

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: P572225

Luminaire Tested: 24ID-85-L840-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572225
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2109-397-8)
Test Lab: INNOVATION CENTER
Issue Date: 10/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: 24ID-85-L840-DBD
Description: 8500 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN DROPPED DOUBLE BARRELL LENS AND 4000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

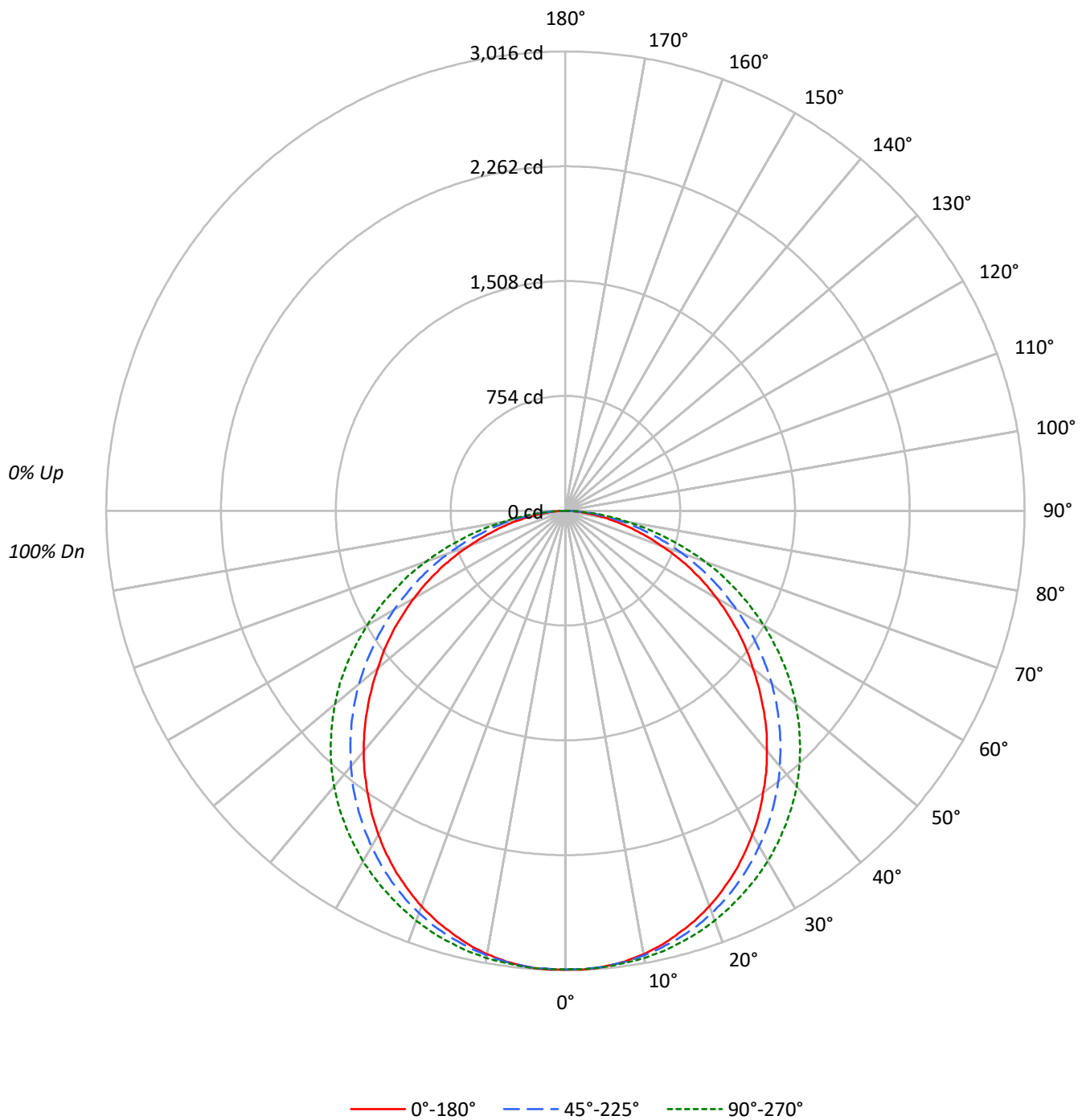
Lumens per Lamp: N/A
Luminaire Lumens: 8596.0 lumens
Efficiency: N/A
Efficacy: 104.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.17')
CIE Type: Direct

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	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61
4	82	70	61	55	80	69	61	54	66	59	54	64	58	53	62	57	52
5	76	63	54	47	74	62	53	47	59	52	46	58	51	46	56	50	45
6	70	56	47	41	68	56	47	41	54	46	40	52	45	40	50	44	40
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4054	4054	4054
5°	4043	4027	4032
10°	4011	3989	4016
15°	3958	3948	3999
20°	3899	3901	3981
25°	3822	3838	3958
30°	3727	3764	3940
35°	3613	3679	3913
40°	3496	3583	3882
45°	3359	3474	3829
50°	3205	3350	3763
55°	3063	3196	3668
60°	2876	3027	3536
65°	2663	2828	3359
70°	2358	2574	3105
75°	2037	2218	2726
80°	1611	1803	2132
85°	1111	1116	1282

