

**LB-51-20-A Standard Gain Horn Antenna 15-22GHz 20dB Gain
Rectangular Waveguide Interface**

Standard Gain Horn Antenna Operating From 15GHz to 22GHz With a Nominal 20dB Gain With Rectangular Waveguide Interface



Product Information

SKU	LB-51-20-A
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Description

Standard Gain Horn Antenna LB-51-20-A, operating from 15 to 22GHz with a nominal 20dB gain and low VSWR 1.15:1 with FBP180 output. The model LB-51-20-A has uniform gain through its frequency span, providing efficient performance characteristics and directionality. Constructed of lightweight corrosion-resistant aluminum, the antenna will provide years of trouble-free indoor and outdoor service. This standard gain horn antenna is linearly polarized and ideally suited for EMI testing, direction finding, surveillance, antenna gain and pattern measurements and other applications.

Technical Specification

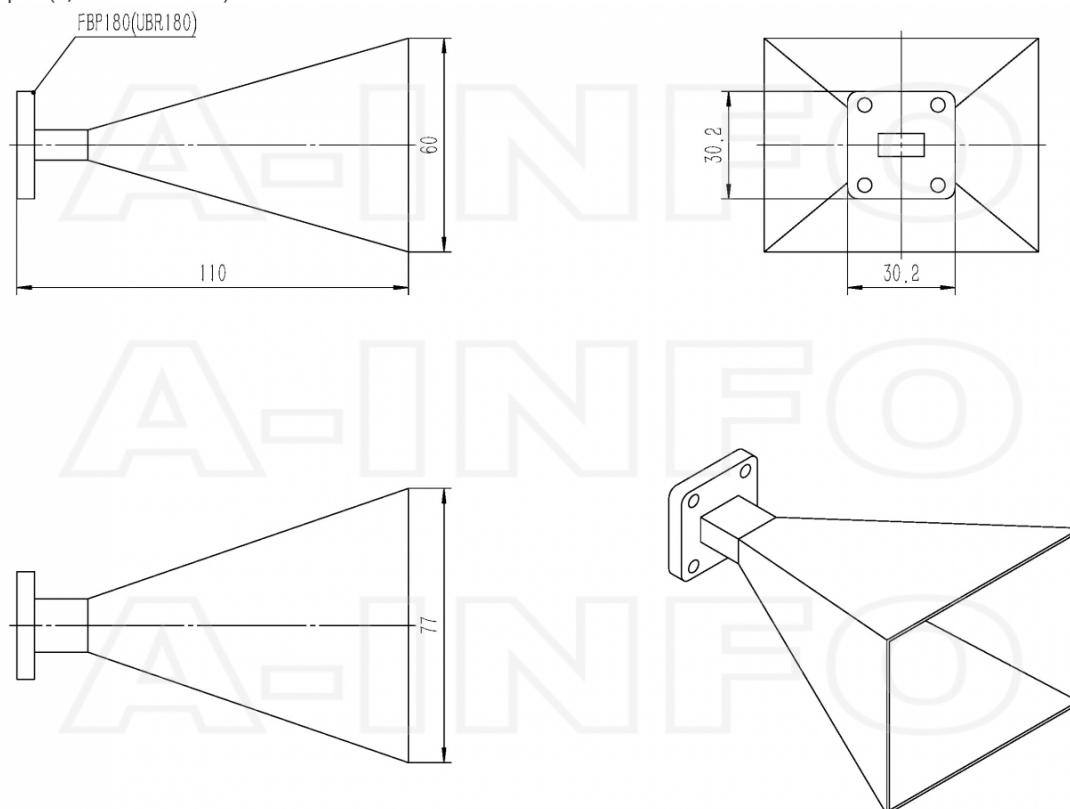
Electrical Specification		Interface	
Frequency, Min (GHz)	15	Output Type	Waveguide
Frequency, Max (GHz)	22	Flange Style	Square
Waveguide Type	Rectangular	Flange Type	Cover
Waveguide Size EIA WR	WR51	Flange Designation	FBP180(UBR180)
Gain, Typ (dBi)	20	Mechanical Specification	
Polarization	Linear	Figure	A Type
3dB Beamwidth, E-Plane, Typ (Deg.)	15	Body Material	Cu
3dB Beamwidth, H-Plane, Typ (Deg.)	17	Finish	Silver Plated, Gray Paint
Cross Pol. Isolation, Typ (dB)	35	Size, W (mm)	77
VSWR, Typ	1.15:1	Size, H (mm)	60
Impedance, (Ohm)	50	Size, L (mm)	110
		Weight, (kg)	0.2

