

SPECIFICATION SHEET

SUBJECT

ULTRATHIN 6" RETROFIT

CUSTOMER PROJECT

Project: _____

Type: _____

Cat. No.: _____

Qty: _____

Date: _____

EEL Rep: _____



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 6" LED Recessed Retrofit Luminaire is compatible with IC and Non-IC 6" New Construction Remodeler and regular medium base screw in housings. This Recessed LED Retrofit is wet location approved and is Energy Star approved. For Indoor use only.

SPECIFICATION FEATURES

Construction

Die Cast housing with metal trim

Controls

Built-In Integrated driver

Electrical

Long life LED system complete electrical driver to deliver the optimal performance

LED's available in 3000K and 4000K with typical CRI: 80

120V

IC-Rated

Ambient temperature -40°C to 40°C

Projected life is 50,000 hours

Comes with E26 ('Medium' or 'Standard') base adapter

12 Watt equivalent to 65 Watt halogen

15 Watt equivalent to 75 Watt halogen

Mounting

Trim includes friction blades to mount trim securely to housing

Beam Angle

120°

Shielding

Diffused glass lens

Finish

White

Compliance

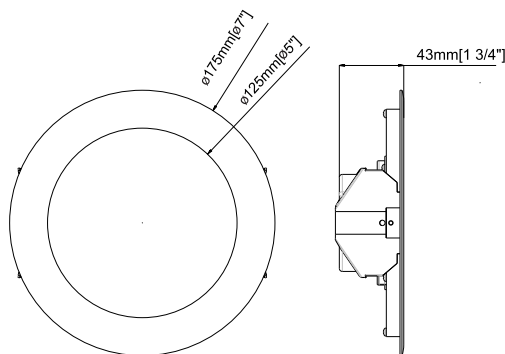
cETLus and Energy Star

Warranty

5 years, 50,000+ hours



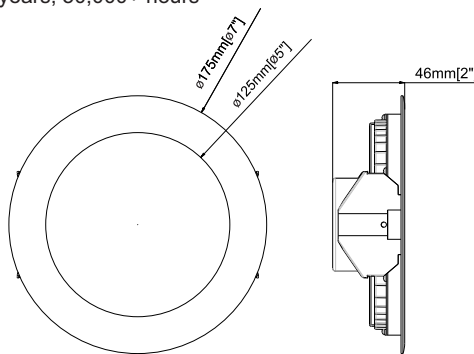
ULTRATHIN 6" LED RECESSED LUMINAIRE RETROFIT



RF-UTLED-6-S12W-3KWH / RF-UTLED-6-S12W-4KWH

Dimensions

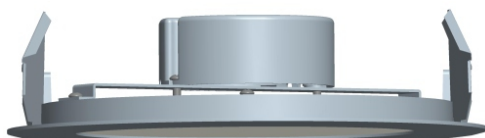
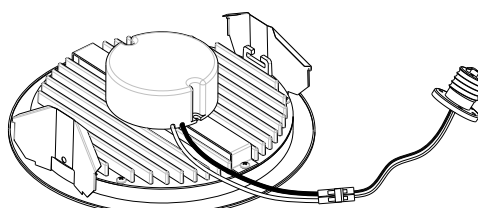
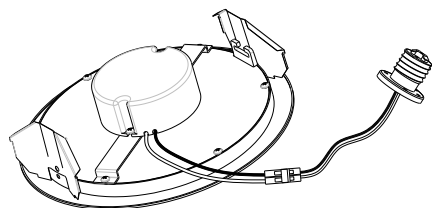
OD 7" (175mm) x ID 5-15/16" (150mm)
Thickness 1-3/4" (50mm)



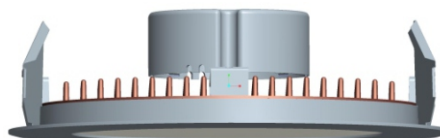
RF-UTLED-6-S15W-3KWH / RF-UTLED-6-S15W-4KWH

