

Bose Antenna Specs (for Aubrey certifications)

A. Trumbo, 2026.June.09

Summary:

Antenna measurement data is provided, applicable to Aubrey regulatory certification. Measurements were made on Bose Aubrey main printed circuit board antenna while inserted in the full speaker assembly. A diagram of the antenna can be found on page 2. Each Aubrey final assembly contains one antenna, which is designed as a fixed part of the equipment. There is no external antenna connector; the antenna cannot be disconnected, replaced, or modified by the end-user.

The antennas specified in this document has a peak gain of

- Left Bud -3.93 dBi, in the 2.4 GHz band.
- Right Bud -4.53 dBi, in the 2.4 GHz band.

Notes:

1. Antenna gain was measured, and is specified, at the final assembly level in FREE SPACE.
2. A rendering of the final assembly and the working coordinate system can be found on page 3.
3. Measurements were made in the RayZone1800 5G OTA anechoic chamber.
4. A temporary coaxial feed was added to the main printed circuit board at the etched antenna within the final assembly to perform the measurements described in this document.

Antenna MFG	Address
Top link	Shenzhen Top-link Technologies Co.,Ltd. No.610# Fengtang Avenue, Zhengfeng Industrial Park, Fuhai Street,Bao'an District, Shenzhen, Guangdong Province, China
SAA	Shanghai Amphenol Airwave No.689 Shen Nan Road, Xin Zhuang Industry Park, Shanghai, China 201108

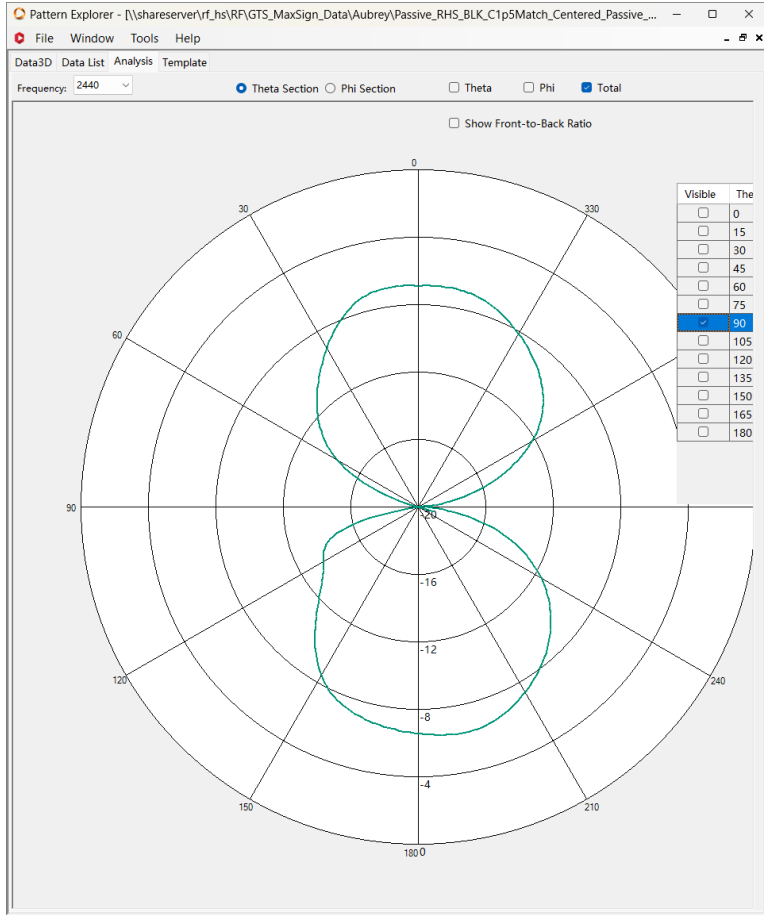
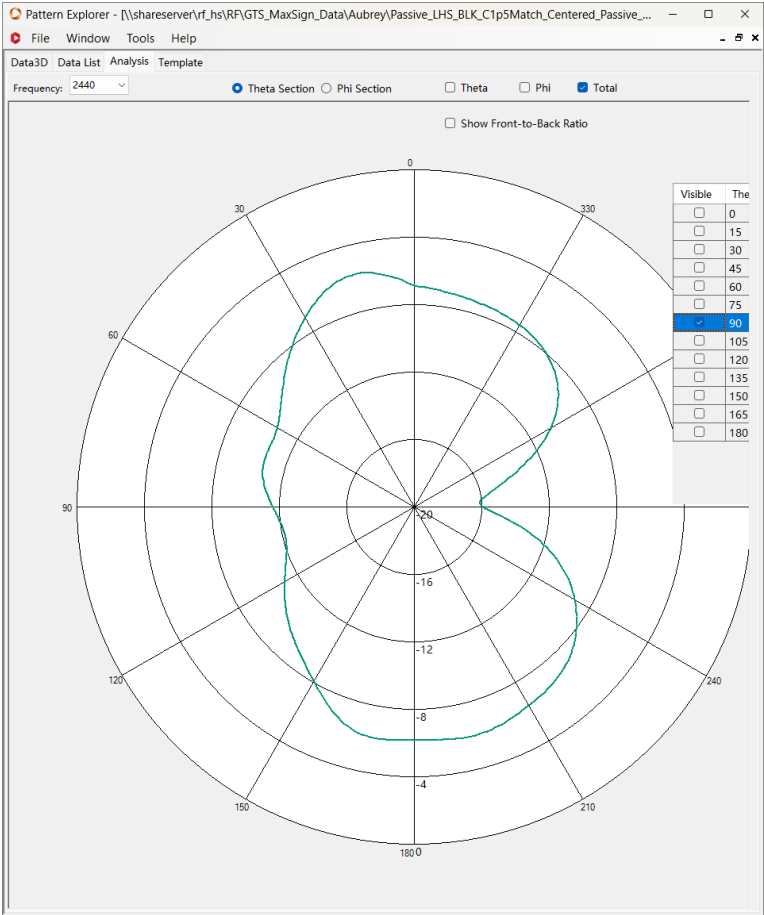
Bose Antenna Specs **Peak Antenna Gain – 2.4 GHz Band**

