2118909-2
COTS
Simulation/Measurement

Presented by:

Date: 18-Jul.-2025

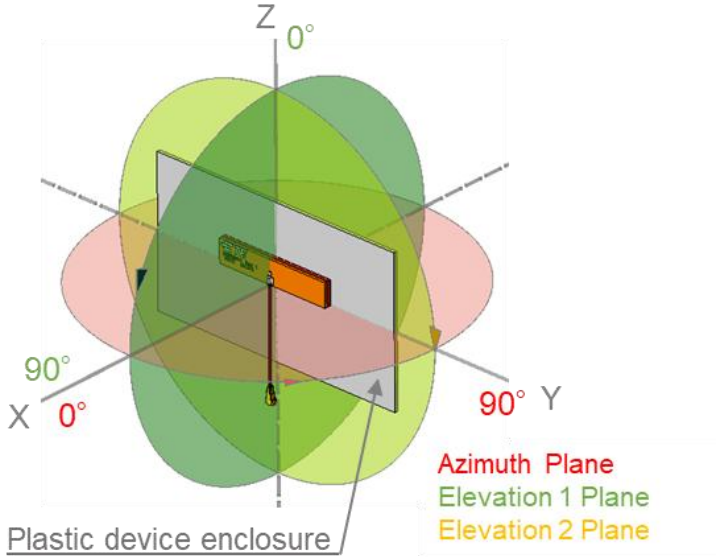
Revision: 1.0 (1.1,1.2…2.0,2.1….)

