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Laird CONNECTIVITY

VLT69273x11J

Vehicular 3-Port MIMO Antenna
698-960 MHz/1710-2700 MHz/2300-2700 MHz/4900-5900 MHz/GNSS



The Laird Connectivity vehicular three-port MIMO antenna covers the 698-960/1710-2700 MHz and 2300-2700/4900-5900 MHz frequency ranges with an added global navigational antenna. Configured with one 3G/4G port, one dual band Wi-Fi port and a third port configured with a GNSS navigational antenna.

Connector options include, but not limited to, SMA male connectors for 3G/4G LTE and GNSS ports with an RPSMA male connector for the Wi-Fi port. The housing incorporates a low-profile, rugged design that meets IP67, EN61373 Shock & Vibration and EN50155 Temperature and Humidity standards. The antenna also features high impact, UV-resistant polycarbonate plastic radome available in black or white.

APPLICATIONS

- FirstNet/Public Safety
- Passenger Fleet
- Commercial Vehicle Fleet
- Rail Transit

ELECTRICAL SPECIFICATIONS				
Number of Ports	3G/4G LTE – 1		Wi-Fi – 1	
Operating Frequency (MHz)	698-960	1710-2700	2300-2700	4900-5900
Peak Gain – Average* (dBi)	2.0	4.1	4.2	4.9
Peak Gain – Max* (dBi)	2.6	4.7	4.9	6.0
VSWR- Average**	1.4	1.2	1.3	1.2
VSWR- Max**	2.0	2.0	2.0	2.0
Isolation** LTE to WIFI (dB)	-25	-25	-25	-38
Nominal Impedance (Ohms)	50			
Max Power - Ambient 25°C (W)	50			
Polarization	Vertical Linear			
Horizontal Plane 3 dB Beamwidth Port 1	Omnidirectional			

* Measured on 1 ft (30.48 cm) diameter ground plane
** Measured on 1 ft (30.48 cm) diameter ground plane and 17 ft (518 cm)
Antenna specification is subjected to change according to the ground plane size

MECHANICAL SPECIFICATIONS	
Dimensions – diameter x height – mm (in.)	132 x 75 (5.20 x 2.9)
Weight – kg (lbs)	0.74 (1.63)
Cable Type	LMR195M
Mounting	P- Mount
Radome and Base Plate Material	PC, UL94 - V0 Rating, UV Stable

ENVIRONMENTAL SPECIFICATIONS	
Operating Temperature – °C (°F)	-30 to +70 (-22 to +158)
Storage Temperature – °C (°F)	-40 to +85 (-40 to +185)
Shock and Vibration Tests	EN61373 Compliant
Temperature and Humidity Tests	EN50155 Compliant
Ingress Protection Rating	IP67
Material Substance Compliance	RoHS

CONFIGURATION

PART NUMBER	CABLE LENGTH	CONNECTOR LTE PORTS	CONNECTOR Wi-Fi PORTS	COLOR	NAVIGATION
VLT69273B11J-518A	5.18m (17ft)	SMA Male	RPSMA Male	Black	GNSS
VLT69273W11J-518A	5.18m (17ft)	SMA Male	RPSMA Male	White	GNSS

