

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: P572233

Luminaire Tested: 24ID-90-L840-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572233
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-90-L840-DBD
Description: 9000 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN DROPPED DOUBLE BARRELL LENS AND 4000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

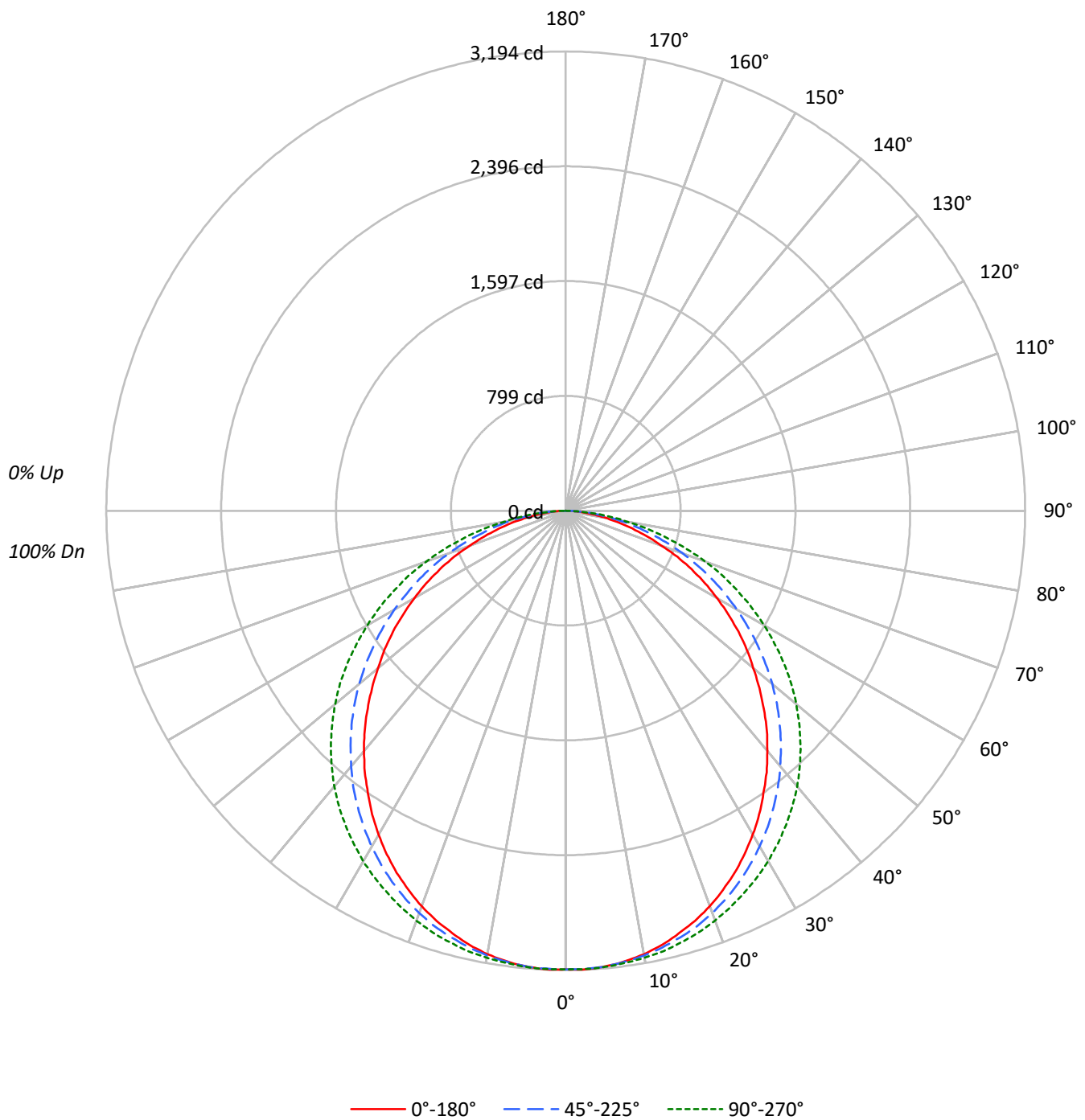
Lumens per Lamp: N/A
Luminaire Lumens: 9103.0 lumens
Efficiency: N/A
Efficacy: 104.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 87.3
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°	4293	4293	4293
5°	4282	4265	4270
10°	4247	4225	4252
15°	4192	4181	4235
20°	4129	4131	4216
25°	4047	4064	4192
30°	3947	3986	4172
35°	3826	3896	4143
40°	3702	3794	4111
45°	3558	3679	4055
50°	3394	3548	3984
55°	3244	3385	3884
60°	3046	3205	3745
65°	2820	2994	3557
70°	2497	2726	3288
75°	2157	2349	2887
80°	1707	1910	2258
85°	1176	1182	1357

