

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: P572146

Luminaire Tested: 24ID-35-L840-DBR

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572146
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-L840-DBR
Description: 3500 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 4000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

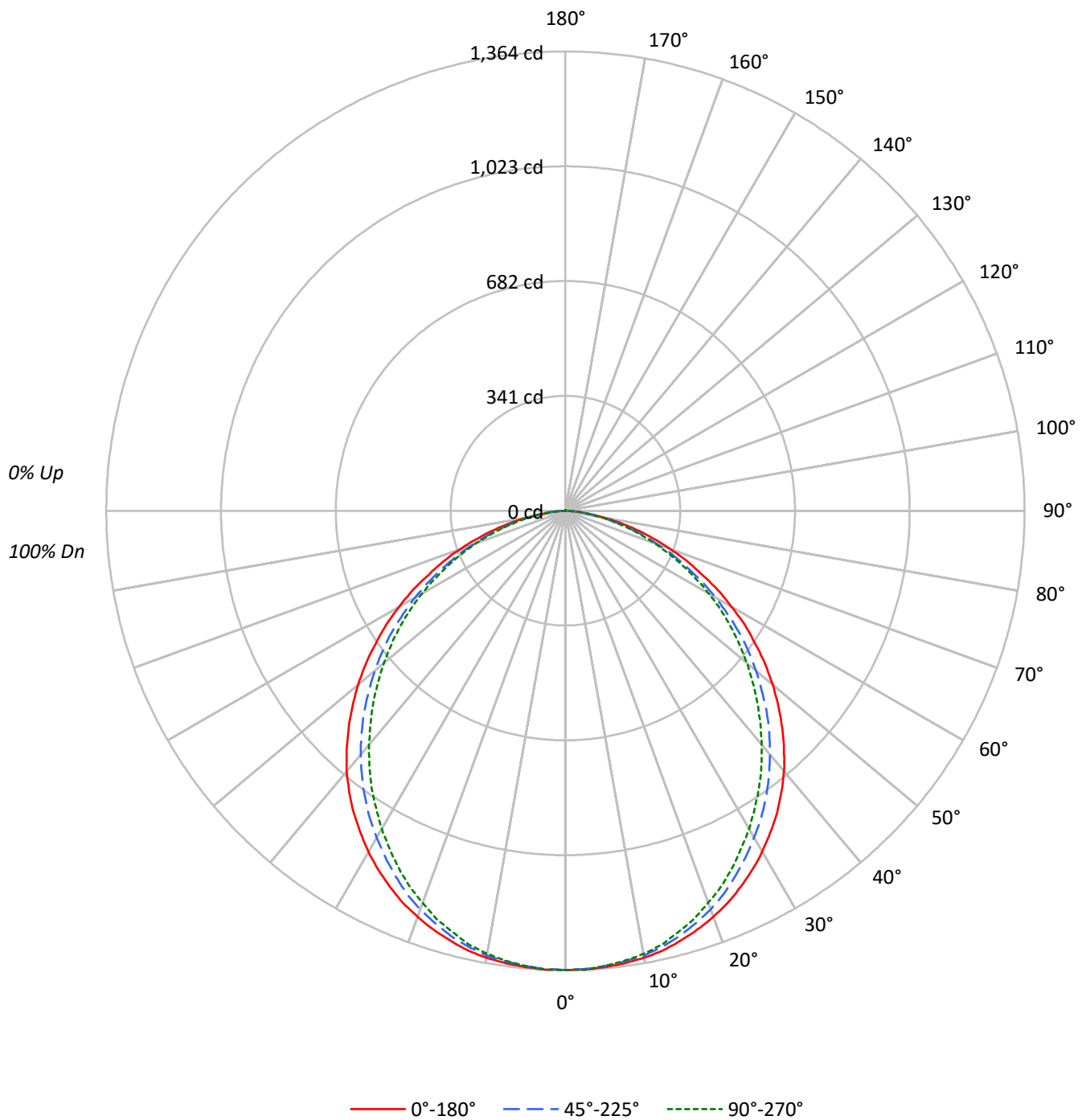
Lumens per Lamp: N/A
Luminaire Lumens: 3585.0 lumens
Efficiency: N/A
Efficacy: 117.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.19 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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

TEST NUMBER: P572146

CATALOG NUMBER: 24ID-35-L840-DBR

Luminous Intensity Polar Plot



TEST NUMBER: P572146

CATALOG NUMBER: 24ID-35-L840-DBR

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°	1835	1835	1835
5°	1838	1833	1833
10°	1842	1833	1825
15°	1842	1822	1805
20°	1838	1805	1775
25°	1830	1776	1739
30°	1817	1741	1695
35°	1801	1706	1648
40°	1775	1661	1593
45°	1733	1609	1536
50°	1682	1547	1473
55°	1614	1479	1405
60°	1531	1385	1324
65°	1422	1271	1221
70°	1302	1144	1109
75°	1129	983	956
80°	909	773	773
85°	460	486	460

