PulseLARSEN Antennas

TECHNICAL DATA SHEET

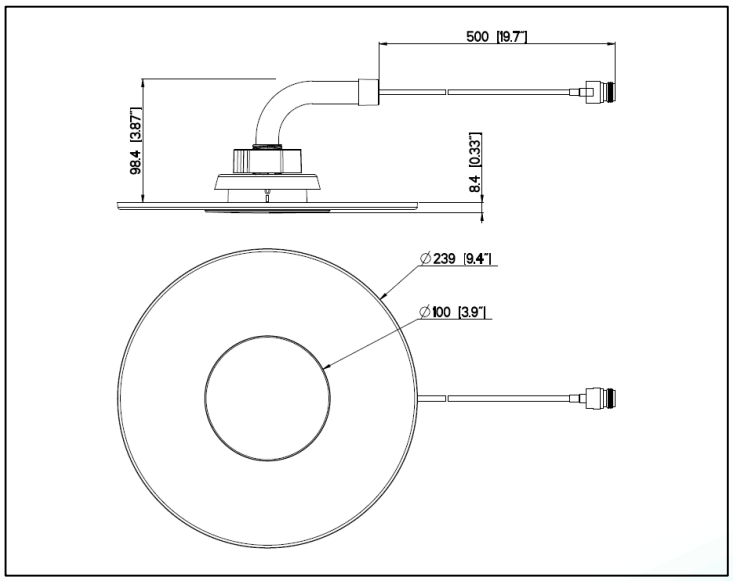
**Description**: DAS, Ultra Thin, Low Clearance Antenna

**Series: Clarity**

**PART NUMBER: DASUTLC500NF**

## Features:

- 608-2700MHz
- Low PIM <-155dBc@2x20W
- L-bent stem to allow mounting on reduced height ceiling clearance
- Mounting height min 98.4mm




## Applications:

- In building DAS systems
- Translucent radiator technology, ideal for areas with high visibility
- Ulra thin, only 4.3mm exposed under ceiling tile

All dimensions are in mm / inches

Issue: 1723

RoHS COMPLIANT

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Tel: 86 512 6807 9998

**Description**: DAS, Ultra Thin, Low Clearance Antenna

**Series: Clarity**

**PART NUMBER: DASUTLC500NF**

**This document covers all product variants of the following product family:**

| Pulse Part Number | Connector Type |
|---|---|
| DASUTLC500NF | N Female |
| DASUTLC500MD | 4.1-9.5 Mini-DIN Female |
| DASUTLC5004310 | 4.3-10 DIN Female |



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## ELECTRICAL SPECIFICATIONS

| | |
|---|---|
| Frequency | 608-960/1695-2200/2300-2700MHz |
| Nominal Impedance | 50Ω |
| VSWR (608-960MHz) | 2：1 |
| VSWR (1695-2700MHz) | 2：1 |
| Average Peak Gain (608-960MHz) | 4dBi |
| Average Peak Gain (1695-2200MHz) | 6dBi |
| Average Peak Gain (2300-2700MHz) | 6dBi |
| Efficiency (608-960MHz) | 70% |
| Efficiency (1695-2200MHz) | 65% |
| Efficiency (2300-2700MHz) | 60% |
| Horizontal plane(th=45deg) | Omni |
| HPBW Vertical plane (608-960MHz) | 80° Typ |
| HPBW Vertical plane (1695-2200MHz) | 60° Typ |
| HPBW Vertical plane (2300-2700MHz) | 60° Typ |
| Maximum power input | 40W |
| PIM at 2x20W | <-155dBc |


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**Series: Clarity**

**PART NUMBER: DASUTLC500NF**

## ELECTRICAL SPECIFICATIONS

| | |
|---|---|
| Connector type | N-female,<br>4.1-9.5 Mini-DIN female or<br>4.3-10 DIN female |
| Cable type | Dia. 0.16” low loss,<br>Low PIM,<br>Plenum Rated |
| Cable length [Inches/mm] | 19.7”/500mm |



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## MECHANICAL SPECIFICATIONS

| | |
|---|---|
| Plastic radome | UV Protected, UL94 V-0 |
| Color | Translucent (clear) |
| Weight | 900 g |
| Mounting | Ceiling |
| Mounting Hole [Inches / mm] | 2 ½”-2 ¾” / 64-70 mm |

