



LB-OSJ-10200-NF Open Boundary Quad-Ridged Dual Polarization Horn Antenna 1-20GHz 10dB Gain N Type Female

Open Boundary Quad-Ridged Dual Polarization Horn Antenna Operating From 1GHz to 20GHz With a Nominal 10dB Gain With N Type Female Connector

### Product Information

SKU	LB-OSJ-10200-NF	Patents	US D997139 (USA)
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### Description

Open Boundary Quad-Ridged Dual Polarization Horn Antenna LB-OSJ-10200-NF, operating from 1 to 20GHz with a nominal 10dB gain and low VSWR 2.0:1 with N Type Female output connector. The model LB-OSJ-10200-NF has uniform gain through its frequency span, providing efficient performance characteristics and directionality. It can handle 50W continuously and 100W peak power. Constructed of lightweight corrosion-resistant aluminum, the antenna will provide years of trouble-free indoor and outdoor service. This horn antenna has dual linear polarization and ideally suited for EMI testing, direction finding, surveillance, antenna gain and pattern measurements and other applications.

### Technical Specification

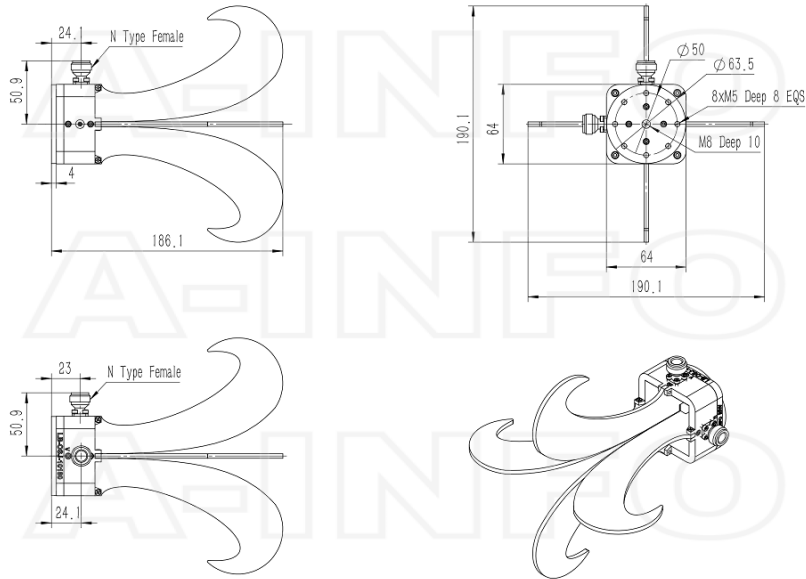
Electrical Specification		Interface	
Frequency, Min (GHz)	1	Output Type	Coaxial
Frequency, Max (GHz)	20	Connector	N Type
Gain, Typ (dBi)	10	Connector Gender	Female
Polarization	Dual Linear	Mechanical Specification	
3dB Beamwidth, E-Plane, Min (Deg.)	24	Body Material	Al
3dB Beamwidth, E-Plane, Max (Deg.)	104	Finish	Chemical Conversion Coating and Nickel Plated
3dB Beamwidth, H-Plane, Min (Deg.)	20	Size, W (mm)	190.1
3dB Beamwidth, H-Plane, Max (Deg.)	195	Size, H (mm)	190.1
Cross Pol. Isolation, Min (dB)	20	Size, L (mm)	186.1
Cross Pol. Isolation, Typ (dB)	30	Weight, (kg)	0.56
Port to Port Isolation, Min (dB)	20		
Port to Port Isolation, Typ (dB)	35		
VSWR, Typ	2.0:1		
Impedance, (Ohm)	50		
Power Handling, CW, (W)	50		
Power Handling, Peak, (W)	100		

