

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: P572216

Luminaire Tested: 24ID-80-L835-DBR

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572216
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-80-L835-DBR
Description: 8000 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 3500K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

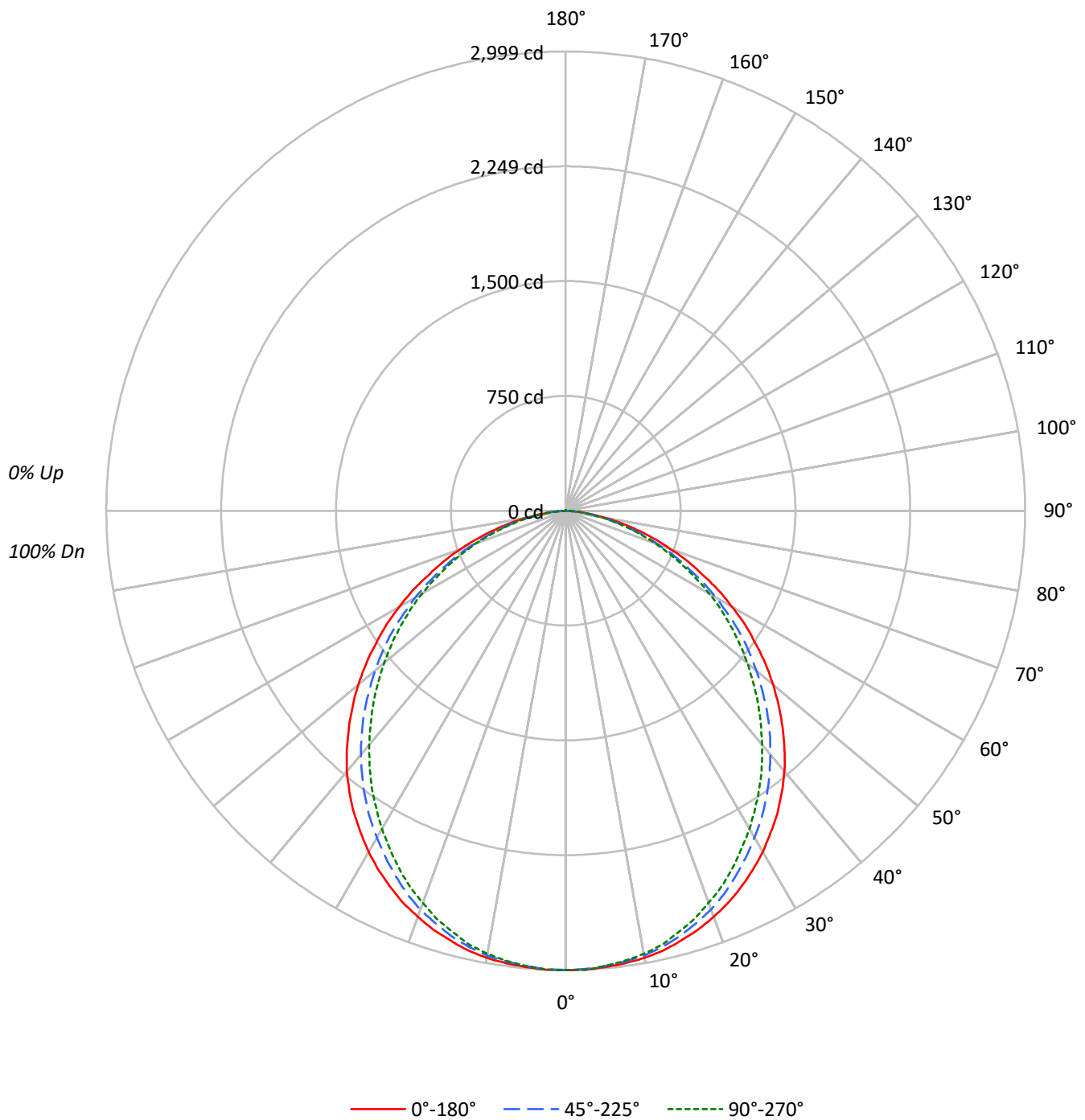
Lumens per Lamp: N/A
Luminaire Lumens: 7883.0 lumens
Efficiency: N/A
Efficacy: 102.4 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.19 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 77
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: P572216

CATALOG NUMBER: 24ID-80-L835-DBR

Luminous Intensity Polar Plot



TEST NUMBER: P572216

CATALOG NUMBER: 24ID-80-L835-DBR

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°	4036	4036	4036
5°	4041	4030	4030
10°	4051	4030	4014
15°	4049	4006	3969
20°	4041	3969	3903
25°	4024	3904	3824
30°	3996	3828	3727
35°	3959	3750	3624
40°	3902	3652	3503
45°	3810	3539	3377
50°	3699	3401	3240
55°	3550	3251	3089
60°	3367	3046	2912
65°	3126	2795	2684
70°	2863	2515	2439
75°	2482	2162	2102
80°	1999	1701	1701
85°	1011	1070	1011

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3810 cd/sqm

TEST NUMBER: P572216

CATALOG NUMBER: 24ID-80-L835-DBR

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	283.8	3.6
10°-20°	811.2	10.3
20°-30°	1214.5	15.4
30°-40°	1435.5	18.2
40°-50°	1444.9	18.3
50°-60°	1250.4	15.9
60°-70°	890.5	11.3
70°-80°	457.2	5.8
80°-90°	94.6	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°	2309.5	29.3
0°-40°	3745.0	47.5
0°-60°	6440.3	81.7
0°-90°	7882.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7883.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2999	2999	2999	2999	2999	
5°	2992	2988	2984	2980	2984	285
15°	2907	2896	2876	2853	2849	821
25°	2711	2688	2630	2588	2576	1249
35°	2410	2372	2283	2226	2206	1506
45°	2002	1960	1860	1794	1775	1544
55°	1513	1471	1386	1328	1317	1354
65°	982	947	878	847	843	978
75°	477	454	416	400	404	509
85°	66	66	69	69	66	98
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	

TEST NUMBER: P572216

CATALOG NUMBER: 24ID-80-L835-DBR

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2999.4	2999.4	2999.4	2999.4	2999.4
2.5°	2999.4	2995.6	2995.6	2991.7	2999.4
5°	2991.7	2987.9	2984.0	2980.2	2984.0
7.5°	2980.2	2972.5	2968.6	2960.9	2964.8
10°	2964.8	2957.1	2949.4	2937.8	2937.8
12.5°	2941.7	2934.0	2918.6	2903.2	2903.2
15°	2907.0	2895.5	2876.2	2853.1	2849.3
17.5°	2868.5	2853.1	2826.2	2799.2	2795.4
20°	2822.3	2806.9	2772.3	2737.6	2726.1
22.5°	2772.3	2753.0	2706.8	2668.3	2656.8
25°	2710.7	2687.6	2629.8	2587.5	2575.9
27.5°	2645.2	2614.4	2549.0	2502.7	2487.3
30°	2572.1	2541.3	2464.2	2418.0	2398.8
32.5°	2491.2	2456.5	2379.5	2321.8	2302.5
35°	2410.3	2371.8	2283.3	2225.5	2206.3
37.5°	2317.9	2275.6	2183.2	2121.6	2102.3
40°	2221.7	2179.3	2079.2	2017.6	1994.5
42.5°	2113.9	2071.5	1971.4	1905.9	1882.8
45°	2002.2	1959.8	1859.7	1794.3	1775.0
47.5°	1886.7	1836.6	1740.4	1678.8	1659.5
50°	1767.3	1717.3	1624.9	1563.3	1547.9
52.5°	1644.1	1594.1	1505.5	1443.9	1432.3
55°	1513.2	1470.8	1386.1	1328.4	1316.8
57.5°	1390.0	1343.8	1255.2	1212.9	1201.3
60°	1251.4	1212.9	1132.0	1093.5	1082.0
62.5°	1124.3	1085.8	1005.0	962.6	958.7
65°	981.8	947.2	877.9	847.1	843.2
67.5°	858.6	820.1	762.4	731.6	731.6
70°	727.7	693.1	639.2	619.9	619.9
72.5°	596.8	573.7	527.5	508.3	512.1
75°	477.4	454.3	415.8	400.4	404.3
77.5°	365.8	338.8	315.7	304.2	308.0
80°	258.0	238.7	219.5	215.6	219.5
82.5°	154.0	142.5	138.6	138.6	138.6
85°	65.5	65.5	69.3	69.3	65.5
87.5°	27.0	23.1	23.1	27.0	27.0
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

TEST NUMBER: P572216

CATALOG NUMBER: 24ID-80-L835-DBR

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°	3.9	0.0	3.9	3.9	3.9
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	3.9	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	3.9
177.5°	0.0	0.0	3.9	3.9	3.9
180°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P572216
CATALOG NUMBER: 24ID-80-L835-DBR

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	16.58	18.18	16.94	18.49	18.81	15.81	17.41	16.17	17.72	18.04
	3H	18.20	19.64	18.58	19.97	20.33	17.36	18.81	17.74	19.13	19.49
	4H	18.75	20.11	19.15	20.46	20.83	17.88	19.24	18.28	19.59	19.96
	6H	19.10	20.36	19.52	20.73	21.12	18.21	19.47	18.63	19.84	20.23
	8H	19.18	20.38	19.61	20.77	21.17	18.29	19.49	18.72	19.88	20.28
	12H	19.20	20.35	19.63	20.73	21.16	18.33	19.47	18.76	19.85	20.28
4H	2H	17.04	18.40	17.44	18.74	19.12	16.42	17.77	16.81	18.12	18.50
	3H	18.87	20.00	19.28	20.40	20.80	18.17	19.30	18.58	19.70	20.10
	4H	19.54	20.56	19.97	20.98	21.41	18.79	19.81	19.22	20.22	20.66
	6H	20.00	20.89	20.45	21.33	21.79	19.22	20.11	19.67	20.55	21.00
	8H	20.11	20.94	20.57	21.38	21.85	19.33	20.16	19.79	20.60	21.07
	12H	20.15	20.89	20.63	21.37	21.84	19.38	20.13	19.86	20.60	21.07
8H	4H	19.73	20.56	20.19	21.00	21.47	19.05	19.88	19.51	20.32	20.79
	6H	20.26	20.95	20.76	21.44	21.92	19.56	20.24	20.05	20.73	21.21
	8H	20.41	21.03	20.92	21.53	22.02	19.71	20.33	20.22	20.84	21.32
	12H	20.49	21.03	20.99	21.52	22.08	19.80	20.35	20.31	20.84	21.40
12H	4H	19.73	20.48	20.21	20.95	21.42	19.06	19.81	19.54	20.29	20.76
	6H	20.27	20.89	20.78	21.40	21.88	19.58	20.20	20.09	20.71	21.19
	8H	20.46	21.00	20.97	21.49	22.06	19.78	20.32	20.29	20.81	21.38