



Proposal Number	C-01146	
Date	8-Mar-07	
Call Letters	KPIX-DT	Channel 29
Location	San Francisco, CA	
Customer	Sutro Tower Inc.	
Antenna Type	TUA-C4SP-12/40U-1-S	

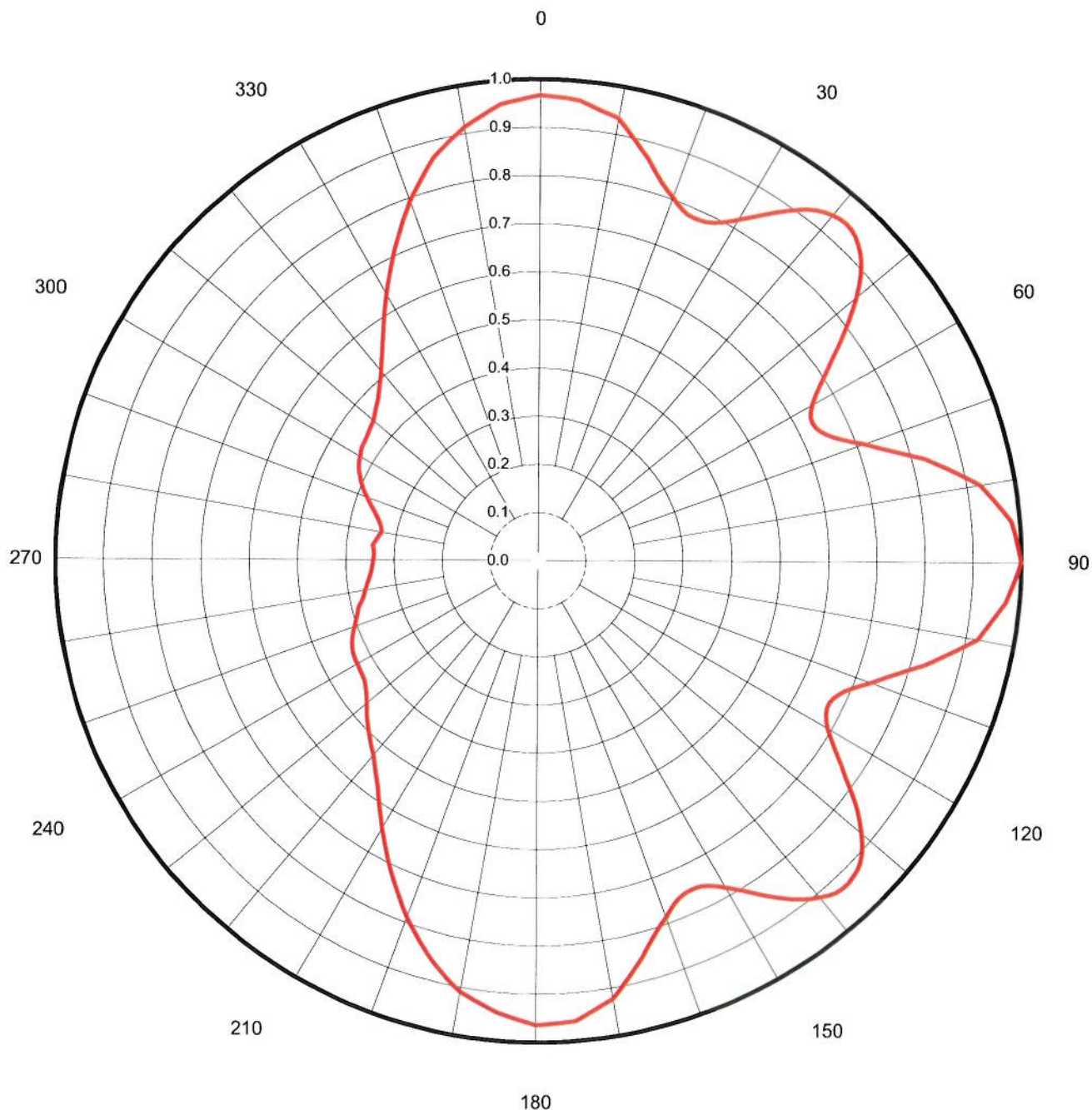
AZIMUTH PATTERN

Gain **1.80**
Calculated / Measured

(2.55 dB)
Calculated

Frequency
Drawing #

563.00 MHz
TUA-C4SP-5630





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Call Letters **KPIX-DT** Channel **29**
Location **San Francisco, CA**
Customer **Sutro Tower Inc.**
Antenna Type **TUA-C4SP-12/40U-1-S**

TABULATION OF AZIMUTH PATTERN

Azimuth Pattern Drawing #: **TUA-C4SP-5630**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
0	0.967	45	0.930	90	1.000	135	0.926	180	0.964	225	0.496	270	0.342	315	0.473
1	0.965	46	0.921	91	0.994	136	0.928	181	0.960	226	0.490	271	0.342	316	0.480
2	0.964	47	0.909	92	0.989	137	0.928	182	0.955	227	0.483	272	0.341	317	0.487
3	0.963	48	0.893	93	0.983	138	0.924	183	0.951	228	0.476	273	0.342	318	0.494
4	0.961	49	0.875	94	0.977	139	0.918	184	0.946	229	0.469	274	0.343	319	0.502
5	0.960	50	0.854	95	0.972	140	0.910	185	0.941	230	0.462	275	0.345	320	0.511
6	0.953	51	0.834	96	0.962	141	0.901	186	0.935	231	0.456	276	0.342	321	0.521
7	0.948	52	0.812	97	0.952	142	0.890	187	0.928	232	0.451	277	0.339	322	0.532
8	0.943	53	0.788	98	0.942	143	0.877	188	0.922	233	0.446	278	0.336	323	0.543
9	0.938	54	0.765	99	0.933	144	0.863	189	0.916	234	0.442	279	0.333	324	0.555
