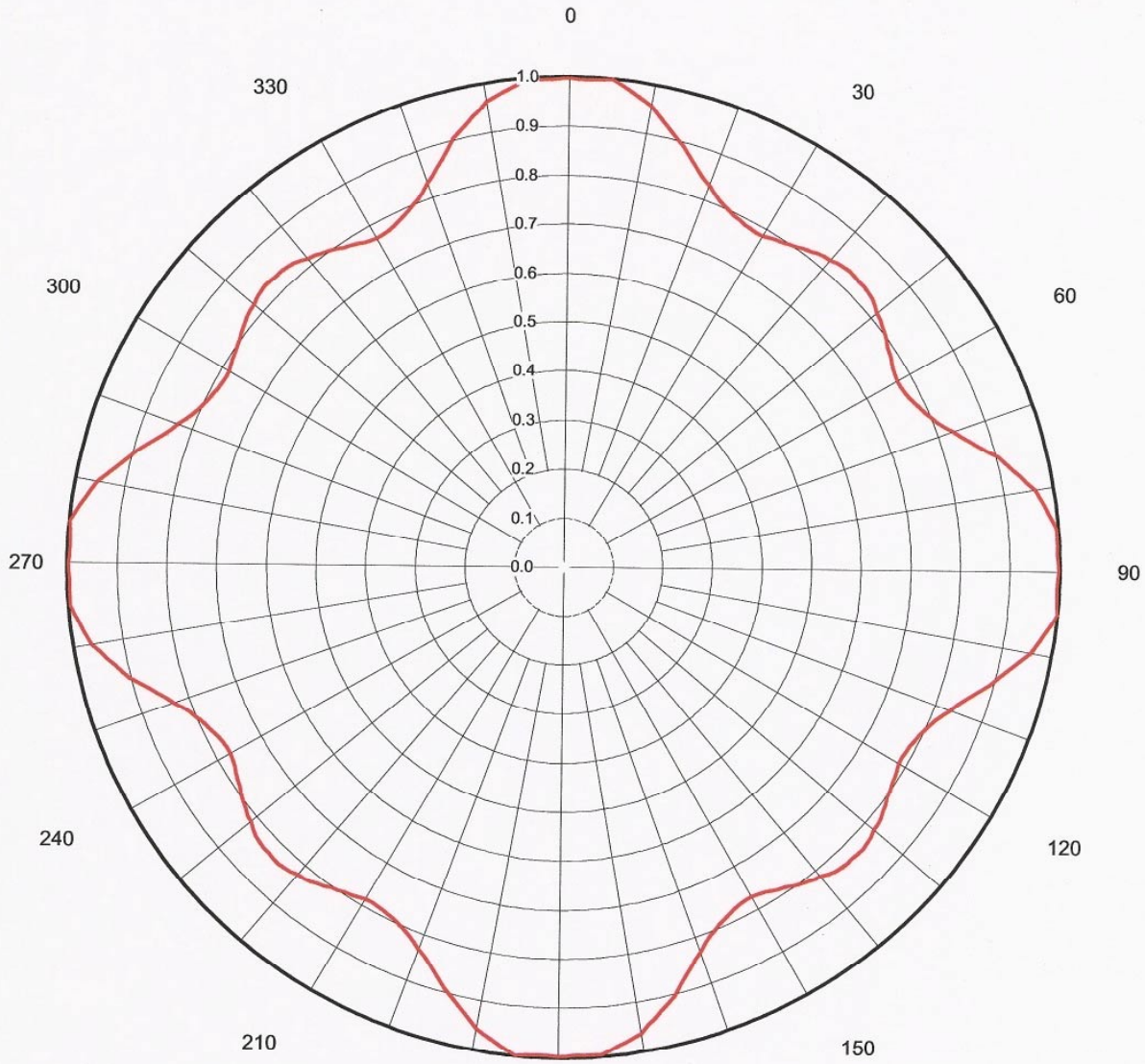
Dielectric

Proposal Number	DCA-9907		
Date	16-Apr-02		
Call Letters	KLJB	Channel	49
Location	Davenport, IA		
Customer			
Antenna Type	TUF-O4-14/56H-1-T		

