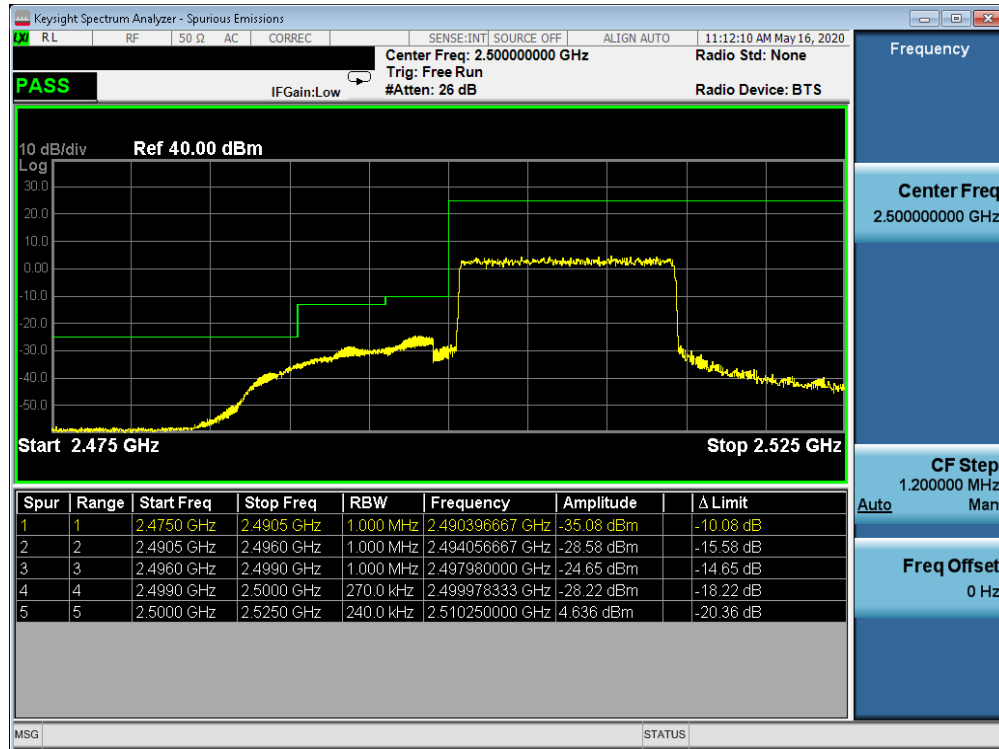


Plot 7-258. Lower ACP Plot (Band 7 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-259. Upper ACP Plot (Band 7 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 155 of 238

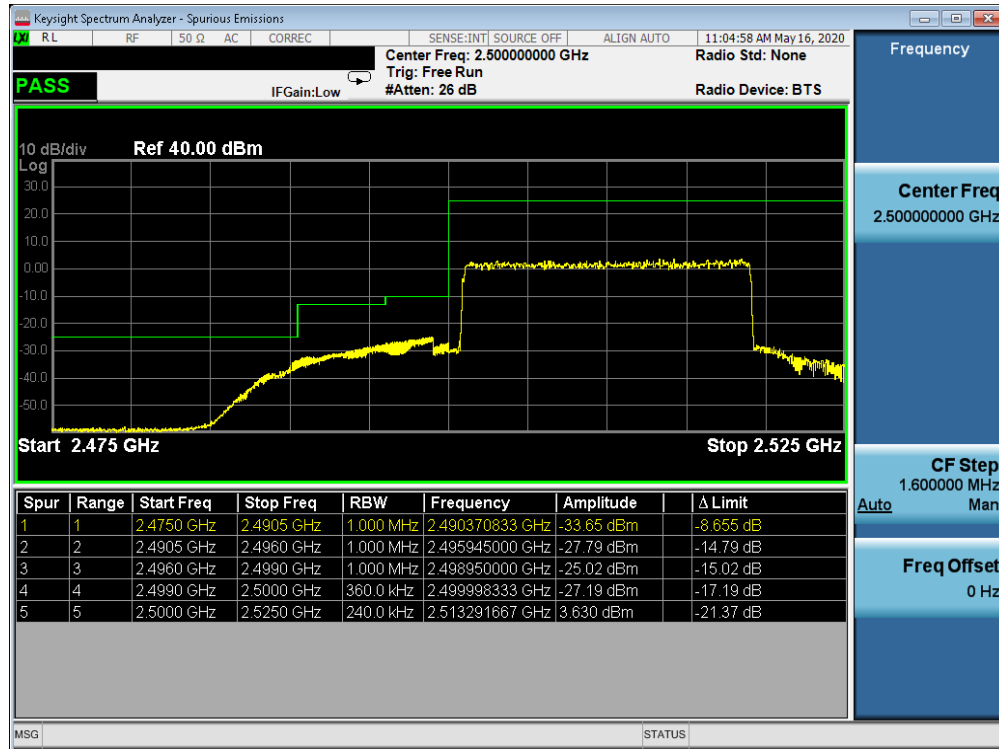


Plot 7-260. Lower ACP Plot (Band 7 - 15.0MHz QPSK - Full RB Configuration)

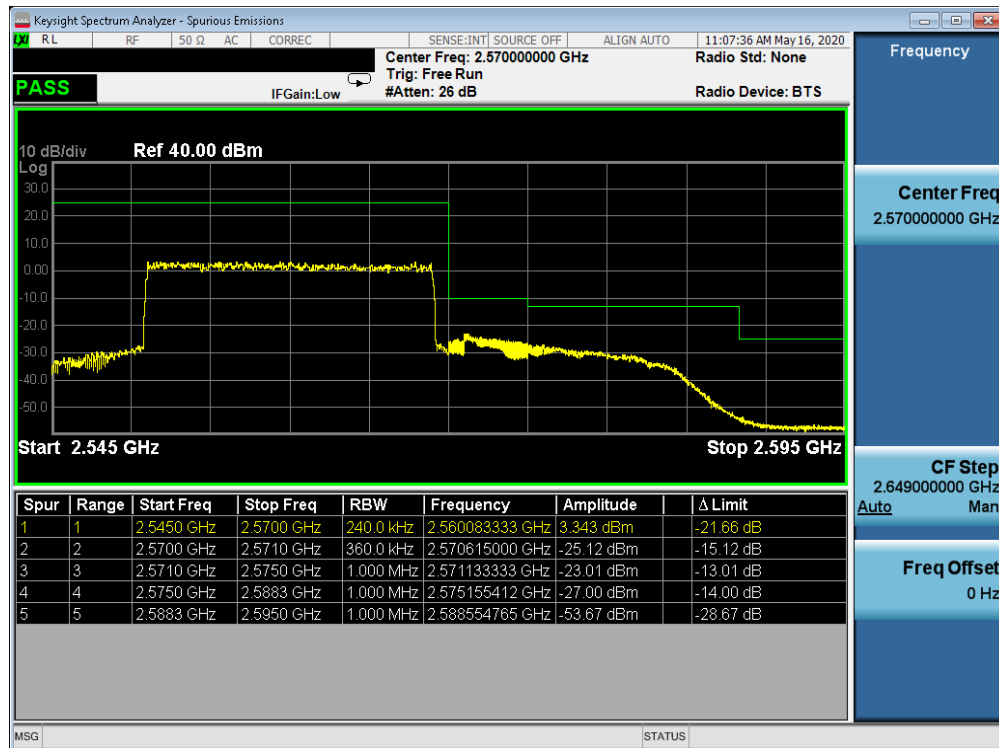


Plot 7-261. Upper ACP Plot (Band 7 - 15.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 156 of 238



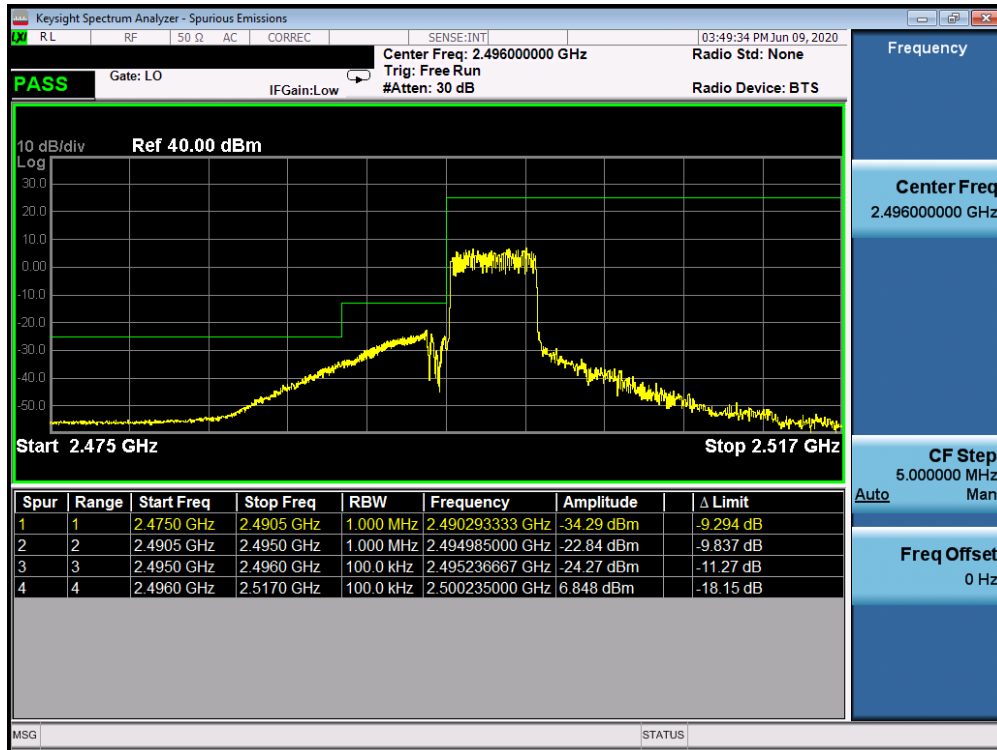
Plot 7-262. Lower ACP Plot (Band 7 - 20.0MHz QPSK - Full RB Configuration)



Plot 7-263. Upper ACP Plot (Band 7 - 20.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 157 of 238

Band 41

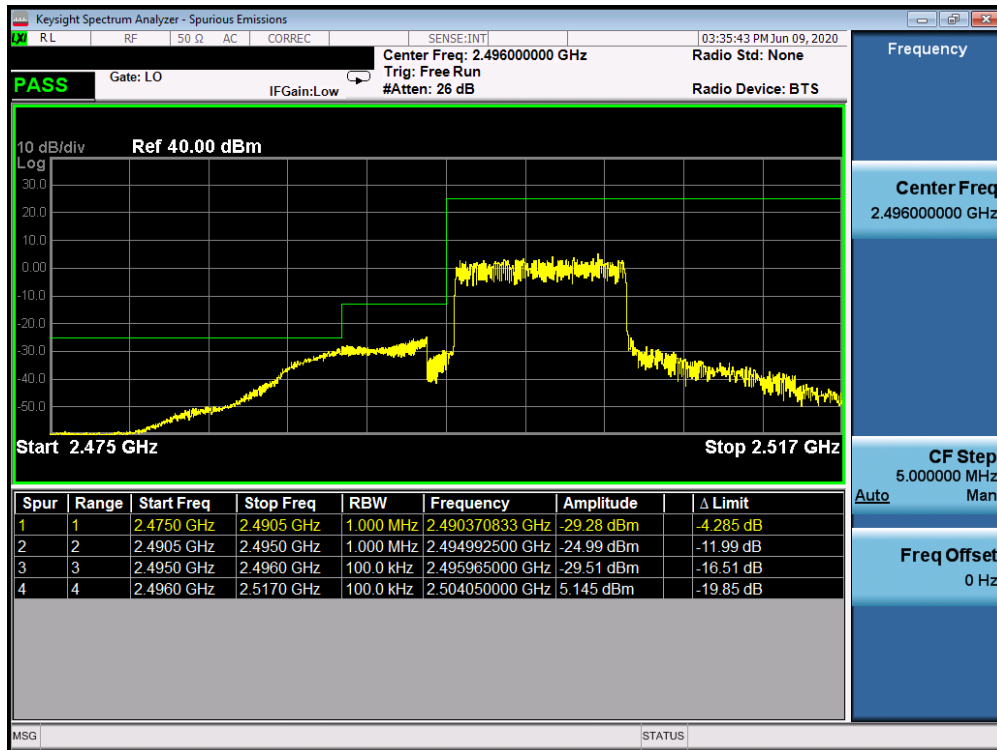


Plot 7-264. Lower ACP Plot (Band 41 - 5.0MHz QPSK - Full RB Configuration)



Plot 7-265. Upper ACP Plot (Band 41 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 158 of 238

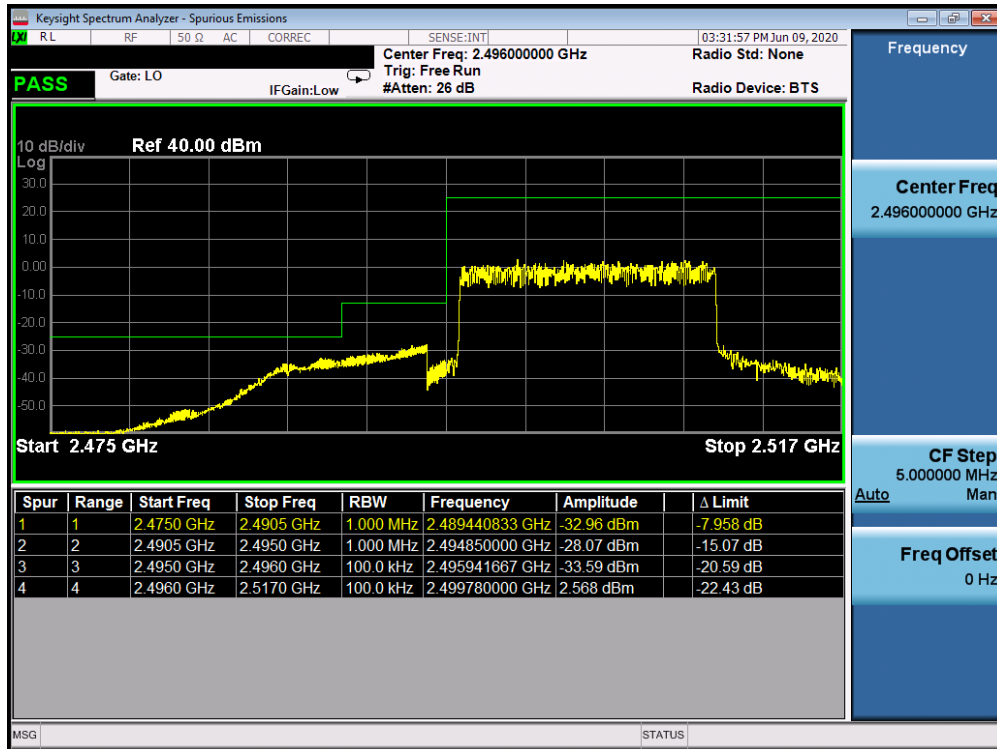


Plot 7-266. Lower ACP Plot (Band 41 - 10.0MHz QPSK - Full RB Configuration)

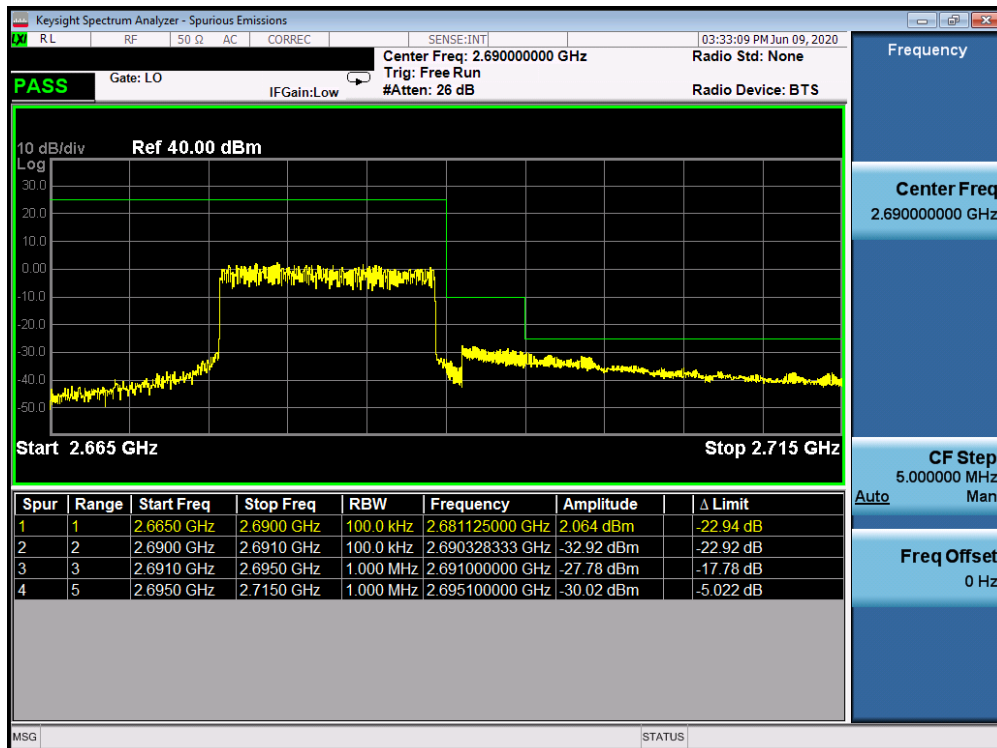


Plot 7-267. Upper ACP Plot (Band 41 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 159 of 238

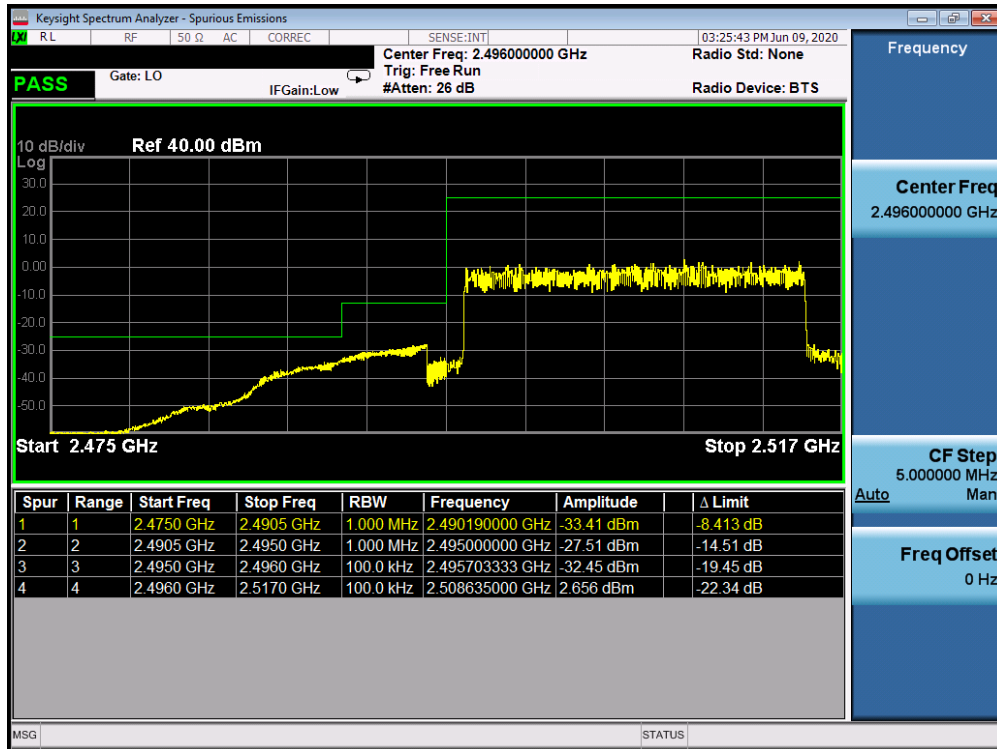


Plot 7-268. Lower ACP Plot (Band 41 - 15.0MHz QPSK - Full RB Configuration)

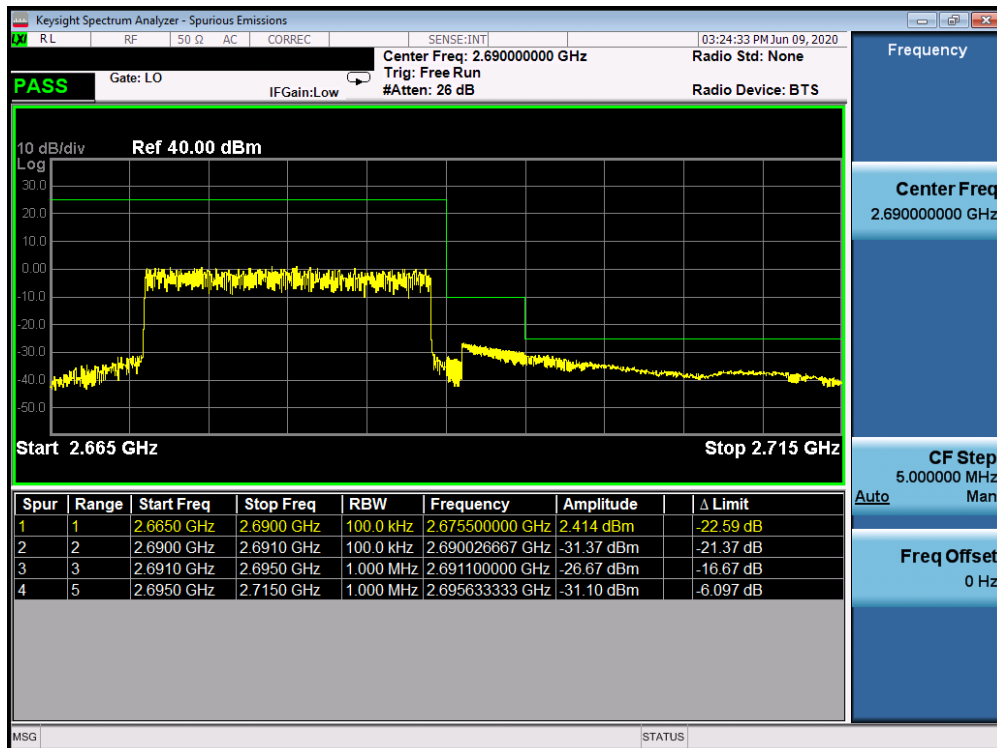


Plot 7-269. Upper ACP Plot (Band 41 - 15.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 160 of 238



Plot 7-270. Lower ACP Plot (Band 41 - 20.0MHz QPSK - Full RB Configuration)



Plot 7-271. Upper ACP Plot (Band 41 - 20.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 161 of 238

7.5 Peak-Average Ratio

Test Overview

A peak to average ratio measurement is performed at the conducted port of the EUT. The spectrum analyzers Complementary Cumulative Distribution Function (CCDF) measurement profile is used to determine the largest deviation between the average and the peak power of the EUT in a given bandwidth. The CCDF curve shows how much time the peak waveform spends at or above a given average power level. The percent of time the signal spends at or above the level defines the probability for that particular power level.

Test Procedure Used

KDB 971168 D01 v03r01 – Section 5.7.1

Test Settings

1. The signal analyzer's CCDF measurement profile is enabled
2. Frequency = carrier center frequency
3. Measurement BW \geq OBW or specified reference bandwidth
4. The signal analyzer was set to collect one million samples to generate the CCDF curve
5. The measurement interval was set depending on the type of signal analyzed. For continuous signals (>98% duty cycle), the measurement interval was set to 1ms. For burst transmissions, the spectrum analyzer is set to use an internal "RF Burst" trigger that is synced with an incoming pulse and the measurement interval is set to less than the duration of the "on time" of one burst to ensure that energy is only captured during a time in which the transmitter is operating at maximum power

Test Setup

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

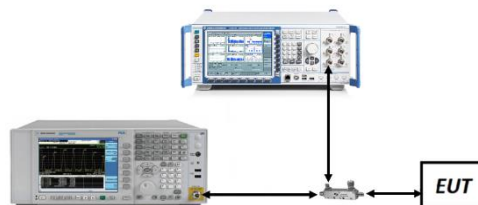


Figure 7-4. Test Instrument & Measurement Setup

Test Notes

1. This device only supports 27RBs or less for 16-QAM uplink.
2. All RB sizes have been investigated and Full RB configuration was found and reported as worst case.

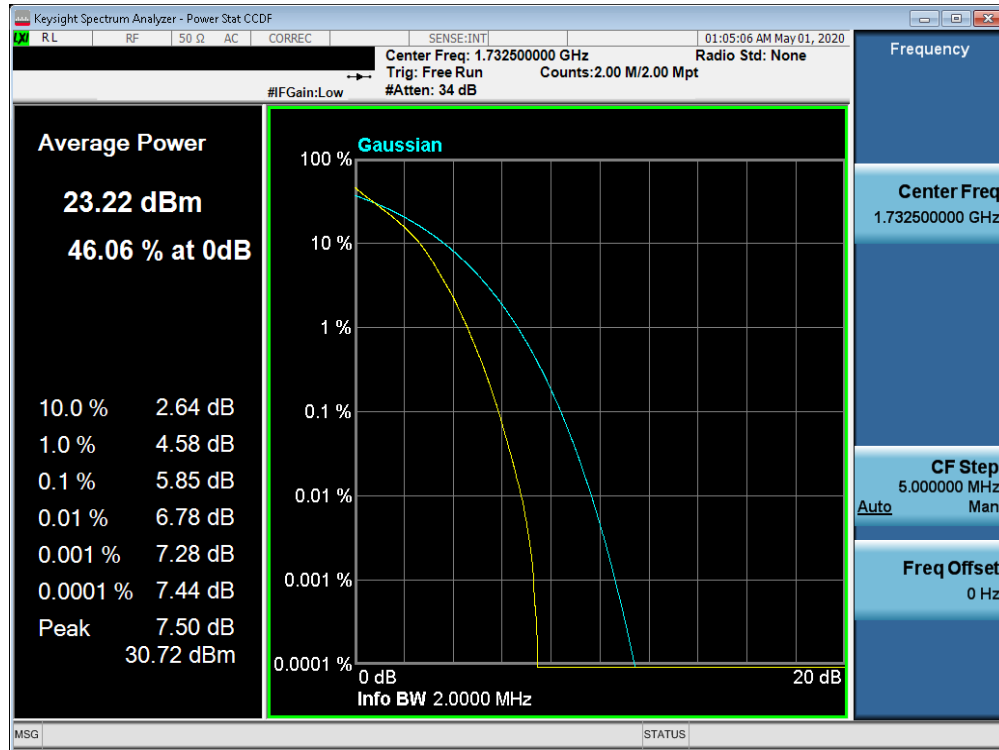
FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 162 of 238

LTE	BW (MHz)	Modulation	Average Power [dBm]	PAR at 0.1% [dB]	Limit [dB]	Margin [dB]
Band 4	1.4	QPSK	23.22	5.85	13	-7.15
Band 4	1.4	16QAM	22.39	6.49	13	-6.51
Band 4	3	QPSK	23.21	5.95	13	-7.05
Band 4	3	16QAM	22.32	6.60	13	-6.40
Band 4	5	QPSK	23.20	5.93	13	-7.07
Band 4	5	16QAM	22.27	6.51	13	-6.49
Band 4	10	QPSK	23.21	5.76	13	-7.24
Band 4	10	16QAM	22.37	6.57	13	-6.43
Band 4	15	QPSK	23.16	5.97	13	-7.03
Band 4	15	16QAM	22.22	6.52	13	-6.48
Band 4	20	QPSK	22.89	5.55	13	-7.45
Band 4	20	16QAM	21.88	6.54	13	-6.46
Band 66	1.4	QPSK	23.00	5.55	13	-7.45
Band 66	1.4	16QAM	22.18	6.22	13	-6.78
Band 66	3	QPSK	23.00	5.75	13	-7.25
Band 66	3	16QAM	22.14	6.40	13	-6.60
Band 66	5	QPSK	23.00	5.74	13	-7.26
Band 66	5	16QAM	22.12	6.33	13	-6.67
Band 66	10	QPSK	23.01	5.64	13	-7.36
Band 66	10	16QAM	22.11	6.10	13	-6.90
Band 66	15	QPSK	22.98	5.90	13	-7.10
Band 66	15	16QAM	22.08	6.10	13	-6.90
Band 66	20	QPSK	23.16	5.59	13	-7.41
Band 66	20	16QAM	22.19	6.32	13	-6.68
Band 2	1.4	QPSK	22.78	5.68	13	-7.32
Band 2	1.4	16QAM	21.87	6.36	13	-6.64
Band 2	3	QPSK	22.81	5.83	13	-7.17
Band 2	3	16QAM	21.85	6.46	13	-6.54
Band 2	5	QPSK	22.78	5.83	13	-7.17
Band 2	5	16QAM	21.80	6.44	13	-6.56
Band 2	10	QPSK	22.89	5.69	13	-7.31
Band 2	10	16QAM	21.87	6.27	13	-6.73
Band 2	15	QPSK	22.91	5.91	13	-7.09
Band 2	15	16QAM	21.85	6.27	13	-6.73
Band 2	20	QPSK	23.09	5.62	13	-7.38
Band 2	20	16QAM	21.77	6.17	13	-6.83
Band 25	1.4	QPSK	22.97	5.75	13	-7.25
Band 25	1.4	16QAM	22.07	6.40	13	-6.60
Band 25	3	QPSK	22.98	5.83	13	-7.17
Band 25	3	16QAM	22.02	6.48	13	-6.52
Band 25	5	QPSK	22.92	5.85	13	-7.15
Band 25	5	16QAM	22.00	6.45	13	-6.55
Band 25	10	QPSK	23.07	5.73	13	-7.27
Band 25	10	16QAM	22.05	6.32	13	-6.68
Band 25	15	QPSK	23.11	5.97	13	-7.03
Band 25	15	16QAM	22.04	6.28	13	-6.72
Band 25	20	QPSK	23.14	5.67	13	-7.33
Band 25	20	16QAM	21.92	6.26	13	-6.74

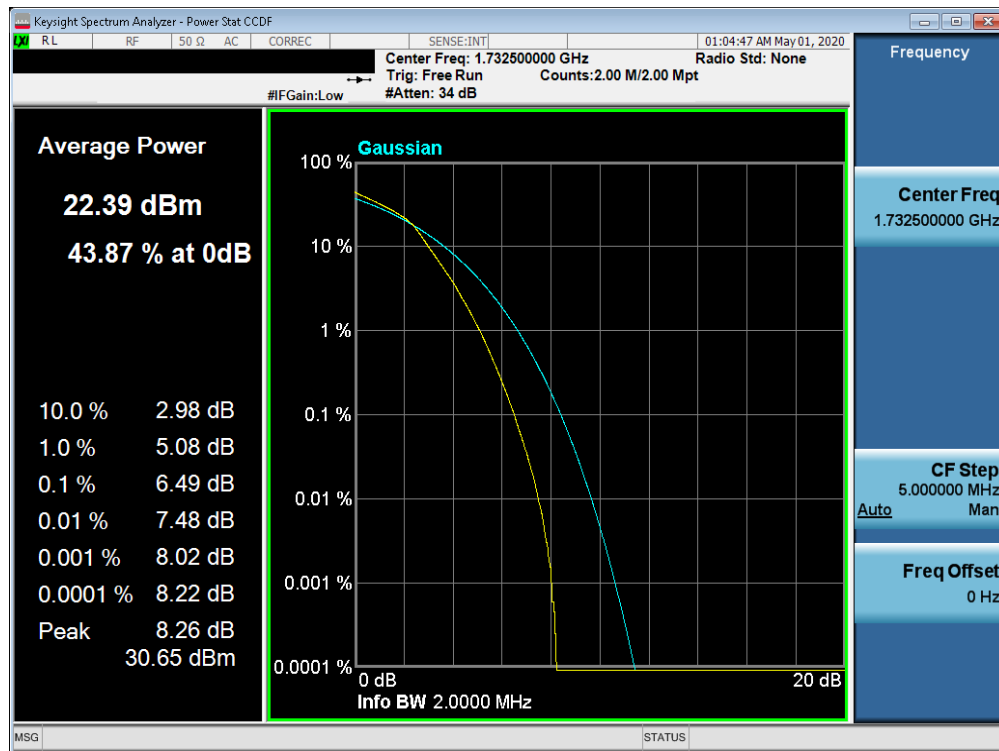
Table 7-6. PAR Results (Mid Bands)

