

SPECIFICATION SHEET

SUBJECT

ULTRATHIN 4" RECESSED LUMINAIRE

CUSTOMER PROJECT

Project: _____
Type: _____
Cat. No.: _____

Qty: _____
Date: _____
EEL Rep: _____

EELighting

solutions closer to nature

Telephone: 905 415 8878 Fax Number: 905 415 8872 Toll Free Telephone: 855 415 8878 Toll Free Fax: 855 415 8872



DESCRIPTION

The UltraThin 4" Recessed Luminaire fits where no other recessed fixture can. This recessed luminaire is dimmable, IC air tight rated, wet location approved and Energy Star rated.



**ULTRATHIN
4" LED RECESSED
LUMINAIRE**

SPECIFICATION FEATURES

Construction

Round 4" fixture with integral LEDs

Controls

Isolated driver factory installed inside connection box

Electrical

Ambient temperature -40°C to 40°C

CRI:80

IC-Rated.

120V dimmable / 277-347V non-dimmable

9 Watt equivalent to 50 Watt halogen

12 Watt equivalent to 65 Watt halogen

Mounting

Cut hole in ceiling by using the template provided and snap fixture in opening with attached spring clips.

Clearance needed - 2" (50mm)

Beam Angle

120°

Finish

Standard - White

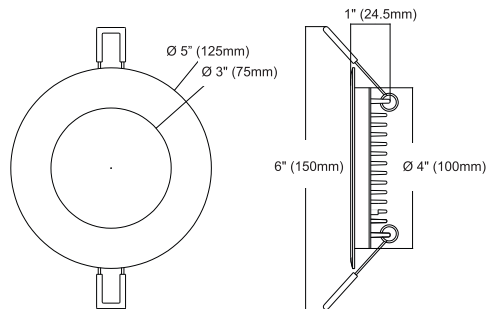
Special Order - Brushed Nickel and Black

Compliance

cETLus and Energy Star

Warranty

5 years, 50,000+ hours



UTLED-S9W-3KWH / UTLED-S9W-3KBN / UTLED-S9W-3KKB
UTLED-S9W-4KWH / UTLED-S9W-4KBN / UTLED-S9W-4KKB

Dimensions

OD 4-15/16" (125mm) x ID 3-15/16" (100mm)

Cut out 4-1/8" (±1/8") (105 ± 3mm)

Thickness 1/2" (12mm)

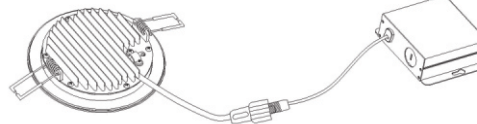
UTLED-S12W-3KWH / UTLED-S12W-3KBN / UTLED-S12W-3KKB
UTLED-S12W-4KWH / UTLED-S12W-4KBN / UTLED-S12W-4KKB

Dimensions

OD 4-15/16" (125mm) x ID 3-15/16" (100mm)

Cut out 4-1/8" (±1/4") (105 ± 6mm)

Thickness 1" (25mm)



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EELSS19W07



ORDERING CODE, ENERGY AND PERFORMANCE DATA

	Model No.	Delivered Lumens (lm)	Input Watts (W)	Voltage (V)	Colour Temp. (K)	Certification	Type
	UTLED-S9W-3KWH UTLED-S9W-4KWH White	550 600	9 9	120V / 277-347V 120V / 277-347V	3000K 4000K		Standard Standard
	UTLED-S12W-3KWH UTLED-S12W-4KWH White	700 800	12 12	120V / 277-347V 120V / 277-347V	3000K 4000K		Standard Standard
	UTLED-S9W-3KBN UTLED-S9W-4KBN Brushed Nickel	550 600	9 9	120V / 277-347V 120V / 277-347V	3000K 4000K		Special Order Special Order
	UTLED-S12W-3KBN UTLED-S12W-4KBN Brushed Nickel	700 800	12 12	120V / 277-347V 120V / 277-347V	3000K 4000K		Special Order Special Order
	UTLED-S9W-3KBK UTLED-S9W-4KBK Black	550 600	9 9	120V / 277-347V 120V / 277-347V	3000K 4000K		Special Order Special Order
	UTLED-S12W-3KBK UTLED-S12W-4KBK Black	700 800	12 12	120V / 277-347V 120V / 277-347V	3000K 4000K		Special Order Special Order