## ENVIRONMENTAL SPECIFICATIONS

| | |
|---|---|
| Operating temperature | -40~+85° C |


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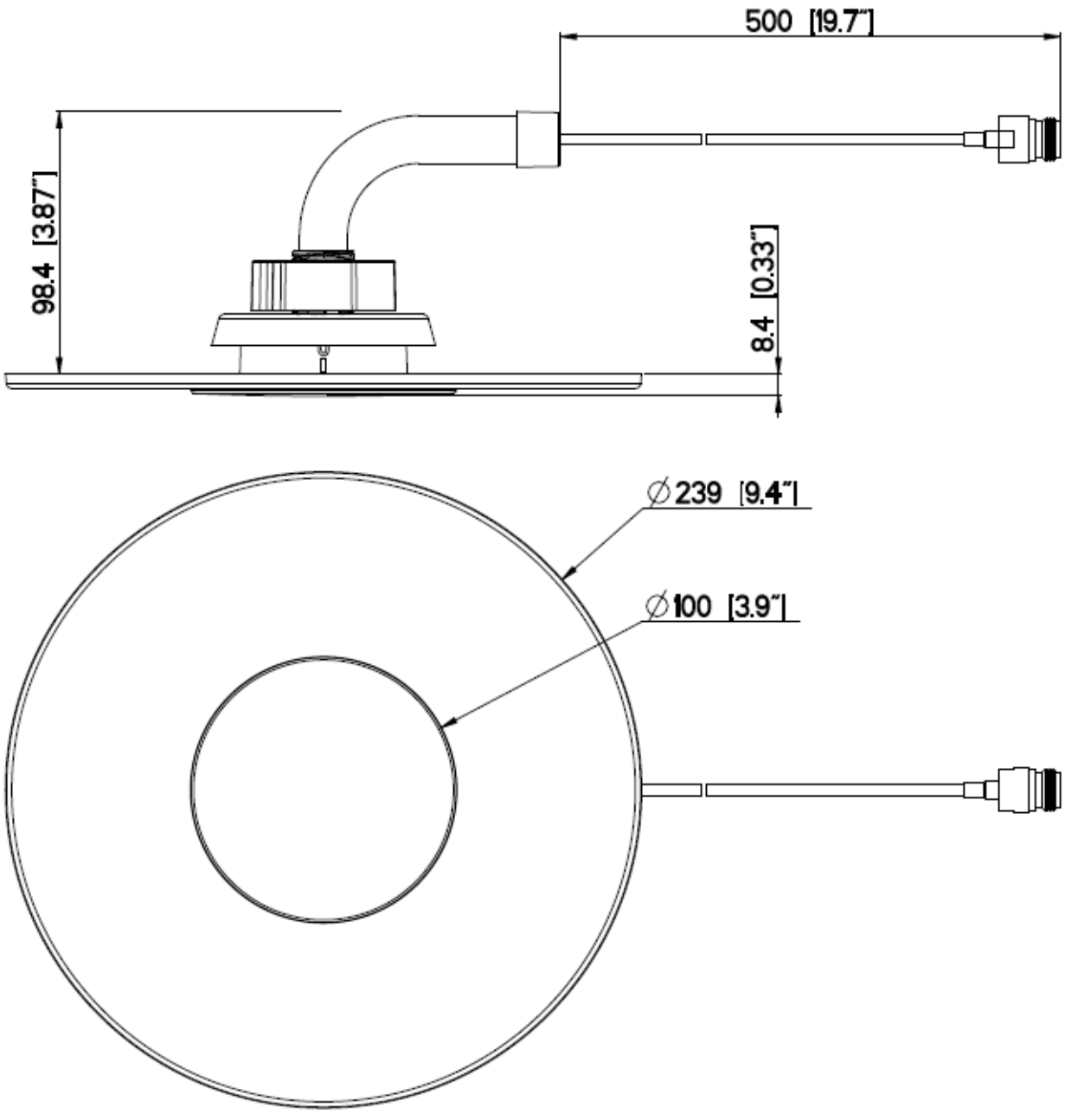
## MECHANICAL DRAWING



