

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: P572214

Luminaire Tested: 24ID-80-L830-DBR

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572214
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2109-397-7)
Test Lab: INNOVATION CENTER
Issue Date: 10/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: 24ID-80-L830-DBR
Description: 8000 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 3000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

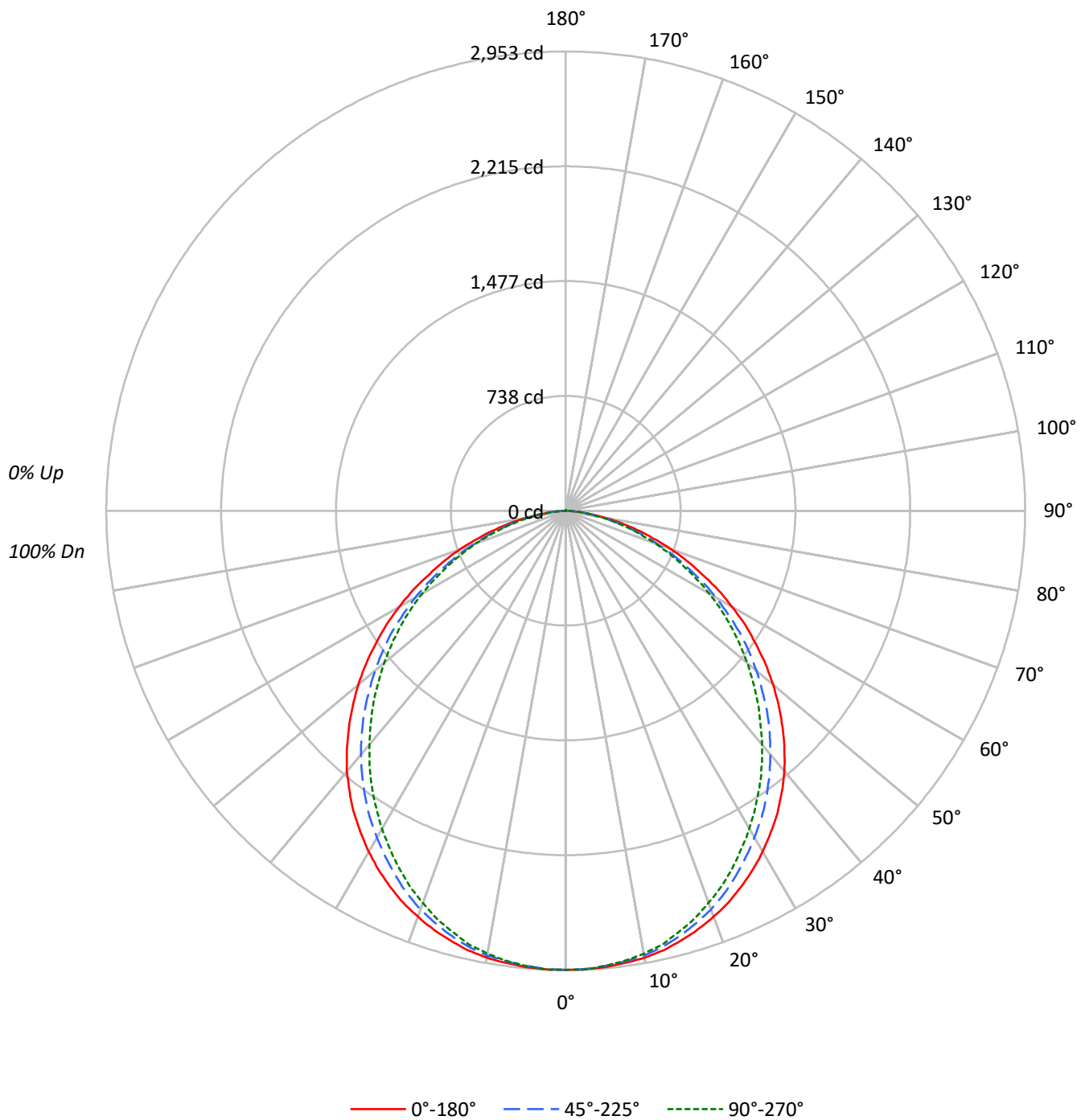
Lumens per Lamp: N/A
Luminaire Lumens: 7760.0 lumens
Efficiency: N/A
Efficacy: 100.8 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.19 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	109	105	101	97	107	103	99	95	98	95	92	94	92	90	91	89	87
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33
9	57	44	36	31	56	44	36	31	42	35	30	41	35	30	40	34	30
10	54	41	33	28	53	40	33	28	39	32	28	38	32	27	37	32	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3973	3973	3973
5°	3978	3967	3967
10°	3987	3967	3951
15°	3986	3944	3907
20°	3978	3907	3842
25°	3961	3843	3764
30°	3934	3769	3669
35°	3897	3692	3567
40°	3841	3595	3449
45°	3750	3483	3325
50°	3642	3348	3189
55°	3494	3201	3041
60°	3315	2999	2866
65°	3077	2751	2643
70°	2818	2475	2400
75°	2443	2128	2069
80°	1968	1674	1674
85°	994	1053	994