NOTE:

- 120V dimmable / 277-347V non-dimmable
- Lumens are estimated
- Energy Star certification applies to 120V only

OPTIONAL ACCESSORIES

- UTLED-4-MP | Mounting Plate for 4" UltraThin
- UTLED-JC-10 | 10' Extension Cable for UltraThin
- UTLED-JC-20 | 20' Extension Cable for UltraThin
- UTLED-4-GOOFRING | Goof Ring for 4" UltraThin

SHIPPING DATA

Model No.	Gross Weight
UTLED-S9W-3KWH	0.44 kg / 1 lbs
UTLED-S9W-4KWH	0.44 kg / 1 lbs
UTLED-S12W-3KWH	0.53 kg / 1.2 lbs
UTLED-S12W-4KWH	0.53 kg / 1.2 lbs
UTLED-S9W-3KBN	0.44 kg / 1 lbs
UTLED-S9W-4KBN	0.44 kg / 1 lbs
UTLED-S12W-3KBN	0.53 kg / 1.2 lbs
UTLED-S12W-4KBN	0.53 kg / 1.2 lbs
UTLED-S9W-3KBK	0.44 kg / 1 lbs
UTLED-S9W-4KBK	0.44 kg / 1 lbs
UTLED-S12W-3KBK	0.53 kg / 1.2 lbs
UTLED-S12W-4KBK	0.53 kg / 1.2 lbs

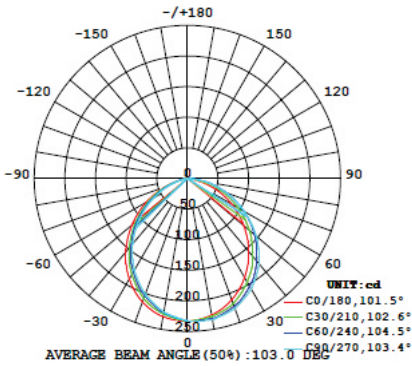


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PHOTOMETRICS



UTLED-S9W-3K

S/MH(C0/180) = 1.2
 S/MH(C90/270) = 1.32
 Lumens: 577.21
 Nominal Power: 9 W
 Efficacy: 70.5 lm/W

Candlepower

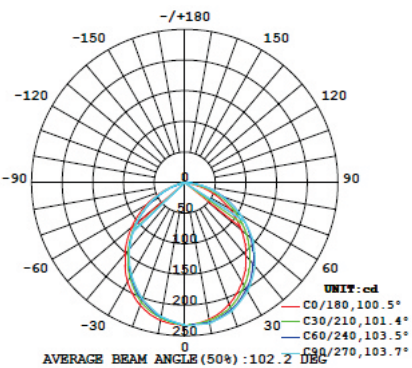
γ	C0	C45	C90	C135	C180	C225	C270	C315
5	230.9	232.2	233.5	234.1	234.1	234.6	237.2	237.8
10	226.5	229.6	229.3	229.2	229.1	229.4	231.7	231.7
15	219.9	227.0	230.3	229.7	223.5	216.4	211.6	213.9
20	211.0	219.5	226.2	222.9	214.7	205.6	201.6	202.4
25	199.8	211.0	217.3	214.7	203.5	193.5	187.6	190.0
30	186.7	199.7	208.5	203.5	189.9	178.9	173.6	175.4
35	171.8	186.3	196.3	189.4	174.3	162.5	156.5	159.0
40	155.5	172.2	182.2	173.9	156.9	145.3	139.4	142.0
45	138.2	155.2	164.6	154.4	138.2	126.7	120.7	123.0
50	120.1	138.2	147.0	134.8	118.4	108.2	102.0	104.1
55	101.6	119.9	127.0	112.9	98.05	88.36	82.76	84.53
60	82.93	101.8	107.0	91.72	77.46	69.08	63.94	65.42
65	64.26	82.85	86.23	70.50	56.92	50.14	44.91	46.28
70	45.34	64.45	65.48	48.00	37.33	32.18	26.28	28.11
75	25.24	46.37	47.19	25.94	19.11	15.32	13.14	11.06
80	7.476	25.65	28.91	9.822	0.7224	0.5187	0	0.474
85	0	5.428	0	0.0111	0	0	0	0

