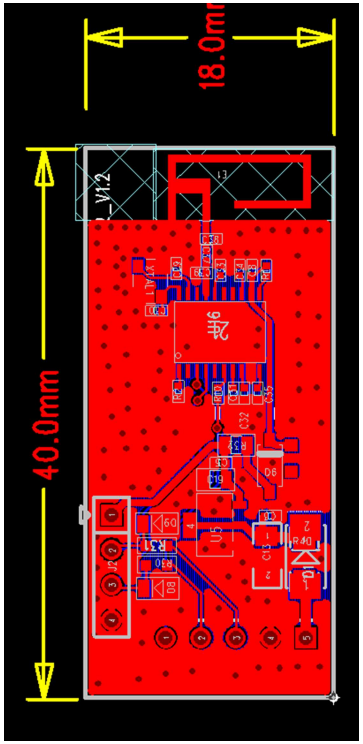
module antenna test report

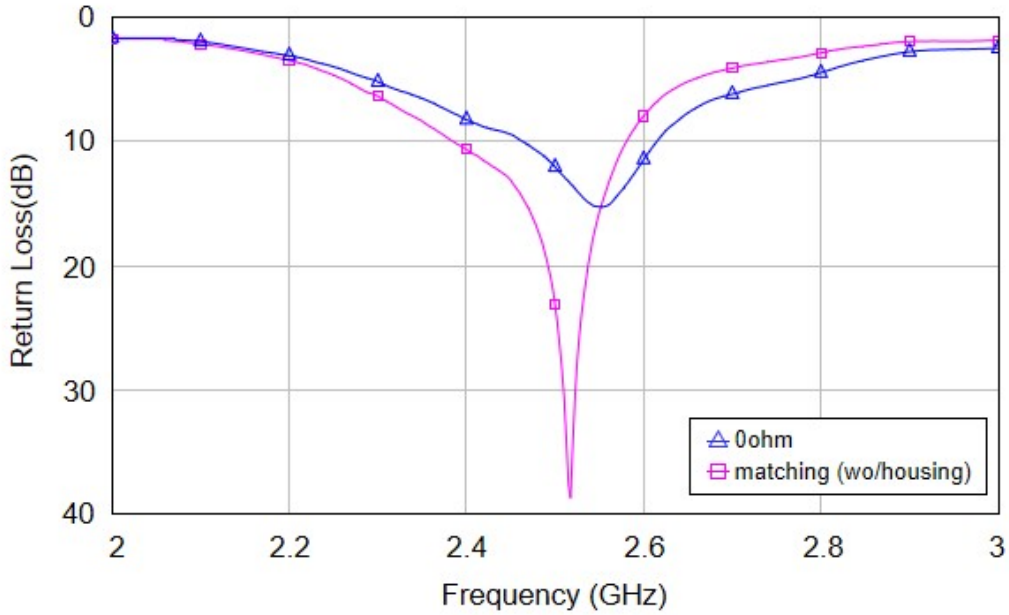
- **Antenna structure**



- **Photo**

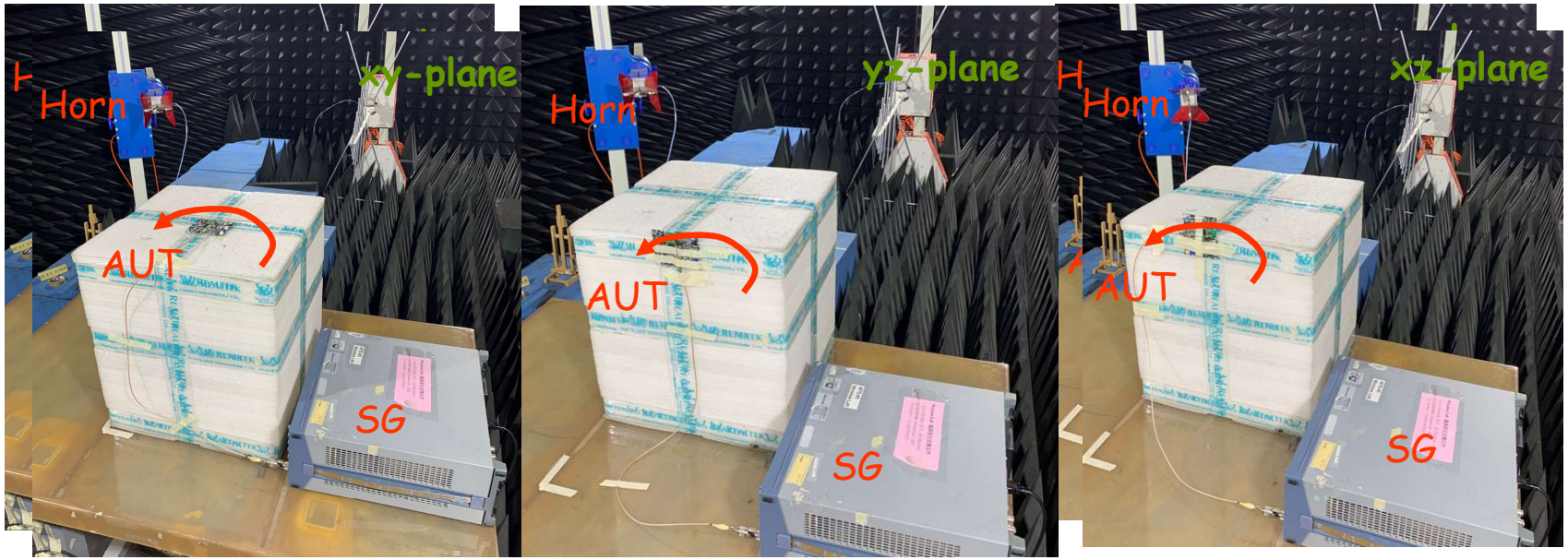
- **Return Loss**

10-dB BW	2.38~ 2.58 GHz



Radiation Patterns

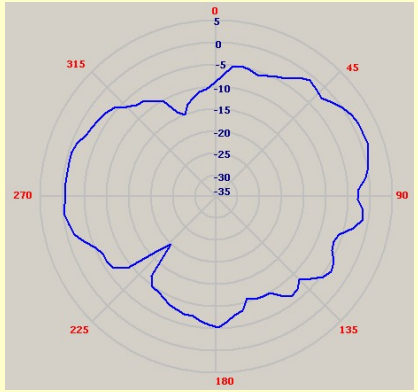
Frequency : 2400MHz, 2450MHz and 2480MHz
Test plane : xy-plane, xz-plane and yz-plane
Input power : SG 0dBm
Place: RTK 4F chamber
Horn h: horizontal polarization
Horn v: vertical polarization



Radiation Patterns — 2400MHz (2n2 wo/housing)

