

7.6 Additional Maximum Power Reduction (A-MPR) §2.1046

Test Overview

A-MPR is implemented in this device when operating at Power Class 2 in LTE Band 41 per the A-MPR specification in 3GPP TS 36.101. The conducted powers are shown herein to cover the different A-MPR levels specified in the standard. Conducted power measurements are performed to measure the average output power of the EUT. The averaging is to be performed only over duration of active transmissions at maximum output power level. The average measurements do not include averaging over periods when the transmitter is quiescent or when operating at reduced power level.

Test Procedure Used

KDB 971168 D01 v03

Test Setup

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



Figure 7-5. Conducted Power Measurement Setup

Test Notes

All ports were tested and only the worst case data were reported.

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Test Case	NS	MCC	MNC	Channel BW [MHz]	Channel Number	Channel Frequency [MHz]	Modulation	RB Size	RB Offset	MPR [dB]	A-MPR [dB]	Measured Power [dBm]	Lowest Typical Power [dBm]	Delta [dB]
1	01	312	530	5	39675	2498.5	QPSK	1	0	0	≤ 3	24.92	23.0	1.92
							16-QAM			≤ 1		23.84	22.0	1.84
							64-QAM			≤ 2		22.92	21.0	1.92
2				5	39675	2498.5	QPSK	1	9	0	0	26.90	26.0	0.90
							16-QAM			≤ 1		25.77	25.0	0.77
							64-QAM			≤ 2		24.92	24.0	0.92
3				10	39700	2501	QPSK	1	0	0	≤ 5	23.88	21.0	2.88
							16-QAM	1	0	≤ 1		22.95	20.0	2.95
							64-QAM	1	0	≤ 2		21.84	19.0	2.84
4				10	39700	2501	QPSK	20	0	0	≤ 2	24.72	23.0	1.72
							16-QAM	20	0	≤ 1		23.72	22.0	1.72
							64-QAM	20	0	≤ 2		22.73	21.0	1.73
5				10	39700	2501	QPSK	50	0	0	≤ 3	23.71	22.0	1.71
							16-QAM	50	0	≤ 1		22.67	21.0	1.67
							64-QAM	50	0	≤ 2		21.63	20.0	1.63
6				10	39700	2501	QPSK	25	20	0	≤ 1	24.69	24.0	0.69
							16-QAM	25	20	≤ 1		23.69	23.0	0.69
							64-QAM	25	20	≤ 2		22.68	22.0	0.68
7				10	39700	2501	QPSK	1	36	0	0	26.86	26.0	0.86
							16-QAM	1	36	≤ 1		25.97	25.0	0.97
							64-QAM	1	36	≤ 2		24.82	24.0	0.82
8				15	39725	2503.5	QPSK	1	0	0	≤ 5	23.72	21.0	2.72
							16-QAM	1	0	≤ 1		22.66	20.0	2.66
							64-QAM	1	0	≤ 2		21.78	19.0	2.78
9				15	39725	2503.5	QPSK	20	0	0	≤ 2	24.69	23.0	1.69
							16-QAM	20	0	≤ 1		23.68	22.0	1.68
							64-QAM	20	0	≤ 2		22.65	21.0	1.65
10				15	39725	2503.5	QPSK	75	0	0	≤ 4	22.70	21.0	1.70
							16-QAM	75	0	≤ 1		21.64	20.0	1.64
							64-QAM	75	0	≤ 2		20.62	19.0	1.62
11				15	39725	2503.5	QPSK	50	15	0	≤ 3	24.62	22.0	2.62
							16-QAM	50	15	≤ 1		23.65	21.0	2.65
							64-QAM	50	15	≤ 2		22.58	20.0	2.58
12				15	39725	2503.5	QPSK	1	60	0	0	26.66	26.0	0.66
							16-QAM	1	60	≤ 1		25.53	25.0	0.53
							64-QAM	1	60	≤ 2		24.58	24.0	0.58
13				20	39750	2506	QPSK	1	0	0	≤ 5	23.77	21.0	2.77
							16-QAM	1	0	≤ 1		22.82	20.0	2.82
							64-QAM	1	0	≤ 2		21.81	19.0	2.81
14				20	39750	2506	QPSK	20	0	0	≤ 2	24.72	23.0	1.72
							16-QAM	20	0	≤ 1		23.75	22.0	1.75
							64-QAM	20	0	≤ 2		22.72	21.0	1.72
15				20	39750	2506	QPSK	100	0	0	≤ 4	22.64	21.0	1.64
							16-QAM	100	0	≤ 1		21.62	20.0	1.62
							64-QAM	100	0	≤ 2		20.59	19.0	1.59
16				20	39750	2506	QPSK	75	24	0	≤ 3	24.70	22.0	2.70
							16-QAM	75	24	≤ 1		23.66	21.0	2.66
							64-QAM	75	24	≤ 2		22.64	20.0	2.64
17				20	39750	2506	QPSK	1	77	0	0	26.64	26.0	0.64
							16-QAM	1	77	≤ 1		25.72	25.0	0.72
							64-QAM	1	77	≤ 2		24.75	24.0	0.75
18	01	311	490	5	39675	2498.5	QPSK	1	0	0	≤ 3	25.69	23.0	2.69
			16-QAM				≤ 1			24.55		22.0	2.55	
			64-QAM				≤ 2			23.68		21.0	2.68	
19	01	001	01	5	39675	2498.5	QPSK	1	0	0	0	26.93	26.0	0.93
			16-QAM				≤ 1			25.95		25.0	0.95	
			64-QAM				≤ 2			24.92		24.0	0.92	

Table 7-7. A-MPR Conducted Power Measurements

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7.7 Uplink Carrier Aggregation Conducted Measurements

\$27.53(m)

Test Overview

The EUT is set up to transmit two contiguous LTE channels. The power level of both carriers and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer. The spectrum is scanned from the lowest frequency generated in the equipment up to a frequency including its 10th harmonic. All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

For Band 38/41, the minimum permissible attenuation level of any spurious emission is $55 + 10 \log_{10}(P_{[Watts]})$.

Test Procedure Used

KDB 971168 D01 v03r01 – Section 6.0

Test Settings

1. Start frequency was set to 30MHz and stop frequency was set to at least 10 * the fundamental frequency (separated into at least two plots per channel)
2. Detector = RMS
3. Trace mode = trace average for continuous emissions, max hold for pulse emissions
4. Sweep time = auto couple
5. The trace was allowed to stabilize
6. Please see test notes below for RBW and VBW settings

Test Setup

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

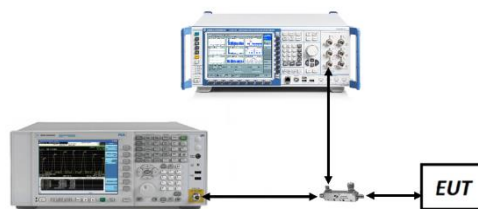


Figure 7-6. Test Instrument & Measurement Setup

FCC ID: BCGA2429	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Test Notes

1. Uplink carrier aggregation is only supported in this EUT while operating in Power Class 3.
2. Conducted power and spurious emissions measurements were evaluated for the two contiguous channels using various combinations of RB size, RB offset, modulation, and channel bandwidth. Channel bandwidth data is shown in the tables below based only on the channel bandwidths that were supported in this device. The worst case (highest) powers were found while operating with QPSK modulation, as shown in the tables below, with both carriers set to transmit using 1RB.
3. Compliance with the applicable limits is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater for frequencies less than 1 GHz and 1 MHz or greater for frequencies greater than 1 GHz. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

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Antenna C (Port A)

PCC						SCC						Power
Channel	Frequency [MHz]	BW [MHz]	Mod.	RB Size	RB Offset	Channel	Frequency [MHz]	BW [MHz]	Mod.	RB Size	RB Offset	ULCA Tx.Power (dBm)
20850	2510.0	20	QPSK	1	99	21048	2529.8	20	QPSK	1	0	25.00
21100	2535.0	20	QPSK	1	99	21298	2554.8	20	QPSK	1	0	25.00
21350	2560.0	20	QPSK	1	0	21152	2540.2	20	QPSK	1	99	24.83

Table 7-8. Conducted Powers (B7 – PCC: RB Size 1 Offset Max SCC: RB Size 1 Offset 0)

PCC						SCC						Power
Channel	Frequency [MHz]	BW [MHz]	Mod.	RB Size	RB Offset	Channel	Frequency [MHz]	BW [MHz]	Mod.	RB Size	RB Offset	ULCA Tx.Power (dBm)
20850	2510.0	20	QPSK	100	0	21048	2529.8	20	QPSK	100	0	23.00
20850	2510.0	20	16-QAM	100	0	21048	2529.8	20	16-QAM	100	0	22.00
20850	2510.0	20	64-QAM	100	0	21048	2529.8	20	64-QAM	100	0	22.00

Table 7-9. Conducted Powers (B7 with Various Combinations for 20MHz Channel Bandwidth)

PCC						SCC						Power
Channel	Frequency [MHz]	BW [MHz]	Mod.	RB Size	RB Offset	Channel	Frequency [MHz]	BW [MHz]	Mod.	RB Size	RB Offset	ULCA Tx.Power (dBm)
39750	2506.0	20	QPSK	1	99	39948	2525.8	20	QPSK	1	0	24.94
40620	2593.0	20	QPSK	1	99	40818	2612.8	20	QPSK	1	0	25.00
41490	2680.0	20	QPSK	1	0	41292	2660.2	20	QPSK	1	99	24.83

Table 7-10. Conducted Powers (B41 – PCC: RB Size 1 Offset Max SCC: RB Size 1 Offset 0)

PCC						SCC						Power
Channel	Frequency [MHz]	BW [MHz]	Mod.	RB Size	RB Offset	Channel	Frequency [MHz]	BW [MHz]	Mod.	RB Size	RB Offset	ULCA Tx.Power (dBm)
39750	2506.0	20	QPSK	100	0	39948	2525.8	20	QPSK	100	0	22.95
39750	2506.0	20	16-QAM	100	0	39948	2525.8	20	16-QAM	100	0	21.94
39750	2506.0	20	64-QAM	100	0	39948	2525.8	20	64-QAM	100	0	21.90

Table 7-11. Conducted Powers (B41 with Various Combinations for 20MHz Channel Bandwidth)

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Antenna D (Port B)

PCC						SCC						Power
Channel	Frequency [MHz]	BW [MHz]	Mod.	RB Size	RB Offset	Channel	Frequency [MHz]	BW [MHz]	Mod.	RB Size	RB Offset	ULCA Tx.Power (dBm)
20850	2510.0	20	QPSK	1	99	21048	2529.8	20	QPSK	1	0	22.75
21100	2535.0	20	QPSK	1	99	21298	2554.8	20	QPSK	1	0	22.69
21350	2560.0	20	QPSK	1	0	21152	2540.2	20	QPSK	1	99	22.67

Table 7-12. Conducted Powers (B7 – PCC: RB Size 1 Offset Max SCC: RB Size 1 Offset 0)

PCC						SCC						Power
Channel	Frequency [MHz]	BW [MHz]	Mod.	RB Size	RB Offset	Channel	Frequency [MHz]	BW [MHz]	Mod.	RB Size	RB Offset	ULCA Tx.Power (dBm)
20850	2510.0	20	QPSK	100	0	21048	2529.8	20	QPSK	100	0	20.72
20850	2510.0	20	16-QAM	100	0	21048	2529.8	20	16-QAM	100	0	19.70
20850	2510.0	20	64-QAM	100	0	21048	2529.8	20	64-QAM	100	0	19.64

Table 7-13. Conducted Powers (B7 with Various Combinations for 20MHz Channel Bandwidth)

PCC						SCC						Power
Channel	Frequency [MHz]	BW [MHz]	Mod.	RB Size	RB Offset	Channel	Frequency [MHz]	BW [MHz]	Mod.	RB Size	RB Offset	ULCA Tx.Power (dBm)
39750	2506.0	20	QPSK	1	99	39948	2525.8	20	QPSK	1	0	22.73
40620	2593.0	20	QPSK	1	99	40818	2612.8	20	QPSK	1	0	22.75
41490	2680.0	20	QPSK	1	0	41292	2660.2	20	QPSK	1	99	22.42

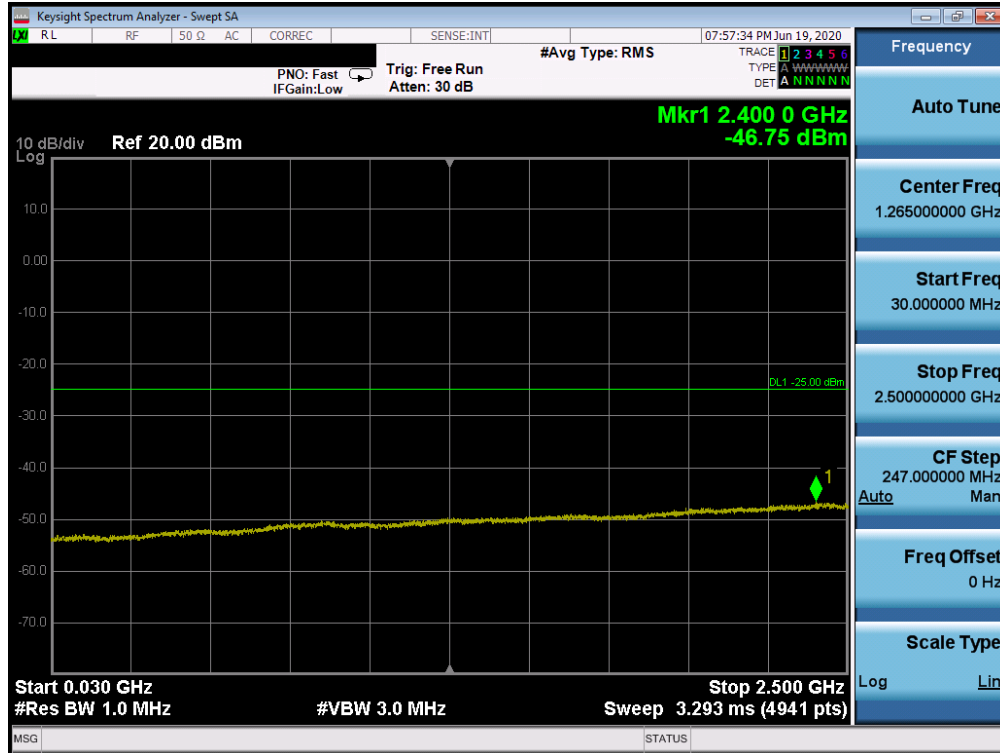
Table 7-14. Conducted Powers (B41 – PCC: RB Size 1 Offset Max SCC: RB Size 1 Offset 0)

PCC						SCC						Power
Channel	Frequency [MHz]	BW [MHz]	Mod.	RB Size	RB Offset	Channel	Frequency [MHz]	BW [MHz]	Mod.	RB Size	RB Offset	ULCA Tx.Power (dBm)
39750	2506.0	20	QPSK	100	0	39948	2525.8	20	QPSK	100	0	20.75
39750	2506.0	20	16-QAM	100	0	39948	2525.8	20	16-QAM	100	0	19.75
39750	2506.0	20	64-QAM	100	0	39948	2525.8	20	64-QAM	100	0	19.75

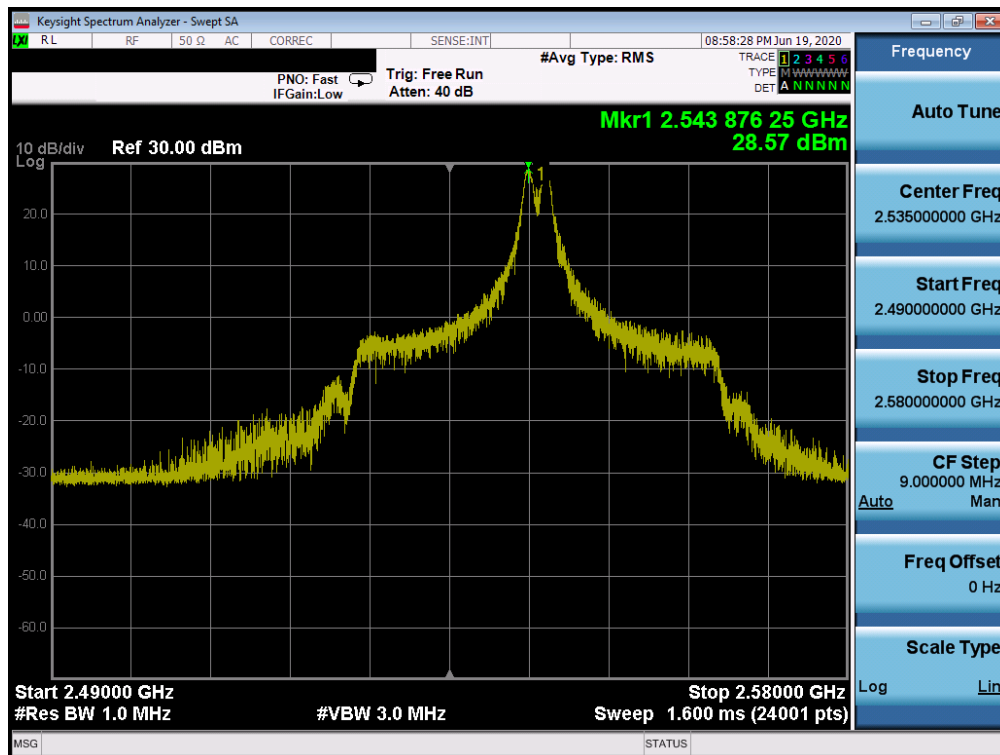
Table 7-15. Conducted Powers (B41 with Various Combinations for 20MHz Channel Bandwidth)

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Band 7

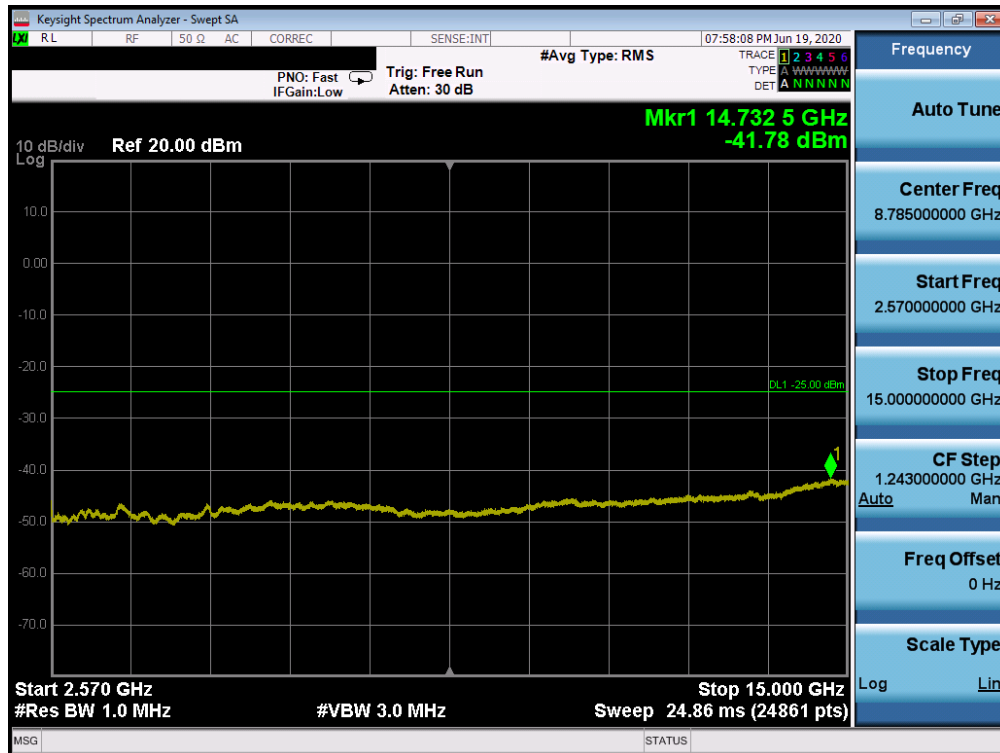


Plot 7-389. Conducted Spurious Plot (Band 7 – 20.0MHz QPSK – PCC 1/99 SCC 1/0 – Mid Channel)

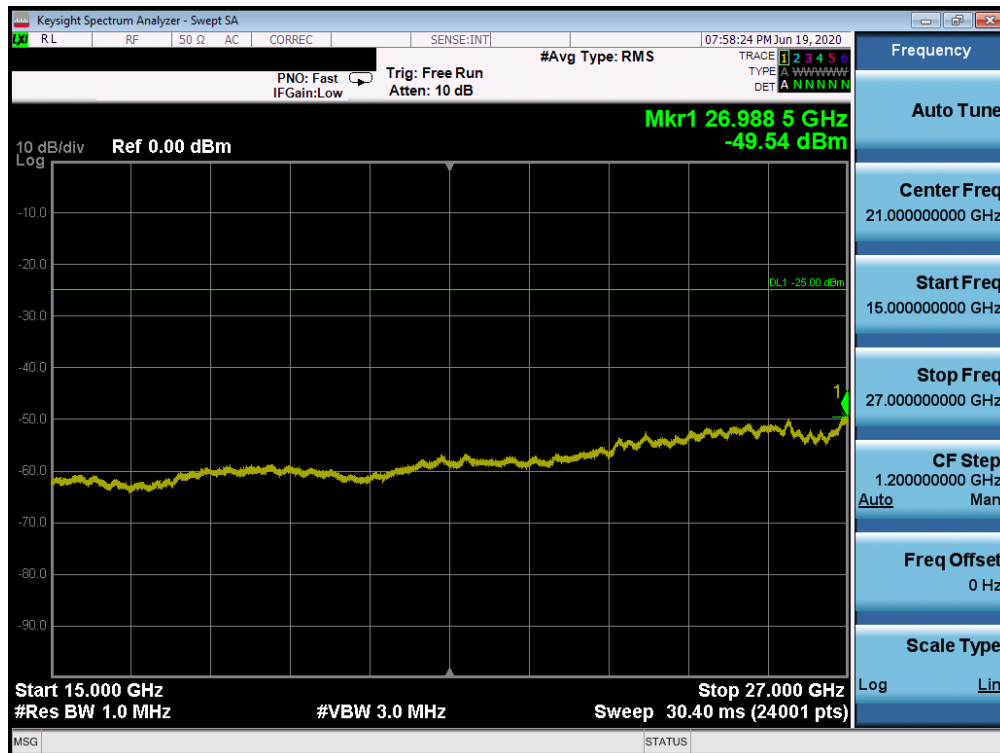


Plot 7-390. Conducted Spurious Plot (Band 7 – 20.0MHz QPSK – PCC 1/99 SCC 1/0 – Mid Channel)

FCC ID: BCGA2429	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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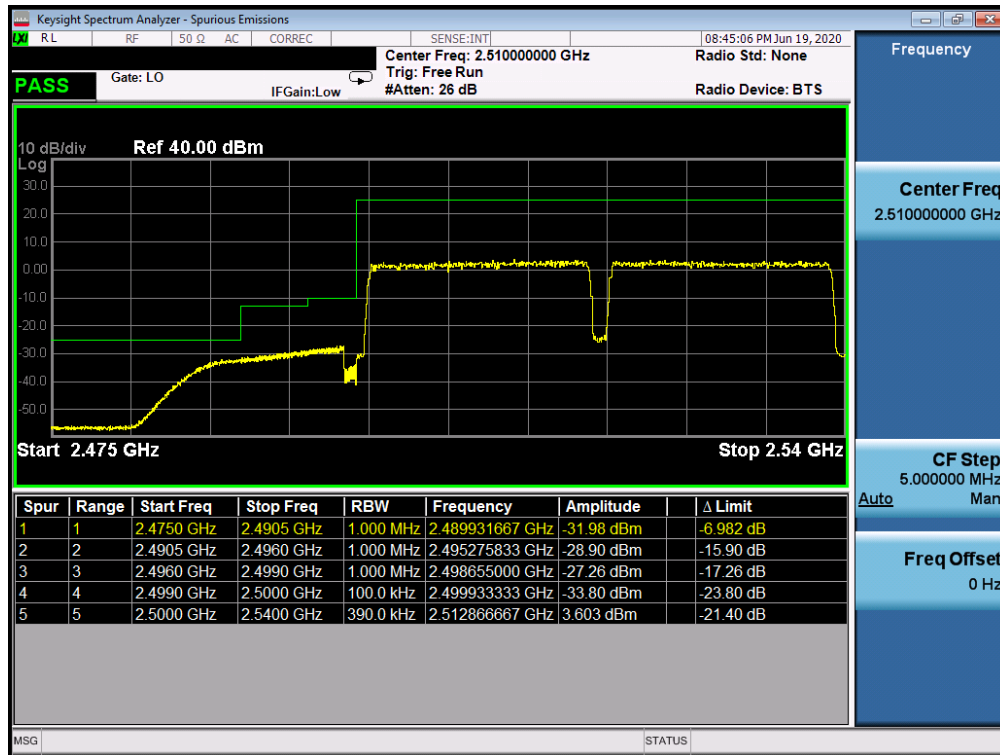


Plot 7-391. Conducted Spurious Plot (Band 7 – 20.0MHz QPSK – PCC 1/99 SCC 1/0 – Mid Channel)

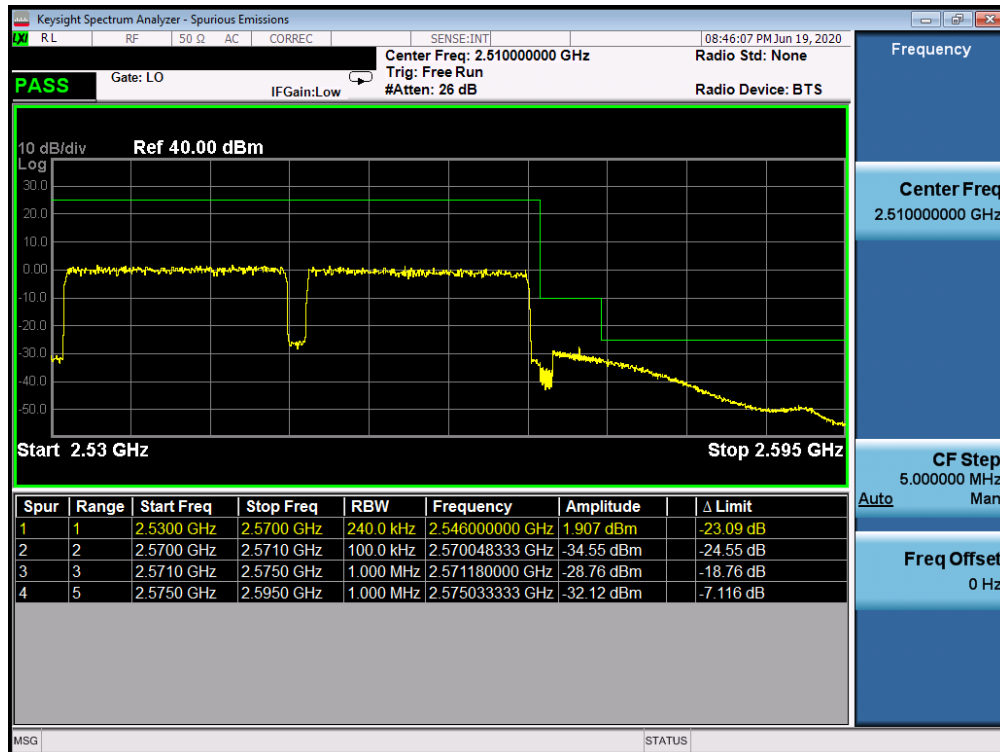


Plot 7-392. Conducted Spurious Plot (Band 7 – 20.0MHz QPSK – PCC 1/99 SCC 1/0 – Mid Channel)

FCC ID: BCGA2429	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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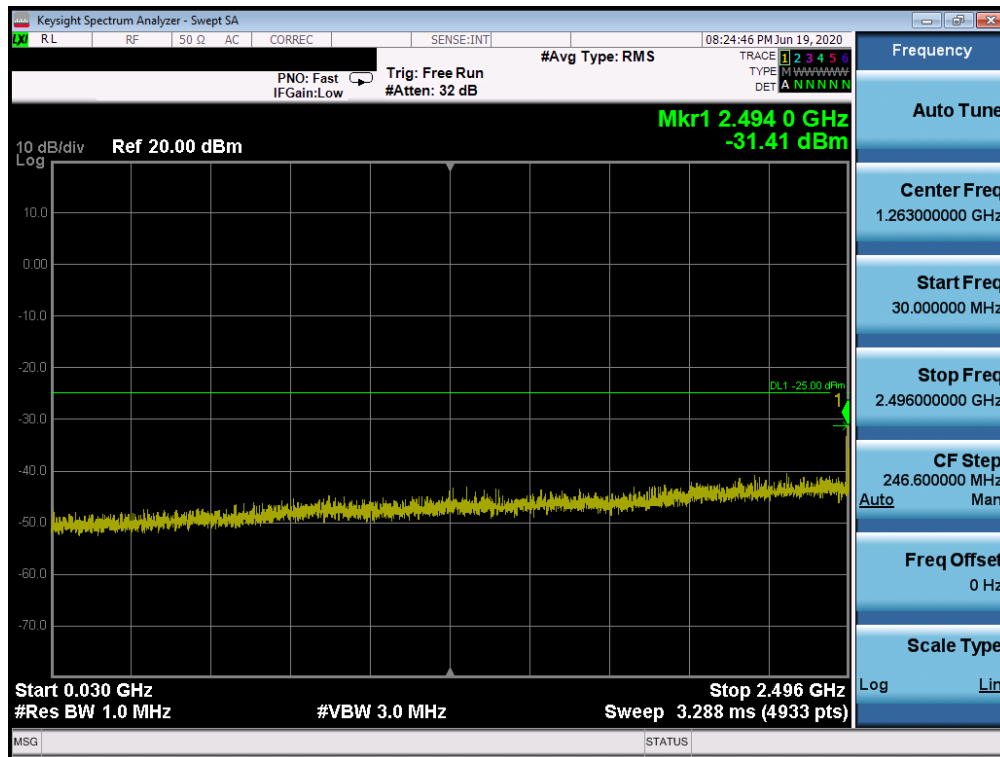
Plot 7-393. Lower ACP Plot (Band 7 QPSK – PCC:20 MHz SCC:20 MHz – Full RB)



