

Viking Certification Report

Model Name : ALP6Y-100011(Main)

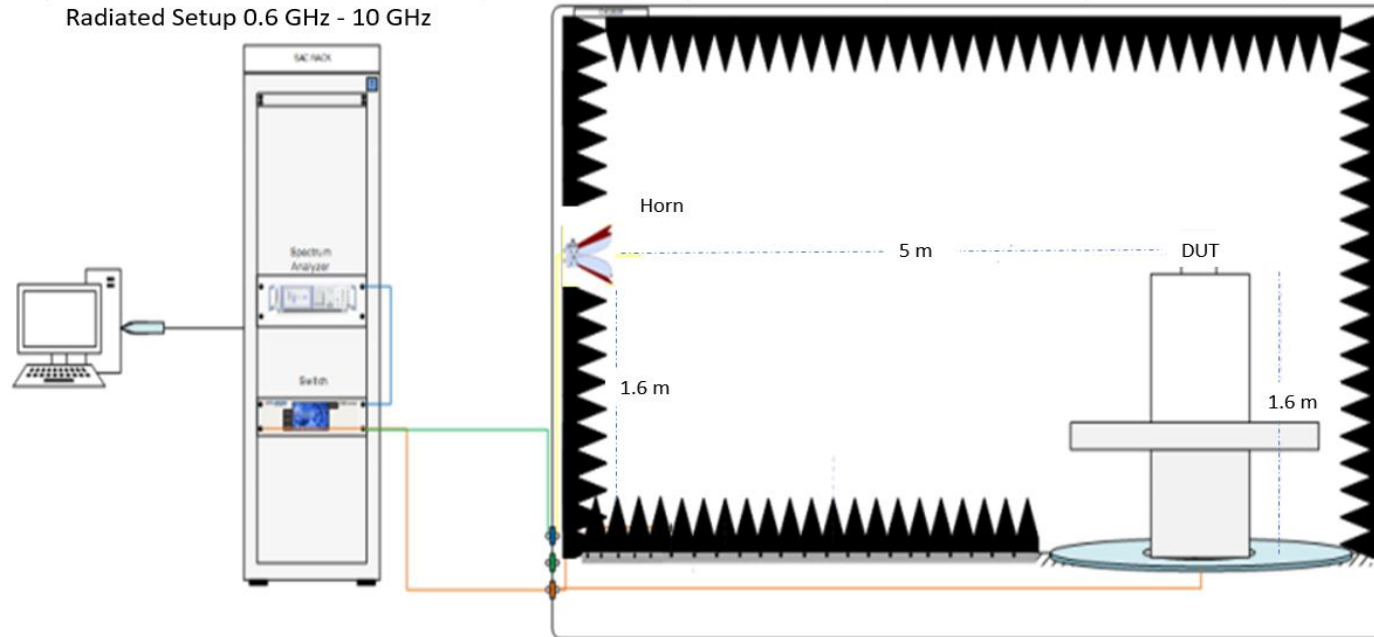
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Aantenna Test System



Device	Type/Module	Serial#	Manufacturer	Cal. Date	Cal. Due Date
Anechoic Chamber	AMS-8500	1047	ETS-Lindgren	2024/2/21	2025/8/21
Turn Table	ETS	-	ETS-Lindgren	N/A	N/A
Rotate controller	2090	SN 00035073	ETS-Lindgren	N/A	N/A
Horn Antenna	HAD-0710	111025-02	Bwant	2023/3/16	2025/3/16
Vector Network Analyzer	E5071C	MY46733781	Keysight	2022/1/21	2025/1/21
Cable 40cm 18 GHz	201EH012010400	201EH012010400#1	Jmtt	2024/1/22	2025/1/27
Cable 6m 18 GHz	201EH012016000	201EH012016000#3	Jmtt	2024/1/22	2025/1/22
Cable 6m 18 GHz	201EH012016000	201EH012016000#5	Jmtt	2024/1/22	2025/1/22
Cable 3.5m 18 GHz	201EH012013500	201EH012013500#3	Jmtt	2024/1/22	2025/1/22
Cable 1.5m 18 GHz	201EH012011500	201EH012011500#2	Jmtt	2024/1/22	2025/1/22

Specification

- . Product Number : ALP6Y-100011(Main)
- . Version :

Electrical Characteristics

- . Frequency (MHz) :2400-2500MHz, 5150-5850MHz, 5925-7125MHz
VSWR: < 4 MAX
- . Efficiency : >50%
- . Peak Gain(Max) : 2.39 dBi
- . Impedance : 50 Ω
- . Polarization : Linear
- . Antenna Type : PIFA

