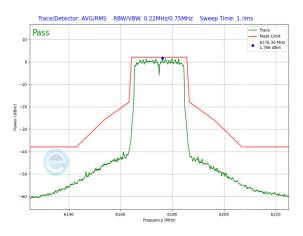
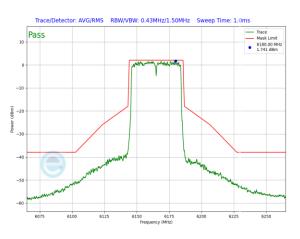


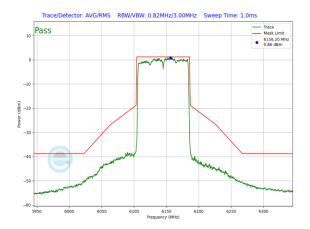
Plot 7-245. In-Band Emission Plot Antenna WF5T SP (20MHz 802.11a (UNII Band 5) – Ch. 45, 54Mbps)



Plot 7-246. In-Band Emission Plot Antenna WF5T SP (20MHz 802.11ax (UNII Band 5) – Ch. 45, MCS11)



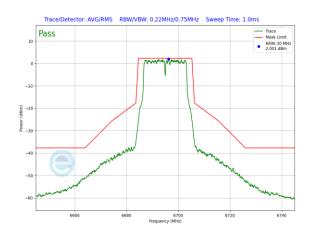
Plot 7-247. In-Band Emission Plot Antenna WF5T SP (40MHz 802.11ax (UNII Band 5) – Ch. 43, MCS11)



Plot 7-248. In-Band Emission Plot Antenna WF5T SP (80MHz 802.11ax (UNII Band 5) – Ch. 39, MCS11)



Plot 7-249. In-Band Emission Plot Antenna WF5T SP (160MHz 802.11ax (UNII Band 5) – Ch. 47, MCS11)

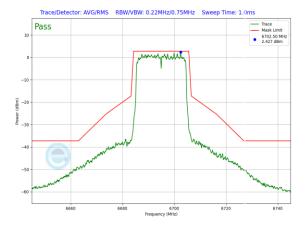


Plot 7-250. In-Band Emission Plot Antenna WF5T SP (20MHz 802.11a (UNII Band 7) – Ch. 149, 54Mbps)

FCC ID: BCGA2993	element MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Daga 07 of 200
1C2405200017-13-R3.BCG	5/20/2024 - 10/1/2024	Tablet Device	Page 97 of 222

V 10.50.40 12/15/2021





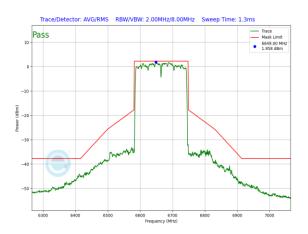
Plot 7-251. In-Band Emission Plot Antenna WF5T SP (20MHz 802.11ax (UNII Band 7) – Ch. 149, MCS11)



Plot 7-252. In-Band Emission Plot Antenna WF5T SP (40MHz 802.11ax (UNII Band 7) – Ch. 155, MCS11)



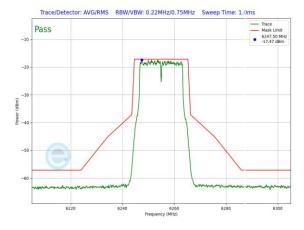
Plot 7-253. In-Band Emission Plot Antenna WF5T SP (80MHz 802.11ax (UNII Band 7) – Ch. 151, MCS11)



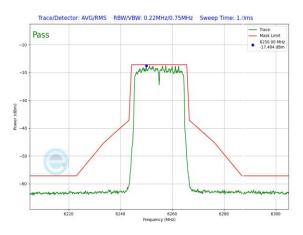
Plot 7-254. In-Band Emission Plot Antenna WF5T SP (160MHz 802.11ax (UNII Band 7) – Ch. 143, MCS11)

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 00 of 222
1C2405200017-13-R3.BCG	5/20/2024 - 10/1/2024	Tablet Device	Page 98 of 222
	•	·	V 10 50 40 12/15/2021

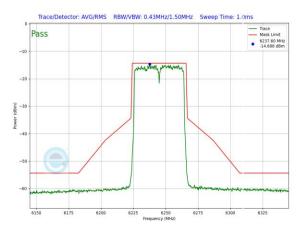




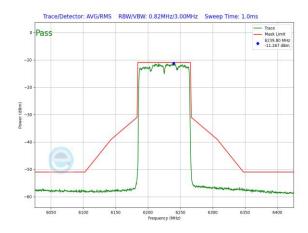
Plot 7-255. In-Band Emission Plot Antenna WF5T VLP (20MHz 802.11a (UNII Band 5) – Ch. 61, 54Mbps)



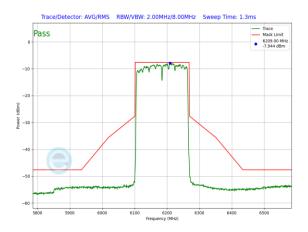
Plot 7-256. In-Band Emission Plot Antenna WF5T VLP (20MHz 802.11ax (UNII Band 5) – Ch. 61, MCS11)



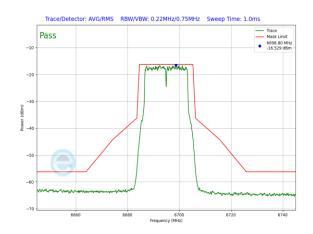
Plot 7-257. In-Band Emission Plot Antenna WF5T VLP (40MHz 802.11ax (UNII Band 5) – Ch. 59, MCS11)



Plot 7-258. In-Band Emission Plot Antenna WF5T VLP (80MHz 802.11ax (UNII Band 5) – Ch. 55, MCS11)



Plot 7-259. In-Band Emission Plot Antenna WF5T VLP (160MHz 802.11ax (UNII Band 5) – Ch. 47, MCS11)

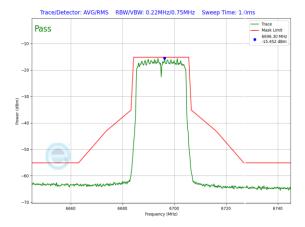


Plot 7-260. In-Band Emission Plot Antenna WF5T VLP (20MHz 802.11a (UNII Band 7) – Ch. 149, 54Mbps)

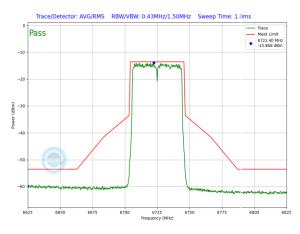
FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Daga 00 of 222
1C2405200017-13-R3.BCG	5/20/2024 - 10/1/2024	Tablet Device	Page 99 of 222

V 10.50.40 12/15/2021





Plot 7-261. In-Band Emission Plot Antenna WF5T VLP (20MHz 802.11ax (UNII Band 7) – Ch. 149, MCS11)



Plot 7-262. In-Band Emission Plot Antenna WF5T VLP (40MHz 802.11ax (UNII Band 7) – Ch. 155, MCS11)



Plot 7-263. In-Band Emission Plot Antenna WF5T VLP (80MHz 802.11ax (UNII Band 7) – Ch. 151, MCS11)

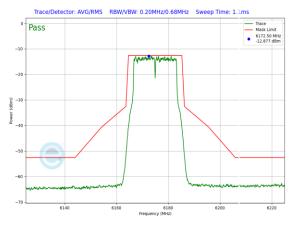


Plot 7-264. In-Band Emission Plot Antenna WF5T VLP (160MHz 802.11ax (UNII Band 7) – Ch. 143, MCS11)

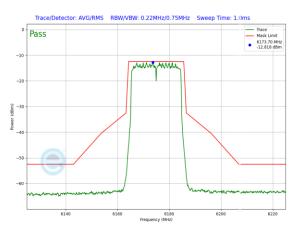
FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 100 of 222
1C2405200017-13-R3.BCG	5/20/2024 - 10/1/2024	Tablet Device	Page 100 of 222
	•	·	V 10 50 40 12/15/2021



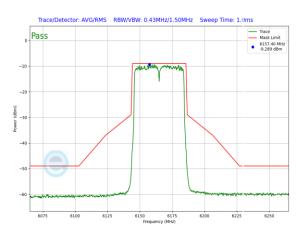
7.5.2 Antenna WF2 In-Band Emission Measurements