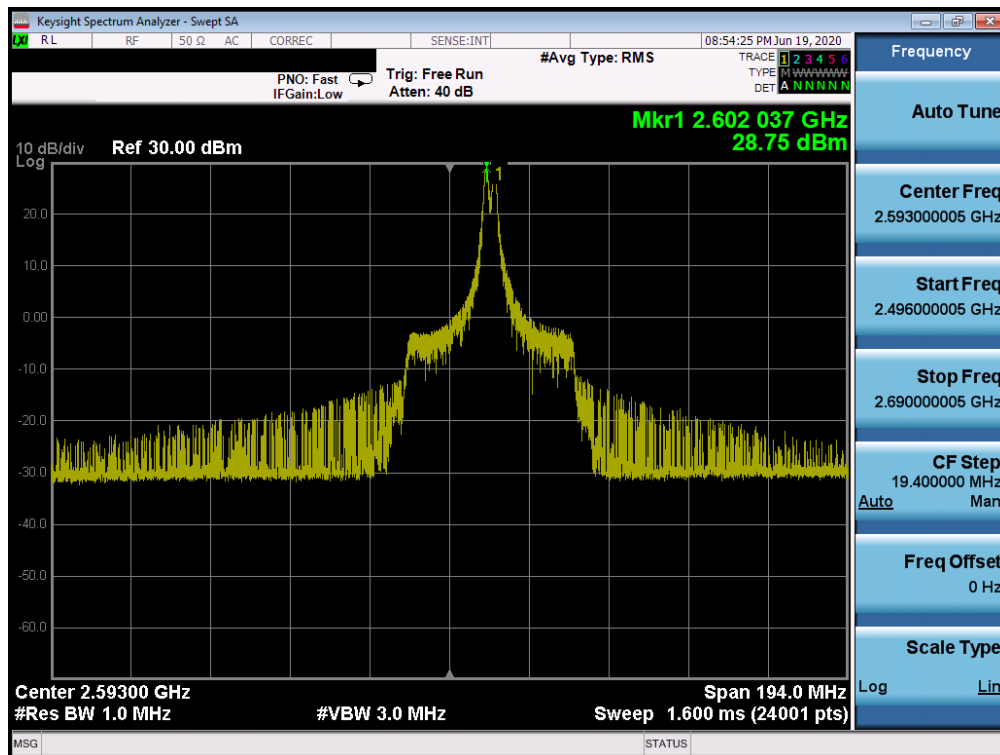
Plot 7-394. Upper ACP Plot (Band 7 QPSK – PCC:20 MHz SCC:20 MHz – Full RB)

FCC ID: BCGA2429	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Band 41

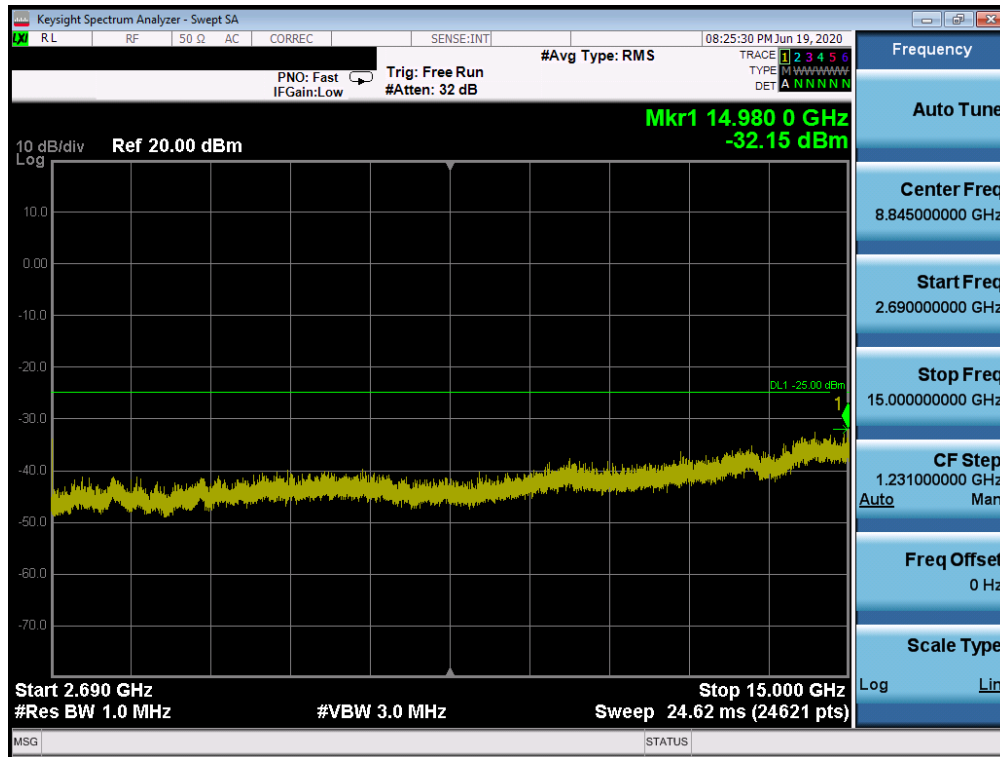


Plot 7-395. Conducted Spurious Plot (Band 41 – 20.0MHz QPSK – PCC 1/99 SCC 1/0 – Mid Channel)

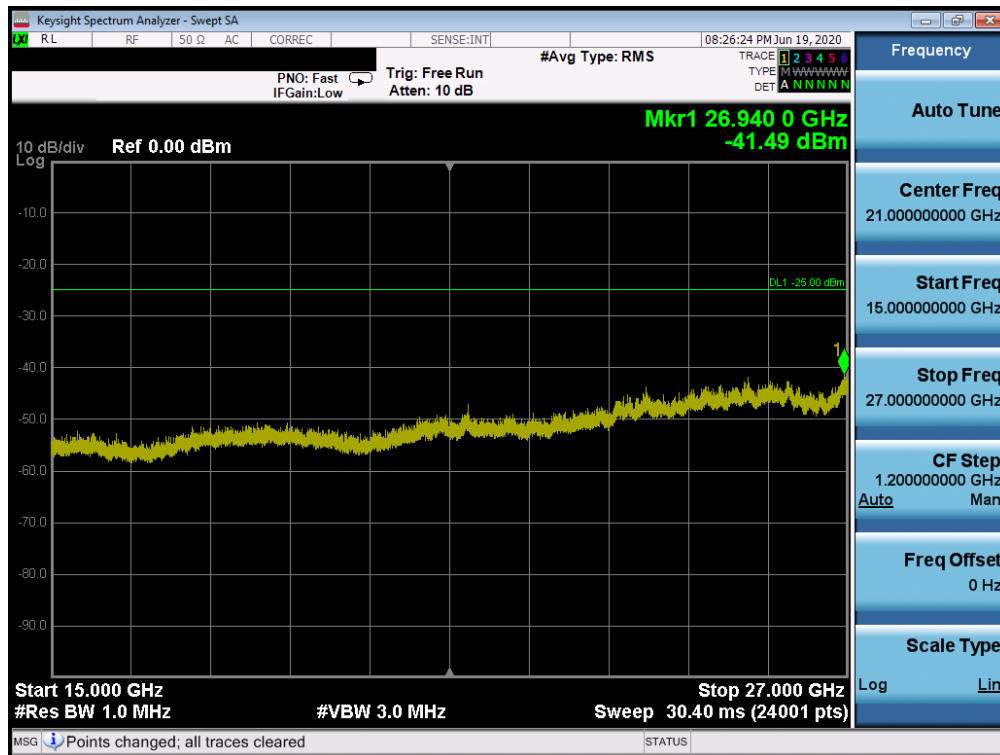


Plot 7-396. Conducted Spurious Plot (Band 41 – 20.0MHz QPSK – PCC 1/99 SCC 1/0 – Mid Channel)

FCC ID: BCGA2429	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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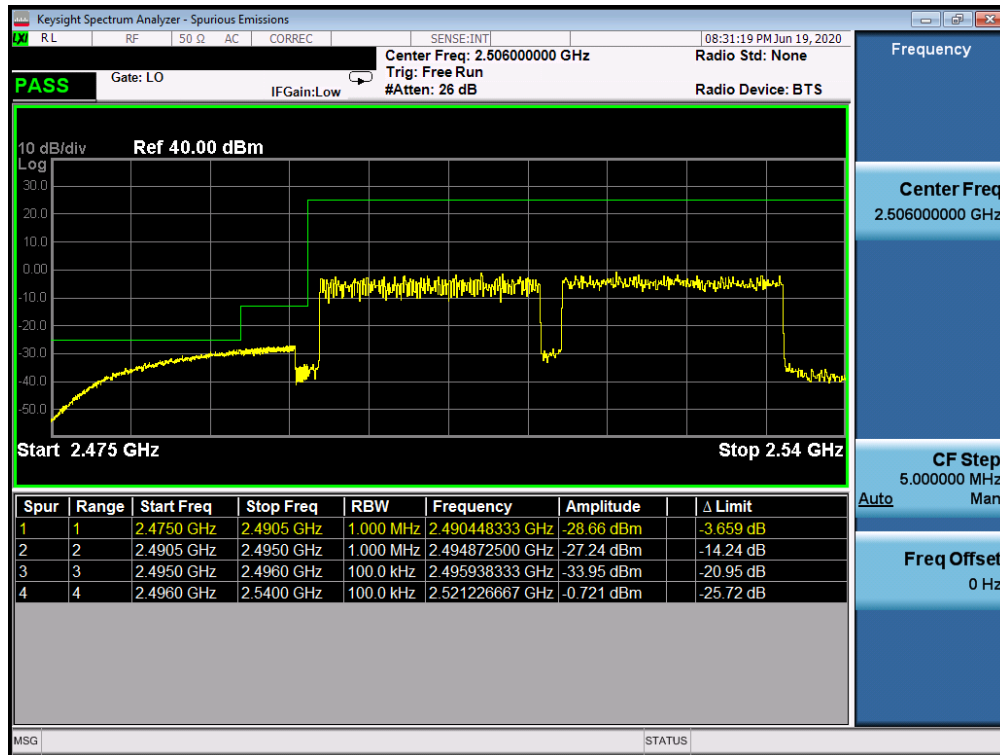


Plot 7-397. Conducted Spurious Plot (Band 41 – 20.0MHz QPSK – PCC 1/99 SCC 1/0 – Mid Channel)

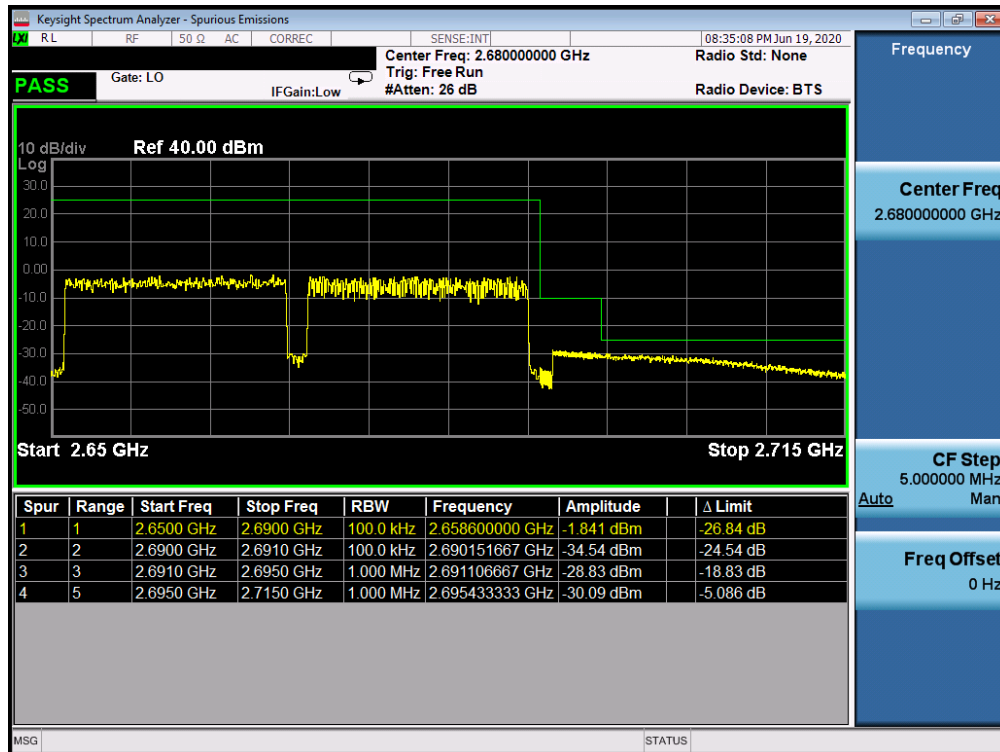


Plot 7-398. Conducted Spurious Plot (Band 41 – 20.0MHz QPSK – PCC 1/99 SCC 1/0 – Mid Channel)

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Plot 7-399. Lower ACP Plot (Band 41 QPSK – PCC:20 MHz SCC:20 MHz – Full RB)



Plot 7-400. Upper ACP Plot (Band 41 QPSK – PCC:20 MHz SCC:20 MHz – Full RB)

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7.8 Radiated Power (ERP/EIRP)

Test Overview

Effective Radiated Power (ERP) and Equivalent Isotropic Radiated Power (EIRP) measurements are calculated by adding highest antenna gain to maximum measured conducted output power. 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
ANSI C63.26-2015 – Section 5.2.5.5

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 all possible test configurations. The worst case emissions are reported with the EUT 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 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.

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7.8.1 Antenna C - 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]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
699.70	1.4	QPSK	1 / 0	25.20	-0.50	22.55	0.180	34.77	-12.22	24.70	0.295	36.99	-12.29
707.50	1.4	QPSK	1 / 5	25.24	-0.50	22.59	0.182	34.77	-12.18	24.74	0.298	36.99	-12.25
715.30	1.4	QPSK	1 / 5	25.50	-0.50	22.85	0.193	34.77	-11.92	25.00	0.316	36.99	-11.99
715.30	1.4	16-QAM	1 / 5	24.67	-0.50	22.02	0.159	34.77	-12.75	24.17	0.261	36.99	-12.82
715.30	1.4	64-QAM	1 / 5	23.92	-0.50	21.27	0.134	34.77	-13.50	23.42	0.220	36.99	-13.57
700.50	3	QPSK	1 / 7	25.17	-0.50	22.52	0.179	34.77	-12.25	24.67	0.293	36.99	-12.32
707.50	3	QPSK	1 / 7	25.22	-0.50	22.57	0.181	34.77	-12.20	24.72	0.296	36.99	-12.27
714.50	3	QPSK	1 / 14	25.32	-0.50	22.67	0.185	34.77	-12.10	24.82	0.303	36.99	-12.17
714.50	3	16-QAM	1 / 14	24.71	-0.50	22.06	0.161	34.77	-12.71	24.21	0.264	36.99	-12.78
714.50	3	64-QAM	1 / 14	23.78	-0.50	21.13	0.130	34.77	-13.64	23.28	0.213	36.99	-13.71
701.50	5	QPSK	1 / 0	25.25	-0.50	22.60	0.182	34.77	-12.17	24.75	0.299	36.99	-12.24
707.50	5	QPSK	1 / 24	25.48	-0.50	22.83	0.192	34.77	-11.94	24.98	0.315	36.99	-12.01
713.50	5	QPSK	1 / 24	25.39	-0.50	22.74	0.188	34.77	-12.03	24.89	0.308	36.99	-12.10
707.50	5	16-QAM	1 / 24	24.83	-0.50	22.18	0.165	34.77	-12.59	24.33	0.271	36.99	-12.66
707.50	5	64-QAM	1 / 24	23.77	-0.50	21.12	0.129	34.77	-13.65	23.27	0.212	36.99	-13.72
704.00	10	QPSK	1 / 49	25.28	-0.50	22.63	0.183	34.77	-12.14	24.78	0.301	36.99	-12.21
707.50	10	QPSK	1 / 49	25.39	-0.50	22.74	0.188	34.77	-12.03	24.89	0.308	36.99	-12.10
711.00	10	QPSK	1 / 49	25.35	-0.50	22.70	0.186	34.77	-12.07	24.85	0.305	36.99	-12.14
707.50	10	16-QAM	1 / 49	24.86	-0.50	22.21	0.166	34.77	-12.56	24.36	0.273	36.99	-12.63
707.50	10	64-QAM	1 / 25	23.77	-0.50	21.12	0.129	34.77	-13.65	23.27	0.212	36.99	-13.72

Table 7-16. Antenna C (Port A) ERP/EIRP Data (Band 12)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 240 of 335

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 / 24	25.40	-0.50	22.75	0.188	34.77	-12.02	24.90	0.309	36.99	-12.09
710.00	5	QPSK	1 / 12	25.50	-0.50	22.85	0.193	34.77	-11.92	25.00	0.316	36.99	-11.99
713.50	5	QPSK	1 / 24	25.46	-0.50	22.81	0.191	34.77	-11.96	24.96	0.313	36.99	-12.03
710.00	5	16-QAM	1 / 12	24.81	-0.50	22.16	0.164	34.77	-12.61	24.31	0.270	36.99	-12.68
710.00	5	64-QAM	1 / 24	23.87	-0.50	21.22	0.132	34.77	-13.55	23.37	0.217	36.99	-13.62
709.00	10	QPSK	1 / 25	25.43	-0.50	22.78	0.190	34.77	-11.99	24.93	0.311	36.99	-12.06
710.00	10	QPSK	1 / 25	25.39	-0.50	22.74	0.188	34.77	-12.03	24.89	0.308	36.99	-12.10
711.00	10	QPSK	1 / 25	25.50	-0.50	22.85	0.193	34.77	-11.92	25.00	0.316	36.99	-11.99
711.00	10	16-QAM	1 / 0	24.99	-0.50	22.34	0.171	34.77	-12.43	24.49	0.281	36.99	-12.50
711.00	10	64-QAM	1 / 49	23.80	-0.50	21.15	0.130	34.77	-13.62	23.30	0.214	36.99	-13.69

Table 7-17. Antenna C (Port A) ERP/EIRP 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	-0.50	22.85	0.193	34.77	-11.92	25.00	0.316	36.99	-11.99
782.00	5	QPSK	1 / 0	25.17	-0.50	22.52	0.179	34.77	-12.25	24.67	0.293	36.99	-12.32
784.50	5	QPSK	1 / 24	24.90	-0.50	22.25	0.168	34.77	-12.52	24.40	0.275	36.99	-12.59
779.50	5	16-QAM	1 / 0	24.79	-0.50	22.14	0.164	34.77	-12.63	24.29	0.269	36.99	-12.70
779.50	5	64-QAM	1 / 0	23.77	-0.50	21.12	0.129	34.77	-13.65	23.27	0.212	36.99	-13.72
782.00	10	QPSK	1 / 0	25.50	-0.50	22.85	0.193	34.77	-11.92	25.00	0.316	36.99	-11.99
782.00	10	16-QAM	1 / 0	25.06	-0.50	22.41	0.174	34.77	-12.36	24.56	0.286	36.99	-12.43
782.00	10	64-QAM	1 / 0	23.92	-0.50	21.27	0.134	34.77	-13.50	23.42	0.220	36.99	-13.57

Table 7-18. Antenna C (Port A) ERP/EIRP Data (Band 13)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 241 of 335

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	25.26	-0.80	22.31	0.170	38.45	-16.14	24.46	0.279	40.61	-16.15
836.50	1.4	QPSK	1 / 5	25.38	-0.80	22.43	0.175	38.45	-16.02	24.58	0.287	40.61	-16.03
848.30	1.4	QPSK	1 / 5	25.50	-0.80	22.55	0.180	38.45	-15.90	24.70	0.295	40.61	-15.91
848.30	1.4	16-QAM	1 / 5	24.56	-0.80	21.61	0.145	38.45	-16.84	23.76	0.238	40.61	-16.85
848.30	1.4	64-QAM	1 / 0	23.61	-0.80	20.66	0.116	38.45	-17.79	22.81	0.191	40.61	-17.80
825.50	3	QPSK	1 / 7	25.33	-0.80	22.38	0.173	38.45	-16.07	24.53	0.284	40.61	-16.08
836.50	3	QPSK	1 / 7	25.50	-0.80	22.55	0.180	38.45	-15.90	24.70	0.295	40.61	-15.91
847.50	3	QPSK	1 / 7	25.43	-0.80	22.48	0.177	38.45	-15.97	24.63	0.290	40.61	-15.98
836.50	3	16-QAM	1 / 0	24.96	-0.80	22.01	0.159	38.45	-16.44	24.16	0.261	40.61	-16.45
836.50	3	64-QAM	1 / 7	23.87	-0.80	20.92	0.124	38.45	-17.53	23.07	0.203	40.61	-17.54
826.50	5	QPSK	1 / 0	25.27	-0.80	22.32	0.171	38.45	-16.13	24.47	0.280	40.61	-16.14
836.50	5	QPSK	1 / 24	25.50	-0.80	22.55	0.180	38.45	-15.90	24.70	0.295	40.61	-15.91
846.50	5	QPSK	1 / 24	25.29	-0.80	22.34	0.171	38.45	-16.11	24.49	0.281	40.61	-16.12
836.50	5	16-QAM	1 / 24	24.92	-0.80	21.97	0.157	38.45	-16.48	24.12	0.258	40.61	-16.49
836.50	5	64-QAM	1 / 0	23.74	-0.80	20.79	0.120	38.45	-17.66	22.94	0.197	40.61	-17.67
829.00	10	QPSK	1 / 49	25.36	-0.80	22.41	0.174	38.45	-16.04	24.56	0.286	40.61	-16.05
836.50	10	QPSK	1 / 49	25.47	-0.80	22.52	0.179	38.45	-15.93	24.67	0.293	40.61	-15.94
844.00	10	QPSK	1 / 0	25.50	-0.80	22.55	0.180	38.45	-15.90	24.70	0.295	40.61	-15.91
844.00	10	16-QAM	1 / 49	24.97	-0.80	22.02	0.159	38.45	-16.43	24.17	0.261	40.61	-16.44
844.00	10	64-QAM	1 / 49	23.71	-0.80	20.76	0.119	38.45	-17.69	22.91	0.195	40.61	-17.70

Table 7-19. Antenna C (Port A) ERP Data (Band 5)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 242 of 335



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	25.25	-0.80	22.30	0.170	38.45	-16.15	24.45	0.279	40.61	-16.16
836.50	1.4	QPSK	1 / 5	25.37	-0.80	22.42	0.175	38.45	-16.03	24.57	0.286	40.61	-16.04
848.30	1.4	QPSK	1 / 5	25.50	-0.80	22.55	0.180	38.45	-15.90	24.70	0.295	40.61	-15.91
848.30	1.4	16-QAM	1 / 5	24.56	-0.80	21.61	0.145	38.45	-16.84	23.76	0.238	40.61	-16.85
848.30	1.4	64-QAM	1 / 2	23.78	-0.80	20.83	0.121	38.45	-17.62	22.98	0.199	40.61	-17.63
825.50	3	QPSK	1 / 0	25.33	-0.80	22.38	0.173	38.45	-16.07	24.53	0.284	40.61	-16.08
836.50	3	QPSK	1 / 7	25.50	-0.80	22.55	0.180	38.45	-15.90	24.70	0.295	40.61	-15.91
847.50	3	QPSK	1 / 7	25.41	-0.80	22.46	0.176	38.45	-15.99	24.61	0.289	40.61	-16.00
836.50	3	16-QAM	1 / 14	24.95	-0.80	22.00	0.158	38.45	-16.45	24.15	0.260	40.61	-16.46
836.50	3	64-QAM	1 / 7	23.89	-0.80	20.94	0.124	38.45	-17.51	23.09	0.204	40.61	-17.52
826.50	5	QPSK	1 / 0	25.30	-0.80	22.35	0.172	38.45	-16.10	24.50	0.282	40.61	-16.11
836.50	5	QPSK	1 / 24	25.50	-0.80	22.55	0.180	38.45	-15.90	24.70	0.295	40.61	-15.91
846.50	5	QPSK	1 / 24	25.30	-0.80	22.35	0.172	38.45	-16.10	24.50	0.282	40.61	-16.11
836.50	5	16-QAM	1 / 0	24.89	-0.80	21.94	0.156	38.45	-16.51	24.09	0.256	40.61	-16.52
836.50	5	64-QAM	1 / 12	23.78	-0.80	20.83	0.121	38.45	-17.62	22.98	0.199	40.61	-17.63
829.00	10	QPSK	1 / 49	25.32	-0.80	22.37	0.173	38.45	-16.08	24.52	0.283	40.61	-16.09
836.50	10	QPSK	1 / 25	25.50	-0.80	22.55	0.180	38.45	-15.90	24.70	0.295	40.61	-15.91
844.00	10	QPSK	1 / 0	25.42	-0.80	22.47	0.177	38.45	-15.98	24.62	0.290	40.61	-15.99
836.50	10	16-QAM	1 / 0	24.92	-0.80	21.97	0.157	38.45	-16.48	24.12	0.258	40.61	-16.49
836.50	10	64-QAM	1 / 49	23.82	-0.80	20.87	0.122	38.45	-17.58	23.02	0.200	40.61	-17.59

Table 7-20. Antenna C (Port A) ERP/EIRP Data (Band 26)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 243 of 335



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	6 / 0	25.29	1.40	26.69	0.467	30.00	-3.31
1732.50	1.4	QPSK	6 / 0	25.41	1.40	26.81	0.480	30.00	-3.19
1754.30	1.4	QPSK	1 / 5	25.50	1.40	26.90	0.490	30.00	-3.10
1754.30	1.4	16-QAM	1 / 0	24.50	1.40	25.90	0.389	30.00	-4.10
1754.30	1.4	64-QAM	1 / 0	23.77	1.40	25.17	0.329	30.00	-4.83
1711.50	3	QPSK	1 / 7	25.40	1.40	26.80	0.479	30.00	-3.20
1732.50	3	QPSK	1 / 7	25.50	1.40	26.90	0.490	30.00	-3.10
1753.50	3	QPSK	1 / 7	25.35	1.40	26.75	0.473	30.00	-3.25
1732.50	3	16-QAM	1 / 7	24.88	1.40	26.28	0.425	30.00	-3.72
1732.50	3	64-QAM	1 / 7	23.57	1.40	24.97	0.314	30.00	-5.03
1712.50	5	QPSK	25 / 0	25.30	1.40	26.70	0.468	30.00	-3.30
1732.50	5	QPSK	1 / 24	25.50	1.40	26.90	0.490	30.00	-3.10
1752.50	5	QPSK	25 / 0	25.32	1.40	26.72	0.470	30.00	-3.28
1732.50	5	16-QAM	1 / 24	24.81	1.40	26.21	0.418	30.00	-3.79
1732.50	5	64-QAM	1 / 12	23.60	1.40	25.00	0.316	30.00	-5.00
1715.00	10	QPSK	1 / 0	25.30	1.40	26.70	0.468	30.00	-3.30
1732.50	10	QPSK	1 / 49	25.48	1.40	26.88	0.488	30.00	-3.12
1750.00	10	QPSK	1 / 0	25.50	1.40	26.90	0.490	30.00	-3.10
1750.00	10	16-QAM	1 / 0	24.94	1.40	26.34	0.431	30.00	-3.66
1750.00	10	64-QAM	1 / 0	23.77	1.40	25.17	0.329	30.00	-4.83
1717.50	15	QPSK	1 / 0	25.50	1.40	26.90	0.490	30.00	-3.10
1732.50	15	QPSK	1 / 36	25.48	1.40	26.88	0.488	30.00	-3.12
1747.50	15	QPSK	1 / 0	25.49	1.40	26.89	0.489	30.00	-3.11
1717.50	15	16-QAM	1 / 36	24.57	1.40	25.97	0.395	30.00	-4.03
1717.50	15	64-QAM	1 / 36	23.56	1.40	24.96	0.313	30.00	-5.04
1720.00	20	QPSK	100 / 0	25.35	1.40	26.75	0.473	30.00	-3.25
1732.50	20	QPSK	100 / 0	25.48	1.40	26.88	0.488	30.00	-3.12
1745.00	20	QPSK	1 / 0	25.50	1.40	26.90	0.490	30.00	-3.10
1745.00	20	16-QAM	1 / 0	24.86	1.40	26.26	0.423	30.00	-3.74
1745.00	20	64-QAM	1 / 0	23.73	1.40	25.13	0.326	30.00	-4.87

Table 7-21. Antenna C (Port A) EIRP Data (Band 4)

FCC ID: BCGA2429	 PCTEST Proud to be part of  element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 244 of 335

