

Part Number料号	3013-0522-001	Part Revision 料件版本	A0	Dated 日期	2024/6/25
Drawing Number图号					
Part description料件描述					
Item	Specification	Deviation			
1					
2					
3					
4					
5					
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9					
10					
11					
12					

SPECIFICATION

SHEET FOR APPROVAL

(Revision: R: A0)

CUSTOMER(客户名称)	Honeywell
CS P/N(客户机种)	CK62
PART NAME(品名)	Upper stent-1 LDS finished product
FREQUENCY(频率)	690~960/1700~2690/3300~4200MHz GPS: L1/L5 WIFI: 2.4G/5G/6E
ZTX NO.(物料编号)	1.20.000088
DATE(日期)	2024/6/25

CUSTOMER			
QA CHECKED	ME CHECKED	RF CHECKED	MANAGER CHECKED

Remark(备注):

Sign(客户确认签字盖章):

Shenzhen ZTX Communication Technology Co., Ltd				
MANAGER CHECKED	MANAGER CHECKED	ME CHECKED	RF CHECKED	LISTER
		Liping. LIU	Wenqi. LIU	



Shenzhen ZTX Communication Technology Co., Ltd

Address: No. 34, Shilong Avenue, Shiyao Town, Baoan District, Shenzhen,
(Tengda Industrial Park)

zip code: 518000

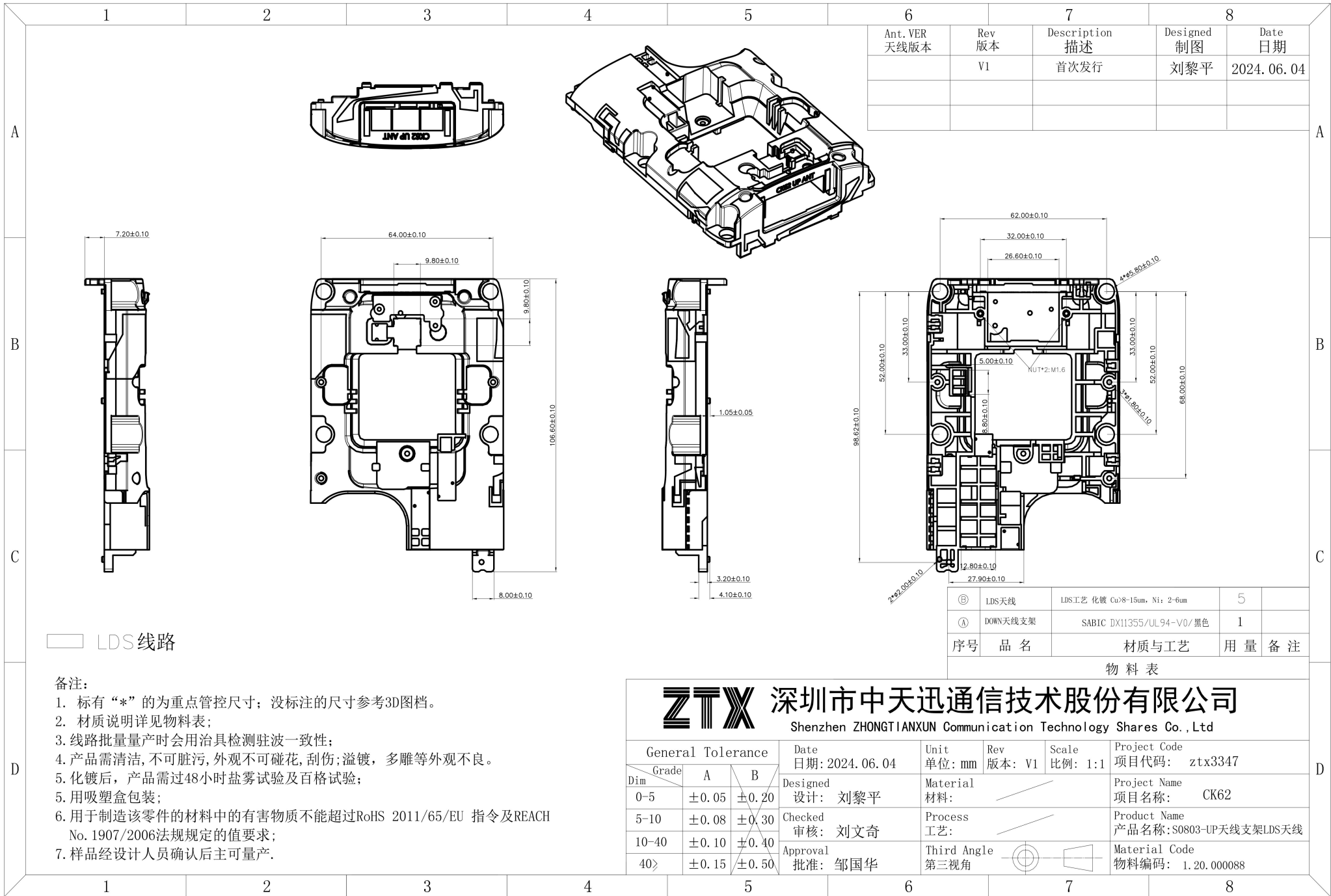
Tel: 0755-27588320

Fax: 0755-27588045

<http://www.chinaztx.com>

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					Ant. VER 天线版本	Rev 版本	Description 描述	Designed 制图	Date 日期
						V1	首次发行	刘黎平	2024. 06. 04

②	LDS天线	LDS工艺 化镀 Cu>8-15um, Ni: 2-6um	5	
①	DOWN天线支架	SABIC DX11355/UL94-V0/黑色	1	
序号	品名	材质与工艺	用量	备注
物料表				

- 备注:
1. 标有“*”的为重点管控尺寸；没标注的尺寸参考3D图档。
 2. 材质说明详见物料表；
 3. 线路批量量产时会用治具检测驻波一致性；
 4. 产品需清洁，不可脏污，外观不可碰花，刮伤；溢镀，多雕等外观不良。
 5. 化镀后，产品需过48小时盐雾试验及百格试验；
 5. 用吸塑盒包装；
 6. 用于制造该零件的材料中的有害物质不能超过RoHS 2011/65/EU 指令及REACH No. 1907/2006法规规定的值要求；
 7. 样品经设计人员确认后主可量产。

ZTX 深圳市中天迅通信技术股份有限公司

Shenzhen ZHONGTIANXUN Communication Technology Shares Co., Ltd

General Tolerance		Date	Unit	Rev	Scale	Project Code
Grade		日期: 2024. 06. 04	单位: mm	版本: V1	比例: 1:1	项目代码: ztx3347
Dim	A	B	Designed		Material	Project Name
0-5	±0.05	±0.20	设计: 刘黎平		材料:	项目名称: CK62
5-10	±0.08	±0.30	Checked		Process	Product Name
10-40	±0.10	±0.40	审核: 刘文奇		工艺:	产品名称: S0803-UP天线支架LDS天线
40>	±0.15	±0.50	Approval		Third Angle	Material Code
		批准: 邹国华			第三视角	物料编码: 1.20.000088