FCC ID: BCG-A2354	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 163 of 238

Band 4

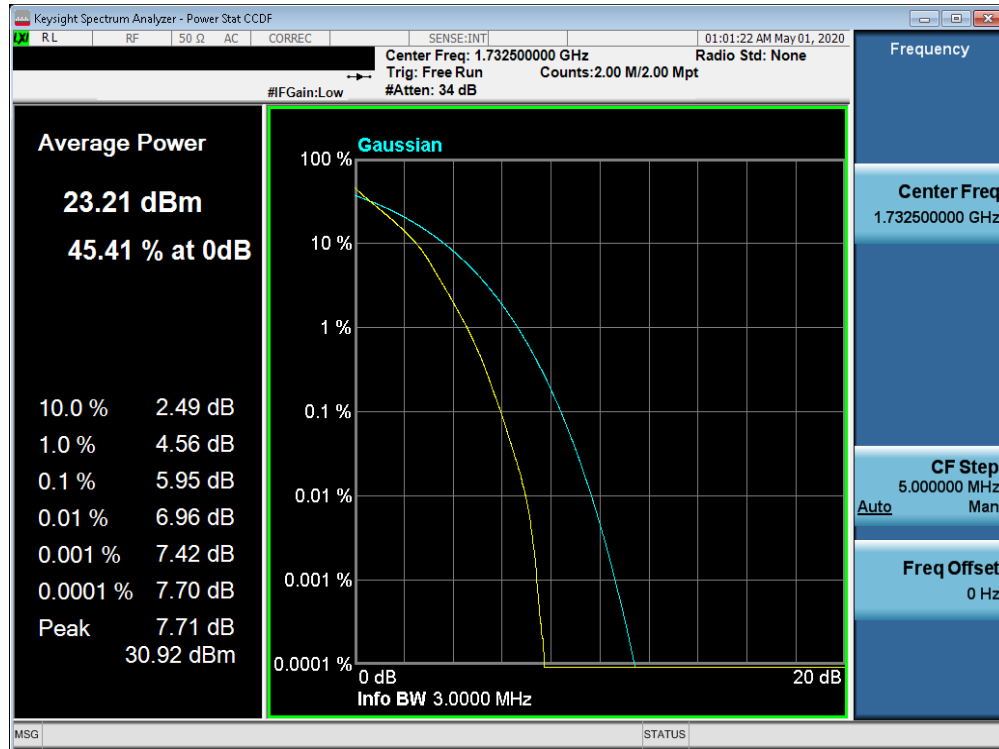


Plot 7-272. PAR Plot (Band 4 - 1.4MHz QPSK - Full RB Configuration)

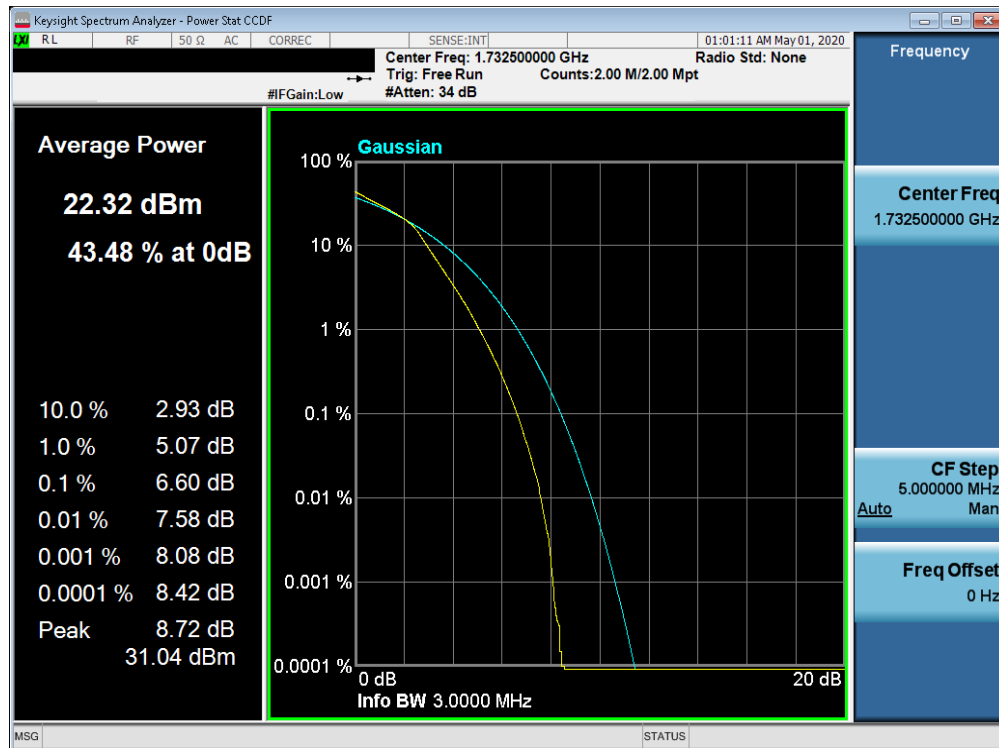


Plot 7-273. PAR Plot (Band 4 - 1.4MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 164 of 238

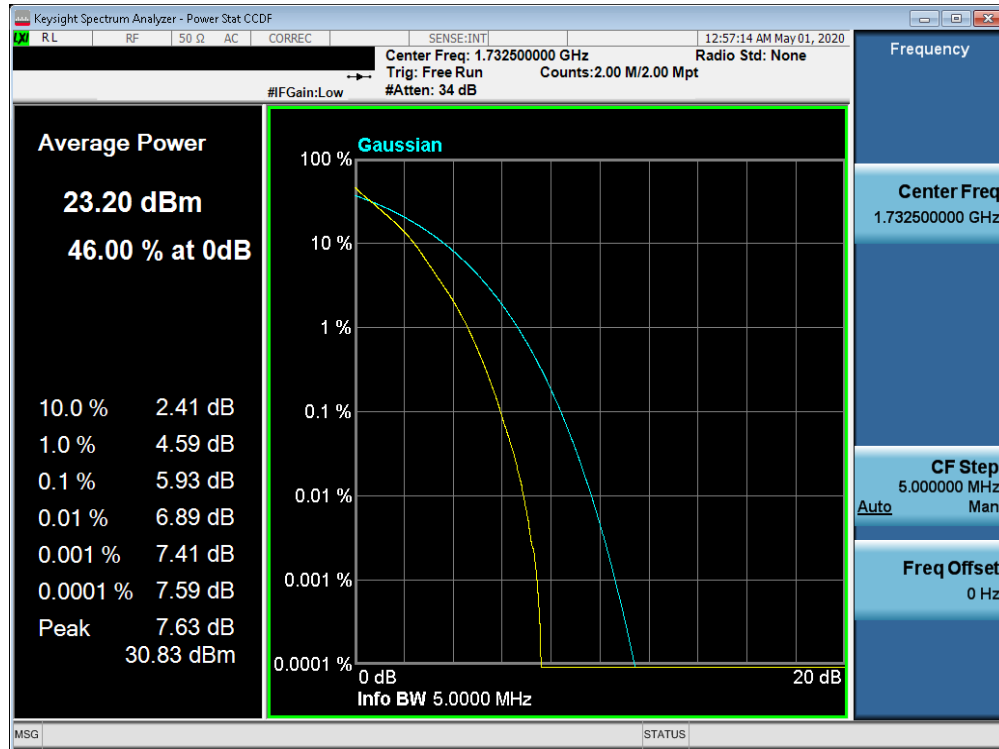


Plot 7-274. PAR Plot (Band 4 - 3.0MHz QPSK - Full RB Configuration)

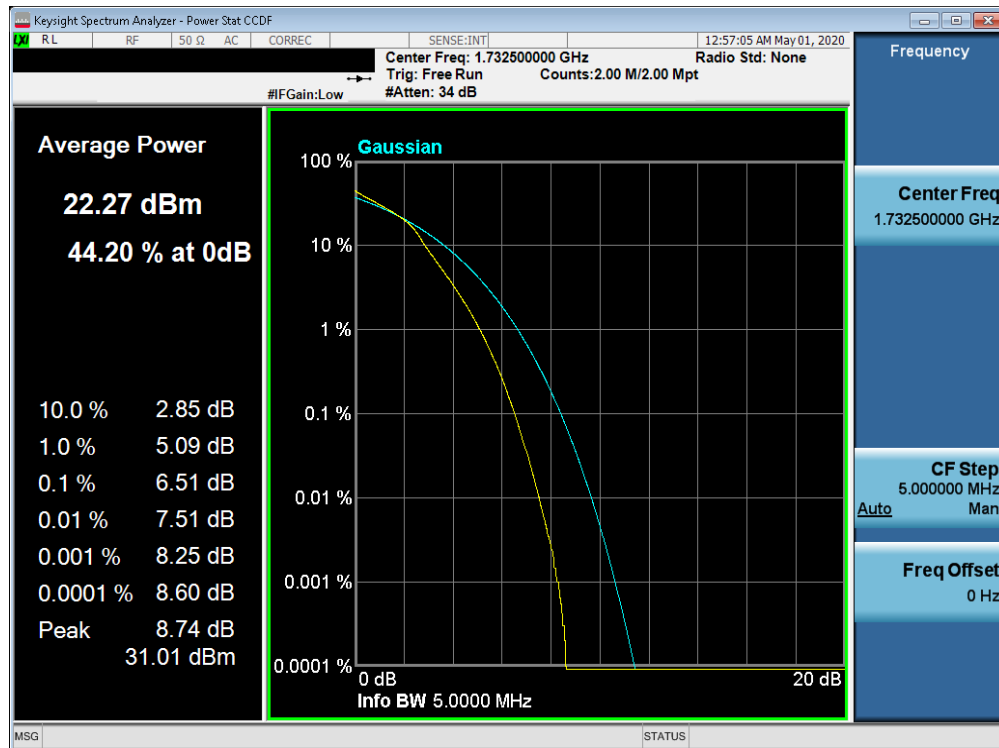


Plot 7-275. PAR Plot (Band 4 - 3.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 165 of 238

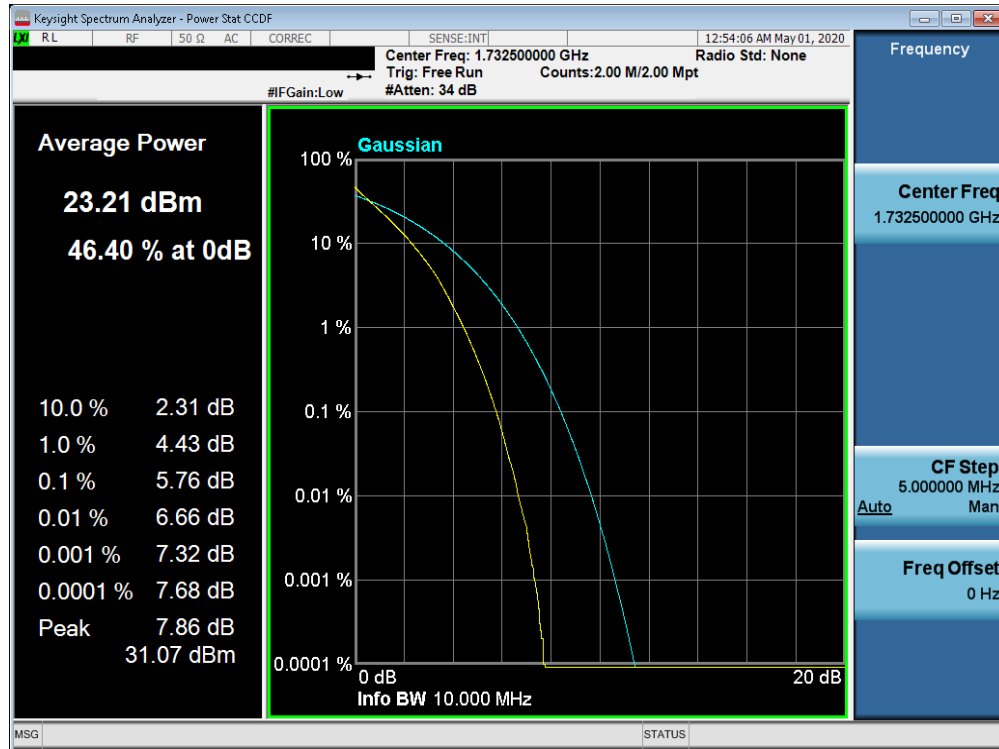


Plot 7-276. PAR Plot (Band 4 - 5.0MHz QPSK - Full RB Configuration)

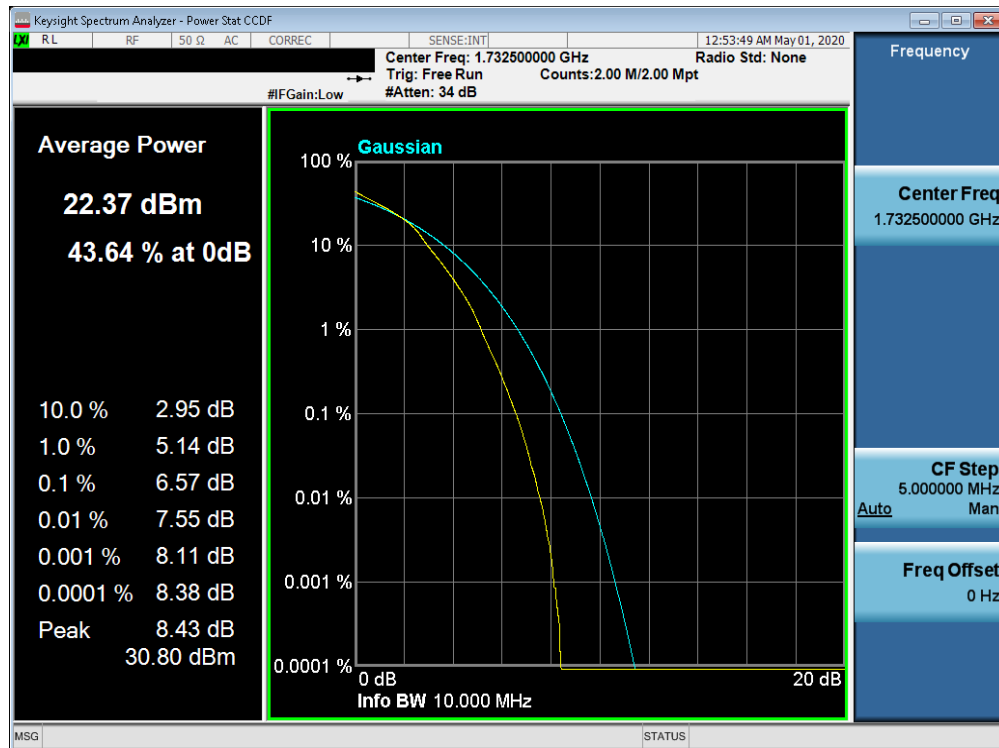


Plot 7-277. PAR Plot (Band 4 - 5.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 166 of 238

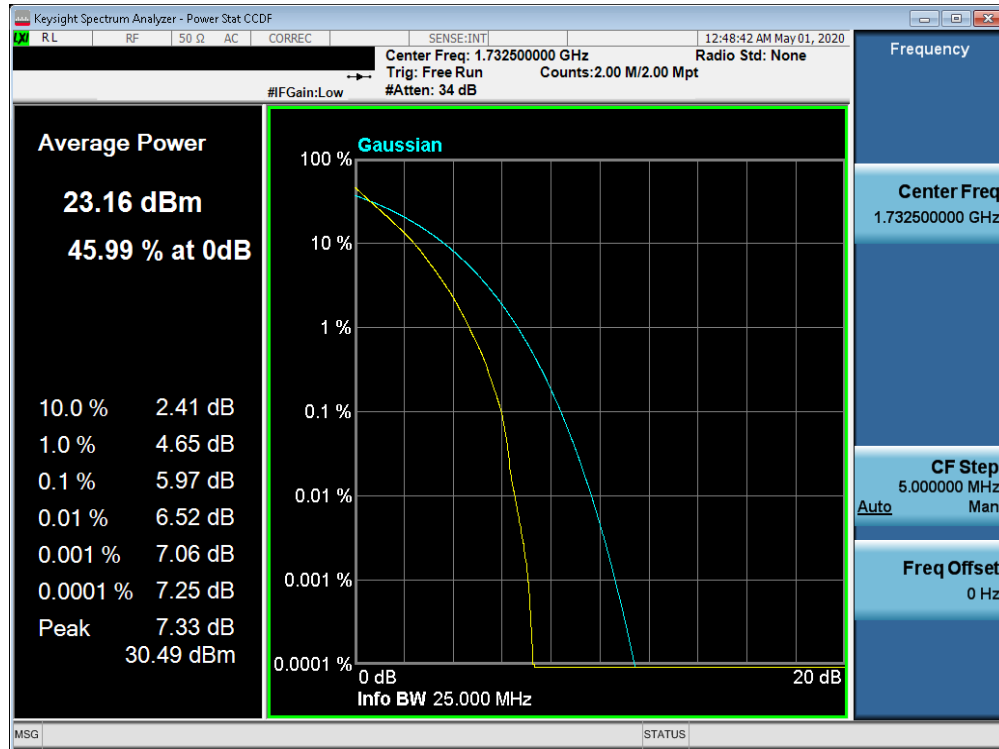


Plot 7-278. PAR Plot (Band 4 - 10.0MHz QPSK - Full RB Configuration)

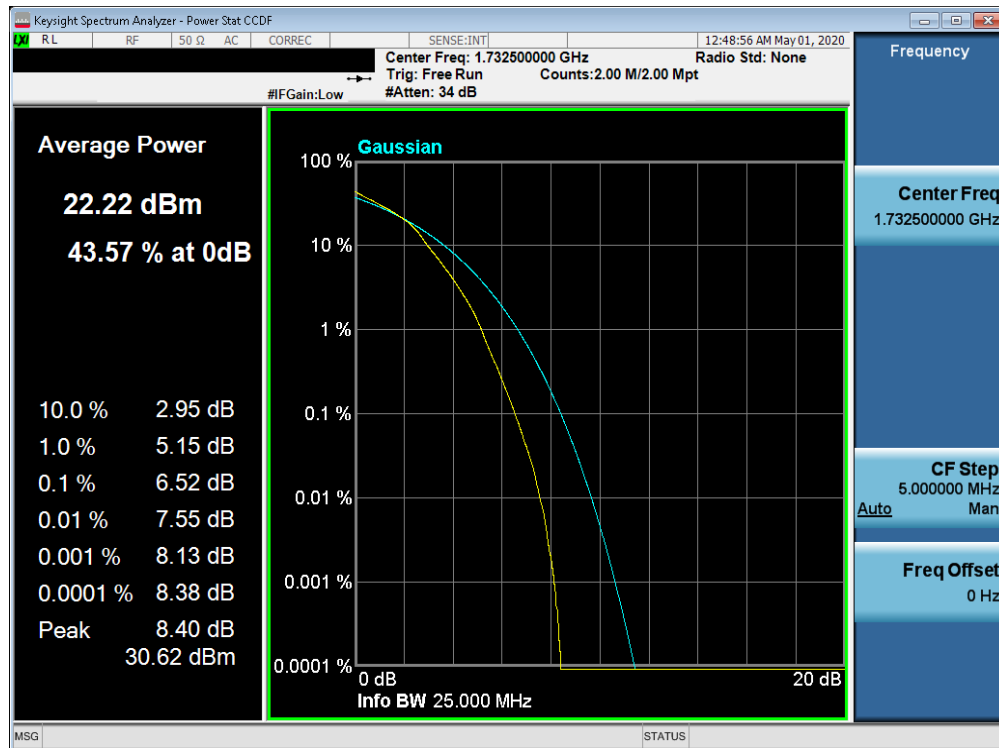


Plot 7-279. PAR Plot (Band 4 - 10.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 167 of 238

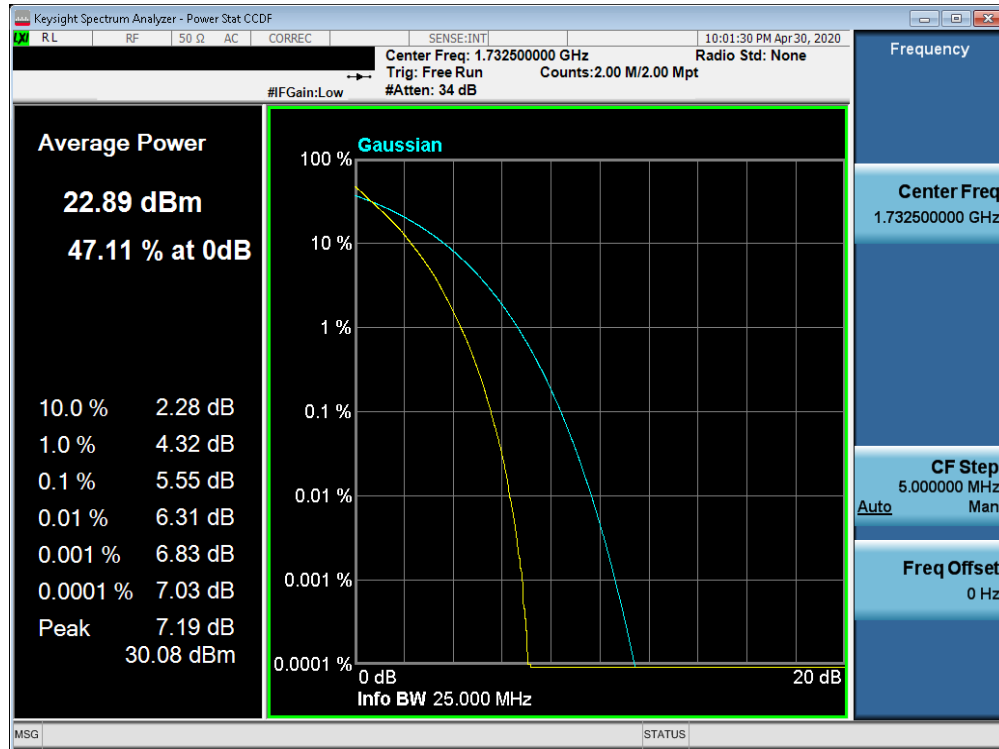


Plot 7-280. PAR Plot (Band 4 - 15.0MHz QPSK - Full RB Configuration)

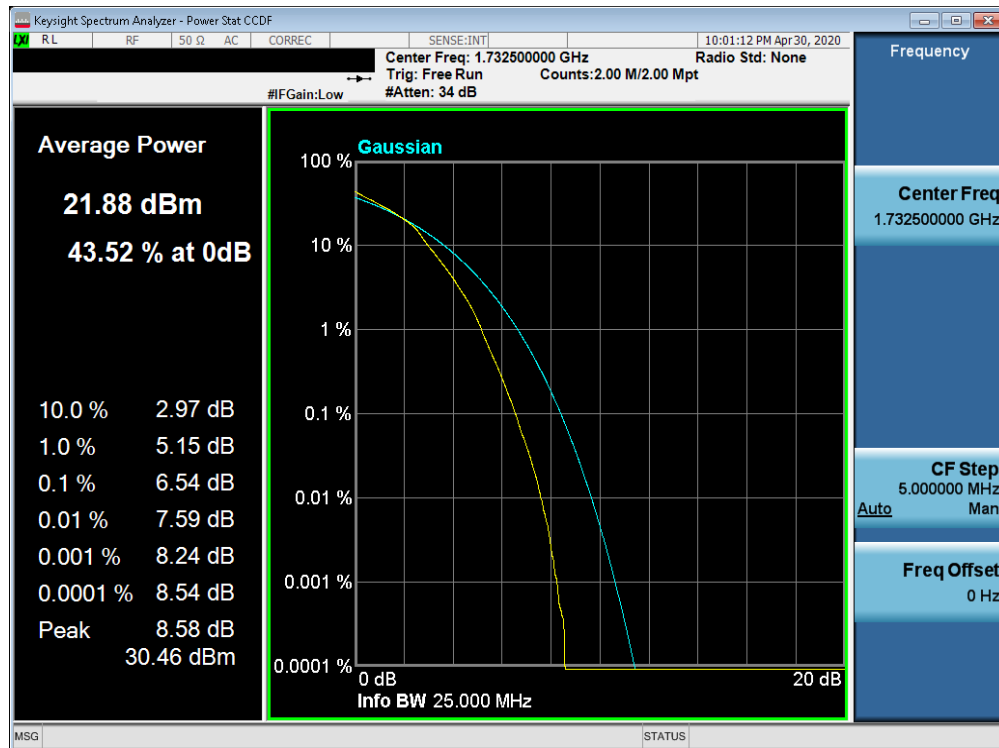


Plot 7-281. PAR Plot (Band 4 - 15.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 168 of 238



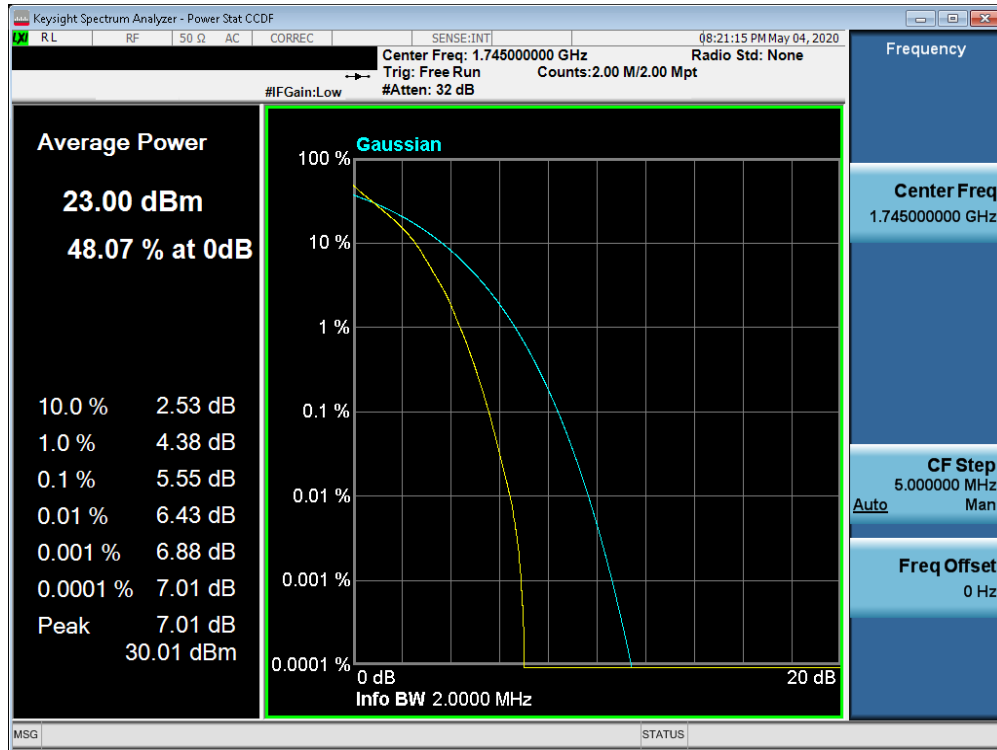
Plot 7-282. PAR Plot (Band 4 - 20.0MHz QPSK - Full RB Configuration)



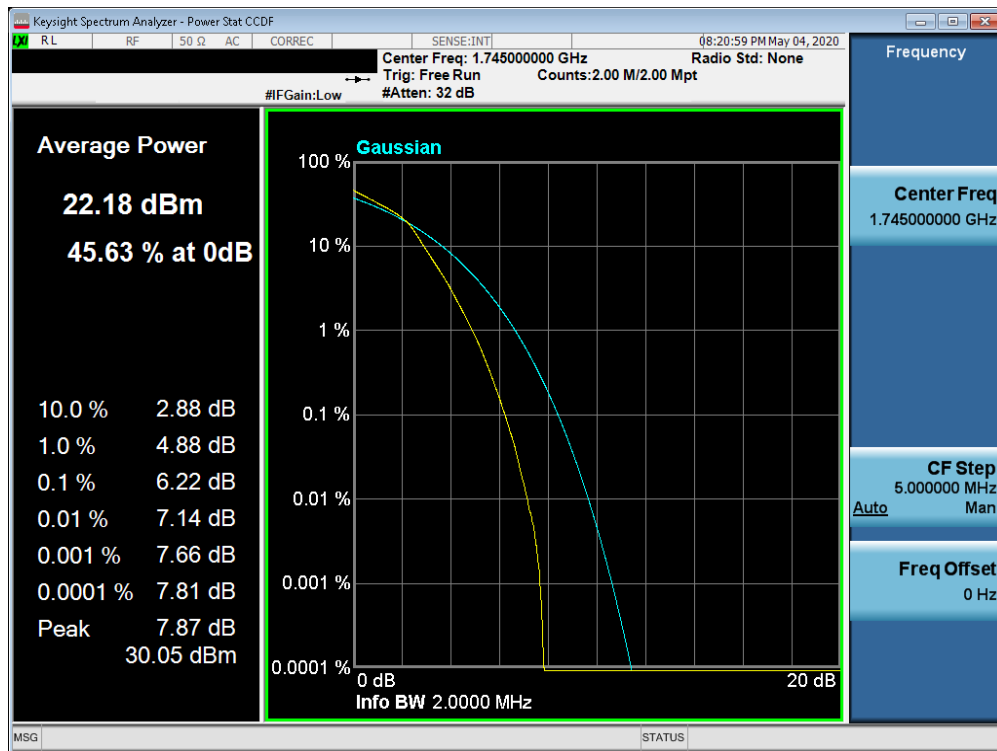
Plot 7-283. PAR Plot (Band 4 - 20.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 169 of 238

Band 66

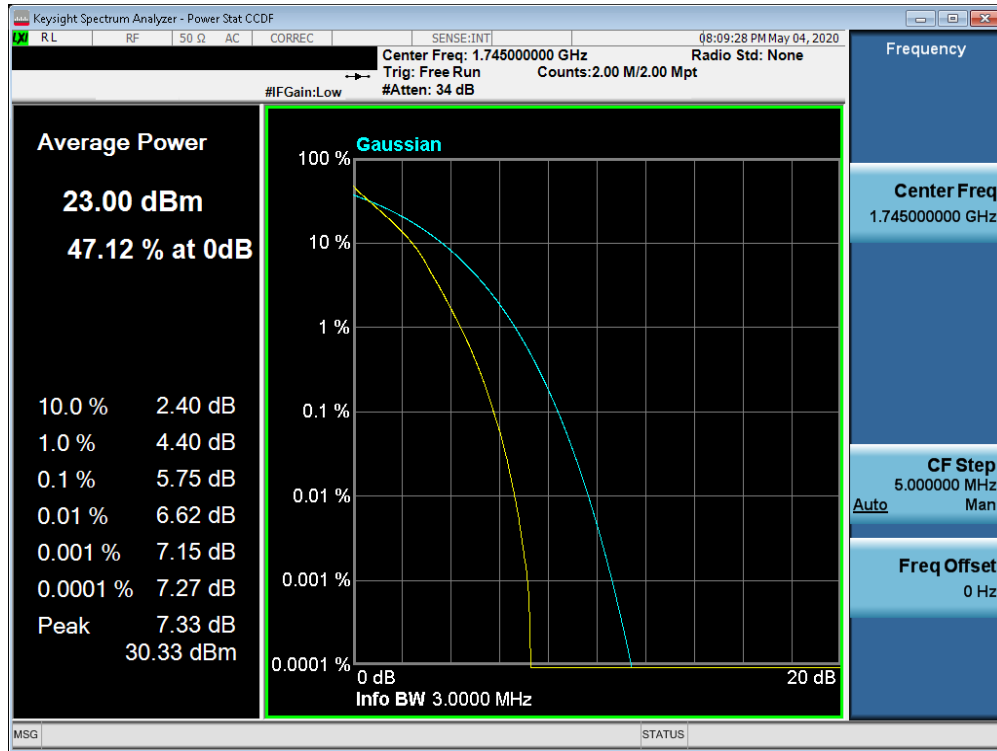


Plot 7-284. PAR Plot (Band 66 - 1.4MHz QPSK - Full RB Configuration)