AZIMUTH PATTERN

Gain	1.30 (1.14 dB)	Frequency	683.00 MHz
Calculated / Measured	Calculated	Drawing #	TUF-O4-683



Dielectric

Proposal Number DCA-9907
Date 16-Apr-02
Call Letters KLJB Channel 49
Location Davenport, IA
Customer
Antenna Type TUF-O4-14/56H-1-T

TABULATION OF AZIMUTH PATTERN

Azimuth Pattern Drawing #: TUF-O4-683

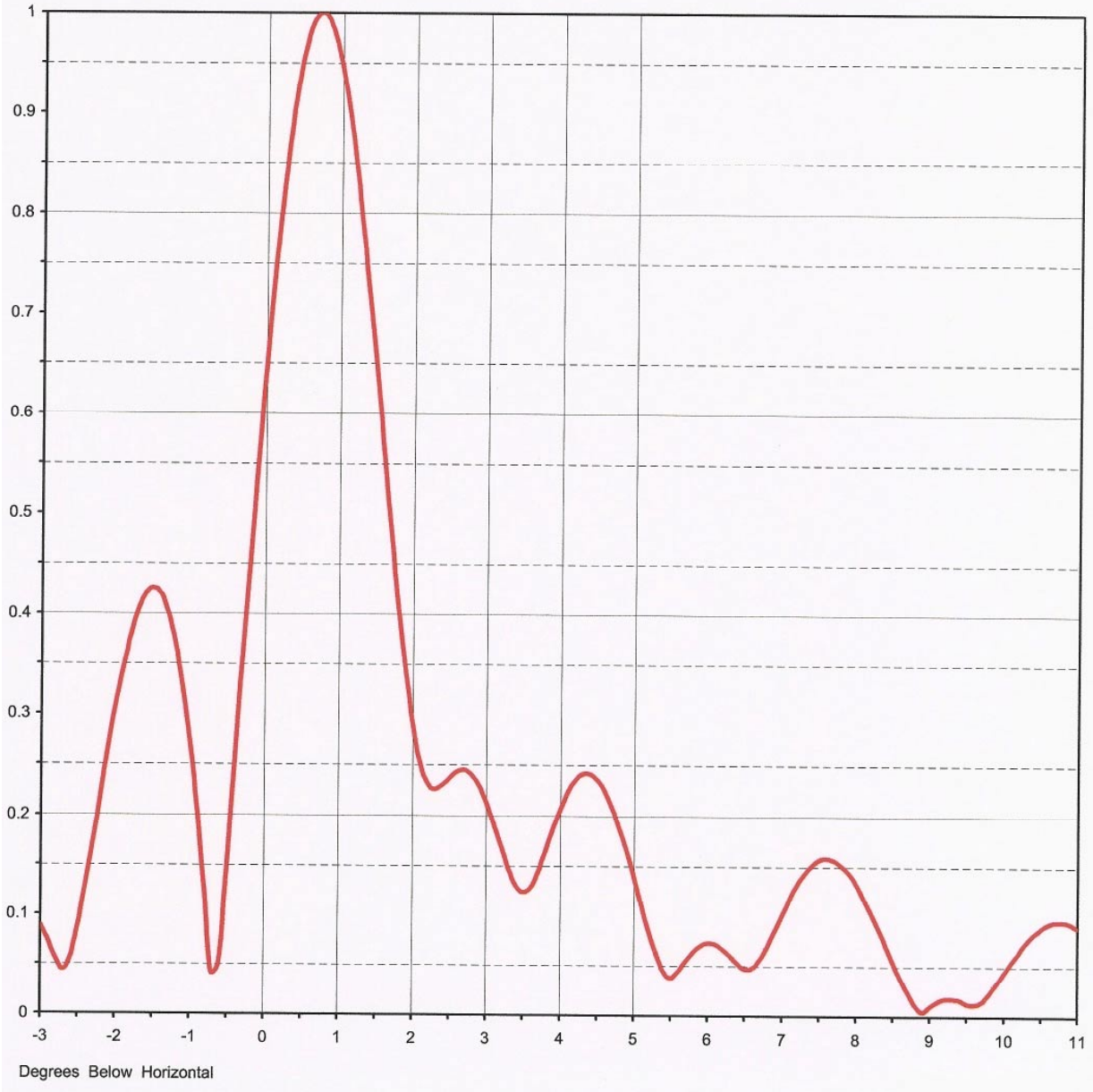
Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
0	0.998	45	0.832	90	0.998	135	0.832	180	0.998	225	0.832	270	0.998	315	0.832
1	0.996	46	0.832	91	0.996	136	0.832	181	0.996	226	0.832	271	0.996	316	0.832
2	0.996	47	0.830	92	0.996	137	0.830	182	0.996	227	0.830	272	0.996	317	0.830
3	0.996	48	0.827	93	0.996	138	0.827	183	0.996	228	0.827	273	0.996	318	0.827
4	0.997	49	0.822	94	0.997	139	0.822	184	0.997	229	0.822	274	0.997	319	0.822
5	1.000	50	0.815	95	1.000	140	0.815	185	1.000	230	0.815	275	1.000	320	0.815
6	0.991	51	0.812	96	0.991	141	0.812	186	0.991	231	0.812	276	0.991	321	0.812
7	0.982	52	0.807	97	0.982	142	0.807	187	0.982	232	0.807	277	0.982	322	0.807
8	0.973	53	0.802	98	0.973	143	0.802	188	0.973	233	0.802	278	0.973	323	0.802
9	0.965	54	0.797	99	0.965	144	0.797	189	0.965	234	0.797	279	0.965	324	0.797
10	0.956	55	0.791	100	0.956	145	0.791	190	0.956	235	0.791	280	0.956	325	0.791
11	0.942	56	0.786	101	0.942	146	0.786	191	0.942	236	0.786	281	0.942	326	0.786
