廠牌: Micon
型號: W124-100-D200

PPROVAL SHEET

CUSTOMER : 海華科技股份有限公司

CUSTOMER NO.

Input Output NO. W124-100-D200

DESCRIPTION: 2.4G -2.5GHz Antenna

Reverse Polarity SMA Plug

Signed By Customers

Approved By:

供應商: 垠 旺 精 密 股 份 有 限 公 司

TEL:02-2917-7528;FAX:02-2912-1659

台北縣新店市寶興路 37 號 3 樓

SPECIFICATION

1. Electrical Properties

1-1 Frequency Range …….2.4~2.5GHz

1-2 Impedance……..…..50 Ohms nominal

1-3 V.S.W.R……..…….……2.0 (Max.)

1-4 Return Loss……..…-10.0 dB(Max.)

1-5 Max. Gain…….0.5dBi

1-6 Polarization……. Vertical

1-7 Admitted Power……1W

1-8 Electrical Wave…….1/4 ג Dipole

2. Mechanical Properties

2-1 Connector……..……Reverse SMA Plug

Cable……..…RG-174

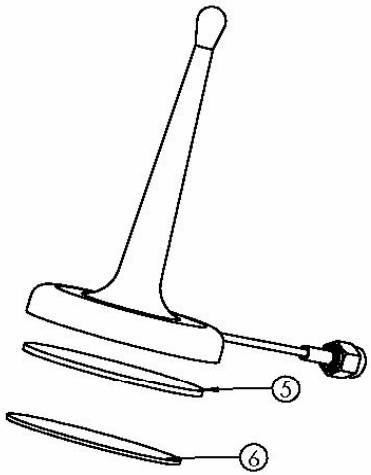
2-3 Antenna Body……T.P.R.

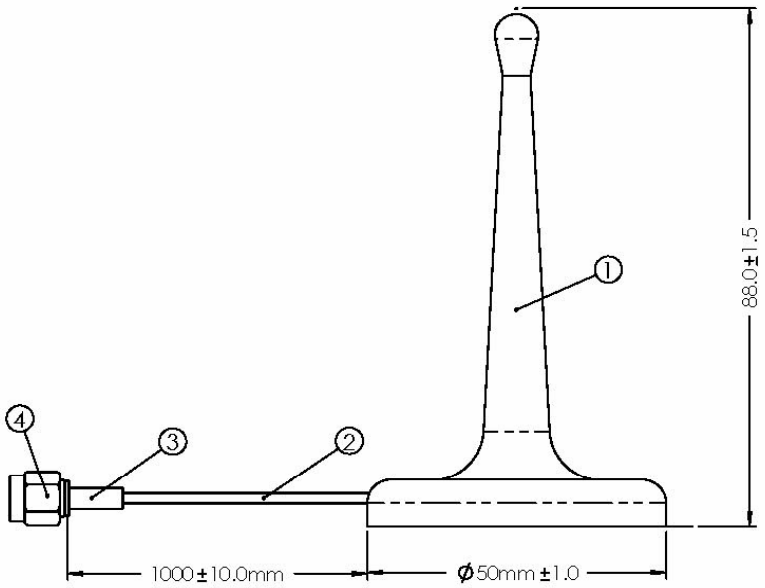
2-4 Operating Temperature Range..……-20℃ ~ +50℃

2-5 Storage Temperature Range……. -20℃ ~ +50℃

工程成品圖

成品圖





6	P.U BottonCover	P.U	
5	Stell BottonCover	Stell	Zin
4	RP-SMA	Brass	GOLD
3	HEAT SHRINK TUB	P.E	Black
2	RG-174Cable	BC0174-B	Black
1	BODY	TPR	黑色
ITEM	DESCRIPTION	MATERIALS	FINISHED

ELECTRICAL PERFORMANCE :
1.Impedance : 50 ohms
2.Frequency Range : 2.4~ 2.5 GHz
3.VSWR : 2.0 max

REV.	DESCRIPTION	ECN	DRAWN	DATE
1	Sample		Yang	2003/12/29

REVISIONS

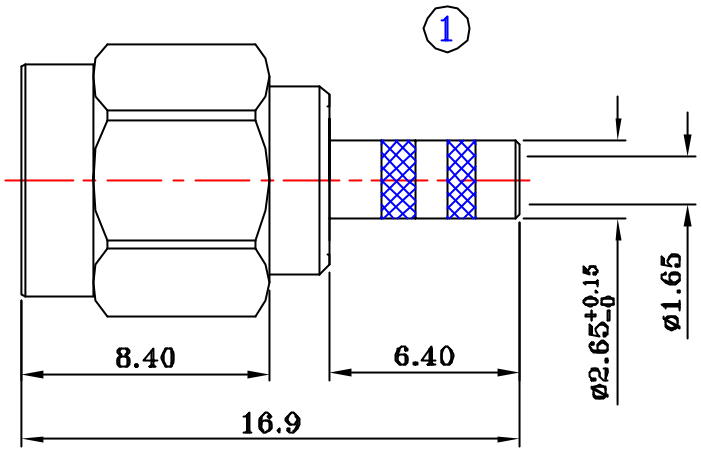
REMARKS:

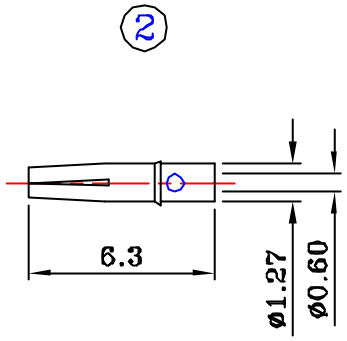
TOLERANCES:
DIM. X.X=±0.5
X.XX=±0.25
UNIT:mm

