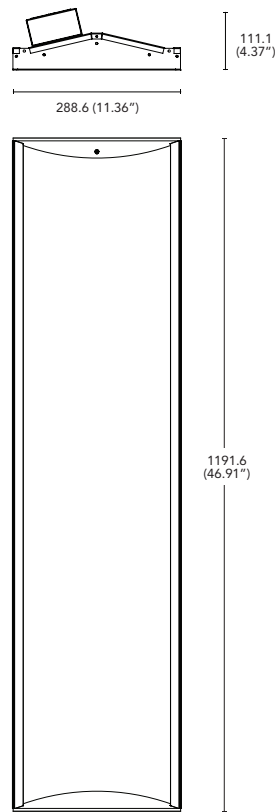


Recessed LED troffer with a beautiful barrel shaped luminous lens providing ambient illumination from Soraa's unparalleled Vivid Color™ and Natural White™ accurate color and white rendering full spectrum LED with 95 CRI / 95 R9 and White Rendering Index of 100.



Soraa LED

The highest possible quality ambient light is provided by Soraa LEDs, available in 3000K, 3500K, and 4000K with 95 CRI / 95 R9. Lumen maintenance is 50,000 hours at 70% lumen output.

Soraa Optics

Precision formed optical assembly provides beautiful, even light distribution.

Construction

Injection molded endplates and extruded aluminum frame provide strength, rigidity and tight tolerances. Gridlock features are built into the endplates for additional safety and convenience. Four suspension points and seismic clips are provided. Large access plate is designed in to enable supply connection. Drivers can be accessed via plenum.

Finish

Durable frame has high reflectance baked matte white enamel finish for luminous uniformity.

Weight

Luminaire: max. 7756gm; additional battery backup & hardware 1814gm.

Emergency Battery Pack

Optional 120V-277V integral emergency battery pack is available in 7 or 14 watts to meet critical life-safety lighting requirements. 90-minute batteries provide constant power to the LED system, ensuring code compliance.

Compliance

Luminaire CE compliant; IP20 rated.

Operating Temperature

Minimum -40°C, 25°C typical.

Warranty

Five year warranty.



Build Your Luminaire Sample Part Number: BL14 - 33 - 935 - UNV - DM1 - EM7 - S3

Series	Delivered Lumens	CCT/CRI	Voltage	Driver	Options	Region
BL14	24 2400 lm	930 3000K/95	UNV 120-277V Universal	DM1 0-10V (1% min)	Blank None	S3 EU
	33 3300 lm	935 3500K/95		EL1 eldoLED Solo-Drive 0% Dim	EM7 7W Emergency Battery Pack Installed	
		940 4000K/95		EL2 eldoLED Eco-Drive 1% Dim	EM14 14W Emergency Battery Pack Installed	
				EL3 eldoLED Eco-Drive 1% Dim DALI		

Photometrics: Sora Barrel 300 x 1200

BL14-33 (3300 lm)

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

rc	80				70				50			30			10			0
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	74	71
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61
4	84	72	64	57	82	71	63	57	68	62	56	66	60	55	64	59	55	52
5	77	65	56	50	75	64	55	49	62	54	49	60	53	48	58	52	48	46
6	72	59	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40
7	66	53	45	39	65	52	44	39	51	44	38	49	43	38	48	42	38	36
8	62	49	40	35	60	48	40	34	47	39	34	45	39	34	44	38	34	32
9	58	45	37	31	57	44	36	31	43	36	31	42	35	31	41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26

Spacing Criteria

(H) 1.36 x mounting height,
(L) 1.28 x mounting height

UGR

<19

Zonal Lumen Summary

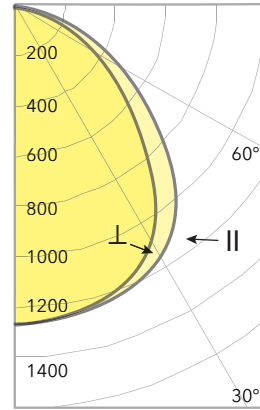
Zone	Lumens	% Fixt
0-30	993	30.1
0-40	1626	49.2
0-60	2708	82.0
0-90	3300	100.0
0-180	3300	100.0

Base Configuration

Driver: LPL
CCT: 3500K

Scaling

3000K	0.95
4000K	1.03
EldoLed Driver	0.975



Candlepower

	Along H	45°	Across ⊥
0	1239	1239	1239
5	1236	1236	1236
10	1235	1231	1225
15	1227	1218	1206
20	1208	1196	1181
25	1179	1158	1137
30	1132	1102	1072
35	1067	1022	975
40	981	916	847
45	871	790	705
50	754	656	567
55	627	530	453
60	506	422	362
65	400	331	288
70	307	255	221
75	227	186	160
80	151	117	96
85	80	50	30
90	0	0	0

