

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: P572152

Luminaire Tested: 24ID-40-L835-DBR

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572152
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-L835-DBR
Description: 4000 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 3500K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

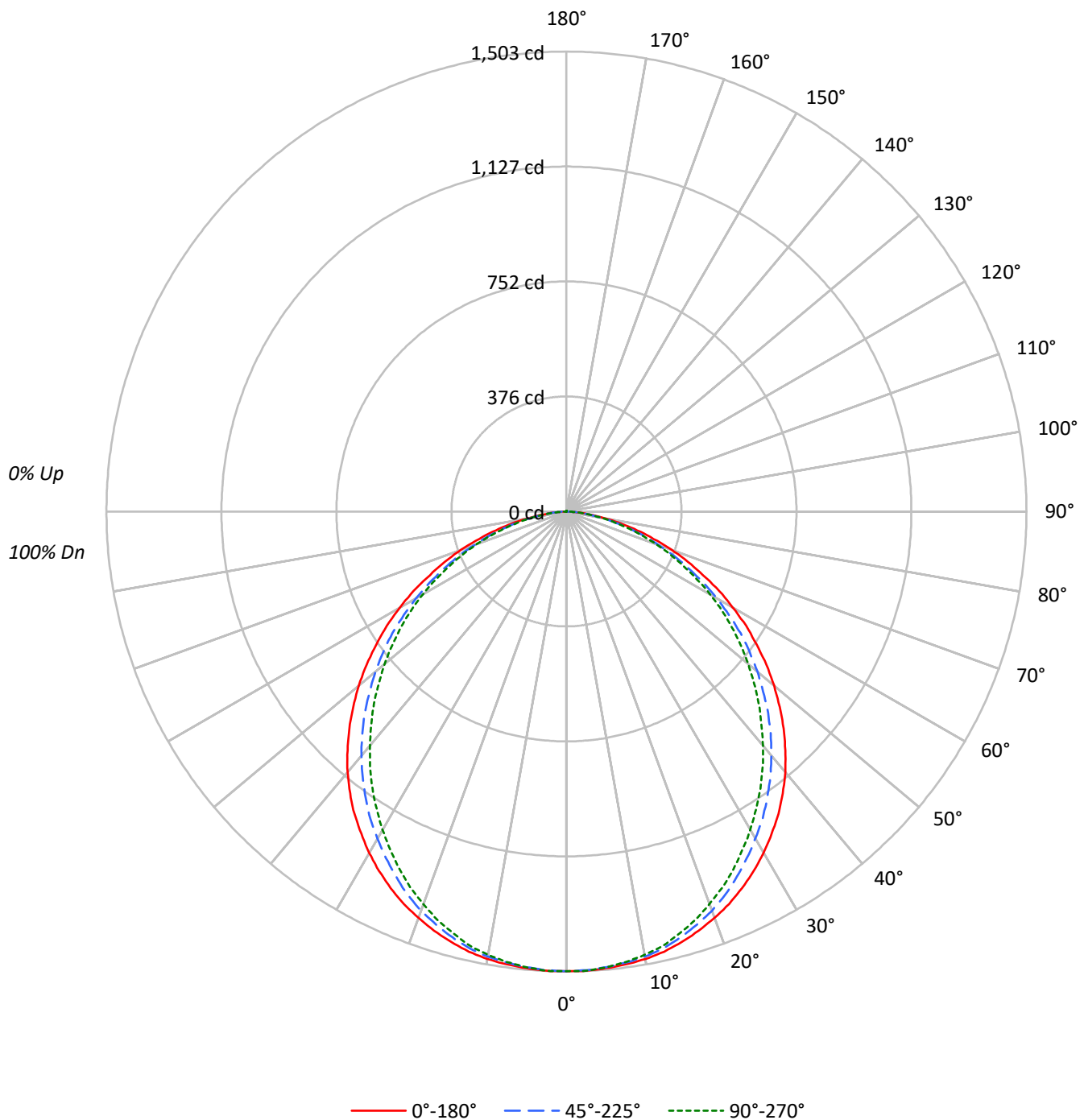
Lumens per Lamp: N/A
Luminaire Lumens: 3949.0 lumens
Efficiency: N/A
Efficacy: 112.2 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.19 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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: P572152

CATALOG NUMBER: 24ID-40-L835-DBR

Luminous Intensity Polar Plot



TEST NUMBER: P572152

CATALOG NUMBER: 24ID-40-L835-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
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°	2022	2022	2022
5°	2024	2019	2019
10°	2029	2019	2011
15°	2029	2007	1988
20°	2024	1989	1955
25°	2016	1956	1916
30°	2002	1918	1867
35°	1983	1879	1815
40°	1955	1829	1755
45°	1909	1773	1692
50°	1853	1704	1623
55°	1778	1629	1548
60°	1687	1526	1459
65°	1566	1400	1345
70°	1434	1260	1221
75°	1243	1083	1053
80°	1001	852	852
85°	506	536	506