Left					
chNo	Freq	TRP [dBm]	Gain [dBi]	Efficiency_dB	Efficiency_Pcent
81	2400	-7.61	-4.50	-7.61	17.35
82	2405	-7.55	-4.25	-7.55	17.60
83	2410	-7.45	-4.19	-7.45	17.99
84	2415	-7.39	-4.12	-7.39	18.26
85	2420	-7.30	-4.01	-7.30	18.63
86	2425	-7.28	-4.01	-7.28	18.71
87	2430	-7.25	-3.96	-7.25	18.85
88	2435	-7.27	-4.25	-7.27	18.77
89	2440	-7.28	-4.08	-7.28	18.70
90	2445	-7.23	-4.06	-7.23	18.94
91	2450	-7.17	-3.99	-7.17	19.20
92	2455	-7.14	-3.94	-7.14	19.31
93	2460	-7.16	-3.93	-7.16	19.22
94	2465	-7.15	-4.08	-7.15	19.29
95	2470	-7.10	-4.04	-7.10	19.52
96	2475	-7.04	-3.99	-7.04	19.78
97	2480	-6.99	-3.96	-6.99	20.01

Right					
chNo	Freq	TRP [dBm]	Gain [dBi]	Efficiency_dB	Efficiency_Pcent
81	2400	-9.28	-6.64	-9.28	11.80
82	2405	-9.08	-6.42	-9.08	12.36
83	2410	-8.92	-6.23	-8.92	12.83
84	2415	-8.78	-6.11	-8.78	13.24
85	2420	-8.63	-5.97	-8.63	13.71
86	2425	-8.51	-5.88	-8.51	14.08
87	2430	-8.40	-5.91	-8.40	14.44
88	2435	-8.32	-5.62	-8.32	14.71
89	2440	-8.25	-5.57	-8.25	14.96
90	2445	-8.10	-5.37	-8.10	15.50
91	2450	-7.92	-5.13	-7.92	16.13
92	2455	-7.81	-5.04	-7.81	16.55
93	2460	-7.77	-5.04	-7.77	16.70
94	2465	-7.72	-4.89	-7.72	16.90
95	2470	-7.64	-4.78	-7.64	17.22
96	2475	-7.47	-4.70	-7.47	17.89
97	2480	-7.29	-4.53	-7.29	18.65

