

# 4-axis Helix BDS/GNSS Passive Antenna

**MODEL: TH-81i**



## 1.. GENERAL DESCRIPTION

Model No	P/N
TH-81i	TH81i-SMA(M)

Below is a table summarizing the antenna design specification.

### 1.1 Electrical Properties

Parameter	Description
Frequency Band	1559,1575,1602MHz
Nominal Impedance	50 ohm
Polarization	R.H.C.P. 4-axis Ceramic helix antenna
Admitted Power radiation	1W
V.S.W.R	2.0:1 Max
Antenna Peak Gain	4 dBi
Note: Gain includes the cable loss	


### 1.2 Mechanical Properties

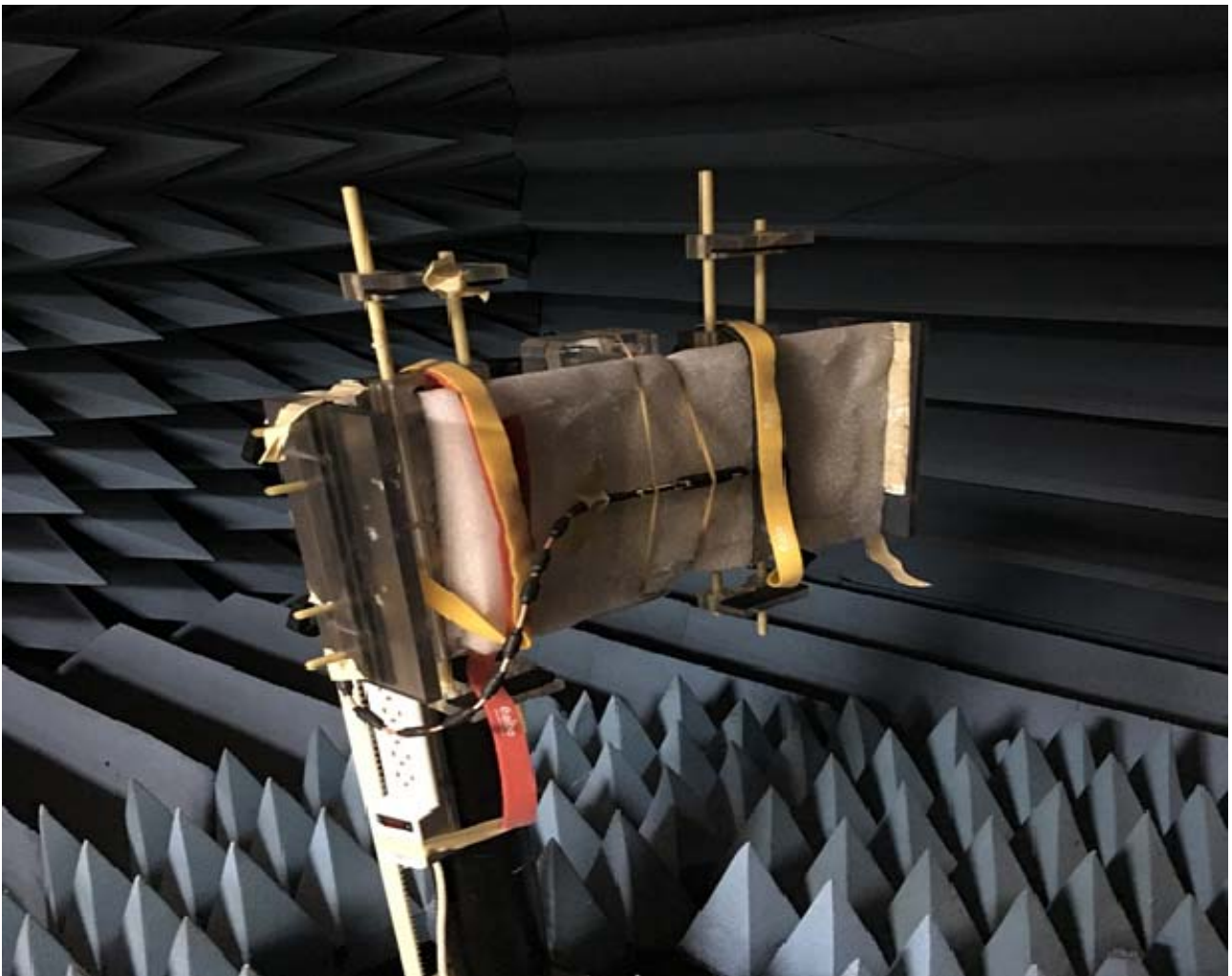
Parameter	Description
Antenna Type	External Antenna
Material	ASA-UV
Touch Type	Screw Type

