

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: P572223

Luminaire Tested: 24ID-85-L835-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572223
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-L835-DBD
Description: 8500 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN DROPPED DOUBLE BARRELL LENS AND 3500K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

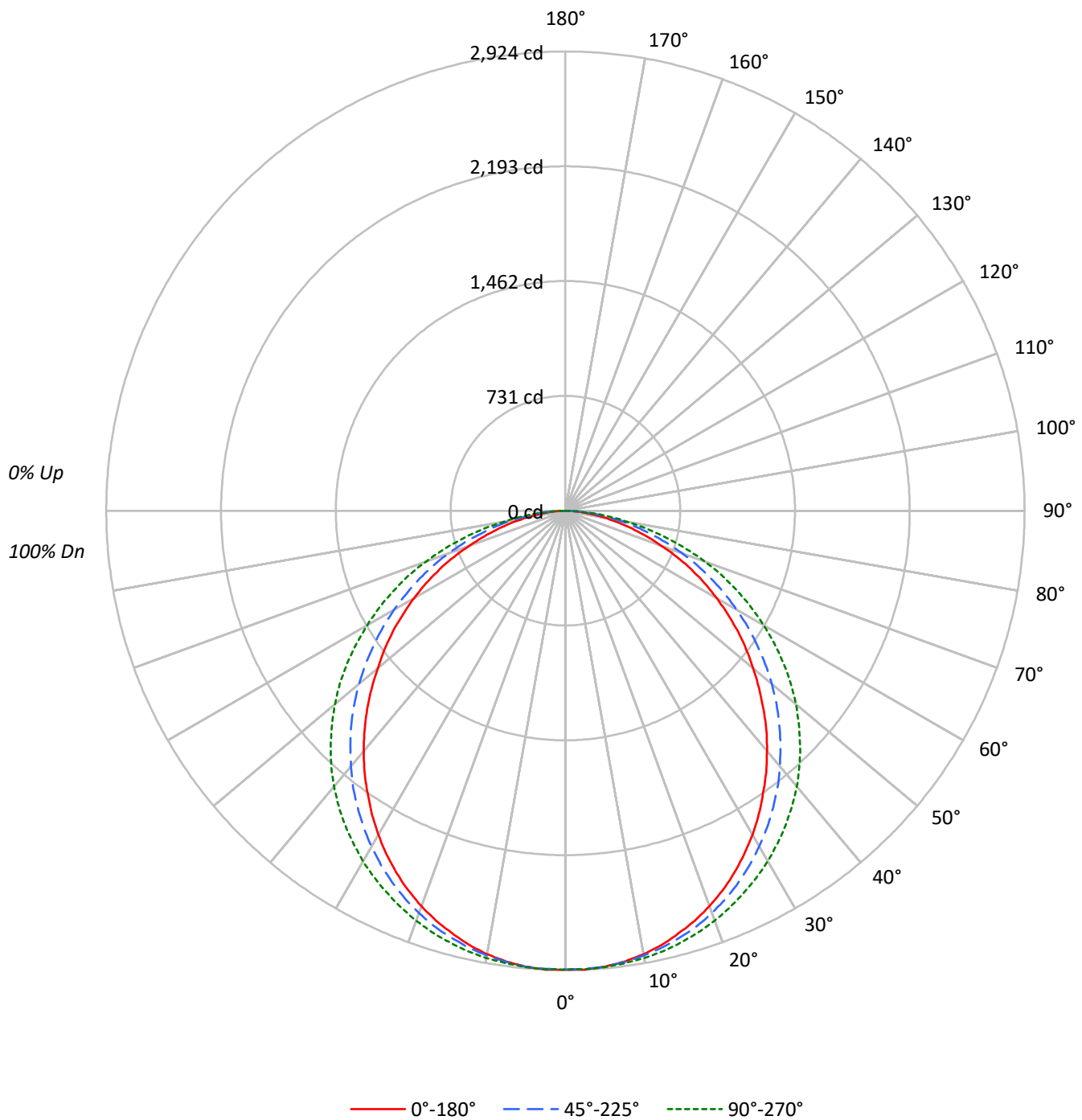
Lumens per Lamp: N/A
Luminaire Lumens: 8335.0 lumens
Efficiency: N/A
Efficacy: 101.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.17')
CIE Type: Direct

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

TEST NUMBER: P572223

CATALOG NUMBER: 24ID-85-L835-DBD

Luminous Intensity Polar Plot



TEST NUMBER: P572223

CATALOG NUMBER: 24ID-85-L835-DBD

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	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61
4	82	70	61	55	80	69	61	54	66	59	54	64	58	53	62	57	52
5	76	63	54	47	74	62	53	47	59	52	46	58	51	46	56	50	45
6	70	56	47	41	68	56	47	41	54	46	40	52	45	40	50	44	40
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3931	3931	3931
5°	3921	3905	3910
10°	3889	3868	3894
15°	3838	3828	3877
20°	3780	3782	3860
25°	3706	3721	3838
30°	3614	3650	3820
35°	3503	3567	3794
40°	3390	3474	3764
45°	3258	3369	3713
50°	3108	3249	3648
55°	2970	3099	3557
60°	2789	2935	3429
65°	2582	2742	3257
70°	2286	2496	3010
75°	1975	2151	2644
80°	1562	1748	2068
85°	1077	1082	1243

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 3713 cd/sqm

TEST NUMBER: P572223

CATALOG NUMBER: 24ID-85-L835-DBD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	276.9	3.3
10°-20°	794.7	9.5
20°-30°	1204.6	14.5
30°-40°	1449.0	17.4
40°-50°	1495.9	17.9
50°-60°	1344.2	16.1
60°-70°	1023.4	12.3
70°-80°	587.6	7.1
80°-90°	158.5	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°	2276.3	27.3
0°-40°	3725.3	44.7
0°-60°	6565.4	78.8
0°-90°	8335.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8335.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2922	2922	2922	2922	2922	
5°	2913	2916	2913	2911	2916	277
15°	2786	2800	2813	2832	2846	786
25°	2545	2569	2610	2664	2686	1171
35°	2195	2233	2306	2407	2445	1374
45°	1783	1824	1927	2060	2114	1375
55°	1342	1377	1488	1632	1697	1197
65°	884	924	1024	1144	1206	874
75°	439	480	550	629	667	465
85°	103	119	141	149	157	120
90°	0	0	0	0	0	

TEST NUMBER: P572223

CATALOG NUMBER: 24ID-85-L835-DBD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2921.5	2921.5	2921.5	2921.5	2921.5
2.5°	2924.3	2924.3	2918.8	2916.1	2921.5
5°	2913.4	2916.1	2913.4	2910.7	2916.1
7.5°	2894.4	2897.2	2897.2	2899.9	2905.3
10°	2867.3	2872.8	2875.5	2883.6	2891.7
12.5°	2832.1	2837.5	2848.4	2861.9	2872.8
15°	2786.0	2799.6	2813.1	2832.1	2845.7
17.5°	2737.3	2753.5	2775.2	2799.6	2815.8
20°	2680.3	2699.3	2726.4	2758.9	2777.9
22.5°	2615.3	2639.7	2672.2	2712.9	2734.5
25°	2544.8	2569.2	2609.9	2664.1	2685.8
27.5°	2466.2	2493.3	2542.1	2604.5	2634.3
30°	2382.2	2412.0	2468.9	2544.8	2577.4
32.5°	2292.8	2325.3	2390.4	2477.1	2512.3
35°	2195.2	2233.2	2306.3	2406.6	2444.6
37.5°	2100.4	2138.3	2219.6	2328.0	2371.4
40°	1997.4	2038.0	2124.8	2244.0	2292.8
42.5°	1894.4	1929.6	2027.2	2154.6	2206.1
45°	1783.3	1823.9	1926.9	2059.7	2113.9
47.5°	1672.2	1715.5	1823.9	1959.4	2016.4
50°	1558.3	1604.4	1715.5	1853.7	1916.1
52.5°	1452.6	1490.6	1604.4	1745.3	1810.4
55°	1341.5	1376.8	1487.9	1631.5	1696.6
57.5°	1225.0	1265.6	1376.8	1512.3	1577.3
60°	1111.2	1151.8	1257.5	1393.0	1458.1
62.5°	1000.0	1038.0	1141.0	1271.1	1336.1
65°	883.5	924.2	1024.4	1143.7	1206.0
67.5°	769.7	813.0	907.9	1016.3	1081.4
70°	647.7	696.5	788.7	888.9	940.4
72.5°	539.3	585.4	669.4	758.8	807.6
75°	439.0	479.7	550.2	628.8	666.7
77.5°	338.8	382.1	444.5	504.1	533.9
80°	249.3	290.0	338.8	379.4	393.0
82.5°	170.7	200.6	235.8	257.5	276.4
85°	103.0	119.2	140.9	149.1	157.2
87.5°	43.4	48.8	56.9	54.2	56.9
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P572223

CATALOG NUMBER: 24ID-85-L835-DBD

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	15.36	17.00	15.73	17.32	17.63	16.83	18.47	17.19	18.78	19.10
	3H	16.93	18.41	17.30	18.74	19.10	18.73	20.21	19.10	20.54	20.90
	4H	17.45	18.85	17.84	19.19	19.57	19.43	20.83	19.83	21.18	21.55
	6H	17.78	19.07	18.19	19.44	19.83	19.92	21.22	20.34	21.59	21.98
	8H	17.86	19.10	18.28	19.49	19.89	20.07	21.31	20.49	21.70	22.09
	12H	17.90	19.09	18.33	19.47	19.90	20.15	21.34	20.58	21.72	22.15
4H	2H	16.11	17.51	16.51	17.86	18.24	17.28	18.68	17.68	19.03	19.41
	3H	17.88	19.06	18.29	19.45	19.85	19.40	20.57	19.81	20.97	21.37
	4H	18.51	19.57	18.94	19.98	20.42	20.23	21.30	20.66	21.71	22.14
	6H	18.94	19.87	19.39	20.31	20.76	20.86	21.79	21.31	22.23	22.68
	8H	19.05	19.92	19.51	20.37	20.83	21.04	21.91	21.50	22.36	22.82
	12H	19.12	19.90	19.60	20.38	20.85	21.16	21.94	21.64	22.42	22.89
8H	4H	18.89	19.76	19.35	20.20	20.66	20.43	21.30	20.89	21.74	22.20
	6H	19.43	20.15	19.92	20.64	21.11	21.15	21.88	21.64	22.36	22.84
	8H	19.59	20.24	20.10	20.75	21.23	21.40	22.05	21.91	22.55	23.04
	12H	19.71	20.28	20.21	20.77	21.33	21.57	22.14	22.07	22.63	23.19
12H	4H	18.94	19.72	19.42	20.19	20.66	20.44	21.22	20.91	21.69	22.16
	6H	19.50	20.15	20.01	20.66	21.14	21.17	21.82	21.68	22.32	22.81
	8H	19.72	20.29	20.22	20.78	21.34	21.46	22.03	21.97	22.52	23.08

END OF REPORT