Dimensions

OD 7" (175mm) x ID 5-15/16" (150mm)
Thickness 2" (50mm)



for reference only



for reference only



www.eelighting.ca

EELSS19W07



ORDERING CODE, ENERGY AND PERFORMANCE DATA

	Model No.	Delivered Lumens (lm)	Input Watts (W)	Voltage (V)	Colour Temp. (K)	Certification	
	RF-UTLED-6-S12W-3KWH	700	12	120	3000K		Special Order
	RF-UTLED-6-S12W-4KWH	800	12	120	4000K		Special Order
	RF-UTLED-6-S15W-3KWH	900	15	120	3000K		Special Order
	RF-UTLED-6-S15W-4KWH	1000	15	120	4000K		Special Order

NOTE:

Lumens are estimated

OPTIONAL ACCESSORIES

RF-UTLED-BA | Base adapter for GU10

UTLED-6-GOOF RING | Goof Ring for 6" UltraThin



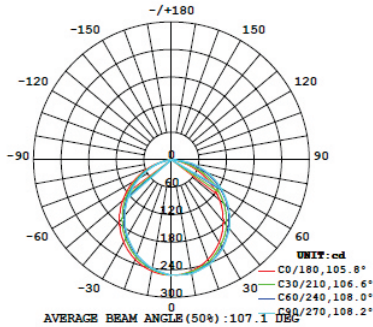


...continued

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

PHOTOMETRICS



Candlepower

Y	C0	C45	C90	C135	C180	C225	C270	C315
5	250.6	251.3	252.0	251.2	250.4	247.2	246.3	247.3
10	246.6	249.6	252.3	249.4	246.5	241.4	240.7	241.5
15	240.2	246.0	247.4	245.5	240.1	232.8	230.5	234.0
20	231.6	238.2	242.5	237.8	231.3	222.5	220.3	222.7
25	220.7	229.6	232.9	229.0	220.3	210.9	206.3	210.5
30	207.9	218.2	223.2	217.5	207.5	196.3	192.3	196.2
35	192.7	204.9	209.6	202.8	192.9	180.4	175.4	180.3
40	175.6	190.7	196.0	189.3	176.6	163.9	159.6	163.9
45	157.1	173.0	179.3	172.1	158.3	145.5	139.6	144.8
50	137.3	155.1	162.6	154.6	138.5	127.1	120.6	125.7
55	116.4	134.8	143.7	133.9	117.7	106.4	100.5	105.0
60	94.49	114.5	124.8	113.2	96.11	85.72	80.35	84.42
65	72.06	92.19	104.5	90.95	74.04	64.65	60.42	63.23
70	49.44	69.41	84.07	64.86	52.17	44.33	40.48	43.16
75	27.45	46.07	62.79	40.11	30.99	24.93	22.42	24.04
80	9.520	22.48	40.51	21.25	11.75	9.462	6.374	8.977
85	0	3.644	0	4.282	0	0.4177	0	0.2821
90	0	0	0	0	0	0	0	0

