

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: P572229

Luminaire Tested: 24ID-90-L830-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572229
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-90-L830-DBD
Description: 9000 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN DROPPED DOUBLE BARRELL LENS AND 3000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

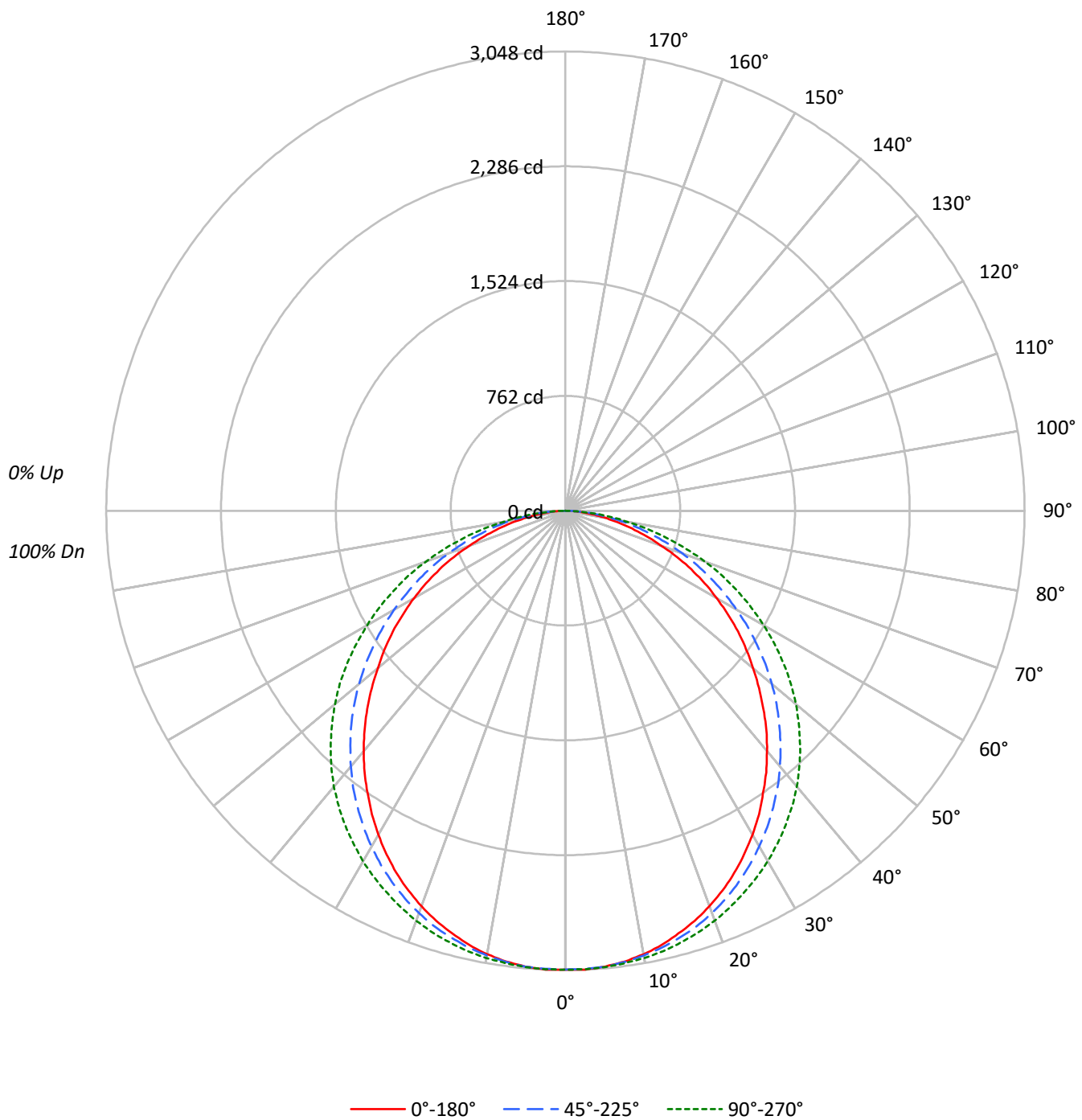
Lumens per Lamp: N/A
Luminaire Lumens: 8689.0 lumens
Efficiency: N/A
Efficacy: 99.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 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	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61
4	82	70	61	55	80	69	61	54	66	59	54	64	58	53	62	57	52
5	76	63	54	47	74	62	53	47	59	52	46	58	51	46	56	50	45
6	70	56	47	41	68	56	47	41	54	46	40	52	45	40	50	44	40
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4098	4098	4098
5°	4087	4071	4076
10°	4054	4033	4059
15°	4001	3990	4042
20°	3941	3943	4024
25°	3863	3879	4001
30°	3768	3805	3983
35°	3652	3719	3955
40°	3534	3622	3924
45°	3396	3512	3871
50°	3240	3387	3803
55°	3096	3231	3707
60°	2907	3059	3574
65°	2692	2858	3396
70°	2383	2602	3138
75°	2059	2242	2756
80°	1629	1823	2156
85°	1123	1128	1296

