

## BTEA Series



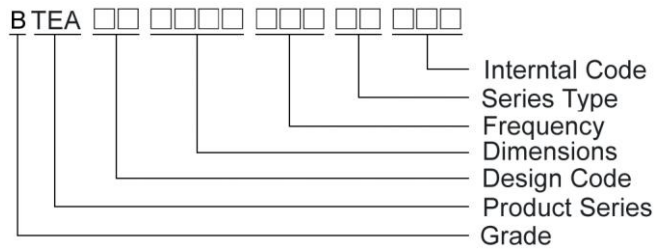
### Features

- Easy installation low cost and light-weight type
- Wide bandwidth and Omni-directional
- Customized

### Applications

- Bluetooth, Wireless Router, Set Top Box and Home digital
- ISM band, Lora, Sigfox, LTE, NB-IOT, GPS, WiFi and Car use.

### Product Identification



### Shapes and Dimensions

FIG 1

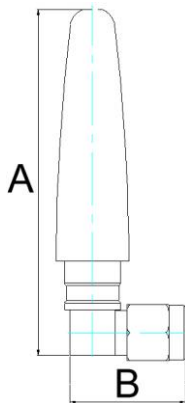


FIG 2

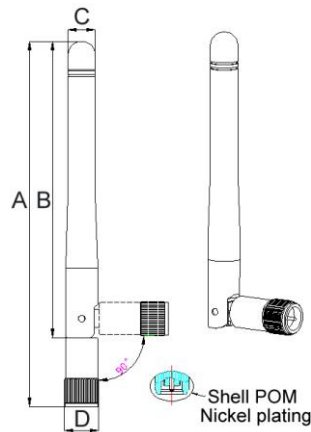


FIG 3

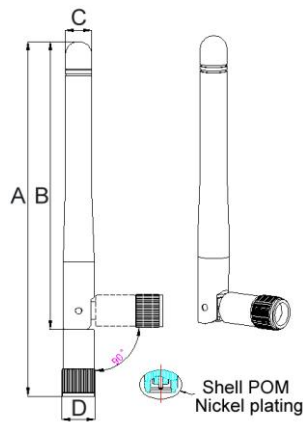
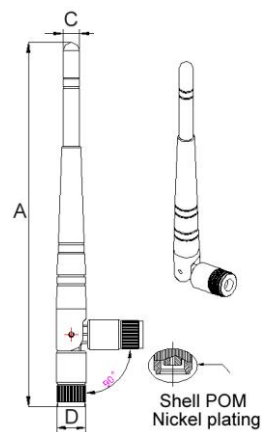


FIG 4



Dimensions in mm

TYPE	FIG	A	B	C	D
BTEA0050160G8R2A01	1	50±2	16.6±0.3	-	-
BTEA0087090G8R2A07	3	108±5	86.7±5	7.9	9.4±0.5
BTEA0087092G4R2B02	2	108±5	86.7±5	7.9	9.95±0.5
BTEA00870925GR2A07	2	108.5±5	87±5	7.8	10±0.5
BTEA0087095G0R2A03	3	108±5	86.7±5	7.8	9.95±0.5
BTEA00151325GR2A07	4	157.5±5	-	7.2	13
BTEA0015132G4R2A08	4	157.5±5	-	7.2	13

## Shapes and Dimensions

FIG 5

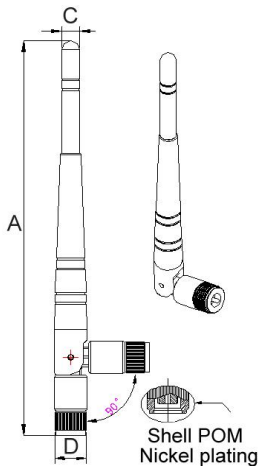


FIG 6

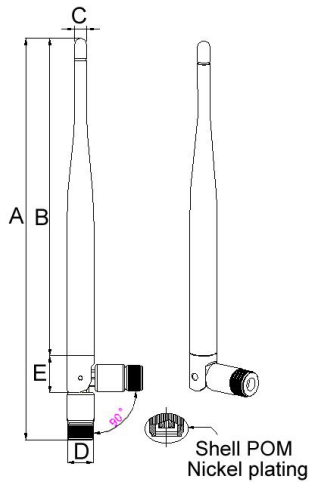


FIG 7

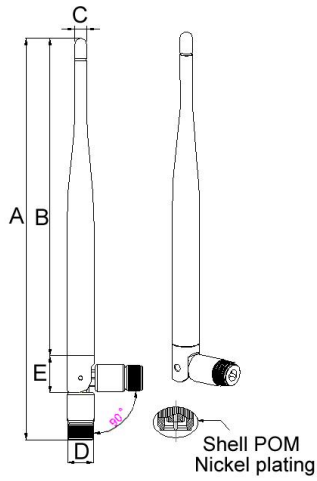
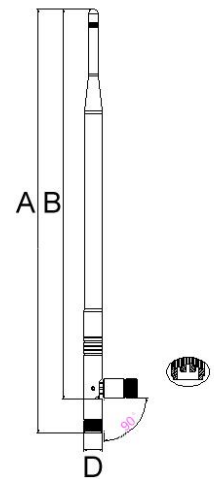


FIG 8



Dimensions in mm

TYPE	FIG	A	B	C	D	E
BTEA0015135G0R2A01	5	157.5±5	-	7.2	13	-
BTEA0017132G4R2A31	6	196±5	154±3	6	13	18
BTEA00171325GR2A05	7	196±5	154±3	6	13	18
BTEA0017135G0R2A07	6	196±5	154±3	6	13	18
BTEA00271325GR2A03	8	293±5	270±5	-	13	-

FIG 9

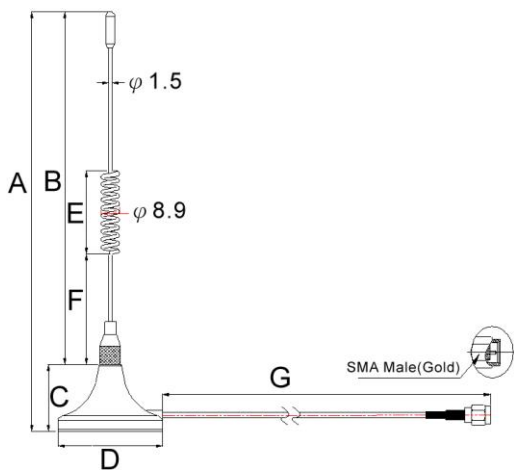
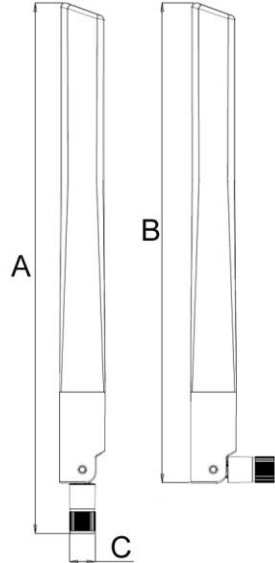


FIG 10



Dimensions in mm

TYPE	FIG	A	B	C	D	E	F	G
BTEA0027300G8R1A01	9	278.2±5	250±2	28.2	φ 30	24	51.3	1000±30
BTEA0020104G0R2A02	10	203.43±3	183.95	10±0.3	-	-	-	-

## External Antenna BTEA Series

### Electrical Characteristics

Part Number	Frequency Range (GHz)	Impedance ( $\Omega$ )	Return Loss dB(Max)	VSWR (Max)	Radiation	Peak Gain (dBi)	Polarization	Admitted Power (W)
BTEA0050160G8R2A01	824~915 1725~1880	50	-2.5	-	Omni-directional	2.56	Linear Vertical	1
BTEA0087090G8R2A07	824~960 1710~2170	50	-4	-	Omni-directional	-0.88 2.03	Linear Vertical	-
BTEA0087092G4R2B02	2.4~2.5	50	-10	2	Omni-directional	2.54	Linear	1
BTEA00870925GR2A07	2.4~2.5 5.15~5.85	50	-10	-	Omni-directional	2	Linear Vertical	1
BTEA0087095G0R2A03	5.15~5.85	50	-10	-	Omni-directional	2.36	Linear Vertical	1
BTEA00151325GR2A07	2.4~2.5 5.15~5.85	50	-10	2	Omni-directional	3±0.5	Linear	-
BTEA0015132G4R2A08	2.4~2.5	50	-10	2	Omni-directional	3	Linear	-
BTEA0015135G0R2A01	5.1~5.9	50	-10	2	Omni-directional	3±1	Linear	-
BTEA0017132G4R2A31	2.4~2.5	50	-10	-	Omni-directional	4.93	Linear Vertical	1
BTEA00171325GR2A05	2.4~2.5 5.15~5.85	50	-10	-	Omni-directional	5±1	Linear Vertical	1
BTEA0017135G0R2A07	5.15~5.85	50	-10	-	Omni-directional	5±1	Linear Vertical	1
BTEA0020104G0R2A02	704~960 1710~2700	50	-	5	Omni-directional	2.45 4.51	Linear Vertical	1
BTEA00271325GR2A03	2.4~2.5 5.15~5.85	50	-10	-	Omni-directional	7±0.5	Linear Vertical	-
BTEA0027300G8R1A01	800~900 1800~1900 2100	50	-10	2	Omni-directional	-	Linear Vertical	-

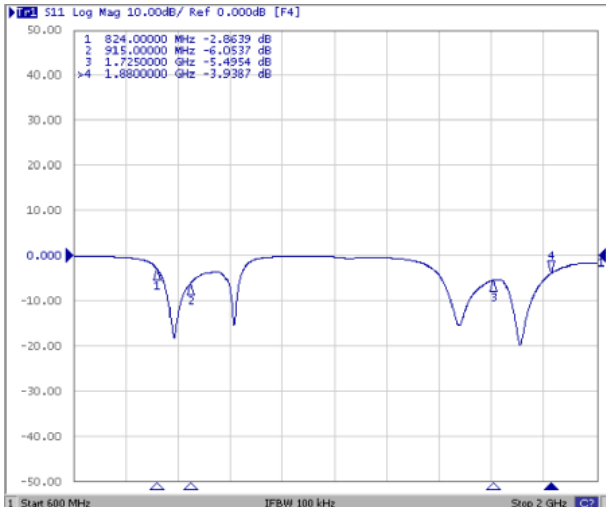
### Physical Properties

Part Number	Cable	Antenna Cover	Antenna Base	Operating Temp	Storage Temp	Color	Connector
BTEA0050160G8R2A01	RG-178	TPEE	PC/PBT	-20°C~+65°C	-30°C~+75°C	Black	SMA-Male 90°
BTEA0087090G8R2A07	RG-178	TPEE	PC/PBT	-20°C~+65°C	-30°C~+75°C	Black	SMA-Male-RP
BTEA0087092G4R2B02	RG-178	TPEE	PC/PBT	-20°C~+65°C	-30°C~+75°C	Black	-
BTEA00870925GR2A07	RG-178	TPEE	PC/PBT	-20°C~+65°C	-30°C~+75°C	Black	SMA-Male
BTEA0087095G0R2A03	RG-178	TPEE	PC/PBT	-20°C~+65°C	-30°C~+75°C	Black	-
BTEA00151325GR2A07	RG-178	TPEE	PC/PBT	-20°C~+65°C	-30°C~+75°C	Black	SMA-Male-RP
BTEA0015132G4R2A08	RG-178	TPEE	PC/PBT	-20°C~+65°C	-30°C~+75°C	Black	SMA-Male-RP
BTEA0015135G0R2A01	RG-178	TPEE	PC/PBT	-20°C~+65°C	-30°C~+75°C	Black	SMA-Male
BTEA0017132G4R2A31	RG-178	TPEE	PC/PBT	-20°C~+65°C	-30°C~+75°C	Black	SMA-Male-Reverse
BTEA00171325GR2A05	RG-178	TPEE	PC/PBT	-20°C~+65°C	-30°C~+75°C	Black	SMA-Male
BTEA0017135G0R2A07	RG-178	TPEE	PC/PBT	-20°C~+65°C	-30°C~+75°C	Black	SMA-Male-Reverse
BTEA0020104G0R2A02	RG-178	ABS	PC/PBT	-20°C~+65°C	-30°C~+75°C	Black	-
BTEA00271325GR2A03	RG-178	ABS	PC/PBT	-20°C~+65°C	-30°C~+75°C	Black	RP-SMA-Male
BTEA0027300G8R1A01	RG-174	ABS	PVC/SPRING	-10°C~+70°C	+40°C~+80°C	Black	SMA-PLUG

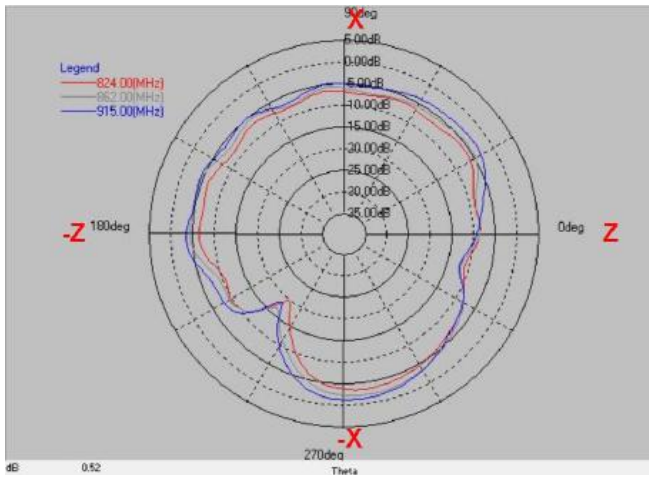
Please be sure to request approval specifications that provide further details of the products. Kindly note that the content of these specifications are subject to change or may be discontinued without prior notice. This product may not be designed/used in medical or high risk applications without Chilisin approval. Please contact our sales department before ordering.

