



BEC ANT 5G FR1
BEC 5G FR1 Antenna

Support Band	LTE	1,2,3,4,5,7,8,11,12,13,14,17,18,19,20,26,28,71,25,39,30 27,29,32,34,38,40,41,42,43,46
	CBRS	48
	5G FRI	n1,n2,n3,n5,n7,n14,n28,n30,n41,n66,n71,n78,n79

Environmental & Mechanical Characteristics

Temperature	-30°C to +70°C
Humidity	95% @55°C
Antenna Housing Color	Black
Antenna Housing Material	PC
Weight	52.0 g
Dimensions	210.0(L)x42.0(W)x13.0(OD)mm

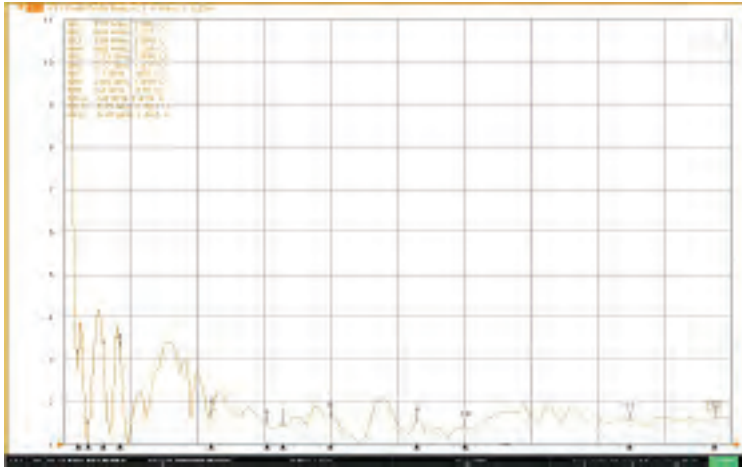


RF Specification (Straight)

Frequency Range	617~960	1427~1559	1710~2200	2300~2690	3300~3800	4400~5000	5150~5850
Polarization	Linear, Vertical						
HPBW / H plane	360°						
HPBW / V plane	60°						
Peak Gain	2.1 dBi max.	1.3 dBi max.	3.3 dBi max.	3.4 dBi max.	3.7 dBi max.	4.0 dBi max.	4.8 dBi max.
Efficiency	36% min.	51% min.	64% min.	71% min.	77% min.	62% min.	68% min.
VSWR	4.0 max.:1			2.5 max.:1			
Power Handling	2W(cw)						
Impedance	50 Ohms						
Connector	SMA Plug						

Performance Summary (Straight) VSWR

Frequency Range	617~960	1427~1559	1710~2200	2300~2690	3300~3800	4400~5000	5150~5850
VSWR	4.0 max.:1			2.5 max.:1			



Gain Table

Frequency (MHz)	3D		
	Efficiency	Avg. Gain	Peak Gain
617	57%	-2.4	-1.0
652	74%	-1.3	1.0
663	74%	-1.3	1.1
698	60%	-2.2	1.4
710	59%	-2.3	1.9
734	57%	-2.5	1.9
751	60%	-2.2	2.1
768	59%	-2.3	1.9
798	53%	-2.8	1.3
824	44%	-3.6	0.9
849	38%	-4.3	1.0
869	36%	-4.4	1.3
894	38%	-4.2	1.6
925	40%	-3.9	1.6
960	41%	-3.9	1.6

Frequency (MHz)	3D		
	Efficiency	Avg. Gain	Peak Gain
1427	57%	-2.5	-0.1
1447	59%	-2.3	0.2
1475	59%	-2.3	0.4
1496	59%	-2.3	0.7
1517	54%	-2.7	1.3
1559	51%	-3.0	0.5

Frequency (MHz)	3D		
	Efficiency	Avg. Gain	Peak Gain
1710	64%	-2.0	1.3
1805	70%	-1.6	1.8
1880	76%	-1.2	2.4
1920	76%	-1.2	2.3
2110	82%	-0.9	2.8
2170	83%	-0.8	3.2
2200	83%	-0.8	3.3

Frequency (MHz)	3D		
	Efficiency	Avg. Gain	Peak Gain
2300	78%	-1.1	2.9
2350	77%	-1.1	2.6
2400	76%	-1.2	2.3
2500	73%	-1.4	2.4
2595	71%	-1.5	3.0
2690	73%	-1.4	3.4