Connector Type	SMA 180°(Male) OD10.0mm
Antenna Dimensions	OD9.3 x 58.8mm ±2
Antenna Color	Black
Operating Temperature Range	-40°C~+85°C
Storage Temperature Range	-40°C~+85°C

NO.	NAME	Q, TY
01	ASA-UV Tube	01
02	SMA(M)	01

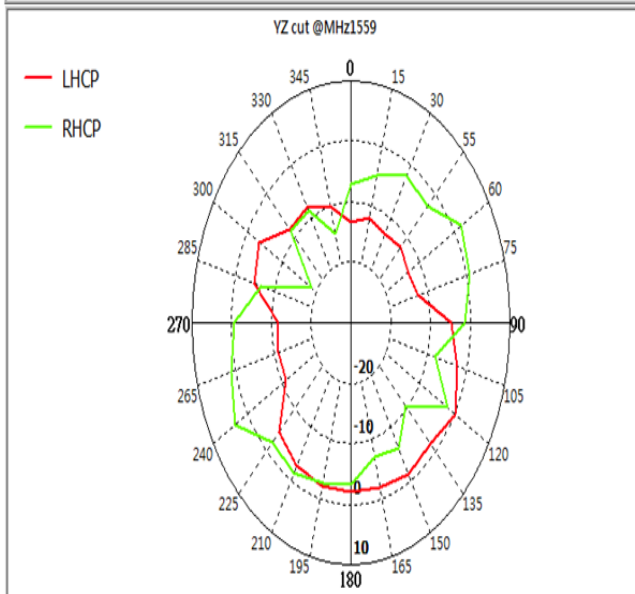
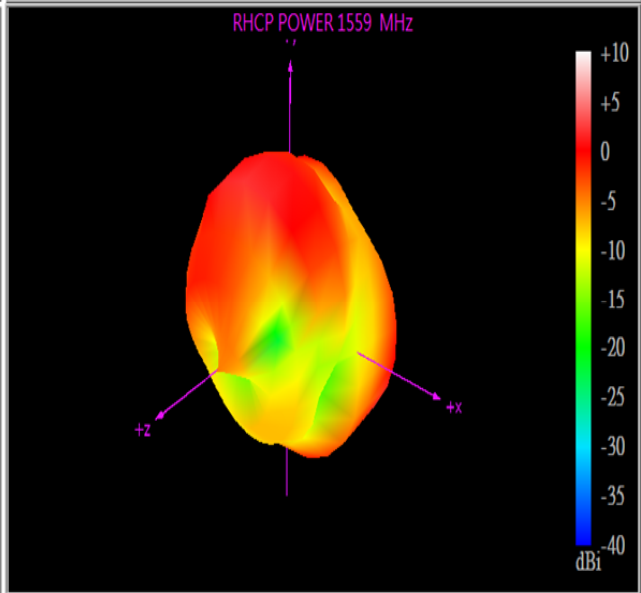
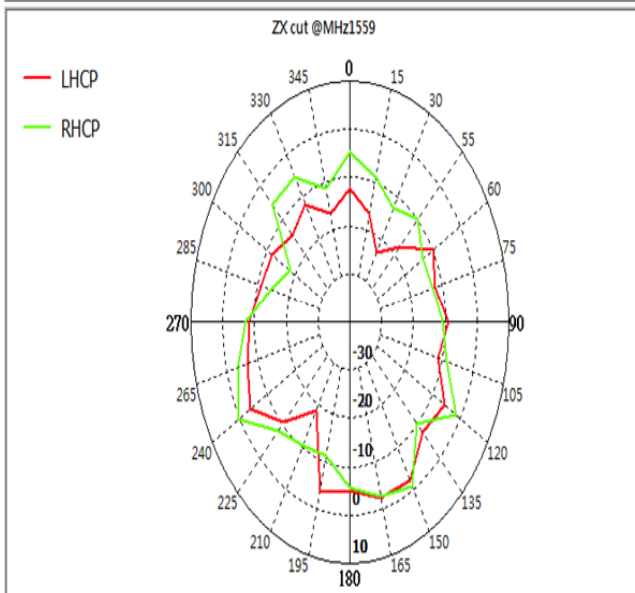
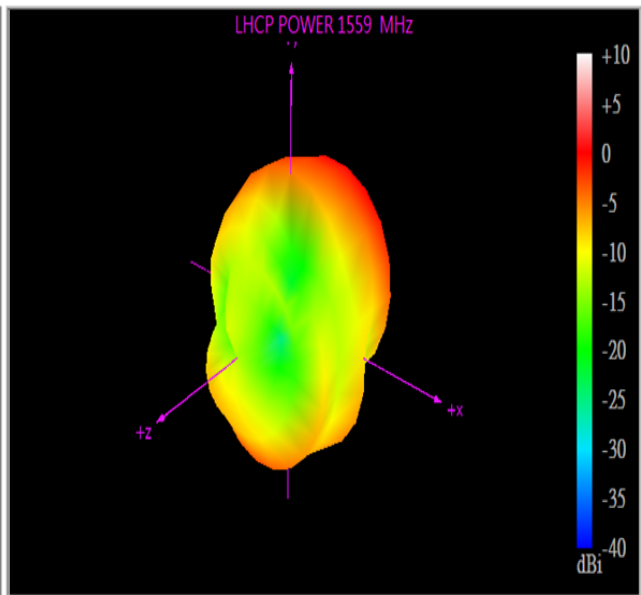
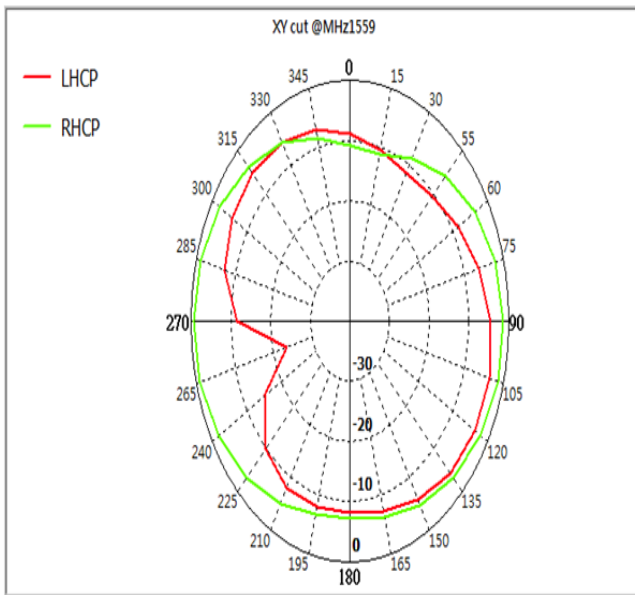


