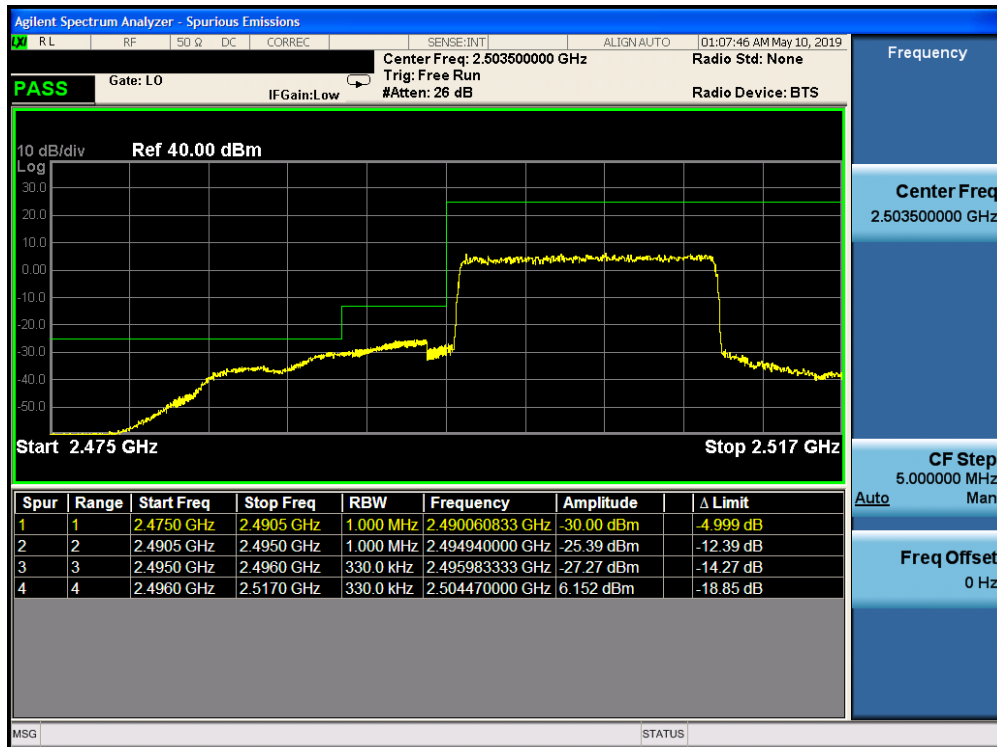
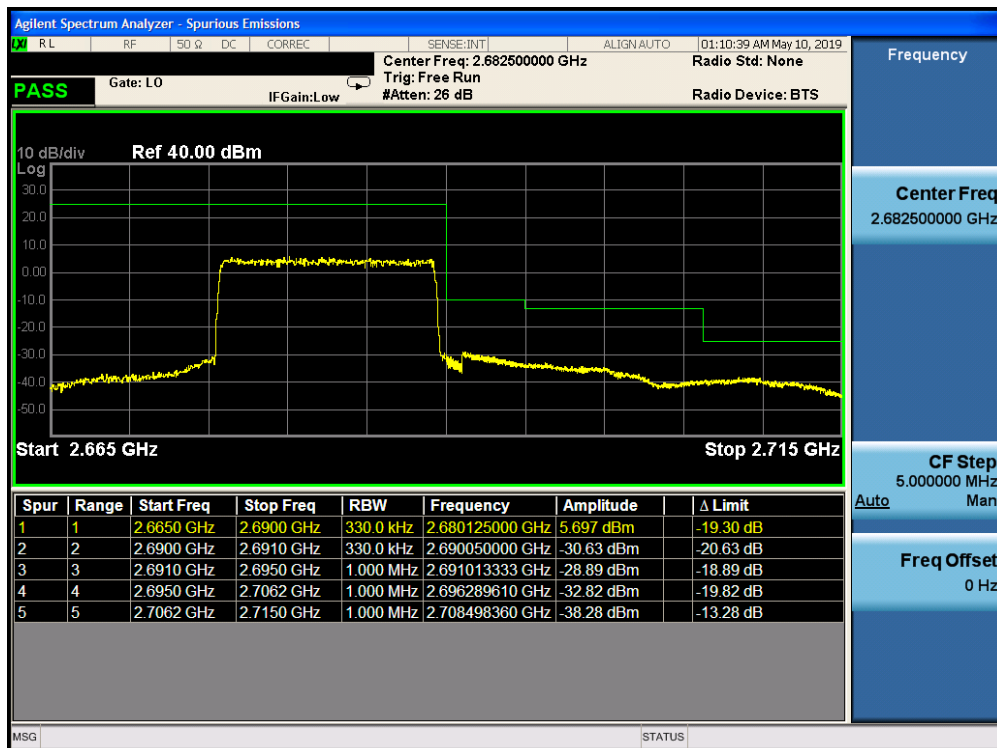


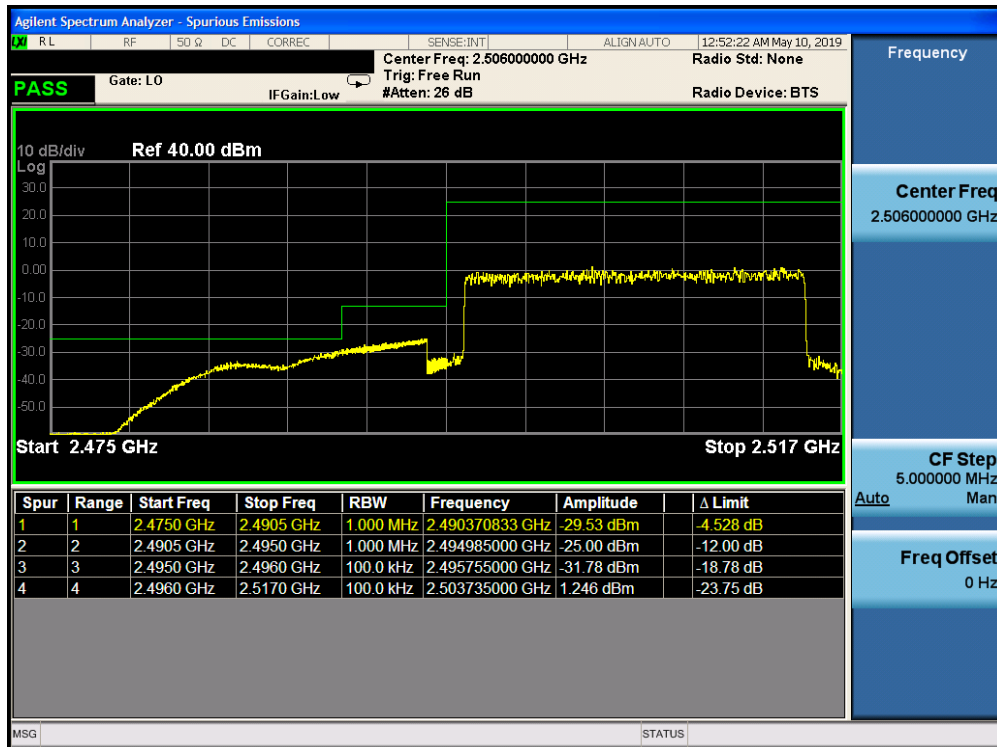


Plot 7-218. Lower ACP Plot (Band 41 - 15.0MHz QPSK - Full RB Configuration)

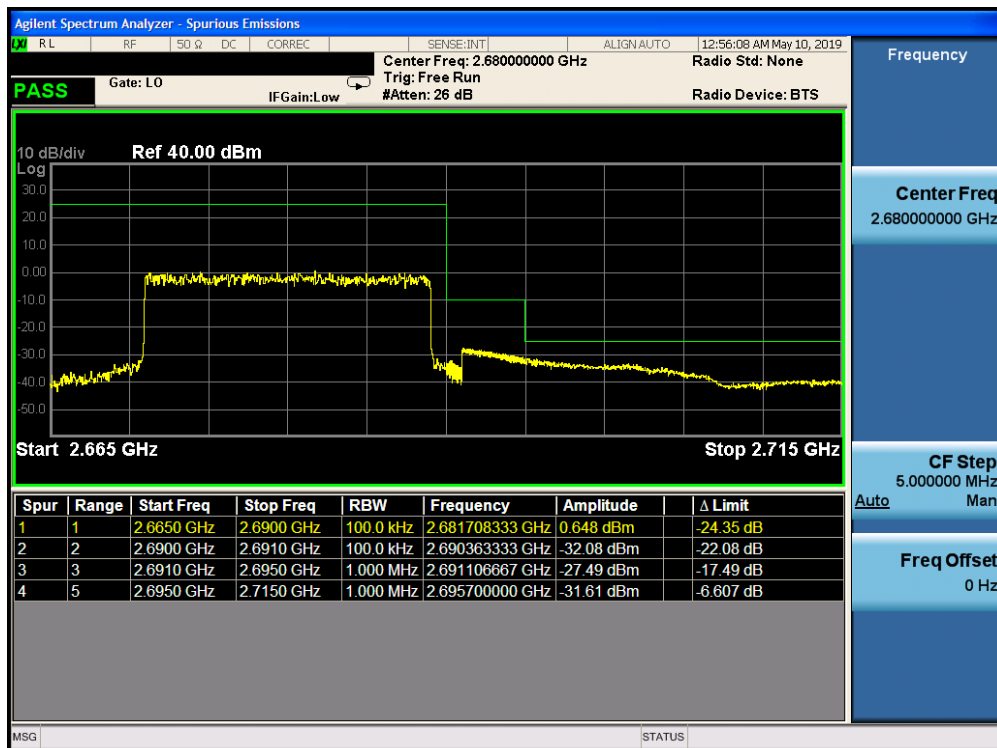


Plot 7-219. Upper ACP Plot (Band 41 - 15.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2157	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 137 of 203



Plot 7-220. Lower ACP Plot (Band 41 - 20.0MHz QPSK - Full RB Configuration)



Plot 7-221. Upper ACP Plot (Band 41 - 20.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2157	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 138 of 203

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.

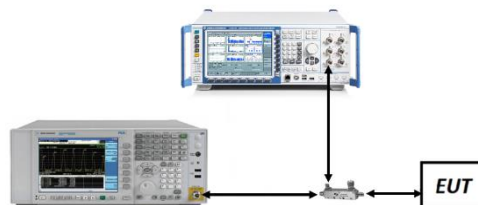


Figure 7-4. Test Instrument & Measurement Setup

Test Notes

None.

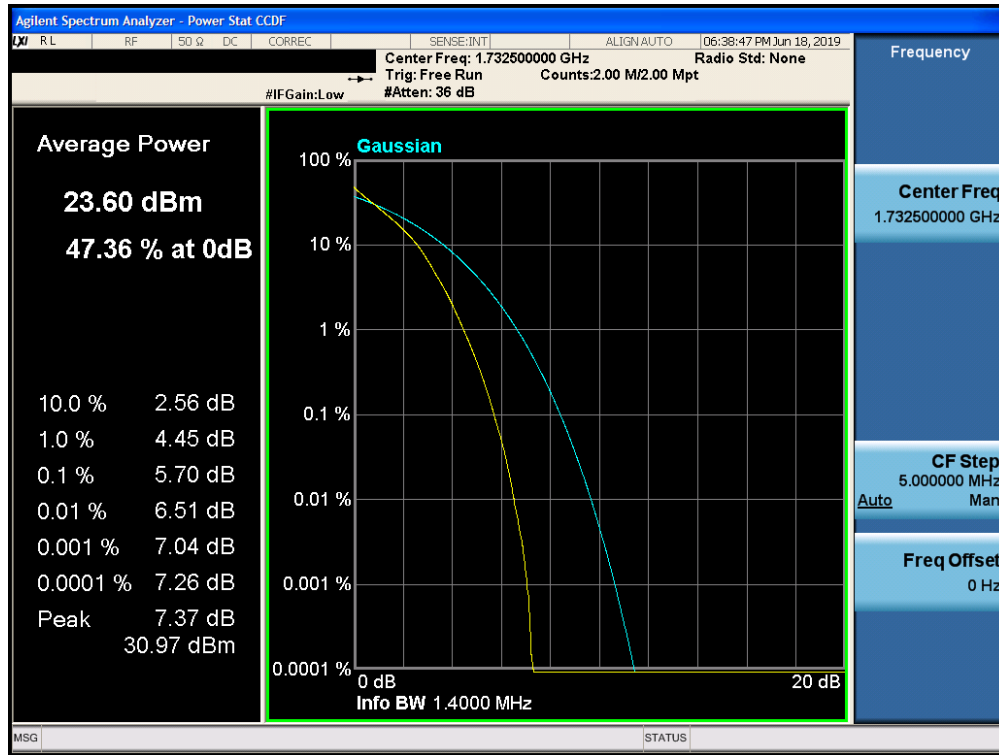
FCC ID: BCG-A2157	PCTEST ENGINEERING LABORATORY, INC.		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch		Page 139 of 203

Mode	BW (MHz)	Modulation	Average Power [dBm]	PAR at 0.1% [dB]	Limit [dB]	Margin [dB]
LTE Band 4	1.4	QPSK	23.60	5.70	13	-7.30
LTE Band 4	1.4	16QAM	22.76	6.30	13	-6.70
LTE Band 4	3	QPSK	23.58	5.77	13	-7.23
LTE Band 4	3	16QAM	22.72	6.47	13	-6.53
LTE Band 4	5	QPSK	23.57	5.81	13	-7.19
LTE Band 4	5	16QAM	22.69	6.37	13	-6.63
LTE Band 4	10	QPSK	23.54	5.75	13	-7.25
LTE Band 4	10	16QAM	22.66	6.31	13	-6.69
LTE Band 4	15	QPSK	23.65	5.80	13	-7.20
LTE Band 4	15	16QAM	22.61	6.28	13	-6.72
LTE Band 4	20	QPSK	23.88	5.60	13	-7.40
LTE Band 4	20	16QAM	22.60	6.34	13	-6.66
LTE Band 66	1.4	QPSK	23.46	5.73	13	-7.27
LTE Band 66	1.4	16QAM	22.57	6.34	13	-6.66
LTE Band 66	3	QPSK	23.39	5.85	13	-7.15
LTE Band 66	3	16QAM	22.51	6.50	13	-6.50
LTE Band 66	5	QPSK	23.38	5.87	13	-7.13
LTE Band 66	5	16QAM	22.50	6.42	13	-6.58
LTE Band 66	10	QPSK	23.33	5.71	13	-7.29
LTE Band 66	10	16QAM	22.52	6.33	13	-6.67
LTE Band 66	15	QPSK	23.37	6.04	13	-6.96
LTE Band 66	15	16QAM	22.49	6.33	13	-6.67
LTE Band 66	20	QPSK	23.47	5.70	13	-7.30
LTE Band 66	20	16QAM	22.57	6.22	13	-6.78
LTE Band 2	1.4	QPSK	23.25	5.70	13	-7.30
LTE Band 2	1.4	16QAM	22.44	6.40	13	-6.60
LTE Band 2	3	QPSK	23.26	5.80	13	-7.20
LTE Band 2	3	16QAM	22.40	6.47	13	-6.53
LTE Band 2	5	QPSK	23.29	5.84	13	-7.16
LTE Band 2	5	16QAM	22.38	6.45	13	-6.55
LTE Band 2	10	QPSK	23.14	5.67	13	-7.33
LTE Band 2	10	16QAM	22.37	6.24	13	-6.76
LTE Band 2	15	QPSK	23.23	6.00	13	-7.00
LTE Band 2	15	16QAM	22.32	6.25	13	-6.75
LTE Band 2	20	QPSK	23.25	5.70	13	-7.30
LTE Band 2	20	16QAM	22.35	6.21	13	-6.79
LTE Band 25	1.4	QPSK	23.27	5.73	13	-7.27
LTE Band 25	1.4	16QAM	22.40	6.40	13	-6.60
LTE Band 25	3	QPSK	23.28	5.79	13	-7.21
LTE Band 25	3	16QAM	22.37	6.49	13	-6.51
LTE Band 25	5	QPSK	23.26	5.82	13	-7.18
LTE Band 25	5	16QAM	22.38	6.46	13	-6.54
LTE Band 25	10	QPSK	23.15	5.69	13	-7.31
LTE Band 25	10	16QAM	22.37	6.26	13	-6.74
LTE Band 25	15	QPSK	23.23	6.00	13	-7.00
LTE Band 25	15	16QAM	22.34	6.29	13	-6.71
LTE Band 25	20	QPSK	23.36	5.70	13	-7.30
LTE Band 25	20	16QAM	22.32	6.24	13	-6.76

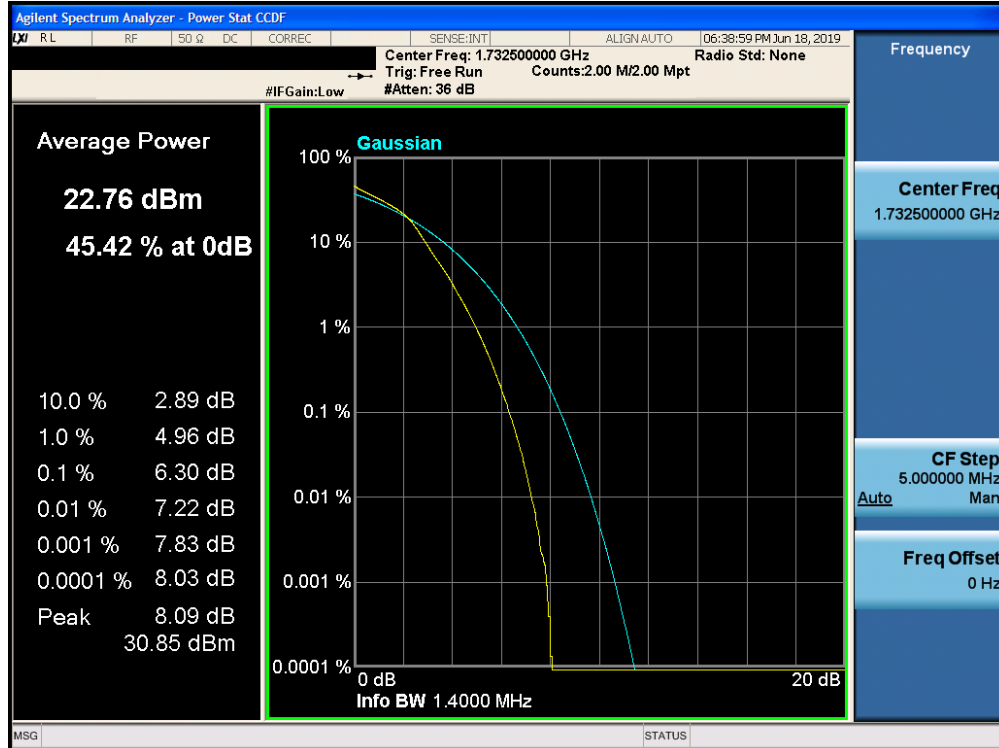
Table 7-6. PAR Results (Mid Bands)

FCC ID: BCG-A2157	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 140 of 203

Band 4

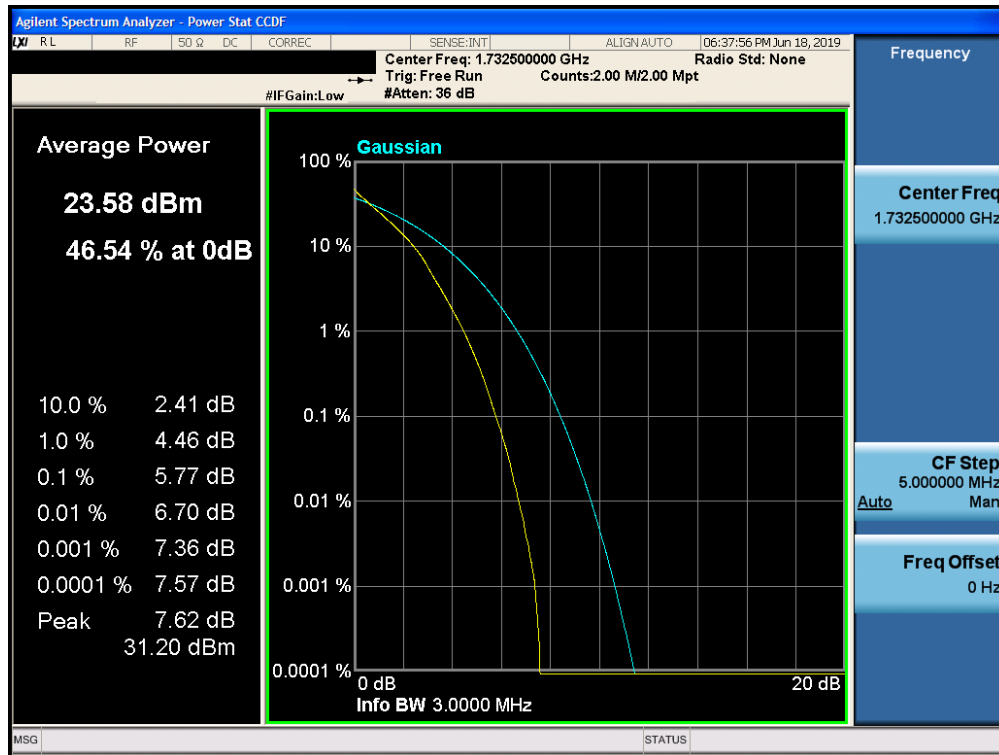


Plot 7-222. PAR Plot (Band 4 - 1.4MHz QPSK - Full RB Configuration)

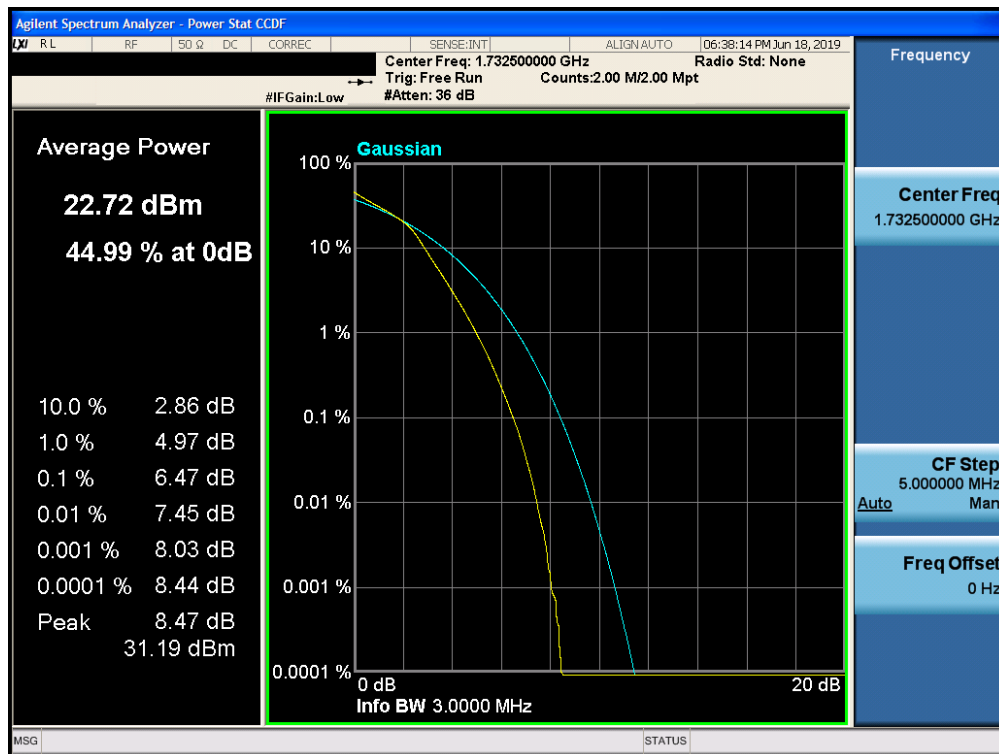


Plot 7-223. PAR Plot (Band 4 - 1.4MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2157	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 141 of 203

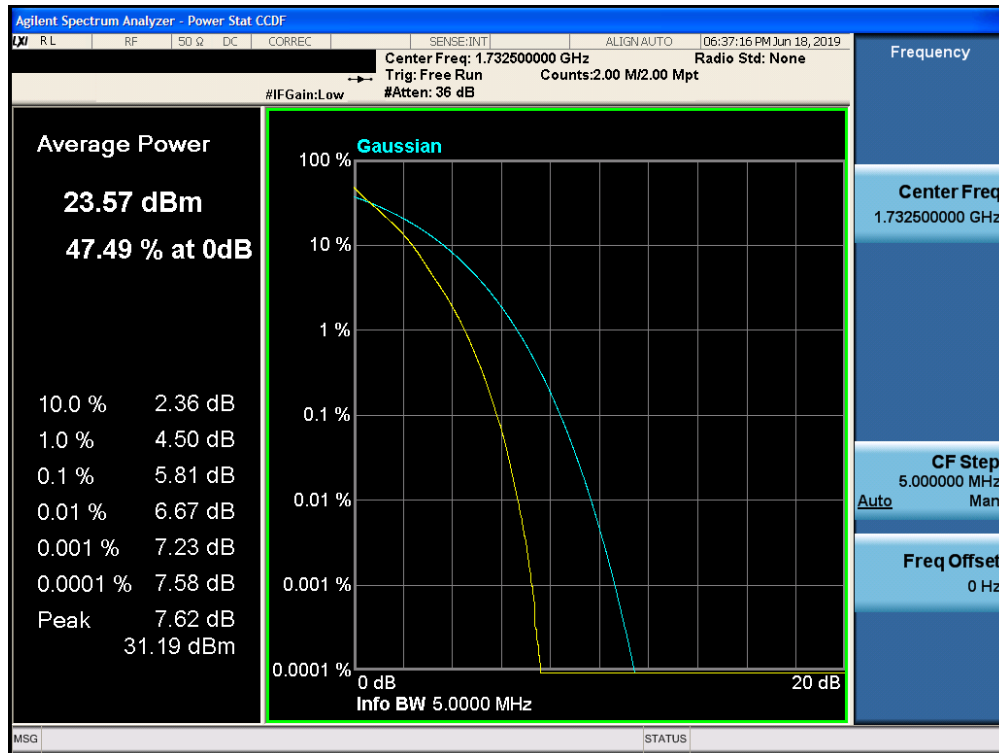


Plot 7-224. PAR Plot (Band 4 - 3.0MHz QPSK - Full RB Configuration)

