



Proposal Number
Date
Call Letters
Location
Customer
Antenna Type

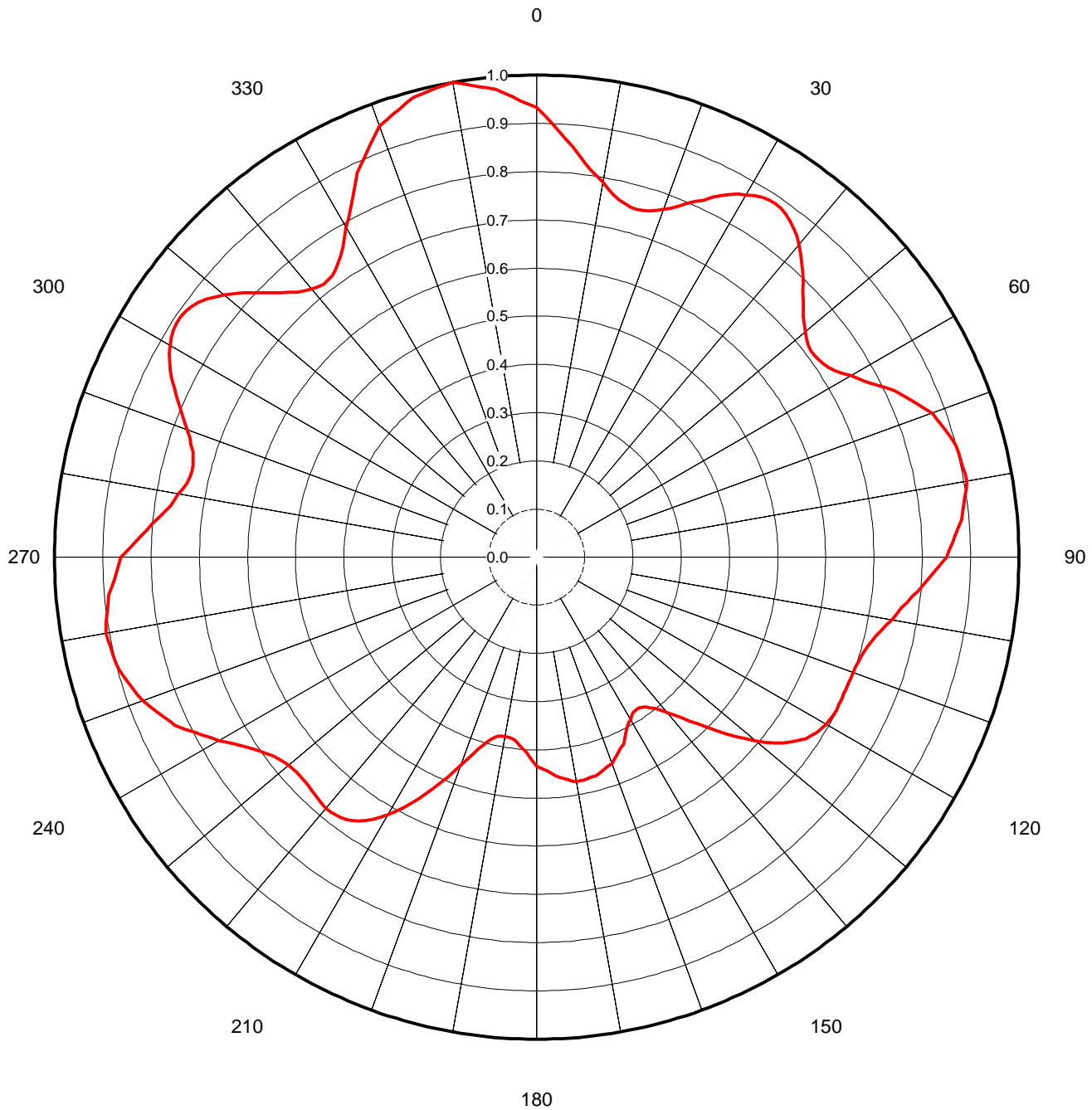
DCA-9668
20-Dec-01
KVWB & KFBT
Las Vegas, NV
Sinclair
TUA-C4-12/48-1-R-T

