

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: P572177

Luminaire Tested: 24ID-55-L840-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572177
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-L840-DBD
Description: 5500 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN DROPPED DOUBLE BARRELL LENS AND 4000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

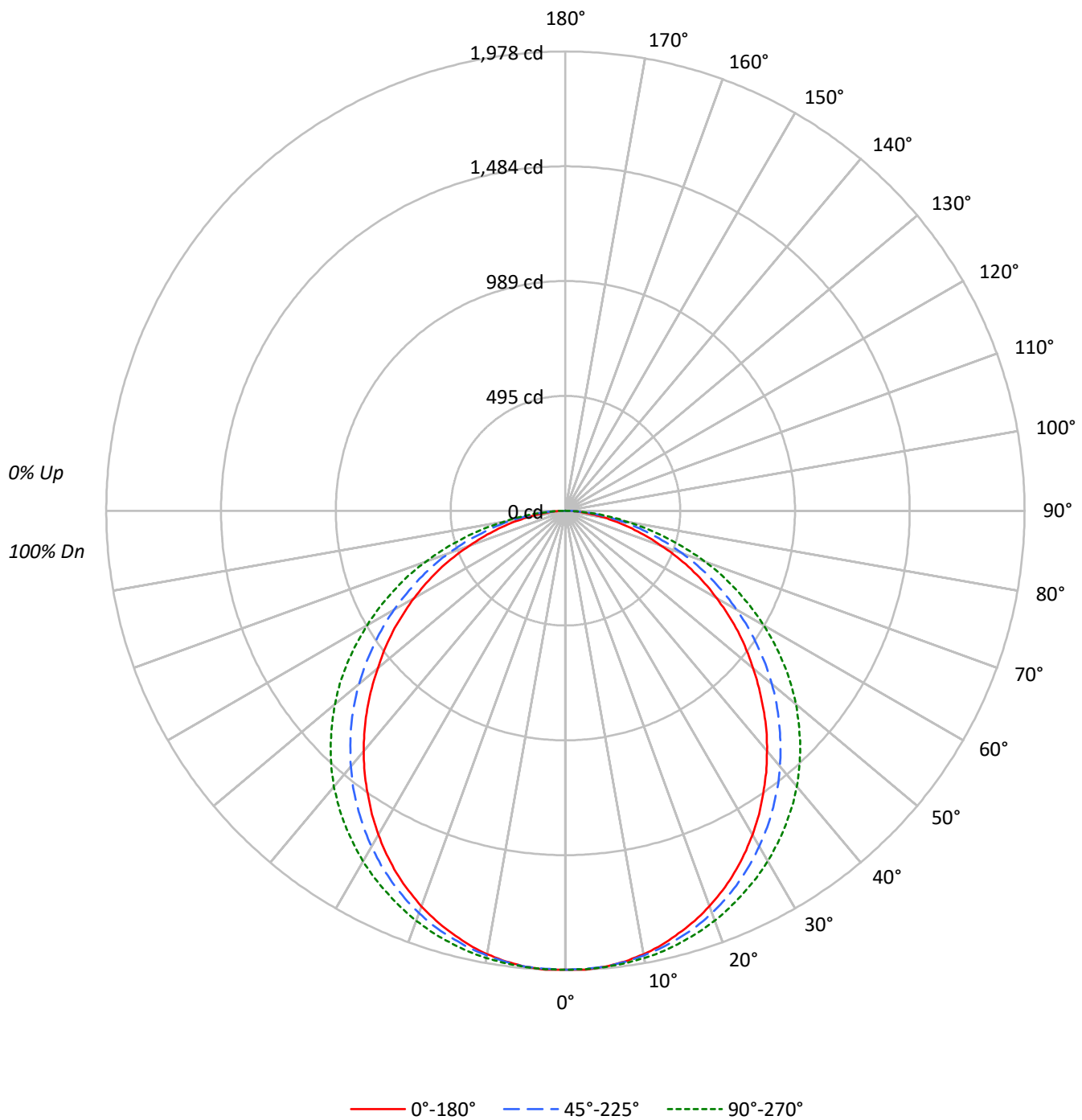
Lumens per Lamp: N/A
Luminaire Lumens: 5639.0 lumens
Efficiency: N/A
Efficacy: 112.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.17')
CIE Type: Direct

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°	2659	2659	2659
5°	2653	2642	2645
10°	2631	2617	2634
15°	2597	2590	2623
20°	2558	2559	2612
25°	2507	2518	2597
30°	2445	2469	2585
35°	2370	2413	2567
40°	2293	2350	2546
45°	2204	2279	2512
50°	2102	2198	2468
55°	2009	2097	2406
60°	1887	1985	2320
65°	1747	1855	2204
70°	1547	1689	2036
75°	1336	1455	1789
80°	1057	1183	1399
85°	729	732	840

