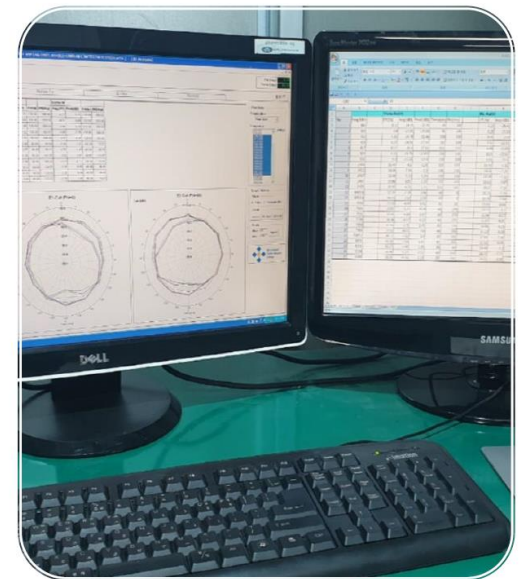
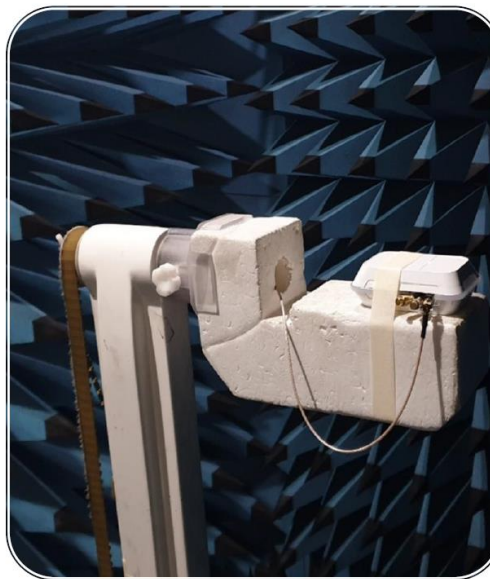


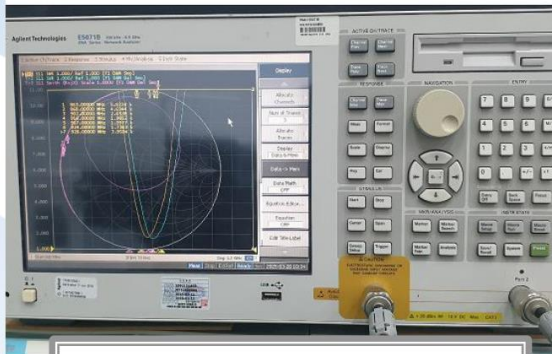
SoluM “CD01HFS01X”

- Antenna Manufacturer: Galtronics Korea
- Measuring Company: Galtronics Korea
- Antenna Model Name: Vehicle tag LDS
- Measurement Procedure



SoluM “CD01HFS01X”

-. Measurement Equipment



E5071B (Agilent)



