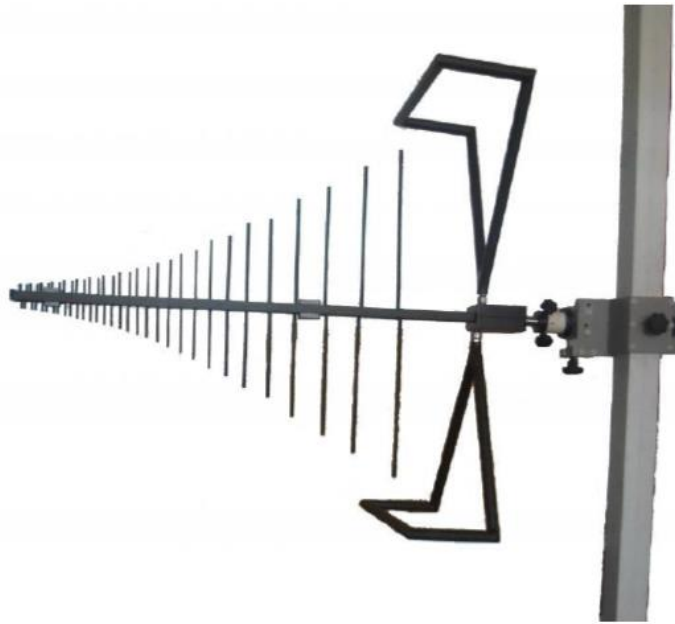


30MHz- 3GHz Broadband Log Periodic Antenna



Applications:

- 30 MHz to 3GHz
- 6061 Aluminum metal alloy
- Stainless Steel N-female
- Design and Made in Taiwan

Features:

- DC Short lightning protection
- Low VSWR
- Uniform Gain

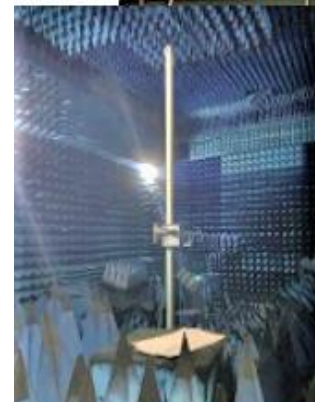
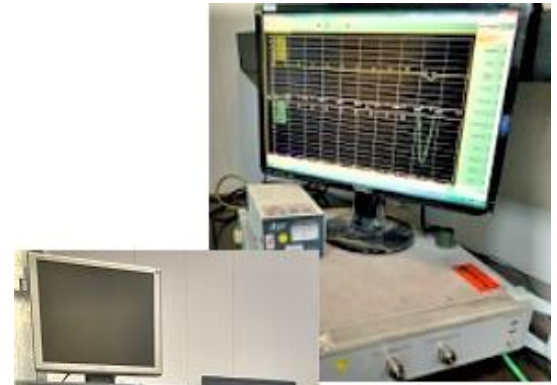
Model:	LO-30M03GA1-NF	-3db Beamwidth:	Horz.65 Deg Vert.120 Deg
LxWxH:	1548x975x438mm	N.W.:	5.2KG
Connector:	N-Female	Frequency:	30MHz-3GHz
Styling:	Log	Polarization:	Vertical or Horizontal
Gain:	3dbi-11dBi	Max Power (C.W):	500W

Electrical Specification

Frequency Range	30MHz - 3000MHz
V.S.W. R	30Mhz-50Mhz 50.0: 1 50Mhz-200Mhz 14.0: 1 200Mhz-3Ghz 2.2: 1
Antenna Type	Log
Radiation	Directional
Gain	3- 11 dBi
Polarization	Vertical and Horizontal
Maximum Power	500 Watts
Vertical Beamwidth	49 deg
Horizontal Beamwidth	86 deg
Impedance	50 Ohm
Connector	N-Female

