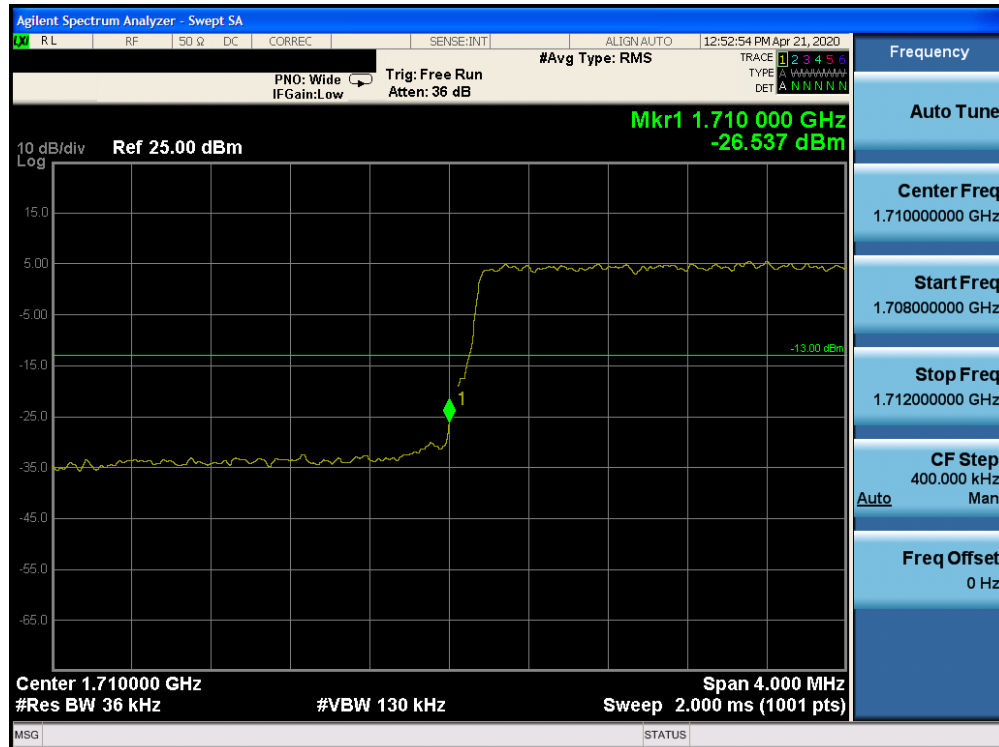
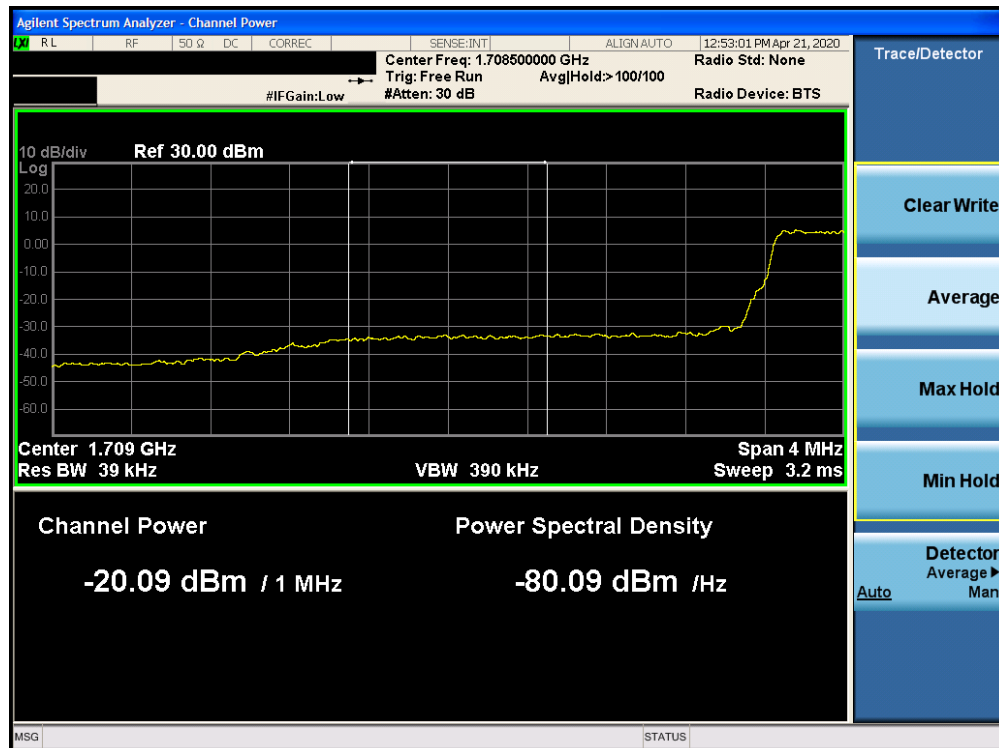


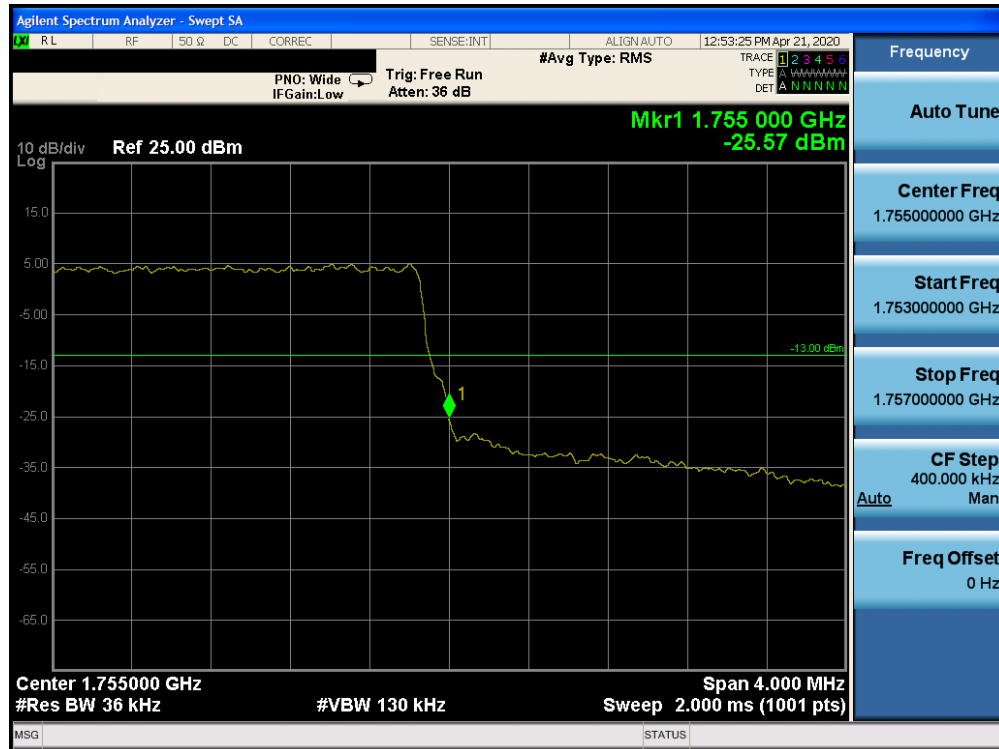


Plot 7-188. Lower Band Edge Plot (Band 4 - 3.0MHz QPSK - Full RB Configuration)

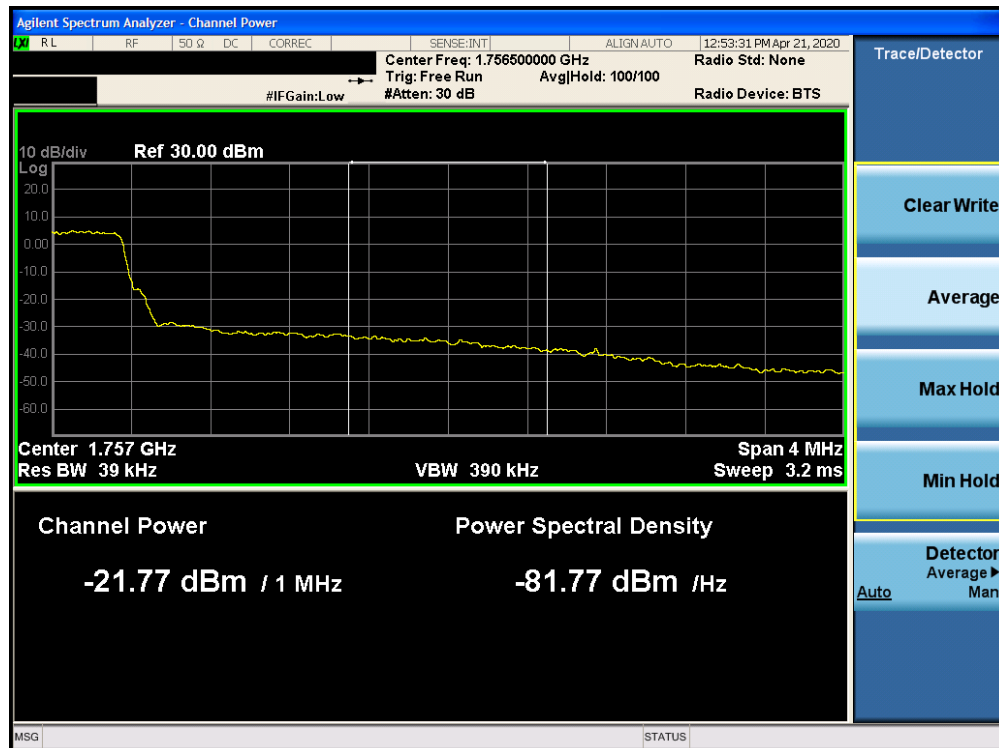


Plot 7-189. Lower Extended Band Edge Plot (Band 4 - 3.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 120 of 237

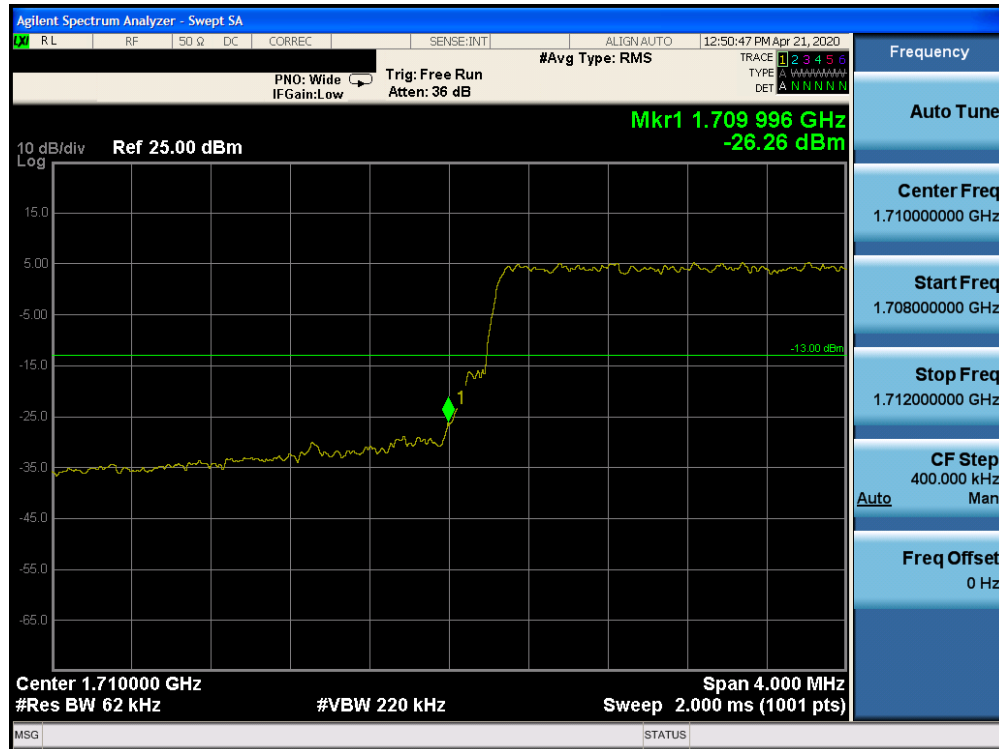


Plot 7-190. Upper Band Edge Plot (Band 4 - 3.0MHz QPSK - Full RB Configuration)

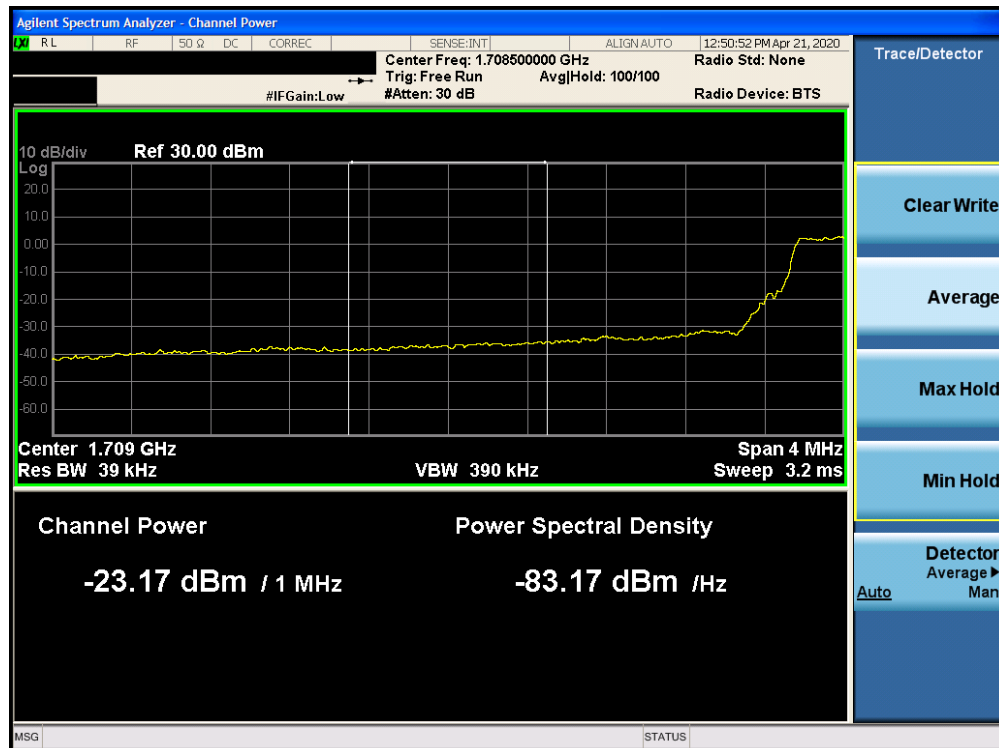


Plot 7-191. Upper Extended Band Edge Plot (Band 4 - 3.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 121 of 237

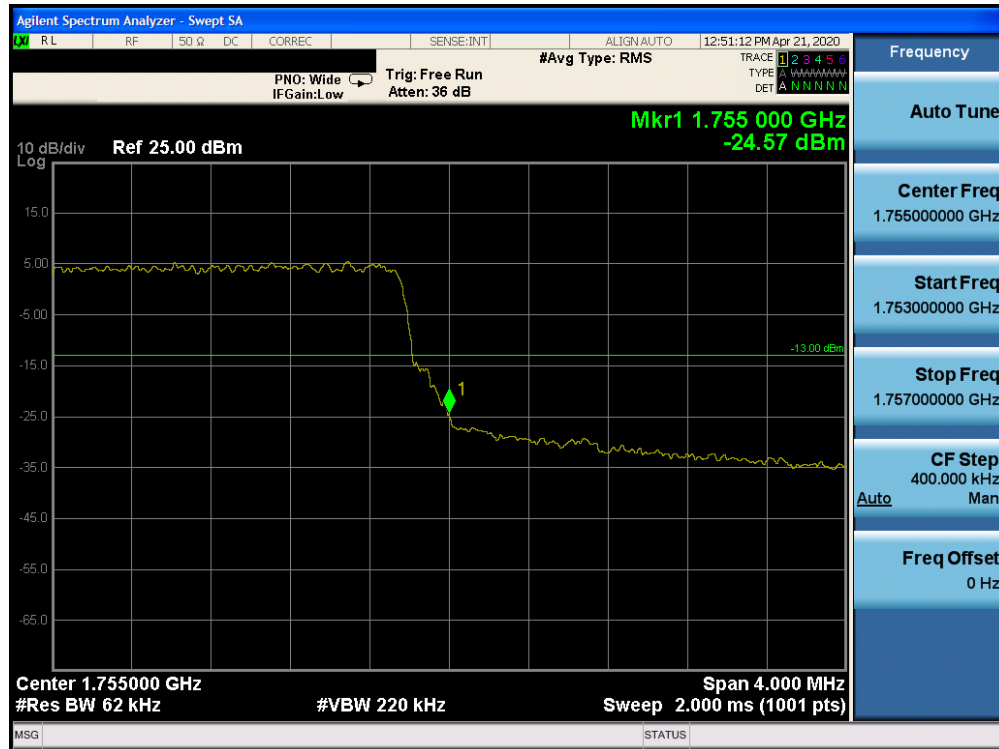


Plot 7-192. Lower Band Edge Plot (Band 4 - 5.0MHz QPSK - Full RB Configuration)



Plot 7-193. Lower Extended Band Edge Plot (Band 4 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 122 of 237

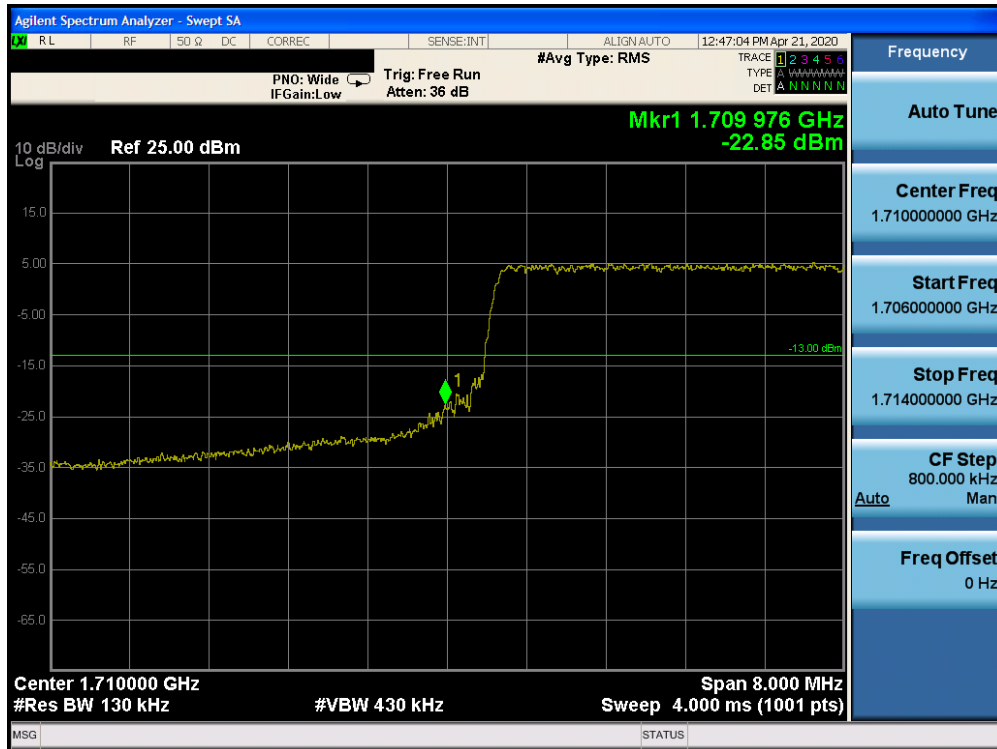


Plot 7-194. Upper Band Edge Plot (Band 4 - 5.0MHz QPSK - Full RB Configuration)

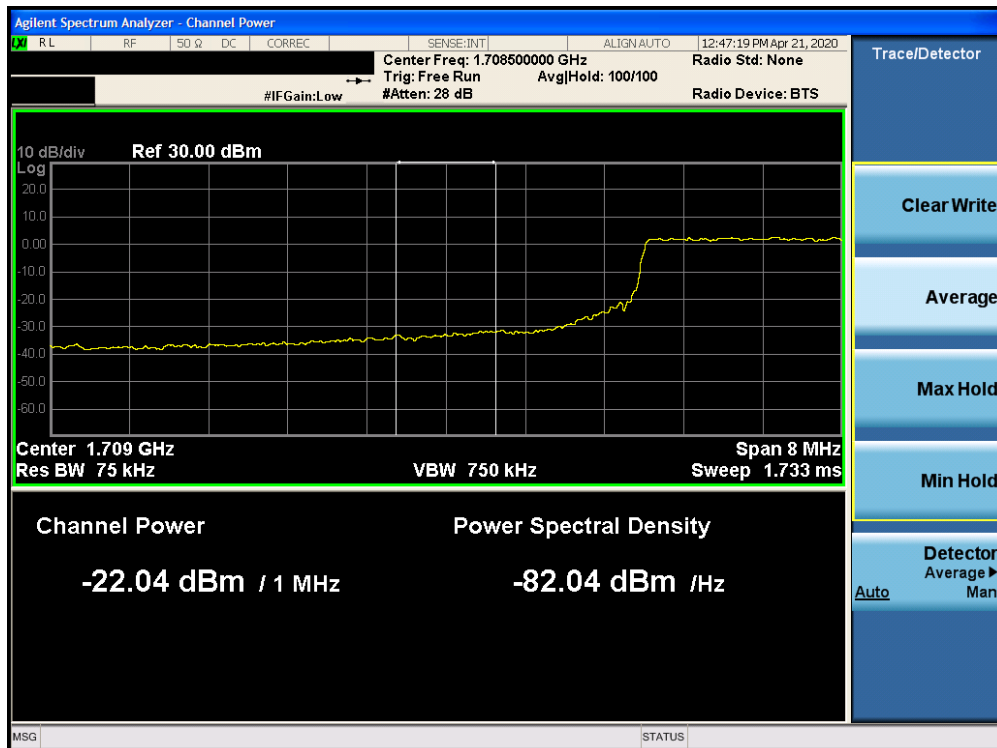


Plot 7-195. Upper Extended Band Edge Plot (Band 4 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 123 of 237

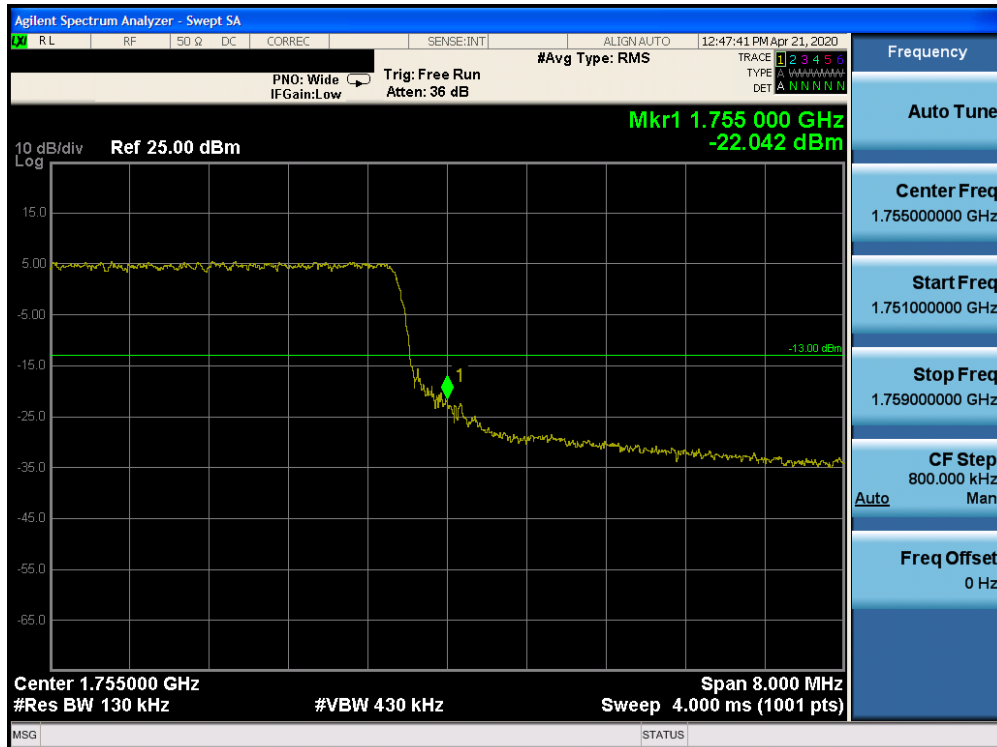


Plot 7-196. Lower Band Edge Plot (Band 4 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-197. Lower Extended Band Edge Plot (Band 4 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 124 of 237

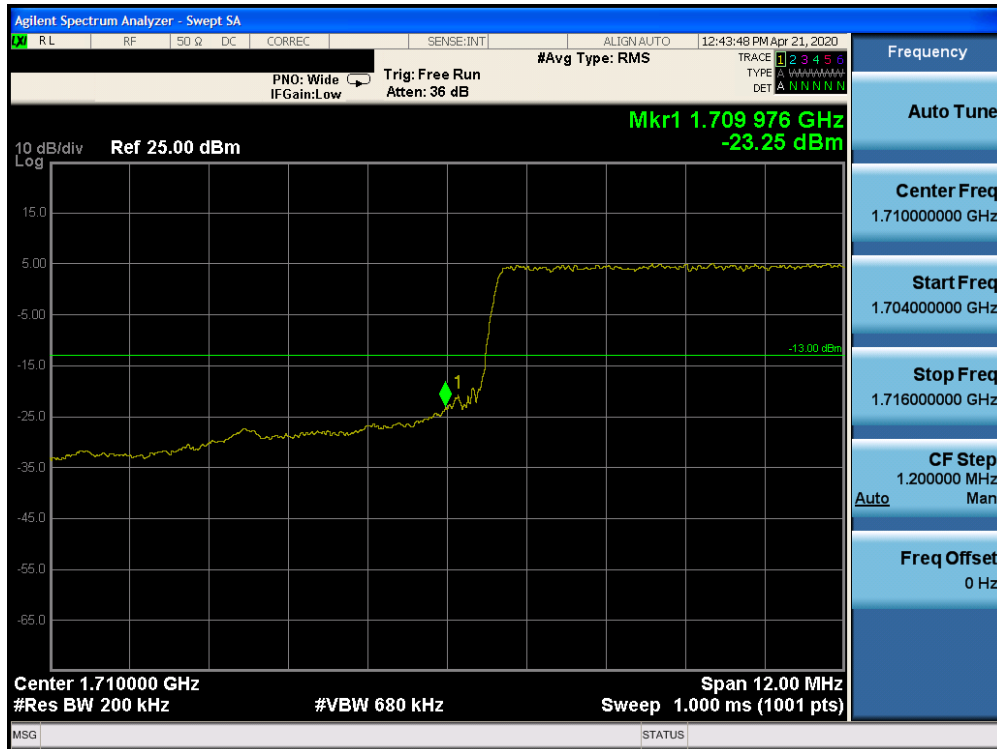


Plot 7-198. Upper Band Edge Plot (Band 4 - 10.0MHz QPSK - Full RB Configuration)

