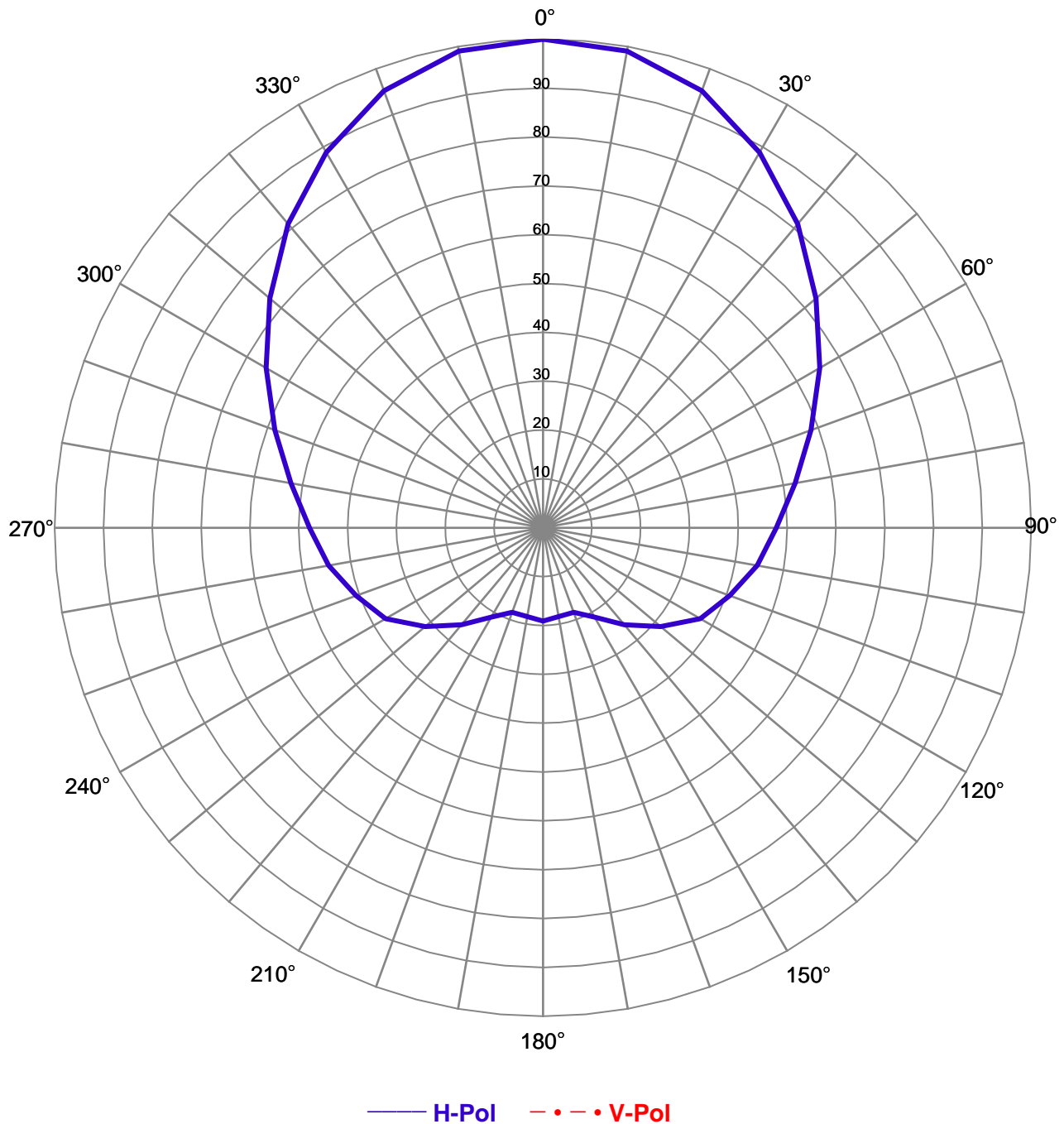




Relative Field Azimuth Plane Pattern



Pattern Type:	Relative Field	Type:	2-Bay VHF Slot
Antenna Model:	PSIVLP2NC3-9-CP	Pattern:	NC3
Polarization:	Circular	Channel:	9
Gain (h-pol):	3.08 (4.89 dB)	Reference:	K09AAF-D
Gain (v-pol):	3.08 (4.89 dB)	Date:	8/23/2023



PROPAGATION SYSTEMS INC.