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	6 / 0	25.30	1.40	26.70	0.468	30.00	-3.30
1745.00	1.4	QPSK	6 / 0	25.45	1.40	26.85	0.484	30.00	-3.15
1779.30	1.4	QPSK	1 / 0	25.50	1.40	26.90	0.490	30.00	-3.10
1779.30	1.4	16-QAM	1 / 5	24.52	1.40	25.92	0.391	30.00	-4.08
1779.30	1.4	64-QAM	1 / 2	23.67	1.40	25.07	0.321	30.00	-4.93
1711.50	3	QPSK	1 / 7	25.39	1.40	26.79	0.478	30.00	-3.21
1745.00	3	QPSK	1 / 7	25.50	1.40	26.90	0.490	30.00	-3.10
1778.50	3	QPSK	1 / 7	25.49	1.40	26.89	0.489	30.00	-3.11
1745.00	3	16-QAM	1 / 7	25.06	1.40	26.46	0.443	30.00	-3.54
1745.00	3	64-QAM	1 / 14	23.87	1.40	25.27	0.337	30.00	-4.73
1712.50	5	QPSK	1 / 0	25.30	1.40	26.70	0.468	30.00	-3.30
1745.00	5	QPSK	1 / 24	25.50	1.40	26.90	0.490	30.00	-3.10
1777.50	5	QPSK	25 / 0	25.39	1.40	26.79	0.478	30.00	-3.21
1745.00	5	16-QAM	1 / 24	25.01	1.40	26.41	0.438	30.00	-3.59
1745.00	5	64-QAM	1 / 12	23.84	1.40	25.24	0.334	30.00	-4.76
1715.00	10	QPSK	1 / 0	25.28	1.40	26.68	0.466	30.00	-3.32
1745.00	10	QPSK	1 / 0	25.45	1.40	26.85	0.484	30.00	-3.15
1775.00	10	QPSK	1 / 0	25.50	1.40	26.90	0.490	30.00	-3.10
1775.00	10	16-QAM	1 / 0	25.00	1.40	26.40	0.437	30.00	-3.60
1775.00	10	64-QAM	1 / 0	23.89	1.40	25.29	0.338	30.00	-4.71
1717.50	15	QPSK	1 / 0	25.50	1.40	26.90	0.490	30.00	-3.10
1745.00	15	QPSK	1 / 0	25.44	1.40	26.84	0.483	30.00	-3.16
1772.50	15	QPSK	1 / 36	25.41	1.40	26.81	0.480	30.00	-3.19
1717.50	15	16-QAM	1 / 0	24.60	1.40	26.00	0.398	30.00	-4.00
1717.50	15	64-QAM	1 / 0	23.63	1.40	25.03	0.318	30.00	-4.97
1720.00	20	QPSK	1 / 99	25.38	1.40	26.78	0.476	30.00	-3.22
1745.00	20	QPSK	1 / 99	25.42	1.40	26.82	0.481	30.00	-3.18
1770.00	20	QPSK	1 / 50	25.50	1.40	26.90	0.490	30.00	-3.10
1770.00	20	16-QAM	1 / 50	24.84	1.40	26.24	0.421	30.00	-3.76
1770.00	20	64-QAM	1 / 50	23.50	1.40	24.90	0.309	30.00	-5.10

Table 7-22. Antenna C (Port A) EIRP Data (Band 66)

FCC ID: BCGA2429	 PCTEST Proud to be part of  element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 245 of 335

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	25.50	2.30	27.80	0.603	33.01	-5.21
1880.00	1.4	QPSK	1 / 5	25.21	2.30	27.51	0.564	33.01	-5.50
1909.30	1.4	QPSK	1 / 5	25.49	2.30	27.79	0.601	33.01	-5.22
1850.70	1.4	16-QAM	1 / 5	24.83	2.30	27.13	0.516	33.01	-5.88
1850.70	1.4	64-QAM	1 / 5	23.90	2.30	26.20	0.417	33.01	-6.81
1851.50	3	QPSK	1 / 7	25.50	2.30	27.80	0.603	33.01	-5.21
1880.00	3	QPSK	1 / 7	25.25	2.30	27.55	0.569	33.01	-5.46
1908.50	3	QPSK	1 / 7	25.31	2.30	27.61	0.577	33.01	-5.40
1851.50	3	16-QAM	1 / 7	24.82	2.30	27.12	0.515	33.01	-5.89
1851.50	3	64-QAM	1 / 7	23.87	2.30	26.17	0.414	33.01	-6.84
1852.50	5	QPSK	1 / 0	25.50	2.30	27.80	0.603	33.01	-5.21
1880.00	5	QPSK	1 / 24	25.32	2.30	27.62	0.578	33.01	-5.39
1907.50	5	QPSK	1 / 24	25.25	2.30	27.55	0.569	33.01	-5.46
1852.50	5	16-QAM	1 / 12	24.81	2.30	27.11	0.514	33.01	-5.90
1852.50	5	64-QAM	1 / 0	23.73	2.30	26.03	0.401	33.01	-6.98
1855.00	10	QPSK	1 / 0	25.50	2.30	27.80	0.603	33.01	-5.21
1880.00	10	QPSK	1 / 49	25.26	2.30	27.56	0.570	33.01	-5.45
1905.00	10	QPSK	1 / 0	25.44	2.30	27.74	0.594	33.01	-5.27
1855.00	10	16-QAM	1 / 0	24.79	2.30	27.09	0.512	33.01	-5.92
1855.00	10	64-QAM	1 / 25	23.73	2.30	26.03	0.401	33.01	-6.98
1857.50	15	QPSK	1 / 0	25.50	2.30	27.80	0.603	33.01	-5.21
1880.00	15	QPSK	1 / 0	25.16	2.30	27.46	0.557	33.01	-5.55
1902.50	15	QPSK	1 / 0	25.24	2.30	27.54	0.568	33.01	-5.47
1857.50	15	16-QAM	1 / 74	24.56	2.30	26.86	0.485	33.01	-6.15
1857.50	15	64-QAM	1 / 74	23.81	2.30	26.11	0.408	33.01	-6.90
1860.00	20	QPSK	1 / 99	25.50	2.30	27.80	0.603	33.01	-5.21
1880.00	20	QPSK	1 / 0	25.17	2.30	27.47	0.558	33.01	-5.54
1900.00	20	QPSK	1 / 50	25.28	2.30	27.58	0.573	33.01	-5.43
1860.00	20	16-QAM	1 / 99	24.67	2.30	26.97	0.498	33.01	-6.04
1860.00	20	64-QAM	1 / 0	23.56	2.30	25.86	0.385	33.01	-7.15

Table 7-23. Antenna C (Port A) EIRP Data (Band 2)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 246 of 335

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 / 5	25.38	2.30	27.68	0.586	33.01	-5.33
1882.50	1.4	QPSK	1 / 0	25.10	2.30	27.40	0.550	33.01	-5.61
1914.30	1.4	QPSK	1 / 5	25.50	2.30	27.80	0.603	33.01	-5.21
1914.30	1.4	16-QAM	1 / 5	24.59	2.30	26.89	0.489	33.01	-6.12
1914.30	1.4	64-QAM	1 / 2	23.79	2.30	26.09	0.406	33.01	-6.92
1851.50	3	QPSK	1 / 7	25.50	2.30	27.80	0.603	33.01	-5.21
1882.50	3	QPSK	1 / 7	25.23	2.30	27.53	0.566	33.01	-5.48
1913.50	3	QPSK	1 / 7	25.39	2.30	27.69	0.587	33.01	-5.32
1851.50	3	16-QAM	1 / 7	24.77	2.30	27.07	0.509	33.01	-5.94
1851.50	3	64-QAM	1 / 7	23.81	2.30	26.11	0.408	33.01	-6.90
1852.50	5	QPSK	1 / 0	25.50	2.30	27.80	0.603	33.01	-5.21
1882.50	5	QPSK	1 / 0	25.34	2.30	27.64	0.581	33.01	-5.37
1912.50	5	QPSK	1 / 24	25.36	2.30	27.66	0.583	33.01	-5.35
1852.50	5	16-QAM	1 / 0	24.88	2.30	27.18	0.522	33.01	-5.83
1852.50	5	64-QAM	1 / 0	23.79	2.30	26.09	0.406	33.01	-6.92
1855.00	10	QPSK	1 / 0	25.50	2.30	27.80	0.603	33.01	-5.21
1882.50	10	QPSK	1 / 49	25.34	2.30	27.64	0.581	33.01	-5.37
1910.00	10	QPSK	1 / 49	25.43	2.30	27.73	0.593	33.01	-5.28
1855.00	10	16-QAM	1 / 0	24.85	2.30	27.15	0.519	33.01	-5.86
1855.00	10	64-QAM	1 / 0	23.66	2.30	25.96	0.394	33.01	-7.05
1857.50	15	QPSK	1 / 0	25.50	2.30	27.80	0.603	33.01	-5.21
1882.50	15	QPSK	1 / 74	25.18	2.30	27.48	0.560	33.01	-5.53
1907.50	15	QPSK	1 / 0	25.23	2.30	27.53	0.566	33.01	-5.48
1857.50	15	16-QAM	1 / 0	24.67	2.30	26.97	0.498	33.01	-6.04
1857.50	15	64-QAM	1 / 0	23.58	2.30	25.88	0.387	33.01	-7.13
1860.00	20	QPSK	1 / 99	25.50	2.30	27.80	0.603	33.01	-5.21
1882.50	20	QPSK	1 / 99	25.06	2.30	27.36	0.545	33.01	-5.65
1905.00	20	QPSK	1 / 99	25.36	2.30	27.66	0.583	33.01	-5.35
1860.00	20	16-QAM	1 / 99	24.65	2.30	26.95	0.495	33.01	-6.06
1860.00	20	64-QAM	1 / 0	23.62	2.30	25.92	0.391	33.01	-7.09

Table 7-24. Antenna C (Port A) EIRP Data (Band 25)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 247 of 335

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	21.79	1.40	23.19	0.208	23.98	-0.79
2312.50	5	QPSK	1 / 24	21.70	1.40	23.10	0.204	23.98	-0.88
2312.50	5	16-QAM	1 / 12	20.99	1.40	22.39	0.173	23.98	-1.59
2312.50	5	64-QAM	1 / 24	20.15	1.40	21.55	0.143	23.98	-2.43
2310.00	10	QPSK	1 / 49	21.71	1.40	23.11	0.205	23.98	-0.87
2310.00	10	16-QAM	1 / 0	21.06	1.40	22.46	0.176	23.98	-1.52
2310.00	10	64-QAM	1 / 0	19.93	1.40	21.33	0.136	23.98	-2.65

Table 7-25. Antenna C (Port A) EIRP Data (Band 30)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 248 of 335

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 / 0	25.46	1.70	27.16	0.520	33.01	-5.85
2535.00	5	QPSK	1 / 24	25.50	1.70	27.20	0.525	33.01	-5.81
2567.50	5	QPSK	1 / 24	25.33	1.70	27.03	0.505	33.01	-5.98
2535.00	5	16-QAM	1 / 24	24.82	1.70	26.52	0.449	33.01	-6.49
2535.00	5	64-QAM	1 / 12	23.70	1.70	25.40	0.347	33.01	-7.61
2505.00	10	QPSK	1 / 0	25.42	1.70	27.12	0.515	33.01	-5.89
2535.00	10	QPSK	1 / 49	25.50	1.70	27.20	0.525	33.01	-5.81
2565.00	10	QPSK	1 / 49	25.43	1.70	27.13	0.516	33.01	-5.88
2535.00	10	16-QAM	1 / 25	24.83	1.70	26.53	0.450	33.01	-6.48
2535.00	10	64-QAM	1 / 49	23.66	1.70	25.36	0.344	33.01	-7.65
2507.50	15	QPSK	1 / 0	25.50	1.70	27.20	0.525	33.01	-5.81
2535.00	15	QPSK	1 / 74	25.29	1.70	26.99	0.500	33.01	-6.02
2562.50	15	QPSK	1 / 74	25.28	1.70	26.98	0.499	33.01	-6.03
2507.50	15	16-QAM	1 / 0	24.29	1.70	25.99	0.397	33.01	-7.02
2507.50	15	64-QAM	1 / 74	23.43	1.70	25.13	0.326	33.01	-7.88
2510.00	20	QPSK	1 / 0	25.50	1.70	27.20	0.525	33.01	-5.81
2535.00	20	QPSK	1 / 99	25.37	1.70	27.07	0.509	33.01	-5.94
2560.00	20	QPSK	1 / 99	25.46	1.70	27.16	0.520	33.01	-5.85
2510.00	20	16-QAM	1 / 99	24.66	1.70	26.36	0.433	33.01	-6.65
2510.00	20	64-QAM	1 / 99	23.48	1.70	25.18	0.330	33.01	-7.83

Table 7-26. Antenna C (Port A) EIRP Data (Band 7)

FCC ID: BCGA2429	 Proud to be part of  element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 249 of 335

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	27.00	1.70	28.70	0.741	33.01	-4.31
2593.00	5	QPSK	1 / 0	26.95	1.70	28.65	0.733	33.01	-4.36
2687.50	5	QPSK	1 / 24	26.98	1.70	28.68	0.738	33.01	-4.33
2593.00	5	16-QAM	1 / 24	26.70	1.70	28.40	0.692	33.01	-4.61
2593.00	5	64-QAM	1 / 0	25.55	1.70	27.25	0.531	33.01	-5.76
2501.00	10	QPSK	1 / 0	27.00	1.70	28.70	0.741	33.01	-4.31
2593.00	10	QPSK	1 / 0	26.93	1.70	28.63	0.729	33.01	-4.38
2685.00	10	QPSK	1 / 0	26.95	1.70	28.65	0.733	33.01	-4.36
2593.00	10	16-QAM	1 / 0	26.56	1.70	28.26	0.670	33.01	-4.75
2593.00	10	64-QAM	1 / 25	25.40	1.70	27.10	0.513	33.01	-5.91
2503.50	15	QPSK	1 / 0	27.00	1.70	28.70	0.741	33.01	-4.31
2593.00	15	QPSK	1 / 36	26.93	1.70	28.63	0.729	33.01	-4.38
2682.50	15	QPSK	1 / 36	26.89	1.70	28.59	0.723	33.01	-4.42
2593.00	15	16-QAM	1 / 36	26.31	1.70	28.01	0.632	33.01	-5.00
2593.00	15	64-QAM	1 / 36	25.37	1.70	27.07	0.509	33.01	-5.94
2506.00	20	QPSK	1 / 99	27.00	1.70	28.70	0.741	33.01	-4.31
2593.00	20	QPSK	1 / 0	26.97	1.70	28.67	0.736	33.01	-4.34
2680.00	20	QPSK	1 / 0	26.78	1.70	28.48	0.705	33.01	-4.53
2593.00	20	16-QAM	1 / 0	26.35	1.70	28.05	0.638	33.01	-4.96
2593.00	20	64-QAM	1 / 0	25.51	1.70	27.21	0.526	33.01	-5.80

Table 7-27. Antenna C (Port A) EIRP Data (Band 41 PC2)

FCC ID: BCGA2429		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 250 of 335

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	25.50	1.70	27.20	0.525	33.01	-5.81
2593.00	5	QPSK	1 / 0	25.48	1.70	27.18	0.522	33.01	-5.83
2687.50	5	QPSK	1 / 0	25.40	1.70	27.10	0.513	33.01	-5.91
2498.50	5	16-QAM	1 / 0	25.23	1.70	26.93	0.493	33.01	-6.08
2498.50	5	64-QAM	1 / 0	24.13	1.70	25.83	0.383	33.01	-7.18
2501.00	10	QPSK	1 / 0	25.50	1.70	27.20	0.525	33.01	-5.81
2593.00	10	QPSK	1 / 0	25.46	1.70	27.16	0.520	33.01	-5.85
2685.00	10	QPSK	1 / 25	25.47	1.70	27.17	0.521	33.01	-5.84
2593.00	10	16-QAM	1 / 25	25.22	1.70	26.92	0.492	33.01	-6.09
2593.00	10	64-QAM	1 / 49	23.98	1.70	25.68	0.370	33.01	-7.33
2503.50	15	QPSK	1 / 0	25.50	1.70	27.20	0.525	33.01	-5.81
2593.00	15	QPSK	1 / 36	25.50	1.70	27.20	0.525	33.01	-5.81
2682.50	15	QPSK	1 / 0	25.49	1.70	27.19	0.524	33.01	-5.82
2593.00	15	16-QAM	1 / 0	24.88	1.70	26.58	0.455	33.01	-6.43
2593.00	15	64-QAM	1 / 36	24.02	1.70	25.72	0.373	33.01	-7.29
2506.00	20	QPSK	1 / 99	25.50	1.70	27.20	0.525	33.01	-5.81
2593.00	20	QPSK	1 / 0	25.43	1.70	27.13	0.516	33.01	-5.88
2680.00	20	QPSK	1 / 0	25.50	1.70	27.20	0.525	33.01	-5.81
2680.00	20	16-QAM	1 / 0	24.84	1.70	26.54	0.451	33.01	-6.47
2680.00	20	64-QAM	1 / 0	23.96	1.70	25.66	0.368	33.01	-7.35

Table 7-28. Antenna C (Port A) EIRP Data (Band 41 PC3)

FCC ID: BCGA2429		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 251 of 335

7.8.2 Antenna D - 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]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
699.70	1.4	QPSK	1 / 0	24.47	-0.70	21.62	0.145	34.77	-13.15	23.77	0.238	36.99	-13.22
707.50	1.4	QPSK	1 / 0	24.47	-0.70	21.62	0.145	34.77	-13.15	23.77	0.238	36.99	-13.22
715.30	1.4	QPSK	1 / 5	24.50	-0.70	21.65	0.146	34.77	-13.12	23.80	0.240	36.99	-13.19
715.30	1.4	16-QAM	1 / 0	23.65	-0.70	20.80	0.120	34.77	-13.97	22.95	0.197	36.99	-14.04
715.30	1.4	64-QAM	1 / 0	22.77	-0.70	19.92	0.098	34.77	-14.85	22.07	0.161	36.99	-14.92
700.50	3	QPSK	1 / 7	24.43	-0.70	21.58	0.144	34.77	-13.19	23.73	0.236	36.99	-13.26
707.50	3	QPSK	1 / 7	24.47	-0.70	21.62	0.145	34.77	-13.15	23.77	0.238	36.99	-13.22
714.50	3	QPSK	1 / 7	24.50	-0.70	21.65	0.146	34.77	-13.12	23.80	0.240	36.99	-13.19
714.50	3	16-QAM	1 / 7	23.93	-0.70	21.08	0.128	34.77	-13.69	23.23	0.210	36.99	-13.76
714.50	3	64-QAM	1 / 0	22.83	-0.70	19.98	0.100	34.77	-14.79	22.13	0.163	36.99	-14.86
701.50	5	QPSK	1 / 24	24.49	-0.70	21.64	0.146	34.77	-13.13	23.79	0.239	36.99	-13.20
707.50	5	QPSK	1 / 24	24.50	-0.70	21.65	0.146	34.77	-13.12	23.80	0.240	36.99	-13.19
713.50	5	QPSK	1 / 12	24.46	-0.70	21.61	0.145	34.77	-13.16	23.76	0.238	36.99	-13.23
707.50	5	16-QAM	1 / 12	23.90	-0.70	21.05	0.127	34.77	-13.72	23.20	0.209	36.99	-13.79
707.50	5	64-QAM	1 / 0	22.76	-0.70	19.91	0.098	34.77	-14.86	22.06	0.161	36.99	-14.93
704.00	10	QPSK	1 / 49	24.50	-0.70	21.65	0.146	34.77	-13.12	23.80	0.240	36.99	-13.19
707.50	10	QPSK	1 / 0	24.48	-0.70	21.63	0.146	34.77	-13.14	23.78	0.239	36.99	-13.21
711.00	10	QPSK	1 / 0	24.49	-0.70	21.64	0.146	34.77	-13.13	23.79	0.239	36.99	-13.20
704.00	10	16-QAM	1 / 25	23.77	-0.70	20.92	0.124	34.77	-13.85	23.07	0.203	36.99	-13.92
704.00	10	64-QAM	1 / 49	22.86	-0.70	20.01	0.100	34.77	-14.76	22.16	0.164	36.99	-14.83

Table 7-29. Antenna D (Port B) ERP/EIRP Data (Band 12)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 252 of 335

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 / 12	24.49	-0.70	21.64	0.146	34.77	-13.13	23.79	0.239	36.99	-13.20
710.00	5	QPSK	1 / 12	24.50	-0.70	21.65	0.146	34.77	-13.12	23.80	0.240	36.99	-13.19
713.50	5	QPSK	1 / 24	24.50	-0.70	21.65	0.146	34.77	-13.12	23.80	0.240	36.99	-13.19
710.00	5	16-QAM	1 / 24	23.92	-0.70	21.07	0.128	34.77	-13.70	23.22	0.210	36.99	-13.77
710.00	5	64-QAM	1 / 12	22.85	-0.70	20.00	0.100	34.77	-14.77	22.15	0.164	36.99	-14.84
709.00	10	QPSK	1 / 0	24.49	-0.70	21.64	0.146	34.77	-13.13	23.79	0.239	36.99	-13.20
710.00	10	QPSK	1 / 25	24.50	-0.70	21.65	0.146	34.77	-13.12	23.80	0.240	36.99	-13.19
711.00	10	QPSK	1 / 49	24.49	-0.70	21.64	0.146	34.77	-13.13	23.79	0.239	36.99	-13.20
710.00	10	16-QAM	1 / 0	23.97	-0.70	21.12	0.129	34.77	-13.65	23.27	0.212	36.99	-13.72
710.00	10	64-QAM	1 / 49	22.80	-0.70	19.95	0.099	34.77	-14.82	22.10	0.162	36.99	-14.89

Table 7-30. Antenna D (Port B) ERP/EIRP 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	24.50	-0.70	21.65	0.146	34.77	-13.12	23.80	0.240	36.99	-13.19
782.00	5	QPSK	1 / 0	24.12	-0.70	21.27	0.134	34.77	-13.50	23.42	0.220	36.99	-13.57
784.50	5	QPSK	1 / 12	24.45	-0.70	21.60	0.145	34.77	-13.17	23.75	0.237	36.99	-13.24
779.50	5	16-QAM	1 / 24	23.97	-0.70	21.12	0.129	34.77	-13.65	23.27	0.212	36.99	-13.72
779.50	5	64-QAM	1 / 24	22.81	-0.70	19.96	0.099	34.77	-14.81	22.11	0.163	36.99	-14.88
782.00	10	QPSK	1 / 0	24.50	-0.70	21.65	0.146	34.77	-13.12	23.80	0.240	36.99	-13.19
782.00	10	16-QAM	1 / 0	24.00	-0.70	21.15	0.130	34.77	-13.62	23.30	0.214	36.99	-13.69
782.00	10	64-QAM	1 / 0	22.76	-0.70	19.91	0.098	34.77	-14.86	22.06	0.161	36.99	-14.93

Table 7-31. Antenna D (Port B) ERP/EIRP Data (Band 13)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device
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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	24.23	-0.60	21.48	0.141	38.45	-16.97	23.63	0.231	40.61	-16.98
836.50	1.4	QPSK	1 / 5	24.29	-0.60	21.54	0.143	38.45	-16.91	23.69	0.234	40.61	-16.92
848.30	1.4	QPSK	1 / 5	24.50	-0.60	21.75	0.150	38.45	-16.70	23.90	0.245	40.61	-16.71
848.30	1.4	16-QAM	1 / 0	23.64	-0.60	20.89	0.123	38.45	-17.56	23.04	0.201	40.61	-17.57
848.30	1.4	64-QAM	1 / 0	22.76	-0.60	20.01	0.100	38.45	-18.44	22.16	0.164	40.61	-18.45
825.50	3	QPSK	1 / 0	24.38	-0.60	21.63	0.146	38.45	-16.82	23.78	0.239	40.61	-16.83
836.50	3	QPSK	1 / 7	24.48	-0.60	21.73	0.149	38.45	-16.72	23.88	0.244	40.61	-16.73
847.50	3	QPSK	1 / 7	24.50	-0.60	21.75	0.150	38.45	-16.70	23.90	0.245	40.61	-16.71
847.50	3	16-QAM	1 / 7	23.84	-0.60	21.09	0.129	38.45	-17.36	23.24	0.211	40.61	-17.37
847.50	3	64-QAM	1 / 7	22.88	-0.60	20.13	0.103	38.45	-18.32	22.28	0.169	40.61	-18.33
826.50	5	QPSK	1 / 0	24.35	-0.60	21.60	0.145	38.45	-16.85	23.75	0.237	40.61	-16.86
836.50	5	QPSK	1 / 24	24.50	-0.60	21.75	0.150	38.45	-16.70	23.90	0.245	40.61	-16.71
846.50	5	QPSK	1 / 24	24.38	-0.60	21.63	0.146	38.45	-16.82	23.78	0.239	40.61	-16.83
836.50	5	16-QAM	1 / 12	23.83	-0.60	21.08	0.128	38.45	-17.37	23.23	0.210	40.61	-17.38
836.50	5	64-QAM	1 / 12	22.83	-0.60	20.08	0.102	38.45	-18.37	22.23	0.167	40.61	-18.38
829.00	10	QPSK	1 / 25	24.50	-0.60	21.75	0.150	38.45	-16.70	23.90	0.245	40.61	-16.71
836.50	10	QPSK	1 / 49	24.45	-0.60	21.70	0.148	38.45	-16.75	23.85	0.243	40.61	-16.76
844.00	10	QPSK	1 / 49	24.50	-0.60	21.75	0.150	38.45	-16.70	23.90	0.245	40.61	-16.71
829.00	10	16-QAM	1 / 49	23.97	-0.60	21.22	0.132	38.45	-17.23	23.37	0.217	40.61	-17.24
829.00	10	64-QAM	1 / 25	22.77	-0.60	20.02	0.100	38.45	-18.43	22.17	0.165	40.61	-18.44

Table 7-32. Antenna D (Port B) ERP/EIRP Data (Band 5)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 254 of 335

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	24.23	-0.60	21.48	0.141	38.45	-16.97	23.63	0.231	40.61	-16.98
836.50	1.4	QPSK	1 / 5	24.27	-0.60	21.52	0.142	38.45	-16.93	23.67	0.233	40.61	-16.94
848.30	1.4	QPSK	1 / 5	24.50	-0.60	21.75	0.150	38.45	-16.70	23.90	0.245	40.61	-16.71
848.30	1.4	16-QAM	1 / 2	23.51	-0.60	20.76	0.119	38.45	-17.69	22.91	0.195	40.61	-17.70
848.30	1.4	64-QAM	1 / 2	22.70	-0.60	19.95	0.099	38.45	-18.50	22.10	0.162	40.61	-18.51
825.50	3	QPSK	1 / 0	24.38	-0.60	21.63	0.146	38.45	-16.82	23.78	0.239	40.61	-16.83
836.50	3	QPSK	1 / 7	24.48	-0.60	21.73	0.149	38.45	-16.72	23.88	0.244	40.61	-16.73
847.50	3	QPSK	1 / 7	24.50	-0.60	21.75	0.150	38.45	-16.70	23.90	0.245	40.61	-16.71
847.50	3	16-QAM	1 / 14	23.89	-0.60	21.14	0.130	38.45	-17.31	23.29	0.213	40.61	-17.32
847.50	3	64-QAM	1 / 14	22.95	-0.60	20.20	0.105	38.45	-18.25	22.35	0.172	40.61	-18.26
826.50	5	QPSK	1 / 0	24.36	-0.60	21.61	0.145	38.45	-16.84	23.76	0.238	40.61	-16.85
836.50	5	QPSK	1 / 24	24.50	-0.60	21.75	0.150	38.45	-16.70	23.90	0.245	40.61	-16.71
846.50	5	QPSK	1 / 24	24.38	-0.60	21.63	0.146	38.45	-16.82	23.78	0.239	40.61	-16.83
836.50	5	16-QAM	1 / 24	23.83	-0.60	21.08	0.128	38.45	-17.37	23.23	0.210	40.61	-17.38
836.50	5	64-QAM	1 / 0	22.77	-0.60	20.02	0.100	38.45	-18.43	22.17	0.165	40.61	-18.44
829.00	10	QPSK	1 / 25	24.50	-0.60	21.75	0.150	38.45	-16.70	23.90	0.245	40.61	-16.71
836.50	10	QPSK	1 / 49	24.44	-0.60	21.69	0.148	38.45	-16.76	23.84	0.242	40.61	-16.77
844.00	10	QPSK	1 / 49	24.50	-0.60	21.75	0.150	38.45	-16.70	23.90	0.245	40.61	-16.71
829.00	10	16-QAM	1 / 25	23.89	-0.60	21.14	0.130	38.45	-17.31	23.29	0.213	40.61	-17.32
829.00	10	64-QAM	1 / 25	22.89	-0.60	20.14	0.103	38.45	-18.31	22.29	0.169	40.61	-18.32

Table 7-33. Antenna D (Port B) ERP/EIRP Data (Band 26)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 255 of 335