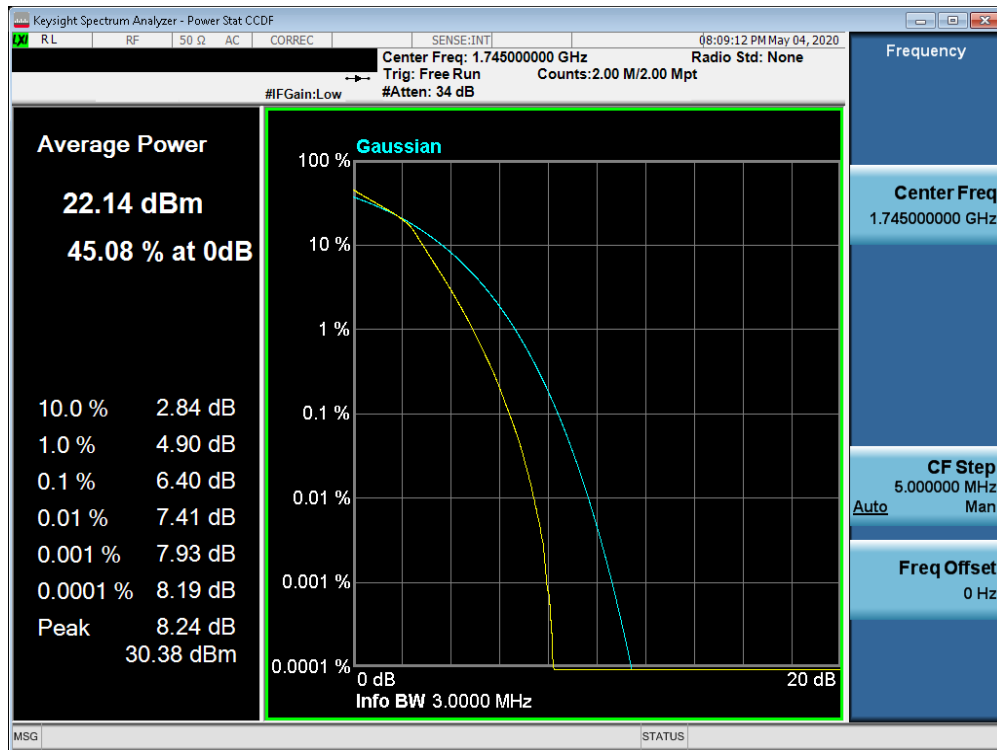


Plot 7-285. PAR Plot (Band 66 - 1.4MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 170 of 238

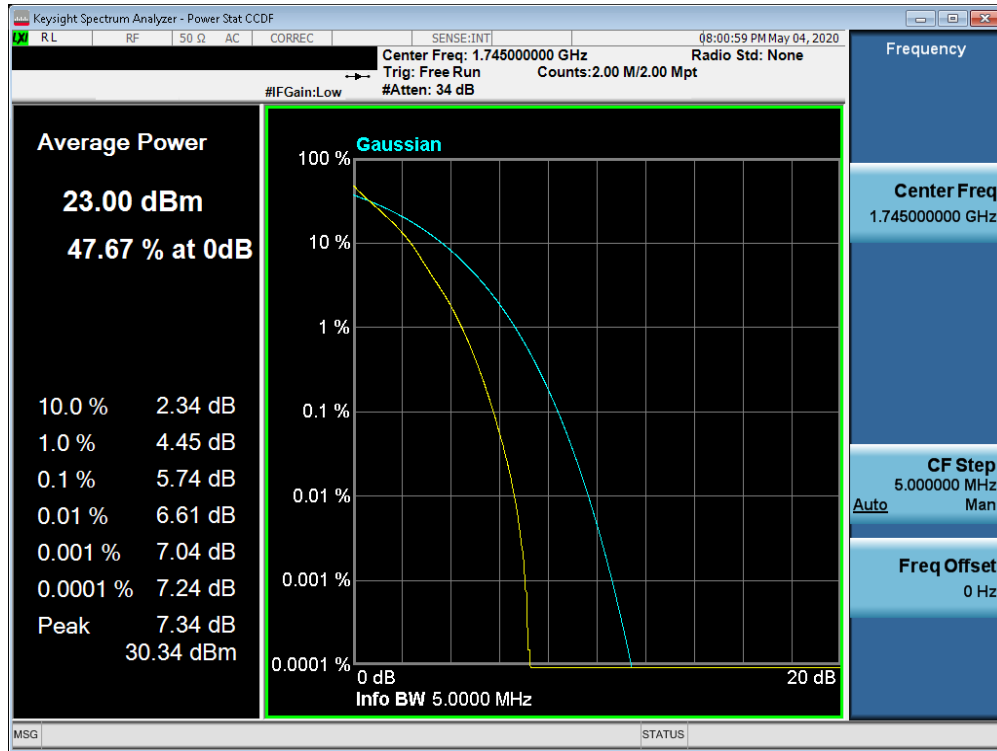


Plot 7-286. PAR Plot (Band 66 - 3.0MHz QPSK - Full RB Configuration)

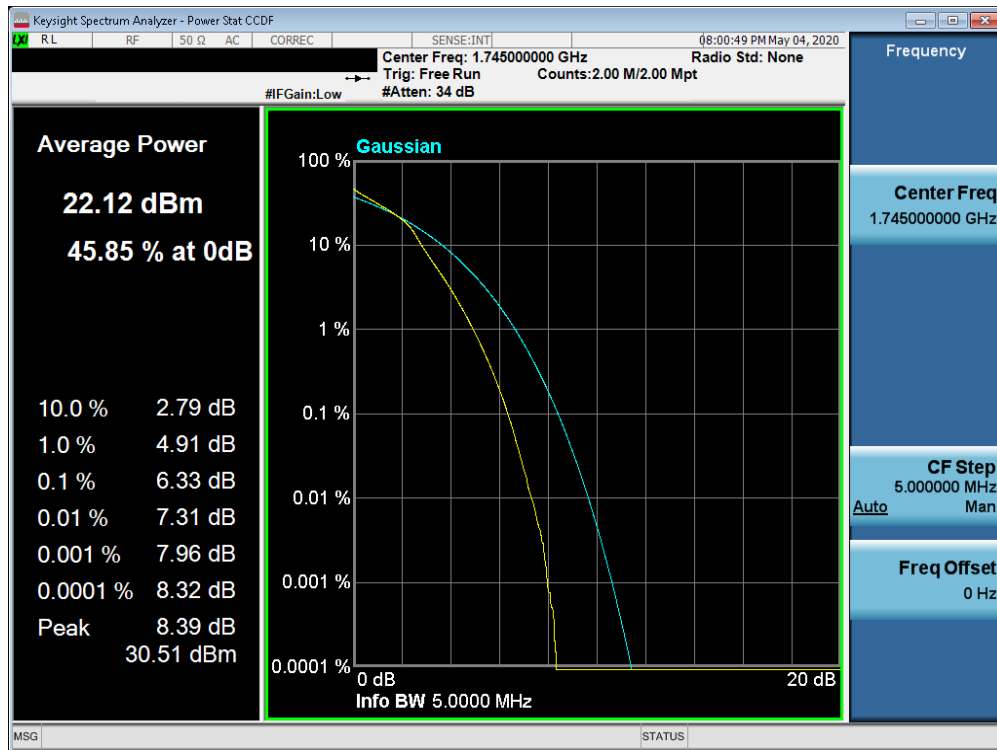


Plot 7-287. PAR Plot (Band 66 - 3.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 171 of 238

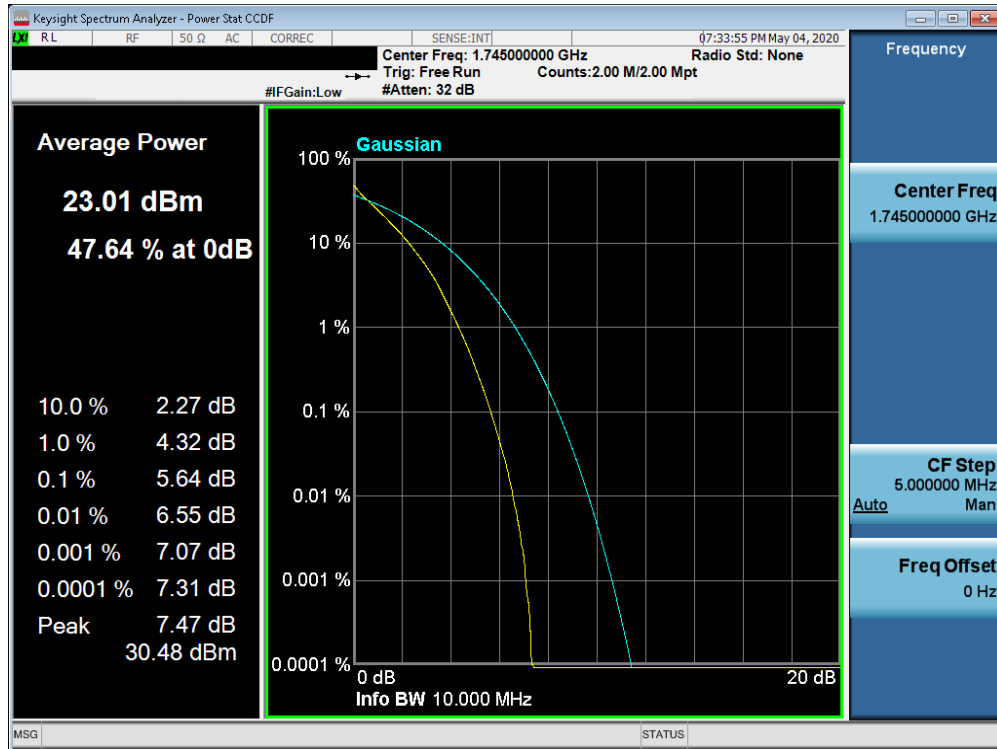


Plot 7-288. PAR Plot (Band 66 - 5.0MHz QPSK - Full RB Configuration)

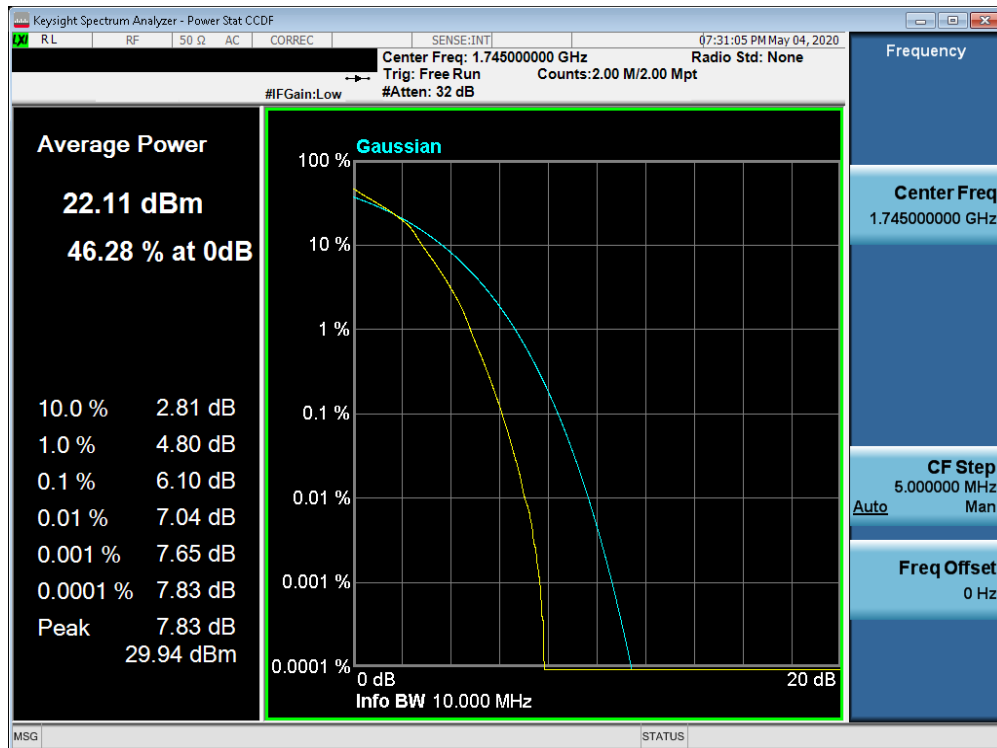


Plot 7-289. PAR Plot (Band 66 - 5.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 172 of 238

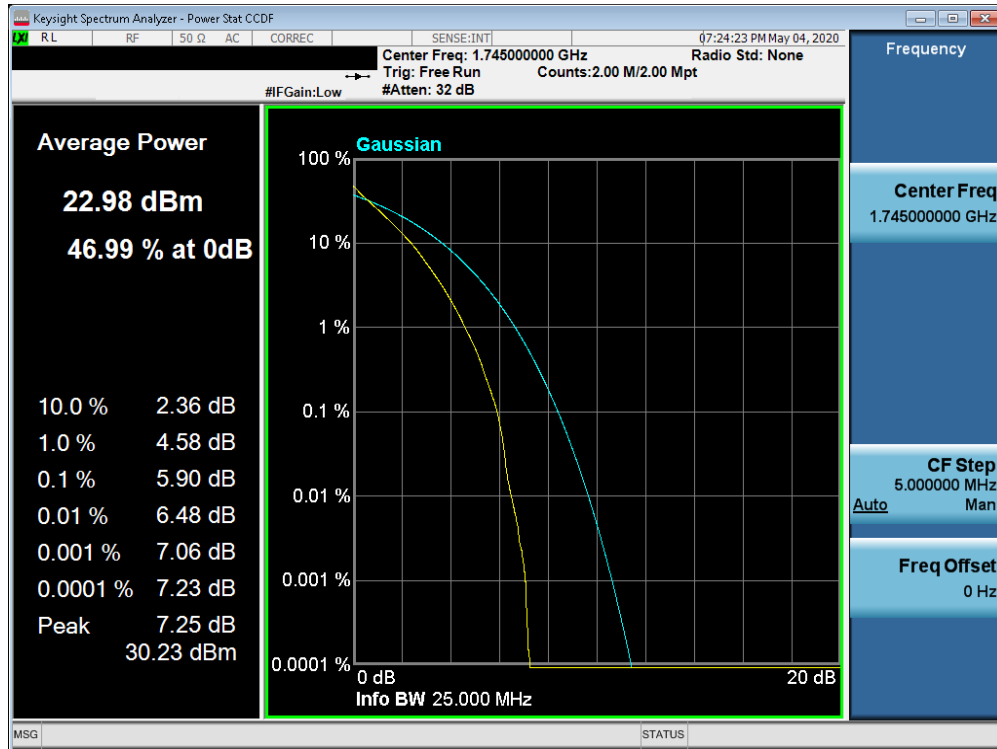


Plot 7-290. PAR Plot (Band 66 - 10.0MHz QPSK - Full RB Configuration)

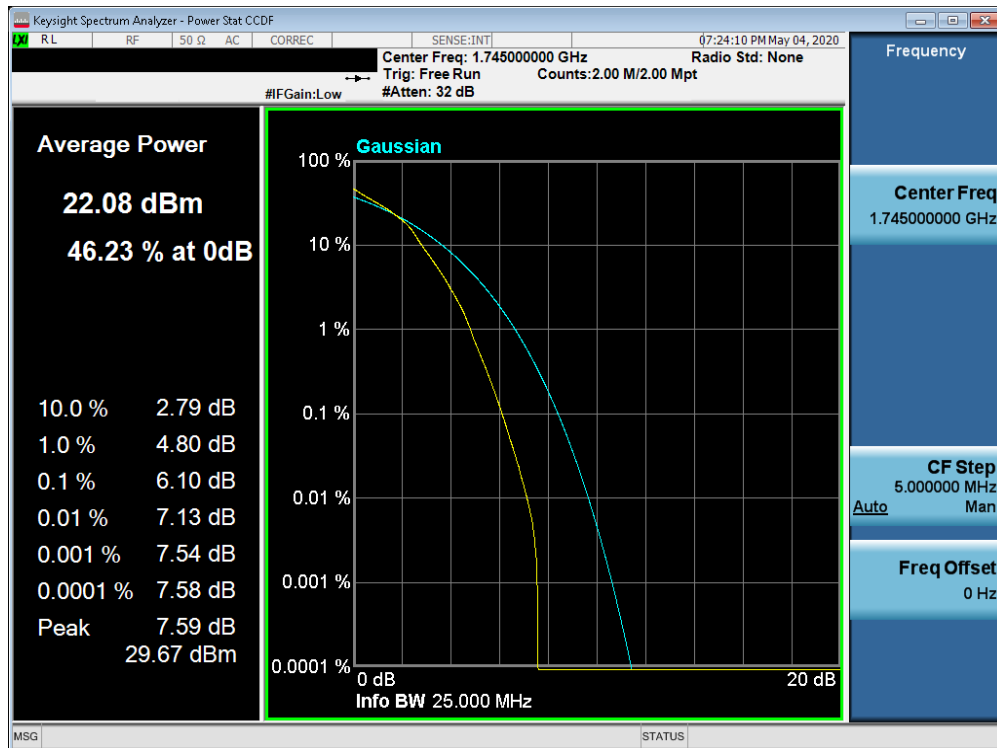


Plot 7-291. PAR Plot (Band 66 - 10.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 173 of 238

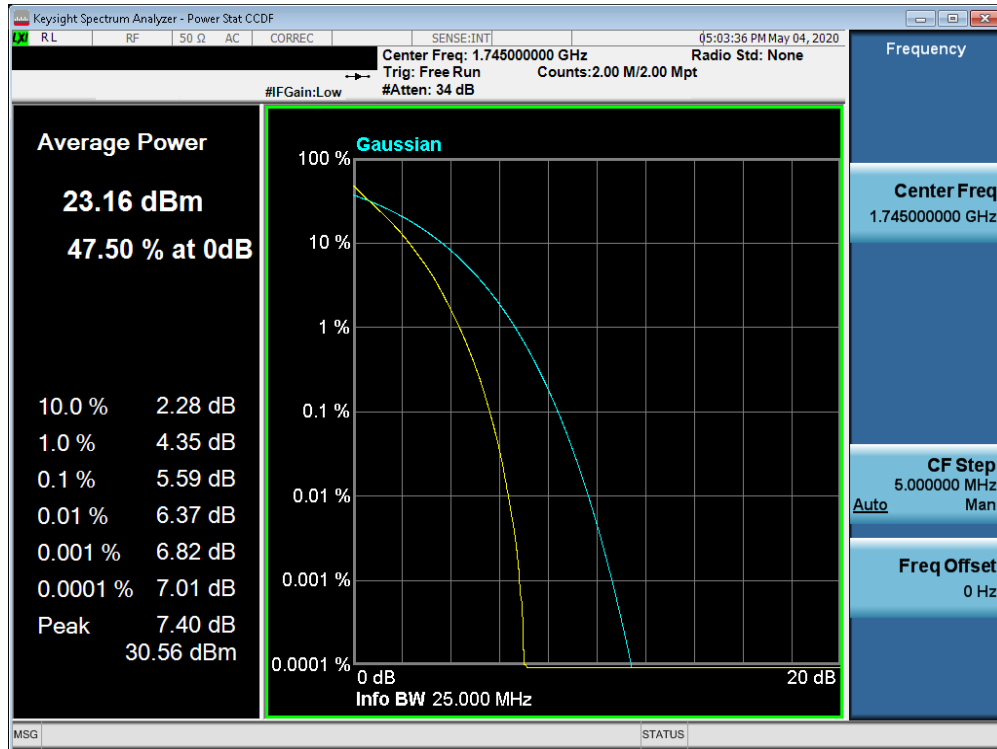


Plot 7-292. PAR Plot (Band 66 - 15.0MHz QPSK - Full RB Configuration)

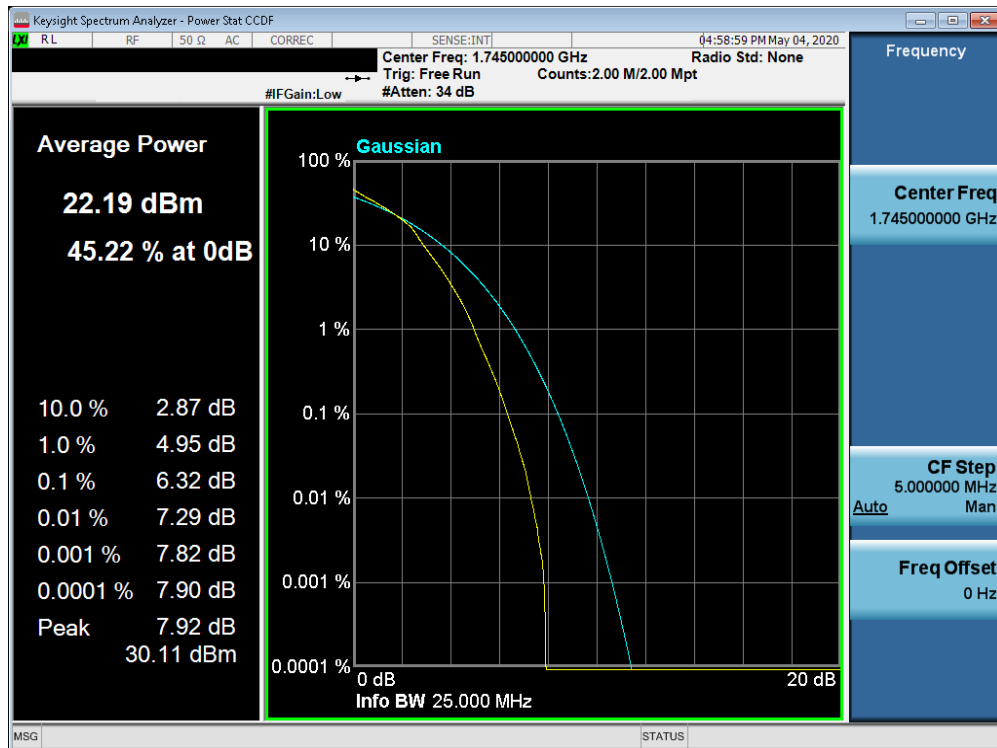


Plot 7-293. PAR Plot (Band 66 - 15.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 174 of 238



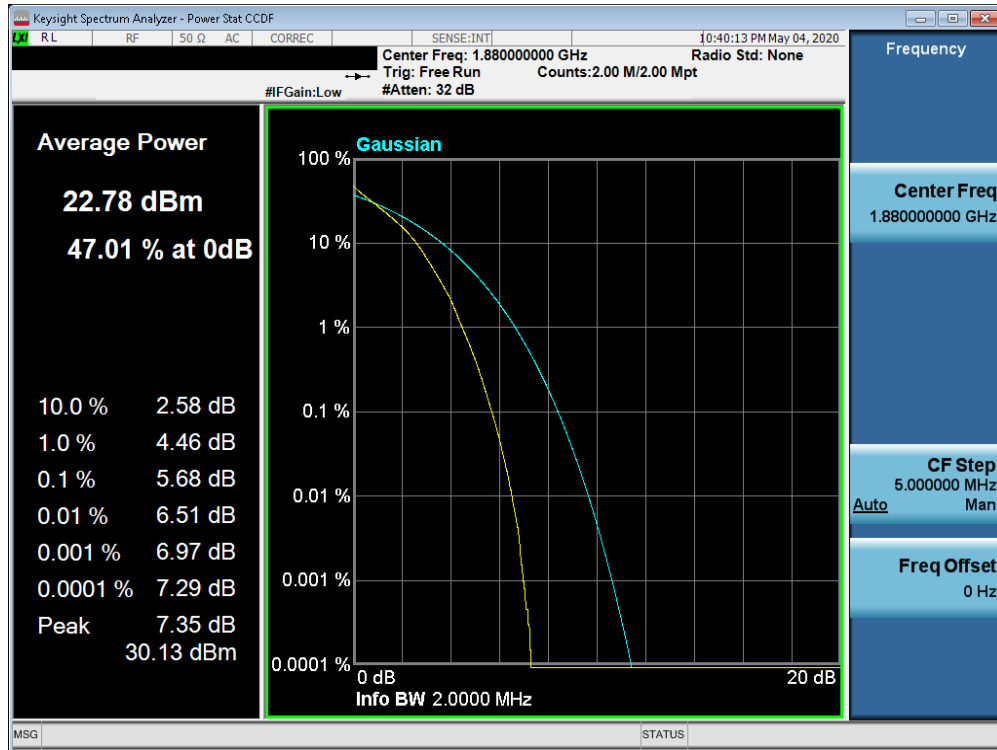
Plot 7-294. PAR Plot (Band 66 - 20.0MHz QPSK - Full RB Configuration)



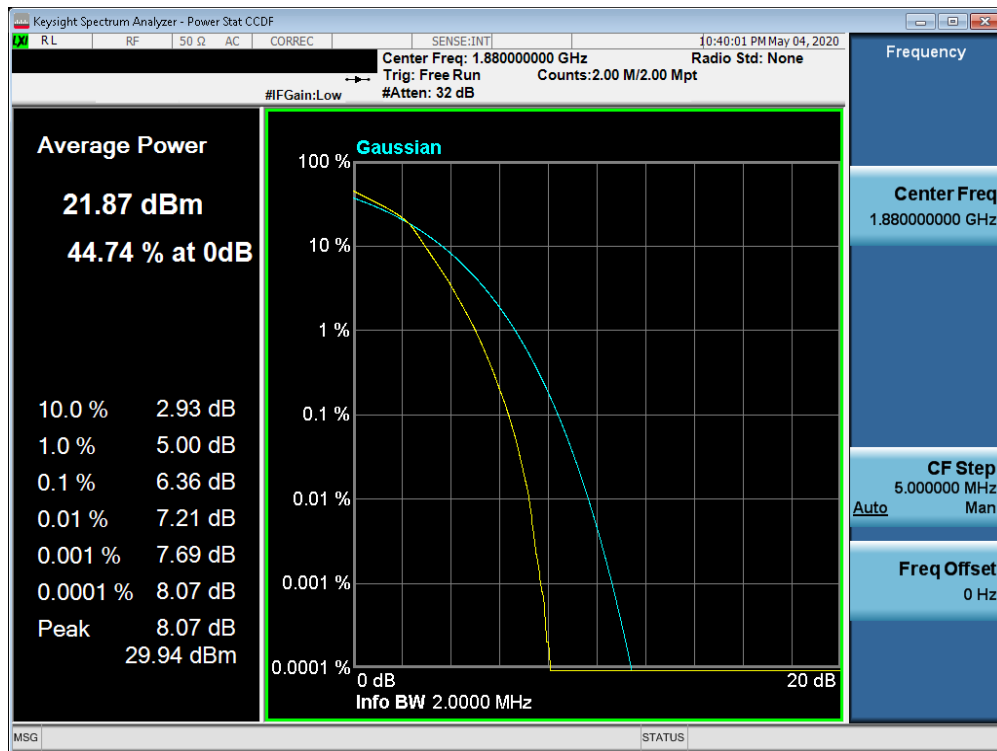
Plot 7-295. PAR Plot (Band 66 - 20.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 175 of 238

Band 2

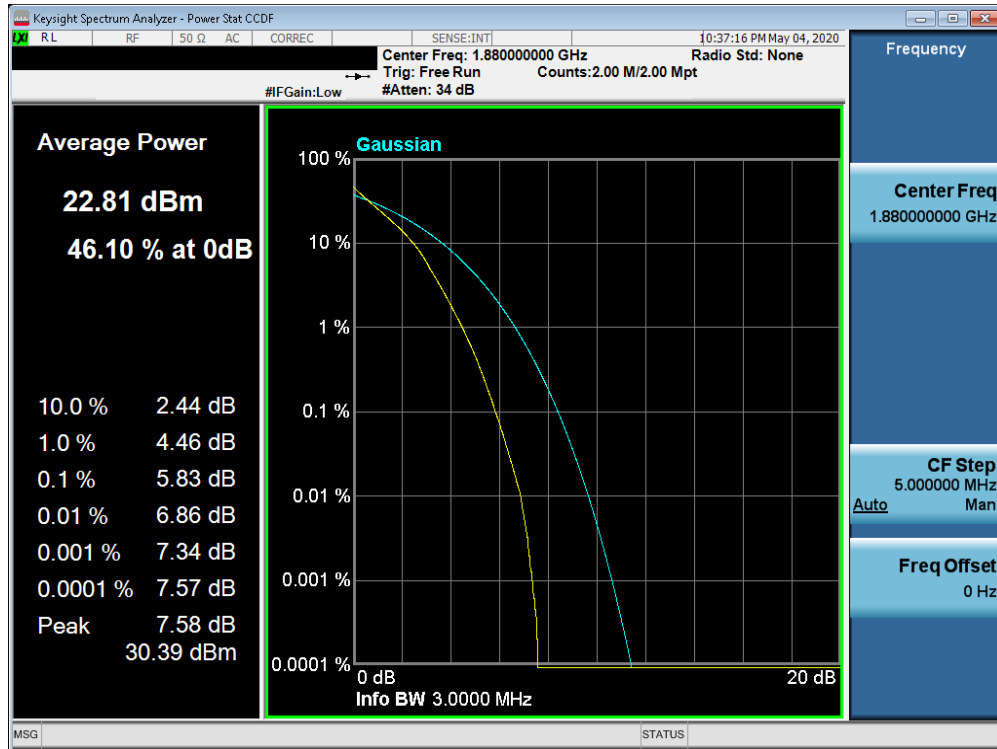


Plot 7-296. PAR Plot (Band 2 - 1.4MHz QPSK - Full RB Configuration)

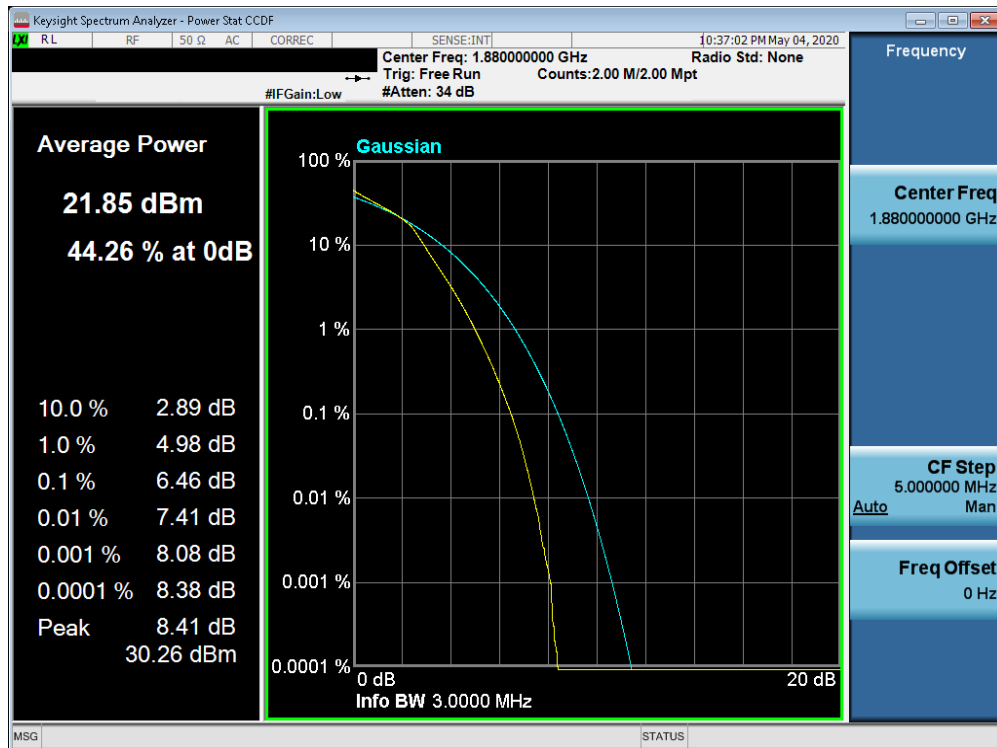


Plot 7-297. PAR Plot (Band 2 - 1.4MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 176 of 238

