

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: P572165

Luminaire Tested: 24ID-50-L830-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572165
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-50-L830-DBD
Description: 5000 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN DROPPED DOUBLE BARRELL LENS AND 3000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

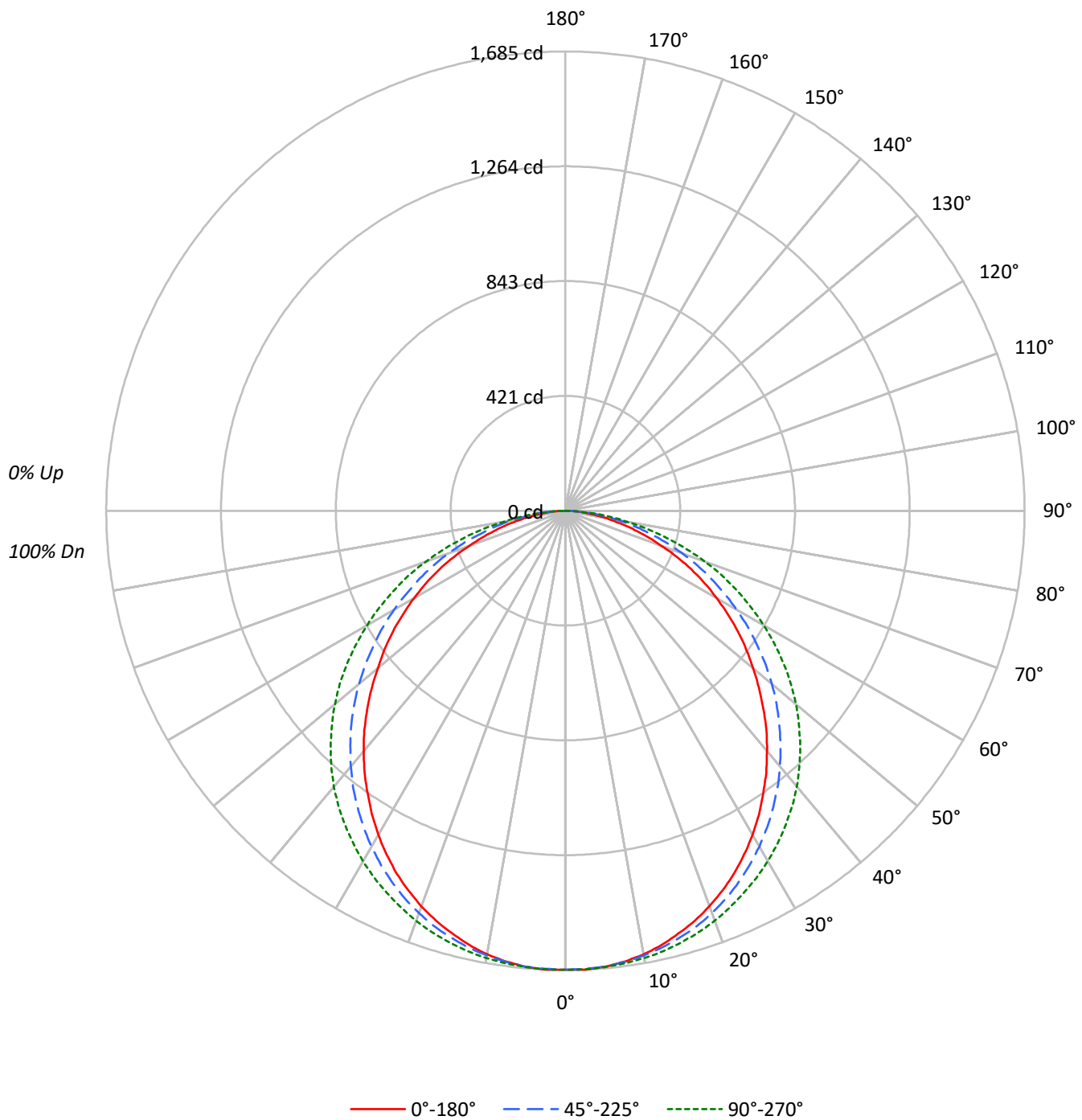
Lumens per Lamp: N/A
Luminaire Lumens: 4804.0 lumens
Efficiency: N/A
Efficacy: 108.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 44.1
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		0
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°	2266	2266	2266
5°	2260	2251	2254
10°	2241	2230	2244
15°	2212	2206	2235
20°	2179	2180	2225
25°	2136	2145	2212
30°	2083	2103	2202
35°	2019	2056	2187
40°	1954	2002	2169
45°	1877	1942	2140
50°	1791	1872	2103
55°	1712	1786	2050
60°	1607	1691	1976
65°	1488	1580	1877
70°	1318	1439	1735
75°	1138	1240	1524
80°	901	1008	1192
85°	621	624	716