BL14-24 (2400 lm)

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

rc	80				70				50			30			10			0
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	74	71
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61
4	84	72	64	57	82	71	63	57	68	62	56	66	60	55	64	59	55	52
5	77	65	56	50	75	64	55	49	62	54	49	60	53	48	58	52	48	46
6	72	59	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40
7	66	53	45	39	65	52	44	39	51	44	38	49	43	38	48	42	38	36
8	62	49	40	35	60	48	40	34	47	39	34	45	39	34	44	38	34	32
9	58	45	37	31	57	44	36	31	43	36	31	42	35	31	41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26

Spacing Criteria

(H) 1.36 x mounting height,
(L) 1.28 x mounting height

UGR

<19

Zonal Lumen Summary

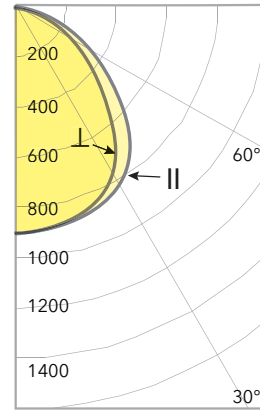
Zone	Lumens	% Fixt
0-30	722	30.1
0-40	1183	49.2
0-60	1969	82.0
0-90	2400	100.0
0-180	2400	100.0

Base Configuration

Driver: LPL
CCT: 3500K

Scaling

3000K	0.95
4000K	1.03
EldoLed Driver	0.975



Candlepower

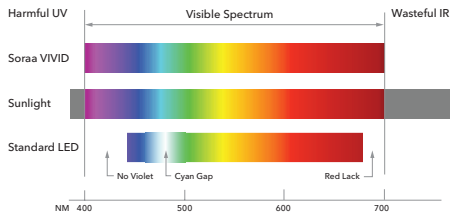
	Along H	45°	Across ⊥
0	901	901	901
5	899	899	899
10	898	895	891
15	893	886	877
20	878	870	859
25	858	842	827
30	823	802	779
35	776	743	709
40	713	666	616
45	634	575	513
50	548	477	412
55	456	385	330
60	368	307	263
65	291	241	209
70	223	185	161
75	165	135	116
80	110	85	70
85	58	36	22
90	0	0	0

Efficacy

SKU	CCT	Driver	Delivered Lumens	Power (W)	Lm/W
BL14-24-930-UNV-DM1	3000	0-10V, 1% Minimum	2300	39	60
BL14-24-930-UNV-EL1	3000	eldoLED Solo-Drive 0% Dim	2300	38	62
BL14-24-930-UNV-EL2	3000	eldoLED Eco-Drive 1% Dim	2300	38	62
BL14-33-930-UNV-DM1	3000	0-10V, 1% Minimum	3100	53	60
BL14-33-930-UNV-EL1	3000	eldoLED Solo-Drive 0% Dim	3100	52	62
BL14-33-930-UNV-EL2	3000	eldoLED Eco-Drive 1% Dim	3100	52	62
BL14-24-935-UNV-DM1	3500	0-10V, 1% Minimum	2400	39	64
BL14-24-935-UNV-EL1	3500	eldoLED Solo-Drive 0% Dim	2400	38	65
BL14-24-935-UNV-EL2	3500	eldoLED Eco-Drive 1% Dim	2400	38	65
BL14-33-935-UNV-DM1	3500	0-10V, 1% Minimum	3300	53	63
BL14-33-935-UNV-EL1	3500	eldoLED Solo-Drive 0% Dim	3300	52	65
BL14-33-935-UNV-EL2	3500	eldoLED Eco-Drive 1% Dim	3300	52	65
BL14-24-940-UNV-DM1	4000	0-10V, 1% Minimum	2500	39	66
BL14-24-940-UNV-EL1	4000	eldoLED Solo-Drive 0% Dim	2500	38	67
BL14-24-940-UNV-EL2	4000	eldoLED Eco-Drive 1% Dim	2500	38	67
BL14-33-940-UNV-DM1	4000	0-10V, 1% Minimum	3400	53	65
BL14-33-940-UNV-EL1	4000	eldoLED Solo-Drive 0% Dim	3400	52	67
BL14-33-940-UNV-EL2	4000	eldoLED Eco-Drive 1% Dim	3400	52	67

Soraa Ambient Color and Whiteness Rendering

CCT	CRI	R9	Rf	Rg	Rfh1	Rw	McA
3000	95	95	90	100	90	100	3
3500	95	95	90	100	90	100	3
4000	95	95	90	100	90	70	4



Soraa has engineered the perfect balance between color rendering and white rendering. Soraa's core technology uses a violet LED emitter as the basis for full spectrum light. This allows both Vivid™ color rendering and Natural White™ white rendering, which creates whiteness by exciting fluorescing agents with violet radiation, without the harmful effect of UV.