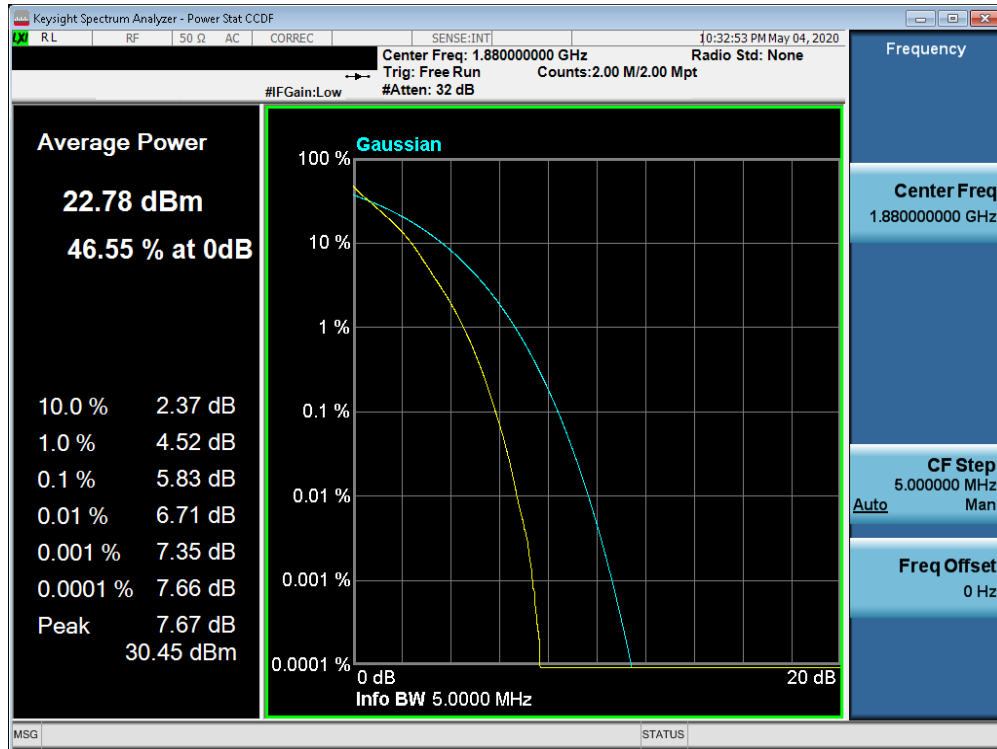


Plot 7-298. PAR Plot (Band 2 - 3.0MHz QPSK - Full RB Configuration)

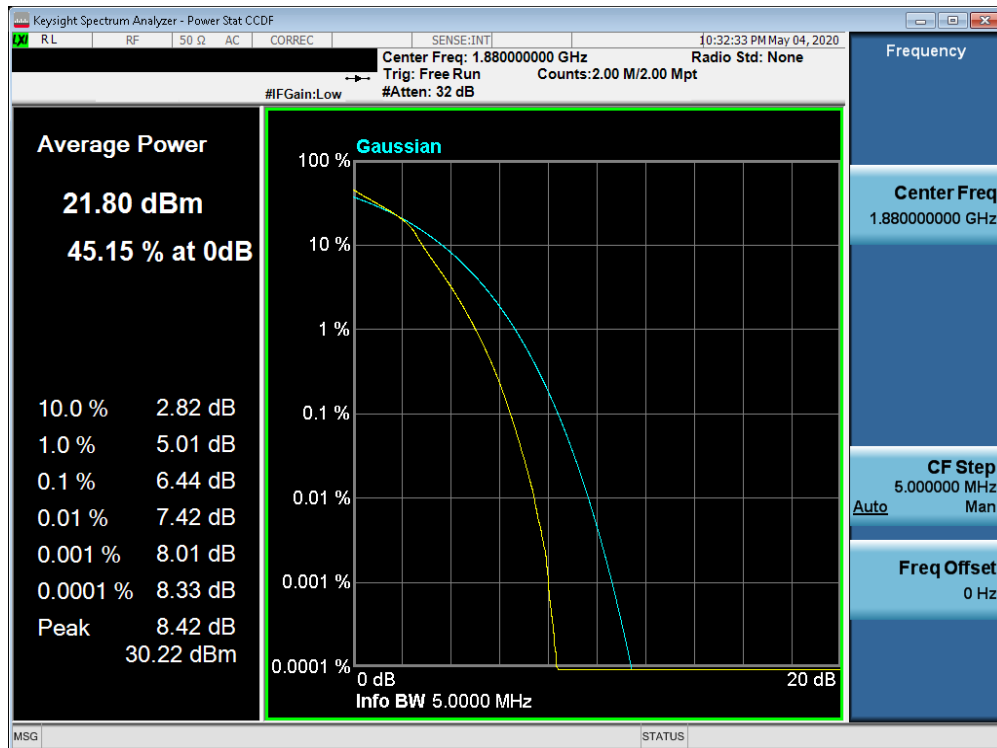


Plot 7-299. PAR Plot (Band 2 - 3.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 177 of 238

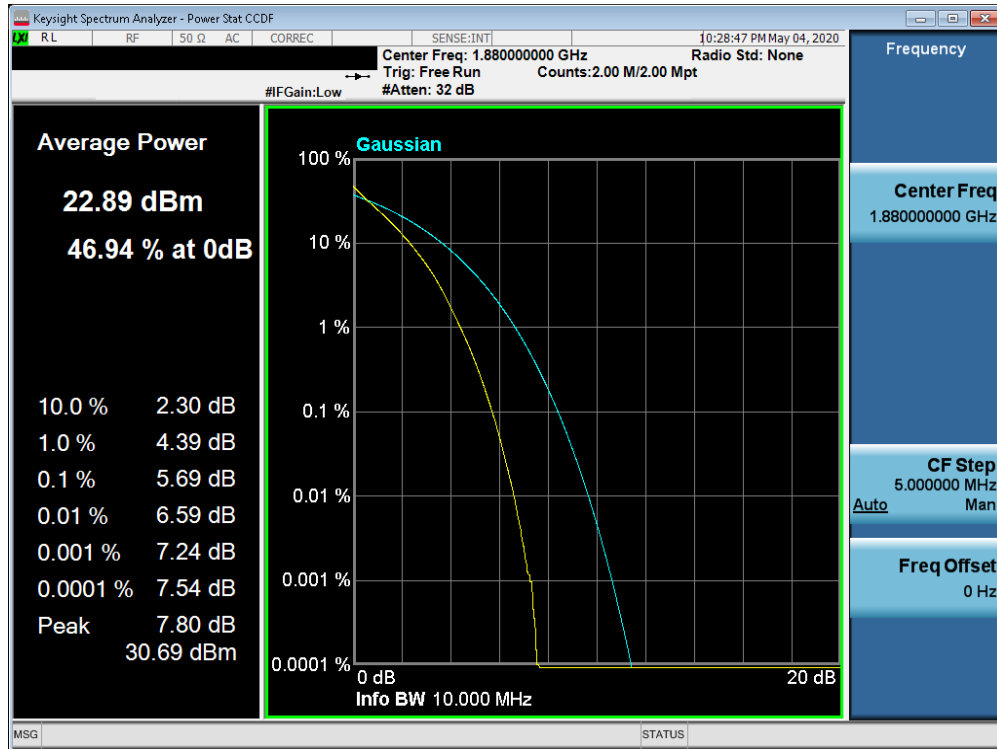


Plot 7-300. PAR Plot (Band 2 - 5.0MHz QPSK - Full RB Configuration)

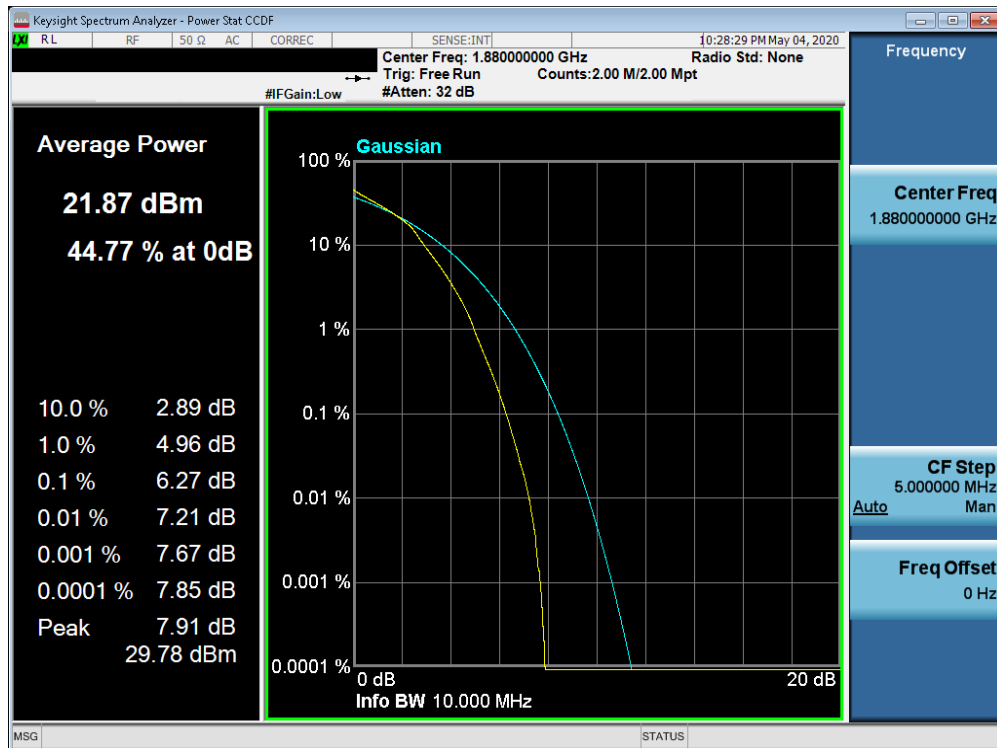


Plot 7-301. PAR Plot (Band 2 - 5.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 178 of 238

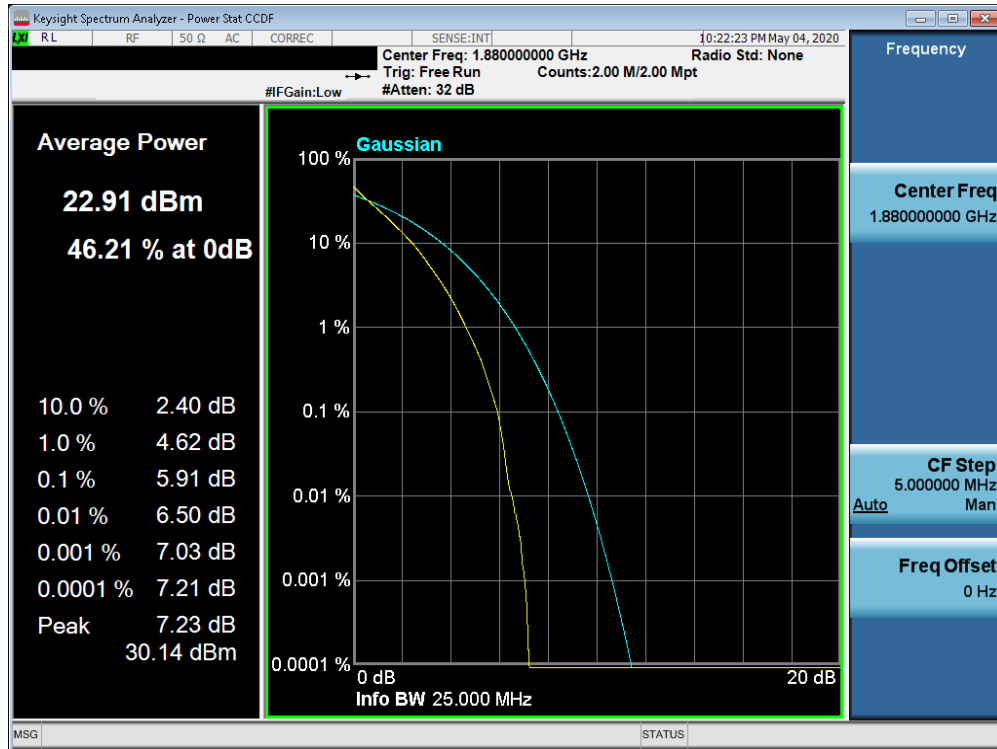


Plot 7-302. PAR Plot (Band 2 - 10.0MHz QPSK - Full RB Configuration)

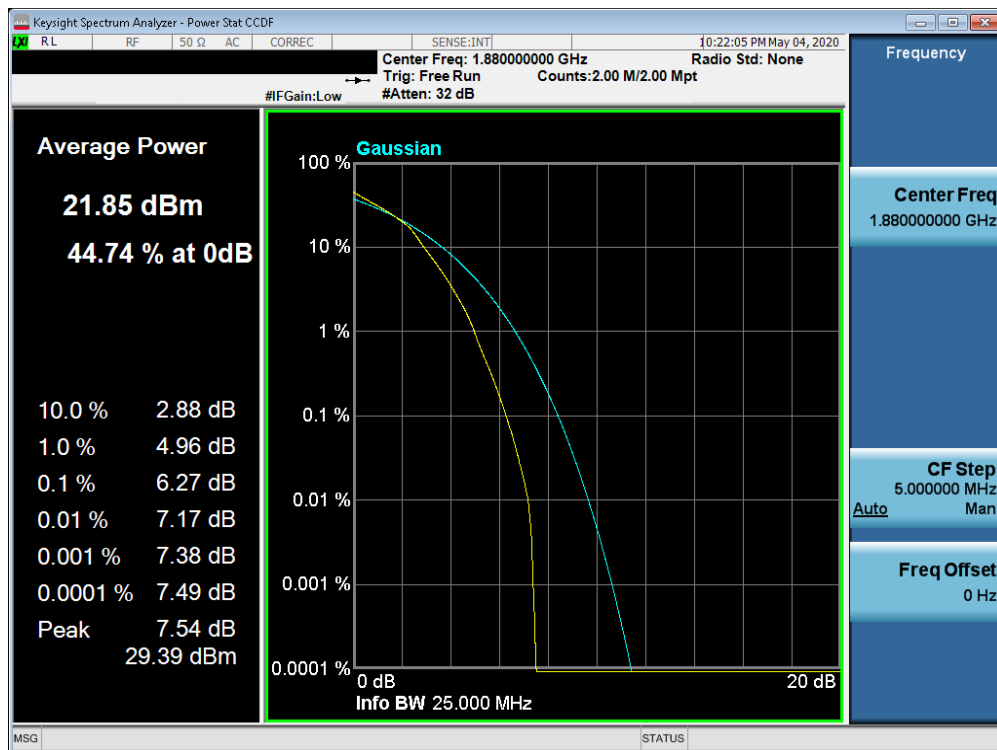


Plot 7-303. PAR Plot (Band 2 - 10.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 179 of 238

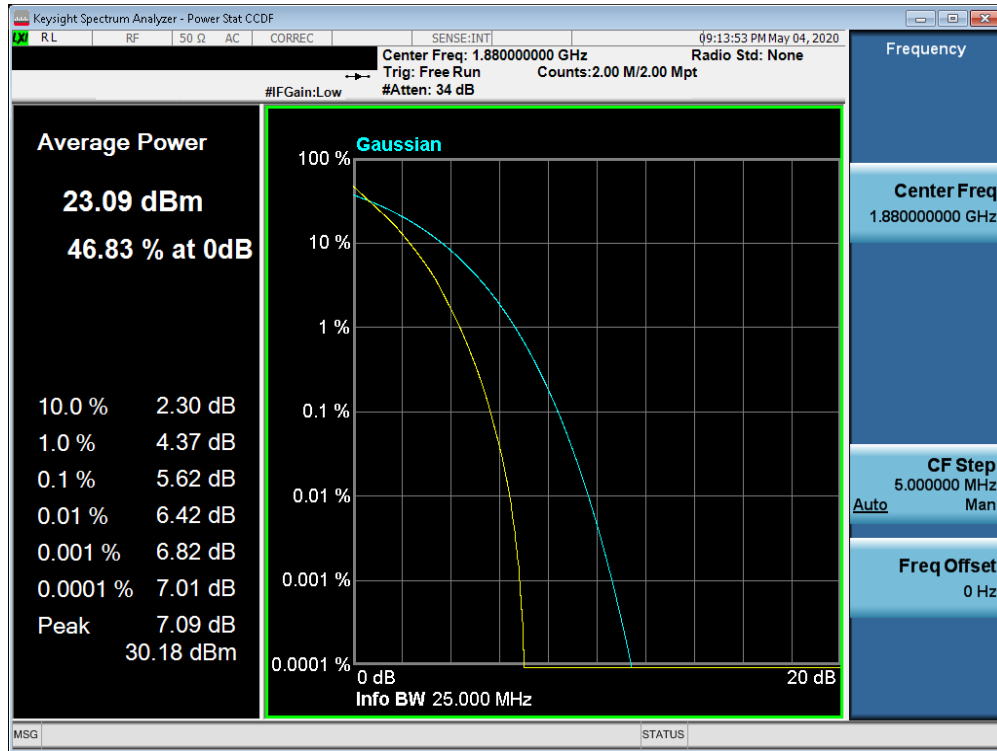


Plot 7-304. PAR Plot (Band 2 - 15.0MHz QPSK - Full RB Configuration)

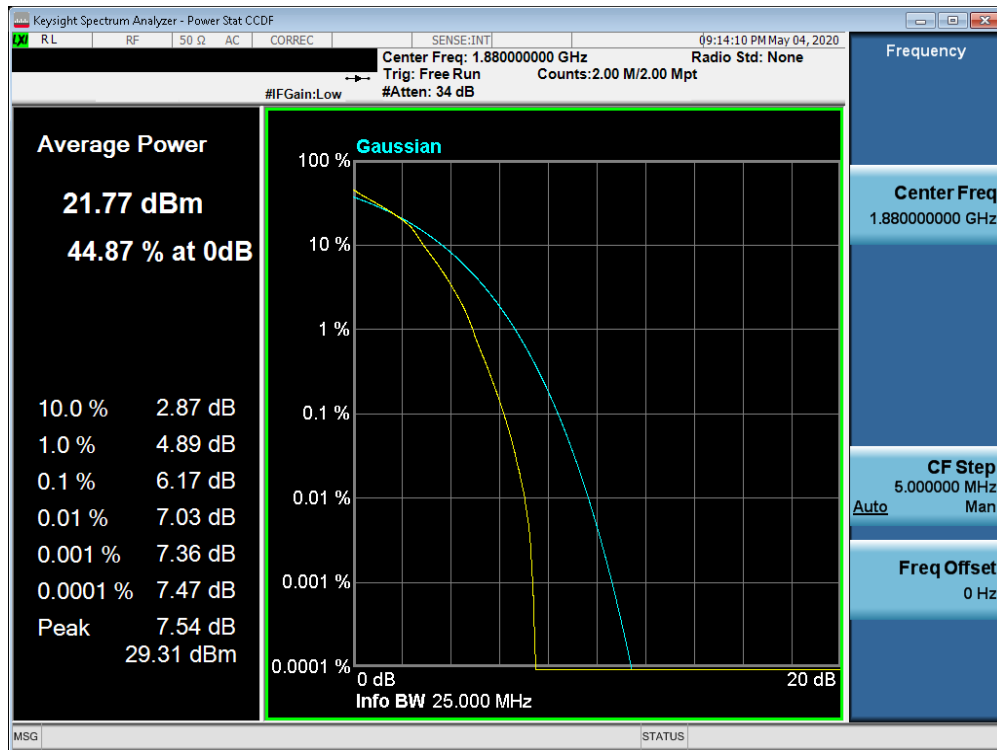


Plot 7-305. PAR Plot (Band 2 - 15.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 180 of 238



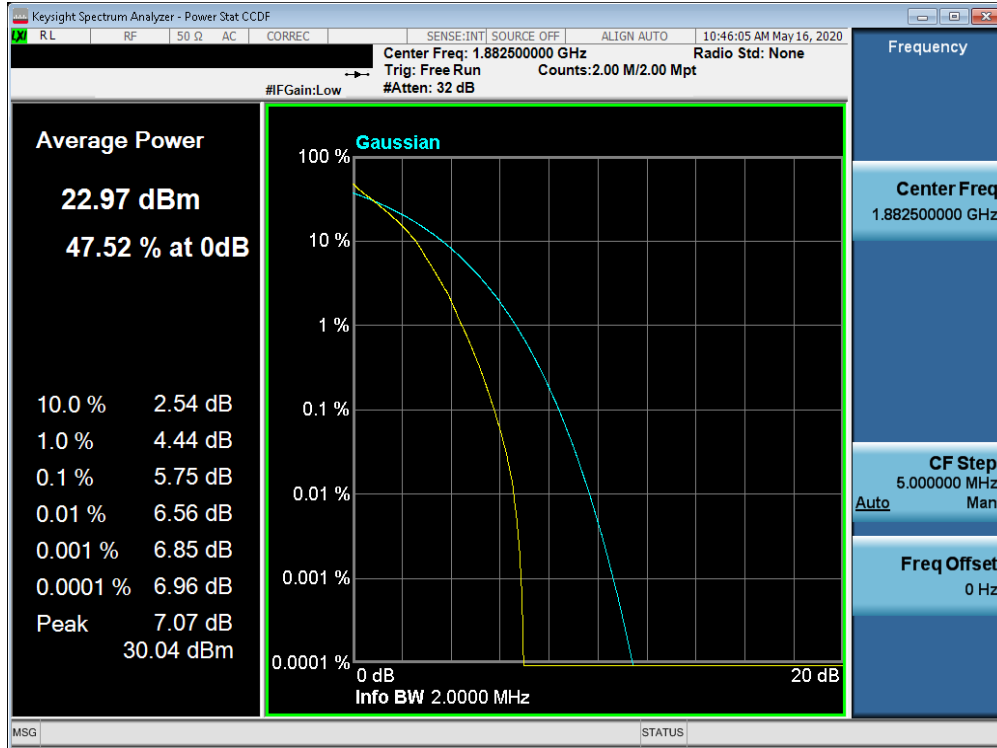
Plot 7-306. PAR Plot (Band 2 - 20.0MHz QPSK - Full RB Configuration)



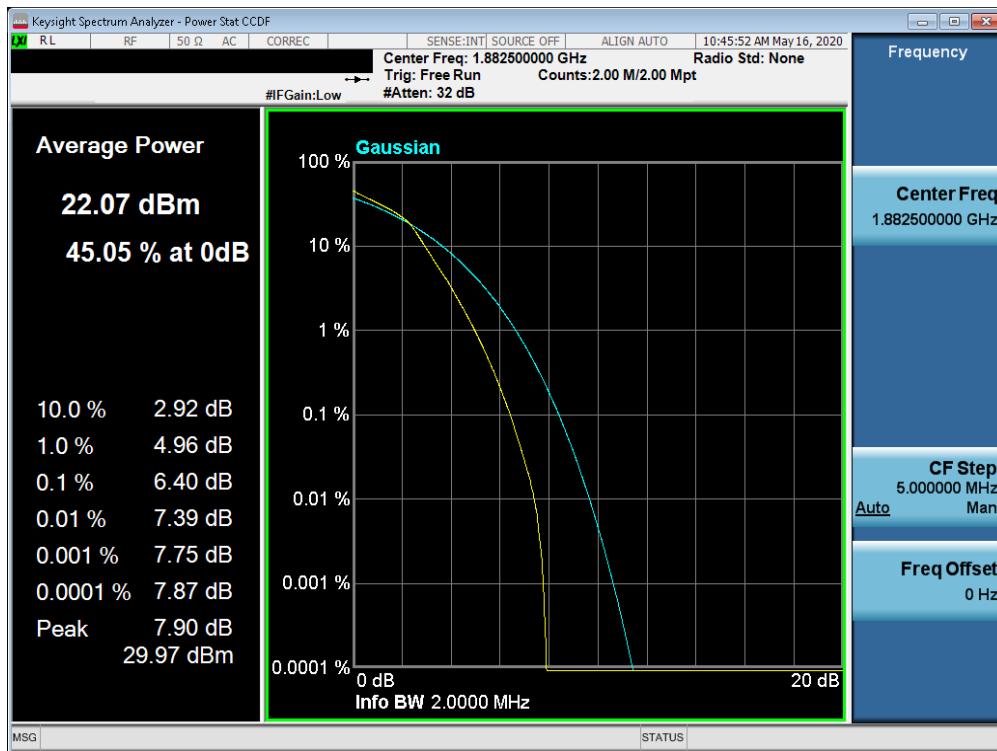
Plot 7-307. PAR Plot (Band 2 - 20.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 181 of 238

Band 25

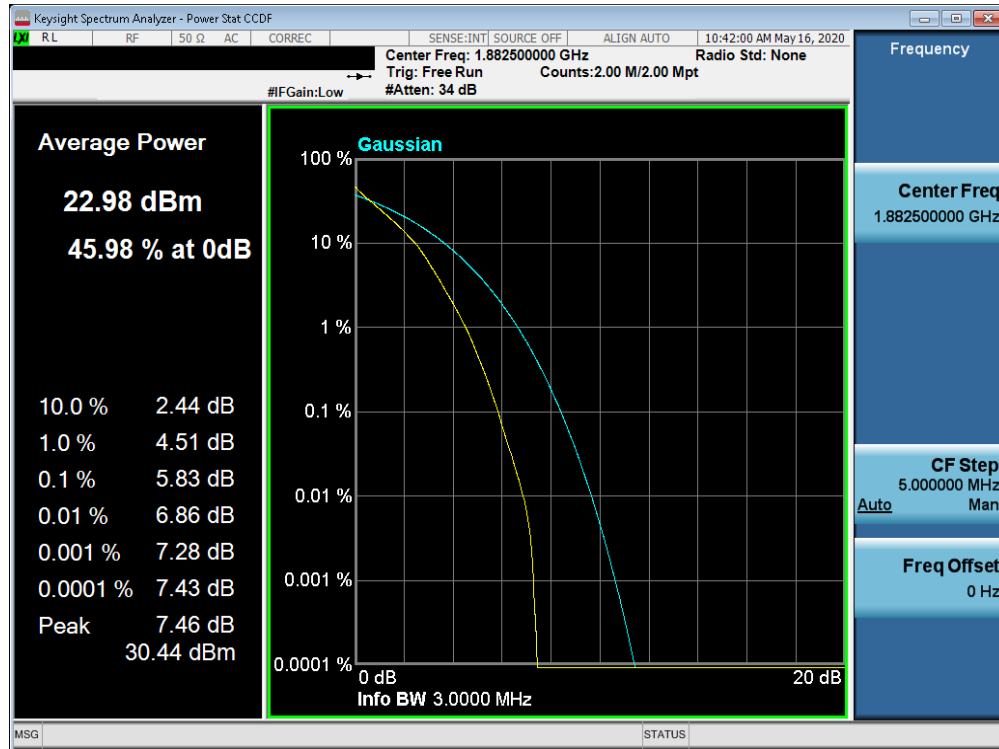


Plot 7-308. PAR Plot (Band 25 - 1.4MHz QPSK - Full RB Configuration)

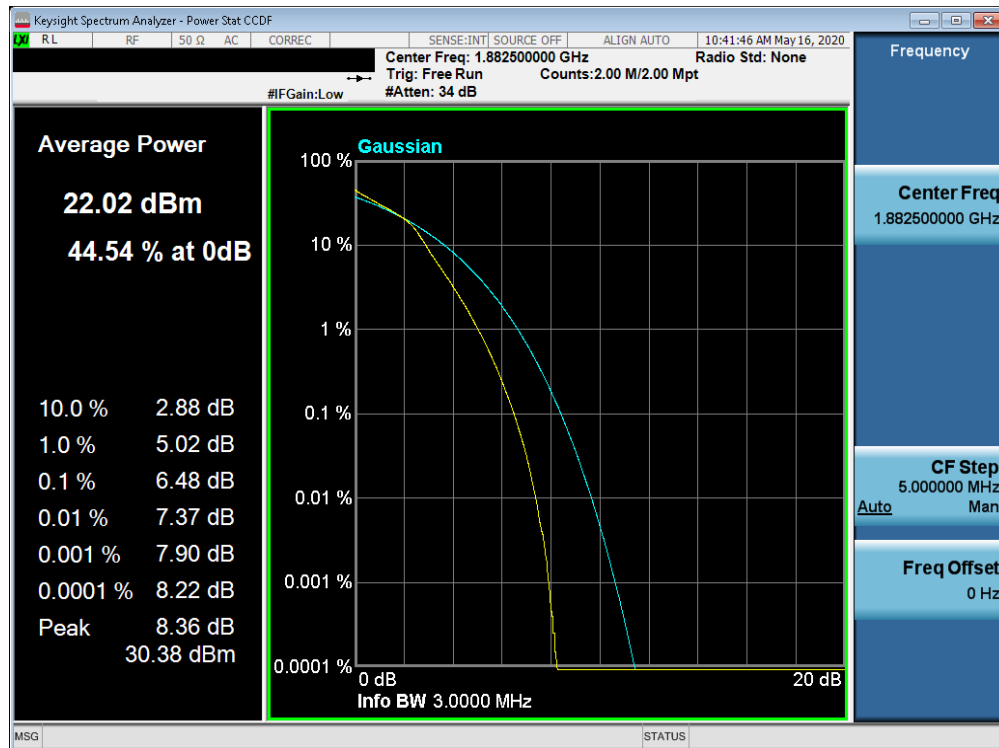


Plot 7-309. PAR Plot (Band 25 - 1.4MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 182 of 238

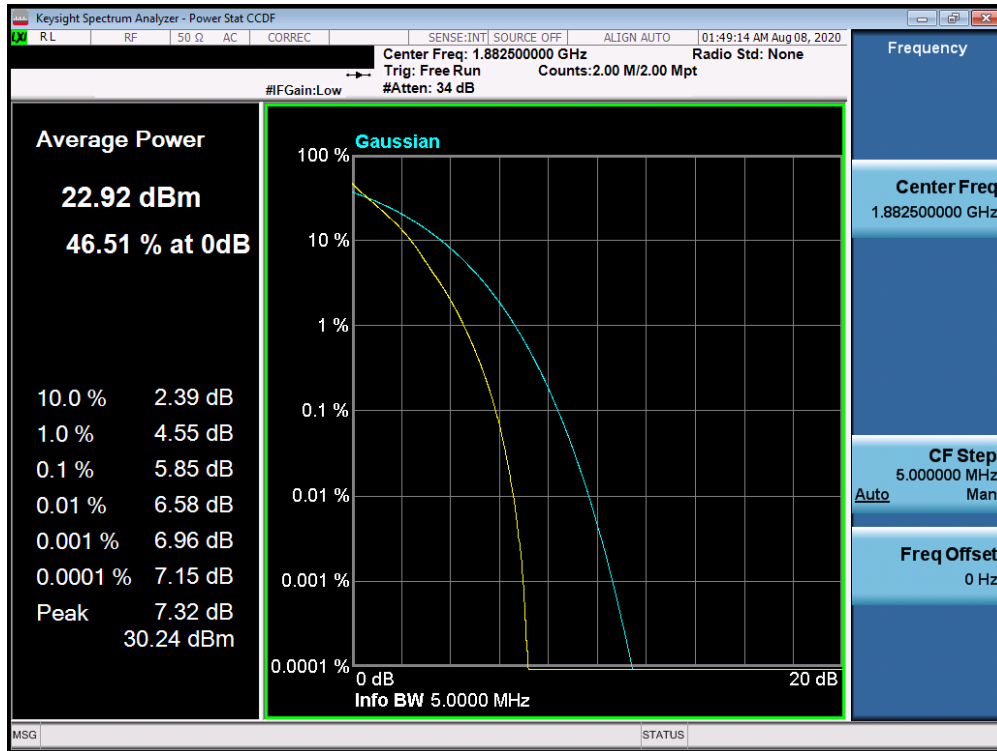


Plot 7-310. PAR Plot (Band 25 - 3.0MHz QPSK - Full RB Configuration)