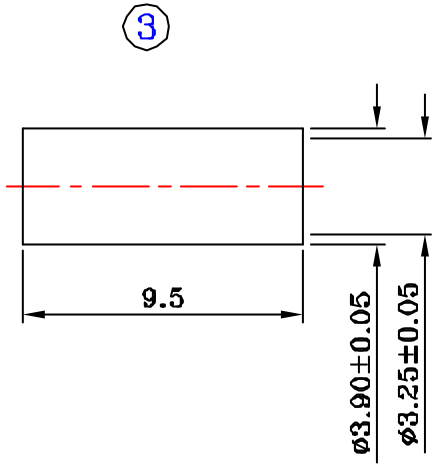
TITLE: 2.4~2.5GHz RF Antennafor Cable Assembly

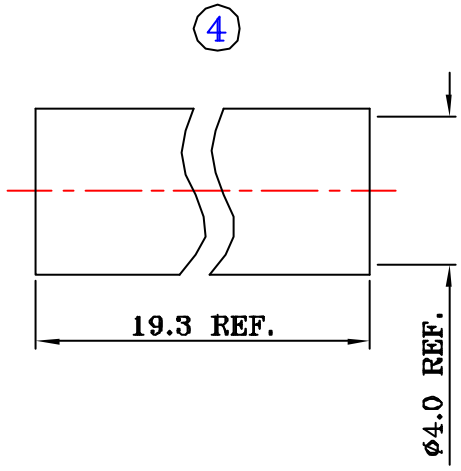
DESIGNED:	DRAWN:	SHEET:	SCALE:
Yang 04/25/03	Yang 04/25/03	OF	
CHECKED:	APPROVAL:	DWG NO. : W124-100-D200	
		LAYER:	REV. 1

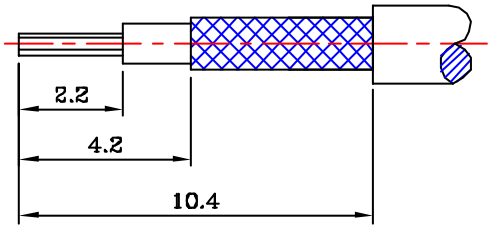
IO
INPUT OUTPUT
P/No. : W124-100-D200











Recommened Cable Stripping Dim's

ITEM	DESCRIPTION	MATERIALS	FINISHED	PART NUMBER
4	HEAT SHRINK TUBE	P.E	NONE	22A000-001
3	FERRULE	BRASS	GOLD	14A003-104
2	CONTACT	BE.COPPER	GOLD	04D014-202
1	GASKET	SI.RUBBER	NONE	D700-000A1
	SHELL	BRASS	GOLD	
	"C" RING	BE.COPPER	NONE	
	INSULATOR	TEFLON	NONE	
	BODY	BRASS	GOLD	

ELECTRICAL PERFORMANCE:
1.Impedance:50 ohms
2.Frequency Range:0~3.0 GHz
3.Working Voltage:250 Vrms maximum
4.Dielectric Withstanding voltage:750 vrms monomum
5.Insulator Resistance:1000 Megohms minimum

REV.	DESCRIPTION	ECN	DRAWN	DATE
C	SEE ECN	02-538	LUKE	12/25/2002
B	SEE ECN	02-491	LUKE	11-29'2002
A	NEW RELEASE	01-362	LUKE	12/06/2001

REVISIONS

REMARKS:

TOLERANCES:
DIM. X.X=±0.3
UNIT: mm X.XX=±0.15

TITLE: RP-SMA ST. PLUG CRIMP TYPE, FOR RG174,188,316/U CABLE

DESIGNED: LUKE 12/06/2001

DRAWN: LUKE 12/06/2001

CHECKED:

APPROVAL:

SHEET: 1 OF 1

SCALE: 4:1

DWG NO.: D700-000A

LAYER: ASY

REV. C

INPUT OUTPUT

P/No.: S-D700-000A

Return Loss

HILTRON

360 NETWORK ANALYZER

MODEL: W124_100_D200 DATE: 09/02/2003 Page 1
DEVICE ID: OPERATOR:

SWEEP DATA

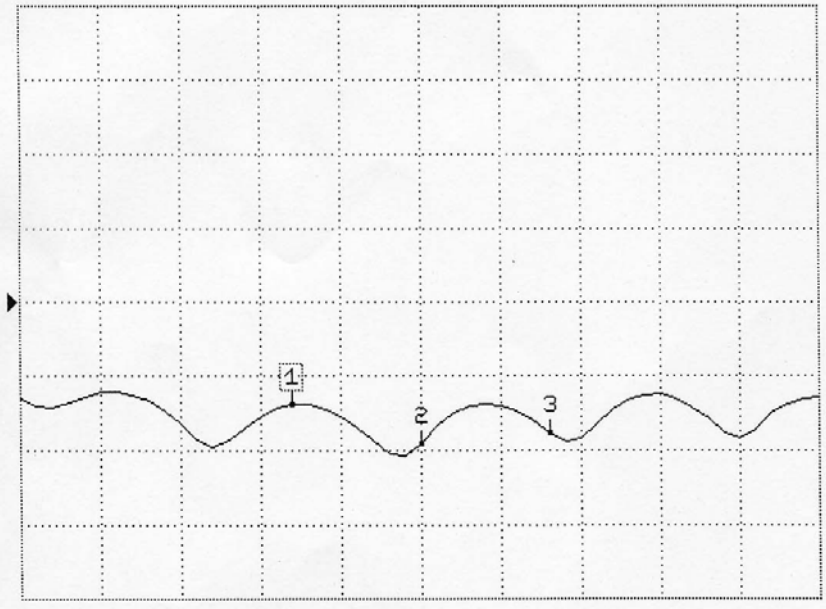
START:	2.3000 GHz	GATE START:	-	ERROR CORR:	REFL ONLY
STOP:	2.6000 GHz	GATE STOP:	-	AVERAGING:	1 PTS
STEP:	0.0060 GHz	GATE:	-	IF BNDWDTH:	REDUCED
		WINDOW:	-		