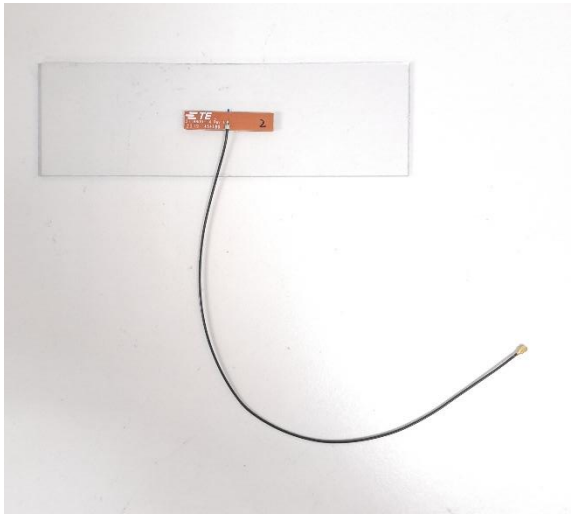
Project Number: WXXX-XXX

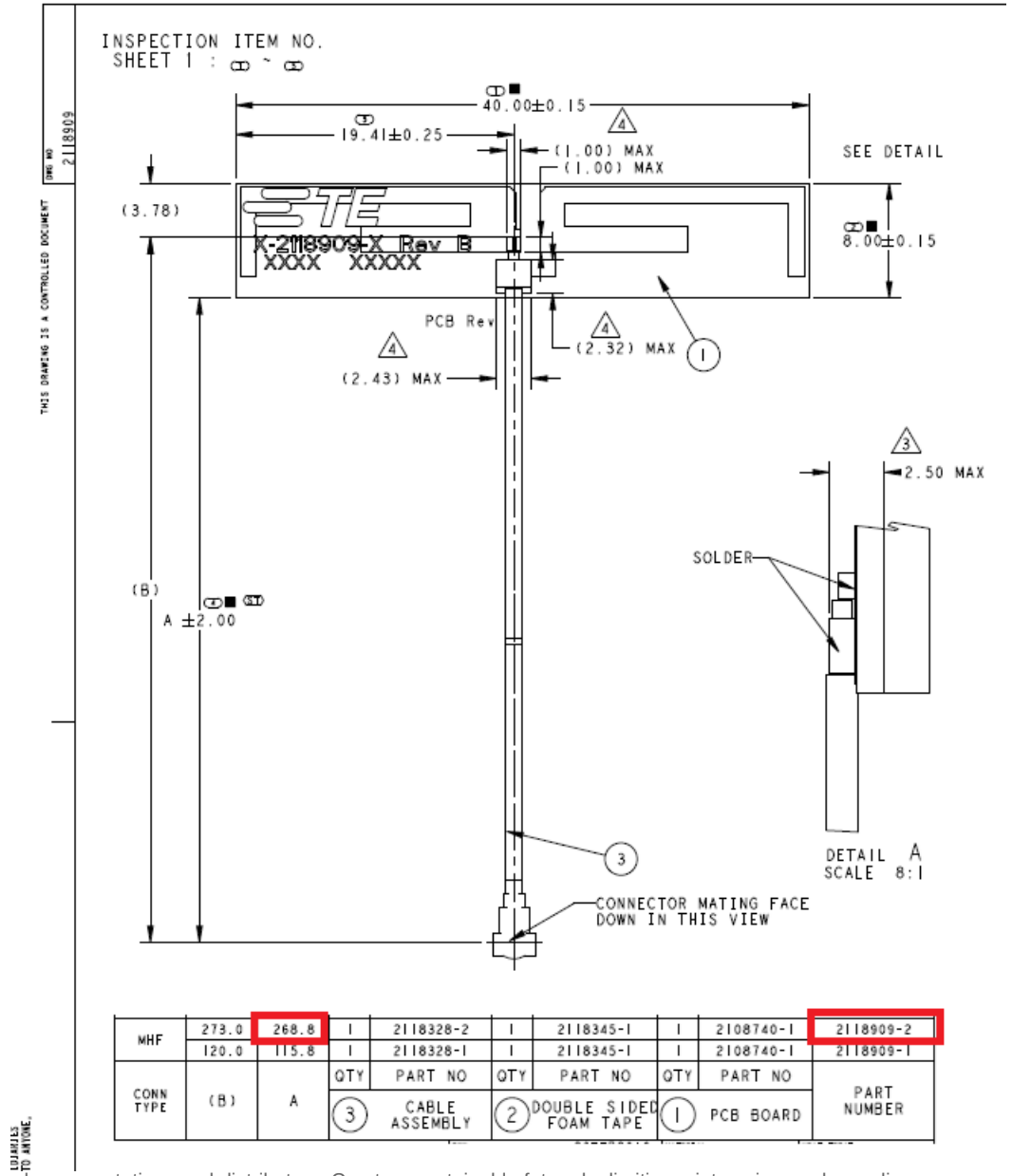
EVERY CONNECTION COUNTS

Coordinate & Picture

Test setup



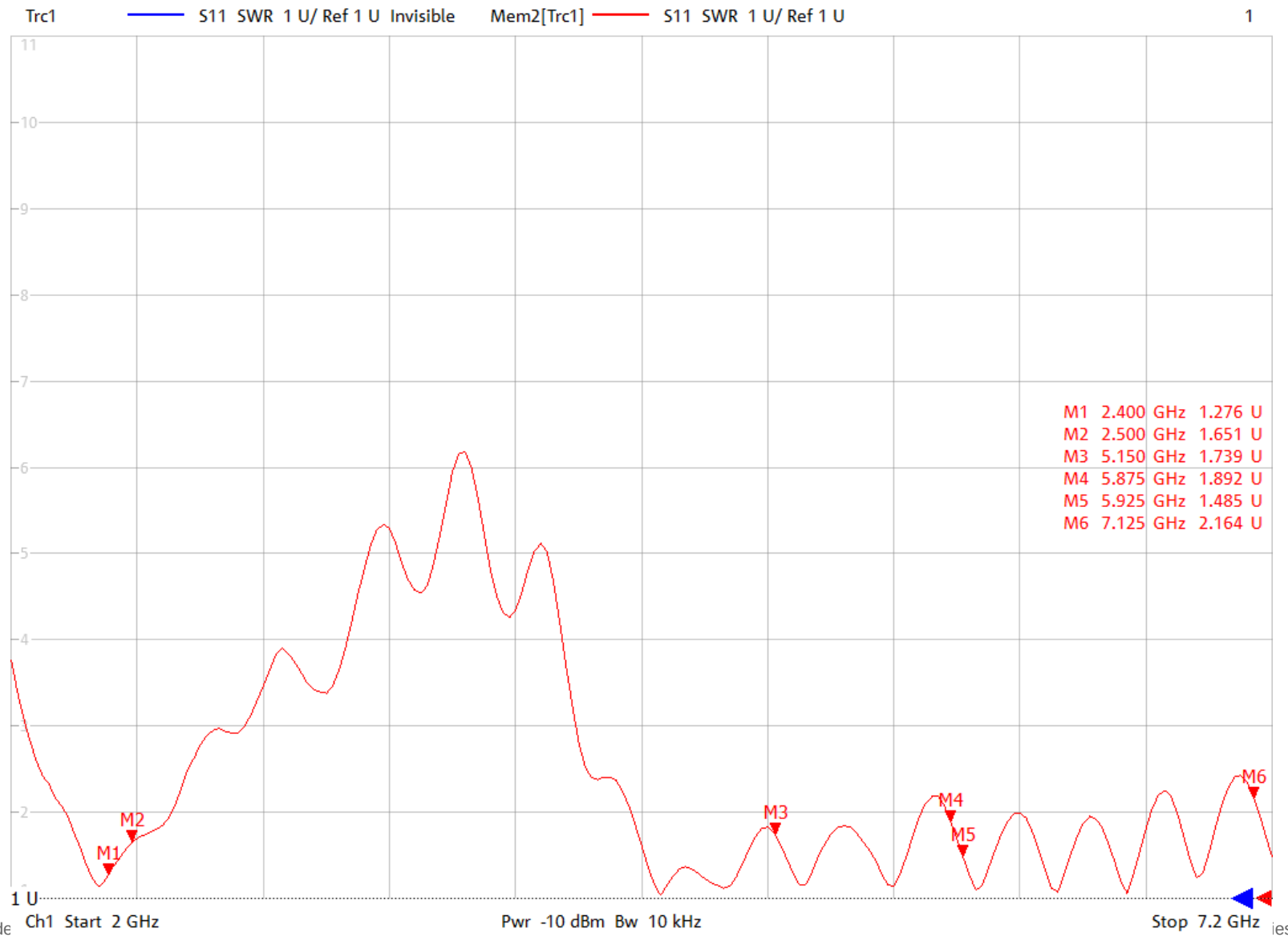




MHF	273.0	268.8	1	2118328-2	1	2118345-1	1	2108740-1	2118909-2
	120.0	115.8	1	2118328-1	1	2118345-1	1	2108740-1	2118909-1
