LB-180400-20-C-EKF Multi Octave Horn Antenna 18-40GHz 20dB Gain Endlaunch 2.92mm Female

Multi Octave Horn Antenna Operating From 18GHz to 40GHz With a Nominal 20dB Gain With Endlaunch 2.92mm Female Connector

Product Information

SKU	LB-180400-20-C-EKF

Description

Multi octave horn antenna LB-180400-20-C-EKF, operating from 18 to 40GHz with a nominal 20dB gain and low VSWR 1.5:1 with Endlaunch 2.92mm Female output connector. The model LB-180400-20-C-EKF has uniform gain through its frequency span, providing efficient performance characteristics and directionality. It can handle 20W continuously and 40W peak power.Constructed of high thermal and electrical conductivity durable copper, the antenna will provide years of trouble-free indoor and outdoor service. This multi octave horn antenna is linearly polarized and ideally suited for EMI testing, direction finding, surveillance, antenna gain and pattern measurements and other applications.

Technical Specification

Electrical Specification	
Frequency, Min (GHz)	18
Frequency, Max (GHz)	40
Waveguide Type	Double Ridge
Waveguide Size EIA WRD	WRD180
Gain, Typ (dBi)	20
Polarization	Linear
3dB Beamwidth, E-Plane, Min (Deg.)	9
3dB Beamwidth, E-Plane, Max (Deg.)	26
3dB Beamwidth, H-Plane, Min (Deg.)	10
3dB Beamwidth, H-Plane, Max (Deg.)	29
Cross Pol. Isolation, Typ (dB)	35
VSWR, Typ	1.5:1
Impedance, (Ohm)	50
Power Handling, CW, (W)	20
Power Handling, Peak, (W)	40

Interface	
Output Type	Coaxial
Connector	2.92mm(K)
Connector Gender	Female
Mechanical Specification	
Figure	C Type
Body Material	Cu
Finish	Gold Plated and Passivation, Gray Paint
Size, W (mm)	55
Size, H (mm)	55
Size, L (mm)	126.4
Weight, (kg)	0.26

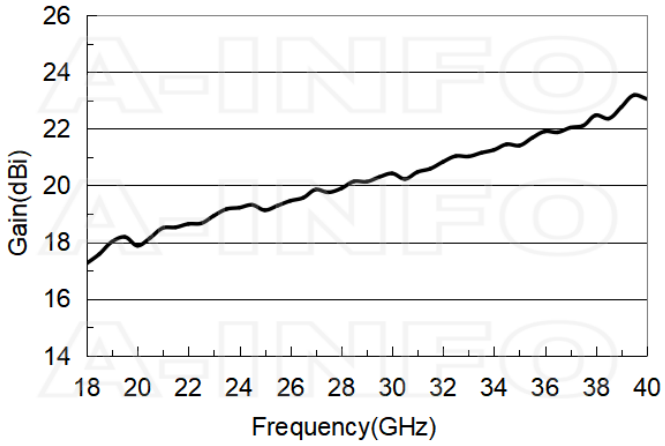
Additional Information

Application	General Purpose Indoor & Outdoor, Fixed

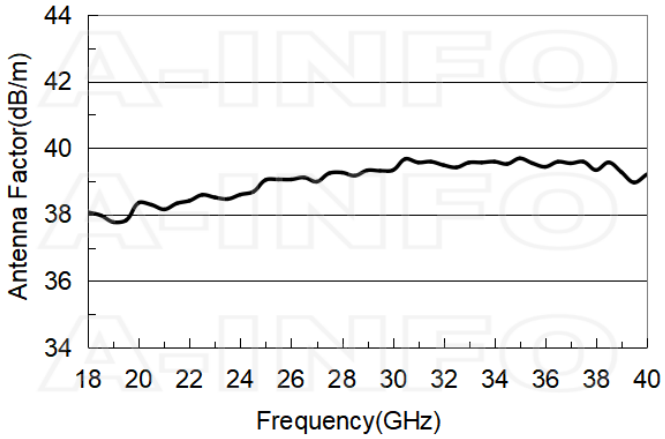
Solution for	Gain Reference Antenna Measurement Far-field Measurement System Intergration