Additional Information

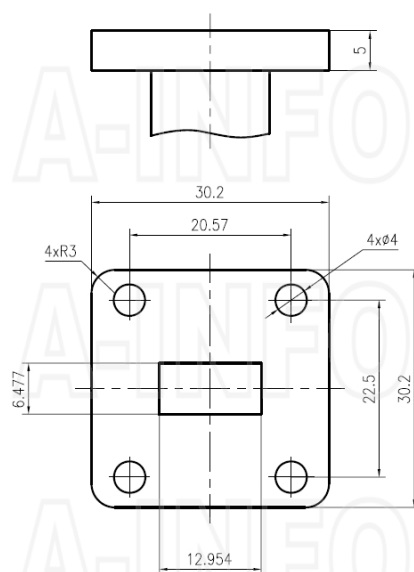
Application	General Purpose Indoor & Outdoor, Fixed	Solution for	Gain Reference Antenna Measurement Reflector Feed Far-field Measurement System Intergration Material Measurement
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Outline Drawing

FBP180 Output (P/N: LB-51-20-A)



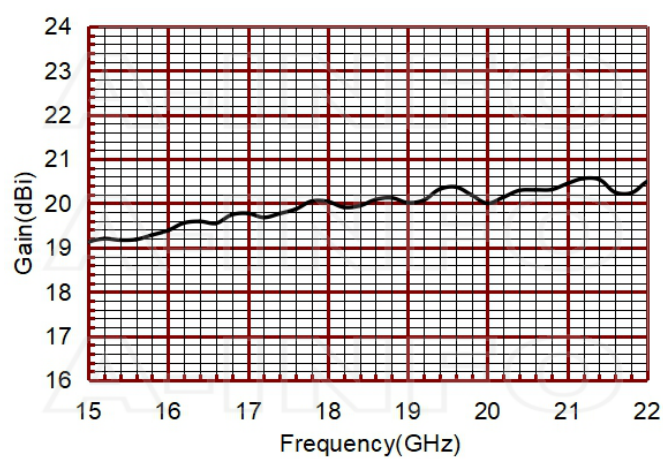
Flange Drawing



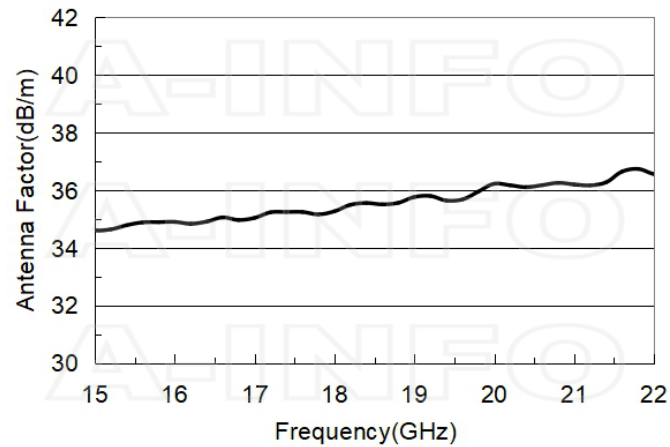
FBP180

Typical Test Results

Gain



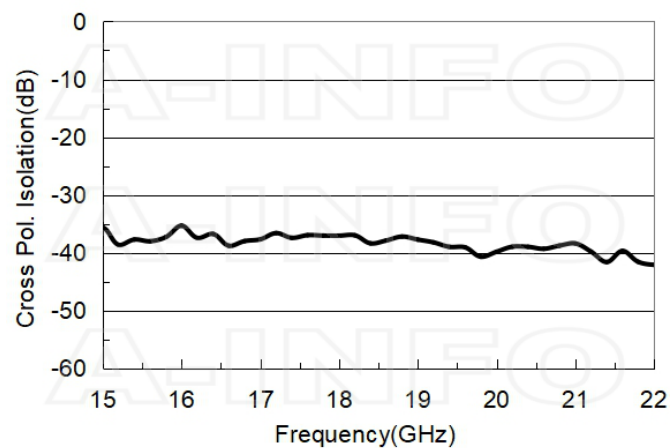
Antenna Factor