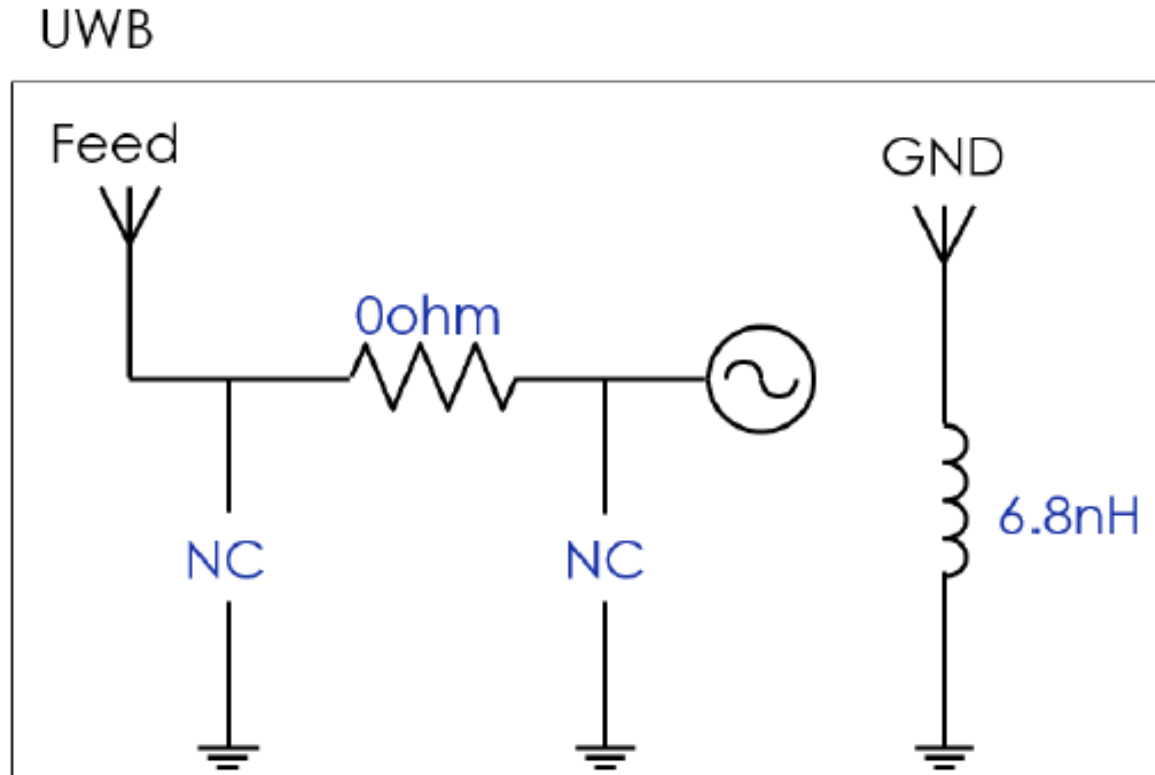
N5230A (Agilent)



**CTIA 3D OTA Chamber
(MTG)**

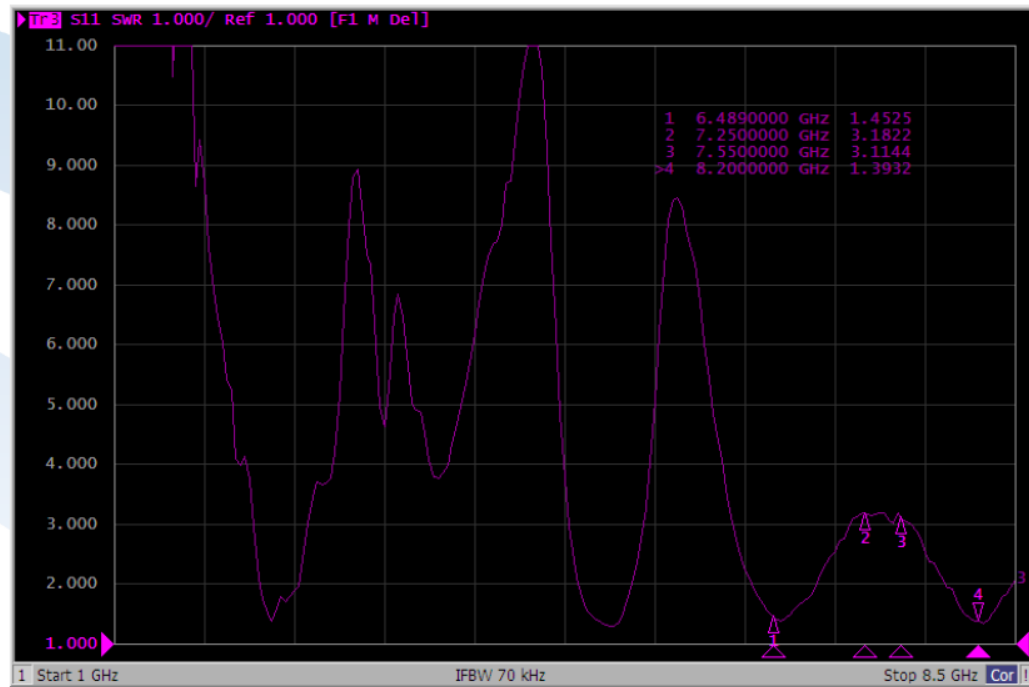
SoluM “CD01HFS01X”

