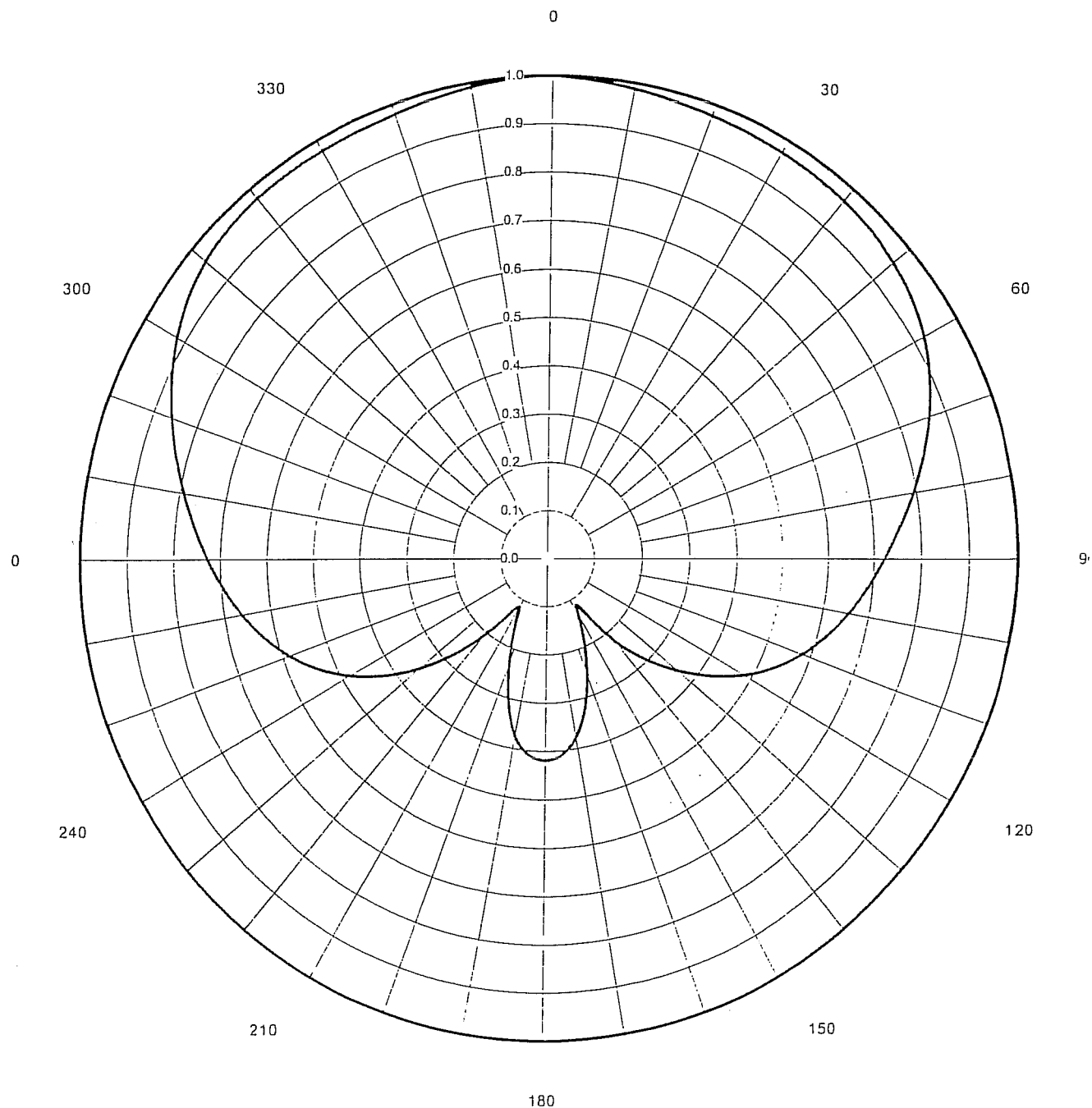


AZIMUTH PATTERN

Gain 1.90 (2.79 dB)
Calculated / Measured Calculated

Frequency 527.00 MHz
Drawing # M



AZIMUTH RELATIVE FIELD PATTERN

STATION WFBT-CA
CHICAGO, ILLINOIS
CH 23 47.5 KW (MAX-DA)
du Treil, Lundin & Rackley, Inc. Sarasota, Florida

