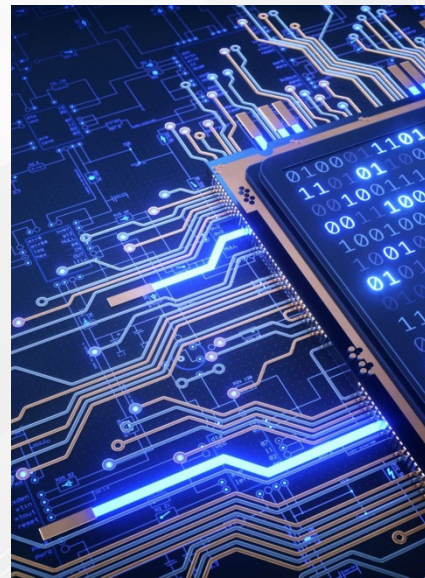


Antenna R0D (Cost Down Plan) Measurement Report



Accton

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Content

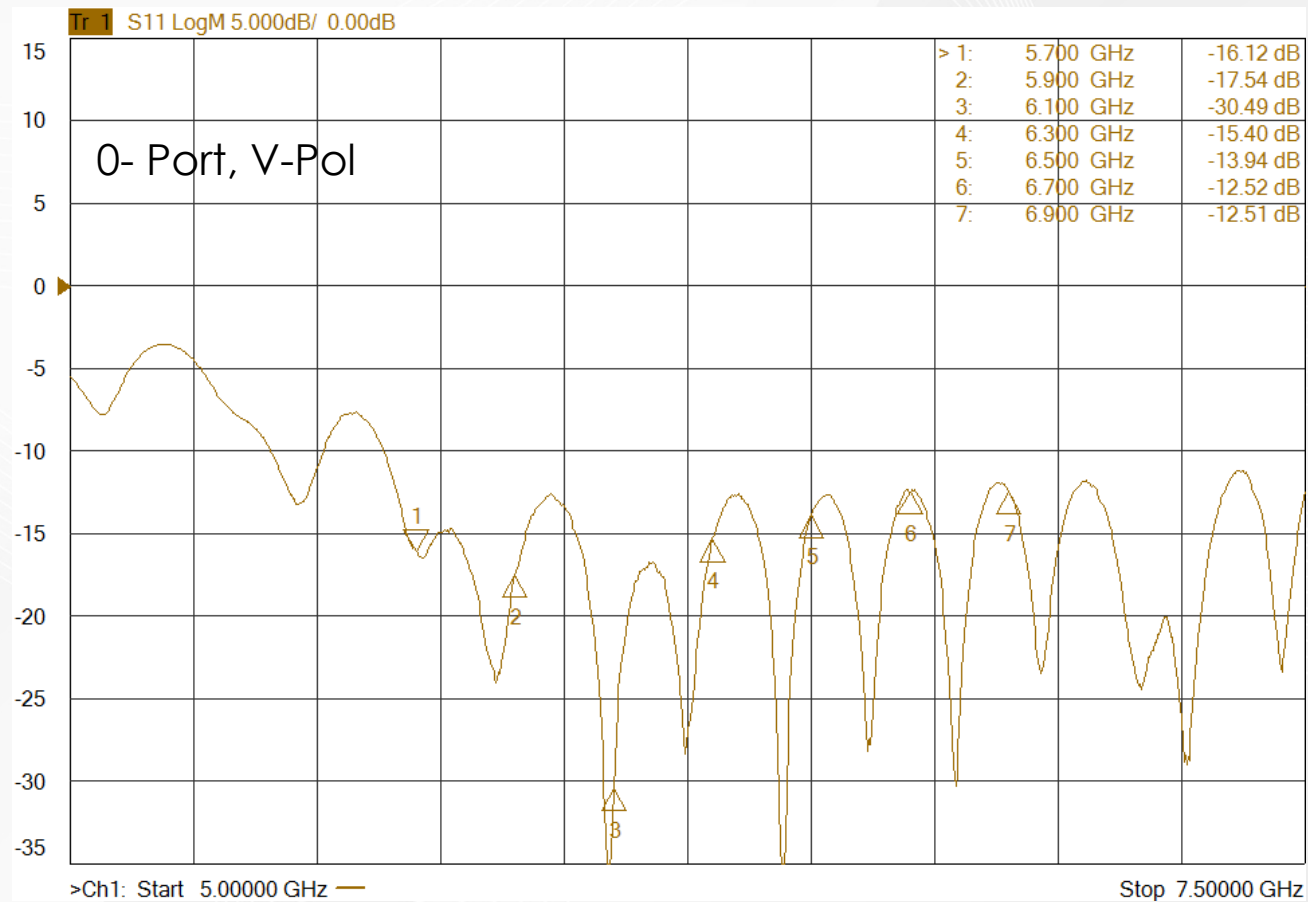
- Antenna Configuration
- Return Loss Test Result
- Isolation Test Result
- Experimental Setup & Coordinate System
- Gain, HPBW. test Result
- 2D Radiation Pattern

Antenna Configuration

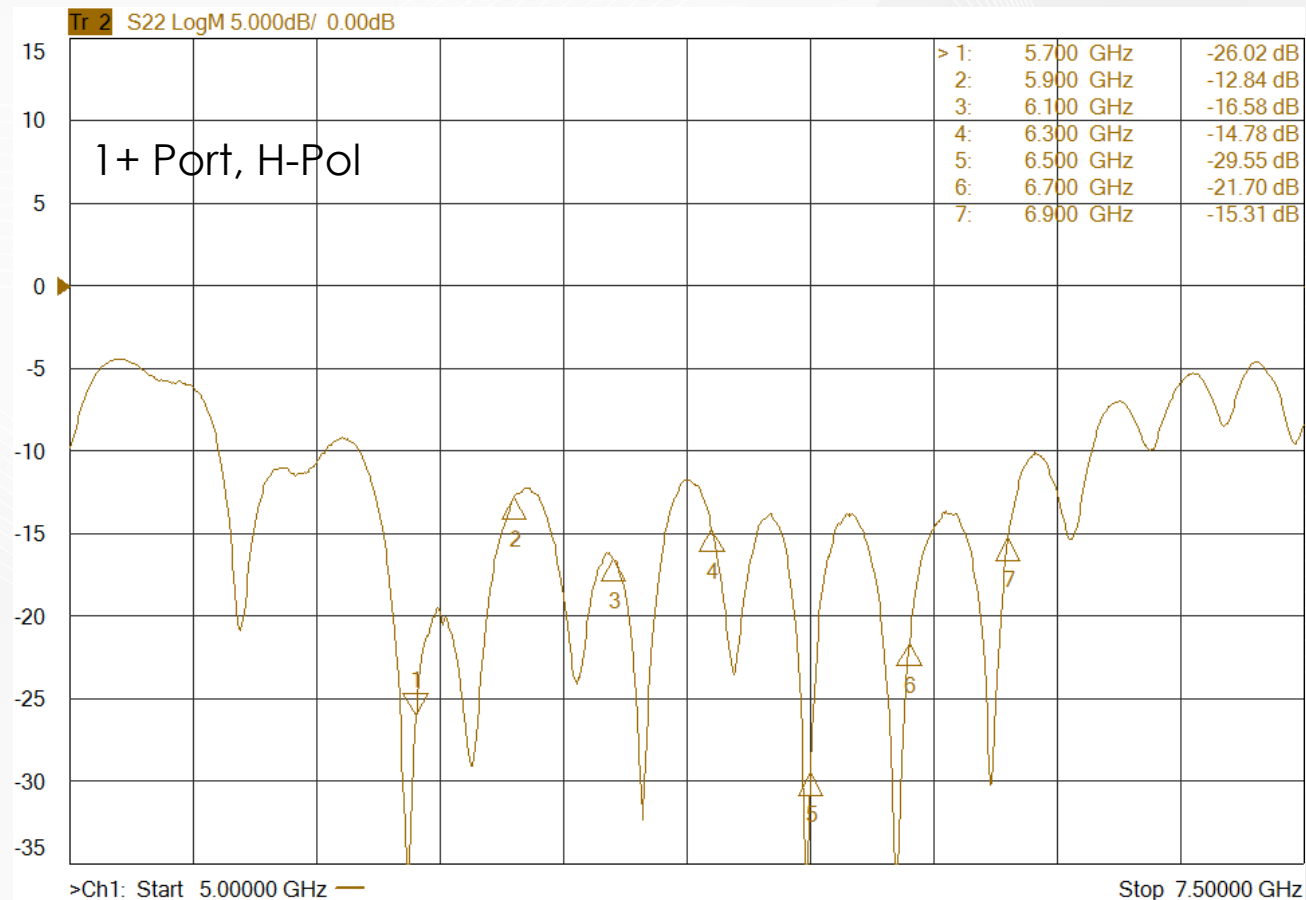
Company name	Address	Model No.
ACCTON Technology Corporation	No.1, Creation Road3, Hsinchu Science Park, Hsinchu 30077,Taiwan, R.O.C	KG755

Antenna Description					
Location	Material	Dimension (mm)	Cable length (mm)	Cable + Connector	Heat shrinking tube color
0-	FSD255G	203x185mm (7.91x7.28 in)	255	RG316 Low Loss + MMCX Plug R/A	Yellow
1+			345	RG316 Low Loss + MMCX Plug R/A	Blue
2-	FSD255G	203x185mm (7.91x7.28 in)	360	RG316 Low Loss + MMCX Plug R/A	White
3+			420	RG316 Low Loss + MMCX Plug R/A	Black
	SUS430	54x10x8mm (2.13x0.39x0.31 in)	385	1.37 Low Loss + MMCX Plug R/A	White
	Reflector	444x222mm (17.48x8.74in)	X	X	X

