



The patent-pending CMQ23496 is an indoor broadband four-port MIMO omnidirectional ceiling mount antenna. It is designed to provide pattern coverage that is optimized for indoor requirements at 2300-2700 MHz and 4900-5950 MHz frequency bands. The individual antenna elements are designed to radiate a pattern that has been specifically shaped to provide optimal radiation within a coverage zone.

FEATURES AND BENEFITS

- Low profile, aesthetically-neutral housing
- Mounts directly and easily to ceiling tile
- Optimized performance using Laird proprietary RF optimization tools
- Excellent flame retardancy rating
- Four radiating elements optimized for indoor applications
- Provides MIMO/MUMIMO capabilities for multiband 802.11n and 802.11ac applications
- Optional antenna mounting kits are available to accommodate a variety of installation requirements
- Attractive, compact design and form factor ideal for indoor solution applications

APPLICATIONS

- WLAN – 802.11n and 802.11ac
- Building operators – Offices and meeting rooms
- Hospitality – Hotels and casinos
- Transportation – Airport, bus, and train terminals
- Retail – Stores and indoor malls
- Education – Libraries and museums

ELECTRICAL SPECIFICATIONS

Operating Frequency (MHz)	2300-2400	2400-2500	2500-2700	4900-5950
Number of Ports	4			
VSWR – Avg	<1.4:1		<1.8:1	
VSWR – Max	<2:1		<2:1	
Gain – Typ (dBi)	4.4	4.5	4.5	5.4
Gain – Max (dBi)	4.9	5.6	5.6	6.3
Isolation Port – Max (dB)	< -17	< -18	< -18	< -24
Port 1 > Port 2 – Typ (dB)	< -19	< -19	< -19	< -26
Port 1 > Port 3 – Typ (dB)	< -20	< -21	< -22	< -24
Port 1 > Port 4 – Typ (dB)	< -20	< -21	< -22	< -25
Port 2 > Port 3 – Typ (dB)	< -20	< -20	< -21	< -25
Port 2 > Port 4 – Typ (dB)	< -19	< -20	< -20	< -25
Port 3 > Port 4 – Typ (dB)	< -19	< -21	< -21	< -26
Max Power - Ambient 25°C (W)	10			
Nominal Impedance (Ohms)	50			
Polarization	Linear Vertical			
Horizontal Plane 3 dB Beamwidth Port 1	Omnidirectional			

MECHANICAL SPECIFICATIONS

Dimensions – diameter x height – mm (inches)	178 x 32 (7.0 x 1.26)
Weight – kg (lbs.)	1.18 (2.60)
Cable Type	Ultralink, Plenum-rated
Radome Material	PC/ABS, UL94-V0, UV Stable, White
Mounting	Ceiling mount (drywall or tile flush)

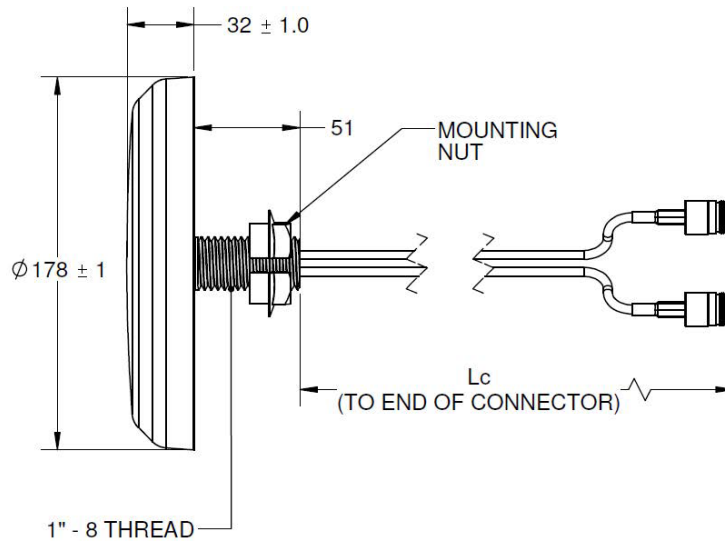
ENVIRONMENTAL SPECIFICATIONS

Operating Temperature – °C (°F)	-30 to +70°C (-22 to +158°F)
Storage Temperature – °C (°F)	-40 to +85°C (-40 to +185°F)
Material Substance Compliance	RoHS