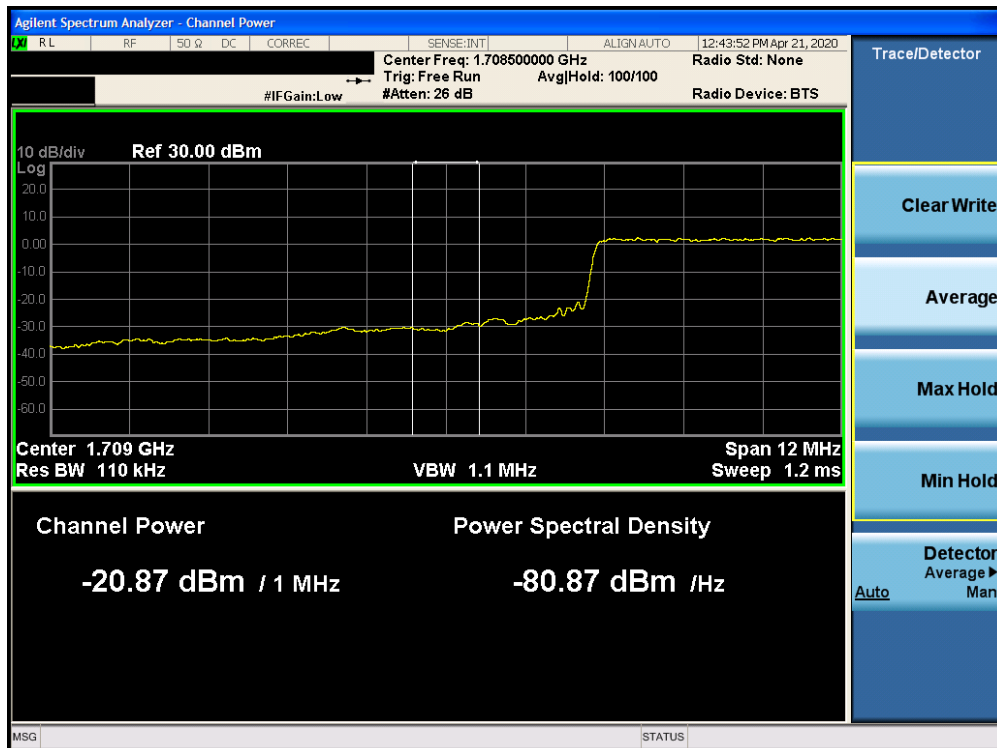


Plot 7-199. Upper Extended Band Edge Plot (Band 4 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 125 of 237

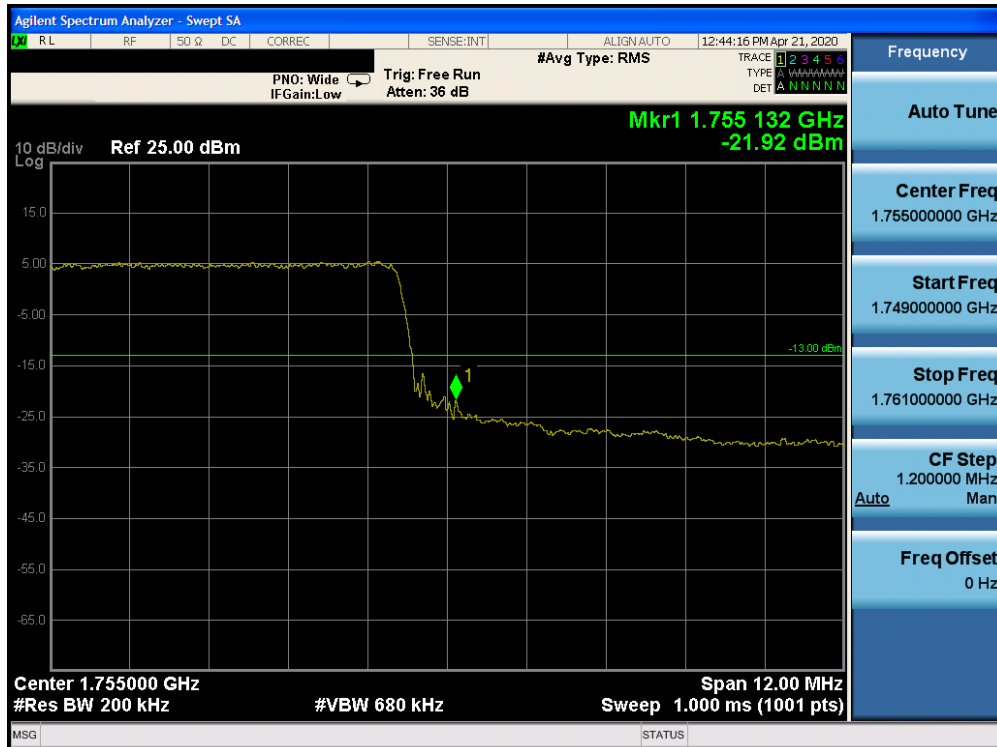


Plot 7-200. Lower Band Edge Plot (Band 4 - 15.0MHz QPSK - Full RB Configuration)

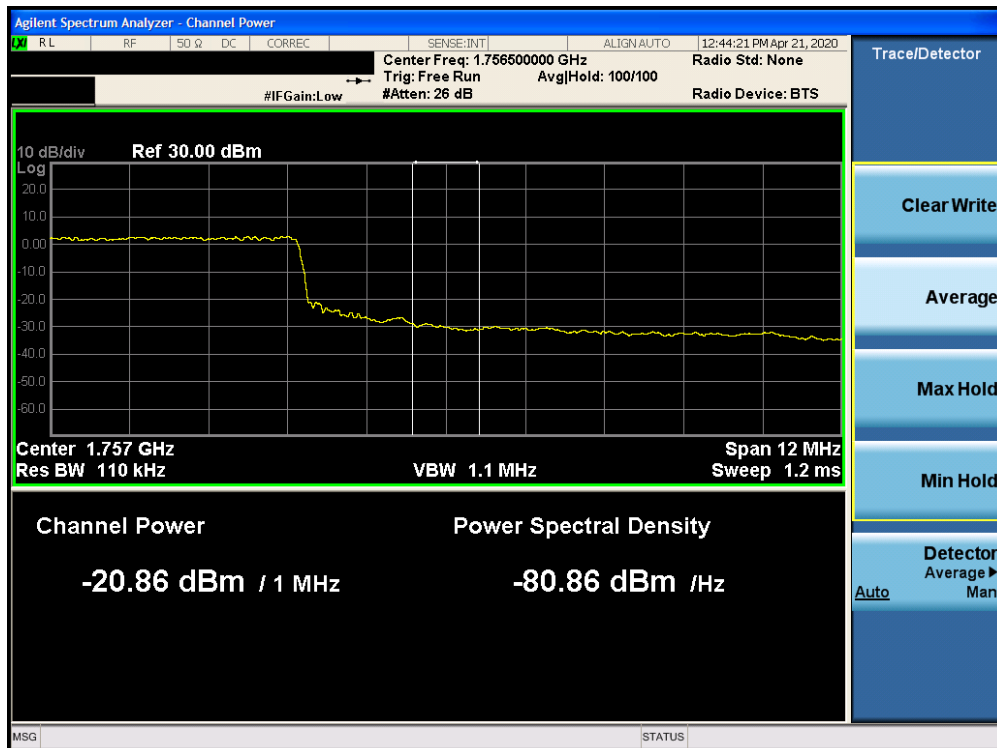


Plot 7-201. Lower Extended Band Edge Plot (Band 4 - 15.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 126 of 237

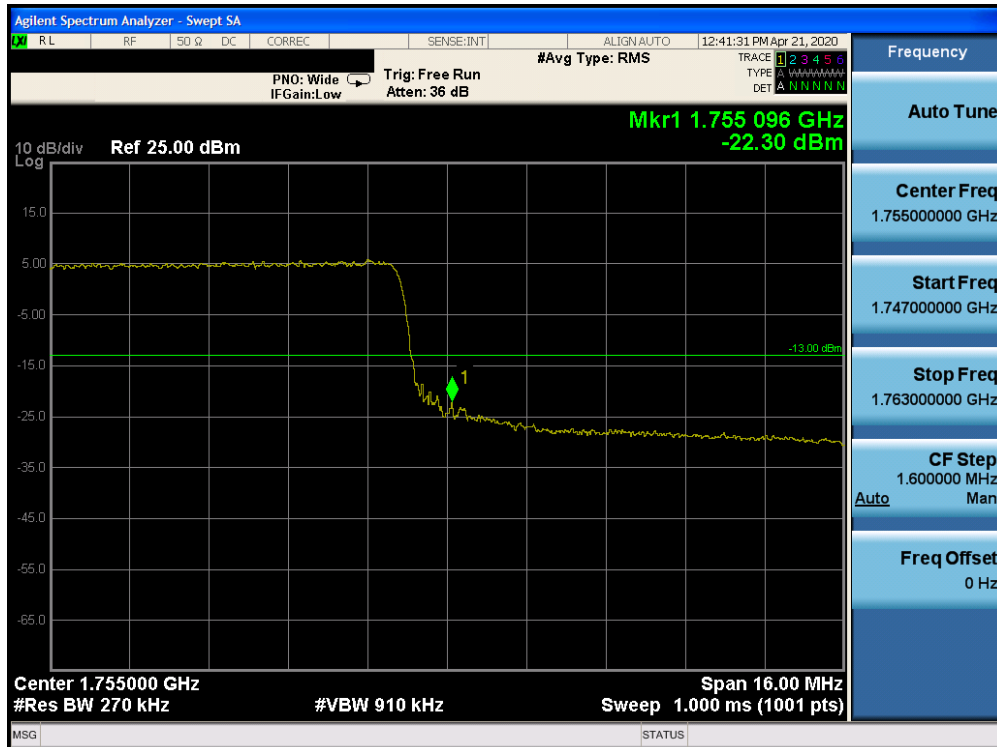


Plot 7-202. Upper Band Edge Plot (Band 4 - 15.0MHz QPSK - Full RB Configuration)

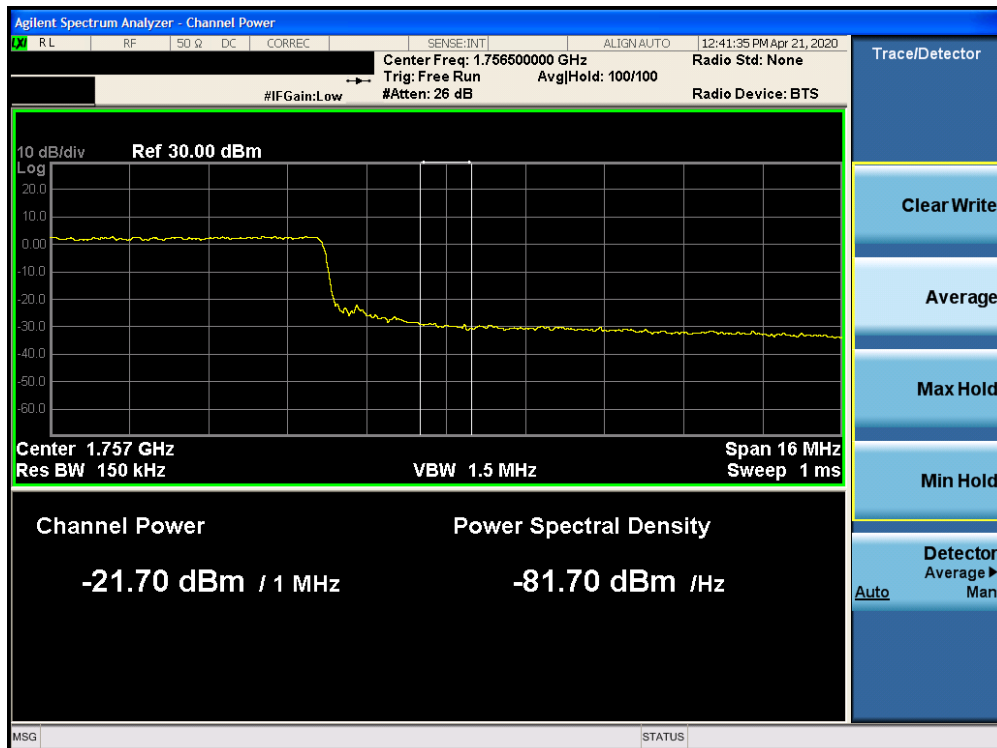


Plot 7-203. Upper Extended Band Edge Plot (Band 4 - 15.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 127 of 237



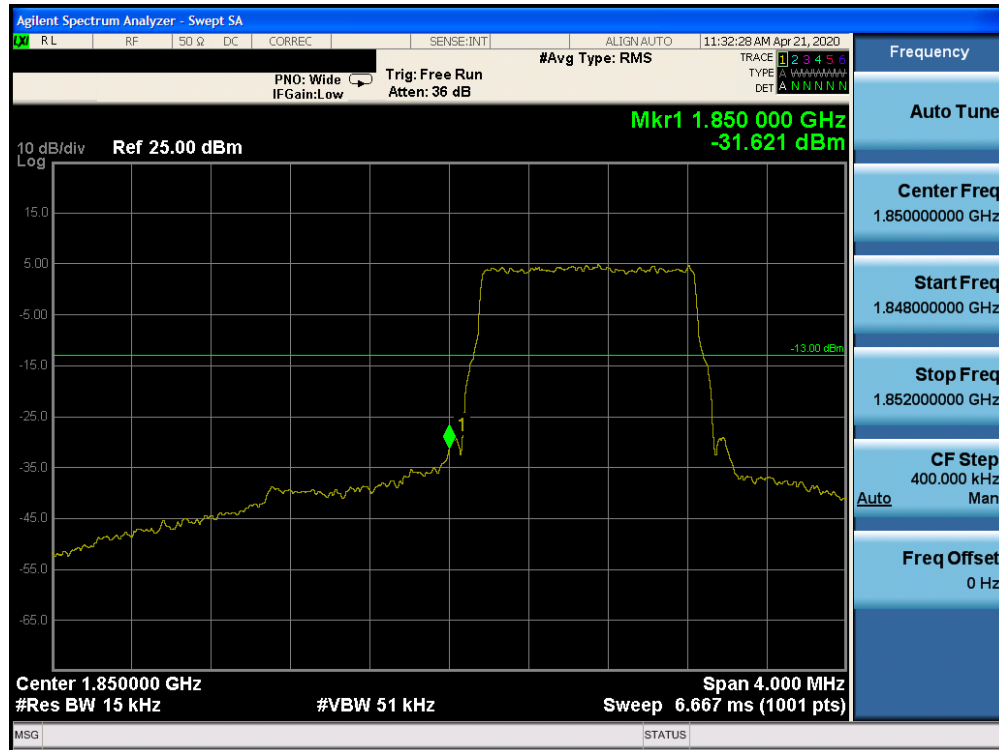
Plot 7-206. Upper Band Edge Plot (Band 4 - 20.0MHz QPSK - Full RB Configuration)



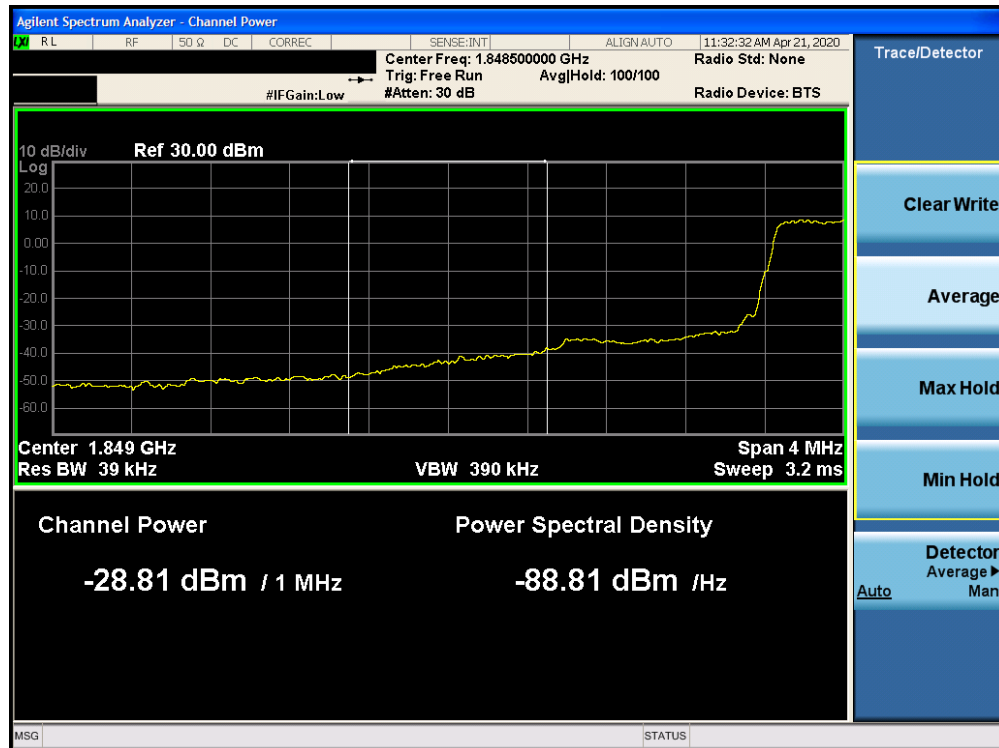
Plot 7-207. Upper Extended Band Edge Plot (Band 4 - 20.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 129 of 237

Band 25

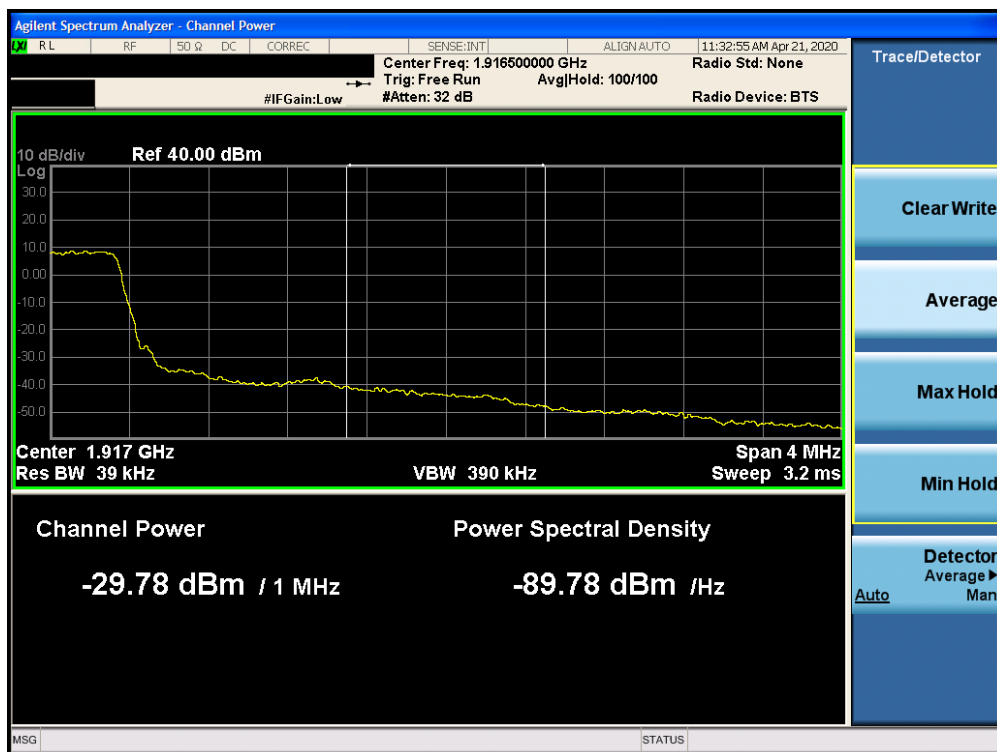
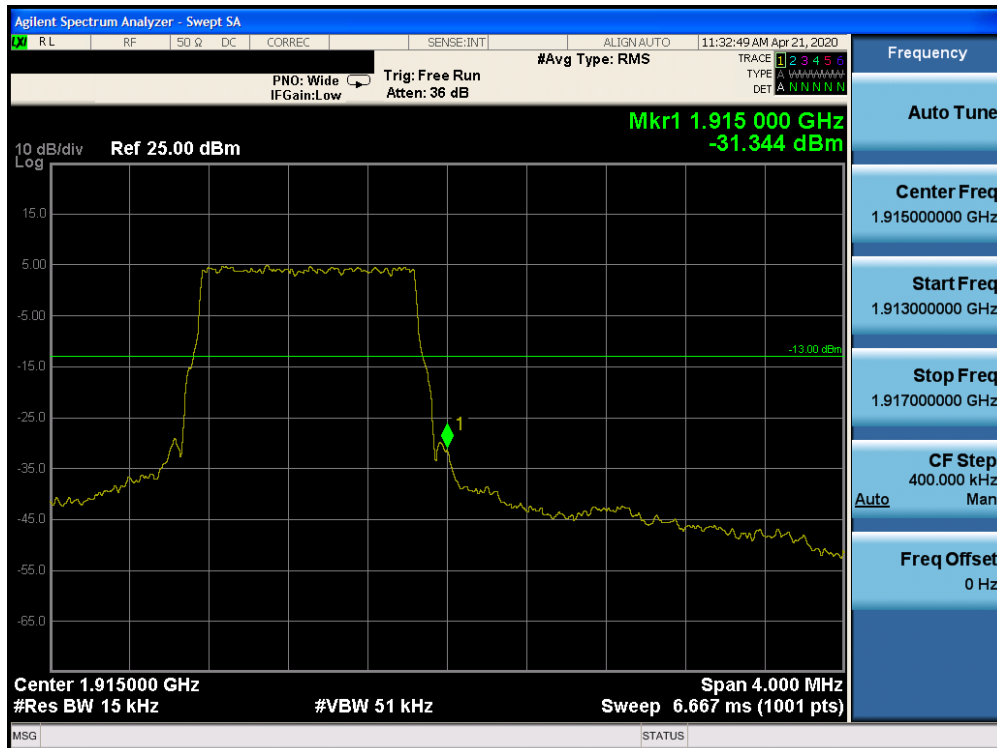


Plot 7-208. Lower Band Edge Plot (Band 25 - 1.4MHz QPSK - Full RB Configuration)

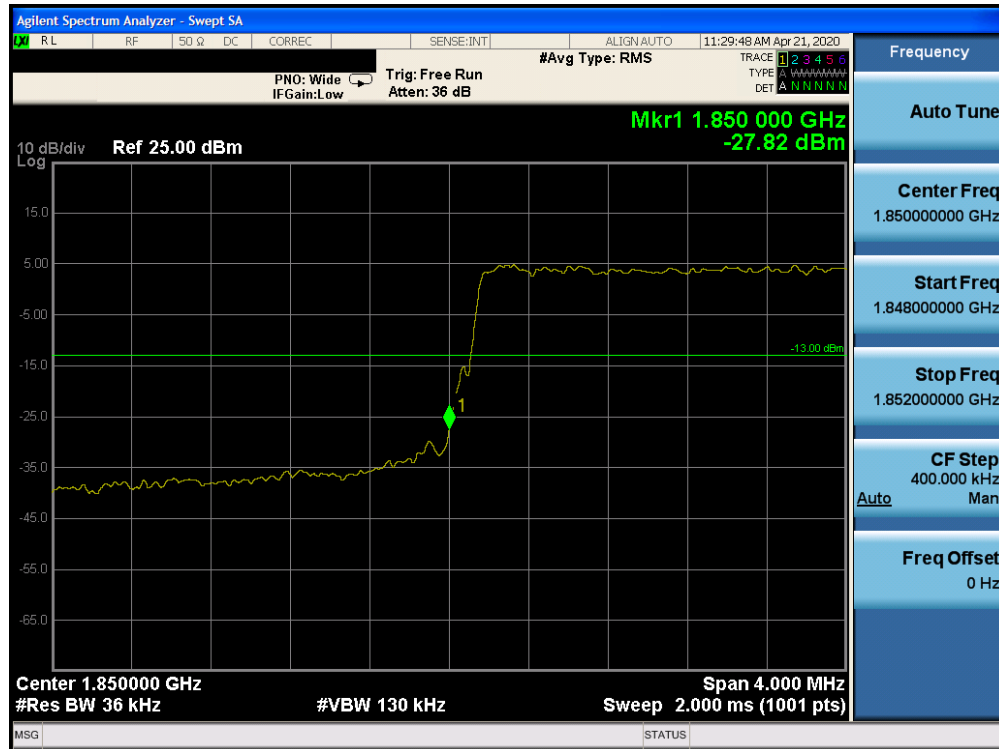


Plot 7-209. Lower Extended Band Edge Plot (Band 25 - 1.4MHz QPSK - Full RB Configuration)

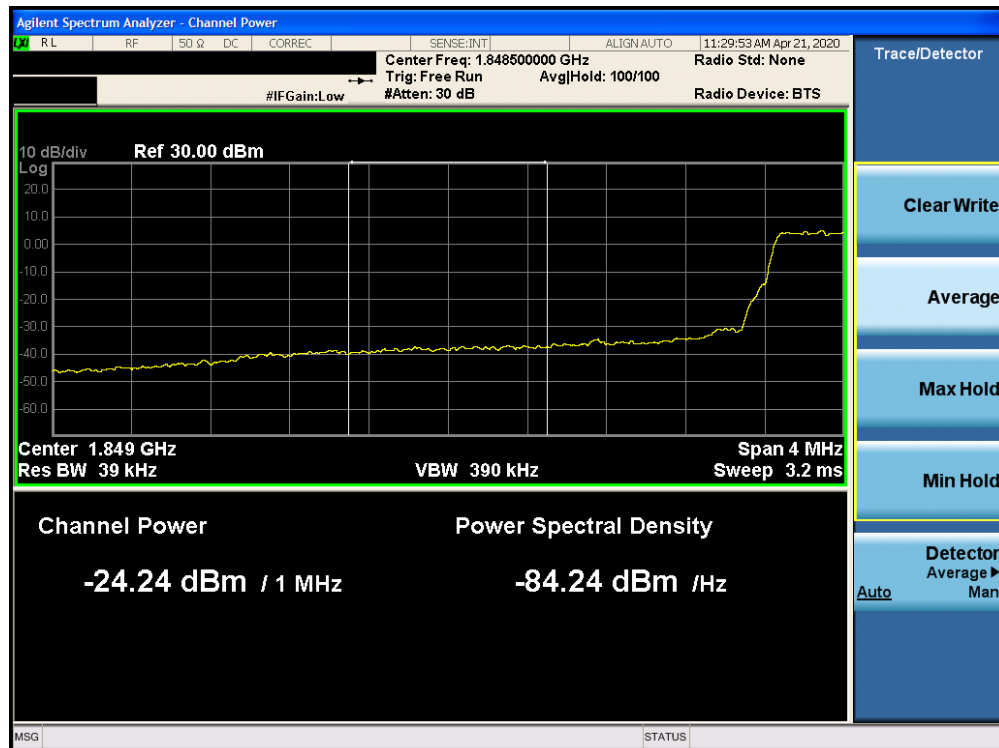
FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 130 of 237



FCC ID: BCG-A2293	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 131 of 237

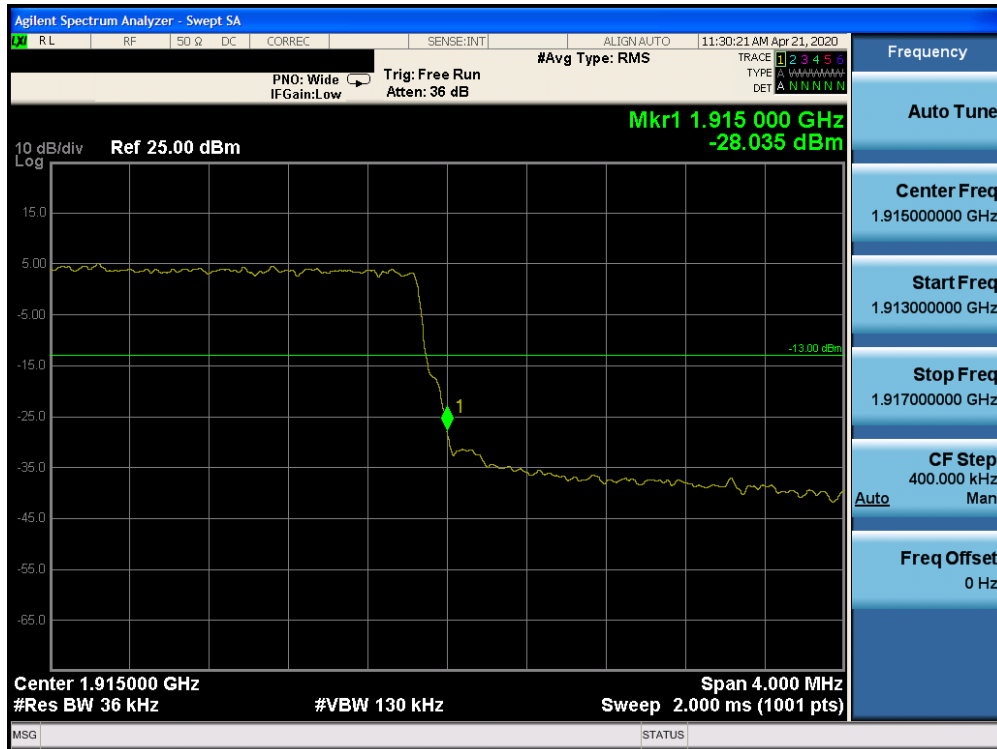


Plot 7-212. Lower Band Edge Plot (Band 25 - 3.0MHz QPSK - Full RB Configuration)