Mechanical Characteristics

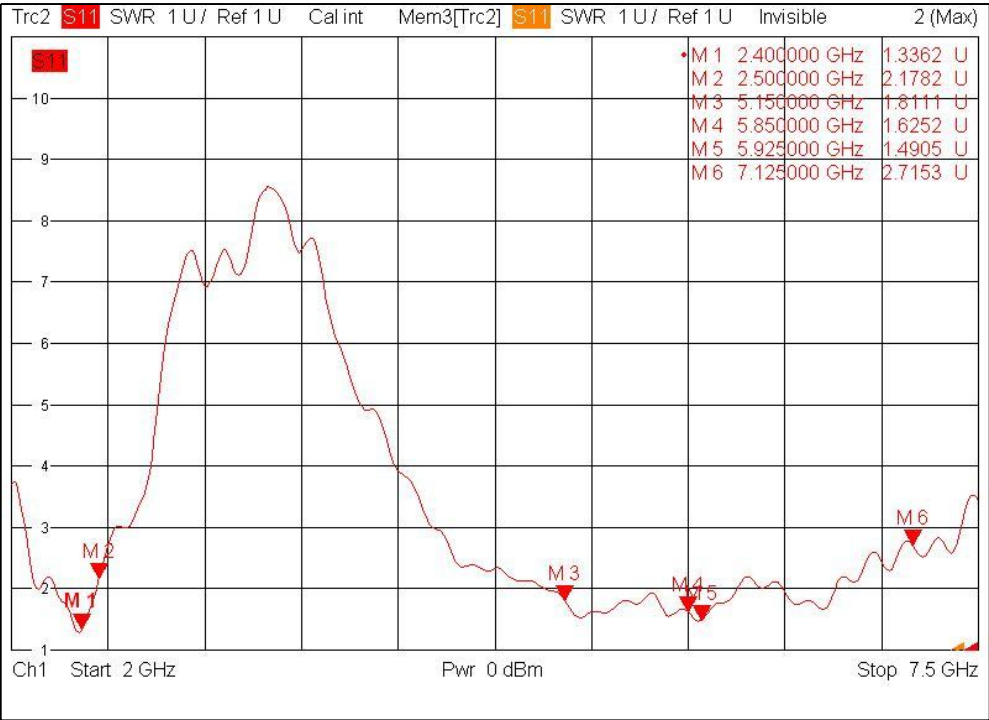
- . Cable / Connector : 1.13mm / IPEX
- . Material : SUS430

Environmental Condition

- . Operation Temperature : -30~+65 $^{\circ}\text{C}$
- . Storage Temperature : -30~+85 $^{\circ}\text{C}$

Return Test Data

i ALP6Y-100011(Main)



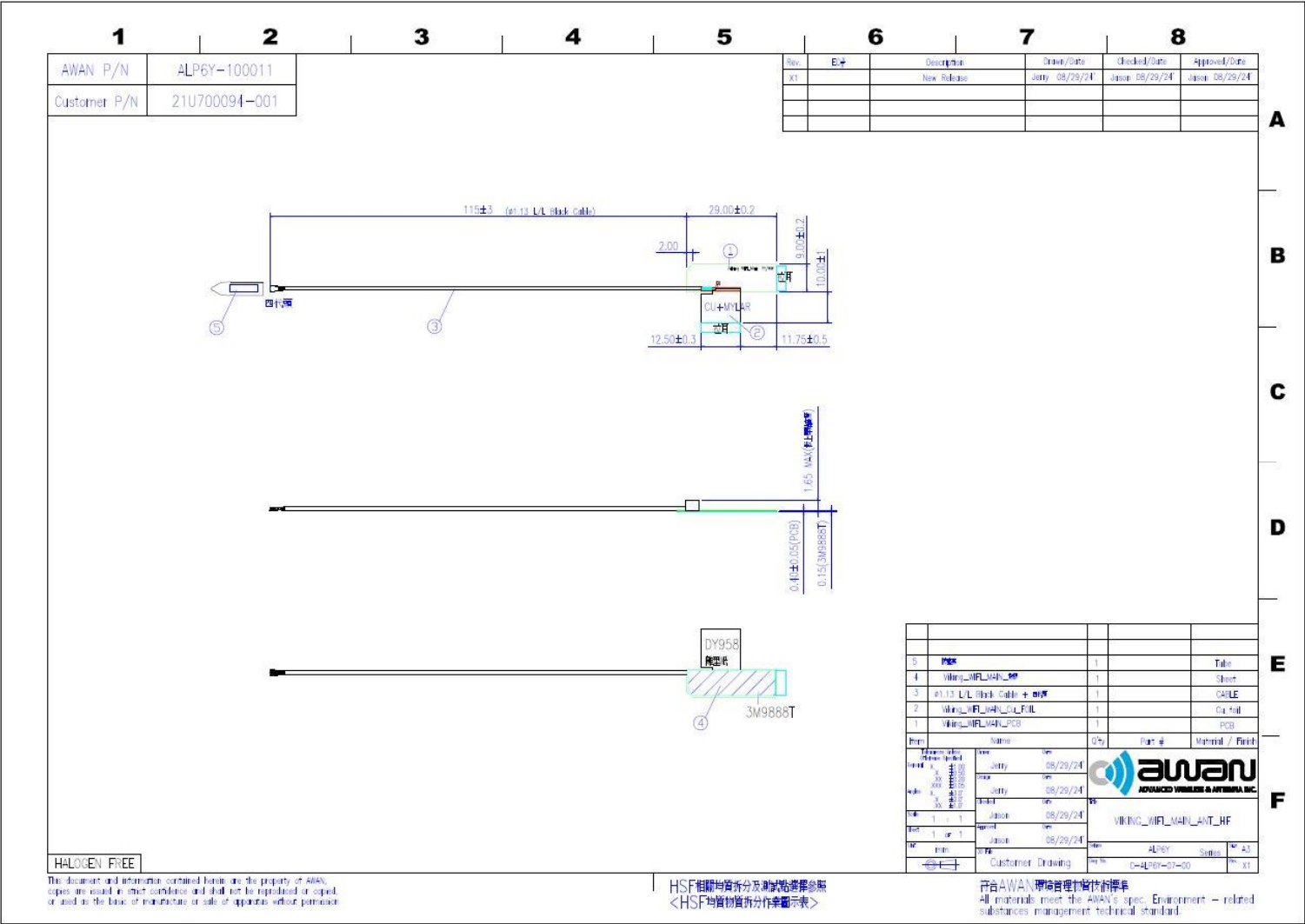
Gain / Efficiency Test Data

i ALP6Y-100011(Main)