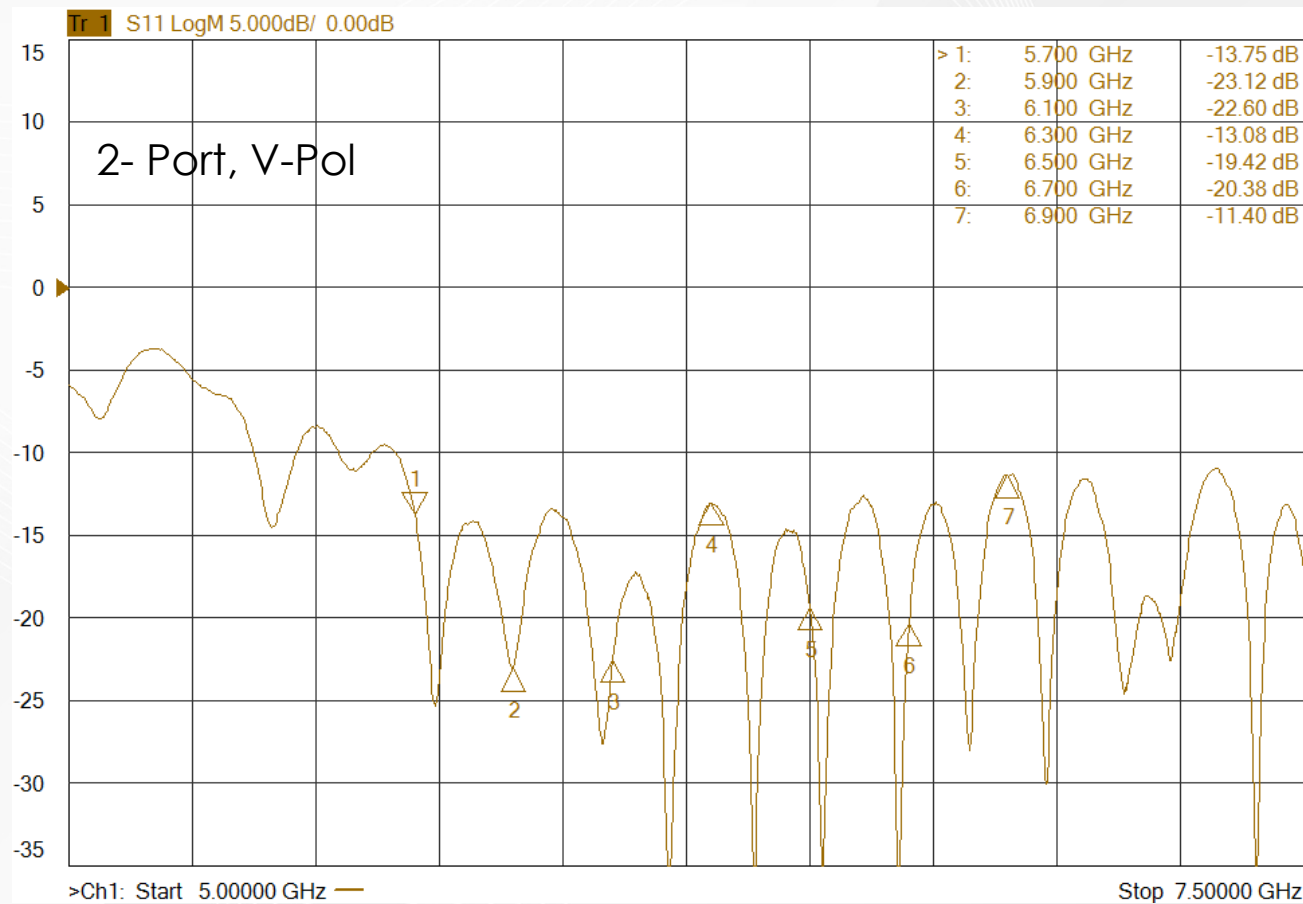
Return Loss test Result (1/5)



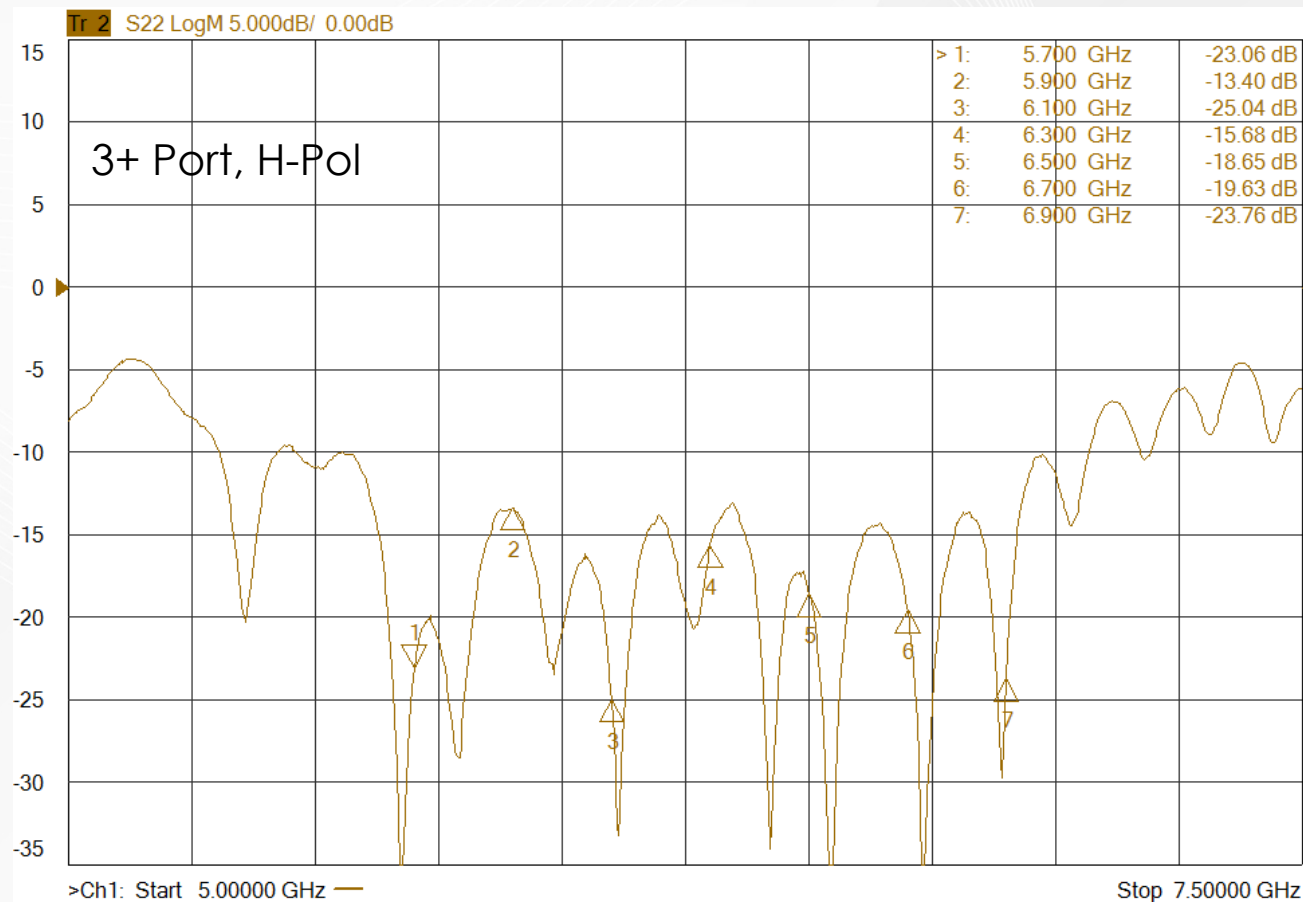
Return Loss test Result (2/5)



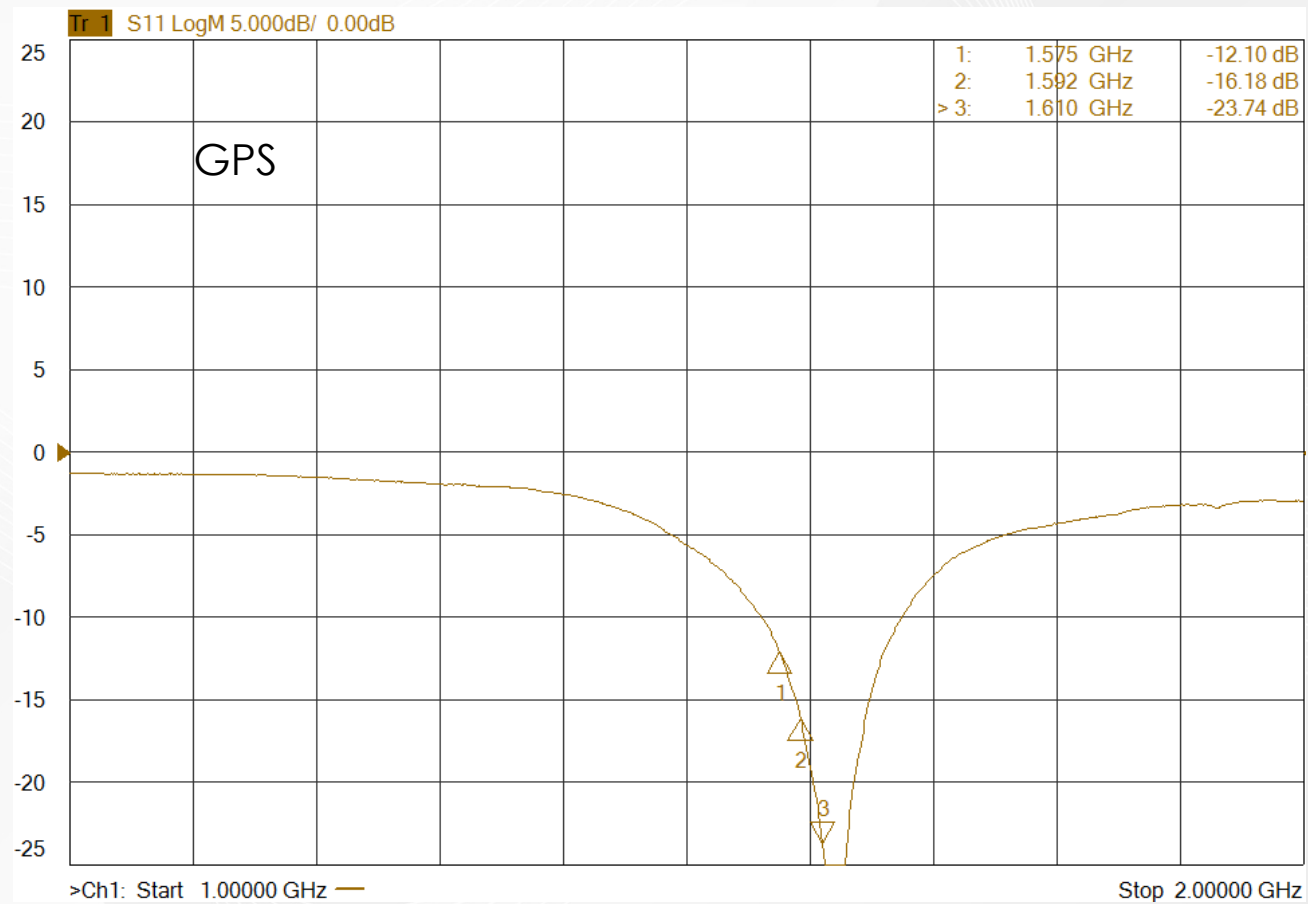
Return Loss test Result (3/5)



