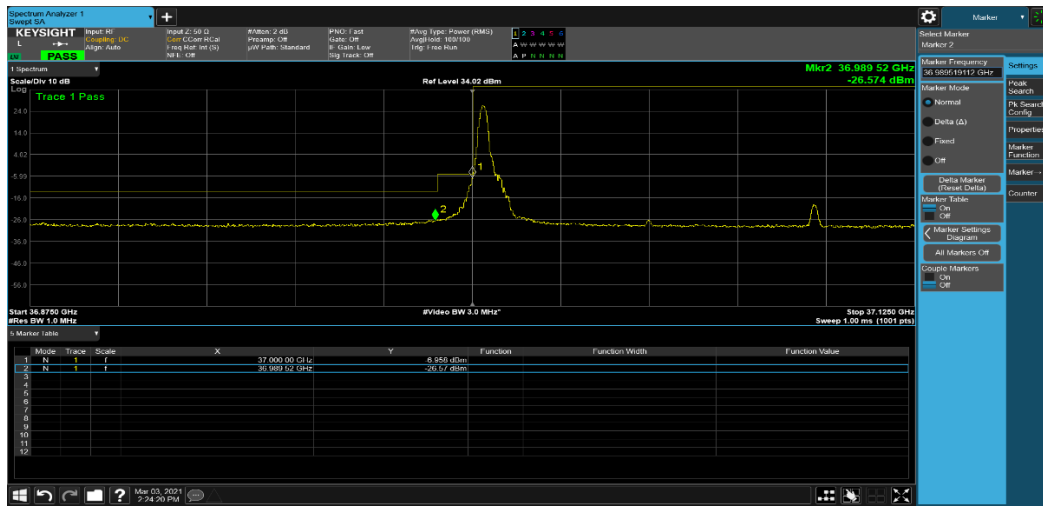
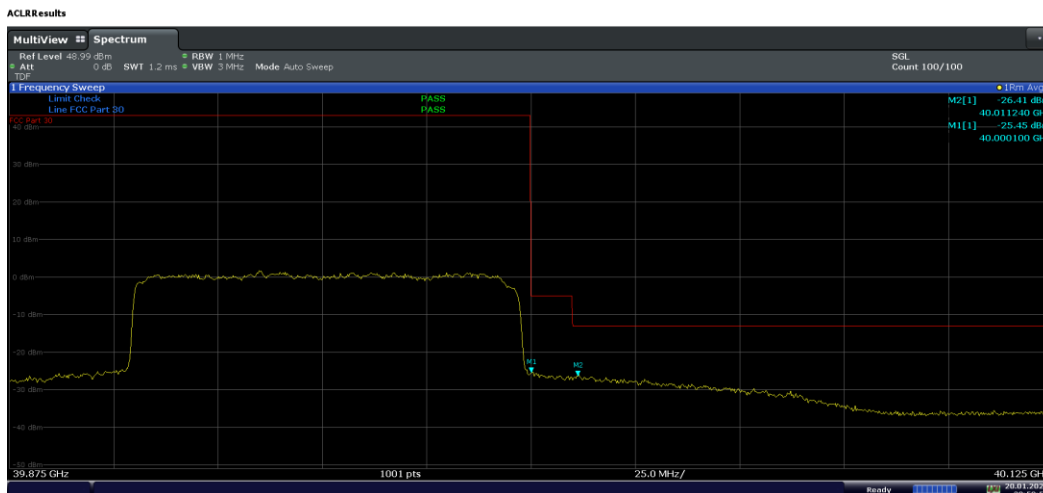


Plot 7-329. Ant M0 Lower BE (Band n260-100MHz-1CC SISO Dual Pol – QPSK Full RB)

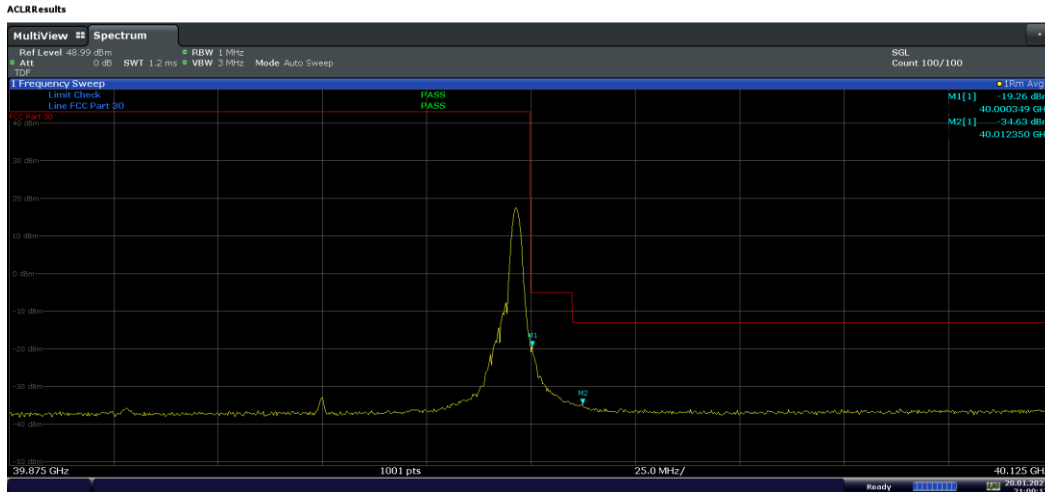


Plot 7-330. Ant M0 Lower BE (Band n260-100MHz-1CC SISO Dual Pol – QPSK 1-L RB)

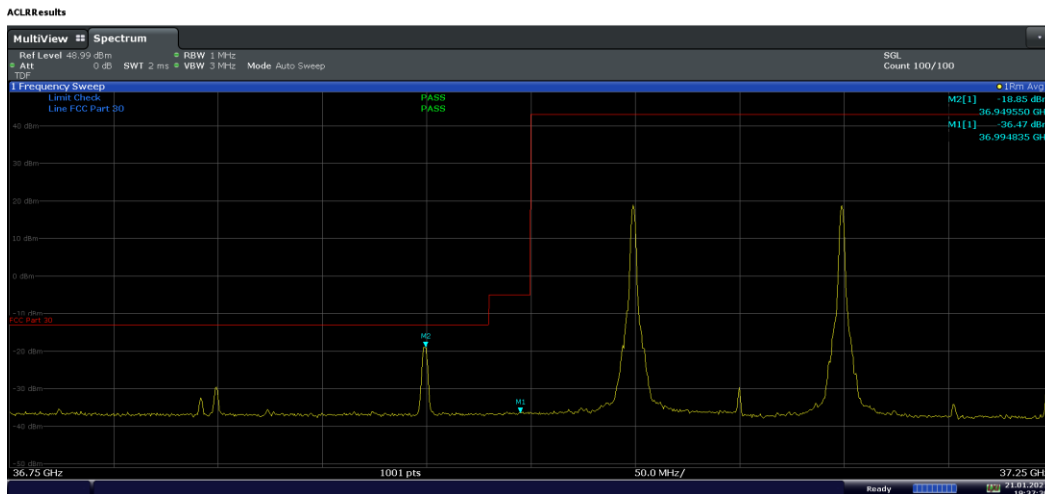


Plot 7-331. Ant M0 Upper BE (Band n260-100MHz-1CC SISO Dual Pol – QPSK Full RB)

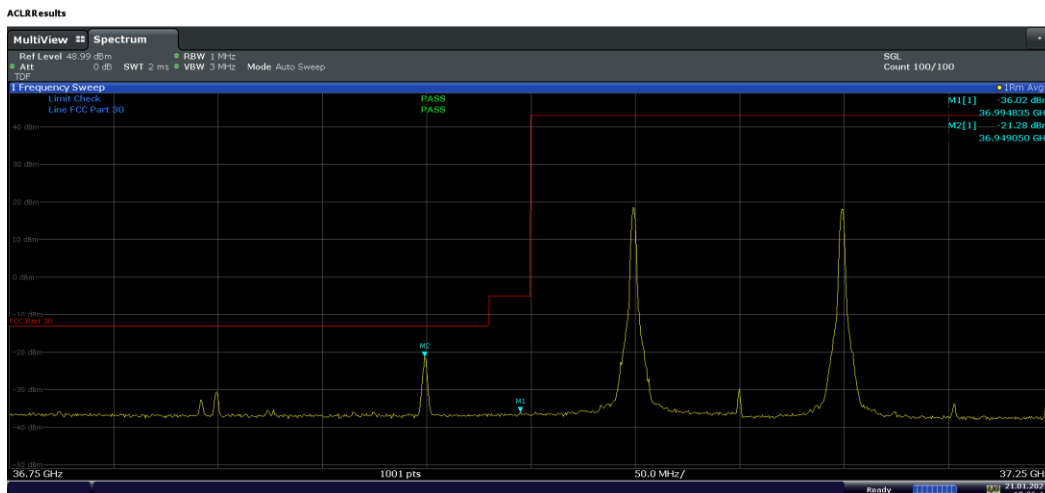
FCC ID: BCGA2301	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 165 of 201



Plot 7-332. Ant M0 Upper BE (Band n260-100MHz-1CC SISO Dual Pol – QPSK 1-H RB)

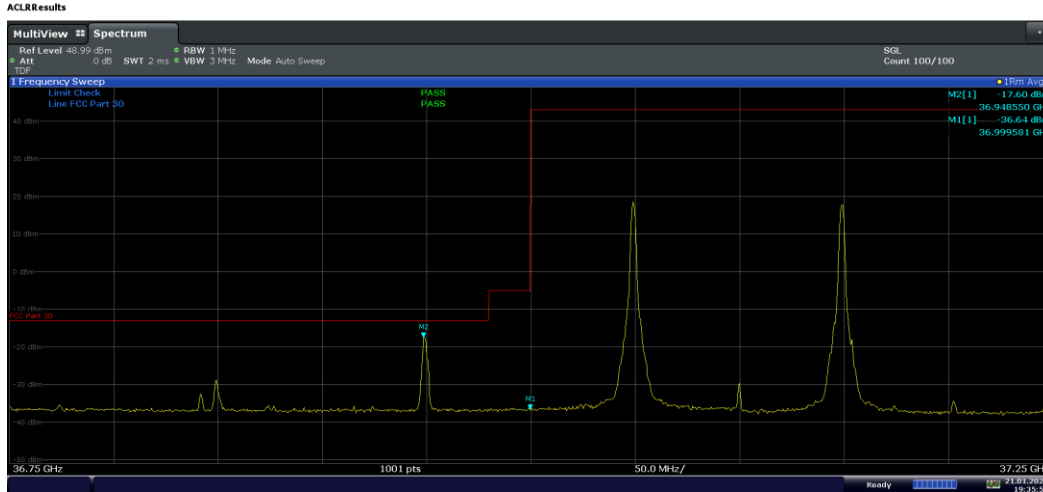


Plot 7-333. Ant M0 Lower BE (Band n260-100+100MHz-2CC SISO Dual Pol– QPSK 1-M RB)

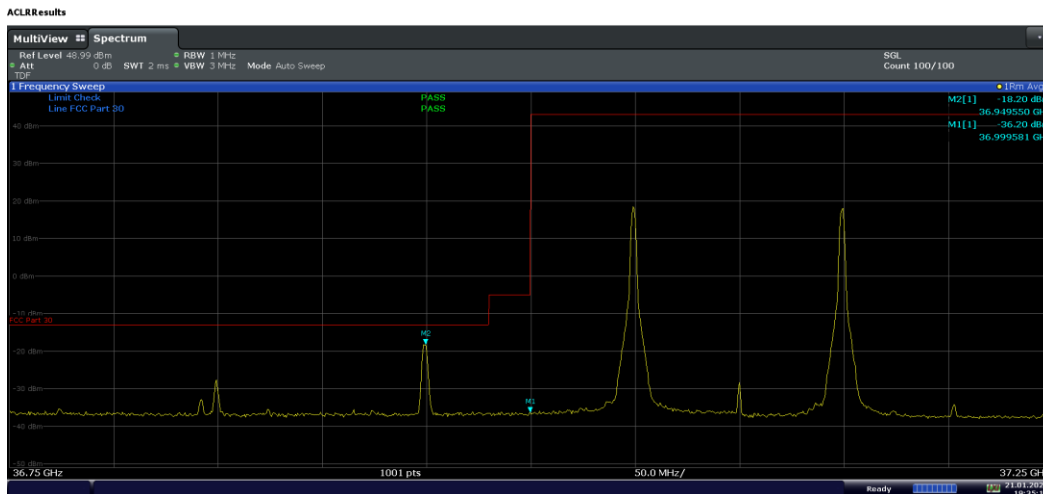


Plot 7-334. Ant M0 Lower BE (Band n260-100+100MHz-2CC SISO Dual Pol– $\pi/2$ BPSK 1-M RB)

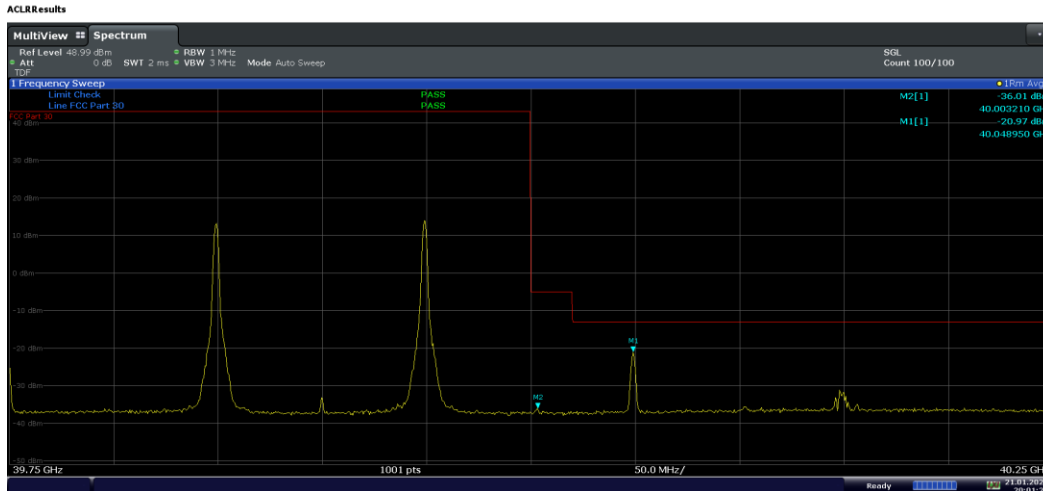
FCC ID: BCGA2301	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 166 of 201



Plot 7-335. Ant M0 Lower BE (Band n260-100+100MHz-2CC SISO Dual Pol – 16QAM 1-M RB)

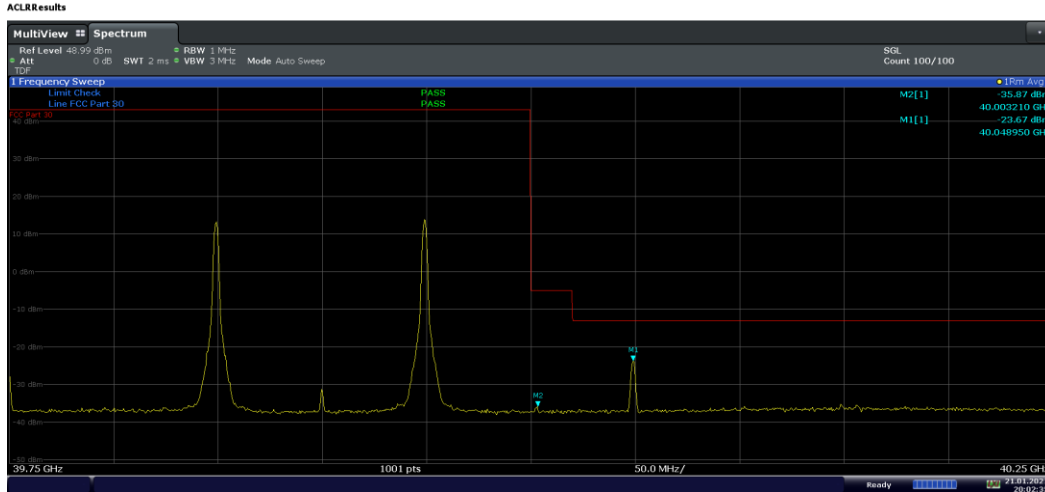


Plot 7-336. Ant M0 Lower BE (Band n260-100+100MHz-2CC SISO Dual Pol– 64QAM 1-M RB)

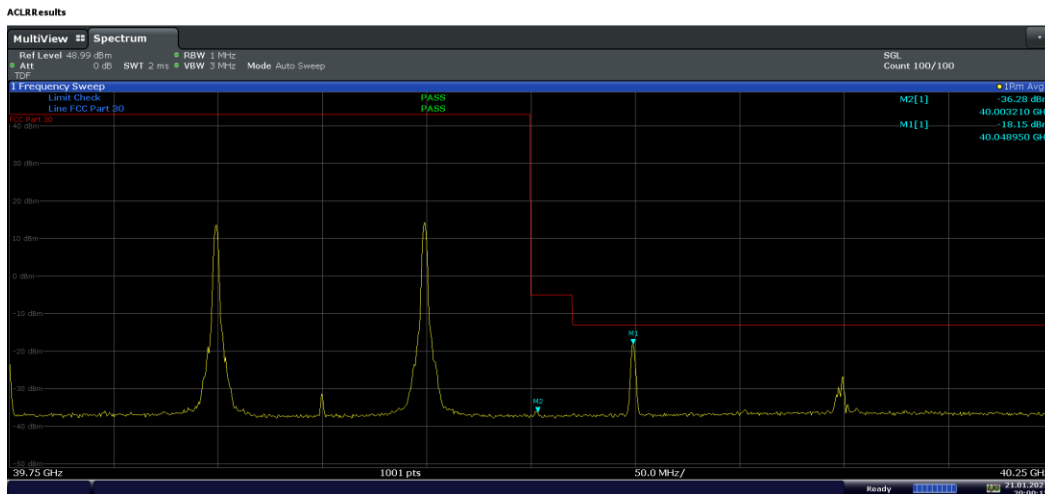


Plot 7-337. Ant M0 Upper BE (Band n260-100+100MHz-2CC SISO Dual Pol– QPSK 1-M RB)

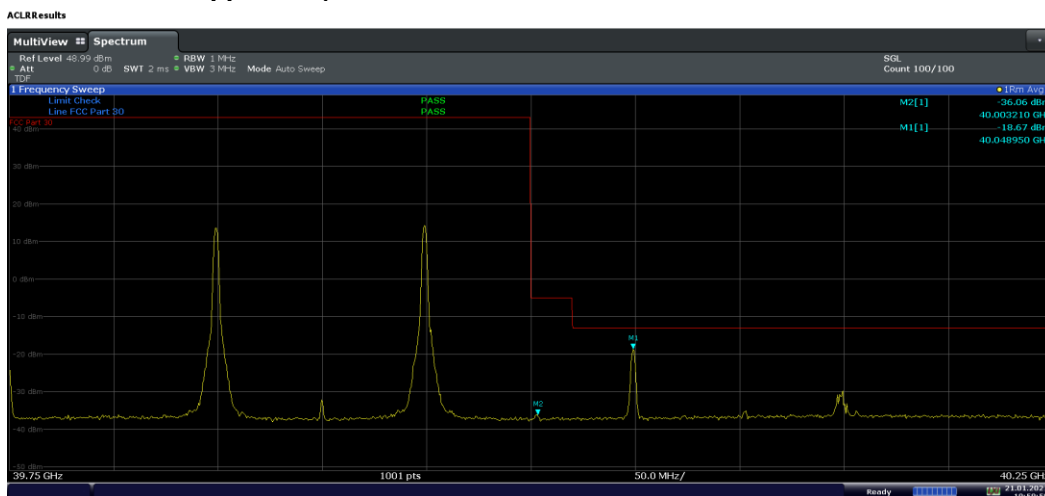
FCC ID: BCGA2301	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 167 of 201