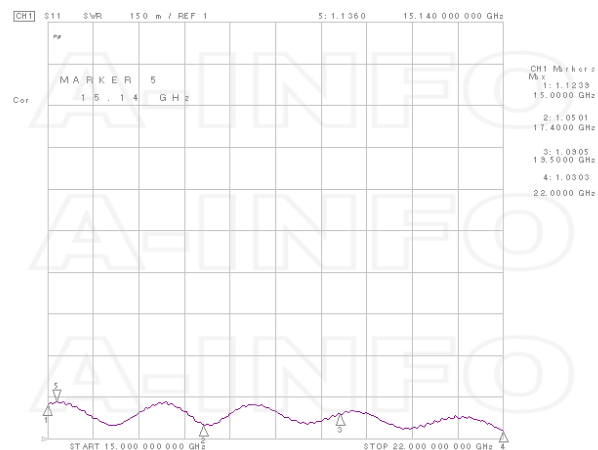
Antenna Factor (Table)

Frequency(GHz)	Gain(dBi)	Antenna Factor(dB/m)
15.0	19.12	34.62
15.5	19.16	34.86
16.0	19.38	34.91
16.5	19.57	34.99
17.0	19.77	35.05
17.5	19.53	35.54
18.0	20.04	35.28
18.5	20.09	35.46
19.0	20.01	35.77
19.5	20.54	35.47
20.0	20.00	36.23
20.5	20.32	36.12
21.0	20.45	36.21
21.5	20.38	36.48
22.0	20.49	36.57

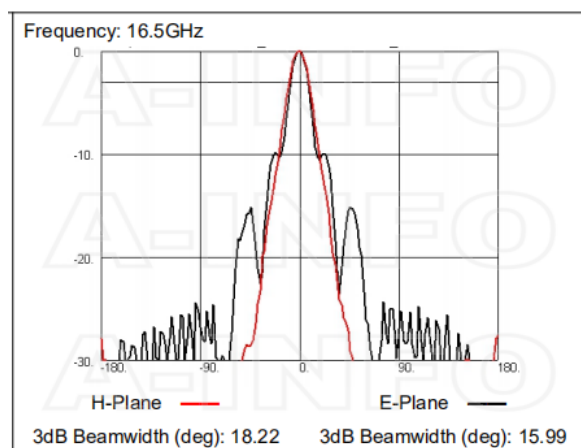
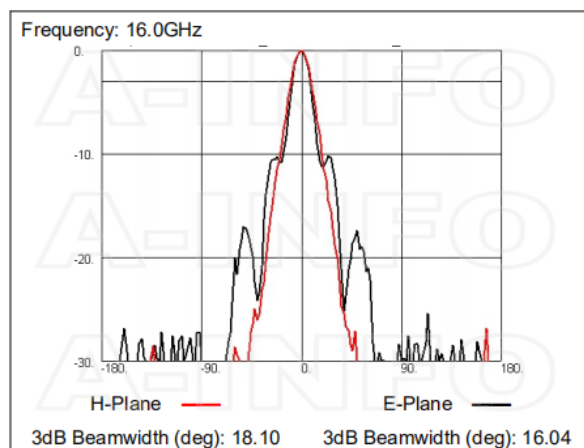
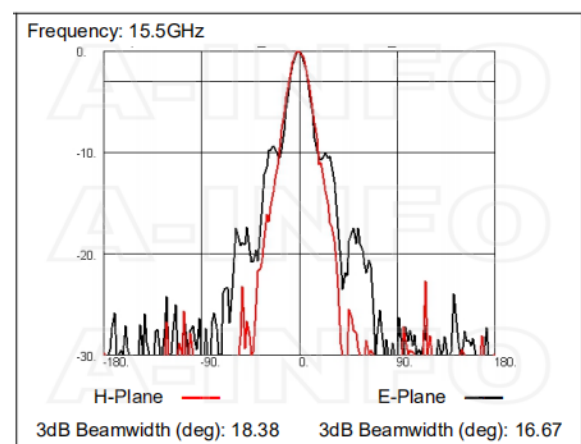
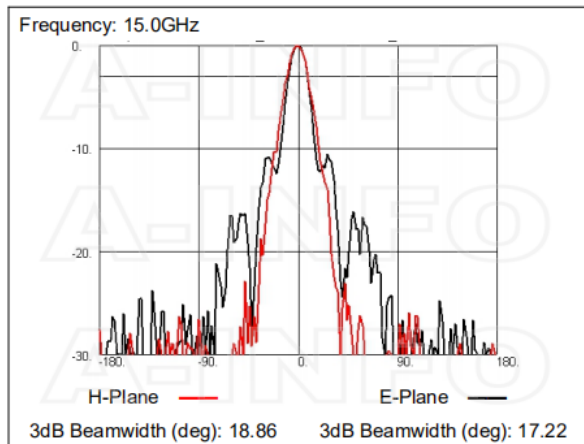
Cross Polarization Isolation

