



1.0. ACR1555 NFC Antenna

Model:	ACR1555		
Transmitter Frequency:	13.56 MHz $\pm$ 7 kHz		
Receiver Frequency:	13.56 MHz $\pm$ 7 kHz		
Type of Modulation:	ASK		
Antenna information:	Antenna Name	Model(s)/Type(s)	
	RF Antenna Assembly	Model/Part Number:	ACR1555
		Manufacturer:	ACS
		Frequency Range:	13.56 MHz $\pm$ 7 kHz
		Connector Type/ Maximum Gain	0 dBi
		Antenna Type/ Pattern:	inductive antenna
		Measurement:	52.28 mm x 24.8 mm



2.0. ACR1555 Bluetooth Antenna

Model:	ACR1555		
Transmitter Frequency:	2.4 GHz		
Receiver Frequency:	2.4 GHz		
Type of Modulation:	1 Mbps to 2Mbps, GFSK, 250 kHz or 500kHz deviation		
Antenna information:	Antenna Name	Model(s)/Type(s)	
	RF Antenna Assembly	Model/Part Number:	ACR1555
		Manufacturer:	ACS
		Frequency Range:	2.402 GHz – 2.480 GHz
		Connector Type/ Maximum Gain	3.026 dBi
		Antenna Type/ Pattern:	Meandered inverted-F antenna
		Measurement:	18.44 mm x 5.42 mm

ACR1555 40 Channels (Unit: MHz)

Channel	0	1	2	3	4	5	6	7	8	9
Frequency	2404	2406	2408	2410	2412	2414	2416	2418	2420	2422
Channel	10	11	12	13	14	15	16	17	18	19
Frequency	2424	2428	2430	2432	2434	2436	2438	2440	2442	2444
Channel	20	21	22	23	24	25	26	27	28	29
Frequency	2446	2448	2450	2452	2454	2456	2458	2460	2462	2464
Channel	30	31	32	33	34	35	36	37	38	39
Frequency	2466	2468	2470	2472	2474	2476	2478	2402	2426	2480