Return Loss test Result (4/5)



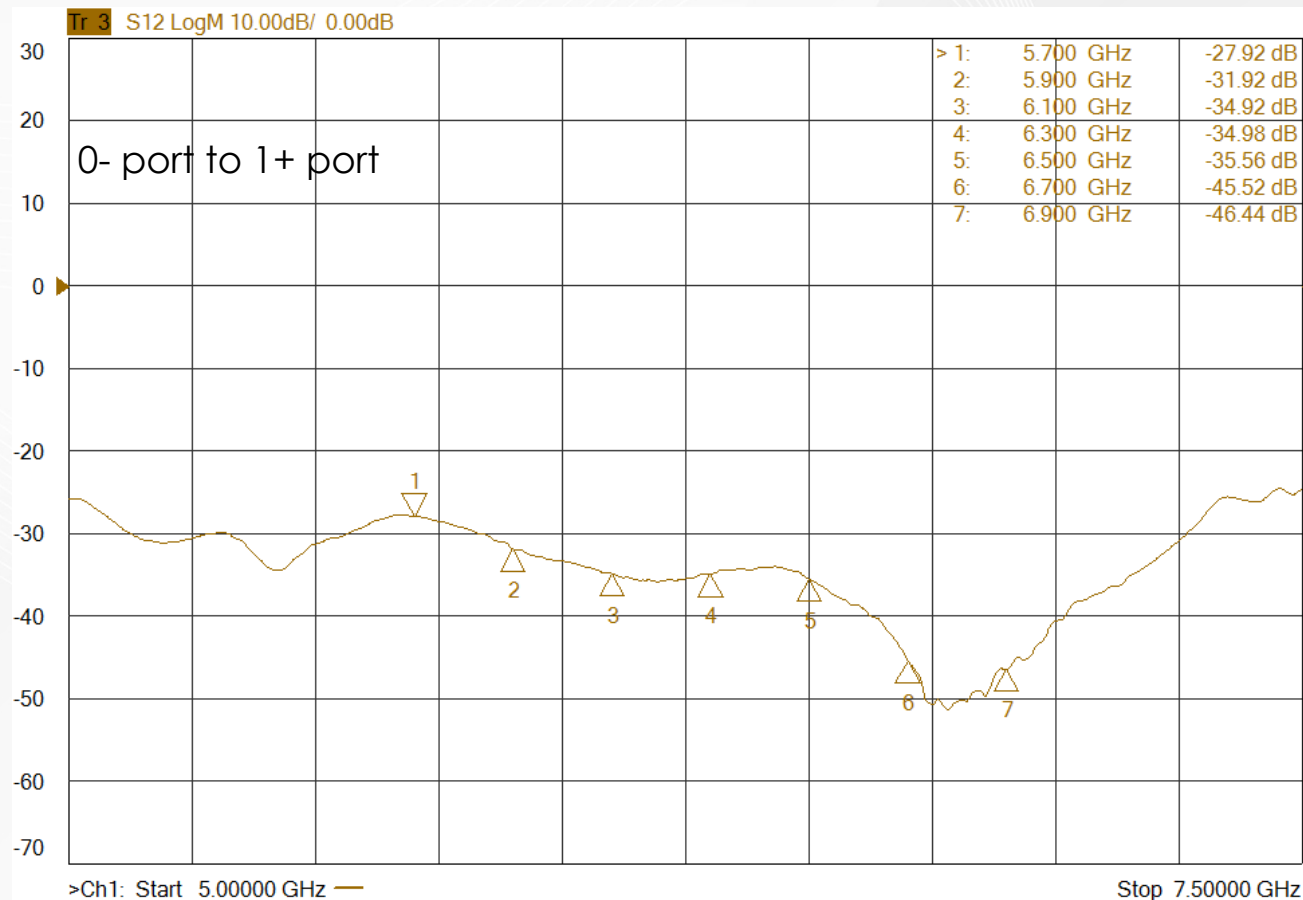
Return Loss test Result (5/5)



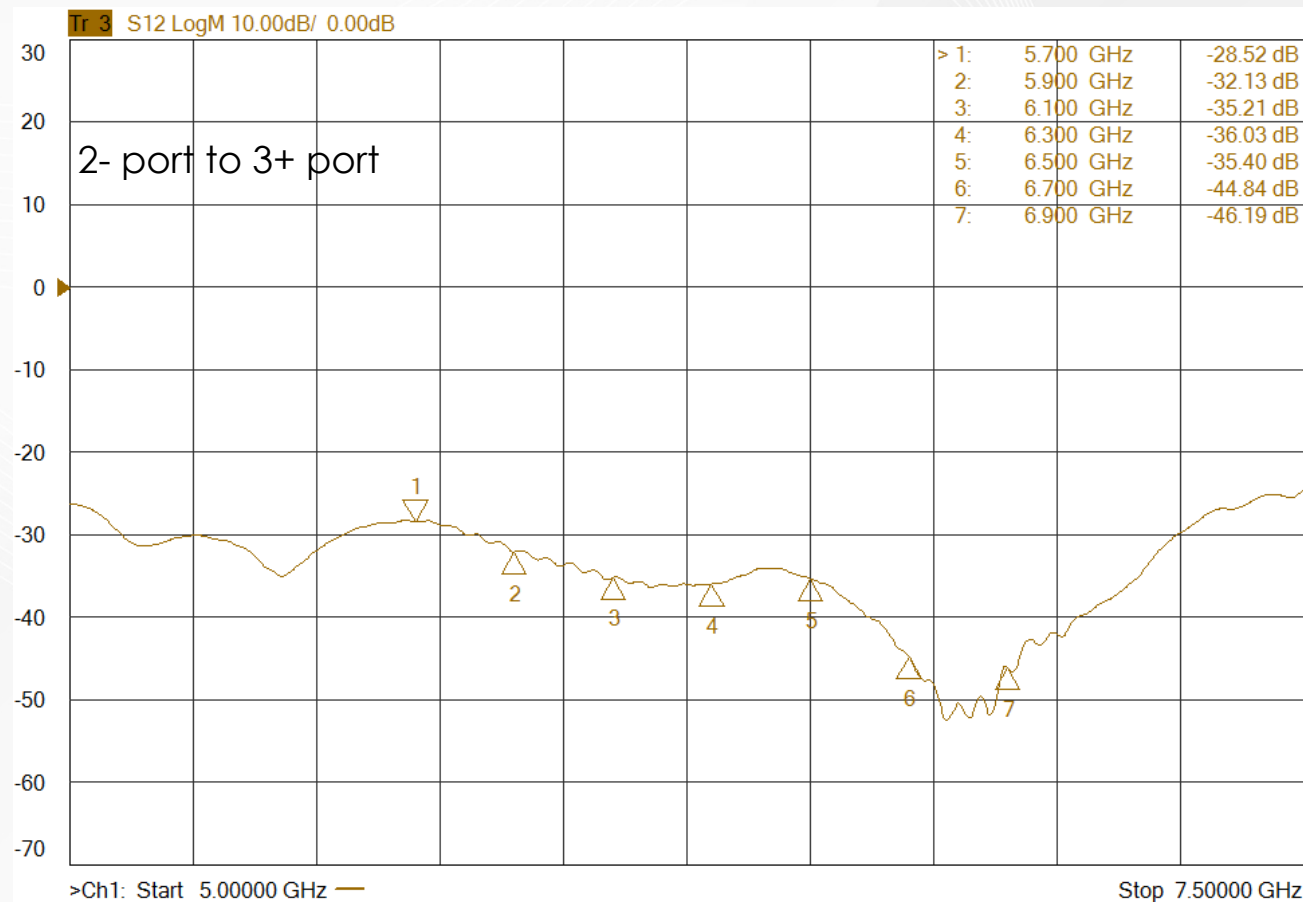
Isolation Test Result (1/7)

Isolation									
Freq. (GHz)	1.575	1.610	5.7	5.9	6.1	6.3	6.5	6.7	6.9
0- port to 1+ port	--	--	-27.92	-31.92	-34.92	-34.98	-35.56	-45.52	-46.44
2- port to 3+ port	--	--	-28.52	-32.13	-35.21	-36.03	-35.40	-44.84	-46.19
0- port to 2- port	--	--	-57.39	-53.25	-50.59	-48.79	-39.62	-39.27	-32.46
1+ port to 3+ port	--	--	-55.05	-59.53	-50.37	-51.24	-34.44	-34.36	-30.45
0- port to 3+ port	--	--	-61.91	-60.79	-59.65	-57.63	-53.77	-53.56	-52.10
1+ port to 2- port	--	--	-67.57	-64.96	-58.74	-58.10	-62.86	-52.95	-50.51
GPS to 0- port	-53.27	-54.45	-57.18	-50.22	-44.77	-45.93	-43.20	-47.70	-40.13
GPS to 1+ port	-62.56	-63.70	-62.76	-53.53	-48.52	-45.45	-45.76	-46.46	-43.80
GPS to 2- port	-43.03	-44.77	-53.20	-39.63	-43.00	-44.57	-45.31	-33.38	-32.96
GPS to 3+ port	-56.40	-57.77	-54.72	-42.09	-52.54	-45.06	-37.62	-46.00	-33.05

