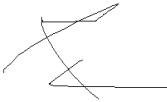


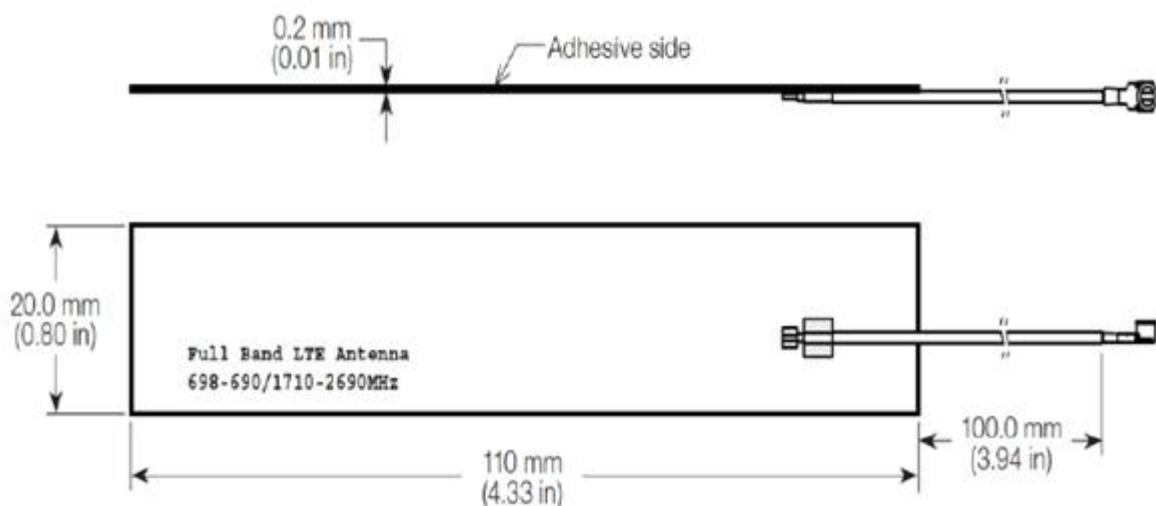
Antenna Test Data Sheet		검토		확인		승인	
							
TEST COMPANY	TELLESTAR.COM						7/10
Enterprise			REV.	IR	Page	1 of 4	
Model name			Date			2026.07.10	
System	FPCB TYPE ANTENNA		Written by			S.H.BACK	
Electrical Specification		Frequency Range					
		698~1000 (MHz)			1710~3000 MHz		
Band Width		302 MHz			1290 MHz		
V.S.W.R (Min)		TBD			TBD		
Gain (Max)		1.792dBi			2.848dBi		
Input Impedance		50 (Ω)					
Directivity		Omni-Directivity					
Polarization		Linear					
Mechanical Specification							
Antenna Size							
Weight		N/A					
Radiator Material		CU					
Connection Type							
Operation Temperature		-30 ~ 85 (°C)					
Operation Humidity		10 ~ 80 (%)					
Option							

Others	
--------	--

Chamber Materials (KTM Korea)

Name of the Equipment	Model	Quantity	Standard
Far Field Chamber	KTM	1EA	· Freq. Range: 400MHz~8.5GHz · Measurement Speed : Radiation Pattern Cuts: Real Time Full sphere far-field : < 600 sec · Measurement Accuracy : Dynamic Range: 70 dB Cross-polar isolation < -45 dB · Gain Accuracy : MTG 1 - 6GHz < ± 0.75 dB 0.17 - 1 GHz < ± 1 dB · Pattern Accuracy : < ± 2 dB @ -20dB
Adaptor		1EA	· SMA(M)-SMA(F)
Computer		1EA	· Data for Measurement