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 3829 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	285.6	3.3
10°-20°	819.6	9.5
20°-30°	1242.3	14.5
30°-40°	1494.4	17.4
40°-50°	1542.8	17.9
50°-60°	1386.3	16.1
60°-70°	1055.5	12.3
70°-80°	606.0	7.1
80°-90°	163.5	1.9
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°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2347.5	27.3
0°-40°	3842.0	44.7
0°-60°	6771.0	78.8
0°-90°	8596.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8596.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3013	3013	3013	3013	3013	
5°	3005	3007	3005	3002	3007	285
15°	2873	2887	2901	2921	2935	811
25°	2624	2650	2692	2748	2770	1208
35°	2264	2303	2379	2482	2521	1417
45°	1839	1881	1987	2124	2180	1418
55°	1384	1420	1534	1683	1750	1234
65°	911	953	1056	1180	1244	901
75°	453	495	567	648	688	480
85°	106	123	145	154	162	124
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3013.0	3013.0	3013.0	3013.0	3013.0
2.5°	3015.8	3015.8	3010.2	3007.4	3013.0
5°	3004.6	3007.4	3004.6	3001.8	3007.4
7.5°	2985.1	2987.9	2987.9	2990.7	2996.3
10°	2957.1	2962.7	2965.5	2973.9	2982.3
12.5°	2920.8	2926.4	2937.6	2951.5	2962.7
15°	2873.3	2887.3	2901.2	2920.8	2934.8
17.5°	2823.0	2839.7	2862.1	2887.3	2904.0
20°	2764.3	2783.8	2811.8	2845.3	2864.9
22.5°	2697.2	2722.3	2755.9	2797.8	2820.2
25°	2624.5	2649.7	2691.6	2747.5	2769.9
27.5°	2543.5	2571.4	2621.7	2686.0	2716.8
30°	2456.8	2487.6	2546.3	2624.5	2658.1
32.5°	2364.6	2398.1	2465.2	2554.6	2591.0
35°	2264.0	2303.1	2378.6	2482.0	2521.1
37.5°	2166.1	2205.3	2289.1	2400.9	2445.6
40°	2059.9	2101.9	2191.3	2314.3	2364.6
42.5°	1953.7	1990.1	2090.7	2222.0	2275.1
45°	1839.1	1881.0	1987.3	2124.2	2180.1
47.5°	1724.5	1769.2	1881.0	2020.8	2079.5
50°	1607.1	1654.6	1769.2	1911.8	1976.1
52.5°	1498.1	1537.3	1654.6	1800.0	1867.1
55°	1383.5	1419.9	1534.5	1682.6	1749.7
57.5°	1263.3	1305.3	1419.9	1559.6	1626.7
60°	1146.0	1187.9	1296.9	1436.6	1503.7
62.5°	1031.4	1070.5	1176.7	1310.9	1377.9
65°	911.2	953.1	1056.5	1179.5	1243.8
67.5°	793.8	838.5	936.3	1048.1	1115.2
70°	668.0	718.3	813.3	916.8	969.9
72.5°	556.2	603.7	690.4	782.6	832.9
75°	452.8	494.7	567.4	648.4	687.6
77.5°	349.4	394.1	458.4	519.9	550.6
80°	257.1	299.1	349.4	391.3	405.3
82.5°	176.1	206.8	243.2	265.5	285.1
85°	106.2	123.0	145.3	153.7	162.1
87.5°	44.7	50.3	58.7	55.9	58.7
90°	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	15.47	17.11	15.83	17.43	17.74	16.94	18.58	17.30	18.89	19.21
	3H	17.04	18.52	17.41	18.85	19.21	18.83	20.32	19.21	20.65	21.01
	4H	17.55	18.95	17.95	19.30	19.68	19.54	20.94	19.94	21.28	21.66
	6H	17.88	19.18	18.29	19.55	19.94	20.03	21.33	20.44	21.69	22.08
	8H	17.97	19.21	18.39	19.60	19.99	20.17	21.41	20.60	21.80	22.20
	12H	18.01	19.20	18.44	19.58	20.01	20.25	21.44	20.68	21.82	22.25
4H	2H	16.22	17.62	16.62	17.97	18.34	17.39	18.79	17.79	19.14	19.51
	3H	17.99	19.16	18.40	19.56	19.96	19.51	20.68	19.91	21.08	21.48
	4H	18.61	19.68	19.04	20.09	20.52	20.34	21.40	20.77	21.82	22.25
	6H	19.05	19.98	19.50	20.42	20.87	20.96	21.89	21.42	22.33	22.79
	8H	19.16	20.03	19.62	20.47	20.94	21.15	22.02	21.61	22.46	22.93
	12H	19.23	20.01	19.71	20.49	20.96	21.27	22.05	21.75	22.53	22.99
8H	4H	18.99	19.86	19.45	20.31	20.77	20.53	21.40	20.99	21.85	22.31
	6H	19.53	20.26	20.03	20.75	21.22	21.26	21.98	21.75	22.47	22.94
	8H	19.70	20.35	20.21	20.86	21.34	21.50	22.15	22.01	22.66	23.15
	12H	19.81	20.39	20.32	20.88	21.44	21.68	22.25	22.18	22.74	23.30
12H	4H	19.04	19.83	19.52	20.30	20.77	20.54	21.33	21.02	21.80	22.27
	6H	19.61	20.26	20.11	20.76	21.25	21.27	21.93	21.78	22.43	22.92
	8H	19.82	20.40	20.33	20.89	21.45	21.57	22.14	22.07	22.63	23.19

END OF REPORT

FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE

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