CONN TYPE	(B)	A	QTY	PART NO	QTY	PART NO	QTY	PART NO	PART NUMBER
			3	CABLE ASSEMBLY	2	DOUBLE SIDED FOAM TAPE	1	PCB BOARD	

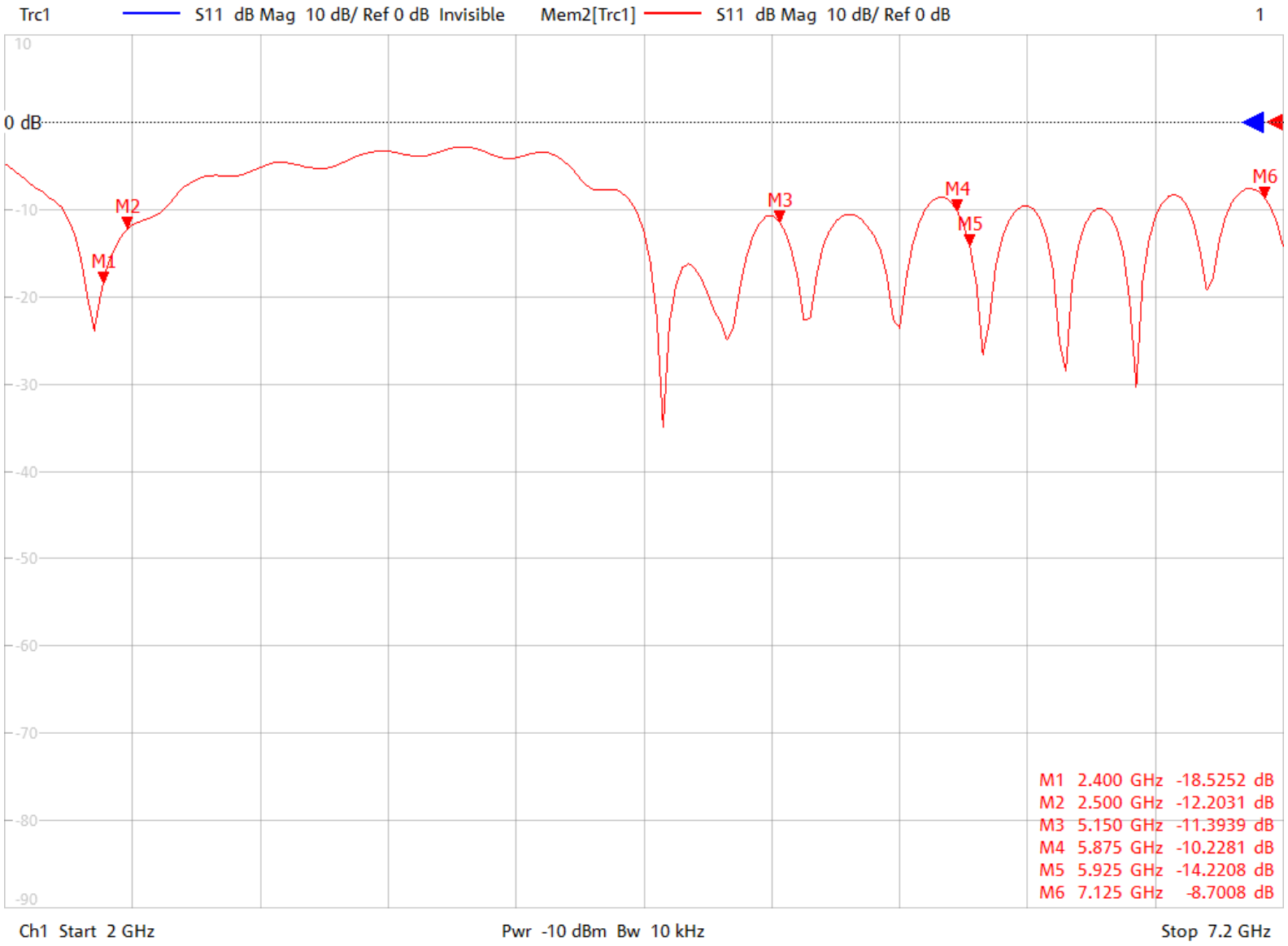
© 2024 TE Connectivity. Confidential & Proprietary. Do not reproduce or distribute externally including non-authorized representatives and distributors. Create a sustainable future by limiting print copies, and recycling paper.

