



Quectel

Pradco E4

Antenna Test Report

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Date: 2026.04.14

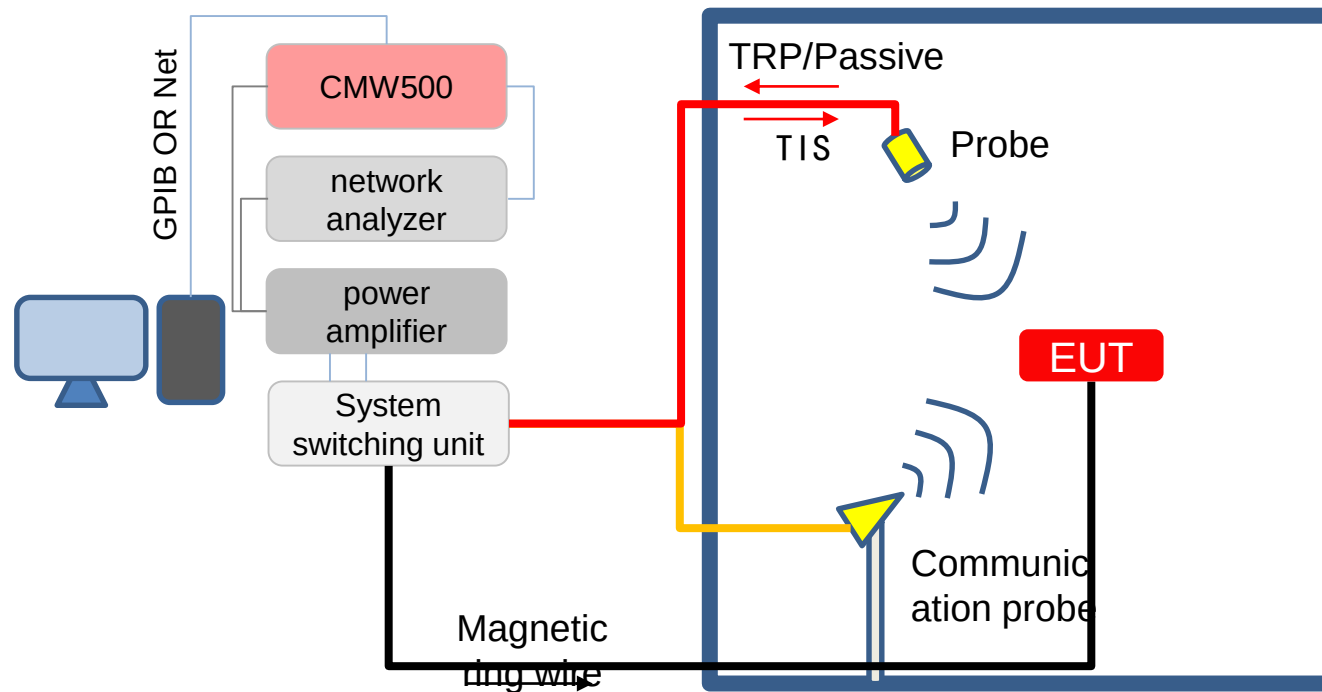
Build a Smarter World

Revision History



Revision	Date	Reporter	Reviewer	Note
V1.0	2026/02/02	Raoul.Rao	Winfred.Wu	E4 Devices Antenna Test Report
V1.1	2026/02/12	Raoul.Rao	Winfred.Wu	Add E4#1 with Integrated Solar and Recharge Pack OTA Test Data
V1.2	2026/02/12	Raoul.Rao	Winfred.Wu	Retest E4#1 with Recharge Pack OTA Test Data
V1.3	2026/02/25	Raoul.Rao	Winfred.Wu	Retest E4#1 + AA Battery + Integrated Solar OTA Test Data
V1.4	2026/04/14	Raoul.Rao	Winfred.Wu	Retest E4#1 + AA Battery + Integrated Solar OTA Test Data

- Chamber HF-GTS2800

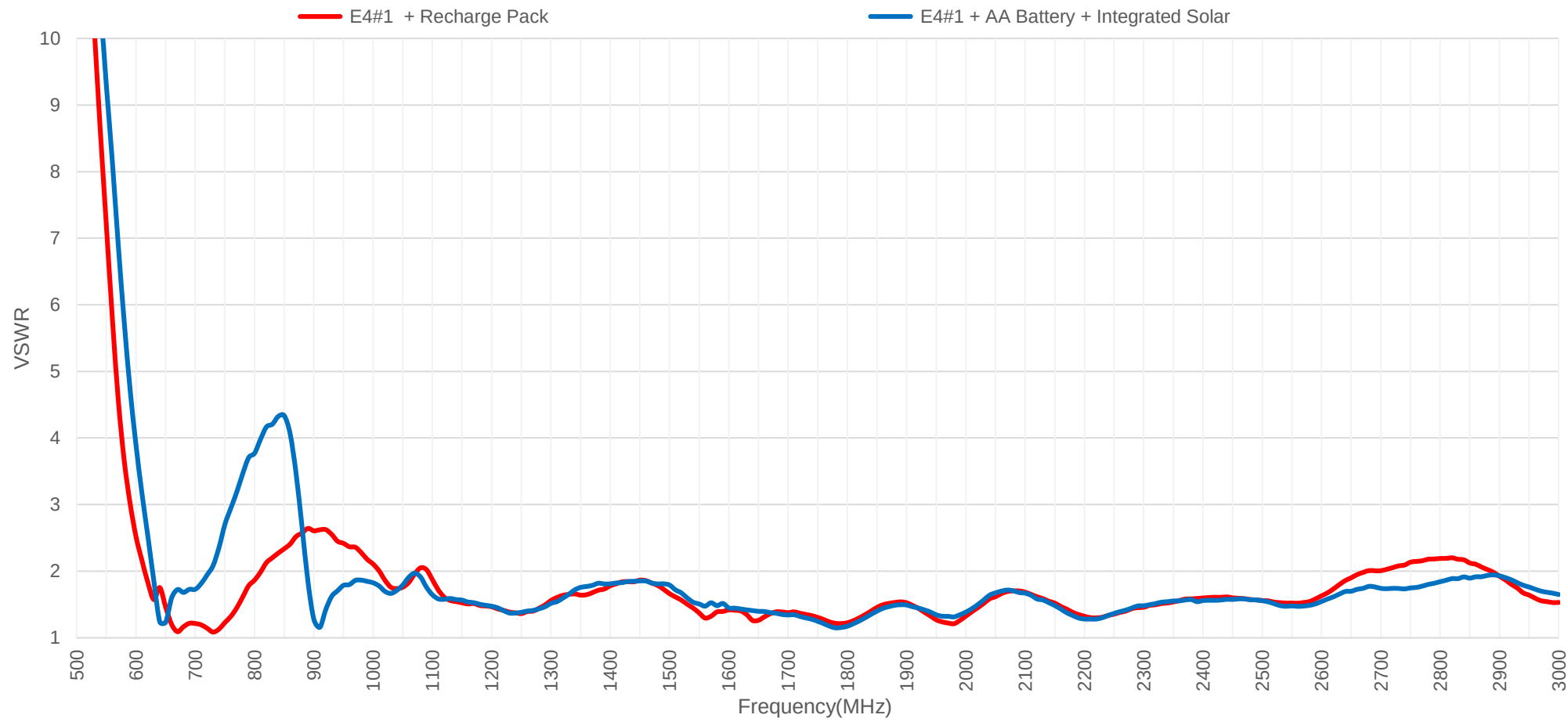


Test Data



Band	Channel	Freq	TRP				Channel	Freq	TIS			
			E4#1 + AA Battery	E4#1 + Recharge Pack	E4#1 + AA Battery + Integrated Solar	Retest E4#1 + AA Battery + Integrated Solar			E4#1 + AA Battery	E4#1 + Recharge Pack	Retest E4#1 + Recharge Pack	E4#1 + AA Battery + Integrated Solar
B2	18650	1855	21.94	21.48	20.92		/	/	/	/	/	/
	18900	1880	21.28	21.75	21.2		/	/	/	/	/	/
	19150	1905	21.35	21.69	21.3		1150	1985	-94.53	-94.66	/	-95.7
B4	20000	1715	21.87	21.94	21.96		/	/	/	/	/	/
	20175	1732.5	21.23	21.35	21.39		/	/	/	/	/	/
	20350	1750	21.11	21.44	21.41		2350	2150	-95.91	-95.84	/	-96.07
B5	20450	829	21.27	20.72	20.9	20.81	/	/	/	/	/	/
	20525	836.5	20.77	20.21	17.6	17.43	/	/	/	/	/	/
	20600	844	21.38	20.98	17.22	17.25	2600	889	-94.31	-93.04	-92.96	-94.19
B12	23035	701.5	21.02	21.02	21.62		/	/	/	/	/	/
	23095	707.5	20.87	20.7	20.81		/	/	/	/	/	/
	23155	713.5	21.72	20.96	20.91		5095	737.5	-95.89	-93.7	-93.56	-95.17
B13	23230	782	21.5	20.97	20.12		5230	751	-93.32	-90.92	-91.08	-93.13
B66	132022	1715	21.57	21.72	21.65		/	/	/	/	/	/
	132322	1745	21.02	21.33	21.28		/	/	/	/	/	/
	132622	1775	21.38	21.8	21.63		67086	2175	-96.02	-94.55	/	-96.48

