

SPECIFICATION FOR APPROVAL

CUSTOMER NAME : QUANTA

DESCRIPTION: RF CABLE ASS'Y

CUSTOMER P/N.:

HON HAI P/N. : WDAN-Q1ZW1001

DATE: 4/3'03

REV : A

PLEASE RETURN TO US ONE COPY OF "SPECIFICATION
FOR APPROVAL" WITH YOUR CONFIRMATIVE SIGNATURES.

SIGNATURES			



Hon Hai Precision Industry Co., Ltd.

FOXCONN COMPUTER CONNECTOR (KUN SHAN) CO., LTD.

No 999 BEIMEN ROAD YUSHAN TOWN

KUNSHAN CITY, JIANGSU PROVINCE

CHINA

TEL: (0520)7790998

FAX: (0520)7790998-2837

UNIFORM INVOICE NUMBER: 04541302

鴻海精密工業股份有限公司

HON HAI PRECISION INC.CO.,LTD.

SPECIFICATION FOR APPROVAL

DESCRIPTION: RF CABLE ASS'Y

CUSTOMER P/N:

HON HAI P/N: WDAN-Q1ZW1001

REV NO: X1

ATTACHMENT: 1. CABLE ASS'Y CUSTOMER DRAWING
2. BILL OF MATERIAL FOR P/N:
WDAN-Q1ZW1001

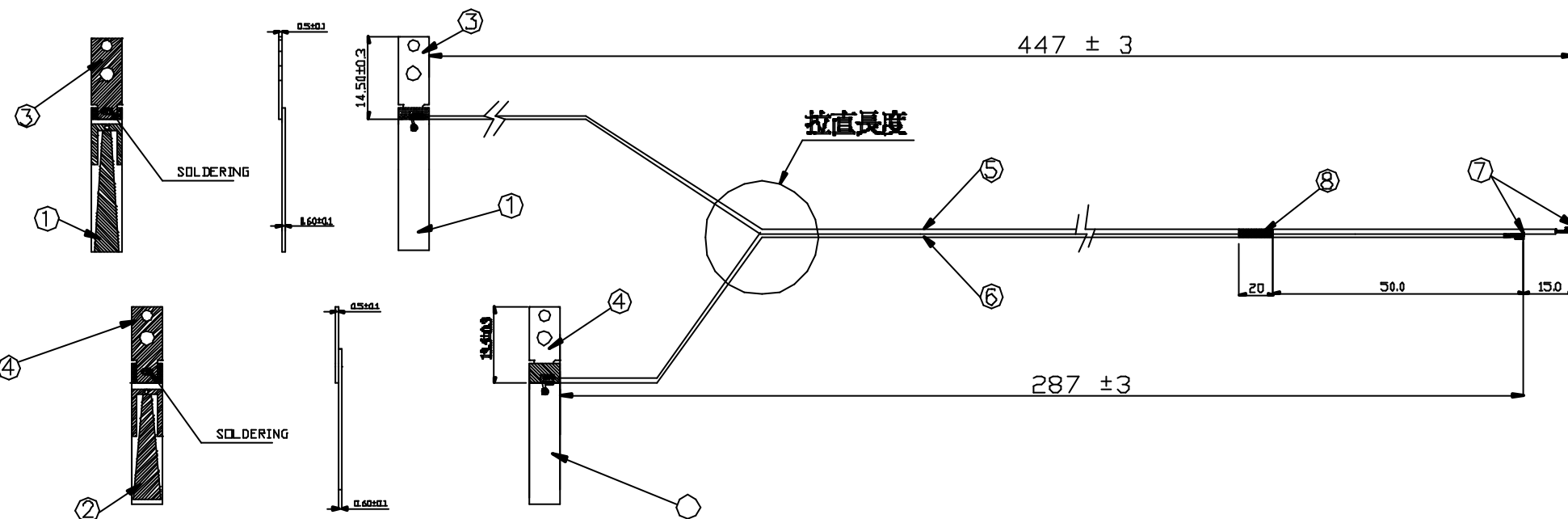
REV.NO.	DATE	CHANGES.	DWG. NO.
X1	4/3'03		605-0100-512

R&D		
APPROVED	CHECKED	PREPARED
C.C Wang 4/3'03	S.T ZHANG 4/3'03	X.F Lin 4/3'03

NOTES:

1. ALL DIMENSIONS SHALL BE INTERPRETED PER ANSI Y14.5M-1982.
2. DIMENSIONS MARKED ▼ SHALL BE CHECKED.
3. HARMFUL MATERIAL CONTROL PLEASE FOLLOW DOC.NO."EPI12".

REV.	ECN. NO.	APPD.
A		



⑧	H.S TUBE (F4-2, 20 MM)	090-0003-033	FOXCONN:090-0003-033	1 PCS
⑦	RF CONNECTOR	SGX0001-00	FOXCONN : SGX0001-00	2 PCS
⑥	32 AWG O.D 1.13 COAXIAL CABLE (GRAY)	703-3208-211	FOXCONN : 703-3208-211	A/R
⑤	32 AWG O.D 1.13 COAXIAL CABLE (BLACK)	703-3200-211	FOXCONN : 703-3200-211	A/R
④	Left Antenna Ground Metal	052-0001-585	FOXCONN:052-0001-585	1 PCS
③	Right Antenna Ground Metal	052-0002-585	FOXCONN:052-0002-585	1 PCS
②	ANTENNA PCB(LEFT)	01-01012008-00	FOXCONN:01-01012008-00	1 PCS
①	ANTENNA PCB(RIGHT)	01-01012009-00	FOXCONN:01-01012009-00	1 PCS
ITEM	DESCRIPTION	FOXCONN P/N	VENDOR P/N	QTY

X. ± 1.0	X. ±	UNITS	mm	NAME(INTENDED USE) QUANTA ZW1 R & L Ass'y	FOXCONN HON HAI PRECISION IND. CO., LTD. TAIPEI, TAIWAN, R.O.C.
.X ± 0.3	.X ±	MAT'L		PART NO.(INTENDED USE) WDAN-Q1ZW1001	TITLE: ANTENNA CABLE ASS'Y
.XX ±	.XX ±	FINISH		APPD. C.C. Wang 03/25/03	DWG NO. 605-0100-512
.XXX ±	.XXX ±	Q'TY		CHKD S.D.Zhang 03/25/03	SCALE SHEET REV. N/A 1/1 A
THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF HON HAI PRECISION IND. CO., LTD. AND SHALL NOT BE REPRODUCED COPIED OR USED IN ANY MANNER WITHOUT THE PREVIOUS WRITTEN CONSENT OF HON HAI PRECISION IND. CO., LTD.				DR. X.F. LI 03/25/03	



BILL OF MATERIAL

HON HAI PRECISION INDUSTRY CO., LTD

FOXCONN COMPUTER CONNECTOR (KUN SHAN) CO., LTD.
NO. 999 BEIMEN ROAD YUSHAN TOWN
KUNSHAN CITY, JIANGSU PROVINCE
CHINA

HON HAI P/N: WDAN-Q1ZW1001

CUSTOMER P/N: _____

DESCRIPTION: RF CABLE ASS'Y

P/N	DESCRIPTION	VENDER	UNIT	REMARK
01-01012008-00	PCB	華新	1	
01-01012009-00	PCB	華新	1	
052-0001-585	Sheet Metal	FOXCONN	1	
052-0002-585	Sheet Metal	FOXCONN	1	
703-3208-211	32 AWG OD=1.13mm	FOXCONN	A/R	
703-3200-211	33 AWG OD=1.13mm	FOXCONN	A/R	
SGX0001-00	RF CONN	FOXCONN	2	
090-0003-033	H.S Tube	蘇州發源	A/R	

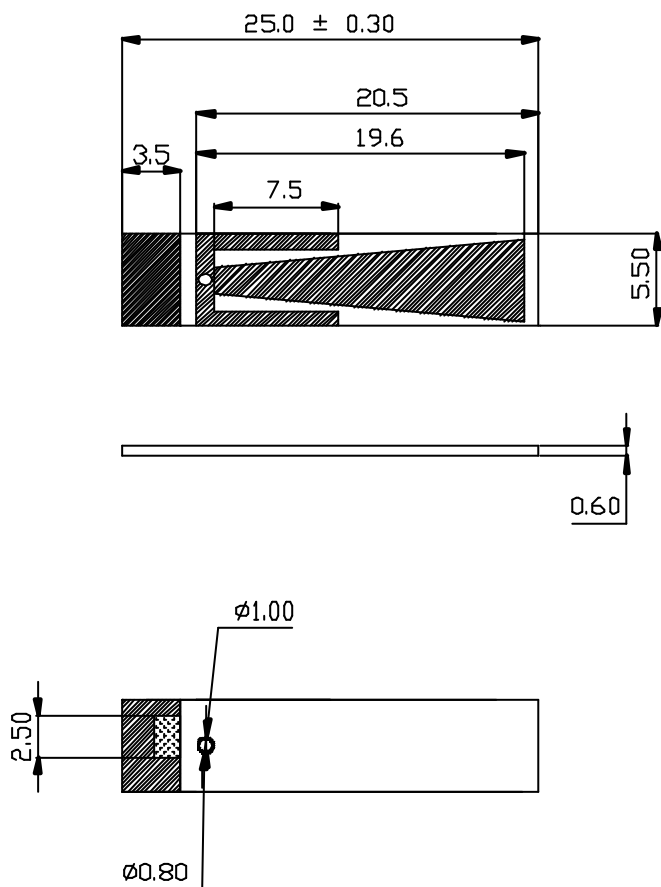
APR.:C.C Wang 4/3'03

CHK:S.T ZHANG 4/3'03

PREPARED: X.F Lin 4/3'03

NOTES:

