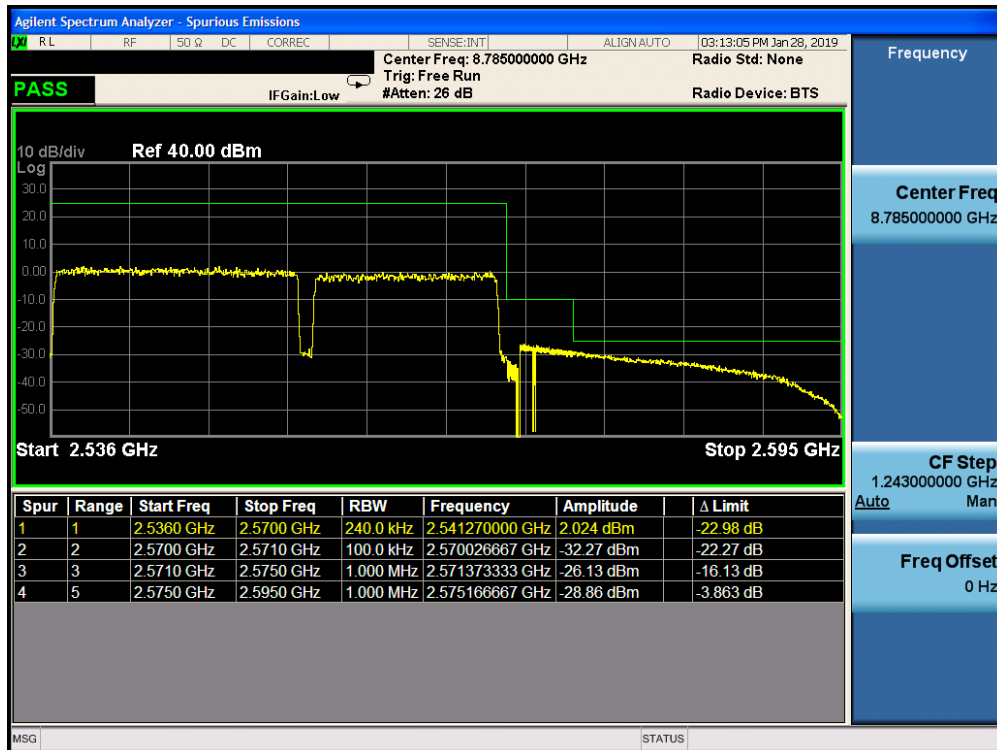


Table 7-423. Upper ACP Plot (Band 7 QPSK – PCC:15 MHz SCC:20 MHz – Full RB)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	
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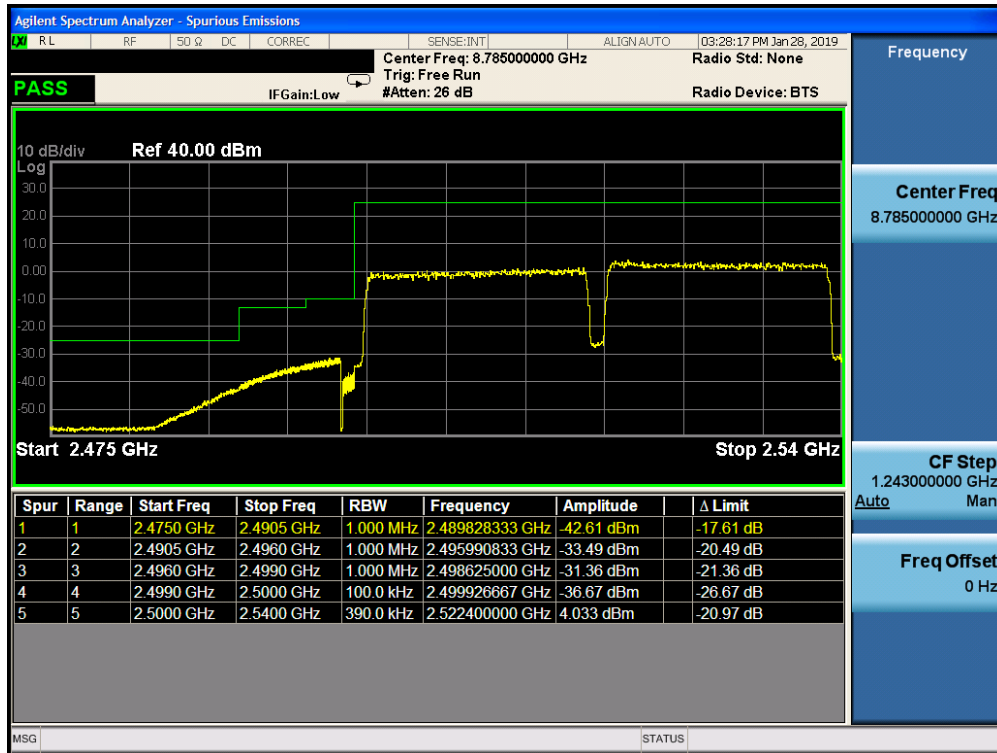


Table 7-424. Lower ACP Plot (Band 7 QPSK – PCC:20 MHz SCC:20 MHz – Full RB)

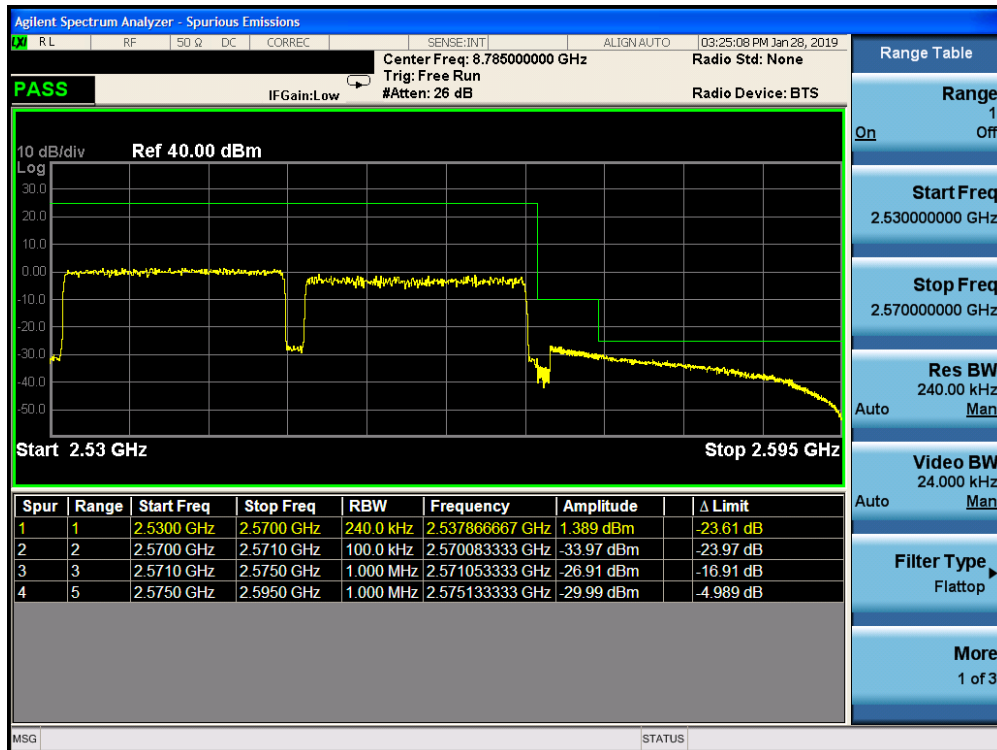
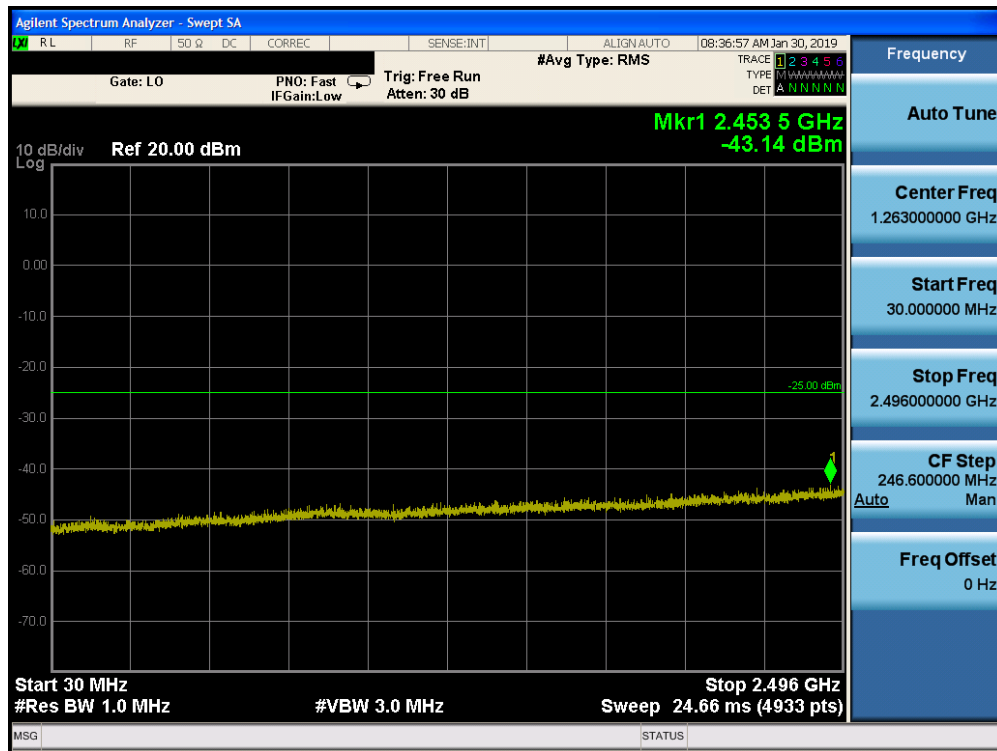


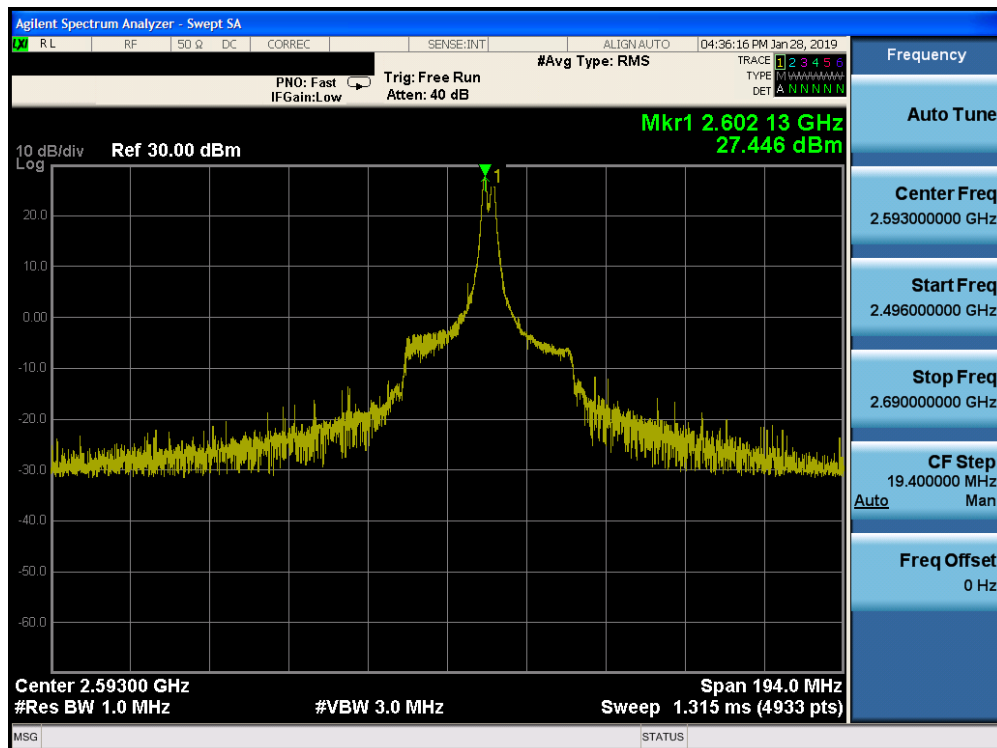
Table 7-425. Upper ACP Plot (Band 7 QPSK – PCC:20 MHz SCC:20 MHz – Full RB)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 259 of 363

Band 41

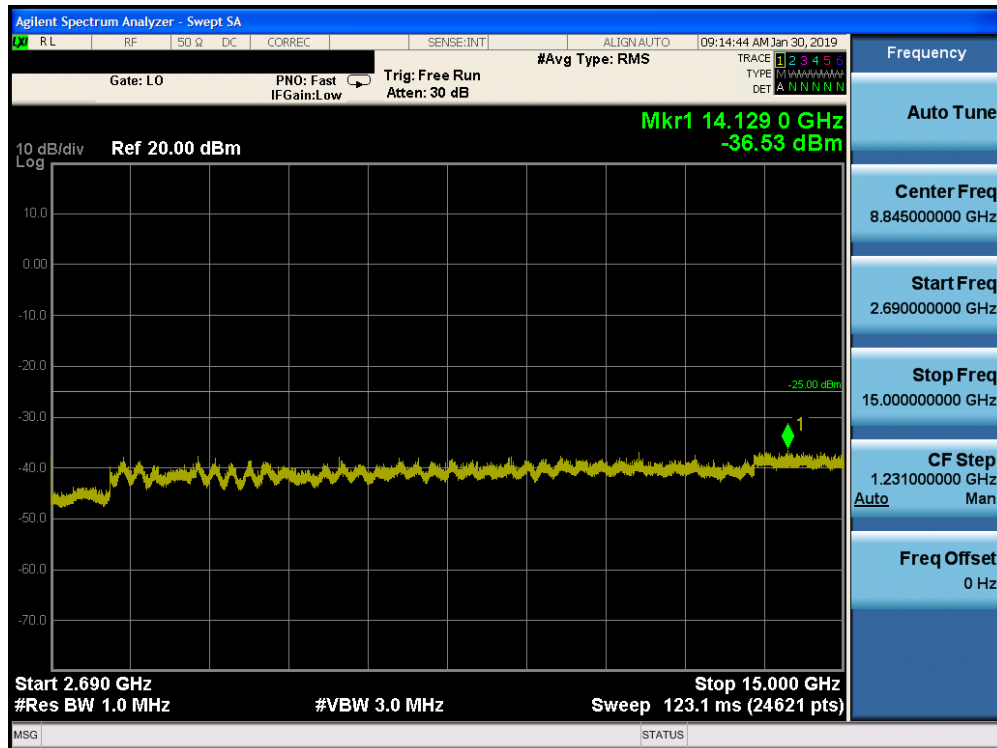


Plot 7-426. Conducted Spurious Plot (Band 41 – 20.0MHz QPSK – PCC 1/99 SCC 1/0 – Mid Channel)

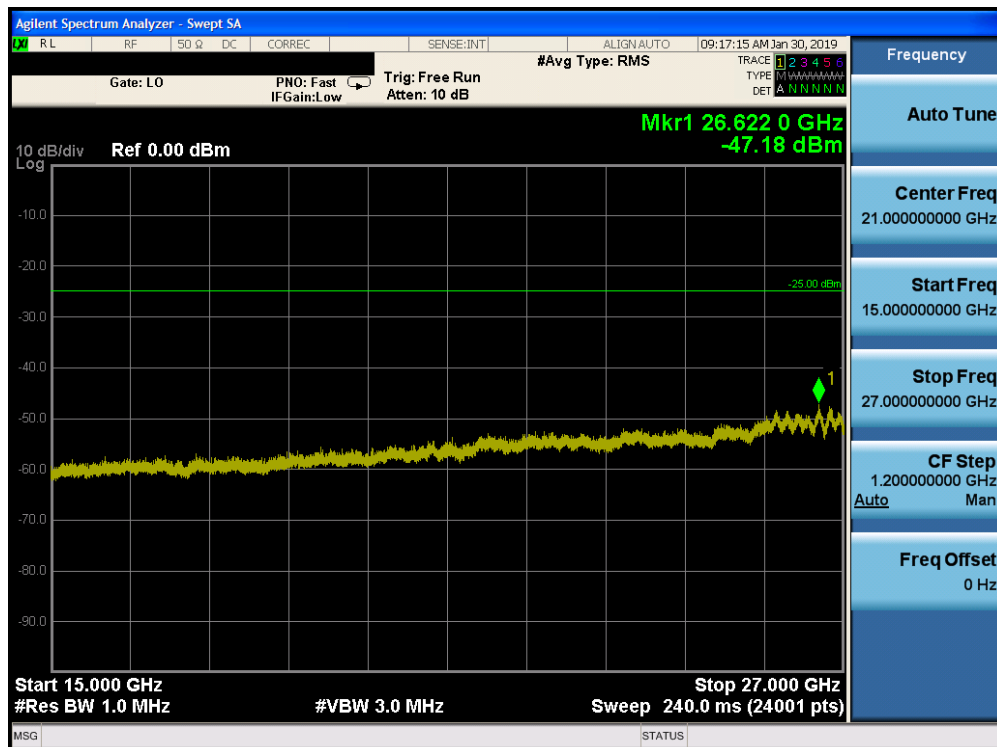


Plot 7-427. Conducted Spurious Plot (Band 41 – 20.0MHz QPSK – PCC 1/99 SCC 1/0 – Mid Channel)

FCC ID: BCGA2153	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 260 of 363



Plot 7-428. Conducted Spurious Plot (Band 41 – 20.0MHz QPSK – PCC 1/99 SCC 1/0 – Mid Channel)



Plot 7-429. Conducted Spurious Plot (Band 41 – 20.0MHz QPSK – PCC 1/99 SCC 1/0 – Mid Channel)

FCC ID: BCGA2153	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 261 of 363

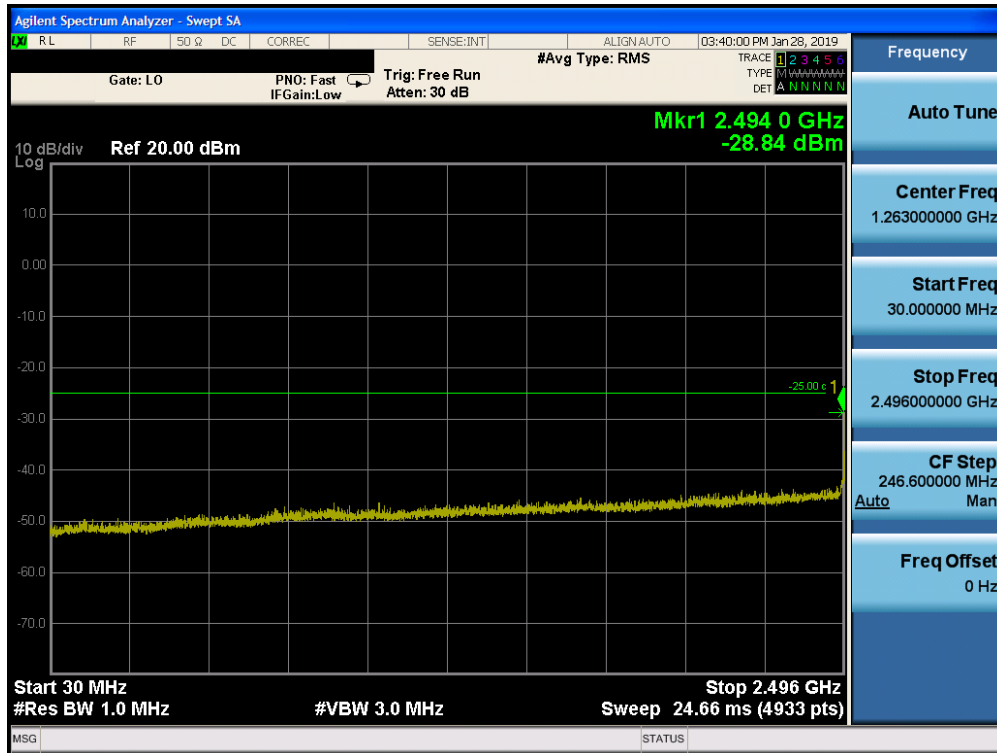


Table 7-430. Conducted Spurious Plot (Band 41 – 20.0MHz QPSK – PCC 100/0 SCC 100/0 – Mid Channel)

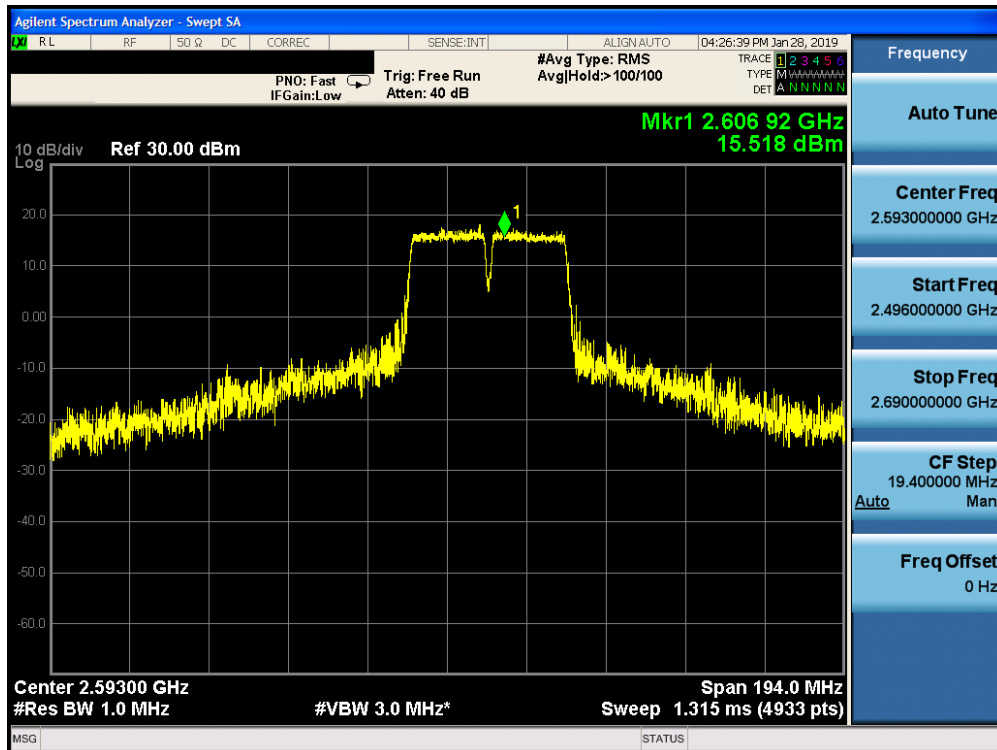


Table 7-431. Conducted Spurious Plot (Band 41 – 20.0MHz QPSK – PCC 100/0 SCC 100/0 – Mid Channel)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 262 of 363

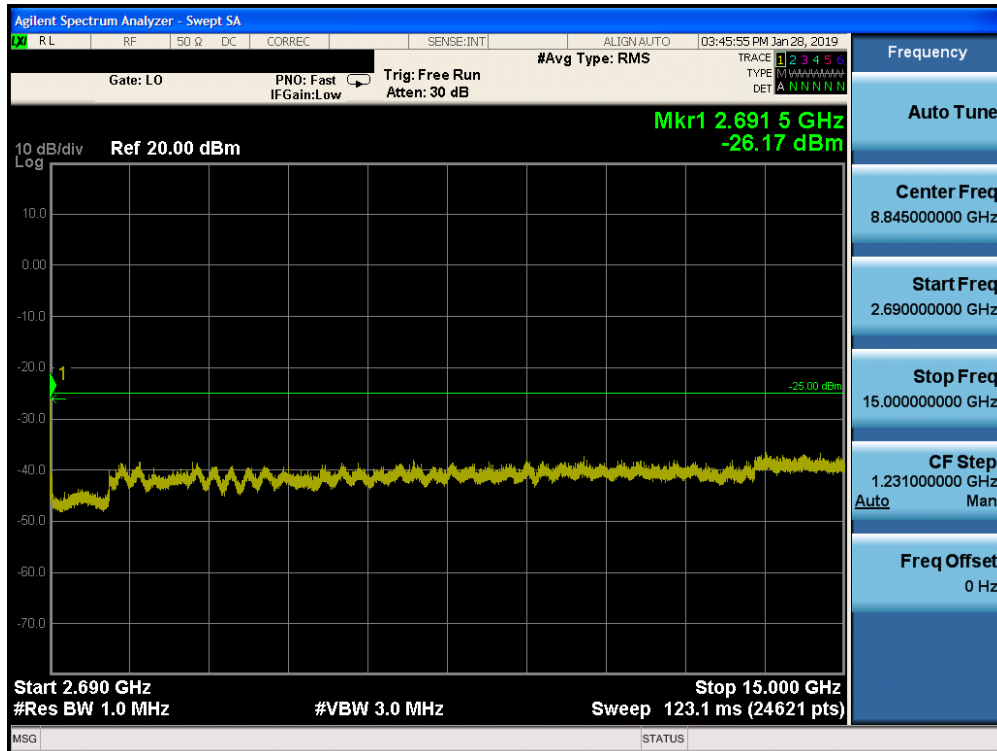


Table 7-432. Conducted Spurious Plot (Band 41 – 20.0MHz QPSK – PCC 100/0 SCC 100/0 – Mid Channel)

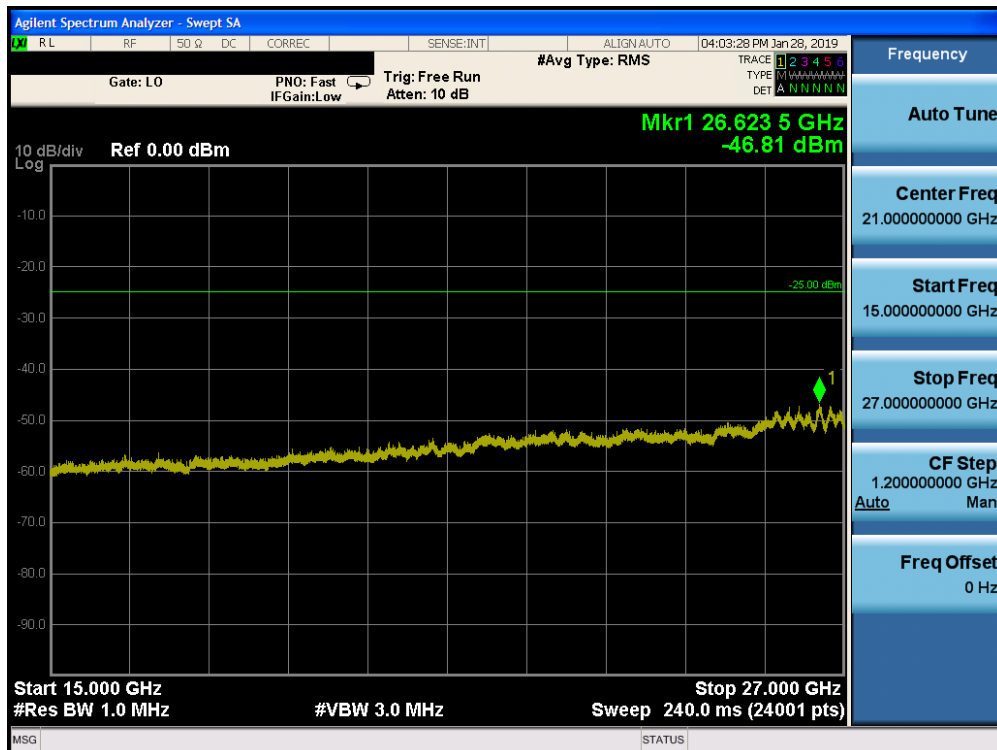


Table 7-433. Conducted Spurious Plot (Band 41 – 20.0MHz QPSK – PCC 100/0 SCC 100/0 – Mid Channel)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 263 of 363

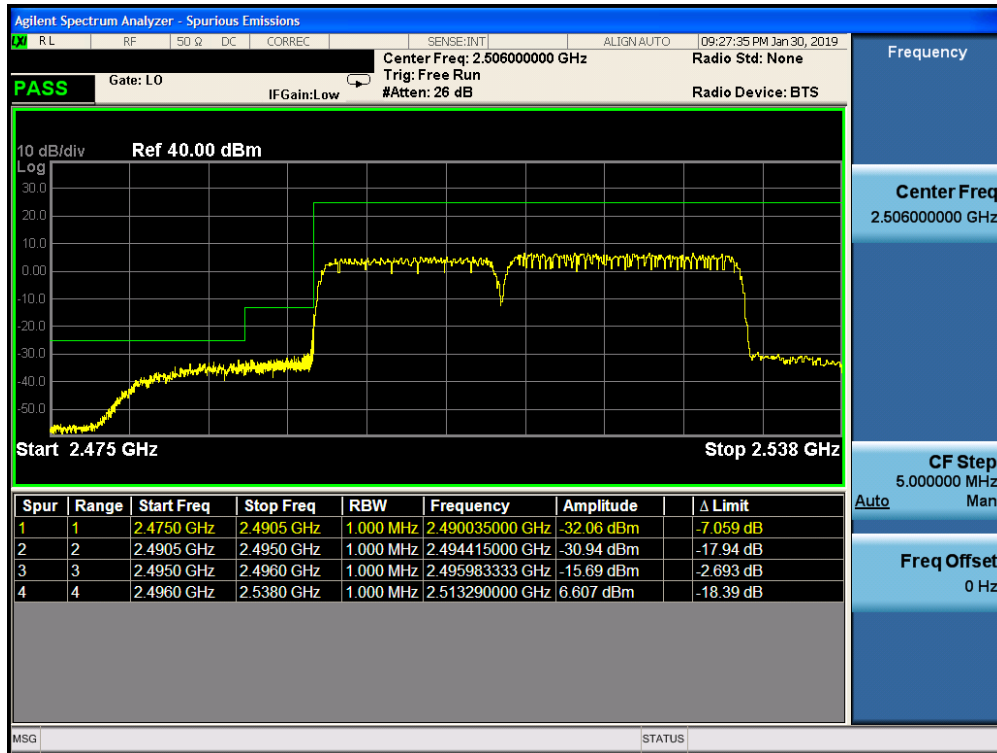


Table 7-434. Lower ACP Plot (Band 41 QPSK – PCC:15 MHz SCC:20 MHz – Full RB)

