

Appendix B. Maximum e.i.r.p. at any elevation angle above 30 degrees

1. Maximum e.i.r.p. at any elevation angle above 30 degrees

Mode 1 (Set 1 Dipole antenna / 3.96dBi / 1TX)

Mode	Frequency	Modulation	Channel	Data Rate	Conducted Pass Setting	Chain (dBm)	Elevation angle above 30°	Elevation angle above 30°	EIRP Power Limit	Test Result
						1	Max gain (dBi)	Max EIRP (dBm)	(dBm)	
Non BF	5180MHz	OFDM	Ch36	6Mbps	79	18.55	2.337	20.89	21	Complies
	5200MHz	OFDM	Ch40	6Mbps	79	18.52	2.337	20.86	21	Complies
	5240MHz	OFDM	Ch48	6Mbps	81	18.48	2.337	20.82	21	Complies
	5180MHz	VHT20	Ch36	MCS0-Nss1	77	18.62	2.337	20.96	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	78	18.58	2.337	20.92	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	79	18.47	2.337	20.81	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	75	18.46	2.337	20.80	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	77	18.56	2.337	20.90	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	76	18.39	2.337	20.73	21	Complies

Mode 1 (Set 1 Dipole antenna / 3.96dBi / 2TX)

Mode	Frequency	Modulation	Channel	Data Rate	Conducted Pass Setting	Chain (dBm)			Elevation angle above 30°	Elevation angle above 30°	EIRP Power Limit (dBm)	Test Result
						1	2	Total	Max gain (dBi)	Max EIRP (dBm)		
Non BF	5180MHz	OFDM	Ch36	6Mbps	58	14.82	16.23	18.59	2.337	20.93	21	Complies
	5200MHz	OFDM	Ch40	6Mbps	57	14.76	16.2	18.55	2.337	20.89	21	Complies
	5240MHz	OFDM	Ch48	6Mbps	59	14.38	16.23	18.41	2.337	20.75	21	Complies
	5180MHz	VHT20	Ch36	MCS0-Nss1	62	14.79	16.11	18.51	2.337	20.85	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	62	14.69	16.31	18.59	2.337	20.92	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	64	14.62	16.27	18.53	2.337	20.87	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	64	15.53	15.51	18.53	2.337	20.87	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	65	15.33	15.64	18.50	2.337	20.84	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	60	14.61	16.3	18.55	2.337	20.88	21	Complies
BF	5180MHz	VHT20	Ch36	MCS0-Nss1	49	11.75	13.05	15.46	5.347	20.81	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	49	11.72	13.03	15.43	5.347	20.78	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	51	11.74	13.21	15.55	5.347	20.89	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	51	12.24	12.76	15.52	5.347	20.87	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	53	12.19	13.03	15.64	5.347	20.99	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	48	11.84	13.14	15.55	5.347	20.90	21	Complies

Note: BF: Beamforming

Mode 1 (Set 1 Dipole antenna / 3.96dBi / 3TX)

Mode	Frequency	Modulation	Channel	Data Rate	Conducted Pass Setting	Chain (dBm)				Elevation angle above 30°	Elevation angle above 30°	EIRP Power Limit (dBm)	Test Result
						1	2	3	Total	Max gain (dBi)	Max EIRP (dBm)		
Non BF	5180MHz	OFDM	Ch36	6Mbps	56	12.97	14.49	13.9	18.60	2.337	20.94	21	Complies
	5200MHz	OFDM	Ch40	6Mbps	56	12.91	14.43	14.16	18.65	2.337	20.99	21	Complies
	5240MHz	OFDM	Ch48	6Mbps	58	12.88	14.42	14.18	18.65	2.337	20.99	21	Complies
	5180MHz	VHT20	Ch36	MCS0-Nss1	56	12.98	14.35	13.76	18.50	2.337	20.84	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	56	12.9	14.42	14.06	18.61	2.337	20.95	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	58	12.83	14.45	14.04	18.60	2.337	20.93	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	56	13.29	13.79	14.48	18.65	2.337	20.99	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	57	13.33	13.46	14.41	18.53	2.337	20.87	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	56	13.36	14.74	13.36	18.64	2.337	20.98	21	Complies
BF	5180MHz	VHT20	Ch36	MCS0-Nss1	34	8.41	9.15	8.98	13.63	7.108	20.74	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	34	8.55	9.56	8.77	13.75	7.108	20.86	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	36	8.35	9.9	8.91	13.87	7.108	20.98	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	32	8.32	8.95	9.8	13.84	7.108	20.95	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	33	8.63	8.86	9.29	13.71	7.108	20.81	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	32	8.86	9.78	8.33	13.80	7.108	20.91	21	Complies

Note: BF: Beamforming

Mode 1 (Set 1 Dipole antenna / 3.96dBi / 4TX)

Mode	Frequency	Modulation	Channel	Data Rate	Conducted Pass Setting	Chain (dBm)					Elevation angle above 30°	Elevation angle above 30°	EIRP Power Limit (dBm)	Test Result
						1	2	3	4	Total	Max gain (dBi)	Max EIRP (dBm)		
Non BF	5180MHz	OFDM	Ch36	6Mbps	45	11.98	13.12	12.39	12.9	18.64	2.337	20.98	21	Complies
	5200MHz	OFDM	Ch40	6Mbps	44	11.91	13.33	12.53	12.56	18.63	2.337	20.97	21	Complies
	5240MHz	OFDM	Ch48	6Mbps	46	11.53	13.24	12.64	12.86	18.63	2.337	20.97	21	Complies
	5180MHz	VHT20	Ch36	MCS0-Nss1	45	12.09	13.14	12.4	12.82	18.65	2.337	20.99	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	44	11.95	13.34	12.51	12.46	18.61	2.337	20.95	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	46	11.82	13.36	12.56	12.48	18.61	2.337	20.95	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	44	12.07	12.18	12.74	12.94	18.52	2.337	20.86	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	45	11.77	12.1	12.86	12.99	18.48	2.337	20.82	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	43	11.94	13.44	11.01	13.55	18.63	2.337	20.97	21	Complies
BF	5180MHz	VHT20	Ch36	MCS0-Nss1	16	5.94	6.94	6.01	6.35	12.35	8.358	20.71	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	17	6.14	7.28	6.37	6.58	12.63	8.358	20.99	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	16	5.71	7.1	6.11	6.24	12.34	8.358	20.70	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	14	5.86	6.34	6.62	6.98	12.49	8.358	20.85	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	16	6.03	6.27	6.92	6.9	12.57	8.358	20.93	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	13	6.29	7.29	5.46	7.15	12.63	8.358	20.99	21	Complies

Note: BF: Beamforming



Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*1 / 1TX)

Mode	Frequency	Modulation	Channel	Data Rate	Conducted Pass Setting	Chain (dBm)	Elevation angle above 30°	Elevation angle above 30°	EIRP Power Limit	Test Result
						1	Max gain (dBi)	Max EIRP (dBm)	(dBm)	
Non BF	5180MHz	OFDM	Ch36	6Mbps	79	18.55	2.337	20.89	21	Complies
	5200MHz	OFDM	Ch40	6Mbps	79	18.52	2.337	20.86	21	Complies
	5240MHz	OFDM	Ch48	6Mbps	81	18.48	2.337	20.82	21	Complies
	5180MHz	VHT20	Ch36	MCS0-Nss1	77	18.62	2.337	20.96	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	78	18.58	2.337	20.92	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	79	18.47	2.337	20.81	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	75	18.46	2.337	20.80	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	77	18.56	2.337	20.90	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	76	18.39	2.337	20.73	21	Complies

Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*1, (2B)1.66dBi*1 / 2TX)

Mode	Frequency	Modulation	Channel	Data Rate	Conducted Pass Setting	Chain (dBm)			Elevation angle above 30°	Elevation angle above 30°	EIRP Power Limit (dBm)	Test Result
						1	2	Total	Max gain (dBi)	Max EIRP (dBm)		
Non BF	5180MHz	OFDM	Ch36	6Mbps	58	14.82	16.23	18.59	2.337	20.93	21	Complies
	5200MHz	OFDM	Ch40	6Mbps	57	14.76	16.2	18.55	2.337	20.89	21	Complies
	5240MHz	OFDM	Ch48	6Mbps	59	14.38	16.23	18.41	2.337	20.75	21	Complies
	5180MHz	VHT20	Ch36	MCS0-Nss1	62	14.79	16.11	18.51	2.337	20.85	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	62	14.69	16.31	18.59	2.337	20.92	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	64	14.62	16.27	18.53	2.337	20.87	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	64	15.53	15.51	18.53	2.337	20.87	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	65	15.33	15.64	18.50	2.337	20.84	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	60	14.61	16.3	18.55	2.337	20.88	21	Complies
BF	5180MHz	VHT20	Ch36	MCS0-Nss1	62	14.79	16.11	18.51	2.337	20.85	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	62	14.69	16.31	18.59	2.337	20.92	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	64	14.62	16.27	18.53	2.337	20.87	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	64	15.53	15.51	18.53	2.337	20.87	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	65	15.33	15.64	18.50	2.337	20.84	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	60	14.61	16.3	18.55	2.337	20.88	21	Complies

Note: BF: Beamforming



Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*2, (2B)1.66dBi*1 / 3TX)

