

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: P572176

Luminaire Tested: 24ID-55-L835-DBR

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572176
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-L835-DBR
Description: 5500 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 3500K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

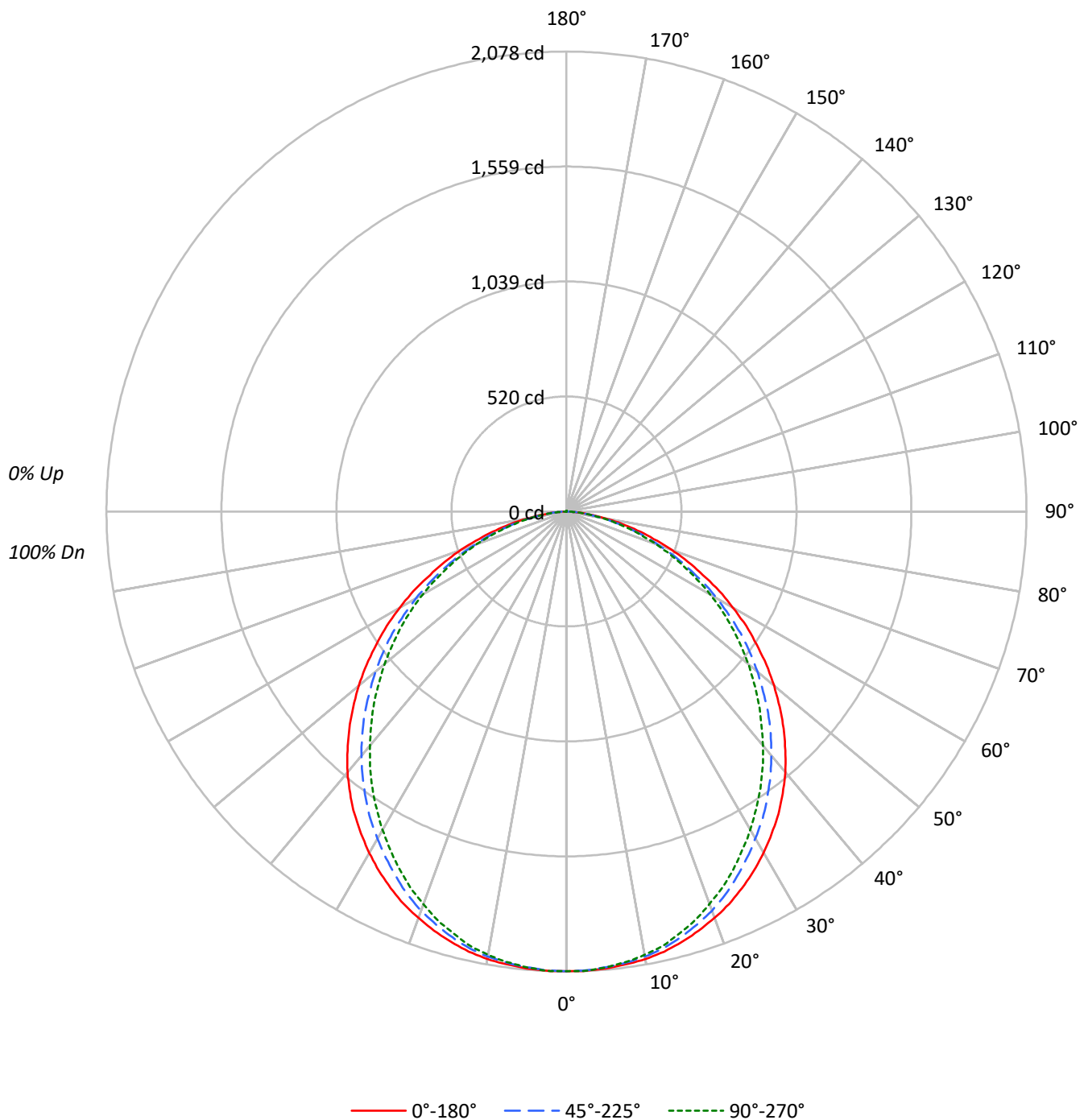
Lumens per Lamp: N/A
Luminaire Lumens: 5460.0 lumens
Efficiency: N/A
Efficacy: 108.8 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.19 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	2795	2795	2795
5°	2799	2791	2791
10°	2806	2791	2780
15°	2805	2775	2749
20°	2799	2749	2704
25°	2787	2704	2649
30°	2768	2652	2581
35°	2742	2598	2510
40°	2703	2529	2426
45°	2639	2451	2339
50°	2562	2356	2244
55°	2459	2252	2140
60°	2332	2110	2017
65°	2165	1936	1859
70°	1983	1742	1689
75°	1719	1497	1456
80°	1385	1178	1178
85°	699	741	699

