

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: P572204

Luminaire Tested: 24ID-70-L850-DBR

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572204
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-70-L850-DBR
Description: 7000 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 5000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

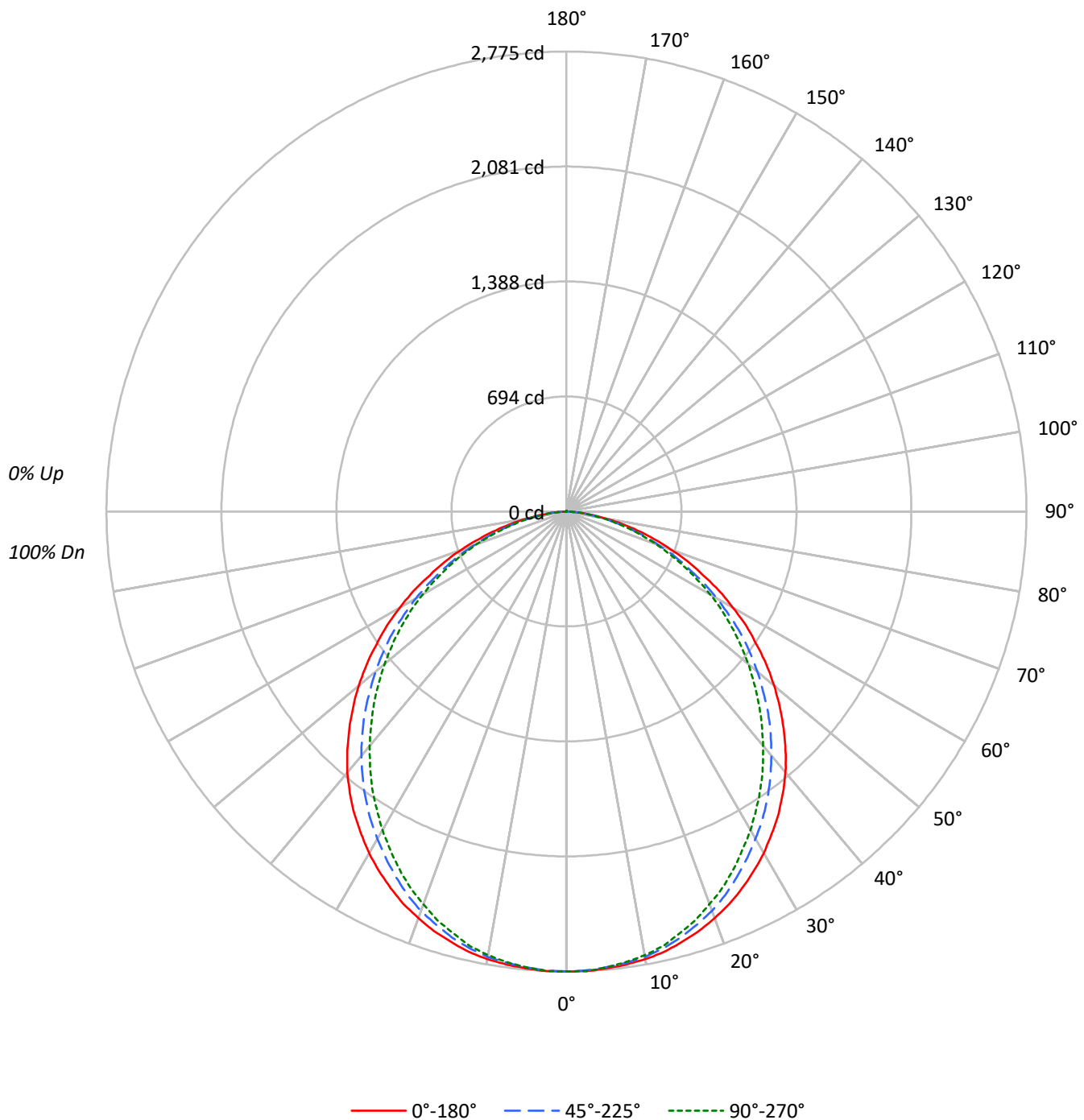
Lumens per Lamp: N/A
Luminaire Lumens: 7294.0 lumens
Efficiency: N/A
Efficacy: 111.2 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.19 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 65.6
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°	3734	3734	3734
5°	3739	3729	3729
10°	3748	3728	3714
15°	3747	3707	3672
20°	3739	3673	3612
25°	3723	3612	3538
30°	3698	3542	3448
35°	3663	3470	3353
40°	3611	3379	3241
45°	3525	3274	3125
50°	3423	3147	2998
55°	3284	3009	2858
60°	3116	2819	2694
65°	2892	2586	2484
70°	2649	2327	2257
75°	2297	2000	1945
80°	1850	1574	1574
85°	936	990	936