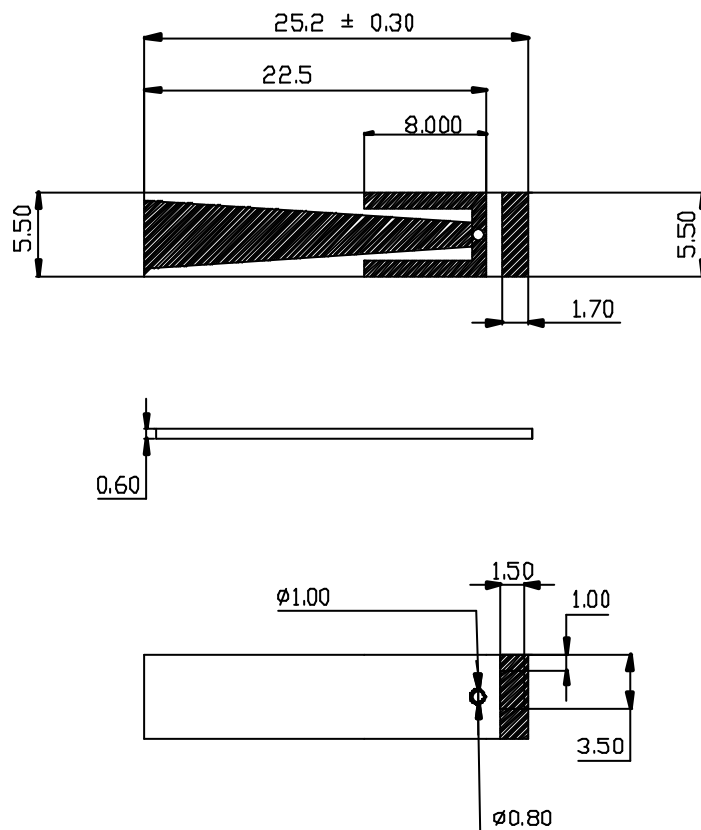
1. ALL DIMENSIONS SHALL BE INTERPRETED PER ANSI Y14.5M-1982.
2. DIMENSIONS MARKED ▼ SHALL BE CHECKED.
3. HARMFUL MATERIAL CONTROL PLEASE FOLLOW DOC.NO."EPI12".



X. ± 0.5	X' ± 0.1"	UNITS	mm	NAME(INTENDED USE)	FOXCONN
X ± 0.1	.X' ± 0.05"	MAT'L		ZV1 Antenna	HON HAI PRECISION IND. CO., LTD.
XX ± 0.01	.XX' ± 0.01"			PART NO.(INTENDED USE)	TAIPEI, TAIWAN, R.O.C.
XXX ± 0.002	.XXX' ± 0.005"	FINISH		01-01012008-00	TITLE:
THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF HON HAI PRECISION IND. CO., LTD. AND SHALL NOT BE REPRODUCED COPIED OR USED IN ANY MANNER WITHOUT THE PREWRITTEN CONSENT OF HON HAI PRECISION IND. CO., LTD.				APPD C.C. Wang 03/12/03	Left ANTENNA PCB
				CHKD: S.J.Zhang 03/12/03	DWG NO:
				DR: X.F. LI 03/12/03	01-01012008-00
				Q'TY	SCALE SHEET REV.
					1/1 1/1 A

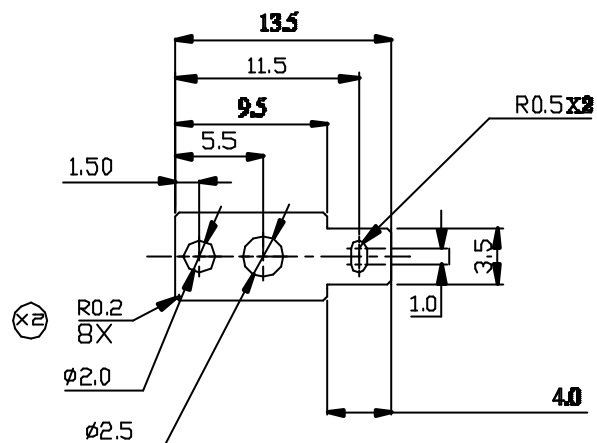
NOTES:

1. ALL DIMENSIONS SHALL BE INTERPRETED PER ANSI Y14.5M-1982.
2. DIMENSIONS MARKED ▼ SHALL BE CHECKED.
3. HARMFUL MATERIAL CONTROL PLEASE FOLLOW DOC.NO."EPI12".

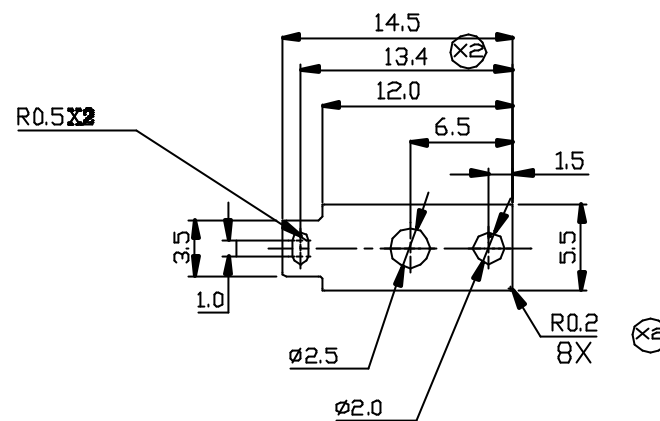


X. $\pm$		NAME<INTENDED USE>	FOXCONN		
X $\pm$		ZV1 Antenna	HON HAI PRECISION IND. CO., LTD.		
XX $\pm$		PART NO.<INTENDED USE>	TAIPEI, TAIWAN, R.O.C.		
XXX $\pm$		01-01012009-00	TITLE:		
THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF HON HAI PRECISION IND. CO., LTD. AND SHALL NOT BE REPRODUCED COPIED OR USED IN ANY MANNER WITHOUT THE PRE- WRITTEN CONSENT OF HON HAI PRECISION IND. CO., LTD.		APPRO: C.C. Wang 03/12/03	Right ANTENNA PCB		
		CHKD: S.D.Zhang 03/12/03	DWG NO.:		
		DR: X.F. Li 03/12/03	01-01012009-00		
			SCALE SHEET REV.		
			N/A 1/1 A		

REV.	ECN. NO.	APPD.
X2		



I
ZW1 LEFT



II
ZW1 RIGHT

NOTE:

1. ALL DIMENSIONS SHALL BE INTERPRETED PER ANSI Y14.5M-1982.

2. ANTENNA BRACKET MATERIAL:

C5191R-H WITH PLATE TIN 100-200u"

THICKNESS : 0.5±0.05mm.m.

3. FINISHED: STAMPING DIRECTION BURR MAX. 0.02mm.

4. UNREMARKED INNER RADIUS $r=0.2$, OUTER RADIUS $R=0.2$

5. CRITICAL DIMENSION: SHOULD CHECK WITH
PROCESS ENGINEER AND Q.C..

6. HARMFUL MATERIAL CONTROL PLEASE FOLLOW DOC. NO.'EPI12'

052-0002-585		ZW1 RIGHT	FOR WDAN-Q1ZW1001	
052-0001-585		ZW1 LEFT	FOR WDAN-Q1ZW1001	
P/N		TYPE	REMARK	
X. ±	X*. ±	UNITS MM	NAME(INTENDED USE)	Foxconn HON HAI PRECISION IND. CO.,LTD. TAIPEI, TAIWAN, R.O.C.
X ± 0.10	.X* ±	MAT'L	NT1 ANTENNA	
XX ±	.XX* ±	FINISH	PART NO.(INTENDED USE)	TITLE: ANTENNA BRACKET
XXX ±	.XXX* ±	Q'TY	WDAN-Q1ZW1001	
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			CHKD: S.D.Zhang 03/25/03	
			DR: X.F. LI 03/25/03	SCALE SHEET REV. 1/1 1/1 X2

AWG	DC RESISTANCE (ohms/km)	COMPOSITION (STRANDS/MM)	DIM "A" (REF.)	DIM "B" (REF.)	DIM "C" (REF.)	DIM "D" (REF.)	PATER NO.
30	MAX. 320	7/0.10	0.305	0.826±0.025	1.358	1.816±0.038	703-30NN-211
32	MAX. 584	7/0.08	0.24	0.68 ^{+0.04} _{-0.02}	0.93	1.13 ^{+0.08} _{-0.05}	703-32NN-211
36	MAX. 1217	7/0.05	0.15	0.4±0.05	0.65	0.8±0.05	703-36NN-211

ELECTRICAL

IMPEDANCE	50±5	ohms
CAPACITANCE	30.5	NOM. pF/ft

FREQUENCY (GHZ)	0.5	1	2	3	4	5	6	PATER NO.
ATTENUATION (dB/10ft)/NOM.	3.1	4.6	6.8	8.6	10.5	12	13.5	703-30NN-211
ATTENUATION (dB/10ft)/NOM.	3.8	5.5	8.2	10.3	12	13.6	15.2	703-32NN-211
ATTENUATION (dB/10ft)/NOM.	6.1	8.4	12.5	15.8	18	20	22.3	703-36NN-211

MECHANICAL

ELONGATION:	MIN 200%
ELON. RETEN.:	MIN 75% 232°C/168H
TENSILE STRENGTH:	MIN 2500PSI
T.E. RETENTION:	MIN 75%
HEAT SHOCK:	232°C NO CRACK
COLD BEND:	-20°C NO CRACK
DEFORMATION:	232°C 50%
FLAME TEST:	VW-1

RATINGS

TEMPERATURE:	200°C/105°C
VOLTAGE:	30V
UL STYLE:	1894/1943

NOTES

1.MATERIAL

CONDUCTOR:SILVER PLATED STRANDED COPPER
PRIMARY INSULATION:FEP
SHIELD:SILVER PLATED BRAID
JACKET:FEP

2.PRIMARY INSULATION CONCENTRICITY=85% MIN.