VSWR



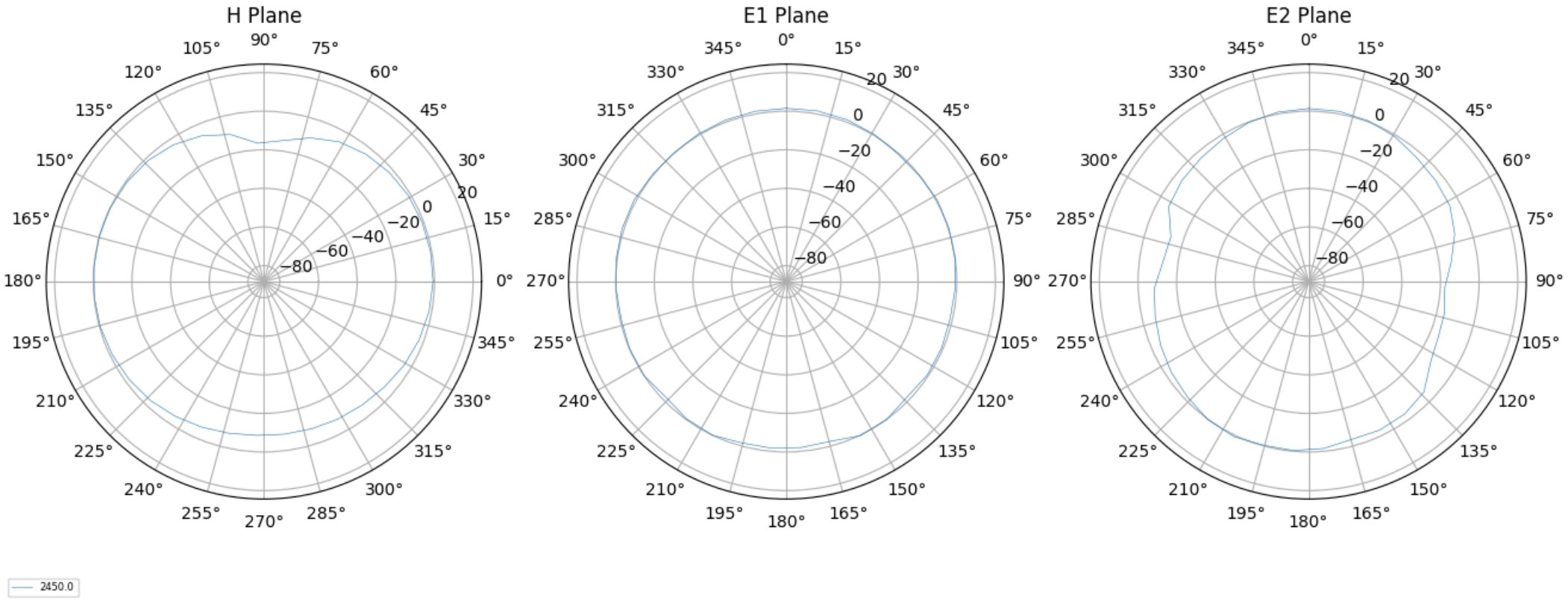
© 2024 TE Connectivity. Confide
ies, and recycling paper.