Mode	Frequency	Modulation	Channel	Data Rate	Conducted Pass Setting	Chain (dBm)				Elevation angle above 30°	Elevation angle above 30°	EIRP Power Limit (dBm)	Test Result
						1	2	3	Total	Max gain (dBi)	Max EIRP (dBm)		
Non BF	5180MHz	OFDM	Ch36	6Mbps	56	12.97	14.49	13.9	18.60	2.337	20.94	21	Complies
	5200MHz	OFDM	Ch40	6Mbps	56	12.91	14.43	14.16	18.65	2.337	20.99	21	Complies
	5240MHz	OFDM	Ch48	6Mbps	58	12.88	14.42	14.18	18.65	2.337	20.99	21	Complies
	5180MHz	VHT20	Ch36	MCS0-Nss1	56	12.98	14.35	13.76	18.50	2.337	20.84	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	56	12.9	14.42	14.06	18.61	2.337	20.95	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	58	12.83	14.45	14.04	18.60	2.337	20.93	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	56	13.29	13.79	14.48	18.65	2.337	20.99	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	57	13.33	13.46	14.41	18.53	2.337	20.87	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	56	13.36	14.74	13.36	18.64	2.337	20.98	21	Complies
BF	5180MHz	VHT20	Ch36	MCS0-Nss1	49	11.41	12.78	12.2	16.94	3.803	20.74	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	49	11.24	12.83	12.56	17.03	3.803	20.84	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	41	11.44	12.83	12.57	17.09	3.803	20.89	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	50	11.72	12.23	12.92	17.09	3.803	20.89	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	51	11.58	12.02	12.83	16.95	3.803	20.75	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	50	11.75	13.37	11.86	17.16	3.803	20.97	21	Complies

Note: BF: Beamforming

Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*2, (2B)1.66dBi*2 / 4TX)

Mode	Frequency	Modulation	Channel	Data Rate	Conducted Pass Setting	Chain (dBm)					Elevation angle above 30°	Elevation angle above 30°	EIRP Power Limit (dBm)	Test Result
						1	2	3	4	Total	Max gain (dBi)	Max EIRP (dBm)		
Non BF	5180MHz	OFDM	Ch36	6Mbps	45	11.98	13.12	12.39	12.9	18.64	2.337	20.98	21	Complies
	5200MHz	OFDM	Ch40	6Mbps	44	11.91	13.33	12.53	12.56	18.63	2.337	20.97	21	Complies
	5240MHz	OFDM	Ch48	6Mbps	46	11.53	13.24	12.64	12.86	18.63	2.337	20.97	21	Complies
	5180MHz	VHT20	Ch36	MCS0-Nss1	45	12.09	13.14	12.4	12.82	18.65	2.337	20.99	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	44	11.95	13.34	12.51	12.46	18.61	2.337	20.95	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	46	11.82	13.36	12.56	12.48	18.61	2.337	20.95	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	44	12.07	12.18	12.74	12.94	18.52	2.337	20.86	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	45	11.77	12.1	12.86	12.99	18.48	2.337	20.82	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	43	11.94	13.44	11.01	13.55	18.63	2.337	20.97	21	Complies
BF	5180MHz	VHT20	Ch36	MCS0-Nss1	37	10.35	11.16	10.23	10.98	16.72	4.253	20.97	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	37	10.32	11.21	10.54	10.47	16.67	4.253	20.92	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	38	10.33	11.21	10.45	10.76	16.72	4.253	20.97	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	37	10.12	10.32	11.06	11.21	16.72	4.253	20.98	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	37	10.11	10.13	11.09	11.31	16.71	4.253	20.97	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	35	10.06	11.03	10.12	11.33	16.69	4.253	20.94	21	Complies

Note: BF: Beamforming



Mode 3 (Set 6 Panel antenna / 2.66dBi / 1TX)

Mode	Frequency	Modulation	Channel	Data Rate	Conducted Pass Setting	Chain (dBm)	Elevation angle above 30°	Elevation angle above 30°	EIRP Power Limit	Test Result
						1	Max gain (dBi)	Max EIRP (dBm)	(dBm)	
Non BF	5180MHz	OFDM	Ch36	6Mbps	81	19.13	1.863	20.99	21	Complies
	5200MHz	OFDM	Ch40	6Mbps	81	19.02	1.863	20.88	21	Complies
	5240MHz	OFDM	Ch48	6Mbps	83	19.09	1.863	20.95	21	Complies
	5180MHz	VHT20	Ch36	MCS0-Nss1	79	19.12	1.860	20.98	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	80	18.81	1.860	20.67	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	80	19.02	1.860	20.88	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	77	19.04	1.860	20.90	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	79	19.09	1.860	20.95	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	77	19.02	1.860	20.88	21	Complies

Mode 3 (Set 6 Panel antenna / 2.66dBi / 2TX)

Mode	Frequency	Modulation	Channel	Data Rate	Conducted Pass Setting	Chain (dBm)			Elevation angle above 30°	Elevation angle above 30°	EIRP Power Limit (dBm)	Test Result
						1	2	Total	Max gain (dBi)	Max EIRP (dBm)		
Non BF	5180MHz	OFDM	Ch36	6Mbps	60	15.33	16.72	19.09	1.863	20.95	21	Complies
	5200MHz	OFDM	Ch40	6Mbps	60	15.24	16.85	19.13	1.863	20.99	21	Complies
	5240MHz	OFDM	Ch48	6Mbps	62	15.14	16.91	19.12	1.863	20.99	21	Complies
	5180MHz	VHT20	Ch36	MCS0-Nss1	64	15.32	16.65	19.05	1.863	20.91	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	63	14.91	16.58	18.84	1.863	20.70	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	65	14.87	16.77	18.93	1.863	20.80	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	66	15.81	16.05	18.94	1.863	20.80	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	67	15.81	16.28	19.06	1.863	20.92	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	62	15.02	16.69	18.95	1.863	20.81	21	Complies
BF	5180MHz	VHT20	Ch36	MCS0-Nss1	51	12.53	13.37	15.98	4.873	20.85	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	51	12.46	13.65	16.11	4.873	20.98	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	53	12.31	13.71	16.08	4.873	20.95	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	53	12.84	13.32	16.10	4.873	20.97	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	54	12.63	13.14	15.90	4.873	20.78	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	50	12.36	13.7	16.09	4.873	20.97	21	Complies

Note: BF: Beamforming

Mode 3 (Set 6 Panel antenna / 2.66dBi / 3TX)

Mode	Frequency	Modulation	Channel	Data Rate	Conducted Pass Setting	Chain (dBm)				Elevation angle above 30°	Elevation angle above 30°	EIRP Power Limit (dBm)	Test Result
						1	2	3	Total	Max gain (dBi)	Max EIRP (dBm)		
Non BF	5180MHz	OFDM	Ch36	6Mbps	57	13.33	14.61	14.19	18.85	1.863	20.71	21	Complies
	5200MHz	OFDM	Ch40	6Mbps	57	13.32	14.83	14.4	19.00	1.863	20.86	21	Complies
	5240MHz	OFDM	Ch48	6Mbps	60	13.37	14.89	14.53	19.08	1.863	20.94	21	Complies
	5180MHz	VHT20	Ch36	MCS0-Nss1	58	13.57	14.81	14.33	19.04	1.863	20.90	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	58	13.35	14.74	14.31	18.94	1.863	20.81	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	60	13.42	14.08	14.5	18.79	1.863	20.66	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	58	13.83	14.2	14.81	19.07	1.863	20.93	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	59	13.73	14.18	14.78	19.02	1.863	20.89	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	57	13.59	15.16	13.49	18.92	1.863	20.78	21	Complies
BF	5180MHz	VHT20	Ch36	MCS0-Nss1	36	9.32	9.75	9.51	14.30	6.634	20.94	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	36	8.91	10.38	9.25	14.33	6.634	20.97	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	38	8.96	10.2	9.41	14.33	6.634	20.96	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	34	8.85	8.91	10.23	14.15	6.634	20.78	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	35	9.14	9.28	9.72	14.16	6.634	20.79	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	34	9.37	10.35	8.72	14.30	6.634	20.94	21	Complies

Note: BF: Beamforming



Mode 3 (Set 6 Panel antenna / 2.66dBi / 4TX)

Mode	Frequency	Modulation	Channel	Data Rate	Conducted Pass Setting	Chain (dBm)					Elevation angle above 30°	Elevation angle above 30°	EIRP Power Limit (dBm)	Test Result
						1	2	3	4	Total	Max gain (dBi)	Max EIRP (dBm)		
Non BF	5180MHz	OFDM	Ch36	6Mbps	46	12.36	13.41	13.02	13.13	19.02	1.863	20.88	21	Complies
	5200MHz	OFDM	Ch40	6Mbps	46	12.32	13.51	13.28	13.18	19.12	1.863	20.98	21	Complies
	5240MHz	OFDM	Ch48	6Mbps	48	11.98	13.59	13.04	13.17	19.00	1.863	20.87	21	Complies
	5180MHz	VHT20	Ch36	MCS0-Nss1	46	12.25	13.57	13.08	13.11	19.05	1.863	20.91	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	46	12.24	13.87	13.14	12.66	19.04	1.863	20.90	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	49	12.21	13.56	13.15	13.39	19.13	1.863	20.99	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	47	12.52	12.87	13.42	13.54	19.13	1.863	20.99	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	48	12.48	12.94	13.32	13.62	19.13	1.863	20.99	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	45	12.48	13.71	11.61	13.81	19.02	1.863	20.88	21	Complies
BF	5180MHz	VHT20	Ch36	MCS0-Nss1	18	6.52	7.31	6.58	6.83	12.84	7.884	20.73	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	18	6.3	7.51	6.98	6.81	12.94	7.884	20.83	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	20	6.47	7.74	6.8	7.04	13.06	7.884	20.94	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	16	6.28	6.81	7.52	7.32	13.03	7.884	20.91	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	18	6.52	6.83	7.36	7.56	13.11	7.884	20.99	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	14	6.44	7.43	5.65	7.61	12.87	7.884	20.76	21	Complies

Note: BF: Beamforming



Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 1TX)

Mode	Frequency	Modulation	Channel	Data Rate	Conducted Pass Setting	Chain (dBm)	Elevation angle above 30°	Elevation angle above 30°	EIRP Power Limit	Test Result
						1	Max gain (dBi)	Max EIRP (dBm)	(dBm)	
Non BF	5180MHz	OFDM	Ch36	6Mbps	86	20.36	0.608	20.97	21	Complies
	5200MHz	OFDM	Ch40	6Mbps	86	20.37	0.608	20.98	21	Complies
	5240MHz	OFDM	Ch48	6Mbps	87	20.26	0.608	20.87	21	Complies
	5180MHz	VHT20	Ch36	MCS0-Nss1	83	20.21	0.608	20.82	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	83	20.10	0.608	20.71	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	85	20.15	0.608	20.76	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	82	20.23	0.608	20.84	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	83	20.33	0.608	20.94	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	81	20.14	0.608	20.75	21	Complies



Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 2TX)

Mode	Frequency	Modulation	Channel	Data Rate	Conducted Pass Setting	Chain (dBm)			Elevation angle above 30°	Elevation angle above 30°	EIRP Power Limit (dBm)	Test Result
						1	2	Total	Max gain (dBi)	Max EIRP (dBm)		
Non BF	5180MHz	OFDM	Ch36	6Mbps	65	16.44	17.93	20.26	0.608	20.87	21	Complies
	5200MHz	OFDM	Ch40	6Mbps	65	16.53	18.06	20.37	0.608	20.98	21	Complies
	5240MHz	OFDM	Ch48	6Mbps	66	16.12	17.97	20.15	0.608	20.76	21	Complies
	5180MHz	VHT20	Ch36	MCS0-Nss1	69	16.53	17.94	20.30	0.608	20.91	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	69	16.49	18.11	20.39	0.608	20.99	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	70	16.14	17.89	20.11	0.608	20.72	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	71	17.23	17.49	20.37	0.608	20.98	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	72	17.17	17.57	20.38	0.608	20.99	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	67	16.31	17.92	20.20	0.608	20.81	21	Complies
BF	5180MHz	VHT20	Ch36	MCS0-Nss1	69	16.53	17.94	20.30	0.608	20.91	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	69	16.49	18.11	20.39	0.608	20.99	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	70	16.14	17.89	20.11	0.608	20.72	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	71	17.23	17.49	20.37	0.608	20.98	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	72	17.17	17.57	20.38	0.608	20.99	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	67	16.31	17.92	20.20	0.608	20.81	21	Complies

Note: BF: Beamforming



Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 3TX)

Mode	Frequency	Modulation	Channel	Data Rate	Conducted Pass Setting	Chain (dBm)				Elevation angle above 30°	Elevation angle above 30°	EIRP Power Limit (dBm)	Test Result
						1	2	3	Total	Max gain (dBi)	Max EIRP (dBm)		
Non BF	5180MHz	OFDM	Ch36	6Mbps	63	14.88	15.94	15.56	20.25	0.608	20.86	21	Complies
	5200MHz	OFDM	Ch40	6Mbps	64	14.94	15.23	16.06	20.21	0.608	20.82	21	Complies
	5240MHz	OFDM	Ch48	6Mbps	66	14.85	15.68	16.01	20.31	0.608	20.92	21	Complies
	5180MHz	VHT20	Ch36	MCS0-Nss1	63	14.77	16.22	15.41	20.28	0.608	20.89	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	63	14.72	16.16	15.68	20.33	0.608	20.94	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	65	14.42	16.21	15.57	20.23	0.608	20.84	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	63	15.07	15.05	16.12	20.21	0.608	20.82	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	64	14.86	15.16	16.16	20.20	0.608	20.81	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	62	14.81	16.25	14.86	20.13	0.608	20.74	21	Complies
BF	5180MHz	VHT20	Ch36	MCS0-Nss1	56	12.98	14.37	13.54	18.44	2.369	20.81	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	56	12.79	14.43	13.76	18.48	2.369	20.85	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	58	12.49	14.32	13.67	18.33	2.369	20.70	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	56	12.48	13.26	14.88	18.43	2.369	20.80	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	56	12.98	13.45	14.56	18.49	2.369	20.85	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	56	12.98	13.89	13.86	18.37	2.369	20.74	21	Complies

Note: BF: Beamforming

Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 4TX)

Mode	Frequency	Modulation	Channel	Data Rate	Conducted Pass Setting	Chain (dBm)					Elevation angle above 30°	Elevation angle above 30°	EIRP Power Limit (dBm)	Test Result
						1	2	3	4	Total	Max gain (dBi)	Max EIRP (dBm)		
Non BF	5180MHz	OFDM	Ch36	6Mbps	51	13.55	14.72	14.12	14.24	20.20	0.608	20.81	21	Complies
	5200MHz	OFDM	Ch40	6Mbps	51	13.46	14.92	14.36	14.08	20.26	0.608	20.87	21	Complies
	5240MHz	OFDM	Ch48	6Mbps	53	13.17	14.68	14.42	14.51	20.25	0.608	20.86	21	Complies
	5180MHz	VHT20	Ch36	MCS0-Nss1	52	13.77	14.71	14.31	14.42	20.34	0.608	20.94	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	52	13.59	15.04	14.46	14.22	20.38	0.608	20.99	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	54	13.43	14.9	14.62	14.37	20.38	0.608	20.99	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	52	13.89	14.01	14.56	14.88	20.37	0.608	20.98	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	53	13.41	14.06	14.43	15.13	20.32	0.608	20.93	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	50	13.72	14.84	13.1	14.84	20.21	0.608	20.82	21	Complies
BF	5180MHz	VHT20	Ch36	MCS0-Nss1	41	10.78	11.32	11.31	11.21	17.18	3.618	20.80	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	41	10.77	11.45	11.46	11.25	17.26	3.618	20.88	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	43	10.87	11.12	11.44	11.78	17.34	3.618	20.95	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	41	10.89	11.01	11.56	11.78	17.35	3.618	20.96	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	42	10.41	11.06	11.43	11.13	17.04	3.618	20.66	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	39	10.74	11.24	11.34	11.44	17.22	3.618	20.84	21	Complies

Note: BF: Beamforming



Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi / 1TX)

Mode	Frequency	Modulation	Channel	Data Rate	Conducted Pass Setting	Chain (dBm)	Elevation angle above 30°	Elevation angle above 30°	EIRP Power Limit	Test Result
						1	Max gain (dBi)	Max EIRP (dBm)	(dBm)	
Non BF	5180MHz	OFDM	Ch36	6Mbps	74	17.57	3.400	20.97	21	Complies
	5200MHz	OFDM	Ch40	6Mbps	76	17.54	3.400	20.94	21	Complies
	5240MHz	OFDM	Ch48	6Mbps	76	17.53	3.400	20.93	21	Complies
	5180MHz	VHT20	Ch36	MCS0-Nss1	74	17.42	3.400	20.82	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	76	17.48	3.400	20.88	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	76	17.45	3.400	20.85	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	74	17.41	3.400	20.81	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	74	17.31	3.400	20.71	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	73	17.49	3.400	20.89	21	Complies

Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi / 2TX)

Mode	Frequency	Modulation	Channel	Data Rate	Conducted Pass Setting	Chain (dBm)			Elevation angle above 30°	Elevation angle above 30°	EIRP Power Limit (dBm)	Test Result
						1	2	Total	Max gain (dBi)	Max EIRP (dBm)		
Non BF	5180MHz	OFDM	Ch36	6Mbps	54	13.48	15.29	17.49	3.400	20.89	21	Complies
	5200MHz	OFDM	Ch40	6Mbps	54	13.33	15.08	17.30	3.400	20.70	21	Complies
	5240MHz	OFDM	Ch48	6Mbps	55	13.54	15.22	17.47	3.400	20.87	21	Complies
	5180MHz	VHT20	Ch36	MCS0-Nss1	54	13.44	15.38	17.53	3.400	20.93	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	54	13.21	15.12	17.28	3.400	20.68	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	55	13.47	15.27	17.47	3.400	20.87	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	57	14.03	14.98	17.54	3.400	20.94	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	57	14.13	14.71	17.44	3.400	20.84	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	53	13.3	15.21	17.37	3.400	20.77	21	Complies
BF	5180MHz	VHT20	Ch36	MCS0-Nss1	42	10.57	12.27	14.51	6.410	20.92	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	42	10.36	12.08	14.31	6.410	20.73	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	43	10.87	12.07	14.52	6.410	20.93	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	45	11.18	11.83	14.53	6.410	20.94	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	45	11.15	11.87	14.54	6.410	20.95	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	39	10.34	12.48	14.55	6.410	20.96	21	Complies

Note: BF: Beamforming

Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi / 3TX)

Mode	Frequency	Modulation	Channel	Data Rate	Conducted Pass Setting	Chain (dBm)				Elevation angle above 30°	Elevation angle above 30°	EIRP Power Limit (dBm)	Test Result
						1	2	3	Total	Max gain (dBi)	Max EIRP (dBm)		
Non BF	5180MHz	OFDM	Ch36	6Mbps	52	11.57	13.46	12.94	17.50	3.400	20.90	21	Complies
	5200MHz	OFDM	Ch40	6Mbps	52	11.29	13.59	12.91	17.47	3.400	20.87	21	Complies
	5240MHz	OFDM	Ch48	6Mbps	53	11.54	13.41	12.82	17.43	3.400	20.83	21	Complies
	5180MHz	VHT20	Ch36	MCS0-Nss1	52	11.52	13.18	12.9	17.36	3.400	20.76	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	52	11.42	13.08	13.09	17.37	3.400	20.77	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	53	11.63	13.22	12.81	17.38	3.400	20.78	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	52	11.56	12.34	13.46	17.30	3.400	20.70	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	54	11.95	12.54	13.21	17.37	3.400	20.77	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	52	11.52	13.46	12.13	17.22	3.400	20.62	21	Complies
BF	5180MHz	VHT20	Ch36	MCS0-Nss1	32	6.95	8.63	8.04	12.70	8.171	20.87	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	32	6.79	8.43	8.41	12.71	8.171	20.88	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	32	7.31	8.32	7.81	12.60	8.171	20.78	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	30	7.12	7.64	8.37	12.51	8.171	20.68	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	30	6.92	7.61	8.63	12.55	8.171	20.72	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	30	7.69	8.56	7.28	12.65	8.171	20.82	21	Complies

