

NAME	TDJ-151717DE-65F	
MAKE	Tongyu	
FREQUENCY	1559	MHz
H_WIDTH	66.87	Degrees
V_WIDTH	8.08	Degrees
FRONT_TO_BACK	33.12	dB
GAIN	16.5	dBi
ELECTRIC TILT	0	Degrees
POLARIZATION	-45	

HORIZONTAL PATTERN

Angle in degrees	Discrimination from boresight (dB)	Gain (dBi)
0	0.0	16.5
1	0.0	16.5
2	0.0	16.5
3	0.0	16.5
4	0.0	16.5
5	0.1	16.4
6	0.1	16.4
7	0.1	16.4
8	0.1	16.4
9	0.2	16.3
10	0.2	16.3
11	0.3	16.2
12	0.3	16.2
13	0.4	16.1
14	0.4	16.1
15	0.5	16.0
16	0.6	15.9
17	0.6	15.9
18	0.7	15.8
19	0.8	15.7
20	0.9	15.6
21	1.0	15.5
22	1.1	15.4
23	1.2	15.3
24	1.3	15.2
25	1.4	15.1
26	1.6	14.9
27	1.7	14.8
28	1.8	14.7
29	2.0	14.5
30	2.1	14.4
31	2.3	14.2
32	2.4	14.1
33	2.6	13.9
34	2.8	13.7

35	2.9	13.6
36	3.1	13.4
37	3.3	13.2
38	3.5	13.0
39	3.6	12.9
40	3.8	12.7
41	4.0	12.5
42	4.2	12.3
43	4.4	12.1
44	4.6	11.9
45	4.8	11.7
46	5.1	11.4
47	5.3	11.2
48	5.5	11.0
49	5.7	10.8
50	6.0	10.5
51	6.2	10.3
52	6.4	10.1
53	6.7	9.8
54	6.9	9.6
55	7.2	9.3
56	7.4	9.1
57	7.7	8.8
58	8.0	8.5
59	8.2	8.3
60	8.5	8.0
61	8.8	7.7
62	9.1	7.4
63	9.3	7.2
64	9.6	6.9
65	9.9	6.6
66	10.2	6.3
67	10.4	6.1
68	10.7	5.8
69	11.0	5.5
70	11.3	5.2
71	11.6	4.9
72	11.9	4.6
73	12.1	4.4
74	12.4	4.1
75	12.7	3.8
76	13.0	3.5
77	13.3	3.2
78	13.6	2.9
79	13.9	2.6
80	14.3	2.2
81	14.6	1.9

82	15.0	1.5
83	15.3	1.2
84	15.7	0.8
85	16.1	0.4
86	16.5	0.0
87	16.9	-0.4
88	17.3	-0.8
89	17.6	-1.1
90	18.1	-1.6
91	18.5	-2.0
92	18.9	-2.4
93	19.3	-2.8
94	19.7	-3.2
95	20.0	-3.5
96	20.4	-3.9
97	20.8	-4.3
98	21.1	-4.6
99	21.5	-5.0
100	21.9	-5.4
101	22.2	-5.7
102	22.7	-6.2
103	23.2	-6.7
104	23.5	-7.0
105	24.0	-7.5
106	24.5	-8.0
107	24.9	-8.4
108	25.4	-8.9
109	26.0	-9.5
110	26.4	-9.9
111	26.9	-10.4
112	27.4	-10.9
113	27.9	-11.4
114	28.2	-11.7
115	28.5	-12.0
116	28.6	-12.1
117	28.7	-12.2
118	28.7	-12.2
119	28.7	-12.2
120	28.6	-12.1
121	28.5	-12.0
122	28.4	-11.9
123	28.4	-11.9
124	28.3	-11.8
125	28.3	-11.8
126	28.3	-11.8
127	28.3	-11.8
128	28.4	-11.9