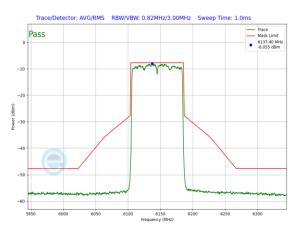
Plot 7-265. In-Band Emission Plot Antenna WF2 LPI (20MHz 802.11a (UNII Band 5) – Ch. 45, 54Mbps)



Plot 7-266. In-Band Emission Plot Antenna WF2 LPI (20MHz 802.11ax (UNII Band 5) – Ch. 45, MCS11)



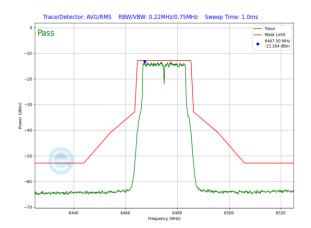
Plot 7-267. In-Band Emission Plot Antenna WF2 LPI (40MHz 802.11ax (UNII Band 5) – Ch. 43, MCS11)



Plot 7-268. In-Band Emission Plot Antenna WF2 LPI (80MHz 802.11ax (UNII Band 5) – Ch. 39, MCS11)



Plot 7-269. In-Band Emission Plot Antenna WF2 LPI (160MHz 802.11ax (UNII Band 5) – Ch. 47, MCS11)

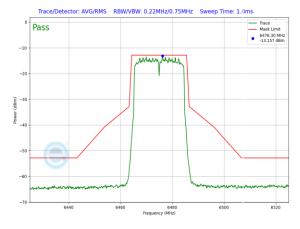


Plot 7-270. In-Band Emission Plot Antenna WF2 LPI (20MHz 802.11a (UNII Band 6) – Ch. 105, 54Mbps)

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 101 of 222
1C2405200017-13-R3.BCG	5/20/2024 - 10/1/2024	Tablet Device	Page 101 of 222

V 10.50.40 12/15/2021

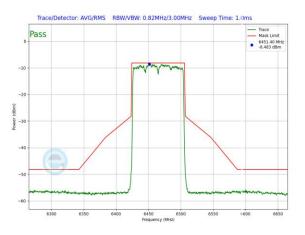




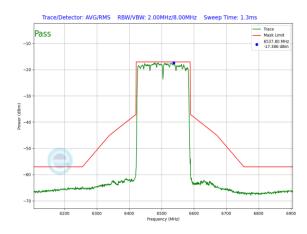
Plot 7-271. In-Band Emission Plot Antenna WF2 LPI (20MHz 802.11ax (UNII Band 6) – Ch. 105, MCS11)



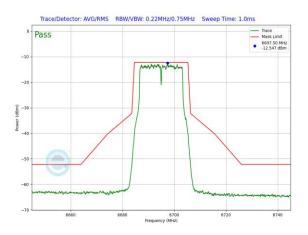
Plot 7-272. In-Band Emission Plot Antenna WF2 LPI (40MHz 802.11ax (UNII Band 6) – Ch. 107, MCS11)



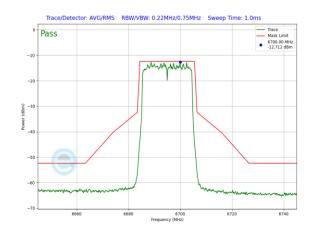
Plot 7-273. In-Band Emission Plot Antenna WF2 LPI (80MHz 802.11ax (UNII Band 6) – Ch. 103, MCS11)



Plot 7-274. In-Band Emission Plot Antenna WF2 LPI (160MHz 802.11ax (UNII Band 6) – Ch. 111, MCS11)



Plot 7-275. In-Band Emission Plot Antenna WF2 LPI (20MHz 802.11a (UNII Band 7) – Ch. 149, 54Mbps)

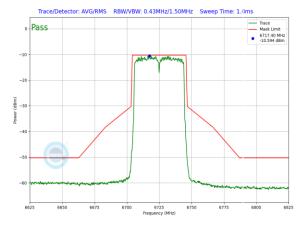


Plot 7-276. In-Band Emission Plot Antenna WF2 LPI (20MHz 802.11ax (UNII Band 7) – Ch. 149, MCS11)

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 102 of 222
1C2405200017-13-R3.BCG	5/20/2024 - 10/1/2024	Tablet Device	Page 102 of 222

V 10.50.40 12/15/2021





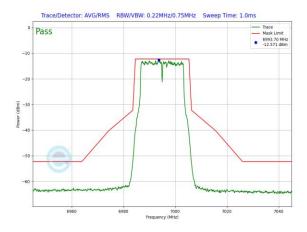
Plot 7-277. In-Band Emission Plot Antenna WF2 LPI (40MHz 802.11ax (UNII Band 7) – Ch. 155, MCS11)



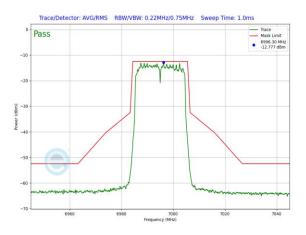
Plot 7-278. In-Band Emission Plot Antenna WF2 LPI (80MHz 802.11ax (UNII Band 7) – Ch. 151, MCS11)



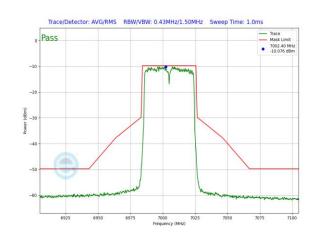
Plot 7-279. In-Band Emission Plot Antenna WF2 LPI (160MHz 802.11ax (UNII Band 7) – Ch. 143, MCS11)



Plot 7-280. In-Band Emission Plot Antenna WF2 LPI (20MHz 802.11a (UNII Band 8) – Ch. 209, 54Mbps)



Plot 7-281. In-Band Emission Plot Antenna WF2 LPI (20MHz 802.11ax (UNII Band 8) – Ch. 209, MCS11)

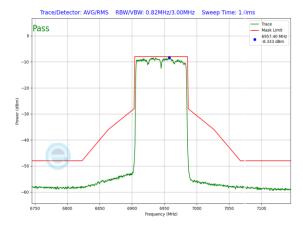


Plot 7-282. In-Band Emission Plot Antenna WF2 LPI (40MHz 802.11ax (UNII Band 8) – Ch. 211, MCS11)

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 102 of 222
1C2405200017-13-R3.BCG	5/20/2024 - 10/1/2024	Tablet Device	Page 103 of 222

V 10.50.40 12/15/2021





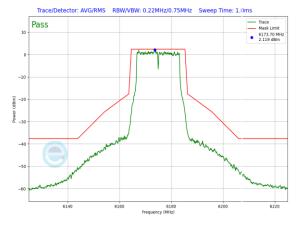
Plot 7-283. In-Band Emission Plot Antenna WF2 LPI (80MHz 802.11ax (UNII Band 8) – Ch. 199, MCS11)



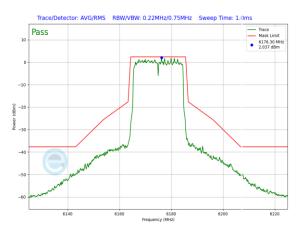
Plot 7-284. In-Band Emission Plot Antenna WF2 LPI (160MHz 802.11ax (UNII Band 8) – Ch. 207, MCS11)

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dama 404 at 000
1C2405200017-13-R3.BCG	5/20/2024 - 10/1/2024	Tablet Device	Page 104 of 222
	•	·	V 10.50.40 12/15/2021





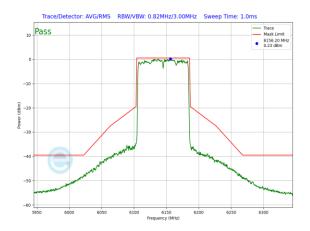
Plot 7-285. In-Band Emission Plot Antenna WF2 SP (20MHz 802.11a (UNII Band 5) – Ch. 45, 54Mbps)



Plot 7-286. In-Band Emission Plot Antenna WF2 SP (20MHz 802.11ax (UNII Band 5) – Ch. 45, MCS11)



Plot 7-287. In-Band Emission Plot Antenna WF2 SP (40MHz 802.11ax (UNII Band 5) – Ch. 43, MCS11)



Plot 7-288. In-Band Emission Plot Antenna WF2 SP (80MHz 802.11ax (UNII Band 5) – Ch. 39, MCS11)