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 / 5	23.48	2.00	25.48	0.353	30.00	-4.52
1732.50	1.4	QPSK	1 / 5	23.50	2.00	25.50	0.355	30.00	-4.50
1754.30	1.4	QPSK	1 / 0	23.45	2.00	25.45	0.351	30.00	-4.55
1732.50	1.4	16-QAM	1 / 0	23.09	2.00	25.09	0.323	30.00	-4.91
1732.50	1.4	64-QAM	1 / 2	21.95	2.00	23.95	0.248	30.00	-6.05
1711.50	3	QPSK	1 / 7	23.49	2.00	25.49	0.354	30.00	-4.51
1732.50	3	QPSK	1 / 7	23.50	2.00	25.50	0.355	30.00	-4.50
1753.50	3	QPSK	1 / 7	23.50	2.00	25.50	0.355	30.00	-4.50
1732.50	3	16-QAM	1 / 14	23.11	2.00	25.11	0.324	30.00	-4.89
1732.50	3	64-QAM	1 / 7	21.86	2.00	23.86	0.243	30.00	-6.14
1712.50	5	QPSK	1 / 0	23.41	2.00	25.41	0.348	30.00	-4.59
1732.50	5	QPSK	1 / 24	23.50	2.00	25.50	0.355	30.00	-4.50
1752.50	5	QPSK	1 / 12	23.46	2.00	25.46	0.352	30.00	-4.54
1732.50	5	16-QAM	1 / 0	23.01	2.00	25.01	0.317	30.00	-4.99
1732.50	5	64-QAM	1 / 12	21.88	2.00	23.88	0.244	30.00	-6.12
1715.00	10	QPSK	1 / 0	23.50	2.00	25.50	0.355	30.00	-4.50
1732.50	10	QPSK	1 / 25	23.48	2.00	25.48	0.353	30.00	-4.52
1750.00	10	QPSK	1 / 25	23.50	2.00	25.50	0.355	30.00	-4.50
1715.00	10	16-QAM	1 / 0	23.01	2.00	25.01	0.317	30.00	-4.99
1715.00	10	64-QAM	1 / 0	21.89	2.00	23.89	0.245	30.00	-6.11
1717.50	15	QPSK	1 / 0	23.50	2.00	25.50	0.355	30.00	-4.50
1732.50	15	QPSK	1 / 36	23.24	2.00	25.24	0.334	30.00	-4.76
1747.50	15	QPSK	1 / 36	23.46	2.00	25.46	0.352	30.00	-4.54
1717.50	15	16-QAM	1 / 0	22.73	2.00	24.73	0.297	30.00	-5.27
1717.50	15	64-QAM	1 / 0	21.79	2.00	23.79	0.239	30.00	-6.21
1720.00	20	QPSK	1 / 0	23.50	2.00	25.50	0.355	30.00	-4.50
1732.50	20	QPSK	1 / 99	23.35	2.00	25.35	0.343	30.00	-4.65
1745.00	20	QPSK	1 / 0	23.50	2.00	25.50	0.355	30.00	-4.50
1720.00	20	16-QAM	1 / 0	23.07	2.00	25.07	0.321	30.00	-4.93
1720.00	20	64-QAM	1 / 0	21.76	2.00	23.76	0.238	30.00	-6.24

Table 7-34. Antenna D (Port B) EIRP Data (Band 4)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 256 of 335

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 / 5	23.42	2.00	25.42	0.348	30.00	-4.58
1745.00	1.4	QPSK	1 / 5	23.30	2.00	25.30	0.339	30.00	-4.70
1779.30	1.4	QPSK	1 / 0	23.50	2.00	25.50	0.355	30.00	-4.50
1779.30	1.4	16-QAM	1 / 0	22.74	2.00	24.74	0.298	30.00	-5.26
1779.30	1.4	64-QAM	1 / 5	21.92	2.00	23.92	0.247	30.00	-6.08
1711.50	3	QPSK	1 / 7	23.50	2.00	25.50	0.355	30.00	-4.50
1745.00	3	QPSK	1 / 7	23.38	2.00	25.38	0.345	30.00	-4.62
1778.50	3	QPSK	1 / 7	23.39	2.00	25.39	0.346	30.00	-4.61
1711.50	3	16-QAM	1 / 7	23.06	2.00	25.06	0.321	30.00	-4.94
1711.50	3	64-QAM	1 / 0	21.88	2.00	23.88	0.244	30.00	-6.12
1712.50	5	QPSK	1 / 0	23.50	2.00	25.50	0.355	30.00	-4.50
1745.00	5	QPSK	1 / 24	23.46	2.00	25.46	0.352	30.00	-4.54
1777.50	5	QPSK	1 / 12	23.47	2.00	25.47	0.352	30.00	-4.53
1712.50	5	16-QAM	1 / 0	23.10	2.00	25.10	0.324	30.00	-4.90
1712.50	5	64-QAM	1 / 0	22.02	2.00	24.02	0.252	30.00	-5.98
1715.00	10	QPSK	1 / 0	23.50	2.00	25.50	0.355	30.00	-4.50
1745.00	10	QPSK	1 / 0	23.47	2.00	25.47	0.352	30.00	-4.53
1775.00	10	QPSK	1 / 25	23.48	2.00	25.48	0.353	30.00	-4.52
1715.00	10	16-QAM	1 / 0	22.94	2.00	24.94	0.312	30.00	-5.06
1715.00	10	64-QAM	1 / 0	21.89	2.00	23.89	0.245	30.00	-6.11
1717.50	15	QPSK	1 / 0	23.50	2.00	25.50	0.355	30.00	-4.50
1745.00	15	QPSK	1 / 74	23.50	2.00	25.50	0.355	30.00	-4.50
1772.50	15	QPSK	1 / 36	23.50	2.00	25.50	0.355	30.00	-4.50
1717.50	15	16-QAM	1 / 0	22.66	2.00	24.66	0.292	30.00	-5.34
1717.50	15	64-QAM	1 / 36	21.75	2.00	23.75	0.237	30.00	-6.25
1720.00	20	QPSK	1 / 0	23.50	2.00	25.50	0.355	30.00	-4.50
1745.00	20	QPSK	1 / 50	23.50	2.00	25.50	0.355	30.00	-4.50
1770.00	20	QPSK	1 / 99	23.43	2.00	25.43	0.349	30.00	-4.57
1720.00	20	16-QAM	1 / 0	22.98	2.00	24.98	0.315	30.00	-5.02
1720.00	20	64-QAM	1 / 0	21.73	2.00	23.73	0.236	30.00	-6.27

Table 7-35. Antenna D (Port B) EIRP Data (Band 66)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 257 of 335

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 / 5	23.29	2.60	25.89	0.388	33.01	-7.12
1880.00	1.4	QPSK	1 / 5	22.95	2.60	25.55	0.359	33.01	-7.46
1909.30	1.4	QPSK	1 / 2	23.23	2.60	25.83	0.383	33.01	-7.18
1850.70	1.4	16-QAM	1 / 2	22.94	2.60	25.54	0.358	33.01	-7.47
1850.70	1.4	64-QAM	1 / 2	21.89	2.60	24.49	0.281	33.01	-8.52
1851.50	3	QPSK	1 / 7	23.29	2.60	25.89	0.388	33.01	-7.12
1880.00	3	QPSK	1 / 7	22.96	2.60	25.56	0.360	33.01	-7.45
1908.50	3	QPSK	1 / 7	23.04	2.60	25.64	0.366	33.01	-7.37
1851.50	3	16-QAM	1 / 7	22.98	2.60	25.58	0.361	33.01	-7.43
1851.50	3	64-QAM	1 / 7	21.92	2.60	24.52	0.283	33.01	-8.49
1852.50	5	QPSK	1 / 0	23.34	2.60	25.94	0.393	33.01	-7.07
1880.00	5	QPSK	1 / 0	23.11	2.60	25.71	0.372	33.01	-7.30
1907.50	5	QPSK	1 / 0	23.06	2.60	25.66	0.368	33.01	-7.35
1852.50	5	16-QAM	1 / 24	22.97	2.60	25.57	0.361	33.01	-7.44
1852.50	5	64-QAM	1 / 24	21.96	2.60	24.56	0.286	33.01	-8.45
1855.00	10	QPSK	1 / 0	23.30	2.60	25.90	0.389	33.01	-7.11
1880.00	10	QPSK	1 / 0	22.93	2.60	25.53	0.357	33.01	-7.48
1905.00	10	QPSK	1 / 0	23.10	2.60	25.70	0.372	33.01	-7.31
1855.00	10	16-QAM	1 / 49	22.88	2.60	25.48	0.353	33.01	-7.53
1855.00	10	64-QAM	1 / 0	21.86	2.60	24.46	0.279	33.01	-8.55
1857.50	15	QPSK	1 / 0	23.49	2.60	26.09	0.406	33.01	-6.92
1880.00	15	QPSK	1 / 0	23.10	2.60	25.70	0.372	33.01	-7.31
1902.50	15	QPSK	1 / 0	23.14	2.60	25.74	0.375	33.01	-7.27
1857.50	15	16-QAM	1 / 36	22.80	2.60	25.40	0.347	33.01	-7.61
1857.50	15	64-QAM	1 / 0	21.97	2.60	24.57	0.286	33.01	-8.44
1860.00	20	QPSK	1 / 0	23.41	2.60	26.01	0.399	33.01	-7.00
1880.00	20	QPSK	1 / 0	23.16	2.60	25.76	0.377	33.01	-7.25
1900.00	20	QPSK	1 / 50	23.24	2.60	25.84	0.384	33.01	-7.17
1860.00	20	16-QAM	1 / 0	23.02	2.60	25.62	0.365	33.01	-7.39
1860.00	20	64-QAM	1 / 99	21.77	2.60	24.37	0.274	33.01	-8.64

Table 7-36. Antenna D (Port B) EIRP Data (Band 2)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 258 of 335

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 / 5	23.32	2.60	25.92	0.391	33.01	-7.09
1882.50	1.4	QPSK	1 / 0	22.96	2.60	25.56	0.360	33.01	-7.45
1914.30	1.4	QPSK	1 / 5	23.32	2.60	25.92	0.391	33.01	-7.09
1850.70	1.4	16-QAM	1 / 5	23.05	2.60	25.65	0.367	33.01	-7.36
1850.70	1.4	64-QAM	1 / 0	21.91	2.60	24.51	0.282	33.01	-8.50
1851.50	3	QPSK	1 / 7	23.31	2.60	25.91	0.390	33.01	-7.10
1882.50	3	QPSK	1 / 7	22.95	2.60	25.55	0.359	33.01	-7.46
1913.50	3	QPSK	1 / 7	23.11	2.60	25.71	0.372	33.01	-7.30
1851.50	3	16-QAM	1 / 7	22.91	2.60	25.51	0.356	33.01	-7.50
1851.50	3	64-QAM	1 / 7	21.77	2.60	24.37	0.274	33.01	-8.64
1852.50	5	QPSK	1 / 0	23.36	2.60	25.96	0.394	33.01	-7.05
1882.50	5	QPSK	1 / 24	23.14	2.60	25.74	0.375	33.01	-7.27
1912.50	5	QPSK	1 / 24	23.15	2.60	25.75	0.376	33.01	-7.26
1852.50	5	16-QAM	1 / 0	23.11	2.60	25.71	0.372	33.01	-7.30
1852.50	5	64-QAM	1 / 0	21.91	2.60	24.51	0.282	33.01	-8.50
1855.00	10	QPSK	1 / 0	23.30	2.60	25.90	0.389	33.01	-7.11
1882.50	10	QPSK	1 / 49	23.01	2.60	25.61	0.364	33.01	-7.40
1910.00	10	QPSK	1 / 49	23.08	2.60	25.68	0.370	33.01	-7.33
1855.00	10	16-QAM	1 / 25	22.86	2.60	25.46	0.352	33.01	-7.55
1855.00	10	64-QAM	1 / 0	21.74	2.60	24.34	0.272	33.01	-8.67
1857.50	15	QPSK	1 / 0	23.50	2.60	26.10	0.407	33.01	-6.91
1882.50	15	QPSK	1 / 74	23.03	2.60	25.63	0.366	33.01	-7.38
1907.50	15	QPSK	1 / 0	23.12	2.60	25.72	0.373	33.01	-7.29
1857.50	15	16-QAM	1 / 0	22.93	2.60	25.53	0.357	33.01	-7.48
1857.50	15	64-QAM	1 / 36	21.88	2.60	24.48	0.281	33.01	-8.53
1860.00	20	QPSK	1 / 0	23.42	2.60	26.02	0.400	33.01	-6.99
1882.50	20	QPSK	1 / 0	23.10	2.60	25.70	0.372	33.01	-7.31
1905.00	20	QPSK	1 / 0	23.37	2.60	25.97	0.395	33.01	-7.04
1860.00	20	16-QAM	1 / 0	22.99	2.60	25.59	0.362	33.01	-7.42
1860.00	20	64-QAM	1 / 99	21.91	2.60	24.51	0.282	33.01	-8.50

Table 7-37. Antenna D (Port B) EIRP Data (Band 25)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 259 of 335

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 / 24	21.30	1.70	23.00	0.200	23.98	-0.98
2312.50	5	QPSK	1 / 0	21.23	1.70	22.93	0.196	23.98	-1.05
2312.50	5	16-QAM	1 / 12	20.57	1.70	22.27	0.169	23.98	-1.71
2312.50	5	64-QAM	1 / 0	19.84	1.70	21.54	0.143	23.98	-2.44
2310.00	10	QPSK	1 / 0	21.30	1.70	23.00	0.200	23.98	-0.98
2310.00	10	16-QAM	1 / 0	19.65	1.70	21.35	0.136	23.98	-2.63
2310.00	10	64-QAM	1 / 0	18.75	1.70	20.45	0.111	23.98	-3.53

Table 7-38. Antenna D (Port B) EIRP Data (Band 30)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 260 of 335

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 / 12	23.20	2.00	25.20	0.331	33.01	-7.81
2535.00	5	QPSK	1 / 24	23.25	2.00	25.25	0.335	33.01	-7.76
2567.50	5	QPSK	1 / 0	23.23	2.00	25.23	0.333	33.01	-7.78
2535.00	5	16-QAM	1 / 12	22.58	2.00	24.58	0.287	33.01	-8.43
2535.00	5	64-QAM	1 / 12	21.49	2.00	23.49	0.223	33.01	-9.52
2505.00	10	QPSK	1 / 0	23.20	2.00	25.20	0.331	33.01	-7.81
2535.00	10	QPSK	1 / 49	23.18	2.00	25.18	0.330	33.01	-7.83
2565.00	10	QPSK	1 / 49	23.24	2.00	25.24	0.334	33.01	-7.77
2565.00	10	16-QAM	1 / 25	22.63	2.00	24.63	0.290	33.01	-8.38
2565.00	10	64-QAM	1 / 0	21.65	2.00	23.65	0.232	33.01	-9.36
2507.50	15	QPSK	1 / 0	23.25	2.00	25.25	0.335	33.01	-7.76
2535.00	15	QPSK	1 / 74	23.20	2.00	25.20	0.331	33.01	-7.81
2562.50	15	QPSK	1 / 36	23.21	2.00	25.21	0.332	33.01	-7.80
2507.50	15	16-QAM	1 / 0	22.34	2.00	24.34	0.272	33.01	-8.67
2507.50	15	64-QAM	1 / 36	21.48	2.00	23.48	0.223	33.01	-9.53
2510.00	20	QPSK	1 / 50	23.22	2.00	25.22	0.333	33.01	-7.79
2535.00	20	QPSK	1 / 99	23.23	2.00	25.23	0.333	33.01	-7.78
2560.00	20	QPSK	1 / 99	23.25	2.00	25.25	0.335	33.01	-7.76
2560.00	20	16-QAM	1 / 0	22.65	2.00	24.65	0.292	33.01	-8.36
2560.00	20	64-QAM	1 / 0	21.58	2.00	23.58	0.228	33.01	-9.43

Table 7-39. Antenna D (Port B) EIRP Data (Band 7)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 261 of 335

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	2.00	26.75	0.473	33.01	-6.26
2593.00	5	QPSK	1 / 0	24.63	2.00	26.63	0.460	33.01	-6.38
2687.50	5	QPSK	1 / 24	24.48	2.00	26.48	0.445	33.01	-6.53
2498.50	5	16-QAM	1 / 12	24.45	2.00	26.45	0.442	33.01	-6.56
2498.50	5	64-QAM	1 / 12	23.37	2.00	25.37	0.344	33.01	-7.64
2501.00	10	QPSK	1 / 0	24.71	2.00	26.71	0.469	33.01	-6.30
2593.00	10	QPSK	1 / 0	24.60	2.00	26.60	0.457	33.01	-6.41
2685.00	10	QPSK	1 / 49	24.54	2.00	26.54	0.451	33.01	-6.47
2501.00	10	16-QAM	1 / 49	24.34	2.00	26.34	0.431	33.01	-6.67
2501.00	10	64-QAM	1 / 0	23.23	2.00	25.23	0.333	33.01	-7.78
2503.50	15	QPSK	1 / 0	24.75	2.00	26.75	0.473	33.01	-6.26
2593.00	15	QPSK	1 / 36	24.67	2.00	26.67	0.465	33.01	-6.34
2682.50	15	QPSK	1 / 74	24.52	2.00	26.52	0.449	33.01	-6.49
2503.50	15	16-QAM	1 / 36	24.10	2.00	26.10	0.407	33.01	-6.91
2503.50	15	64-QAM	1 / 0	23.24	2.00	25.24	0.334	33.01	-7.77
2506.00	20	QPSK	1 / 99	24.75	2.00	26.75	0.473	33.01	-6.26
2593.00	20	QPSK	1 / 50	24.71	2.00	26.71	0.469	33.01	-6.30
2680.00	20	QPSK	1 / 0	24.49	2.00	26.49	0.446	33.01	-6.52
2506.00	20	16-QAM	1 / 99	24.15	2.00	26.15	0.412	33.01	-6.86
2506.00	20	64-QAM	1 / 0	23.19	2.00	25.19	0.330	33.01	-7.82

Table 7-40. Antenna D (Port B) EIRP Data (Band 41 PC2)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 262 of 335

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	23.25	2.00	25.25	0.335	33.01	-7.76
2593.00	5	QPSK	1 / 12	23.23	2.00	25.23	0.333	33.01	-7.78
2687.50	5	QPSK	1 / 24	23.12	2.00	25.12	0.325	33.01	-7.89
2593.00	5	16-QAM	1 / 12	22.87	2.00	24.87	0.307	33.01	-8.14
2593.00	5	64-QAM	1 / 12	21.85	2.00	23.85	0.243	33.01	-9.16
2501.00	10	QPSK	1 / 25	23.19	2.00	25.19	0.330	33.01	-7.82
2593.00	10	QPSK	1 / 0	23.22	2.00	25.22	0.333	33.01	-7.79
2685.00	10	QPSK	1 / 49	23.18	2.00	25.18	0.330	33.01	-7.83
2501.00	10	16-QAM	1 / 25	22.91	2.00	24.91	0.310	33.01	-8.10
2501.00	10	64-QAM	1 / 25	21.73	2.00	23.73	0.236	33.01	-9.28
2503.50	15	QPSK	1 / 0	23.25	2.00	25.25	0.335	33.01	-7.76
2593.00	15	QPSK	1 / 36	23.18	2.00	25.18	0.330	33.01	-7.83
2682.50	15	QPSK	1 / 74	23.14	2.00	25.14	0.327	33.01	-7.87
2503.50	15	16-QAM	1 / 0	22.74	2.00	24.74	0.298	33.01	-8.27
2503.50	15	64-QAM	1 / 0	21.77	2.00	23.77	0.238	33.01	-9.24
2506.00	20	QPSK	1 / 0	23.25	2.00	25.25	0.335	33.01	-7.76
2593.00	20	QPSK	1 / 0	23.24	2.00	25.24	0.334	33.01	-7.77
2680.00	20	QPSK	1 / 0	23.23	2.00	25.23	0.333	33.01	-7.78
2593.00	20	16-QAM	1 / 0	22.85	2.00	24.85	0.305	33.01	-8.16
2593.00	20	64-QAM	1 / 99	21.61	2.00	23.61	0.230	33.01	-9.40

Table 7-41. Antenna D (Port B) EIRP Data (Band 41 PC3)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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7.9 Radiated Spurious Emissions

Test Overview

Radiated spurious emissions measurements are performed using the substitution method described in ANSI C63.26-2015 and 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 C63.26-2015

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: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Test Setup

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

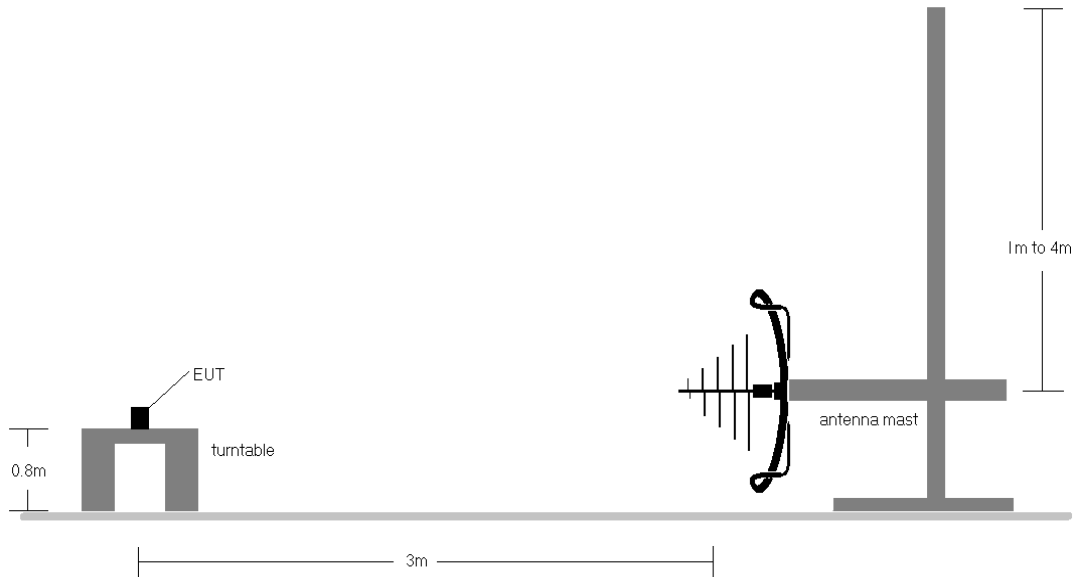


Figure 7-8. Test Instrument & Measurement Setup < 1GHz

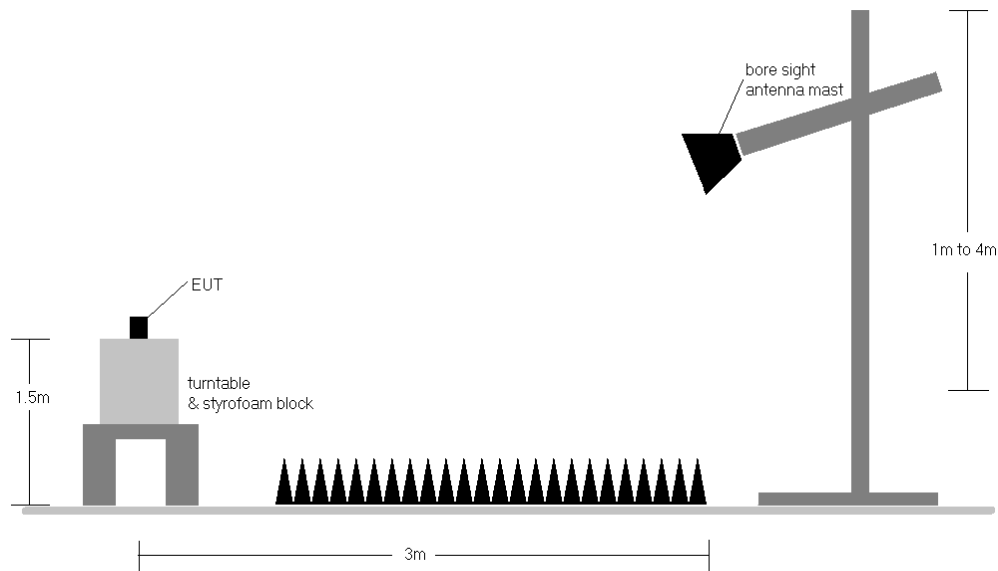


Figure 7-9. Test Instrument & Measurement Setup > 1GHz

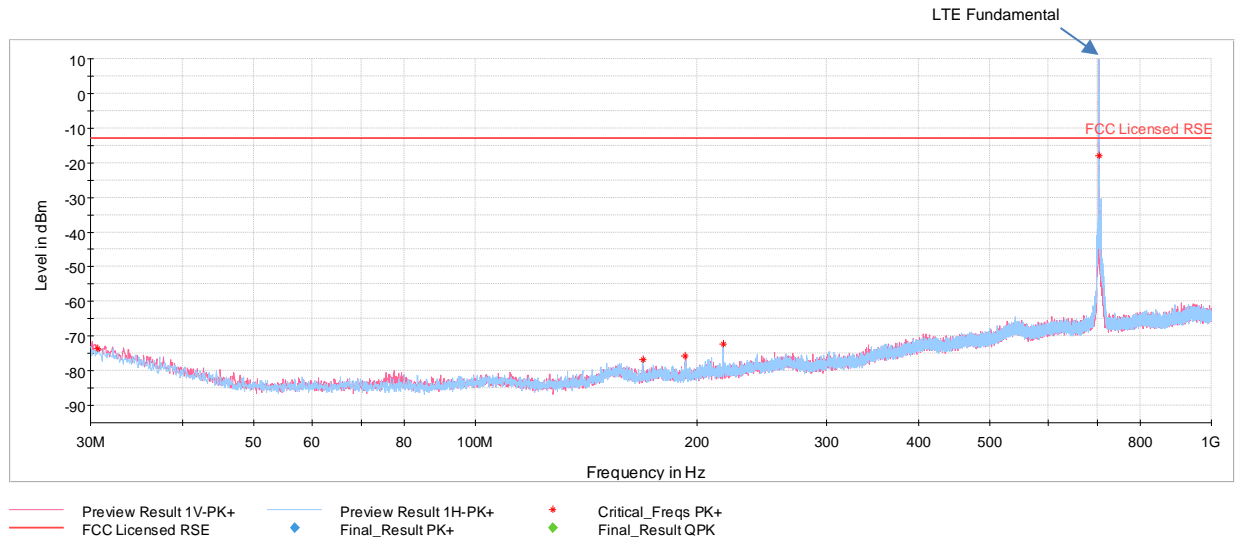
FCC ID: BCGA2429	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Test Notes

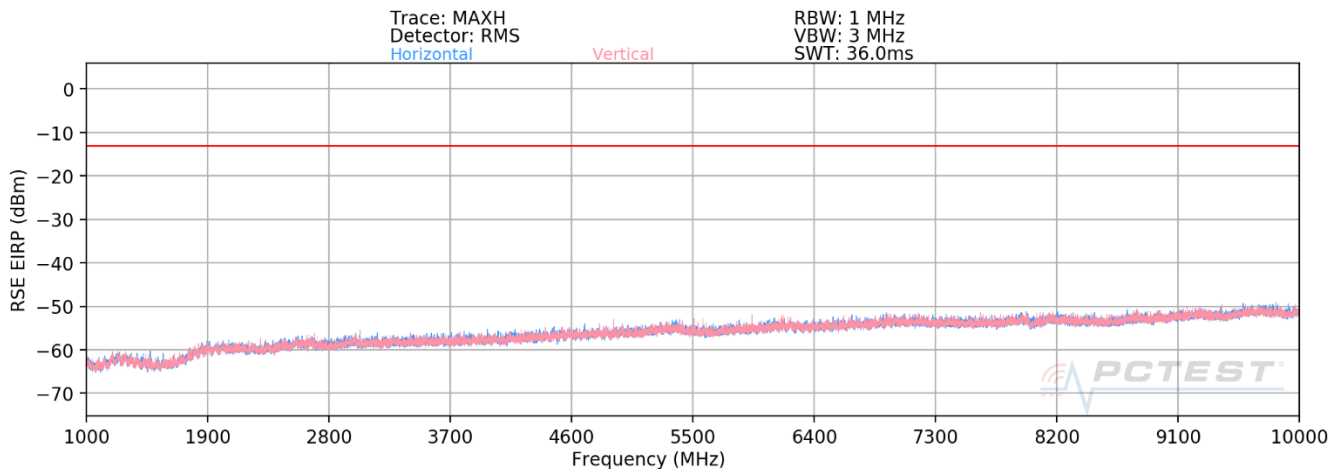
- 1) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The worst case emissions are reported with modulations, offsets and channel bandwidth configurations in this section. 1RB config was found and reported as a worst case RB size.
- 2) This unit was 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) D is the measurement test distance and emissions 1-18GHz were measured at a 3 meters 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.
- 6) No significant emissions were found for below 1GHz and Above 18GHz measurement.
- 7) For LTE Band 30 pre-scans above 1GHz, the RBW is set to 1MHz and VBW to 30kHz. For final measurements above 1GHz, the RBW is set to 1MHz and VBW to 3MHz when measuring with an RMS detector and trace averaging.
- 8) Below 1GHz pre-scan plot shows no significant emissions.