129	28.7	-12.2
130	28.8	-12.3
131	29.2	-12.7
132	29.5	-13.0
133	29.9	-13.4
134	30.4	-13.9
135	30.9	-14.4
136	31.5	-15.0
137	32.2	-15.7
138	32.8	-16.3
139	33.5	-17.0
140	34.3	-17.8
141	35.0	-18.5
142	35.5	-19.0
143	35.7	-19.2
144	36.1	-19.6
145	35.9	-19.4
146	35.8	-19.3
147	35.5	-19.0
148	35.2	-18.7
149	34.7	-18.2
150	34.4	-17.9
151	34.1	-17.6
152	33.9	-17.4
153	33.5	-17.0
154	33.3	-16.8
155	33.2	-16.7
156	33.1	-16.6
157	33.2	-16.7
158	33.3	-16.8
159	33.4	-16.9
160	33.6	-17.1
161	33.8	-17.3
162	34.1	-17.6
163	34.5	-18.0
164	34.8	-18.3
165	35.1	-18.6
166	35.6	-19.1
167	36.1	-19.6
168	36.7	-20.2
169	37.2	-20.7
170	37.7	-21.2
171	38.0	-21.5
172	38.4	-21.9
173	38.4	-21.9
174	38.8	-22.3
175	38.7	-22.2

176	38.8	-22.3
177	38.7	-22.2
178	38.3	-21.8
179	38.4	-21.9
180	37.8	-21.3
181	37.7	-21.2
182	37.4	-20.9
183	37.1	-20.6
184	37.1	-20.6
185	37.0	-20.5
186	36.8	-20.3
187	36.8	-20.3
188	36.7	-20.2
189	36.8	-20.3
190	36.7	-20.2
191	36.9	-20.4
192	37.1	-20.6
193	37.3	-20.8
194	37.5	-21.0
195	37.7	-21.2
196	38.3	-21.8
197	38.7	-22.2
198	39.1	-22.6
199	39.9	-23.4
200	40.6	-24.1
201	41.0	-24.5
202	41.9	-25.4
203	42.4	-25.9
204	43.2	-26.7
205	43.1	-26.6
206	43.1	-26.6
207	42.6	-26.1
208	42.0	-25.5
209	41.3	-24.8
210	40.6	-24.1
211	39.7	-23.2
212	39.1	-22.6
213	38.4	-21.9
214	37.7	-21.2
215	36.8	-20.3
216	36.3	-19.8
217	35.7	-19.2
218	35.4	-18.9
219	35.0	-18.5
220	34.7	-18.2
221	34.5	-18.0
222	34.4	-17.9

223	34.2	-17.7
224	34.1	-17.6
225	34.1	-17.6
226	34.2	-17.7
227	34.3	-17.8
228	34.5	-18.0
229	34.8	-18.3
230	35.1	-18.6
231	35.7	-19.2
232	36.3	-19.8
233	37.0	-20.5
234	37.4	-20.9
235	38.0	-21.5
236	38.4	-21.9
237	38.1	-21.6
238	37.8	-21.3
239	37.0	-20.5
240	35.6	-19.1
241	34.5	-18.0
242	33.3	-16.8
243	32.1	-15.6
244	31.1	-14.6
245	30.1	-13.6
246	29.4	-12.9
247	28.5	-12.0
248	27.7	-11.2
249	27.2	-10.7
250	26.6	-10.1
251	26.1	-9.6
252	25.7	-9.2
253	25.4	-8.9
254	25.1	-8.6
255	24.8	-8.3
256	24.6	-8.1
257	24.5	-8.0
258	24.3	-7.8
259	24.2	-7.7
260	24.0	-7.5
261	23.9	-7.4
262	23.7	-7.2
263	23.5	-7.0
264	23.2	-6.7
265	22.9	-6.4
266	22.5	-6.0
267	22.0	-5.5
268	21.5	-5.0
269	20.9	-4.4

