

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: P572173

Luminaire Tested: 24ID-55-L830-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572173
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-55-L830-DBD
Description: 5500 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN DROPPED DOUBLE BARRELL LENS AND 3000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

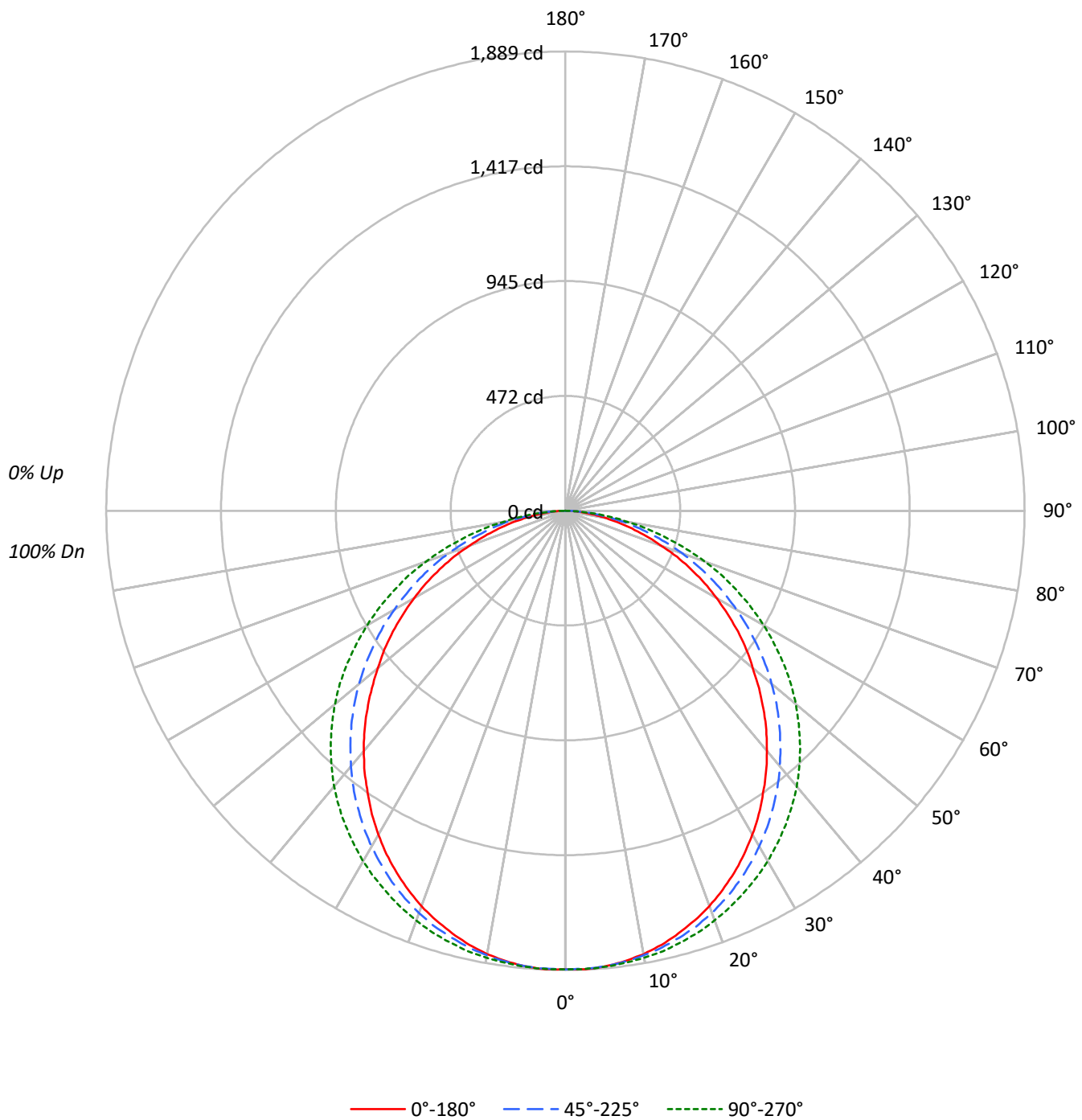
Lumens per Lamp: N/A
Luminaire Lumens: 5383.0 lumens
Efficiency: N/A
Efficacy: 107.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 50.2
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	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°	2539	2539	2539
5°	2532	2522	2525
10°	2512	2498	2515
15°	2479	2472	2504
20°	2441	2443	2493
25°	2393	2403	2479
30°	2334	2357	2467
35°	2263	2304	2450
40°	2189	2244	2431
45°	2104	2176	2398
50°	2007	2098	2356
55°	1918	2001	2297
60°	1801	1895	2214
65°	1668	1771	2104
70°	1477	1612	1944
75°	1275	1389	1707
80°	1009	1129	1335
85°	695	699	802