Plot 7-289. In-Band Emission Plot Antenna WF2 SP (160MHz 802.11ax (UNII Band 5) – Ch. 47, MCS11)

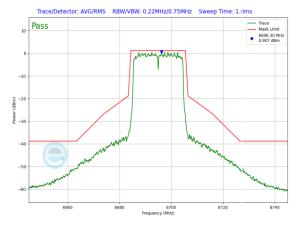


Plot 7-290. In-Band Emission Plot Antenna WF2 SP (20MHz 802.11a (UNII Band 7) – Ch. 149, 54Mbps)

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 105 of 222
1C2405200017-13-R3.BCG	5/20/2024 - 10/1/2024	Tablet Device	Page 105 of 222

V 10.50.40 12/15/2021

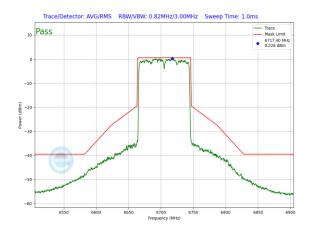




Plot 7-291. In-Band Emission Plot Antenna WF2 SP (20MHz 802.11ax (UNII Band 7) – Ch. 149, MCS11)



Plot 7-292. In-Band Emission Plot Antenna WF2 SP (40MHz 802.11ax (UNII Band 7) – Ch. 155, MCS11)



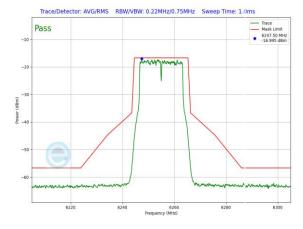
Plot 7-293. In-Band Emission Plot Antenna WF2 SP (80MHz 802.11ax (UNII Band 7) – Ch. 151, MCS11)



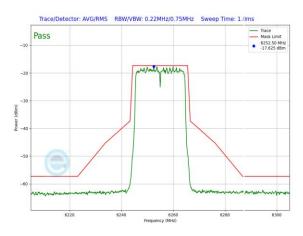
Plot 7-294. In-Band Emission Plot Antenna WF2 SP (160MHz 802.11ax (UNII Band 7) – Ch. 143, MCS11)

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 100 of 222
1C2405200017-13-R3.BCG	5/20/2024 - 10/1/2024	Tablet Device	Page 106 of 222
	•	•	V 10 50 40 12/15/2021

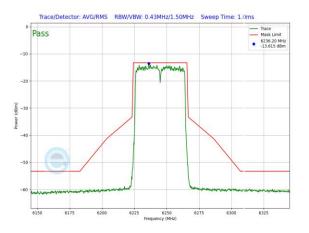




Plot 7-295. In-Band Emission Plot Antenna WF2 VLP (20MHz 802.11a (UNII Band 5) – Ch. 61, 54Mbps)



Plot 7-296. In-Band Emission Plot Antenna WF2 VLP (20MHz 802.11ax (UNII Band 5) – Ch. 61, MCS11)



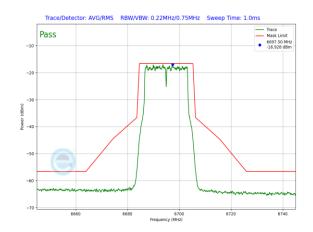
Plot 7-297. In-Band Emission Plot Antenna WF2 VLP (40MHz 802.11ax (UNII Band 5) – Ch. 59, MCS11)



Plot 7-298. In-Band Emission Plot Antenna WF2 VLP (80MHz 802.11ax (UNII Band 5) – Ch. 55, MCS11)



Plot 7-299. In-Band Emission Plot Antenna WF2 VLP (160MHz 802.11ax (UNII Band 5) – Ch. 47, MCS11)

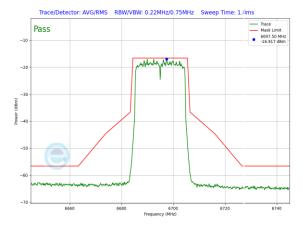


Plot 7-300. In-Band Emission Plot Antenna WF2 VLP (20MHz 802.11a (UNII Band 7) – Ch. 149, 54Mbps)

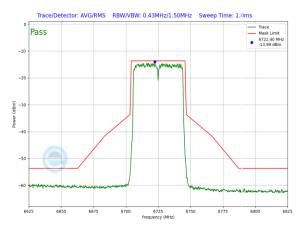
FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 107 of 222
1C2405200017-13-R3.BCG	5/20/2024 - 10/1/2024	Tablet Device	Page 107 of 222

V 10.50.40 12/15/2021

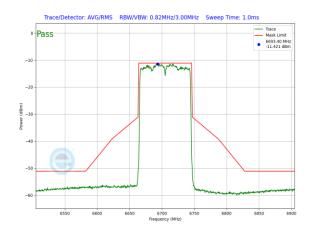




Plot 7-301. In-Band Emission Plot Antenna WF2 VLP (20MHz 802.11ax (UNII Band 7) – Ch. 149, MCS11)



Plot 7-302. In-Band Emission Plot Antenna WF2 VLP (40MHz 802.11ax (UNII Band 7) – Ch. 155, MCS11)



Plot 7-303. In-Band Emission Plot Antenna WF2 VLP (80MHz 802.11ax (UNII Band 7) – Ch. 151, MCS11)

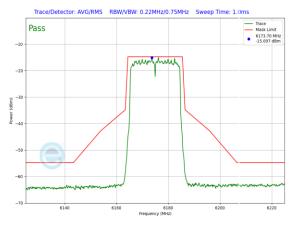


Plot 7-304. In-Band Emission Plot Antenna WF2 VLP (160MHz 802.11ax (UNII Band 7) – Ch. 143, MCS11)

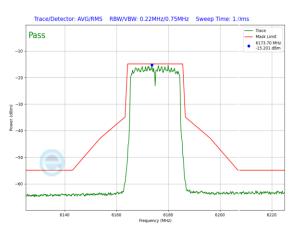
FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 109 of 222
1C2405200017-13-R3.BCG	5/20/2024 - 10/1/2024	Tablet Device	Page 108 of 222
		·	V 10 50 40 12/15/2021



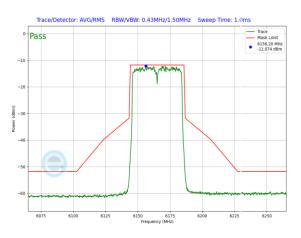
7.5.3 CDD/SDM In-Band Emission Measurements

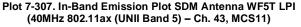


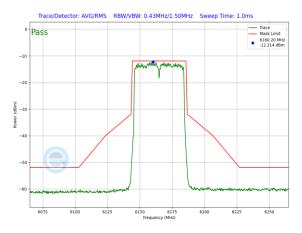




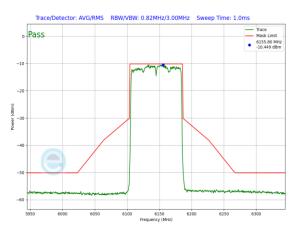
Plot 7-306. In-Band Emission Plot SDM Antenna WF2 LPI (20MHz 802.11ax (UNII Band 5) – Ch. 45, MCS11)



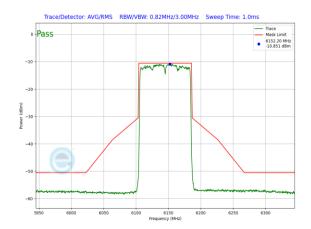




Plot 7-308. In-Band Emission Plot SDM Antenna WF2 LPI (40MHz 802.11ax (UNII Band 5) – Ch. 43, MCS11)



Plot 7-309. In-Band Emission Plot SDM Antenna WF5T LPI (80MHz 802.11ax (UNII Band 5) – Ch. 39, MCS11)

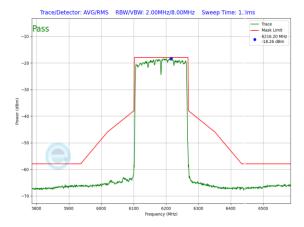


Plot 7-310. In-Band Emission Plot SDM Antenna WF2 LPI (80MHz 802.11ax (UNII Band 5) – Ch. 39, MCS11)

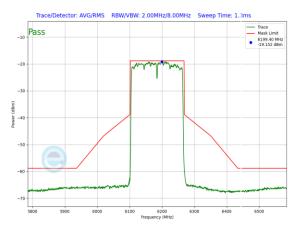
FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 100 of 222
1C2405200017-13-R3.BCG	5/20/2024 - 10/1/2024	Tablet Device	Page 109 of 222

