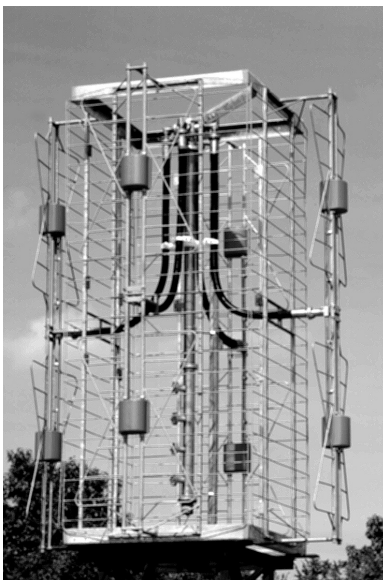




VHF

Dielectric has a full portfolio of VHF arrays in both top- and side-mounted versions. These arrays consist of horizontal, elliptical, and full circularly polarized options:

- THV series pylon array
- TH and DCBR series panel arrays
- TLS-V side-mount array
- The new DCR-Q ring-style array



Shown with standard feed point radomes.

TH SERIES - DELTAWING

Dielectric's TH Series Deltawing VHF TV Antennas feature a rugged, field-proven design for worry-free long life. They offer the flexibility of side mounting on existing towers, and provide unlimited pattern control for directional applications.

The TH Deltawing uses a pair of batwing shaped radiating elements in a panel configuration designed for minimum weight and windloading. The design optimizes impedance and radiation performance, and allows for wrap-around mounting to existing structures, or installation on custom-designed support splines. Typically used in one- to six-around configurations, the azimuth pattern characteristics are unlimited.

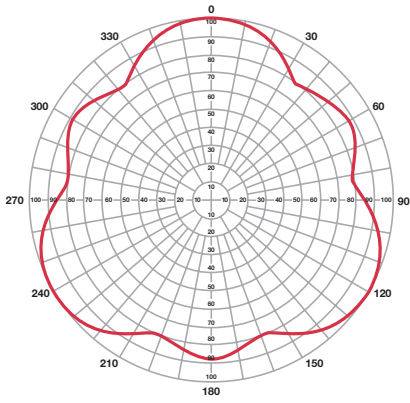
In addition, the impedance bandwidth of the Deltawing element allows for the combining or multiplexing of multiple frequencies into a common array.

The Deltawing antenna is designed and constructed to operate in severe environments. Radiating elements and ground screens are fabricated of structural steel and are hot-dip galvanized. Feed point radomes are standard and protect the feed point area from ice buildup to minimize VSWR degradation during icing conditions. For severe icing conditions, full slot radomes are available.

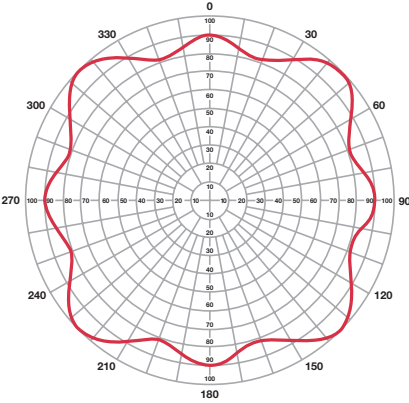
- Field-proven design for superior reliability
- Excellent horizontal pattern control capabilities
- High input power capability
- Wide impedance bandwidth for multiplex operation
- Rugged corrosion-resistant radiator with simple feed
- Branch feed—ideal for analog or digital transmission
- Available in 1- to 12-bay arrays

Contact factory for mechanical specifications.

