

SLK-T60 智能组合天线 SMA 接口规格书 (SLK-T60-SMA V1.1-001)

共 13 页
(包括封面)

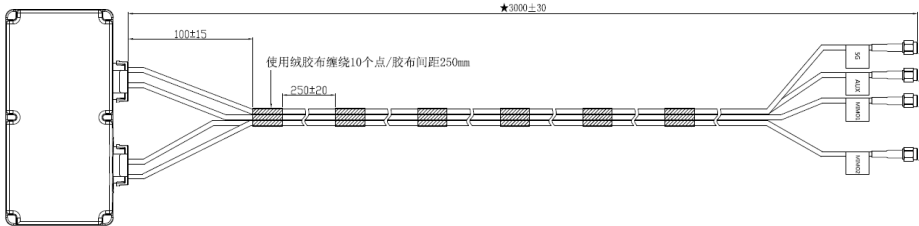
深圳市仕方通信科技有限公司

拟 制 江鹏飞、廖义智

审 核 杨东

2022-01-09

承认书

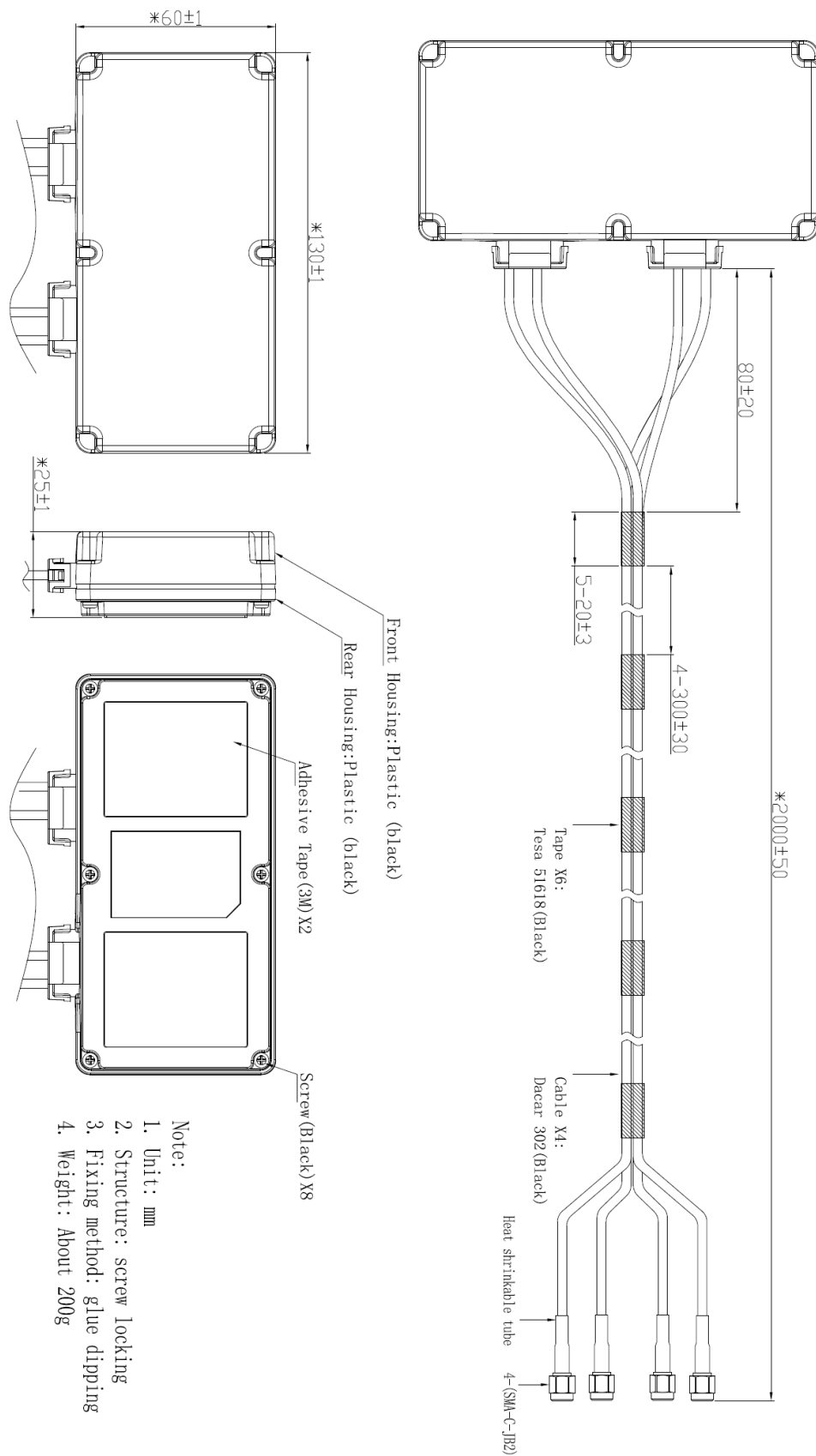
客户/项目名	5G-BOX 天线（3 米 302 线材）			频段	700-960/1710-2690/3300-5000MHz		
VLG 料号				版本	A		
射频	徐鹏飞	确认		品质	邵晓东	确认	
结构	廖义永			PM	黄莉莉		
日期	2022-01-09						
客户项目名称料号	客户项目名称:						
	客户项目编号:						
客户确认							
VLG Wireless Technology							
研发项目客户满意度调查（客户请针对我们的研发或 PM 管理人员工作进行一个评述，督促我们更好服务于你）							
RF 技术人员	☐ 满意		☐ 基本满意		☐ 不满意		
结构技术人员	☐ 满意		☐ 基本满意		☐ 不满意		
项目管理（PM 管理人员）	☐ 满意		☐ 基本满意		☐ 不满意		
建议项说明:							
天线组装图片:							