1. TEST condition



SoluM “CD01HFS01X”

2-1. Passive TEST – VSWR & GAIN_UWB

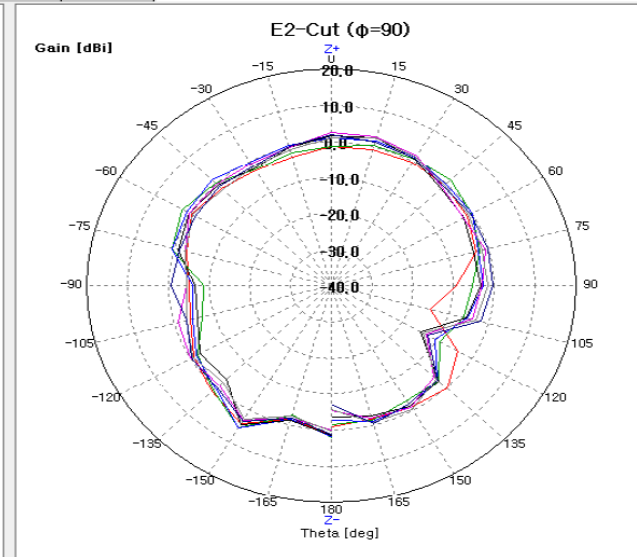
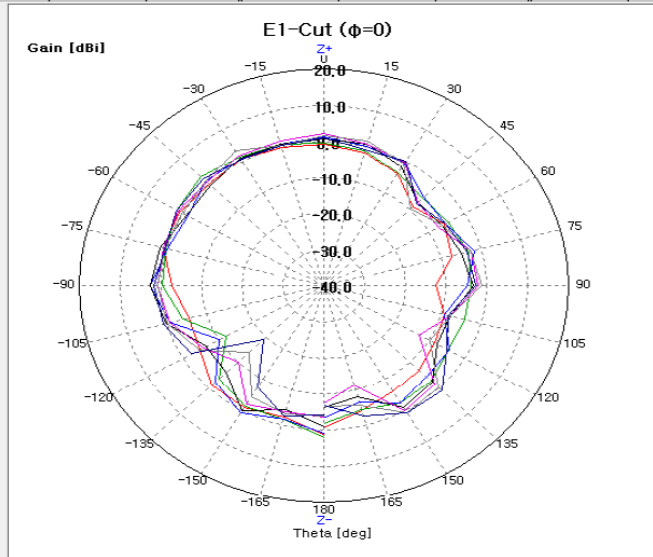
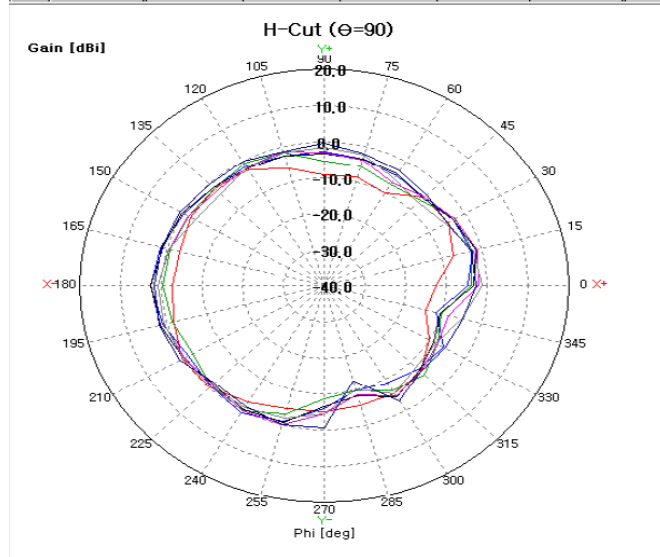


