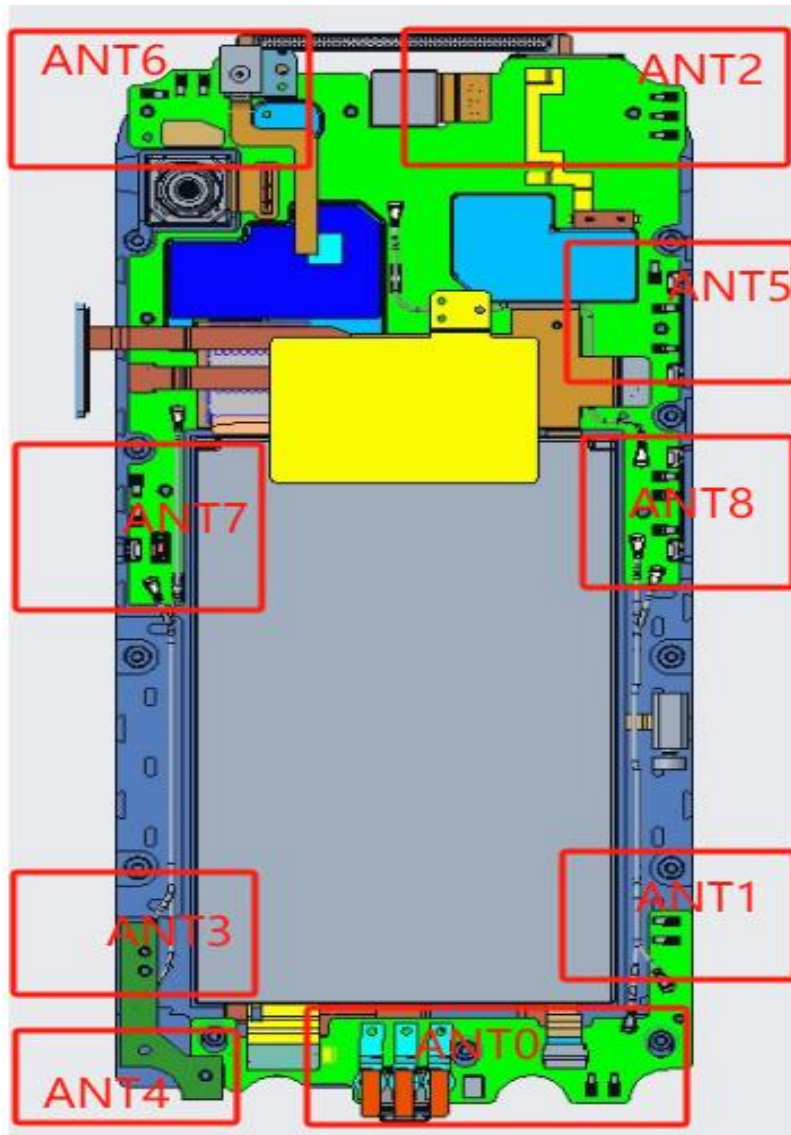


Product General Information:

Project Name	ECOM S203
Antenna Model Name	BMC10002753
Type and shape of antenna	PIFA Antenna
Directional characteristics	Omni-directional
Deflection Characteristics Of Antenna	Linear
Type of connection with transmitter	Antenna shrapnel
Manufacturer	Haitong Communication Electronics Co., Ltd. Room A405, Building A, Jingmeng Hi-Tech, No. 5, Shangdi East Road, Haidian District, Beijing, China
Produced by	Haitong Communication Electronics Co., Ltd. Room A405, Building A, Jingmeng Hi-Tech, No. 5, Shangdi East Road, Haidian District, Beijing, China
Tested by	Haitong Communication Electronics Co., Ltd. Room A405, Building A, Jingmeng Hi-Tech, No. 5, Shangdi East Road, Haidian District, Beijing, China

