CHINMORE INDUSTRY CO.,LTD

Specification

(1) Combined Antenna for GNSS and LTE(R39 series)

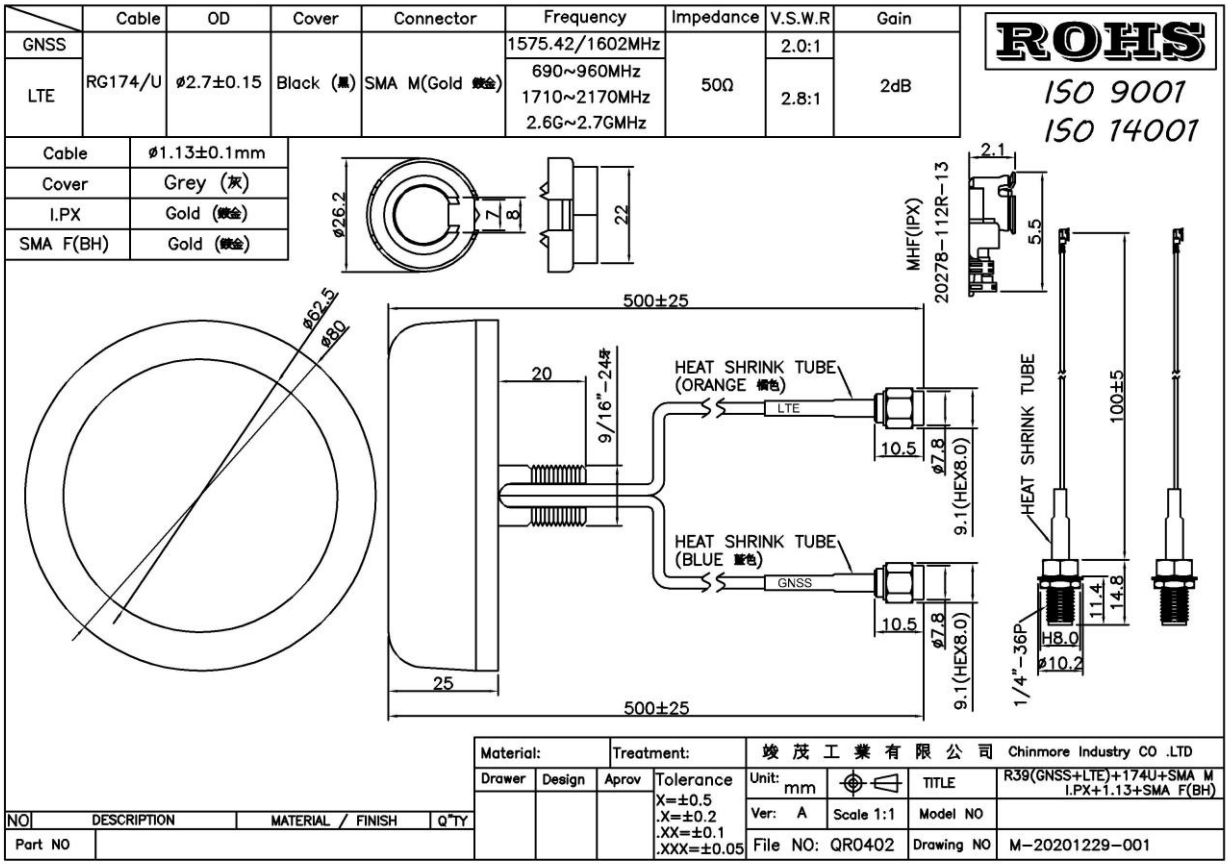
1. Frequency for GNSS: 1575.42 /1602MHz
2. Frequency for 4G/LTE: 700~2700 MHz
3. V.S.W.R : 2.0:1
4. Gain for GNSS: 30dBi
5. Gain for 4G/LTE: 0dBi
6. Cable: RG174 500mm
7. Connector: SMA M

