

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: P572218

Luminaire Tested: 24ID-80-L840-DBR

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572218
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-L840-DBR
Description: 8000 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 4000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

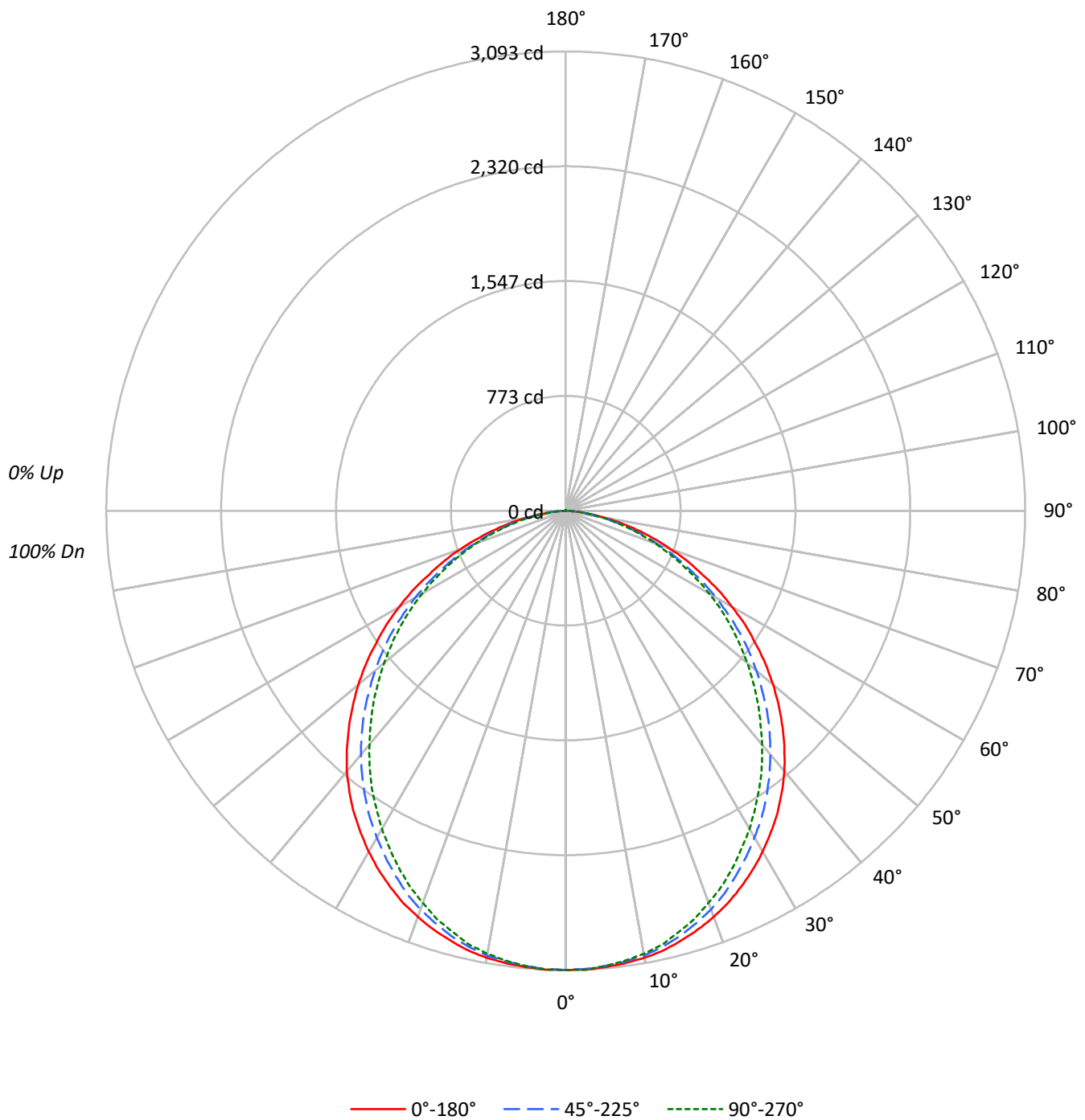
Lumens per Lamp: N/A
Luminaire Lumens: 8129.0 lumens
Efficiency: N/A
Efficacy: 105.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.19 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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
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°	4162	4162	4162
5°	4167	4156	4156
10°	4177	4155	4139
15°	4176	4131	4093
20°	4167	4093	4025
25°	4150	4026	3943
30°	4121	3948	3843
35°	4083	3867	3737
40°	4024	3766	3612
45°	3929	3649	3483
50°	3815	3507	3341
55°	3660	3353	3185
60°	3472	3141	3002
65°	3223	2882	2768
70°	2952	2593	2515
75°	2559	2229	2167
80°	2061	1753	1753
85°	1042	1104	1042