Return Loss



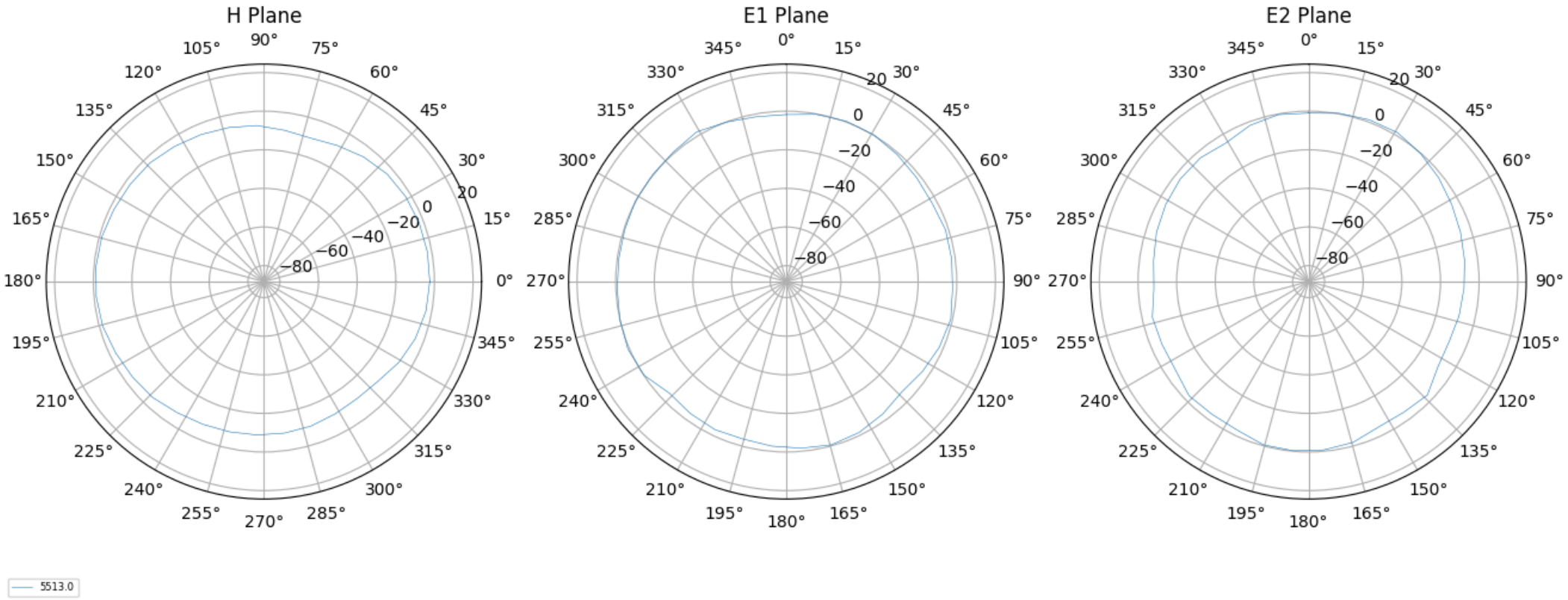
© 2024 TE Connectivity. Confidential & Proprietary. Do not reproduce or distribute externally including non-authorized representatives and distributors. Create a sustainable future by limiting print copies, and recycling paper.

2D Radiation _ 2450MHz



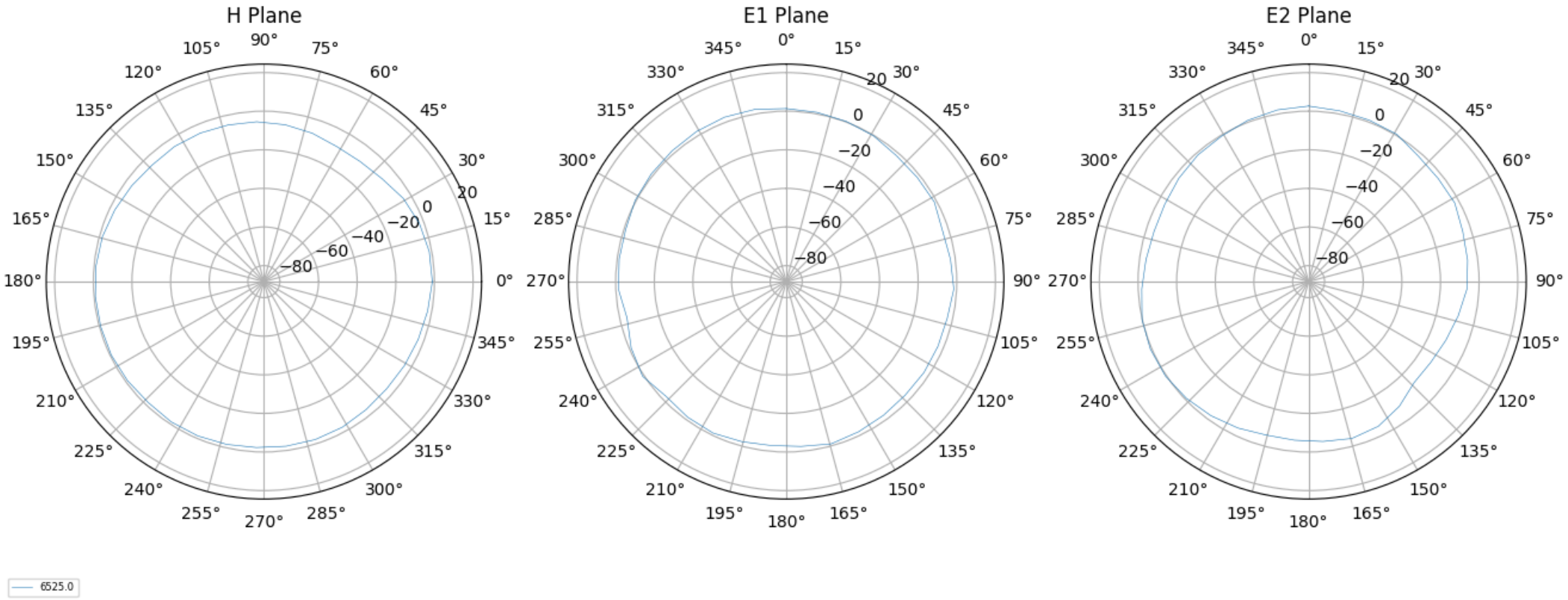
© 2024 TE Connectivity. Confidential & Proprietary. Do not reproduce or distribute externally including non-authorized representatives and distributors. Create a sustainable future by limiting print copies, and recycling paper.