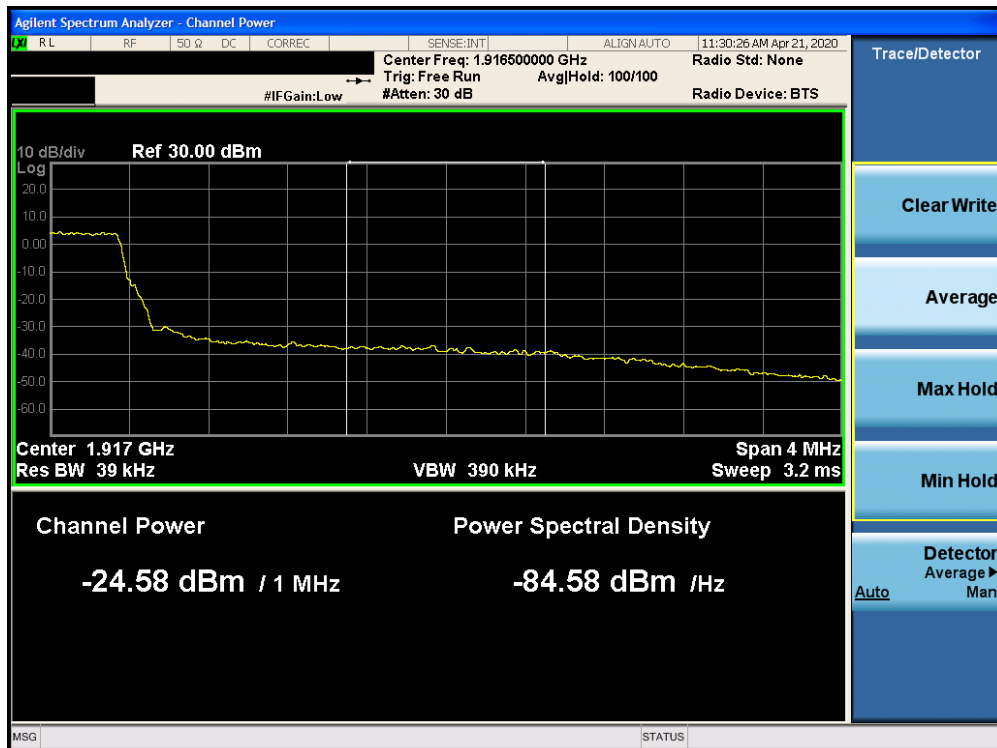


Plot 7-213. Lower Extended Band Edge Plot (Band 25 - 3.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 132 of 237

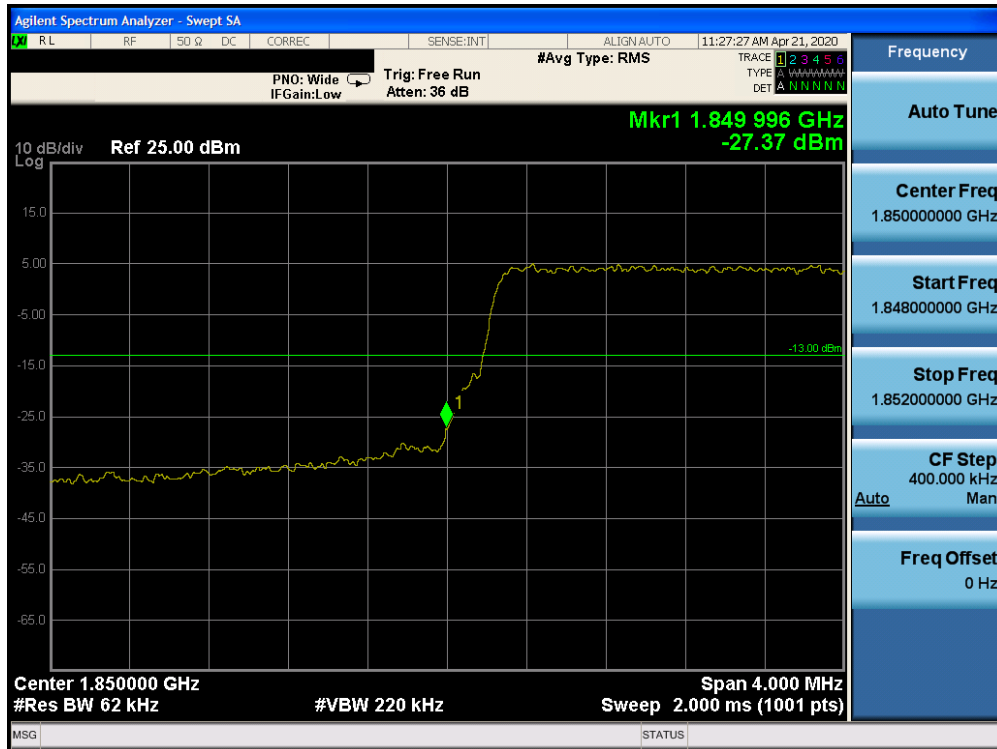


Plot 7-214. Upper Band Edge Plot (Band 25 - 3.0MHz QPSK - Full RB Configuration)

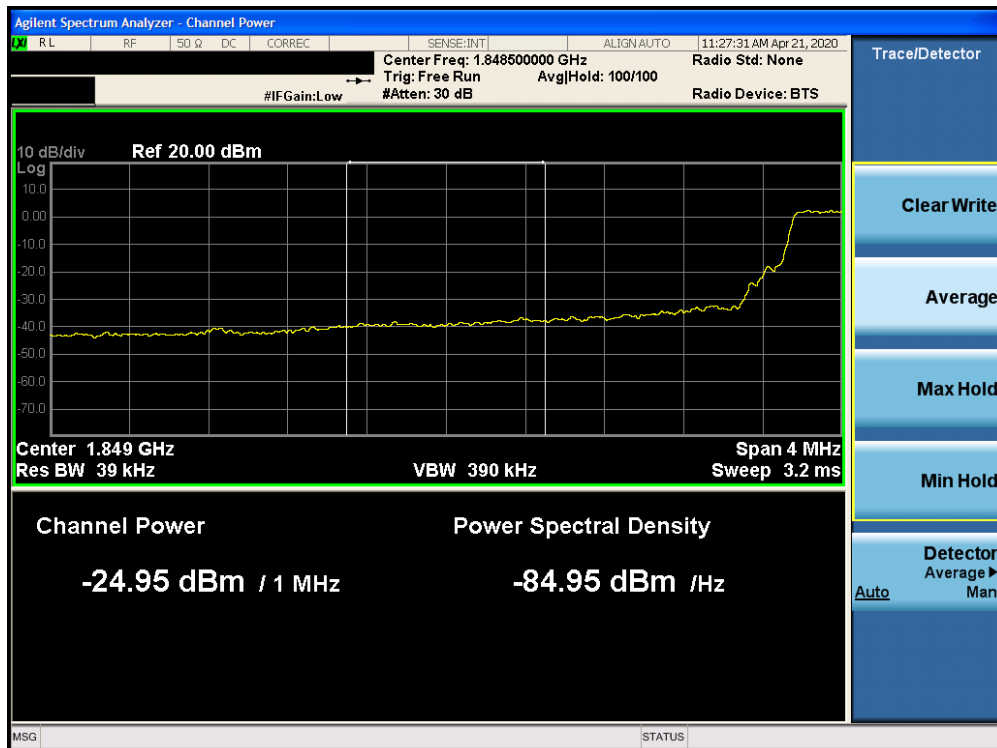


Plot 7-215. Upper Extended Band Edge Plot (Band 25 - 3.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 133 of 237



Plot 7-216. Lower Band Edge Plot (Band 25 - 5.0MHz QPSK - Full RB Configuration)

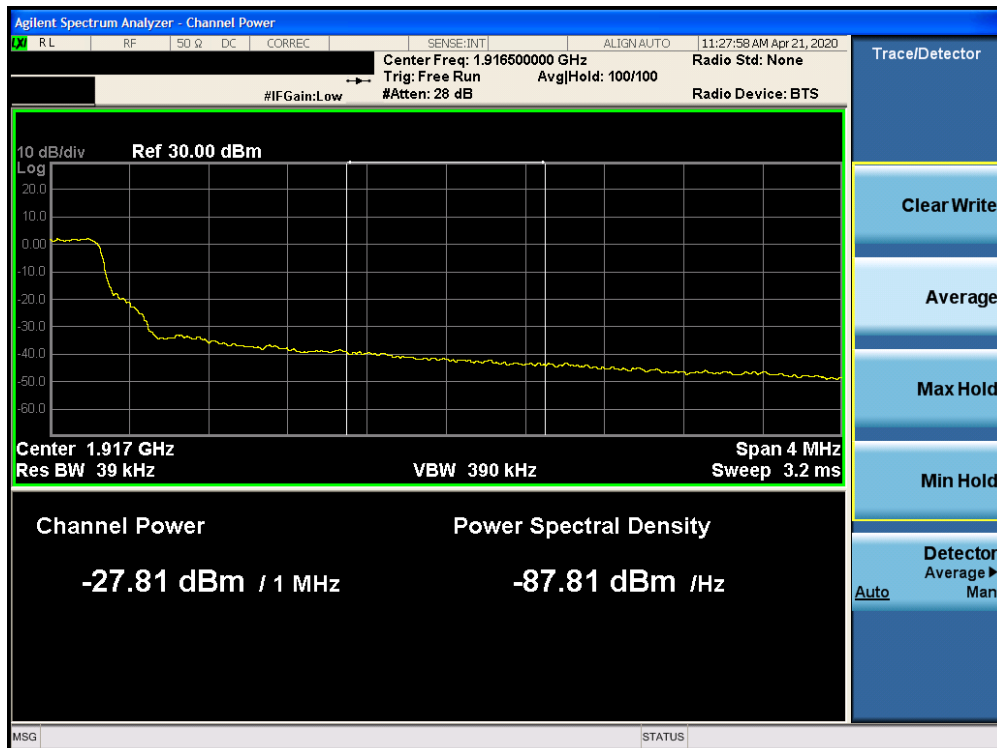


Plot 7-217. Lower Extended Band Edge Plot (Band 25 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 134 of 237

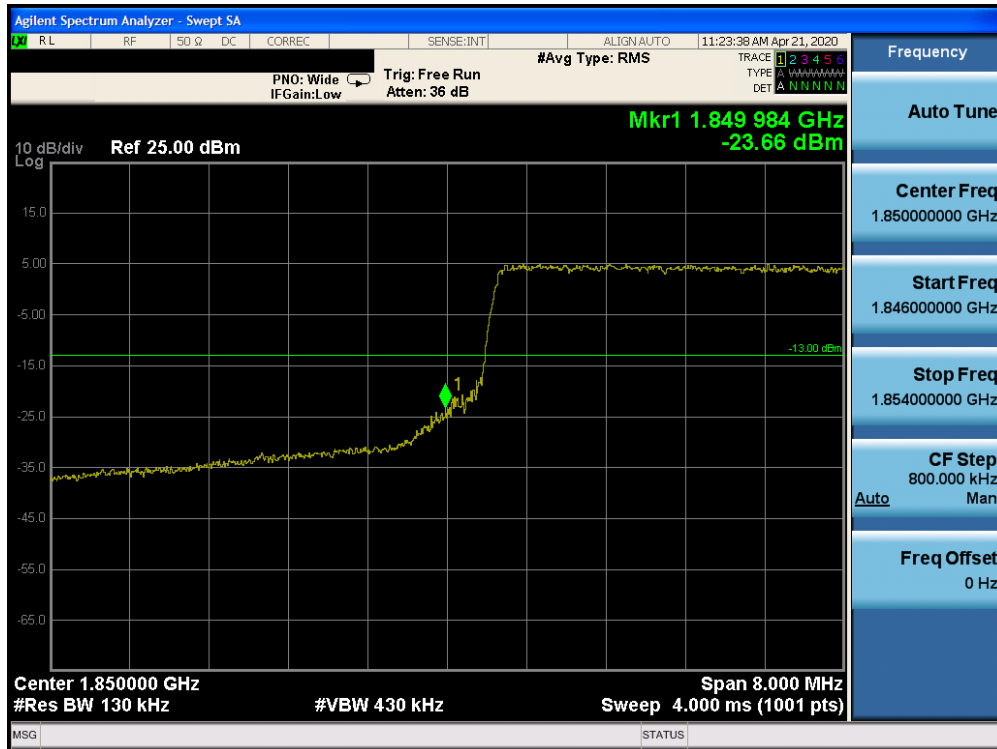


Plot 7-218. Upper Band Edge Plot (Band 25 - 5.0MHz QPSK - Full RB Configuration)

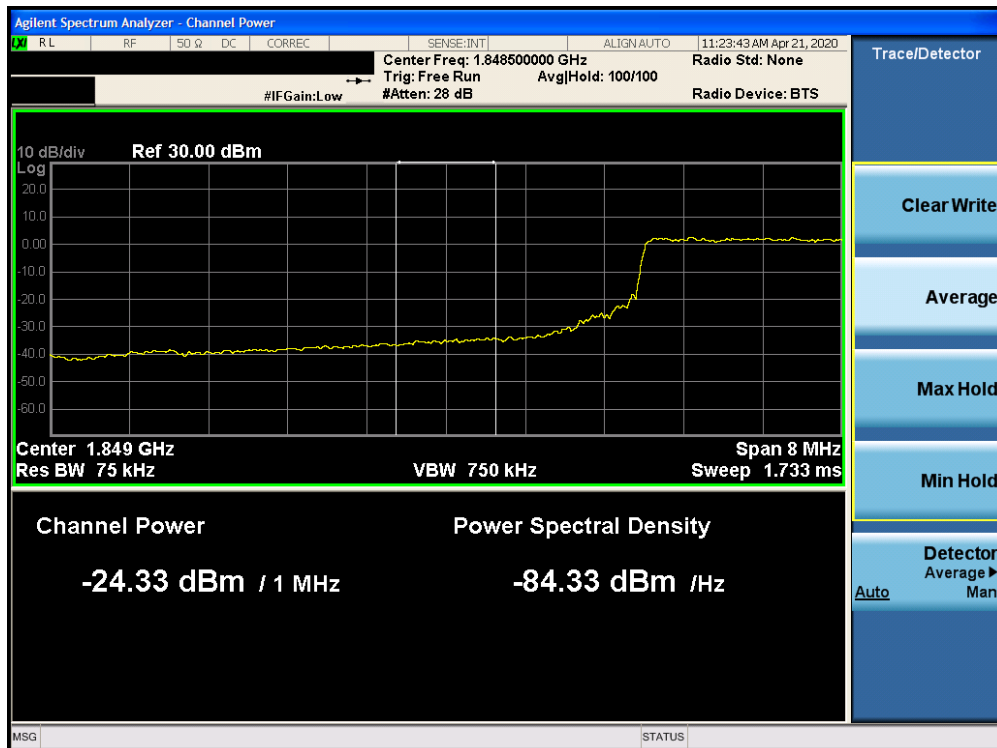


Plot 7-219. Upper Extended Band Edge Plot (Band 25 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 135 of 237

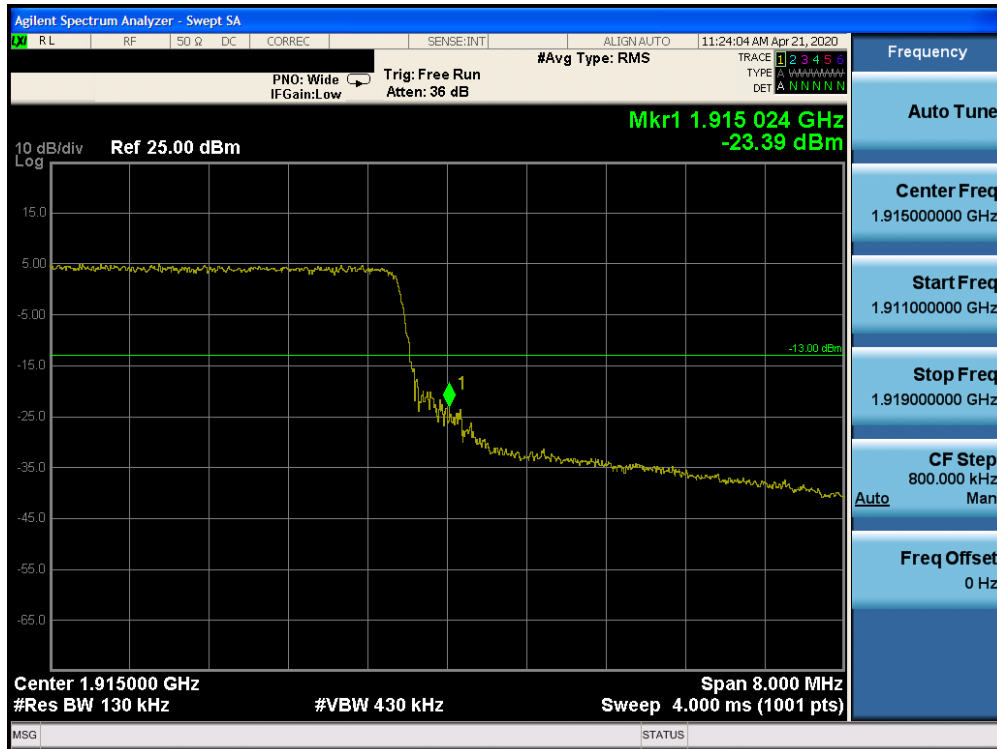


Plot 7-220. Lower Band Edge Plot (Band 25 - 10.0MHz QPSK - Full RB Configuration)

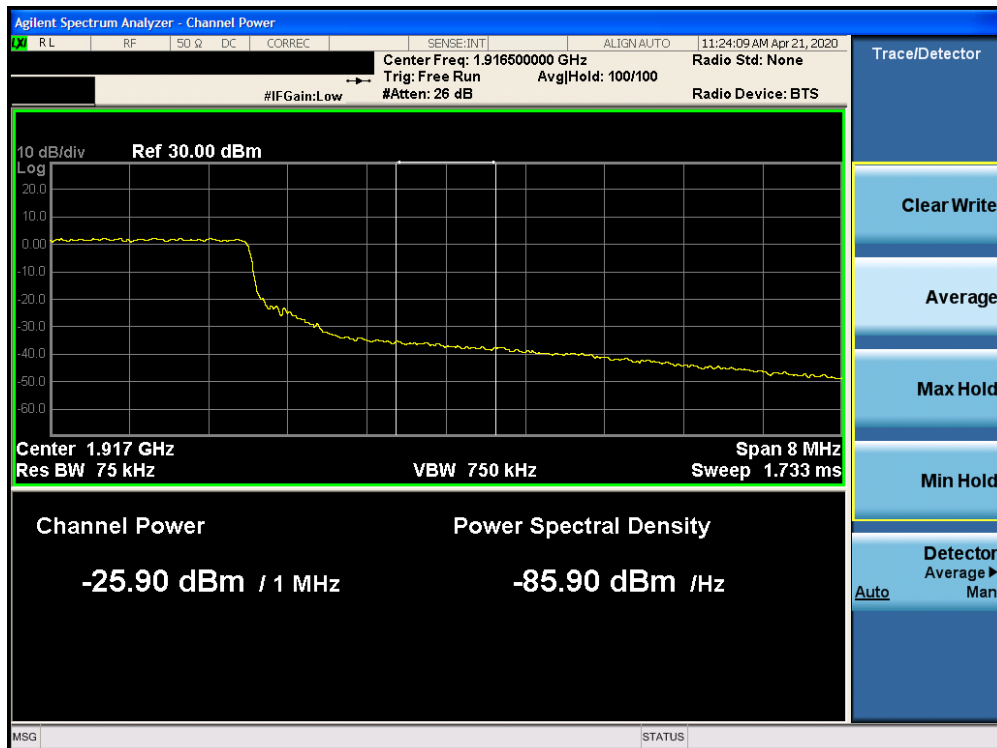


Plot 7-221. Lower Extended Band Edge Plot (Band 25 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 136 of 237

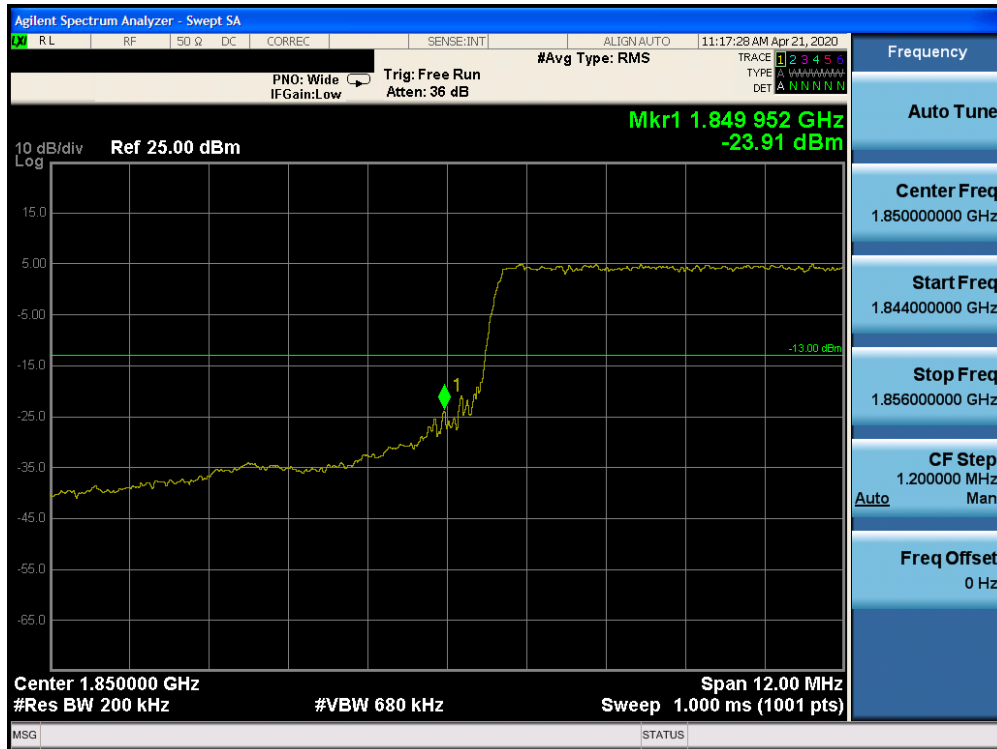


Plot 7-222. Upper Band Edge Plot (Band 25 - 10.0MHz QPSK - Full RB Configuration)

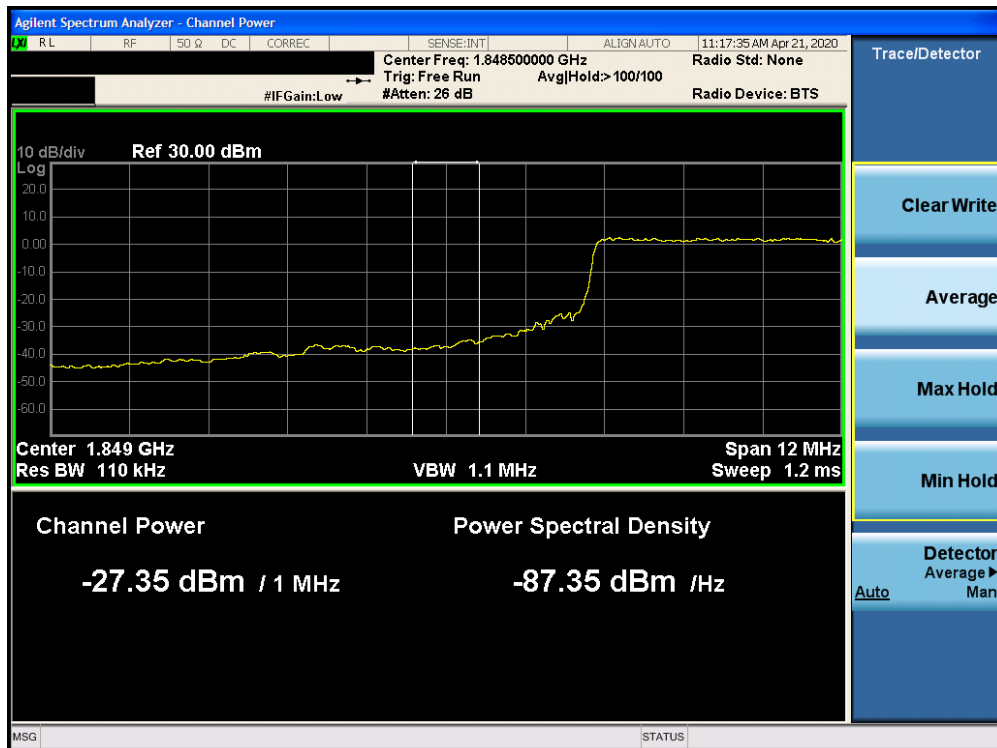


Plot 7-223. Upper Extended Band Edge Plot (Band 25 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 137 of 237

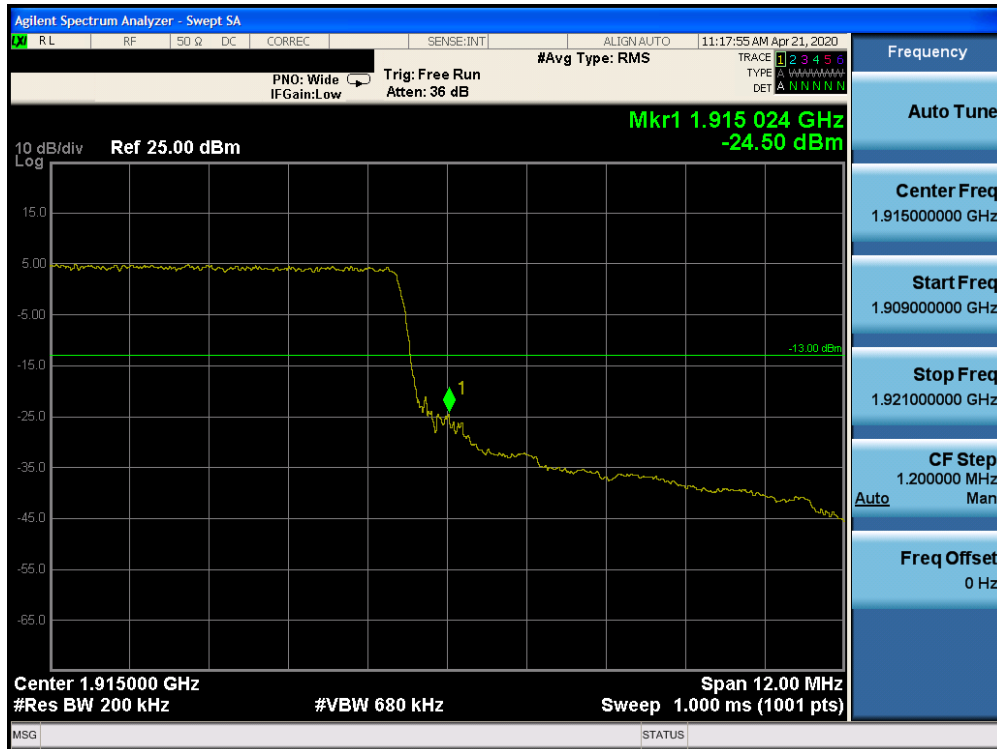


Plot 7-224. Lower Band Edge Plot (Band 25 - 15.0MHz QPSK - Full RB Configuration)