Relative Field Tabulation

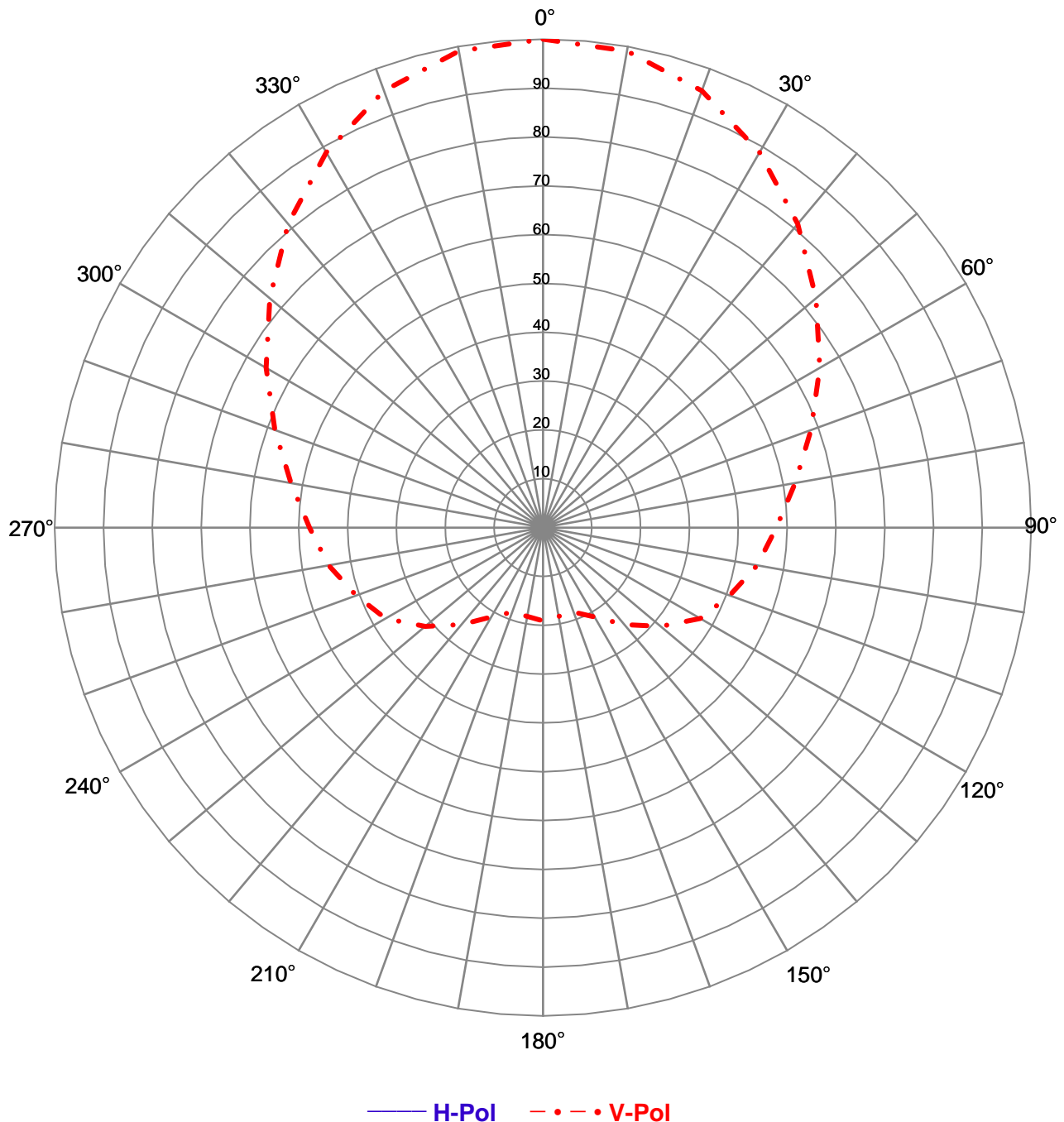
Antenna Model: PSIVLP2NC3-9-CP

Peak Gain (h-pol): 3.08 (4.89 dBd)