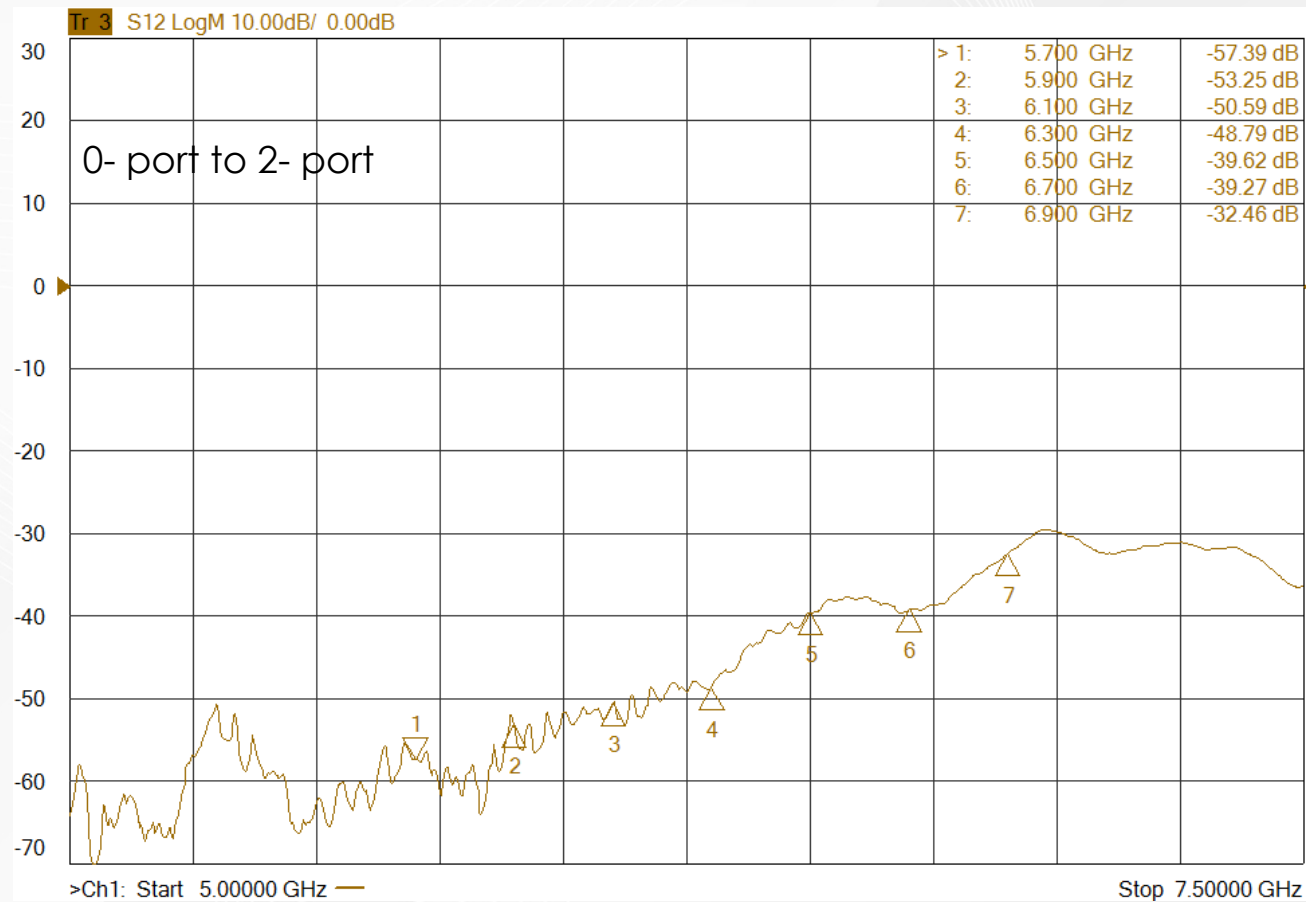
Isolation Test Result (2/7)



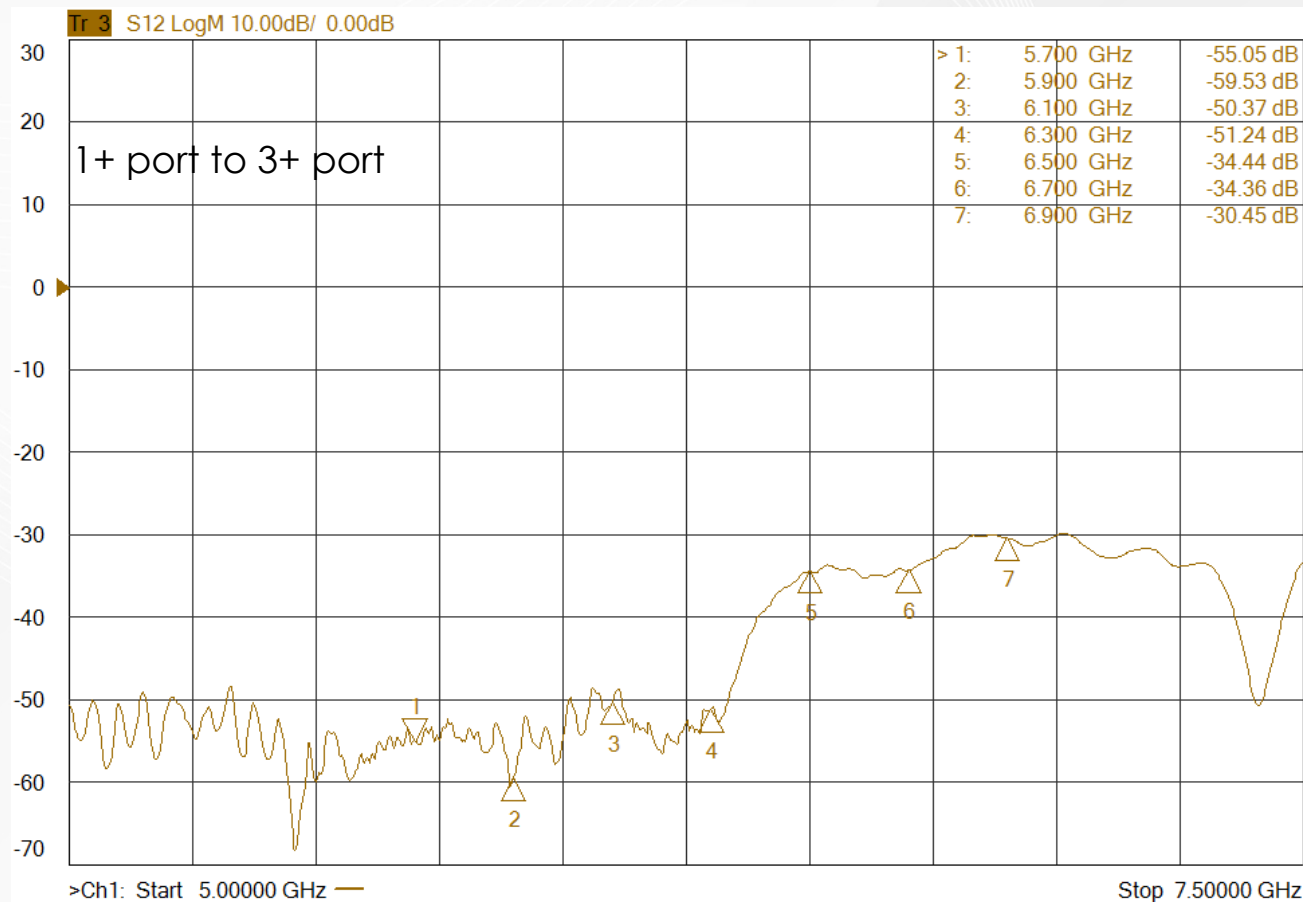
Isolation Test Result (3/7)



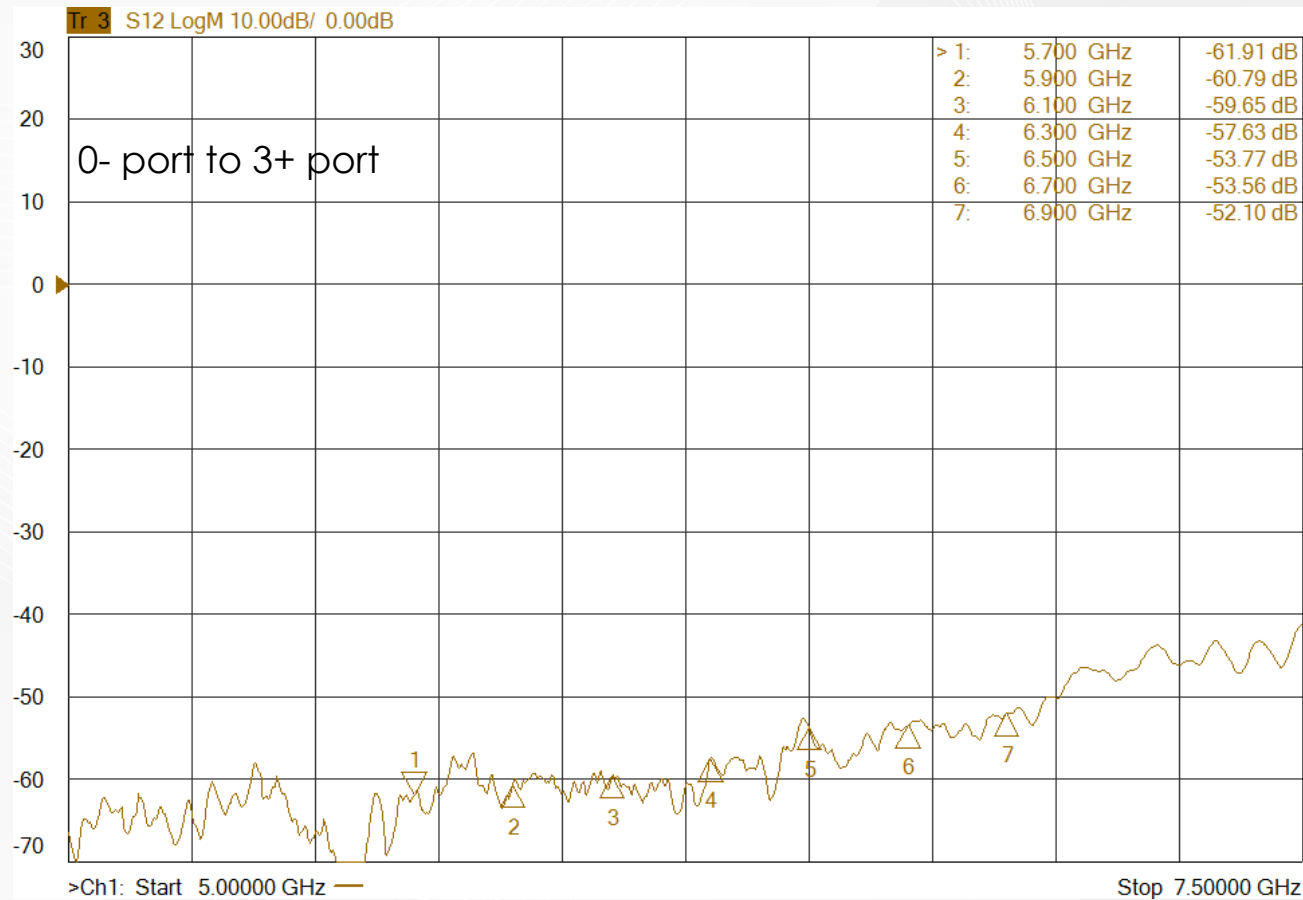
Isolation Test Result (4/7)