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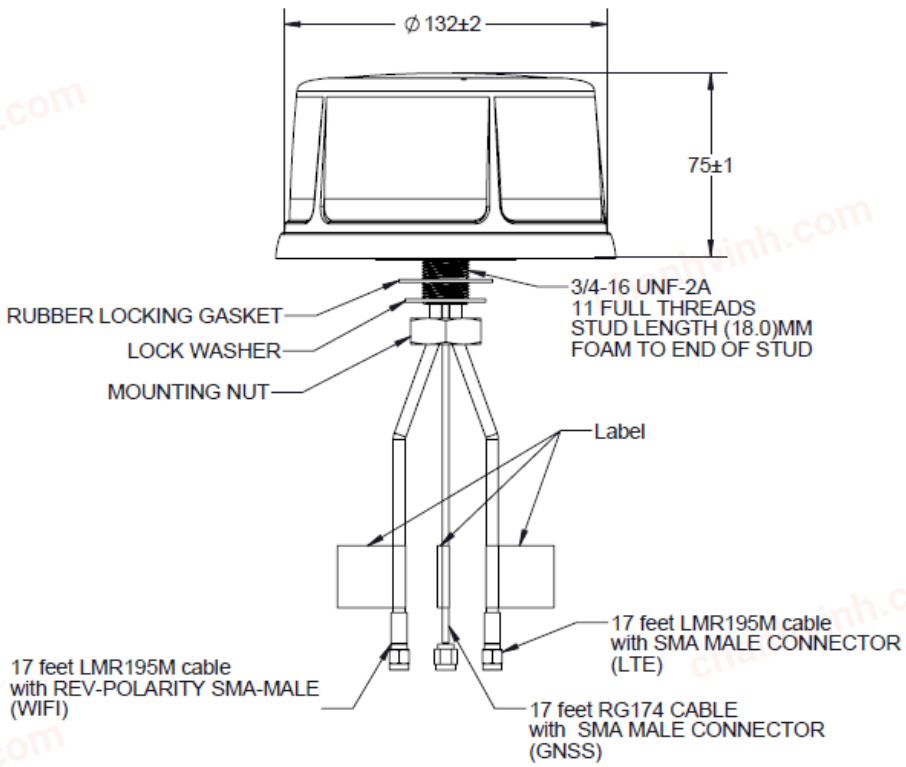
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GNSS ANTENNA SPECIFICATIONS:			
Model Number	VHP69273x22J		
Number of Ports	GNSS- 1		
Frequency Band (MHz)	Beidou	GPS	GLONASS
Frequency of Operation (MHz)	1561.098 ± 2.046	1.575.42 ± 1.023	1602.0 ± 5.0
Amplifier Gain (dB)	28 dB ± 3		
Nominal Impedance (Ohms)	50 Ω		
Output VSWR	< 2:1		
DC Voltage	2.5 - 7 Vdc		
Current Consumption, mA	8.5 ± 3 (at 3.0V)		
Input Max Power, dBm	-10		
Out of Band Rejection, dBc	> 80 (698- 960 MHz)	> 80 (1428- 2700 MHz)	> 70 (4900- 5800 MHz)
Working/Storage Temperature	-40°C - +85°C (-40°F - +185°F)		
Connector	SMA-Male		
Cable – Exposed Length	RG174-518.2 cm (17 ft.)		

PACKAGING INFORMATION

PACKAGE DIMENSIONS	CARTON	MASTER CARTON	AIR PALLET	OCEAN PALLET
Number of Antennas	4	8	192	240
Height- mm (in.)	305 (12.0)	305 (12.0)	1363 (53.66)	1668 (65.67)
Length- mm (in.)	525 (20.7)	525 (20.7)	1200 (47.24)	1200 (47.24)
Width- mm (in.)	132 (5.22)	265 (10.4)	800 (31.5)	800 (31.5)
Shipping Weight- kg (lb.)	5.0 (11)	10.1 (22.3)	255 (562)	316 (697)