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7.9.1 Antenna C (Port A) Radiated Spurious Emissions Measurements Band 12/17



Plot 7-401. Radiated Spurious Emissions below 1GHz (Band 12/17)



Plot 7-402. Radiated Spurious Emissions above 1GHz (Band 12/17)

FCC ID: BCGA2429	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 267 of 335

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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1408.00	H	-	-	-71.67	4.42	-67.25	-54.3
2112.00	H	-	-	-69.30	5.26	-64.04	-51.0
2816.00	H	-	-	-70.75	6.93	-63.83	-50.8

Table 7-42. Radiated Spurious Data (Band 12/17 – Low Channel)

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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1415.00	H	133	123	-71.86	4.51	-67.35	-54.3
2122.50	H	-	-	-69.52	5.32	-64.19	-51.2
2830.00	H	-	-	-70.16	7.00	-63.17	-50.2
3537.50	H	-	-	-71.24	8.17	-63.07	-50.1

Table 7-43. Radiated Spurious Data (Band 12/17 – Mid Channel)

FCC ID: BCGA2429		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 268 of 335

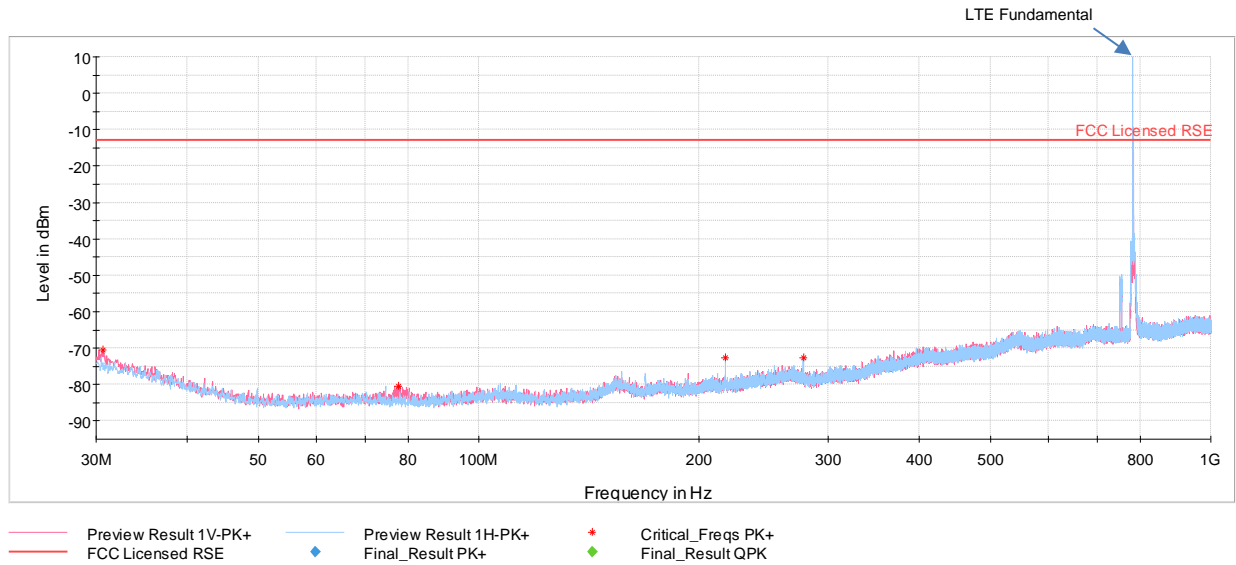
OPERATING FREQUENCY: 711.00 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 10.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1422.00	H	-	-	-72.19	4.61	-67.58	-54.6
2133.00	H	-	-	-69.38	5.39	-64.00	-51.0
2844.00	H	-	-	-70.85	7.07	-63.79	-50.8

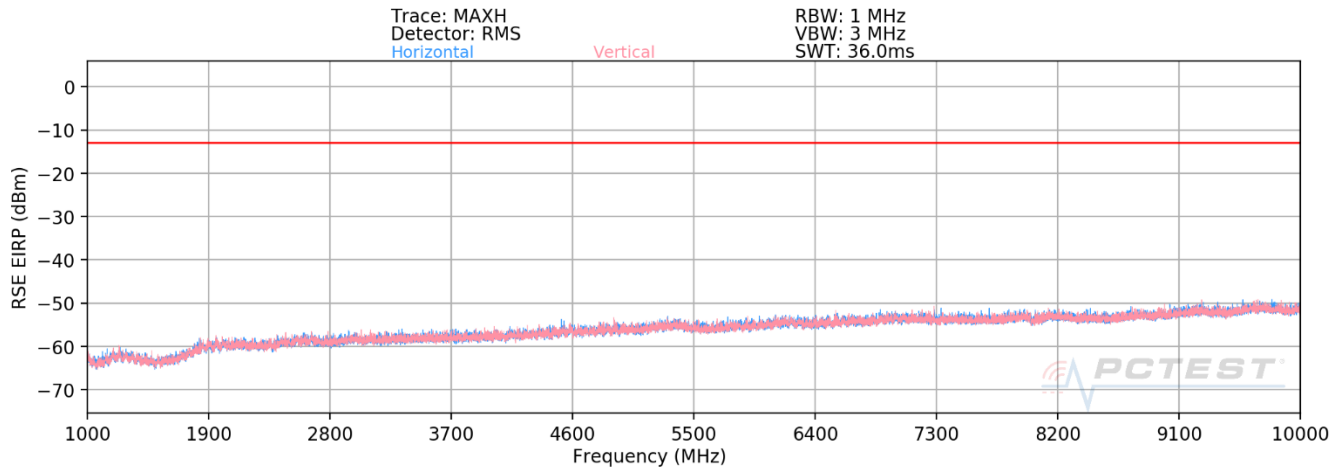
Table 7-44. Radiated Spurious Data (Band 12/17 – High Channel)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device
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Band 13



Plot 7-403. Radiated Spurious Emissions below 1GHz (Band 13)



Plot 7-404. Radiated Spurious Emissions above 1GHz (Band 13)

FCC ID: BCGA2429	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 270 of 335

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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
2338.50	H	-	-	-70.82	6.14	-64.68	-51.7
3118.00	H	-	-	-72.31	7.54	-64.77	-51.8

Table 7-45. Radiated Spurious Data (Band 13 – Low Channel)

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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
2346.00	H	-	-	-71.10	6.14	-64.95	-52.0
3128.00	H	-	-	-71.55	7.59	-63.96	-51.0

Table 7-46. 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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
2353.50	H	-	-	-71.48	6.15	-65.33	-52.3
3138.00	H	-	-	-71.62	7.65	-63.98	-51.0

Table 7-47. Radiated Spurious Data (Band 13 – High Channel)

FCC ID: BCGA2429	 PCTEST Proud to be part of  element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 271 of 335

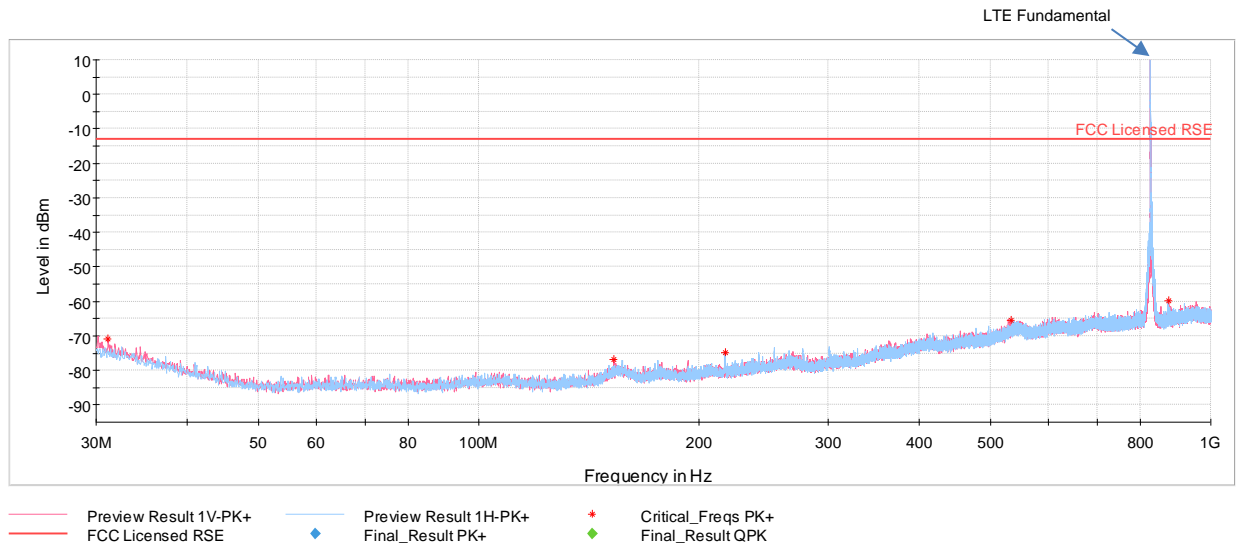
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	5.00	MHz
DISTANCE:	3	meters
NARROWBAND EMISSION LIMIT:	-50	dBm
WIDEBAND EMISSION LIMIT:	-40	dBm/MHz

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1559.00	H	-	-	-74.91	5.76	-69.14	-29.1
1564.00	H	-	-	-73.59	5.77	-67.83	-27.8
1569.00	H	-	-	-74.25	5.77	-68.48	-28.5

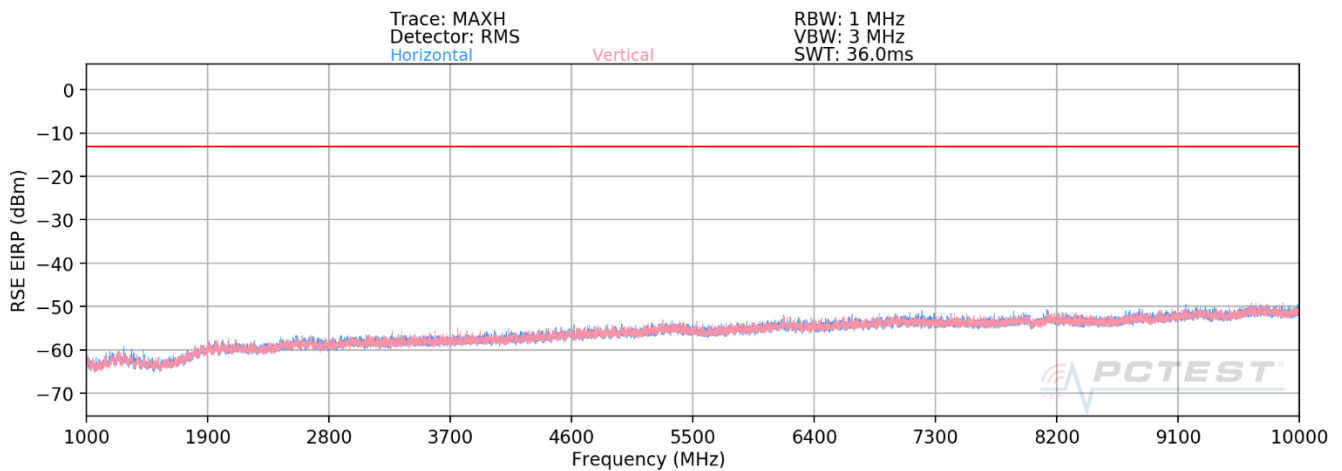
Table 7-48. Radiated Spurious Data (Band 13 – 1559-1610MHz Band)

FCC ID: BCGA2429	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 272 of 335

Band 26/5



Plot 7-405. Radiated Spurious Emissions below 1GHz (Band 26/5)



Plot 7-406. Radiated Spurious Emissions above 1GHz (Band 26/5)

FCC ID: BCGA2429	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 273 of 335

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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1658.00	H	-	-	-74.65	5.56	-69.08	-56.1
2487.00	H	-	-	-70.55	6.09	-64.47	-51.5
3316.00	H	-	-	-72.57	7.91	-64.66	-51.7

Table 7-49. Radiated Spurious Data (Band 26/5 – Low Channel)

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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1673.00	H	-	-	-72.95	5.57	-67.37	-54.4
2509.50	H	-	-	-69.50	6.10	-63.40	-50.4
3346.00	H	-	-	-70.73	7.99	-62.74	-49.7

Table 7-50. Radiated Spurious Data (Band 26/5 – Mid Channel)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 274 of 335

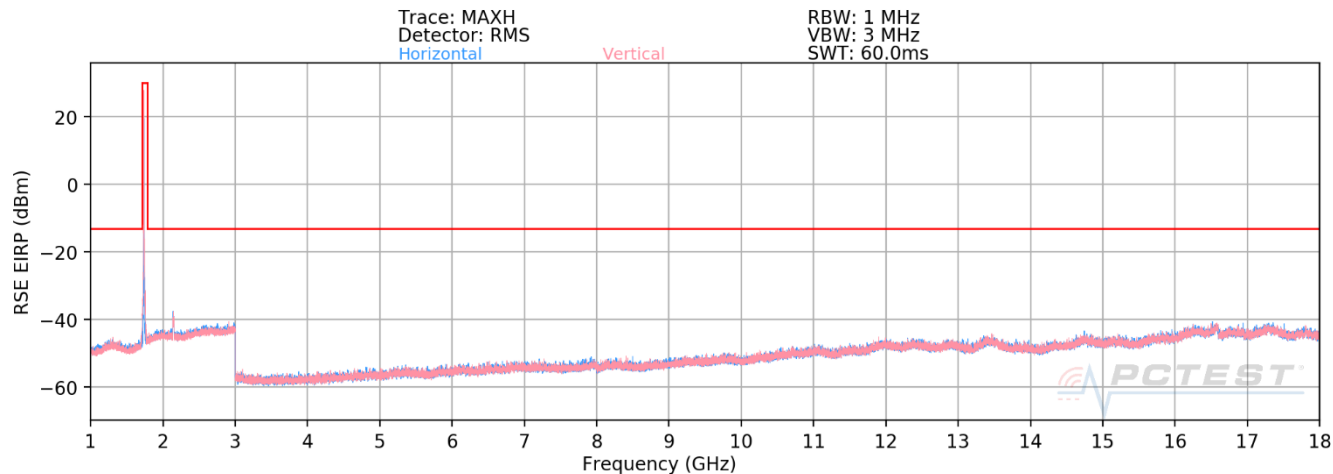
OPERATING FREQUENCY: 844.00 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 10.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1688.00	H	104	134	-72.50	5.58	-66.92	-53.9
2532.00	H	-	-	-69.42	6.22	-63.20	-50.2
3376.00	H	-	-	-71.30	8.06	-63.24	-50.2
4220.00	H	-	-	-70.59	9.28	-61.31	-48.3

Table 7-51. Radiated Spurious Data (Band 26/5 – High Channel)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 275 of 335

Band 66/4



Plot 7-407. Radiated Spurious Emissions 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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3440.00	V	-	-	-74.24	8.15	-66.09	-53.1
5160.00	V	-	-	-73.63	10.19	-63.43	-50.4
6880.00	V	-	-	-72.49	11.48	-61.01	-48.0

Table 7-52. Radiated Spurious Data (Band 66/4 – Low Channel)

FCC ID: BCGA2429	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 276 of 335

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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3490.00	V	-	-	-71.71	8.23	-63.48	-50.5
5235.00	V	-	-	-71.64	10.36	-61.28	-48.3
6980.00	V	-	-	-71.94	11.59	-60.36	-47.4

Table 7-53. Radiated Spurious Data (Band 66/4 – Mid Channel)

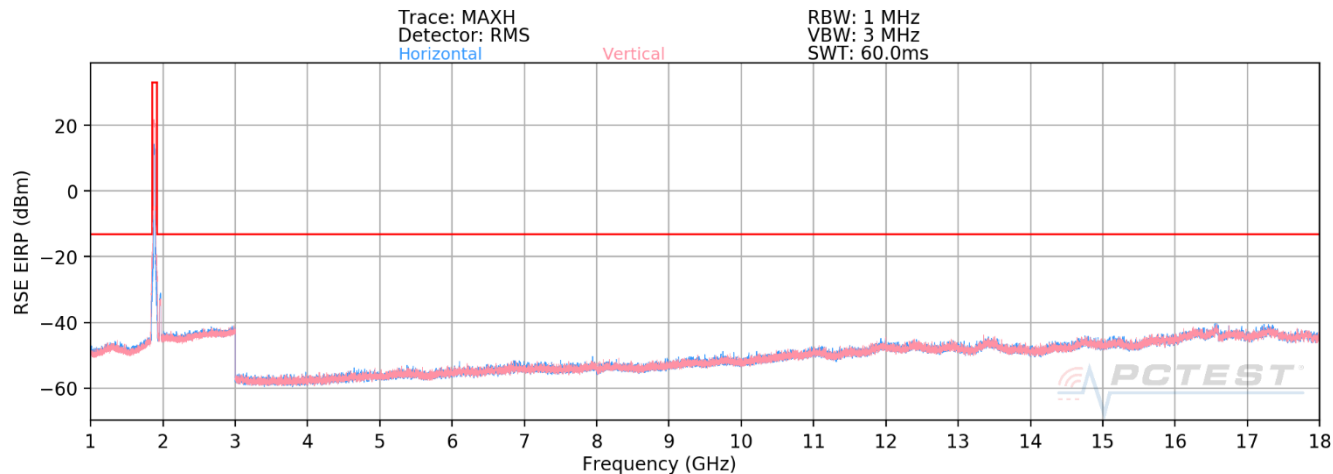
OPERATING FREQUENCY: 1770.00 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3540.00	V	-	-	-73.85	8.16	-65.69	-52.7
5310.00	V	-	-	-73.39	10.34	-63.04	-50.0
7080.00	V	-	-	-72.93	11.69	-61.24	-48.2

Table 7-54. Radiated Spurious Data (Band 66/4 – High Channel)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 277 of 335

Band 25/2



Plot 7-408. Radiated Spurious Emissions 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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3720.00	V	-	-	-61.32	8.45	-52.86	-39.9
5580.00	V	-	-	-62.31	10.75	-51.57	-38.6
7440.00	V	-	-	-62.67	11.93	-50.74	-37.7

Table 7-55. Radiated Spurious Data (Band 25/2 – Low Channel)

FCC ID: BCGA2429	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device		Page 278 of 335

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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3765.00	V	-	-	-62.39	8.51	-53.89	-40.9
5647.50	V	-	-	-63.41	10.72	-52.69	-39.7
7530.00	V	-	-	-63.09	12.02	-51.07	-38.1
9412.50	V	-	-	-62.44	13.39	-49.06	-36.1

Table 7-56. Radiated Spurious Data (Band 25/2 – Mid Channel)

OPERATING FREQUENCY: 1905.00 MHz

MODULATION SIGNAL: QPSK

BANDWIDTH: 20.0 MHz

DISTANCE: 3 meters

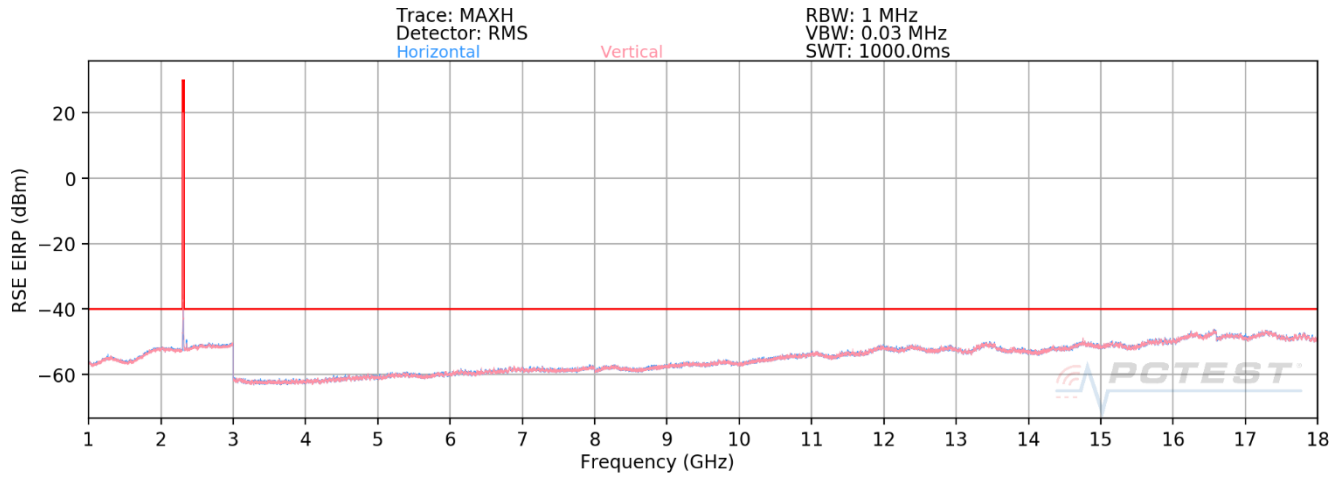
LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3810.00	V	-	-	-61.70	8.62	-53.08	-40.1
5715.00	V	-	-	-62.91	10.69	-52.21	-39.2
7620.00	V	-	-	-62.45	12.19	-50.27	-37.3

Table 7-57. Radiated Spurious Data (Band 25/2 – High Channel)

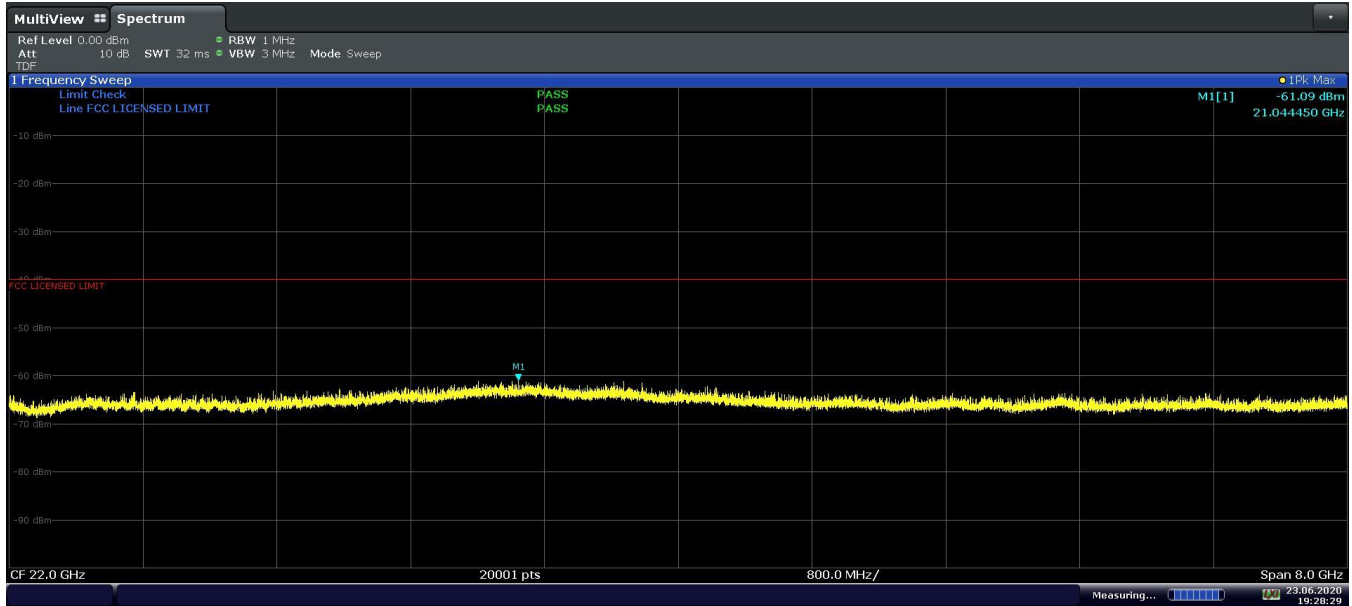
FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 279 of 335

Band 30



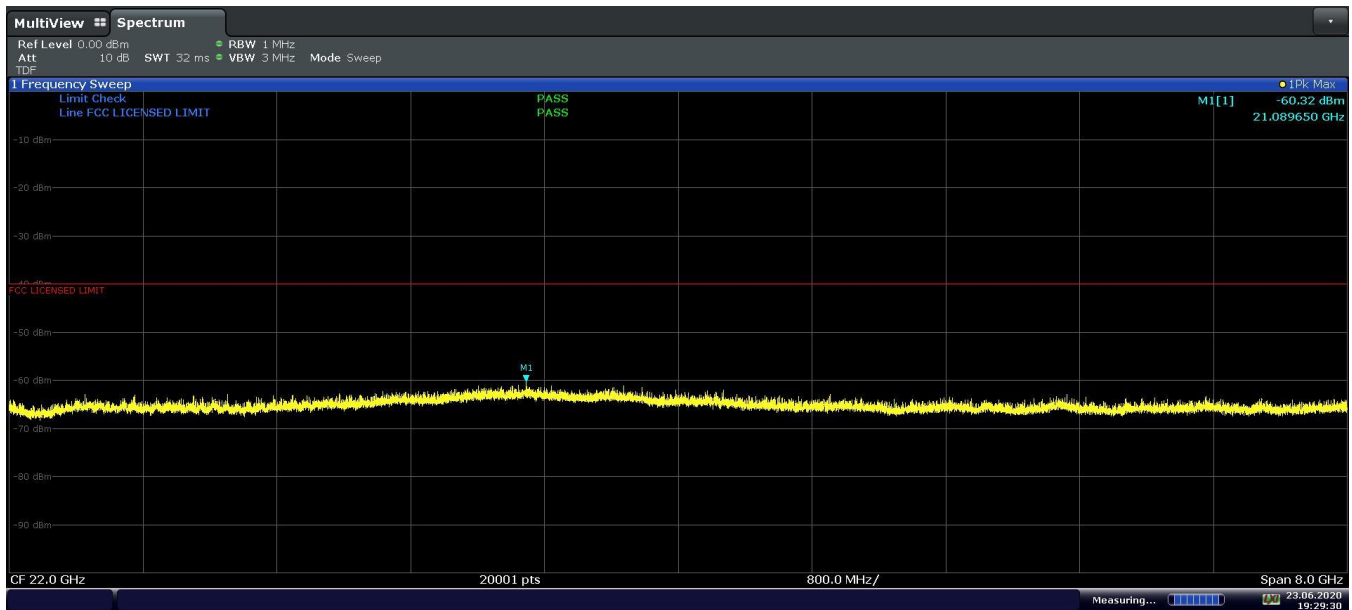
Plot 7-409. Radiated Spurious Emissions 1GHz - 18GHz (Band 30)

FCC ID: BCGA2429	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 280 of 335



19:28:30 23.06.2020

Plot 7-410. Radiated Spurious Emissions Above 18GHz (Band 30, Pol. H)



19:29:30 23.06.2020

Plot 7-411. Radiated Spurious Emissions Above 18GHz (Band 30, Pol. V)

FCC ID: BCGA2429	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 281 of 335

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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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
4615.00	V	-	-	-71.40	9.52	-61.88	-21.9
6922.50	V	-	-	-71.20	11.43	-59.77	-19.8
9230.00	V	-	-	-71.12	13.32	-57.80	-17.8

Table 7-58. Radiated Spurious Data (Band 30 – Low Channel)

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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
4620.00	V	-	-	-72.54	9.54	-63.00	-23.0
6930.00	V	-	-	-71.26	11.44	-59.82	-19.8
9240.00	V	-	-	-71.90	13.33	-58.58	-18.6

Table 7-59. Radiated Spurious Data (Band 30 – Mid Channel)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 282 of 335

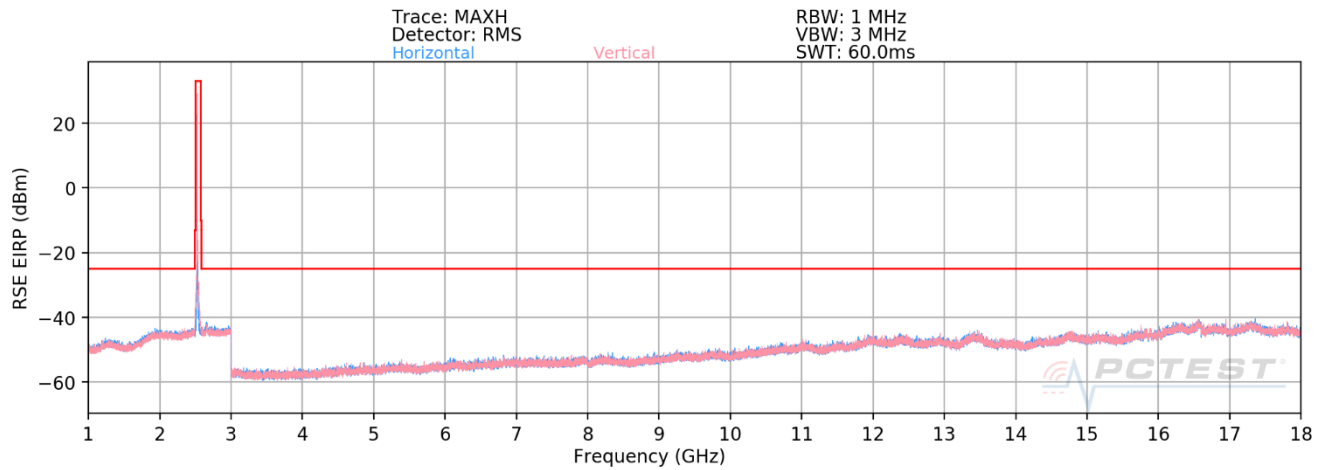
OPERATING FREQUENCY: 2312.50 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 5.0 MHz
 DISTANCE: 3 meters
 LIMIT: -40 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
4625.00	V	-	-	-72.72	9.56	-63.16	-23.2
6937.50	V	-	-	-71.18	11.44	-59.74	-19.7
9250.00	V	-	-	-71.48	13.34	-58.14	-18.1

Table 7-60. Radiated Spurious Data (Band 30 – High Channel)

