



Antenna Specification 天线规格书

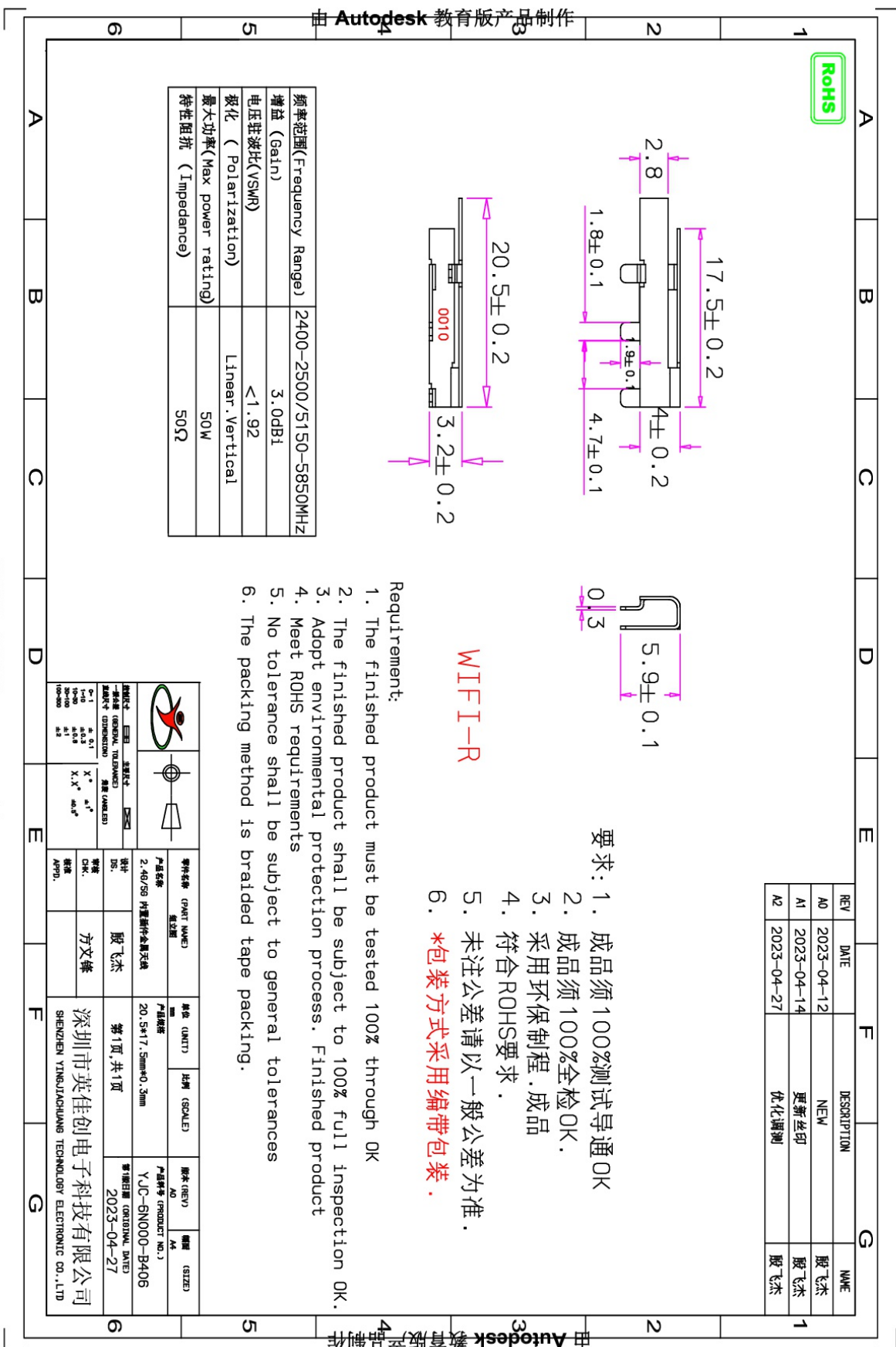
YJC-6N000-B406

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产品平面图 (Product plan):



由 Autodesk 教育版产品制作



天线技术参数(Antenna technical parameters):

