Product specification

WIFI	
Frequency Band	5150 ~ 5850MHz
Interface	SDIO1.1/2.0/3.0
Size	17mm*17mm*2.4mm
Operating	-40℃~+85℃
Storage Temperature	-55℃~+125℃
VBAT	3.3V
VDD_PIO	1.8V or 3.3V
Working current	350mA
Max current	<700mA
Humidity	Operating Humidity 60% to 85% Non-Condensing

All the technical data and information contained herein are subject to change without prior notice

## Antenna Layout & module on the system board
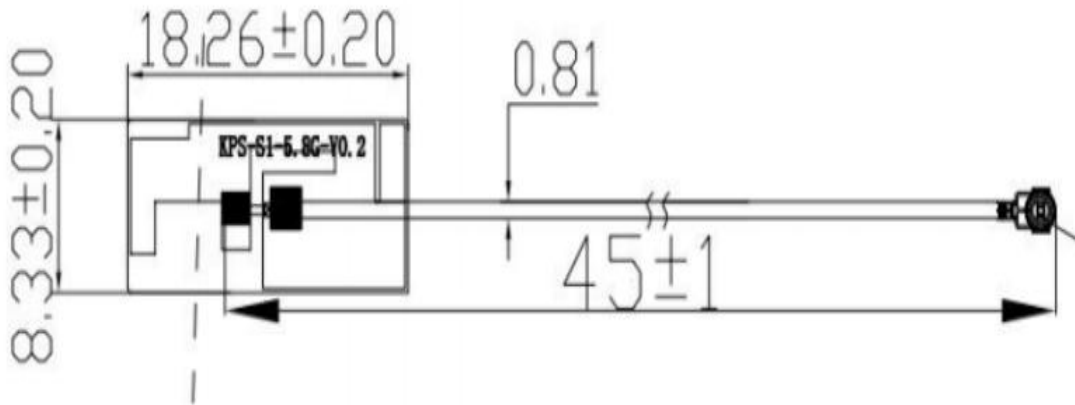
Antenna Gain

Efficiency Table

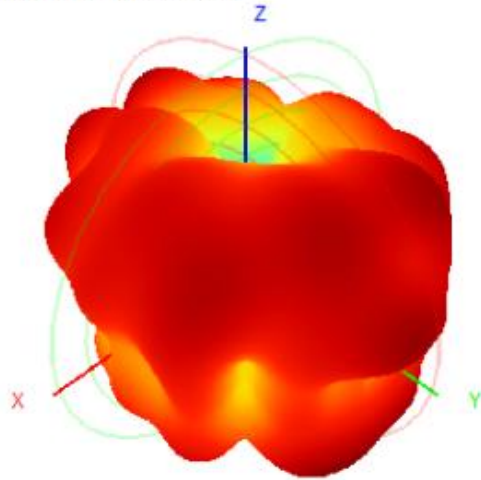| Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Frequency (MHz)	5150.0	5200.0	5250.0	5300.0	5350.0	5400.0	5450.0	5500.0	5550.0	5600.0	5650.0	5700.0	5750.0	5800.0	5850.0
Efficiency (dBi)	-4.17	-4.34	-4.36	-4.62	-5.48	-6.53	-8.11	-9.19	-8.89	-8.61	-8.51	-7.97	-7.72	-7.78	-7.52
Gain (dBi)	1.71	1.49	2.27	1.79	0.72	0.38	-1.46	-2.81	-2.18	-1.88	-2.22	-1.58	-1.57	-1.35	-0.99
Efficiency (%)	38.30	36.80	36.65	34.51	28.28	22.21	15.45	12.05	12.91	13.76	14.10	15.96	16.90	16.66	17.71
Directivity (dB)	5.87	5.83	6.63	6.41	6.20	6.92	6.65	6.38	6.72	6.74	6.29	6.39	6.16	6.44	6.52
Peak Gain Position (Theta)	116.00	116.00	115.00	115.00	115.00	115.00	115.00	115.00	116.00	116.00	116.00	116.00	114.00	116.00	116.00
Peak Gain Position (Phi)	73.00	72.00	69.00	70.00	99.00	72.00	70.00	98.00	73.00	73.00	73.00	73.00	99.00	72.00	70.00
Efficiency ThetaPol (%)	28.20	25.80	26.17	25.25	19.16	14.99	10.70	7.86	8.41	9.21	9.45	10.54	10.99	11.07	11.90
Efficiency PhiPol (%)	10.10	11.00	10.48	9.26	9.12	7.23	4.75	4.19	4.49	4.56	4.65	5.42	5.91	5.58	5.81
Upper Hem. Efficiency (%)	23.99	22.51	21.93	20.92	16.37	12.64	8.70	6.50	7.06	7.56	7.60	8.50	8.93	8.75	9.33
Lower Hem. Efficiency (%)	14.31	14.29	14.72	13.59	11.92	9.57	6.75	5.55	5.84	6.21	6.50	7.46	7.97	7.91	8.38