Zonal Lumen Summary

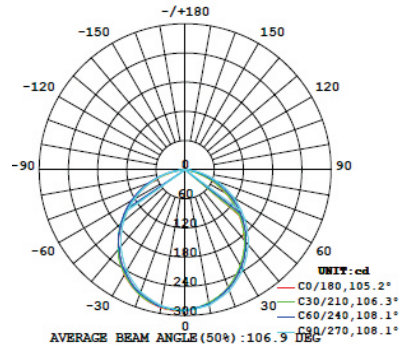
Y	Φ zone	Φ total	lum, lamp
0- 5	5.985	5.985	0.91,0.91
5- 10	17.71	23.70	3.88,3.88
10- 15	28.78	52.47	7.94,7.94
15- 20	38.72	91.20	13.8,13.8
20- 25	47.25	138.5	20.9,20.9
25- 30	54.01	192.5	29.1,29.1
30- 35	59.85	252.3	38.28
35- 40	61.52	312.8	47.3,47.3
40- 45	62.04	374.9	56.7,56.7
45- 50	60.30	435.2	65.8,65.8
50- 55	56.44	491.6	74.4,74.4
55- 60	50.58	542.2	82.82
60- 65	42.01	585.2	88.5,88.5
65- 70	32.87	619.1	93.6,93.6
70- 75	23.78	642.9	97.2,97.2
75- 80	13.79	656.6	99.2,99.2
80- 85	4.981	661.0	100,100
85- 90	0.0561	661.1	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	1.05	1.01	.97	1.03	.99	.96	.99	.96	.93	.95	.92	.90	.91	.89	.87	.85
2.0	.92	.85	.80	.90	.84	.79	.87	.82	.77	.83	.79	.75	.80	.77	.74	.72
3.0	.81	.73	.67	.79	.72	.66	.76	.70	.65	.74	.68	.64	.71	.67	.63	.61
4.0	.72	.63	.57	.71	.63	.56	.68	.61	.56	.66	.60	.55	.64	.58	.54	.52
5.0	.64	.56	.49	.63	.55	.49	.61	.54	.48	.59	.53	.48	.57	.52	.47	.45
6.0	.58	.49	.43	.57	.49	.43	.55	.48	.42	.54	.47	.42	.52	.46	.42	.40
7.0	.53	.44	.38	.52	.44	.38	.50	.43	.38	.49	.42	.37	.47	.42	.37	.35
8.0	.48	.40	.34	.47	.39	.34	.46	.39	.34	.45	.38	.33	.44	.38	.33	.31
9.0	.44	.36	.31	.44	.36	.30	.42	.35	.30	.41	.35	.30	.40	.34	.30	.28
10.0	.41	.33	.28	.40	.33	.28	.39	.32	.28	.38	.32	.27	.37	.32	.27	.26

RF-UTLED-6-S12W-3K

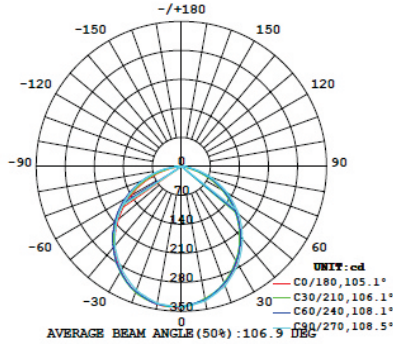
S/MH(C0/180) = 1.23
S/MH(C90/270) = 1.31
Lumens: 661.09
Nominal Power: 12 W
Efficacy: 65.54 lm/W



Candlepower

y	C0	C45	C90	C135	C180	C225	C270	C315
5	285.7	284.8	286.2	287.9	290.2	288.5	287.0	285.4
10	279.0	278.7	282.7	284.7	287.7	285.9	284.4	279.8
15	269.6	270.5	272.7	279.1	282.2	281.0	276.0	272.3
20	257.7	258.0	264.6	269.1	273.9	271.5	267.6	260.1
25	243.4	244.6	250.7	257.9	262.1	260.9	254.3	246.9
30	227.2	228.6	236.7	243.8	249.6	247.4	240.9	232.2
35	209.1	210.7	218.9	227.2	233.1	231.4	223.7	213.7
40	189.2	192.2	201.1	209.5	214.1	214.6	206.4	195.5
45	167.7	171.0	180.5	188.6	193.0	194.6	186.2	174.5
50	144.8	149.4	159.9	167.3	170.5	174.2	165.9	153.6
55	120.7	125.8	137.5	143.7	146.7	150.6	143.5	130.4
60	95.87	102.3	115.2	120.1	122.0	127.0	121.1	107.3
65	70.69	77.58	91.40	94.61	96.38	102.1	97.78	82.92
70	48.65	53.66	67.65	66.92	70.43	77.16	74.43	59.19
75	22.02	30.38	46.17	39.34	44.66	52.10	51.95	36.13
80	3.211	11.20	24.69	19.56	18.80	29.48	29.48	18.49
85	0	0.1746	0	0.555	6.101	6.101	1.594	0
90	0	0	0	0	0	0	0	0

