



深圳市海德门电子有限公司

ShenZhen Deman Electronics Technology Co., Ltd

Antenna Test Report

For

Project R010 Main Antenna

Customer	Beijing Wiseasy Technology Co.,Ltd.	Project	R010
Band	R010-NA: LTE-B2/4/5/7/12/17/25/26/41/66 WCDMA-B2/4/5 GSM-850/1900 R010-EU: LTE- B1/2/3/4/5/7/8/18/19/20/25/26/28/66 /38/40/41 WCDMA-B1/2/3/4/5/8 GSM850/900/1800/1900	Color	Black
PRS PN	ShenZhen Deman Electronics Technology Co., Ltd	Version	V1.0
Model name	R010-MIAN_ANT-H3772	Antenna type	FPC
		Date	2025.09.18

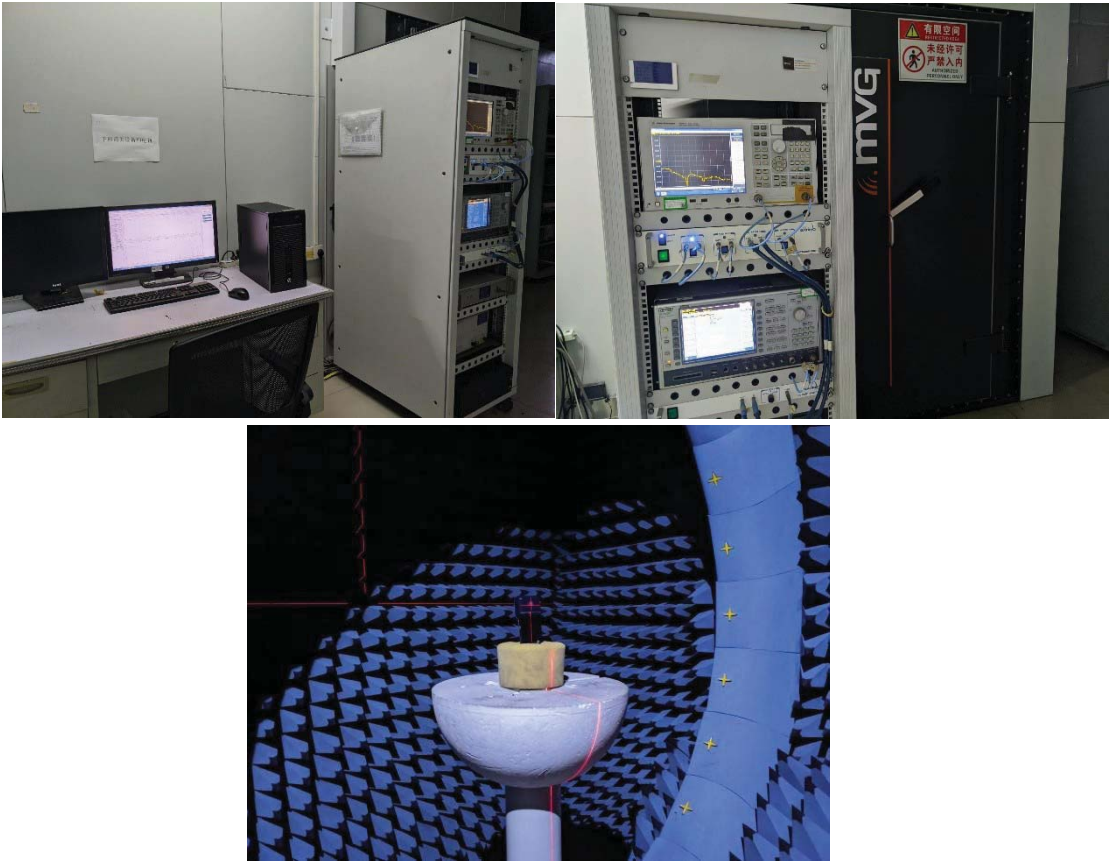
ShenZhen Deman Electronics Technology Co., Ltd

Address: Sunlord Industrial Park, No. 1 Fengtai Road, Tangxia Town, Dongguan City, Guangdong

This test report belongs to ShenZhen Deman Electronics Technology Co., Ltd and related clients to file, please keeping it propely, without our company and related clients allowed, anybody has no rights to reval it to public.