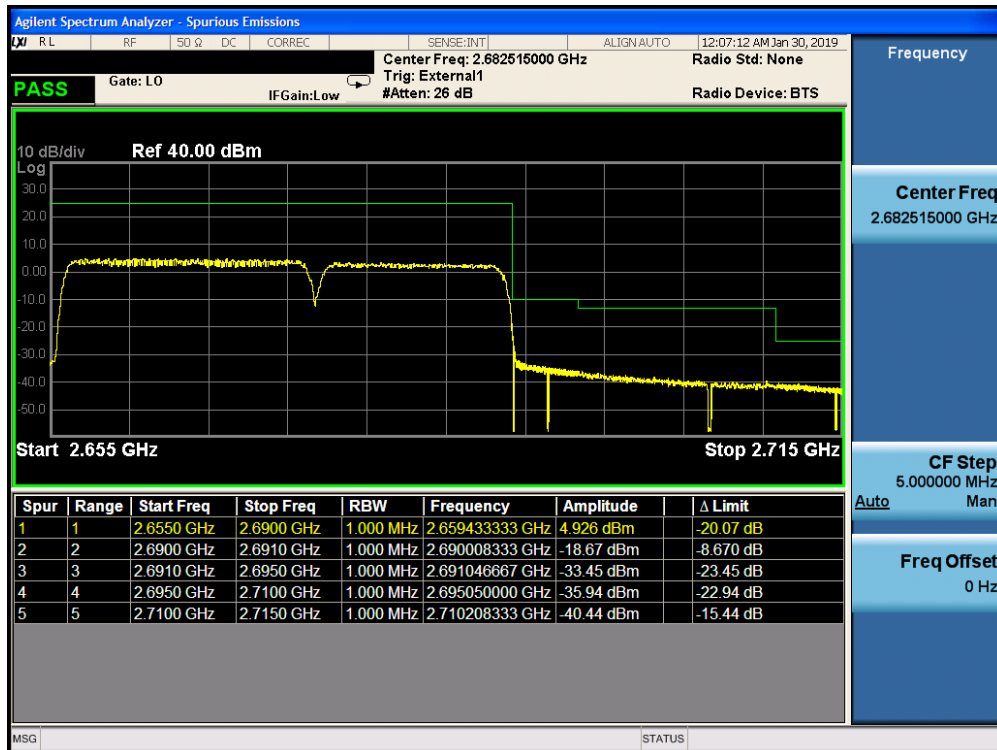


Table 7-435. Upper ACP Plot (Band 41 QPSK – PCC:15 MHz SCC:20 MHz – Full RB)

FCC ID: BCGA2153	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	
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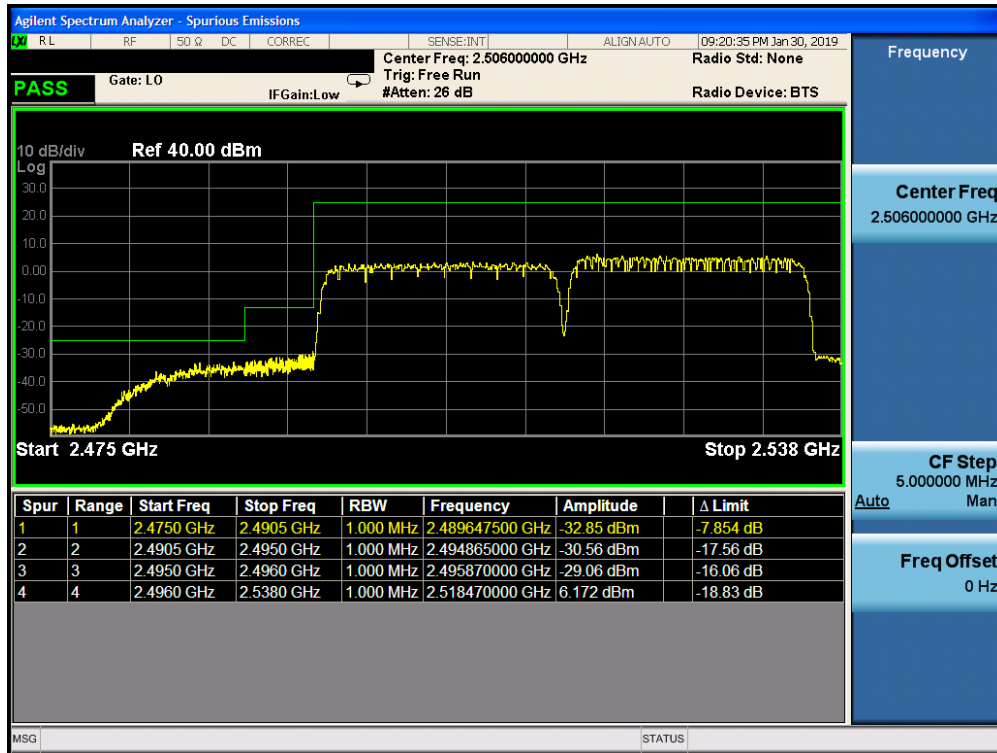


Table 7-436. Lower ACP Plot (Band 41 QPSK – PCC:20 MHz SCC:20 MHz – Full RB)

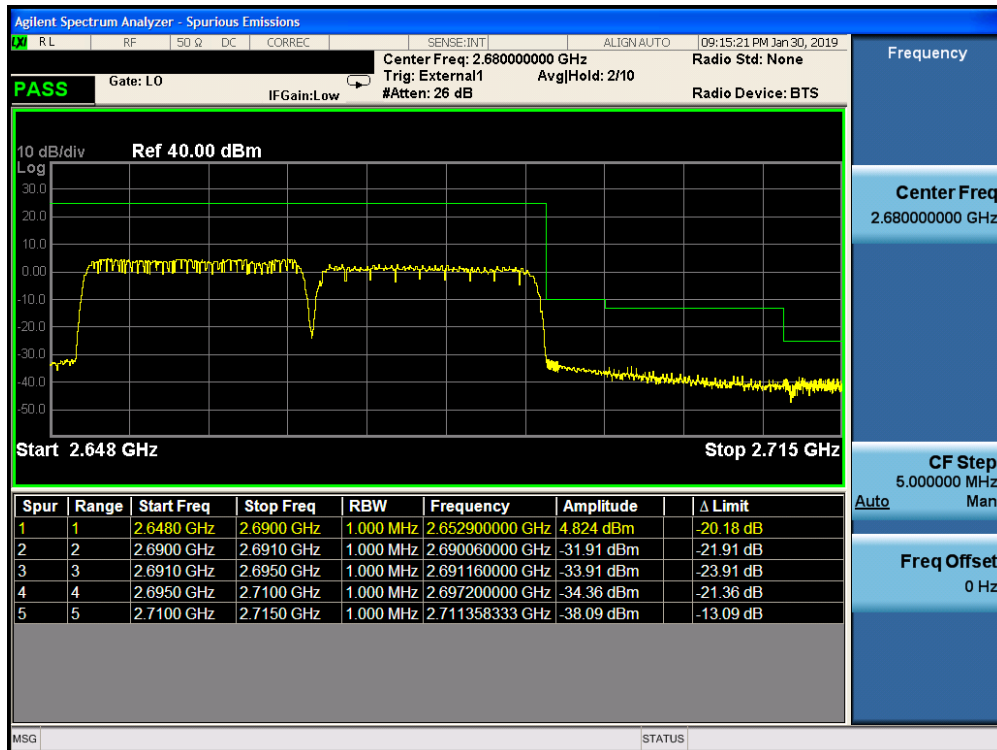


Table 7-437. Upper ACP Plot (Band 41 QPSK – PCC:20 MHz SCC:20 MHz – Full RB)

FCC ID: BCGA2153	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	
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7.8 Radiated Power (ERP/EIRP)

Test Overview

Effective Radiated Power (ERP) and Equivalent Isotropic Radiated Power (EIRP) measurements are performed using the substitution method described in ANSI/TIA-603-E-2016 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 RMS average 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 v03r01 – Section 5.2.1

Test Settings

The relevant equation for determining the ERP or EIRP from the conducted RF output power measured is:

$$\text{ERP/EIRP} = \text{PMeas} - \text{LC} + \text{GT}$$

Where:

ERP/EIRP = effective or equivalent radiated power, respectively (expressed in the same units as PMeas, typically dBW or dBm)

PMeas = measured transmitter output power or PSD, in dBW or dBm

LC = signal attenuation in the connecting cable between the transmitter and antenna in dB

GT = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP)

Test Setup

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

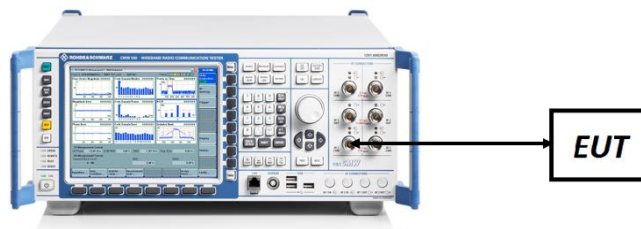


Figure 7-7. ERP/EIRP Measurement Setup

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.

FCC ID: BCGA2153	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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- 3) The Level (dBm) readings in the table were taken with a correction table loaded into the base station simulator. The correction table was used to account for the signal attenuation in the connecting cable between the transmitter and antenna.
- 4) The Ant. Gains (GT) are listed in dBi.

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 267 of 363

7.8.1 Port A Radiated Power (ERP/EIRP)

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]
665.50	5	QPSK	1 / 0	25.50	-5.77	17.58	0.057	34.77	-17.19
680.50	5	QPSK	1 / 0	25.35	-5.77	17.43	0.055	34.77	-17.34
695.50	5	QPSK	1 / 24	25.50	-5.77	17.58	0.057	34.77	-17.19
665.50	5	16-QAM	1 / 0	24.87	-5.77	16.95	0.050	34.77	-17.82
665.50	5	64-QAM	1 / 0	23.76	-5.77	15.84	0.038	34.77	-18.93
668.00	10	QPSK	1 / 0	25.41	-5.77	17.49	0.056	34.77	-17.28
680.50	10	QPSK	1 / 49	25.31	-5.77	17.39	0.055	34.77	-17.38
693.00	10	QPSK	1 / 49	25.31	-5.77	17.39	0.055	34.77	-17.38
668.00	10	16-QAM	1 / 0	24.74	-5.77	16.82	0.048	34.77	-17.95
680.50	10	64-QAM	1 / 0	23.70	-5.77	15.78	0.038	34.77	-18.99
670.50	15	QPSK	1 / 0	25.50	-5.77	17.58	0.057	34.77	-17.19
680.50	15	QPSK	1 / 0	25.37	-5.77	17.45	0.056	34.77	-17.32
690.50	15	QPSK	1 / 74	25.50	-5.77	17.58	0.057	34.77	-17.19
670.50	15	16-QAM	1 / 74	24.62	-5.77	16.70	0.047	34.77	-18.07
670.50	15	64-QAM	1 / 74	23.79	-5.77	15.87	0.039	34.77	-18.90
673.00	20	QPSK	1 / 99	25.50	-5.77	17.58	0.057	34.77	-17.19
680.50	20	QPSK	1 / 99	25.47	-5.77	17.55	0.057	34.77	-17.22
688.00	20	QPSK	1 / 0	25.45	-5.77	17.53	0.057	34.77	-17.24
680.50	20	16-QAM	1 / 99	24.89	-5.77	16.97	0.050	34.77	-17.80
673.00	20	64-QAM	1 / 99	23.77	-5.77	15.85	0.038	34.77	-18.92

Table 7-16. ERP Data (Band 71)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 268 of 363

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
699.70	1.4	QPSK	3 / 2	25.48	-0.16	23.17	0.207	34.77	-11.60	25.32	0.340	36.99	-11.67
707.50	1.4	QPSK	3 / 2	25.44	-0.16	23.13	0.206	34.77	-11.64	25.28	0.337	36.99	-11.71
715.30	1.4	QPSK	1 / 5	25.47	-0.16	23.16	0.207	34.77	-11.61	25.31	0.340	36.99	-11.68
715.30	1.4	16-QAM	1 / 5	24.90	-0.16	22.59	0.182	34.77	-12.18	24.74	0.298	36.99	-12.25
715.30	1.4	64-QAM	1 / 5	23.64	-0.16	21.33	0.136	34.77	-13.44	23.48	0.223	36.99	-13.51
700.50	3	QPSK	1 / 14	25.47	-0.16	23.16	0.207	34.77	-11.61	25.31	0.340	36.99	-11.68
707.50	3	QPSK	1 / 14	25.42	-0.16	23.11	0.205	34.77	-11.66	25.26	0.336	36.99	-11.73
714.50	3	QPSK	1 / 14	25.49	-0.16	23.18	0.208	34.77	-11.59	25.33	0.341	36.99	-11.66
714.50	3	16-QAM	1 / 14	24.88	-0.16	22.57	0.181	34.77	-12.20	24.72	0.296	36.99	-12.27
707.50	3	64-QAM	1 / 14	23.76	-0.16	21.45	0.140	34.77	-13.32	23.60	0.229	36.99	-13.39
701.50	5	QPSK	1 / 0	25.42	-0.16	23.11	0.205	34.77	-11.66	25.26	0.336	36.99	-11.73
707.50	5	QPSK	1 / 24	25.50	-0.16	23.19	0.208	34.77	-11.58	25.34	0.342	36.99	-11.65
713.50	5	QPSK	1 / 24	25.49	-0.16	23.18	0.208	34.77	-11.59	25.33	0.341	36.99	-11.66
707.50	5	16-QAM	1 / 24	24.82	-0.16	22.51	0.178	34.77	-12.26	24.66	0.292	36.99	-12.33
707.50	5	64-QAM	1 / 24	23.91	-0.16	21.60	0.145	34.77	-13.17	23.75	0.237	36.99	-13.24
704.00	10	QPSK	1 / 0	25.50	-0.16	23.19	0.208	34.77	-11.58	25.34	0.342	36.99	-11.65
707.50	10	QPSK	1 / 49	25.44	-0.16	23.13	0.206	34.77	-11.64	25.28	0.337	36.99	-11.71
711.00	10	QPSK	1 / 49	25.50	-0.16	23.19	0.208	34.77	-11.58	25.34	0.342	36.99	-11.65
704.00	10	16-QAM	1 / 0	24.87	-0.16	22.56	0.180	34.77	-12.21	24.71	0.296	36.99	-12.28
711.00	10	64-QAM	1 / 0	23.83	-0.16	21.52	0.142	34.77	-13.25	23.67	0.233	36.99	-13.32

Table 7-17. ERP Data (Band 12)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 269 of 363

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
706.50	5	QPSK	1 / 0	25.47	-0.16	23.16	0.207	34.77	-11.61	25.31	0.340	36.99	-11.68
710.00	5	QPSK	1 / 24	25.50	-0.16	23.19	0.208	34.77	-11.58	25.34	0.342	36.99	-11.65
713.50	5	QPSK	1 / 24	25.48	-0.16	23.17	0.207	34.77	-11.60	25.32	0.340	36.99	-11.67
713.50	5	16-QAM	1 / 24	24.88	-0.16	22.57	0.181	34.77	-12.20	24.72	0.296	36.99	-12.27
706.50	5	64-QAM	1 / 24	23.88	-0.16	21.57	0.144	34.77	-13.20	23.72	0.236	36.99	-13.27
709.00	10	QPSK	1 / 49	25.50	-0.16	23.19	0.208	34.77	-11.58	25.34	0.342	36.99	-11.65
710.00	10	QPSK	1 / 0	25.32	-0.16	23.01	0.200	34.77	-11.76	25.16	0.328	36.99	-11.83
711.00	10	QPSK	1 / 49	25.50	-0.16	23.19	0.208	34.77	-11.58	25.34	0.342	36.99	-11.65
710.00	10	16-QAM	1 / 0	24.83	-0.16	22.52	0.179	34.77	-12.25	24.67	0.293	36.99	-12.32
710.00	10	64-QAM	1 / 49	23.80	-0.16	21.49	0.141	34.77	-13.28	23.64	0.231	36.99	-13.35

Table 7-18. ERP Data (Band 17)

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
779.50	5	QPSK	1 / 0	25.50	-0.16	23.19	0.208	34.77	-11.58	25.34	0.342	36.99	-11.65
782.00	5	QPSK	1 / 0	25.50	-0.16	23.19	0.208	34.77	-11.58	25.34	0.342	36.99	-11.65
784.50	5	QPSK	1 / 0	25.38	-0.16	23.07	0.203	34.77	-11.70	25.22	0.333	36.99	-11.77
782.00	5	16-QAM	1 / 0	24.88	-0.16	22.57	0.181	34.77	-12.20	24.72	0.296	36.99	-12.27
779.50	5	64-QAM	1 / 0	23.89	-0.16	21.58	0.144	34.77	-13.19	23.73	0.236	36.99	-13.26
782.00	10	QPSK	1 / 49	25.50	-0.16	23.19	0.208	34.77	-11.58	25.34	0.342	36.99	-11.65
782.00	10	16-QAM	1 / 0	24.72	-0.16	22.41	0.174	34.77	-12.36	24.56	0.286	36.99	-12.43
782.00	10	64-QAM	1 / 0	23.53	-0.16	21.22	0.132	34.77	-13.55	23.37	0.217	36.99	-13.62

Table 7-19. ERP Data (Band 13)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 270 of 363

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
824.70	1.4	QPSK	1 / 0	25.50	0.49	23.84	0.242	38.45	-14.61	25.99	0.397	40.61	-14.62
836.50	1.4	QPSK	1 / 5	25.45	0.49	23.79	0.239	38.45	-14.66	25.94	0.393	40.61	-14.67
848.30	1.4	QPSK	3 / 2	25.47	0.49	23.81	0.240	38.45	-14.64	25.96	0.394	40.61	-14.65
848.30	1.4	16-QAM	1 / 5	24.81	0.49	23.15	0.207	38.45	-15.30	25.30	0.339	40.61	-15.31
824.70	1.4	64-QAM	1 / 0	23.74	0.49	22.08	0.161	38.45	-16.37	24.23	0.265	40.61	-16.38
825.50	3	QPSK	1 / 0	25.39	0.49	23.73	0.236	38.45	-14.72	25.88	0.387	40.61	-14.73
836.50	3	QPSK	1 / 14	25.33	0.49	23.67	0.233	38.45	-14.78	25.82	0.382	40.61	-14.79
847.50	3	QPSK	1 / 14	25.37	0.49	23.71	0.235	38.45	-14.74	25.86	0.385	40.61	-14.75
847.50	3	16-QAM	1 / 14	24.90	0.49	23.24	0.211	38.45	-15.21	25.39	0.346	40.61	-15.22
847.50	3	64-QAM	1 / 14	23.72	0.49	22.06	0.161	38.45	-16.39	24.21	0.264	40.61	-16.40
826.50	5	QPSK	1 / 0	25.48	0.49	23.82	0.241	38.45	-14.63	25.97	0.395	40.61	-14.64
836.50	5	QPSK	1 / 24	25.38	0.49	23.72	0.236	38.45	-14.73	25.87	0.386	40.61	-14.74
846.50	5	QPSK	1 / 24	25.47	0.49	23.81	0.240	38.45	-14.64	25.96	0.394	40.61	-14.65
846.50	5	16-QAM	1 / 0	24.84	0.49	23.18	0.208	38.45	-15.27	25.33	0.341	40.61	-15.28
836.50	5	64-QAM	1 / 24	23.81	0.49	22.15	0.164	38.45	-16.30	24.30	0.269	40.61	-16.31
829.00	10	QPSK	1 / 0	25.44	0.49	23.78	0.239	38.45	-14.67	25.93	0.392	40.61	-14.68
836.50	10	QPSK	1 / 49	25.50	0.49	23.84	0.242	38.45	-14.61	25.99	0.397	40.61	-14.62
844.00	10	QPSK	1 / 49	25.50	0.49	23.84	0.242	38.45	-14.61	25.99	0.397	40.61	-14.62
836.50	10	16-QAM	1 / 49	24.77	0.49	23.11	0.205	38.45	-15.34	25.26	0.336	40.61	-15.35
836.50	10	64-QAM	1 / 49	23.72	0.49	22.06	0.161	38.45	-16.39	24.21	0.264	40.61	-16.40

Table 7-20. ERP Data (Band 5)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 271 of 363

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
824.70	1.4	QPSK	1 / 0	25.44	0.49	23.78	0.239	38.45	-14.67	25.93	0.392	40.61	-14.68
836.50	1.4	QPSK	3 / 2	25.36	0.49	23.70	0.234	38.45	-14.75	25.85	0.385	40.61	-14.76
848.30	1.4	QPSK	1 / 0	25.50	0.49	23.84	0.242	38.45	-14.61	25.99	0.397	40.61	-14.62
824.70	1.4	16-QAM	1 / 0	24.83	0.49	23.17	0.207	38.45	-15.28	25.32	0.340	40.61	-15.29
848.30	1.4	64-QAM	1 / 0	23.84	0.49	22.18	0.165	38.45	-16.27	24.33	0.271	40.61	-16.28
825.50	3	QPSK	1 / 0	25.28	0.49	23.62	0.230	38.45	-14.83	25.77	0.378	40.61	-14.84
836.50	3	QPSK	1 / 14	25.31	0.49	23.65	0.232	38.45	-14.80	25.80	0.380	40.61	-14.81
847.50	3	QPSK	1 / 14	25.38	0.49	23.72	0.236	38.45	-14.73	25.87	0.386	40.61	-14.74
847.50	3	16-QAM	1 / 14	24.72	0.49	23.06	0.202	38.45	-15.39	25.21	0.332	40.61	-15.40
847.50	3	64-QAM	1 / 14	23.63	0.49	21.97	0.157	38.45	-16.48	24.12	0.258	40.61	-16.49
826.50	5	QPSK	1 / 0	25.39	0.49	23.73	0.236	38.45	-14.72	25.88	0.387	40.61	-14.73
836.50	5	QPSK	1 / 24	25.48	0.49	23.82	0.241	38.45	-14.63	25.97	0.395	40.61	-14.64
846.50	5	QPSK	1 / 24	25.50	0.49	23.84	0.242	38.45	-14.61	25.99	0.397	40.61	-14.62
846.50	5	16-QAM	1 / 24	24.83	0.49	23.17	0.207	38.45	-15.28	25.32	0.340	40.61	-15.29
846.50	5	64-QAM	1 / 24	23.80	0.49	22.14	0.164	38.45	-16.31	24.29	0.269	40.61	-16.32
829.00	10	QPSK	1 / 0	25.32	0.49	23.66	0.232	38.45	-14.79	25.81	0.381	40.61	-14.80
836.50	10	QPSK	1 / 49	25.50	0.49	23.84	0.242	38.45	-14.61	25.99	0.397	40.61	-14.62
844.00	10	QPSK	1 / 49	25.43	0.49	23.77	0.238	38.45	-14.68	25.92	0.391	40.61	-14.69
836.50	10	16-QAM	1 / 49	24.89	0.49	23.23	0.210	38.45	-15.22	25.38	0.345	40.61	-15.23
844.00	10	64-QAM	1 / 49	23.75	0.49	22.09	0.162	38.45	-16.36	24.24	0.265	40.61	-16.37

Table 7-21. ERP Data (Band 26)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 272 of 363

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
1710.70	1.4	QPSK	1 / 0	25.50	-1.31	24.19	0.262	30.00	-5.81
1732.50	1.4	QPSK	3 / 2	25.40	-1.31	24.09	0.256	30.00	-5.91
1754.30	1.4	QPSK	3 / 2	25.45	-1.31	24.14	0.259	30.00	-5.86
1754.30	1.4	16-QAM	1 / 5	24.73	-1.31	23.42	0.220	30.00	-6.58
1754.30	1.4	64-QAM	1 / 5	23.80	-1.31	22.49	0.177	30.00	-7.51
1711.50	3	QPSK	1 / 14	25.41	-1.31	24.10	0.257	30.00	-5.90
1732.50	3	QPSK	1 / 14	25.39	-1.31	24.08	0.256	30.00	-5.92
1753.50	3	QPSK	1 / 14	25.48	-1.31	24.17	0.261	30.00	-5.83
1732.50	3	16-QAM	1 / 0	24.75	-1.31	23.44	0.221	30.00	-6.56
1711.50	3	64-QAM	1 / 0	23.70	-1.31	22.39	0.173	30.00	-7.61
1712.50	5	QPSK	1 / 0	25.50	-1.31	24.19	0.262	30.00	-5.81
1732.50	5	QPSK	1 / 0	25.41	-1.31	24.10	0.257	30.00	-5.90
1752.50	5	QPSK	1 / 24	25.48	-1.31	24.17	0.261	30.00	-5.83
1712.50	5	16-QAM	1 / 0	24.86	-1.31	23.55	0.226	30.00	-6.45
1732.50	5	64-QAM	1 / 0	23.70	-1.31	22.39	0.173	30.00	-7.61
1715.00	10	QPSK	1 / 0	25.44	-1.31	24.13	0.259	30.00	-5.87
1732.50	10	QPSK	1 / 0	25.50	-1.31	24.19	0.262	30.00	-5.81
1750.00	10	QPSK	1 / 49	25.38	-1.31	24.07	0.255	30.00	-5.93
1732.50	10	16-QAM	1 / 0	24.81	-1.31	23.50	0.224	30.00	-6.50
1715.00	10	64-QAM	1 / 0	23.80	-1.31	22.49	0.177	30.00	-7.51
1717.50	15	QPSK	1 / 0	25.50	-1.31	24.19	0.262	30.00	-5.81
1732.50	15	QPSK	1 / 0	25.33	-1.31	24.02	0.252	30.00	-5.98
1747.50	15	QPSK	1 / 74	25.42	-1.31	24.11	0.258	30.00	-5.89
1717.50	15	16-QAM	1 / 0	24.68	-1.31	23.37	0.217	30.00	-6.63
1747.50	15	64-QAM	1 / 74	23.60	-1.31	22.29	0.169	30.00	-7.71
1720.00	20	QPSK	1 / 99	25.38	-1.31	24.07	0.255	30.00	-5.93
1732.50	20	QPSK	1 / 0	25.50	-1.31	24.19	0.262	30.00	-5.81
1745.00	20	QPSK	1 / 99	25.42	-1.31	24.11	0.258	30.00	-5.89
1720.00	20	16-QAM	1 / 99	24.74	-1.31	23.43	0.220	30.00	-6.57
1720.00	20	64-QAM	1 / 0	23.70	-1.31	22.39	0.173	30.00	-7.61

Table 7-22. EIRP Data (Band 4)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 273 of 363

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
1710.70	1.4	QPSK	1 / 0	25.50	-1.31	24.19	0.262	30.00	-5.81
1745.00	1.4	QPSK	1 / 5	25.49	-1.31	24.18	0.262	30.00	-5.82
1779.30	1.4	QPSK	1 / 0	25.47	-1.31	24.16	0.261	30.00	-5.84
1710.70	1.4	16-QAM	1 / 0	24.70	-1.31	23.39	0.218	30.00	-6.61
1745.00	1.4	64-QAM	1 / 0	23.50	-1.31	22.19	0.166	30.00	-7.81
1711.50	3	QPSK	1 / 0	25.50	-1.31	24.19	0.262	30.00	-5.81
1745.00	3	QPSK	1 / 0	25.46	-1.31	24.15	0.260	30.00	-5.85
1778.50	3	QPSK	1 / 14	25.48	-1.31	24.17	0.261	30.00	-5.83
1711.50	3	16-QAM	1 / 0	24.64	-1.31	23.33	0.215	30.00	-6.67
1745.00	3	64-QAM	1 / 0	23.50	-1.31	22.19	0.166	30.00	-7.81
1712.50	5	QPSK	1 / 0	25.50	-1.31	24.19	0.262	30.00	-5.81
1745.00	5	QPSK	1 / 24	25.48	-1.31	24.17	0.261	30.00	-5.83
1777.50	5	QPSK	1 / 24	25.49	-1.31	24.18	0.262	30.00	-5.82
1712.50	5	16-QAM	1 / 0	24.79	-1.31	23.48	0.223	30.00	-6.52
1745.00	5	64-QAM	1 / 24	23.60	-1.31	22.29	0.169	30.00	-7.71
1715.00	10	QPSK	1 / 0	25.50	-1.31	24.19	0.262	30.00	-5.81
1745.00	10	QPSK	1 / 49	25.45	-1.31	24.14	0.259	30.00	-5.86
1775.00	10	QPSK	1 / 49	25.50	-1.31	24.19	0.262	30.00	-5.81
1715.00	10	16-QAM	1 / 0	24.70	-1.31	23.39	0.218	30.00	-6.61
1745.00	10	64-QAM	1 / 49	23.60	-1.31	22.29	0.169	30.00	-7.71
1717.50	15	QPSK	1 / 0	25.50	-1.31	24.19	0.262	30.00	-5.81
1745.00	15	QPSK	1 / 74	25.42	-1.31	24.11	0.258	30.00	-5.89
1772.50	15	QPSK	1 / 74	25.47	-1.31	24.16	0.261	30.00	-5.84
1717.50	15	16-QAM	1 / 0	24.69	-1.31	23.38	0.218	30.00	-6.62
1772.50	15	64-QAM	1 / 0	23.70	-1.31	22.39	0.173	30.00	-7.61
1720.00	20	QPSK	1 / 99	25.50	-1.31	24.19	0.262	30.00	-5.81
1745.00	20	QPSK	1 / 99	25.49	-1.31	24.18	0.262	30.00	-5.82
1770.00	20	QPSK	1 / 0	25.47	-1.31	24.16	0.261	30.00	-5.84
1720.00	20	16-QAM	1 / 99	24.69	-1.31	23.38	0.218	30.00	-6.62
1720.00	20	64-QAM	1 / 0	23.90	-1.31	22.59	0.182	30.00	-7.41