12	0.929	57	0.781	102	0.929	147	0.781	192	0.929	237	0.781	282	0.929	327	0.781
13	0.916	58	0.777	103	0.916	148	0.777	193	0.916	238	0.777	283	0.916	328	0.777
14	0.904	59	0.773	104	0.904	149	0.773	194	0.904	239	0.773	284	0.904	329	0.773
15	0.892	60	0.770	105	0.892	150	0.770	195	0.892	240	0.770	285	0.892	330	0.770
16	0.877	61	0.771	106	0.877	151	0.771	196	0.877	241	0.771	286	0.877	331	0.771
17	0.864	62	0.773	107	0.864	152	0.773	197	0.864	242	0.773	287	0.864	332	0.773
18	0.851	63	0.776	108	0.851	153	0.776	198	0.851	243	0.776	288	0.851	333	0.776
19	0.840	64	0.781	109	0.840	154	0.781	199	0.840	244	0.781	289	0.840	334	0.781
20	0.831	65	0.787	110	0.831	155	0.787	200	0.831	245	0.787	290	0.831	335	0.787
21	0.820	66	0.793	111	0.820	156	0.793	201	0.820	246	0.793	291	0.820	336	0.793
22	0.811	67	0.800	112	0.811	157	0.800	202	0.811	247	0.800	292	0.811	337	0.800
23	0.804	68	0.808	113	0.804	158	0.808	203	0.804	248	0.808	293	0.804	338	0.808
24	0.799	69	0.818	114	0.799	159	0.818	204	0.799	249	0.818	294	0.799	339	0.818
25	0.795	70	0.830	115	0.795	160	0.830	205	0.795	250	0.830	295	0.795	340	0.830
26	0.790	71	0.842	116	0.790	161	0.842	206	0.790	251	0.842	296	0.790	341	0.842
27	0.787	72	0.856	117	0.787	162	0.856	207	0.787	252	0.856	297	0.787	342	0.856