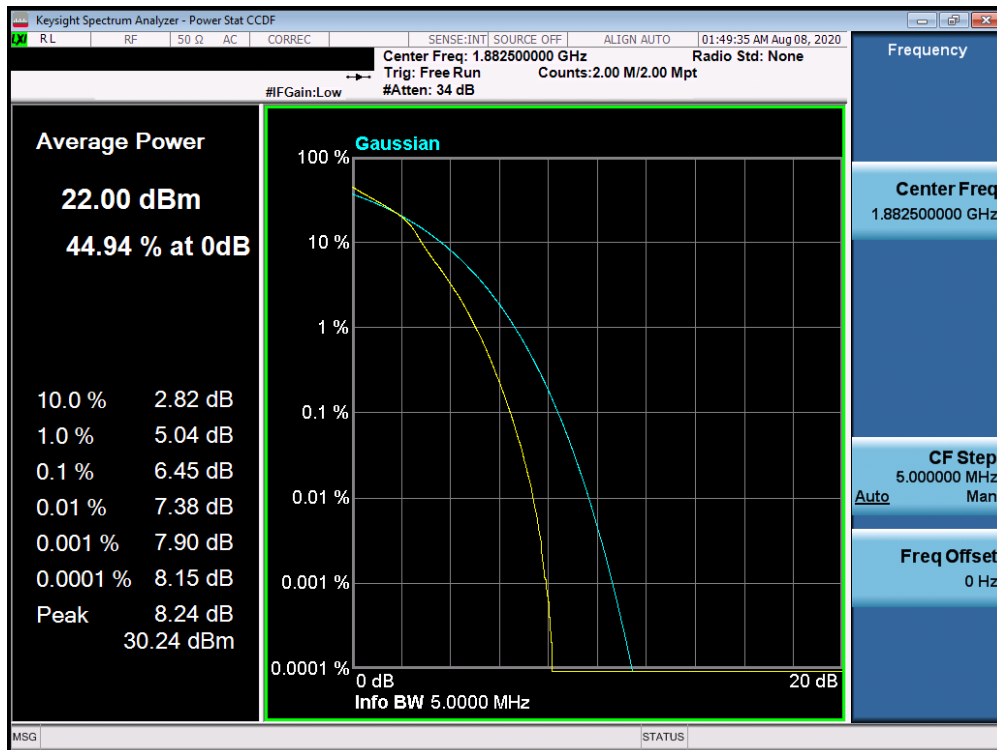


Plot 7-311. PAR Plot (Band 25 - 3.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 183 of 238

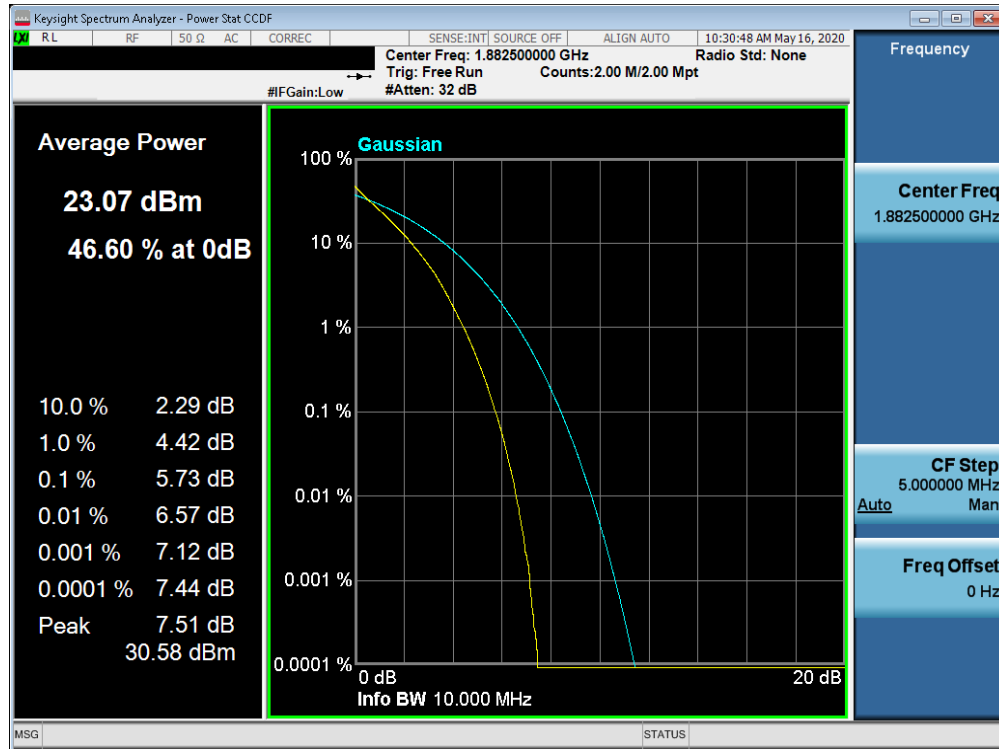


Plot 7-312. PAR Plot (Band 25 - 5.0MHz QPSK - Full RB Configuration)

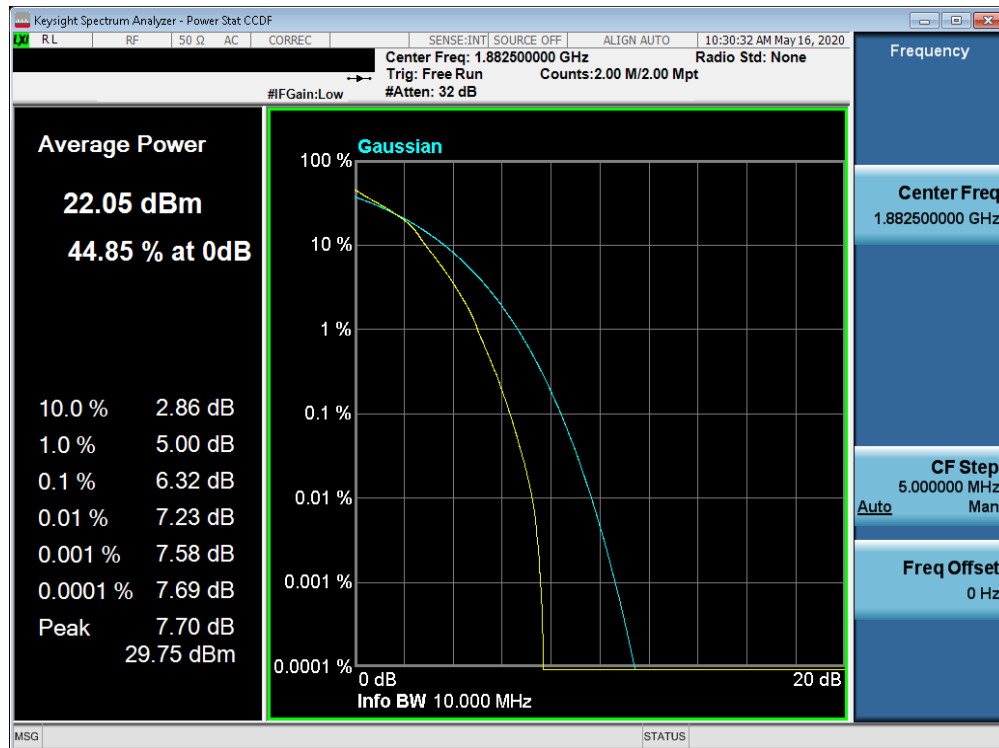


Plot 7-313. PAR Plot (Band 25 - 5.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 184 of 238

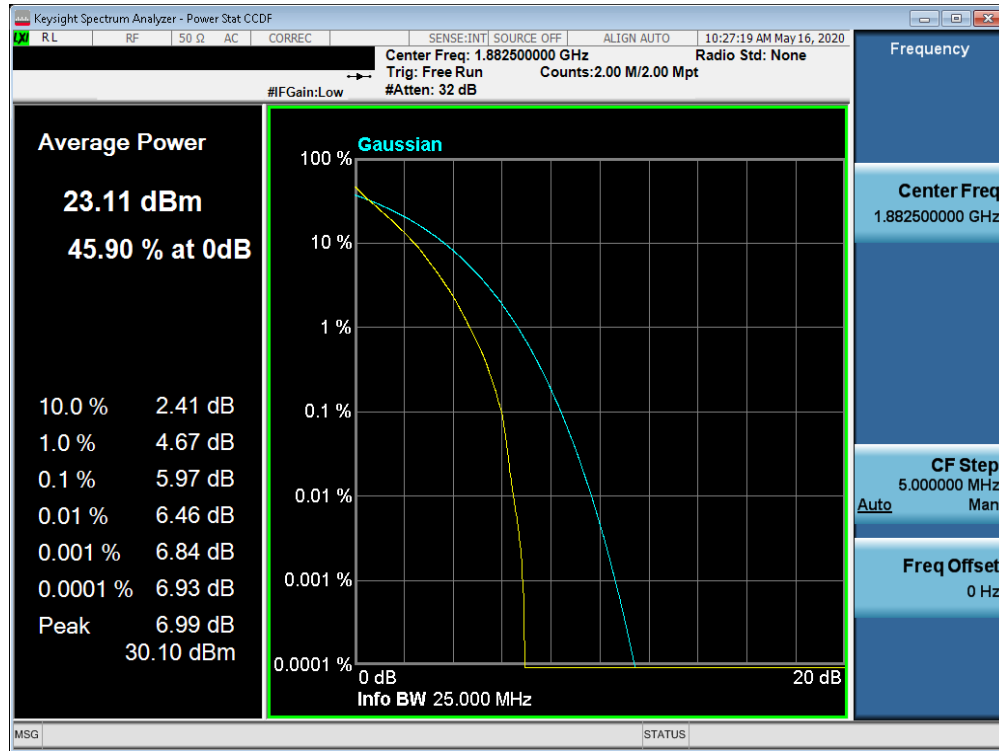


Plot 7-314. PAR Plot (Band 25 - 10.0MHz QPSK - Full RB Configuration)

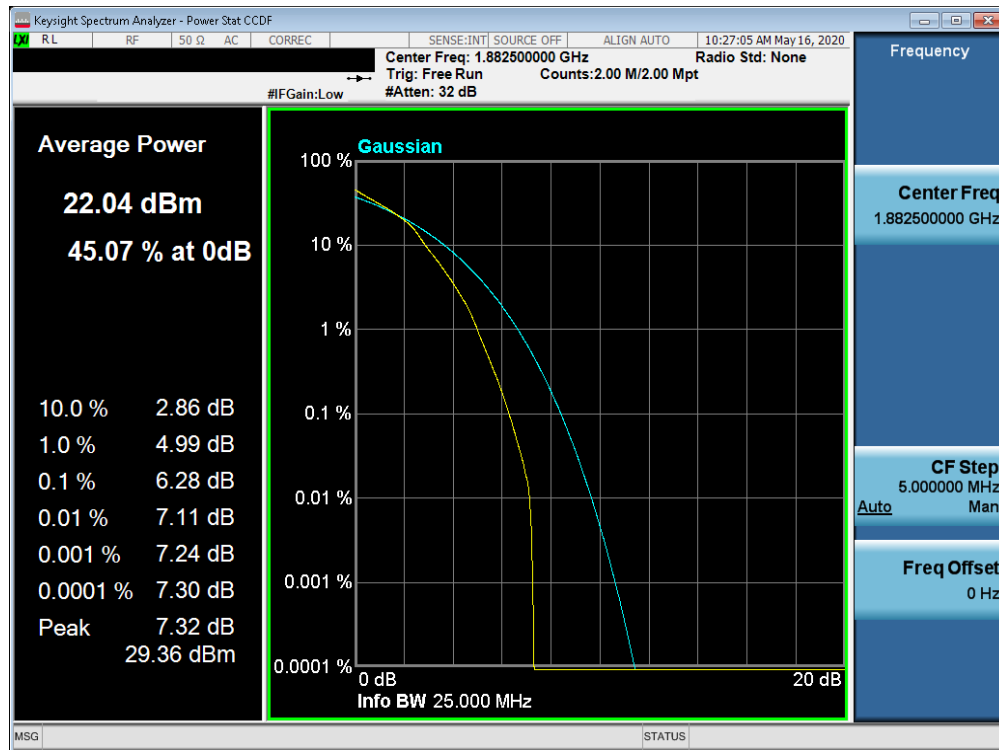


Plot 7-315. PAR Plot (Band 25 - 10.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 185 of 238

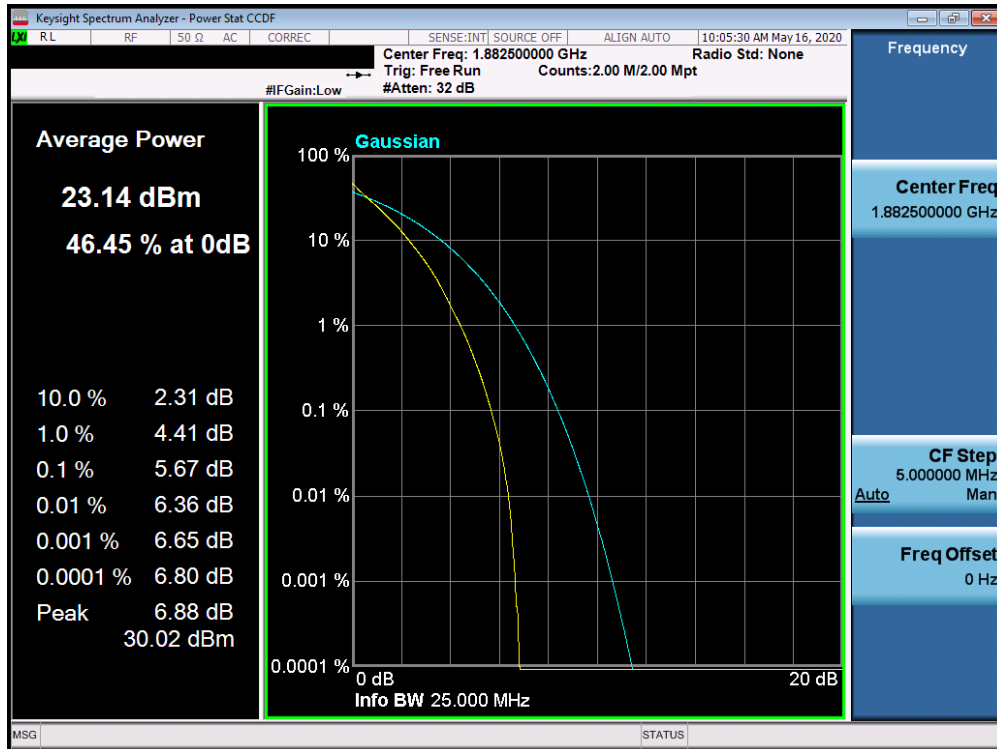


Plot 7-316. PAR Plot (Band 25 - 15.0MHz QPSK - Full RB Configuration)

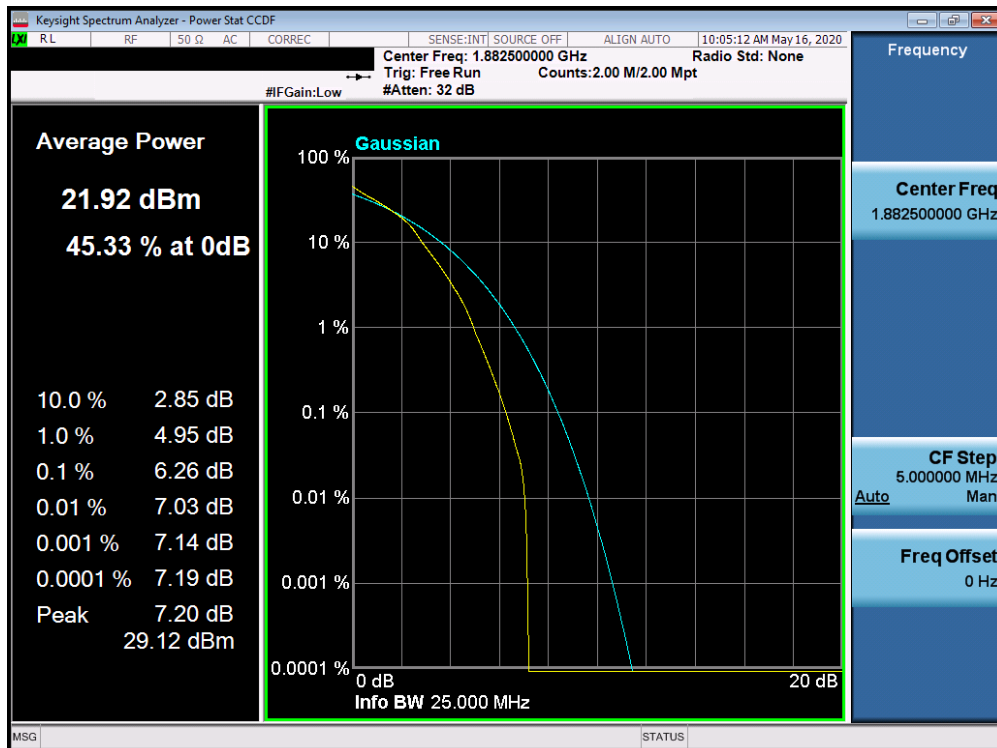


Plot 7-317. PAR Plot (Band 25 - 15.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 186 of 238



Plot 7-318. PAR Plot (Band 25 - 20.0MHz QPSK - Full RB Configuration)



Plot 7-319. PAR Plot (Band 25 - 20.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 187 of 238

7.6 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 7-5. 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.
- 5) This device only supports 27RBs or less for 16-QAM uplink.

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 188 of 238

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [mW]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [mW]	EIRP Limit [dBm]	Margin [dB]
699.70	1.4	QPSK	1 / 0	24.97	-27.00	-4.18	0.382	34.77	-38.95	-2.03	0.627	36.99	-39.02
707.50	1.4	QPSK	1 / 5	25.00	-27.00	-4.15	0.385	34.77	-38.92	-2.00	0.631	36.99	-38.99
715.30	1.4	QPSK	1 / 0	25.00	-27.00	-4.15	0.385	34.77	-38.92	-2.00	0.631	36.99	-38.99
707.50	1.4	16-QAM	1 / 0	24.50	-27.00	-4.65	0.343	34.77	-39.42	-2.50	0.562	36.99	-39.49
700.50	3	QPSK	1 / 7	24.98	-27.00	-4.17	0.383	34.77	-38.94	-2.02	0.628	36.99	-39.01
707.50	3	QPSK	1 / 7	25.00	-27.00	-4.15	0.385	34.77	-38.92	-2.00	0.631	36.99	-38.99
714.50	3	QPSK	1 / 14	24.96	-27.00	-4.19	0.381	34.77	-38.96	-2.04	0.625	36.99	-39.03
707.50	3	16-QAM	1 / 0	24.52	-27.00	-4.63	0.344	34.77	-39.40	-2.48	0.565	36.99	-39.47
701.50	5	QPSK	1 / 24	24.90	-27.00	-4.25	0.376	34.77	-39.02	-2.10	0.617	36.99	-39.09
707.50	5	QPSK	1 / 0	25.00	-27.00	-4.15	0.385	34.77	-38.92	-2.00	0.631	36.99	-38.99
713.50	5	QPSK	1 / 24	24.97	-27.00	-4.18	0.382	34.77	-38.95	-2.03	0.627	36.99	-39.02
707.50	5	16-QAM	1 / 0	24.36	-27.00	-4.79	0.332	34.77	-39.56	-2.64	0.545	36.99	-39.63
704.00	10	QPSK	1 / 0	24.92	-27.00	-4.23	0.378	34.77	-39.00	-2.08	0.619	36.99	-39.07
707.50	10	QPSK	1 / 25	24.93	-27.00	-4.22	0.378	34.77	-38.99	-2.07	0.621	36.99	-39.06
711.00	10	QPSK	1 / 49	25.00	-27.00	-4.15	0.385	34.77	-38.92	-2.00	0.631	36.99	-38.99
704.00	10	16-QAM	1 / 0	24.50	-27.00	-4.65	0.343	34.77	-39.42	-2.50	0.562	36.99	-39.49

Table 7-7. ERP/EIRP Data (Band 12)

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [mW]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [mW]	EIRP Limit [dBm]	Margin [dB]
706.50	5	QPSK	1 / 0	24.99	-27.00	-4.16	0.384	34.77	-38.93	-2.01	0.630	36.99	-39.00
710.00	5	QPSK	1 / 0	25.00	-27.00	-4.15	0.385	34.77	-38.92	-2.00	0.631	36.99	-38.99
713.50	5	QPSK	1 / 0	25.00	-27.00	-4.15	0.385	34.77	-38.92	-2.00	0.631	36.99	-38.99
710.00	5	16-QAM	1 / 0	24.47	-27.00	-4.68	0.340	34.77	-39.45	-2.53	0.558	36.99	-39.52
709.00	10	QPSK	1 / 0	25.00	-27.00	-4.15	0.385	34.77	-38.92	-2.00	0.631	36.99	-38.99
710.00	10	QPSK	1 / 0	25.00	-27.00	-4.15	0.385	34.77	-38.92	-2.00	0.631	36.99	-38.99
711.00	10	QPSK	1 / 25	24.97	-27.00	-4.18	0.382	34.77	-38.95	-2.03	0.627	36.99	-39.02
711.00	10	16-QAM	1 / 27	24.45	-27.00	-4.70	0.339	34.77	-39.47	-2.55	0.556	36.99	-39.54

Table 7-8. ERP/EIRP Data (Band 17)

FCC ID: BCG-A2354	 MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch
		Page 189 of 238

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [mW]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [mW]	EIRP Limit [dBm]	Margin [dB]
779.50	5	QPSK	1 / 0	25.00	-25.90	-3.05	0.495	34.77	-37.82	-0.90	0.813	36.99	-37.89
782.00	5	QPSK	1 / 24	24.88	-25.90	-3.17	0.482	34.77	-37.94	-1.02	0.791	36.99	-38.01
784.50	5	QPSK	1 / 24	24.63	-25.90	-3.42	0.455	34.77	-38.19	-1.27	0.746	36.99	-38.26
782.00	5	16-QAM	1 / 24	24.28	-25.90	-3.77	0.420	34.77	-38.54	-1.62	0.689	36.99	-38.61
782.00	10	QPSK	1 / 0	25.00	-25.90	-3.05	0.495	34.77	-37.82	-0.90	0.813	36.99	-37.89
782.00	10	16-QAM	1 / 27	24.46	-25.90	-3.59	0.438	34.77	-38.36	-1.44	0.718	36.99	-38.43

Table 7-9. ERP/EIRP Data (Band 13)

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [mW]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [mW]	EIRP Limit [dBm]	Margin [dB]
824.70	1.4	QPSK	1 / 5	25.00	-25.90	-3.05	0.495	38.45	-41.50	-0.90	0.813	40.61	-41.51
836.50	1.4	QPSK	1 / 0	24.97	-25.90	-3.08	0.492	38.45	-41.53	-0.93	0.807	40.61	-41.54
848.30	1.4	QPSK	1 / 0	25.00	-25.90	-3.05	0.495	38.45	-41.50	-0.90	0.813	40.61	-41.51
836.50	1.4	16-QAM	1 / 0	24.42	-25.90	-3.63	0.434	38.45	-42.08	-1.48	0.711	40.61	-42.09
825.50	3	QPSK	1 / 7	24.99	-25.90	-3.06	0.494	38.45	-41.51	-0.91	0.811	40.61	-41.52
836.50	3	QPSK	1 / 7	25.00	-25.90	-3.05	0.495	38.45	-41.50	-0.90	0.813	40.61	-41.51
847.50	3	QPSK	1 / 14	24.90	-25.90	-3.15	0.484	38.45	-41.60	-1.00	0.794	40.61	-41.61
836.50	3	16-QAM	1 / 0	24.44	-25.90	-3.61	0.436	38.45	-42.06	-1.46	0.714	40.61	-42.07
826.50	5	QPSK	1 / 24	24.87	-25.90	-3.18	0.481	38.45	-41.63	-1.03	0.789	40.61	-41.64
836.50	5	QPSK	1 / 0	25.00	-25.90	-3.05	0.495	38.45	-41.50	-0.90	0.813	40.61	-41.51
846.50	5	QPSK	1 / 0	24.97	-25.90	-3.08	0.492	38.45	-41.53	-0.93	0.807	40.61	-41.54
846.50	5	16-QAM	1 / 0	24.33	-25.90	-3.72	0.425	38.45	-42.17	-1.57	0.697	40.61	-42.18
829.00	10	QPSK	1 / 49	25.00	-25.90	-3.05	0.495	38.45	-41.50	-0.90	0.813	40.61	-41.51
836.50	10	QPSK	1 / 25	24.93	-25.90	-3.12	0.488	38.45	-41.57	-0.97	0.800	40.61	-41.58
844.00	10	QPSK	1 / 25	24.98	-25.90	-3.07	0.493	38.45	-41.52	-0.92	0.809	40.61	-41.53
836.50	10	16-QAM	1 / 0	24.46	-25.90	-3.59	0.438	38.45	-42.04	-1.44	0.718	40.61	-42.05

Table 7-10. ERP/EIRP Data (Band 5)

FCC ID: BCG-A2354	 MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch
		Page 190 of 238

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [mW]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [mW]	EIRP Limit [dBm]	Margin [dB]
824.70	1.4	QPSK	1 / 5	24.99	-25.90	-3.06	0.494	38.45	-41.51	-0.91	0.811	40.61	-41.52
836.50	1.4	QPSK	1 / 5	24.98	-25.90	-3.07	0.493	38.45	-41.52	-0.92	0.809	40.61	-41.53
848.30	1.4	QPSK	1 / 0	25.00	-25.90	-3.05	0.495	38.45	-41.50	-0.90	0.813	40.61	-41.51
836.50	1.4	16-QAM	1 / 5	24.50	-25.90	-3.55	0.442	38.45	-42.00	-1.40	0.724	40.61	-42.01
825.50	3	QPSK	1 / 7	25.00	-25.90	-3.05	0.495	38.45	-41.50	-0.90	0.813	40.61	-41.51
836.50	3	QPSK	1 / 7	25.00	-25.90	-3.05	0.495	38.45	-41.50	-0.90	0.813	40.61	-41.51
847.50	3	QPSK	1 / 14	24.93	-25.90	-3.12	0.488	38.45	-41.57	-0.97	0.800	40.61	-41.58
836.50	3	16-QAM	1 / 7	24.47	-25.90	-3.58	0.439	38.45	-42.03	-1.43	0.719	40.61	-42.04
826.50	5	QPSK	1 / 24	24.82	-25.90	-3.23	0.475	38.45	-41.68	-1.08	0.780	40.61	-41.69
836.50	5	QPSK	1 / 0	25.00	-25.90	-3.05	0.495	38.45	-41.50	-0.90	0.813	40.61	-41.51
846.50	5	QPSK	1 / 0	24.98	-25.90	-3.07	0.493	38.45	-41.52	-0.92	0.809	40.61	-41.53
846.50	5	16-QAM	1 / 0	24.35	-25.90	-3.70	0.427	38.45	-42.15	-1.55	0.700	40.61	-42.16
829.00	10	QPSK	1 / 49	25.00	-25.90	-3.05	0.495	38.45	-41.50	-0.90	0.813	40.61	-41.51
836.50	10	QPSK	1 / 0	24.93	-25.90	-3.12	0.488	38.45	-41.57	-0.97	0.800	40.61	-41.58
844.00	10	QPSK	1 / 25	25.00	-25.90	-3.05	0.495	38.45	-41.50	-0.90	0.813	40.61	-41.51
836.50	10	16-QAM	1 / 0	24.46	-25.90	-3.59	0.438	38.45	-42.04	-1.44	0.718	40.61	-42.05

Table 7-11. ERP/EIRP Data (Band 26)

FCC ID: BCG-A2354	 MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch
Page 191 of 238		

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [mW]	EIRP Limit [dBm]	Margin [dB]
1710.70	1.4	QPSK	1 / 5	23.99	-11.40	12.59	18.155	30.00	-17.41
1732.50	1.4	QPSK	1 / 0	24.00	-11.40	12.60	18.197	30.00	-17.40
1754.30	1.4	QPSK	1 / 0	23.99	-11.40	12.59	18.155	30.00	-17.41
1732.50	1.4	16-QAM	1 / 2	23.44	-11.40	12.04	15.996	30.00	-17.96
1711.50	3	QPSK	1 / 0	23.97	-11.40	12.57	18.072	30.00	-17.43
1732.50	3	QPSK	1 / 7	23.97	-11.40	12.57	18.072	30.00	-17.43
1753.50	3	QPSK	1 / 0	23.83	-11.40	12.43	17.498	30.00	-17.57
1732.50	3	16-QAM	1 / 7	23.44	-11.40	12.04	15.996	30.00	-17.96
1712.50	5	QPSK	1 / 0	24.00	-11.40	12.60	18.197	30.00	-17.40
1732.50	5	QPSK	1 / 0	23.99	-11.40	12.59	18.155	30.00	-17.41
1752.50	5	QPSK	1 / 0	23.86	-11.40	12.46	17.620	30.00	-17.54
1732.50	5	16-QAM	1 / 0	23.47	-11.40	12.07	16.106	30.00	-17.93
1715.00	10	QPSK	1 / 49	23.91	-11.40	12.51	17.824	30.00	-17.49
1732.50	10	QPSK	1 / 0	23.95	-11.40	12.55	17.989	30.00	-17.45
1750.00	10	QPSK	1 / 25	23.84	-11.40	12.44	17.539	30.00	-17.56
1750.00	10	16-QAM	1 / 27	23.48	-11.40	12.08	16.144	30.00	-17.92
1717.50	15	QPSK	1 / 36	24.00	-11.40	12.60	18.197	30.00	-17.40
1732.50	15	QPSK	1 / 36	23.87	-11.40	12.47	17.660	30.00	-17.53
1747.50	15	QPSK	1 / 36	23.79	-11.40	12.39	17.338	30.00	-17.61
1732.50	15	16-QAM	1 / 13	23.49	-11.40	12.09	16.181	30.00	-17.91
1720.00	20	QPSK	1 / 50	24.00	-11.40	12.60	18.197	30.00	-17.40
1732.50	20	QPSK	1 / 50	23.98	-11.40	12.58	18.113	30.00	-17.42
1745.00	20	QPSK	1 / 0	23.72	-11.40	12.32	17.061	30.00	-17.68
1720.00	20	16-QAM	1 / 27	23.49	-11.40	12.09	16.181	30.00	-17.91

Table 7-12. EIRP Data (Band 4)

FCC ID: BCG-A2354	 MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch
		Page 192 of 238

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [mW]	EIRP Limit [dBm]	Margin [dB]
1710.70	1.4	QPSK	1 / 0	23.89	-11.40	12.49	17.742	30.00	-17.51
1745.00	1.4	QPSK	1 / 5	23.99	-11.40	12.59	18.155	30.00	-17.41
1779.30	1.4	QPSK	1 / 5	24.00	-11.40	12.60	18.197	30.00	-17.40
1745.00	1.4	16-QAM	1 / 2	23.44	-11.40	12.04	15.996	30.00	-17.96
1711.50	3	QPSK	1 / 7	24.00	-11.40	12.60	18.197	30.00	-17.40
1745.00	3	QPSK	1 / 7	23.99	-11.40	12.59	18.155	30.00	-17.41
1778.50	3	QPSK	1 / 14	23.99	-11.40	12.59	18.155	30.00	-17.41
1778.50	3	16-QAM	1 / 7	23.51	-11.40	12.11	16.255	30.00	-17.89
1712.50	5	QPSK	1 / 0	24.00	-11.40	12.60	18.197	30.00	-17.40
1745.00	5	QPSK	1 / 12	23.98	-11.40	12.58	18.113	30.00	-17.42
1777.50	5	QPSK	1 / 12	23.92	-11.40	12.52	17.865	30.00	-17.48
1745.00	5	16-QAM	1 / 12	23.49	-11.40	12.09	16.181	30.00	-17.91
1715.00	10	QPSK	1 / 0	23.98	-11.40	12.58	18.113	30.00	-17.42
1745.00	10	QPSK	1 / 49	23.97	-11.40	12.57	18.072	30.00	-17.43
1775.00	10	QPSK	1 / 0	23.93	-11.40	12.53	17.906	30.00	-17.47
1745.00	10	16-QAM	1 / 27	23.42	-11.40	12.02	15.922	30.00	-17.98
1717.50	15	QPSK	1 / 36	24.00	-11.40	12.60	18.197	30.00	-17.40
1745.00	15	QPSK	1 / 0	23.86	-11.40	12.46	17.620	30.00	-17.54
1772.50	15	QPSK	1 / 0	23.88	-11.40	12.48	17.701	30.00	-17.52
1772.50	15	16-QAM	1 / 0	23.50	-11.40	12.10	16.218	30.00	-17.90
1720.00	20	QPSK	1 / 0	24.00	-11.40	12.60	18.197	30.00	-17.40
1745.00	20	QPSK	1 / 0	23.87	-11.40	12.47	17.660	30.00	-17.53
1770.00	20	QPSK	1 / 50	23.91	-11.40	12.51	17.824	30.00	-17.49
1745.00	20	16-QAM	1 / 0	23.41	-11.40	12.01	15.885	30.00	-17.99