电气技术参数(Electrical technical parameters)	
电 性 能 指 标 (Electrical Specifications)	
频率范围 (Frequency Range)	2400 -2500/5150-5850MHZ
电压驻波比 (VSWR)	<1.92
输入阻抗 (Input Impedance)	50 Ω
方向 (Direction)	全向
增益 (Gain)	WIFI-L: 2.4G $\geq$ 2.01dBi, 5G $\geq$ 2.0dBi
机 械 指 标 (Mechanical Specifications)	
材质	304 不锈钢 (Stainless steel)
工作温度	-20℃~+70℃
工作湿度	20~80%

包装方式 (The packing way) :



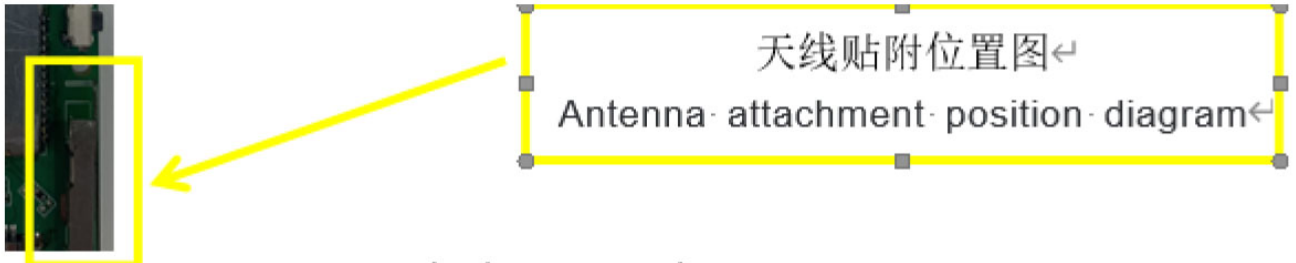


环境性能测试(Environmental performance testing):