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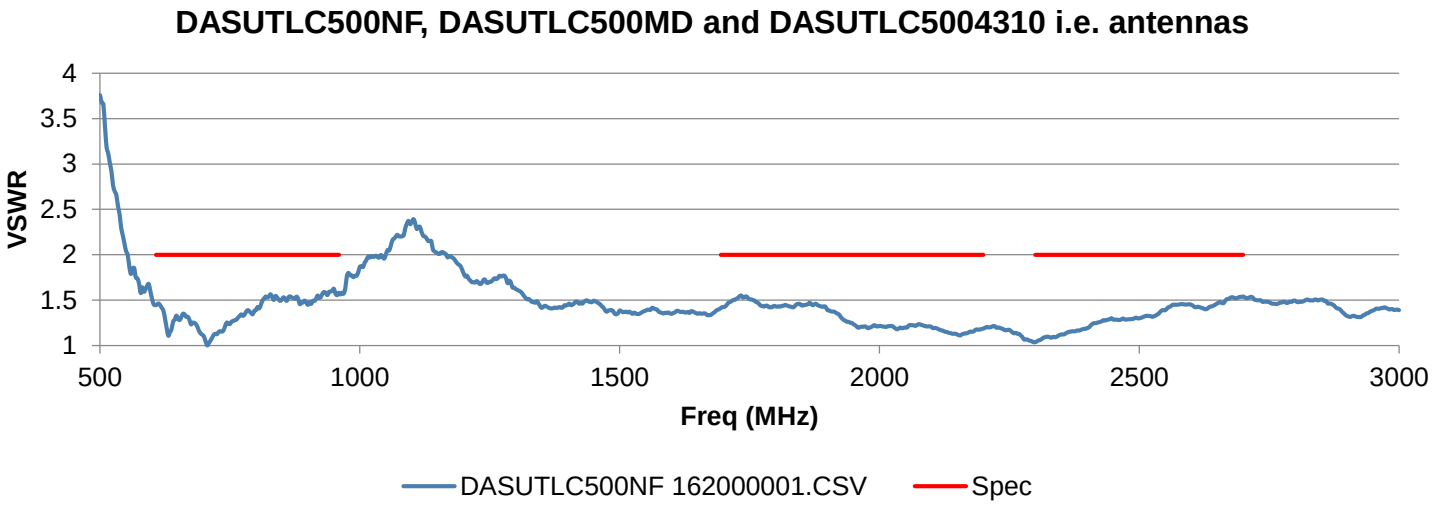
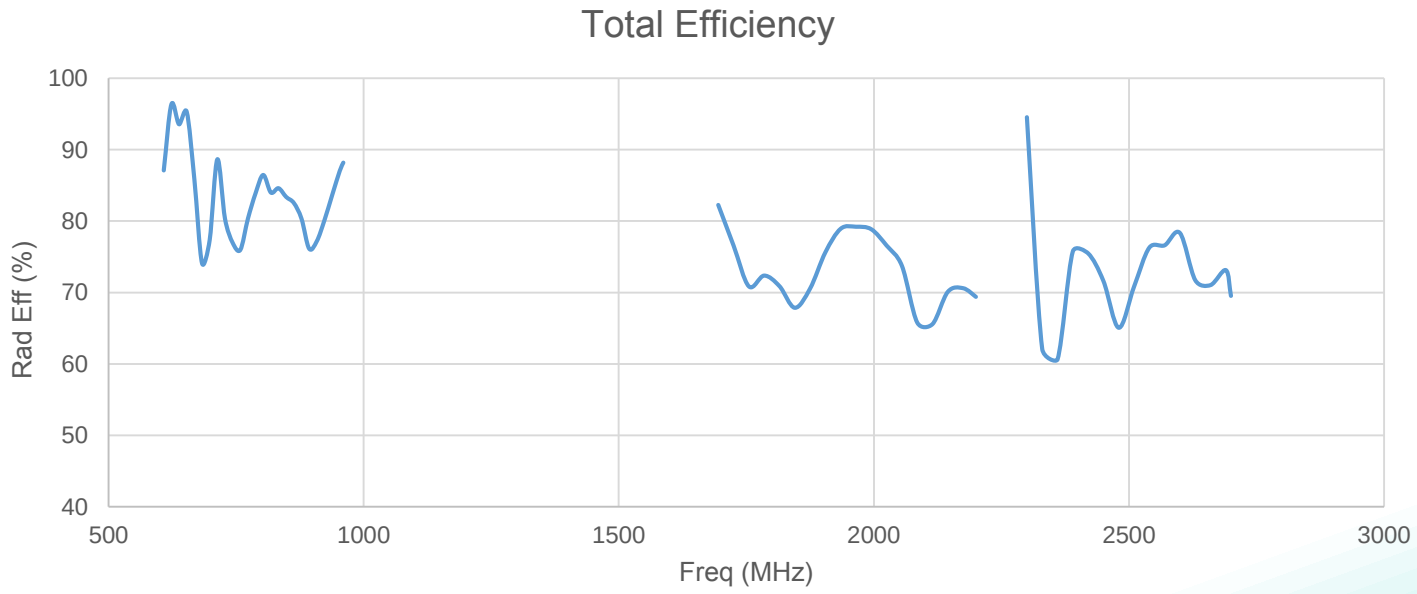
## CHARTS