1. Antenna Distribution



Antenna No.	Description	Frequency	RF Bands/frequency
Ant 0	LB TRX	617 – 960 MHz	LTE: B5/B26, B8, B12, B13, B14, B18, B19, B20, B28, B29, B71 FR1: n5, n8, n12, n13, n14, n18, n20, n28, n29, n71
	MHB TRX	1710–2690 MHz	LTE: B1, B3, B7, B30, B34, B38, B39, B40, B41 FR1: n1, n2, n3, n7, n25, n30, n38, n40, n41
	MHB DRX	1710–2690 MHz	LTE: B2 (25), B4 (B66) FR1: n66
Ant 1	MHB MIMO PRX	1710–2690 MHz	LTE: B1, B2 (25), B3, B4 (B66), B7, B30, B38, B40, B41 FR1: n1, n2, n3, n7, n25, n30, n38, n40, n41, n66
	UHB DRX	3300 – 5000 MHz	LTE: B42, B43, B48 FR1: n48, n77, n78, n79
Ant 2	LB DRX	617 – 960 MHz	LTE: B5/B26, B8, B12, B13, B14, B18, B19, B20, B28, B29, B71 FR1: n5, n8, n12, n13, n14, n18, n20, n28, n29, n71
	MHB DRX	1710–2690 MHz	LTE: B1, B3, B7, B30, B34, B38, B39, B40, B41 FR1: n1, n2, n3, n7, n25, n30, n38, n40, n41
	MHB TRX	1710–2690 MHz	LTE: B2 (25), B4 (B66) FR1: n66

Ant 3	MHB MIMO DRX	1710–2690 MHz	LTE: B1, B2(25), B3, B4(B66), B7, B30, B38, B40, B41 FR1: n1, n2, n3, n7, n25, n30, n38, n40, n41, n66
Ant 4	UHB MIMO PRX	3300 – 5000 MHz	LTE: B42, B43, B48 FR1: n48, n77, n78, n79
Ant 5	GPS L5 UHB MIMO DRX	1166 – 1229 MHz	L5
		3300 – 5000 MHz	LTE: B42, B43, B48 FR1: n48, n77, n78, n79
Ant 6	GPS L1 WLAN CH0	1565 – 1610 MHz	L1
		2401 – 2495 MHz	2.4G WIFI/BT
		5150 – 7125 MHz	5G WIFI
Ant 7	UHB TRX	3300 – 4200 MHz	LTE: B42, B43, B48 FR1: n48, n77, n78, n79
Ant 8	WLAN CH1	2401 – 2495 MHz	2.4G WIFI/BT
		5150 – 7125 MHz	5G WIFI

2. Antenna Gain: (Main frequency)

ANT0		
Frequency Band		Antenna Gain
LTE-FDD-B1	1920-1980	1.45
LTE-FDD-B2	1850-1910	1.34
LTE-FDD-B3	1710-1785	-0.13
LTE-FDD-B4	1710-1755	-1.2
LTE-FDD-B5	824-849	-2.16
LTE-FDD-B7	2500-2570	0.74
LTE-FDD-B8	880-915	-2.09
LTE-FDD-B12	699-716	-3
LTE-FDD-B13	777-787	-2.06
LTE-FDD-B14	788-798	-3.11
LTE-FDD-B18	815-830	-2.22
LTE-FDD-B19	830-845	-2.16
LTE-FDD-B20	832-862	-1.9
LTE-FDD-B25	1850-1915	1.34
LTE-FDD-B26	814-849	-2.16
LTE-FDD-B28	703-748	-1.47
LTE-FDD-B30	2305-2315	-1.02
LTE-TDD-B34	2010-2025	0.51
LTE-FDD-B66	1710-1780	0.28
LTE-FDD-B71	663-698	-2.27
LTE-TDD-B38	2570-2620	0.74
LTE-TDD-B40	2300-2400	-0.66
LTE-TDD-B41	2496-2690	0.74

ANT1		
Frequency Band		Antenna Gain
LTE-TDD-B42	3400-3600	-1.24
LTE-TDD-B43	3600-3800	-1.02
LTE-TDD-B48	3550-3700	-1.76
NR-TDD-N77	3300-4200	0.37
NR-TDD-N78	3300-3800	-1.02
NR-TDD-N79	4400-5000	1.81