270	20.3	-3.8
271	19.7	-3.2
272	19.2	-2.7
273	18.6	-2.1
274	18.0	-1.5
275	17.4	-0.9
276	16.9	-0.4
277	16.4	0.1
278	15.9	0.6
279	15.5	1.0
280	15.0	1.5
281	14.7	1.8
282	14.3	2.2
283	13.9	2.6
284	13.6	2.9
285	13.3	3.2
286	13.0	3.5
287	12.7	3.8
288	12.4	4.1
289	12.1	4.4
290	11.9	4.6
291	11.6	4.9
292	11.3	5.2
293	11.1	5.4
294	10.8	5.7
295	10.6	5.9
296	10.3	6.2
297	10.1	6.4
298	9.8	6.7
299	9.6	6.9
300	9.3	7.2
301	9.0	7.5
302	8.8	7.7
303	8.5	8.0
304	8.3	8.2
305	8.0	8.5
306	7.7	8.8
307	7.5	9.0
308	7.3	9.2
309	7.0	9.5
310	6.8	9.7
311	6.5	10.0
312	6.3	10.2
313	6.1	10.4
314	5.9	10.6
315	5.6	10.9
316	5.4	11.1

317	5.2	11.3
318	5.0	11.5
319	4.8	11.7
320	4.6	11.9
321	4.4	12.1
322	4.2	12.3
323	4.0	12.5
324	3.8	12.7
325	3.7	12.8
326	3.5	13.0
327	3.3	13.2
328	3.1	13.4
329	2.9	13.6
330	2.8	13.7
331	2.6	13.9
332	2.4	14.1
333	2.3	14.2
334	2.1	14.4
335	2.0	14.5
336	1.8	14.7
337	1.7	14.8
338	1.5	15.0
339	1.4	15.1
340	1.3	15.2
341	1.2	15.3
342	1.0	15.5
343	0.9	15.6
344	0.8	15.7
345	0.7	15.8
346	0.6	15.9
347	0.5	16.0
348	0.5	16.0
349	0.4	16.1
350	0.3	16.2
351	0.3	16.2
352	0.2	16.3
353	0.2	16.3
354	0.1	16.4
355	0.1	16.4
356	0.1	16.4
357	0.1	16.5
358	0.0	16.5
359	0.0	16.5
VERTICAL PATTERN		
Angle in degrees	Discrimination from boresight (dB)	Gain (dBd)
0	0	16.5

1	0.27	16.23
2	0.86	15.64
3	1.96	14.55
4	3.48	13.02
5	5.78	10.72
6	8.88	7.62
7	13.82	2.68
8	18.91	-2.41
9	16.65	-0.15
10	12.93	3.57
11	10.93	5.57
12	10.13	6.37
13	10.36	6.14
14	11.23	5.27
15	13.19	3.31
16	16.02	0.48
17	19.39	-2.89
18	19.67	-3.17
19	16.81	-0.31
20	14.56	1.94
21	13.19	3.31
22	12.70	3.80
23	12.99	3.52
24	13.92	2.58
25	15.78	0.72
26	18.40	-1.90
27	22.32	-5.82
28	22.97	-6.47
29	20.36	-3.86
30	17.67	-1.17
31	15.93	0.57
32	14.89	1.61
33	14.58	1.92
34	14.75	1.75
35	15.36	1.14
36	16.30	0.20
37	17.45	-0.95
38	18.25	-1.75
39	18.86	-2.36
40	18.67	-2.17
41	18.05	-1.55
42	17.35	-0.85
43	16.77	-0.27
44	16.50	0.00
45	16.43	0.07
46	16.65	-0.15
47	17.11	-0.61

