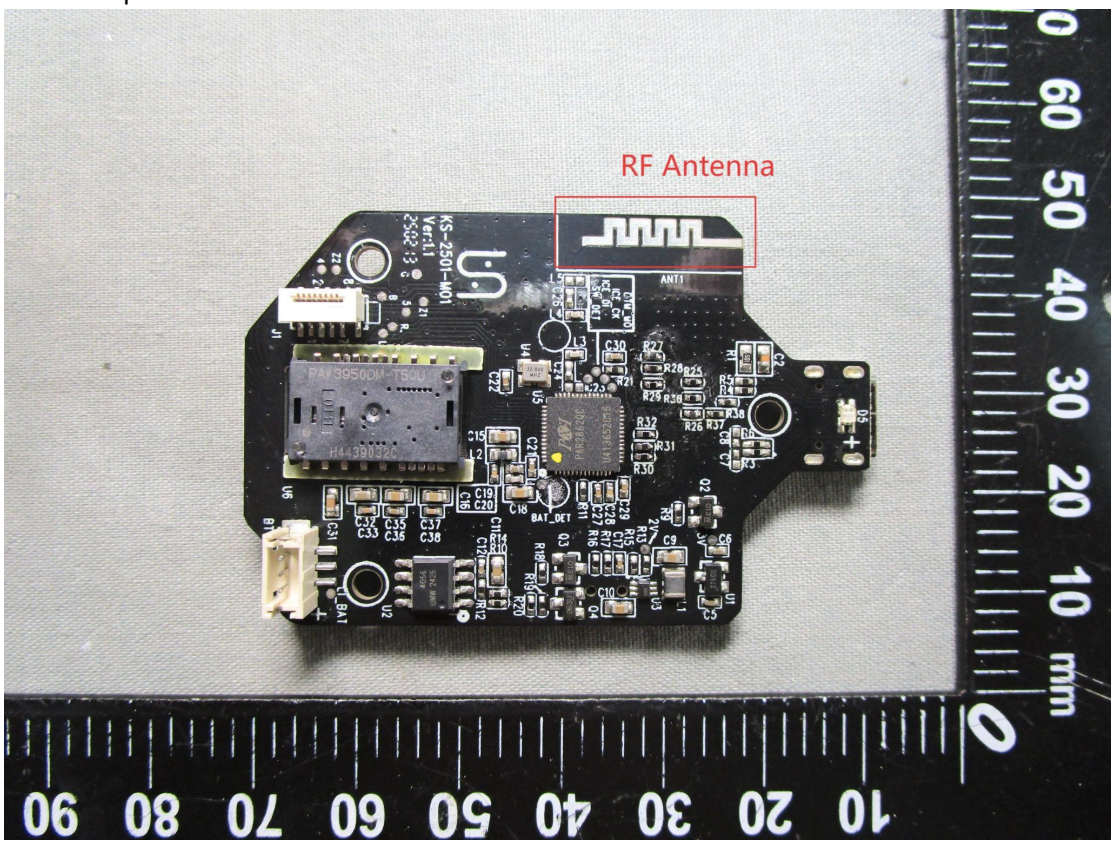
Manufacturer:VAXEE Corporation

Add:No. 61-3, Sec. 2, Jiayuan Rd., Shulin Dist., New Taipei City 23804 , Taiwan

Antenna specification



1. TEST CONDITIONS

1.1 Power supply (V)

Power supply (V) under test:

N/A

1.2 Temperature (°C)

Tn = +22 to +28

The subscript n indicates normal test conditions.

1.3 Test frequencies and Output Power

In all required operating bands the measurements for Total Radiated Power (TRP) and Total Isotropic Sensitivity (TIS) measurements were performed on lowest, middle and highest channels defined by the standard [1]. Continuum of channels across each supported band was performed for Intermediate Channel Sensitivity (ICS) tests.