## BTEA0050160G8R2A01

### Return Loss S11

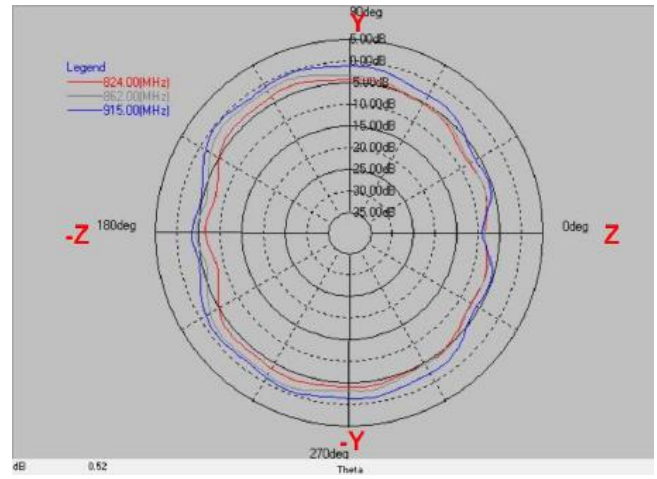


Frequency(MHz) : 824~915. Pattern Field : X-Z plane



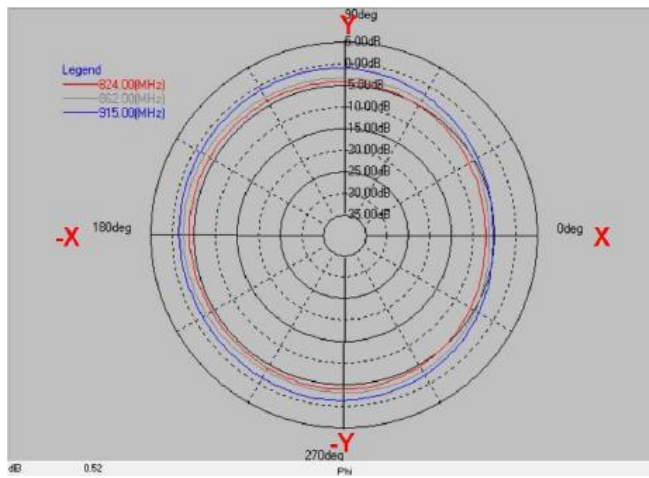
Frequency	Max value	Min value	Average
824(MHz)	-3.68 dB	-19.80 dB	-7.22 dB
862(MHz)	-2.31 dB	-16.80 dB	-6.07 dB
915(MHz)	-1.52 dB	-18.72 dB	-5.13 dB

Frequency(MHz) : 824~915. Pattern Field : Y-Z plane



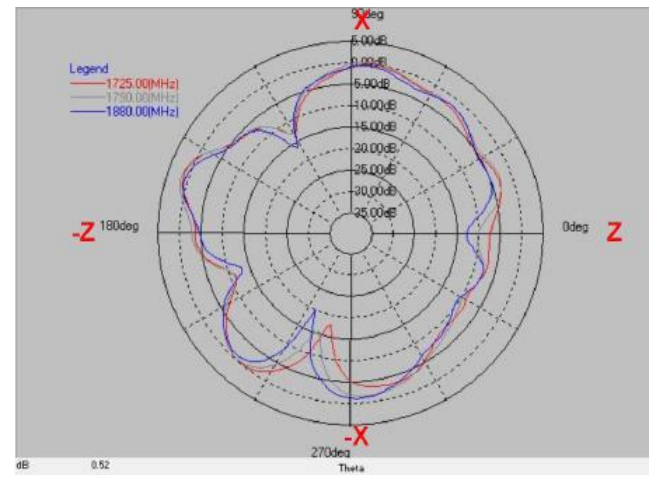
Frequency	Max value	Min value	Average
824(MHz)	-3.26 dB	-8.39 dB	-5.27 dB
862(MHz)	-1.60 dB	-8.61 dB	-4.02 dB
915(MHz)	-0.37 dB	-9.12 dB	-2.62 dB

Frequency(MHz) : 824~915. Pattern Field : Y-X plane



Frequency	Max value	Min value	Average
824(MHz)	-3.85 dB	-7.08 dB	-4.79 dB
862(MHz)	-2.50 dB	-6.26 dB	-3.66 dB
915(MHz)	-1.06 dB	-5.29 dB	-2.22 dB

Frequency(MHz) : 1725~1880. Pattern Field : X-Z plane

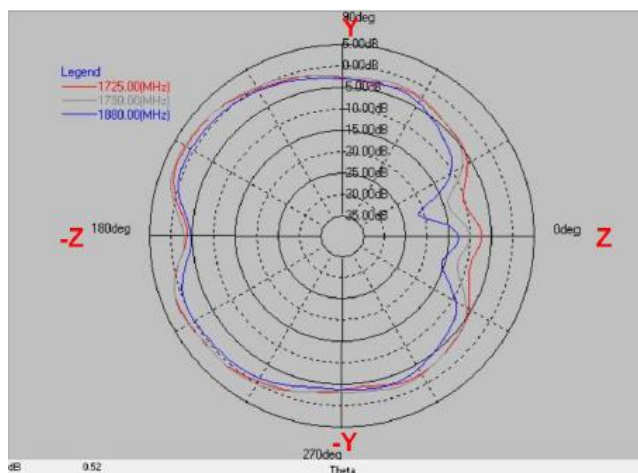


Frequency	Max value	Min value	Average
1725 (MHz)	1.20 dB	-17.94 dB	-4.00 dB
1790(MHz)	1.73 dB	-15.77 dB	-3.52 dB
1880(MHz)	0.74 dB	-20.26 dB	-4.27 dB

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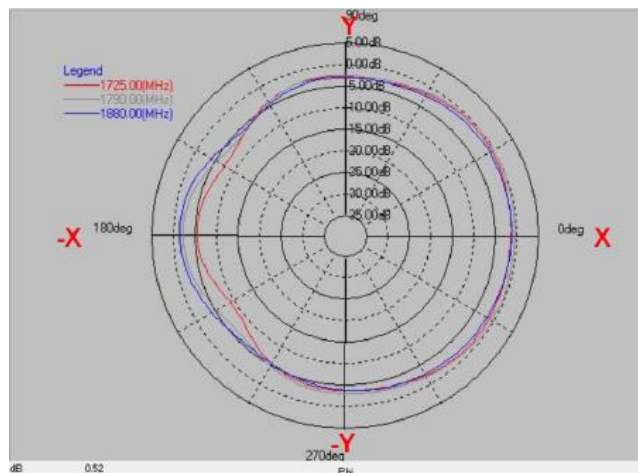
# External Antenna BTEA Series

Frequency(MHz) : 1725~1880. Pattern Field : Y-Z plane



Frequency	Max value	Min value	Average
1725 (MHz)	2.15 dB	-10.24 dB	-1.80 dB
1790(MHz)	2.56 dB	-14.06 dB	-1.55 dB
1880(MHz)	0.74 dB	-21.26 dB	-3.03 dB

Frequency(MHz) : 1725~1880. Pattern Field : X-Y plane

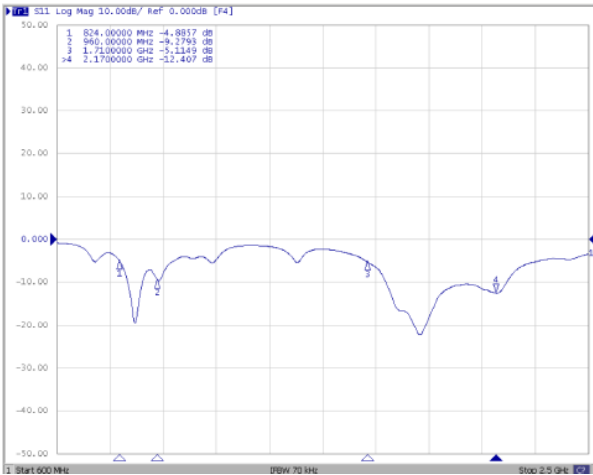


Frequency	Max value	Min value	Average
1725 (MHz)	-0.49 dB	-9.26 dB	-3.20 dB
1790(MHz)	0.01 dB	-6.67 dB	-2.35 dB
1880(MHz)	-1.09 dB	-5.91 dB	-2.84 dB

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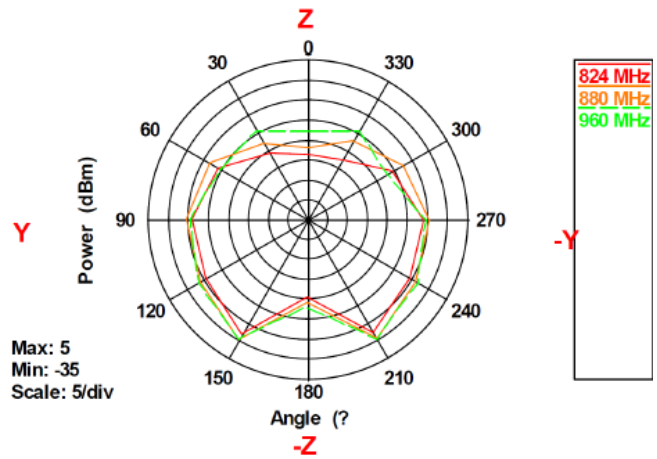
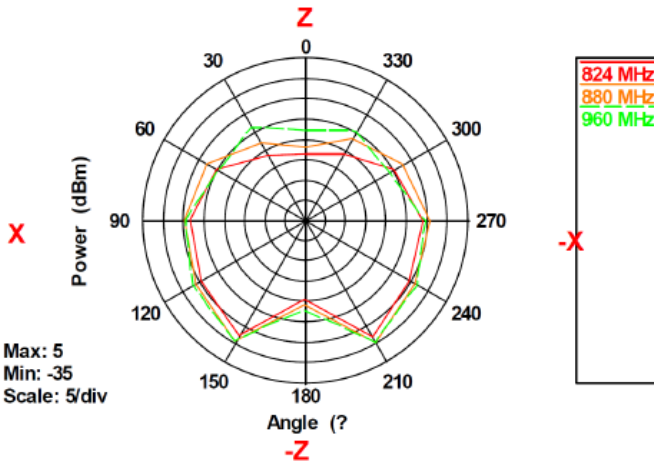
## BTEA0087090G8R2A07

### Return Loss S11



Frequency(MHz) : 824~960. Pattern Field : X-Z plane

Frequency(MHz) : 824~960. Pattern Field : Y-Z plane

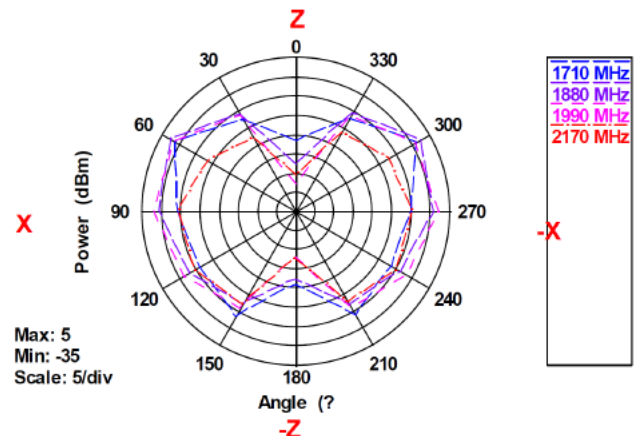
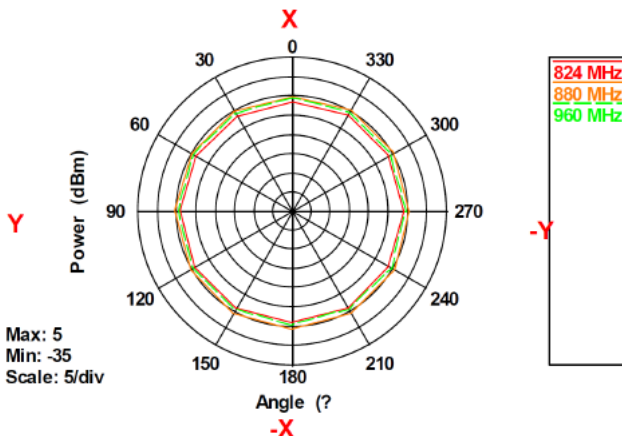