No.	Freq.[GHz]	PwrSum	Avg.[dBi]	Peak[dBi]	θ [deg]	φ [deg]
1	6489.6	57.4	-2.41	4.59	150	255
2	6988.6	67.14	-1.73	5.38	150	270
3	7250	64.76	-1.89	5.33	150	270
4	7400	59.14	-2.28	4.2	150	270
5	7550	63.2	-1.99	3.81	150	285
6	7700	62.97	-2.01	3.71	150	285
7	7850	72.83	-1.38	4.37	150	285
8	7900	73.81	-1.32	5.2	150	285
9	7897.2	82.71	-0.82	5.13	150	285
10	8050	79.09	-1.02	5.3	150	285
11	8200	86.52	-0.63	5.91	150	300
12	8350	83.26	-0.8	5.91	150	300
13	8500	84.61	-0.73	4.96	150	300

SoluM “CD01HFS01X”

2-2. Passive TEST – 2D(1)

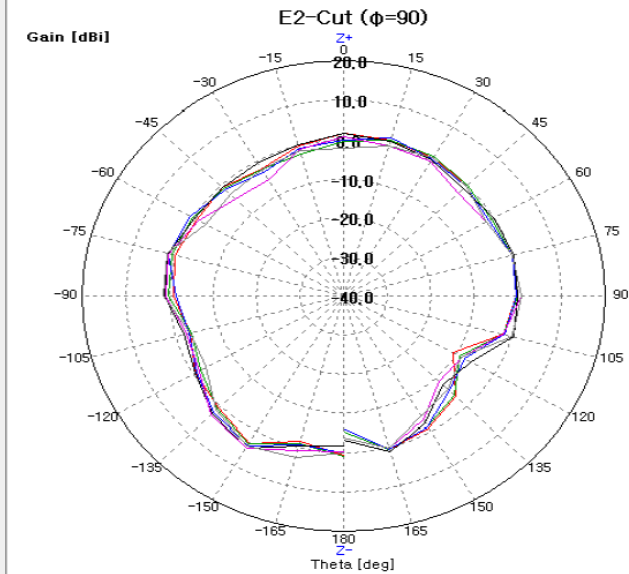
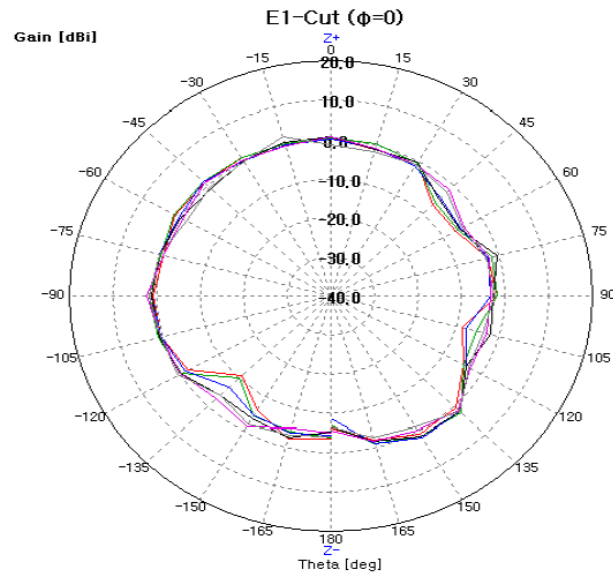
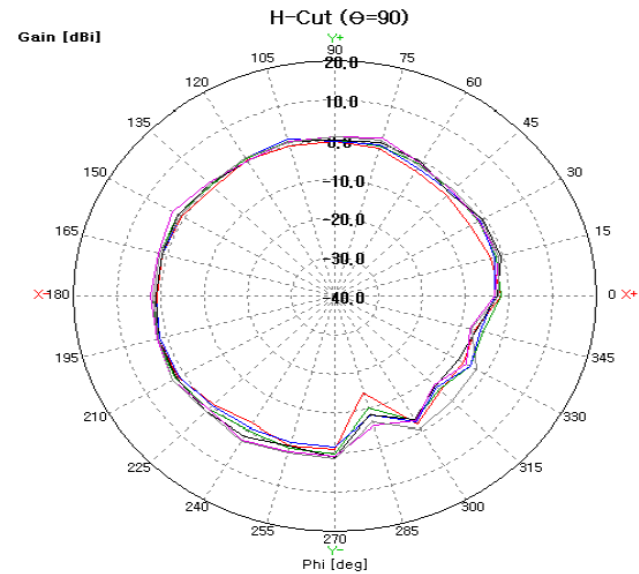
No.	Freq.	PwrSum	Eff.[%]	Avg.[dBi]	Peak[dBi]	θ [deg]	ϕ [deg]	H($\theta=90$)	Peak[dBi]	ϕ [deg]	E1($\phi=0$)	Peak[dBi]	θ [deg]	E2($\phi=90$)	Peak[dBi]	θ [deg]
1	6.490	57.40	-2.41	4.59	150.00	255.00		-4.32	0.19	210.00	-2.49	1.03	-180.00	-1.25	4.12	-150.00
2	6.989	67.14	-1.73	5.38	150.00	270.00		-3.21	-0.18	240.00	-1.39	2.77	-45.00	-0.58	5.38	-150.00
3	7.250	64.76	-1.89	5.33	150.00	270.00		-2.09	2.56	180.00	-1.26	2.56	-90.00	-0.19	5.33	-150.00
4	7.400	59.14	-2.28	4.20	150.00	270.00		-1.98	2.56	180.00	-1.49	2.56	-90.00	-1.05	4.20	-150.00
5	7.550	63.20	-1.99	3.81	150.00	285.00		-2.32	0.80	195.00	-1.32	2.36	0.00	-0.66	2.87	-150.00
6	7.700	62.97	-2.01	3.71	150.00	285.00		-2.57	0.77	180.00	-1.16	3.21	-30.00	-0.98	2.60	-150.00
7	7.850	72.83	-1.38	4.37	150.00	285.00		-1.31	2.02	195.00	-1.15	1.74	-45.00	-0.46	3.22	-150.00