----------CH1----------

PARAMETER:	S11
NORMALIZATION:	OFF
REFERENCE PLANE:	0.0000 mm
SMOOTHING:	0.0 PERCENT
DELAY APERTURE:	-

S11 FORWARD REFLECTION

LOG MAG. ▶REF=0.000dB 10.000dB/DIV



2.3000 GHz 2.6000

CH 1 - S11
REF. PLANE
0.0000 mm

▶MARKER 1
2.4020 GHz
-13.704 dB

MARKER TO MAX
MARKER TO MIN

2 2.4500 GHz
↓ -19.036 dB

3 2.4980 GHz
↓ -17.519 dB

V. S .W .R

HILTRON

360 NETWORK ANALYZER

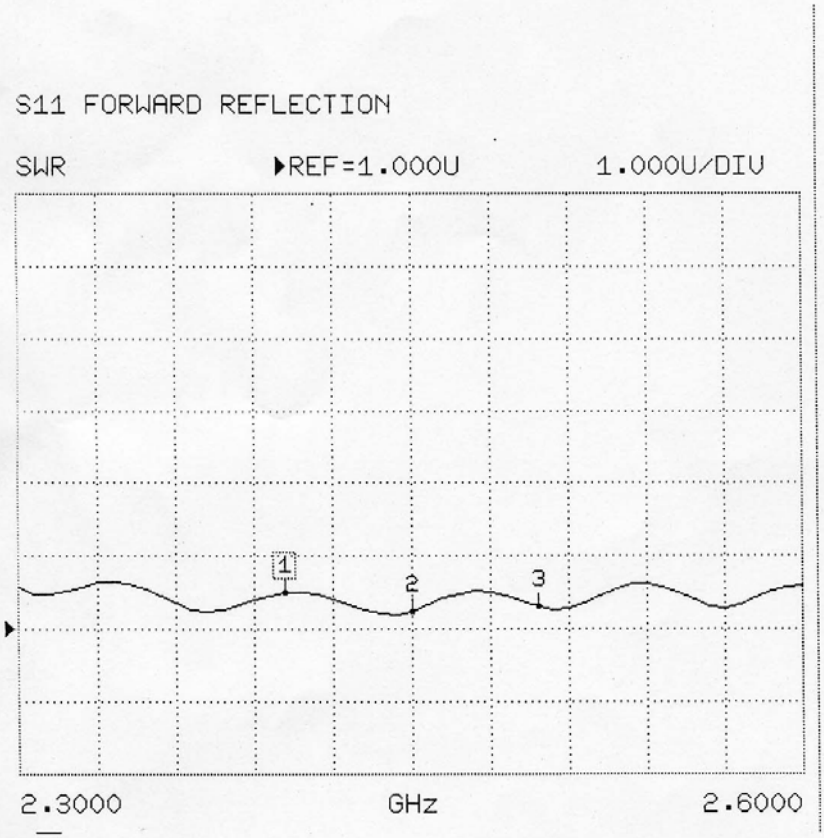
MODEL: W124_100_D200 DATE: 09/02/2003 Page 1
DEVICE ID: OPERATOR:

SWEEP DATA

START:	2.3000 GHz	GATE START:	-	ERROR CORR:	REFL ONLY
STOP:	2.6000 GHz	GATE STOP:	-	AVERAGING:	1 PTS
STEP:	0.0060 GHz	GATE:	-	IF BNDWDTH:	REDUCED
		WINDOW:	-		

