

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: P572230

Luminaire Tested: 24ID-90-L830-DBR

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572230
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-90-L830-DBR
Description: 9000 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 3000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

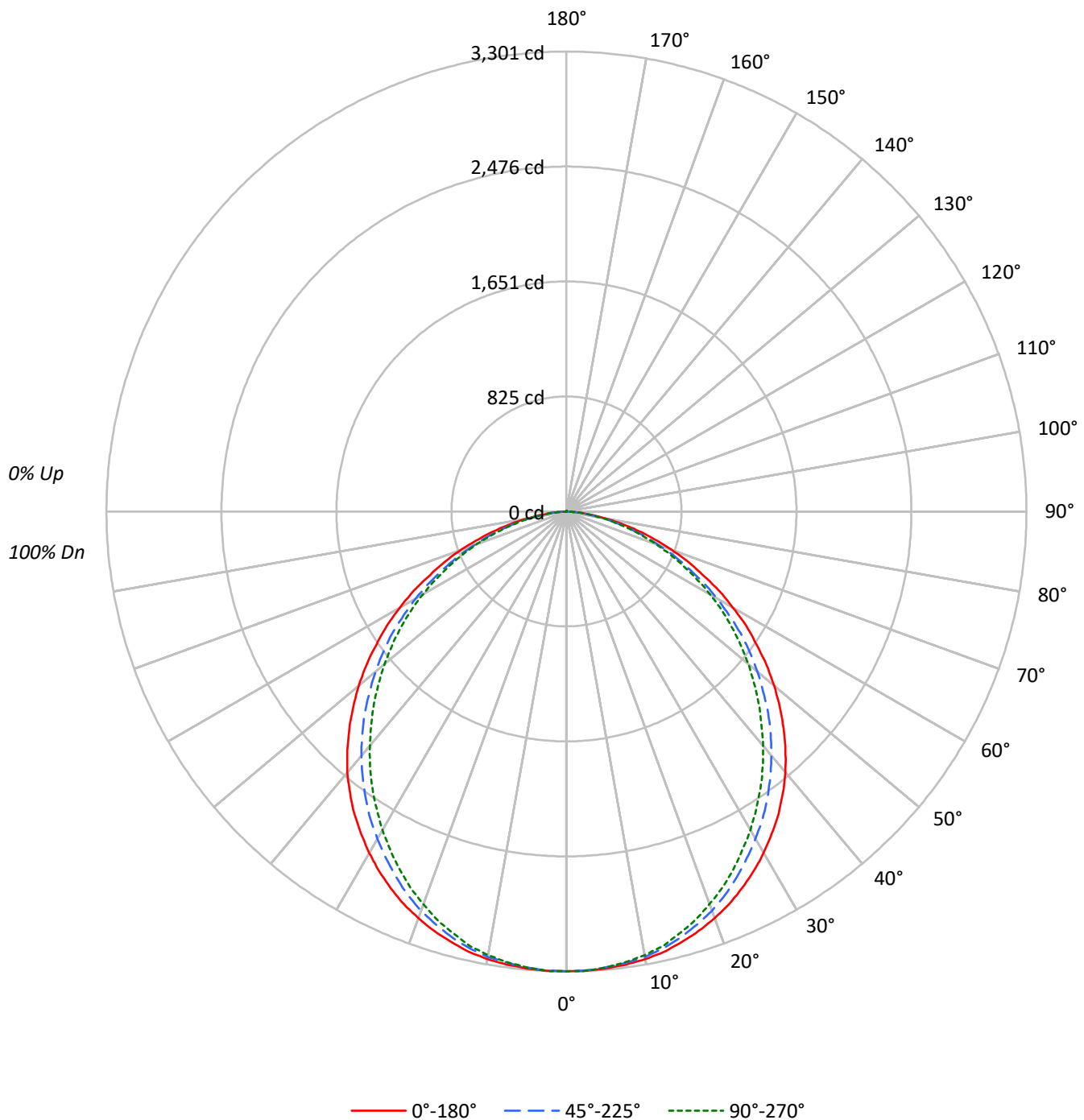
Lumens per Lamp: N/A
Luminaire Lumens: 8675.0 lumens
Efficiency: N/A
Efficacy: 99.4 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.19 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4441	4441	4441
5°	4447	4435	4435
10°	4458	4434	4417
15°	4456	4409	4368
20°	4447	4368	4296
25°	4429	4296	4208
30°	4398	4213	4101
35°	4357	4127	3988
40°	4294	4019	3855
45°	4193	3894	3717
50°	4071	3743	3566
55°	3906	3578	3399
60°	3706	3352	3204
65°	3440	3076	2954
70°	3150	2767	2684
75°	2731	2379	2313
80°	2200	1871	1871
85°	1112	1178	1112