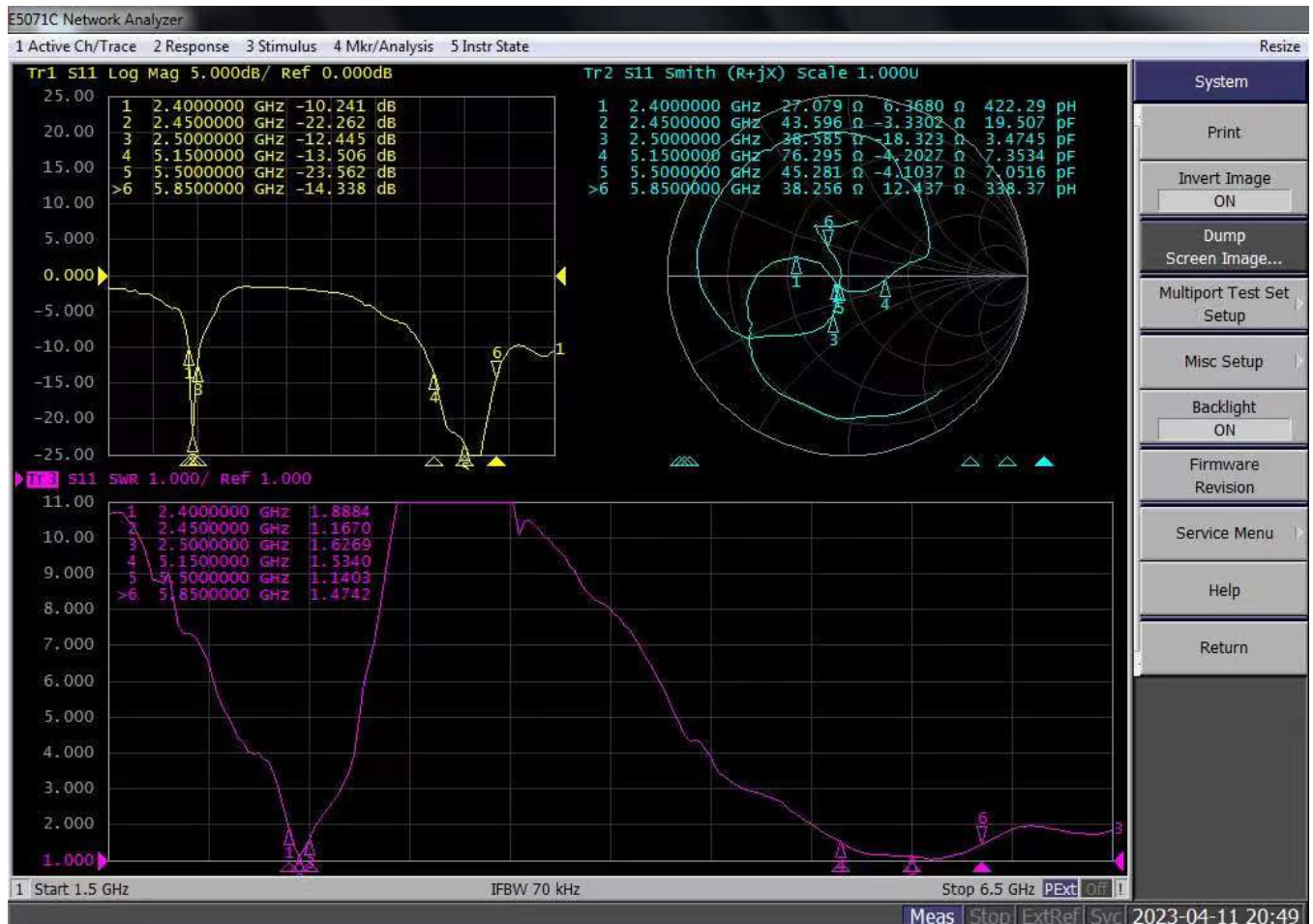
项目 (Project)	测试条件 (Test condition)	规格 (Specification)
储存环境 Storage Conditions	In the absence of specified test temperature, humidity, air pressure is as follows: 在没有指定的情况下测试温度、湿度、气压如下: 1. Temperature is $-30\text{ }^{\circ}\text{C} \sim +80\text{ }^{\circ}\text{C}$ 1. 温度为 $-30^{\circ}\text{C} \sim +80^{\circ}\text{C}$ 2. Relative humidity of 45% to 85% 2. 相对湿度为45%-85% 3. Air pressure is 86 kpa to 106 kpa 3. 气压为86kpa-106kpa	Electrical and mechanical properties is normal 电气机械性能正常
高低温试验 high and low temperature test	Between $70\text{ }^{\circ}\text{C}$ and $-20\text{ }^{\circ}\text{C}$ for 5 loops, then 1-2 h under normal conditions, check the appearance quality. 在 70°C 与 -20°C 之间进行5次循环,然后在正常条件下1-2H, 检查外观质量。	Size should meet the requirements and should satisfy the content with the electrical and mechanical properties 尺寸应满足规定并应满足于机械、电气性能
耐恒定 湿热试验 Constant damp and hot resistance test	95 + / - 3% relative humidity, temperature test: $40\text{ }^{\circ}\text{C}$. Lasts 2 h after, try to take out the determination of electrical properties, within 5 min after try 1-2 h under article normal thing, check the appearance quality 相对湿度 $95 \pm 3\%$, 试验温度: 40°C . 持续2H作用后, 试品取出后5min之内测定电气性能, 试品在正常条件下1-2H, 检查外观质量	Size should meet the requirements and should satisfy the content with the electrical and mechanical properties 尺寸应满足规定并应满足于机械、电气性能
振动试验 vibration test	10-55 hz, vibration frequency range of displacement amplitude: 0.35 MM, acceleration amplitude: 50.0 M/S, sweep cycles: 30 times 振频范围10-55HZ, 位移幅值: 0.35MM, 加速度幅值: 50.0M/S, 扫频循环次数: 30次	Electrical and mechanical properties is normal 电气机械性能正常
跌落试验 fall down test	1 m high altitude in accordance with the perpendicular axis free drop 3 times 1M高空按照互相垂直的轴方向自由跌落3次	Electrical and mechanical properties is normal 电气机械性能正常



天线贴附位置图 (Antenna attachment position diagram) :



天线性能测试图 (Antenna performance test diagram) (WIFI-R) :





2D、3D 测试数据 Test data(WIFI-R: 2.4G/5G) :

