

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: CORELITE

Report Number: P572222

Luminaire Tested: 24ID-85-L830-DBR

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572222
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2109-397-7)
Test Lab: INNOVATION CENTER
Issue Date: 10/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: 24ID-85-L830-DBR
Description: 8500 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 3000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

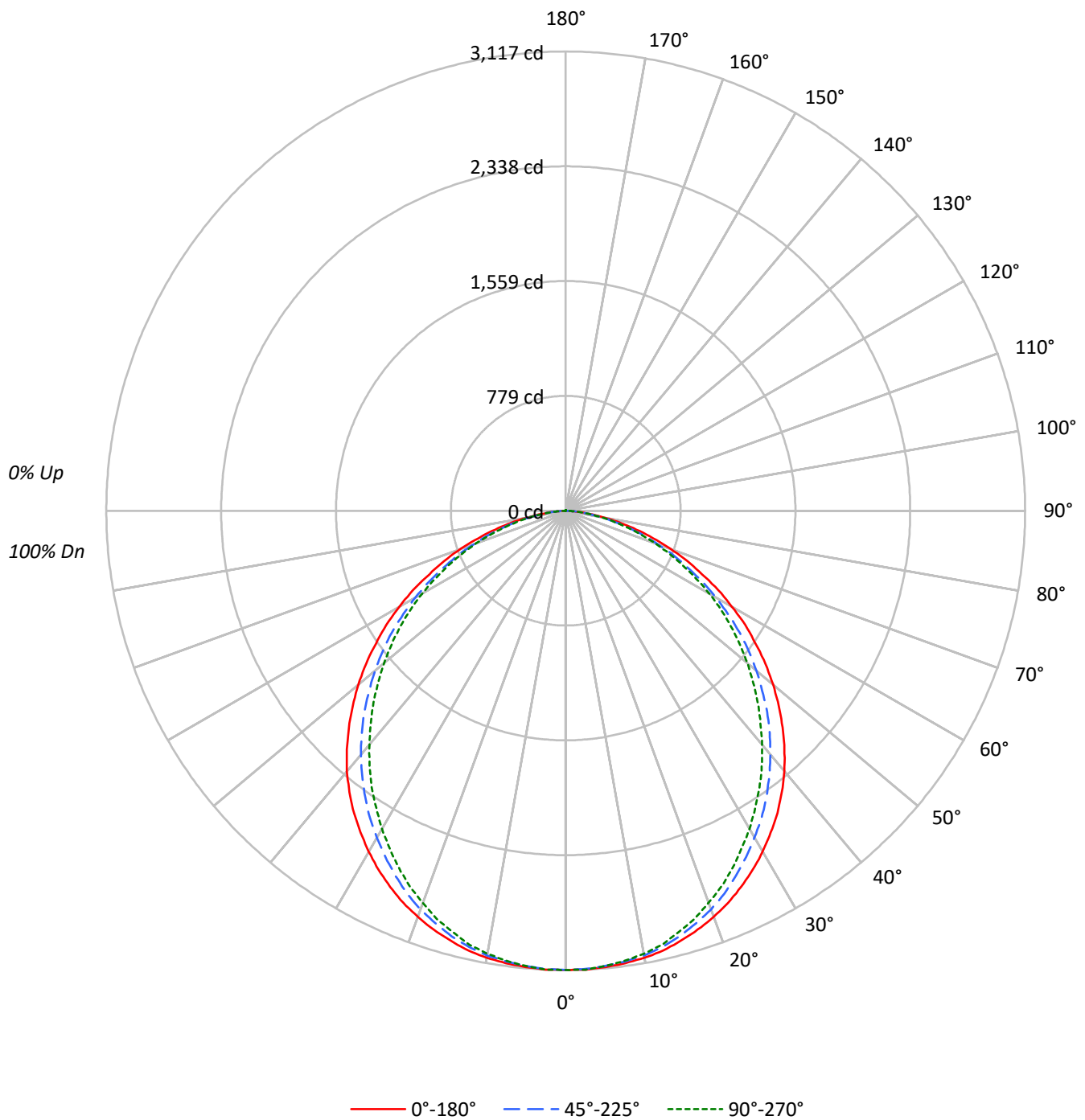
Lumens per Lamp: N/A
Luminaire Lumens: 8192.0 lumens
Efficiency: N/A
Efficacy: 99.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.19 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 82
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	105	101	97	107	103	99	95	98	95	92		94	92	90		91
2	100	92	85	80	97	90	84	79	86	81	77		83	79	75		80
3	91	81	73	67	89	79	72	66	76	70	65		74	68	64		71
4	84	72	63	57	81	71	63	56	68	61	56		66	60	55		64
5	77	64	56	49	75	63	55	49	61	54	48		59	53	48		57
6	71	58	49	43	69	57	49	43	55	48	42		54	47	42		52
7	66	53	44	38	64	52	44	38	50	43	38		49	42	37		48
8	61	48	40	34	60	47	39	34	46	39	34		45	38	33		44
9	57	44	36	31	56	44	36	31	42	35	30		41	35	30		40
10	54	41	33	28	53	40	33	28	39	32	28		38	32	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4194	4194	4194
5°	4199	4188	4188
10°	4209	4188	4171
15°	4208	4164	4125
20°	4200	4125	4056
25°	4182	4057	3974
30°	4153	3979	3873
35°	4114	3897	3766
40°	4055	3795	3641
45°	3959	3677	3510
50°	3844	3535	3367
55°	3689	3379	3210
60°	3499	3166	3026
65°	3248	2904	2790
70°	2975	2613	2534
75°	2580	2246	2184
80°	2077	1767	1767
85°	1050	1112	1050

