



Panel antenne 2500-
2700MHz LTE high band
18dBi N hun
PAX-L01

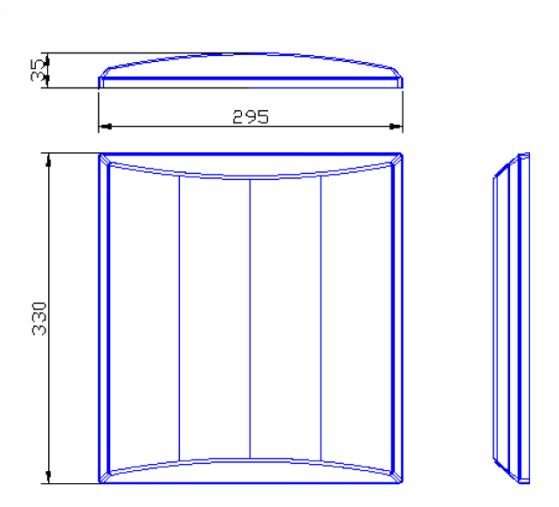


EAN: 5704717012305



PAX-L01

1. OVERVIEW & SPECIFICATIONS



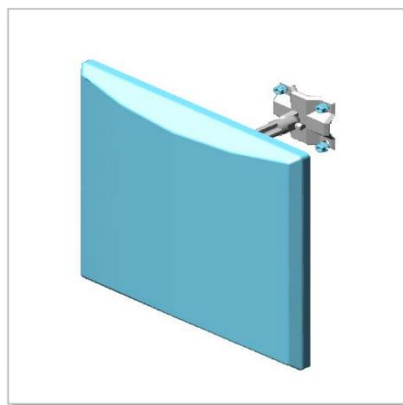
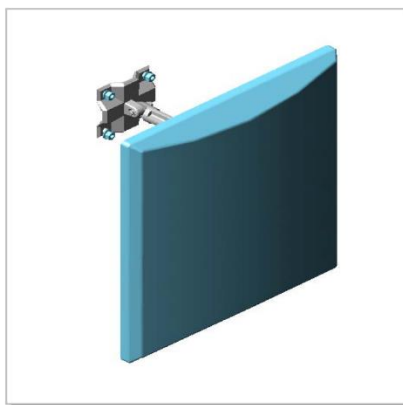
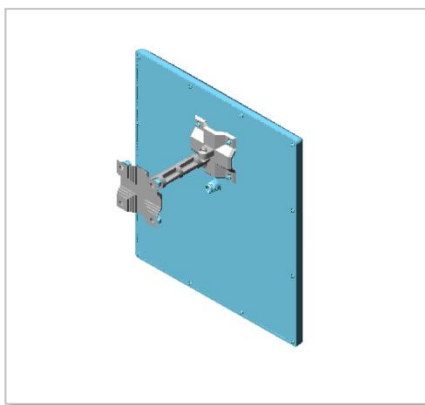
Electrical Specifications:

Frequency Range :	2500~2700MHz
VSWR :	≤ 2.0
Impedance :	$50\Omega \pm 5\Omega$
Gain :	18 dBi
Polarization :	Vertical
Power Handling :	10 Watt

Mechanical Specifications:

Connector :	N Female
Operation Temp. :	$-30^{\circ}\text{C} \sim +60^{\circ}\text{C}$
Material :	Radome: ABS Mount: Zinc alloy
Dimension (L*W*H) :	330*295*35 mm
Weight :	$1334 \pm 20\text{g}$ (w/ mount)
Color :	White

3D Illustration



2. TESTING CONDITION

2.1 TEST SETUP

VSWR measurement (S11): Use ROHDE & SCHWARZ ZV8 Network Analyzer with Harbour RG-142 coaxial cable: 1000mm length in free space.

2.1.1 VSWR

The table as below summarizes concern about Return loss measurement according to The frequency band is based on PRO-CELL design. The detail be shown as appendix that is from ROHDE & SCHWARZ ZV8 Network Analyzer

VSWR Performance			
Freq(MHz)	2500	2600	2700
Free space	1.22	1.272	1.489

3. GAIN MEASUREMENT

3.1 TEST SETUP

The gain of the antenna was measured by **PROCELL** Chamber. The chamber provides less than -30 dB reflectivity from 800 MHz through 6 GHz and a 60cm diameter spherical quiet zone. The measurement results are calibrated using both **SCHWARZBECK** horn standards. A decoupling sleeve is used to reduce feed line radiation