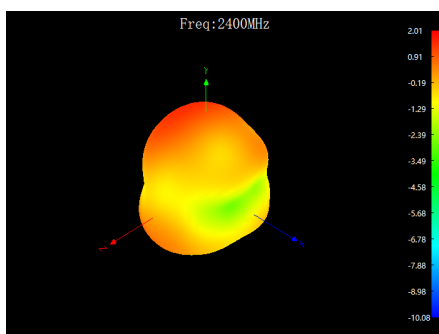
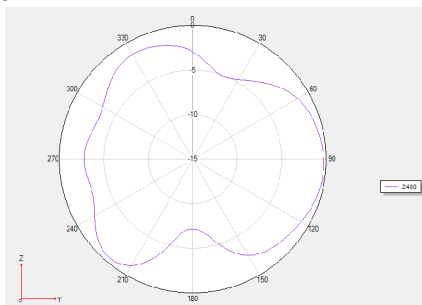
Frequency (MHz)	Efficiency (%)	Gain. (dBi)
2400	60.12	2.01
2410	64.57	2.51
2420	64.71	2.79
2430	68.87	3.04
2440	68.55	3.07
2450	69.18	3.21
2460	68.39	3.16
2470	66.99	3.14
2480	65.61	3.04
2490	65.31	3.03
2500	60.67	3.29
5150	63.83	2.64
5200	67.76	2.88
5250	70.15	2.21
5300	67.76	2
5350	67.61	2.34
5400	65.01	2.33
5450	67.45	2.45
5500	69.82	2.48
5550	70.63	2.66
5600	68.55	2.75
5650	66.68	2.96
5700	66.99	3.09
5750	66.99	3.13
5800	65.46	3.01
5850	65.31	3.07



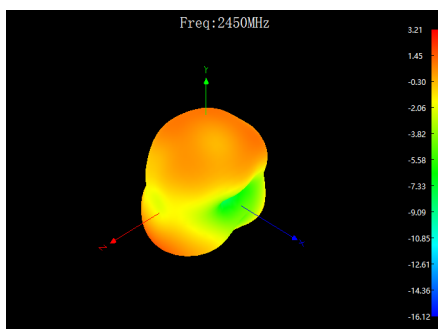
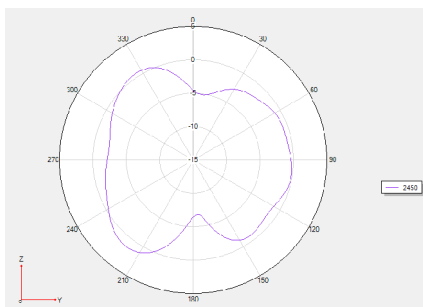
2D、3D 测试数据 Test data(WIFI-R: 2.4G/5G) :

WIFI -R 天线方向图-2.4G/5G(Antenna direction diagram - 2.4G/5G)

Phi =90 freq=2400MHz

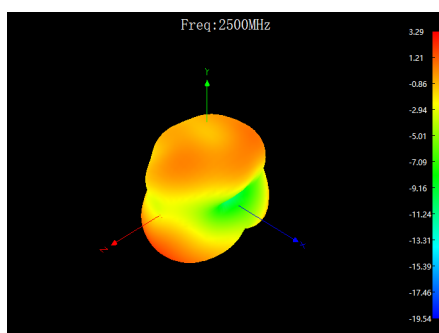
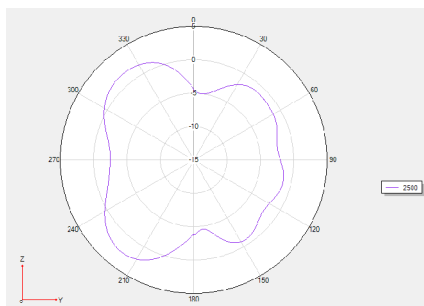