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3、产品图面(Product Picture)

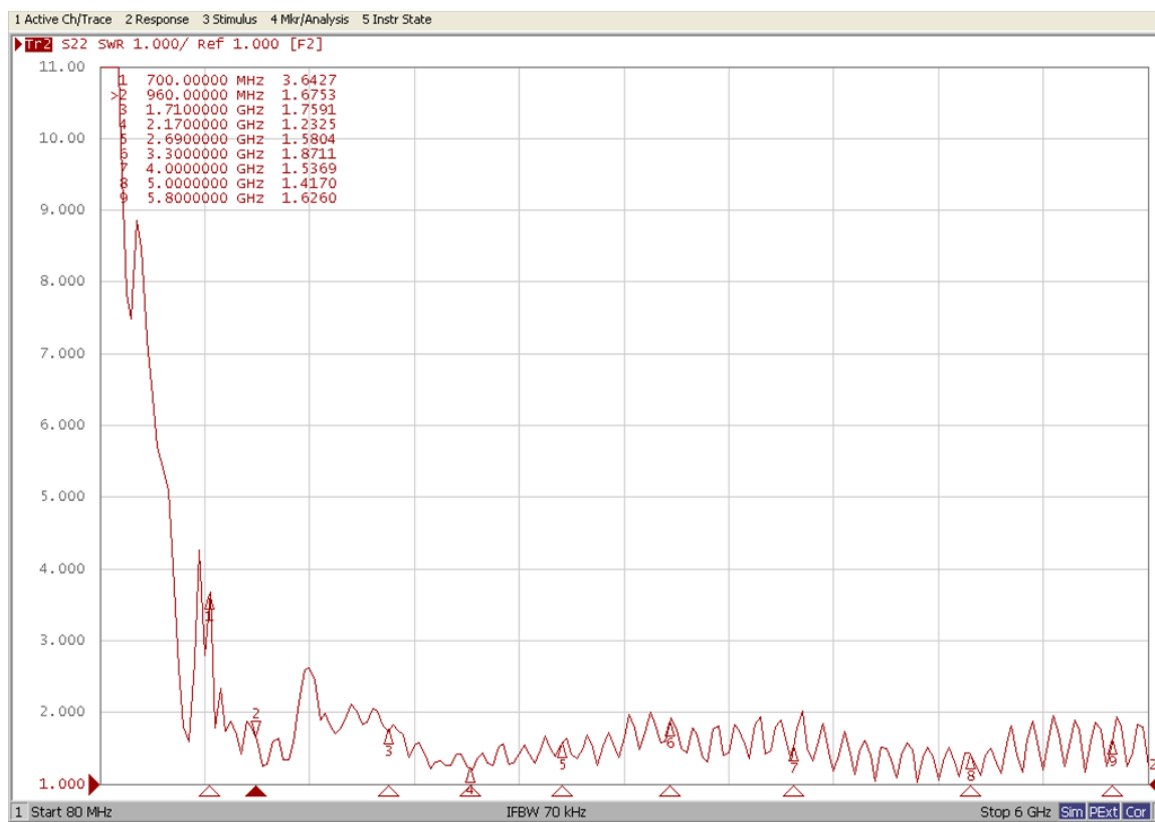


4、产品规格描述 (Product specification describes)