10	0.934	55	0.741	100	0.925	145	0.849	190	0.910	235	0.438	280	0.331	325	0.567
11	0.920	56	0.720	101	0.905	146	0.834	191	0.899	236	0.437	281	0.332	326	0.580
12	0.905	57	0.699	102	0.885	147	0.820	192	0.888	237	0.435	282	0.334	327	0.593
13	0.891	58	0.681	103	0.866	148	0.806	193	0.877	238	0.434	283	0.338	328	0.607
14	0.878	59	0.665	104	0.846	149	0.793	194	0.866	239	0.433	284	0.342	329	0.622
15	0.866	60	0.651	105	0.828	150	0.782	195	0.855	240	0.432	285	0.347	330	0.637
16	0.850	61	0.642	106	0.806	151	0.771	196	0.842	241	0.432	286	0.353	331	0.651
17	0.836	62	0.636	107	0.786	152	0.763	197	0.829	242	0.431	287	0.359	332	0.666
18	0.824	63	0.634	108	0.767	153	0.757	198	0.815	243	0.430	288	0.365	333	0.681
19	0.813	64	0.635	109	0.750	154	0.754	199	0.802	244	0.428	289	0.372	334	0.697
20	0.805	65	0.641	110	0.734	155	0.755	200	0.789	245	0.425	290	0.379	335	0.713
21	0.795	66	0.650	111	0.717	156	0.756	201	0.773	246	0.422	291	0.386	336	0.728
22	0.788	67	0.661	112	0.702	157	0.760	202	0.758	247	0.419	292	0.393	337	0.744
23	0.783	68	0.676	113	0.690	158	0.766	203	0.743	248	0.414	293	0.399	338	0.760
24	0.781	69	0.695	114	0.680	159	0.776	204	0.729	249	0.410	294	0.404	339	0.776
25	0.782	70	0.715	115	0.674	160	0.788	205	0.715	250	0.405	295	0.409	340	0.793
26	0.784	71	0.734	116	0.671	161	0.797	206	0.700	251	0.401	296	0.415	341	0.807
