

Exhibit 2
WLS Television, Inc.
July 2012

ENGINEERING EXHIBIT

**WLS TELEVISION, INC.,
ENGINEERING EXHIBIT IN SUPPORT OF
APPLICATION FOR SPECIAL TEMPORARY AUTHORITY
CHANNEL 44 – 1000 KW (DA-MAX) – 437 METERS HAAT**

CHICAGO, ILLINOIS

Sheets 1 and 2	Elevation Pattern Plot
Sheet 3	Elevation Pattern Tabulation
Sheet 4	Azimuth Pattern Plot
Sheet 5	Azimuth Pattern Tabulation



Proposal Number

Revision

Date

10 Nov 2009

Call Letters

Channel

44

Location

Customer

Antenna Type

TUF-C4-12/48U-2BR**ELEVATION PATTERN**

RMS Gain at Main Lobe

22.0 (13.41 dB)

Beam Tilt

1.00 Degrees

RMS Gain at Horizontal

6.7 (8.26 dB)

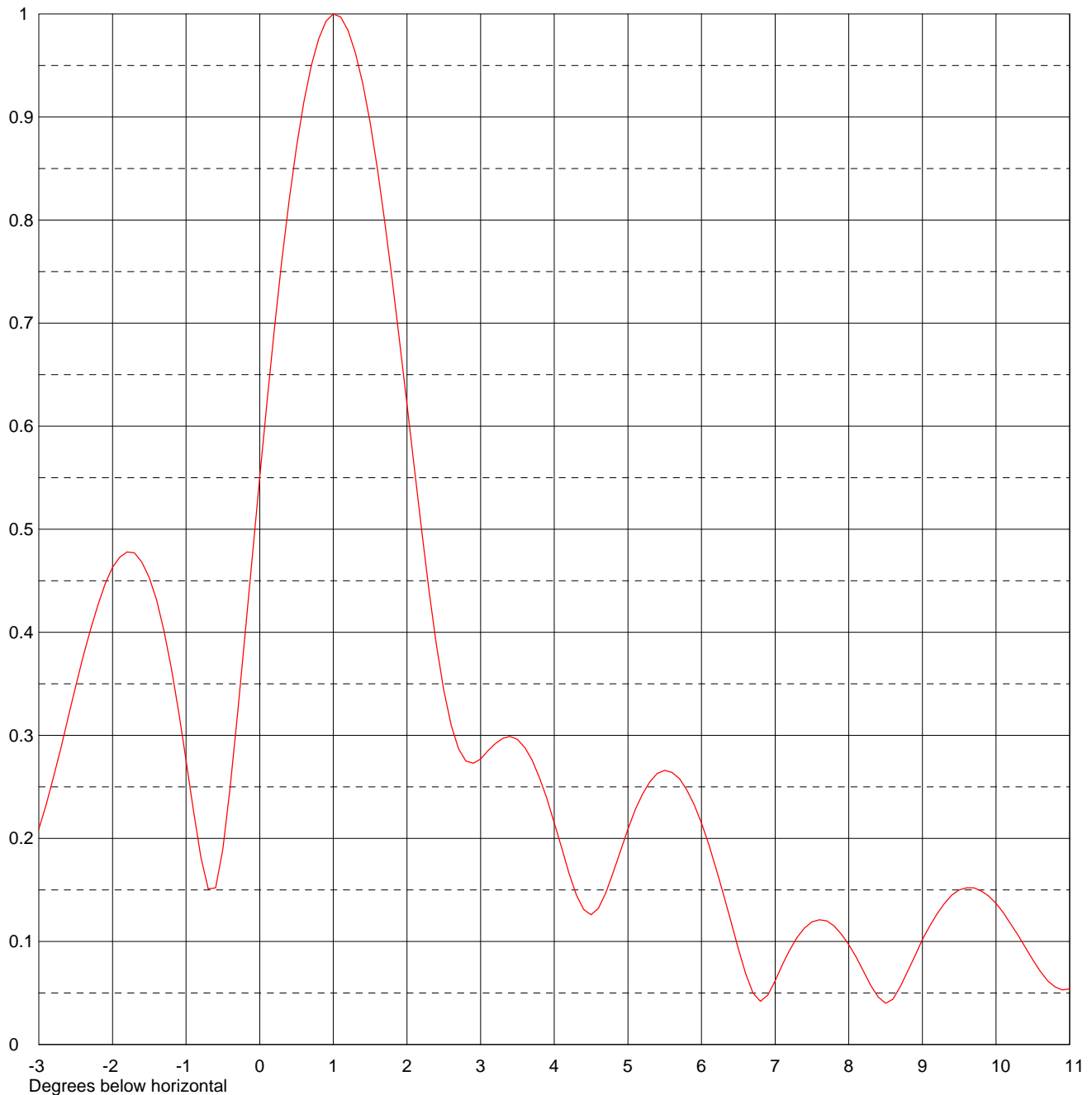
Frequency

653.00 MHz

Calculated / Measured

Calculated

Drawing #

12U22010-6530

Remarks:



Proposal Number

Revision

Date

10 Nov 2009

Call Letters

Channel

44

Location

Customer

Antenna Type

TUF-C4-12/48U-2BR**ELEVATION PATTERN**

RMS Gain at Main Lobe

22.0 (13.41 dB)

Beam Tilt

1.00 Degrees

RMS Gain at Horizontal

6.7 (8.26 dB)