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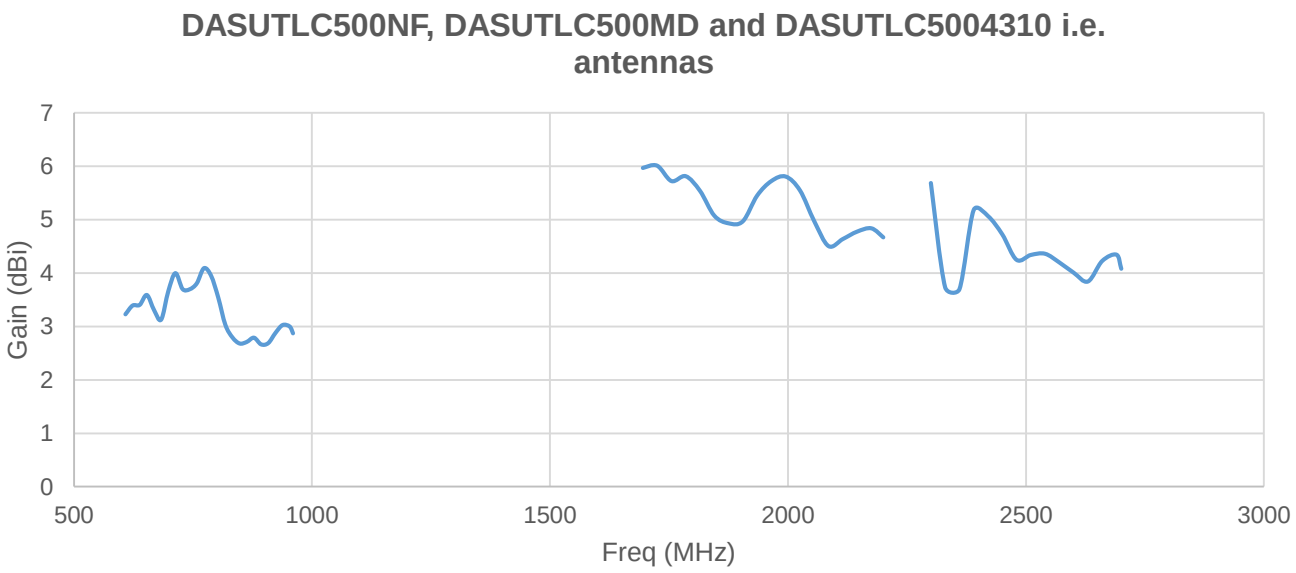




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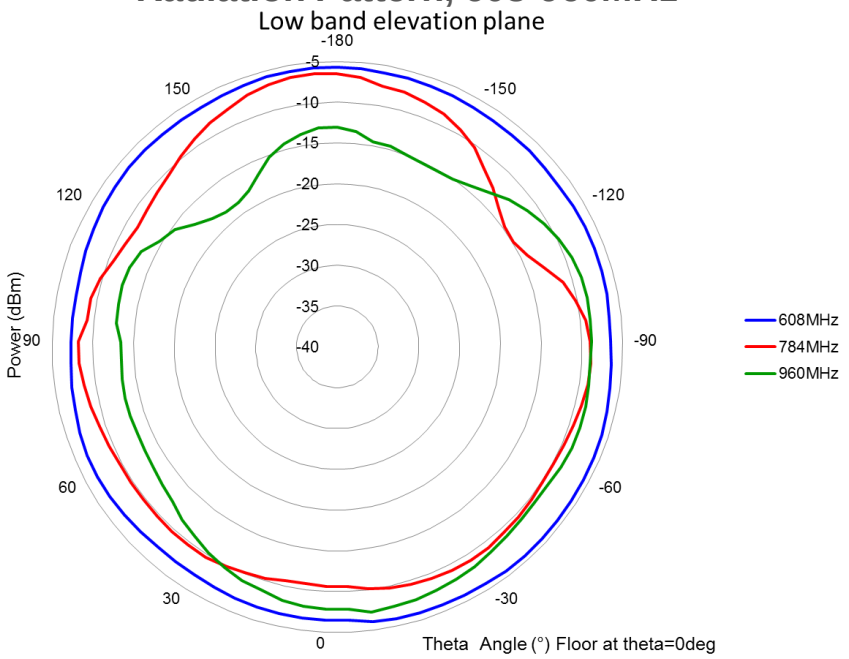
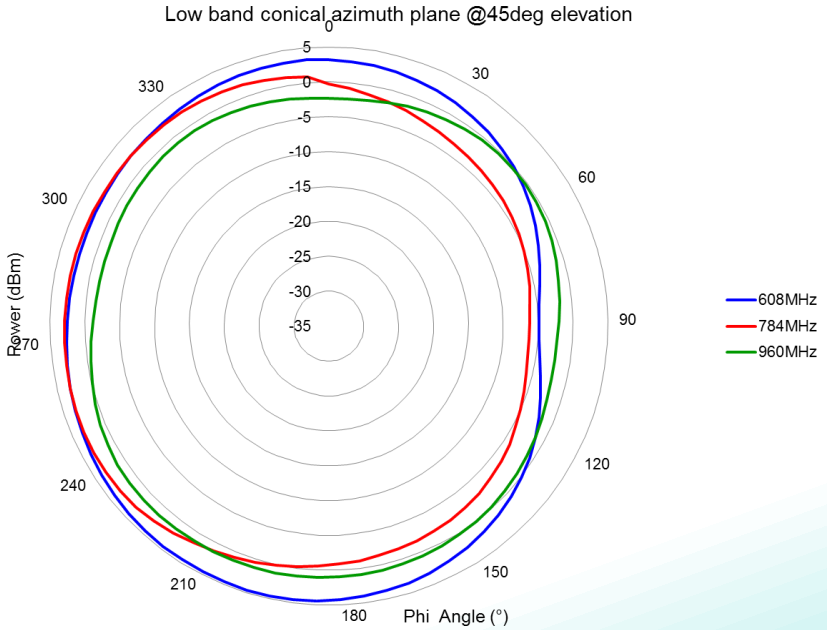
## CHARTS