Zonal Lumen Summary

γ	Φ zone	Φ total	Φ lum. lamp
0- 5	5.533	5.533	0.96, 0.96
5- 10	16.38	21.91	3.8, 3.8
10- 15	26.61	48.51	8.4, 8.4
15- 20	35.76	84.27	14.6, 14.6
20- 25	43.32	127.6	22.1, 22.1
25- 30	49.51	177.3	30.7, 30.7
30- 35	53.57	230.9	40.40
35- 40	55.46	286.3	49.6, 49.6
40- 45	55.22	341.6	59.2, 59.2
45- 50	52.92	394.4	68.3, 68.3
50- 55	48.51	442.9	76.7, 76.7
55- 60	42.51	485.4	84.1, 84.1
60- 65	35.18	520.6	90.2, 90.2
65- 70	26.79	547.4	94.8, 94.8
70- 75	17.97	565.3	97.9, 97.9
75- 80	9.412	574.7	99.6, 99.6
80- 85	2.515	577.2	100, 100
85- 90	0.0217	577.2	100, 100

Coefficient of Utilization

ρcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization (CU)									
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1.0	1.06	1.02	.98	1.03	.00	.97	.99	.96	.94	.95	.92	.91	.92	.90	.88	.86
2.0	.93	.87	.81	.91	.85	.80	.88	.83	.78	.84	.80	.77	.81	.78	.75	.73
3.0	.82	.74	.68	.81	.73	.68	.78	.72	.66	.75	.70	.65	.72	.68	.64	.62
4.0	.73	.65	.58	.72	.64	.58	.69	.63	.57	.67	.61	.56	.65	.60	.56	.54
5.0	.66	.57	.51	.64	.56	.50	.62	.55	.50	.60	.54	.49	.59	.53	.49	.47
6.0	.59	.51	.44	.58	.50	.44	.56	.49	.44	.55	.48	.43	.53	.47	.43	.41
7.0	.54	.45	.39	.53	.45	.39	.51	.44	.39	.50	.43	.39	.49	.43	.38	.36
8.0	.49	.41	.35	.48	.41	.35	.47	.40	.35	.46	.39	.35	.45	.39	.34	.33
9.0	.45	.37	.32	.45	.37	.32	.43	.36	.32	.42	.36	.31	.41	.36	.31	.29
10.0	.42	.34	.29	.41	.34	.29	.40	.33	.29	.39	.33	.29	.38	.33	.28	.27



UTLED-S9W-4K

S/MH(C0/180) = 1.20
 S/MH(C90/270) = 1.30
 Lumens: 571.29
 Nominal Power: 9 W
 Efficacy: 70.59 lm/W

Candlepower

γ	C0	C45	C90	C135	C180	C225	C270	C315
5	230.7	231.7	232.6	232.1	231.4	228.2	227.1	227.8
10	226.6	229.8	232.9	230.7	228.1	223.0	221.8	222.0
15	220.1	226.1	228.2	227.3	222.0	215.9	211.9	214.4
20	211.2	219.3	223.4	219.9	213.0	204.9	202.1	203.1
25	200.1	209.5	214.1	211.1	201.2	192.4	189.2	190.9
30	187.1	198.1	204.8	199.3	186.8	177.1	174.3	176.8
35	172.2	184.7	191.6	185.1	170.4	159.8	157.4	160.5
40	156.0	170.6	178.4	169.8	152.4	142.0	140.6	144.0
45	138.7	159.7	161.3	150.9	133.3	122.6	122.1	125.7
50	120.7	146.9	144.7	131.5	119.3	103.6	104.6	107.6
55	102.3	119.7	124.9	109.6	92.88	83.39	84.79	89.97
60	83.71	100.9	105.2	88.35	72.28	62.49	65.93	70.76
65	65.33	82.15	84.35	67.19	51.85	43.42	47.03	52.62
70	46.25	63.88	63.59	45.79	32.14	24.32	28.13	35.46
75	25.88	46.08	46.35	24.50	13.77	6.432	14.06	19.35
80	10.28	26.20	29.18	8.452	0.0000	1.537	0	6.809
85	0	5.904	0	0	0	0	0	0
90	0	0	0	0	0	0	0	0

