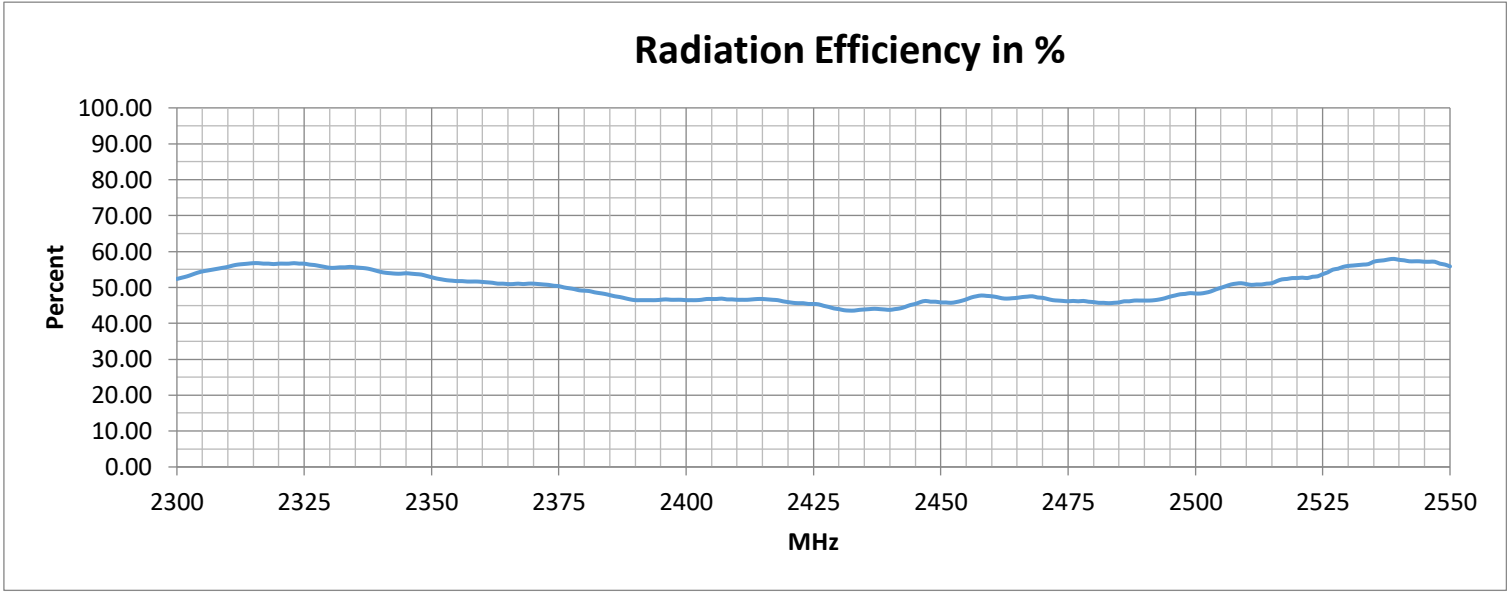
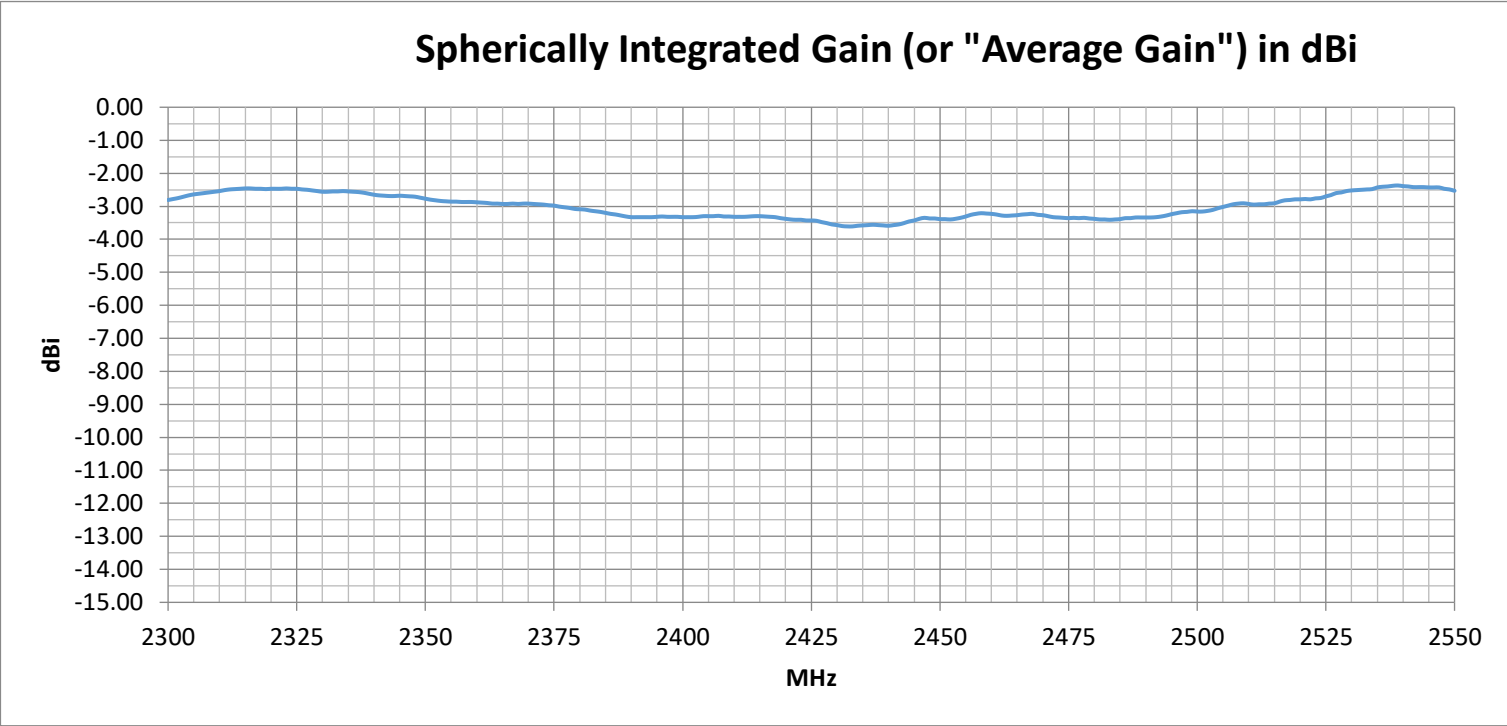


Antenna Test Lab Co. Summary	
www.AntennaTestLab.com	
Test Date	2022 年 10 月 21 日
Tested By:	Glenn Robb (919) 200-0292 Info@AntennaTestLab.com