### Additional Information

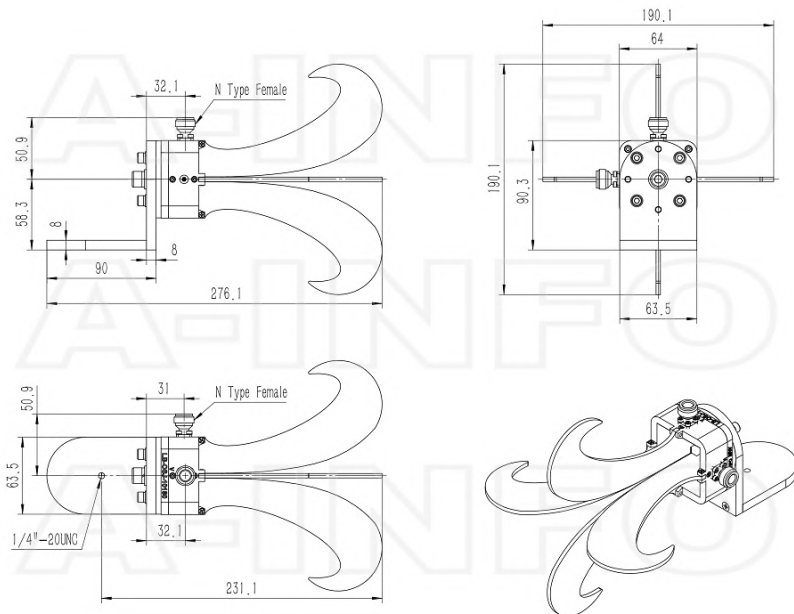
Application	General Purpose Indoor & Outdoor, Fixed	Solution for	Antenna Measurement Reflector Feed Far-field Measurement Planar Near-Field Measurement Cylindrical Near-Field Measurement Spherical Near-Field Measurement CATR System Intergration
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## Outline Drawing

N-Female Output (P/N: LB-OSJ-10200-NF)

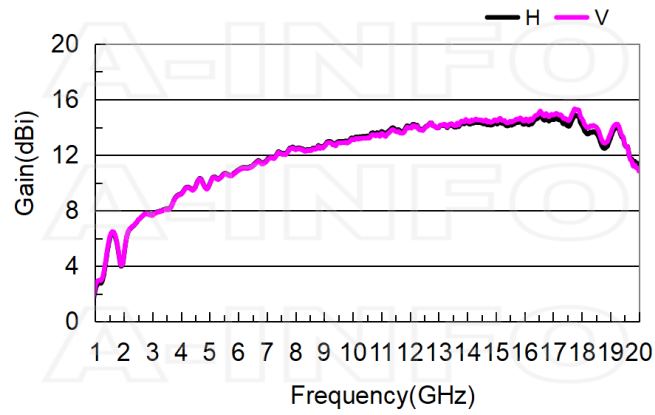


N-Female Output with L Type Mounting Bracket (Option, P/N: LB-10180-L)