Revision: **2**
Exhibit ONE
Channel **22**

AZIMUTH PATTERN

Gain **1.81** **(2.57 dB)**
Calculated / Measured **Calculated**

Frequency **521.00 MHz**
Drawing # **TUA-C4-521**





Proposal Number

DCA-9668

Revision:

2

Date

20-Dec-01

Exhibit TWO

Call Letters

KVWB & KFBT

Channel

22

Location

Las Vegas, NV

Customer

Sinclair

Antenna Type

TUA-C4-12/48-1-R-T

TABULATION OF AZIMUTH PATTERN

Azimuth Pattern Drawing #: **TUA-C4-521**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
0	0.933	45	0.781	90	0.850	135	0.499	180	0.434	225	0.670	270	0.862	315	0.775
1	0.916	46	0.768	91	0.838	136	0.482	181	0.424	226	0.669	271	0.849	316	0.763
2	0.900	47	0.756	92	0.826	137	0.465	182	0.415	227	0.668	272	0.835	317	0.751
3	0.884	48	0.745	93	0.815	138	0.449	183	0.407	228	0.668	273	0.822	318	0.741
4	0.869	49	0.735	94	0.805	139	0.434	184	0.399	229	0.670	274	0.811	319	0.732
5	0.855	50	0.727	95	0.795	140	0.421	185	0.393	230	0.672	275	0.800	320	0.726
6	0.839	51	0.720	96	0.783	141	0.409	186	0.387	231	0.675	276	0.787	321	0.721
7	0.824	52	0.715	97	0.773	142	0.399	187	0.382	232	0.679	277	0.776	322	0.719
8	0.810	53	0.711	98	0.764	143	0.390	188	0.378	233	0.685	278	0.767	323	0.719
9	0.799	54	0.711	99	0.755	144	0.384	189	0.377	234	0.692	279	0.760	324	0.722
10	0.790	55	0.713	100	0.748	145	0.380	190	0.378	235	0.702	280	0.754	325	0.728
11	0.778	56	0.716	101	0.738	146	0.378	191	0.378	236	0.711	281	0.747	326	0.736
12	0.768	57	0.722	102	0.730	147	0.377	192	0.380	237	0.721	282	0.741	327	0.746
13	0.761	58	0.730	103	0.723	148	0.379	193	0.384	238	0.733	283	0.738	328	0.758
14	0.755	59	0.740	104	0.717	149	0.383	194	0.389	239	0.746	284	0.737	329	0.773
15	0.751	60	0.753	105	0.711	150	0.389	195	0.396	240	0.761	285	0.738	330	0.790
16	0.751	61	0.763	106	0.707	151	0.393	196	0.406	241	0.772	286	0.741	331	0.805
17	0.752	62	0.774	107	0.704	152	0.400	197	0.418	242	0.785	287	0.746	332	0.821
18	0.755	63	0.788	108	0.701	153	0.408	198	0.431	243	0.798	288	0.753	333	0.839