Table 7-23. EIRP Data (Band 66)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 274 of 363

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
1850.70	1.4	QPSK	1 / 0	25.48	0.29	25.77	0.378	33.01	-7.24
1880.00	1.4	QPSK	1 / 0	25.49	0.29	25.78	0.378	33.01	-7.23
1909.30	1.4	QPSK	1 / 0	25.50	0.29	25.79	0.379	33.01	-7.22
1909.30	1.4	16-QAM	1 / 0	24.85	0.29	25.14	0.327	33.01	-7.87
1909.30	1.4	64-QAM	1 / 5	23.80	0.29	24.09	0.256	33.01	-8.92
1851.50	3	QPSK	1 / 0	25.50	0.29	25.79	0.379	33.01	-7.22
1880.00	3	QPSK	1 / 14	25.45	0.29	25.74	0.375	33.01	-7.27
1908.50	3	QPSK	1 / 0	25.50	0.29	25.79	0.379	33.01	-7.22
1908.50	3	16-QAM	1 / 0	24.90	0.29	25.19	0.330	33.01	-7.82
1851.50	3	64-QAM	1 / 0	23.80	0.29	24.09	0.256	33.01	-8.92
1852.50	5	QPSK	1 / 0	25.40	0.29	25.69	0.371	33.01	-7.32
1880.00	5	QPSK	1 / 0	25.50	0.29	25.79	0.379	33.01	-7.22
1907.50	5	QPSK	1 / 24	25.30	0.29	25.59	0.362	33.01	-7.42
1852.50	5	16-QAM	1 / 0	24.80	0.29	25.09	0.323	33.01	-7.92
1852.50	5	64-QAM	1 / 0	23.80	0.29	24.09	0.256	33.01	-8.92
1855.00	10	QPSK	1 / 0	25.50	0.29	25.79	0.379	33.01	-7.22
1880.00	10	QPSK	1 / 49	25.40	0.29	25.69	0.371	33.01	-7.32
1905.00	10	QPSK	1 / 49	25.40	0.29	25.69	0.371	33.01	-7.32
1880.00	10	16-QAM	1 / 0	24.70	0.29	24.99	0.316	33.01	-8.02
1855.00	10	64-QAM	1 / 0	23.70	0.29	23.99	0.251	33.01	-9.02
1857.50	15	QPSK	1 / 0	25.40	0.29	25.69	0.371	33.01	-7.32
1880.00	15	QPSK	1 / 0	25.35	0.29	25.64	0.366	33.01	-7.37
1902.50	15	QPSK	1 / 74	25.40	0.29	25.69	0.371	33.01	-7.32
1857.50	15	16-QAM	1 / 0	24.80	0.29	25.09	0.323	33.01	-7.92
1880.00	15	64-QAM	1 / 0	23.70	0.29	23.99	0.251	33.01	-9.02
1860.00	20	QPSK	1 / 99	25.45	0.29	25.74	0.375	33.01	-7.27
1880.00	20	QPSK	1 / 0	25.50	0.29	25.79	0.379	33.01	-7.22
1900.00	20	QPSK	1 / 0	25.50	0.29	25.79	0.379	33.01	-7.22
1880.00	20	16-QAM	1 / 99	24.80	0.29	25.09	0.323	33.01	-7.92
1860.00	20	64-QAM	1 / 99	24.00	0.29	24.29	0.269	33.01	-8.72

Table 7-24. EIRP Data (Band 2)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 275 of 363

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
1850.70	1.4	QPSK	1 / 0	25.40	0.29	25.69	0.371	33.01	-7.32
1882.50	1.4	QPSK	1 / 0	25.40	0.29	25.69	0.371	33.01	-7.32
1914.30	1.4	QPSK	1 / 0	25.40	0.29	25.69	0.371	33.01	-7.32
1882.50	1.4	16-QAM	1 / 0	24.80	0.29	25.09	0.323	33.01	-7.92
1882.50	1.4	64-QAM	1 / 0	23.80	0.29	24.09	0.256	33.01	-8.92
1851.50	3	QPSK	1 / 0	25.50	0.29	25.79	0.379	33.01	-7.22
1882.50	3	QPSK	1 / 14	25.40	0.29	25.69	0.371	33.01	-7.32
1913.50	3	QPSK	1 / 14	25.40	0.29	25.69	0.371	33.01	-7.32
1851.50	3	16-QAM	1 / 0	24.90	0.29	25.19	0.330	33.01	-7.82
1851.50	3	64-QAM	1 / 0	23.85	0.29	24.14	0.259	33.01	-8.87
1852.50	5	QPSK	1 / 0	25.50	0.29	25.79	0.379	33.01	-7.22
1882.50	5	QPSK	1 / 0	25.50	0.29	25.79	0.379	33.01	-7.22
1912.50	5	QPSK	1 / 0	25.40	0.29	25.69	0.371	33.01	-7.32
1882.50	5	16-QAM	12 / 6	24.90	0.29	25.19	0.330	33.01	-7.82
1882.50	5	64-QAM	1 / 0	24.00	0.29	24.29	0.269	33.01	-8.72
1855.00	10	QPSK	1 / 49	25.50	0.29	25.79	0.379	33.01	-7.22
1882.50	10	QPSK	1 / 49	25.50	0.29	25.79	0.379	33.01	-7.22
1910.00	10	QPSK	1 / 0	25.50	0.29	25.79	0.379	33.01	-7.22
1882.50	10	16-QAM	1 / 49	24.75	0.29	25.04	0.319	33.01	-7.97
1882.50	10	64-QAM	1 / 49	23.75	0.29	24.04	0.254	33.01	-8.97
1857.50	15	QPSK	1 / 0	25.50	0.29	25.79	0.379	33.01	-7.22
1882.50	15	QPSK	1 / 74	25.50	0.29	25.79	0.379	33.01	-7.22
1907.50	15	QPSK	1 / 0	25.40	0.29	25.69	0.371	33.01	-7.32
1882.50	15	16-QAM	1 / 74	24.87	0.29	25.16	0.328	33.01	-7.85
1882.50	15	64-QAM	1 / 74	23.90	0.29	24.19	0.262	33.01	-8.82
1860.00	20	QPSK	1 / 0	25.50	0.29	25.79	0.379	33.01	-7.22
1882.50	20	QPSK	1 / 99	25.50	0.29	25.79	0.379	33.01	-7.22
1905.00	20	QPSK	1 / 0	25.50	0.29	25.79	0.379	33.01	-7.22
1882.50	20	16-QAM	1 / 99	24.87	0.29	25.16	0.328	33.01	-7.85
1882.50	20	64-QAM	1 / 99	23.77	0.29	24.06	0.255	33.01	-8.95

Table 7-25. EIRP Data (Band 25)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 276 of 363

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
2502.50	5	QPSK	1 / 24	25.40	-0.10	25.30	0.339	33.01	-7.71
2535.00	5	QPSK	1 / 24	25.50	-0.81	24.69	0.294	33.01	-8.32
2567.50	5	QPSK	1 / 0	25.50	-0.81	24.69	0.294	33.01	-8.32
2502.50	5	16-QAM	1 / 0	24.61	-0.10	24.51	0.282	33.01	-8.50
2502.50	5	64-QAM	1 / 0	23.79	-0.10	23.69	0.234	33.01	-9.32
2505.00	10	QPSK	1 / 49	25.50	-0.10	25.40	0.347	33.01	-7.61
2535.00	10	QPSK	1 / 49	25.45	-0.81	24.64	0.291	33.01	-8.37
2565.00	10	QPSK	1 / 0	25.42	-0.81	24.61	0.289	33.01	-8.40
2505.00	10	16-QAM	1 / 49	24.57	-0.10	24.47	0.280	33.01	-8.54
2505.00	10	64-QAM	1 / 0	23.67	-0.10	23.57	0.228	33.01	-9.44
2507.50	15	QPSK	1 / 74	25.50	-0.10	25.40	0.347	33.01	-7.61
2535.00	15	QPSK	1 / 0	25.50	-0.81	24.69	0.294	33.01	-8.32
2562.50	15	QPSK	1 / 74	25.48	-0.81	24.67	0.293	33.01	-8.34
2507.50	15	16-QAM	1 / 74	24.65	-0.10	24.55	0.285	33.01	-8.46
2507.50	15	64-QAM	1 / 74	23.71	-0.10	23.61	0.230	33.01	-9.40
2510.00	20	QPSK	1 / 99	25.50	-0.10	25.40	0.347	33.01	-7.61
2535.00	20	QPSK	1 / 0	25.45	-0.81	24.64	0.291	33.01	-8.37
2560.00	20	QPSK	1 / 99	25.48	-0.81	24.67	0.293	33.01	-8.34
2510.00	20	16-QAM	1 / 99	24.76	-0.10	24.66	0.292	33.01	-8.35
2510.00	20	64-QAM	1 / 99	23.77	-0.10	23.67	0.233	33.01	-9.34

Table 7-26. EIRP Data (Band 7)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 277 of 363

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
2498.50	5	QPSK	1 / 24	26.80	-0.10	26.70	0.468	33.01	-6.31
2593.00	5	QPSK	1 / 0	27.00	-0.81	26.19	0.416	33.01	-6.82
2687.50	5	QPSK	1 / 0	26.70	-0.81	25.89	0.388	33.01	-7.12
2498.50	5	16-QAM	1 / 0	26.20	-0.10	26.10	0.407	33.01	-6.91
2498.50	5	64-QAM	1 / 0	24.00	-0.10	23.90	0.245	33.01	-9.11
2501.00	10	QPSK	1 / 0	27.00	-0.10	26.90	0.490	33.01	-6.11
2593.00	10	QPSK	1 / 0	26.80	-0.81	25.99	0.397	33.01	-7.02
2685.00	10	QPSK	1 / 0	26.70	-0.81	25.89	0.388	33.01	-7.12
2501.00	10	16-QAM	1 / 0	26.20	-0.10	26.10	0.407	33.01	-6.91
2501.00	10	64-QAM	1 / 0	24.80	-0.10	24.70	0.295	33.01	-8.31
2503.50	15	QPSK	1 / 0	26.70	-0.10	26.60	0.457	33.01	-6.41
2593.00	15	QPSK	1 / 0	27.00	-0.81	26.19	0.416	33.01	-6.82
2682.50	15	QPSK	1 / 0	26.80	-0.81	25.99	0.397	33.01	-7.02
2503.50	15	16-QAM	1 / 0	26.10	-0.10	26.00	0.398	33.01	-7.01
2503.50	15	64-QAM	1 / 0	25.00	-0.10	24.90	0.309	33.01	-8.11
2506.00	20	QPSK	1 / 0	26.80	-0.10	26.70	0.468	33.01	-6.31
2593.00	20	QPSK	1 / 0	27.00	-0.81	26.19	0.416	33.01	-6.82
2680.00	20	QPSK	1 / 0	26.80	-0.81	25.99	0.397	33.01	-7.02
2506.00	20	16-QAM	1 / 0	26.00	-0.10	25.90	0.389	33.01	-7.11
2506.00	20	64-QAM	1 / 99	25.00	-0.10	24.90	0.309	33.01	-8.11

Table 7-27. EIRP Data (Band 41)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 278 of 363

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
2307.50	5	QPSK	1 / 0	23.30	-0.10	23.20	0.209	23.98	-0.78
2312.50	5	QPSK	1 / 0	23.25	-0.10	23.15	0.207	23.98	-0.83
2312.50	5	16-QAM	1 / 0	22.55	-0.10	22.45	0.176	23.98	-1.53
2307.50	5	64-QAM	1 / 24	21.69	-0.10	21.59	0.144	23.98	-2.39
2310.00	10	QPSK	1 / 0	23.30	-0.10	23.20	0.209	23.98	-0.78
2310.00	10	16-QAM	1 / 0	22.65	-0.10	22.55	0.180	23.98	-1.43
2310.00	10	64-QAM	1 / 0	21.55	-0.10	21.45	0.140	23.98	-2.53

Table 7-28. EIRP Data (Band 30)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 279 of 363

7.8.2 Port B Radiated Power (ERP/EIRP)

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]
665.50	5	QPSK	1 / 0	24.48	-3.75	18.58	0.072	34.77	-16.19
680.50	5	QPSK	1 / 0	24.50	-3.75	18.60	0.072	34.77	-16.17
695.50	5	QPSK	1 / 0	24.49	-3.75	18.59	0.072	34.77	-16.18
695.50	5	16-QAM	1 / 24	23.91	-3.75	18.01	0.063	34.77	-16.76
695.50	5	64-QAM	1 / 24	23.11	-3.75	17.21	0.053	34.77	-17.56
668.00	10	QPSK	1 / 0	24.40	-3.75	18.50	0.071	34.77	-16.27
680.50	10	QPSK	1 / 49	24.45	-3.75	18.55	0.072	34.77	-16.22
693.00	10	QPSK	1 / 0	24.50	-3.75	18.60	0.072	34.77	-16.17
680.50	10	16-QAM	1 / 49	23.86	-3.75	17.96	0.063	34.77	-16.81
693.00	10	64-QAM	1 / 49	22.98	-3.75	17.08	0.051	34.77	-17.69
670.50	15	QPSK	1 / 0	24.50	-3.75	18.60	0.072	34.77	-16.17
680.50	15	QPSK	1 / 74	24.46	-3.75	18.56	0.072	34.77	-16.21
690.50	15	QPSK	1 / 0	24.50	-3.75	18.60	0.072	34.77	-16.17
670.50	15	16-QAM	1 / 74	23.89	-3.75	17.99	0.063	34.77	-16.78
670.50	15	64-QAM	1 / 74	23.02	-3.75	17.12	0.052	34.77	-17.65
673.00	20	QPSK	1 / 0	24.45	-3.75	18.55	0.072	34.77	-16.22
680.50	20	QPSK	1 / 0	24.50	-3.75	18.60	0.072	34.77	-16.17
688.00	20	QPSK	1 / 0	25.48	-3.75	19.58	0.091	34.77	-15.19
680.50	20	16-QAM	1 / 99	23.88	-3.75	17.98	0.063	34.77	-16.79
680.50	20	64-QAM	1 / 99	23.30	-3.75	17.40	0.055	34.77	-17.37

Table 7-29. ERP Data (Band 71)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 280 of 363

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
699.70	1.4	QPSK	3 / 2	24.48	0.01	22.34	0.171	34.77	-12.43	24.49	0.281	36.99	-12.50
707.50	1.4	QPSK	1 / 5	24.49	0.01	22.35	0.172	34.77	-12.42	24.50	0.282	36.99	-12.49
715.30	1.4	QPSK	3 / 2	24.45	0.01	22.31	0.170	34.77	-12.46	24.46	0.279	36.99	-12.53
699.70	1.4	16-QAM	1 / 5	23.70	0.01	21.56	0.143	34.77	-13.21	23.71	0.235	36.99	-13.28
715.30	1.4	64-QAM	3 / 2	22.70	0.01	20.56	0.114	34.77	-14.21	22.71	0.187	36.99	-14.28
700.50	3	QPSK	1 / 14	24.45	0.01	22.31	0.170	34.77	-12.46	24.46	0.279	36.99	-12.53
707.50	3	QPSK	1 / 0	24.40	0.01	22.26	0.168	34.77	-12.51	24.41	0.276	36.99	-12.58
714.50	3	QPSK	1 / 0	24.50	0.01	22.36	0.172	34.77	-12.41	24.51	0.282	36.99	-12.48
707.50	3	16-QAM	1 / 0	23.70	0.01	21.56	0.143	34.77	-13.21	23.71	0.235	36.99	-13.28
714.50	3	64-QAM	1 / 14	23.00	0.01	20.86	0.122	34.77	-13.91	23.01	0.200	36.99	-13.98
701.50	5	QPSK	1 / 24	24.48	0.01	22.34	0.171	34.77	-12.43	24.49	0.281	36.99	-12.50
707.50	5	QPSK	1 / 0	24.50	0.01	22.36	0.172	34.77	-12.41	24.51	0.282	36.99	-12.48
713.50	5	QPSK	1 / 24	24.42	0.01	22.28	0.169	34.77	-12.49	24.43	0.277	36.99	-12.56
707.50	5	16-QAM	1 / 0	23.80	0.01	21.66	0.147	34.77	-13.11	23.81	0.240	36.99	-13.18
701.50	5	64-QAM	1 / 0	23.70	0.01	21.56	0.143	34.77	-13.21	23.71	0.235	36.99	-13.28
704.00	10	QPSK	1 / 0	24.50	0.01	22.36	0.172	34.77	-12.41	24.51	0.282	36.99	-12.48
707.50	10	QPSK	1 / 0	24.50	0.01	22.36	0.172	34.77	-12.41	24.51	0.282	36.99	-12.48
711.00	10	QPSK	1 / 49	24.43	0.01	22.29	0.169	34.77	-12.48	24.44	0.278	36.99	-12.55
711.00	10	16-QAM	1 / 49	23.82	0.01	21.68	0.147	34.77	-13.09	23.83	0.242	36.99	-13.16
711.00	10	64-QAM	1 / 49	22.98	0.01	20.84	0.121	34.77	-13.93	22.99	0.199	36.99	-14.00

Table 7-30. ERP Data (Band 12)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 281 of 363

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
706.50	5	QPSK	1 / 0	24.39	0.01	22.25	0.168	34.77	-12.52	24.40	0.275	36.99	-12.59
710.00	5	QPSK	1 / 0	24.40	0.01	22.26	0.168	34.77	-12.51	24.41	0.276	36.99	-12.58
713.50	5	QPSK	1 / 24	24.50	0.01	22.36	0.172	34.77	-12.41	24.51	0.282	36.99	-12.48
713.50	5	16-QAM	1 / 24	23.88	0.01	21.74	0.149	34.77	-13.03	23.89	0.245	36.99	-13.10
713.50	5	64-QAM	1 / 24	23.06	0.01	20.92	0.124	34.77	-13.85	23.07	0.203	36.99	-13.92
709.00	10	QPSK	1 / 0	24.46	0.01	22.32	0.171	34.77	-12.45	24.47	0.280	36.99	-12.52
710.00	10	QPSK	1 / 0	24.49	0.01	22.35	0.172	34.77	-12.42	24.50	0.282	36.99	-12.49
711.00	10	QPSK	1 / 0	24.40	0.01	22.26	0.168	34.77	-12.51	24.41	0.276	36.99	-12.58
711.00	10	16-QAM	1 / 0	23.92	0.01	21.78	0.151	34.77	-12.99	23.93	0.247	36.99	-13.06
711.00	10	64-QAM	1 / 49	22.93	0.01	20.79	0.120	34.77	-13.98	22.94	0.197	36.99	-14.05

Table 7-31. ERP Data (Band 17)

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
779.50	5	QPSK	1 / 0	24.67	0.01	22.53	0.179	34.77	-12.24	24.68	0.294	36.99	-12.31
782.00	5	QPSK	1 / 0	24.50	0.01	22.36	0.172	34.77	-12.41	24.51	0.282	36.99	-12.48
784.50	5	QPSK	1 / 0	24.50	0.01	22.36	0.172	34.77	-12.41	24.51	0.282	36.99	-12.48
779.50	5	16-QAM	1 / 0	23.90	0.01	21.76	0.150	34.77	-13.01	23.91	0.246	36.99	-13.08
779.50	5	64-QAM	1 / 0	23.06	0.01	20.92	0.124	34.77	-13.85	23.07	0.203	36.99	-13.92
782.00	10	QPSK	1 / 0	24.50	0.01	22.36	0.172	34.77	-12.41	24.51	0.282	36.99	-12.48
782.00	10	16-QAM	1 / 0	23.86	0.01	21.72	0.149	34.77	-13.05	23.87	0.244	36.99	-13.12
782.00	10	64-QAM	1 / 0	22.85	0.01	20.71	0.118	34.77	-14.06	22.86	0.193	36.99	-14.13

Table 7-32. ERP Data (Band 13)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 282 of 363

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
824.70	1.4	QPSK	3 / 2	24.35	0.36	22.56	0.180	38.45	-15.89	24.71	0.296	40.61	-15.90
836.50	1.4	QPSK	1 / 0	24.50	0.36	22.71	0.187	38.45	-15.74	24.86	0.306	40.61	-15.75
848.30	1.4	QPSK	3 / 2	24.41	0.36	22.62	0.183	38.45	-15.83	24.77	0.300	40.61	-15.84
848.30	1.4	16-QAM	1 / 0	23.70	0.36	21.91	0.155	38.45	-16.54	24.06	0.255	40.61	-16.55
848.30	1.4	64-QAM	1 / 0	22.80	0.36	21.01	0.126	38.45	-17.44	23.16	0.207	40.61	-17.45
825.50	3	QPSK	1 / 0	24.30	0.36	22.51	0.178	38.45	-15.94	24.66	0.292	40.61	-15.95
836.50	3	QPSK	1 / 14	24.50	0.36	22.71	0.187	38.45	-15.74	24.86	0.306	40.61	-15.75
847.50	3	QPSK	1 / 0	24.49	0.36	22.70	0.186	38.45	-15.75	24.85	0.305	40.61	-15.76
836.50	3	16-QAM	1 / 14	23.80	0.36	22.01	0.159	38.45	-16.44	24.16	0.261	40.61	-16.45
836.50	3	64-QAM	1 / 14	22.80	0.36	21.01	0.126	38.45	-17.44	23.16	0.207	40.61	-17.45
826.50	5	QPSK	1 / 0	24.40	0.36	22.61	0.182	38.45	-15.84	24.76	0.299	40.61	-15.85
836.50	5	QPSK	1 / 24	24.35	0.36	22.56	0.180	38.45	-15.89	24.71	0.296	40.61	-15.90
846.50	5	QPSK	1 / 24	24.00	0.36	22.21	0.166	38.45	-16.24	24.36	0.273	40.61	-16.25
836.50	5	16-QAM	1 / 24	23.80	0.36	22.01	0.159	38.45	-16.44	24.16	0.261	40.61	-16.45
826.50	5	64-QAM	1 / 0	22.75	0.36	20.96	0.125	38.45	-17.49	23.11	0.205	40.61	-17.50
829.00	10	QPSK	1 / 0	24.30	0.36	22.51	0.178	38.45	-15.94	24.66	0.292	40.61	-15.95
836.50	10	QPSK	1 / 49	24.50	0.36	22.71	0.187	38.45	-15.74	24.86	0.306	40.61	-15.75
844.00	10	QPSK	1 / 0	24.39	0.36	22.60	0.182	38.45	-15.85	24.75	0.299	40.61	-15.86
844.00	10	16-QAM	1 / 49	23.80	0.36	22.01	0.159	38.45	-16.44	24.16	0.261	40.61	-16.45
836.50	10	64-QAM	1 / 49	23.00	0.36	21.21	0.132	38.45	-17.24	23.36	0.217	40.61	-17.25

Table 7-33. ERP Data (Band 5)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 283 of 363

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
824.70	1.4	QPSK	3 / 2	24.35	0.36	22.56	0.180	38.45	-15.89	24.71	0.296	40.61	-15.90
836.50	1.4	QPSK	1 / 5	24.45	0.36	22.66	0.185	38.45	-15.79	24.81	0.303	40.61	-15.80
848.30	1.4	QPSK	3 / 2	24.48	0.36	22.69	0.186	38.45	-15.76	24.84	0.305	40.61	-15.77
848.30	1.4	16-QAM	1 / 5	23.62	0.36	21.83	0.152	38.45	-16.62	23.98	0.250	40.61	-16.63
848.30	1.4	64-QAM	1 / 5	22.72	0.36	20.93	0.124	38.45	-17.52	23.08	0.203	40.61	-17.53
825.50	3	QPSK	1 / 0	24.48	0.36	22.69	0.186	38.45	-15.76	24.84	0.305	40.61	-15.77
836.50	3	QPSK	1 / 14	24.49	0.36	22.70	0.186	38.45	-15.75	24.85	0.305	40.61	-15.76
847.50	3	QPSK	1 / 14	24.45	0.36	22.66	0.185	38.45	-15.79	24.81	0.303	40.61	-15.80
847.50	3	16-QAM	1 / 0	23.79	0.36	22.00	0.158	38.45	-16.45	24.15	0.260	40.61	-16.46
836.50	3	64-QAM	1 / 14	22.69	0.36	20.90	0.123	38.45	-17.55	23.05	0.202	40.61	-17.56
826.50	5	QPSK	1 / 24	24.40	0.36	22.61	0.182	38.45	-15.84	24.76	0.299	40.61	-15.85
836.50	5	QPSK	1 / 24	24.50	0.36	22.71	0.187	38.45	-15.74	24.86	0.306	40.61	-15.75
846.50	5	QPSK	1 / 0	24.50	0.36	22.71	0.187	38.45	-15.74	24.86	0.306	40.61	-15.75
826.50	5	16-QAM	1 / 0	23.69	0.36	21.90	0.155	38.45	-16.55	24.05	0.254	40.61	-16.56
846.50	5	64-QAM	1 / 24	22.78	0.36	20.99	0.126	38.45	-17.46	23.14	0.206	40.61	-17.47
829.00	10	QPSK	1 / 0	24.45	0.36	22.66	0.185	38.45	-15.79	24.81	0.303	40.61	-15.80
836.50	10	QPSK	1 / 49	24.50	0.36	22.71	0.187	38.45	-15.74	24.86	0.306	40.61	-15.75
844.00	10	QPSK	1 / 49	24.40	0.36	22.61	0.182	38.45	-15.84	24.76	0.299	40.61	-15.85
836.50	10	16-QAM	1 / 49	23.90	0.36	22.11	0.163	38.45	-16.34	24.26	0.267	40.61	-16.35
836.50	10	64-QAM	1 / 49	22.80	0.36	21.01	0.126	38.45	-17.44	23.16	0.207	40.61	-17.45

Table 7-34. ERP Data (Band 26)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 284 of 363

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
1710.70	1.4	QPSK	1 / 0	23.45	-1.08	22.37	0.173	30.00	-7.63
1732.50	1.4	QPSK	1 / 0	23.50	-1.08	22.42	0.175	30.00	-7.58
1754.30	1.4	QPSK	1 / 5	23.41	-1.08	22.33	0.171	30.00	-7.67
1732.50	1.4	16-QAM	1 / 5	22.81	-1.08	21.73	0.149	30.00	-8.27
1710.70	1.4	64-QAM	1 / 0	21.86	-1.08	20.78	0.120	30.00	-9.22
1711.50	3	QPSK	1 / 14	23.45	-1.08	22.37	0.173	30.00	-7.63
1732.50	3	QPSK	1 / 0	23.50	-1.08	22.42	0.175	30.00	-7.58
1753.50	3	QPSK	1 / 14	23.40	-1.08	22.32	0.171	30.00	-7.68
1753.50	3	16-QAM	1 / 14	22.86	-1.08	21.78	0.151	30.00	-8.22
1732.50	3	64-QAM	1 / 0	21.88	-1.08	20.80	0.120	30.00	-9.20
1712.50	5	QPSK	1 / 24	23.41	-1.08	22.33	0.171	30.00	-7.67
1732.50	5	QPSK	1 / 0	23.48	-1.08	22.40	0.174	30.00	-7.60
1752.50	5	QPSK	1 / 24	23.39	-1.08	22.31	0.170	30.00	-7.69
1752.50	5	16-QAM	1 / 24	22.92	-1.08	21.84	0.153	30.00	-8.16
1752.50	5	64-QAM	1 / 24	21.89	-1.08	20.81	0.121	30.00	-9.19
1715.00	10	QPSK	1 / 49	23.50	-1.08	22.42	0.175	30.00	-7.58
1732.50	10	QPSK	1 / 0	23.39	-1.08	22.31	0.170	30.00	-7.69
1750.00	10	QPSK	1 / 49	23.41	-1.08	22.33	0.171	30.00	-7.67
1715.00	10	16-QAM	1 / 0	22.83	-1.08	21.75	0.150	30.00	-8.25
1732.50	10	64-QAM	1 / 0	21.91	-1.08	20.83	0.121	30.00	-9.17
1717.50	15	QPSK	1 / 0	23.50	-1.08	22.42	0.175	30.00	-7.58
1732.50	15	QPSK	1 / 0	23.42	-1.08	22.34	0.171	30.00	-7.66
1747.50	15	QPSK	1 / 74	23.47	-1.08	22.39	0.173	30.00	-7.61
1747.50	15	16-QAM	1 / 74	22.84	-1.08	21.76	0.150	30.00	-8.24
1717.50	15	64-QAM	1 / 0	21.86	-1.08	20.78	0.120	30.00	-9.22
1720.00	20	QPSK	1 / 99	23.50	-1.08	22.42	0.175	30.00	-7.58
1732.50	20	QPSK	1 / 0	23.41	-1.08	22.33	0.171	30.00	-7.67
1745.00	20	QPSK	1 / 99	23.49	-1.08	22.41	0.174	30.00	-7.59
1720.00	20	16-QAM	1 / 99	22.90	-1.08	21.82	0.152	30.00	-8.18
1745.00	20	64-QAM	1 / 99	22.17	-1.08	21.09	0.129	30.00	-8.91