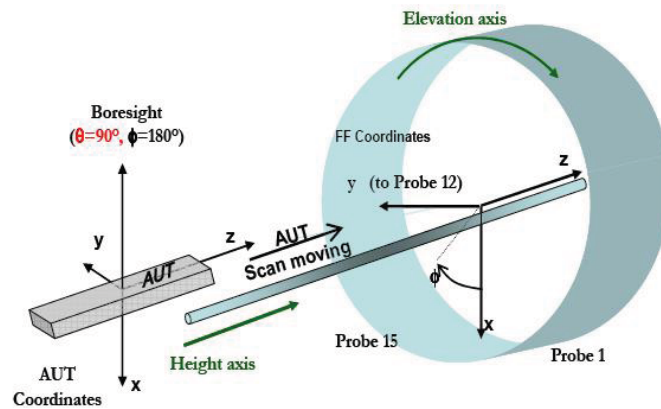
A.TEST INSTRUMENTATION

CHAMBER	SATIMO Chamber
Wireless Networking Test Set	Agilent 8960 5515C
NETWORK ANALYZER	Agilent 5072AD
COMPREHENSIVE TESTER	R&S CMW500
TEMPERATURE	20±2℃
HUMIDITY	50±20%rh
Antenna Types	Loop

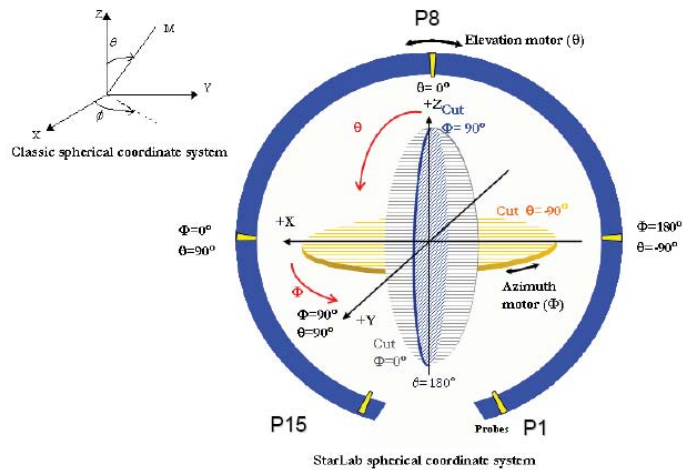


This test report belongs to ShenZhen Deman Electronics Technology Co., Ltd and related clients to file,please keeping it propely,without our company and related clients allowed,anybody has no rights to reval it to public.

Coordinate system – Cylindrical geometry



Coordinate system – Spherical geometry



B. Definitions

VSWR: Voltage Standing Wave Rate



This test report belongs to ShenZhen Deman Electronics Technology Co., Ltd and related clients to file, please keeping it properly, without our company and related clients allowed, anybody has no rights to reveal it to public.

C. TRP&TIS

R010-NA unit: dBm

OTA(Main ant_V1.0)							
Band	Channel	TRP	TIS	Band	Channel	TRP	TIS
B2 (10M)	18000	17.48		B20 (10M)	20090	17.04	
	18900	17.72			20300	17.58	
	19100	17.97	-94.0		20540	17.34	-93.78
B4 (10M)	20000	10.17		B20 (10M)	20740	10.40	
	20170	10.7	-92.13		20800	10.9	
	20300	10.30			20990	10.43	-90.04
B5 (10M)	20400	17.07		B41 (20M)	40340	17.09	
	20520	17.04			40740	10.92	
	20600	10.49	-90.08		41140	10.07	-90.84
B7 (10M)	20800	17.09		W2	9202	10.90	
	21100	17.2			9400	17.12	
	21300	10.88	-91.79		9538	17.89	-104.53
B12 (10M)	23000	14.02		W4	1312	10.04	
	23090	14			1412	10.24	
	23130	14.04	-88.43		1513	10.77	-104.03
B17 (10M)	23780	14.20		W5	4132	10.88	
	23790	14.22			4180	17.47	
	23800	14.28	-88.59		4233	17.31	-102.55

This test report belongs to ShenZhen Deman Electronics Technology Co., Ltd and related clients to file, please keeping it properly, without our company and related clients allowed, anybody has no rights to reveal it to public.