2D Radiation _ 5513MHz



© 2024 TE Connectivity. Confidential & Proprietary. Do not reproduce or distribute externally including non-authorized representatives and distributors. Create a sustainable future by limiting print copies, and recycling paper.

2D Radiation _ 6525MHz

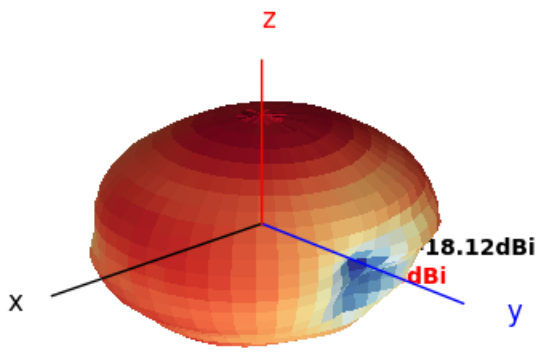


© 2024 TE Connectivity. Confidential & Proprietary. Do not reproduce or distribute externally including non-authorized representatives and distributors. Create a sustainable future by limiting print copies, and recycling paper.

3D Radiation

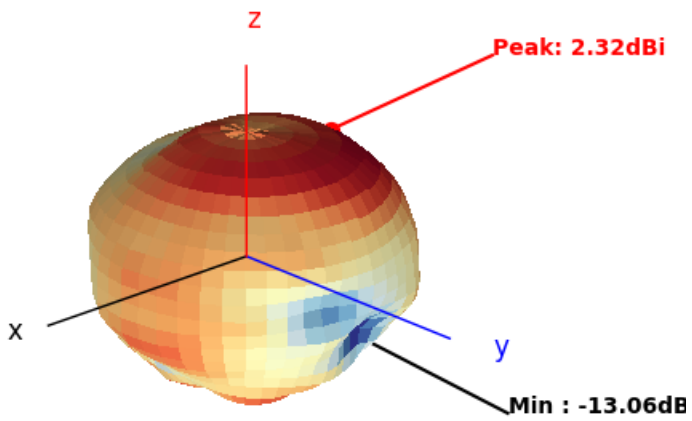
Total (2450 MHz)

Peak Value:1.86dBi Theta:150° Phi:225°
Min Value:-18.12dBi Theta:90° Phi:90°



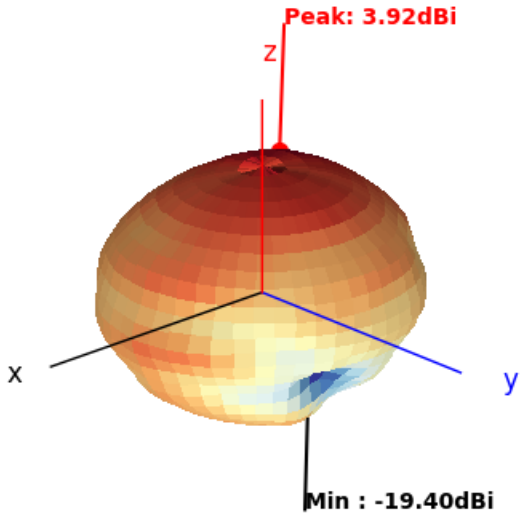
Total (5513 MHz)

Peak Value:2.32dBi Theta:30° Phi:165°
Min Value:-13.06dBi Theta:120° Phi:105



Total (6525 MHz)

Peak Value:3.92dBi Theta:15° Phi:210°
Min Value:-19.40dBi Theta:120° Phi:75°



© 2024 TE Connectivity. Confidential & Proprietary. Do not reproduce or distribute externally including non-authorized representatives and distributors. Create a sustainable future by limiting print copies, and recycling paper.

