

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: P572226

Luminaire Tested: 24ID-85-L840-DBR

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572226
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-85-L840-DBR
Description: 8500 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 4000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

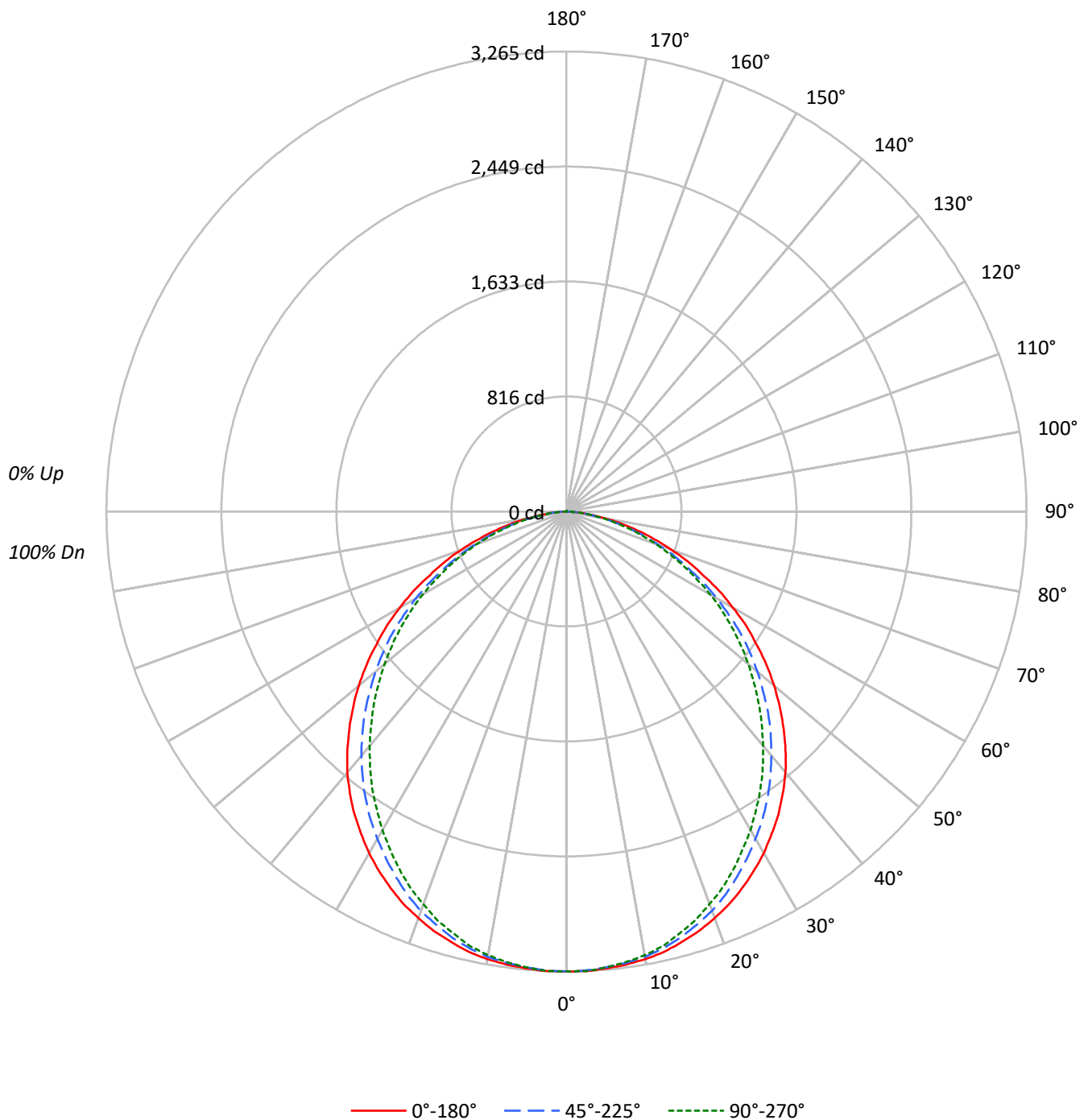
Lumens per Lamp: N/A
Luminaire Lumens: 8582.0 lumens
Efficiency: N/A
Efficacy: 104.7 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.19 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 82
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	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	109	105	101	97	107	103	99	95	98	95	92	94	92	90	91	89	87
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33
9	57	44	36	31	56	44	36	31	42	35	30	41	35	30	40	34	30
10	54	41	33	28	53	40	33	28	39	32	28	38	32	27	37	32	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4394	4394	4394
5°	4399	4388	4388
10°	4410	4387	4370
15°	4408	4362	4321
20°	4399	4321	4249
25°	4381	4250	4163
30°	4350	4168	4057
35°	4310	4083	3945
40°	4248	3976	3814
45°	4148	3852	3677
50°	4027	3703	3527
55°	3864	3540	3363
60°	3666	3316	3170
65°	3403	3043	2923
70°	3117	2737	2655
75°	2702	2353	2288
80°	2177	1851	1851
85°	1101	1166	1101