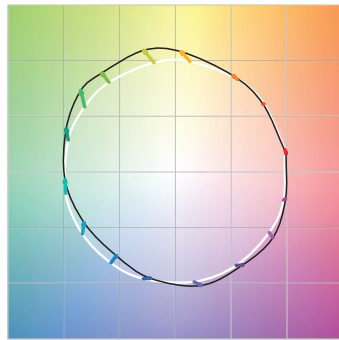
Rf: The TM-30 metric for color fidelity (similarity to colors under natural light), a more accurate version of the CRI Ra. Rf is 100 for natural light.

Rg: The TM-30 metric for color gamut (whether colors are more saturated than under natural light). Rg is 100 for natural light.

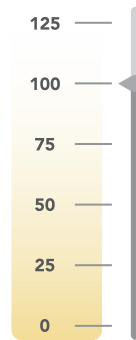
Rfh1: The TM-30 metric for color fidelity for red tones. Rfh1 is a more accurate version of the CRI R9. Rfh1 is 100 for natural light.

Rw: The Soraa-developed metric for white fidelity. Rw measures the magnitude of excitation of whitening agents within white materials. Rw is 100 for natural light.

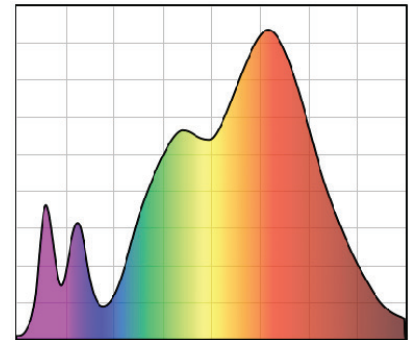
3000K



Rf: 90, Rg: 100, Rfh1: 90

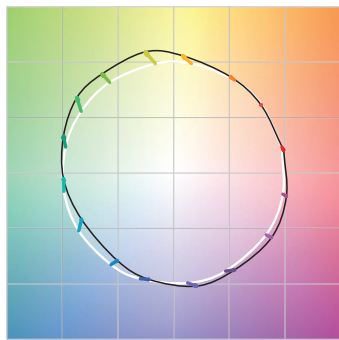


Rw: 100

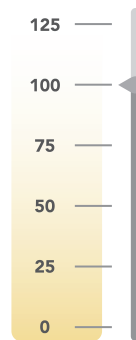


CRI: 95, R9: 95

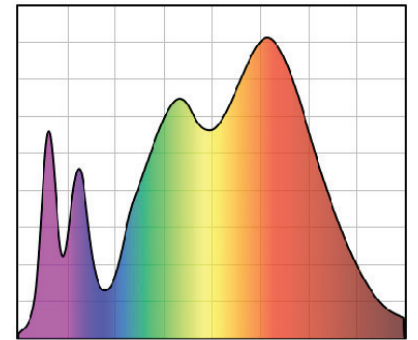
3500K



Rf: 90, Rg: 100, Rfh1: 90

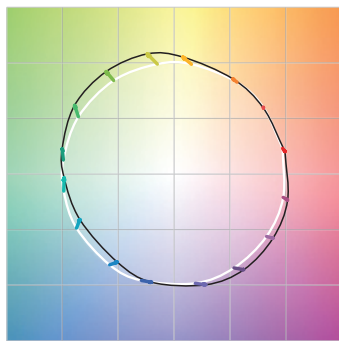


Rw: 100

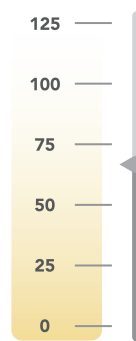


CRI: 95, R9: 95

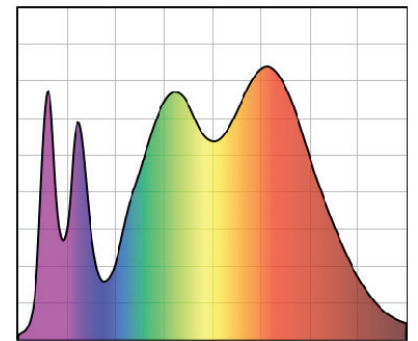
4000K



Rf: 90, Rg: 100, Rfh1: 90



Rw: 70



CRI: 95, R9: 95