(2) Mini Coaxial Cable with RF Connector

1. MHF (I.PX)
2. SMA F Bulkhead
3. Cable Ø1.13 100mm (Gray)

※RoHS Compliant

※ISO 9001 & ISO 14001

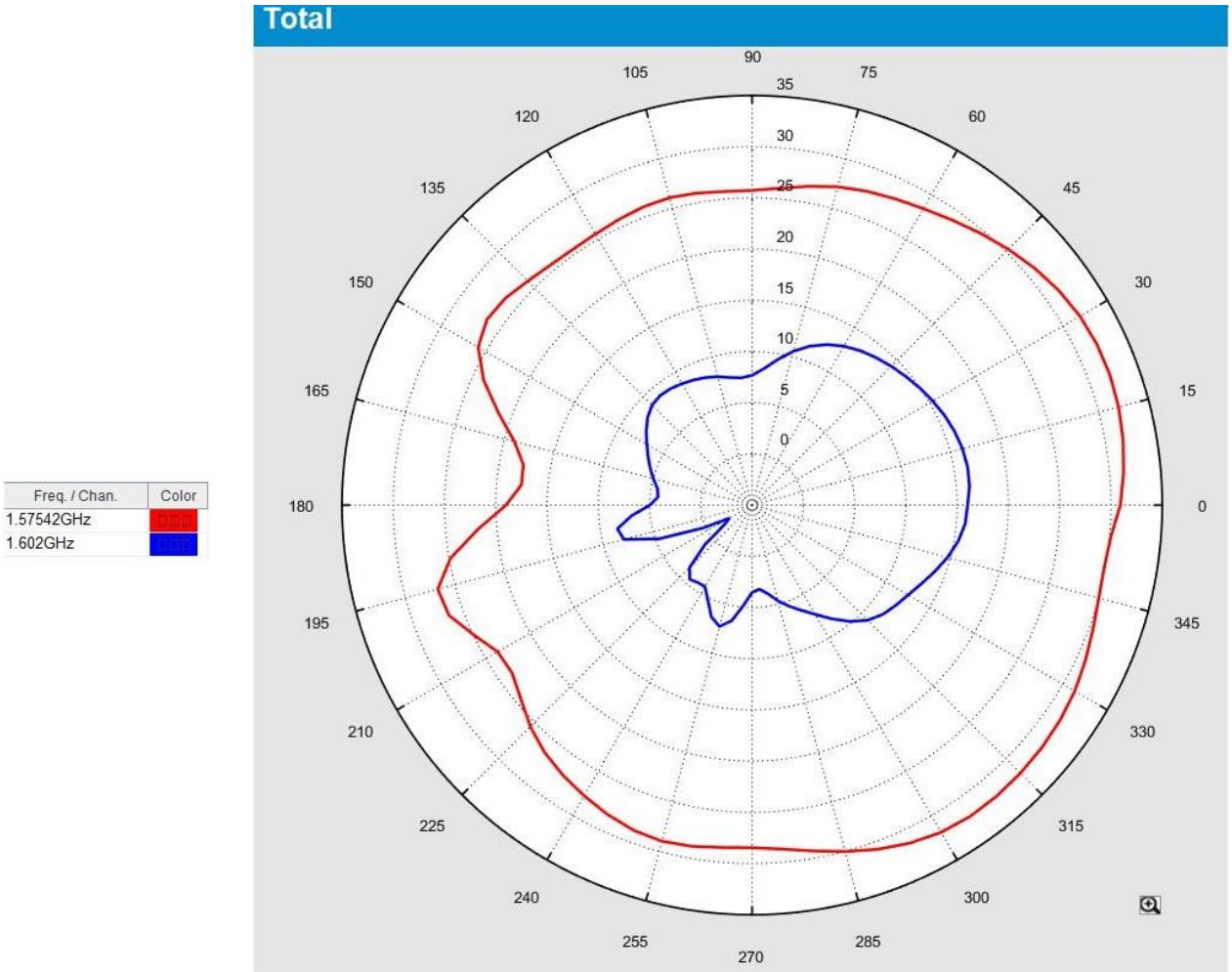


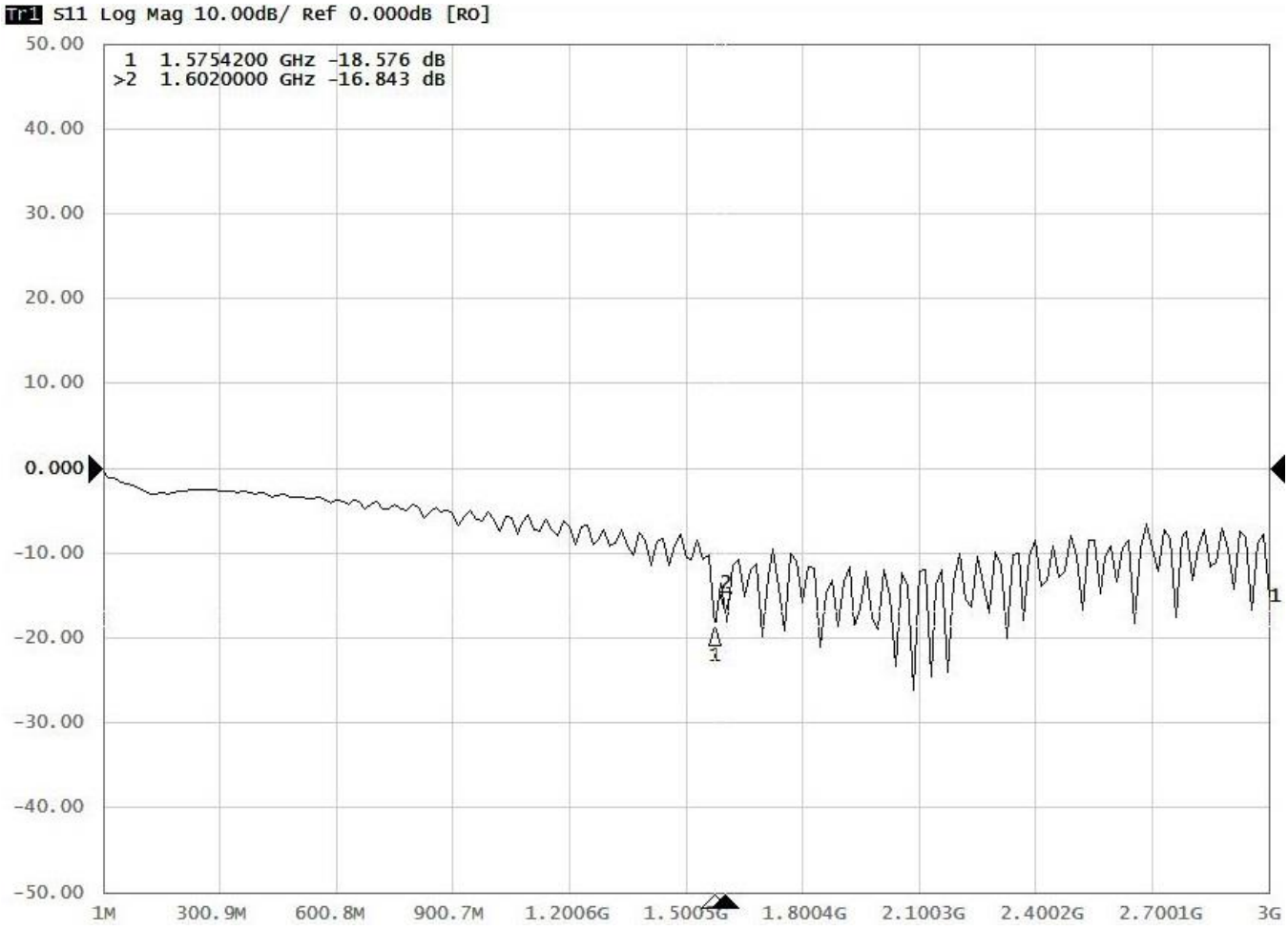
(1)Test report for R39 series Antenna

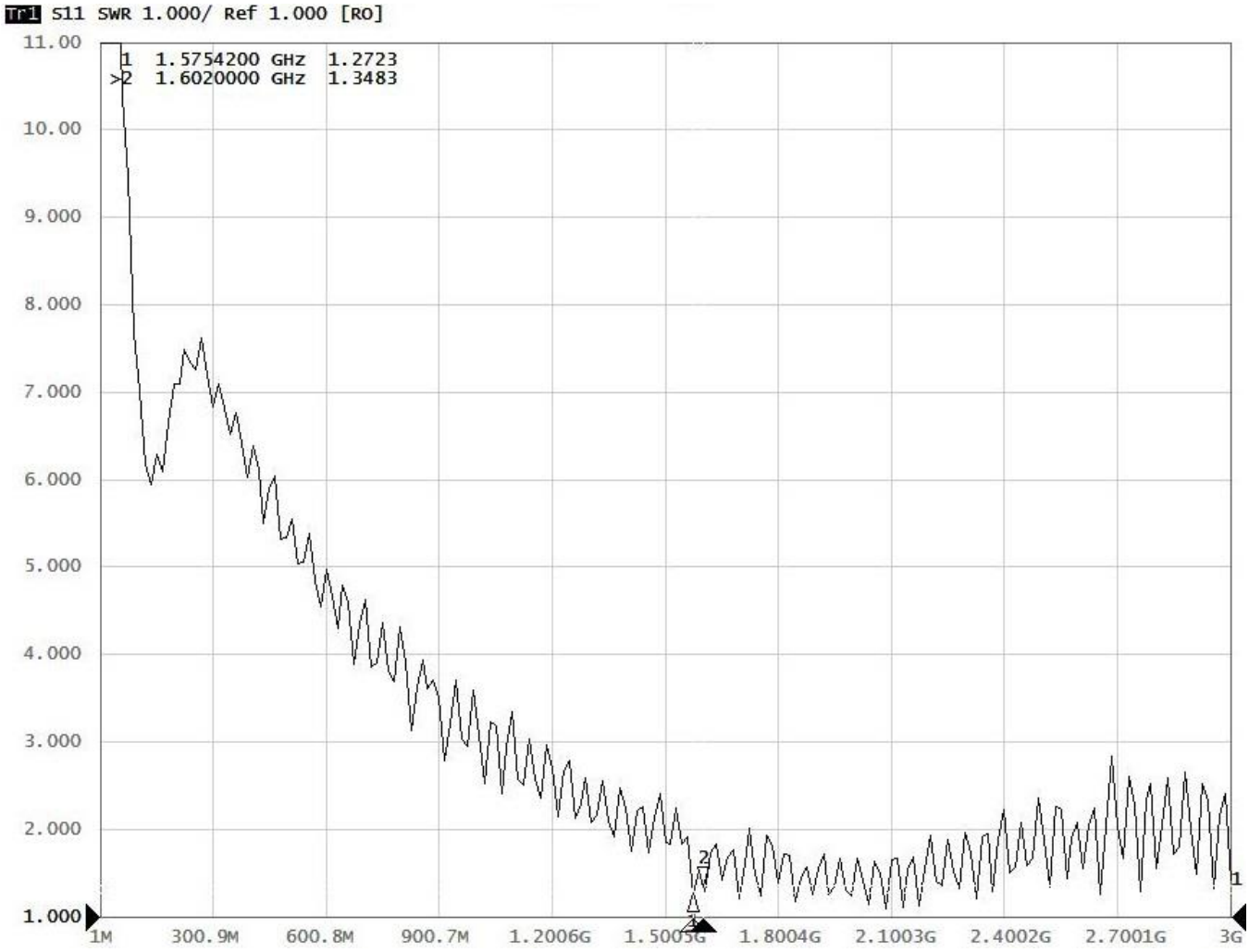
ELECTRICAL

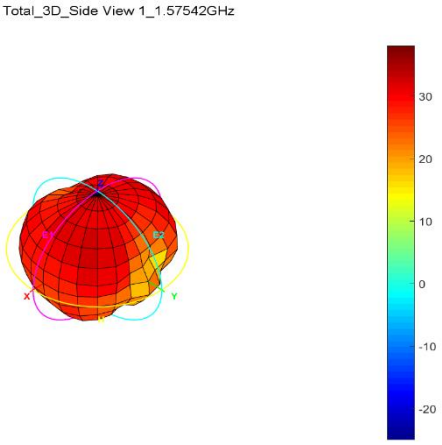
