

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: P572202

Luminaire Tested: 24ID-70-L840-DBR

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572202
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-L840-DBR
Description: 7000 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 4000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

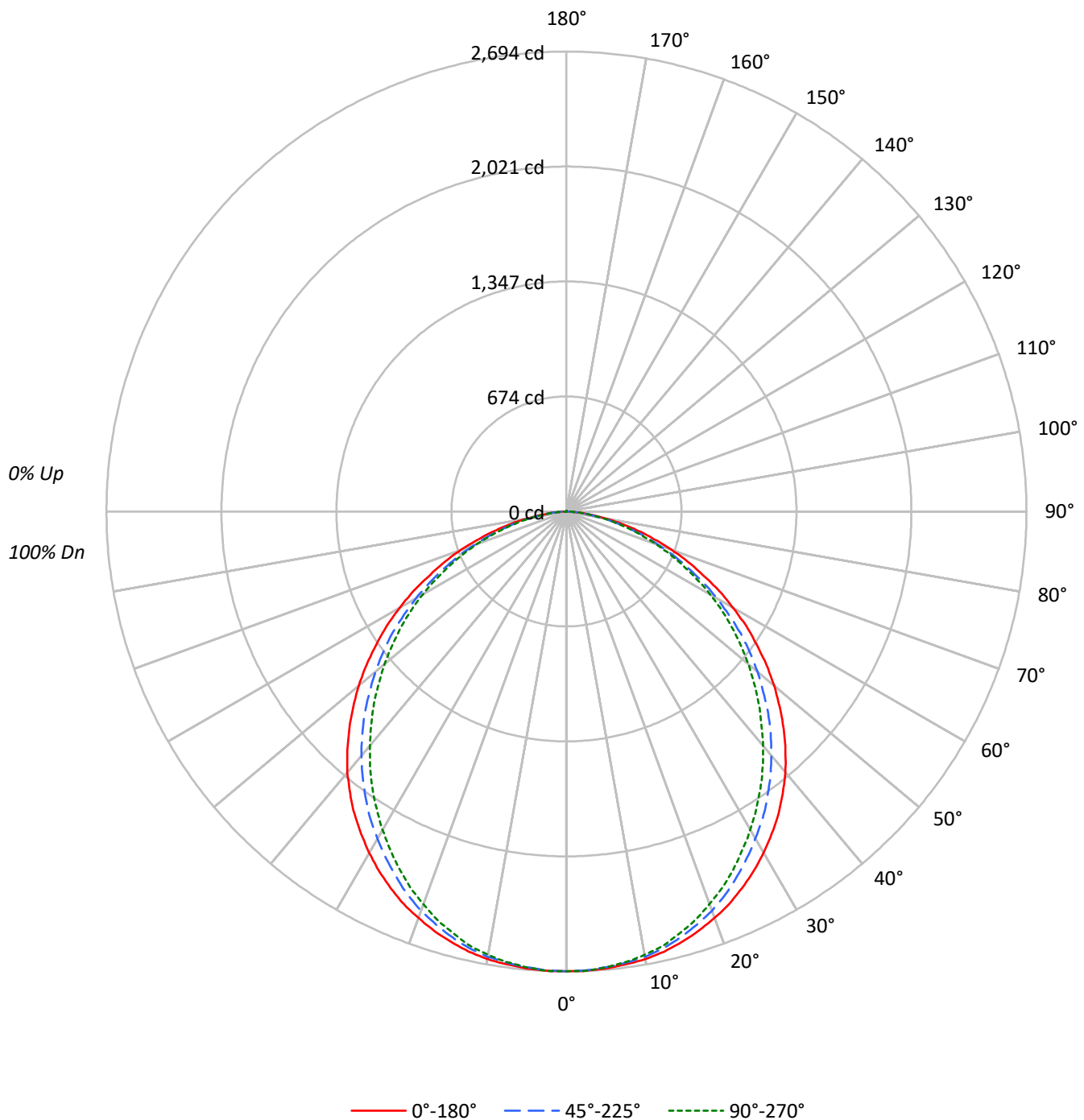
Lumens per Lamp: N/A
Luminaire Lumens: 7079.0 lumens
Efficiency: N/A
Efficacy: 107.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.19 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P572202

CATALOG NUMBER: 24ID-70-L840-DBR

Luminous Intensity Polar Plot



TEST NUMBER: P572202

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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°	3624	3624	3624
5°	3629	3619	3619
10°	3637	3619	3604
15°	3636	3598	3564
20°	3629	3565	3505
25°	3614	3506	3434
30°	3588	3438	3347
35°	3555	3368	3254
40°	3504	3279	3146
45°	3421	3178	3033
50°	3322	3054	2910
55°	3188	2920	2774
60°	3024	2736	2615
65°	2807	2510	2411
70°	2571	2258	2190
75°	2229	1941	1888
80°	1795	1527	1527
85°	908	960	908

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 3421 cd/sqm

TEST NUMBER: P572202

CATALOG NUMBER: 24ID-70-L840-DBR

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	254.8	3.6
10°-20°	728.5	10.3
20°-30°	1090.7	15.4
30°-40°	1289.1	18.2
40°-50°	1297.6	18.3
50°-60°	1122.8	15.9
60°-70°	799.7	11.3
70°-80°	410.6	5.8
80°-90°	84.9	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°	2074.0	29.3
0°-40°	3363.1	47.5
0°-60°	5783.5	81.7
0°-90°	7078.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7079.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2694	2694	2694	2694	2694	
5°	2687	2683	2680	2676	2680	256
15°	2610	2600	2583	2562	2559	737
25°	2434	2414	2362	2324	2313	1122
35°	2164	2130	2050	1998	1981	1352
45°	1798	1760	1670	1611	1594	1386
55°	1359	1321	1245	1193	1182	1216
65°	882	851	788	761	757	878
75°	429	408	373	360	363	457
85°	59	59	62	62	59	88
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	4	0
180°	0	0	0	0	0	