Zonal Lumen Summary

γ	Φ zone	Φ total	Φ lum. lamp
0- 5	5.522	5.522	0.97, 0.97
5- 10	16.34	21.86	3.83, 3.83
10- 15	26.32	48.38	8.47, 8.47
15- 20	35.61	83.99	14.7, 14.7
20- 25	43.28	127.3	22.3, 22.3
25- 30	49.15	176.4	30.9, 30.9
30- 35	53.09	229.5	40.2, 40.2
35- 40	54.89	284.4	49.8, 49.8
40- 45	54.62	339.0	59.2, 59.2
45- 50	52.24	391.3	68.5, 68.5
50- 55	47.98	439.2	76.9, 76.9
55- 60	42.02	481.3	84.2, 84.2
60- 65	34.71	516.0	90.2, 90.2
65- 70	26.30	542.3	94.9, 94.9
70- 75	17.37	559.6	98.98
75- 80	9.089	569.7	99.6, 99.6
80- 85	2.532	571.3	100, 100
85- 90	0.0228	571.3	100, 100

Coefficient of Utilization

ρcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization (CU)									
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1.0	1.06	1.02	.98	1.03	.00	.97	.99	.96	.94	.95	.92	.91	.92	.90	.88	.86
2.0	.93	.87	.81	.91	.85	.80	.88	.83	.78	.84	.80	.77	.81	.78	.75	.73
3.0	.82	.75	.68	.81	.74	.68	.78	.72	.66	.75	.70	.65	.72	.68	.64	.62
4.0	.73	.65	.58	.72	.64	.58	.69	.63	.57	.67	.61	.56	.65	.60	.56	.54
5.0	.66	.57	.51	.64	.56	.50	.62	.55	.50	.60	.54	.49	.59	.53	.49	.47
6.0	.59	.51	.44	.58	.50	.44	.57	.49	.44	.55	.48	.43	.53	.48	.43	.41
7.0	.54	.45	.39	.53	.45	.39	.52	.44	.39	.50	.44	.39	.49	.43	.38	.37
8.0	.49	.41	.35	.49	.41	.35	.47	.40	.35	.46	.40	.35	.45	.39	.35	.33
9.0	.45	.37	.32	.45	.37	.32	.44	.37	.32	.42	.36	.31	.41	.36	.31	.30
10.0	.42	.34	.29	.41	.34	.29	.40	.33	.29	.39	.33	.29	.38	.33	.29	.27



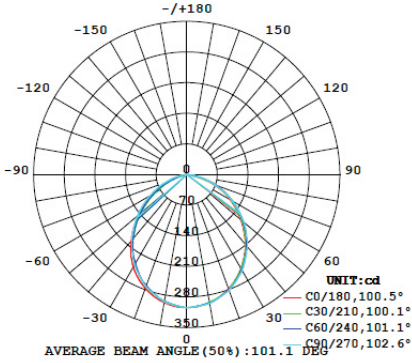


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PHOTOMETRICS



UTLED-S12W-3K

S/MH(C0/180) = 1.21
 S/MH(C90/270) = 1.24
 Lumens: 739.38
 Nominal Power: 12 W
 Efficacy: 67.11 lm/W