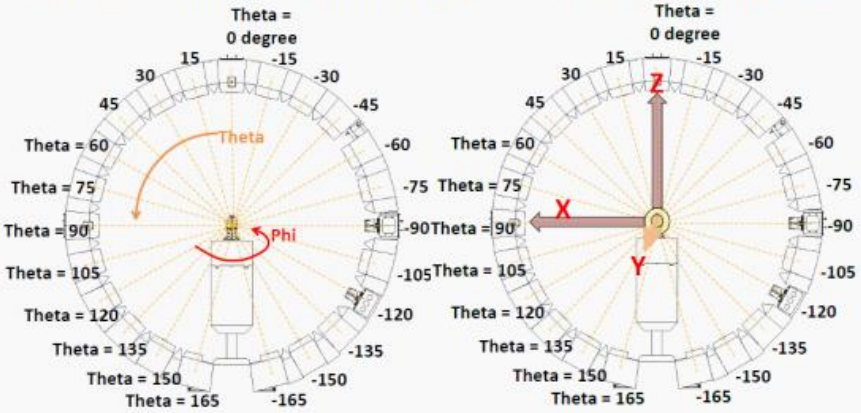
The output power of the device was set to maximum for all tests.

1.4 Device orientation and Setup Requirements

The EUT has only one mechanical configuration and it was tested in the scenario required by the standard [1]:

- "Free-space" configuration, whereby the EUT has been placed directly on a support.

The EUT is rotated along two different spherical axes: theta (θ) and phi (Φ). The relationship between the 3D Cartesian coordinate system (X, Y, Z) and the theta and phi axes is illustrated in the following figure.



- Locate the two rotational axes
  - Theta – the ring, multiple antennas
  - Phi – the turntable
- Define X,Y and Z directions
  - X – Theta = 90 degree