Plot 7-338. Ant M0 Upper BE (Band n260-100+100MHz-2CC SISO Dual Pol- $\pi/2$ BPSK 1-M RB)



Plot 7-339. Ant M0 Upper BE (Band n260-100+100MHz-2CC SISO Dual Pol- 16QAM 1-M RB)



Plot 7-340. Ant M0 Upper BE (Band n260-100+100MHz-2CC SISO Dual Pol- 64QAM 1-M RB)

FCC ID: BCGA2301	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 168 of 201

Band n260 Ant M2

Bandwidth (MHz)	CCs Active	Channel	Antenna Diversity	Waveform	Modulation	Peak Beam ID	Paired Beam ID	RB Config	Frequency [GHz]	Average EIRP [dBm]	TRP Limit [dBm]	Margin [dB]
50	1	Low	SISO	CP-OFDM	QPSK	39		Full	36.995	-23.66	-13.00	-10.66
		Low	SISO	CP-OFDM	QPSK	39		1-Low	37.000	-13.74	-5.00	-8.74
		High	SISO	CP-OFDM	QPSK	39		Full	40.005	-27.79	-13.00	-14.79
		High	SISO	CP-OFDM	QPSK	39		1-High	40.000	-20.22	-5.00	-15.22
		Low	SISO	DFT-s-OFDM	QPSK	39		Full	36.995	-20.48	-13.00	-7.48
		Low	SISO	DFT-s-OFDM	QPSK	39		1-Low	36.998	-10.93	-5.00	-5.93
		High	SISO	DFT-s-OFDM	QPSK	39		Full	40.005	-25.01	-13.00	-12.01
		High	SISO	DFT-s-OFDM	QPSK	39		1-High	40.000	-17.59	-5.00	-12.59
		Low	MIMO	CP-OFDM	QPSK	39		Full	36.995	-23.18	-13.00	-10.18
		Low	MIMO	CP-OFDM	QPSK	39		1-Low	37.000	-12.23	-5.00	-7.23
		High	MIMO	CP-OFDM	QPSK	39		Full	40.005	-25.78	-13.00	-12.78
		High	MIMO	CP-OFDM	QPSK	39		1-High	40.000	-17.39	-5.00	-12.39
		Low	SISO Dual Pol	DFT-s-OFDM	QPSK	39		Full	36.995	-18.36	-13.00	-5.36
		Low	SISO Dual Pol	DFT-s-OFDM	QPSK	39		1-Low	36.998	-10.31	-5.00	-5.31
		High	SISO Dual Pol	DFT-s-OFDM	QPSK	39		Full	40.005	-23.36	-13.00	-10.36
		High	SISO Dual Pol	DFT-s-OFDM	QPSK	39		1-High	40.001	-15.74	-5.00	-10.74
50+50	2	Low	SISO	CP-OFDM	QPSK	39		Full	36.990	-34.16	-13.00	-21.16
		Low	SISO	CP-OFDM	QPSK	39		1-Low	36.953	-21.05	-13.00	-8.05
		Low	SISO	CP-OFDM	QPSK	39		1-Mid	36.974	-18.67	-13.00	-5.67
		Low	SISO	CP-OFDM	16QAM	39		1-Low	36.953	-19.63	-13.00	-6.63
		Low	SISO	CP-OFDM	16QAM	39		1-Mid	36.974	-17.91	-13.00	-4.91
		Low	SISO	CP-OFDM	64QAM	39		1-Low	36.953	-24.09	-13.00	-11.09
		Low	SISO	CP-OFDM	64QAM	39		1-Mid	36.974	-20.85	-13.00	-7.85
		High	SISO	CP-OFDM	QPSK	39		Full	40.011	-36.02	-13.00	-23.02
		High	SISO	CP-OFDM	QPSK	39		1-High	40.047	-28.89	-13.00	-15.89
		High	SISO	CP-OFDM	QPSK	39		1-Mid	40.024	-25.39	-13.00	-12.39
		High	SISO	CP-OFDM	16QAM	39		1-High	40.046	-25.36	-13.00	-12.36
		High	SISO	CP-OFDM	16QAM	39		1-Mid	40.024	-21.91	-13.00	-8.91
		High	SISO	CP-OFDM	64QAM	39		1-High	40.047	-29.19	-13.00	-16.19
		High	SISO	CP-OFDM	64QAM	39		1-Mid	40.024	-25.97	-13.00	-12.97
		Low	SISO	DFTs-OFDM	QPSK	39		Full	36.990	-34.67	-13.00	-21.67
		Low	SISO	DFTs-OFDM	QPSK	39		1-Low	36.953	-25.02	-13.00	-12.02
		Low	SISO	DFTs-OFDM	QPSK	39		1-Mid	36.974	-23.29	-13.00	-10.29
		Low	SISO	DFTs-OFDM	$\pi/2$ BPSK	39		1-Low	36.953	-26.28	-13.00	-13.28
		Low	SISO	DFTs-OFDM	$\pi/2$ BPSK	39		1-Mid	36.974	-25.29	-13.00	-12.29
		Low	SISO	DFTs-OFDM	16QAM	39		1-Low	36.953	-23.71	-13.00	-10.71
		Low	SISO	DFTs-OFDM	16QAM	39		1-Mid	36.974	-22.06	-13.00	-9.06
		Low	SISO	DFTs-OFDM	64QAM	39		1-Low	36.953	-24.46	-13.00	-11.46
		Low	SISO	DFTs-OFDM	64QAM	39		1-Mid	36.974	-22.30	-13.00	-9.30
		High	SISO	DFTs-OFDM	QPSK	39		Full	40.011	-36.32	-13.00	-23.32
		High	SISO	DFTs-OFDM	QPSK	39		1-High	40.047	-29.34	-13.00	-16.34
		High	SISO	DFTs-OFDM	QPSK	39		1-Mid	40.024	-27.80	-13.00	-14.80
		High	SISO	DFTs-OFDM	$\pi/2$ BPSK	39		1-High	40.047	-29.20	-13.00	-16.20
		High	SISO	DFTs-OFDM	$\pi/2$ BPSK	39		1-Mid	40.024	-28.51	-13.00	-15.51
		High	SISO	DFTs-OFDM	16QAM	39		1-High	40.047	-29.54	-13.00	-16.54
		High	SISO	DFTs-OFDM	16QAM	39		1-Mid	40.024	-27.42	-13.00	-14.42
		High	SISO	DFTs-OFDM	64QAM	39		1-High	40.047	-28.63	-13.00	-15.63
		High	SISO	DFTs-OFDM	64QAM	39		1-Mid	40.024	-26.41	-13.00	-13.41
		Low	SISO Dual Pol	DFTs-OFDM	QPSK	39		Full	36.976	-33.25	-13.00	-20.25
		Low	SISO Dual Pol	DFTs-OFDM	QPSK	39		1-Low	36.953	-21.84	-13.00	-8.84
		Low	SISO Dual Pol	DFTs-OFDM	QPSK	39		1-Mid	36.974	-20.34	-13.00	-7.34
		Low	SISO Dual Pol	DFTs-OFDM	$\pi/2$ BPSK	39		1-Low	36.953	-22.50	-13.00	-9.50
		Low	SISO Dual Pol	DFTs-OFDM	$\pi/2$ BPSK	39		1-Mid	36.975	-22.23	-13.00	-9.23
		Low	SISO Dual Pol	DFTs-OFDM	16QAM	39		1-Low	36.953	-21.75	-13.00	-8.75
		Low	SISO Dual Pol	DFTs-OFDM	16QAM	39		1-Mid	36.974	-20.32	-13.00	-7.32
		Low	SISO Dual Pol	DFTs-OFDM	64QAM	39		1-Low	36.953	-20.70	-13.00	-7.70
		Low	SISO Dual Pol	DFTs-OFDM	64QAM	39		1-Mid	36.974	-20.00	-13.00	-7.00
		High	SISO Dual Pol	DFTs-OFDM	QPSK	39		Full	40.021	-34.93	-13.00	-21.93
		High	SISO Dual Pol	DFTs-OFDM	QPSK	39		1-High	40.047	-26.31	-13.00	-13.31
		High	SISO Dual Pol	DFTs-OFDM	QPSK	39		1-Mid	40.024	-26.11	-13.00	-13.11
		High	SISO Dual Pol	DFTs-OFDM	$\pi/2$ BPSK	39		1-High	40.047	-26.69	-13.00	-13.69
		High	SISO Dual Pol	DFTs-OFDM	$\pi/2$ BPSK	39		1-Mid	40.024	-26.35	-13.00	-13.35
		High	SISO Dual Pol	DFTs-OFDM	16QAM	39		1-High	40.047	-26.84	-13.00	-13.84
		High	SISO Dual Pol	DFTs-OFDM	16QAM	39		1-Mid	40.024	-26.56	-13.00	-13.56
		High	SISO Dual Pol	DFTs-OFDM	64QAM	39		1-High	40.047	-25.12	-13.00	-12.12
		High	SISO Dual Pol	DFTs-OFDM	64QAM	39		1-Mid	40.024	-20.90	-13.00	-7.90

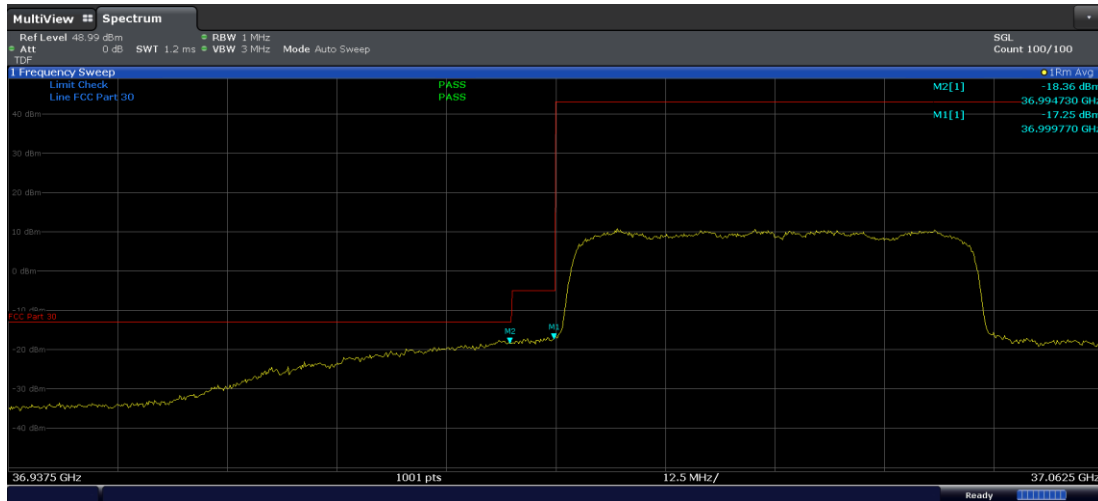
Table 7-90. Ant M2 – Band Edge Measurement Table (Band n260 – 50MHz/50+50MHz)

FCC ID: BCGA2301		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 169 of 201

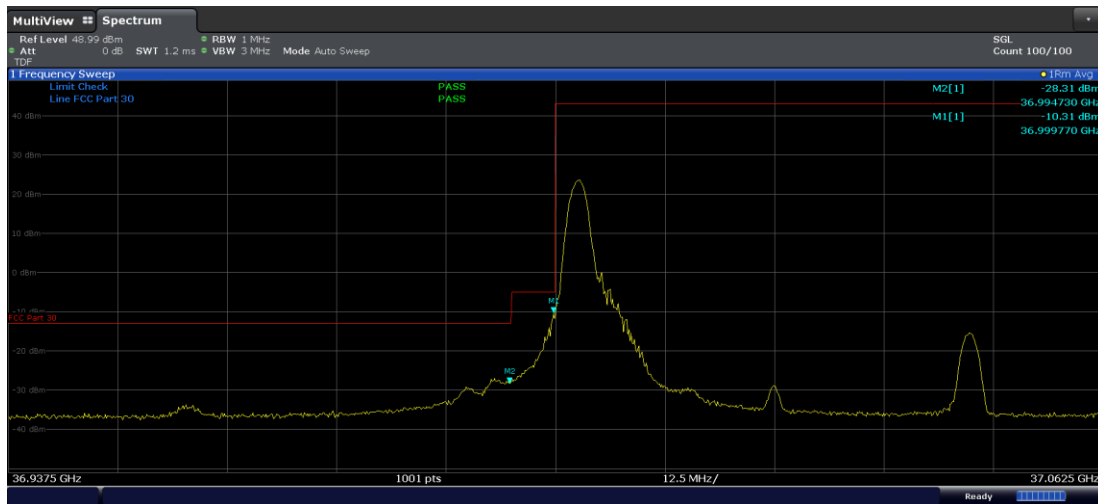
Bandwidth (MHz)	CCs Active	Channel	Antenna Diversity	Waveform	Modulation	Peak Beam ID	Paired Beam ID	RB Config	Frequency [GHz]	Average EIRP [dBm]	TRP Limit [dBm]	Margin [dB]
100	1	Low	SISO	CP-OFDM	QPSK	39		Full	36.987	-26.38	-13.00	-13.38
		Low	SISO	CP-OFDM	QPSK	39		1-Low	37.000	-15.14	-5.00	-10.14
		High	SISO	CP-OFDM	QPSK	39		Full	40.010	-28.94	-13.00	-15.94
		High	SISO	CP-OFDM	QPSK	39		1-High	40.000	-17.27	-5.00	-12.27
		Low	SISO	DFT-s-OFDM	QPSK	39		Full	36.988	-23.40	-13.00	-10.40
		Low	SISO	DFT-s-OFDM	QPSK	39		1-Low	37.000	-10.58	-5.00	-5.58
		High	SISO	DFT-s-OFDM	QPSK	39		Full	40.011	-26.41	-13.00	-13.41
		High	SISO	DFT-s-OFDM	QPSK	39		1-High	40.000	-18.39	-5.00	-13.39
		Low	MIMO	CP-OFDM	QPSK	39	167	Full	36.988	-25.47	-13.00	-12.47
		Low	MIMO	CP-OFDM	QPSK	39	167	1-Low	37.000	-15.29	-5.00	-10.29
		High	MIMO	CP-OFDM	QPSK	39	167	Full	40.013	-27.33	-13.00	-14.33
		High	MIMO	CP-OFDM	QPSK	39	167	1-High	40.000	-20.85	-5.00	-15.85
		Low	SISO Dual Pol	DFT-s-OFDM	QPSK	39	167	Full	36.990	-21.42	-13.00	-8.42
		Low	SISO Dual Pol	DFT-s-OFDM	QPSK	39	167	1-Low	37.000	-10.18	-5.00	-5.18
		High	SISO Dual Pol	DFT-s-OFDM	QPSK	39	167	Full	40.014	-24.83	-13.00	-11.83
		High	SISO Dual Pol	DFT-s-OFDM	QPSK	39	167	1-High	40.000	-15.25	-5.00	-10.25
100+100	2	Low	SISO	CP-OFDM	QPSK	39		Full	36.877	-34.33	-13.00	-21.33
		Low	SISO	CP-OFDM	QPSK	39		1-Low	36.903	-20.29	-13.00	-7.29
		Low	SISO	CP-OFDM	QPSK	39		1-Mid	36.949	-18.00	-13.00	-5.00
		Low	SISO	CP-OFDM	16QAM	39		1-Low	36.903	-19.68	-13.00	-6.68
		Low	SISO	CP-OFDM	16QAM	39		1-Mid	36.949	-17.43	-13.00	-4.43
		Low	SISO	CP-OFDM	64QAM	39		1-Low	36.903	-24.87	-13.00	-11.87
		Low	SISO	CP-OFDM	64QAM	39		1-Mid	36.949	-22.97	-13.00	-9.97
		High	SISO	CP-OFDM	QPSK	39		Full	40.122	-34.11	-13.00	-21.11
		High	SISO	CP-OFDM	QPSK	39		1-High	40.097	-28.04	-13.00	-15.04
		High	SISO	CP-OFDM	QPSK	39		1-Mid	40.149	-19.15	-13.00	-6.15
		High	SISO	CP-OFDM	16QAM	39		1-High	40.097	-21.51	-13.00	-8.51
		High	SISO	CP-OFDM	16QAM	39		1-Mid	40.049	-19.86	-13.00	-6.86
		High	SISO	CP-OFDM	64QAM	39		1-High	40.097	-26.50	-13.00	-13.50
		High	SISO	CP-OFDM	64QAM	39		1-Mid	40.148	-21.03	-13.00	-8.03
		Low	SISO	DFTs-OFDM	QPSK	39		Full	36.968	-34.99	-13.00	-21.99
		Low	SISO	DFTs-OFDM	QPSK	39		1-Low	36.903	-24.84	-13.00	-11.84
		Low	SISO	DFTs-OFDM	QPSK	39		1-Mid	36.949	-22.95	-13.00	-9.95
		Low	SISO	DFTs-OFDM	$\pi/2$ BPSK	39		1-Low	36.903	-25.43	-13.00	-12.43
		Low	SISO	DFTs-OFDM	$\pi/2$ BPSK	39		1-Mid	36.949	-23.86	-13.00	-10.86
		Low	SISO	DFTs-OFDM	16QAM	39		1-Low	36.903	-22.71	-13.00	-9.71
		Low	SISO	DFTs-OFDM	16QAM	39		1-Mid	36.949	-21.79	-13.00	-8.79
		Low	SISO	DFTs-OFDM	64QAM	39		1-Low	36.903	-22.89	-13.00	-9.89
		Low	SISO	DFTs-OFDM	64QAM	39		1-Mid	36.949	-21.61	-13.00	-8.61
		High	SISO	DFTs-OFDM	QPSK	39		Full	40.022	-35.95	-13.00	-22.95
		High	SISO	DFTs-OFDM	QPSK	39		1-High	40.096	-28.42	-13.00	-15.42
		High	SISO	DFTs-OFDM	QPSK	39		1-Mid	40.148	-25.51	-13.00	-12.51
		High	SISO	DFTs-OFDM	$\pi/2$ BPSK	39		1-High	40.096	-29.61	-13.00	-16.61
		High	SISO	DFTs-OFDM	$\pi/2$ BPSK	39		1-Mid	40.049	-27.53	-13.00	-14.53
		High	SISO	DFTs-OFDM	16QAM	39		1-High	40.096	-24.93	-13.00	-11.93
		High	SISO	DFTs-OFDM	16QAM	39		1-Mid	40.049	-23.66	-13.00	-10.66
		High	SISO	DFTs-OFDM	64QAM	39		1-High	40.096	-27.34	-13.00	-14.34
		High	SISO	DFTs-OFDM	64QAM	39		1-Mid	40.049	-25.63	-13.00	-12.63
		Low	SISO Dual Pol	DFTs-OFDM	QPSK	39	167	Full	36.957	-34.04	-13.00	-21.04
		Low	SISO Dual Pol	DFTs-OFDM	QPSK	39	167	1-Low	36.903	-21.85	-13.00	-8.85
		Low	SISO Dual Pol	DFTs-OFDM	QPSK	39	167	1-Mid	36.949	-20.07	-13.00	-7.07
		Low	SISO Dual Pol	DFTs-OFDM	$\pi/2$ BPSK	39	167	1-Low	36.903	-21.89	-13.00	-8.89
		Low	SISO Dual Pol	DFTs-OFDM	$\pi/2$ BPSK	39	167	1-Mid	36.949	-20.32	-13.00	-7.32
		Low	SISO Dual Pol	DFTs-OFDM	16QAM	39	167	1-Low	36.903	-21.10	-13.00	-8.10
		Low	SISO Dual Pol	DFTs-OFDM	16QAM	39	167	1-Mid	36.949	-19.49	-13.00	-6.49
		Low	SISO Dual Pol	DFTs-OFDM	64QAM	39	167	1-Low	36.903	-20.74	-13.00	-7.74
		Low	SISO Dual Pol	DFTs-OFDM	64QAM	39	167	1-Mid	36.949	-18.39	-13.00	-5.39
		High	SISO Dual Pol	DFTs-OFDM	QPSK	39	167	Full	40.083	-36.07	-13.00	-23.07
		High	SISO Dual Pol	DFTs-OFDM	QPSK	39	167	1-High	40.096	-29.17	-13.00	-16.17
		High	SISO Dual Pol	DFTs-OFDM	QPSK	39	167	1-Mid	40.049	-28.55	-13.00	-15.55
		High	SISO Dual Pol	DFTs-OFDM	$\pi/2$ BPSK	39	167	1-High	40.096	-28.88	-13.00	-15.88
		High	SISO Dual Pol	DFTs-OFDM	$\pi/2$ BPSK	39	167	1-Mid	40.049	-28.50	-13.00	-15.50
		High	SISO Dual Pol	DFTs-OFDM	16QAM	39	167	1-High	40.096	-29.36	-13.00	-16.36
		High	SISO Dual Pol	DFTs-OFDM	16QAM	39	167	1-Mid	40.049	-28.65	-13.00	-15.65
		High	SISO Dual Pol	DFTs-OFDM	64QAM	39	167	1-High	40.096	-29.64	-13.00	-16.64
		High	SISO Dual Pol	DFTs-OFDM	64QAM	39	167	1-Mid	40.049	-28.02	-13.00	-15.02

