



WATTS ANTENNA COMPANY



For The Very Best Image!

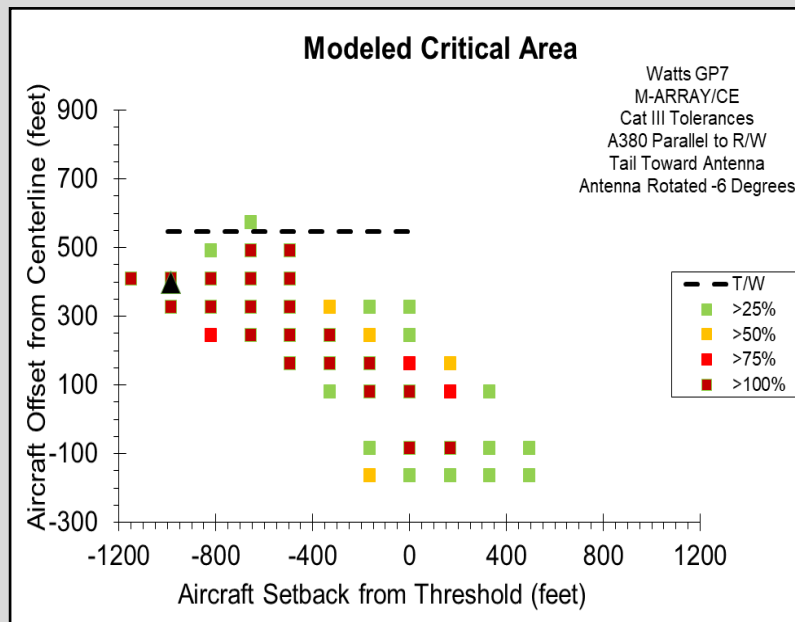
MODEL GP7
DIRECTIONAL IMAGE GLIDE PATH ANTENNA
CATEGORY I/II/III INSTRUMENT LANDING SYSTEM
(FOR SMALLER CRITICAL AND SENSITIVE AREAS)



**The Proof Is In The
 Critical Area
 Computations**

Computed ILS Glide Slope Critical Area for an Airbus A380 Parallel to the Runway Using the Watts Model GP7 Beam Steered Directional Antenna in M-Array Configuration, also referred to as Capture Effect (CE). This Figure Shows the Addition Critical Area Reduction Achieved by Mechanically Rotating the Already Canted Beam by an Additional 6.0 Degrees Toward the Runway.

The Dashed Line on the Plot Represents a Taxiway Offset Distance Where the Tower to Wingtip Separation is Only 5 Meters (16.4 Feet). The Black Triangular Shape Represents the Location of the Glide Slope Tower.



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Antenna Type: Directional Beam-Steered Image Glide Slope Antenna
Nomenclature: **Model GP7**
Color: International Orange and White
Coating: Icephobic
Frequency Range: 329.0 to 335 MHz
Polarization: Horizontal
Radome Type: Full Cover-Fiberglass
Reflector Type: 90 Degree Trough and Corner
Maximum Power: 50w CW
Input: Type N Female Connector
Pattern Type: Asymmetric
Gain: > 14 dBd
Beam Displacement: > 6 Degrees Nominal * See Note
-3 dB Beamwidth: 23 Degrees Nominal
Sidelobe Suppression: 25 dB Nominal
Front-to-Back Ratio: >21 dB Nominal
Input Impedance: 50 Ohms Nominal
VSWR: < 1.25 to 1
Distribution Loss: < 1 dB
Distribution Isolation: > 22 dB Between Ports
Monitor Impedance: 50 Ohms Nominal
Monitor Output: Type N Female Connector
Monitor Coupling: > 20 dB Nominal
Temp Range: -55 to +75 Degrees C
Lateral Thrust: 1450 N at 160 km/h
Max. Wind Velocity: 200 km/h (incl. 1/2" radial ice)
Length: 3.33 Meters (131.25 Inches)
Height: 79 CM (31 Inches)
Weight: 42.18 KG Approximate (93 lbs)
Heaters: Not Needed
NOTE: Up To An Additional 6 Degree Physical Beam Displacement In Either Direction With Shim Kit

Material:
Dipole System: Aluminum.
Reflector: Aluminum w/ Icephobic Coating (orange).
Radome: Fiberglass (white).

Scope of Supply: Antennas w/ Mounting Hardware, Shim Kit and Instruction Manual.
Mounting Hardware: B-Line 304 Stainless Steel Mounting Struts and Components.
Lightning Protection: Antenna is DC Grounded Including Inner Conductors.