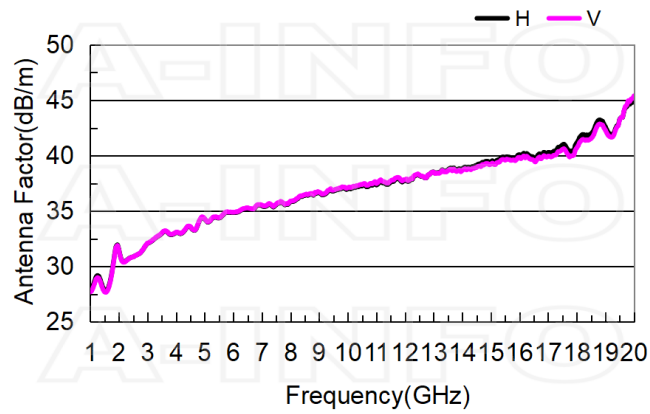


## Typical Test Results

### Gain



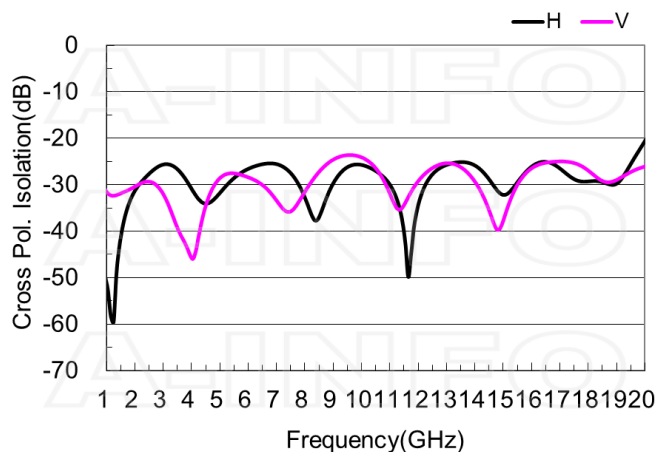
### Antenna Factor



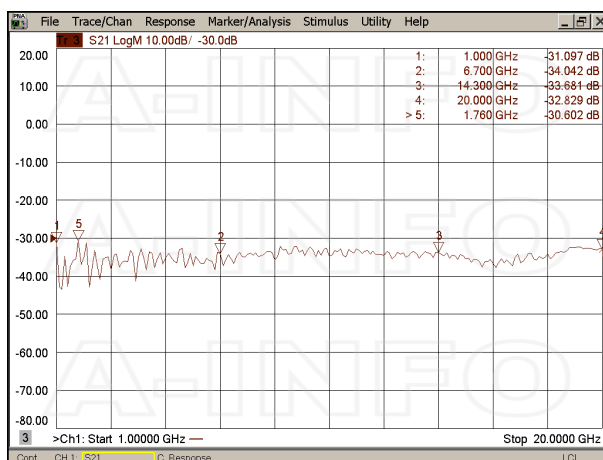
## Antenna Factor (Table)

Frequency(GHz)	Vertical		Horizontal	
	Gain(dBi)	AF(dB/m)	Gain(dBi)	AF(dB/m)
1.0	2.51	27.70	2.27	27.94
2.0	4.77	31.46	4.71	31.52
3.0	7.65	32.10	7.68	32.08
4.0	9.16	33.09	9.20	33.05
5.0	9.90	34.29	9.93	34.26
6.0	10.88	34.90	10.92	34.85
7.0	11.59	35.53	11.64	35.47
8.0	12.38	35.89	12.44	35.83
9.0	12.60	36.70	12.67	36.63
10.0	13.11	37.10	13.21	37.00
12.0	13.96	37.83	14.06	37.73
14.0	14.47	38.66	14.32	38.81
16.0	14.45	39.84	14.22	40.07
18.0	14.62	40.69	14.17	41.14
20.0	10.83	45.40	11.25	44.98

