



Dielectric’s TUM-LP Series panel antenna is designed for broadband circular or elliptical polarization.

**Dielectric Advantages**

- Operating Range: 470-806 MHz
- Circularly or elliptically polarized panel
- Economical broadband design
- A key building block for antennas with different azimuth and elevation patterns
- Suitable for multiplexing many channels
- 500 W average power per panel with 7-16 DIN input
- Dual input allows for field adjustability of H/V ratio
- 4 standard azimuth patterns available
- Low VSWR, <1.1:1 over operating band
- Aluminum construction
- ABS radome for environmental protection
- Custom azimuth and elevation patterns available upon request
- Panels are equipped with a bracket for mounting to a 2" nominal pipe

**Electric Specifications—Individual Panel**

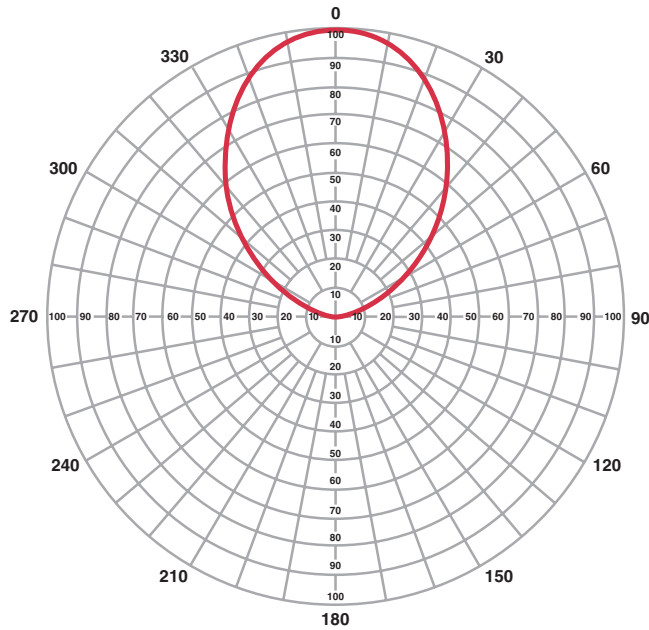
Band	Polarization	VSWR	Input	Power Rating
UHF 470-806 MHz	Variable Elliptical Circular	1.1:1	Dual 7-16 DIN	1 kW per panel

**Mechanical Specifications—Individual Panel**

Model	Height ft (m)	Weight lb (kg)	Wind Area <sup>1</sup> ft <sup>2</sup> (m <sup>2</sup> )	Dimensions LxWxD (in)
TUM-LP UHF CP	3.2 (1.0)	40 (18.1)	6.8 (0.63)	38.25 x 18.25 x 8.10

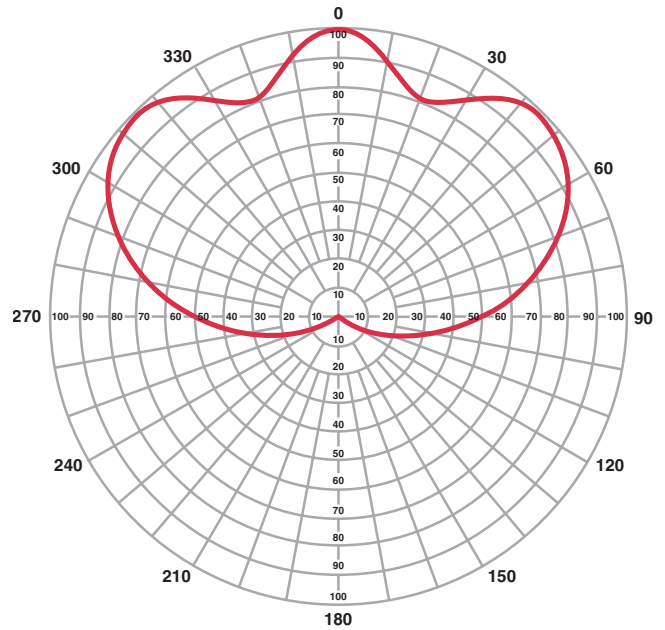
<sup>1</sup> Wind area C<sub>A</sub>A<sub>C</sub> per TIA/EIA-222-G