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 2512 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.4	3.3
10°-20°	537.7	9.5
20°-30°	815.0	14.5
30°-40°	980.3	17.4
40°-50°	1012.1	17.9
50°-60°	909.4	16.1
60°-70°	692.4	12.3
70°-80°	397.6	7.1
80°-90°	107.2	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°	1540.0	27.3
0°-40°	2520.3	44.7
0°-60°	4441.8	78.8
0°-90°	5639.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5639.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1977	1977	1977	1977	1977	
5°	1971	1973	1971	1969	1973	187
15°	1885	1894	1903	1916	1925	532
25°	1722	1738	1766	1802	1817	792
35°	1485	1511	1560	1628	1654	930
45°	1206	1234	1304	1394	1430	930
55°	908	931	1007	1104	1148	810
65°	598	625	693	774	816	591
75°	297	324	372	425	451	315
85°	70	81	95	101	106	81
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1976.6	1976.6	1976.6	1976.6	1976.6
2.5°	1978.4	1978.4	1974.7	1972.9	1976.6
5°	1971.1	1972.9	1971.1	1969.2	1972.9
7.5°	1958.2	1960.1	1960.1	1961.9	1965.6
10°	1939.9	1943.6	1945.4	1950.9	1956.4
12.5°	1916.0	1919.7	1927.0	1936.2	1943.6
15°	1884.9	1894.0	1903.2	1916.0	1925.2
17.5°	1851.9	1862.9	1877.5	1894.0	1905.0
20°	1813.4	1826.2	1844.5	1866.5	1879.4
22.5°	1769.4	1785.9	1807.9	1835.4	1850.0
25°	1721.7	1738.2	1765.7	1802.4	1817.0
27.5°	1668.5	1686.9	1719.9	1762.0	1782.2
30°	1611.7	1631.8	1670.4	1721.7	1743.7
32.5°	1551.2	1573.2	1617.2	1675.9	1699.7
35°	1485.2	1510.8	1560.3	1628.2	1653.9
37.5°	1421.0	1446.7	1501.7	1575.0	1604.3
40°	1351.3	1378.8	1437.5	1518.2	1551.2
42.5°	1281.6	1305.5	1371.5	1457.7	1492.5
45°	1206.5	1234.0	1303.6	1393.5	1430.2
47.5°	1131.3	1160.6	1234.0	1325.6	1364.2
50°	1054.3	1085.5	1160.6	1254.1	1296.3
52.5°	982.8	1008.4	1085.5	1180.8	1224.8
55°	907.6	931.4	1006.6	1103.8	1147.8
57.5°	828.8	856.3	931.4	1023.1	1067.1
60°	751.8	779.3	850.8	942.4	986.4
62.5°	676.6	702.2	771.9	859.9	903.9
65°	597.7	625.2	693.1	773.8	815.9
67.5°	520.7	550.1	614.2	687.6	731.6
70°	438.2	471.2	533.6	601.4	636.2
72.5°	364.9	396.0	452.9	513.4	546.4
75°	297.0	324.5	372.2	425.4	451.1
77.5°	229.2	258.5	300.7	341.0	361.2
80°	168.7	196.2	229.2	256.7	265.9
82.5°	115.5	135.7	159.5	174.2	187.0
85°	69.7	80.7	95.3	100.8	106.3
87.5°	29.3	33.0	38.5	36.7	38.5
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	14.00	15.65	14.37	15.96	16.28	15.47	17.11	15.84	17.43	17.74
	3H	15.57	17.06	15.95	17.38	17.74	17.37	18.86	17.75	19.18	19.54
	4H	16.09	17.49	16.49	17.84	18.21	18.07	19.47	18.47	19.82	20.20
	6H	16.42	17.72	16.83	18.08	18.47	18.57	19.87	18.98	20.23	20.62
	8H	16.50	17.74	16.93	18.13	18.53	18.71	19.95	19.13	20.34	20.74
	12H	16.54	17.73	16.97	18.11	18.54	18.79	19.98	19.22	20.36	20.79
4H	2H	14.76	16.16	15.15	16.50	16.88	15.93	17.33	16.32	17.67	18.05
	3H	16.52	17.70	16.93	18.10	18.50	18.04	19.22	18.45	19.61	20.01
	4H	17.15	18.21	17.58	18.62	19.06	18.87	19.94	19.31	20.35	20.79
	6H	17.58	18.51	18.04	18.95	19.41	19.50	20.43	19.95	20.87	21.32
	8H	17.70	18.57	18.16	19.01	19.47	19.69	20.56	20.15	21.00	21.46
	12H	17.76	18.55	18.24	19.02	19.49	19.80	20.59	20.28	21.06	21.53
8H	4H	17.53	18.40	17.99	18.84	19.31	19.07	19.94	19.53	20.38	20.85
	6H	18.07	18.79	18.56	19.28	19.76	19.79	20.52	20.29	21.01	21.48
	8H	18.24	18.89	18.74	19.39	19.88	20.04	20.69	20.55	21.20	21.68
	12H	18.35	18.92	18.86	19.41	19.97	20.21	20.79	20.72	21.28	21.84
12H	4H	17.58	18.36	18.06	18.84	19.31	19.08	19.86	19.56	20.34	20.80
	6H	18.14	18.79	18.65	19.30	19.78	19.81	20.46	20.32	20.97	21.45
	8H	18.36	18.93	18.87	19.42	19.98	20.10	20.68	20.61	21.17	21.73