

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: P572154

Luminaire Tested: 24ID-40-L840-DBR

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572154
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-L840-DBR
Description: 4000 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 4000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

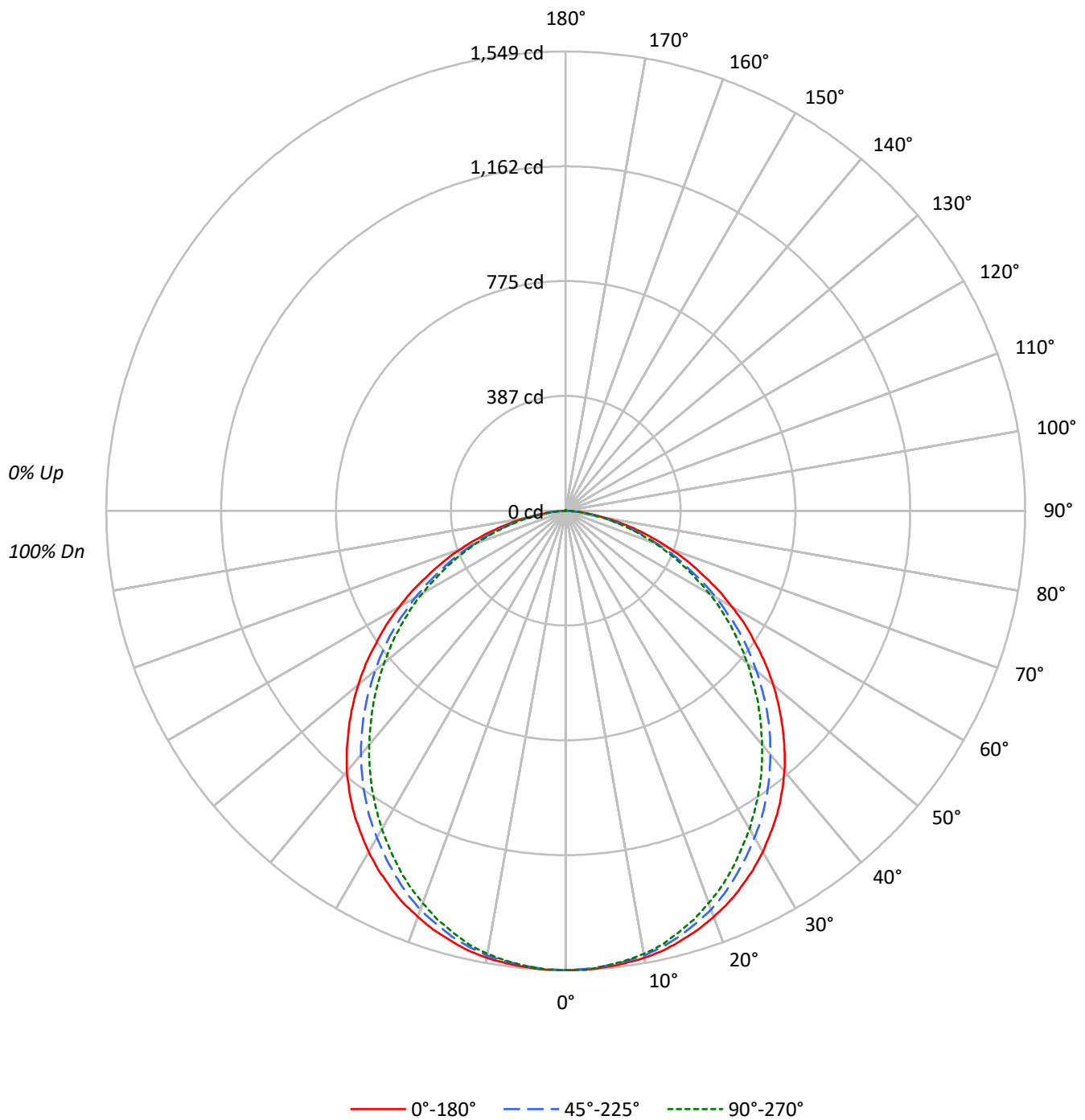
Lumens per Lamp: N/A
Luminaire Lumens: 4072.0 lumens
Efficiency: N/A
Efficacy: 115.7 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.19 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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

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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
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°	2085	2085	2085
5°	2087	2082	2082
10°	2092	2081	2073
15°	2092	2070	2050
20°	2087	2050	2016
25°	2079	2017	1975
30°	2064	1978	1925
35°	2045	1937	1872
40°	2016	1886	1810
45°	1968	1828	1745
50°	1911	1757	1674
55°	1834	1680	1596
60°	1739	1573	1504
65°	1615	1444	1387
70°	1479	1299	1260
75°	1282	1117	1085
80°	1033	879	879
85°	522	553	522