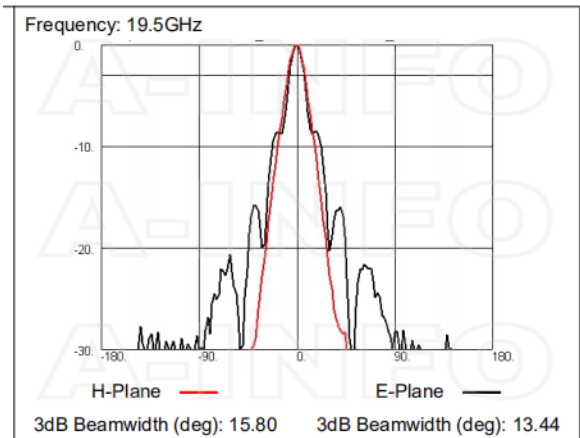
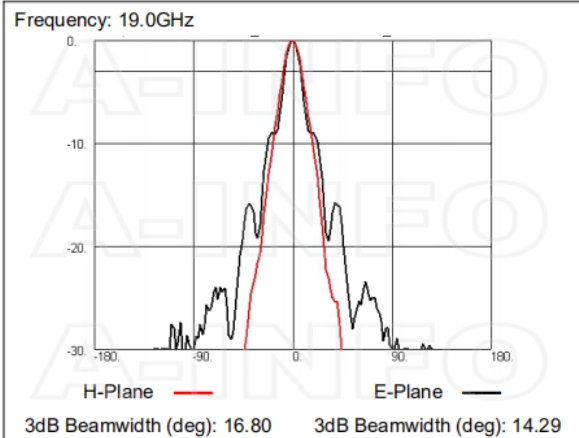
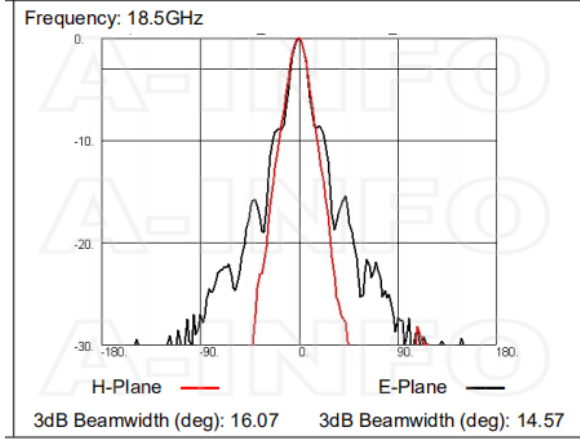
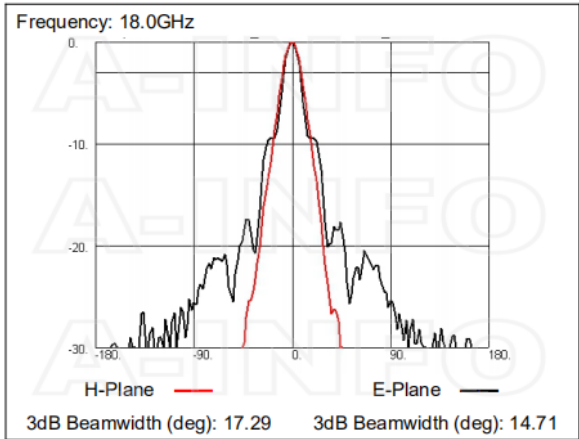
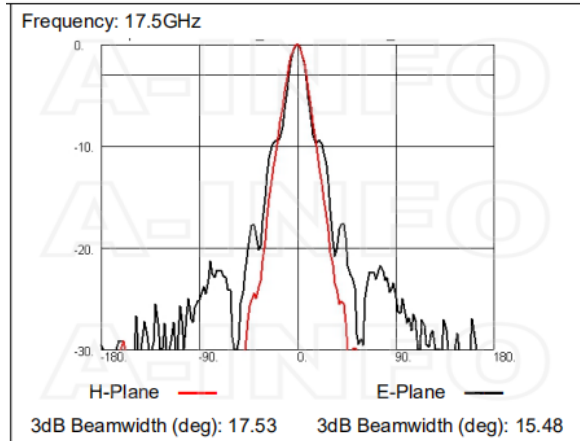
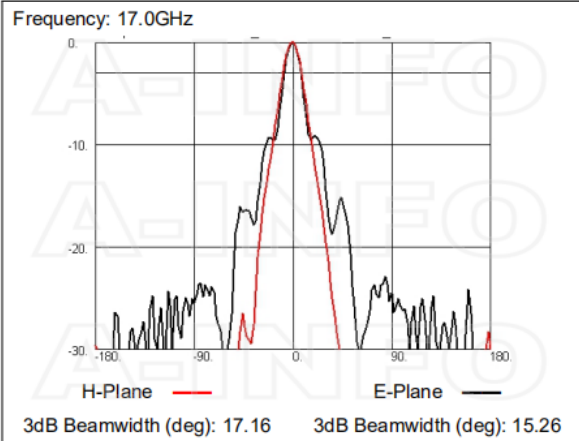


