

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: P572156

Luminaire Tested: 24ID-40-L850-DBR

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572156
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-40-L850-DBR
Description: 4000 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 5000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

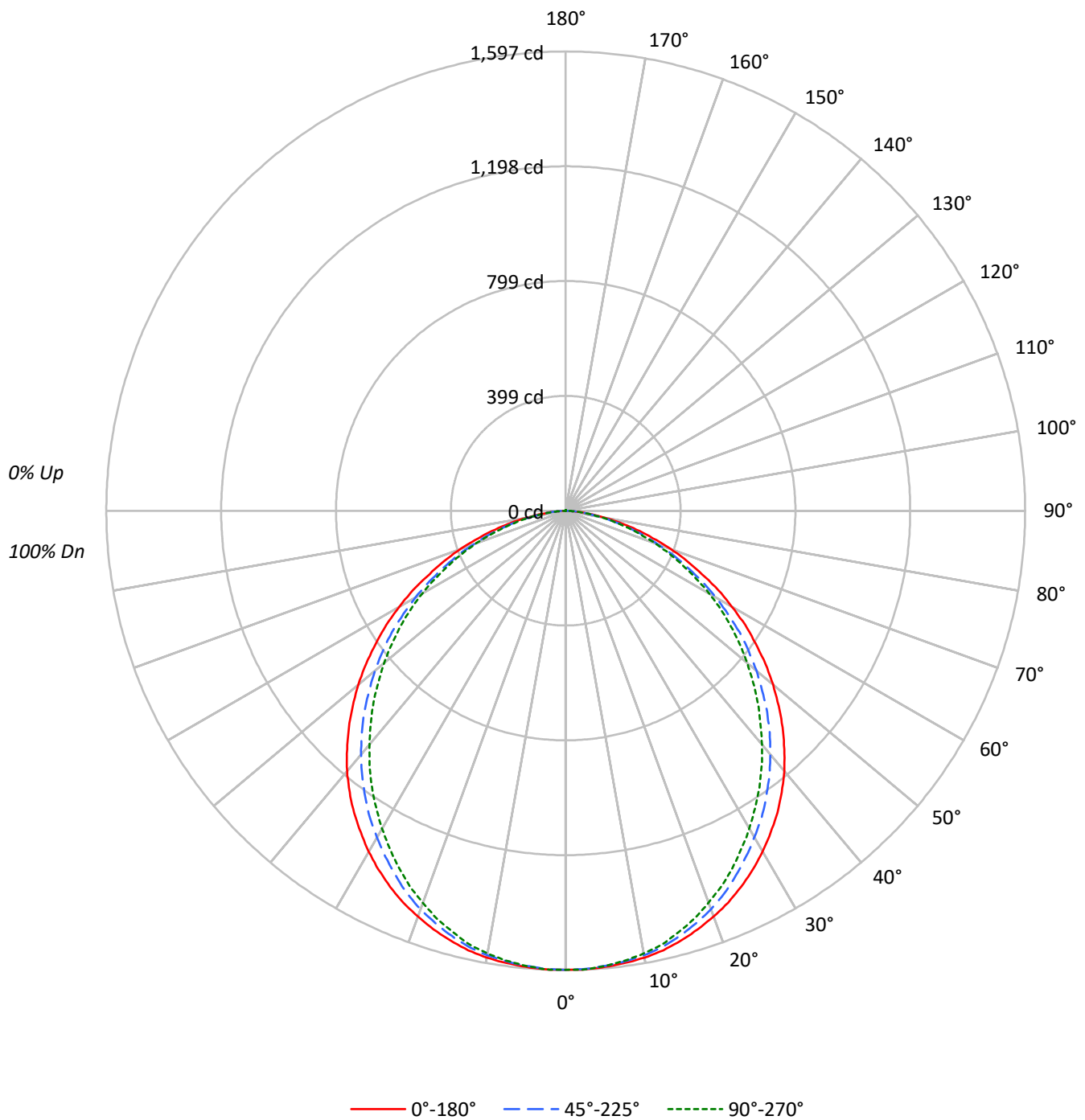
Lumens per Lamp: N/A
Luminaire Lumens: 4196.0 lumens
Efficiency: N/A
Efficacy: 119.2 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.19 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35.2
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: P572156

CATALOG NUMBER: 24ID-40-L850-DBR

Luminous Intensity Polar Plot



TEST NUMBER: P572156

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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°	2148	2148	2148
5°	2151	2145	2145
10°	2156	2145	2137
15°	2155	2133	2113
20°	2151	2113	2078
25°	2142	2078	2036
30°	2127	2038	1984
35°	2107	1996	1929
40°	2077	1944	1865
45°	2028	1884	1798
50°	1969	1810	1725
55°	1890	1731	1644
60°	1792	1622	1550
65°	1664	1488	1429
70°	1524	1338	1298
75°	1321	1150	1119
80°	1064	905	905
85°	537	570	537