Frequency (MHz)	Return Loss (dB)	V.S.W.R	Efficiency (%)	Gain (dBi)
1575.42	-18.57	1.27	-------	32.42
1602	-16.84	1.34	--------	17.51
700	-12.14	1.72	43.45	0.53
824	-10.87	1.81	36.31	0.83
960	-12.97	1.56	36.56	1.92
1710	-13.55	1.52	68.55	6.61
1880	-17.96	1.32	64.86	7.79
2170	-16.90	1.35	52.97	6.75
2500	-17.08	1.42	53.21	5.67
2700	-10.59	1.85	51.29	5.75

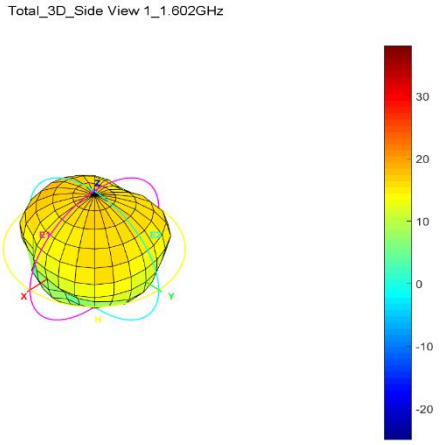
Test Data(GPS+GLONASS)



