

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: P572180

Luminaire Tested: 24ID-55-L850-DBR

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572180
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-L850-DBR
Description: 5500 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 5000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

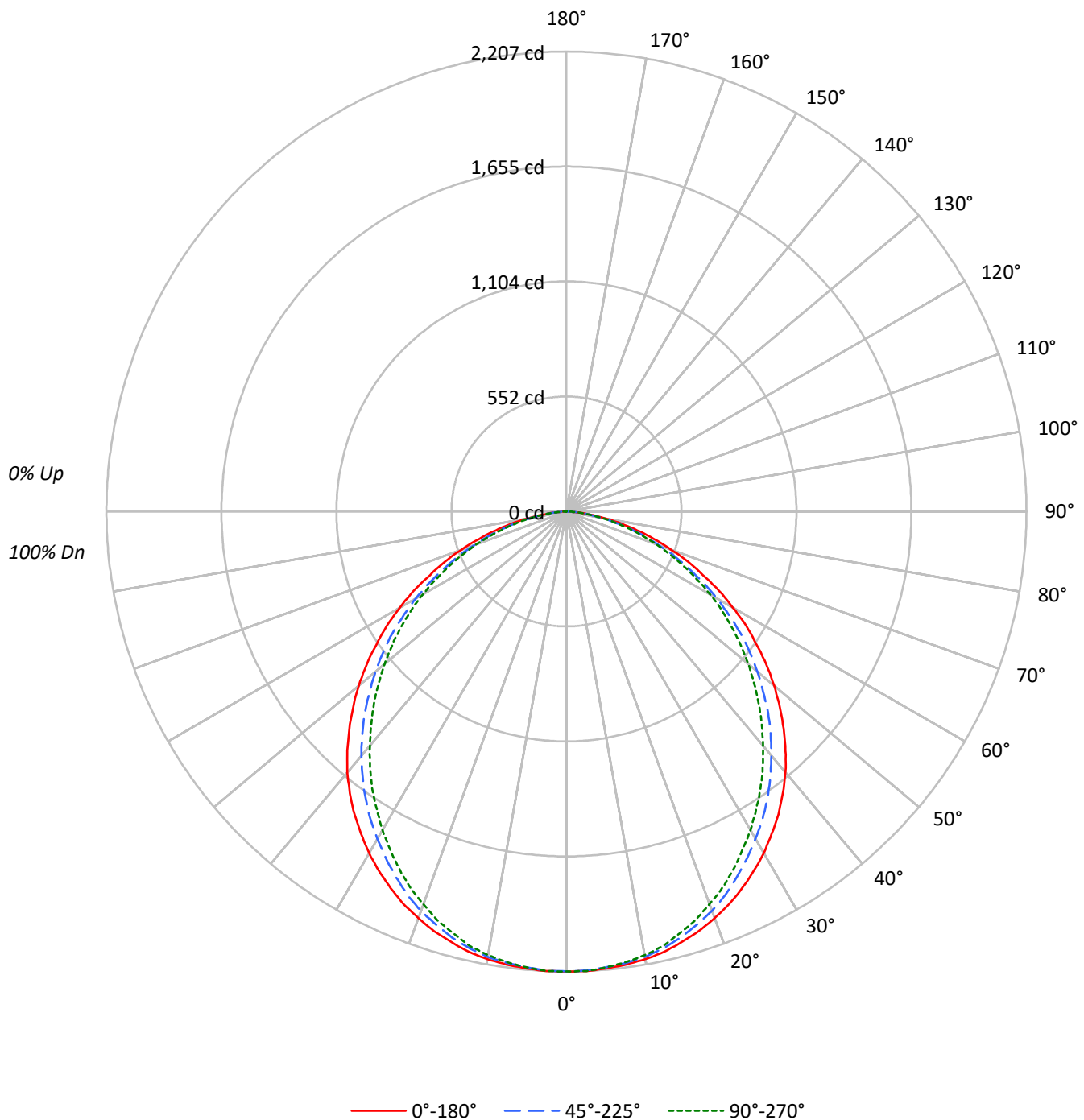
Lumens per Lamp: N/A
Luminaire Lumens: 5801.0 lumens
Efficiency: N/A
Efficacy: 115.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.19 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P572180

CATALOG NUMBER: 24ID-55-L850-DBR

Luminous Intensity Polar Plot



TEST NUMBER: P572180

CATALOG NUMBER: 24ID-55-L850-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°	2970	2970	2970
5°	2974	2966	2966
10°	2981	2965	2954
15°	2980	2948	2921
20°	2974	2921	2872
25°	2961	2873	2814
30°	2941	2817	2742
35°	2913	2760	2667
40°	2872	2687	2578
45°	2804	2604	2485
50°	2722	2503	2384
55°	2612	2393	2273
60°	2478	2242	2143
65°	2300	2057	1975
70°	2107	1851	1795
75°	1826	1591	1547
80°	1471	1251	1251
85°	744	787	744