VSWR



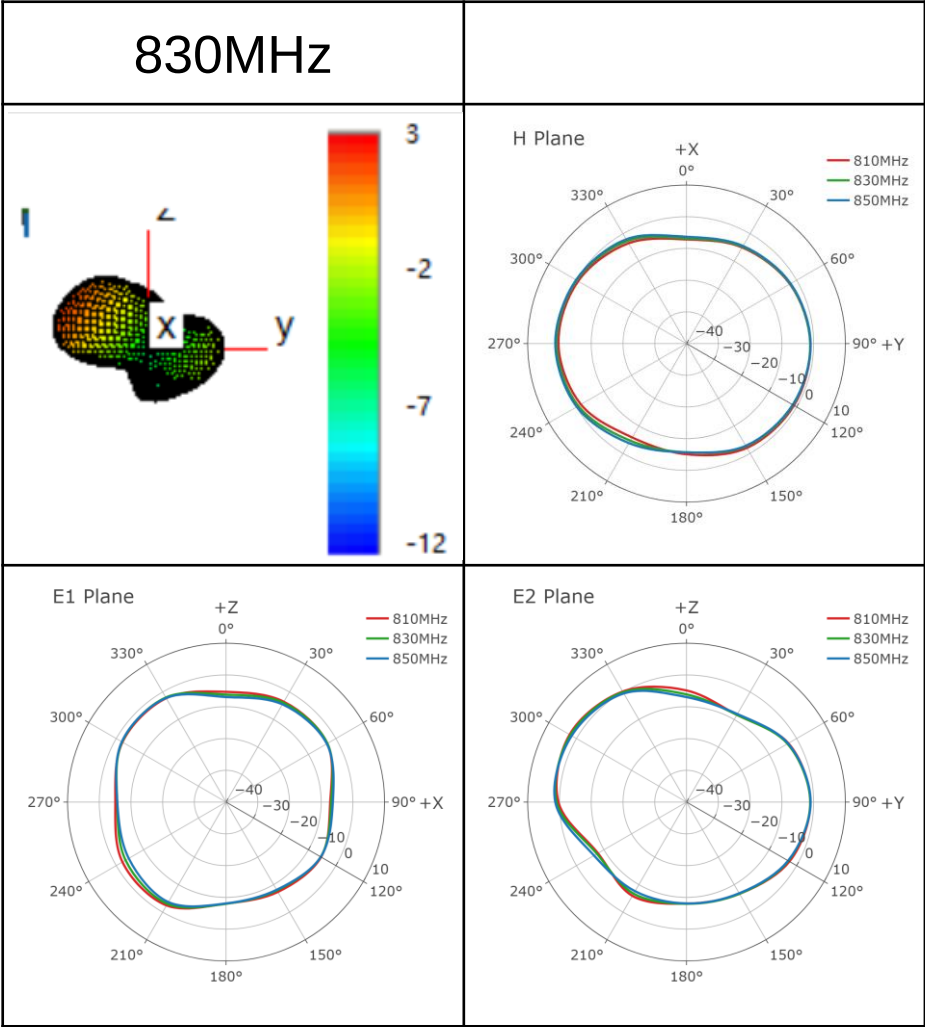
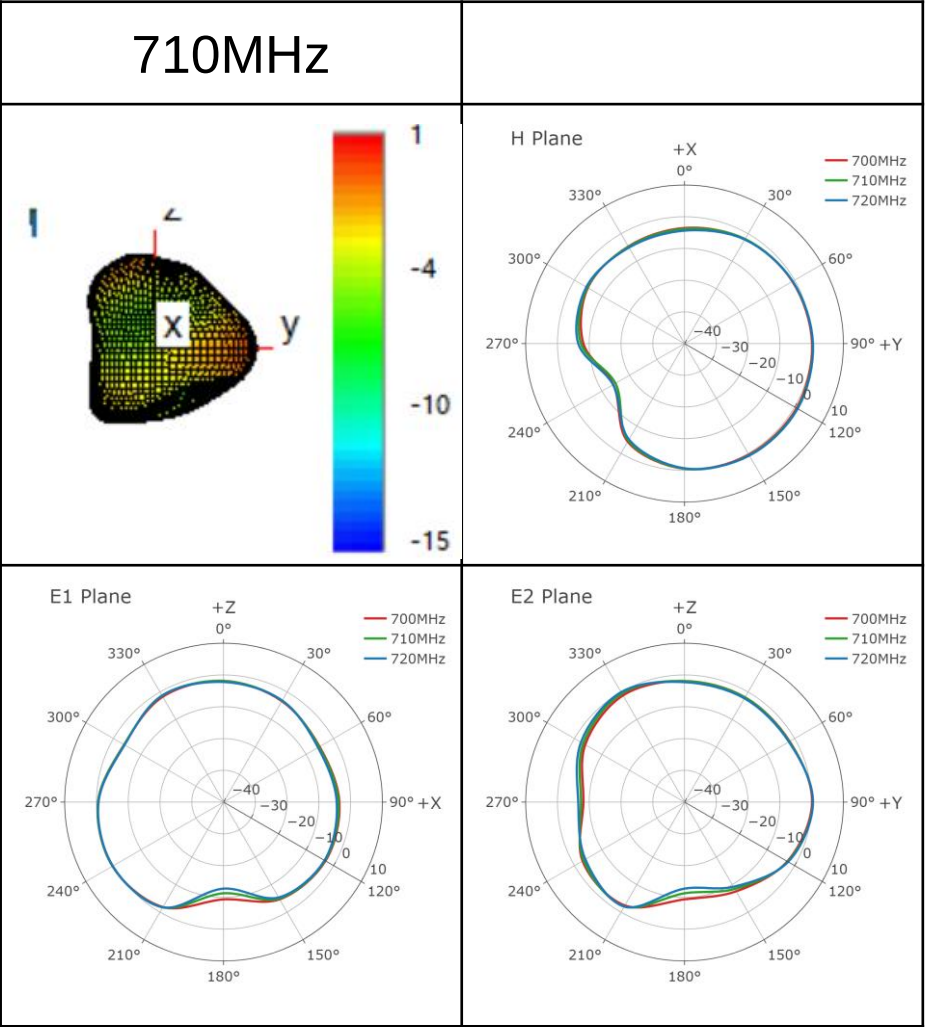
Frequency (MHz)	Efficiency(dB)		Gain(dBi)		Efficiency(%)	
	E4#1 + AA Battery	E4#1 + AA Battery + Integrated Solar	E4#1 + AA Battery	E4#1 + AA Battery + Integrated Solar	E4#1 + AA Battery	E4#1 + AA Battery + Integrated Solar
700	-2.59	-2.77	0.71	1.82	55.06	52.88
720	-2.54	-2.73	1.11	2.28	55.66	53.31
740	-2.66	-3	0.98	2.21	54.16	50.1
760	-2.75	-3.37	0.94	1.96	53.09	46.04
780	-2.68	-3.57	2.14	1.69	53.97	43.91
800	-2.67	-3.9	2.41	1.07	54.08	40.73
820	-2.68	-4.3	2.35	0.25	53.93	37.11
840	-2.75	-4.83	1.93	-1.18	53.06	32.89
860	-2.8	-5.66	1.5	-2.87	52.52	27.19
880	-3.03	-6.23	1.32	-1.83	49.72	23.82
900	-3.19	-3.42	1.11	0.5	47.92	45.48

Frequency (MHz)	Efficiency(dB)		Gain(dBi)		Efficiency(%)	
	E4#1 + AA Battery	E4#1 + AA Battery + Integrated Solar	E4#1 + AA Battery	E4#1 + AA Battery + Integrated Solar	E4#1 + AA Battery	E4#1 + AA Battery + Integrated Solar
1700	-1.85	-1.89	2.45	2.24	65.38	64.77
1750	-1.81	-1.84	2.98	2.64	65.98	65.44
1800	-1.94	-1.91	3.29	2.95	63.9	64.35
1850	-1.74	-1.83	3.75	3.27	66.95	65.55
1900	-1.55	-1.65	3.68	3.2	69.91	68.33
1950	-1.59	-1.65	3.15	3.26	69.36	68.42
2000	-1.9	-1.93	2.88	2.81	64.5	64.09
2050	-1.85	-1.99	2.91	2.78	65.3	63.22
2100	-1.78	-1.94	2.62	2.17	66.4	64.01
2150	-1.65	-1.76	2.34	2.1	68.44	66.61
2200	-1.54	-1.59	2.57	2.11	70.14	69.27
2250	-1.3	-1.33	2.55	2.14	74.14	73.64
2300	-1.72	-1.74	2.1	1.14	67.25	66.92
2350	-1.35	-1.4	2.74	1.82	73.23	72.38
2400	-1.67	-1.75	2.07	2.43	68.05	66.83
2450	-1.72	-1.88	2.18	2.59	67.33	64.79
2500	-1.54	-1.84	2.64	2.64	70.13	65.52
2550	-1.7	-1.93	2.38	2.56	67.64	64.19
2600	-2.07	-2.23	1.91	2.24	62.15	59.8
2650	-2.24	-2.38	2.04	1.97	59.74	57.8
2700	-2.5	-2.61	2.44	2.26	56.28	54.8