ANT2		
Frequency Band		Antenna Gain
LTE-FDD-B1	1920-1980	0.55
LTE-FDD-B2	1850-1910	1.34
LTE-FDD-B3	1710-1785	0.28
LTE-FDD-B4	1710-1755	-1.2
LTE-FDD-B5	824-849	-0.68
LTE-FDD-B7	2500-2570	1.79
LTE-FDD-B8	880-915	-0.86
LTE-FDD-B12	699-716	-2.02
LTE-FDD-B13	777-787	-1.05
LTE-FDD-B14	788-798	-1.36
LTE-FDD-B18	815-830	-0.92
LTE-FDD-B19	830-845	-0.68
LTE-FDD-B20	832-862	-0.68
LTE-FDD-B25	1850-1915	1.34
LTE-FDD-B26	814-849	-0.68
LTE-FDD-B28	703-748	-0.84
LTE-FDD-B30	2305-2315	0.48
LTE-TDD-B34	2010-2025	-2.88
LTE-FDD-B66	1710-1780	0.28
LTE-FDD-B71	663-698	-1.42
LTE-TDD-B38	2570-2620	0.24
LTE-TDD-B40	2300-2400	1.32
LTE-TDD-B41	2496-2690	1.79

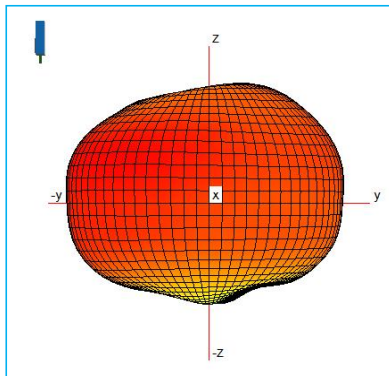
ANT7		
Frequency Band		Antenna Gain
LTE-TDD-B42	3400-3600	-0.89
LTE-TDD-B43	3600-3800	-0.36
LTE-TDD-B48	3550-3700	-0.48
NR-TDD-N77	3300-4200	-0.18
NR-TDD-N78	3300-3800	-0.48
NR-TDD-N79	4400-5000	-1.05

ANT6 (WLAN-CH0 and BT)		
Frequency Band		Antenna Gain
WIFI-B/BT	2400-2500	0.12
WIFI-A	5150-5850	0.63
WIFI-6E	5925-6425	1.69
	6425-6525	-1.02
	6525-6875	-1.27
	6875-7125	1.60

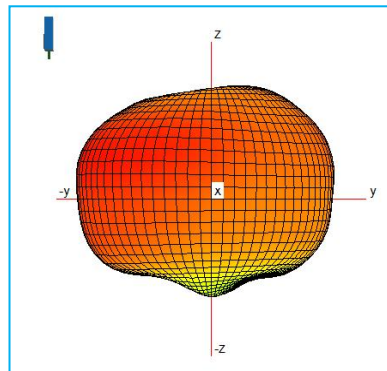
ANT8 (WLAN-CH1 and BT)		
Frequency Band		Antenna Gain
WIFI-B/BT	2400-2500	-0.68
WIFI-A	5150-5850	0.18
WIFI-6E	5925-6425	1.7
	6425-6525	1.28
	6525-6875	0.84
	6875-7125	-2.72