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 2398 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.9	3.3
10°-20°	513.3	9.5
20°-30°	778.0	14.5
30°-40°	935.8	17.4
40°-50°	966.1	17.9
50°-60°	868.1	16.1
60°-70°	661.0	12.3
70°-80°	379.5	7.1
80°-90°	102.4	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°	1470.1	27.3
0°-40°	2405.9	44.7
0°-60°	4240.2	78.8
0°-90°	5383.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5383.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1887	1887	1887	1887	1887	
5°	1882	1883	1882	1880	1883	179
15°	1799	1808	1817	1829	1838	508
25°	1644	1659	1686	1720	1734	756
35°	1418	1442	1490	1554	1579	887
45°	1152	1178	1244	1330	1365	888
55°	866	889	961	1054	1096	773
65°	571	597	662	739	779	564
75°	284	310	355	406	431	301
85°	66	77	91	96	102	78
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1886.8	1886.8	1886.8	1886.8	1886.8
2.5°	1888.6	1888.6	1885.1	1883.3	1886.8
5°	1881.6	1883.3	1881.6	1879.8	1883.3
7.5°	1869.3	1871.1	1871.1	1872.8	1876.3
10°	1851.8	1855.3	1857.1	1862.3	1867.6
12.5°	1829.1	1832.6	1839.6	1848.3	1855.3
15°	1799.3	1808.1	1816.8	1829.1	1837.8
17.5°	1767.8	1778.3	1792.3	1808.1	1818.6
20°	1731.0	1743.3	1760.8	1781.8	1794.1
22.5°	1689.0	1704.8	1725.8	1752.0	1766.1
25°	1643.5	1659.3	1685.5	1720.5	1734.5
27.5°	1592.8	1610.3	1641.8	1682.0	1701.3
30°	1538.5	1557.8	1594.5	1643.5	1664.5
32.5°	1480.8	1501.8	1543.8	1599.8	1622.5
35°	1417.7	1442.2	1489.5	1554.3	1578.8
37.5°	1356.5	1381.0	1433.5	1503.5	1531.5
40°	1290.0	1316.2	1372.2	1449.2	1480.8
42.5°	1223.5	1246.2	1309.2	1391.5	1424.7
45°	1151.7	1178.0	1244.5	1330.2	1365.2
47.5°	1079.9	1107.9	1178.0	1265.5	1302.2
50°	1006.4	1036.2	1107.9	1197.2	1237.5
52.5°	938.2	962.7	1036.2	1127.2	1169.2
55°	866.4	889.2	960.9	1053.7	1095.7
57.5°	791.1	817.4	889.2	976.7	1018.7
60°	717.6	743.9	812.1	899.7	941.7
62.5°	645.9	670.4	736.9	820.9	862.9
65°	570.6	596.9	661.6	738.6	778.9
67.5°	497.1	525.1	586.4	656.4	698.4
70°	418.3	449.8	509.3	574.1	607.4
72.5°	348.3	378.1	432.3	490.1	521.6
75°	283.5	309.8	355.3	406.1	430.6
77.5°	218.8	246.8	287.0	325.6	344.8
80°	161.0	187.3	218.8	245.0	253.8
82.5°	110.3	129.5	152.3	166.3	178.5
85°	66.5	77.0	91.0	96.3	101.5
87.5°	28.0	31.5	36.8	35.0	36.8
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	13.84	15.48	14.21	15.80	16.11	15.31	16.95	15.67	17.27	17.58
	3H	15.41	16.90	15.79	17.22	17.58	17.21	18.70	17.59	19.02	19.38
	4H	15.93	17.33	16.33	17.68	18.05	17.91	19.31	18.31	19.66	20.03
	6H	16.26	17.56	16.67	17.92	18.31	18.41	19.70	18.82	20.07	20.46
	8H	16.34	17.58	16.76	17.97	18.37	18.55	19.79	18.97	20.18	20.58
	12H	16.38	17.57	16.81	17.95	18.38	18.63	19.82	19.06	20.20	20.63
4H	2H	14.60	16.00	14.99	16.34	16.72	15.76	17.16	16.16	17.51	17.89
	3H	16.36	17.54	16.77	17.93	18.33	17.88	19.05	18.29	19.45	19.85
	4H	16.99	18.05	17.42	18.46	18.90	18.71	19.78	19.14	20.19	20.63
	6H	17.42	18.35	17.87	18.79	19.25	19.34	20.27	19.79	20.71	21.16
	8H	17.53	18.41	17.99	18.85	19.31	19.52	20.40	19.98	20.84	21.30
	12H	17.60	18.39	18.08	18.86	19.33	19.64	20.42	20.12	20.90	21.37
8H	4H	17.37	18.24	17.83	18.68	19.15	18.91	19.78	19.37	20.22	20.69
	6H	17.91	18.63	18.40	19.12	19.59	19.63	20.36	20.13	20.84	21.32
	8H	18.07	18.72	18.58	19.23	19.72	19.88	20.53	20.39	21.03	21.52
	12H	18.19	18.76	18.69	19.25	19.81	20.05	20.62	20.56	21.11	21.67
12H	4H	17.42	18.20	17.90	18.68	19.14	18.92	19.70	19.40	20.17	20.64
	6H	17.98	18.63	18.49	19.14	19.62	19.65	20.30	20.16	20.81	21.29
	8H	18.20	18.77	18.70	19.26	19.82	19.94	20.52	20.45	21.01	21.57

END OF REPORT

FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE

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