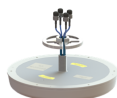


# 2300 to 2700 MHz/4900 to 5950 MHz 4-port MIMO Ceiling Mount Antenna



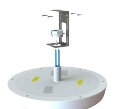
Patent Pending  
CMQ23496



(TILE FLUSH MOUNT)  
Standard



(ABOVE CEILING TILE MOUNT)  
Part # HKIT-CMX-001



(HARD CEILING EXTENSION MOUNT)  
Part # HKIT-CMX-002

## 4-PORT MIMO MULTI-BAND CEILING MOUNTED OMNIDIRECTIONAL ANTENNA

The Patent Pending CMQ23496 is an indoor broadband 4-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

- Low Profile aesthetically neutral housing
- Mounts directly and easily to ceiling tile
- Performance optimized using Laird proprietary RF optimization tools
- Excellent flame retardancy rating
- Four radiating elements optimized for indoor applications
- RoHS compliant

### MARKETS

- WLAN - 802.11n & 802.11ac
- Building Operators – offices & meeting rooms
- Hospitality – hotels & casinos
- Transportation – airport, bus, & train terminals
- Retail – stores & indoor pedestrian malls
- Education – libraries & museums

### BENEFITS

- 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.

| PARAMETER                      | SPECIFICATION                       |           |           |           |
|--------------------------------|-------------------------------------|-----------|-----------|-----------|
| Frequency Bands, MHz           | 2300-2400                           | 2400-2500 | 2500-2700 | 4900-5950 |
| Peak Gain, dBi (Typ)           | 4.4                                 | 4.5       | 4.5       | 5.4       |
| Peak Gain, dBi (Max)           | 4.9                                 | 5.6       | 5.6       | 6.3       |
| VSWR (Typ)                     | <1.4:1                              | <1.4:1    | <1.8:1    | <1.8:1    |
| VSWR (Max)                     | <2:1                                | <2:1      | <2:1      | <2:1      |
| Isolation, dB (Max)            | < -17                               | < -18     | < -18     | < -24     |
| Port 1->Port 2, dB (Typ)       | < -19                               | < -19     | < -19     | < -26     |
| Port 1->Port 3, dB (Typ)       | < -20                               | < -21     | < -22     | < -24     |
| Port 1->Port 4, dB (Typ)       | < -20                               | < -21     | < -22     | < -25     |
| Port 2->Port 3, dB (Typ)       | < -20                               | < -20     | < -21     | < -25     |
| Port 2->Port 4, dB (Typ)       | < -19                               | < -20     | < -20     | < -25     |
| Port 3->Port 4, dB (Typ)       | < -19                               | < -21     | < -21     | < -26     |
| Number of Ports                | 4                                   |           |           |           |
| Polarization                   | Linear Vertical                     |           |           |           |
| Azimuth Pattern Beamwidth      | Omnidirectional                     |           |           |           |
| Power                          | 10 Watts                            |           |           |           |
| Dimensions (diameter x height) | 17.8 cm x 3.2 cm (7" x 1.26")       |           |           |           |
| Weight                         | 1.18 kg (2.60 lbs.)                 |           |           |           |
| Operating Temperature          | -30° C to +70° C (-22° F to 158° F) |           |           |           |
| Storage Temperature            | -40° C to +85° C (-40° F to 185° F) |           |           |           |
| Radome                         | PC/ABS, UL94-V0, UV STABLE, WHITE   |           |           |           |
| Cable Type                     | Ultralink, Plenum Rated             |           |           |           |

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

Americas: +1.847.839.6907  
IAS-AmericasEastSales@lairdtech.com

Europe: +44.1628.858941  
IAS-EUSales@lairdtech.com

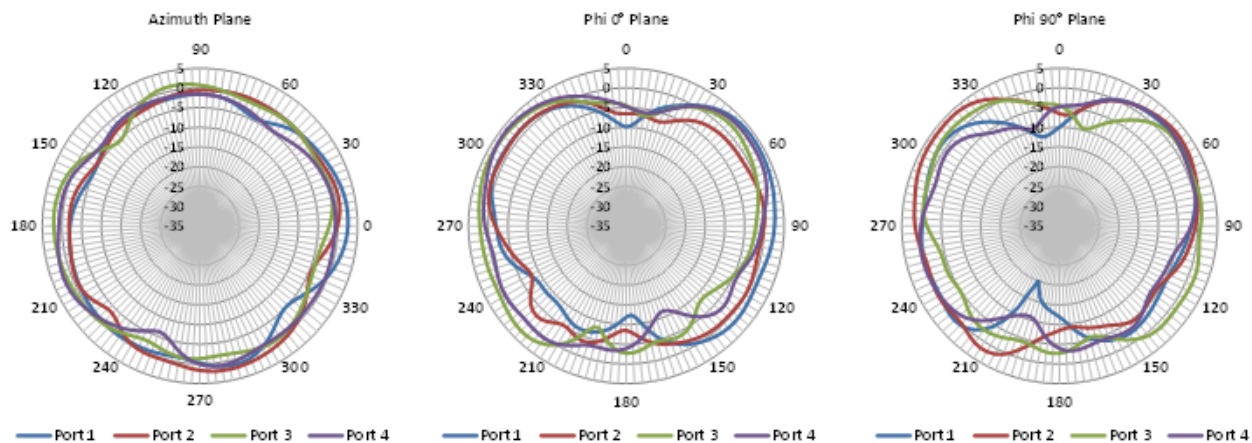
Asia: +86.21.5855.0827.127  
IAS-AsiaSales@lairdtech.com