V 10.50.40 12/15/2021

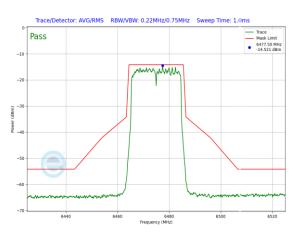




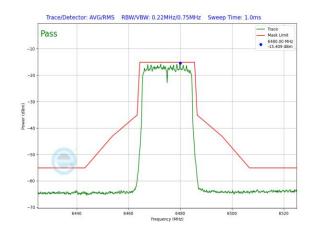
Plot 7-311. In-Band Emission Plot SDM Antenna WF5T LPI (160MHz 802.11ax (UNII Band 5) – Ch. 47, MCS11)



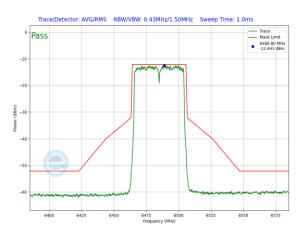
Plot 7-312. In-Band Emission Plot SDM Antenna WF2 LPI (160MHz 802.11ax (UNII Band 5) – Ch. 47, MCS11)



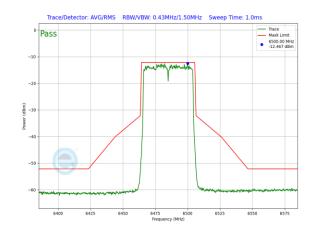
Plot 7-313. In-Band Emission Plot SDM Antenna WF5T LPI (20MHz 802.11ax (UNII Band 6) – Ch. 105, MCS11)



Plot 7-314. In-Band Emission Plot SDM Antenna WF2 LPI (20MHz 802.11ax (UNII Band 6) – Ch. 105, MCS11)



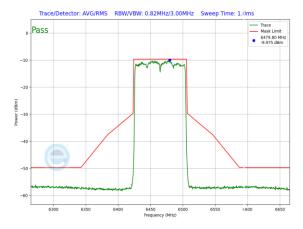
Plot 7-315. In-Band Emission Plot SDM Antenna WF5T LPI (40MHz 802.11ax (UNII Band 6) – Ch. 107, MCS11)



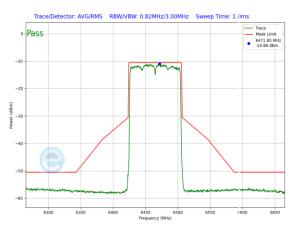
Plot 7-316. In-Band Emission Plot SDM Antenna WF2 LPI (40MHz 802.11ax (UNII Band 6) – Ch. 107, MCS11)

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 110 of 222
1C2405200017-13-R3.BCG	5/20/2024 - 10/1/2024	Tablet Device	Page 110 of 222
			V 10.50.40 12/15/2021

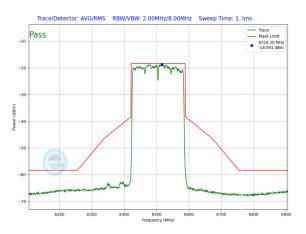




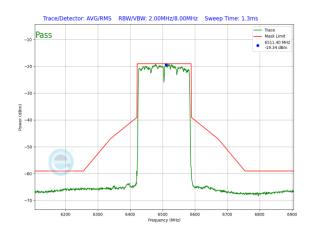
Plot 7-317. In-Band Emission Plot SDM Antenna WF5T LPI (80MHz 802.11ax (UNII Band 6) – Ch. 103, MCS11)



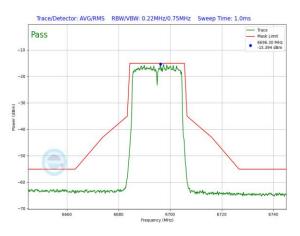
Plot 7-318. In-Band Emission Plot SDM Antenna WF2 LPI (80MHz 802.11ax (UNII Band 6) – Ch. 103, MCS11)



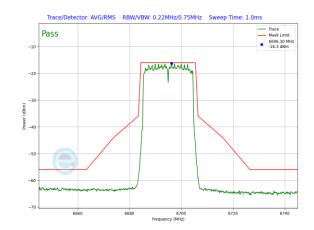




Plot 7-320. In-Band Emission Plot SDM Antenna WF2 LPI (160MHz 802.11ax (UNII Band 6) – Ch. 111, MCS11)



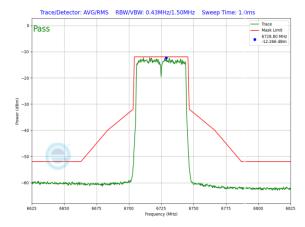
Plot 7-321. In-Band Emission Plot SDM Antenna WF5T LPI (20MHz 802.11ax (UNII Band 7) – Ch. 149, MCS11)



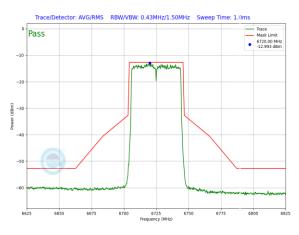
Plot 7-322. In-Band Emission Plot SDM Antenna WF2 LPI (20MHz 802.11ax (UNII Band 7) – Ch. 149, MCS11)

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 111 of 222
1C2405200017-13-R3.BCG	5/20/2024 - 10/1/2024	Tablet Device	Page 111 of 222
			V 10.50.40 12/15/2021

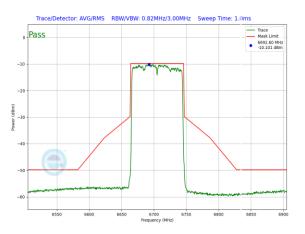




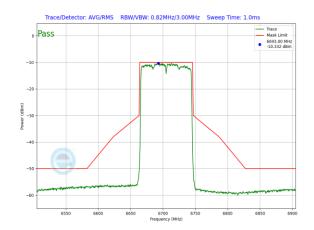
Plot 7-323. In-Band Emission Plot SDM Antenna WF5T LPI (40MHz 802.11ax (UNII Band 7) – Ch. 155, MCS11)



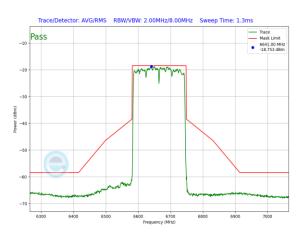
Plot 7-324. In-Band Emission Plot SDM Antenna WF2 LPI (40MHz 802.11ax (UNII Band 7) – Ch. 155, MCS11)



Plot 7-325. In-Band Emission Plot SDM Antenna WF5T LPI (80MHz 802.11ax (UNII Band 7) – Ch. 151, MCS11)



Plot 7-326. In-Band Emission Plot SDM Antenna WF2 LPI (80MHz 802.11ax (UNII Band 7) – Ch. 151, MCS11)



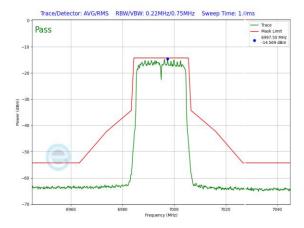
Plot 7-327. In-Band Emission Plot SDM Antenna WF5T LPI (160MHz 802.11ax (UNII Band 7) – Ch. 143, MCS11)



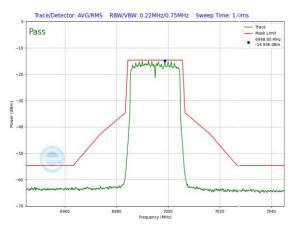
Plot 7-328. In-Band Emission Plot SDM Antenna WF2 LPI (160MHz 802.11ax (UNII Band 7) – Ch. 143, MCS11)

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 110 of 222
1C2405200017-13-R3.BCG	5/20/2024 - 10/1/2024	Tablet Device	Page 112 of 222
<u></u>	-	•	V 10.50.40 12/15/2021

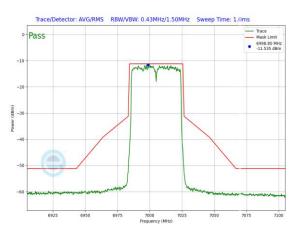




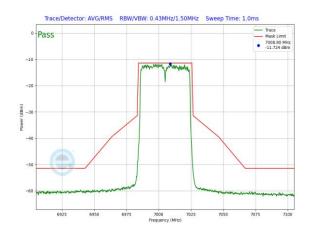
Plot 7-329. In-Band Emission Plot SDM Antenna WF5T LPI (20MHz 802.11ax (UNII Band 8) – Ch. 209, MCS11)



