

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: P572163

Luminaire Tested: 24ID-45-L850-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572163
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-L850-DBD
Description: 4500 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN DROPPED DOUBLE BARRELL LENS AND 5000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

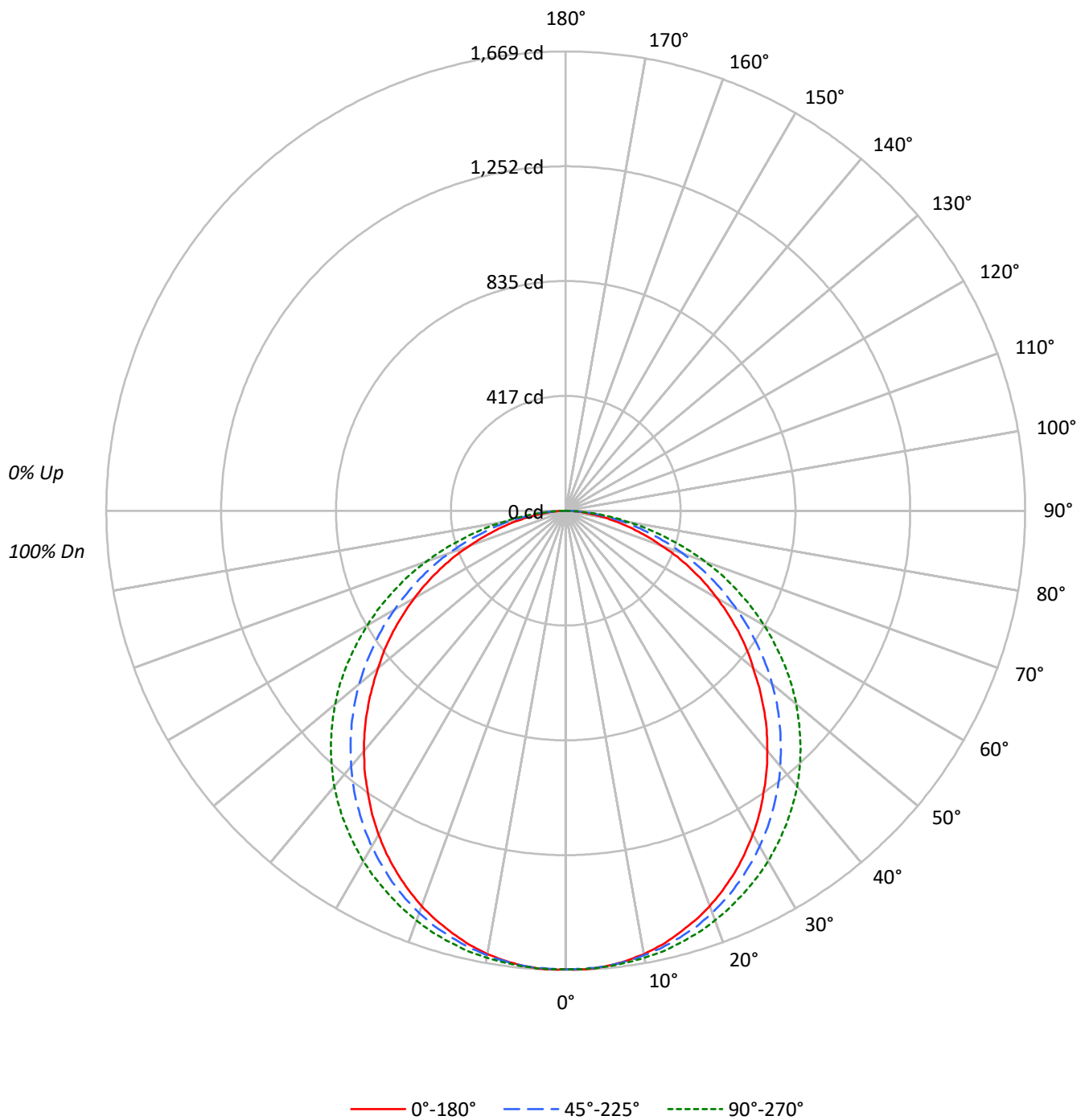
Lumens per Lamp: N/A
Luminaire Lumens: 4755.9 lumens
Efficiency: N/A
Efficacy: 118.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.17')
CIE Type: Direct

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°	2243	2243	2243
5°	2237	2228	2231
10°	2219	2207	2222
15°	2190	2184	2212
20°	2157	2158	2203
25°	2115	2123	2190
30°	2062	2082	2180
35°	1999	2036	2165
40°	1934	1982	2148
45°	1859	1922	2119
50°	1773	1854	2082
55°	1695	1768	2029
60°	1591	1674	1956
65°	1473	1564	1859
70°	1305	1424	1718
75°	1127	1227	1508
80°	892	998	1180
85°	615	617	709