Typical Test Results

Gain



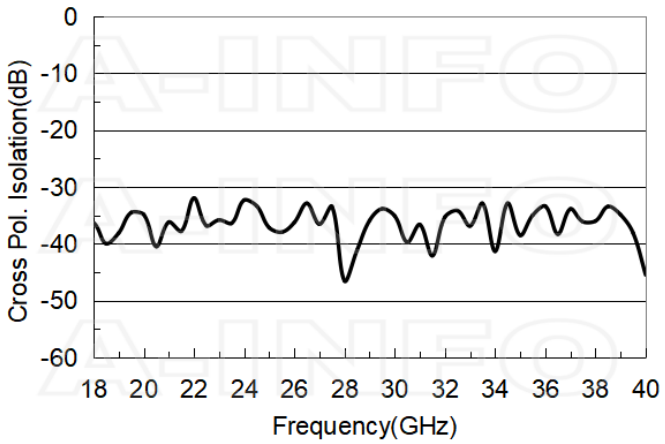
Antenna Factor



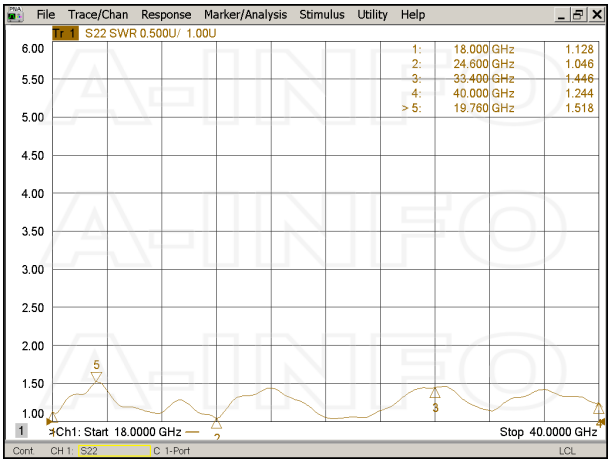
Antenna Factor (Table)

Frequency(GHz)	Gain(dBi)	AF(dB/m)
18.0	17.25	38.06
20.0	17.88	38.35
22.0	18.64	38.41
24.0	19.22	38.60
26.0	19.46	39.05
28.0	19.89	39.26
30.0	20.42	39.33
32.0	20.83	39.48
34.0	21.25	39.59
36.0	21.90	39.43
38.0	22.47	39.33
40.0	23.05	39.20