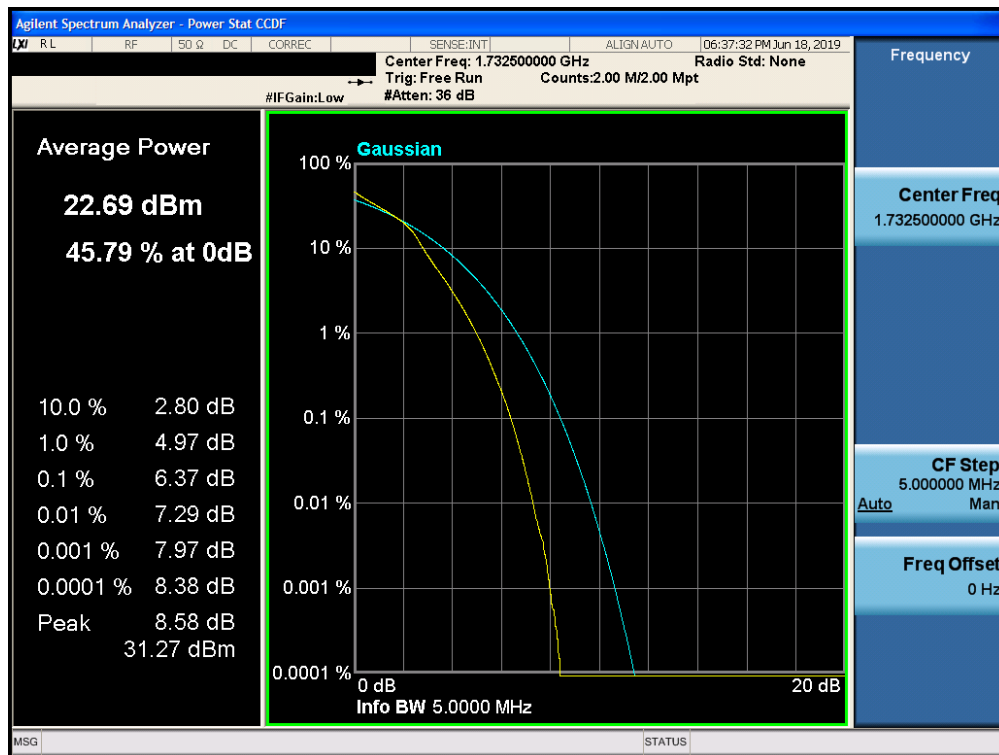


Plot 7-225. PAR Plot (Band 4 - 3.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2157	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 142 of 203

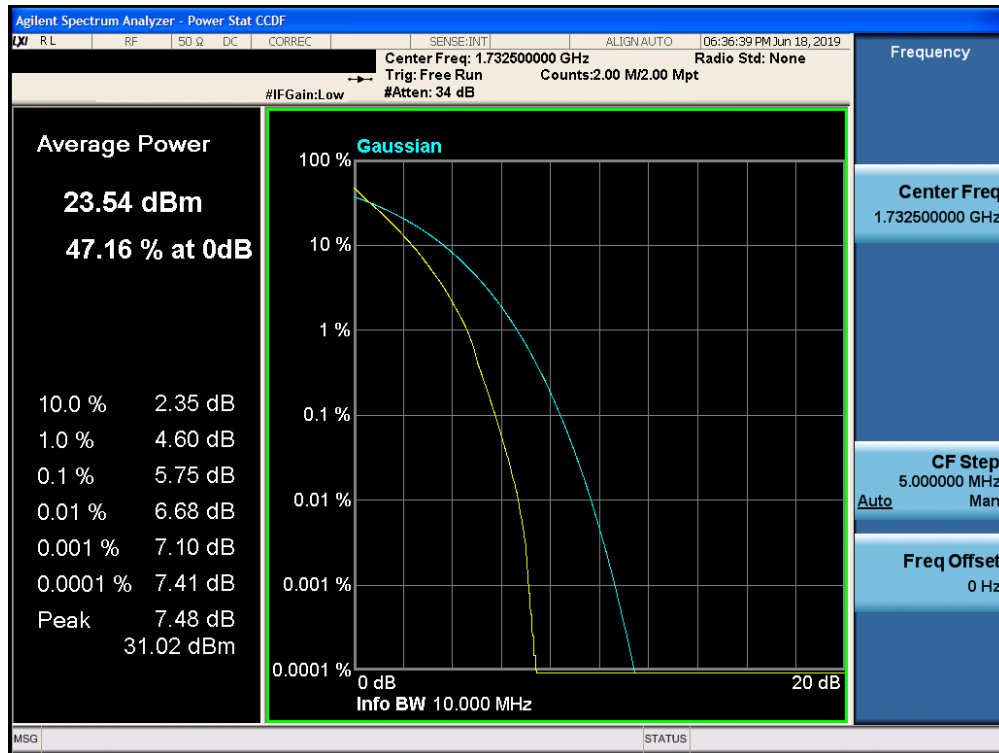


Plot 7-226. PAR Plot (Band 4 - 5.0MHz QPSK - Full RB Configuration)

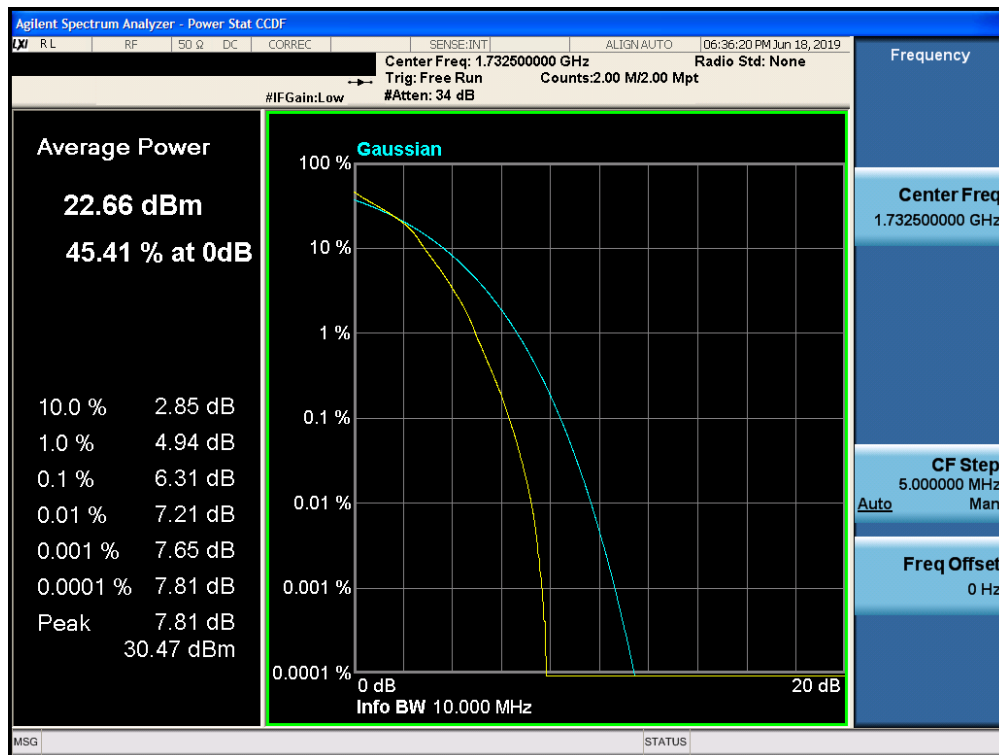


Plot 7-227. PAR Plot (Band 4 - 5.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2157	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 143 of 203

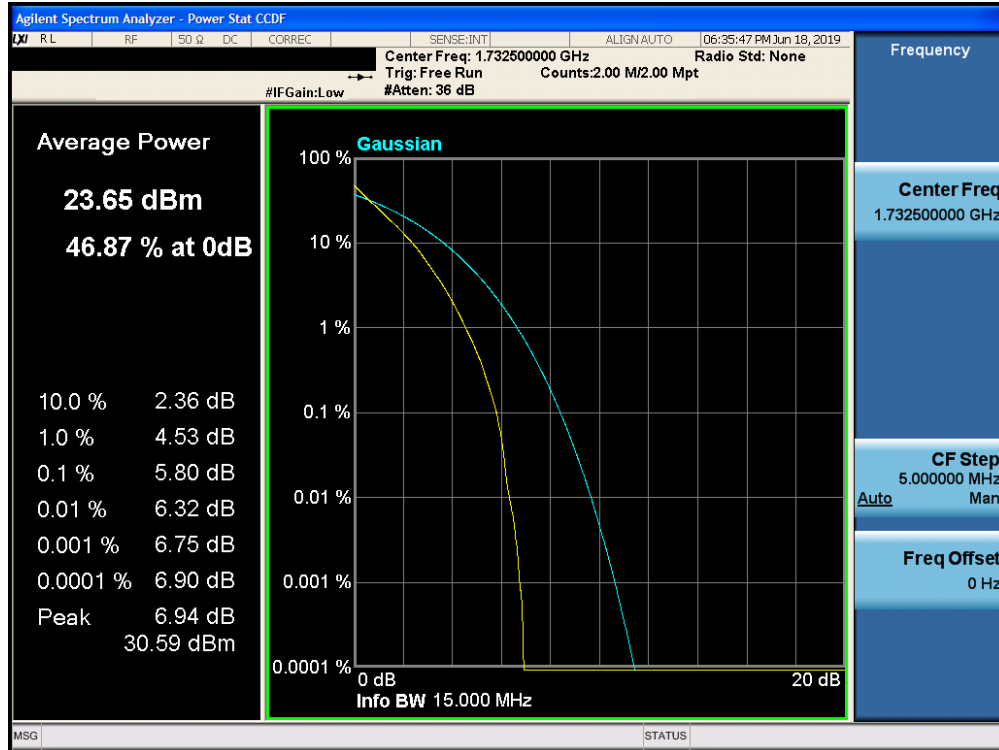


Plot 7-228. PAR Plot (Band 4 - 10.0MHz QPSK - Full RB Configuration)

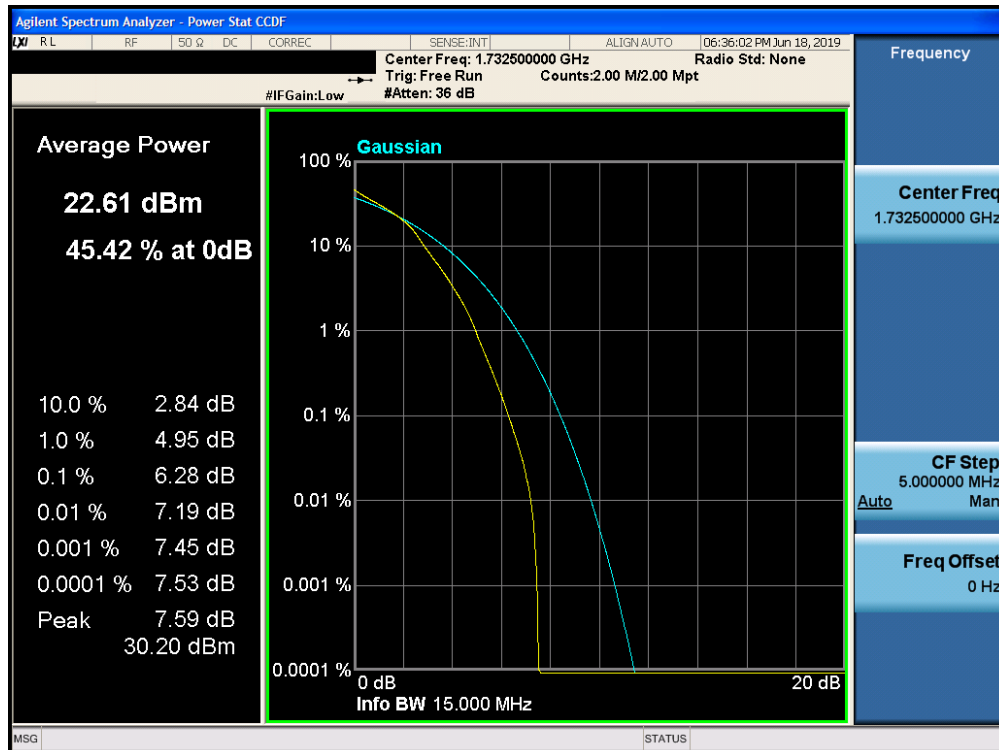


Plot 7-229. PAR Plot (Band 4 - 10.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2157	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 144 of 203

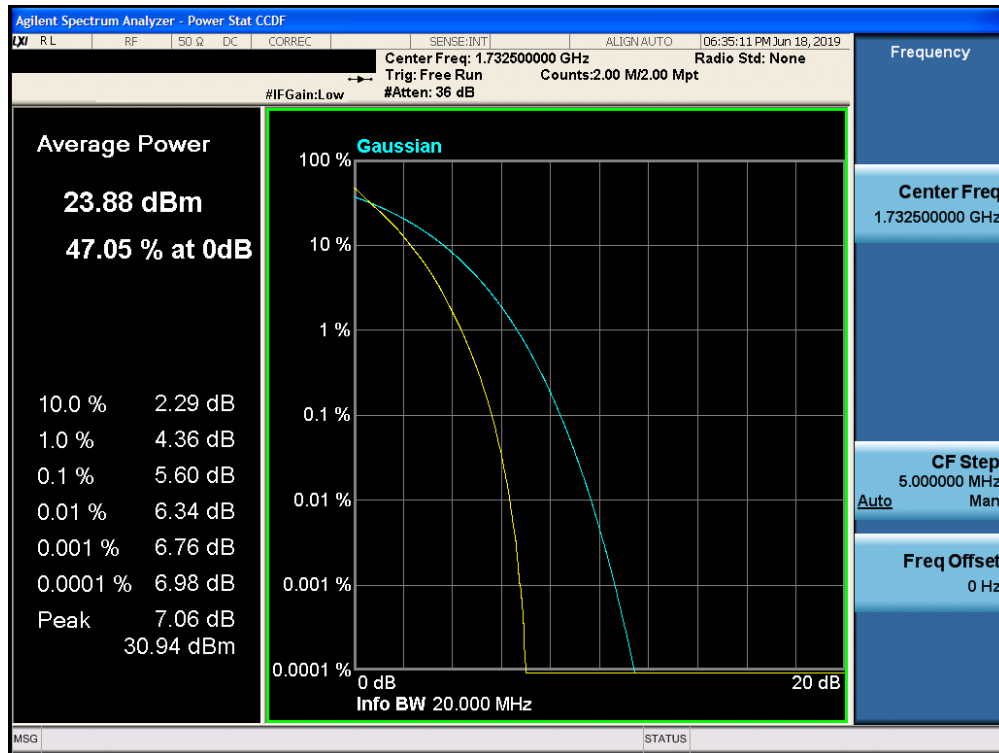


Plot 7-230. PAR Plot (Band 4 - 15.0MHz QPSK - Full RB Configuration)

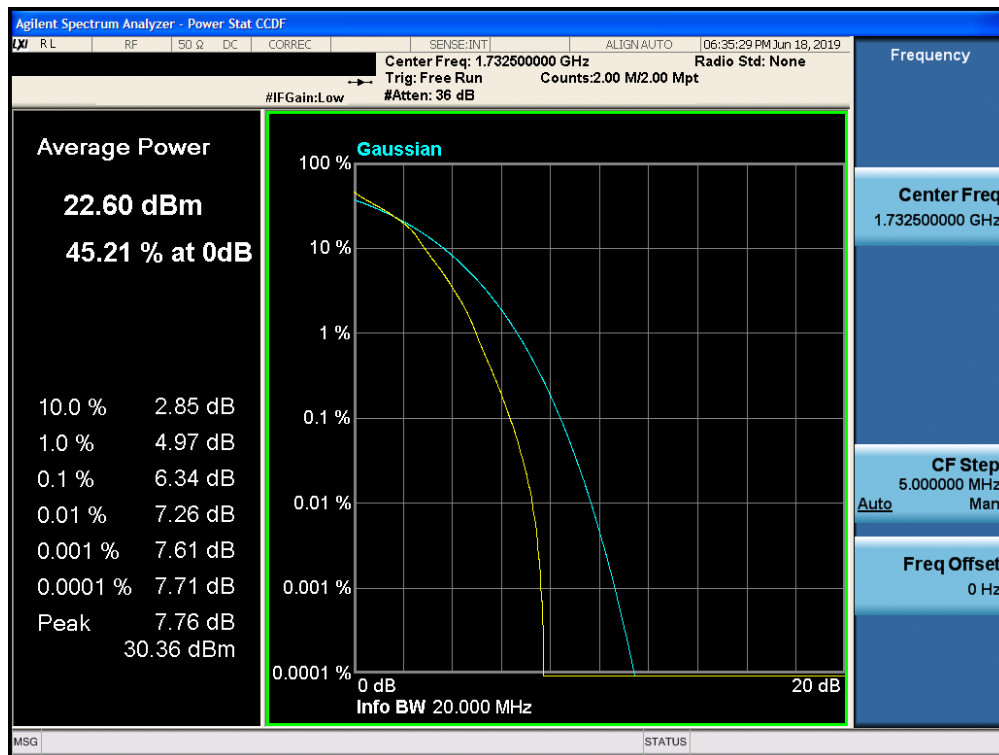


Plot 7-231. PAR Plot (Band 4 - 15.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2157	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 145 of 203



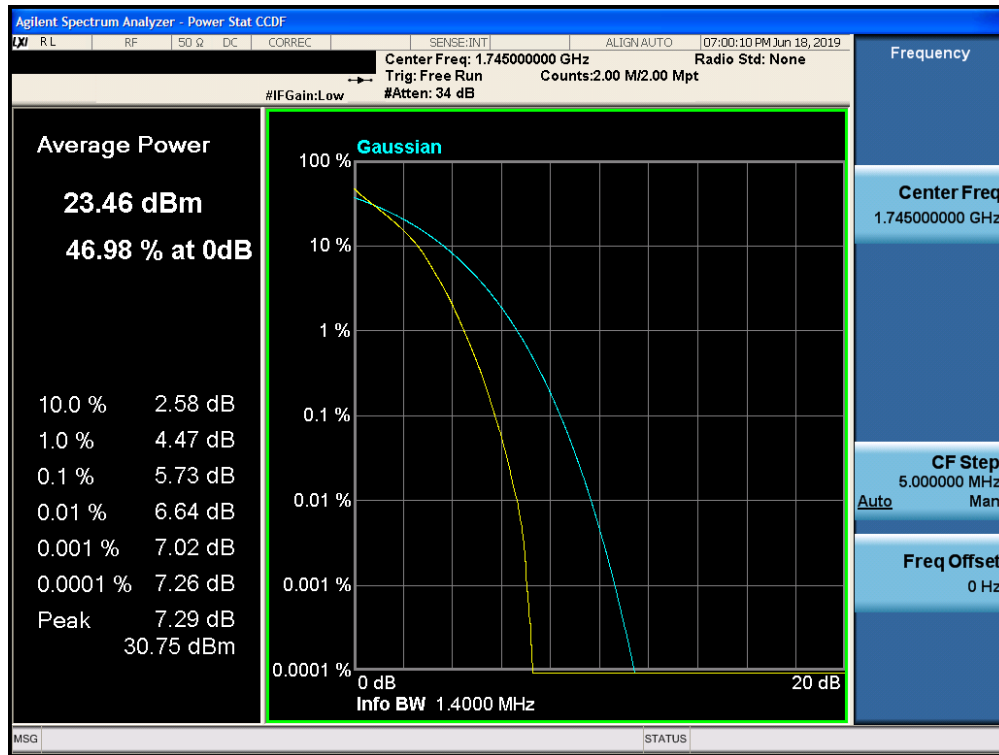
Plot 7-232. PAR Plot (Band 4 - 20.0MHz QPSK - Full RB Configuration)



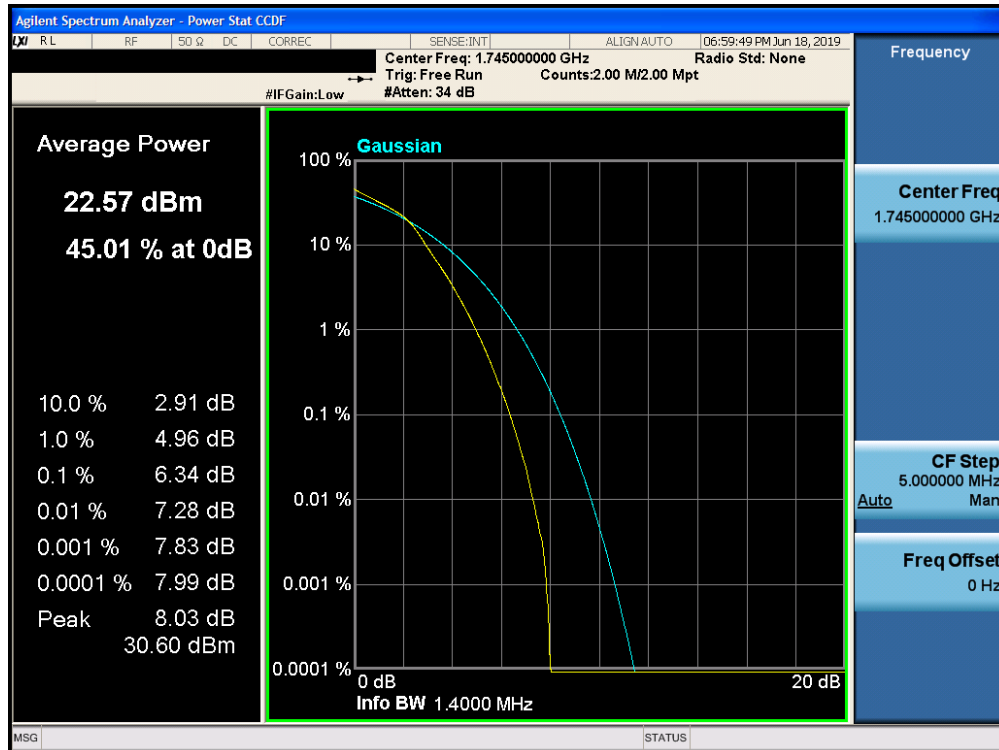
Plot 7-233. PAR Plot (Band 4 - 20.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2157	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 146 of 203

Band 66

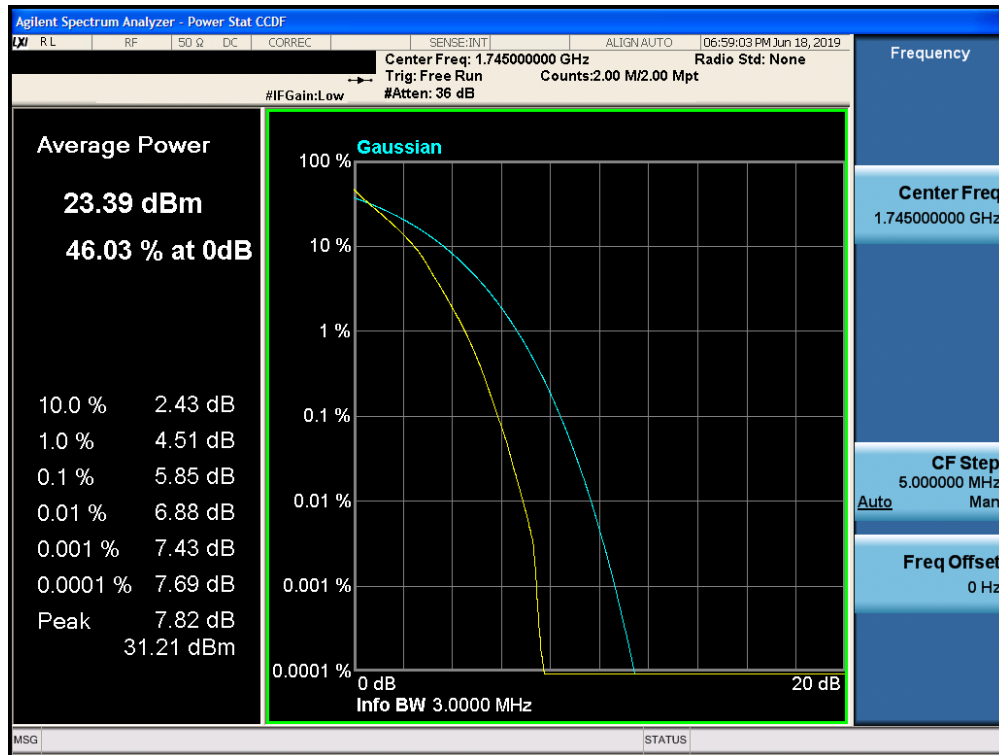


Plot 7-234. PAR Plot (Band 66 - 1.4MHz QPSK - Full RB Configuration)

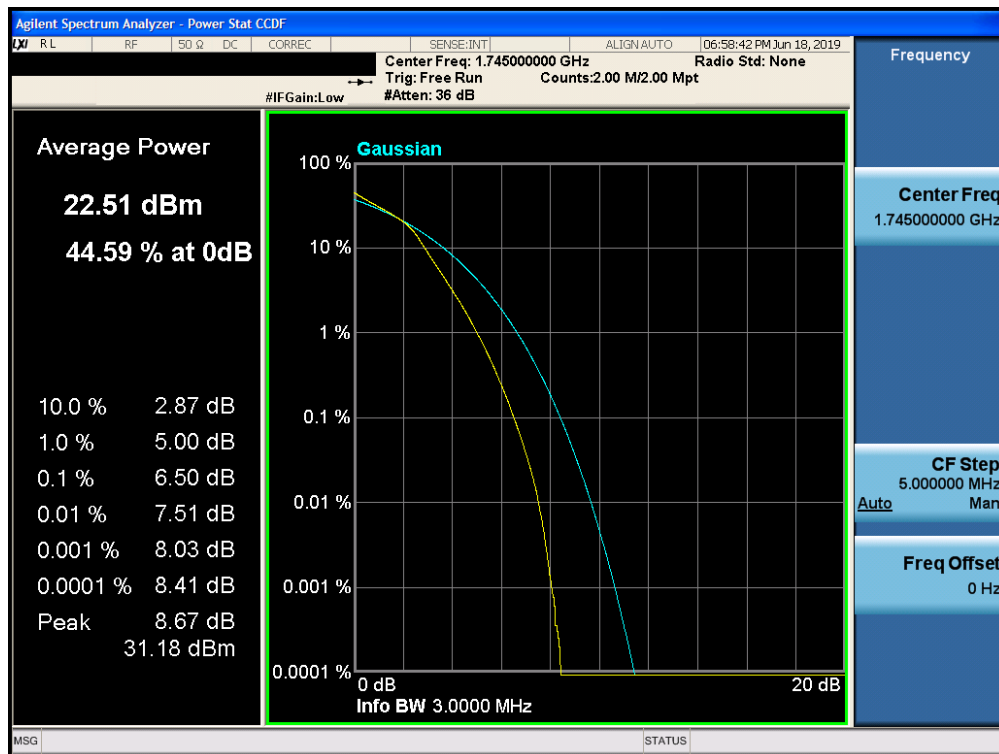


Plot 7-235. PAR Plot (Band 66 - 1.4MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2157	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 147 of 203