CONFIGURATION

PART NUMBER	CABLE LENGTH	CONNECTOR
CMQ23496-75RSM	4x – 75 mm	4x – RSMA Male
CMQ23496-91NF	4x – 91 mm	4x – Type N Female
CMQ23496-91RTN	4x – 91 mm	4x – RTNC Male

MECHANICAL DRAWING

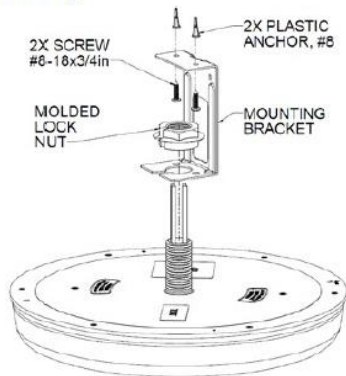


MOUNTING OPTIONS

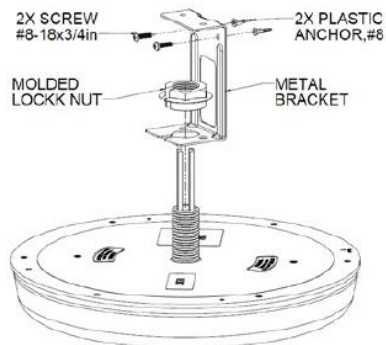
Hard Ceiling