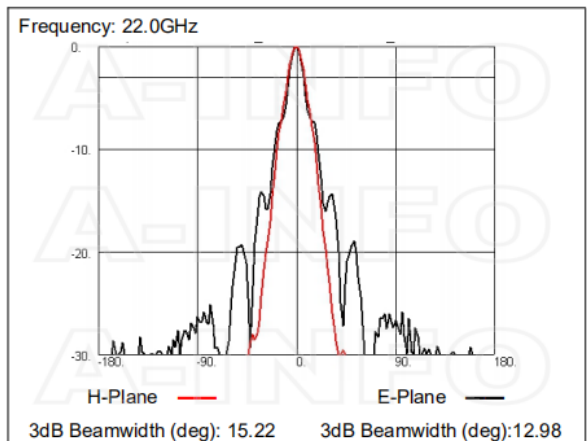
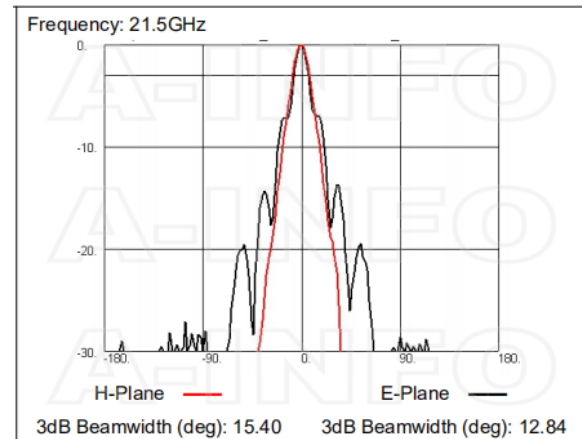
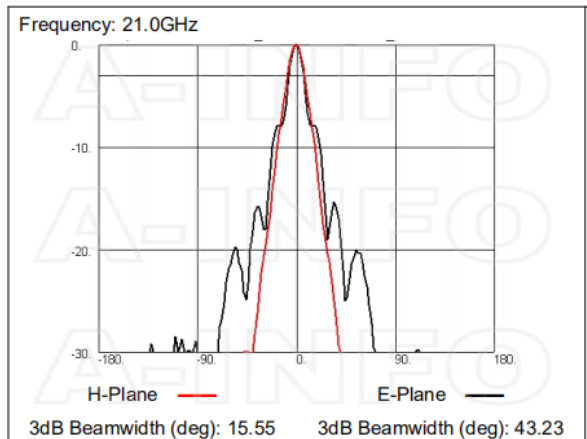
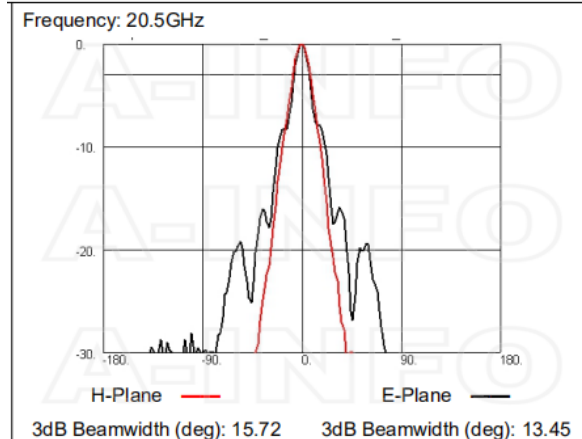
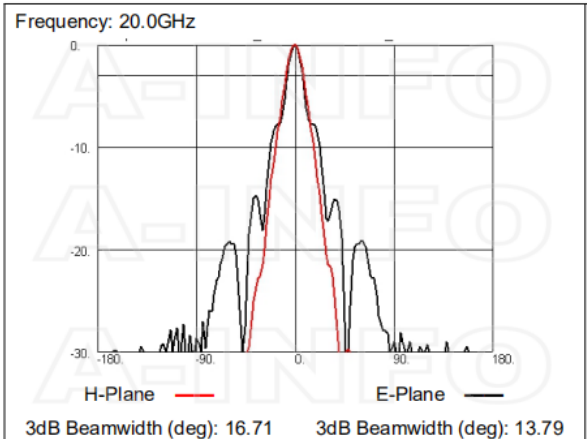
VSWR