SoluM “CD01HFS01X”

2-2. Passive TEST – 2D(2)

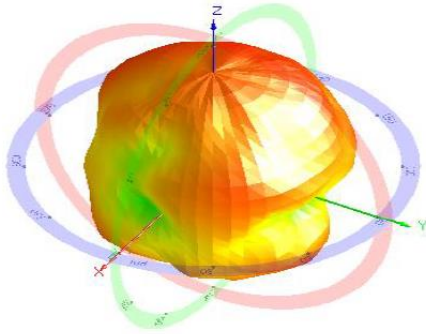
No.	Freq.	PwrSum					H($\theta=90$)			E1($\phi=0$)			E2($\phi=90$)		
		Eff.[%]	Avg.[dBi]	Peak[dBi]	θ [deg]	ϕ [deg]	Avg.[dBi]	Peak[dBi]	ϕ [deg]	Avg.[dBi]	Peak[dBi]	θ [deg]	Avg.[dBi]	Peak[dBi]	θ [deg]
8	7.900	73.81	-1.32	5.20	150.00	285.00	-1.20	1.92	195.00	-1.26	1.45	-60.00	-0.38	3.24	-150.00
9	7.987	82.71	-0.82	5.13	150.00	285.00	-0.35	2.17	210.00	-0.68	2.06	135.00	-0.38	3.50	-150.00
10	8.050	79.09	-1.02	5.30	150.00	285.00	-0.80	1.63	195.00	-1.11	1.96	135.00	-0.29	3.88	-150.00
11	8.200	86.52	-0.63	5.91	150.00	300.00	-0.28	1.92	195.00	-0.87	1.99	135.00	0.16	4.56	-150.00
12	8.350	83.26	-0.80	5.91	150.00	300.00	0.23	2.98	210.00	-0.88	2.28	-90.00	-0.42	4.55	-150.00
13	8.500	84.61	-0.73	4.96	150.00	300.00	0.32	3.08	210.00	-1.09	2.18	-15.00	-0.41	4.12	-150.00