MECHANICAL DRAWING



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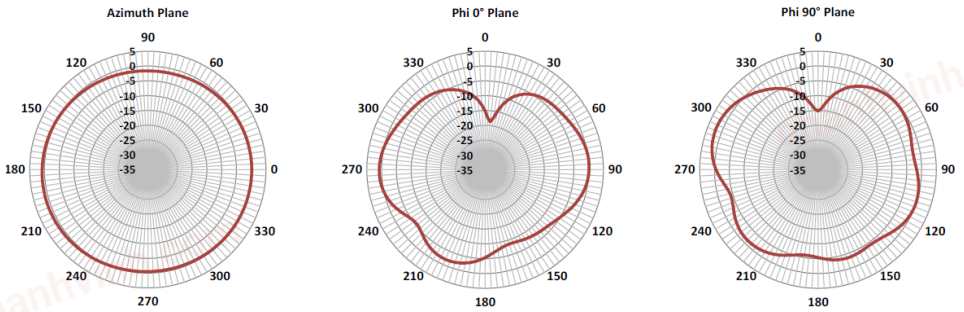
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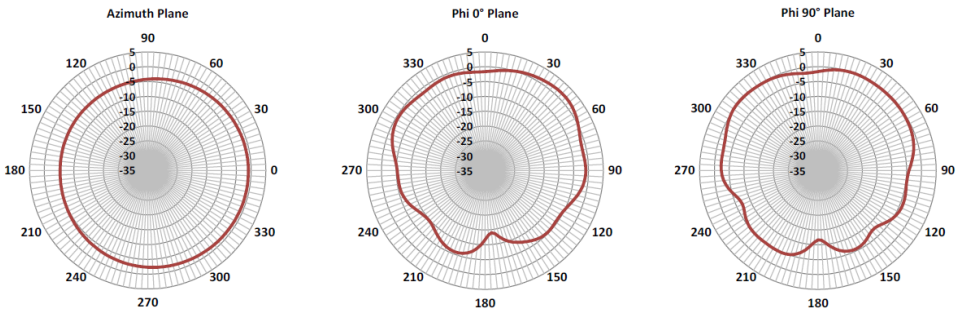
Vehicular 3-Port MIMO Antenna