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 2804 cd/sqm

TEST NUMBER: P572180

CATALOG NUMBER: 24ID-55-L850-DBR

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.8	3.6
10°-20°	597.0	10.3
20°-30°	893.8	15.4
30°-40°	1056.4	18.2
40°-50°	1063.3	18.3
50°-60°	920.1	15.9
60°-70°	655.3	11.3
70°-80°	336.5	5.8
80°-90°	69.6	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°	0.2	0.0
170°-180°	0.0	0.0
0°-30°	1699.6	29.3
0°-40°	2755.9	47.5
0°-60°	4739.4	81.7
0°-90°	5800.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5801.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2207	2207	2207	2207	2207	
5°	2202	2199	2196	2193	2196	210
15°	2139	2131	2117	2100	2097	604
25°	1995	1978	1935	1904	1896	919
35°	1774	1745	1680	1638	1624	1108
45°	1473	1442	1369	1320	1306	1136
55°	1114	1082	1020	978	969	996
65°	722	697	646	623	620	720
75°	351	334	306	295	298	375
85°	48	48	51	51	48	72
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	

TEST NUMBER: P572180

CATALOG NUMBER: 24ID-55-L850-DBR

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2207.3	2207.3	2207.3	2207.3	2207.3
2.5°	2207.3	2204.4	2204.4	2201.6	2207.3
5°	2201.6	2198.8	2195.9	2193.1	2195.9
7.5°	2193.1	2187.4	2184.6	2178.9	2181.8
10°	2181.8	2176.1	2170.4	2161.9	2161.9
12.5°	2164.8	2159.1	2147.8	2136.4	2136.4
15°	2139.3	2130.8	2116.6	2099.6	2096.8
17.5°	2110.9	2099.6	2079.8	2059.9	2057.1
20°	2076.9	2065.6	2040.1	2014.6	2006.1
22.5°	2040.1	2025.9	1991.9	1963.6	1955.1
25°	1994.7	1977.7	1935.2	1904.1	1895.6
27.5°	1946.6	1923.9	1875.7	1841.7	1830.4
30°	1892.7	1870.1	1813.4	1779.4	1765.2
32.5°	1833.2	1807.7	1751.1	1708.6	1694.4
35°	1773.7	1745.4	1680.2	1637.7	1623.6
37.5°	1705.7	1674.6	1606.6	1561.2	1547.1
40°	1634.9	1603.7	1530.1	1484.7	1467.7
42.5°	1555.6	1524.4	1450.7	1402.6	1385.6
45°	1473.4	1442.2	1368.6	1320.4	1306.2
47.5°	1388.4	1351.6	1280.7	1235.4	1221.2
50°	1300.6	1263.7	1195.7	1150.4	1139.0
52.5°	1209.9	1173.0	1107.9	1062.5	1054.0
55°	1113.5	1082.4	1020.0	977.5	969.0
57.5°	1022.9	988.9	923.7	892.5	884.0
60°	920.9	892.5	833.0	804.7	796.2
62.5°	827.4	799.0	739.5	708.4	705.5
65°	722.5	697.0	646.0	623.4	620.5
67.5°	631.9	603.5	561.0	538.4	538.4
70°	535.5	510.0	470.4	456.2	456.2
72.5°	439.2	422.2	388.2	374.0	376.8
75°	351.3	334.3	306.0	294.7	297.5
77.5°	269.2	249.3	232.3	223.8	226.7
80°	189.8	175.7	161.5	158.7	161.5
82.5°	113.3	104.8	102.0	102.0	102.0
85°	48.2	48.2	51.0	51.0	48.2
87.5°	19.8	17.0	17.0	19.8	19.8
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: P572180

CATALOG NUMBER: 24ID-55-L850-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°	2.8	0.0	2.8	2.8	2.8
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	2.8	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	2.8
177.5°	0.0	0.0	2.8	2.8	2.8
180°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P572180
CATALOG NUMBER: 24ID-55-L850-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	15.51	17.11	15.88	17.43	17.74	14.74	16.34	15.11	16.66	16.97
	3H	17.14	18.58	17.51	18.91	19.27	16.30	17.74	16.67	18.07	18.43
	4H	17.69	19.04	18.09	19.39	19.77	16.82	18.17	17.22	18.52	18.90
	6H	18.04	19.30	18.45	19.66	20.05	17.15	18.40	17.56	18.77	19.16
	8H	18.12	19.32	18.54	19.70	20.10	17.23	18.43	17.65	18.82	19.22
	12H	18.14	19.29	18.57	19.67	20.10	17.26	18.41	17.69	18.79	19.22
4H	2H	15.97	17.33	16.37	17.68	18.06	15.35	16.71	15.75	17.06	17.43
	3H	17.81	18.94	18.22	19.34	19.74	17.10	18.23	17.51	18.63	19.03
	4H	18.48	19.50	18.91	19.91	20.35	17.72	18.74	18.15	19.16	19.59
	6H	18.93	19.82	19.39	20.26	20.72	18.15	19.04	18.61	19.48	19.94
	8H	19.04	19.87	19.50	20.31	20.78	18.26	19.09	18.72	19.53	20.00
	12H	19.08	19.83	19.56	20.30	20.77	18.32	19.06	18.80	19.54	20.01
8H	4H	18.66	19.49	19.12	19.94	20.40	17.98	18.81	18.44	19.25	19.72
	6H	19.20	19.89	19.69	20.37	20.85	18.49	19.18	18.99	19.67	20.14
	8H	19.34	19.96	19.86	20.47	20.96	18.65	19.26	19.16	19.77	20.26
	12H	19.42	19.97	19.93	20.46	21.02	18.74	19.28	19.25	19.77	20.34
12H	4H	18.67	19.41	19.15	19.89	20.36	18.00	18.74	18.48	19.22	19.69
	6H	19.21	19.82	19.72	20.33	20.82	18.52	19.13	19.03	19.64	20.13
	8H	19.39	19.94	19.90	20.43	20.99	18.71	19.26	19.22	19.75	20.31