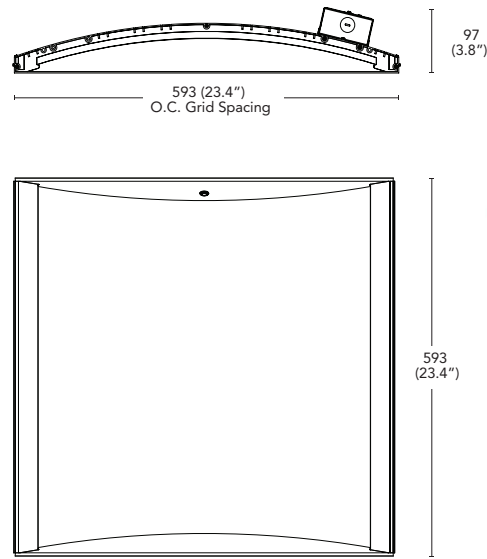


Recessed LED troffer with a beautiful barrel shaped luminous lens providing ambient illumination from Soraa's unparalleled Vivid Color™ and Natural White™ accurate color and white rendering full spectrum LED with 90 CRI / 90 R9 and White Rendering Index of 100.



**Soraa LED**

The highest possible quality ambient light is provided by Soraa LEDs, available in 3000K, 3500K, and 4000K with up to 90 CRI / 90 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. 7031gm; additional battery backup & hardware 1814gm.

**Emergency Battery Pack**

Optional 100V-277V integral emergency battery pack is available in 7 and 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, PSE compliant and IC rated.

**Operating Temperature**

Minimum -40°C, 25°C typical.

**Applications**

Suitable for dry locations. For interior use only.

**Warranty**

Five year warranty. Consult website for current information.



**Build Your Luminaire** Sample Part Number: BL22 - 35 - 935- UNV - DM1

Series	Delivered Lumens	CCT	Voltage	Driver	Emergency
BL22	25 2500 lm	930 3000K	UNV 120-277V Universal J 100VAC	DM1 0-10V (1% min) EL1 eldoLED Solo-Drive 0% Dim EL2 eldoLED Eco-Drive 1% Dim	Blank None
	35 3500 lm	935 3500K			EM7 7W Emergency Battery Pack Installed
		940 4000K			EM14 14W Emergency Battery Pack Installed

# Photometrics: Soraa Barrel 600 x 600

## BL22-35 (3500 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

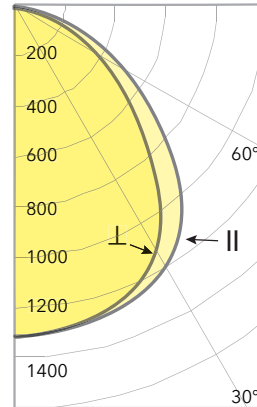
Zone	Lumens	% Fixt
0-30	1054	30.1
0-40	1725	49.2
0-60	2872	82.0
0-90	3500	100.0
0-180	3500	100.0

### Base Configuration

Driver: LPL  
CCT: 3500K

### Scaling

3000K	0.95
4000K	1.03
EldoLed Driver	0.975



### Candlepower

	Along H	45°	Across L
0	1314	1314	1314
5	1311	1311	1311
10	1309	1306	1299
15	1302	1292	1279
20	1281	1269	1252
25	1251	1228	1206
30	1200	1169	1137
35	1131	1084	1034
40	1040	972	898
45	924	838	748
50	800	696	601
55	665	562	481
60	537	448	384
65	424	352	305
70	326	270	235
75	241	197	170
80	160	124	102
85	85	53	32
90	0	0	0

## BL22-25 (2500 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
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

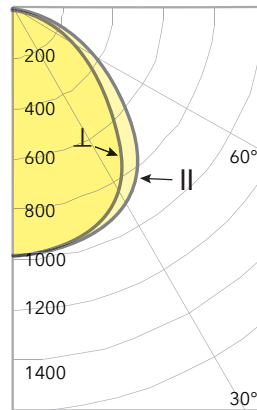
Zone	Lumens	% Fixt
0-30	753	30.1
0-40	1232	49.2
0-60	2052	82.0
0-90	2500	100.0
0-180	2500	100.0

### Base Configuration

Driver: LPL  
CCT: 3500K

### Scaling

3000K	0.95
4000K	1.03
EldoLed Driver	0.975



### Candlepower

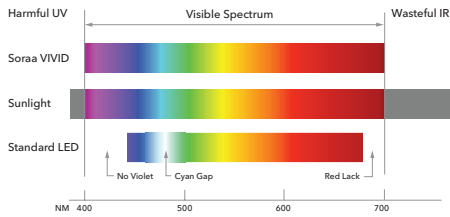
	Along H	45°	Across L
0°	994	994	994
5°	991	990	990
10°	983	979	980
15°	966	962	963
20°	939	935	936
25°	905	898	895
30°	851	841	837
35°	787	768	753
40°	708	677	649
45°	617	574	534
50°	525	471	427
55°	431	378	340
60°	350	300	272
65°	277	237	217
70°	214	184	172
75°	156	136	128
80°	106	87	83
85°	56	41	34
90°	0	0	0