Radiation Pattern



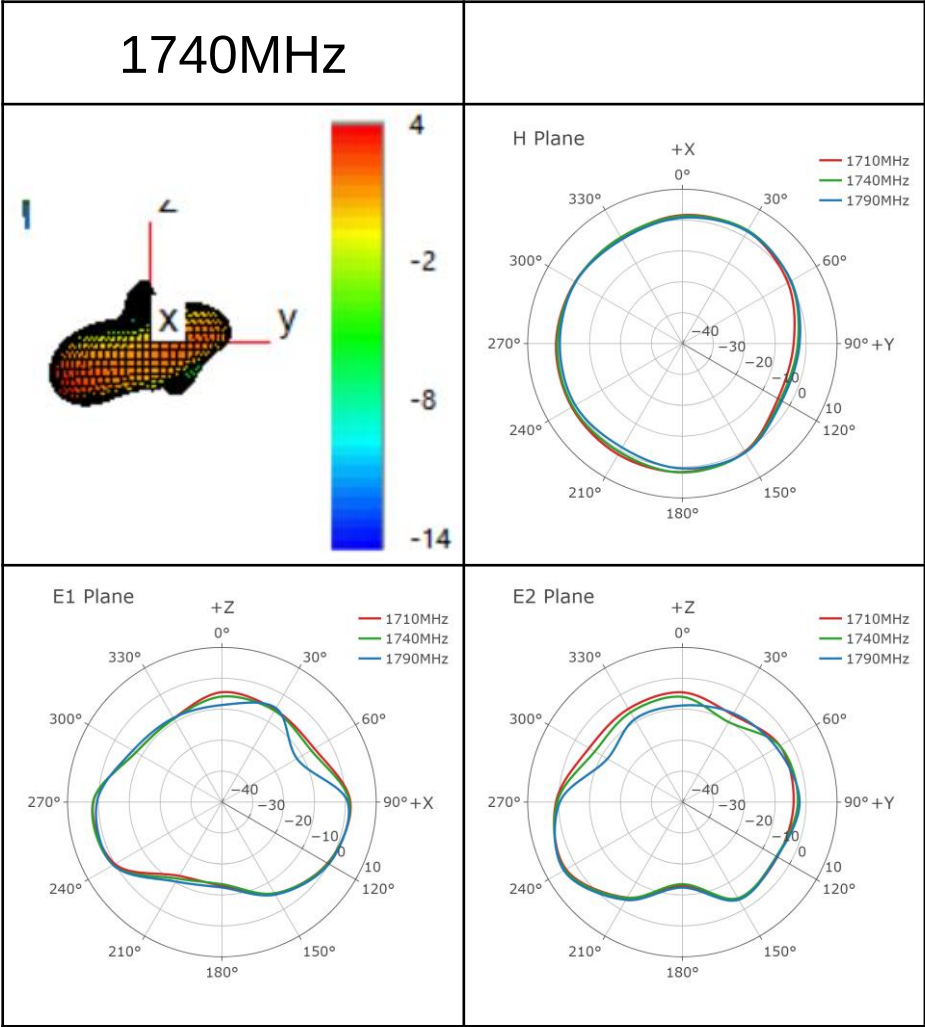
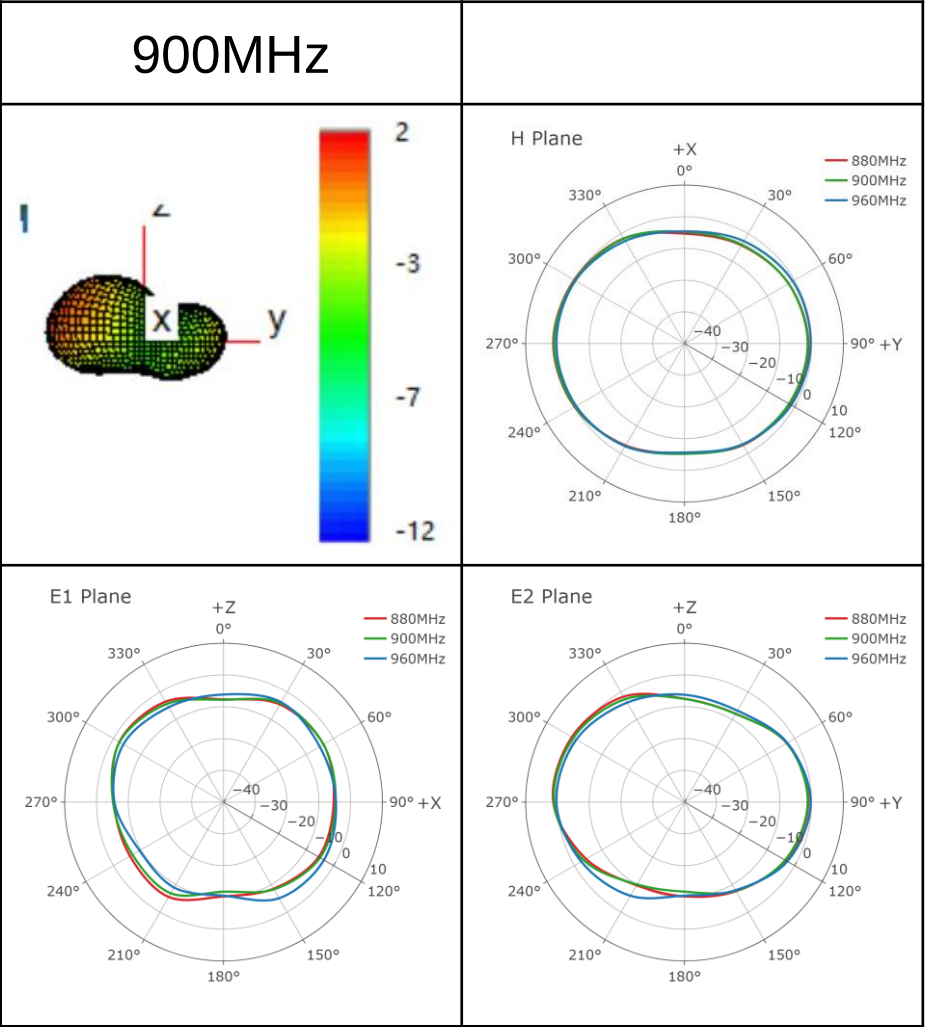
E4#1 + AA Battery



Radiation Pattern



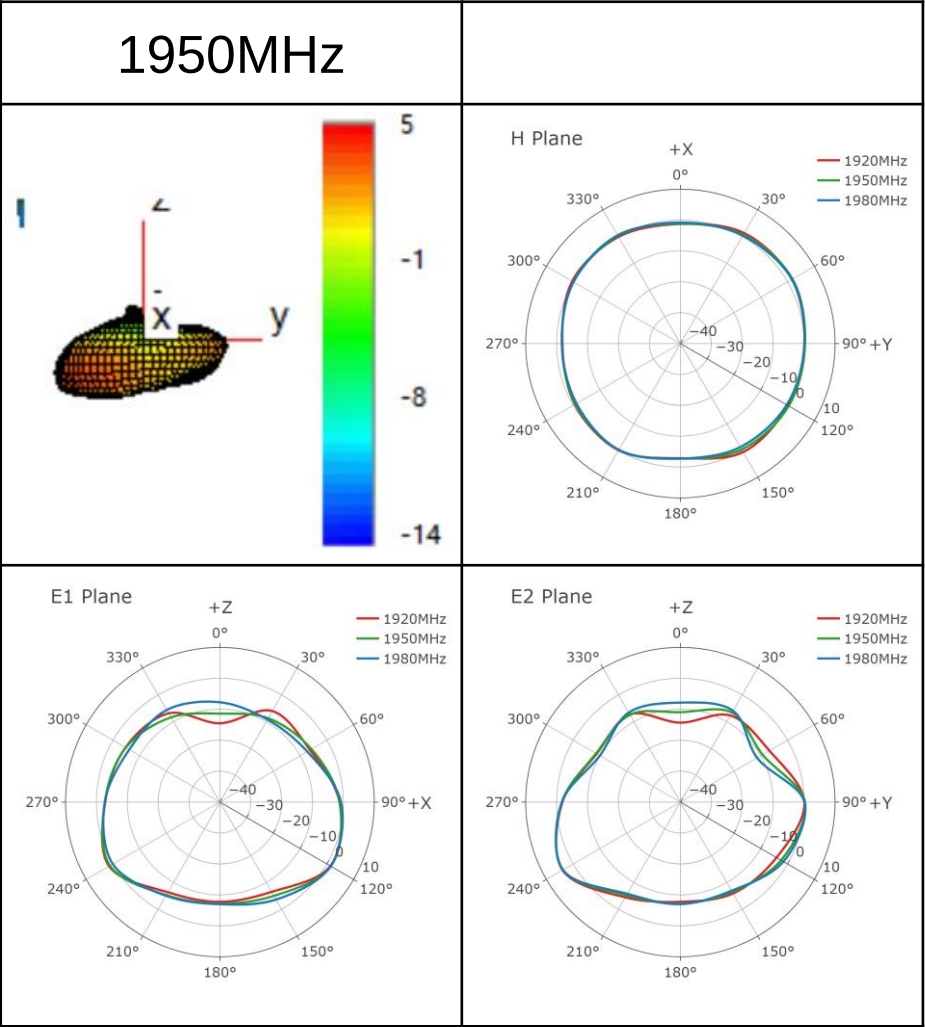
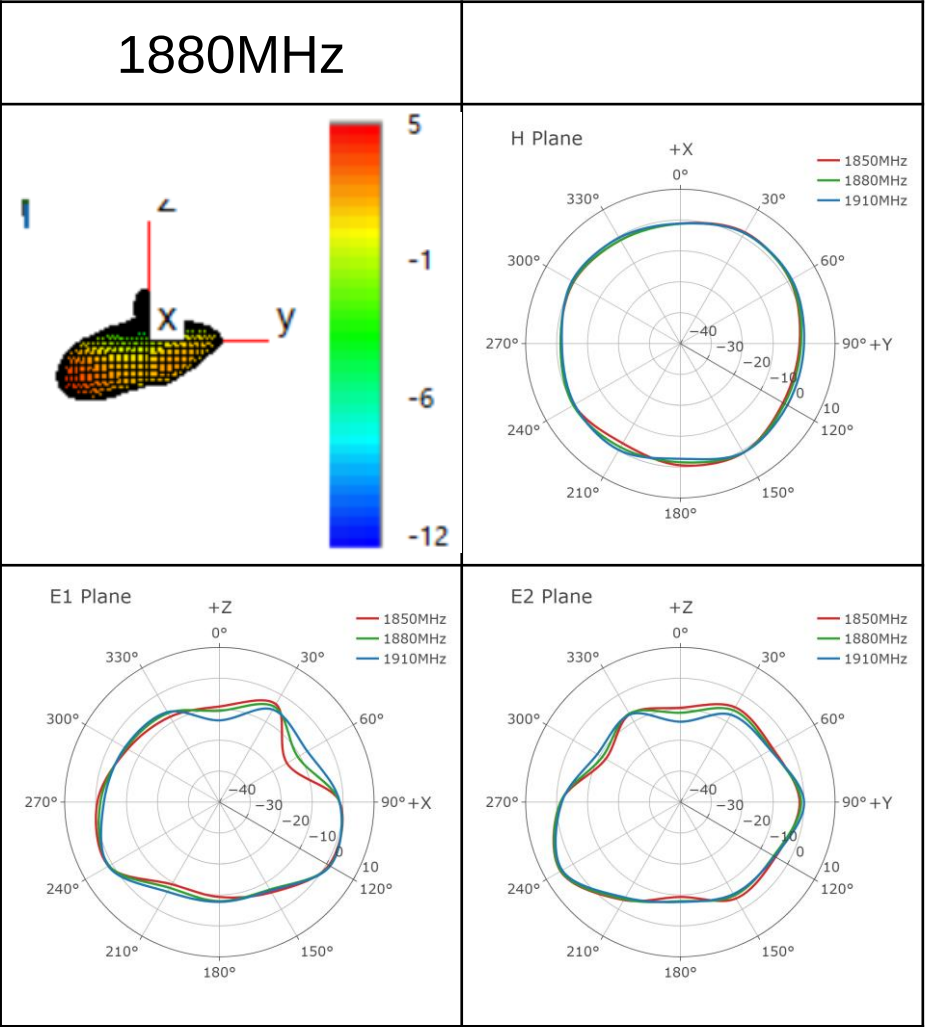
E4#1 + AA Battery