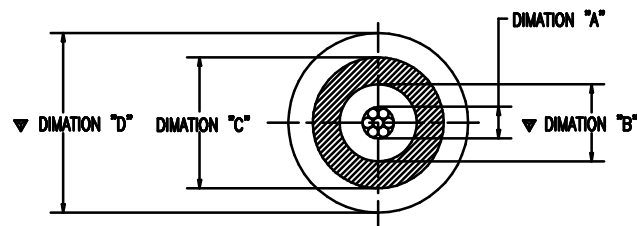
3.BRAIDING COVERAGE TO BE 95% MIN.

4.NN: JACKET COLOR CODE

00--BLACK 01--BROWN 02--RED 03--ORANGE 04--YELLOW
05--GREEN 06--BLUE 07--PURPLE 08--GRAY 09--WHITE
10--CLEAR 99--NATURAL

5.DIMENSIONS WITH ▼ ARE TO BE INSPECTED

6.SPARK TEST AT 0.5 KVAC



REV.	ECN.	NO.	APPD.
A	IC016491		Allen Cheng 12/21/01
B	IC023064		Allen Cheng 4/23/02
C	IC024343		Allen Cheng 6/9/02
D	IC029148		Allen Cheng 10/24/02
E	BC0350986		Allen Cheng 01/07/03

7.DIELECTRIC STRENGTH: 0.5 KVAC/MIN.

8.JACKET CONCENTRICITY=80% MIN.

10.PART NO.:703-AANN-211

AA---CONDUCTION AWG

FOR EXAMPLE:

703-3010-211

30 AWG
CLEAR COLOR

SILVER PLATED STRANDED COPPER
FEP FOR TEFLON

備注:

本產品製造之原料/零件必須符合EP12環境管理規範規定

Harmful material control please follow Doc. No. "EP12"

X.±	X'±	UNITS	MM	NAME(INTENDED USE)	FOXCONN		
.X±	.X'±	MAT'L		COAXIAL CABLE	HON HAI PRECISION IND. CO.,LTD. TAIPEI, TAIWAN, R.O.C.		
.XX±	.XX'±	SEE BOM		PART NO.(INTENDED USE)	TITLE:		
.XXX±	.XXX'±		FINISH	703-AANN-211	RF CABLE		
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				CHKD: William yao1/7/03	703-0000-211		
				Q'TY	DR: Yehe Zhang10/24'02		
					SCALE	SHEET	REV.
					NONE	1/1	E

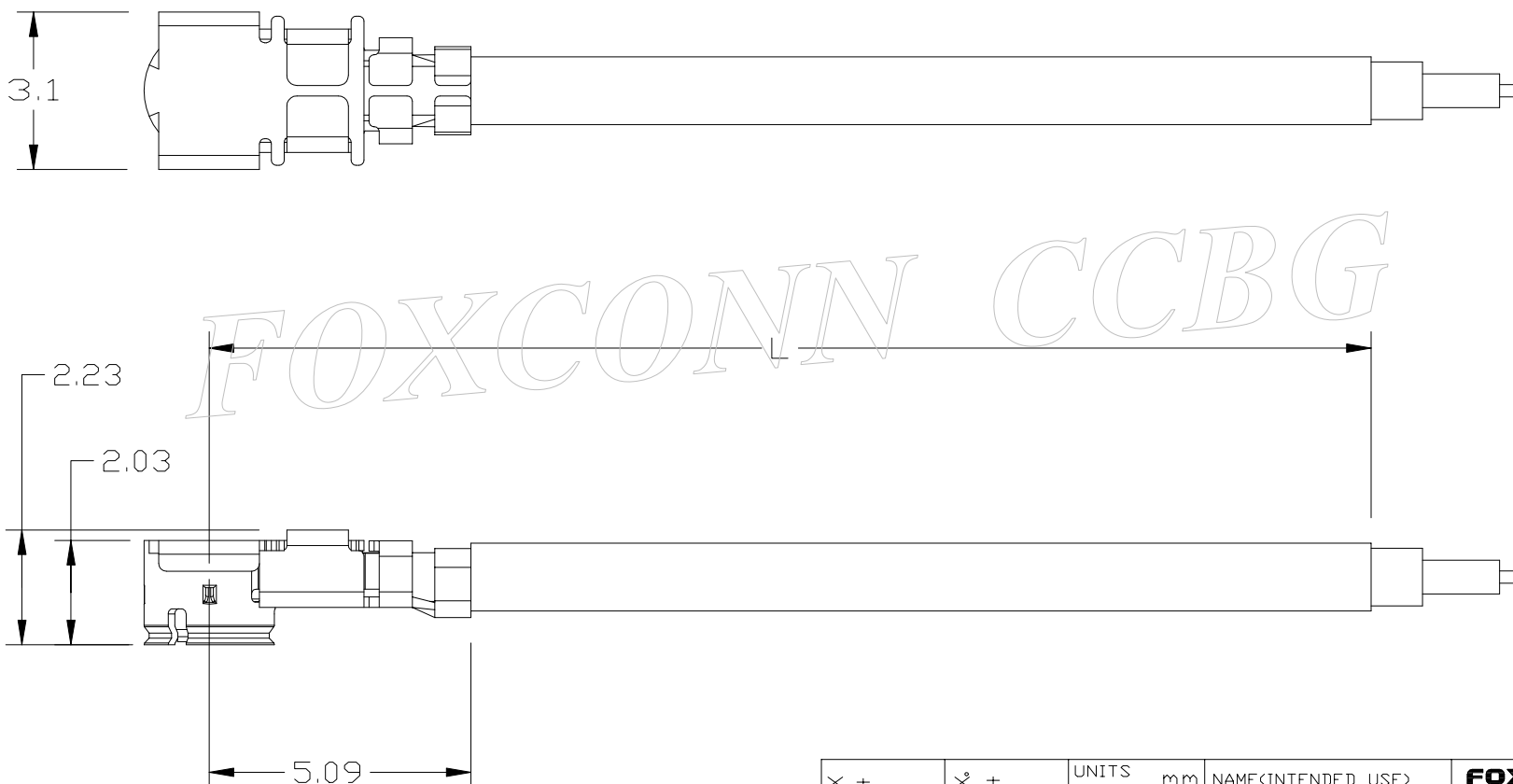
GENERAL SPECIFICATION:

1. CONTACT RESISTANCE: 20 MILIOHMS MAX.
2. INSULATION RESISTANCE: 500 MEGOHMS MIN.
3. WITHSTAND VOLTAGE: 200 Vac
4. V.S.W.R: 1.2 OR LESS AT DC TO 3 GHz
5. OPERATION TEMPERATURE: -40°C TO 90 °C
6. The TOTAL HEIGHT OF RF CABLE ASSEMBLY WITH THE MATING HEADER IS 2.64mm .

RF CABLE ASSEMBLY MATERIAL:

1. CONTACT: COPPER ALLOY, GOLD PLATING
2. HOUSING: THERMOPLASTIC, UL 94V-0 RATED
3. METAL SHELL: COPPER ALLOY, SILVER PLATING
4. CABEL: DIAMETER 1.32mm ULTRA-FINE TEFLON COAXIAL CABLE
5. PART NO. MATRIX: SGX0001-00

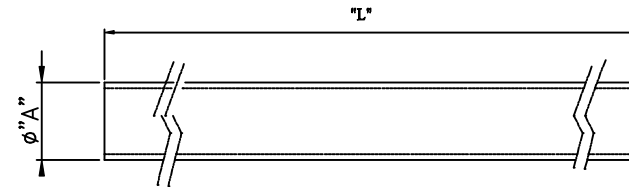
REV.	ECN. NO.	APPD.
X6		D. KO



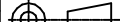
×.±	×.±	UNITS	mm	NAME<INTENDED USE>	FOXCONN
.×±0.1	.×±	MAT'L			HON HAI PRECISION IND. CO.,LTD. TAIPEI, TAIWAN, R.O.C.
.xx±0.1	.xx±	SEE NOTES		PART NO.<INTENDED USE>	TITLE:
.xxx±	.xxx±	FINISH		SGX0001-00	RF CABLE ASSEMBLY
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				CHKD: D. KO	EP00-082-01
				DR: D. KO 10/10/00	
					SCALE SHEET REV.
					10:1 1/2 X6

1. HEAT SHRINKABLE TUBING MUST BE UL-224 125°C. 300V VW-1
FUJIKURA FUE-5 OR HON HAI APPROVED EQUIVALENT
2. MATERIAL: POLYOLEFINS, COLOR-BLACK
3. MARKING: FUJIKURA-A CSA HSXPO TUBING 125°C
OFT F-TUBE FUE-5 VW-1-F-() (直徑在5mm以下, 直接在()
內標示直徑規格)
4. SHRINKING PROPERTIES:
(1) RADIAL SHRINKAGE: 50% MIN.
(2) LONGITUDINAL SHRINKAGE: 15% MAX.
(3) MINIMUM SHRINK TEMPERATURE: 90°C.
5. Harmful material control please follow Doc. No. "EPI12" (G)

REV.	ECN.	NO.	APPD.
A	REL		CHU 7/9/88
B	81148		CHU 5/29/92
C	CC94164		CHU 4/21/94
D	CC94723		CHU 4/19/00
E	IC0212523		Kenny Chao 11/23/02
F	IC0215301		Wang 12/23/02
G	BC0350591		CHU 1/4/2003