2

A

B

C

D

A

B

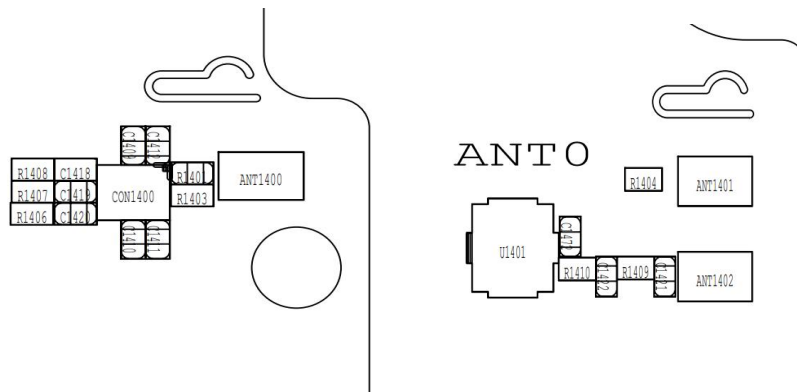
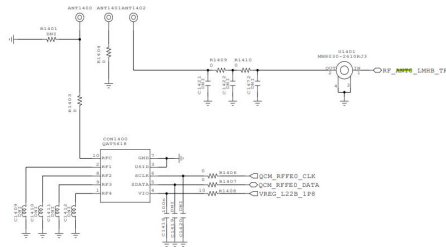
C

D

matching circuit

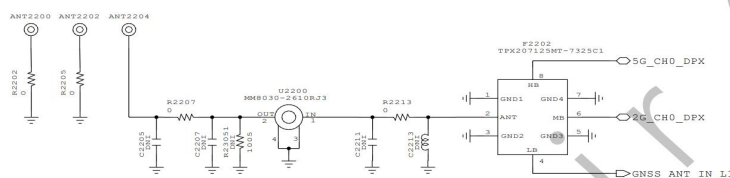
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ANT1402-弹脚				ANT1400-弹脚	
C1421	12NH			R1401	33NH
R1409	0欧姆			R1403	0欧姆
C1422	0.5PF		RF1	C1409-RF1	0欧姆
R1410	2.4NH		RF2	C1410-RF2	5.1NH
C1472	NC		RF3	C1411-RF3	15NH
			RF4	C1412-RF4	27NH
ANT1401-弹脚					
R1404	NC				

ANT0_LMH_PRX

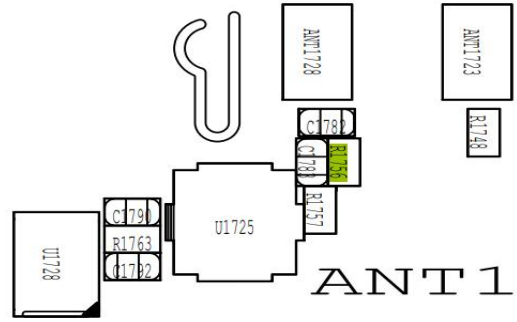


ANT3	
ANT2204	
C2205	NC
R2207	0欧姆
C2207	NC
ANT2200	
R2202	NC
ANT2202	
R2205	0欧姆

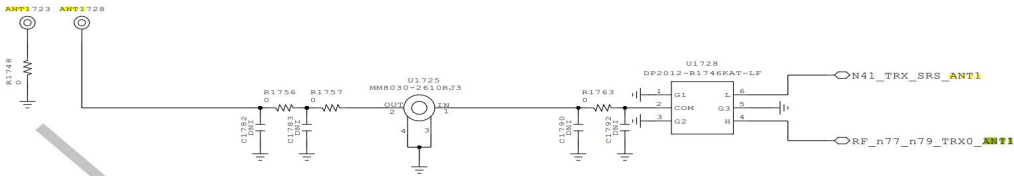
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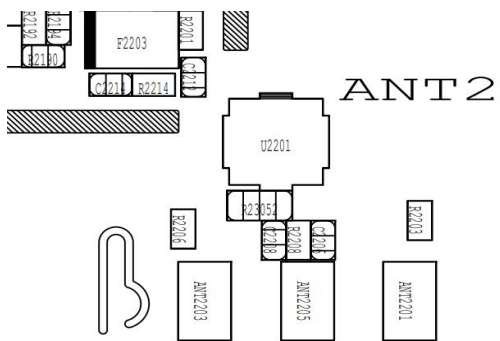
ANT1	
ANT1728	
C1782	NC
R1756	0.5P
C1783	0.3P
R1757	1N
ANT1723	
R1748	0欧姆



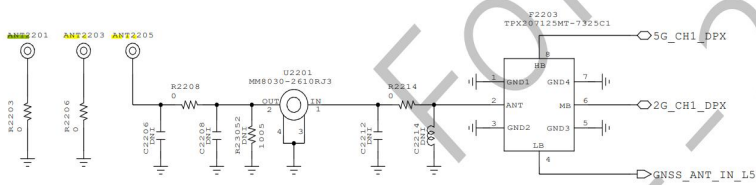
ANT1_N40_N41_N77-TRX



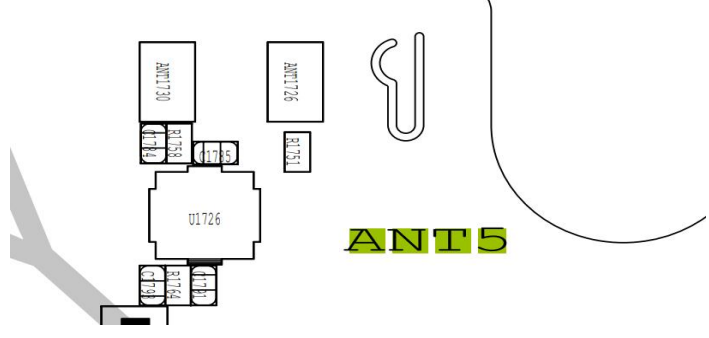
ANT2	
ANT2205	
C2206	NC
R2208	0欧姆
C2208	NC
ANT2201	
R2203	NC
ANT2203	
R2206	0欧姆