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 3525 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	262.6	3.6
10°-20°	750.6	10.3
20°-30°	1123.8	15.4
30°-40°	1328.2	18.2
40°-50°	1337.0	18.3
50°-60°	1156.9	15.9
60°-70°	824.0	11.3
70°-80°	423.1	5.8
80°-90°	87.5	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°	0.3	0.0
170°-180°	0.0	0.0
0°-30°	2137.0	29.3
0°-40°	3465.2	47.5
0°-60°	5959.1	81.7
0°-90°	7293.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7294.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2775	2775	2775	2775	2775	
5°	2768	2765	2761	2758	2761	263
15°	2690	2679	2661	2640	2636	759
25°	2508	2487	2433	2394	2383	1156
35°	2230	2195	2113	2059	2041	1393
45°	1853	1813	1721	1660	1642	1428
55°	1400	1361	1283	1229	1218	1253
65°	908	876	812	784	780	905
75°	442	420	385	370	374	471
85°	61	61	64	64	61	91
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	4	0
180°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2775.3	2775.3	2775.3	2775.3	2775.3
2.5°	2775.3	2771.8	2771.8	2768.2	2775.3
5°	2768.2	2764.6	2761.1	2757.5	2761.1
7.5°	2757.5	2750.4	2746.8	2739.7	2743.3
10°	2743.3	2736.1	2729.0	2718.3	2718.3
12.5°	2721.9	2714.8	2700.5	2686.3	2686.3
15°	2689.8	2679.1	2661.3	2640.0	2636.4
17.5°	2654.2	2640.0	2615.0	2590.1	2586.5
20°	2611.5	2597.2	2565.1	2533.1	2522.4
22.5°	2565.1	2547.3	2504.6	2468.9	2458.3
25°	2508.1	2486.8	2433.3	2394.1	2383.4
27.5°	2447.6	2419.1	2358.5	2315.8	2301.5
30°	2379.9	2351.4	2280.1	2237.4	2219.6
32.5°	2305.1	2273.0	2201.7	2148.3	2130.5
35°	2230.2	2194.6	2112.7	2059.2	2041.4
37.5°	2144.7	2105.6	2020.0	1963.0	1945.2
40°	2055.7	2016.5	1923.9	1866.9	1845.5
42.5°	1955.9	1916.7	1824.1	1763.5	1742.2
45°	1852.6	1813.4	1720.8	1660.2	1642.4
47.5°	1745.7	1699.4	1610.3	1553.3	1535.5
50°	1635.3	1589.0	1503.5	1446.5	1432.2
52.5°	1521.3	1475.0	1393.0	1336.0	1325.3
55°	1400.1	1360.9	1282.6	1229.1	1218.4
57.5°	1286.1	1243.4	1161.4	1122.2	1111.6
60°	1157.9	1122.2	1047.4	1011.8	1001.1
62.5°	1040.3	1004.7	929.9	890.7	887.1
65°	908.5	876.4	812.3	783.8	780.2
67.5°	794.5	758.9	705.4	676.9	676.9
70°	673.3	641.3	591.4	573.6	573.6
72.5°	552.2	530.8	488.1	470.3	473.8
75°	441.8	420.4	384.8	370.5	374.1
77.5°	338.5	313.5	292.1	281.5	285.0
80°	238.7	220.9	203.1	199.5	203.1
82.5°	142.5	131.8	128.3	128.3	128.3
85°	60.6	60.6	64.1	64.1	60.6
87.5°	24.9	21.4	21.4	24.9	24.9
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°	3.6	0.0	3.6	3.6	3.6
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	3.6	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	3.6
177.5°	0.0	0.0	3.6	3.6	3.6
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	16.31	17.91	16.67	18.22	18.54	15.54	17.14	15.90	17.45	17.77
	3H	17.93	19.37	18.31	19.70	20.06	17.09	18.54	17.47	18.86	19.22
	4H	18.48	19.84	18.88	20.19	20.56	17.61	18.97	18.01	19.32	19.69
	6H	18.83	20.09	19.25	20.46	20.85	17.94	19.20	18.36	19.57	19.96
	8H	18.91	20.11	19.34	20.50	20.90	18.03	19.22	18.45	19.61	20.01
	12H	18.94	20.08	19.36	20.46	20.89	18.06	19.20	18.49	19.58	20.01
4H	2H	16.77	18.13	17.17	18.47	18.85	16.15	17.50	16.54	17.85	18.23
	3H	18.60	19.73	19.01	20.13	20.53	17.90	19.03	18.31	19.43	19.83
	4H	19.27	20.29	19.70	20.71	21.14	18.52	19.54	18.95	19.95	20.39
	6H	19.73	20.62	20.18	21.06	21.52	18.95	19.84	19.40	20.28	20.73
	8H	19.84	20.67	20.30	21.11	21.58	19.06	19.89	19.52	20.33	20.80
	12H	19.88	20.62	20.36	21.10	21.57	19.11	19.86	19.59	20.33	20.80
8H	4H	19.46	20.29	19.92	20.73	21.20	18.78	19.61	19.24	20.05	20.52
	6H	19.99	20.68	20.49	21.17	21.65	19.29	19.97	19.78	20.46	20.94
	8H	20.14	20.76	20.65	21.26	21.75	19.44	20.06	19.95	20.57	21.05
	12H	20.22	20.76	20.72	21.25	21.81	19.53	20.08	20.04	20.57	21.13
12H	4H	19.46	20.21	19.94	20.69	21.16	18.79	19.54	19.28	20.02	20.49
	6H	20.00	20.62	20.51	21.13	21.61	19.31	19.93	19.82	20.44	20.92
	8H	20.19	20.73	20.70	21.22	21.79	19.51	20.05	20.02	20.55	21.11

END OF REPORT