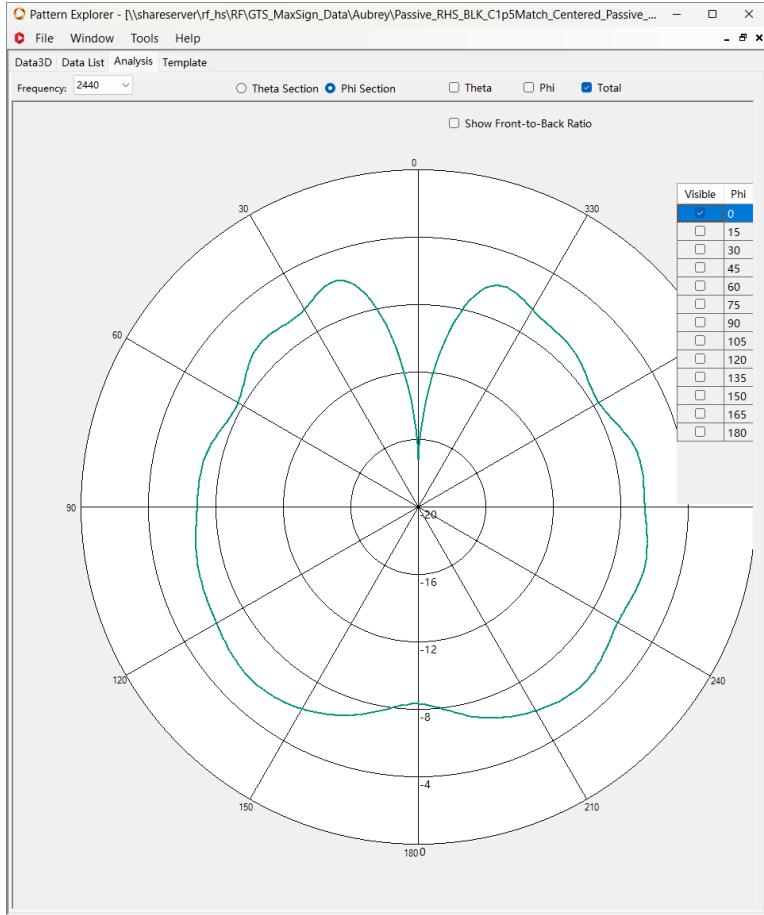
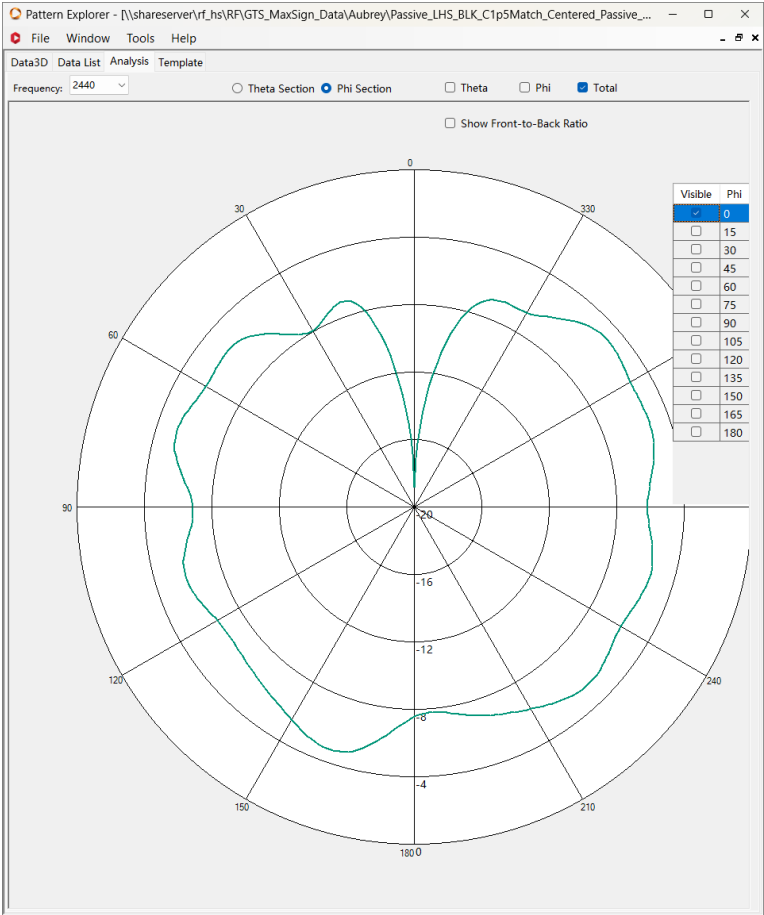
Bose Antenna Specs