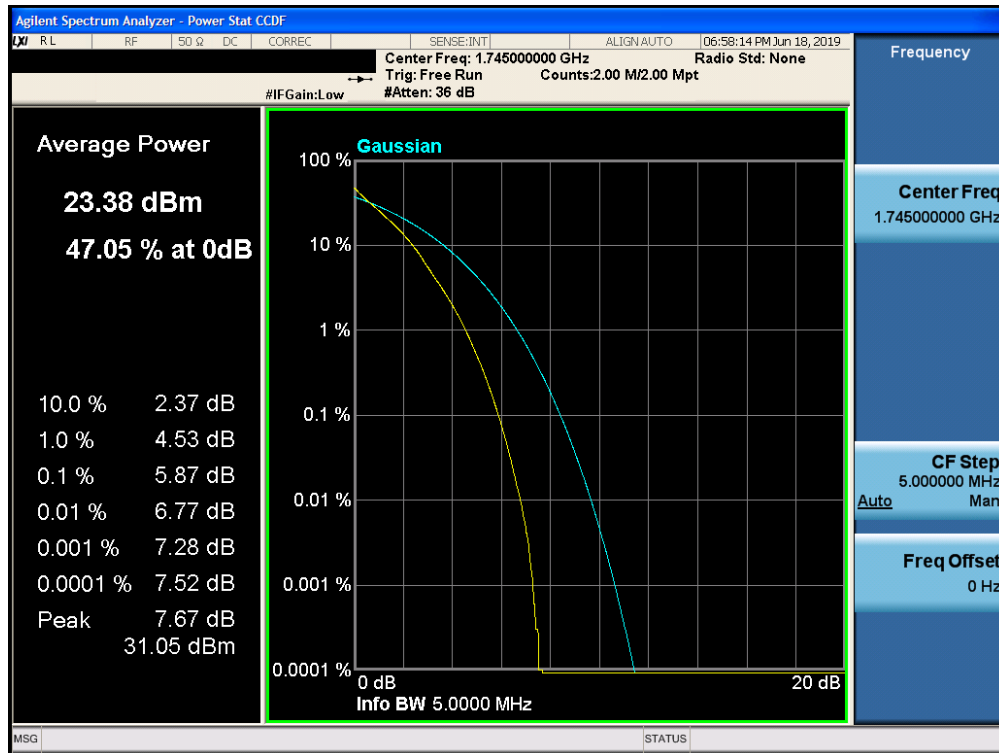


Plot 7-236. PAR Plot (Band 66 - 3.0MHz QPSK - Full RB Configuration)

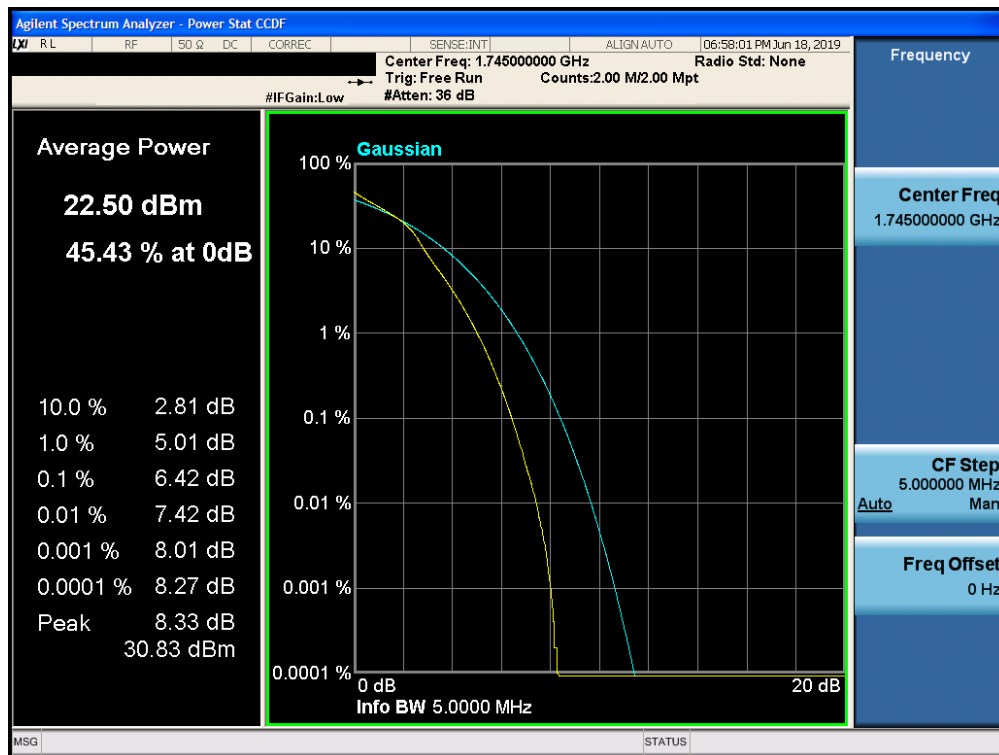


Plot 7-237. PAR Plot (Band 66 - 3.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2157	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 148 of 203

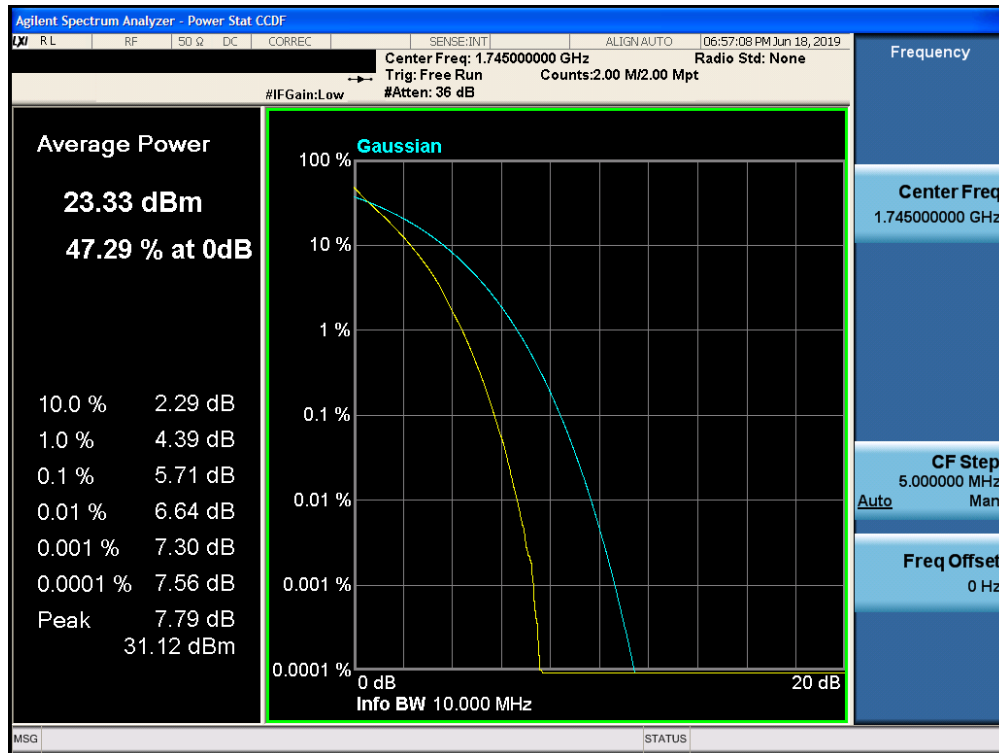


Plot 7-238. PAR Plot (Band 66 - 5.0MHz QPSK - Full RB Configuration)

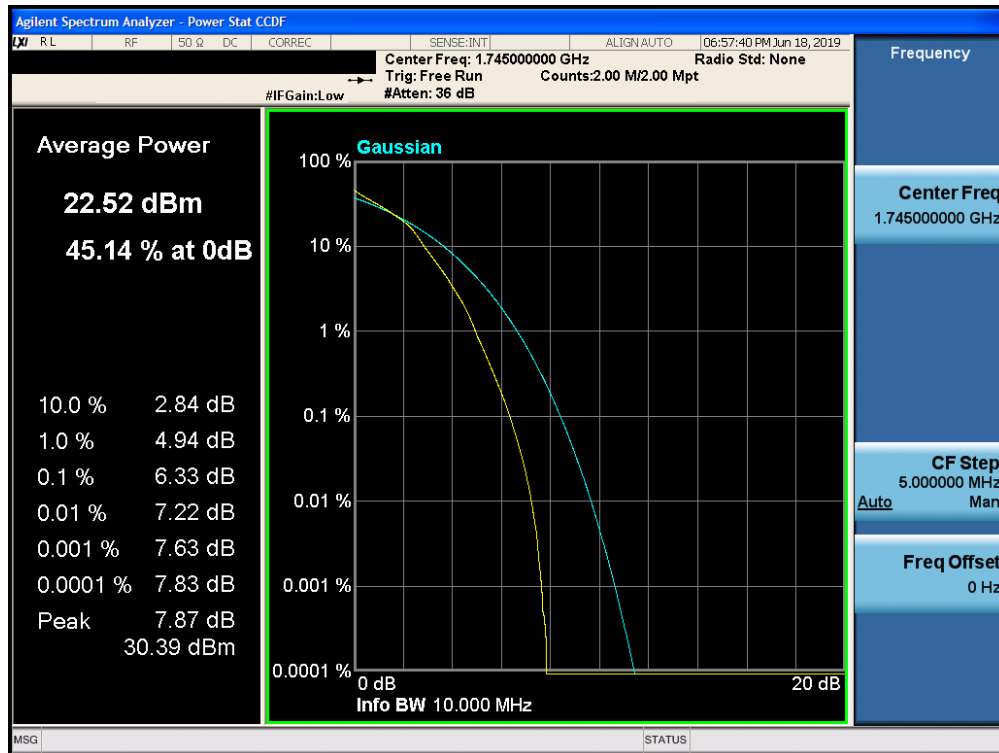


Plot 7-239. PAR Plot (Band 66 - 5.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2157	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 149 of 203

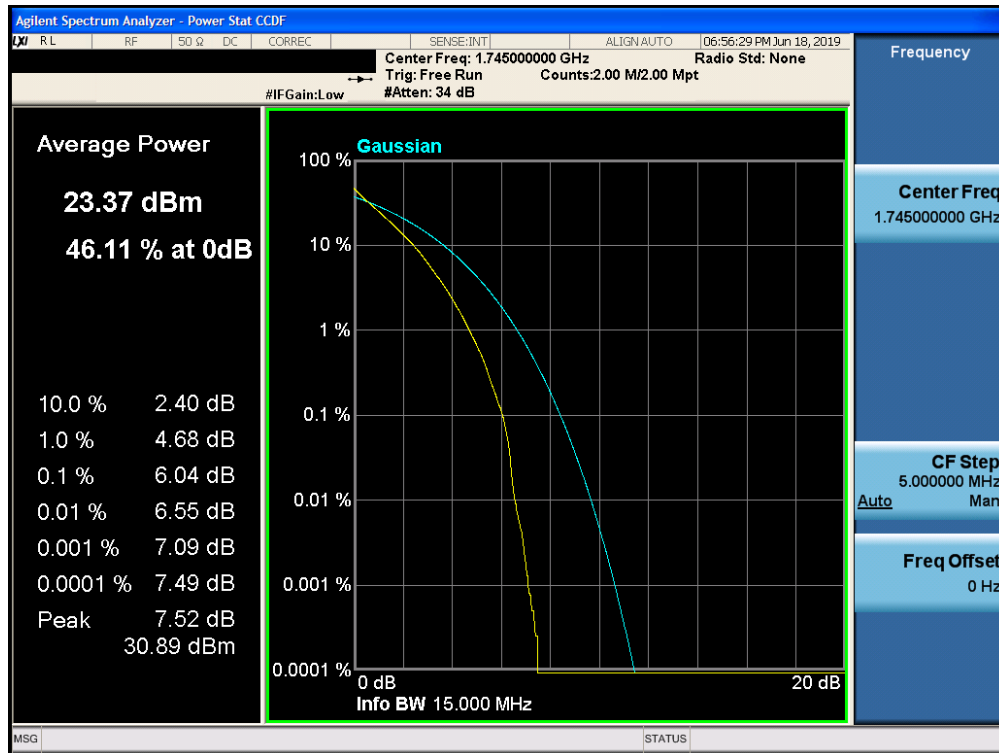


Plot 7-240. PAR Plot (Band 66 - 10.0MHz QPSK - Full RB Configuration)

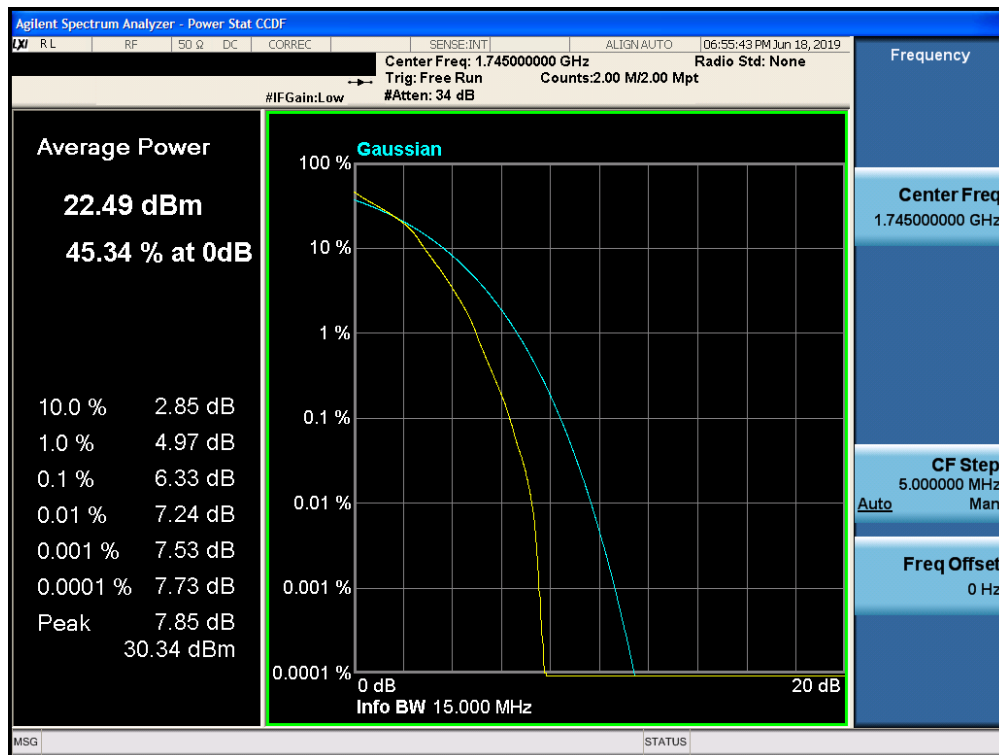


Plot 7-241. PAR Plot (Band 66 - 10.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2157	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 150 of 203

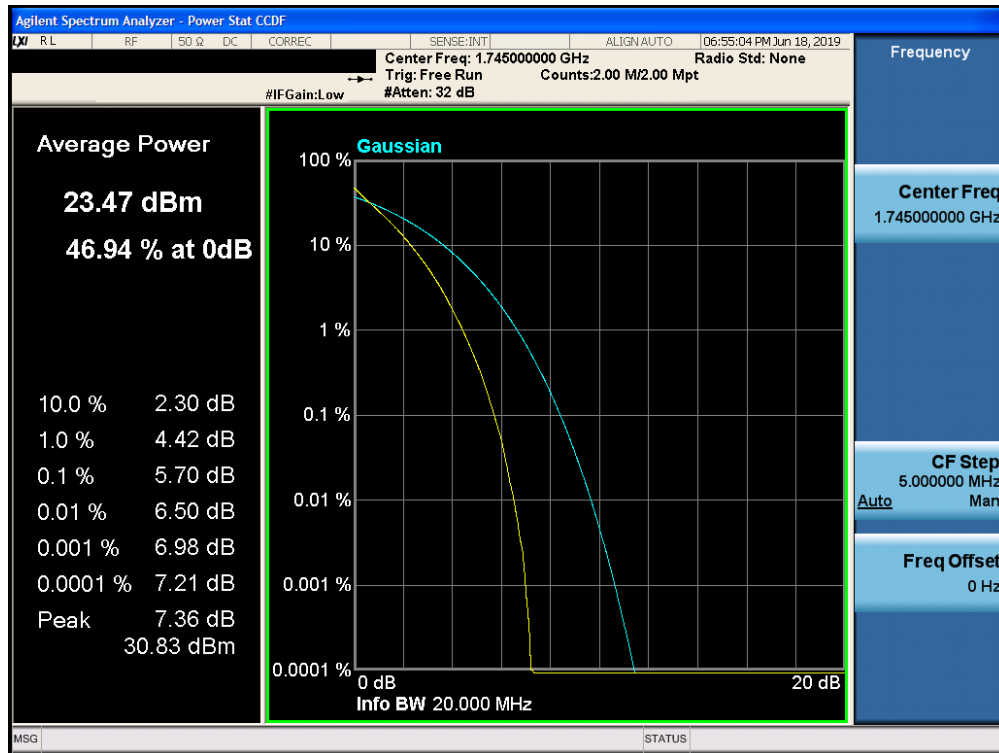


Plot 7-242. PAR Plot (Band 66 - 15.0MHz QPSK - Full RB Configuration)

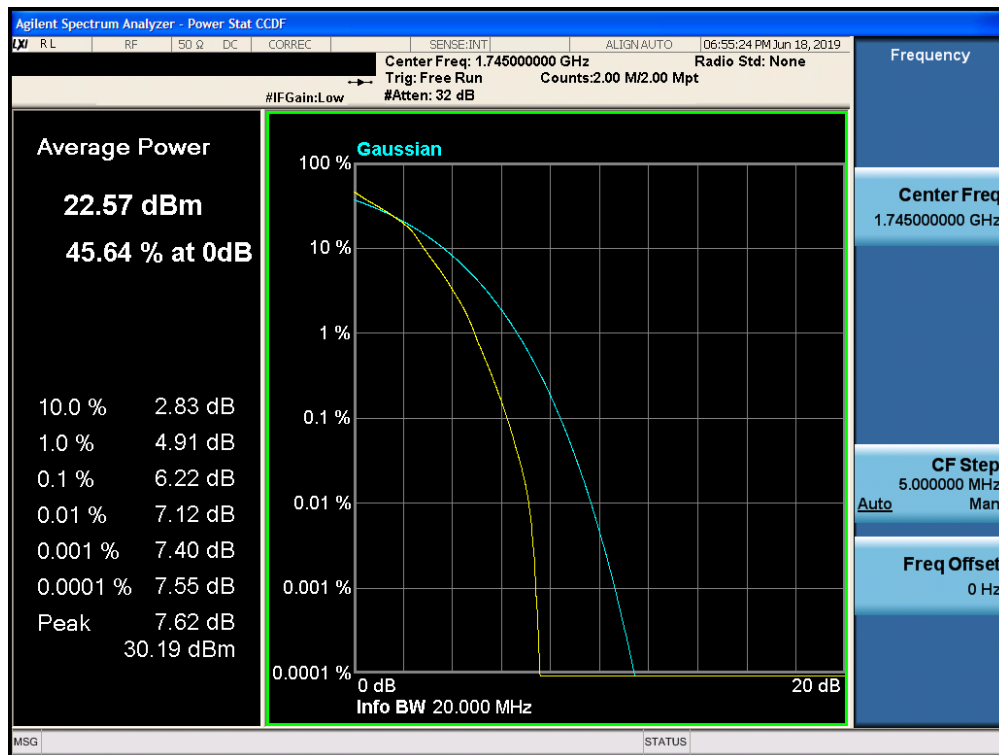


Plot 7-243. PAR Plot (Band 66 - 15.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2157	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 151 of 203



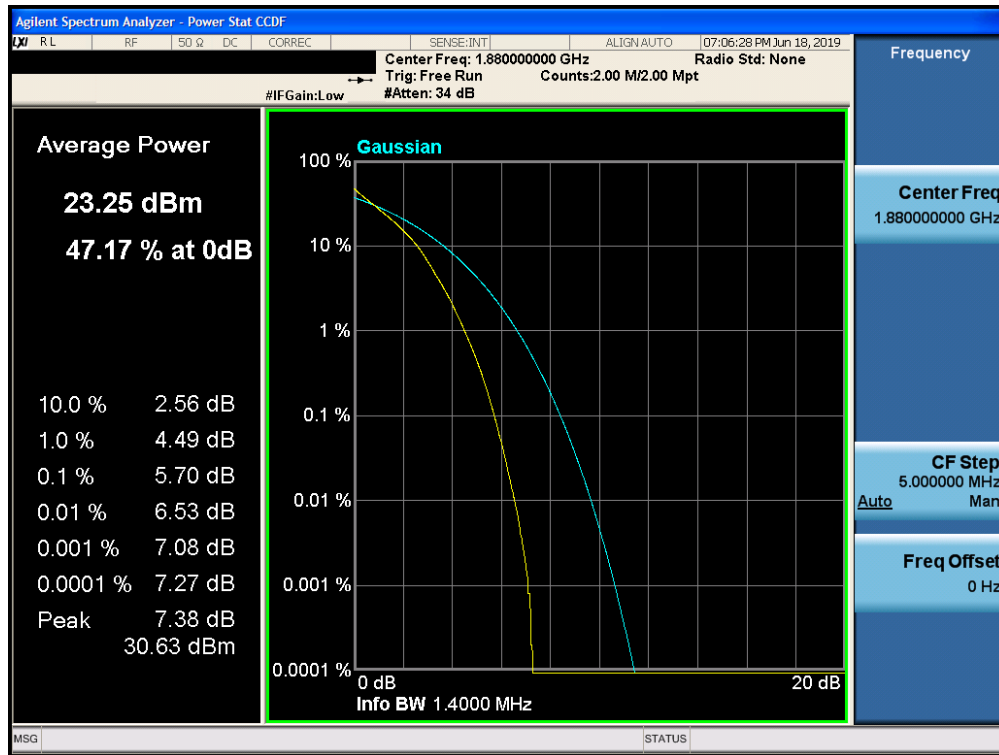
Plot 7-244. PAR Plot (Band 66 - 20.0MHz QPSK - Full RB Configuration)



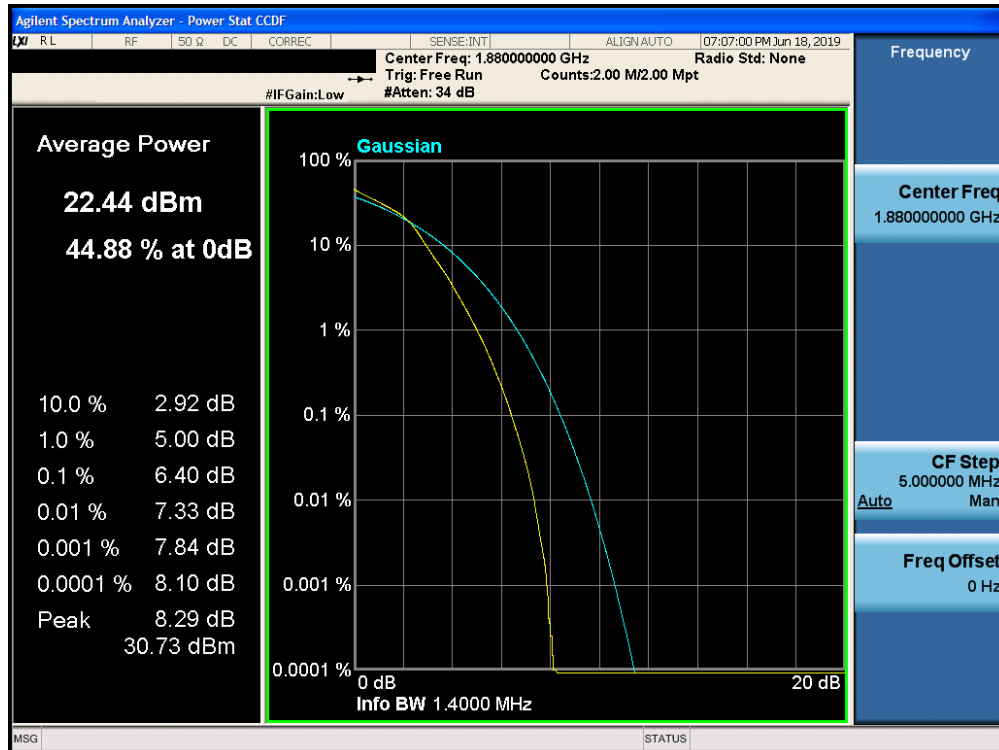
Plot 7-245. PAR Plot (Band 66 - 20.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2157	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 152 of 203

Band 2

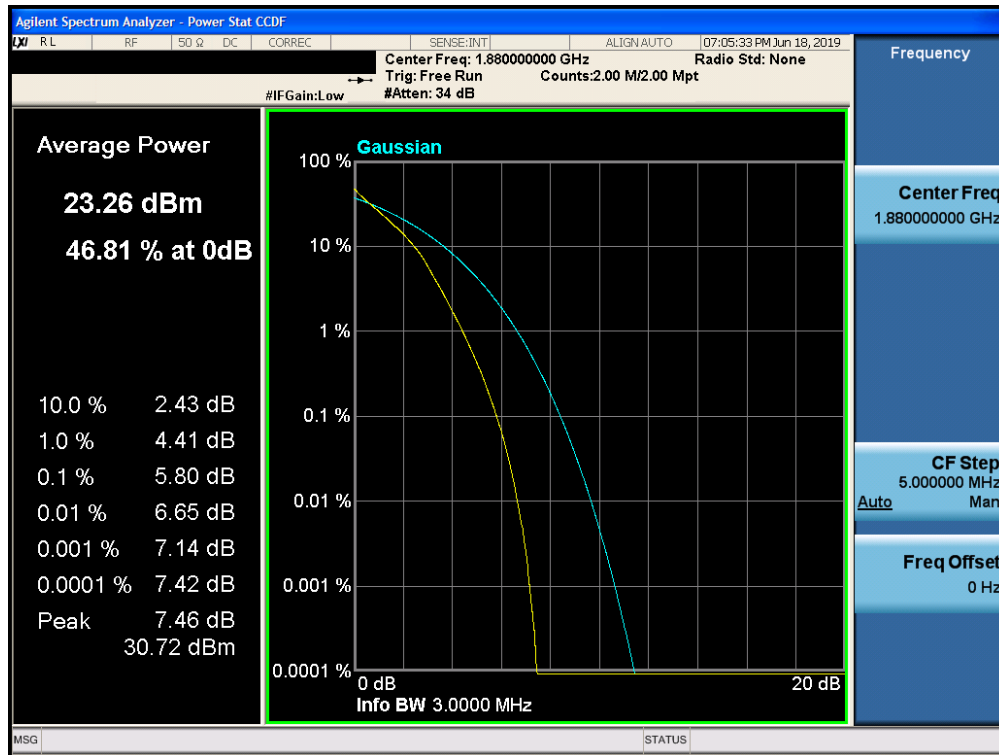


Plot 7-246. PAR Plot (Band 2 - 1.4MHz QPSK - Full RB Configuration)