Part Number: HKIT-CMx-002

Top Mounting

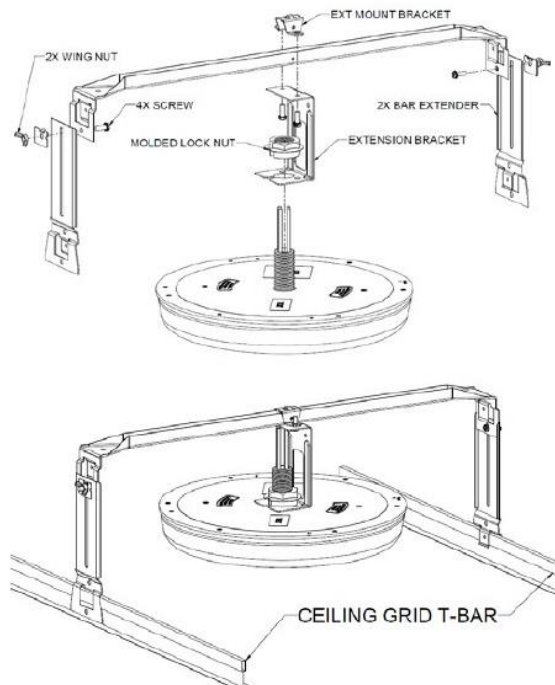


Side Mounting



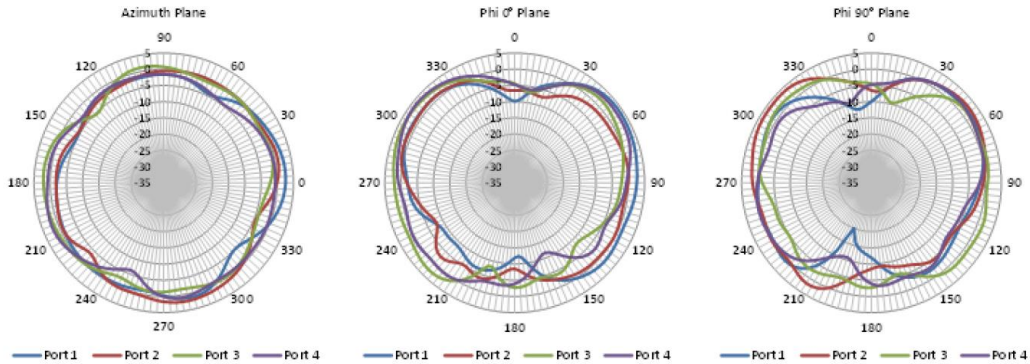
Above Ceiling

Mounting Bracket Part Number: HKIT-CMx-001

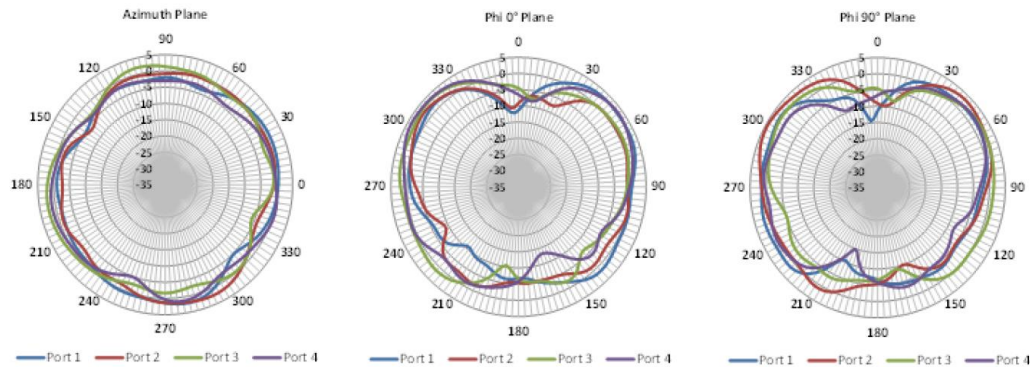


RADIATION PATTERNS

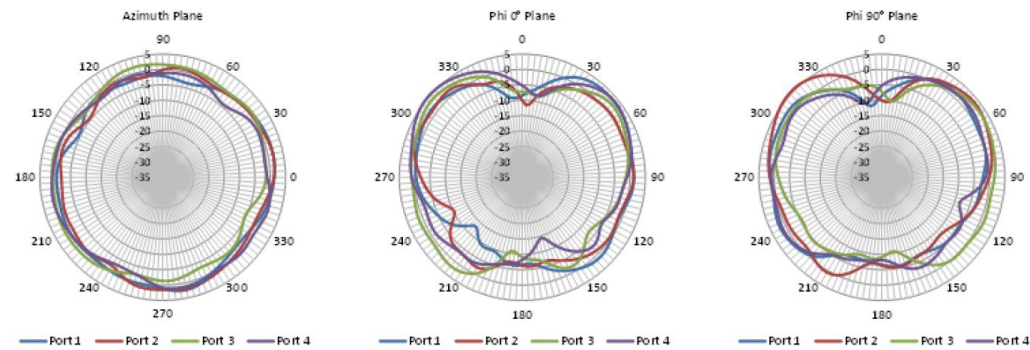
2300 MHz