090-0018-033	15.0	15.7±0.4	0.3	7.5	0.35	REFL
090-0017-033	14.0	14.7±0.4	0.3	7.0	0.35	REFL
090-0016-033	13.0	13.7±0.4	0.3	6.5	0.35	REFL
090-0015-033	12.0	12.5±0.4	0.2	6.0	0.28	REFL
090-0014-033	11.0	11.5±0.4	0.2	5.5	0.28	REFL
090-0013-033	10.0	10.5±0.4	0.15	5.0	0.28	REFL
090-0012-033	9.0	9.5±0.4	0.15	4.5	0.28	REFL
090-0011-033	8.0	8.5±0.4	0.15	4.0	0.28	REFL
090-0010-033	7.0	7.8±0.4	0.15	3.5	0.28	REFL
090-0009-033	6.0	6.5±0.4	0.15	3.0	0.28	REFL
090-0008-033	5.0	5.4±0.3	0.15	2.5	0.26	REFL
090-0007-033	4.0	4.4±0.3	0.15	2.0	0.26	REFL
090-0006-033	3.5	3.9±0.3	0.15	1.75	0.26	REFL
090-0005-033	3.0	3.4±0.3	0.15	1.5	0.26	REFL
090-0004-033	2.5	2.9±0.2	0.15	1.25	0.26	REFL
090-0003-033	2.0	2.4±0.2	0.10	1.0	0.26	REFL
090-0002-033	1.5	1.9±0.2	0.10	0.75	0.21	REFL
090-0001-033	1.0	1.4±0.2	0.10	0.5	0.21	REFL
Part NO.	DIM. "A" NOMINAL (mm)	MINIMUM INSIDE DIAMETER	Wall Thickness,	MAXIMUM INSIDE DIAMETER	MINIMUM WALL THICKNESS	
		"A" As Supplied MM		"A" As RECOVERED MM		

X.±	X°±	UNITS mm	NAME(INTENDED USE)	FOXCONN HON HAI PRECISION IND. CO.,LTD. TAIPEI, TAIWAN, R.O.C.				
.X± 0.15	.X°±	MAT'L	PART NO.(INTENDED USE)	TITLE: H.S.TUBING ULTRA THIN WAU				
.XX± 0.10	.XX°±	FINISH	APPD: Kenny Chao 1/4'03	DWG NO.: 090-0000-033				
.XXX±	.XXX°±		CHKD: Hai Wang 1/4'03					
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					NONE	1/1	G	

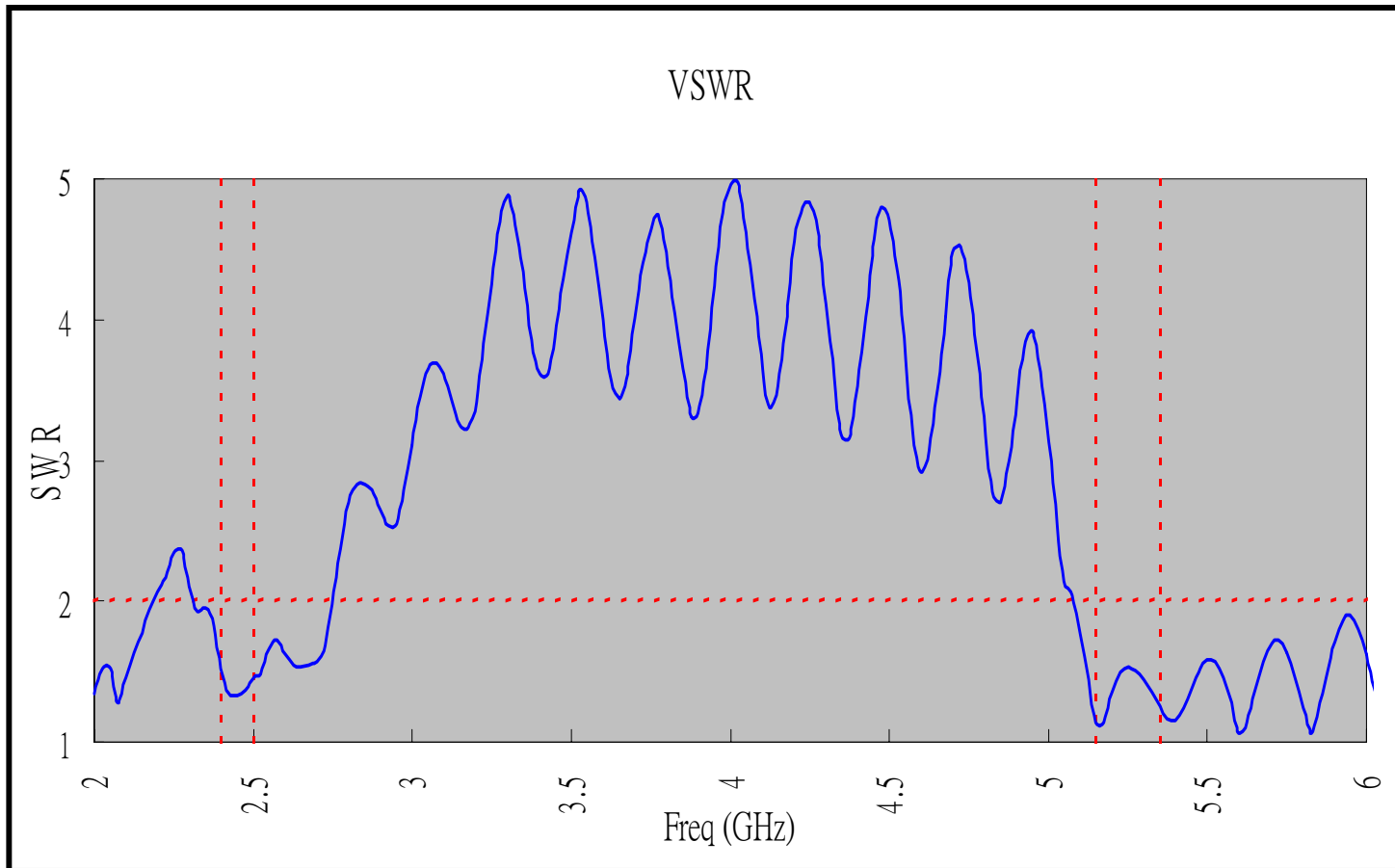
FOXCONN NWInG

Antenna Engineering Test Report

QUANTA ZW1 WLAN Antenna **C Test Report**



VSWR of Right Antenna with 14 “ panel



2.4 GHz = 1.520

2.45GHz = 1.329

2.5 GHz = 1.451

5.15GHz = 1.135

5.25GHz = 1.530

5.35GHz = 1.259

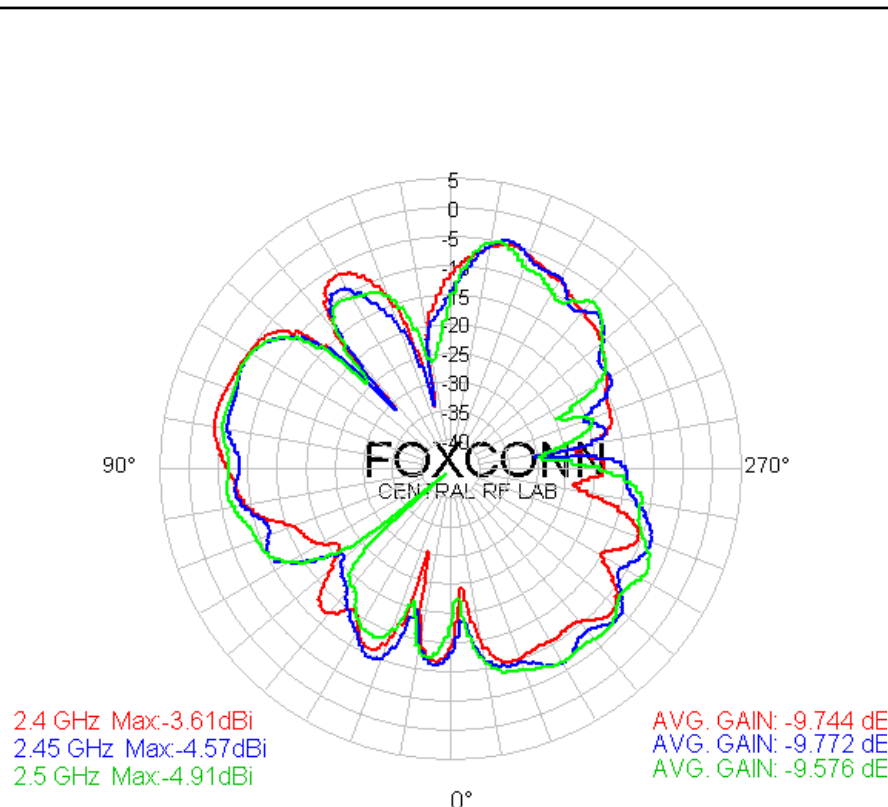


Cable length = 447 mm

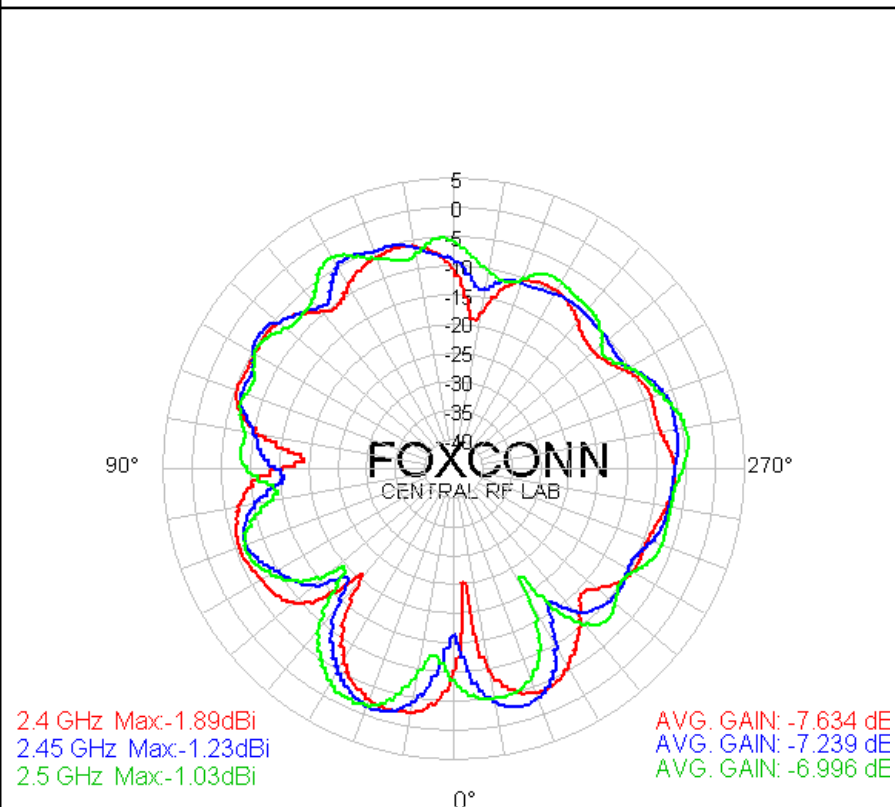
X-Y Plane Radiation Pattern of Right Antenna