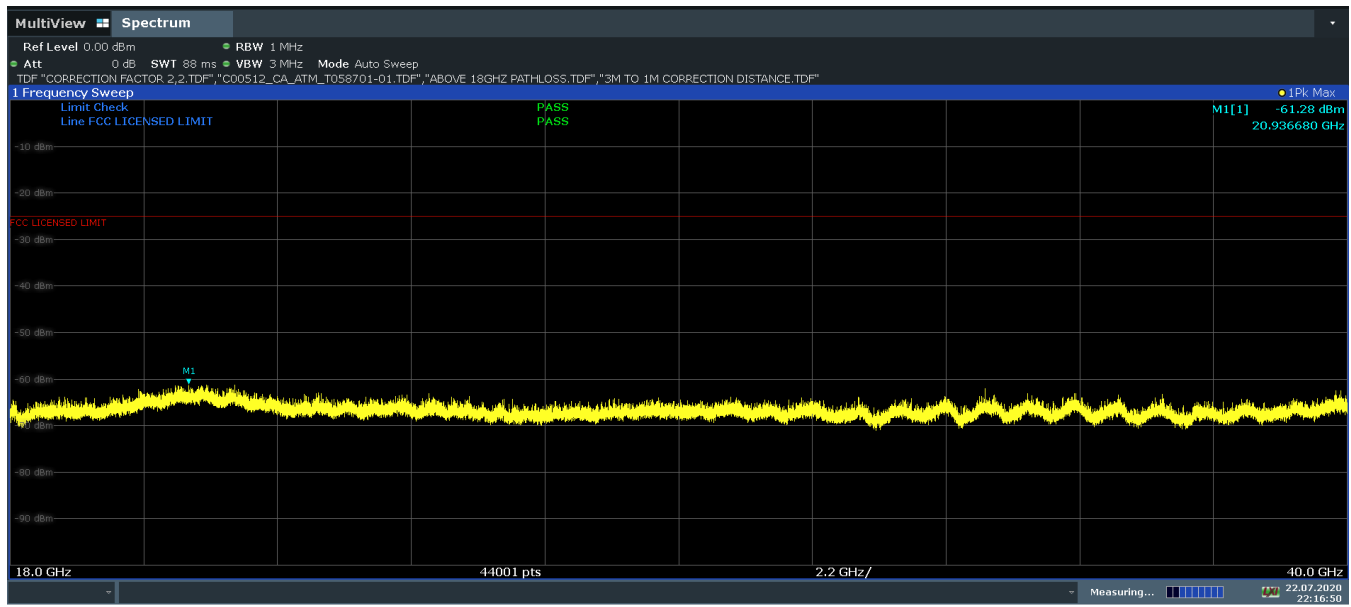
FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device
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Band 7



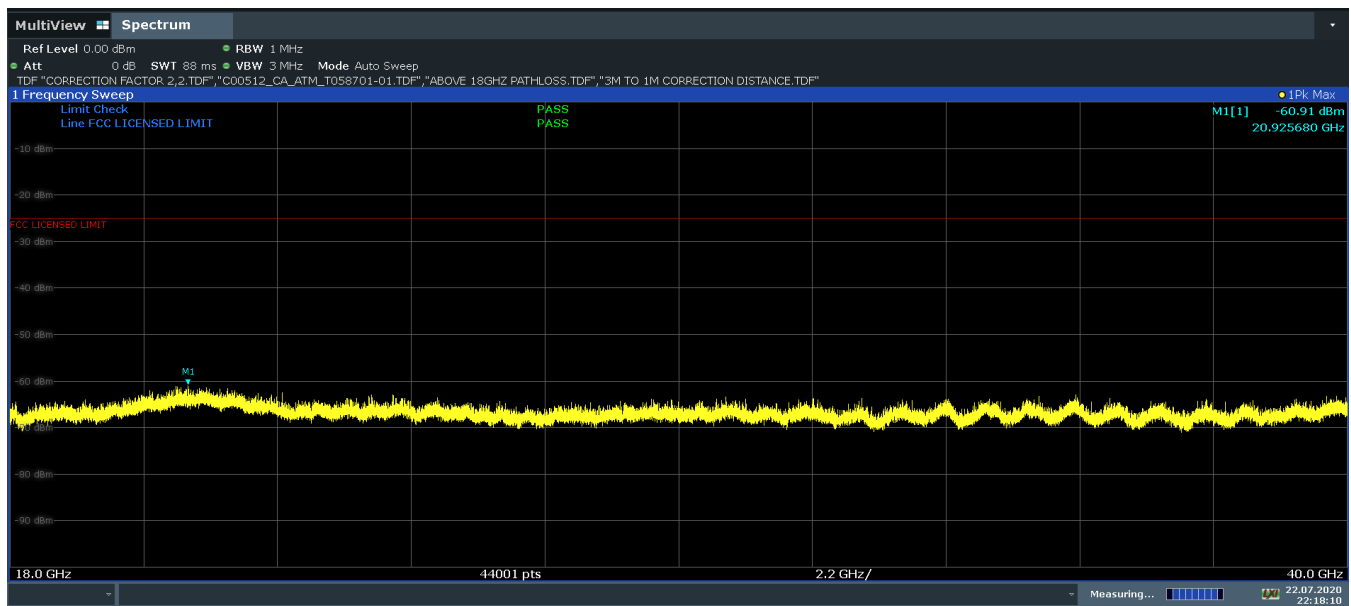
Plot 7-412. Radiated Spurious Emissions 1GHz - 18GHz (Band 7)

FCC ID: BCGA2429	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 284 of 335



22:16:50 22.07.2020

Plot 7-413. Radiated Spurious Emissions Above 18GHz (Band 7, Pol H)



22:18:10 22.07.2020

Plot 7-414. Radiated Spurious Emissions Above 18GHz (Band 7, Pol. V)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 285 of 335

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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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5020.00	V	-	-	-73.06	10.03	-63.03	-38.0
7530.00	V	-	-	-72.77	12.02	-60.75	-35.7
10040.00	V	-	-	-69.33	13.14	-56.19	-31.2

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

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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5070.00	V	-	-	-72.72	10.10	-62.62	-37.6
7605.00	V	-	-	-72.48	12.18	-60.30	-35.3
10140.00	V	-	-	-70.98	13.13	-57.86	-32.9

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

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 286 of 335

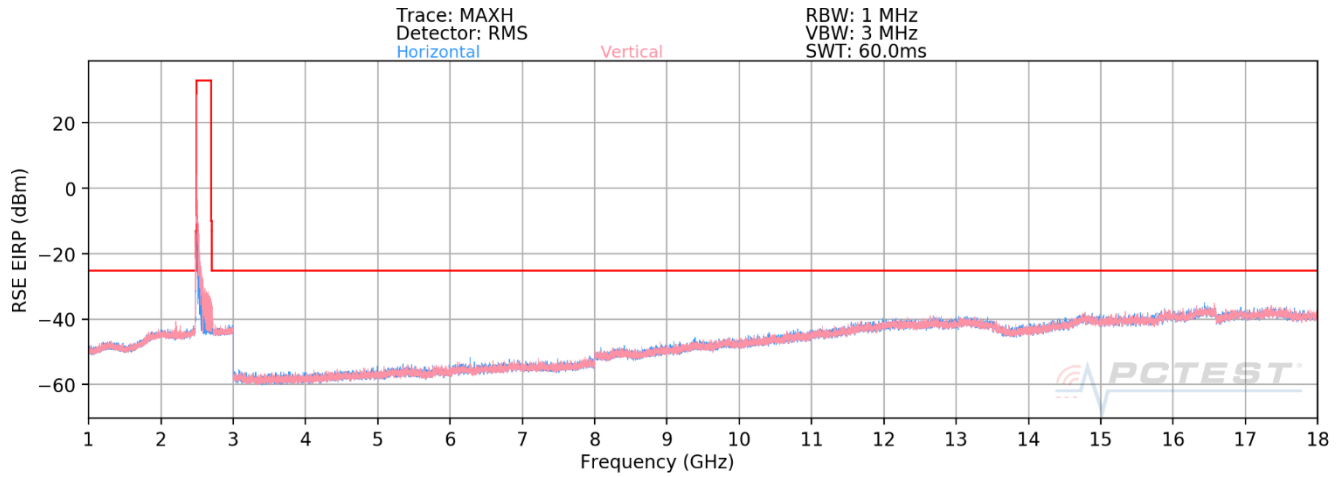
OPERATING FREQUENCY: 2560.00 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5120.00	V	-	-	-73.24	10.13	-63.11	-38.1
7680.00	V	-	-	-73.51	12.18	-61.32	-36.3
10240.00	V	-	-	-70.44	13.13	-57.31	-32.3

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

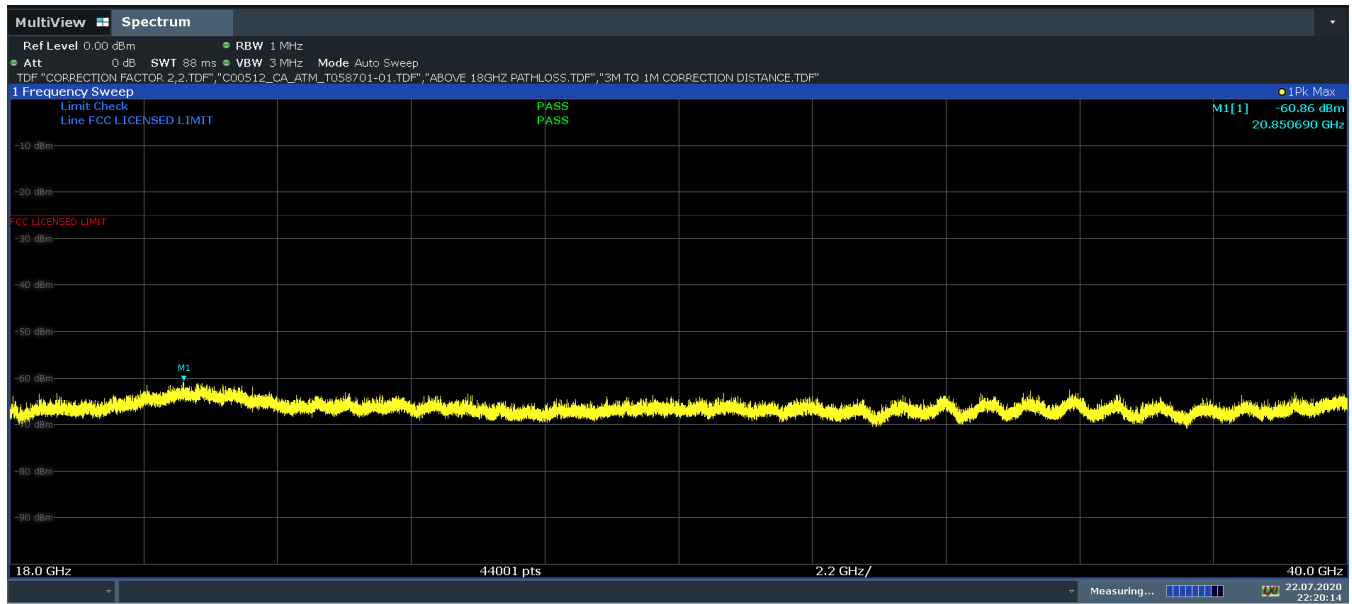
FCC ID: BCGA2429		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 287 of 335

Band 41



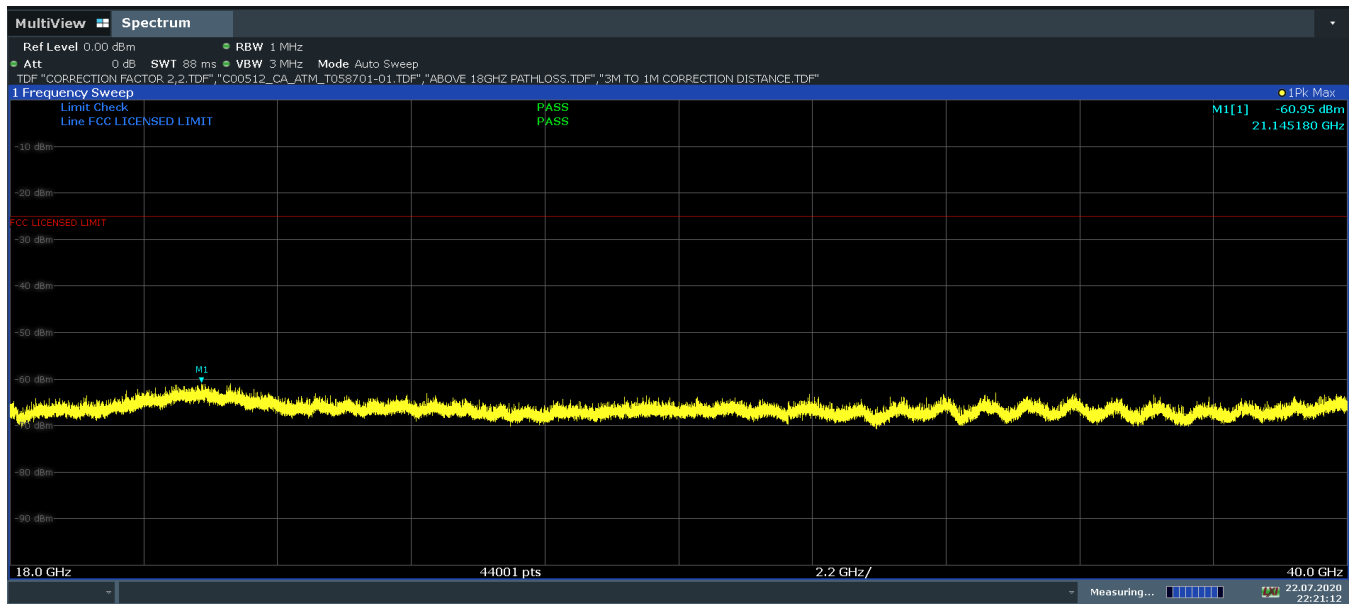
Plot 7-415. Radiated Spurious Emissions 1GHz - 18GHz (Band 41)

FCC ID: BCGA2429	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 288 of 335



22:20:15 22.07.2020

Plot 7-416. Radiated Spurious Emissions Above 18GHz (Band 41, Pol. H)



22:21:12 22.07.2020

Plot 7-417. Radiated Spurious Emissions Above 18GHz (Band 41, Pol. V)

FCC ID: BCGA2429	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 289 of 335

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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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5012.00	V	-	-	-62.88	10.15	-52.73	-27.7
7518.00	V	-	-	-63.10	12.13	-50.97	-26.0
10024.00	V	-	-	-62.81	13.26	-49.55	-24.6

Table 7-64. 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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5186.00	V	-	-	-62.13	10.26	-51.87	-26.9
7779.00	V	-	-	-63.08	12.39	-50.69	-25.7
10372.00	V	-	-	-62.16	13.34	-48.82	-23.8

Table 7-65. Radiated Spurious Data (Band 41 – Mid Channel)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 290 of 335

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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5360.00	V	-	-	-61.67	10.44	-51.23	-26.2
8040.00	V	-	-	-64.22	12.63	-51.59	-26.6
10720.00	V	-	-	-60.92	13.33	-47.59	-22.6

Table 7-66. Radiated Spurious Data (Band 41 – High Channel)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 291 of 335

7.9.2 Antenna D (Port B) Radiated Spurious Emissions Measurements 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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1408.00	V	-	-	-72.70	4.38	-68.33	-55.3
2112.00	V	-	-	-70.39	5.08	-65.30	-52.3
2816.00	V	-	-	-71.67	6.93	-64.74	-51.7
3520.00	V	-	-	-71.38	8.06	-63.32	-50.3

Table 7-67. Radiated Spurious Data (Band 12/17 – Low Channel)

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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1415.00	V	-	-	-72.83	4.45	-68.38	-55.4
2122.50	V	-	-	-70.47	5.25	-65.22	-52.2
2830.00	V	-	-	-71.56	7.04	-64.53	-51.5
3537.50	V	-	-	-71.65	8.03	-63.62	-50.6

Table 7-68. Radiated Spurious Data (Band 12/17 – Mid Channel)

FCC ID: BCGA2429	 <small>Proud to be part of element</small>	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1422.00	V	-	-	-73.04	4.53	-68.51	-55.5
2133.00	V	-	-	-70.55	5.37	-65.18	-52.2
2844.00	V	-	-	-71.64	7.09	-64.55	-51.5
3555.00	V	-	-	-71.53	8.01	-63.51	-50.5

Table 7-69. Radiated Spurious Data (Band 12/17 – High Channel)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 293 of 335

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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1559.00	V	-	-	-71.94	6.24	-65.71	-52.7
2338.50	V	-	-	-71.44	7.48	-63.96	-51.0

Table 7-70. Radiated Spurious Data (Band 13 – Low Channel)

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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1564.00	V	-	-	-71.79	6.25	-65.54	-52.5
2346.00	V	-	-	-71.66	7.53	-64.13	-51.1

Table 7-71. Radiated Spurious Data (Band 13 – Mid Channel)

FCC ID: BCGA2429		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1569.00	V	-	-	-71.73	6.25	-65.49	-52.5
2353.50	V	-	-	-71.55	7.57	-63.98	-51.0

Table 7-72. Radiated Spurious Data (Band 13 – High Channel)

MODULATION SIGNAL: QPSK

BANDWIDTH: 5.00 MHz

DISTANCE: 3 meters

NARROWBAND EMISSION LIMIT: -50 dBm

WIDEBAND EMISSION LIMIT: -40 dBm/MHz

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1559.00	V	-	-	-74.79	5.83	-68.96	-29.0
1564.00	V	-	-	-74.91	5.85	-69.06	-29.1
1569.00	V	-	-	-74.80	5.85	-68.95	-29.0

Table 7-73. Radiated Spurious Data (Band 13 – 1559-1610MHz Band)

FCC ID: BCGA2429	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1658.00	V	-	-	-73.98	5.53	-68.45	-55.5
2487.00	V	-	-	-70.44	5.95	-64.50	-51.5
3316.00	V	-	-	-71.93	7.90	-64.04	-51.0

Table 7-74. Radiated Spurious Data (Band 26/5 – Low Channel)

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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1673.00	V	-	-	-73.78	5.63	-68.15	-55.2
2509.50	V	-	-	-69.66	5.93	-63.73	-50.7
3346.00	V	-	-	-71.96	7.98	-63.99	-51.0

Table 7-75. Radiated Spurious Data (Band 26/5 – Mid Channel)

FCC ID: BCGA2429	 PCTEST Proud to be part of  element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1688.00	V	-	-	-73.71	5.68	-68.03	-55.0
2532.00	V	-	-	-70.35	5.96	-64.40	-51.4
3376.00	V	-	-	-72.31	8.07	-64.24	-51.2

Table 7-76. Radiated Spurious Data (Band 26/5 – High Channel)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device
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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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3440.00	V	-	-	-71.85	8.15	-63.70	-50.7
5160.00	V	-	-	-71.50	10.17	-61.34	-48.3
6880.00	V	-	-	-71.43	11.41	-60.02	-47.0

Table 7-77. Radiated Spurious Data (Band 66/4 – Low Channel)

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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3490.00	V	-	-	-71.04	8.11	-62.92	-49.9
5235.00	V	-	-	-71.68	10.29	-61.39	-48.4
6980.00	V	-	-	-71.68	11.50	-60.18	-47.2

Table 7-78. Radiated Spurious Data (Band 66/4 – Mid Channel)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 298 of 335

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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3540.00	V	-	-	-71.31	8.02	-63.29	-50.3
5310.00	V	-	-	-71.52	10.31	-61.21	-48.2
7080.00	V	-	-	-71.96	11.60	-60.36	-47.4

Table 7-79. Radiated Spurious Data (Band 66/4 – High Channel)

FCC ID: BCGA2429	 PCTEST Proud to be part of  element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3720.00	V	-	-	-71.23	8.45	-62.77	-49.8
5580.00	V	-	-	-72.49	10.75	-61.75	-48.7
7440.00	V	-	-	-72.32	11.93	-60.39	-47.4

Table 7-80. Radiated Spurious Data (Band 25/2 – Low Channel)

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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3765.00	V	-	-	-71.91	8.51	-63.41	-50.4
5647.50	V	-	-	-72.56	10.72	-61.84	-48.8
7530.00	V	-	-	-71.68	12.02	-59.66	-46.7

Table 7-81. Radiated Spurious Data (Band 25/2 – Mid Channel)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3810.00	V	-	-	-71.70	8.62	-63.08	-50.1
5715.00	V	-	-	-72.42	10.69	-61.72	-48.7
7620.00	V	-	-	-71.90	12.19	-59.72	-46.7

Table 7-82. Radiated Spurious Data (Band 25/2 – High Channel)

FCC ID: BCGA2429	 PCTEST Proud to be part of  element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
4615.00	H	-	-	-71.83	9.52	-62.31	-22.3
6922.50	H	-	-	-71.68	11.43	-60.25	-20.2
9230.00	H	-	-	-67.91	13.32	-54.59	-14.6

Table 7-83. Radiated Spurious Data (Band 30 – Low Channel)

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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
4620.00	H	-	-	-72.08	9.54	-62.54	-22.5
6930.00	H	-	-	-71.65	11.44	-60.21	-20.2
9240.00	H	-	-	-67.75	13.33	-54.43	-14.4

Table 7-84. Radiated Spurious Data (Band 30 – Mid Channel)

FCC ID: BCGA2429		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
4625.00	H	-	-	-72.66	9.56	-63.10	-23.1
6937.50	H	-	-	-71.32	11.44	-59.88	-19.9
9250.00	H	-	-	-68.03	13.34	-54.69	-14.7

Table 7-85. Radiated Spurious Data (Band 30 – High Channel)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5020.00	H	-	-	-75.91	10.03	-65.87	-40.9
7530.00	H	-	-	-74.29	12.02	-62.27	-37.3
10040.00	H	-	-	-71.63	13.14	-58.48	-33.5

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

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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5070.00	H	-	-	-75.51	10.10	-65.41	-40.4
7605.00	H	-	-	-74.76	12.18	-62.58	-37.6
10140.00	H	-	-	-71.23	13.13	-58.10	-33.1

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

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5120.00	H	-	-	-74.75	10.13	-64.62	-39.6
7680.00	H	-	-	-74.58	12.18	-62.40	-37.4
10240.00	H	-	-	-71.50	13.13	-58.37	-33.4

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

FCC ID: BCGA2429	 PCTEST Proud to be part of  element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5012.00	H	-	-	-72.11	10.03	-62.07	-37.1
7518.00	H	-	-	-72.37	12.02	-60.35	-35.3
10024.00	H	-	-	-66.34	13.14	-53.19	-28.2

Table 7-89. 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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5186.00	H	-	-	-71.23	10.23	-61.00	-36.0
7779.00	H	-	-	-72.07	12.23	-59.84	-34.8
10372.00	H	-	-	-65.28	13.10	-52.18	-27.2

Table 7-90. Radiated Spurious Data (Band 41 – Mid Channel)

FCC ID: BCGA2429	 <small>Proud to be part of element</small>	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5360.00	H	-	-	-71.50	10.40	-61.10	-36.1
8040.00	H	-	-	-69.35	12.56	-56.79	-31.8
10720.00	H	-	-	-64.42	13.09	-51.33	-26.3

Table 7-91. Radiated Spurious Data (Band 41 – High Channel)

FCC ID: BCGA2429	 PCTEST Proud to be part of  element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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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 C63.26-2015 and 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 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 C63.26-2015

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. 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

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Test Setup

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

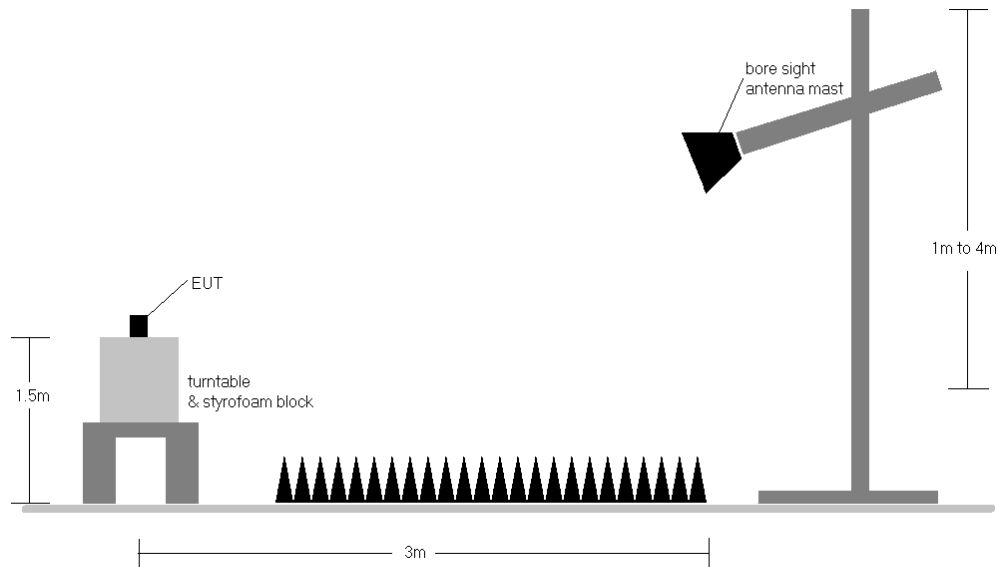


Figure 7-10. Test Instrument & Measurement Setup

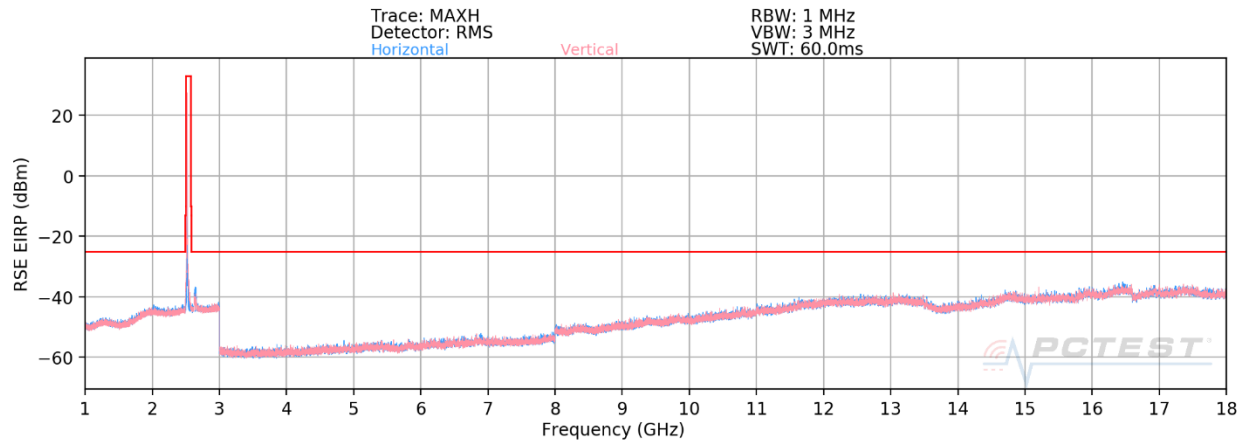
Test Notes

- 1) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The worst case emissions are reported with modulations, offsets and channel bandwidth configurations in this section. 1RB config was found and reported as a worst case RB size..
- 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) No significant emissions were found for below 1GHz and Above 18GHz measurement.
- 6) 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.
- 7) No significant emissions were found as a result of two uplink carriers operating contiguously.