Table 7-13. EIRP Data (Band 66)

FCC ID: BCG-A2354		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 193 of 238

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [mW]	EIRP Limit [dBm]	Margin [dB]
1850.70	1.4	QPSK	1 / 5	23.82	-9.10	14.72	29.648	33.01	-18.29
1880.00	1.4	QPSK	1 / 5	23.83	-9.10	14.73	29.717	33.01	-18.28
1909.30	1.4	QPSK	1 / 0	23.86	-9.10	14.76	29.923	33.01	-18.25
1880.00	1.4	16-QAM	1 / 2	23.28	-9.10	14.18	26.182	33.01	-18.83
1851.50	3	QPSK	1 / 7	23.82	-9.10	14.72	29.648	33.01	-18.29
1880.00	3	QPSK	1 / 7	23.83	-9.10	14.73	29.717	33.01	-18.28
1908.50	3	QPSK	1 / 7	23.73	-9.10	14.63	29.040	33.01	-18.38
1851.50	3	16-QAM	1 / 7	23.26	-9.10	14.16	26.062	33.01	-18.85
1852.50	5	QPSK	1 / 12	24.00	-9.10	14.90	30.903	33.01	-18.11
1880.00	5	QPSK	1 / 0	23.97	-9.10	14.87	30.690	33.01	-18.14
1907.50	5	QPSK	1 / 0	23.77	-9.10	14.67	29.309	33.01	-18.34
1852.50	5	16-QAM	1 / 12	23.37	-9.10	14.27	26.730	33.01	-18.74
1855.00	10	QPSK	1 / 0	23.83	-9.10	14.73	29.717	33.01	-18.28
1880.00	10	QPSK	1 / 49	23.80	-9.10	14.70	29.512	33.01	-18.31
1905.00	10	QPSK	1 / 0	23.72	-9.10	14.62	28.973	33.01	-18.39
1880.00	10	16-QAM	1 / 27	23.32	-9.10	14.22	26.424	33.01	-18.79
1857.50	15	QPSK	1 / 0	24.00	-9.10	14.90	30.903	33.01	-18.11
1880.00	15	QPSK	1 / 74	23.84	-9.10	14.74	29.785	33.01	-18.27
1902.50	15	QPSK	1 / 36	23.75	-9.10	14.65	29.174	33.01	-18.36
1880.00	15	16-QAM	1 / 27	23.40	-9.10	14.30	26.915	33.01	-18.71
1860.00	20	QPSK	1 / 0	23.95	-9.10	14.85	30.549	33.01	-18.16
1880.00	20	QPSK	1 / 99	23.81	-9.10	14.71	29.580	33.01	-18.30
1900.00	20	QPSK	1 / 0	23.94	-9.10	14.84	30.479	33.01	-18.17
1880.00	20	16-QAM	1 / 27	23.37	-9.10	14.27	26.730	33.01	-18.74

Table 7-14. EIRP Data (Band 2)

FCC ID: BCG-A2354	 Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 194 of 238

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [mW]	EIRP Limit [dBm]	Margin [dB]
1850.70	1.4	QPSK	1 / 5	23.82	-9.10	14.72	29.648	33.01	-18.29
1882.50	1.4	QPSK	1 / 5	23.84	-9.10	14.74	29.785	33.01	-18.27
1914.30	1.4	QPSK	1 / 0	23.84	-9.10	14.74	29.785	33.01	-18.27
1882.50	1.4	16-QAM	1 / 2	23.34	-9.10	14.24	26.546	33.01	-18.77
1851.50	3	QPSK	1 / 7	23.83	-9.10	14.73	29.717	33.01	-18.28
1882.50	3	QPSK	1 / 7	23.84	-9.10	14.74	29.785	33.01	-18.27
1913.50	3	QPSK	1 / 0	23.66	-9.10	14.56	28.576	33.01	-18.45
1882.50	3	16-QAM	1 / 7	23.28	-9.10	14.18	26.182	33.01	-18.83
1852.50	5	QPSK	1 / 0	23.96	-9.10	14.86	30.620	33.01	-18.15
1882.50	5	QPSK	1 / 0	23.94	-9.10	14.84	30.479	33.01	-18.17
1912.50	5	QPSK	1 / 0	23.65	-9.10	14.55	28.510	33.01	-18.46
1852.50	5	16-QAM	1 / 12	23.43	-9.10	14.33	27.102	33.01	-18.68
1855.00	10	QPSK	1 / 0	23.82	-9.10	14.72	29.648	33.01	-18.29
1882.50	10	QPSK	1 / 49	23.86	-9.10	14.76	29.923	33.01	-18.25
1910.00	10	QPSK	1 / 0	23.74	-9.10	14.64	29.107	33.01	-18.37
1882.50	10	16-QAM	1 / 27	23.36	-9.10	14.26	26.669	33.01	-18.75
1857.50	15	QPSK	1 / 0	23.99	-9.10	14.89	30.832	33.01	-18.12
1882.50	15	QPSK	1 / 36	23.81	-9.10	14.71	29.580	33.01	-18.30
1907.50	15	QPSK	1 / 36	23.73	-9.10	14.63	29.040	33.01	-18.38
1882.50	15	16-QAM	1 / 0	23.28	-9.10	14.18	26.182	33.01	-18.83
1860.00	20	QPSK	1 / 0	23.96	-9.10	14.86	30.620	33.01	-18.15
1882.50	20	QPSK	1 / 99	23.82	-9.10	14.72	29.648	33.01	-18.29
1905.00	20	QPSK	1 / 0	23.93	-9.10	14.83	30.409	33.01	-18.18
1882.50	20	16-QAM	1 / 27	23.33	-9.10	14.23	26.485	33.01	-18.78

Table 7-15. EIRP Data (Band 25)

FCC ID: BCG-A2354	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 195 of 238

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [mW]	EIRP Limit [dBm]	Margin [dB]
2502.50	5	QPSK	1 / 24	23.32	-6.60	16.72	46.989	33.01	-16.29
2535.00	5	QPSK	1 / 0	23.11	-6.60	16.51	44.771	33.01	-16.50
2567.50	5	QPSK	1 / 24	23.12	-6.60	16.52	44.875	33.01	-16.49
2502.50	5	16-QAM	1 / 12	22.66	-6.60	16.06	40.365	33.01	-16.95
2505.00	10	QPSK	1 / 0	23.18	-6.60	16.58	45.499	33.01	-16.43
2535.00	10	QPSK	1 / 0	22.95	-6.60	16.35	43.152	33.01	-16.66
2565.00	10	QPSK	1 / 49	23.10	-6.60	16.50	44.668	33.01	-16.51
2505.00	10	16-QAM	1 / 0	22.61	-6.60	16.01	39.902	33.01	-17.00
2507.50	15	QPSK	1 / 0	23.36	-6.60	16.76	47.424	33.01	-16.25
2535.00	15	QPSK	1 / 0	22.96	-6.60	16.36	43.251	33.01	-16.65
2562.50	15	QPSK	1 / 74	23.09	-6.60	16.49	44.566	33.01	-16.52
2562.50	15	16-QAM	1 / 0	22.69	-6.60	16.09	40.644	33.01	-16.92
2510.00	20	QPSK	1 / 99	23.27	-6.60	16.67	46.452	33.01	-16.34
2535.00	20	QPSK	1 / 0	22.92	-6.60	16.32	42.855	33.01	-16.69
2560.00	20	QPSK	1 / 99	23.32	-6.60	16.72	46.989	33.01	-16.29
2560.00	20	16-QAM	1 / 27	22.69	-6.60	16.09	40.644	33.01	-16.92

Table 7-16. EIRP Data (Band 7)

FCC ID: BCG-A2354	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 196 of 238

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	RB Size/Offset	Conducted Power [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [mW]	EIRP Limit [dBm]	Margin [dB]
2498.50	5	QPSK	1 / 24	23.50	-6.60	16.90	48.978	33.01	-16.11
2593.00	5	QPSK	1 / 24	23.34	-6.60	16.74	47.206	33.01	-16.27
2687.50	5	QPSK	1 / 0	23.48	-6.60	16.88	48.753	33.01	-16.13
2687.50	5	16-QAM	1 / 12	22.72	-6.60	16.12	40.926	33.01	-16.89
2501.00	10	QPSK	1 / 25	23.50	-6.60	16.90	48.978	33.01	-16.11
2593.00	10	QPSK	1 / 49	23.38	-6.60	16.78	47.643	33.01	-16.23
2685.00	10	QPSK	1 / 0	23.39	-6.60	16.79	47.753	33.01	-16.22
2501.00	10	16-QAM	1 / 13	22.65	-6.60	16.05	40.272	33.01	-16.96
2503.50	15	QPSK	1 / 74	23.50	-6.60	16.90	48.978	33.01	-16.11
2593.00	15	QPSK	1 / 36	23.28	-6.60	16.68	46.559	33.01	-16.33
2682.50	15	QPSK	1 / 0	23.38	-6.60	16.78	47.643	33.01	-16.23
2682.50	15	16-QAM	1 / 0	22.45	-6.60	15.85	38.459	33.01	-17.16
2506.00	20	QPSK	1 / 0	23.46	-6.60	16.86	48.529	33.01	-16.15
2593.00	20	QPSK	1 / 0	23.49	-6.60	16.89	48.865	33.01	-16.12
2680.00	20	QPSK	1 / 0	23.50	-6.60	16.90	48.978	33.01	-16.11
2593.00	20	16-QAM	1 / 27	22.60	-6.60	16.00	39.811	33.01	-17.01

Table 7-17. EIRP Data (Band 41)

FCC ID: BCG-A2354		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 197 of 238

7.7 Radiated Spurious Emissions

Test Overview

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

TIA-603-E-2016 – Section 2.2.12

ANSI C63.26-2015

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: BCG-A2354	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 198 of 238

Test Setup

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

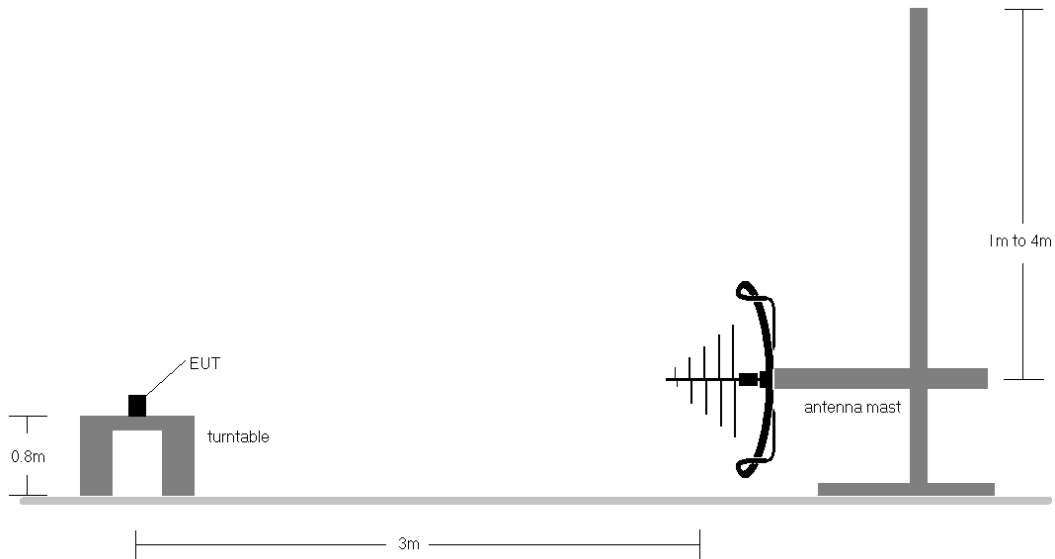


Figure 7-6. Radiated Measurement Setup < 1GHz

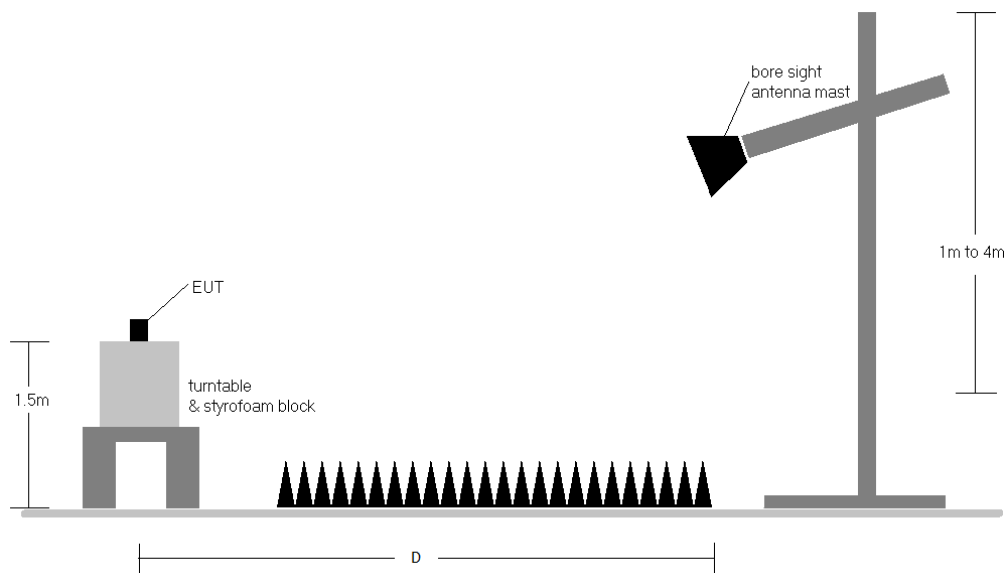


Figure 7-7. Radiated Measurement Setup > 1GHz

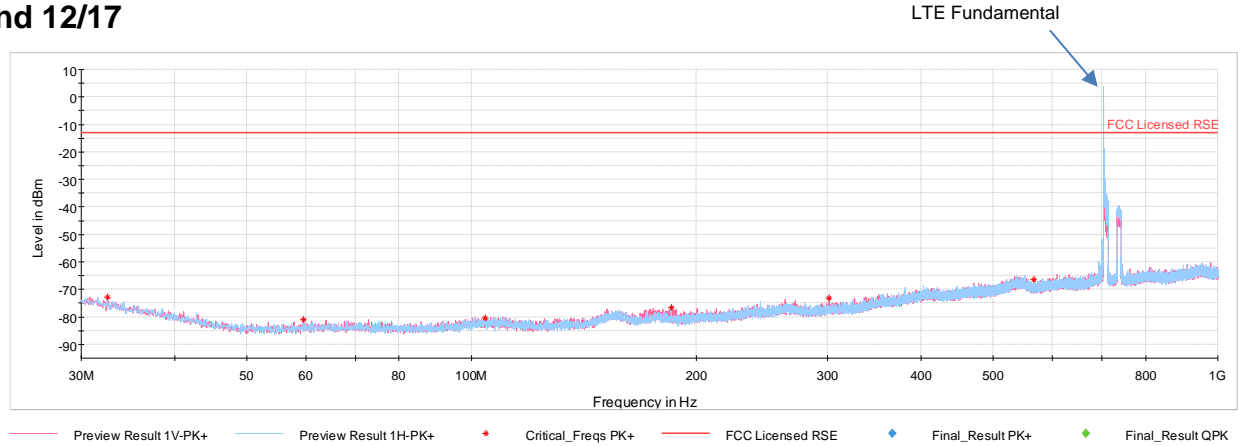
FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 199 of 238

Test Notes

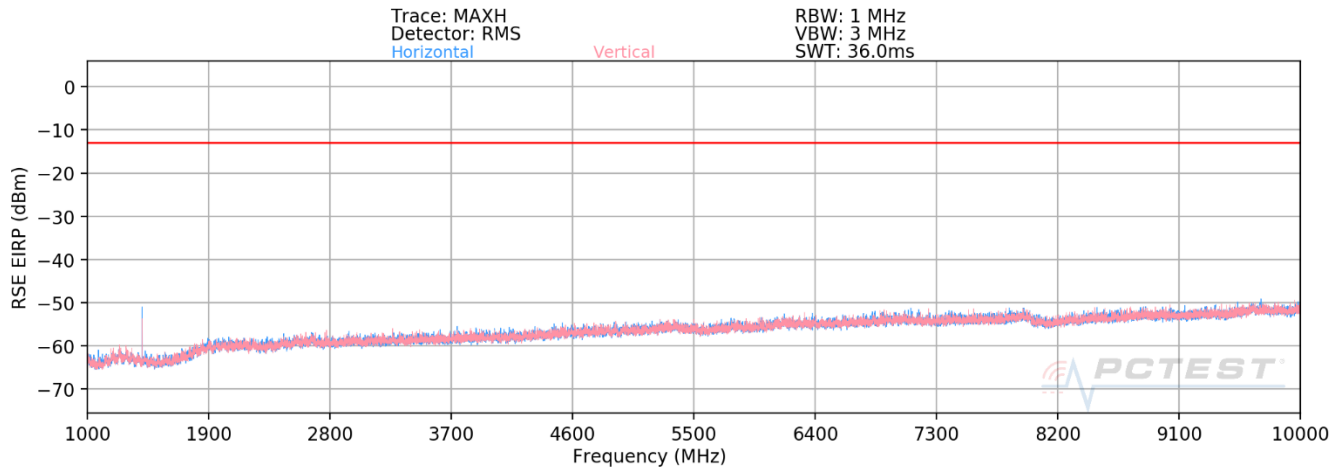
- 1) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The worst case emissions are reported with the EUT positioning, modulations, RB sizes and offsets, and channel bandwidth configurations shown in the tables below. QPSK/10MHz/1RB was found and reported as worst case configuration for low bands and QPSK/20MHz/1RB was found and reported as worst case configuration for mid/high bands.
- 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 3 meter distance for 1GHz – 18GHz measurements and 1 meter distance for above 18GHz 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) The intermodulation emissions were tested against the less stringent limit across all rule parts applicable to simultaneous transmitters.

FCC ID: BCG-A2354	 MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch
		Page 200 of 238

Band 12/17



Plot 7-320. Radiated Spurious Emissions below 1GHz (Band 12/17)



Plot 7-321. Radiated Spurious Emissions above 1GHz (Band 12/17)

FCC ID: BCG-A2354		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 201 of 238

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	209	199	-69.44	3.79	-65.65	-52.6
2112.00	H	-	-	-67.39	3.59	-63.80	-50.8
2816.00	H	-	-	-67.59	5.39	-62.20	-49.2
3520.00	H	-	-	-67.59	7.01	-60.58	-47.6

Table 7-18. 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	116	179	-56.91	3.89	-53.03	-40.0
2122.50	H	-	-	-66.65	3.69	-62.95	-50.0
2830.00	H	-	-	-67.71	5.45	-62.26	-49.3
3537.50	H	-	-	-67.91	6.98	-60.93	-47.9

Table 7-19. Radiated Spurious Data (Band 12/17 – Mid Channel)

FCC ID: BCG-A2354	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 202 of 238

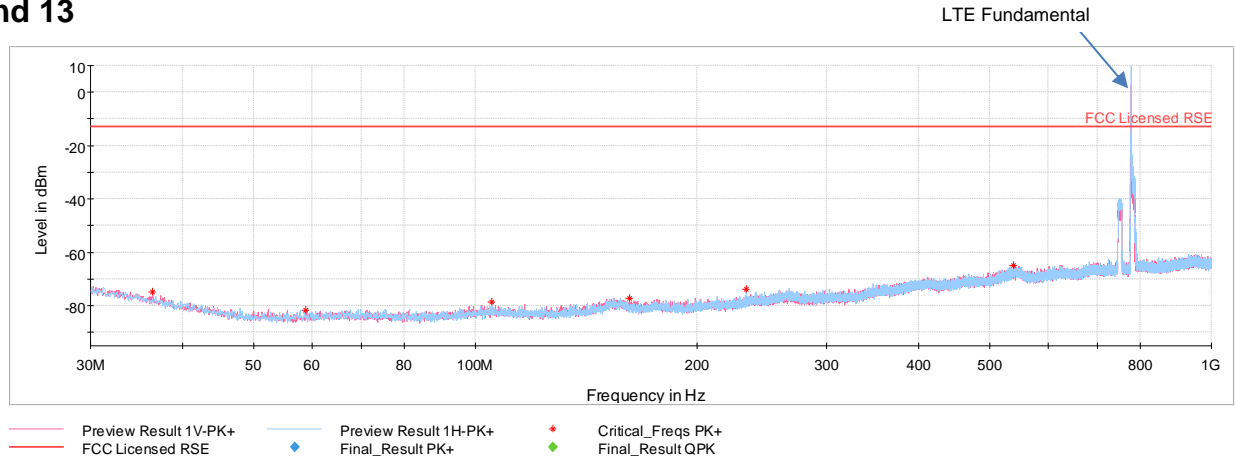
OPERATING FREQUENCY: 711.00 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 10.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

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	182	333	-59.80	3.99	-55.81	-42.8
2133.00	H	-	-	-66.57	3.76	-62.81	-49.8
2844.00	H	-	-	-68.12	5.60	-62.53	-49.5
3555.00	H	-	-	-68.32	6.97	-61.34	-48.3

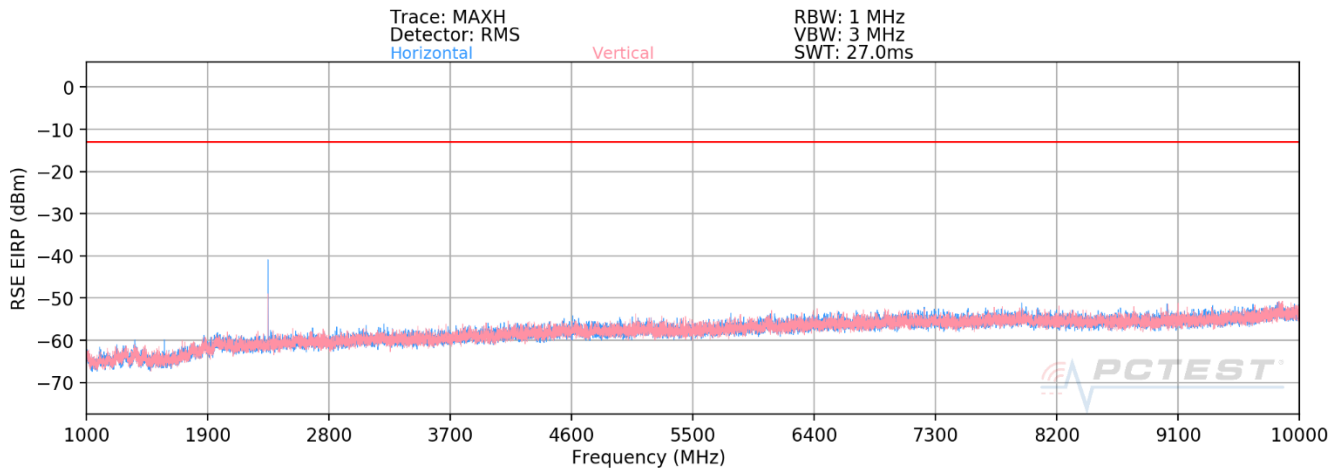
Table 7-20. Radiated Spurious Data (Band 12/17 – High Channel)

FCC ID: BCG-A2354	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 203 of 238

Band 13



Plot 7-322. Radiated Spurious Emissions below 1GHz (Band 13)



Plot 7-323. Radiated Spurious Emissions above 1GHz (Band 13)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 204 of 238

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	122	8	-50.03	4.05	-45.98	-33.0
3118.00	H	-	-	-66.76	6.28	-60.48	-47.5
3897.50	H	-	-	-68.45	7.74	-60.71	-47.7
4677.00	H	-	-	-68.40	8.47	-59.93	-46.9

Table 7-21. 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	123	360	-47.18	4.10	-43.08	-30.1
3128.00	H	-	-	-66.55	6.30	-60.25	-47.3
3910.00	H	-	-	-67.80	7.75	-60.05	-47.0
4692.00	H	-	-	-68.50	8.49	-60.01	-47.0

Table 7-22. Radiated Spurious Data (Band 13 – Mid Channel)

FCC ID: BCG-A2354	 MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch
		Page 205 of 238

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	118	334	-49.66	4.15	-45.51	-32.5
3138.00	H	-	-	-66.93	6.33	-60.60	-47.6
3922.50	H	-	-	-68.51	7.78	-60.74	-47.7
4707.00	H	-	-	-67.44	8.50	-58.94	-45.9

Table 7-23. Radiated Spurious Data (Band 13 – High Channel)

MODULATION SIGNAL: QPSK

BANDWIDTH: 5.00 MHz

DISTANCE: 3 meters

NARROWBAND EMISSION LIMIT: -50 dBm

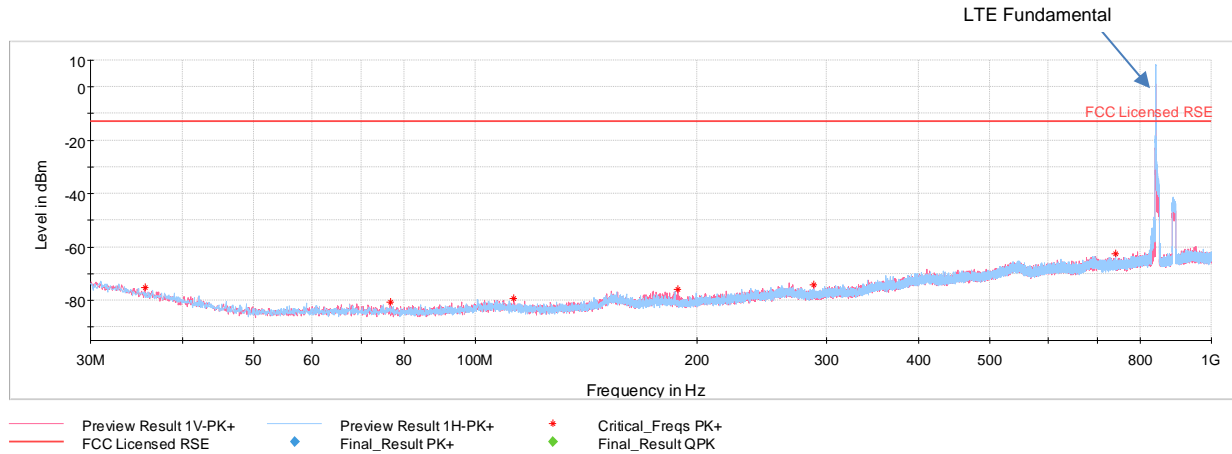
WIDEBAND EMISSION LIMIT: -40 dBm/MHz

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	H	217	335	-80.41	4.44	-75.97	-36.0
1564.00	H	222	322	-83.72	4.44	-79.28	-39.3
1569.00	H	247	325	-80.25	4.44	-75.81	-35.8

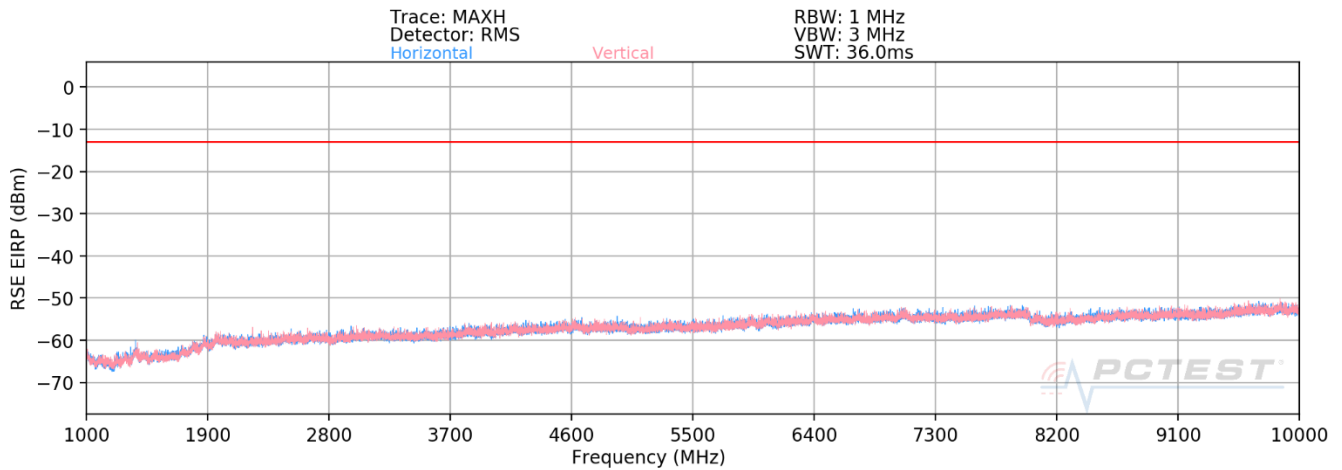
Table 7-24. Radiated Spurious Data (Band 13 – 1559-1610MHz Band)

FCC ID: BCG-A2354	 MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch
		Page 206 of 238

Band 26/5



Plot 7-324. Radiated Spurious Emissions below 1GHz (Band 26/5)



Plot 7-325. Radiated Spurious Emissions above 1GHz (Band 26/5)

FCC ID: BCG-A2354		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 207 of 238

OPERATING FREQUENCY: 819.00 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]
1638.00	H	245	168	-65.56	4.74	-60.82	-47.8
2457.00	H	-	-	-68.94	4.30	-64.65	-51.6
3276.00	H	-	-	-70.11	6.57	-63.54	-50.5

Table 7-25. 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	135	147	-60.90	4.71	-56.19	-43.2
2509.50	H	101	164	-67.72	4.38	-63.34	-50.3
3346.00	H	-	-	-70.11	6.70	-63.41	-50.4
4182.50	H	-	-	-69.66	8.07	-61.59	-48.6

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

FCC ID: BCG-A2354	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 208 of 238

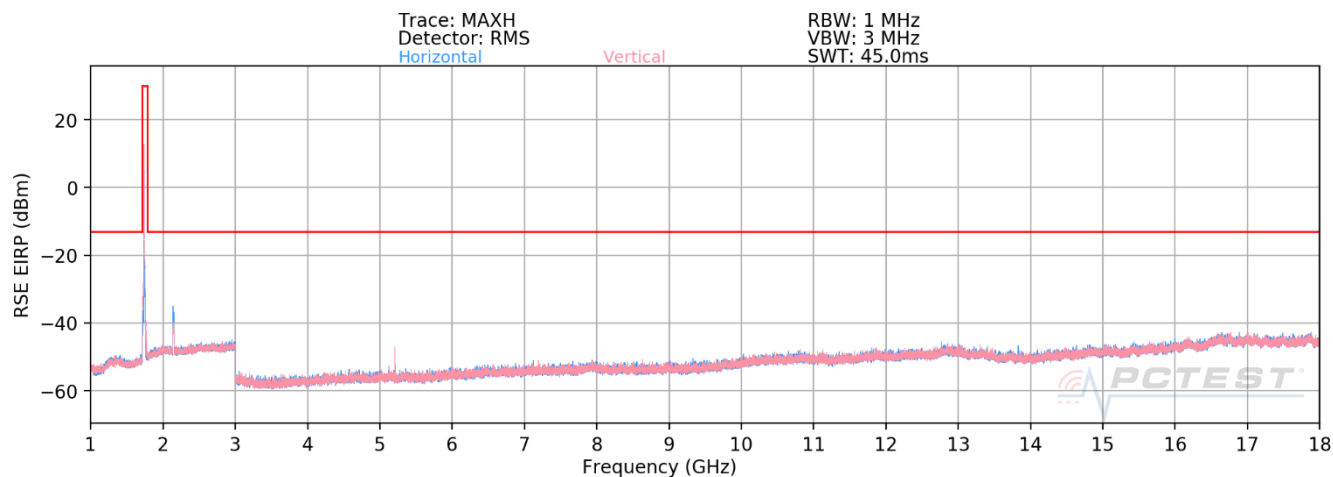
OPERATING FREQUENCY: 844.00 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 10.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

