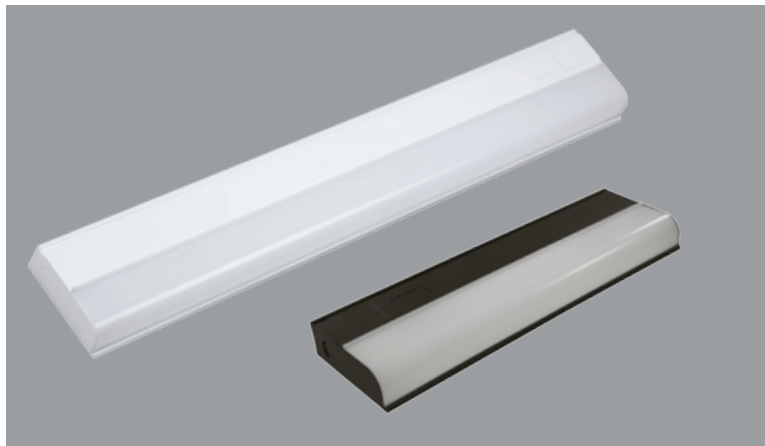
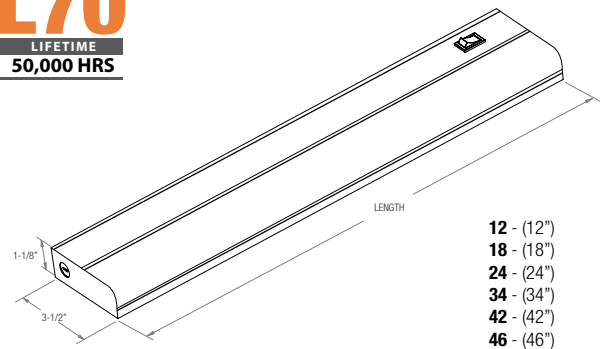




EU-LED SERIES



CALCULATED
L70
LIFETIME
50,000 HRS



- 12 - (12")
- 18 - (18")
- 24 - (24")
- 34 - (34")
- 42 - (42")
- 46 - (46")

APPLICATION:

Suitable for retail displays, gondolas, coves and undercabinet applications.

PRODUCT FEATURES:

- Life tested to ensure light output up to 50,000 hours of operation to L70
- Tested to LM-79 and LM-80 standards
- Easy-fit cover channel attachment
- Tool-less wireway access
- Detachable channel cover for quick installation
- Romex/BX conduit connector included with every fixture
- Soft-lumens, linear prismatic diffuser gives better visual comfort

- Knockouts available at the back, side, and rear for easy installation
- Available keyhole mounting slots on the back finish

FINISH:

UV coated rust resistance. Painted parts finished with polyester powder coating. 22-gauge die-formed steel housing.

PERFORMANCE - The light engines found in the EU-LED are rated at 90+ CRI and are available in CCTs 4100K. Rated and tested to LM-79 and LM-80 standards. The LEDs are also binned to a 3-step MacAdam ellipses to achieve consistent color from fixture to fixture.

QUALITY CONTROL - Every fixture is turned on and rigorously tested by our QC Department before shipping.

ELECTRICAL - Powered by high-quality constant-current power LED drivers which are rated for 50 to 60Hz at 120V input, produce less than 20% THD, and have a power factor of .90 to 1.00.

WARRANTY - Limited 5 Year Warranty

DIMMING - The EU-LED can be ordered with TRIAC dimming system. Consult factory for more information. Dimmable with INC (Incandescent), ELV (Electronic Low Voltage) or MLV (Magnetic Low Voltage) Dimmers.

