

# 2.4&5.8G Antenna

**MODEL: TH-2458L**



## 1. GENERAL DESCRIPTION

Model No
TH2458L-N(M)

Below is a table summarizing the antenna design specification.

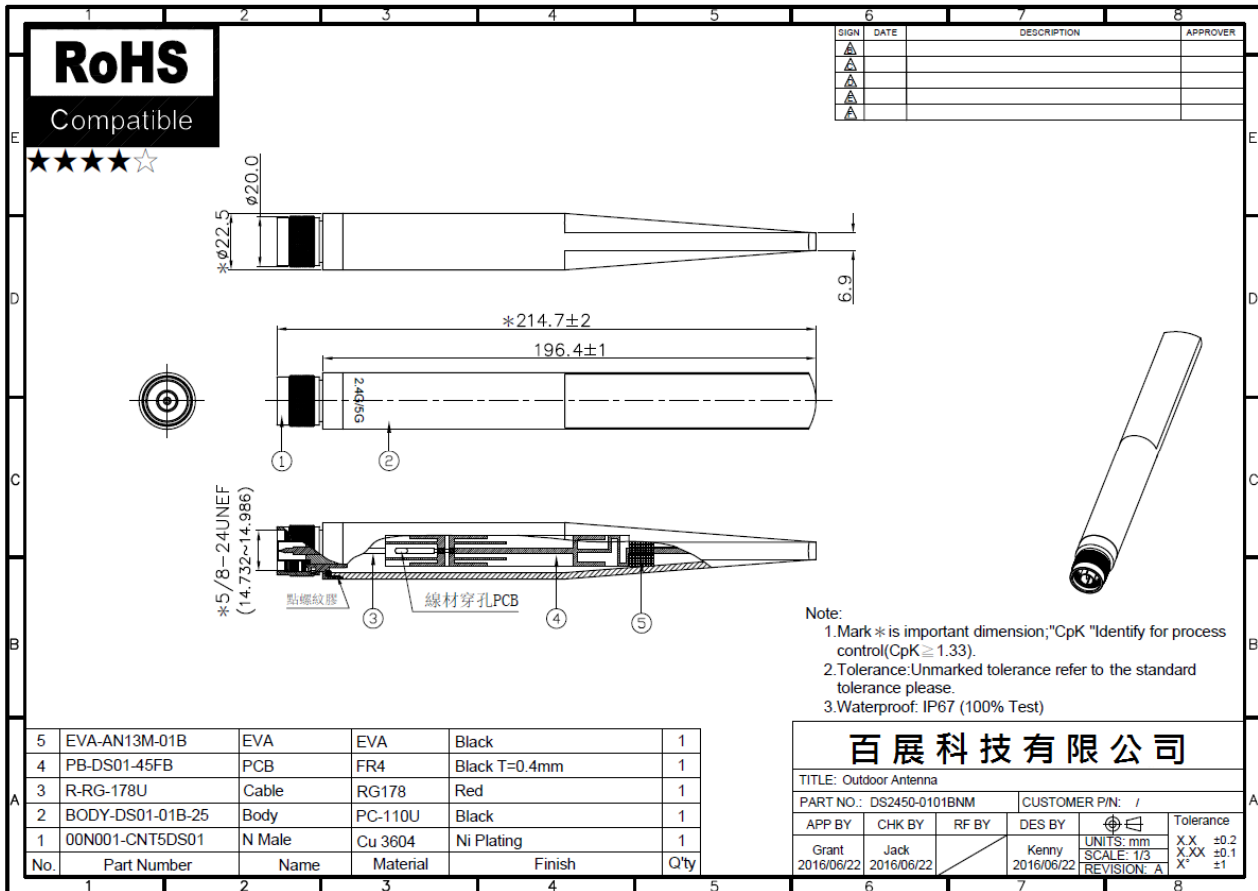
### 1.1 Electrical Properties

Parameter	Description
Frequency Band	2.4~2.5/5.1~5.85GHz
Nominal Impedance	50 ohm
Polarization	Vertical
Return Loss	Please See Data-1
V.S.W.R	3.0 : 1
Gain	3-5db