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 1968 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.6	3.6
10°-20°	419.0	10.3
20°-30°	627.4	15.4
30°-40°	741.5	18.2
40°-50°	746.4	18.3
50°-60°	645.9	15.9
60°-70°	460.0	11.3
70°-80°	236.2	5.8
80°-90°	48.9	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°	1193.0	29.3
0°-40°	1934.5	47.5
0°-60°	3326.8	81.7
0°-90°	4071.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4072.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1549	1549	1549	1549	1549	
5°	1545	1543	1541	1539	1541	147
15°	1502	1496	1486	1474	1472	424
25°	1400	1388	1358	1337	1331	645
35°	1245	1225	1179	1150	1140	778
45°	1034	1012	961	927	917	797
55°	782	760	716	686	680	699
65°	507	489	454	438	436	505
75°	247	235	215	207	209	263
85°	34	34	36	36	34	51
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°	1549.4	1549.4	1549.4	1549.4	1549.4
2.5°	1549.4	1547.4	1547.4	1545.4	1549.4
5°	1545.4	1543.4	1541.4	1539.4	1541.4
7.5°	1539.4	1535.5	1533.5	1529.5	1531.5
10°	1531.5	1527.5	1523.5	1517.6	1517.6
12.5°	1519.5	1515.6	1507.6	1499.7	1499.7
15°	1501.6	1495.7	1485.7	1473.8	1471.8
17.5°	1481.8	1473.8	1459.9	1446.0	1444.0
20°	1457.9	1449.9	1432.0	1414.1	1408.2
22.5°	1432.0	1422.1	1398.2	1378.3	1372.4
25°	1400.2	1388.3	1358.4	1336.6	1330.6
27.5°	1366.4	1350.5	1316.7	1292.8	1284.9
30°	1328.6	1312.7	1272.9	1249.1	1239.1
32.5°	1286.8	1268.9	1229.2	1199.3	1189.4
35°	1245.1	1225.2	1179.4	1149.6	1139.7
37.5°	1197.3	1175.5	1127.7	1095.9	1086.0
40°	1147.6	1125.7	1074.0	1042.2	1030.3
42.5°	1091.9	1070.0	1018.3	984.5	972.6
45°	1034.2	1012.4	960.7	926.8	916.9
47.5°	974.6	948.7	899.0	867.2	857.2
50°	912.9	887.1	839.3	807.5	799.6
52.5°	849.3	823.4	777.7	745.9	739.9
55°	781.7	759.8	716.0	686.2	680.2
57.5°	718.0	694.1	648.4	626.5	620.5
60°	646.4	626.5	584.7	564.9	558.9
62.5°	580.8	560.9	519.1	497.2	495.2
65°	507.2	489.3	453.5	437.6	435.6
67.5°	443.5	423.6	393.8	377.9	377.9
70°	375.9	358.0	330.2	320.2	320.2
72.5°	308.3	296.4	272.5	262.5	264.5
75°	246.6	234.7	214.8	206.8	208.8
77.5°	188.9	175.0	163.1	157.1	159.1
80°	133.3	123.3	113.4	111.4	113.4
82.5°	79.6	73.6	71.6	71.6	71.6
85°	33.8	33.8	35.8	35.8	33.8
87.5°	13.9	11.9	11.9	13.9	13.9
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°	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	14.28	15.88	14.65	16.20	16.51	13.51	15.12	13.88	15.43	15.74
	3H	15.91	17.35	16.28	17.68	18.04	15.07	16.51	15.44	16.84	17.20
	4H	16.46	17.81	16.86	18.16	18.54	15.59	16.94	15.99	17.29	17.67
	6H	16.81	18.07	17.22	18.43	18.82	15.92	17.17	16.33	17.54	17.93
	8H	16.89	18.09	17.31	18.47	18.87	16.00	17.20	16.42	17.59	17.99
	12H	16.91	18.06	17.34	18.44	18.87	16.03	17.18	16.46	17.56	17.99
4H	2H	14.74	16.10	15.14	16.45	16.83	14.12	15.48	14.52	15.83	16.20
	3H	16.58	17.71	16.99	18.11	18.51	15.87	17.00	16.28	17.40	17.80
	4H	17.25	18.27	17.68	18.68	19.12	16.49	17.51	16.92	17.93	18.36
	6H	17.70	18.59	18.16	19.03	19.49	16.92	17.81	17.38	18.25	18.71
	8H	17.81	18.64	18.27	19.08	19.55	17.03	17.86	17.49	18.30	18.77
	12H	17.85	18.60	18.33	19.08	19.55	17.09	17.83	17.57	18.31	18.78
8H	4H	17.43	18.26	17.89	18.71	19.17	16.75	17.58	17.21	18.03	18.49
	6H	17.97	18.66	18.46	19.14	19.62	17.26	17.95	17.76	18.44	18.91
	8H	18.11	18.73	18.63	19.24	19.73	17.42	18.03	17.93	18.54	19.03
	12H	18.19	18.74	18.70	19.23	19.79	17.51	18.05	18.02	18.54	19.11
12H	4H	17.44	18.18	17.92	18.66	19.13	16.77	17.51	17.25	17.99	18.46
	6H	17.98	18.59	18.49	19.10	19.59	17.29	17.90	17.80	18.41	18.90
	8H	18.16	18.71	18.67	19.20	19.76	17.48	18.03	17.99	18.52	19.08