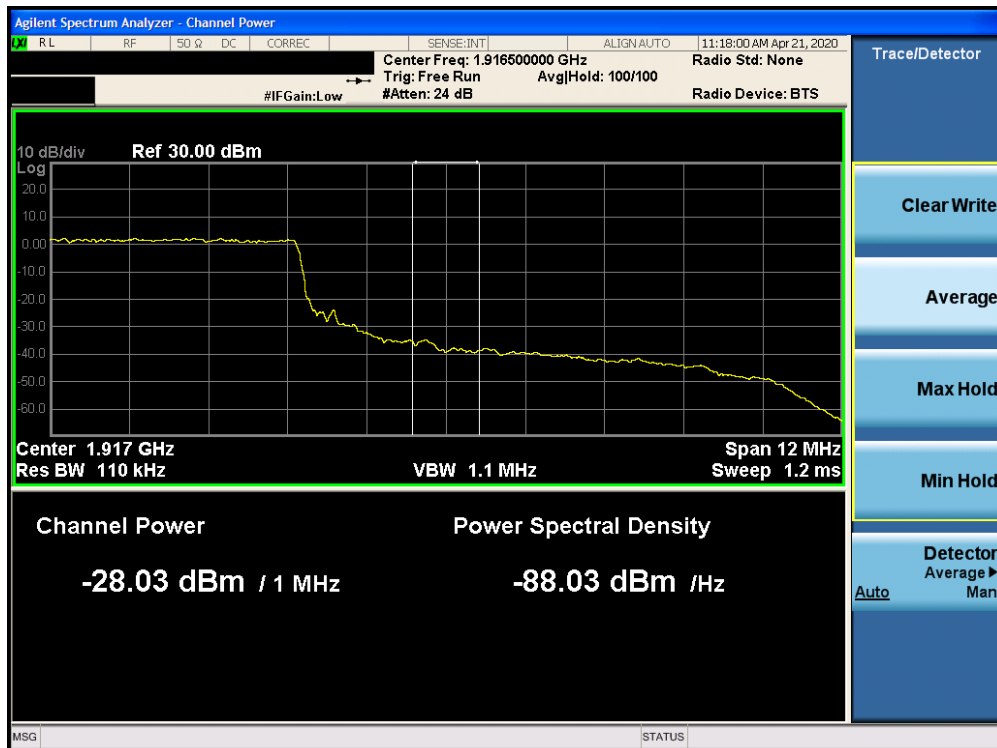


Plot 7-225. Lower Extended Band Edge Plot (Band 25 - 15.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 138 of 237

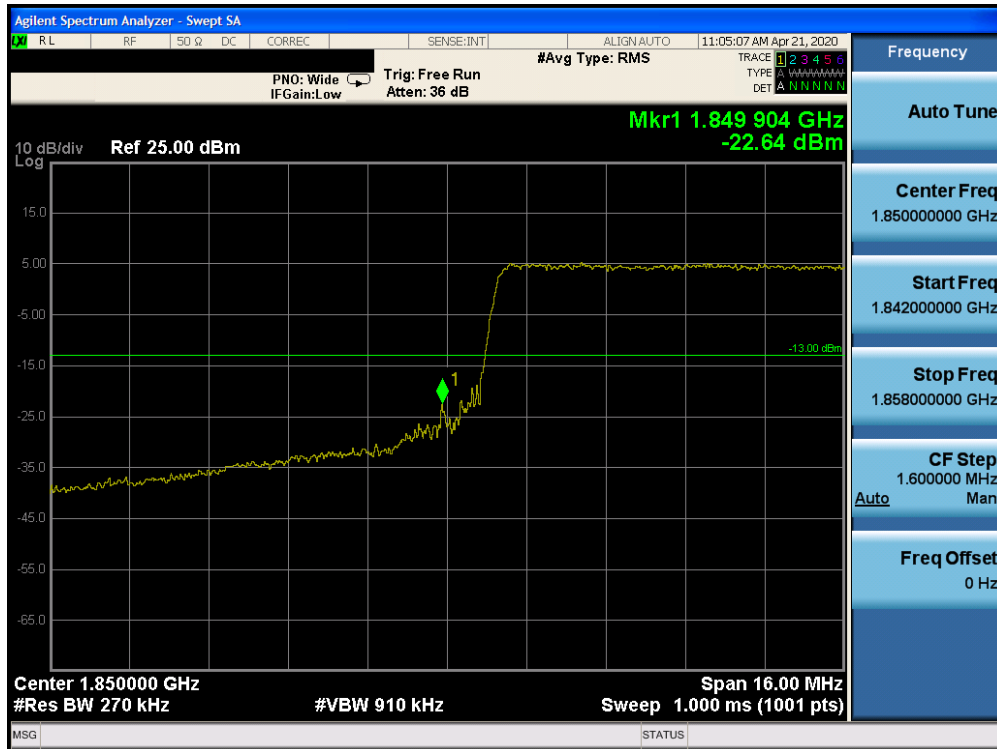


Plot 7-226. Upper Band Edge Plot (Band 25 - 15.0MHz QPSK - Full RB Configuration)

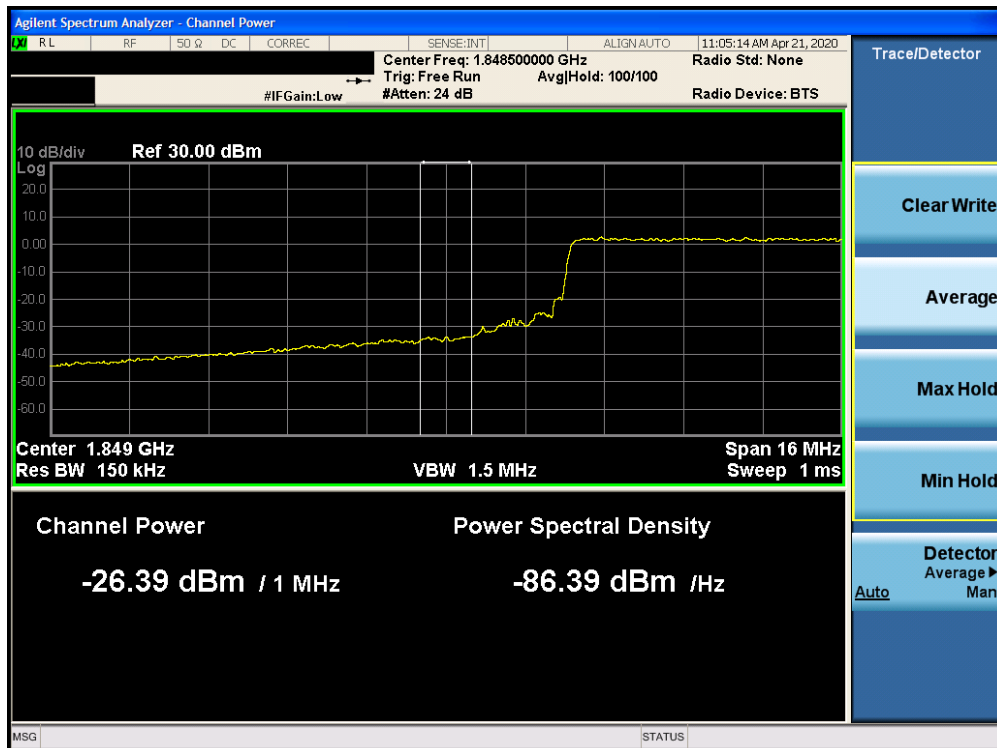


Plot 7-227. Upper Extended Band Edge Plot (Band 25 - 15.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 139 of 237

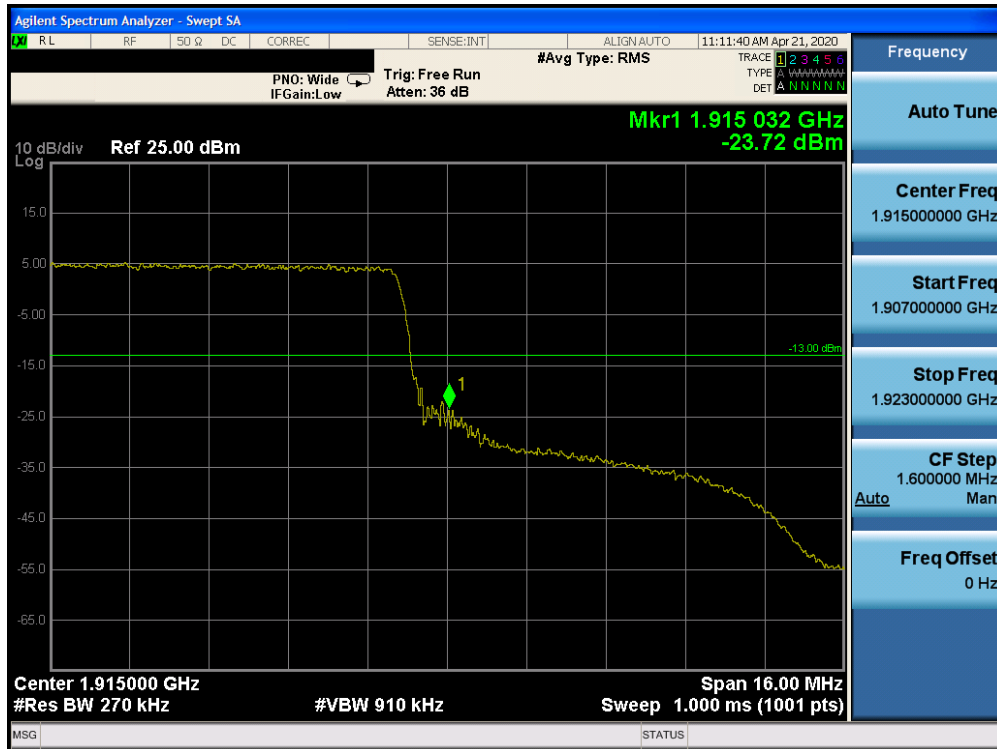


Plot 7-228. Lower Band Edge Plot (Band 25 - 20.0MHz QPSK - Full RB Configuration)

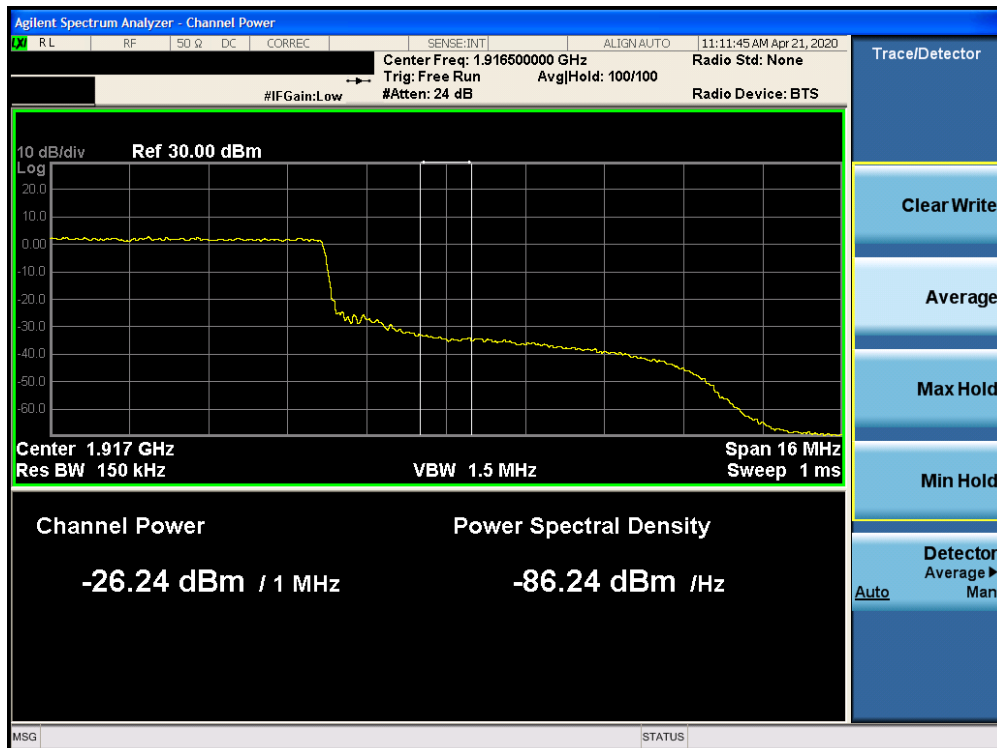


Plot 7-229. Lower Extended Band Edge Plot (Band 25 - 20.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 140 of 237



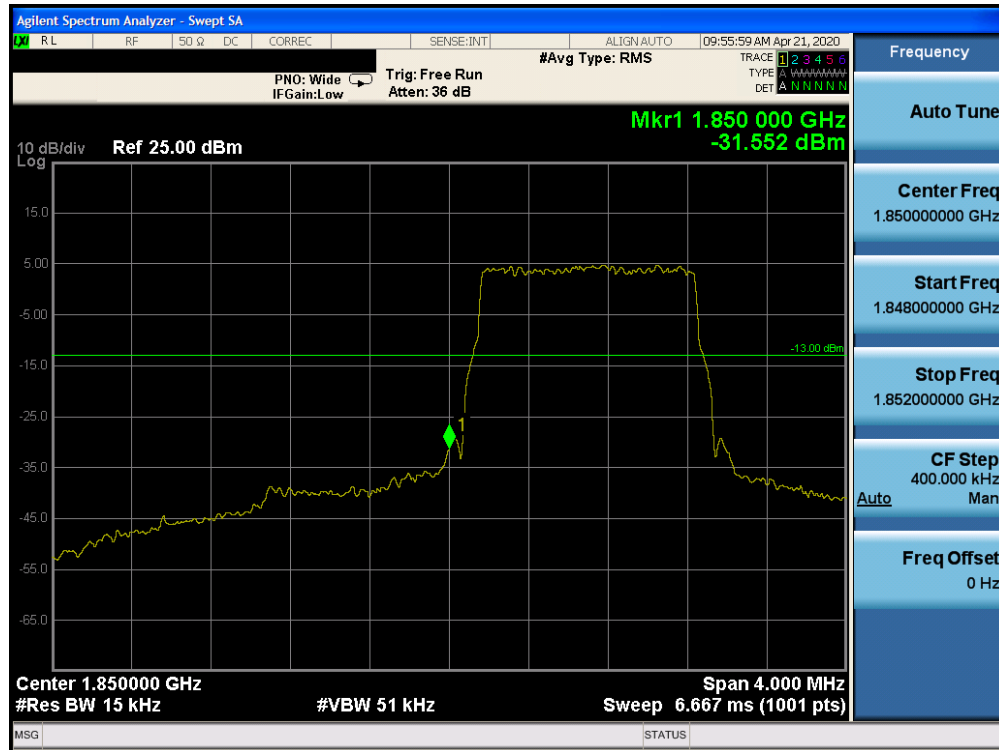
Plot 7-230. Upper Band Edge Plot (Band 25 - 20.0MHz QPSK - Full RB Configuration)



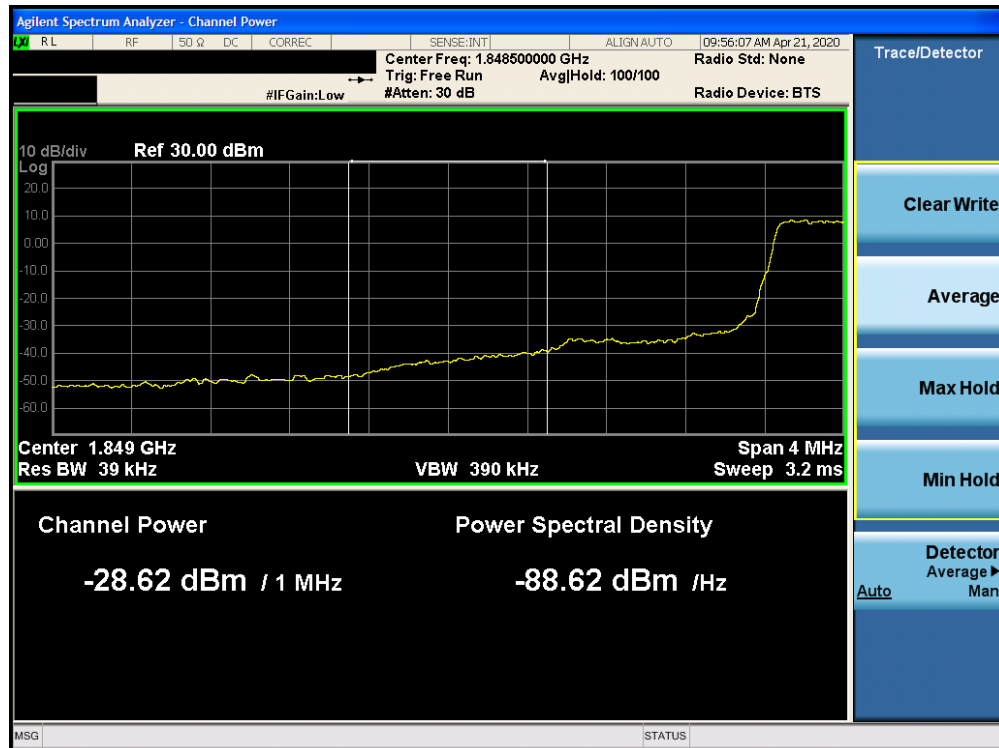
Plot 7-231. Upper Extended Band Edge Plot (Band 25 - 20.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 141 of 237

Band 2

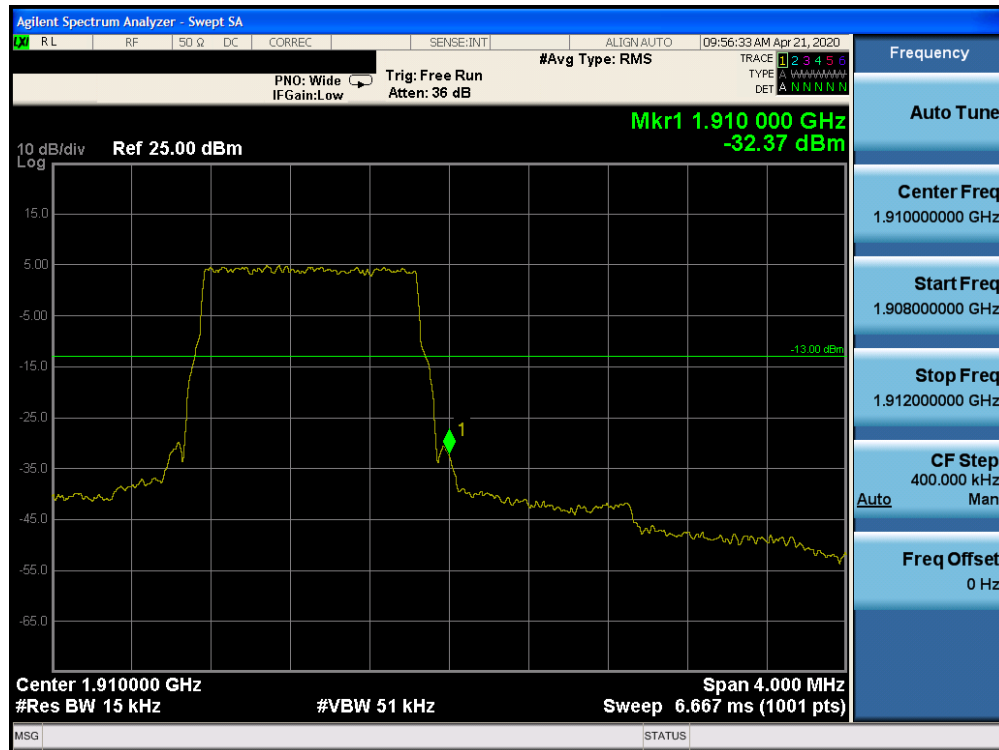


Plot 7-232. Lower Band Edge Plot (Band 2 - 1.4MHz QPSK - Full RB Configuration)

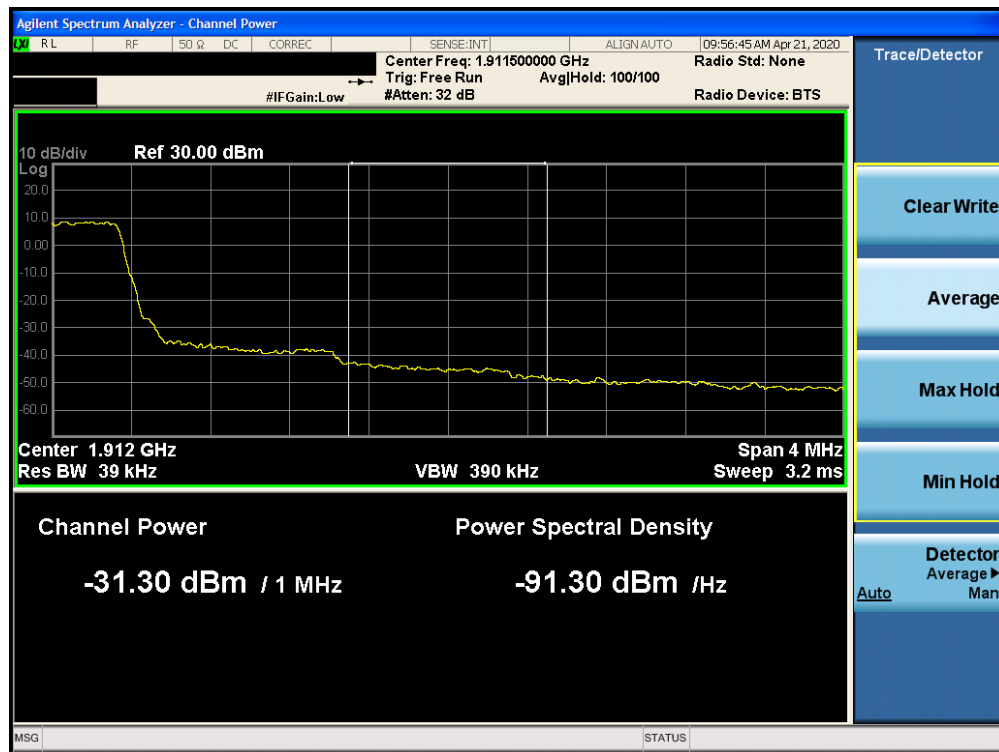


Plot 7-233. Lower Extended Band Edge Plot (Band 2 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 142 of 237

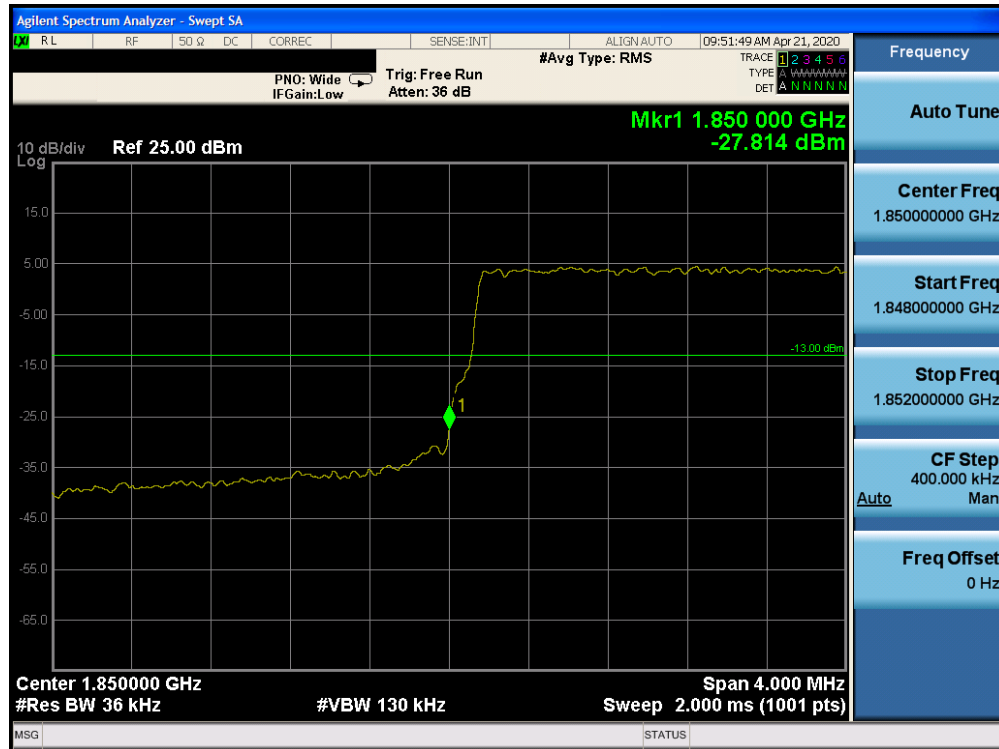


Plot 7-234. Upper Band Edge Plot (Band 2 - 1.4MHz QPSK - Full RB Configuration)

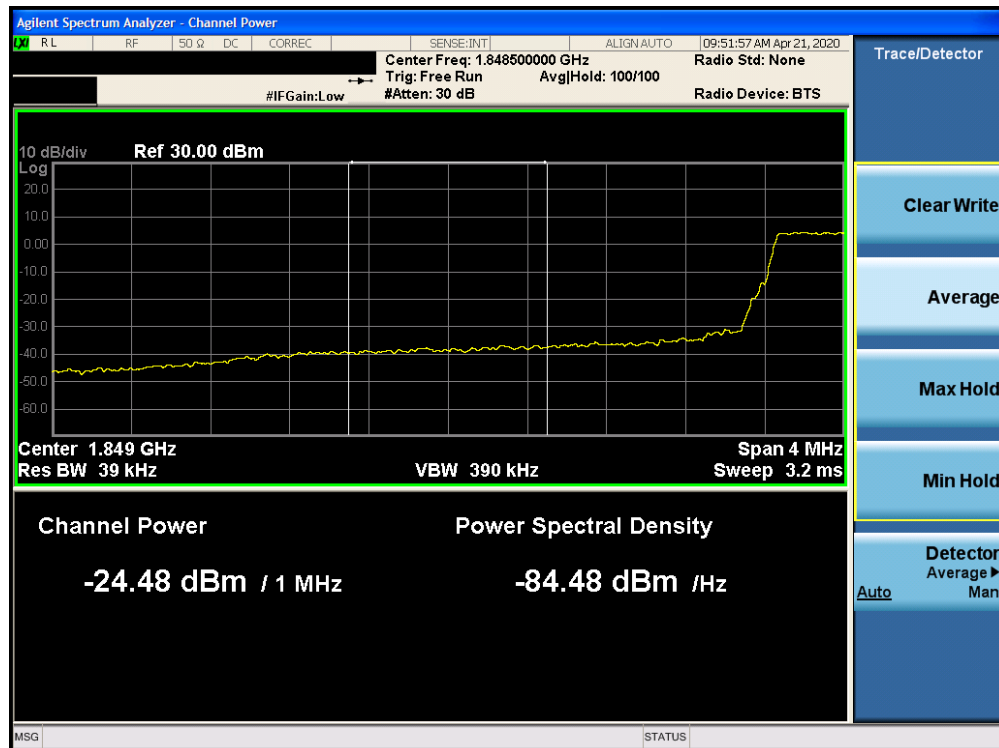


Plot 7-235. Upper Extended Band Edge Plot (Band 2 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 143 of 237

