

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: P572178

Luminaire Tested: 24ID-55-L840-DBR

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572178
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-L840-DBR
Description: 5500 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 4000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

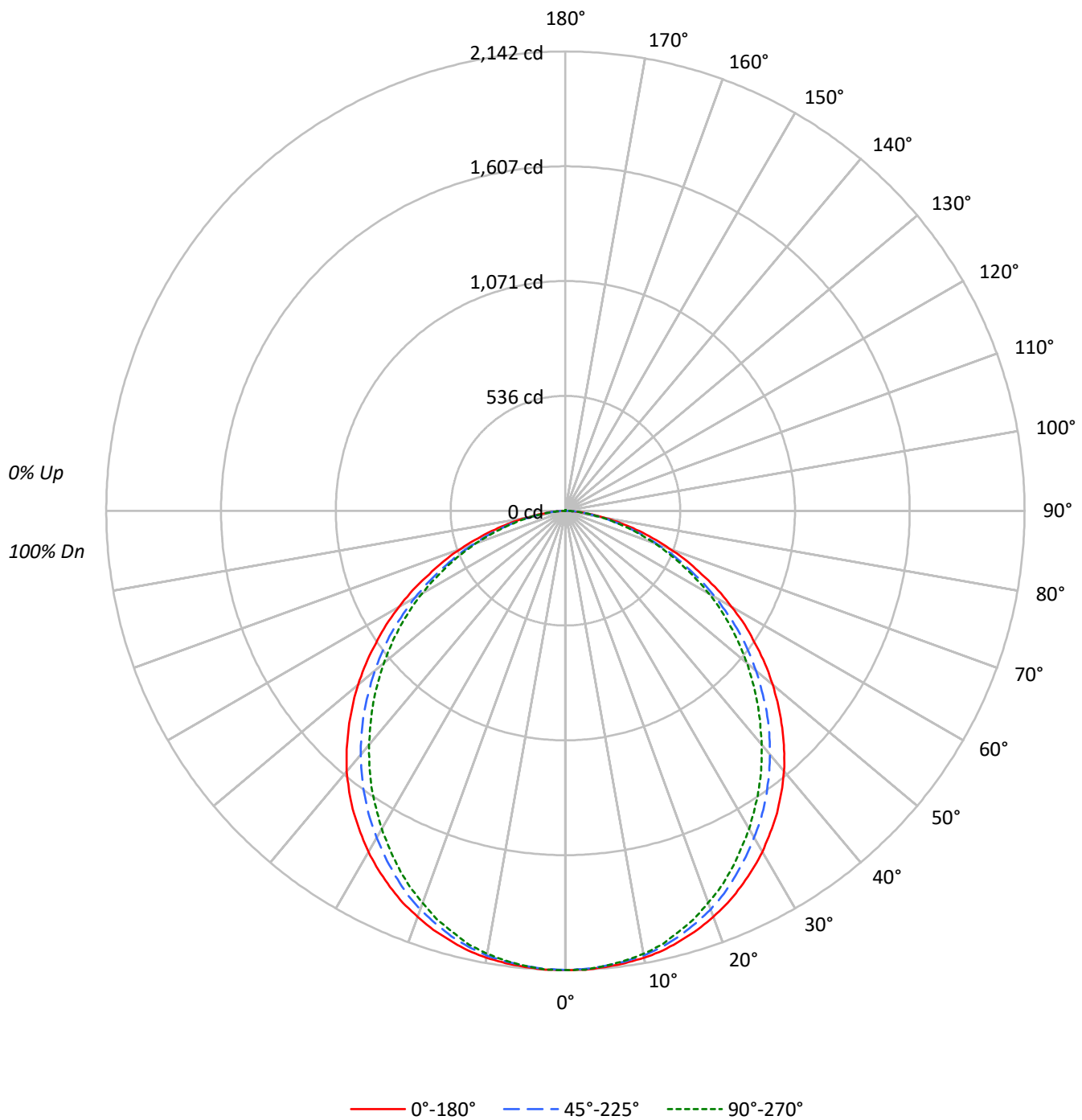
Lumens per Lamp: N/A
Luminaire Lumens: 5630.0 lumens
Efficiency: N/A
Efficacy: 112.2 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.19 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	2882	2882	2882
5°	2886	2878	2878
10°	2893	2878	2867
15°	2892	2861	2835
20°	2886	2835	2788
25°	2874	2788	2731
30°	2854	2734	2662
35°	2828	2678	2588
40°	2787	2608	2502
45°	2721	2527	2412
50°	2642	2429	2314
55°	2535	2322	2206
60°	2405	2176	2079
65°	2232	1996	1917
70°	2044	1796	1742
75°	1773	1544	1501
80°	1427	1214	1214
85°	721	764	721