3. 3D Map

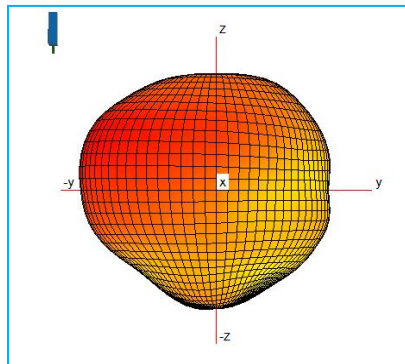
680MHz



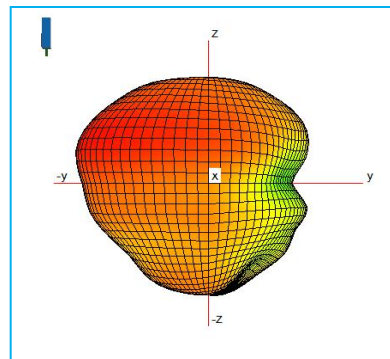
700MHz



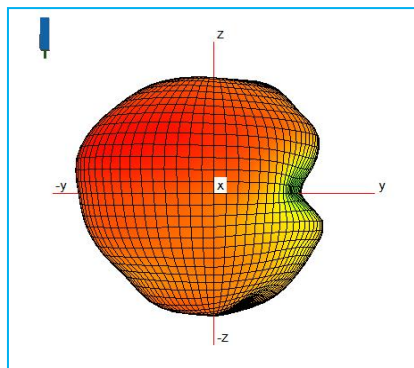
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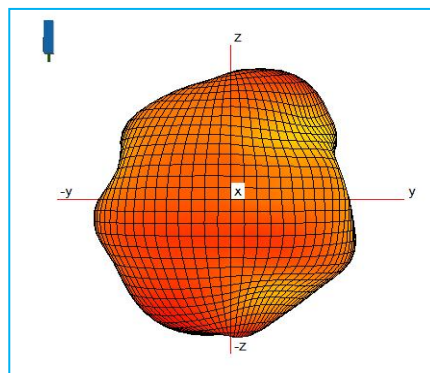
840MHz