Frequency (MHz)	3D		
	Efficiency	Avg. Gain	Peak Gain
3300	82%	-0.8	3.7
3400	78%	-1.1	3.2
3550	77%	-1.1	2.5
3600	80%	-1.0	2.5
3700	77%	-1.1	2.8
3800	79%	-1.0	3.3

Frequency (MHz)	3D		
	Efficiency	Avg. Gain	Peak Gain
4400	68%	-1.7	3.2
4499	66%	-1.8	3.1
4800	62%	-2.0	4.0
4900	67%	-1.7	3.9
5000	67%	-1.7	3.0

Frequency (MHz)	3D		
	Efficiency	Avg. Gain	Peak Gain
5150	68%	-1.7	2.7
5500	73%	-1.4	3.1
5850	71%	-1.5	4.8

Gain Table

Peak Gain

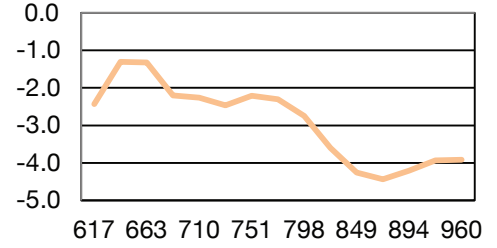
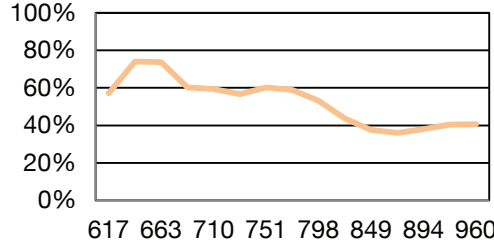
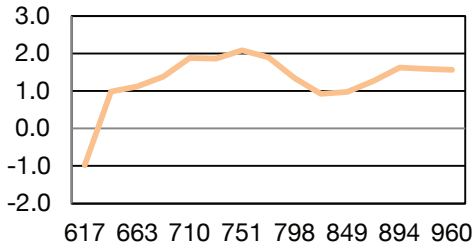
EFFICIENCY

Average Gain

617MHz~960MHz

617MHz~960MHz

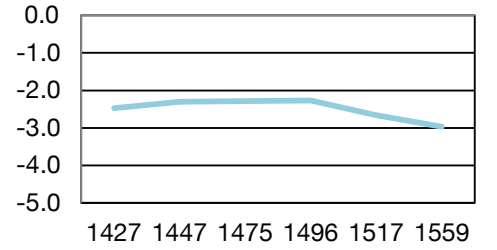
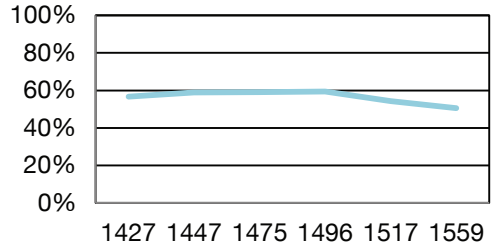
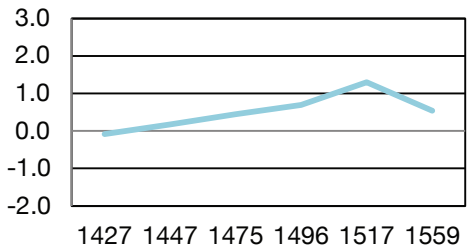
617MHz~960MHz



1427MHz~1559MHz

1427MHz~1559MHz

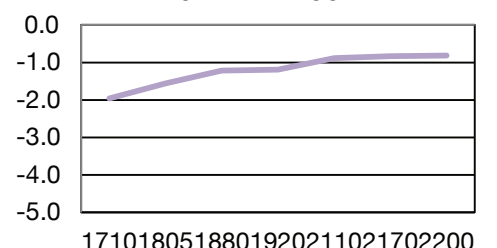
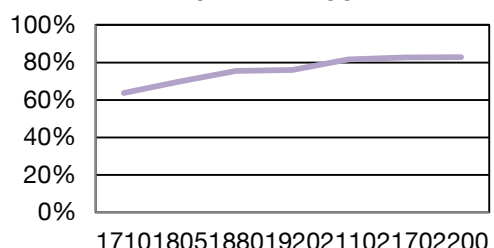
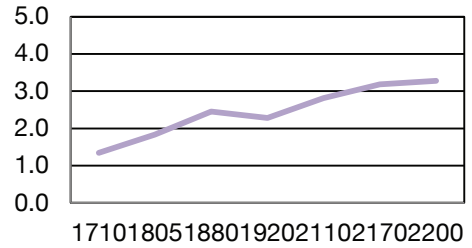
1427MHz~1559MHz



