

Date	Prepared by	Approved by	Document nos	Revision
3 Feb 2023	Ray Ling	Pavel	MS-4F30-IM-001	0

INSTRUCTION MANUAL MS-4F30

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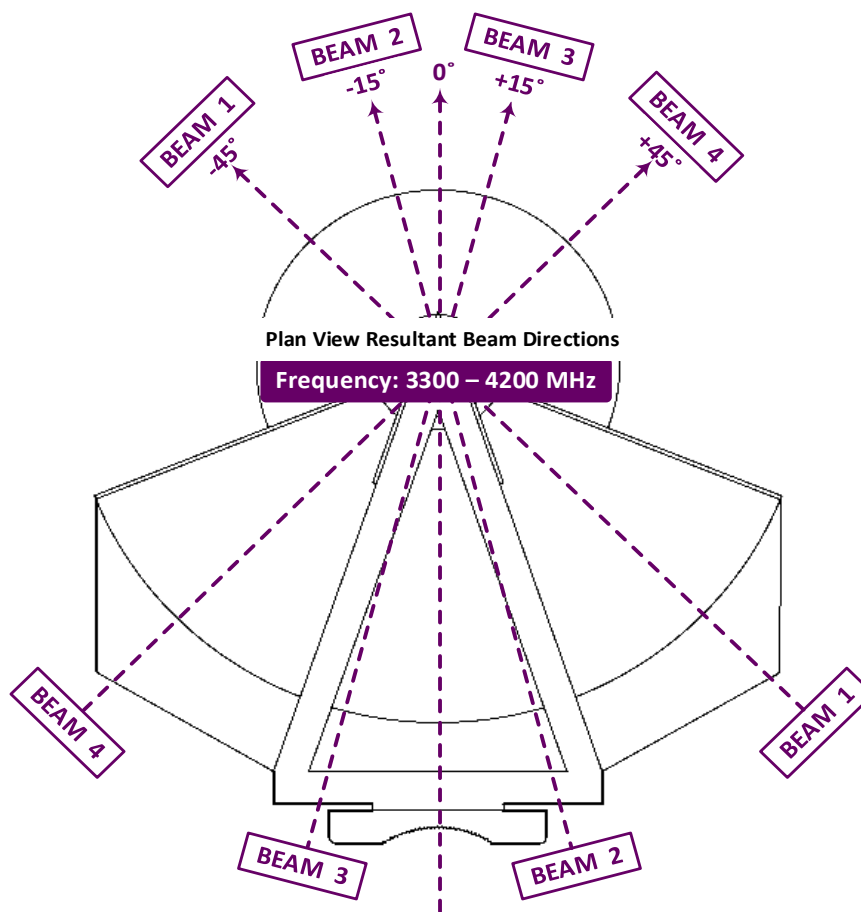
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Revision History:

