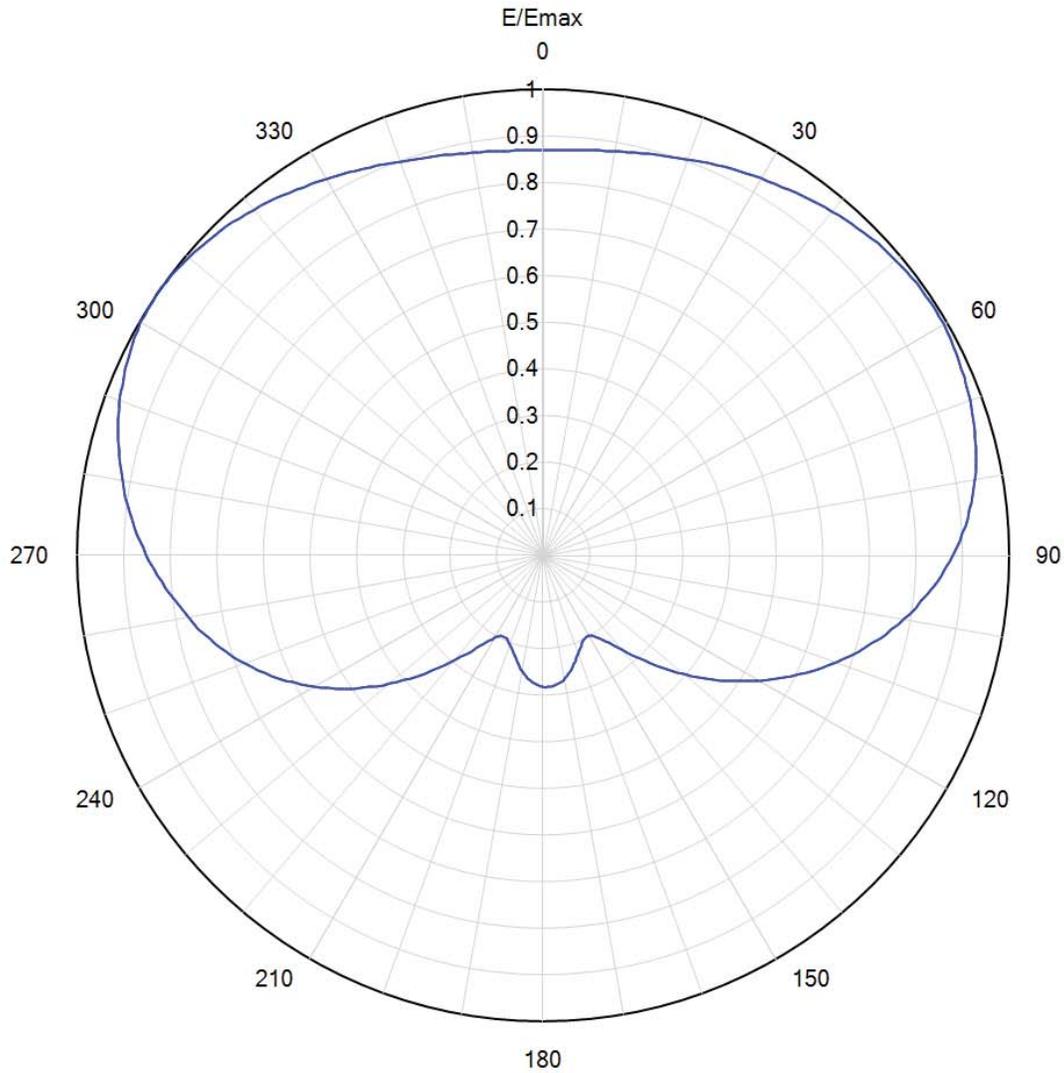




### Azimuth Pattern



Model:	SBB-E-8C170	Polarization:	<u>Horizontal</u>
Location:	Palm Springs, CA.	Frequency:	521.00 MHz
Customer:	News-Press & Gazette Broadcasting	Directivity:	1.8 (2.51 dB)
Date:	April 4, 2018	Elevation Angle:	1.00 degrees
Rotation Angle:	0 degrees	Horizontal Unit Pattern:	
Note: Pattern Tolerance +/-5% of Emax		File =	SBB-C170-509.pat