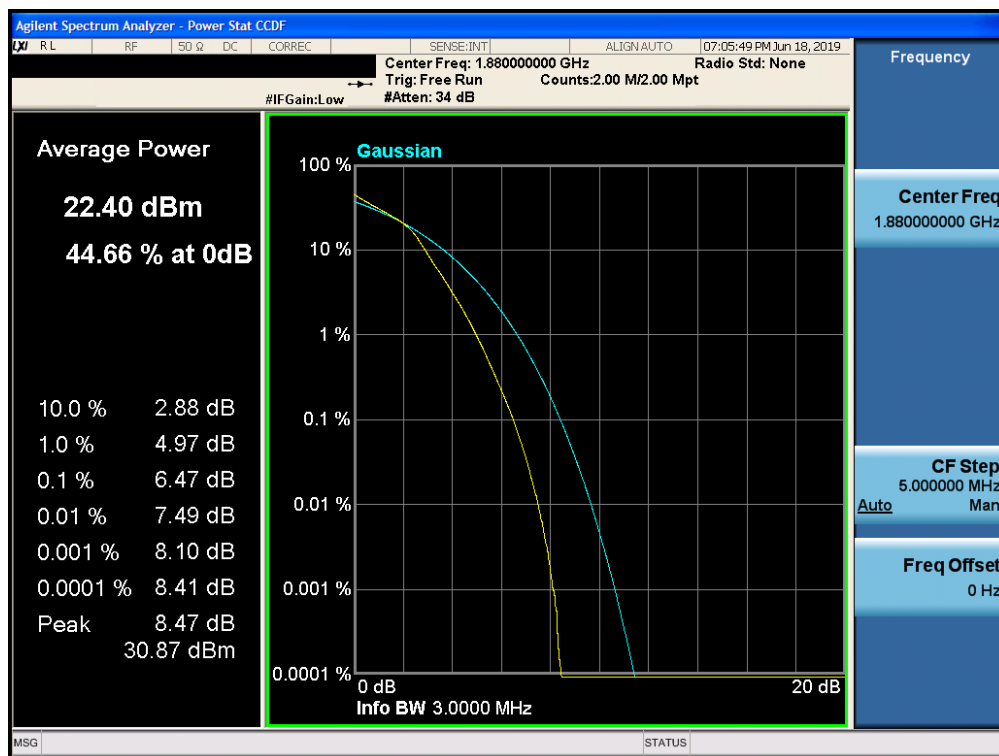


Plot 7-247. PAR Plot (Band 2 - 1.4MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2157	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 153 of 203

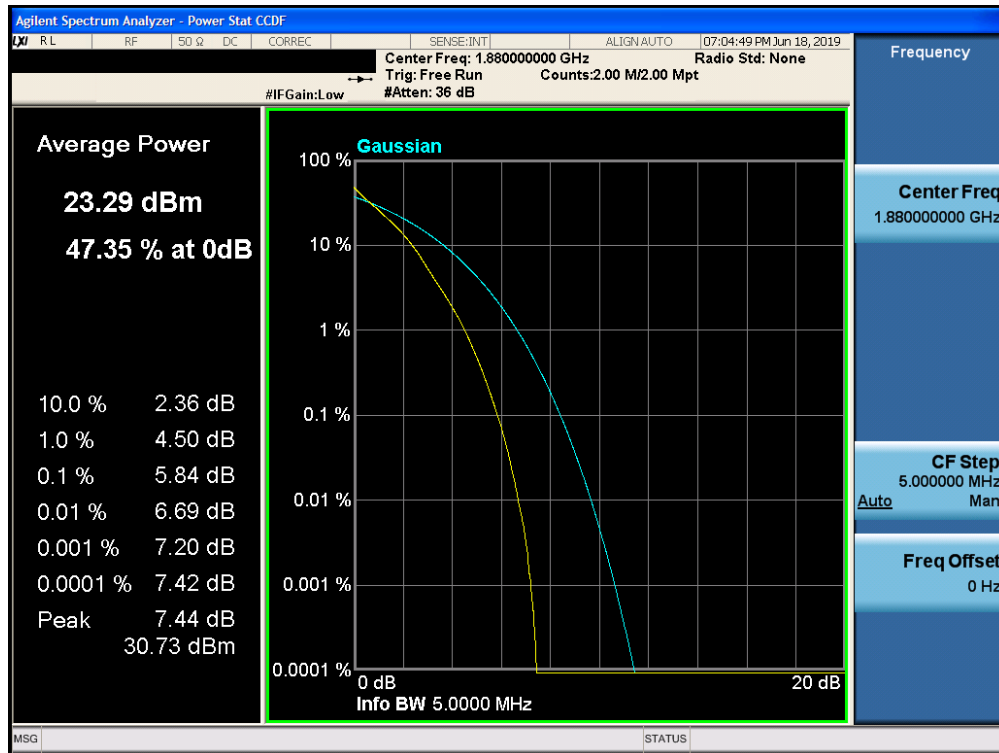


Plot 7-248. PAR Plot (Band 2 - 3.0MHz QPSK - Full RB Configuration)

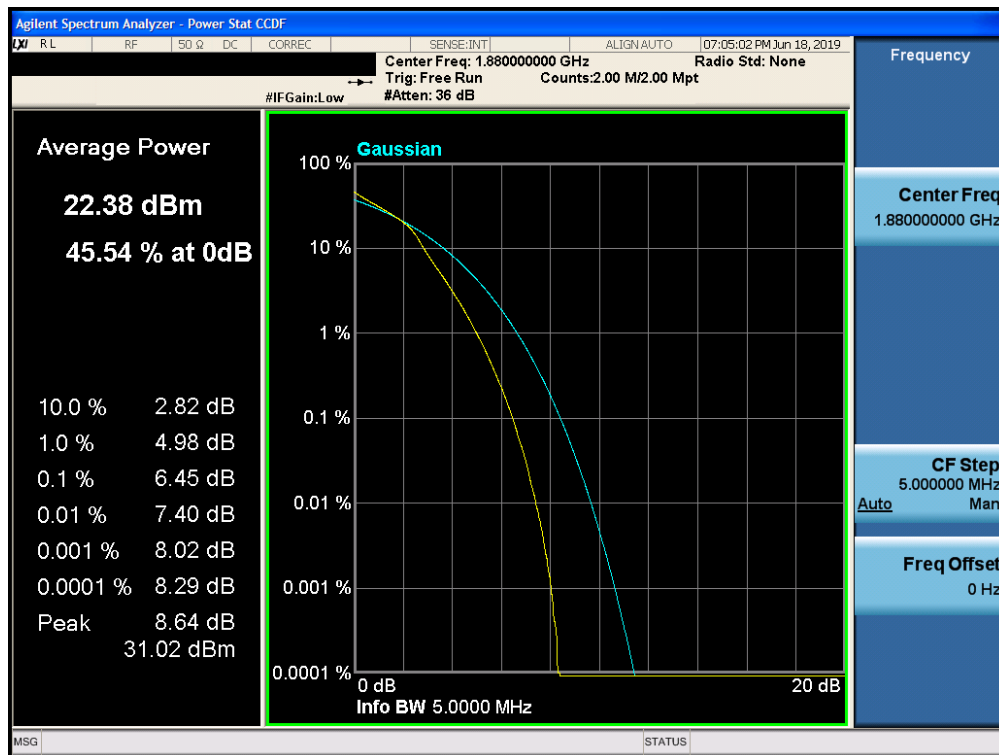


Plot 7-249. PAR Plot (Band 2 - 3.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2157	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 154 of 203

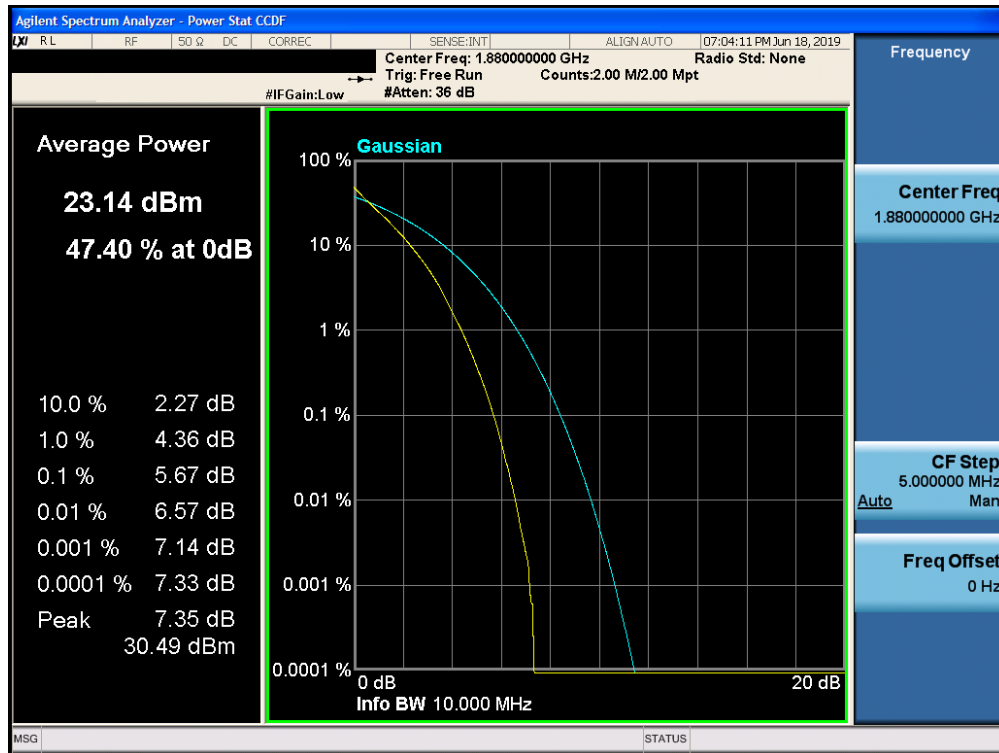


Plot 7-250. PAR Plot (Band 2 - 5.0MHz QPSK - Full RB Configuration)

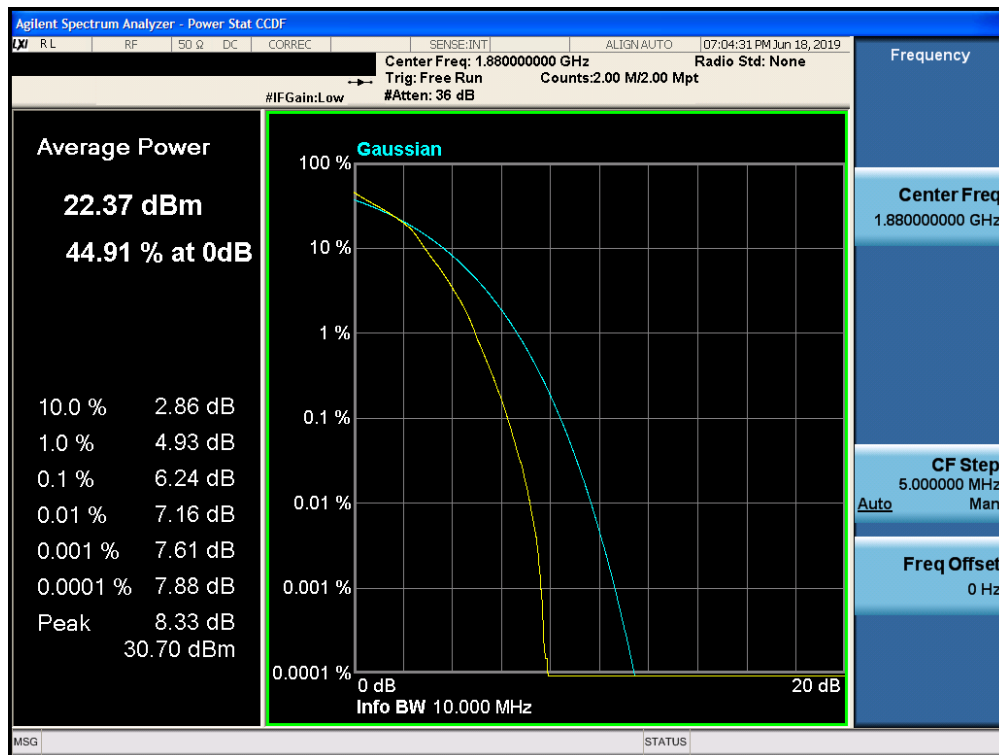


Plot 7-251. PAR Plot (Band 2 - 5.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2157	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 155 of 203

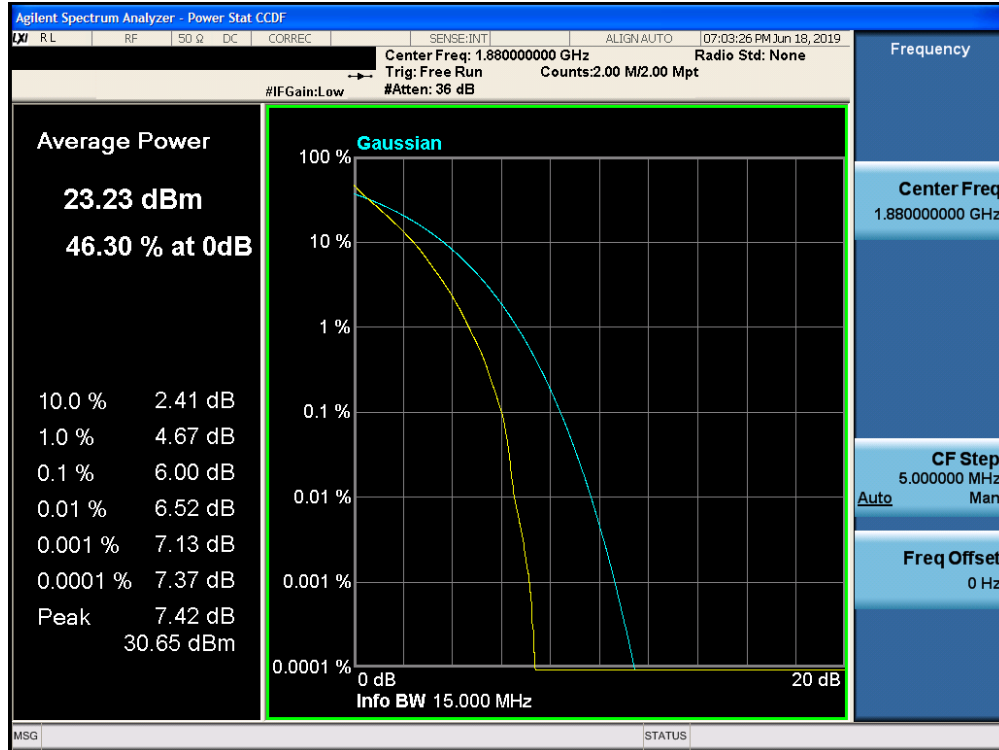


Plot 7-252. PAR Plot (Band 2 - 10.0MHz QPSK - Full RB Configuration)

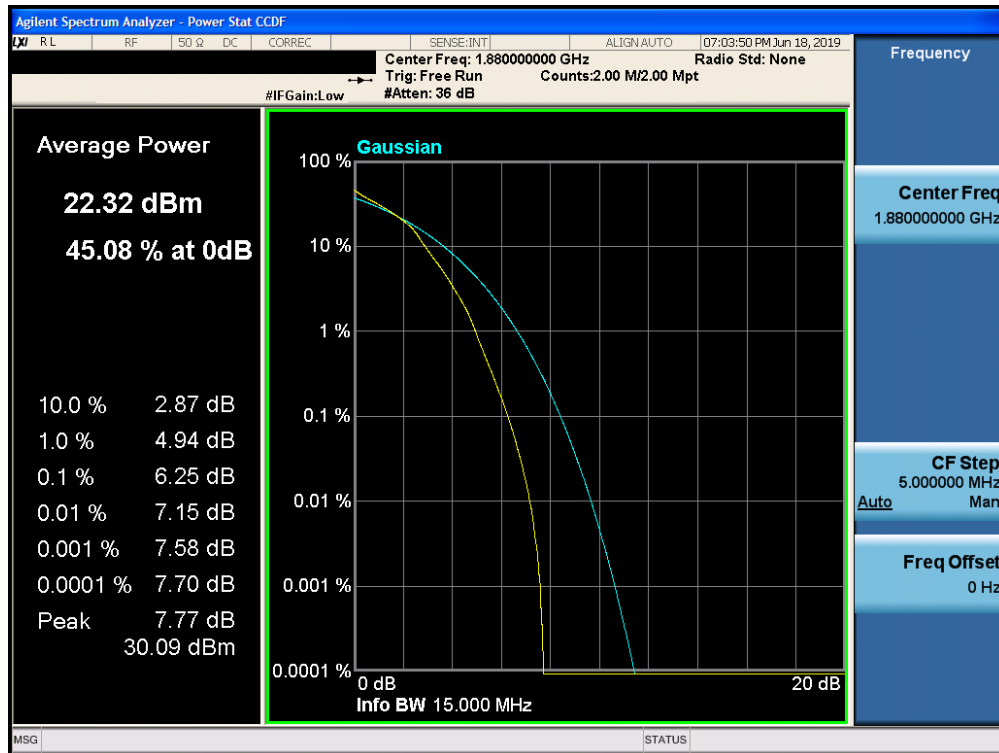


Plot 7-253. PAR Plot (Band 2 - 10.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2157	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 156 of 203

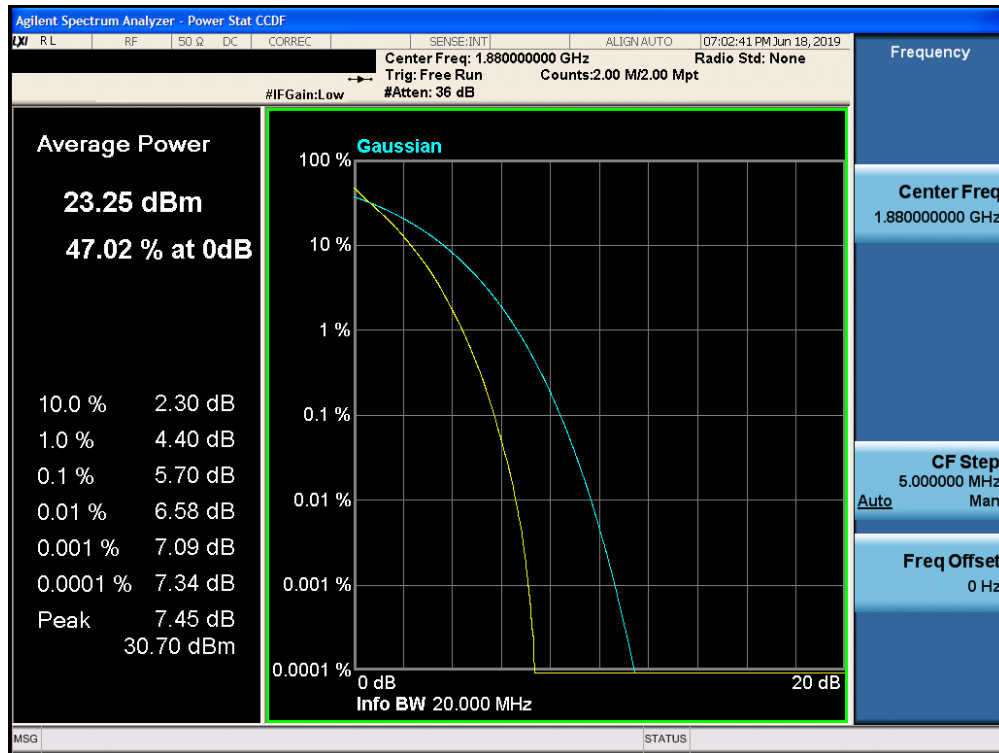


Plot 7-254. PAR Plot (Band 2 - 15.0MHz QPSK - Full RB Configuration)

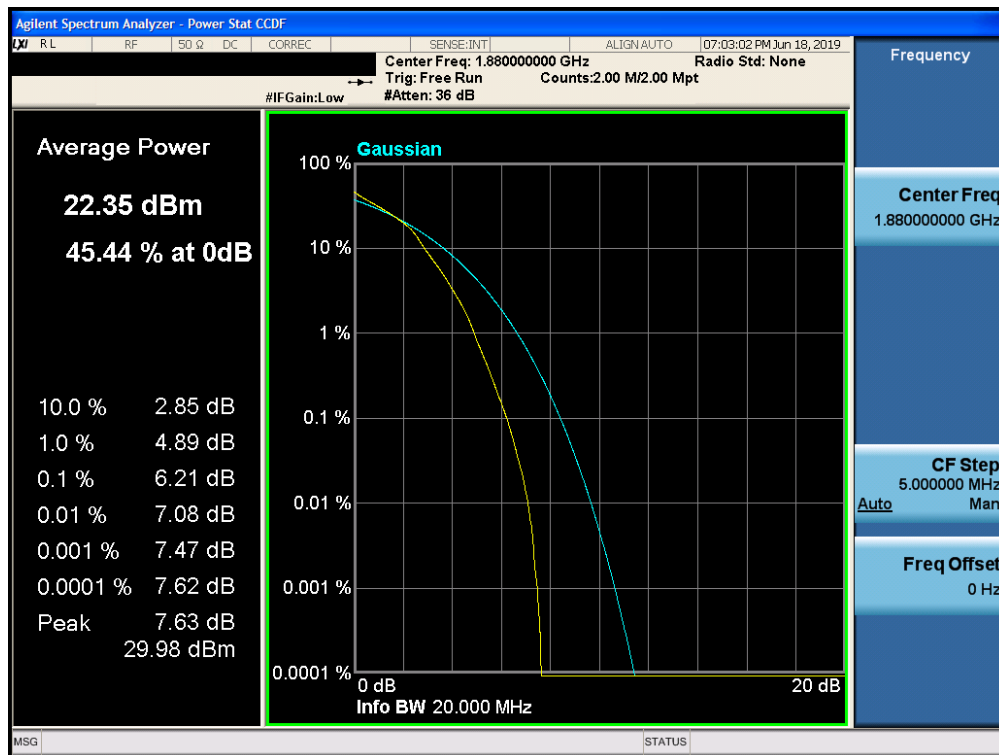


Plot 7-255. PAR Plot (Band 2 - 15.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2157	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 157 of 203



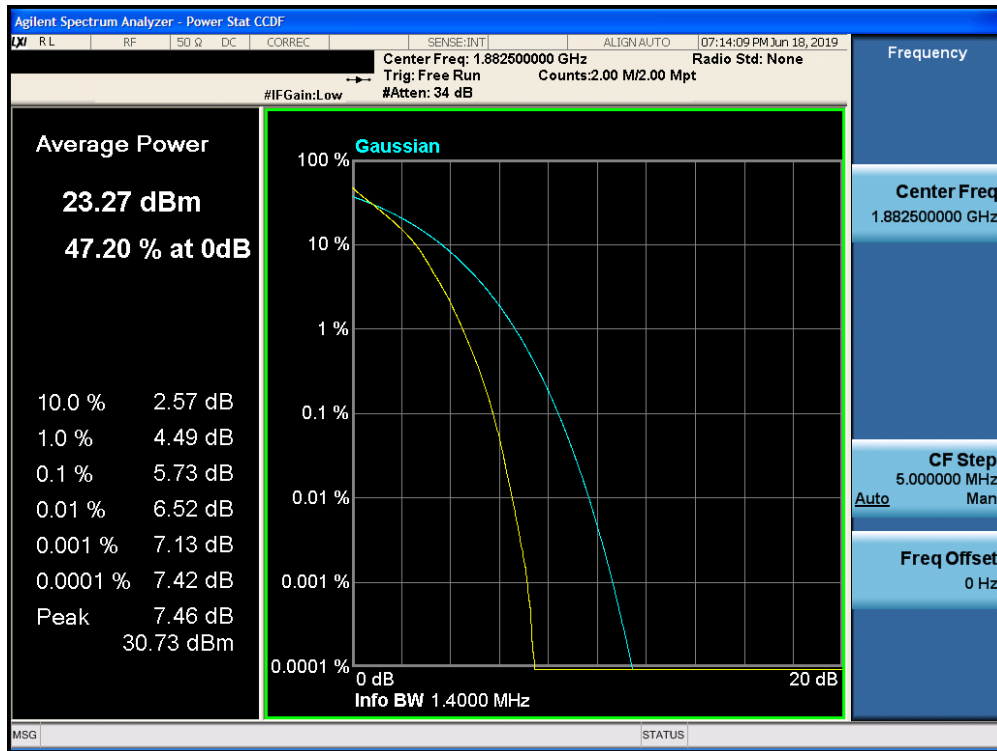
Plot 7-256. PAR Plot (Band 2 - 20.0MHz QPSK - Full RB Configuration)