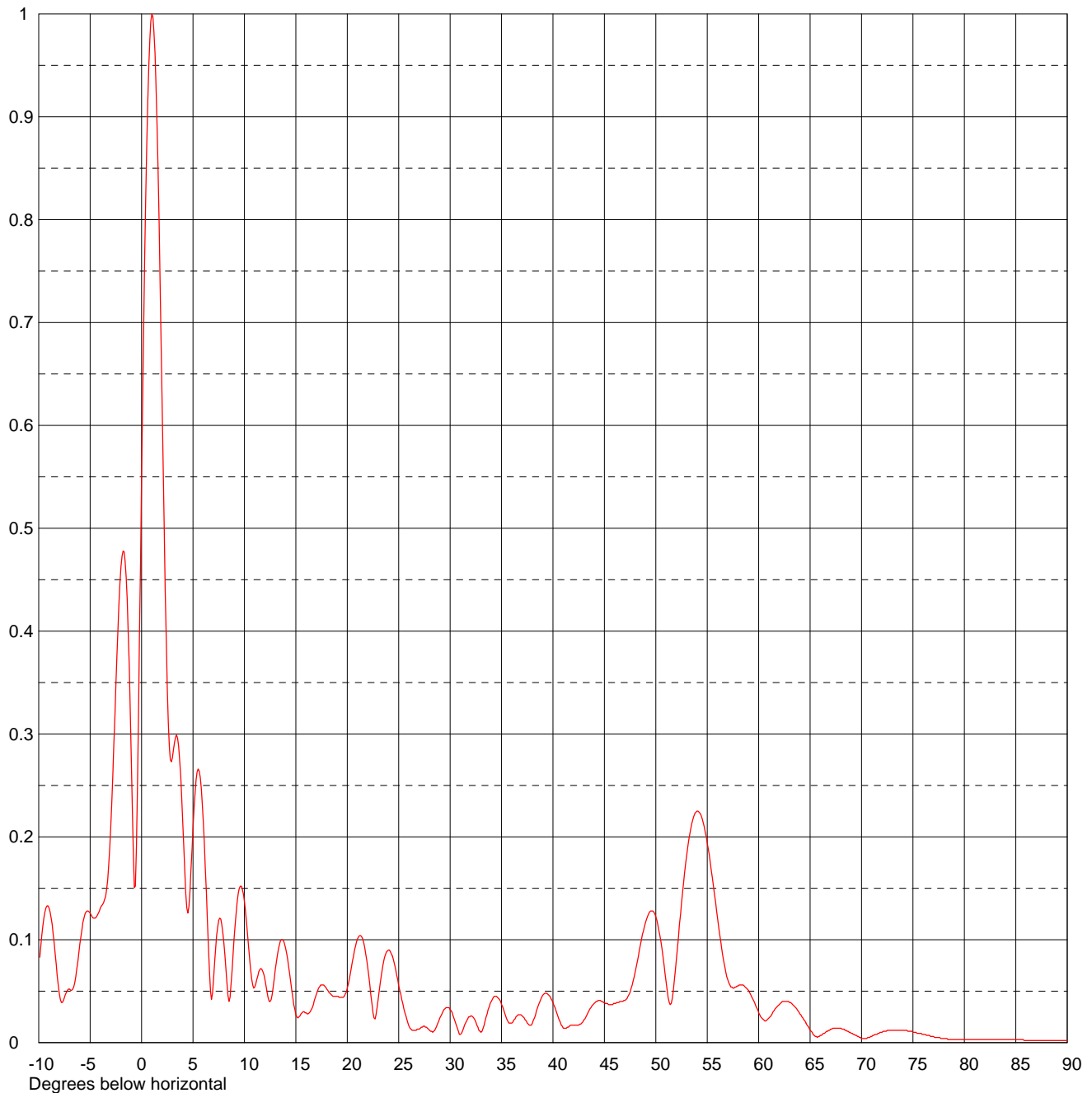
Frequency

653.00 MHz

Calculated / Measured

Calculated

Drawing #

12U22010-6530-90

Remarks:



Proposal Number

Revision

Date

10 Nov 2009

Call Letters

Channel **44**

Location

Customer

Antenna Type

TUF-C4-12/48U-2BR

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #

12U22010-6530-90

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.072	2.4	0.388	10.6	0.071	30.5	0.020	51.0	0.059	71.5	0.008
-9.5	0.121	2.6	0.310	10.8	0.056	31.0	0.008	51.5	0.038	72.0	0.010
-9.0	0.131	2.8	0.275	11.0	0.054	31.5	0.019	52.0	0.081	72.5	0.012
-8.5	0.097	3.0	0.277	11.5	0.071	32.0	0.026	52.5	0.136	73.0	0.012
-8.0	0.048	3.2	0.292	12.0	0.061	32.5	0.020	53.0	0.182	73.5	0.012
-7.5	0.044	3.4	0.299	12.5	0.040	33.0	0.010	53.5	0.213	74.0	0.012
-7.0	0.052	3.6	0.288	13.0	0.071	33.5	0.025	54.0	0.225	74.5	0.011
-6.5	0.058	3.8	0.259	13.5	0.099	34.0	0.040	54.5	0.218	75.0	0.010
-6.0	0.096	4.0	0.215	14.0	0.092	34.5	0.045	55.0	0.194	75.5	0.009
-5.5	0.125	4.2	0.166	14.5	0.059	35.0	0.037	55.5	0.160	76.0	0.008
-5.0	0.126	4.4	0.131	15.0	0.027	35.5	0.023	56.0	0.121	76.5	0.007
-4.5	0.121	4.6	0.132	15.5	0.028	36.0	0.019	56.5	0.085	77.0	0.006
-4.0	0.131	4.8	0.167	16.0	0.029	36.5	0.026	57.0	0.061	77.5	0.005
-3.5	0.142	5.0	0.209	16.5	0.032	37.0	0.026	57.5	0.053	78.0	0.004
-3.0	0.209	5.2	0.243	17.0	0.047	37.5	0.019	58.0	0.055	78.5	0.003
-2.8	0.260	5.4	0.263	17.5	0.056	38.0	0.019	58.5	0.056	79.0	0.003
-2.6	0.318	5.6	0.264	18.0	0.052	38.5	0.034	59.0	0.051	79.5	0.003