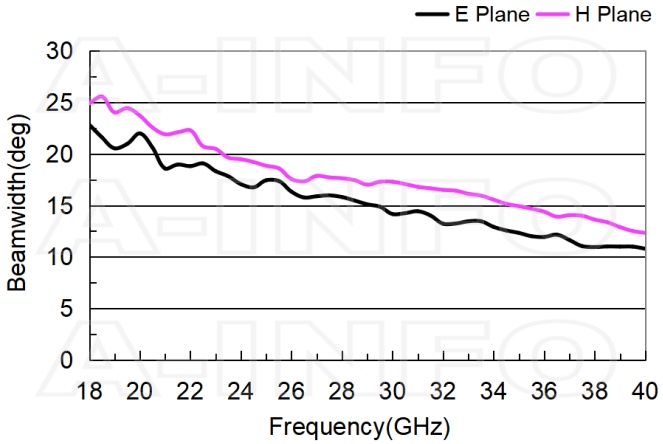
Cross Polarization Isolation



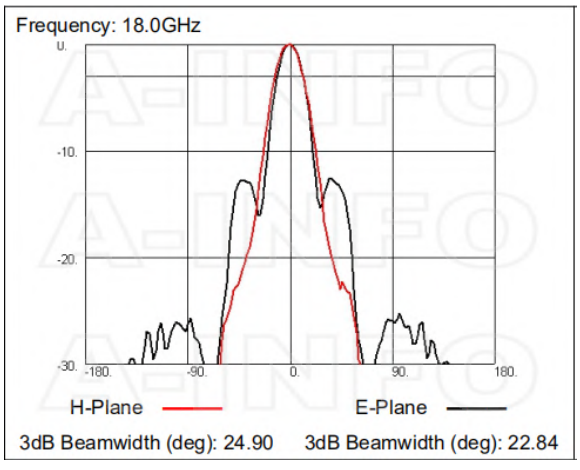
VSWR

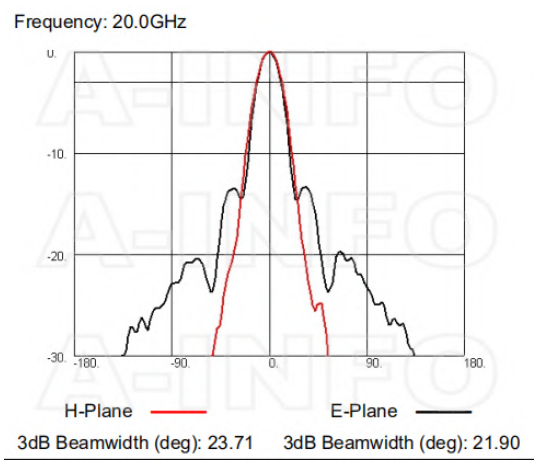


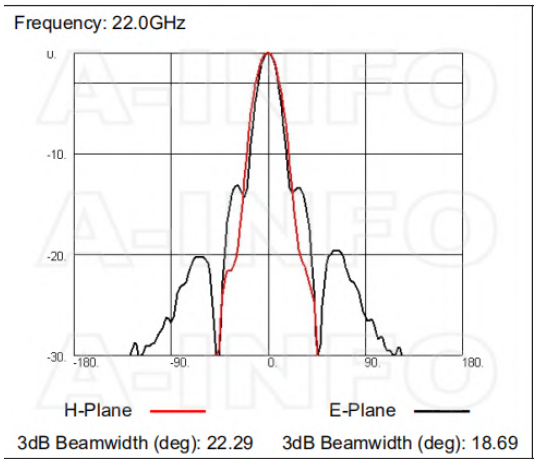
Beamwidth

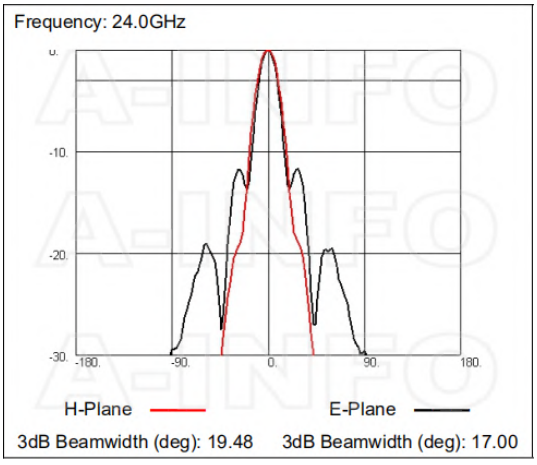


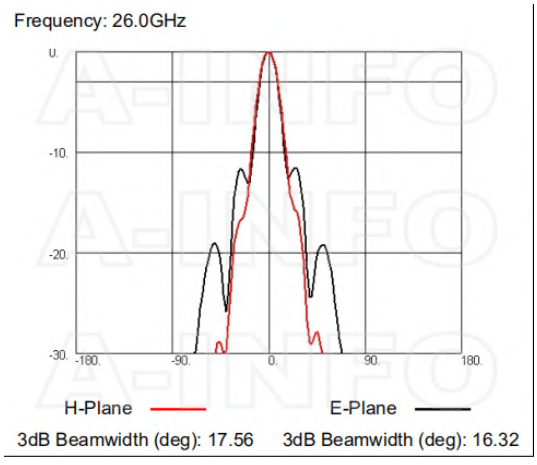
Pattern

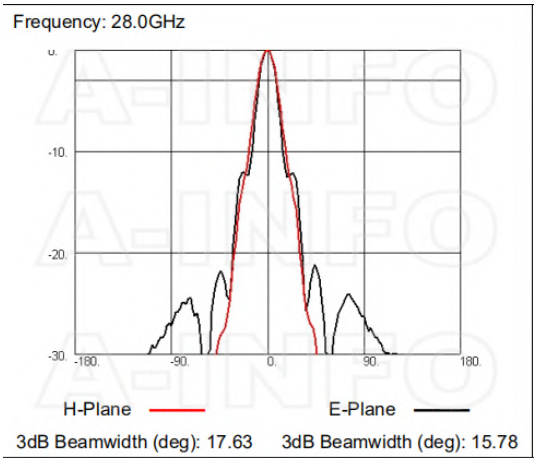


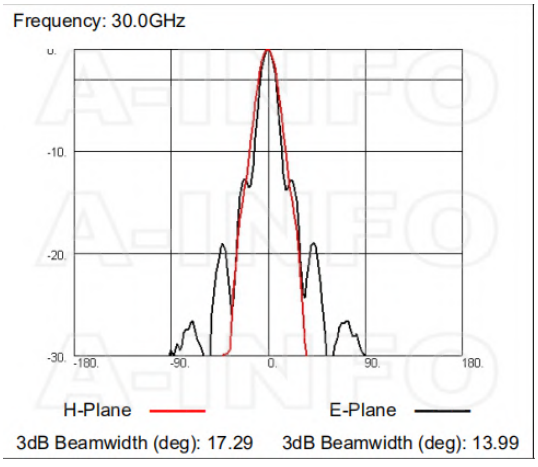