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 3959 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	294.9	3.6
10°-20°	843.0	10.3
20°-30°	1262.1	15.4
30°-40°	1491.8	18.2
40°-50°	1501.6	18.3
50°-60°	1299.4	15.9
60°-70°	925.4	11.3
70°-80°	475.1	5.8
80°-90°	98.3	1.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.3	0.0
170°-180°	0.0	0.0
0°-30°	2400.1	29.3
0°-40°	3891.8	47.5
0°-60°	6692.8	81.7
0°-90°	8191.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8192.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3117	3117	3117	3117	3117	
5°	3109	3105	3101	3097	3101	296
15°	3021	3009	2989	2965	2961	853
25°	2817	2793	2733	2689	2677	1298
35°	2505	2465	2373	2313	2293	1565
45°	2081	2037	1933	1865	1845	1604
55°	1572	1528	1440	1380	1368	1407
65°	1020	984	912	880	876	1016
75°	496	472	432	416	420	529
85°	68	68	72	72	68	102
90°	0	0	0	0	0	4
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	4	0
180°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3117.0	3117.0	3117.0	3117.0	3117.0
2.5°	3117.0	3113.0	3113.0	3109.0	3117.0
5°	3109.0	3105.0	3101.0	3097.0	3101.0
7.5°	3097.0	3089.0	3085.0	3077.0	3081.0
10°	3081.0	3073.0	3065.0	3053.0	3053.0
12.5°	3057.0	3049.0	3033.0	3017.0	3017.0
15°	3021.0	3009.0	2989.0	2965.0	2961.0
17.5°	2981.0	2965.0	2937.0	2909.0	2905.0
20°	2933.0	2917.0	2880.9	2844.9	2832.9
22.5°	2880.9	2860.9	2812.9	2772.9	2760.9
25°	2816.9	2792.9	2732.9	2688.9	2676.9
27.5°	2748.9	2716.9	2648.9	2600.9	2584.8
30°	2672.9	2640.9	2560.8	2512.8	2492.8
32.5°	2588.8	2552.8	2472.8	2412.8	2392.8
35°	2504.8	2464.8	2372.8	2312.8	2292.8
37.5°	2408.8	2364.8	2268.7	2204.7	2184.7
40°	2308.8	2264.7	2160.7	2096.7	2072.7
42.5°	2196.7	2152.7	2048.7	1980.6	1956.6
45°	2080.7	2036.7	1932.6	1864.6	1844.6
47.5°	1960.6	1908.6	1808.6	1744.6	1724.6
50°	1836.6	1784.6	1688.6	1624.5	1608.5
52.5°	1708.6	1656.5	1564.5	1500.5	1488.5
55°	1572.5	1528.5	1440.5	1380.5	1368.4
57.5°	1444.5	1396.5	1304.4	1260.4	1248.4
60°	1300.4	1260.4	1176.4	1136.4	1124.4
62.5°	1168.4	1128.4	1044.3	1000.3	996.3
65°	1020.3	984.3	912.3	880.3	876.3
67.5°	892.3	852.3	792.3	760.2	760.2
70°	756.2	720.2	664.2	644.2	644.2
72.5°	620.2	596.2	548.2	528.2	532.2
75°	496.2	472.2	432.1	416.1	420.1
77.5°	380.1	352.1	328.1	316.1	320.1
80°	268.1	248.1	228.1	224.1	228.1
82.5°	160.1	148.0	144.0	144.0	144.0
85°	68.0	68.0	72.0	72.0	68.0
87.5°	28.0	24.0	24.0	28.0	28.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	4.0	0.0	4.0	4.0	4.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	4.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	4.0
177.5°	0.0	0.0	4.0	4.0	4.0
180°	0.0	0.0	0.0	0.0	0.0

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	16.71	18.31	17.08	18.63	18.94	15.94	17.54	16.31	17.86	18.17
	3H	18.33	19.78	18.71	20.10	20.47	17.49	18.94	17.87	19.27	19.63
	4H	18.89	20.24	19.28	20.59	20.97	18.02	19.37	18.41	19.72	20.10
	6H	19.24	20.49	19.65	20.86	21.25	18.35	19.60	18.76	19.97	20.36
	8H	19.32	20.51	19.74	20.90	21.30	18.43	19.63	18.85	20.02	20.42
	12H	19.34	20.49	19.77	20.87	21.30	18.46	19.61	18.89	19.99	20.42
4H	2H	17.17	18.53	17.57	18.88	19.25	16.55	17.91	16.95	18.25	18.63
	3H	19.01	20.14	19.42	20.54	20.94	18.30	19.43	18.71	19.83	20.23
	4H	19.67	20.69	20.11	21.11	21.55	18.92	19.94	19.35	20.35	20.79
	6H	20.13	21.02	20.59	21.46	21.92	19.35	20.24	19.80	20.68	21.14
	8H	20.24	21.07	20.70	21.51	21.98	19.46	20.29	19.92	20.73	21.20
	12H	20.28	21.03	20.76	21.50	21.97	19.51	20.26	19.99	20.74	21.21
8H	4H	19.86	20.69	20.32	21.14	21.60	19.18	20.01	19.64	20.45	20.92
	6H	20.40	21.08	20.89	21.57	22.05	19.69	20.38	20.18	20.87	21.34
	8H	20.54	21.16	21.05	21.67	22.15	19.84	20.46	20.36	20.97	21.46
	12H	20.62	21.16	21.13	21.66	22.22	19.94	20.48	20.45	20.97	21.54
12H	4H	19.87	20.61	20.35	21.09	21.56	19.20	19.94	19.68	20.42	20.89
	6H	20.41	21.02	20.92	21.53	22.02	19.72	20.33	20.23	20.84	21.33
	8H	20.59	21.14	21.10	21.63	22.19	19.91	20.46	20.42	20.95	21.51

END OF REPORT