-2.4	0.376	5.8	0.247	18.5	0.046	39.0	0.046	59.5	0.041	80.0	0.003
-2.2	0.426	6.0	0.215	19.0	0.045	39.5	0.047	60.0	0.029	80.5	0.003
-2.0	0.463	6.2	0.170	19.5	0.044	40.0	0.039	60.5	0.022	81.0	0.003
-1.8	0.478	6.4	0.119	20.0	0.053	40.5	0.025	61.0	0.024	81.5	0.003
-1.6	0.468	6.6	0.069	20.5	0.079	41.0	0.014	61.5	0.031	82.0	0.003
-1.4	0.431	6.8	0.042	21.0	0.101	41.5	0.015	62.0	0.037	82.5	0.003
-1.2	0.365	7.0	0.062	21.5	0.101	42.0	0.017	62.5	0.040	83.0	0.003
-1.0	0.276	7.2	0.092	22.0	0.072	42.5	0.017	63.0	0.039	83.5	0.003
-0.8	0.182	7.4	0.113	22.5	0.029	43.0	0.022	63.5	0.035	84.0	0.003
-0.6	0.152	7.6	0.121	23.0	0.042	43.5	0.031	64.0	0.028	84.5	0.003
-0.4	0.250	7.8	0.115	23.5	0.077	44.0	0.038	64.5	0.021	85.0	0.003
-0.2	0.397	8.0	0.097	24.0	0.090	44.5	0.041	65.0	0.012	85.5	0.003
0.0	0.551	8.2	0.071	24.5	0.080	45.0	0.039	65.5	0.006	86.0	0.002
0.2	0.695	8.4	0.046	25.0	0.055	45.5	0.037	66.0	0.007	86.5	0.002
0.4	0.819	8.6	0.044	25.5	0.033	46.0	0.038	66.5	0.010	87.0	0.002
0.6	0.915	8.8	0.071	26.0	0.016	46.5	0.040	67.0	0.013	87.5	0.002
0.8	0.976	9.0	0.102	26.5	0.012	47.0	0.041	67.5	0.014	88.0	0.002
1.0	1.000	9.2	0.127	27.0	0.013	47.5	0.049	68.0	0.014	88.5	0.002
1.2	0.984	9.4	0.145	27.5	0.016	48.0	0.069	68.5	0.012	89.0	0.002
1.4	0.932	9.6	0.152	28.0	0.012	48.5	0.095	69.0	0.009	89.5	0.002
1.6	0.849	9.8	0.149	28.5	0.012	49.0	0.117	69.5	0.007	90.0	0.002
1.8	0.742	10.0	0.137	29.0	0.024	49.5	0.128	70.0	0.004		
2.0	0.621	10.2	0.117	29.5	0.033	50.0	0.122	70.5	0.004		
2.2	0.498	10.4	0.094	30.0	0.032	50.5	0.098	71.0	0.006		