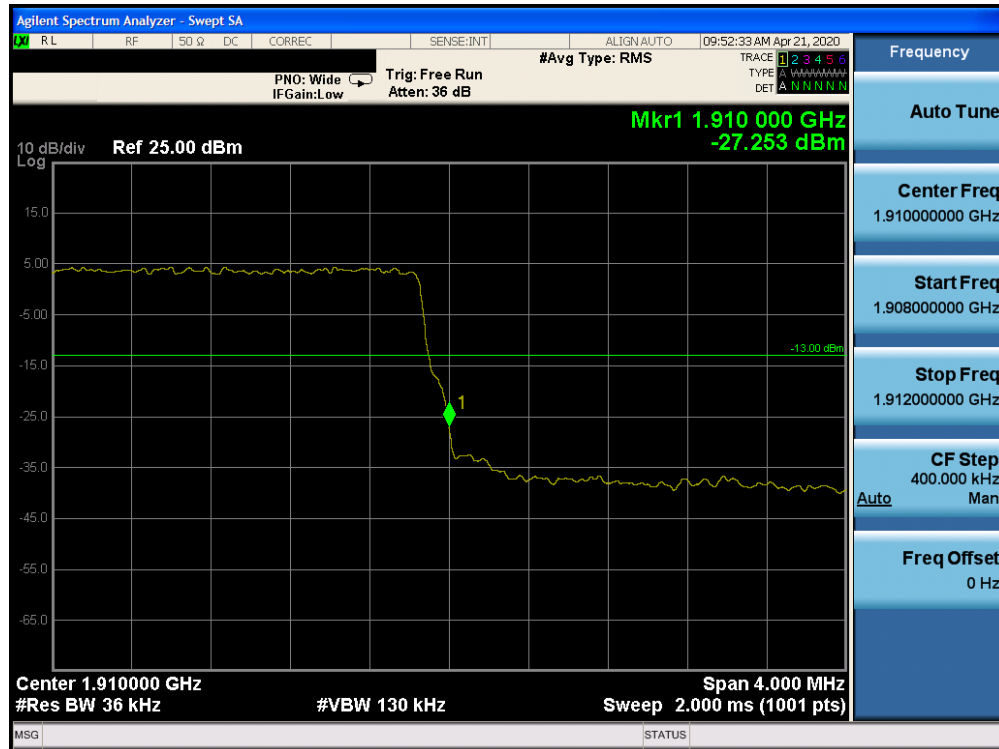


Plot 7-236. Lower Band Edge Plot (Band 2 - 3.0MHz QPSK - Full RB Configuration)

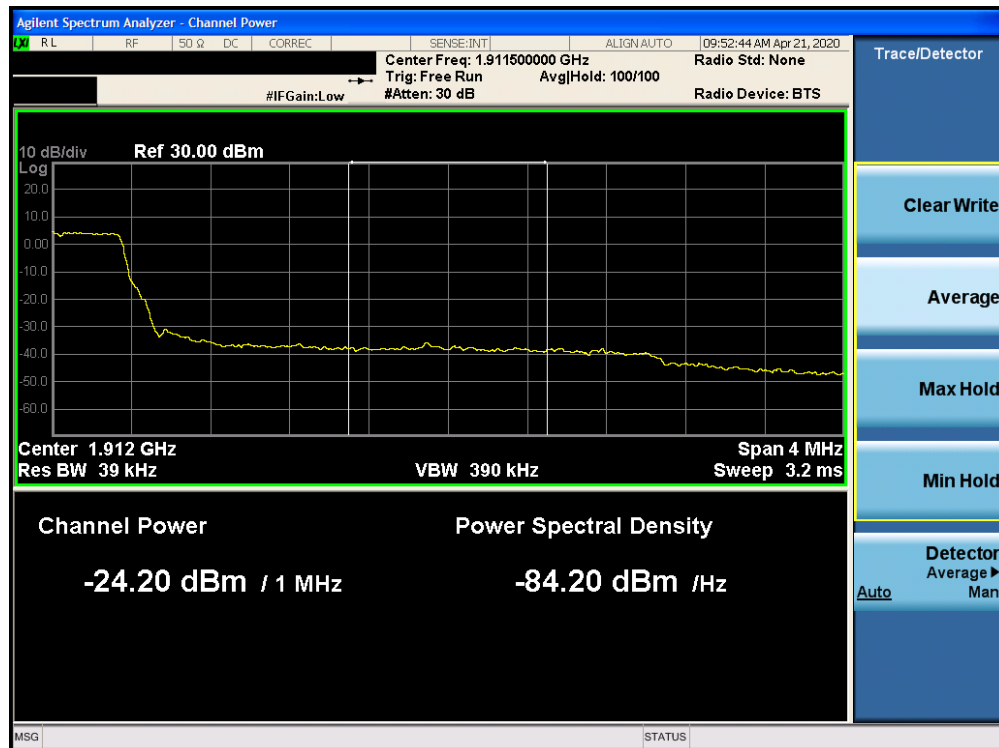


Plot 7-237. Lower Extended Band Edge Plot (Band 2 - 3.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 144 of 237

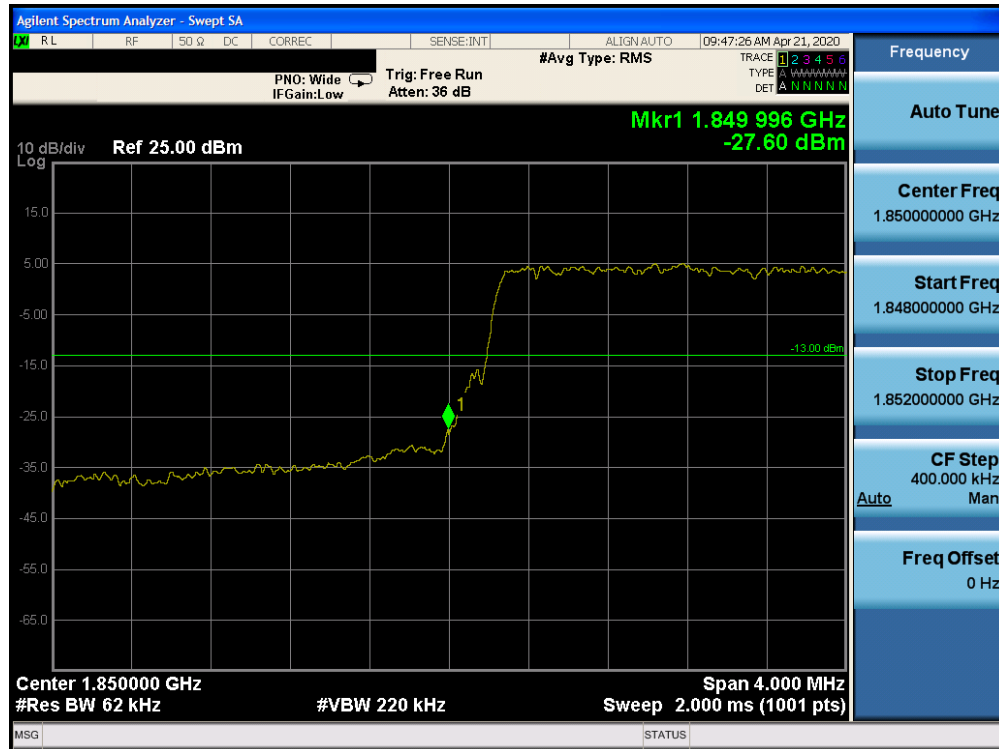


Plot 7-238. Upper Band Edge Plot (Band 2 - 3.0MHz QPSK - Full RB Configuration)



Plot 7-239. Upper Extended Band Edge Plot (Band 2 - 3.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 145 of 237

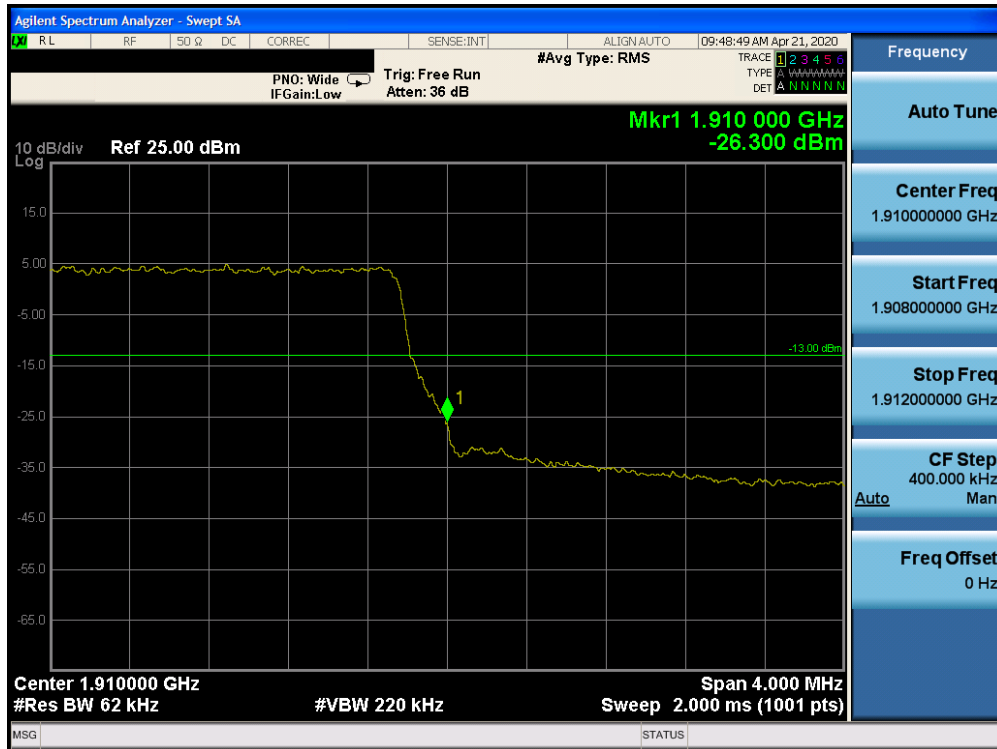


Plot 7-240. Lower Band Edge Plot (Band 2 - 5.0MHz QPSK - Full RB Configuration)

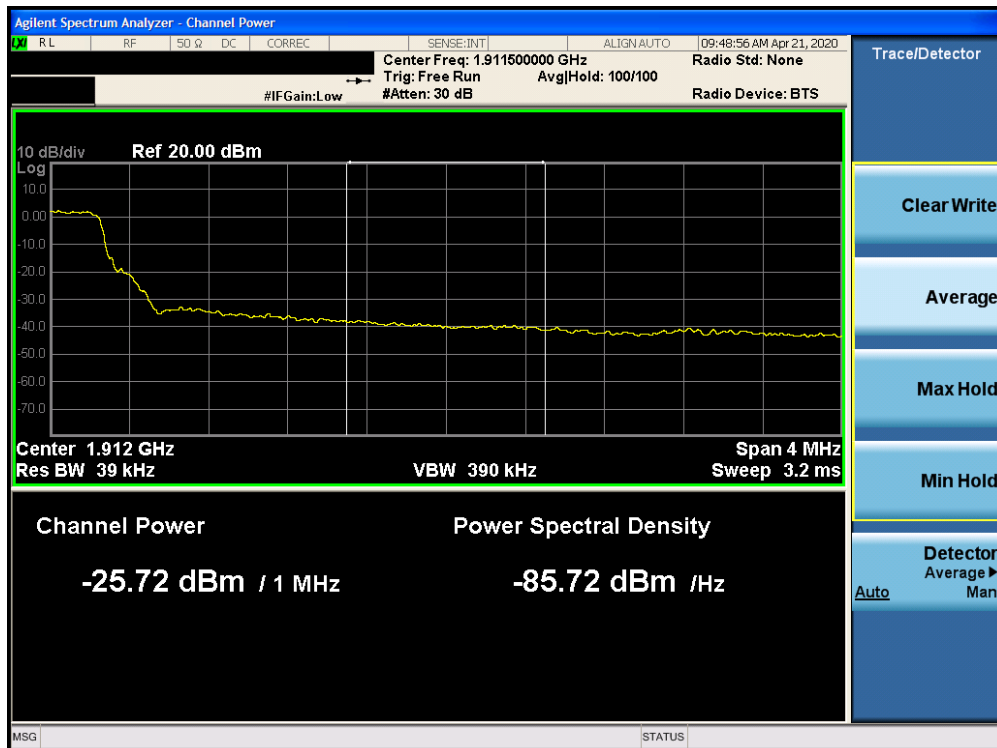


Plot 7-241. Lower Extended Band Edge Plot (Band 2 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 146 of 237

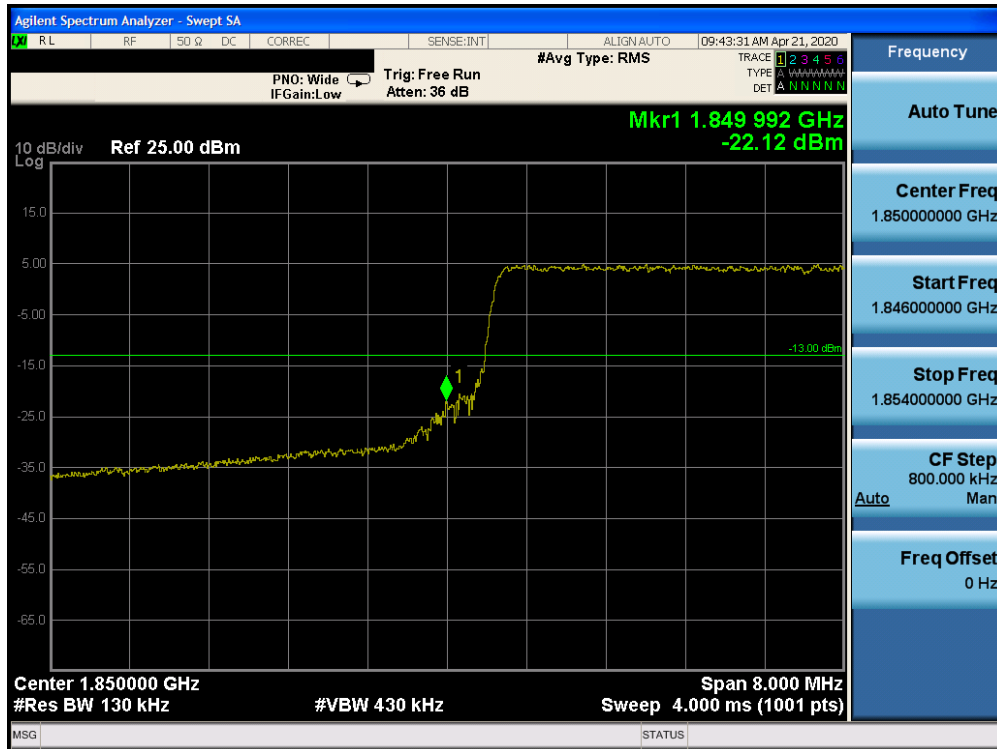


Plot 7-242. Upper Band Edge Plot (Band 2 - 5.0MHz QPSK - Full RB Configuration)

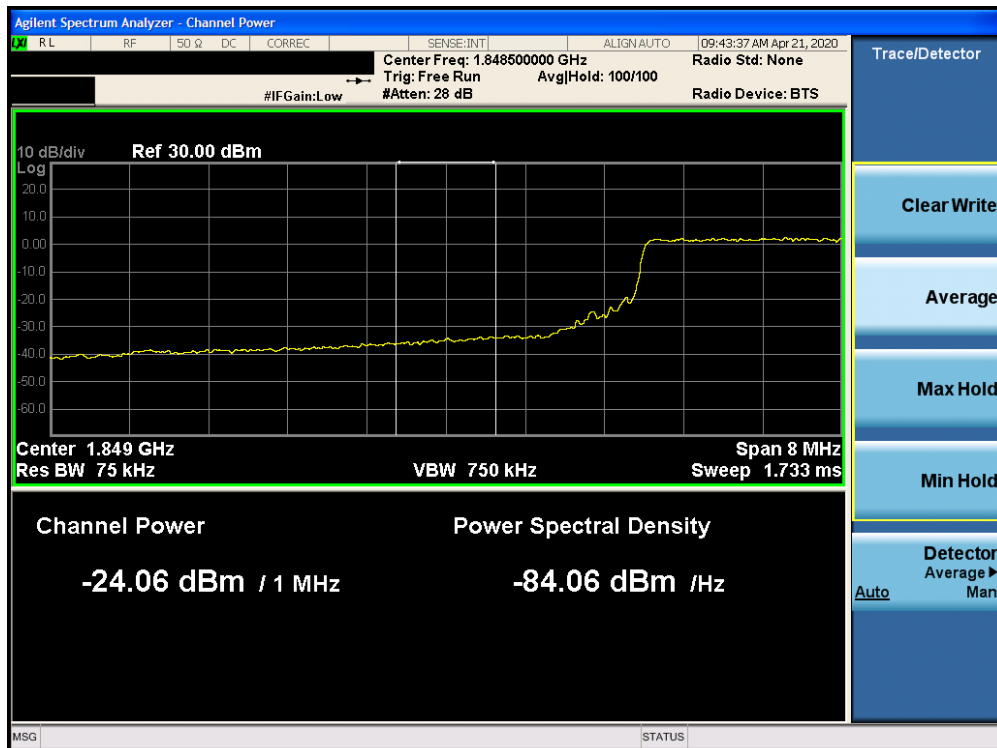


Plot 7-243. Upper Extended Band Edge Plot (Band 2 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 147 of 237

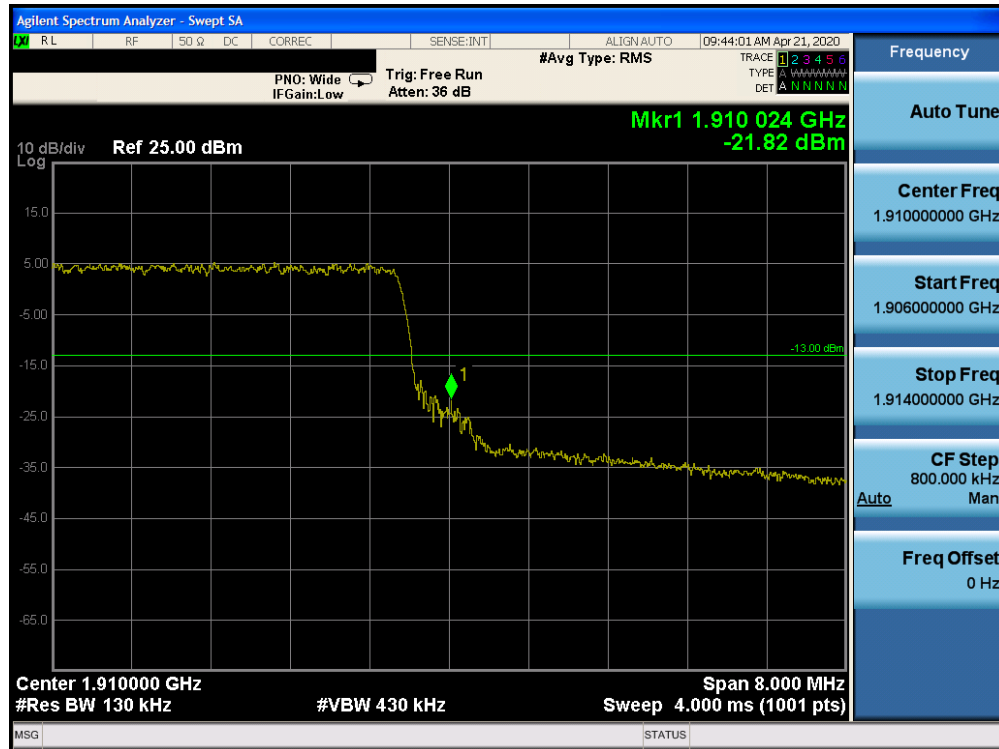


Plot 7-244. Lower Band Edge Plot (Band 2 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-245. Lower Extended Band Edge Plot (Band 2 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 148 of 237

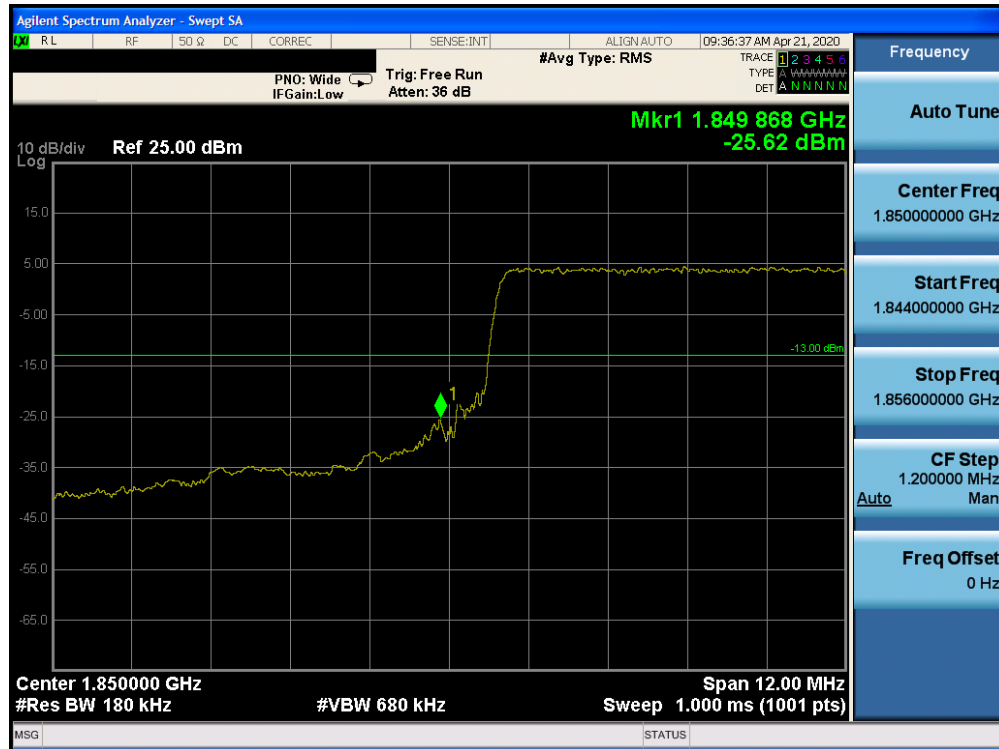


Plot 7-246. Upper Band Edge Plot (Band 2 - 10.0MHz QPSK - Full RB Configuration)

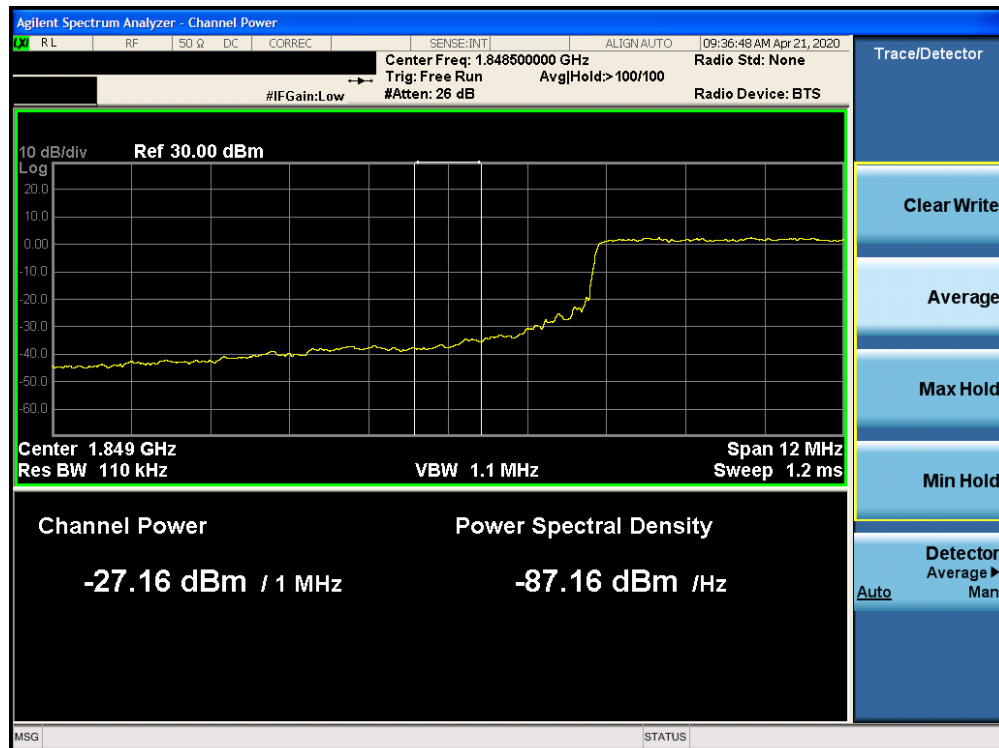


Plot 7-247. Upper Extended Band Edge Plot (Band 2 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 149 of 237

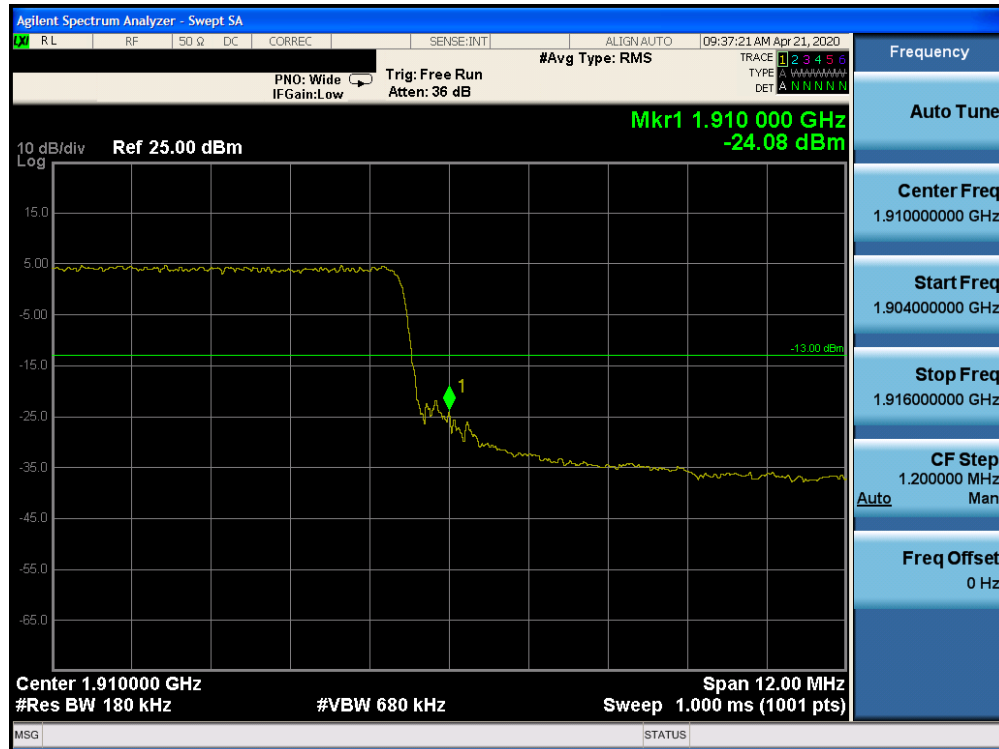


Plot 7-248. Lower Band Edge Plot (Band 2 - 15.0MHz QPSK - Full RB Configuration)



Plot 7-249. Lower Extended Band Edge Plot (Band 2 - 15.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 150 of 237

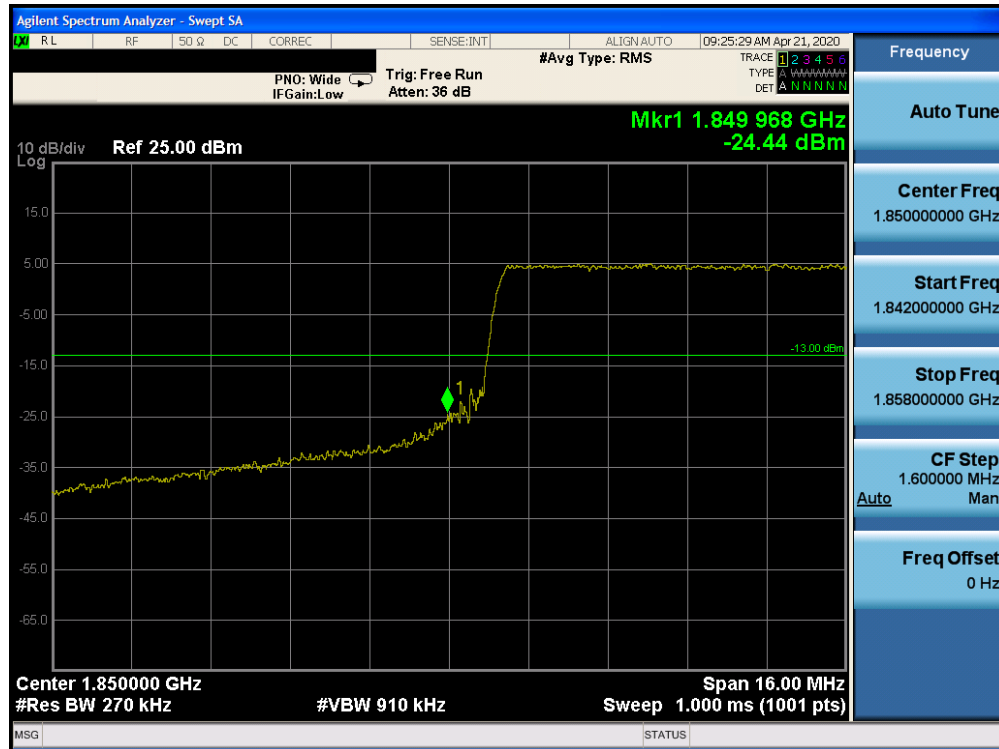


Plot 7-250. Upper Band Edge Plot (Band 2 - 15.0MHz QPSK - Full RB Configuration)