Table 7-91. Ant M2 – Band Edge Measurement Table (Band n260 – 100MHz/100+100MHz)

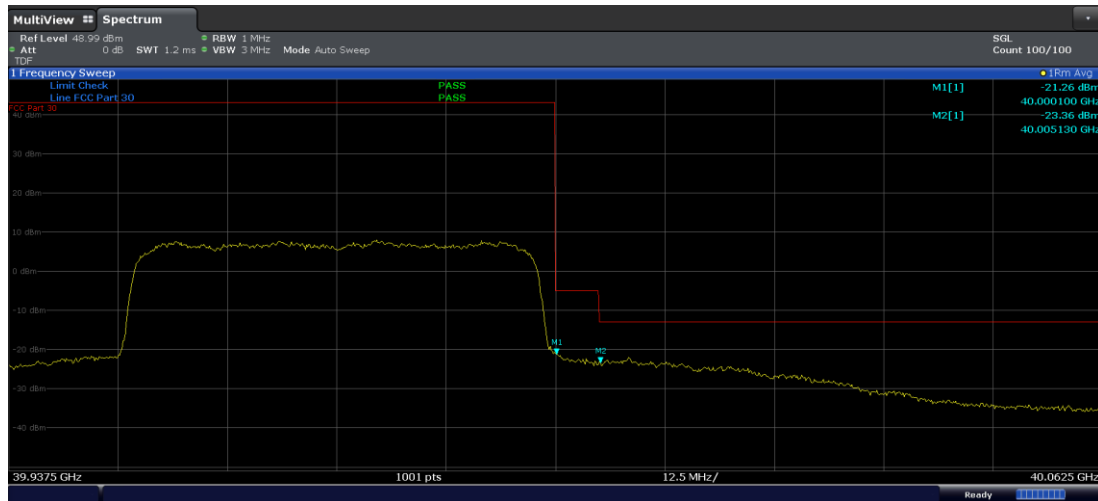
FCC ID: BCGA2301		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 170 of 201



Plot 7-341. Ant M2 Lower BE (Band n260-50MHz-1CC SISO Dual Pol- QPSK Full RB)

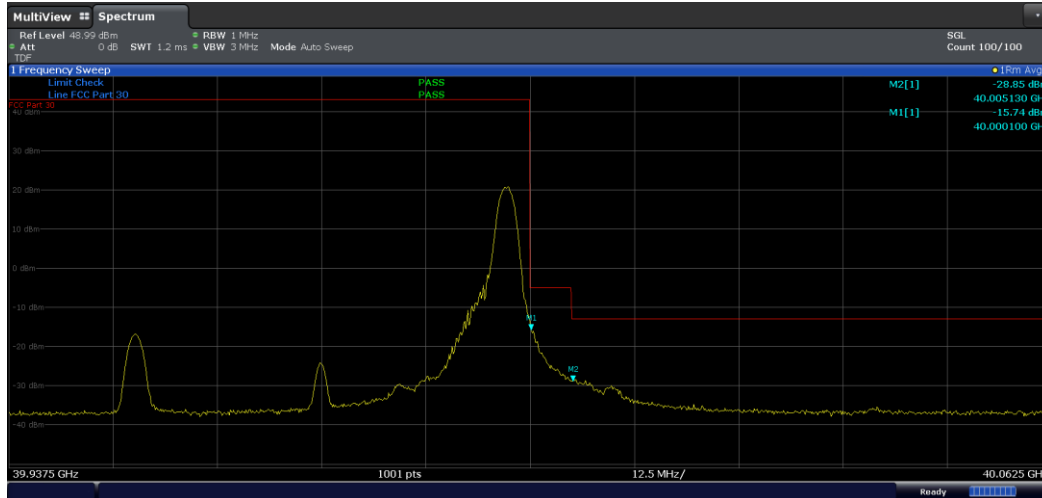


Plot 7-342. Ant M2 Lower BE (Band n260-50MHz-1CC SISO Dual Pol- QPSK 1-L RB)

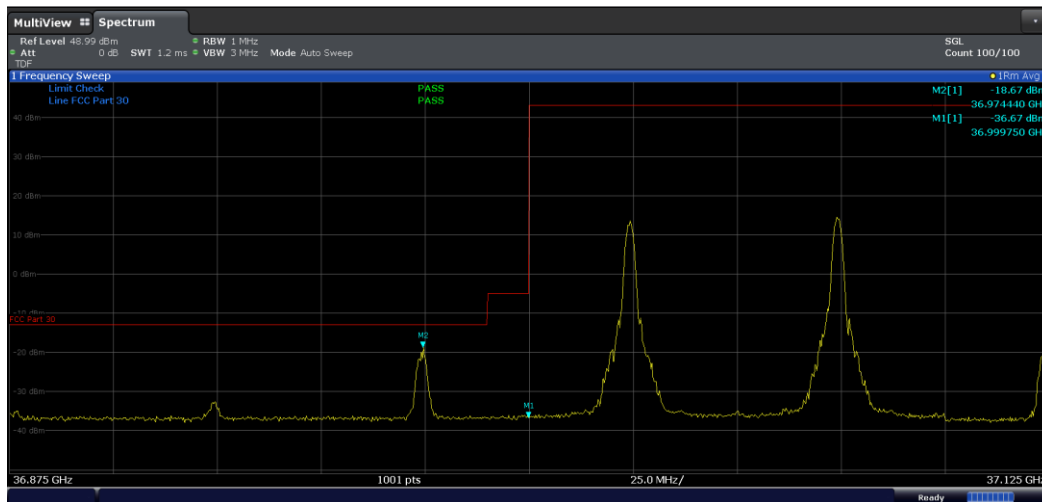


Plot 7-343. Ant M2 Upper BE (Band n260-50MHz-1CC SISO Dual Pol- QPSK Full RB)

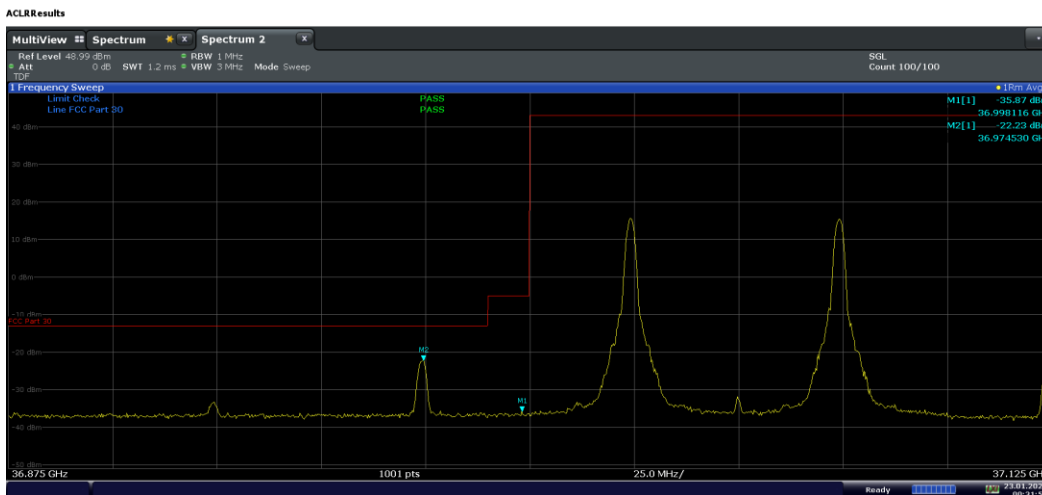
FCC ID: BCGA2301	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 171 of 201



Plot 7-344. Ant M2 Upper BE (Band n260-50MHz-1CC SISO Dual Pol- QPSK 1-H RB)

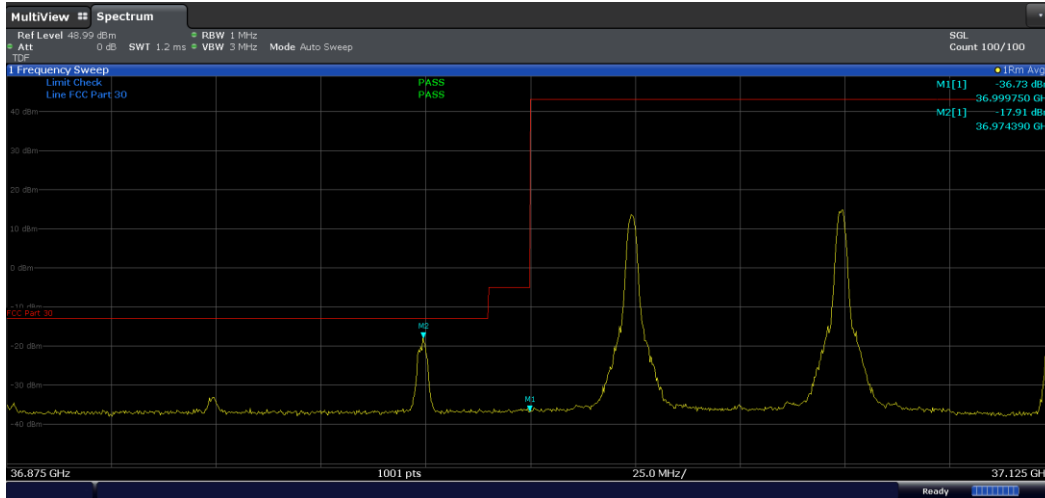


Plot 7-345. Ant M2 Lower BE (Band n260-50+50MHz-2CC SISO CP-OFDM - QPSK 1-M RB)

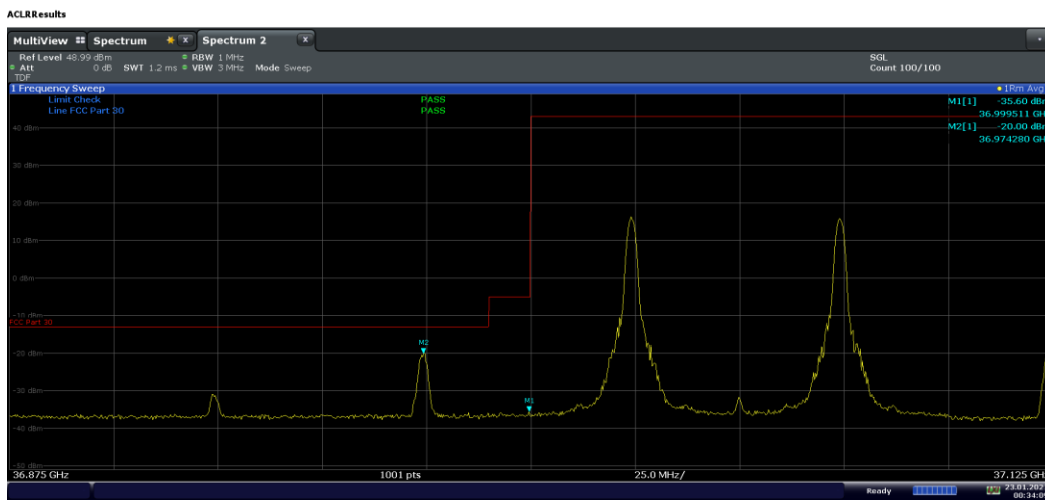


Plot 7-346. Ant M2 Lower BE (Band n260-50+50MHz-2CC SISO Dual Pol- $\pi/2$ BPSK 1-M RB)

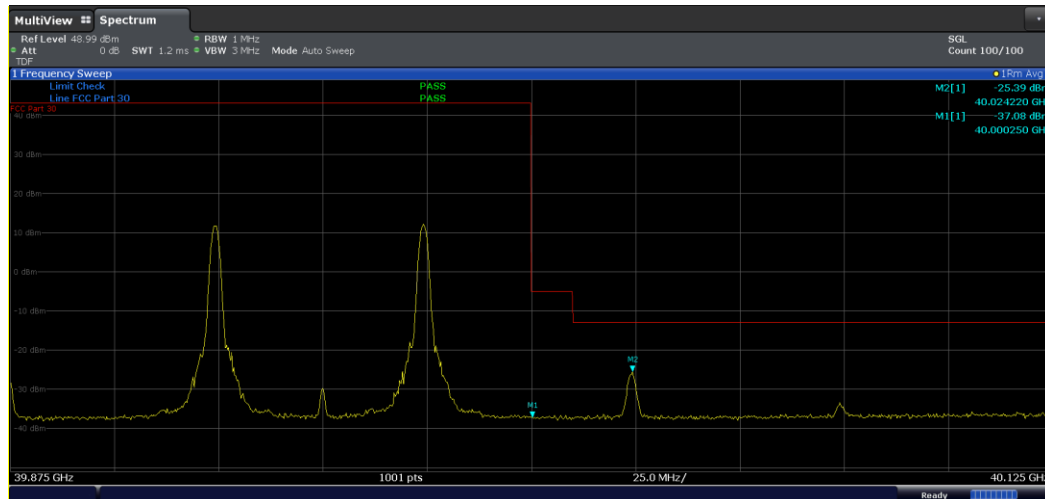
FCC ID: BCGA2301	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 172 of 201



Plot 7-347. Ant M2 Lower BE (Band n260-50+50MHz-2CC SISO CP-OFDM – 16QAM 1-M RB)

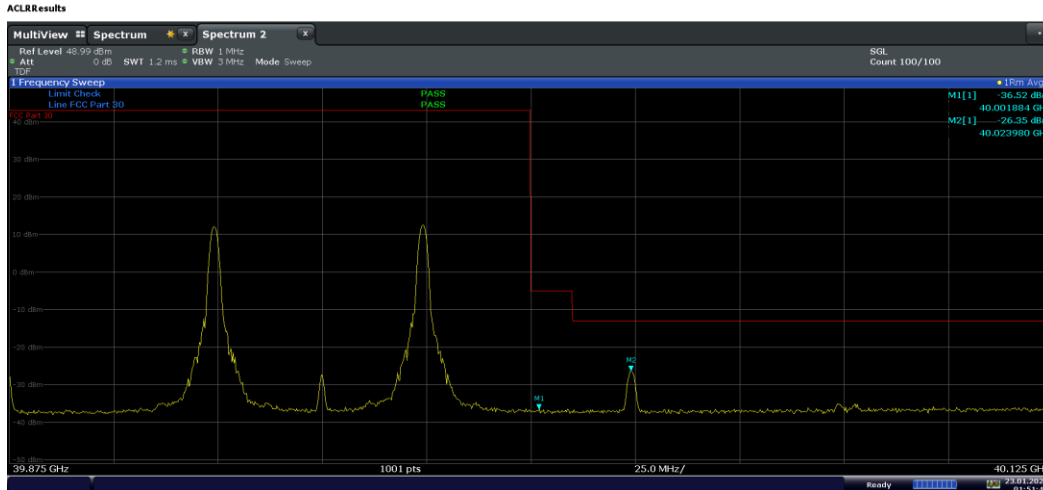


Plot 7-348. Ant M2 Lower BE (Band n260-50+50MHz-2CC SISO Dual Pol– 64QAM 1-M RB)

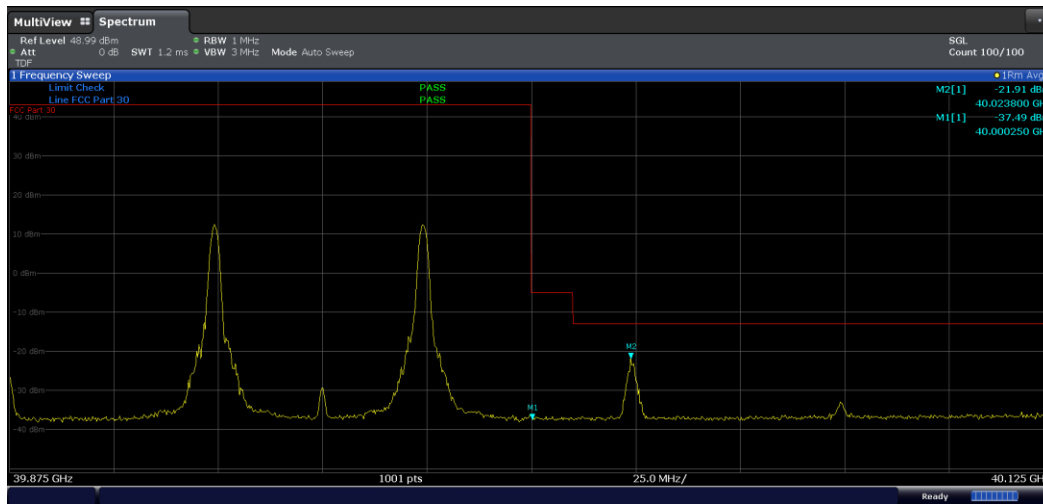


Plot 7-349. Ant M2 Upper BE (Band n260-50+50MHz-2CC SISO CP-OFDM – QPSK 1-M RB)

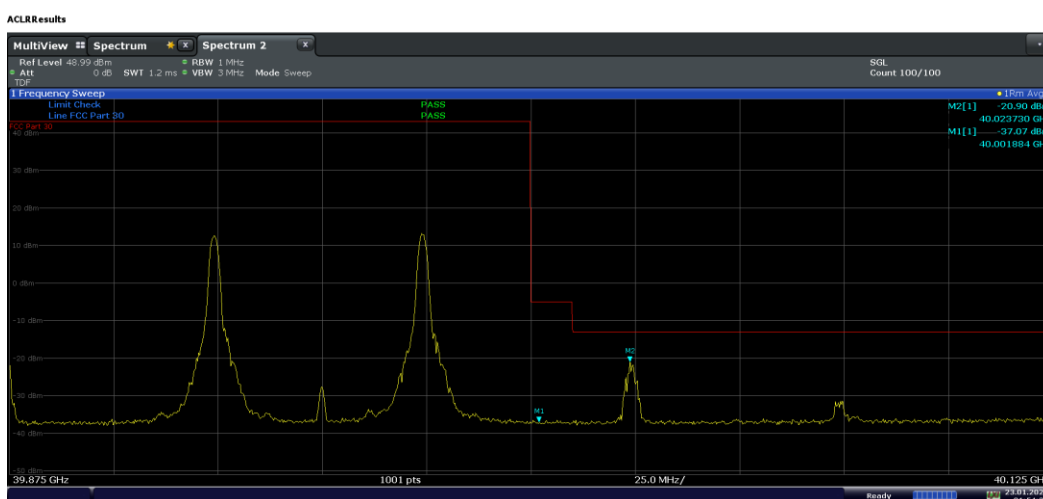
FCC ID: BCGA2301	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 173 of 201