Frequency (MHz)	2400	2450	2500	5150	5250	5350	5470	5600
Peak Gain (dBi)	1.81	2.39	2.23	1.95	1.92	1.93	1.47	2.02
Efficiency (dBi)	-2.65	-2.77	-2.85	-2.71	-2.48	-2.57	-2.50	-2.39
Efficiency (%)	54.34	52.82	51.90	53.64	56.44	55.28	56.27	57.68
Frequency (MHz)	5725	5785	5850	5925	6000	6125	6225	6325
Peak Gain (dBi)	2.03	2.05	2.01	2.02	1.92	1.95	1.41	1.86
Efficiency (dBi)	-2.56	-2.27	-2.34	-2.05	-2.26	-2.29	-2.32	-2.29
Efficiency (%)	55.48	59.27	58.29	62.32	59.48	59.06	58.65	59.06
Frequency (MHz)	6425	6525	6625	6725	6875	6925	7000	7125
Peak Gain (dBi)	1.96	1.44	1.48	1.42	0.64	0.93	0.50	0.17
Efficiency (dBi)	-2.40	-2.54	-2.62	-2.31	-2.61	-2.75	-2.84	-2.89
Efficiency (%)	57.49	55.67	54.76	58.82	54.82	53.04	51.99	51.45

Drawing Layout

i ALP6Y-100011(Main)



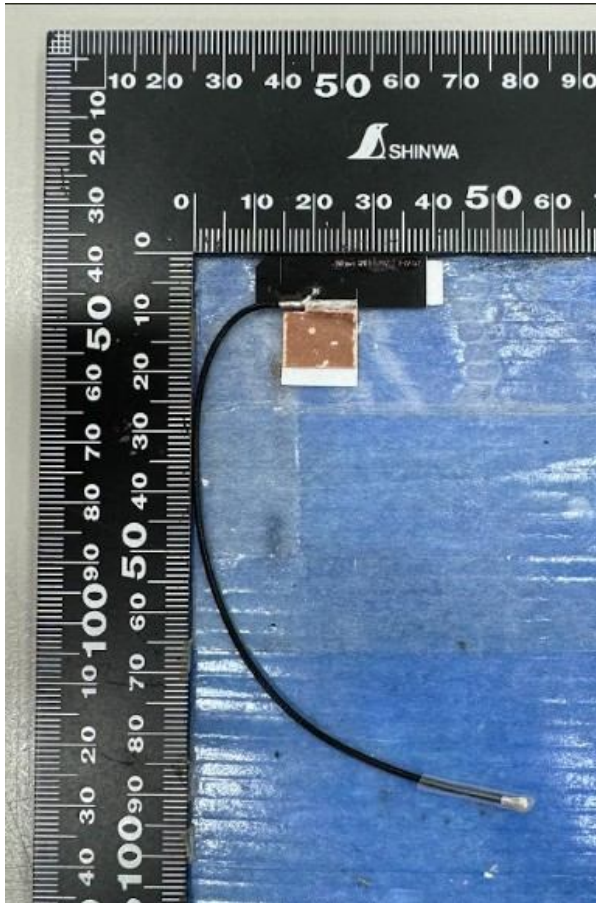
Antenna Assembly Specifications

Antenna Part Number	Manufacturer	Antenna Type	Cable Assembly Part Number and Information	Freq Range MHz	Peak Gain W/ Cable loss (dBi)	Peak Gain w/o Cable Loss (dBi)	Max VSWR	Cable Loss (dB)
P/N: 21U700094-001 Vender P/N: ALP6Y-100011 Main Antenna	AWAN	PIFA	I-PEX:MHF4 Coaxial length: 115mm Diameter: 1.13	2400-2500MHz	2.39	2.68	4	0.29
				5150-5250MHz	1.95	2.43	4	0.48
				5250-5350MHz	1.93	2.41	4	0.48
				5470-5725MHz	2.03	2.51	4	0.48
				5725-5850MHz	2.05	2.54	4	0.49
				5925-6425MHz	2.02	2.51	4	0.49
				6425-6525MHz	1.96	2.45	4	0.49
				6525-6875MHz	1.48	1.97	4	0.49
				6875-7125MHz	0.93	1.48	4	0.55

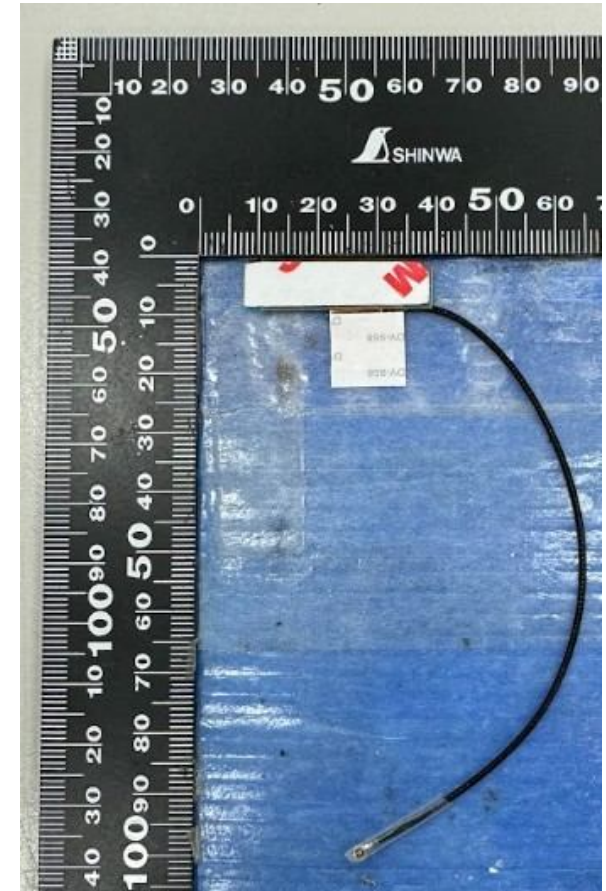
Antenna Photo (Front/Back):

i ALP6Y-100011(Main)

