

# Antenna Specification

Manufacture's name : Shenzhen Hongxin Technology Electronics Co., Ltd.  
Address : 2nd Floor, West Building, C10, Xin'an Second Industrial Zone,  
Guxing Community, Xixiang Street, Baoan District, Shenzhen City

## EUT Description

Test Item	Antenna gain; Radiation pattern and efficiency
Antenna Type	Cabinet Antenna
Frequency Range	2400MHz-2500MHz

# 1 Test Data

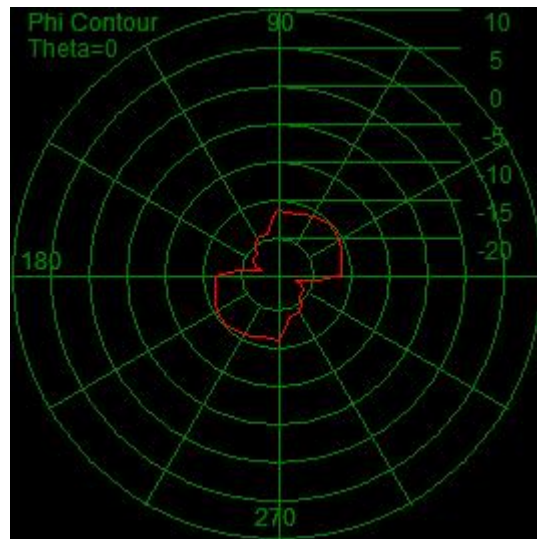
## 1.1 Typical free space efficiency and gain

<b>FETUKS.LI</b>																					
Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Frequency (MHz)	2300.0	2310.0	2320.0	2330.0	2340.0	2350.0	2360.0	2370.0	2380.0	2390.0	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Point Values																					
Ant. Port Input Pwr. (dBm)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tot. Rad. Pwr. (dBm)	-3.27	-3.37	-3.43	-3.36	-3.31	-3.29	-3.13	-2.90	-2.70	-2.57	-2.27	-2.00	-1.91	-1.84	-1.68	-1.63	-1.78	-1.88	-1.97	-2.03	-2.07
Peak EIRP (dBm)	1.42	1.11	1.47	2.04	2.66	3.19	3.75	4.18	4.62	4.95	5.38	5.67	5.74	5.81	5.98	6.06	5.88	5.67	5.39	5.19	5.10
Directivity (dBi)	4.70	4.48	4.90	5.40	5.97	6.48	6.87	7.08	7.32	7.52	7.65	7.67	7.65	7.65	7.66	7.69	7.66	7.56	7.36	7.22	7.17
Efficiency (dB)	-3.27	-3.37	-3.43	-3.36	-3.31	-3.29	-3.13	-2.90	-2.70	-2.57	-2.27	-2.00	-1.91	-1.84	-1.68	-1.63	-1.78	-1.88	-1.97	-2.03	-2.07
Efficiency (%)	47.10	46.00	45.40	46.20	46.70	46.90	48.70	51.30	53.70	55.40	59.30	63.10	64.40	65.50	67.90	68.60	66.40	64.80	63.60	62.60	62.10
Gain (dBi)	1.42	1.11	1.47	2.04	2.66	3.19	3.75	4.18	4.62	4.95	5.38	5.67	5.74	5.81	5.98	6.06	5.88	5.67	5.39	5.19	5.10
NIHPRP ±Pi/4 (dBm)	-3.55	-3.66	-3.72	-3.64	-3.60	-3.59	-3.43	-3.21	-3.00	-2.87	-2.55	-2.27	-2.17	-2.09	-1.93	-1.88	-2.01	-2.11	-2.18	-2.23	-2.26
NIHPRP ±Pi/6 (dBm)	-4.02	-4.16	-4.25	-4.18	-4.13	-4.11	-3.93	-3.69	-3.47	-3.31	-2.99	-2.69	-2.56	-2.45	-2.26	-2.17	-2.29	-2.39	-2.46	-2.51	-2.52
NIHPRP ±Pi/8 (dBm)	-4.29	-4.46	-4.58	-4.54	-4.50	-4.47	-4.29	-4.04	-3.81	-3.66	-3.34	-3.04	-2.90	-2.76	-2.53	-2.42	-2.52	-2.62	-2.70	-2.75	-2.75
Upper Hem. PRP (dBm)	-6.19	-6.25	-6.26	-6.15	-6.07	-6.03	-5.82	-5.52	-5.23	-4.99	-4.58	-4.21	-4.04	-3.93	-3.79	-3.76	-3.89	-3.94	-3.93	-3.93	-3.92
Lower Hem. PRP (dBm)	-6.38	-6.52	-6.63	-6.60	-6.58	-6.60	-6.48	-6.34	-6.25	-6.25	-6.11	-6.00	-6.03	-6.00	-5.84	-5.76	-5.92	-6.12	-6.35	-6.54	-6.65
Upper Hem. PRP (%)	24.04	23.72	23.65	24.29	24.70	24.97	26.19	28.06	30.01	31.68	34.81	37.97	39.46	40.43	41.81	42.10	40.85	40.38	40.42	40.44	40.54
Lower Hem. PRP (%)	23.03	22.29	21.74	21.90	21.99	21.89	22.50	23.25	23.74	23.70	24.49	25.13	24.97	25.10	26.06	26.55	25.58	24.41	23.16	22.17	21.60