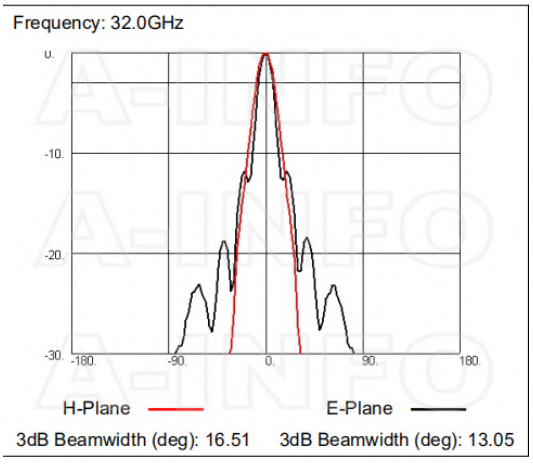

Frequency: 22.0GHz
H-Plane
E-Plane
3dB Beamwidth (deg): 22.29
3dB Beamwidth (deg): 18.69

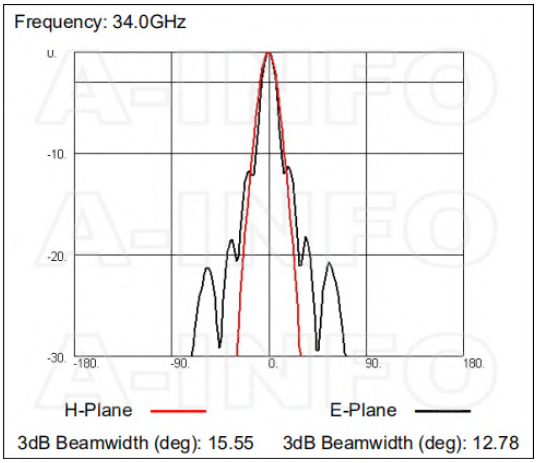

Frequency: 24.0GHz
H-Plane
E-Plane
3dB Beamwidth (deg): 19.48
3dB Beamwidth (deg): 17.00

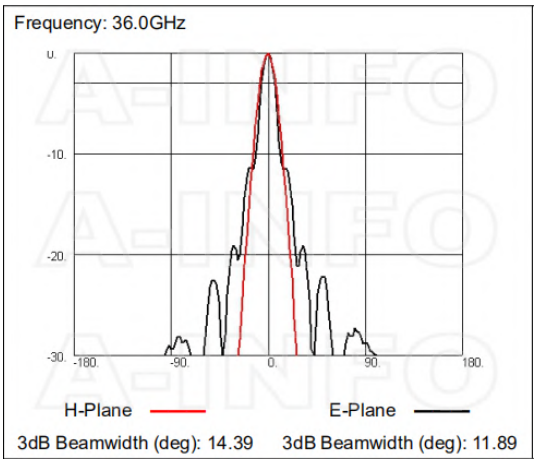

Frequency: 26.0GHz
H-Plane
E-Plane
3dB Beamwidth (deg): 17.56
3dB Beamwidth (deg): 16.32

