

BLE Antenna passive radiation data

(주) 윌로그

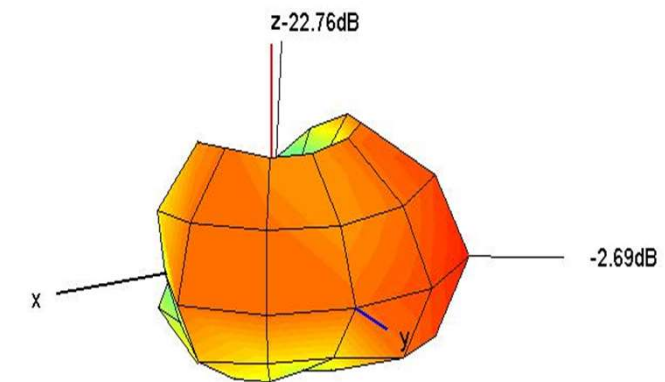
BLE Antenna Passive radiation Data

1) Measurement Condition

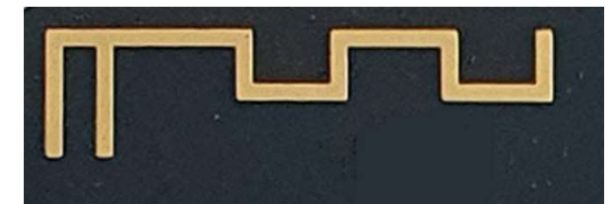
- Equipment : TC-3000C (TESCOM)
- Device : PCB Rev0.5
- OTA Chamber (AWAVE)

2) BLE Antenna Passive Gain Data (Peak Gain : -2.69dB/2.42GHz)

	1	2	3	4	5	6	7	8	9	10	11	12
Frequency [MHz]	2360	2380	2400	2420	2440	2460	2480	2485	2500	2520	2540	2560
Efficiency [dB]	-8.42	-7.87	-7.73	-6.92	-7.07	-7.72	-7.80	-7.92	-8.03	-8.29	-7.84	-8.21
Efficiency [%]	14.4	16.3	16.8	20.3	19.6	16.9	16.6	16.2	15.7	14.8	16.4	15.1
TRG _θ [dB]	-10.35	-9.94	-9.94	-9.27	-9.57	-10.37	-10.55	-10.69	-11.00	-11.37	-10.96	-11.43
Gain _{θ Peak} [dB]	-5.37	-5.31	-5.14	-4.52	-4.74	-5.13	-4.92	-5.03	-5.15	-5.25	-4.75	-5.48
Gain _{θ Min} [dB]	-35.72	-29.73	-32.55	-31.13	-36.27	-37.71	-35.14	-34.70	-34.68	-30.70	-28.28	-29.35
TRG _φ [dB]	-12.87	-12.07	-11.73	-10.71	-10.66	-11.12	-11.08	-11.18	-11.09	-11.24	-10.74	-11.02
Gain _{φ Peak} [dB]	-7.05	-6.19	-5.72	-4.55	-4.28	-4.58	-4.39	-4.51	-4.44	-4.53	-3.92	-4.14
Gain _{φ Min} [dB]	-29.14	-45.31	-38.62	-32.12	-41.55	-37.84	-49.22	-43.60	-38.68	-41.94	-37.69	-32.24
UHRG [dB]	-11.57	-10.86	-10.61	-9.71	-9.77	-10.34	-10.34	-10.43	-10.46	-10.67	-10.20	-10.61
UHRG/TRG [%]	48.4	50.1	51.6	52.7	53.7	54.6	55.7	56.1	57.1	57.9	58.1	57.6
H-Plane	-10.36	-9.37	-8.99	-8.18	-8.47	-9.34	-9.62	-9.78	-10.22	-10.74	-10.18	-10.30
E1-Plane, AVG [dB]	-11.87	-11.72	-11.83	-11.30	-11.92	-13.11	-13.77	-14.01	-14.72	-15.56	-15.28	-15.60
E2-Plane, AVG [dB]	-10.03	-9.33	-9.14	-8.24	-8.31	-8.90	-8.88	-8.97	-9.14	-9.33	-8.83	-9.26
Peak Gain [dB]	-4.18	-3.90	-3.63	-2.69	-2.84	-3.53	-3.58	-3.68	-3.75	-3.98	-3.45	-3.70
Directivity [dB]	4.24	3.96	4.11	4.23	4.23	4.19	4.22	4.23	4.28	4.31	4.39	4.52
Minimum Gain [dB]	-21.37	-22.23	-22.60	-22.76	-22.00	-21.27	-19.40	-19.07	-17.48	-20.88	-22.28	-19.88
Test Condition	FS											
Antenna Type												
Average Efficiency	-7.80 dB 16.61 %											



[BLE Ant. 3D Radiation Pattern]



[BLE PCB Pattern Antenna]