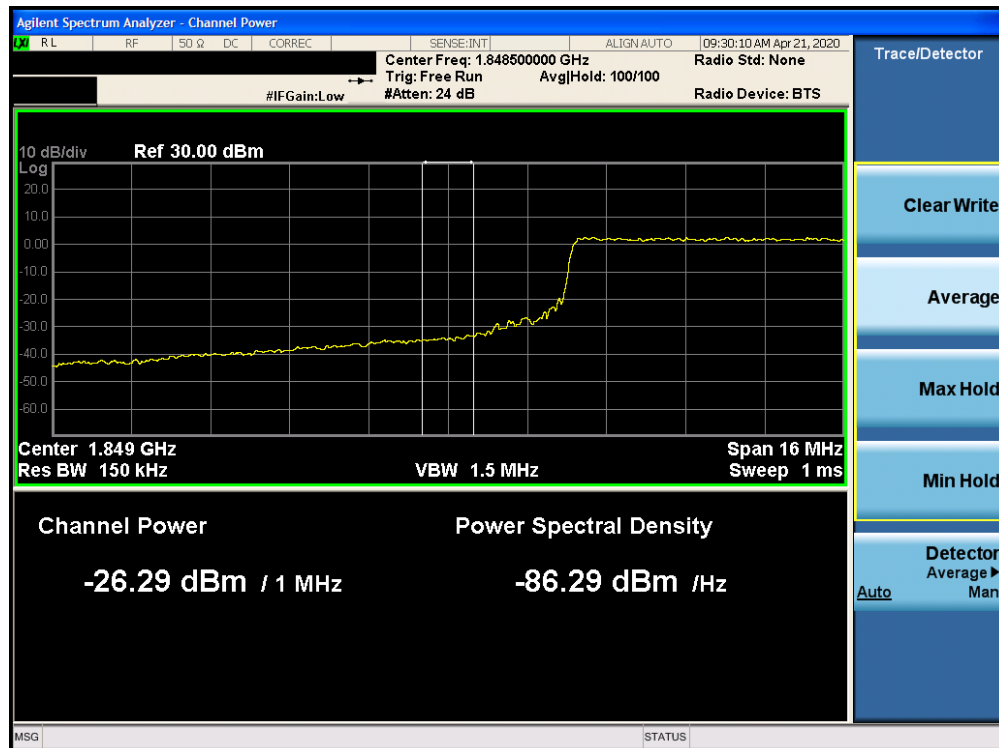


Plot 7-251. Upper Extended Band Edge Plot (Band 2 - 15.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 151 of 237

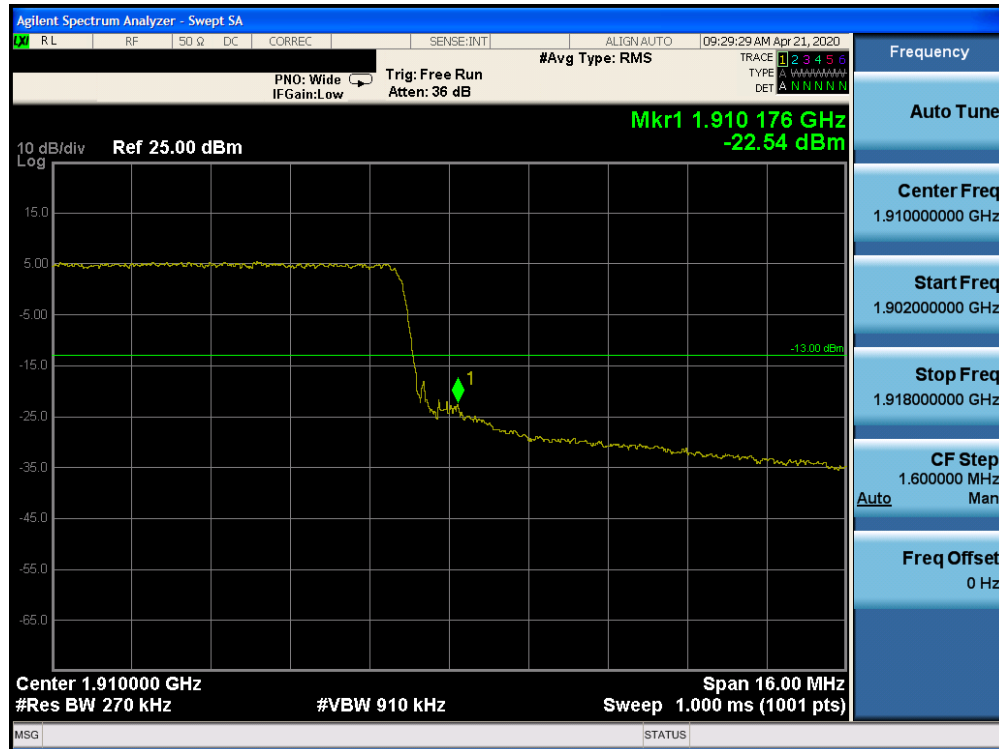


Plot 7-252. Lower Band Edge Plot (Band 2 - 20.0MHz QPSK - Full RB Configuration)



Plot 7-253. Lower Extended Band Edge Plot (Band 2 - 20.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 152 of 237



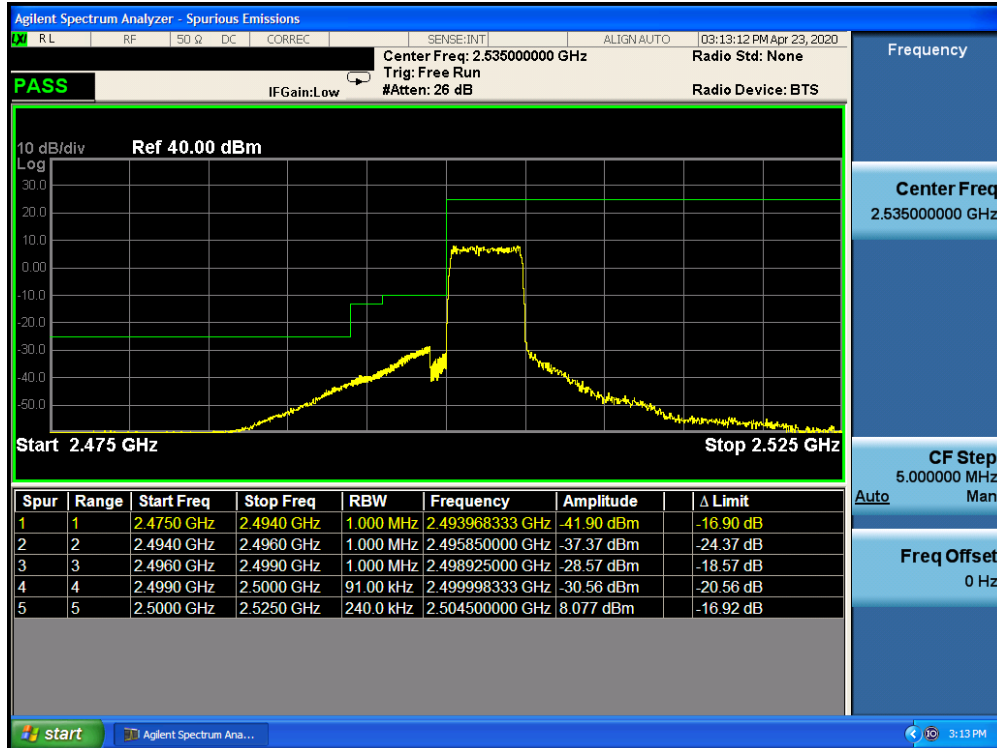
Plot 7-254. Upper Band Edge Plot (Band 2 - 20.0MHz QPSK - Full RB Configuration)



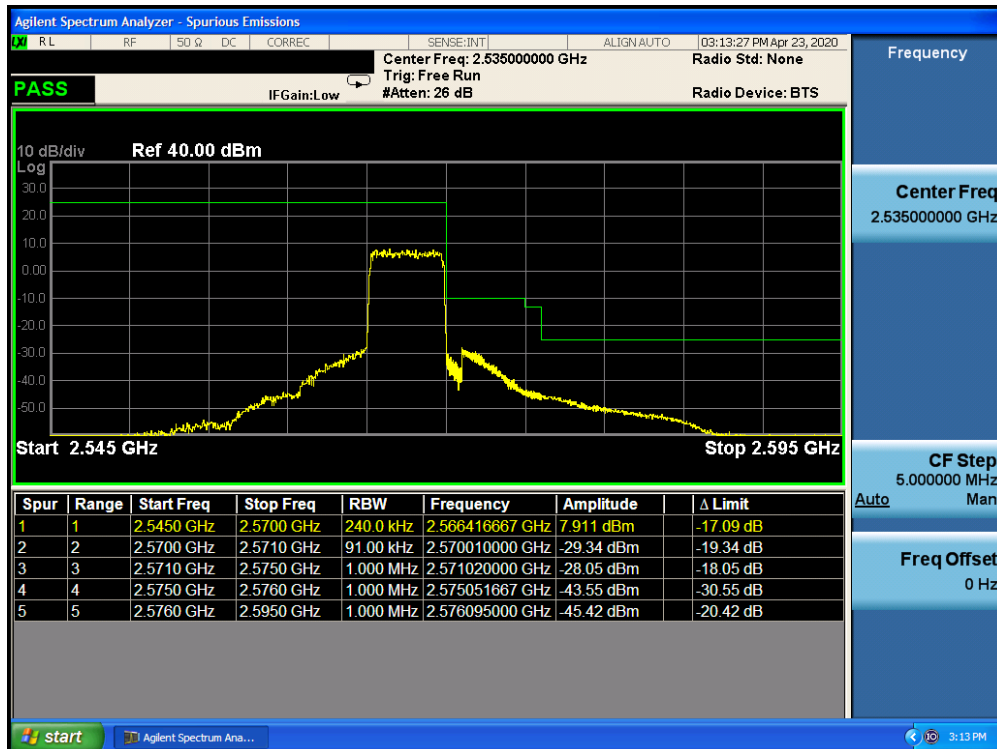
Plot 7-255. Upper Extended Band Edge Plot (Band 2 - 20.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 153 of 237

Band 7

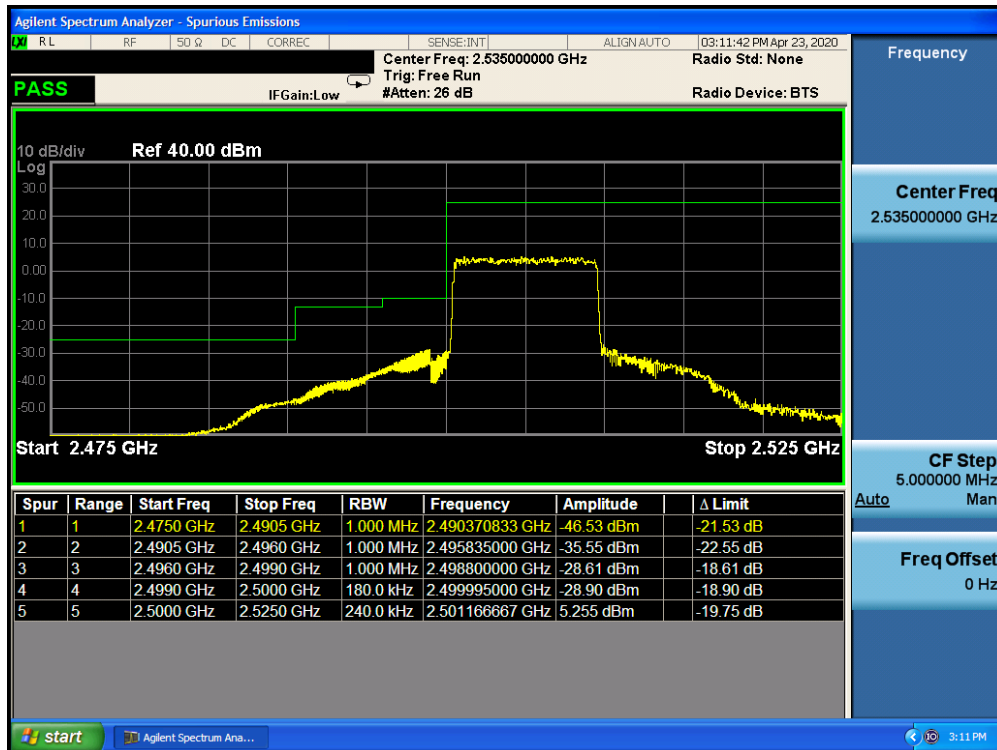


Plot 7-256. Lower ACP Plot (Band 7 - 5.0MHz QPSK - Full RB Configuration)



Plot 7-257. Upper ACP Plot (Band 7 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 154 of 237

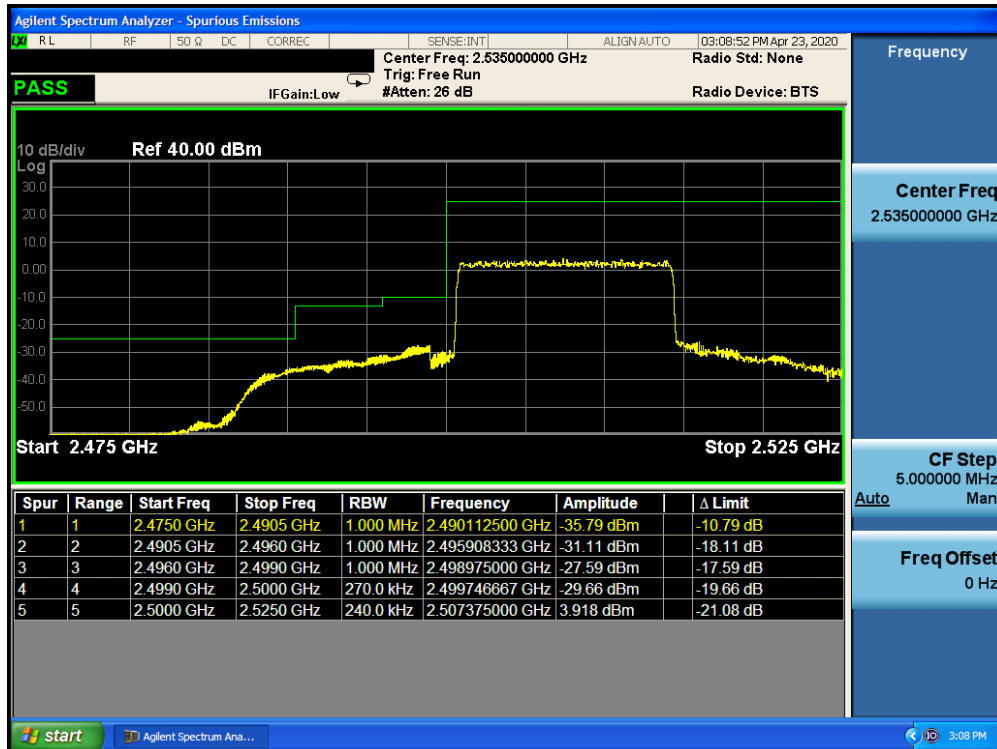


Plot 7-258. Lower ACP Plot (Band 7 - 10.0MHz QPSK - Full RB Configuration)



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

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 155 of 237

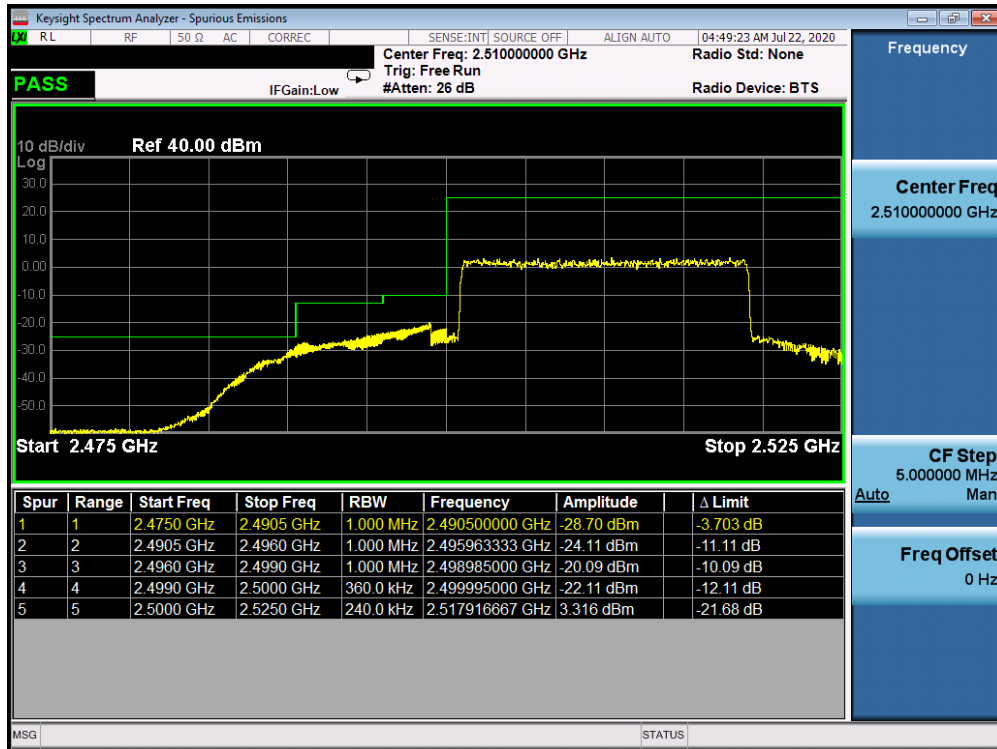


Plot 7-260. Lower ACP Plot (Band 7 - 15.0MHz QPSK - Full RB Configuration)

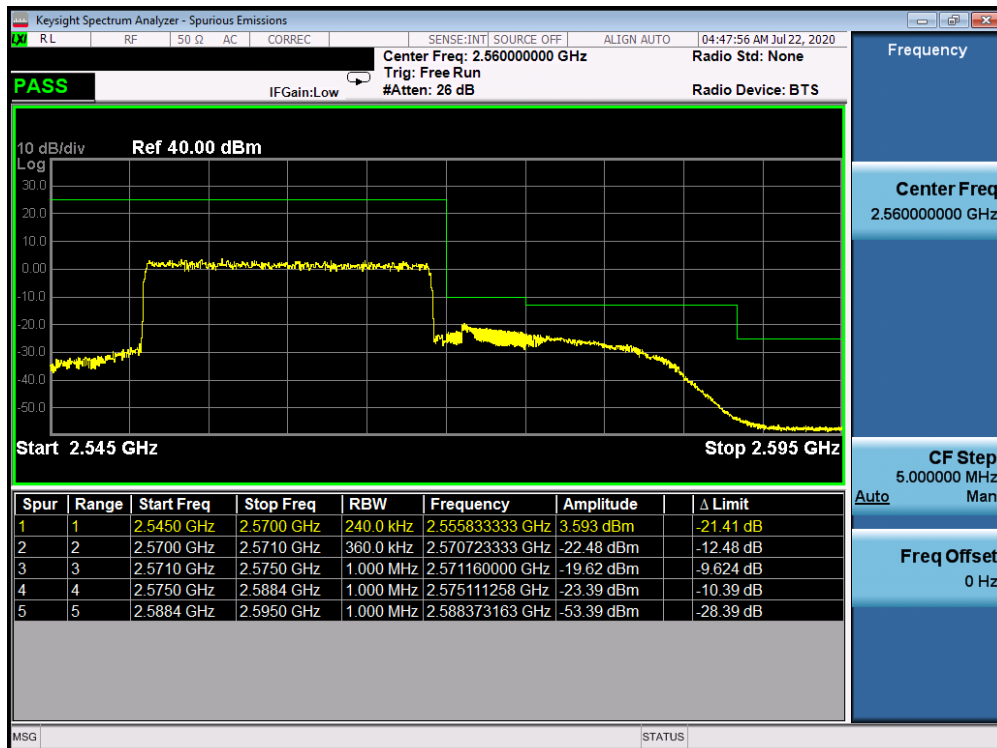


Plot 7-261. Upper ACP Plot (Band 7 - 15.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 156 of 237



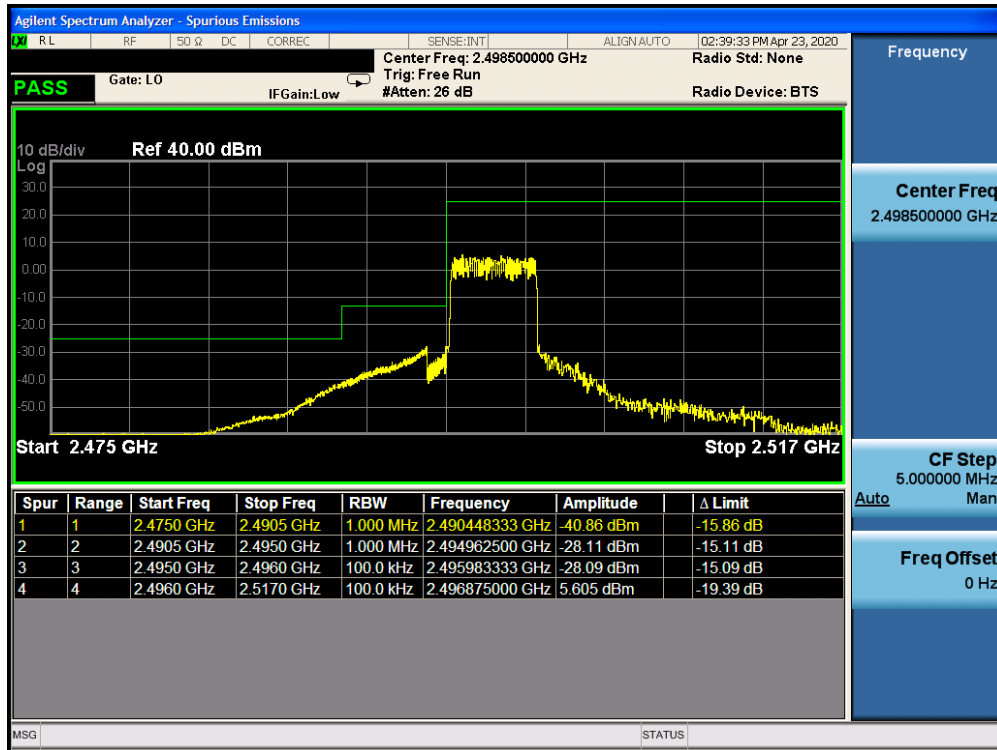
Plot 7-262. Lower ACP Plot (Band 7 - 20.0MHz QPSK - Full RB Configuration)



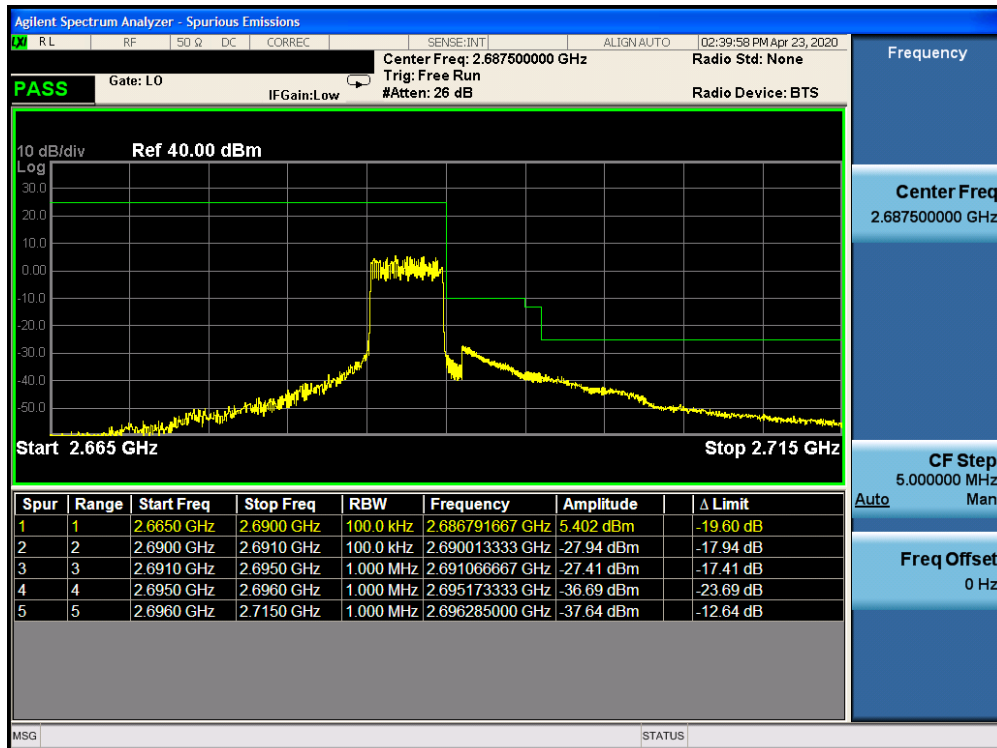
Plot 7-263. Upper ACP Plot (Band 7 - 20.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 157 of 237

Band 41

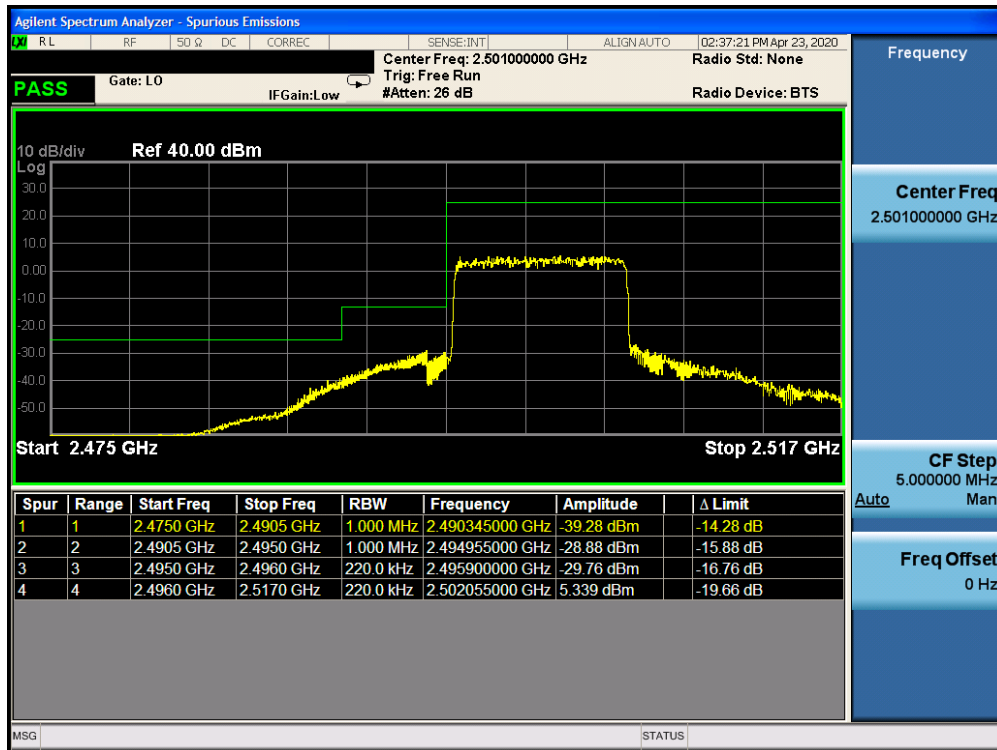


Plot 7-346. Lower ACP Plot (Band 41 - 5.0MHz QPSK - Full RB Configuration)