In 2.4 GHz~2.5 GHz

HORIZONTAL POLARIZATION



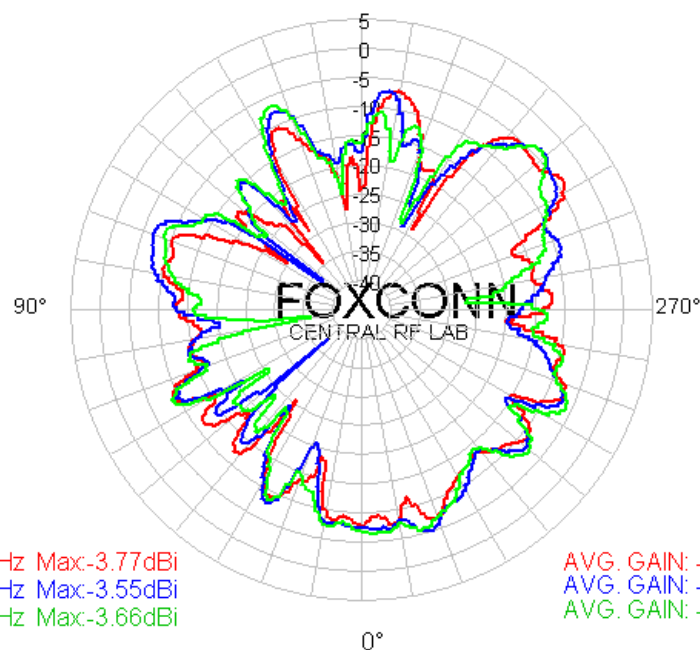
VERTICAL POLARIZATION



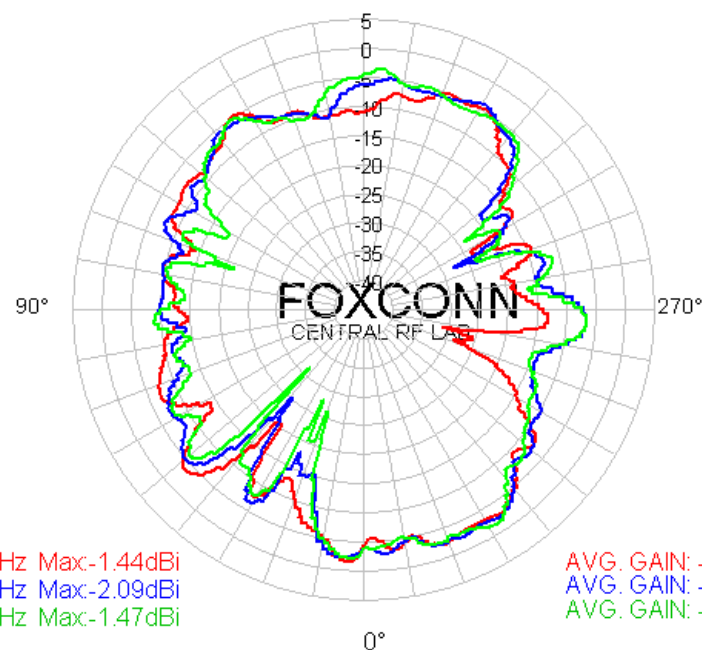
X-Y Plane Radiation Pattern of Right Antenna

In 5.15 GHz~5.35 GHz

HORIZONTAL POLARIZATION



VERTICAL POLARIZATION



X-Y Plane Gain of Right Antenna 14 “ panel

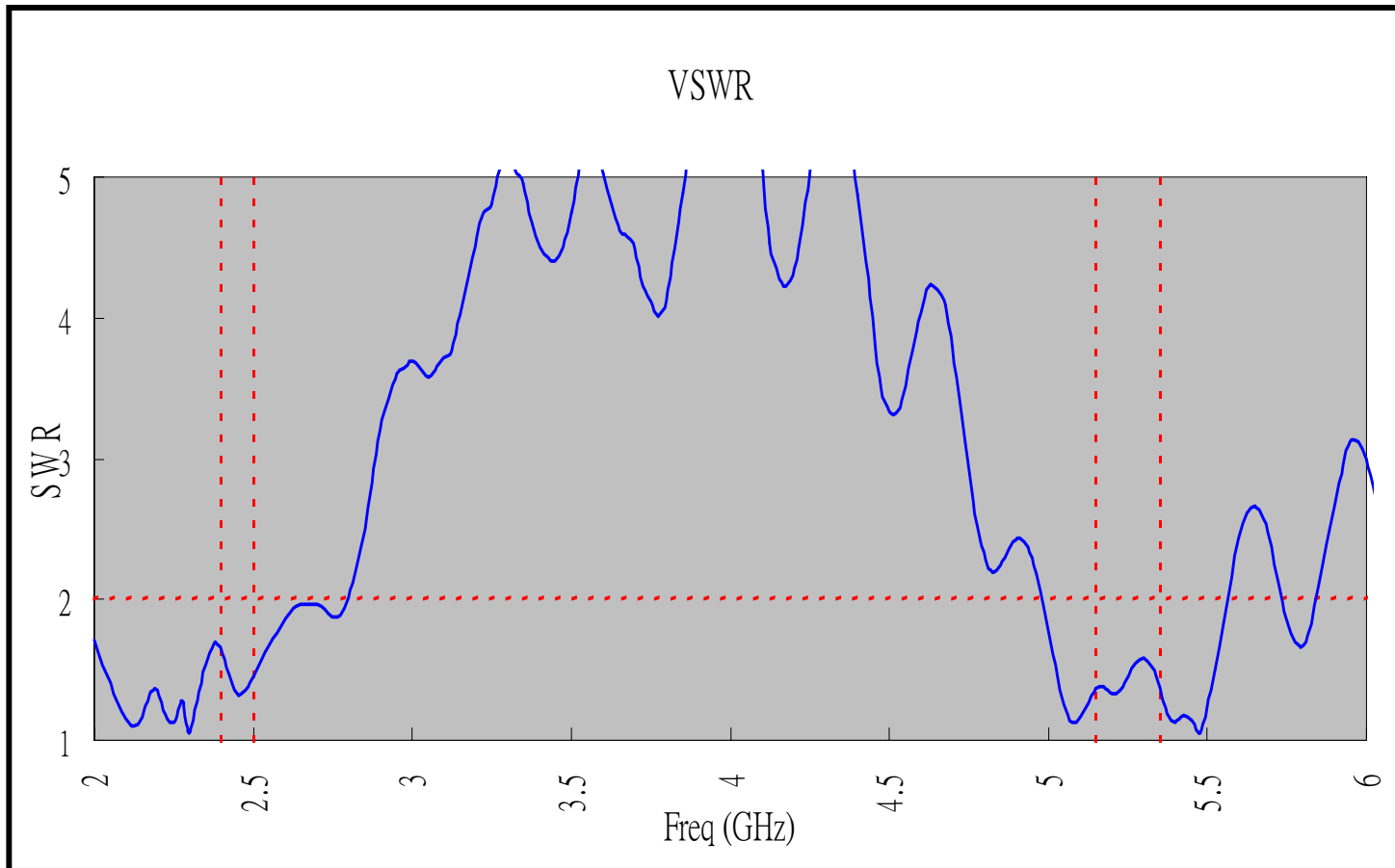
Average Gain

Freq(GHz)	2.4	2.45	2.5	5.15	5.25	5.35
XY-H(dBi)	-9.74	-9.77	-9.58	-11.08	-10.34	-10.77
XY-V(dBi)	-7.63	-7.24	-7.00	-7.73	-7.23	-7.50
Average Gain	-5.55	-5.31	-5.09	-6.08	-5.50	-5.83

Peak Gain

Freq(GHz)	2.4	2.45	2.5	5.15	5.25	5.35
XY-H(dBi)	-3.61	-4.57	-4.91	-3.77	-3.55	-3.66
XY-V(dBi)	-1.89	-1.23	-1.03	-1.44	-2.09	-1.47