Sample Description	See file name for model number and/or test configuration

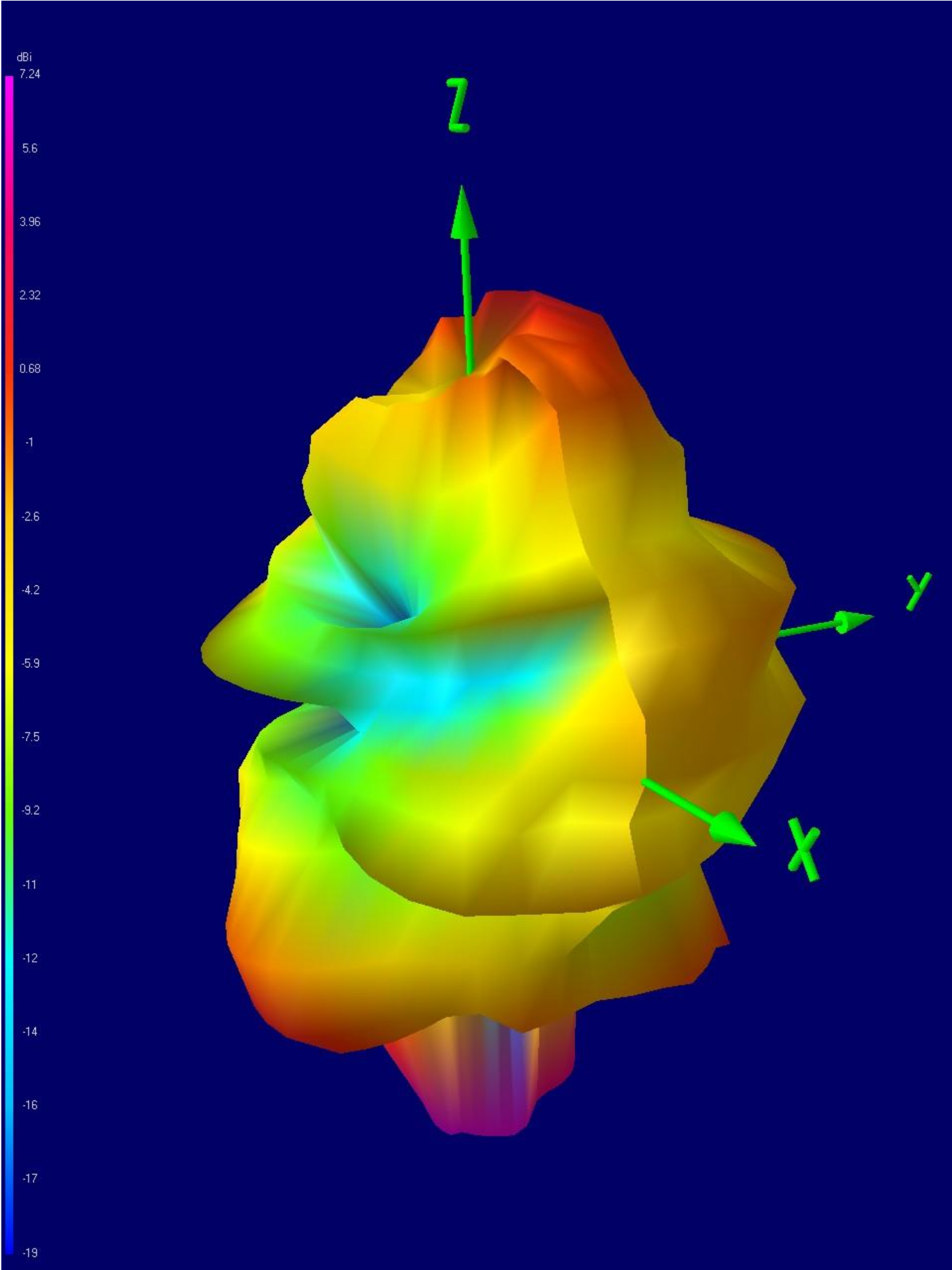
Axis	Antenna Under Test Orientation Notes (See Coordinate Diagram Tab And Separate Setup Photos)
+Z Axis is Theta= 0 & Phi=any	
-Z Axis is Theta= 180 & Phi=any	Axis of feed line
+X axis is Theta=90 & Phi=0	
-X axis is Theta=90 & Phi=180	
+Y axis is Theta=90 & Phi=90	
-Y axis is Theta=90 & Phi=270	
Other Coordinate Notes, 3-Axis Cuts in Spherical Coordinates ...	