### DASUTLC500NF, DASUTLC500MD and DASUTLC5004310 i.e. antennas

### Radiation Pattern, 608-960MHz



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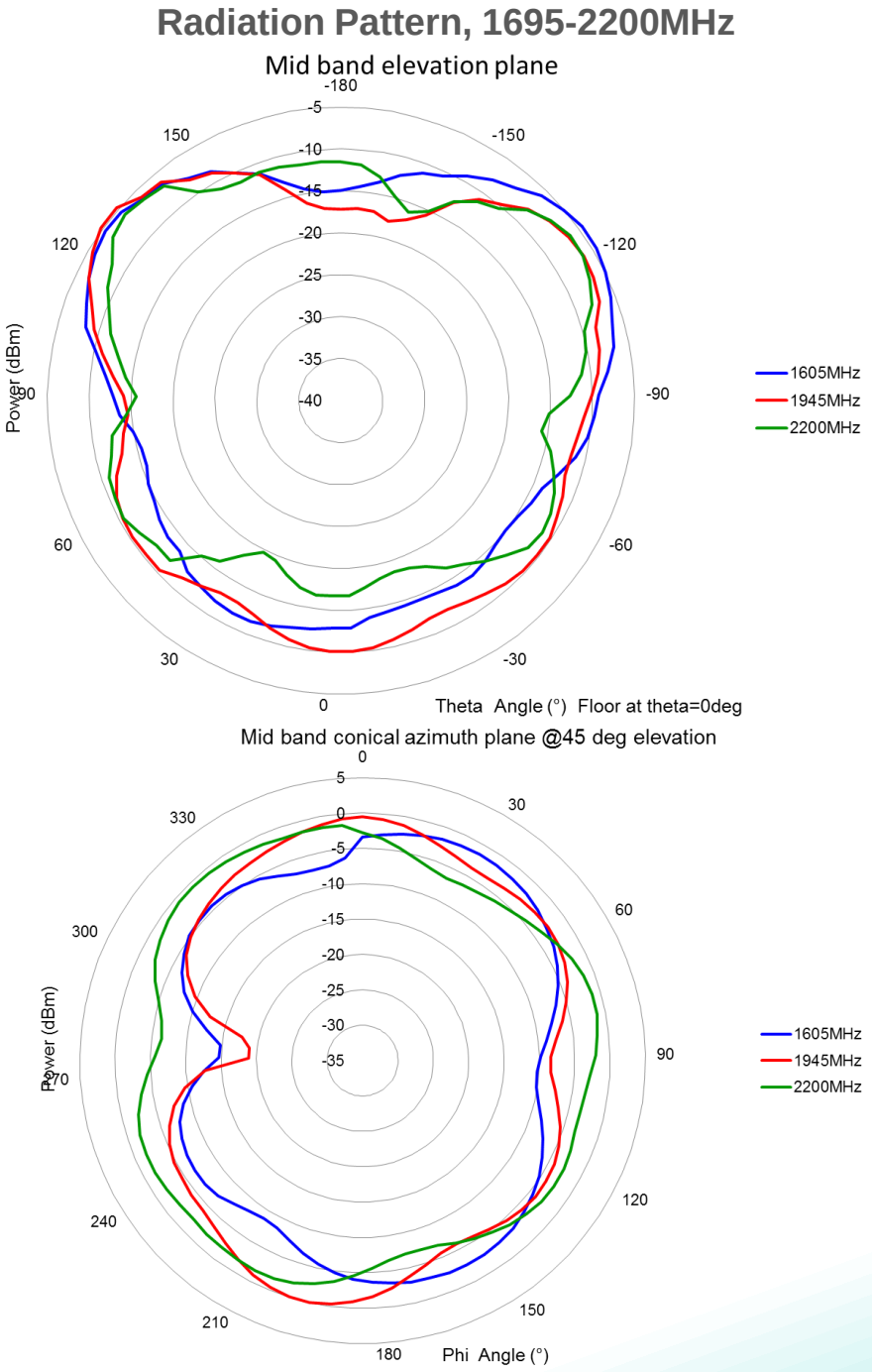
## CHARTS



