

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: P572148

Luminaire Tested: 24ID-35-L850-DBR

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572148
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-35-L850-DBR
Description: 3500 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 5000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

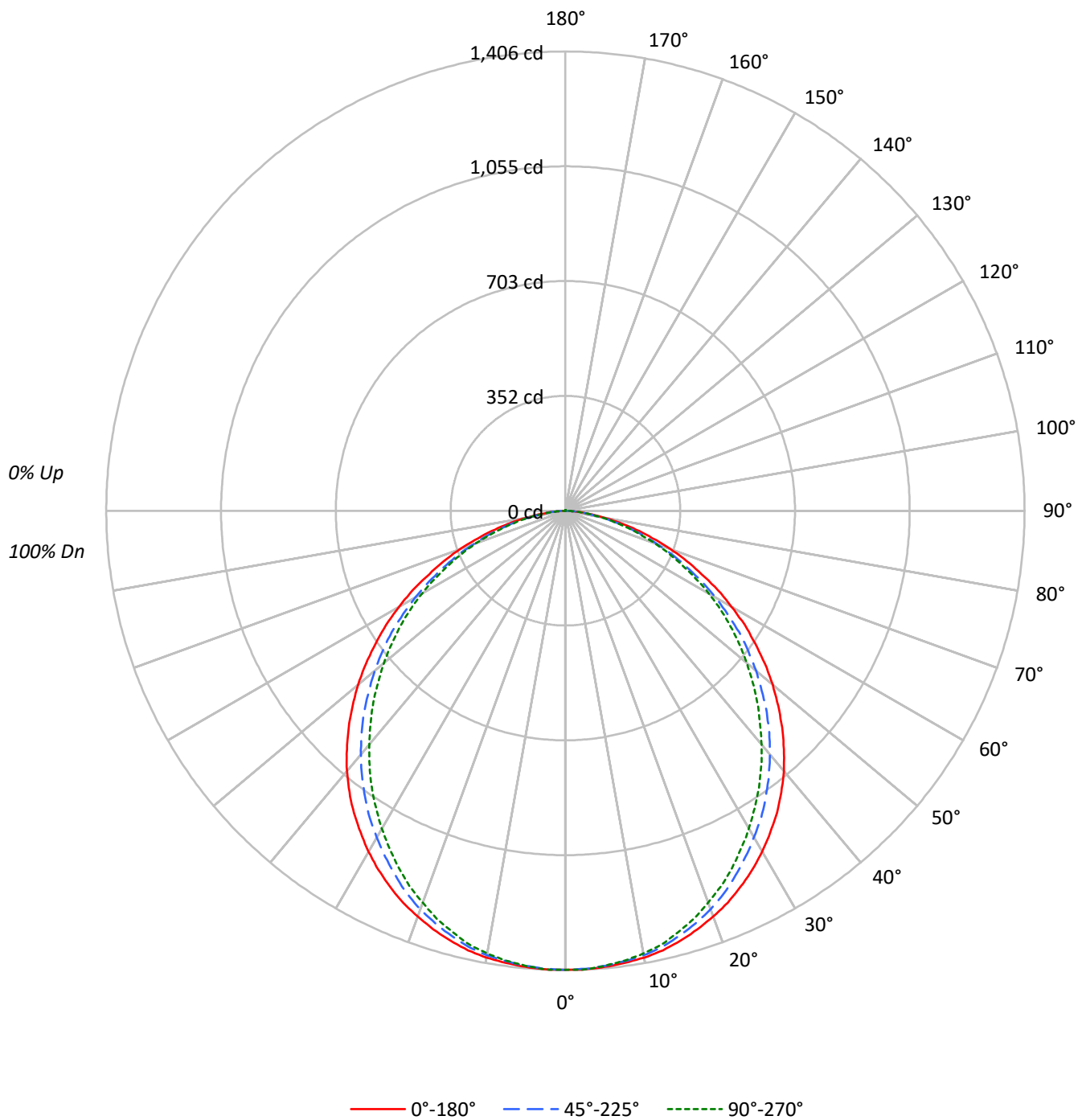
Lumens per Lamp: N/A
Luminaire Lumens: 3694.0 lumens
Efficiency: N/A
Efficacy: 121.5 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.19 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 30.4
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	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°	1891	1891	1891
5°	1893	1889	1889
10°	1898	1888	1881
15°	1897	1877	1860
20°	1894	1860	1829
25°	1886	1829	1792
30°	1873	1794	1746
35°	1855	1758	1698
40°	1829	1711	1642
45°	1785	1658	1583
50°	1734	1594	1518
55°	1663	1524	1448
60°	1578	1428	1364
65°	1465	1310	1258
70°	1341	1178	1143
75°	1163	1013	985
80°	937	797	797
85°	474	502	474