19	0.761	64	0.802	109	0.700	154	0.417	199	0.444	244	0.813	289	0.761	334	0.859
20	0.767	65	0.818	110	0.699	155	0.428	200	0.458	245	0.828	290	0.771	335	0.880
21	0.776	66	0.828	111	0.698	156	0.432	201	0.474	246	0.835	291	0.781	336	0.893
22	0.786	67	0.839	112	0.697	157	0.437	202	0.491	247	0.843	292	0.793	337	0.907
23	0.796	68	0.850	113	0.697	158	0.443	203	0.508	248	0.852	293	0.805	338	0.921
24	0.807	69	0.862	114	0.697	159	0.449	204	0.524	249	0.861	294	0.817	339	0.936
25	0.818	70	0.874	115	0.697	160	0.456	205	0.540	250	0.870	295	0.829	340	0.951
26	0.830	71	0.878	116	0.698	161	0.458	206	0.558	251	0.875	296	0.841	341	0.958
27	0.842	72	0.883	117	0.698	162	0.461	207	0.574	252	0.881	297	0.852	342	0.965
28	0.852	73	0.888	118	0.697	163	0.463	208	0.590	253	0.886	298	0.863	343	0.973
29	0.861	74	0.894	119	0.695	164	0.467	209	0.604	254	0.892	299	0.871	344	0.980
30	0.868	75	0.900	120	0.693	165	0.470	210	0.617	255	0.898	300	0.878	345	0.988
31	0.876	76	0.901	121	0.690	166	0.471	211	0.630	256	0.900	301	0.884	346	0.990
32	0.881	77	0.902	122	0.686	167	0.471	212	0.642	257	0.902	302	0.889	347	0.993
33	0.884	78	0.903	123	0.680	168	0.472	213	0.652	258	0.904	303	0.891	348	0.995
34	0.884	79	0.905	124	0.673	169	0.473	214	0.661	259	0.906	304	0.891	349	0.997
35	0.883	80	0.907	125	0.663	170	0.474	215	0.667	260	0.908	305	0.888	350	1.000
36	0.879	81	0.902	126	0.652	171	0.470	216	0.673	261	0.904	306	0.884	351	0.994
37	0.874	82	0.897	127	0.640	172	0.466	217	0.676	262	0.900	307	0.877	352	0.989
38	0.866	83	0.892	128	0.626	173	0.462	218	0.678	263	0.897	308	0.868	353	0.984
39	0.857	84	0.888	129	0.610	174	0.459	219	0.679	264	0.894	309	0.858	354	0.979
40	0.846	85	0.884	130	0.593	175	0.456	220	0.679	265	0.891	310	0.846	355	0.974
41	0.834	86	0.876	131	0.575	176	0.450	221	0.678	266	0.883	311	0.833	356	0.965
42	0.822	87	0.869	132	0.556	177	0.445	222	0.676	267	0.877	312	0.819	357	0.956
43	0.808	88	0.862	133	0.537	178	0.441	223	0.674	268	0.871	313	0.804	358	0.947
44	0.795	89	0.856	134	0.518	179	0.437	224	0.672	269	0.866	314	0.790	359	0.940



