

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: P572220

Luminaire Tested: 24ID-80-L850-DBR

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572220
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-80-L850-DBR
Description: 8000 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 5000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

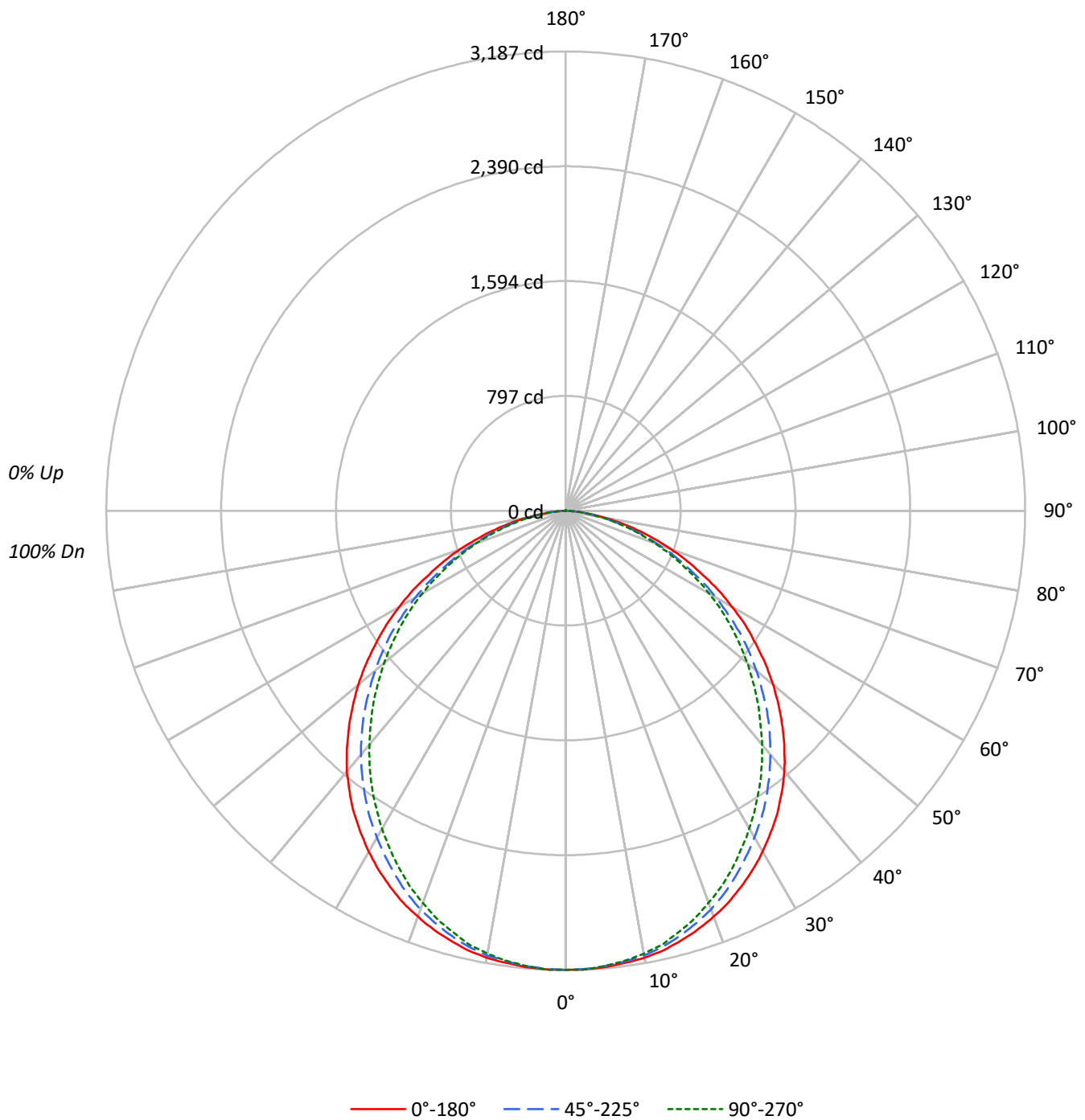
Lumens per Lamp: N/A
Luminaire Lumens: 8375.0 lumens
Efficiency: N/A
Efficacy: 108.8 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.19 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 77
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°	4288	4288	4288
5°	4293	4282	4282
10°	4303	4281	4264
15°	4302	4257	4217
20°	4293	4217	4147
25°	4275	4148	4063
30°	4245	4067	3959
35°	4206	3984	3850
40°	4146	3880	3722
45°	4048	3760	3588
50°	3930	3614	3442
55°	3771	3455	3282
60°	3578	3236	3093
65°	3321	2969	2852
70°	3041	2672	2591
75°	2637	2297	2233
80°	2124	1807	1807
85°	1073	1136	1073