----------CH4----------

PARAMETER:	S11
NORMALIZATION:	OFF
REFERENCE PLANE:	0.0000 mm
SMOOTHING:	0.0 PERCENT
DELAY APERTURE:	-



CH 4 - S11
REF. PLANE
0.0000 mm

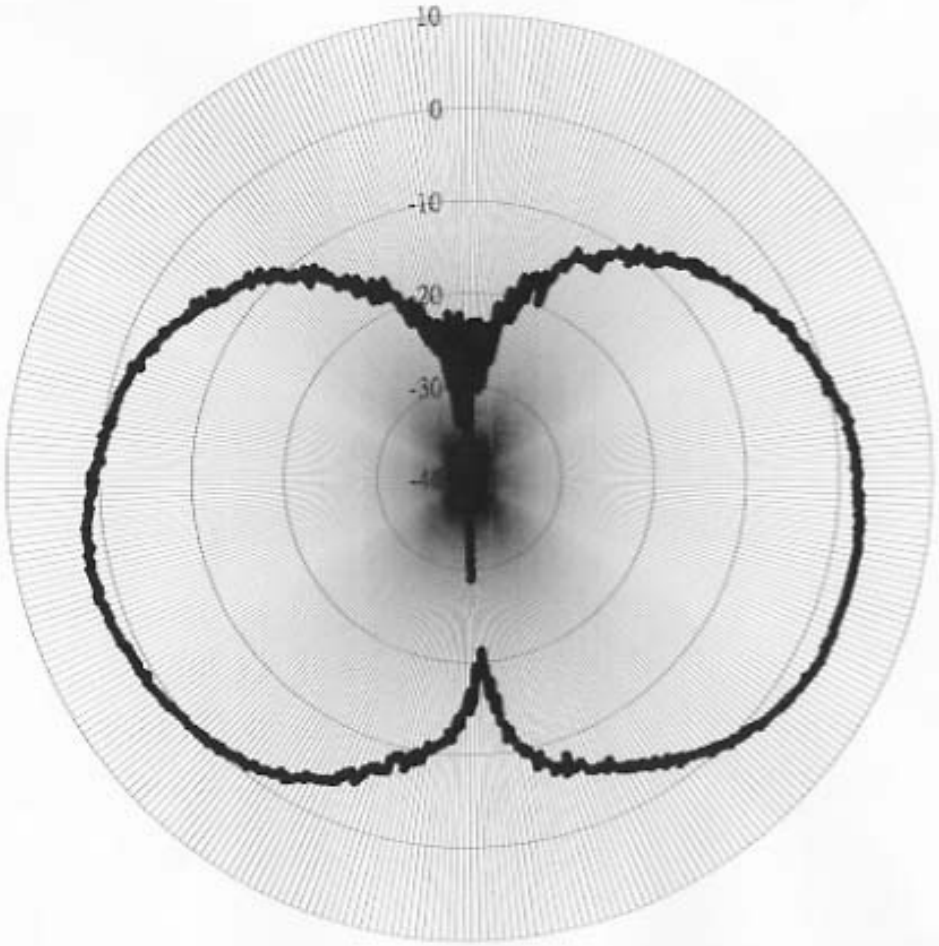
▶MARKER 1
2.4020 GHz
1.511 U

MARKER TO MAX
MARKER TO MIN

2 2.4500 GHz
1.246 U

3 2.4980 GHz
1.314 U

E-Plane Test Report



IO ANTENNA PATTEM

ANTENNA TEST NO. W124-100-D200

TEST DATE:2003/10/02

TEST FREQUENCY:2400Mhz

TEST POLARIZATION:HORIZTAL
(E-PLANE)

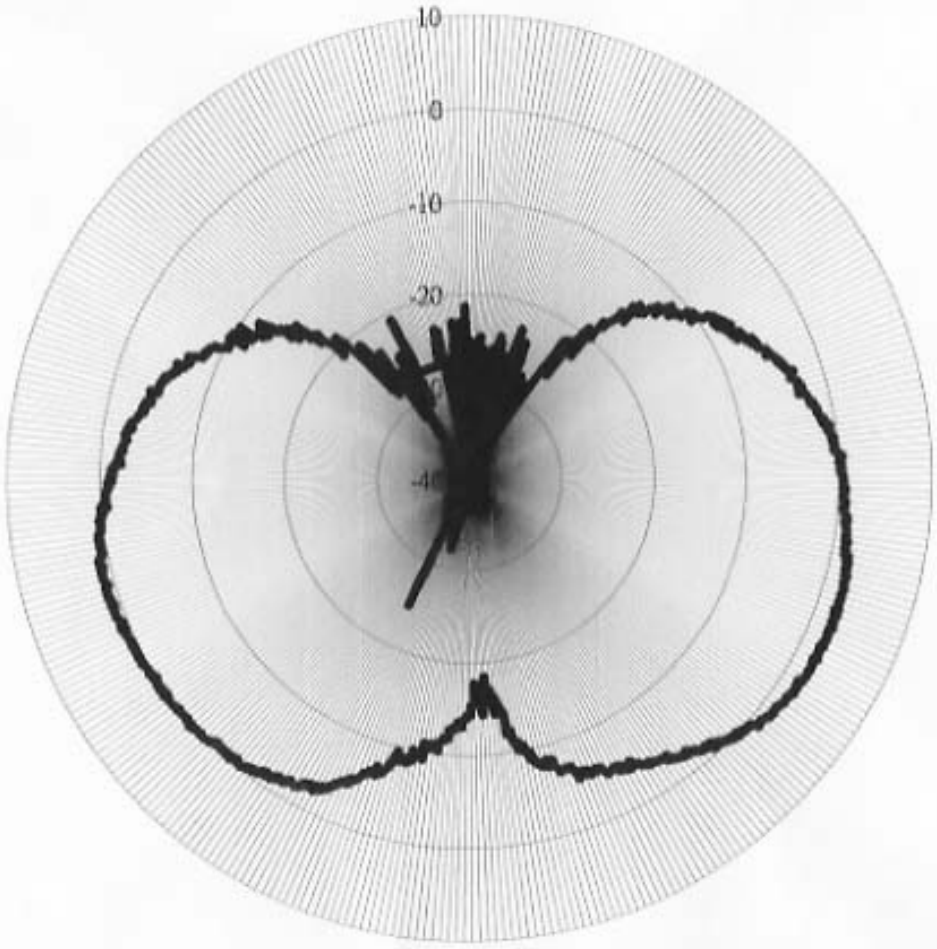
TEST ANTENNA:HORN ANTENNA

TEST CHAMBER:RF CHAMBER

TEST PERSONNEL: Yang

MAX GAIN:	3.00	dBi
MIN GAIN:	-50.99	dBi
AVE GAIN:	-6.42	dBi

E-Plane Test Report



IO ANTENNA PATTEM

ANTENNA TEST NO. W124-100-D200

TEST DATE:2003/10/02

TEST FREQUENCY:2450Mhz

TEST POLARIZATION:HORIZTAL
(E-PLANE)