Model: **SBB-E-8C170**  
Location: **Palm Springs, CA.**  
Customer: **News-Press & Gazette**  
Date: **April 4, 2018**

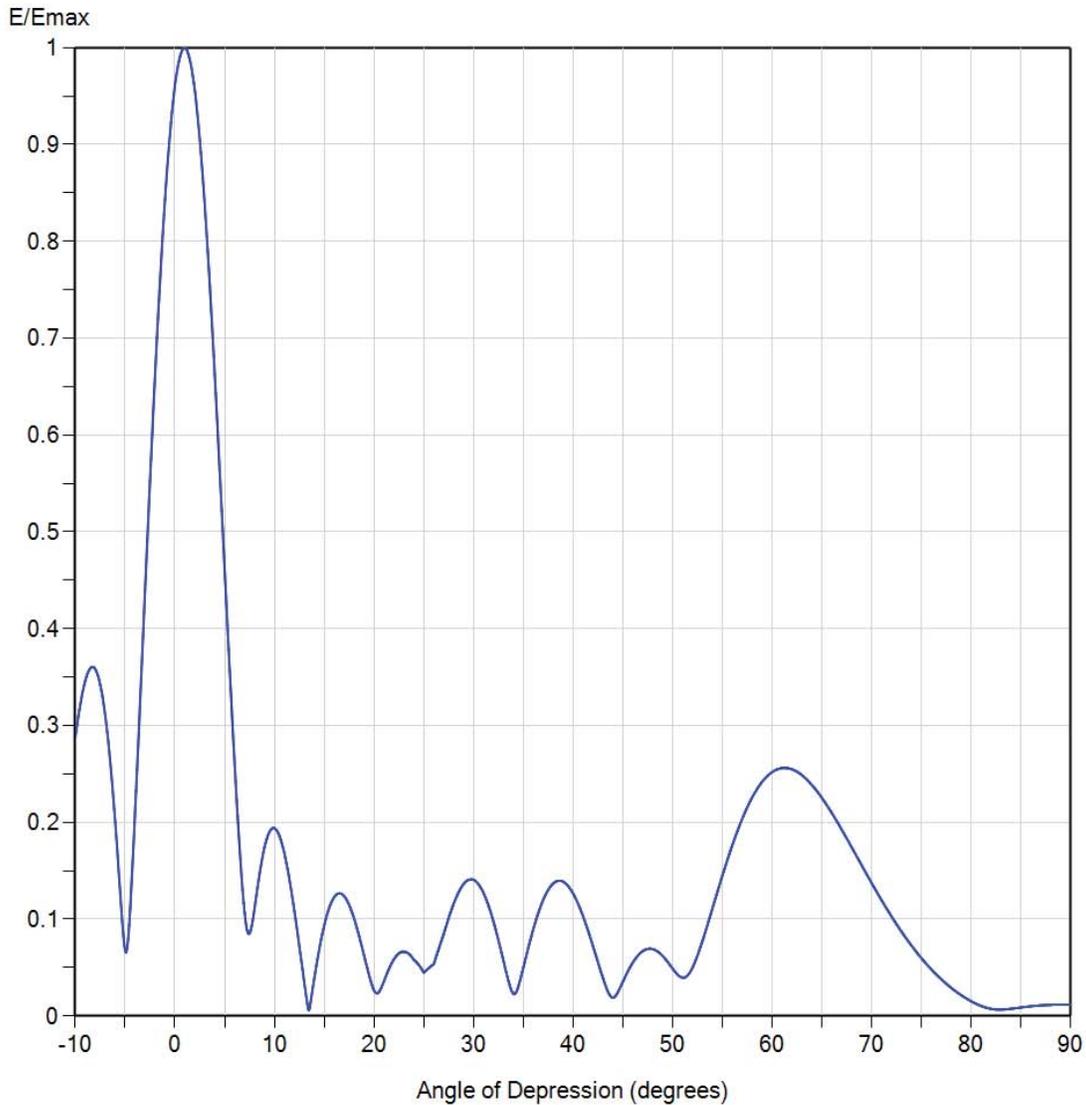
Polarization: **Horizontal**  
Frequency (MHz): **521.00**  
Directivity: **1.8 (2.51 dB)**  
Elevation Angle: **1.00 degrees**  
Rotation Angle: **0 degrees**