Table 7-35. EIRP Data (Band 4)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 285 of 363

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
1710.70	1.4	QPSK	3 / 2	23.42	-1.08	22.34	0.171	30.00	-7.66
1745.00	1.4	QPSK	3 / 2	23.40	-1.08	22.32	0.171	30.00	-7.68
1779.30	1.4	QPSK	1 / 0	23.50	-1.08	22.42	0.175	30.00	-7.58
1710.70	1.4	16-QAM	1 / 5	22.80	-1.08	21.72	0.149	30.00	-8.28
1779.30	1.4	64-QAM	1 / 0	21.70	-1.08	20.62	0.115	30.00	-9.38
1711.50	3	QPSK	1 / 14	23.40	-1.08	22.32	0.171	30.00	-7.68
1745.00	3	QPSK	1 / 14	23.30	-1.08	22.22	0.167	30.00	-7.78
1778.50	3	QPSK	1 / 14	23.50	-1.08	22.42	0.175	30.00	-7.58
1745.00	3	16-QAM	1 / 14	22.70	-1.08	21.62	0.145	30.00	-8.38
1745.00	3	64-QAM	1 / 0	21.60	-1.08	20.52	0.113	30.00	-9.48
1712.50	5	QPSK	1 / 0	23.40	-1.08	22.32	0.171	30.00	-7.68
1745.00	5	QPSK	1 / 0	23.25	-1.08	22.17	0.165	30.00	-7.83
1777.50	5	QPSK	1 / 0	23.50	-1.08	22.42	0.175	30.00	-7.58
1712.50	5	16-QAM	1 / 24	22.65	-1.08	21.57	0.144	30.00	-8.43
1745.00	5	64-QAM	1 / 0	21.80	-1.08	20.72	0.118	30.00	-9.28
1715.00	10	QPSK	1 / 0	23.50	-1.08	22.42	0.175	30.00	-7.58
1745.00	10	QPSK	1 / 49	23.25	-1.08	22.17	0.165	30.00	-7.83
1775.00	10	QPSK	1 / 49	23.25	-1.08	22.17	0.165	30.00	-7.83
1715.00	10	16-QAM	1 / 0	22.80	-1.08	21.72	0.149	30.00	-8.28
1745.00	10	64-QAM	1 / 49	21.65	-1.08	20.57	0.114	30.00	-9.43
1717.50	15	QPSK	1 / 0	23.50	-1.08	22.42	0.175	30.00	-7.58
1745.00	15	QPSK	1 / 0	23.30	-1.08	22.22	0.167	30.00	-7.78
1772.50	15	QPSK	1 / 0	23.50	-1.08	22.42	0.175	30.00	-7.58
1745.00	15	16-QAM	1 / 0	22.75	-1.08	21.67	0.147	30.00	-8.33
1717.50	15	64-QAM	1 / 0	21.75	-1.08	20.67	0.117	30.00	-9.33
1720.00	20	QPSK	1 / 0	23.50	-1.08	22.42	0.175	30.00	-7.58
1745.00	20	QPSK	1 / 99	23.40	-1.08	22.32	0.171	30.00	-7.68
1770.00	20	QPSK	1 / 0	23.50	-1.08	22.42	0.175	30.00	-7.58
1720.00	20	16-QAM	1 / 99	22.75	-1.08	21.67	0.147	30.00	-8.33
1720.00	20	64-QAM	1 / 99	21.90	-1.08	20.82	0.121	30.00	-9.18

Table 7-36. EIRP Data (Band 66)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 286 of 363

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
1850.70	1.4	QPSK	1 / 0	23.40	-0.61	22.79	0.190	33.01	-10.22
1880.00	1.4	QPSK	1 / 5	23.20	-0.61	22.59	0.182	33.01	-10.42
1909.30	1.4	QPSK	1 / 0	23.10	-0.61	22.49	0.177	33.01	-10.52
1850.70	1.4	16-QAM	1 / 0	22.60	-0.61	21.99	0.158	33.01	-11.02
1850.70	1.4	64-QAM	1 / 5	21.60	-0.61	20.99	0.126	33.01	-12.02
1851.50	3	QPSK	1 / 0	23.15	-0.61	22.54	0.179	33.01	-10.47
1880.00	3	QPSK	1 / 14	23.40	-0.61	22.79	0.190	33.01	-10.22
1908.50	3	QPSK	1 / 0	23.40	-0.61	22.79	0.190	33.01	-10.22
1851.50	3	16-QAM	1 / 0	22.60	-0.61	21.99	0.158	33.01	-11.02
1851.50	3	64-QAM	1 / 0	21.50	-0.61	20.89	0.123	33.01	-12.12
1852.50	5	QPSK	1 / 0	23.30	-0.61	22.69	0.186	33.01	-10.32
1880.00	5	QPSK	1 / 24	23.40	-0.61	22.79	0.190	33.01	-10.22
1907.50	5	QPSK	1 / 0	23.30	-0.61	22.69	0.186	33.01	-10.32
1852.50	5	16-QAM	1 / 0	22.80	-0.61	22.19	0.166	33.01	-10.82
1852.50	5	64-QAM	1 / 0	21.70	-0.61	21.09	0.129	33.01	-11.92
1855.00	10	QPSK	1 / 0	23.50	-0.61	22.89	0.195	33.01	-10.12
1880.00	10	QPSK	1 / 49	23.50	-0.61	22.89	0.195	33.01	-10.12
1905.00	10	QPSK	1 / 0	23.10	-0.61	22.49	0.177	33.01	-10.52
1880.00	10	16-QAM	1 / 49	22.70	-0.61	22.09	0.162	33.01	-10.92
1855.00	10	64-QAM	1 / 0	21.50	-0.61	20.89	0.123	33.01	-12.12
1857.50	15	QPSK	1 / 0	23.40	-0.61	22.79	0.190	33.01	-10.22
1880.00	15	QPSK	1 / 74	23.22	-0.61	22.61	0.182	33.01	-10.40
1902.50	15	QPSK	1 / 0	23.40	-0.61	22.79	0.190	33.01	-10.22
1857.50	15	16-QAM	1 / 0	22.50	-0.61	21.89	0.155	33.01	-11.12
1857.50	15	64-QAM	1 / 0	21.70	-0.61	21.09	0.129	33.01	-11.92
1860.00	20	QPSK	1 / 0	23.25	-0.61	22.64	0.184	33.01	-10.37
1880.00	20	QPSK	1 / 99	23.40	-0.61	22.79	0.190	33.01	-10.22
1900.00	20	QPSK	1 / 0	23.25	-0.61	22.64	0.184	33.01	-10.37
1860.00	20	16-QAM	1 / 0	22.90	-0.61	22.29	0.169	33.01	-10.72
1860.00	20	64-QAM	1 / 0	21.80	-0.61	21.19	0.132	33.01	-11.82

Table 7-37. EIRP Data (Band 2)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 287 of 363

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
1850.70	1.4	QPSK	3 / 2	23.50	-0.61	22.89	0.195	33.01	-10.12
1882.50	1.4	QPSK	3 / 2	23.50	-0.61	22.89	0.195	33.01	-10.12
1914.30	1.4	QPSK	1 / 5	23.44	-0.61	22.83	0.192	33.01	-10.18
1850.70	1.4	16-QAM	1 / 5	22.81	-0.61	22.20	0.166	33.01	-10.81
1850.70	1.4	64-QAM	1 / 5	22.02	-0.61	21.41	0.138	33.01	-11.60
1851.50	3	QPSK	1 / 0	23.50	-0.61	22.89	0.195	33.01	-10.12
1882.50	3	QPSK	1 / 14	23.40	-0.61	22.79	0.190	33.01	-10.22
1913.50	3	QPSK	1 / 0	23.45	-0.61	22.84	0.192	33.01	-10.17
1851.50	3	16-QAM	1 / 0	22.86	-0.61	22.25	0.168	33.01	-10.76
1851.50	3	64-QAM	1 / 14	21.80	-0.61	21.19	0.132	33.01	-11.82
1852.50	5	QPSK	1 / 0	23.50	-0.61	22.89	0.195	33.01	-10.12
1882.50	5	QPSK	1 / 24	23.40	-0.61	22.79	0.190	33.01	-10.22
1912.50	5	QPSK	1 / 0	23.30	-0.61	22.69	0.186	33.01	-10.32
1852.50	5	16-QAM	1 / 0	22.90	-0.61	22.29	0.169	33.01	-10.72
1852.50	5	64-QAM	1 / 0	21.80	-0.61	21.19	0.132	33.01	-11.82
1855.00	10	QPSK	1 / 0	23.50	-0.61	22.89	0.195	33.01	-10.12
1882.50	10	QPSK	1 / 49	23.48	-0.61	22.87	0.194	33.01	-10.14
1910.00	10	QPSK	1 / 0	23.46	-0.61	22.85	0.193	33.01	-10.16
1855.00	10	16-QAM	1 / 0	22.87	-0.61	22.26	0.168	33.01	-10.75
1882.50	10	64-QAM	1 / 0	21.67	-0.61	21.06	0.128	33.01	-11.95
1857.50	15	QPSK	1 / 74	23.50	-0.61	22.89	0.195	33.01	-10.12
1882.50	15	QPSK	1 / 74	23.50	-0.61	22.89	0.195	33.01	-10.12
1907.50	15	QPSK	1 / 0	23.40	-0.61	22.79	0.190	33.01	-10.22
1882.50	15	16-QAM	1 / 0	22.70	-0.61	22.09	0.162	33.01	-10.92
1882.50	15	64-QAM	1 / 74	22.00	-0.61	21.39	0.138	33.01	-11.62
1860.00	20	QPSK	1 / 0	23.50	-0.61	22.89	0.195	33.01	-10.12
1882.50	20	QPSK	1 / 99	23.20	-0.61	22.59	0.182	33.01	-10.42
1905.00	20	QPSK	1 / 0	23.45	-0.61	22.84	0.192	33.01	-10.17
1882.50	20	16-QAM	1 / 99	22.85	-0.61	22.24	0.167	33.01	-10.77
1860.00	20	64-QAM	1 / 0	21.95	-0.61	21.34	0.136	33.01	-11.67

Table 7-38. EIRP Data (Band 25)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 288 of 363

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
2502.50	5	QPSK	1 / 24	23.25	0.15	23.40	0.219	33.01	-9.61
2535.00	5	QPSK	1 / 0	23.04	0.56	23.60	0.229	33.01	-9.41
2567.50	5	QPSK	1 / 0	23.08	0.56	23.64	0.231	33.01	-9.37
2567.50	5	16-QAM	1 / 0	22.50	0.56	23.06	0.202	33.01	-9.95
2567.50	5	64-QAM	1 / 24	21.52	0.56	22.08	0.161	33.01	-10.93
2505.00	10	QPSK	1 / 49	22.91	0.15	23.06	0.202	33.01	-9.95
2535.00	10	QPSK	1 / 49	23.25	0.56	23.81	0.240	33.01	-9.20
2565.00	10	QPSK	1 / 49	22.92	0.56	23.48	0.223	33.01	-9.53
2535.00	10	16-QAM	1 / 49	22.33	0.56	22.89	0.195	33.01	-10.12
2565.00	10	64-QAM	1 / 49	21.60	0.56	22.16	0.164	33.01	-10.85
2507.50	15	QPSK	1 / 0	23.10	0.15	23.25	0.211	33.01	-9.76
2535.00	15	QPSK	1 / 0	23.25	0.56	23.81	0.240	33.01	-9.20
2562.50	15	QPSK	1 / 74	23.20	0.56	23.76	0.238	33.01	-9.25
2535.00	15	16-QAM	1 / 0	22.45	0.56	23.01	0.200	33.01	-10.00
2562.50	15	64-QAM	1 / 74	21.70	0.56	22.26	0.168	33.01	-10.75
2510.00	20	QPSK	1 / 0	23.25	0.15	23.40	0.219	33.01	-9.61
2535.00	20	QPSK	1 / 0	23.20	0.56	23.76	0.238	33.01	-9.25
2560.00	20	QPSK	1 / 99	23.22	0.56	23.78	0.239	33.01	-9.23
2535.00	20	16-QAM	1 / 0	22.40	0.56	22.96	0.198	33.01	-10.05
2560.00	20	64-QAM	1 / 99	21.90	0.56	22.46	0.176	33.01	-10.55

Table 7-39. EIRP Data (Band 7)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 289 of 363

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
2498.50	5	QPSK	1 / 0	24.75	0.15	24.90	0.309	33.01	-8.11
2593.00	5	QPSK	1 / 0	24.75	0.56	25.31	0.340	33.01	-7.70
2687.50	5	QPSK	1 / 0	24.60	0.56	25.16	0.328	33.01	-7.85
2593.00	5	16-QAM	1 / 0	24.02	0.56	24.58	0.287	33.01	-8.43
2593.00	5	64-QAM	1 / 0	23.22	0.56	23.78	0.239	33.01	-9.23
2501.00	10	QPSK	1 / 0	24.70	0.15	24.85	0.305	33.01	-8.16
2593.00	10	QPSK	1 / 0	24.75	0.56	25.31	0.340	33.01	-7.70
2685.00	10	QPSK	1 / 0	24.73	0.56	25.29	0.338	33.01	-7.72
2593.00	10	16-QAM	1 / 0	24.10	0.56	24.66	0.292	33.01	-8.35
2593.00	10	64-QAM	1 / 0	22.90	0.56	23.46	0.222	33.01	-9.55
2503.50	15	QPSK	1 / 0	24.70	0.15	24.85	0.305	33.01	-8.16
2593.00	15	QPSK	1 / 0	24.75	0.56	25.31	0.340	33.01	-7.70
2682.50	15	QPSK	1 / 0	24.60	0.56	25.16	0.328	33.01	-7.85
2593.00	15	16-QAM	1 / 0	23.90	0.56	24.46	0.279	33.01	-8.55
2593.00	15	64-QAM	1 / 0	23.20	0.56	23.76	0.238	33.01	-9.25
2506.00	20	QPSK	1 / 0	24.75	0.15	24.90	0.309	33.01	-8.11
2593.00	20	QPSK	1 / 0	24.75	0.56	25.31	0.340	33.01	-7.70
2680.00	20	QPSK	1 / 0	24.70	0.56	25.26	0.336	33.01	-7.75
2593.00	20	16-QAM	1 / 0	23.90	0.56	24.46	0.279	33.01	-8.55
2593.00	20	64-QAM	1 / 0	22.90	0.56	23.46	0.222	33.01	-9.55

Table 7-40. EIRP Data (Band 41)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 290 of 363

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
2307.50	5	QPSK	1 / 0	23.20	0.15	23.35	0.216	23.98	-0.63
2310.00	5	QPSK	1 / 0	23.25	0.15	23.40	0.219	23.98	-0.58
2312.50	5	QPSK	1 / 0	23.20	0.15	23.35	0.216	23.98	-0.63
2307.50	5	16-QAM	1 / 0	22.40	0.15	22.55	0.180	23.98	-1.43
2310.00	5	64-QAM	1 / 24	21.60	0.15	21.75	0.150	23.98	-2.23
2310.00	10	QPSK	1 / 0	23.10	0.15	23.25	0.211	23.98	-0.73
2310.00	10	16-QAM	1 / 0	22.30	0.15	22.45	0.176	23.98	-1.53
2310.00	10	64-QAM	1 / 0	21.50	0.15	21.65	0.146	23.98	-2.33

Table 7-41. EIRP Data (Band 30)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 291 of 363

7.9 Radiated Spurious Emissions Measurements

Test Overview

Radiated spurious emissions measurements are performed using the substitution method described in ANSI/TIA-603-E-2016 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.

Test Procedures Used

KDB 971168 D01 v03r01 – Section 5.8

ANSI/TIA-603-E-2016 – 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. Span = 1.5 times the OBW
4. No. of sweep points $\geq 2 \times$ span / RBW
5. Detector = RMS
6. Trace mode = Average (Max Hold for pulsed emissions)
7. The trace was allowed to stabilize

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 292 of 363

Test Setup

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

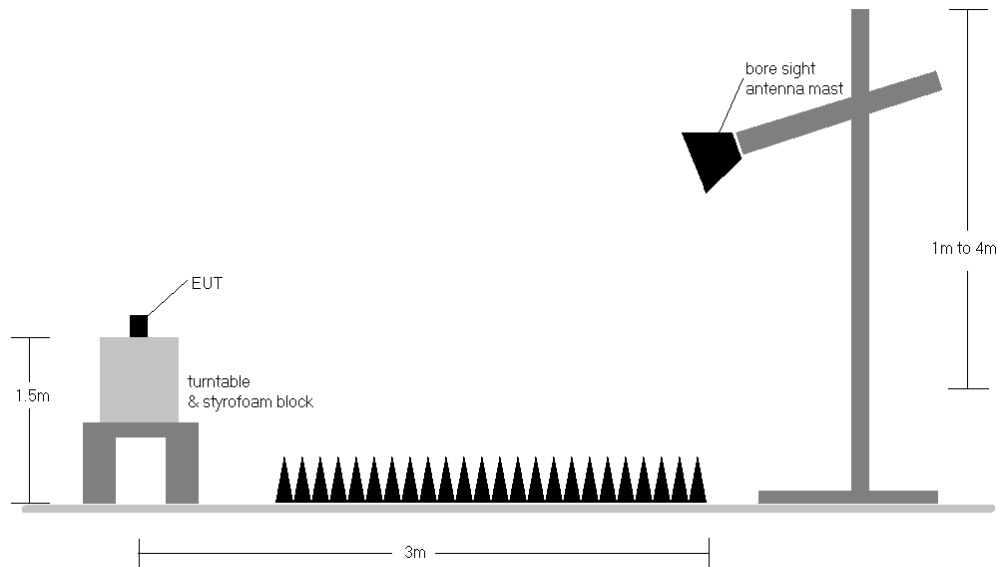


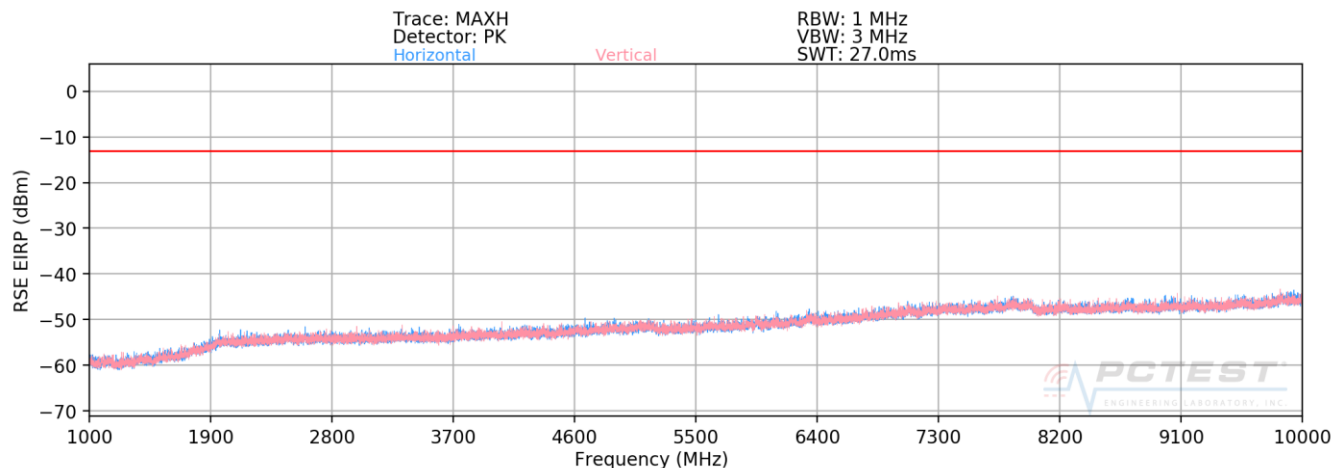
Figure 7-8. Test Instrument & Measurement Setup

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) The spectrum is measured from 9kHz to the 10th harmonic of the fundamental frequency of the transmitter. The worst-case emissions are reported.
- 4) 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.
- 5) The "-" shown in the following RSE tables are used to denote a noise floor measurement.

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 293 of 363

7.9.1 ANT WF3 (Port A) Radiated Spurious Emissions Measurements Band 71



Plot 7-438. Radiated Spurious Plot above 1GHz (Band 71)

OPERATING FREQUENCY: 673.00 MHz
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]
1346.00	H	-	-	-71.47	3.29	-68.18	-55.2
2019.00	H	-	-	-68.10	4.11	-63.98	-51.0
2692.00	H	-	-	-69.10	5.91	-63.19	-50.2

Table 7-42. Radiated Spurious Data (Band 71 – Low Channel)

FCC ID: BCGA2153	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 294 of 363

OPERATING FREQUENCY: 680.50 MHz
 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]
1361.00	H	-	-	-71.43	3.43	-68.00	-55.0
2041.50	H	-	-	-68.63	4.24	-64.39	-51.4
2722.00	H	-	-	-69.12	5.96	-63.17	-50.2

Table 7-43. Radiated Spurious Data (Band 71 – Mid Channel)

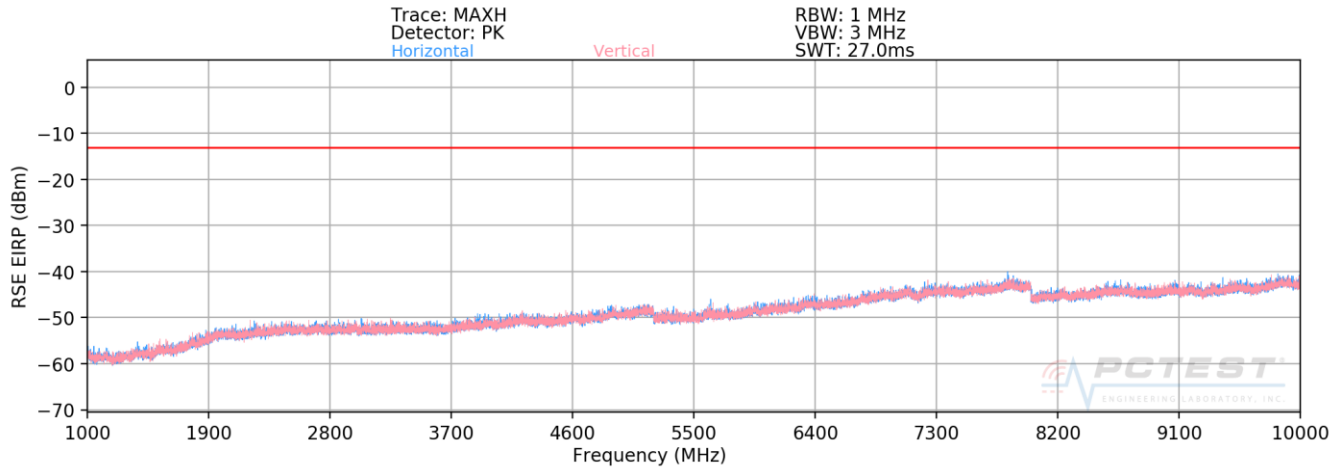
OPERATING FREQUENCY: 688.00 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

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]
1376.00	H	-	-	-71.34	3.56	-67.78	-54.8
2064.00	H	-	-	-68.56	4.37	-64.18	-51.2
2752.00	H	-	-	-69.58	6.00	-63.58	-50.6

Table 7-44. Radiated Spurious Data (Band 71 – High Channel)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 295 of 363

Band 12/17



Plot 7-439. Radiated Spurious Plot above 1GHz (Band 12/17)

OPERATING FREQUENCY: 704.00 MHz

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	H	-	-	-72.02	3.84	-68.19	-55.2
2112.00	H	-	-	-68.75	4.65	-64.10	-51.1
2816.00	H	-	-	-69.78	6.03	-63.75	-50.8

Table 7-45. Radiated Spurious Data (Band 12/17 – Low Channel)

FCC ID: BCGA2153	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 296 of 363

OPERATING FREQUENCY: 707.50 MHz
 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	H	-	-	-72.04	3.90	-68.15	-55.1
2122.50	H	-	-	-68.89	4.71	-64.18	-51.2
2830.00	H	-	-	-69.58	6.03	-63.55	-50.6

Table 7-46. Radiated Spurious Data (Band 12/17 – Mid Channel)

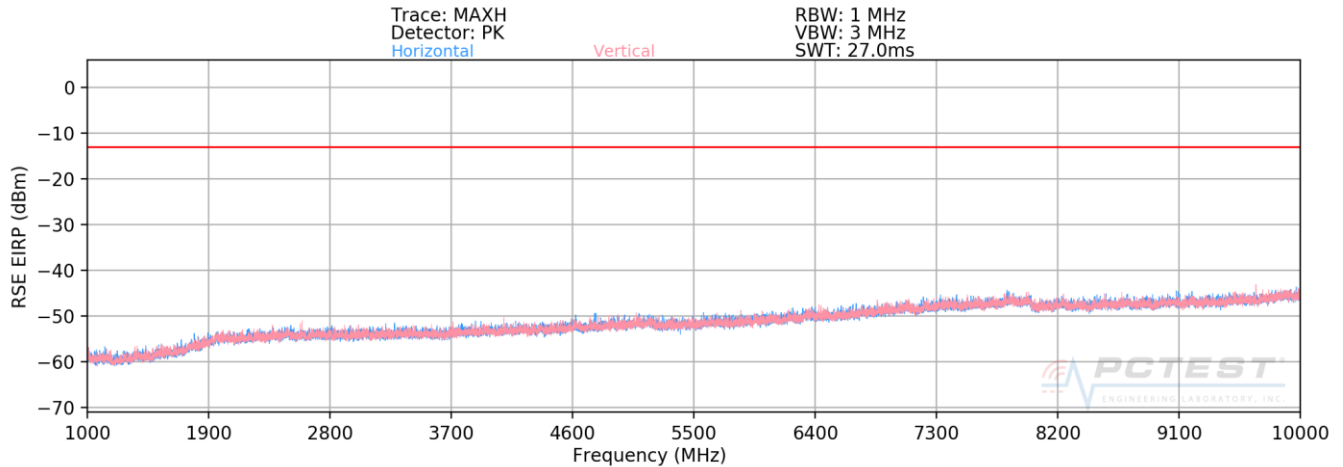
OPERATING FREQUENCY: 711.00 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 10.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

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	H	-	-	-72.04	3.96	-68.08	-55.1
2133.00	H	-	-	-69.00	4.77	-64.24	-51.2
2844.00	H	-	-	-69.63	6.04	-63.59	-50.6

Table 7-47. Radiated Spurious Data (Band 12/17 – High Channel)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 297 of 363

Band 13



Plot 7-440. Radiated Spurious Plot above 1GHz (Band 13)

OPERATING FREQUENCY: 779.50 MHz

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	H	-	-	-68.10	5.47	-62.63	-49.6
3118.00	H	-	-	-68.70	6.63	-62.07	-49.1
3897.50	H	-	-	-68.77	7.62	-61.15	-48.1

Table 7-48. Radiated Spurious Data (Band 13 – Low Channel)

FCC ID: BCGA2153	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 298 of 363

OPERATING FREQUENCY: 782.00 MHz
 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]
2346.00	H	-	-	-67.73	5.48	-62.25	-49.3
3128.00	H	-	-	-68.25	6.67	-61.57	-48.6
3910.00	H	-	-	-68.61	7.65	-60.96	-48.0

Table 7-49. Radiated Spurious Data (Band 13 – Mid Channel)

OPERATING FREQUENCY: 784.50 MHz
 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	H	-	-	-67.99	5.49	-62.51	-49.5
3138.00	H	-	-	-68.66	6.72	-61.95	-48.9
3922.50	H	-	-	-68.70	7.69	-61.01	-48.0

Table 7-50. Radiated Spurious Data (Band 13 – High Channel)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 299 of 363

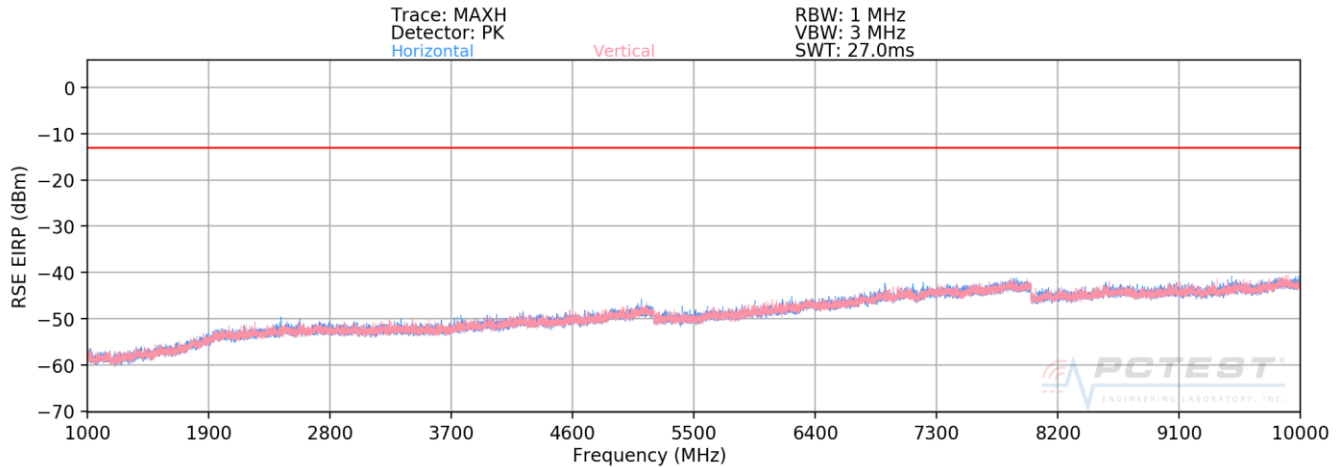
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	5.00	MHz
DISTANCE:	3	meters
NARROWBAND EMISSION LIMIT:	-50	dBm
WIDEBAND EMISSION LIMIT:	-40	dBm/MHz