Plot 7-350. Ant M2 Upper BE (Band n260-50+50MHz-2CC SISO Dual Pol- $\pi/2$ BPSK 1-M RB)

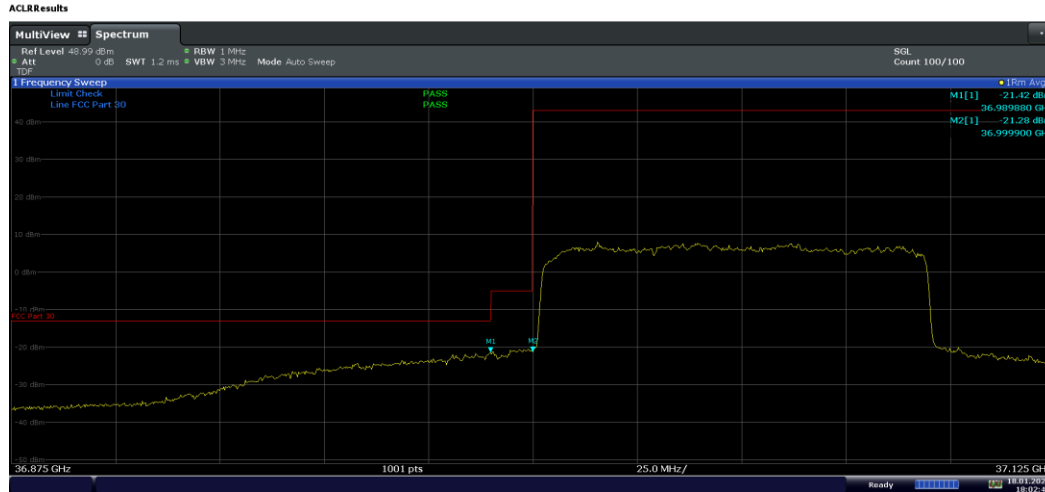


Plot 7-351. Ant M2 Upper BE (Band n260-50+50MHz-2CC SISO CP-OFDM - 16QAM 1-M RB)

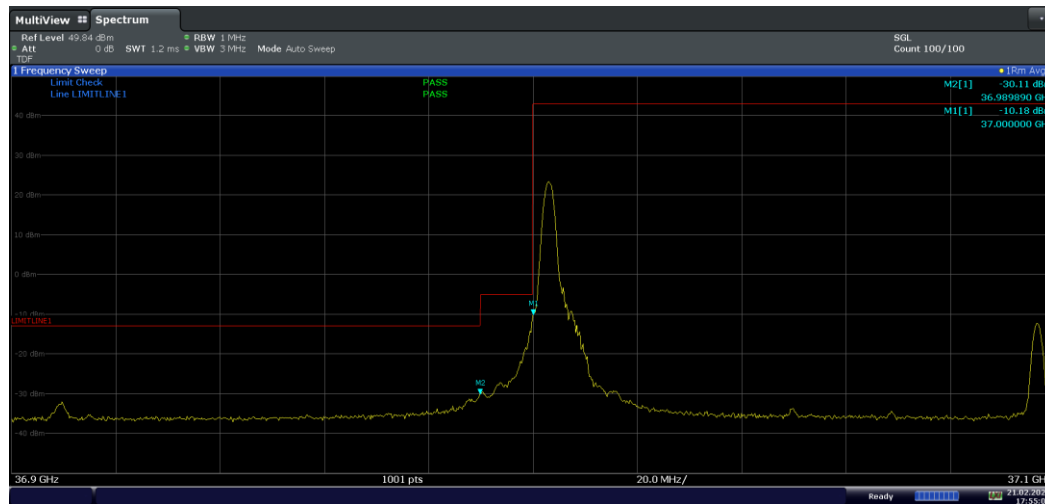


Plot 7-352. Ant M2 Upper BE (Band n260-50+50MHz-2CC SISO Dual Pol- 64QAM 1-M RB)

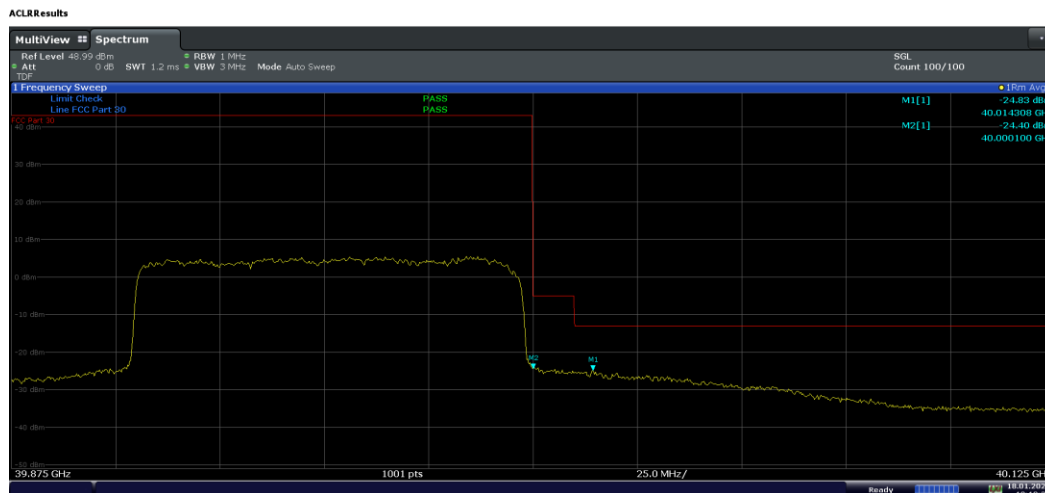
FCC ID: BCGA2301	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 174 of 201



Plot 7-353. Ant M2 Lower BE (Band n260-100MHz-1CC SISO Dual Pol- QPSK Full RB)

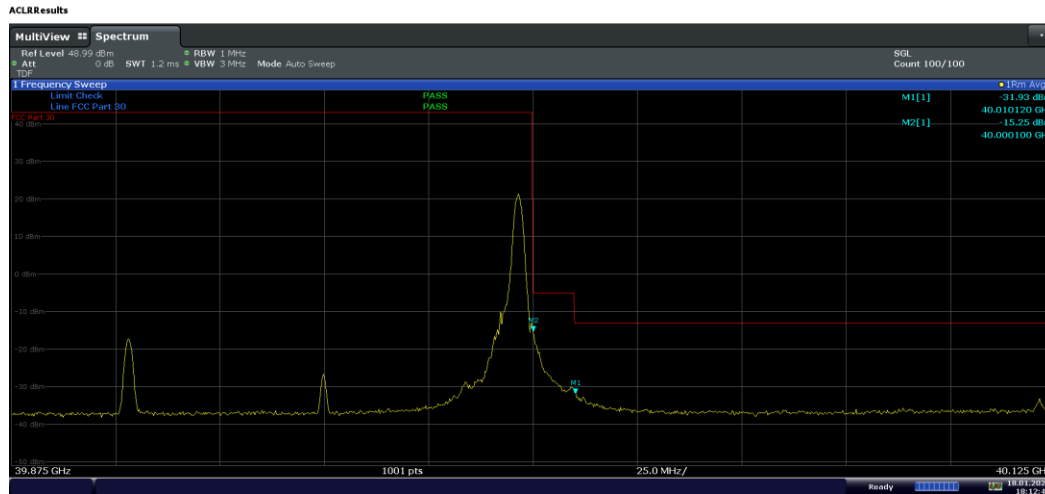


Plot 7-354. Ant M2 Lower BE (Band n260-100MHz-1CC SISO Dual Pol- QPSK 1-L RB)

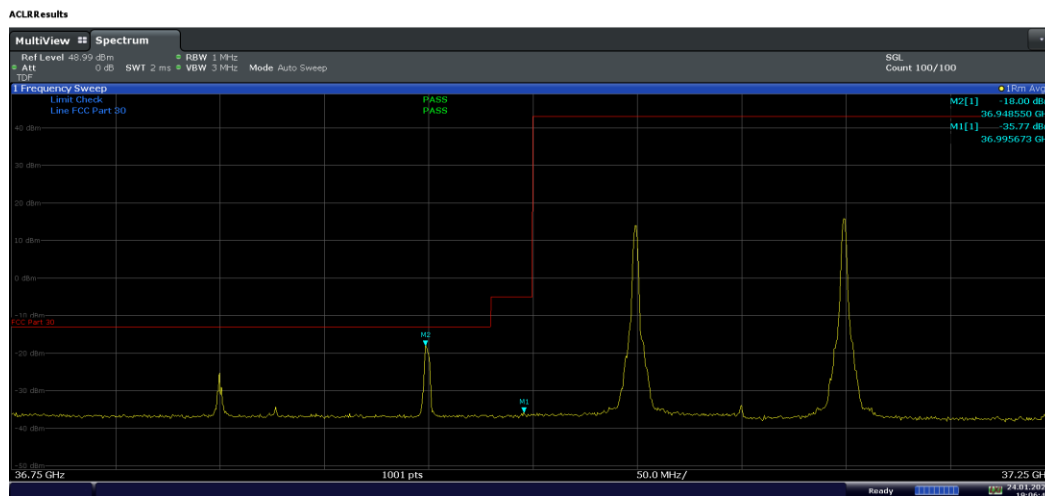


Plot 7-355. Ant M2 Upper BE (Band n260-100MHz-1CC SISO Dual Pol- QPSK Full RB)

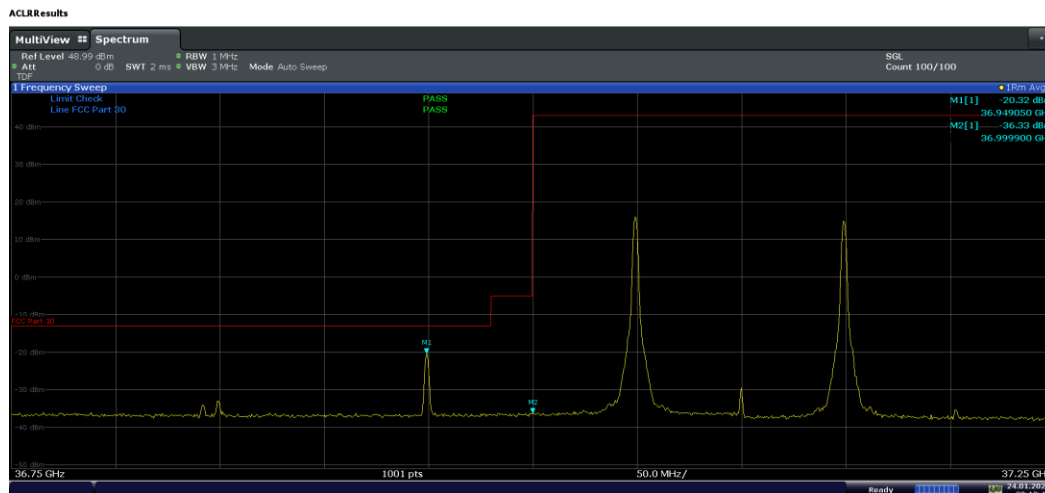
FCC ID: BCGA2301	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 175 of 201



Plot 7-356. Ant M2 Upper BE (Band n260-100MHz-1CC SISO Dual Pol- QPSK 1-H RB)

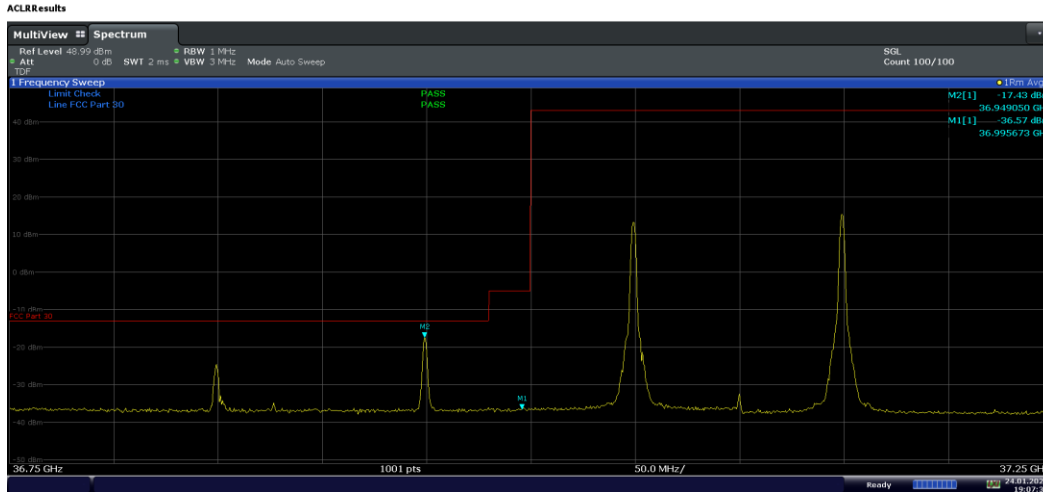


Plot 7-357. Ant M2 Lower BE (Band n260-100+100MHz-2CC SISO CP-OFDM – QPSK 1-M RB)

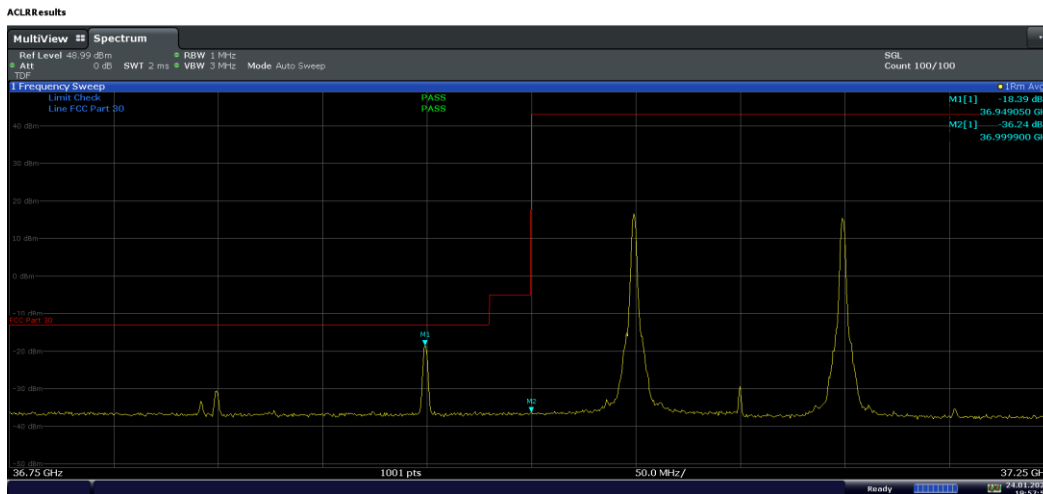


Plot 7-358. Ant M2 Lower BE (Band n260-100+100MHz-2CC SISO Dual Pol- $\pi/2$ BPSK 1-M RB)

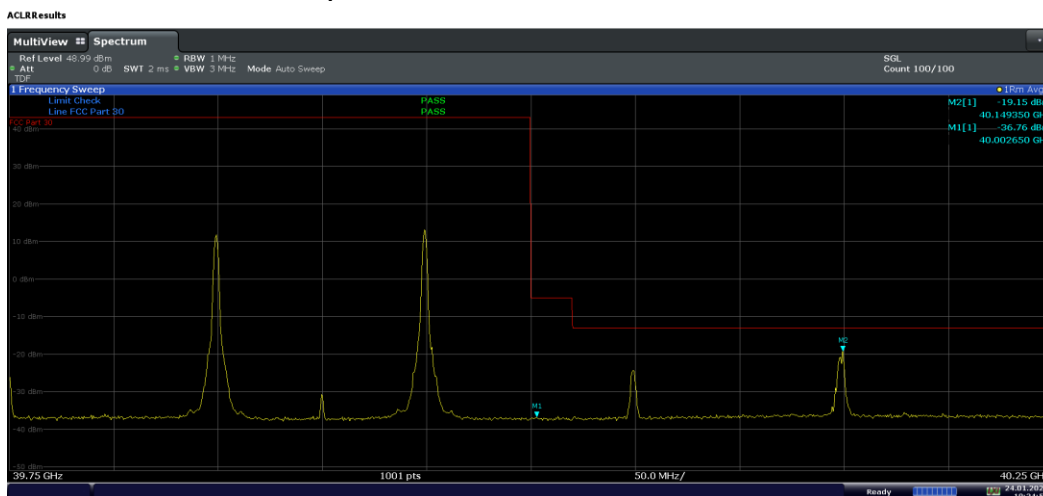
FCC ID: BCGA2301	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 176 of 201



Plot 7-359. Ant M2 Lower BE (Band n260-100+100MHz-2CC SISO CP-OFDM – 16QAM 1-M RB)



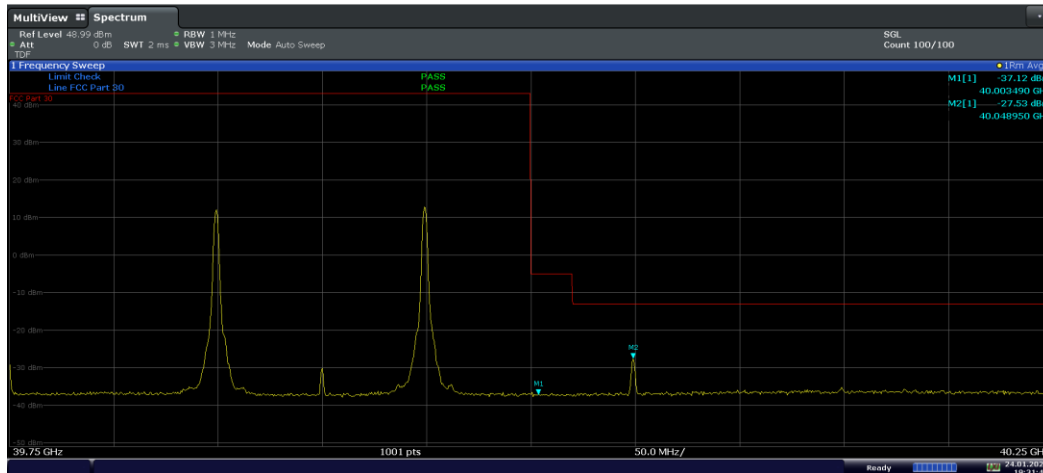
Plot 7-360. Ant M2 Lower BE (Band n260-100+100MHz-2CC SISO Dual Pol– 64QAM 1-M RB)