Proposal Number	DCA-9668	Revision:	2
Date	20-Dec-01	Exhibit	THREE
Call Letters	KVWB & KFBT	Channel	22
Location	Las Vegas, NV		
Customer	Sinclair		
Antenna Type	TUA-C4-12/48-1-R-T		

ELEVATION PATTERN

RMS Gain at Main Lobe **21.80 (13.39 dB)**

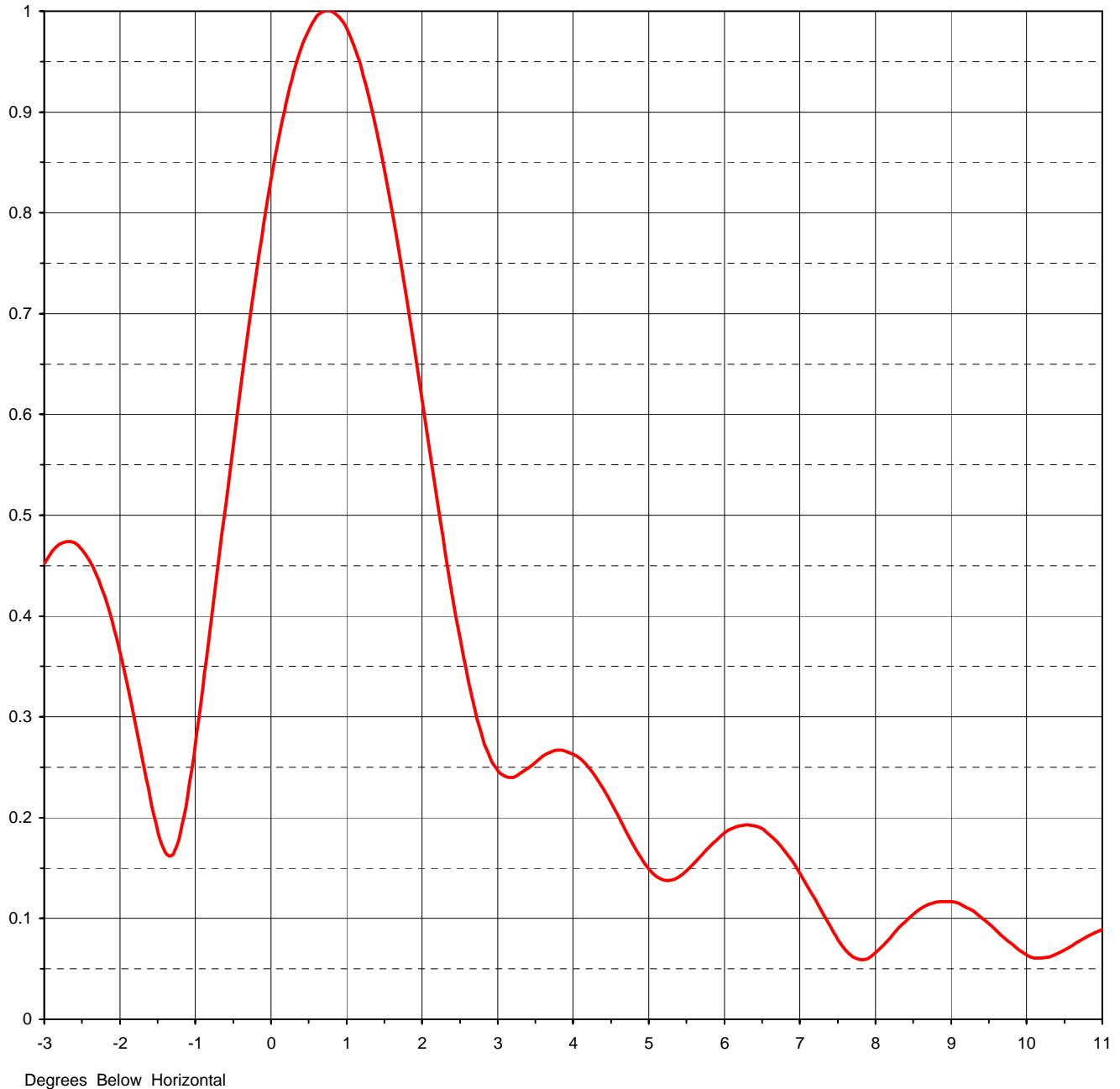
RMS Gain at Horizontal **15.10 (11.79 dB)**