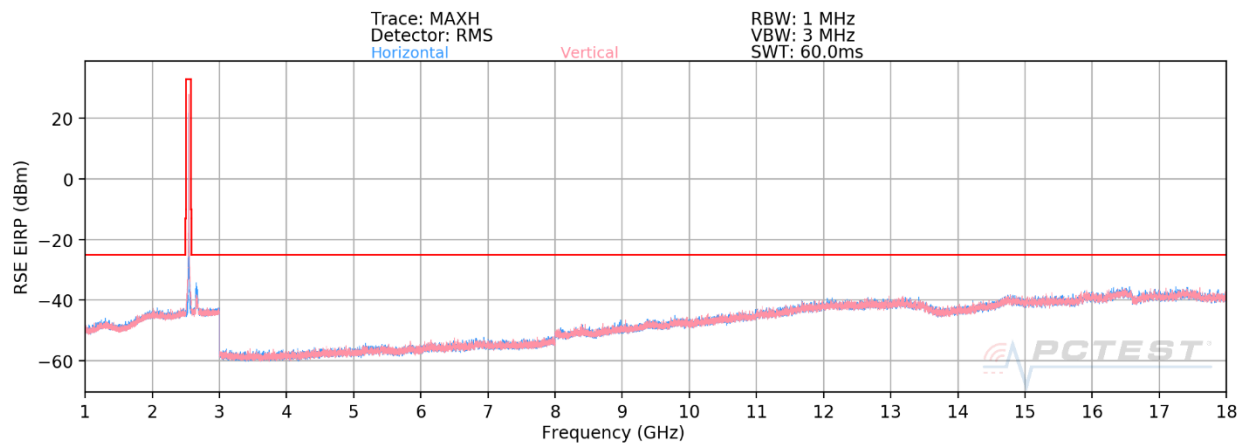
FCC ID: BCGA2429	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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7.10.1 Antenna C (Port-A) Radiated Spurious Emissions Measurements

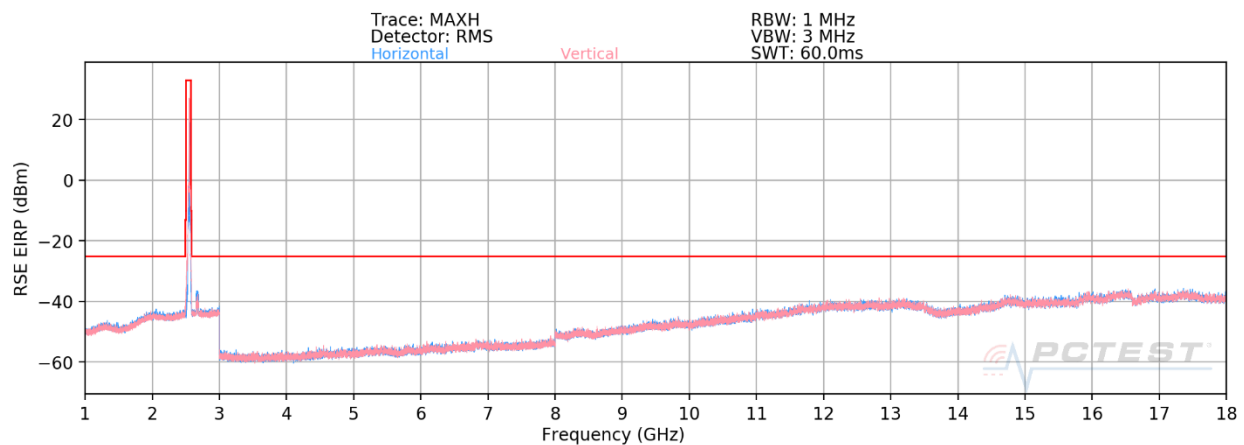
Band 7



Plot 7-418. Radiated Spurious Emissions (ULCA B7 PCC: RB 1 Offset 99, SCC: RB 1 Offset 0 – Low Channel)



Plot 7-419. Radiated Spurious Emissions (ULCA B7 PCC: RB 1 Offset 0, SCC: RB 1 Offset 99 – Mid Channel)



Plot 7-420. Radiated Spurious Emissions (ULCA B7 PCC: RB 1 Offset 0, SCC: RB 1 Offset 99 – High Channel)

FCC ID: BCGA2429	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 310 of 335

OPERATING FREQUENCY (PCC): 2510.00 MHz
 OPERATING FREQUENCY (SCC): 2529.80 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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5020.00	V	-	-	-72.41	8.86	-63.55	-38.5
7530.00	V	-	-	-70.44	9.44	-60.99	-36.0
10040.00	V	-	-	-66.99	9.55	-57.44	-32.4

Table 7-92. 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
 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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5070.00	V	-	-	-72.12	8.94	-63.18	-38.2
7605.00	V	-	-	-69.52	9.37	-60.15	-35.1
10140.00	V	-	-	-62.80	9.59	-53.21	-28.2

Table 7-93. Radiated Spurious Data (ULCA B7 PCC: RB 1 Offset 0, SCC: RB 1 Offset 99 – Mid Channel)

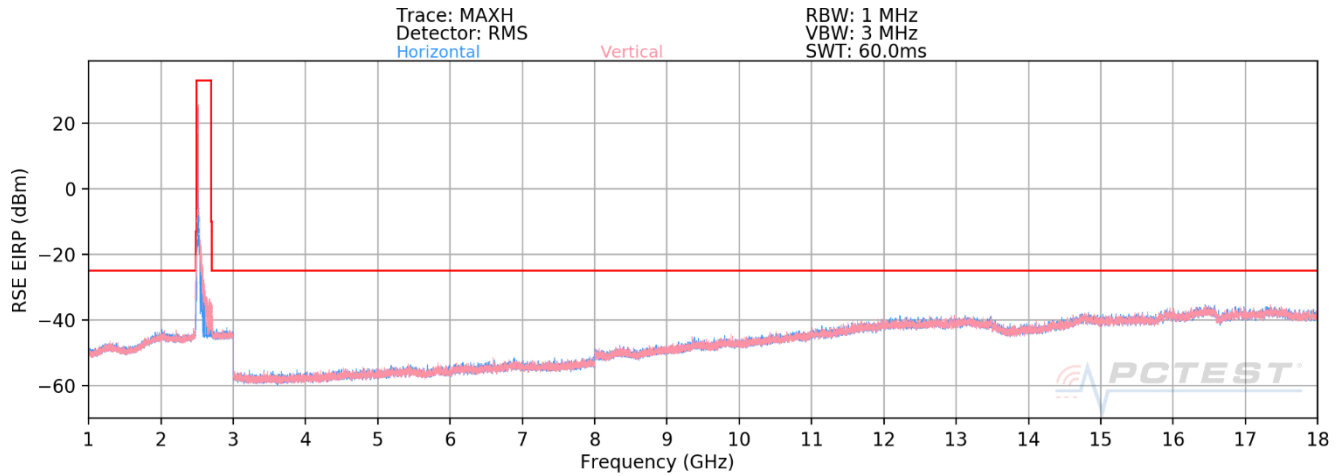
OPERATING FREQUENCY (PCC): 2560.00 MHz
 OPERATING FREQUENCY (SCC): 2540.20 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5120.00	V	-	-	-71.62	9.01	-62.61	-37.6
7680.00	V	-	-	-70.63	9.40	-61.23	-36.2
10240.00	V	-	-	-62.48	9.56	-52.92	-27.9

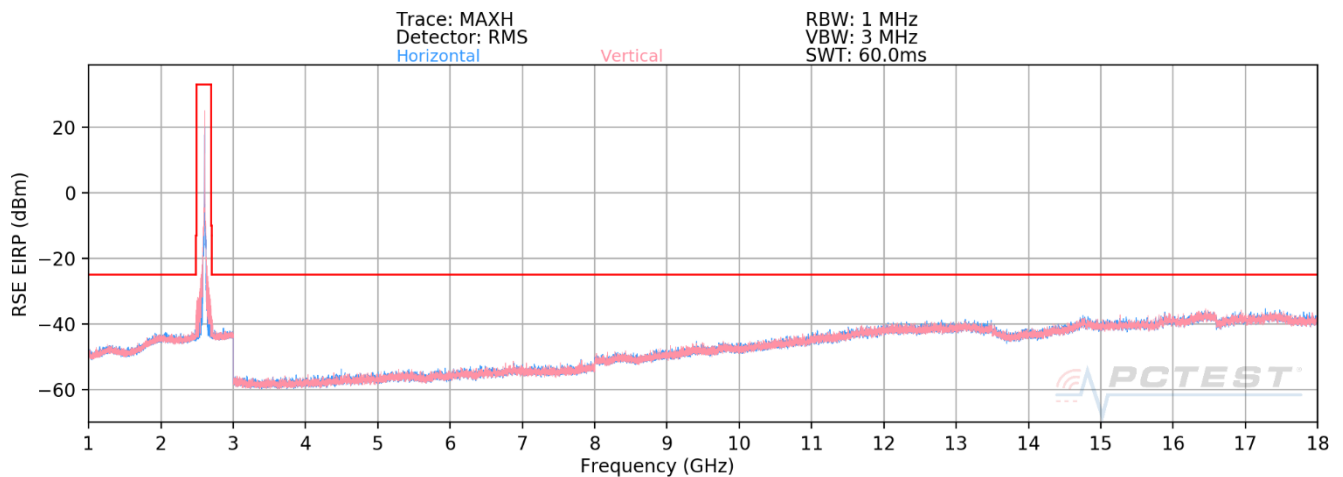
Table 7-94. Radiated Spurious Data (ULCA B7 PCC: RB 1 Offset 0, SCC: RB 1 Offset 99 – High Channel)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 311 of 335

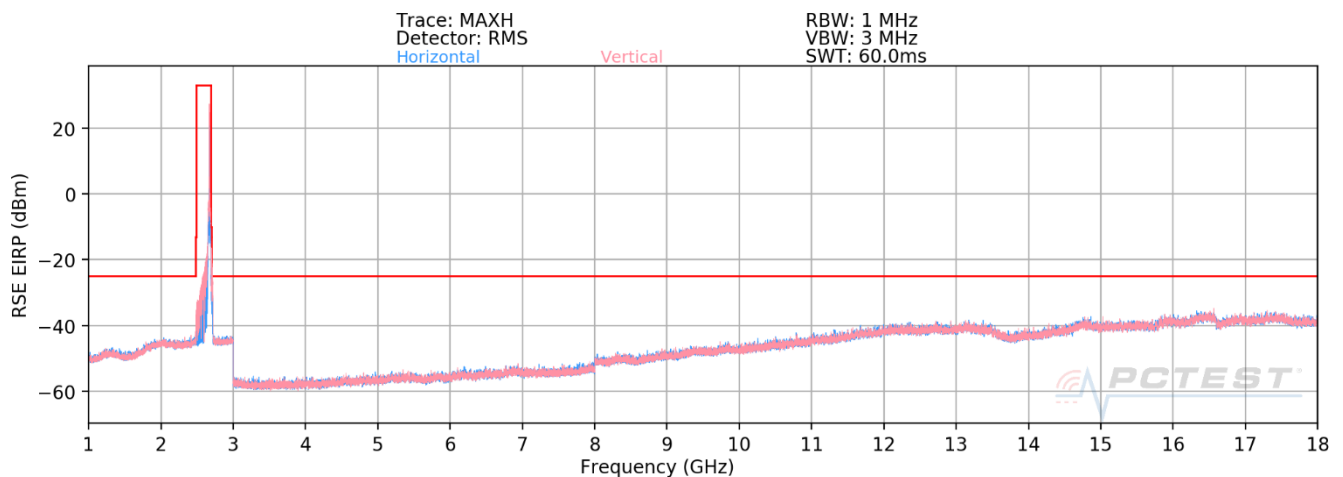
Band 41



Plot 7-421. Radiated Spurious Emissions (ULCA B41 PCC: RB 1 Offset 99, SCC: RB 1 Offset 0 – Low Channel)



Plot 7-422. Radiated Spurious Emissions (ULCA B41 PCC: RB 1 Offset 0, SCC: RB 1 Offset 99 – Mid Channel)



Plot 7-423. Radiated Spurious Emissions (ULCA B41 PCC: RB 1 Offset 0, SCC: RB 1 Offset 99 – High Channel)

FCC ID: BCGA2429	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 312 of 335

OPERATING FREQUENCY (PCC): 2506.00 MHz
OPERATING FREQUENCY (SCC): 2525.80 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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5012.00	V	-	-	-60.61	8.85	-51.76	-26.8
7518.00	V	-	-	-60.11	9.44	-50.67	-25.7
10024.00	V	-	-	-58.21	9.54	-48.67	-23.7

Table 7-95. 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
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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5186.00	V	-	-	-60.55	9.13	-51.42	-26.4
7779.00	V	-	-	-59.38	9.38	-50.00	-25.0
10372.00	V	-	-	-57.80	9.52	-48.28	-23.3

Table 7-96. Radiated Spurious Data (ULCA B41 PCC: RB 1 Offset 0, SCC: RB 1 Offset 99 – Mid Channel)

OPERATING FREQUENCY (PCC): 2680.00 MHz
OPERATING FREQUENCY (SCC): 2660.20 MHz
MODULATION SIGNAL: QPSK
BANDWIDTH: 20.0 MHz
DISTANCE: 3 meters
LIMIT: -25 dBm

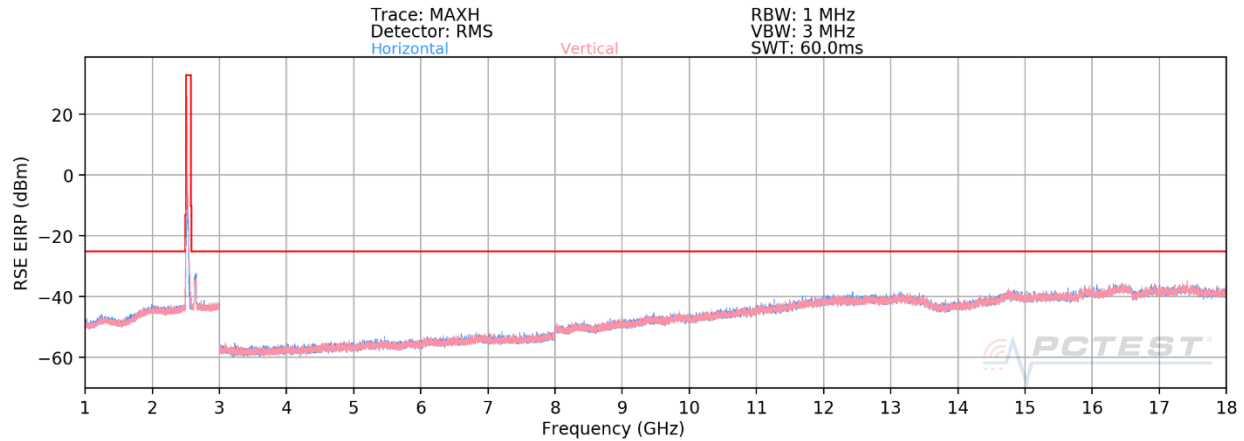
Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5360.00	V	-	-	-59.60	9.13	-50.47	-25.5
8040.00	V	-	-	-57.50	9.41	-48.08	-23.1
10720.00	V	-	-	-53.16	9.49	-43.67	-18.7

Table 7-97. Radiated Spurious Data (ULCA B41 PCC: RB 1 Offset 0, SCC: RB 1 Offset 99 – High Channel)

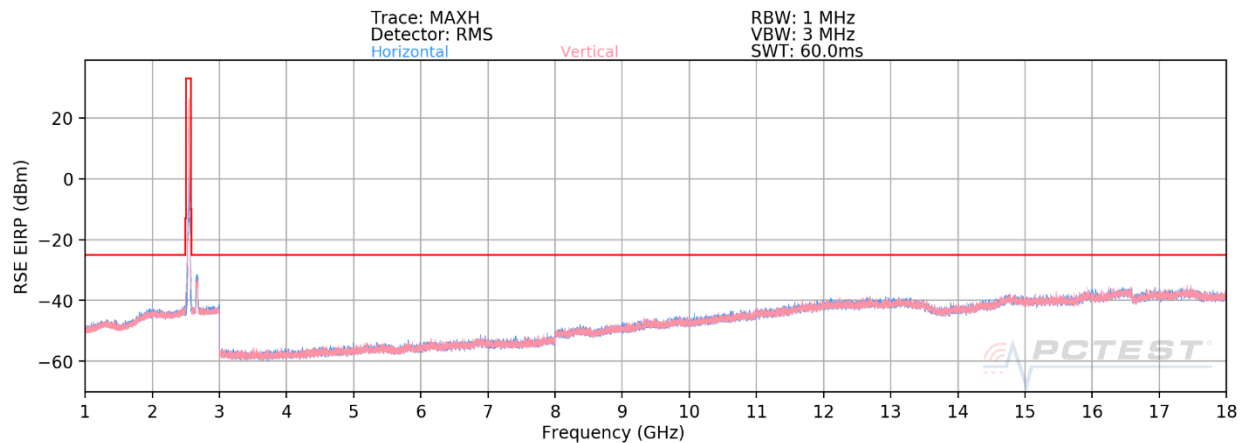
FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 313 of 335

7.10.2 Antenna D (Port-B) Radiated Spurious Emissions Measurements

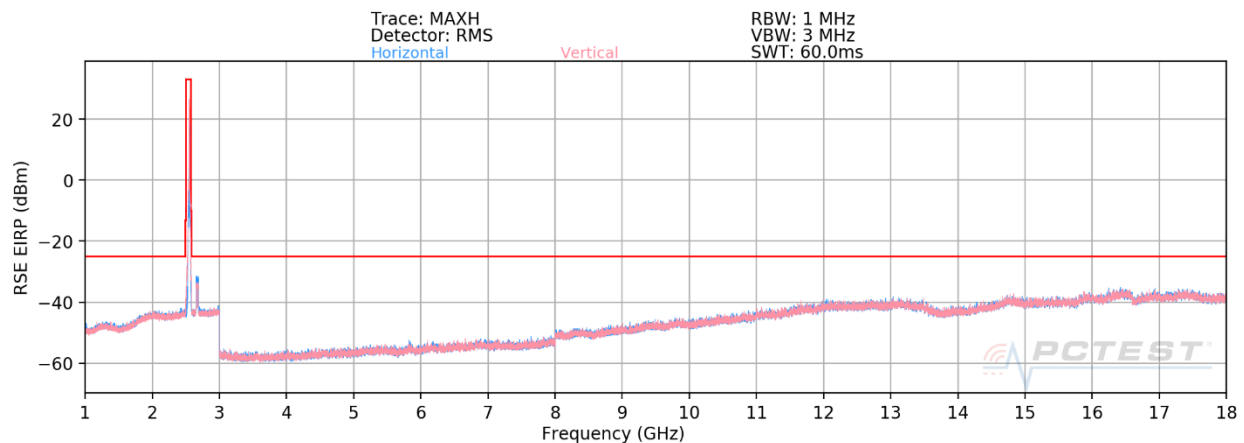
Band 7



Plot 7-424. Radiated Spurious Emissions (ULCA B7 PCC: RB 1 Offset 99, SCC: RB 1 Offset 0 – Low Channel)



Plot 7-425. Radiated Spurious Emissions (ULCA B7 PCC: RB 1 Offset 0, SCC: RB 1 Offset 99 – Mid Channel)



Plot 7-426. Radiated Spurious Emissions (ULCA B7 PCC: RB 1 Offset 0, SCC: RB 1 Offset 99 – High Channel)

FCC ID: BCGA2429	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 314 of 335

OPERATING FREQUENCY (PCC): 2510.00 MHz
 OPERATING FREQUENCY (SCC): 2529.80 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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5020.00	H	-	-	-72.68	8.86	-63.82	-38.8
7530.00	H	-	-	-70.55	9.44	-61.10	-36.1
10040.00	H	-	-	-66.92	9.55	-57.37	-32.4

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
 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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5070.00	H	-	-	-72.06	8.94	-63.12	-38.1
7605.00	H	-	-	-70.15	9.37	-60.78	-35.8
10140.00	H	-	-	-67.22	9.59	-57.63	-32.6

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

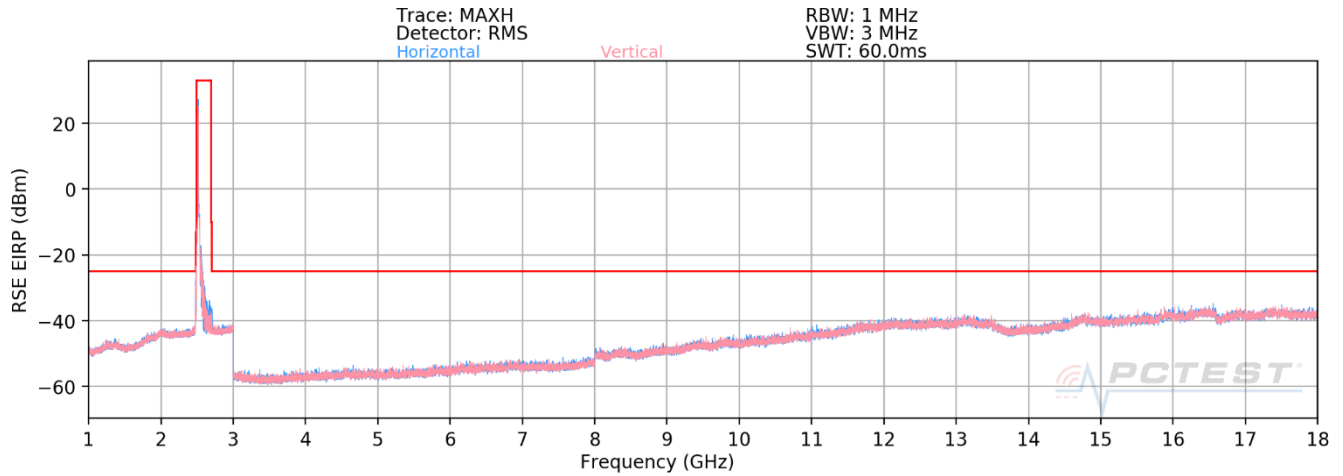
OPERATING FREQUENCY (PCC): 2560.00 MHz
 OPERATING FREQUENCY (SCC): 2540.20 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5120.00	H	-	-	-72.32	9.01	-63.31	-38.3
7680.00	H	-	-	-71.01	9.40	-61.61	-36.6
10240.00	H	-	-	-66.79	9.56	-57.23	-32.2

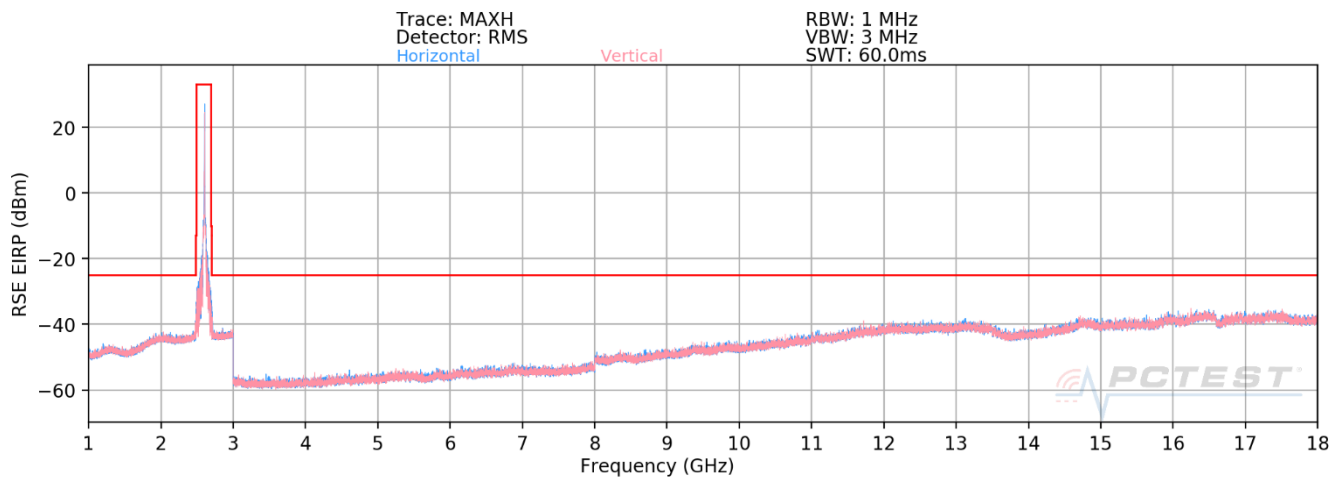
Table 7-100. Radiated Spurious Data (ULCA B7 PCC: RB 1 Offset 0, SCC: RB 1 Offset 99 – High Channel)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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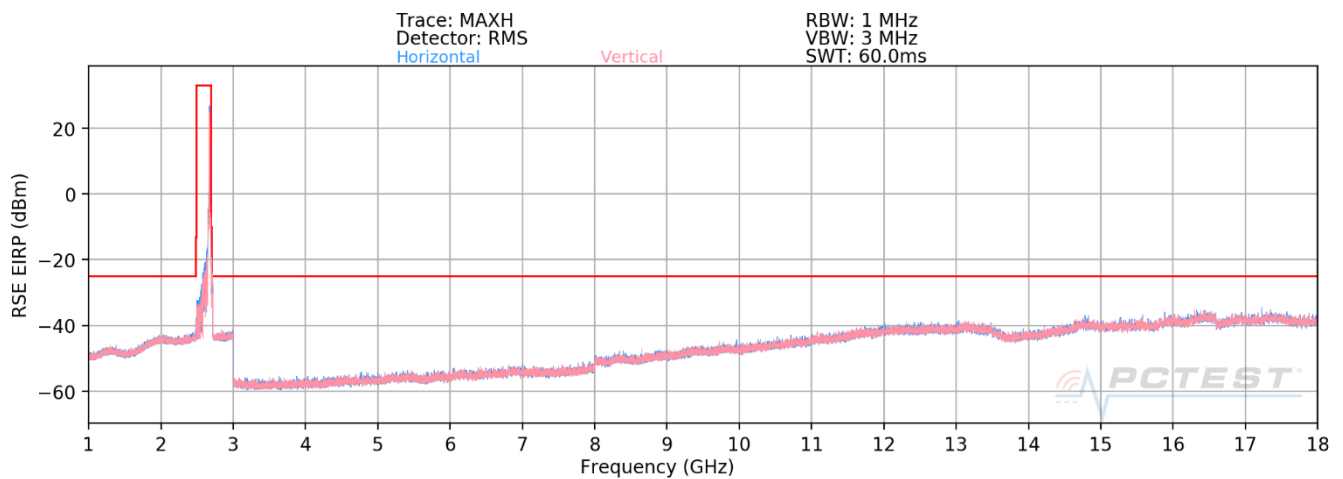
Band 41



Plot 7-427. Radiated Spurious Emissions (ULCA B41 PCC: RB 1 Offset 99, SCC: RB 1 Offset 0 – Low Channel)



Plot 7-428. Radiated Spurious Emissions (ULCA B41 PCC: RB 1 Offset 0, SCC: RB 1 Offset 99 – Mid Channel)



Plot 7-429. Radiated Spurious Emissions (ULCA B41 PCC: RB 1 Offset 0, SCC: RB 1 Offset 99 – High Channel)

FCC ID: BCGA2429	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 316 of 335

OPERATING FREQUENCY (PCC): 2506.00 MHz
 OPERATING FREQUENCY (SCC): 2525.80 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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5012.00	H	-	-	-61.54	8.85	-52.69	-27.7
7518.00	H	-	-	-60.42	9.44	-50.98	-26.0
10024.00	H	-	-	-57.89	9.54	-48.35	-23.4

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
 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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5186.00	V	-	-	-59.78	9.13	-50.65	-25.6
7779.00	V	-	-	-59.95	9.38	-50.57	-25.6
10372.00	V	-	-	-56.70	9.52	-47.18	-22.2

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

OPERATING FREQUENCY (PCC): 2680.00 MHz
 OPERATING FREQUENCY (SCC): 2660.20 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]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5360.00	H	-	-	-59.02	9.13	-49.89	-24.9
8040.00	H	-	-	-56.15	9.41	-46.73	-21.7
10720.00	H	-	-	-53.12	9.49	-43.63	-18.6

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

FCC ID: BCGA2429	 PCTEST Proud to be part of  element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 317 of 335

7.11 Frequency Stability / Temperature Variation

Test Overview and Limit

Frequency stability testing is performed in accordance with the guidelines of ANSI C63.26-2015 and TIA-603-E-2016. The frequency stability of the transmitter is measured by:

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

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

Test Procedure Used

ANSI C63.26 2015

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.