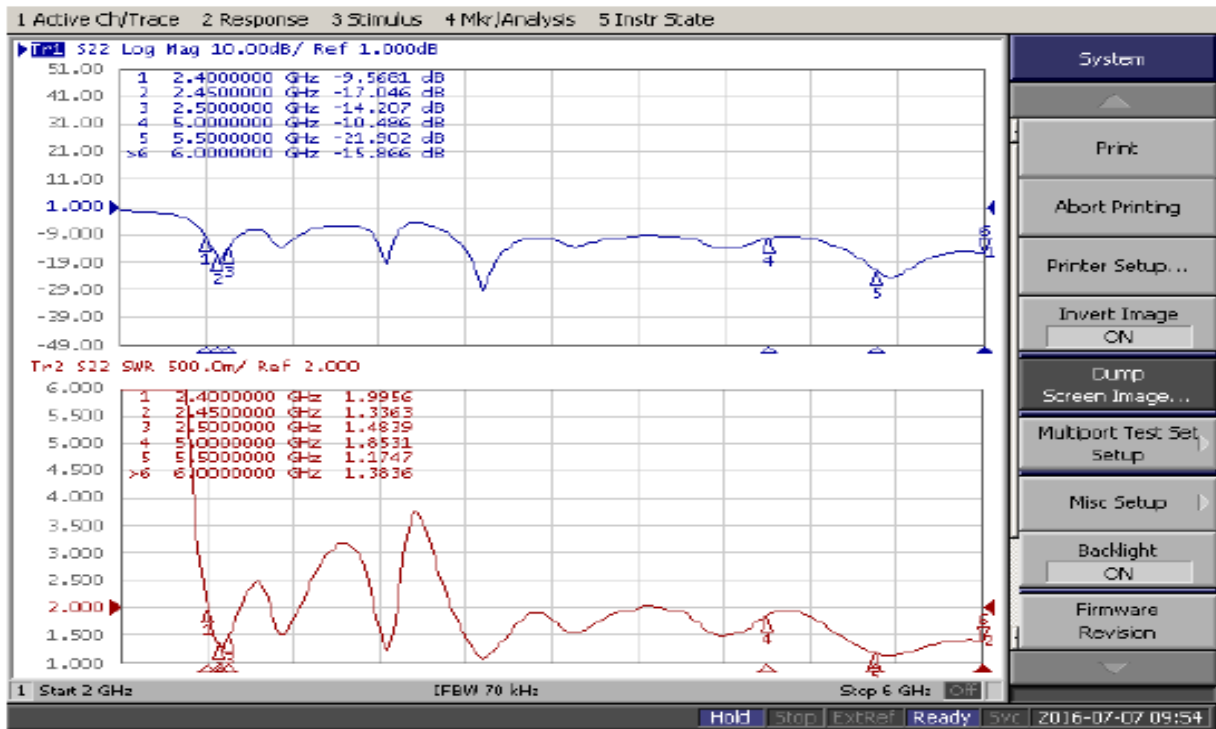
### 1.2 Mechanical Properties

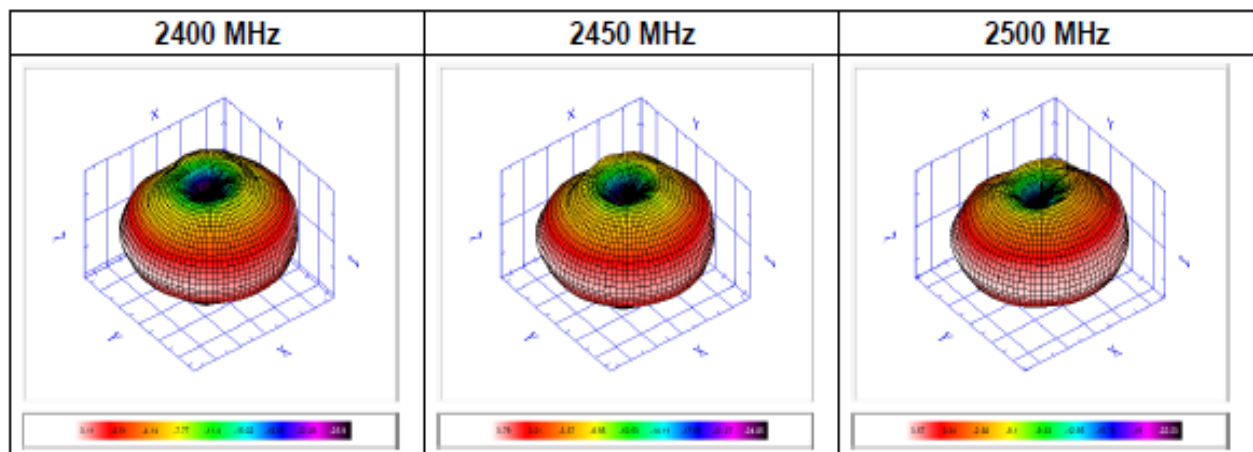
Parameter	Description
Antenna Type	External Antenna
Antenna Material	PC110U
Touch Type	Screw Type
Connector Type	N (Male)
Antenna Dimensions	OD22.5 x 214.7mm ±2
Antenna Color	White OR Black
Operating Temperature Range	-40°C~+80°C
Storage Temperature Range	-40°C~+80°C