RADIATION PATTERNS- LTE/CELL PORTS

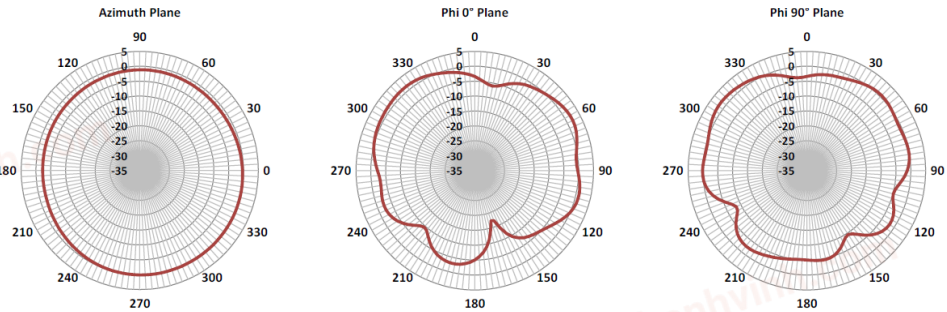
698 MHz



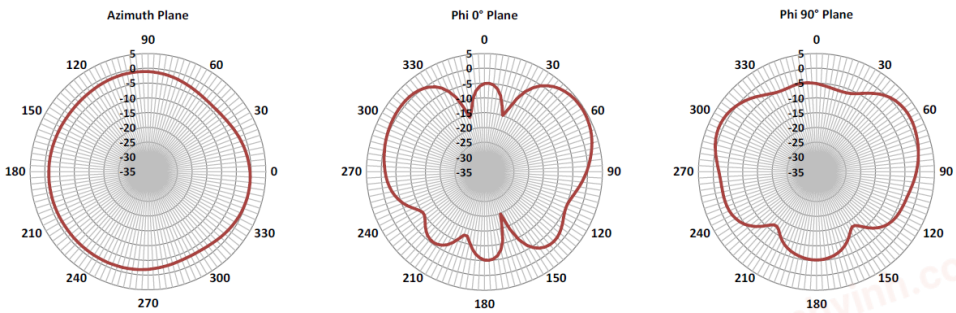
850 MHz



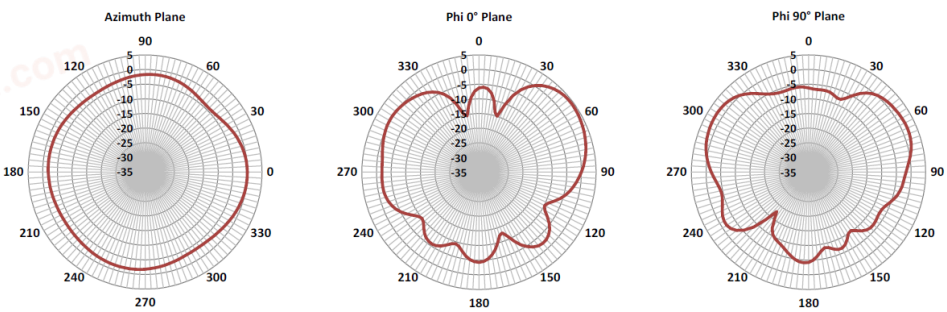
960 MHz



1710 MHz



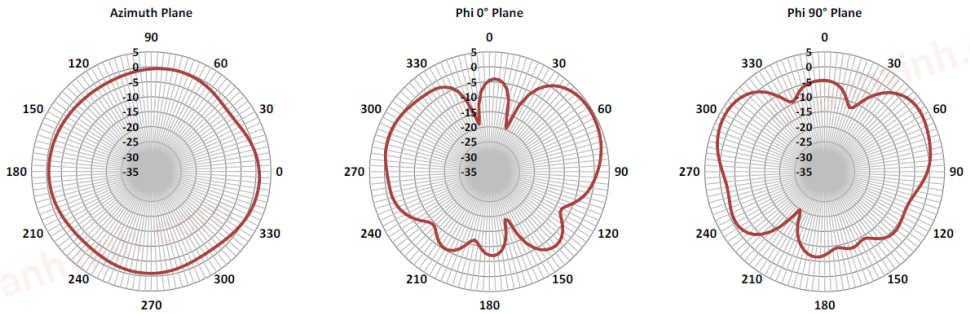
1880 MHz



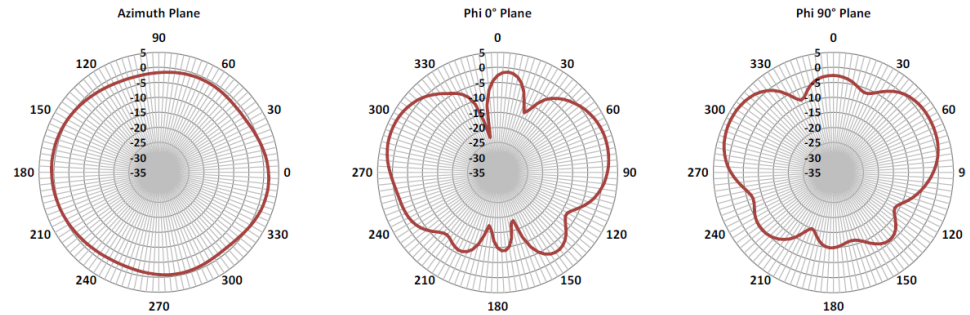
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RADIATION PATTERNS- LTE/CELL PORTS

