

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: P572217

Luminaire Tested: 24ID-80-L840-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572217
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2109-397-8)
Test Lab: INNOVATION CENTER
Issue Date: 10/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: 24ID-80-L840-DBD
Description: 8000 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN DROPPED DOUBLE BARRELL LENS AND 4000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

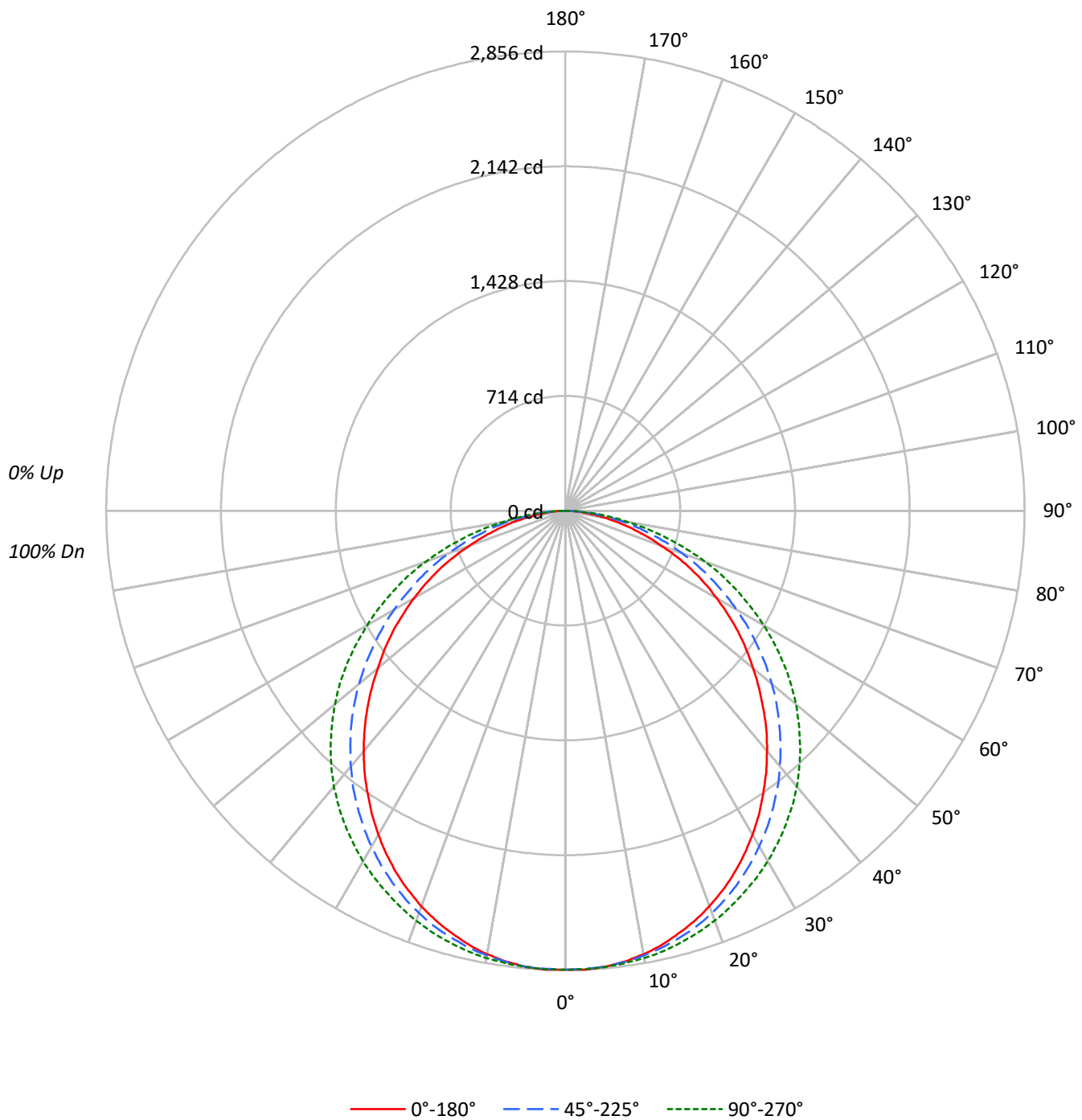
Lumens per Lamp: N/A
Luminaire Lumens: 8142.0 lumens
Efficiency: N/A
Efficacy: 105.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.17')
CIE Type: Direct

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		0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111			106	106	106		102
1	109	104	100	96	106	102	98	94	97	94	91			93	91	88		90
2	99	90	84	78	96	89	82	77	85	80	75			82	77	73		79
3	90	79	71	65	87	78	70	64	75	68	63			72	66	62		69
4	82	70	61	55	80	69	61	54	66	59	54			64	58	53		62
5	76	63	54	47	74	62	53	47	59	52	46			58	51	46		56
6	70	56	47	41	68	56	47	41	54	46	40			52	45	40		50
7	65	51	42	36	63	50	42	36	49	41	36			47	41	36		46
8	60	47	38	32	59	46	38	32	45	37	32			43	37	32		42
9	56	43	35	29	55	42	34	29	41	34	29			40	33	29		39
10	53	40	32	26	52	39	31	26	38	31	26			37	31	26		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3840	3840	3840
5°	3830	3814	3820
10°	3799	3779	3803
15°	3749	3739	3788
20°	3693	3695	3771
25°	3620	3635	3749
30°	3531	3565	3732
35°	3422	3485	3706
40°	3311	3394	3677
45°	3182	3291	3627
50°	3036	3173	3564
55°	2901	3027	3474
60°	2724	2867	3349
65°	2522	2678	3182
70°	2233	2438	2940
75°	1930	2101	2583
80°	1527	1708	2020
85°	1052	1057	1214