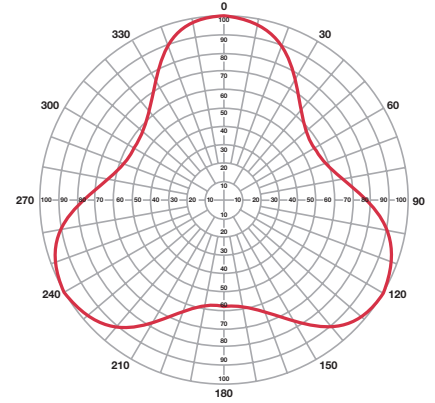
TH SERIES - DELTAWING



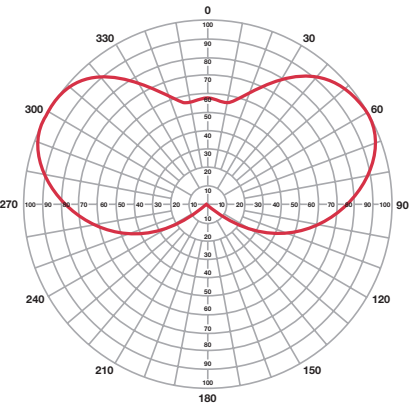
THB-03 DIRECTIVITY = 1.3



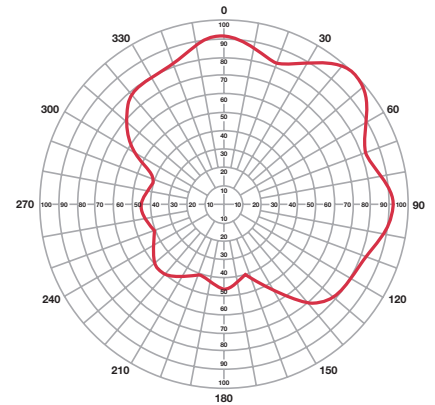
THA-04 DIRECTIVITY = 1.3



THA-T160 DIRECTIVITY = 1.6

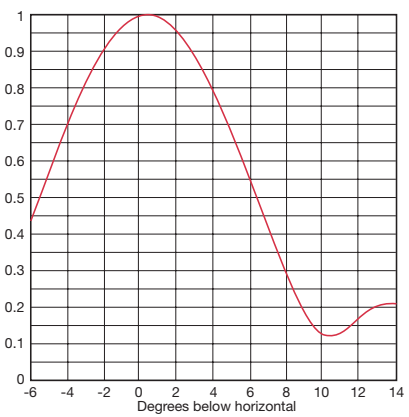


THA-MC2 DIRECTIVITY = 2.5

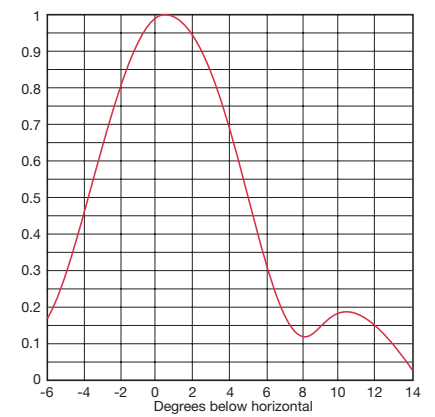


THA-S4 DIRECTIVITY = 1.9

THA-6



THA-8



TH SERIES - DELTAWING VHF ANTENNA ELEVATION GAIN

Bays	Band	F (MHz)	0% Null Fill 0° tilt		15% Null Fill .75° tilt	
1	L	Ch 2 54-60	1.2	0.64	—	—
2	L		2.2	3.40	—	—
3	L		3.2	5.11	3.4	5.29
4	L		4.3	6.32	4.1	6.11
5	L		5.3	7.28	5.1	7.04
6	L		6.5	8.13	6.1	7.82
1	L	Ch 3 60-66	1.2	0.64	—	—
2	L		2.3	3.54	—	—
3	L		3.4	5.28	3.2	5.01
4	L		4.5	6.52	4.3	6.29
5	L		5.6	7.48	5.3	7.23
6	L		6.7	8.26	6.3	8.01
1	M	Ch 4 66-72	1.2	0.64	—	—
2	M		2.2	3.40	—	—
3	M		3.2	5.11	3.0	4.83
4	M		4.3	6.32	4.1	6.11
5	M		5.4	7.28	5.1	7.05
6	M		6.4	8.06	6.1	7.82
1	M	Ch 5 76-82	1.2	0.64	—	—
2	M		2.3	3.58	—	—
3	M		3.4	5.33	3.2	5.07
4	M		4.6	6.57	4.3	6.34
5	M		5.7	7.53	5.4	7.28
6	M		6.8	8.31	6.4	8.07
1	M	Ch 6 82-88	1.2	0.64	—	—
2	M		2.3	3.58	—	—
3	M		3.4	5.34	3.2	5.07
4	M		4.6	6.58	4.3	6.35
5	M		5.7	7.54	5.4	7.30
6	M		6.8	8.33	6.4	8.07
2	H	Ch 7 174-180	2.1	3.21	—	—
3	H		3.1	4.95	2.9	4.68
4	H		4.5	6.53	3.9	5.96
5	H		5.2	7.15	4.9	6.91
6	H		6.2	7.92	5.9	7.69
8	H		8.3	9.18	7.9	8.96
10	H	10.3	10.14	9.9	9.94	
12	H	12.4	10.93	11.9	10.74	
2	H	Ch 8 180-186	2.1	3.32	—	—
3	H		3.2	5.07	3.0	4.79
4	H		4.3	6.31	4.1	6.08
5	H		5.3	7.27	5.1	7.03
6	H		6.4	8.06	6.1	7.82
8	H		8.5	9.31	8.1	9.09