3 Channels are Advertising Channel: 37 (2402 MHz), 38 (2426 MHz), 39 (2480 MHz)

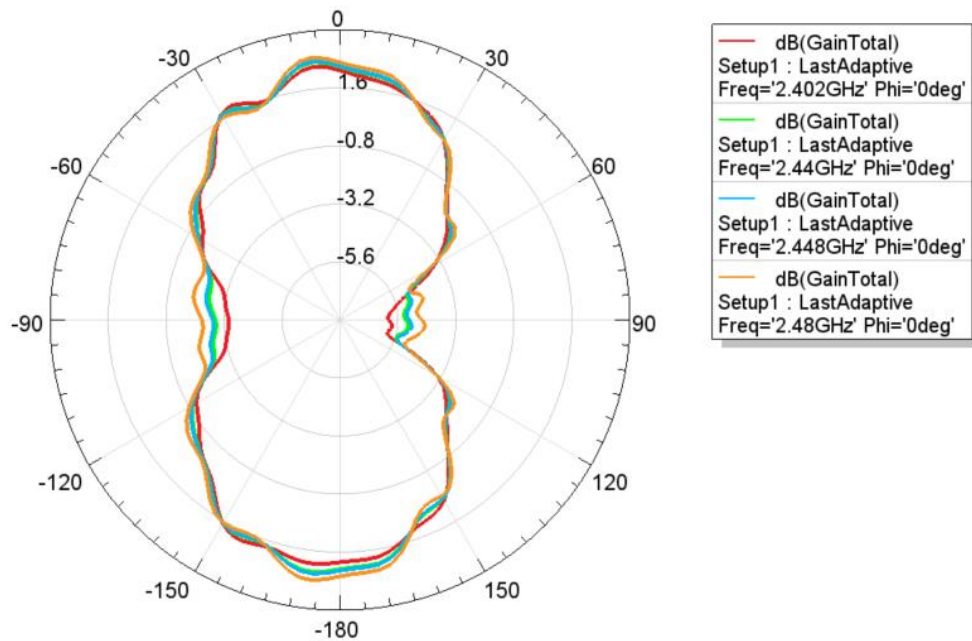
2.1.1. Gain and Efficiency

Frequency	Gain (dBi)
2402Mhz	3.026
2440Mhz	2.864
2448Mhz	2.842
2480Mhz	3.007

Annex A Figures