3.2 TEST RESULT

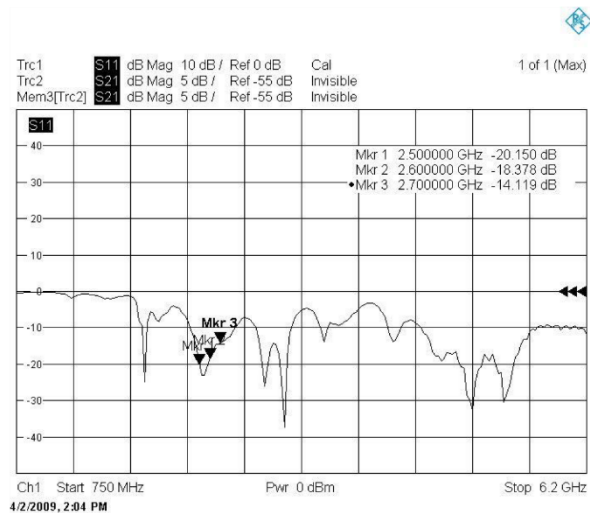
The peak gain is picked up as table list from Network analyzer in Chamber room, the completely gain plots also be shown as appendix.

Peak Gain (dBi) / Beam width(°)			
Freq(MHz)	2500	2600	2700
H PLANE	16.95 / 26.6°	18.22 / 24.8°	18.25 / 23.8°
E PLANE	16.54 / 18.9°	17.49 / 18.2°	17.57/ 18°

