

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: P572198

Luminaire Tested: 24ID-70-L830-DBR

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572198
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-70-L830-DBR
Description: 7000 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 3000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

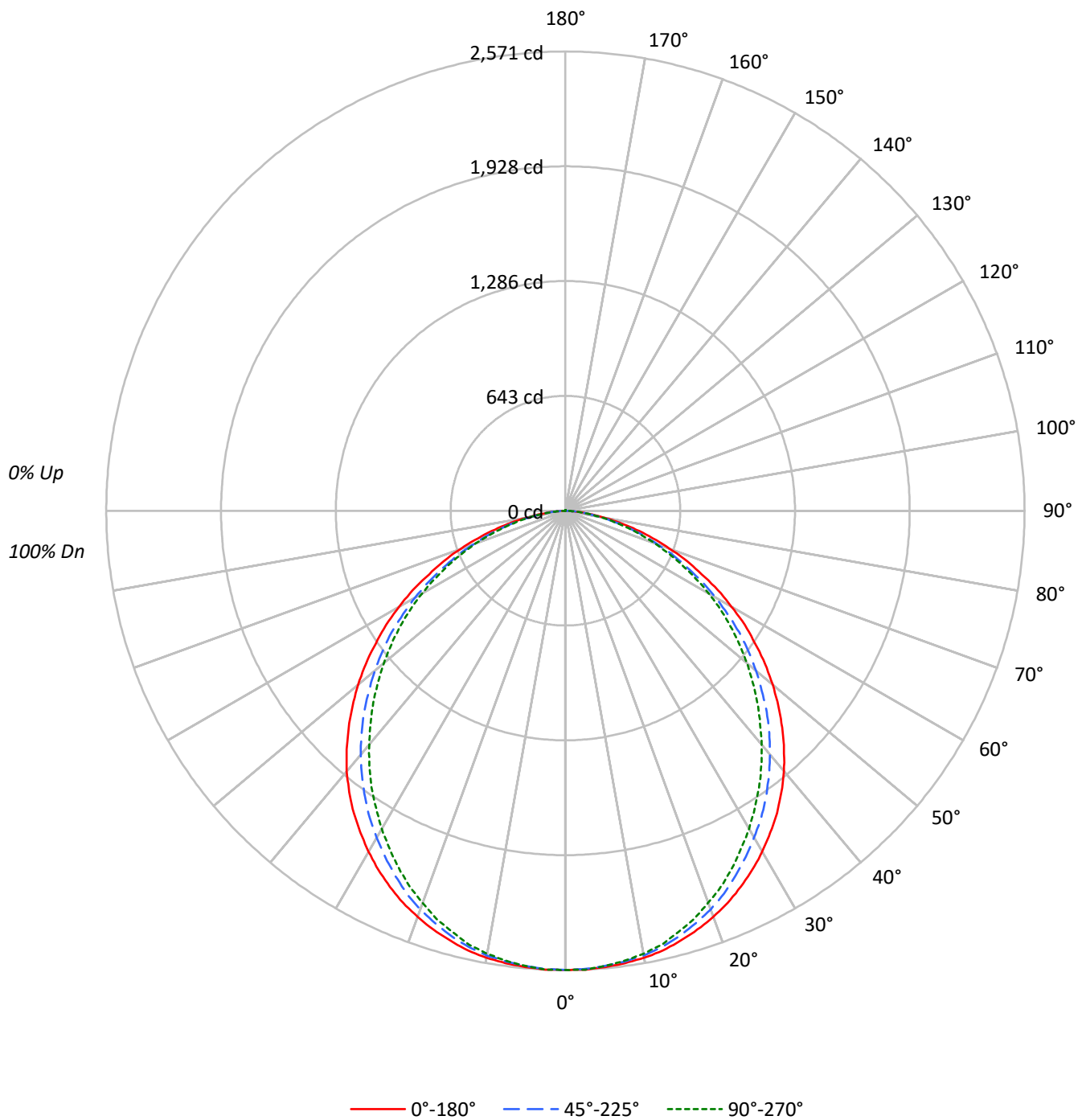
Lumens per Lamp: N/A
Luminaire Lumens: 6757.0 lumens
Efficiency: N/A
Efficacy: 103.0 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.19 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 65.6
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°	3459	3459	3459
5°	3464	3455	3455
10°	3472	3454	3440
15°	3471	3434	3402
20°	3464	3402	3346
25°	3449	3347	3278
30°	3425	3282	3194
35°	3394	3215	3106
40°	3345	3130	3003
45°	3266	3033	2895
50°	3171	2915	2777
55°	3043	2787	2648
60°	2886	2611	2496
65°	2679	2396	2301
70°	2454	2155	2090
75°	2127	1853	1801
80°	1713	1457	1457
85°	866	917	866