TEST NUMBER: P572202

CATALOG NUMBER: 24ID-70-L840-DBR

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2693.5	2693.5	2693.5	2693.5	2693.5
2.5°	2693.5	2690.1	2690.1	2686.6	2693.5
5°	2686.6	2683.2	2679.7	2676.2	2679.7
7.5°	2676.2	2669.3	2665.9	2659.0	2662.4
10°	2662.4	2655.5	2648.6	2638.2	2638.2
12.5°	2641.7	2634.8	2620.9	2607.1	2607.1
15°	2610.5	2600.2	2582.9	2562.1	2558.7
17.5°	2576.0	2562.1	2537.9	2513.7	2510.3
20°	2534.5	2520.6	2489.5	2458.4	2448.0
22.5°	2489.5	2472.2	2430.7	2396.2	2385.8
25°	2434.2	2413.5	2361.6	2323.6	2313.2
27.5°	2375.4	2347.8	2289.0	2247.5	2233.7
30°	2309.7	2282.1	2212.9	2171.4	2154.1
32.5°	2237.1	2206.0	2136.8	2085.0	2067.7
35°	2164.5	2129.9	2050.4	1998.5	1981.2
37.5°	2081.5	2043.5	1960.5	1905.2	1887.9
40°	1995.1	1957.0	1867.1	1811.8	1791.1
42.5°	1898.3	1860.2	1770.3	1711.6	1690.8
45°	1798.0	1760.0	1670.1	1611.3	1594.0
47.5°	1694.3	1649.3	1562.9	1507.5	1490.3
50°	1587.1	1542.1	1459.1	1403.8	1390.0
52.5°	1476.4	1431.5	1352.0	1296.6	1286.3
55°	1358.9	1320.8	1244.8	1192.9	1182.5
57.5°	1248.2	1206.7	1127.2	1089.2	1078.8
60°	1123.7	1089.2	1016.6	982.0	971.6
62.5°	1009.6	975.1	902.5	864.4	861.0
65°	881.7	850.6	788.4	760.7	757.2
67.5°	771.1	736.5	684.6	657.0	657.0
70°	653.5	622.4	574.0	556.7	556.7
72.5°	535.9	515.2	473.7	456.4	459.9
75°	428.8	408.0	373.4	359.6	363.1
77.5°	328.5	304.3	283.5	273.2	276.6
80°	231.7	214.4	197.1	193.6	197.1
82.5°	138.3	127.9	124.5	124.5	124.5
85°	58.8	58.8	62.2	62.2	58.8
87.5°	24.2	20.7	20.7	24.2	24.2
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

TEST NUMBER: P572202

CATALOG NUMBER: 24ID-70-L840-DBR

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°	3.5	0.0	3.5	3.5	3.5
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	3.5	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	3.5
177.5°	0.0	0.0	3.5	3.5	3.5
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	16.20	17.80	16.57	18.12	18.43	15.44	17.04	15.80	17.35	17.67
	3H	17.83	19.27	18.20	19.60	19.96	16.99	18.43	17.36	18.76	19.12
	4H	18.38	19.74	18.78	20.08	20.46	17.51	18.87	17.91	19.21	19.59
	6H	18.73	19.99	19.14	20.35	20.74	17.84	19.10	18.25	19.46	19.85
	8H	18.81	20.01	19.23	20.40	20.80	17.92	19.12	18.35	19.51	19.91
	12H	18.83	19.98	19.26	20.36	20.79	17.95	19.10	18.38	19.48	19.91
4H	2H	16.67	18.02	17.06	18.37	18.75	16.04	17.40	16.44	17.75	18.12
	3H	18.50	19.63	18.91	20.03	20.43	17.79	18.92	18.20	19.32	19.72
	4H	19.17	20.19	19.60	20.60	21.04	18.41	19.43	18.84	19.85	20.28
	6H	19.62	20.51	20.08	20.96	21.41	18.84	19.73	19.30	20.17	20.63
	8H	19.73	20.56	20.19	21.01	21.47	18.95	19.78	19.41	20.23	20.69
	12H	19.78	20.52	20.26	21.00	21.47	19.01	19.75	19.49	20.23	20.70
8H	4H	19.35	20.19	19.82	20.63	21.09	18.67	19.50	19.13	19.95	20.41
	6H	19.89	20.58	20.38	21.07	21.54	19.18	19.87	19.68	20.36	20.84
	8H	20.04	20.65	20.55	21.16	21.65	19.34	19.95	19.85	20.46	20.95
	12H	20.11	20.66	20.62	21.15	21.71	19.43	19.98	19.94	20.47	21.03
12H	4H	19.36	20.10	19.84	20.58	21.05	18.69	19.44	19.17	19.91	20.38
	6H	19.90	20.52	20.41	21.02	21.51	19.21	19.83	19.72	20.33	20.82
	8H	20.08	20.63	20.59	21.12	21.68	19.41	19.95	19.91	20.44	21.00

END OF REPORT