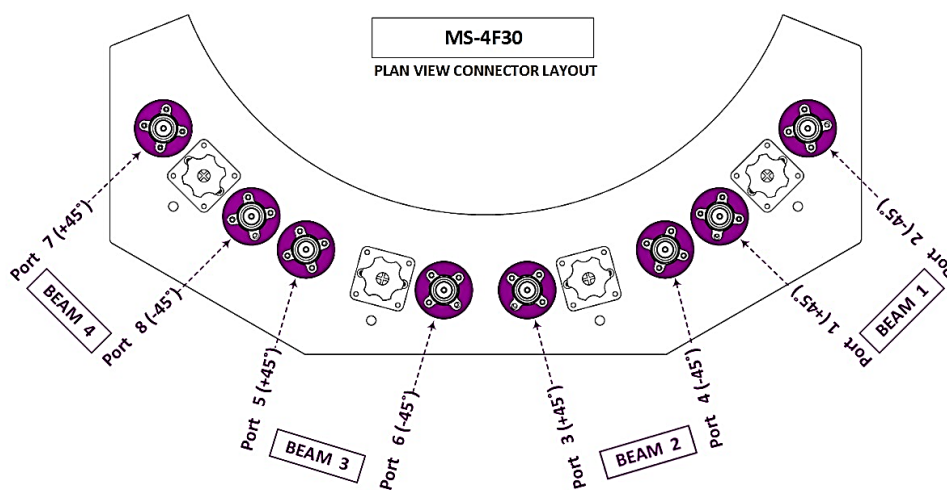
Date	Description	Revised by	Rev nos

1.00 BEAMS & CONNECTORS:

1.10 Plan View Resultant Beam Direction



1.20 Connector Layout

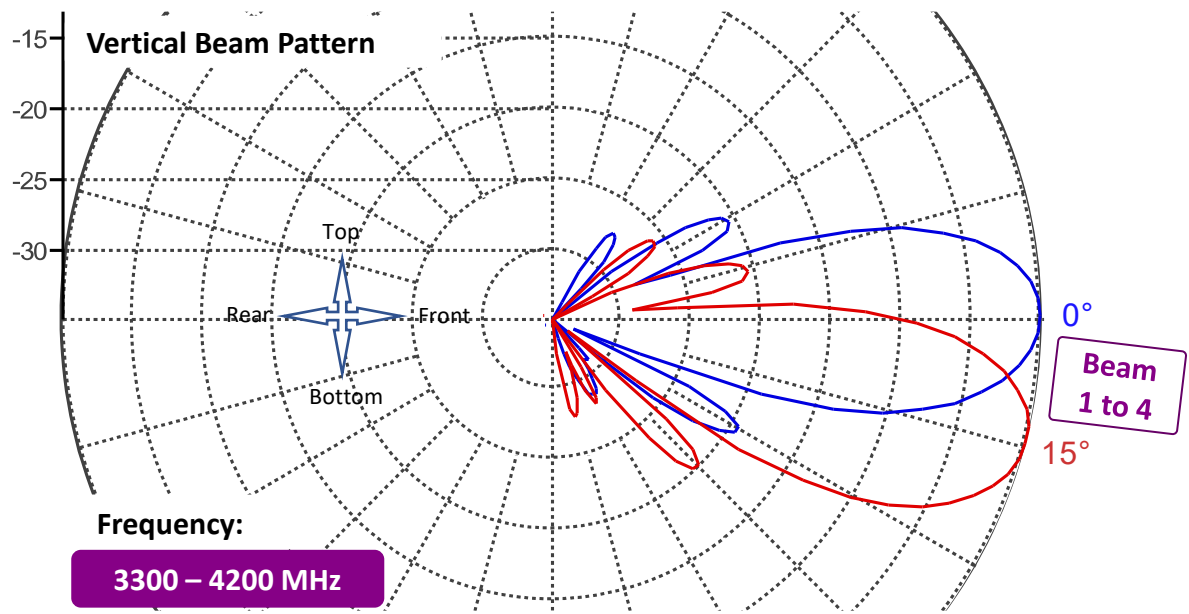


1.30 Connector Port Table

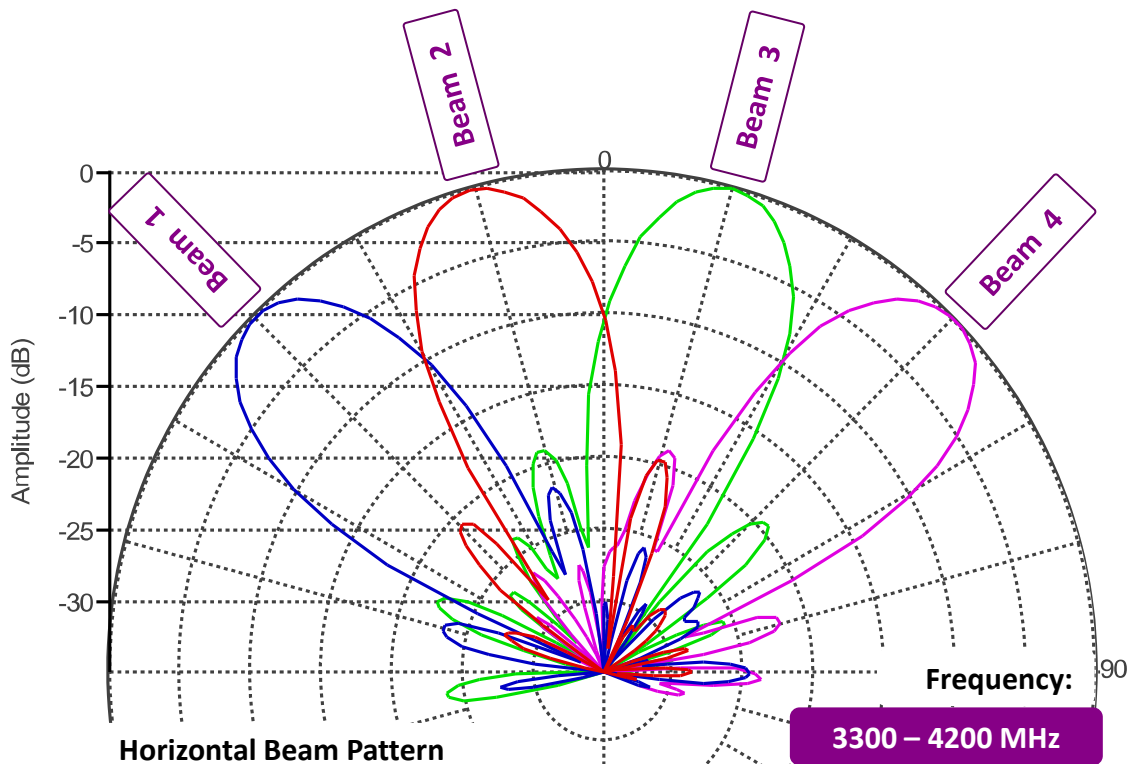
BEAM 4		BEAM 3		BEAM 2		BEAM 1	
PORT 7 (+45°)	PORT 8 (-45°)	PORT 5 (+45°)	PORT 6 (-45°)	PORT 3 (+45°)	PORT 4 (-45°)	PORT 1 (+45°)	PORT 2 (-45°)
7	8	5	6	3	4	1	2
(+45°)	(-45°)	(+45°)	(-45°)	(+45°)	(-45°)	(+45°)	(-45°)