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1733 cd/sqm

TEST NUMBER: P572146

CATALOG NUMBER: 24ID-35-L840-DBR

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.1	3.6
10°-20°	368.9	10.3
20°-30°	552.3	15.4
30°-40°	652.8	18.2
40°-50°	657.1	18.3
50°-60°	568.6	15.9
60°-70°	405.0	11.3
70°-80°	207.9	5.8
80°-90°	43.0	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°	1050.3	29.3
0°-40°	1703.2	47.5
0°-60°	2928.9	81.7
0°-90°	3584.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3585.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1364	1364	1364	1364	1364	
5°	1361	1359	1357	1355	1357	129
15°	1322	1317	1308	1298	1296	373
25°	1233	1222	1196	1177	1172	568
35°	1096	1079	1038	1012	1003	685
45°	911	891	846	816	807	702
55°	688	669	630	604	599	616
65°	446	431	399	385	384	445
75°	217	207	189	182	184	232
85°	30	30	32	32	30	45
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	

TEST NUMBER: P572146

CATALOG NUMBER: 24ID-35-L840-DBR

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1364.1	1364.1	1364.1	1364.1	1364.1
2.5°	1364.1	1362.3	1362.3	1360.6	1364.1
5°	1360.6	1358.8	1357.1	1355.3	1357.1
7.5°	1355.3	1351.8	1350.1	1346.6	1348.3
10°	1348.3	1344.8	1341.3	1336.1	1336.1
12.5°	1337.8	1334.3	1327.3	1320.3	1320.3
15°	1322.1	1316.8	1308.0	1297.5	1295.8
17.5°	1304.5	1297.5	1285.3	1273.0	1271.3
20°	1283.5	1276.5	1260.8	1245.0	1239.8
22.5°	1260.8	1252.0	1231.0	1213.5	1208.2
25°	1232.7	1222.2	1196.0	1176.7	1171.5
27.5°	1203.0	1189.0	1159.2	1138.2	1131.2
30°	1169.7	1155.7	1120.7	1099.7	1090.9
32.5°	1132.9	1117.2	1082.2	1055.9	1047.1
35°	1096.2	1078.7	1038.4	1012.1	1003.4
37.5°	1054.1	1034.9	992.9	964.8	956.1
40°	1010.4	991.1	945.6	917.6	907.1
42.5°	961.3	942.1	896.5	866.8	856.3
45°	910.6	891.3	845.8	816.0	807.2
47.5°	858.0	835.3	791.5	763.5	754.7
50°	803.7	781.0	738.9	710.9	703.9
52.5°	747.7	724.9	684.7	656.6	651.4
55°	688.2	668.9	630.4	604.1	598.9
57.5°	632.1	611.1	570.8	551.6	546.3
60°	569.1	551.6	514.8	497.3	492.0
62.5°	511.3	493.8	457.0	437.8	436.0
65°	446.5	430.8	399.2	385.2	383.5
67.5°	390.5	373.0	346.7	332.7	332.7
70°	331.0	315.2	290.7	281.9	281.9
72.5°	271.4	260.9	239.9	231.1	232.9
75°	217.1	206.6	189.1	182.1	183.9
77.5°	166.4	154.1	143.6	138.3	140.1
80°	117.3	108.6	99.8	98.1	99.8
82.5°	70.0	64.8	63.0	63.0	63.0
85°	29.8	29.8	31.5	31.5	29.8
87.5°	12.3	10.5	10.5	12.3	12.3
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: P572146

CATALOG NUMBER: 24ID-35-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°	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	13.84	15.44	14.20	15.75	16.07	13.07	14.67	13.44	14.99	15.30
	3H	15.46	16.91	15.84	17.23	17.59	14.62	16.07	15.00	16.39	16.75
	4H	16.01	17.37	16.41	17.72	18.10	15.14	16.50	15.54	16.85	17.23
	6H	16.37	17.62	16.78	17.99	18.38	15.48	16.73	15.89	17.10	17.49
	8H	16.44	17.64	16.87	18.03	18.43	15.56	16.76	15.98	17.14	17.54
	12H	16.47	17.61	16.90	18.00	18.43	15.59	16.74	16.02	17.12	17.55
4H	2H	14.30	15.66	14.70	16.01	16.38	13.68	15.04	14.08	15.38	15.76
	3H	16.13	17.27	16.54	17.66	18.07	15.43	16.56	15.84	16.96	17.36
	4H	16.80	17.82	17.23	18.24	18.67	16.05	17.07	16.48	17.48	17.92
	6H	17.26	18.15	17.72	18.59	19.05	16.48	17.37	16.93	17.81	18.27
	8H	17.37	18.20	17.83	18.64	19.11	16.59	17.42	17.05	17.86	18.33
	12H	17.41	18.16	17.89	18.63	19.10	16.64	17.39	17.12	17.86	18.33
8H	4H	16.99	17.82	17.45	18.26	18.73	16.31	17.14	16.77	17.58	18.05
	6H	17.53	18.21	18.02	18.70	19.18	16.82	17.51	17.31	18.00	18.47
	8H	17.67	18.29	18.18	18.80	19.28	16.97	17.59	17.48	18.10	18.58
	12H	17.75	18.29	18.26	18.78	19.35	17.07	17.61	17.57	18.10	18.66
12H	4H	17.00	17.74	17.48	18.22	18.69	16.33	17.07	16.81	17.55	18.02
	6H	17.53	18.15	18.05	18.66	19.15	16.84	17.46	17.36	17.97	18.46
	8H	17.72	18.26	18.23	18.76	19.32	17.04	17.59	17.55	18.08	18.64

END OF REPORT