XZ Cut (Turntable) is Theta=0-360 & Phi=0, or Theta=0-180 & Phi=0 then Theta=180-0 & Phi=180	
YZ Cut is Theta=0-360 & Phi=90, or Theta=0-180 & Phi=90 then Theta=180-0 & Phi=270	
XY Cut is Theta=90 & Phi=0-360	

Notes And Observations
Customers may download 3-Dimensional pattern visualization software (use on Theta-Ring.TXT file) from
http://antennatestlab.com/antenna-education-tutorials/plotting

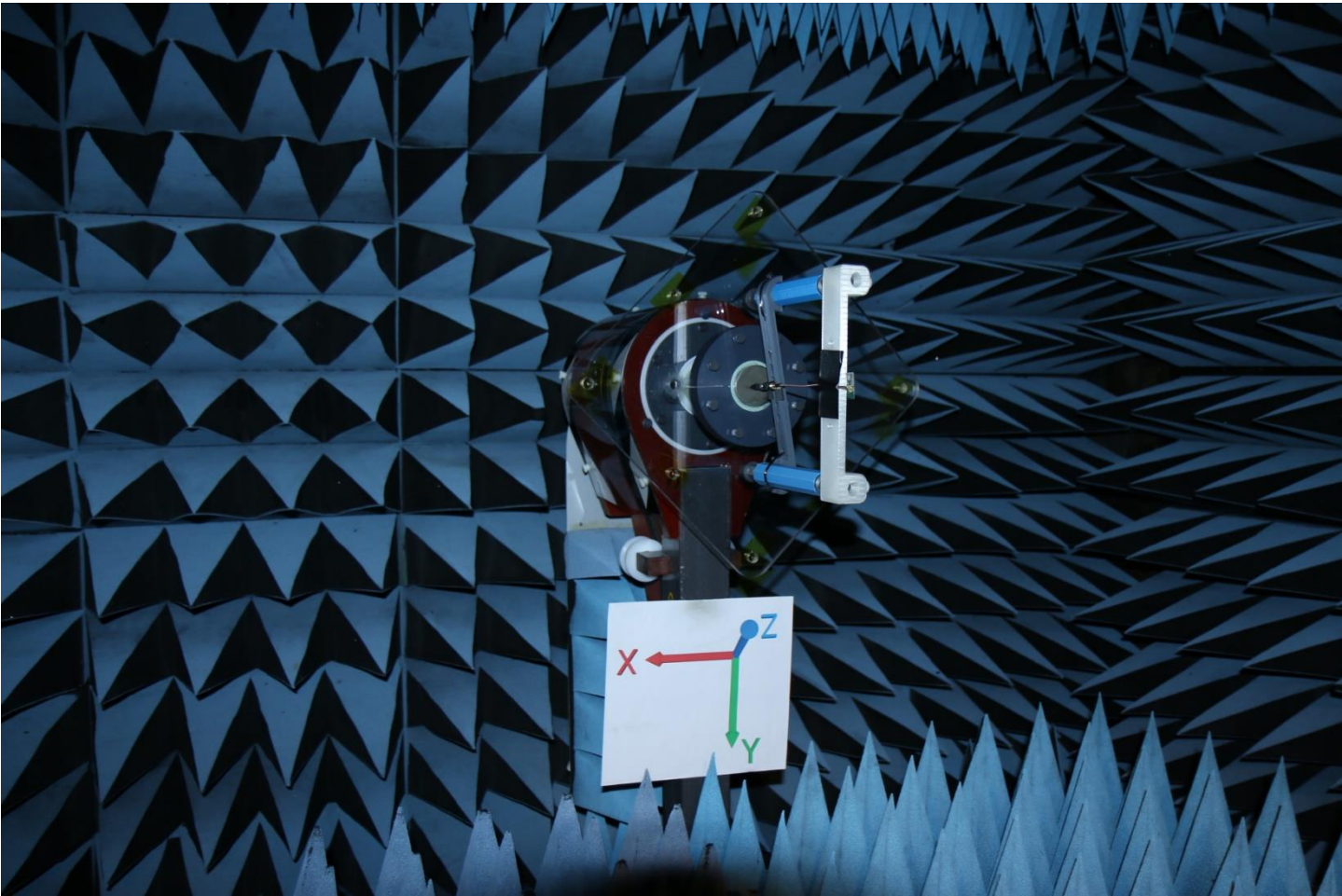
Frequency (MHz)	Integrated Spherical Total Isotropic Gain (dBi)	Estimated Radiation Efficiency (%)
2300	-2.81	52.36
2301	-2.78	52.72
2302	-2.75	53.09
2303	-2.71	53.58
2304	-2.67	54.08
2305	-2.64	54.45
2306	-2.62	54.70
2307	-2.60	54.95
2308	-2.58	55.21
2309	-2.56	55.46
2310	-2.54	55.72
2311	-2.51	56.10
2312	-2.49	56.36
2313	-2.48	56.49
2314	-2.47	56.62
2315	-2.46	56.75
2316	-2.46	56.75
2317	-2.47	56.62
2318	-2.47	56.62
2319	-2.48	56.49
2320	-2.47	56.62
2321	-2.47	56.62
2322	-2.47	56.62
2323	-2.46	56.75
2324	-2.47	56.62
2325	-2.47	56.62
2326	-2.49	56.36