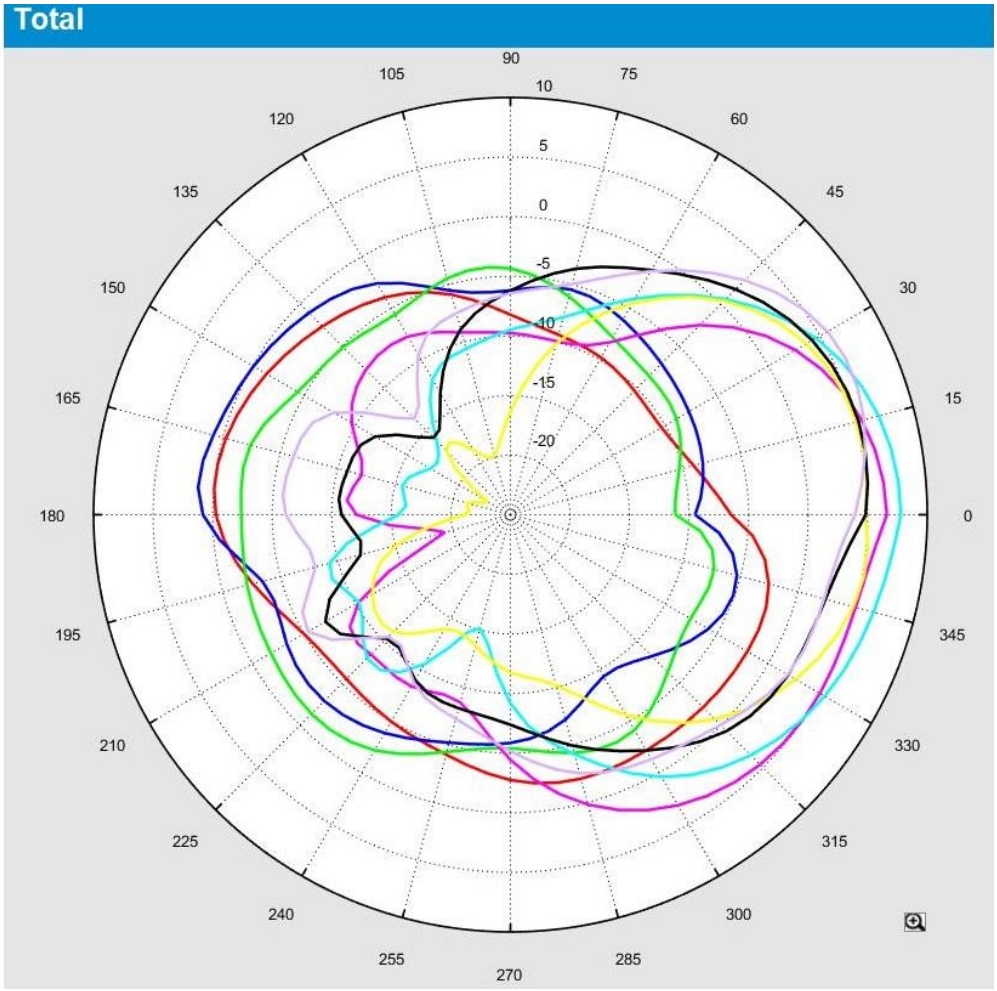



Tr1 S11 SWR 1.000/ Ref 1.000 [RO]
1 1.5754200 GHz 1.2723
>2 1.6020000 GHz 1.3483
11.00
10.00
9.000
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1.000
1M
300.9M
600.8M
900.7M
1.2006G
1.5005G
1.8004G
2.1003G
2.4002G
2.7001G
3G