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4193 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	312.3	3.6
10°-20°	892.7	10.3
20°-30°	1336.6	15.4
30°-40°	1579.7	18.2
40°-50°	1590.1	18.3
50°-60°	1376.0	15.9
60°-70°	980.0	11.3
70°-80°	503.2	5.8
80°-90°	104.1	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°	2541.6	29.3
0°-40°	4121.3	47.5
0°-60°	7087.4	81.7
0°-90°	8674.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8675.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3301	3301	3301	3301	3301	
5°	3292	3288	3284	3280	3284	313
15°	3199	3186	3165	3140	3136	903
25°	2983	2958	2894	2847	2835	1375
35°	2652	2610	2513	2449	2428	1657
45°	2203	2157	2047	1974	1953	1699
55°	1665	1619	1525	1462	1449	1490
65°	1080	1042	966	932	928	1076
75°	525	500	458	441	445	561
85°	72	72	76	76	72	108
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°	3300.8	3300.8	3300.8	3300.8	3300.8
2.5°	3300.8	3296.6	3296.6	3292.3	3300.8
5°	3292.3	3288.1	3283.9	3279.6	3283.9
7.5°	3279.6	3271.1	3266.9	3258.4	3262.7
10°	3262.7	3254.2	3245.7	3233.0	3233.0
12.5°	3237.2	3228.8	3211.8	3194.9	3194.9
15°	3199.1	3186.4	3165.2	3139.8	3135.6
17.5°	3156.7	3139.8	3110.1	3080.5	3076.2
20°	3105.9	3088.9	3050.8	3012.7	3000.0
22.5°	3050.8	3029.6	2978.8	2936.4	2923.7
25°	2983.0	2957.6	2894.0	2847.4	2834.7
27.5°	2911.0	2877.1	2805.0	2754.2	2737.3
30°	2830.5	2796.6	2711.8	2661.0	2639.8
32.5°	2741.5	2703.4	2618.6	2555.0	2533.9
35°	2652.5	2610.1	2512.7	2449.1	2427.9
37.5°	2550.8	2504.2	2402.5	2334.7	2313.5
40°	2444.9	2398.3	2288.1	2220.3	2194.9
42.5°	2326.2	2279.6	2169.5	2097.4	2072.0
45°	2203.4	2156.8	2046.6	1974.5	1953.4
47.5°	2076.2	2021.2	1915.2	1847.4	1826.2
50°	1944.9	1889.8	1788.1	1720.3	1703.4
52.5°	1809.3	1754.2	1656.8	1589.0	1576.2
55°	1665.2	1618.6	1525.4	1461.8	1449.1
57.5°	1529.6	1478.8	1381.3	1334.7	1322.0
60°	1377.1	1334.7	1245.7	1203.4	1190.7
62.5°	1237.3	1194.9	1105.9	1059.3	1055.1
65°	1080.5	1042.4	966.1	932.2	928.0
67.5°	944.9	902.5	839.0	805.1	805.1
70°	800.8	762.7	703.4	682.2	682.2
72.5°	656.8	631.3	580.5	559.3	563.6
75°	525.4	500.0	457.6	440.7	444.9
77.5°	402.5	372.9	347.5	334.7	339.0
80°	283.9	262.7	241.5	237.3	241.5
82.5°	169.5	156.8	152.5	152.5	152.5
85°	72.0	72.0	76.3	76.3	72.0
87.5°	29.7	25.4	25.4	29.7	29.7
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°	4.2	0.0	4.2	4.2	4.2
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	4.2	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	4.2
177.5°	0.0	0.0	4.2	4.2	4.2
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	16.91	18.51	17.27	18.83	19.14	16.14	17.74	16.51	18.06	18.37
	3H	18.53	19.98	18.91	20.30	20.66	17.69	19.14	18.07	19.46	19.83
	4H	19.08	20.44	19.48	20.79	21.17	18.22	19.57	18.61	19.92	20.30
	6H	19.44	20.69	19.85	21.06	21.45	18.55	19.80	18.96	20.17	20.56
	8H	19.52	20.71	19.94	21.10	21.50	18.63	19.83	19.05	20.21	20.61
	12H	19.54	20.68	19.97	21.07	21.50	18.66	19.81	19.09	20.19	20.62
4H	2H	17.37	18.73	17.77	19.08	19.45	16.75	18.11	17.15	18.45	18.83
	3H	19.21	20.34	19.61	20.74	21.14	18.50	19.63	18.91	20.03	20.43
	4H	19.87	20.89	20.30	21.31	21.74	19.12	20.14	19.55	20.55	20.99
	6H	20.33	21.22	20.79	21.66	22.12	19.55	20.44	20.00	20.88	21.34
	8H	20.44	21.27	20.90	21.71	22.18	19.66	20.49	20.12	20.93	21.40
	12H	20.48	21.23	20.96	21.70	22.17	19.71	20.46	20.19	20.93	21.40
8H	4H	20.06	20.89	20.52	21.33	21.80	19.38	20.21	19.84	20.65	21.12
	6H	20.60	21.28	21.09	21.77	22.25	19.89	20.58	20.38	21.07	21.54
	8H	20.74	21.36	21.25	21.87	22.35	20.04	20.66	20.55	21.17	21.65
	12H	20.82	21.36	21.33	21.85	22.42	20.14	20.68	20.64	21.17	21.73
12H	4H	20.07	20.81	20.55	21.29	21.76	19.40	20.14	19.88	20.62	21.09
	6H	20.60	21.22	21.12	21.73	22.22	19.91	20.53	20.43	21.04	21.53
	8H	20.79	21.34	21.30	21.83	22.39	20.11	20.66	20.62	21.15	21.71

END OF REPORT