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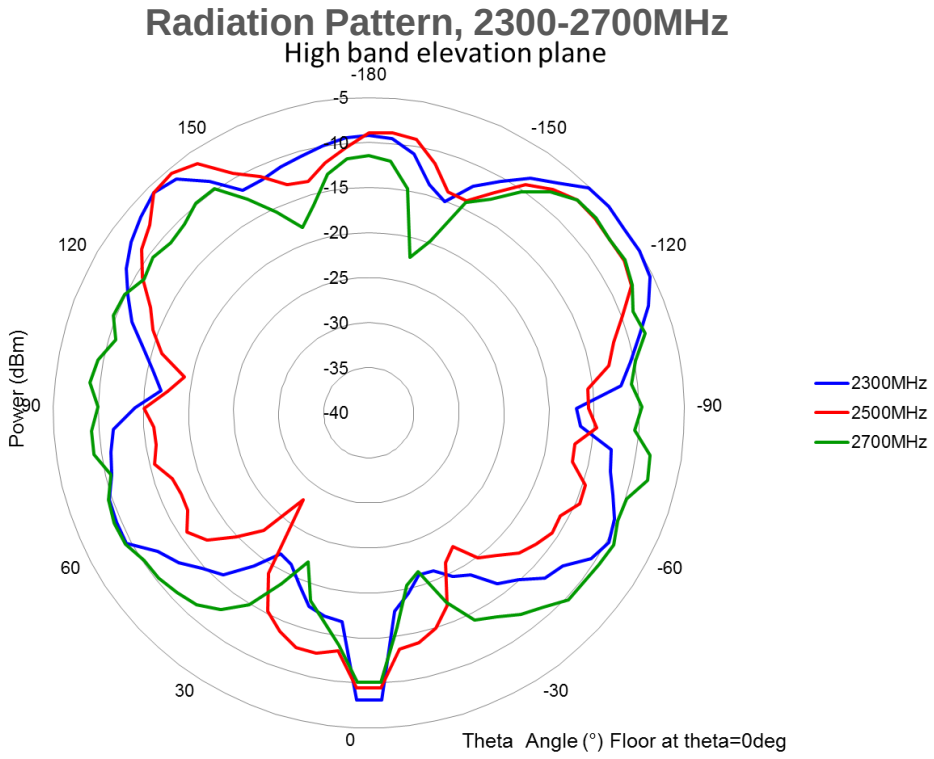