2327	-2.50	56.23
2328	-2.52	55.98
2329	-2.54	55.72
2330	-2.56	55.46
2331	-2.56	55.46



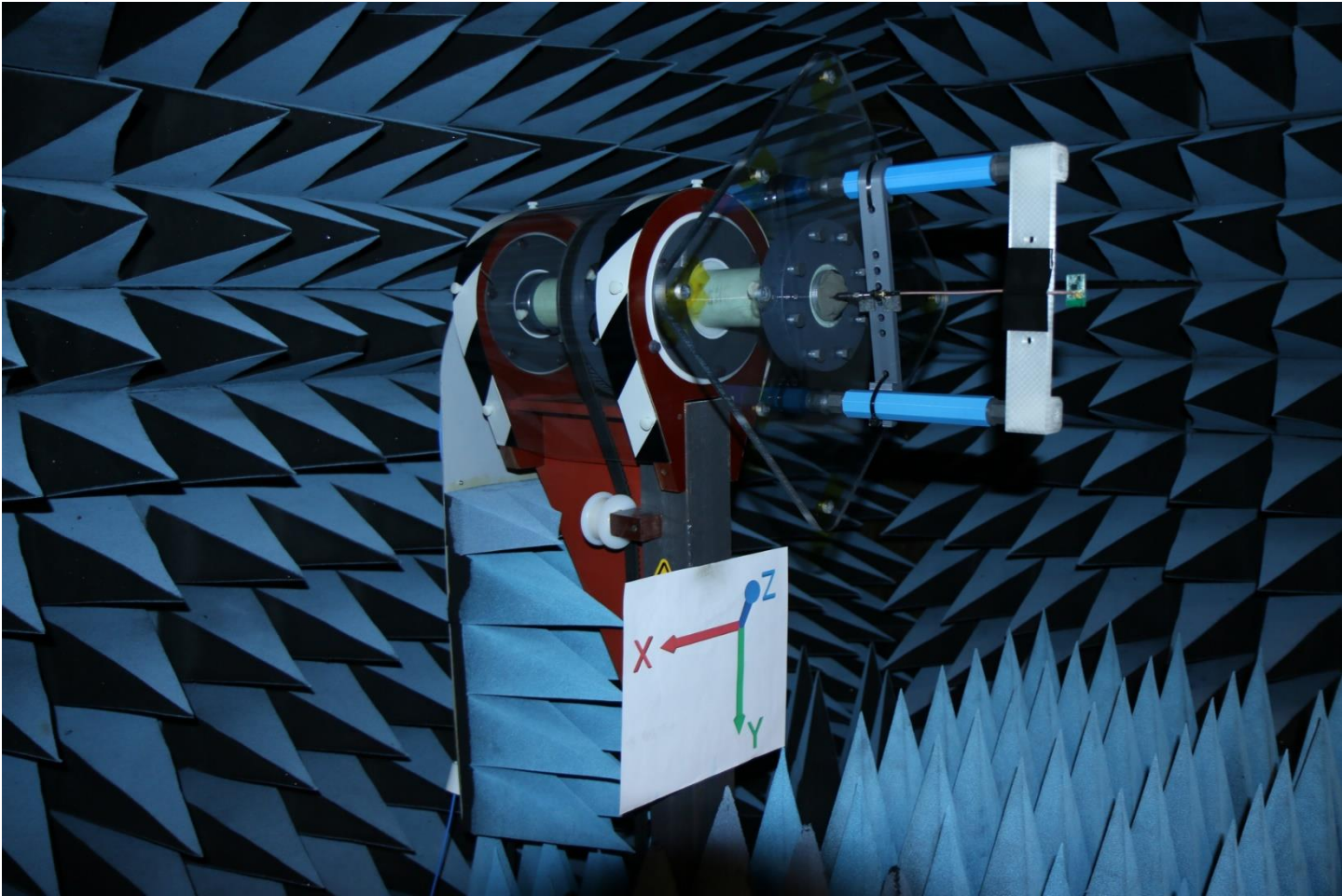
2332	-2.55	55.59
2333	-2.55	55.59
2334	-2.54	55.72
2335	-2.55	55.59
2336	-2.56	55.46
2337	-2.57	55.34
2338	-2.59	55.08
2339	-2.62	54.70
2340	-2.65	54.33
2341	-2.67	54.08
2342	-2.68	53.95
2343	-2.69	53.83
2344	-2.69	53.83
2345	-2.68	53.95
2346	-2.69	53.83
2347	-2.70	53.70
2348	-2.71	53.58
2349	-2.74	53.21
2350	-2.77	52.84
2351	-2.80	52.48
2352	-2.82	52.24
2353	-2.84	52.00
2354	-2.85	51.88
2355	-2.86	51.76
2356	-2.86	51.76
2357	-2.87	51.64
2358	-2.87	51.64
2359	-2.87	51.64
2360	-2.88	51.52
2361	-2.89	51.40
2362	-2.90	51.29
2363	-2.92	51.05
2364	-2.92	51.05
2365	-2.93	50.93
2366	-2.93	50.93
2367	-2.92	51.05



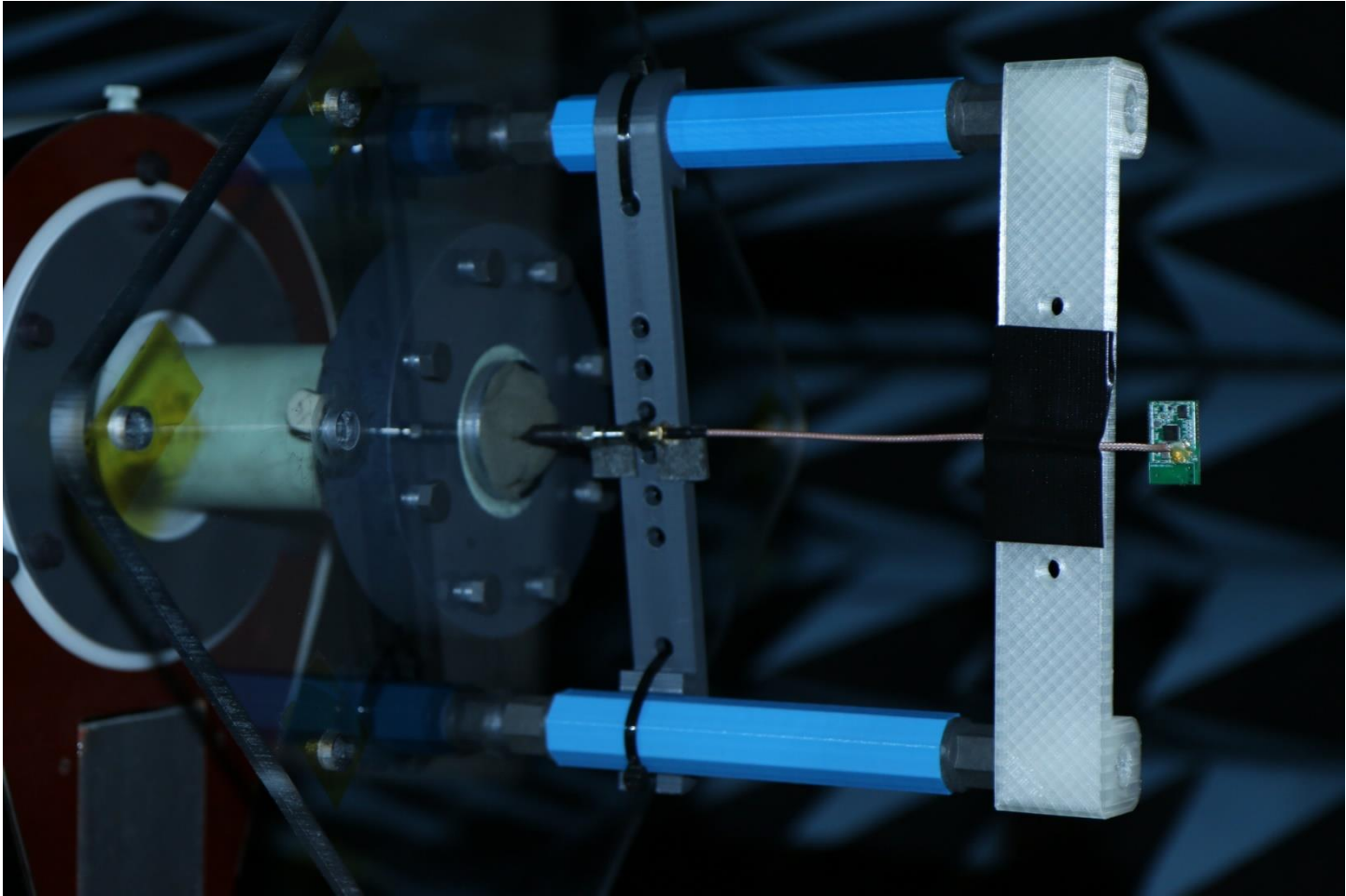
2368	-2.93	50.93
2369	-2.92	51.05
2370	-2.92	51.05
2371	-2.93	50.93
2372	-2.94	50.82
2373	-2.95	50.70
2374	-2.97	50.47
2375	-2.98	50.35
2376	-3.01	50.00
2377	-3.03	49.77
2378	-3.05	49.55
2379	-3.08	49.20
