

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: P572179

Luminaire Tested: 24ID-55-L850-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572179
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2109-397-8)
Test Lab: INNOVATION CENTER
Issue Date: 10/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: 24ID-55-L850-DBD
Description: 5500 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN DROPPED DOUBLE BARRELL LENS AND 5000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

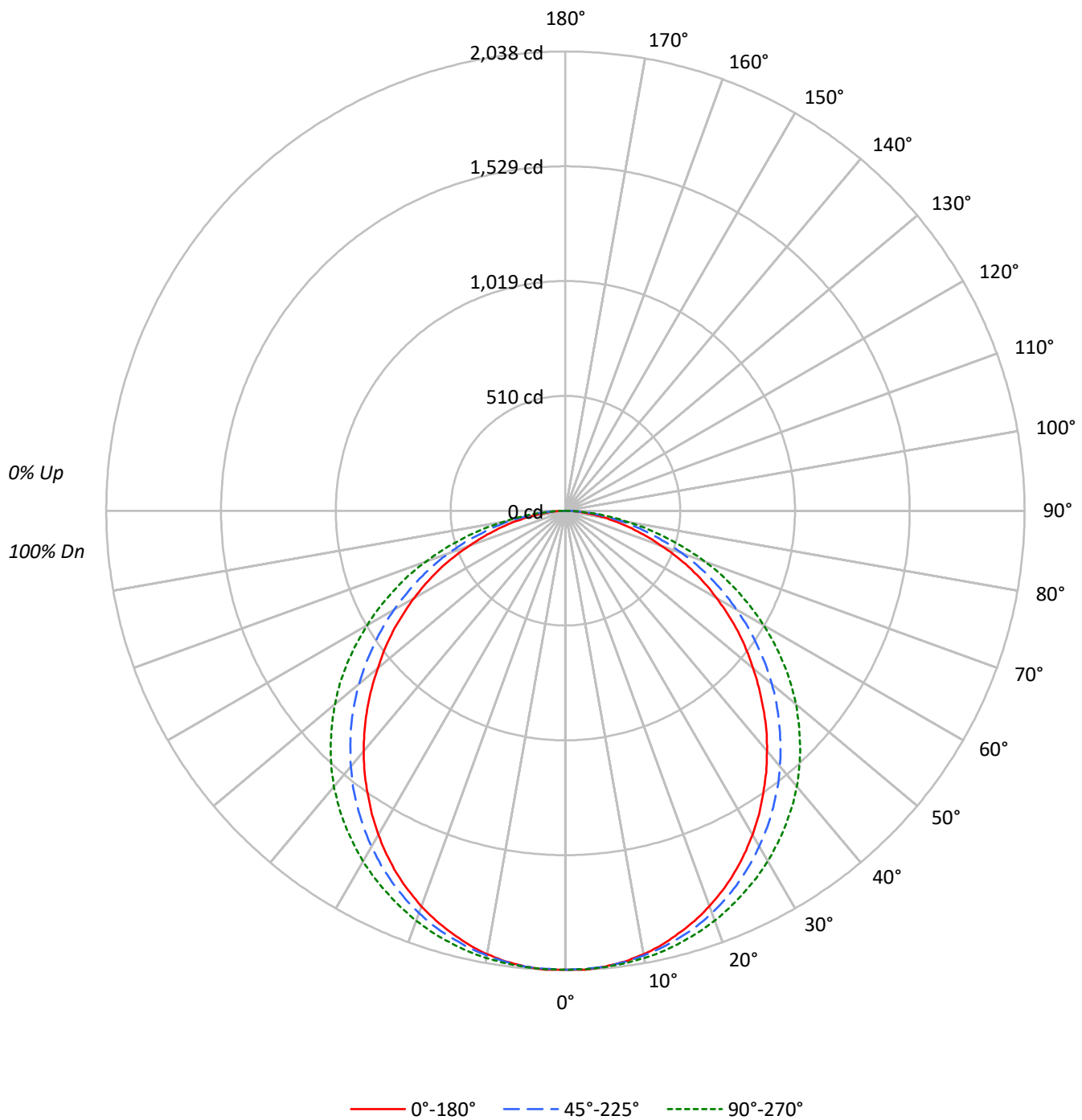
Lumens per Lamp: N/A
Luminaire Lumens: 5810.0 lumens
Efficiency: N/A
Efficacy: 115.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.17')
CIE Type: Direct

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	104	100	96	106	102	98	94	97	94	91		93	91	88		90
2	99	90	84	78	96	89	82	77	85	80	75		82	77	73		79
3	90	79	71	65	87	78	70	64	75	68	63		72	66	62		69
4	82	70	61	55	80	69	61	54	66	59	54		64	58	53		62
5	76	63	54	47	74	62	53	47	59	52	46		58	51	46		56
6	70	56	47	41	68	56	47	41	54	46	40		52	45	40		50
7	65	51	42	36	63	50	42	36	49	41	36		47	41	36		46
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		42
9	56	43	35	29	55	42	34	29	41	34	29		40	33	29		39
10	53	40	32	26	52	39	31	26	38	31	26		37	31	26		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2740	2740	2740
5°	2733	2722	2726
10°	2711	2696	2714
15°	2675	2668	2703
20°	2635	2636	2691
25°	2583	2594	2675
30°	2519	2544	2663
35°	2442	2487	2645
40°	2363	2422	2624
45°	2271	2348	2588
50°	2166	2264	2543
55°	2070	2160	2479
60°	1944	2046	2390
65°	1800	1911	2271
70°	1594	1740	2098
75°	1377	1499	1843
80°	1089	1218	1441
85°	751	754	866