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1909 cd/sqm

TEST NUMBER: P572152

CATALOG NUMBER: 24ID-40-L835-DBR

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.2	3.6
10°-20°	406.4	10.3
20°-30°	608.4	15.4
30°-40°	719.1	18.2
40°-50°	723.8	18.3
50°-60°	626.4	15.9
60°-70°	446.1	11.3
70°-80°	229.0	5.8
80°-90°	47.4	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°	1157.0	29.3
0°-40°	1876.1	47.5
0°-60°	3226.3	81.7
0°-90°	3948.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3949.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1503	1503	1503	1503	1503	
5°	1499	1497	1495	1493	1495	143
15°	1456	1450	1441	1429	1427	411
25°	1358	1346	1317	1296	1290	626
35°	1208	1188	1144	1115	1105	754
45°	1003	982	932	899	889	773
55°	758	737	694	666	660	678
65°	492	474	440	424	422	490
75°	239	228	208	201	202	255
85°	33	33	35	35	33	49
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: P572152

CATALOG NUMBER: 24ID-40-L835-DBR

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1502.6	1502.6	1502.6	1502.6	1502.6
2.5°	1502.6	1500.6	1500.6	1498.7	1502.6
5°	1498.7	1496.8	1494.9	1492.9	1494.9
7.5°	1492.9	1489.1	1487.1	1483.3	1485.2
10°	1485.2	1481.4	1477.5	1471.7	1471.7
12.5°	1473.6	1469.8	1462.1	1454.4	1454.4
15°	1456.3	1450.5	1440.9	1429.3	1427.4
17.5°	1437.0	1429.3	1415.8	1402.3	1400.3
20°	1413.9	1406.1	1388.8	1371.4	1365.6
22.5°	1388.8	1379.1	1356.0	1336.7	1330.9
25°	1357.9	1346.3	1317.4	1296.2	1290.4
27.5°	1325.1	1309.7	1276.9	1253.8	1246.0
30°	1288.5	1273.0	1234.5	1211.3	1201.7
32.5°	1248.0	1230.6	1192.0	1163.1	1153.5
35°	1207.5	1188.2	1143.8	1114.9	1105.2
37.5°	1161.2	1140.0	1093.7	1062.8	1053.2
40°	1112.9	1091.7	1041.6	1010.7	999.1
42.5°	1058.9	1037.7	987.6	954.8	943.2
45°	1003.0	981.8	931.6	898.8	889.2
47.5°	945.1	920.1	871.8	841.0	831.3
50°	885.3	860.3	814.0	783.1	775.4
52.5°	823.6	798.5	754.2	723.3	717.5
55°	758.0	736.8	694.4	665.5	659.7
57.5°	696.3	673.2	628.8	607.6	601.8
60°	626.9	607.6	567.1	547.8	542.0
62.5°	563.2	543.9	503.4	482.2	480.3
65°	491.9	474.5	439.8	424.3	422.4
67.5°	430.1	410.8	381.9	366.5	366.5
70°	364.6	347.2	320.2	310.5	310.5
72.5°	299.0	287.4	264.3	254.6	256.5
75°	239.2	227.6	208.3	200.6	202.5
77.5°	183.2	169.7	158.2	152.4	154.3
80°	129.2	119.6	109.9	108.0	109.9
82.5°	77.2	71.4	69.4	69.4	69.4
85°	32.8	32.8	34.7	34.7	32.8
87.5°	13.5	11.6	11.6	13.5	13.5
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: P572152

CATALOG NUMBER: 24ID-40-L835-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°	1.9	0.0	1.9	1.9	1.9
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	1.9	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	1.9
177.5°	0.0	0.0	1.9	1.9	1.9
180°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P572152
CATALOG NUMBER: 24ID-40-L835-DBR

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	14.17	15.78	14.54	16.09	16.41	13.41	15.01	13.77	15.32	15.64
	3H	15.80	17.24	16.18	17.57	17.93	14.96	16.40	15.34	16.73	17.09
	4H	16.35	17.71	16.75	18.06	18.43	15.48	16.84	15.88	17.19	17.56
	6H	16.70	17.96	17.11	18.32	18.72	15.81	17.07	16.22	17.43	17.82
	8H	16.78	17.98	17.21	18.37	18.77	15.89	17.09	16.32	17.48	17.88
	12H	16.80	17.95	17.23	18.33	18.76	15.92	17.07	16.35	17.45	17.88
4H	2H	14.64	16.00	15.04	16.34	16.72	14.01	15.37	14.41	15.72	16.10
	3H	16.47	17.60	16.88	18.00	18.40	15.76	16.90	16.17	17.29	17.69
	4H	17.14	18.16	17.57	18.57	19.01	16.39	17.41	16.82	17.82	18.26
	6H	17.60	18.49	18.05	18.93	19.38	16.81	17.70	17.27	18.14	18.60
	8H	17.70	18.53	18.17	18.98	19.44	16.92	17.76	17.39	18.20	18.66
	12H	17.75	18.49	18.23	18.97	19.44	16.98	17.72	17.46	18.20	18.67
8H	4H	17.33	18.16	17.79	18.60	19.07	16.64	17.48	17.11	17.92	18.38
	6H	17.86	18.55	18.36	19.04	19.51	17.15	17.84	17.65	18.33	18.81
	8H	18.01	18.62	18.52	19.13	19.62	17.31	17.93	17.82	18.43	18.92
	12H	18.08	18.63	18.59	19.12	19.68	17.40	17.95	17.91	18.44	19.00
12H	4H	17.33	18.08	17.81	18.55	19.02	16.66	17.41	17.14	17.88	18.35
	6H	17.87	18.49	18.38	19.00	19.48	17.18	17.80	17.69	18.31	18.79
	8H	18.06	18.60	18.56	19.09	19.65	17.38	17.92	17.88	18.41	18.98