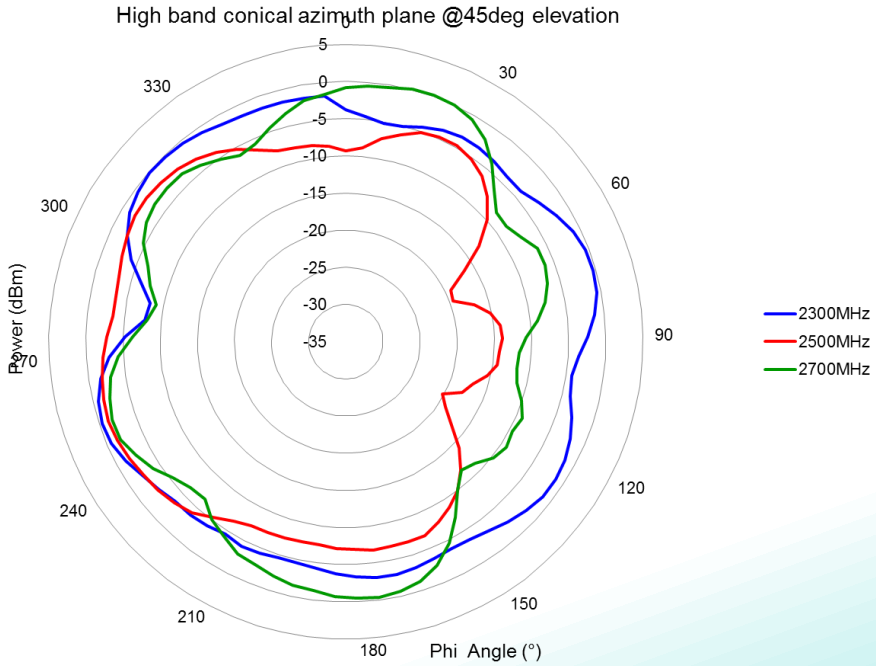




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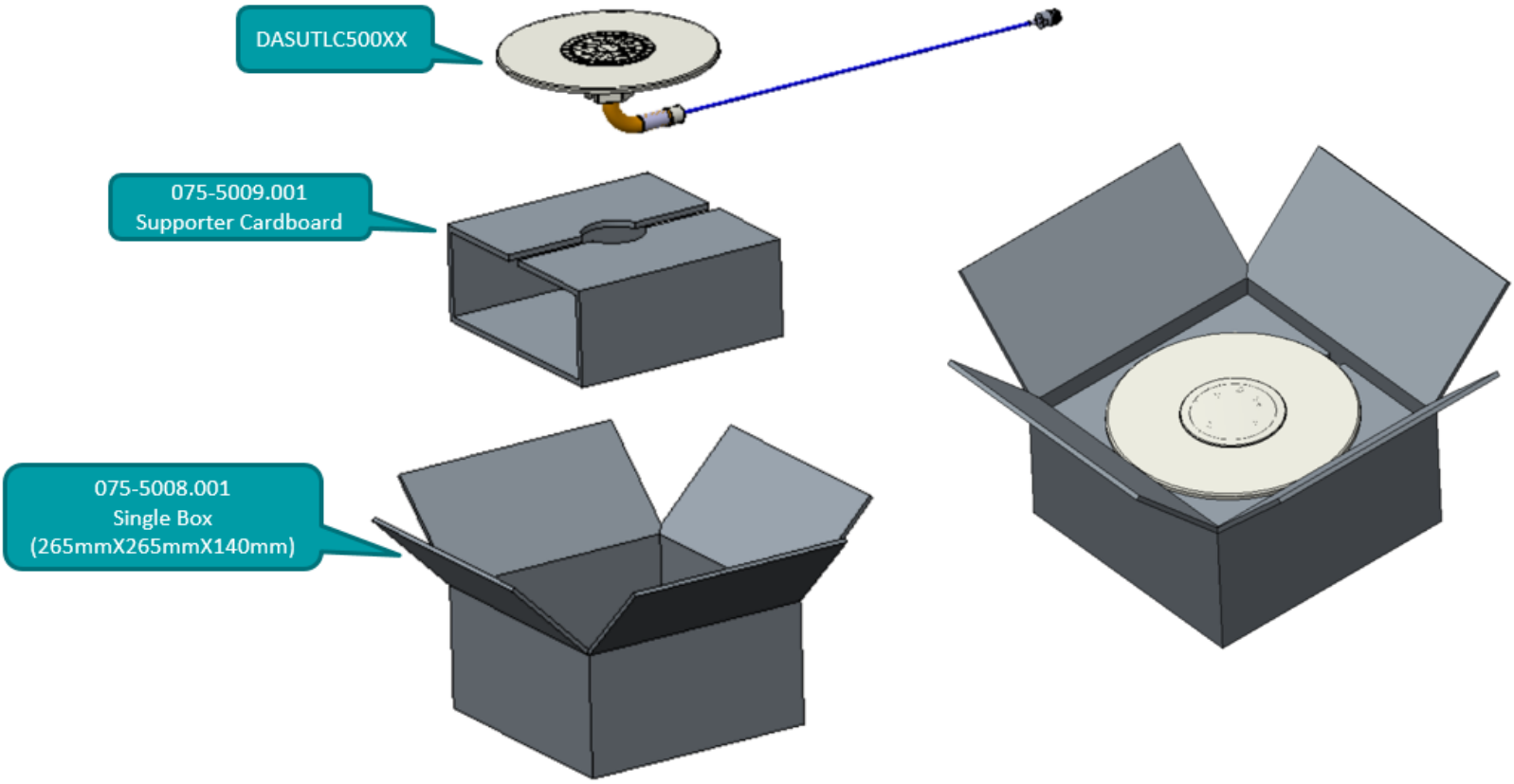
## PACKAGING




P.S.: Antenna DASUTLC500NF should be packed by PE bag(**075-4692.001**) first.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## INSTALLATION INSTRUCTION

Drill or cut a hole 2.5-2.75 inches (64-70 mm) diameter at the center of the ceiling tile or at the desired location. Slide the antenna cable/connector assembly through the hole. Slide the Collar and Nut onto the cable. Turn the Nut, tightening the antenna against the ceiling tile. See Figure 1 and Figure 2