PHOTOMETRICS



RF-UTLED-6-S15W-3K

S/MH(C0/180) = 1.17
S/MH(C90/270) = 1.20
Lumens: 889.63
Nominal Power: 14 W
Efficacy: 70.63 lm/W

Candlepower

°	C0	C45	C90	C135	C180	C225	C270	C315
5	224.9	222.0	224.6	227.0	240.4	229.1	227.6	225.1
10	226.8	223.3	225.6	227.6	237.8	226.9	225.5	223.3
15	215.6	214.8	218.1	225.8	221.7	222.2	222.6	220.9
20	201.5	209.5	206.7	213.5	222.5	222.1	218.1	207.3
25	204.6	202.9	209.5	209.9	209.7	210.7	202.2	202.7
30	265.8	263.6	272.2	282.9	292.3	295.2	288.4	274.7
35	244.3	242.0	250.8	262.5	272.5	276.9	269.1	254.4
40	221.6	219.7	229.3	240.6	249.9	257.0	249.7	233.4
45	196.7	194.4	204.7	215.6	225.1	232.5	224.6	209.1
50	170.6	169.3	180.0	190.3	198.5	209.6	202.5	185.0
55	142.6	142.1	153.1	162.0	170.5	182.0	177.9	159.4
60	113.6	115.0	126.2	133.7	141.3	154.4	152.2	132.1
65	84.04	86.44	98.55	102.9	111.0	125.1	125.2	104.2
70	54.43	58.88	70.86	75.76	85.49	98.37	98.19	76.33
75	26.00	32.80	46.40	50.75	59.10	65.19	71.45	49.70
80	2.700	11.39	21.92	19.20	20.91	26.33	44.71	21.86
85	0	0	0	2.955	0	8.102	0	2.640
90	0	0	0	0	0	0	0	0

Zonal Lumen Summary

°	φ zone	φ total	lum,lm
0-5	8.069	8.069	0.91,0.91
5-10	12.88	21.95	3.59,3.59
10-15	28.81	70.76	7.95,7.95
15-20	52.23	123.0	13.8,13.8
20-25	63.73	186.7	21.21
25-30	72.79	259.5	25.2,25.2
30-35	79.22	338.7	28.1,28.1
35-40	82.74	421.5	47.4,47.4
40-45	82.37	504.8	56.7,56.7
45-50	81.02	585.9	65.9,65.9
50-55	75.89	661.8	74.4,74.4
55-60	68.06	729.8	82.62
60-65	57.86	787.7	86.5,86.5
65-70	45.52	833.2	92.7,92.7
70-75	31.95	865.1	97.2,97.2
75-80	18.43	883.6	99.3,99.3
80-85	5.954	889.5	100,100
85-90	0.0983	889.6	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	1.05	1.01	.97	1.03	.99	.96	.99	.96	.93	.95	.92	.90	.91	.89	.87	.85
2.0	.92	.85	.80	.90	.84	.79	.87	.82	.77	.83	.79	.75	.80	.77	.74	.72
3.0	.81	.73	.67	.79	.72	.66	.76	.70	.65	.74	.68	.64	.71	.67	.63	.61
4.0	.72	.63	.57	.71	.63	.56	.68	.61	.56	.66	.60	.55	.64	.58	.54	.52
5.0	.64	.56	.49	.63	.55	.49	.61	.54	.48	.59	.53	.48	.57	.52	.47	.45
6.0	.58	.49	.43	.57	.49	.43	.55	.48	.42	.54	.47	.42	.52	.46	.42	.40
7.0	.53	.44	.38	.52	.44	.38	.50	.43	.38	.49	.42	.37	.48	.42	.37	.35
8.0	.48	.40	.34	.47	.39	.34	.46	.39	.34	.45	.38	.33	.44	.38	.33	.31
9.0	.44	.36	.31	.44	.36	.30	.42	.35	.30	.41	.35	.30	.40	.34	.30	.28
10.0	.41	.33	.28	.40	.33	.28	.39	.32	.28	.38	.32	.27	.37	.32	.27	.26