Frequency	Max value	Min value	Average
824(MHz)	-2.29 dB	-18.85 dB	-7.31 dB
880(MHz)	-0.73 dB	-17.10 dB	-5.59 dB
960(MHz)	-0.65 dB	-13.27 dB	-5.52 dB

Frequency	Max value	Min value	Average
824(MHz)	-2.27 dB	-18.85 dB	-7.29 dB
880(MHz)	-0.78 dB	-17.10 dB	-5.57 dB
960(MHz)	-0.66 dB	-13.27 dB	-5.51 dB

Frequency(MHz) : 824~960. Pattern Field : Y-X plane

Frequency(MHz) : 1710~2170. Pattern Field : X-Z plane

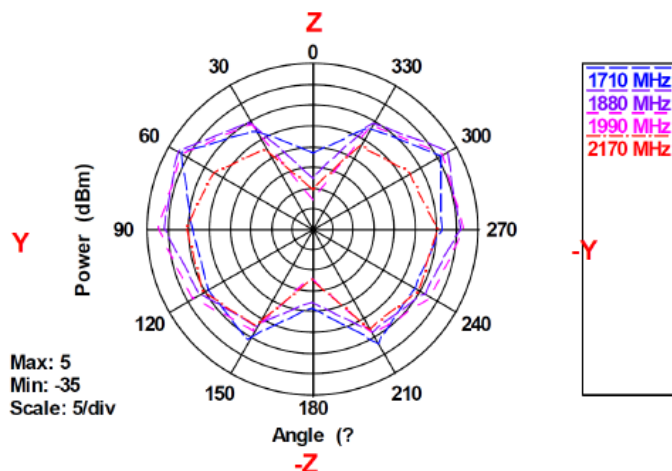


Frequency	Max value	Min value	Average
824(MHz)	-6.15 dB	-7.09 dB	-6.48 dB
880(MHz)	-4.59 dB	-5.46 dB	-4.93 dB
960(MHz)	-5.45 dB	-6.01 dB	-5.71 dB

Frequency	Max value	Min value	Average
1710(MHz)	0.82 dB	-17.00 dB	-4.42 dB
1880(MHz)	2.25 dB	-22.99 dB	-2.49 dB
1990(MHz)	1.93 dB	-28.26 dB	-2.27 dB
2170(MHz)	-4.89 dB	-25.83 dB	-8.01 dB

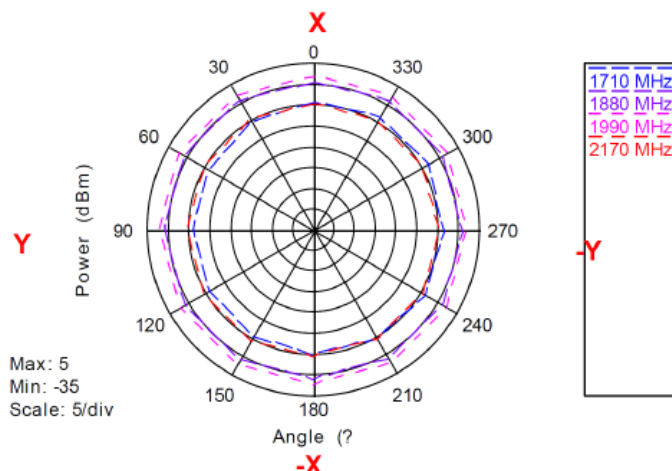
# External Antenna BTEA Series

Frequency(MHz) : 1710~2170. Pattern Field : Y-Z plane



Frequency	Max value	Min value	Average
1710(MHz)	1.39 dB	-17.00 dB	-4.31 dB
1880(MHz)	2.34 dB	-22.99 dB	-2.42 dB
1990(MHz)	1.76 dB	-28.26 dB	-2.31 dB
2170(MHz)	-4.76 dB	-25.83 dB	-8.05 dB

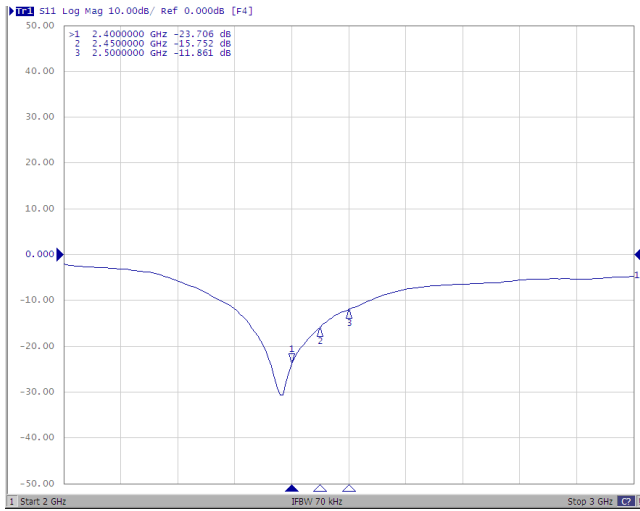
Frequency(MHz) : 1710~2170. Pattern Field : Y-X plane



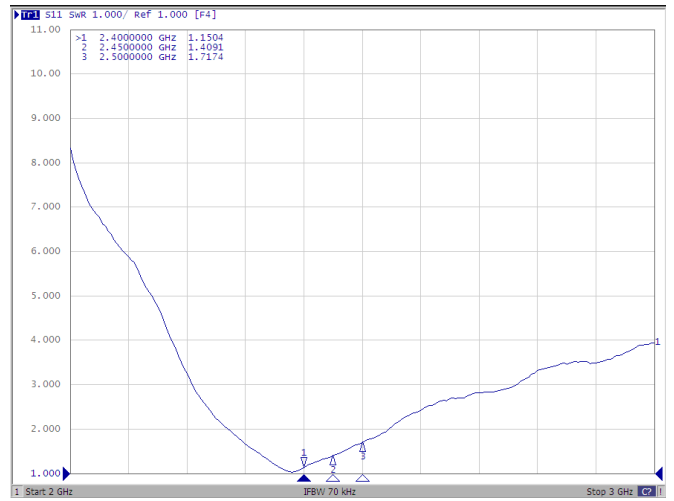
Frequency	Max value	Min value	Average
1710(MHz)	-3.50 dB	-6.20 dB	-4.87 dB
1880(MHz)	0.73 dB	0.38 dB	0.57 dB
1990(MHz)	1.93 dB	1.73 dB	1.83 dB
2170(MHz)	-4.70 dB	-5.03 dB	-4.86 dB

## BTEA0087092G4R2B02

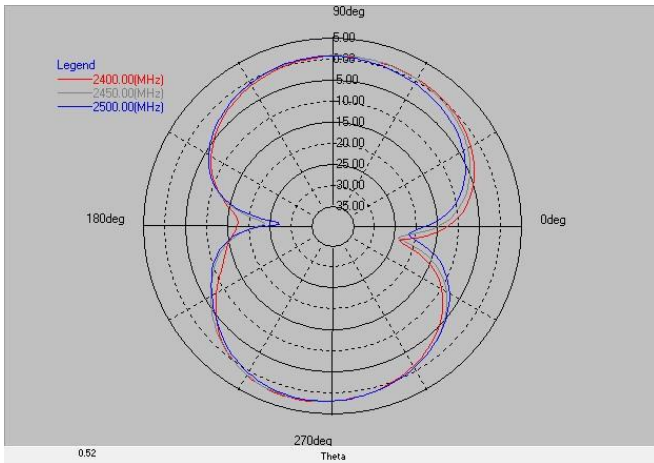
### Return Loss



### VSWR

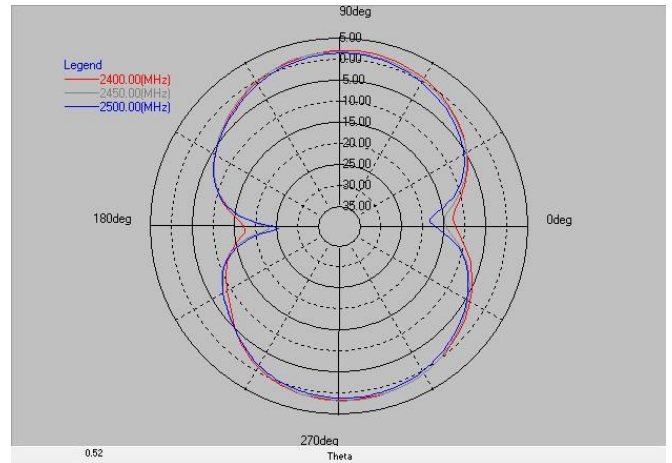


### Pattern Field : Z-X plane, Phi=0.00deg



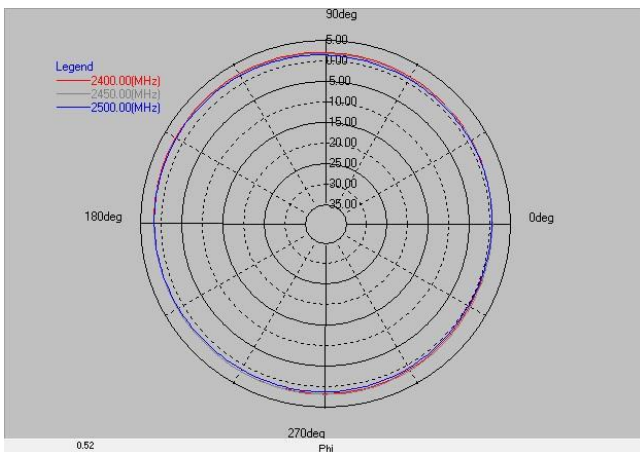
Layer	Max value	Min value	Average
2400(MHz)	2.15	-23.78	-1.96
2450(MHz)	2.04	-24.00	-1.90
2500(MHz)	1.89	-27.29	-2.22

### Pattern Field : Z-Y plane, Phi=90.00deg



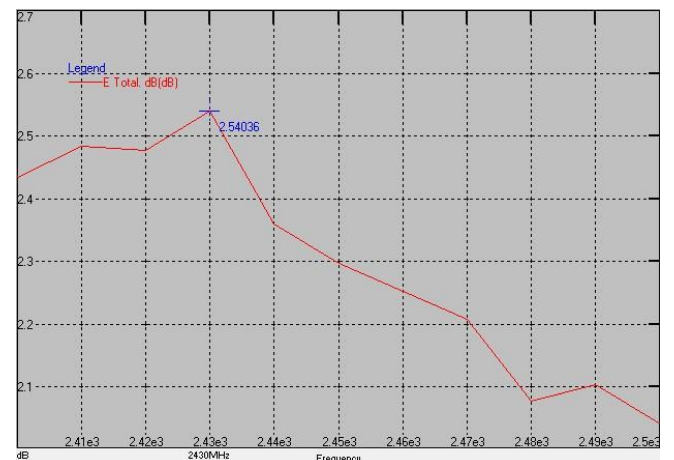
Layer	Max value	Min value	Average
2400(MHz)	1.94	-17.61	-1.74
2450(MHz)	1.73	-23.26	-1.88
2500(MHz)	1.23	-25.61	-2.37

### Pattern Field : X-Y plane, Theta=90.00deg



Layer	Max value	Min value	Average
2400(MHz)	2.28	0.36	1.46
2450(MHz)	2.04	0.62	1.42
2500(MHz)	1.91	0.21	1.11