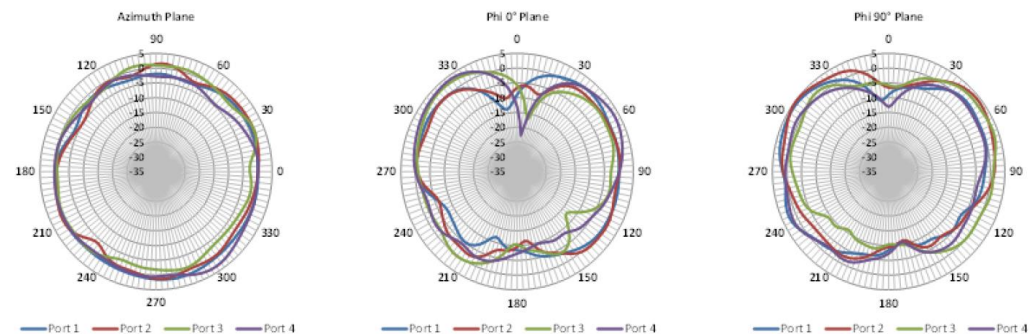
2400 MHz



2500 MHz

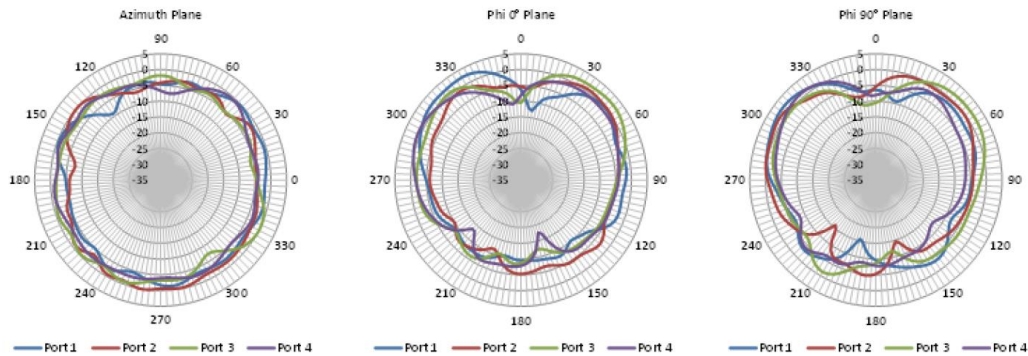


2700 MHz

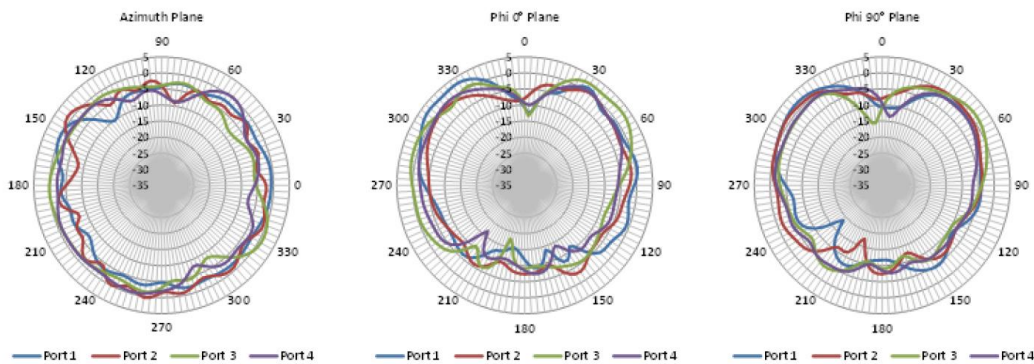


RADIATION PATTERNS

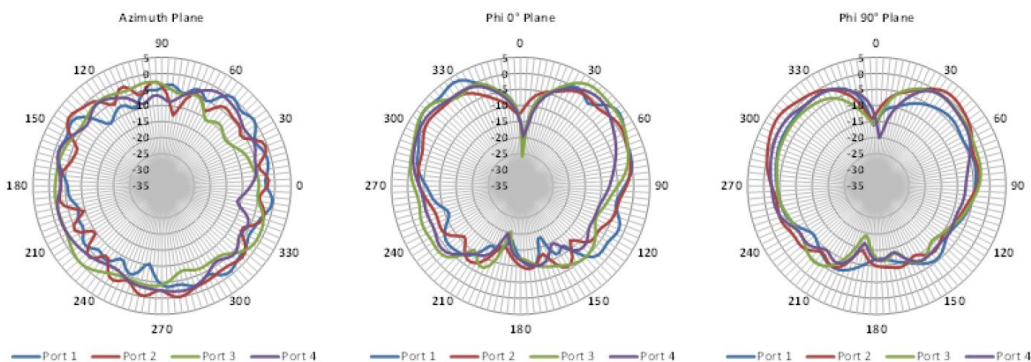
4900 MHz



5400 MHz



5900 MHz



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