SoluM “CD01HFS01X”

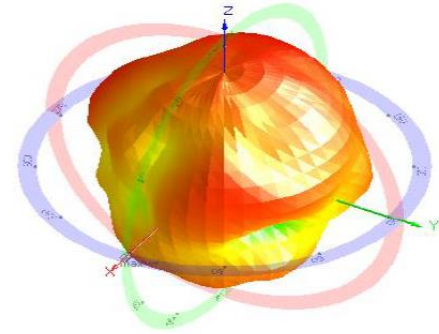
2-3. Passive TEST – 3D(1)

6.490GHz



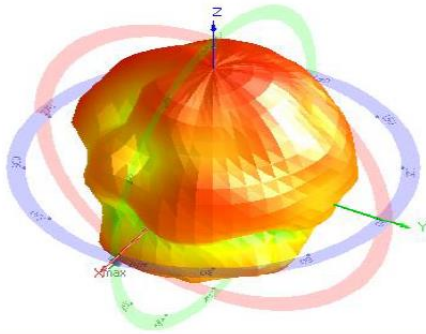
[dBi]
max 10.00
4.59 3.75
-14.82 -8.75
min -15.00
-21.25
-33.75
-40.00

6.989GHz



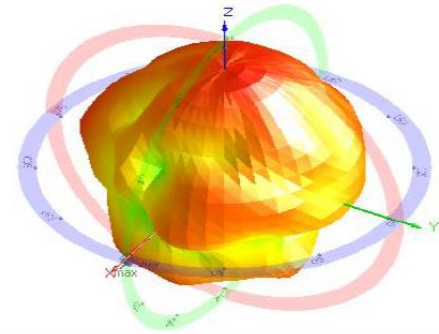
[dBi]
max 10.00
5.38 3.75
-15.74 -8.75
min -15.00
-21.25
-33.75
-40.00

7.250GHz



[dBi]
max 10.00
5.40 3.75
-22.97 -8.75
min -21.25
-33.75
-40.00

7.400GHz

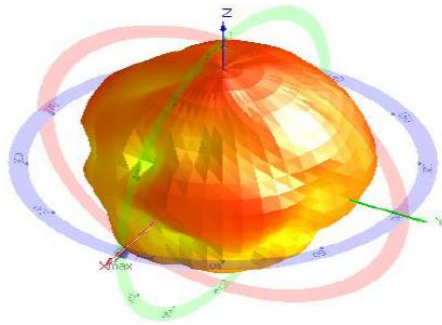


[dBi]
max 10.00
4.57 3.75
-20.45 -8.75
min -21.25
-33.75
-40.00

SoluM “CD01HFS01X”

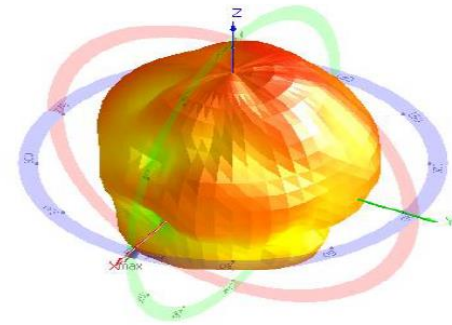
2-3. Passive TEST – 3D(2)

7.250GHz



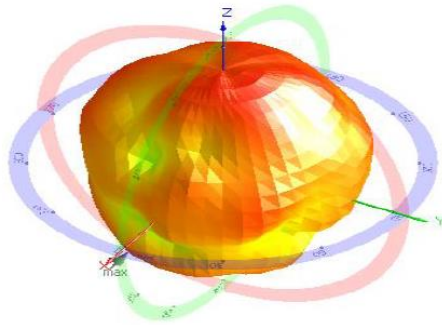
[dB]
max 10.00
4.75 3.75
-14.65 -8.75
min -15.00
-21.25
-33.75
-40.00