Dimensions



Normal View

- Data -

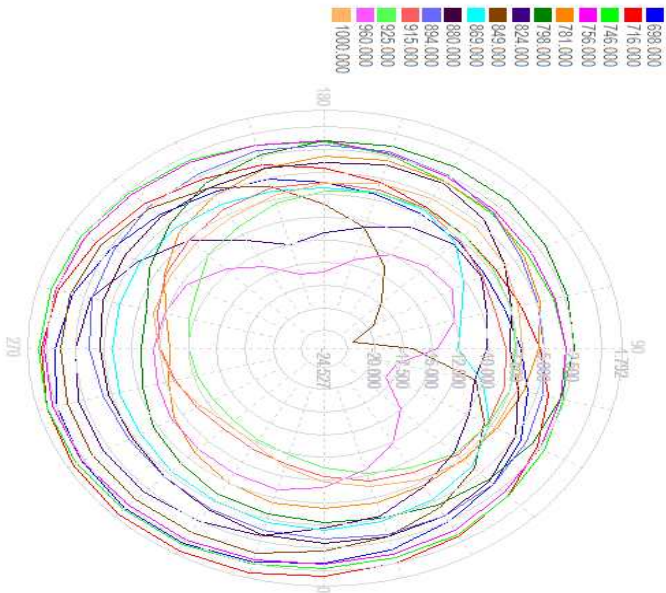
Frequency	Sum					H($\Phi=90$)					E1($\Phi=90$)					E2($\Phi=90$)				
	El(Deg)	Ql(Deg)	Max(dB)	Avg(dB)	Eff(%)	Ql(Deg)	Max(dB)	Avg(dB)	BM(Deg)	El(Deg)	Max(dB)	Avg(dB)	BM(Deg)	El(Deg)	Max(dB)	Avg(dB)	BM(Deg)			
698.000	105.0	300.0	1.146	-4.172	38.265	315.0	0.516	-2.657	132.65	-105.0	0.560	-4.973	54.36	105.0	-0.190	-5.122	56.54			
716.000	105.0	315.0	1.560	-3.848	41.226	315.0	1.469	-1.349	156.09	-105.0	0.990	-5.085	49.78	105.0	-0.778	-4.797	51.07			
736.000	90.0	285.0	0.845	-4.039	39.451	285.0	0.845	-0.798	238.49	-90.0	0.784	-5.160	51.61	90.0	-0.067	-5.373	53.07			
756.000	90.0	285.0	0.424	-3.967	40.112	285.0	0.424	-1.087	256.45	-90.0	0.398	-4.694	50.92	90.0	-0.575	-5.110	59.94			
781.000	60.0	105.0	-1.222	-5.943	25.453	165.0	-3.041	-5.881	142.94	-60.0	-1.352	-6.823	62.51	-75.0	-2.746	-5.937	80.88			
798.000	75.0	135.0	0.038	-4.637	34.383	150.0	-1.331	-3.777	184.36	-120.0	-0.734	-5.073	29.37	-75.0	-1.068	-5.282	70.21			
824.000	105.0	300.0	1.485	-5.942	26.053	300.0	-1.825	-5.596	105.89	-105.0	1.285	-5.669	37.07	105.0	-1.551	-7.178	32.40			
849.000	105.0	285.0	1.792	-3.857	41.142	300.0	-0.819	-3.930	157.48	-105.0	1.742	-3.525	36.79	105.0	0.161	-3.975	32.24			
889.000	150.0	90.0	-0.357	-5.066	31.146	0.0	-4.490	-6.388	0.00	150.0	-0.357	-5.011	54.92	-135.0	-2.157	-4.557	96.99			
890.000	150.0	90.0	0.373	-3.287	46.910	15.0	-2.897	-4.303	0.00	150.0	0.373	-3.568	61.85	45.0	-0.304	-3.880	75.53			
884.000	45.0	15.0	-0.281	-3.379	45.926	195.0	-1.930	-3.368	0.00	135.0	-0.763	-4.047	53.18	45.0	-0.345	-2.980	100.70			
915.000	45.0	195.0	-4.111	-7.488	17.791	180.0	-6.188	-8.413	238.96	135.0	-4.855	-7.619	84.06	-45.0	-0.120	-7.065	128.06			
925.000	60.0	185.0	-3.990	-7.606	17.353	150.0	-6.688	-9.039	197.30	45.0	-5.384	-7.990	131.07	-60.0	-4.186	-7.579	63.46			
980.000	150.0	90.0	-1.921	-6.706	21.348	345.0	-8.309	-11.271	137.45	150.0	-1.921	-6.220	52.29	-150.0	-3.608	-6.022	94.74			
1000.000	60.0	15.0	-4.347	-7.845	17.199	150.0	-5.401	-7.808	214.29	105.0	-6.281	-8.412	71.91	60.0	-4.589	-7.689	77.60			