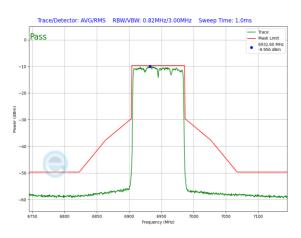
Plot 7-330. In-Band Emission Plot SDM Antenna WF2 LPI (20MHz 802.11ax (UNII Band 8) – Ch. 209, MCS11)



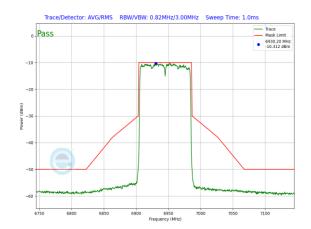
Plot 7-331. In-Band Emission Plot SDM Antenna WF5T LPI (40MHz 802.11ax (UNII Band 8) – Ch. 211, MCS11)



Plot 7-332. In-Band Emission Plot SDM Antenna WF2 LPI (40MHz 802.11ax (UNII Band 8) – Ch. 211, MCS11)



Plot 7-333. In-Band Emission Plot SDM Antenna WF5T LPI (80MHz 802.11ax (UNII Band 8) – Ch. 199, MCS11)



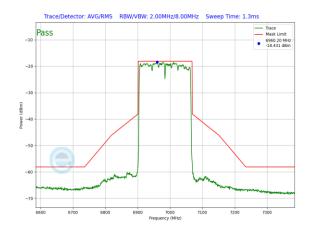
Plot 7-334. In-Band Emission Plot SDM Antenna WF2 LPI (80MHz 802.11ax (UNII Band 8) – Ch. 199, MCS11)

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 112 of 222
1C2405200017-13-R3.BCG	5/20/2024 - 10/1/2024	Tablet Device	Page 113 of 222
			V 10.50.40 12/15/2021





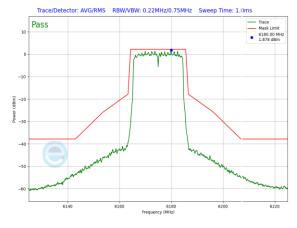
Plot 7-335. In-Band Emission Plot SDM Antenna WF5T LPI (160MHz 802.11ax (UNII Band 8) – Ch. 207, MCS11)



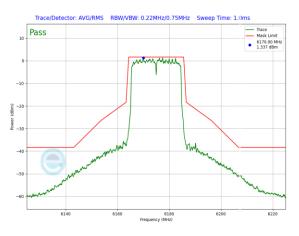
Plot 7-336. In-Band Emission Plot SDM Antenna WF2 LPI (160MHz 802.11ax (UNII Band 8) – Ch. 207, MCS11)

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 111 of 222
1C2405200017-13-R3.BCG	5/20/2024 - 10/1/2024	Tablet Device	Page 114 of 222
			V 10 50 40 12/15/2021

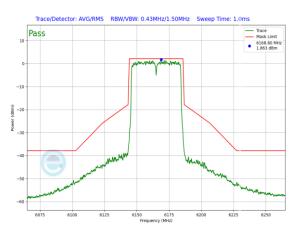




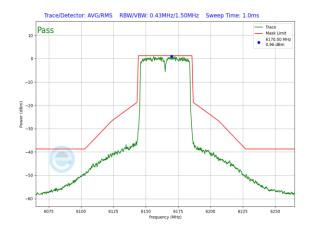
Plot 7-337. In-Band Emission Plot SDM Antenna WF5T SP (20MHz 802.11ax (UNII Band 5) – Ch. 45, MCS11)



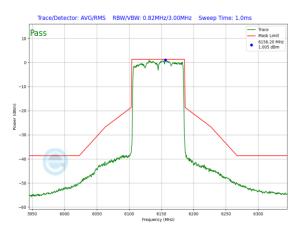
Plot 7-338. In-Band Emission Plot SDM Antenna WF2 SP (20MHz 802.11ax (UNII Band 5) – Ch. 45, MCS11)



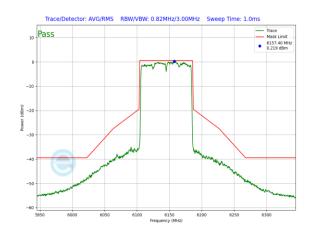




Plot 7-340. In-Band Emission Plot CDD Antenna WF2 SP (40MHz 802.11ax (UNII Band 5) – Ch. 43, MCS11)



Plot 7-341. In-Band Emission Plot CDD Antenna WF5T SP (80MHz 802.11ax (UNII Band 5) – Ch. 39, MCS11)

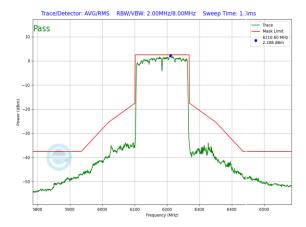


Plot 7-342. In-Band Emission Plot CDD Antenna WF2 SP (80MHz 802.11ax (UNII Band 5) – Ch. 39, MCS11)

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 115 of 222
1C2405200017-13-R3.BCG	5/20/2024 - 10/1/2024	Tablet Device	Page 115 of 222

V 10.50.40 12/15/2021

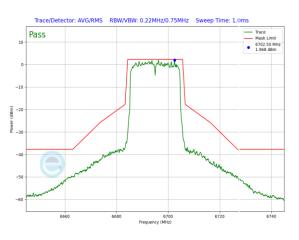




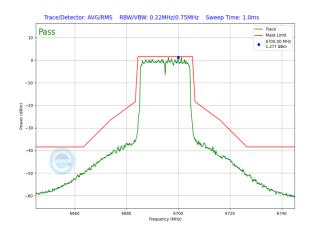
Plot 7-343. In-Band Emission Plot CDD Antenna WF5T SP (160MHz 802.11ax (UNII Band 5) – Ch. 47, MCS11)



Plot 7-344. In-Band Emission Plot CDD Antenna WF2 SP (160MHz 802.11ax (UNII Band 5) – Ch. 47, MCS11)







Plot 7-346. In-Band Emission Plot SDM Antenna WF2 SP (20MHz 802.11ax (UNII Band 7) – Ch. 149, MCS11)



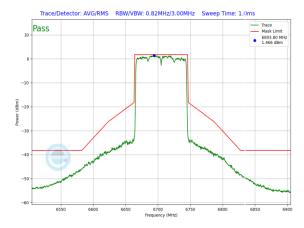
Plot 7-347. In-Band Emission Plot CDD Antenna WF5T SP (40MHz 802.11ax (UNII Band 7) – Ch. 155, MCS11)



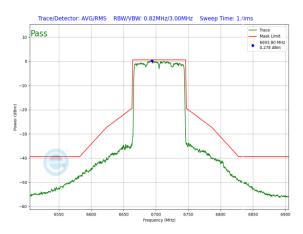
Plot 7-348. In-Band Emission Plot CDD Antenna WF2 SP (40MHz 802.11ax (UNII Band 7) – Ch. 155, MCS11)

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 116 of 222
1C2405200017-13-R3.BCG	5/20/2024 - 10/1/2024	Tablet Device	Page 116 of 222
			V 10.50.40 12/15/2021





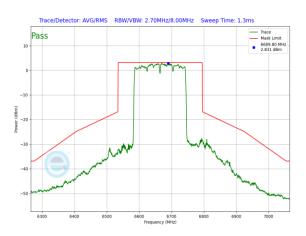
Plot 7-349. In-Band Emission Plot CDD Antenna WF5T SP (80MHz 802.11ax (UNII Band 7) – Ch. 151, MCS11)



Plot 7-350. In-Band Emission Plot CDD Antenna WF2 SP (80MHz 802.11ax (UNII Band 7) – Ch. 151, MCS11)



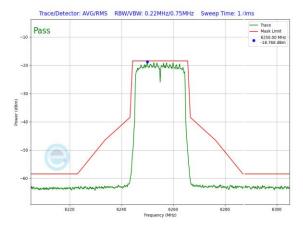
Plot 7-351. In-Band Emission Plot CDD Antenna WF5T SP (160MHz 802.11ax (UNII Band 7) – Ch. 143, MCS11)