1710MHz~2200MHz

1710MHz~2200MHz

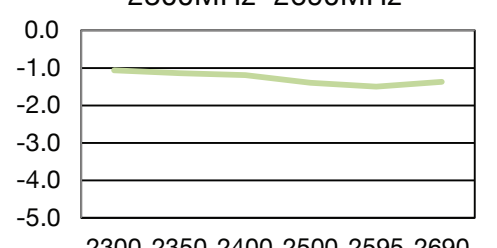
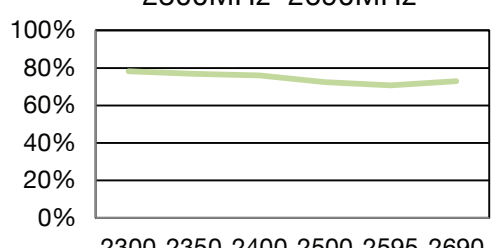
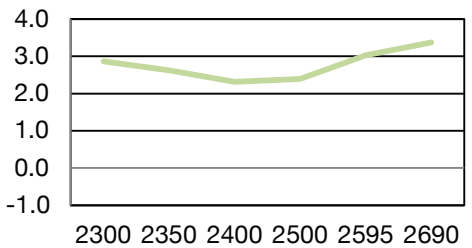
1710MHz~2200MHz



2300MHz~2690MHz

2300MHz~2690MHz

2300MHz~2690MHz



Peak Gain

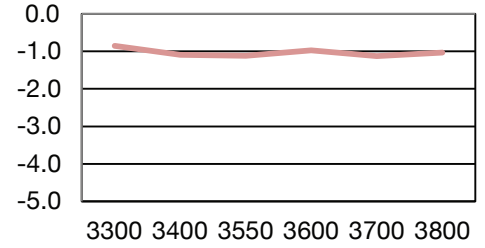
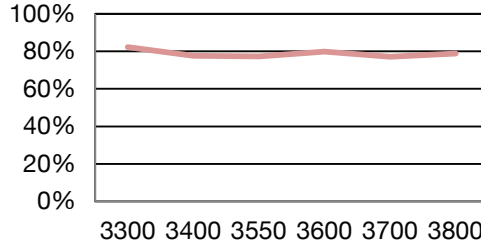
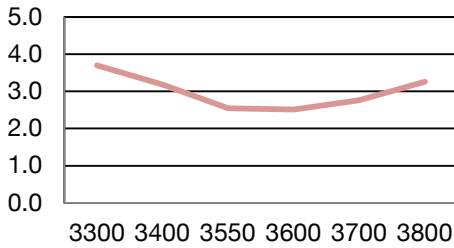
EFFICIENCY

Average Gain

3300MHz~3800MHz

3300MHz~3800MHz

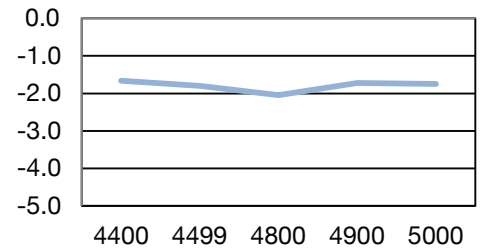
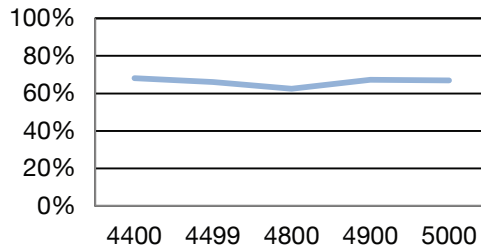
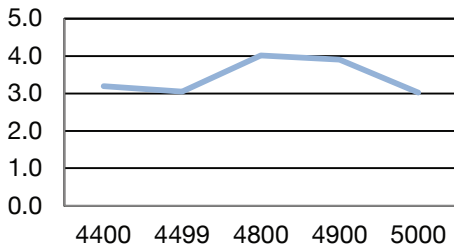
3300MHz~3800MHz