Radiation Pattern



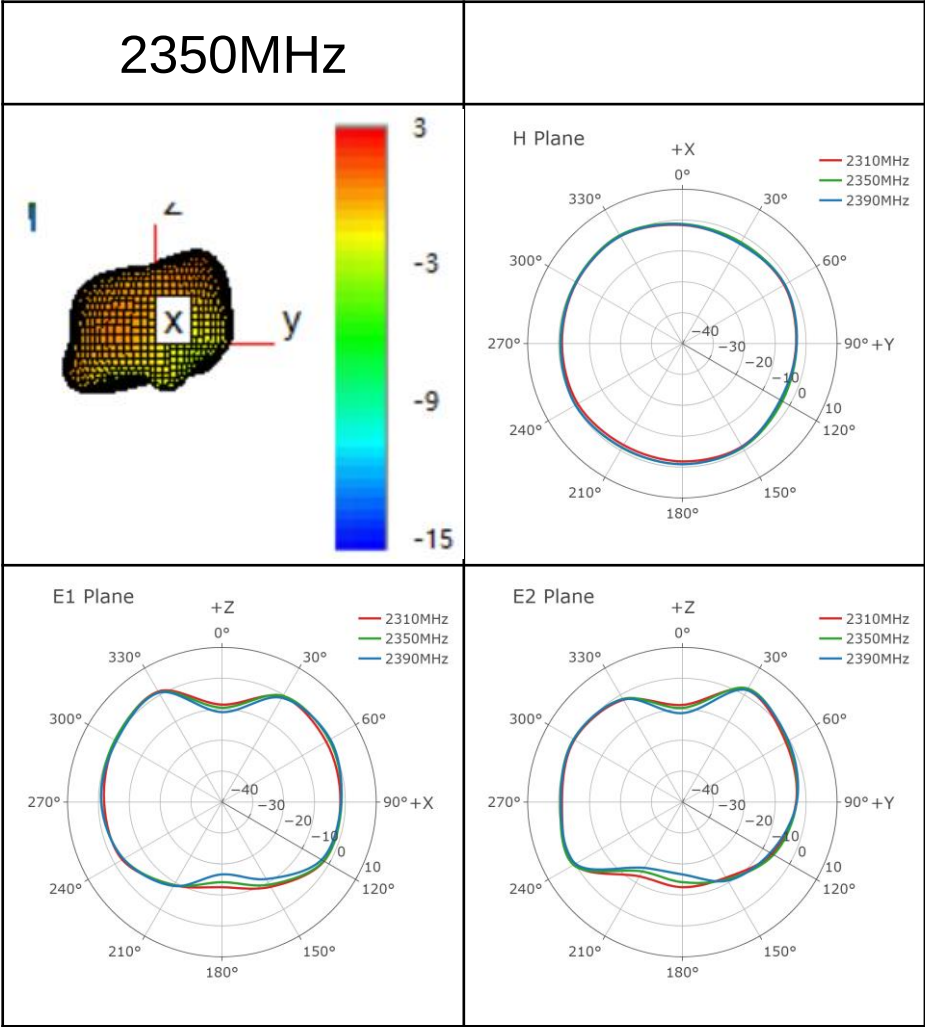
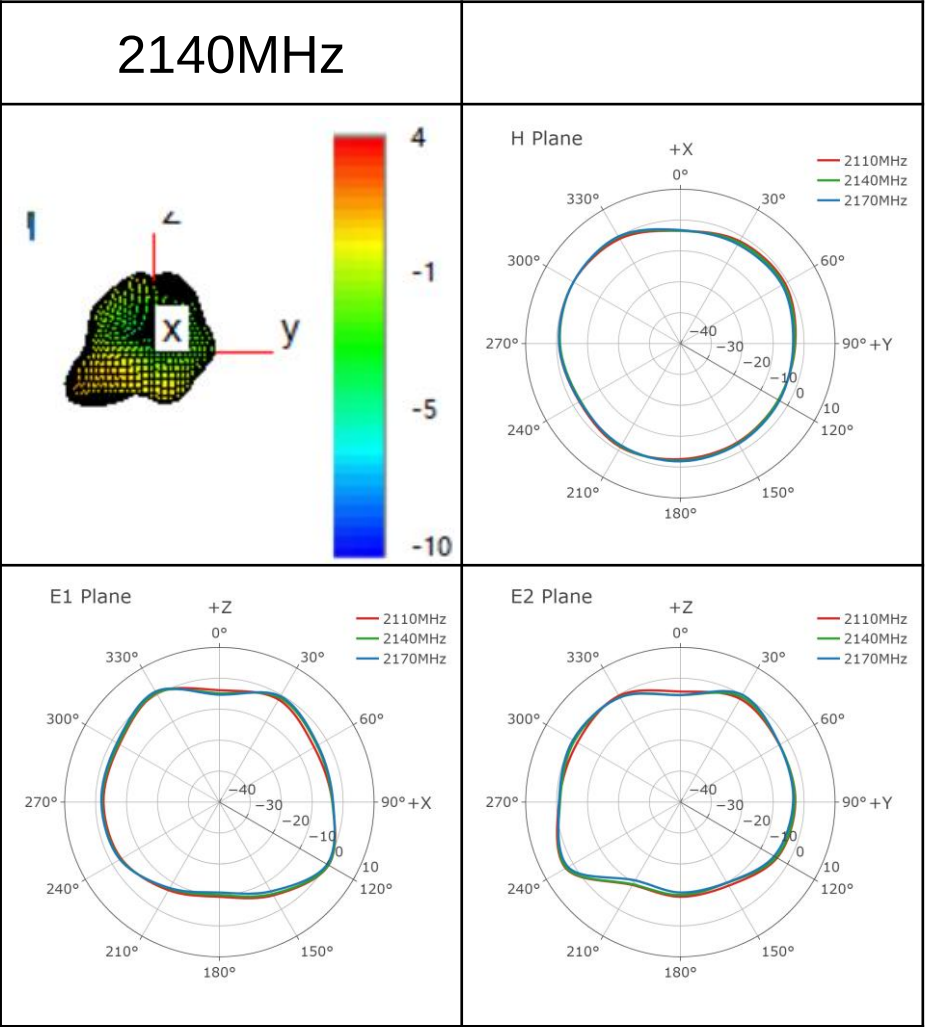
E4#1 + AA Battery