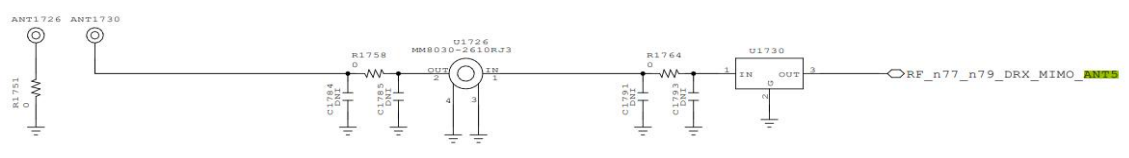
ANT2_WIFI_CH1/BT/GPS_L5



ANT5	
ANT1730	
C1784	0.3P
R1758	1N
C1785	NC
ANT1726	
R1751	0欧姆



ANT5_N77-RX



2G/3G OTA			
	Channels	TRP	TIS
850	L	23.6	
	M	24.4	
	H	24.6	-102.06
900	L	26.1	
	M	24.9	
	H	24.4	-101.72
1800	L	24.1	
	M	23.8	
	H	23.6	-104.17
1900	L	23.3	
	M	23.2	
	H	22.5	-103.18
W1	L	18.1	
	M	17.7	
	H	17.7	-104.62
W2	L	18.8	
	M	18.8	
	H	18.2	-106.23
W4	L	19.7	
	M	19.1	
	H	18.8	-105.32
W5	L	16.6	
	M	17.1	
	H	17.5	-104.41
W6	L	17.0	
	M	17.1	
	H	17.2	-104.11
W8	L	18.5	
	M	18.0	
	H	17.2	-103.42
W19	L	16.9	
	M	17.3	
	H	17.3	-102.57

4G OTA											
LTE-FDD	Channels	TRP	TIS	LTE-FDD	Channels	TRP	TIS	LTE-FDD	Channels	TRP	TIS
B1	L	17.7		B19	L	16.1		B41	L	18.5	
	M	17.3			M	16.4			M	18.5	
	H	17.1	-94.1		H	16.6	-92.64		H	18.9	-88.5
B2	L	18.5		B20	L	17.4		B42	L	18.5	
	M	18.5			M	17.2			M	18.2	
	H	17.8	-94.89		H	17.2	-92.4		H	19.4	-88.6
B3	L	19.5		B25	L	18.4		B43	L	19.3	
	M	18.6			M	18.4			M	18.9	
	H	18.4	-93.34		H	17.9	-95.87		H	18.8	-90.8
B4	L	19.6		B26	L	15.9					
	M	19.0			M	16.1					
	H	18.7	-94.08		H	17.0	-92.98				
B5	L	16.3		B28	L	15.7					
	M	16.7			M	15.1					
	H	17.2	-92.36		H	13.2	-89.97				
B7	L	18.5		B30	L	19.2					
	M	18.3			M	18.3					
	H	18.2	-90.5		H	18.2	-94.44				
B8	L	18.0		B66	L	17.6					
	M	17.8			M	17.9					
	H	17.1	-91.67		H	17.9	-93.26				
B12	L	15.5		B34	L	18.4					
	M	15.7			M	18.4					
	H	15.7	-90.85		H	18.4	-89.3				
B13	L	14.1		B39	L	18.4					
	M	14.0			M	18.1					
	H	13.8	-90.01		H	17.9	-92.04				
B17	L	15.7		B40	L	20.0					
	M	15.6			M	19.3					
	H	15.6	-90.4		H	19.1	-90.01				

5G OTA											
band	Channels	TRP	TIS	band	Channels	TRP	TIS	band	Channels	TRP	TIS
N77	L	20.34		N5	L	16.56		N66	L	16.9	
	M	20.06			M	16.61			M	17.1	
	H	20.63	-89.67		H	16.43	-90.74		H	16.2	-93.45
N78	L	20.23		N7	L	17.11					
	M	19.64			M	16.55					
	H	19.96	-90.21		H	16.21	-93.45				
N41	L	20.5		N8	L	16.99					
	M	20.2			M	16.49					
	H	20.1	-88.89		H	17.07	-91.08				
N1	L	16.59		N20	L	17.0					
	M	16.17			M	16.5					
	H	17.46	-93.31		H	16.5	-89.57				
N2	L	16.74		N25	L	16.9					
	M	17.04			M	17.3					
	H	16.25	-94.42		H	16.3	-94.78				
N3	L	17.13		N28	L	15.0					
	M	17.22			M	14.4					
	H	16.13	-91.78		H	13.6	-90.18				

ANT2天线			
2.4G-11B	1	12.29	-81.64
	6	13.17	-82.76
	11	12.86	-81.98
5G-11A	36	12.21	-70.95
	149	13.54	-70.69
	165	13.26	-70.13
ANT3天线			
2.4G-11B	1	12.74	-82.5
	6	13.15	-82.47
	11	13.22	-81.66
5G-11A	36	13.12	-72.05
	149	12.98	-71.38
	165	12.44	-71.42
GPS	-152.69		

Passive Test

ANTO							
Frequency (MHz)	Efficiency	Efficiency . dB	Gain . dB	Frequency (MHz)	Efficiency	Efficiency . dB	Gain . dB
700	16%	-7.99	-4.30	1900	49%	-3.07	2.01
710	17%	-7.68	-3.89	1920	44%	-3.56	3.42
720	20%	-6.89	-2.91	1940	41%	-3.90	2.97
730	23%	-6.40	-2.33	1960	39%	-4.10	3.21
740	26%	-5.86	-1.81	1980	36%	-4.44	2.59
750	27%	-5.61	-1.36	2000	33%	-4.76	2.05
760	26%	-5.92	-1.83	2020	33%	-4.77	1.80
770	23%	-6.46	-2.43	2040	31%	-5.08	1.34
780	17%	-7.65	-3.44	2060	32%	-4.99	1.20
791	22%	-6.62	-1.89	2080	33%	-4.80	1.39
800	25%	-5.95	-1.34	2100	37%	-4.29	2.09
810	32%	-4.93	-0.47	2120	37%	-4.27	2.24
820	33%	-4.76	-0.03	2140	36%	-4.42	2.13
824	37%	-4.33	0.40	2160	36%	-4.41	2.17
830	40%	-3.98	0.76	2180	35%	-4.59	2.15
840	37%	-4.28	0.51	2200	34%	-4.69	2.12
850	32%	-5.00	-0.13	2220	35%	-4.62	2.31
860	28%	-5.58	-0.60	2240	38%	-4.24	2.77
870	25%	-6.10	-1.53	2260	39%	-4.04	3.03
880	23%	-6.47	-2.08	2280	41%	-3.92	3.17
890	27%	-5.72	-1.17	2300	41%	-3.85	3.13
894	30%	-5.16	-0.69	2320	40%	-4.00	2.99
900	32%	-4.93	-0.24	2340	41%	-3.91	2.88
910	34%	-4.64	-0.16	2360	39%	-4.07	2.22
920	36%	-4.49	-0.24	2380	41%	-3.92	2.15
930	31%	-5.03	-0.88	2400	39%	-4.11	1.80
940	29%	-5.31	-0.91	2420	36%	-4.43	0.98
950	25%	-5.95	-1.61	2440	34%	-4.73	0.34
960	23%	-6.43	-1.96	2460	32%	-4.95	0.32
1700	39%	-4.13	2.03	2480	33%	-4.86	0.46
1710	38%	-4.16	3.00	2500	32%	-4.89	0.29
1720	43%	-3.63	2.34	2520	33%	-4.83	-0.27
1740	49%	-3.07	2.41	2540	33%	-4.77	-0.71
1760	50%	-3.03	2.56	2560	34%	-4.64	-0.29
1780	56%	-2.51	2.55	2580	36%	-4.39	0.29
1800	58%	-2.34	3.12	2600	38%	-4.18	0.66
1820	58%	-2.35	3.45	2620	40%	-3.93	0.73
1840	59%	-2.32	3.00	2640	40%	-3.94	0.46
1860	60%	-2.21	2.36	2660	40%	-3.95	0.23
1880	57%	-2.43	1.76	2680	39%	-4.14	-0.05