Phi =90 freq=2450MHz

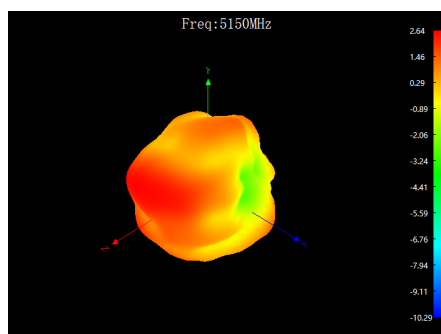
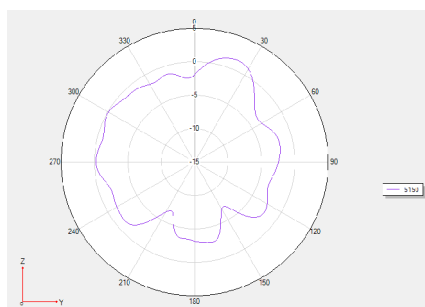




Phi =90 freq=2500MHz

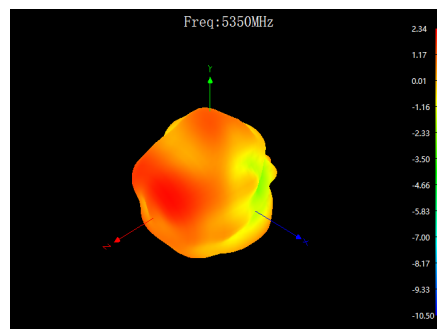
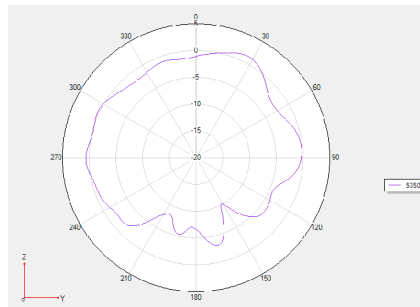


Phi =90 freq=5150MHz

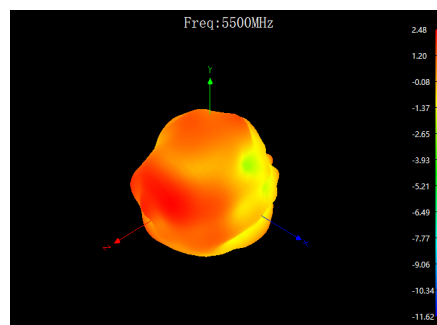
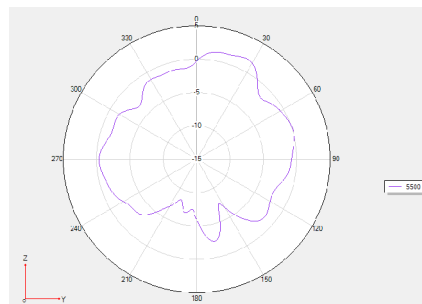




Phi =90 freq=5350MHz

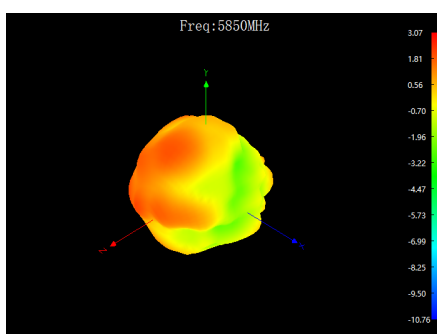
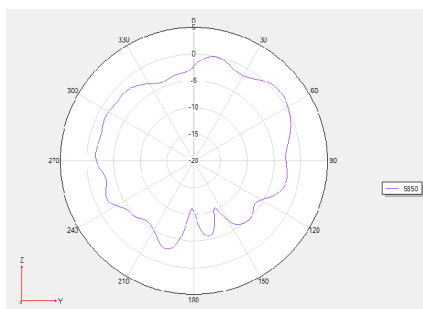


Phi =90 freq=5500MHz





Phi =90 freq=5850MHz





OTA 有源测试数据统计(OTA active test data statistics):