27	0.789	72	0.755	117	0.671	162	0.809	207	0.685	252	0.396	297	0.419	342	0.821
28	0.797	73	0.778	118	0.675	163	0.822	208	0.671	253	0.392	298	0.423	343	0.835
29	0.807	74	0.802	119	0.682	164	0.837	209	0.657	254	0.389	299	0.426	344	0.850
30	0.819	75	0.827	120	0.692	165	0.852	210	0.643	255	0.386	300	0.428	345	0.865
31	0.832	76	0.847	121	0.706	166	0.866	211	0.629	256	0.380	301	0.431	346	0.874
32	0.846	77	0.867	122	0.723	167	0.880	212	0.615	257	0.375	302	0.434	347	0.884
33	0.861	78	0.887	123	0.741	168	0.894	213	0.602	258	0.371	303	0.436	348	0.893
34	0.875	79	0.907	124	0.760	169	0.909	214	0.589	259	0.367	304	0.437	349	0.903
35	0.889	80	0.927	125	0.779	170	0.923	215	0.577	260	0.364	305	0.438	350	0.913
36	0.903	81	0.938	126	0.801	171	0.930	216	0.566	261	0.361	306	0.440	351	0.920
37	0.916	82	0.950	127	0.822	172	0.937	217	0.556	262	0.358	307	0.442	352	0.928
38	0.926	83	0.961	128	0.842	173	0.944	218	0.547	263	0.355	308	0.444	353	0.935
39	0.934	84	0.972	129	0.860	174	0.952	219	0.538	264	0.352	309	0.446	354	0.943
40	0.940	85	0.983	130	0.876	175	0.959	220	0.529	265	0.349	310	0.448	355	0.951
41	0.944	86	0.987	131	0.892	176	0.960	221	0.522	266	0.348	311	0.453	356	0.954
42	0.946	87	0.990	132	0.905	177	0.961	222	0.516	267	0.346	312	0.458	357	0.957
43	0.944	88	0.993	133	0.915	178	0.962	223	0.509	268	0.344	313	0.463	358	0.960
44	0.939	89	0.997	134	0.922	179	0.963	224	0.502	269	0.343	314	0.468	359	0.964