R010-EU Unit: dBm

OTA (Main ant V1.6)																					
B1 (10M)	18050	17.84		B18 (10M)	23900	16.96		B38 (20M)	37850	18.24		W1	9612	16.75							
	18300	17.45			23925	16.98			38000	17.73			9750	16.96							
	18550	17.15	-93.14		23950	17.11	-92.71		38150	17.12	-90.17		9888	17.11	-105.79						
B2 (10M)	18650	18.38		B19 (10M)	24050	17.82		B40 (20M)	38750	17.42		W2	9262	17.25							
	18900	17.55			24075	17.65			39150	16.84			9400	16.41							
	19150	16.93	-94.31		24100	17.27	-91.48		39550	17.08	-90.63		9538	16.49	-105.89						
B3 (10M)	19250	16.85		B20 (10M)	24200	17.66		B41 (20M)	40340	17.99		W3	937	16.7							
	19575	17.09			24300	17.02			40740	17.8			1075	18.41							
	19900	18.79	-96.81		24400	17.54	-91.4		41140	16.13	-91.81		1213	19.16	-105.42						
B4 (10M)	20000	16.42		B25 (10M)	26090	18.36						W4	1312	16.48							
	20175	17.09			26365	17.56							1412	17.9							
	20350	17.7	-93.79		26640	16.97	-92.63						1513	17.43	-104.01						
B5 (10M)	20450	17.57		B26 (10M)	26740	16.82						W5	4132	16.62							
	20525	17.42			26865	17.29							4185	17.53							
	20600	16.93	-91.51		26990	16.87	-91.44						4233	17.41	-104.86						
B7 (10M)	20850	18.69		B28 (10M)	27260	14.29						W6	2712	18.45							
	21100	18.51			27435	13.94							2788	18.79							
	21350	18.35	-92.04		27610	13.93	-88.34						2863	18.07	-103.71						
B8 (10M)	21500	18.12		B66 (10M)	132022	16.52															
	21625	18.41			132322	17.78															
	21750	17.26	-91.08		132622	17.84	-93.02														

D. Cell-Phone Photo and Dealing Method



This test report belongs to ShenZhen Deman Electronics Technology Co., Ltd and related clients to file, please keeping it properly, without our company and related clients allowed, anybody has no rights to reveal it to public.

This test report belongs to ShenZhen Deman Electronics Technology Co., Ltd and related clients to file, please keeping it properly, without our company and related clients allowed, anybody has no rights to reveal it to public.



深圳市海德门电子有限公司

ShenZhen Deman Electronics Technology Co., Ltd

Cell-phone cable test (Conduct at the test hole and set the line loss as 0)

F. Efficiency test results

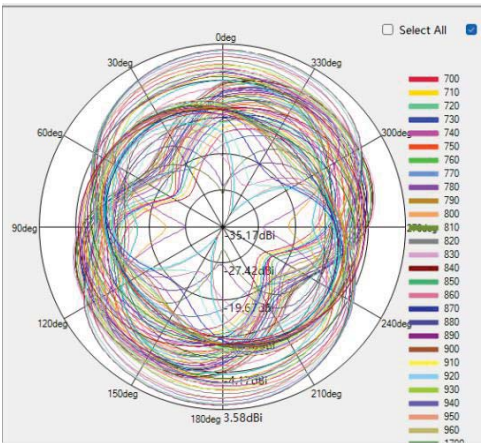
RF1	G900/W8/LTE B8
RF2	G850/W5/LTE B5/18/19/20/26
RF3	G1800/1900/W1/2/3/4/LTE B1/2/3/4/7/25/38/40/41/66
RF4	B12/13/17/28/