2.00 BEAM PATTERN

2.10 Vertical Beam Pattern



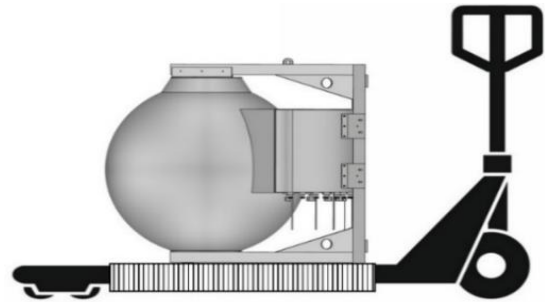
2.20 Horizontal Beam Pattern



3.00 TRANSPORTATION / INSTALLATION

3.10 Transportation (From Point to Point)

Appropriate material handling machine should be used. **(Risk Assessment applies for Forklift or Pallet Truck Lifting)**

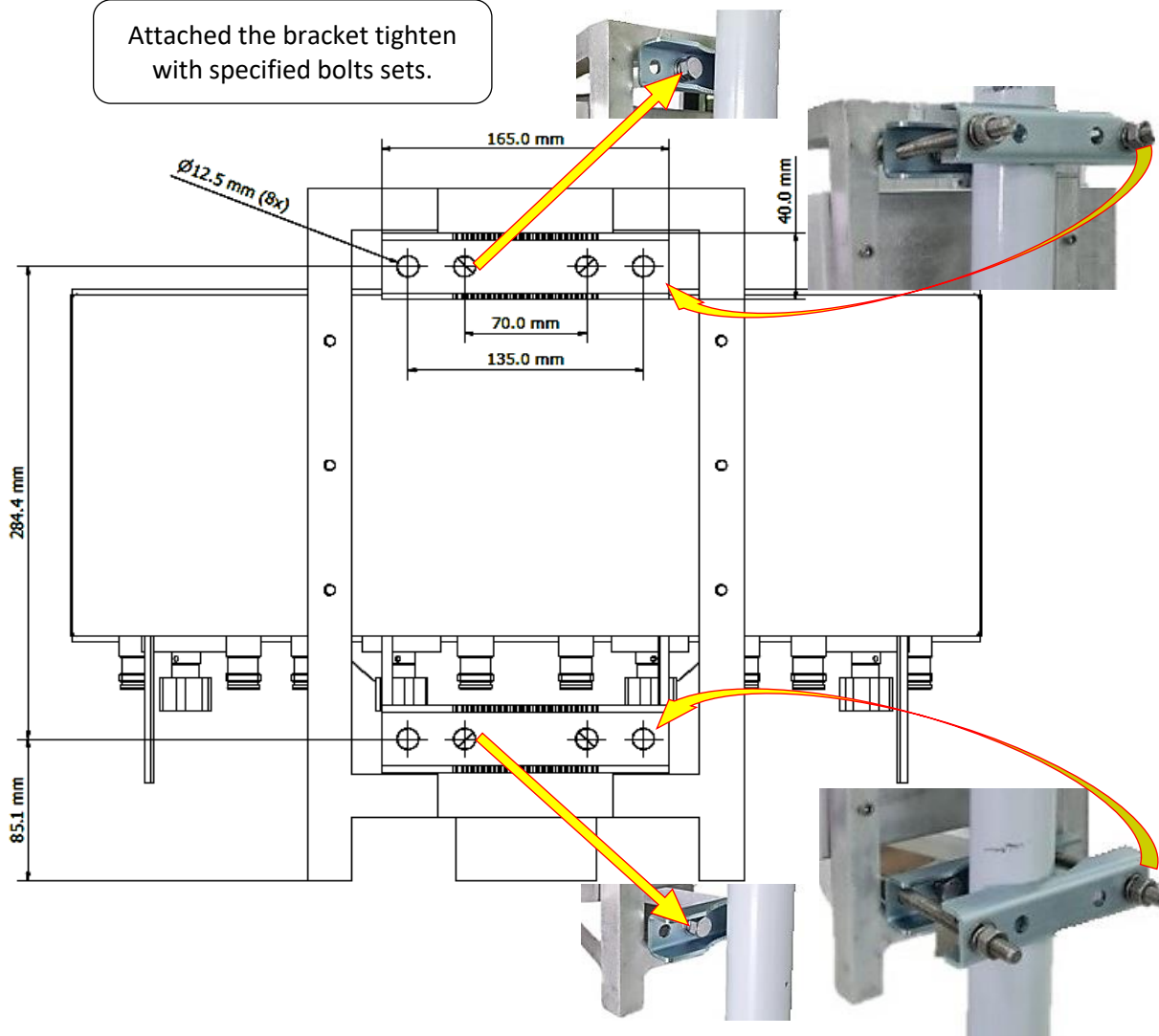


3.20 Bracket Mounting

Item	Lens Size	Holes Size	Bracket Qty	Bolt & Nuts Sets
1	30cm	Ø12.5mm x 8	2	M12 x 20cm = 4 Sets



Attached the bracket tighten with specified bolts sets.



Important Notes:

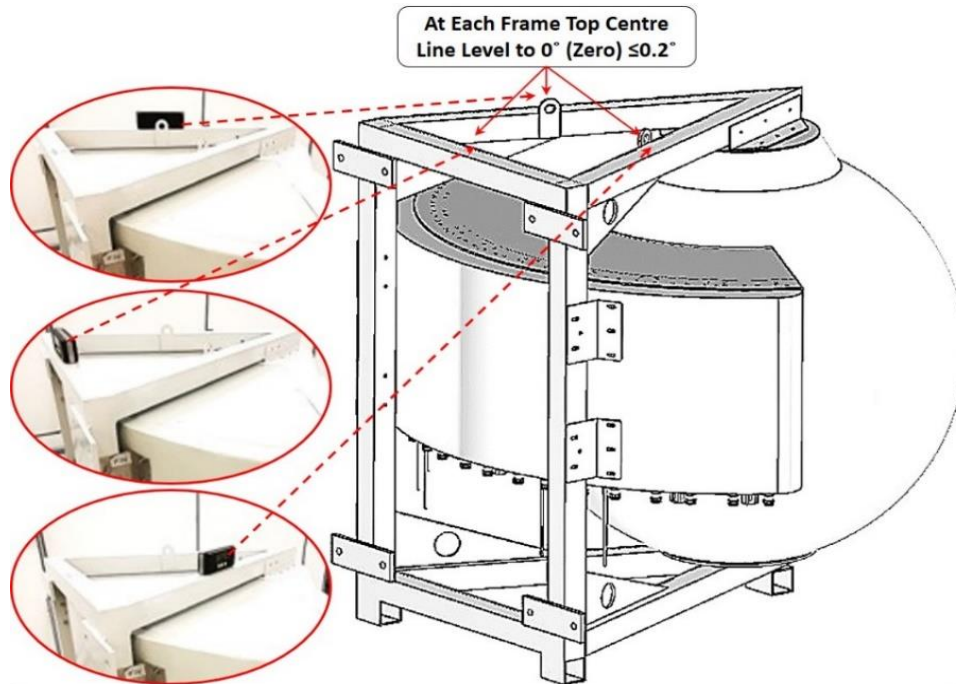
End User is require to Custom-Make the additional supporting bracket and tighten to the existing Antenna bracket to meet the deployment needs.

3.30 Antenna Installation

With reference to "**Bracket Mounting Procedure**", End user is required to Custom-Make the additional supporting bracket and tighten it to the existing Antenna bracket to meet the deployment needs.

3.31 Antenna Leveling

After the Antenna is mounted to the bracket, it is required to be adjusted to 0° (Zero Degree) with $\leq 0.2^\circ$ on 3 sides of the frame top level.(Rear, Right & Left=As shown in picture)



ANTENNA LEVELING ADJUSTMENT (AFTER INSTALLATION)

3.32 Digital Level Gauge Calibration



3.33 Adjustment Requirement



ANTENNA LEVELING ACCEPTED



REQUIRE ADJUSTMENT