Radiation Pattern



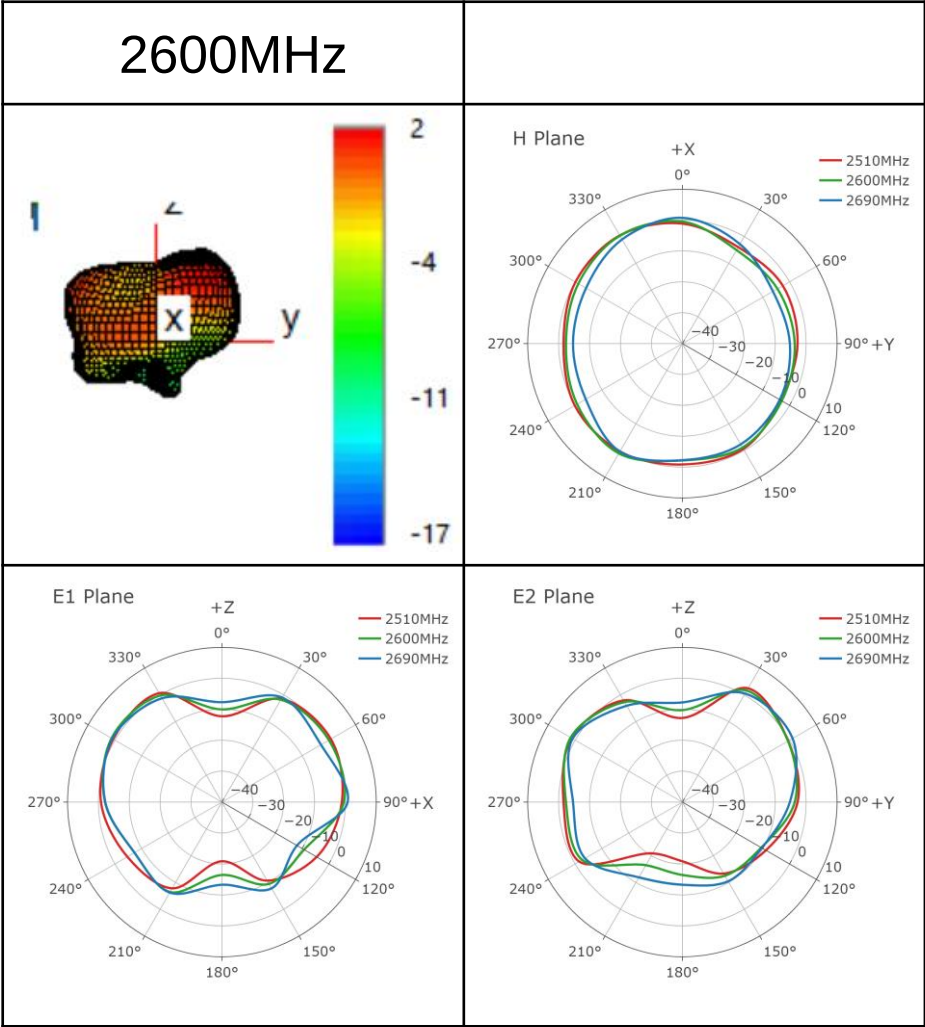
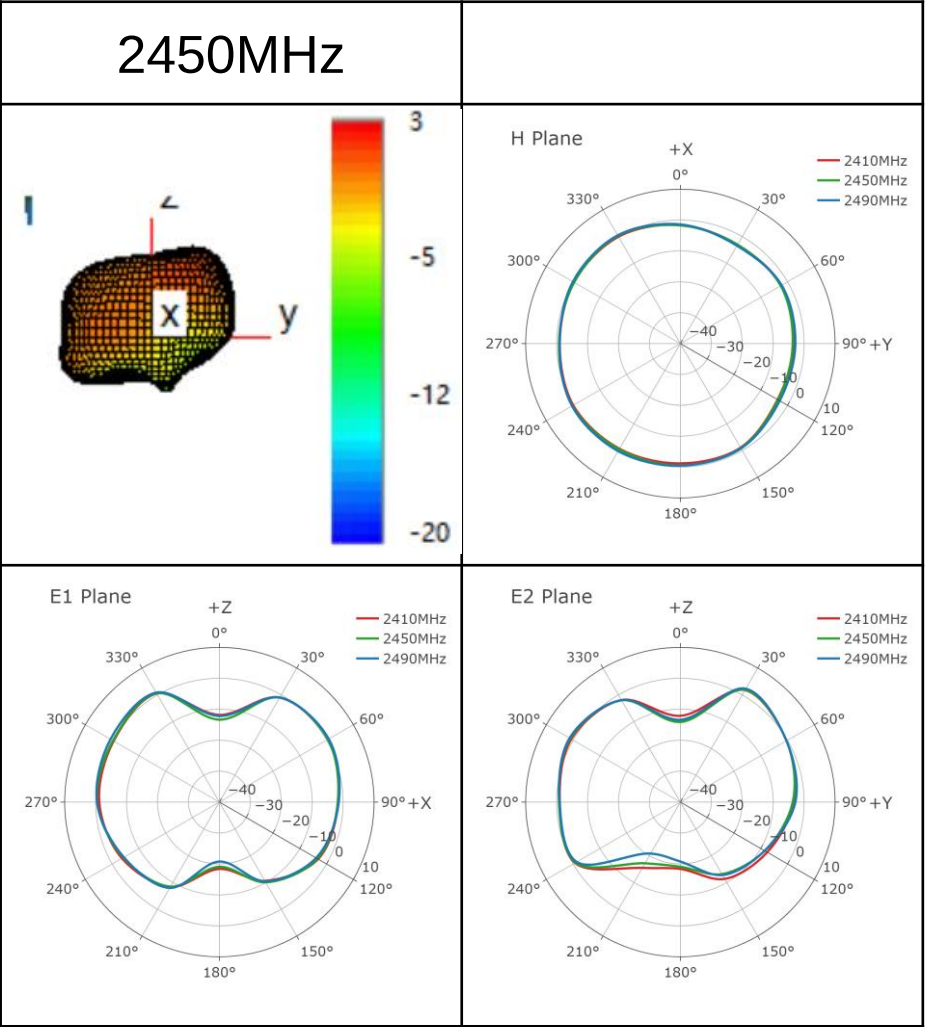
E4#1 + AA Battery



Radiation Pattern



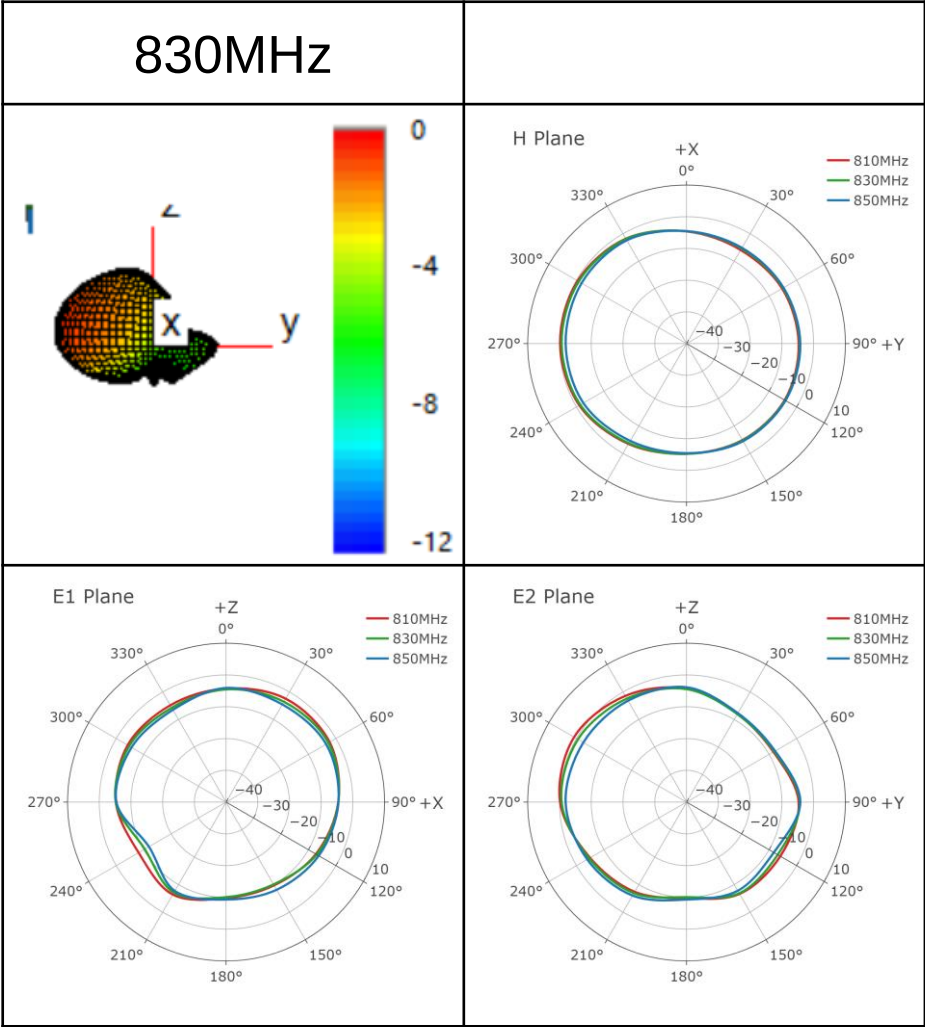
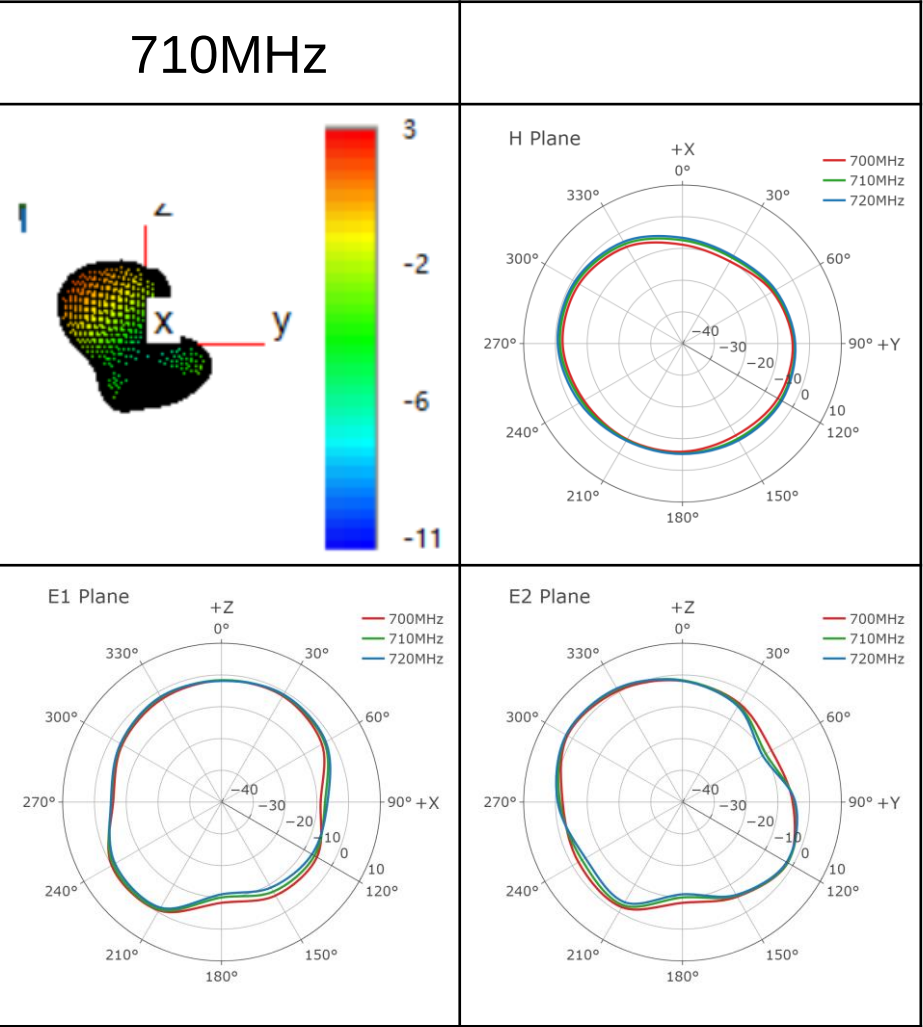
E4#1 + AA Battery