2. TEST RESULTS

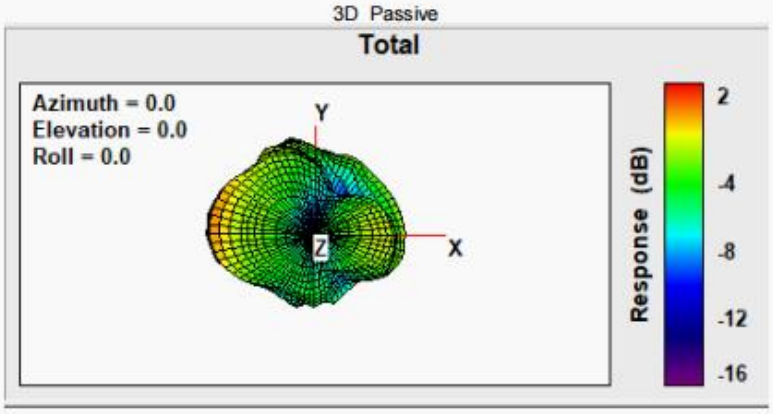
2.1 Summary

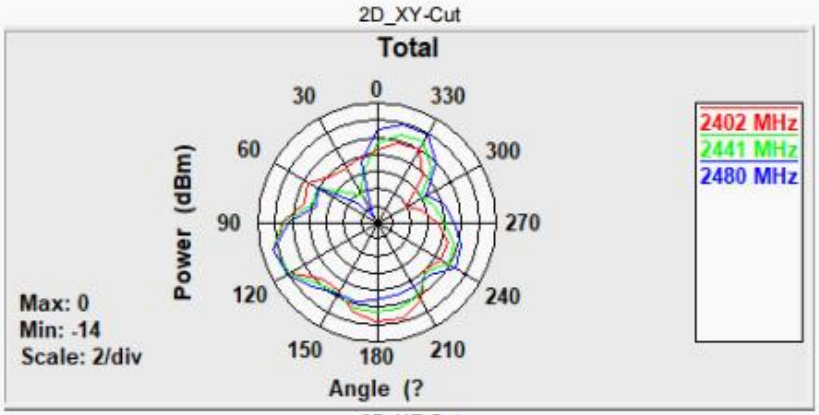
2.2 Antenna_Passive

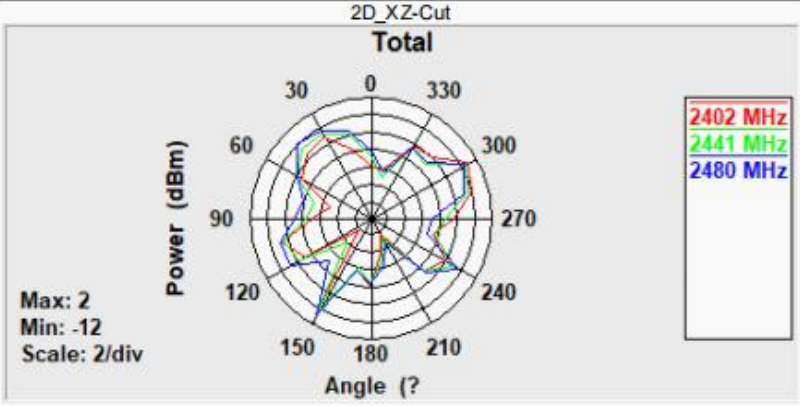
3D_Passive_2402MHz-2480MHz

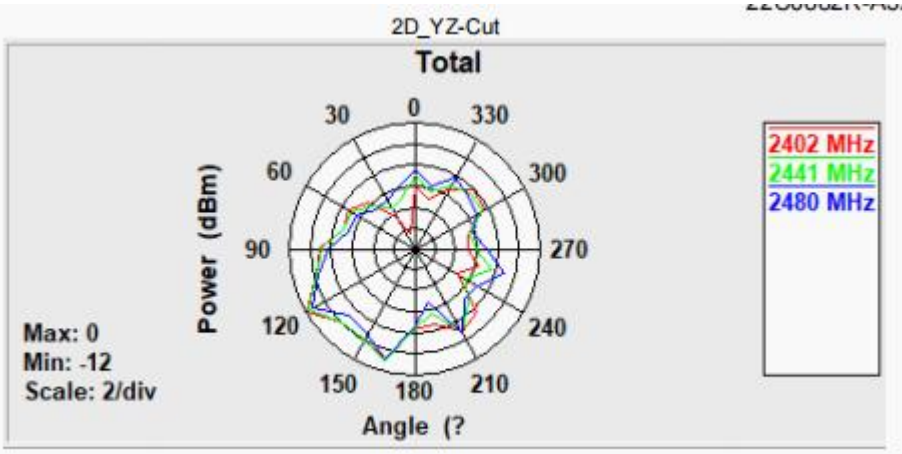
Frequency (MHz)	Tot. Rad. Pwr. (dBm)	Peak EIRP (dBm)	Directivity (dBi)	Efficiency (dB)	Efficiency (%)	Gain (dBi)	NHPRP ±Pi/4 (dBm)	NHPRP ±Pi/6 (dBm)
2402	-3.6	1.3	4.9	-3.6	43.2	1.3	-5.2	-6.8
2441	-3.5	0.7	4.2	-3.5	44.7	0.7	-5.0	-6.7
2480	-3.3	1.0	4.3	-3.3	47.1	1.0	-4.8	-6.5

2.3 3D Plots


3D_Passive
Total
Azimuth = 0.0
Elevation = 0.0
Roll = 0.0
Y
Z
X
Response (dB)
2
-4
-8
-12
-16


2D_XY-Cut
Total
Power (dBm)
0
30
330
60
300
90
270
120
240
150
180
210
Angle (?
2402 MHz
2441 MHz
2480 MHz
Max: 0
Min: -14
Scale: 2/div


2D_XZ-Cut
Total
Power (dBm)
0
30
330
60
300
90
270
120
240
150
180
210
Angle (?
2402 MHz
2441 MHz
2480 MHz
Max: 2
Min: -12
Scale: 2/div



2.4 PHOTOGRAPHS

Equipment under test:

• EUT front view:

2.5 Test Setup