4400MHz~5000MHz

4400MHz~5000MHz

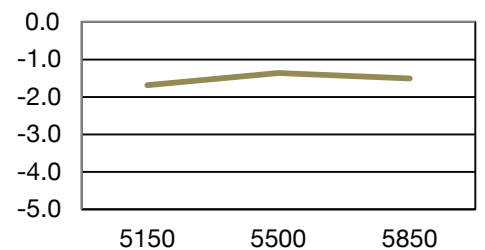
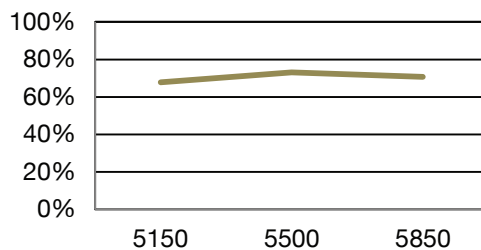
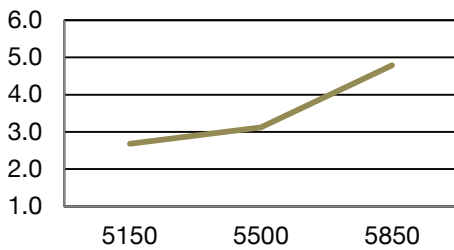
4400MHz~5000MHz



5150MHz~5925MHz

5150MHz~5850MHz

5150MHz~5850MHz

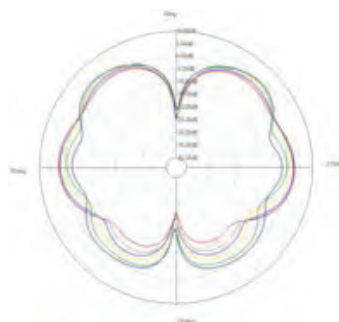
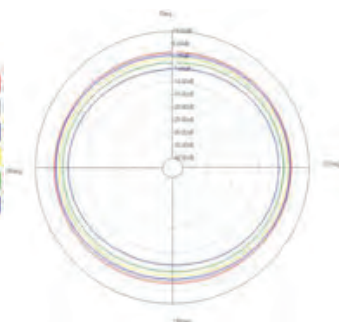
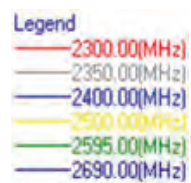
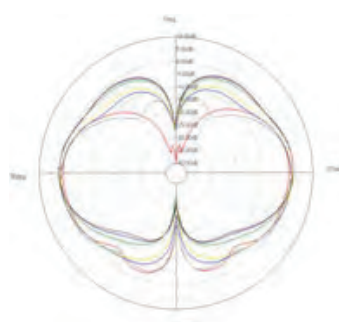
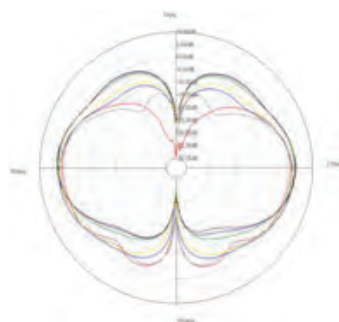
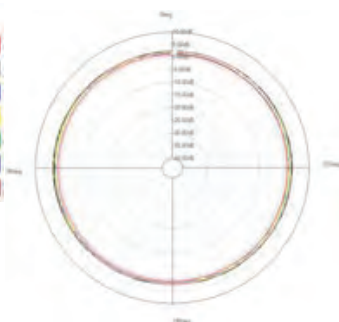
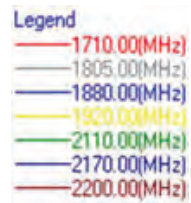
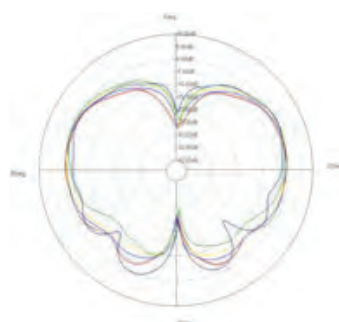
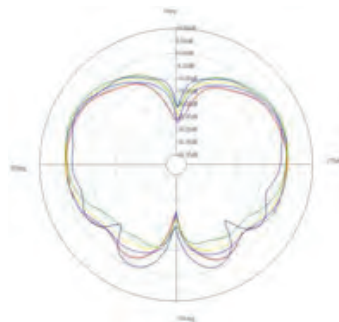
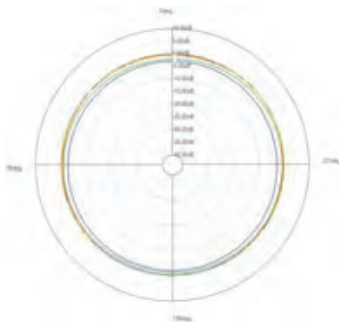
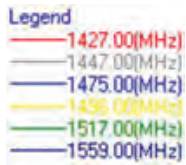
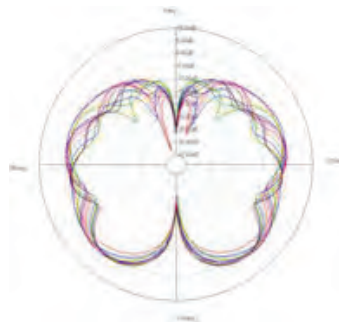
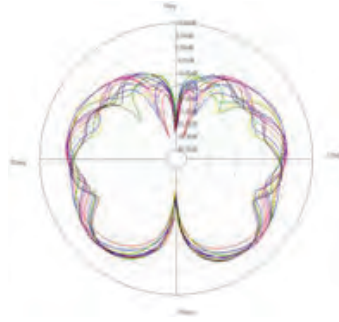
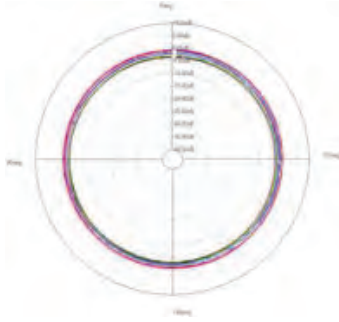
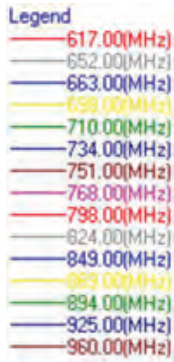