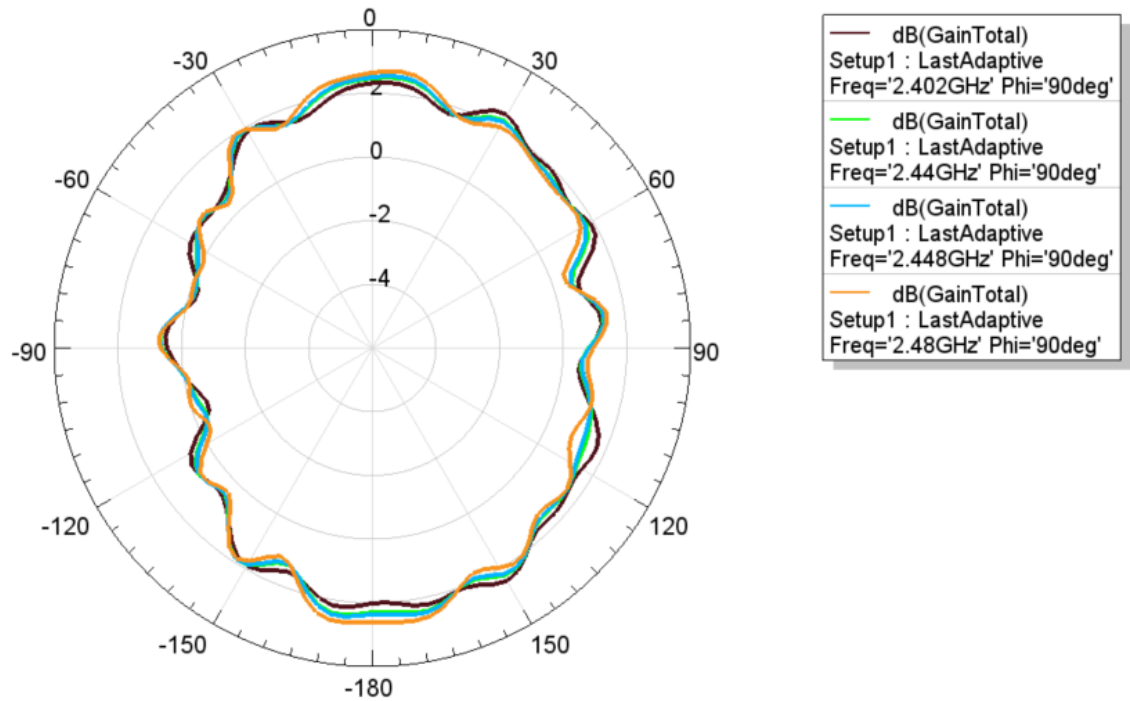
1. 2D Radiation Pattern

Phi=0°

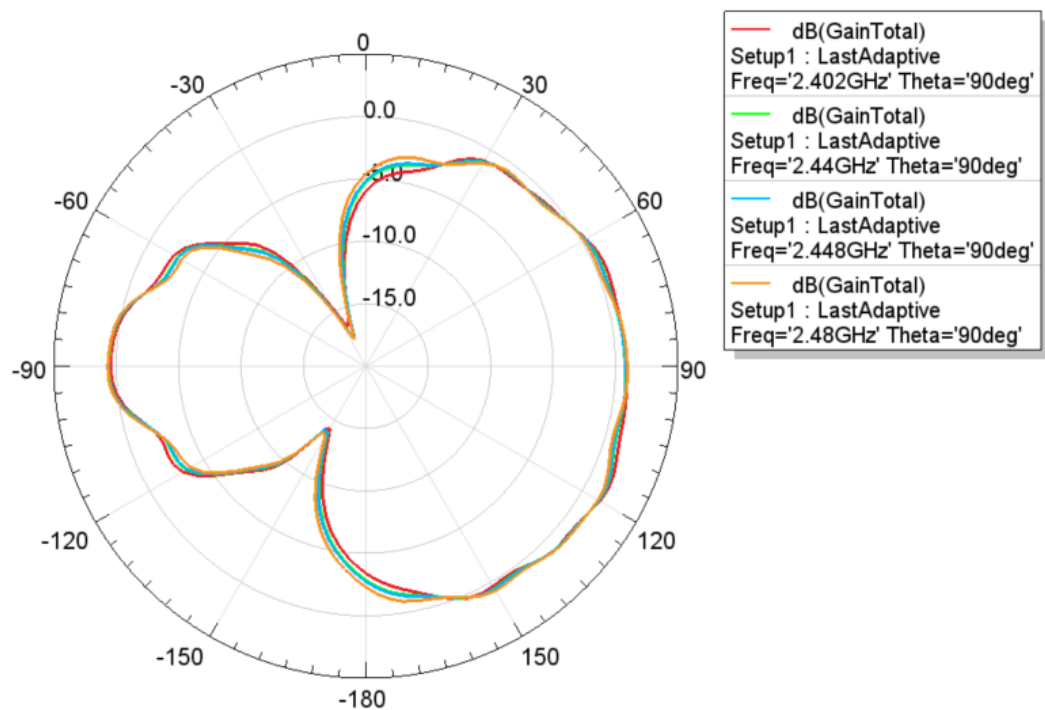




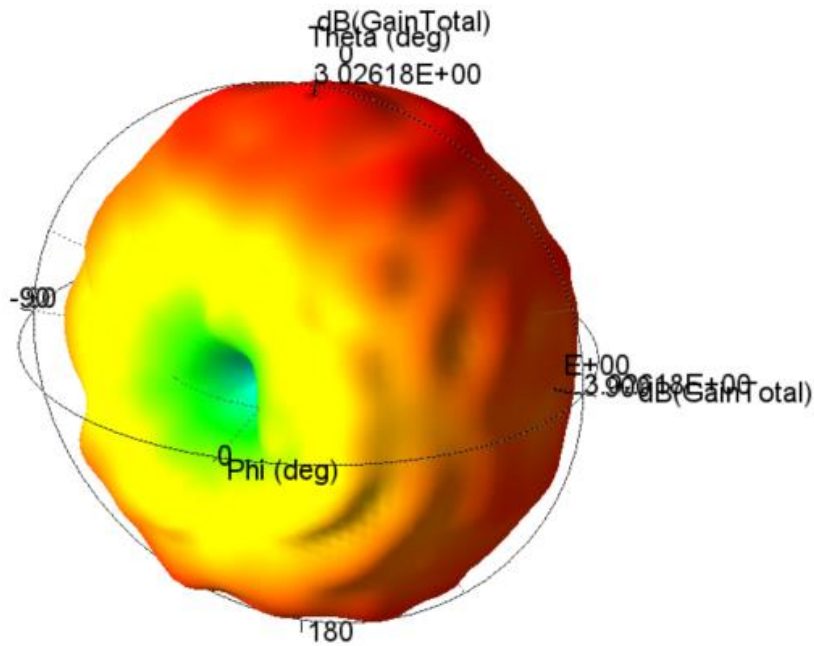
Phi=90°



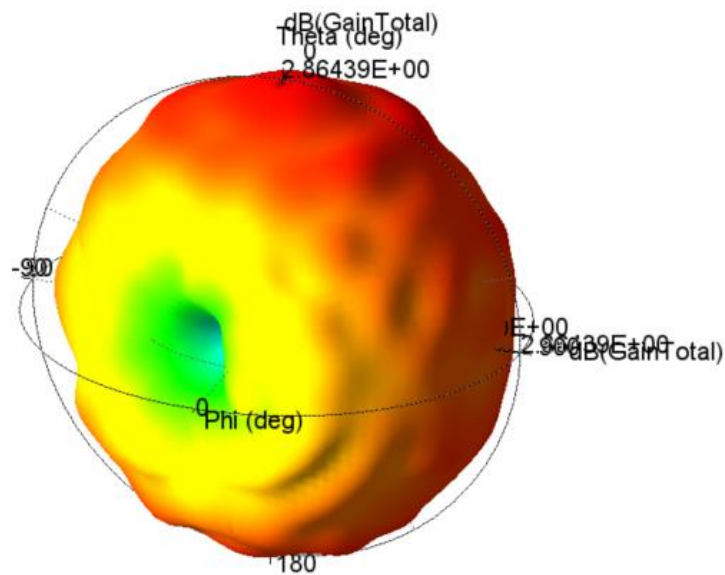
Theta=90°



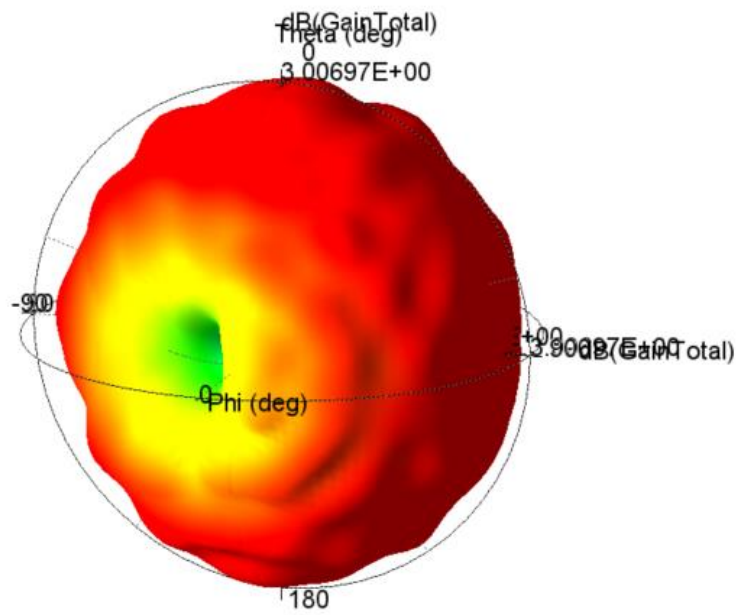