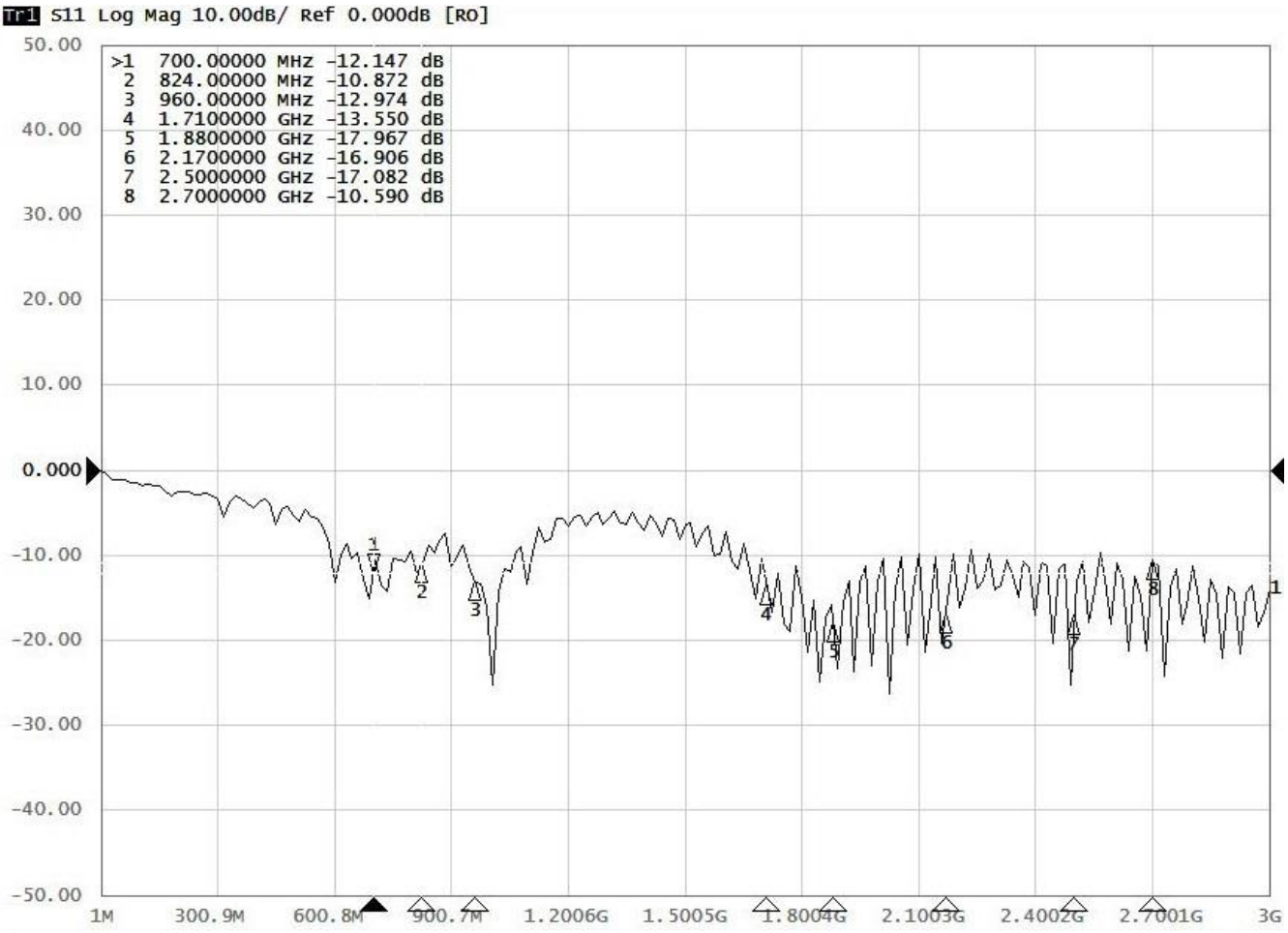

Total_3D_Side View 1_1.57542GHz
30
20
10
0
-10
-20

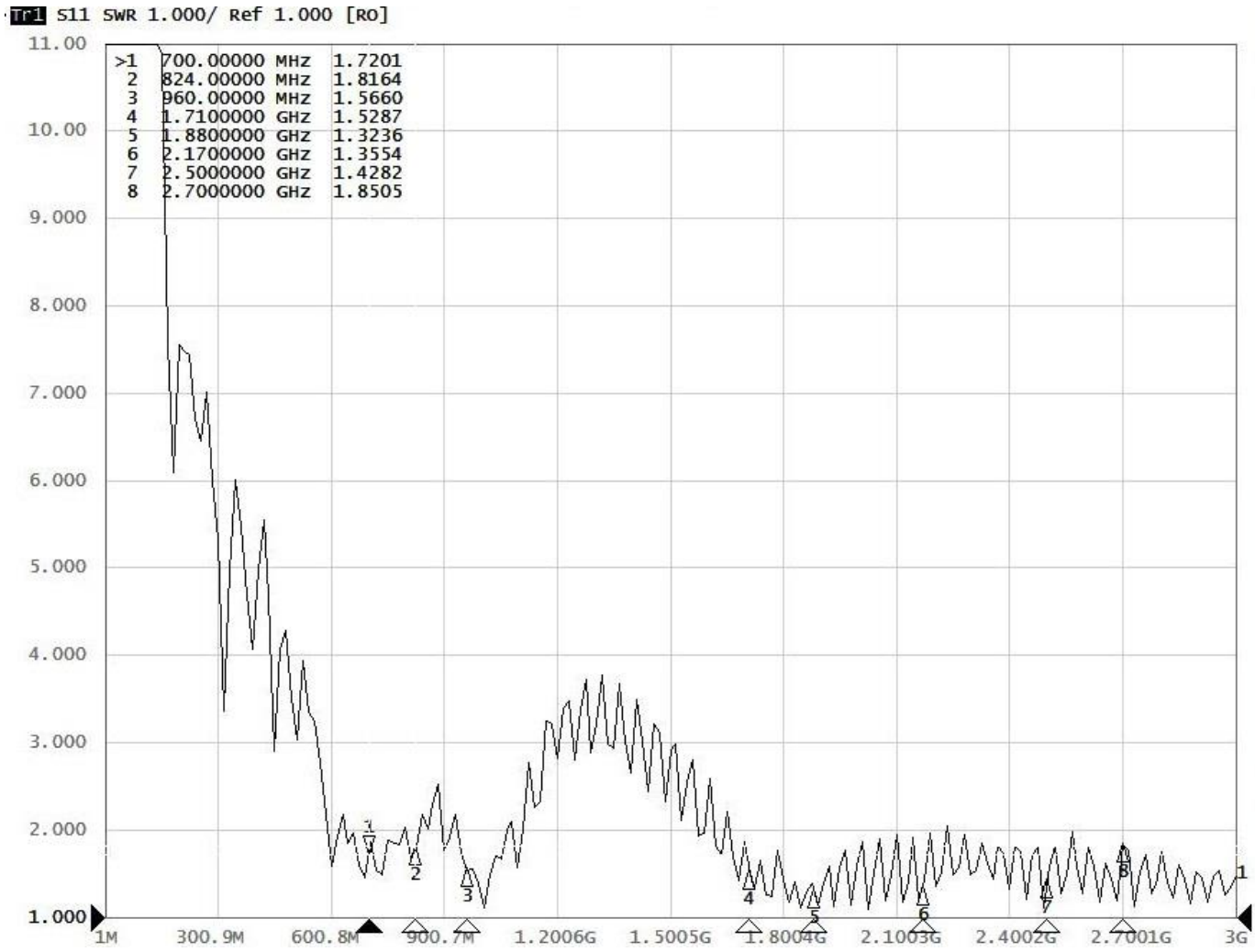

Total_3D_Side View 1_1.602GHz
30
20
10
0
-10
-20

Test Data(LTE)

