

Antenna datasheet

1.1 DATASHEET KEYWORDS

The PCB antenna Description

Antenna Name: PCB Antenna

Model Number: SYH-AND-LY2.4-FS REV

1.0

Maximum Gain: 4.33dBi

Antenna Type: PCB Antenna

Operation Frequency: 2402MHz ~ 2480MHz

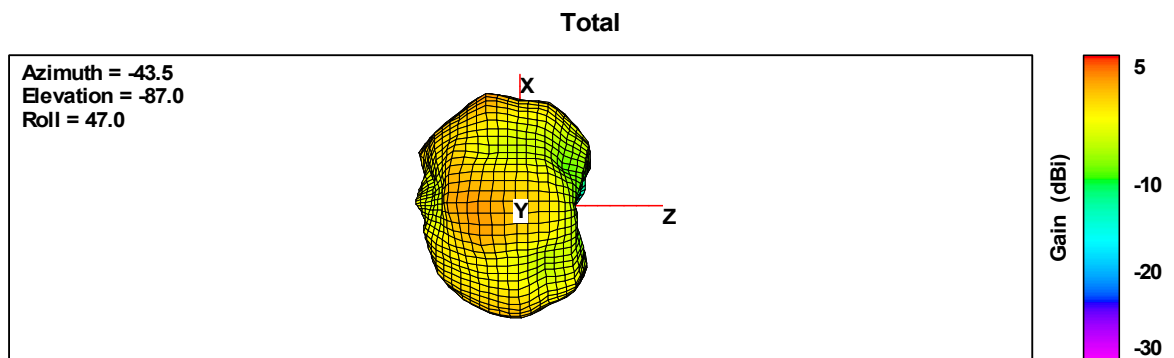
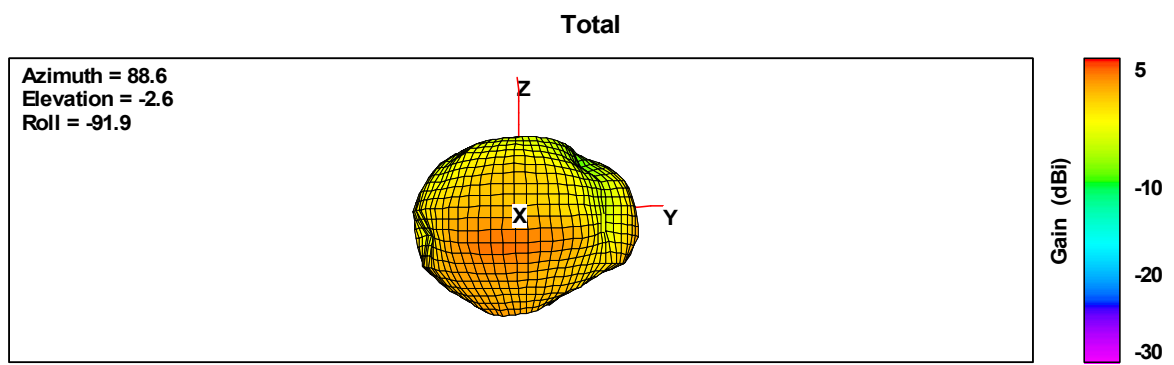
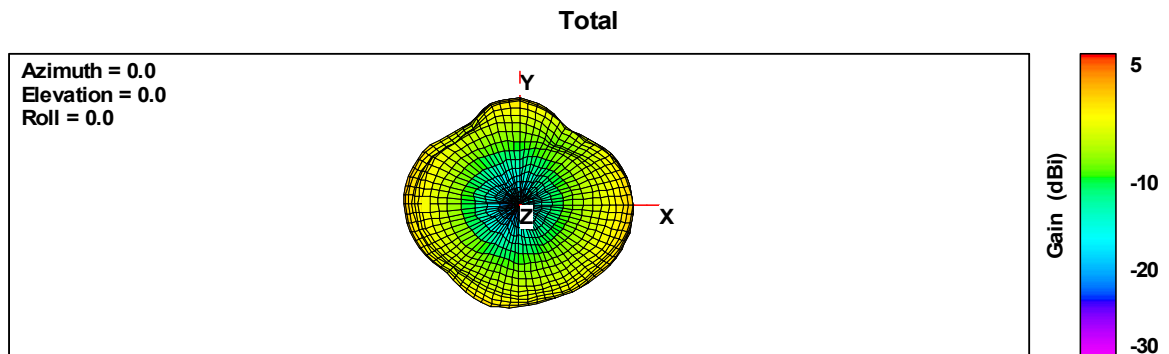
2.1 Maximum Gain

The following table lists the maximum Gain of the antenna, the free line of sight (LOS) range was measured with 2.4G