7.400GHz



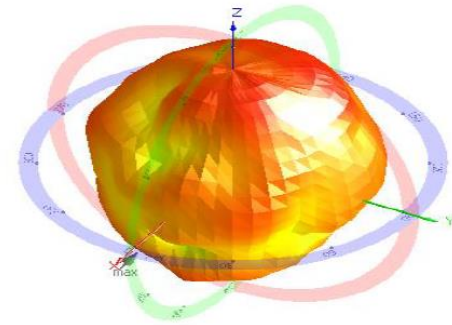
[dB]
max 3.96
-15.63
min

7.550GHz



[dB]
max 10.00
3.88 3.75
-15.53 -8.75
min -15.00
-21.25
-33.75
-40.00

7.700GHz

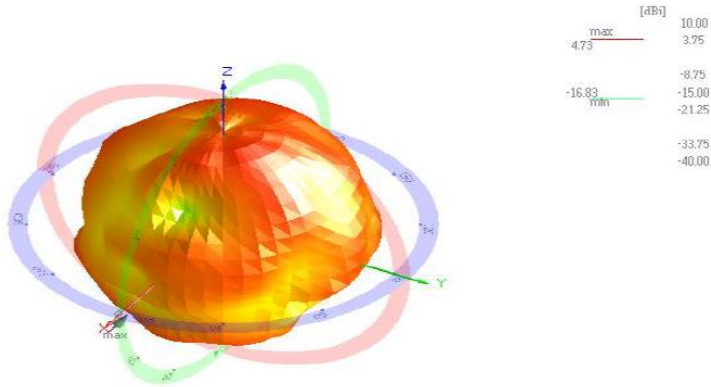


[dB]
max 3.43
-16.66
min

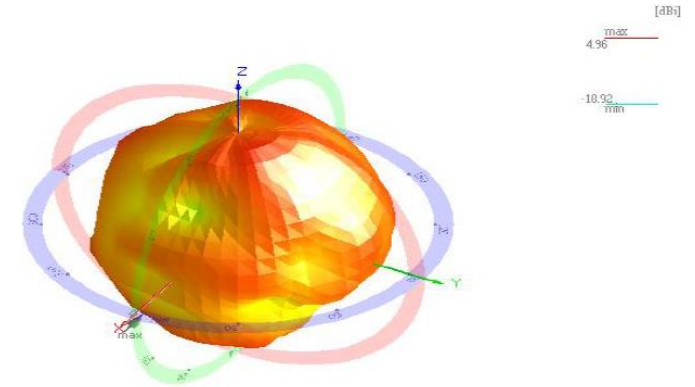
SoluM “CD01HFS01X”

2-3. Passive TEST – 3D(3)