Calculated / Measured **Calculated**

Beam Tilt **0.80 deg**

Frequency **521.00 MHz**

Drawing # **12U218075-B521**

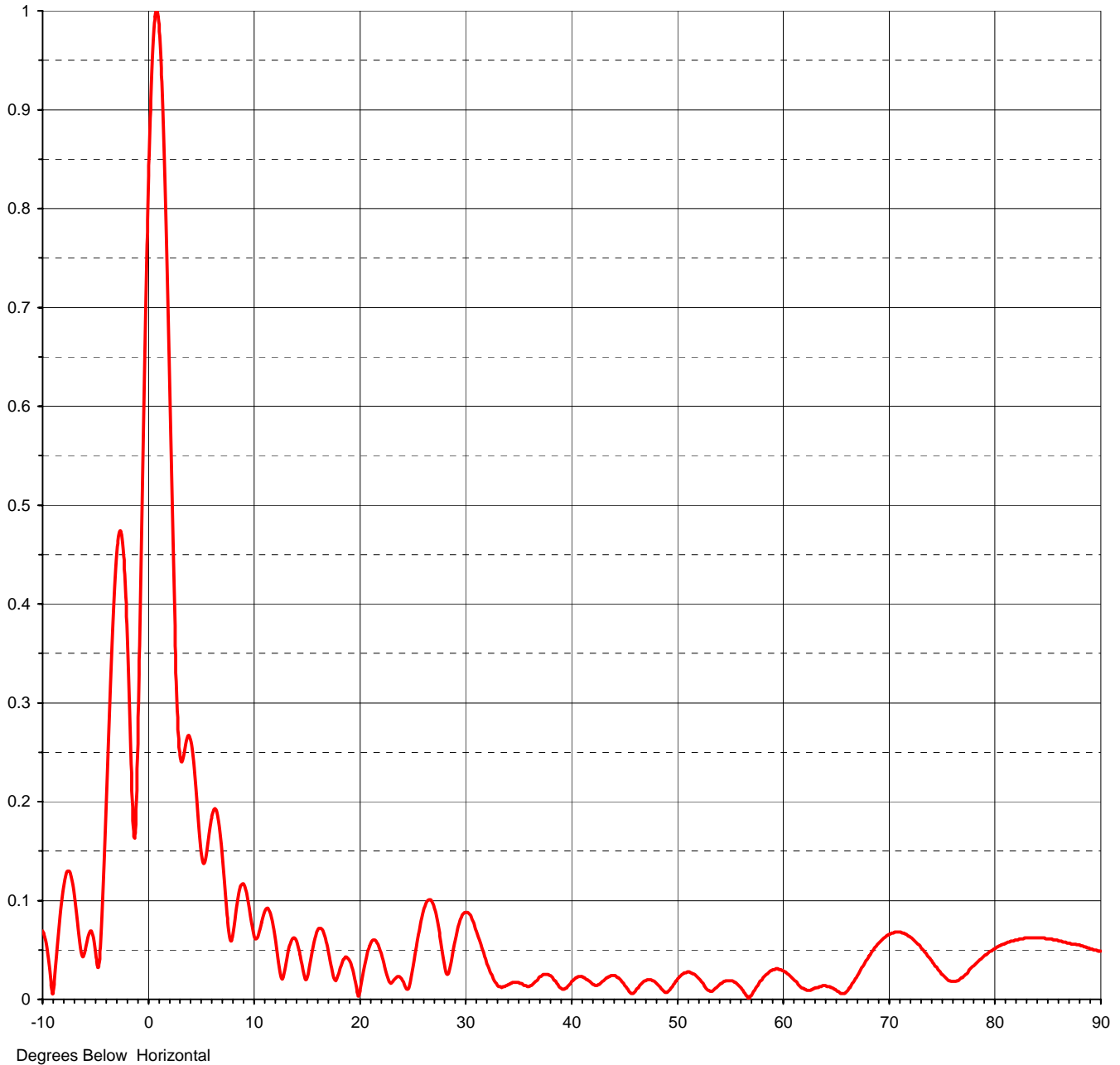




Proposal Number	DCA-9668	Revision:	2
Date	20-Dec-01	Exhibit	FOUR
Call Letters	KVWB & KFBT	Channel	22
Location	Las Vegas, NV		
Customer	Sinclair		
Antenna Type	TUA-C4-12/48-1-R-T		

ELEVATION PATTERN

RMS Gain at Main Lobe	21.80 (13.39 dB)	Beam Tilt	0.80 deg
RMS Gain at Horizontal	15.10 (11.79 dB)	Frequency	521.00 MHz
Calculated / Measured	Calculated	Drawing #	12U218075-B521-90





Proposal Number **DCA-9668** Revision: **2**
 Date **20-Dec-01** **Exhibit FIVE**
 Call Letters **KVWB & KFBT** Channel **22**
 Location **Las Vegas, NV**
 Customer **Sinclair**
 Antenna Type **TUA-C4-12/48-1-R-T**

