

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: P572153

Luminaire Tested: 24ID-40-L840-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572153
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-L840-DBD
Description: 4000 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN DROPPED DOUBLE BARRELL LENS AND 4000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

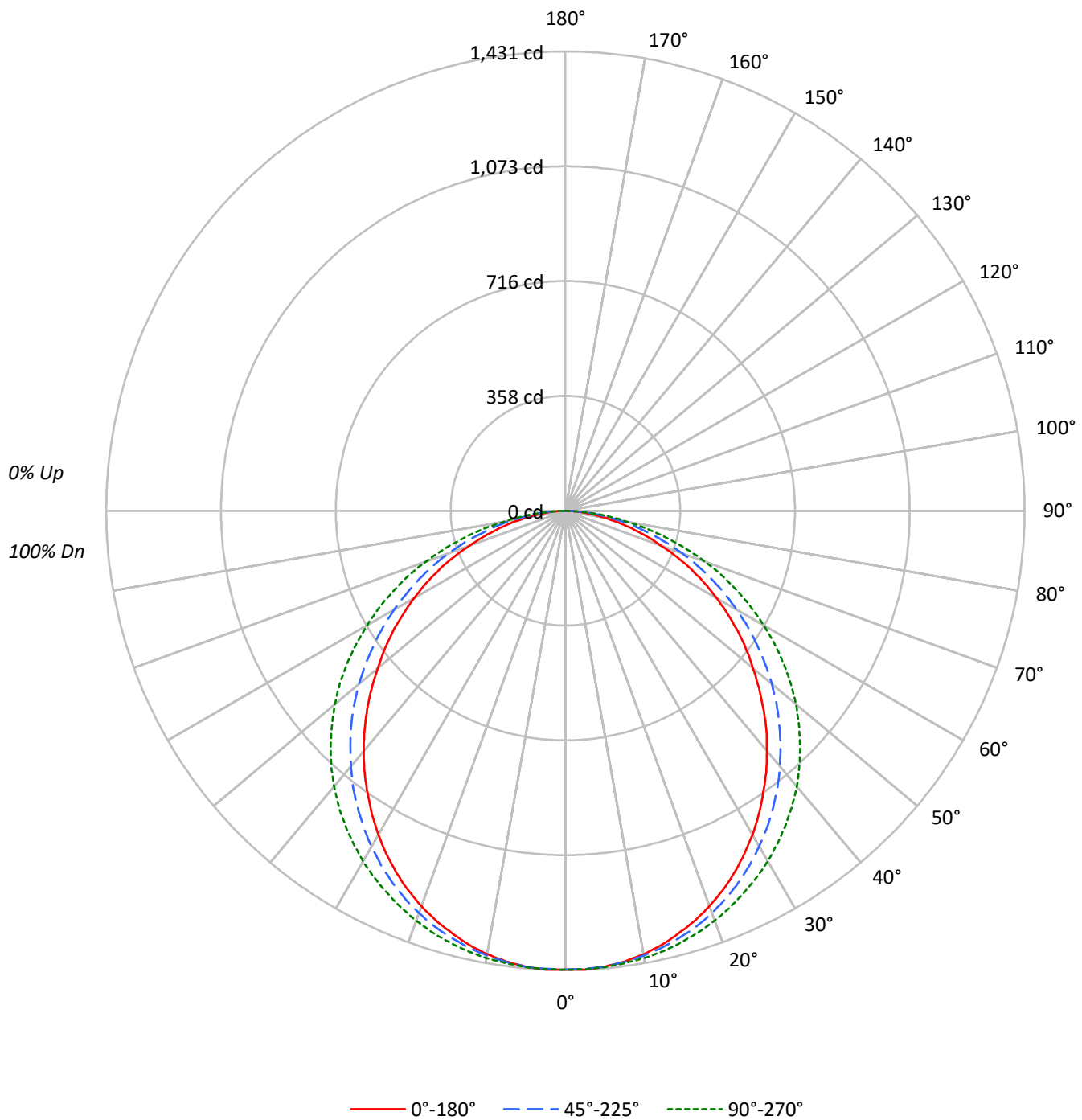
Lumens per Lamp: N/A
Luminaire Lumens: 4079.0 lumens
Efficiency: N/A
Efficacy: 115.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 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		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°	1924	1924	1924
5°	1919	1911	1914
10°	1903	1893	1906
15°	1878	1873	1897
20°	1850	1851	1889
25°	1814	1821	1878
30°	1769	1786	1870
35°	1715	1746	1857
40°	1659	1700	1842
45°	1594	1649	1817
50°	1521	1590	1785
55°	1454	1517	1741
60°	1365	1436	1678
65°	1264	1342	1594
70°	1119	1222	1473
75°	967	1052	1294
80°	765	856	1012
85°	527	530	608