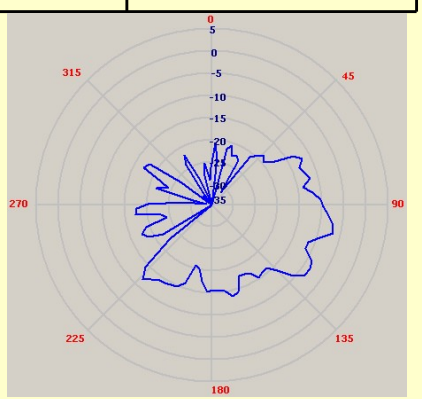
xy-plane

horizontal



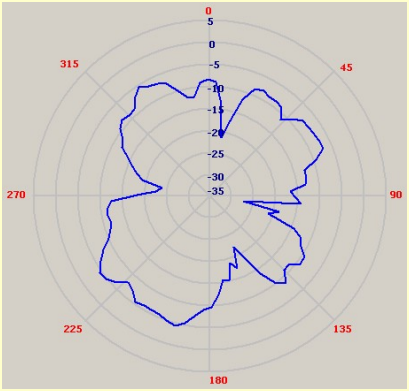
Pol.	Peak	avg.
h	+1.4	-3.6

vertical

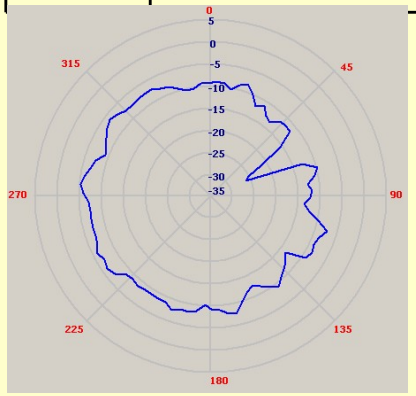


Pol.	peak	avg.
v	-6.9	-14.8

xz-plane

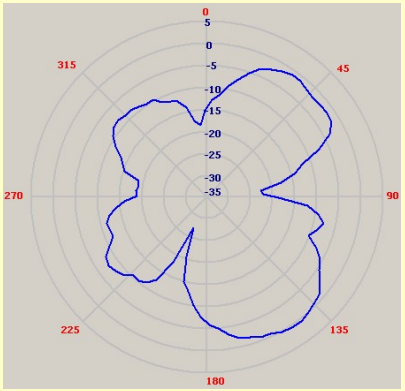


Pol.	peak	avg.
h	-4.6	-9.3

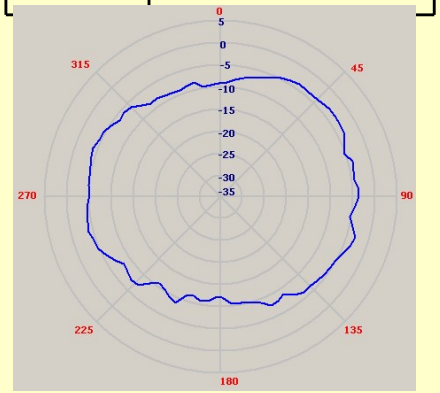


Pol.	peak	avg.
v	-5.4	-8.8

yz-plane



Pol.	peak	avg.
h	+0.4	-5.8

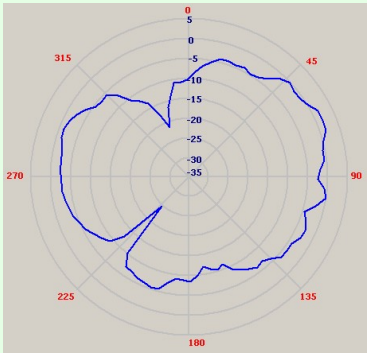


Pol.	peak	avg.
v	-3.2	-5.9

Radiation Patterns — 2450MHz (2n2 wo/housing)