VSWR of Left Antenna with 14 “ panel



2.4 GHz = 1.666

2.45GHz = 1.336

2.5 GHz = 1.457

5.15 GHz = 1.373

5.25 GHz = 1.452

5.35 GHz = 1.366

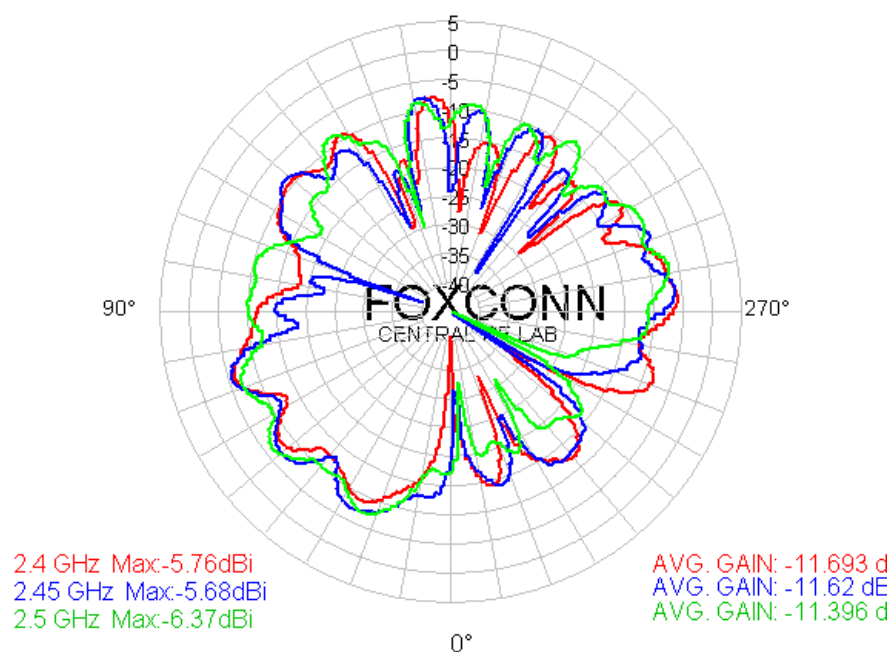


Cable length = 287 mm

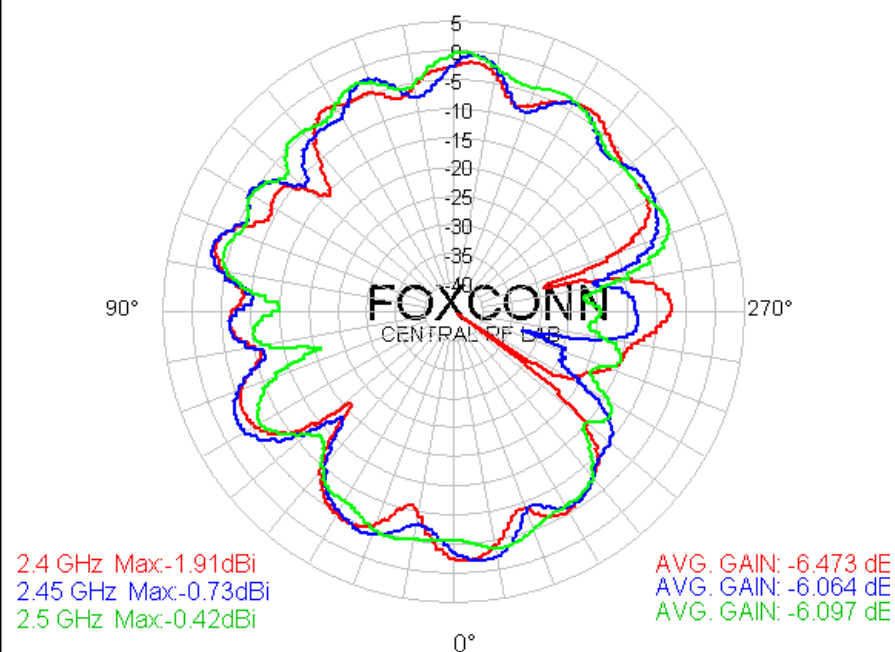
X-Y Plane Radiation Pattern of Left Antenna

In 2.4GHz~2.5GHz

HORIZONTAL POLARIZATION



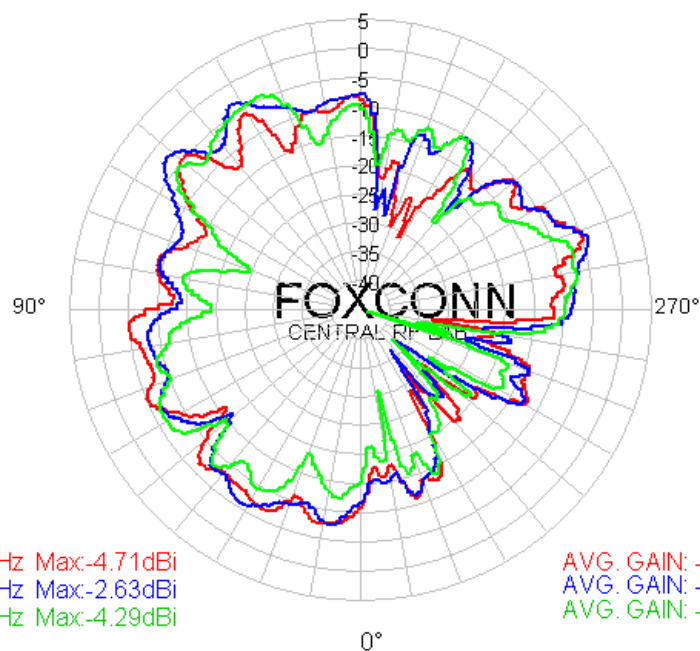
VERTICAL POLARIZATION



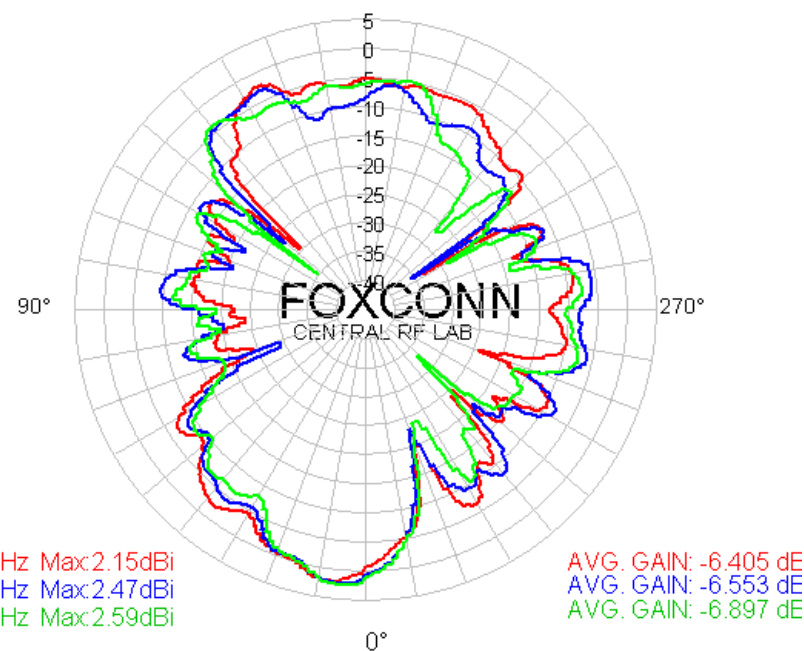
X-Y Plane Radiation Pattern of Left Antenna

In 5.15GHz~5.35GHz

HORIZONTAL POLARIZATION



VERTICAL POLARIZATION



X-Y Plane Gain of Left Antenna 14 “ panel

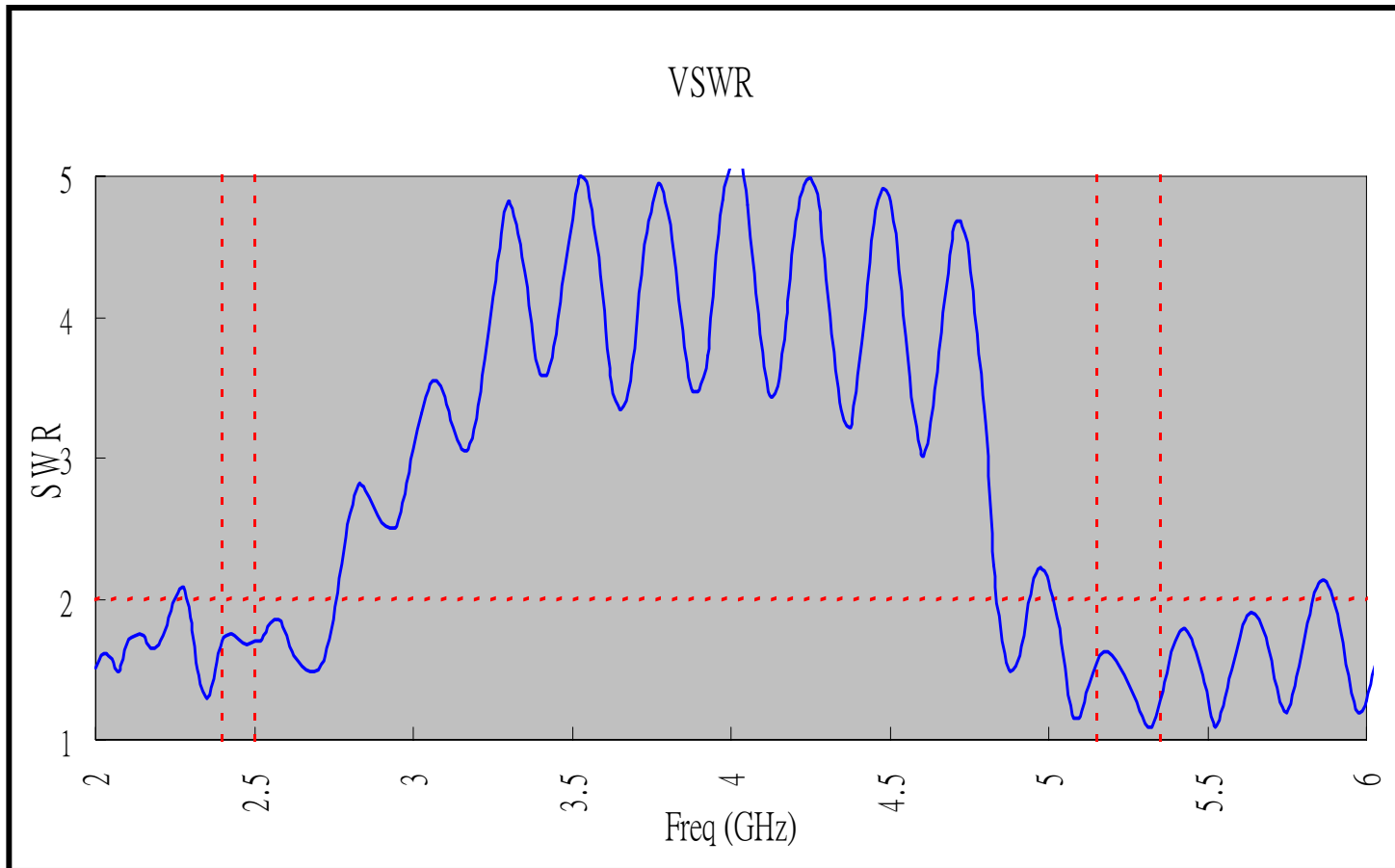
Average Gain

Freq(GHz)	2.4	2.45	2.5	5.15	5.25	5.35
XY-H(dBi)	-11.69	-11.62	-11.40	-10.20	-9.36	-11.10
XY-V(dBi)	-6.47	-6.06	-6.10	-6.41	-6.55	-6.90
Average Gain	-5.33	-5.00	-4.97	-4.89	-4.72	-5.50