**TABULATED AZIMUTH PATTERN**

Angl	Field														
0	0.869	45	0.977	90	0.880	135	0.327	180	0.283	225	0.359	270	0.851	315	0.982
1	0.869	46	0.980	91	0.872	136	0.314	181	0.282	226	0.373	271	0.858	316	0.979
2	0.870	47	0.982	92	0.864	137	0.301	182	0.281	227	0.387	272	0.865	317	0.976
3	0.870	48	0.984	93	0.855	138	0.289	183	0.279	228	0.401	273	0.872	318	0.974
4	0.871	49	0.986	94	0.846	139	0.277	184	0.276	229	0.415	274	0.879	319	0.971
5	0.872	50	0.987	95	0.837	140	0.266	185	0.273	230	0.429	275	0.886	320	0.967
6	0.873	51	0.988	96	0.827	141	0.255	186	0.270	231	0.443	276	0.892	321	0.964
7	0.875	52	0.990	97	0.817	142	0.245	187	0.266	232	0.457	277	0.899	322	0.961
8	0.876	53	0.990	98	0.807	143	0.236	188	0.262	233	0.471	278	0.905	323	0.957
9	0.878	54	0.991	99	0.797	144	0.228	189	0.258	234	0.485	279	0.911	324	0.954
10	0.880	55	0.992	100	0.787	145	0.221	190	0.253	235	0.499	280	0.916	325	0.950
11	0.882	56	0.992	101	0.776	146	0.214	191	0.249	236	0.512	281	0.922	326	0.946
12	0.884	57	0.992	102	0.765	147	0.209	192	0.244	237	0.526	282	0.928	327	0.942
13	0.886	58	0.992	103	0.754	148	0.205	193	0.239	238	0.539	283	0.933	328	0.939
14	0.889	59	0.992	104	0.743	149	0.201	194	0.234	239	0.552	284	0.938	329	0.935
15	0.891	60	0.991	105	0.731	150	0.199	195	0.229	240	0.565	285	0.944	330	0.931
16	0.893	61	0.990	106	0.719	151	0.198	196	0.224	241	0.577	286	0.949	331	0.928
17	0.896	62	0.989	107	0.707	152	0.198	197	0.219	242	0.589	287	0.954	332	0.925
18	0.898	63	0.988	108	0.695	153	0.199	198	0.214	243	0.601	288	0.958	333	0.921
19	0.901	64	0.987	109	0.682	154	0.201	199	0.210	244	0.613	289	0.963	334	0.918
20	0.904	65	0.985	110	0.670	155	0.203	200	0.206	245	0.625	290	0.967	335	0.915
21	0.907	66	0.983	111	0.657	156	0.206	201	0.202	246	0.636	291	0.970	336	0.912
22	0.910	67	0.981	112	0.645	157	0.210	202	0.199	247	0.647	292	0.974	337	0.908
23	0.913	68	0.979	113	0.632	158	0.214	203	0.197	248	0.659	293	0.978	338	0.905
24	0.916	69	0.977	114	0.619	159	0.218	204	0.195	249	0.669	294	0.981	339	0.902
25	0.920	70	0.975	115	0.606	160	0.223	205	0.194	250	0.680	295	0.985	340	0.899
26	0.923	71	0.972	116	0.592	161	0.228	206	0.194	251	0.691	296	0.988	341	0.896
27	0.926	72	0.969	117	0.579	162	0.233	207	0.195	252	0.701	297	0.991	342	0.894
28	0.929	73	0.967	118	0.566	163	0.238	208	0.197	253	0.711	298	0.994	343	0.891
29	0.932	74	0.964	119	0.552	164	0.243	209	0.200	254	0.721	299	0.996	344	0.889
30	0.934	75	0.961	120	0.539	165	0.248	210	0.204	255	0.730	300	0.997	345	0.886
31	0.937	76	0.957	121	0.525	166	0.252	211	0.209	256	0.739	301	0.998	346	0.884
32	0.940	77	0.954	122	0.511	167	0.257	212	0.216	257	0.748	302	0.999	347	0.882
33	0.942	78	0.950	123	0.497	168	0.261	213	0.223	258	0.756	303	1.000	348	0.880
34	0.945	79	0.946	124	0.483	169	0.265	214	0.231	259	0.765	304	1.000	349	0.879
35	0.948	80	0.941	125	0.469	170	0.269	215	0.239	260	0.773	305	1.000	350	0.877
36	0.951	81	0.936	126	0.455	171	0.272	216	0.249	261	0.781	306	0.999	351	0.876
37	0.954	82	0.931	127	0.441	172	0.275	217	0.259	262	0.789	307	0.998	352	0.874
38	0.958	83	0.926	128	0.426	173	0.278	218	0.270	263	0.797	308	0.997	353	0.873
39	0.961	84	0.920	129	0.412	174	0.280	219	0.281	264	0.805	309	0.995	354	0.872
40	0.964	85	0.914	130	0.397	175	0.281	220	0.294	265	0.813	310	0.993	355	0.871
41	0.966	86	0.908	131	0.383	176	0.283	221	0.306	266	0.821	311	0.991	356	0.870
42	0.969	87	0.901	132	0.369	177	0.283	222	0.319	267	0.829	312	0.989	357	0.869
43	0.972	88	0.895	133	0.355	178	0.284	223	0.332	268	0.836	313	0.987	358	0.869
44	0.975	89	0.887	134	0.341	179	0.284	224	0.346	269	0.844	314	0.984	359	0.869