Frequency (MHz)	Efficiency	Efficiency . dB	Gain . dB
2690	38%	-4.24	-0.18
2700	37%	-4.37	-0.32
3400	41%	-3.85	1.08
3450	42%	-3.81	0.95
3500	41%	-3.92	0.60
3550	39%	-4.05	0.17
3600	40%	-4.03	1.58
3650	35%	-4.60	1.11
3700	40%	-3.99	2.06
3750	36%	-4.45	2.17
3800	33%	-4.86	1.33

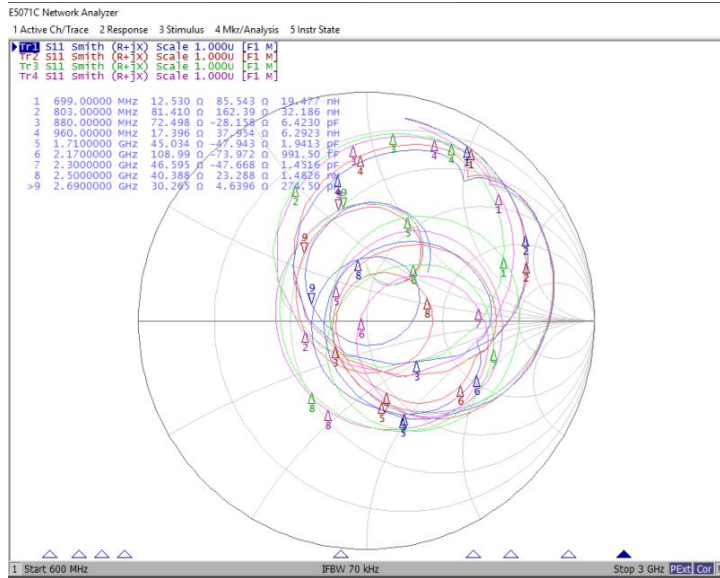
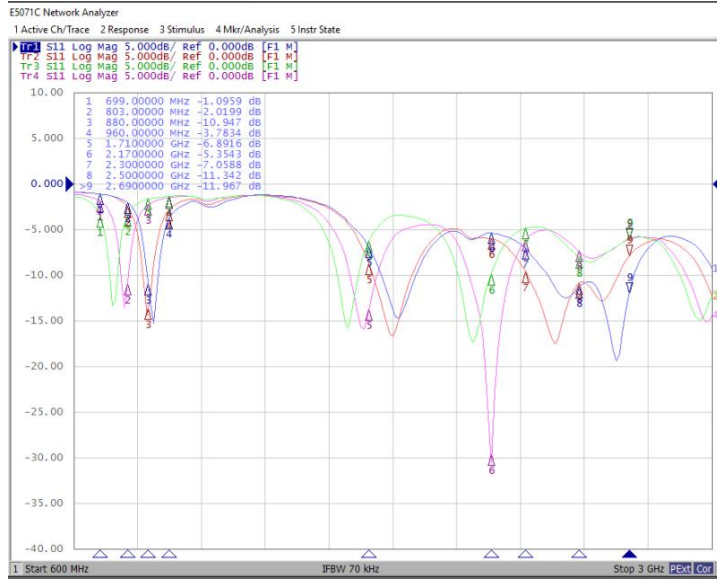
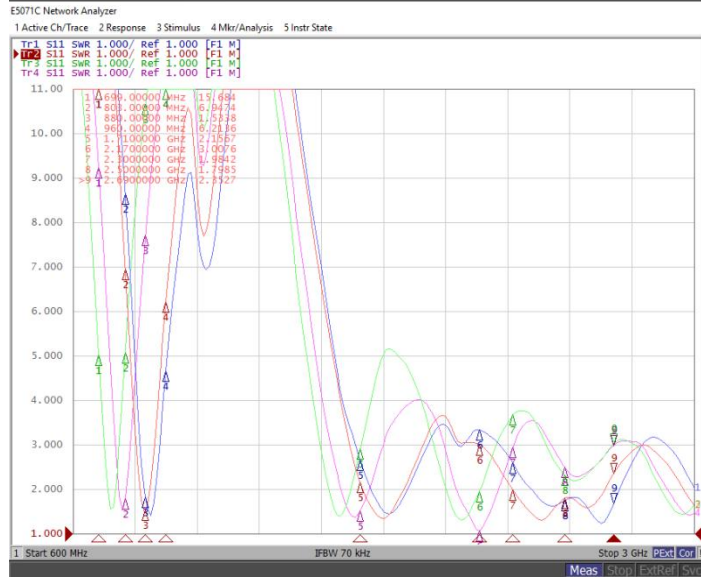
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Frequency (MHz)	Efficiency	Efficiency . dB	Gain . dB
2300	38%	-4.16	2.22
2320	40%	-4.03	2.65
2340	41%	-3.86	3.07
2360	42%	-3.76	2.88
2380	45%	-3.49	3.36
2400	45%	-3.43	3.30
2420	46%	-3.37	3.08
2440	46%	-3.42	3.31
2460	47%	-3.25	3.57
2480	49%	-3.06	3.88
2500	52%	-2.83	4.10
2520	53%	-2.76	3.93
2540	53%	-2.73	3.72
2560	54%	-2.69	3.26
2580	52%	-2.85	2.27
2600	52%	-2.85	2.06
2620	52%	-2.83	1.92
2640	52%	-2.87	2.08
2660	52%	-2.84	2.15
2680	52%	-2.80	2.30
2700	51%	-2.89	2.31
3300	47%	-3.26	2.96
3350	47%	-3.29	3.22
3400	48%	-3.20	3.50
3450	46%	-3.42	3.54
3500	45%	-3.47	3.50
3550	43%	-3.70	3.54
3600	41%	-3.83	3.57
3650	42%	-3.79	3.65
3700	40%	-3.97	3.41
3750	40%	-3.97	3.64
3800	41%	-3.84	4.13
3850	46%	-3.39	5.05
3900	49%	-3.13	5.26
3950	50%	-2.98	5.48
4000	52%	-2.87	5.33
4050	50%	-2.98	4.94
4100	53%	-2.79	4.81
4150	53%	-2.78	4.53
4200	52%	-2.84	4.21