### Peak Gain

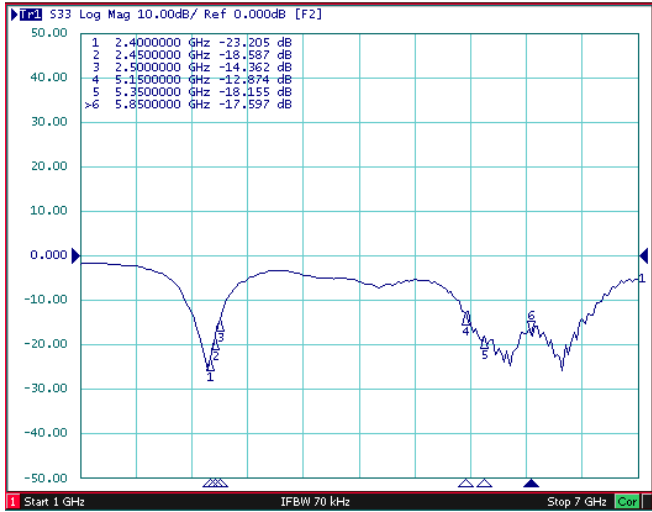


Peak Gain : Max 2.54 dBi

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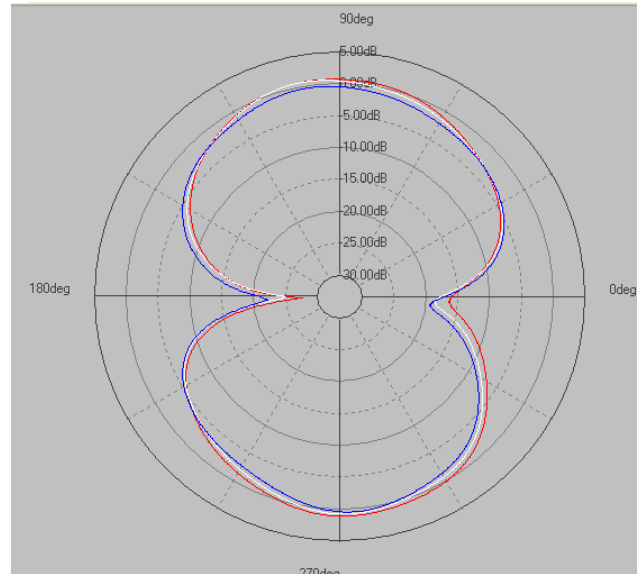
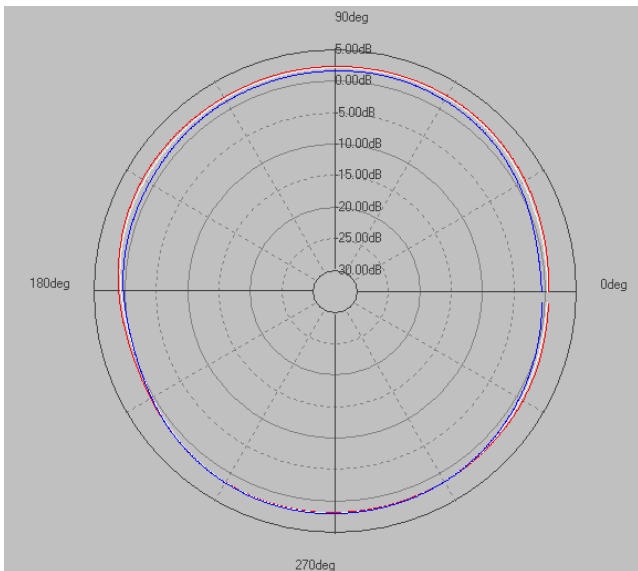
## BTEA00870925GR2A07

### Return Loss S33



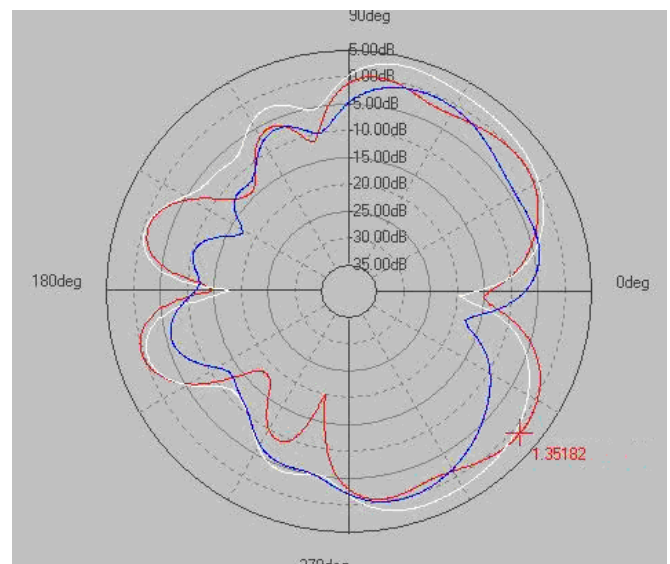
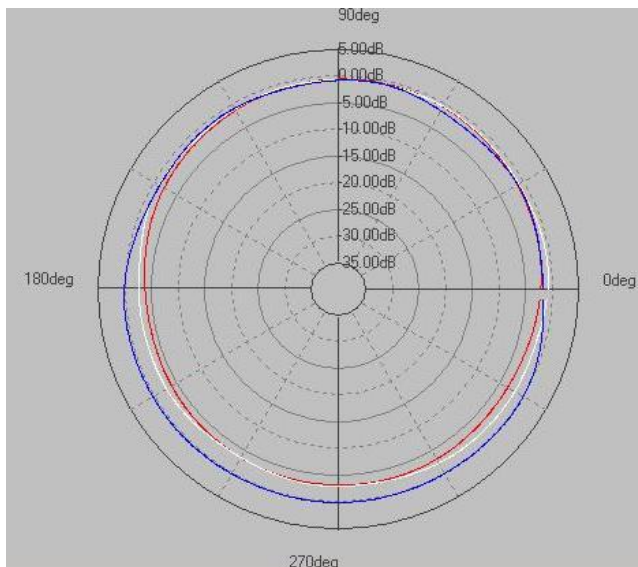
Frequency(MHz) : 2400~2500. Pattern Field : H plane

Frequency(MHz) : 2400~2500. Pattern Field : E plane



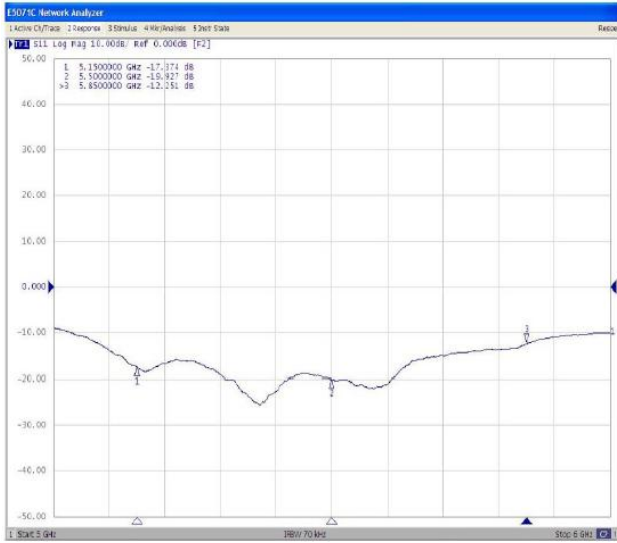
Frequency(MHz) : 5150-5850. Pattern Field : H plane

Frequency(MHz) : 5150-5850. Pattern Field : E plane

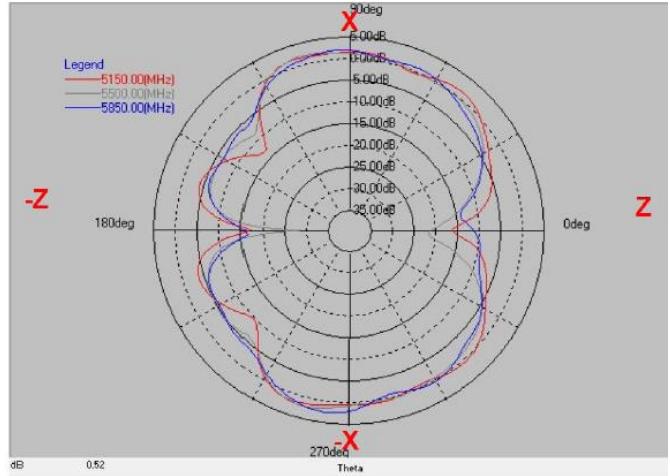


## BTEA0087095G0R2A03

### Return Loss S11

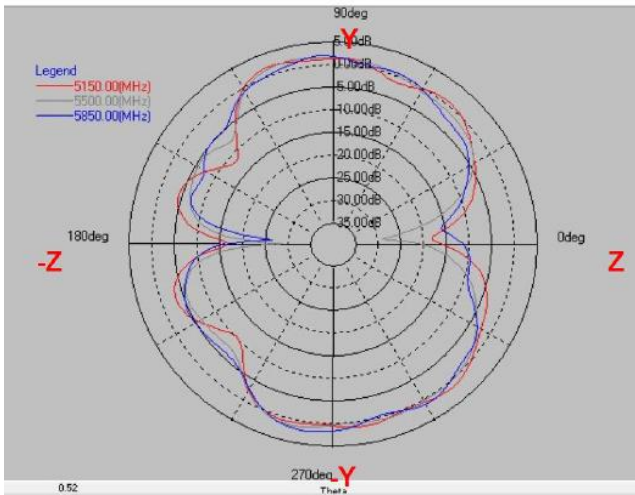


### Frequency(MHz) : 5150~5850. Pattern Field : Z-X plane



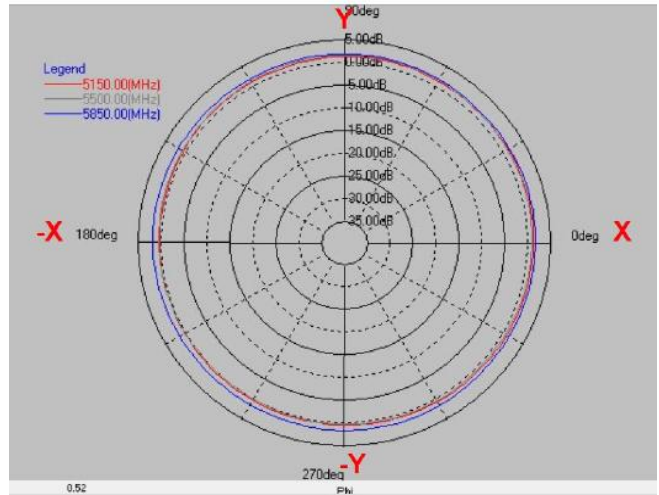
Layer	Max value	Min value	Average
5150(MHz)	1.52 dB	-17.32 dB	-1.78 dB
5550(MHz)	2.01 dB	-28.64 dB	-2.18 dB
5850(MHz)	2.36 dB	-16.51 dB	-2.06 dB

### Frequency(MHz) : 5150~5850. Pattern Field : Z-Y plane



Layer	Max value	Min value	Average
5150(MHz)	1.79 dB	-18.10 dB	-1.89 dB
5550(MHz)	1.71 dB	-29.01 dB	-2.17 dB
5850(MHz)	1.86 dB	-26.43 dB	-2.14 dB

### Frequency(MHz) : 5150~5850. Pattern Field : X-Y plane

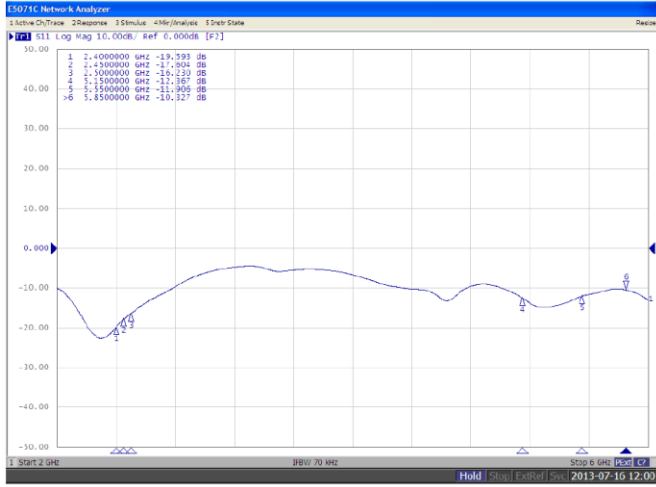


Layer	Max value	Min value	Average
5150(MHz)	1.44 dB	0.15 dB	0.77 dB
5550(MHz)	1.46 dB	-0.10 dB	0.73 dB
5850(MHz)	1.87 dB	1.29 dB	1.61 dB