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 3750 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	279.3	3.6
10°-20°	798.6	10.3
20°-30°	1195.6	15.4
30°-40°	1413.1	18.2
40°-50°	1422.4	18.3
50°-60°	1230.9	15.9
60°-70°	876.6	11.3
70°-80°	450.1	5.8
80°-90°	93.1	1.2
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°	0.3	0.0
170°-180°	0.0	0.0
0°-30°	2273.5	29.3
0°-40°	3686.6	47.5
0°-60°	6339.9	81.7
0°-90°	7759.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7760.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2953	2953	2953	2953	2953	
5°	2945	2941	2938	2934	2938	280
15°	2862	2850	2831	2809	2805	808
25°	2668	2646	2589	2547	2536	1230
35°	2373	2335	2248	2191	2172	1482
45°	1971	1929	1831	1766	1747	1520
55°	1490	1448	1364	1308	1296	1333
65°	966	932	864	834	830	963
75°	470	447	409	394	398	501
85°	64	64	68	68	64	97
90°	0	0	0	0	0	4
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	4	0
180°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2952.6	2952.6	2952.6	2952.6	2952.6
2.5°	2952.6	2948.9	2948.9	2945.1	2952.6
5°	2945.1	2941.3	2937.5	2933.7	2937.5
7.5°	2933.7	2926.1	2922.3	2914.7	2918.5
10°	2918.5	2911.0	2903.4	2892.0	2892.0
12.5°	2895.8	2888.2	2873.1	2857.9	2857.9
15°	2861.7	2850.3	2831.4	2808.6	2804.8
17.5°	2823.8	2808.6	2782.1	2755.6	2751.8
20°	2778.3	2763.1	2729.0	2694.9	2683.5
22.5°	2729.0	2710.1	2664.6	2626.7	2615.3
25°	2668.4	2645.6	2588.8	2547.1	2535.7
27.5°	2603.9	2573.6	2509.2	2463.7	2448.5
30°	2531.9	2501.6	2425.8	2380.3	2361.4
32.5°	2452.3	2418.2	2342.4	2285.6	2266.6
35°	2372.7	2334.8	2247.7	2190.8	2171.8
37.5°	2281.8	2240.1	2149.1	2088.5	2069.5
40°	2187.0	2145.3	2046.8	1986.1	1963.4
42.5°	2080.9	2039.2	1940.6	1876.2	1853.5
45°	1971.0	1929.3	1830.7	1766.3	1747.3
47.5°	1857.3	1808.0	1713.2	1652.6	1633.6
50°	1739.8	1690.5	1599.5	1538.9	1523.7
52.5°	1618.5	1569.2	1482.0	1421.4	1410.0
55°	1489.6	1447.9	1364.5	1307.7	1296.3
57.5°	1368.3	1322.8	1235.6	1193.9	1182.6
60°	1231.8	1193.9	1114.4	1076.4	1065.1
62.5°	1106.8	1068.9	989.3	947.6	943.8
65°	966.5	932.4	864.2	833.9	830.1
67.5°	845.2	807.3	750.5	720.2	720.2
70°	716.4	682.3	629.2	610.2	610.2
72.5°	587.5	564.8	519.3	500.3	504.1
75°	470.0	447.3	409.4	394.2	398.0
77.5°	360.1	333.5	310.8	299.4	303.2
80°	254.0	235.0	216.0	212.3	216.0
82.5°	151.6	140.2	136.5	136.5	136.5
85°	64.4	64.4	68.2	68.2	64.4
87.5°	26.5	22.7	22.7	26.5	26.5
90°	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	3.8	0.0	3.8	3.8	3.8
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	3.8	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	3.8
177.5°	0.0	0.0	3.8	3.8	3.8
180°	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	16.52	18.12	16.89	18.44	18.75	15.75	17.36	16.12	17.67	17.98
	3H	18.15	19.59	18.52	19.92	20.28	17.31	18.75	17.68	19.08	19.44
	4H	18.70	20.05	19.10	20.40	20.78	17.83	19.19	18.23	19.53	19.91
	6H	19.05	20.31	19.46	20.67	21.06	18.16	19.42	18.57	19.78	20.17
	8H	19.13	20.33	19.55	20.72	21.11	18.24	19.44	18.67	19.83	20.23
	12H	19.15	20.30	19.58	20.68	21.11	18.27	19.42	18.70	19.80	20.23
4H	2H	16.98	18.34	17.38	18.69	19.07	16.36	17.72	16.76	18.07	18.44
	3H	18.82	19.95	19.23	20.35	20.75	18.11	19.24	18.52	19.64	20.04
	4H	19.49	20.51	19.92	20.92	21.36	18.73	19.75	19.16	20.17	20.60
	6H	19.94	20.83	20.40	21.27	21.73	19.16	20.05	19.62	20.49	20.95
	8H	20.05	20.88	20.51	21.32	21.79	19.27	20.10	19.73	20.55	21.01
	12H	20.09	20.84	20.58	21.32	21.79	19.33	20.07	19.81	20.55	21.02
8H	4H	19.67	20.50	20.13	20.95	21.41	18.99	19.82	19.45	20.27	20.73
	6H	20.21	20.90	20.70	21.39	21.86	19.50	20.19	20.00	20.68	21.16
	8H	20.36	20.97	20.87	21.48	21.97	19.66	20.27	20.17	20.78	21.27
	12H	20.43	20.98	20.94	21.47	22.03	19.75	20.29	20.26	20.79	21.35
12H	4H	19.68	20.42	20.16	20.90	21.37	19.01	19.75	19.49	20.23	20.70
	6H	20.22	20.84	20.73	21.34	21.83	19.53	20.15	20.04	20.65	21.14
	8H	20.40	20.95	20.91	21.44	22.00	19.72	20.27	20.23	20.76	21.32

END OF REPORT