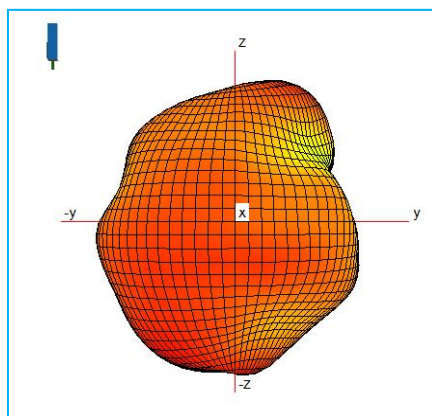
900MHz



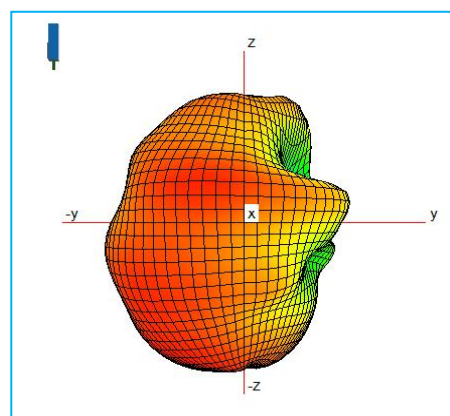
1720MHz



1740MHz

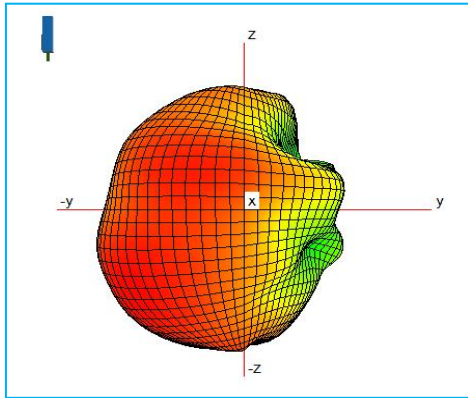


1880MHz

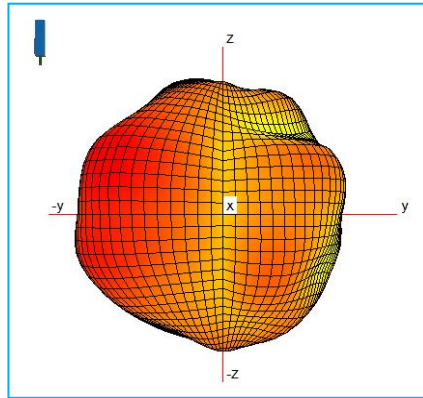


1940MHz

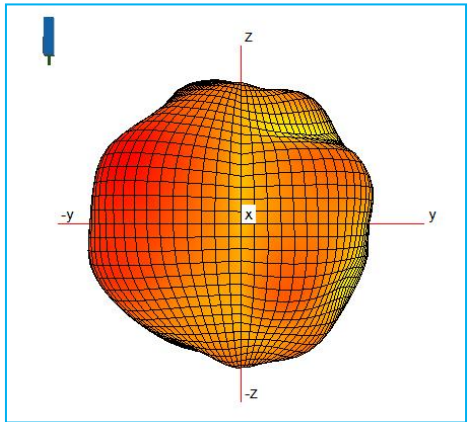
2320MHz



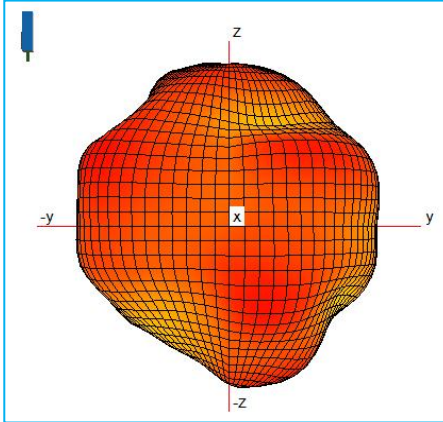
2340MHz



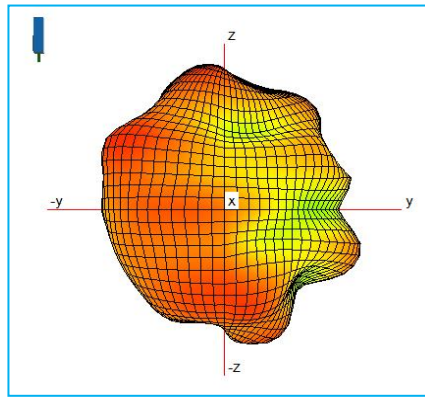
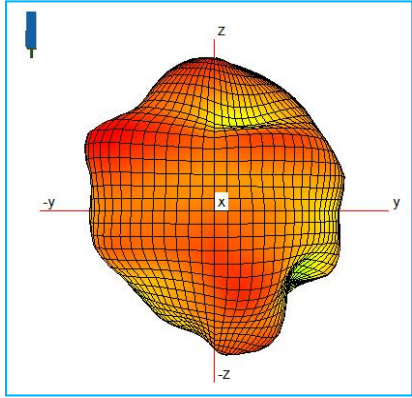
2500MHz



