

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: P572159

Luminaire Tested: 24ID-45-L835-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572159
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2109-397-8)
Test Lab: INNOVATION CENTER
Issue Date: 10/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: 24ID-45-L835-DBD
Description: 4500 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN DROPPED DOUBLE BARRELL LENS AND 3500K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

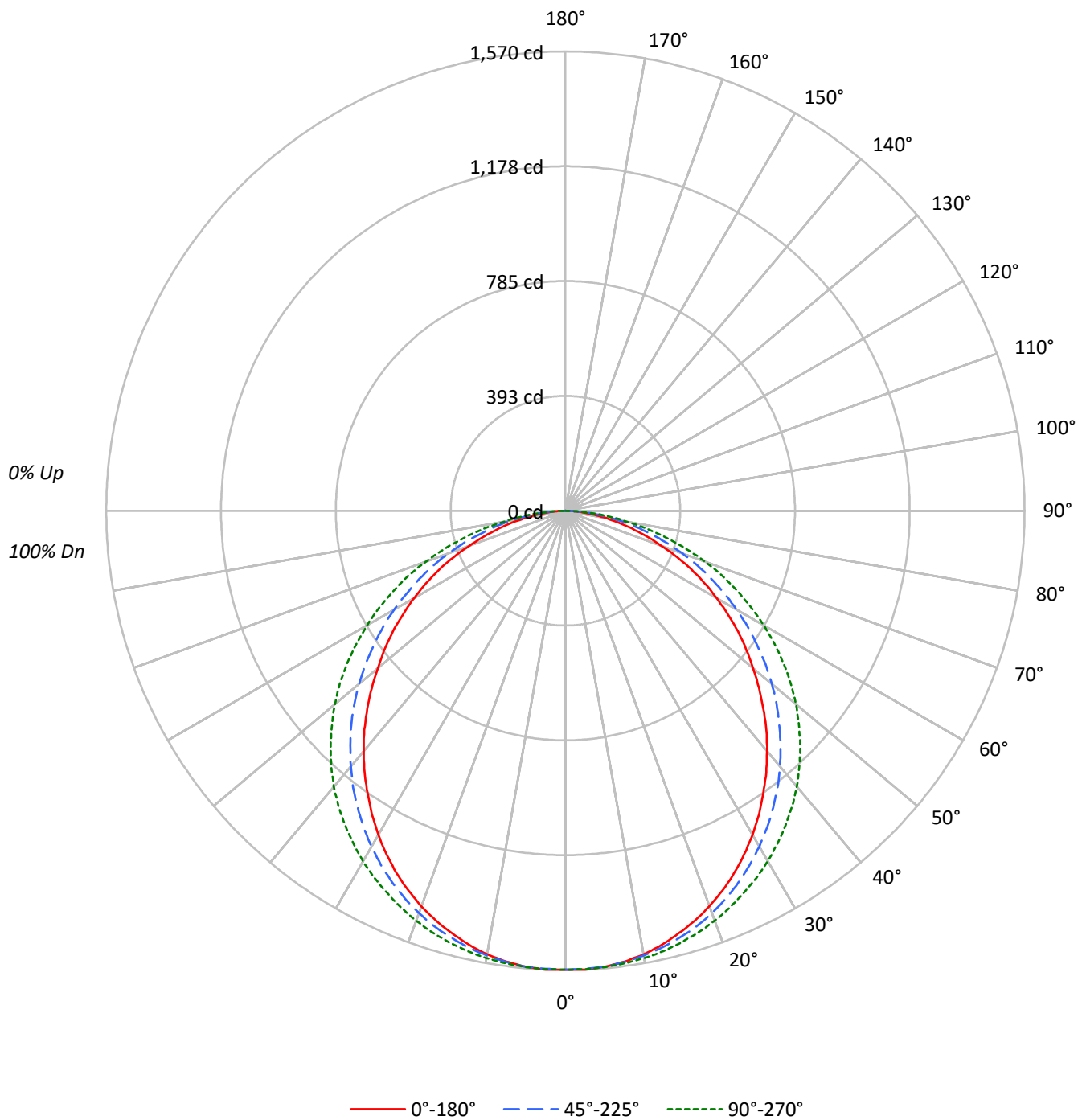
Lumens per Lamp: N/A
Luminaire Lumens: 4476.0 lumens
Efficiency: N/A
Efficacy: 111.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 40
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	104	100	96	106	102	98	94	97	94	91		93	91	88		90
2	99	90	84	78	96	89	82	77	85	80	75		82	77	73		79
3	90	79	71	65	87	78	70	64	75	68	63		72	66	62		69
4	82	70	61	55	80	69	61	54	66	59	54		64	58	53		62
5	76	63	54	47	74	62	53	47	59	52	46		58	51	46		56
6	70	56	47	41	68	56	47	41	54	46	40		52	45	40		50
7	65	51	42	36	63	50	42	36	49	41	36		47	41	36		46
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		42
9	56	43	35	29	55	42	34	29	41	34	29		40	33	29		39
10	53	40	32	26	52	39	31	26	38	31	26		37	31	26		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2111	2111	2111
5°	2105	2097	2100
10°	2088	2077	2091
15°	2061	2056	2082
20°	2030	2031	2073
25°	1990	1998	2061
30°	1941	1960	2052
35°	1881	1916	2037
40°	1820	1866	2021
45°	1749	1809	1994
50°	1669	1745	1959
55°	1595	1664	1910
60°	1498	1576	1841
65°	1387	1472	1749
70°	1228	1340	1616
75°	1061	1155	1420
80°	839	939	1110
85°	578	581	667

