

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: P572212

Luminaire Tested: 24ID-75-L850-DBR

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572212
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-75-L850-DBR
Description: 7500 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 5000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

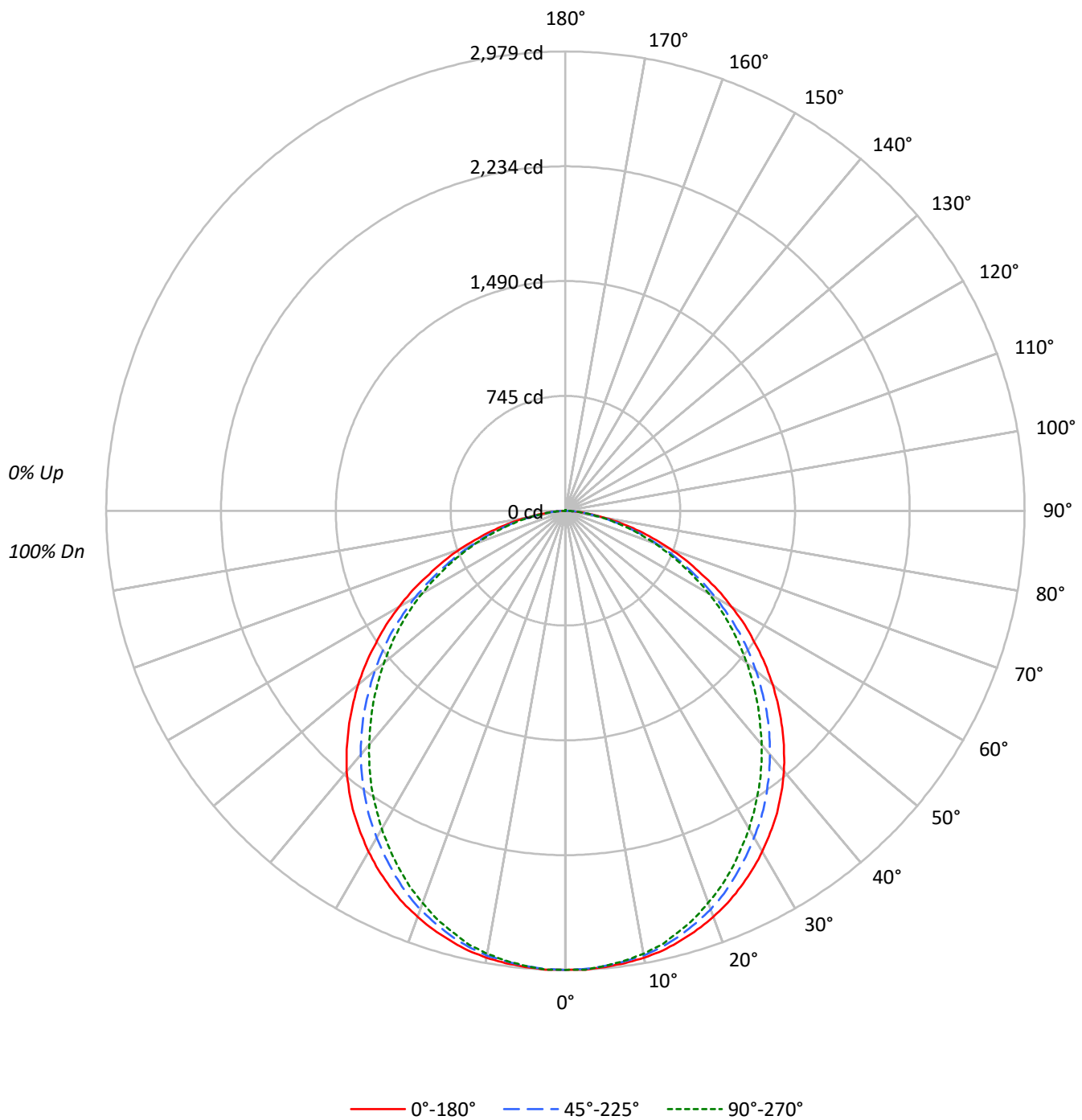
Lumens per Lamp: N/A
Luminaire Lumens: 7829.0 lumens
Efficiency: N/A
Efficacy: 110.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.19 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.8
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°	4008	4008	4008
5°	4013	4003	4003
10°	4023	4002	3986
15°	4022	3979	3942
20°	4013	3942	3877
25°	3997	3877	3798
30°	3969	3802	3701
35°	3932	3725	3599
40°	3876	3627	3479
45°	3784	3514	3354
50°	3674	3378	3218
55°	3525	3229	3068
60°	3344	3025	2891
65°	3104	2776	2666
70°	2843	2497	2422
75°	2465	2147	2087
80°	1985	1689	1689
85°	1003	1062	1003