7-2-5. 3D Efficiency vs. Frequency
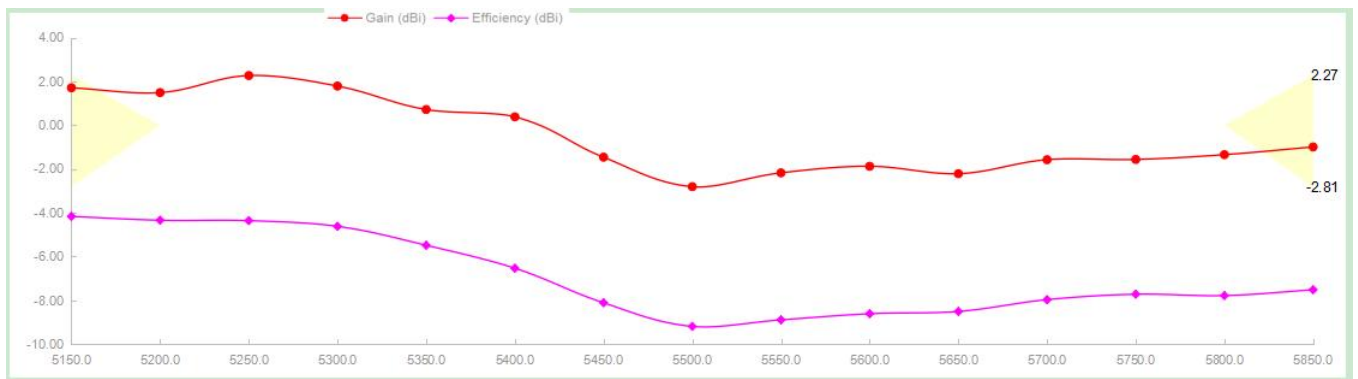
The Environment of Antenna Radiation Pattern
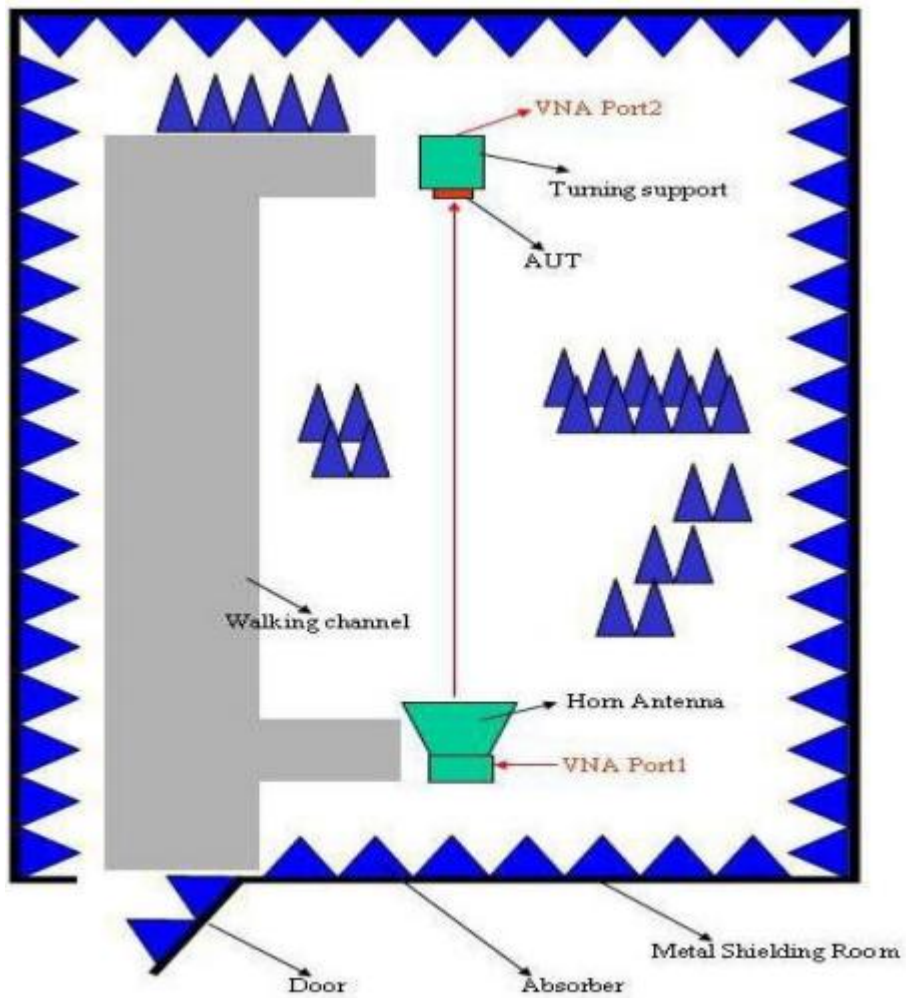
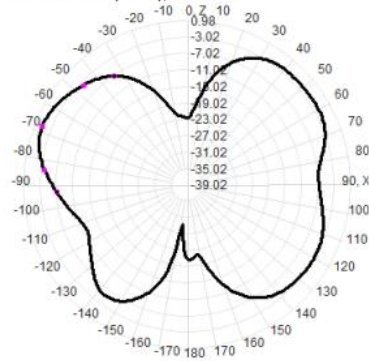## 5150~5850 MHz Band