2380	-3.09	49.09
2381	-3.10	48.98
2382	-3.13	48.64
2383	-3.15	48.42
2384	-3.17	48.19
2385	-3.20	47.86
2386	-3.23	47.53
2387	-3.25	47.32
2388	-3.28	46.99
2389	-3.31	46.67
2390	-3.33	46.45
2391	-3.33	46.45
2392	-3.33	46.45
2393	-3.33	46.45
2394	-3.33	46.45
2395	-3.32	46.56
2396	-3.31	46.67
2397	-3.32	46.56
2398	-3.32	46.56
2399	-3.32	46.56
2400	-3.33	46.45
2401	-3.33	46.45
2402	-3.33	46.45
2403	-3.32	46.56



2404	-3.30	46.77
2405	-3.30	46.77
2406	-3.30	46.77
2407	-3.29	46.88
2408	-3.31	46.67
2409	-3.31	46.67
2410	-3.32	46.56
2411	-3.32	46.56
2412	-3.32	46.56
2413	-3.31	46.67
2414	-3.30	46.77
2415	-3.30	46.77
2416	-3.31	46.67
2417	-3.32	46.56
2418	-3.33	46.45
2419	-3.36	46.13
2420	-3.38	45.92
2421	-3.40	45.71
2422	-3.41	45.60
2423	-3.41	45.60
2424	-3.43	45.39
2425	-3.43	45.39
2426	-3.44	45.29
2427	-3.48	44.87
2428	-3.51	44.57
2429	-3.55	44.16
2430	-3.57	43.95
2431	-3.60	43.65
2432	-3.61	43.55
2433	-3.61	43.55
2434	-3.59	43.75
2435	-3.58	43.85
2436	-3.57	43.95
2437	-3.56	44.06
2438	-3.57	43.95