Note: BF: Beamforming

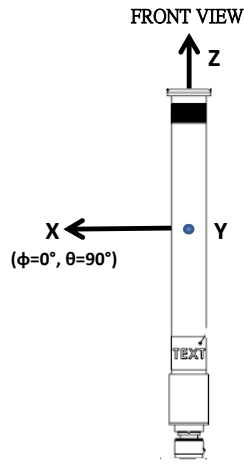
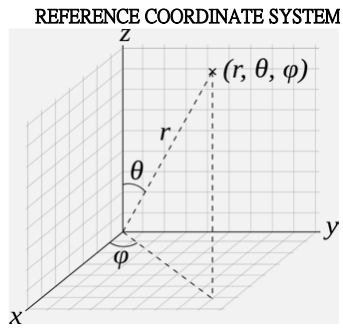


Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi, Chain 4: 5.9dBi / 4TX)

Mode	Frequency	Modulation	Channel	Data Rate	Conducted Pass Setting	Chain (dBm)					Elevation angle above 30°	Elevation angle above 30°	EIRP Power Limit (dBm)	Test Result
						1	2	3	4	Total	Max gain (dBi)	Max EIRP (dBm)		
Non BF	5180MHz	OFDM	Ch36	6Mbps	40	10.88	12.17	11.57	11.26	17.52	3.400	20.92	21	Complies
	5200MHz	OFDM	Ch40	6Mbps	40	10.42	11.86	11.56	11.13	17.30	3.400	20.70	21	Complies
	5240MHz	OFDM	Ch48	6Mbps	42	10.97	12.26	11.61	11.23	17.57	3.400	20.97	21	Complies
	5180MHz	VHT20	Ch36	MCS0-Nss1	40	10.84	12.08	11.58	11.09	17.44	3.400	20.84	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	40	10.74	11.83	11.58	11.24	17.39	3.400	20.79	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	42	10.97	12.2	11.62	11.21	17.55	3.400	20.95	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	40	10.23	10.92	12.12	11.47	17.26	3.400	20.66	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	42	10.82	11.34	12.07	11.36	17.44	3.400	20.84	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	40	10.44	12.42	9.84	12.13	17.36	3.400	20.76	21	Complies
BF	5180MHz	VHT20	Ch36	MCS0-Nss1	13	4.55	6.24	5.67	4.91	11.41	9.421	20.83	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	14	4.62	5.83	5.64	4.82	11.28	9.421	20.70	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	14	4.89	5.79	5.54	4.91	11.32	9.421	20.74	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	11	4.16	5.05	6.28	5.51	11.34	9.421	20.76	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	12	4.56	4.85	5.98	5.33	11.23	9.421	20.65	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	10	4.73	5.87	4.14	5.65	11.17	9.421	20.59	21	Complies

Note: BF: Beamforming

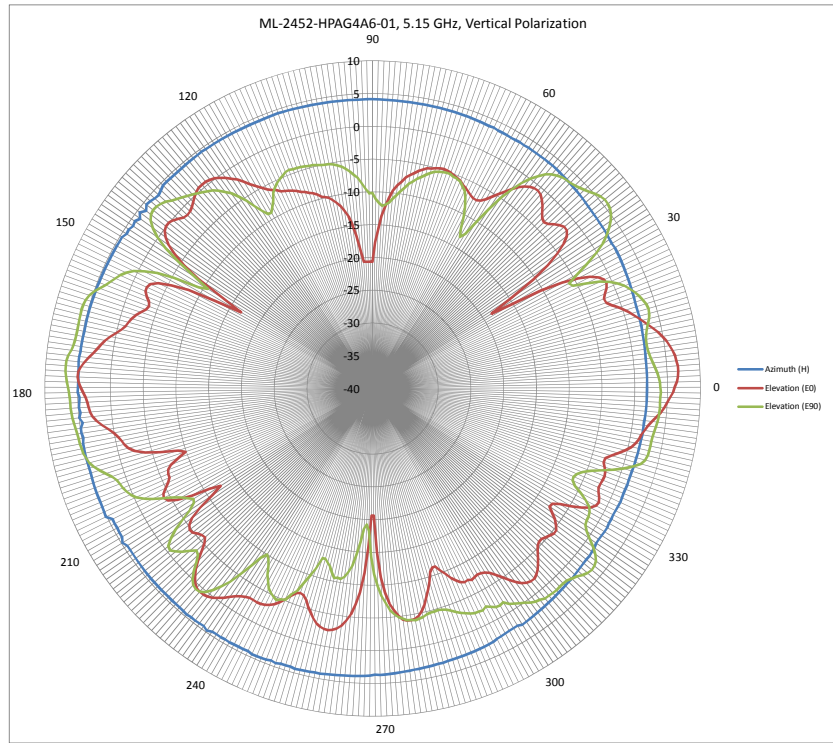
Revisions	Date	Change
0	2014/12/12	Initial release
1	2014/12/16	AZ/EL data orientation



Azimuth (H) is in XY plane, angle is phi (X-axis reference)
Elevation (E0) is in XZ plane, angle is theta (Z-axis reference)
Elevation (E90) is in YZ plane, angle is theta (Z-axis reference)

ML-2452-HPAG4A6-01
Vertical (Z-axis) polarization

Angle (°)	XY Plane H (dBi)	XZ Plane E0 (dBi)	YZ Plane E90 (dBi)	Label
90	4.141	-20.629	-10.173	90
89	4.109	-17.7	-11.126	
88	4.079	-15.648	-11.632	
87	4.083	-13.642	-12.053	
86	4.088	-12.155	-11.867	
85	4.095	-10.756	-11.537	
84	4.069	-9.569	-10.917	
83	4.061	-8.748	-10.327	
82	4.057	-8.142	-9.678	
81	4.061	-7.388	-9.065	
80	4.061	-6.95	-8.292	
79	4.053	-6.507	-7.84	
78	4.055	-6.023	-7.272	
77	4.05	-5.713	-6.842	
76	4.02	-5.36	-6.45	
75	4.028	-5.248	-5.953	
74	4.039	-5.031	-5.604	
73	3.999	-4.891	-5.446	
72	3.964	-4.797	-5.312	
71	3.934	-4.889	-5.169	
70	3.905	-4.973	-5.199	
69	3.906	-5.186	-5.442	
68	3.862	-5.396	-5.482	
67	3.837	-5.573	-5.683	
66	3.824	-5.984	-6.222	
65	3.891	-6.281	-6.686	
64	3.758	-6.62	-7.632	
63	3.781	-6.967	-8.905	
62	3.742	-7.151	-10.291	
61	3.723	-7.16	-12.161	
60	3.757	-6.903	-13.327	60
59	3.767	-6.356	-12.562	
58	3.72	-5.525	-10.026	
57	3.735	-4.698	-7.336	
56	3.733	-3.782	-4.92	
55	3.734	-2.91	-2.987	
54	3.725	-2.081	-1.342	
53	3.712	-1.468	0.019	
52	3.71	-0.991	1.064	
51	3.726	-0.732	1.959	
50	3.658	-0.628	2.577	
49	3.606	-0.847	2.966	
48	3.543	-1.328	3.286	
47	3.503	-1.903	3.438	
46	3.431	-2.664	3.532	
45	3.389	-3.347	3.711	
44	3.355	-3.581	3.993	
43	3.287	-3.279	4.272	
42	3.219	-2.615	4.703	
41	3.116	-2.1	5.113	
40	3.056	-1.732	5.462	
39	3.017	-1.792	5.677	
38	2.972	-2.319	5.65	
37	2.924	-3.416	5.453	
36	2.887	-5.179	5.034	
35	2.859	-7.301	4.444	
34	2.851	-10.373	3.627	
33	2.794	-14.647	2.65	
32	2.76	-18.552	1.457	
31	2.658	-15.167	-0.184	
30	2.734	-10.278	-2.243	30
29	2.729	-6.825	-4.28	
28	2.672	-4.438	-6.014	
27	2.635	-2.661	-5.665	
26	2.573	-1.602	-3.723	
25	2.502	-0.921	-1.695	
24	2.493	-0.894	-0.291	
23	2.389	-1.16	0.699	
22	2.37	-1.743	1.491	
21	2.309	-2.153	2.079	
20	2.276	-2.024	2.593	
19	2.216	-1.393	3.037	
18	2.161	-0.457	3.396	
17	2.127	0.37	3.687	
16	2.128	1.073	3.816	
15	2.123	1.744	3.725	
14	2.125	2.374	3.515	
13	2.104	3.049	3.145	
12	2.056	3.707	2.815	
11	2.022	4.359	2.577	
10	2	4.919	2.39	
9	2.001	5.394	2.339	
8	1.992	5.795	2.387	
7	1.976	6.117	2.501	
6	1.912	6.394	2.688	
5	1.937	6.549	2.955	
4	1.882	6.689	3.231	
3	1.909	6.692	3.479	
2	1.902	6.627	3.704	
1	1.865	6.433	3.85	
0	1.836	6.106	3.891	0
359	1.884	5.829	3.984	
358	1.875	5.397	3.93	
357	1.903	5.036	3.892	
356	1.853	4.635	3.921	
355	1.845	4.143	3.899	
354	1.788	3.516	3.847	
353	1.759	2.907	3.759	
352	1.739	2.392	3.599	
351	1.74	1.962	3.478	
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349	1.681	1.38	3.28	
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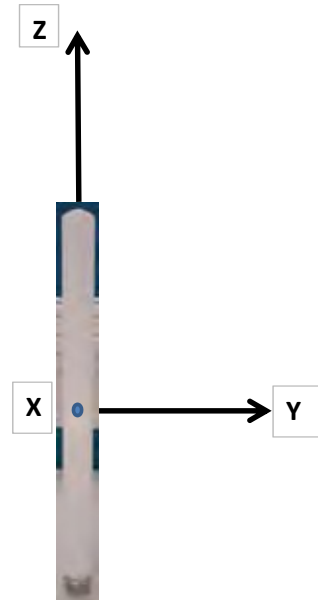
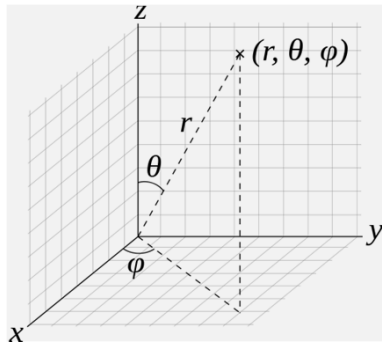
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346	1.649	-0.31	3.226
345	1.569	-1.241	3.018
344	1.569	-2.234	2.481
343	1.581	-2.931	1.411
342	1.531	-2.997	0.109
341	1.514	-2.624	-1.38
340	1.502	-2.292	-3.001
339	1.518	-2.18	-4.474
338	1.507	-2.211	-5.523
337	1.501	-2.308	-6.2
336	1.506	-2.342	-6.501
335	1.571	-2.068	-6.443
334	1.551	-1.654	-5.754
333	1.494	-1.352	-4.45
332	1.463	-1.498	-3.269
331	1.484	-2.149	-2.318
330	1.547	-3.313	-1.902 330
329	1.617	-4.779	-1.677
328	1.59	-6.403	-1.646
327	1.494	-7.42	-1.437
326	1.449	-7.544	-0.748
325	1.482	-6.714	0.26
324	1.613	-5.779	1.411
323	1.725	-5.11	2.344
322	1.783	-4.604	3.049
321	1.765	-4.594	3.329
320	1.768	-4.885	3.424
319	1.809	-5.168	3.205
318	1.884	-5.495	2.832
317	1.952	-5.48	2.333
316	2.008	-5.224	2.035
315	1.947	-4.629	1.668
314	1.983	-3.94	1.608
313	2.067	-3.289	1.577
312	2.155	-2.655	1.637
311	2.236	-2.19	1.588
310	2.259	-1.916	1.482
309	2.264	-1.956	1.438
308	2.318	-2.191	1.128
307	2.375	-2.606	0.912
306	2.448	-3.335	0.563
305	2.492	-4.234	0.095
304	2.552	-5.128	-0.299
303	2.607	-5.939	-0.7
302	2.651	-6.683	-1.091
301	2.387	-7.111	-1.787
300	2.388	-7.337	-1.589 300
299	2.428	-7.423	-1.744
298	2.502	-7.325	-2.117
297	2.591	-7.126	-2.538
296	2.662	-7.382	-2.192
295	2.843	-7.312	-2.3
294	2.89	-7.549	-2.373
293	2.945	-8.145	-2.609
292	2.966	-8.727	-2.928
291	2.995	-9.619	-3.234
290	2.992	-10.335	-3.654
289	3.011	-11.218	-4.065
288	3.04	-11.209	-4.413
287	3.08	-10.647	-4.64
286	3.114	-9.301	-4.763
285	3.121	-8.252	-4.691
284	3.187	-7.104	-4.713
283	3.197	-6.01	-4.536
282	3.254	-5.225	-4.315
281	3.281	-4.594	-4.193
280	3.298	-4.236	-4.073
279	3.345	-4.154	-4.205
278	3.331	-4.222	-4.273
277	3.447	-4.457	-4.585
276	3.456	-5.117	-4.924
275	3.527	-6.006	-5.407
274	3.589	-7.112	-6.052
273	3.634	-8.81	-7.223
272	3.686	-11.185	-8.341
271	3.706	-14.995	-9.853
270	3.639	-20.629	-11.689 270
269	3.797	-20.629	-14.293
268	3.85	-15.801	-18.261
267	3.871	-11.781	-19.247
266	3.903	-8.855	-18.531
265	3.96	-6.929	-16.567
264	3.988	-5.423	-14.559
263	4.052	-4.353	-12.78
262	4.07	-3.514	-11.787
261	4.102	-2.972	-10.959
260	4.174	-2.658	-10.574
259	4.238	-2.527	-10.682
258	4.206	-2.589	-10.509
257	4.275	-2.804	-11.236
256	4.303	-3.175	-12.13
255	4.327	-3.788	-12.597
254	4.371	-4.522	-13.039
253	4.235	-5.297	-13.005
252	4.251	-6.228	-11.21
251	4.241	-6.777	-9.953
250	4.412	-6.928	-8.564
249	4.282	-6.729	-7.081
248	4.419	-6.04	-6.319
247	4.476	-5.262	-5.112
246	4.459	-4.492	-4.929
245	4.489	-3.871	-4.576
244	4.321	-3.447	-4.812
243	4.355	-3.166	-5.16
242	4.377	-3.003	-5.617
241	4.4	-2.893	-6.517