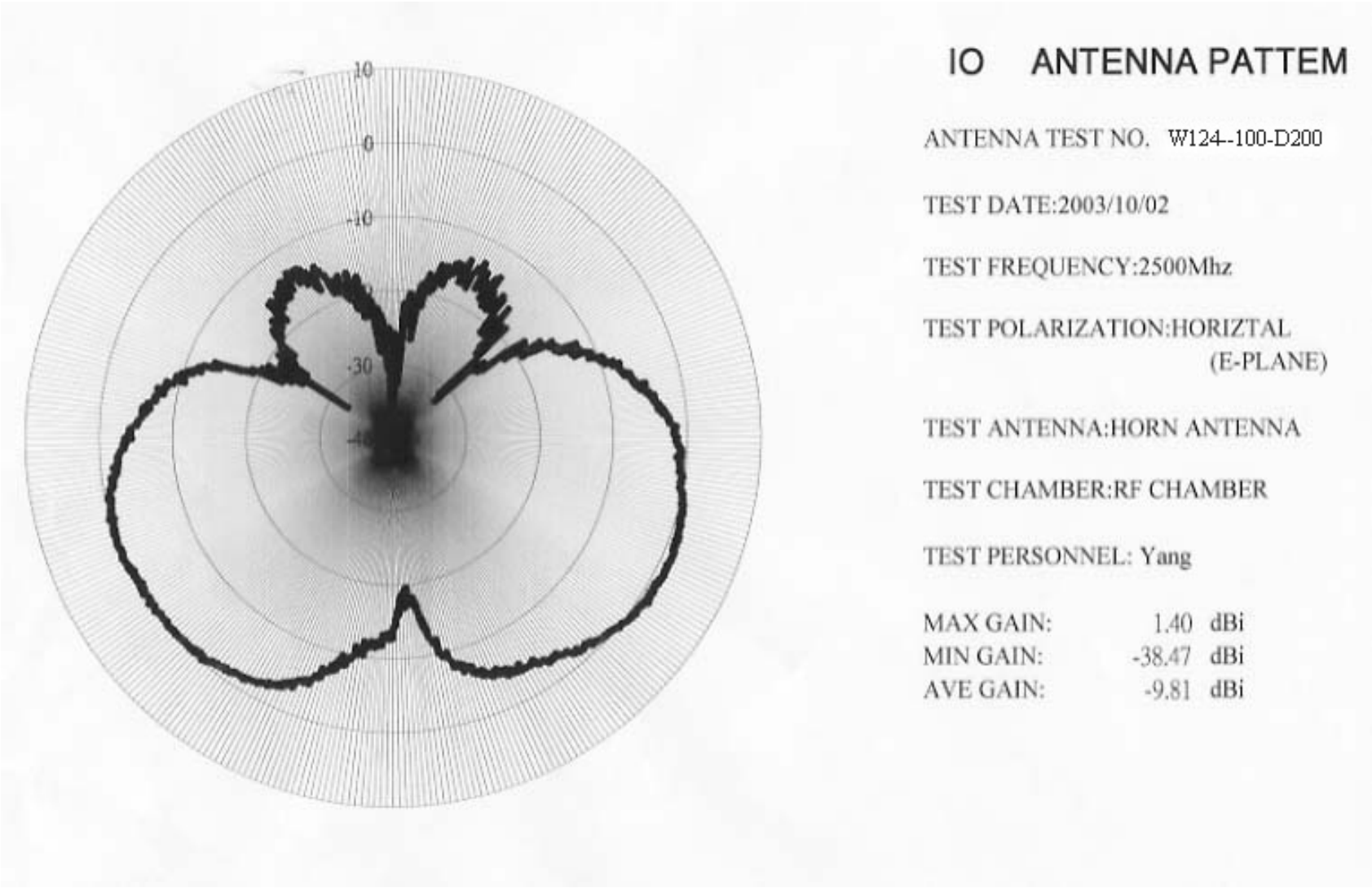
TEST ANTENNA:HORN ANTENNA

TEST CHAMBER:RF CHAMBER

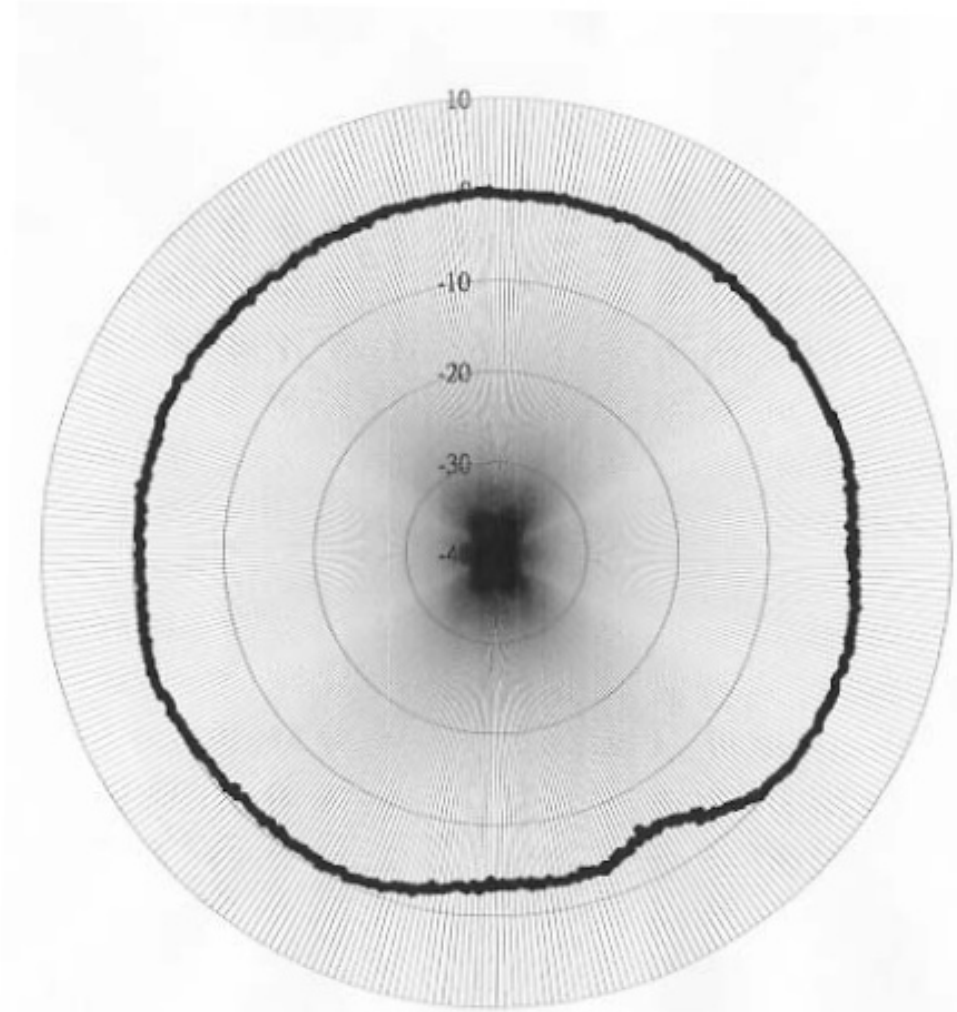
TEST PERSONNEL: Yang

MAX GAIN:	2.50	dBi
MIN GAIN:	-55.07	dBi
AVE GAIN:	-9.92	dBi

E-Plane Test Report



H-Plane Test Report



IO ANTENNA PATTEM

ANTENNA TEST NO. W124-100-D200

TEST DATE:2003/10/02

TEST FREQUENCY:2400MHz

TEST POLARIZATION:VERTICAL
(H-PLANE)