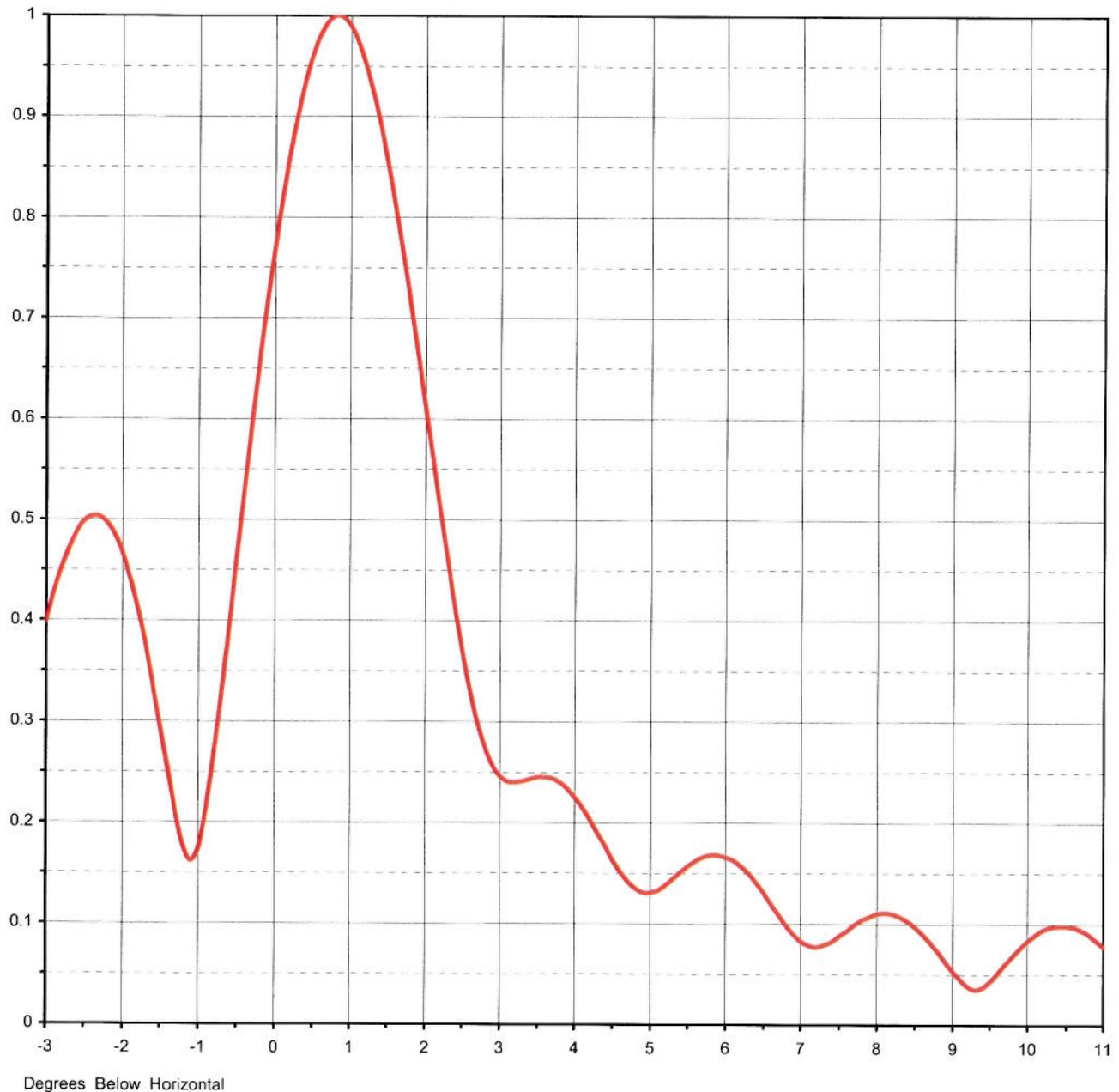
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Location	San Francisco, CA	
Customer	Sutro Tower Inc.	
Antenna Type	TUA-C4SP-12/40U-1-S	