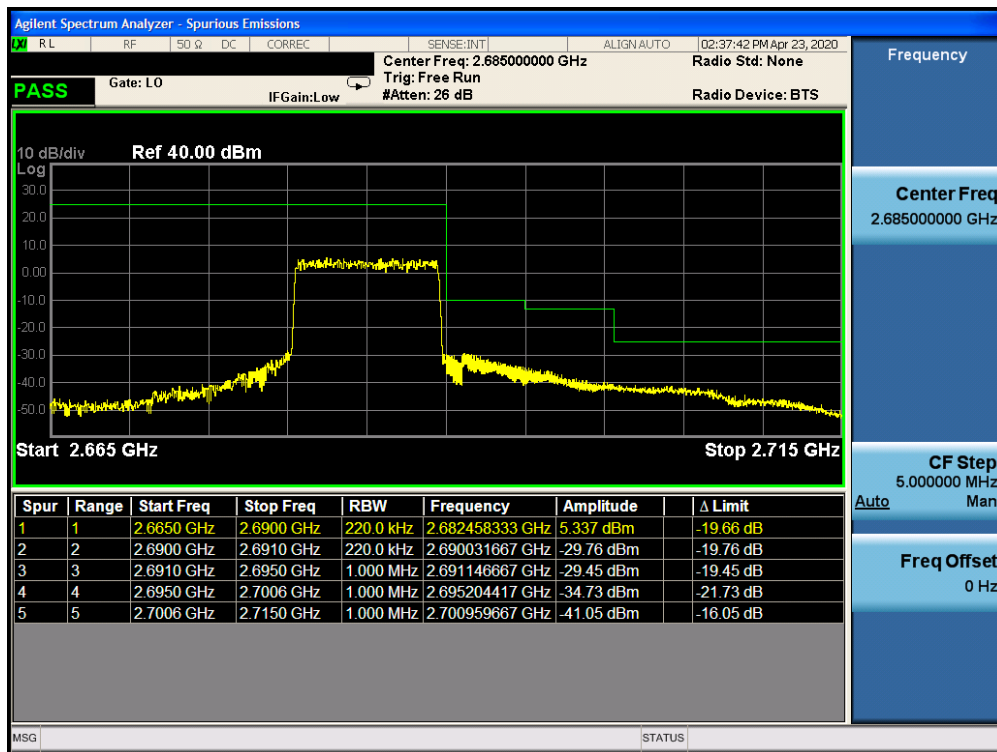


Plot 7-347. Upper ACP Plot (Band 41 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 158 of 237

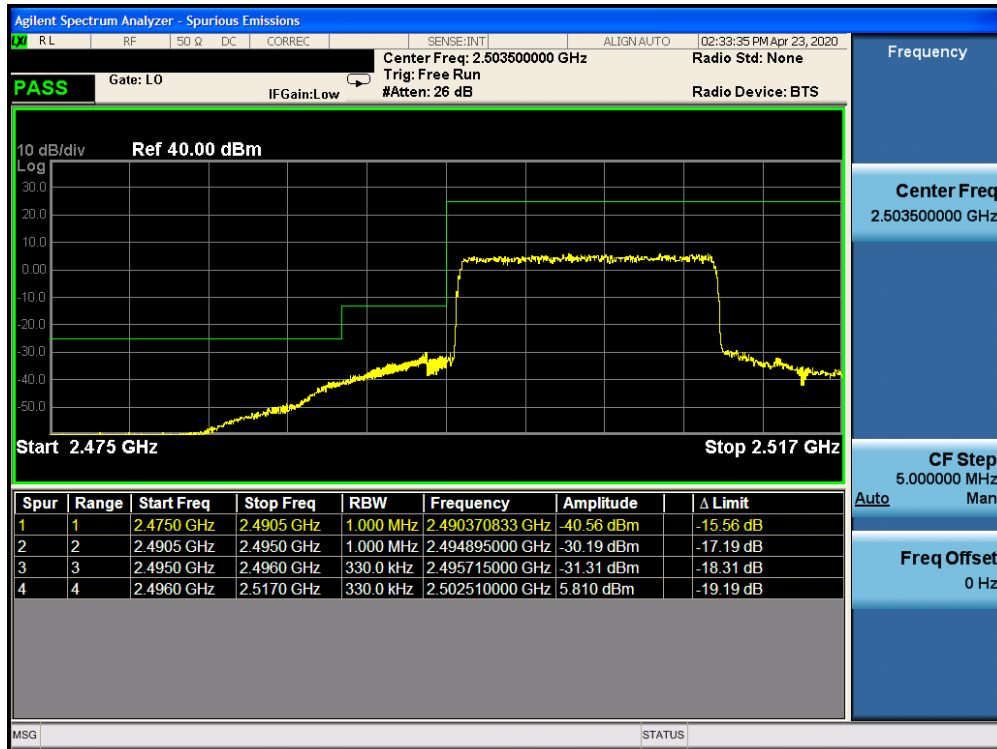


Plot 7-348. Lower ACP Plot (Band 41 - 10.0MHz QPSK - Full RB Configuration)

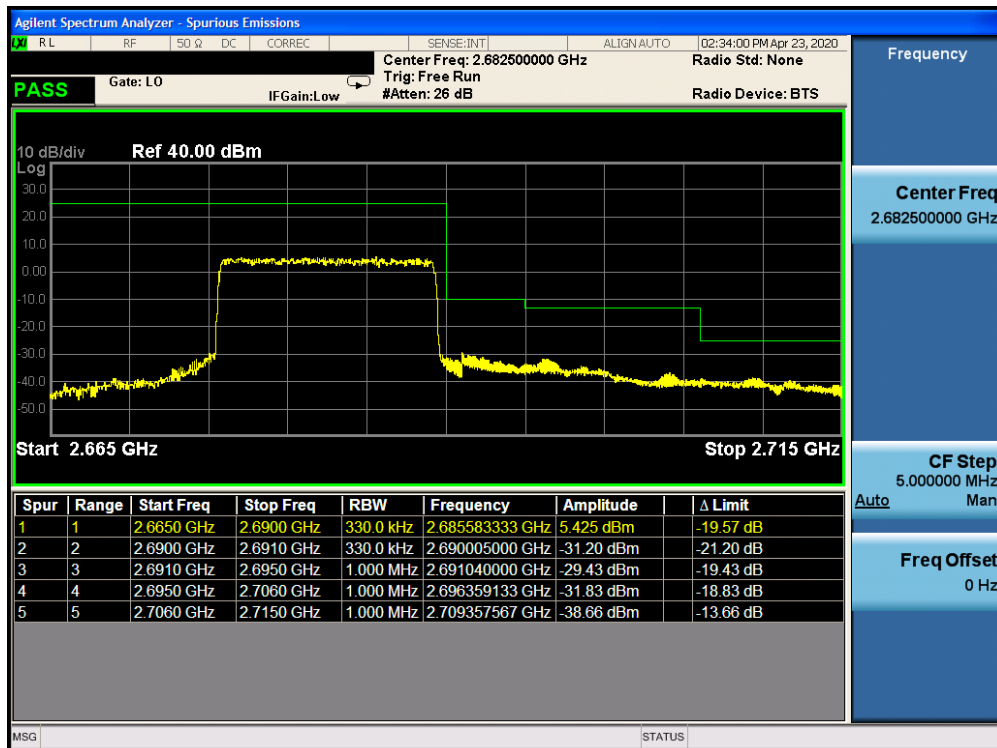


Plot 7-349. Upper ACP Plot (Band 41 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 159 of 237

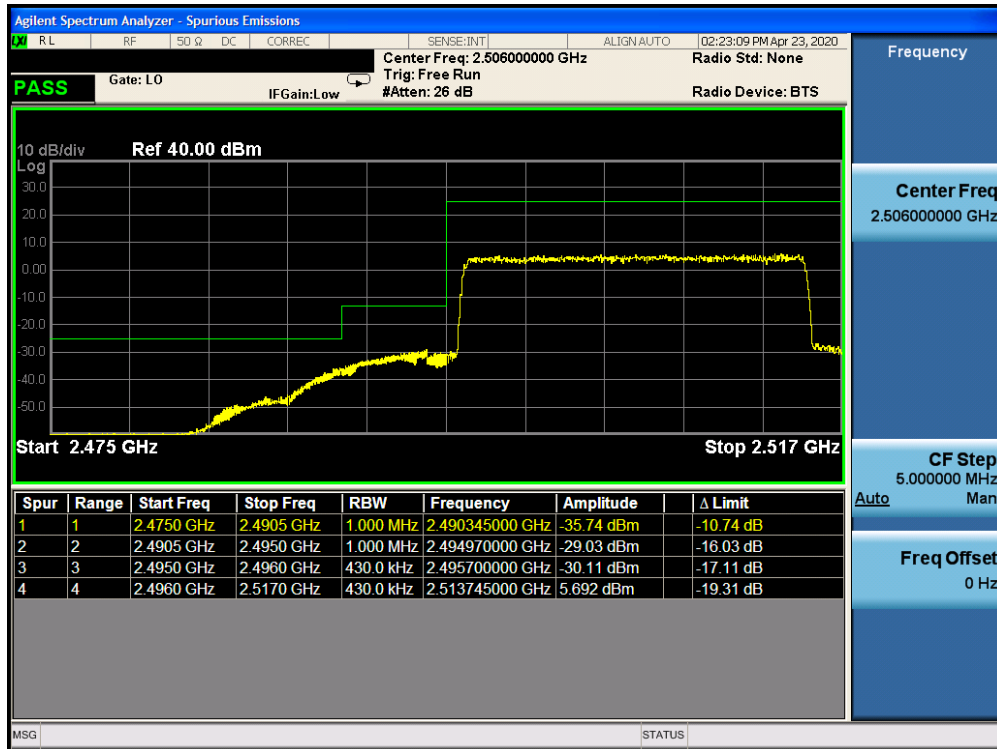


Plot 7-350. Lower ACP Plot (Band 41 - 15.0MHz QPSK - Full RB Configuration)

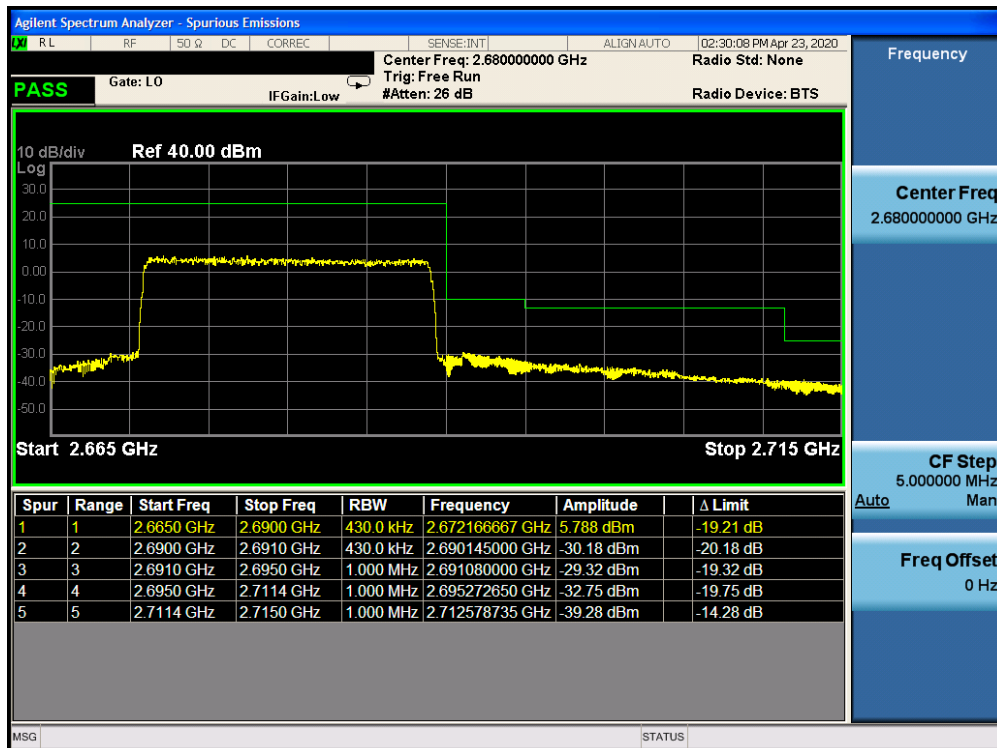


Plot 7-351. Upper ACP Plot (Band 41 - 15.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 160 of 237



Plot 7-352. Lower ACP Plot (Band 41 - 20.0MHz QPSK - Full RB Configuration)



Plot 7-353. Upper ACP Plot (Band 41 - 20.0MHz QPSK - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 161 of 237

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.

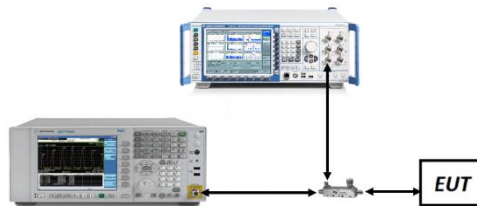


Figure 7-4. Test Instrument & Measurement Setup

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.

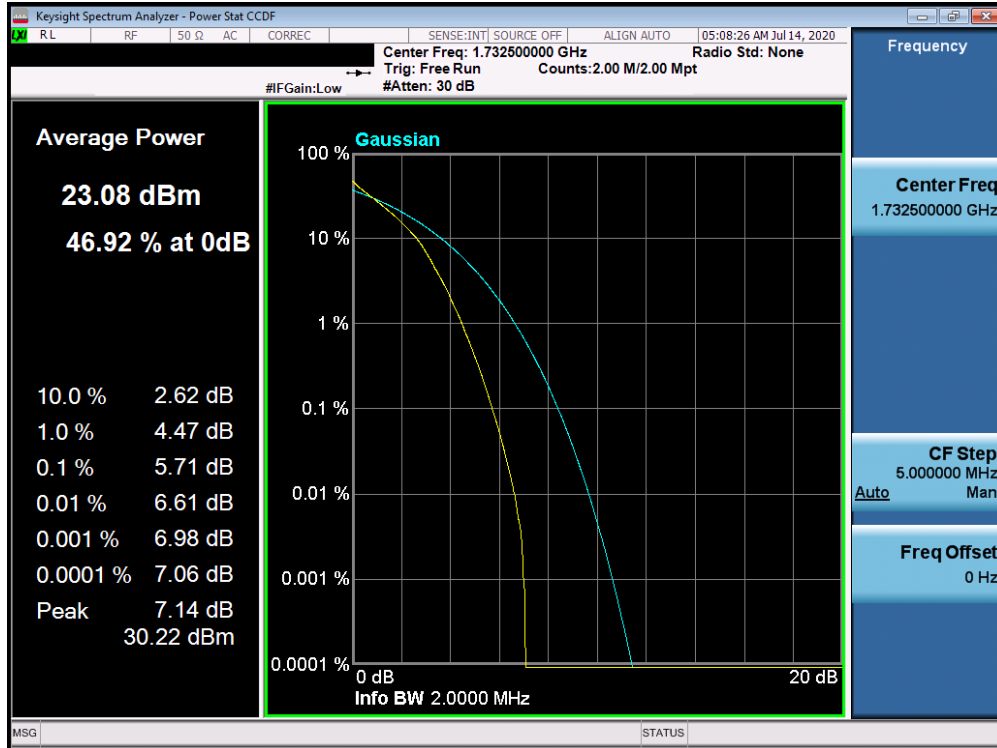
FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 162 of 237

LTE	BW (MHz)	Modulation	Average Power [dBm]	PAR at 0.1% [dB]	Limit [dB]	Margin [dB]
Band 4	1.4	QPSK	23.08	5.71	13	-7.29
Band 4	1.4	16QAM	22.19	6.34	13	-6.66
Band 4	3	QPSK	23.08	5.86	13	-7.14
Band 4	3	16QAM	22.13	6.55	13	-6.45
Band 4	5	QPSK	22.62	5.87	13	-7.13
Band 4	5	16QAM	21.69	6.52	13	-6.48
Band 4	10	QPSK	22.66	5.67	13	-7.33
Band 4	10	16QAM	21.76	6.42	13	-6.58
Band 4	15	QPSK	22.75	5.84	13	-7.16
Band 4	15	16QAM	21.66	6.31	13	-6.69
Band 4	20	QPSK	22.95	5.45	13	-7.55
Band 4	20	16QAM	21.67	6.25	13	-6.75
Band 66	1.4	QPSK	23.00	5.39	13	-7.61
Band 66	1.4	16QAM	22.04	6.06	13	-6.94
Band 66	3	QPSK	23.00	5.67	13	-7.33
Band 66	3	16QAM	22.00	6.36	13	-6.64
Band 66	5	QPSK	23.00	5.63	13	-7.37
Band 66	5	16QAM	21.98	6.25	13	-6.75
Band 66	10	QPSK	23.05	5.56	13	-7.44
Band 66	10	16QAM	22.01	6.09	13	-6.91
Band 66	15	QPSK	23.11	5.67	13	-7.33
Band 66	15	16QAM	21.98	6.15	13	-6.85
Band 66	20	QPSK	22.99	5.51	13	-7.49
Band 66	20	16QAM	21.78	6.28	13	-6.72
Band 2	1.4	QPSK	22.94	5.45	13	-7.55
Band 2	1.4	16QAM	22.03	6.17	13	-6.83
Band 2	3	QPSK	22.94	5.57	13	-7.43
Band 2	3	16QAM	21.96	6.33	13	-6.67
Band 2	5	QPSK	22.81	5.58	13	-7.42
Band 2	5	16QAM	21.83	6.30	13	-6.70
Band 2	10	QPSK	22.89	5.51	13	-7.49
Band 2	10	16QAM	21.88	6.22	13	-6.78
Band 2	15	QPSK	22.86	5.67	13	-7.33
Band 2	15	16QAM	21.78	6.26	13	-6.74
Band 2	20	QPSK	23.00	5.43	13	-7.57
Band 2	20	16QAM	21.87	6.30	13	-6.70
Band 25	1.4	QPSK	22.96	5.33	13	-7.67
Band 25	1.4	16QAM	22.04	6.21	13	-6.79
Band 25	3	QPSK	22.90	5.64	13	-7.36
Band 25	3	16QAM	21.98	6.32	13	-6.68
Band 25	5	QPSK	22.96	5.65	13	-7.35
Band 25	5	16QAM	21.97	6.27	13	-6.73
Band 25	10	QPSK	22.92	5.52	13	-7.48
Band 25	10	16QAM	21.90	6.16	13	-6.84
Band 25	15	QPSK	22.98	5.68	13	-7.32
Band 25	15	16QAM	21.89	6.13	13	-6.87
Band 25	20	QPSK	22.97	5.47	13	-7.53
Band 25	20	16QAM	21.81	6.22	13	-6.78

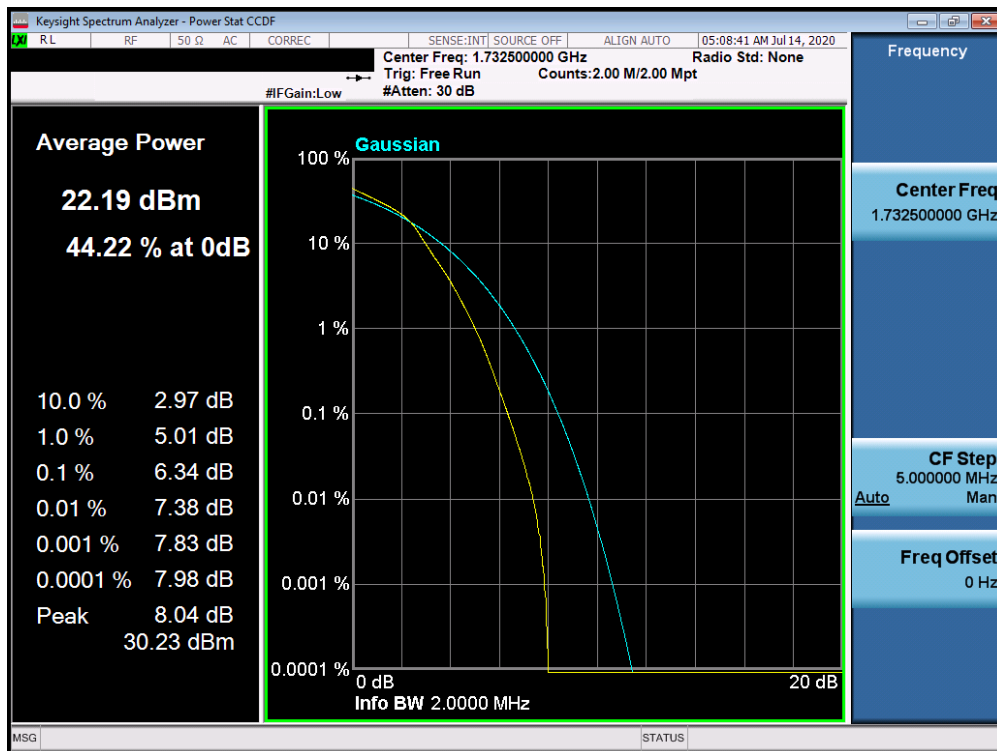
Table 7-6. PAR Results (Mid Bands)

FCC ID: BCG-A2293	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 163 of 237

Band 4

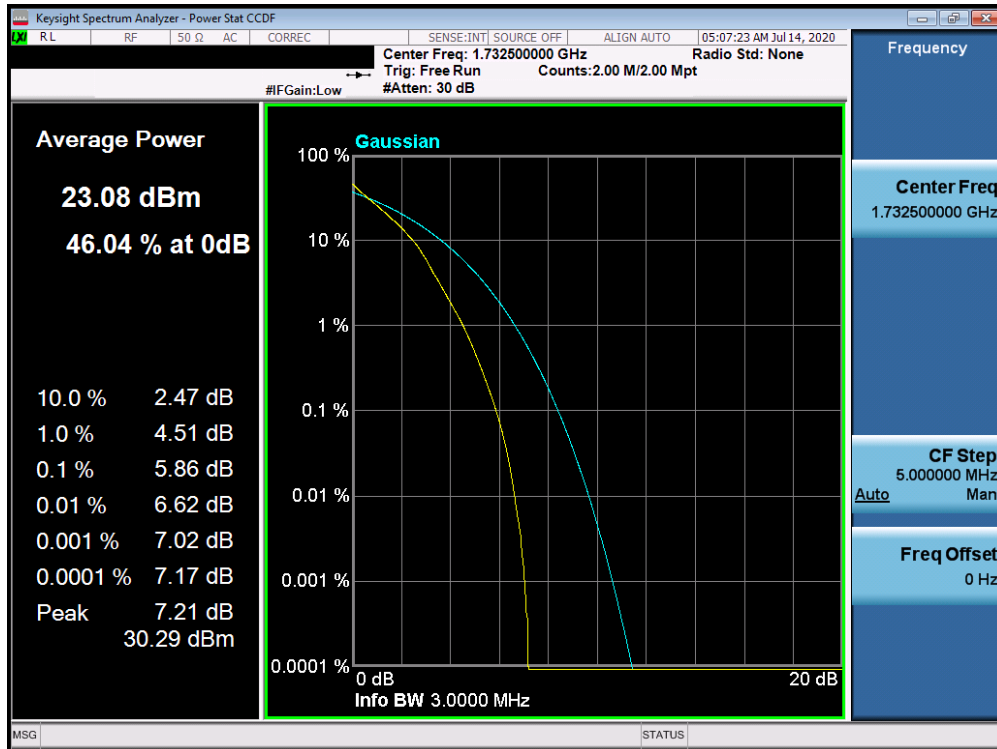


Plot 7-264. PAR Plot (Band 4 - 1.4MHz QPSK - Full RB Configuration)

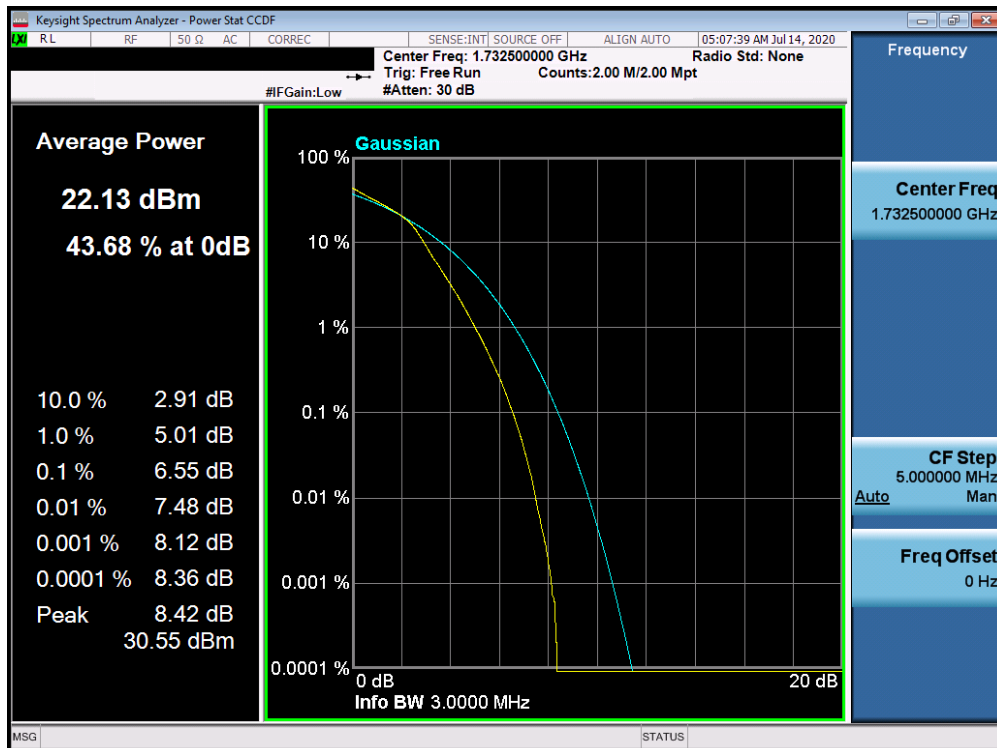


Plot 7-265. PAR Plot (Band 4 - 1.4MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 164 of 237

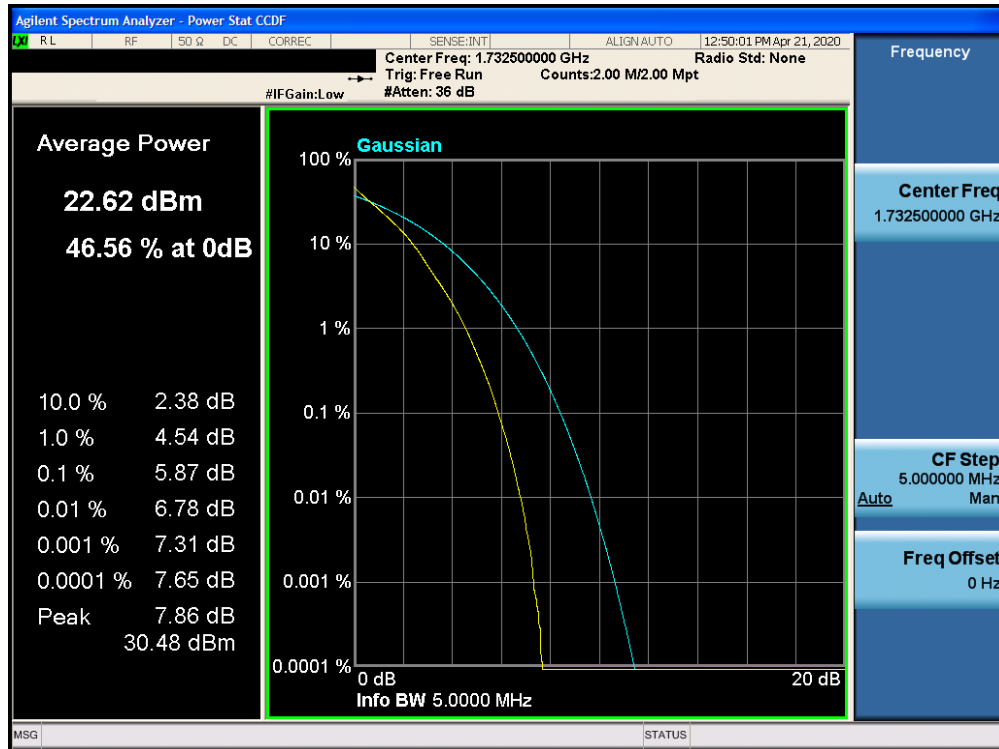


Plot 7-266. PAR Plot (Band 4 - 3.0MHz QPSK - Full RB Configuration)