28	0.785	73	0.870	118	0.785	163	0.870	208	0.785	253	0.870	298	0.785	343	0.870
29	0.784	74	0.886	119	0.784	164	0.886	209	0.784	254	0.886	299	0.784	344	0.886
30	0.784	75	0.903	120	0.784	165	0.903	210	0.784	255	0.903	300	0.784	345	0.903
31	0.788	76	0.914	121	0.788	166	0.914	211	0.788	256	0.914	301	0.788	346	0.914
32	0.792	77	0.925	122	0.792	167	0.925	212	0.792	257	0.925	302	0.792	347	0.925
33	0.796	78	0.937	123	0.796	168	0.937	213	0.796	258	0.937	303	0.796	348	0.937
34	0.800	79	0.950	124	0.800	169	0.950	214	0.800	259	0.950	304	0.800	349	0.950
35	0.803	80	0.962	125	0.803	170	0.962	215	0.803	260	0.962	305	0.803	350	0.962
36	0.809	81	0.969	126	0.809	171	0.969	216	0.809	261	0.969	306	0.809	351	0.969
37	0.814	82	0.976	127	0.814	172	0.976	217	0.814	262	0.976	307	0.814	352	0.976
38	0.818	83	0.983	128	0.818	173	0.983	218	0.818	263	0.983	308	0.818	353	0.983
39	0.821	84	0.990	129	0.821	174	0.990	219	0.821	264	0.990	309	0.821	354	0.990
40	0.824	85	0.997	130	0.824	175	0.997	220	0.824	265	0.997	310	0.824	355	0.997
41	0.828	86	0.996	131	0.828	176	0.996	221	0.828	266	0.996	311	0.828	356	0.996
42	0.831	87	0.996	132	0.831	177	0.996	222	0.831	267	0.996	312	0.831	357	0.996
43	0.833	88	0.996	133	0.833	178	0.996	223	0.833	268	0.996	313	0.833	358	0.996
44	0.833	89	0.997	134	0.833	179	0.997	224	0.833	269	0.997	314	0.833	359	0.997