LISTING - ETL listed



Example: EU-LED-24-900L-DIMTR-40K

TYPE	LENGTH / LUMENS	DIMMING	COLOR OPTION	FINISH	ACCESSORIES
EU-LED	9-300L - (9", 4 Watts, 300 lumens) 12-450L - (12", 5 Watts, 450 lumens) 18-600L - (18", 7 Watts, 600 lumens) 24-900L - (24", 10 Watts, 900 lumens) 34-1300L - (34", 14 Watts, 1300 lumens) 42-1600L - (42", 18 Watts, 1600 lumens) 46-1800L - (46", 18 Watts, 1800 lumens)	DIMTR - 120V only	30K - (3000K) 35K - (3500K) 40K - (4100K)	WH - White BZ - Bronze	RC - Grounded outlet

PHOTOMETRY DATA

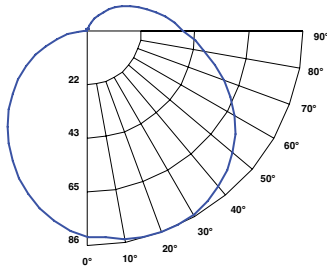
EU-LED-12-450L-120-30K-WH

WATTAGE: 4.6

LUMENS: 313

TOTAL LUMINAIRE EFFICACY: 68

Candle Power Distribution (Candelas)



Spacing Criteria

0-180 : 1.24
90-270 : 1.12
Diagonal : 1.42

EFFICACY: 68 LM/W

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-30°	64.90	20.80	20.80
0-40°	107.28	34.40	34.30
0-60°	196.14	62.80	62.70
0-90°	277.43	88.80	88.80
0-180°	312.59	100.10	100.00

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0°	Average 45°	Average 90°
45°	265	222	218
55°	249	206	203
65°	233	188	188
75°	195	164	171
85°	115	135	160

Candela Tabulation

	0	45	90
0	83.005	83.005	83.005
5	83.000	81.390	80.800
15	79.610	75.420	74.150
25	73.230	67.120	65.500
35	64.510	56.990	55.530
45	54.810	45.930	45.010
55	41.750	34.550	34.090
65	28.720	23.150	23.250
75	14.740	12.370	12.920
85	2.940	3.440	4.070
90	0.300	1.100	1.600

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 20% = PF

RC RW	80%			70%			50%			30%			10%			0%			
	70%	50%	30%	70%	50%	30%	70%	50%	30%	70%	50%	30%	70%	50%	30%	70%	50%	30%	
0	116	116	116	116	112	112	112	112	105	105	105	98	98	98	92	92	92	89	89
1	104	99	94	89	100	95	91	87	89	85	82	83	80	77	78	75	73	70	70
2	94	85	77	71	90	82	75	69	77	71	66	72	67	63	67	63	60	57	57
3	85	74	65	58	82	71	63	57	67	60	54	63	57	52	59	54	50	47	47
4	78	65	56	49	75	63	54	48	59	52	46	55	49	44	52	47	42	40	40
5	71	58	49	42	68	56	47	41	53	45	39	49	43	38	46	41	36	34	34
6	66	52	43	36	63	50	42	35	47	40	34	45	38	33	42	36	32	30	30
7	61	47	38	32	58	46	37	31	43	36	30	41	34	29	38	33	28	26	26
8	57	43	34	28	54	42	33	28	39	32	27	37	31	26	35	29	25	23	23
9	53	39	31	25	51	38	30	25	36	29	24	34	28	23	32	27	23	21	21
10	49	36	28	23	48	35	27	22	33	26	22	32	25	21	30	24	20	19	19

RC - Ceiling Cavity Reflectance RW - Wall Reflectance

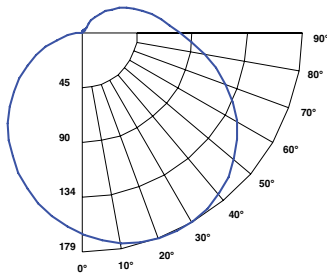
EU-LED-24-900L-120-30K-WH

WATTAGE: 9.2

LUMENS: 636

TOTAL LUMINAIRE EFFICACY: 69

Candle Power Distribution (Candelas)



Spacing Criteria

0-180 : 1.24
90-270 : 1.08
Diagonal : 1.44

EFFICACY: 69 LM/W

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-30°	130.22	20.50	20.50
0-40°	215.55	33.90	33.90
0-60°	395.70	62.30	62.20
0-90°	562.25	88.50	88.40
0-180°	635.79	100.10	100.00