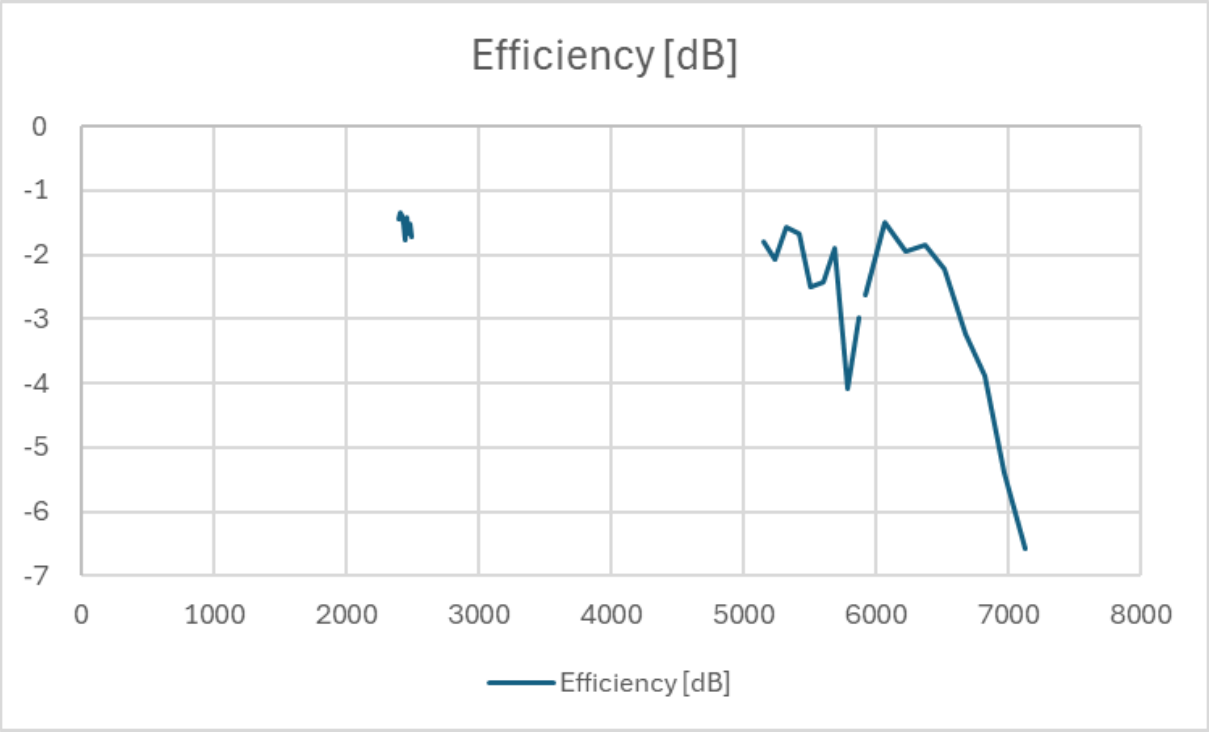
Efficiency

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Frequency [MHz]	**2400**	**2413**	**2425**	**2438**	**2450**	**2463**	**2475**	**2488**	**2500**	**5150**	**5241**	**5331**	**5422**	**5513**	**5603**	**5694**	**5784**	**5875**	**5925**	**6075**
Efficiency [dB]	**-1.43**	**-1.36**	**-1.39**	**-1.53**	**-1.77**	**-1.42**	**-1.68**	**-1.53**	**-1.71**	**-1.79**	**-2.06**	**-1.56**	**-1.67**	**-2.51**	**-2.43**	**-1.90**	**-4.08**	**-2.98**	**-2.63**	**-1.51**
Efficiency [%]	**71.9**	**73.2**	**72.5**	**70.4**	**66.6**	**72.2**	**67.9**	**70.4**	**67.4**	**66.3**	**62.2**	**69.8**	**68.1**	**56.1**	**57.1**	**64.5**	**39.1**	**50.4**	**54.5**	**70.7**
TRG_θ [dB]	-6.76	-6.70	-6.74	-6.84	-6.96	-6.57	-6.78	-6.53	-6.71	-6.07	-6.54	-5.87	-5.72	-6.83	-6.85	-6.06	-8.55	-7.85	-7.29	-5.80
$Gain_{\theta\ Peak}$ [dBi]	1.86	1.89	1.78	1.49	1.36	2.05	1.74	2.20	2.04	1.45	1.94	3.12	2.80	1.69	0.91	3.76	1.98	2.54	1.76	2.61
$Gain_{\theta\ Min}$ [dBi]	-31.14	-33.75	-38.15	-37.94	-43.93	-43.68	-45.59	-33.91	-35.51	-31.96	-36.07	-40.77	-30.22	-34.97	-28.34	-36.10	-31.17	-30.78	-32.17	-37.04
TRG_φ [dB]	-2.94	-2.86	-2.89	-3.04	-3.33	-3.00	-3.29	-3.18	-3.37	-3.81	-3.98	-3.57	-3.84	-4.52	-4.38	-4.00	-5.99	-4.69	-4.45	-3.53
$Gain_{\varphi\ Peak}$ [dBi]	1.89	2.03	2.02	1.95	1.67	2.14	1.88	1.90	1.94	2.14	2.09	2.84	2.52	2.18	2.33	4.07	2.19	2.61	2.56	3.93
$Gain_{\varphi\ Min}$ [dBi]	-29.21	-29.82	-30.47	-34.05	-37.76	-36.90	-33.49	-31.44	-30.87	-26.86	-29.44	-31.37	-30.28	-40.93	-28.42	-24.16	-35.86	-30.31	-32.52	-36.57
UHRG [dB]	-4.01	-3.95	-4.00	-4.17	-4.47	-4.14	-4.46	-4.32	-4.49	-4.13	-4.46	-4.03	-4.12	-4.94	-4.78	-4.01	-6.08	-5.03	-4.58	-3.25
UHRG/TRG [%]	55.2	55.1	54.8	54.4	53.7	53.4	52.8	52.6	52.8	58.3	57.5	56.6	56.9	57.2	58.3	61.5	63.0	62.4	63.9	66.9
H-Plane	-2.61	-2.53	-2.54	-2.67	-2.95	-2.52	-2.83	-2.68	-2.85	-2.78	-3.70	-2.68	-3.33	-4.43	-4.89	-5.07	-6.41	-4.47	-3.92	-2.99
E1-Plane, AVG [dB]	0.36	0.45	0.45	0.34	0.09	0.45	0.17	0.28	0.15	-0.12	-0.26	0.09	-0.20	-0.99	-0.47	0.15	-2.01	-1.00	-0.79	0.57
E2-Plane, AVG [dB]	-2.38	-2.32	-2.38	-2.51	-2.62	-2.25	-2.54	-2.33	-2.54	-2.08	-2.37	-1.35	-1.23	-2.73	-2.79	-1.76	-4.06	-3.44	-3.23	-2.11
Peak Gain [dBi]	1.83	2.02	2.17	1.95	1.86	2.36	2.37	2.75	2.72	2.72	2.74	2.98	3.11	2.32	2.43	3.64	1.83	2.78	2.71	4.39
Directivity [dB]	3.27	3.37	3.57	3.48	3.63	3.77	4.05	4.27	4.43	4.51	4.80	4.54	4.78	4.83	4.87	5.55	5.91	5.76	5.35	5.89
Minimum Gain [dBi]	-17.66	-17.66	-17.51	-17.81	-18.12	-17.85	-17.72	-17.01	-16.59	-14.85	-18.01	-13.39	-12.84	-13.06	-13.37	-12.97	-15.22	-18.71	-25.31	-22.54