Candlepower

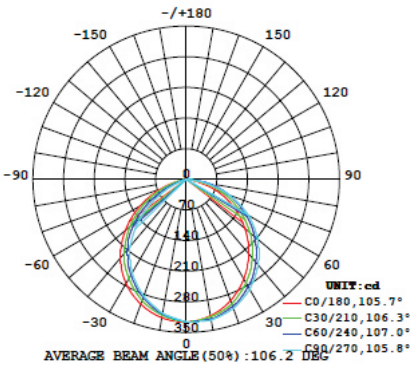
γ	C0	C45	C90	C135	C180	C225	C270	C315
5	302.6	301.7	301.9	301.9	302.7	300.1	299.9	300.5
10	297.5	297.3	299.4	298.0	297.4	293.8	295.3	295.3
15	289.4	290.7	290.7	291.8	288.8	284.9	284.1	287.9
20	278.2	279.1	282.1	280.6	277.2	270.7	273.0	275.1
25	264.1	266.2	267.7	268.6	262.6	255.0	256.1	261.4
30	247.5	250.0	253.4	253.1	244.8	236.0	239.1	244.4
35	228.4	231.4	234.2	234.7	223.7	214.1	217.5	224.9
40	207.4	211.9	215.1	215.1	199.2	191.0	196.0	204.9
45	184.9	189.2	192.8	190.4	172.0	165.0	171.7	181.6
50	161.5	166.8	170.6	164.7	144.4	139.1	147.4	158.8
55	137.7	142.9	145.4	134.2	116.3	111.7	122.4	134.6
60	113.8	119.3	120.2	104.5	88.09	85.06	97.51	111.1
65	89.78	94.48	93.85	75.38	60.37	59.16	73.73	87.33
70	62.08	67.77	67.50	47.01	33.95	34.91	49.94	64.60
75	31.26	38.34	44.45	19.14	10.43	12.64	30.69	42.90
80	5.674	13.29	21.40	5.751	0	3.656	11.44	19.61
85	0	0	0	0	0	0	0	2.342

Zonal Lumen Summary

γ	Φ zone	Φ total	lum, lm
0- 5	7.233	7.233	0.99, 0.98
5- 10	21.38	28.61	3.87, 3.87
10- 15	34.68	63.29	8.56, 8.56
15- 20	46.53	109.8	14.9, 14.4
20- 25	56.56	166.4	22.5, 22.5
25- 30	64.28	230.7	31.2, 31.2
30- 35	69.44	300.1	40.6, 40.6
35- 40	71.74	371.8	50.3, 50.3
40- 45	71.28	443.1	59.9, 59.9
45- 50	68.05	511.2	69.1, 69.1
50- 55	62.31	573.5	77.6, 77.6
55- 60	54.35	627.8	84.9, 84.9
60- 65	44.67	672.5	91.91
65- 70	33.48	706.0	95.5, 95.5
70- 75	21.34	727.3	98.4, 98.4
75- 80	9.896	737.2	99.7, 99.7
80- 85	2.157	739.4	100, 100
85- 90	0.0162	739.4	100, 100

Coefficient of Utilization

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio									Coefficients of Utilization(CU)						
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1.0	1.06	1.02	.99	1.04	1.00	.97	.99	.97	.94	.96	.93	.91	.92	.90	.88	.86
2.0	.93	.87	.82	.91	.86	.81	.88	.83	.79	.85	.81	.77	.82	.78	.75	.73
3.0	.83	.75	.69	.81	.74	.68	.78	.72	.67	.75	.70	.66	.73	.68	.65	.63
4.0	.73	.65	.59	.72	.64	.58	.70	.63	.58	.67	.62	.57	.65	.60	.56	.54
5.0	.66	.57	.51	.65	.57	.51	.63	.56	.50	.61	.55	.50	.59	.54	.49	.47
6.0	.60	.51	.45	.59	.51	.45	.57	.50	.44	.55	.49	.44	.54	.48	.43	.41
7.0	.54	.46	.40	.53	.45	.40	.52	.45	.39	.50	.44	.39	.49	.43	.39	.37
8.0	.50	.41	.36	.49	.41	.35	.48	.40	.35	.46	.40	.35	.45	.39	.35	.33
9.0	.46	.38	.32	.45	.37	.32	.44	.37	.32	.43	.36	.32	.42	.36	.32	.30
10.0	.42	.34	.29	.42	.34	.29	.41	.34	.29	.40	.33	.29	.39	.33	.29	.27