i Front

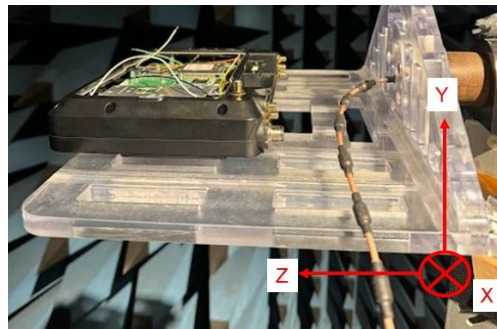
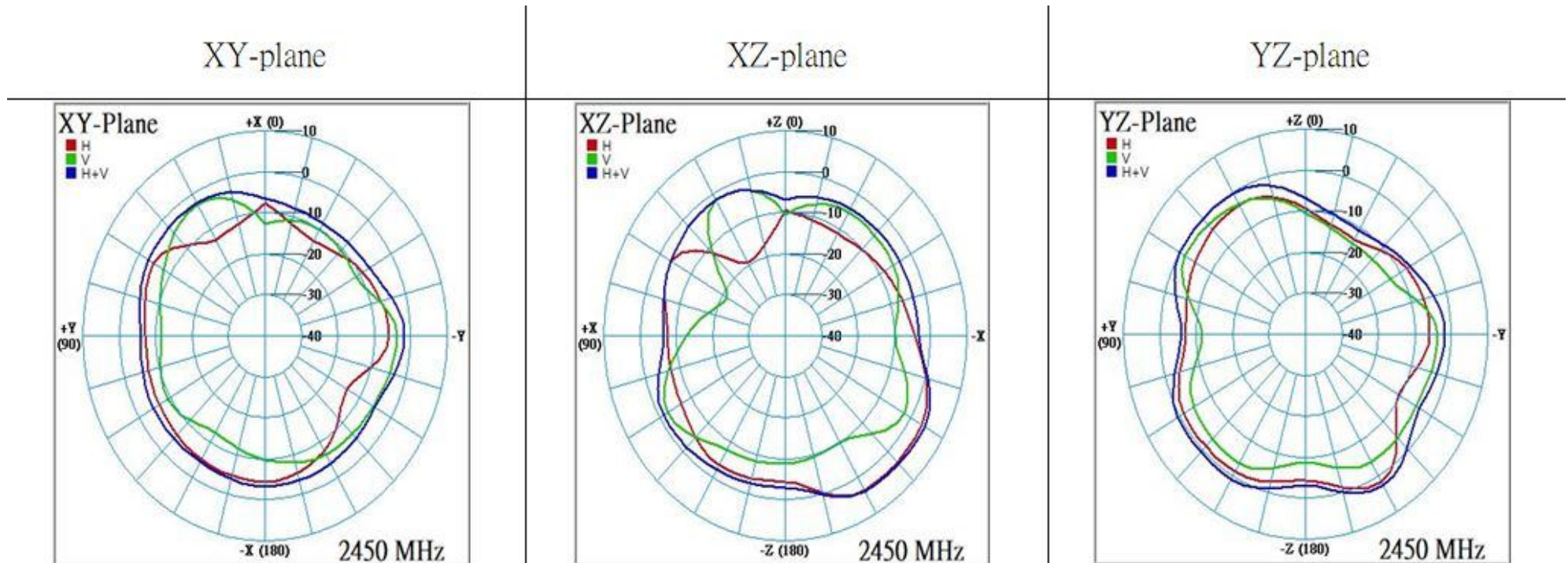


i Back



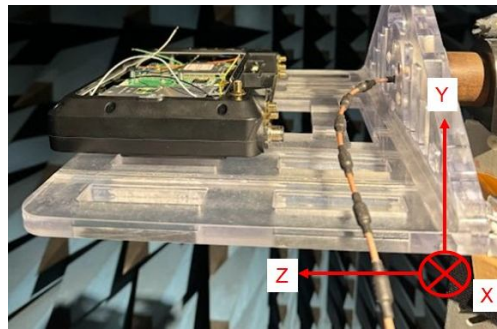
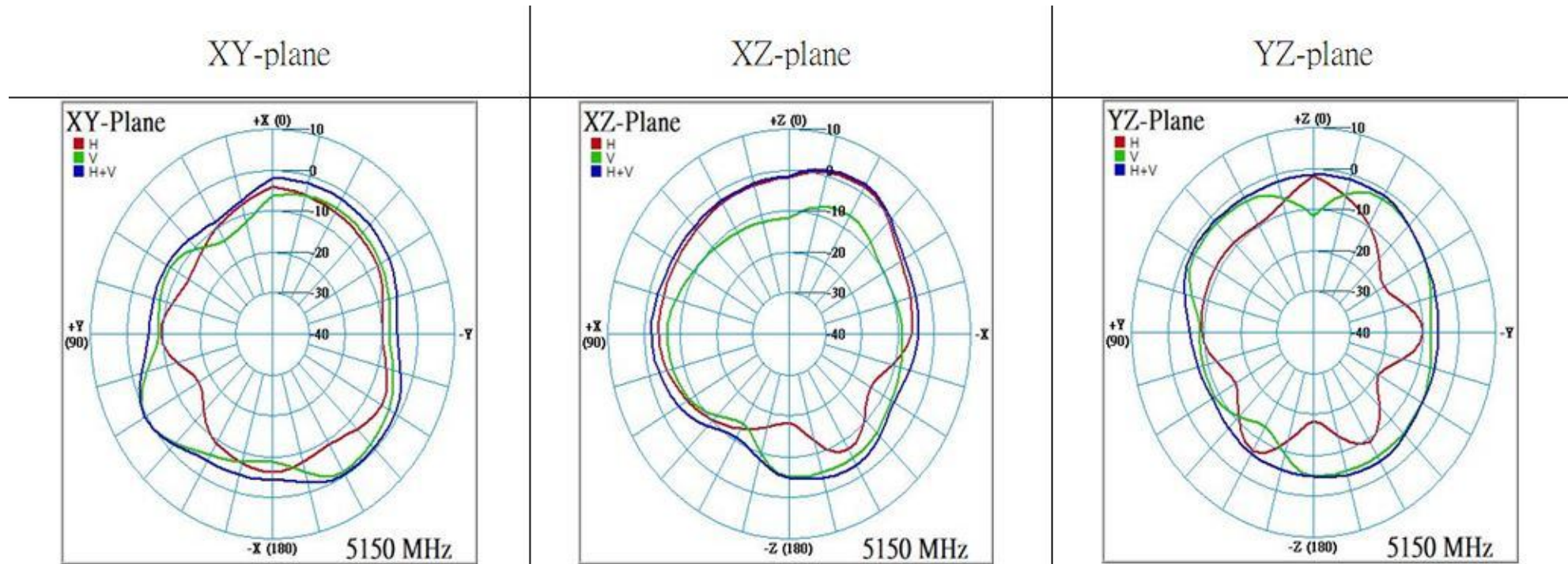
Radiation characteristics of antenna loaded in Host Platform @ 2450MHz:

i ALP6Y-100011(Main)



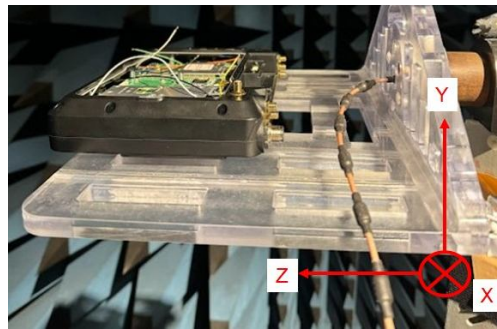
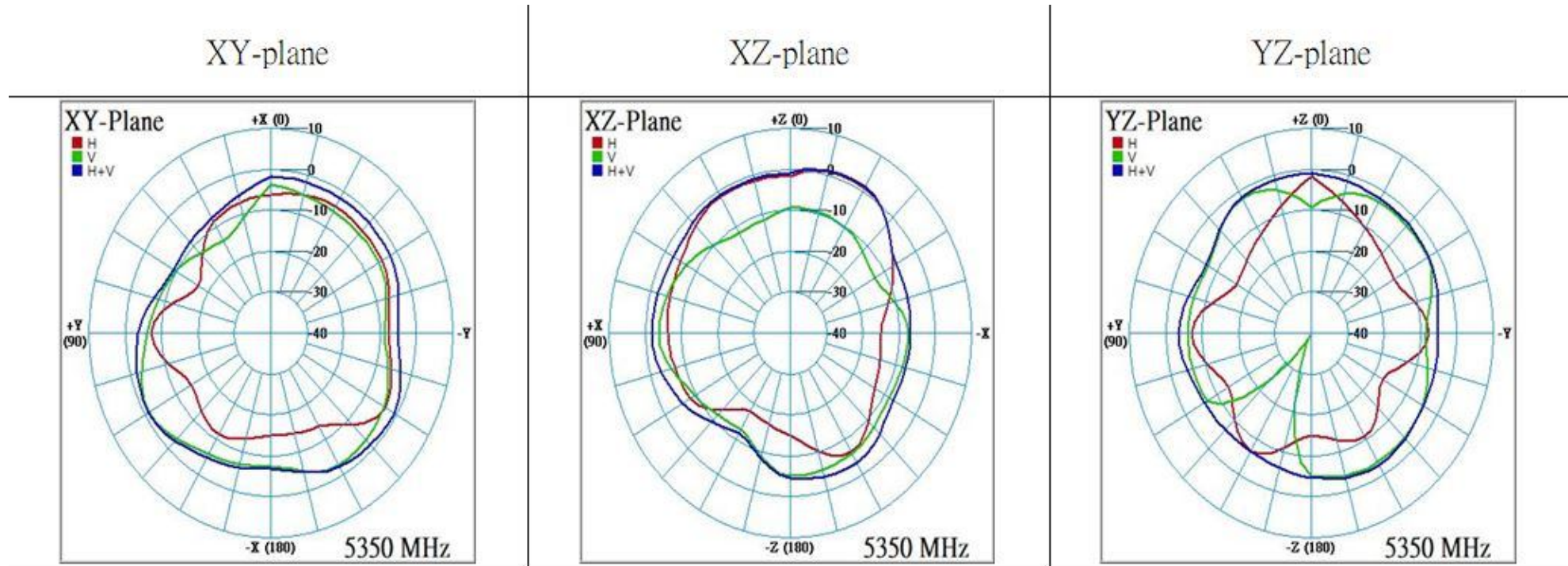
Radiation characteristics of antenna loaded in Host Platform @ 5150MHz:

i ALP6Y-100011(Main)