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 2119 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.0	3.3
10°-20°	453.5	9.5
20°-30°	687.3	14.5
30°-40°	826.8	17.4
40°-50°	853.6	17.9
50°-60°	767.0	16.1
60°-70°	584.0	12.3
70°-80°	335.3	7.0
80°-90°	90.4	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°	1298.8	27.3
0°-40°	2125.7	44.7
0°-60°	3746.2	78.8
0°-90°	4755.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4755.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1667	1667	1667	1667	1667	
5°	1662	1664	1662	1661	1664	158
15°	1590	1598	1605	1616	1624	448
25°	1452	1466	1489	1520	1532	668
35°	1253	1274	1316	1373	1395	784
45°	1018	1041	1100	1175	1206	785
55°	766	786	849	931	968	683
65°	504	527	584	653	688	499
75°	250	274	314	359	380	266
85°	59	68	80	85	90	69
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1667.0	1667.0	1667.0	1667.0	1667.0
2.5°	1668.6	1668.6	1665.5	1664.0	1667.0
5°	1662.4	1664.0	1662.4	1660.9	1664.0
7.5°	1651.6	1653.1	1653.1	1654.7	1657.8
10°	1636.1	1639.2	1640.8	1645.4	1650.0
12.5°	1616.0	1619.1	1625.3	1633.0	1639.2
15°	1589.7	1597.5	1605.2	1616.0	1623.7
17.5°	1561.9	1571.2	1583.5	1597.5	1606.7
20°	1529.4	1540.2	1555.7	1574.3	1585.1
22.5°	1492.3	1506.2	1524.8	1548.0	1560.3
25°	1452.1	1466.0	1489.2	1520.1	1532.5
27.5°	1407.2	1422.7	1450.5	1486.1	1503.1
30°	1359.3	1376.3	1408.8	1452.1	1470.7
32.5°	1308.3	1326.8	1363.9	1413.4	1433.5
35°	1252.6	1274.3	1316.0	1373.2	1394.9
37.5°	1198.5	1220.1	1266.5	1328.4	1353.1
40°	1139.7	1162.9	1212.4	1280.4	1308.3
42.5°	1081.0	1101.1	1156.7	1229.4	1258.8
45°	1017.5	1040.7	1099.5	1175.3	1206.2
47.5°	954.1	978.9	1040.7	1118.1	1150.5
50°	889.2	915.5	978.9	1057.8	1093.3
52.5°	828.9	850.5	915.5	995.9	1033.0
55°	765.5	785.6	849.0	930.9	968.1
57.5°	699.0	722.2	785.6	862.9	900.0
60°	634.0	657.2	717.5	794.9	832.0
62.5°	570.6	592.3	651.0	725.3	762.4
65°	504.1	527.3	584.5	652.6	688.2
67.5°	439.2	463.9	518.1	579.9	617.0
70°	369.6	397.4	450.0	507.2	536.6
72.5°	307.7	334.0	382.0	433.0	460.8
75°	250.5	273.7	313.9	358.8	380.4
77.5°	193.3	218.0	253.6	287.6	304.6
80°	142.3	165.5	193.3	216.5	224.2
82.5°	97.4	114.4	134.5	146.9	157.7
85°	58.8	68.0	80.4	85.1	89.7
87.5°	24.7	27.8	32.5	30.9	32.5
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	13.41	15.05	13.78	15.37	15.68	14.88	16.52	15.24	16.84	17.15
	3H	14.98	16.46	15.36	16.79	17.15	16.78	18.26	17.16	18.59	18.95
	4H	15.50	16.90	15.90	17.25	17.62	17.48	18.88	17.88	19.23	19.60
	6H	15.83	17.13	16.24	17.49	17.88	17.97	19.27	18.39	19.64	20.03
	8H	15.91	17.15	16.33	17.54	17.94	18.12	19.36	18.54	19.75	20.15
	12H	15.95	17.14	16.38	17.52	17.95	18.20	19.39	18.63	19.77	20.20
4H	2H	14.16	15.57	14.56	15.91	16.29	15.33	16.73	15.73	17.08	17.46
	3H	15.93	17.11	16.34	17.50	17.90	17.45	18.62	17.86	19.02	19.42
	4H	16.56	17.62	16.99	18.03	18.47	18.28	19.35	18.71	19.76	20.19
	6H	16.99	17.92	17.44	18.36	18.81	18.91	19.84	19.36	20.28	20.73
	8H	17.10	17.98	17.56	18.42	18.88	19.09	19.96	19.55	20.41	20.87
	12H	17.17	17.96	17.65	18.43	18.90	19.21	19.99	19.69	20.47	20.94
8H	4H	16.94	17.81	17.40	18.25	18.71	18.48	19.35	18.94	19.79	20.25
	6H	17.48	18.20	17.97	18.69	19.16	19.20	19.93	19.69	20.41	20.89
	8H	17.64	18.29	18.15	18.80	19.29	19.45	20.10	19.96	20.60	21.09
	12H	17.76	18.33	18.26	18.82	19.38	19.62	20.19	20.13	20.68	21.24
12H	4H	16.99	17.77	17.47	18.25	18.71	18.49	19.27	18.97	19.74	20.21
	6H	17.55	18.20	18.06	18.71	19.19	19.22	19.87	19.73	20.37	20.86
	8H	17.77	18.34	18.27	18.83	19.39	19.51	20.08	20.02	20.57	21.13