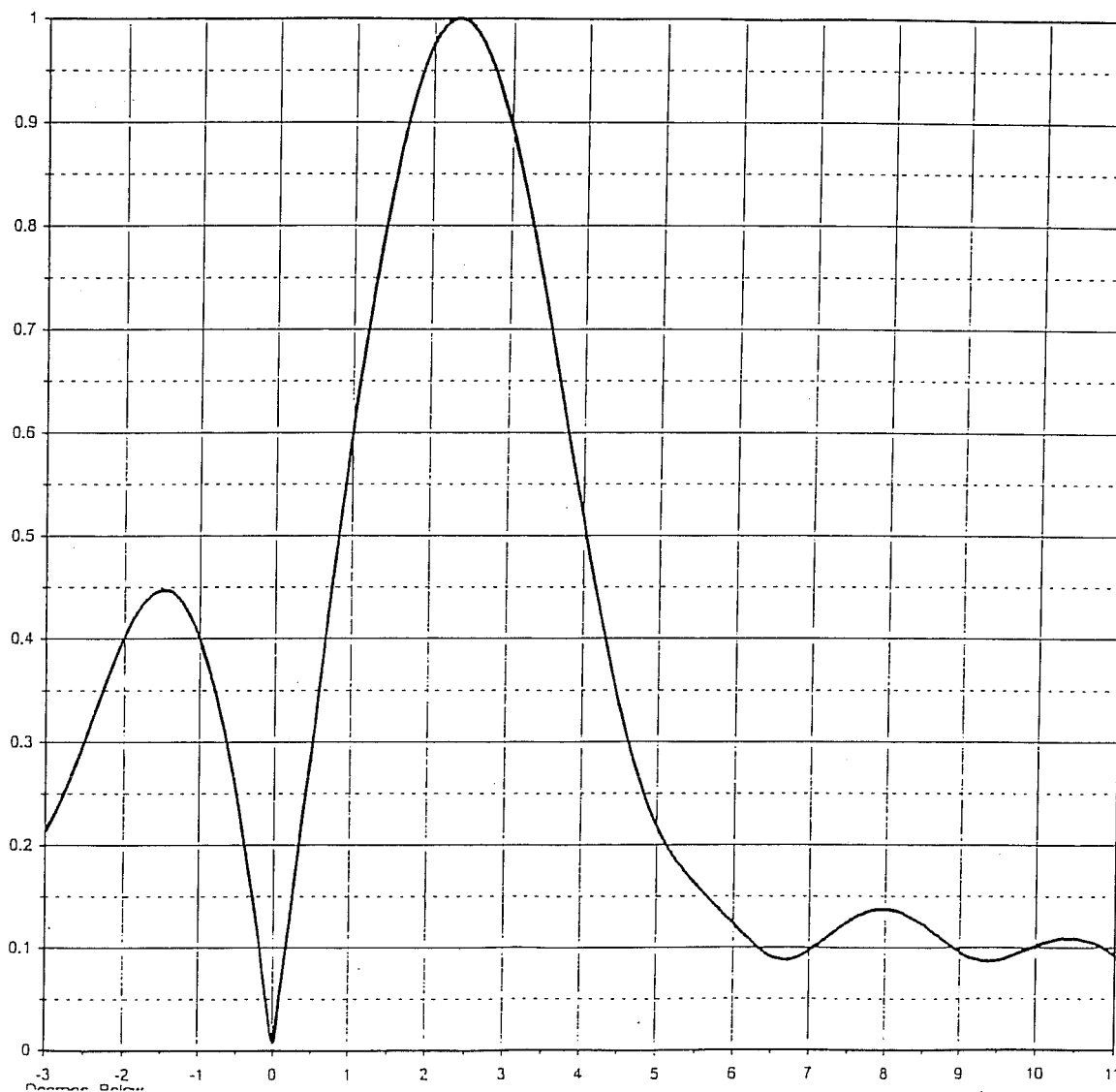
Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
0	1.000	45	0.964	90	0.722	135	0.297	180	0.419	225	0.279	270	0.727	315	0.971				
1	0.999	46	0.963	91	0.715	136	0.283	181	0.419	226	0.294	271	0.734	316	0.972				
2	0.998	47	0.961	92	0.709	137	0.269	182	0.418	227	0.309	272	0.740	317	0.973				
3	0.997	48	0.960	93	0.702	138	0.255	183	0.416	228	0.324	273	0.746	318	0.974				
4	0.995	49	0.958	94	0.695	139	0.239	184	0.413	229	0.338	274	0.752	319	0.975				
5	0.994	50	0.956	95	0.689	140	0.223	185	0.409	230	0.352	275	0.759	320	0.975				
6	0.993	51	0.954	96	0.682	141	0.206	186	0.405	231	0.366	276	0.765	321	0.976				
7	0.991	52	0.951	97	0.675	142	0.187	187	0.399	232	0.380	277	0.772	322	0.976				
8	0.990	53	0.948	98	0.669	143	0.166	188	0.392	233	0.394	278	0.778	323	0.976				
9	0.989	54	0.945	99	0.662	144	0.146	189	0.383	234	0.408	279	0.785	324	0.976				
10	0.988	55	0.942	100	0.655	145	0.129	190	0.374	235	0.421	280	0.791	325	0.976				
11	0.986	56	0.939	101	0.648	146	0.118	191	0.363	236	0.434	281	0.798	326	0.976				
12	0.985	57	0.935	102	0.641	147	0.115	192	0.351	237	0.447	282	0.805	327	0.976				
13	0.984	58	0.931	103	0.634	148	0.117	193	0.337	238	0.459	283	0.812	328	0.976				
14	0.983	59	0.926	104	0.626	149	0.124	194	0.323	239	0.471	284	0.819	329	0.976				
15	0.981	60	0.922	105	0.619	150	0.132	195	0.309	240	0.483	285	0.825	330	0.975				
16	0.980	61	0.917	106	0.611	151	0.142	196	0.294	241	0.495	286	0.832	331	0.975				
17	0.979	62	0.912	107	0.604	152	0.152	197	0.278	242	0.506	287	0.839	332	0.975				
18	0.978	63	0.906	108	0.596	153	0.163	198	0.263	243	0.517	288	0.846	333	0.975				
19	0.977	64	0.901	109	0.588	154	0.174	199	0.248	244	0.528	289	0.853	334	0.976				
20	0.976	65	0.895	110	0.579	155	0.186	200	0.232	245	0.538	290	0.859	335	0.976				
21	0.975	66	0.889	111	0.571	156	0.199	201	0.218	246	0.548	291	0.866	336	0.976				