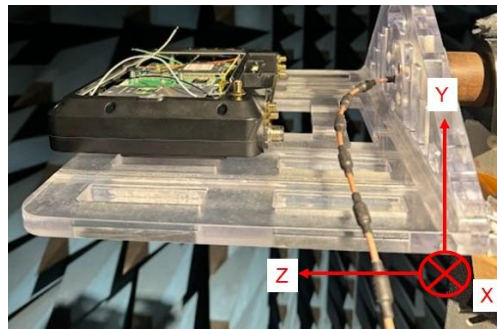
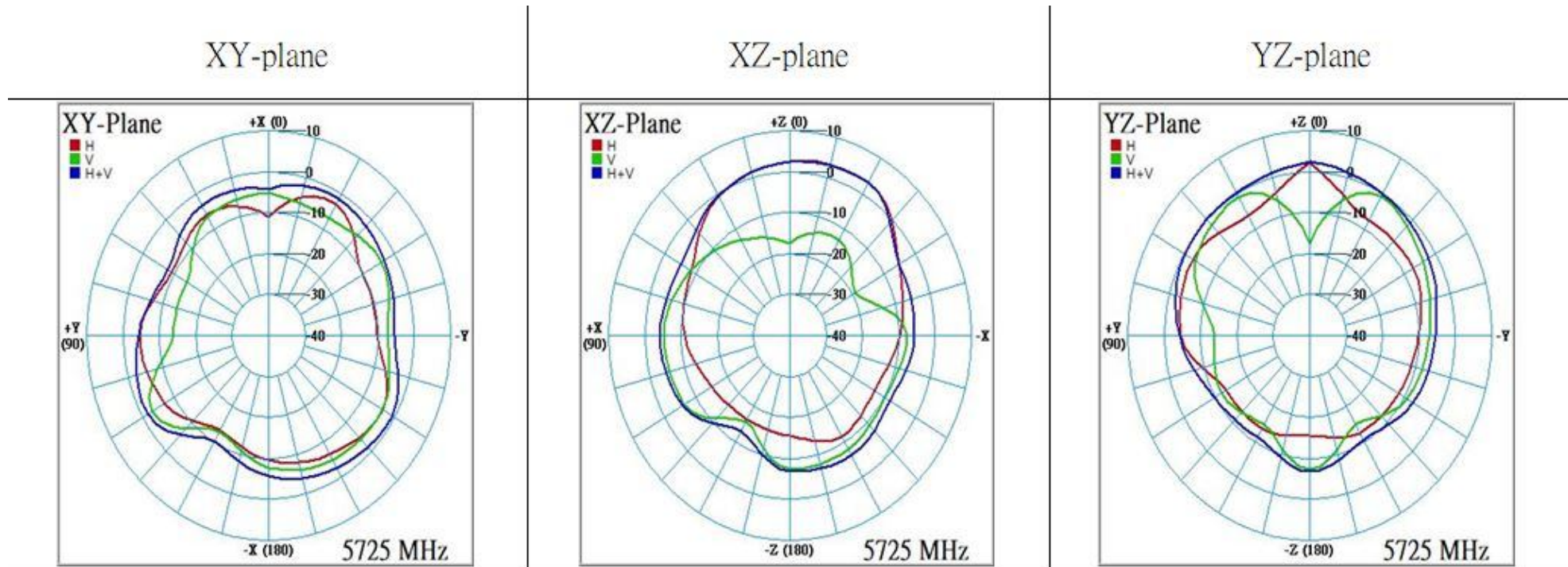
Radiation characteristics of antenna loaded in Host Platform @ 5350MHz:

i ALP6Y-100011(Main)



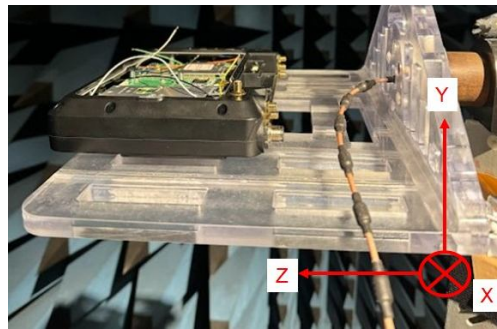
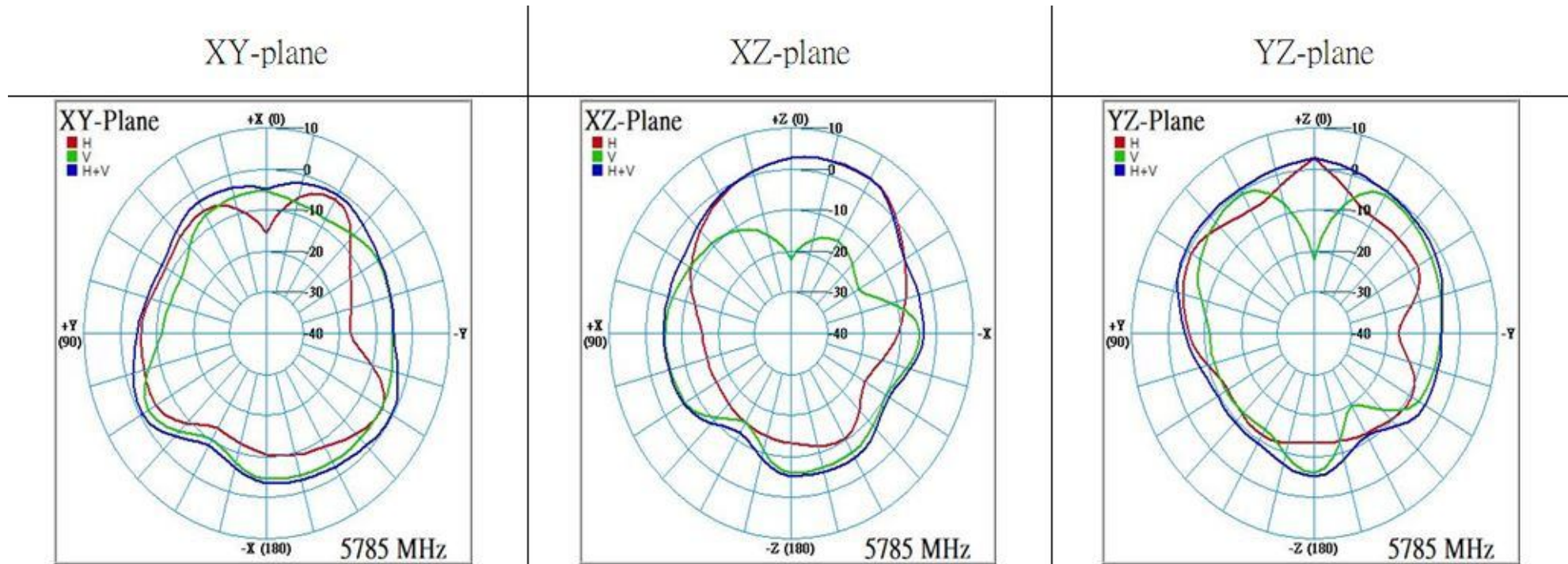
Radiation characteristics of antenna loaded in Host Platform @ 5725MHz:

i ALP6Y-100011(Main)