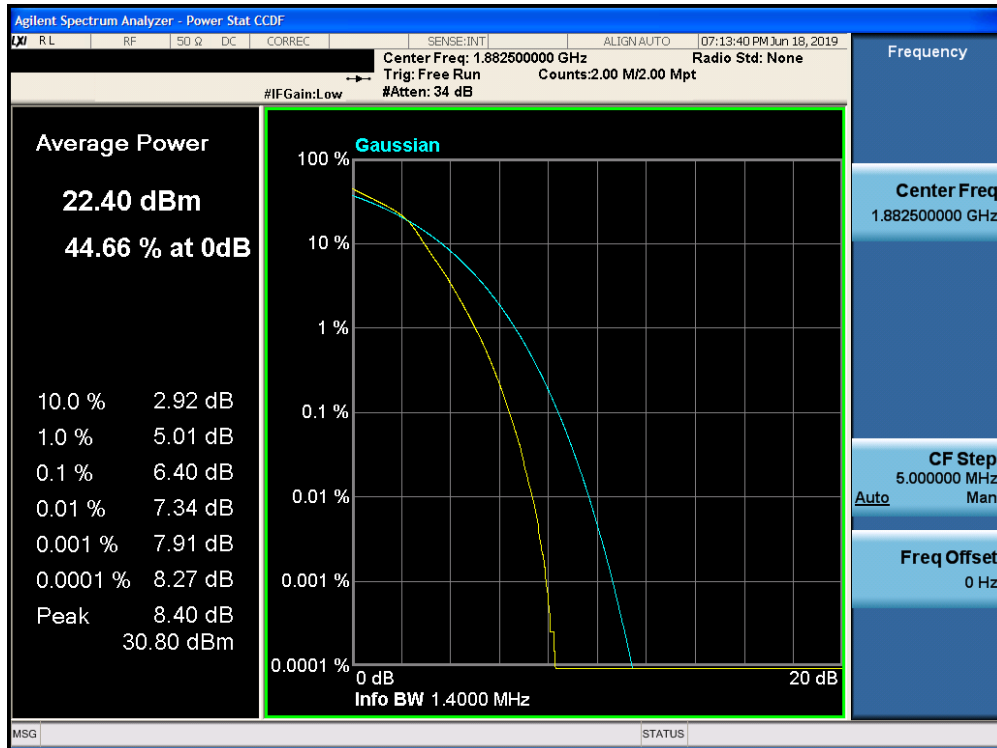
Plot 7-257. PAR Plot (Band 2 - 20.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2157	PCTEST ENGINEERING LABORATORY, INC.		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 158 of 203	

Band 25

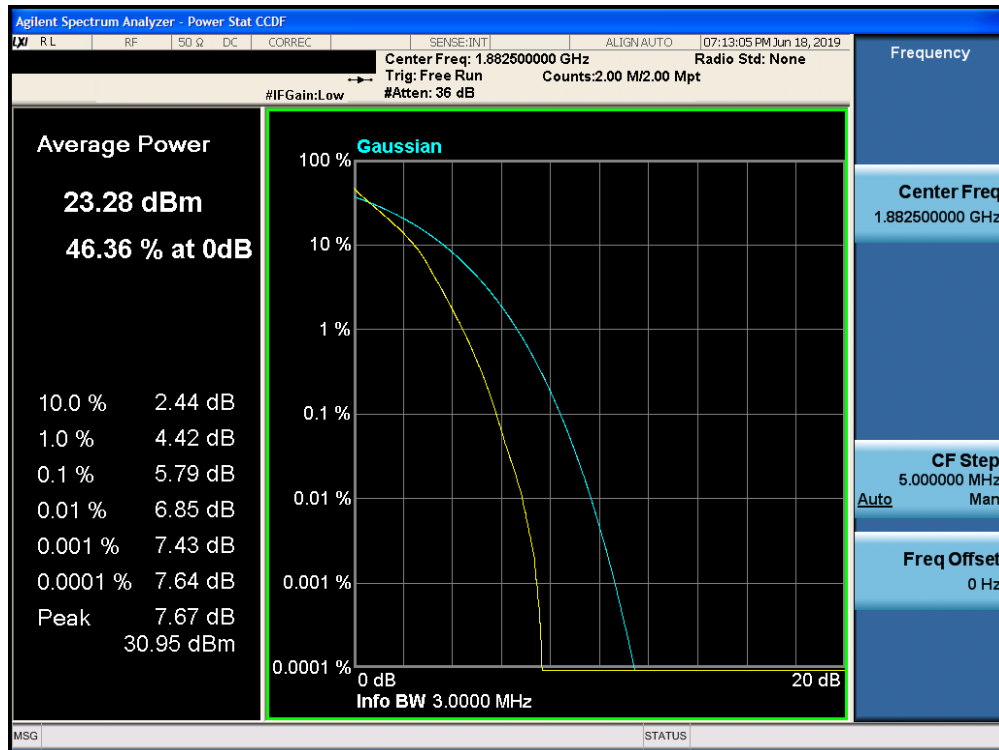


Plot 7-258. PAR Plot (Band 25 - 1.4MHz QPSK - Full RB Configuration)

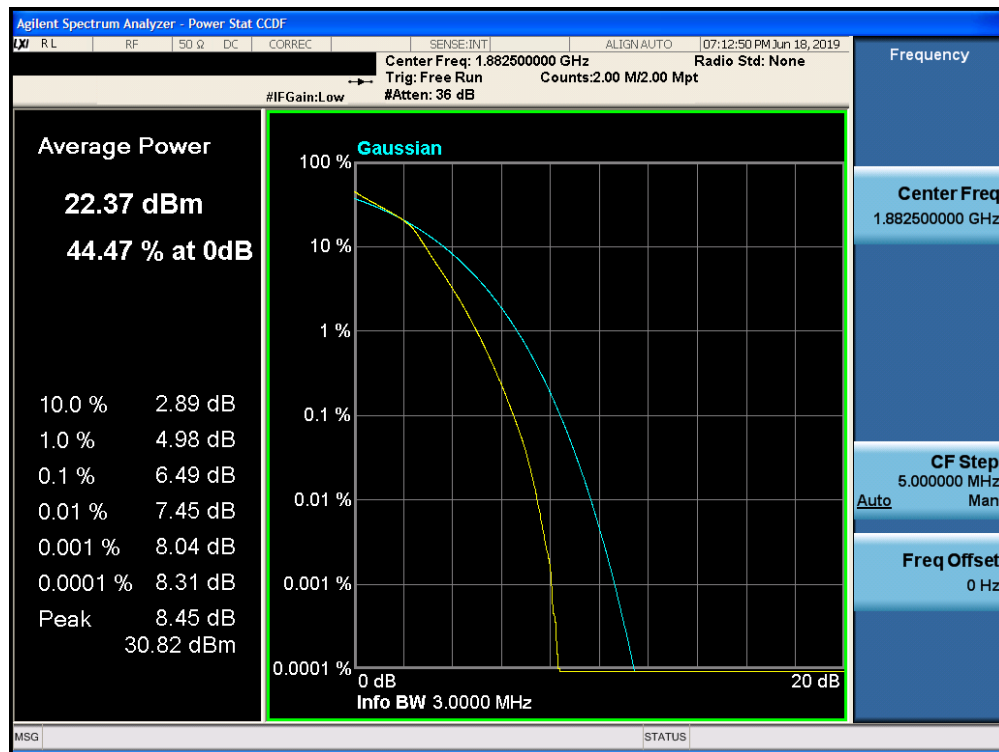


Plot 7-259. PAR Plot (Band 25 - 1.4MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2157	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 159 of 203

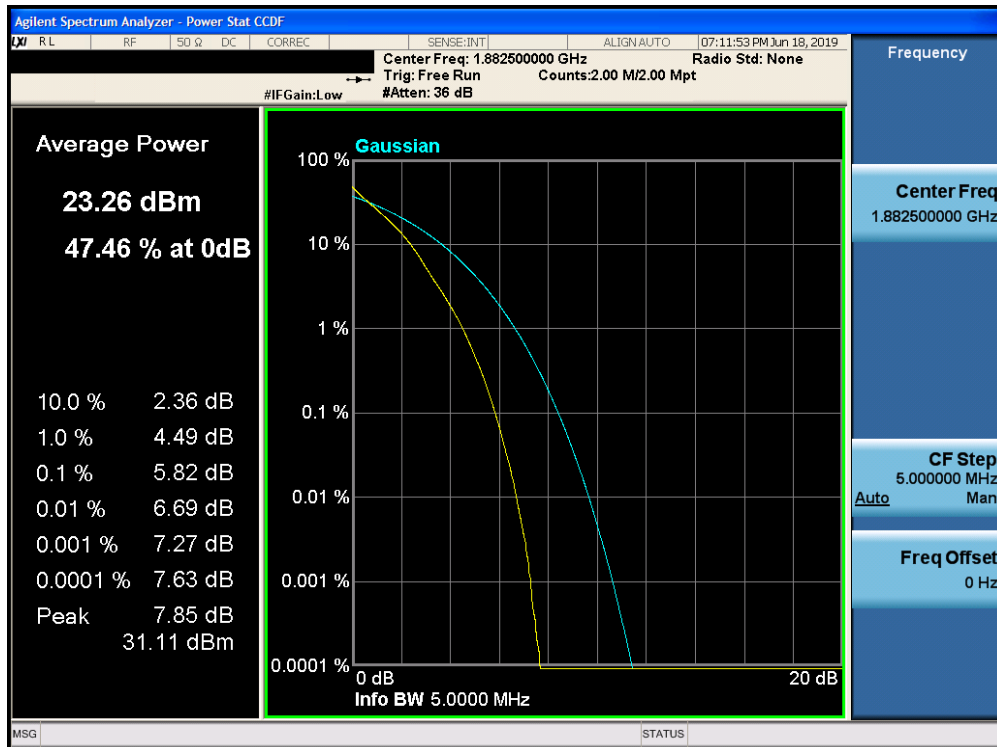


Plot 7-260. PAR Plot (Band 25 - 3.0MHz QPSK - Full RB Configuration)

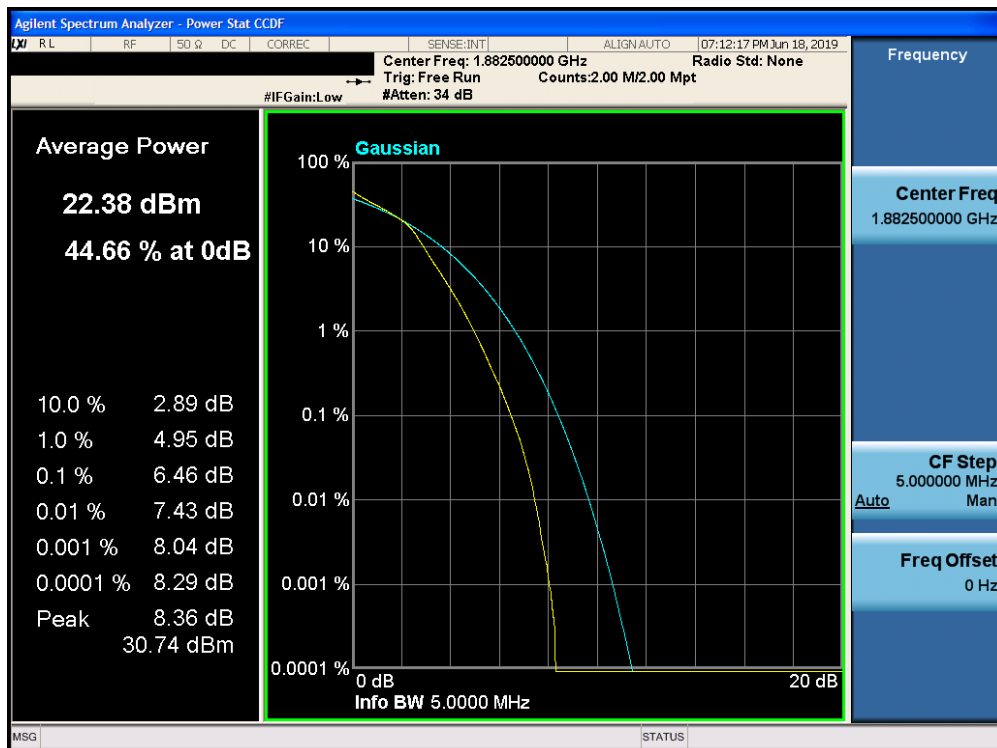


Plot 7-261. PAR Plot (Band 25 - 3.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2157	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 160 of 203

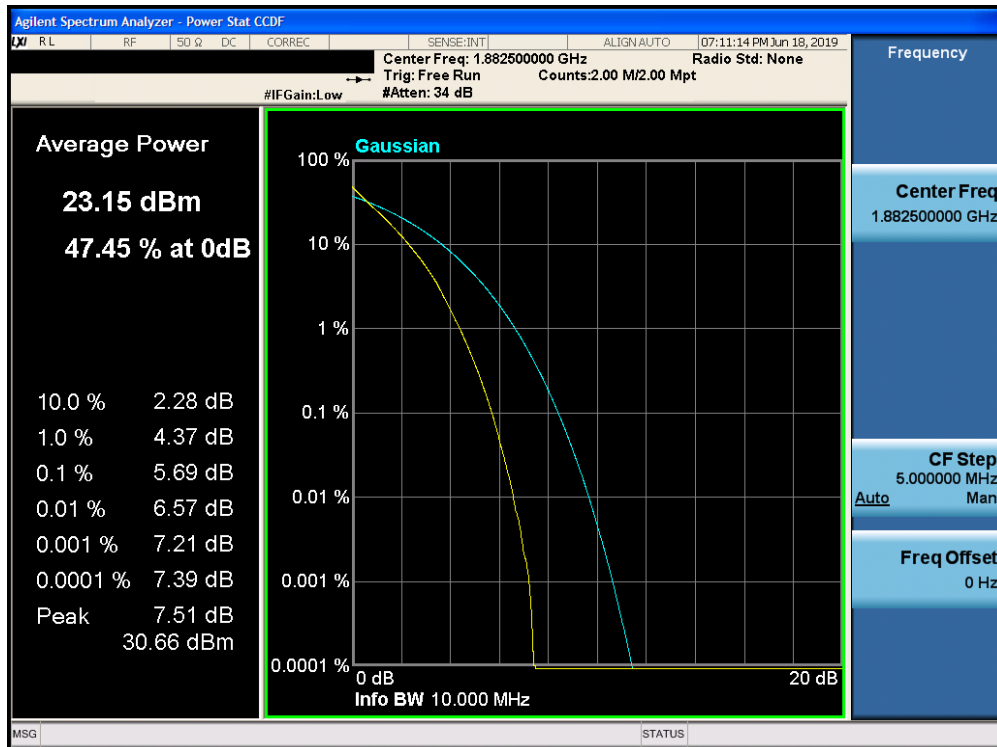


Plot 7-262. PAR Plot (Band 25 - 5.0MHz QPSK - Full RB Configuration)

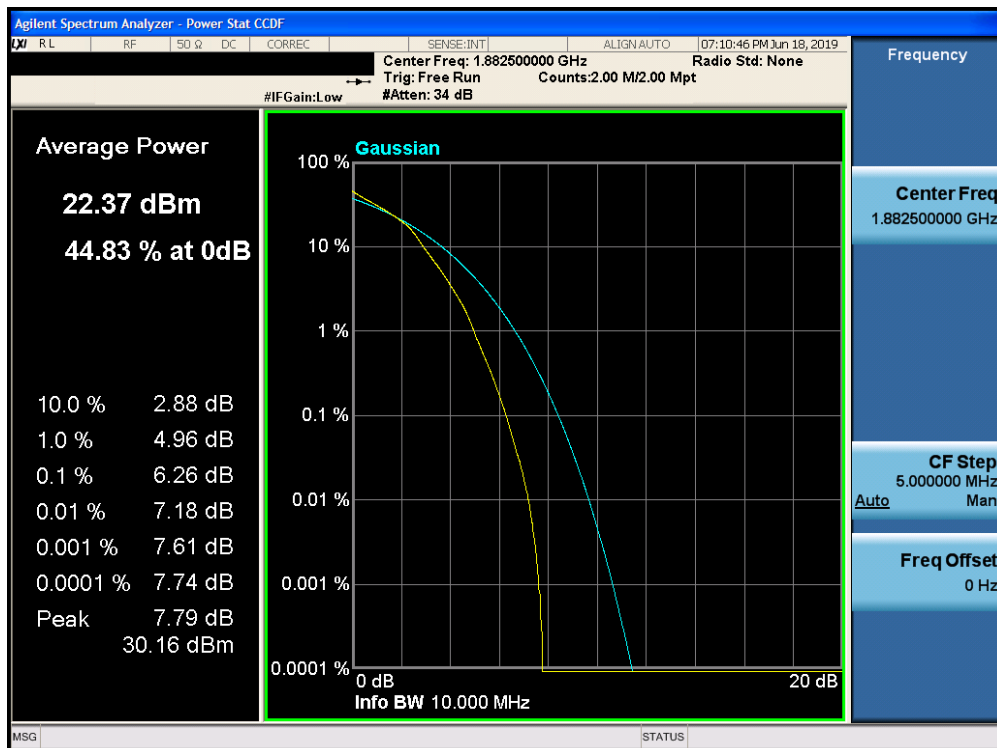


Plot 7-263. PAR Plot (Band 25 - 5.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2157	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 161 of 203

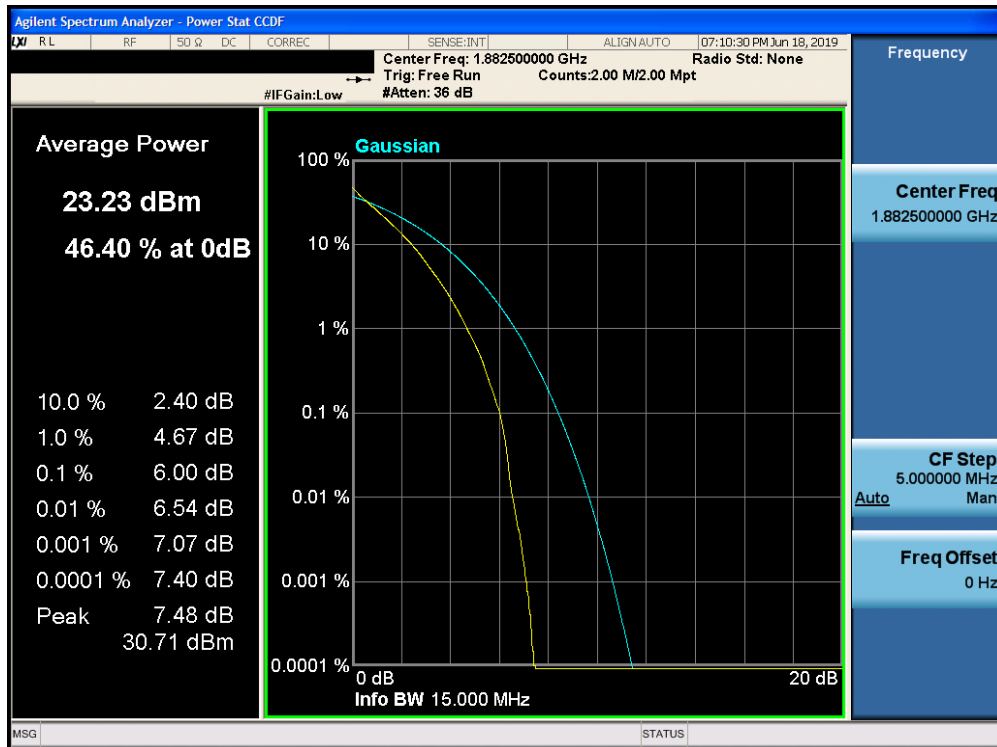


Plot 7-264. PAR Plot (Band 25 - 10.0MHz QPSK - Full RB Configuration)

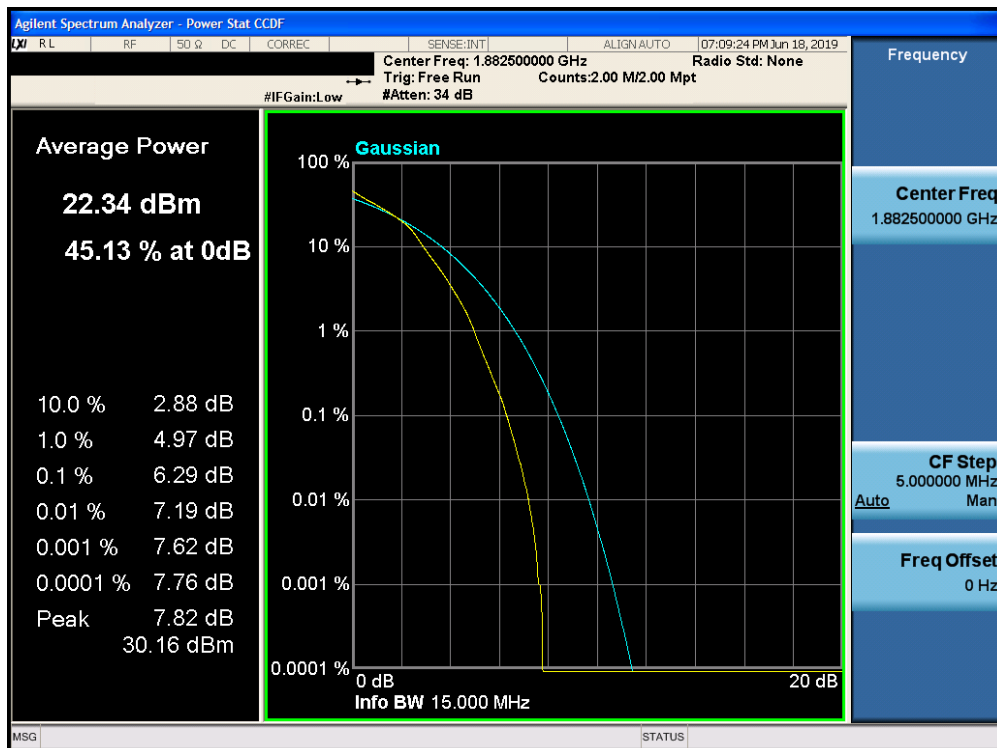


Plot 7-265. PAR Plot (Band 25 - 10.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2157	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 162 of 203

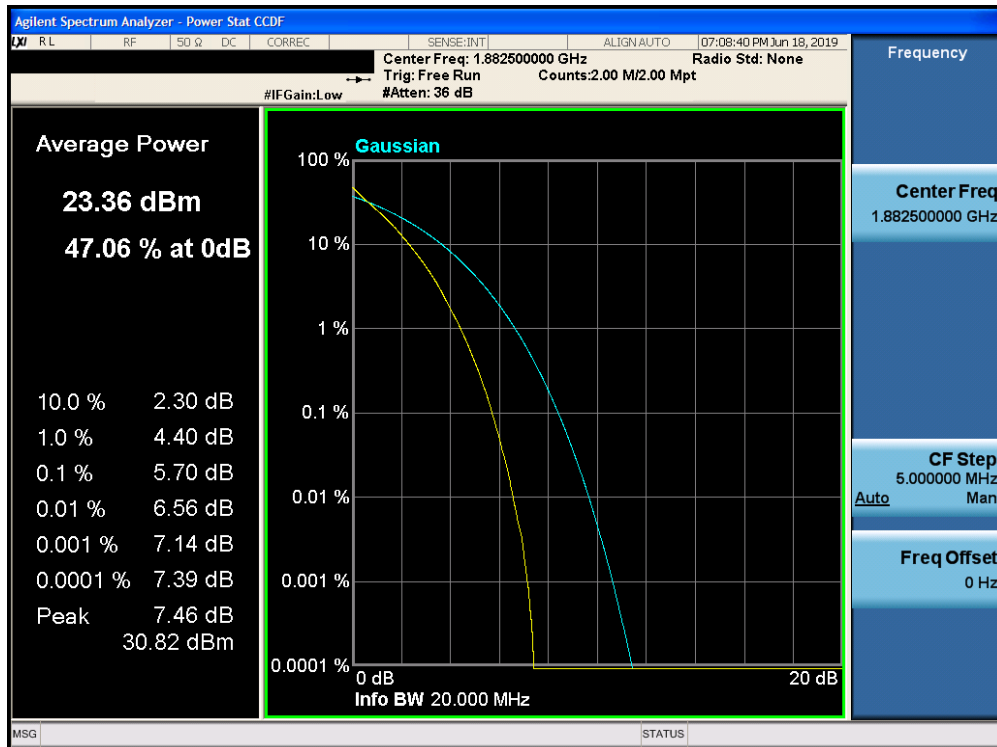


Plot 7-266. PAR Plot (Band 25 - 15.0MHz QPSK - Full RB Configuration)

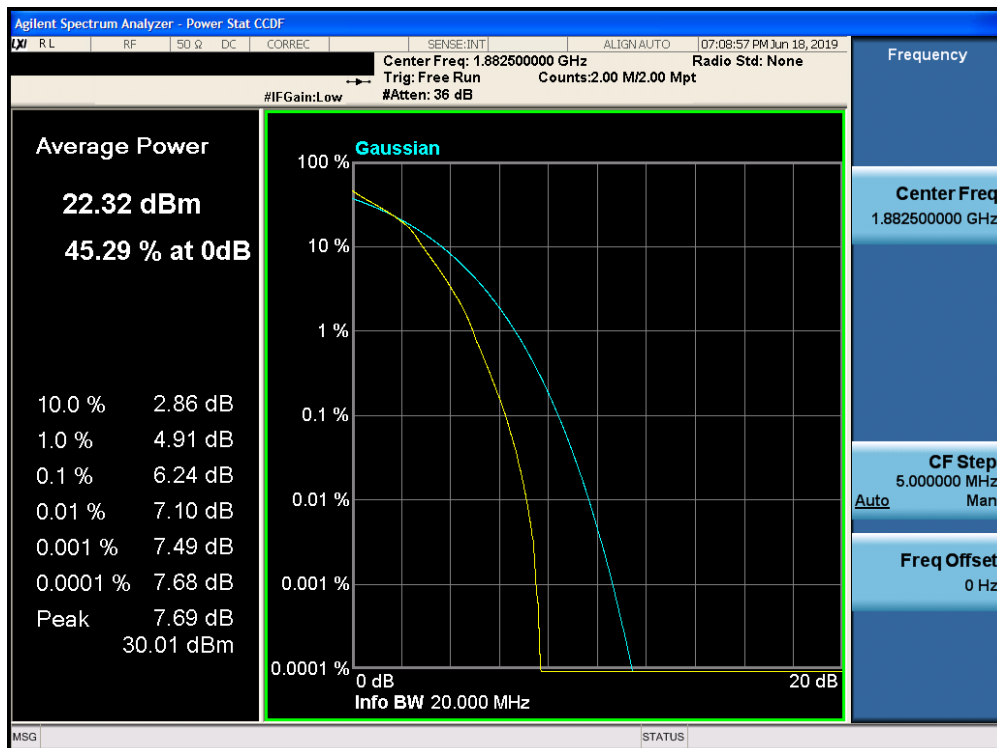


Plot 7-267. PAR Plot (Band 25 - 15.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2157	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 163 of 203



Plot 7-268. PAR Plot (Band 25 - 20.0MHz QPSK - Full RB Configuration)



Plot 7-269. PAR Plot (Band 25 - 20.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2157	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 164 of 203

7.6 Radiated Power (ERP/EIRP)

Test Overview

Effective Radiated Power (ERP) and Equivalent Isotropic Radiated Power (EIRP) measurements are performed using the substitution method described in ANSI/TIA-603-E-2016 with the EUT transmitting into an integral antenna. Measurements on signals operating below 1GHz are performed using vertically and horizontally polarized tuned dipole antennas. Measurements on signals operating above 1GHz are performed using vertically and horizontally polarized broadband horn antennas. All measurements are performed as RMS average measurements while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies.