22	0.975	67	0.883	112	0.562	157	0.212	202	0.204	247	0.558	292	0.872	337	0.977				
23	0.974	68	0.877	113	0.553	158	0.225	203	0.190	248	0.568	293	0.879	338	0.977				
24	0.973	69	0.870	114	0.544	159	0.239	204	0.177	249	0.577	294	0.885	339	0.978				
25	0.973	70	0.864	115	0.534	160	0.253	205	0.165	250	0.586	295	0.891	340	0.979				
26	0.972	71	0.857	116	0.524	161	0.267	206	0.153	251	0.594	296	0.897	341	0.980				
27	0.972	72	0.850	117	0.514	162	0.280	207	0.142	252	0.603	297	0.903	342	0.981				
28	0.972	73	0.843	118	0.504	163	0.294	208	0.132	253	0.611	298	0.909	343	0.982				
29	0.971	74	0.836	119	0.493	164	0.307	209	0.123	254	0.619	299	0.915	344	0.983				
30	0.971	75	0.829	120	0.482	165	0.320	210	0.118	255	0.627	300	0.920	345	0.984				
31	0.971	76	0.822	121	0.471	166	0.333	211	0.117	256	0.634	301	0.925	346	0.986				
32	0.971	77	0.815	122	0.459	167	0.345	212	0.118	257	0.642	302	0.930	347	0.987				
33	0.971	78	0.807	123	0.448	168	0.356	213	0.123	258	0.649	303	0.935	348	0.988				
34	0.971	79	0.800	124	0.436	169	0.366	214	0.130	259	0.656	304	0.939	349	0.990				
35	0.970	80	0.793	125	0.424	170	0.376	215	0.139	260	0.663	305	0.944	350	0.991				
36	0.970	81	0.785	126	0.412	171	0.384	216	0.149	261	0.670	306	0.948	351	0.992				
37	0.970	82	0.778	127	0.399	172	0.392	217	0.161	262	0.676	307	0.952	352	0.994				
38	0.969	83	0.771	128	0.387	173	0.398	218	0.175	263	0.683	308	0.955	353	0.995				
39	0.969	84	0.764	129	0.374	174	0.404	219	0.189	264	0.690	309	0.958	354	0.996				
40	0.968	85	0.757	130	0.361	175	0.408	220	0.204	265	0.696	310	0.961	355	0.998				
41	0.968	86	0.750	131	0.349	176	0.412	221	0.219	266	0.702	311	0.964	356	0.999				
42	0.967	87	0.743	132	0.336	177	0.415	222	0.234	267	0.709	312	0.966	357	0.999				
43	0.966	88	0.736	133	0.323	178	0.417	223	0.249	268	0.715	313	0.968	358	1.000				
44	0.965	89	0.729	134	0.310	179	0.418	224	0.264	269	0.721	314	0.970	359	1.000				