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4148 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	308.9	3.6
10°-20°	883.2	10.3
20°-30°	1322.2	15.4
30°-40°	1562.8	18.2
40°-50°	1573.1	18.3
50°-60°	1361.2	15.9
60°-70°	969.5	11.3
70°-80°	497.8	5.8
80°-90°	103.0	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°	2514.3	29.3
0°-40°	4077.1	47.5
0°-60°	7011.4	81.7
0°-90°	8581.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8582.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3265	3265	3265	3265	3265	
5°	3257	3253	3249	3244	3249	310
15°	3165	3152	3131	3106	3102	894
25°	2951	2926	2863	2817	2804	1360
35°	2624	2582	2486	2423	2402	1640
45°	2180	2134	2025	1953	1932	1680
55°	1647	1601	1509	1446	1434	1474
65°	1069	1031	956	922	918	1065
75°	520	495	453	436	440	555
85°	71	71	76	76	71	107
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°	3265.4	3265.4	3265.4	3265.4	3265.4
2.5°	3265.4	3261.2	3261.2	3257.0	3265.4
5°	3257.0	3252.8	3248.6	3244.5	3248.6
7.5°	3244.5	3236.1	3231.9	3223.5	3227.7
10°	3227.7	3219.3	3210.9	3198.3	3198.3
12.5°	3202.5	3194.2	3177.4	3160.6	3160.6
15°	3164.8	3152.2	3131.3	3106.1	3101.9
17.5°	3122.9	3106.1	3076.8	3047.4	3043.3
20°	3072.6	3055.8	3018.1	2980.4	2967.8
22.5°	3018.1	2997.1	2946.8	2904.9	2892.3
25°	2951.0	2925.9	2863.0	2816.9	2804.3
27.5°	2879.8	2846.2	2775.0	2724.7	2707.9
30°	2800.1	2766.6	2682.8	2632.5	2611.5
32.5°	2712.1	2674.4	2590.5	2527.7	2506.7
35°	2624.1	2582.2	2485.7	2422.9	2401.9
37.5°	2523.5	2477.4	2376.8	2309.7	2288.7
40°	2418.7	2372.6	2263.6	2196.5	2171.4
42.5°	2301.3	2255.2	2146.2	2074.9	2049.8
45°	2179.7	2133.6	2024.6	1953.4	1932.4
47.5°	2054.0	1999.5	1894.7	1827.6	1806.7
50°	1924.0	1869.5	1768.9	1701.9	1685.1
52.5°	1789.9	1735.4	1639.0	1571.9	1559.4
55°	1647.4	1601.3	1509.0	1446.2	1433.6
57.5°	1513.2	1462.9	1366.5	1320.4	1307.8
60°	1362.3	1320.4	1232.4	1190.5	1177.9
62.5°	1224.0	1182.1	1094.1	1048.0	1043.8
65°	1068.9	1031.2	955.7	922.2	918.0
67.5°	934.8	892.9	830.0	796.4	796.4
70°	792.3	754.5	695.8	674.9	674.9
72.5°	649.7	624.6	574.3	553.3	557.5
75°	519.8	494.6	452.7	435.9	440.1
77.5°	398.2	368.9	343.7	331.2	335.3
80°	280.9	259.9	238.9	234.7	238.9
82.5°	167.7	155.1	150.9	150.9	150.9
85°	71.3	71.3	75.5	75.5	71.3
87.5°	29.3	25.2	25.2	29.3	29.3
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°	4.2	0.0	4.2	4.2	4.2
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	4.2	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	4.2
177.5°	0.0	0.0	4.2	4.2	4.2
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	16.87	18.47	17.24	18.79	19.10	16.10	17.71	16.47	18.02	18.33
	3H	18.50	19.94	18.87	20.27	20.63	17.66	19.10	18.03	19.43	19.79
	4H	19.05	20.40	19.45	20.75	21.13	18.18	19.53	18.58	19.88	20.26
	6H	19.40	20.66	19.81	21.02	21.41	18.51	19.77	18.92	20.13	20.52
	8H	19.48	20.68	19.90	21.07	21.46	18.59	19.79	19.01	20.18	20.58
	12H	19.50	20.65	19.93	21.03	21.46	18.62	19.77	19.05	20.15	20.58
4H	2H	17.33	18.69	17.73	19.04	19.42	16.71	18.07	17.11	18.42	18.79
	3H	19.17	20.30	19.58	20.70	21.10	18.46	19.59	18.87	19.99	20.39
	4H	19.84	20.86	20.27	21.27	21.71	19.08	20.10	19.51	20.52	20.95
	6H	20.29	21.18	20.75	21.62	22.08	19.51	20.40	19.97	20.84	21.30
	8H	20.40	21.23	20.86	21.67	22.14	19.62	20.45	20.08	20.90	21.36
	12H	20.44	21.19	20.93	21.67	22.14	19.68	20.42	20.16	20.90	21.37
8H	4H	20.02	20.85	20.48	21.30	21.76	19.34	20.17	19.80	20.62	21.08
	6H	20.56	21.25	21.05	21.74	22.21	19.85	20.54	20.35	21.03	21.50
	8H	20.71	21.32	21.22	21.83	22.32	20.01	20.62	20.52	21.13	21.62
	12H	20.78	21.33	21.29	21.82	22.38	20.10	20.64	20.61	21.13	21.70
12H	4H	20.03	20.77	20.51	21.25	21.72	19.36	20.10	19.84	20.58	21.05
	6H	20.57	21.19	21.08	21.69	22.18	19.88	20.50	20.39	21.00	21.49
	8H	20.75	21.30	21.26	21.79	22.35	20.07	20.62	20.58	21.11	21.67

END OF REPORT