Test Procedures Used

KDB 971168 D01 v03r01 – Section 5.2.1

Test Settings

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

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

Where:

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

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

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

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

Test Setup

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

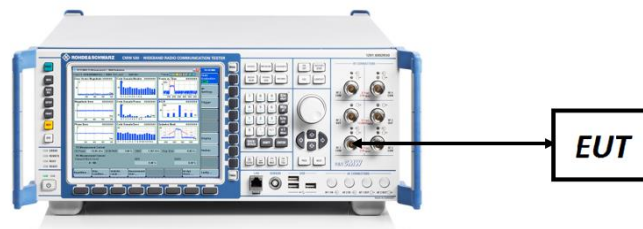


Figure 7-5. ERP/EIRP Measurement Setup

FCC ID: BCG-A2157	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 165 of 203

Test Notes

- 1) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The worst case emissions are reported with the EUT positioning, modulations, RB sizes and offsets, and channel bandwidth configurations shown in the tables below.
- 2) This unit was tested with its standard battery.
- 3) The Level (dBm) readings in the table were taken with a correction table loaded into the base station simulator. The correction table was used to account for the signal attenuation in the connecting cable between the transmitter and antenna.
- 4) The Ant. Gains (GT) are listed in dBi.

FCC ID: BCG-A2157	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 166 of 203

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	3 / 2	24.97	-26.10	-3.28	0.470	38.45	-41.73	-1.13	0.771	40.61	-41.74
836.50	1.4	QPSK	3 / 2	25.00	-26.10	-3.25	0.473	38.45	-41.70	-1.10	0.776	40.61	-41.71
848.30	1.4	QPSK	3 / 2	24.98	-26.10	-3.27	0.471	38.45	-41.72	-1.12	0.773	40.61	-41.73
836.50	1.4	16-QAM	3 / 2	24.37	-26.10	-3.88	0.409	38.45	-42.33	-1.73	0.671	40.61	-42.34
825.50	3	QPSK	1 / 0	24.86	-26.10	-3.39	0.458	38.45	-41.84	-1.24	0.752	40.61	-41.85
836.50	3	QPSK	1 / 14	24.98	-26.10	-3.27	0.471	38.45	-41.72	-1.12	0.773	40.61	-41.73
847.50	3	QPSK	1 / 14	24.82	-26.10	-3.43	0.454	38.45	-41.88	-1.28	0.745	40.61	-41.89
836.50	3	16-QAM	1 / 0	24.50	-26.10	-3.75	0.422	38.45	-42.20	-1.60	0.692	40.61	-42.21
826.50	5	QPSK	1 / 0	25.00	-26.10	-3.25	0.473	38.45	-41.70	-1.10	0.776	40.61	-41.71
836.50	5	QPSK	1 / 24	25.00	-26.10	-3.25	0.473	38.45	-41.70	-1.10	0.776	40.61	-41.71
846.50	5	QPSK	1 / 24	24.89	-26.10	-3.36	0.461	38.45	-41.81	-1.21	0.757	40.61	-41.82
826.50	5	16-QAM	1 / 0	24.47	-26.10	-3.78	0.419	38.45	-42.23	-1.63	0.687	40.61	-42.24
829.00	10	QPSK	1 / 0	24.86	-26.10	-3.39	0.458	38.45	-41.84	-1.24	0.752	40.61	-41.85
836.50	10	QPSK	1 / 0	25.00	-26.10	-3.25	0.473	38.45	-41.70	-1.10	0.776	40.61	-41.71
844.00	10	QPSK	1 / 0	24.88	-26.10	-3.37	0.460	38.45	-41.82	-1.22	0.755	40.61	-41.83
836.50	10	16-QAM	1 / 27	24.58	-26.10	-3.67	0.430	38.45	-42.12	-1.52	0.705	40.61	-42.13

Table 7-7. ERP Data (Band 5)

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	3 / 2	25.00	-26.10	-3.25	0.473	38.45	-41.70	-1.10	0.776	40.61	-41.71
836.50	1.4	QPSK	1 / 0	24.89	-26.10	-3.36	0.461	38.45	-41.81	-1.21	0.757	40.61	-41.82
848.30	1.4	QPSK	3 / 2	24.94	-26.10	-3.31	0.467	38.45	-41.76	-1.16	0.766	40.61	-41.77
836.50	1.4	16-QAM	1 / 5	24.36	-26.10	-3.89	0.408	38.45	-42.34	-1.74	0.670	40.61	-42.35
825.50	3	QPSK	1 / 0	24.80	-26.10	-3.45	0.452	38.45	-41.90	-1.30	0.741	40.61	-41.91
836.50	3	QPSK	1 / 14	24.93	-26.10	-3.32	0.466	38.45	-41.77	-1.17	0.764	40.61	-41.78
847.50	3	QPSK	1 / 14	24.81	-26.10	-3.44	0.453	38.45	-41.89	-1.29	0.743	40.61	-41.90
836.50	3	16-QAM	1 / 14	24.49	-26.10	-3.76	0.421	38.45	-42.21	-1.61	0.690	40.61	-42.22
826.50	5	QPSK	1 / 0	24.96	-26.10	-3.29	0.469	38.45	-41.74	-1.14	0.769	40.61	-41.75
836.50	5	QPSK	1 / 0	25.00	-26.10	-3.25	0.473	38.45	-41.70	-1.10	0.776	40.61	-41.71
846.50	5	QPSK	1 / 24	24.78	-26.10	-3.47	0.450	38.45	-41.92	-1.32	0.738	40.61	-41.93
836.50	5	16-QAM	1 / 24	24.54	-26.10	-3.71	0.426	38.45	-42.16	-1.56	0.698	40.61	-42.17
829.00	10	QPSK	1 / 0	24.80	-26.10	-3.45	0.452	38.45	-41.90	-1.30	0.741	40.61	-41.91
836.50	10	QPSK	1 / 0	24.90	-26.10	-3.35	0.462	38.45	-41.80	-1.20	0.759	40.61	-41.81
844.00	10	QPSK	1 / 0	24.83	-26.10	-3.42	0.455	38.45	-41.87	-1.27	0.746	40.61	-41.88
844.00	10	16-QAM	1 / 0	24.49	-26.10	-3.76	0.421	38.45	-42.21	-1.61	0.690	40.61	-42.22

Table 7-8. ERP Data (Band 26)

FCC ID: BCG-A2157	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 167 of 203

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	23.73	-12.60	11.13	12.972	30.00	-18.87
1732.50	1.4	QPSK	1 / 0	24.00	-12.60	11.40	13.804	30.00	-18.60
1754.30	1.4	QPSK	3 / 2	23.93	-12.60	11.33	13.583	30.00	-18.67
1732.50	1.4	16-QAM	1 / 0	23.20	-12.60	10.60	11.482	30.00	-19.40
1711.50	3	QPSK	1 / 14	23.80	-12.60	11.20	13.183	30.00	-18.80
1732.50	3	QPSK	1 / 14	23.92	-12.60	11.32	13.552	30.00	-18.68
1753.50	3	QPSK	1 / 14	23.81	-12.60	11.21	13.213	30.00	-18.79
1732.50	3	16-QAM	1 / 14	23.37	-12.60	10.77	11.940	30.00	-19.23
1712.50	5	QPSK	1 / 24	23.77	-12.60	11.17	13.092	30.00	-18.83
1732.50	5	QPSK	1 / 24	23.96	-12.60	11.36	13.677	30.00	-18.64
1752.50	5	QPSK	1 / 24	23.94	-12.60	11.34	13.614	30.00	-18.66
1732.50	5	16-QAM	1 / 24	23.33	-12.60	10.73	11.830	30.00	-19.27
1715.00	10	QPSK	1 / 0	23.85	-12.60	11.25	13.335	30.00	-18.75
1732.50	10	QPSK	1 / 49	23.97	-12.60	11.37	13.709	30.00	-18.63
1750.00	10	QPSK	1 / 49	23.79	-12.60	11.19	13.152	30.00	-18.81
1732.50	10	16-QAM	1 / 0	23.35	-12.60	10.75	11.885	30.00	-19.25
1717.50	15	QPSK	1 / 0	23.81	-12.60	11.21	13.213	30.00	-18.79
1732.50	15	QPSK	1 / 74	23.98	-12.60	11.38	13.740	30.00	-18.62
1747.50	15	QPSK	1 / 0	23.88	-12.60	11.28	13.428	30.00	-18.72
1732.50	15	16-QAM	1 / 0	23.25	-12.60	10.65	11.614	30.00	-19.35
1720.00	20	QPSK	1 / 0	23.83	-12.60	11.23	13.274	30.00	-18.77
1732.50	20	QPSK	1 / 99	23.90	-12.60	11.30	13.490	30.00	-18.70
1745.00	20	QPSK	1 / 0	23.97	-12.60	11.37	13.709	30.00	-18.63
1745.00	20	16-QAM	1 / 27	23.35	-12.60	10.75	11.885	30.00	-19.25

Table 7-9. EIRP Data (Band 4)

FCC ID: BCG-A2157	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 168 of 203

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	3 / 2	23.86	-12.60	11.26	13.366	30.00	-18.74
1745.00	1.4	QPSK	3 / 2	23.99	-12.60	11.39	13.772	30.00	-18.61
1779.30	1.4	QPSK	3 / 2	24.00	-12.60	11.40	13.804	30.00	-18.60
1779.30	1.4	16-QAM	1 / 0	23.26	-12.60	10.66	11.641	30.00	-19.34
1711.50	3	QPSK	1 / 14	23.81	-12.60	11.21	13.213	30.00	-18.79
1745.00	3	QPSK	1 / 0	23.79	-12.60	11.19	13.152	30.00	-18.81
1778.50	3	QPSK	1 / 14	23.87	-12.60	11.27	13.397	30.00	-18.73
1778.50	3	16-QAM	1 / 14	23.30	-12.60	10.70	11.749	30.00	-19.30
1712.50	5	QPSK	1 / 24	23.76	-12.60	11.16	13.062	30.00	-18.84
1745.00	5	QPSK	1 / 0	24.00	-12.60	11.40	13.804	30.00	-18.60
1777.50	5	QPSK	1 / 0	23.92	-12.60	11.32	13.552	30.00	-18.68
1745.00	5	16-QAM	1 / 24	23.36	-12.60	10.76	11.912	30.00	-19.24
1715.00	10	QPSK	1 / 49	23.81	-12.60	11.21	13.213	30.00	-18.79
1745.00	10	QPSK	1 / 0	23.86	-12.60	11.26	13.366	30.00	-18.74
1775.00	10	QPSK	1 / 0	23.94	-12.60	11.34	13.614	30.00	-18.66
1745.00	10	16-QAM	1 / 27	23.37	-12.60	10.77	11.940	30.00	-19.23
1717.50	15	QPSK	1 / 74	23.85	-12.60	11.25	13.335	30.00	-18.75
1745.00	15	QPSK	1 / 0	23.96	-12.60	11.36	13.677	30.00	-18.64
1772.50	15	QPSK	1 / 0	24.00	-12.60	11.40	13.804	30.00	-18.60
1772.50	15	16-QAM	1 / 27	23.38	-12.60	10.78	11.967	30.00	-19.22
1720.00	20	QPSK	1 / 99	23.84	-12.60	11.24	13.305	30.00	-18.76
1745.00	20	QPSK	1 / 0	24.00	-12.60	11.40	13.804	30.00	-18.60
1770.00	20	QPSK	1 / 99	23.82	-12.60	11.22	13.243	30.00	-18.78
1770.00	20	16-QAM	1 / 0	23.49	-12.60	10.89	12.274	30.00	-19.11

Table 7-10. EIRP Data (Band 66)

FCC ID: BCG-A2157	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 169 of 203

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	3 / 2	23.64	-13.10	10.54	11.324	33.01	-22.47
1880.00	1.4	QPSK	1 / 0	23.70	-13.10	10.60	11.482	33.01	-22.41
1909.30	1.4	QPSK	3 / 2	23.62	-13.10	10.52	11.272	33.01	-22.49
1850.70	1.4	16-QAM	1 / 0	23.11	-13.10	10.01	10.023	33.01	-23.00
1851.50	3	QPSK	1 / 0	23.66	-13.10	10.56	11.376	33.01	-22.45
1880.00	3	QPSK	1 / 0	23.76	-13.10	10.66	11.641	33.01	-22.35
1908.50	3	QPSK	1 / 14	23.48	-13.10	10.38	10.914	33.01	-22.63
1880.00	3	16-QAM	1 / 0	23.25	-13.10	10.15	10.351	33.01	-22.86
1852.50	5	QPSK	1 / 0	23.75	-13.10	10.65	11.614	33.01	-22.36
1880.00	5	QPSK	1 / 0	23.80	-13.10	10.70	11.749	33.01	-22.31
1907.50	5	QPSK	1 / 24	23.69	-13.10	10.59	11.455	33.01	-22.42
1852.50	5	16-QAM	1 / 24	23.18	-13.10	10.08	10.186	33.01	-22.93
1855.00	10	QPSK	1 / 0	23.71	-13.10	10.61	11.508	33.01	-22.40
1880.00	10	QPSK	1 / 0	23.79	-13.10	10.69	11.722	33.01	-22.32
1905.00	10	QPSK	1 / 0	23.83	-13.10	10.73	11.830	33.01	-22.28
1905.00	10	16-QAM	1 / 0	23.36	-13.10	10.26	10.617	33.01	-22.75
1857.50	15	QPSK	1 / 0	23.79	-13.10	10.69	11.722	33.01	-22.32
1880.00	15	QPSK	1 / 0	23.78	-13.10	10.68	11.695	33.01	-22.33
1902.50	15	QPSK	1 / 0	23.86	-13.10	10.76	11.912	33.01	-22.25
1902.50	15	16-QAM	1 / 0	23.37	-13.10	10.27	10.641	33.01	-22.74
1860.00	20	QPSK	1 / 99	23.91	-13.10	10.81	12.050	33.01	-22.20
1880.00	20	QPSK	1 / 0	23.98	-13.10	10.88	12.246	33.01	-22.13
1900.00	20	QPSK	1 / 0	23.67	-13.10	10.57	11.402	33.01	-22.44
1880.00	20	16-QAM	1 / 0	23.40	-13.10	10.30	10.715	33.01	-22.71

Table 7-11. EIRP Data (Band 2)

FCC ID: BCG-A2157	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 170 of 203

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	3 / 2	23.67	-13.10	10.57	11.402	33.01	-22.44
1882.50	1.4	QPSK	1 / 0	23.59	-13.10	10.49	11.194	33.01	-22.52
1914.30	1.4	QPSK	3 / 2	23.65	-13.10	10.55	11.350	33.01	-22.46
1850.70	1.4	16-QAM	1 / 0	23.11	-13.10	10.01	10.023	33.01	-23.00
1851.50	3	QPSK	1 / 0	23.56	-13.10	10.46	11.117	33.01	-22.55
1882.50	3	QPSK	1 / 0	23.51	-13.10	10.41	10.990	33.01	-22.60
1913.50	3	QPSK	1 / 0	23.52	-13.10	10.42	11.015	33.01	-22.59
1851.50	3	16-QAM	1 / 0	23.07	-13.10	9.97	9.931	33.01	-23.04
1852.50	5	QPSK	1 / 0	23.64	-13.10	10.54	11.324	33.01	-22.47
1882.50	5	QPSK	1 / 0	23.46	-13.10	10.36	10.864	33.01	-22.65
1912.50	5	QPSK	1 / 0	23.56	-13.10	10.46	11.117	33.01	-22.55
1852.50	5	16-QAM	1 / 0	23.07	-13.10	9.97	9.931	33.01	-23.04
1855.00	10	QPSK	1 / 0	23.47	-13.10	10.37	10.889	33.01	-22.64
1882.50	10	QPSK	1 / 0	23.53	-13.10	10.43	11.041	33.01	-22.58
1910.00	10	QPSK	1 / 49	23.45	-13.10	10.35	10.839	33.01	-22.66
1855.00	10	16-QAM	1 / 0	23.05	-13.10	9.95	9.886	33.01	-23.06
1857.50	15	QPSK	1 / 74	23.62	-13.10	10.52	11.272	33.01	-22.49
1882.50	15	QPSK	1 / 74	23.67	-13.10	10.57	11.402	33.01	-22.44
1907.50	15	QPSK	1 / 0	23.67	-13.10	10.57	11.402	33.01	-22.44
1882.50	15	16-QAM	1 / 0	23.14	-13.10	10.04	10.093	33.01	-22.97
1860.00	20	QPSK	1 / 99	24.00	-13.10	10.90	12.303	33.01	-22.11
1882.50	20	QPSK	1 / 0	23.93	-13.10	10.83	12.106	33.01	-22.18
1905.00	20	QPSK	1 / 0	24.00	-13.10	10.90	12.303	33.01	-22.11
1905.00	20	16-QAM	1 / 0	23.47	-13.10	10.37	10.889	33.01	-22.64

Table 7-12. EIRP Data (Band 25)

FCC ID: BCG-A2157	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 171 of 203

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	23.47	-10.70	12.77	18.923	33.01	-20.24
2535.00	5	QPSK	1 / 0	23.50	-10.70	12.80	19.055	33.01	-20.21
2567.50	5	QPSK	1 / 0	23.43	-10.70	12.73	18.750	33.01	-20.28
2502.50	5	16-QAM	1 / 24	22.97	-10.70	12.27	16.866	33.01	-20.74
2505.00	10	QPSK	1 / 49	23.48	-10.70	12.78	18.967	33.01	-20.23
2535.00	10	QPSK	1 / 49	23.35	-10.70	12.65	18.408	33.01	-20.36
2565.00	10	QPSK	1 / 49	23.50	-10.70	12.80	19.055	33.01	-20.21
2505.00	10	16-QAM	1 / 27	22.95	-10.70	12.25	16.788	33.01	-20.76
2507.50	15	QPSK	1 / 74	23.45	-10.70	12.75	18.836	33.01	-20.26
2535.00	15	QPSK	1 / 74	23.50	-10.70	12.80	19.055	33.01	-20.21
2562.50	15	QPSK	1 / 74	23.36	-10.70	12.66	18.450	33.01	-20.35
2507.50	15	16-QAM	1 / 27	22.96	-10.70	12.26	16.827	33.01	-20.75
2510.00	20	QPSK	1 / 99	23.50	-10.70	12.80	19.055	33.01	-20.21
2535.00	20	QPSK	1 / 99	23.38	-10.70	12.68	18.535	33.01	-20.33
2560.00	20	QPSK	1 / 0	23.25	-10.70	12.55	17.989	33.01	-20.46
2510.00	20	16-QAM	1 / 27	22.86	-10.70	12.16	16.444	33.01	-20.85

Table 7-13. EIRP Data (Band 7)

FCC ID: BCG-A2157	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 172 of 203

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	23.50	-10.70	12.80	0.019055	33.01	-20.21
2593.00	5	QPSK	1 / 24	23.32	-10.70	12.62	18.281	33.01	-20.39
2687.50	5	QPSK	1 / 24	23.38	-10.70	12.68	18.535	33.01	-20.33
2498.50	5	16-QAM	1 / 24	22.87	-10.70	12.17	16.482	33.01	-20.84
2501.00	10	QPSK	1 / 49	23.50	-10.70	12.80	19.055	33.01	-20.21
2593.00	10	QPSK	1 / 0	23.36	-10.70	12.66	18.450	33.01	-20.35
2685.00	10	QPSK	1 / 0	23.49	-10.70	12.79	19.011	33.01	-20.22
2501.00	10	16-QAM	1 / 27	22.92	-10.70	12.22	16.672	33.01	-20.79
2503.50	15	QPSK	1 / 0	23.50	-10.70	12.80	19.055	33.01	-20.21
2593.00	15	QPSK	1 / 0	23.47	-10.70	12.77	18.923	33.01	-20.24
2682.50	15	QPSK	1 / 0	23.48	-10.70	12.78	18.967	33.01	-20.23
2503.50	15	16-QAM	1 / 27	22.96	-10.70	12.26	16.827	33.01	-20.75
2506.00	20	QPSK	1 / 99	23.50	-10.70	12.80	19.055	33.01	-20.21
2593.00	20	QPSK	1 / 0	23.43	-10.70	12.73	18.750	33.01	-20.28
2680.00	20	QPSK	1 / 0	23.24	-10.70	12.54	17.947	33.01	-20.47
2506.00	20	16-QAM	1 / 27	22.91	-10.70	12.21	16.634	33.01	-20.80

Table 7-14. EIRP Data (Band 41)

FCC ID: BCG-A2157	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 173 of 203

7.7 Radiated Spurious Emissions Measurements

Test Overview

Radiated spurious emissions measurements are performed using the substitution method described in ANSI/TIA-603-E-2016 with the EUT transmitting into an integral antenna. Measurements on signals operating below 1GHz are performed using vertically and horizontally polarized tuned dipole antennas. Measurements on signals operating above 1GHz are performed using vertically and horizontally polarized broadband horn antennas.

Test Procedures Used

KDB 971168 D01 v03r01 – Section 5.8

ANSI/TIA-603-E-2016 – Section 2.2.12

Test Settings

1. RBW = 100kHz for emissions below 1GHz and 1MHz for emissions above 1GHz
2. VBW $\geq 3 \times$ RBW
3. Span = 1.5 times the OBW
4. No. of sweep points $\geq 2 \times$ span / RBW
5. Detector = RMS
6. Trace mode = Average (Max Hold for pulsed emissions)
7. The trace was allowed to stabilize

FCC ID: BCG-A2157	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 174 of 203

Test Setup

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

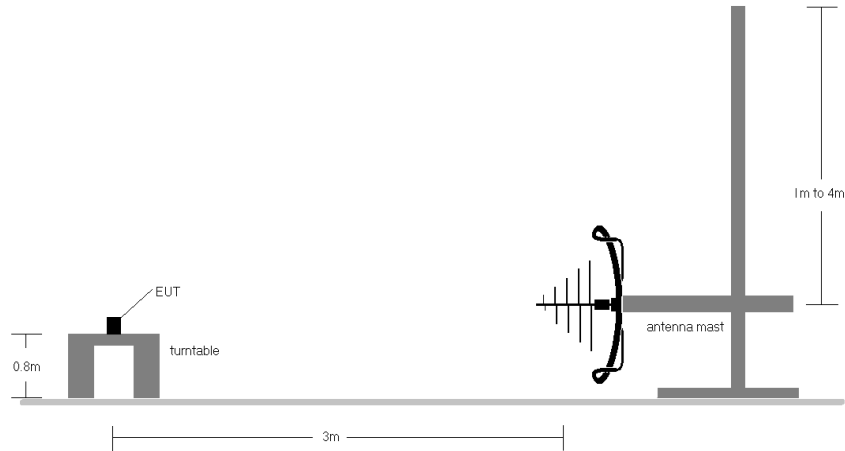


Figure 7-6. Test Instrument & Measurement Setup < 1GHz

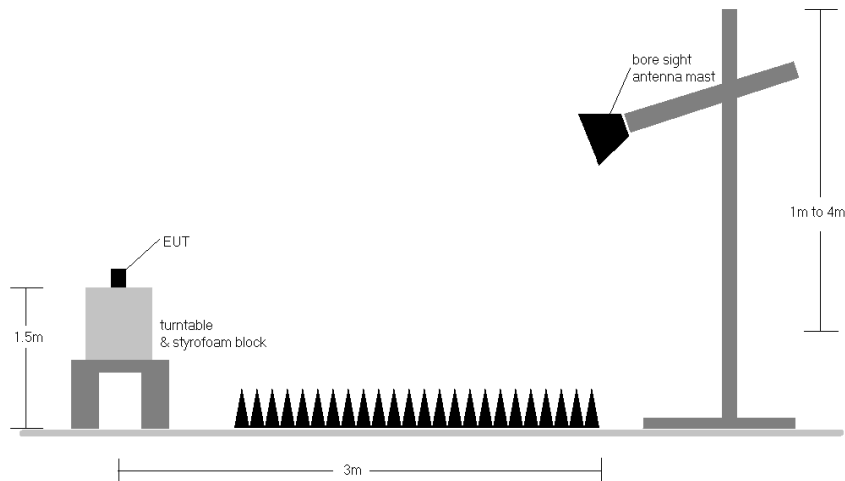


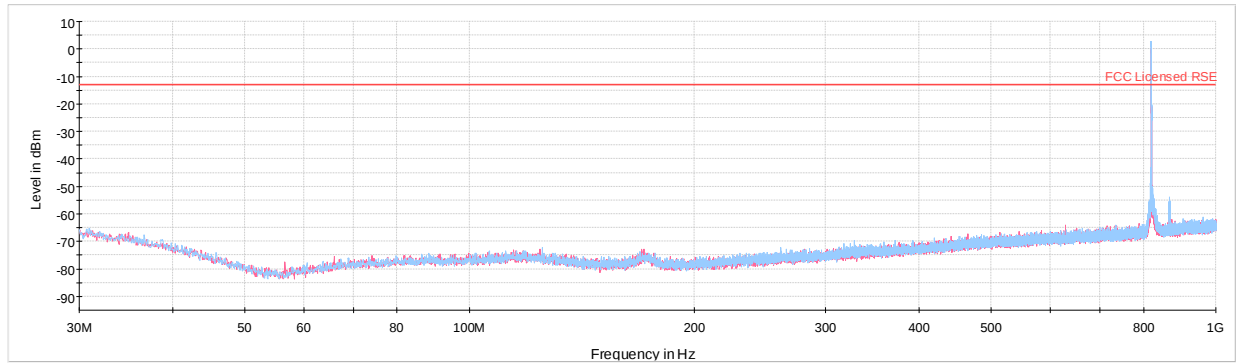
Figure 7-7. Test Instrument & Measurement Setup > 1GHz

Test Notes

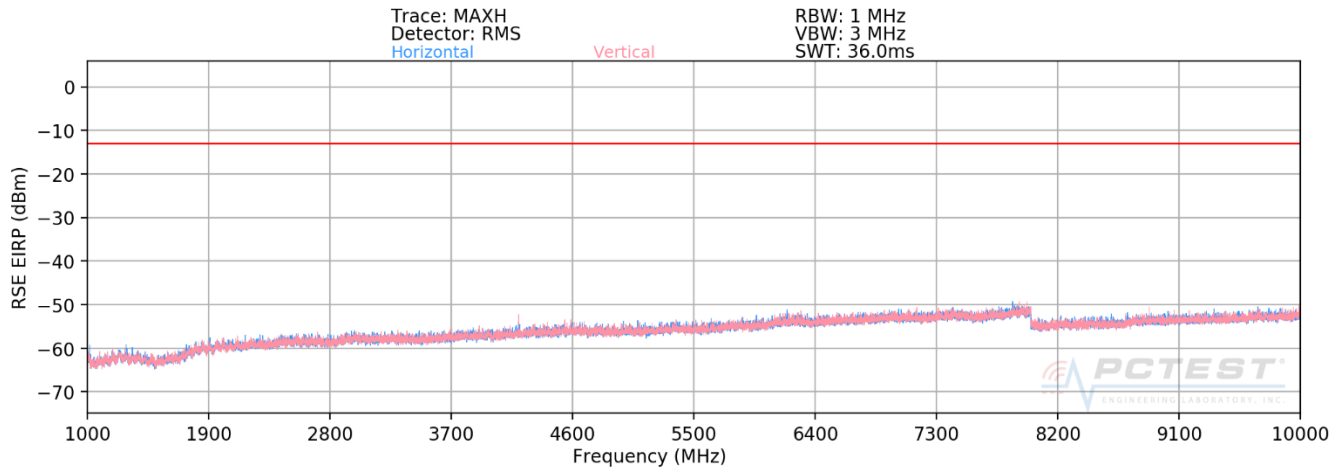
- 1) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The worst case emissions are reported with the EUT positioning, modulations, RB sizes and offsets, and channel bandwidth configurations shown in the tables below.
- 2) This unit was tested with its standard battery.
- 3) The spectrum is measured from 9kHz to the 10th harmonic of the fundamental frequency of the transmitter. The worst-case emissions are reported.
- 4) Emissions below 18GHz were measured at a 3 meter test distance while emissions above 18GHz were measured at a 1 meter test distance with the application of a distance correction factor.
- 5) The "-" shown in the following RSE tables are used to denote a noise floor measurement.
- 6) Below 1GHz Pre-scan plot shows no significant emissions.