ANT2							
Frequency (MHz)	Efficiency	Efficiency . dB	Gain . dB	Frequency (MHz)	Efficiency	Efficiency . dB	Gain . dB
1150	42%	-3.79	1.64	5700	41%	-3.84	4.19
1155	43%	-3.63	1.43	5750	39%	-4.07	4.21
1160	41%	-3.83	1.32	5800	38%	-4.15	4.06
1165	41%	-3.83	0.68	5850	39%	-4.09	4.02
1170	38%	-4.25	0.27	5900	45%	-3.43	6.56
1175	37%	-4.28	0.25	5950	48%	-3.18	7.02
1180	35%	-4.52	0.09	6000	45%	-3.51	7.22
1185	38%	-4.24	0.35	6050	48%	-3.16	6.94
1190	37%	-4.27	0.30	6100	47%	-3.29	6.84
2400	41%	-3.90	2.93	6150	44%	-3.58	6.39
2410	41%	-3.89	3.06	6200	50%	-2.99	6.01
2420	42%	-3.82	3.13	6250	49%	-3.10	5.70
2430	42%	-3.76	2.98	6300	50%	-2.98	5.64
2440	43%	-3.68	2.84	6350	46%	-3.38	4.93
2450	44%	-3.52	2.82	6400	47%	-3.25	4.72
2460	45%	-3.45	2.80	6450	46%	-3.38	4.55
2470	47%	-3.32	2.84	6500	43%	-3.70	4.33
2480	46%	-3.39	2.77	6550	47%	-3.24	4.86
2490	46%	-3.36	2.79	6600	42%	-3.76	4.19
2500	46%	-3.35	2.78	6650	47%	-3.31	4.87
5150	43%	-3.68	0.58	6700	45%	-3.48	4.63
5200	44%	-3.55	3.35	6750	41%	-3.89	4.52
5250	44%	-3.53	3.48	6800	46%	-3.36	5.49
5300	46%	-3.38	3.76	6850	40%	-3.96	4.79
5350	46%	-3.34	3.75	6900	42%	-3.77	4.95
5400	47%	-3.29	3.81	6950	42%	-3.75	4.84
5450	47%	-3.32	3.72	7000	42%	-3.78	4.94
5500	47%	-3.26	3.97	7050	44%	-3.56	4.87
5550	48%	-3.17	4.37	7100	39%	-4.07	4.40
5600	46%	-3.37	4.36	7150	41%	-3.82	4.22
5650	44%	-3.53	4.37	7200	41%	-3.83	4.08

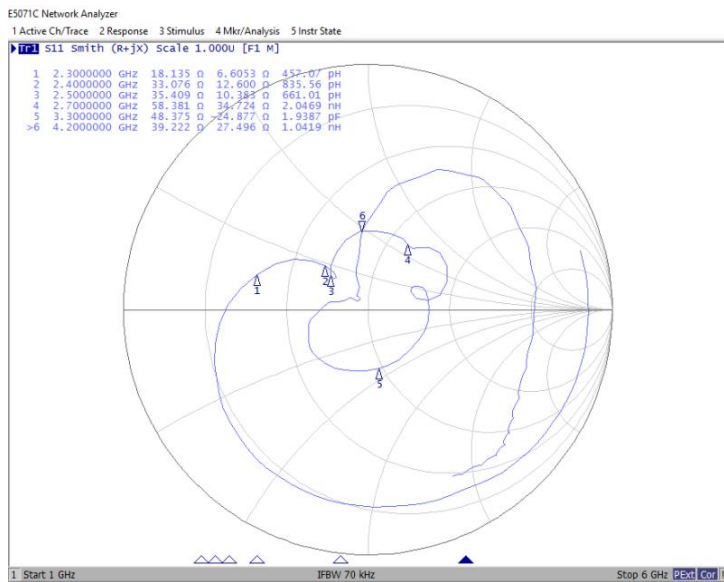
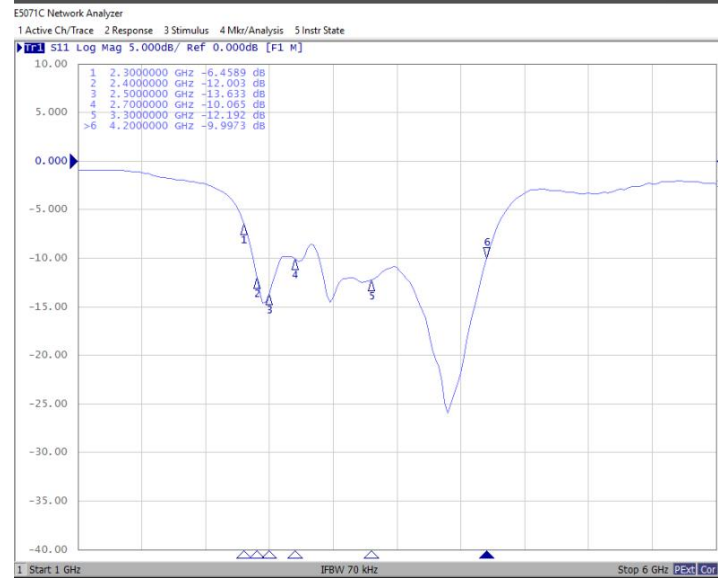
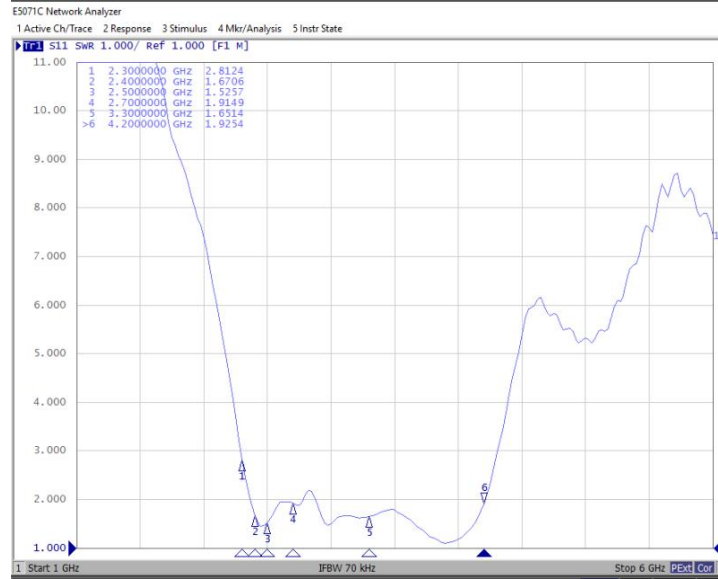
ANT3							
Frequency (MHz)	Efficiency	Efficiency . dB	Gain . dB	Frequency (MHz)	Efficiency	Efficiency . dB	Gain . dB
1550	48%	-3.22	0.31	5650	55%	-2.56	4.07
1555	49%	-3.11	0.58	5700	55%	-2.60	3.73
1560	49%	-3.06	0.54	5750	54%	-2.65	3.62
1565	50%	-3.05	0.58	5800	55%	-2.61	3.53
1570	49%	-3.13	0.34	5850	55%	-2.59	3.76
1575	49%	-3.11	0.36	5900	44%	-3.57	4.32
1580	49%	-3.11	0.11	5950	46%	-3.41	4.47
1585	49%	-3.10	0.12	6000	47%	-3.32	4.56
1590	48%	-3.19	-0.30	6050	46%	-3.36	4.25
1595	48%	-3.18	-0.41	6100	47%	-3.26	4.42
1600	49%	-3.13	-0.74	6150	50%	-3.01	4.67
2400	36%	-4.44	0.82	6200	50%	-3.04	4.71
2410	36%	-4.44	0.96	6250	52%	-2.83	4.88
2420	36%	-4.49	1.22	6300	53%	-2.72	4.88
2430	35%	-4.54	1.31	6350	51%	-2.94	4.65
2440	35%	-4.62	1.32	6400	53%	-2.78	4.89
2450	34%	-4.67	1.44	6450	51%	-2.92	4.84
2460	33%	-4.76	1.59	6500	49%	-3.10	4.65
2470	34%	-4.73	1.76	6550	51%	-2.93	4.93
2480	34%	-4.68	1.85	6600	46%	-3.35	4.40
2490	34%	-4.64	1.87	6650	48%	-3.20	4.54
2500	35%	-4.56	1.92	6700	45%	-3.48	4.26
5150	46%	-3.38	3.04	6750	41%	-3.87	3.91
5200	48%	-3.22	3.42	6800	43%	-3.67	4.12
5250	50%	-3.04	3.65	6850	38%	-4.15	3.40
5300	51%	-2.93	3.79	6900	39%	-4.14	3.29
5350	52%	-2.87	3.97	6950	38%	-4.25	3.11
5400	52%	-2.87	4.10	7000	36%	-4.40	2.34
5450	52%	-2.84	4.25	7050	36%	-4.38	2.11
5500	53%	-2.76	4.33	7100	33%	-4.79	2.86
5550	56%	-2.54	4.54	7150	34%	-4.65	2.55
5600	55%	-2.58	4.30	7200	33%	-4.77	2.13