Angle	Relative Field	Power Gain	Gain dB
0	1.000	3.08	4.89
10	0.991	3.02	4.81
20	0.952	2.79	4.46
30	0.887	2.42	3.85
40	0.812	2.03	3.08
50	0.730	1.64	2.16
60	0.655	1.32	1.21
70	0.584	1.05	0.22
80	0.524	0.85	-0.72
90	0.478	0.70	-1.52
100	0.446	0.61	-2.13
110	0.407	0.51	-2.92
120	0.372	0.43	-3.70
130	0.315	0.31	-5.15
140	0.259	0.21	-6.84
150	0.211	0.14	-8.62
160	0.184	0.10	-9.81
170	0.185	0.11	-9.79
180	0.191	0.11	-9.48
190	0.185	0.11	-9.79
200	0.184	0.10	-9.81
210	0.211	0.14	-8.62
220	0.259	0.21	-6.84
230	0.315	0.31	-5.15
240	0.372	0.43	-3.70
250	0.407	0.51	-2.92
260	0.446	0.61	-2.13
270	0.478	0.70	-1.52
280	0.524	0.85	-0.72
290	0.584	1.05	0.22
300	0.655	1.32	1.21
310	0.730	1.64	2.16
320	0.812	2.03	3.08
330	0.887	2.42	3.85
340	0.952	2.79	4.46
350	0.991	3.02	4.81



Relative Field Azimuth Plane Pattern



Pattern Type:	Relative Field	Type:	2-Bay VHF Slot
Antenna Model:	PSIVLP2NC3-9-CP	Pattern:	NC3
Polarization:	Circular	Channel:	9
Gain (h-pol):	3.08 (4.89 dB)	Reference:	K09AAF-D
Gain (v-pol):	3.08 (4.89 dB)	Date:	8/23/2023



PROPAGATION SYSTEMS INC.