**www.lairdtech.com**

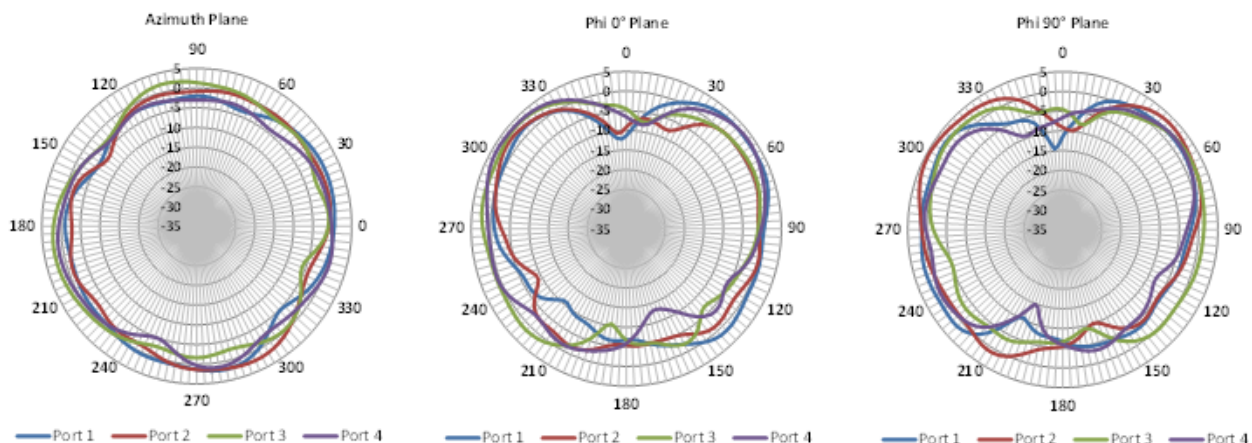
# 2300 to 2700 MHz/4900 to 5950 MHz 4-port MIMO Ceiling Mount Antenna