Frequency(MHz)	efficiency (dB)	Gain (dBi)	efficiency (%)	Frequency(MHz)	efficiency (dB)	Gain (dBi)	effi. (dB)	Frequency(MHz)	effi. (dB)	Gain (dBi)	efficiency (%)
700	-8.49	-4.64	14.16	1700	-4.48	-0.36	35.66	2220	-4.52	-0.14	35.31
710	-8.5	-4.41	14.14	1720	-4.34	-0.25	36.83	2240	-4.66	-0.18	34.22
720	-8.44	-4.18	14.32	1740	-4.17	0.13	38.25	2260	-4.71	-0.23	33.83
730	-8.78	-4.48	13.26	1760	-3.93	0.72	40.44	2280	-4.64	-0.23	34.35
740	-8.81	-4.56	13.15	1780	-3.81	1.47	41.61	2300	-4.75	-0.2	33.46
750	-8.86	-4.7	13	1800	-3.67	2.07	42.95	2320	-4.7	0.12	33.9
760	-9.11	-5.21	12.28	1820	-3.55	2.57	44.16	2340	-4.59	0.32	34.74
770	-9.37	-5.9	11.57	1840	-3.6	3.15	43.62	2360	-4.32	0.68	37.01
780	-9.43	-6.54	11.41	1860	-3.91	3.29	40.65	2380	-4.21	0.9	37.94
790	-9.85	-6.95	10.34	1880	-4.13	3.65	38.67	2400	-3.96	1.23	40.19
800	-10.22	-7.33	9.51	1900	-3.91	4.19	40.65	2420	-3.7	1.56	42.64
				1920	-3.98	4.06	39.96	2440	-3.5	1.91	44.62
790	-6.24	-2.46	23.77	1940	-4.47	3.3	35.76	2460	-3.54	1.92	44.24
800	-5.43	-2.06	28.65	1960	-5.13	2.4	30.68	2480	-3.45	1.98	45.23
810	-4.88	-1.7	32.51	1980	-5.55	1.74	27.85	2500	-3.69	1.65	42.76
820	-4.53	-1.29	35.21	2000	-5.36	1.56	29.13	2520	-3.71	1.58	42.53
830	-4.23	-0.63	37.72	2020	-5.03	1.48	31.42	2540	-3.81	1.77	41.59
840	-4.51	-0.86	35.43	2040	-4.96	1.11	31.95	2560	-4.19	1.8	38.14
850	-4.87	-1.02	32.59	2060	-5.19	0.6	30.28	2580	-4.33	1.65	36.89
860	-5.22	-1.34	30.07	2080	-5.23	-0.04	29.98	2600	-4.76	1.31	33.43
870	-5.23	-1.3	29.96	2100	-5.14	-0.56	30.62	2620	-4.69	1.35	34
880	-5.49	-1.63	28.23	2120	-4.83	-0.68	32.89	2640	-4.77	1.35	33.38
890	-5.89	-2.14	25.74	2140	-4.73	-0.53	33.69	2660	-4.69	1.46	33.97
				2160	-4.8	-0.53	33.15	2680	-4.65	1.39	34.28
880	-4.32	-0.46	37	2180	-4.56	-0.24	35.01	2700	-4.74	1.29	33.56
890	-4.18	-0.48	38.17	2200	-4.47	-0.11	35.75				
900	-4.23	-0.56	37.77								
910	-4.19	-0.67	38.09								
920	-4.58	-1.3	34.8								
930	-5.08	-1.85	31.04								
940	-5.64	-2.31	27.3								
950	-6.15	-2.78	24.24								
960	-6.79	-3.27	20.94								

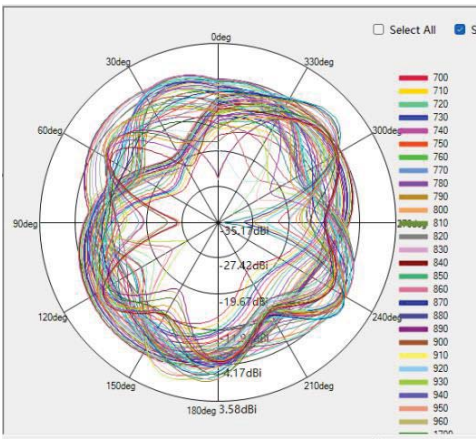
This test report belongs to ShenZhen Deman Electronics Technology Co., Ltd and related clients to file, please keeping it properly, without our company and related clients allowed, anybody has no rights to reveal it to public.