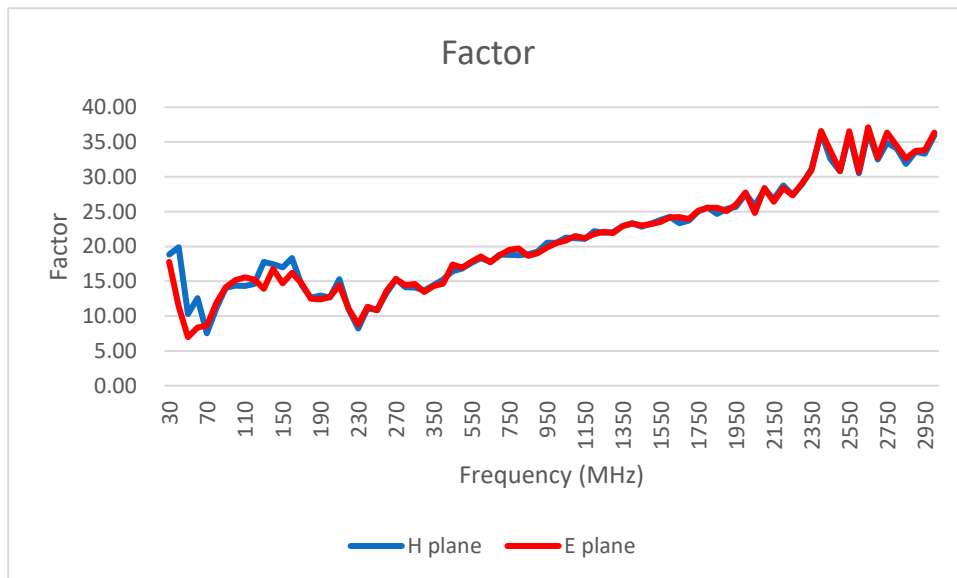
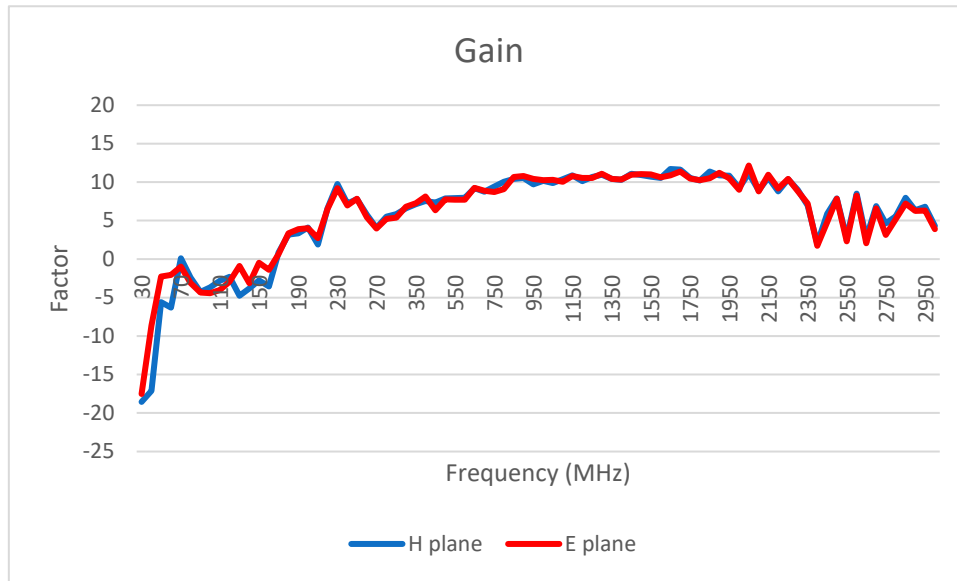
Mechanical Specification

Length (MAX)	1548 mm (+-10%)
WxH	975 x 438 mm (+-10%)
Antenna Weight (N.W)	5.2 Kg
Application	Indoor/ Outdoor
Storage Temperature	-40 to +80
Operating Temperature	-40 to +60
Operating Humidity	10%~90% non-condensing
Storage Humidity	5%~90% non-condensing
Safety, Emission and other	RoHS, FCC, CE



1MHz to 70GHz Antenna R&D. Manufacturing. OEM. ODM
Meet Various International Standards
High-Quality Made in Taiwan Antenna Products