Maximum Gain	4.33 dBi
LOS range	240m
Antenna Size	15mm

3.1 3D Radiation Pattern

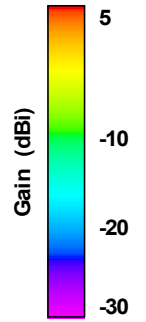
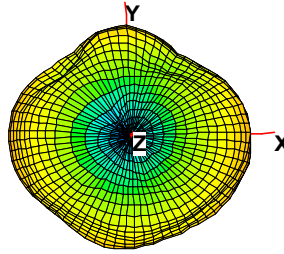
2440 MHz



2442 MHz

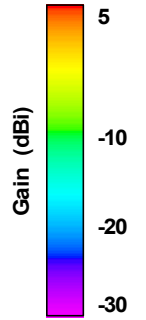
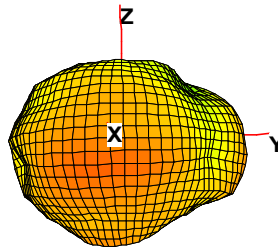
Total

Azimuth = -1.9
Elevation = 1.9
Roll = 0.8



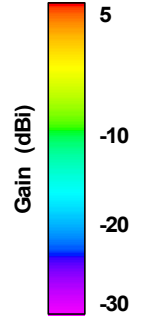
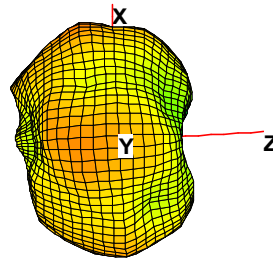
Total

Azimuth = 88.0
Elevation = -5.0
Roll = -95.4



Total

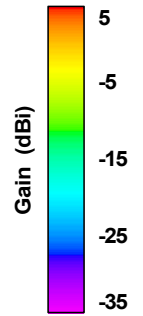
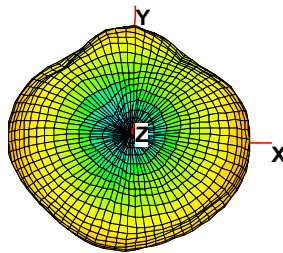
Azimuth = -6.9
Elevation = -88.2
Roll = 86.3



2480 MHz

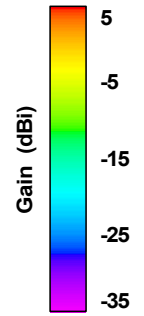
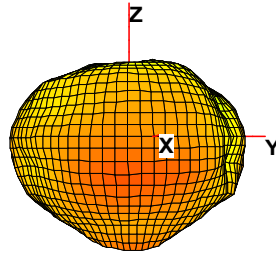
Total

Azimuth = 2.3
Elevation = 4.9
Roll = 1.4



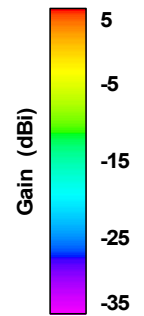
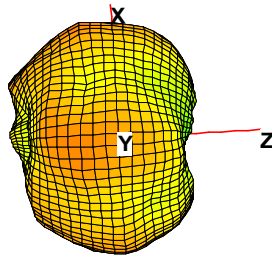
Total

Azimuth = 89.7
Elevation = 9.3
Roll = -90.4



Total

Azimuth = -6.9
Elevation = -88.2
Roll = 86.3



Gain

Frequency (MHz)	Efficiency(%)	Gain(dBi)
2400	70.60	3.91
2402	70.60	3.48
2404	72.30	3.89
2406	73.33	4.04
2408	74.85	4.07
2410	75.98	4.06
2412	77.74	4.13
2414	78.38	4.33
2416	78.75	3.97
2418	78.58	4.27
2420	77.16	4.32
2422	76.41	3.84
2424	75.04	4.02
2426	75.62	3.81
2428	75.17	4.00
2430	76.05	3.90
2432	76.39	3.84
2434	77.30	3.88

2436	78.71	4.06
2438	79.35	3.87
2440	80.92	4.26
2442	82.15	4.20
2444	82.14	4.23
2446	83.01	4.30
2448	82.11	4.15
2450	82.83	4.14
2452	83.45	4.16
2454	83.79	4.21
2456	83.95	4.19
2458	84.34	4.14
2460	85.77	4.20
2462	86.15	4.16
2464	86.81	4.07
2466	88.06	4.23
2468	87.84	4.20
2470	87.06	4.08
2472	86.87	4.21
2474	86.15	4.15
2476	86.59	4.23
2478	86.60	4.21
2480	87.17	4.29
2482	86.82	4.16
2484	86.82	4.14