

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: P572219

Luminaire Tested: 24ID-80-L850-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572219
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-80-L850-DBD
Description: 8000 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN DROPPED DOUBLE BARRELL LENS AND 5000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

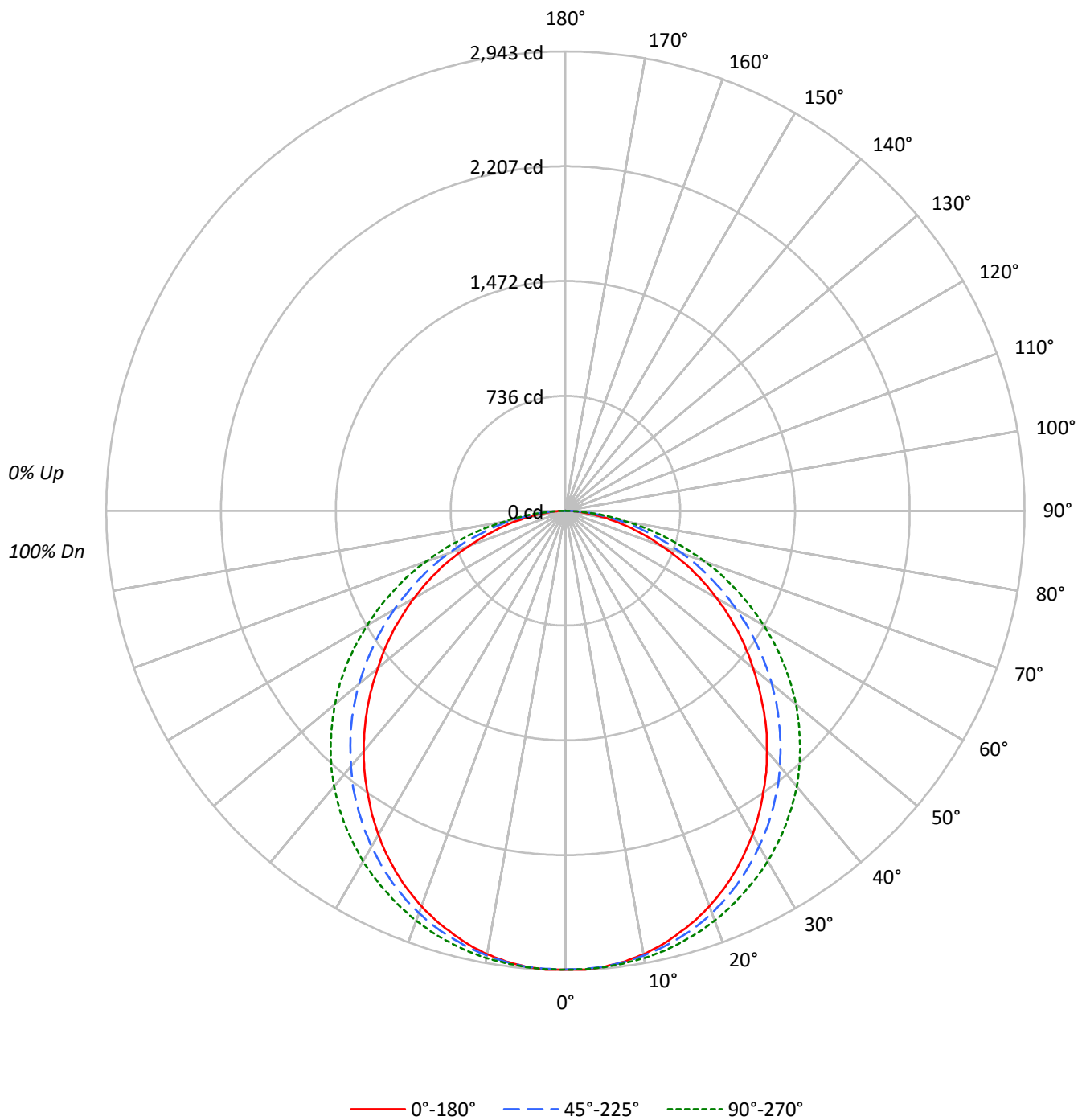
Lumens per Lamp: N/A
Luminaire Lumens: 8389.0 lumens
Efficiency: N/A
Efficacy: 108.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.17')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3956	3956	3956
5°	3946	3930	3935
10°	3914	3893	3919
15°	3863	3853	3902
20°	3805	3807	3885
25°	3730	3745	3863
30°	3638	3673	3845
35°	3526	3591	3818
40°	3412	3497	3788
45°	3279	3391	3737
50°	3128	3270	3672
55°	2989	3119	3579
60°	2807	2954	3451
65°	2599	2760	3278
70°	2301	2512	3030
75°	1988	2164	2661
80°	1572	1760	2081
85°	1084	1089	1251