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4048 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	301.5	3.6
10°-20°	861.9	10.3
20°-30°	1290.3	15.4
30°-40°	1525.1	18.2
40°-50°	1535.1	18.3
50°-60°	1328.4	15.9
60°-70°	946.1	11.3
70°-80°	485.8	5.8
80°-90°	100.5	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°	2453.7	29.3
0°-40°	3978.8	47.5
0°-60°	6842.3	81.7
0°-90°	8374.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8375.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3187	3187	3187	3187	3187	
5°	3178	3174	3170	3166	3170	302
15°	3088	3076	3056	3031	3027	872
25°	2880	2855	2794	2749	2737	1327
35°	2561	2520	2426	2364	2344	1600
45°	2127	2082	1976	1906	1886	1640
55°	1608	1563	1473	1411	1399	1439
65°	1043	1006	933	900	896	1039
75°	507	483	442	425	430	541
85°	70	70	74	74	70	104
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°	3186.7	3186.7	3186.7	3186.7	3186.7
2.5°	3186.7	3182.6	3182.6	3178.5	3186.7
5°	3178.5	3174.4	3170.3	3166.2	3170.3
7.5°	3166.2	3158.0	3153.9	3145.7	3149.8
10°	3149.8	3141.7	3133.5	3121.2	3121.2
12.5°	3125.3	3117.1	3100.7	3084.4	3084.4
15°	3088.5	3076.2	3055.8	3031.2	3027.1
17.5°	3047.6	3031.2	3002.6	2973.9	2969.8
20°	2998.5	2982.1	2945.3	2908.5	2896.2
22.5°	2945.3	2924.8	2875.8	2834.9	2822.6
25°	2879.9	2855.3	2793.9	2748.9	2736.7
27.5°	2810.3	2777.6	2708.0	2659.0	2642.6
30°	2732.6	2699.9	2618.0	2569.0	2548.5
32.5°	2646.7	2609.9	2528.1	2466.7	2446.2
35°	2560.8	2519.9	2425.8	2364.4	2344.0
37.5°	2462.6	2417.6	2319.4	2254.0	2233.5
40°	2360.3	2315.3	2209.0	2143.5	2119.0
42.5°	2245.8	2200.8	2094.4	2024.9	2000.4
45°	2127.2	2082.2	1975.8	1906.3	1885.8
47.5°	2004.4	1951.3	1849.0	1783.5	1763.1
50°	1877.6	1824.5	1726.3	1660.8	1644.5
52.5°	1746.7	1693.5	1599.5	1534.0	1521.7
55°	1607.6	1562.6	1472.7	1411.3	1399.0
57.5°	1476.7	1427.7	1333.6	1288.6	1276.3
60°	1329.5	1288.6	1202.7	1161.8	1149.5
62.5°	1194.5	1153.6	1067.7	1022.7	1018.6
65°	1043.1	1006.3	932.7	900.0	895.9
67.5°	912.2	871.3	810.0	777.2	777.2
70°	773.1	736.3	679.1	658.6	658.6
72.5°	634.1	609.5	560.4	540.0	544.1
75°	507.2	482.7	441.8	425.4	429.5
77.5°	388.6	360.0	335.4	323.2	327.3
80°	274.1	253.6	233.2	229.1	233.2
82.5°	163.6	151.4	147.3	147.3	147.3
85°	69.5	69.5	73.6	73.6	69.5
87.5°	28.6	24.5	24.5	28.6	28.6
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°	4.1	0.0	4.1	4.1	4.1
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	4.1	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	4.1
177.5°	0.0	0.0	4.1	4.1	4.1
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	16.79	18.39	17.15	18.70	19.02	16.02	17.62	16.38	17.94	18.25
	3H	18.41	19.85	18.79	20.18	20.54	17.57	19.02	17.95	19.34	19.70
	4H	18.96	20.32	19.36	20.67	21.04	18.09	19.45	18.49	19.80	20.17
	6H	19.31	20.57	19.73	20.94	21.33	18.42	19.68	18.84	20.05	20.44
	8H	19.39	20.59	19.82	20.98	21.38	18.51	19.70	18.93	20.09	20.49
	12H	19.42	20.56	19.84	20.94	21.37	18.54	19.68	18.97	20.07	20.49
4H	2H	17.25	18.61	17.65	18.96	19.33	16.63	17.98	17.03	18.33	18.71
	3H	19.08	20.21	19.49	20.61	21.01	18.38	19.51	18.79	19.91	20.31
	4H	19.75	20.77	20.18	21.19	21.62	19.00	20.02	19.43	20.43	20.87
	6H	20.21	21.10	20.66	21.54	22.00	19.43	20.32	19.88	20.76	21.21
	8H	20.32	21.15	20.78	21.59	22.06	19.54	20.37	20.00	20.81	21.28
	12H	20.36	21.10	20.84	21.58	22.05	19.59	20.34	20.07	20.81	21.28
8H	4H	19.94	20.77	20.40	21.21	21.68	19.26	20.09	19.72	20.53	21.00
	6H	20.47	21.16	20.97	21.65	22.13	19.77	20.46	20.26	20.94	21.42
	8H	20.62	21.24	21.13	21.74	22.23	19.92	20.54	20.43	21.05	21.53
	12H	20.70	21.24	21.20	21.73	22.29	20.01	20.56	20.52	21.05	21.61
12H	4H	19.94	20.69	20.42	21.17	21.64	19.27	20.02	19.76	20.50	20.97
	6H	20.48	21.10	20.99	21.61	22.09	19.79	20.41	20.30	20.92	21.40
	8H	20.67	21.21	21.18	21.70	22.27	19.99	20.53	20.50	21.03	21.59