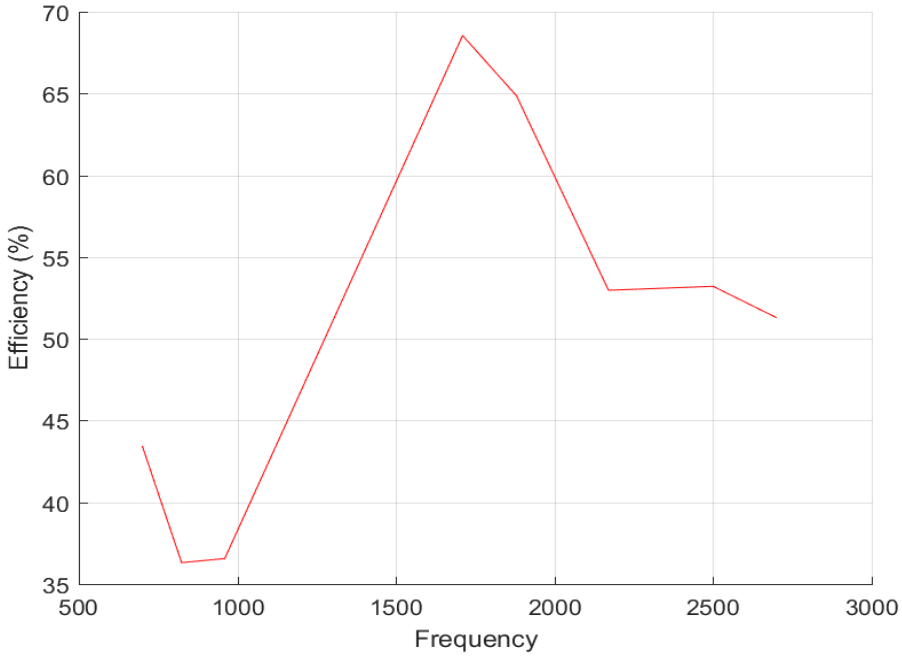


Freq. / Chan.	Color
700MHz	
824MHz	
960MHz	
1.71GHz	
1.88GHz	
2.17GHz	
2.5GHz	
2.7GHz	

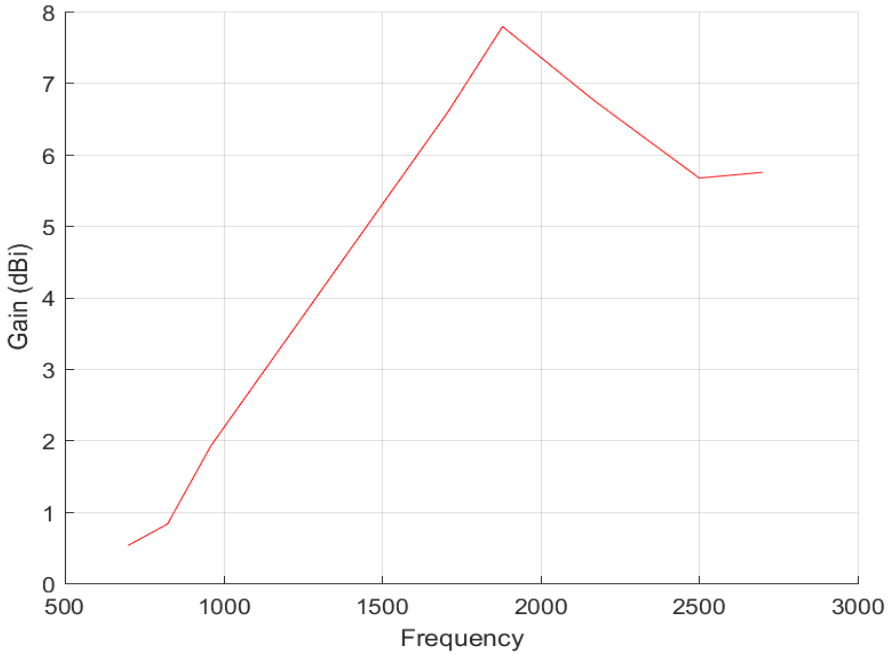




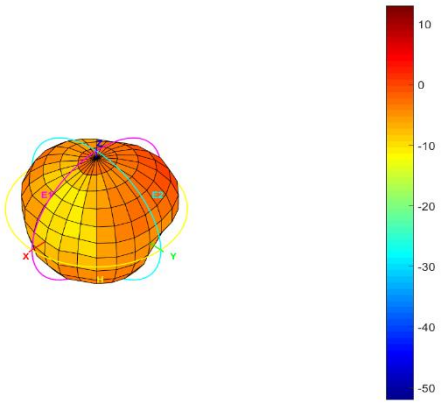
Total_Efficiency (%)



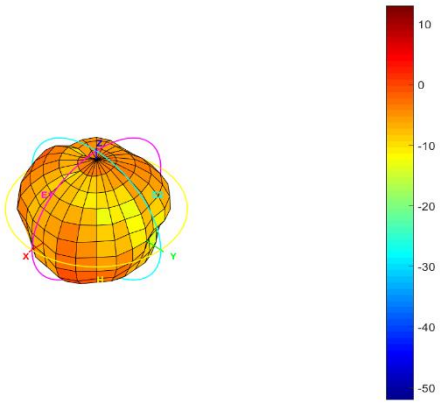
Total_Gain (dBi)