Relative Field Tabulation

Antenna Model: PSIVLP2NC3-9-CP

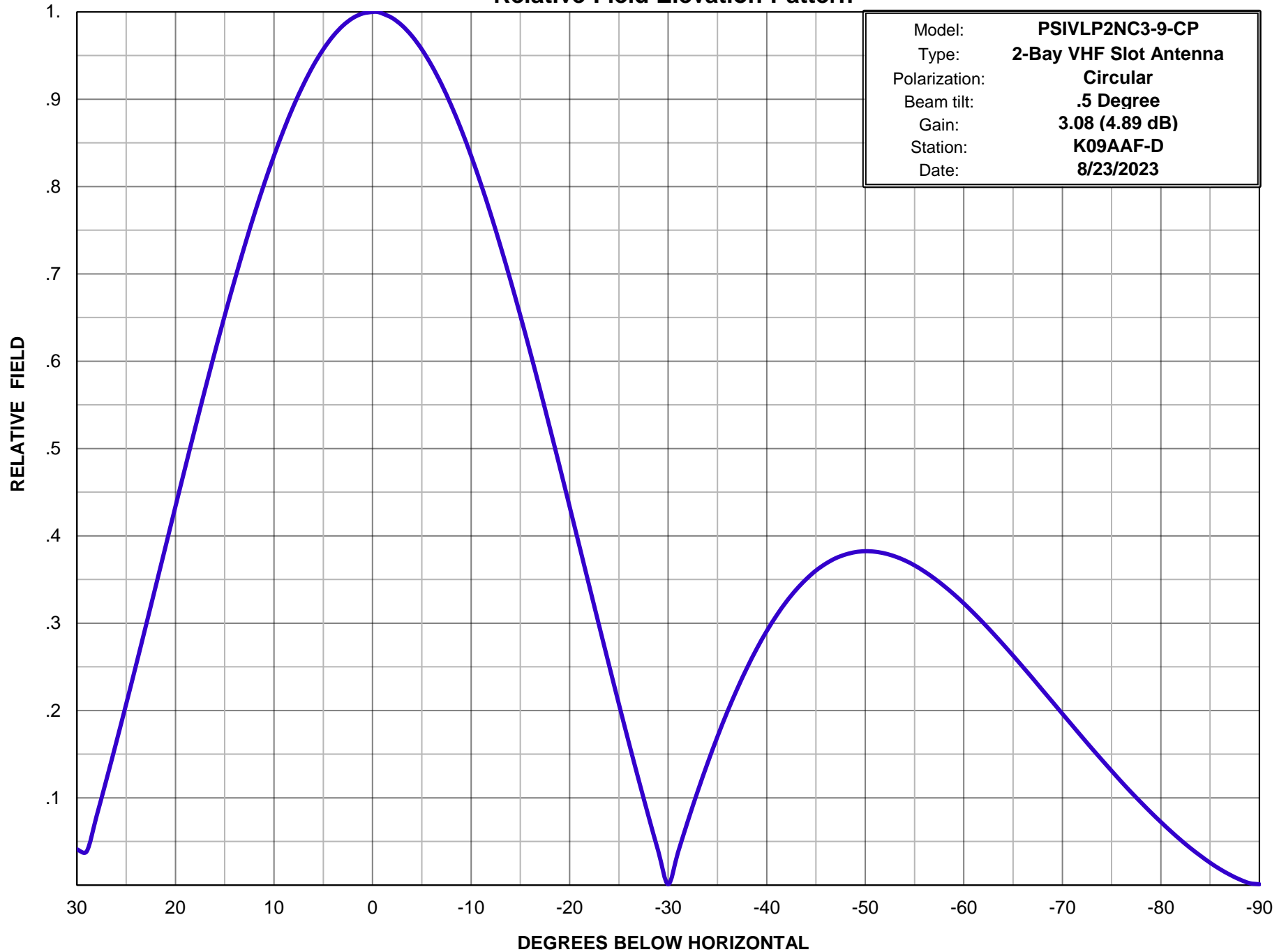
Peak Gain (v-pol): 3.08 (4.89 dBd)

Angle	Relative Field	Power Gain	Gain dB
0	1.000	3.08	4.89
10	0.991	3.02	4.81
20	0.952	2.79	4.46
30	0.887	2.42	3.85
40	0.812	2.03	3.08
50	0.730	1.64	2.16
60	0.655	1.32	1.21
70	0.584	1.05	0.22
80	0.524	0.85	-0.72
90	0.478	0.70	-1.52
100	0.446	0.61	-2.13
110	0.407	0.51	-2.92
120	0.372	0.43	-3.70
130	0.315	0.31	-5.15
140	0.259	0.21	-6.84
150	0.211	0.14	-8.62
160	0.184	0.10	-9.81
170	0.185	0.11	-9.79
180	0.191	0.11	-9.48
190	0.185	0.11	-9.79
200	0.184	0.10	-9.81
210	0.211	0.14	-8.62
220	0.259	0.21	-6.84
230	0.315	0.31	-5.15
240	0.372	0.43	-3.70
250	0.407	0.51	-2.92
260	0.446	0.61	-2.13
270	0.478	0.70	-1.52
280	0.524	0.85	-0.72
290	0.584	1.05	0.22
300	0.655	1.32	1.21
310	0.730	1.64	2.16
320	0.812	2.03	3.08
330	0.887	2.42	3.85
340	0.952	2.79	4.46
350	0.991	3.02	4.81



Propagation Systems, Inc.

Relative Field Elevation Pattern





Propagation Systems Inc.