FCC ID: BCG-A2157	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 175 of 203

Band 26/5



Plot 7-270. Radiated Spurious Plot - Below 1GHz (Band 26/5 – with WCP + AC/DC Adapter)



Plot 7-271. Radiated Spurious Plot above 1GHz (Band 26/5)

FCC ID: BCG-A2157	PCTEST ENGINEERING LABORATORY, INC.		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch		Page 176 of 203

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

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1658.00	H	-	-	-73.74	5.83	-67.91	-54.9
2487.00	H	-	-	-69.52	5.89	-63.63	-50.6
3316.00	H	-	-	-71.13	7.73	-63.40	-50.4
4145.00	H	106	316	-66.00	8.78	-57.21	-44.2
4974.00	H	-	-	-71.32	9.98	-61.35	-48.3
5803.00	H	-	-	-71.31	10.82	-60.49	-47.5

Table 7-15. 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]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1673.00	H	-	-	-73.44	5.89	-67.55	-54.5
2509.50	H	-	-	-70.02	6.07	-63.95	-51.0
3346.00	H	-	-	-70.86	7.94	-62.91	-49.9
4182.50	H	116	180	-69.57	8.90	-60.66	-47.7
5019.00	H	-	-	-72.08	10.07	-62.01	-49.0
5855.50	H	-	-	-71.02	10.71	-60.31	-47.3

Table 7-16. Radiated Spurious Data (Band 26/5 – Mid Channel)

FCC ID: BCG-A2157	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 177 of 203

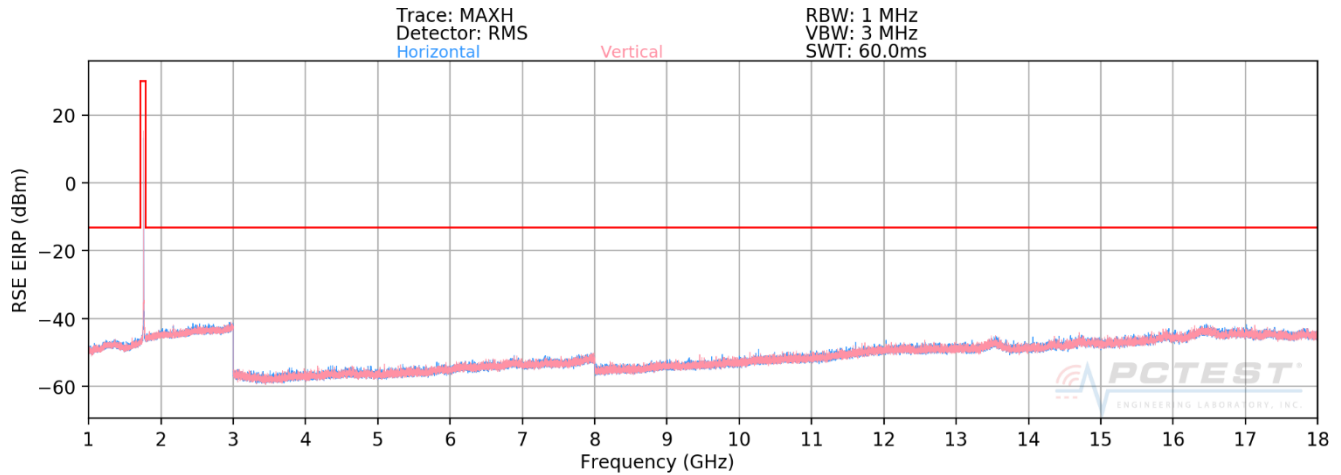
OPERATING FREQUENCY: 844.00 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 10.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1688.00	H	-	-	-73.41	5.87	-67.54	-54.5
2532.00	H	-	-	-69.96	6.16	-63.80	-50.8
3376.00	H	-	-	-71.76	8.09	-63.67	-50.7
4220.00	H	118	160	-65.29	8.88	-56.41	-43.4
5064.00	H	-	-	-72.04	10.11	-61.93	-48.9
5908.00	H	-	-	-71.29	10.62	-60.67	-47.7

Table 7-17. Radiated Spurious Data (Band 26/5 – High Channel)

FCC ID: BCG-A2157	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 178 of 203

Band 66/4



Plot 7-272. Radiated Spurious Plot above 1GHz (Band 66/4)

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

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3440.00	V	-	-	-71.28	8.27	-63.01	-50.0
5150.70	V	-	-	-71.83	10.19	-61.65	-48.6
6861.40	V	-	-	-70.34	11.43	-58.91	-45.9
8572.10	V	-	-	-73.52	13.15	-60.37	-47.4
10282.80	V	-	-	-70.17	13.15	-57.02	-44.0

Table 7-18. Radiated Spurious Data (Band 66/4 – Low Channel)

FCC ID: BCG-A2157	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 179 of 203

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

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3490.00	V	-	-	-71.07	8.30	-62.77	-49.8
5235.00	V	-	-	-71.67	10.29	-61.37	-48.4
6980.00	V	-	-	-70.99	11.59	-59.40	-46.4
8725.00	V	-	-	-73.25	13.22	-60.03	-47.0
10470.00	V	-	-	-71.23	13.19	-58.04	-45.0

Table 7-19. Radiated Spurious Data (Band 66/4 – Mid Channel)

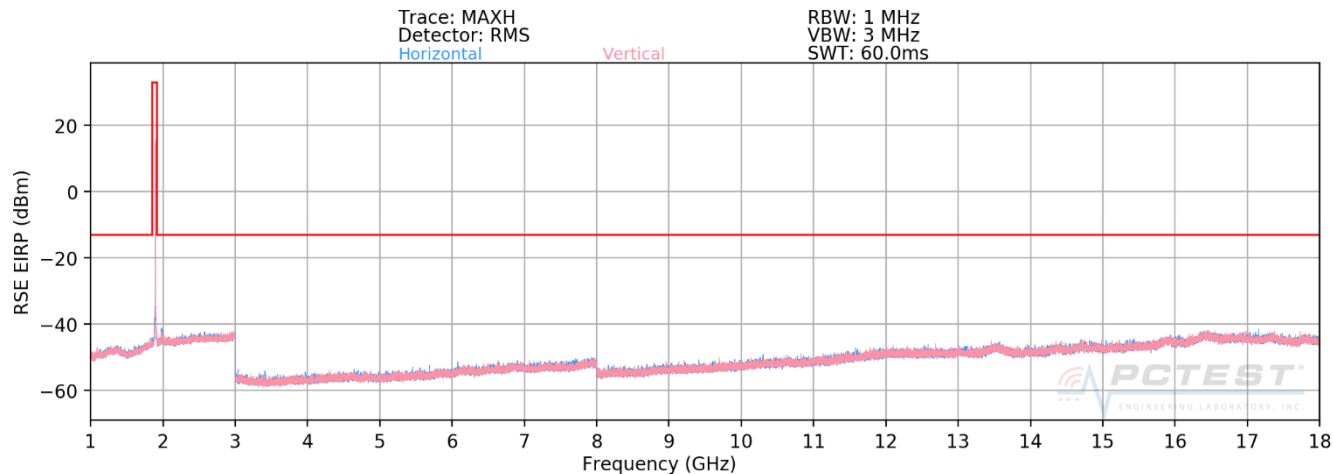
OPERATING FREQUENCY: 1770.00 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3540.00	V	-	-	-70.88	8.32	-62.56	-49.6
5310.00	V	-	-	-71.30	10.29	-61.01	-48.0
7080.00	V	-	-	-71.02	11.69	-59.33	-46.3
8850.00	V	-	-	-72.37	13.21	-59.16	-46.2
10620.00	V	-	-	-70.35	13.14	-57.21	-44.2

Table 7-20. Radiated Spurious Data (Band 66/4 – High Channel)

FCC ID: BCG-A2157	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 180 of 203

Band 25/2



Plot 7-273. Radiated Spurious Plot above 1GHz (Band 25/2)

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

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3720.00	V	-	-	-70.08	8.41	-61.66	-48.7
5580.00	V	400	186	-68.64	10.66	-57.99	-45.0
7440.00	V	-	-	-70.55	12.02	-58.53	-45.5
9300.00	V	-	-	-71.10	13.39	-57.71	-44.7
11160.00	V	-	-	-69.40	13.19	-56.22	-43.2

Table 7-21. Radiated Spurious Data (Band 25/2 – Low Channel)

FCC ID: BCG-A2157	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 181 of 203

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

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3765.00	V	-	-	-70.02	8.34	-61.69	-48.7
5647.50	V	140	95	-69.70	10.72	-58.98	-46.0
7530.00	V	-	-	-72.00	12.13	-59.87	-46.9
9412.50	V	-	-	-73.96	13.37	-60.59	-47.6
11295.00	V	-	-	-73.32	13.17	-60.14	-47.1

Table 7-22. Radiated Spurious Data (Band 25/2 – Mid Channel)

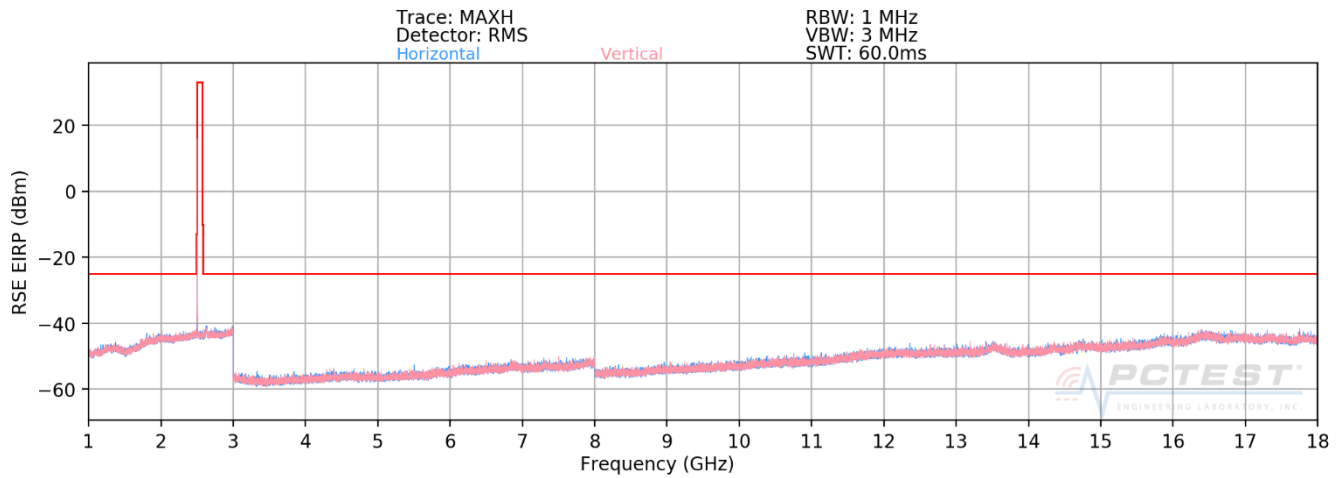
OPERATING FREQUENCY: 1905.00 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3810.00	V	-	-	-69.07	8.30	-60.76	-47.8
5715.00	V	288	30	-69.71	10.82	-58.89	-45.9
7620.00	V	-	-	-73.08	12.31	-60.77	-47.8
9525.00	V	-	-	-74.39	13.38	-61.01	-48.0
11430.00	V	-	-	-73.50	13.17	-60.33	-47.3

Table 7-23. Radiated Spurious Data (Band 25/2 – High Channel)

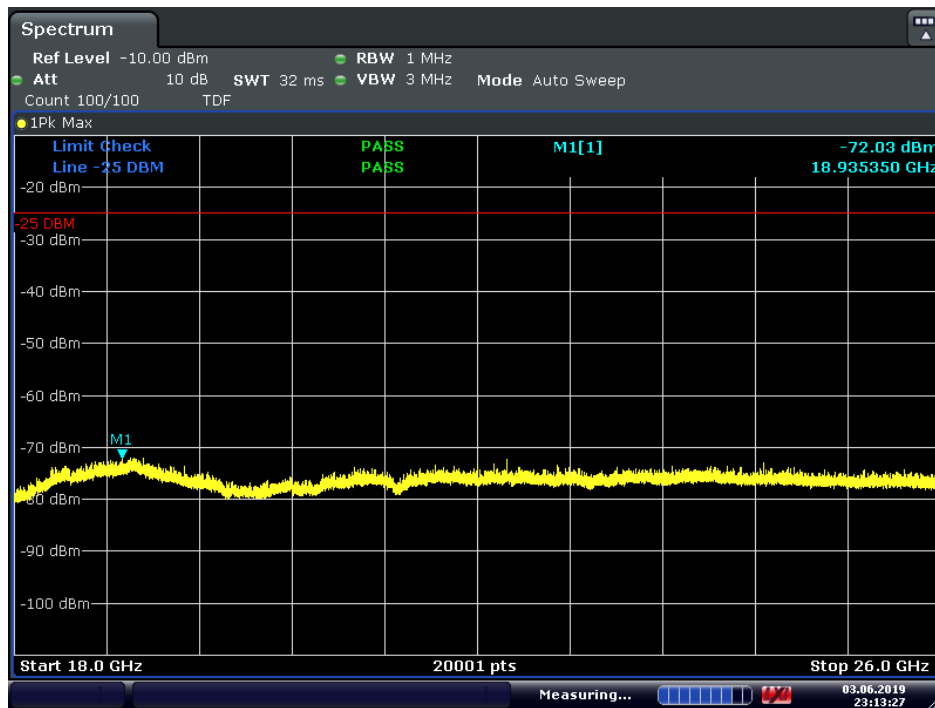
FCC ID: BCG-A2157	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 182 of 203

Band 7

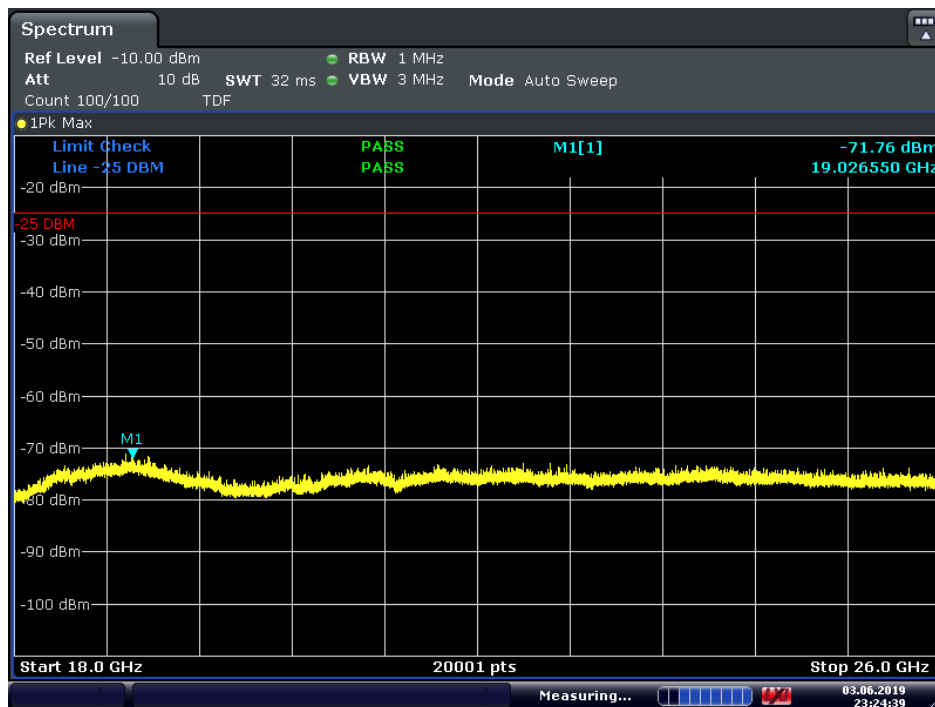


Plot 7-274. Radiated Spurious Plot 1GHz - 18GHz (Band 7)

FCC ID: BCG-A2157	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 183 of 203



Plot 7-275. Radiated Spurious Plot 18GHz – 26GHz (Band 7, Pol. H)



Plot 7-276. Radiated Spurious Plot 18GHz – 26GHz (Band 7, Pol. V)

FCC ID: BCG-A2157	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 184 of 203

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

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5020.00	H	239	208	-71.56	10.07	-61.49	-36.5
7530.00	H	311	131	-66.90	12.13	-54.77	-29.8
10040.00	H	-	-	-71.74	13.21	-58.53	-33.5
12550.00	H	-	-	-68.23	13.21	-55.02	-30.0
15060.00	H	-	-	-67.68	14.10	-53.58	-28.6

Table 7-24. 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]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5070.00	V	399	82	-72.06	10.12	-61.94	-36.9
7605.00	V	244	6	-70.75	12.30	-58.45	-33.5
10140.00	V	-	-	-71.13	13.19	-57.94	-32.9
12675.00	V	-	-	-67.72	13.15	-54.57	-29.6
15210.00	V	-	-	-66.98	14.12	-52.86	-27.9

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

FCC ID: BCG-A2157	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 185 of 203

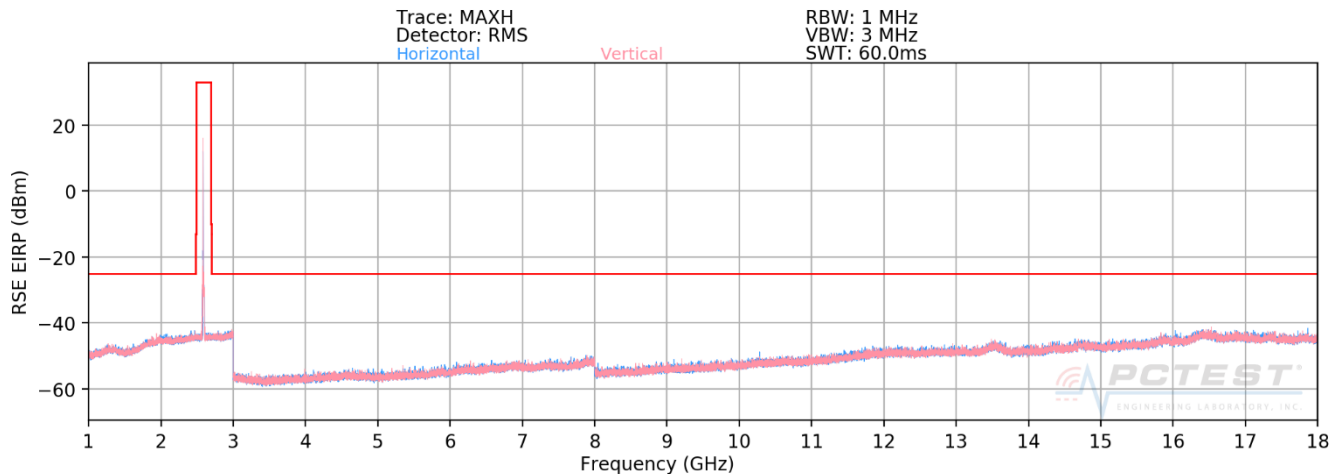
OPERATING FREQUENCY: 2560.00 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5120.00	H	-	-	-71.66	10.16	-61.50	-36.5
7680.00	H	257	163	-67.64	12.28	-55.36	-30.4
10240.00	H	-	-	-70.85	13.14	-57.71	-32.7
12800.00	H	-	-	-68.38	13.19	-55.19	-30.2
15360.00	H	-	-	-68.32	14.11	-54.21	-29.2

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

FCC ID: BCG-A2157	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 186 of 203

Band 41



Plot 7-277. Radiated Spurious Plot 1GHz - 18GHz (Band 41)

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

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5012.00	V	-	-	-62.60	10.07	-52.53	-27.5
7518.00	V	-	-	-63.15	12.12	-51.03	-26.0
10024.00	V	-	-	-61.44	13.22	-48.22	-23.2
12530.00	V	-	-	-58.41	13.22	-45.19	-20.2
15036.00	V	-	-	-58.31	14.11	-44.20	-19.2

Table 7-27. Radiated Spurious Data (Band 41 – Low Channel)

FCC ID: BCG-A2157	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 187 of 203

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

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5186.00	V	-	-	-63.09	10.26	-52.83	-27.8
7779.00	V	-	-	-61.74	12.30	-49.44	-24.4
10372.00	V	-	-	-62.34	13.20	-49.14	-24.1
12965.00	V	-	-	-58.81	13.29	-45.52	-20.5
15558.00	V	-	-	-57.87	14.04	-43.83	-18.8

Table 7-28. Radiated Spurious Data (Band 41 – Mid Channel)

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

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5360.00	V	-	-	-62.22	10.34	-51.88	-26.9
8040.00	V	-	-	-63.26	12.51	-50.75	-25.8
10720.00	V	-	-	-62.47	13.13	-49.34	-24.3
13400.00	V	-	-	-60.77	13.78	-46.99	-22.0
16080.00	V	-	-	-58.51	13.47	-45.04	-20.0

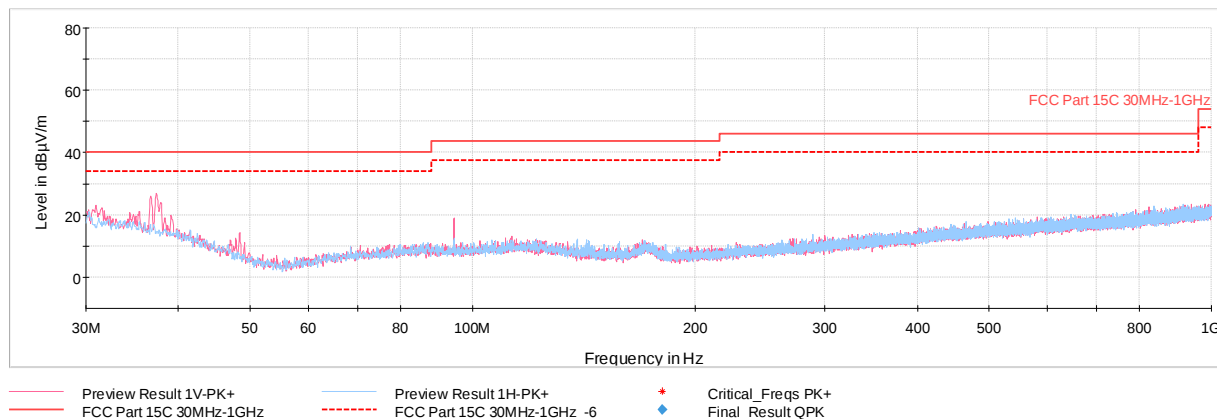
Table 7-29. Radiated Spurious Data (Band 41 – High Channel)

FCC ID: BCG-A2157	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 188 of 203

Simultaneous Tx Radiated Spurious Measurements

Description	Bluetooth	LTE
Antenna	FCM	FCM
Channel	39	26365
Operating Frequency (MHz)	2441	1882.5
Modulation/Mode	GFSK/ePA	QPSK/1RB/20MHz

Table 7-30. Worst Case Simultaneous Transmission Config

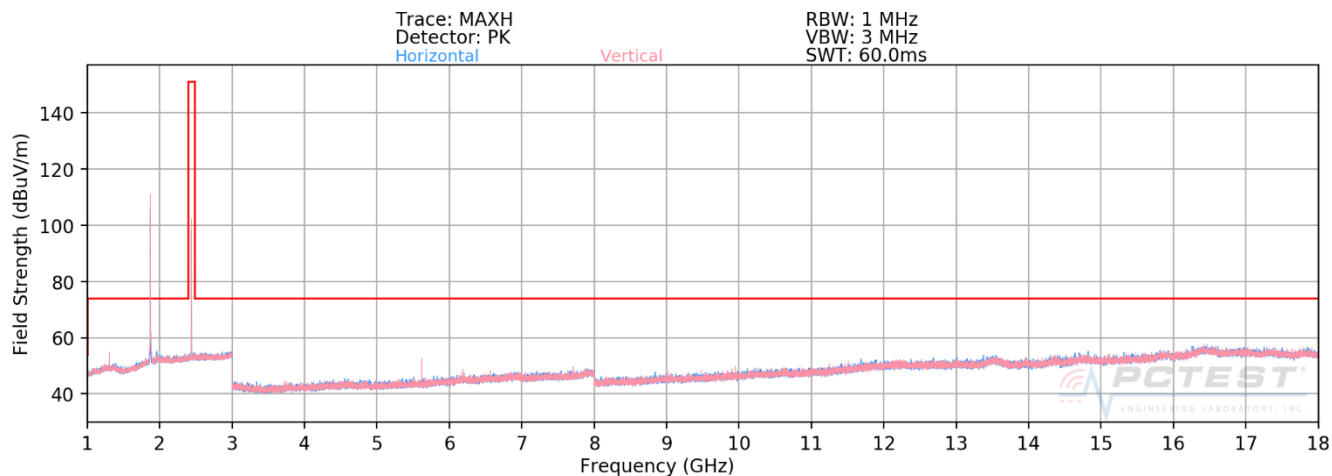


Plot 7-278. Radiated Spurious Plot Below 1GHz (with WCP + AC/DC Adapter)