2D Antenna Gain – 2440 MHz / Top View (“XY” Plane)



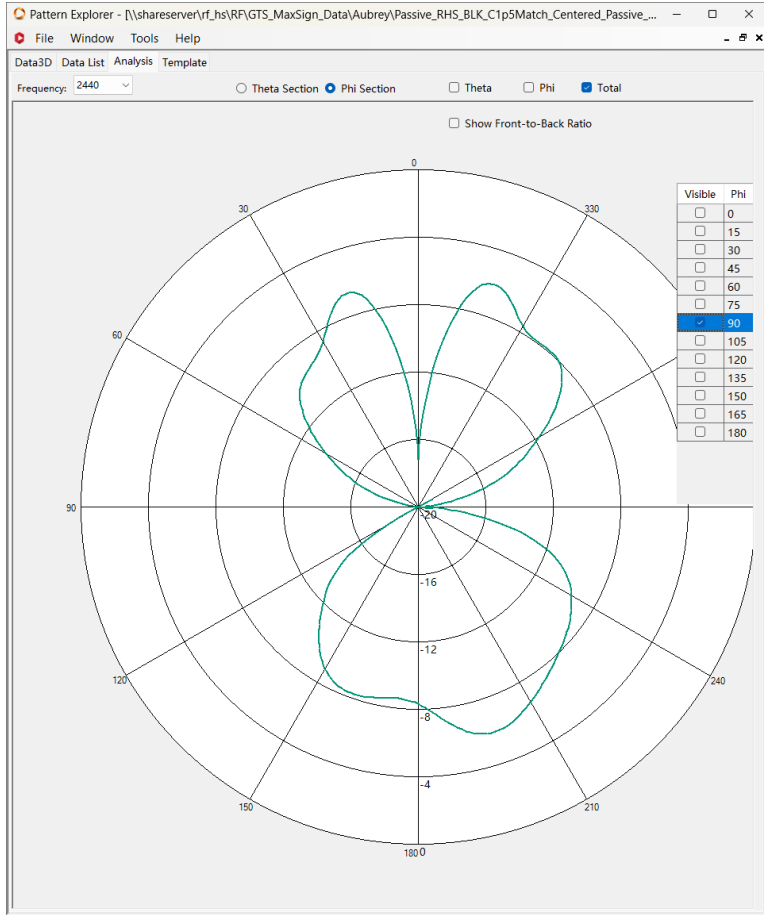
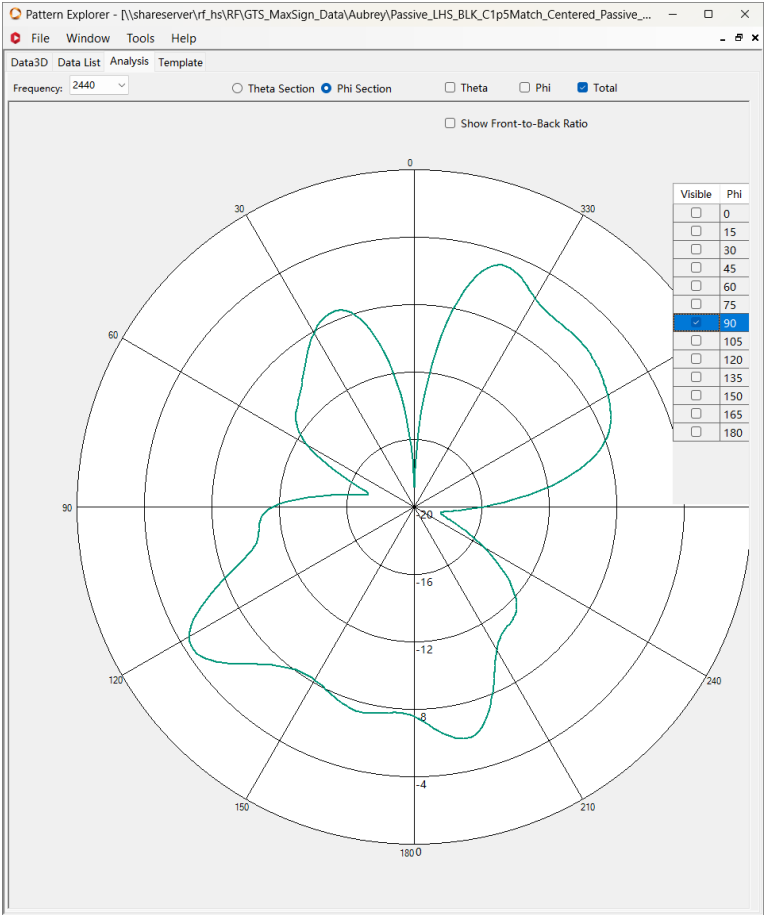
Bose Antenna Specs