Elevation Pattern Tabulation

Antenna: PSIVLP2NC3-9-CP

Gain: 3.08 (4.89 dB)

Beam tilt: -.5 Degree

Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
-90.0	0.001	-60.000	-50.0	0.382	-8.349	-10.0	0.835	-1.563
-89.0	0.002	-52.869	-49.0	0.381	-8.373	-9.0	0.865	-1.257
-88.0	0.007	-43.722	-48.0	0.379	-8.436	-8.0	0.893	-0.987
-87.0	0.012	-38.438	-47.0	0.374	-8.533	-7.0	0.917	-0.751
-86.0	0.018	-34.735	-46.0	0.368	-8.679	-6.0	0.939	-0.550
-85.0	0.026	-31.833	-45.0	0.360	-8.867	-5.0	0.957	-0.381
-84.0	0.034	-29.425	-44.0	0.350	-9.111	-4.0	0.972	-0.243
-83.0	0.042	-27.448	-43.0	0.338	-9.409	-3.0	0.984	-0.137
-82.0	0.052	-25.710	-42.0	0.325	-9.770	-2.0	0.993	-0.061
-81.0	0.062	-24.178	-41.0	0.309	-10.207	-1.0	0.998	-0.016
-80.0	0.072	-22.821	-40.0	0.291	-10.725	0.0	1.000	0.000
-79.0	0.083	-21.599	-39.0	0.271	-11.344	1.0	0.998	-0.016
-78.0	0.095	-20.487	-38.0	0.249	-12.083	2.0	0.993	-0.061
-77.0	0.106	-19.477	-37.0	0.225	-12.974	3.0	0.984	-0.137
-76.0	0.118	-18.538	-36.0	0.198	-14.052	4.0	0.972	-0.243
-75.0	0.131	-17.661	-35.0	0.170	-15.391	5.0	0.957	-0.381
-74.0	0.144	-16.855	-34.0	0.140	-17.096	6.0	0.939	-0.549
-73.0	0.157	-16.109	-33.0	0.108	-19.366	7.0	0.917	-0.751
-72.0	0.170	-15.407	-32.0	0.073	-22.676	8.0	0.893	-0.986
-71.0	0.183	-14.750	-31.0	0.038	-28.502	9.0	0.865	-1.257
-70.0	0.196	-14.139	-30.0	0.001	-60.000	10.0	0.835	-1.563
-69.0	0.210	-13.562	-29.0	0.039	-28.226	11.0	0.803	-1.907
-68.0	0.223	-13.027	-28.0	0.079	-22.037	12.0	0.768	-2.291
-67.0	0.237	-12.517	-27.0	0.121	-18.351	13.0	0.731	-2.717
-66.0	0.250	-12.046	-26.0	0.164	-15.722	14.0	0.693	-3.191
-65.0	0.263	-11.605	-25.0	0.207	-13.663	15.0	0.652	-3.711
-64.0	0.276	-11.194	-24.0	0.252	-11.973	16.0	0.610	-4.287
-63.0	0.288	-10.811	-23.0	0.297	-10.546	17.0	0.568	-4.920
-62.0	0.300	-10.453	-22.0	0.342	-9.309	18.0	0.523	-5.622
-61.0	0.312	-10.126	-21.0	0.388	-8.223	19.0	0.479	-6.397
-60.0	0.323	-9.823	-20.0	0.433	-7.261	20.0	0.434	-7.257
-59.0	0.333	-9.550	-19.0	0.479	-6.397	21.0	0.388	-8.223
-58.0	0.343	-9.305	-18.0	0.523	-5.622	22.0	0.342	-9.309
-57.0	0.351	-9.085	-17.0	0.567	-4.922	23.0	0.297	-10.541
-56.0	0.359	-8.892	-16.0	0.610	-4.287	24.0	0.252	-11.973
-55.0	0.366	-8.725	-15.0	0.652	-3.711	25.0	0.207	-13.663
-54.0	0.372	-8.590	-14.0	0.693	-3.191	26.0	0.164	-15.714
-53.0	0.377	-8.484	-13.0	0.731	-2.719	27.0	0.121	-18.351
-52.0	0.380	-8.408	-12.0	0.768	-2.291	28.0	0.079	-22.021
-51.0	0.382	-8.363	-11.0	0.803	-1.907	29.0	0.039	-28.226