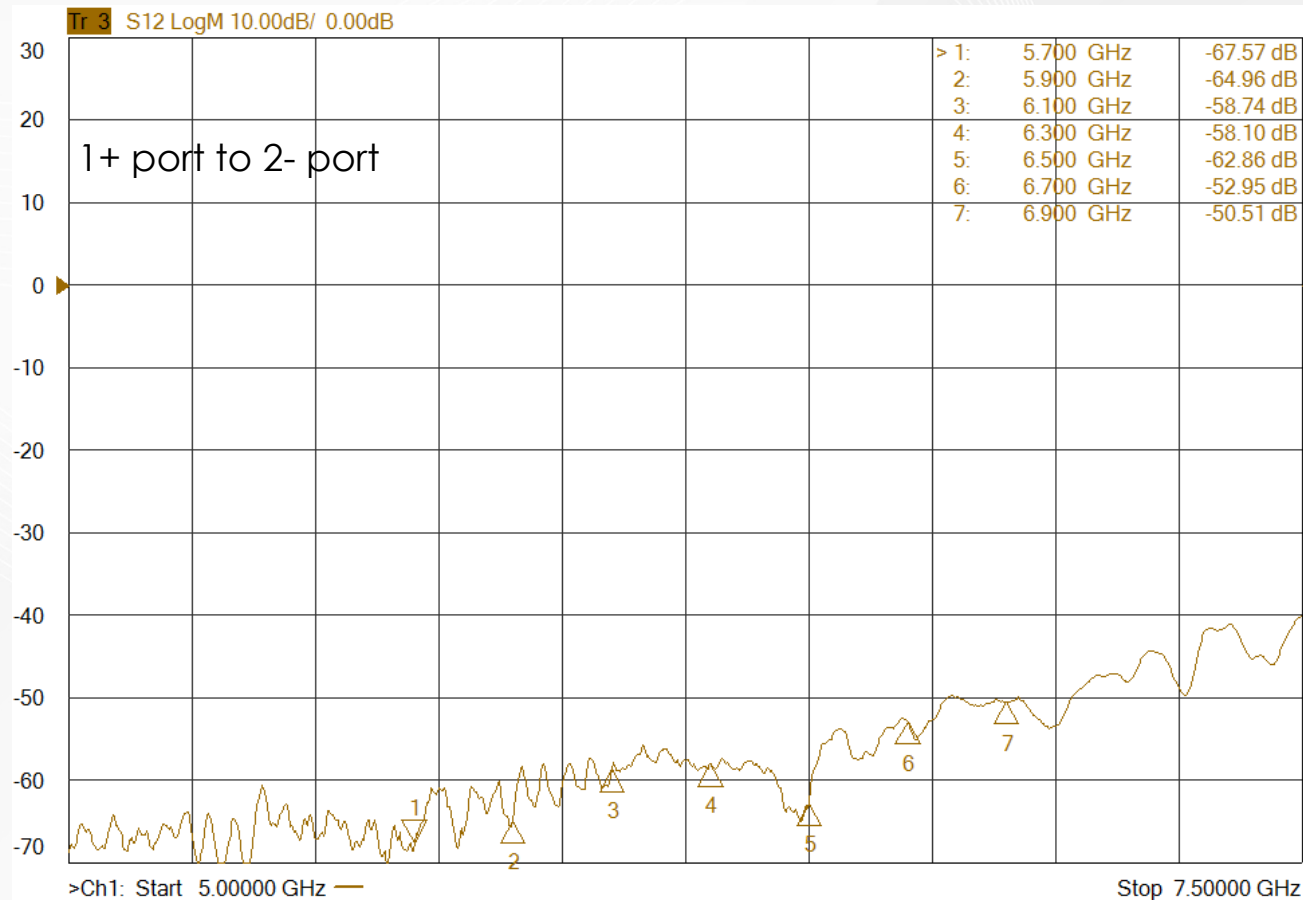
Isolation Test Result (5/7)



Isolation Test Result (6/7)



Isolation Test Result (7/7)



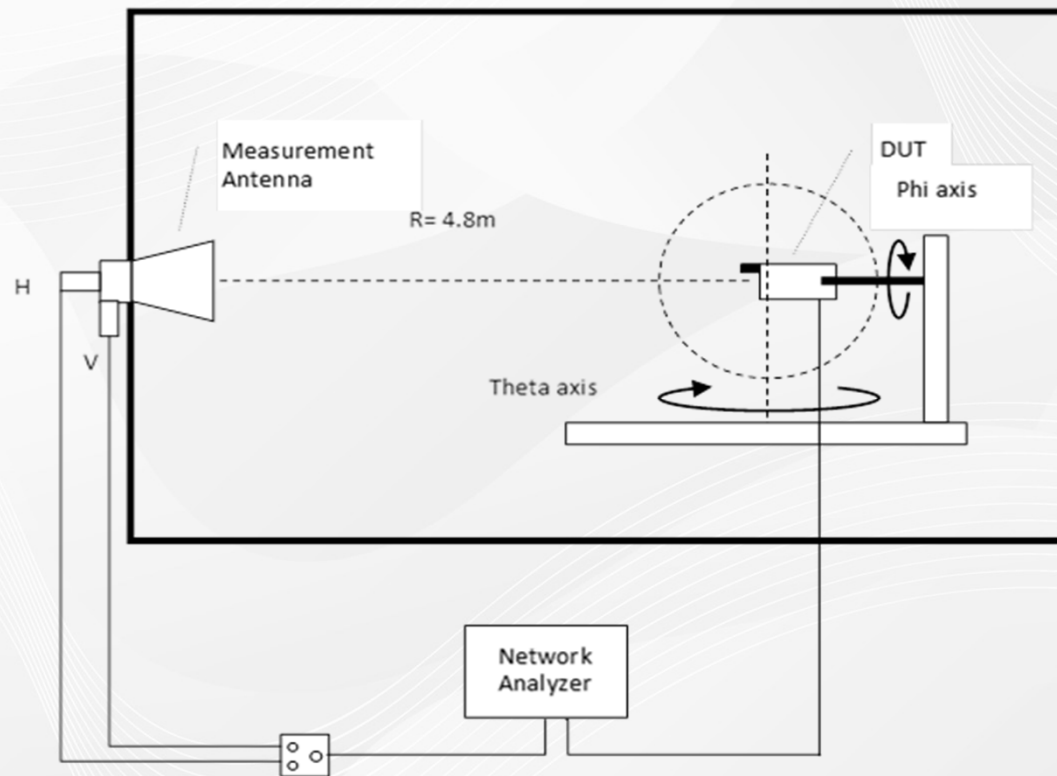
Experimental Setup & Coordinate System(1/2)

Chamber Name: ETS AMS-8500 Rectangular CTIA-Compliant Test Lab

- Fully-compliant for CTIA Over-The-Air (OTA) Testing for Wireless Devices
- Fully Anechoic Chamber: 7.32m*3.66m*3.51m (L*W*H)
- Passive Antenna Measurements
- Frequency Range: 600 MHz to 8 GHz
- Modular High Performance Shielded System
- Multi-Axis Positioning System (MAPS) for High Resolution 3D Pattern Testing



Experimental Setup & Coordinate System(2/2)



Gain Test Result (1/2)

0- Port, V-Pol. Peak Gain													
Freq. (GHz)	5.7	5.8	5.9	6.0	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9
Azimuth (dBi)	19.8	20.0	20.4	20.2	20.4	20.0	20.1	20.5	20.4	20.4	19.7	20.4	19.7
Elevation (dBi)	19.1	19.4	19.8	19.4	20.0	19.7	20.0	20.3	20.2	20.2	19.3	20.0	19.4
1+ Port, H-Pol. Peak Gain													
Freq. (GHz)	5.7	5.8	5.9	6.0	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9
Azimuth (dBi)	19.1	19.4	18.9	19.1	19.4	19.1	19.0	18.8	19.1	18.3	18.7	19.1	18.8
Elevation (dBi)	19.8	20.0	19.7	20.0	19.9	19.8	19.5	19.5	19.6	18.8	19.4	19.7	19.4
2- Port, V-Pol. Peak Gain													
Freq. (GHz)	5.7	5.8	5.9	6.0	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9
Azimuth (dBi)	19.2	19.9	20.4	20.1	20.2	20.2	19.8	20.5	20.5	20.0	20.2	20.3	19.7
Elevation (dBi)	18.6	19.2	19.4	19.1	19.8	19.7	19.7	20.3	20.2	19.7	19.8	20.1	19.2
3+ Port, H-Pol. Peak Gain													
Freq. (GHz)	5.7	5.8	5.9	6.0	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9
Azimuth (dBi)	19.0	19.3	18.7	19.1	19.2	18.7	19.0	19.1	19.0	18.5	18.7	18.6	19.0
Elevation (dBi)	19.5	19.8	19.4	20.1	19.8	19.2	19.5	19.8	19.6	18.8	19.2	19.0	18.8

Gain Test Result (2/2)

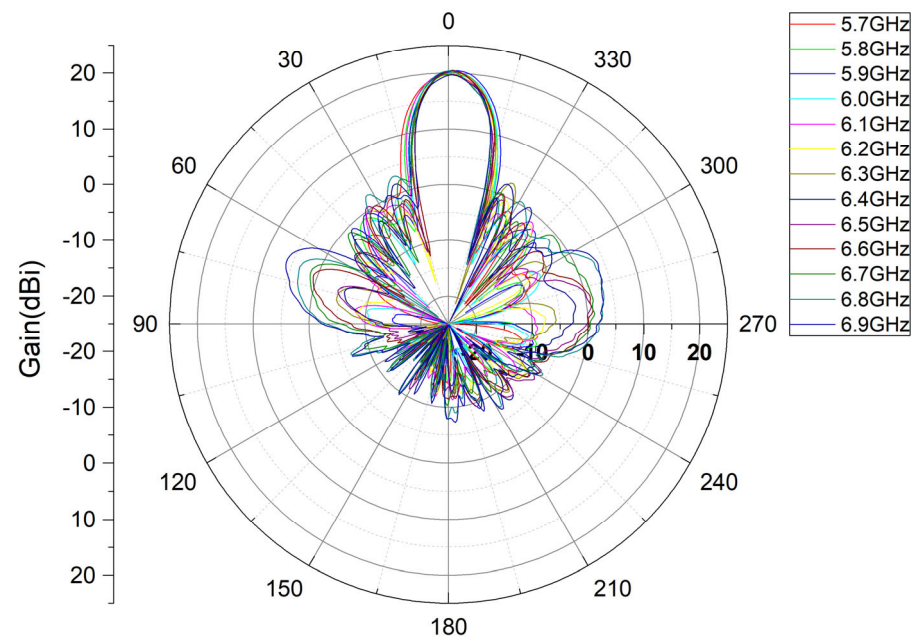
GPS Antenna			
Freq. (GHz)	1.575	1.592	1.610
Efficiency (%)	76.5	76.9	82.4
Gain (dBi)	3.9	4.5	4.4