ELEVATION PATTERN

RMS Gain at Main Lobe	20.70 (13.16 dB)	Beam Tilt	0.75 deg
RMS Gain at Horizontal	12.30 (10.90 dB)	Frequency	563.00 MHz
Calculated / Measured	Calculated	Drawing #	12U222075

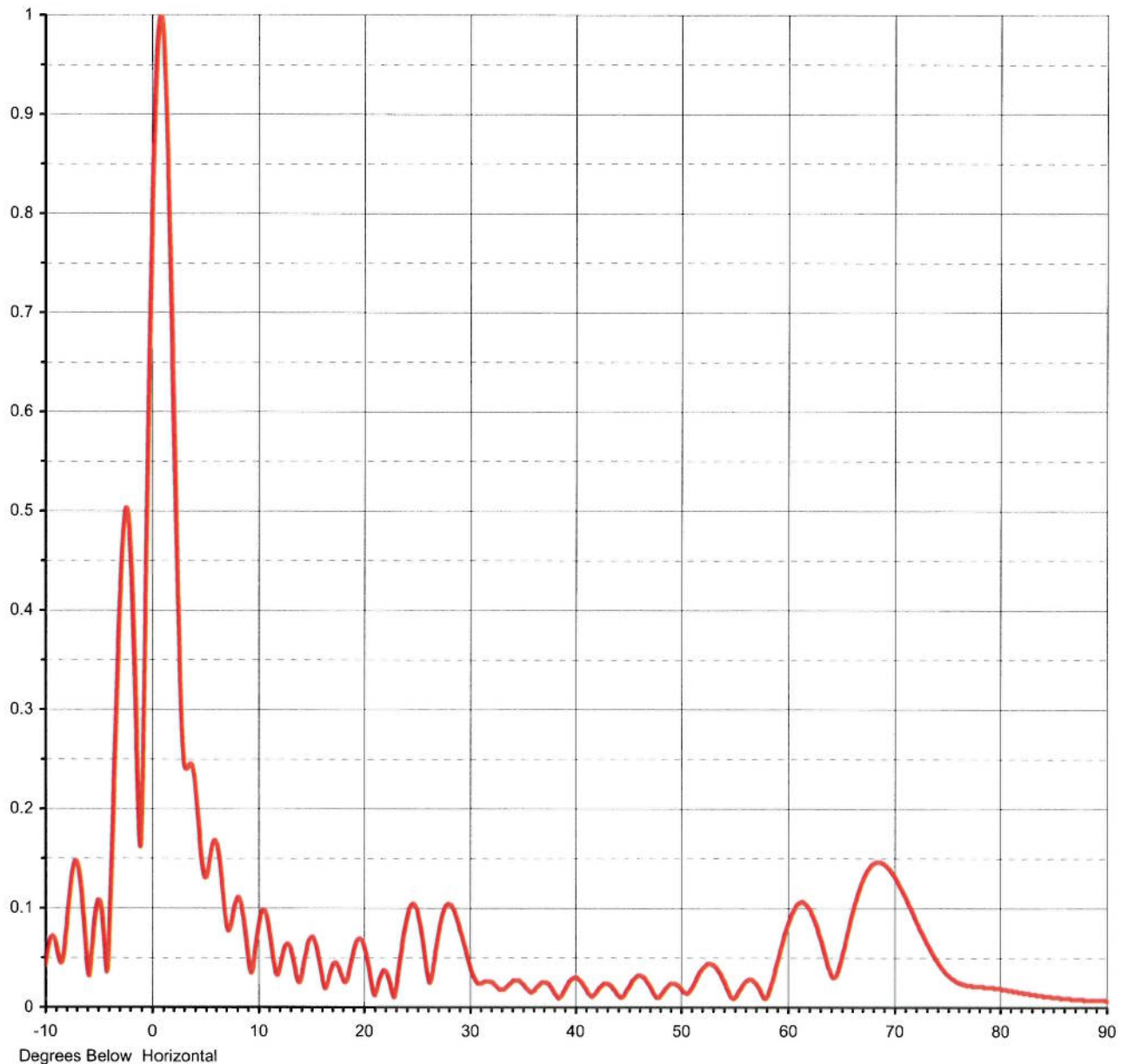




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Antenna Type	TUA-C4SP-12/40U-1-S		

ELEVATION PATTERN

RMS Gain at Main Lobe	20.70 (13.16 dB)	Beam Tilt	0.75 deg
RMS Gain at Horizontal	12.30 (10.90 dB)	Frequency	563.00 MHz
Calculated / Measured	Calculated	Drawing #	12U222075-90



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 Antenna Type **TUA-C4SP-12/40U-1-S**