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2028 cd/sqm

TEST NUMBER: P572156

CATALOG NUMBER: 24ID-40-L850-DBR

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.0	3.6
10°-20°	431.8	10.3
20°-30°	646.5	15.4
30°-40°	764.1	18.2
40°-50°	769.1	18.3
50°-60°	665.6	15.9
60°-70°	474.0	11.3
70°-80°	243.4	5.8
80°-90°	50.3	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°	0.2	0.0
170°-180°	0.0	0.0
0°-30°	1229.3	29.3
0°-40°	1993.4	47.5
0°-60°	3428.1	81.7
0°-90°	4195.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4196.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1597	1597	1597	1597	1597	
5°	1592	1590	1588	1586	1588	152
15°	1547	1541	1531	1519	1517	437
25°	1443	1431	1400	1377	1371	665
35°	1283	1262	1215	1185	1174	802
45°	1066	1043	990	955	945	822
55°	806	783	738	707	701	721
65°	523	504	467	451	449	521
75°	254	242	221	213	215	271
85°	35	35	37	37	35	52
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: P572156

CATALOG NUMBER: 24ID-40-L850-DBR

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1596.6	1596.6	1596.6	1596.6	1596.6
2.5°	1596.6	1594.5	1594.5	1592.5	1596.6
5°	1592.5	1590.4	1588.4	1586.3	1588.4
7.5°	1586.3	1582.2	1580.2	1576.1	1578.1
10°	1578.1	1574.0	1569.9	1563.8	1563.8
12.5°	1565.8	1561.7	1553.5	1545.3	1545.3
15°	1547.4	1541.2	1531.0	1518.7	1516.6
17.5°	1526.9	1518.7	1504.3	1490.0	1487.9
20°	1502.3	1494.1	1475.6	1457.2	1451.0
22.5°	1475.6	1465.4	1440.8	1420.3	1414.2
25°	1442.8	1430.6	1399.8	1377.3	1371.1
27.5°	1408.0	1391.6	1356.8	1332.2	1324.0
30°	1369.1	1352.7	1311.7	1287.1	1276.8
32.5°	1326.0	1307.6	1266.6	1235.8	1225.6
35°	1283.0	1262.5	1215.4	1184.6	1174.4
37.5°	1233.8	1211.3	1162.1	1129.3	1119.0
40°	1182.6	1160.0	1106.7	1073.9	1061.6
42.5°	1125.2	1102.6	1049.3	1014.5	1002.2
45°	1065.7	1043.2	989.9	955.1	944.8
47.5°	1004.3	977.6	926.4	893.6	883.3
50°	940.7	914.1	864.9	832.1	823.9
52.5°	875.1	848.5	801.4	768.6	762.4
55°	805.5	782.9	737.8	707.1	700.9
57.5°	739.9	715.3	668.1	645.6	639.4
60°	666.1	645.6	602.6	582.1	575.9
62.5°	598.5	578.0	534.9	512.4	510.3
65°	522.6	504.2	467.3	450.9	448.8
67.5°	457.0	436.5	405.8	389.4	389.4
70°	387.4	368.9	340.2	330.0	330.0
72.5°	317.7	305.4	280.8	270.5	272.6
75°	254.1	241.8	221.3	213.1	215.2
77.5°	194.7	180.4	168.1	161.9	164.0
80°	137.3	127.1	116.8	114.8	116.8
82.5°	82.0	75.8	73.8	73.8	73.8
85°	34.8	34.8	36.9	36.9	34.8
87.5°	14.3	12.3	12.3	14.3	14.3
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: P572156

CATALOG NUMBER: 24ID-40-L850-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°	2.0	0.0	2.0	2.0	2.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	2.0	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	2.0
177.5°	0.0	0.0	2.0	2.0	2.0
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	14.39	15.99	14.75	16.30	16.62	13.62	15.22	13.98	15.53	15.85
	3H	16.01	17.45	16.39	17.78	18.14	15.17	16.61	15.55	16.94	17.30
	4H	16.56	17.92	16.96	18.27	18.64	15.69	17.05	16.09	17.40	17.77
	6H	16.91	18.17	17.32	18.53	18.93	16.02	17.28	16.43	17.64	18.04
	8H	16.99	18.19	17.42	18.58	18.98	16.10	17.30	16.53	17.69	18.09
	12H	17.01	18.16	17.44	18.54	18.97	16.13	17.28	16.56	17.66	18.09
4H	2H	14.85	16.21	15.25	16.55	16.93	14.23	15.58	14.62	15.93	16.31
	3H	16.68	17.81	17.09	18.21	18.61	15.98	17.11	16.39	17.51	17.91
	4H	17.35	18.37	17.78	18.78	19.22	16.60	17.62	17.03	18.03	18.47
	6H	17.81	18.70	18.26	19.14	19.59	17.03	17.91	17.48	18.36	18.81
	8H	17.91	18.75	18.38	19.19	19.65	17.14	17.97	17.60	18.41	18.88
	12H	17.96	18.70	18.44	19.18	19.65	17.19	17.93	17.67	18.41	18.88
8H	4H	17.54	18.37	18.00	18.81	19.28	16.86	17.69	17.32	18.13	18.60
	6H	18.07	18.76	18.57	19.25	19.73	17.37	18.05	17.86	18.54	19.02
	8H	18.22	18.84	18.73	19.34	19.83	17.52	18.14	18.03	18.64	19.13
	12H	18.30	18.84	18.80	19.33	19.89	17.61	18.16	18.12	18.65	19.21
12H	4H	17.54	18.29	18.02	18.76	19.23	16.87	17.62	17.35	18.09	18.56
	6H	18.08	18.70	18.59	19.21	19.69	17.39	18.01	17.90	18.52	19.00
	8H	18.27	18.81	18.77	19.30	19.86	17.59	18.13	18.10	18.62	19.19