

HyperX (HDT586) Stinger 3 Antenna Radiation Report

MERRY Sounds Excellent

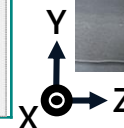
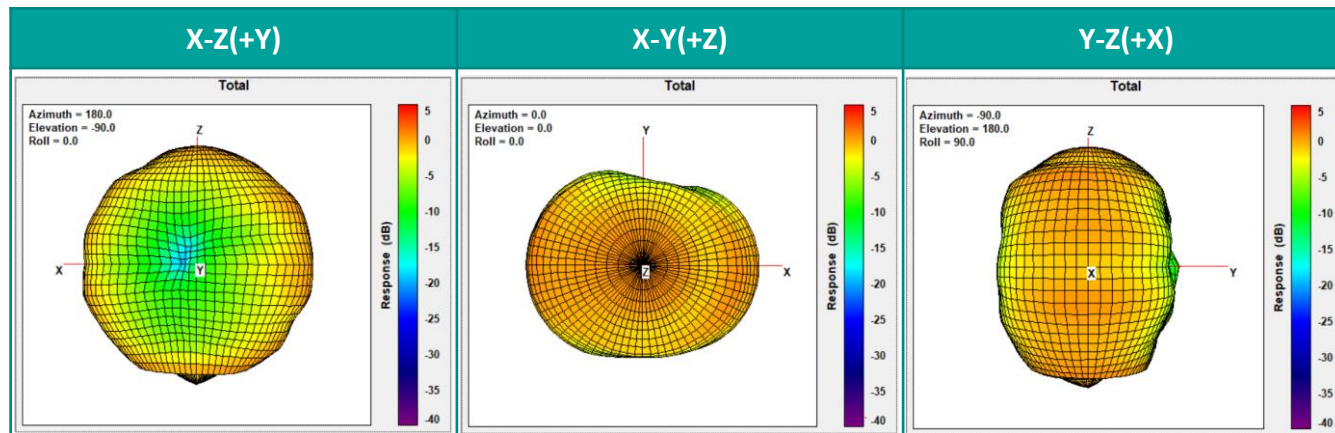
*Presented by : Merry_RF Eden
Date : 2025.08.29*

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- Test Photo & Setting
- Measured result
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 - Radiation pattern

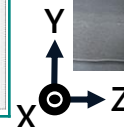
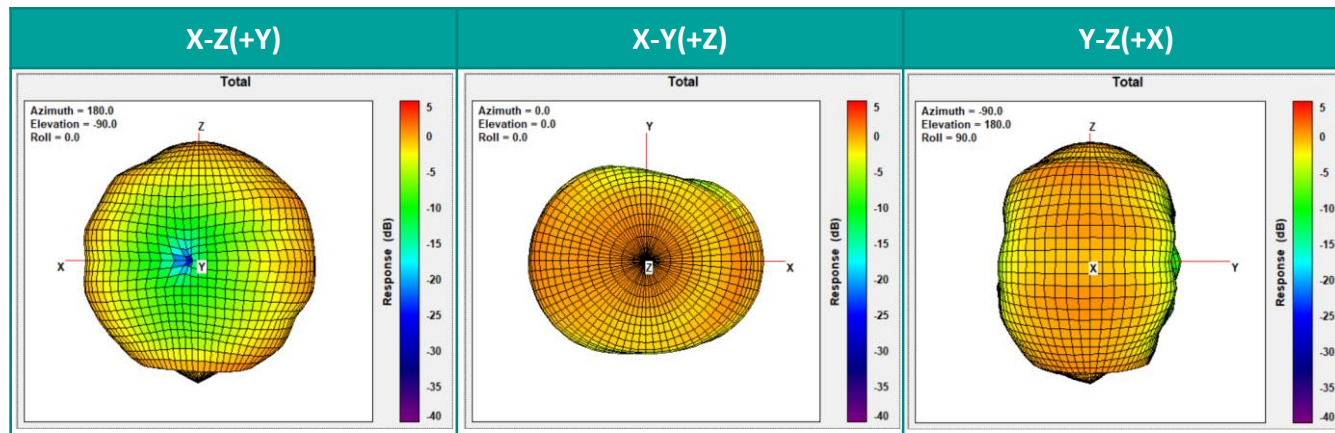
Antenna Efficiency & Gain – Dongle_Xbox (Free Space)

Model	Merry_HDT586_EV_Original_DG_FS_XBOX_3D_Gain										
Test / Position	3D Gain / FS										
Frequency	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Peak EIRP (dBm)	1.49	1.46	1.37	1.21	1.02	0.88	0.66	0.50	0.49	0.50	0.48
Directivity (dBi)	3.95	3.93	3.90	3.86	3.80	3.78	3.72	3.67	3.75	3.80	3.85
Efficiency (dB)	-2.46	-2.47	-2.53	-2.65	-2.78	-2.90	-3.05	-3.17	-3.26	-3.31	-3.36
Efficiency (%)	56.80	56.57	55.86	54.38	52.70	51.25	49.52	48.18	47.20	46.68	46.12
Gain (dBi)	1.49	1.46	1.37	1.21	1.02	0.88	0.66	0.50	0.49	0.50	0.48