ANT5			
Frequency (MHz)	Efficiency	Efficiency . dB	Gain . dB
2300	9%	-10.34	-4.39
2320	10%	-10.07	-4.23
2340	11%	-9.62	-3.78
2360	12%	-9.16	-3.41
2380	13%	-8.74	-3.31
2400	14%	-8.41	-3.06
2420	16%	-8.04	-2.77
2440	18%	-7.41	-2.24
2460	21%	-6.80	-1.85
2480	26%	-5.93	-0.98
2500	29%	-5.34	-0.07
2520	33%	-4.80	0.69
2540	35%	-4.60	0.96
2560	36%	-4.42	1.18
2580	37%	-4.27	1.31
2600	39%	-4.10	1.39
2620	41%	-3.89	1.66
2640	41%	-3.84	1.69
2660	43%	-3.70	1.68
2680	42%	-3.73	1.47
2700	43%	-3.65	1.59
3300	40%	-3.99	1.46
3350	36%	-4.39	0.89
3400	33%	-4.75	0.64
3450	32%	-4.98	0.63
3500	30%	-5.20	0.29
3550	29%	-5.40	0.07
3600	28%	-5.51	-0.43
3650	28%	-5.57	-0.25
3700	26%	-5.83	-0.55
3750	25%	-6.00	-1.05
3800	24%	-6.25	-1.59
3850	23%	-6.44	-1.53
3900	21%	-6.75	-1.68
3950	20%	-7.08	-1.97
4000	18%	-7.34	-1.67
4050	17%	-7.81	-1.82
4100	16%	-8.09	-2.02
4150	14%	-8.53	-2.57
4200	13%	-8.77	-2.54