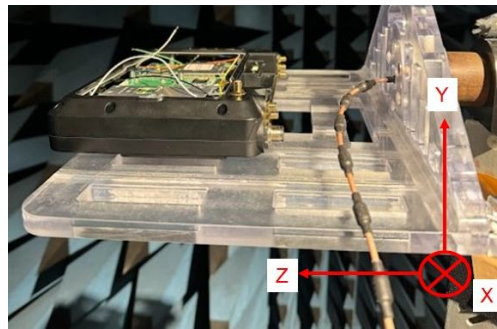
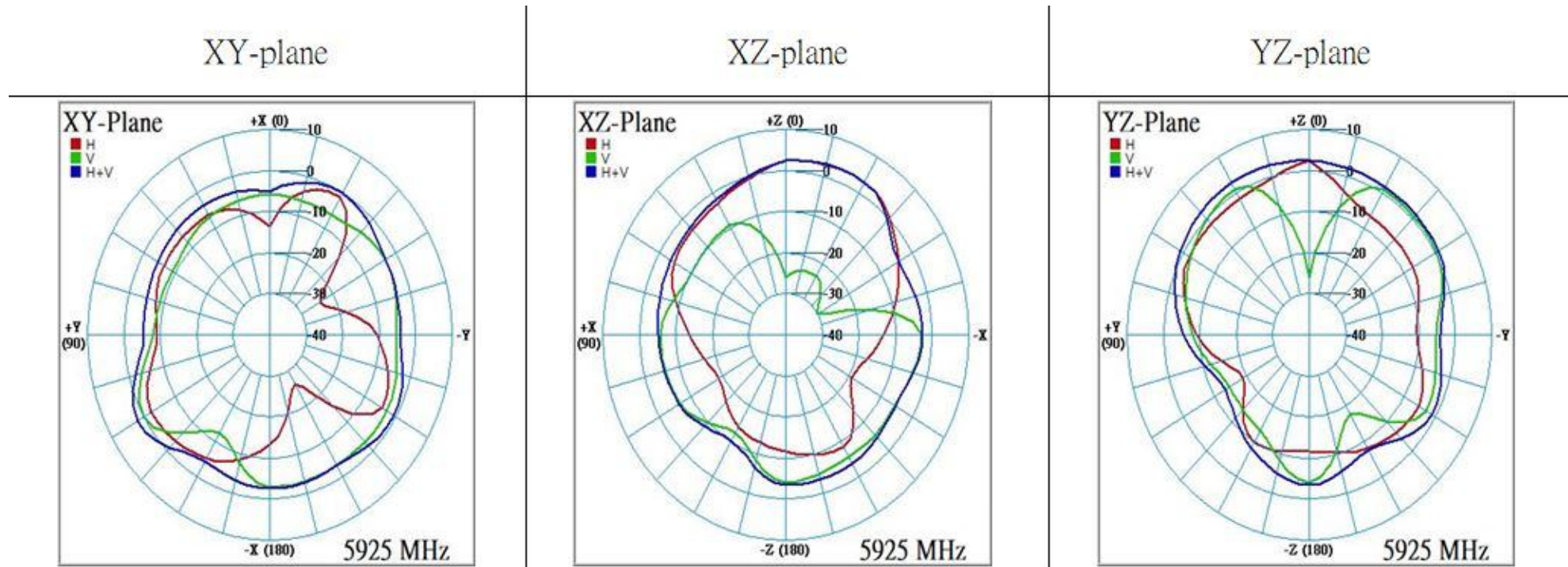
Radiation characteristics of antenna loaded in Host Platform @ 5785MHz:

i ALP6Y-100011(Main)