	21	22	23	24	25	26	27
Frequency [MHz]	**6225**	**6375**	**6525**	**6675**	**6825**	**6975**	**7125**
Efficiency [dB]	**-1.94**	**-1.84**	**-2.21**	**-3.24**	**-3.89**	**-5.38**	**-6.56**
Efficiency [%]	**64.0**	**65.5**	**60.1**	**47.4**	**40.8**	**29.0**	**22.1**
TRG_θ [dB]	-6.10	-5.58	-5.42	-6.00	-5.91	-7.11	-8.28
$Gain_{\theta\ Peak}$ [dBi]	4.05	3.02	2.20	1.71	2.95	1.26	-0.21
$Gain_{\theta\ Min}$ [dBi]	-37.49	-30.31	-23.53	-30.02	-34.87	-27.13	-32.73
TRG_φ [dB]	-4.04	-4.22	-5.03	-6.51	-8.19	-10.22	-11.43
$Gain_{\varphi\ Peak}$ [dBi]	3.98	3.37	2.74	0.76	-2.29	-4.33	-5.38
$Gain_{\varphi\ Min}$ [dBi]	-35.14	-29.41	-36.29	-34.11	-32.77	-32.86	-36.41
UHRG [dB]	-3.69	-3.83	-4.36	-5.93	-7.33	-9.04	-10.17
UHRG/TRG [%]	66.8	63.3	60.9	53.8	45.4	43.1	43.6
H-Plane	-3.22	-2.64	-2.73	-4.14	-4.71	-5.84	-6.70
E1-Plane, AVG [dB]	0.47	0.28	-0.62	-2.29	-5.02	-7.81	-10.31
E2-Plane, AVG [dB]	-2.02	-1.97	-1.84	-2.86	-2.86	-4.09	-4.73
Peak Gain [dBi]	3.82	3.81	3.92	2.04	3.15	1.38	0.48
Directivity [dB]	5.76	5.64	6.13	5.28	7.04	6.76	7.05
Minimum Gain [dBi]	-18.07	-19.27	-19.40	-14.96	-21.31	-19.53	-28.29

© 2024 TE Connectivity. Confidential & Proprietary. Do not reproduce or ... a sustainable future by limiting print copies, and recycling paper.

Efficiency



© 2024 TE Connectivity. Confidential & Proprietary. Do not reproduce or distribute externally including non-authorized representatives and distributors. Create a sustainable future by limiting print copies, and recycling paper.

ANY CONNECTION CAN CHANGE THE WORLD

EVERY CONNECTION COUNTS

TE connectivity