## Cross Polarization Isolation

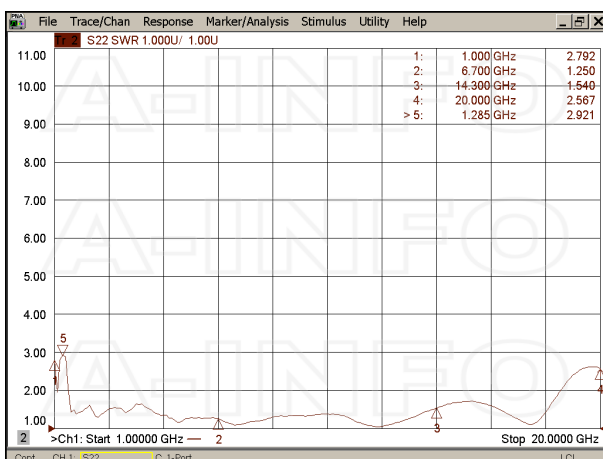


## Port to Port Isolation

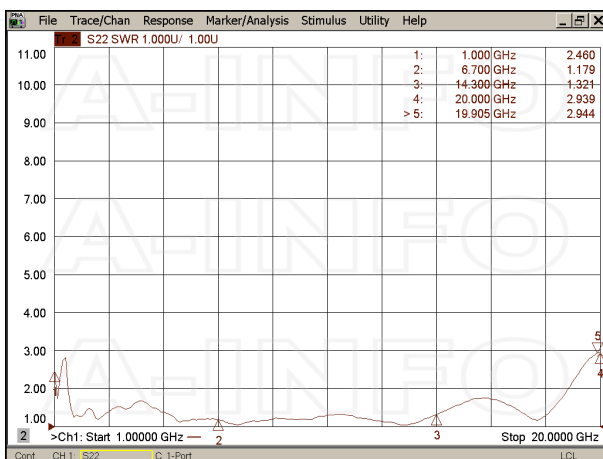


## VSWR

### Port-H

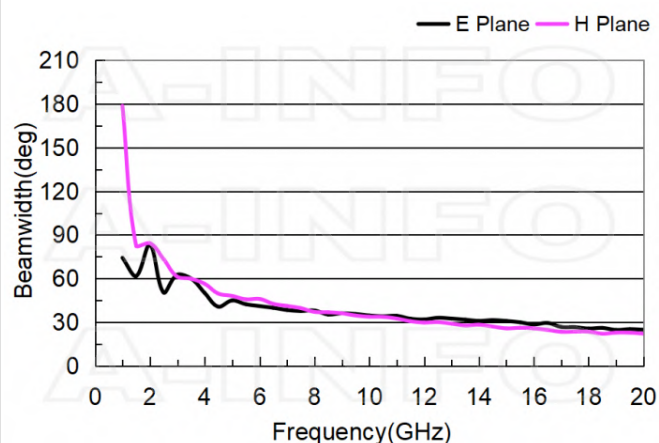


### Port-V

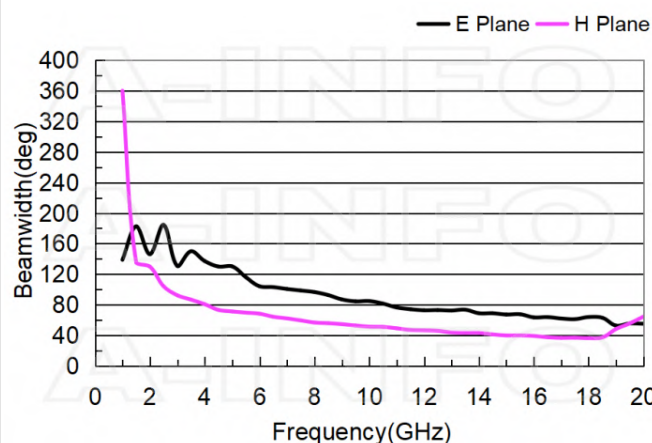


## Beamwidth

### 3dB Beamwidth



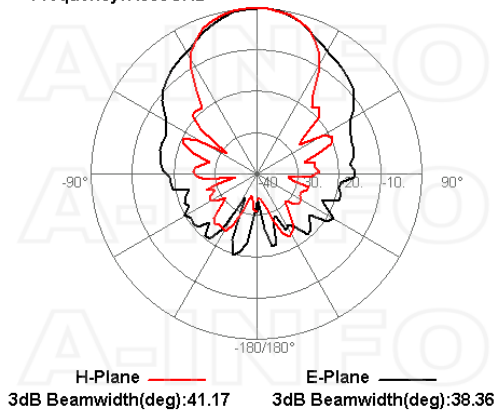
### 10dB Beamwidth



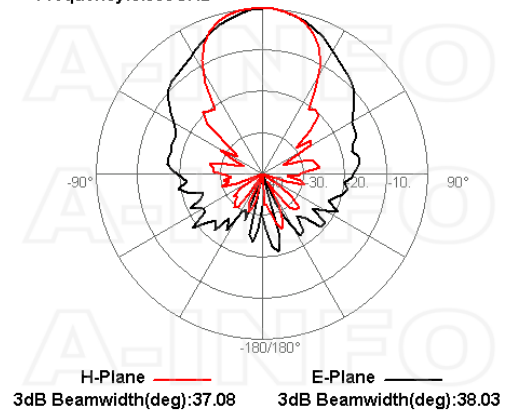