### Elevation Pattern



Model:	SBB-E-8C170	Frequency:	521.00 MHz
Polarization:	<u>Horizontal</u>	Directivity (Main Lobe):	9.3 (9.69 dBd)
Location:	Palm Springs, CA.	Directivity (At Horizon):	8.6 (9.34 dBd)
Customer:	News-Press & Gazette Broadcasting	Beam Tilt:	1.00 degrees
Date:	April 4, 2018	Azimuth Angle:	304 degrees



Model: **SBB-E-8C170**  
 Location: **Palm Springs, CA.**  
 Customer: **News-Press & Gazette**  
 Date: **April 4, 2018**

Polarization: **Horizontal**  
 Frequency (MHz): **521.00**  
 Directivity (Main Lobe): **9.3 (9.69 dB)**  
 Directivity (At Horizon): **8.6 (9.34 dB)**  
 Beam Tilt: **1.00 degrees**

**TABULATED ELEVATION PATTERN**

Angle	Field										
-10.0	0.288	2.4	0.916	10.6	0.183	30.5	0.136	51.0	0.039	71.5	0.111
-9.5	0.322	2.6	0.892	10.8	0.176	31.0	0.127	51.5	0.042	72.0	0.103
-9.0	0.347	2.8	0.865	11.0	0.168	31.5	0.114	52.0	0.050	72.5	0.095
-8.5	0.359	3.0	0.837	11.5	0.141	32.0	0.098	52.5	0.063	73.0	0.087
-8.0	0.358	3.2	0.805	12.0	0.108	32.5	0.078	53.0	0.078	73.5	0.080
-7.5	0.342	3.4	0.772	12.5	0.072	33.0	0.057	53.5	0.094	74.0	0.073
-7.0	0.310	3.6	0.737	13.0	0.034	33.5	0.036	54.0	0.111	74.5	0.066
-6.5	0.262	3.8	0.701	13.5	0.007	34.0	0.023	54.5	0.128	75.0	0.060
-6.0	0.200	4.0	0.663	14.0	0.039	34.5	0.031	55.0	0.145	75.5	0.054
-5.5	0.127	4.2	0.623	14.5	0.069	35.0	0.050	55.5	0.161	76.0	0.048
-5.0	0.068	4.4	0.583	15.0	0.094	35.5	0.071	56.0	0.177	76.5	0.043
-4.5	0.110	4.6	0.543	15.5	0.112	36.0	0.090	56.5	0.191	77.0	0.038
-4.0	0.211	4.8	0.501	16.0	0.123	36.5	0.106	57.0	0.204	77.5	0.033
-3.5	0.323	5.0	0.460	16.5	0.127	37.0	0.120	57.5	0.216	78.0	0.029
-3.0	0.439	5.2	0.419	17.0	0.124	37.5	0.130	58.0	0.226	78.5	0.025