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	192	147	-60.68	4.68	-56.00	-43.0
2532.00	H	-	-	-67.85	4.46	-63.40	-50.4
3376.00	H	-	-	-70.32	6.78	-63.54	-50.5

Table 7-27. Radiated Spurious Data (Band 26/5 – High Channel)

FCC ID: BCG-A2354	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 209 of 238

Band 66/4



Plot 7-326. 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	-	-	-69.83	6.93	-62.89	-49.9
5160.00	V	101	100	-61.18	9.13	-52.05	-39.0
6880.00	V	-	-	-70.09	9.86	-60.23	-47.2
8600.00	V	-	-	-69.27	10.01	-59.26	-46.3

Table 7-28. Radiated Spurious Data (Band 66/4 – Low Channel)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch		Page 210 of 238

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	-	-	-70.38	7.02	-63.36	-50.4
5235.00	V	113	257	-60.34	9.24	-51.09	-38.1
6980.00	V	-	-	-69.86	9.83	-60.02	-47.0
8725.00	V	-	-	-69.43	10.03	-59.40	-46.4

Table 7-29. Radiated Spurious Data (Band 66/4 – Mid Channel)

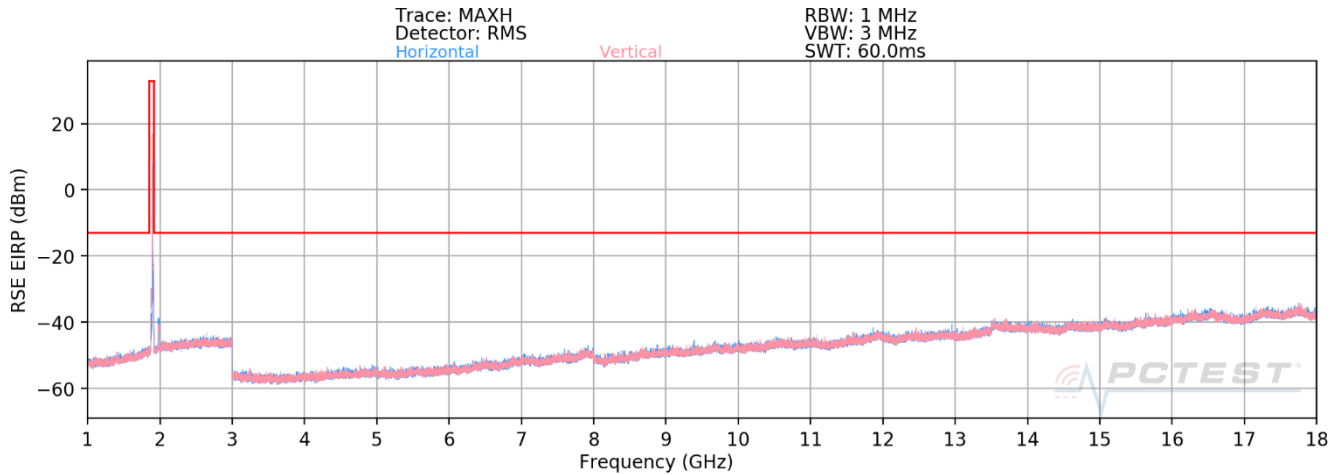
OPERATING FREQUENCY: 1770.00 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

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	-	-	-70.14	6.98	-63.16	-50.2
5310.00	V	101	103	-61.70	9.24	-52.45	-39.5
7080.00	V	-	-	-68.94	9.86	-59.08	-46.1
8850.00	V	-	-	-68.26	10.05	-58.21	-45.2

Table 7-30. Radiated Spurious Data (Band 66/4 – High Channel)

FCC ID: BCG-A2354	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 211 of 238

Band 25/2



Plot 7-327. 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	-	-	-72.57	7.36	-65.21	-52.2
5580.00	V	-	-	-74.03	9.38	-64.65	-51.6
7440.00	V	-	-	-71.51	9.45	-62.06	-49.1

Table 7-31. Radiated Spurious Data (Band 25/2 – Low Channel)

FCC ID: BCG-A2354		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch		Page 212 of 238

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	-	-	-68.33	7.43	-60.90	-47.9
5647.50	V	112	125	-63.67	9.49	-54.18	-41.2
7530.00	V	-	-	-67.78	9.47	-58.30	-45.3
9412.50	V	-	-	-68.32	9.65	-58.67	-45.7

Table 7-32. Radiated Spurious Data (Band 25/2 – Mid Channel)

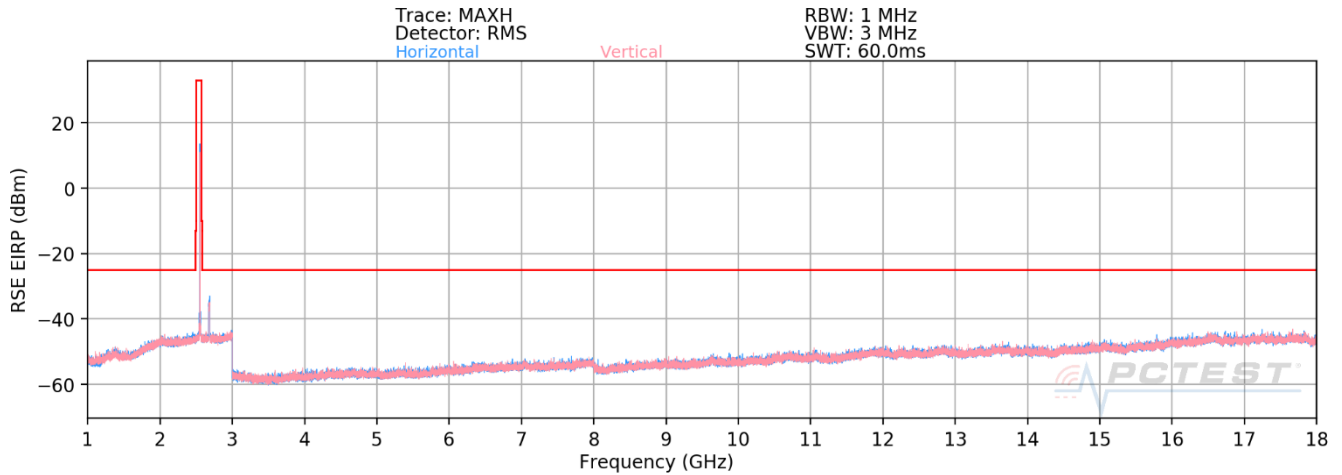
OPERATING FREQUENCY: 1905.00 MHz
MODULATION SIGNAL: QPSK
BANDWIDTH: 20.0 MHz
DISTANCE: 3 meters
LIMIT: -13 dBm

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	-	-	-68.36	7.55	-60.81	-47.8
5715.00	V	108	120	-61.15	9.48	-51.67	-38.7
7620.00	V	-	-	-67.84	9.54	-58.30	-45.3
9525.00	V	-	-	-67.77	9.73	-58.04	-45.0

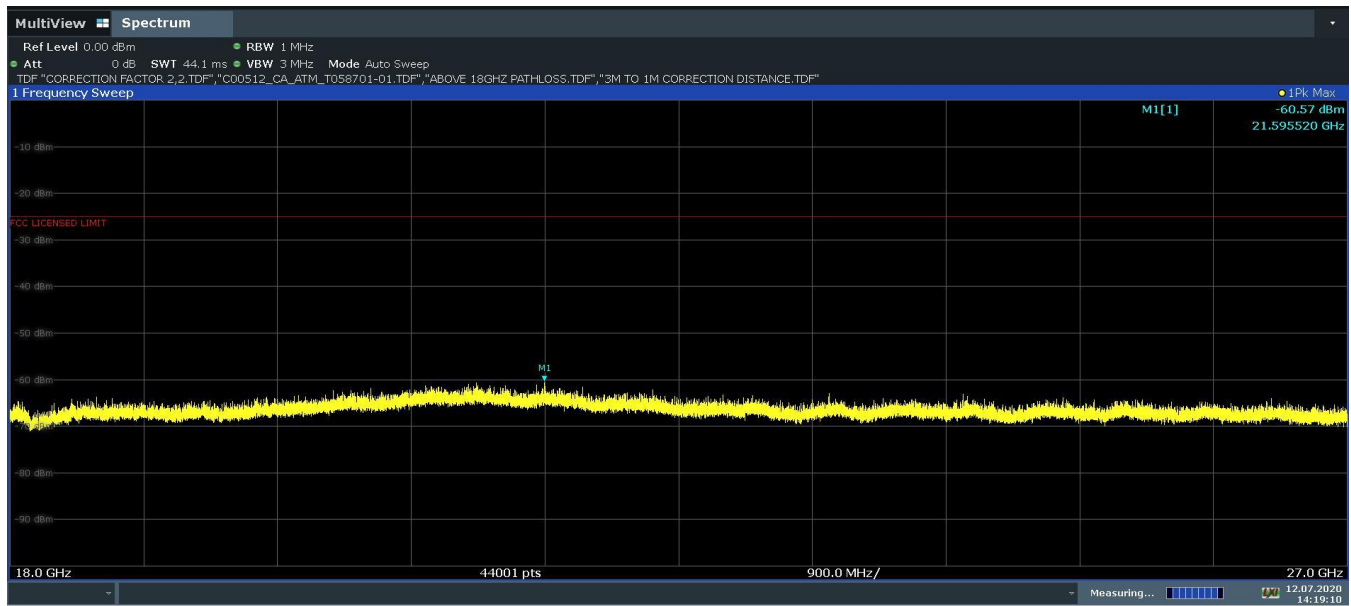
Table 7-33. Radiated Spurious Data (Band 25/2 – High Channel)

FCC ID: BCG-A2354	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 213 of 238

Band 7

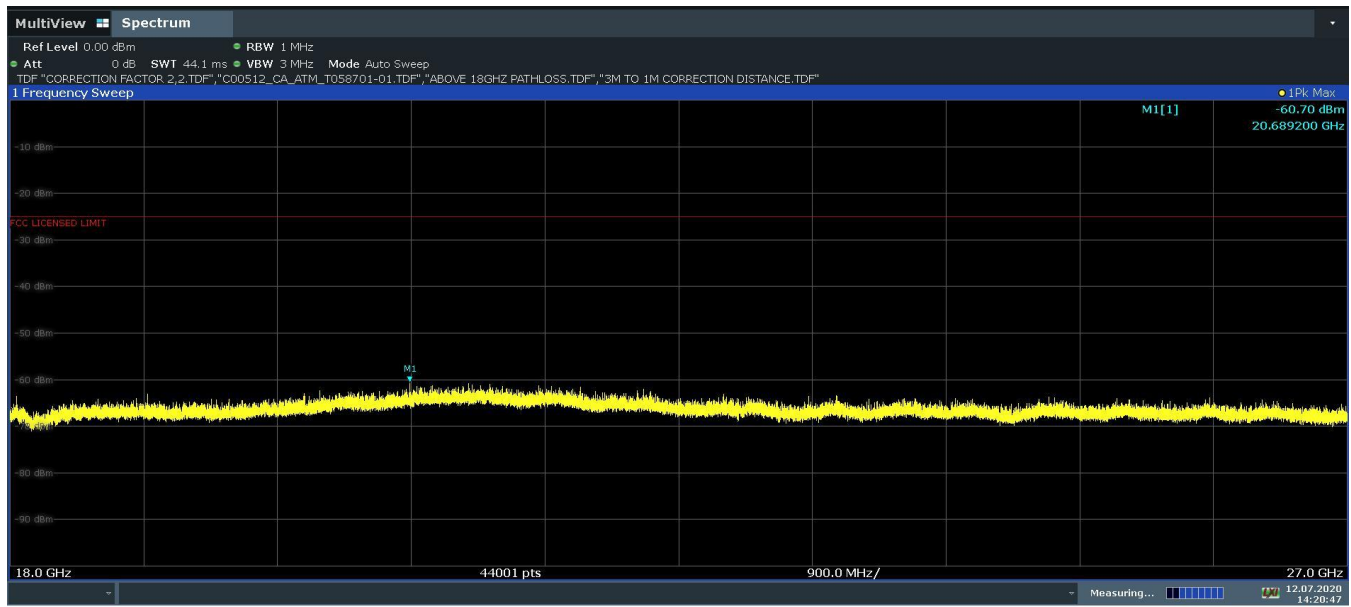


Plot 7-328. Radiated Spurious Emissions 1GHz - 18GHz (Band 7)



Plot 7-329. Radiated Spurious Emissions 18GHz – 27GHz (Band 7, Pol. H)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 214 of 238



14:20:48 12.07.2020

Plot 7-330. Radiated Spurious Emissions 18GHz – 27GHz (Band 7, Pol. V)

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	-	-	-71.00	8.76	-62.23	-37.2
7530.00	H	-	-	-68.92	9.47	-59.45	-34.4
10040.00	H	-	-	-67.40	9.67	-57.74	-32.7

Table 7-34. Radiated Spurious Data (Band 7 – Low Channel)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch		Page 215 of 238

© 2020 PCTEST

V 10.1 02/01/2020

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

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	231	112	-70.24	8.88	-61.36	-36.4
7605.00	H	220	79	-65.60	9.53	-56.07	-31.1
10140.00	H	-	-	-67.17	9.75	-57.42	-32.4
12675.00	H	-	-	-63.44	9.43	-54.02	-29.0
15210.00	H	-	-	-62.05	9.11	-52.94	-27.9

Table 7-35. Radiated Spurious Data (Band 7 – Mid Channel)

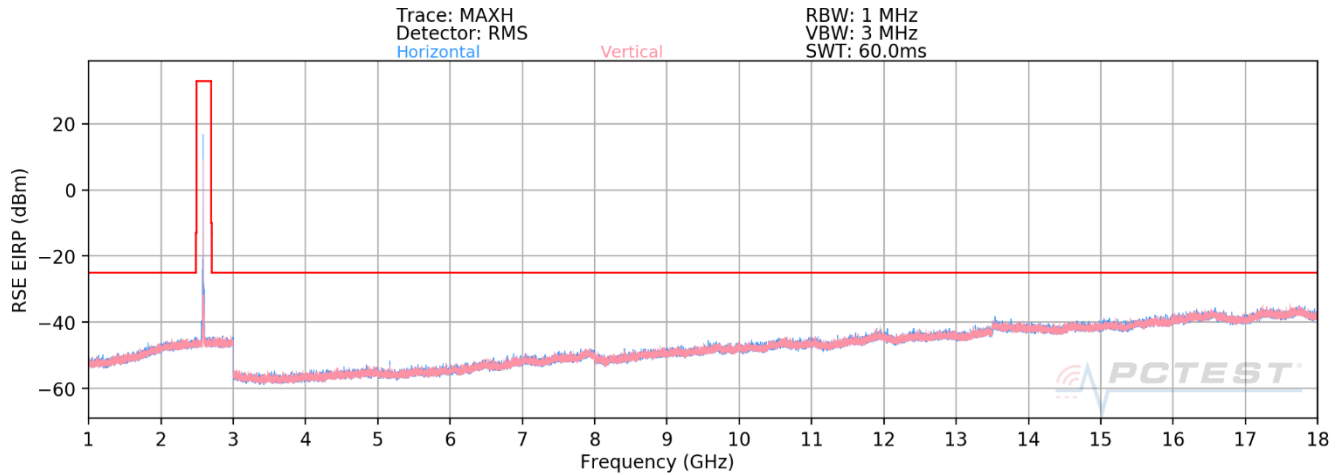
OPERATING FREQUENCY: 2560.00 MHz
MODULATION SIGNAL: QPSK
BANDWIDTH: 20.0 MHz
DISTANCE: 3 meters
LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5120.00	H	132	71	-68.45	9.00	-59.45	-34.4
7680.00	H	-	-	-67.31	9.58	-57.73	-32.7
10240.00	H	263	216	-66.45	9.73	-56.71	-31.7
12800.00	H	-	-	-63.24	9.36	-53.87	-28.9
15360.00	H	-	-	-62.03	8.97	-53.06	-28.1

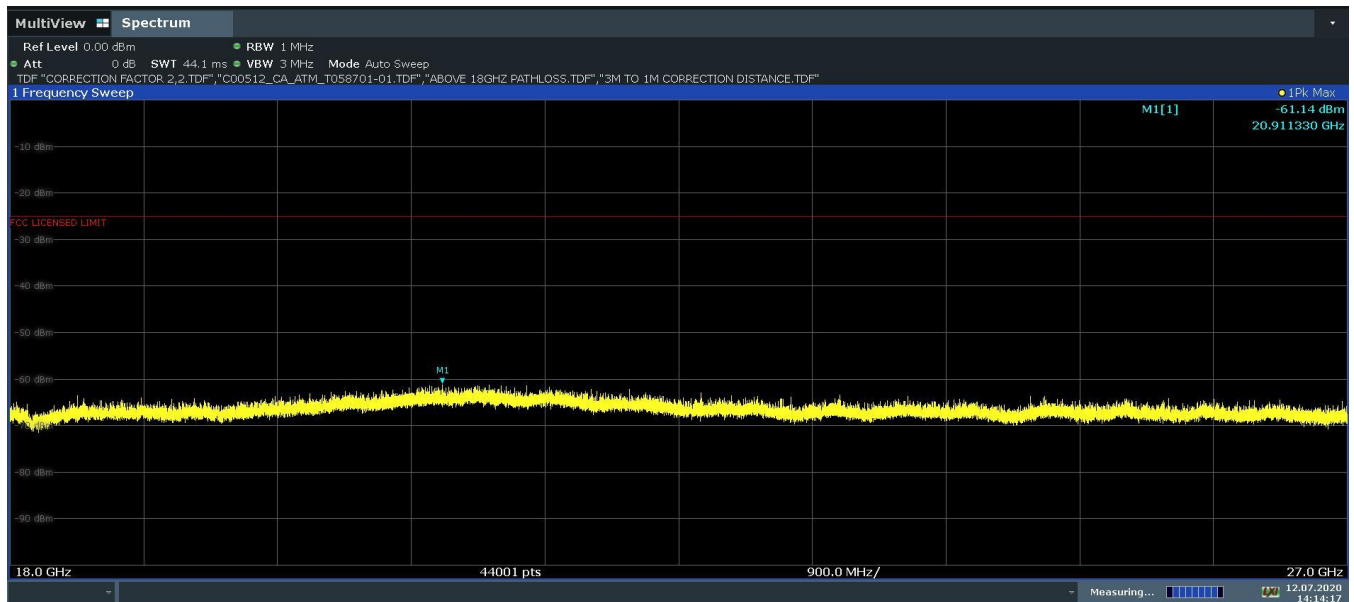
Table 7-36. Radiated Spurious Data (Band 7 – High Channel)

FCC ID: BCG-A2354	 MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch
		Page 216 of 238

Band 41

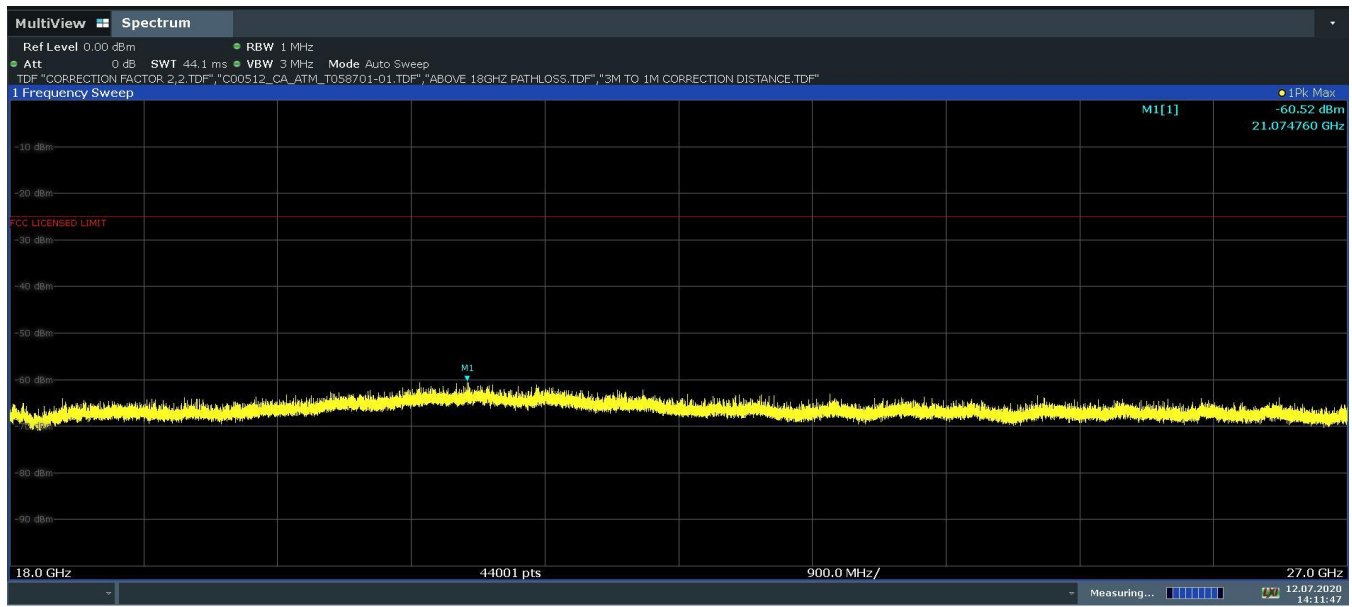


Plot 7-331. Radiated Spurious Emissions 1GHz - 18GHz (Band 41)



Plot 7-332. Radiated Spurious Emissions 18GHz – 27GHz (Band 41, Pol. H)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 217 of 238



14:11:48 12.07.2020

Plot 7-333. Radiated Spurious Emissions 18GHz – 27GHz (Band 41, Pol. V)

OPERATING FREQUENCY: 2506.00 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 -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	244	214	-58.95	8.74	-50.21	-25.2
7518.00	H	-	-	-57.54	9.49	-48.06	-23.1
10024.00	H	-	-	-54.19	9.67	-44.52	-19.5
12530.00	H	-	-	-51.48	9.56	-41.91	-16.9

Table 7-37. Radiated Spurious Data (Band 41 – Low Channel)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 218 of 238

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	366	154	-56.02	9.21	-46.82	-21.8
7779.00	H	-	-	-57.42	9.62	-47.80	-22.8
10372.00	H	-	-	-54.65	9.75	-44.90	-19.9
12965.00	H	-	-	-50.19	9.37	-40.82	-15.8

Table 7-38. Radiated Spurious Data (Band 41 – Mid Channel)

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

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	EIRP Level at Sub Ant Port [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5360.00	H	314	2	-61.01	9.22	-51.79	-26.8
8040.00	H	-	-	-57.23	9.70	-47.54	-22.5
10720.00	H	-	-	-53.95	9.72	-44.23	-19.2
13400.00	H	-	-	-50.19	9.31	-40.88	-15.9

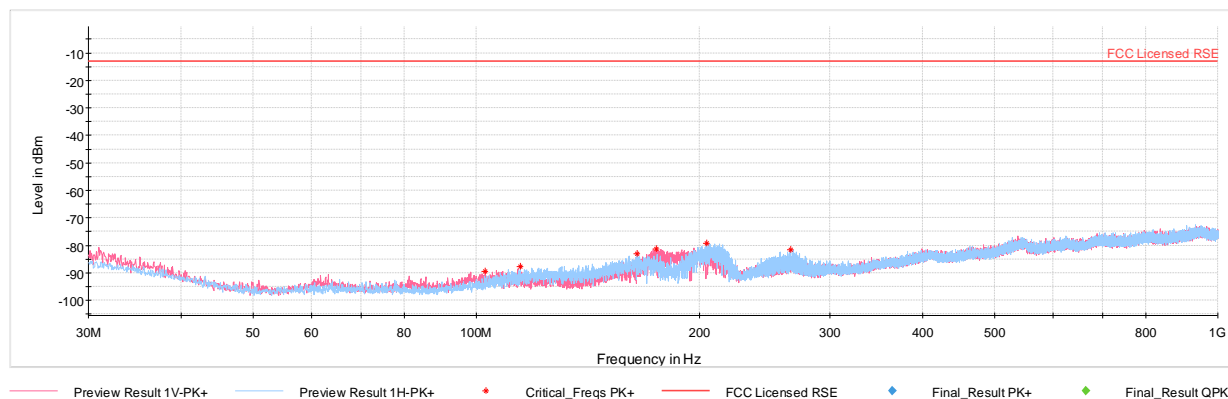
Table 7-39. Radiated Spurious Data (Band 41 – High Channel)

FCC ID: BCG-A2354	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 219 of 238

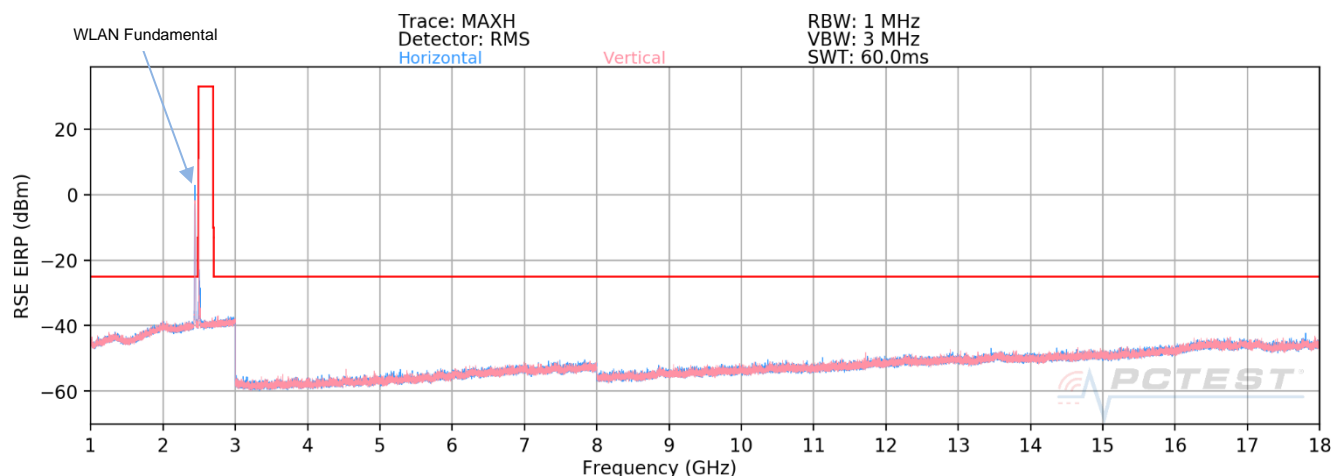
7.7.1 Simultaneous Tx Radiated Spurious Emissions Measurements

Description	WLAN	LTE (Band 41)
Antenna	FCM	FCM
Channel	6	39750
Operating Frequency (MHz)	2437	2506
Mode/Modulation	802.11b	QPSK/1RB/20MHz

Table 7-40. Worst Case Simultaneous Transmission Configuration



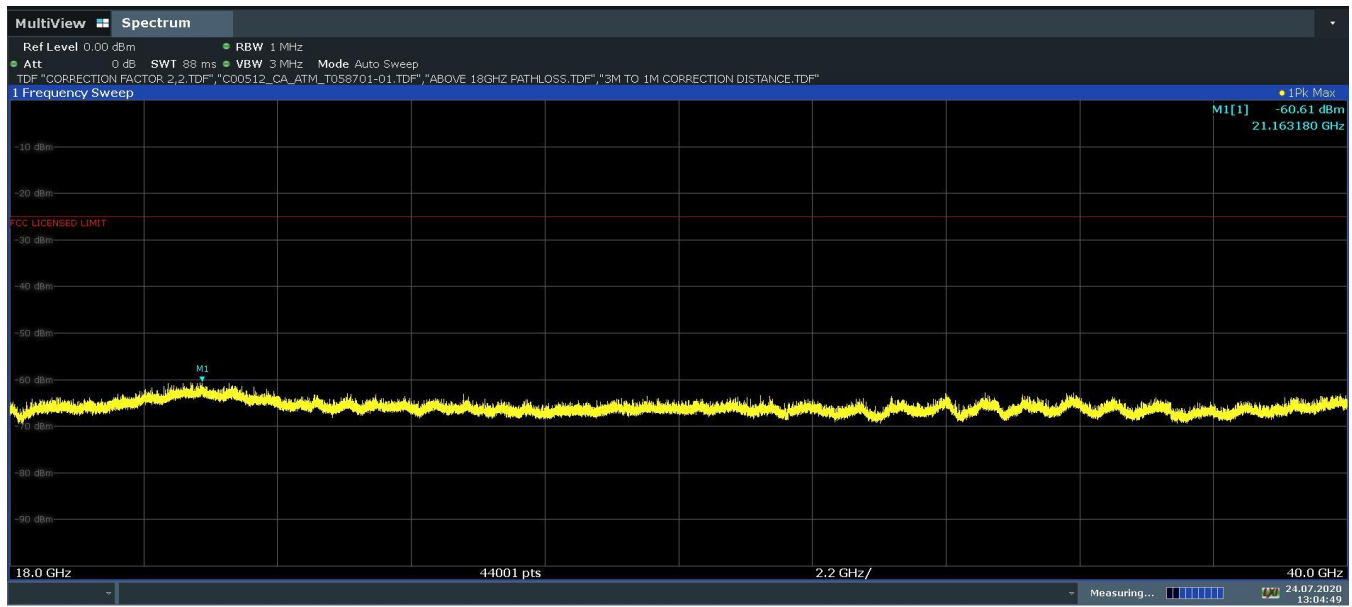
Plot 7-334. Radiated Spurious Emissions – Simultaneous Transmission 30MHz – 1GHz



Plot 7-335. Radiated Spurious Emissions – Simultaneous Transmission 1GHz – 18GHz

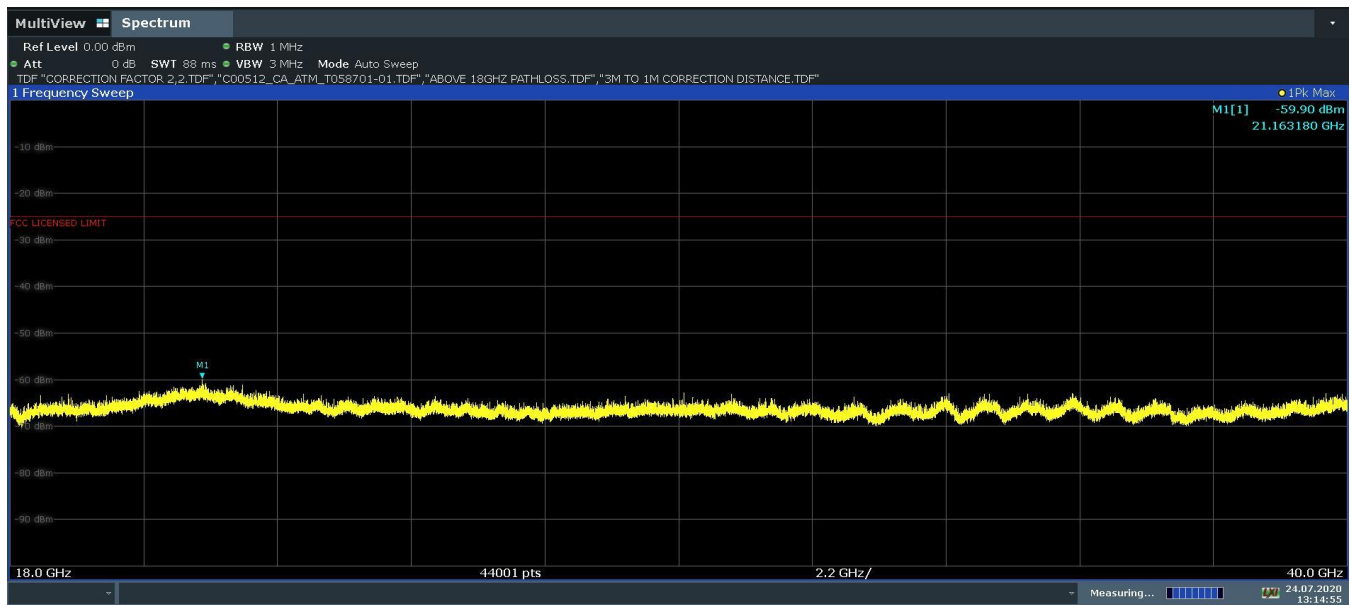
Note: Only the LTE B41 limit was shown in the plot above. The other fundamental is WLAN.