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0°	Average 45°	Average 90°
45°	516	428	417
55°	491	391	384
65°	452	350	350
75°	383	295	306
85°	206	213	260

Candela Tabulation

	0	45	90
0	165.575	165.575	165.575
5	164.260	160.370	159.180
15	157.310	147.340	144.660
25	144.860	130.280	126.820
35	127.690	110.080	107.070
45	106.610	88.390	86.090
55	82.330	65.590	64.330
65	55.770	43.270	43.180
75	28.970	22.280	23.110
85	5.240	5.420	6.630
90	0.580	2.260	3.240

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 20% = PF

RC RW	80%			70%			50%			30%			10%			0%			
	70%	50%	30%	70%	50%	30%	70%	50%	30%	70%	50%	30%	70%	50%	30%	70%	50%	30%	
0	116	116	116	116	112	112	112	112	105	105	105	98	98	98	92	92	92	89	89
1	104	99	94	89	100	95	91	86	89	85	82	83	80	77	77	75	73	70	70
2	94	85	77	71	90	82	75	69	76	71	66	71	67	62	67	63	59	56	56
3	85	74	65	58	82	71	63	57	67	60	54	62	57	52	58	54	49	47	47
4	78	65	56	49	74	63	54	48	59	51	46	55	49	44	52	46	42	39	39
5	71	58	48	41	68	56	47	41	52	45	39	49	43	38	46	41	36	34	34
6	66	52	42	36	63	50	42	35	47	40	34	44	38	33	42	36	32	29	29
7	61	47	38	31	58	45	37	31	43	35	30	40	34	29	38	32	28	26	26
8	56	43	34	28	54	41	33	27	39	32	27	37	30	26	35	29	25	23	23
9	53	39	31	25	51	38	30	25	36	29	24	34	28	23	32	27	22	20	20
10	49	36	28	22	47	35	27	22	33	26	22	31	25	21	30	24	20	18	18

RC - Ceiling Cavity Reflectance RW - Wall Reflectance

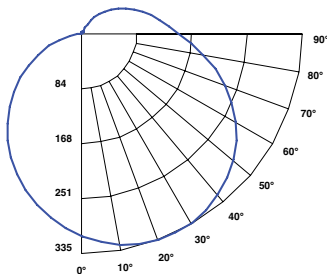
EU-LED-46-1800L-120-30K-WH

WATTAGE: 17.5

LUMENS: 1183

TOTAL LUMINAIRE EFFICACY: 68

Candle Power Distribution (Candelas)



Spacing Criteria

0-180 : 1.28
90-270 : 1.60
Diagonal : 1.44

EFFICACY: 68 LM/W

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-30°	243.38	20.60	20.60
0-40°	403.20	34.10	34.10
0-60°	739.52	62.60	62.50
0-90°	1046.64	88.50	88.50
0-180°	1183.13	100.10	100.00

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0°	Average 45°	Average 90°
45°	257	343	377
55°	250	376	425
65°	236	430	507
75°	205	550	690
85°	137	1178	1626

Candela Tabulation

	0	45	90
0	308.709	308.709	308.709
5	308.860	316.170	319.010
15	299.280	322.810	331.960
25	279.330	319.360	335.080
35	249.960	306.000	327.970
45	212.170	283.220	311.130
55	167.270	251.690	285.130
65	116.360	212.180	250.370
75	62.030	166.300	208.580
85	13.920	120.010	165.610
90	1.040	101.240	146.620