10	H	10.7	10.28	10.2	10.07	
12	H	12.8	11.07	12.2	10.87	
2	H	Ch 9 186-192	2.2	3.40	—	—
3	H		3.3	5.17	3.1	4.89
4	H		4.4	6.42	4.2	6.19
5	H		5.5	7.39	5.2	7.15
6	H		6.6	8.19	6.2	7.94
8	H		8.8	9.44	8.3	9.22
10	H	11.0	10.41	10.5	10.20	
12	H	13.2	11.20	12.6	11.00	

Bays	Band	F (MHz)	0% Null Fill 0° tilt		15% Null Fill .75° tilt	
2	H	Ch 10 192-198	2.2	3.45	—	—
3	H		3.3	5.22	3.1	4.94
4	H		4.4	6.46	4.2	6.24
5	H		5.5	7.43	5.2	7.19
6	H		6.6	8.22	6.3	7.97
8	H		8.8	9.47	8.4	9.25
10	H	11.0	10.43	10.5	10.23	
12	H	13.2	11.22	12.7	11.03	
2	H	Ch 11 198-204	2.3	3.56	—	—
3	H		3.4	5.34	3.2	5.05
4	H		4.6	6.60	4.3	6.36
5	H		5.7	7.57	5.4	7.32
6	H		6.9	8.36	6.5	8.11
8	H		9.2	9.61	8.7	9.39
10	H	11.4	10.58	10.9	10.38	
12	H	13.7	11.38	13.1	11.18	
2	H	Ch 12 204-210	2.3	3.63	—	—
3	H		3.5	5.42	3.3	5.13
4	H		4.7	6.68	4.4	6.45
5	H		5.8	7.66	5.5	7.41
6	H		7.0	8.46	6.6	8.20
8	H		9.4	9.71	8.9	9.49
10	H	11.7	10.69	11.2	10.48	
12	H	14.1	11.48	13.4	11.28	
2	H	Ch 13 210-216	2.3	3.69	—	—
3	H		3.5	5.48	3.3	5.20
4	H		4.7	6.76	4.5	6.51
5	H		5.9	7.73	5.6	7.47
6	H		7.1	8.53	6.7	8.27
8	H		9.5	9.78	9.0	9.56
10	H	11.9	10.76	11.4	10.55	
12	H	14.3	11.55	13.7	11.35	
2	H	Ch E11 216-223	2.4	3.71	—	—
3	H		3.6	5.52	3.3	5.24
4	H		4.8	6.79	4.4	6.46
5	H		6.0	7.77	5.6	7.51
6	H		7.2	8.57	6.8	8.31
8	H		9.6	9.83	9.1	9.60
10	H	12.0	10.81	11.5	10.60	
12	H	14.5	11.60	13.8	11.40	
2	H	Ch E12 223-230	2.4	3.77	—	—
3	H		3.6	5.57	3.4	5.29
4	H		4.8	6.84	4.6	6.61
5	H		6.1	7.83	5.7	7.57
6	H		7.3	8.63	6.9	8.37
8	H		9.8	9.89	9.3	9.66
10	H	12.2	10.87	11.6	10.66	
12	H	14.7	11.66	14.0	11.46	