

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: P572221

Luminaire Tested: 24ID-85-L830-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572221
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2109-397-8)
Test Lab: INNOVATION CENTER
Issue Date: 10/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: 24ID-85-L830-DBD
Description: 8500 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN DROPPED DOUBLE BARRELL LENS AND 3000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

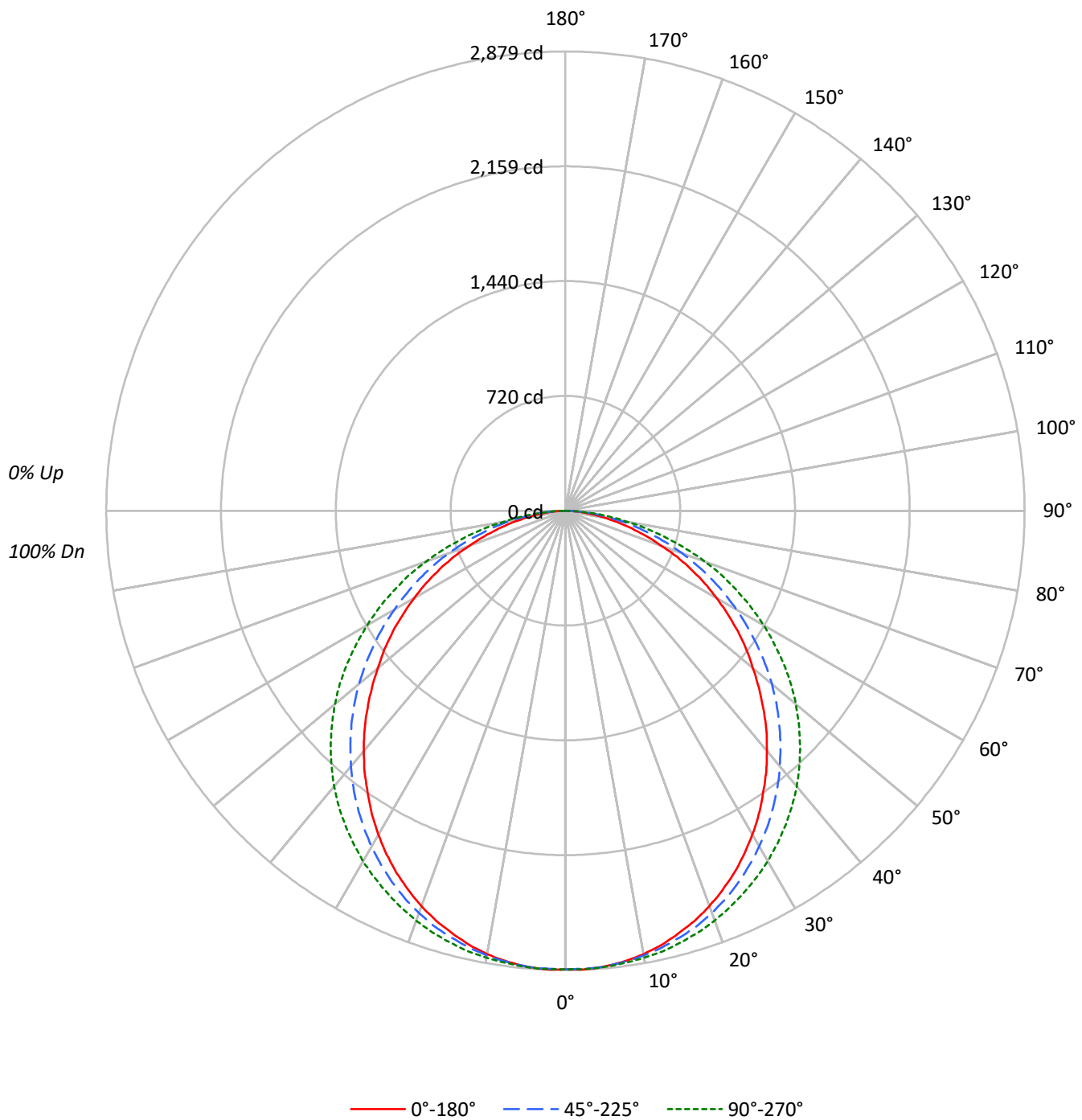
Lumens per Lamp: N/A
Luminaire Lumens: 8205.0 lumens
Efficiency: N/A
Efficacy: 100.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.17')
CIE Type: Direct

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	104	100	96	106	102	98	94	97	94	91		93	91	88		90
2	99	90	84	78	96	89	82	77	85	80	75		82	77	73		79
3	90	79	71	65	87	78	70	64	75	68	63		72	66	62		69
4	82	70	61	55	80	69	61	54	66	59	54		64	58	53		62
5	76	63	54	47	74	62	53	47	59	52	46		58	51	46		56
6	70	56	47	41	68	56	47	41	54	46	40		52	45	40		50
7	65	51	42	36	63	50	42	36	49	41	36		47	41	36		46
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		42
9	56	43	35	29	55	42	34	29	41	34	29		40	33	29		39
10	53	40	32	26	52	39	31	26	38	31	26		37	31	26		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3870	3870	3870
5°	3860	3844	3849
10°	3828	3808	3833
15°	3778	3768	3817
20°	3721	3723	3800
25°	3648	3663	3778
30°	3558	3593	3761
35°	3449	3512	3735
40°	3337	3420	3705
45°	3207	3316	3655
50°	3059	3198	3591
55°	2924	3051	3501
60°	2745	2889	3375
65°	2542	2699	3207
70°	2251	2457	2963
75°	1944	2117	2602
80°	1538	1721	2035
85°	1060	1065	1223