Radiation Pattern

XY-plane

YZ-plane

ZX-plane



Radiation Pattern

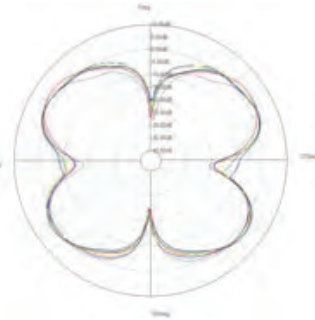
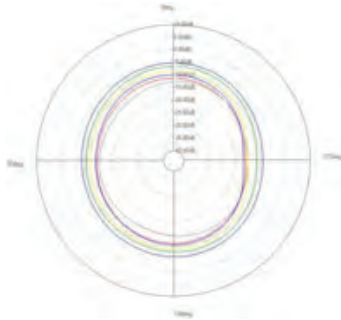
XY-plane

YZ-plane

ZX-plane

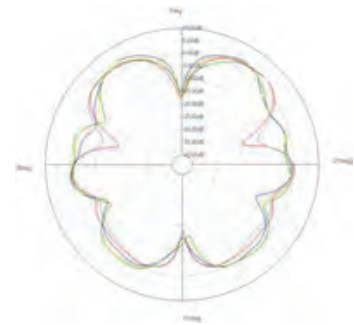
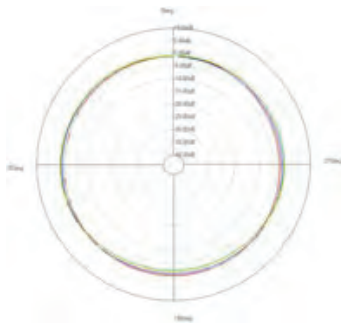
Legend

- 3300.00(MHz)
- 3400.00(MHz)
- 3550.00(MHz)
- 3600.00(MHz)
- 3700.00(MHz)
- 3800.00(MHz)



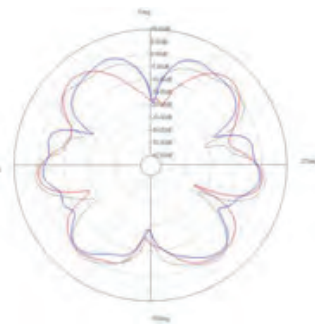
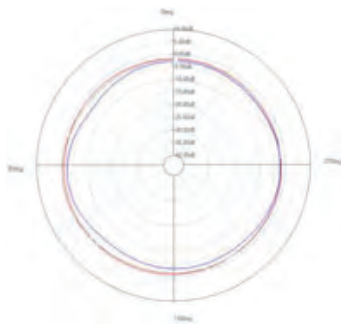
Legend

- 4400.00(MHz)
- 4499.00(MHz)
- 4800.00(MHz)
- 4900.00(MHz)
- 5000.00(MHz)



Legend

- 5150.00(MHz)
- 5500.00(MHz)
- 5850.00(MHz)



Dimension(unit: mm)