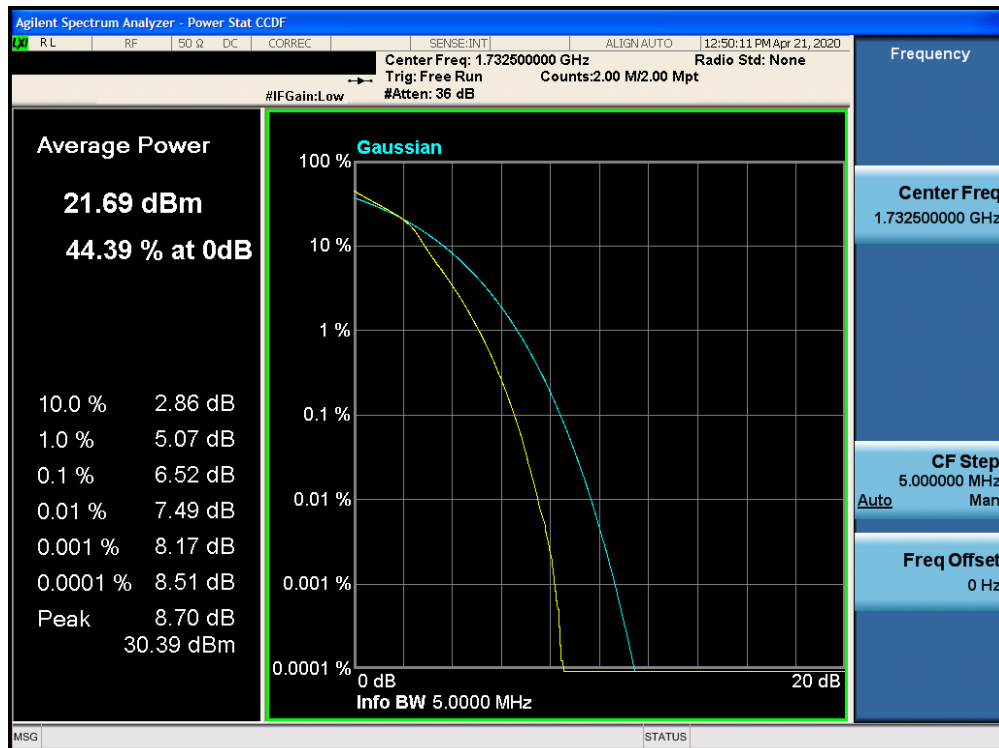


Plot 7-267. PAR Plot (Band 4 - 3.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 165 of 237

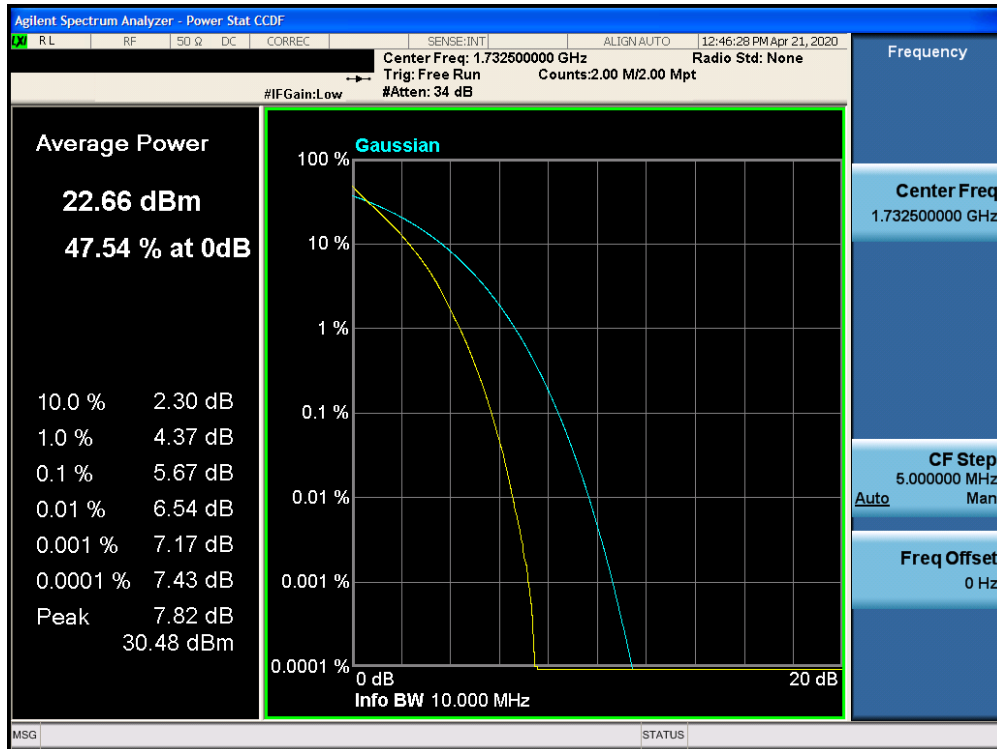


Plot 7-268. PAR Plot (Band 4 - 5.0MHz QPSK - Full RB Configuration)

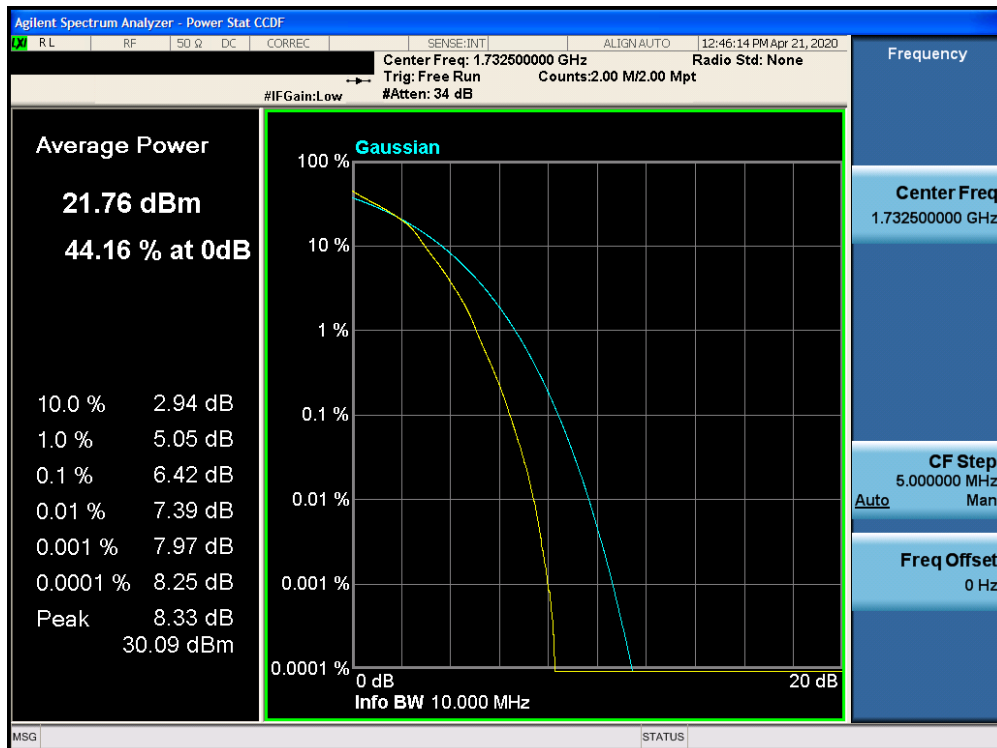


Plot 7-269. PAR Plot (Band 4 - 5.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 166 of 237

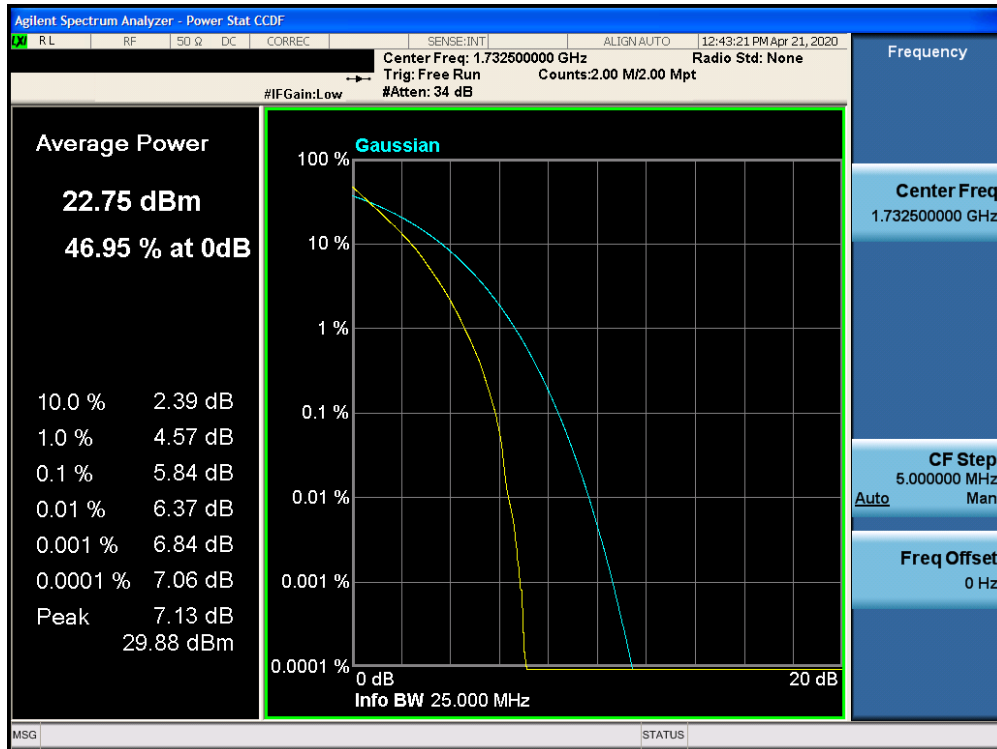


Plot 7-270. PAR Plot (Band 4 - 10.0MHz QPSK - Full RB Configuration)

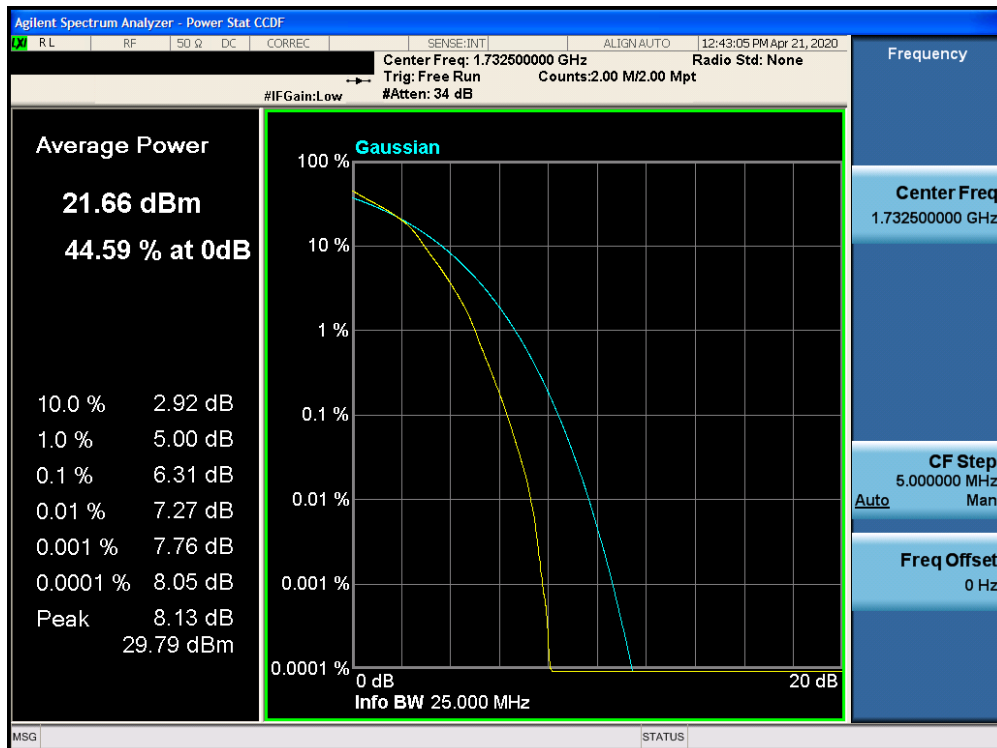


Plot 7-271. PAR Plot (Band 4 - 10.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 167 of 237

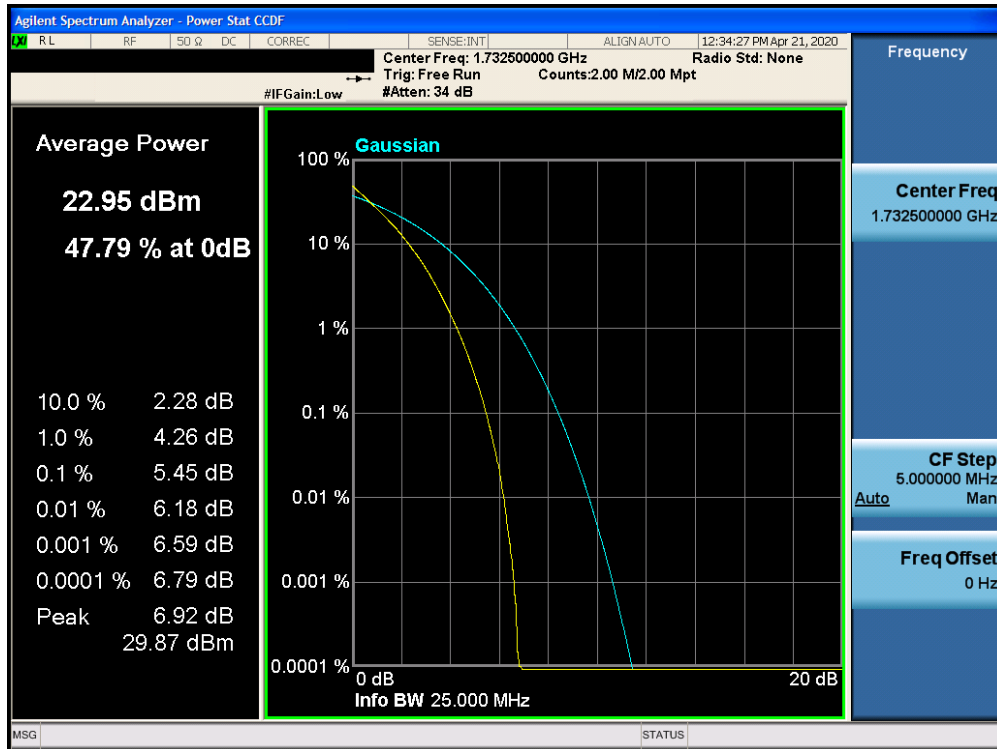


Plot 7-272. PAR Plot (Band 4 - 15.0MHz QPSK - Full RB Configuration)

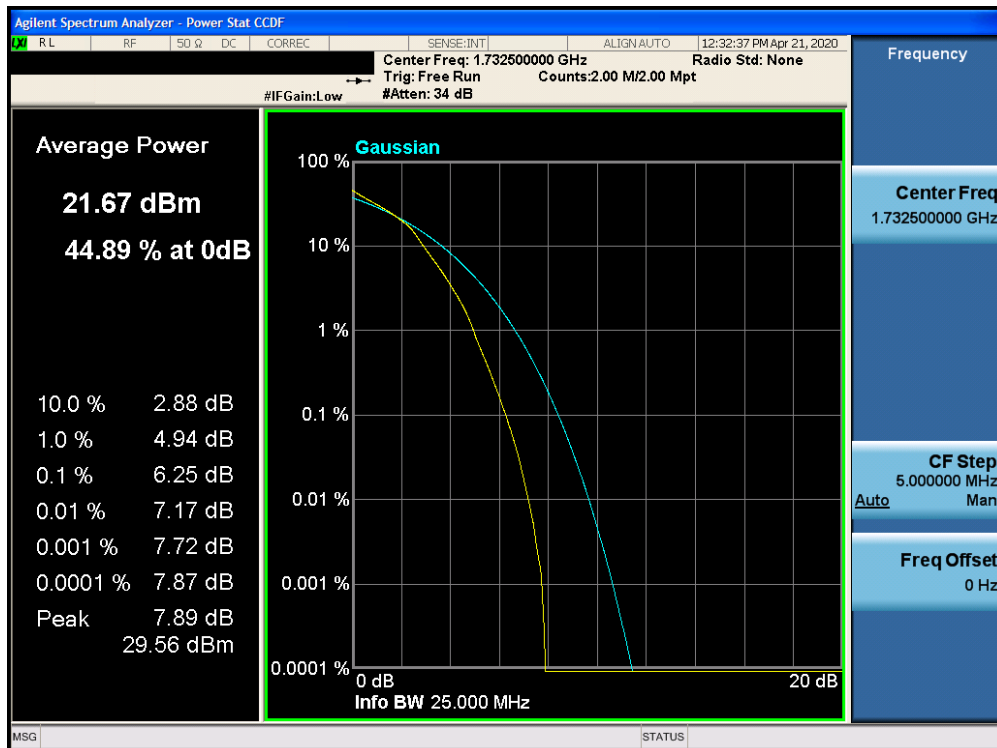


Plot 7-273. PAR Plot (Band 4 - 15.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 168 of 237



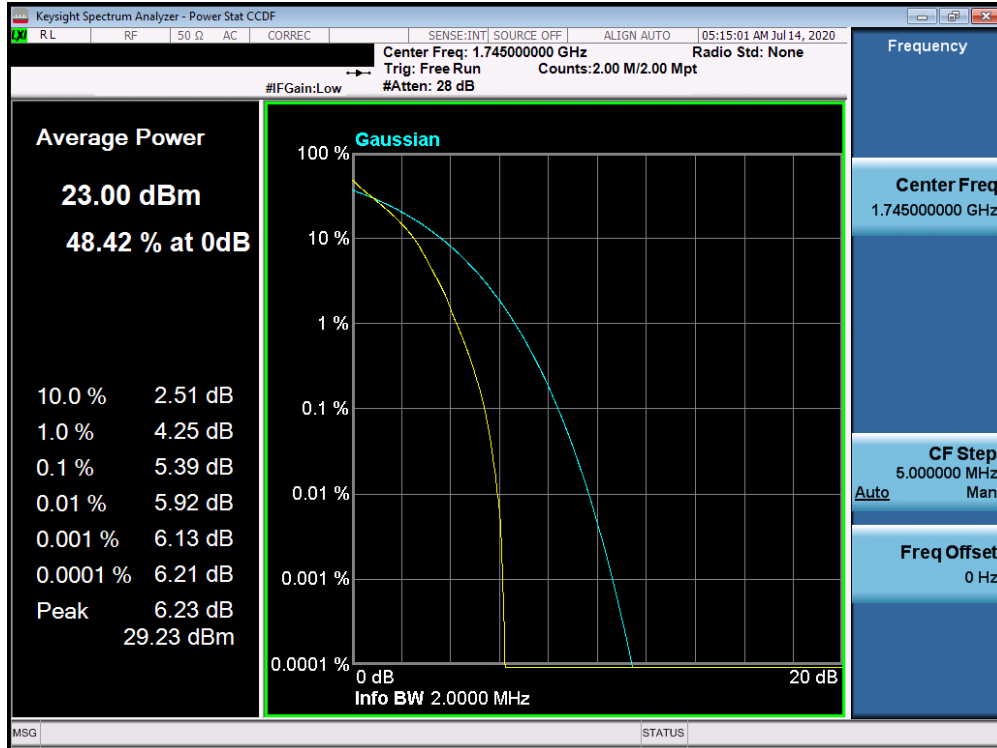
Plot 7-274. PAR Plot (Band 4 - 20.0MHz QPSK - Full RB Configuration)



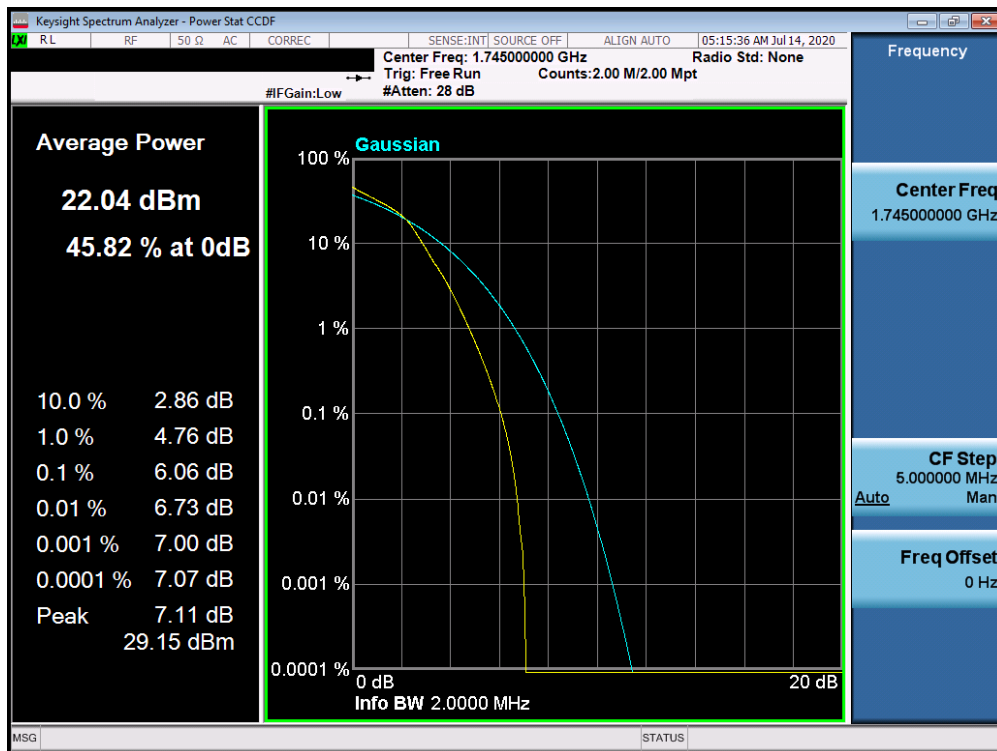
Plot 7-275. PAR Plot (Band 4 - 20.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 169 of 237

Band 66

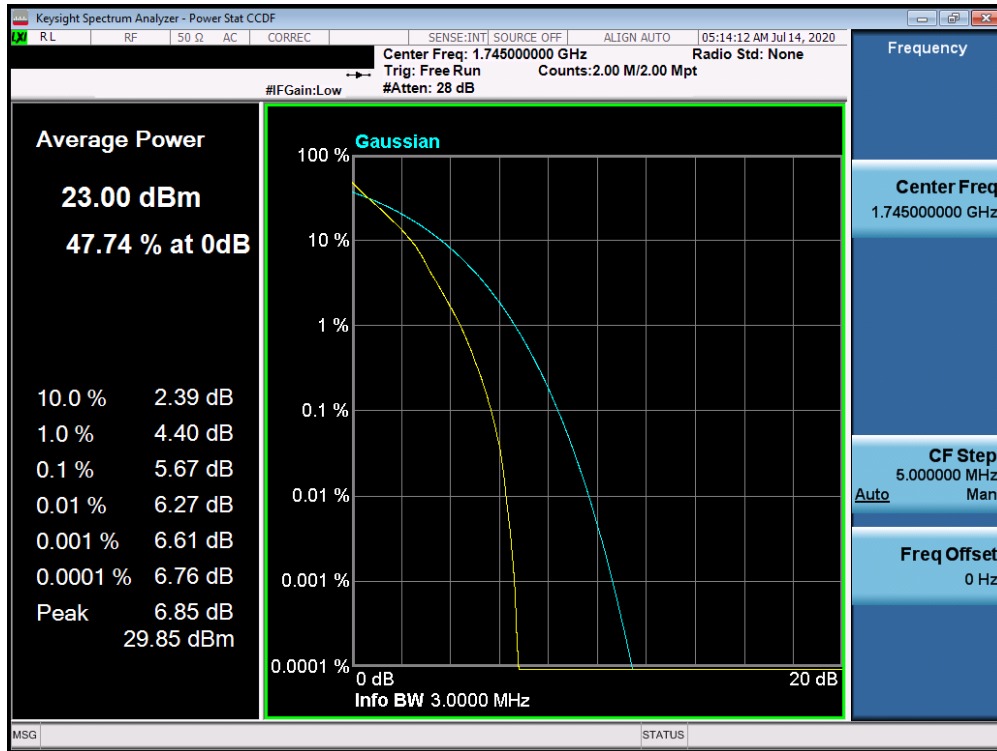


Plot 7-276. PAR Plot (Band 66 - 1.4MHz QPSK - Full RB Configuration)

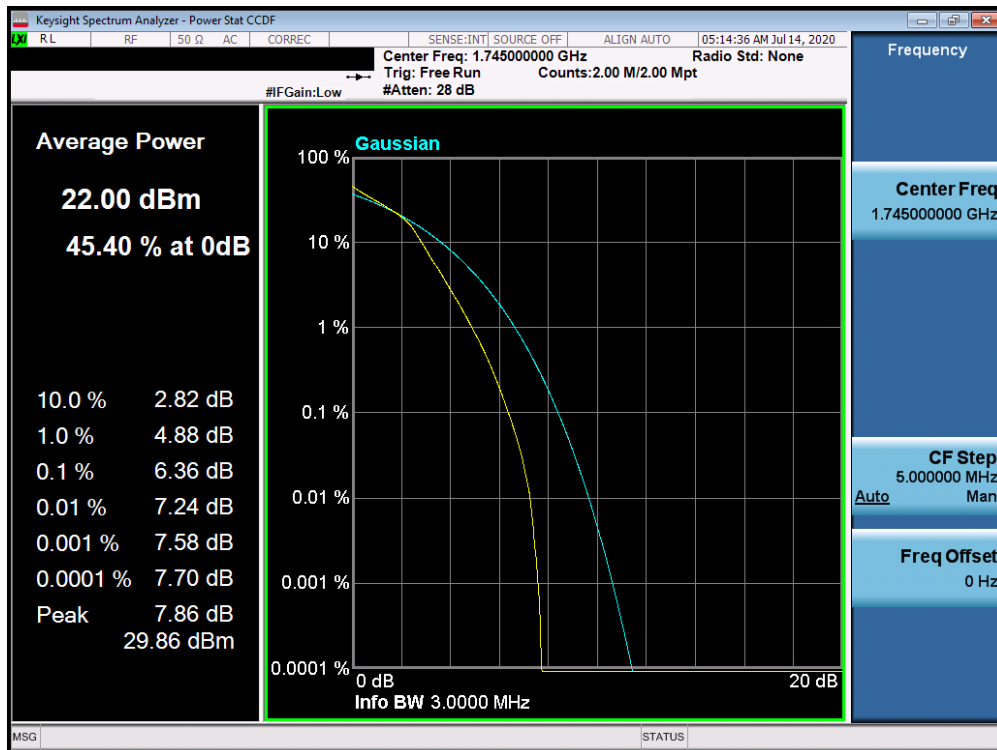


Plot 7-277. PAR Plot (Band 66 - 1.4MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 170 of 237



Plot 7-278. PAR Plot (Band 66 - 3.0MHz QPSK - Full RB Configuration)



Plot 7-279. PAR Plot (Band 66 - 3.0MHz 16-QAM - Full RB Configuration)

FCC ID: BCG-A2293	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2004270017-03-R1.BCG	Test Dates: 04/09/2020-08/17/2020	EUT Type: Watch	Page 171 of 237