

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: P572174

Luminaire Tested: 24ID-55-L830-DBR

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572174
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-55-L830-DBR
Description: 5500 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 3000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

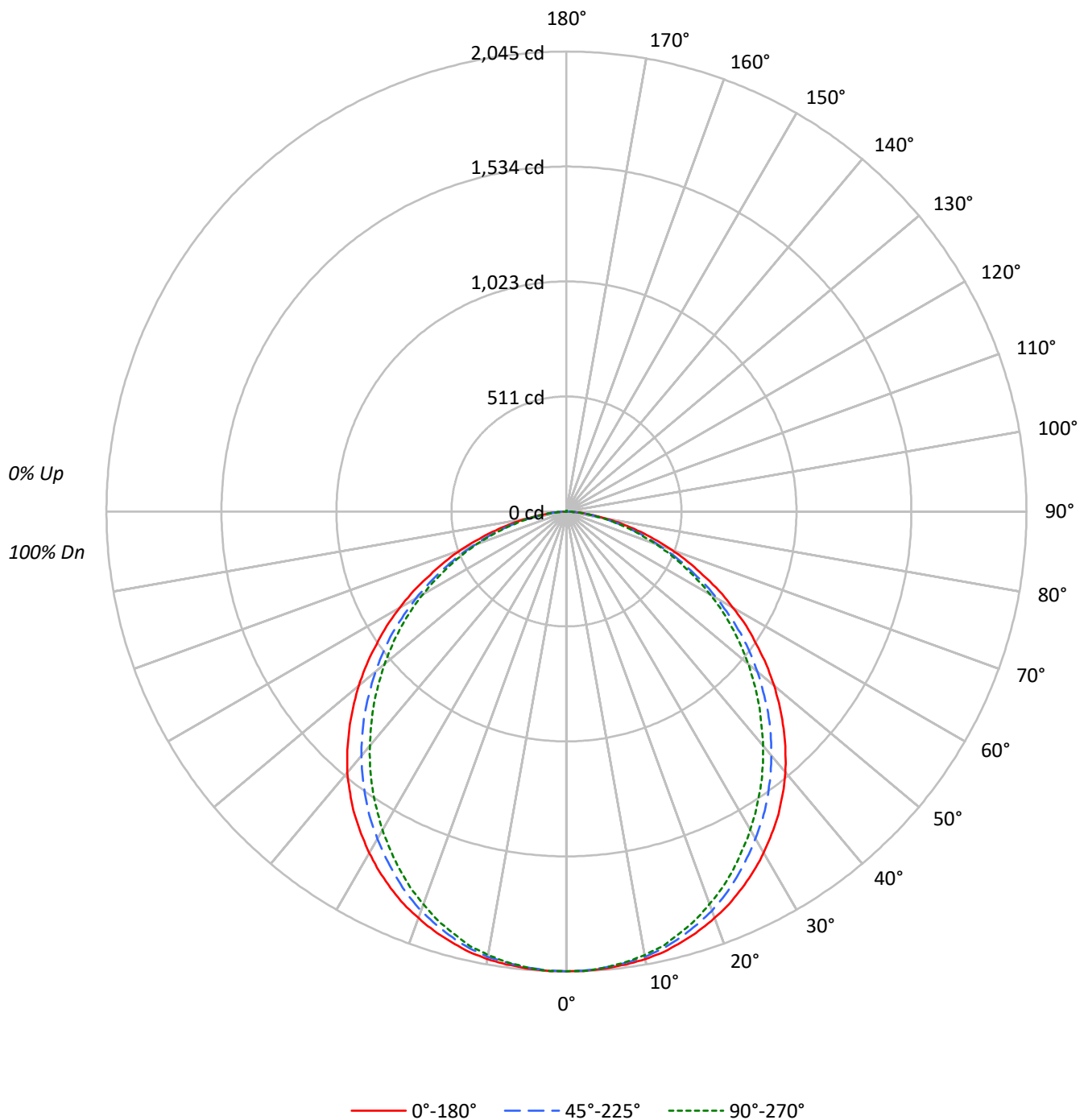
Lumens per Lamp: N/A
Luminaire Lumens: 5374.0 lumens
Efficiency: N/A
Efficacy: 107.1 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.19 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 50.2
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°	2751	2751	2751
5°	2755	2748	2748
10°	2761	2747	2736
15°	2761	2731	2706
20°	2755	2706	2661
25°	2743	2662	2607
30°	2724	2610	2541
35°	2699	2557	2471
40°	2660	2490	2388
45°	2597	2412	2303
50°	2522	2319	2209
55°	2420	2217	2106
60°	2296	2077	1985
65°	2131	1905	1830
70°	1952	1714	1662
75°	1692	1474	1433
80°	1363	1159	1159
85°	689	729	689