2D Antenna Gain – 2440 MHz / Top View (“XZ” Plane)



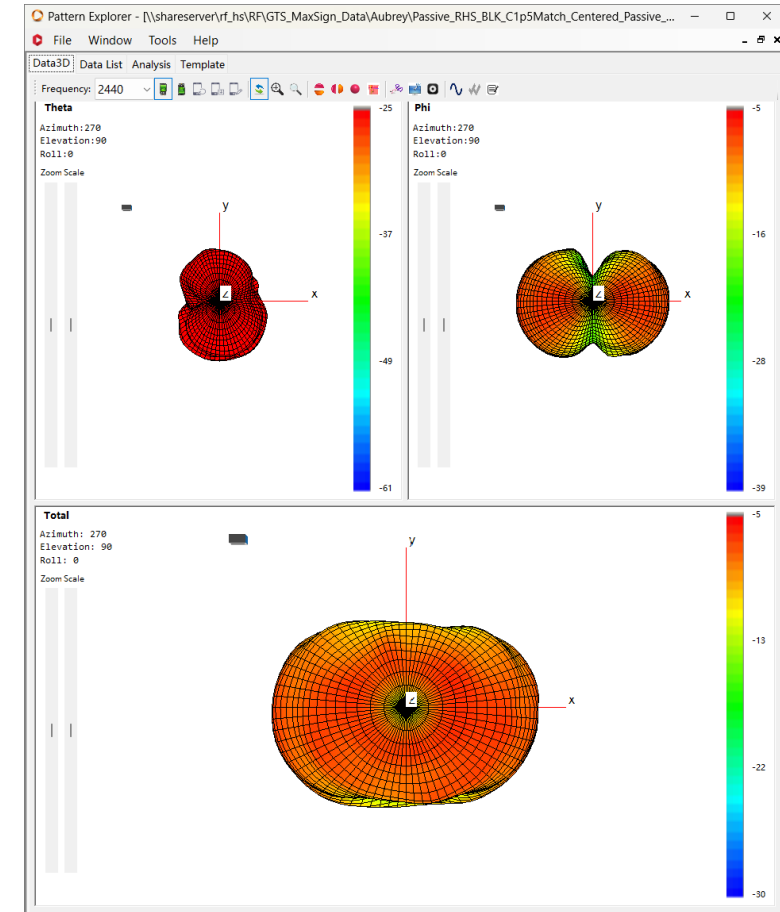
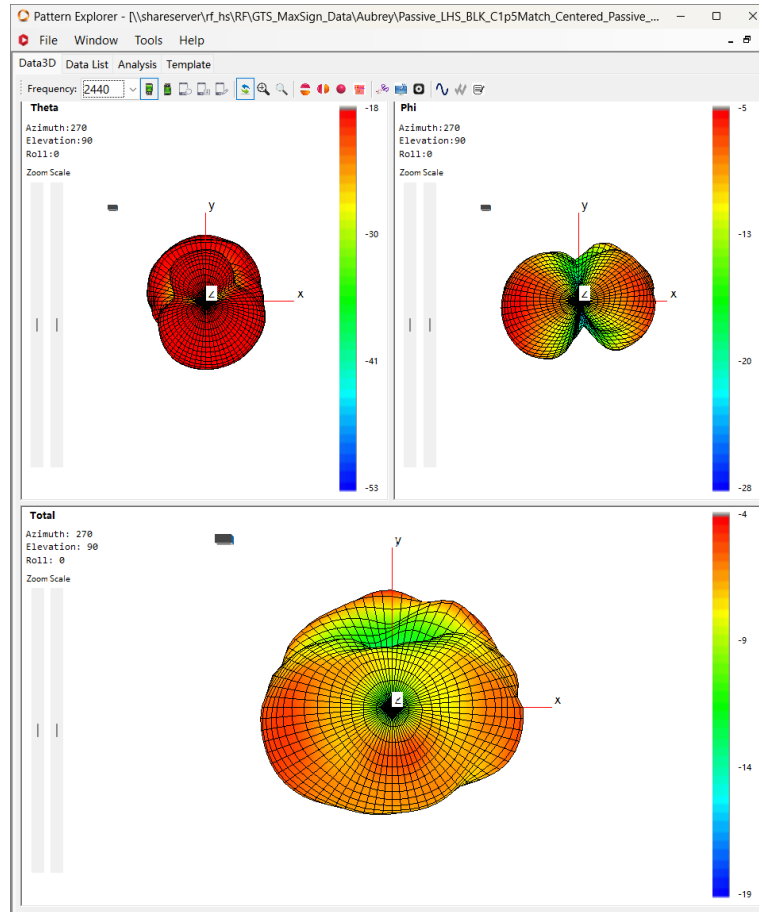
Bose Antenna Specs

2D Antenna Gain – 2440 MHz / Top View (“YZ” Plane)



