

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: P572227

Luminaire Tested: 24ID-85-L850-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572227
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-L850-DBD
Description: 8500 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN DROPPED DOUBLE BARRELL LENS AND 5000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

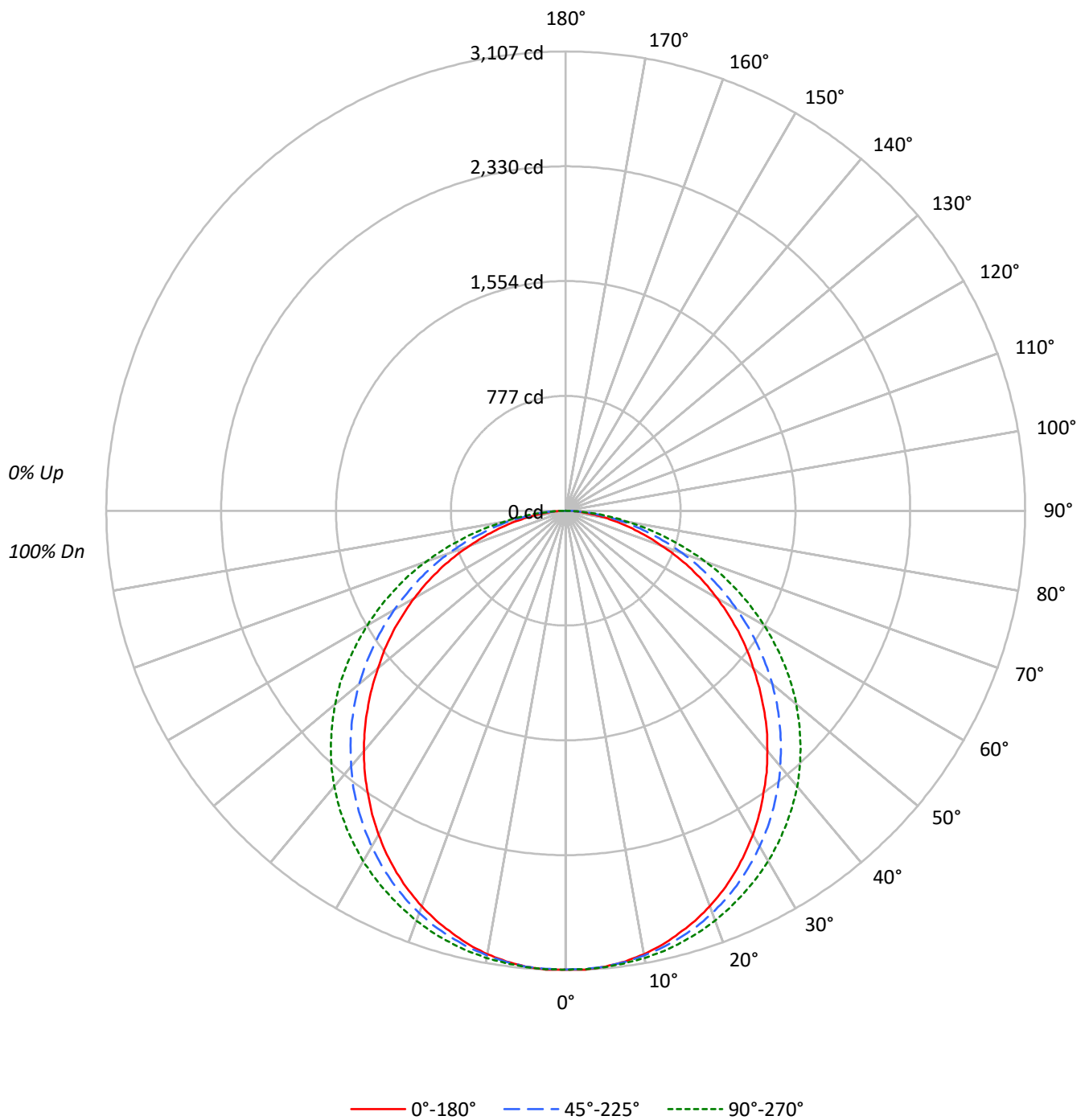
Lumens per Lamp: N/A
Luminaire Lumens: 8856.0 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.17')
CIE Type: Direct

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°	4177	4177	4177
5°	4166	4149	4154
10°	4132	4110	4137
15°	4078	4067	4120
20°	4017	4018	4102
25°	3938	3954	4078
30°	3840	3878	4059
35°	3722	3790	4031
40°	3602	3691	3999
45°	3461	3579	3945
50°	3302	3452	3876
55°	3156	3293	3779
60°	2963	3118	3643
65°	2743	2913	3461
70°	2429	2652	3198
75°	2099	2285	2809
80°	1660	1857	2197
85°	1144	1149	1320

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 3945 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	294.3	3.3
10°-20°	844.4	9.5
20°-30°	1279.9	14.5
30°-40°	1539.6	17.4
40°-50°	1589.4	17.9
50°-60°	1428.2	16.1
60°-70°	1087.4	12.3
70°-80°	624.4	7.1
80°-90°	168.4	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°	2418.5	27.3
0°-40°	3958.2	44.7
0°-60°	6975.8	78.8
0°-90°	8856.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8856.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3104	3104	3104	3104	3104	
5°	3096	3098	3096	3093	3098	294
15°	2960	2975	2989	3009	3024	835
25°	2704	2730	2773	2831	2854	1245
35°	2332	2373	2450	2557	2597	1460
45°	1895	1938	2047	2188	2246	1461
55°	1425	1463	1581	1734	1803	1272
65°	939	982	1088	1215	1281	928
75°	466	510	584	668	708	495
85°	109	127	150	158	167	128
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3104.2	3104.2	3104.2	3104.2	3104.2
2.5°	3107.0	3107.0	3101.3	3098.4	3104.2
5°	3095.5	3098.4	3095.5	3092.6	3098.4
7.5°	3075.4	3078.2	3078.2	3081.1	3086.9
10°	3046.6	3052.3	3055.2	3063.8	3072.5
12.5°	3009.1	3014.9	3026.4	3040.8	3052.3
15°	2960.2	2974.6	2989.0	3009.1	3023.5
17.5°	2908.4	2925.6	2948.7	2974.6	2991.9
20°	2847.9	2868.0	2896.8	2931.4	2951.5
22.5°	2778.8	2804.7	2839.2	2882.4	2905.5
25°	2703.9	2729.8	2773.0	2830.6	2853.6
27.5°	2620.4	2649.2	2701.0	2767.3	2798.9
30°	2531.1	2562.8	2623.3	2703.9	2738.5
32.5°	2436.1	2470.7	2539.8	2631.9	2669.3
35°	2332.4	2372.8	2450.5	2557.0	2597.4
37.5°	2231.7	2272.0	2358.4	2473.5	2519.6
40°	2122.2	2165.4	2257.6	2384.3	2436.1
42.5°	2012.8	2050.2	2153.9	2289.2	2344.0
45°	1894.7	1937.9	2047.4	2188.5	2246.1
47.5°	1776.7	1822.8	1937.9	2081.9	2142.4
50°	1655.7	1704.7	1822.8	1969.6	2035.8
52.5°	1543.4	1583.8	1704.7	1854.4	1923.5
55°	1425.4	1462.8	1580.9	1733.5	1802.6
57.5°	1301.6	1344.8	1462.8	1606.8	1675.9
60°	1180.6	1223.8	1336.1	1480.1	1549.2
62.5°	1062.6	1102.9	1212.3	1350.5	1419.6
65°	938.7	981.9	1088.5	1215.2	1281.4
67.5°	817.8	863.9	964.7	1079.8	1148.9
70°	688.2	740.0	838.0	944.5	999.2
72.5°	573.0	622.0	711.3	806.3	858.1
75°	466.5	509.7	584.5	668.1	708.4
77.5°	359.9	406.0	472.2	535.6	567.3
80°	264.9	308.1	359.9	403.1	417.5
82.5°	181.4	213.1	250.5	273.6	293.7
85°	109.4	126.7	149.7	158.4	167.0
87.5°	46.1	51.8	60.5	57.6	60.5
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	15.57	17.21	15.94	17.53	17.84	17.04	18.68	17.40	19.00	19.31
	3H	17.14	18.62	17.52	18.95	19.31	18.94	20.42	19.32	20.75	21.11
	4H	17.66	19.06	18.06	19.41	19.78	19.64	21.04	20.04	21.39	21.76
	6H	17.99	19.29	18.40	19.65	20.04	20.13	21.43	20.55	21.80	22.19
	8H	18.07	19.31	18.49	19.70	20.10	20.28	21.52	20.70	21.91	22.31
	12H	18.11	19.30	18.54	19.68	20.11	20.36	21.55	20.79	21.93	22.36
4H	2H	16.33	17.73	16.72	18.07	18.45	17.49	18.89	17.89	19.24	19.62
	3H	18.09	19.27	18.50	19.66	20.06	19.61	20.78	20.02	21.18	21.58
	4H	18.72	19.78	19.15	20.19	20.63	20.44	21.51	20.87	21.92	22.36
	6H	19.15	20.08	19.60	20.52	20.98	21.07	22.00	21.52	22.44	22.89
	8H	19.26	20.14	19.72	20.58	21.04	21.25	22.13	21.71	22.57	23.03
	12H	19.33	20.12	19.81	20.59	21.06	21.37	22.15	21.85	22.63	23.10
8H	4H	19.10	19.97	19.56	20.41	20.88	20.64	21.51	21.10	21.95	22.41
	6H	19.64	20.36	20.13	20.85	21.32	21.36	22.09	21.85	22.57	23.05
	8H	19.80	20.45	20.31	20.96	21.45	21.61	22.26	22.12	22.76	23.25
	12H	19.92	20.49	20.42	20.98	21.54	21.78	22.35	22.29	22.84	23.40
12H	4H	19.15	19.93	19.63	20.41	20.87	20.65	21.43	21.13	21.90	22.37
	6H	19.71	20.36	20.22	20.87	21.35	21.38	22.03	21.89	22.53	23.02
	8H	19.93	20.50	20.43	20.99	21.55	21.67	22.24	22.18	22.73	23.29

END OF REPORT