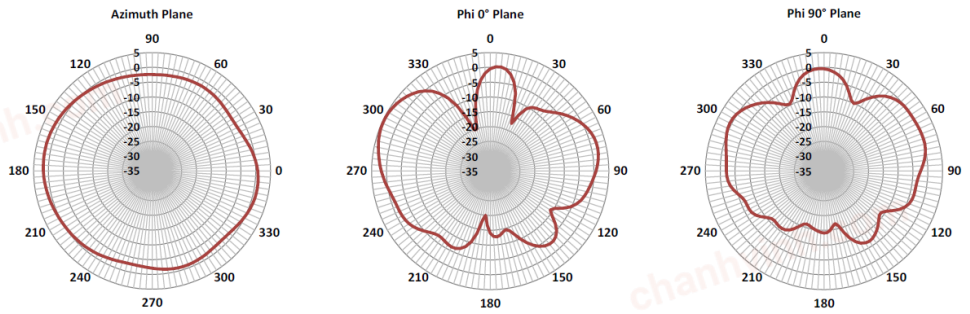
1930 MHz



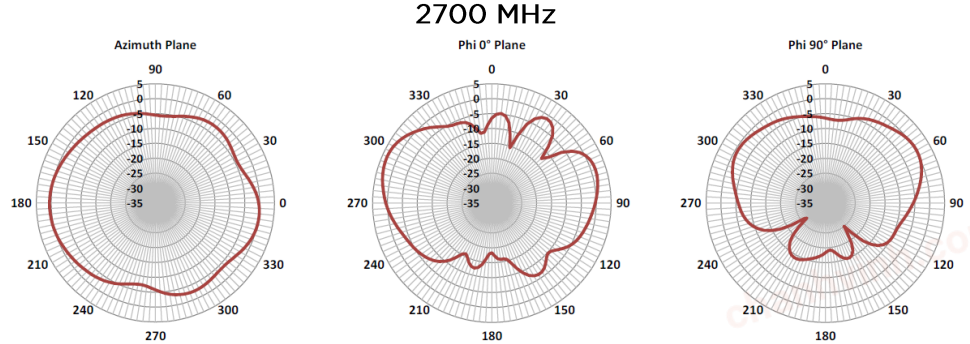
2170 MHz



2310 MHz



2700 MHz



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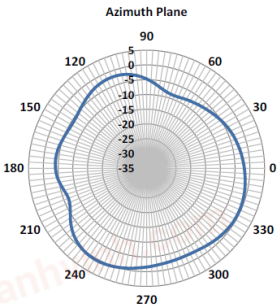
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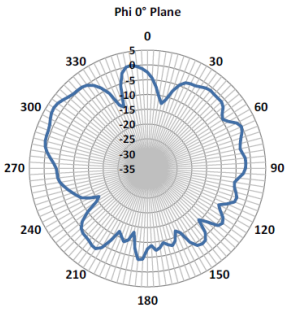
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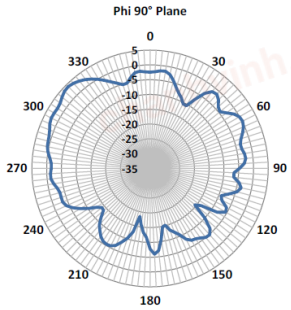
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RADIATION PATTERNS- WI-FI PORTS