HPBW. Test Result

0- Port, V-Pol. HPBW.													
Freq. (GHz)	5.7	5.8	5.9	6.0	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9
Azimuth (deg)	16	15	15	15	15	14	15	13	13	13	13	13	14
Elevation (deg)	18	17	17	17	16	17	17	15	16	16	15	15	13
1+ Port, H-Pol. HPBW.													
Freq. (GHz)	5.7	5.8	5.9	6.0	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9
Azimuth (deg)	17	16	16	15	15	16	15	16	16	16	16	13	12
Elevation (deg)	18	17	17	17	17	16	17	17	16	15	16	15	15
2- Port, V-Pol. HPBW.													
Freq. (GHz)	5.7	5.8	5.9	6.0	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9
Azimuth (deg)	16	15	15	15	14	14	14	14	14	12	12	12	13
Elevation (deg)	18	18	17	17	16	17	17	15	16	16	15	14	14
3+ Port, H-Pol. HPBW.													
Freq. (GHz)	5.7	5.8	5.9	6.0	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9
Azimuth (deg)	16	16	16	16	15	16	15	15	15	16	15	15	15
Elevation (deg)	19	17	17	17	17	17	18	17	16	15	16	14	14

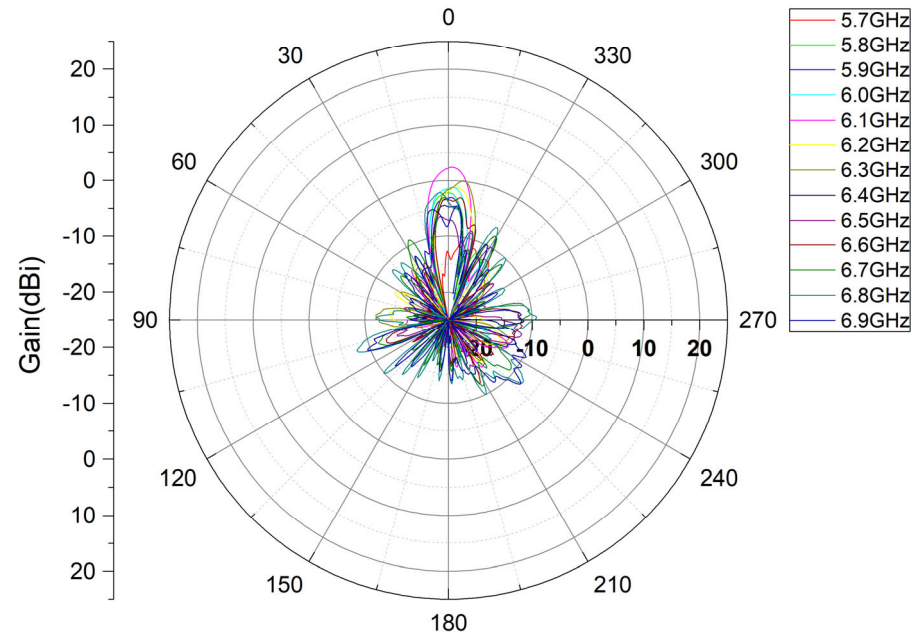
2D Radiation Pattern (1/17)

0- Port, V-Pol, Azimuth Co-Pol.



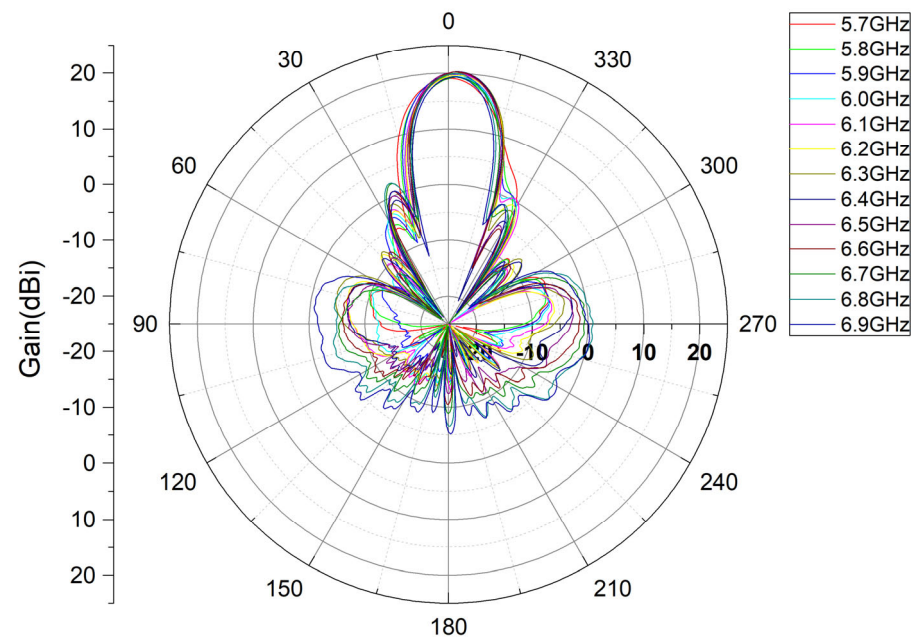
2D Radiation Pattern (2/17)

0- Port, V-Pol, Azimuth Cross-Pol.



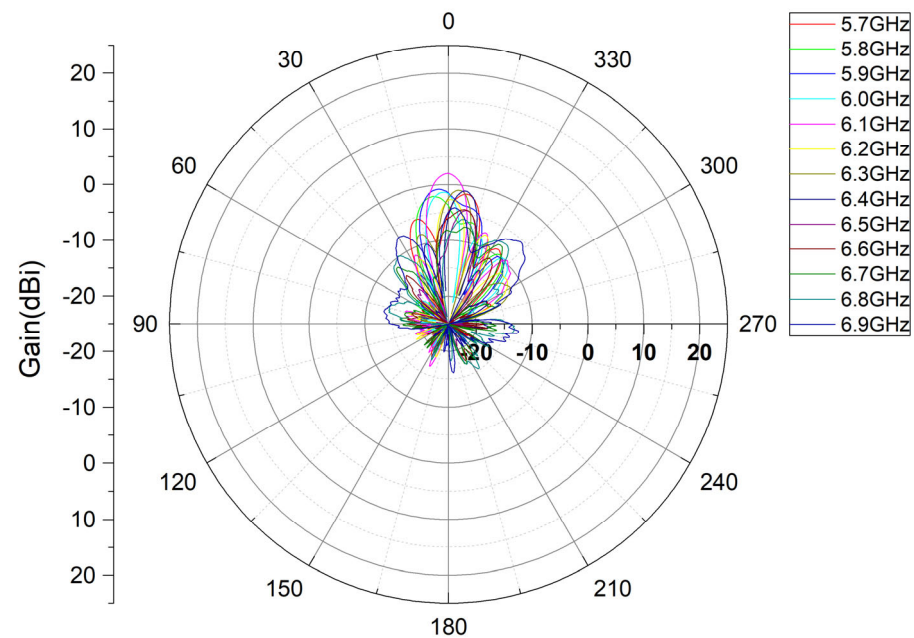
2D Radiation Pattern (3/17)

0- Port, V-Pol, Elevation Co-Pol.



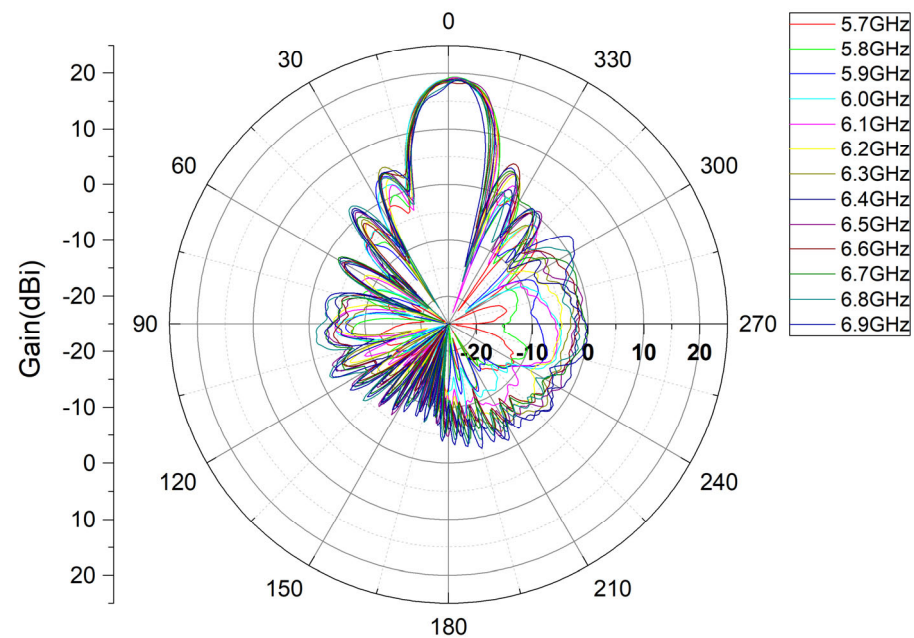
2D Radiation Pattern (4/17)

0- Port, V-Pol, Elevation Cross-Pol.



