

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: P572172

Luminaire Tested: 24ID-50-L850-DBR

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572172
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-L850-DBR
Description: 5000 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 5000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

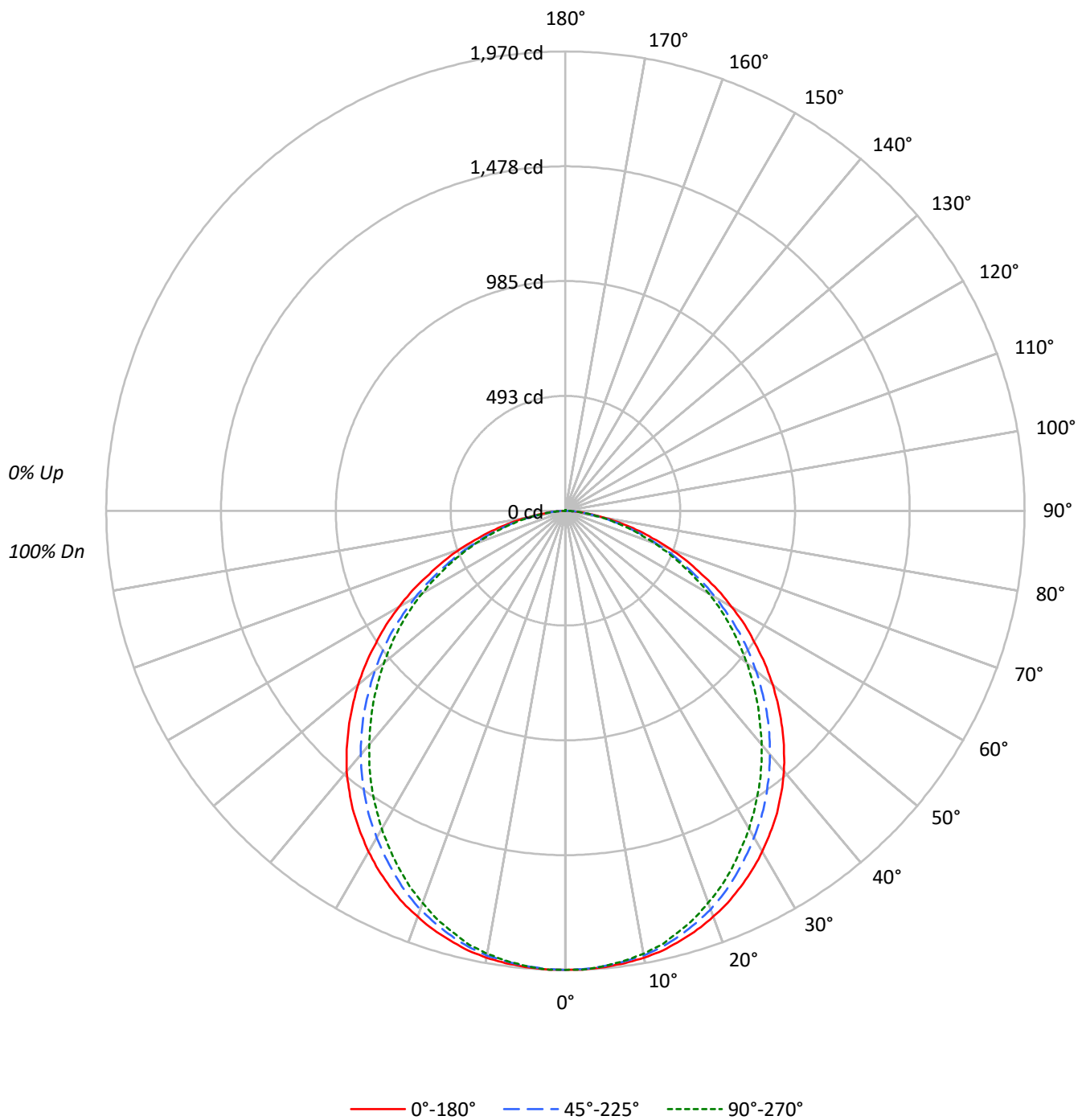
Lumens per Lamp: N/A
Luminaire Lumens: 5177.0 lumens
Efficiency: N/A
Efficacy: 117.4 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.19 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	2650	2650	2650
5°	2654	2647	2647
10°	2660	2646	2636
15°	2659	2631	2606
20°	2654	2607	2563
25°	2643	2564	2511
30°	2624	2514	2448
35°	2600	2463	2380
40°	2563	2398	2301
45°	2502	2324	2218
50°	2430	2234	2128
55°	2331	2135	2029
60°	2211	2000	1912
65°	2053	1835	1763
70°	1880	1651	1602
75°	1630	1420	1380
80°	1313	1117	1117
85°	664	702	664