G. Antenna lobe pattern

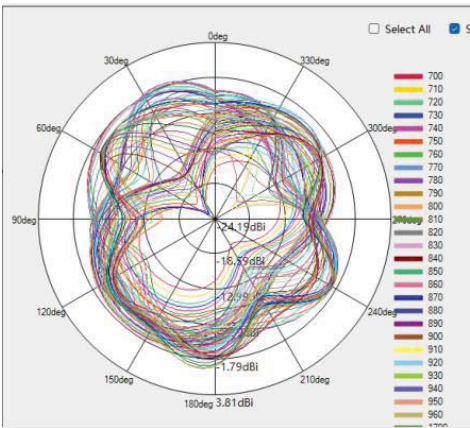
2D Direction diagram



Phi=0

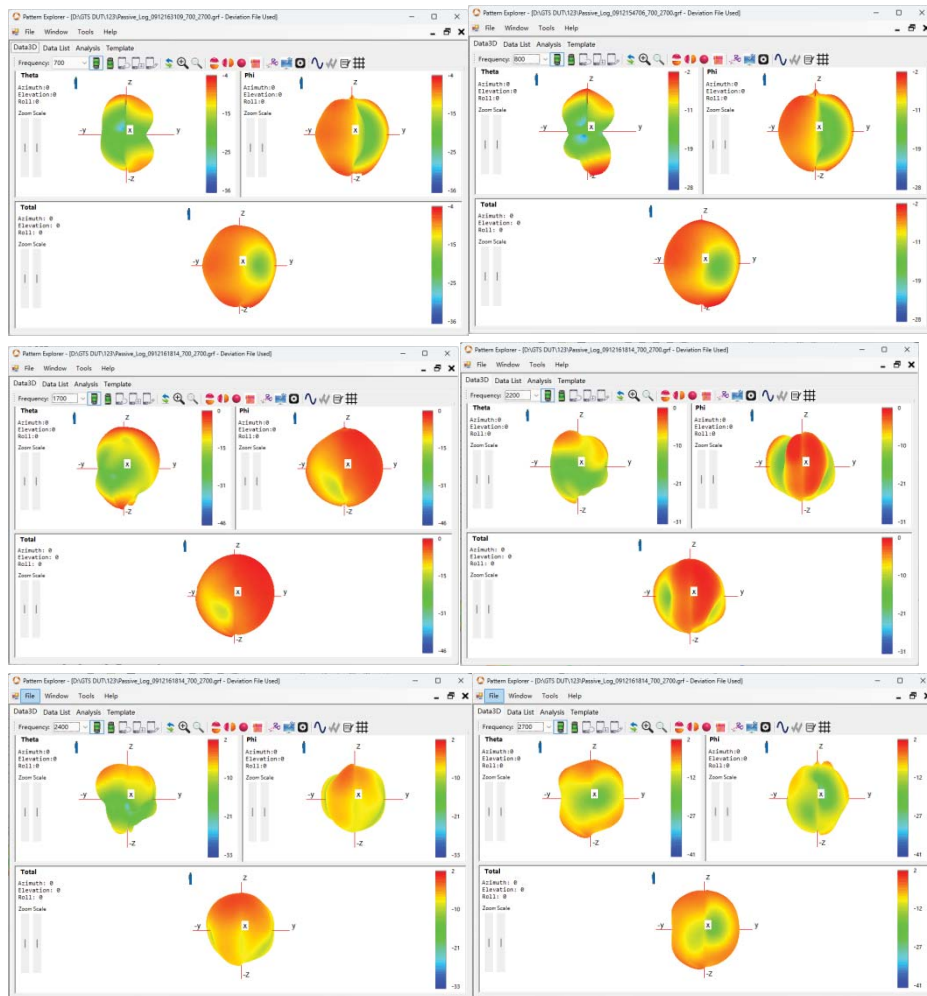


Phi=90



Theta=90

3D apple Map



This test report belongs to ShenZhen Deman Electronics Technology Co., Ltd and related clients to file, please keeping it properly, without our company and related clients allowed, anybody has no rights to reveal it to public.

H. Antenna drawing

Main Antenna(V1.6)

Unit: mm