2439	-3.58	43.85



2440	−3. 59	43. 75
2441	−3. 57	43. 95
2442	−3. 55	44. 16
2443	−3. 51	44. 57
2444	−3. 46	45. 08
2445	−3. 43	45. 39
2446	−3. 38	45. 92
2447	−3. 35	46. 24
2448	−3. 37	46. 03
2449	−3. 37	46. 03
2450	−3. 39	45. 81
2451	−3. 39	45. 81
2452	−3. 40	45. 71
2453	−3. 38	45. 92
2454	−3. 35	46. 24
2455	−3. 31	46. 67
2456	−3. 26	47. 21
2457	−3. 23	47. 53
2458	−3. 21	47. 75
2459	−3. 22	47. 64
2460	−3. 23	47. 53
2461	−3. 25	47. 32
2462	−3. 28	46. 99
2463	−3. 29	46. 88
2464	−3. 28	46. 99
2465	−3. 27	47. 10
2466	−3. 25	47. 32
2467	−3. 24	47. 42
2468	−3. 23	47. 53
2469	−3. 26	47. 21
2470	−3. 27	47. 10
2471	−3. 30	46. 77
2472	−3. 33	46. 45
2473	−3. 34	46. 34
2474	−3. 35	46. 24
2475	−3. 36	46. 13



2476	-3.35	46.24
2477	-3.36	46.13
2478	-3.35	46.24
2479	-3.37	46.03
2480	-3.38	45.92
2481	-3.40	45.71
2482	-3.40	45.71
2483	-3.41	45.60
2484	-3.40	45.71
2485	-3.39	45.81
2486	-3.36	46.13
2487	-3.36	46.13
2488	-3.34	46.34
2489	-3.34	46.34
2490	-3.34	46.34
2491	-3.34	46.34
2492	-3.33	46.45