Radiation Pattern



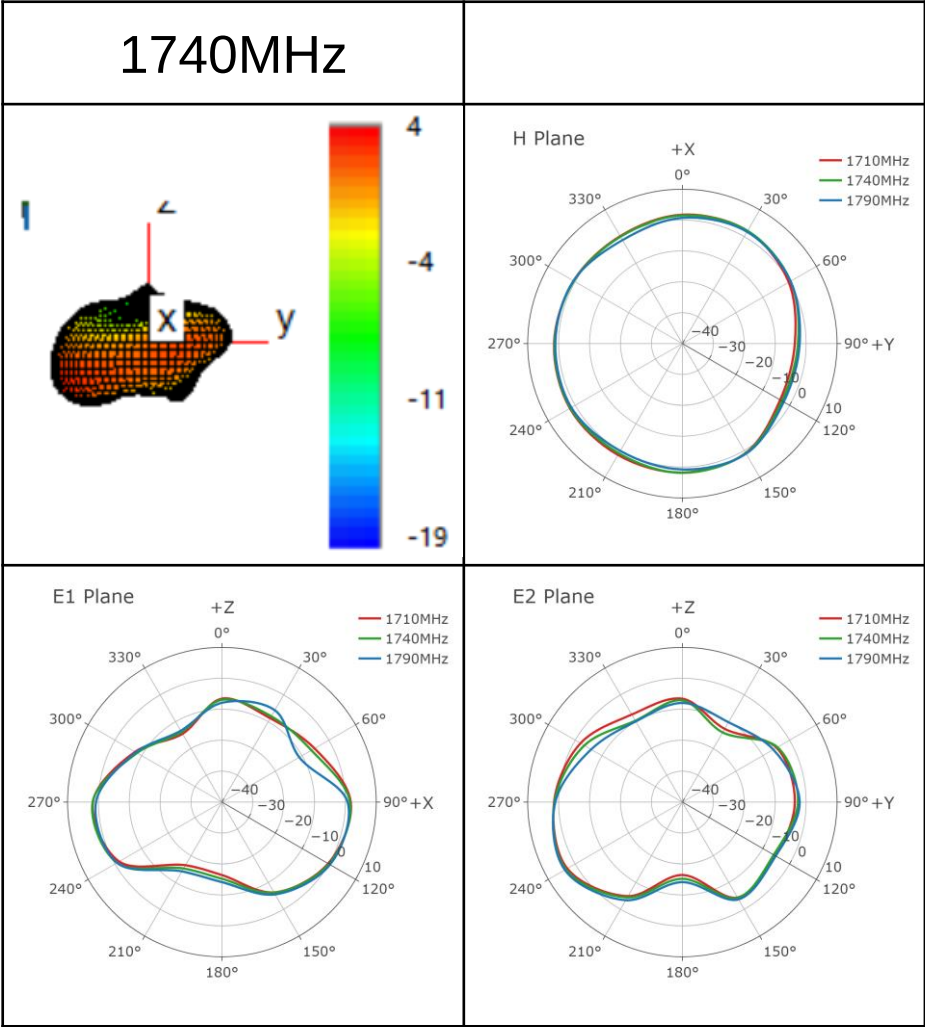
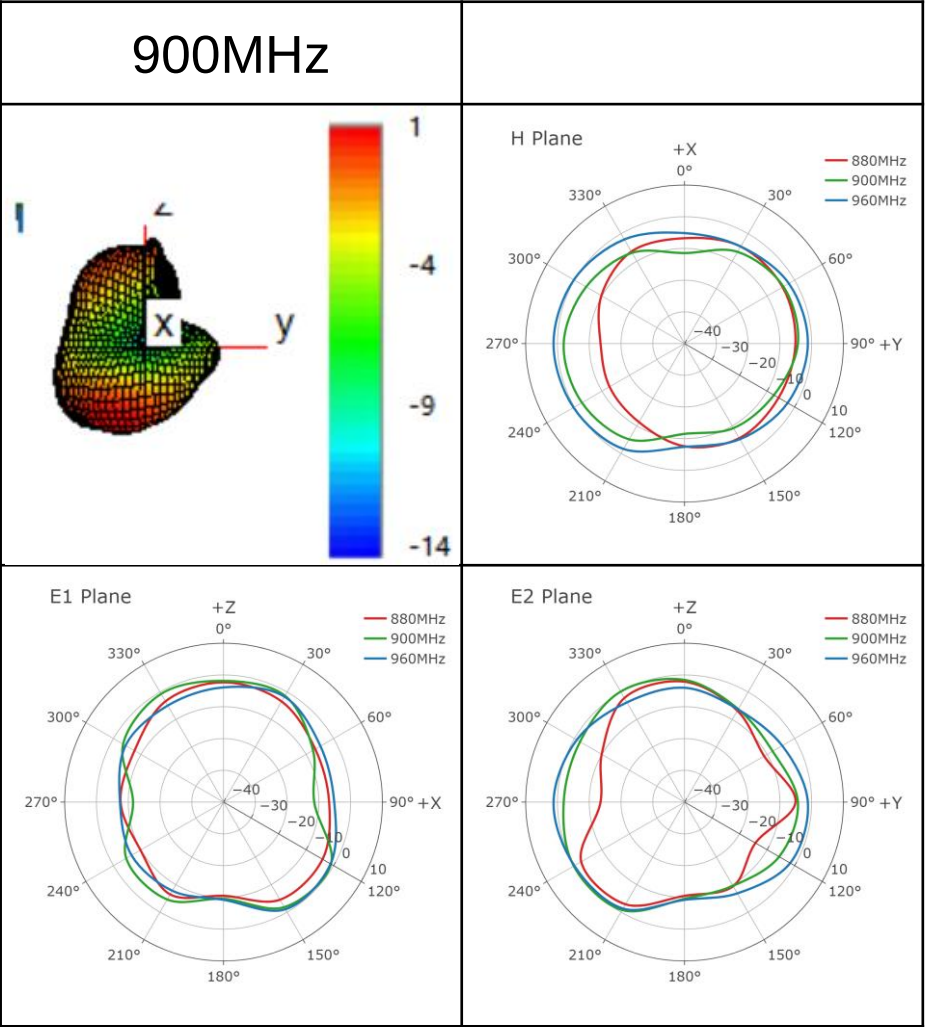
E4#1 + AA Battery + Integrated Solar