Pattern 1



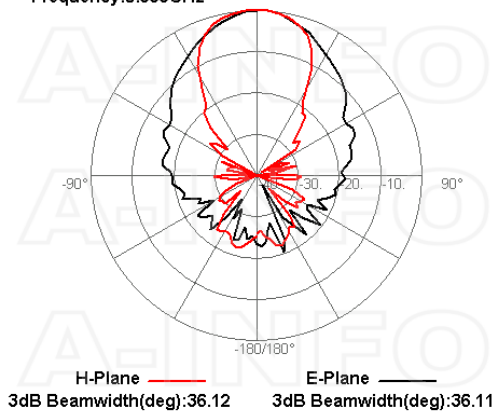
Frequency:7.000GHz



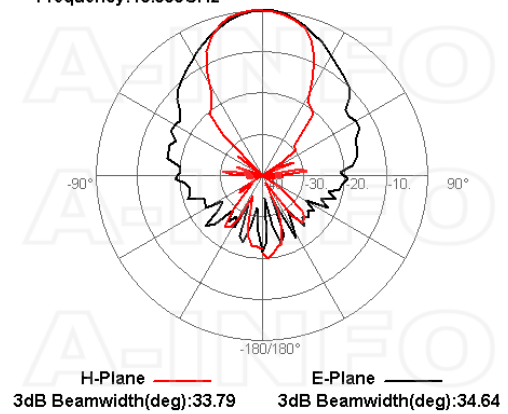
Frequency:8.000GHz



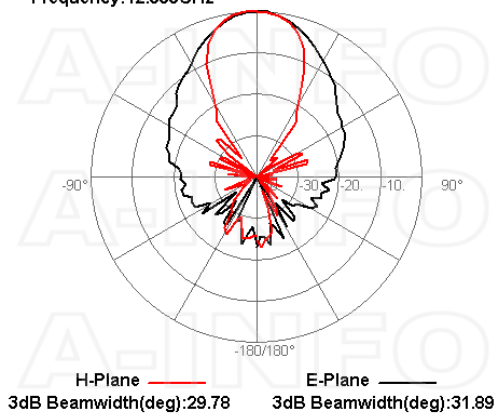
Frequency:9.000GHz



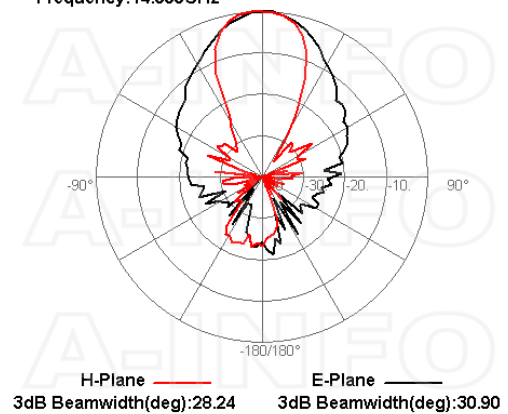
Frequency:10.000GHz

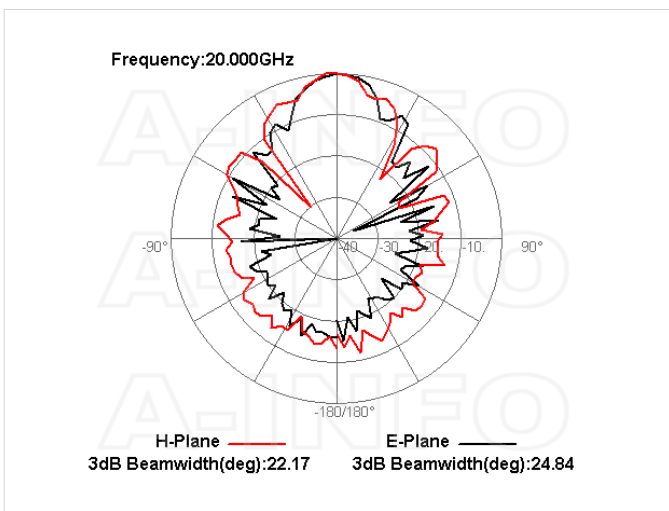
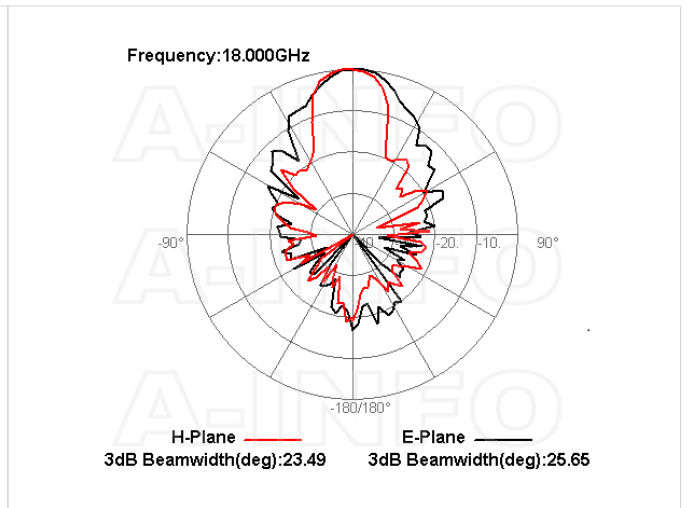
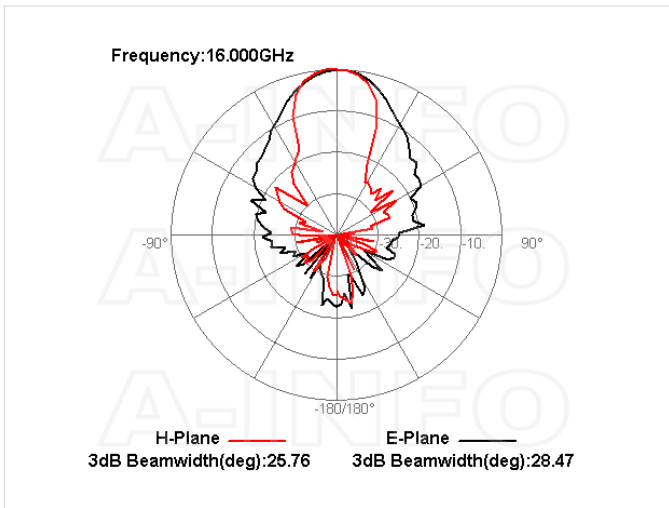