2.1.2. 3D Radiation Pattern



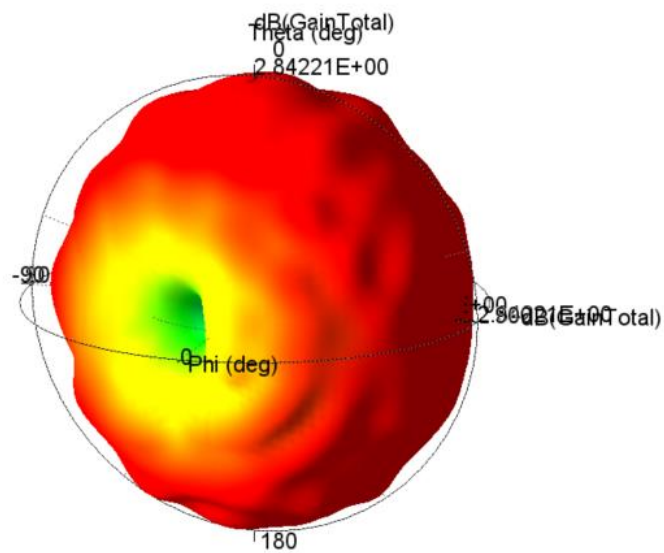
2402MHz



2440MHz



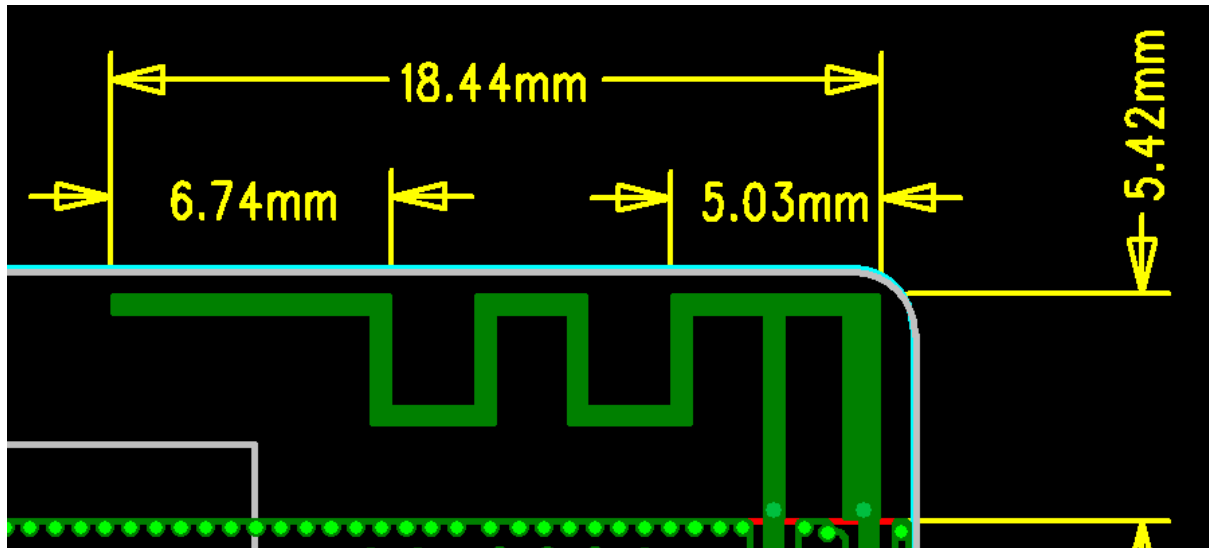
2448MHz



2448MHz

2.1.3. Antenna Size

BLE 2.4GHz antenna size : 18.44mm x 5.42mm



NFC antenna size 24.80mm x 52.28mm