Peak Gain

Freq(GHz)	2.4	2.45	2.5	5.15	5.25	5.35
XY-H(dBi)	-5.76	-5.68	-6.37	-4.71	-2.63	-4.29
XY-V(dBi)	-1.91	-0.73	-0.42	2.15	2.47	2.59

VSWR of Right Antenna with 15 “ panel



2.4 GHz = 1.701
2.45GHz = 1.709
2.5 GHz = 1.697
5.15 GHz = 1.547
5.25 GHz = 1.390
5.35 GHz = 1.279

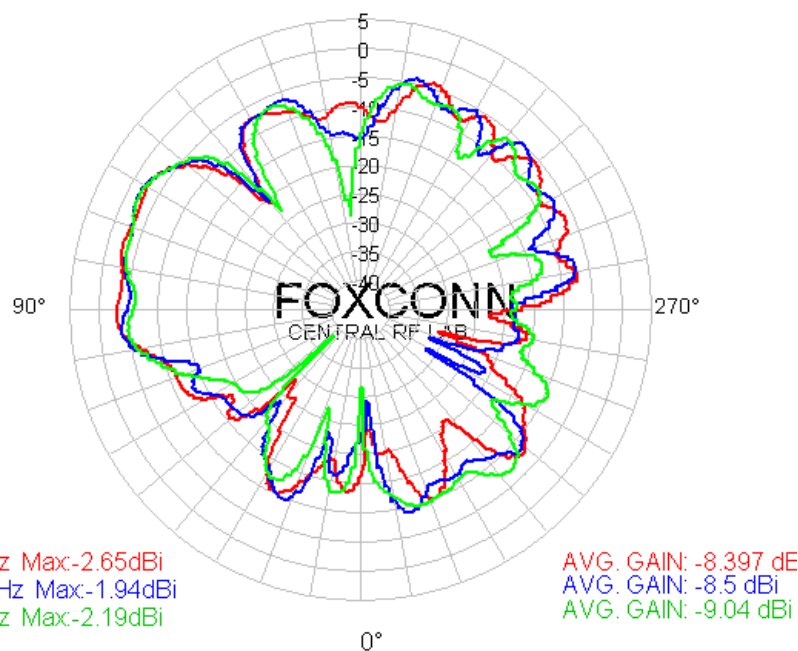


Cable length = 447 mm

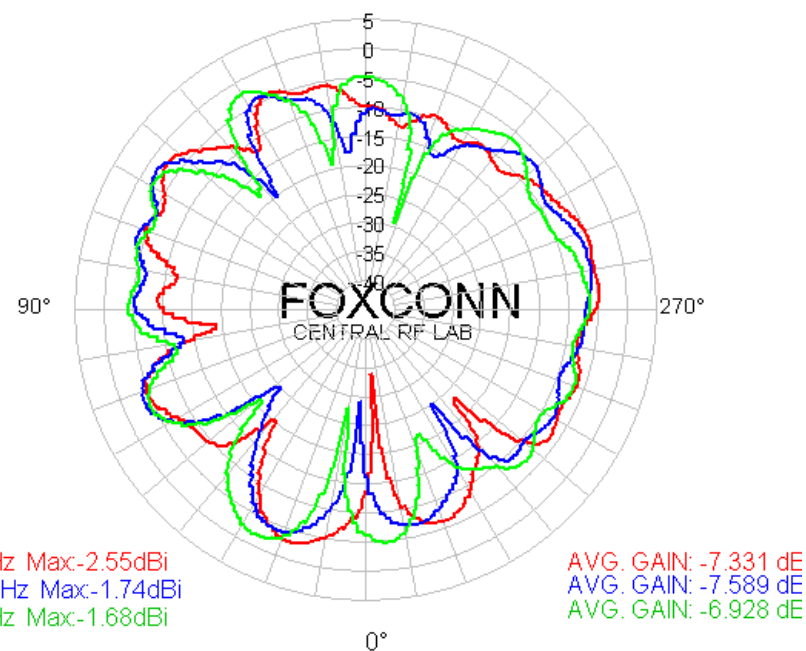
X-Y Plane Radiation Pattern of Right Antenna

In 2.4 GHz~2.5 GHz

HORIZONTAL POLARIZATION



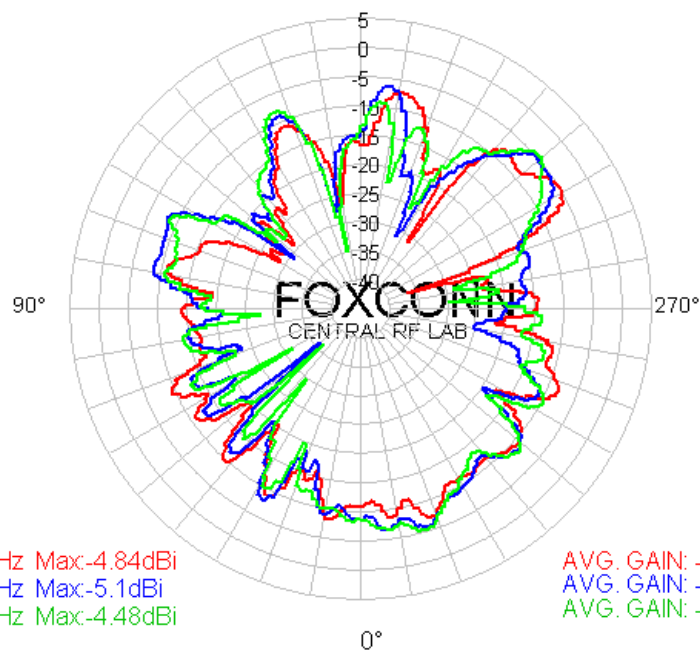
VERTICAL POLARIZATION



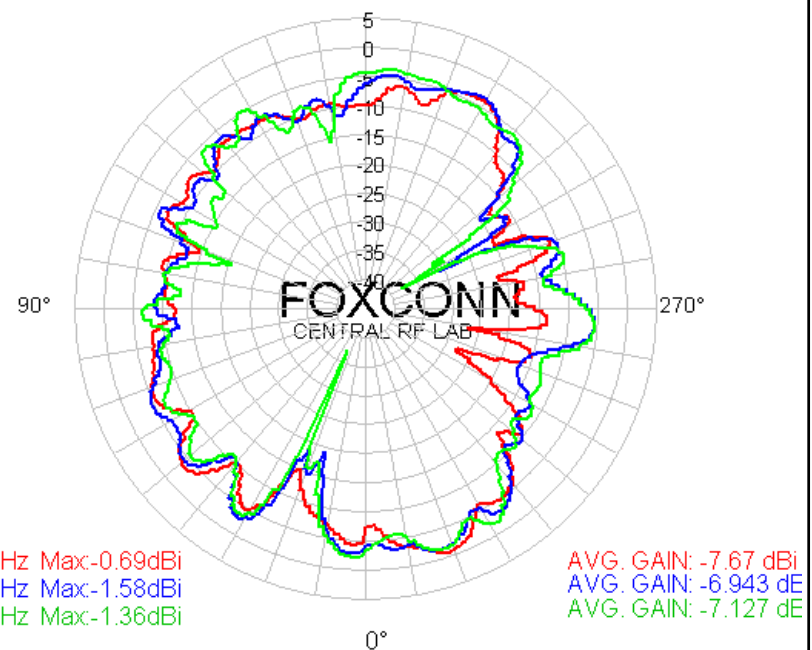
X-Y Plane Radiation Pattern of Right Antenna

In 5.15 GHz~5.35 GHz

HORIZONTAL POLARIZATION



VERTICAL POLARIZATION



X-Y Plane Gain of Right Antenna 15 “ panel

Average Gain

Freq(GHz)	2.4	2.45	2.5	5.15	5.25	5.35
XY-H(dBi)	-8.50	-8.50	-9.04	-11.92	-11.44	-11.69
XY-V(dBi)	-7.33	-7.59	-6.93	-7.67	-6.94	-7.13
Average Gain	-4.86	-5.01	-4.85	-6.28	-5.62	-5.83

Peak Gain

Freq(GHz)	2.4	2.45	2.5	5.15	5.25	5.35
XY-H(dBi)	-2.65	-1.94	-2.19	-4.84	-5.00	-4.48
XY-V(dBi)	-2.55	-1.74	-1.68	-0.69	-1.58	-1.36