Capture

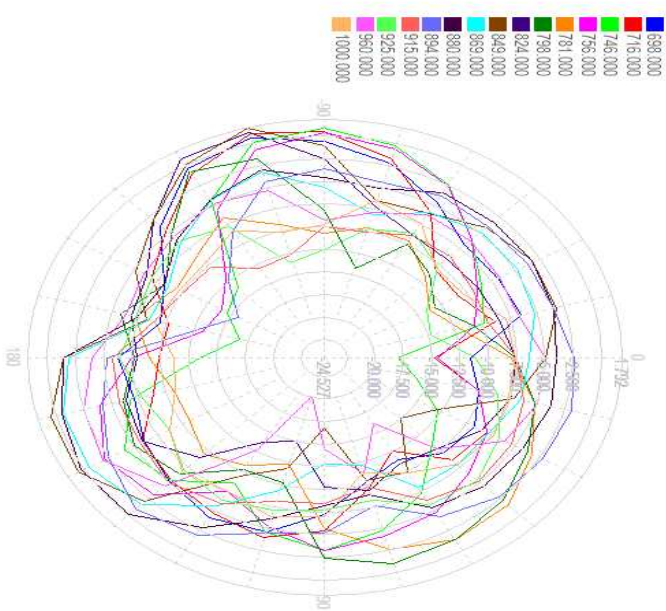
Multiple Cut

H/E1/E2 Plane

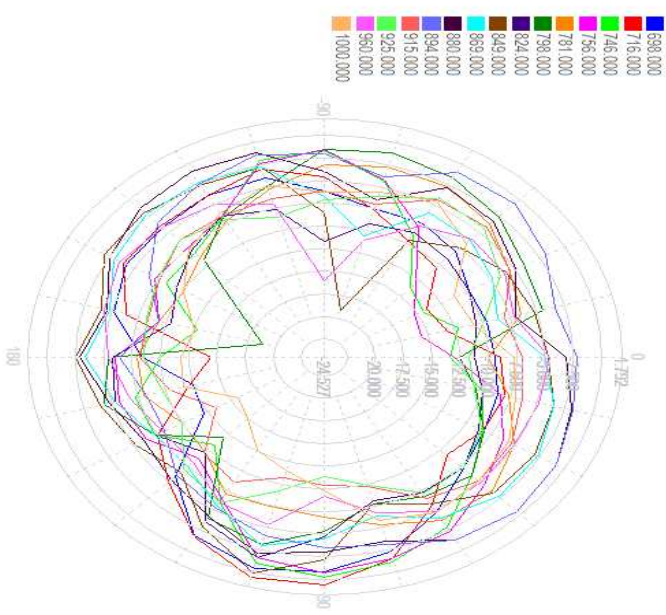
- H Plane PolarLine Chart -



- E1 Plane PolarLine Chart -



- E2 Plane PolarLine Chart -



Normal View

- Data -

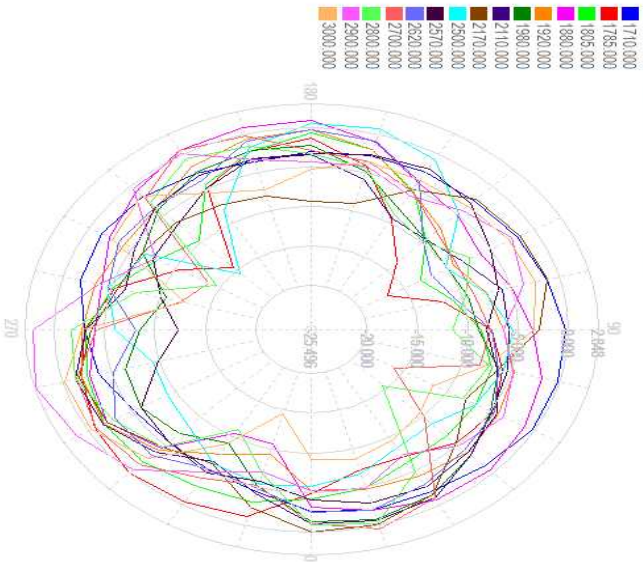
Capture

Frequency	Sum					H($\Phi=90^\circ$)					E1($\Phi=90^\circ$)					E2($\Phi=0^\circ$)				
	Φ [Deg]	Ψ [Deg]	Max[db]	Avg[db]	Eff[%]	Φ [Deg]	Ψ [Deg]	Max[db]	Avg[db]	BM[db]	Φ [Deg]	Ψ [Deg]	Max[db]	Avg[db]	BM[db]	Φ [Deg]	Ψ [Deg]	Max[db]	Avg[db]	BM[db]
1,710,000	75.0	315.0	1,748	-3,821	41,487	75.0	0.0	-0.208	-2,346	183.04	-75.0	0.145	-4,801	25.63	75.0	-0.269	-4,211	33.01		
1,785,000	45.0	345.0	1,003	-3,786	42,308	315.0	0.014	0.014	-4,219	68.49	45.0	-1,734	-5,743	36.04	-120.0	0.891	-2,926	45.76		
1,860,000	120.0	180.0	1,609	-3,429	45,405	180.0	-0.823	-0.823	-4,506	48.70	180.0	-2,638	-5,665	30.41	-120.0	1,609	-2,308	25.42		
1,888,000	75.0	0.0	1,324	-4,226	37,794	195.0	0.871	0.871	-2,301	76.82	180.0	-1,635	-5,164	41.26	75.0	1,324	-3,414	32.72		
1,920,000	60.0	15.0	2,848	-3,348	46,263	180.0	-0.395	-0.395	-3,940	62.13	30.0	-0.898	-4,180	61.76	60.0	2,828	-2,314	29.11		
1,980,000	60.0	15.0	1,621	-4,487	35,691	15.0	-0.811	-0.811	-4,780	55.83	180.0	-0.517	-5,663	30.75	45.0	1,194	-3,344	58.56		