240	4.441	-2.977	-7.393	240
239	4.413	-2.953	-8.634	
238	4.427	-2.742	-9.505	
237	4.424	-2.447	-10.002	
236	4.451	-2.024	-9.107	
235	4.754	-1.47	-7.229	
234	4.473	-0.844	-5.265	
233	4.497	-0.318	-3.394	
232	4.555	0.174	-1.945	
231	4.546	0.505	-0.737	
230	4.638	0.689	0.171	
229	4.564	0.727	0.717	
228	4.492	0.539	0.816	
227	4.51	0.127	0.575	
226	4.552	-0.562	-0.055	
225	4.503	-1.47	-1.033	
224	4.505	-2.59	-2.242	
223	4.535	-3.957	-3.203	
222	4.519	-5.139	-3.497	
221	4.519	-5.841	-2.765	
220	4.538	-5.669	-1.746	
219	4.517	-5.316	-1.015	
218	4.502	-4.846	-0.46	
217	4.502	-4.75	-0.647	
216	4.467	-5.143	-1.626	
215	4.435	-6.099	-2.948	
214	4.429	-8.007	-4.697	
213	4.433	-10.734	-6.515	
212	4.438	-12.515	-7.645	
211	4.795	-10.856	-7.935	
210	4.437	-7.977	-7.209	210
209	4.4	-5.693	-6.423	
208	4.377	-4.436	-5.399	
207	4.383	-4.024	-4	
206	4.393	-4.278	-2.464	
205	5.145	-5.007	-1.249	
204	5.071	-5.721	-0.262	
203	4.997	-6.199	0.297	
202	4.98	-6.212	0.689	
201	4.984	-6.431	0.983	
200	4.988	-7.161	1.204	
199	4.981	-8.538	1.45	
198	4.972	-9.902	1.936	
197	4.927	-8.888	2.7	
196	4.895	-6.14	3.437	
195	4.902	-3.97	4.143	
194	4.894	-2.454	4.671	
193	4.932	-1.611	4.976	
192	4.966	-1.167	5.211	
191	4.971	-0.868	5.322	
190	4.948	-0.496	5.448	
189	4.757	0.052	5.499	
188	4.906	0.793	5.554	
187	4.905	1.628	5.702	
186	4.5	2.369	5.853	
185	4.983	2.921	5.994	
184	4.716	3.249	6.081	
183	4.893	3.433	6.141	
182	4.795	3.555	6.178	
181	4.728	3.796	6.25	
180	4.972	4.141	6.333	180
179	4.923	4.537	6.463	
178	4.912	4.873	6.642	
177	4.92	5.037	6.778	
176	4.939	4.945	6.899	
175	4.976	4.633	6.938	
174	5.009	4.163	6.875	
173	5.019	3.54	6.686	
172	4.891	2.933	6.328	
171	4.895	2.433	6.088	
170	4.883	1.948	5.978	
169	4.887	1.459	5.918	
168	4.831	0.794	5.937	
167	4.836	0.053	5.918	
166	4.834	-0.684	5.935	
165	4.868	-1.151	5.981	
164	4.856	-1.428	5.991	
163	4.821	-1.735	5.956	
162	4.824	-2.212	5.784	
161	4.788	-2.827	5.472	
160	4.785	-3.398	4.952	
159	4.82	-3.65	4.309	
158	4.754	-3.405	3.653	
157	4.757	-2.816	3.165	
156	4.734	-2.309	2.675	
155	4.728	-2.247	2.198	
154	4.709	-2.557	1.523	
153	4.669	-3.568	0.609	
152	4.67	-5.497	-0.886	
151	4.663	-8.153	-2.683	
150	4.658	-12.497	-5.27	150
149	4.617	-16.824	-9.288	
148	4.619	-13.41	-10.655	
147	4.344	-8.644	-8.023	
146	4.397	-5.612	-4.552	
145	4.154	-3.485	-1.865	
144	4.351	-1.911	0.136	
143	3.931	-0.925	1.522	
142	4.531	-0.201	2.477	
141	3.929	0.084	2.985	
140	4.498	0.082	3.158	
139	4.318	-0.205	3.099	
138	4.127	-0.65	2.878	
137	4.002	-1.108	2.509	
136	4.225	-1.291	1.979	
135	4.535	-1.194	1.543	
134	4.521	-0.932	1.165	

133	4.496	-0.498	0.772
132	4.458	-0.106	0.379
131	4.486	0.261	0.007
130	4.469	0.491	-0.375
129	4.486	0.536	-0.755
128	4.501	0.541	-1.165
127	4.519	0.373	-1.76
126	4.54	0.14	-2.519
125	4.537	-0.328	-3.223
124	4.52	-0.829	-4.345
123	4.496	-1.446	-5.535
122	4.494	-2.03	-6.83
121	4.48	-2.826	-8.082
120	4.472	-3.675	-8.953
119	4.463	-4.388	-9.066
118	4.441	-5.035	-8.401
117	4.405	-5.632	-7.612
116	4.392	-6.04	-6.548
115	4.38	-6.304	-5.935
114	4.39	-6.813	-5.404
113	4.376	-7.007	-5.069
112	4.37	-7.201	-4.764
111	4.394	-7.447	-4.397
110	4.367	-7.715	-4.269
109	4.389	-8.091	-4.394
108	4.394	-8.276	-4.436
107	4.364	-8.607	-4.488
106	4.355	-8.868	-4.582
105	4.333	-9.196	-4.684
104	4.323	-9.719	-4.717
103	4.267	-9.88	-4.842
102	4.277	-10.143	-5.001
101	4.237	-10.599	-5.085
100	4.214	-11.12	-5.139
99	4.211	-11.705	-5.265
98	4.192	-12.577	-5.537
97	4.192	-13.458	-5.806
96	4.186	-14.778	-6.252
95	4.165	-16.606	-6.723
94	4.153	-18.727	-7.279
93	4.143	-20.629	-7.8
92	4.131	-20.629	-8.704
91	4.134	-20.629	-9.527
90	4.141	-20.629	-10.173