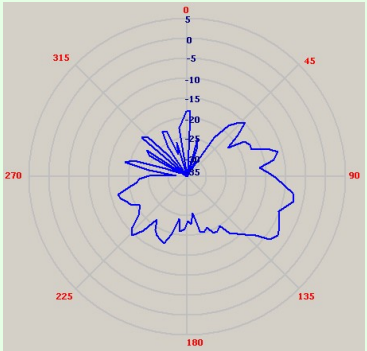
xy-plane

horizontal



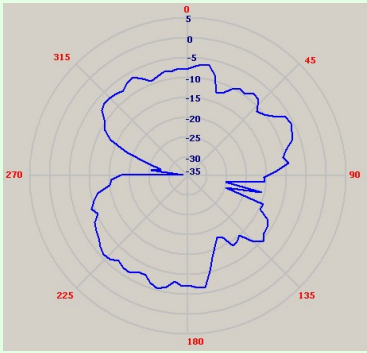
Pol.	Peak	avg.
h	+1.5	-3.8

vertical

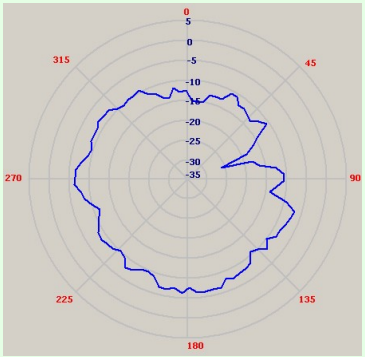


Pol.	peak	avg.
v	-7.5	-15.8

xz-plane

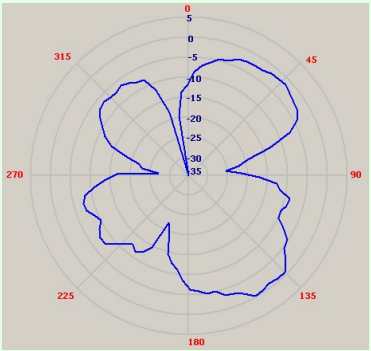


Pol.	peak	avg.
h	-5.7	-9.0

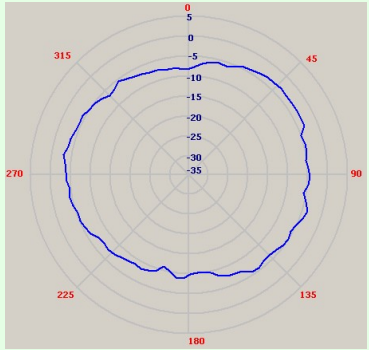


Pol.	peak	avg.
v	-6.4	-9.4

yz-plane



Pol.	peak	avg.
h	-0.5	-6.2

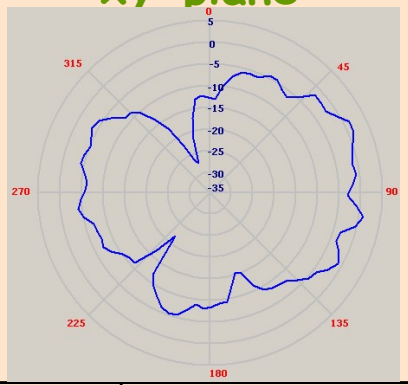


Pol.	peak	avg.
v	-3.3	-5.5

Radiation Patterns — 2480MHz (2n2 wo/housing)