2,110,000	75.0	0.0	-0.004	-5,414	28,750	15.0	-0.661	-0.661	-3,828	57.25	-45.0	-2,157	-6,779	29.87	75.0	-0.004	-4,764	67.37		
2,170,000	75.0	0.0	2,683	-4,623	34,491	0.0	-0.133	-0.133	-3,662	44.05	90.0	-2,949	-5,884	25.15	75.0	2,683	-3,301	47.94		
2,500,000	60.0	345.0	1,946	-3,874	40,887	165.0	0.622	0.622	-4,927	51.59	60.0	0.514	-4,549	15.91	165.0	0.929	-2,509	20.91		
2,570,000	60.0	180.0	-0.245	-5,232	29,875	150.0	-2.223	-2.223	-4,862	94.41	-165.0	-2,770	-6,788	62.49	-60.0	0.245	-4,619	38.14		
2,620,000	150.0	30.0	1,066	-4,086	39,028	180.0	-0.394	-0.394	-3,948	54.29	-105.0	-0.987	-5,370	16.68	165.0	0.819	-3,093	26.22		
2,700,000	60.0	180.0	2,562	-3,766	42,014	210.0	0.664	0.664	-3,445	42.53	-165.0	-1,332	-5,661	29.17	-60.0	2,562	-2,934	16.17		
2,800,000	105.0	210.0	0.377	-4,698	33,899	15.0	-0.226	-0.226	-4,400	28.01	-105.0	-0.961	-5,617	26.60	165.0	-0.501	-3,759	21.86		
2,900,000	90.0	285.0	2,779	-4,496	35,611	285.0	2,779	2,779	-2,439	49.14	-90.0	1,930	-4,330	20.18	165.0	-0.909	-5,081	15.47		
3,000,000	90.0	285.0	-0.269	-6,426	22,774	285.0	-0.269	-0.269	-4,456	47.22	-90.0	-2,897	-6,709	29.51	-75.0	-1,433	-7,554	19.16		

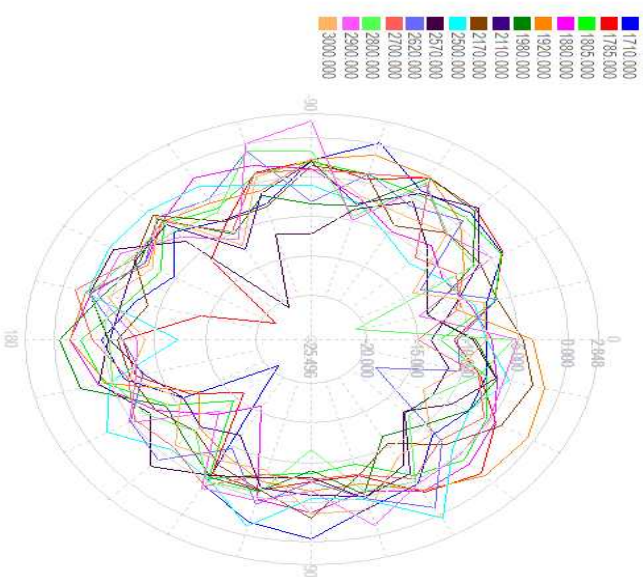
Multiple Cut

H/E1/E2 Plane

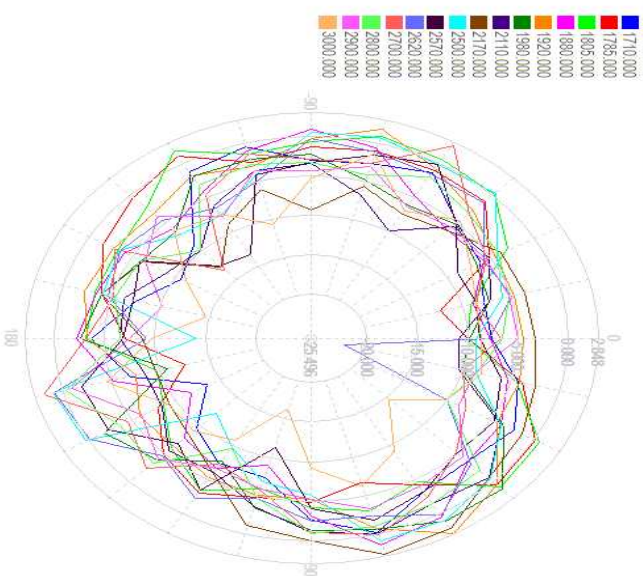
- H Plane PolarLine Chart -



- E1 Plane PolarLine Chart -



- E2 Plane PolarLine Chart -



Test photos attached below

