

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: P572157

Luminaire Tested: 24ID-45-L830-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572157
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-L830-DBD
Description: 4500 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN DROPPED DOUBLE BARRELL LENS AND 3000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

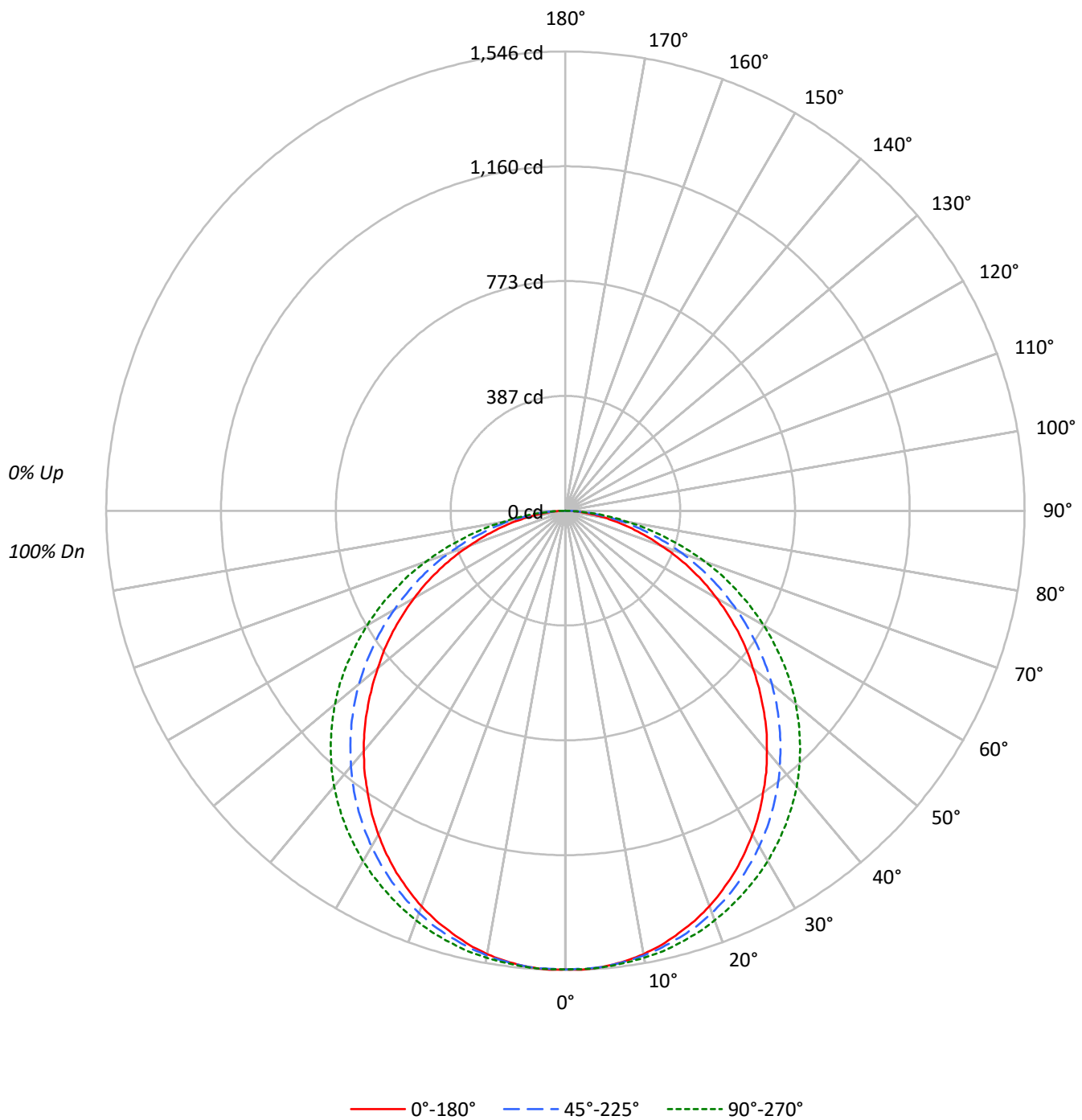
Lumens per Lamp: N/A
Luminaire Lumens: 4406.0 lumens
Efficiency: N/A
Efficacy: 110.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.17')
CIE Type: Direct

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°	2078	2078	2078
5°	2073	2064	2067
10°	2056	2045	2058
15°	2029	2024	2050
20°	1998	1999	2041
25°	1959	1967	2029
30°	1911	1929	2019
35°	1852	1886	2005
40°	1792	1837	1990
45°	1722	1781	1963
50°	1643	1717	1929
55°	1570	1638	1880
60°	1474	1551	1813
65°	1365	1449	1722
70°	1209	1320	1591
75°	1044	1137	1397
80°	826	924	1093
85°	569	572	657