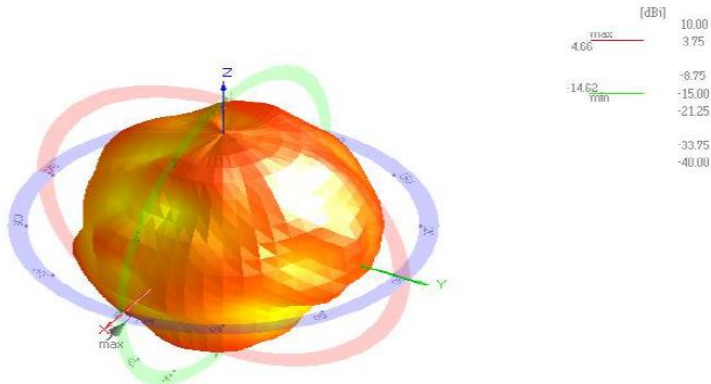
7.850GHz



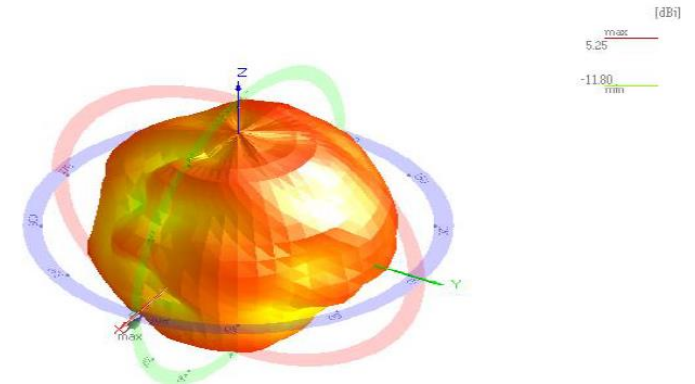
7.900GHz



7.987GHz



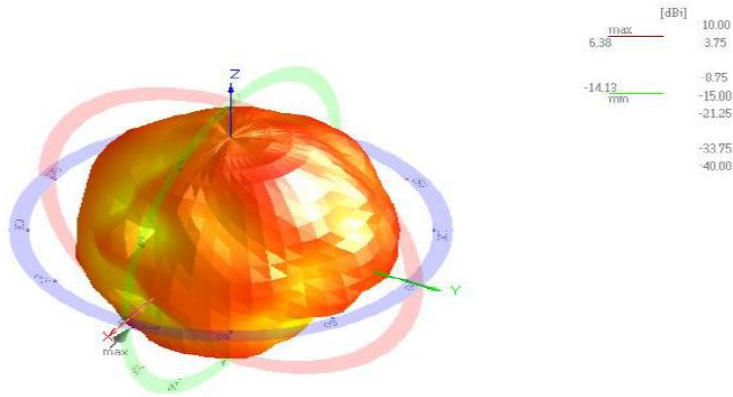
8.050GHz



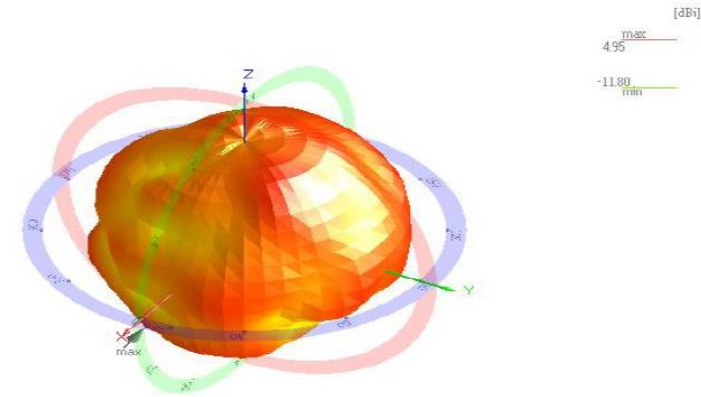
SoluM “CD01HFS01X”

2-3. Passive TEST – 3D(4)

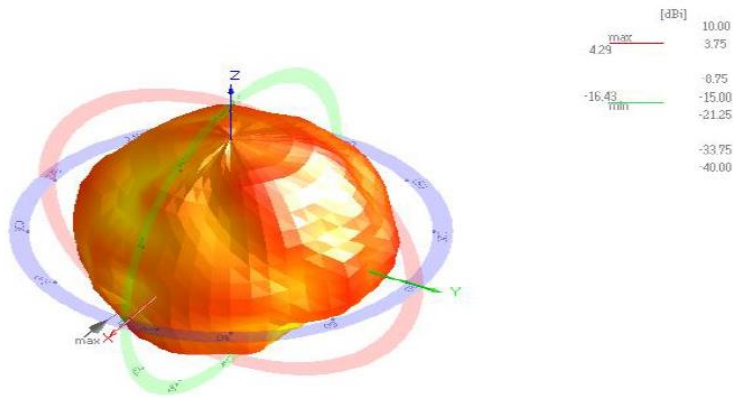
8.200GHz



8.350GHz



8.500GHz



N/A