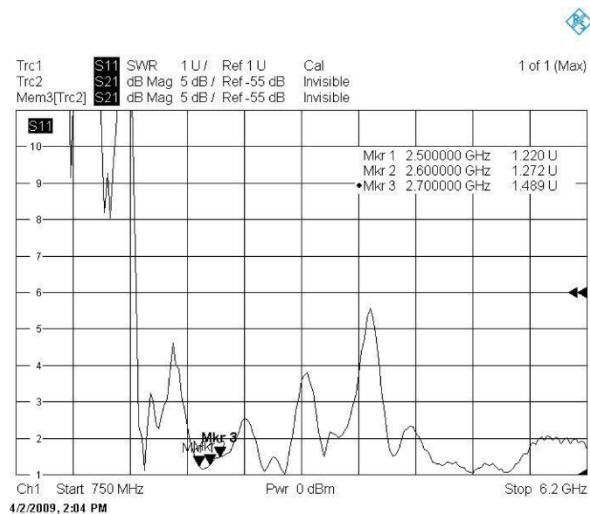
4. APPENDIX

4.1 RETURN LOSS & VSWR

RETURN LOSS

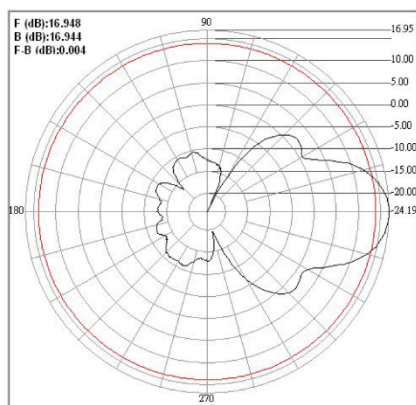


SWR

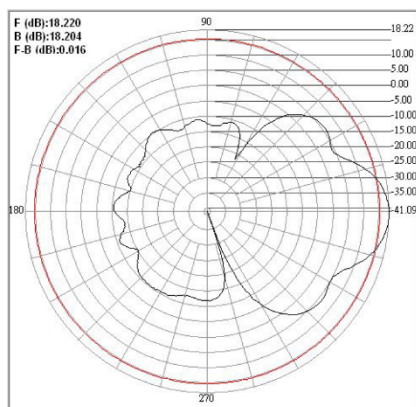


4.2 RADIATION PATTERN

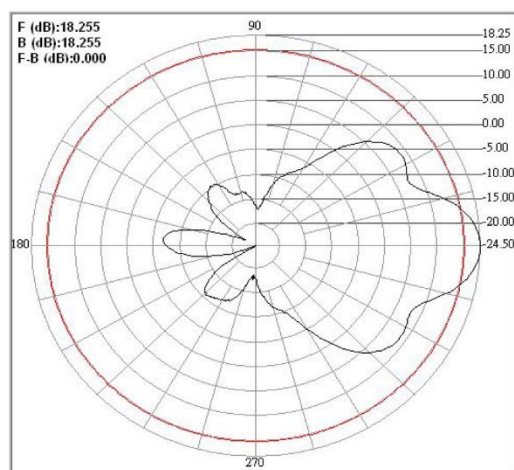
H-PLANE



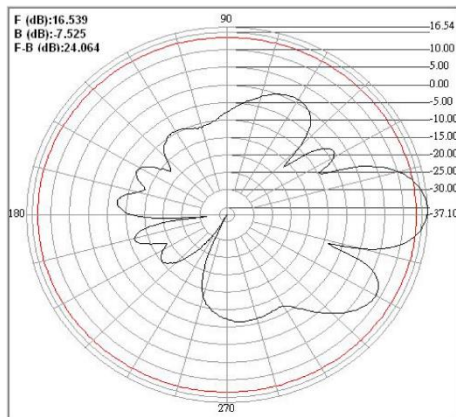
Center freq.(MHz): 2500	Plane : H Plane	
Max gain(dBi) : 16.95	Min gain(dBi) : -24.19	Avg gain(dBi) : 7.60
-3dB1(°) : 372.20	-3dB2(°) : 345.60	HPB(°) : 26.60
Front (dB) : 16.948	Back (dB) : 16.944	F B Ratio (dB) : 0.004



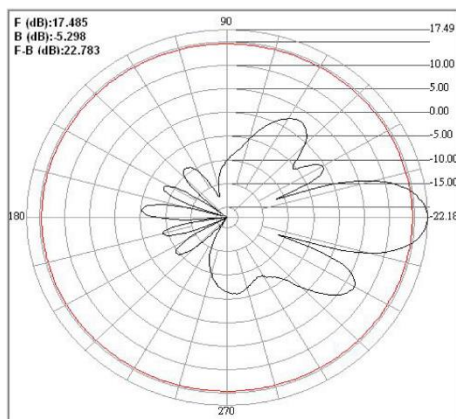
Center freq.(MHz): 2600	Plane : H Plane	
Max gain(dBi) : 18.22	Min gain(dBi) : -41.09	Avg gain(dBi) : 8.50
-3dB1(°) : 371.20	-3dB2(°) : 346.40	HPB(°) : 24.80
Front (dB) : 18.220	Back (dB) : 18.204	F B Ratio (dB) : 0.016



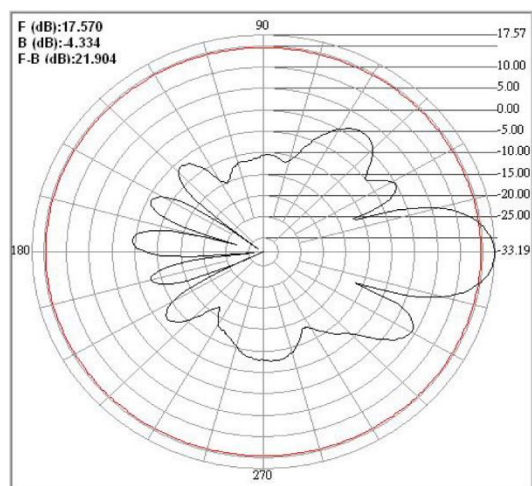
Center freq.(MHz): 2700	Plane : H Plane	
Max gain(dBi) : 18.25	Min gain(dBi) : -24.50	Avg gain(dBi) : 8.95
-3dB1(°) : 371.60	-3dB2(°) : 347.80	HPB(°) : 23.80
Front (dB) : 18.255	Back (dB) : 18.255	F B Ratio (dB) : 0.000

E-PLANE

Center freq.(MHz): 2500	Plane : E Plane	
Max gain(dBi) : 16.54	Min gain(dBi) : -37.10	Avg gain(dBi) : 6.45
-3dB1(°) : 11.50	-3dB2(°) : -7.40	HPB(°) : 18.90
Front (dB) : 16.539	Back (dB) : -7.525	F B Ratio (dB) : 24.064



Center freq.(MHz): 2600	Plane : E Plane	
Max gain(dBi) : 17.49	Min gain(dBi) : -22.18	Avg gain(dBi) : 7.17
-3dB1(°) : 8.90	-3dB2(°) : -9.30	HPB(°) : 18.20
Front (dB) : 17.485	Back (dB) : -5.298	F B Ratio (dB) : 22.783



Center freq.(MHz): 2700	Plane : E Plane	
Max gain(dBi) : 17.57	Min gain(dBi) : -33.19	Avg gain(dBi) : 7.10
-3dB1(°) : 8.60	-3dB2(°) : -9.40	HPB(°) : 18.00
Front (dB) : 17.570	Back (dB) : -4.334	F B Ratio (dB) : 21.904