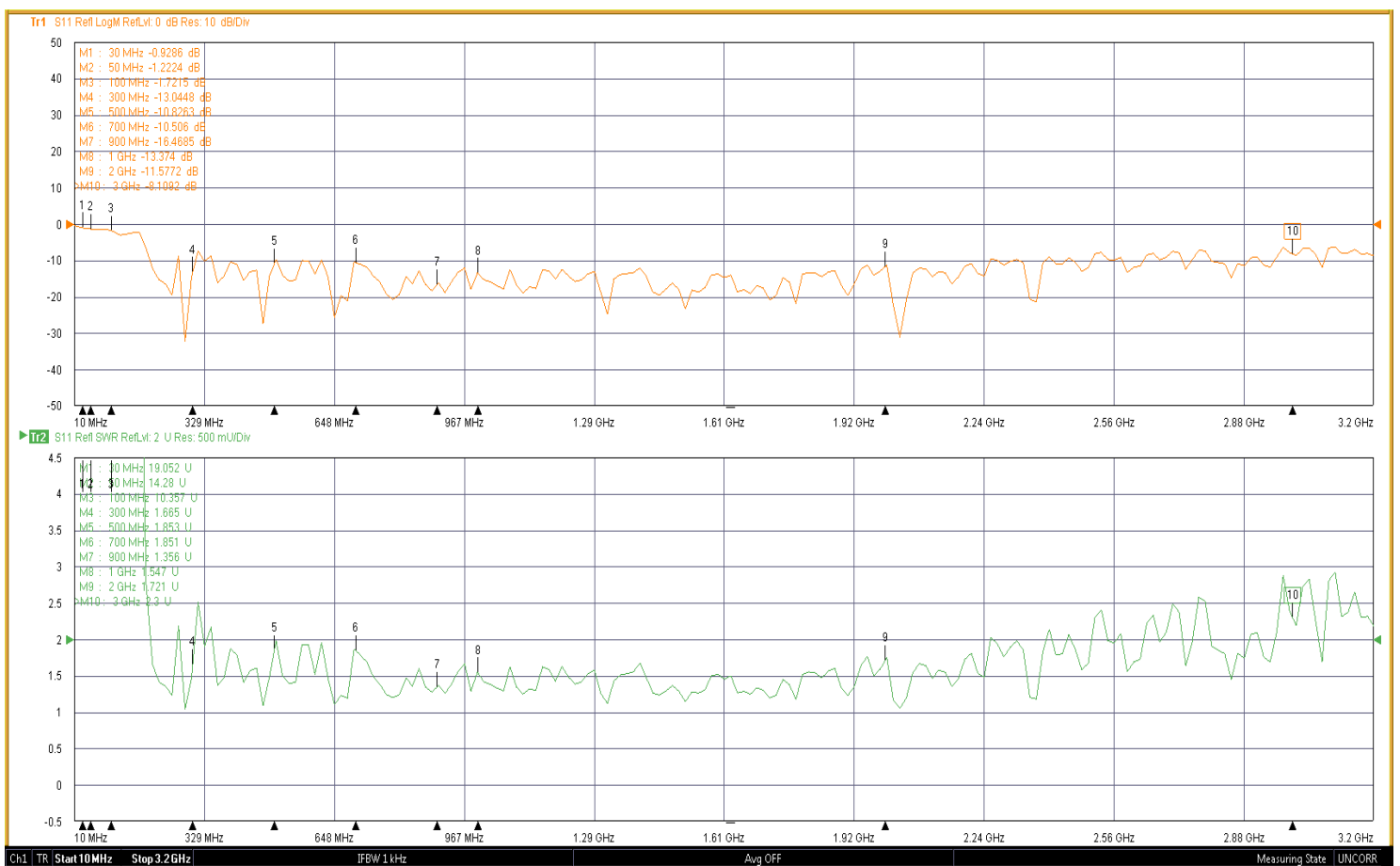
Antenna Gain and Factor



Antenna VSWR and Return loss

Test Equipment	Anritsu MS4644A 10MHz-40Ghz
Test Equipment Cable	Agilent 60cm SMA male to SMA male
RF connector Adapter	Agilent SMA-Female to N-Male DC~18GHz
Correction	85052D-DC-26.5Ghz
Test Model	LO-03M03GA1-NF
Test Port	S11