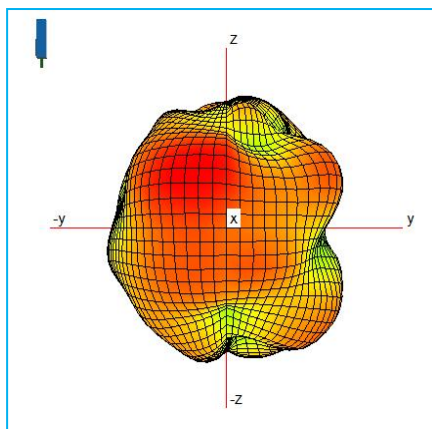
2580MHz



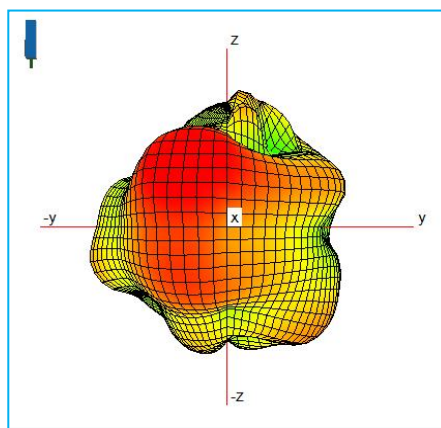
2680MHz



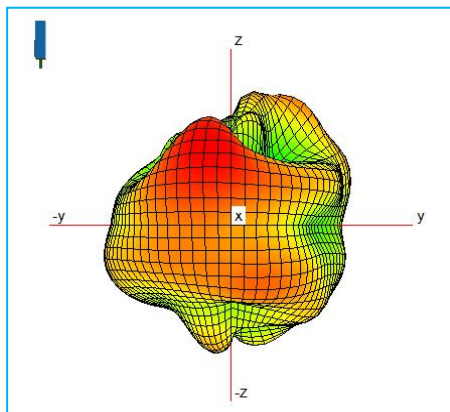
3350MHz



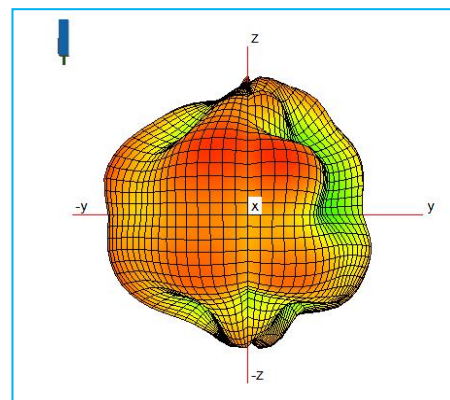
3550MHz



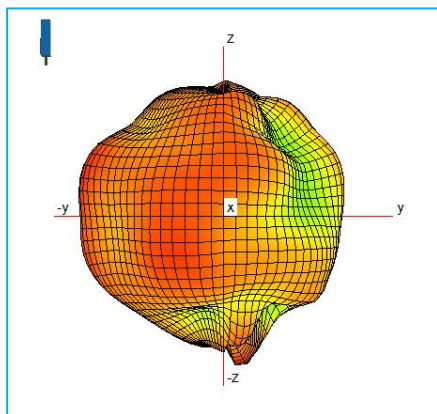
3750MHz



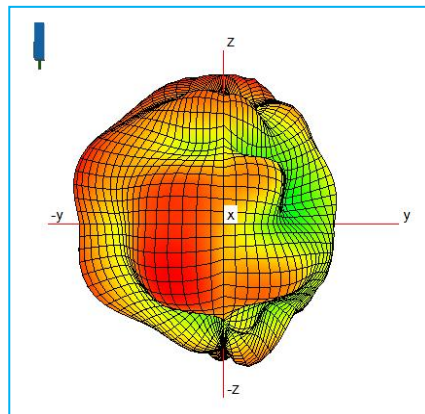
4150MHz



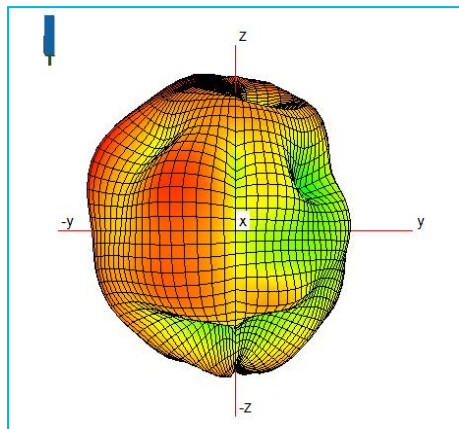
4450MHz



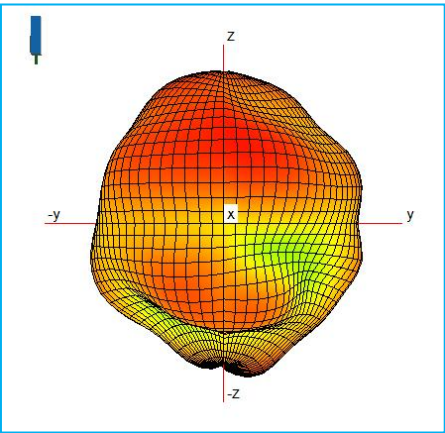