-2.8	0.485	5.4	0.378	17.5	0.115	38.0	0.137	58.5	0.235	79.0	0.021
-2.6	0.531	5.6	0.338	18.0	0.101	38.5	0.140	59.0	0.242	79.5	0.018
-2.4	0.575	5.8	0.298	18.5	0.083	39.0	0.139	59.5	0.248	80.0	0.015
-2.2	0.619	6.0	0.260	19.0	0.062	39.5	0.134	60.0	0.252	80.5	0.013
-2.0	0.661	6.2	0.223	19.5	0.042	40.0	0.127	60.5	0.255	81.0	0.010
-1.8	0.701	6.4	0.189	20.0	0.026	40.5	0.116	61.0	0.256	81.5	0.009
-1.6	0.740	6.6	0.157	20.5	0.025	41.0	0.103	61.5	0.256	82.0	0.007
-1.4	0.776	6.8	0.129	21.0	0.036	41.5	0.088	62.0	0.255	82.5	0.007
-1.2	0.811	7.0	0.106	21.5	0.049	42.0	0.072	62.5	0.252	83.0	0.007
-1.0	0.843	7.2	0.091	22.0	0.059	42.5	0.055	63.0	0.249	83.5	0.007
-0.8	0.872	7.4	0.085	22.5	0.065	43.0	0.039	63.5	0.244	84.0	0.007
-0.6	0.899	7.6	0.088	23.0	0.066	43.5	0.025	64.0	0.238	84.5	0.008
-0.4	0.000	7.8	0.098	23.5	0.064	44.0	0.019	64.5	0.232	85.0	0.009
-0.2	0.000	8.0	0.111	24.0	0.058	44.5	0.025	65.0	0.225	85.5	0.009
0.0	0.961	8.2	0.126	24.5	0.053	45.0	0.035	65.5	0.217	86.0	0.010
0.2	0.975	8.4	0.140	25.0	0.045	45.5	0.046	66.0	0.209	86.5	0.011
0.4	0.986	8.6	0.153	25.5	0.049	46.0	0.055	66.5	0.201	87.0	0.011
0.6	0.000	8.8	0.165	26.0	0.054	46.5	0.062	67.0	0.192	87.5	0.011
0.8	0.999	9.0	0.174	26.5	0.069	47.0	0.067	67.5	0.183	88.0	0.012
1.0	1.000	9.2	0.182	27.0	0.085	47.5	0.069	68.0	0.174	88.5	0.012
1.2	0.997	9.4	0.188	27.5	0.101	48.0	0.069	68.5	0.165	89.0	0.012
1.4	0.991	9.6	0.192	28.0	0.116	48.5	0.066	69.0	0.155	89.5	0.012
1.6	0.982	9.8	0.194	28.5	0.128	49.0	0.062	69.5	0.146	90.0	0.000
1.8	0.971	10.0	0.194	29.0	0.136	49.5	0.056	70.0	0.137		
2.0	0.956	10.2	0.192	29.5	0.141	50.0	0.049	70.5	0.128		
2.2	0.937	10.4	0.188	30.0	0.141	50.5	0.043	71.0	0.119		