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 3627 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	270.5	3.3
10°-20°	776.3	9.5
20°-30°	1176.7	14.5
30°-40°	1415.5	17.4
40°-50°	1461.3	17.9
50°-60°	1313.0	16.1
60°-70°	999.7	12.3
70°-80°	574.0	7.1
80°-90°	154.9	1.9
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°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2223.6	27.3
0°-40°	3639.0	44.7
0°-60°	6413.4	78.8
0°-90°	8142.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8142.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2854	2854	2854	2854	2854	
5°	2846	2849	2846	2843	2849	270
15°	2722	2735	2748	2766	2780	768
25°	2486	2510	2549	2602	2624	1144
35°	2144	2182	2253	2351	2388	1342
45°	1742	1782	1882	2012	2065	1343
55°	1310	1345	1453	1594	1657	1169
65°	863	903	1001	1117	1178	854
75°	429	469	537	614	651	455
85°	101	116	138	146	154	117
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2853.9	2853.9	2853.9	2853.9	2853.9
2.5°	2856.5	2856.5	2851.2	2848.6	2853.9
5°	2846.0	2848.6	2846.0	2843.3	2848.6
7.5°	2827.4	2830.1	2830.1	2832.7	2838.0
10°	2800.9	2806.2	2808.9	2816.8	2824.8
12.5°	2766.5	2771.8	2782.4	2795.7	2806.2
15°	2721.5	2734.8	2748.0	2766.5	2779.8
17.5°	2673.9	2689.8	2710.9	2734.8	2750.6
20°	2618.3	2636.8	2663.3	2695.1	2713.6
22.5°	2554.7	2578.6	2610.3	2650.0	2671.2
25°	2485.9	2509.7	2549.4	2602.4	2623.6
27.5°	2409.1	2435.6	2483.3	2544.1	2573.3
30°	2327.1	2356.2	2411.8	2485.9	2517.7
32.5°	2239.7	2271.5	2335.0	2419.7	2454.1
35°	2144.4	2181.5	2252.9	2350.9	2388.0
37.5°	2051.7	2088.8	2168.2	2274.1	2316.5
40°	1951.1	1990.8	2075.6	2192.0	2239.7
42.5°	1850.5	1884.9	1980.3	2104.7	2155.0
45°	1742.0	1781.7	1882.3	2012.0	2065.0
47.5°	1633.4	1675.8	1781.7	1914.1	1969.7
50°	1522.3	1567.3	1675.8	1810.8	1871.7
52.5°	1419.0	1456.1	1567.3	1704.9	1768.5
55°	1310.5	1344.9	1453.4	1593.7	1657.3
57.5°	1196.6	1236.3	1344.9	1477.2	1540.8
60°	1085.4	1125.1	1228.4	1360.8	1424.3
62.5°	976.9	1014.0	1114.6	1241.6	1305.2
65°	863.1	902.8	1000.7	1117.2	1178.1
67.5°	751.9	794.2	886.9	992.8	1056.3
70°	632.7	680.4	770.4	868.3	918.6
72.5°	526.8	571.8	653.9	741.3	788.9
75°	428.9	468.6	537.4	614.2	651.3
77.5°	330.9	373.3	434.2	492.4	521.5
80°	243.6	283.3	330.9	370.6	383.9
82.5°	166.8	195.9	230.3	251.5	270.0
85°	100.6	116.5	137.7	145.6	153.5
87.5°	42.4	47.7	55.6	52.9	55.6
90°	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	15.28	16.92	15.64	17.24	17.55	16.75	18.39	17.11	18.70	19.02
	3H	16.85	18.33	17.22	18.66	19.02	18.65	20.13	19.02	20.46	20.82
	4H	17.37	18.77	17.76	19.11	19.49	19.35	20.75	19.75	21.10	21.47
	6H	17.69	18.99	18.11	19.36	19.75	19.84	21.14	20.25	21.51	21.90
	8H	17.78	19.02	18.20	19.41	19.81	19.99	21.23	20.41	21.61	22.01
	12H	17.82	19.01	18.25	19.39	19.82	20.06	21.25	20.49	21.63	22.06
4H	2H	16.03	17.43	16.43	17.78	18.16	17.20	18.60	17.60	18.95	19.33
	3H	17.80	18.98	18.21	19.37	19.77	19.32	20.49	19.73	20.89	21.29
	4H	18.42	19.49	18.85	19.90	20.34	20.15	21.21	20.58	21.63	22.06
	6H	18.86	19.79	19.31	20.23	20.68	20.78	21.71	21.23	22.15	22.60
	8H	18.97	19.84	19.43	20.29	20.75	20.96	21.83	21.42	22.27	22.74
	12H	19.04	19.82	19.52	20.30	20.77	21.08	21.86	21.56	22.34	22.81
8H	4H	18.81	19.68	19.27	20.12	20.58	20.35	21.22	20.80	21.66	22.12
	6H	19.34	20.07	19.84	20.56	21.03	21.07	21.79	21.56	22.28	22.76
	8H	19.51	20.16	20.02	20.67	21.15	21.32	21.97	21.82	22.47	22.96
	12H	19.63	20.20	20.13	20.69	21.25	21.49	22.06	21.99	22.55	23.11
12H	4H	18.86	19.64	19.34	20.11	20.58	20.35	21.14	20.83	21.61	22.08
	6H	19.42	20.07	19.93	20.57	21.06	21.09	21.74	21.59	22.24	22.73
	8H	19.64	20.21	20.14	20.70	21.26	21.38	21.95	21.88	22.44	23.00

END OF REPORT