AZIMUTH RELATIVE FIELD TABULATION

STATION WFBT-CA
CHICAGO, ILLINOIS
CH 23 47.5 KW (MAX-DA)

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

RMS Gain at Main Lobe	19.00 (12.79 dB)	Beam Tilt	2.30 deg
RMS Gain at Horizontal		Frequency	527.00 MHz
Calculated / Measured	Calculated	Drawing #	22Z19023



ELEVATION RELATIVE FIELD PATTERN

STATION WFBT-CA
CHICAGO, ILLINOIS
CH 23 47.5 KW (MAX-DA)

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.200	2.4	0.998	10.6	0.109	30.5	0.061	51.0	0.065	71.5	0.039
-9.5	0.215	2.6	0.980	10.8	0.105	31.0	0.080	51.5	0.055	72.0	0.042
-9.0	0.211	2.8	0.945	11.0	0.097	31.5	0.093	52.0	0.050	72.5	0.045
-8.5	0.191	3.0	0.894	11.5	0.064	32.0	0.097	52.5	0.050	73.0	0.048
-8.0	0.169	3.2	0.830	12.0	0.026	32.5	0.090	53.0	0.053	73.5	0.051
-7.5	0.162	3.4	0.757	12.5	0.039	33.0	0.075	53.5	0.058	74.0	0.053
-7.0	0.170	3.6	0.678	13.0	0.064	33.5	0.055	54.0	0.064	74.5	0.054
-6.5	0.177	3.8	0.595	13.5	0.070	34.0	0.036	54.5	0.071	75.0	0.054
-6.0	0.183	4.0	0.514	14.0	0.056	34.5	0.026	55.0	0.078	75.5	0.054
-5.5	0.197	4.2	0.436	14.5	0.035	35.0	0.024	55.5	0.083	76.0	0.052
-5.0	0.221	4.4	0.365	15.0	0.034	35.5	0.021	56.0	0.088	76.5	0.050
-4.5	0.236	4.6	0.304	15.5	0.048	36.0	0.015	56.5	0.090	77.0	0.048
-4.0	0.224	4.8	0.255	16.0	0.052	36.5	0.018	57.0	0.089	77.5	0.045
-3.5	0.195	5.0	0.217	16.5	0.041	37.0	0.031	57.5	0.086	78.0	0.041
-3.0	0.213	5.2	0.189	17.0	0.020	37.5	0.046	58.0	0.080	78.5	0.038
-2.8	0.243	5.4	0.169	17.5	0.017	38.0	0.055	58.5	0.074	79.0	0.034
-2.6	0.282	5.6	0.153	18.0	0.035	38.5	0.057	59.0	0.068	79.5	0.030
-2.4	0.325	5.8	0.138	18.5	0.045	39.0	0.052	59.5	0.062	80.0	0.027
