

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: P572155

Luminaire Tested: 24ID-40-L850-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572155
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-40-L850-DBD
Description: 4000 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN DROPPED DOUBLE BARRELL LENS AND 5000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

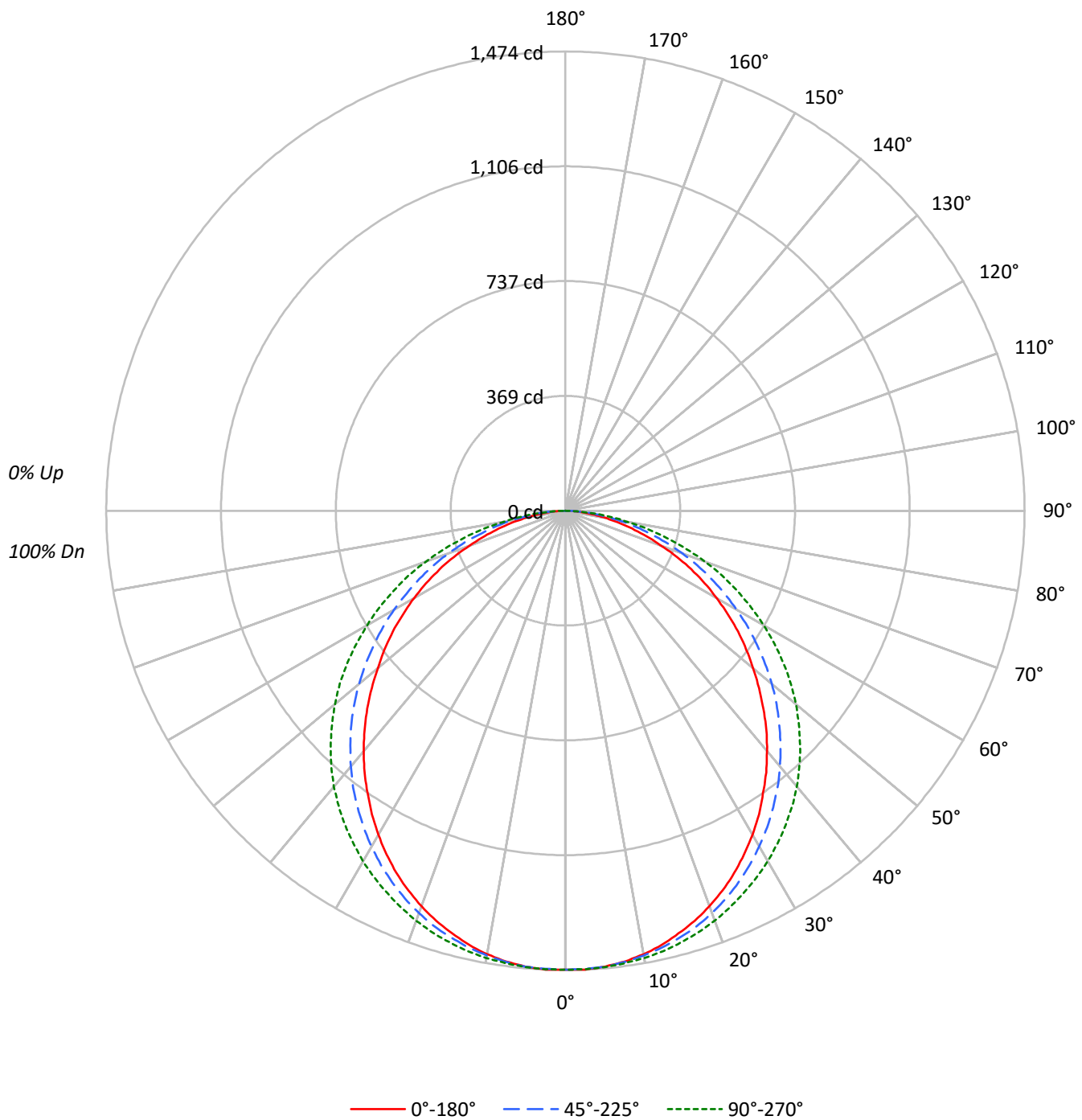
Lumens per Lamp: N/A
Luminaire Lumens: 4202.0 lumens
Efficiency: N/A
Efficacy: 119.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 35.2
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		0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111			106	106	106		100
1	109	104	100	96	106	102	98	94	97	94	91			93	91	88		84
2	99	90	84	78	96	89	82	77	85	80	75			82	77	73		70
3	90	79	71	65	87	78	70	64	75	68	63			72	66	62		58
4	82	70	61	55	80	69	61	54	66	59	54			64	58	53		50
5	76	63	54	47	74	62	53	47	59	52	46			58	51	46		43
6	70	56	47	41	68	56	47	41	54	46	40			52	45	40		38
7	65	51	42	36	63	50	42	36	49	41	36			47	41	36		33
8	60	47	38	32	59	46	38	32	45	37	32			43	37	32		30
9	56	43	35	29	55	42	34	29	41	34	29			40	33	29		27
10	53	40	32	26	52	39	31	26	38	31	26			37	31	26		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1982	1982	1982
5°	1977	1969	1971
10°	1961	1950	1963
15°	1935	1930	1955
20°	1906	1907	1946
25°	1868	1876	1935
30°	1822	1840	1926
35°	1766	1798	1913
40°	1709	1752	1898
45°	1642	1698	1872
50°	1567	1638	1839
55°	1497	1562	1793
60°	1406	1480	1729
65°	1302	1382	1642
70°	1152	1258	1518
75°	996	1084	1333
80°	788	881	1042
85°	543	545	626