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	H	-	-	-71.15	4.55	-66.60	-26.6
1564.00	H	-	-	-70.99	4.55	-66.44	-26.4
1569.00	H	-	-	-70.89	4.54	-66.35	-26.3

Table 7-51. Radiated Spurious Data (Band 13 – 1559-1610MHz Band)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 300 of 363

Band 26/5



Plot 7-441. Radiated Spurious Plot above 1GHz (Band 26/5)

OPERATING FREQUENCY: 829.00 MHz
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	-	-	-71.74	4.47	-67.27	-54.3
2487.00	H	178	357	-68.85	5.59	-63.26	-50.3
3316.00	H	-	-	-70.24	7.23	-63.01	-50.0
4145.00	H	-	-	-70.10	7.72	-62.37	-49.4
4974.00	H	-	-	-69.72	8.15	-61.57	-48.6

Table 7-52. Radiated Spurious Data (Band 26/5 – Low Channel)

FCC ID: BCGA2153	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 301 of 363

OPERATING FREQUENCY: 836.50 MHz
 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	-	-	-71.43	4.46	-66.97	-54.0
2509.50	H	142	318	-68.99	5.62	-63.38	-50.4
3346.00	H	-	-	-70.30	7.24	-63.06	-50.1
4182.50	H	-	-	-70.16	7.68	-62.48	-49.5
5019.00	H	-	-	-69.43	8.16	-61.27	-48.3

Table 7-53. Radiated Spurious Data (Band 26/5 – Mid Channel)

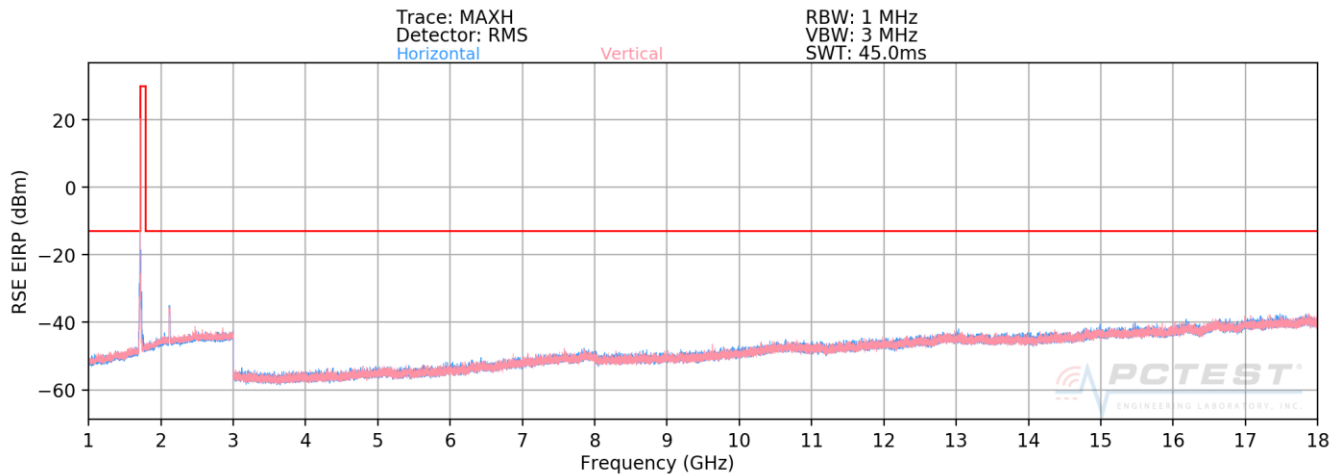
OPERATING FREQUENCY: 844.00 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 10.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

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	-	-	-71.26	4.45	-66.81	-53.8
2532.00	H	109	370	-69.17	5.65	-63.51	-50.5
3376.00	H	-	-	-70.44	7.25	-63.19	-50.2
4220.00	H	-	-	-69.96	7.64	-62.32	-49.3
5064.00	H	-	-	-69.79	8.07	-61.72	-48.7

Table 7-54. Radiated Spurious Data (Band 26/5 – High Channel)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 302 of 363

Band 66/4



Plot 7-442. Radiated Spurious Plot above 1GHz (Band 66/4)

OPERATING FREQUENCY: 1720.00 MHz
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	H	-	-	-69.73	7.28	-62.46	-49.5
5160.00	H	-	-	-69.47	7.88	-61.60	-48.6
6880.00	H	-	-	-67.86	8.91	-58.94	-45.9

Table 7-55. Radiated Spurious Data (Band 66/4 – Low Channel)

FCC ID: BCGA2153	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 303 of 363

OPERATING FREQUENCY: 1745.00 MHz
 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	H	-	-	-70.16	7.30	-62.86	-49.9
5235.00	H	-	-	-69.16	7.73	-61.43	-48.4
6980.00	H	-	-	-68.01	9.15	-58.86	-45.9

Table 7-56. Radiated Spurious Data (Band 66/4 – Mid Channel)

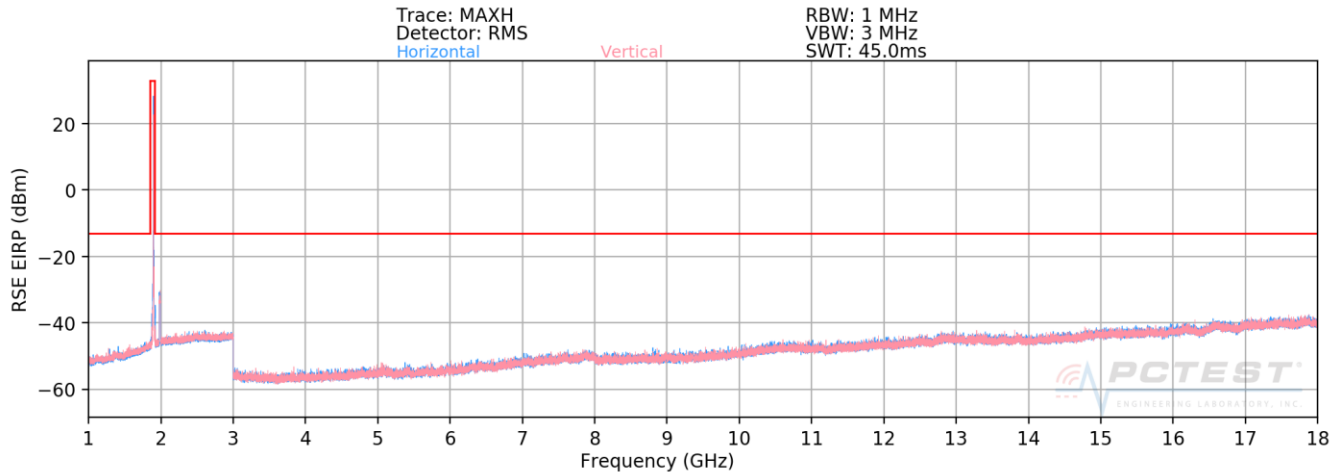
OPERATING FREQUENCY: 1770.00 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

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	H	-	-	-70.17	7.28	-62.88	-49.9
5310.00	H	-	-	-68.95	7.87	-61.08	-48.1
7080.00	H	-	-	-67.69	9.20	-58.49	-45.5

Table 7-57. Radiated Spurious Data (Band 66/4 – High Channel)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 304 of 363

Band 25/2



Plot 7-443. Radiated Spurious Plot above 1GHz (Band 25/2)

OPERATING FREQUENCY: 1860.00 MHz

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	-	-	-69.92	7.21	-62.70	-49.7
5580.00	H	-	-	-69.33	8.27	-61.06	-48.1
7440.00	H	-	-	-67.50	9.58	-57.92	-44.9

Table 7-58. Radiated Spurious Data (Band 25/2 – Low Channel)

FCC ID: BCGA2153	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 305 of 363

OPERATING FREQUENCY: 1882.50 MHz
 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	150	46	-69.80	7.24	-62.55	-49.6
5647.50	H	-	-	-68.92	8.16	-60.76	-47.8
7530.00	H	-	-	-67.20	9.69	-57.51	-44.5

Table 7-59. Radiated Spurious Data (Band 25/2 – Mid Channel)

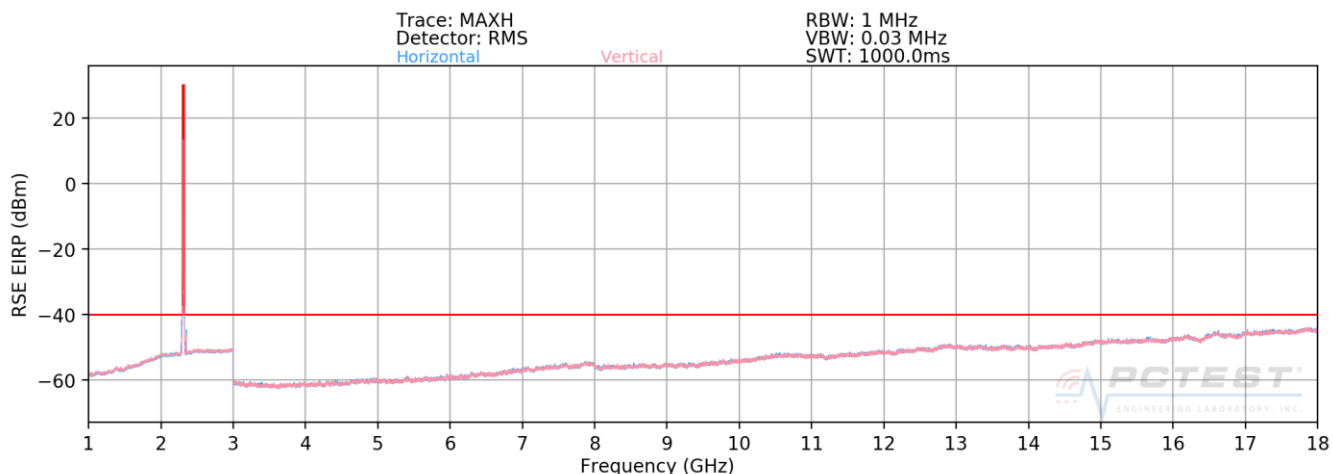
OPERATING FREQUENCY: 1905.00 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

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	110	306	-69.06	7.37	-61.69	-48.7
5715.00	H	-	-	-68.90	8.05	-60.84	-47.8
7620.00	H	-	-	-67.31	9.65	-57.66	-44.7
9525.00	H	-	-	-67.06	10.67	-56.39	-43.4

Table 7-60. Radiated Spurious Data (Band 25/2 – High Channel)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 306 of 363

Band 30



Plot 7-444. Radiated Spurious Plot 1GHz - 18GHz (Band 30)

OPERATING FREQUENCY: 2307.50 MHz
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	-	-	-70.60	7.81	-62.79	-22.8
6922.50	H	-	-	-69.51	9.02	-60.49	-20.5
9230.00	H	-	-	-68.58	10.50	-58.08	-18.1

Table 7-61. Radiated Spurious Data (Band 30 – Low Channel)

FCC ID: BCGA2153	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 307 of 363

OPERATING FREQUENCY: 2310.00 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 10.0 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	-	-	-68.69	7.80	-60.89	-20.9
6930.00	H	-	-	-67.40	9.03	-58.37	-18.4
9240.00	H	-	-	-66.38	10.50	-55.88	-15.9

Table 7-62. Radiated Spurious Data (Band 30 – Mid Channel)

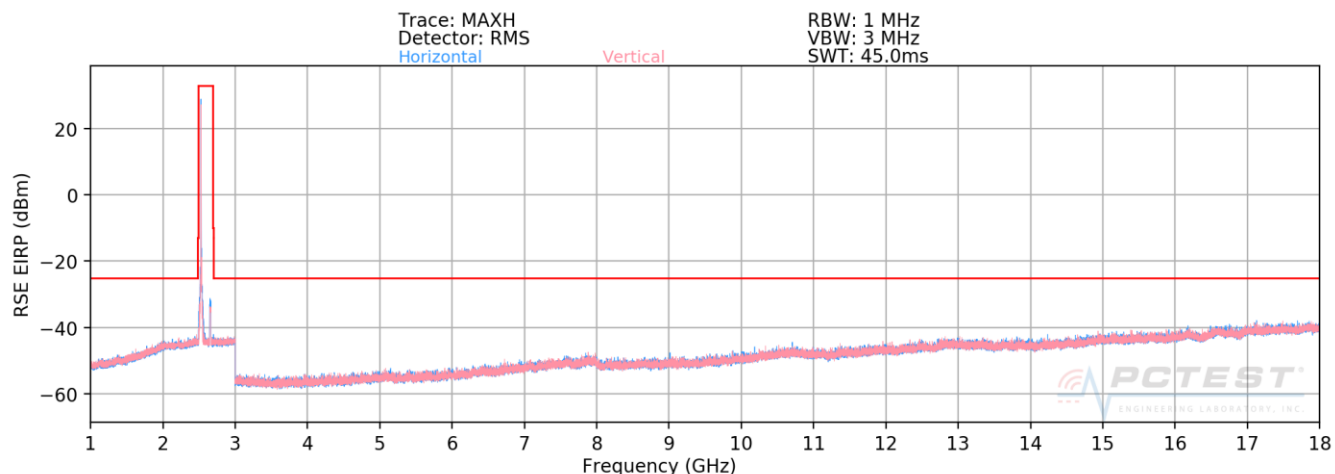
OPERATING FREQUENCY: 2312.50 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 5.0 MHz
 DISTANCE: 3 meters
 LIMIT: -40 dBm

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	-	-	-69.44	7.80	-61.64	-21.6
6937.50	H	-	-	-67.90	9.05	-58.85	-18.8
9250.00	H	-	-	-67.35	10.50	-56.85	-16.8

Table 7-63. Radiated Spurious Data (Band 30 – High Channel)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 308 of 363

Band 7



Plot 7-445. Radiated Spurious Plot 1GHz - 18GHz (Band 7)

OPERATING FREQUENCY: 2510.00 MHz
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	-	-	-68.71	8.16	-60.55	-35.5
7530.00	H	-	-	-66.62	9.69	-56.93	-31.9
10040.00	H	-	-	-65.43	10.48	-54.95	-29.9
12550.00	H	-	-	-62.88	10.82	-52.06	-27.1

Table 7-64. Radiated Spurious Data (Band 7 – Low Channel)

FCC ID: BCGA2153	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 309 of 363

OPERATING FREQUENCY: 2535.00 MHz
 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	-	-	-69.49	8.06	-61.43	-36.4
7605.00	H	-	-	-67.23	9.66	-57.57	-32.6
10140.00	H	-	-	-66.17	10.44	-55.72	-30.7
12675.00	H	-	-	-64.04	10.87	-53.17	-28.2

Table 7-65. Radiated Spurious Data (Band 7 – Mid Channel)

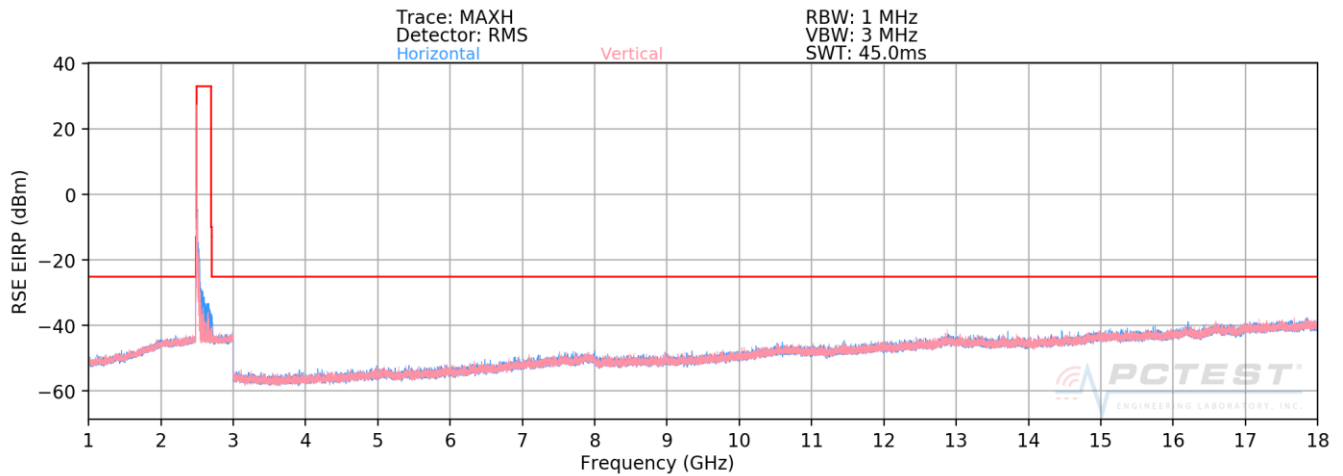
OPERATING FREQUENCY: 2560.00 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -25 dBm

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	-	-	-69.21	7.96	-61.25	-36.2
7680.00	H	-	-	-67.06	9.63	-57.43	-32.4
10240.00	H	-	-	-65.41	10.40	-55.00	-30.0
12800.00	H	-	-	-62.72	10.96	-51.76	-26.8

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

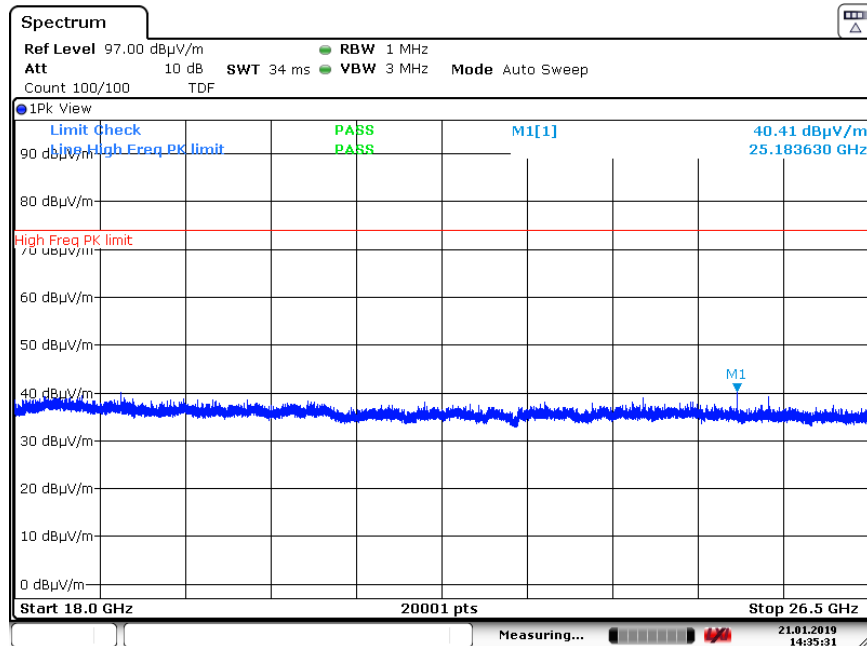
FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 310 of 363

Band 41

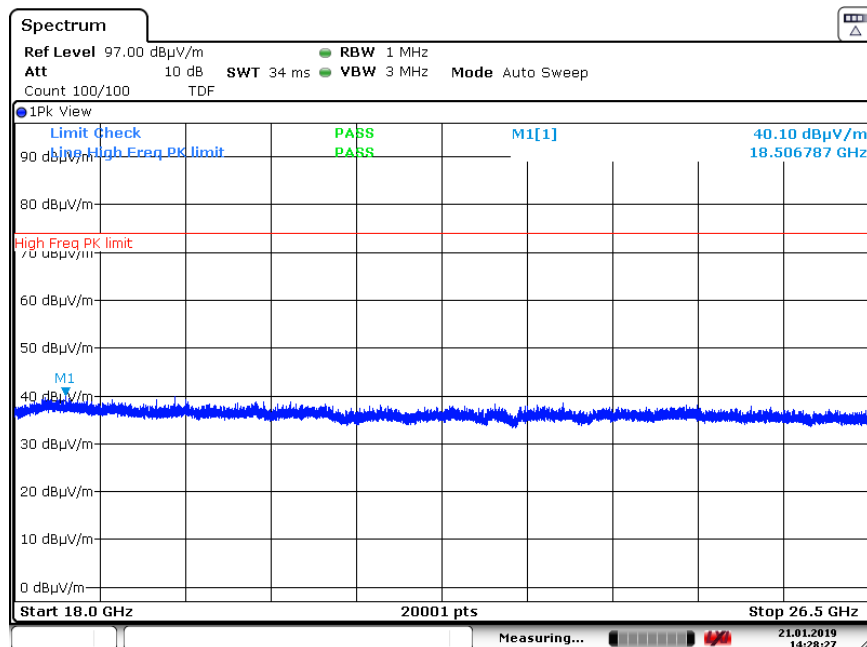


Plot 7-446. Radiated Spurious Plot 1GHz - 18GHz (Band 41)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 311 of 363



Plot 7-447. Radiated Spurious Plot 18GHz – 26.5GHz (Band 41, Pol. H)



Plot 7-448. Radiated Spurious Plot 18GHz – 26.5GHz (Band 41, Pol. V)

FCC ID: BCGA2153	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 312 of 363

OPERATING FREQUENCY: 2506.00 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20MHz 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	-	-	-58.93	8.18	-50.76	-25.8
7518.00	H	-	-	-57.43	9.69	-47.74	-22.7
10024.00	H	-	-	-56.20	10.49	-45.71	-20.7
12530.00	H	-	-	-53.80	10.81	-42.99	-18.0
15036.00	H	-	-	-52.04	11.80	-40.24	-15.2
17542.00	H	-	-	-49.15	11.17	-37.98	-13.0

Table 7-67. Radiated Spurious Data (Band 41 – Low Channel)

OPERATING FREQUENCY: 2593.00 MHz
 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	-	-	-59.35	7.83	-51.53	-26.5
7779.00	H	-	-	-57.12	9.66	-47.46	-22.5
10372.00	H	-	-	-55.84	10.30	-45.54	-20.5
12965.00	H	-	-	-53.98	11.16	-42.82	-17.8
15558.00	H	-	-	-51.29	11.28	-40.01	-15.0

Table 7-68. Radiated Spurious Data (Band 41 – Mid Channel)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 313 of 363

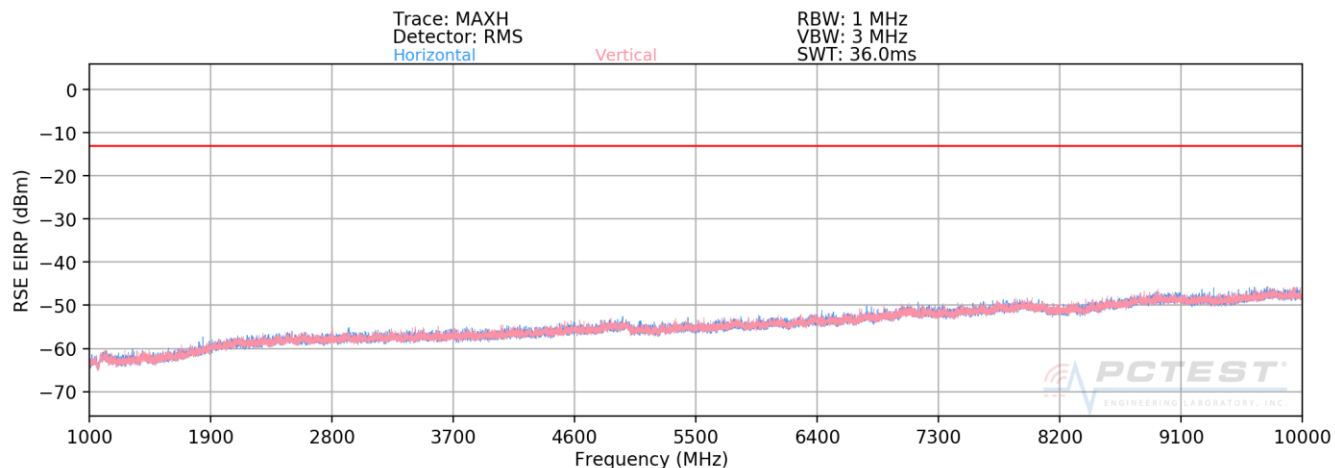
OPERATING FREQUENCY: 2680.00 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20MHz MHz
 DISTANCE: 3 meters
 LIMIT: -25 dBm

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	-	-	-59.03	8.01	-51.02	-26.0
8040.00	H	-	-	-57.94	10.07	-47.87	-22.9
10720.00	H	-	-	-55.26	10.64	-44.62	-19.6
13400.00	H	-	-	-52.94	11.12	-41.82	-16.8
16080.00	H	-	-	-49.81	10.53	-39.28	-14.3

Table 7-69. Radiated Spurious Data (Band 41 – High Channel)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 314 of 363

7.9.2 ANT WF5 (Port B) Radiated Spurious Emissions Measurements Band 71



Plot 7-449. Radiated Spurious Plot above 1GHz (Band 71)

OPERATING FREQUENCY: 673.00 MHz

MODULATION SIGNAL: QPSK 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]
1346.00	H	-	-	-62.74	3.29	-59.45	-46.4
2019.00	H	382	178	-54.42	4.11	-50.30	-37.3
2692.00	H	-	-	-61.40	5.91	-55.49	-42.5
3365.00	H	-	-	-63.25	7.25	-56.01	-43.0
4038.00	H	-	-	-63.36	7.85	-55.50	-42.5

Table 7-70. Radiated Spurious Data (Band 71 – Low Channel)

FCC ID: BCGA2153	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 315 of 363

OPERATING FREQUENCY: 680.50 MHz
 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]
1361.00	H	-	-	-62.61	3.43	-59.18	-46.2
2041.50	H	354	139	-56.26	4.24	-52.02	-39.0
2722.00	H	-	-	-60.40	5.96	-54.45	-41.4
3402.50	H	-	-	-61.83	7.26	-54.56	-41.6
4083.00	H	-	-	-62.39	7.80	-54.59	-41.6

Table 7-71. Radiated Spurious Data (Band 71 – Mid Channel)

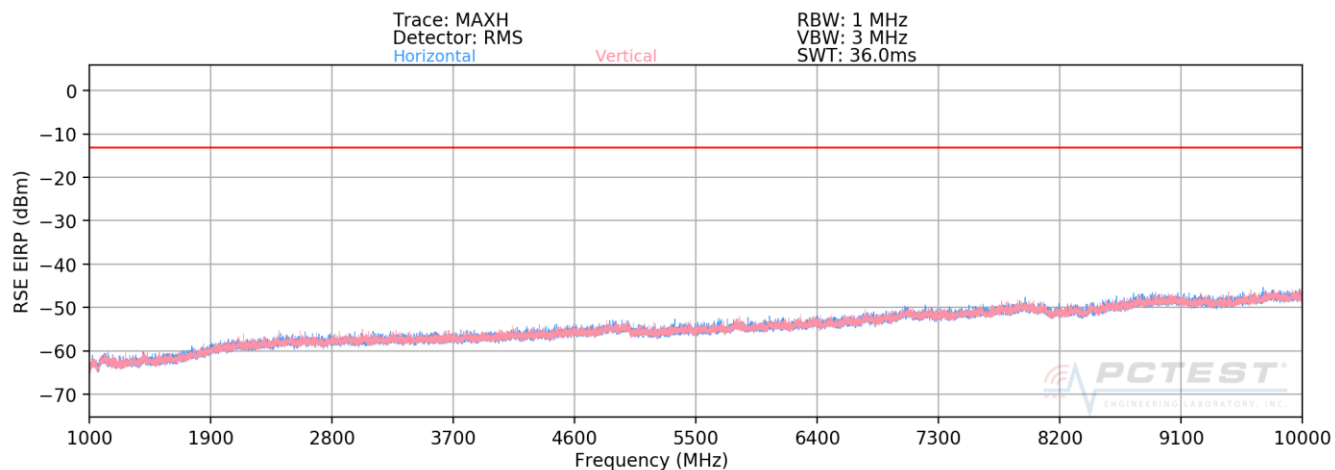
OPERATING FREQUENCY: 688.00 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

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]
1376.00	H	-	-	-63.67	3.56	-60.11	-47.1
2064.00	H	358	178	-57.19	4.37	-52.81	-39.8
2752.00	H	-	-	-61.57	6.00	-55.57	-42.6
3440.00	H	-	-	-62.98	7.28	-55.71	-42.7
4128.00	H	-	-	-62.77	7.74	-55.03	-42.0

Table 7-72. Radiated Spurious Data (Band 71 – High Channel)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 316 of 363

Band 12/17



Plot 7-450. Radiated Spurious Plot above 1GHz (Band 12/17)

OPERATING FREQUENCY: 704.00 MHz

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	H	-	-	-63.26	3.84	-59.43	-46.4
2112.00	H	-	-	-60.62	4.65	-55.97	-43.0
2816.00	H	-	-	-62.21	6.03	-56.18	-43.2

Table 7-73. Radiated Spurious Data (Band 12/17 – Low Channel)

FCC ID: BCGA2153	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 317 of 363

OPERATING FREQUENCY: 707.50 MHz
 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	H	-	-	-64.06	3.90	-60.17	-47.2
2122.50	H	-	-	-61.50	4.71	-56.79	-43.8
2830.00	H	-	-	-61.67	6.03	-55.64	-42.6

Table 7-74. Radiated Spurious Data (Band 12/17 – Mid Channel)