Pattern







Related Products



51WCAS_Cu Right Angle
Rectangular Waveguide to
Coaxial Adapter 15-22GHz WR51
to SMA Female



51WCASM_Cu Right Angle
Rectangular Waveguide to
Coaxial Adapter 15-22GHz WR51
to SMA Male



51WCA3.5_Cu Right Angle
Rectangular Waveguide to
Coaxial Adapter 15-22GHz WR51
to 3.5mm Female



51WCA3.5M_Cu Right Angle
Rectangular Waveguide to
Coaxial Adapter 15-22GHz WR51
to 3.5mm Male



51WCAK_Cu Right Angle
Rectangular Waveguide to
Coaxial Adapter 15-22GHz WR51
to 2.92mm Female



51WCAKM_Cu Right Angle
Rectangular Waveguide to
Coaxial Adapter 15-22GHz WR51
to 2.92mm Male



51WCA2.4_Cu Right Angle
Rectangular Waveguide to
Coaxial Adapter 15-22GHz WR51
to 2.4mm Female



51WCA2.4M_Cu Right Angle
Rectangular Waveguide to
Coaxial Adapter 15-22GHz WR51
to 2.4mm Male



51WECAS_Cu Endlaunch
Rectangular Waveguide to
Coaxial Adapter 15-22GHz WR51
to SMA Female



51WECAK_Cu Endlaunch
Rectangular Waveguide to
Coaxial Adapter 15-22GHz WR51
to 2.92mm Female



M4x18 Hex_Pack WR112- WR51
Flange Assembly Pack

Similar Products



LB-51-20-ASPO Standard Gain
Horn Antenna 15-22GHz 20dB
Gain Rectangular Waveguide
Interface



LB-51-20-C-SF Standard Gain
Horn Antenna 15-22GHz 20dB
Gain SMA Female



LB-51-20-C-SFSPO Standard Gain
Horn Antenna 15-22GHz 20dB
Gain SMA Female

About this Datasheet

● Product Information Product Link: https://www.ainfoinc.com/lb-51-20-a-standard-gain-horn-antenna-15-22-ghz-20db-gain-fbp180 Data subject to change without notice. © A-INFO INC. 2023. All Rights Reserved	● Contact Us Address:dd 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
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