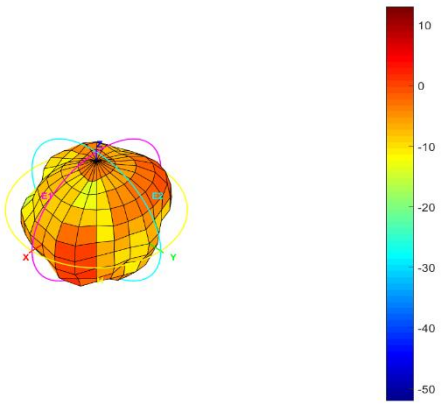
Total_3D_Side View 1_700MHz



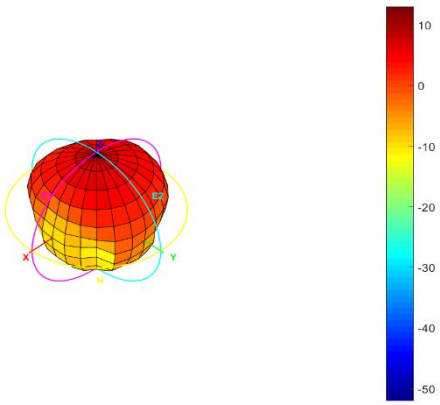
Total_3D_Side View 1_824MHz

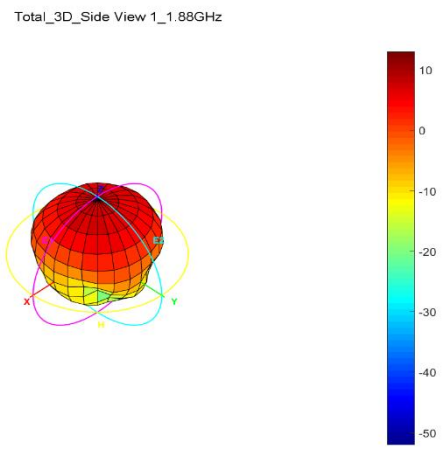


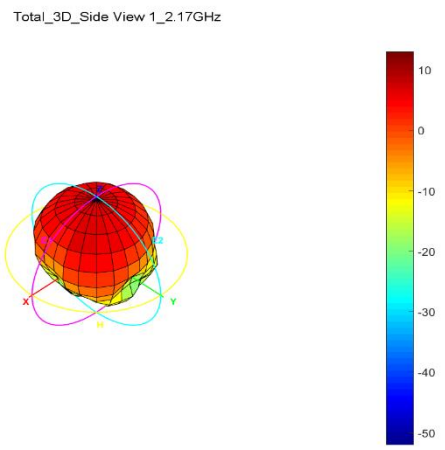
Total_3D_Side View 1_960MHz

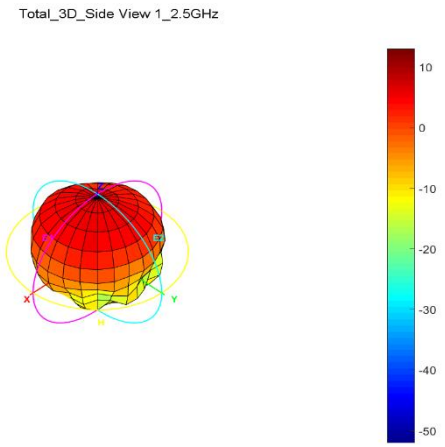


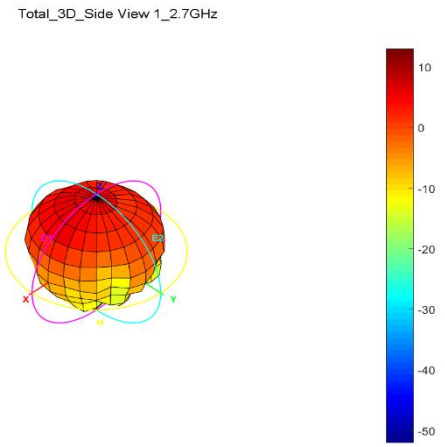
Total_3D_Side View 1_1.71GHz







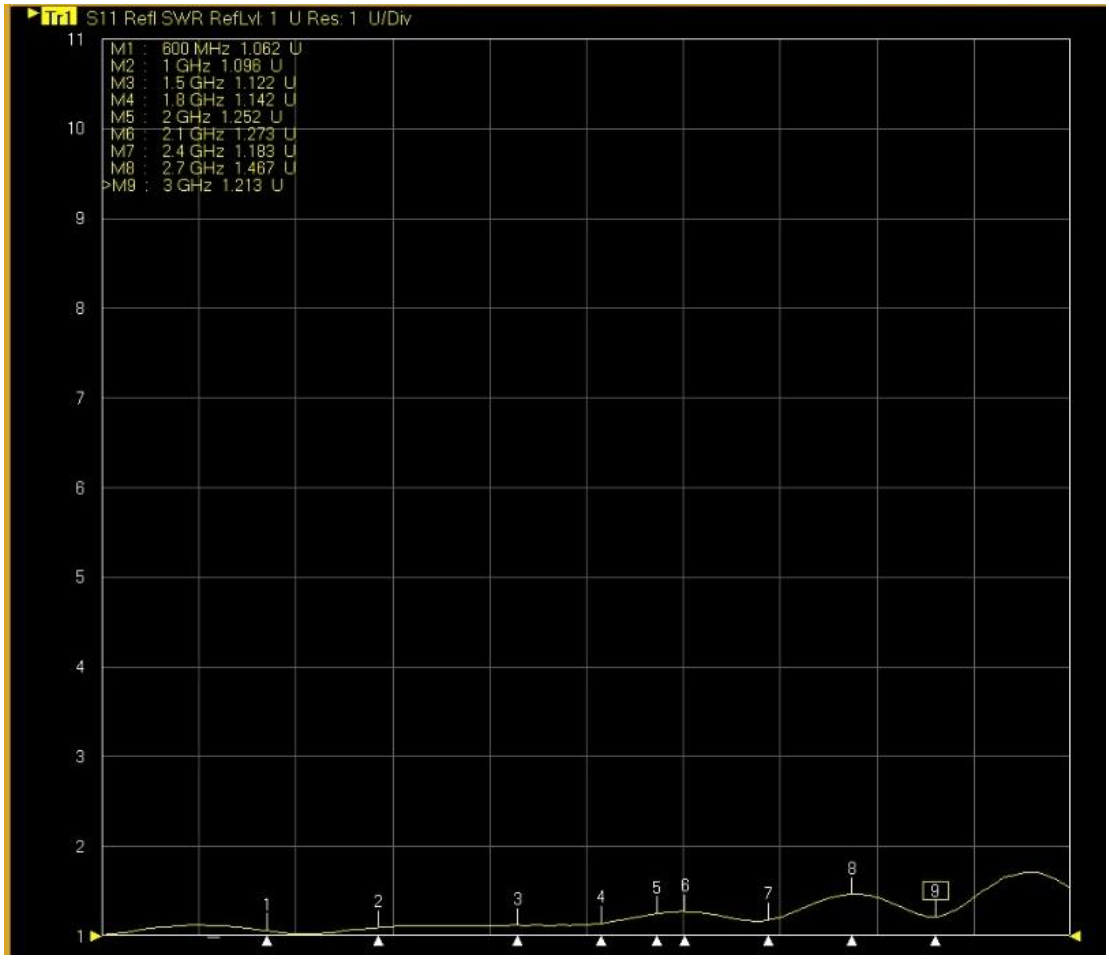


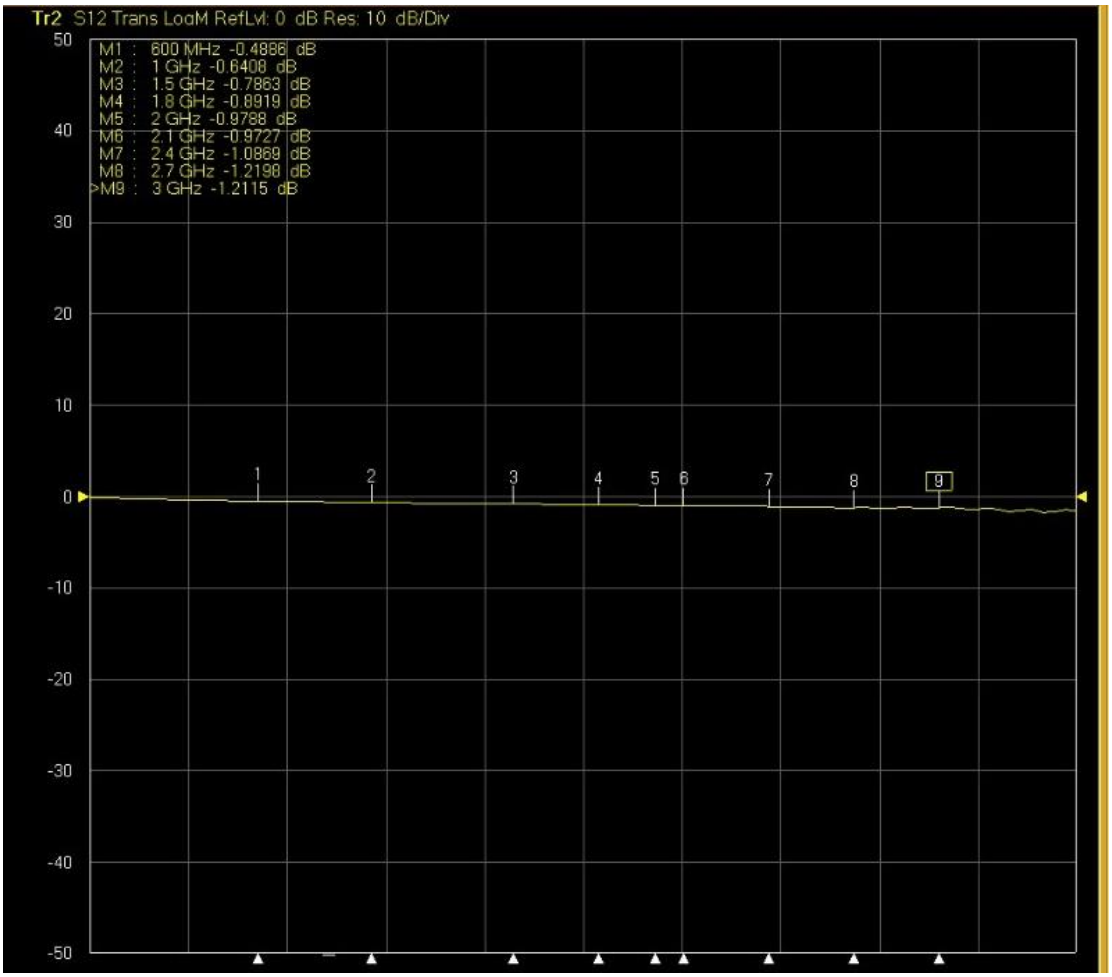


Test report for Mini Coaxial Cable RF Connector (I.PX Ø1.13 100mm SMA F(BH))

Frequency (MHz)	VSWR	Insertion Loss (dB)
600 MHz	1.06	-0.48
1000 MHz	1.09	-0.64
1500 MHz	1.12	-0.78
1800 MHz	1.14	-0.89