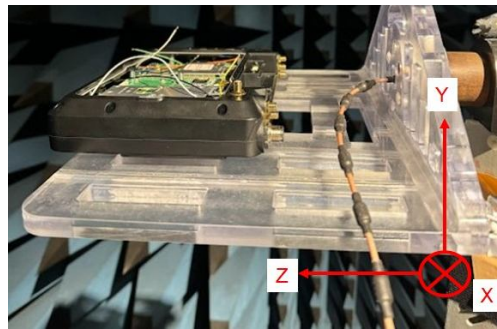
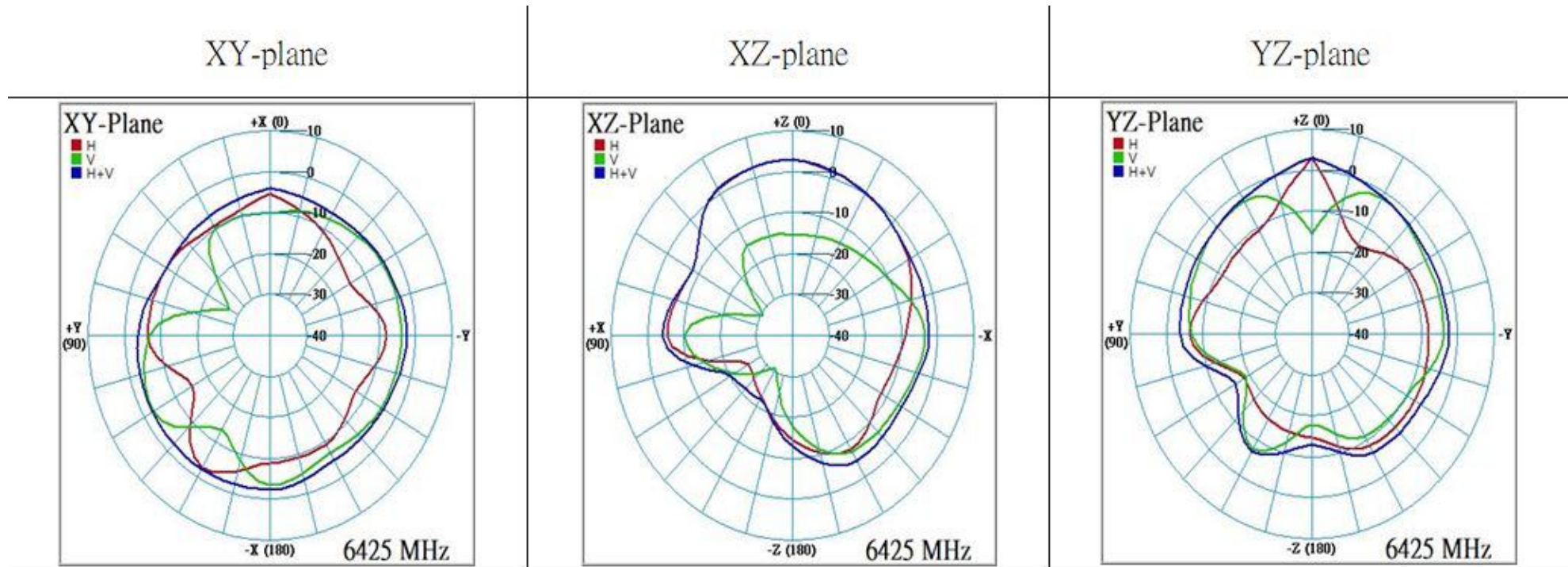
Radiation characteristics of antenna loaded in Host Platform @ 5925MHz:

i ALP6Y-100011(Main)



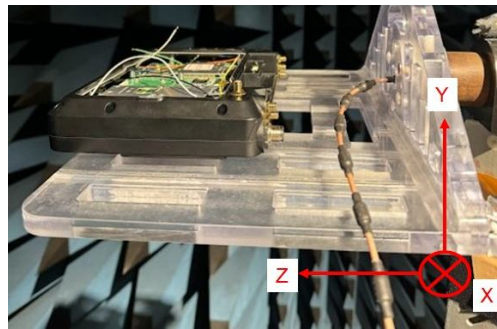
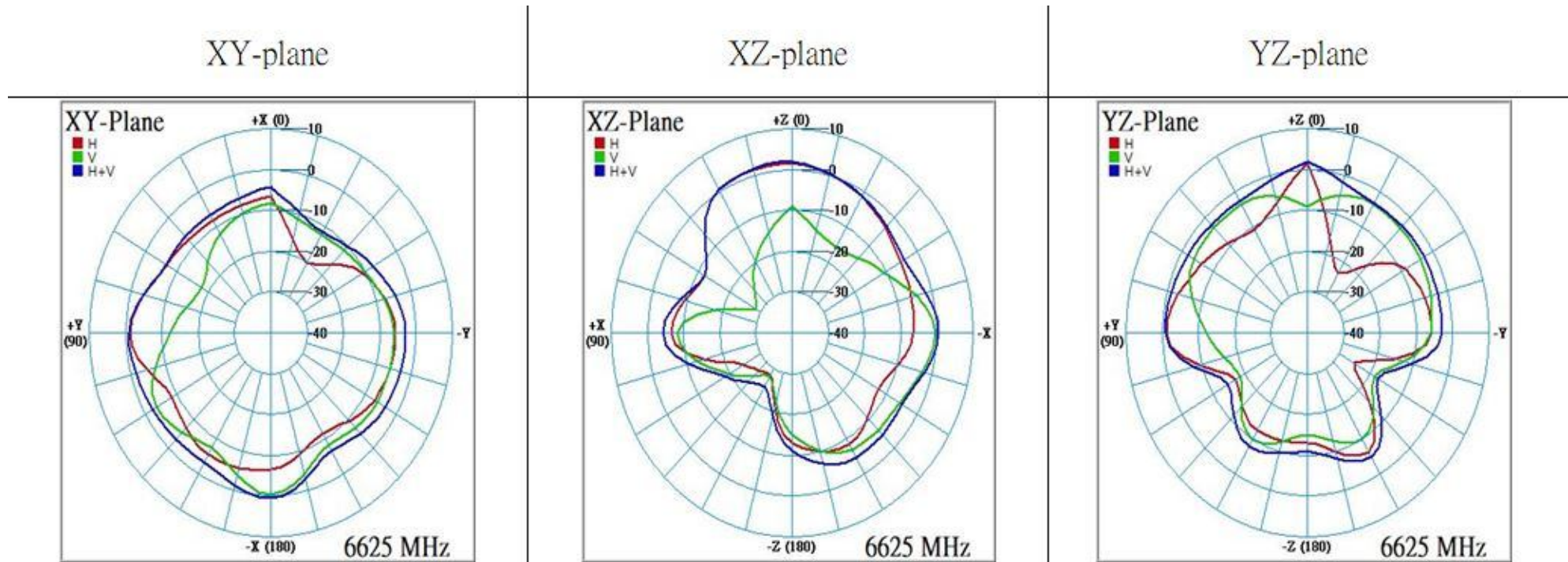
Radiation characteristics of antenna loaded in Host Platform @ 6425MHz:

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Radiation characteristics of antenna loaded in Host Platform @ 6625MHz:

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Radiation characteristics of antenna loaded in Host Platform @ 6925MHz:

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