## 2. Appearance

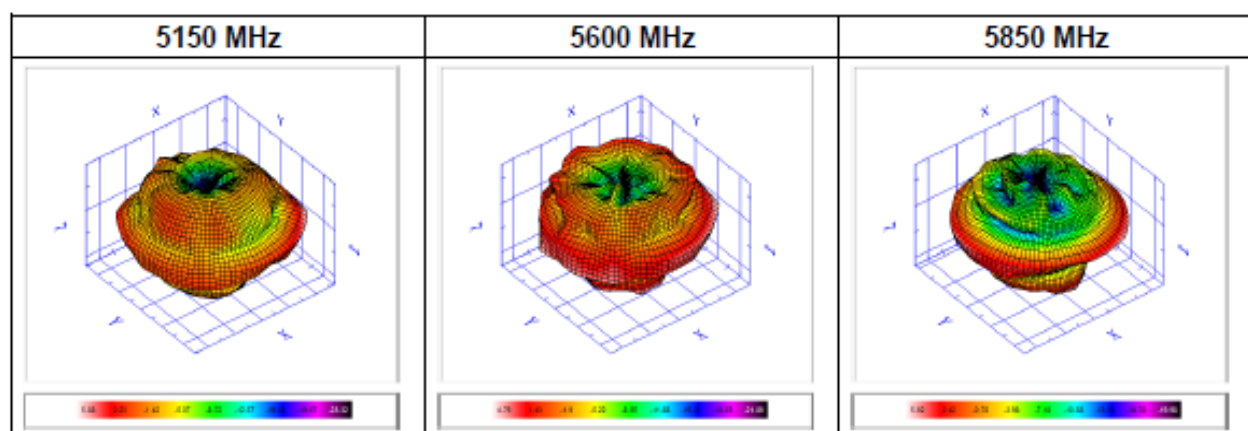


## 3. Frequency





Frequency	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
TRP (dBm)	-0.76	-0.58	-0.49	-0.31	-0.47	-0.54	-0.25	-0.34	-0.44	-0.62	-0.6
Peak EIRP (dBm)	3.11	3.38	3.6	4.04	3.77	3.79	4.11	4.02	3.67	3.49	3.57
NHPRP +/- 45 (degree)	-1.08	-0.89	-0.79	-0.58	-0.73	-0.8	-0.5	-0.59	-0.68	-0.84	-0.82
NHPRP +/- 30 (degree)	-1.57	-1.38	-1.26	-1.06	-1.2	-1.25	-0.94	-1.02	-1.09	-1.25	-1.2
E-Theta Peak Gain (dBi)	-14.41	-14.08	-14.19	-14.87	-15.93	-16.09	-14.88	-15.44	-14.69	-14.54	-14.85
E-Phi Peak Gain (dBi)	3.1	3.37	3.6	4.04	3.77	3.79	4.11	4.01	3.66	3.48	3.56
E-Total Peak Gain (dBi)	3.11	3.38	3.6	4.04	3.77	3.79	4.11	4.02	3.67	3.49	3.57
Directivity (dBi)	3.87	3.96	4.09	4.34	4.24	4.33	4.36	4.36	4.11	4.1	4.17
Efficiency (%)	83.95	87.45	89.43	93.2	89.75	88.33	94.39	92.38	90.39	86.76	87



Frequency	5150	5250	5350	5470	5600	5700	5725	5785	5800	5850
TRP (dBm)	-0.3	-0.09	-0.68	-0.09	-0.3	-0.65	-0.26	-0.85	-0.5	-0.07
Peak EIRP (dBm)	5.88	4.75	5.06	4.78	4.76	4.82	4.81	4.1	5.03	5.62
NHPRP +/- 45 (degree)	-1.1	-0.87	-1.39	-0.81	-1.09	-1.55	-1.18	-1.82	-1.5	-1.03
NHPRP +/- 30 (degree)	-2.13	-1.89	-2.36	-1.68	-1.7	-2.13	-1.73	-2.46	-2.14	-1.65
E-Theta Peak Gain (dBi)	-7.44	-5.47	-6.53	-4.49	-3.51	-2.11	-2.72	-2.07	-3.05	-0.12
E-Phi Peak Gain (dBi)	5.88	4.75	5	4.72	4.67	4.8	4.78	4.04	4.98	5.58
E-Total Peak Gain (dBi)	5.88	4.75	5.06	4.78	4.76	4.82	4.81	4.1	5.03	5.62
Directivity (dBi)	6.18	4.84	5.74	4.88	5.06	5.46	5.07	4.96	5.53	5.7
Efficiency (%)	93.35	97.96	85.52	97.88	93.33	86.13	94.17	82.13	89.09	98.37