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2597 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.5	3.6
10°-20°	553.0	10.3
20°-30°	828.0	15.4
30°-40°	978.6	18.2
40°-50°	985.0	18.3
50°-60°	852.4	15.9
60°-70°	607.1	11.3
70°-80°	311.7	5.8
80°-90°	64.5	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°	1574.5	29.3
0°-40°	2553.1	47.5
0°-60°	4390.5	81.7
0°-90°	5373.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5374.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2045	2045	2045	2045	2045	
5°	2040	2037	2034	2032	2034	194
15°	1982	1974	1961	1945	1942	560
25°	1848	1832	1793	1764	1756	852
35°	1643	1617	1557	1517	1504	1027
45°	1365	1336	1268	1223	1210	1052
55°	1032	1003	945	906	898	923
65°	669	646	598	578	575	667
75°	326	310	284	273	276	347
85°	45	45	47	47	45	67
90°	0	0	0	0	0	3
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	3	0
180°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2044.8	2044.8	2044.8	2044.8	2044.8
2.5°	2044.8	2042.2	2042.2	2039.5	2044.8
5°	2039.5	2036.9	2034.3	2031.7	2034.3
7.5°	2031.7	2026.4	2023.8	2018.5	2021.2
10°	2021.2	2015.9	2010.7	2002.8	2002.8
12.5°	2005.4	2000.2	1989.7	1979.2	1979.2
15°	1981.8	1973.9	1960.8	1945.0	1942.4
17.5°	1955.5	1945.0	1926.7	1908.3	1905.7
20°	1924.0	1913.5	1889.9	1866.3	1858.4
22.5°	1889.9	1876.8	1845.3	1819.0	1811.2
25°	1847.9	1832.2	1792.8	1763.9	1756.0
27.5°	1803.3	1782.3	1737.7	1706.2	1695.7
30°	1753.4	1732.4	1679.9	1648.4	1635.3
32.5°	1698.3	1674.7	1622.2	1582.8	1569.7
35°	1643.2	1616.9	1556.6	1517.2	1504.1
37.5°	1580.2	1551.3	1488.3	1446.3	1433.2
40°	1514.6	1485.7	1417.4	1375.4	1359.7
42.5°	1441.1	1412.2	1343.9	1299.3	1283.6
45°	1364.9	1336.1	1267.8	1223.2	1210.1
47.5°	1286.2	1252.1	1186.4	1144.4	1131.3
50°	1204.8	1170.7	1107.7	1065.7	1055.2
52.5°	1120.8	1086.7	1026.3	984.3	976.5
55°	1031.6	1002.7	945.0	905.6	897.7
57.5°	947.6	916.1	855.7	826.8	819.0
60°	853.1	826.8	771.7	745.5	737.6
62.5°	766.5	740.2	685.1	656.2	653.6
65°	669.3	645.7	598.5	577.5	574.8
67.5°	585.3	559.1	519.7	498.7	498.7
70°	496.1	472.5	435.7	422.6	422.6
72.5°	406.9	391.1	359.6	346.5	349.1
75°	325.5	309.7	283.5	273.0	275.6
77.5°	249.4	231.0	215.2	207.4	210.0
80°	175.9	162.7	149.6	147.0	149.6
82.5°	105.0	97.1	94.5	94.5	94.5
85°	44.6	44.6	47.2	47.2	44.6
87.5°	18.4	15.7	15.7	18.4	18.4
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°	2.6	0.0	2.6	2.6	2.6
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	2.6	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	2.6
177.5°	0.0	0.0	2.6	2.6	2.6
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	15.25	16.85	15.61	17.16	17.48	14.48	16.08	14.84	16.39	16.71
	3H	16.87	18.31	17.25	18.64	19.00	16.03	17.47	16.41	17.80	18.16
	4H	17.42	18.78	17.82	19.13	19.50	16.55	17.91	16.95	18.26	18.63
	6H	17.77	19.03	18.18	19.39	19.79	16.88	18.14	17.29	18.50	18.89
	8H	17.85	19.05	18.28	19.44	19.84	16.96	18.16	17.39	18.55	18.95
	12H	17.87	19.02	18.30	19.40	19.83	16.99	18.14	17.42	18.52	18.95
4H	2H	15.71	17.07	16.11	17.41	17.79	15.08	16.44	15.48	16.79	17.17
	3H	17.54	18.67	17.95	19.07	19.47	16.83	17.97	17.24	18.36	18.77
	4H	18.21	19.23	18.64	19.64	20.08	17.46	18.48	17.89	18.89	19.33
	6H	18.67	19.56	19.12	20.00	20.45	17.88	18.77	18.34	19.22	19.67
	8H	18.77	19.61	19.24	20.05	20.51	17.99	18.83	18.46	19.27	19.73
	12H	18.82	19.56	19.30	20.04	20.51	18.05	18.79	18.53	19.27	19.74
8H	4H	18.40	19.23	18.86	19.67	20.14	17.72	18.55	18.18	18.99	19.46
	6H	18.93	19.62	19.43	20.11	20.58	18.23	18.91	18.72	19.40	19.88
	8H	19.08	19.70	19.59	20.20	20.69	18.38	19.00	18.89	19.50	19.99
	12H	19.15	19.70	19.66	20.19	20.75	18.47	19.02	18.98	19.51	20.07
12H	4H	18.40	19.15	18.88	19.62	20.09	17.73	18.48	18.21	18.95	19.42
	6H	18.94	19.56	19.45	20.07	20.55	18.25	18.87	18.76	19.38	19.86
	8H	19.13	19.67	19.63	20.16	20.72	18.45	18.99	18.96	19.48	20.05

END OF REPORT