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3266 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.2	3.6
10°-20°	695.4	10.3
20°-30°	1041.1	15.4
30°-40°	1230.4	18.2
40°-50°	1238.6	18.3
50°-60°	1071.8	15.9
60°-70°	763.3	11.3
70°-80°	391.9	5.8
80°-90°	81.1	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°	1979.7	29.3
0°-40°	3210.1	47.5
0°-60°	5520.4	81.7
0°-90°	6756.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6757.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2571	2571	2571	2571	2571	
5°	2564	2561	2558	2554	2558	244
15°	2492	2482	2465	2446	2442	704
25°	2324	2304	2254	2218	2208	1071
35°	2066	2033	1957	1908	1891	1291
45°	1716	1680	1594	1538	1522	1323
55°	1297	1261	1188	1139	1129	1161
65°	842	812	752	726	723	838
75°	409	389	356	343	346	437
85°	56	56	59	59	56	84
90°	0	0	0	0	0	3
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	3	0
180°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2571.0	2571.0	2571.0	2571.0	2571.0
2.5°	2571.0	2567.7	2567.7	2564.4	2571.0
5°	2564.4	2561.1	2557.8	2554.5	2557.8
7.5°	2554.5	2547.9	2544.6	2538.0	2541.3
10°	2541.3	2534.7	2528.1	2518.2	2518.2
12.5°	2521.5	2514.9	2501.7	2488.5	2488.5
15°	2491.8	2481.9	2465.4	2445.6	2442.3
17.5°	2458.8	2445.6	2422.5	2399.4	2396.1
20°	2419.2	2406.0	2376.3	2346.6	2336.7
22.5°	2376.3	2359.8	2320.2	2287.2	2277.3
25°	2323.5	2303.7	2254.2	2217.9	2208.0
27.5°	2267.4	2241.0	2184.9	2145.3	2132.1
30°	2204.7	2178.3	2112.3	2072.7	2056.1
32.5°	2135.4	2105.7	2039.6	1990.1	1973.6
35°	2066.1	2033.0	1957.1	1907.6	1891.1
37.5°	1986.8	1950.5	1871.3	1818.5	1802.0
40°	1904.3	1868.0	1782.2	1729.4	1709.6
42.5°	1811.9	1775.6	1689.8	1633.7	1613.9
45°	1716.2	1679.9	1594.1	1538.0	1521.5
47.5°	1617.2	1574.3	1491.8	1439.0	1422.5
50°	1514.9	1472.0	1392.8	1340.0	1326.8
52.5°	1409.3	1366.4	1290.5	1237.6	1227.7
55°	1297.1	1260.8	1188.1	1138.6	1128.7
57.5°	1191.4	1151.8	1075.9	1039.6	1029.7
60°	1072.6	1039.6	970.3	937.3	927.4
62.5°	963.7	930.7	861.4	825.1	821.8
65°	841.6	811.9	752.5	726.1	722.8
67.5°	736.0	703.0	653.5	627.1	627.1
70°	623.8	594.1	547.9	531.4	531.4
72.5°	511.6	491.8	452.2	435.7	439.0
75°	409.2	389.4	356.4	343.2	346.5
77.5°	313.5	290.4	270.6	260.7	264.0
80°	221.1	204.6	188.1	184.8	188.1
82.5°	132.0	122.1	118.8	118.8	118.8
85°	56.1	56.1	59.4	59.4	56.1
87.5°	23.1	19.8	19.8	23.1	23.1
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°	3.3	0.0	3.3	3.3	3.3
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	3.3	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	3.3
177.5°	0.0	0.0	3.3	3.3	3.3
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	16.04	17.64	16.41	17.96	18.27	15.27	16.88	15.64	17.19	17.50
	3H	17.66	19.11	18.04	19.44	19.80	16.83	18.27	17.20	18.60	18.96
	4H	18.22	19.57	18.62	19.92	20.30	17.35	18.70	17.75	19.05	19.43
	6H	18.57	19.82	18.98	20.19	20.58	17.68	18.93	18.09	19.30	19.69
	8H	18.65	19.85	19.07	20.23	20.63	17.76	18.96	18.18	19.35	19.75
	12H	18.67	19.82	19.10	20.20	20.63	17.79	18.94	18.22	19.32	19.75
4H	2H	16.50	17.86	16.90	18.21	18.59	15.88	17.24	16.28	17.59	17.96
	3H	18.34	19.47	18.75	19.87	20.27	17.63	18.76	18.04	19.16	19.56
	4H	19.01	20.03	19.44	20.44	20.88	18.25	19.27	18.68	19.69	20.12
	6H	19.46	20.35	19.92	20.79	21.25	18.68	19.57	19.14	20.01	20.47
	8H	19.57	20.40	20.03	20.84	21.31	18.79	19.62	19.25	20.06	20.53
	12H	19.61	20.36	20.09	20.83	21.30	18.84	19.59	19.33	20.07	20.54
8H	4H	19.19	20.02	19.65	20.47	20.93	18.51	19.34	18.97	19.78	20.25
	6H	19.73	20.42	20.22	20.90	21.38	19.02	19.71	19.52	20.20	20.67
	8H	19.87	20.49	20.39	21.00	21.49	19.18	19.79	19.69	20.30	20.79
	12H	19.95	20.49	20.46	20.99	21.55	19.27	19.81	19.78	20.30	20.87
12H	4H	19.20	19.94	19.68	20.42	20.89	18.53	19.27	19.01	19.75	20.22
	6H	19.74	20.35	20.25	20.86	21.35	19.05	19.66	19.56	20.17	20.66
	8H	19.92	20.47	20.43	20.96	21.52	19.24	19.79	19.75	20.28	20.84

END OF REPORT