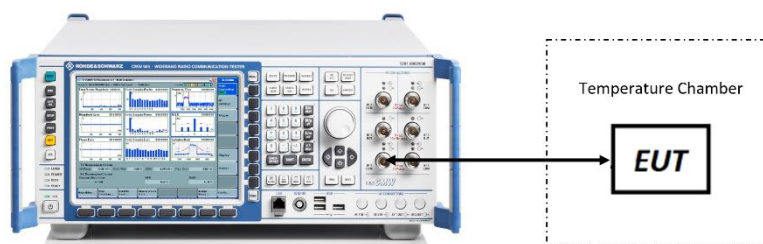


Figure 7-11. Test Instrument & Measurement Setup

Test Notes

All port were tested and only the worst case data were reported

FCC ID: BCGA2429	PCTEST Proud to be part of element		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Band 12/17 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	0.0000004
100 %		- 20	707,500,007	7	0.0000010
100 %		- 10	707,500,005	5	0.0000007
100 %		0	707,500,017	17	0.0000024
100 %		+ 10	707,500,006	6	0.0000008
100 %		+ 20	707,500,003	3	0.0000004
100 %		+ 30	707,500,004	4	0.0000006
100 %		+ 40	707,500,005	5	0.0000007
100 %		+ 50	707,500,006	6	0.0000008
BATT. ENDPOINT	3.40	+ 20	707,500,002	2	0.0000003

Table 7-104. Frequency Stability Data (Band 12/17 - 10MHz QPSK - Full RB Configuration)

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: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 319 of 335

Band 12/17 Frequency Stability Measurements

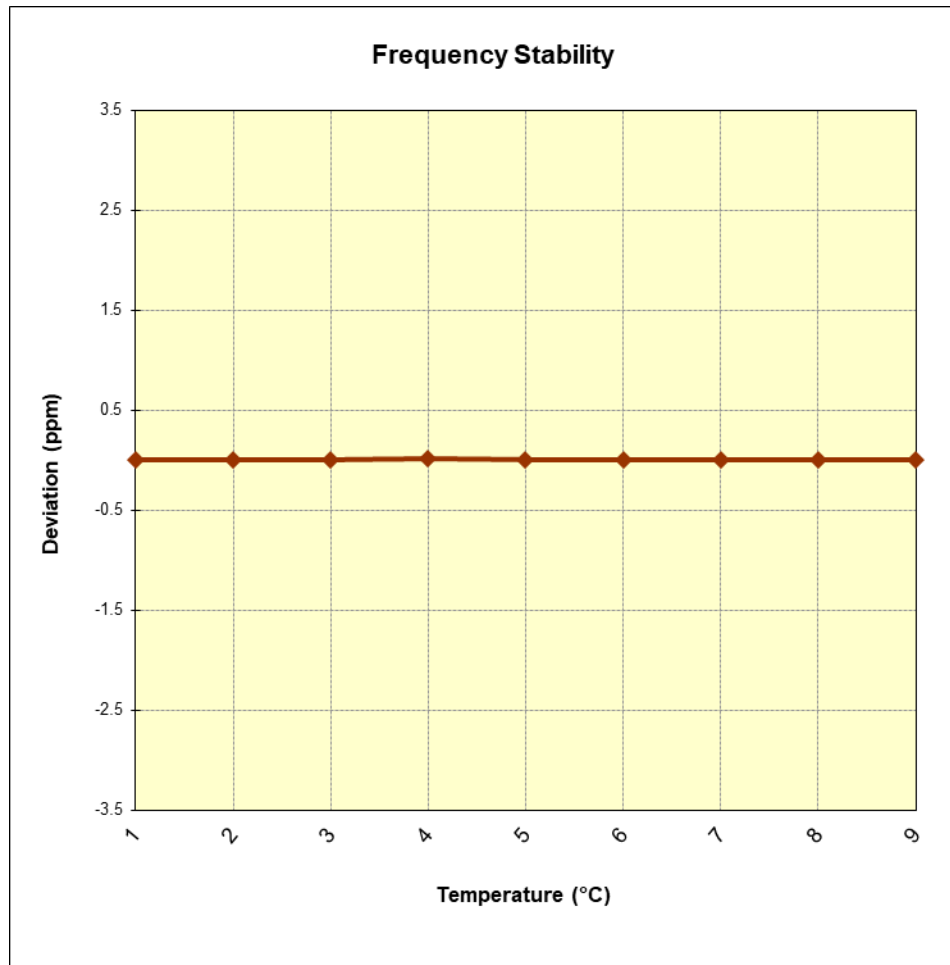


Figure 7-12. Frequency Stability Graph (Band 12/17 - 10MHz QPSK - Full RB Configuration)

FCC ID: BCGA2429	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 320 of 335

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	782,000,008	8	0.0000010
100 %		- 20	782,000,005	5	0.0000006
100 %		- 10	782,000,007	7	0.0000009
100 %		0	782,000,005	5	0.0000006
100 %		+ 10	782,000,004	4	0.0000005
100 %		+ 20	782,000,003	3	0.0000004
100 %		+ 30	782,000,002	2	0.0000003
100 %		+ 40	782,000,006	6	0.0000008
100 %		+ 50	782,000,009	9	0.0000012
BATT. ENDPOINT	3.40	+ 20	782,000,004	4	0.0000005

Table 7-105. Frequency Stability Data (Band 13 - 10MHz QPSK - Full RB Configuration)

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: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 321 of 335

Band 13 Frequency Stability Measurements

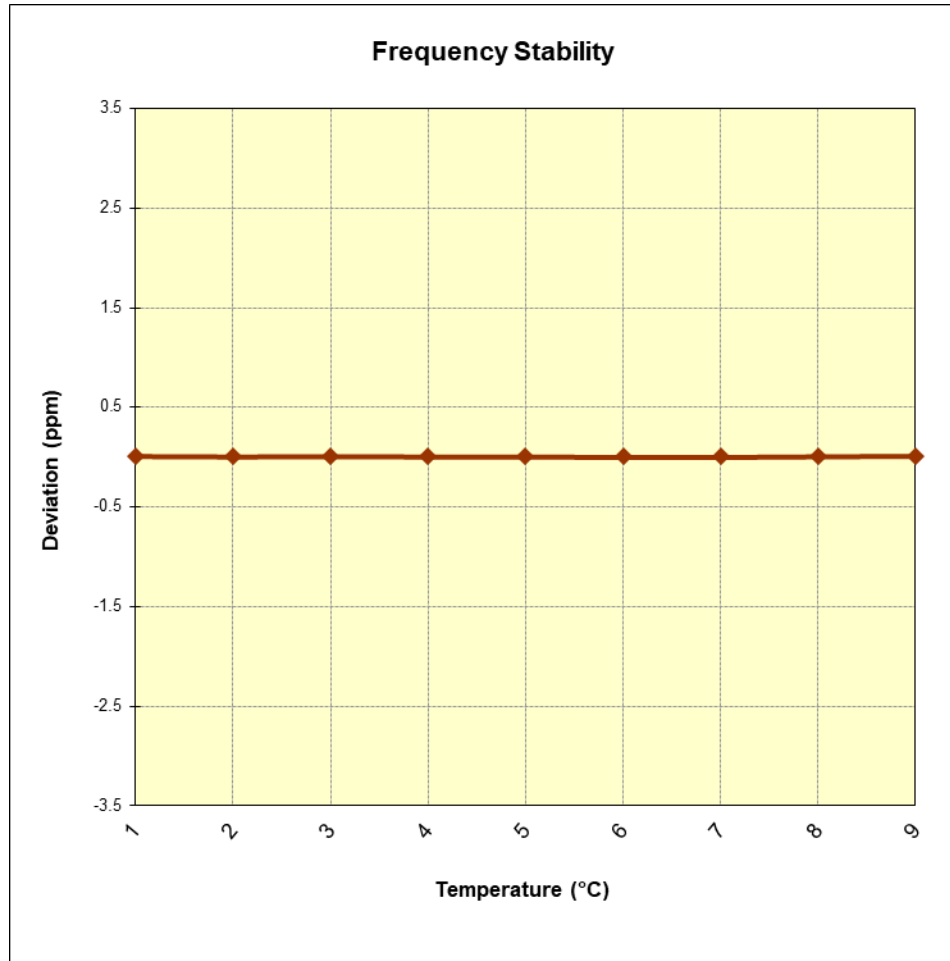


Figure 7-13. Frequency Stability Graph (Band 13 - 10MHz QPSK - Full RB Configuration)

FCC ID: BCGA2429	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 322 of 335

Band 26/5 Frequency Stability Measurements

OPERATING FREQUENCY:	836,500,000	Hz
CHANNEL:	20525	
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	836,500,004	4	0.0000005
100 %		- 20	836,500,007	7	0.0000008
100 %		- 10	836,500,021	21	0.0000025
100 %		0	836,500,016	16	0.0000019
100 %		+ 10	836,500,006	6	0.0000007
100 %		+ 20	836,500,017	17	0.0000020
100 %		+ 30	836,500,004	4	0.0000005
100 %		+ 40	836,500,006	6	0.0000007
100 %		+ 50	836,500,004	4	0.0000005
BATT. ENDPOINT	3.40	+ 20	836,500,004	4	0.0000005

Table 7-106. Frequency Stability Data (Band 26/5 - 10MHz QPSK - Full RB Configuration)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 323 of 335

Band 26/5 Frequency Stability Measurements

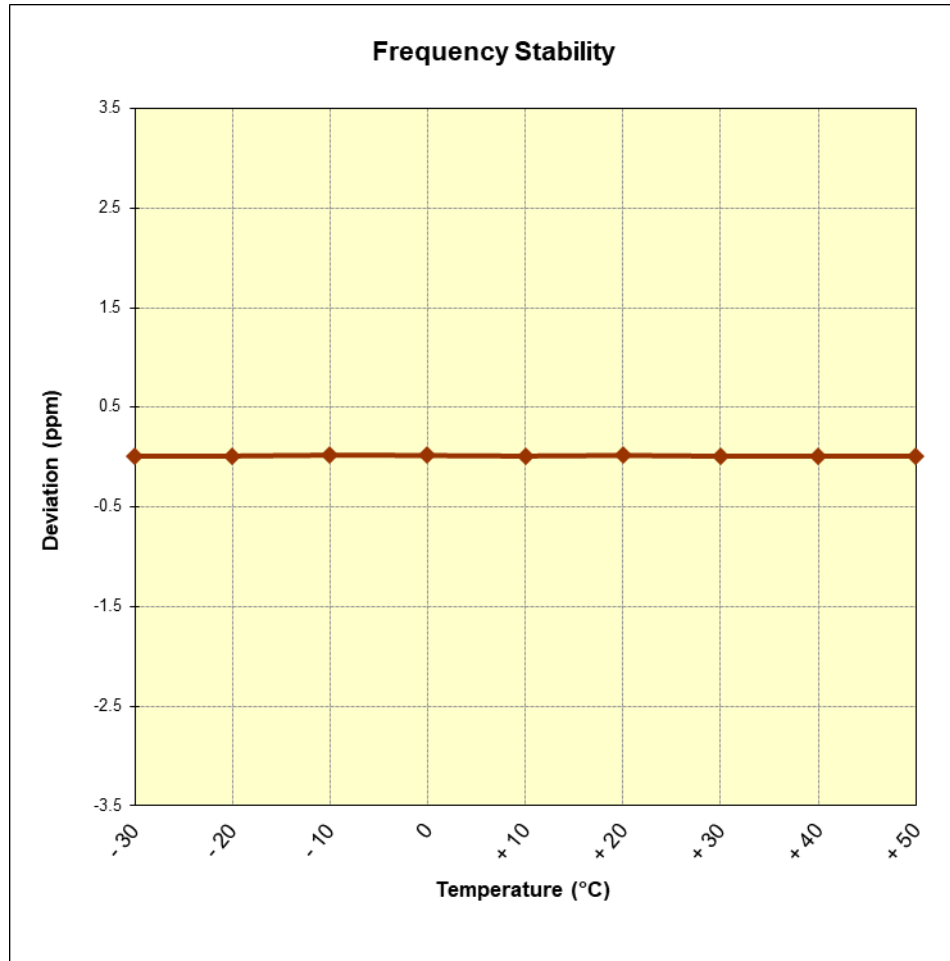


Figure 7-14. Frequency Stability Graph (Band 26/5 - 10MHz QPSK - Full RB Configuration)

FCC ID: BCGA2429	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270034-03.BCG	Test Dates: 05/01/2020 - 07/29/2020	EUT Type: Tablet Device	Page 324 of 335

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	1,745,000,008	8	0.0000005
100 %		- 20	1,745,000,006	6	0.0000003
100 %		- 10	1,745,000,009	9	0.0000005
100 %		0	1,745,000,012	12	0.0000007
100 %		+ 10	1,745,000,009	9	0.0000005
100 %		+ 20	1,745,000,005	5	0.0000003
100 %		+ 30	1,745,000,003	3	0.0000002
100 %		+ 40	1,745,000,005	5	0.0000003
100 %		+ 50	1,745,000,006	6	0.0000003
BATT. ENDPOINT	3.40	+ 20	1,745,000,003	3	0.0000002

Table 7-107. Frequency Stability Data (Band 66/4 - 20MHz QPSK - Full RB Configuration)

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 66/4 Frequency Stability Measurements

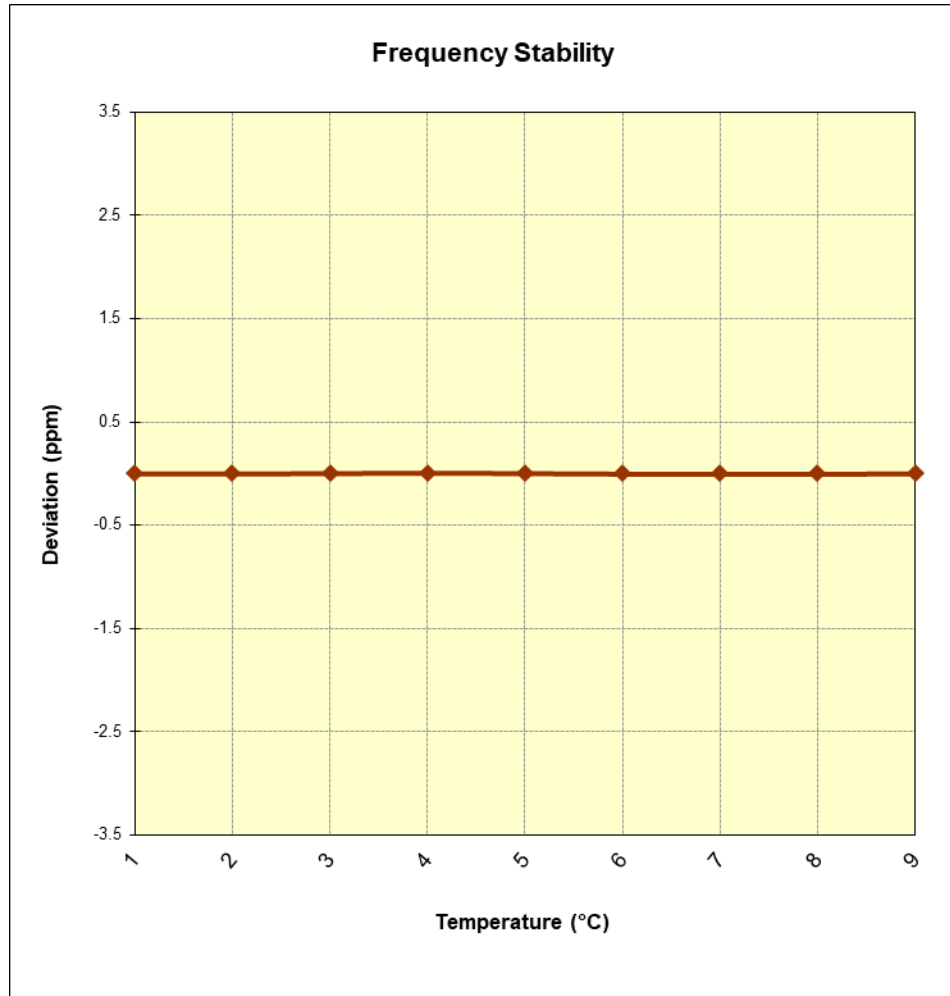


Figure 7-15. Frequency Stability Graph (Band 66/4 - 20MHz QPSK - Full RB Configuration)

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Band 25/2 Frequency Stability Measurements

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

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	- 30	1,882,500,007	7	0.0000004
100 %		- 20	1,882,500,007	7	0.0000004
100 %		- 10	1,882,500,009	9	0.0000005
100 %		0	1,882,500,007	7	0.0000004
100 %		+ 10	1,882,500,006	6	0.0000003
100 %		+ 20	1,882,500,007	7	0.0000004
100 %		+ 30	1,882,500,006	6	0.0000003
100 %		+ 40	1,882,500,007	7	0.0000004
100 %		+ 50	1,882,500,006	6	0.0000003
BATT. ENDPOINT	3.40	+ 20	1,882,500,003	3	0.0000002

Table 7-108. Frequency Stability Data (Band 25/2 - 20MHz QPSK - Full RB Configuration)

FCC ID: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Band 25/2 Frequency Stability Measurements

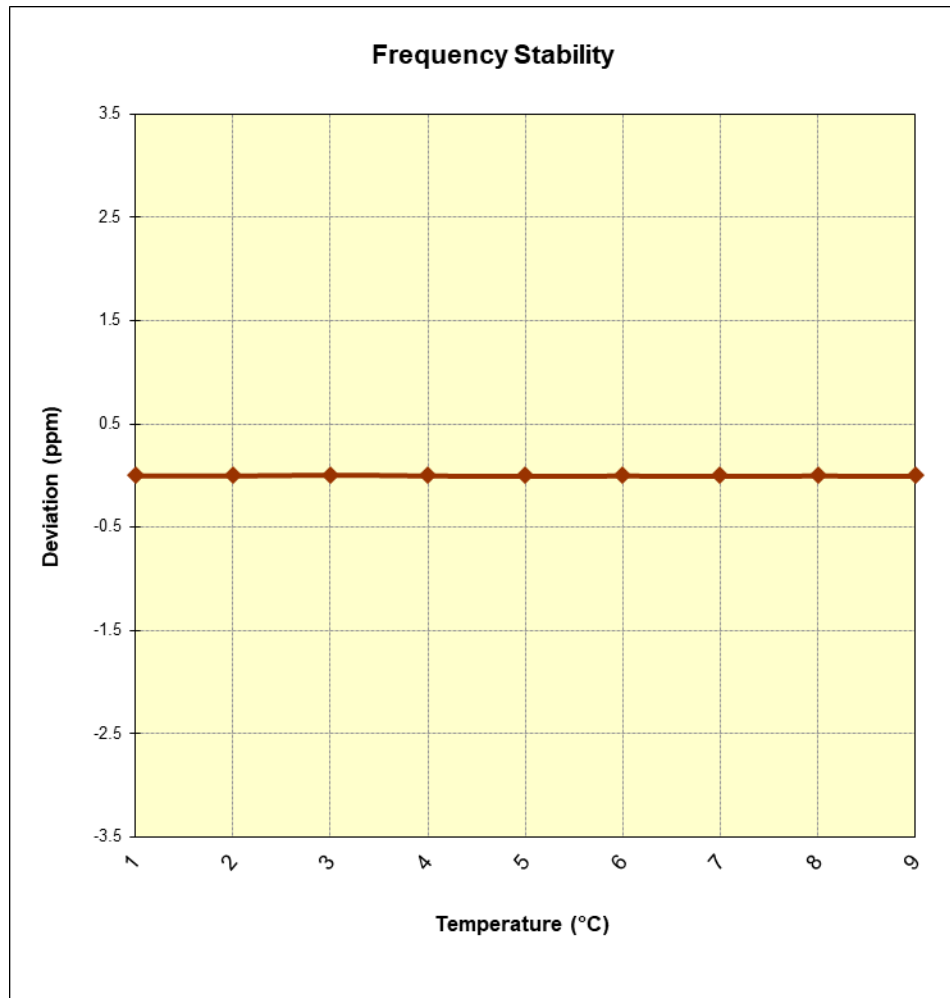


Figure 7-16. Frequency Stability Graph (Band 25/2 - 20MHz QPSK - Full RB Configuration)

FCC ID: BCGA2429	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Band 30 Frequency Stability Measurements

OPERATING FREQUENCY: 2,310,000,000 Hz

CHANNEL: 27710

REFERENCE VOLTAGE: 3.80 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	- 30	2,310,000,004	4	0.0000002
100 %		- 20	2,310,000,004	4	0.0000002
100 %		- 10	2,310,000,008	8	0.0000003
100 %		0	2,310,000,011	11	0.0000005
100 %		+ 10	2,310,000,006	6	0.0000003
100 %		+ 20	2,310,000,007	7	0.0000003
100 %		+ 30	2,310,000,002	2	0.0000001
100 %		+ 40	2,310,000,006	6	0.0000003
100 %		+ 50	2,310,000,004	4	0.0000002
BATT. ENDPOINT	3.40	+ 20	2,310,000,003	3	0.0000001

Table 7-109. Frequency Stability Data (Band 30 - 10MHz QPSK - Full RB Configuration)

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: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Band 30 Frequency Stability Measurements

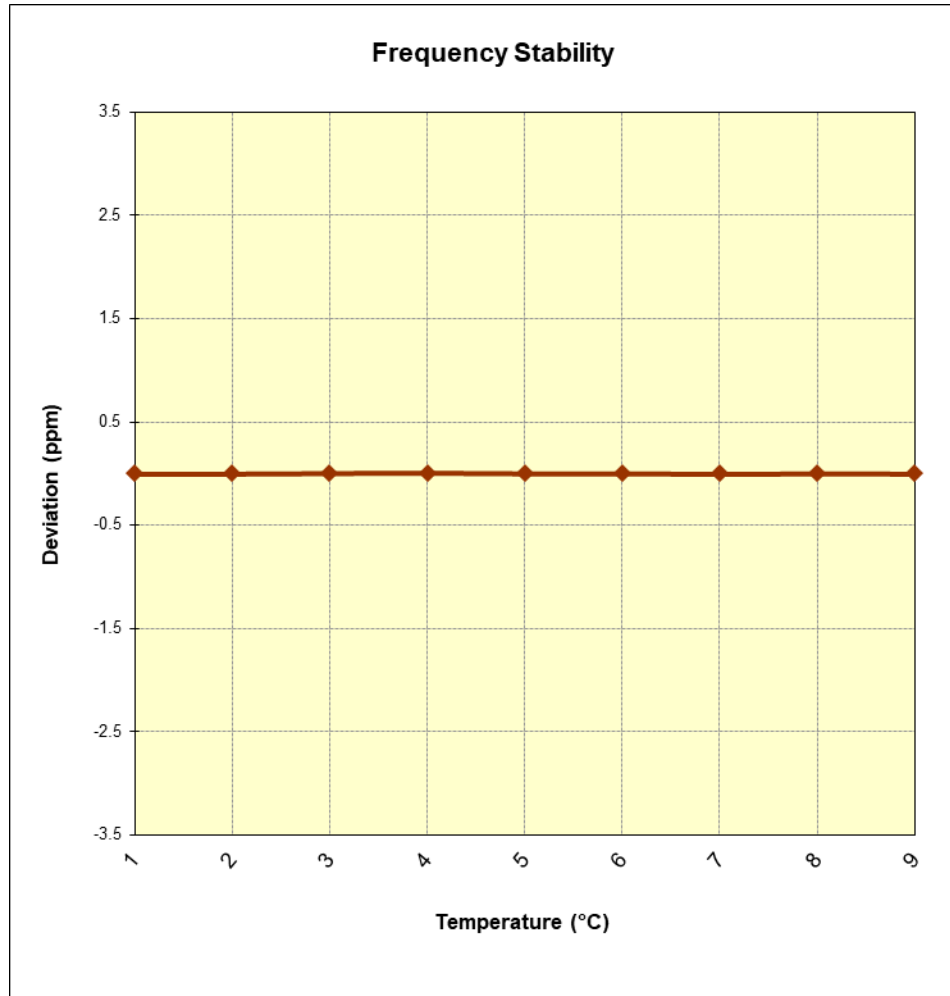


Figure 7-17. Frequency Stability Graph (Band 30 - 10MHz QPSK - Full RB Configuration)

FCC ID: BCGA2429	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Band 7 Frequency Stability Measurements

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

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	- 30	2,535,000,006	6	0.0000002
100 %		- 20	2,535,000,005	5	0.0000002
100 %		- 10	2,535,000,007	7	0.0000003
100 %		0	2,535,000,009	9	0.0000004
100 %		+ 10	2,535,000,004	4	0.0000002
100 %		+ 20	2,535,000,006	6	0.0000002
100 %		+ 30	2,535,000,003	3	0.0000001
100 %		+ 40	2,535,000,004	4	0.0000002
100 %		+ 50	2,535,000,007	7	0.0000003
BATT. ENDPOINT	3.40	+ 20	2,535,000,003	3	0.0000001

Table 7-110. Frequency Stability Data (Band 7 - 20MHz QPSK - Full RB Configuration)

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: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Band 7 Frequency Stability Measurements

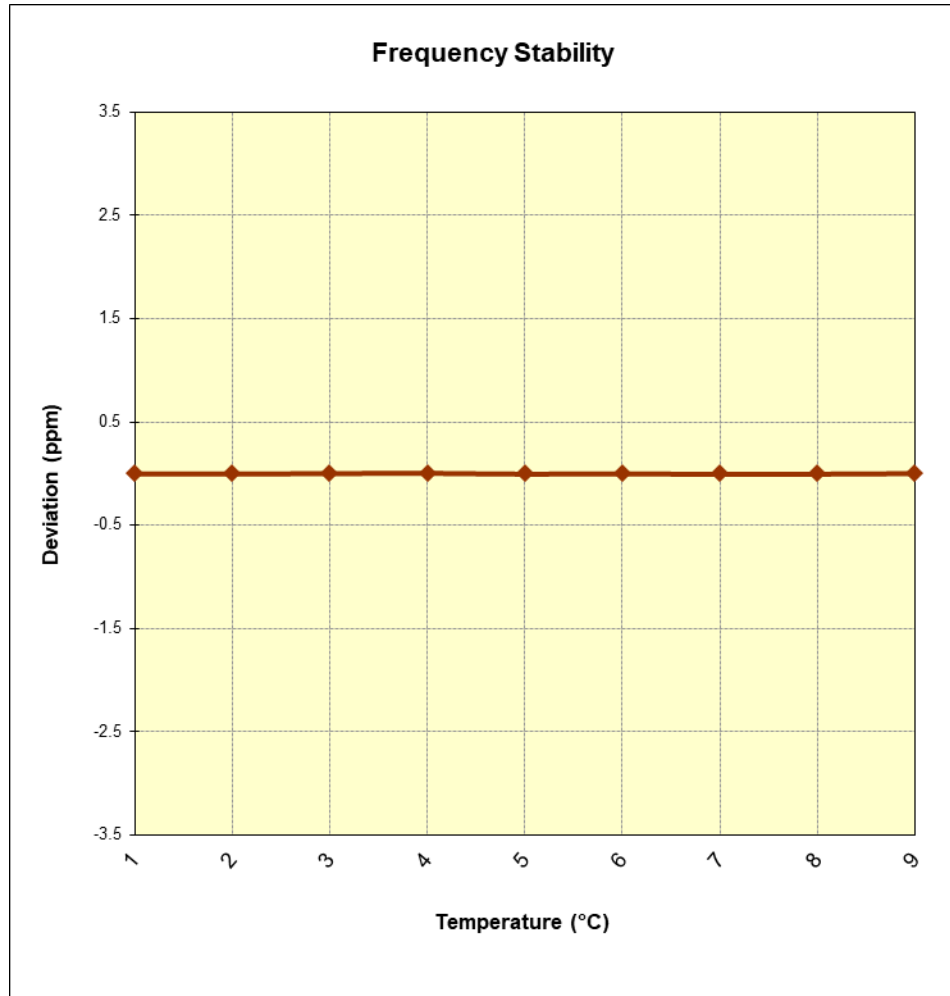


Figure 7-18. Frequency Stability Graph (Band 7 - 20MHz QPSK - Full RB Configuration)

FCC ID: BCGA2429	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Band 41 Frequency Stability Measurements

OPERATING FREQUENCY: 2,593,000,000 Hz

CHANNEL: 40620

REFERENCE VOLTAGE: 3.80 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	- 30	2,593,000,049	49	0.0000019
100 %		- 20	2,593,000,047	47	0.0000018
100 %		- 10	2,593,000,047	47	0.0000018
100 %		0	2,593,000,049	49	0.0000019
100 %		+ 10	2,593,000,048	48	0.0000019
100 %		+ 20	2,593,000,050	50	0.0000019
100 %		+ 30	2,593,000,049	49	0.0000019
100 %		+ 40	2,593,000,045	45	0.0000017
100 %		+ 50	2,593,000,049	49	0.0000019
BATT. ENDPOINT	3.40	+ 20	2,593,000,039	39	0.0000015

Table 7-111. Frequency Stability Data (Band 41 - 20MHz QPSK - Full RB Configuration)

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: BCGA2429	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Band 41 Frequency Stability Measurements

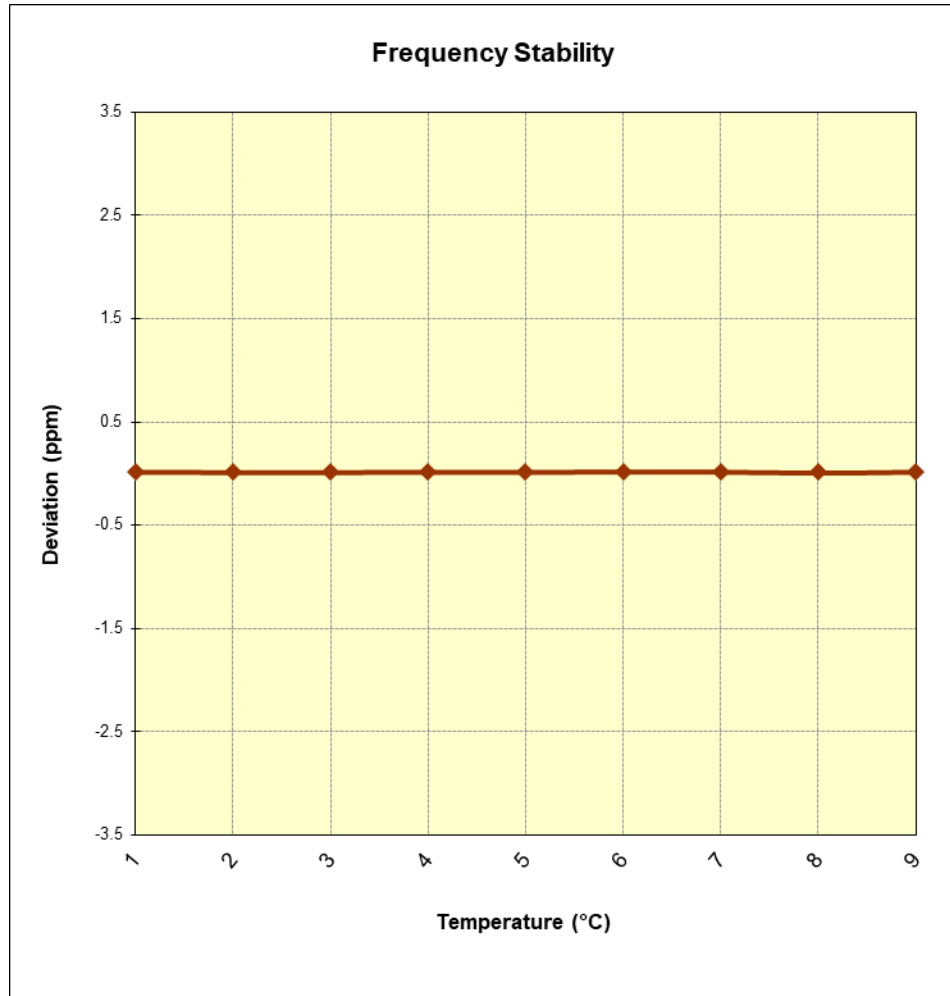


Figure 7-19. Frequency Stability Graph (Band 41 - 20MHz QPSK - Full RB Configuration)

FCC ID: BCGA2429	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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8.0 CONCLUSION

The data collected relate only to the item(s) tested and show that the **Apple Tablet Device** **FCC ID: BCGA2429** complies with all the requirements of Part 22, 24, & 27 of the FCC Rules for LTE operation only.

FCC ID: BCGA2429	 Proud to be part of  element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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