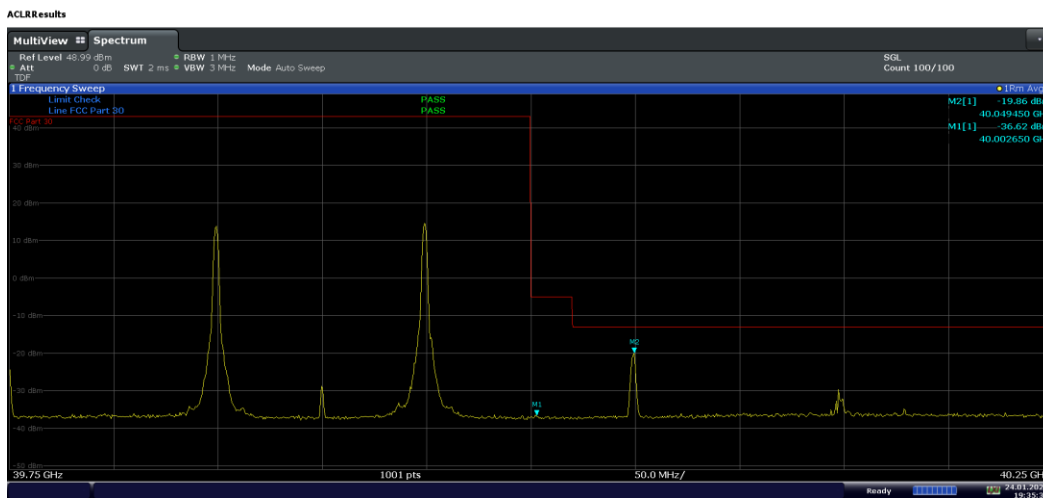
Plot 7-361. Ant M2 Upper BE (Band n260-100+100MHz-2CC SISO CP-OFDM – QPSK 1-M RB)

FCC ID: BCGA2301	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 177 of 201

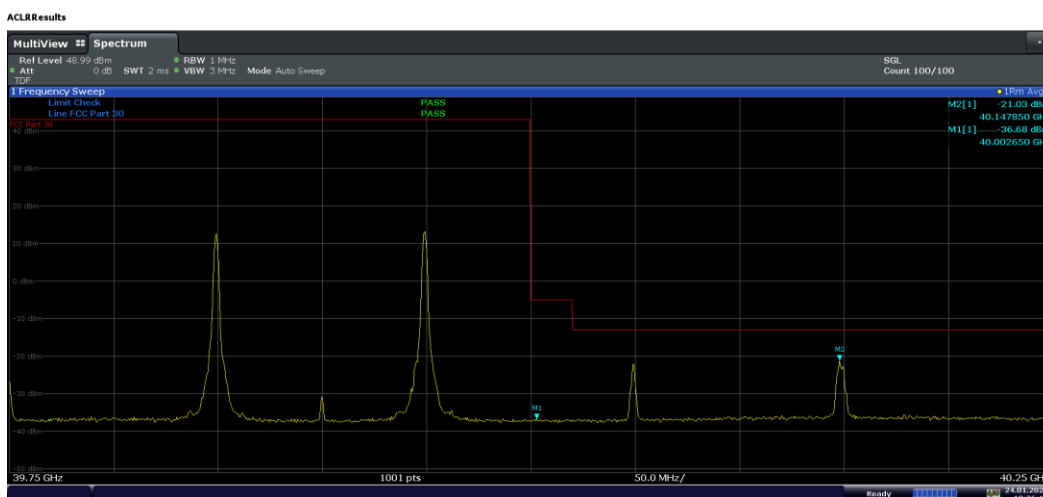
ACLR Results



Plot 7-362. Ant M2 Upper BE (Band n260-100+100MHz-2CC SISO DFTs-OFDM – $\pi/2$ BPSK 1-M RB)



Plot 7-363. Ant M2 Upper BE (Band n260-100+100MHz-2CC SISO CP-OFDM – 16QAM 1-M RB)



Plot 7-364. Ant M2 Upper BE (Band n260-100+100MHz-2CC SISO CP-OFDM – 64QAM 1-M RB)

FCC ID: BCGA2301	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 178 of 201

Band n260 Ant M3

Bandwidth (MHz)	CCs Active	Channel	Antenna Diversity	Waveform	Modulation	Peak Beam ID	Paired Beam ID	RB Config	Frequency [GHz]	Average EIRP [dBm]	TRP Limit [dBm]	Margin [dB]
50	1	Low	SISO	CP-OFDM	QPSK	43		Full	36.994	-19.04	-13.00	-6.04
		Low	SISO	CP-OFDM	QPSK	43		1-Low	37.000	-12.95	-5.00	-7.95
		High	SISO	CP-OFDM	QPSK	43		Full	40.008	-18.94	-13.00	-5.94
		High	SISO	CP-OFDM	QPSK	43		1-High	40.007	-21.32	-13.00	-8.32
		Low	SISO	DFT-s-OFDM	QPSK	43		Full	36.995	-16.14	-13.00	-3.14
		Low	SISO	DFT-s-OFDM	QPSK	43		1-Low	37.000	-11.11	-5.00	-6.11
		High	SISO	DFT-s-OFDM	QPSK	43		Full	40.008	-17.06	-13.00	-4.06
		High	SISO	DFT-s-OFDM	QPSK	43		1-High	40.005	-21.24	-13.00	-8.24
		Low	MIMO	CP-OFDM	QPSK	43		Full	36.995	-18.83	-13.00	-5.83
		Low	MIMO	CP-OFDM	QPSK	43		1-Low	37.000	-15.09	-5.00	-10.09
		High	MIMO	CP-OFDM	QPSK	43		Full	40.006	-19.17	-13.00	-6.17
		High	MIMO	CP-OFDM	QPSK	43		1-High	40.008	-21.50	-13.00	-8.50
		Low	SISO Dual Pol	DFT-s-OFDM	QPSK	43		Full	36.994	-15.01	-13.00	-2.01
		Low	SISO Dual Pol	DFT-s-OFDM	QPSK	43		1-Low	37.000	-8.93	-5.00	-3.93
50+50	2	High	SISO Dual Pol	DFT-s-OFDM	QPSK	43		Full	40.007	-19.19	-13.00	-6.19
		High	SISO Dual Pol	DFT-s-OFDM	QPSK	43		1-High	40.000	-12.66	-5.00	-7.66
		Low	SISO	CP-OFDM	QPSK	43		Full	36.988	-25.63	-13.00	-12.63
		Low	SISO	CP-OFDM	QPSK	43		1-Low	36.953	-15.95	-13.00	-2.95
		Low	SISO	CP-OFDM	QPSK	43		1-Mid	36.975	-14.23	-13.00	-1.23
		Low	SISO	CP-OFDM	16QAM	43		1-Low	36.953	-16.56	-13.00	-3.56
		Low	SISO	CP-OFDM	16QAM	43		1-Mid	36.975	-14.99	-13.00	-1.99
		Low	SISO	CP-OFDM	64QAM	43		1-Low	36.953	-18.84	-13.00	-5.84
		Low	SISO	CP-OFDM	64QAM	43		1-Mid	36.975	-18.40	-13.00	-5.40
		High	SISO	CP-OFDM	QPSK	43		Full	40.020	-21.94	-13.00	-8.94
		High	SISO	CP-OFDM	QPSK	43		1-High	40.047	-16.53	-13.00	-3.53
		High	SISO	CP-OFDM	QPSK	43		1-Mid	40.024	-15.79	-13.00	-2.79
		High	SISO	CP-OFDM	16QAM	43		1-High	40.047	-18.25	-13.00	-5.25
		High	SISO	CP-OFDM	16QAM	43		1-Mid	40.024	-15.25	-13.00	-2.25
		High	SISO	CP-OFDM	64QAM	43		1-High	40.047	-19.37	-13.00	-6.37
		High	SISO	CP-OFDM	64QAM	43		1-Mid	40.024	-17.14	-13.00	-4.14
		Low	SISO	DFTs-OFDM	QPSK	43		Full	36.985	-25.64	-13.00	-12.64
		Low	SISO	DFTs-OFDM	QPSK	43		1-Low	36.953	-18.85	-13.00	-5.85
		Low	SISO	DFTs-OFDM	QPSK	43		1-Mid	36.974	-17.55	-13.00	-4.55
		Low	SISO	DFTs-OFDM	$\pi/2$ BPSK	43		1-Low	36.953	-21.16	-13.00	-8.16
		Low	SISO	DFTs-OFDM	$\pi/2$ BPSK	43		1-Mid	36.974	-21.33	-13.00	-8.33
		Low	SISO	DFTs-OFDM	16QAM	43		1-Low	36.953	-19.03	-13.00	-6.03
		Low	SISO	DFTs-OFDM	16QAM	43		1-Mid	36.974	-18.70	-13.00	-5.70
		Low	SISO	DFTs-OFDM	64QAM	43		1-Low	36.953	-19.12	-13.00	-6.12
		Low	SISO	DFTs-OFDM	64QAM	43		1-Mid	36.974	-18.49	-13.00	-5.49
		High	SISO	DFTs-OFDM	QPSK	43		Full	40.022	-21.92	-13.00	-8.92
		High	SISO	DFTs-OFDM	QPSK	43		1-High	40.047	-19.57	-13.00	-6.57
		High	SISO	DFTs-OFDM	QPSK	43		1-Mid	40.024	-18.56	-13.00	-5.56
		High	SISO	DFTs-OFDM	$\pi/2$ BPSK	43		1-High	40.047	-20.32	-13.00	-7.32
		High	SISO	DFTs-OFDM	$\pi/2$ BPSK	43		1-Mid	40.024	-19.92	-13.00	-6.92
		High	SISO	DFTs-OFDM	16QAM	43		1-High	40.047	-18.49	-13.00	-5.49
		High	SISO	DFTs-OFDM	16QAM	43		1-Mid	40.024	-17.95	-13.00	-4.95
		High	SISO	DFTs-OFDM	64QAM	43		1-High	40.047	-19.66	-13.00	-6.66
		High	SISO	DFTs-OFDM	64QAM	43		1-Mid	40.024	-18.40	-13.00	-5.40
		Low	SISO Dual Pol	DFTs-OFDM	QPSK	43		Full	36.973	-25.22	-13.00	-12.22
		Low	SISO Dual Pol	DFTs-OFDM	QPSK	43		1-Low	36.953	-19.65	-13.00	-6.65
		Low	SISO Dual Pol	DFTs-OFDM	QPSK	43		1-Mid	36.974	-17.51	-13.00	-4.51
		Low	SISO Dual Pol	DFTs-OFDM	$\pi/2$ BPSK	43		1-Low	36.953	-20.73	-13.00	-7.73
		Low	SISO Dual Pol	DFTs-OFDM	$\pi/2$ BPSK	43		1-Mid	36.974	-20.31	-13.00	-7.31
		Low	SISO Dual Pol	DFTs-OFDM	16QAM	43		1-Low	36.953	-18.52	-13.00	-5.52
		Low	SISO Dual Pol	DFTs-OFDM	16QAM	43		1-Mid	36.974	-16.93	-13.00	-3.93
		Low	SISO Dual Pol	DFTs-OFDM	64QAM	43		1-Low	36.953	-18.56	-13.00	-5.56
		Low	SISO Dual Pol	DFTs-OFDM	64QAM	43		1-Mid	36.974	-17.69	-13.00	-4.69
		High	SISO Dual Pol	DFTs-OFDM	QPSK	43		Full	40.121	-21.65	-13.00	-8.65
		High	SISO Dual Pol	DFTs-OFDM	QPSK	43		1-High	40.047	-21.02	-13.00	-8.02
		High	SISO Dual Pol	DFTs-OFDM	QPSK	43		1-Mid	40.024	-20.70	-13.00	-7.70
		High	SISO Dual Pol	DFTs-OFDM	$\pi/2$ BPSK	43		1-High	40.048	-21.08	-13.00	-8.08
		High	SISO Dual Pol	DFTs-OFDM	$\pi/2$ BPSK	43		1-Mid	40.025	-20.89	-13.00	-7.89
		High	SISO Dual Pol	DFTs-OFDM	16QAM	43		1-High	40.047	-20.82	-13.00	-7.82
		High	SISO Dual Pol	DFTs-OFDM	16QAM	43		1-Mid	40.025	-21.24	-13.00	-8.24
		High	SISO Dual Pol	DFTs-OFDM	64QAM	43		1-High	40.047	-20.70	-13.00	-7.70
		High	SISO Dual Pol	DFTs-OFDM	64QAM	43		1-Mid	40.025	-20.64	-13.00	-7.64

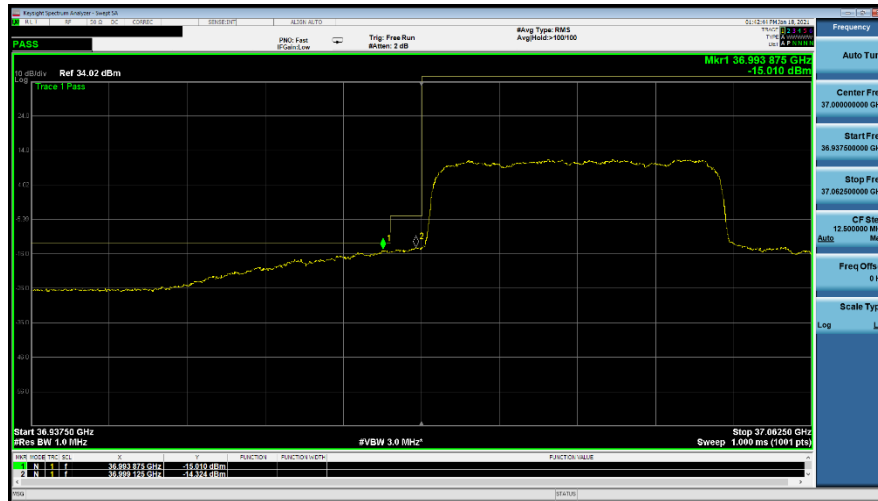
Table 7-92. Ant M3 – Band Edge Measurement Table (Band n260 – 50MHz/50+50MHz)

FCC ID: BCGA2301		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 179 of 201

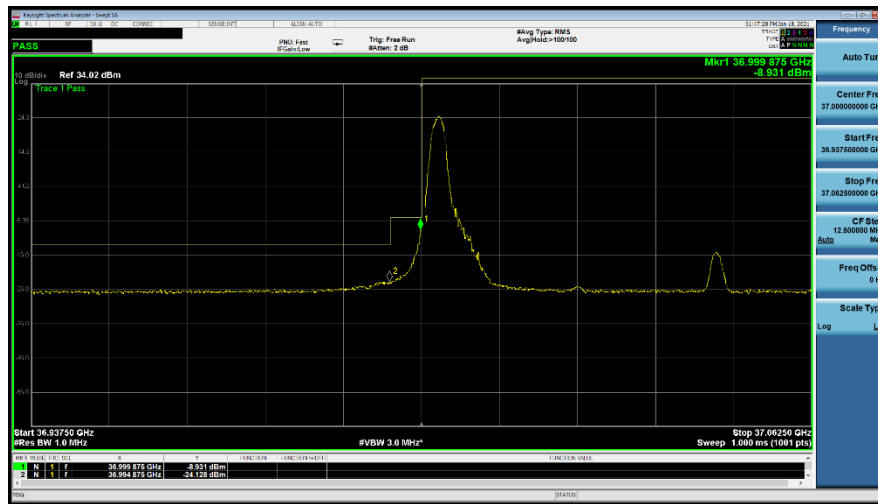
Bandwidth (MHz)	CCs Active	Channel	Antenna Diversity	Waveform	Modulation	Peak Beam ID	Paired Beam ID	RB Config	Frequency [GHz]	Average EIRP [dBm]	TRP Limit [dBm]	Margin [dB]
100	1	Low	SISO	CP-OFDM	QPSK	43		Full	36.987	-21.35	-13.00	-8.35
		Low	SISO	CP-OFDM	QPSK	43		1-Low	37.000	-13.36	-5.00	-8.36
		High	SISO	CP-OFDM	QPSK	43		Full	40.017	-20.78	-13.00	-7.78
		High	SISO	CP-OFDM	QPSK	43		1-High	40.011	-22.02	-13.00	-9.02
		Low	SISO	DFT-s-OFDM	QPSK	43		Full	36.988	-19.97	-13.00	-6.97
		Low	SISO	DFT-s-OFDM	QPSK	43		1-Low	37.000	-12.20	-5.00	-7.20
		High	SISO	DFT-s-OFDM	QPSK	43		Full	40.011	-19.57	-13.00	-6.57
		High	SISO	DFT-s-OFDM	QPSK	43		1-High	40.074	-21.93	-13.00	-8.93
		Low	MIMO	CP-OFDM	QPSK	43		Full	36.989	-21.96	-13.00	-8.96
		Low	MIMO	CP-OFDM	QPSK	43		1-Low	37.000	-14.83	-5.00	-9.83
		High	MIMO	CP-OFDM	QPSK	43		Full	40.019	-20.48	-13.00	-7.48
		High	MIMO	CP-OFDM	QPSK	43		1-High	40.089	-21.64	-13.00	-8.64
		Low	SISO Dual Pol	DFT-s-OFDM	QPSK	43		Full	36.990	-18.97	-13.00	-5.97
		Low	SISO Dual Pol	DFT-s-OFDM	QPSK	43		1-Low	37.000	-13.19	-5.00	-8.19
100+100	2	High	SISO Dual Pol	DFT-s-OFDM	QPSK	43		Full	40.026	-19.51	-13.00	-6.51
		High	SISO Dual Pol	DFT-s-OFDM	QPSK	43		1-High	40.010	-21.65	-13.00	-8.65
		Low	SISO	CP-OFDM	QPSK	43		Full	36.864	-25.35	-13.00	-12.35
		Low	SISO	CP-OFDM	QPSK	43		1-Low	36.903	-18.61	-13.00	-5.61
		Low	SISO	CP-OFDM	QPSK	43		1-Mid	36.949	-18.50	-13.00	-5.50
		Low	SISO	CP-OFDM	16QAM	43		1-Low	36.903	-14.40	-13.00	-1.40
		Low	SISO	CP-OFDM	16QAM	43		1-Mid	36.849	-14.73	-13.00	-1.73
		Low	SISO	CP-OFDM	64QAM	43		1-Low	36.903	-18.28	-13.00	-5.28
		Low	SISO	CP-OFDM	64QAM	43		1-Mid	36.850	-17.08	-13.00	-4.08
		High	SISO	CP-OFDM	QPSK	43		Full	40.217	-21.73	-13.00	-8.73
		High	SISO	CP-OFDM	QPSK	43		1-High	40.097	-21.07	-13.00	-8.07
		High	SISO	CP-OFDM	QPSK	43		1-Mid	40.050	-17.90	-13.00	-4.90
		High	SISO	CP-OFDM	16QAM	43		1-High	40.097	-17.16	-13.00	-4.16
		High	SISO	CP-OFDM	16QAM	43		1-Mid	40.049	-17.82	-13.00	-4.82
		High	SISO	CP-OFDM	64QAM	43		1-High	40.096	-21.60	-13.00	-8.60
		High	SISO	CP-OFDM	64QAM	43		1-Mid	40.049	-18.14	-13.00	-5.14
		Low	SISO	DFTs-OFDM	QPSK	43		Full	36.786	-25.49	-13.00	-12.49
		Low	SISO	DFTs-OFDM	QPSK	43		1-Low	36.903	-19.50	-13.00	-6.50
		Low	SISO	DFTs-OFDM	QPSK	43		1-Mid	36.949	-19.08	-13.00	-6.08
		Low	SISO	DFTs-OFDM	$\pi/2$ BPSK	43		1-Low	36.903	-20.25	-13.00	-7.25
		Low	SISO	DFTs-OFDM	$\pi/2$ BPSK	43		1-Mid	36.949	-20.33	-13.00	-7.33
		Low	SISO	DFTs-OFDM	16QAM	43		1-Low	36.904	-18.17	-13.00	-5.17
		Low	SISO	DFTs-OFDM	16QAM	43		1-Mid	36.849	-17.09	-13.00	-4.09
		Low	SISO	DFTs-OFDM	64QAM	43		1-Low	36.903	-17.21	-13.00	-4.21
		Low	SISO	DFTs-OFDM	64QAM	43		1-Mid	36.949	-17.26	-13.00	-4.26
		High	SISO	DFTs-OFDM	QPSK	43		Full	40.226	-21.92	-13.00	-8.92
		High	SISO	DFTs-OFDM	QPSK	43		1-High	40.097	-21.73	-13.00	-8.73
		High	SISO	DFTs-OFDM	QPSK	43		1-Mid	40.049	-19.75	-13.00	-6.75
		High	SISO	DFTs-OFDM	$\pi/2$ BPSK	43		1-High	40.238	-21.80	-13.00	-8.80
		High	SISO	DFTs-OFDM	$\pi/2$ BPSK	43		1-Mid	40.049	-20.86	-13.00	-7.86
		High	SISO	DFTs-OFDM	16QAM	43		1-High	40.097	-21.29	-13.00	-8.29
		High	SISO	DFTs-OFDM	16QAM	43		1-Mid	40.049	-18.38	-13.00	-5.38
		High	SISO	DFTs-OFDM	64QAM	43		1-High	40.097	-21.13	-13.00	-8.13
		High	SISO	DFTs-OFDM	64QAM	43		1-Mid	40.049	-18.91	-13.00	-5.91
		Low	SISO Dual Pol	DFTs-OFDM	QPSK	43		Full	36.753	-25.50	-13.00	-12.50
		Low	SISO Dual Pol	DFTs-OFDM	QPSK	43		1-Low	36.903	-19.95	-13.00	-6.95
		Low	SISO Dual Pol	DFTs-OFDM	QPSK	43		1-Mid	36.950	-18.87	-13.00	-5.87
		Low	SISO Dual Pol	DFTs-OFDM	$\pi/2$ BPSK	43		1-Low	36.903	-20.43	-13.00	-7.43
		Low	SISO Dual Pol	DFTs-OFDM	$\pi/2$ BPSK	43		1-Mid	36.949	-19.14	-13.00	-6.14
		Low	SISO Dual Pol	DFTs-OFDM	16QAM	43		1-Low	36.904	-17.79	-13.00	-4.79
		Low	SISO Dual Pol	DFTs-OFDM	16QAM	43		1-Mid	36.949	-17.21	-13.00	-4.21
		Low	SISO Dual Pol	DFTs-OFDM	64QAM	43		1-Low	36.903	-18.56	-13.00	-5.56
		Low	SISO Dual Pol	DFTs-OFDM	64QAM	43		1-Mid	36.950	-16.48	-13.00	-3.48
		High	SISO Dual Pol	DFTs-OFDM	QPSK	43		Full	40.222	-21.54	-13.00	-8.54
		High	SISO Dual Pol	DFTs-OFDM	QPSK	43		1-High	40.097	-21.38	-13.00	-8.38
		High	SISO Dual Pol	DFTs-OFDM	QPSK	43		1-Mid	40.049	-21.00	-13.00	-8.00
		High	SISO Dual Pol	DFTs-OFDM	$\pi/2$ BPSK	43		1-High	40.097	-21.35	-13.00	-8.35
		High	SISO Dual Pol	DFTs-OFDM	$\pi/2$ BPSK	43		1-Mid	40.049	-21.21	-13.00	-8.21
		High	SISO Dual Pol	DFTs-OFDM	16QAM	43		1-High	40.203	-21.52	-13.00	-8.52
		High	SISO Dual Pol	DFTs-OFDM	16QAM	43		1-Mid	40.049	-21.46	-13.00	-8.46
		High	SISO Dual Pol	DFTs-OFDM	64QAM	43		1-High	40.097	-21.27	-13.00	-8.27
		High	SISO Dual Pol	DFTs-OFDM	64QAM	43		1-Mid	40.049	-20.99	-13.00	-7.99