2493	-3.31	46.67
2494	-3.28	46.99
2495	-3.24	47.42
2496	-3.21	47.75
2497	-3.18	48.08
2498	-3.17	48.19
2499	-3.15	48.42
2500	-3.16	48.31
2501	-3.16	48.31
2502	-3.14	48.53
2503	-3.11	48.87
2504	-3.06	49.43
2505	-3.02	49.89
2506	-2.98	50.35
2507	-2.94	50.82
2508	-2.92	51.05
2509	-2.91	51.17
2510	-2.93	50.93
2511	-2.95	50.70

2512	-2.94	50.82
2513	-2.94	50.82
2514	-2.92	51.05
2515	-2.91	51.17
2516	-2.86	51.76
2517	-2.82	52.24
2518	-2.81	52.36
2519	-2.79	52.60
2520	-2.79	52.60
2521	-2.78	52.72
2522	-2.79	52.60
2523	-2.76	52.97
2524	-2.75	53.09
2525	-2.70	53.70
2526	-2.66	54.20
2527	-2.60	54.95
2528	-2.58	55.21
2529	-2.54	55.72
2530	-2.52	55.98
2531	-2.51	56.10
2532	-2.50	56.23
2533	-2.49	56.36
2534	-2.48	56.49
2535	-2.43	57.15
2536	-2.41	57.41
2537	-2.40	57.54
2538	-2.38	57.81
2539	-2.37	57.94
2540	-2.39	57.68
2541	-2.40	57.54
2542	-2.42	57.28
2543	-2.42	57.28
2544	-2.42	57.28
2545	-2.43	57.15
2546	-2.43	57.15
2547	-2.43	57.15

2548	-2.47	56.62
2549	-2.49	56.36
2550	-2.53	55.85