 Third angle projection	CUSTOMER'S	MODEL	PARTS NUMBER	FREQUENCY	UNIT	SCALE	DATE	VERSION
		TH-81i		1559~1602Mhz	M/M		20200602	1
	TOLERANCE	X.XX±0.15	NAME	PARTS NUMBER	APPROVED	CHECKED	DRAWING	DESIGNED
	SURFACE ROUGHNESS	$\frac{S}{\nabla}$	APPEARANCE					

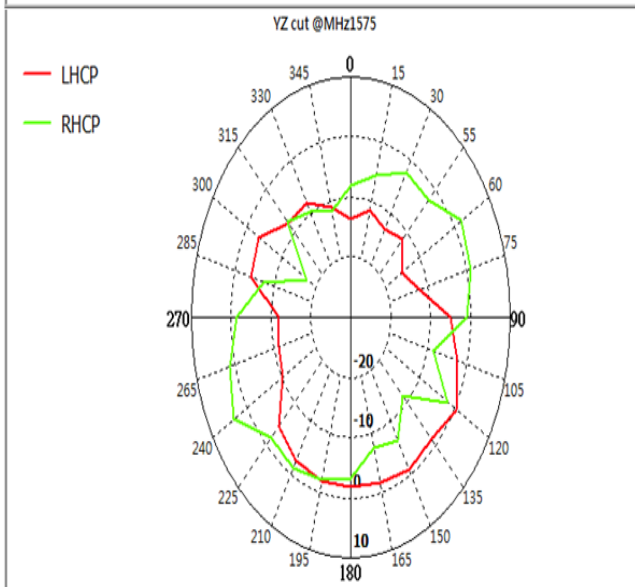
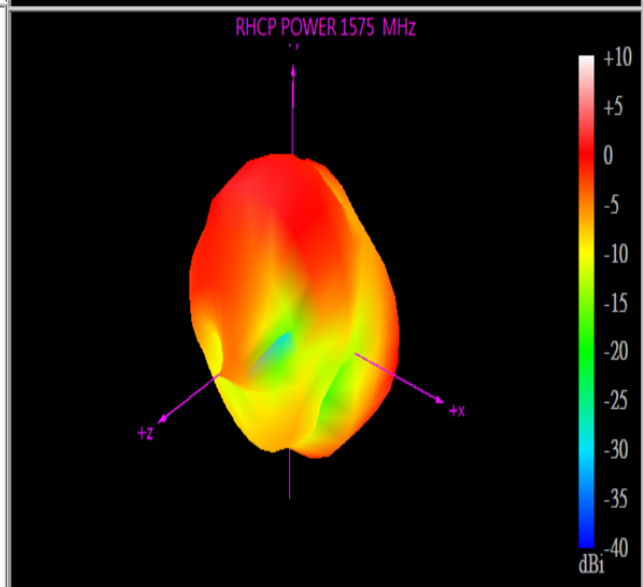
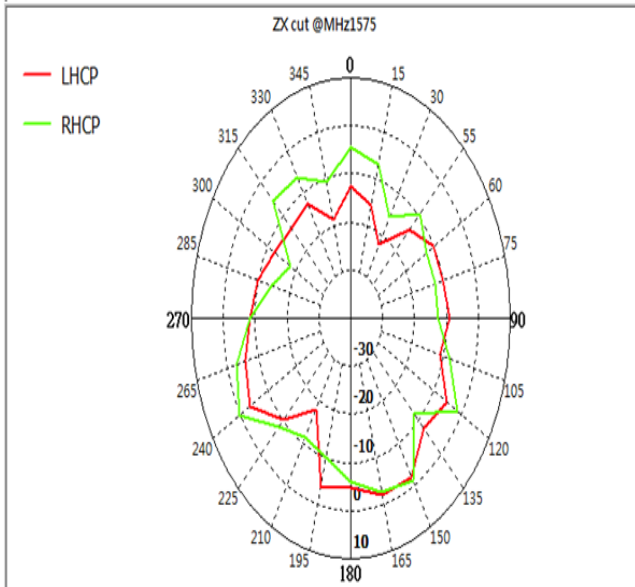
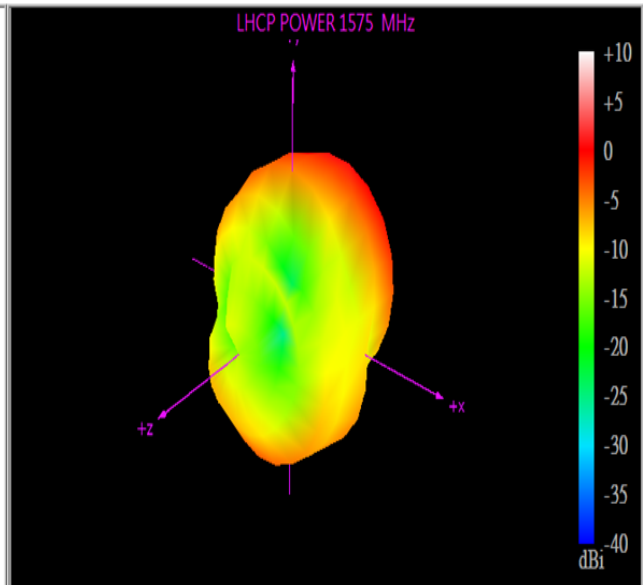