Table 7-93. Ant M3 – Band Edge Measurement Table (Band n260 – 100MHz/100+100MHz)

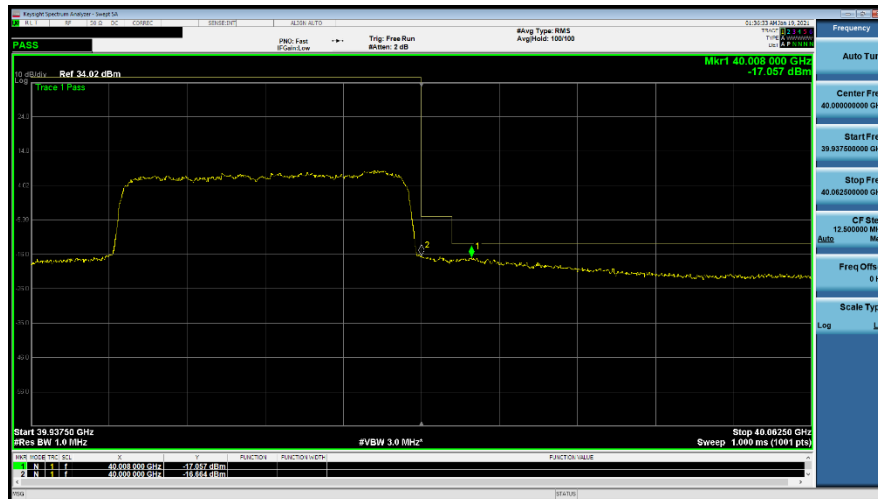
FCC ID: BCGA2301	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 180 of 201



Plot 7-365. Ant M3 Lower BE (Band n260-50MHz-1CC SISO Dual Pol – QPSK Full RB)

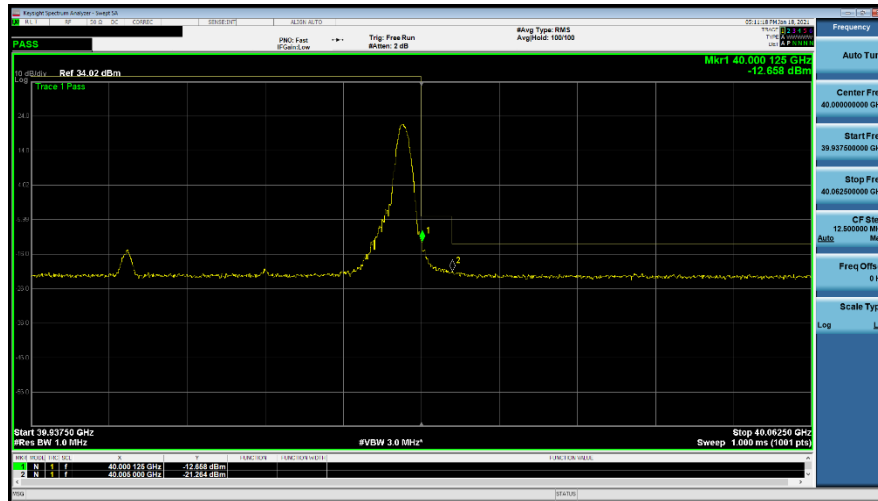


Plot 7-366. Ant M3 Lower BE (Band n260-50MHz-1CC SISO Dual Pol – QPSK 1-L RB)

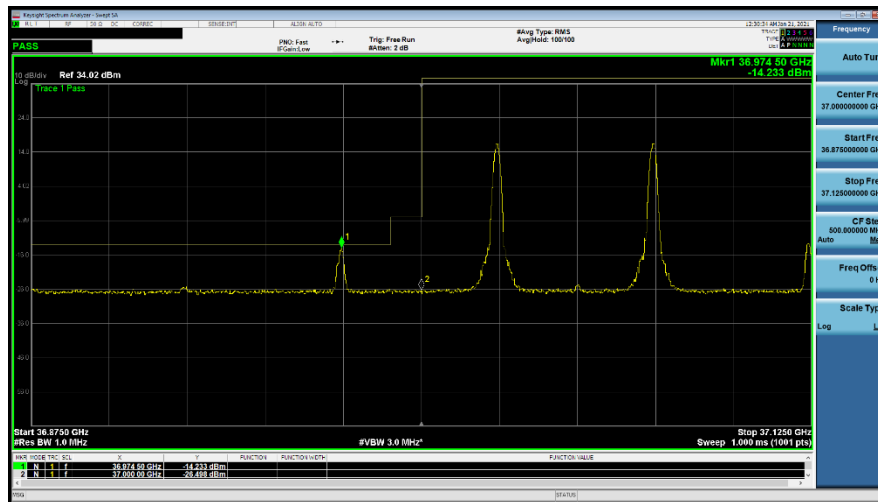


Plot 7-367. Ant M3 Upper BE (Band n260-50MHz-1CC SISO DFTs-OFDM – QPSK Full RB)

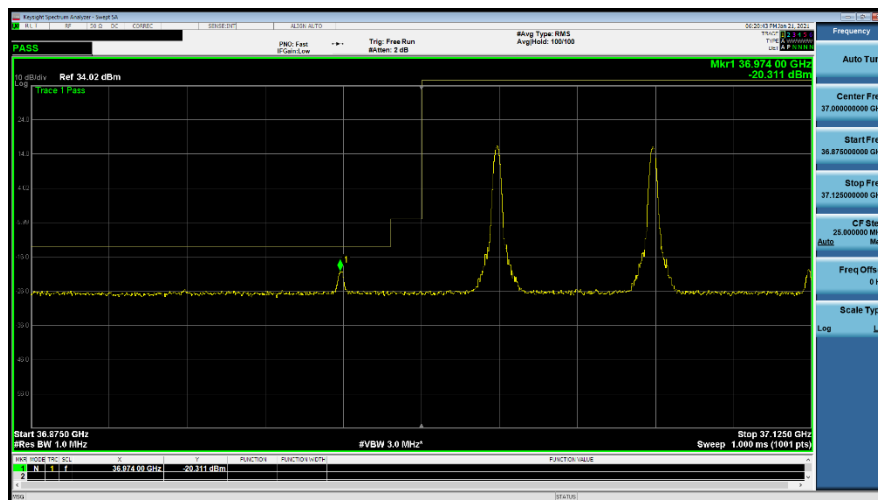
FCC ID: BCGA2301	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 181 of 201



Plot 7-368. Ant M3 Upper BE (Band n260-50MHz-1CC SISO Dual Pol – QPSK 1-H RB)

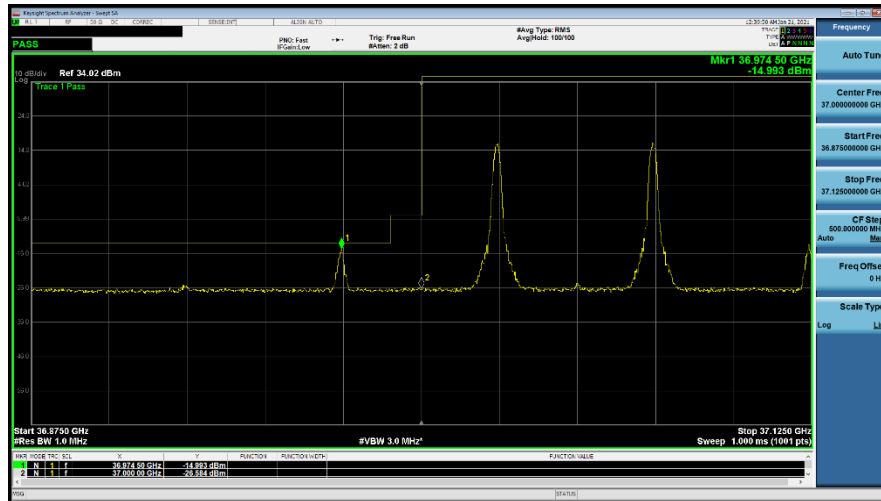


Plot 7-369. Ant M3 Lower BE (Band n260-50+50MHz-2CC SISO CP-OFDM – QPSK 1-M RB)

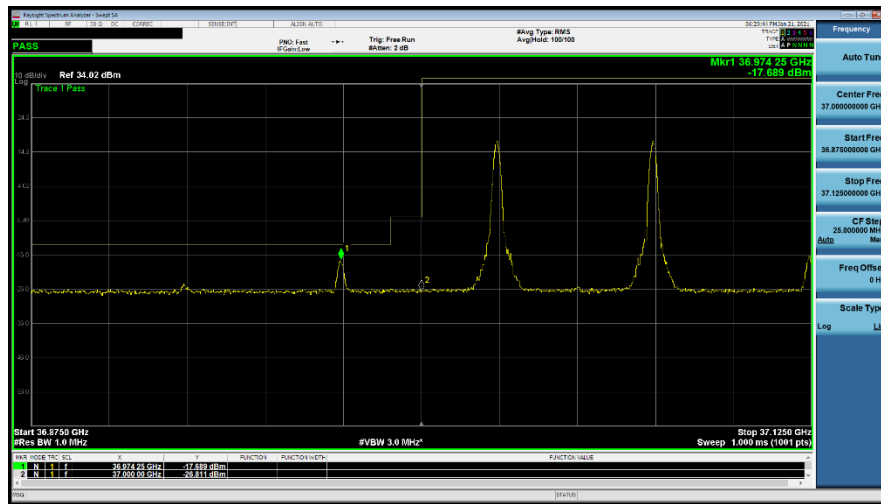


Plot 7-370. Ant M3 Lower BE (Band n260-50+50MHz-2CC SISO Dual Pol – $\pi/2$ BPSK 1-M RB)

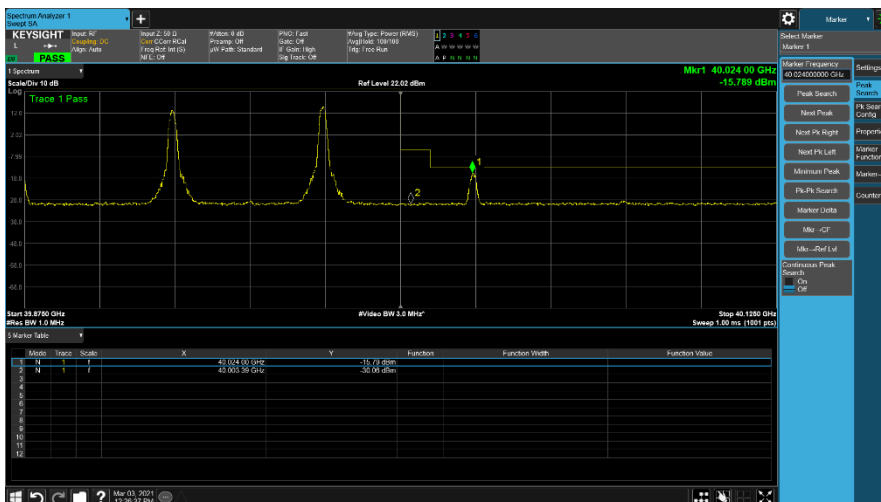
FCC ID: BCGA2301	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 182 of 201



Plot 7-371. Ant M3 Lower BE (Band n260-50+50MHz-2CC SISO CP-OFDM – 16QAM 1-M RB)

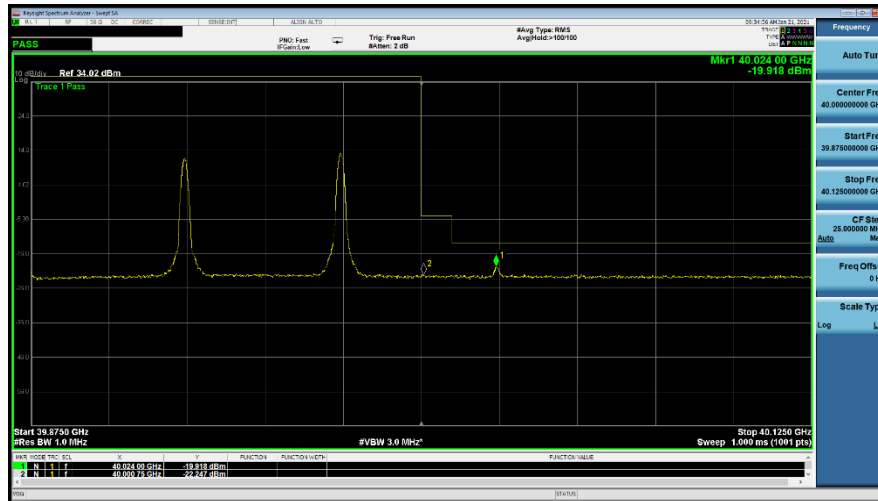


Plot 7-372. Ant M3 Lower BE (Band n260-50+50MHz-2CC SISO Dual Pol – 64QAM 1-M RB)

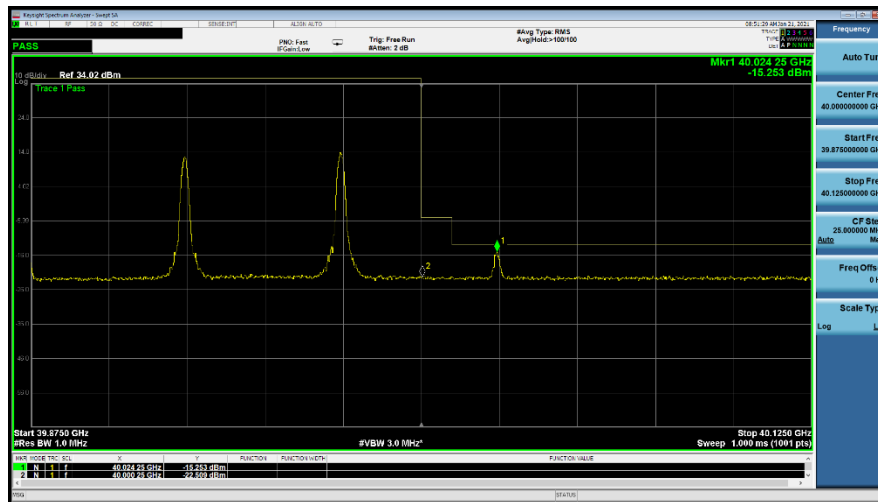


Plot 7-373. Ant M3 Upper BE (Band n260-50+50MHz-2CC SISO CP-OFDM – QPSK 1-M RB)

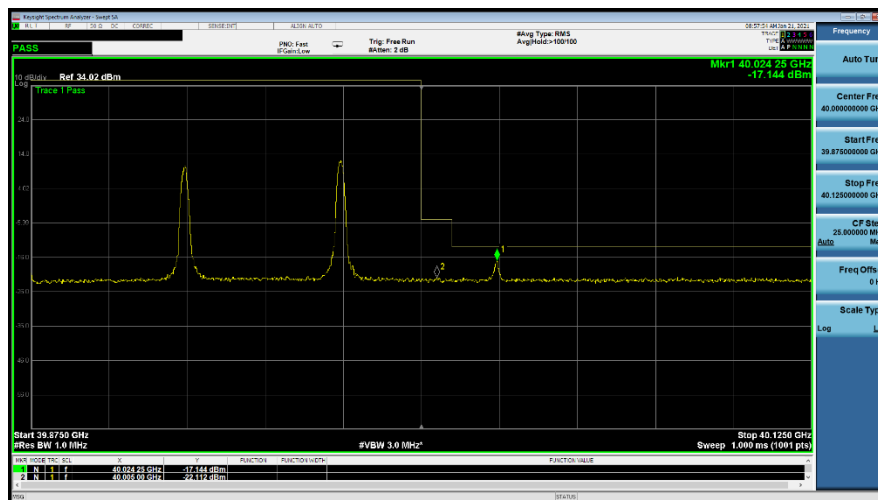
FCC ID: BCGA2301	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 183 of 201



Plot 7-374. Ant M3 Upper BE (Band n260-50+50MHz-2CC SISO DFTs-OFDM – $\pi/2$ BPSK 1-M RB)