Item	Measurement	Band	Channel	Frequency	Total
1	TRP	WIFI_B (11M)	1	2412	15.26
2	TRP	WIFI_B (11M)	6	2437	15.06
3	TRP	WIFI_B (11M)	11	2462	14.75
4	TIS FAST	WIFI_B (11M)	1	2412	-83.84
5	TIS FAST	WIFI_B (11M)	6	2437	-86.67
6	TIS FAST	WIFI_B (11M)	11	2462	-84.1
7	TRP	WIFI_N(65M)	1	2412	9.74
8	TRP	WIFI_N(65M)	6	2437	9.73
9	TRP	WIFI_N(65M)	11	2462	10.11
10	TIS FAST	WIFI_N(65M)	1	2412	-68.52
11	TIS FAST	WIFI_N(65M)	6	2437	-69.48
12	TIS FAST	WIFI_N(65M)	11	2462	-67.48
13	TRP	WIFI_N(65M)	36	5180	9.06
14	TRP	WIFI_N(65M)	64	5320	10.54
15	TRP	WIFI_N(65M)	100	5500	10.91
16	TRP	WIFI_N(65M)	161	5805	11.23
17	TIS FAST	WIFI_N(65M)	36	5180	-73.36
18	TIS FAST	WIFI_N(65M)	64	5320	-72.67
19	TIS FAST	WIFI_N(65M)	100	5500	-70.98
20	TIS FAST	WIFI_N(65M)	161	5805	-69.92
21	TRP	WIFI_A (54M)	36	5180	8.75
22	TRP	WIFI_A (54M)	64	5320	11.04
23	TRP	WIFI_A (54M)	100	5500	11.63
24	TRP	WIFI_A (54M)	161	5805	11.71
25	TIS FAST	WIFI_A (54M)	36	5180	-77.68
26	TIS FAST	WIFI_A (54M)	64	5320	-78.21
27	TIS FAST	WIFI_A (54M)	100	5500	-77.12
28	TIS FAST	WIFI_A (54M)	161	5805	-76.6



OTA 有源测试数据统计(OTA active test data statistics):

1	TRP	0	2402	-1.58
2	TRP	9	2411	-1.69
3	TRP	19	2421	-1.94
4	TRP	29	2431	-1.98
5	TRP	39	2441	-2.27
6	TRP	49	2451	-2.44
7	TRP	59	2461	-2.87
8	TRP	69	2471	-3.29
9	TRP	78	2480	-3.66
10	TIS (EIRP)	0	2402	-90.1
11	TIS (EIRP)	9	2411	-89.12
12	TIS (EIRP)	19	2421	-89.54
13	TIS (EIRP)	29	2431	-90.77
14	TIS (EIRP)	39	2441	-91.78
15	TIS (EIRP)	49	2451	-89.24
16	TIS (EIRP)	59	2461	-90.56
17	TIS (EIRP)	69	2471	-90.75
18	TIS (EIRP)	78	2480	-91.88
19	TRP	0	2402	-1.45
20	TRP	9	2411	-1.6
21	TRP	19	2421	-1.77
22	TRP	29	2431	-1.78
23	TRP	39	2441	-2.1
24	TRP	49	2451	-2.29
25	TRP	59	2461	-2.69
26	TRP	69	2471	-3.11
27	TRP	78	2480	-3.51
28	TIS (EIRP)	0	2402	-88.79
29	TIS (EIRP)	9	2411	-87.35
30	TIS (EIRP)	19	2421	-88.4
31	TIS (EIRP)	29	2431	-89.26
32	TIS (EIRP)	39	2441	-90.11



33	TIS (EIRP)	49	2451	-88.89
34	TIS (EIRP)	59	2461	-88.59
35	TIS (EIRP)	69	2471	-90.48
36	TIS (EIRP)	78	2480	-90.79
37	TRP	0	2402	-1.33
38	TRP	9	2411	-1.55
39	TRP	19	2421	-1.8
40	TRP	29	2431	-1.8
41	TRP	39	2441	-2.07
42	TRP	49	2451	-2.26
43	TRP	59	2461	-2.69
44	TRP	69	2471	-3.11
45	TRP	78	2480	-3.48
46	TIS (EIRP)	0	2402	-81.17
47	TIS (EIRP)	9	2411	-81.49
48	TIS (EIRP)	19	2421	-82.07
49	TIS (EIRP)	29	2431	-83.57
50	TIS (EIRP)	39	2441	-84.07
51	TIS (EIRP)	49	2451	-84.13
52	TIS (EIRP)	59	2461	-83.62
53	TIS (EIRP)	69	2471	-85.08
54	TIS (EIRP)	78	2480	-85.21