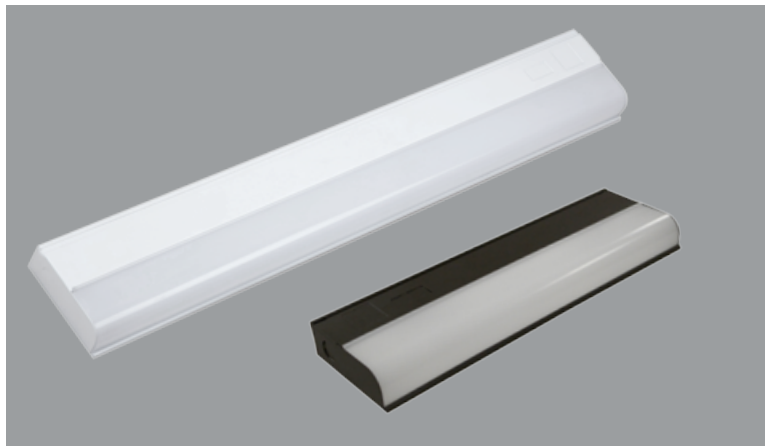
Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 20% = PF

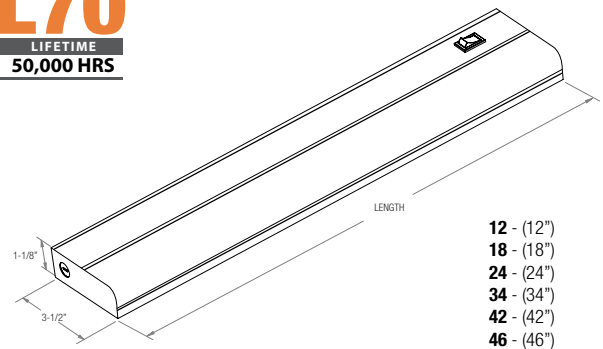
RC RW	80%			70%			50%			30%			10%			0%			
	70%	50%	30%	70%	50%	30%	70%	50%	30%	70%	50%	30%	70%	50%	30%	70%	50%	30%	
0	116	116	116	116	112	112	112	112	105	105	105	98	98	98	92	92	92	89	89
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5	71	58	48	41	68	56	47	41	52	45	39	49	43	38	46	41	36	34	34
6	66	52	43	36	63	50	42	35	47	40	34	44	38	33	42	36	32	29	29
7	61	47	38	32	58	45	37	31	43	35	30	40	34	29	38	32	28	26	26
8	56	43	34	28	54	41													



EU-LED SERIES



CALCULATED
L70
LIFETIME
50,000 HRS



- 12 - (12")
- 18 - (18")
- 24 - (24")
- 34 - (34")
- 42 - (42")
- 46 - (46")

APPLICATION:

Suitable for retail displays, gondolas, coves and undercabinet applications.

PRODUCT FEATURES:

- Life tested to ensure light output up to 50,000 hours of operation to L70
- Tested to LM-79 and LM-80 standards
- Easy-fit cover channel attachment
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- Soft-lumens, linear prismatic diffuser gives better visual comfort

- Knockouts available at the back, side, and rear for easy installation
- Available keyhole mounting slots on the back finish

FINISH:

UV coated rust resistance. Painted parts finished with polyester powder coating. 22-gauge die-formed steel housing.

PERFORMANCE - The light engines found in the EU-LED are rated at 90+ CRI and are available in CCTs 4100K. Rated and tested to LM-79 and LM-80 standards. The LEDs are also binned to a 3-step MacAdam ellipses to achieve consistent color from fixture to fixture.

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ELECTRICAL - Powered by high-quality constant-current power LED drivers which are rated for 50 to 60Hz at 120V input, produce less than 20% THD, and have a power factor of .90 to 1.00.

WARRANTY - Limited 5 Year Warranty

DIMMING - The EU-LED can be ordered with TRIAC dimming system. Consult factory for more information. Dimmable with INC (Incandescent), ELV (Electronic Low Voltage) or MLV (Magnetic Low Voltage) Dimmers.