## RADIATION PATTERNS

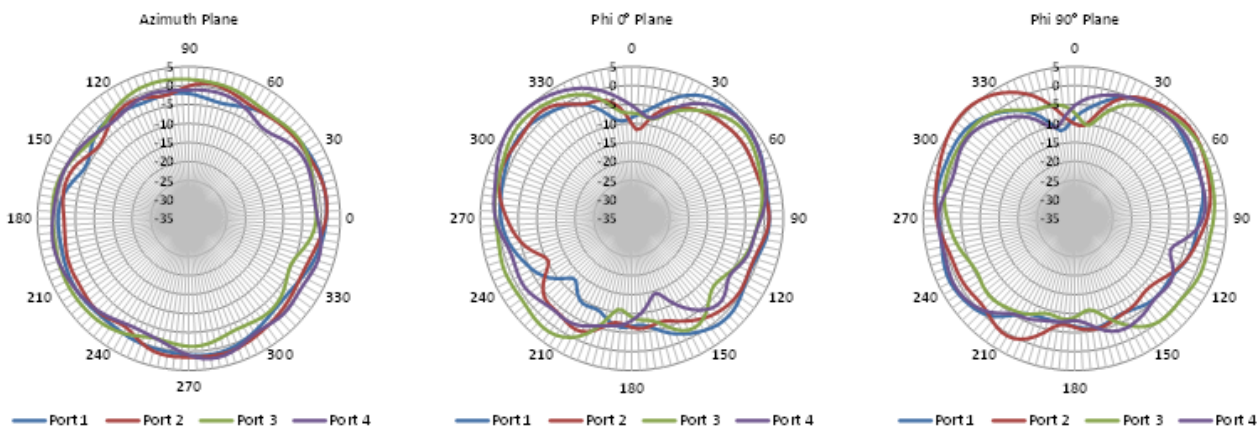
Radiation Pattern at 2300 MHz



Radiation Pattern at 2400 MHz

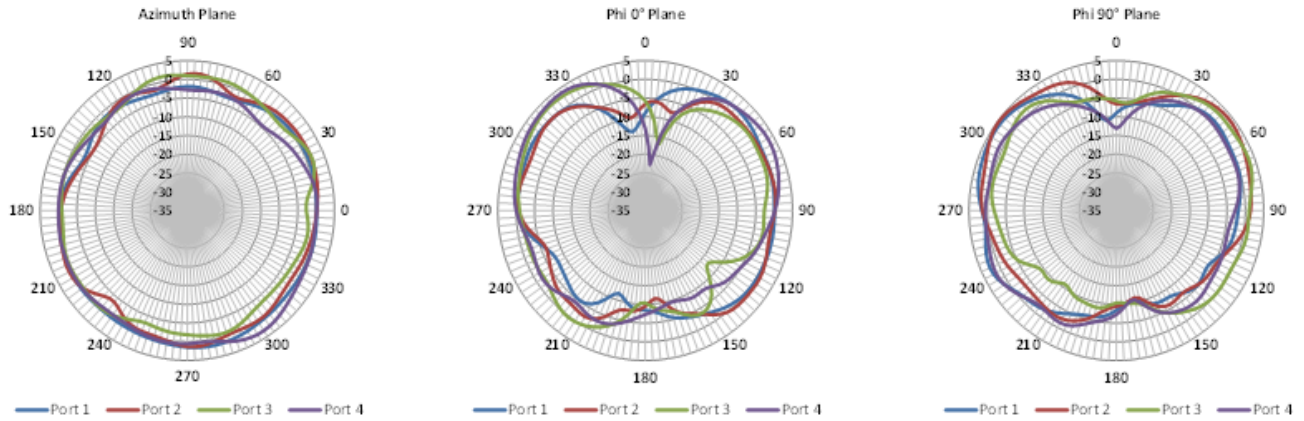


Radiation Pattern at 2500 MHz

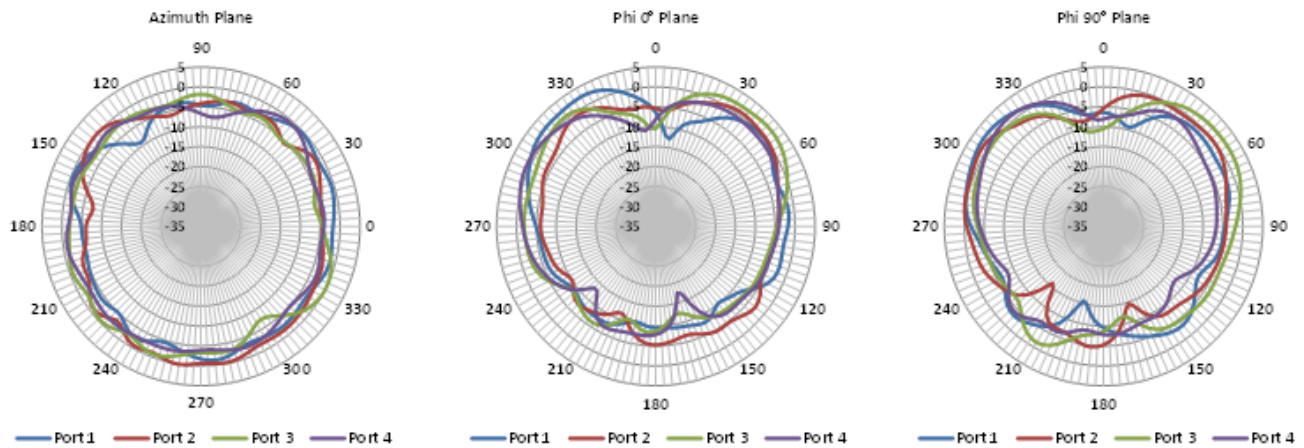


# 2300 to 2700 MHz/4900 to 5950 MHz 4-port MIMO Ceiling Mount Antenna

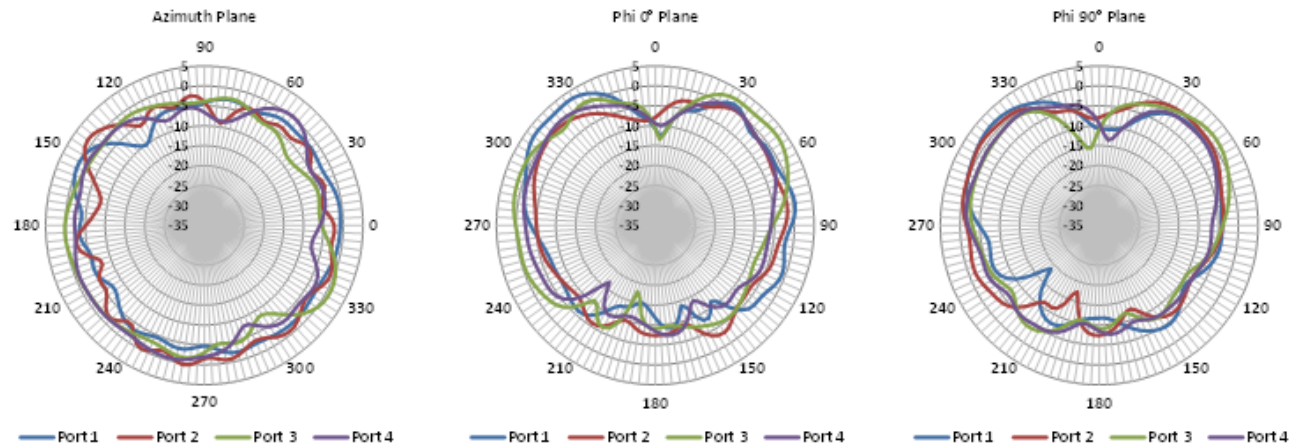
**Radiation Pattern at 2700 MHz**



**Radiation Pattern at 4900 MHz**



**Radiation Pattern at 5400 MHz**

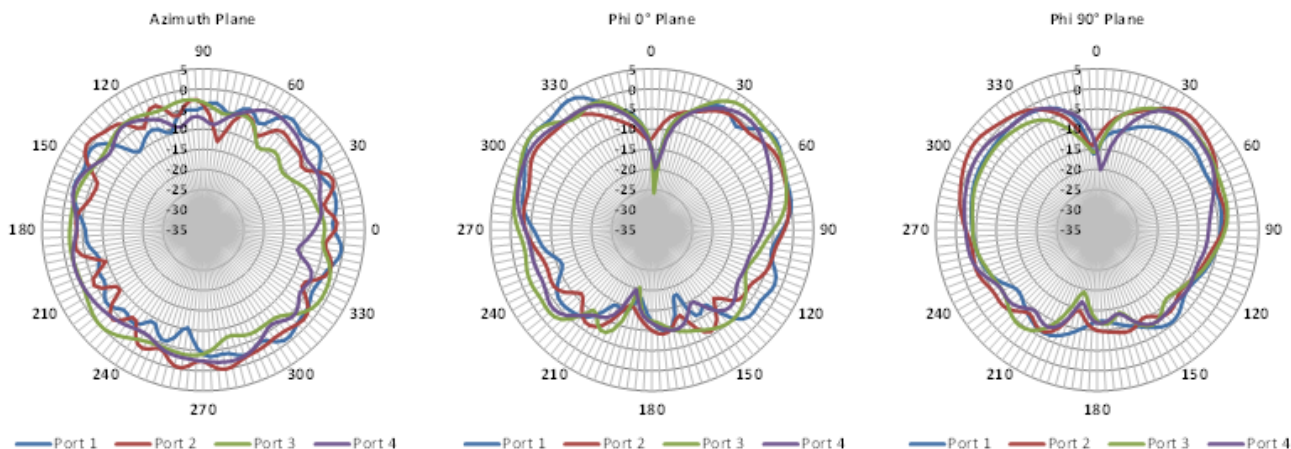


# CMQ23496

## 2300 to 2700 MHz/4900 to 5950 MHz

### 4-port MIMO Ceiling Mount Antenna

Radiation Pattern at 5900 MHz



Americas: +1.847 839.6907  
IAS-AmericasEastSales@lairdtech.com

Europe: +44.1628.858941  
IAS-EUSales@lairdtech.com

Asia: +86.21.5855.0827.127  
IAS-AsiaSales@lairdtech.com

[www.lairdtech.com](http://www.lairdtech.com)

IAS-ANT-DS-CMQ23496\_0617

Any information furnished by Laird Inc. and its agents is believed to be accurate and reliable. All specifications are subject to change without notice. Responsibility for the use and application of Laird materials rests with the end user, since Laird and its agents cannot be aware of all potential uses. Laird makes no warranties as to the fitness, merchantability or suitability of any Laird materials or products for any specific or general uses. Laird shall not be liable for incidental or consequential damages of any kind. All Laird products are sold pursuant to the Laird Terms and Conditions of sale in effect from time to time, a copy of which will be furnished upon request. © Copyright 2015 Laird Inc. All Rights Reserved. Laird, Laird Technologies, the Laird Logo, and other marks are trademarks or registered trademarks of Laird Inc. or an affiliate company thereof. Other product or service names may be the property of third parties. Nothing herein provides a license under any Laird or any third party intellectual property rights.



Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



Тел: +7 (812) 336 43 04 (многоканальный)

Email: [org@lifeelectronics.ru](mailto:org@lifeelectronics.ru)

[www.lifeelectronics.ru](http://www.lifeelectronics.ru)