电气参数 (Parameter)	
频率范围 (Frequency)	4G&5G 主天线 700-960/1710-2690/3300-5000MHz 4G&5G 分集天线 700-960/1710-2690/3300-5000MHz 5G-MIMO1/5G-MIMO2 1710-2690/3300-5000 MHz
带宽 (Bandwidth)	/
输入阻抗 (Impedance)	50 Ω
驻波比 (VSWR)	5G 主天线: 700-960 $\leq$ 4, 1710-2690 $\leq$ 2.3, 3300-5000 $\leq$ 2.3 5G 分集天线: 700-960 $\leq$ 4.5, 1710-2690 $\leq$ 2.3, 3300-5000 $\leq$ 2.3 5G-MIMO: 1710-2690 $\leq$ 3, 3300-5000 $\leq$ 2.5
极化方式 (Polarization)	Linear polarization/Vertical
辐射方向图 (Radiation pattern)	Omni-directional
接口类型 (Connector)	SMA公头公针
机械参数 (Mechanical Parameter)	
天线尺寸 (Antenna size)	140*70*30.2mm
线长 (Cable length)	3M
盐雾测试 (Salt Spray Test)	48H
环境参数 (Environment Parameter)	
工作温度 (Operation Temperature)	-40 $^{\circ}$ C~+85 $^{\circ}$ C
储藏温度 (Storage Temperature)	-40 $^{\circ}$ C~+85 $^{\circ}$ C

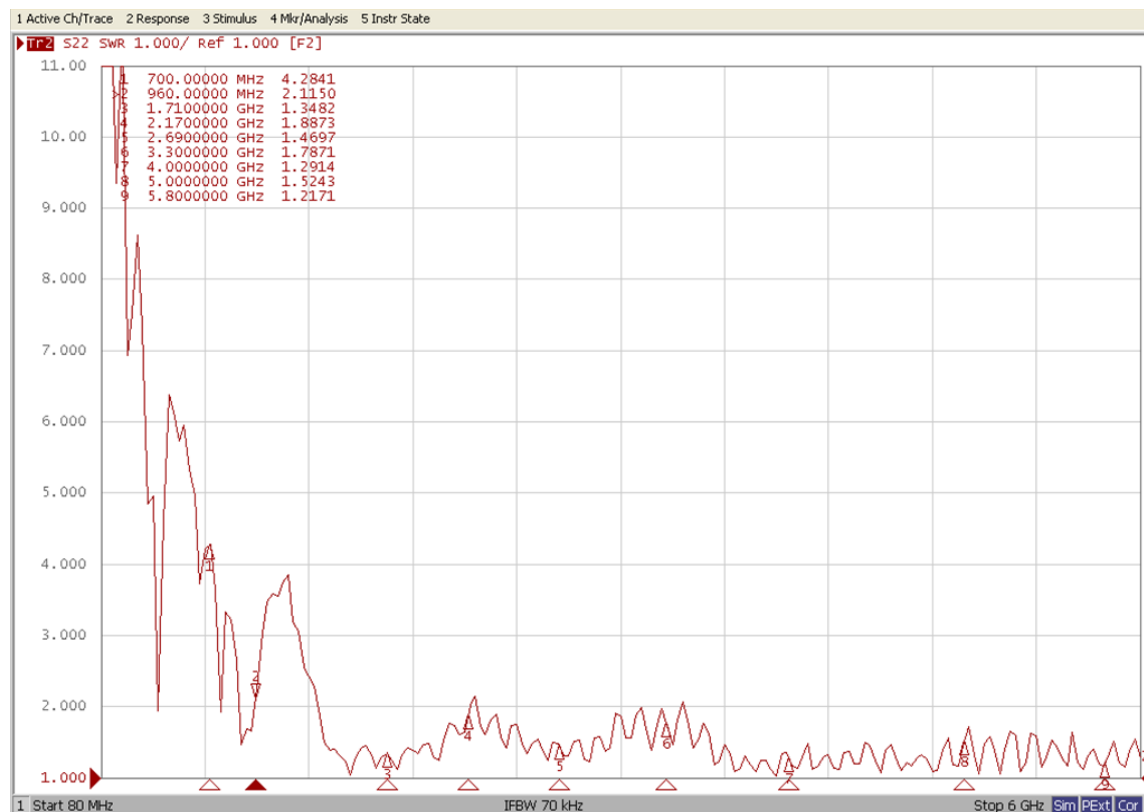
5、电气性能测试报告(Radiation Report)