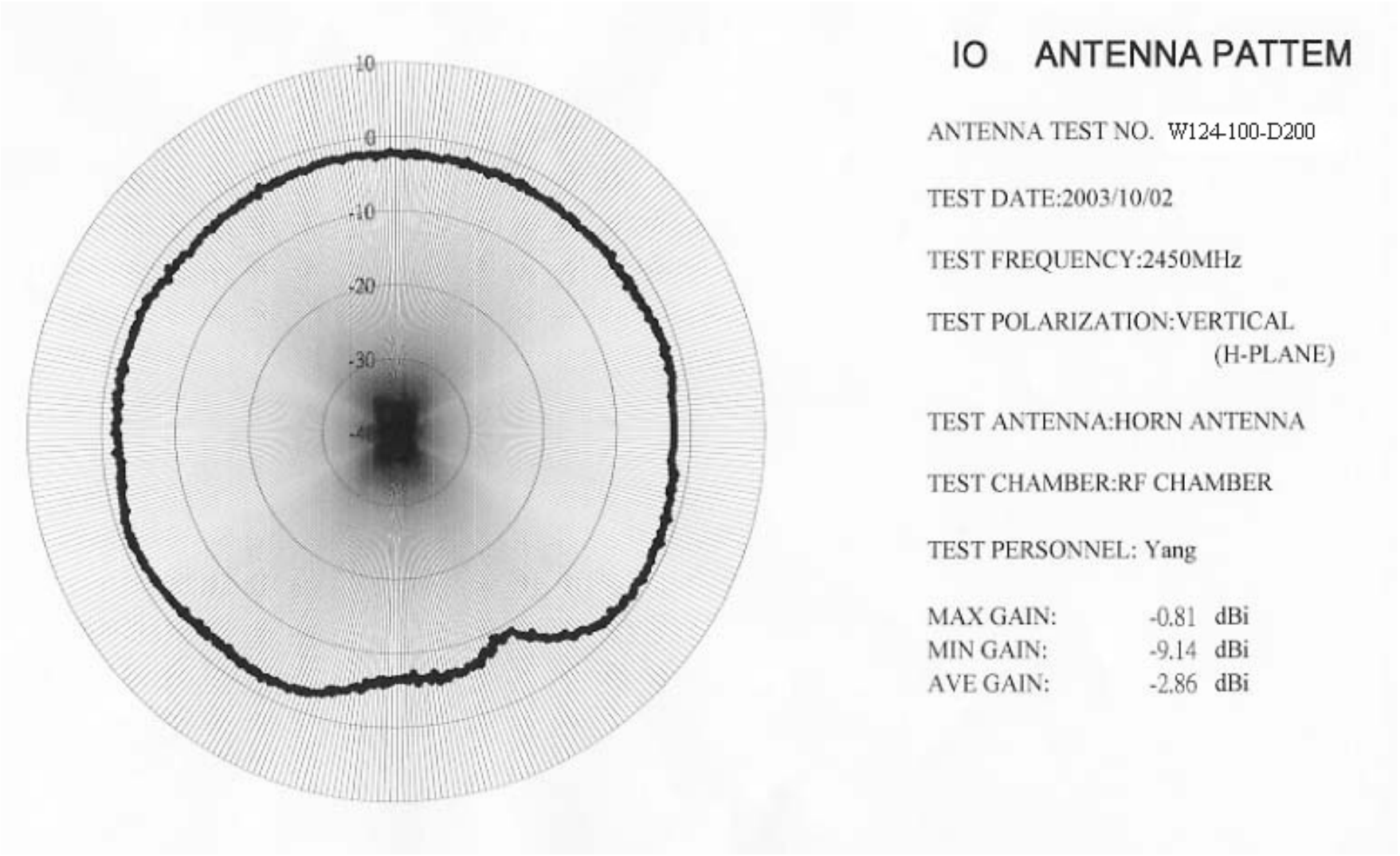
TEST ANTENNA:HORN ANTENNA

TEST CHAMBER:RF CHAMBER

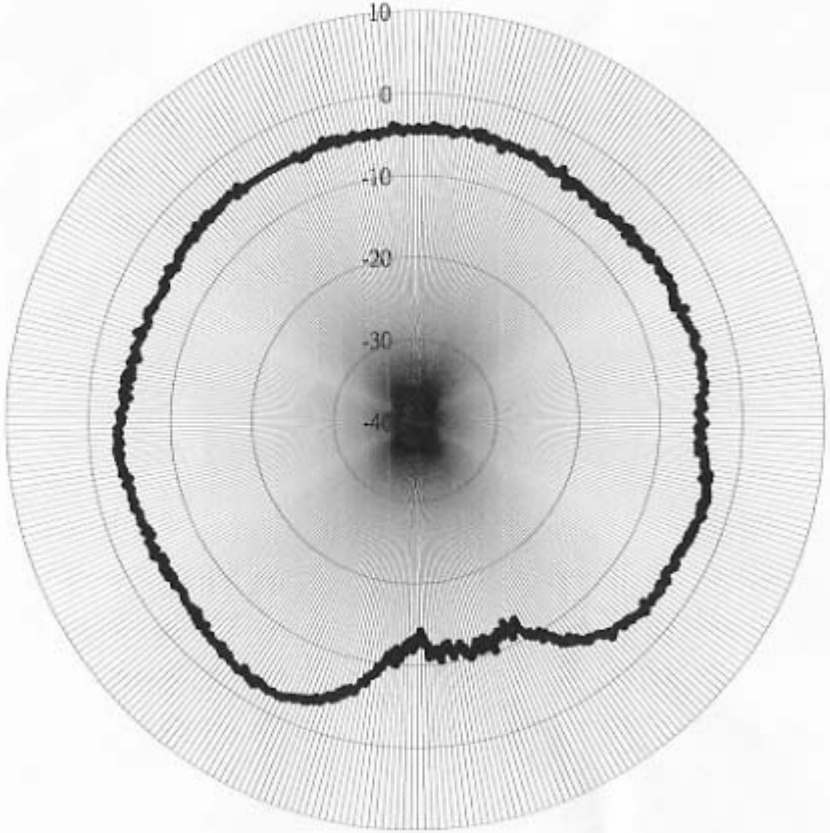
TEST PERSONNEL: Yang

MAX GAIN:	0.43	dBi
MIN GAIN:	-5.76	dBi
AVE GAIN:	-1.03	dBi

H-Plane Test Report



H-Plane Test Report



IO ANTENNA PATTEM

ANTENNA TEST NO. W124-100-D200

TEST DATE:2003/10/02

TEST FREQUENCY:2500MHz

TEST POLARIZATION:VERTICAL
(H-PLANE)

TEST ANTENNA:HORN ANTENNA

TEST CHAMBER:RF CHAMBER

TEST PERSONNEL: Yang

MAX GAIN:	-2.16	dBi
MIN GAIN:	-14.19	dBi
AVE GAIN:	-5.28	dBi

Test Report

EVER POLYMER CO., LTD.
3F, NO. 538, SEC. 1, MINSHENG N. RD., GUEISHAN
SHIANG, TAOYUAN, TAIWAN, 333

Report No. : CE/2005/A2310
Date : 2005/10/20
Page : 1 of 4

The following merchandise was (were) submitted and identified by the client as :

Type of Product	:	THERMO PLASTIC ELASTOMER
Style/Item No	:	EVERLON SERIES
Sample Received	:	2005/10/13
Testing Date	:	2005/10/13 TO 2005/10/20

==========

Test Result : - Please see the next page -

Daniel Yeh, M.R. / Operation Manager
Signed for and on behalf of
SGS TAIWAN LTD.

Test Report

EVER POLYMER CO., LTD.
3F, NO. 538, SEC. 1, MINSHENG N. RD., GUEISHAN SHIANG, TAOYUAN, TAIWAN, 333

Report No. : CE/2005/A2310
Date : 2005/10/20

Test Result