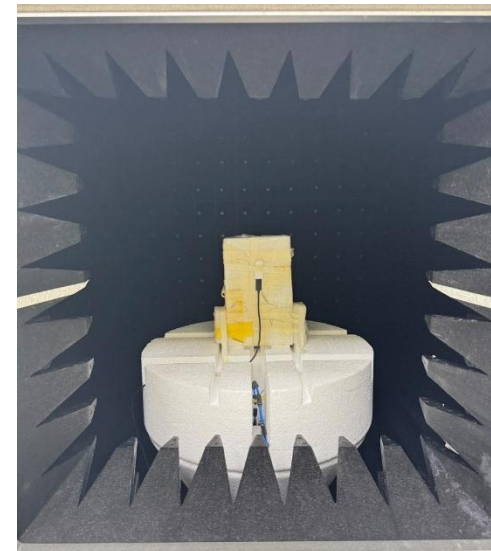
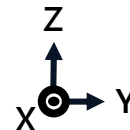
Antenna Efficiency & Gain – Dongle_PC (Free Space)

Model	<i>Merry_HDT586_EV_Original_DG_PC_FS_3D_Gain</i>										
Test / Position	<i>3D Gain / FS</i>										
Frequency	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Peak EIRP (dBm)	1.93	1.90	1.82	1.64	1.52	1.47	1.38	1.34	1.32	1.31	1.30
Directivity (dBi)	3.98	3.97	3.95	3.88	3.88	3.96	4.01	4.07	4.14	4.17	4.22
Efficiency (dB)	-2.05	-2.07	-2.12	-2.24	-2.36	-2.48	-2.63	-2.73	-2.82	-2.86	-2.91
Efficiency (%)	62.40	62.12	61.34	59.69	58.06	56.44	54.58	53.32	52.24	51.74	51.12
Gain (dBi)	1.93	1.90	1.82	1.64	1.52	1.47	1.38	1.34	1.32	1.31	1.30



Antenna Efficiency & Gain – Dongle TIS/TRP(Xbox)

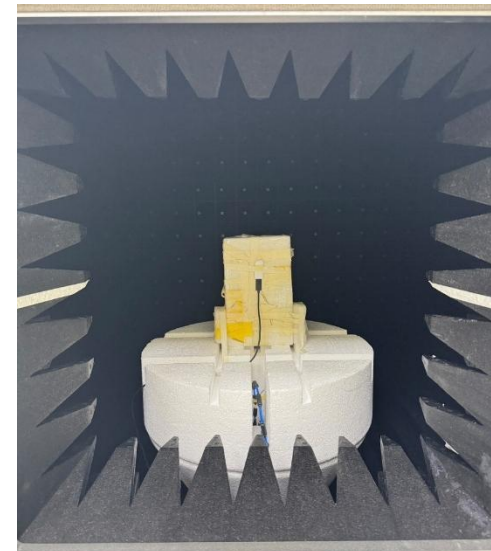
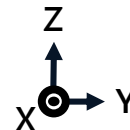
Model	Merry_HDT586_Dongle_Xbox		
Test/Position	TRP/TIS		
Communication system	BT OTA		
Channel	0	39	78
Frequency(MHz)	2402	2441	2480
Tot. Rad. Pwr. (dBm)	5.55	5.28	4.78
Tot. Iso. Sen. (dBm)	-92.23	-91.76	-91.01



Model	Merry_HDT586_EV_Original_DG_FS_XBOX_3D_Gain										
Test / Position	3D Gain / FS										
Frequency	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Peak EIRP (dBm)	1.49	1.46	1.37	1.21	1.02	0.88	0.66	0.50	0.49	0.50	0.48
Directivity (dBi)	3.95	3.93	3.90	3.86	3.80	3.78	3.72	3.67	3.75	3.80	3.85
Efficiency (dB)	-2.46	-2.47	-2.53	-2.65	-2.78	-2.90	-3.05	-3.17	-3.26	-3.31	-3.36
Efficiency (%)	56.80	56.57	55.86	54.38	52.70	51.25	49.52	48.18	47.20	46.68	46.12
Gain (dBi)	1.49	1.46	1.37	1.21	1.02	0.88	0.66	0.50	0.49	0.50	0.48

Antenna Efficiency & Gain – Dongle TIS/TRP(PC)

Model	Merry_HDT586_Dongle_PC		
Test/Position	TRP/TIS		
Communication system	BT OTA		
Channel	0	39	78
Frequency(MHz)	2402	2441	2480
Tot. Rad. Pwr. (dBm)	5.74	5.32	5.33
Tot. Iso. Sen. (dBm)	-93.01	-91.91	-91.56



Model	Merry_HDT586_EV_Original_DG_PC_FS_3D_Gain										
Test / Position	3D Gain / FS										
Frequency	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Peak EIRP (dBm)	1.93	1.90	1.82	1.64	1.52	1.47	1.38	1.34	1.32	1.31	1.30
Directivity (dBi)	3.98	3.97	3.95	3.88	3.88	3.96	4.01	4.07	4.14	4.17	4.22
Efficiency (dB)	-2.05	-2.07	-2.12	-2.24	-2.36	-2.48	-2.63	-2.73	-2.82	-2.86	-2.91
Efficiency (%)	62.40	62.12	61.34	59.69	58.06	56.44	54.58	53.32	52.24	51.74	51.12
Gain (dBi)	1.93	1.90	1.82	1.64	1.52	1.47	1.38	1.34	1.32	1.31	1.30