4G&5G Main Antenna



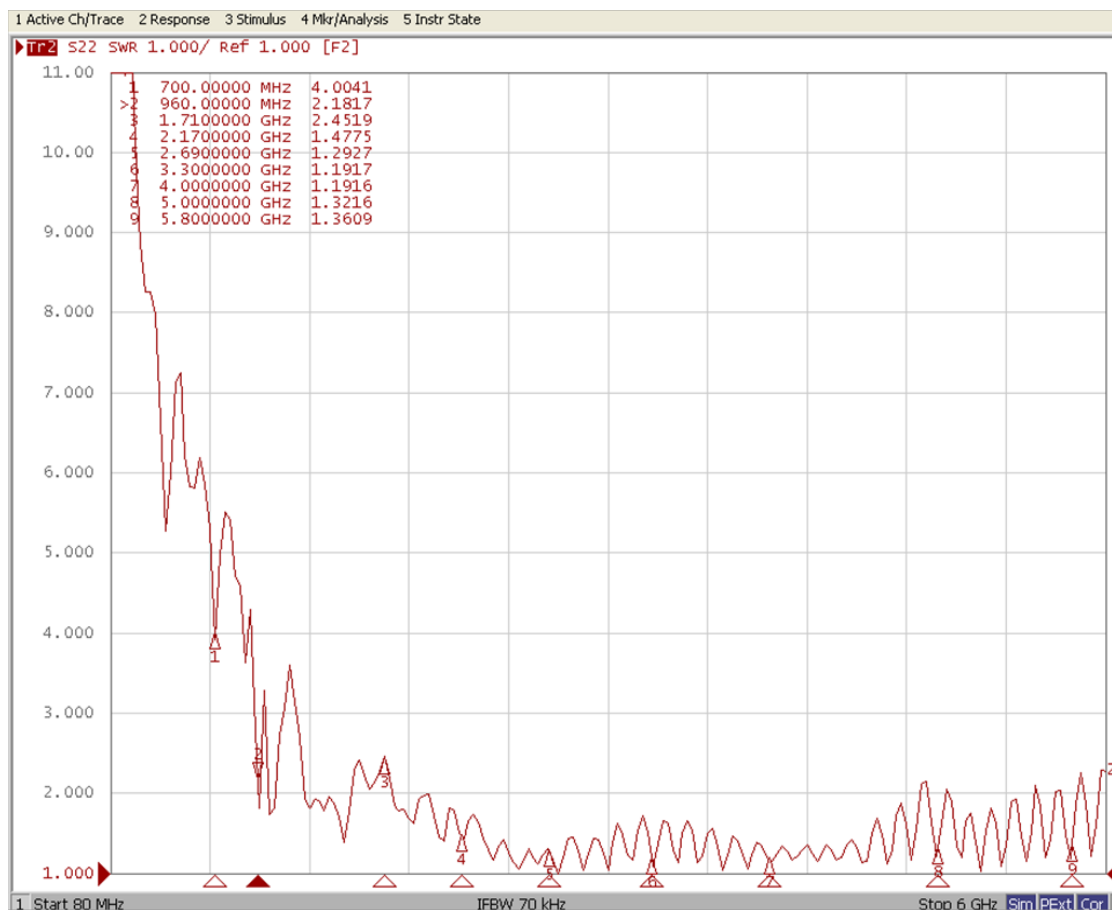
Frequency(MHz)	700	960	1710	2170	2690	3300	4000	5000
VSWR	3.64	1.68	1.75	1.23	1.58	1.87	1.53	1.41