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 2588 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.0	3.3
10°-20°	554.0	9.5
20°-30°	839.7	14.5
30°-40°	1010.1	17.4
40°-50°	1042.8	17.9
50°-60°	937.0	16.1
60°-70°	713.4	12.3
70°-80°	409.6	7.1
80°-90°	110.5	1.9
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°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1586.7	27.3
0°-40°	2596.8	44.7
0°-60°	4576.5	78.8
0°-90°	5810.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5810.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2036	2036	2036	2036	2036	
5°	2031	2033	2031	2029	2033	193
15°	1942	1952	1961	1974	1984	548
25°	1774	1791	1819	1857	1872	817
35°	1530	1557	1608	1678	1704	958
45°	1243	1271	1343	1436	1474	959
55°	935	960	1037	1137	1183	834
65°	616	644	714	797	841	609
75°	306	334	384	438	465	324
85°	72	83	98	104	110	84
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2036.5	2036.5	2036.5	2036.5	2036.5
2.5°	2038.4	2038.4	2034.6	2032.7	2036.5
5°	2030.8	2032.7	2030.8	2028.9	2032.7
7.5°	2017.6	2019.5	2019.5	2021.4	2025.2
10°	1998.7	2002.5	2004.4	2010.0	2015.7
12.5°	1974.2	1977.9	1985.5	1994.9	2002.5
15°	1942.0	1951.5	1960.9	1974.2	1983.6
17.5°	1908.0	1919.4	1934.5	1951.5	1962.8
20°	1868.4	1881.6	1900.5	1923.1	1936.4
22.5°	1823.0	1840.0	1862.7	1891.0	1906.1
25°	1773.9	1790.9	1819.2	1857.0	1872.1
27.5°	1719.1	1738.0	1772.0	1815.5	1836.2
30°	1660.6	1681.3	1721.0	1773.9	1796.6
32.5°	1598.2	1620.9	1666.2	1726.7	1751.2
35°	1530.2	1556.7	1607.7	1677.6	1704.0
37.5°	1464.1	1490.5	1547.2	1622.8	1653.0
40°	1392.3	1420.6	1481.1	1564.2	1598.2
42.5°	1320.5	1345.1	1413.1	1501.9	1537.8
45°	1243.1	1271.4	1343.2	1435.7	1473.5
47.5°	1165.6	1195.8	1271.4	1365.8	1405.5
50°	1086.3	1118.4	1195.8	1292.2	1335.6
52.5°	1012.6	1039.0	1118.4	1216.6	1261.9
55°	935.1	959.7	1037.1	1137.3	1182.6
57.5°	853.9	882.2	959.7	1054.1	1099.5
60°	774.5	802.9	876.6	971.0	1016.4
62.5°	697.1	723.5	795.3	886.0	931.3
65°	615.9	644.2	714.1	797.2	840.7
67.5°	536.5	566.7	632.9	708.4	753.8
70°	451.5	485.5	549.7	619.6	655.5
72.5°	375.9	408.1	466.6	529.0	563.0
75°	306.0	334.4	383.5	438.3	464.7
77.5°	236.1	266.4	309.8	351.4	372.2
80°	173.8	202.1	236.1	264.5	273.9
82.5°	119.0	139.8	164.4	179.5	192.7
85°	71.8	83.1	98.2	103.9	109.6
87.5°	30.2	34.0	39.7	37.8	39.7
90°	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	14.11	15.75	14.47	16.06	16.38	15.57	17.22	15.94	17.53	17.85
	3H	15.67	17.16	16.05	17.49	17.85	17.47	18.96	17.85	19.29	19.65
	4H	16.19	17.59	16.59	17.94	18.32	18.18	19.58	18.57	19.92	20.30
	6H	16.52	17.82	16.93	18.18	18.58	18.67	19.97	19.08	20.33	20.72
	8H	16.60	17.85	17.03	18.23	18.63	18.81	20.05	19.24	20.44	20.84
	12H	16.65	17.84	17.08	18.22	18.65	18.89	20.08	19.32	20.46	20.89
4H	2H	14.86	16.26	15.26	16.61	16.98	16.03	17.43	16.43	17.78	18.15
	3H	16.63	17.80	17.04	18.20	18.60	18.14	19.32	18.55	19.72	20.12
	4H	17.25	18.32	17.68	18.73	19.16	18.98	20.04	19.41	20.45	20.89
	6H	17.69	18.62	18.14	19.06	19.51	19.60	20.53	20.06	20.97	21.43
	8H	17.80	18.67	18.26	19.11	19.58	19.79	20.66	20.25	21.10	21.57
	12H	17.87	18.65	18.35	19.13	19.59	19.91	20.69	20.39	21.16	21.63
8H	4H	17.63	18.50	18.09	18.95	19.41	19.17	20.04	19.63	20.49	20.95
	6H	18.17	18.90	18.67	19.38	19.86	19.90	20.62	20.39	21.11	21.58
	8H	18.34	18.99	18.85	19.50	19.98	20.14	20.79	20.65	21.30	21.78
	12H	18.45	19.03	18.96	19.52	20.08	20.32	20.89	20.82	21.38	21.94
12H	4H	17.68	18.47	18.16	18.94	19.41	19.18	19.96	19.66	20.44	20.91
	6H	18.24	18.90	18.75	19.40	19.89	19.91	20.56	20.42	21.07	21.56
	8H	18.46	19.04	18.97	19.53	20.09	20.21	20.78	20.71	21.27	21.83

END OF REPORT