TUM-LP-C1



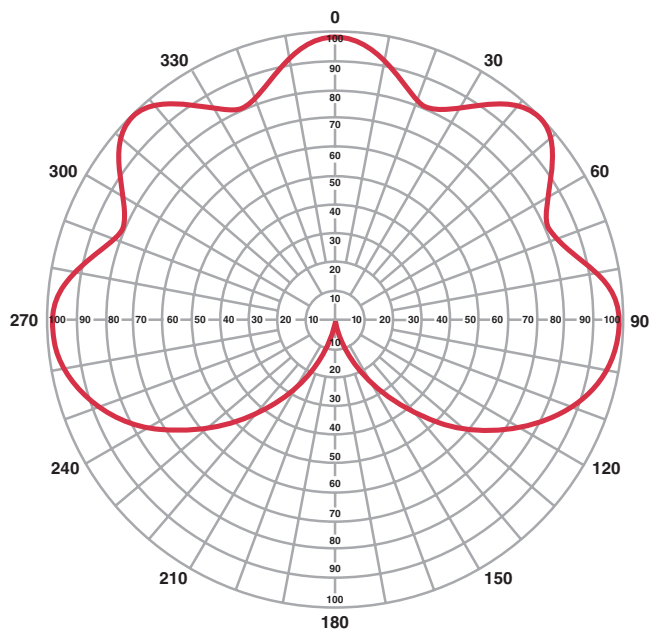
AZIMUTH GAIN: 5.2

TUM-LP-C2



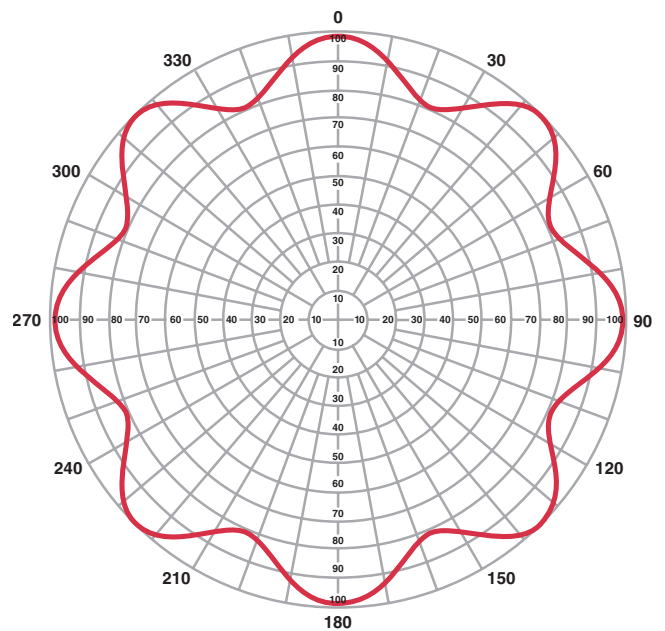
AZIMUTH GAIN: 2.6

TUM-LP-C3



AZIMUTH GAIN: 1.8

TUM-LP-O4



AZIMUTH GAIN: 1.3

**Notes:**

1. Patterns shown are typical and calculated using a 24" square tower at 587 MHz. Specific gains and patterns will be supplied with the proposal.

Antenna Type	Azimuth Pattern	Peak Gain (Ratio)	Peak Gain (dBd)	Length (ft)	Weight (lb)	Wind Area (ft <sup>2</sup> )
TUM-C1-1/1	C1	5.2	7.2	3.2	40	5.83
TUM-C1-2/2	C1	11.5	10.6	6.78	91.8	13.82
TUM-C1-3/3	C1	17.7	12.5	10.36	134.05	20.85
TUM-C1-4/4	C1	23.4	13.7	13.94	177.2	28.36
TUM-C2-1/2	C2	2.6	4.2	3.2	91.8	11.92
TUM-C2-2/4	C2	5.7	7.6	6.78	175.4	23.6
TUM-C2-3/6	C2	8.9	9.5	10.36	260.8	36.24
TUM-C2-4/8	C2	11.7	10.7	13.94	348	49.84
TUM-C3-1/3	C3	1.8	2.6	3.2	132.7	14.9
TUM-C3-2/6	C3	4.0	6.0	6.78	258.1	30.04
TUM-C3-3/9	C3	6.1	7.9	10.36	386.2	46.62
TUM-C3-4/12	C3	8.1	9.1	13.94	537	67.04
TUM-O4-1/4	O4	1.3	1.1	3.2	173.6	18.79
TUM-O4-2/8	O4	2.9	4.6	6.78	340.8	38.3
TUM-O4-3/12	O4	4.4	6.4	10.36	531.6	62.13
TUM-O4-4/16	O4	5.9	7.7	13.94	706	85.48

- Wind area  $C_A A_C$  per TIA/EIA-222-G
- Weight excludes brackets and mounting hardware, includes typical feed system