3D Gain Pattern @ 5150 MHz (unit: dBi)
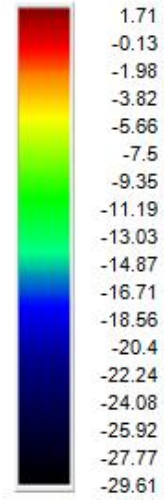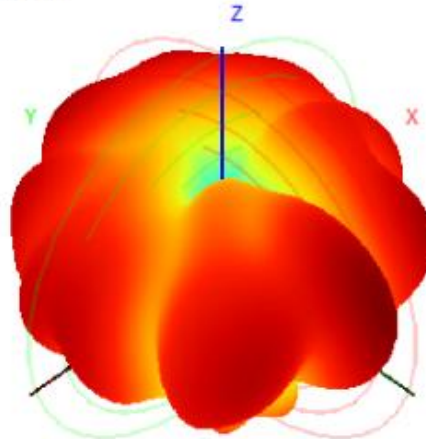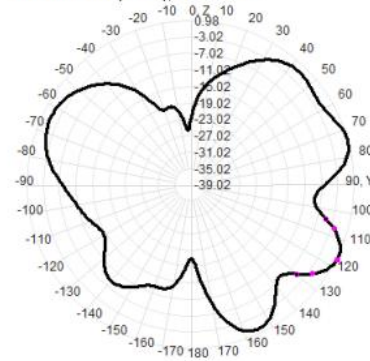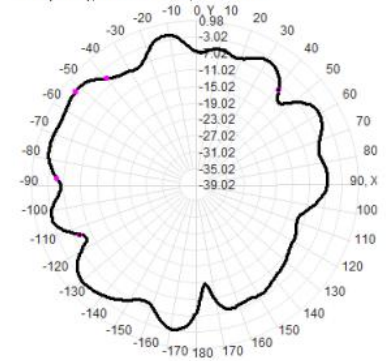
3D Gain Pattern @ 5550 MHz (unit: dBi)