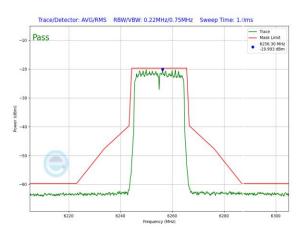
Plot 7-352. In-Band Emission Plot CDD Antenna WF2 SP (160MHz 802.11ax (UNII Band 7) – Ch. 143, MCS11)

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 117 of 222
1C2405200017-13-R3.BCG	5/20/2024 - 10/1/2024	Tablet Device	Page 117 of 222
		·	V 10 50 40 12/15/2021

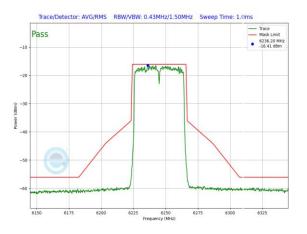




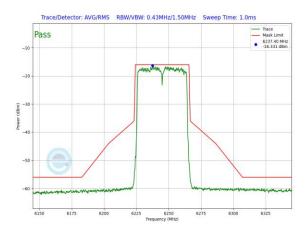




Plot 7-354. In-Band Emission Plot SDM Antenna WF2 VLP (20MHz 802.11ax (UNII Band 5) – Ch. 61, MCS11)



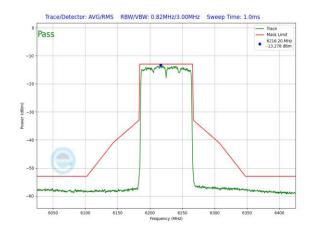
Plot 7-355. In-Band Emission Plot SDM Antenna WF5T VLP (40MHz 802.11ax (UNII Band 5) – Ch. 59, MCS11)



Plot 7-356. In-Band Emission Plot SDM Antenna WF2 VLP (40MHz 802.11ax (UNII Band 5) – Ch. 59, MCS11)



Plot 7-357. In-Band Emission Plot SDM Antenna WF5T VLP (80MHz 802.11ax (UNII Band 5) – Ch. 55, MCS11)

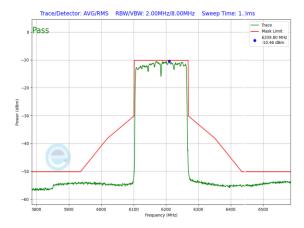


Plot 7-358. In-Band Emission Plot SDM Antenna WF2 VLP (80MHz 802.11ax (UNII Band 5) – Ch. 55, MCS11)

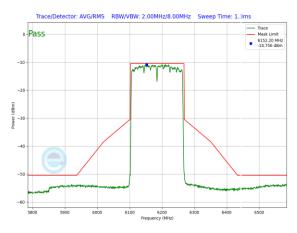
FCC ID: BCGA2993	element MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 110 of 222
1C2405200017-13-R3.BCG	5/20/2024 - 10/1/2024	Tablet Device	Page 118 of 222

V 10.50.40 12/15/2021

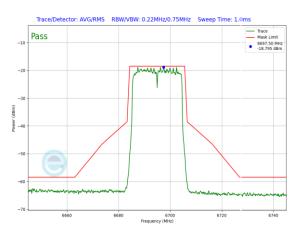




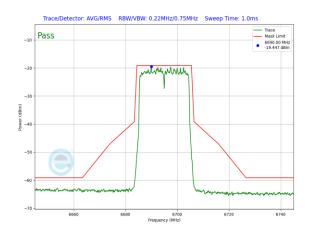
Plot 7-359. In-Band Emission Plot SDM Antenna WF5T VLP (160MHz 802.11ax (UNII Band 5) – Ch. 47, MCS11)



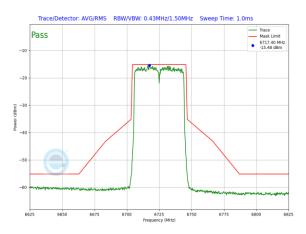
Plot 7-360. In-Band Emission Plot SDM Antenna WF2 VLP (160MHz 802.11ax (UNII Band 5) – Ch. 47, MCS11)



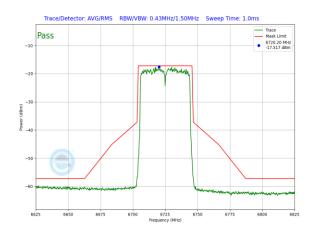
Plot 7-361. In-Band Emission Plot SDM Antenna WF5T VLP (20MHz 802.11ax (UNII Band 7) – Ch. 149, MCS11)



Plot 7-362. In-Band Emission Plot SDM Antenna WF2 VLP (20MHz 802.11ax (UNII Band 7) – Ch. 149, MCS11)



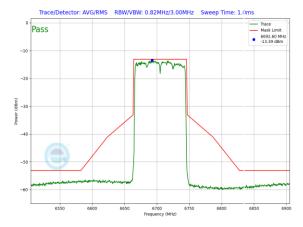
Plot 7-363. In-Band Emission Plot SDM Antenna WF5T VLP (40MHz 802.11ax (UNII Band 7) – Ch. 155, MCS11)



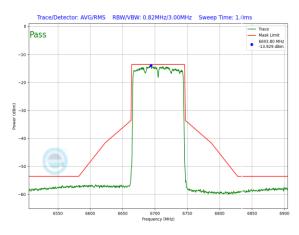
Plot 7-364. In-Band Emission Plot SDM Antenna WF2 VLP (40MHz 802.11ax (UNII Band 7) – Ch. 155, MCS11)

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dega 110 of 222
1C2405200017-13-R3.BCG	5/20/2024 - 10/1/2024	Tablet Device	Page 119 of 222
	•		V 10.50.40 12/15/2021

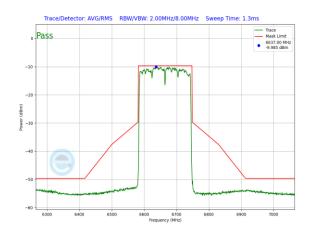




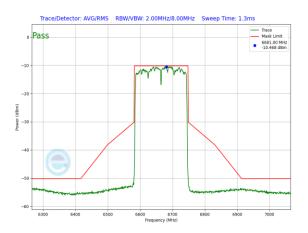
Plot 7-365. In-Band Emission Plot SDM Antenna WF5T VLP (80MHz 802.11ax (UNII Band 7) – Ch. 151, MCS11)



Plot 7-366. In-Band Emission Plot SDM Antenna WF2 VLP (80MHz 802.11ax (UNII Band 7) – Ch. 151, MCS11)



Plot 7-367. In-Band Emission Plot SDM Antenna WF5T VLP (160MHz 802.11ax (UNII Band 7) – Ch. 143, MCS11)



Plot 7-368. In-Band Emission Plot SDM Antenna WF2 VLP (160MHz 802.11ax (UNII Band 7) – Ch. 143, MCS11)

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 100 of 000
1C2405200017-13-R3.BCG	5/20/2024 - 10/1/2024	Tablet Device	Page 120 of 222
			V 10 50 40 12/15/2021



7.6 Contention Based Protocol – 802.11a/ax(SU) §15.407(d)(6)

Test Overview and Limit

Indoor access points, subordinate devices and client devices operating in the 5.925-7.125 GHz band (herein referred to as unlicensed devices), while very low power devices operating in the 5.925-6.425 GHz and 6.525-6.875 GHz bands are required to use technologies that include a contention-based protocol to avoid co-channel interference with incumbent devices sharing the band. To ensure incumbent co-channel operations are detected in a technology-agnostic manner, unlicensed devices are required to detect co-channel radio frequency energy (energy detect) and avoid simultaneous transmission.

Unlicensed indoor low-power and very low power devices must detect co-channel radio frequency power that is at least -62 dBm or lower. Upon detection of energy in the band, unlicensed low power indoor and very low power devices must vacate the channel and stay off the channel as long as detected radio frequency power is equal to or greater than the threshold (-62 dBm). The -62 dBm (or lower) threshold is referenced to a 0 dBi antenna gain.

To ensure incumbent operations are reliably detected in the band, low power indoor devices must detect RF energy throughout their intended operating channel.