Dielectric

Proposal Number	**DCA-9907**		
Date	**16-Apr-02**		
Call Letters	**KLJB**	Channel	**49**
Location	**Davenport, IA**		
Customer			
Antenna Type	**TUF-O4-14/56H-1-T**		

ELEVATION PATTERN

RMS Gain at Main Lobe	**30.40 (14.83 dB)**	Beam Tilt	**0.70 deg**
RMS Gain at Horizontal	**12.80 (11.07 dB)**	Frequency	**683.00 MHz**
Calculated / Measured	**Calculated**	Drawing #	**14U304070**

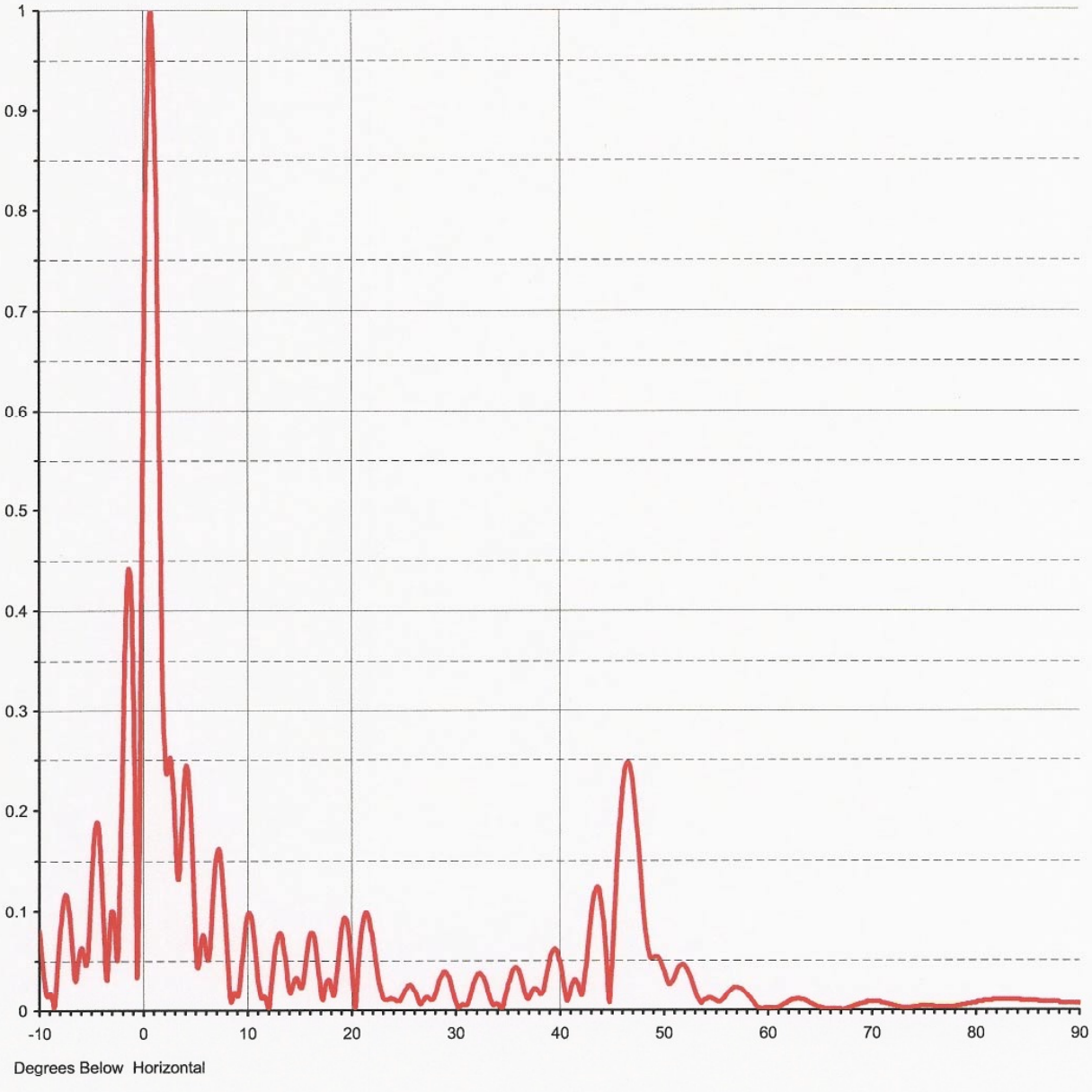


Dielectric

Proposal Number	DCA-9907		
Date	16-Apr-02		
Call Letters	KLJB	Channel	49
Location	Davenport, IA		
Customer			
Antenna Type	TUF-O4-14/56H-1-T		

ELEVATION PATTERN

RMS Gain at Main Lobe	30.40 (14.83 dB)	Beam Tilt	0.70 deg
RMS Gain at Horizontal	12.80 (11.07 dB)	Frequency	683.00 MHz
Calculated / Measured	Calculated	Drawing #	14U304070-90



Dielectric

Proposal Number **DCA-9907**
Date **16-Apr-02**
Call Letters **KLJB** Channel **49**
Location **Davenport, IA**
Customer
Antenna Type **TUF-O4-14/56H-1-T**