5550.0MHz H+V, Eff: 12.9%

Back View

-2.18	-13.23
-4.02	-15.07
-5.86	-16.91
-7.7	-18.76
-9.54	-20.6
-11.39	-22.44
	-24.28
	-26.12
	-27.97
	-29.81
	-31.65
	-33.49

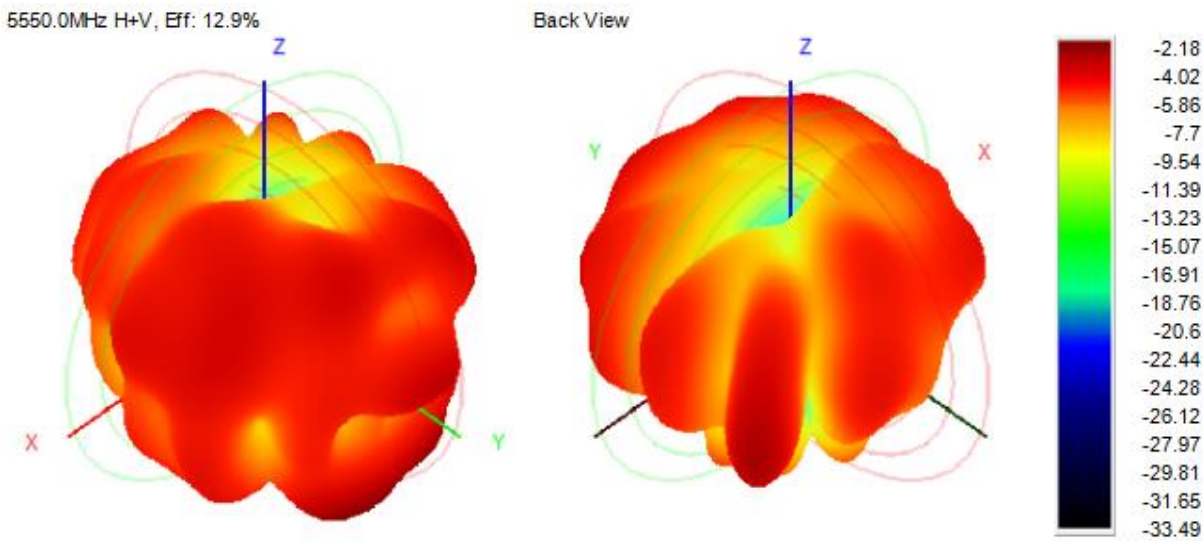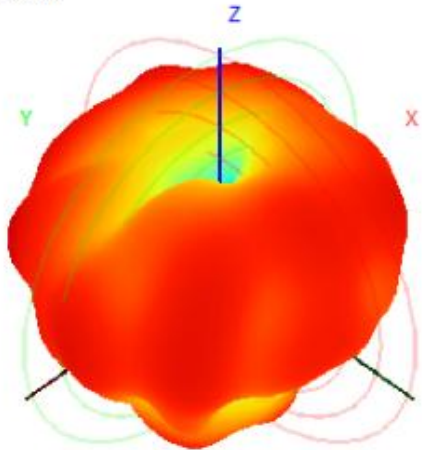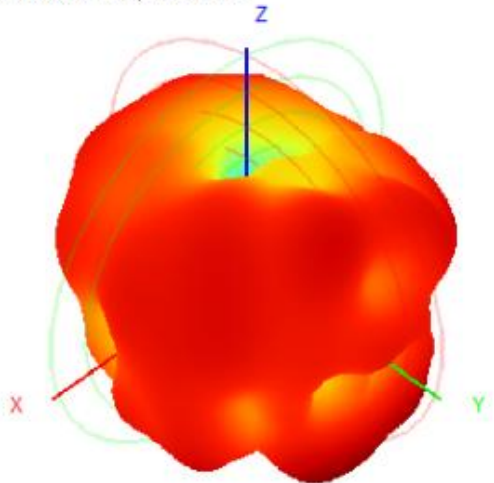5550.0MHz Total(E1-XZ), Max= -7.34dBi