Radiation Pattern



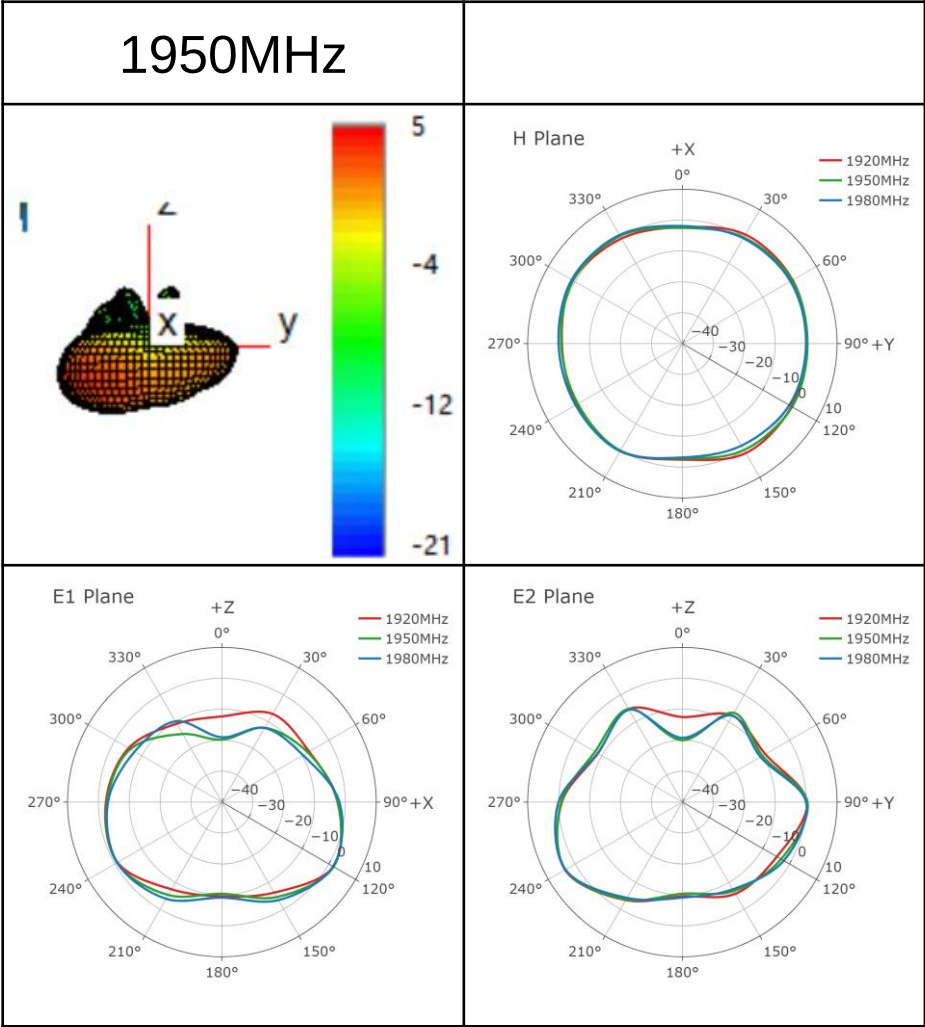
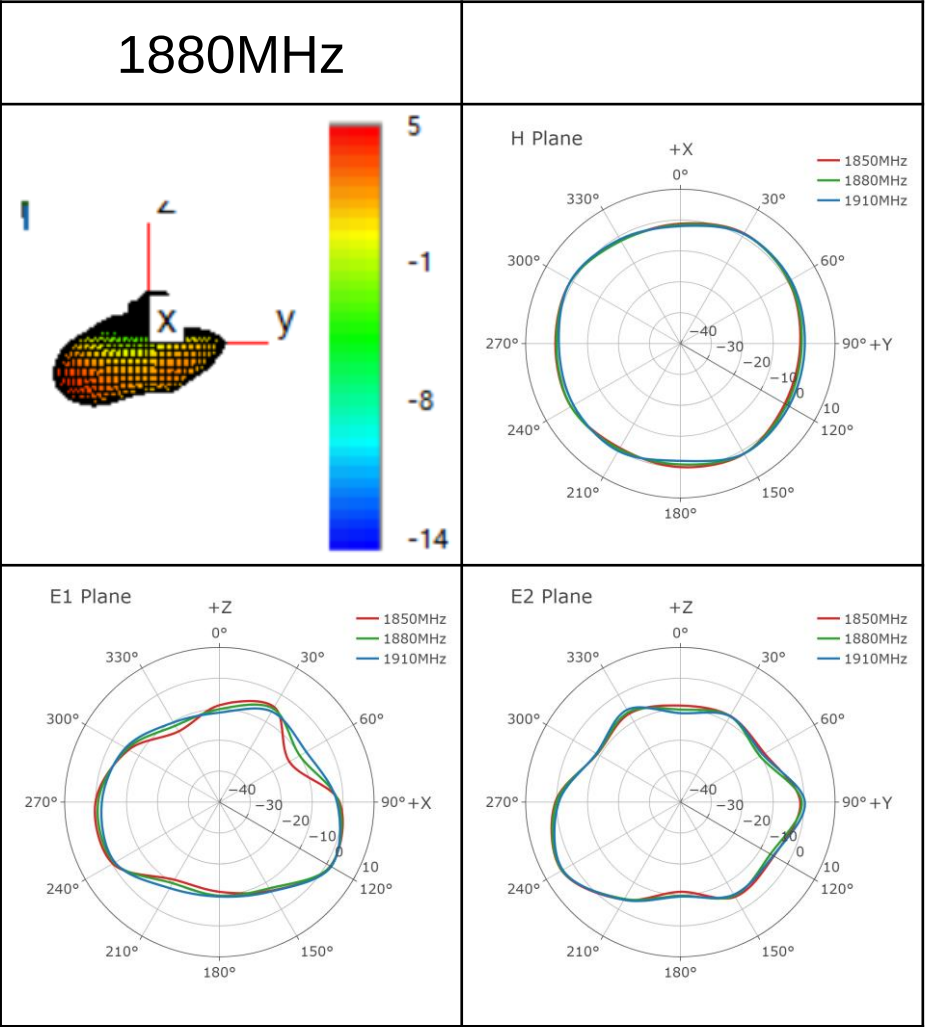
E4#1 + AA Battery + Integrated Solar



Radiation Pattern



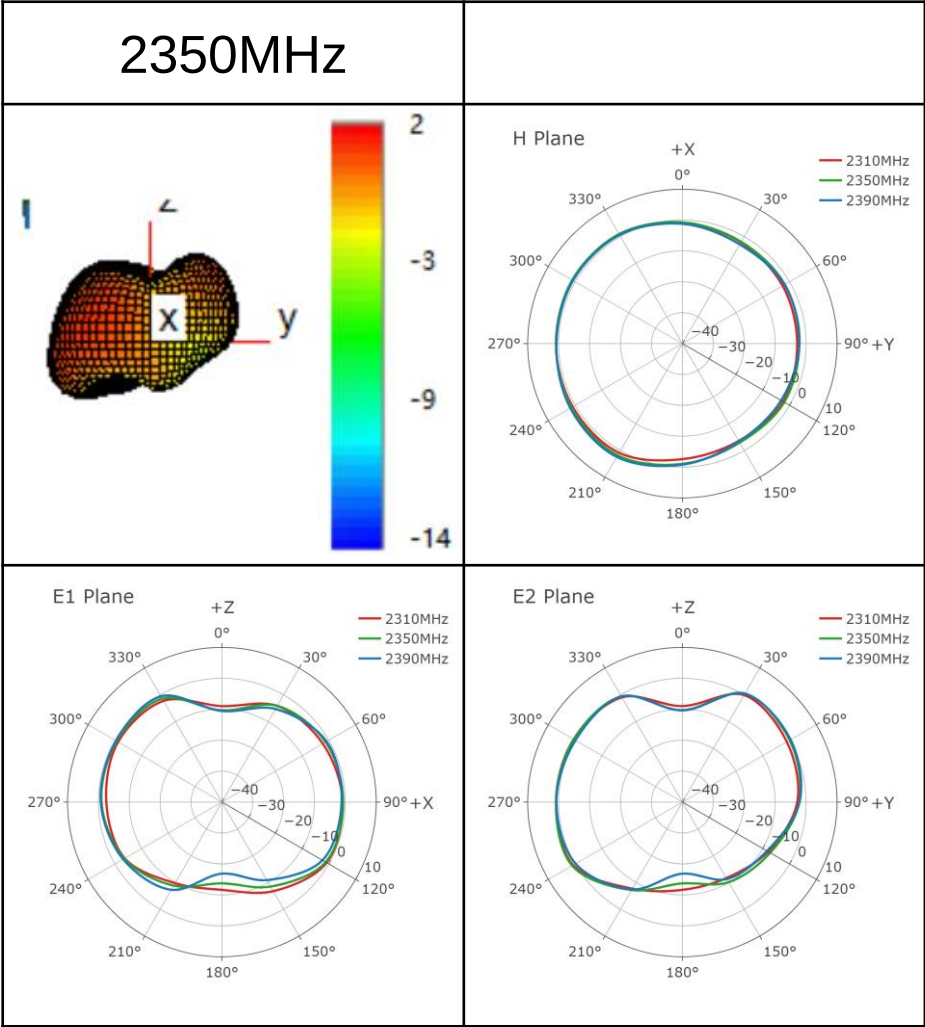
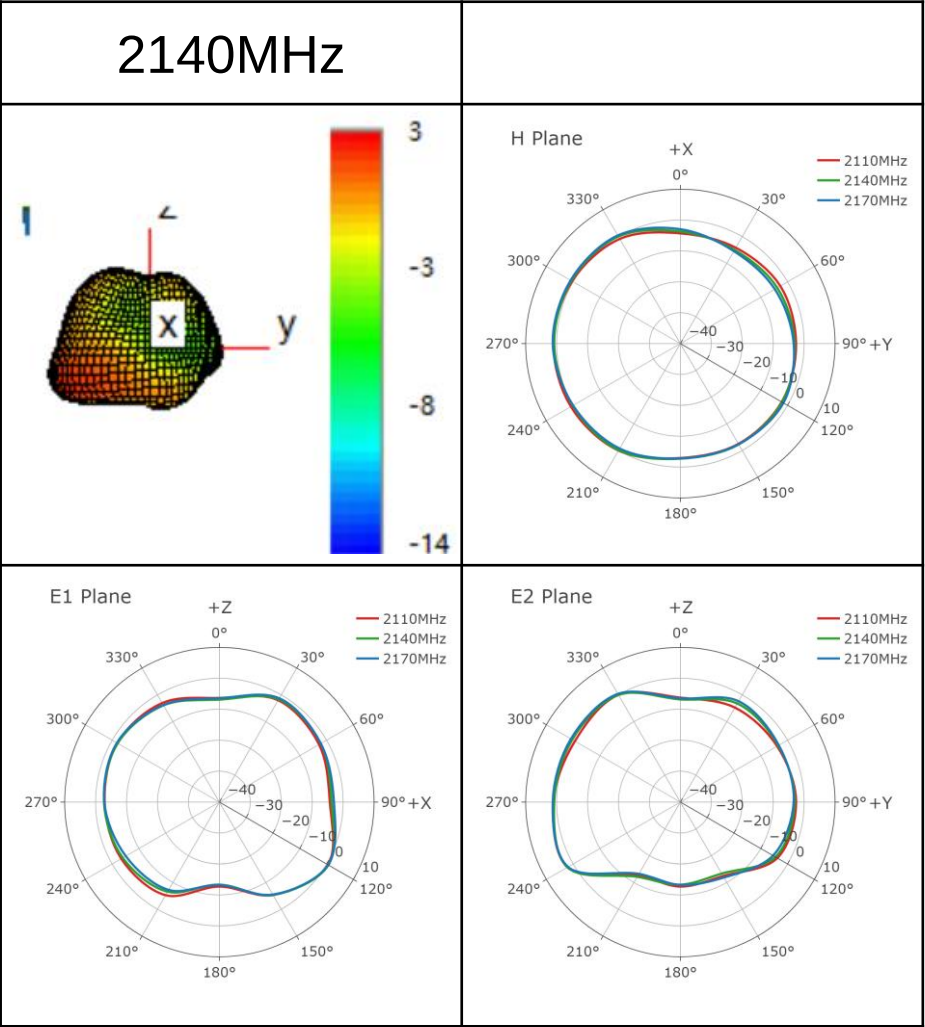
E4#1 + AA Battery + Integrated Solar