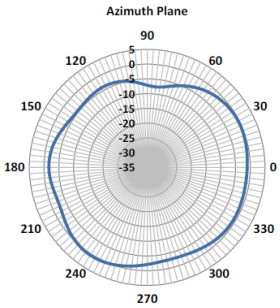
2400 MHz

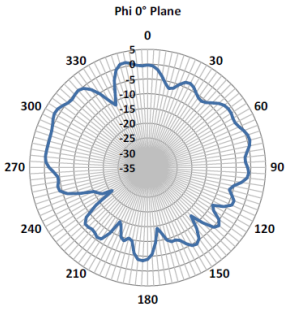


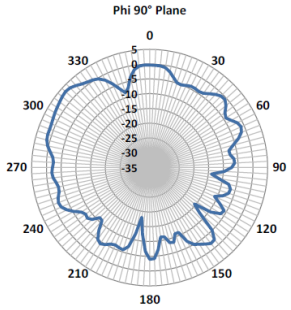




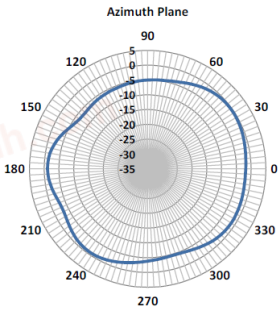
2460 MHz

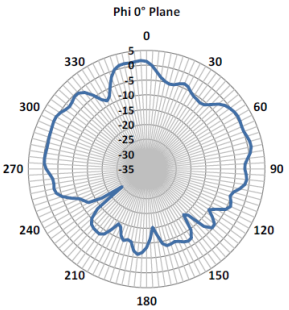


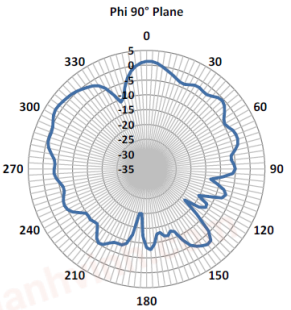




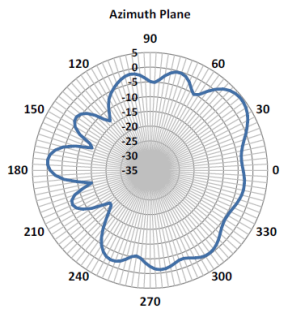
2500 MHz

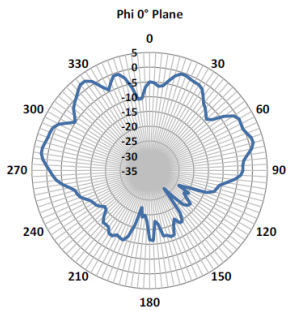


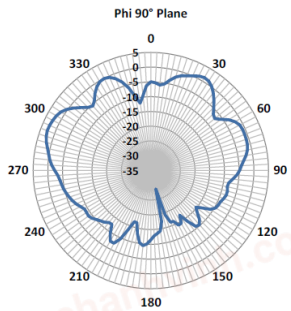




4900 MHz







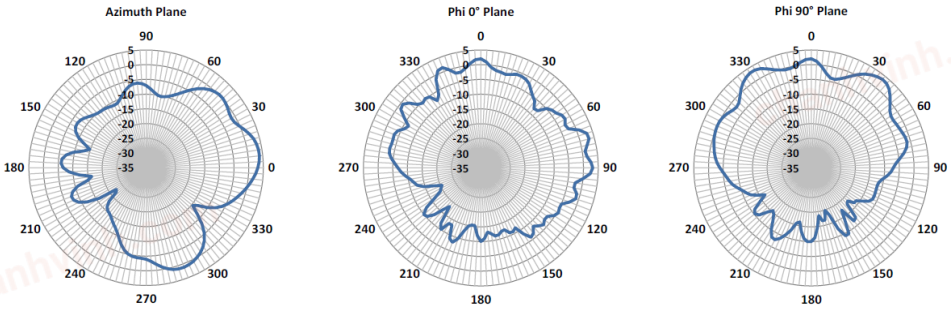
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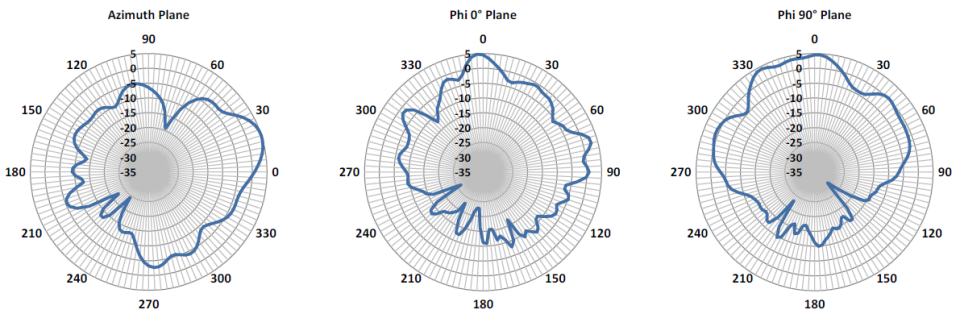
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RADIATION PATTERNS- WI-FI PORTS

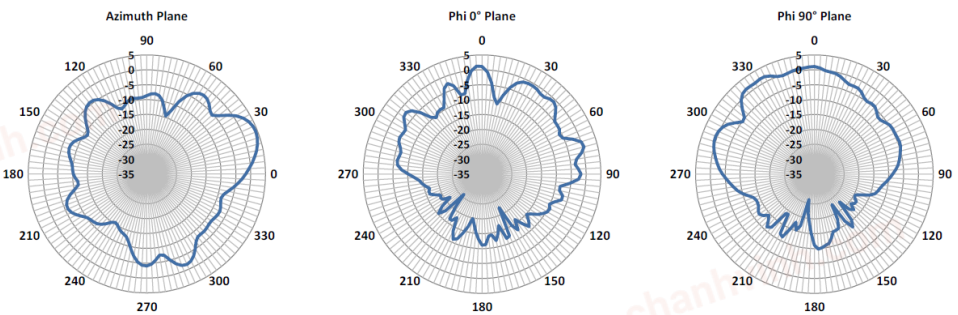
5470 MHz



5725 MHz



5925 MHz



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RoHS

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