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1785 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.0	3.6
10°-20°	380.1	10.3
20°-30°	569.1	15.4
30°-40°	672.7	18.2
40°-50°	677.1	18.3
50°-60°	585.9	15.9
60°-70°	417.3	11.3
70°-80°	214.3	5.8
80°-90°	44.3	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°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	1082.3	29.3
0°-40°	1754.9	47.5
0°-60°	3018.0	81.7
0°-90°	3693.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3694.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1406	1406	1406	1406	1406	
5°	1402	1400	1398	1396	1398	133
15°	1362	1357	1348	1337	1335	385
25°	1270	1259	1232	1212	1207	585
35°	1130	1112	1070	1043	1034	706
45°	938	918	872	841	832	723
55°	709	689	650	622	617	635
65°	460	444	411	397	395	458
75°	224	213	195	188	190	239
85°	31	31	32	32	31	46
90°	0	0	0	0	0	2
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	2	0
180°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1405.6	1405.6	1405.6	1405.6	1405.6
2.5°	1405.6	1403.7	1403.7	1401.9	1405.6
5°	1401.9	1400.1	1398.3	1396.5	1398.3
7.5°	1396.5	1392.9	1391.1	1387.5	1389.3
10°	1389.3	1385.7	1382.1	1376.7	1376.7
12.5°	1378.5	1374.9	1367.7	1360.4	1360.4
15°	1362.2	1356.8	1347.8	1337.0	1335.2
17.5°	1344.2	1337.0	1324.4	1311.7	1309.9
20°	1322.6	1315.3	1299.1	1282.9	1277.4
22.5°	1299.1	1290.1	1268.4	1250.4	1245.0
25°	1270.2	1259.4	1232.3	1212.5	1207.1
27.5°	1239.6	1225.1	1194.4	1172.8	1165.6
30°	1205.3	1190.8	1154.8	1133.1	1124.1
32.5°	1167.4	1151.1	1115.1	1088.0	1079.0
35°	1129.5	1111.5	1070.0	1042.9	1033.9
37.5°	1086.2	1066.3	1023.0	994.2	985.1
40°	1041.1	1021.2	974.3	945.5	934.6
42.5°	990.6	970.7	923.8	893.1	882.3
45°	938.2	918.4	871.5	840.8	831.8
47.5°	884.1	860.7	815.5	786.7	777.7
50°	828.2	804.7	761.4	732.5	725.3
52.5°	770.4	747.0	705.5	676.6	671.2
55°	709.1	689.2	649.5	622.5	617.1
57.5°	651.4	629.7	588.2	568.4	562.9
60°	586.4	568.4	530.5	512.4	507.0
62.5°	526.9	508.8	470.9	451.1	449.3
65°	460.1	443.9	411.4	396.9	395.1
67.5°	402.4	384.3	357.3	342.8	342.8
70°	341.0	324.8	299.5	290.5	290.5
72.5°	279.7	268.8	247.2	238.2	240.0
75°	223.7	212.9	194.9	187.6	189.5
77.5°	171.4	158.8	148.0	142.5	144.3
80°	120.9	111.9	102.8	101.0	102.8
82.5°	72.2	66.8	65.0	65.0	65.0
85°	30.7	30.7	32.5	32.5	30.7
87.5°	12.6	10.8	10.8	12.6	12.6
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°	1.8	0.0	1.8	1.8	1.8
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	1.8	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	1.8
177.5°	0.0	0.0	1.8	1.8	1.8
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	13.94	15.54	14.31	15.86	16.17	13.18	14.78	13.54	15.09	15.41
	3H	15.57	17.01	15.94	17.34	17.70	14.73	16.17	15.11	16.50	16.86
	4H	16.12	17.48	16.52	17.82	18.20	15.25	16.61	15.65	16.95	17.33
	6H	16.47	17.73	16.88	18.09	18.48	15.58	16.84	15.99	17.20	17.59
	8H	16.55	17.75	16.97	18.14	18.54	15.66	16.86	16.09	17.25	17.65
	12H	16.57	17.72	17.00	18.10	18.53	15.69	16.84	16.12	17.22	17.65
4H	2H	14.41	15.76	14.80	16.11	16.49	13.78	15.14	14.18	15.49	15.86
	3H	16.24	17.37	16.65	17.77	18.17	15.53	16.66	15.94	17.06	17.46
	4H	16.91	17.93	17.34	18.34	18.78	16.15	17.17	16.58	17.59	18.02
	6H	17.36	18.25	17.82	18.70	19.15	16.58	17.47	17.04	17.91	18.37
	8H	17.47	18.30	17.93	18.75	19.21	16.69	17.52	17.15	17.97	18.43
	12H	17.52	18.26	18.00	18.74	19.21	16.75	17.49	17.23	17.97	18.44
8H	4H	17.09	17.93	17.56	18.37	18.83	16.41	17.24	16.87	17.69	18.15
	6H	17.63	18.32	18.12	18.81	19.28	16.92	17.61	17.42	18.10	18.58
	8H	17.78	18.39	18.29	18.90	19.39	17.08	17.69	17.59	18.20	18.69
	12H	17.85	18.40	18.36	18.89	19.45	17.17	17.72	17.68	18.21	18.77
12H	4H	17.10	17.85	17.58	18.32	18.79	16.43	17.18	16.91	17.65	18.12
	6H	17.64	18.26	18.15	18.76	19.25	16.95	17.57	17.46	18.07	18.56
	8H	17.82	18.37	18.33	18.86	19.42	17.15	17.69	17.65	18.18	18.74

END OF REPORT