Radiation Pattern



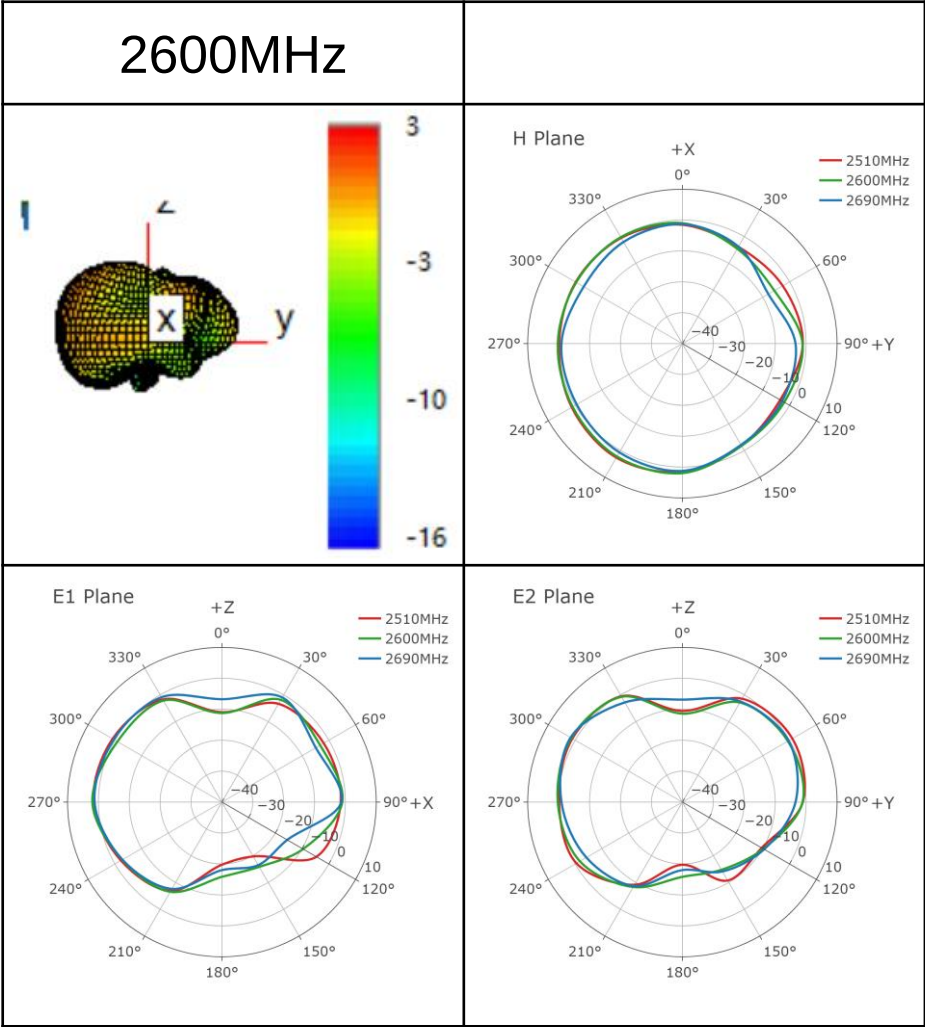
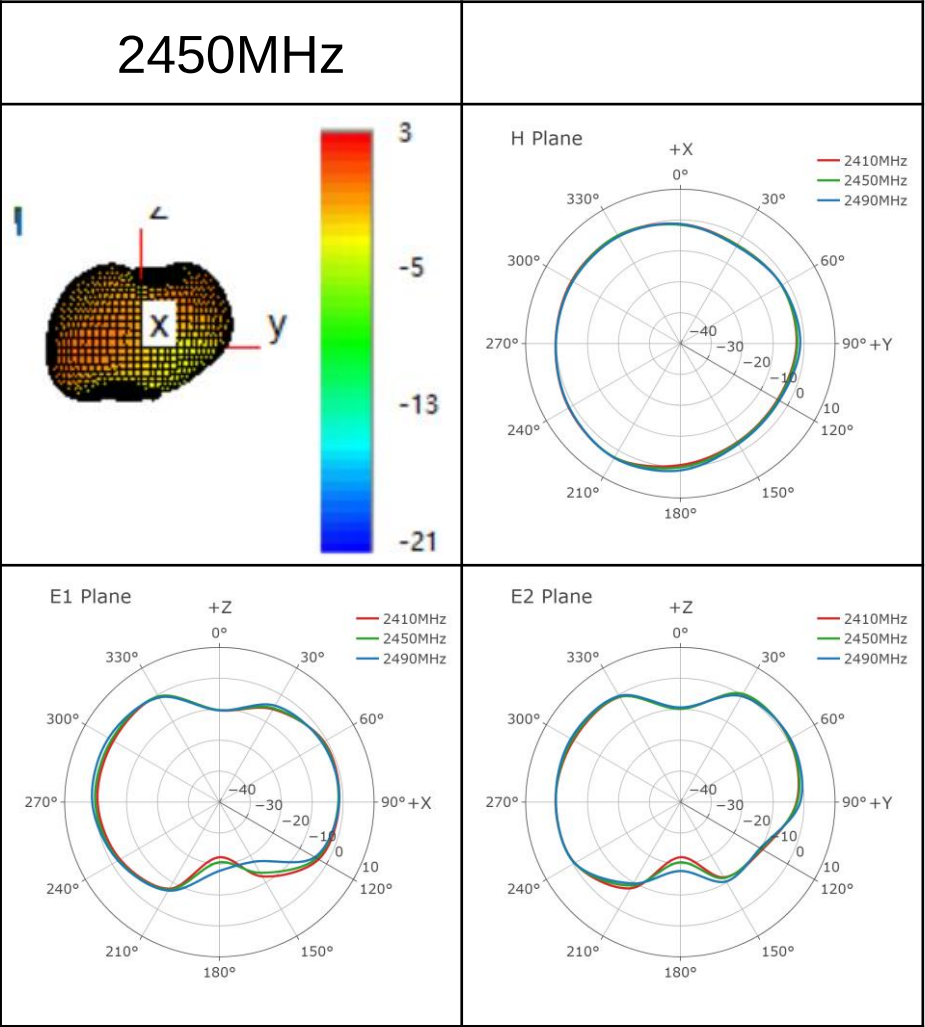
E4#1 + AA Battery + Integrated Solar



Radiation Pattern



E4#1 + AA Battery + Integrated Solar





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Thank You

Build a Smarter World

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