120

90 to 30 deg	4.141	-0.628	5.677
30 to 150 deg	4.658	0.541	3.158
90 to 150 deg (COMBINED)	4.658	0.541	5.677

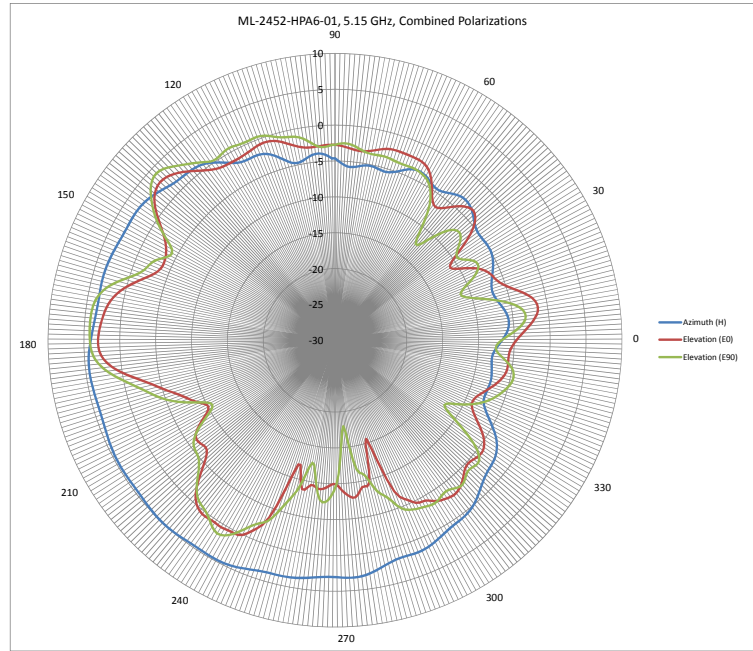


Azimuth H is in XY plane, angle is phi (X-axis reference, pos disp toward Y-axis).
Elevation E0 is in XZ plane, angle is theta (Z-axis reference, pos disp toward X-axis).
Elevation E90 is in YZ plane, angle is theta (Z-axis reference, pos disp toward Y-axis).

Revisions	Date	Change
0	2015/1/6	Initial release.

ML-2452-HPA6-01, 5.15 GHz
Composite polarization

Angle (°)	XY Plane H (dBi)	XZ Plane E0 (dBi)	YZ Plane E90 (dBi)	Label
90	-4.634688213	-2.744358341	-2.744358341	90
89	-4.955332157	-2.789352644	-2.604646902	
88	-5.263327383	-2.870061093	-2.51264515	
87	-5.518256466	-2.978296021	-2.48965853	
86	-5.681222975	-3.094791269	-2.533771899	
85	-5.745149772	-3.210813694	-2.647165818	
84	-5.713867534	-3.307579116	-2.818273153	
83	-5.60808674	-3.362750563	-3.017586696	
82	-5.471715472	-3.372398583	-3.220990673	
81	-5.337831574	-3.325468186	-3.38924507	
80	-5.235240824	-3.219004326	-3.49266173	
79	-5.186172447	-3.070659258	-3.538622838	
78	-5.188260339	-2.890083559	-3.528086989	
77	-5.239224809	-2.699098327	-3.488288671	
76	-5.3243827	-2.524478561	-3.462135127	
75	-5.407667976	-2.374816379	-3.452128641	
74	-5.466457531	-2.266947878	-3.45261367	
73	-5.467689407	-2.205127684	-3.532056006	
72	-5.38207937	-2.177342564	-3.595135818	
71	-5.216169616	-2.179860507	-3.660008457	
70	-4.978468945	-2.196398097	-3.71005714	
69	-4.691484989	-2.210210259	-3.721574192	
68	-4.397916317	-2.220899574	-3.700905859	
67	-4.123560885	-2.222762776	-3.658938058	
66	-3.89430514	-2.223172791	-3.623353804	
65	-3.735943492	-2.247181721	-3.63287665	
64	-3.649031732	-2.307000574	-3.682716333	
63	-3.639824039	-2.430305058	-3.761013227	
62	-3.709088939	-2.648287214	-3.866998213	
61	-3.834357541	-2.956202755	-4.000735494	
60	-4.008817768	-3.369521457	-4.212252695	60
59	-4.207735206	-3.890616972	-4.539915871	
58	-4.38540752	-4.479233963	-4.967193071	
57	-4.521200425	-5.11293376	-5.491213038	
56	-4.581332799	-5.731226814	-6.127676639	
55	-4.543428252	-6.24556729	-6.937140522	
54	-4.423561677	-6.595486705	-8.010547533	
53	-4.233886235	-6.726053554	-9.329038715	
52	-4.0021864	-6.62242433	-10.71095303	
51	-3.771098583	-6.328718841	-11.86599441	
50	-3.558914213	-5.901249091	-12.48760916	
49	-3.391940327	-5.4128726	-12.43710852	
48	-3.293320483	-4.929943375	-11.80475359	
47	-3.256764099	-4.479734344	-10.80626094	
46	-3.295140382	-4.091398466	-9.71752488	
45	-3.410188564	-3.793922065	-8.748059494	
44	-3.57553076	-3.608868446	-7.976302842	
43	-3.796635505	-3.577984262	-7.443366801	
42	-4.054205271	-3.720608256	-7.13996926	
41	-4.314410035	-4.03177494	-7.037593001	
40	-4.567734606	-4.509442291	-7.135401317	
39	-4.785988696	-5.154100945	-7.417762685	
38	-4.945642033	-5.980632389	-7.855230248	
37	-5.048693381	-6.994639937	-8.394931573	
36	-5.089599678	-8.13974135	-8.923518339	
35	-5.079984403	-9.286876689	-9.306166874	
34	-5.045547289	-10.25323817	-9.431705949	
33	-4.996343875	-10.85888397	-9.252965151	
32	-4.956862017	-11.01495109	-8.83783723	
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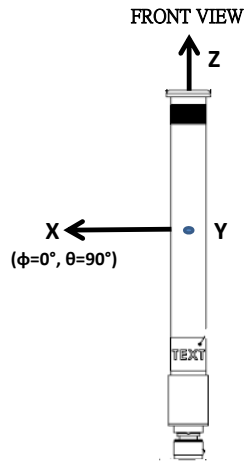
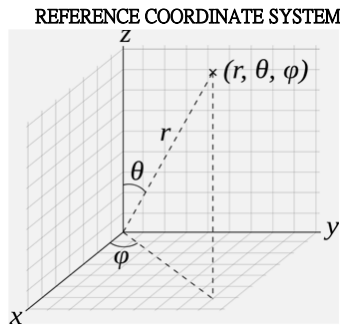


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90 to 30 deg	-3.256764099	-2.177342564	-2.48965853
30 to 150 deg	3.006099283	2.889334076	4.093903869
30 to 150 deg (COMBINED)	3.006099283	2.889334076	4.093903869

Revisions	Date	Change
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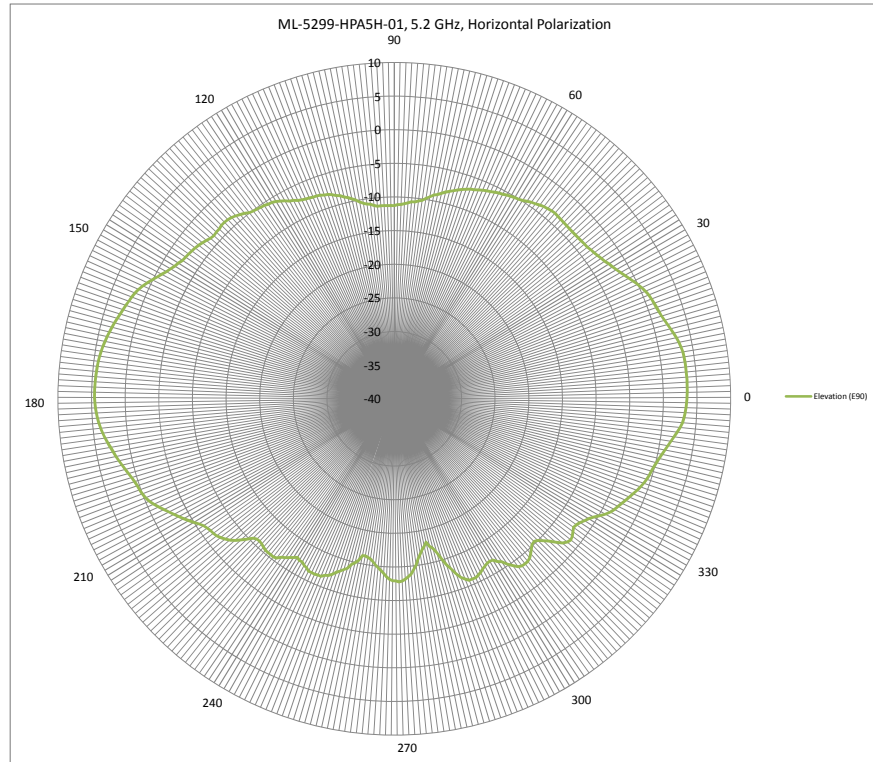


Azimuth (H) is in XY plane, angle is phi (X-axis reference)
Elevation (E0) is in XZ plane, angle is theta (Z-axis reference)
Elevation (E90) is in YZ plane, angle is theta (Z-axis reference)