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 3871 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	288.7	3.3
10°-20°	828.5	9.5
20°-30°	1255.8	14.5
30°-40°	1510.6	17.4
40°-50°	1559.5	17.9
50°-60°	1401.3	16.1
60°-70°	1066.9	12.3
70°-80°	612.6	7.1
80°-90°	165.3	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°	2372.9	27.3
0°-40°	3883.5	44.7
0°-60°	6844.3	78.8
0°-90°	8689.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8689.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3046	3046	3046	3046	3046	
5°	3037	3040	3037	3034	3040	288
15°	2904	2918	2933	2952	2966	819
25°	2653	2678	2721	2777	2800	1221
35°	2288	2328	2404	2509	2548	1432
45°	1859	1901	2009	2147	2204	1434
55°	1398	1435	1551	1701	1769	1248
65°	921	963	1068	1192	1257	911
75°	458	500	574	656	695	485
85°	107	124	147	155	164	125
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3045.6	3045.6	3045.6	3045.6	3045.6
2.5°	3048.5	3048.5	3042.8	3040.0	3045.6
5°	3037.1	3040.0	3037.1	3034.3	3040.0
7.5°	3017.4	3020.2	3020.2	3023.0	3028.7
10°	2989.1	2994.8	2997.6	3006.1	3014.5
12.5°	2952.4	2958.0	2969.3	2983.5	2994.8
15°	2904.4	2918.5	2932.6	2952.4	2966.5
17.5°	2853.5	2870.5	2893.1	2918.5	2935.4
20°	2794.2	2814.0	2842.2	2876.1	2895.9
22.5°	2726.4	2751.8	2785.7	2828.1	2850.7
25°	2652.9	2678.3	2720.7	2777.2	2799.8
27.5°	2571.0	2599.2	2650.1	2715.1	2746.1
30°	2483.4	2514.5	2573.8	2652.9	2686.8
32.5°	2390.2	2424.1	2491.9	2582.3	2619.0
35°	2288.5	2328.0	2404.3	2508.8	2548.4
37.5°	2189.6	2229.1	2313.9	2426.9	2472.1
40°	2082.2	2124.6	2215.0	2339.3	2390.2
42.5°	1974.9	2011.6	2113.3	2246.1	2299.8
45°	1859.0	1901.4	2008.8	2147.2	2203.7
47.5°	1743.2	1788.4	1901.4	2042.7	2102.0
50°	1624.5	1672.6	1788.4	1932.5	1997.5
52.5°	1514.3	1553.9	1672.6	1819.5	1887.3
55°	1398.5	1435.2	1551.1	1700.8	1768.6
57.5°	1277.0	1319.4	1435.2	1576.5	1644.3
60°	1158.4	1200.7	1310.9	1452.2	1520.0
62.5°	1042.5	1082.1	1189.4	1325.0	1392.9
65°	921.0	963.4	1067.9	1192.3	1257.2
67.5°	802.4	847.6	946.5	1059.5	1127.3
70°	675.2	726.1	822.1	926.7	980.4
72.5°	562.2	610.3	697.8	791.1	841.9
75°	457.7	500.1	573.5	655.5	695.0
77.5°	353.2	398.4	463.3	525.5	556.6
80°	259.9	302.3	353.2	395.5	409.7
82.5°	178.0	209.1	245.8	268.4	288.2
85°	107.4	124.3	146.9	155.4	163.9
87.5°	45.2	50.9	59.3	56.5	59.3
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	15.51	17.15	15.87	17.46	17.78	16.97	18.62	17.34	18.93	19.24
	3H	17.07	18.56	17.45	18.88	19.24	18.87	20.36	19.25	20.68	21.04
	4H	17.59	18.99	17.99	19.34	19.71	19.57	20.98	19.97	21.32	21.70
	6H	17.92	19.22	18.33	19.58	19.97	20.07	21.37	20.48	21.73	22.12
	8H	18.00	19.24	18.43	19.63	20.03	20.21	21.45	20.64	21.84	22.24
	12H	18.04	19.23	18.47	19.62	20.04	20.29	21.48	20.72	21.86	22.29
4H	2H	16.26	17.66	16.66	18.01	18.38	17.43	18.83	17.83	19.18	19.55
	3H	18.03	19.20	18.44	19.60	20.00	19.54	20.72	19.95	21.11	21.51
	4H	18.65	19.71	19.08	20.13	20.56	20.38	21.44	20.81	21.85	22.29
	6H	19.08	20.01	19.54	20.45	20.91	21.00	21.93	21.45	22.37	22.83
	8H	19.20	20.07	19.66	20.51	20.98	21.19	22.06	21.65	22.50	22.97
	12H	19.27	20.05	19.75	20.52	20.99	21.31	22.09	21.78	22.56	23.03
8H	4H	19.03	19.90	19.49	20.34	20.81	20.57	21.44	21.03	21.88	22.35
	6H	19.57	20.30	20.06	20.78	21.26	21.30	22.02	21.79	22.51	22.98
	8H	19.74	20.39	20.25	20.89	21.38	21.54	22.19	22.05	22.70	23.18
	12H	19.85	20.43	20.36	20.92	21.48	21.71	22.29	22.22	22.78	23.34
12H	4H	19.08	19.86	19.56	20.34	20.81	20.58	21.36	21.06	21.84	22.31
	6H	19.64	20.29	20.15	20.80	21.29	21.31	21.96	21.82	22.47	22.95
	8H	19.86	20.44	20.37	20.93	21.49	21.60	22.18	22.11	22.67	23.23

END OF REPORT