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 220 of 238



13:04:49 24.07.2020

Plot 7-336. Radiated Spurious Emissions – Simultaneous Transmission 18GHz – 40GHz (Pol. H)



13:14:56 24.07.2020

Plot 7-337. Radiated Spurious Emissions – Simultaneous Transmission 18GHz – 40GHz (Pol. V)

FCC ID: BCG-A2354	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 221 of 238

© 2020 PCTEST

V 10.1 02/01/2020

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
4874.00	Avg	H	-	-	-81.92	13.44	38.52	53.98	-15.46
4874.00	Peak	H	-	-	-70.38	13.44	50.06	73.98	-23.92
7311.00	Avg	H	-	-	-82.59	16.49	40.90	53.98	-13.08
7311.00	Peak	H	-	-	-71.09	16.49	52.40	73.98	-21.58
12185.00	Avg	H	-	-	-85.16	22.65	44.49	53.98	-9.49
12185.00	Peak	H	-	-	-74.18	22.65	55.47	73.98	-18.51

Table 7-41. WLAN Harmonics Emissions Measurements in Simultaneous Transmission Mode

Frequency [MHz]	Detector	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]	Limit [dBm]	Margin [dB]
5012.00	Avg	H	-	-	-54.92	8.74	-46.17	-25.0	-21.2
7518.00	Avg	H	261	76	-53.43	9.49	-43.95	-25.0	-18.9
10024.00	Avg	H	-	-	-53.89	9.67	-44.22	-25.0	-19.2
12530.00	Avg	H	-	-	-51.48	9.56	-41.92	-25.0	-16.9
2387.00	Avg	H	184	9	-40.32	4.34	-35.98	-25.0	-11.0

Table 7-42. LTE Harmonics and Intermodulations Emissions Measurements in Simultaneous Transmission Mode

FCC ID: BCG-A2354	 MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch
		Page 222 of 238

7.8 Frequency Stability / Temperature Variation

Test Overview and Limit

Frequency stability testing is performed in accordance with the guidelines of ANSI C63.26-2015/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 wideband radio communication tester with the EUT placed inside an environmental chamber.

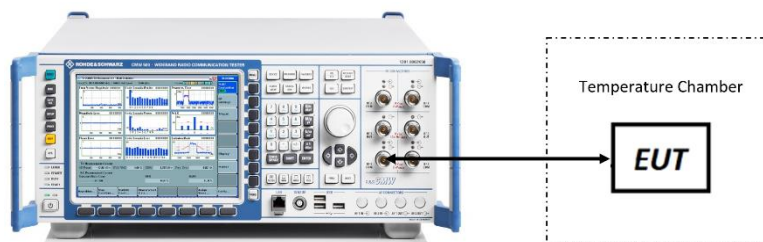


Figure 7-8. Test Instrument & Measurement Setup

Test Notes

None

FCC ID: BCG-A2354	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 223 of 238

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	707,500,002	1.5	0.0000002
100 %		- 20	707,500,001	1.4	0.0000002
100 %		- 10	707,500,002	1.6	0.0000002
100 %		0	707,500,001	1.3	0.0000002
100 %		+ 10	707,500,002	1.7	0.0000002
100 %		+ 20	707,500,001	1.0	0.0000001
100 %		+ 30	707,500,001	1.0	0.0000001
100 %		+ 40	707,500,001	1.4	0.0000002
100 %		+ 50	707,500,002	1.8	0.0000002
BATT. ENDPOINT	3.40	+ 20	707,500,002	1.6	0.0000002

Table 7-43. 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: BCG-A2354	 MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch
		Page 224 of 238

Band 12/17 Frequency Stability Measurements

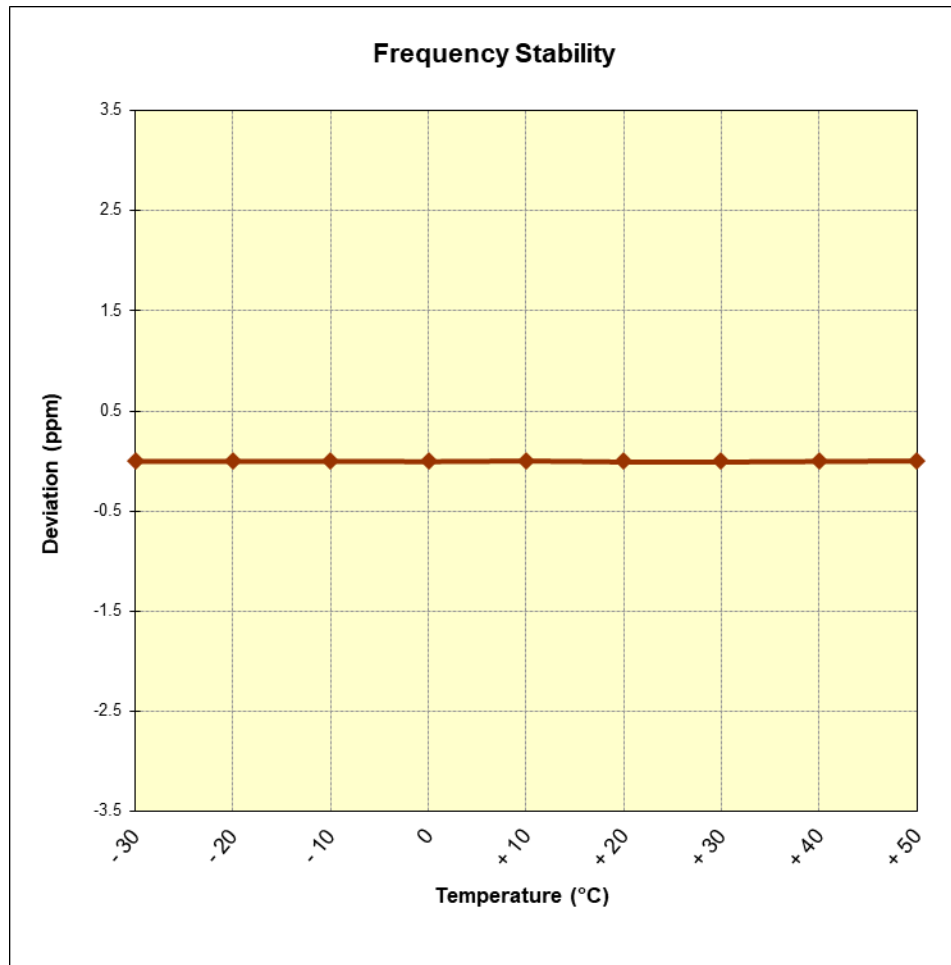


Figure 7-9. Frequency Stability Graph (Band 12/17 – 10MHz QPSK – Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 225 of 238

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	782,000,002	1.6	0.0000002
100 %		- 20	782,000,002	1.7	0.0000002
100 %		- 10	782,000,002	1.6	0.0000002
100 %		0	782,000,002	1.6	0.0000002
100 %		+ 10	782,000,002	1.7	0.0000002
100 %		+ 20	782,000,002	1.5	0.0000002
100 %		+ 30	782,000,003	2.7	0.0000003
100 %		+ 40	782,000,002	2.5	0.0000003
100 %		+ 50	782,000,002	1.7	0.0000002
BATT. ENDPOINT	3.40	+ 20	782,000,003	2.7	0.0000003

Table 7-44. 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: BCG-A2354		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 226 of 238

Band 13 Frequency Stability Measurements

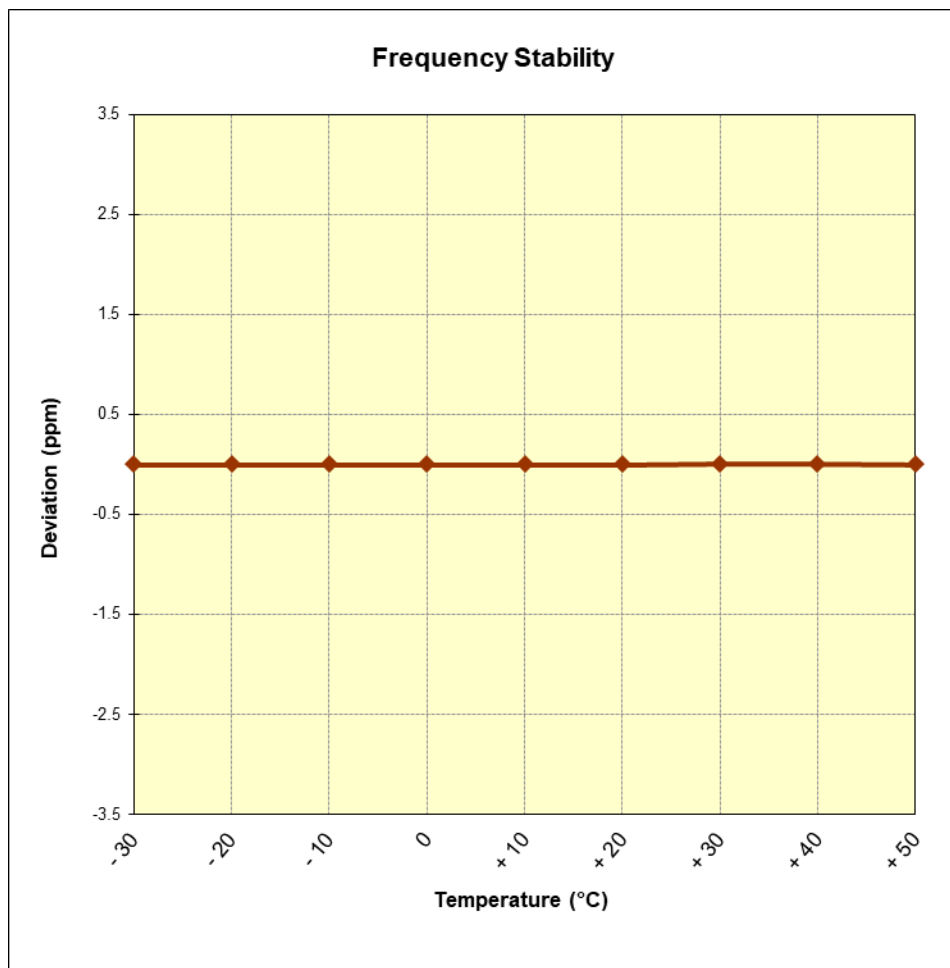


Figure 7-10. Frequency Stability Graph (Band 13 – 10MHz QPSK – Full RB Configuration)

FCC ID: BCG-A2354	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 227 of 238

Band 26/5 Frequency Stability Measurements

OPERATING FREQUENCY: 836,500,000 Hz
CHANNEL: 26865
REFERENCE VOLTAGE: 3.80 VDC
DEVIATION LIMIT: ± 0.00025 % or 2.5 ppm

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	- 30	836,500,001	1.1	0.00000013
100 %		- 20	836,500,001	1.2	0.00000014
100 %		- 10	836,500,001	0.7	0.00000008
100 %		0	836,500,001	1.1	0.00000013
100 %		+ 10	836,500,001	0.8	0.00000009
100 %		+ 20	836,500,001	1.3	0.00000015
100 %		+ 30	836,500,001	0.8	0.00000010
100 %		+ 40	836,500,001	0.7	0.00000009
100 %		+ 50	836,500,001	0.7	0.00000008
BATT. ENDPOINT	3.40	+ 20	836,500,001	1.2	0.00000014

Table 7-45. Frequency Stability Data (Band 26/5 – 10MHz QPSK – Full RB Configuration)

FCC ID: BCG-A2354	 MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch
		Page 228 of 238

Band 26/5 Frequency Stability Measurements

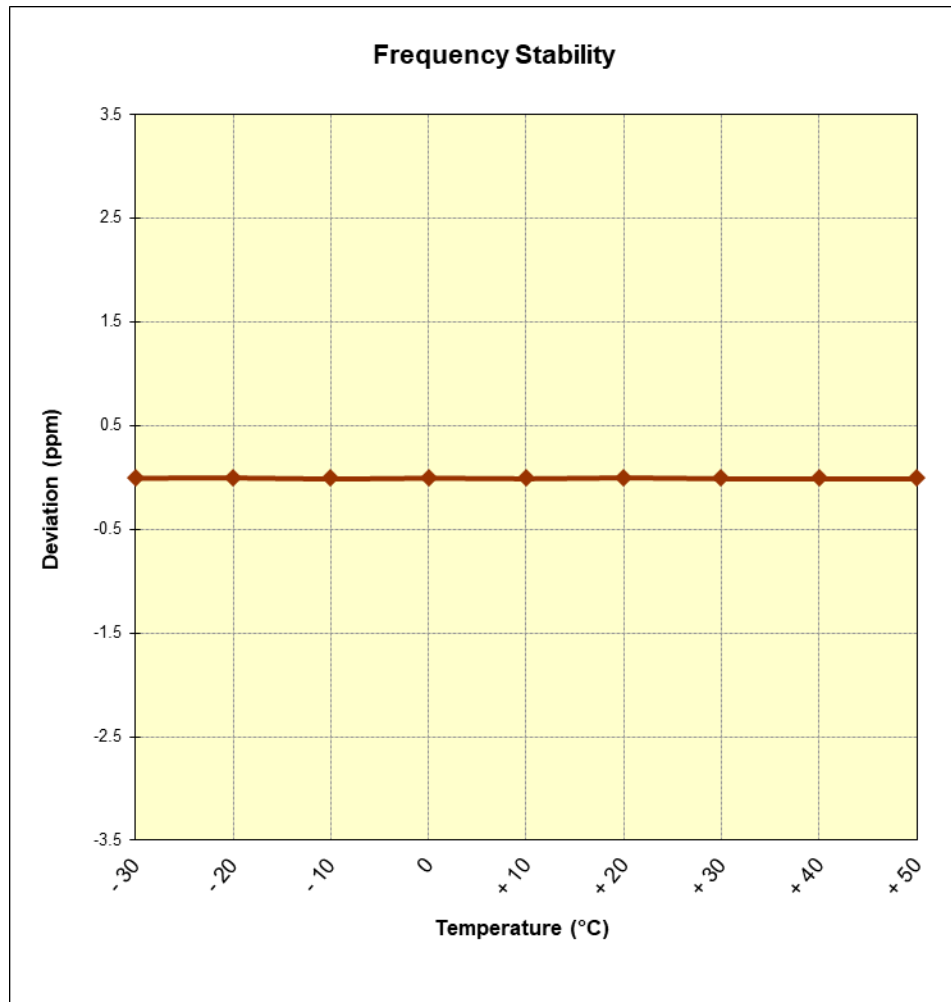


Figure 7-11. Frequency Stability Graph (Band 26/5 – 10MHz QPSK – Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 229 of 238

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	1,744,999,999	-1.2	-0.00000007
100 %		- 20	1,744,999,999	-0.8	-0.00000005
100 %		- 10	1,745,000,001	0.7	0.00000004
100 %		0	1,745,000,001	0.6	0.00000004
100 %		+ 10	1,744,999,999	-0.8	-0.00000005
100 %		+ 20	1,745,000,001	1.1	0.00000006
100 %		+ 30	1,745,000,001	0.6	0.00000004
100 %		+ 40	1,744,999,999	-0.8	-0.00000005
100 %		+ 50	1,745,000,002	1.8	0.00000010
BATT. ENDPOINT	3.40	+ 20	1,744,999,999	-1.2	-0.00000007

Table 7-46. Frequency Stability Data (Band 66/4 – 20MHz QPSK – Full RB Configuration)

FCC ID: BCG-A2354	 MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch
		Page 230 of 238

Band 66/4 Frequency Stability Measurements

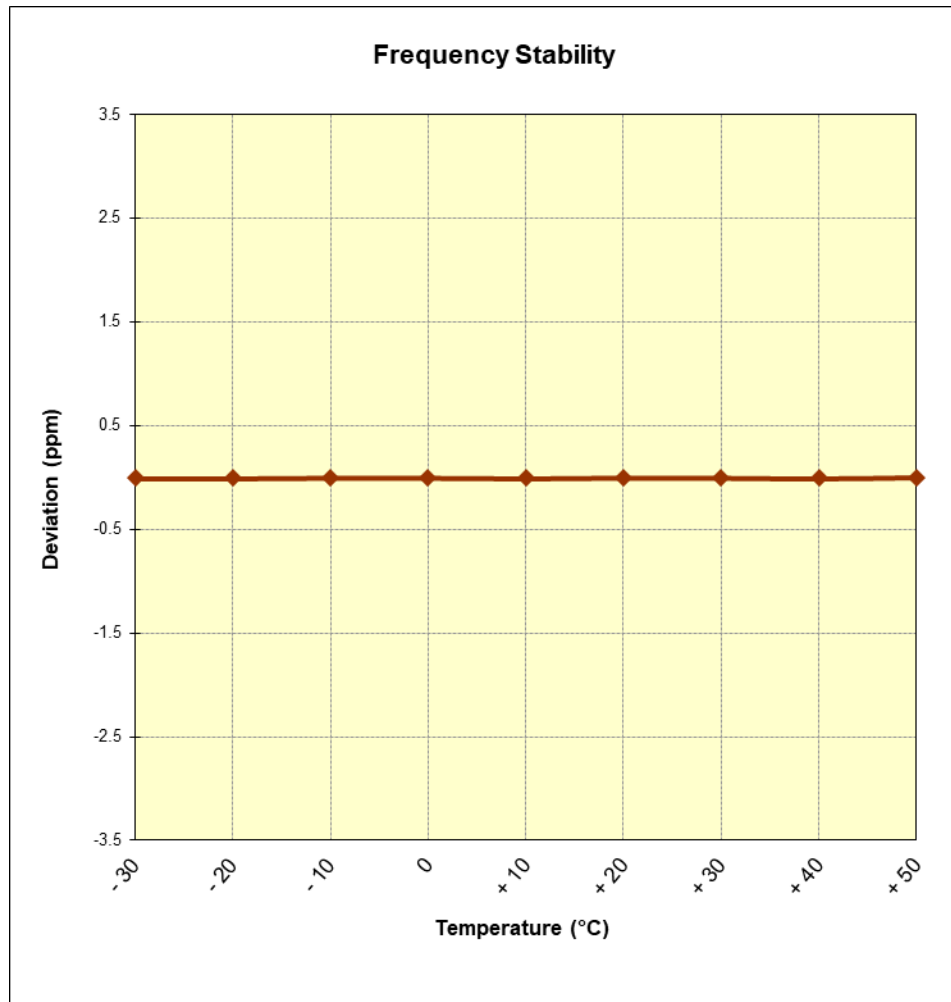


Figure 7-12. Frequency Stability Graph (Band 66/4 – 20MHz QPSK – Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 231 of 238

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	1,882,500,001	0.7	0.00000004
100 %		- 20	1,882,500,001	1.1	0.00000006
100 %		- 10	1,882,499,999	-0.9	-0.00000005
100 %		0	1,882,500,001	1.2	0.00000006
100 %		+ 10	1,882,500,001	0.7	0.00000004
100 %		+ 20	1,882,500,001	0.9	0.00000005
100 %		+ 30	1,882,500,001	0.6	0.00000003
100 %		+ 40	1,882,500,001	1.2	0.00000006
100 %		+ 50	1,882,500,001	1.3	0.00000007
BATT. ENDPOINT	3.40	+ 20	1,882,500,001	1.4	0.00000007

Table 7-47. Frequency Stability Data (Band 25/2 – 20MHz QPSK – Full RB Configuration)

FCC ID: BCG-A2354	 MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch
		Page 232 of 238

Band 25/2 Frequency Stability Measurements

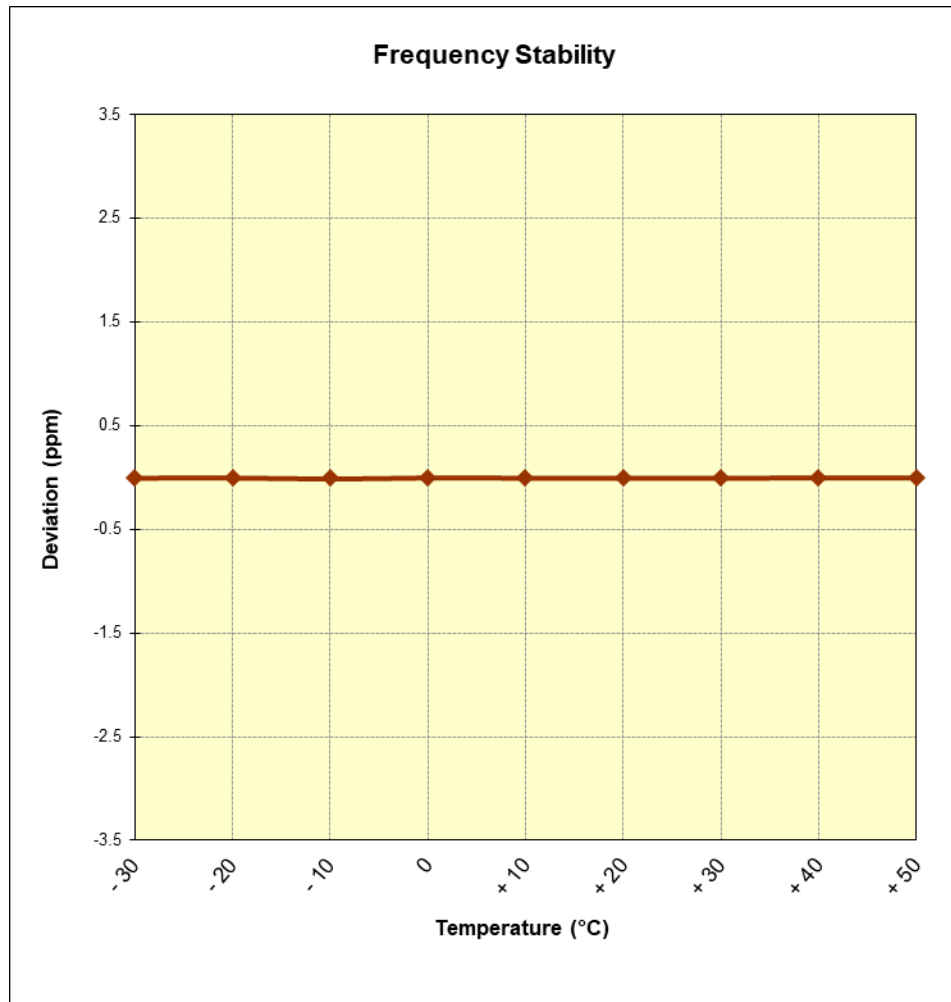


Figure 7-13. Frequency Stability Graph (Band 25/2 – 20MHz QPSK – Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 233 of 238

Band 7 Frequency Stability Measurements

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

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	- 30	2,535,000,003	2.8	0.00000011
100 %		- 20	2,535,000,003	2.6	0.00000010
100 %		- 10	2,535,000,002	2.4	0.00000009
100 %		0	2,535,000,003	2.8	0.00000011
100 %		+ 10	2,535,000,002	2.1	0.00000008
100 %		+ 20	2,535,000,003	3.0	0.00000012
100 %		+ 30	2,535,000,003	3.0	0.00000012
100 %		+ 40	2,535,000,004	3.8	0.00000015
100 %		+ 50	2,535,000,003	3.1	0.00000012
BATT. ENDPOINT	3.40	+ 20	2,535,000,003	3.2	0.00000013

Table 7-48. 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: BCG-A2354	 MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch
		Page 234 of 238

Band 7 Frequency Stability Measurements

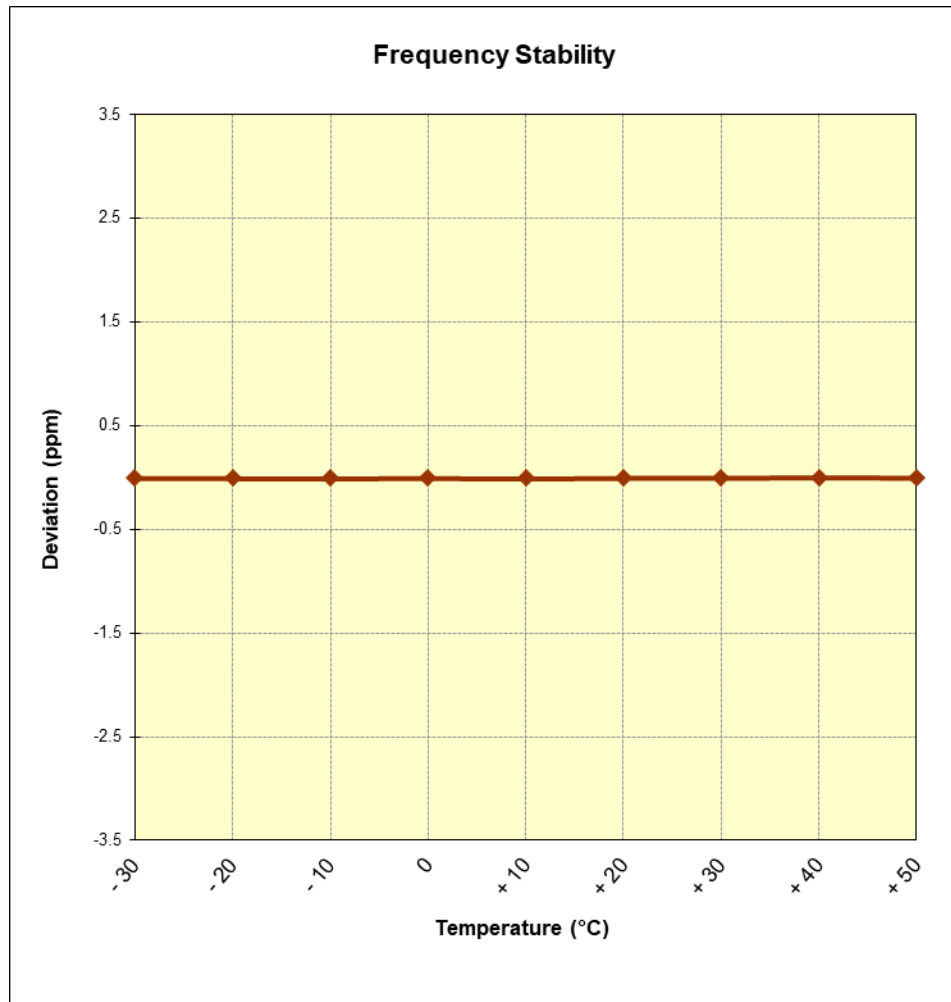


Figure 7-14. Frequency Stability Graph (Band 7 – 20MHz QPSK – Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 235 of 238

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	2,593,000,013	12.7	0.0000005
100 %		- 20	2,593,000,010	9.6	0.0000004
100 %		- 10	2,593,000,010	9.5	0.0000004
100 %		0	2,593,000,009	8.7	0.0000003
100 %		+ 10	2,593,000,010	9.5	0.0000004
100 %		+ 20	2,593,000,008	7.6	0.0000003
100 %		+ 30	2,593,000,006	5.6	0.0000002
100 %		+ 40	2,593,000,013	13.0	0.0000005
100 %		+ 50	2,593,000,009	9.1	0.0000004
BATT. ENDPOINT	3.40	+ 20	2,593,000,010	10.4	0.0000004

Table 7-49. 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: BCG-A2354	 MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch
		Page 236 of 238

Band 41 Frequency Stability Measurements

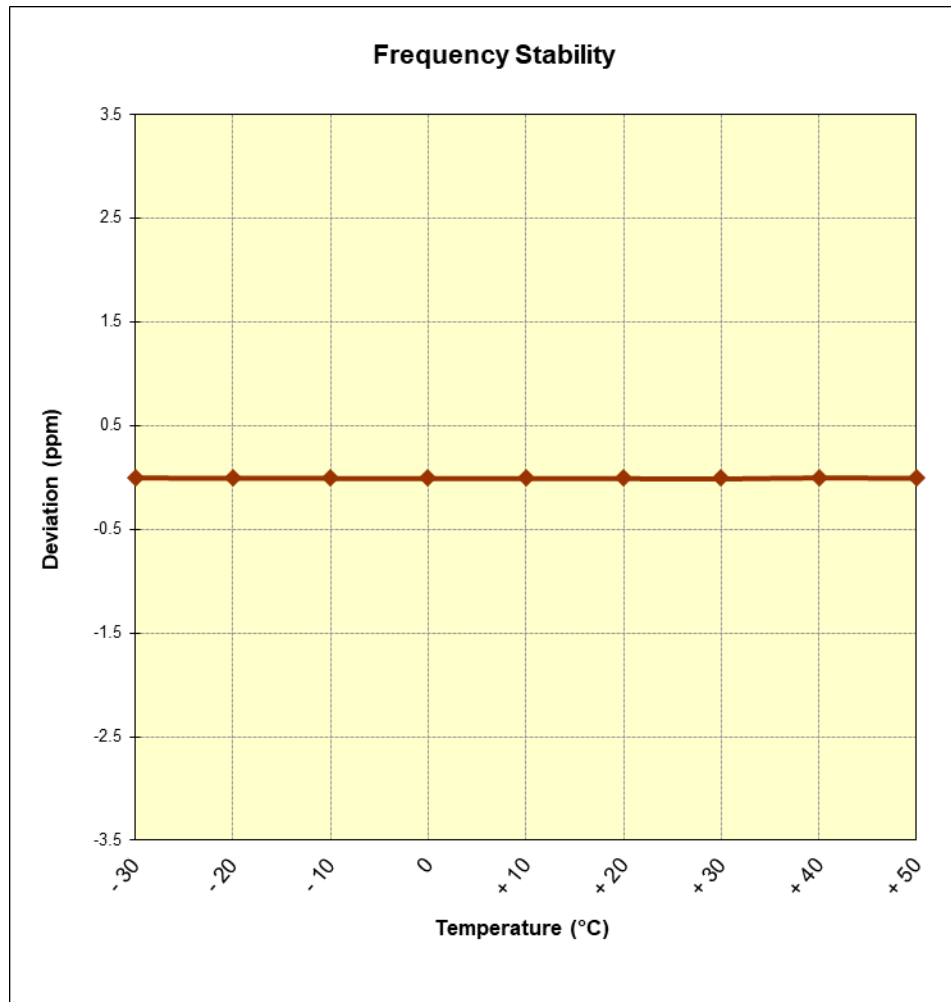


Figure 7-15. Frequency Stability Graph (Band 41 – 20MHz QPSK – Full RB Configuration)

FCC ID: BCG-A2354	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 237 of 238

8.0 CONCLUSION

The data collected relate only to the item(s) tested and show that the **Apple Watch FCC ID: BCG-A2354** complies with all the requirements of Part 22, 24, & 27 of the FCC Rules for LTE operation only.

FCC ID: BCG-A2354	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270025-03-R1.BCG	Test Dates: 05/01/2020 - 08/20/2020	EUT Type: Watch	Page 238 of 238