ML-5299-HPASH-01

Horizontal polarization

Angle (°)	XY Plane H (dBi)	XZ Plane EO (dBi)	YZ Plane E90 (dBi)	Label
90			-11.274	90
89			-11.139	
88			-11.101	
87			-10.958	
86			-10.796	
85			-10.595	
84			-10.572	
83			-10.377	
82			-10.198	
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79			-9.149	
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62			-5.593	
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45			-3.666	
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43			-3.741	
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40			-3.611	
39			-3.551	
38			-3.515	
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36			-3.196	
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33			-2.614	
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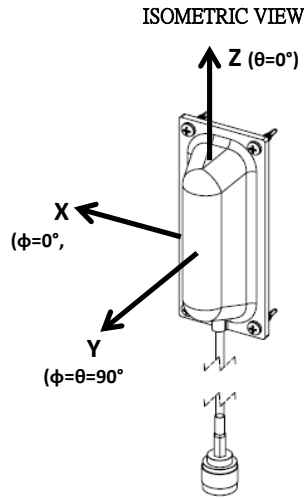
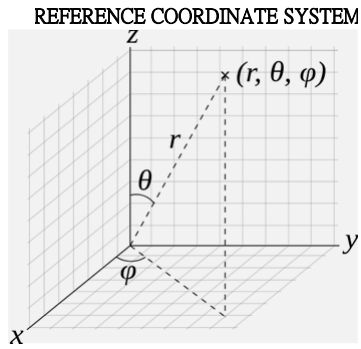
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190	2.495	
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183	4.195	
182	4.33	
181	4.43	
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177	4.558	
176	4.537	
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98	-10.588	
97	-10.752	
96	-10.874	
95	-11.096	
94	-11.262	
93	-11.24	
92	-11.229	
91	-11.274	
90	-11.274	

Max Gain for elevations above 30° from horizontal (assuming upright mounting orientation)

	Max Gain	Max Gain El > 30°
5.2 GHz	4.583	-1.214

Revisions	Date	Change
0	2014/12/12	Initial release
1	2014/12/16	AZ/EL data orientation

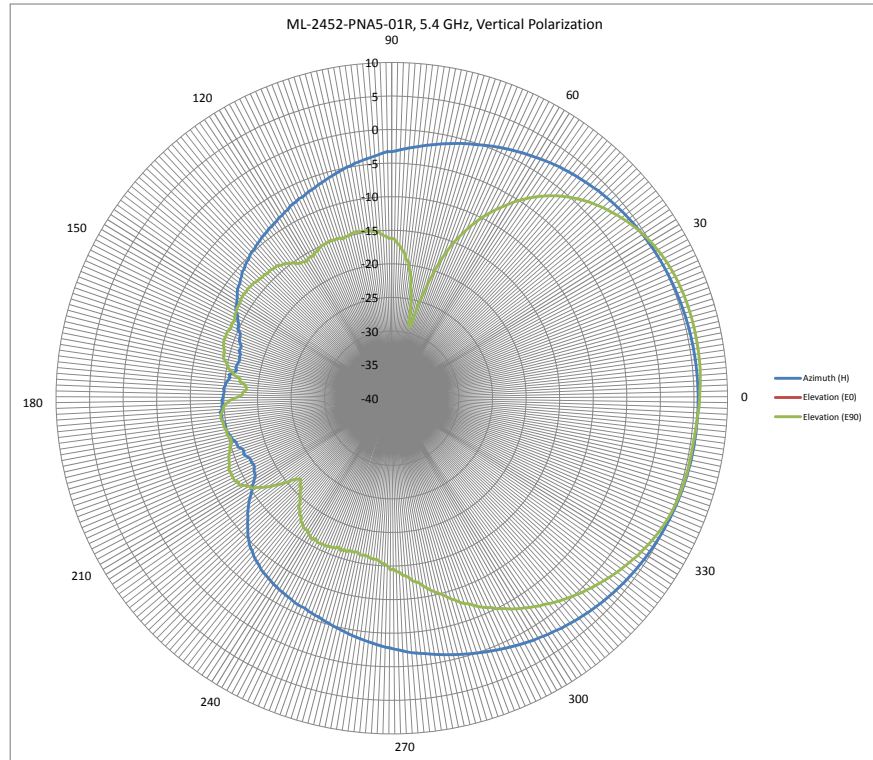


Azimuth (H) is in XY plane, angle is phi (X-axis reference)
Elevation (E0) is in XZ plane, angle is theta (Z-axis reference)
Elevation (E90) is in YZ plane, angle is theta (Z-axis reference)

ML-2452-PNA5-01R

Vertical (Z-axis) polarization

Angle (°)	XY Plane H (dBi)	XZ Plane EO (dBi)	YZ Plane E90 (dBi)	Label
90	-3.276		-16.182	90
89	-3.162		-16.308	
88	-2.97		-16.874	
87	-2.822		-17.239	
86	-2.635		-17.862	
85	-2.466		-18.276	
84	-2.286		-19.312	
83	-2.174		-19.452	
82	-1.936		-20.869	
81	-1.792		-21.732	
80	-1.587		-23.705	
79	-1.438		-24.644	
78	-1.258		-26.694	
77	-1.076		-28.584	
76	-0.91		-29.169	
75	-0.747		-28.063	
74	-0.551		-25.195	
73	-0.391		-23.423	
72	-0.279		-21.017	
71	-0.091		-19.26	
70	0.093		-17.792	
69	0.256		-15.953	
68	0.437		-14.76	
67	0.594		-13.66	
66	0.769		-12.533	
65	0.907		-11.528	
64	1.053		-10.457	
63	1.246		-9.623	
62	1.36		-8.73	
61	1.507		-7.917	
60	1.661		-7.156	60
59	1.786		-6.377	
58	1.922		-5.605	
57	2.102		-4.856	
56	2.244		-4.23	
55	2.382		-3.523	
54	2.548		-2.93	
53	2.645		-2.315	
52	2.785		-1.806	
51	2.896		-1.268	
50	2.995		-0.758	
49	3.121		-0.295	
48	3.229		0.091	
47	3.339		0.541	
46	3.445		0.943	
45	3.59		1.326	
44	3.651		1.661	
43	3.778		2.003	
42	3.848		2.354	
41	3.978		2.623	
40	4.043		2.912	
39	4.133		3.243	
38	4.229		3.496	
37	4.32		3.765	
36	4.362		4.006	
35	4.471		4.233	
34	4.498		4.453	
33	4.604		4.655	
32	4.648		4.853	
31	4.727		5.036	
30	4.764		5.203	30
29	4.829		5.343	
28	4.895		5.482	
27	4.922		5.592	
26	4.986		5.721	
25	5.05		5.808	
24	5.088		5.898	
23	5.125		5.96	
22	5.177		6.034	
21	5.23		6.078	
20	5.268		6.119	
19	5.288		6.132	
18	5.336		6.162	
17	5.347		6.194	
16	5.381		6.182	
15	5.402		6.214	
14	5.415		6.198	
13	5.443		6.196	
12	5.464		6.209	
11	5.479		6.222	
10	5.502		6.21	
9	5.509		6.211	
8	5.532		6.196	
7	5.553		6.191	
6	5.571		6.146	
5	5.582		6.13	
4	5.602		6.058	
3	5.607		6.016	
2	5.614		5.962	
1	5.627		5.876	
0	5.627		5.876	0
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358	5.609		5.745	
357	5.607		5.661	
356	5.606		5.585	
355	5.59		5.536	
354	5.568		5.508	
353	5.584		5.448	
352	5.559		5.419	
351	5.542		5.396	



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348	5.503	5.357	
347	5.493	5.361	
346	5.473	5.361	
345	5.452	5.325	
344	5.403	5.308	
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341	5.321	5.22	
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338	5.206	5.017	
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336	5.129	4.86	
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333	4.967	4.447	
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327	4.595	3.479	
326	4.504	3.216	
325	4.427	3.048	
324	4.362	2.816	
323	4.257	2.608	
322	4.215	2.392	
321	4.126	2.156	
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319	3.965	1.698	
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317	3.769	1.189	
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315	3.601	0.685	
314	3.474	0.509	
313	3.372	0.213	
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310	3.023	-0.608	
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277	-1.633	-12.418	
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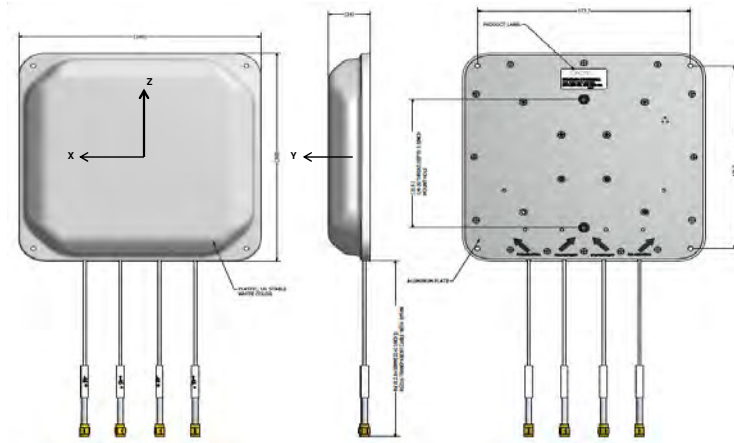
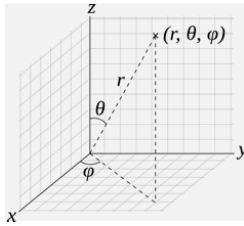
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96	-4.315	-14.915
95	-4.144	-15.099
94	-4.031	-14.947
93	-3.851	-15.428
92	-3.637	-15.725
91	-3.457	-15.904
90	-3.276	-16.182