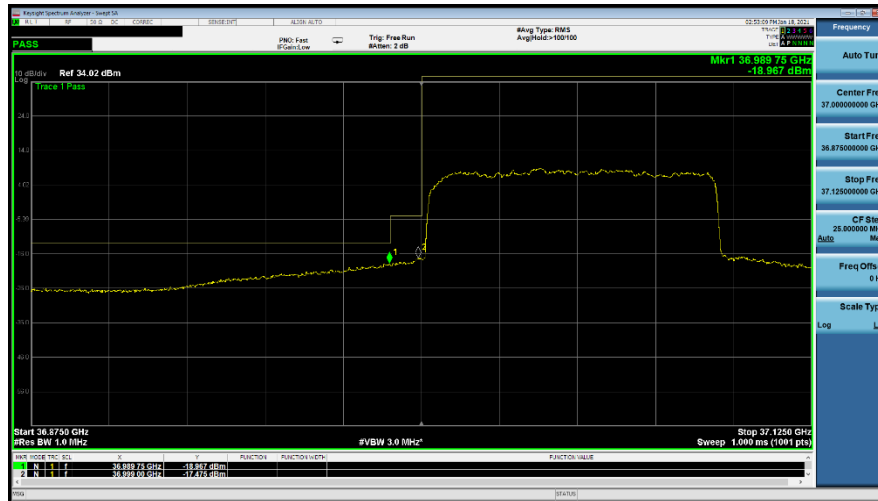


Plot 7-375. Ant M3 Upper BE (Band n260-50+50MHz-2CC SISO CP-OFDM – 16QAM 1-M RB)

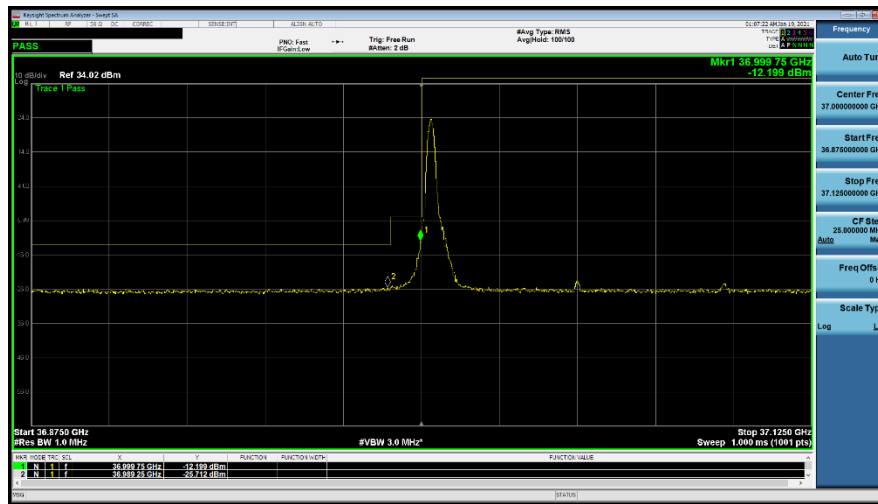


Plot 7-376. Ant M3 Upper BE (Band n260-50+50MHz-2CC SISO CP-OFDM – 64QAM 1-M RB)

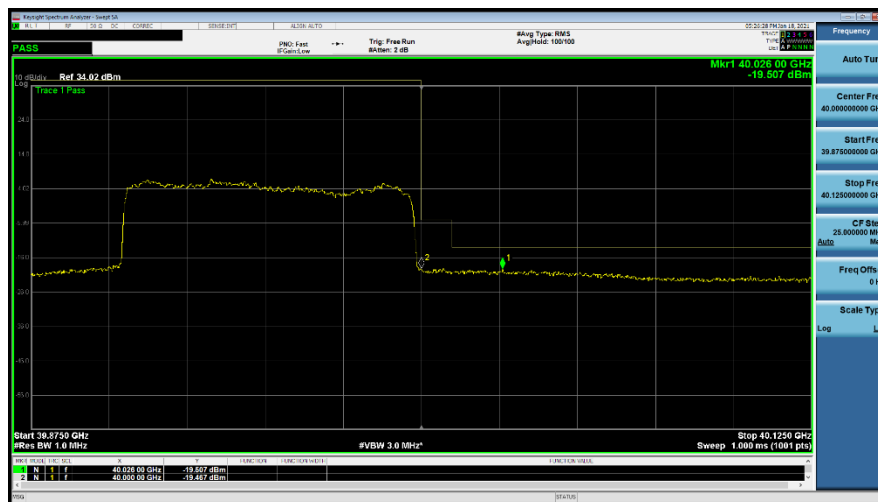
FCC ID: BCGA2301	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 184 of 201



Plot 7-377. Ant M3 Lower BE (Band n260-100MHz-1CC SISO Dual Pol- QPSK Full RB)

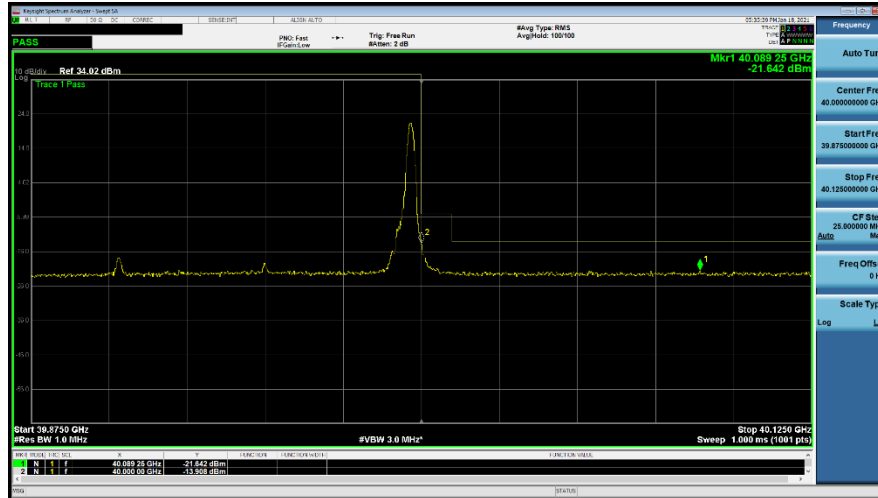


Plot 7-378. Ant M3 Lower BE (Band n260-100MHz-1CC SISO DFTs-OFDM – QPSK 1-L RB)

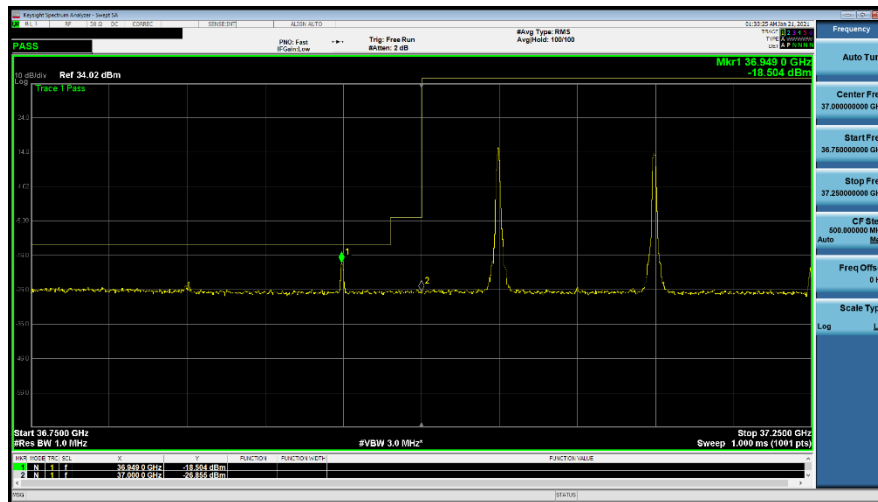


Plot 7-379. Ant M3 Upper BE (Band n260-100MHz-1CC SISO Dual Pol- QPSK Full RB)

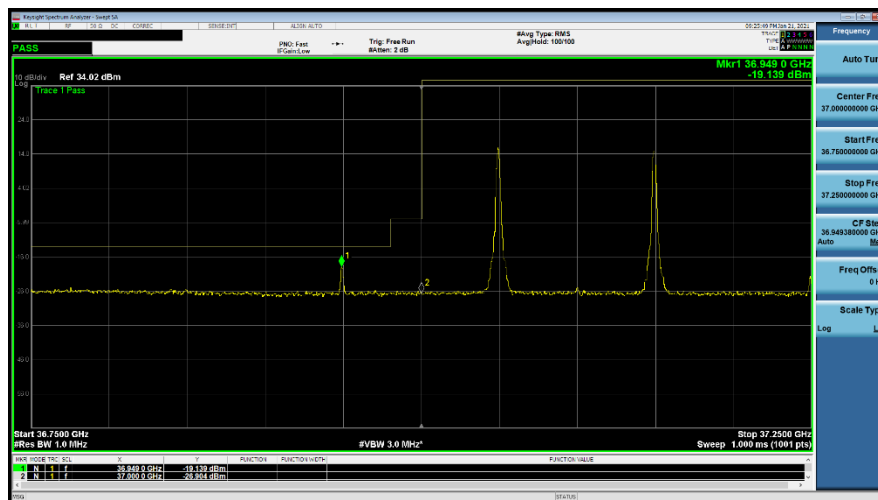
FCC ID: BCGA2301	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 185 of 201



Plot 7-380. Ant M3 Upper BE (Band n260-100MHz-1CC MIMO CP-OFDM – QPSK 1-H RB)

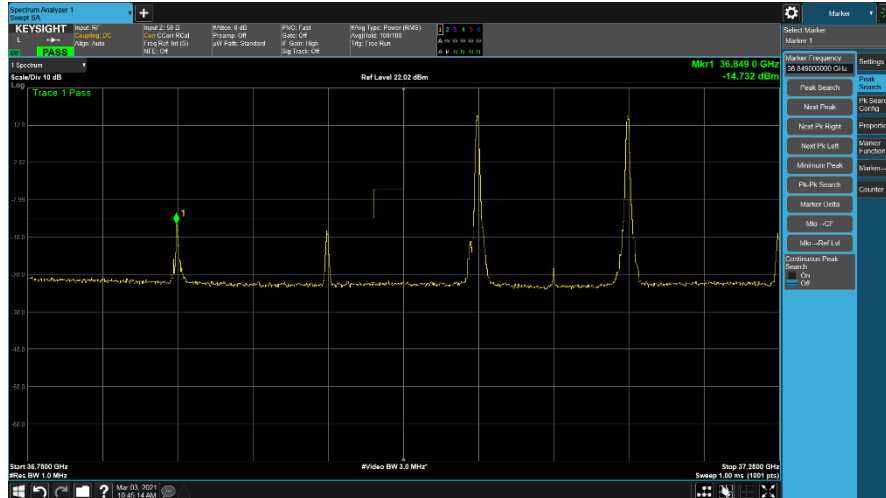


Plot 7-381. Ant M3 Lower BE (Band n260-100+100MHz-2CC SISO CP-OFDM – QPSK 1-M RB)

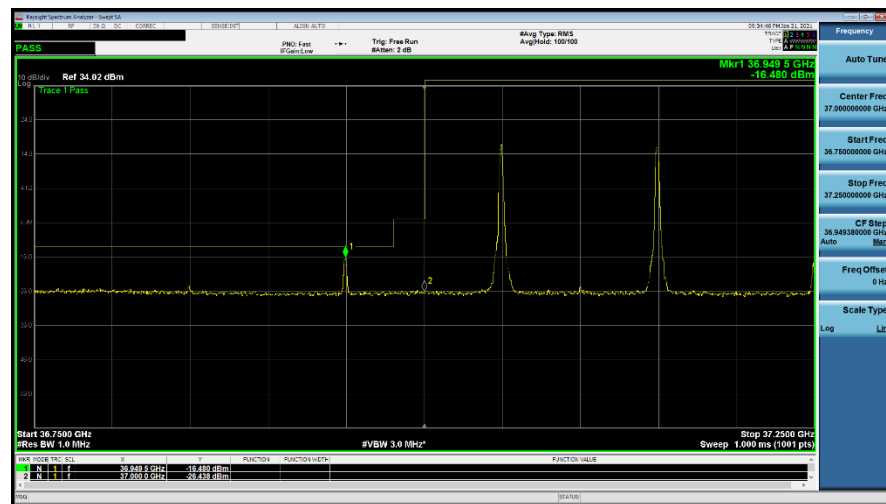


Plot 7-382. Ant M3 Lower BE (Band n260-100+100MHz-2CC SISO Dual Pol – $\pi/2$ BPSK 1-M RB)

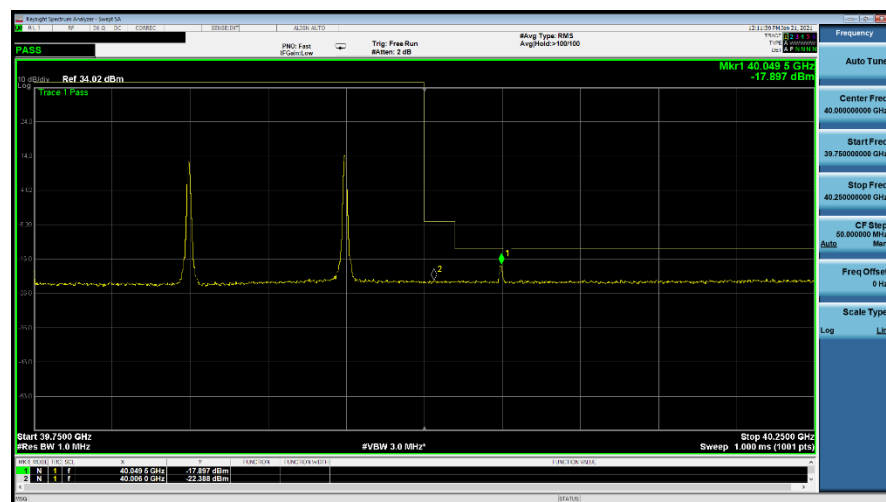
FCC ID: BCGA2301	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 186 of 201



Plot 7-383. Ant M3 Lower BE (Band n260-100+100MHz-2CC SISO CP-OFDM – 16QAM 1-M RB)

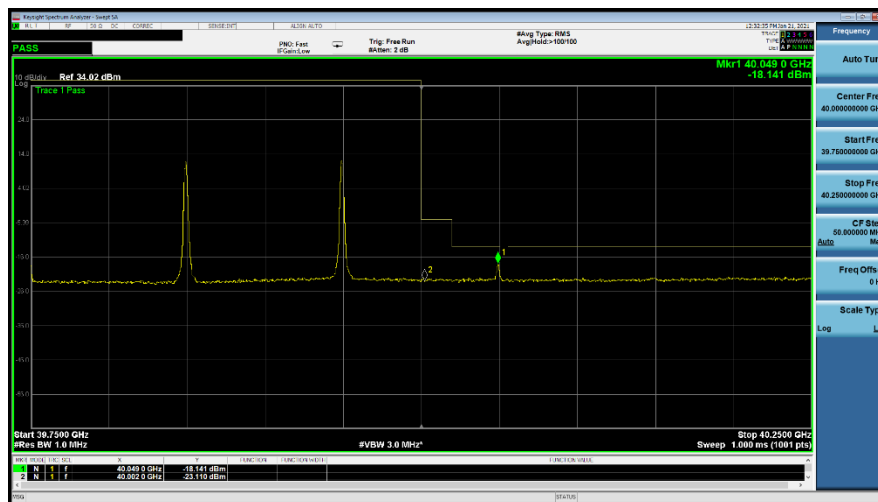
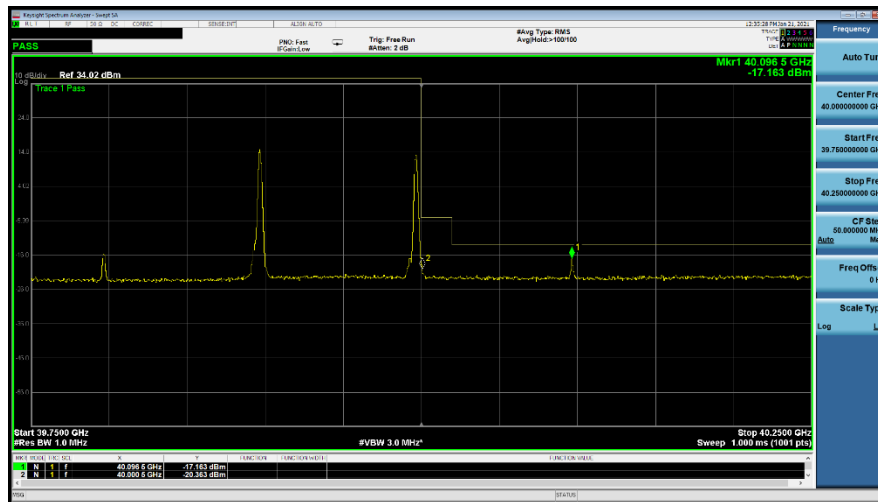
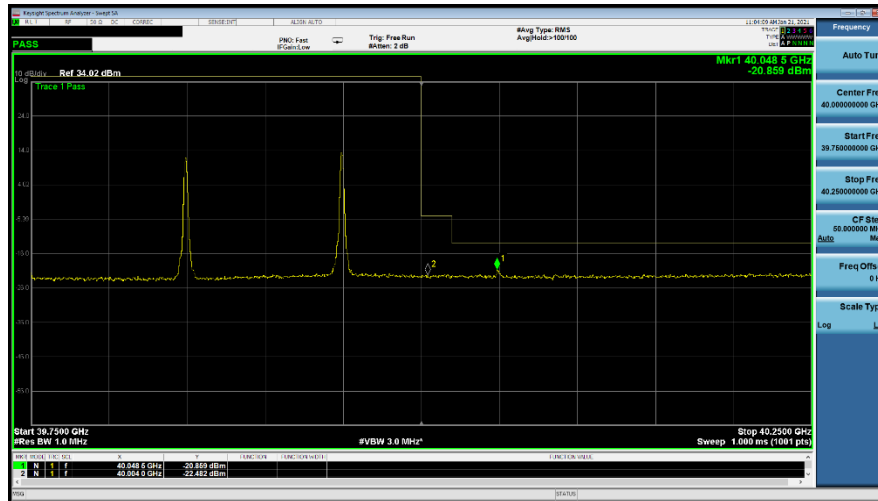


Plot 7-384. Ant M3 Lower BE (Band n260-100+100MHz-2CC SISO Dual Pol – 64QAM 1-M RB)



Plot 7-385. Ant M3 Upper BE (Band n260-100+100MHz-2CC SISO CP-OFDM – QPSK 1-M RB)

FCC ID: BCGA2301	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 187 of 201



FCC ID: BCGA2301	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 188 of 201

7.6 Frequency Stability / Temperature Variation

§2.1055

Test Overview and Limit

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

- Temperature:** The temperature is varied from -30°C to +50°C in 10°C increments using an environmental chamber.
- 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.

Test Procedure Used

ANSI C63.5-2015 Section 5.6
KDB 842590 D01 v01r01 Section 4.5

Test Settings

- The carrier frequency of the transmitter is measured at room temperature (20°C to provide a reference).
- 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.
- Frequency measurements are made at 10°C intervals ranging from -30°C to +50°C. A period of at least one half-hour is provided to allow stabilization of the equipment at each temperature level.

Test Setup

The EUT was measured using horn antenna connected to a spectrum analyzer. The EUT was placed inside an environmental chamber. Using a foam plug, the horn antenna measured the frequency of the fundamental signal.