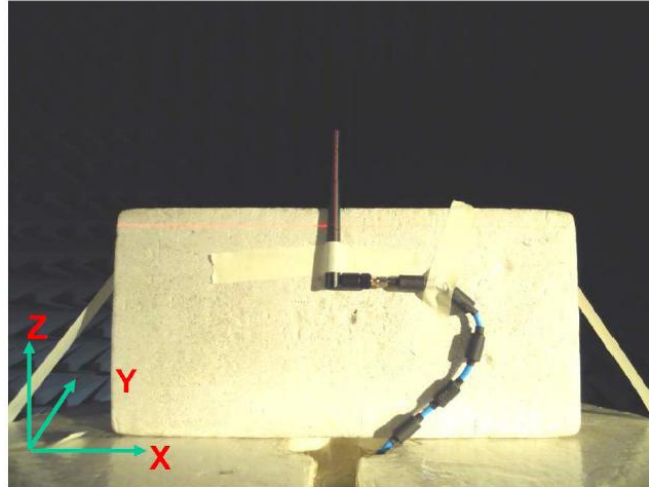
# External Antenna BTEA Series

## BTEA00151325GR2A07

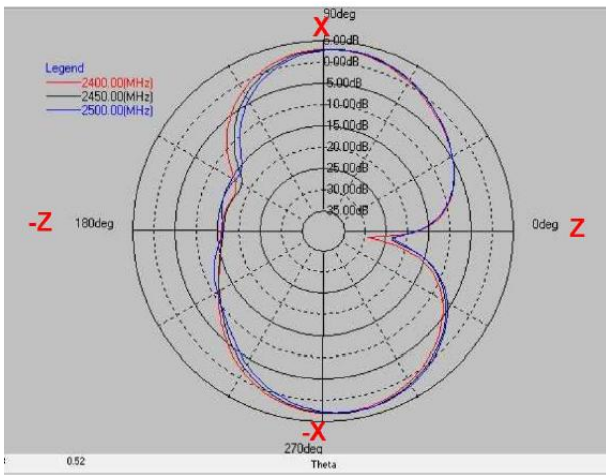
### Return Loss



### Experimental Setup

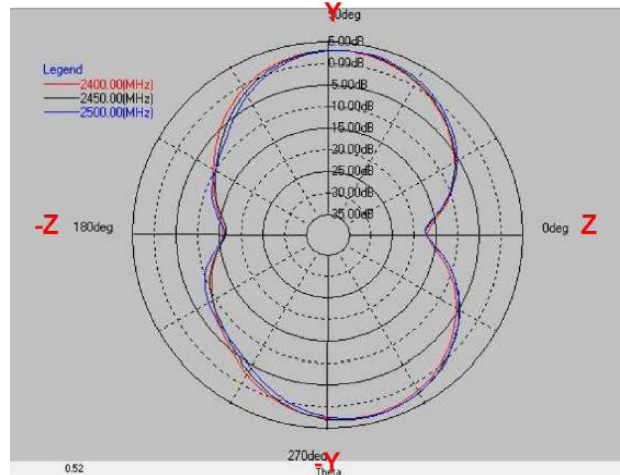


### Frequency(MHz): 2400~2500. Pattern Field : X-Z plane



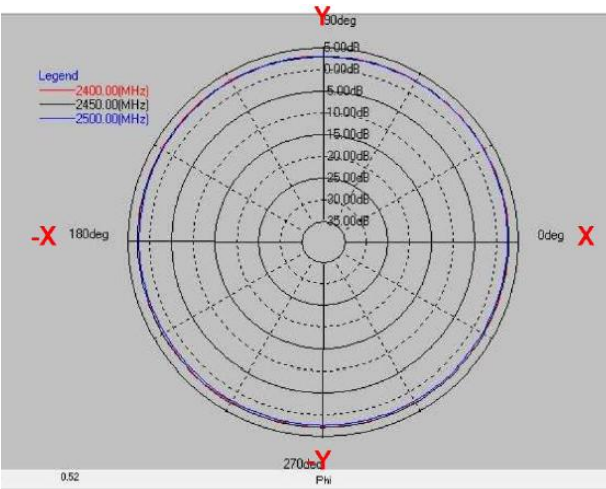
Layer	Max value	Average
2400(MHz)	2.96 dB	-1.69 dB
2450(MHz)	3.14 dB	-1.70 dB
2500(MHz)	3.05 dB	-1.84 dB

### Frequency(MHz): 2400~2500. Pattern Field : Y-Z plane



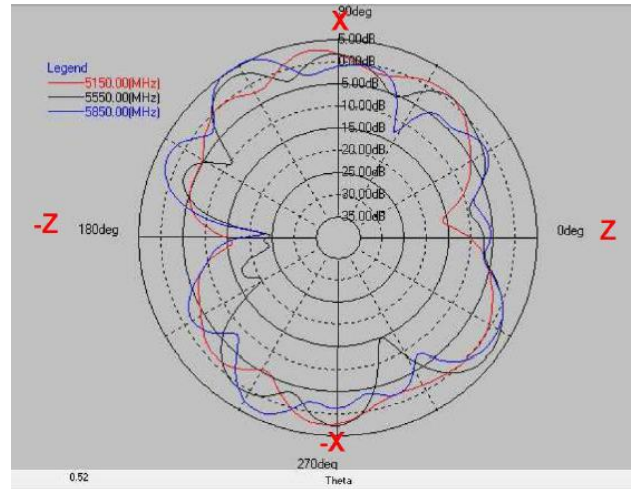
Layer	Max value	Average
2400(MHz)	3.03 dB	-1.49 dB
2450(MHz)	3.10 dB	-1.45 dB
2500(MHz)	3.09 dB	-1.54 dB

### Frequency(MHz): 2400~2500. Pattern Field : X-Y plane



Layer	Max value	Average
2400(MHz)	2.96 dB	2.81 dB
2450(MHz)	2.91 dB	2.81 dB
2500(MHz)	2.80 dB	2.53 dB

### Frequency(MHz): 5150~5850. Pattern Field : X-Z plane



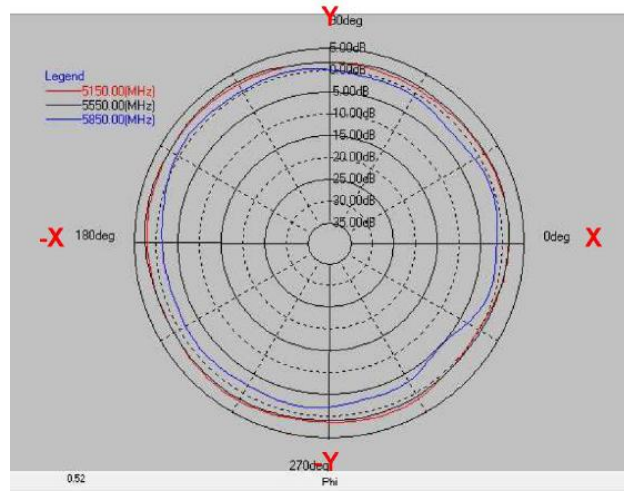
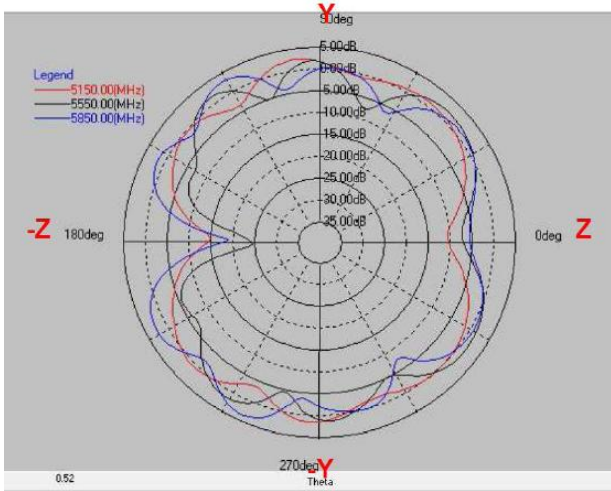
Layer	Max value	Average
5150(MHz)	2.72 dB	-1.71 dB
5550(MHz)	3.45 dB	-1.53 dB
5850(MHz)	5.63 dB	-1.05 dB

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# External Antenna BTEA Series

Frequency(MHz) : 5150~5850. Pattern Field : Y-Z plane

Frequency(MHz) : 5150~5850. Pattern Field : X-Y plane



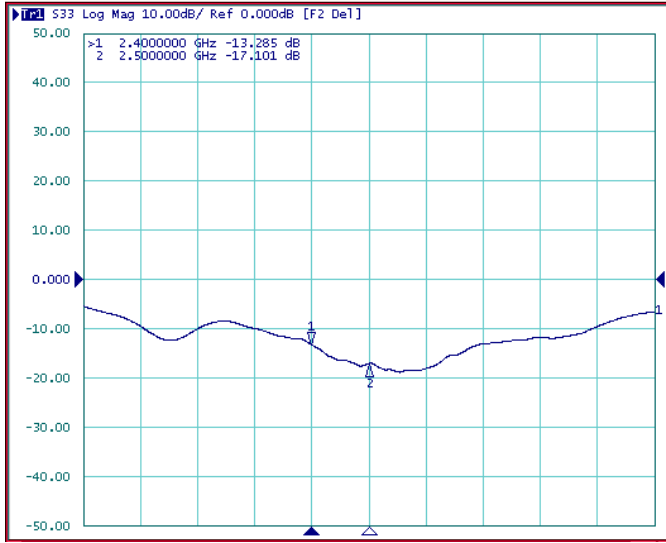
Layer	Max value	Average
5150(MHz)	2.36 dB	-1.38 dB
5550(MHz)	2.03 dB	-1.48 dB
5850(MHz)	3.44 dB	-0.63 dB

Layer	Max value	Average
5150(MHz)	2.52 dB	1.54 dB
5550(MHz)	2.82 dB	1.63 dB
5850(MHz)	0.83 dB	-1.21 dB

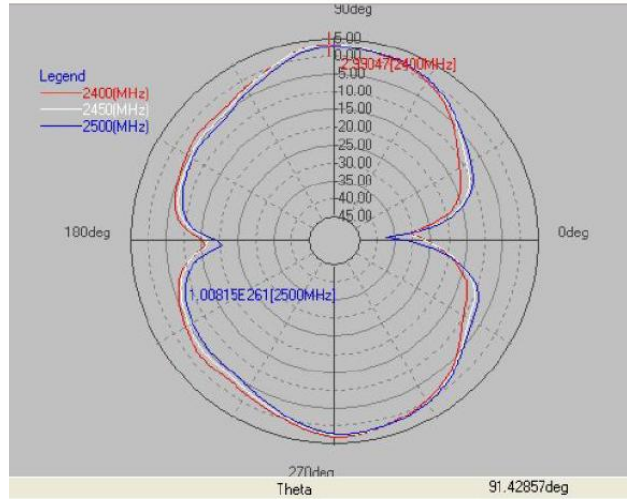
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## BTEA0015132G4R2A08

### Return Loss S33

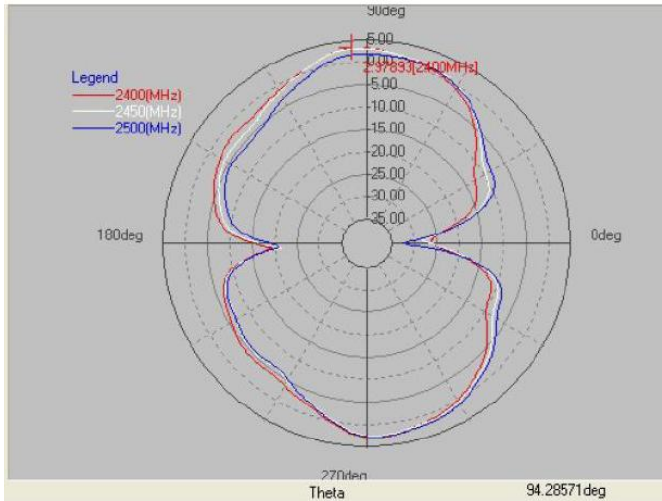


### Frequency(MHz) : 2400~2500. Pattern Field : X-Z plane



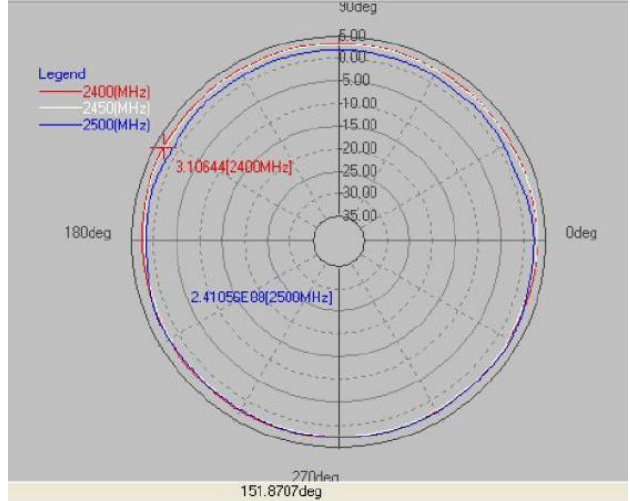
Layer	Max value	Average
2400(MHz)	2.99 dB	-2.07 dB
2450(MHz)	2.93 dB	-2.15 dB
2500(MHz)	2.30 dB	-2.51 dB

### Frequency(MHz) : 2400~2500. Pattern Field : Y-Z plane



Layer	Max value	Average
2400(MHz)	2.98 dB	-2.08 dB
2450(MHz)	2.86 dB	-2.19 dB
2500(MHz)	2.77 dB	-2.50 dB

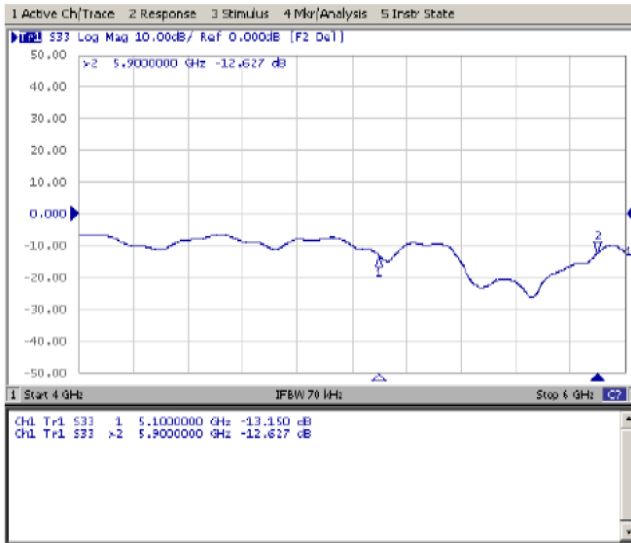
### Frequency(MHz) : 2400~2500. Pattern Field : X-Y plane