Remarks:

AZIMUTH PATTERN

Gain

1.85 (2.67 dB)

Frequency

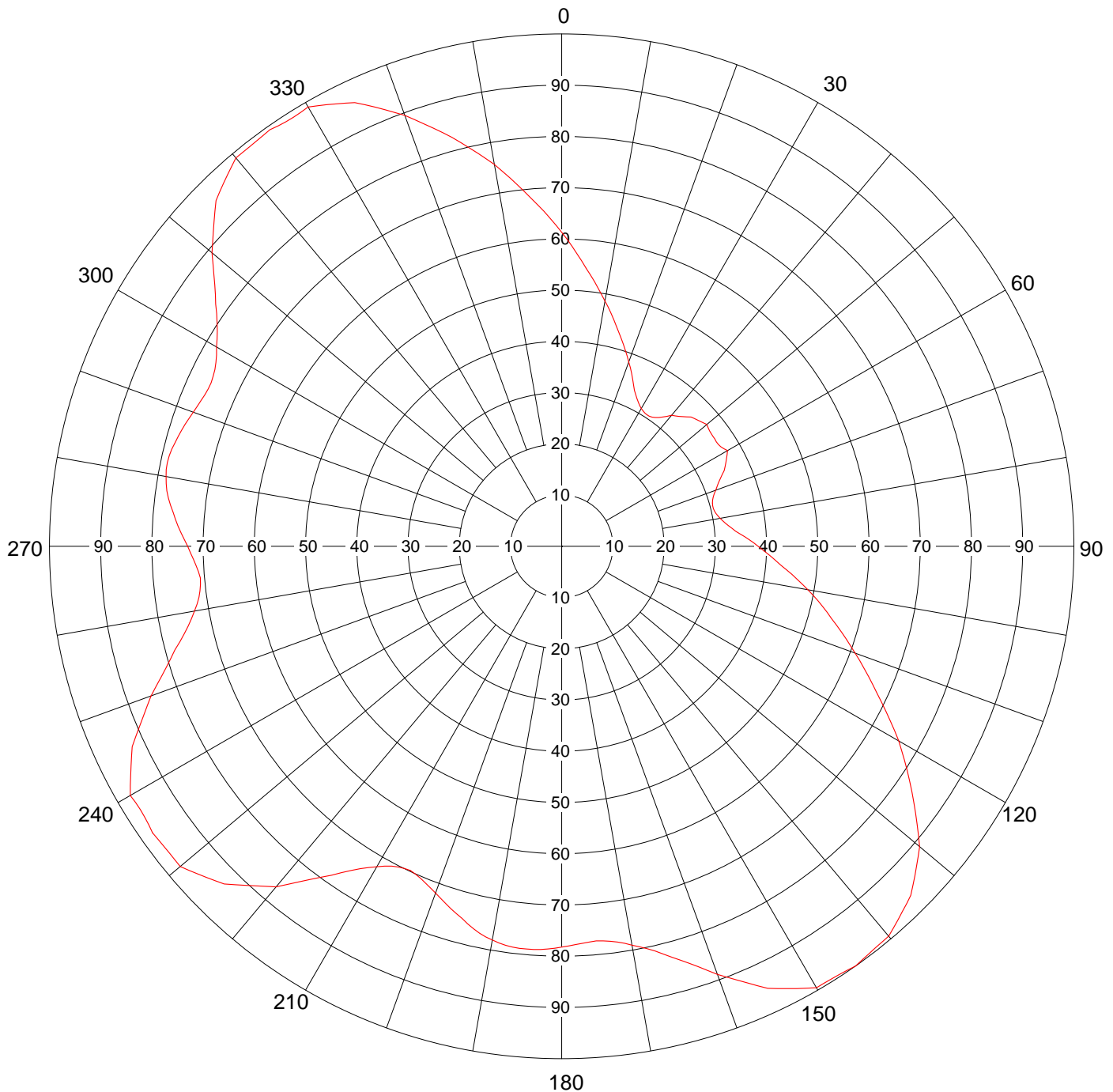
653 MHz

Calculated / Measured

Calculated

Drawing #

TUF-C4-6530



Remarks:



Proposal Number

Revision

Date

10 Nov 2009

Call Letters

Channel **44**

Location

Customer

Antenna Type **TUF-C4**

TABULATION OF AZIMUTH PATTERN

Azimuth Pattern Drawing # **TUF-C4-6530**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
0	0.613	45	0.357	90	0.384	135	0.964	180	0.782	225	0.932	270	0.730	315	0.954
1	0.599	46	0.359	91	0.393	136	0.969	181	0.785	226	0.940	271	0.737	316	0.961
2	0.586	47	0.362	92	0.402	137	0.975	182	0.786	227	0.948	272	0.744	317	0.968
3	0.572	48	0.364	93	0.411	138	0.981	183	0.788	228	0.956	273	0.750	318	0.975
4	0.558	49	0.367	94	0.421	139	0.987	184	0.789	229	0.964	274	0.756	319	0.982
5	0.545	50	0.370	95	0.430	140	0.993	185	0.789	230	0.972	275	0.761	320	0.989
6	0.533	51	0.368	96	0.442	141	0.994	186	0.789	231	0.972	276	0.768	321	0.989
7	0.521	52	0.366	97	0.453	142	0.995	187	0.788	232	0.972	277	0.774	322	0.990
8	0.509	53	0.365	98	0.465	143	0.996	188	0.786	233	0.973	278	0.778	323	0.990
9	0.498	54	0.365	99	0.476	144	0.998	189	0.784	234	0.974	279	0.782	324	0.991
10	0.486	55	0.365	100	0.488	145	1.000	190	0.780	235	0.975	280	0.784	325	0.993
11	0.475	56	0.364	101	0.500	146	0.998	191	0.777	236	0.972	281	0.786	326	0.990
12	0.464	57	0.365	102	0.512	147	0.996	192	0.772	237	0.970	282	0.787	327	0.988
13	0.453	58	0.366	103	0.523	148	0.995	193	0.766	238	0.970	283	0.786	328	0.988
14	0.442	59	0.369	104	0.534	149	0.995	194	0.759	239	0.971	284	0.785	329	0.988
15	0.432	60	0.374	105	0.545	150	0.995	195	0.752	240	0.973	285	0.782	330	0.990
16	0.422	61	0.369	106	0.558	151	0.986	196	0.746	241	0.963	286	0.779	331	0.983
17	0.412	62	0.364	107	0.571	152	0.978	197	0.740	242	0.953	287	0.776	332	0.976
18	0.402	63	0.359	108	0.584	153	0.969	198	0.733	243	0.944	288	0.773	333	0.969
19	0.393	64	0.355	109	0.596	154	0.960	199	0.727	244	0.934	289	0.769	334	0.962
20	0.383	65	0.350	110	0.610	155	0.952	200	0.720	245	0.925	290	0.765	335	0.956