Test Procedure Used

KDB 987594 D02 v02r01

Test Settings

- 1. Configure the EUT to transmit with a constant duty cycle.
- 2. Set the operating parameters of the EUT including power level, operating frequency, modulation and bandwidth
- 3. Set the signal analyzer center frequency to the nominal EUT channel center frequency. The span range of the signal analyzer shall be between two times and five times the OBW of the EUT.
- 4. Connect the output port of the EUT to the signal analyzer 2, as shown in Figure 2. Ensure that the attenuator 2 provides enough attenuation to not overload the signal analyzer 2 receiver.
- 5. Monitoring the signal analyzer 2, verify the EUT is operating and transmitting with the parameters set at step two.
- Using an AWGN signal source, generate (but do not transmit, i.e., RF OFF) a 10 MHz-wide AWGN signal. Use Table 1 to determine the center frequency of the 10 MHz AWGN signal relative to the EUT's channel bandwidth and center frequency.
- Set the AWGN signal power to an extremely low level (more than 20 dB below the -62 dBm threshold). Connect the AWGN signal source, via a 3-dB splitter, to the signal analyzer 1 and the EUT as shown in Figure 2.
- 8. Transmit the AWGN signal (RF ON) and verify its characteristics on the signal analyzer 1.
- Monitor the signal analyzer 2 to verify if the AWGN signal has been detected and the EUT has ceased transmission. If the EUT continues to transmit, then incrementally increase the AWGN signal power level until the EUT stops transmitting.
- 10. Including all losses in the RF paths) Determine and record the AWGN signal power level (at the EUT's antenna port) at which the EUT ceased transmission. Repeat the procedure at least 10 times to verify the EUT can detect an AWGN signal with 90% (or better) level of certainty.
- 11. Refer to Table 1 to determine number of times the detection threshold testing needs to be repeated. If testing is required more than once, then go back to step 5, choose a different center frequency for the AWGN signal and repeat the process.

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dama 404 af 000
1C2405200017-13-R3.BCG	5/20/2024 - 10/1/2024	Tablet Device	Page 121 of 222
<u>-</u>			V 10.50.40 12/15/2021



Test Setup

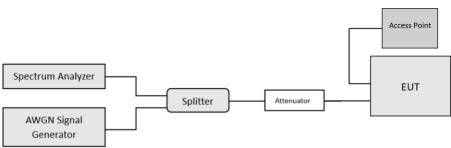


Figure 7-5. Contention-based protocol test setup, conducted method

Test Notes

- 1. The EUT does not support channel puncturing.
- 2. Per guidance from KDB 987594 D02 v02r01, contention-based protocol was tested using an AWGN signal with a bandwidth of 10MHz. The amplitude of the signal was increased until detected by the EUT, signaled by the ceasing of transmission, marker indicates the point at which the AWGN signal is introduced.
- 3. Per KDB 987594 D04 v02, contention-based protocol was tested with receiver with the lowest antenna gain.
- 4. 15 trials were ran in order to assure that at least 90% of certainty was met.

Detection Level = Injected AWGN Power (dBm) – Antenna Gain (dBi) + Path Loss (dB)

Equation 7-1. Incumbent Detection Level Calculation

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 100 of 000
1C2405200017-13-R3.BCG	5/20/2024 - 10/1/2024	Tablet Device	Page 122 of 222
			V 10 50 40 12/15/2021



Band	Channel	Channel Frquency [MHz]	Channel BW [MHz]	Incumbent Frequency [MHz]	Injected (AWGN) [dBm]	Antenna Gain [dBi]	Adjusted Power Level [dBm]	Detection Limit [dBm]	Margin [dB]
	53	6215	20	6215	-73.53	-0.90	-72.63	-62.0	-10.63
UNII				6110	-66.48	-0.90	-65.58	-62.0	-3.58
Band 5	47	6185	160	6185	-70.74	-0.90	-69.84	-62.0	-7.84
				6260	-65.13	-0.90	-64.23	-62.0	-2.23
	101	6455	20	6455	-72.56	-0.90	-71.66	-62.0	-9.66
UNII				6430	-69.86	-0.90	-68.96	-62.0	-6.96
Band 6	111	6505	160	6505	-71.51	-0.90	-70.61	-62.0	-8.61
				6580	-68.55	-0.90	-67.65	-62.0	-5.65
	149	6695	20	6695	-72.36	-0.90	-71.46	-62.0	-9.46
UNII				6590	-68.90	-0.90	-68.00	-62.0	-6.00
Band 7	143	6665	160	6665	-72.84	-0.90	-71.94	-62.0	-9.94
				6740	-64.83	-0.90	-63.93	-62.0	-1.93
	197	6935	20	6935	-74.39	-0.90	-73.49	-62.0	-11.49
UNII				6910	-69.81	-0.90	-68.91	-62.0	-6.91
Band 8	207	6985	160	6985	-71.18	-0.90	-70.28	-62.0	-8.28
				7060	-65.21	-0.90	-64.31	-62.0	-2.31

Table 7-53. Contention Based Protocol LPI – Incumbent Detection Results

		Channel	Channel	Incumbent	EUTTra	Insmission	Status	
Band	Channel	Frquency	BW	Frequency	Adjusted A	AWGN Powe	er (dBm)	
		[MHz]	[MHz]	[MHz]	Normal	Minimal	Ceased	
	53	6215	20	6215	-83.81	-73.88	-72.63	
UNII				6110	-76.76	-66.83	-65.58	
Band 5	47	6185	160	6185	-81.02	-71.09	-69.84	
				6260	-75.41	-65.48	-64.23	
	101	6455	20	6455	-82.84	-72.91	-71.66	
UNII				6430	-80.14	-70.21	-68.96	
Band 6	111	6505	160	6505	-81.79	-71.86	-70.61	
				6580	-78.83	-68.90	-67.65	
	149	6695	20	6695	-82.44	-72.68	-71.46	
UNII				6750	-78.98	-69.22	-68.00	
Band 7	143	6665	160	6825	-82.92	-73.16	-71.94	
				6900	-74.91	-65.15	-63.93	
	197	6935	20	6935	-84.47	-74.71	-73.49	
UNII				6910	-79.89	-70.13	-68.91	
Band 8	207	6985	160	6985	-81.26	-71.50	-70.28	
				7060	-75.29	-65.53	-64.31	

Table 7-54. Contention Based Protocol LPI – Detection Results – All Tx Cases

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 102 of 000
1C2405200017-13-R3.BCG	5/20/2024 - 10/1/2024	Tablet Device	Page 123 of 222
		·	V 10 50 40 12/15/2021



$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		CBP Detection (1 = Detection, Blank = No Detection)																				
UNI Band 5 AT 6185 1 <th1< th=""> 1 1 <</th1<>	Band	Channel	Frquency	BW	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Rate		Pass/Fail
Band5 47 6185 160 1 <th1< th=""> 1 <th1< td=""><td></td><td>53</td><td>6215</td><td>20</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>100.0</td><td></td><td>Pass</td></th1<></th1<>		53	6215	20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	100.0		Pass
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	UNII				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	100.0	90	Pass
UNI 6455 20 1 </td <td>Band 5</td> <td>47</td> <td>6185</td> <td>160</td> <td>1</td> <td>100.0</td> <td>90</td> <td></td>	Band 5	47	6185	160	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	100.0	90	
UNII Band6 II <th< td=""><td></td><td></td><td></td><td></td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>100.0</td><td>90</td><td>Pass</td></th<>					1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	100.0	90	Pass
Band6 111 6505 160 1 </td <td></td> <td>101</td> <td>6455</td> <td>20</td> <td>1</td> <td>100.0</td> <td>90</td> <td>Pass</td>		101	6455	20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	100.0	90	Pass
Image: Normal base in the image: Normal base intermines in the image: Normal base in the image: Nor	UNII				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	100.0	90	Pass
Image: Normal base in the image: Normal base intend base in the image: Normal base in the image: No	Band 6	111	6505	160	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	100.0	90	Pass
UNI Band7 Add A					1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	100.0	90	Pass
Band7 143 6665 160 1 </td <td></td> <td>149</td> <td>6695</td> <td>20</td> <td>1</td> <td>100.0</td> <td>90</td> <td>Pass</td>		149	6695	20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	100.0	90	Pass
Image: Non-state of the state of t	UNII				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	100.0	90	Pass
Image: Instant line Image: Image	Band 7	143	6665	160	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	100.0	90	Pass
UNII Band8 207 6985 160 1 <th1< th=""> 1 <th1< th=""></th1<></th1<>					1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	100.0	90	Pass
Band8 207 6985 160 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		197	6935	20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	100.0	90	Pass
	UNII				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	100.0	90	Pass
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Band 8	207	6985	160	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	100.0	90	Pass
					1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	100.0	90	Pass