4G&5G Diversity Antenna



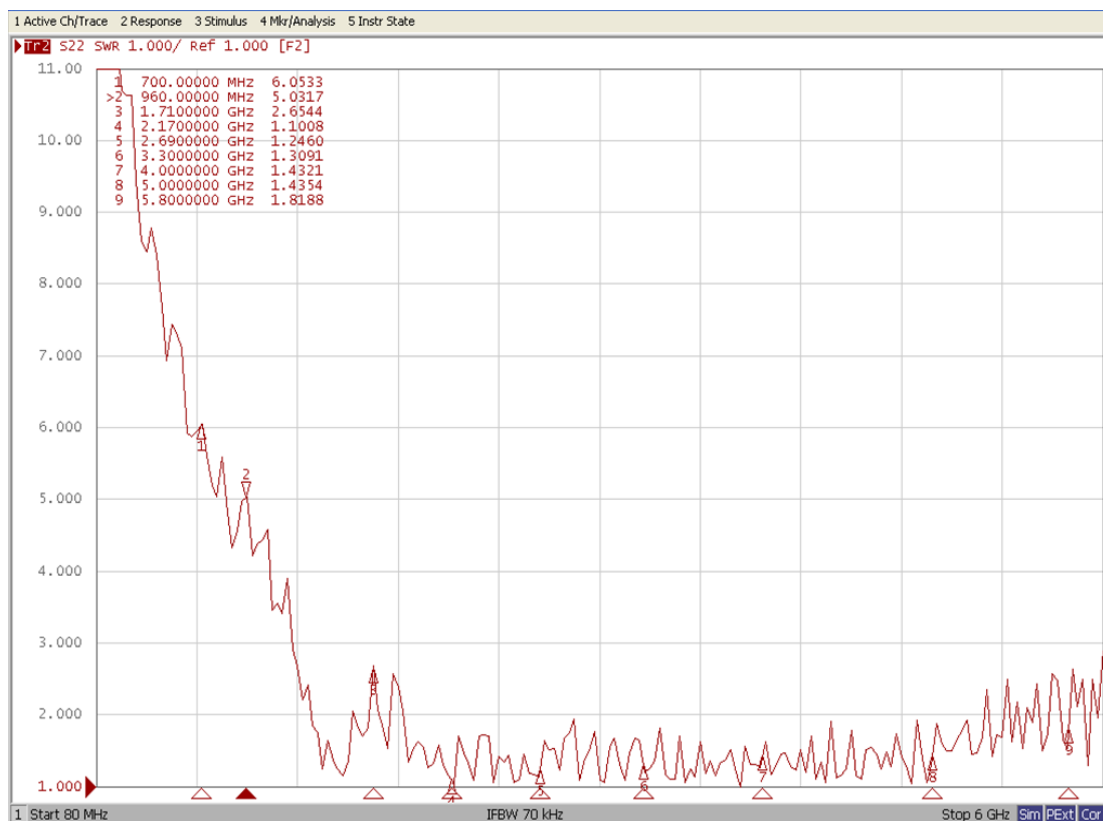
Frequency(MHz)	700	960	1710	2170	2690	3300	4000	5000
VSWR	4.28	2.11	1.34	1.89	1.47	1.78	1.29	1.52