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 1817 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.5	3.3
10°-20°	388.9	9.5
20°-30°	589.5	14.5
30°-40°	709.1	17.4
40°-50°	732.1	17.9
50°-60°	657.8	16.1
60°-70°	500.9	12.3
70°-80°	287.6	7.1
80°-90°	77.6	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°	1114.0	27.3
0°-40°	1823.1	44.7
0°-60°	3213.0	78.8
0°-90°	4079.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4079.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1430	1430	1430	1430	1430	
5°	1426	1427	1426	1424	1427	135
15°	1363	1370	1377	1386	1393	385
25°	1245	1257	1277	1304	1314	573
35°	1074	1093	1129	1178	1196	672
45°	873	893	943	1008	1034	673
55°	656	674	728	798	830	586
65°	432	452	501	560	590	428
75°	215	235	269	308	326	228
85°	50	58	69	73	77	59
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1429.8	1429.8	1429.8	1429.8	1429.8
2.5°	1431.1	1431.1	1428.4	1427.1	1429.8
5°	1425.8	1427.1	1425.8	1424.4	1427.1
7.5°	1416.5	1417.8	1417.8	1419.1	1421.8
10°	1403.2	1405.9	1407.2	1411.2	1415.2
12.5°	1386.0	1388.6	1393.9	1400.6	1405.9
15°	1363.4	1370.1	1376.7	1386.0	1392.6
17.5°	1339.6	1347.5	1358.1	1370.1	1378.0
20°	1311.7	1321.0	1334.3	1350.2	1359.5
22.5°	1279.9	1291.8	1307.7	1327.6	1338.2
25°	1245.4	1257.3	1277.2	1303.8	1314.4
27.5°	1206.9	1220.2	1244.1	1274.6	1289.2
30°	1165.8	1180.4	1208.3	1245.4	1261.3
32.5°	1122.0	1138.0	1169.8	1212.2	1229.5
35°	1074.3	1092.9	1128.7	1177.8	1196.3
37.5°	1027.9	1046.5	1086.2	1139.3	1160.5
40°	977.5	997.4	1039.8	1098.2	1122.0
42.5°	927.1	944.3	992.1	1054.4	1079.6
45°	872.7	892.6	943.0	1008.0	1034.5
47.5°	818.3	839.5	892.6	958.9	986.8
50°	762.6	785.2	839.5	907.2	937.7
52.5°	710.9	729.5	785.2	854.1	886.0
55°	656.5	673.8	728.1	798.4	830.3
57.5°	599.5	619.4	673.8	740.1	771.9
60°	543.8	563.7	615.4	681.7	713.5
62.5°	489.4	508.0	558.4	622.0	653.9
65°	432.4	452.3	501.3	559.7	590.2
67.5°	376.7	397.9	444.3	497.4	529.2
70°	317.0	340.9	386.0	435.0	460.2
72.5°	263.9	286.5	327.6	371.4	395.2
75°	214.9	234.8	269.2	307.7	326.3
77.5°	165.8	187.0	217.5	246.7	261.3
80°	122.0	141.9	165.8	185.7	192.3
82.5°	83.6	98.1	115.4	126.0	135.3
85°	50.4	58.4	69.0	72.9	76.9
87.5°	21.2	23.9	27.9	26.5	27.9
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	12.88	14.52	13.24	14.84	15.15	14.35	15.99	14.71	16.30	16.62
	3H	14.45	15.93	14.82	16.26	16.62	16.25	17.73	16.62	18.06	18.42
	4H	14.96	16.36	15.36	16.71	17.09	16.95	18.35	17.35	18.70	19.07
	6H	15.29	16.59	15.70	16.96	17.35	17.44	18.74	17.85	19.10	19.49
	8H	15.38	16.62	15.80	17.01	17.40	17.58	18.82	18.01	19.21	19.61
	12H	15.42	16.61	15.85	16.99	17.42	17.66	18.85	18.09	19.23	19.66
4H	2H	13.63	15.03	14.03	15.38	15.75	14.80	16.20	15.20	16.55	16.92
	3H	15.40	16.57	15.81	16.97	17.37	16.92	18.09	17.32	18.49	18.89
	4H	16.02	17.09	16.45	17.50	17.93	17.75	18.81	18.18	19.23	19.66
	6H	16.46	17.39	16.91	17.83	18.28	18.37	19.30	18.83	19.74	20.20
	8H	16.57	17.44	17.03	17.88	18.35	18.56	19.43	19.02	19.87	20.34
	12H	16.64	17.42	17.12	17.90	18.37	18.68	19.46	19.16	19.94	20.40
8H	4H	16.40	17.28	16.86	17.72	18.18	17.94	18.81	18.40	19.26	19.72
	6H	16.94	17.67	17.44	18.16	18.63	18.67	19.39	19.16	19.88	20.35
	8H	17.11	17.76	17.62	18.27	18.75	18.91	19.56	19.42	20.07	20.56
	12H	17.22	17.80	17.73	18.29	18.85	19.09	19.66	19.59	20.15	20.71
12H	4H	16.45	17.24	16.93	17.71	18.18	17.95	18.74	18.43	19.21	19.68
	6H	17.02	17.67	17.52	18.17	18.66	18.68	19.34	19.19	19.84	20.33
	8H	17.23	17.81	17.74	18.30	18.86	18.98	19.55	19.48	20.04	20.60