

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: P572170

Luminaire Tested: 24ID-50-L840-DBR

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572170
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-L840-DBR
Description: 5000 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 4000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

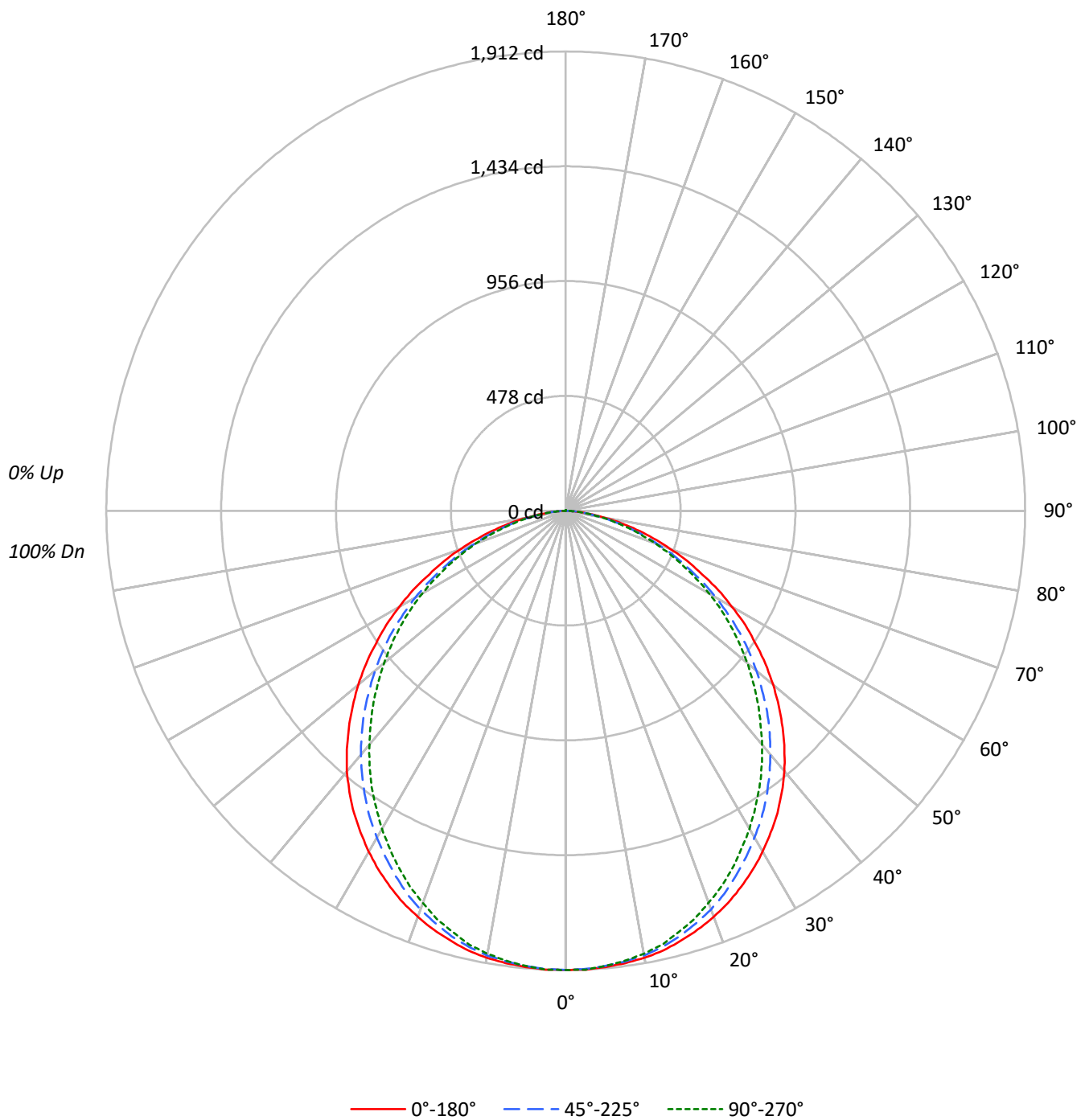
Lumens per Lamp: N/A
Luminaire Lumens: 5025.0 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.19 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	2573	2573	2573
5°	2576	2569	2569
10°	2582	2569	2559
15°	2581	2554	2530
20°	2576	2530	2488
25°	2565	2489	2438
30°	2547	2440	2376
35°	2524	2391	2310
40°	2487	2328	2233
45°	2429	2256	2153
50°	2358	2168	2065
55°	2263	2073	1969
60°	2147	1942	1856
65°	1993	1782	1711
70°	1825	1603	1555
75°	1582	1378	1340
80°	1274	1084	1084
85°	644	682	644