4700MHz



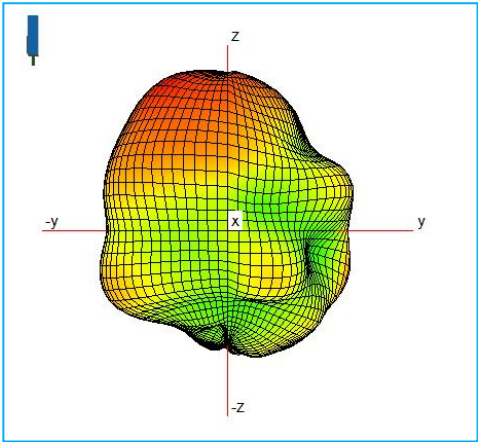
4950MHz



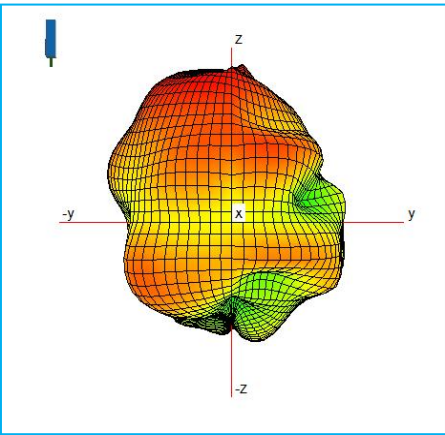
2450MHz(WLAN-CH0)



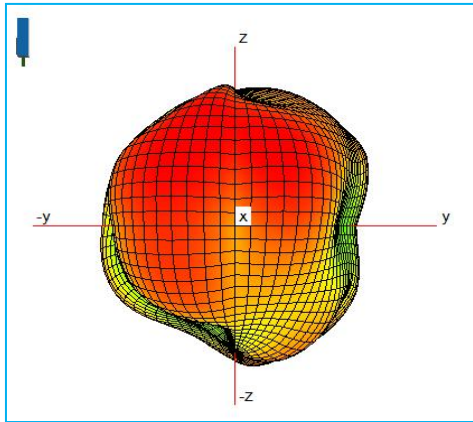
5500MHz(WLAN-CH0)



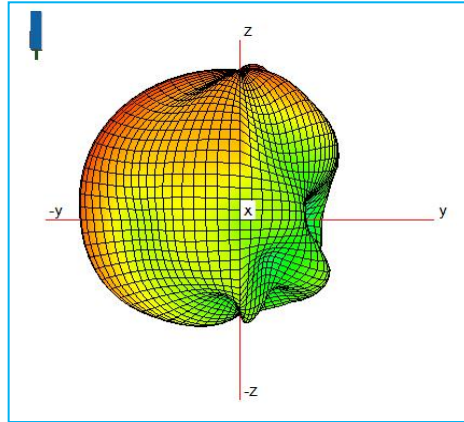
6520MHz(WLAN-CH0)



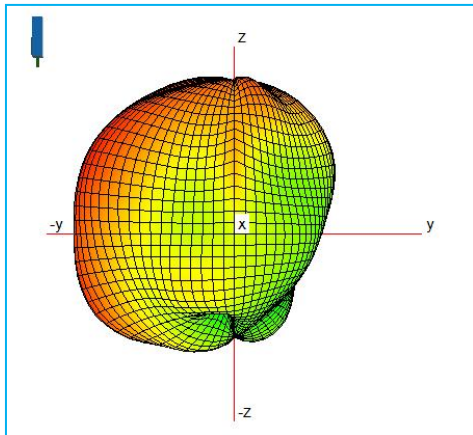
2450MHz(WLAN-CH1)



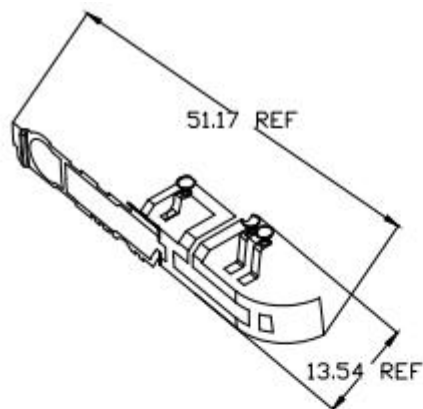
5500MHz(WLAN-CH1)