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 1994 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.7	3.3
10°-20°	426.8	9.5
20°-30°	646.9	14.5
30°-40°	778.2	17.4
40°-50°	803.3	17.9
50°-60°	721.8	16.1
60°-70°	549.6	12.3
70°-80°	315.6	7.1
80°-90°	85.1	1.9
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°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1222.4	27.3
0°-40°	2000.5	44.7
0°-60°	3525.7	78.8
0°-90°	4476.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4476.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1569	1569	1569	1569	1569	
5°	1564	1566	1564	1563	1566	149
15°	1496	1503	1511	1521	1528	422
25°	1367	1380	1402	1431	1442	629
35°	1179	1199	1238	1292	1313	738
45°	958	980	1035	1106	1135	739
55°	720	739	799	876	911	643
65°	474	496	550	614	648	469
75°	236	258	295	338	358	250
85°	55	64	76	80	84	65
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1568.9	1568.9	1568.9	1568.9	1568.9
2.5°	1570.4	1570.4	1567.5	1566.0	1568.9
5°	1564.5	1566.0	1564.5	1563.1	1566.0
7.5°	1554.4	1555.8	1555.8	1557.3	1560.2
10°	1539.8	1542.7	1544.2	1548.5	1552.9
12.5°	1520.9	1523.8	1529.6	1536.9	1542.7
15°	1496.1	1503.4	1510.7	1520.9	1528.2
17.5°	1469.9	1478.7	1490.3	1503.4	1512.1
20°	1439.4	1449.6	1464.1	1481.6	1491.8
22.5°	1404.4	1417.5	1435.0	1456.8	1468.5
25°	1366.6	1379.7	1401.5	1430.6	1442.3
27.5°	1324.4	1339.0	1365.2	1398.6	1414.6
30°	1279.3	1295.3	1325.9	1366.6	1384.1
32.5°	1231.3	1248.7	1283.7	1330.2	1349.1
35°	1178.9	1199.2	1238.5	1292.4	1312.8
37.5°	1127.9	1148.3	1192.0	1250.2	1273.5
40°	1072.6	1094.4	1141.0	1205.1	1231.3
42.5°	1017.3	1036.2	1088.6	1157.0	1184.7
45°	957.6	979.5	1034.8	1106.1	1135.2
47.5°	898.0	921.3	979.5	1052.2	1082.8
50°	836.8	861.6	921.3	995.5	1029.0
52.5°	780.1	800.5	861.6	937.3	972.2
55°	720.4	739.3	799.0	876.1	911.1
57.5°	657.8	679.7	739.3	812.1	847.0
60°	596.7	618.5	675.3	748.1	783.0
62.5°	537.0	557.4	612.7	682.6	717.5
65°	474.5	496.3	550.1	614.2	647.6
67.5°	413.3	436.6	487.6	545.8	580.7
70°	347.8	374.0	423.5	477.4	505.0
72.5°	289.6	314.4	359.5	407.5	433.7
75°	235.8	257.6	295.4	337.6	358.0
77.5°	181.9	205.2	238.7	270.7	286.7
80°	133.9	155.7	181.9	203.8	211.0
82.5°	91.7	107.7	126.6	138.3	148.4
85°	55.3	64.0	75.7	80.0	84.4
87.5°	23.3	26.2	30.6	29.1	30.6
90°	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	13.20	14.84	13.57	15.16	15.47	14.67	16.31	15.03	16.62	16.94
	3H	14.77	16.25	15.14	16.58	16.94	16.57	18.05	16.94	18.38	18.74
	4H	15.29	16.69	15.68	17.03	17.41	17.27	18.67	17.67	19.02	19.39
	6H	15.62	16.91	16.03	17.28	17.67	17.76	19.06	18.17	19.43	19.82
	8H	15.70	16.94	16.12	17.33	17.73	17.91	19.15	18.33	19.54	19.93
	12H	15.74	16.93	16.17	17.31	17.74	17.99	19.17	18.41	19.56	19.98
4H	2H	13.95	15.35	14.35	15.70	16.08	15.12	16.52	15.52	16.87	17.25
	3H	15.72	16.90	16.13	17.29	17.69	17.24	18.41	17.65	18.81	19.21
	4H	16.35	17.41	16.78	17.82	18.26	18.07	19.14	18.50	19.55	19.98
	6H	16.78	17.71	17.23	18.15	18.60	18.70	19.63	19.15	20.07	20.52
	8H	16.89	17.76	17.35	18.21	18.67	18.88	19.75	19.34	20.20	20.66
	12H	16.96	17.74	17.44	18.22	18.69	19.00	19.78	19.48	20.26	20.73
8H	4H	16.73	17.60	17.19	18.04	18.50	18.27	19.14	18.73	19.58	20.04
	6H	17.27	17.99	17.76	18.48	18.95	18.99	19.72	19.48	20.20	20.68
	8H	17.43	18.08	17.94	18.59	19.07	19.24	19.89	19.75	20.39	20.88
	12H	17.55	18.12	18.05	18.61	19.17	19.41	19.98	19.91	20.47	21.03
12H	4H	16.78	17.56	17.26	18.03	18.50	18.27	19.06	18.75	19.53	20.00
	6H	17.34	17.99	17.85	18.50	18.98	19.01	19.66	19.52	20.16	20.65
	8H	17.56	18.13	18.06	18.62	19.18	19.30	19.87	19.80	20.36	20.92