VSWR of Left Antenna with 15 “ panel



2.4 GHz = 1.656
2.45GHz = 1.518
2.5 GHz = 1.271
5.15 GHz = 1.261
5.25 GHz = 1.535
5.35 GHz = 1.504

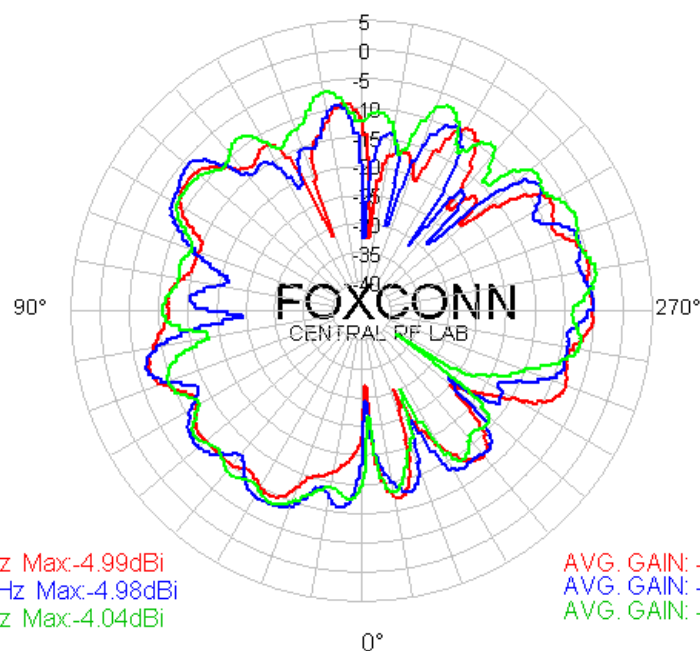


Cable length = 287 mm

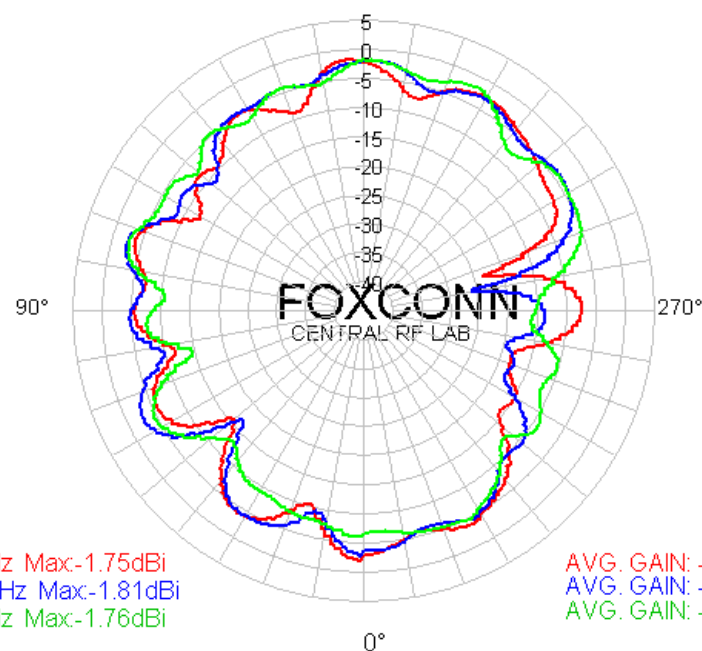
X-Y Plane Radiation Pattern of Left Antenna

In 2.4GHz~2.5GHz

HORIZONTAL POLARIZATION



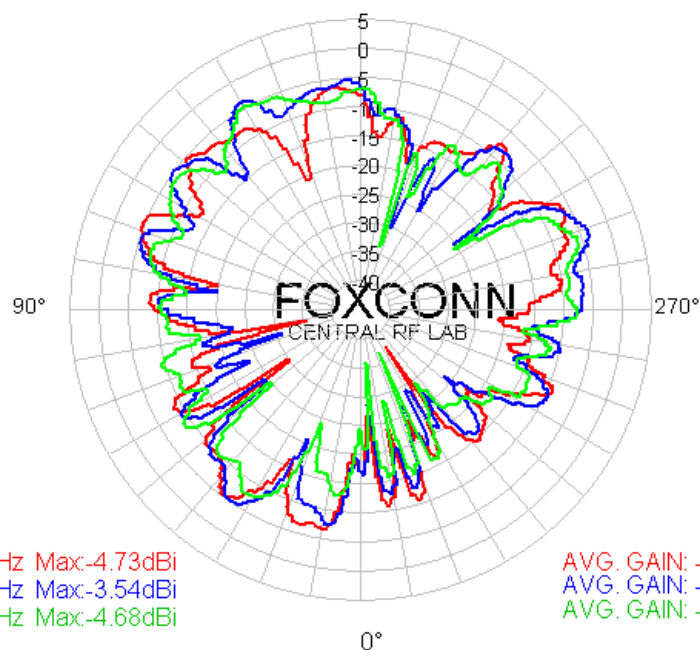
VERTICAL POLARIZATION



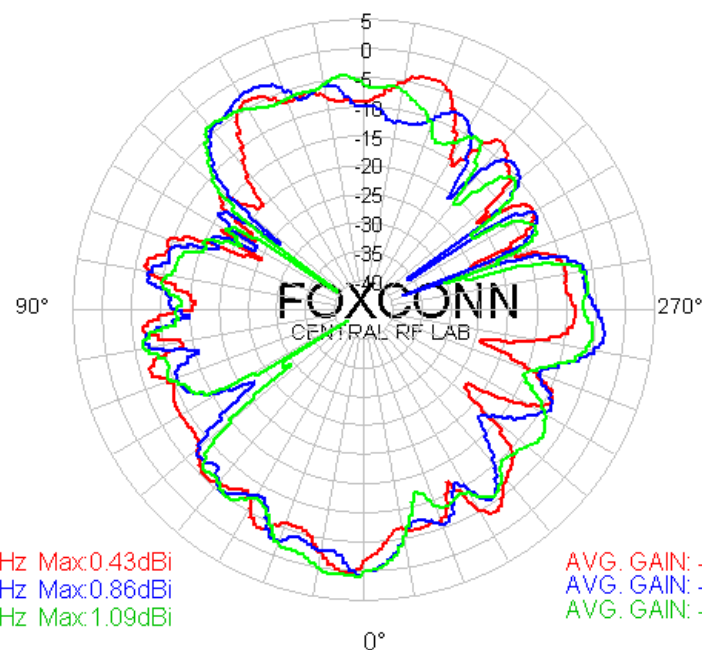
X-Y Plane Radiation Pattern of Left Antenna

In 5.15GHz~5.35GHz

HORIZONTAL POLARIZATION



VERTICAL POLARIZATION



X-Y Plane Gain of Left Antenna 15 “ panel

Average Gain

Freq(GHz)	2.4	2.45	2.5	5.15	5.25	5.35
XY-H(dBi)	-10.72	-10.75	-10.00	-10.51	-9.67	-10.64
XY-V(dBi)	-6.32	-5.79	-6.16	-7.40	-7.10	-6.81
Average Gain	-4.97	-4.58	-4.66	-5.67	-5.18	-5.31

Peak Gain

Freq(GHz)	2.4	2.45	2.5	5.15	5.25	5.35
XY-H(dBi)	-4.99	-4.98	-4.04	-4.73	-3.54	-4.68
XY-V(dBi)	-1.75	-1.81	-1.76	0.43	0.86	1.09

Antenna Gain Comparison Of ZW1 Antenna with 14" panel

Left Antenna fixed on hinge testing on 03/26						
Freq (GHz)	2.4	2.45	2.5	5.15	5.25	5.35
XY-H(dBi)	-11.69	-11.62	-11.40	-10.20	-9.36	-11.10
XY-V(dBi)	-6.47	-6.06	-6.10	-6.41	-6.55	-6.90
Average Gain	-5.33	-5.00	-4.97	-4.89	-4.72	-5.50

Left Antenna fixed on hinge testing on 03/21						
Freq (GHz)	2.4	2.45	2.5	5.15	5.25	5.35
XY-H(dBi)	-9.88	-8.77	-9.36	-13.36	-13.05	-12.58
XY-V(dBi)	-5.16	-4.26	-4.77	-6.51	-7.16	-6.99
Average Gain	-3.90	-2.94	-3.47	-5.69	-6.17	-5.93

Right Antenna fixed on base testing on 03/26						
Freq (GHz)	2.4	2.45	2.5	5.15	5.25	5.35
XY-H(dBi)	-9.74	-9.77	-9.58	-11.08	-10.34	-10.77
XY-V(dBi)	-7.63	-7.24	-7.00	-7.73	-7.23	-7.50
Average Gain	-5.55	-5.31	-5.09	-6.08	-5.50	-5.82

Right Antenna fixed on hinge testing on 03/21						
Freq (GHz)	2.4	2.45	2.5	5.15	5.25	5.35
XY-H(dBi)	-9.00	-9.30	-8.79	-12.49	-11.93	-12.50
XY-V(dBi)	-7.52	-7.03	-6.17	-8.19	-8.09	-8.30
Average Gain	-5.19	-5.01	-4.27	-6.81	-6.59	-6.90

Antenna Gain Comparison Of ZW1 Antenna with 15" panel

Left Antenna fixed on hinge testing on 03/26						
Freq (GHz)	2.4	2.45	2.5	5.15	5.25	5.35
XY-H(dBi)	-10.72	-10.75	-10.00	-10.51	-9.67	-10.64
XY-V(dBi)	-6.32	-5.79	-6.16	-7.40	-7.10	-6.81
Average Gain	-4.97	-4.58	-4.66	-5.67	-5.18	-5.31

Left Antenna fixed on hinge testing on 03/21						
Freq (GHz)	2.4	2.45	2.5	5.15	5.25	5.35
XY-H(dBi)	-9.28	-8.88	-9.10	-13.14	-13.48	-12.99
XY-V(dBi)	-6.37	-5.97	-6.18	-6.40	-6.60	-7.57
Average Gain	-4.58	-4.18	-4.39	-5.57	-5.79	-6.47

Right Antenna fixed on base testing on 03/26						
Freq (GHz)	2.4	2.45	2.5	5.15	5.25	5.35
XY-H(dBi)	-8.50	-8.50	-9.04	-11.92	-11.44	-11.69
XY-V(dBi)	-7.33	-7.59	-6.93	-7.67	-6.94	-7.13
Average Gain	-4.87	-5.01	-4.85	-6.28	-5.62	-5.83

Right Antenna fixed on hinge testing on 03/21						
Freq (GHz)	2.4	2.45	2.5	5.15	5.25	5.35
XY-H(dBi)	-8.60	-8.58	-8.86	-12.94	-12.59	-13.52
XY-V(dBi)	-8.33	-7.74	-6.97	-8.01	-8.28	-7.43
Average Gain	-5.45	-5.13	-4.80	-6.80	-6.91	-6.47