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 1963 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.4	3.3
10°-20°	420.1	9.5
20°-30°	636.8	14.5
30°-40°	766.0	17.4
40°-50°	790.8	17.9
50°-60°	710.5	16.1
60°-70°	541.0	12.3
70°-80°	310.6	7.1
80°-90°	83.8	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°	1203.3	27.3
0°-40°	1969.2	44.7
0°-60°	3470.6	78.8
0°-90°	4406.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4406.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1544	1544	1544	1544	1544	
5°	1540	1542	1540	1539	1542	146
15°	1473	1480	1487	1497	1504	415
25°	1345	1358	1380	1408	1420	619
35°	1160	1180	1219	1272	1292	726
45°	943	964	1019	1089	1117	727
55°	709	728	786	862	897	633
65°	467	488	542	605	638	462
75°	232	254	291	332	352	246
85°	54	63	74	79	83	64
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1544.4	1544.4	1544.4	1544.4	1544.4
2.5°	1545.8	1545.8	1542.9	1541.5	1544.4
5°	1540.1	1541.5	1540.1	1538.6	1541.5
7.5°	1530.0	1531.5	1531.5	1532.9	1535.8
10°	1515.7	1518.6	1520.0	1524.3	1528.6
12.5°	1497.1	1500.0	1505.7	1512.9	1518.6
15°	1472.7	1479.9	1487.1	1497.1	1504.3
17.5°	1447.0	1455.5	1467.0	1479.9	1488.5
20°	1416.9	1426.9	1441.2	1458.4	1468.4
22.5°	1382.5	1395.4	1412.6	1434.1	1445.5
25°	1345.2	1358.1	1379.6	1408.3	1419.7
27.5°	1303.7	1318.0	1343.8	1376.8	1392.5
30°	1259.3	1275.0	1305.1	1345.2	1362.4
32.5°	1212.0	1229.2	1263.6	1309.4	1328.0
35°	1160.4	1180.5	1219.2	1272.2	1292.2
37.5°	1110.3	1130.3	1173.3	1230.6	1253.5
40°	1055.8	1077.3	1123.2	1186.2	1212.0
42.5°	1001.4	1020.0	1071.6	1138.9	1166.2
45°	942.7	964.2	1018.6	1088.8	1117.4
47.5°	883.9	906.9	964.2	1035.8	1065.9
50°	823.8	848.1	906.9	979.9	1012.9
52.5°	767.9	787.9	848.1	922.6	957.0
55°	709.1	727.8	786.5	862.4	896.8
57.5°	647.5	669.0	727.8	799.4	833.8
60°	587.4	608.9	664.7	736.4	770.8
62.5°	528.6	548.7	603.1	671.9	706.3
65°	467.0	488.5	541.5	604.6	637.5
67.5°	406.9	429.8	479.9	537.2	571.6
70°	342.4	368.2	416.9	469.9	497.1
72.5°	285.1	309.4	353.9	401.1	426.9
75°	232.1	253.6	290.8	332.4	352.4
77.5°	179.1	202.0	235.0	266.5	282.2
80°	131.8	153.3	179.1	200.6	207.7
82.5°	90.3	106.0	124.6	136.1	146.1
85°	54.4	63.0	74.5	78.8	83.1
87.5°	22.9	25.8	30.1	28.7	30.1
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	13.15	14.79	13.51	15.10	15.42	14.61	16.26	14.98	16.57	16.88
	3H	14.71	16.20	15.09	16.53	16.89	16.51	18.00	16.89	18.33	18.69
	4H	15.23	16.63	15.63	16.98	17.35	17.22	18.62	17.61	18.96	19.34
	6H	15.56	16.86	15.97	17.22	17.61	17.71	19.01	18.12	19.37	19.76
	8H	15.64	16.88	16.07	17.27	17.67	17.85	19.09	18.28	19.48	19.88
	12H	15.69	16.87	16.11	17.26	17.68	17.93	19.12	18.36	19.50	19.93
4H	2H	13.90	15.30	14.30	15.65	16.02	15.07	16.47	15.47	16.82	17.19
	3H	15.67	16.84	16.08	17.24	17.64	17.18	18.36	17.59	18.76	19.16
	4H	16.29	17.35	16.72	17.77	18.20	18.02	19.08	18.45	19.49	19.93
	6H	16.72	17.65	17.18	18.09	18.55	18.64	19.57	19.09	20.01	20.47
	8H	16.84	17.71	17.30	18.15	18.62	18.83	19.70	19.29	20.14	20.61
	12H	16.91	17.69	17.39	18.17	18.63	18.95	19.73	19.42	20.20	20.67
8H	4H	16.67	17.54	17.13	17.98	18.45	18.21	19.08	18.67	19.52	19.99
	6H	17.21	17.94	17.70	18.42	18.90	18.94	19.66	19.43	20.15	20.62
	8H	17.38	18.03	17.89	18.53	19.02	19.18	19.83	19.69	20.34	20.82
	12H	17.49	18.07	18.00	18.56	19.12	19.35	19.93	19.86	20.42	20.98
12H	4H	16.72	17.51	17.20	17.98	18.45	18.22	19.00	18.70	19.48	19.95
	6H	17.28	17.93	17.79	18.44	18.93	18.95	19.60	19.46	20.11	20.59
	8H	17.50	18.08	18.01	18.57	19.13	19.24	19.82	19.75	20.31	20.87