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 3655 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	272.6	3.3
10°-20°	782.3	9.5
20°-30°	1185.8	14.5
30°-40°	1426.4	17.4
40°-50°	1472.6	17.9
50°-60°	1323.2	16.1
60°-70°	1007.5	12.3
70°-80°	578.5	7.1
80°-90°	156.0	1.9
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°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2240.8	27.3
0°-40°	3667.2	44.7
0°-60°	6463.0	78.8
0°-90°	8205.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8205.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2876	2876	2876	2876	2876	
5°	2868	2871	2868	2865	2871	272
15°	2743	2756	2769	2788	2801	774
25°	2505	2529	2569	2622	2644	1153
35°	2161	2198	2270	2369	2406	1352
45°	1756	1796	1897	2028	2081	1354
55°	1321	1355	1465	1606	1670	1178
65°	870	910	1008	1126	1187	860
75°	432	472	542	619	656	458
85°	101	117	139	147	155	118
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2876.0	2876.0	2876.0	2876.0	2876.0
2.5°	2878.6	2878.6	2873.3	2870.6	2876.0
5°	2868.0	2870.6	2868.0	2865.3	2870.6
7.5°	2849.3	2852.0	2852.0	2854.6	2860.0
10°	2822.6	2828.0	2830.6	2838.6	2846.6
12.5°	2787.9	2793.3	2803.9	2817.3	2828.0
15°	2742.6	2755.9	2769.3	2787.9	2801.3
17.5°	2694.6	2710.6	2731.9	2755.9	2771.9
20°	2638.5	2657.2	2683.9	2715.9	2734.6
22.5°	2574.5	2598.5	2630.5	2670.5	2691.9
25°	2505.1	2529.2	2569.2	2622.5	2643.9
27.5°	2427.8	2454.5	2502.5	2563.8	2593.2
30°	2345.1	2374.4	2430.4	2505.1	2537.2
32.5°	2257.0	2289.0	2353.1	2438.4	2473.1
35°	2161.0	2198.3	2270.4	2369.1	2406.4
37.5°	2067.6	2105.0	2185.0	2291.7	2334.4
40°	1966.2	2006.2	2091.6	2209.0	2257.0
42.5°	1864.8	1899.5	1995.6	2121.0	2171.7
45°	1755.5	1795.5	1896.9	2027.6	2080.9
47.5°	1646.1	1688.8	1795.5	1928.9	1984.9
50°	1534.0	1579.4	1688.8	1824.8	1886.2
52.5°	1430.0	1467.3	1579.4	1718.1	1782.1
55°	1320.6	1355.3	1464.7	1606.1	1670.1
57.5°	1205.9	1245.9	1355.3	1488.7	1552.7
60°	1093.8	1133.8	1237.9	1371.3	1435.3
62.5°	984.4	1021.8	1123.2	1251.2	1315.3
65°	869.7	909.7	1008.5	1125.8	1187.2
67.5°	757.7	800.4	893.7	1000.5	1064.5
70°	637.6	685.6	776.4	875.1	925.8
72.5°	530.9	576.3	659.0	747.0	795.0
75°	432.2	472.2	541.6	618.9	656.3
77.5°	333.5	376.2	437.5	496.2	525.6
80°	245.4	285.5	333.5	373.5	386.8
82.5°	168.1	197.4	232.1	253.4	272.1
85°	101.4	117.4	138.7	146.7	154.7
87.5°	42.7	48.0	56.0	53.4	56.0
90°	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	15.31	16.95	15.67	17.26	17.58	16.77	18.42	17.14	18.73	19.04
	3H	16.87	18.36	17.25	18.69	19.05	18.67	20.16	19.05	20.49	20.85
	4H	17.39	18.79	17.79	19.14	19.52	19.38	20.78	19.77	21.12	21.50
	6H	17.72	19.02	18.13	19.38	19.77	19.87	21.17	20.28	21.53	21.92
	8H	17.80	19.04	18.23	19.43	19.83	20.01	21.25	20.44	21.64	22.04
	12H	17.85	19.03	18.27	19.42	19.84	20.09	21.28	20.52	21.66	22.09
4H	2H	16.06	17.46	16.46	17.81	18.18	17.23	18.63	17.63	18.98	19.35
	3H	17.83	19.00	18.24	19.40	19.80	19.34	20.52	19.75	20.92	21.32
	4H	18.45	19.51	18.88	19.93	20.36	20.18	21.24	20.61	21.65	22.09
	6H	18.88	19.81	19.34	20.26	20.71	20.80	21.73	21.26	22.17	22.63
	8H	19.00	19.87	19.46	20.31	20.78	20.99	21.86	21.45	22.30	22.77
	12H	19.07	19.85	19.55	20.33	20.79	21.11	21.89	21.59	22.36	22.83
8H	4H	18.83	19.70	19.29	20.15	20.61	20.37	21.24	20.83	21.68	22.15
	6H	19.37	20.10	19.86	20.58	21.06	21.10	21.82	21.59	22.31	22.78
	8H	19.54	20.19	20.05	20.69	21.18	21.34	21.99	21.85	22.50	22.98
	12H	19.65	20.23	20.16	20.72	21.28	21.51	22.09	22.02	22.58	23.14
12H	4H	18.88	19.67	19.36	20.14	20.61	20.38	21.16	20.86	21.64	22.11
	6H	19.44	20.10	19.95	20.60	21.09	21.11	21.76	21.62	22.27	22.75
	8H	19.66	20.24	20.17	20.73	21.29	21.40	21.98	21.91	22.47	23.03

END OF REPORT