Frequency:12.000GHz



Frequency:14.000GHz





## Related Products



LB-10180-L L type mounting bracket



LB-10180-MA Stinger Type Mounting Bracket



Tripod\_15Kg Al Alloy Tripod



3033HL Wooden Tripod



3033QM Wooden Tripod Metalfree



Carrying Case\_LB-OSJ-10180 AI Alloy Carrying Case



NM-NM-A050-1000 Flexible Cable Assembly 1000mm DC-18GHz N Male to N Male



NM-NM-A050-1500 Flexible Cable Assembly 1500mm DC-18GHz N Male to N Male



NM-NM-A050-2000 Flexible Cable Assembly 2000mm DC-18GHz N Male to N Male



NM-NM-A050-3000 Flexible Cable Assembly 3000mm DC-18GHz N Male to N Male



NM-NM-A050-5000 Flexible Cable Assembly 5000mm DC-18GHz N Male to N Male



NM-NM-A050-10000 Flexible Cable Assembly 10000mm DC-18GHz N Male to N Male



NM-NM-A050-20000 Flexible Cable Assembly 20000mm DC-18GHz N Male to N Male



NM-NM-A100-1000 Flexible Cable Assembly 1000mm DC-18GHz N Male to N Male



NM-NM-A100-1500 Flexible Cable Assembly 1500mm DC-18GHz N Male to N Male



NM-NM-A100-2000 Flexible Cable Assembly 2000mm DC-18GHz N Male to N Male



NM-NM-A100-3000 Flexible Cable Assembly 3000mm DC-18GHz N Male to N Male



NM-NM-A100-5000 Flexible Cable Assembly 5000mm DC-18GHz N Male to N Male



NM-NM-A100-10000 Flexible Cable Assembly 10000mm DC-18GHz N Male to N Male



NM-NM-A100-20000 Flexible Cable Assembly 20000mm DC-18GHz N Male to N Male

### About this Datasheet

<ul style="list-style-type: none"> <li>● <b>Product Information</b></li> </ul> <p>Product Link:  <a href="https://www.ainfoinc.com/lb-osj-10200-nf-open-boundary-quad-ridged-dual-polarization-horn-antenna-1-20-ghz-10db-gain-n-type-female">https://www.ainfoinc.com/lb-osj-10200-nf-open-boundary-quad-ridged-dual-polarization-horn-antenna-1-20-ghz-10db-gain-n-type-female</a></p> <p>Data subject to change without notice.          © A-INFO INC. 2024. All Rights Reserved</p>	<ul style="list-style-type: none"> <li>● <b>Contact Us</b></li> </ul> <p>Address:          60 Tesla, Irvine, CA 92618, USA</p> <p>Website:  <a href="http://www.ainfoinc.com">www.ainfoinc.com</a></p> <p>Email:  <a href="mailto:sales@ainfoinc.com">sales@ainfoinc.com</a></p>	<ul style="list-style-type: none"> <li>● <b>Phone &amp; Fax</b></li> </ul> <p>Phone:          +1-949-639-9688          +1-949-639-9608</p> <p>Fax:          +1-949-639-9670</p>
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