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]
36.69	Max-Peak	V	100	215	-68.10	-12.86	26.04	40.00	-13.96
37.37	Max-Peak	V	100	286	-67.02	-13.15	26.83	40.00	-13.17
48.43	Max-Peak	V	100	30	-72.38	-20.39	14.23	40.00	-25.77
94.46	Max-Peak	V	100	122	-69.70	-18.15	19.15	43.52	-24.37
113.08	Max-Peak	V	100	15	-76.94	-17.04	13.02	43.52	-30.51
138.59	Max-Peak	H	250	244	-76.29	-18.48	12.23	43.52	-31.30

Table 7-31. Radiated Spurious Emissions Below 1GHz (with WCP + AC/DC Adapter)

FCC ID: BCG-A2157	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 189 of 203

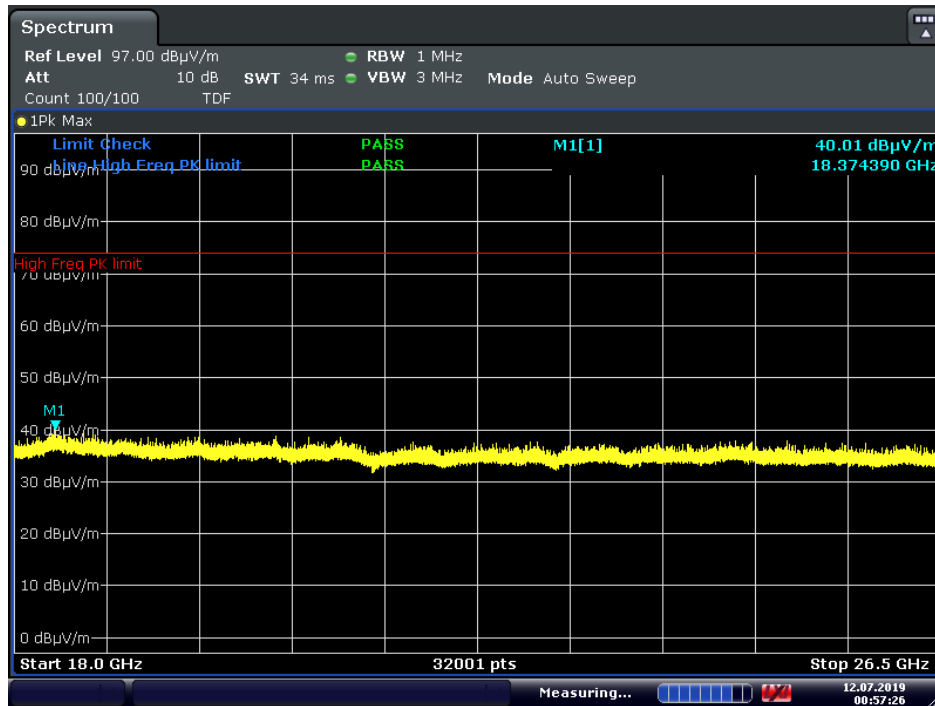


Plot 7-279. Radiated Spurious Plot Above 1GHz

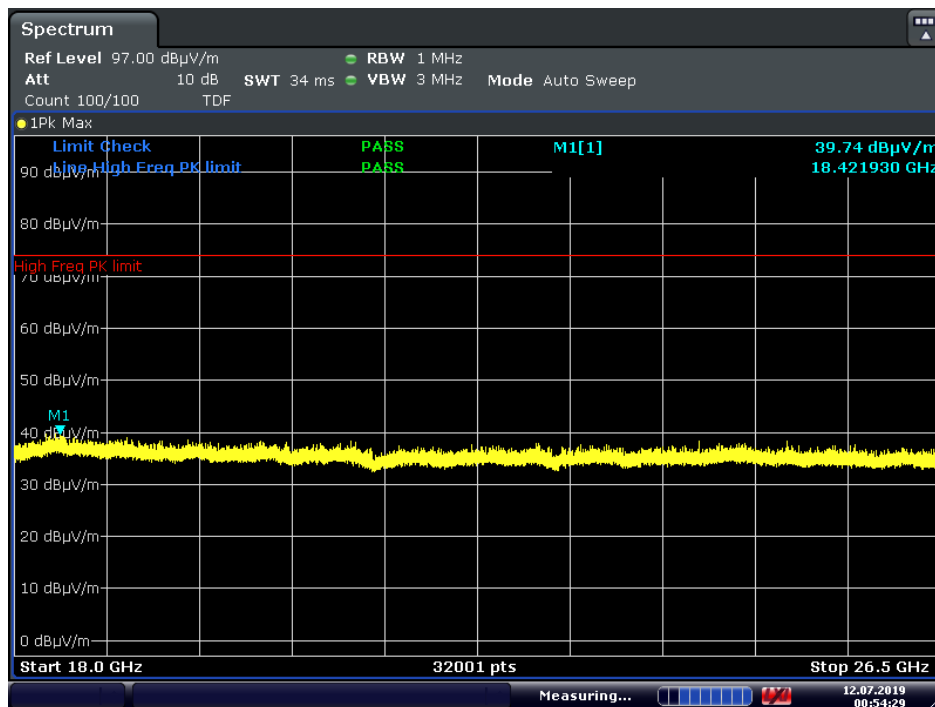
Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
3765.00	V	-	-	-70.59	8.34	-62.26	-25.00	-37.3
5647.50	V	307	345	-63.80	10.72	-53.08	-25.00	-28.1
7530.00	V	-	-	-71.01	12.13	-58.88	-25.00	-33.9
2999.50	V	143	325	-54.26	6.98	-47.28	-25.00	-22.3
1324.00	V	125	325	-49.70	4.04	-45.66	-25.00	-20.7

Table 7-32. Radiated Spurious Measurements Above 1GHz

FCC ID: BCG-A2157	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 190 of 203



Plot 7-280. Radiated Spurious Plot Above 18GHz (Ant. Pol. H)



Plot 7-281. Radiated Spurious Plot Above 18GHz (Ant. Pol. V)

FCC ID: BCG-A2157	PCTEST ENGINEERING LABORATORY, INC.		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch		Page 191 of 203

7.8 Frequency Stability / Temperature Variation

Test Overview and Limit

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

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

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

Test Procedure Used

ANSI/TIA-603-E-2016

Test Settings

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

Test Setup

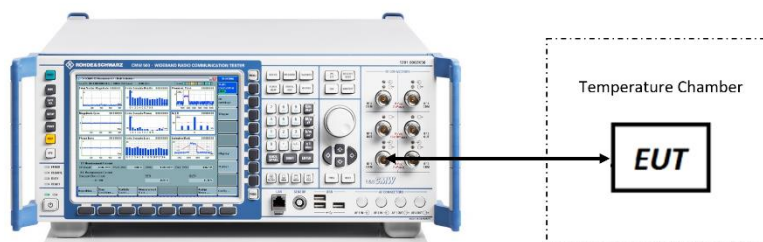


Figure 7-8. Test Instrument & Measurement Setup

Test Notes

None

FCC ID: BCG-A2157	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 192 of 203

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	836,500,047	47	0.0000056
100 %		- 20	836,500,042	42	0.0000050
100 %		- 10	836,500,034	34	0.0000040
100 %		0	836,500,034	34	0.0000041
100 %		+ 10	836,500,039	39	0.0000047
100 %		+ 20	836,500,041	41	0.0000049
100 %		+ 30	836,500,005	5	0.0000006
100 %		+ 40	836,500,006	6	0.0000007
100 %		+ 50	836,500,005	5	0.0000006
BATT. ENDPOINT	3.40	+ 20	836,500,005	5	0.0000005

Table 7-33. Frequency Stability Data (Band 26/5)

FCC ID: BCG-A2157	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 193 of 203

Band 26/5 Frequency Stability Measurements

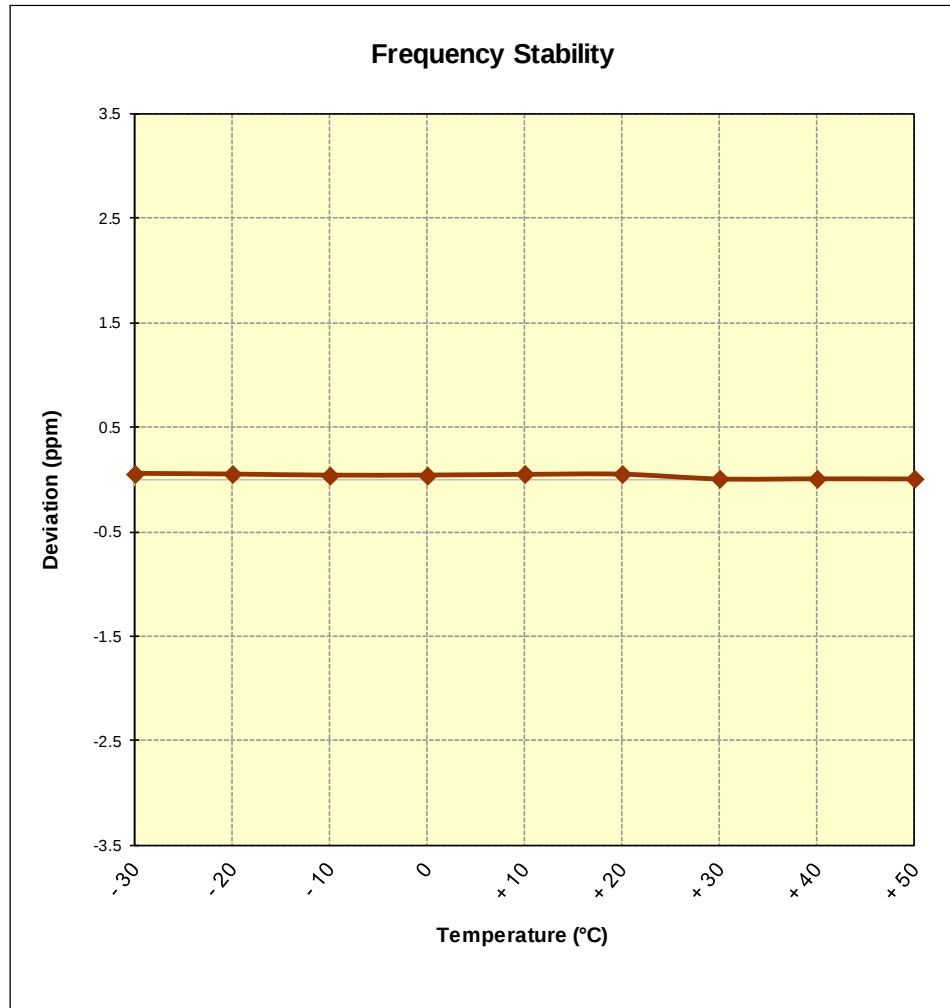


Figure 7-9. Frequency Stability Graph (Band 26/5)

FCC ID: BCG-A2157	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 194 of 203

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	1,745,000,039	39	0.0000023
100 %		- 20	1,745,000,032	32	0.0000019
100 %		- 10	1,745,000,034	34	0.0000020
100 %		0	1,745,000,038	38	0.0000022
100 %		+ 10	1,745,000,036	36	0.0000020
100 %		+ 20	1,745,000,038	38	0.0000022
100 %		+ 30	1,745,000,010	10	0.0000005
100 %		+ 40	1,745,000,009	9	0.0000005
100 %		+ 50	1,745,000,010	10	0.0000006
BATT. ENDPOINT	3.40	+ 20	1,745,000,008	8	0.0000004

Table 7-34. Frequency Stability Data (Band 66/4)

Note:

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

FCC ID: BCG-A2157	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 195 of 203

Band 66/4 Frequency Stability Measurements

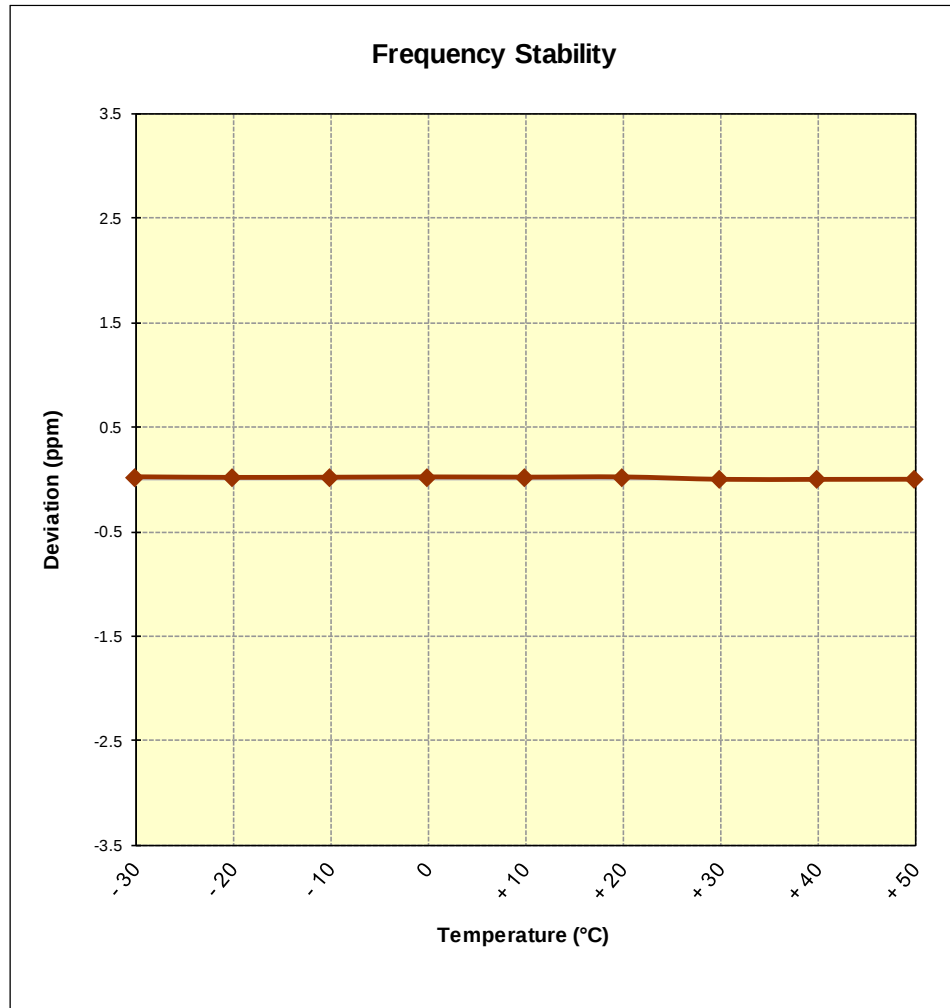


Figure 7-10. Frequency Stability Graph (Band 66/4)

FCC ID: BCG-A2157	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 196 of 203

Band 25/2 Frequency Stability Measurements

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

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	- 30	1,882,500,039	39	0.0000021
100 %		- 20	1,882,500,047	47	0.0000025
100 %		- 10	1,882,500,049	49	0.0000026
100 %		0	1,882,500,044	44	0.0000024
100 %		+ 10	1,882,500,048	48	0.0000026
100 %		+ 20	1,882,500,046	46	0.0000024
100 %		+ 30	1,882,500,010	10	0.0000005
100 %		+ 40	1,882,500,011	11	0.0000006
100 %		+ 50	1,882,500,010	10	0.0000005
BATT. ENDPOINT	3.40	+ 20	1,882,500,007	7	0.0000004

Table 7-35. Frequency Stability Data (Band 25/2)

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-A2157	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 197 of 203

Band 25/2 Frequency Stability Measurements

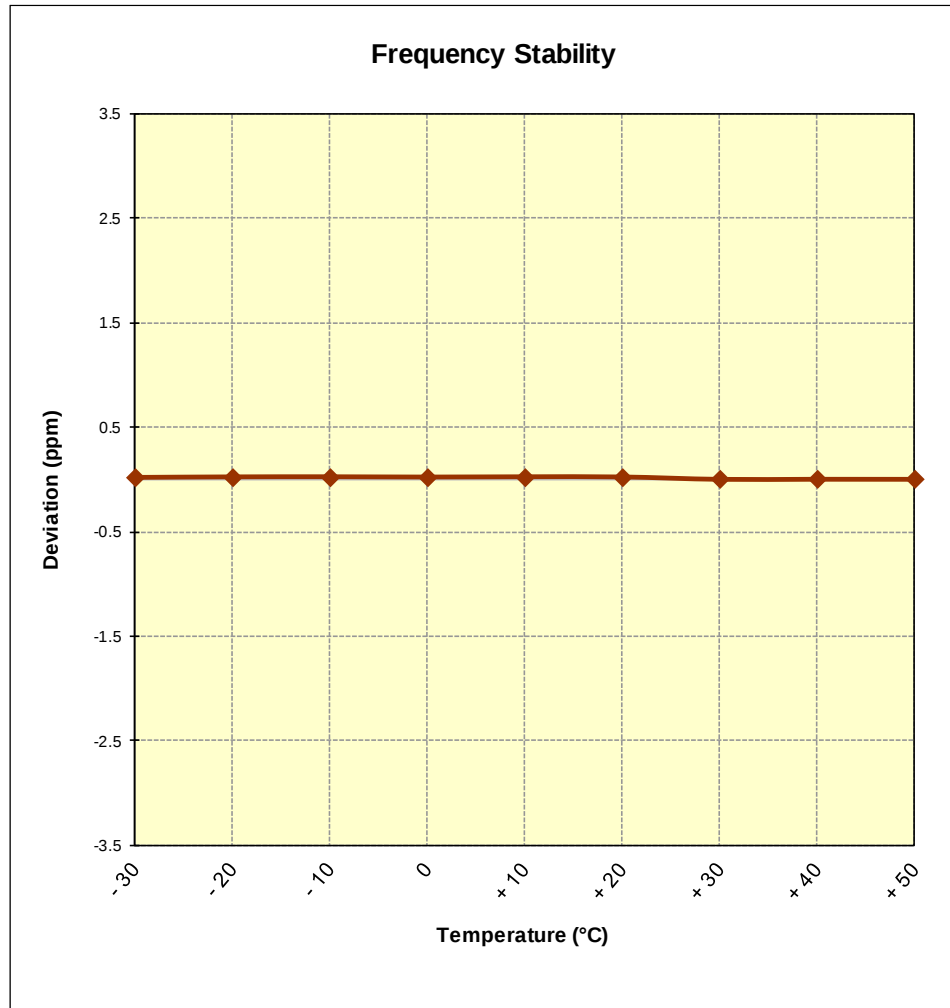


Figure 7-11. Frequency Stability Graph (Band 25/2)

FCC ID: BCG-A2157	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 198 of 203

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	2,535,000,048	48	0.0000019
100 %		- 20	2,535,000,045	45	0.0000018
100 %		- 10	2,535,000,045	45	0.0000018
100 %		0	2,535,000,042	42	0.0000017
100 %		+ 10	2,535,000,043	43	0.0000017
100 %		+ 20	2,535,000,050	50	0.0000020
100 %		+ 30	2,535,000,017	17	0.0000007
100 %		+ 40	2,535,000,016	16	0.0000006
100 %		+ 50	2,535,000,016	16	0.0000006
BATT. ENDPOINT	3.40	+ 20	2,535,000,012	12	0.0000005

Table 7-36. Frequency Stability Data (Band 7)

Note:

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

FCC ID: BCG-A2157	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 199 of 203

Band 7 Frequency Stability Measurements

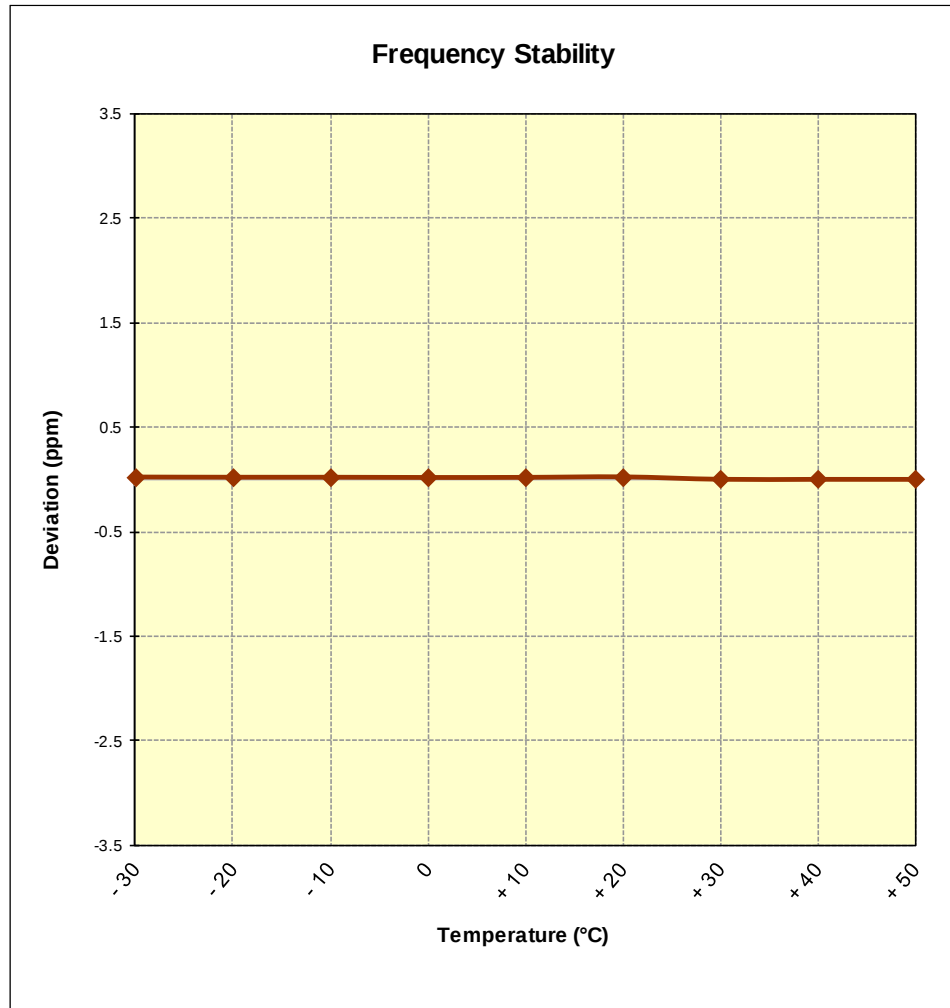


Figure 7-12. Frequency Stability Graph (Band 7)

FCC ID: BCG-A2157	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 200 of 203

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	2,593,000,060	60	0.0000023
100 %		- 20	2,593,000,062	62	0.0000024
100 %		- 10	2,593,000,056	56	0.0000022
100 %		0	2,593,000,052	52	0.0000020
100 %		+ 10	2,593,000,054	54	0.0000021
100 %		+ 20	2,593,000,052	52	0.0000020
100 %		+ 30	2,593,000,062	62	0.0000024
100 %		+ 40	2,593,000,061	61	0.0000024
100 %		+ 50	2,593,000,071	71	0.0000027
BATT. ENDPOINT	3.40	+ 20	2,593,000,061	61	0.0000023

Table 7-37. Frequency Stability Data (Band 41)

Note:

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

FCC ID: BCG-A2157	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 201 of 203

Band 41 Frequency Stability Measurements

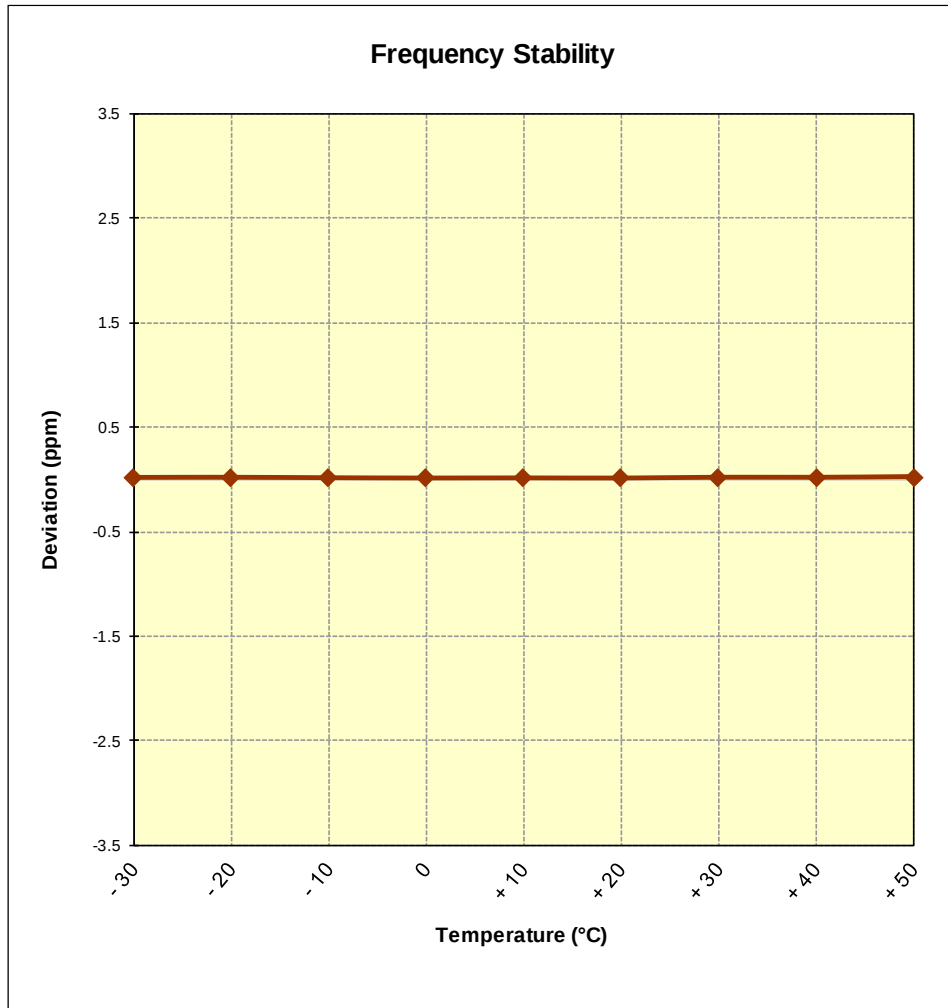


Figure 7-13. Frequency Stability Graph (Band 41)

FCC ID: BCG-A2157	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 202 of 203

8.0 CONCLUSION

The data collected relate only to the item(s) tested and show that the **Apple Watch FCC ID: BCG-A2157** complies with all the requirements of Part 22, 24, & 27 of the FCC Rules for LTE operation only.

FCC ID: BCG-A2157	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1905130011-03.BCG	Test Dates: 05/01/2019 - 08/09/2019	EUT Type: Watch	Page 203 of 203