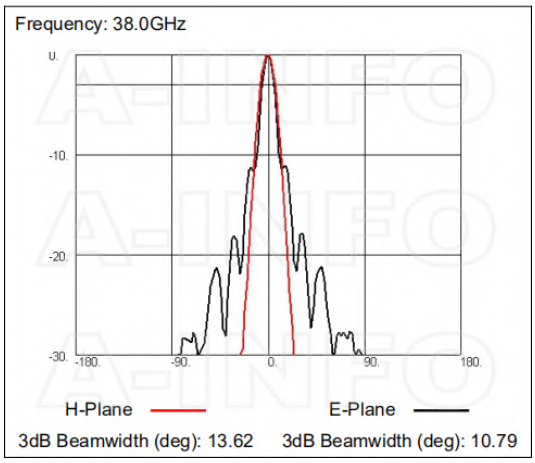

Frequency: 28.0GHz
H-Plane
E-Plane
3dB Beamwidth (deg): 17.63
3dB Beamwidth (deg): 15.78

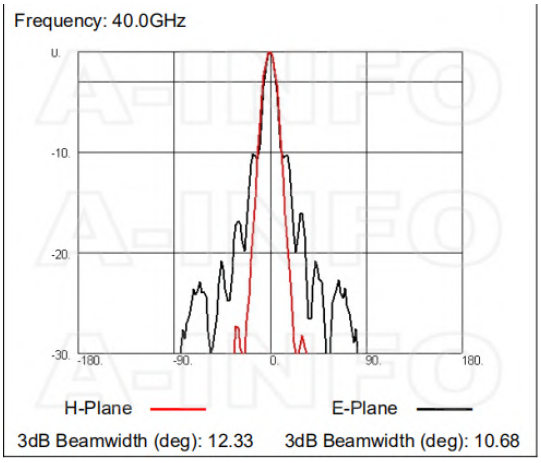

Frequency: 30.0GHz
H-Plane
E-Plane
3dB Beamwidth (deg): 17.29
3dB Beamwidth (deg): 13.99


Frequency: 32.0GHz
H-Plane
E-Plane
3dB Beamwidth (deg): 16.51
3dB Beamwidth (deg): 13.05









Related Products

LB-19-25-MB2 Round Type Mounting Bracket

LB-19-25-L2 L type mounting bracket

LB-19-25-MA2 Stinger Type Mounting Bracket

Tripod_15Kg Al Alloy Tripod

3033HL Wooden Tripod

3033QM Wooden Tripod Metalfree

Carrying Case_LB-180400-20 Al Alloy Carrying Case

2.92M-2.92M-A050-1000 Flexible Cable Assembly 1000mm DC-40GHz 2.92mm Male to 2.92mm Male

2.92M-2.92M-A050-1500 Flexible Cable Assembly 1500mm DC-40GHz 2.92mm Male to 2.92mm Male

2.92M-2.92M-A050-2000 Flexible Cable Assembly 2000mm DC-40GHz 2.92mm Male to 2.92mm Male

2.92M-2.92M-A050-3000 Flexible Cable Assembly 3000mm DC-40GHz 2.92mm Male to 2.92mm Male

2.92M-2.92M-A050-5000 Flexible Cable Assembly 5000mm DC-40GHz 2.92mm Male to 2.92mm Male

2.92M-2.92M-A050-10000 Flexible Cable Assembly 10000mm DC- 40GHz 2.92mm Male to 2.92mm Male

About this Datasheet

● Product Information Product Link: https://www.ainfoinc.com/lb-180400-20-c-ekf-multi-octave-horn-antenna-18-40-ghz-20db-gain-endlaunch-2-92mm-female Data subject to change without notice. 	● Contact Us Address: 60 Tesla, Irvine, CA 92618, USA Website: www.ainfoinc.com Email: sales@ainfoinc.com	● Phone & Fax Phone: +1-949-639-9688 +1-949-639-9608 Fax: +1-949-639-9670