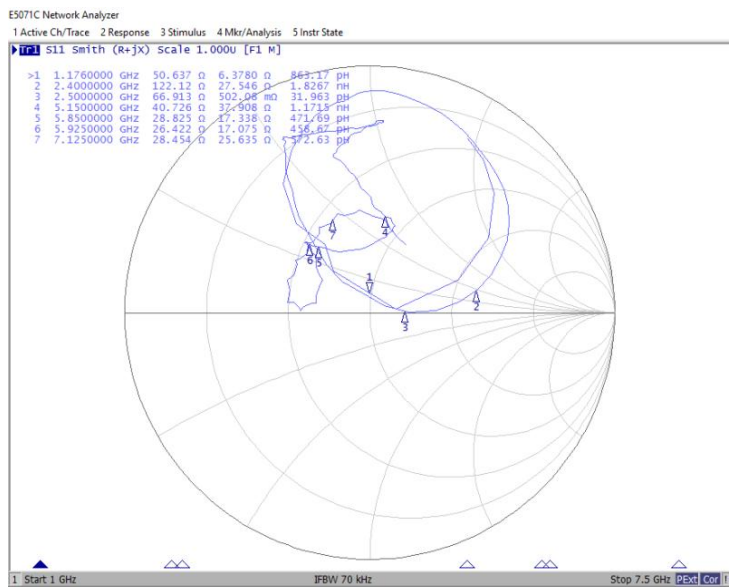
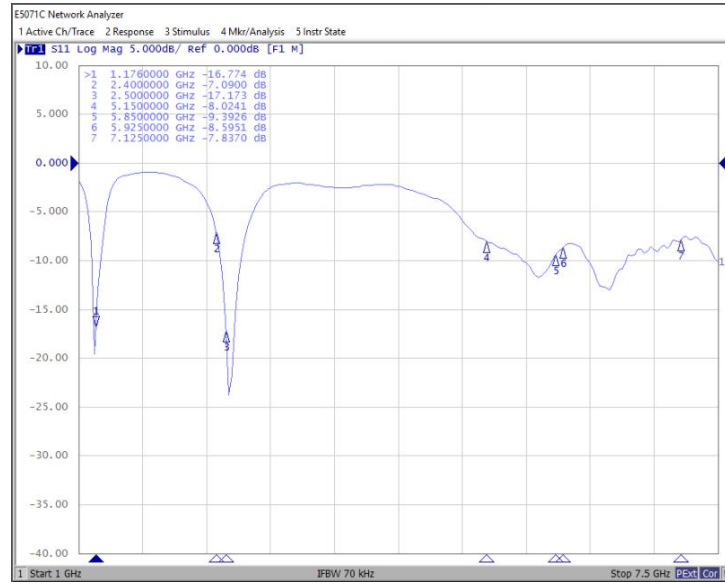
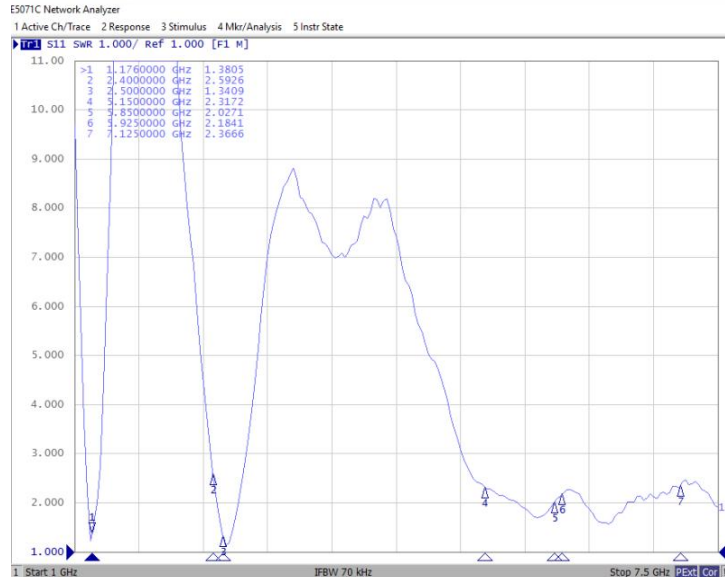
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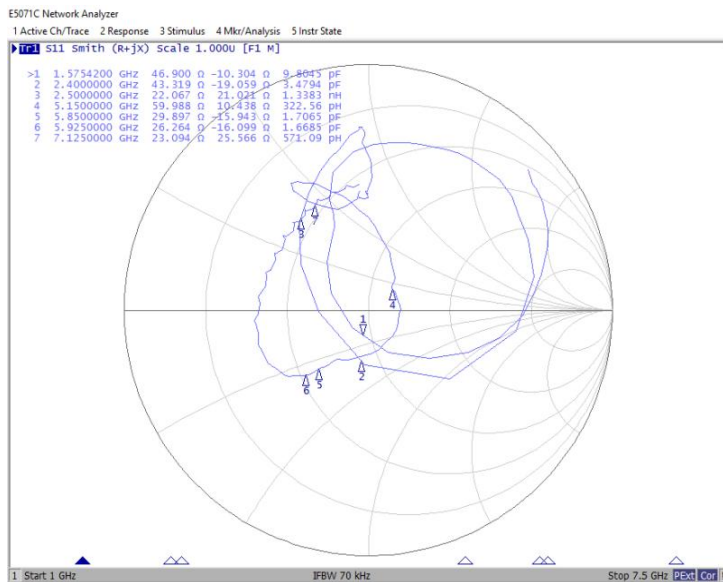
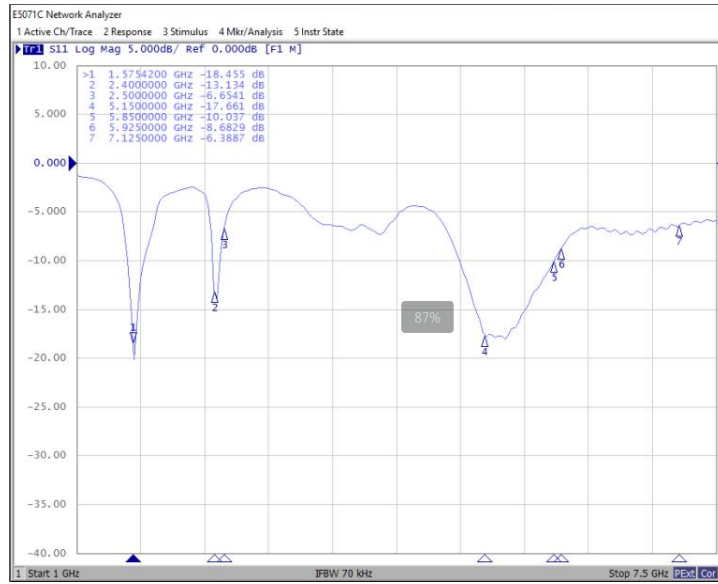
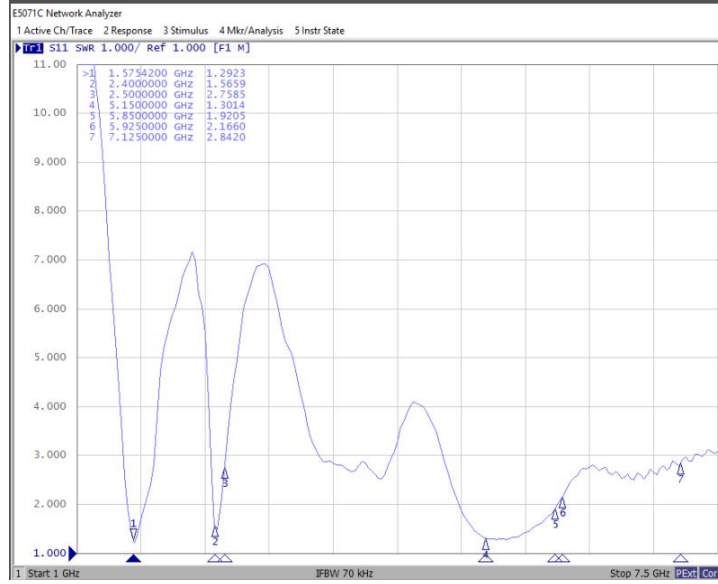
ANT1