5550.0MHz Total(E2-YZ), Max= -2.98dBi

Total(H-XY), Max= -4.72dBi, CirD=14.28
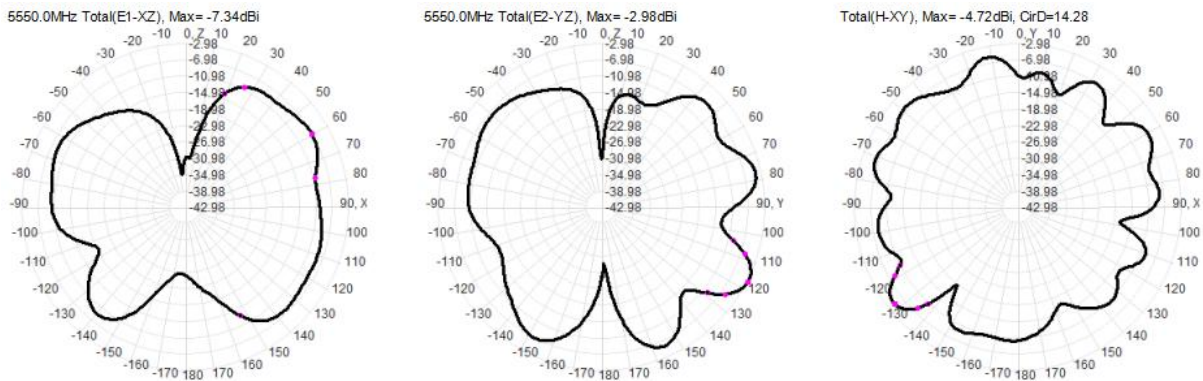
3D Gain Pattern @ 5850 MHz (unit: dBi)

5850.0MHz H+V, Eff: 17.7%

Back View

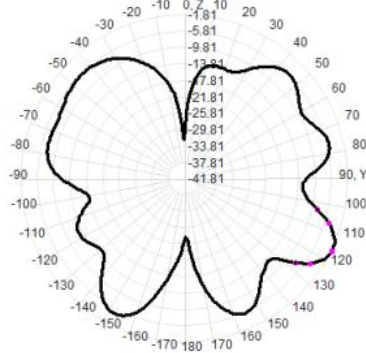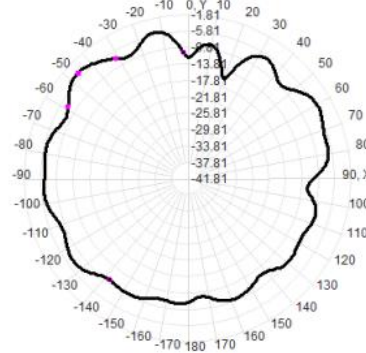|	
-0.99	
-2.84	
-4.68	
-6.52	
-8.36	
-10.2	
-12.05	
-13.89	
-15.73	
-17.57	
-19.41	
-21.26	
-23.1	
-24.94	
-26.78	
-28.62	
-30.47	
-32.31	

5850.0MHz Total(E1-XZ), Max= -5.53dBi
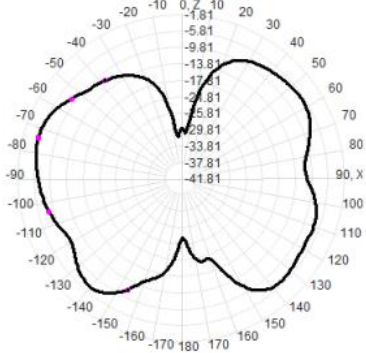
5850.0MHz Total(E2-YZ), Max= -1.81dBi

Total(H-XY), Max= -4.66dBi, CirD=11.28

V.S.W.R.