48	17.85	-1.35
49	18.82	-2.32
50	20.00	-3.50
51	21.52	-5.02
52	23.16	-6.66
53	24.95	-8.45
54	26.16	-9.66
55	27.29	-10.79
56	27.28	-10.78
57	26.78	-10.28
58	26.20	-9.70
59	25.66	-9.16
60	25.51	-9.01
61	25.61	-9.11
62	25.94	-9.44
63	26.54	-10.04
64	27.32	-10.82
65	28.29	-11.79
66	29.45	-12.95
67	30.85	-14.35
68	32.42	-15.92
69	34.16	-17.66
70	35.96	-19.46
71	37.86	-21.36
72	39.32	-22.82
73	41.18	-24.68
74	43.01	-26.51
75	45.10	-28.60
76	47.66	-31.16
77	50.75	-34.25
78	48.69	-32.19
79	45.00	-28.50
80	42.05	-25.55
81	39.93	-23.43
82	38.51	-22.01
83	37.41	-20.91
84	36.56	-20.06
85	36.34	-19.84
86	36.12	-19.62
87	36.51	-20.01
88	37.18	-20.68
89	37.79	-21.29
90	38.75	-22.25
91	39.58	-23.08
92	40.10	-23.60
93	39.87	-23.37
94	39.33	-22.83

95	38.15	-21.65
96	37.06	-20.56
97	36.08	-19.58
98	35.27	-18.77
99	34.68	-18.18
100	34.47	-17.97
101	34.31	-17.81
102	34.45	-17.95
103	34.85	-18.35
104	35.42	-18.92
105	35.92	-19.42
106	37.41	-20.91
107	38.78	-22.28
108	40.86	-24.36
109	42.49	-25.99
110	44.10	-27.60
111	43.92	-27.42
112	43.00	-26.50
113	41.78	-25.28
114	40.80	-24.30
115	40.09	-23.59
116	39.84	-23.34
117	39.75	-23.25
118	39.90	-23.40
119	40.27	-23.77
120	41.15	-24.65
121	42.60	-26.10
122	44.30	-27.80
123	46.63	-30.13
124	49.09	-32.59
125	49.04	-32.54
126	47.38	-30.88
127	44.62	-28.12
128	43.06	-26.56
129	42.49	-25.99
130	41.74	-25.24
131	41.28	-24.78
132	41.23	-24.73
133	41.27	-24.77
134	41.00	-24.50
135	40.91	-24.41
136	40.78	-24.28
137	41.47	-24.97
138	42.76	-26.26
139	44.61	-28.11
140	49.53	-33.03
141	55.78	-39.28

142	56.47	-39.97
143	48.33	-31.83
144	44.34	-27.84
145	42.27	-25.77
146	42.14	-25.64
147	42.99	-26.49
148	44.72	-28.22
149	46.61	-30.11
150	45.57	-29.07
151	43.89	-27.39
152	40.66	-24.16
153	38.20	-21.70
154	36.44	-19.94
155	35.13	-18.63
156	34.21	-17.71
157	33.95	-17.45
158	34.27	-17.77
159	35.36	-18.86
160	37.00	-20.50
161	38.52	-22.02
162	46.97	-30.47
163	65.12	-48.62
164	45.91	-29.41
165	41.81	-25.31
166	40.46	-23.96
167	40.64	-24.14
168	42.38	-25.88
169	46.61	-30.11
170	51.58	-35.08
171	49.11	-32.61
172	44.78	-28.28
173	41.09	-24.59
174	38.64	-22.14
175	36.44	-19.94
176	35.08	-18.58
177	33.83	-17.33
178	33.06	-16.56
179	32.53	-16.03
180	32.12	-15.62
181	31.49	-14.99
182	31.23	-14.73
183	31.37	-14.87
184	31.77	-15.27
185	32.27	-15.77
186	33.25	-16.75
187	34.54	-18.04
188	36.21	-19.71

189	38.38	-21.88
190	41.26	-24.76
191	45.05	-28.55
192	50.03	-33.53
193	54.34	-37.84
194	53.40	-36.90
195	49.14	-32.64
196	45.84	-29.34
197	42.94	-26.44
198	40.97	-24.47
199	40.05	-23.55
200	39.85	-23.35
201	40.86	-24.36
202	42.84	-26.34
203	45.45	-28.95
204	47.56	-31.06
205	47.71	-31.21
206	47.42	-30.92
207	47.56	-31.06
208	47.06	-30.56
209	45.58	-29.08
210	44.02	-27.52
211	43.45	-26.95
212	43.21	-26.71
213	43.21	-26.71
214	42.86	-26.36
215	42.46	-25.96
216	41.63	-25.13
217	41.01	-24.51
218	41.02	-24.52
219	41.39	-24.89
220	41.78	-25.28
221	42.14	-25.64
222	42.84	-26.34
223	43.80	-27.30
224	45.14	-28.64
225	46.11	-29.61
226	47.33	-30.83
227	47.99	-31.49
228	47.54	-31.04
229	46.17	-29.67
230	44.69	-28.19
231	44.25	-27.75
232	42.89	-26.39
233	42.36	-25.86
234	42.14	-25.64
235	41.54	-25.04