-2.2	0.367	6.0	0.123	19.0	0.045	39.5	0.043	60.0	0.059	80.5	0.023
-2.0	0.403	6.2	0.108	19.5	0.040	40.0	0.034	60.5	0.057	81.0	0.020
-1.8	0.430	6.4	0.095	20.0	0.040	40.5	0.032	61.0	0.057	81.5	0.017
-1.6	0.445	6.6	0.089	20.5	0.046	41.0	0.036	61.5	0.057	82.0	0.014
-1.4	0.446	6.8	0.090	21.0	0.049	41.5	0.041	62.0	0.057	82.5	0.011
-1.2	0.430	7.0	0.098	21.5	0.044	42.0	0.040	62.5	0.056	83.0	0.009
-1.0	0.398	7.2	0.109	22.0	0.033	42.5	0.035	63.0	0.056	83.5	0.007
-0.8	0.348	7.4	0.121	22.5	0.021	43.0	0.026	63.5	0.055	84.0	0.005
-0.6	0.281	7.6	0.130	23.0	0.019	43.5	0.015	64.0	0.055	84.5	0.004
-0.4	0.198	7.8	0.136	23.5	0.022	44.0	0.008	64.5	0.055	85.0	0.003
-0.2	0.102	8.0	0.137	24.0	0.019	44.5	0.011	65.0	0.056	85.5	0.002
0.0	0.008	8.2	0.134	24.5	0.008	45.0	0.016	65.5	0.057	86.0	0.001
0.2	0.123	8.4	0.126	25.0	0.010	45.5	0.023	66.0	0.058	86.5	0.001
0.4	0.245	8.6	0.116	25.5	0.026	46.0	0.033	66.5	0.058	87.0	0.000
0.6	0.368	8.8	0.105	26.0	0.038	46.5	0.047	67.0	0.058	87.5	0.000
0.8	0.488	9.0	0.095	26.5	0.042	47.0	0.063	67.5	0.056	88.0	0.000
1.0	0.603	9.2	0.089	27.0	0.040	47.5	0.078	68.0	0.053	88.5	0.000
1.2	0.708	9.4	0.087	27.5	0.033	48.0	0.091	68.5	0.050	89.0	0.000
1.4	0.800	9.6	0.090	28.0	0.027	48.5	0.098	69.0	0.046	89.5	0.000
1.6	0.877	9.8	0.093	28.5	0.025	49.0	0.100	69.5	0.042	90.0	0.000
1.8	0.936	10.0	0.099	29.0	0.026	49.5	0.096	70.0	0.039		
2.0	0.977	10.2	0.105	29.5	0.031	50.0	0.087	70.5	0.037		
2.2	0.997	10.4	0.109	30.0	0.043	50.5	0.076	71.0	0.037		

ELEVATION RELATIVE FIELD TABULATION

STATION WFBT-CA
CHICAGO, ILLINOIS
CH 23 47.5 KW (MAX-DA)

du Treil, Lundin & Rackley, Inc. Sarasota, Florida