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 4055 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	302.5	3.3
10°-20°	867.9	9.5
20°-30°	1315.6	14.5
30°-40°	1582.6	17.4
40°-50°	1633.8	17.9
50°-60°	1468.0	16.1
60°-70°	1117.7	12.3
70°-80°	641.8	7.1
80°-90°	173.1	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°	2486.0	27.3
0°-40°	4068.5	44.7
0°-60°	7170.3	78.8
0°-90°	9103.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9103.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3191	3191	3191	3191	3191	
5°	3182	3185	3182	3179	3185	302
15°	3043	3058	3072	3093	3108	858
25°	2779	2806	2850	2910	2933	1279
35°	2398	2439	2519	2628	2670	1500
45°	1948	1992	2104	2250	2309	1502
55°	1465	1504	1625	1782	1853	1307
65°	965	1009	1119	1249	1317	954
75°	480	524	601	687	728	508
85°	112	130	154	163	172	131
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3190.7	3190.7	3190.7	3190.7	3190.7
2.5°	3193.7	3193.7	3187.8	3184.8	3190.7
5°	3181.9	3184.8	3181.9	3178.9	3184.8
7.5°	3161.1	3164.1	3164.1	3167.1	3173.0
10°	3131.5	3137.5	3140.4	3149.3	3158.2
12.5°	3093.1	3099.0	3110.8	3125.6	3137.5
15°	3042.7	3057.5	3072.3	3093.1	3107.9
17.5°	2989.5	3007.2	3030.9	3057.5	3075.3
20°	2927.3	2948.0	2977.6	3013.1	3033.9
22.5°	2856.3	2882.9	2918.4	2962.8	2986.5
25°	2779.3	2806.0	2850.4	2909.6	2933.2
27.5°	2693.5	2723.1	2776.4	2844.4	2877.0
30°	2601.7	2634.3	2696.4	2779.3	2814.8
32.5°	2504.0	2539.6	2610.6	2705.3	2743.8
35°	2397.5	2438.9	2518.8	2628.4	2669.8
37.5°	2293.9	2335.3	2424.1	2542.5	2589.9
40°	2181.4	2225.8	2320.5	2450.8	2504.0
42.5°	2068.9	2107.4	2214.0	2353.1	2409.3
45°	1947.6	1992.0	2104.5	2249.5	2308.7
47.5°	1826.2	1873.6	1992.0	2140.0	2202.1
50°	1701.9	1752.2	1873.6	2024.6	2092.6
52.5°	1586.5	1627.9	1752.2	1906.2	1977.2
55°	1465.1	1503.6	1625.0	1781.8	1852.9
57.5°	1337.9	1382.3	1503.6	1651.6	1722.6
60°	1213.5	1257.9	1373.4	1521.4	1592.4
62.5°	1092.2	1133.6	1246.1	1388.2	1459.2
65°	964.9	1009.3	1118.8	1249.1	1317.1
67.5°	840.6	888.0	991.6	1110.0	1181.0
70°	707.4	760.7	861.3	970.8	1027.1
72.5°	589.0	639.3	731.1	828.8	882.0
75°	479.5	523.9	600.9	686.7	728.1
77.5°	370.0	417.3	485.4	550.5	583.1
80°	272.3	316.7	370.0	414.4	429.2
82.5°	186.5	219.0	257.5	281.2	301.9
85°	112.5	130.2	153.9	162.8	171.7
87.5°	47.4	53.3	62.2	59.2	62.2
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	15.67	17.31	16.03	17.62	17.94	17.13	18.78	17.50	19.09	19.41
	3H	17.23	18.72	17.61	19.05	19.41	19.03	20.52	19.41	20.85	21.21
	4H	17.75	19.15	18.15	19.50	19.88	19.74	21.14	20.13	21.48	21.86
	6H	18.08	19.38	18.49	19.74	20.14	20.23	21.53	20.64	21.89	22.28
	8H	18.17	19.41	18.59	19.79	20.19	20.37	21.61	20.80	22.00	22.40
	12H	18.21	19.40	18.64	19.78	20.21	20.45	21.64	20.88	22.02	22.45
4H	2H	16.42	17.82	16.82	18.17	18.54	17.59	18.99	17.99	19.34	19.71
	3H	18.19	19.36	18.60	19.76	20.16	19.70	20.88	20.11	21.28	21.68
	4H	18.81	19.88	19.24	20.29	20.72	20.54	21.60	20.97	22.02	22.45
	6H	19.25	20.18	19.70	20.62	21.07	21.16	22.09	21.62	22.53	22.99
	8H	19.36	20.23	19.82	20.67	21.14	21.35	22.22	21.81	22.66	23.13
	12H	19.43	20.21	19.91	20.69	21.16	21.47	22.25	21.95	22.72	23.19
8H	4H	19.19	20.06	19.65	20.51	20.97	20.73	21.60	21.19	22.05	22.51
	6H	19.73	20.46	20.23	20.94	21.42	21.46	22.18	21.95	22.67	23.14
	8H	19.90	20.55	20.41	21.06	21.54	21.70	22.35	22.21	22.86	23.34
	12H	20.01	20.59	20.52	21.08	21.64	21.88	22.45	22.38	22.94	23.50
12H	4H	19.24	20.03	19.72	20.50	20.97	20.74	21.52	21.22	22.00	22.47
	6H	19.80	20.46	20.31	20.96	21.45	21.47	22.12	21.98	22.63	23.12
	8H	20.02	20.60	20.53	21.09	21.65	21.77	22.34	22.27	22.83	23.39