

SOURCE CONTROL DRAWING**100499-001**

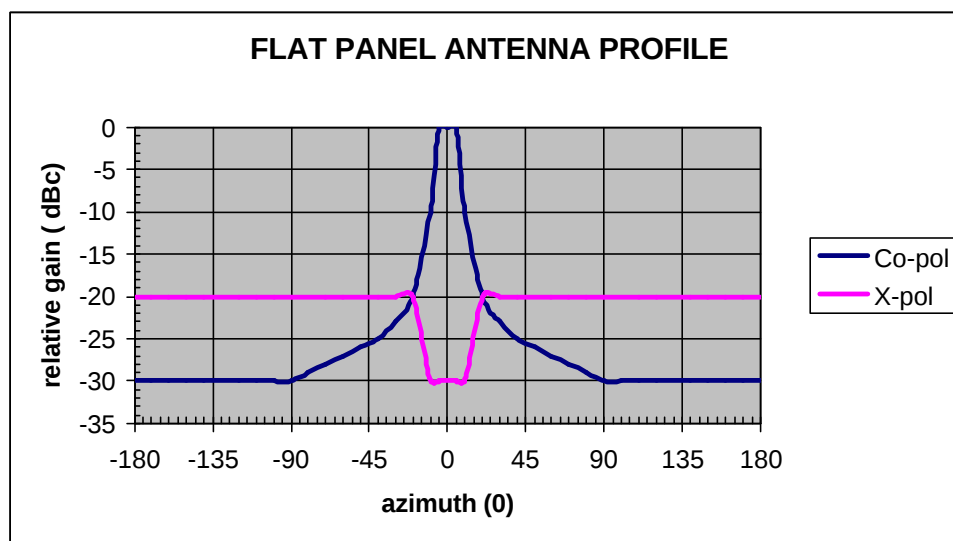
Part Number:	100499-001
PART:	12" x 12" integral flat panel
DATE:	10/08/2001
DOCUMENT REVISION:	Release 1
PART REVISION:	1
ORIGINATOR:	Lam Huynh / Stuart Taylor
ECN	C00442

Antenna Type:	Integral panel antenna
Operating Frequency:	5.25 – 5.35 GHz and 5.725 – 5.825 GHz
Bore-sight gain:	21.0 dBi, including cable loss, (21 dBi +/- 0.5 dB)
Beamwidth –3 dB	11 ± 2° on both azimuth and elevation planes
Beamwidth –20 dB	
5.25 – 5.35 GHz:	36° max on azimuth, 48° max on elevation planes
5.725 – 5.825 GHz:	36° max on both azimuth and elevation planes
Polarization:	either vertical or horizontal by 90° plane rotation
Side lobe peaks:	20 dB min on both planes (when mounted in 45° diamond position)
Antenna radiation envelope:	see typical antenna profile
Front-to-back ratio:	-30 dB min when mounted on CX radio mechanical box
Cross-polarization:	-30 dB min within 3dB beamwidth, -20 dB elsewhere
VSWR (with radome):	1.5:1 nom, 1.7:1 max
RF interface:	SMP female on 0.085" flex cable, 6" long (Recommended CDI P/N P657-3705-1CC female straight to flex cable or equivalent. Recommended double-shielded cable but single-shielded cable is acceptable if min antenna gain is met)
Labeling:	Frequency and polarization must be labeled at RF interfaces. Part must be labeled with Vendor Name or ID

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I	and Date Code.
Radome:	white, molded
Antenna finish:	TBD
Antenna mount:	integral to radio mechanics, in diamond position See attached mechanical interface drawing
Weight:	TBD
Size:	fit in 12" x 12" radome
Wind load:	N/A
Operating temperature:	-40°C to +60°C
Environmental exposure:	Humidity test, dust test, salt fog test performed in accordance with FA-903000, Rev.1, which references MIL-STD-810E
Vendor:	TBD
Vendor Part Number:	TBD

Appendix A: typical azimuth beam pattern



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Appendix C. CDI SMP connector specification (for reference only)