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #: **14U304070-90**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.016	2.4	0.230	10.6	0.089	30.5	0.030	51.0	0.218	71.5	0.008
-9.5	0.018	2.6	0.243	10.8	0.095	31.0	0.036	51.5	0.171	72.0	0.007
-9.0	0.015	2.8	0.240	11.0	0.093	31.5	0.027	52.0	0.115	72.5	0.006
-8.5	0.077	3.0	0.213	11.5	0.056	32.0	0.010	52.5	0.067	73.0	0.004
-8.0	0.114	3.2	0.169	12.0	0.012	32.5	0.003	53.0	0.049	73.5	0.003
-7.5	0.085	3.4	0.130	12.5	0.014	33.0	0.005	53.5	0.051	74.0	0.002
-7.0	0.026	3.6	0.129	13.0	0.015	33.5	0.010	54.0	0.048	74.5	0.001
-6.5	0.059	3.8	0.165	13.5	0.059	34.0	0.026	54.5	0.036	75.0	0.001
-6.0	0.046	4.0	0.207	14.0	0.077	34.5	0.034	55.0	0.025	75.5	0.001
-5.5	0.088	4.2	0.235	14.5	0.053	35.0	0.030	55.5	0.029	76.0	0.001
-5.0	0.172	4.4	0.241	15.0	0.016	35.5	0.016	56.0	0.040	76.5	0.001
-4.5	0.166	4.6	0.224	15.5	0.032	36.0	0.004	56.5	0.044	77.0	0.001
-4.0	0.058	4.8	0.187	16.0	0.025	36.5	0.006	57.0	0.041	77.5	0.000
-3.5	0.075	5.0	0.138	16.5	0.038	37.0	0.003	57.5	0.031	78.0	0.000
-3.0	0.089	5.2	0.085	17.0	0.073	37.5	0.020	58.0	0.018	78.5	0.001
-2.8	0.056	5.4	0.044	17.5	0.071	38.0	0.036	58.5	0.008	79.0	0.001
-2.6	0.056	5.6	0.044	18.0	0.032	38.5	0.040	59.0	0.008	79.5	0.002
-2.4	0.130	5.8	0.064	18.5	0.017	39.0	0.028	59.5	0.011	80.0	0.002
-2.2	0.221	6.0	0.073	19.0	0.031	39.5	0.011	60.0	0.011	80.5	0.002
-2.0	0.310	6.2	0.067	19.5	0.012	40.0	0.016	60.5	0.008	81.0	0.003
-1.8	0.381	6.4	0.053	20.0	0.054	40.5	0.021	61.0	0.008	81.5	0.003
-1.6	0.420	6.6	0.048	20.5	0.088	41.0	0.014	61.5	0.012	82.0	0.003
-1.4	0.419	6.8	0.069	21.0	0.077	41.5	0.026	62.0	0.017	82.5	0.004
-1.2	0.369	7.0	0.102	21.5	0.023	42.0	0.048	62.5	0.021	83.0	0.004
-1.0	0.270	7.2	0.132	22.0	0.046	42.5	0.058	63.0	0.022	83.5	0.004
-0.8	0.127	7.4	0.152	22.5	0.094	43.0	0.049	63.5	0.020	84.0	0.004
-0.6	0.052	7.6	0.158	23.0	0.102	43.5	0.023	64.0	0.016	84.5	0.004
-0.4	0.252	7.8	0.151	23.5	0.081	44.0	0.011	64.5	0.011	85.0	0.004
-0.2	0.456	8.0	0.132	24.0	0.046	44.5	0.029	65.0	0.006	85.5	0.004
0.0	0.648	8.2	0.103	24.5	0.020	45.0	0.026	65.5	0.002	86.0	0.004
0.2	0.809	8.4	0.070	25.0	0.013	45.5	0.014	66.0	0.001	86.5	0.003
0.4	0.926	8.6	0.038	25.5	0.013	46.0	0.052	66.5	0.002	87.0	0.003
0.6	0.990	8.8	0.011	26.0	0.008	46.5	0.094	67.0	0.002	87.5	0.003
0.8	0.996	9.0	0.010	26.5	0.010	47.0	0.116	67.5	0.001	88.0	0.003
1.0	0.945	9.2	0.018	27.0	0.019	47.5	0.104	68.0	0.002	88.5	0.003
1.2	0.845	9.4	0.017	27.5	0.021	48.0	0.057	68.5	0.004	89.0	0.003
1.4	0.709	9.6	0.012	28.0	0.013	48.5	0.018	69.0	0.006	89.5	0.003
1.6	0.556	9.8	0.015	28.5	0.005	49.0	0.103	69.5	0.007	90.0	0.003
1.8	0.407	10.0	0.033	29.0	0.011	49.5	0.178	70.0	0.008		
2.0	0.290	10.2	0.055	29.5	0.009	50.0	0.227	70.5	0.009		
2.2	0.232	10.4	0.075	30.0	0.015	50.5	0.240	71.0	0.009		