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3784 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	281.8	3.6
10°-20°	805.7	10.3
20°-30°	1206.2	15.4
30°-40°	1425.7	18.2
40°-50°	1435.1	18.3
50°-60°	1241.8	15.9
60°-70°	884.4	11.3
70°-80°	454.1	5.8
80°-90°	94.0	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°	2293.7	29.3
0°-40°	3719.4	47.5
0°-60°	6396.2	81.7
0°-90°	7828.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7829.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2979	2979	2979	2979	2979	
5°	2971	2967	2964	2960	2964	283
15°	2887	2876	2856	2834	2830	815
25°	2692	2669	2612	2570	2558	1241
35°	2394	2356	2268	2210	2191	1496
45°	1988	1946	1847	1782	1763	1533
55°	1503	1461	1377	1319	1308	1345
65°	975	941	872	841	838	971
75°	474	451	413	398	402	506
85°	65	65	69	69	65	98
90°	0	0	0	0	0	4
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°	2978.9	2978.9	2978.9	2978.9	2978.9
2.5°	2978.9	2975.1	2975.1	2971.3	2978.9
5°	2971.3	2967.4	2963.6	2959.8	2963.6
7.5°	2959.8	2952.1	2948.3	2940.7	2944.5
10°	2944.5	2936.8	2929.2	2917.7	2917.7
12.5°	2921.5	2913.9	2898.6	2883.3	2883.3
15°	2887.1	2875.7	2856.5	2833.6	2829.8
17.5°	2848.9	2833.6	2806.8	2780.1	2776.2
20°	2803.0	2787.7	2753.3	2718.9	2707.4
22.5°	2753.3	2734.2	2688.3	2650.0	2638.6
25°	2692.1	2669.2	2611.8	2569.7	2558.3
27.5°	2627.1	2596.5	2531.5	2485.6	2470.3
30°	2554.4	2523.8	2447.4	2401.5	2382.4
32.5°	2474.1	2439.7	2363.2	2305.9	2286.8
35°	2393.8	2355.6	2267.6	2210.3	2191.2
37.5°	2302.1	2260.0	2168.2	2107.0	2087.9
40°	2206.5	2164.4	2065.0	2003.8	1980.8
42.5°	2099.4	2057.3	1957.9	1892.9	1869.9
45°	1988.5	1946.4	1847.0	1782.0	1762.9
47.5°	1873.8	1824.1	1728.5	1667.3	1648.1
50°	1755.2	1705.5	1613.7	1552.5	1537.3
52.5°	1632.9	1583.1	1495.2	1434.0	1422.5
55°	1502.8	1460.8	1376.6	1319.3	1307.8
57.5°	1380.5	1334.6	1246.6	1204.6	1193.1
60°	1242.8	1204.6	1124.3	1086.0	1074.5
62.5°	1116.6	1078.4	998.1	956.0	952.2
65°	975.1	940.7	871.9	841.3	837.5
67.5°	852.8	814.5	757.2	726.6	726.6
70°	722.7	688.3	634.8	615.7	615.7
72.5°	592.7	569.8	523.9	504.8	508.6
75°	474.2	451.2	413.0	397.7	401.5
77.5°	363.3	336.5	313.6	302.1	305.9
80°	256.2	237.1	218.0	214.1	218.0
82.5°	153.0	141.5	137.7	137.7	137.7
85°	65.0	65.0	68.8	68.8	65.0
87.5°	26.8	22.9	22.9	26.8	26.8
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°	3.8	0.0	3.8	3.8	3.8
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	3.8	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	3.8
177.5°	0.0	0.0	3.8	3.8	3.8
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	16.55	18.15	16.92	18.47	18.78	15.78	17.39	16.15	17.70	18.02
	3H	18.18	19.62	18.55	19.95	20.31	17.34	18.78	17.71	19.11	19.47
	4H	18.73	20.09	19.13	20.43	20.81	17.86	19.22	18.26	19.56	19.94
	6H	19.08	20.34	19.49	20.70	21.09	18.19	19.45	18.60	19.81	20.20
	8H	19.16	20.36	19.58	20.75	21.15	18.27	19.47	18.70	19.86	20.26
	12H	19.18	20.33	19.61	20.71	21.14	18.30	19.45	18.73	19.83	20.26
4H	2H	17.02	18.37	17.41	18.72	19.10	16.39	17.75	16.79	18.10	18.47
	3H	18.85	19.98	19.26	20.38	20.78	18.14	19.27	18.55	19.67	20.07
	4H	19.52	20.54	19.95	20.95	21.39	18.76	19.78	19.19	20.20	20.63
	6H	19.97	20.86	20.43	21.30	21.76	19.19	20.08	19.65	20.52	20.98
	8H	20.08	20.91	20.54	21.36	21.82	19.30	20.13	19.76	20.58	21.04
	12H	20.13	20.87	20.61	21.35	21.82	19.36	20.10	19.84	20.58	21.05
8H	4H	19.70	20.54	20.17	20.98	21.44	19.02	19.85	19.48	20.30	20.76
	6H	20.24	20.93	20.73	21.42	21.89	19.53	20.22	20.03	20.71	21.19
	8H	20.39	21.00	20.90	21.51	22.00	19.69	20.30	20.20	20.81	21.30
	12H	20.46	21.01	20.97	21.50	22.06	19.78	20.32	20.29	20.82	21.38
12H	4H	19.71	20.45	20.19	20.93	21.40	19.04	19.79	19.52	20.26	20.73
	6H	20.25	20.87	20.76	21.37	21.86	19.56	20.18	20.07	20.68	21.17
	8H	20.43	20.98	20.94	21.47	22.03	19.76	20.30	20.26	20.79	21.35