2000 MHz	1.25	-0.97
2100 MHz	1.27	-0.97
2400 MHz	1.18	-1.08
2700 MHz	1.46	-1.21
3000 MHz	1.21	-1.21

Test Report


Tr1 S11 Refl SWR RefLvl: 1 U Res: 1 U/Div
M1 : 600 MHz 1.062 U
M2 : 1 GHz 1.096 U
M3 : 1.5 GHz 1.122 U
M4 : 1.8 GHz 1.142 U
M5 : 2 GHz 1.252 U
M6 : 2.1 GHz 1.273 U
M7 : 2.4 GHz 1.183 U
M8 : 2.7 GHz 1.467 U
>M9 : 3 GHz 1.213 U
11
10
9
8
7
6
5
4
3
2
1


Tr2 S12 Trans LogM RefLvl: 0 dB Res: 10 dB/Div
M1 : 600 MHz -0.4886 dB
M2 : 1 GHz -0.6408 dB
M3 : 1.5 GHz -0.7863 dB
M4 : 1.8 GHz -0.8919 dB
M5 : 2 GHz -0.9788 dB
M6 : 2.1 GHz -0.9727 dB
M7 : 2.4 GHz -1.0869 dB
M8 : 2.7 GHz -1.2198 dB
>M9 : 3 GHz -1.2115 dB
50
40
30
20
10
0
-10
-20
-30
-40
-50