

**WATTS ANTENNA COMPANY**

**.....THE TOUGH SITE SOLUTION**

**CATEGORY I/II/III INSTRUMENT LANDING SYSTEM  
WITH SMALLER CRITICAL AND SENSITIVE AREAS**

**MODEL GP-5A  
DIRECTIONAL IMAGE GLIDE PATH ANTENNA**



***ANOTHER TOUGH SITE SOLUTION BY:***

***WATTS ANTENNA COMPANY***

***270 SUNSET PARK DRIVE***

***HERNDON, VIRGINIA, 20170-5219***

***PHONE: (703) 787-7547; FAX: (703) 787-7548***

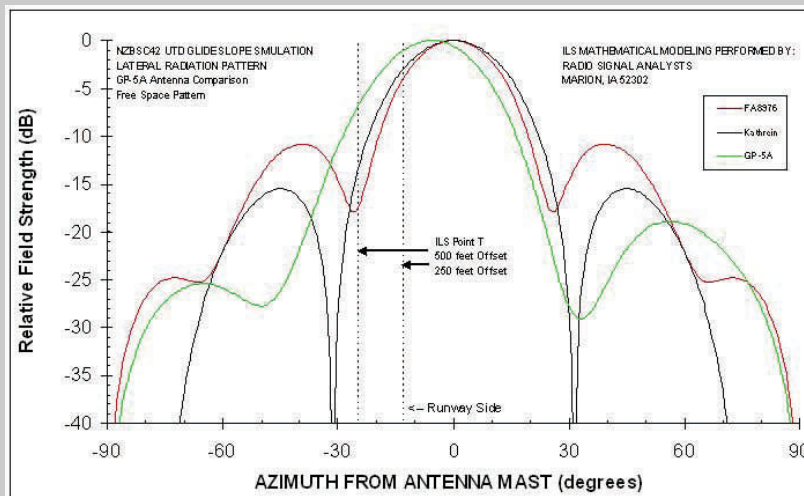
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**THE GP-5A IS THE ANSWER TO SMALLER CRITICAL AND SENSITIVE AREAS AND GREATER AIRPORT CAPACITY**

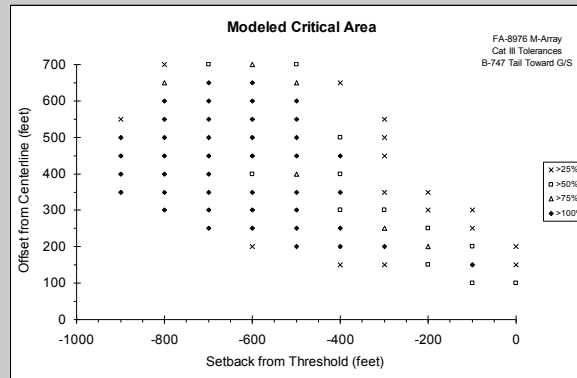


**Critical Area Tests Conducted in Zurich Switzerland with a 747 Aircraft  
Watts GP-5A Image Glide Slope Antenna Element in an M-Array**

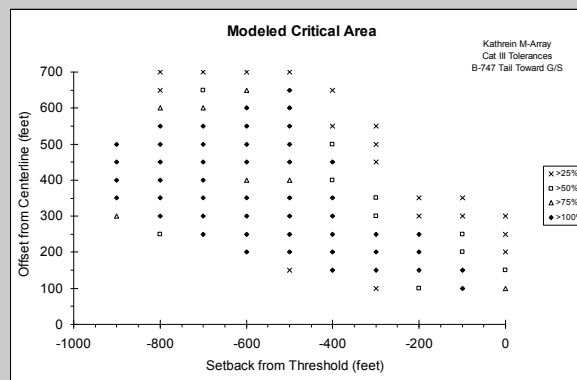


**Lateral Radiation Pattern Comparison of the FA-8976 (red), Kathrein (black) and the Watts GP-5A (green) Image Glide Slope Antenna Element**

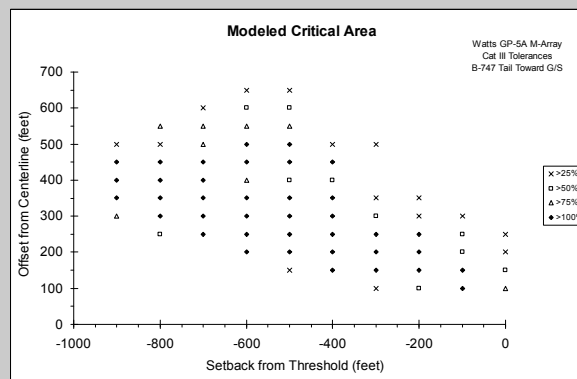
# THE PROOF IS IN THE CRITICAL AREA COMPUTATIONS



**M-Array Tower Modeled at 400 feet Offset from Runway Centerline with FA-8976 Elements. Simulated 747 Aircraft Parallel to the Runway with Tail Towards the Tower (CAT III Tolerances)**



**M-Array Tower Modeled at 400 feet Offset from Runway Centerline with Kathrein Elements. Simulated 747 Aircraft Parallel to the Runway with Tail Towards the Tower (CAT III Tolerances)**



**M-Array Tower Modeled at 400 feet Offset from Runway Centerline with Watts GP-5A Elements. Simulated 747 Aircraft Parallel to the Runway with Tail Towards the Tower (CAT III Tolerances)**

## SPECIFICATIONS

|                             |   |
|-----------------------------|---|
| <b>Nomenclature</b>         | <b>Image Glide Path Antenna Element<br/>Model GP-5A</b> |
| <b>Frequency Range</b>      | <b>329.0 to 335 MHz</b>                                 |
| <b>Antenna Type</b>         | <b>5 Collinear dipoles</b>                              |
| <b>Color</b>                | <b>International Orange and White</b>                   |
| <b>Coating</b>              | <b>Isophobic</b>  |
| <b>Maximum Power</b>        | <b>15 Watts</b>   |
| <b>Reflector Type</b>       | <b>90-Degree Trough and Corner</b>                      |
| <b>Pattern Type</b>         | <b>Asymmetric</b>                                       |
| <b>Beam Displacement</b>    | <b>5 Degrees</b>  |
| <b>-3 dB Beamwidth</b>      | <b>23 Degrees</b>                                       |
| <b>Sidelobe Suppression</b> | <b>16 dB Nominal</b>                                    |
| <b>Front-to-Back Ratio</b>  | <b>-20 dB</b>   |
| <b>Input Impedance</b>      | <b>50 Ohms Nominal</b>                                  |
| <b>VSWR</b>                 | <b>&lt; 2.0 to 1</b>                                    |
| <b>Monitor Impedance</b>    | <b>50 Ohms Nominal</b>                                  |
| <b>Monitor Coupling</b>     | <b>12 dB Nominal</b>                                    |
| <b>Radome Type</b>          | <b>Full Cover – Fiberglass</b>                          |
| <b>Length</b>               | <b>2.74 Meters (108 Inches)</b>                         |
| <b>Height</b>               | <b>79 CM (31 Inches)</b>                                |
| <b>Weight</b>               | <b>22.68 KG Approximate (50 lbs)</b>                    |
| <b>Heaters</b>              | <b>Optional</b>   |