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 1872 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.6	3.3
10°-20°	400.7	9.5
20°-30°	607.3	14.5
30°-40°	730.5	17.4
40°-50°	754.2	17.9
50°-60°	677.7	16.1
60°-70°	516.0	12.3
70°-80°	296.3	7.1
80°-90°	79.9	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°	1147.6	27.3
0°-40°	1878.1	44.7
0°-60°	3309.9	78.8
0°-90°	4202.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4202.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1473	1473	1473	1473	1473	
5°	1469	1470	1469	1467	1470	139
15°	1404	1411	1418	1428	1435	396
25°	1283	1295	1316	1343	1354	591
35°	1107	1126	1163	1213	1232	693
45°	899	920	971	1038	1066	693
55°	676	694	750	822	855	603
65°	445	466	516	577	608	440
75°	221	242	277	317	336	235
85°	52	60	71	75	79	61
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1472.9	1472.9	1472.9	1472.9	1472.9
2.5°	1474.2	1474.2	1471.5	1470.1	1472.9
5°	1468.8	1470.1	1468.8	1467.4	1470.1
7.5°	1459.2	1460.6	1460.6	1461.9	1464.7
10°	1445.5	1448.3	1449.6	1453.7	1457.8
12.5°	1427.8	1430.5	1436.0	1442.8	1448.3
15°	1404.5	1411.4	1418.2	1427.8	1434.6
17.5°	1380.0	1388.2	1399.1	1411.4	1419.6
20°	1351.3	1360.8	1374.5	1390.9	1400.5
22.5°	1318.5	1330.8	1347.2	1367.7	1378.6
25°	1282.9	1295.2	1315.7	1343.1	1354.0
27.5°	1243.3	1257.0	1281.6	1313.0	1328.0
30°	1201.0	1216.0	1244.7	1282.9	1299.3
32.5°	1155.9	1172.3	1205.1	1248.8	1266.6
35°	1106.7	1125.8	1162.7	1213.3	1232.4
37.5°	1058.9	1078.0	1119.0	1173.6	1195.5
40°	1007.0	1027.5	1071.2	1131.3	1155.9
42.5°	955.0	972.8	1022.0	1086.2	1112.2
45°	899.0	919.5	971.4	1038.4	1065.7
47.5°	843.0	864.9	919.5	987.8	1016.5
50°	785.6	808.8	864.9	934.5	966.0
52.5°	732.3	751.5	808.8	879.9	912.7
55°	676.3	694.1	750.1	822.5	855.3
57.5°	617.6	638.1	694.1	762.4	795.2
60°	560.2	580.7	634.0	702.3	735.1
62.5°	504.2	523.3	575.2	640.8	673.6
65°	445.4	465.9	516.5	576.6	608.0
67.5°	388.0	409.9	457.7	512.4	545.2
70°	326.5	351.1	397.6	448.1	474.1
72.5°	271.9	295.1	337.5	382.6	407.2
75°	221.3	241.8	277.4	317.0	336.1
77.5°	170.8	192.6	224.1	254.1	269.2
80°	125.7	146.2	170.8	191.3	198.1
82.5°	86.1	101.1	118.9	129.8	139.4
85°	51.9	60.1	71.0	75.1	79.2
87.5°	21.9	24.6	28.7	27.3	28.7
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	12.98	14.62	13.35	14.94	15.25	14.45	16.09	14.81	16.41	16.72
	3H	14.55	16.03	14.93	16.36	16.72	16.35	17.83	16.73	18.16	18.52
	4H	15.07	16.47	15.46	16.81	17.19	17.05	18.45	17.45	18.80	19.17
	6H	15.40	16.69	15.81	17.06	17.45	17.54	18.84	17.96	19.21	19.60
	8H	15.48	16.72	15.90	17.11	17.51	17.69	18.93	18.11	19.32	19.72
	12H	15.52	16.71	15.95	17.09	17.52	17.77	18.96	18.20	19.34	19.77
4H	2H	13.73	15.14	14.13	15.48	15.86	14.90	16.30	15.30	16.65	17.03
	3H	15.50	16.68	15.91	17.07	17.47	17.02	18.19	17.43	18.59	18.99
	4H	16.13	17.19	16.56	17.60	18.04	17.85	18.92	18.28	19.33	19.76
	6H	16.56	17.49	17.01	17.93	18.38	18.48	19.41	18.93	19.85	20.30
	8H	16.67	17.54	17.13	17.99	18.45	18.66	19.54	19.12	19.98	20.44
	12H	16.74	17.53	17.22	18.00	18.47	18.78	19.56	19.26	20.04	20.51
8H	4H	16.51	17.38	16.97	17.82	18.28	18.05	18.92	18.51	19.36	19.82
	6H	17.05	17.77	17.54	18.26	18.73	18.77	19.50	19.26	19.98	20.46
	8H	17.21	17.86	17.72	18.37	18.85	19.02	19.67	19.53	20.17	20.66
	12H	17.33	17.90	17.83	18.39	18.95	19.19	19.76	19.70	20.25	20.81
12H	4H	16.56	17.34	17.04	17.82	18.28	18.06	18.84	18.54	19.31	19.78
	6H	17.12	17.77	17.63	18.28	18.76	18.79	19.44	19.30	19.94	20.43
	8H	17.34	17.91	17.84	18.40	18.96	19.08	19.65	19.59	20.14	20.70