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 3929 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	292.6	3.6
10°-20°	836.5	10.3
20°-30°	1252.4	15.4
30°-40°	1480.3	18.2
40°-50°	1490.0	18.3
50°-60°	1289.4	15.9
60°-70°	918.3	11.3
70°-80°	471.5	5.8
80°-90°	97.6	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°	2381.6	29.3
0°-40°	3861.9	47.5
0°-60°	6641.3	81.7
0°-90°	8128.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8129.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3093	3093	3093	3093	3093	
5°	3085	3081	3077	3073	3077	294
15°	2998	2986	2966	2942	2938	846
25°	2795	2771	2712	2668	2656	1288
35°	2486	2446	2354	2295	2275	1553
45°	2065	2021	1918	1850	1830	1592
55°	1560	1517	1429	1370	1358	1396
65°	1012	977	905	874	870	1008
75°	492	468	429	413	417	525
85°	68	68	72	72	68	101
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°	3093.1	3093.1	3093.1	3093.1	3093.1
2.5°	3093.1	3089.1	3089.1	3085.1	3093.1
5°	3085.1	3081.1	3077.2	3073.2	3077.2
7.5°	3073.2	3065.3	3061.3	3053.3	3057.3
10°	3057.3	3049.4	3041.4	3029.5	3029.5
12.5°	3033.5	3025.6	3009.7	2993.8	2993.8
15°	2997.8	2985.8	2966.0	2942.2	2938.2
17.5°	2958.1	2942.2	2914.4	2886.6	2882.6
20°	2910.4	2894.5	2858.8	2823.1	2811.1
22.5°	2858.8	2838.9	2791.3	2751.6	2739.7
25°	2795.3	2771.4	2711.9	2668.2	2656.3
27.5°	2727.8	2696.0	2628.5	2580.9	2565.0
30°	2652.3	2620.6	2541.1	2493.5	2473.6
32.5°	2568.9	2533.2	2453.8	2394.2	2374.4
35°	2485.6	2445.9	2354.5	2295.0	2275.1
37.5°	2390.3	2346.6	2251.3	2187.8	2167.9
40°	2291.0	2247.3	2144.1	2080.6	2056.7
42.5°	2179.8	2136.2	2032.9	1965.4	1941.6
45°	2064.7	2021.0	1917.8	1850.3	1830.4
47.5°	1945.6	1893.9	1794.7	1731.2	1711.3
50°	1822.5	1770.9	1675.6	1612.0	1596.2
52.5°	1695.4	1643.8	1552.5	1489.0	1477.0
55°	1560.4	1516.7	1429.4	1369.8	1357.9
57.5°	1433.4	1385.7	1294.4	1250.7	1238.8
60°	1290.4	1250.7	1167.3	1127.6	1115.7
62.5°	1159.4	1119.7	1036.3	992.6	988.7
65°	1012.5	976.8	905.3	873.5	869.5
67.5°	885.4	845.7	786.2	754.4	754.4
70°	750.4	714.7	659.1	639.3	639.3
72.5°	615.4	591.6	544.0	524.1	528.1
75°	492.3	468.5	428.8	412.9	416.9
77.5°	377.2	349.4	325.6	313.7	317.6
80°	266.0	246.2	226.3	222.4	226.3
82.5°	158.8	146.9	142.9	142.9	142.9
85°	67.5	67.5	71.5	71.5	67.5
87.5°	27.8	23.8	23.8	27.8	27.8
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°	4.0	0.0	4.0	4.0	4.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	4.0	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	4.0
177.5°	0.0	0.0	4.0	4.0	4.0
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	16.68	18.29	17.05	18.60	18.91	15.92	17.52	16.28	17.83	18.15
	3H	18.31	19.75	18.68	20.08	20.44	17.47	18.91	17.85	19.24	19.60
	4H	18.86	20.22	19.26	20.56	20.94	17.99	19.35	18.39	19.69	20.07
	6H	19.21	20.47	19.62	20.83	21.22	18.32	19.58	18.73	19.94	20.33
	8H	19.29	20.49	19.71	20.88	21.28	18.40	19.60	18.83	19.99	20.39
	12H	19.31	20.46	19.74	20.84	21.27	18.43	19.58	18.86	19.96	20.39
4H	2H	17.15	18.50	17.54	18.85	19.23	16.52	17.88	16.92	18.23	18.60
	3H	18.98	20.11	19.39	20.51	20.91	18.27	19.40	18.68	19.80	20.20
	4H	19.65	20.67	20.08	21.08	21.52	18.89	19.91	19.33	20.33	20.77
	6H	20.10	20.99	20.56	21.44	21.89	19.32	20.21	19.78	20.65	21.11
	8H	20.21	21.04	20.67	21.49	21.95	19.43	20.26	19.89	20.71	21.17
	12H	20.26	21.00	20.74	21.48	21.95	19.49	20.23	19.97	20.71	21.18
8H	4H	19.83	20.67	20.30	21.11	21.57	19.15	19.98	19.61	20.43	20.89
	6H	20.37	21.06	20.86	21.55	22.02	19.66	20.35	20.16	20.84	21.32
	8H	20.52	21.13	21.03	21.64	22.13	19.82	20.43	20.33	20.94	21.43
	12H	20.59	21.14	21.10	21.63	22.19	19.91	20.46	20.42	20.95	21.51
12H	4H	19.84	20.59	20.32	21.06	21.53	19.17	19.92	19.65	20.39	20.86
	6H	20.38	21.00	20.89	21.50	21.99	19.69	20.31	20.20	20.81	21.30
	8H	20.56	21.11	21.07	21.60	22.16	19.89	20.43	20.39	20.92	21.48