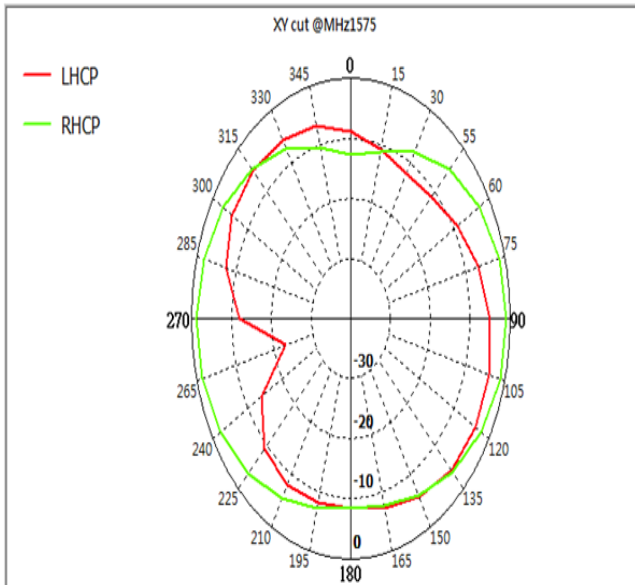


3D Total						
Frequency (MHz)	Upper Hem. PRP (dBm)	Lower HEM. PRP (dBm)	Efficiency (dB)	Efficiency (%)	Gain (dBi)	Tot. Rad.Pwr. (dBm)
1559 MHz	-6.03	-3.14	-1.34	73.53	4.37	-1.34
1561 MHz	-6.04	-3.12	-1.33	73.63	4.40	-1.33
1575 MHz	-6.17	-3.17	-1.40	72.37	4.39	-1.40
1602 MHz	-6.39	-3.17	-1.48	71.17	4.44	-1.48

# 1559Mhz :



# 1575Mhz:



# 1602Mhz:

