

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: P572231

Luminaire Tested: 24ID-90-L835-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572231
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-L835-DBD
Description: 9000 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN DROPPED DOUBLE BARRELL LENS AND 3500K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

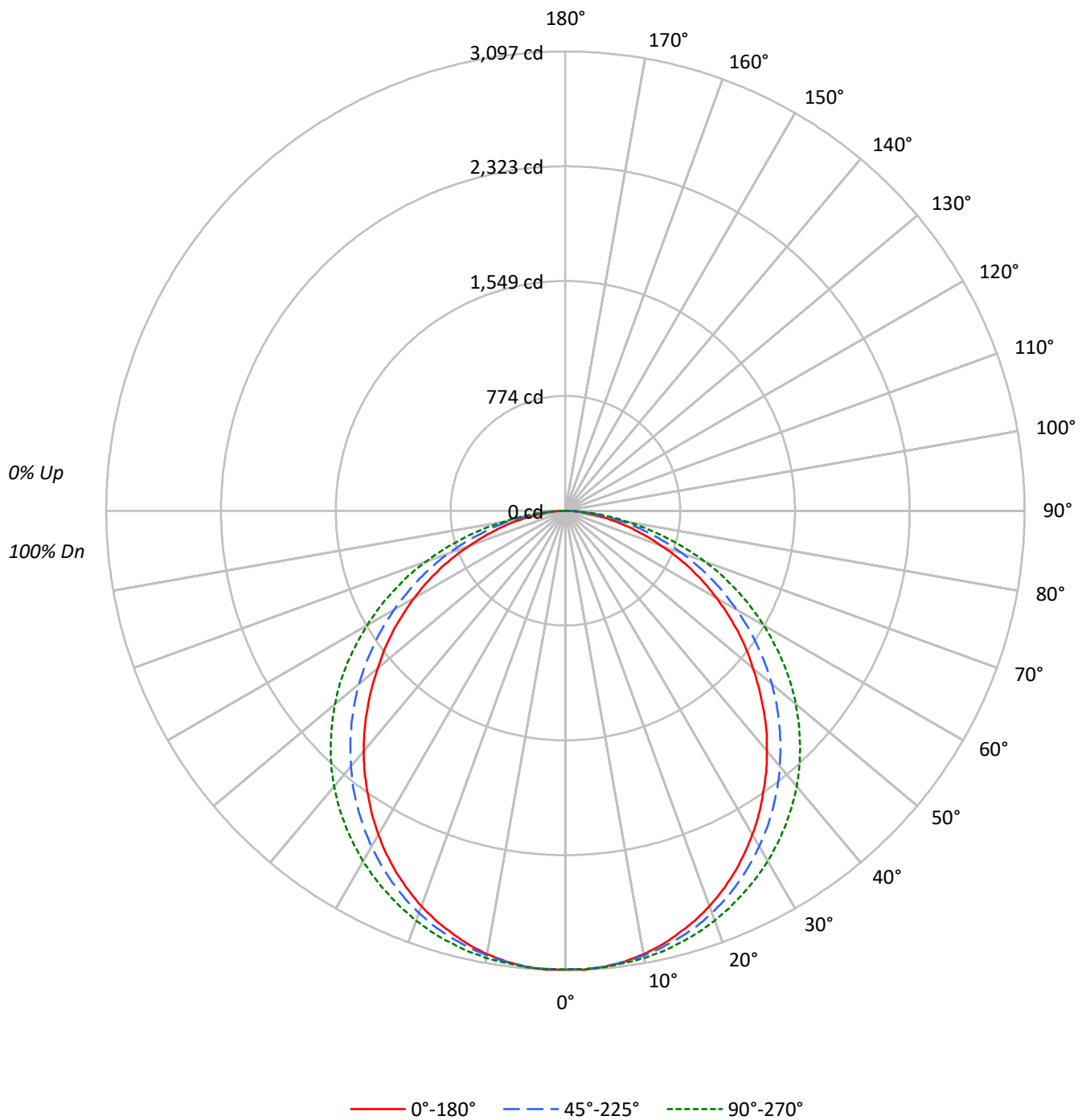
Lumens per Lamp: N/A
Luminaire Lumens: 8827.0 lumens
Efficiency: N/A
Efficacy: 101.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.17')
CIE Type: Direct

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°	4163	4163	4163
5°	4152	4135	4141
10°	4118	4097	4123
15°	4065	4054	4106
20°	4004	4005	4088
25°	3925	3941	4065
30°	3827	3865	4046
35°	3710	3778	4018
40°	3590	3679	3986
45°	3450	3568	3932
50°	3291	3440	3864
55°	3145	3282	3766
60°	2954	3108	3631
65°	2735	2904	3450
70°	2421	2644	3188
75°	2092	2277	2800
80°	1655	1852	2190
85°	1141	1146	1316

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 3932 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	293.3	3.3
10°-20°	841.6	9.5
20°-30°	1275.7	14.5
30°-40°	1534.6	17.4
40°-50°	1584.2	17.9
50°-60°	1423.5	16.1
60°-70°	1083.8	12.3
70°-80°	622.3	7.1
80°-90°	167.9	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°	2410.6	27.3
0°-40°	3945.2	44.7
0°-60°	6952.9	78.8
0°-90°	8827.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8827.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3094	3094	3094	3094	3094	
5°	3085	3088	3085	3082	3088	293
15°	2950	2965	2979	2999	3014	832
25°	2695	2721	2764	2821	2844	1241
35°	2325	2365	2442	2549	2589	1455
45°	1888	1932	2041	2181	2239	1457
55°	1421	1458	1576	1728	1797	1268
65°	936	979	1085	1211	1277	925
75°	465	508	583	666	706	493
85°	109	126	149	158	166	127
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3094.0	3094.0	3094.0	3094.0	3094.0
2.5°	3096.9	3096.9	3091.1	3088.3	3094.0
5°	3085.4	3088.3	3085.4	3082.5	3088.3
7.5°	3065.3	3068.2	3068.2	3071.0	3076.8
10°	3036.6	3042.3	3045.2	3053.8	3062.4
12.5°	2999.3	3005.0	3016.5	3030.9	3042.3
15°	2950.5	2964.8	2979.2	2999.3	3013.6
17.5°	2898.8	2916.0	2939.0	2964.8	2982.1
20°	2838.6	2858.6	2887.3	2921.8	2941.9
22.5°	2769.7	2795.5	2829.9	2873.0	2896.0
25°	2695.0	2720.9	2763.9	2821.3	2844.3
27.5°	2611.8	2640.5	2692.2	2758.2	2789.8
30°	2522.8	2554.4	2614.7	2695.0	2729.5
32.5°	2428.1	2462.6	2531.5	2623.3	2660.6
35°	2324.8	2365.0	2442.5	2548.7	2588.9
37.5°	2224.3	2264.5	2350.6	2465.4	2511.4
40°	2115.3	2158.3	2250.2	2376.5	2428.1
42.5°	2006.2	2043.5	2146.9	2281.8	2336.3
45°	1888.5	1931.6	2040.7	2181.3	2238.7
47.5°	1770.9	1816.8	1931.6	2075.1	2135.4
50°	1650.3	1699.1	1816.8	1963.2	2029.2
52.5°	1538.4	1578.6	1699.1	1848.4	1917.2
55°	1420.7	1458.0	1575.7	1727.8	1796.7
57.5°	1297.3	1340.3	1458.0	1601.5	1670.4
60°	1176.8	1219.8	1331.7	1475.2	1544.1
62.5°	1059.1	1099.3	1208.3	1346.1	1415.0
65°	935.7	978.7	1084.9	1211.2	1277.2
67.5°	815.1	861.0	961.5	1076.3	1145.2
70°	686.0	737.6	835.2	941.4	995.9
72.5°	571.2	619.9	708.9	803.6	855.3
75°	465.0	508.0	582.6	665.9	706.1
77.5°	358.8	404.7	470.7	533.8	565.4
80°	264.1	307.1	358.8	401.8	416.2
82.5°	180.8	212.4	249.7	272.7	292.8
85°	109.1	126.3	149.2	157.9	166.5
87.5°	45.9	51.7	60.3	57.4	60.3
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	15.56	17.20	15.93	17.52	17.83	17.03	18.67	17.39	18.98	19.30
	3H	17.13	18.61	17.50	18.94	19.30	18.93	20.41	19.30	20.74	21.10
	4H	17.65	19.05	18.04	19.39	19.77	19.63	21.03	20.03	21.38	21.75
	6H	17.98	19.27	18.39	19.64	20.03	20.12	21.42	20.53	21.79	22.18
	8H	18.06	19.30	18.48	19.69	20.09	20.27	21.51	20.69	21.90	22.29
	12H	18.10	19.29	18.53	19.67	20.10	20.35	21.53	20.77	21.92	22.34
4H	2H	16.31	17.71	16.71	18.06	18.44	17.48	18.88	17.88	19.23	19.61
	3H	18.08	19.26	18.49	19.65	20.05	19.60	20.77	20.01	21.17	21.57
	4H	18.70	19.77	19.14	20.18	20.62	20.43	21.50	20.86	21.91	22.34
	6H	19.14	20.07	19.59	20.51	20.96	21.06	21.99	21.51	22.43	22.88
	8H	19.25	20.12	19.71	20.57	21.03	21.24	22.11	21.70	22.56	23.02
	12H	19.32	20.10	19.80	20.58	21.05	21.36	22.14	21.84	22.62	23.09
8H	4H	19.09	19.96	19.55	20.40	20.86	20.63	21.50	21.09	21.94	22.40
	6H	19.63	20.35	20.12	20.84	21.31	21.35	22.07	21.84	22.56	23.04
	8H	19.79	20.44	20.30	20.95	21.43	21.60	22.25	22.11	22.75	23.24
	12H	19.91	20.48	20.41	20.97	21.53	21.77	22.34	22.27	22.83	23.39
12H	4H	19.14	19.92	19.62	20.39	20.86	20.63	21.42	21.11	21.89	22.36
	6H	19.70	20.35	20.21	20.85	21.34	21.37	22.02	21.87	22.52	23.01
	8H	19.92	20.49	20.42	20.98	21.54	21.66	22.23	22.16	22.72	23.28

END OF REPORT