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2639 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.5	3.6
10°-20°	561.9	10.3
20°-30°	841.2	15.4
30°-40°	994.3	18.2
40°-50°	1000.8	18.3
50°-60°	866.0	15.9
60°-70°	616.8	11.3
70°-80°	316.7	5.8
80°-90°	65.5	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°	1599.7	29.3
0°-40°	2593.9	47.5
0°-60°	4460.8	81.7
0°-90°	5459.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5460.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2078	2078	2078	2078	2078	
5°	2072	2070	2067	2064	2067	197
15°	2014	2006	1992	1976	1974	568
25°	1878	1862	1822	1792	1784	865
35°	1670	1643	1582	1542	1528	1043
45°	1387	1357	1288	1243	1229	1069
55°	1048	1019	960	920	912	938
65°	680	656	608	587	584	677
75°	331	315	288	277	280	353
85°	45	45	48	48	45	68
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°	2077.5	2077.5	2077.5	2077.5	2077.5
2.5°	2077.5	2074.8	2074.8	2072.2	2077.5
5°	2072.2	2069.5	2066.8	2064.2	2066.8
7.5°	2064.2	2058.8	2056.2	2050.8	2053.5
10°	2053.5	2048.2	2042.8	2034.8	2034.8
12.5°	2037.5	2032.2	2021.5	2010.8	2010.8
15°	2013.5	2005.5	1992.2	1976.2	1973.5
17.5°	1986.8	1976.2	1957.5	1938.8	1936.2
20°	1954.8	1944.2	1920.2	1896.2	1888.2
22.5°	1920.2	1906.8	1874.8	1848.2	1840.2
25°	1877.5	1861.5	1821.5	1792.2	1784.1
27.5°	1832.2	1810.8	1765.5	1733.5	1722.8
30°	1781.5	1760.1	1706.8	1674.8	1661.5
32.5°	1725.5	1701.5	1648.1	1608.1	1594.8
35°	1669.5	1642.8	1581.5	1541.5	1528.1
37.5°	1605.5	1576.1	1512.1	1469.5	1456.1
40°	1538.8	1509.5	1440.1	1397.5	1381.4
42.5°	1464.1	1434.8	1365.4	1320.1	1304.1
45°	1386.8	1357.4	1288.1	1242.8	1229.4
47.5°	1306.8	1272.1	1205.4	1162.8	1149.4
50°	1224.1	1189.4	1125.4	1082.8	1072.1
52.5°	1138.8	1104.1	1042.8	1000.1	992.1
55°	1048.1	1018.8	960.1	920.1	912.1
57.5°	962.7	930.7	869.4	840.1	832.1
60°	866.7	840.1	784.1	757.4	749.4
62.5°	778.7	752.1	696.1	666.7	664.1
65°	680.1	656.1	608.1	586.7	584.0
67.5°	594.7	568.0	528.0	506.7	506.7
70°	504.0	480.0	442.7	429.4	429.4
72.5°	413.4	397.4	365.4	352.0	354.7
75°	330.7	314.7	288.0	277.4	280.0
77.5°	253.4	234.7	218.7	210.7	213.4
80°	178.7	165.3	152.0	149.3	152.0
82.5°	106.7	98.7	96.0	96.0	96.0
85°	45.3	45.3	48.0	48.0	45.3
87.5°	18.7	16.0	16.0	18.7	18.7
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°	2.7	0.0	2.7	2.7	2.7
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	2.7	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	2.7
177.5°	0.0	0.0	2.7	2.7	2.7
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	15.30	16.90	15.66	17.22	17.53	14.53	16.13	14.90	16.45	16.76
	3H	16.92	18.37	17.30	18.69	19.06	16.09	17.53	16.46	17.86	18.22
	4H	17.48	18.83	17.87	19.18	19.56	16.61	17.96	17.01	18.31	18.69
	6H	17.83	19.08	18.24	19.45	19.84	16.94	18.19	17.35	18.56	18.95
	8H	17.91	19.10	18.33	19.49	19.89	17.02	18.22	17.44	18.61	19.01
	12H	17.93	19.08	18.36	19.46	19.89	17.05	18.20	17.48	18.58	19.01
4H	2H	15.76	17.12	16.16	17.47	17.84	15.14	16.50	15.54	16.85	17.22
	3H	17.60	18.73	18.01	19.13	19.53	16.89	18.02	17.30	18.42	18.82
	4H	18.26	19.29	18.70	19.70	20.14	17.51	18.53	17.94	18.95	19.38
	6H	18.72	19.61	19.18	20.05	20.51	17.94	18.83	18.40	19.27	19.73
	8H	18.83	19.66	19.29	20.10	20.57	18.05	18.88	18.51	19.32	19.79
	12H	18.87	19.62	19.35	20.09	20.56	18.10	18.85	18.59	19.33	19.80
8H	4H	18.45	19.28	18.91	19.73	20.19	17.77	18.60	18.23	19.04	19.51
	6H	18.99	19.67	19.48	20.16	20.64	18.28	18.97	18.78	19.46	19.93
	8H	19.13	19.75	19.64	20.26	20.74	18.44	19.05	18.95	19.56	20.05
	12H	19.21	19.75	19.72	20.25	20.81	18.53	19.07	19.04	19.56	20.13
12H	4H	18.46	19.20	18.94	19.68	20.15	17.79	18.53	18.27	19.01	19.48
	6H	19.00	19.61	19.51	20.12	20.61	18.31	18.92	18.82	19.43	19.92
	8H	19.18	19.73	19.69	20.22	20.78	18.50	19.05	19.01	19.54	20.10