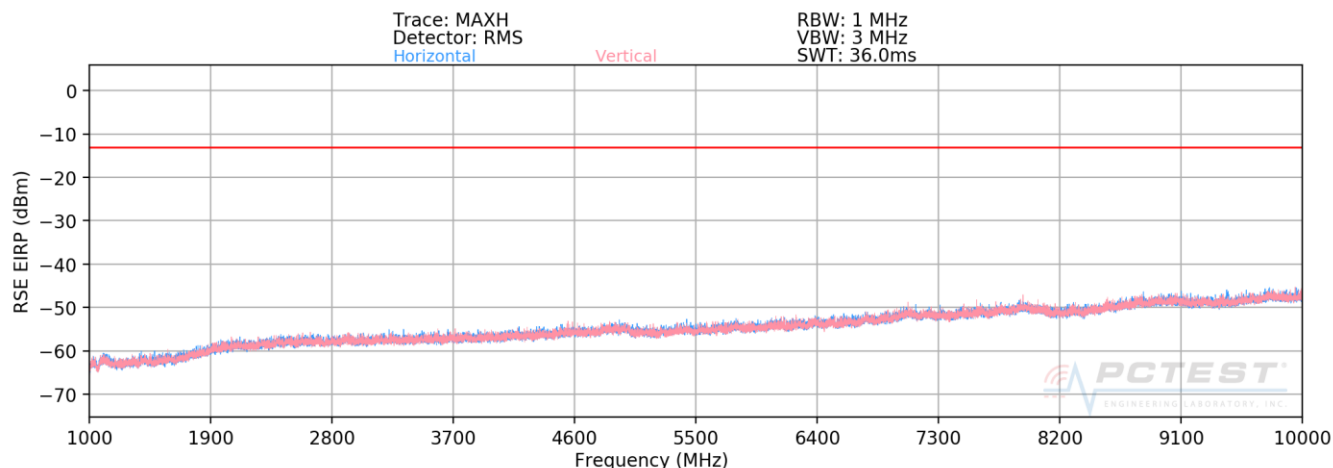
OPERATING FREQUENCY: 711.00 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 10.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

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	H	-	-	-64.41	3.96	-60.45	-47.5
2133.00	H	-	-	-60.90	4.77	-56.14	-43.1
2844.00	H	-	-	-61.98	6.04	-55.94	-42.9

Table 7-75. Radiated Spurious Data (Band 12/17 – High Channel)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 318 of 363

Band 13



Plot 7-451. Radiated Spurious Plot above 1GHz (Band 13)

OPERATING FREQUENCY: 779.50 MHz
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	H	-	-	-69.86	5.47	-64.39	-51.4
3118.00	H	-	-	-69.82	6.63	-63.19	-50.2
3897.50	H	-	-	-70.48	7.62	-62.86	-49.9

Table 7-76. Radiated Spurious Data (Band 13 – Low Channel)

FCC ID: BCGA2153	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 319 of 363

OPERATING FREQUENCY: 782.00 MHz
 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]
2346.00	H	-	-	-69.60	5.48	-64.12	-51.1
3128.00	H	-	-	-70.06	6.67	-63.38	-50.4
3910.00	H	-	-	-70.50	7.65	-62.85	-49.8

Table 7-77. Radiated Spurious Data (Band 13 – Mid Channel)

OPERATING FREQUENCY: 784.50 MHz
 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	H	-	-	-69.78	5.49	-64.30	-51.3
3138.00	H	-	-	-69.98	6.72	-63.27	-50.3
3922.50	H	-	-	-70.18	7.69	-62.49	-49.5

Table 7-78. Radiated Spurious Data (Band 13 – High Channel)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 320 of 363

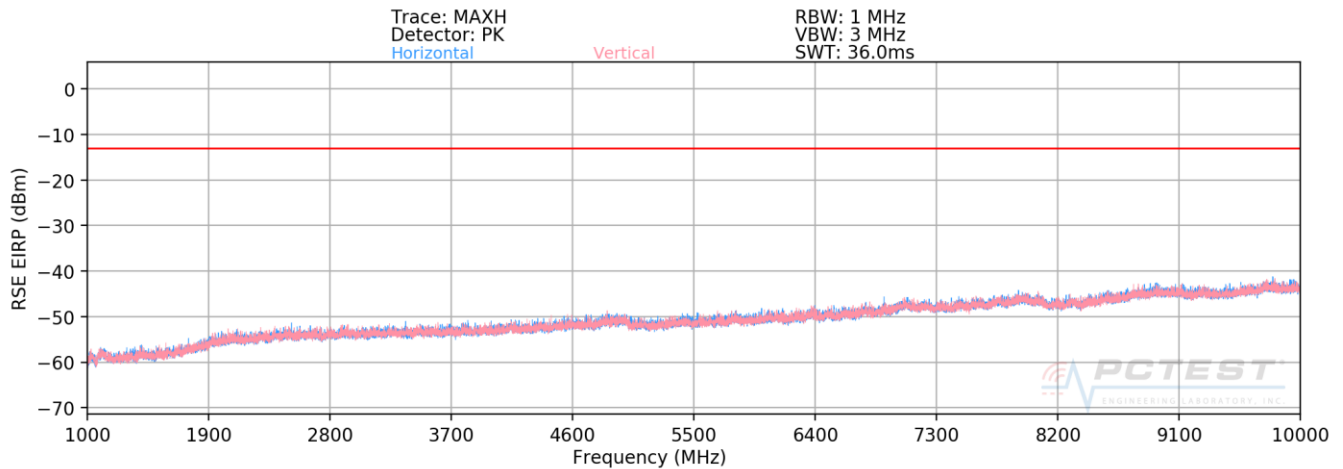
MODULATION SIGNAL:	QPSK
BANDWIDTH:	5.00 MHz
DISTANCE:	3 meters
NARROWBAND EMISSION LIMIT:	-50 dBm
WIDEBAND EMISSION LIMIT:	-40 dBm/MHz

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	H	-	-	-72.19	4.55	-67.64	-27.6
1564.00	H	-	-	-72.32	4.55	-67.77	-27.8
1569.00	H	-	-	-72.38	4.54	-67.84	-27.8

Table 7-79. Radiated Spurious Data (Band 13 – 1559-1610MHz Band)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 321 of 363

Band 26/5



Plot 7-452. Radiated Spurious Plot above 1GHz (Band 26/5)

OPERATING FREQUENCY: 829.00 MHz
MODULATION SIGNAL: OPSK
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	-	-	-71.49	4.49	-67.01	-54.0
2477.00	H	-	-	-68.82	5.57	-63.25	-50.2
3296.00	H	-	-	-70.36	7.21	-63.14	-50.1

Table 7-80. Radiated Spurious Data (Band 26/5 – Low Channel)

FCC ID: BCGA2153	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 322 of 363

OPERATING FREQUENCY: 836.50 MHz
 MODULATION SIGNAL: OPSK
 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	-	-	-71.21	4.47	-66.74	-53.7
2504.50	H	-	-	-68.83	5.60	-63.23	-50.2
3336.00	H	-	-	-70.03	7.23	-62.80	-49.8

Table 7-81. Radiated Spurious Data (Band 26/5 – Mid Channel)

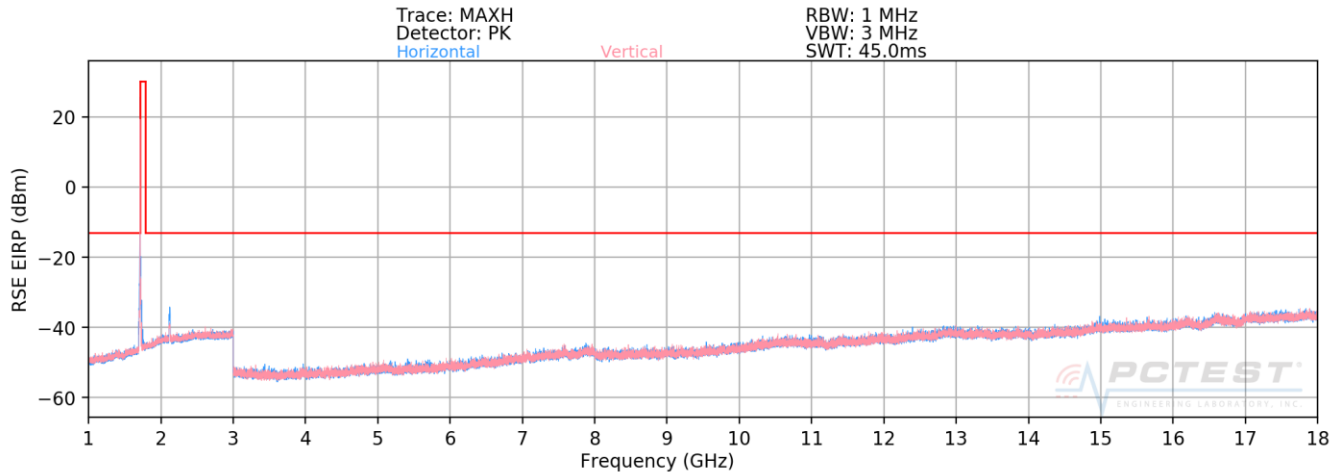
OPERATING FREQUENCY: 844.00 MHz
 MODULATION SIGNAL: OPSK
 BANDWIDTH: 10.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

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	-	-	-71.48	4.45	-67.03	-54.0
2532.00	H	-	-	-69.37	5.65	-63.72	-50.7
3376.00	H	-	-	-70.63	7.25	-63.38	-50.4

Table 7-82. Radiated Spurious Data (Band 26/5 – High Channel)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 323 of 363

Band 66/4



Plot 7-453. Radiated Spurious Plot above 1GHz (Band 66/4)

OPERATING FREQUENCY: 1720.00 MHz
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	H	-	-	-69.78	7.28	-62.51	-49.5
5160.00	H	-	-	-69.33	7.88	-61.46	-48.5
6880.00	H	-	-	-67.91	8.91	-58.99	-46.0

Table 7-83. Radiated Spurious Data (Band 66/4 – Low Channel)

FCC ID: BCGA2153	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 324 of 363

OPERATING FREQUENCY: 1745.00 MHz
 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	H	-	-	-70.08	7.30	-62.78	-49.8
5235.00	H	-	-	-69.08	7.73	-61.35	-48.3
6980.00	H	-	-	-67.96	9.15	-58.81	-45.8

Table 7-84. Radiated Spurious Data (Band 66/4 – Mid Channel)

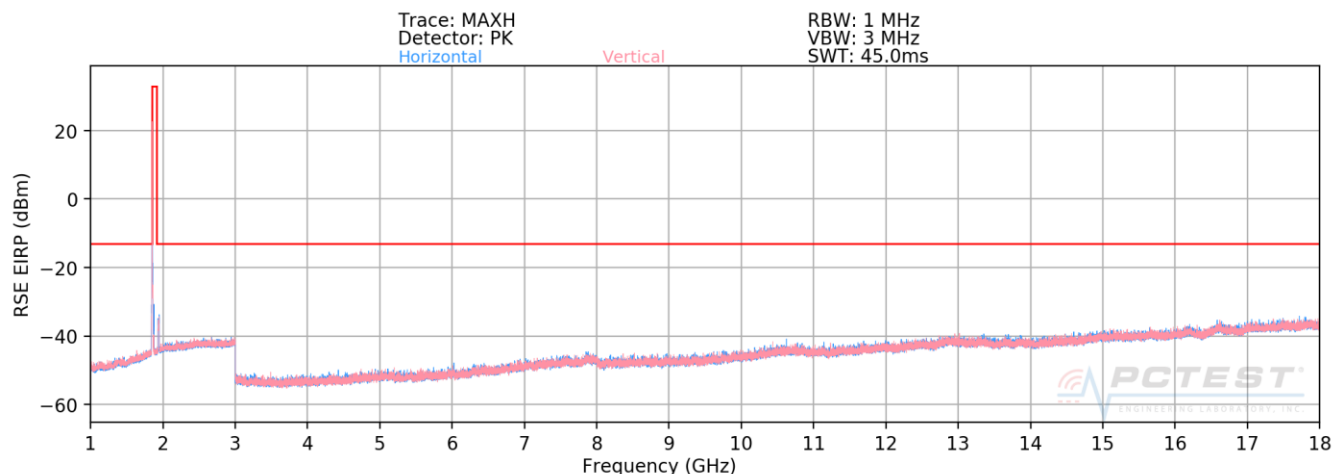
OPERATING FREQUENCY: 1770.00 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

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	H	-	-	-70.12	7.28	-62.83	-49.8
5310.00	H	-	-	-68.90	7.87	-61.03	-48.0
7080.00	H	-	-	-67.73	9.20	-58.53	-45.5

Table 7-85. Radiated Spurious Data (Band 66/4 – High Channel)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 325 of 363

Band 25/2



Plot 7-454. Radiated Spurious Plot above 1GHz (Band 25/2)

OPERATING FREQUENCY: 1860.00 MHz
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	-	-	-70.05	7.21	-62.83	-49.8
5580.00	H	-	-	-69.34	8.27	-61.07	-48.1
7440.00	H	-	-	-67.63	9.58	-58.05	-45.0

Table 7-86. Radiated Spurious Data (Band 25/2 – Low Channel)

FCC ID: BCGA2153	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 326 of 363

OPERATING FREQUENCY: 1882.50 MHz
 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	-	-	-69.70	7.24	-62.45	-49.5
5647.50	H	-	-	-68.95	8.16	-60.79	-47.8
7530.00	H	-	-	-67.21	9.69	-57.52	-44.5

Table 7-87. Radiated Spurious Data (Band 25/2 – Mid Channel)

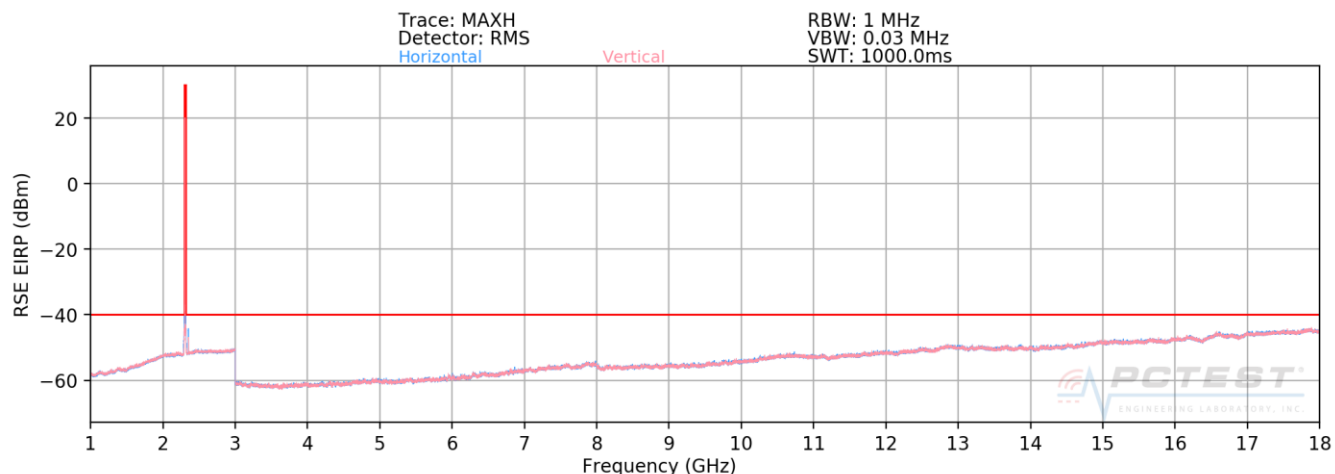
OPERATING FREQUENCY: 1905.00 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

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	-	-	-69.97	7.37	-62.60	-49.6
5715.00	H	-	-	-68.97	8.05	-60.91	-47.9
7620.00	H	-	-	-67.43	9.65	-57.78	-44.8

Table 7-88. Radiated Spurious Data (Band 25/2 – High Channel)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 327 of 363

Band 30



Plot 7-455. Radiated Spurious Plot 1GHz - 18GHz (Band 30)

OPERATING FREQUENCY: 2307.50 MHz
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	-	-	-69.52	7.81	-61.71	-21.7
6922.50	H	-	-	-67.93	9.02	-58.91	-18.9
9230.00	H	-	-	-67.39	10.50	-56.89	-16.9

Table 7-89. Radiated Spurious Data (Band 30 – Low Channel)

FCC ID: BCGA2153	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 328 of 363

OPERATING FREQUENCY: 2310.00 MHz
 MODULATION SIGNAL: GFSK
 BANDWIDTH: 10.0 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	-	-	-69.17	7.80	-61.37	-21.4
6930.00	H	-	-	-67.25	9.03	-58.22	-18.2
9240.00	H	-	-	-66.53	10.50	-56.03	-16.0

Table 7-90. Radiated Spurious Data (Band 30 – Mid Channel)

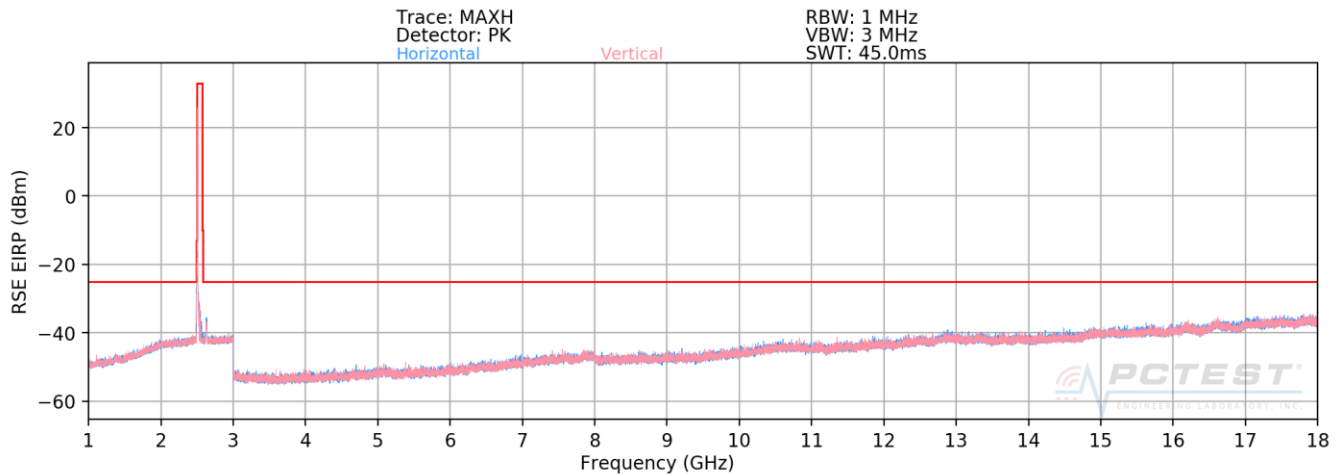
OPERATING FREQUENCY: 2312.50 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 5.0 MHz
 DISTANCE: 3 meters
 LIMIT: -40 dBm

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	-	-	-69.39	7.80	-61.59	-21.6
6937.50	H	-	-	-67.93	9.05	-58.88	-18.9
9250.00	H	-	-	-67.36	10.50	-56.86	-16.9

Table 7-91. Radiated Spurious Data (Band 30 – High Channel)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 329 of 363

Band 7



Plot 7-456. Radiated Spurious Plot 1GHz - 18GHz (Band 7)

OPERATING FREQUENCY: 2510.00 MHz
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	-	-	-69.39	8.16	-61.23	-36.2
7530.00	H	-	-	-65.32	9.69	-55.63	-30.6
10040.00	H	-	-	-66.47	10.48	-55.99	-31.0

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

FCC ID: BCGA2153	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 330 of 363

OPERATING FREQUENCY: 2535.00 MHz
 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	-	-	-69.61	8.06	-61.55	-36.6
7605.00	H	-	-	-67.28	9.66	-57.62	-32.6
10140.00	H	-	-	-65.92	10.44	-55.47	-30.5

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

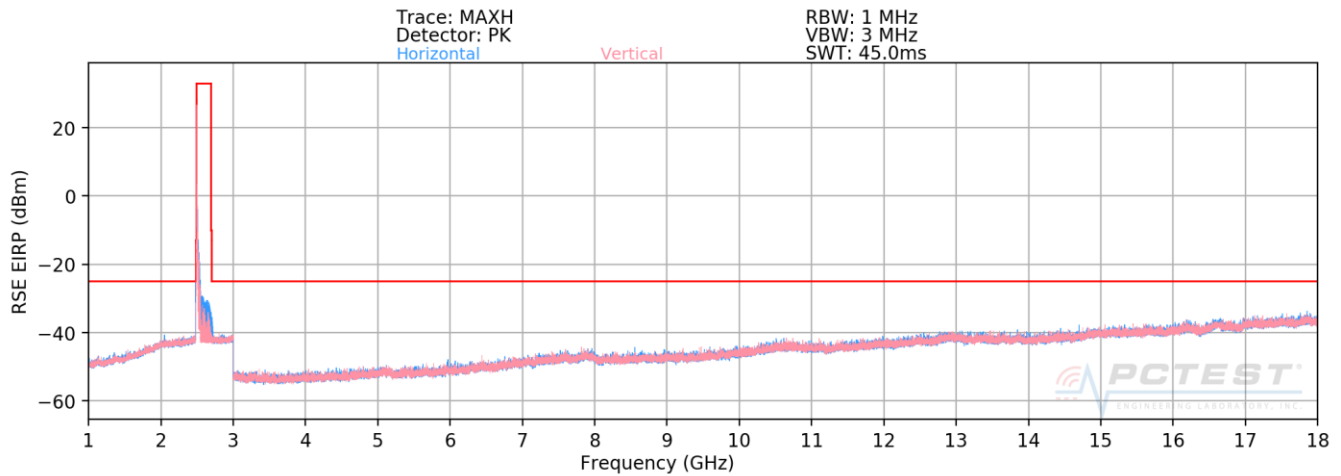
OPERATING FREQUENCY: 2560.00 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -25 dBm

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	-	-	-69.78	7.96	-61.82	-36.8
7680.00	H	-	-	-67.63	9.63	-58.00	-33.0
10240.00	H	-	-	-65.93	10.40	-55.52	-30.5

Table 7-94. Radiated Spurious Data (Band 7 – High Channel)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 331 of 363

Band 41



Plot 7-457. Radiated Spurious Plot 1GHz - 18GHz (Band 41)

OPERATING FREQUENCY: 2506.00 MHz
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	-	-	-59.74	8.18	-51.57	-26.6
7518.00	H	-	-	-57.32	9.69	-47.63	-22.6
10024.00	H	-	-	-57.32	10.49	-46.83	-21.8

Table 7-95. Radiated Spurious Data (Band 41 – Low Channel)

FCC ID: BCGA2153	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 332 of 363

OPERATING FREQUENCY: 2593.00 MHz
 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	-	-	-59.18	7.83	-51.36	-26.4
7779.00	H	-	-	-56.39	9.66	-46.73	-21.7
10372.00	H	-	-	-55.41	10.30	-45.11	-20.1

Table 7-96. Radiated Spurious Data (Band 41 – Mid Channel)

OPERATING FREQUENCY: 2680.00 MHz
 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	-	-	-58.72	8.01	-50.71	-25.7
8040.00	H	-	-	-57.37	10.07	-47.30	-22.3
10720.00	H	-	-	-54.91	10.64	-44.27	-19.3

Table 7-97. Radiated Spurious Data (Band 41 – High Channel)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 333 of 363

7.10 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: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 334 of 363

Test Setup

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

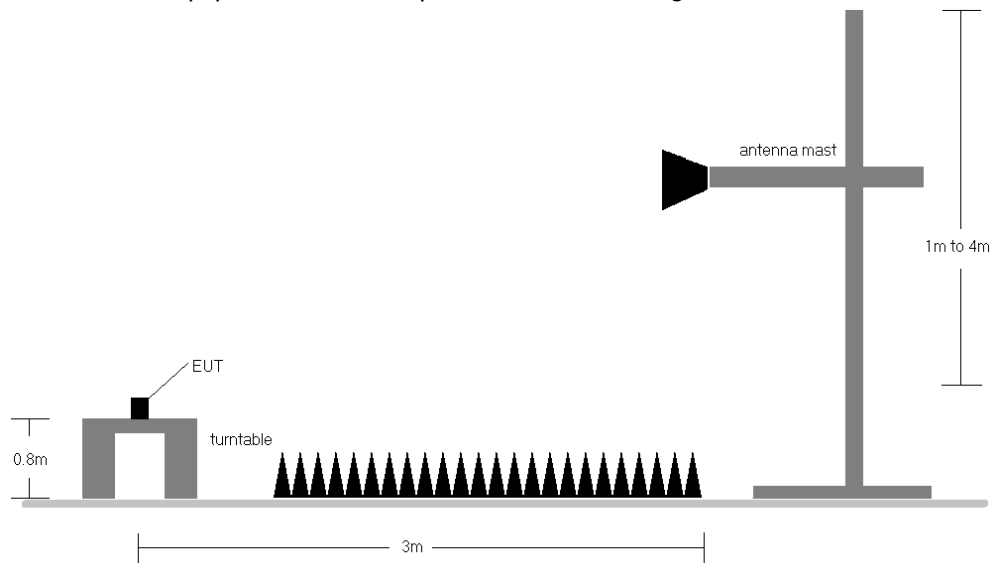


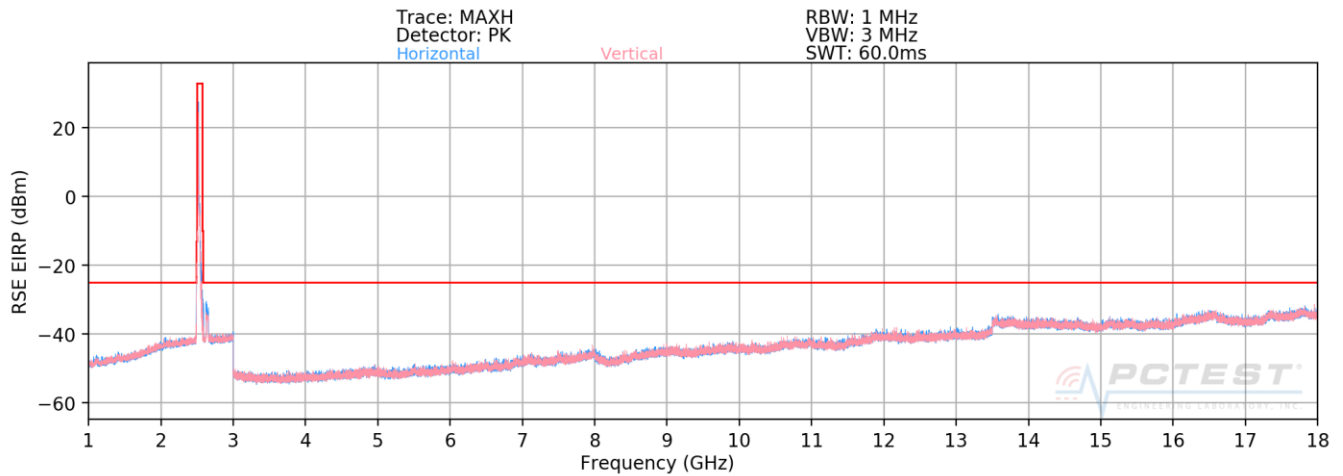
Figure 7-9. Test Instrument & Measurement Setup

Test Notes

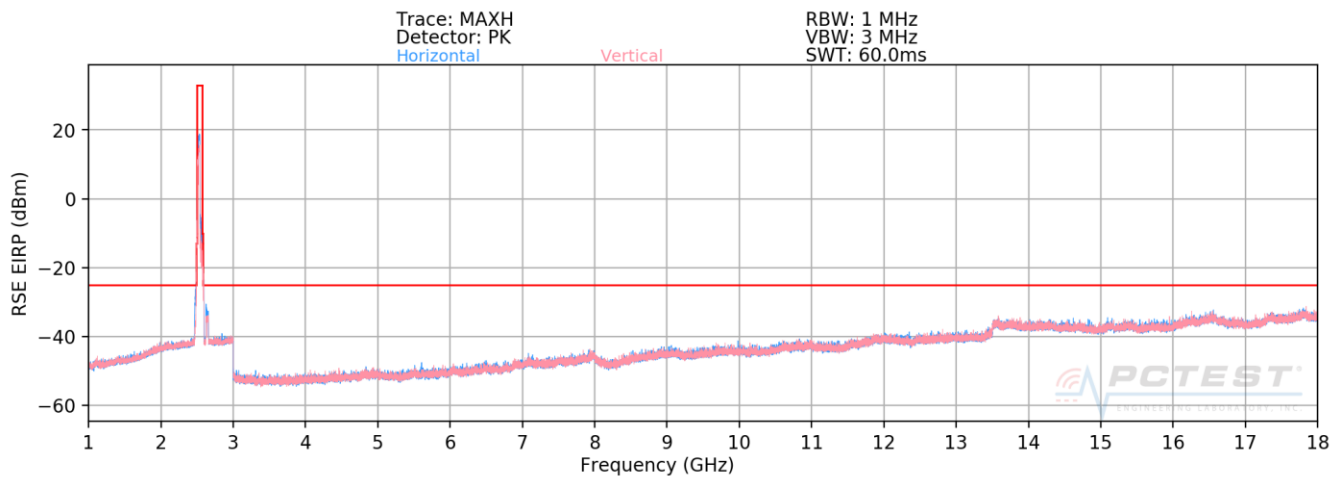
- 1) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The worst case emissions are reported with the EUT positioning, modulations, RB sizes and offsets, and channel bandwidth configurations shown in the tables below.
- 2) This unit was tested with 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: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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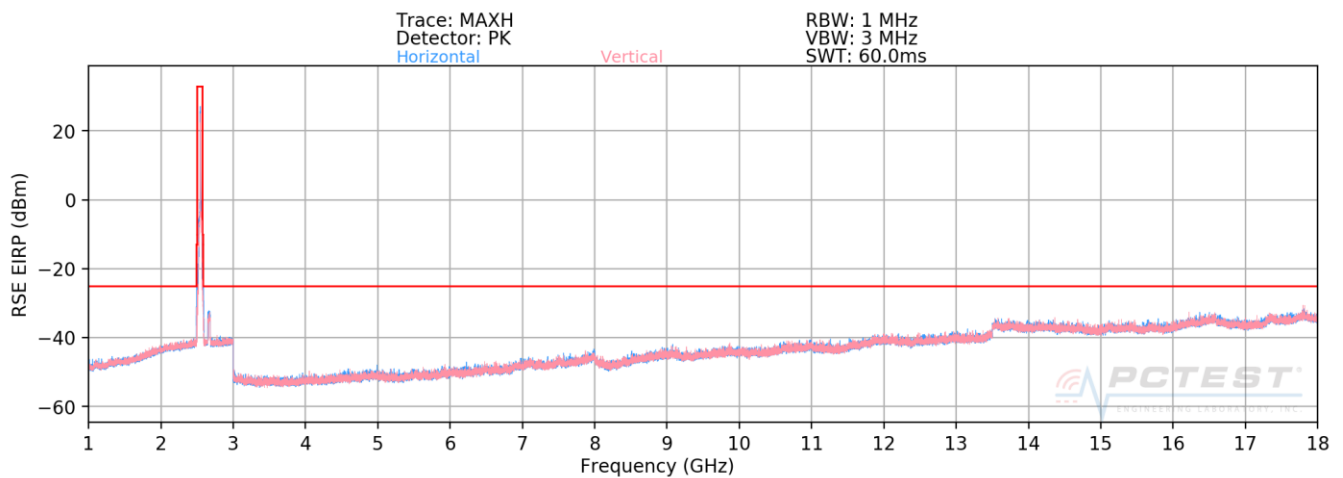
Band 7