LISTING - ETL listed



Example: **EU-LED-24-900L-DIMTR-40K**

TYPE	LENGTH / LUMENS	DIMMING	COLOR OPTION	FINISH	ACCESSORIES
EU-LED	9-300L - (9", 4 Watts, 300 lumens) 12-450L - (12", 5 Watts, 450 lumens) 18-600L - (18", 7 Watts, 600 lumens) 24-900L - (24", 10 Watts, 900 lumens) 34-1300L - (34", 14 Watts, 1300 lumens) 42-1600L - (42", 18 Watts, 1600 lumens) 46-1800L - (46", 18 Watts, 1800 lumens)	DIMTR - 120V only	30K - (3000K) 35K - (3500K) 40K - (4100K)	WH - White BZ - Bronze	RC - Grounded outlet

PHOTOMETRY DATA

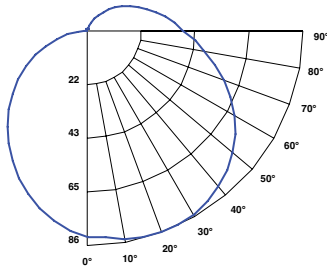
EU-LED-12-450L-120-30K-WH

WATTAGE: 4.6

LUMENS: 313

TOTAL LUMINAIRE EFFICACY: 68

Candle Power Distribution (Candelas)



Spacing Criteria

0-180 : 1.24
 90-270 : 1.12
 Diagonal : 1.42

EFFICACY: 68 LM/W

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-30°	64.90	20.80	20.80
0-40°	107.28	34.40	34.30
0-60°	196.14	62.80	62.70
0-90°	277.43	88.80	88.80
0-180°	312.59	100.10	100.00

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0°	Average 45°	Average 90°
45°	265	222	218
55°	249	206	203
65°	233	188	188
75°	195	164	171
85°	115	135	160

Candela Tabulation

	0	45	90
0	83.005	83.005	83.005
5	83.000	81.390	80.800
15	79.610	75.420	74.150
25	73.230	67.120	65.500
35	64.510	56.990	55.530
45	54.810	45.930	45.010
55	41.750	34.550	34.090
65	28.720	23.150	23.250
75	14.740	12.370	12.920
85	2.940	3.440	4.070
90	0.300	1.100	1.600

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 20% = PF

RC RW	80%			70%			50%			30%			10%			0%			
	70%	50%	30%	70%	50%	30%	70%	50%	30%	70%	50%	30%	70%	50%	30%	70%	50%	30%	
0	116	116	116	116	112	112	112	112	105	105	105	98	98	98	92	92	92	89	89
1	104	99	94	89	100	95	91	87	89	85	82	83	80	77	78	75	73	70	70
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3	85	74	65	58	82	71	63	57	67	60	54	63	57	52	59	54	50	47	47
4	78	65	56	49	75	63	54	48	59	52	46	55	49	44	52	47	42	40	40
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7	61	47	38	32	58	46	37	31	43	36	30	41	34	29	38	33	28	26	26
8	57	43	34	28	54	42	33	28	39	32	27	37	31	26	35	29	25	23	23
9	53	39	31	25	51	38	30	25	36	29	24	34	28	23	32	27	23	21	21
10	49	36	28	23	48	35	27	22	33	26	22	32	25	21	30	24	20	19	19

RC - Ceiling Cavity Reflectance RW - Wall Reflectance

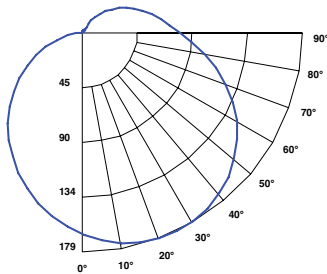
EU-LED-24-900L-120-30K-WH

WATTAGE: 9.2

LUMENS: 636

TOTAL LUMINAIRE EFFICACY: 69

Candle Power Distribution (Candelas)



Spacing Criteria

0-180 : 1.24
 90-270 : 1.08
 Diagonal : 1.44

EFFICACY: 69 LM/W

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-30°	130.22	20.50	20.50
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0-90°	562.25	88.50	88.40
0-180°	635.79	100.10	100.00

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0°	Average 45°	Average 90°
45°	516	428	417
55°	491	391	384
65°	452	350	350
75°	383	295	306
85°	206	213	260

Candela Tabulation

	0	45	90
0	165.575	165.575	165.575
5	164.260	160.370	159.180
15	157.310	147.340	144.660
25	144.860	130.280	126.820
35	127.690	110.080	107.070
45	106.610	88.390	86.090
55	82.330	65.590	64.330
65	55.770	43.270	43.180
75	28.970	22.280	23.110
85	5.240	5.420	6.630
90	0.580	2.260	3.240