236	41.62	-25.12
237	41.66	-25.16
238	41.38	-24.88
239	41.32	-24.82
240	40.61	-24.11
241	40.35	-23.85
242	39.81	-23.31
243	39.15	-22.65
244	38.22	-21.72
245	37.47	-20.97
246	36.93	-20.43
247	36.41	-19.91
248	36.01	-19.51
249	35.85	-19.35
250	35.69	-19.19
251	35.67	-19.17
252	35.97	-19.47
253	36.17	-19.67
254	36.54	-20.04
255	36.87	-20.37
256	37.21	-20.71
257	37.67	-21.17
258	37.93	-21.43
259	38.28	-21.78
260	38.62	-22.12
261	38.77	-22.27
262	38.73	-22.23
263	38.72	-22.22
264	38.46	-21.96
265	38.25	-21.75
266	37.41	-20.91
267	36.80	-20.30
268	35.94	-19.44
269	35.24	-18.74
270	34.59	-18.09
271	33.70	-17.20
272	33.19	-16.69
273	32.58	-16.08
274	32.08	-15.58
275	31.66	-15.16
276	31.34	-14.84
277	30.91	-14.41
278	30.72	-14.22
279	30.38	-13.88
280	30.18	-13.68
281	29.86	-13.36
282	29.52	-13.02

283	29.27	-12.77
284	29.06	-12.56
285	28.58	-12.08
286	28.31	-11.81
287	28.00	-11.50
288	27.80	-11.30
289	27.67	-11.17
290	27.72	-11.22
291	27.91	-11.41
292	28.20	-11.70
293	28.67	-12.17
294	29.83	-13.33
295	31.21	-14.71
296	33.49	-16.99
297	37.18	-20.68
298	45.19	-28.69
299	44.27	-27.77
300	35.07	-18.57
301	30.57	-14.07
302	27.31	-10.81
303	24.99	-8.49
304	23.31	-6.81
305	21.99	-5.49
306	21.01	-4.51
307	20.37	-3.87
308	20.02	-3.52
309	19.97	-3.47
310	20.19	-3.69
311	20.64	-4.14
312	21.23	-4.73
313	21.68	-5.18
314	21.61	-5.11
315	20.98	-4.48
316	20.05	-3.55
317	18.92	-2.42
318	17.95	-1.45
319	17.35	-0.85
320	17.01	-0.51
321	17.02	-0.52
322	17.41	-0.91
323	18.22	-1.72
324	19.51	-3.01
325	21.33	-4.83
326	23.76	-7.26
327	26.13	-9.63
328	26.20	-9.70
329	24.05	-7.55

330	22.28	-5.78
331	20.75	-4.25
332	19.90	-3.40
333	19.73	-3.23
334	19.94	-3.44
335	20.72	-4.22
336	21.95	-5.45
337	23.76	-7.26
338	26.12	-9.62
339	28.47	-11.97
340	29.69	-13.19
341	28.55	-12.05
342	26.55	-10.05
343	25.19	-8.69
344	24.42	-7.92
345	24.55	-8.05
346	25.90	-9.40
347	29.42	-12.92
348	40.41	-23.91
349	27.36	-10.86
350	19.67	-3.17
351	14.65	1.85
352	11.06	5.44
353	8.11	8.39
354	5.80	10.70
355	3.87	12.63
356	2.43	14.07
357	1.29	15.22
358	0.54	15.96
359	0.10	16.40