5G-MIM01 Antenna



Frequency(MHz)	1710	2170	2690	3300	4000	5000
VSWR	2.45	1.47	1.29	1.19	1.19	1.32

5G-MIM02 Antenna



Frequency(MHz)	1710	2170	2690	3300	4000	5000
VSWR	2.65	1.10	1.24	1.30	1.43	1.43

5G Main Antenna

频点	效率	损耗	频点	效率	损耗	频点	效率	损耗
700	29.22%	-5.34	1910	39.56%	-4.03	2670	39.48%	-4.04
710	30.07%	-5.22	1930	38.38%	-4.16	2690	39.93%	-3.99
720	30.88%	-5.10	1950	37.76%	-4.23			
730	31.68%	-4.99	1970	36.49%	-4.38	3300	30.34%	-5.18
740	33.00%	-4.81	1990	38.68%	-4.12	3350	32.40%	-4.89
750	33.02%	-4.81	2010	38.35%	-4.16	3400	33.60%	-4.74
760	34.58%	-4.61	2030	36.90%	-4.33	3450	32.56%	-4.87
770	35.18%	-4.54	2050	36.35%	-4.39	3500	30.32%	-5.18
780	36.63%	-4.36	2070	35.75%	-4.47	3550	28.85%	-5.40
790	37.32%	-4.28	2090	37.05%	-4.31	3600	29.24%	-5.34
800	38.95%	-4.10	2110	36.19%	-4.41	3650	25.87%	-5.87
810	40.30%	-3.95	2130	37.41%	-4.27	3700	26.76%	-5.72
820	41.92%	-3.78	2150	38.09%	-4.19	3750	28.77%	-5.41
830	42.14%	-3.75	2170	39.34%	-4.05	3800	27.21%	-5.65
840	43.56%	-3.61	2190	41.23%	-3.85	3850	26.72%	-5.73
850	47.83%	-3.20	2210	42.17%	-3.75	3900	25.86%	-5.87
860	48.34%	-3.16	2230	42.71%	-3.69	3950	27.25%	-5.65
870	48.88%	-3.11	2250	38.63%	-4.13	4000	25.09%	-6.01
880	46.44%	-3.33	2270	42.91%	-3.67	4050	24.16%	-6.17
890	46.66%	-3.31	2290	41.68%	-3.80	4100	26.73%	-5.73
900	47.99%	-3.19	2310	43.08%	-3.66	4150	26.64%	-5.74
910	47.06%	-3.27	2330	41.16%	-3.85	4200	27.34%	-5.63
920	46.60%	-3.32	2350	42.01%	-3.77	4250	27.99%	-5.53
930	47.40%	-3.24	2370	43.78%	-3.59	4300	27.15%	-5.66
940	46.19%	-3.35	2390	44.92%	-3.48	4350	27.05%	-5.68
950	45.81%	-3.39	2410	45.73%	-3.40	4400	25.45%	-5.94
960	47.80%	-3.21	2430	44.91%	-3.48	4450	25.49%	-5.94
			2450	44.70%	-3.50	4500	25.48%	-5.94
1710	32.85%	-4.84	2470	42.75%	-3.69	4550	24.83%	-6.05
1730	34.43%	-4.63	2490	43.52%	-3.61	4600	25.74%	-5.89
1750	35.20%	-4.53	2510	42.99%	-3.67	4650	26.60%	-5.75
1770	36.12%	-4.42	2530	41.98%	-3.77	4700	26.55%	-5.76
1790	36.89%	-4.33	2550	40.55%	-3.92	4750	26.29%	-5.80
1810	35.12%	-4.54	2570	39.94%	-3.99	4800	26.13%	-5.83
1830	35.25%	-4.53	2590	39.45%	-4.04	4850	25.91%	-5.86
1850	34.94%	-4.57	2610	38.14%	-4.19	4900	25.69%	-5.90
1870	37.87%	-4.22	2630	39.53%	-4.03	4950	24.85%	-6.05
1890	38.60%	-4.13	2650	38.14%	-4.19	5000	24.87%	-6.04