Table 7-55. Contention Based Protocol LPI – Incumbent Detection Trial Results

Band	Channel	Channel Frquency [MHz]	Channel BW [MHz]	Incumbent Frequency [MHz]	Injected (AWGN) [dBm]	Antenna Gain [dBi]	Adjusted Power Level [dBm]	Detection Limit [dBm]	Margin [dB]
	53	6215	20	6215	-69.45	-0.90	-68.55	-62.0	-6.55
UNII	UNII			6115	-67.53	-0.90	-66.63	-62.0	-4.63
Band 5	47	6185	160	6185	-71.16	-0.90	-70.26	-62.0	-8.26
				6260	-67.19	-0.90	-66.29	-62.0	-4.29
	149	6695	20	6695	-69.42	-0.90	-68.52	-62.0	-6.52
UNII				6590	-69.53	-0.90	-68.63	-62.0	-6.63
Band 7	143	6665	160	6665	-70.86	-0.90	-69.96	-62.0	-7.96
				6740	-68.55	-0.90	-67.65	-62.0	-5.65

Table 7-56. Contention Based Protocol VLP – Incumbent Detection Results

		Channel	Channel	Incumbent	E UT Tra	ansmissior	n Status
Band	Channel	Frquency	BW	Frequency	Adjusted AWGN Power (d		ver (dBm)
		[MHz]	[MHz]	[MHz]	Normal	Minimal	Ceased
	53	6215	20	6215	-79.73	-69.80	-68.55
UNII				6110	-77.81	-67.88	-66.63
Band 5	47	6185	160	6185	-81.44	-71.51	-70.26
				6260	-77.47	-67.54	-66.29
	149	6695	20	6695	-79.50	-69.74	-68.52
UNII				6750	-79.61	-69.85	-68.63
Band 7	175	6665	160	6825	-80.94	-71.18	-69.96
				6900	-78.63	-68.87	-67.65

Table 7-57. Contention Based Protocol VLP – Detection Results – All Tx Cases

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 104 of 000
1C2405200017-13-R3.BCG	5/20/2024 - 10/1/2024	Tablet Device	Page 124 of 222
			V/ 10 50 /0 12/15/2021



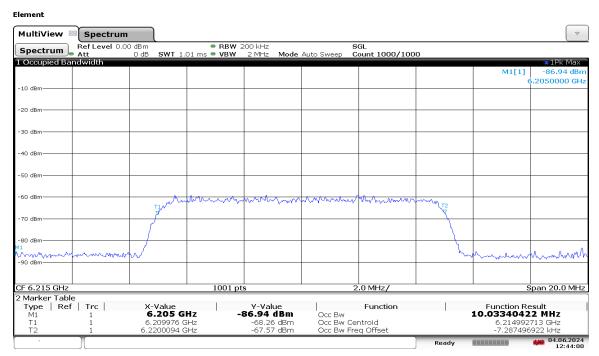
								CB	PDetection	(1 = Detect	ion, Blank:	= No Detect	ion)								
Band	Channel	Channel Frquency [MHz]	Channel BW [MHz]	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Detection Rate [%]	Limit [%]	Pass/Fail
	53	6215	20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	100.0	90	Pass
UNII				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	100.0	90	Pass
Band 5	47	6185	160	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	100.0	90	Pass
				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	100.0	90	Pass
	149	6695	20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	100.0	90	Pass
UNII				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	100.0	90	Pass
Band 7	175	6665	160	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	100.0	90	Pass
				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	100.0	90	Pass

Table 7-58. Contention Based Protocol VLP – Incumbent Detection Trial Results

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 125 of 222
1C2405200017-13-R3.BCG	5/20/2024 - 10/1/2024	Tablet Device	Page 125 of 222
			V 10 50 40 12/15/2021

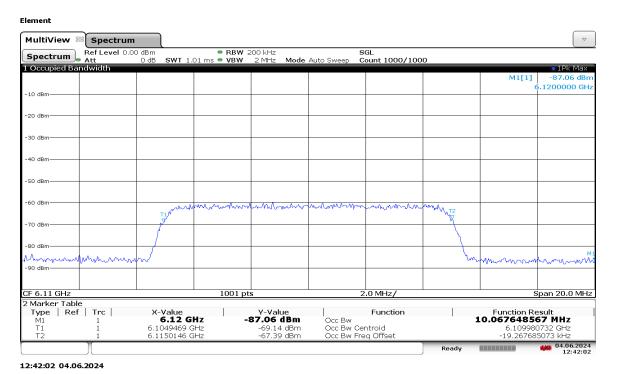


AWGN Plots



12:44:00 04.06.2024

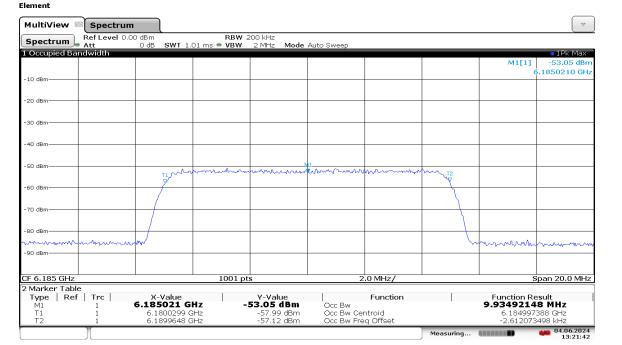




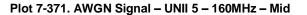
Plot 7-370. AWGN Signal - UNII 5 - 160MHz - Low

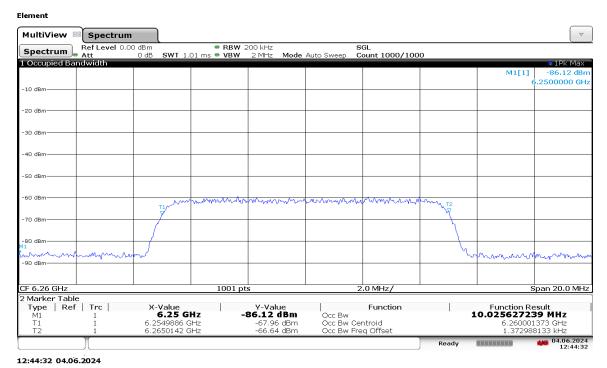
FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 106 of 202
1C2405200017-13-R3.BCG	5/20/2024 - 10/1/2024	Tablet Device	Page 126 of 222
		·	V 10 50 40 12/15/2021





13:21:42 04.06.2024

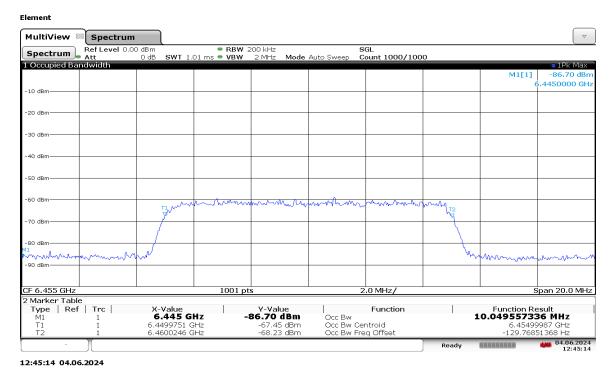




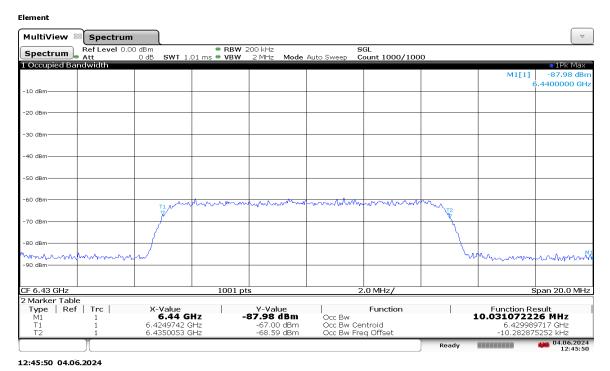


FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 127 of 222
1C2405200017-13-R3.BCG	5/20/2024 - 10/1/2024	Tablet Device	
			V 10.50.40 12/15/2021











FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 128 of 222
1C2405200017-13-R3.BCG	5/20/2024 - 10/1/2024	Tablet Device	
			V 10.50.40 12/15/2021