Plot 7-458. Radiated Spurious Plot (ULCA B7 PCC: RB 1 Offset 99, SCC: RB 1 Offset 0 – Low Channel)

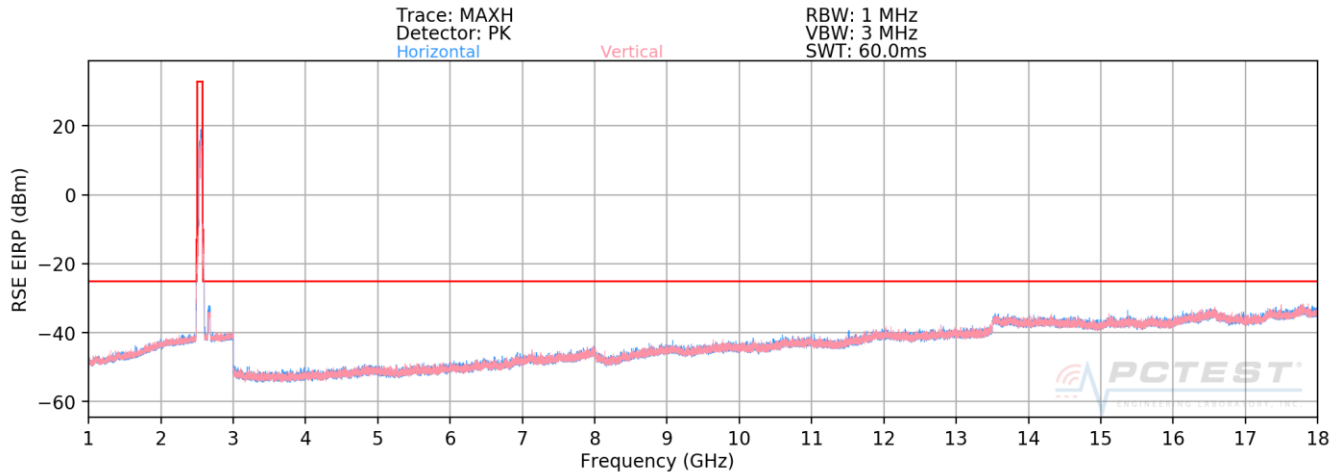


Plot 7-459. Radiated Spurious Plot (ULCA B7 PCC: RB 100 Offset 0, SCC: RB 100 Offset 0 – Low Channel)

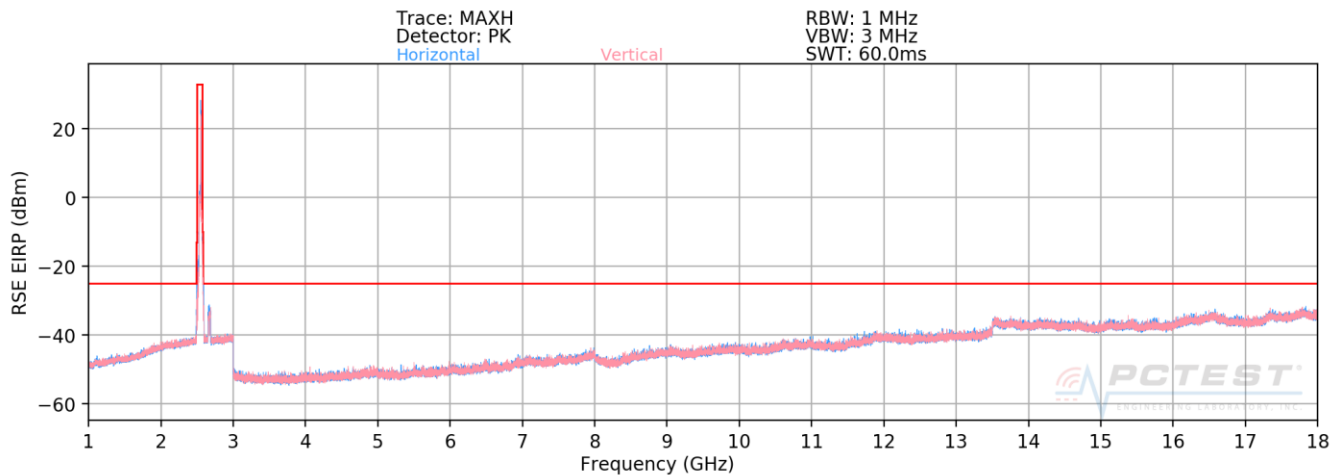


Plot 7-460. Radiated Spurious Plot (ULCA B7 PCC: RB 1 Offset 0, SCC: RB 1 Offset 99 – Mid Channel)

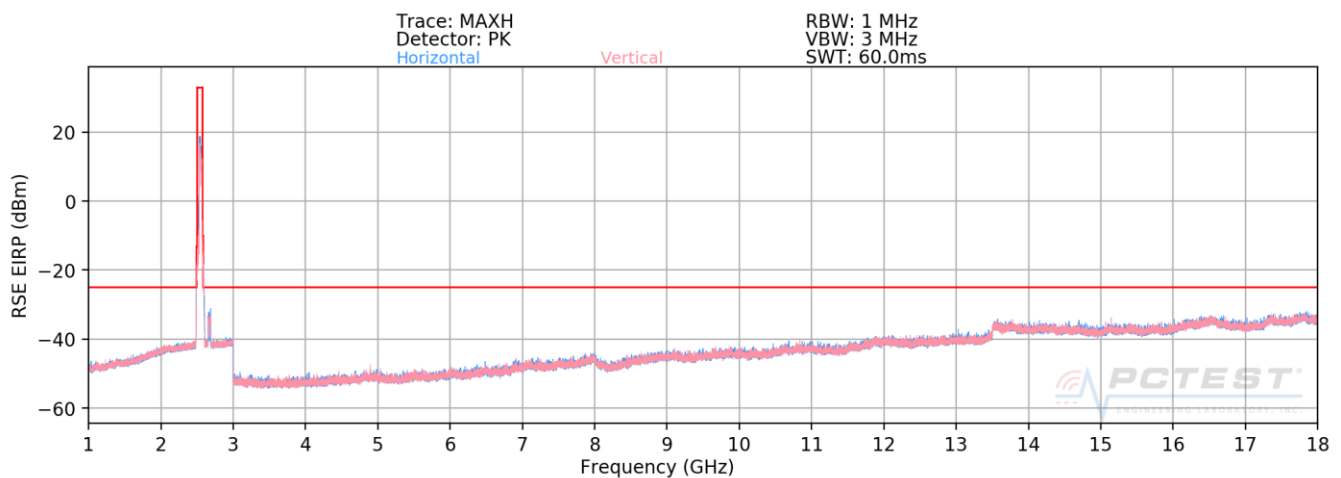
FCC ID: BCGA2153	PCTEST ENGINEERING LABORATORY, INC.		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device		Page 336 of 363



Plot 7-461. Radiated Spurious Plot (ULCA B7 PCC: RB 100 Offset 0, SCC: RB 100 Offset 0 – Mid Channel)



Plot 7-462. Radiated Spurious Plot (ULCA B7 PCC: RB 1 Offset 0, SCC: RB 1 Offset 99 – High Channel)



Plot 7-463. Radiated Spurious Plot (ULCA B7 PCC: RB 100 Offset 0, SCC: RB 100 Offset 0 – High Channel)

FCC ID: BCGA2153	PCTEST ENGINEERING LABORATORY, INC.		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device		Page 337 of 363

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	-	-	-68.09	8.06	-60.03	-60.0
7530.00	H	-	-	-65.86	9.66	-56.20	-56.2
10040.00	H	-	-	-63.54	10.44	-53.09	-53.1

Table 7-98. 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	-	-	-68.33	8.06	-60.27	-60.3
7605.00	H	-	-	-66.10	9.66	-56.45	-56.4
10140.00	H	-	-	-63.84	10.44	-53.40	-53.4

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

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 338 of 363

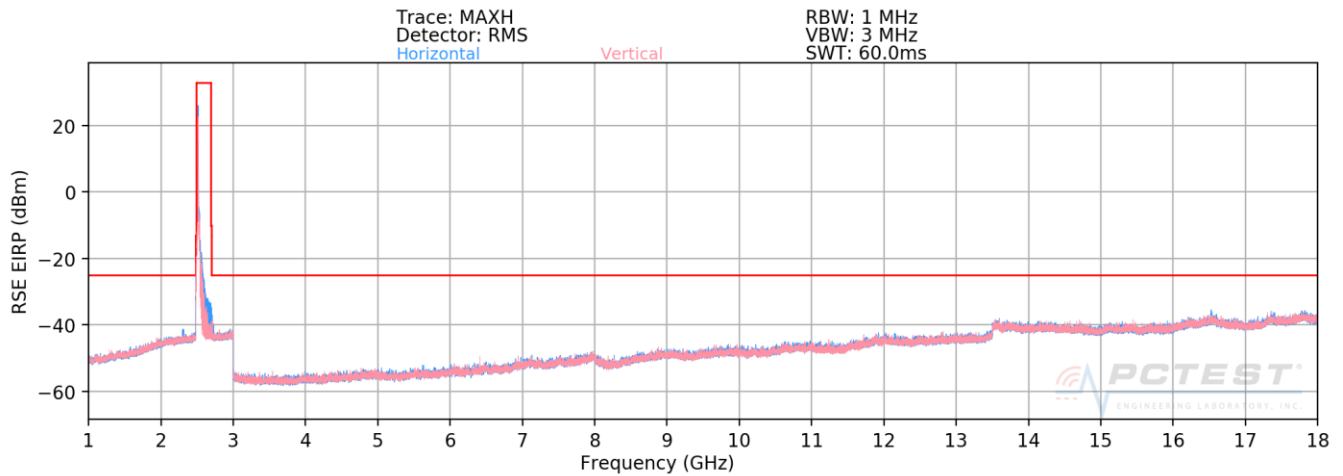
OPERATING FREQUENCY (PCC):	2560.00	MHz
OPERATING FREQUENCY (SCC):	2540.20	MHz
CHANNEL (PCC):	21350	
CHANNEL (SCC):	21152	
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	20.0	MHz
DISTANCE:	3	meters
LIMIT:	-25	dBm

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	-	-	-68.60	7.96	-60.64	-60.6
7680.00	H	-	-	-66.24	9.63	-56.61	-56.6
10240.00	H	-	-	-63.81	10.40	-53.40	-53.4

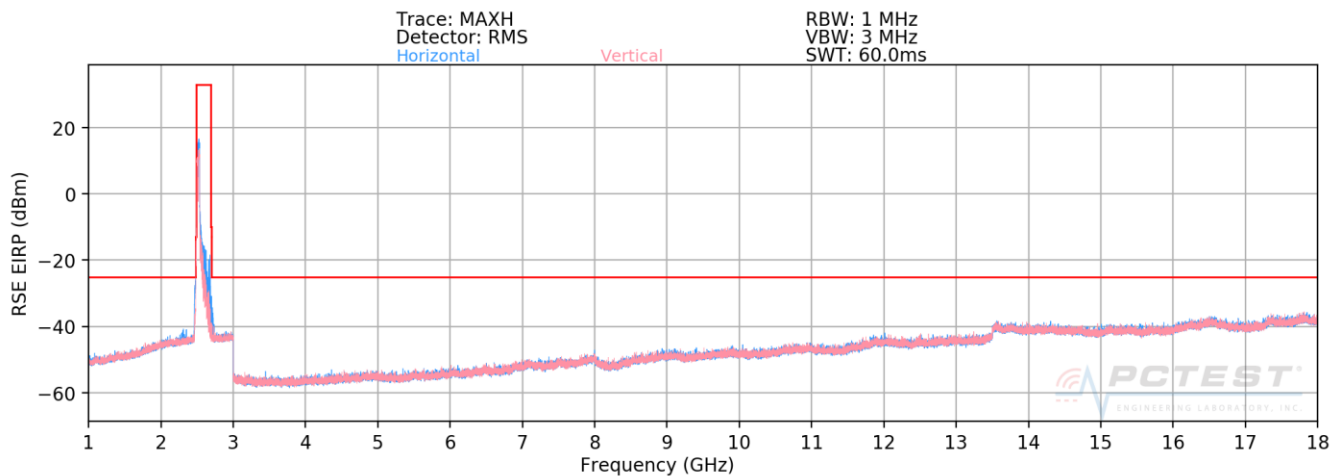
Table 7-100. Radiated Spurious Data (ULCA B7 PCC: RB 1 Offset 0, SCC: RB 1 Offset 99 – High Channel)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 339 of 363

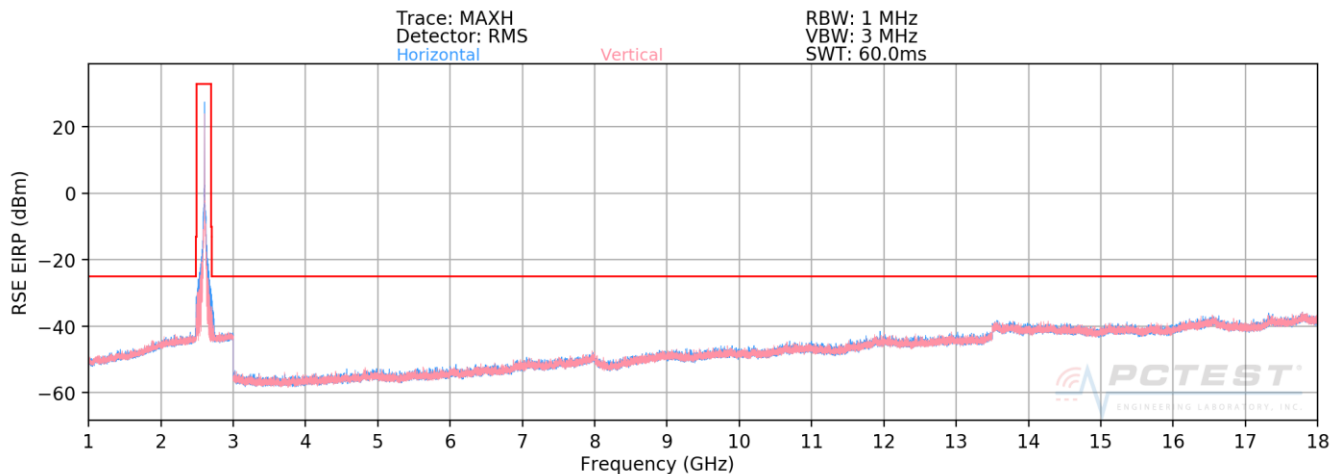
Band 41



Plot 7-464. Radiated Spurious Plot (ULCA B41 PCC: RB 1 Offset 99, SCC: RB 1 Offset 0 – Low Channel)

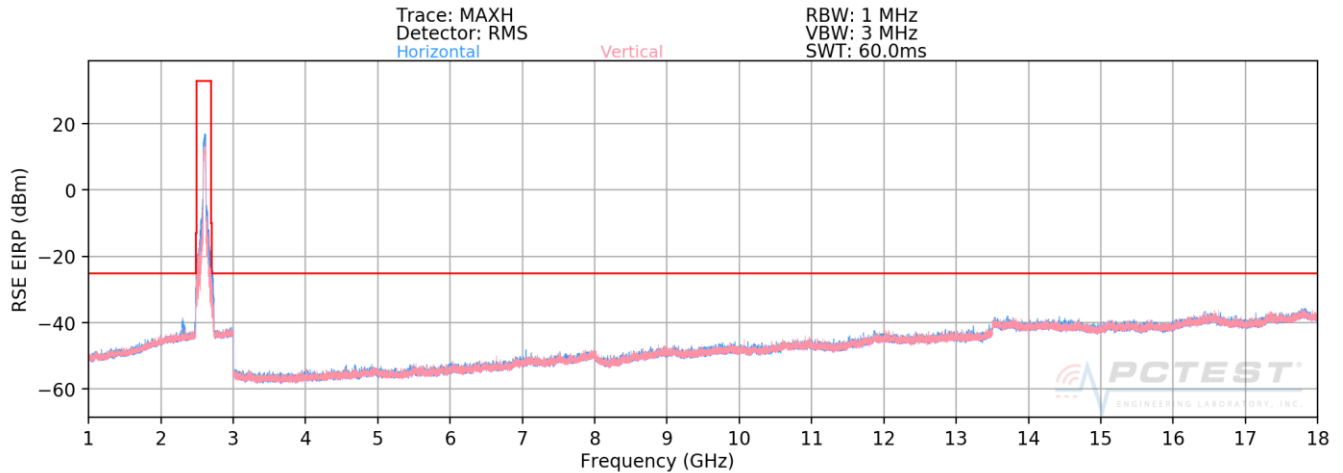


Plot 7-465. Radiated Spurious Plot (ULCA B41 PCC: RB 100 Offset 0, SCC: RB 100 Offset 0 – Low Channel)

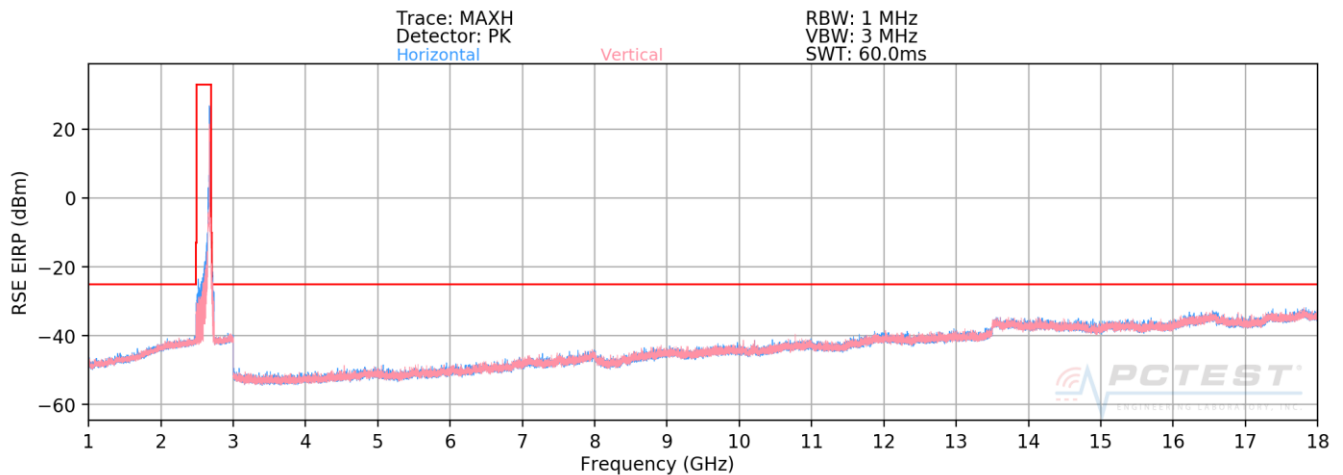


Plot 7-466. Radiated Spurious Plot (ULCA B41 PCC: RB 1 Offset 0, SCC: RB 1 Offset 99 – Mid Channel)

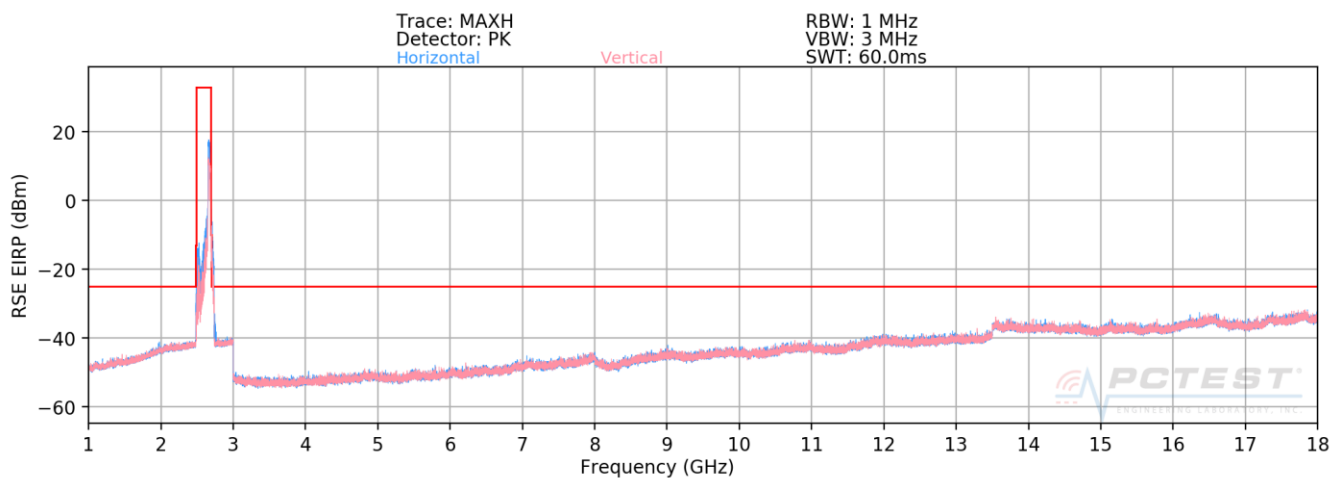
FCC ID: BCGA2153	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 340 of 363



Plot 7-467. Radiated Spurious Plot (ULCA B41 PCC: RB 100 Offset 0, SCC: RB 100 Offset 0 – Mid Channel)



Plot 7-468. Radiated Spurious Plot (ULCA B41 PCC: RB 1 Offset 0, SCC: RB 1 Offset 99 – High Channel)



Plot 7-469. Radiated Spurious Plot (ULCA B41 PCC: RB 100 Offset 0, SCC: RB 100 Offset 0 – High Channel)

FCC ID: BCGA2153	PCTEST ENGINEERING LABORATORY, INC.		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device		Page 341 of 363

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	-	-	-58.93	8.18	-50.75	-50.8
7518.00	H	-	-	-56.41	9.69	-46.72	-46.7
10024.00	H	-	-	-54.10	10.49	-43.61	-43.6

Table 7-101. 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: 0 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	-	-	-58.58	7.83	-50.76	-50.8
7779.00	H	-	-	-56.76	9.66	-47.11	-47.1
10372.00	H	-	-	-53.48	10.30	-43.18	-43.2

Table 7-102. Radiated Spurious Data (ULCA B41 PCC: RB 1 Offset 0, SCC: RB 1 Offset 99 – Mid Channel)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 342 of 363

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	-	-	-58.96	8.01	-50.95	-51.0
8040.00	H	-	-	-56.71	10.07	-46.64	-46.6
10720.00	H	-	-	-54.29	10.64	-43.65	-43.7

Table 7-103. Radiated Spurious Data (ULCA B41 PCC: RB 1 Offset 0, SCC: RB 1 Offset 99 – High Channel)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 343 of 363

7.11 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 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: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 344 of 363

Band 71 Frequency Stability Measurements

OPERATING FREQUENCY: 680,500,000 Hz
 CHANNEL: 133297
 REFERENCE VOLTAGE: 3.80 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	- 30	680,500,004	4	0.0000005
100 %		- 20	680,500,003	3	0.0000005
100 %		- 10	680,500,003	3	0.0000004
100 %		0	680,500,003	3	0.0000005
100 %		+ 10	680,500,002	2	0.0000004
100 %		+ 20	680,500,003	3	0.0000004
100 %		+ 30	680,500,004	4	0.0000005
100 %		+ 40	680,500,003	3	0.0000004
100 %		+ 50	680,500,004	4	0.0000006
BATT. ENDPOINT	3.40	+ 20	680,500,004	4	0.0000005

Table 7-104. Frequency Stability Data (Band 71)

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: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Band 71 Frequency Stability Measurements

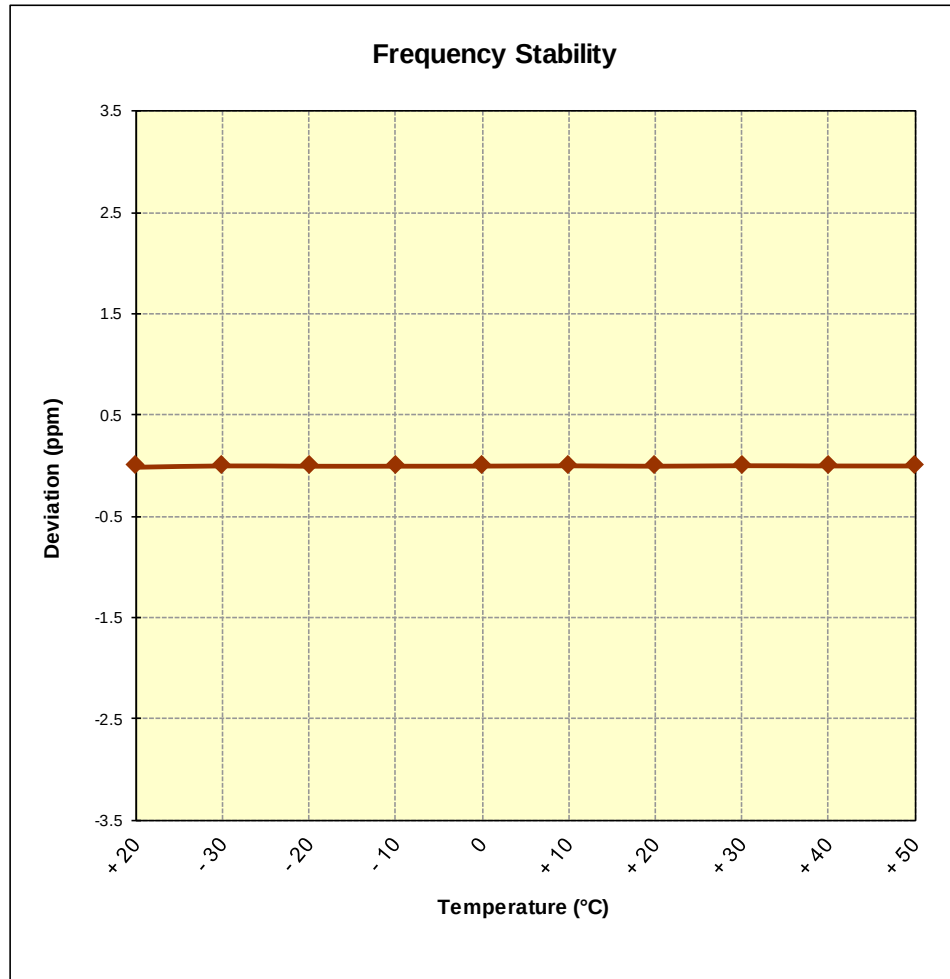


Figure 7-10. Frequency Stability Graph (Band 71)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 346 of 363

Band 12 Frequency Stability Measurements

OPERATING FREQUENCY: 707,500,000 Hz
 CHANNEL: 23790
 REFERENCE VOLTAGE: 3.80 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	- 30	707,500,003	3	0.0000005
100 %		- 20	707,500,003	3	0.0000004
100 %		- 10	707,500,003	3	0.0000004
100 %		0	707,500,003	3	0.0000004
100 %		+ 10	707,500,004	4	0.0000005
100 %		+ 20	707,500,003	3	0.0000004
100 %		+ 30	707,500,004	4	0.0000006
100 %		+ 40	707,500,003	3	0.0000005
100 %		+ 50	707,500,003	3	0.0000005
BATT. ENDPOINT	3.40	+ 20	707,500,003	3	0.0000004

Table 7-105. 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: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Band 12/17 Frequency Stability Measurements