5G Diversity Antenna

频点	效率	损耗	频点	效率	损耗	频点	效率	损耗
700	20.69%	-6.84	1910	34.00%	-4.69	2670	45.64%	-3.41
710	21.20%	-6.74	1930	38.25%	-4.17	2690	42.83%	-3.68
720	25.81%	-5.88	1950	37.18%	-4.30			
730	24.83%	-6.05	1970	37.64%	-4.24	3300	28.83%	-5.40
740	27.34%	-5.63	1990	34.63%	-4.61	3350	25.85%	-5.88
750	27.00%	-5.69	2010	36.76%	-4.35	3400	30.20%	-5.20
760	28.86%	-5.40	2030	35.52%	-4.49	3450	28.75%	-5.41
770	30.60%	-5.14	2050	35.58%	-4.49	3500	31.25%	-5.05
780	30.05%	-5.22	2070	36.10%	-4.43	3550	28.23%	-5.49
790	32.12%	-4.93	2090	36.72%	-4.35	3600	29.45%	-5.31
800	31.96%	-4.95	2110	35.74%	-4.47	3650	30.62%	-5.14
810	33.98%	-4.69	2130	36.76%	-4.35	3700	30.56%	-5.15
820	35.91%	-4.45	2150	36.76%	-4.35	3750	29.45%	-5.31
830	37.47%	-4.26	2170	37.19%	-4.30	3800	29.46%	-5.31
840	40.19%	-3.96	2190	38.23%	-4.18	3850	29.34%	-5.33
850	41.04%	-3.87	2210	38.78%	-4.11	3900	29.84%	-5.25
860	38.24%	-4.17	2230	39.18%	-4.07	3950	28.55%	-5.44
870	31.58%	-5.01	2250	40.05%	-3.97	4000	28.29%	-5.48
880	32.61%	-4.87	2270	41.20%	-3.85	4050	29.03%	-5.37
890	37.61%	-4.25	2290	39.94%	-3.99	4100	27.26%	-5.64
900	36.91%	-4.33	2310	41.17%	-3.85	4150	27.42%	-5.62
910	33.19%	-4.79	2330	39.27%	-4.06	4200	27.47%	-5.61
920	30.36%	-5.18	2350	41.63%	-3.81	4250	27.98%	-5.53
930	30.20%	-5.20	2370	35.52%	-4.50	4300	27.66%	-5.58
940	31.42%	-5.03	2390	40.12%	-3.97	4350	25.69%	-5.90
950	29.89%	-5.24	2410	36.18%	-4.41	4400	25.19%	-5.99
960	28.25%	-5.49	2430	41.23%	-3.85	4450	24.32%	-6.14
			2450	38.92%	-4.10	4500	21.92%	-6.59
1710	43.16%	-3.65	2470	40.97%	-3.88	4550	22.89%	-6.40
1730	41.26%	-3.84	2490	39.20%	-4.07	4600	22.94%	-6.39
1750	41.25%	-3.85	2510	40.68%	-3.91	4650	23.25%	-6.34
1770	40.73%	-3.90	2530	40.39%	-3.94	4700	24.45%	-6.12
1790	39.94%	-3.99	2550	40.34%	-3.94	4750	24.56%	-6.10
1810	37.44%	-4.27	2570	40.76%	-3.90	4800	24.03%	-6.19
1830	35.64%	-4.48	2590	40.74%	-3.90	4850	24.02%	-6.19
1850	36.03%	-4.43	2610	40.95%	-3.88	4900	25.00%	-6.02
1870	32.85%	-4.83	2630	43.05%	-3.66	4950	24.87%	-6.04
1890	36.42%	-4.39	2650	41.52%	-3.82	5000	23.38%	-6.31

5G-MIM01 Antenna

频点	效率	损耗	频点	效率	损耗	频点	效率	损耗
1710	24.80%	-6.05	2290	31.57%	-5.01	3650	29.26%	-5.34
1730	25.51%	-5.93	2310	30.42%	-5.17	3700	27.17%	-5.66
1750	24.73%	-6.07	2330	34.36%	-4.64	3750	28.65%	-5.43
1770	25.65%	-5.91	2350	33.36%	-4.77	3800	29.63%	-5.28
1790	25.17%	-5.99	2370	33.50%	-4.75	3850	29.56%	-5.29
1810	25.10%	-6.00	2390	32.23%	-4.92	3900	29.82%	-5.25
1830	24.43%	-6.12	2410	35.64%	-4.48	3950	29.83%	-5.25
1850	23.27%	-6.33	2430	35.02%	-4.56	4000	28.87%	-5.40
1870	22.92%	-6.40	2450	35.57%	-4.49	4050	29.76%	-5.26
1890	21.93%	-6.59	2470	37.15%	-4.30	4100	29.88%	-5.25
1910	20.09%	-6.97	2490	36.75%	-4.35	4150	29.05%	-5.37
1930	20.00%	-6.99	2510	38.41%	-4.16	4200	30.70%	-5.13
1950	21.55%	-6.67	2530	38.96%	-4.09	4250	30.08%	-5.22
1970	22.43%	-6.49	2550	38.84%	-4.11	4300	27.20%	-5.65
1990	22.82%	-6.42	2570	38.98%	-4.09	4350	26.93%	-5.70
2010	21.68%	-6.64	2590	39.69%	-4.01	4400	26.62%	-5.75
2030	22.53%	-6.47	2610	38.82%	-4.11	4450	25.93%	-5.86
2050	26.09%	-5.84	2630	38.07%	-4.19	4500	25.53%	-5.93
2070	27.73%	-5.57	2650	37.62%	-4.25	4550	24.88%	-6.04
2090	24.86%	-6.04	2670	37.93%	-4.21	4600	24.14%	-6.17
2110	26.61%	-5.75	2690	36.98%	-4.32	4650	24.49%	-6.11
2130	24.78%	-6.06				4700	24.28%	-6.15
2150	26.91%	-5.70	3300	34.22%	-4.66	4750	23.62%	-6.27
2170	24.24%	-6.15	3350	31.71%	-4.99	4800	23.59%	-6.27
2190	30.69%	-5.13	3400	32.08%	-4.94	4850	22.81%	-6.42
2210	28.27%	-5.49	3450	30.37%	-5.18	4900	22.44%	-6.49
2230	31.72%	-4.99	3500	32.59%	-4.87	4950	21.66%	-6.64
2250	34.52%	-4.62	3550	29.49%	-5.30	5000	21.53%	-6.67
2270	35.10%	-4.55	3600	30.05%	-5.22			