120

90 to 30.4	4.764	0	5.203
30 to 150	-3.276	0	-13.045
30 to 150	4.764	0	5.203

REFERENCE COORDINATE SYSTEM

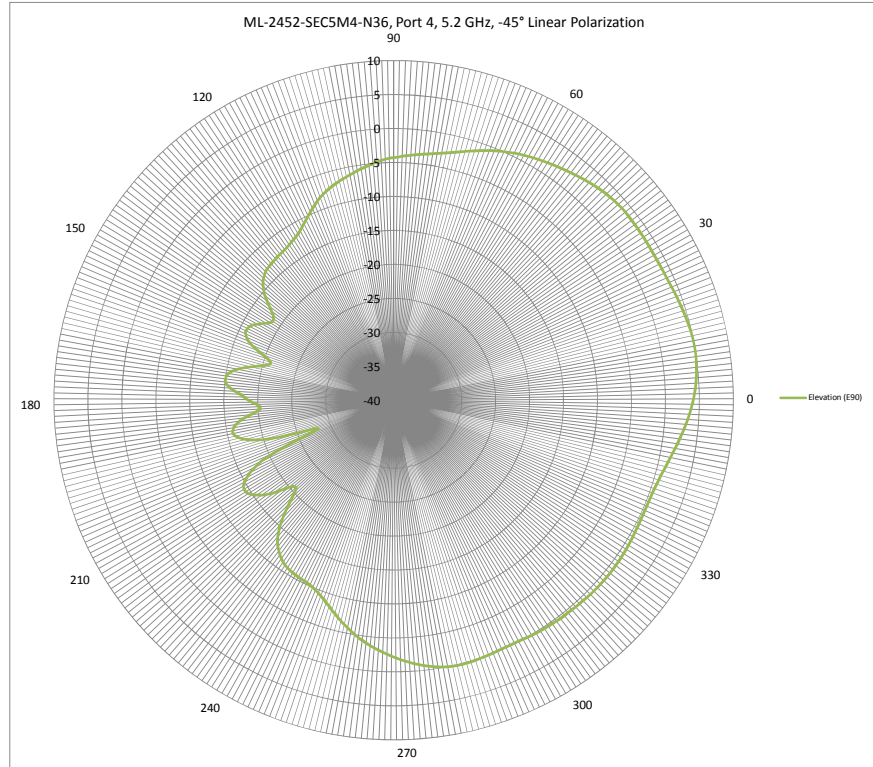


muth (H) is in XY plane, angle is phi
ation (E0) is in XZ plane, angle is theta
tation (E90) is in YZ plane, angle is

ML-2452-SECSM4-N36

-45° linear polarization

Angle (°)	XY Plane H (dBi)	XZ Plane E0 (dBi)	YZ Plane E90 (dBi)	Label
90			-4.3107	90
89			-4.17646	
88			-4.05328	
87			-3.93895	
86			-3.81942	
85			-3.71658	
84			-3.61543	
83			-3.50615	
82			-3.38789	
81			-3.25745	
80			-3.10304	
79			-2.943	
78			-2.76498	
77			-2.56992	
76			-2.35945	
75			-2.13561	
74			-1.89316	
73			-1.6513	
72			-1.40103	
71			-1.15053	
70			-0.9003	
69			-0.65284	
68			-0.40445	
67			-0.17134	
66			0.057455	
65			0.272196	
64			0.476912	
63			0.671579	
62			0.860037	
61			1.033629	
60			1.206263	60
59			1.366966	
58			1.523698	
57			1.678149	
56			1.832813	
55			1.986124	
54			2.149688	
53			2.308093	
52			2.468365	
51			2.629382	
50			2.787846	
49			2.944329	
48			3.104357	
47			3.249249	
46			3.384304	
45			3.507129	
44			3.61235	
43			3.705621	
42			3.7915	
41			3.853537	
40			3.899331	
39			3.929505	
38			3.940193	
37			3.944449	
36			3.948546	
35			3.938177	
34			3.923666	
33			3.907531	
32			3.885633	
31			3.875366	
30			3.881538	30
29			3.886466	
28			3.899737	
27			3.922308	
26			3.947379	
25			3.99149	
24			4.056128	
23			4.119384	
22			4.189748	
21			4.266111	
20			4.339248	
19			4.42351	
18			4.519035	
17			4.603899	
16			4.685507	
15			4.76095	
14			4.819638	
13			4.876039	
12			4.929413	
11			4.961484	
10			4.978339	
9			4.977558	
8			4.949284	
7			4.911113	
6			4.860241	
5			4.784857	
4			4.69051	
3			4.577063	
2			4.435963	
1			4.288705	
0			4.129762	0
359			3.954108	
358			3.765817	
357			3.565835	
356			3.346191	
355			3.130058	
354			2.909794	
353			2.684766	
352			2.457834	



351	2.230896	
350	1.997675	
349	1.780138	
348	1.571059	
347	1.371238	
346	1.184119	
345	1.012895	
344	0.85363	
343	0.722871	
342	0.613621	
341	0.523529	
340	0.453691	
339	0.40393	
338	0.368643	
337	0.354561	
336	0.354923	
335	0.364449	
334	0.382967	
333	0.408812	
332	0.438105	
331	0.473324	
330	0.512317	330
329	0.551325	
328	0.590702	
327	0.6288	
326	0.663096	
325	0.693947	
324	0.720663	
323	0.740222	
322	0.752724	
321	0.757306	
320	0.752864	
319	0.741526	
318	0.724139	
317	0.700207	
316	0.671564	
315	0.639535	
314	0.604529	
313	0.570875	
312	0.538735	
311	0.50837	
310	0.48004	
309	0.453233	
308	0.425645	
307	0.399356	
306	0.371054	
305	0.33964	
304	0.303563	
303	0.262165	
302	0.214431	
301	0.163957	
300	0.111012	300
299	0.05755	
298	0.006862	
297	-0.03754	
296	-0.07343	
295	-0.09654	
294	-0.1062	
293	-0.10174	
292	-0.08311	
291	-0.05211	
290	-0.01262	
289	0.032107	
288	0.074674	
287	0.113161	
286	0.14148	
285	0.155337	
284	0.151602	
283	0.127869	
282	0.077208	
281	0.00691	
280	-0.08788	
279	-0.20694	
278	-0.34864	
277	-0.51104	
276	-0.70076	
275	-0.90002	
274	-1.11385	
273	-1.33992	
272	-1.57606	
271	-1.8195	
270	-2.08288	270
269	-2.34101	
268	-2.60478	
267	-2.87445	
266	-3.14999	
265	-3.43312	
264	-3.7444	
263	-4.05105	
262	-4.37029	
261	-4.70302	
260	-5.04684	
259	-5.40743	
258	-5.8046	
257	-6.19497	
256	-6.59507	
255	-7.00138	
254	-7.40407	
253	-7.80979	
252	-8.22893	
251	-8.60828	
250	-8.95914	
249	-9.27481	

248	-9.54163	
247	-9.77594	
246	-9.99177	
245	-10.1417	
244	-10.2528	
243	-10.3341	
242	-10.3821	
241	-10.436	
240	-10.5245	240
239	-10.5969	
238	-10.6899	
237	-10.8108	
236	-10.9472	
235	-11.1444	
234	-11.4371	
233	-11.7469	
232	-12.1201	
231	-12.5635	
230	-13.0659	
229	-13.6825	
228	-14.436	
227	-15.2602	
226	-16.1919	
225	-17.2367	
224	-18.3495	
223	-19.4633	
222	-20.3691	
221	-20.768	
220	-20.57	
219	-19.8584	
218	-18.8354	
217	-17.7868	
216	-16.8747	
215	-16.0722	
214	-15.422	
213	-14.9236	
212	-14.5474	
211	-14.3676	
210	-14.3912	210
209	-14.5397	
208	-14.9201	
207	-15.5581	
206	-16.3401	
205	-17.2863	
204	-18.5911	
203	-20.6337	
202	-23.556	
201	-26.5464	
200	-28.1339	
199	-27.4593	
198	-24.9768	
197	-22.0064	
196	-19.7221	
195	-18.3197	
194	-17.3683	
193	-16.6241	
192	-16.1075	
191	-15.8435	
190	-15.8666	
189	-16.1073	
188	-16.468	
187	-17.0574	
186	-17.864	
185	-18.7841	
184	-19.6959	
183	-20.3117	
182	-20.3359	
181	-19.8556	
180	-19.1712	180
179	-18.5311	
178	-18.0093	
177	-17.4265	
176	-16.6518	
175	-15.8879	
174	-15.3641	
173	-15.0786	
172	-15.0175	
171	-15.1173	
170	-15.3383	
169	-15.7908	
168	-16.4759	
167	-17.3251	
166	-18.3532	
165	-19.4703	
164	-20.4304	
163	-21.0302	
162	-21.0721	
161	-20.4998	
160	-19.5643	
159	-18.5478	
158	-17.6185	
157	-16.9113	
156	-16.4343	
155	-16.1041	
154	-15.9564	
153	-15.9848	
152	-16.1366	
151	-16.4764	
150	-16.9739	150
149	-17.5267	
148	-18.0847	
147	-18.5375	
146	-18.733	

145	-18.6693	
144	-18.3262	
143	-17.7223	
142	-16.9988	
141	-16.2618	
140	-15.5462	
139	-14.9472	
138	-14.4667	
137	-14.0532	
136	-13.726	
135	-13.4736	
134	-13.2464	
133	-13.1102	
132	-13.0398	
131	-12.9728	
130	-12.9195	
129	-12.8695	
128	-12.7854	
127	-12.7323	
126	-12.6909	
125	-12.6163	
124	-12.5258	
123	-12.4175	
122	-12.2622	
121	-12.1107	
120	-11.9425	120
119	-11.7196	
118	-11.4563	
117	-11.1548	
116	-10.7947	
115	-10.4366	
114	-10.0744	
113	-9.69135	
112	-9.31039	
111	-8.94001	
110	-8.5627	
109	-8.23539	
108	-7.94471	
107	-7.66873	
106	-7.41585	
105	-7.18222	
104	-6.94239	
103	-6.73954	
102	-6.55372	
101	-6.36287	
100	-6.17149	
99	-5.97677	
98	-5.7609	
97	-5.56285	
96	-5.37228	
95	-5.17668	
94	-4.98547	
93	-4.80104	
92	-4.61235	
91	-4.45204	
90	-4.3107	

Max Gain for elevations above 30° from horizontal (assuming upright mounting orientation)

	Max Gain
	El > 30°
5.2 GHz Port 4	3.948546