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2502 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.4	3.6
10°-20°	532.8	10.3
20°-30°	797.6	15.4
30°-40°	942.7	18.2
40°-50°	948.9	18.3
50°-60°	821.1	15.9
60°-70°	584.8	11.3
70°-80°	300.3	5.8
80°-90°	62.1	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°	1516.7	29.3
0°-40°	2459.5	47.5
0°-60°	4229.5	81.7
0°-90°	5176.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5177.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1970	1970	1970	1970	1970	
5°	1965	1962	1960	1957	1960	187
15°	1909	1902	1889	1874	1871	539
25°	1780	1765	1727	1699	1692	820
35°	1583	1558	1500	1462	1449	989
45°	1315	1287	1221	1178	1166	1014
55°	994	966	910	872	865	889
65°	645	622	576	556	554	642
75°	314	298	273	263	266	335
85°	43	43	46	46	43	65
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°	1969.8	1969.8	1969.8	1969.8	1969.8
2.5°	1969.8	1967.3	1967.3	1964.8	1969.8
5°	1964.8	1962.2	1959.7	1957.2	1959.7
7.5°	1957.2	1952.1	1949.6	1944.5	1947.1
10°	1947.1	1942.0	1937.0	1929.4	1929.4
12.5°	1931.9	1926.8	1916.7	1906.6	1906.6
15°	1909.1	1901.6	1888.9	1873.7	1871.2
17.5°	1883.9	1873.7	1856.0	1838.3	1835.8
20°	1853.5	1843.4	1820.6	1797.9	1790.3
22.5°	1820.6	1808.0	1777.6	1752.4	1744.8
25°	1780.2	1765.0	1727.1	1699.3	1691.7
27.5°	1737.2	1717.0	1674.0	1643.6	1633.5
30°	1689.1	1668.9	1618.3	1588.0	1575.4
32.5°	1636.0	1613.3	1562.7	1524.8	1512.1
35°	1582.9	1557.7	1499.5	1461.6	1448.9
37.5°	1522.3	1494.4	1433.8	1393.3	1380.6
40°	1459.0	1431.2	1365.5	1325.0	1309.8
42.5°	1388.2	1360.4	1294.7	1251.7	1236.5
45°	1314.9	1287.1	1221.3	1178.4	1165.7
47.5°	1239.0	1206.2	1143.0	1102.5	1089.9
50°	1160.7	1127.8	1067.1	1026.6	1016.5
52.5°	1079.7	1046.9	988.7	948.2	940.7
55°	993.8	965.9	910.3	872.4	864.8
57.5°	912.8	882.5	824.3	796.5	788.9
60°	821.8	796.5	743.4	718.1	710.6
62.5°	738.4	713.1	660.0	632.2	629.6
65°	644.8	622.1	576.5	556.3	553.8
67.5°	563.9	538.6	500.7	480.4	480.4
70°	477.9	455.2	419.8	407.1	407.1
72.5°	391.9	376.8	346.4	333.8	336.3
75°	313.6	298.4	273.1	263.0	265.5
77.5°	240.2	222.5	207.4	199.8	202.3
80°	169.4	156.8	144.1	141.6	144.1
82.5°	101.1	93.6	91.0	91.0	91.0
85°	43.0	43.0	45.5	45.5	43.0
87.5°	17.7	15.2	15.2	17.7	17.7
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°	2.5	0.0	2.5	2.5	2.5
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	2.5	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	2.5
177.5°	0.0	0.0	2.5	2.5	2.5
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	15.12	16.72	15.48	17.03	17.35	14.35	15.95	14.71	16.26	16.58
	3H	16.74	18.18	17.12	18.51	18.87	15.90	17.34	16.28	17.67	18.03
	4H	17.29	18.65	17.69	19.00	19.37	16.42	17.78	16.82	18.13	18.50
	6H	17.64	18.90	18.05	19.26	19.66	16.75	18.01	17.16	18.37	18.77
	8H	17.72	18.92	18.15	19.31	19.71	16.83	18.03	17.26	18.42	18.82
	12H	17.74	18.89	18.17	19.27	19.70	16.86	18.01	17.29	18.39	18.82
4H	2H	15.58	16.94	15.98	17.28	17.66	14.96	16.31	15.35	16.66	17.04
	3H	17.41	18.54	17.82	18.94	19.34	16.70	17.84	17.11	18.23	18.64
	4H	18.08	19.10	18.51	19.51	19.95	17.33	18.35	17.76	18.76	19.20
	6H	18.54	19.43	18.99	19.87	20.32	17.75	18.64	18.21	19.09	19.54
	8H	18.64	19.48	19.11	19.92	20.38	17.86	18.70	18.33	19.14	19.60
	12H	18.69	19.43	19.17	19.91	20.38	17.92	18.66	18.40	19.14	19.61
8H	4H	18.27	19.10	18.73	19.54	20.01	17.59	18.42	18.05	18.86	19.33
	6H	18.80	19.49	19.30	19.98	20.46	18.10	18.78	18.59	19.27	19.75
	8H	18.95	19.57	19.46	20.07	20.56	18.25	18.87	18.76	19.37	19.86
	12H	19.03	19.57	19.53	20.06	20.62	18.34	18.89	18.85	19.38	19.94
12H	4H	18.27	19.02	18.75	19.49	19.96	17.60	18.35	18.08	18.82	19.29
	6H	18.81	19.43	19.32	19.94	20.42	18.12	18.74	18.63	19.25	19.73
	8H	19.00	19.54	19.50	20.03	20.59	18.32	18.86	18.83	19.35	19.92

END OF REPORT