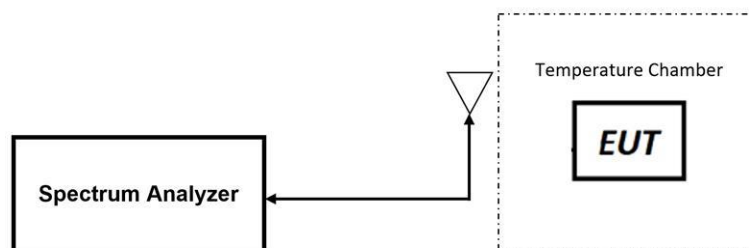


Figure 7-1. Test Instrument & Measurement Setup

Test Notes

- CW signal was used for frequency stability measurement.
- The Frequency Deviation column in the table below is the amount of deviation measured from the center frequency of the Reference temperature.

FCC ID: BCGA2301	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 189 of 201

Frequency Stability Measurements (Band n261-1CC)

\$2.1055

OPERATING FREQUENCY: 27,924,960,000 Hz
REFERENCE VOLTAGE: 3.80 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	- 30	27935059556	-108,824	-0.0003896
100 %		- 20	27934807466	143,266	0.0005129
100 %		- 10	27935048105	-97,373	-0.0003486
100 %		0	27934942303	8,429	0.0000302
100 %		+ 10	27934990093	-39,361	-0.0001409
100 %		+ 20 (Reference)	27934950732	0	0.0000000
100 %		+ 30	27935059327	-108,595	-0.0003887
100 %		+ 40	27934852179	98,553	0.0003528
100 %		+ 50	27934790418	160,314	0.0005739
Battery Endpoint	3.23	+ 20	27934849326	101,406	0.0003630

Table 7-55. Frequency Stability Data (Band n261-1CC)

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 authorized band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in authorized band over the temperature and voltage range as tested.

FCC ID: BCGA2301		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 190 of 201

Frequency Stability Measurements (Band n261-2CC)

§2.1055

OPERATING FREQUENCY CC1:	27,924,960,000	Hz
OPERATING FREQUENCY CC2:	28,024,960,000	Hz
REFERENCE VOLTAGE:	3.80	VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY CC1 (Hz)	FREQUENCY CC2 (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	- 30	27935064187	28035022874	113,281	0.0004048
100 %		- 20	27934978778	28034996921	57,600	0.0002058
100 %		- 10	27934949982	28034972935	31,209	0.0001115
100 %		0	27934987722	28034786582	-43,098	-0.0001540
100 %		+ 10	27934812537	28034996378	-25,792	-0.0000922
100 %		+ 20 (Reference)	27934951079	28034909420	0	0.0000000
100 %		+ 30	27935045199	28034914684	49,692	0.0001776
100 %		+ 40	27934808255	28034798619	-126,813	-0.0004531
100 %		+ 50	27934790306	28034749727	-160,233	-0.0005726
Battery Endpoint	3.23	+ 20	27934832600	28034792372	-117,764	-0.0004208

Table 7-55. Frequency Stability Data (Band n261-2CC)

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 authorized band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in authorized band over the temperature and voltage range as tested.

FCC ID: BCGA2301		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 191 of 201

Frequency Stability Measurements (Band n260-1CC)

\$2.1055

OPERATING FREQUENCY: 38,499,960,000 Hz
REFERENCE VOLTAGE: 3.80 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	- 30	38510059931	-116,334	-0.0003021
100 %		- 20	38510042776	-99,179	-0.0002575
100 %		- 10	38509859773	83,824	0.0002177
100 %		0	38509972175	-28,578	-0.0000742
100 %		+ 10	38509849639	93,958	0.0002440
100 %		+ 20 (Reference)	38509943597	0	0.0000000
100 %		+ 30	38510045679	-102,082	-0.0002651
100 %		+ 40	38509786934	156,663	0.0004068
100 %		+ 50	38509724328	219,269	0.0005694
Battery Endpoint	3.23	+ 20	38,509,788,783	154,814	0.0004020

Table 7-56. Frequency Stability Data (Band n260-1CC)

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 authorized band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in authorized band over the temperature and voltage range as tested.

FCC ID: BCGA2301		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 192 of 201

Frequency Stability Measurements (Band n260-2CC)

\$2.1055

OPERATING FREQUENCY CC1:	38,499,960,000	Hz
OPERATING FREQUENCY CC2:	38,599,960,000	Hz
REFERENCE VOLTAGE:	3.80	VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY CC1 (Hz)	FREQUENCY CC2 (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	- 30	38510103647	38610064754	162,338	0.0004210
100 %		- 20	38510042776	38609944649	71,850	0.0001863
100 %		- 10	38509859773	38610025632	20,840	0.0000540
100 %		0	38509972175	38609771341	-50,105	-0.0001299
100 %		+ 10	38509849639	38609866036	-64,025	-0.0001660
100 %		+ 20 (Reference)	38509942055	38609901670	0	0.0000000
100 %		+ 30	38510045679	38609732055	-32,996	-0.0000856
100 %		+ 40	38509726934	38609824485	-146,153	-0.0003790
100 %		+ 50	38509726129	38609685495	-216,051	-0.0005603
Battery Endpoint	3.23	+ 20	38509786412	38609746544	-155,385	-0.0004030

Table 7-56. Frequency Stability Data (Band n260-2CC)

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 authorized band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in authorized band over the temperature and voltage range as tested.

FCC ID: BCGA2301		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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8.0 CONCLUSION

The data collected relate only to the item(s) tested and show that the **Apple Tablet Device** **FCC ID: BCGA2301** complies with all the requirements of Part 30.

FCC ID: BCGA2301	 PCTEST Proud to be part of  element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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9.0 APPENDIX A

9.1 VDI Mixer Verification Certificate

VDI Mixer WR19SAX Module (40-60 GHz)



Virginia Diodes, Inc
979 2nd St. SE
Suite 309
Charlottesville, VA 22902
Phone: 434-297-3257
Fax: 434-297-3258

Certificate of Conformance

To: PCTEST Engineering Laboratory
18855 Adams Court
Morgan Hill, CA 95037
United States

From: Virginia Diodes, Inc
979 2nd St. SE
Suite 309
Charlottesville, VA 22902

Packing List No: 203785	Today's Date: 11/04/20
Shipping Date: 10/30/20	PO Number: 201013.AE1

Quantity	Shipped	Unit	Description	Order-Job Number
1		EA	RETEST-WR19SAX SAX 459	20503-01

The VDI product(s) in this shipment meet(s) the guidelines for performance specifications established in accordance with the corresponding Purchase Order. Data presented in the User Guide, where applicable, has been obtained in accordance with VDI's Quality Management System. All instruments, used to obtain data, which require calibration have been calibrated with equipment traceable to the National Institute of Standards and Technology (NIST) and through NIST to the International System of Units (SI).


Authorized Signature
Virginia Diodes, Inc

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FCC ID: BCGA2301		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 195 of 201

VDI Mixer WR12SAX Module (60-90 GHz)

VDI Mixer WR8.0SAX Module (90-140 GHz)



Virginia Diodes, Inc
979 2nd St. SE
Suite 309
Charlottesville, VA 22902
Phone: 434-297-3257
Fax: 434-297-3258

Certificate of Conformance

To: PCTEST Engineering Laboratory
18855 Adams Court
Morgan Hill, CA 95037
United States

From: Virginia Diodes, Inc
979 2nd St. SE
Suite 309
Charlottesville, VA 22902

Packing List No: 203756
Shipping Date: 10/30/20

Today's Date: 10/30/20
PO Number: 201013.AE1

Quantity	Shipped	Unit	Description	Order-Job Number
1		EA	RETEST-WR12SAX WR12SAX / SN: SAX 461	20503-02
1		EA	RETEST-WR8.0SAX WR8.0SAX / SN: SAX 462	20503-03

The VDI product(s) in this shipment meet(s) the guidelines for performance specifications established in accordance with the corresponding Purchase Order. Data presented in the User Guide, where applicable, has been obtained in accordance with VDI's Quality Management System. All instruments, used to obtain data, which require calibration have been calibrated with equipment traceable to the National Institute of Standards and Technology (NIST) and through NIST to the International System of Units (SI).

Authorized Signature
Virginia Diodes, Inc



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FCC ID: BCGA2301		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 196 of 201

VDI Mixer WR5.1SAX Module (140-220 GHz)



Virginia Diodes, Inc
979 2nd St. SE
Suite 309
Charlottesville, VA 22902
Phone: 434-297-3257
Fax: 434-297-3258

Certificate of Conformance

To: PCTEST Engineering Laboratory
18855 Adams Court
Morgan Hill, CA 95037
United States

From: Virginia Diodes, Inc
979 2nd St. SE
Suite 309
Charlottesville, VA 22902

Packing List No: 203777
Shipping Date: 10/30/20

Today's Date: 11/04/20
PO Number: 201013.AE1

Quantity			Order-Job
Shipped	Unit	Description	Number
1	EA	RETEST-WR5.1SAX SAX 463	20503-04

The VDI product(s) in this shipment meet(s) the guidelines for performance specifications established in accordance with the corresponding Purchase Order. Data presented in the User Guide, where applicable, has been obtained in accordance with VDI's Quality Management System. All instruments, used to obtain data, which require calibration have been calibrated with equipment traceable to the National Institute of Standards and Technology (NIST) and through NIST to the International System of Units (SI).

Authorized Signature
Virginia Diodes, Inc

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FCC ID: BCGA2301	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 197 of 201

9.2 Manufacturer's Antenna Gain Curves for Standard Gain Horn Antennas

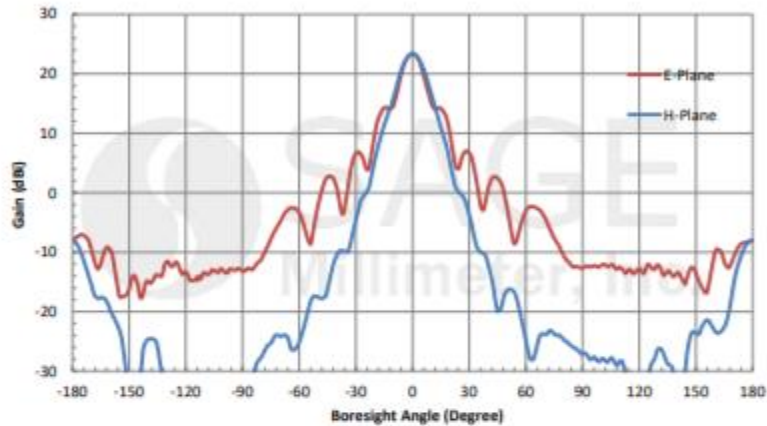
WR-19 Horn Antenna, 23 dBi Gain (40-60 GHz)

SAR-2309-19-S2

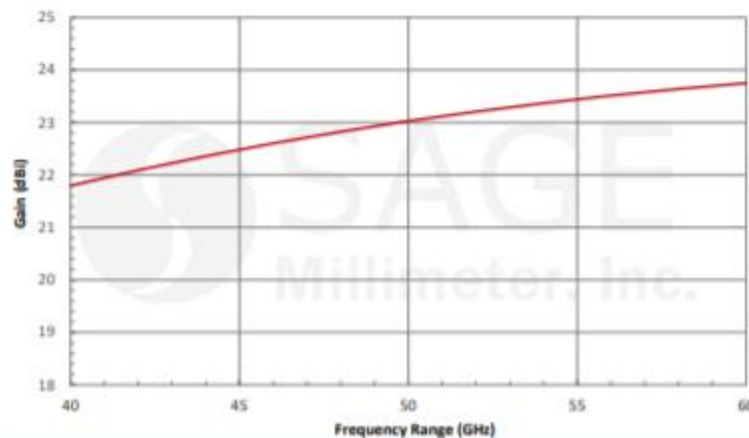
Rev. 1.1

WR-19 Pyramidal Horn Antenna, 23 dBi Gain

Typical Antenna Pattern @ 50 GHz



Typical Gain vs. Frequency



FCC ID: BCGA2301	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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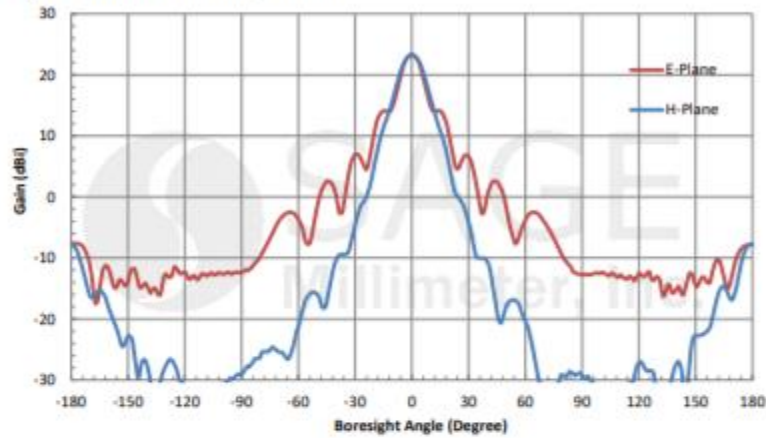
WR-12 Horn Antenna, 23 dBi Gain (60-90 GHz)

SAR-2309-12-S2

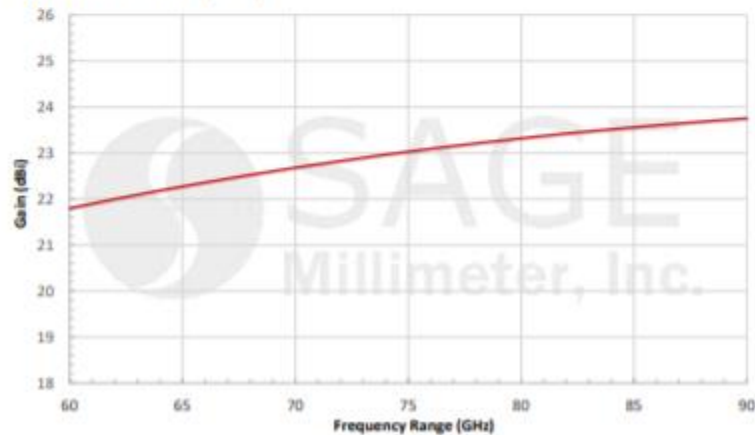
Rev. 1.1

WR-12 Pyramidal Horn Antenna, 23 dBi Gain

Typical Antenna Pattern @ 75 GHz



Typical Gain vs. Frequency



FCC ID: BCGA2301	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 199 of 201

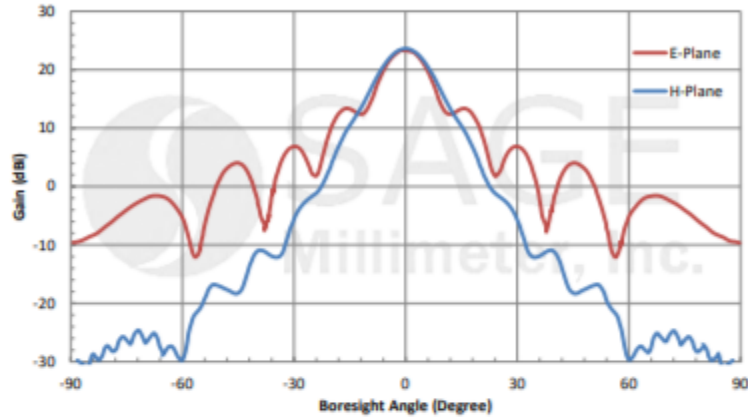
WR-08 Horn Antenna, 23 dBi Gain (90-140 GHz)

SAR-2309-08-S2

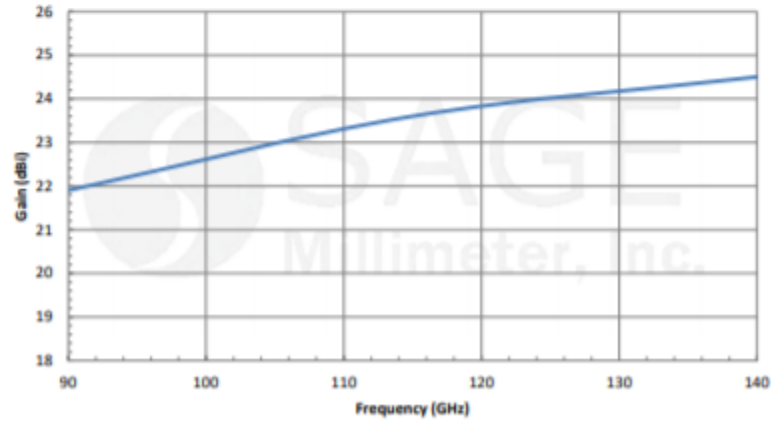
Rev. 1.1

WR-08 Pyramidal Horn Antenna, 23 dBi Gain

Typical Antenna Pattern @ 115 GHz



Typical Gain vs. Frequency



FCC ID: BCGA2301	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 200 of 201

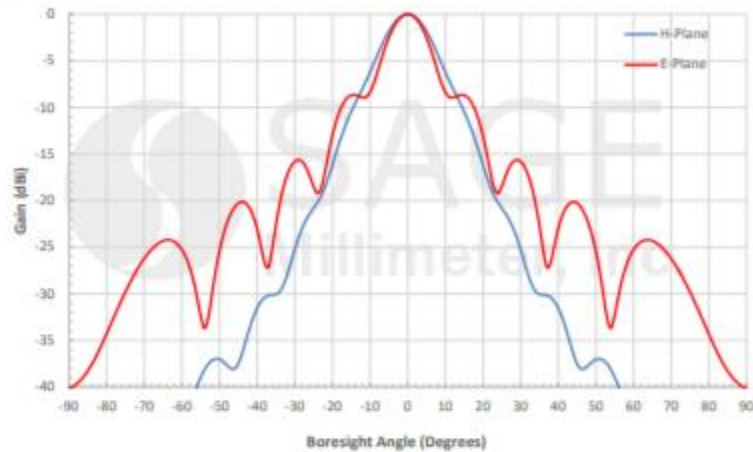
WR-05 Horn Antenna, 23 dBi Gain (140-220 GHz)

SAR-2309-05-S2

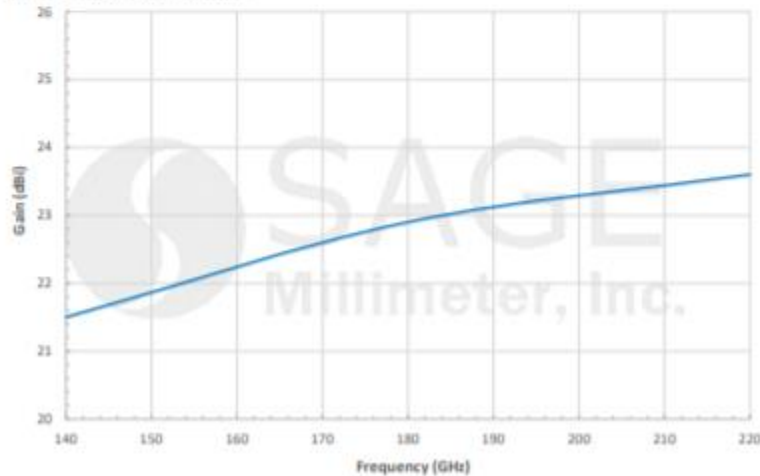
Rev. 1.1

WR-05 Pyramidal Horn Antenna, 23 dBi Gain

Typical Antenna Pattern @ 180 GHz



Typical Gain vs. Frequency



FCC ID: BCGA2301	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C2101020002-06.BCG	Test Dates: 12/15/2020-03/09/2021	EUT Type: Tablet Device	Page 201 of 201