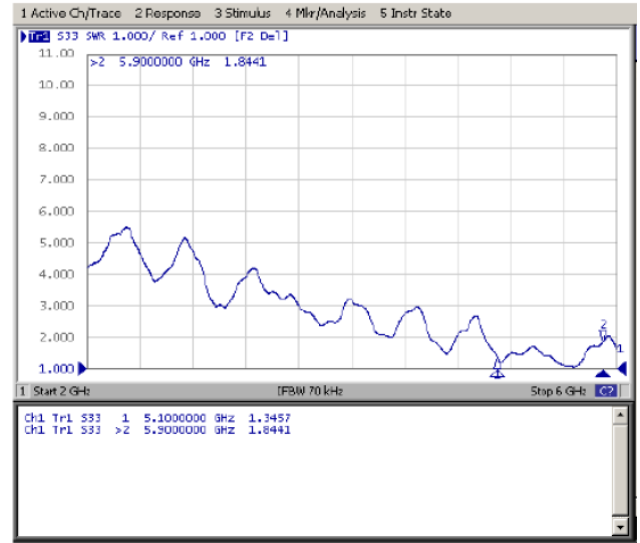
Layer	Max value	Average
2400(MHz)	3.11 dB	2.79 dB
2450(MHz)	3.15 dB	2.54 dB
2500(MHz)	3.17 dB	2.06 dB

## BTEA0015135G0R2A01

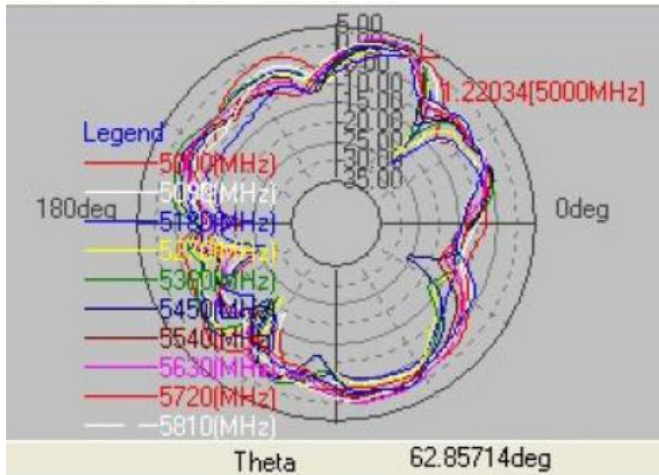
### Return Loss S33



### VSWR

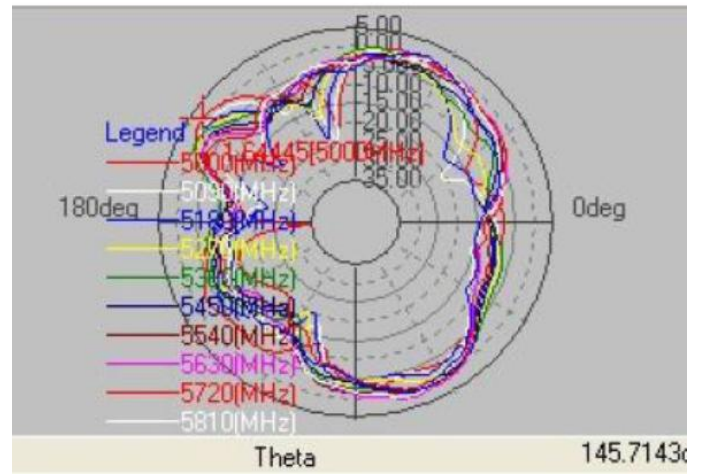


### Frequency(MHz): 5000~5900. Pattern Field : X-Z plane



Layer	Max value	Average
5000(MHz)	1.22 dB	-4.52 dB
5090(MHz)	1.08 dB	-5.81 dB
5180(MHz)	0.11 dB	-6.54 dB
5270(MHz)	1.34 dB	-5.93 dB
5360(MHz)	2.54 dB	-4.58 dB
5450(MHz)	1.62 dB	-5.76 dB
5540(MHz)	2.56 dB	-4.93 dB
5630(MHz)	2.45 dB	-4.49 dB
5720(MHz)	0.74 dB	-5.92 dB
5810(MHz)	0.73 dB	-5.11 dB
5900(MHz)	0.55 dB	-6.18 dB

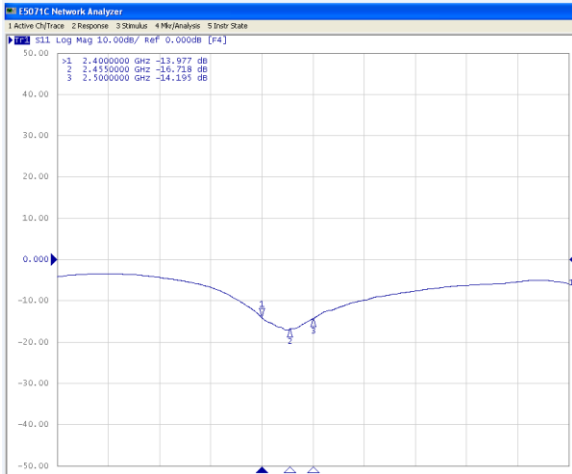
### Frequency(MHz): 5000~5900. Pattern Field : Y-Z plane



Layer	Max value	Average
5000(MHz)	1.64dB	-4.60 dB
5090(MHz)	0.16 dB	-6.00 dB
5180(MHz)	-0.22 dB	-6.52 dB
5270(MHz)	-0.47 dB	-6.00 dB
5360(MHz)	0.36 dB	-4.84 dB
5450(MHz)	0.43 dB	-5.51 dB
5540(MHz)	0.77 dB	-4.84 dB
5630(MHz)	1.71 dB	-4.24 dB
5720(MHz)	-0.36 dB	-5.59 dB
5810(MHz)	1.26 dB	-4.95 dB
5900(MHz)	0.55 dB	-5.85 dB

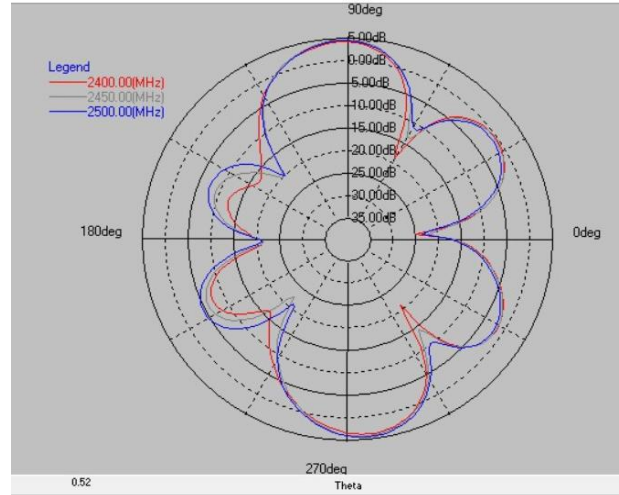
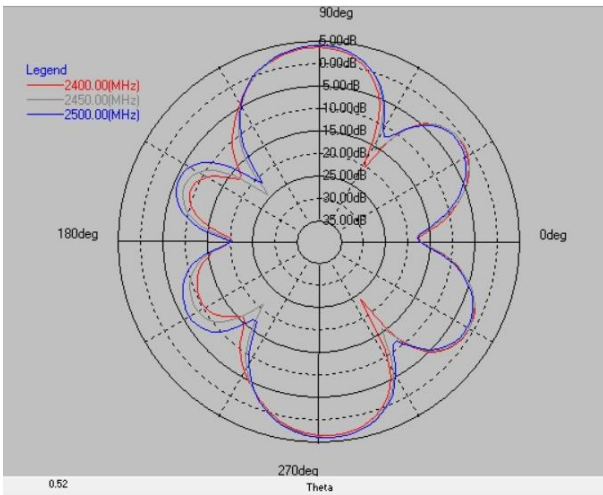
## BTEA0017132G4R2A31

### Return Loss S11



Frequency(MHz) : 2400~2500. Pattern Field : Z-X plane

Frequency(MHz) : 2400~2500. Pattern Field : Z-Y plane

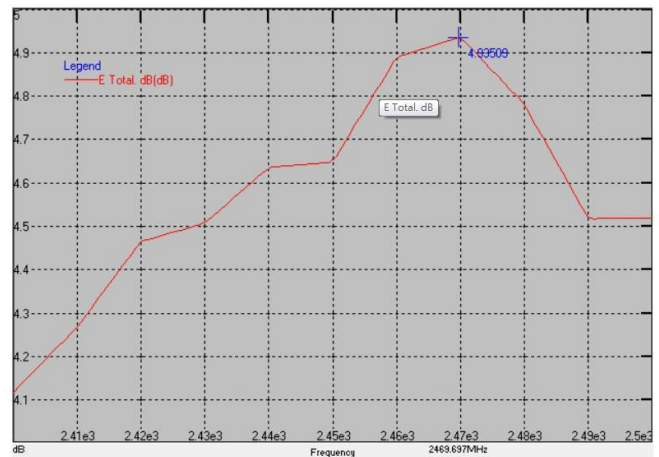
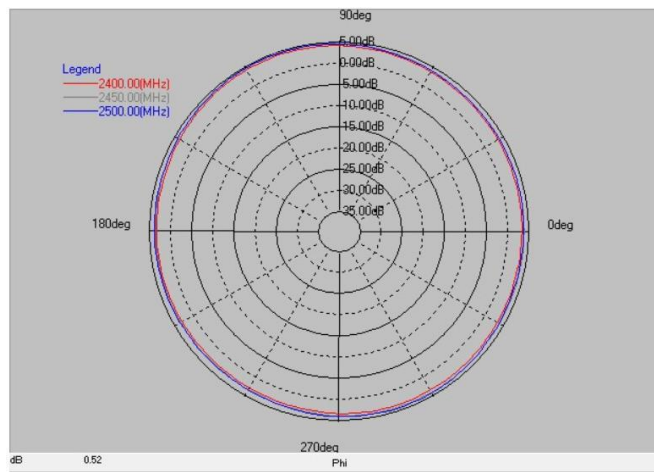


Layer	Max value	Position	Min value
2400(MHz)	3.46 dB	-86.00 deg	-23.93 dB
2450(MHz)	3.96 dB	90.00 deg	-24.55 dB
2500(MHz)	3.95 dB	-86.00 deg	-21.86 dB

Layer	Max value	Position	Min value
2400(MHz)	4.00 dB	92.00 deg	-24.97 dB
2450(MHz)	4.46 dB	92.00 deg	-22.51 dB
2500(MHz)	4.35 dB	92.00 deg	-23.53 dB

Frequency(MHz) : 2400~2500. Pattern Field : X-Y plane

### Peak Gain



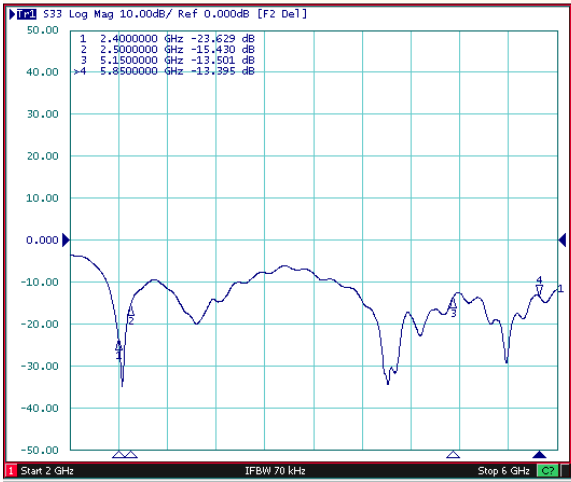
Layer	Max value	Position	Min value
2400(MHz)	4.12 dB	108.00 deg	2.80 dB
2450(MHz)	4.65 dB	112.00 deg	3.21 dB
2500(MHz)	4.52 dB	110.00 deg	3.29 dB

Peak Gain : Max 4.93 dBi

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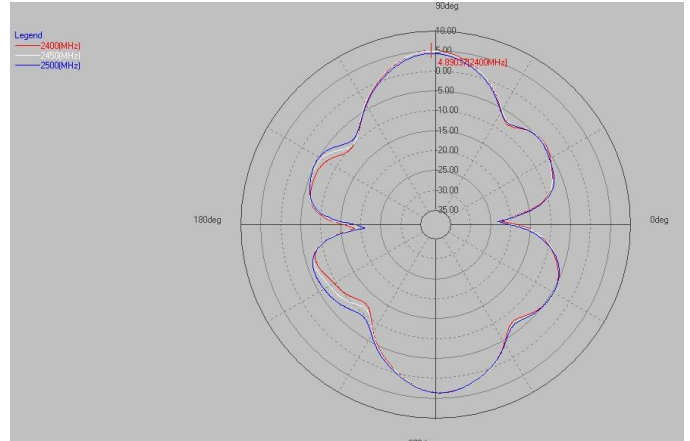
## BTEA00171325GR2A05