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 20% = PF

RC RW	80%			70%			50%			30%			10%			0%			
	70%	50%	30%	70%	50%	30%	70%	50%	30%	70%	50%	30%	70%	50%	30%	70%	50%	30%	
0	116	116	116	116	112	112	112	112	105	105	105	98	98	98	92	92	92	89	89
1	104	99	94	89	100	95	91	86	89	85	82	83	80	77	77	75	73	70	70
2	94	85	77	71	90	82	75	69	76	71	66	71	67	62	67	63	59	56	56
3	85	74	65	58	82	71	63	57	67	60	54	62	57	52	58	54	49	47	47
4	78	65	56	49	74	63	54	48	59	51	46	55	49	44	52	46	42	39	39
5	71	58	48	41	68	56	47	41	52	45	39	49	43	38	46	41	36	34	34
6	66	52	42	36	63	50	42	35	47	40	34	44	38	33	42	36	32	29	29
7	61	47	38	31	58	45	37	31	43	35	30	40	34	29	38	32	28	26	26
8	56	43	34	28	54	41	33	27	39	32	27	37	30	26	35	29	25	23	23
9	53	39	31	25	51	38	30	25	36	29	24	34	28	23	32	27	22	20	20
10	49	36	28	22	47	35	27	22	33	26	22	31	25	21	30	24	20	18	18

RC - Ceiling Cavity Reflectance RW - Wall Reflectance

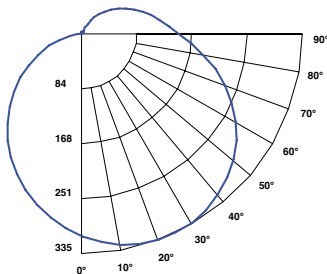
EU-LED-46-1800L-120-30K-WH

WATTAGE: 17.5

LUMENS: 1183

TOTAL LUMINAIRE EFFICACY: 68

Candle Power Distribution (Candelas)



Spacing Criteria

0-180 : 1.28
 90-270 : 1.60
 Diagonal : 1.44

EFFICACY: 68 LM/W

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-30°	243.38	20.60	20.60
0-40°	403.20	34.10	34.10
0-60°	739.52	62.60	62.50
0-90°	1046.64	88.50	88.50
0-180°	1183.13	100.10	100.00

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0°	Average 45°	Average 90°
45°	257	343	377
55°	250	376	425
65°	236	430	507
75°	205	550	690
85°	137	1178	1626

Candela Tabulation

	0	45	90
0	308.709	308.709	308.709
5	308.860	316.170	319.010
15	299.280	322.810	331.960
25	279.330	319.360	335.080
35	249.960	306.000	327.970
45	212.170	283.220	311.130
55	167.270	251.690	285.130
65	116.360	212.180	250.370
75	62.030	166.300	208.580
85	13.920	120.010	165.610
90	1.040	101.240	146.620

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 20% = PF

RC RW	80%			70%			50%			30%			10%			0%			
	70%	50%	30%	70%	50%	30%	70%	50%	30%	70%	50%	30%	70%	50%	30%	70%	50%	30%	
0	116	116	116	116	112	112	112	112	105	105	105	98	98	98	92	92	92	89	89
1	104	99	94	89	100	95	91	87	89	85	82	83	80	77	77	75	73	70	70
2	94	85	77	71	90	82	75	69	76	71	66	71	67	62	67	63	60	57	57
3	85	74	65	58	82	71	63	57	67	60	54	62	57	52	58	54	50	47	47
4	78	65	56	49	74	63	54	48	59	52	46	55	49	44	52	46	42	39	39
5	71	58	48	41	68	56	47	41	52	45	39	49	43	38	46	41	36	34	34
6	66	52	42	36	63	50	42	35	47	40	34	44	38	33	42	36	32	29	29
7	61	47	38	31	58	45	37	31	43	35	30	40	34	29	38	32	28	26</	