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #: **12U222075-90**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.043	2.4	0.411	10.6	0.098	30.5	0.029	51.0	0.018	71.5	0.099
-9.5	0.070	2.6	0.331	10.8	0.094	31.0	0.024	51.5	0.027	72.0	0.086
-9.0	0.065	2.8	0.275	11.0	0.084	31.5	0.026	52.0	0.037	72.5	0.075
-8.5	0.045	3.0	0.246	11.5	0.047	32.0	0.026	52.5	0.043	73.0	0.064
-8.0	0.080	3.2	0.240	12.0	0.036	32.5	0.022	53.0	0.043	73.5	0.054
-7.5	0.131	3.4	0.243	12.5	0.059	33.0	0.018	53.5	0.038	74.0	0.045
-7.0	0.147	3.6	0.245	13.0	0.062	33.5	0.020	54.0	0.028	74.5	0.038
-6.5	0.111	3.8	0.240	13.5	0.040	34.0	0.025	54.5	0.016	75.0	0.032
-6.0	0.042	4.0	0.225	14.0	0.027	34.5	0.027	55.0	0.009	75.5	0.028
-5.5	0.066	4.2	0.203	14.5	0.054	35.0	0.024	55.5	0.017	76.0	0.025
-5.0	0.108	4.4	0.177	15.0	0.070	35.5	0.018	56.0	0.025	76.5	0.023
-4.5	0.079	4.6	0.152	15.5	0.062	36.0	0.016	56.5	0.028	77.0	0.022
-4.0	0.059	4.8	0.135	16.0	0.035	36.5	0.021	57.0	0.025	77.5	0.021
-3.5	0.226	5.0	0.131	16.5	0.021	37.0	0.025	57.5	0.017	78.0	0.021
-3.0	0.399	5.2	0.138	17.0	0.039	37.5	0.024	58.0	0.009	78.5	0.020
-2.8	0.451	5.4	0.151	17.5	0.044	38.0	0.016	58.5	0.022	79.0	0.020
-2.6	0.487	5.6	0.162	18.0	0.031	38.5	0.009	59.0	0.042	79.5	0.019
-2.4	0.503	5.8	0.168	18.5	0.028	39.0	0.016	59.5	0.062	80.0	0.019
-2.2	0.497	6.0	0.166	19.0	0.052	39.5	0.026	60.0	0.081	80.5	0.018
-2.0	0.467	6.2	0.157	19.5	0.068	40.0	0.030	60.5	0.095	81.0	0.017
-1.8	0.413	6.4	0.141	20.0	0.064	40.5	0.027	61.0	0.104	81.5	0.016
-1.6	0.339	6.6	0.120	20.5	0.041	41.0	0.020	61.5	0.106	82.0	0.015
-1.4	0.253	6.8	0.099	21.0	0.013	41.5	0.012	62.0	0.100	82.5	0.014
-1.2	0.177	7.0	0.083	21.5	0.027	42.0	0.014	62.5	0.089	83.0	0.013
-1.0	0.174	7.2	0.077	22.0	0.037	42.5	0.021	63.0	0.072	83.5	0.012
-0.8	0.266	7.4	0.082	22.5	0.025	43.0	0.024	63.5	0.053	84.0	0.011
-0.6	0.393	7.6	0.093	23.0	0.014	43.5	0.021	64.0	0.035	84.5	0.011
-0.4	0.528	7.8	0.104	23.5	0.051	44.0	0.013	64.5	0.033	85.0	0.010
-0.2	0.656	8.0	0.110	24.0	0.085	44.5	0.011	65.0	0.052	85.5	0.010
0.0	0.771	8.2	0.110	24.5	0.103	45.0	0.019	65.5	0.074	86.0	0.009
0.2	0.866	8.4	0.103	25.0	0.099	45.5	0.028	66.0	0.095	86.5	0.009
0.4	0.938	8.6	0.090	25.5	0.072	46.0	0.032	66.5	0.114	87.0	0.008
0.6	0.983	8.8	0.073	26.0	0.035	46.5	0.030	67.0	0.128	87.5	0.008
0.8	1.000	9.0	0.053	26.5	0.034	47.0	0.023	67.5	0.139	88.0	0.007
1.0	0.989	9.2	0.038	27.0	0.068	47.5	0.013	68.0	0.145	88.5	0.007
1.2	0.950	9.4	0.037	27.5	0.094	48.0	0.010	68.5	0.146	89.0	0.007
1.4	0.889	9.6	0.051	28.0	0.104	48.5	0.017	69.0	0.144	89.5	0.007
1.6	0.808	9.8	0.060	28.5	0.099	49.0	0.023	69.5	0.139	90.0	0.006
1.8	0.713	10.0	0.076	29.0	0.084	49.5	0.024	70.0	0.131		
2.0	0.610	10.2	0.089	29.5	0.064	50.0	0.020	70.5	0.121		
2.2	0.507	10.4	0.097	30.0	0.044	50.5	0.015	71.0	0.111		

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