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 3737 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	278.7	3.3
10°-20°	799.9	9.5
20°-30°	1212.4	14.5
30°-40°	1458.4	17.4
40°-50°	1505.6	17.9
50°-60°	1352.9	16.1
60°-70°	1030.1	12.3
70°-80°	591.4	7.1
80°-90°	159.6	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°	2291.0	27.3
0°-40°	3749.4	44.7
0°-60°	6607.9	78.8
0°-90°	8389.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8389.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2940	2940	2940	2940	2940	
5°	2932	2935	2932	2930	2935	278
15°	2804	2818	2831	2850	2864	791
25°	2561	2586	2627	2681	2703	1179
35°	2209	2248	2321	2422	2460	1383
45°	1795	1836	1939	2073	2128	1384
55°	1350	1386	1498	1642	1708	1205
65°	889	930	1031	1151	1214	879
75°	442	483	554	633	671	468
85°	104	120	142	150	158	121
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2940.5	2940.5	2940.5	2940.5	2940.5
2.5°	2943.2	2943.2	2937.7	2935.0	2940.5
5°	2932.3	2935.0	2932.3	2929.6	2935.0
7.5°	2913.2	2915.9	2915.9	2918.6	2924.1
10°	2885.9	2891.4	2894.1	2902.3	2910.5
12.5°	2850.5	2855.9	2866.8	2880.5	2891.4
15°	2804.1	2817.7	2831.4	2850.5	2864.1
17.5°	2755.0	2771.4	2793.2	2817.7	2834.1
20°	2697.7	2716.8	2744.1	2776.8	2795.9
22.5°	2632.2	2656.8	2689.5	2730.4	2752.3
25°	2561.3	2585.9	2626.8	2681.3	2703.2
27.5°	2482.2	2509.5	2558.6	2621.3	2651.3
30°	2397.7	2427.7	2484.9	2561.3	2594.1
32.5°	2307.6	2340.4	2405.8	2493.1	2528.6
35°	2209.4	2247.6	2321.3	2422.2	2460.4
37.5°	2114.0	2152.2	2234.0	2343.1	2386.7
40°	2010.3	2051.2	2138.5	2258.5	2307.6
42.5°	1906.7	1942.1	2040.3	2168.5	2220.4
45°	1794.8	1835.7	1939.4	2073.1	2127.6
47.5°	1683.0	1726.6	1835.7	1972.1	2029.4
50°	1568.4	1614.8	1726.6	1865.8	1928.5
52.5°	1462.1	1500.2	1614.8	1756.6	1822.1
55°	1350.2	1385.7	1497.5	1642.1	1707.5
57.5°	1232.9	1273.8	1385.7	1522.1	1587.5
60°	1118.4	1159.3	1265.7	1402.0	1467.5
62.5°	1006.5	1044.7	1148.4	1279.3	1344.8
65°	889.2	930.1	1031.1	1151.1	1213.8
67.5°	774.7	818.3	913.8	1022.9	1088.4
70°	651.9	701.0	793.8	894.7	946.5
72.5°	542.8	589.2	673.7	763.8	812.9
75°	441.9	482.8	553.7	632.8	671.0
77.5°	341.0	384.6	447.3	507.4	537.4
80°	250.9	291.9	341.0	381.9	395.5
82.5°	171.8	201.9	237.3	259.1	278.2
85°	103.7	120.0	141.8	150.0	158.2
87.5°	43.6	49.1	57.3	54.6	57.3
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	15.38	17.03	15.75	17.34	17.65	16.85	18.49	17.22	18.81	19.12
	3H	16.95	18.44	17.33	18.76	19.12	18.75	20.24	19.13	20.56	20.92
	4H	17.47	18.87	17.87	19.22	19.59	19.45	20.85	19.85	21.20	21.58
	6H	17.80	19.10	18.21	19.46	19.85	19.95	21.25	20.36	21.61	22.00
	8H	17.88	19.12	18.31	19.51	19.91	20.09	21.33	20.51	21.72	22.12
	12H	17.92	19.11	18.35	19.49	19.92	20.17	21.36	20.60	21.74	22.17
4H	2H	16.14	17.54	16.53	17.88	18.26	17.31	18.71	17.70	19.05	19.43
	3H	17.90	19.08	18.31	19.48	19.88	19.42	20.60	19.83	20.99	21.39
	4H	18.53	19.59	18.96	20.00	20.44	20.25	21.32	20.69	21.73	22.17
	6H	18.96	19.89	19.42	20.33	20.79	20.88	21.81	21.33	22.25	22.70
	8H	19.08	19.95	19.54	20.39	20.85	21.07	21.94	21.53	22.38	22.84
	12H	19.14	19.93	19.62	20.40	20.87	21.18	21.97	21.66	22.44	22.91
8H	4H	18.91	19.78	19.37	20.22	20.69	20.45	21.32	20.91	21.76	22.23
	6H	19.45	20.17	19.94	20.66	21.14	21.17	21.90	21.67	22.39	22.86
	8H	19.62	20.27	20.12	20.77	21.26	21.42	22.07	21.93	22.58	23.06
	12H	19.73	20.30	20.24	20.79	21.35	21.59	22.17	22.10	22.66	23.22
12H	4H	18.96	19.74	19.44	20.22	20.69	20.46	21.24	20.94	21.72	22.18
	6H	19.52	20.17	20.03	20.68	21.16	21.19	21.84	21.70	22.35	22.83
	8H	19.74	20.31	20.25	20.80	21.36	21.48	22.06	21.99	22.55	23.11