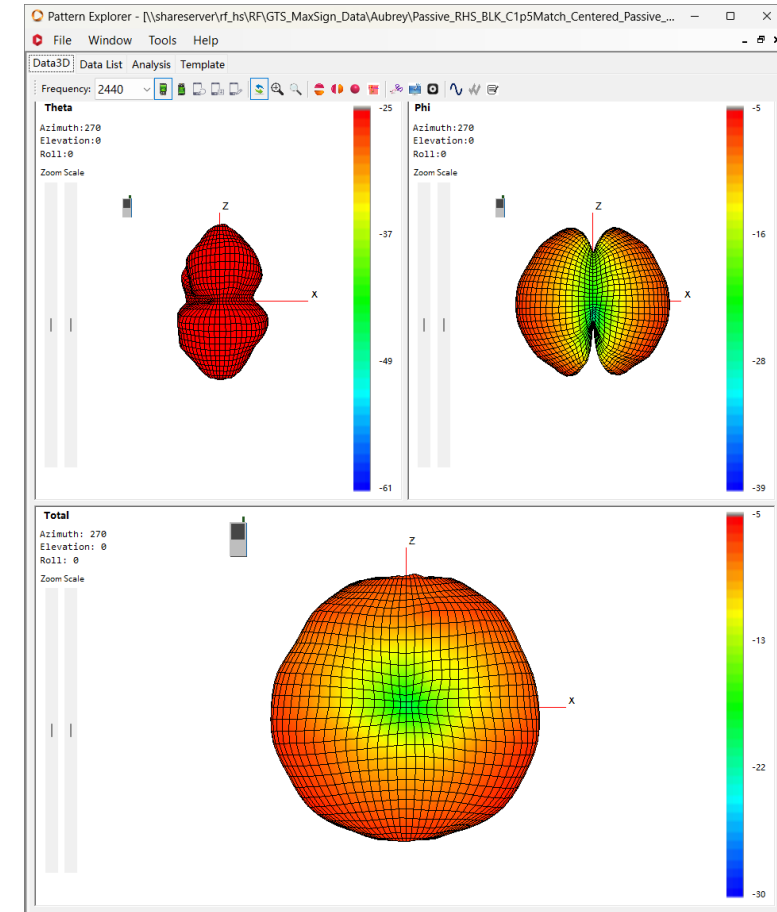
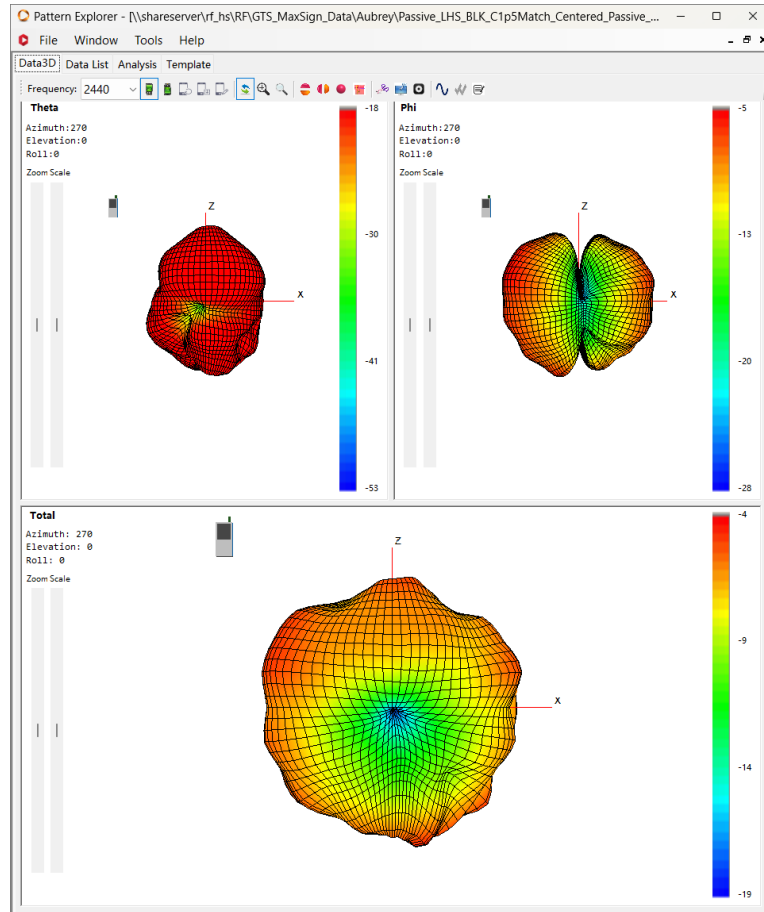
Bose Antenna Specs

3D Antenna Gain – 2440 MHz / Front View (“XY” Plane)



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3D Antenna Gain – 2440 MHz / Front View (“XZ” Plane)



Bose Antenna Specs

3D Antenna Gain – 2440 MHz / Front View (“YZ” Plane)