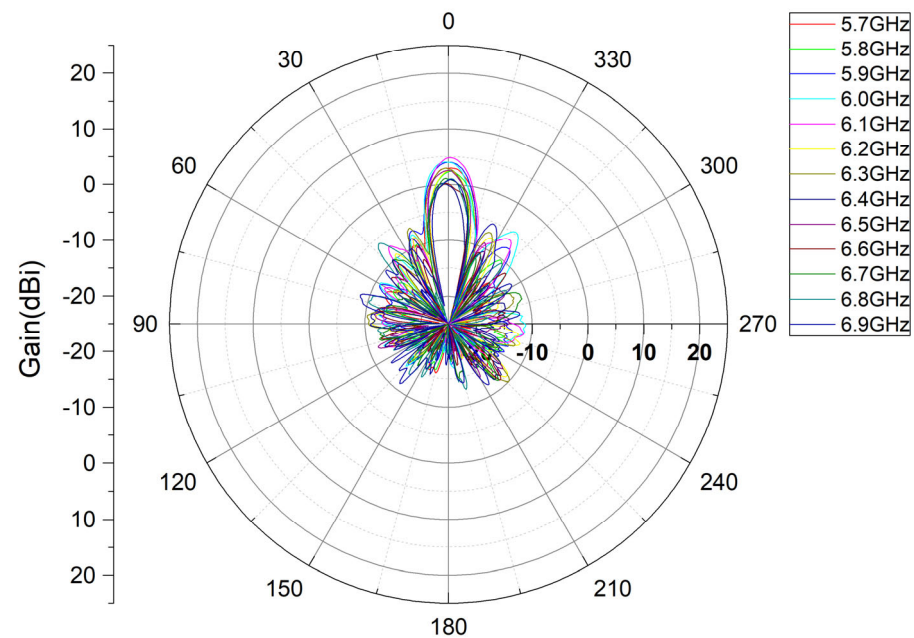
2D Radiation Pattern (5/17)

1+ Port, H-Pol, Azimuth Co-Pol.



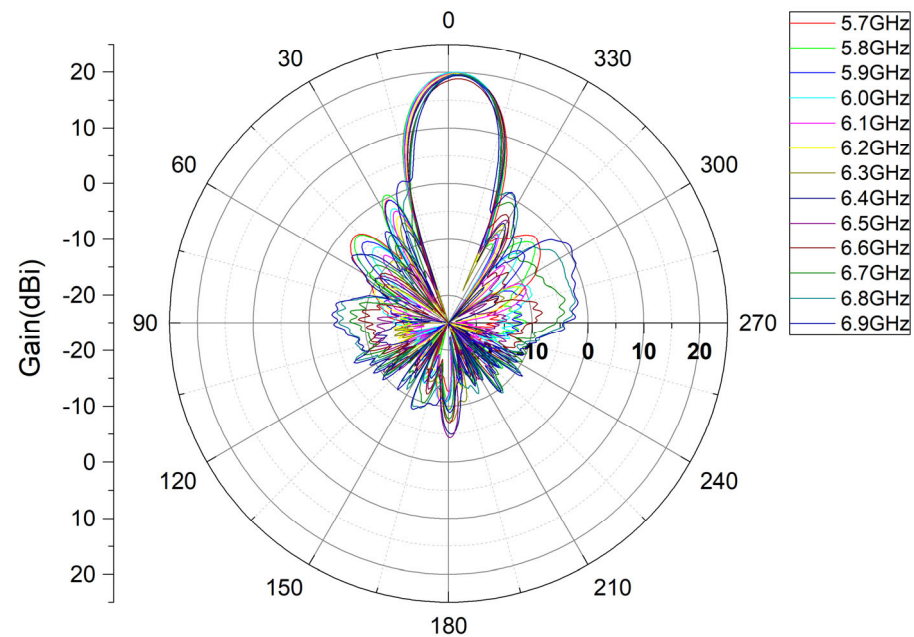
2D Radiation Pattern (6/17)

1 + Port, H-Pol, Azimuth Cross-Pol.



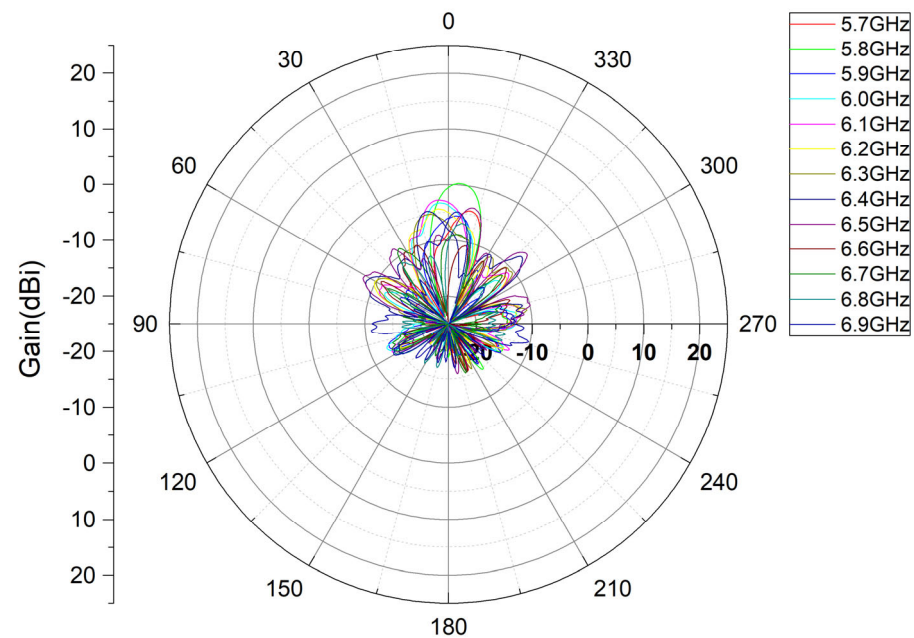
2D Radiation Pattern (7/17)

1+ Port, H-Pol, Elevation Co-Pol.



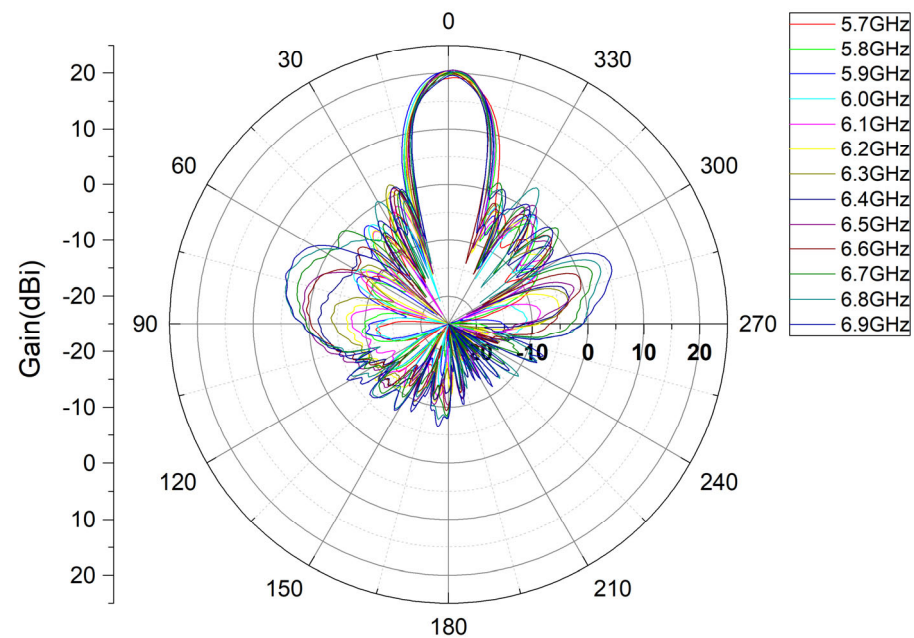
2D Radiation Pattern (8/17)

1+ Port, H-Pol, Elevation Cross-Pol.



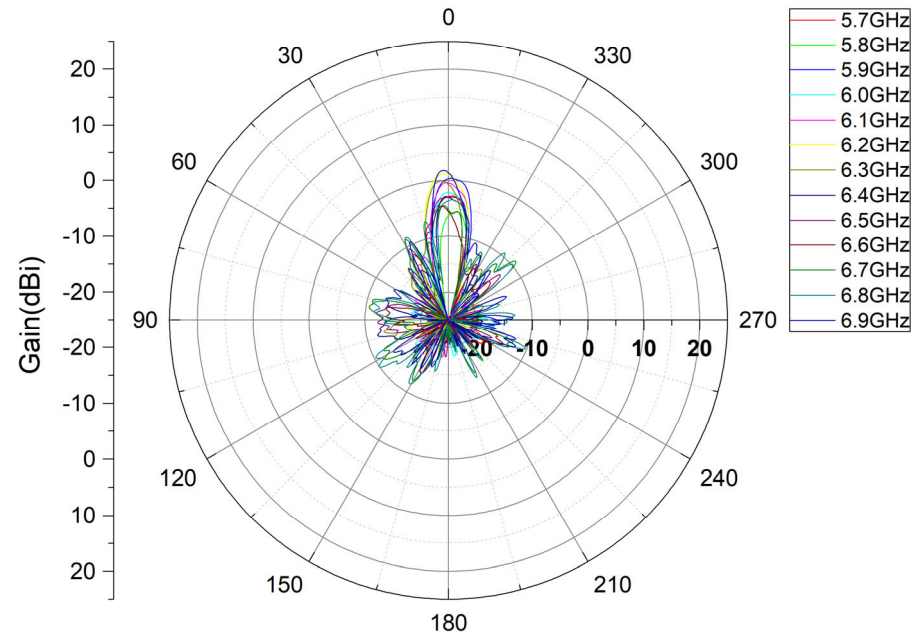
2D Radiation Pattern (9/17)

2- Port, V-Pol, Azimuth Co-Pol.



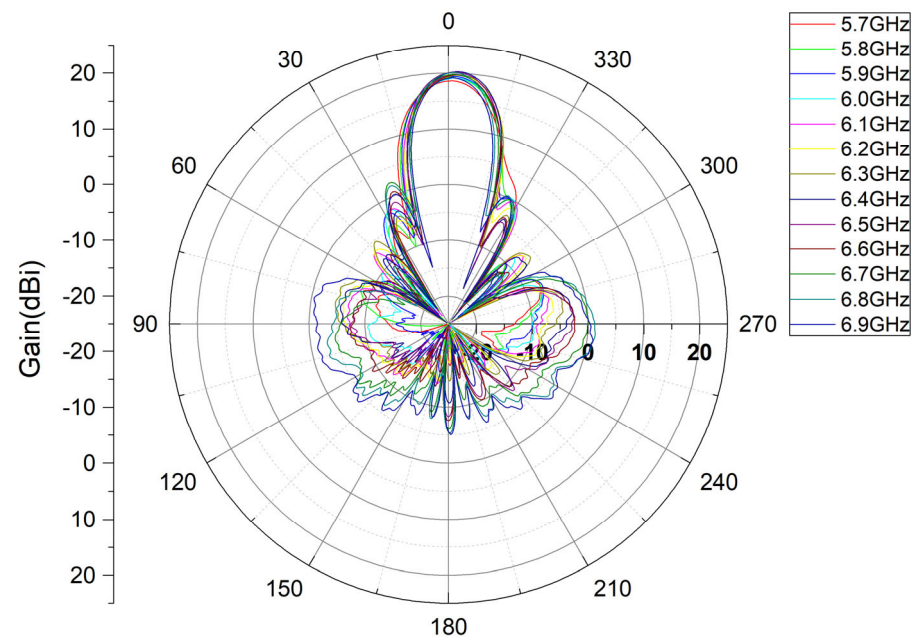
2D Radiation Pattern (10/17)

2- Port, V-Pol, Azimuth Cross-Pol.