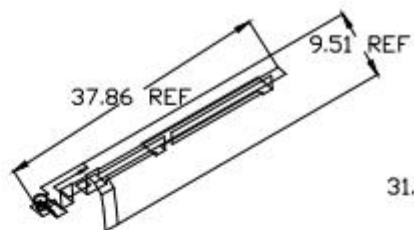
6520MHz(WLAN-CH1)



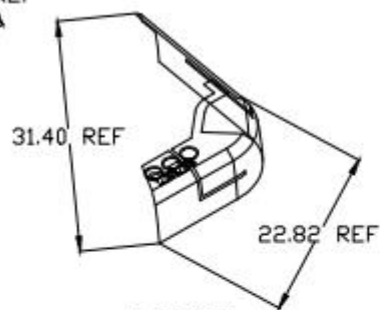
4. Antenna Pattern



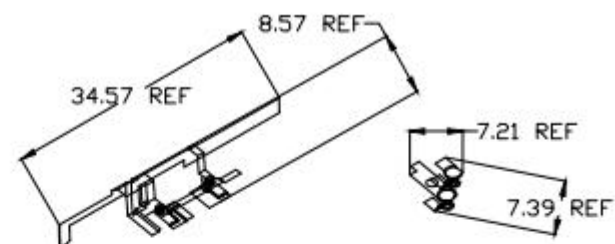
ANT0



ANT1

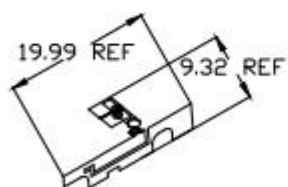


ANT2

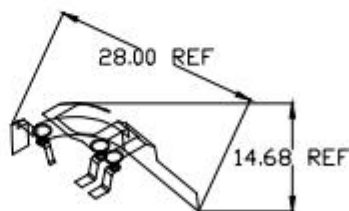


ANT3

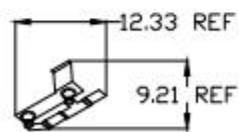
ANT4



ANT5



ANT6

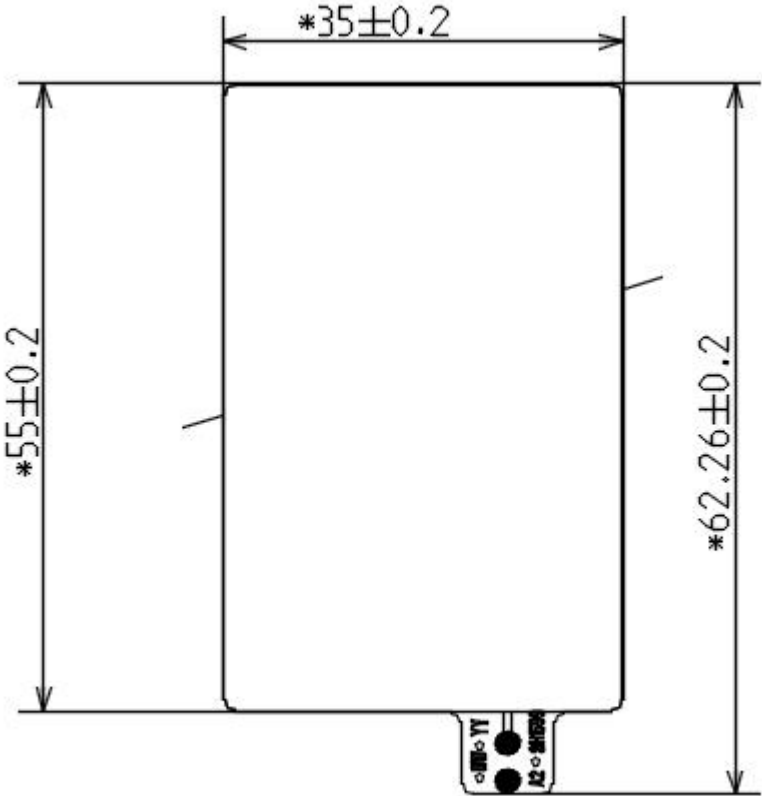


ANT7



ANT8

NFC Antenna



Antenna Placement (Rear View)