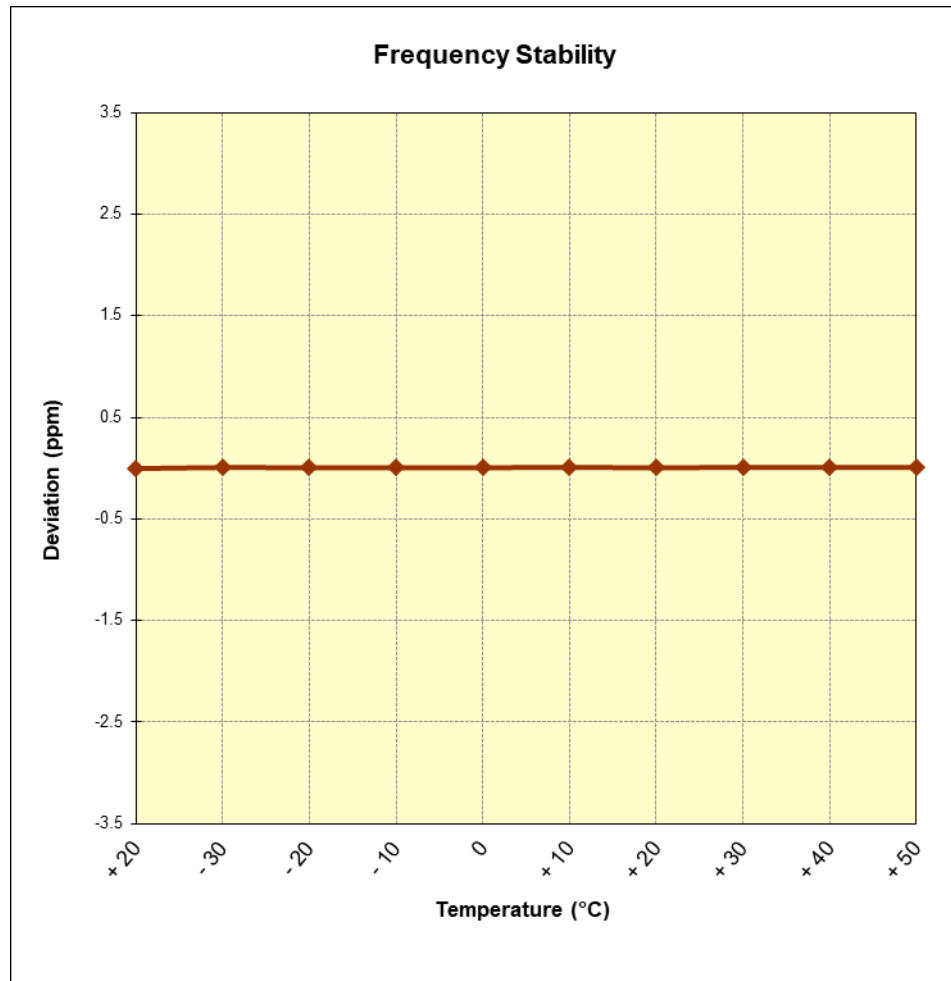


Figure 7-11. Frequency Stability Graph (Band 12/17)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 348 of 363

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	782,000,004	4	0.0000005
100 %		- 20	782,000,004	4	0.0000005
100 %		- 10	782,000,003	3	0.0000004
100 %		0	782,000,003	3	0.0000004
100 %		+ 10	782,000,004	4	0.0000006
100 %		+ 20	782,000,004	4	0.0000005
100 %		+ 30	782,000,004	4	0.0000005
100 %		+ 40	782,000,004	4	0.0000005
100 %		+ 50	782,000,004	4	0.0000005
BATT. ENDPOINT	3.40	+ 20	782,000,004	4	0.0000005

Table 7-106. 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: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Band 13 Frequency Stability Measurements

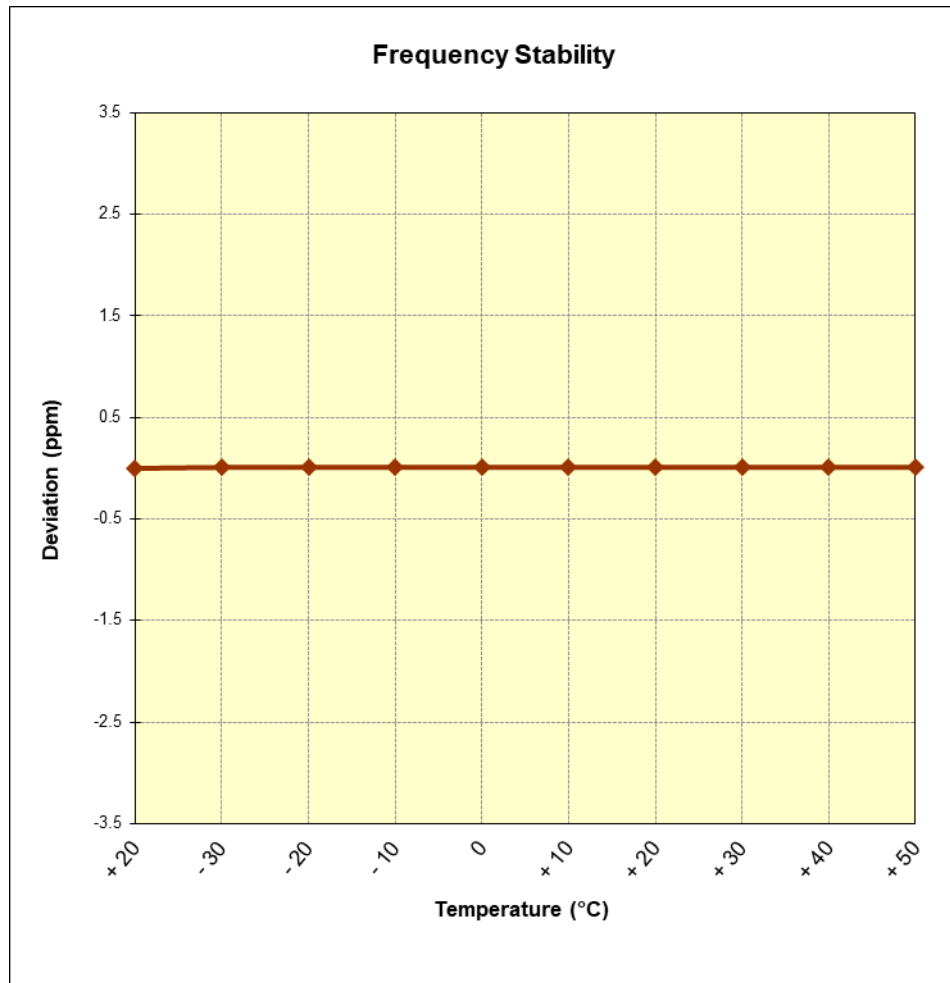


Figure 7-12. Frequency Stability Graph (Band 13)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 350 of 363

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	831,500,004	4	0.0000005
100 %		- 20	831,500,004	4	0.0000005
100 %		- 10	831,500,004	4	0.0000004
100 %		0	831,500,004	4	0.0000005
100 %		+ 10	831,500,004	4	0.0000005
100 %		+ 20	831,500,004	4	0.0000005
100 %		+ 30	831,500,003	3	0.0000004
100 %		+ 40	831,500,003	3	0.0000003
100 %		+ 50	831,500,004	4	0.0000004
BATT. ENDPOINT	3.40	+ 20	831,500,004	4	0.0000005

Table 7-107. Frequency Stability Data (Band 26/5)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 351 of 363

Band 26/5 Frequency Stability Measurements

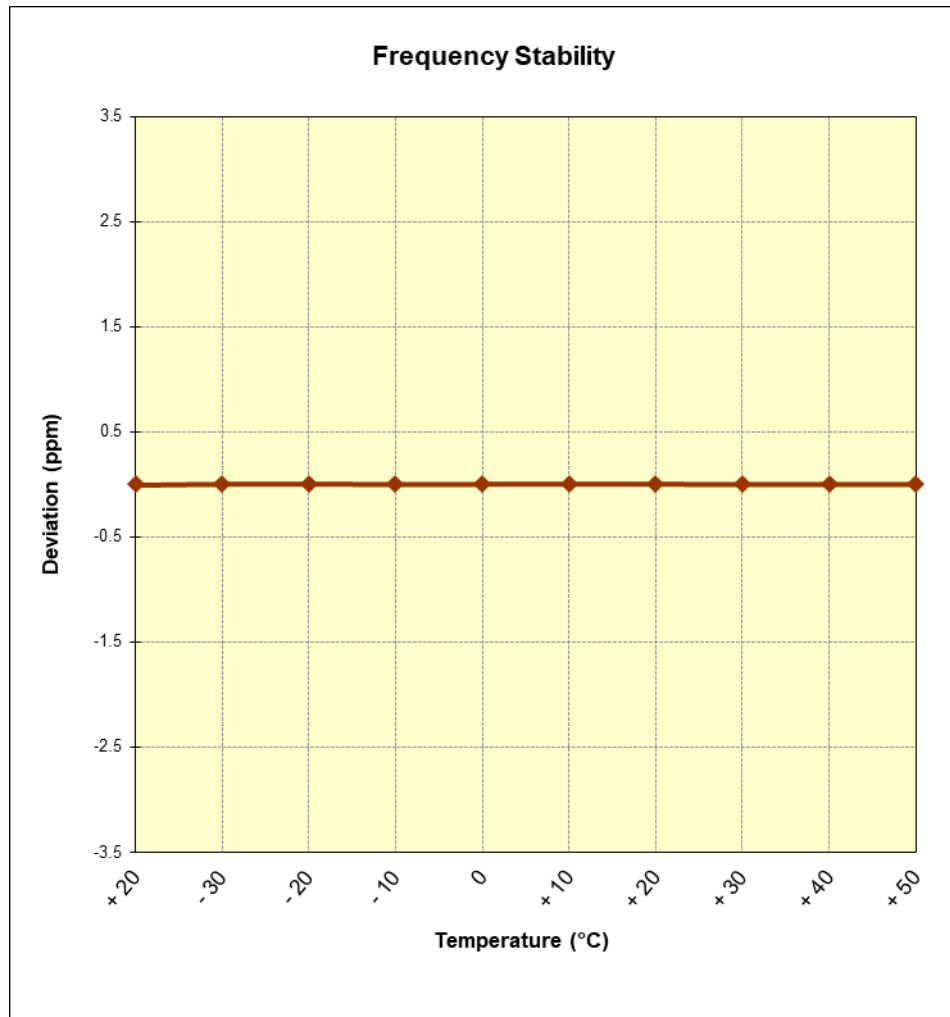


Figure 7-13. Frequency Stability Graph (Band 26/5)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 352 of 363

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	1,745,000,002	2	0.0000001
100 %		- 20	1,745,000,004	4	0.0000002
100 %		- 10	1,745,000,002	2	0.0000001
100 %		0	1,745,000,001	1	0.0000001
100 %		+ 10	1,745,000,000	0	0.0000000
100 %		+ 20	1,745,000,001	1	0.0000001
100 %		+ 30	1,745,000,001	1	0.0000000
100 %		+ 40	1,745,000,002	2	0.0000001
100 %		+ 50	1,745,000,002	2	0.0000001
BATT. ENDPOINT	3.40	+ 20	1,745,000,001	1	0.0000001

Table 7-108. 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: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 353 of 363

Band 66/4 Frequency Stability Measurements

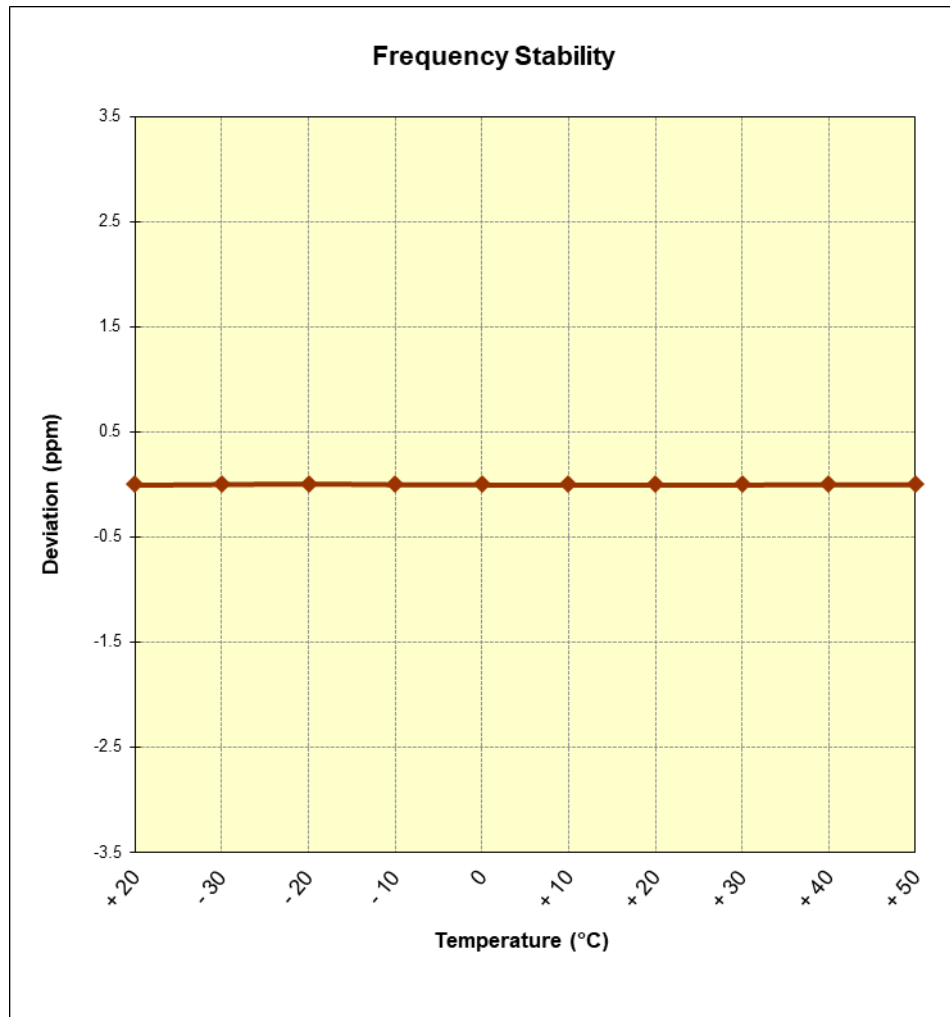


Figure 7-14. Frequency Stability Graph (Band 66/4)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 354 of 363

Band 25 Frequency Stability Measurements

OPERATING FREQUENCY: 1,882,500,000 Hz
 CHANNEL: 26365
 REFERENCE VOLTAGE: 3.80 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	- 30	1,882,500,003	3	0.0000002
100 %		- 20	1,882,500,003	3	0.0000002
100 %		- 10	1,882,500,001	1	0.0000000
100 %		0	1,882,500,001	1	0.0000001
100 %		+ 10	1,882,500,001	1	0.0000001
100 %		+ 20	1,882,500,000	0	0.0000000
100 %		+ 30	1,882,500,002	2	0.0000001
100 %		+ 40	1,882,500,001	1	0.0000000
100 %		+ 50	1,882,500,002	2	0.0000001
BATT. ENDPOINT	3.40	+ 20	1,882,500,001	1	0.0000001

Table 7-109. Frequency Stability Data (Band 25)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 355 of 363

Band 25 Frequency Stability Measurements

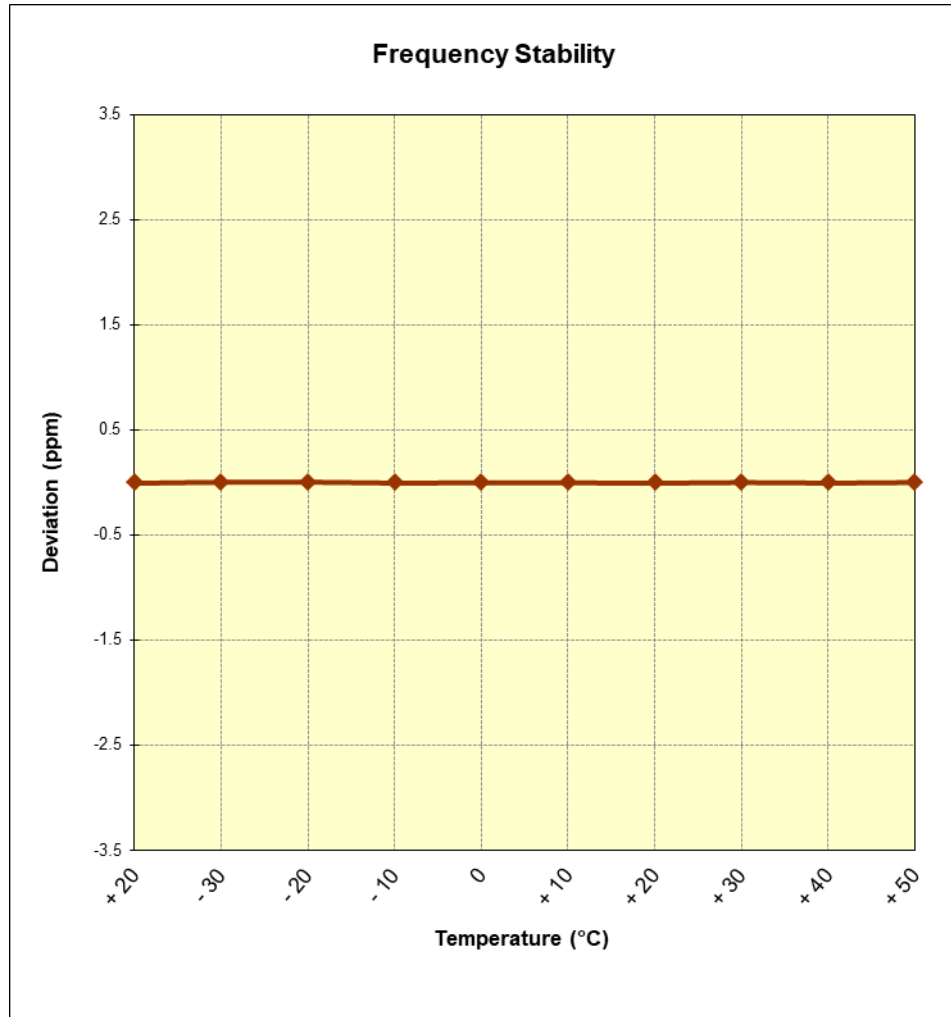


Figure 7-15. Frequency Stability Graph (Band 25)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 356 of 363

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	2,310,000,002	2	0.0000001
100 %		- 20	2,310,000,002	2	0.0000001
100 %		- 10	2,310,000,002	2	0.0000001
100 %		0	2,310,000,002	2	0.0000001
100 %		+ 10	2,310,000,002	2	0.0000001
100 %		+ 20	2,310,000,003	3	0.0000001
100 %		+ 30	2,310,000,003	3	0.0000001
100 %		+ 40	2,310,000,003	3	0.0000001
100 %		+ 50	2,310,000,003	3	0.0000001
BATT. ENDPOINT	3.40	+ 20	2,310,000,002	2	0.0000001

Table 7-110. 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: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 357 of 363

Band 30 Frequency Stability Measurements

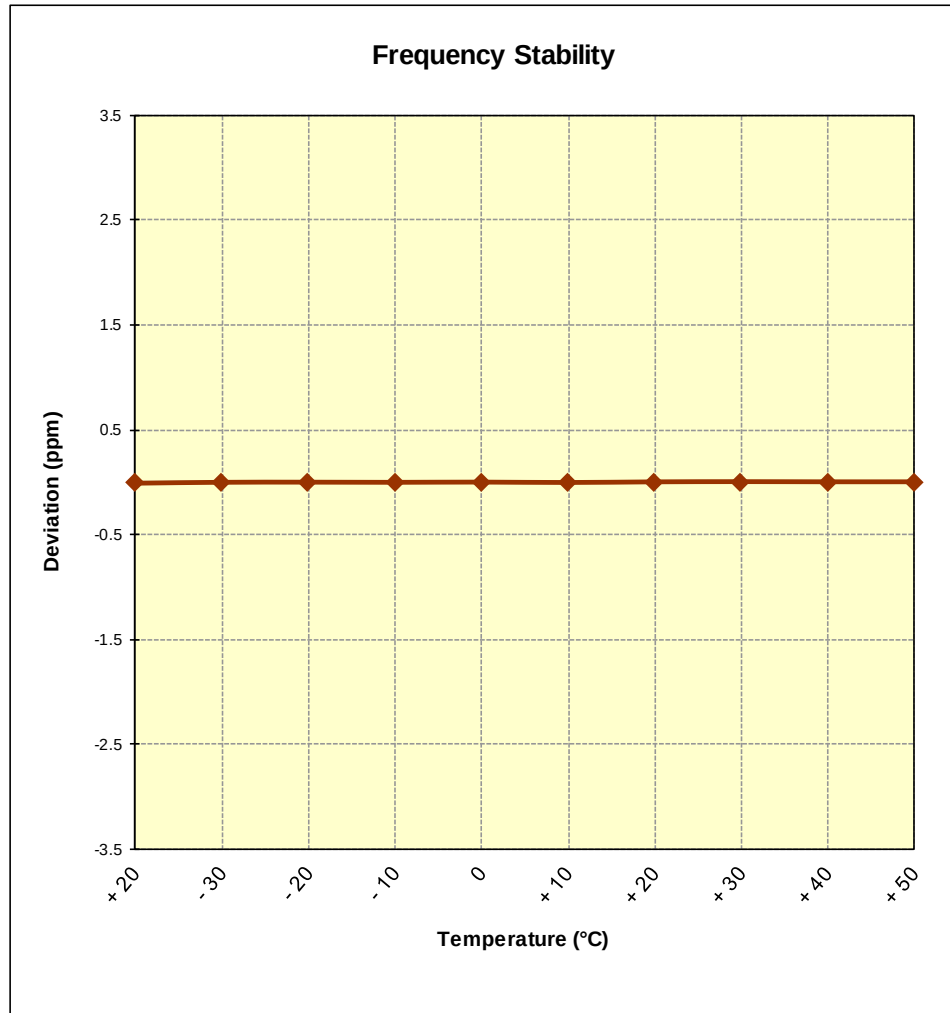


Figure 7-16. Frequency Stability Graph (Band 30)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 358 of 363

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	2,535,000,003	3	0.0000001
100 %		- 20	2,535,000,003	3	0.0000001
100 %		- 10	2,535,000,001	1	0.0000000
100 %		0	2,535,000,002	2	0.0000001
100 %		+ 10	2,535,000,002	2	0.0000001
100 %		+ 20	2,535,000,003	3	0.0000001
100 %		+ 30	2,535,000,003	3	0.0000001
100 %		+ 40	2,535,000,001	1	0.0000000
100 %		+ 50	2,535,000,003	3	0.0000001
BATT. ENDPOINT	3.40	+ 20	2,535,000,003	3	0.0000001

Table 7-111. 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: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 359 of 363

Band 7 Frequency Stability Measurements

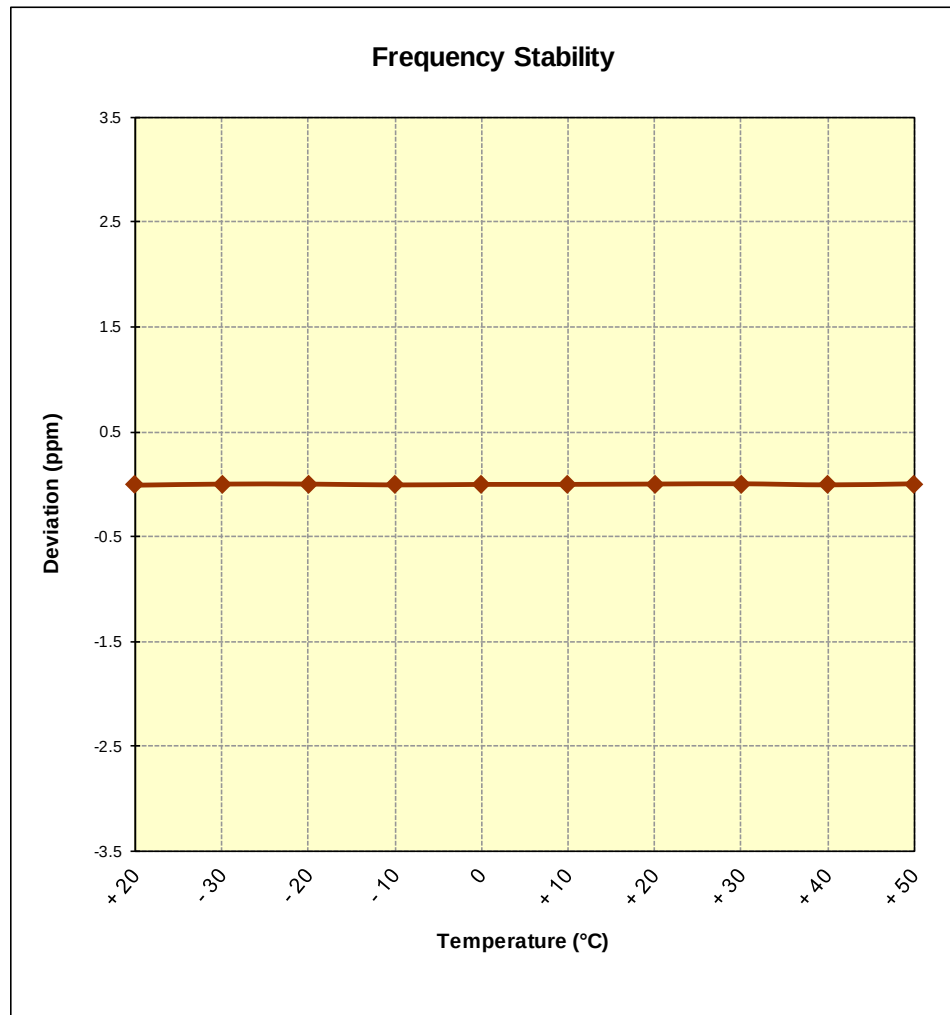


Figure 7-17. Frequency Stability Graph (Band 7)

FCC ID: BCGA2153	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1811080028-03-R1.BCG	Test Dates: 11/09/2018-02/06/2019	EUT Type: Tablet Device	Page 360 of 363

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	2,593,000,003	3	0.0000001
100 %		- 20	2,593,000,003	3	0.0000001
100 %		- 10	2,593,000,000	0	0.0000000
100 %		0	2,593,000,002	2	0.0000001
100 %		+ 10	2,592,999,998	-2	-0.0000001
100 %		+ 20	2,593,000,003	3	0.0000001
100 %		+ 30	2,592,999,999	-1	0.0000000
100 %		+ 40	2,593,000,001	1	0.0000000
100 %		+ 50	2,593,000,000	0	0.0000000
BATT. ENDPOINT	3.40	+ 20	2,593,000,002	2	0.0000001

Table 7-112. 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.

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Band 41 Frequency Stability Measurements

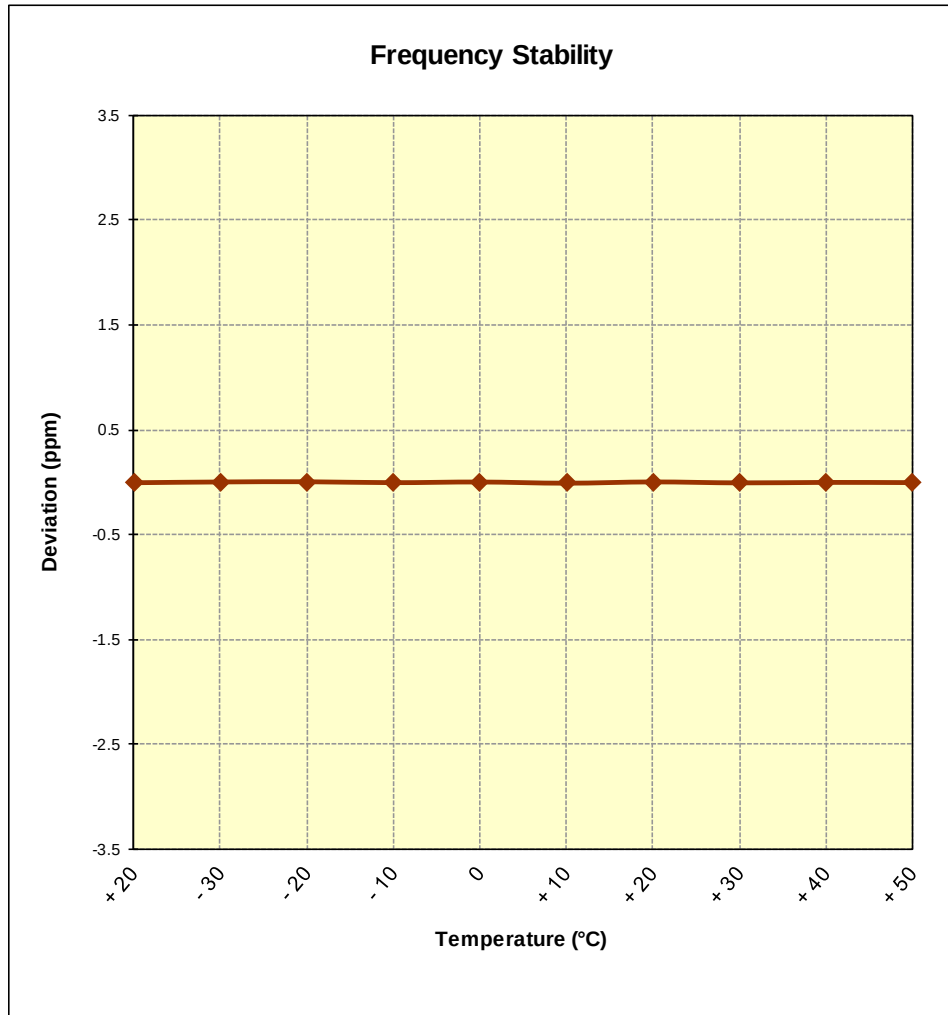


Figure 7-18. Frequency Stability Graph (Band 41)

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8.0 CONCLUSION

The data collected relate only to the item(s) tested and show that the **Apple Tablet Device FCC ID: BCGA2153** complies with all the requirements of Part 22, 24, & 27 of the FCC Rules for LTE operation only.

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