## 1.2 Typical free space radiation pattern

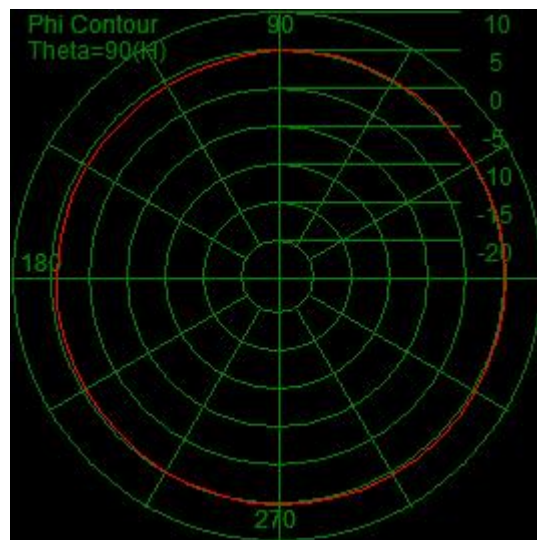
(1) X-Z Plane:

V  $\Phi=0$



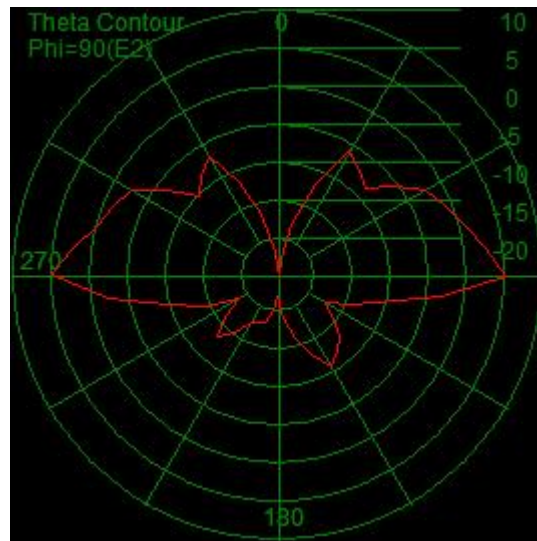
(2) Y-Z Plane:

V  $\Phi=90$



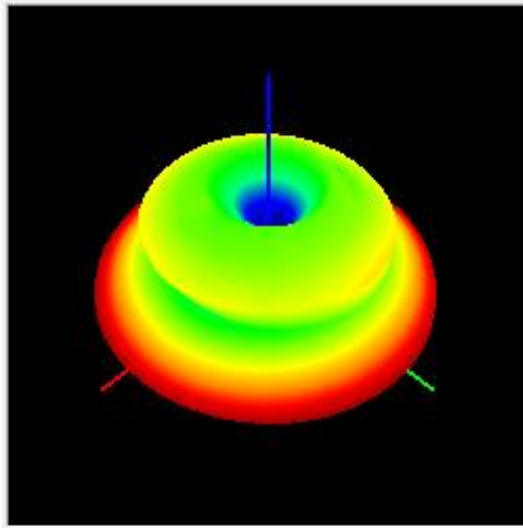
(3) X-Y Plane:

H  $\Theta=90$

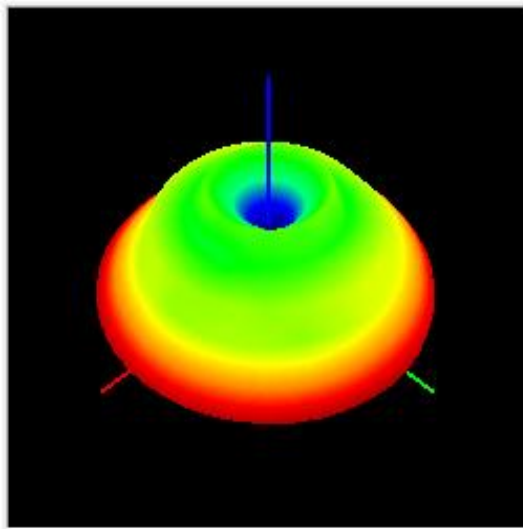


### 1.3 3D Pattern

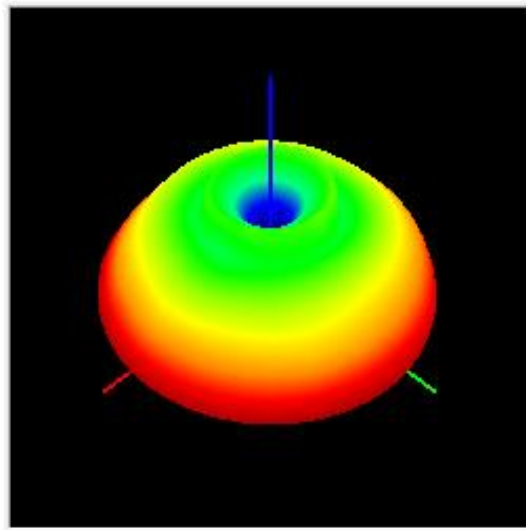
3D Pattern for 2400MHz



3D Pattern for 2450MHz



3D Pattern for 2500MHz



## 2 EUT appearance