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2721 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.7	3.6
10°-20°	579.4	10.3
20°-30°	867.4	15.4
30°-40°	1025.2	18.2
40°-50°	1032.0	18.3
50°-60°	893.0	15.9
60°-70°	636.0	11.3
70°-80°	326.5	5.8
80°-90°	67.5	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°	1649.5	29.3
0°-40°	2674.7	47.5
0°-60°	4599.7	81.7
0°-90°	5629.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5630.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2142	2142	2142	2142	2142	
5°	2137	2134	2131	2128	2131	203
15°	2076	2068	2054	2038	2035	586
25°	1936	1919	1878	1848	1840	892
35°	1722	1694	1631	1590	1576	1076
45°	1430	1400	1328	1282	1268	1102
55°	1081	1050	990	949	940	967
65°	701	676	627	605	602	698
75°	341	324	297	286	289	364
85°	47	47	50	50	47	70
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°	2142.2	2142.2	2142.2	2142.2	2142.2
2.5°	2142.2	2139.4	2139.4	2136.7	2142.2
5°	2136.7	2133.9	2131.2	2128.4	2131.2
7.5°	2128.4	2122.9	2120.2	2114.7	2117.4
10°	2117.4	2111.9	2106.4	2098.2	2098.2
12.5°	2100.9	2095.4	2084.4	2073.4	2073.4
15°	2076.2	2067.9	2054.2	2037.7	2034.9
17.5°	2048.7	2037.7	2018.4	1999.2	1996.4
20°	2015.7	2004.7	1979.9	1955.2	1946.9
22.5°	1979.9	1966.2	1933.2	1905.7	1897.4
25°	1935.9	1919.4	1878.2	1848.0	1839.7
27.5°	1889.2	1867.2	1820.5	1787.5	1776.5
30°	1837.0	1815.0	1760.0	1727.0	1713.2
32.5°	1779.2	1754.5	1699.5	1658.2	1644.5
35°	1721.5	1694.0	1630.7	1589.5	1575.7
37.5°	1655.5	1625.2	1559.2	1515.2	1501.5
40°	1586.7	1556.5	1485.0	1441.0	1424.5
42.5°	1509.7	1479.5	1408.0	1361.2	1344.7
45°	1430.0	1399.7	1328.2	1281.5	1267.7
47.5°	1347.5	1311.7	1243.0	1199.0	1185.2
50°	1262.2	1226.5	1160.5	1116.5	1105.5
52.5°	1174.2	1138.5	1075.2	1031.2	1023.0
55°	1080.7	1050.5	990.0	948.7	940.5
57.5°	992.7	959.7	896.5	866.2	858.0
60°	893.7	866.2	808.5	781.0	772.7
62.5°	803.0	775.5	717.7	687.5	684.7
65°	701.2	676.5	627.0	605.0	602.2
67.5°	613.2	585.7	544.5	522.5	522.5
70°	519.7	495.0	456.5	442.7	442.7
72.5°	426.2	409.7	376.7	363.0	365.7
75°	341.0	324.5	297.0	286.0	288.7
77.5°	261.2	242.0	225.5	217.2	220.0
80°	184.2	170.5	156.7	154.0	156.7
82.5°	110.0	101.7	99.0	99.0	99.0
85°	46.7	46.7	49.5	49.5	46.7
87.5°	19.2	16.5	16.5	19.2	19.2
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	15.41	17.01	15.77	17.32	17.64	14.64	16.24	15.00	16.56	16.87
	3H	17.03	18.47	17.41	18.80	19.16	16.19	17.64	16.57	17.96	18.32
	4H	17.58	18.94	17.98	19.29	19.66	16.71	18.07	17.11	18.42	18.79
	6H	17.93	19.19	18.35	19.56	19.95	17.04	18.30	17.46	18.67	19.06
	8H	18.01	19.21	18.44	19.60	20.00	17.13	18.32	17.55	18.71	19.11
	12H	18.04	19.18	18.46	19.56	19.99	17.16	18.30	17.59	18.68	19.11
4H	2H	15.87	17.23	16.27	17.57	17.95	15.25	16.60	15.65	16.95	17.33
	3H	17.70	18.83	18.11	19.23	19.63	17.00	18.13	17.41	18.53	18.93
	4H	18.37	19.39	18.80	19.81	20.24	17.62	18.64	18.05	19.05	19.49
	6H	18.83	19.72	19.28	20.16	20.62	18.05	18.94	18.50	19.38	19.83
	8H	18.94	19.77	19.40	20.21	20.68	18.16	18.99	18.62	19.43	19.90
	12H	18.98	19.72	19.46	20.20	20.67	18.21	18.96	18.69	19.43	19.90
8H	4H	18.56	19.39	19.02	19.83	20.30	17.88	18.71	18.34	19.15	19.62
	6H	19.09	19.78	19.59	20.27	20.75	18.39	19.08	18.88	19.56	20.04
	8H	19.24	19.86	19.75	20.36	20.85	18.54	19.16	19.05	19.67	20.15
	12H	19.32	19.86	19.82	20.35	20.91	18.63	19.18	19.14	19.67	20.23
12H	4H	18.56	19.31	19.04	19.79	20.26	17.89	18.64	18.38	19.12	19.59
	6H	19.10	19.72	19.61	20.23	20.71	18.41	19.03	18.92	19.54	20.02
	8H	19.29	19.83	19.80	20.32	20.89	18.61	19.15	19.12	19.65	20.21