Figure 1

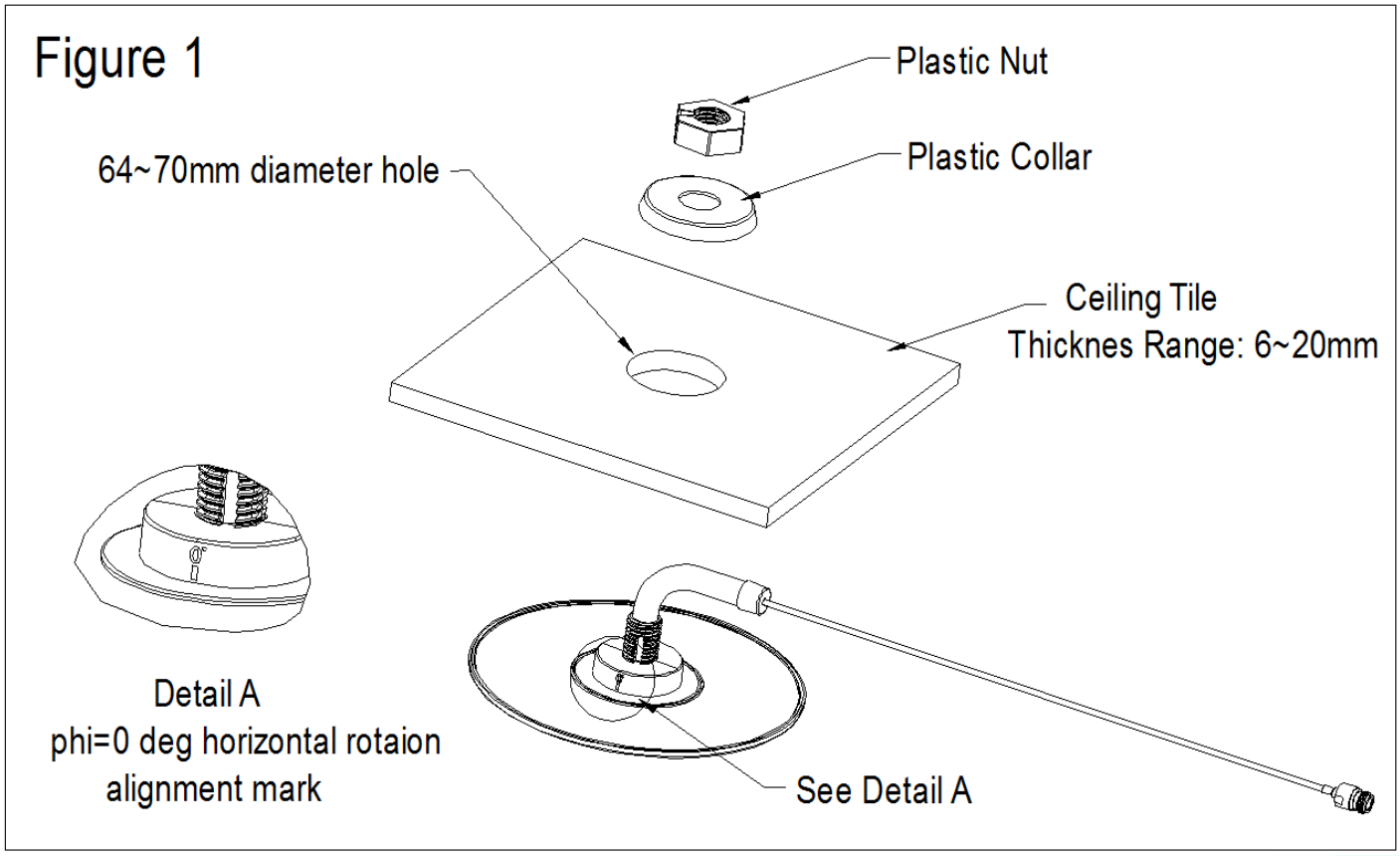




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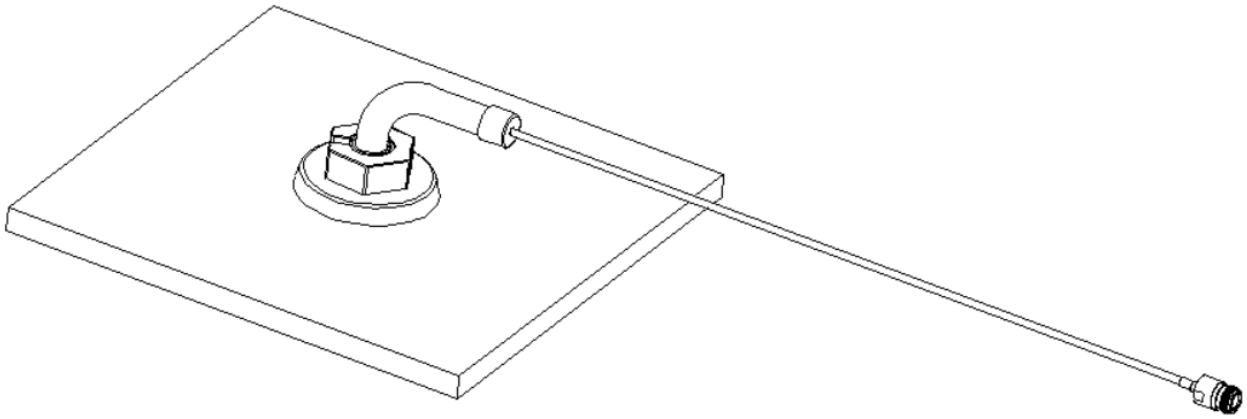
Figure 2

Note:
Fiberboard ceiling tile is soft; tighten the nut just enough to hold the antenna firmly in place.



## ADDITIONAL NOTES:

Some customers may chose to take into consideration the antenna propagation orientation during their planning process. The Horizontal rotation alignment mark (Phi=0 deg), along with data from iBwave file will support this.

For Optimum Performance, Metal ceiling rails need to be a minimum 200mm from the - antenna center as the antenna requires 400mm x 400mm space free of any metal.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# CONNECTOR TORQUE REQUIREMENTS

N Female: Maximum Torque 6.2-9.74 in-lbs (0.7-1.1Nm)
Mini-DIN: Maximum torque 12-16 ft Lbs (17-22Nm)
4.3-10 DIN: Maximum torque 45-70 in-lbs (5-8Nm)


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