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 2140 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.6	3.3
10°-20°	458.1	9.5
20°-30°	694.3	14.5
30°-40°	835.2	17.4
40°-50°	862.2	17.9
50°-60°	774.7	16.1
60°-70°	589.9	12.3
70°-80°	338.7	7.1
80°-90°	91.4	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°	1312.0	27.3
0°-40°	2147.1	44.7
0°-60°	3784.1	78.8
0°-90°	4804.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4804.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1684	1684	1684	1684	1684	
5°	1679	1681	1679	1678	1681	159
15°	1606	1614	1621	1632	1640	453
25°	1467	1481	1504	1536	1548	675
35°	1265	1287	1329	1387	1409	792
45°	1028	1051	1111	1187	1218	793
55°	773	794	858	940	978	690
65°	509	533	590	659	695	504
75°	253	276	317	362	384	268
85°	59	69	81	86	91	69
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1683.9	1683.9	1683.9	1683.9	1683.9
2.5°	1685.4	1685.4	1682.3	1680.8	1683.9
5°	1679.2	1680.8	1679.2	1677.6	1680.8
7.5°	1668.3	1669.8	1669.8	1671.4	1674.5
10°	1652.6	1655.8	1657.3	1662.0	1666.7
12.5°	1632.3	1635.5	1641.7	1649.5	1655.8
15°	1605.8	1613.6	1621.4	1632.3	1640.1
17.5°	1577.7	1587.0	1599.5	1613.6	1623.0
20°	1544.9	1555.8	1571.4	1590.2	1601.1
22.5°	1507.4	1521.4	1540.2	1563.6	1576.1
25°	1466.8	1480.8	1504.2	1535.5	1548.0
27.5°	1421.5	1437.1	1465.2	1501.1	1518.3
30°	1373.0	1390.2	1423.0	1466.8	1485.5
32.5°	1321.5	1340.2	1377.7	1427.7	1448.0
35°	1265.2	1287.1	1329.3	1387.1	1409.0
37.5°	1210.6	1232.4	1279.3	1341.8	1366.8
40°	1151.2	1174.7	1224.6	1293.4	1321.5
42.5°	1091.9	1112.2	1168.4	1241.8	1271.5
45°	1027.8	1051.3	1110.6	1187.1	1218.4
47.5°	963.8	988.8	1051.3	1129.4	1162.2
50°	898.2	924.7	988.8	1068.4	1104.4
52.5°	837.3	859.1	924.7	1006.0	1043.4
55°	773.2	793.5	857.6	940.3	977.8
57.5°	706.0	729.5	793.5	871.6	909.1
60°	640.4	663.9	724.8	802.9	840.4
62.5°	576.4	598.3	657.6	732.6	770.1
65°	509.2	532.7	590.4	659.2	695.1
67.5°	443.6	468.6	523.3	585.8	623.3
70°	373.3	401.4	454.6	512.3	542.0
72.5°	310.8	337.4	385.8	437.4	465.5
75°	253.0	276.5	317.1	362.4	384.3
77.5°	195.3	220.2	256.2	290.5	307.7
80°	143.7	167.1	195.3	218.7	226.5
82.5°	98.4	115.6	135.9	148.4	159.3
85°	59.4	68.7	81.2	85.9	90.6
87.5°	25.0	28.1	32.8	31.2	32.8
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	13.45	15.09	13.81	15.40	15.72	14.91	16.56	15.28	16.87	17.18
	3H	15.01	16.50	15.39	16.83	17.19	16.81	18.30	17.19	18.63	18.99
	4H	15.53	16.93	15.93	17.28	17.66	17.52	18.92	17.91	19.26	19.64
	6H	15.86	17.16	16.27	17.52	17.91	18.01	19.31	18.42	19.67	20.06
	8H	15.94	17.18	16.37	17.57	17.97	18.15	19.39	18.58	19.78	20.18
	12H	15.99	17.17	16.41	17.56	17.98	18.23	19.42	18.66	19.80	20.23
4H	2H	14.20	15.60	14.60	15.95	16.32	15.37	16.77	15.77	17.12	17.49
	3H	15.97	17.14	16.38	17.54	17.94	17.48	18.66	17.89	19.06	19.46
	4H	16.59	17.65	17.02	18.07	18.50	18.32	19.38	18.75	19.79	20.23
	6H	17.02	17.95	17.48	18.39	18.85	18.94	19.87	19.40	20.31	20.77
	8H	17.14	18.01	17.60	18.45	18.92	19.13	20.00	19.59	20.44	20.91
	12H	17.21	17.99	17.69	18.47	18.93	19.25	20.03	19.73	20.50	20.97
8H	4H	16.97	17.84	17.43	18.29	18.75	18.51	19.38	18.97	19.82	20.29
	6H	17.51	18.24	18.00	18.72	19.20	19.24	19.96	19.73	20.45	20.92
	8H	17.68	18.33	18.19	18.83	19.32	19.48	20.13	19.99	20.64	21.12
	12H	17.79	18.37	18.30	18.86	19.42	19.65	20.23	20.16	20.72	21.28
12H	4H	17.02	17.81	17.50	18.28	18.75	18.52	19.30	19.00	19.78	20.25
	6H	17.58	18.24	18.09	18.74	19.23	19.25	19.90	19.76	20.41	20.90
	8H	17.80	18.38	18.31	18.87	19.43	19.54	20.12	20.05	20.61	21.17