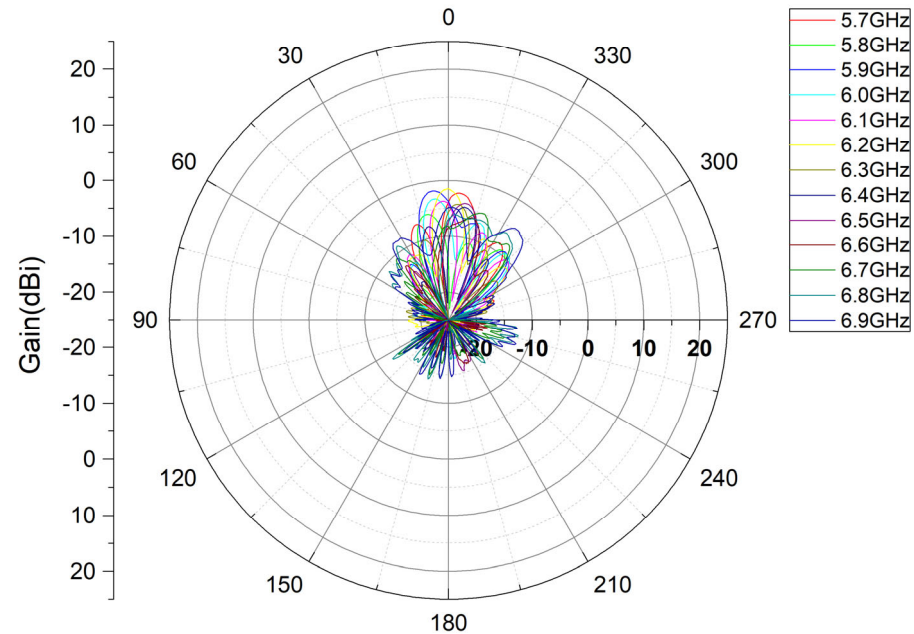
2D Radiation Pattern (11/17)

2- Port, V-Pol, Elevation Co-Pol.



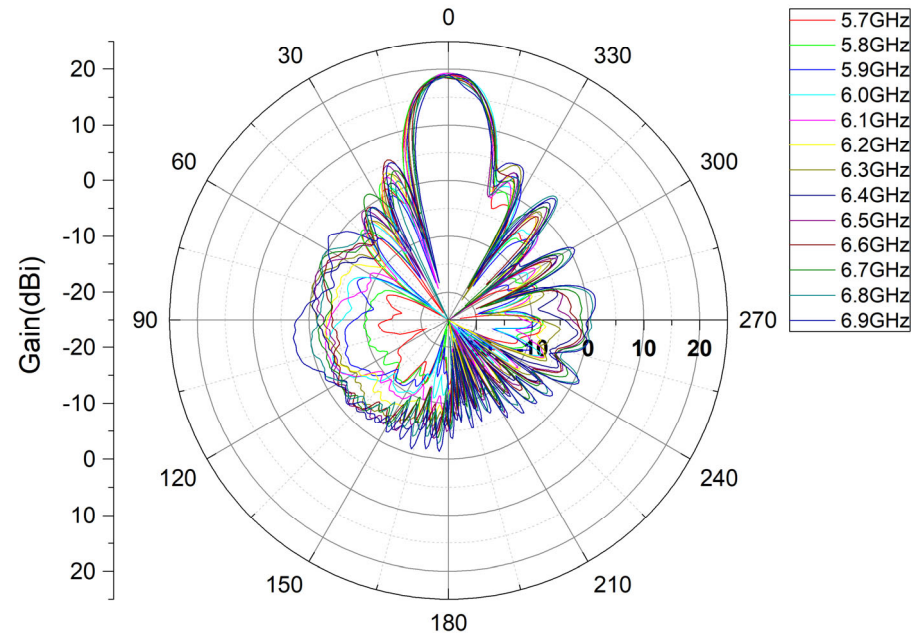
2D Radiation Pattern (12/17)

2- Port, V-Pol, Elevation Cross-Pol.



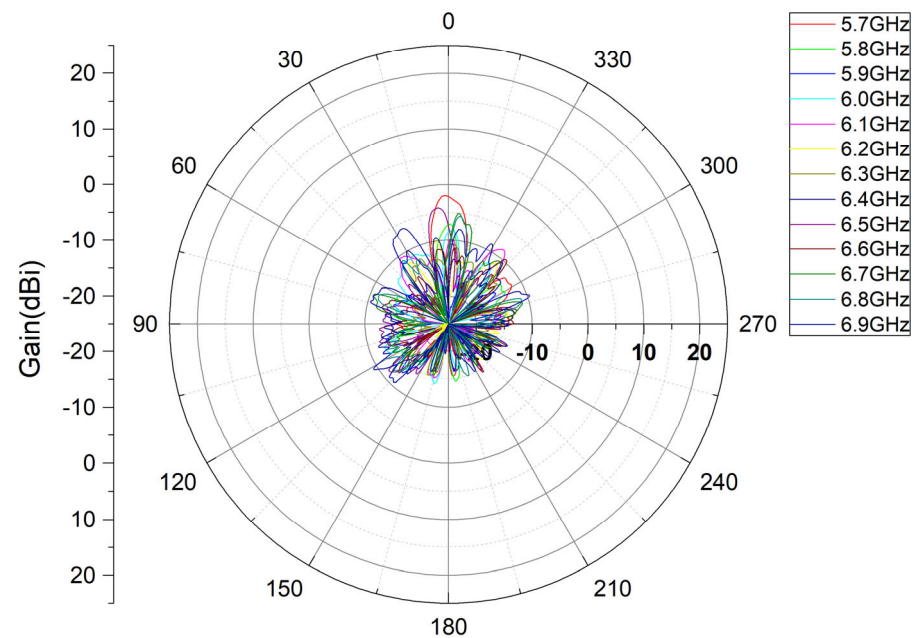
2D Radiation Pattern (13/17)

3+ Port, H-Pol, Azimuth Co-Pol.



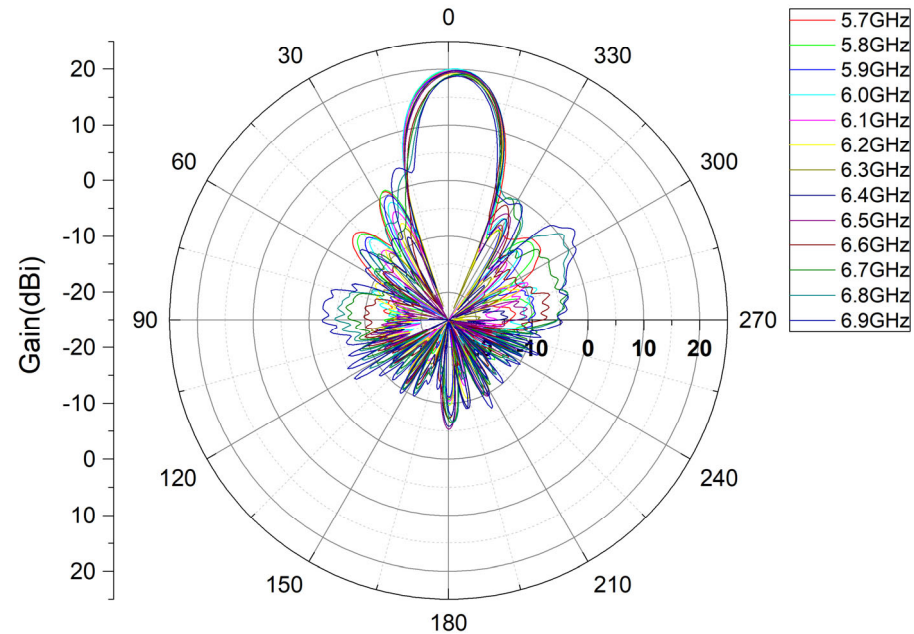
2D Radiation Pattern (14/17)

3+ Port, H-Pol, Azimuth Cross-Pol.



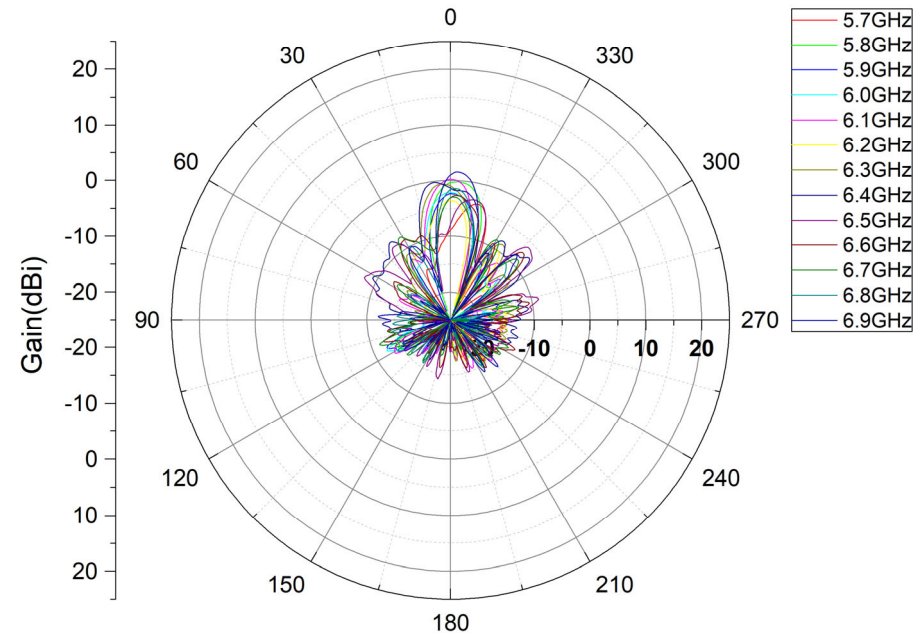
2D Radiation Pattern (15/17)

3+ Port, H-Pol, Elevation Co-Pol.



2D Radiation Pattern (16/17)

3+ Port, H-Pol, Elevation Cross-Pol.



2D Radiation Pattern (17/17)

GPS Antenna