5G-MIM02 Antenna

频点	效率	损耗	频点	效率	损耗	频点	效率	损耗
1710	24.18%	-6.16	2290	41.33%	-3.84	3650	33.17%	-4.79
1730	33.58%	-4.74	2310	41.23%	-3.85	3700	31.55%	-5.01
1750	30.55%	-5.15	2330	36.83%	-4.34	3750	30.72%	-5.13
1770	28.85%	-5.40	2350	35.92%	-4.45	3800	28.65%	-5.43
1790	27.15%	-5.66	2370	36.18%	-4.42	3850	28.75%	-5.41
1810	26.79%	-5.72	2390	33.98%	-4.69	3900	28.14%	-5.51
1830	25.62%	-5.91	2410	37.69%	-4.24	3950	28.44%	-5.46
1850	23.81%	-6.23	2430	34.03%	-4.68	4000	27.95%	-5.54
1870	25.68%	-5.90	2450	35.36%	-4.51	4050	27.52%	-5.60
1890	26.39%	-5.79	2470	34.18%	-4.66	4100	27.39%	-5.62
1910	31.14%	-5.07	2490	36.98%	-4.32	4150	27.98%	-5.53
1930	30.27%	-5.19	2510	34.52%	-4.62	4200	28.96%	-5.38
1950	37.32%	-4.28	2530	36.13%	-4.42	4250	28.44%	-5.46
1970	37.34%	-4.28	2550	35.58%	-4.49	4300	27.93%	-5.54
1990	40.54%	-3.92	2570	36.98%	-4.32	4350	26.11%	-5.83
2010	39.19%	-4.07	2590	37.25%	-4.29	4400	25.59%	-5.92
2030	42.66%	-3.70	2610	37.63%	-4.25	4450	25.18%	-5.99
2050	47.00%	-3.28	2630	37.03%	-4.31	4500	25.57%	-5.92
2070	47.70%	-3.22	2650	36.59%	-4.37	4550	24.28%	-6.15
2090	43.29%	-3.64	2670	39.34%	-4.05	4600	23.76%	-6.24
2110	44.74%	-3.49	2690	41.41%	-3.83	4650	23.87%	-6.22
2130	42.29%	-3.74				4700	25.28%	-5.97
2150	41.78%	-3.79	3300	38.08%	-4.19	4750	24.54%	-6.10
2170	41.69%	-3.80	3350	35.64%	-4.48	4800	24.84%	-6.05
2190	40.93%	-3.88	3400	33.21%	-4.79	4850	24.81%	-6.05
2210	37.36%	-4.28	3450	35.00%	-4.56	4900	23.50%	-6.29
2230	40.07%	-3.97	3500	34.36%	-4.64	4950	23.43%	-6.30
2250	40.28%	-3.95	3550	35.19%	-4.54	5000	23.78%	-6.24
2270	42.65%	-3.70	3600	34.47%	-4.63			