### Return Loss S33



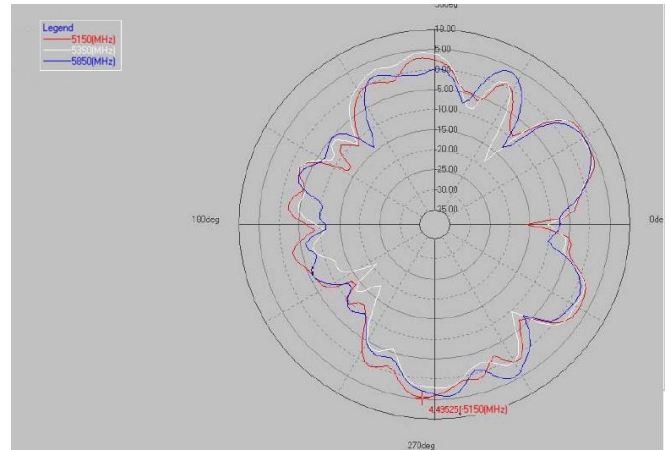
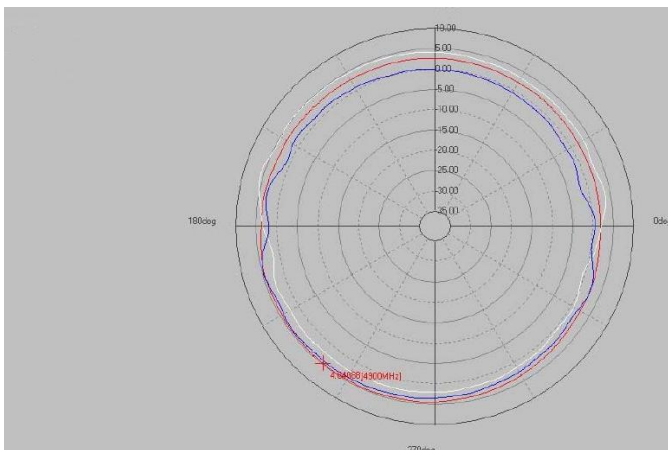
Frequency(MHz) : 2400~2500. Pattern Field : H plane

Frequency(MHz) : 2400~2500. Pattern Field : E plane



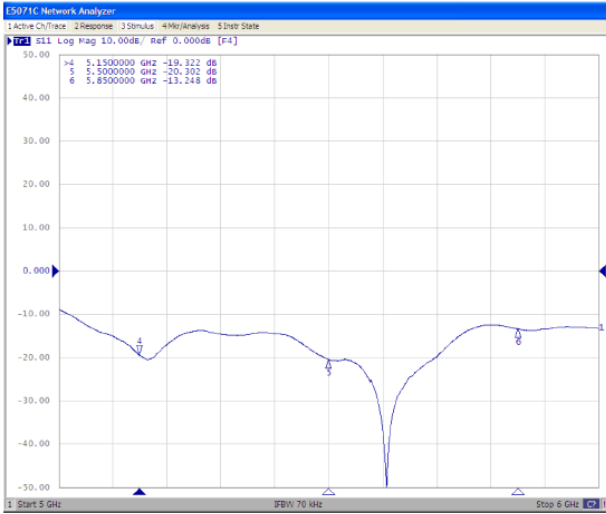
Frequency(MHz) : 5150-5850. Pattern Field : H plane

Frequency(MHz) : 5150-5850. Pattern Field : H plane

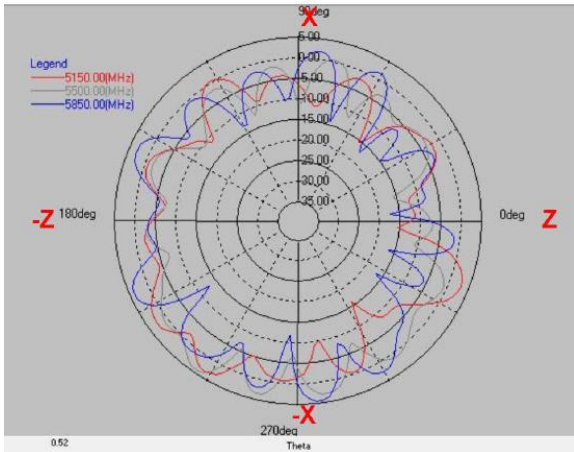


## BTEA0017135G0R2A07

### Return Loss S11

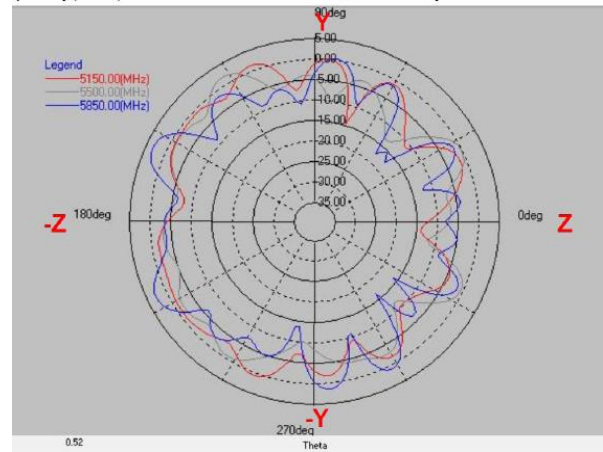


Frequency(MHz) : 5150~5850. Pattern Field : Z-X plane



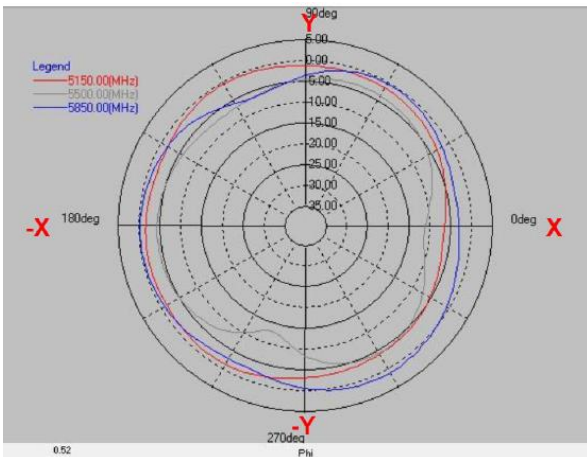
Layer	Max value	Min value	Average
5150(MHz)	3.34 dB	-16.23 dB	-2.61 dB
5500(MHz)	4.16 dB	-15.79 dB	-2.21 dB
5850(MHz)	4.32 dB	-17.42 dB	-1.71 dB

Frequency(MHz) : 2400~2500. Pattern Field : Z-Y plane



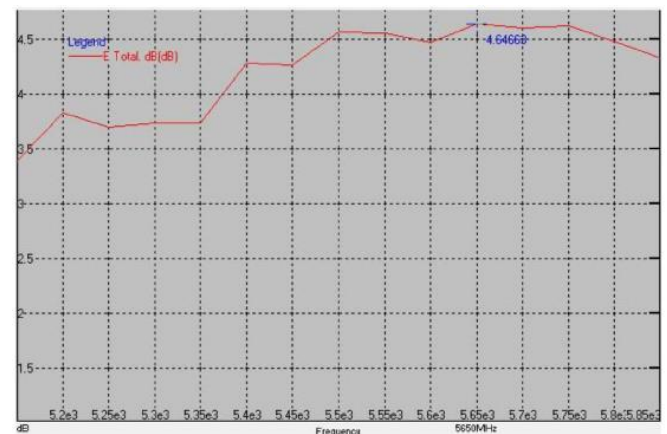
Layer	Max value	Min value	Average
5150(MHz)	1.29 dB	-14.92 dB	-3.08 dB
5500(MHz)	1.91 dB	-13.64 dB	-3.70 dB
5850(MHz)	3.34 dB	-17.69 dB	-3.01 dB

Frequency(MHz) : 2400~2500. Pattern Field : X-Y plane



Layer	Max value	Min value	Average
5150(MHz)	-0.60 dB	-6.57 dB	-2.41 dB
5500(MHz)	-3.85 dB	-13.30 dB	-6.05 dB
5850(MHz)	-0.98 dB	-6.75 dB	-1.47 dB

### Peak Gain



Peak Gain : Max 4.64 dBi

## BTEA0020104G0R2A02

### Return Loss



### VSWR



### Antenna Efficiency Peak Gain

Frequency (MHz)	TRP (dB)	Peak EIRP (Db)	E-Theta Peak Gain (dBi)	E-Phi Peak Gain (dBi)	E-Total Peak Gain (dBi)	Efficiency (%)
700	-2.82	0.83	0.43	-1.96	0.83	52.28
704	-2.64	0.98	0.55	-1.53	0.98	54.47
710	-2.39	1.23	0.69	-0.82	1.23	57.66
716	-2.05	1.57	0.75	-0.08	1.57	62.4
734	-1.53	2.61	1.53	1.25	2.61	70.28
740	-1.57	2.6	1.62	1.23	2.6	69.7
746	-1.69	2.43	1.45	1.21	2.43	67.84
751	-1.76	2.31	1.32	1.34	2.31	66.71
756	-1.88	2.21	1.16	1.4	2.21	64.8
777	-2.06	1.94	0.15	1.58	1.94	62.21
782	-2.07	1.8	0.11	1.46	1.8	62.02
787	-2.11	1.56	0.13	1.28	1.56	61.48
791	-2.21	1.31	0.06	1.06	1.31	60.18
806	-2.85	0.58	-0.1	0.02	0.58	51.86
821	-3.72	-0.34	-0.87	-1.47	-0.34	42.4
824	-3.87	-0.34	-1.06	-1.48	-0.34	40.97
836	-4.29	-0.48	-1	-1.5	-0.48	37.25
849	-4.05	-0.03	-0.71	-1.34	-0.03	39.36
862	-3.31	0.59	-0.27	-0.66	0.59	46.67
869	-2.96	0.91	-0.07	-0.41	0.91	50.58
880	-2.6	0.92	0.36	-0.73	0.92	54.92
894	-2.35	1.54	0.67	-0.34	1.54	58.1
900	-2.25	1.74	0.71	0.01	1.74	59.6
915	-2.05	2.34	0.66	0.93	2.34	62.33
925	-1.72	3.02	1.11	1.63	2.15	67.22
940	-1.15	4.2	1.54	2.97	2.31	76.81
960	-0.99	4.13	1.5	3.39	2.45	79.54