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2429 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.9	3.6
10°-20°	517.1	10.3
20°-30°	774.2	15.4
30°-40°	915.1	18.2
40°-50°	921.1	18.3
50°-60°	797.0	15.9
60°-70°	567.6	11.3
70°-80°	291.5	5.8
80°-90°	60.3	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°	1472.2	29.3
0°-40°	2387.3	47.5
0°-60°	4105.4	81.7
0°-90°	5024.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5025.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1912	1912	1912	1912	1912	
5°	1907	1905	1902	1900	1902	181
15°	1853	1846	1834	1819	1816	523
25°	1728	1713	1676	1649	1642	796
35°	1536	1512	1456	1419	1406	960
45°	1276	1249	1186	1144	1132	984
55°	965	938	884	847	839	863
65°	626	604	560	540	538	623
75°	304	290	265	255	258	325
85°	42	42	44	44	42	63
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°	1912.0	1912.0	1912.0	1912.0	1912.0
2.5°	1912.0	1909.5	1909.5	1907.1	1912.0
5°	1907.1	1904.6	1902.2	1899.7	1902.2
7.5°	1899.7	1894.8	1892.4	1887.4	1889.9
10°	1889.9	1885.0	1880.1	1872.7	1872.7
12.5°	1875.2	1870.3	1860.4	1850.6	1850.6
15°	1853.1	1845.7	1833.5	1818.7	1816.3
17.5°	1828.5	1818.7	1801.5	1784.4	1781.9
20°	1799.1	1789.3	1767.2	1745.1	1737.7
22.5°	1767.2	1754.9	1725.5	1700.9	1693.5
25°	1727.9	1713.2	1676.4	1649.4	1642.0
27.5°	1686.2	1666.6	1624.8	1595.4	1585.6
30°	1639.6	1619.9	1570.8	1541.4	1529.1
32.5°	1588.0	1565.9	1516.8	1480.0	1467.7
35°	1536.5	1511.9	1455.5	1418.7	1406.4
37.5°	1477.6	1450.6	1391.7	1352.4	1340.1
40°	1416.2	1389.2	1325.4	1286.1	1271.4
42.5°	1347.5	1320.5	1256.7	1214.9	1200.2
45°	1276.3	1249.3	1185.5	1143.8	1131.5
47.5°	1202.7	1170.8	1109.4	1070.1	1057.9
50°	1126.6	1094.7	1035.8	996.5	986.7
52.5°	1048.0	1016.1	959.7	920.4	913.0
55°	964.6	937.6	883.6	846.8	839.4
57.5°	886.0	856.6	800.1	773.1	765.8
60°	797.7	773.1	721.6	697.1	689.7
62.5°	716.7	692.1	640.6	613.6	611.2
65°	625.9	603.8	559.6	540.0	537.5
67.5°	547.3	522.8	486.0	466.3	466.3
70°	463.9	441.8	407.4	395.2	395.2
72.5°	380.4	365.7	336.3	324.0	326.4
75°	304.3	289.6	265.1	255.3	257.7
77.5°	233.2	216.0	201.3	193.9	196.4
80°	164.4	152.2	139.9	137.4	139.9
82.5°	98.2	90.8	88.4	88.4	88.4
85°	41.7	41.7	44.2	44.2	41.7
87.5°	17.2	14.7	14.7	17.2	17.2
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°	2.5	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	15.01	16.61	15.38	16.93	17.24	14.24	15.85	14.61	16.16	16.47
	3H	16.64	18.08	17.01	18.41	18.77	15.80	17.24	16.17	17.57	17.93
	4H	17.19	18.54	17.59	18.89	19.27	16.32	17.68	16.72	18.02	18.40
	6H	17.54	18.80	17.95	19.16	19.55	16.65	17.91	17.06	18.27	18.66
	8H	17.62	18.82	18.04	19.21	19.60	16.73	17.93	17.16	18.32	18.72
	12H	17.64	18.79	18.07	19.17	19.60	16.76	17.91	17.19	18.29	18.72
4H	2H	15.47	16.83	15.87	17.18	17.56	14.85	16.21	15.25	16.56	16.93
	3H	17.31	18.44	17.72	18.84	19.24	16.60	17.73	17.01	18.13	18.53
	4H	17.98	19.00	18.41	19.41	19.85	17.22	18.24	17.65	18.66	19.09
	6H	18.43	19.32	18.89	19.76	20.22	17.65	18.54	18.11	18.98	19.44
	8H	18.54	19.37	19.00	19.81	20.28	17.76	18.59	18.22	19.04	19.50
	12H	18.58	19.33	19.07	19.81	20.28	17.82	18.56	18.30	19.04	19.51
8H	4H	18.16	18.99	18.62	19.44	19.90	17.48	18.31	17.94	18.76	19.22
	6H	18.70	19.39	19.19	19.88	20.35	17.99	18.68	18.49	19.17	19.65
	8H	18.85	19.46	19.36	19.97	20.46	18.15	18.76	18.66	19.27	19.76
	12H	18.92	19.47	19.43	19.96	20.52	18.24	18.78	18.75	19.28	19.84
12H	4H	18.17	18.91	18.65	19.39	19.86	17.50	18.24	17.98	18.72	19.19
	6H	18.71	19.33	19.22	19.83	20.32	18.02	18.64	18.53	19.14	19.63
	8H	18.89	19.44	19.40	19.93	20.49	18.21	18.76	18.72	19.25	19.81

END OF REPORT