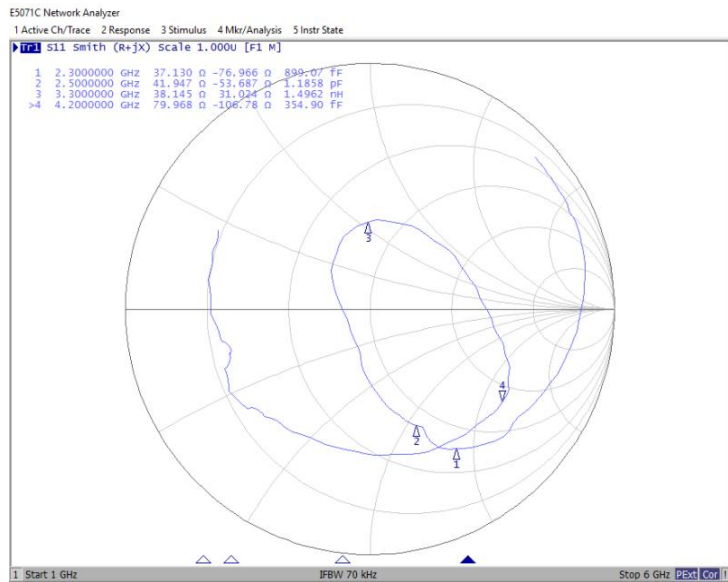
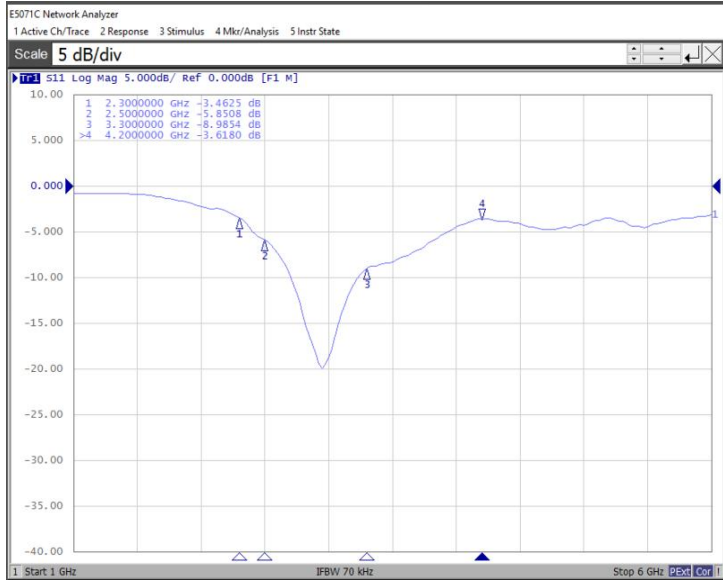
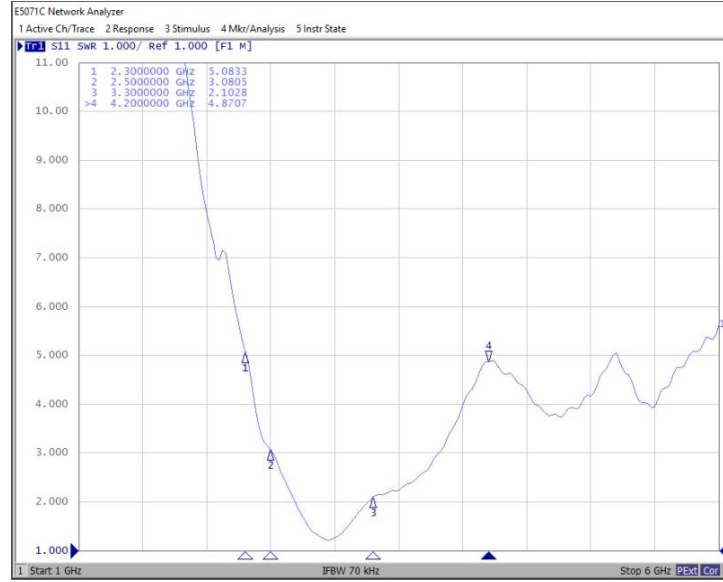
ANT2



ANT3

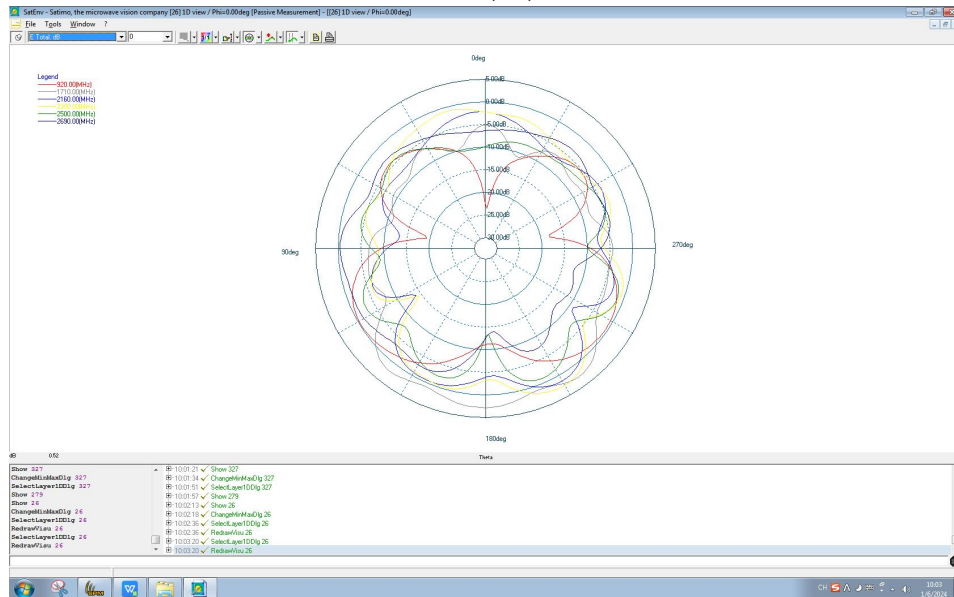


ANT5

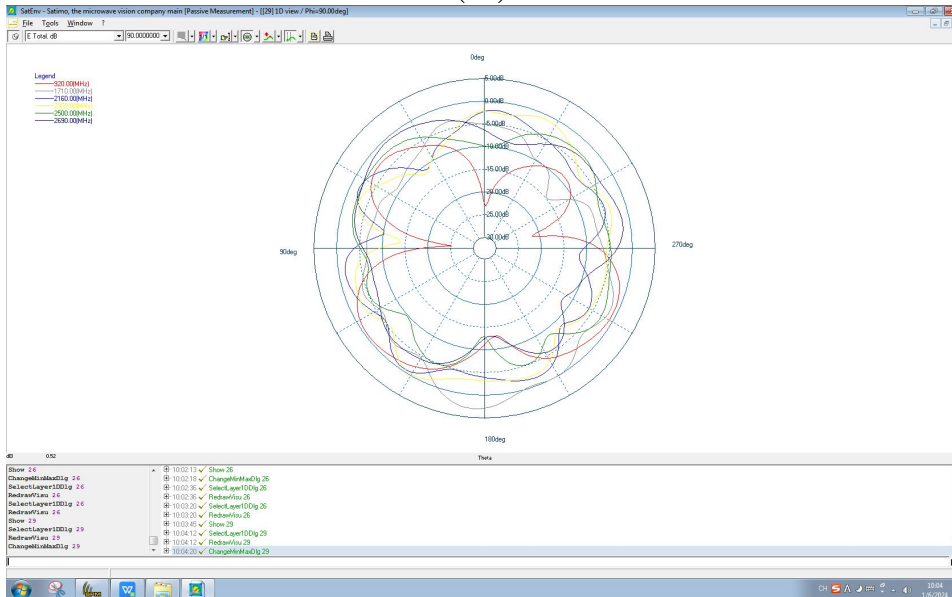


2D/3D Radiation Pattern Results

ANTO XOZ(E1)



YOZ(E2)



XOY(H)