PART NAME NO.1 : TRANSPARENT PLASTIC PELLETS (PLEASE REFER TO THE PHOTO ATTACHED)

Test Item (s):	Unit	Method	MDL	Result
				No.1
Monobromobiphenyl	%	With reference to USEPA3540C or USEPA3550C. Analysis was performed by HPLC/DAD, LC/MS or GC/MS. (prohibited by 2002/95/EC (RoHS), 83/264/EEC, and 76/769/EEC)	0.0005	N.D.
Dibromobiphenyl	%		0.0005	N.D.
Tribromobiphenyl	%		0.0005	N.D.
Tetrabromobiphenyl	%		0.0005	N.D.
Pentabromobiphenyl	%		0.0005	N.D.
Hexabromobiphenyl	%		0.0005	N.D.
Heptabromobiphenyl	%		0.0005	N.D.
Octabromobiphenyl	%		0.0005	N.D.
Nonabromobiphenyl	%		0.0005	N.D.
Decabromobiphenyl	%		0.0005	N.D.
Total PBBs (Polybrominated biphenyls)/Sum of above	%		-	N.D.
Monobromobiphenyl ether	%	With reference to USEPA3540C or USEPA3550C. Analysis was performed by HPLC/DAD, LC/MS or GC/MS. (prohibited by 2002/95/EC (RoHS), 83/264/EEC, and 76/769/EEC)	0.0005	N.D.
Dibromobiphenyl ether	%		0.0005	N.D.
Tribromobiphenyl ether	%		0.0005	N.D.
Tetrabromobiphenyl ether	%		0.0005	N.D.
Pentabromobiphenyl ether	%		0.0005	N.D.
Hexabromobiphenyl ether	%		0.0005	N.D.
Heptabromobiphenyl ether	%		0.0005	N.D.
Octabromobiphenyl ether	%		0.0005	N.D.
Nonabromobiphenyl ether	%		0.0005	N.D.
Decabromobiphenyl ether	%		0.0005	N.D.
Total PBBEs(PBDEs) (Polybrominated biphenyl ethers)/Sum of above	%		-	N.D.

Test Report

EVER POLYMER CO., LTD.
3F, NO. 538, SEC. 1, MINSHENG N. RD., GUEISHAN SHIANG, TAOYUAN, TAIWAN, 333

Report No. : CE/2005/A2310
Date : 2005/10/20

Test Item (s):	Unit	Method	MDL	Result
				No.1
Chromium VI (Cr+6)	ppm	UV-VIS after reference to US EPA 3060A.	2	N.D.
Cadmium (Cd)	ppm	ICP-AES after reference to EN 1122, method B:2001 or other acid digestion.	2	N.D.
Mercury (Hg)	ppm	ICP-AES after reference to US EPA 3052 or other acid digestion.	2	N.D.
Lead (Pb)	ppm	ICP-AES after reference to US EPA 3050B or other acid digestion.	2	N.D.

NOTE: (1) N.D. = Not detected (<MDL)
(2) ppm = mg/kg
(3) MDL = Method Detection Limit
(4) " - " = No Regulation

Test Report

EVER POLYMER CO., LTD.
3F, NO. 538, SEC. 1, MINSHENG N. RD., GUEISHAN SHIANG, TAOYUAN, TAIWAN, 333

Report No. : CE/2005/A2310
Date : 2005/10/20

Test Report

Report No. : CE/2005/B4391
Date : 2005/11/25

The following merchandise was (were) submitted and identified by the client as :

Type of Product	:	PVC
Style/Item No	:	RUS-40
Sample Received	:	2005/11/18
Testing Date	:	2005/11/18 TO 2005/11/25

==========

Conclusion : The test results of Pb, Cd, Hg, Cr+6, PBB and PBDE for the submitted sample comply with the requirements of RoHS (2002/95/EC).

Daniel Yeh, M.R. / Operation Manager
Signed for and on behalf of
SGS TAIWAN LTD.

Test Report

Report No. : CE/2005/B4391
Date : 2005/11/25

Test Result

PART NAME NO.1 : WHITE PELLETS

PASS

Test Item (s):	Unit	Method	MDL	Result No.1	Limit of ROHS
Monobromobiphenyl	%	With reference to USEPA3540C or USEPA3550C. Analysis was performed by HPLC/DAD, LC/MS or GC/MS. (prohibited by 2002/95/EC (RoHS), 83/264/EEC, and 76/769/EEC)	0.0005	N.D.	-
Dibromobiphenyl	%		0.0005	N.D.	-
Tribromobiphenyl	%		0.0005	N.D.	-
Tetrabromobiphenyl	%		0.0005	N.D.	-
Pentabromobiphenyl	%		0.0005	N.D.	-
Hexabromobiphenyl	%		0.0005	N.D.	-
Heptabromobiphenyl	%		0.0005	N.D.	-
Octabromobiphenyl	%		0.0005	N.D.	-
Nonabromobiphenyl	%		0.0005	N.D.	-
Decabromobiphenyl	%		0.0005	N.D.	-
Total PBBs (Polybrominated biphenyls)/Sum of above	%		-	N.D.	0.1
Monobromobiphenyl ether	%	With reference to USEPA3540C or USEPA3550C. Analysis was performed by HPLC/DAD, LC/MS or GC/MS. (prohibited by 2002/95/EC (RoHS), 83/264/EEC, and 76/769/EEC)	0.0005	N.D.	-
Dibromobiphenyl ether	%		0.0005	N.D.	-
Tribromobiphenyl ether	%		0.0005	N.D.	-
Tetrabromobiphenyl ether	%		0.0005	N.D.	-
Pentabromobiphenyl ether	%		0.0005	N.D.	-
Hexabromobiphenyl ether	%		0.0005	N.D.	-
Heptabromobiphenyl ether	%		0.0005	N.D.	-
Octabromobiphenyl ether	%		0.0005	N.D.	-
Nonabromobiphenyl ether	%		0.0005	N.D.	-
Decabromobiphenyl ether	%		0.0005	N.D.	-
Total PBBEs(PBDEs) (Polybrominated biphenyl ethers)/Sum of above	%		-	N.D.	-
Total of Mono to Nona-brominated biphenyl ether. (Note 6)	%		-	N.D.	0.1

Test Report

Report No. : CE/2005/B4391
Date : 2005/11/25

PASS

Test Item (s):	Unit	Method	MDL	Result No.1	Limit of ROHS
Chromium VI (Cr+6)	ppm	UV-VIS after reference to US EPA 3060A.	2	N.D.	1000
Cadmium (Cd)	ppm	ICP-AES after reference to EN 1122, method B:2001 or other acid digestion.	2	N.D.	100
Mercury (Hg)	ppm	ICP-AES after reference to US EPA 3052 or other acid digestion.	2	N.D.	1000
Lead (Pb)	ppm	ICP-AES after reference to US EPA 3050B or other acid digestion.	2	N.D.	1000

NOTE: (1) N.D. = Not detected (<MDL)
(2) ppm = mg/kg
(3) MDL = Method Detection Limit
(4) " - " = Not Regulation
(5) " --- " = Not Applicable
(6) Decabromodiphenyl ether (DecaBDE) in polymeric applications is exempted by Commission Decision of 13 Oct 2005 amending Directive 2002/95/EC notified under document 2005/717/EC.
(7) PBBEs=PBDEs=Polybrominated Diphenyl Ethers=PBDOs=PBBOs.