21	0.374	66	0.343	111	0.623	156	0.939	201	0.714	246	0.910	291	0.762	336	0.943
22	0.364	67	0.336	112	0.637	157	0.925	202	0.709	247	0.895	292	0.759	337	0.931
23	0.355	68	0.330	113	0.651	158	0.913	203	0.704	248	0.880	293	0.757	338	0.919
24	0.345	69	0.325	114	0.665	159	0.901	204	0.701	249	0.866	294	0.755	339	0.907
25	0.336	70	0.320	115	0.680	160	0.889	205	0.698	250	0.853	295	0.755	340	0.895
26	0.330	71	0.315	116	0.695	161	0.875	206	0.700	251	0.837	296	0.757	341	0.881
27	0.324	72	0.311	117	0.711	162	0.863	207	0.702	252	0.821	297	0.760	342	0.867
28	0.319	73	0.308	118	0.727	163	0.851	208	0.707	253	0.807	298	0.765	343	0.853
29	0.314	74	0.306	119	0.743	164	0.840	209	0.714	254	0.794	299	0.770	344	0.839
30	0.311	75	0.305	120	0.760	165	0.830	210	0.722	255	0.782	300	0.778	345	0.826
31	0.308	76	0.305	121	0.774	166	0.820	211	0.731	256	0.768	301	0.785	346	0.812
32	0.307	77	0.306	122	0.789	167	0.811	212	0.742	257	0.756	302	0.793	347	0.798
33	0.306	78	0.308	123	0.804	168	0.803	213	0.754	258	0.745	303	0.802	348	0.784
34	0.306	79	0.311	124	0.819	169	0.796	214	0.768	259	0.736	304	0.813	349	0.770
35	0.308	80	0.314	125	0.835	170	0.791	215	0.784	260	0.728	305	0.824	350	0.757
36	0.311	81	0.318	126	0.850	171	0.785	216	0.798	261	0.721	306	0.836	351	0.741
37	0.315	82	0.323	127	0.865	172	0.780	217	0.814	262	0.715	307	0.848	352	0.726
38	0.320	83	0.328	128	0.881	173	0.777	218	0.831	263	0.711	308	0.862	353	0.711
39	0.326	84	0.334	129	0.896	174	0.774	219	0.849	264	0.709	309	0.876	354	0.696
40	0.334	85	0.340	130	0.912	175	0.773	220	0.867	265	0.708	310	0.891	355	0.682
41	0.337	86	0.349	131	0.922	176	0.774	221	0.879	266	0.711	311	0.903	356	0.668
42	0.341	87	0.358	132	0.932	177	0.776	222	0.892	267	0.715	312	0.915	357	0.654
43	0.346	88	0.366	133	0.943	178	0.778	223	0.905	268	0.720	313	0.928	358	0.641
44	0.351	89	0.375	134	0.953	179	0.780	224	0.918	269	0.725	314	0.941	359	0.627

Remarks: