

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: P572168

Luminaire Tested: 24ID-50-L835-DBR

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572168
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-50-L835-DBR
Description: 5000 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 3500K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

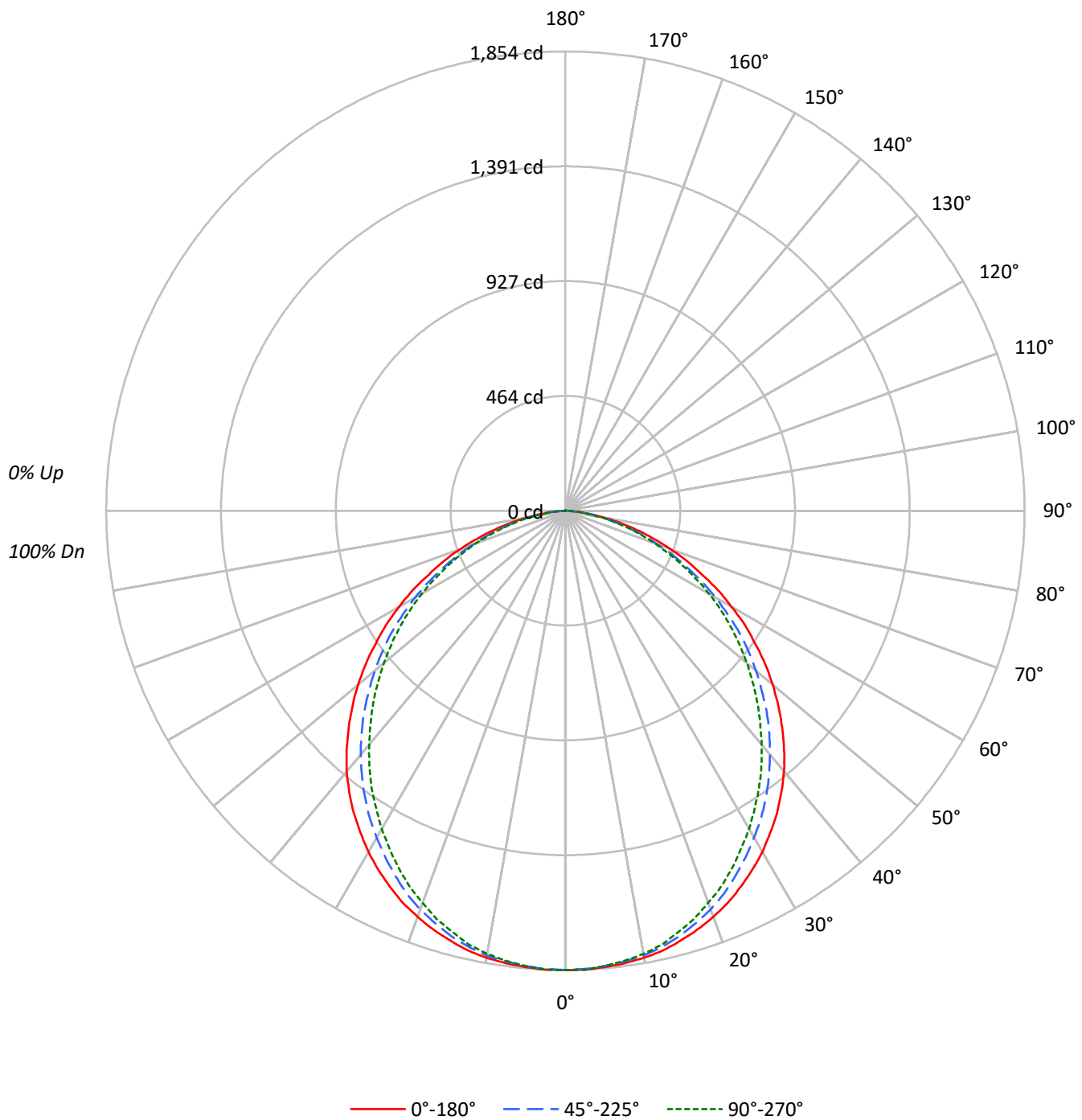
Lumens per Lamp: N/A
Luminaire Lumens: 4873.0 lumens
Efficiency: N/A
Efficacy: 110.5 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.19 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 44.1
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°	2495	2495	2495
5°	2498	2491	2491
10°	2504	2491	2481
15°	2503	2477	2453
20°	2498	2454	2413
25°	2488	2413	2364
30°	2470	2367	2304
35°	2447	2318	2240
40°	2412	2258	2165
45°	2355	2187	2088
50°	2287	2102	2003
55°	2194	2010	1909
60°	2082	1883	1800
65°	1932	1728	1660
70°	1770	1554	1507
75°	1534	1337	1299
80°	1236	1051	1051
85°	625	661	625

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 2355 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.4	3.6
10°-20°	501.5	10.3
20°-30°	750.8	15.4
30°-40°	887.4	18.2
40°-50°	893.2	18.3
50°-60°	772.9	15.9
60°-70°	550.5	11.3
70°-80°	282.6	5.8
80°-90°	58.5	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°	0.2	0.0
170°-180°	0.0	0.0
0°-30°	1427.7	29.3
0°-40°	2315.1	47.5
0°-60°	3981.2	81.7
0°-90°	4872.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4873.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1854	1854	1854	1854	1854	
5°	1849	1847	1845	1842	1845	176
15°	1797	1790	1778	1764	1761	507
25°	1676	1661	1626	1600	1592	772
35°	1490	1466	1411	1376	1364	931
45°	1238	1212	1150	1109	1097	954
55°	935	909	857	821	814	837
65°	607	586	543	524	521	605
75°	295	281	257	248	250	315
85°	40	40	43	43	40	61
90°	0	0	0	0	0	2
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	2	0
180°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1854.2	1854.2	1854.2	1854.2	1854.2
2.5°	1854.2	1851.8	1851.8	1849.4	1854.2
5°	1849.4	1847.0	1844.6	1842.3	1844.6
7.5°	1842.3	1837.5	1835.1	1830.4	1832.7
10°	1832.7	1828.0	1823.2	1816.1	1816.1
12.5°	1818.5	1813.7	1804.2	1794.7	1794.7
15°	1797.0	1789.9	1778.0	1763.7	1761.3
17.5°	1773.2	1763.7	1747.0	1730.4	1728.0
20°	1744.7	1735.1	1713.7	1692.3	1685.2
22.5°	1713.7	1701.8	1673.3	1649.5	1642.3
25°	1675.6	1661.4	1625.7	1599.5	1592.3
27.5°	1635.2	1616.1	1575.7	1547.1	1537.6
30°	1590.0	1570.9	1523.3	1494.8	1482.8
32.5°	1540.0	1518.6	1470.9	1435.2	1423.3
35°	1490.0	1466.2	1411.4	1375.7	1363.8
37.5°	1432.9	1406.7	1349.6	1311.5	1299.6
40°	1373.4	1347.2	1285.3	1247.2	1232.9
42.5°	1306.7	1280.5	1218.6	1178.2	1163.9
45°	1237.7	1211.5	1149.6	1109.2	1097.3
47.5°	1166.3	1135.3	1075.8	1037.8	1025.9
50°	1092.5	1061.6	1004.4	966.4	956.8
52.5°	1016.3	985.4	930.6	892.6	885.4
55°	935.4	909.2	856.9	821.2	814.0
57.5°	859.2	830.7	775.9	749.8	742.6
60°	773.6	749.8	699.8	676.0	668.8
62.5°	695.0	671.2	621.2	595.0	592.7
65°	606.9	585.5	542.7	523.6	521.3
67.5°	530.8	507.0	471.3	452.2	452.2
70°	449.9	428.4	395.1	383.2	383.2
72.5°	368.9	354.6	326.1	314.2	316.6
75°	295.1	280.9	257.1	247.5	249.9
77.5°	226.1	209.5	195.2	188.0	190.4
80°	159.5	147.6	135.7	133.3	135.7
82.5°	95.2	88.1	85.7	85.7	85.7
85°	40.5	40.5	42.8	42.8	40.5
87.5°	16.7	14.3	14.3	16.7	16.7
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°	2.4	0.0	2.4	2.4	2.4
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	2.4	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	2.4
177.5°	0.0	0.0	2.4	2.4	2.4
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	14.91	16.51	15.27	16.82	17.14	14.14	15.74	14.50	16.05	16.37
	3H	16.53	17.97	16.91	18.30	18.66	15.69	17.13	16.07	17.46	17.82
	4H	17.08	18.44	17.48	18.79	19.16	16.21	17.57	16.61	17.92	18.29
	6H	17.43	18.69	17.84	19.05	19.45	16.54	17.80	16.95	18.16	18.56
	8H	17.51	18.71	17.94	19.10	19.50	16.62	17.82	17.05	18.21	18.61
	12H	17.53	18.68	17.96	19.06	19.49	16.65	17.80	17.08	18.18	18.61
4H	2H	15.37	16.73	15.77	17.07	17.45	14.75	16.10	15.14	16.45	16.83
	3H	17.20	18.33	17.61	18.73	19.13	16.49	17.63	16.90	18.02	18.43
	4H	17.87	18.89	18.30	19.30	19.74	17.12	18.14	17.55	18.55	18.99
	6H	18.33	19.22	18.78	19.66	20.11	17.54	18.43	18.00	18.88	19.33
	8H	18.43	19.27	18.90	19.71	20.17	17.65	18.49	18.12	18.93	19.39
	12H	18.48	19.22	18.96	19.70	20.17	17.71	18.45	18.19	18.93	19.40
8H	4H	18.06	18.89	18.52	19.33	19.80	17.38	18.21	17.84	18.65	19.12
	6H	18.59	19.28	19.09	19.77	20.25	17.89	18.57	18.38	19.06	19.54
	8H	18.74	19.36	19.25	19.86	20.35	18.04	18.66	18.55	19.16	19.65
	12H	18.82	19.36	19.32	19.85	20.41	18.13	18.68	18.64	19.17	19.73
12H	4H	18.06	18.81	18.54	19.28	19.75	17.39	18.14	17.87	18.61	19.08
	6H	18.60	19.22	19.11	19.73	20.21	17.91	18.53	18.42	19.04	19.52
	8H	18.79	19.33	19.29	19.82	20.38	18.11	18.65	18.62	19.14	19.71