Candlepower

°	C0	C45	C90	C135	C180	C225	C270	C315
5	262.1	258.9	258.5	260.1	263.8	263.8	262.7	262.6
10	255.5	251.3	252.2	252.2	259.0	260.8	262.7	259.6
15	245.5	241.0	239.2	242.9	250.5	255.1	254.5	251.6
20	232.6	225.2	226.0	229.1	238.8	248.7	246.3	239.0
25	216.1	208.3	206.7	212.9	223.6	231.1	231.5	225.2
30	207.1	208.1	207.4	209.3	204.6	214.7	216.7	207.6
35	275.7	265.2	263.9	269.6	281.1	294.8	296.3	287.1
40	252.1	241.3	240.4	244.8	258.9	273.1	275.8	269.7
45	225.5	215.1	213.4	216.9	225.2	247.3	251.7	240.7
50	196.8	189.4	186.5	188.9	198.8	221.1	227.6	215.7
55	165.4	158.4	157.2	157.8	167.8	191.3	200.3	187.3
60	131.0	127.7	127.9	126.9	135.5	161.2	173.1	158.1
65	97.38	95.49	95.12	94.96	102.2	128.7	144.0	125.7
70	62.29	64.17	63.33	61.84	68.86	95.60	114.8	92.16
75	28.34	34.77	42.03	31.67	36.48	62.45	84.20	57.36
80	2.378	12.01	17.72	10.71	7.549	30.68	52.62	25.15
85	0	0	0	0.0022	0	5.066	0	2.634
90	0	0	0	0	0	0	0	0

Zonal Lumen Summary

°	φ zone	φ total	lum,lm
0-5	8.675	8.675	0.91,0.91
5-10	25.68	34.35	3.61,3.61
10-15	41.74	76.09	8.8
15-20	56.19	132.3	13.9,13.9
20-25	68.60	200.9	21.1,21.1
25-30	78.42	279.3	25.4,25.4
30-35	85.38	364.7	28.4,28.4
35-40	78.20	442.9	47.2,47.2
40-45	89.90	532.8	57.2,57.2
45-50	87.35	621.1	66.4,66.4
50-55	81.68	712.8	75.75
55-60	72.97	785.8	82.6,82.6
60-65	61.62	847.4	89.1,89.1
65-70	47.86	895.3	94.2,94.2
70-75	32.64	927.9	97.6,97.6
75-80	17.75	945.6	99.5,99.5
80-85	5.088	950.7	100,100
85-90	0.0499	950.8	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	1.05	1.01	.98	1.03	.99	.96	.99	.96	.93	.95	.92	.90	.91	.89	.88	.86														
2.0	.92	.86	.80	.90	.84	.79	.87	.82	.78	.84	.79	.76	.81	.77	.74	.72														
3.0	.81	.73	.67	.80	.72	.67	.77	.71	.65	.74	.69	.64	.72	.67	.63	.61														
4.0	.72	.64	.57	.71	.63	.57	.68	.61	.56	.66	.60	.55	.64	.59	.55	.52														
5.0	.65	.56	.49	.64	.55	.49	.61	.54	.49	.59	.53	.48	.58	.52	.48	.45														
6.0	.58	.49	.43	.57	.49	.43	.56	.48	.43	.54	.47	.42	.52	.46	.42	.40														
7.0	.53	.44	.38	.52	.44	.38	.51	.43	.38	.49	.42	.38	.48	.42	.37	.35														
8.0	.48	.40	.34	.48	.40	.34	.46	.39	.34	.45	.38	.34	.44	.38	.33	.32														
9.0	.44	.36	.31	.44	.36	.31	.43	.35	.31	.42	.35	.30	.41	.35	.30	.28														
10.0	.41	.33	.28	.40	.33	.28	.39	.32	.28	.38	.32	.28	.38	.32	.27	.26														

RF-UTLED-6-S15W-4K

S/MH(C0/180) = 1.22
S/MH(C90/270) = 1.18
Lumens: 950.782 W
Nominal Power: 14W
Efficacy: 73.48 lm/W