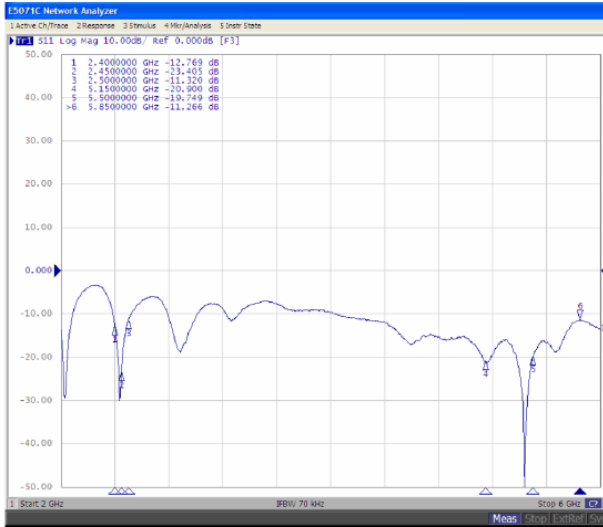
## External Antenna BTEA Series

### Antenna Efficiency Peak Gain

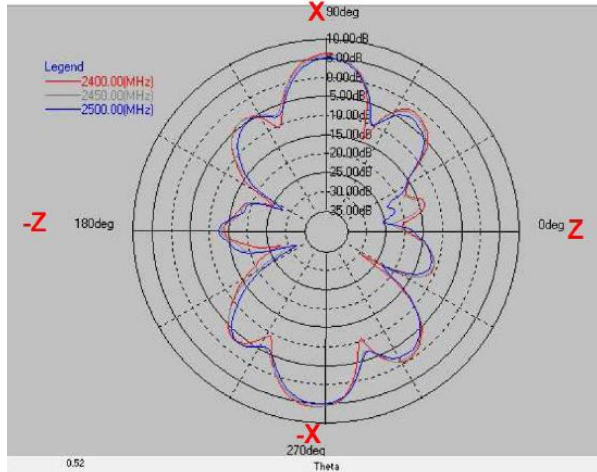
Frequency (MHz)	TRP (dB)	Peak EIRP (Db)	E-Theta Peak Gain (dBi)	E-Phi Peak Gain (dBi)	E-Total Peak Gain (dBi)	Efficiency (%)
1500	-4.62	0.3	-2.05	-2.12	0.3	34.5
1565	-3.46	0.21	-1.1	-1.69	0.21	45.03
1575	-2.95	1.11	-0.13	-0.88	1.11	50.73
1585	-2.39	2.09	0.82	-0.41	2.09	57.62
1592	-2.23	2.51	1.46	0.08	2.51	59.89
1602	-2.37	2.81	1.09	-0.13	2.81	57.95
1612	-3.15	2.05	0.61	-1.08	2.05	48.45
1710	-1.95	2.89	2.6	0.9	2.89	63.8
1730	-1.67	2.66	2.56	0.85	2.66	68.06
1750	-1.71	3.08	2.94	1.14	3.08	67.39
1770	-1.6	3.01	2.5	2.04	3.01	69.13
1785	-1.5	3.2	1.91	2.18	3.2	70.82
1805	-1.8	2.7	2.01	1.19	2.7	66.07
1840	-2.68	2.64	0.13	2.52	2.64	54
1850	-2.72	3.16	-0.39	2.9	3.16	53.4
1880	-1.79	3.41	1.91	3.04	3.41	66.21
1910	-1.5	3.51	1.95	2.62	3.51	70.78
1920	-1.43	2.97	2.07	2.06	2.97	71.91
1930	-1.49	3.15	2.12	2.01	3.15	70.99
1950	-1.37	2.8	2.05	2.1	2.8	72.96
1960	-1.15	3.11	2.09	2.37	3.11	76.8
1980	-0.989	2.91	2.34	2.31	2.91	79.8
1990	-0.72	3.17	3.04	2.77	3.17	84.78
2010	-0.7	3.3	3.03	2.38	3.3	85.11
2018	-0.73	3.43	3.16	2.52	3.43	84.55
2025	-0.73	3.35	3.09	2.07	3.35	84.44
2110	-0.85	3.55	2.9	3.11	3.55	82.27
2140	-0.95	4.33	2.9	4.06	4.33	80.28
2170	-1.2	4.05	2.28	3.91	4.05	75.9
2200	-1.29	3.01	2.22	2.45	3.01	74.27
2300	-1.02	4.51	2.04	3.7	4.51	78.98
2325	-1.36	3.87	1.32	3.45	3.87	73.13
2350	-1.44	4.01	1.34	3.76	4.01	71.72
2375	-1.23	3.42	0.67	2.58	3.42	75.29
2400	-0.87	3.89	1.14	3.23	3.89	81.88
2442	-1.12	3.7	0.88	3.33	3.72	77.2
2450	-1.09	3.46	1.26	3.29	3.46	77.75
2484	-1.06	3.19	0.61	2.48	3.19	78.36
2500	-1.31	3.28	1.03	3.14	3.28	73.96
2525	-1.4	3.41	0.67	3.28	3.41	72.4
2550	-1.34	4.01	1.2	3.79	4.01	73.4
2575	-1.22	3.97	0.55	3.79	3.97	75.56
2600	-1.57	3.8	1.02	3.78	3.8	69.7
2625	-2.05	3.05	0.7	2.99	3.05	62.39
2650	-2.35	2.89	0.27	2.43	2.89	58.19
2675	-2.48	3.37	-0.08	2.01	3.37	56.55
2700	-3.12	2.83	-0.06	1.57	2.83	48.8

## BTEA00271325GR2A03

### Return Loss S11

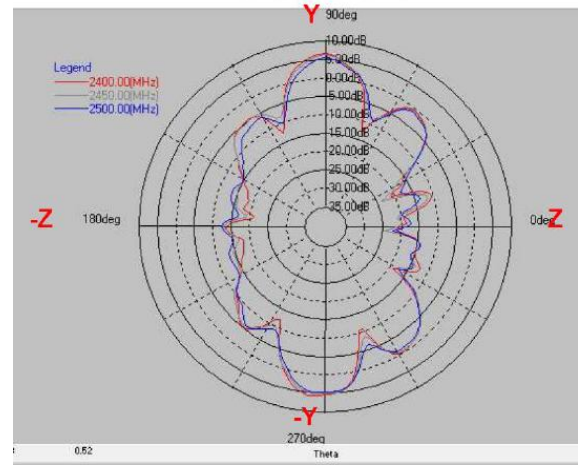


Frequency(MHz) : 2400~2500. Pattern Field : X-Z plane



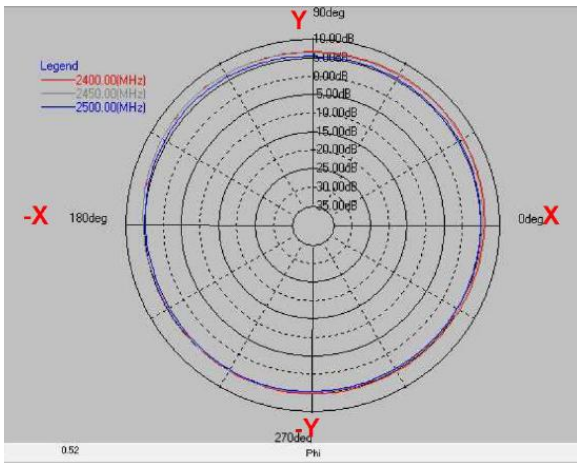
Layer	Max value	Min value	Average
2400(MHz)	6.00 dB	-29.73 dB	-2.29 dB
2450(MHz)	5.65 dB	-29.37 dB	-2.39 dB
2500(MHz)	4.97 dB	-32.12 dB	-3.07 dB

Frequency(MHz) : 2400~2500. Pattern Field : Y-Z plane



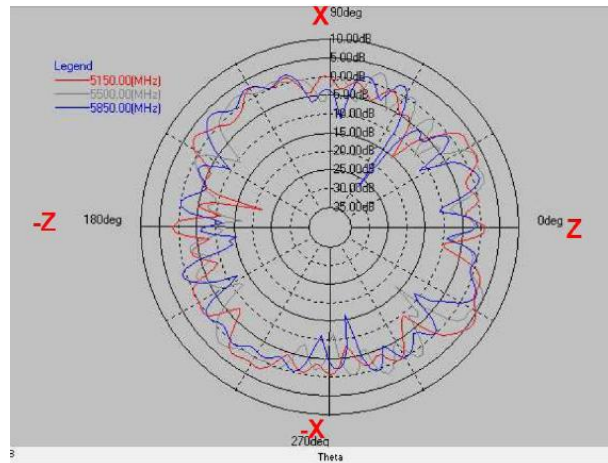
Layer	Max value	Min value	Average
2400(MHz)	6.34 dB	-21.38 dB	-2.36 dB
2450(MHz)	6.10 dB	-24.27 dB	-2.51 dB
2500(MHz)	5.19 dB	-22.16 dB	-3.04 dB

Frequency(MHz) : 2400~2500. Pattern Field : X-Y plane



Layer	Max value	Min value	Average
2400(MHz)	6.71 dB	4.62 dB	5.79 dB
2450(MHz)	6.70 dB	4.43 dB	5.57 dB
2500(MHz)	5.84 dB	4.20 dB	4.92 dB

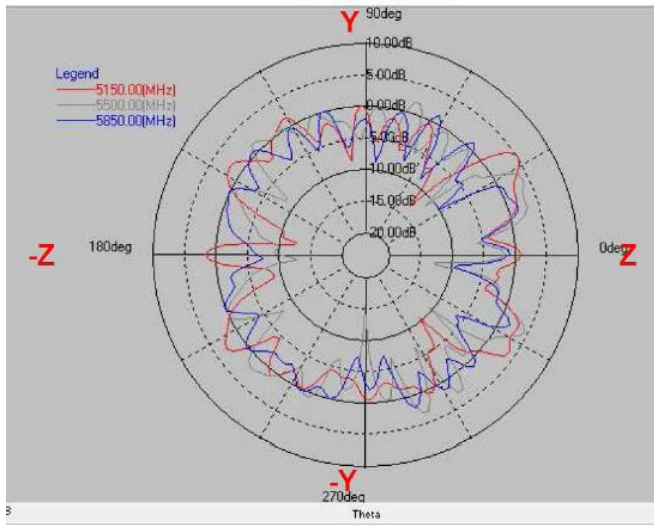
Frequency(MHz) : 5150~5850. Pattern Field : X-Z plane



Layer	Max value	Min value	Average
5150(MHz)	5.91 dB	-21.93 dB	-0.60 dB
5500(MHz)	4.90 dB	-17.01 dB	-1.14 dB
5850(MHz)	3.15 dB	-27.21 dB	-1.72 dB

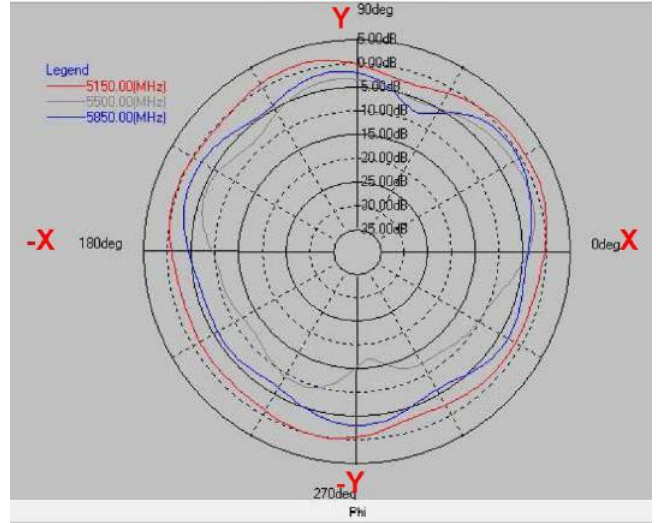
# External Antenna BTEA Series

Frequency(MHz) : 5150~5850. Pattern Field : Y-Z plane



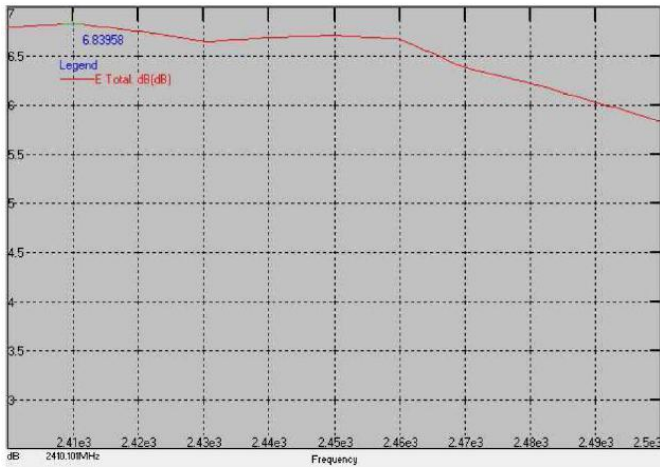
Layer	Max value	Min value	Average
5150(MHz)	5.02 dB	-13.25 dB	-0.85 dB
5500(MHz)	4.44 dB	-15.62 dB	-1.14 dB
5850(MHz)	1.87 dB	-10.07 dB	-1.75 dB

Frequency(MHz) : 5150~5850. Pattern Field : X-Y plane



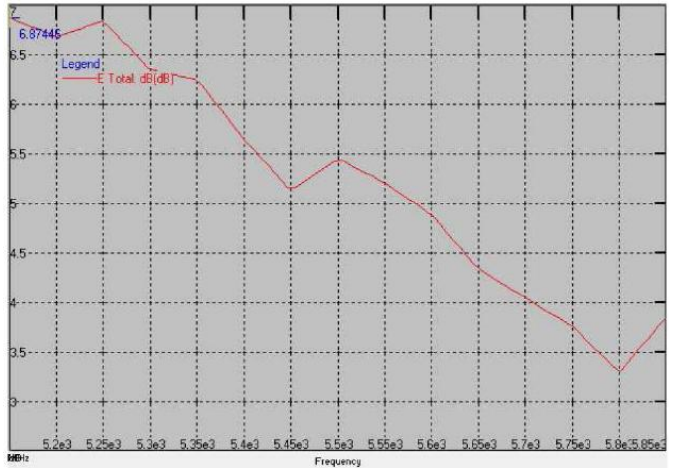
Layer	Max value	Min value	Average
5150(MHz)	1.32 dB	-2.94 dB	-0.60 dB
5500(MHz)	-1.36 dB	-17.19 dB	-6.32 dB
5850(MHz)	-0.40 dB	-7.88 dB	-3.67 dB

## 2.4G / Peak Gain



Peak Gain : Max 6.83 dBi

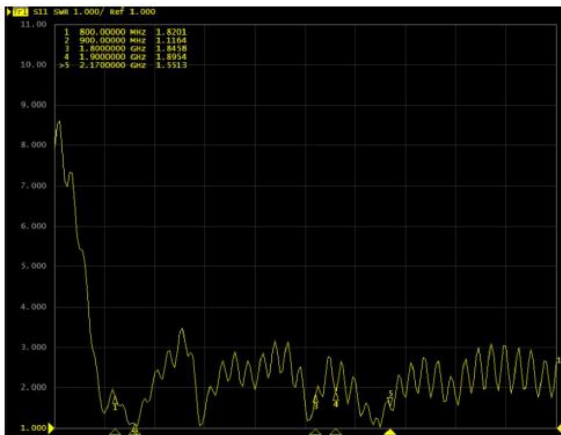
## 5G / Peak Gain



Peak Gain : Max 6.87 dBi

## BTEA0027300G8R1A01

### Return Loss S11



Please be sure to request approval specifications that provide further details of the products. Kindly note that the content of these specifications are subject to change or may be discontinued without prior notice. This product may not be designed/used in medical or high risk applications without Chilisin approval. Please contact our sales department before ordering.