UTLED-S12W-4K

S/MH(C0/180) = 1.21
 S/MH(C90/270) = 1.31
 Lumens: 821.53
 Nominal Power: 12 W
 Efficacy: 74.26 lm/W

Candlepower

γ	C0	C45	C90	C135	C180	C225	C270	C315
5	322.7	324.4	326.2	326.0	325.0	320.3	318.3	318.8
10	316.6	321.5	326.9	324.7	321.2	313.5	311.0	310.6
15	307.3	316.1	320.6	320.8	313.9	304.2	297.7	299.9
20	295.1	305.4	314.4	311.7	302.7	290.3	284.4	284.7
25	280.1	292.5	302.3	301.4	290.7	275.3	266.2	268.3
30	262.8	278.3	290.1	287.6	275.0	257.3	248.0	249.3
35	243.3	260.7	272.8	271.0	256.1	237.1	223.6	228.0
40	221.9	242.1	255.5	253.4	234.0	215.7	199.3	205.1
45	199.0	219.9	234.3	231.5	209.3	190.1	168.3	176.0
50	174.9	197.7	213.1	208.4	181.9	162.8	137.4	146.6
55	149.6	172.9	188.4	178.0	152.8	132.1	102.4	113.6
60	123.5	148.3	163.7	147.2	121.9	101.0	67.38	81.00
65	97.04	121.9	134.3	114.9	90.51	66.01	35.08	48.35
70	68.99	95.86	102.8	76.81	59.34	37.76	2.789	21.72
75	38.99	68.99	70.45	37.88	29.66	10.95	1.394	2.163
80	14.65	41.39	38.10	13.99	3.608	3.080	0	0
85	0	9.920	0	0.4889	0	0	0	0
90	0	0	0	0	0	0	0	0

Zonal Lumen Summary

γ	Φ zone	Φ total	lum, lm
0- 5	7.741	7.741	0.94, 0.94
5- 10	22.91	30.65	3.73, 3.73
10- 15	37.23	67.88	8.26, 8.26
15- 20	50.10	118.0	14.4, 14.4
20- 25	61.16	179.1	21.8, 21.8
25- 30	69.92	249.1	30.3, 30.3
30- 35	76.19	325.3	39.6, 39.6
35- 40	79.92	404.8	49.2, 49.2
40- 45	79.86	484.6	59.59
45- 50	76.95	561.6	68.4, 68.4
50- 55	70.94	632.5	77.77
55- 60	61.90	694.4	84.5, 84.5
60- 65	50.42	744.9	90.7, 90.7
65- 70	37.07	781.9	95.2, 95.2
70- 75	23.50	805.4	98.98
75- 80	12.40	817.8	99.5, 99.5
80- 85	2.651	821.5	100, 100
85- 90	0.0590	821.5	100, 100

Coefficient of Utilization

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio									Coefficients of Utilization(CU)						
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1.0	1.06	1.02	.98	1.03	1.00	.97	.99	.96	.94	.95	.93	.91	.92	.90	.88	.86
2.0	.93	.87	.81	.91	.85	.80	.88	.83	.79	.84	.80	.77	.81	.78	.75	.73
3.0	.82	.74	.68	.81	.73	.68	.78	.72	.67	.75	.70	.65	.72	.68	.64	.62
4.0	.73	.65	.58	.72	.64	.58	.69	.63	.57	.67	.61	.56	.65	.60	.56	.54
5.0	.65	.57	.50	.64	.56	.50	.62	.55	.50	.60	.54	.49	.59	.53	.49	.47
6.0	.59	.50	.44	.58	.50	.44	.56	.49	.44	.55	.48	.43	.53	.47	.43	.41
7.0	.54	.45	.39	.53	.45	.39	.51	.44	.39	.50	.43	.38	.49	.43	.38	.36
8.0	.49	.41	.35	.48	.40	.35	.47	.40	.35	.46	.39	.35	.45	.39	.34	.32
9.0	.45	.37	.32	.44	.37	.32	.43	.36	.31	.42	.36	.31	.41	.35	.31	.29
10.0	.42	.34	.29	.41	.34	.29	.40	.33	.28	.39	.32	.28	.38	.32	.28	.27