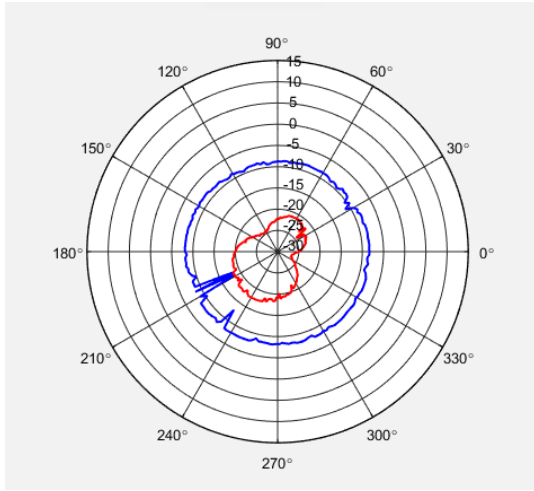
Return loss & V.S.W.R



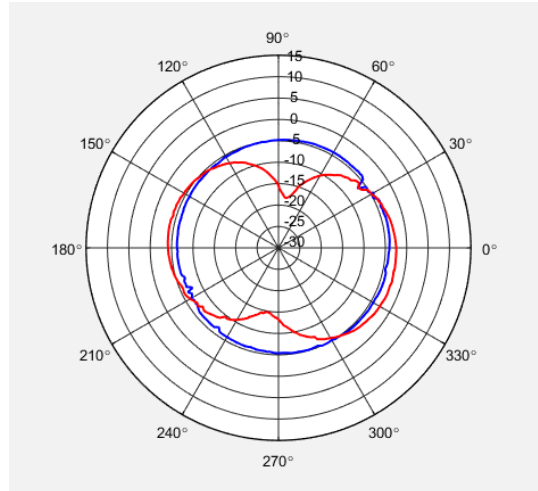
Antenna Pattern

E-Plane —
H-Plane —

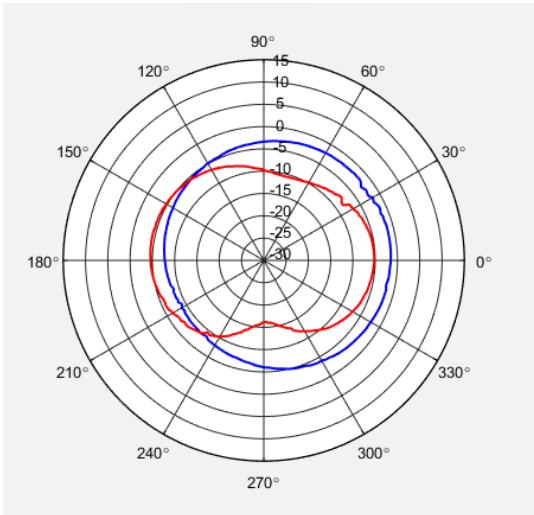
30MHz



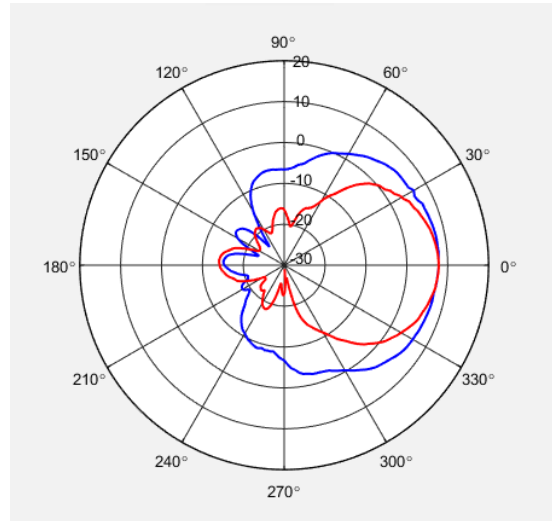
50MHz



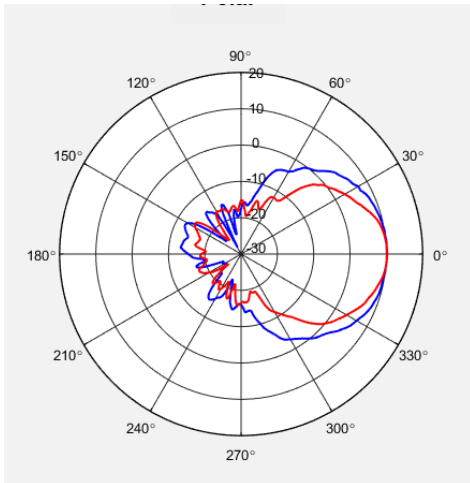
100MHz



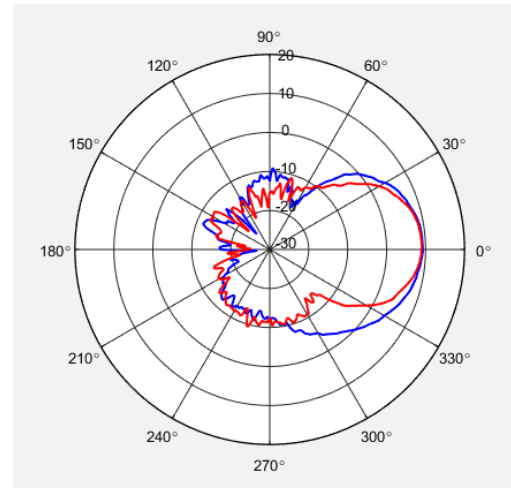
500MHz



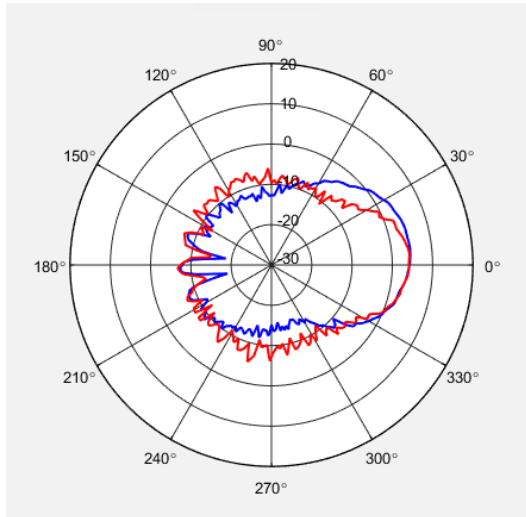
1000MHz



2000MHz



3000MHz



Antenna Gain and FBR Curve

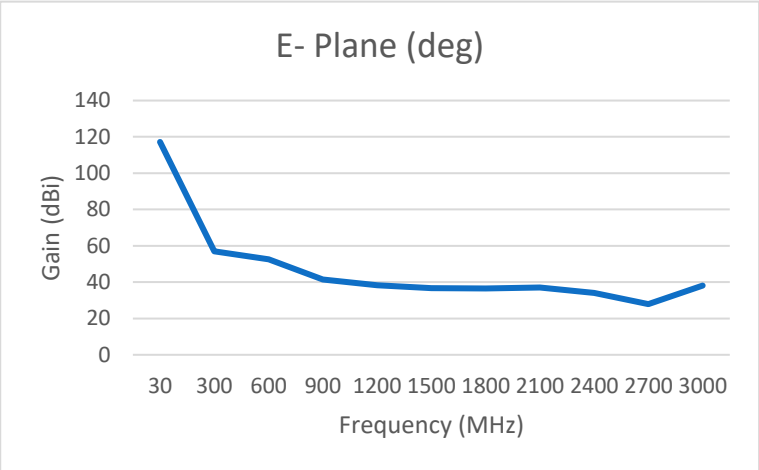
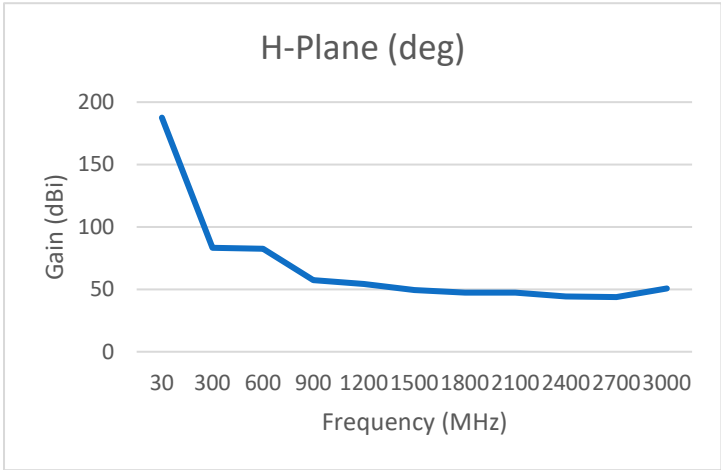
Frequency (MHz)	H-Plane	E-Plane	H-Plane	E-Plane
	Gain (dBi)	Gain (dBi)	Factor (dB)	Factor (dB)
30	-18.55	-17.52	18.82	17.79
40	-17.13	-8.62	19.89	11.38
50	-5.58	-2.27	10.28	6.97
60	-6.29	-2.06	12.58	8.35
70	0.1	-0.99	7.53	8.62
80	-2.38	-3.11	11.17	11.90
90	-4.24	-4.34	14.05	14.15
100	-3.67	-4.41	14.39	15.13
110	-2.79	-4	14.34	15.55
120	-2.31	-2.93	14.62	15.24
130	-4.77	-0.9	17.77	13.90
140	-3.82	-3.13	17.47	16.78
150	-2.77	-0.46	17.02	14.71
160	-3.54	-1.4	18.35	16.21
170	0.87	0.65	14.46	14.68
180	3.18	3.35	12.65	12.48
190	3.37	3.88	12.93	12.42
200	4.09	4.03	12.65	12.71
210	1.88	2.73	15.29	14.44
220	6.59	6.5	10.98	11.07
230	9.75	9.2	8.21	8.76
240	7.2	6.98	11.13	11.35
250	7.82	7.84	10.86	10.84
260	5.75	5.42	13.27	13.60
270	4.08	3.99	15.27	15.36
280	5.51	5.23	14.16	14.44
290	5.86	5.37	14.11	14.60
300	6.6	6.79	13.67	13.48
350	7.13	7.26	14.47	14.34
400	7.54	8.12	15.22	14.64
450	7.35	6.36	16.44	17.43
500	7.88	7.77	16.82	16.93
550	7.91	7.73	17.62	17.80
600	7.98	7.74	18.31	18.55
650	9.22	9.24	17.76	17.74
700	8.78	8.87	18.85	18.76
750	9.44	8.72	18.78	19.50

800	10.05	9.1	18.74	19.69
850	10.41	10.68	18.90	18.63
900	10.55	10.8	19.26	19.01
950	9.73	10.41	20.55	19.87
1000	10.19	10.24	20.53	20.48
1050	9.89	10.28	21.26	20.87
1100	10.37	10.04	21.18	21.51
1150	10.86	10.78	21.08	21.16
1200	10.13	10.54	22.18	21.77
1250	10.68	10.54	21.98	22.12
1300	10.95	11.09	22.05	21.91
1350	10.42	10.41	22.91	22.92
1400	10.29	10.36	23.36	23.29
1450	11.1	10.95	22.85	23.00
1500	10.93	11.04	23.32	23.21
1550	10.72	11.02	23.81	23.51
1600	10.54	10.65	24.27	24.16
1650	11.71	10.86	23.36	24.21
1700	11.62	11.39	23.71	23.94
1750	10.53	10.47	25.05	25.11
1800	10.22	10.26	25.61	25.57
1850	11.37	10.52	24.70	25.55
1900	10.87	11.23	25.43	25.07
1950	10.82	10.52	25.70	26.00
2000	9.24	9.01	27.50	27.73
2050	11.11	12.16	25.85	24.80
2100	8.93	8.79	28.24	28.38
2150	10.59	10.96	26.78	26.41
2200	8.79	9.17	28.78	28.40
2250	10.4	10.41	27.37	27.36
2300	9.02	8.85	28.94	29.11
2350	6.99	7.22	31.15	30.92
2400	2.01	1.72	36.32	36.61
2450	5.91	4.79	32.60	33.72
2500	7.88	7.84	30.80	30.84
2550	2.72	2.3	36.13	36.55
2600	8.51	8.26	30.51	30.76
2650	2.76	2.07	36.43	37.12
2700	6.88	6.58	32.47	32.77
2750	4.63	3.16	34.88	36.35
2800	5.57	5.18	34.10	34.49

2850	7.98	7.21	31.84	32.61
2900	6.36	6.26	33.61	33.71
2950	6.82	6.3	33.30	33.82
3000	4.3	3.9	35.97	36.37

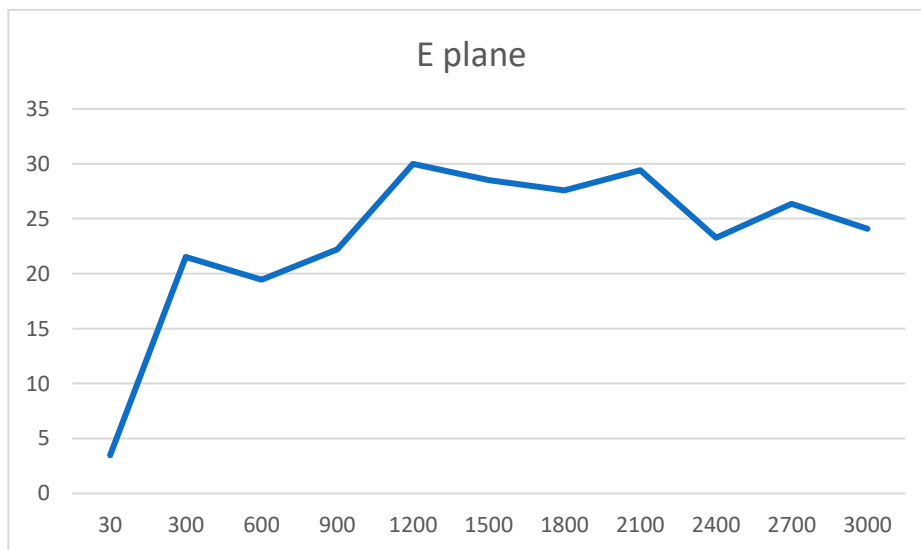
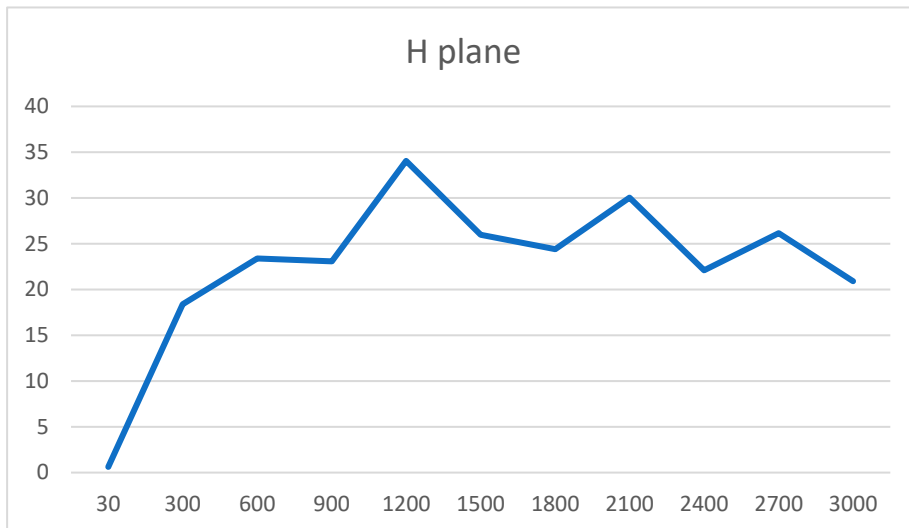
Antenna -3dB Beamwidth Curve

Frequency (MHz)	H-Plane (deg)	E-Plane (deg)
30	187.6	117.2
300	83.3	56.9
600	82.4	52.5
900	57.3	41.5
1200	54.3	38.3
1500	49.3	36.7
1800	47.4	36.6
2100	47.4	37.1
2400	44.2	34.1
2700	43.8	27.9
3000	50.8	38.1
AVG	86.12	49.4

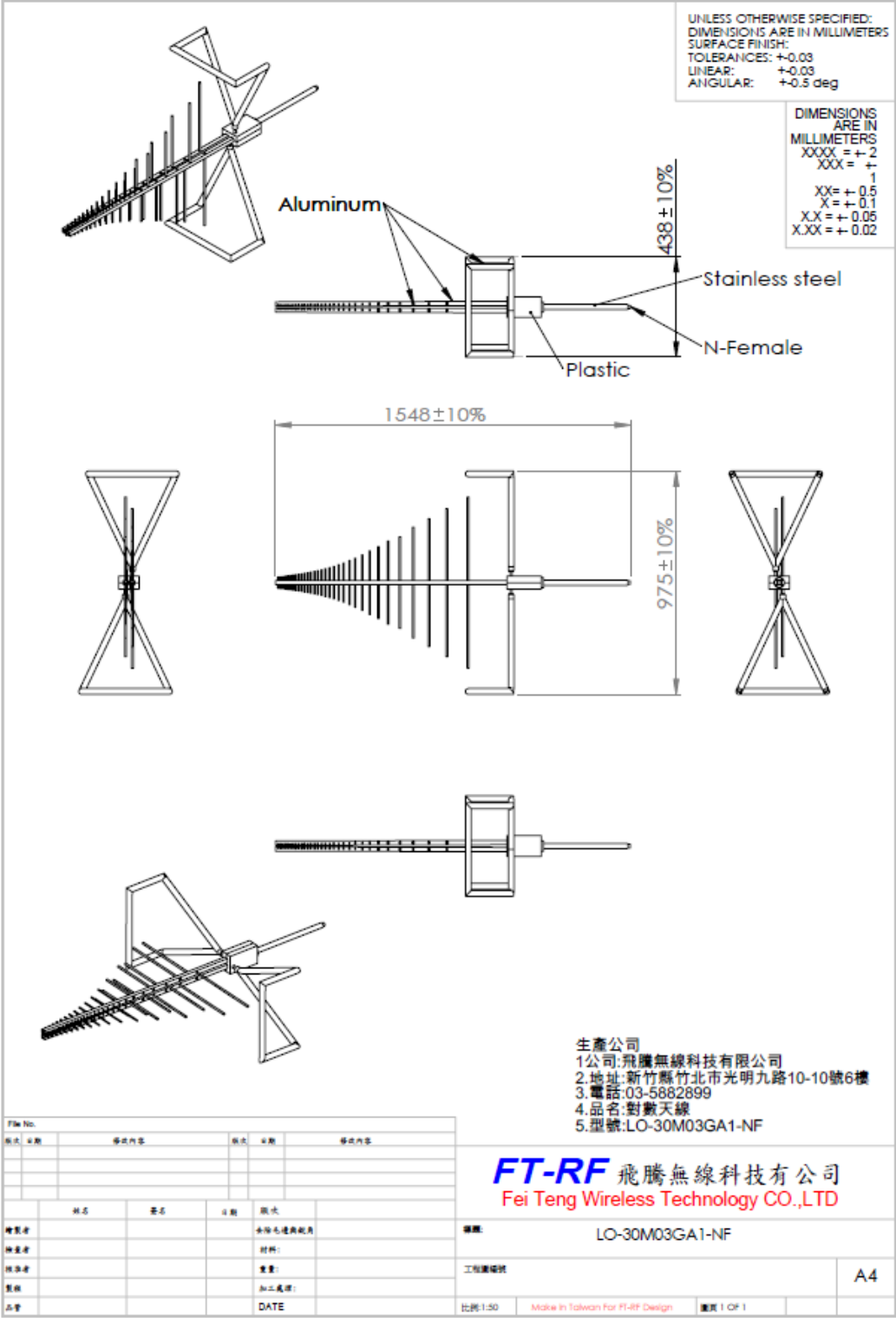


Antenna FBR curve

Frequency (MHz)	H-Plane (dB)	E-Plane (dB)
30	0.62	3.47
300	18.4	21.51
600	23.38	19.46
900	23.06	22.23
1200	34.05	29.99
1500	25.98	28.51
1800	24.41	27.59
2100	30.03	29.42
2400	22.11	23.28
2700	26.16	26.36
3000	20.91	24.07
AVG	24.3	24.7



Antenna Dimension



Packing List & Label List

	1 Set Packing		
	Antenna		
	ITEM NO.	LO-30M03GA1-NF	
	Q'TY	1	PCS
	G. W.	5	KG
	N. W.	1.087	KG
CARTON			
1 set carton Label		Antenna Label	
Size	50 x 80 mm(white)	Size	30 x 50 mm (blue)
Customer:	Manufacture Data: yy/mm/dd	LO-30M03GA1-NF 30MHz- 3GHz Broadband Log Periodic Antenna	
Customer Mode:			
Order Number:			
Weight:	kg		
Carton:	Box		
Amount:	Pcs		
Paste Position		Paste Position	
			

RoHs and WEEE Status (RoHs and WEEE Compliance)

Certificate of Compliance

Date:

To Whom It May Concern

FT-RF hereby certifies that product:

Model	Product
LO-30M03GA1-NF	30MHz- 3GHz Broadband Log Periodic Antenna

is in conformance with the requirements of the European RoHS Directive 2011/65/EU and the European WEEE Directive 2012/19/EU, all materials referenced therein are in concentrations below the maximum allowable levels specified. Products manufactured by FT-RF bear the CE marking and have FCC certificate. FT-RF has been assessed and found to be in accordance with the requirements of ISO 14001:2015 and ISO 9001:2015 standards, scope of Design and Manufacture of Antenna.

Our statements in this letter regarding RoHS and WEEE compliance do not extend to, or apply to any product subjected to unintended contamination, misuse, neglect, accident, improper installation, or to use in violation of instructions furnished by FT-RF.

Sincerely,

FT-RF (Fei Teng Wireless Technology CO., LTD)

The information contained in this letter is being provided for informational purposes only and to clarify certain information concerning FT-RF products. Nothing provided in this letter is:

- (1) a representation, warranty, or agreement to indemnification by FT-RF.
- (2) a statement which may form the basis of reliance by FT-RF,
- (3) a modification of any of the terms and conditions of sale agreed to in writing between FT-RF and its customers with respect to any FT-RF products, whether previously sold or to be sold in the future.