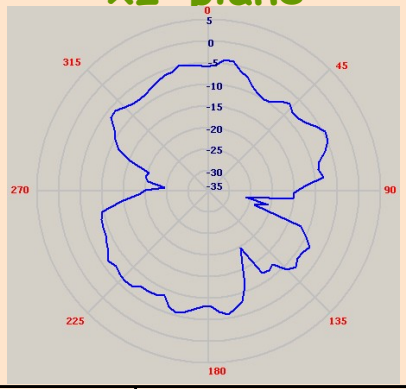
horizontal

xy-plane



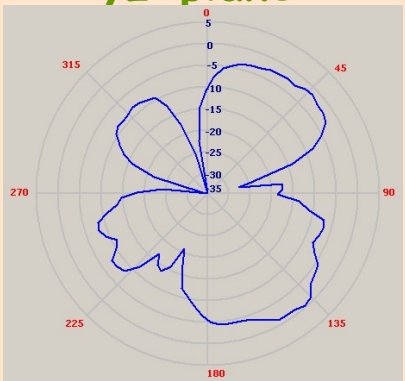
Pol.	Peak	avg.
h	+1.1	-4.9
v	-7.1	-15.4

xz-plane



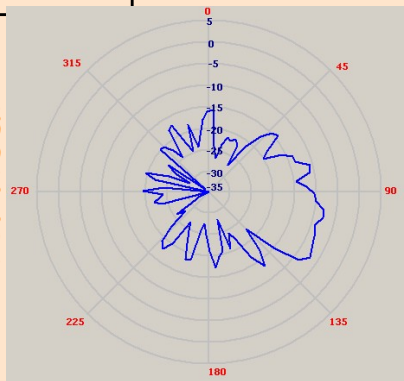
Pol.	peak	avg.
h	-4.4	-7.9
v	-4.4	-8.1

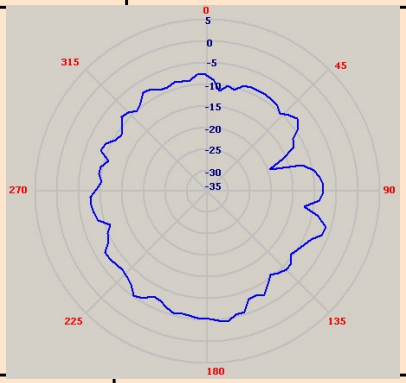
yz-plane

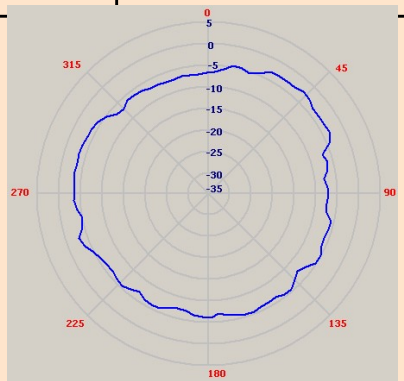


Pol.	peak	avg.
h	-0.6	-6.3
v	-2.1	-4.8

vertical







Antenna gain table

Freq.	2400MHz												
Plane	*xy*-plane				*xz*-plane				*yz*-plane				Efficiency (%)
Pol.	h		v		h		v		h		v		
Gain (dBi)	peak	avg.	peak	avg.	peak	avg.	peak	avg.	peak	avg.	peak	avg.	
	+1.4	-3.6	-6.9	-14.8	-4.6	-9.3	-5.4	-8.8	+0.4	-5.8	-3.2	-5.9	41.3

Freq.	2450MHz												
Plane	*xy*-plane				*xz*-plane				*yz*-plane				Efficiency (%)
Pol.	h		v		h		v		h		v		
Gain (dBi)	peak	avg.	peak	avg.	peak	avg.	peak	avg.	peak	avg.	peak	avg.	
	+1.5	-3.8	-7.5	-15.8	-5.7	-9.0	-6.4	-9.4	-0.5	-6.2	-3.3	-5.5	40.1

Freq.	2480MHz												
Plane	*xy*-plane				*xz*-plane				*yz*-plane				Efficiency (%)
Pol.	h		v		h		v		h		v		
Gain (dBi)	peak	avg.	peak	avg.	peak	avg.	peak	avg.	peak	avg.	peak	avg.	
	+1.1	-4.9	-7.1	-15.4	-4.4	-7.9	-4.4	-8.1	-0.6	-6.3	-2.1	-4.8	41.1