## Efficacy

SKU	CCT	Driver	Delivered Lumens	Power (W)	Lm/W
BL22-25-930-UNV-DM1	3000	0-10V, 1% Minimum	2400	39	63
BL22-25-930-UNV-EL1	3000	eldoLED Solo-Drive 0% Dim	2400	38	64
BL22-25-930-UNV-EL2	3000	eldoLED Eco-Drive 1% Dim	2400	38	64
BL22-35-930-UNV-DM1	3000	0-10V, 1% Minimum	3300	53	62
BL22-35-930-UNV-EL1	3000	eldoLED Solo-Drive 0% Dim	3300	52	64
BL22-35-930-UNV-EL2	3000	eldoLED Eco-Drive 1% Dim	3300	52	64
BL22-25-935-UNV-DM1	3500	0-10V, 1% Minimum	2500	39	66
BL22-25-935-UNV-EL1	3500	eldoLED Solo-Drive 0% Dim	2500	38	68
BL22-25-935-UNV-EL2	3500	eldoLED Eco-Drive 1% Dim	2500	38	68
BL22-35-935-UNV-DM1	3500	0-10V, 1% Minimum	3500	53	66
BL22-35-935-UNV-EL1	3500	eldoLED Solo-Drive 0% Dim	3500	52	67
BL22-35-935-UNV-EL2	3500	eldoLED Eco-Drive 1% Dim	3500	52	67
BL22-25-940-UNV-DM1	4000	0-10V, 1% Minimum	2600	39	68
BL22-25-940-UNV-EL1	4000	eldoLED Solo-Drive 0% Dim	2600	38	70
BL22-25-940-UNV-EL2	4000	eldoLED Eco-Drive 1% Dim	2600	38	70
BL22-35-940-UNV-DM1	4000	0-10V, 1% Minimum	3600	53	68
BL22-35-940-UNV-EL1	4000	eldoLED Solo-Drive 0% Dim	3600	52	69
BL22-35-940-UNV-EL2	4000	eldoLED Eco-Drive 1% Dim	3600	52	69

# Soraa Ambient Color and Whiteness Rendering

CCT	CRI	R9	Rf	Rg	Rfh1	Rw	McA
3000	90	90	90	100	90	100	3
3500	90	90	90	100	90	100	3
4000	90	90	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.

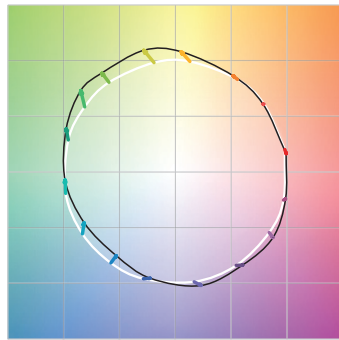
**Rf:** The TM-30 metric for color fidelity (similarity to colors under natural light), a more accurate version of the CRI Ra. Rf is 100 for natural light.

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

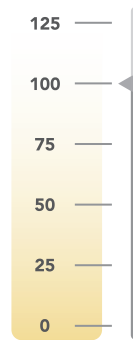
**Rfh1:** The TM-30 metric for color fidelity for red tones. Rfh1 is a more accurate version of the CRI R9. Rfh1 is 100 for natural light.

**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.

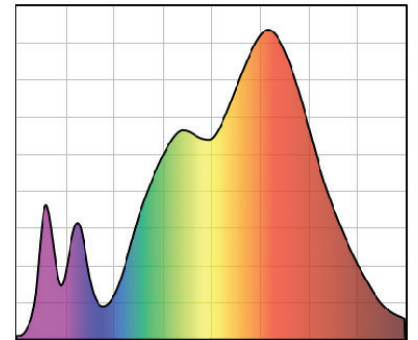
## 3000K



Rf: 90, Rg: 100, Rfh1: 90

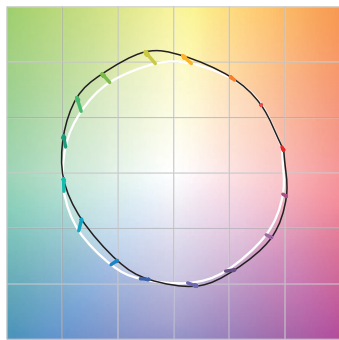


Rw: 100

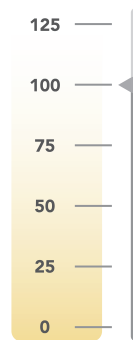


CRI: 90, R9: 90

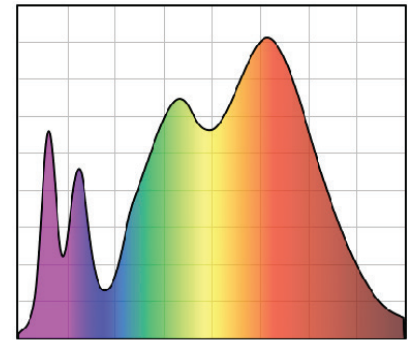
## 3500K



Rf: 90, Rg: 100, Rfh1: 90

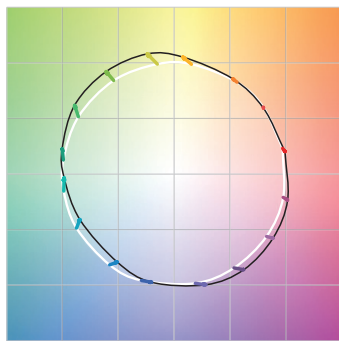


Rw: 100

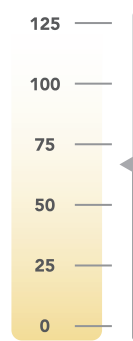


CRI: 90, R9: 90

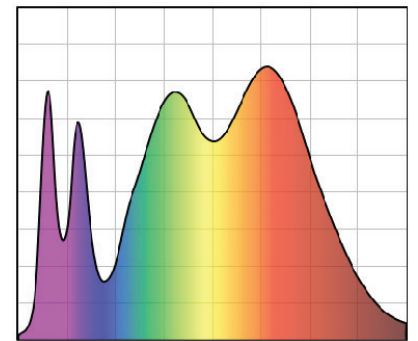
## 4000K



Rf: 90, Rg: 100, Rfh1: 90



Rw: 70



CRI: 90, R9: 90