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #: **12U218075-B521-90**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.069	2.4	0.421	10.6	0.069	30.5	0.086	51.0	0.028	71.5	0.066
-9.5	0.045	2.6	0.339	10.8	0.078	31.0	0.072	51.5	0.026	72.0	0.063
-9.0	0.006	2.8	0.279	11.0	0.086	31.5	0.057	52.0	0.022	72.5	0.058
-8.5	0.067	3.0	0.247	11.5	0.090	32.0	0.040	52.5	0.016	73.0	0.052
-8.0	0.115	3.2	0.240	12.0	0.068	32.5	0.026	53.0	0.009	73.5	0.046
-7.5	0.130	3.4	0.249	12.5	0.030	33.0	0.016	53.5	0.009	74.0	0.039
-7.0	0.105	3.6	0.261	13.0	0.030	33.5	0.012	54.0	0.014	74.5	0.032
-6.5	0.058	3.8	0.267	13.5	0.056	34.0	0.014	54.5	0.018	75.0	0.025
-6.0	0.049	4.0	0.263	14.0	0.061	34.5	0.017	55.0	0.019	75.5	0.020
-5.5	0.069	4.2	0.250	14.5	0.041	35.0	0.017	55.5	0.017	76.0	0.018
-5.0	0.047	4.4	0.228	15.0	0.020	35.5	0.015	56.0	0.013	76.5	0.019
-4.5	0.063	4.6	0.201	15.5	0.044	36.0	0.013	56.5	0.006	77.0	0.023
-4.0	0.197	4.8	0.172	16.0	0.068	36.5	0.016	57.0	0.003	77.5	0.029
-3.5	0.346	5.0	0.149	16.5	0.071	37.0	0.022	57.5	0.011	78.0	0.034
-3.0	0.452	5.2	0.138	17.0	0.054	37.5	0.025	58.0	0.019	78.5	0.039
-2.8	0.471	5.4	0.141	17.5	0.027	38.0	0.024	58.5	0.025	79.0	0.044
-2.6	0.473	5.6	0.155	18.0	0.024	38.5	0.019	59.0	0.029	79.5	0.048
-2.4	0.455	5.8	0.171	18.5	0.040	39.0	0.012	59.5	0.031	80.0	0.051
-2.2	0.419	6.0	0.185	19.0	0.041	39.5	0.011	60.0	0.029	80.5	0.054
-2.0	0.364	6.2	0.192	19.5	0.025	40.0	0.016	60.5	0.026	81.0	0.057
-1.8	0.295	6.4	0.192	20.0	0.004	40.5	0.022	61.0	0.021	81.5	0.059
-1.6	0.220	6.6	0.183	20.5	0.033	41.0	0.023	61.5	0.015	82.0	0.060
-1.4	0.166	6.8	0.167	21.0	0.054	41.5	0.020	62.0	0.011	82.5	0.061
-1.2	0.184	7.0	0.145	21.5	0.060	42.0	0.016	62.5	0.009	83.0	0.062
-1.0	0.272	7.2	0.119	22.0	0.049	42.5	0.014	63.0	0.011	83.5	0.062
-0.8	0.388	7.4	0.092	22.5	0.029	43.0	0.018	63.5	0.013	84.0	0.062
-0.6	0.510	7.6	0.069	23.0	0.016	43.5	0.022	64.0	0.014	84.5	0.062
-0.4	0.629	7.8	0.059	23.5	0.022	44.0	0.024	64.5	0.012	85.0	0.061
-0.2	0.738	8.0	0.066	24.0	0.021	44.5	0.022	65.0	0.009	85.5	0.060
0.0	0.833	8.2	0.081	24.5	0.010	45.0	0.016	65.5	0.006	86.0	0.059
0.2	0.909	8.4	0.097	25.0	0.028	45.5	0.008	66.0	0.008	86.5	0.058
0.4	0.963	8.6	0.110	25.5	0.060	46.0	0.007	66.5	0.016	87.0	0.057
0.6	0.994	8.8	0.116	26.0	0.087	46.5	0.014	67.0	0.024	87.5	0.056
0.8	1.000	9.0	0.117	26.5	0.100	47.0	0.019	67.5	0.033	88.0	0.055
1.0	0.983	9.2	0.111	27.0	0.096	47.5	0.020	68.0	0.042	88.5	0.053
1.2	0.942	9.4	0.101	27.5	0.073	48.0	0.017	68.5	0.050	89.0	0.051
1.4	0.880	9.6	0.088	28.0	0.041	48.5	0.011	69.0	0.057	89.5	0.050
1.6	0.803	9.8	0.081	28.5	0.027	49.0	0.007	69.5	0.062	90.0	0.049
1.8	0.713	10.0	0.069	29.0	0.054	49.5	0.012	70.0	0.066		
2.0	0.615	10.2	0.061	29.5	0.077	50.0	0.019	70.5	0.068		
2.2	0.516	10.4	0.062	30.0	0.088	50.5	0.025	71.0	0.068		