

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: P572149

Luminaire Tested: 24ID-40-L830-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572149
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-L830-DBD
Description: 4000 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN DROPPED DOUBLE BARRELL LENS AND 3000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

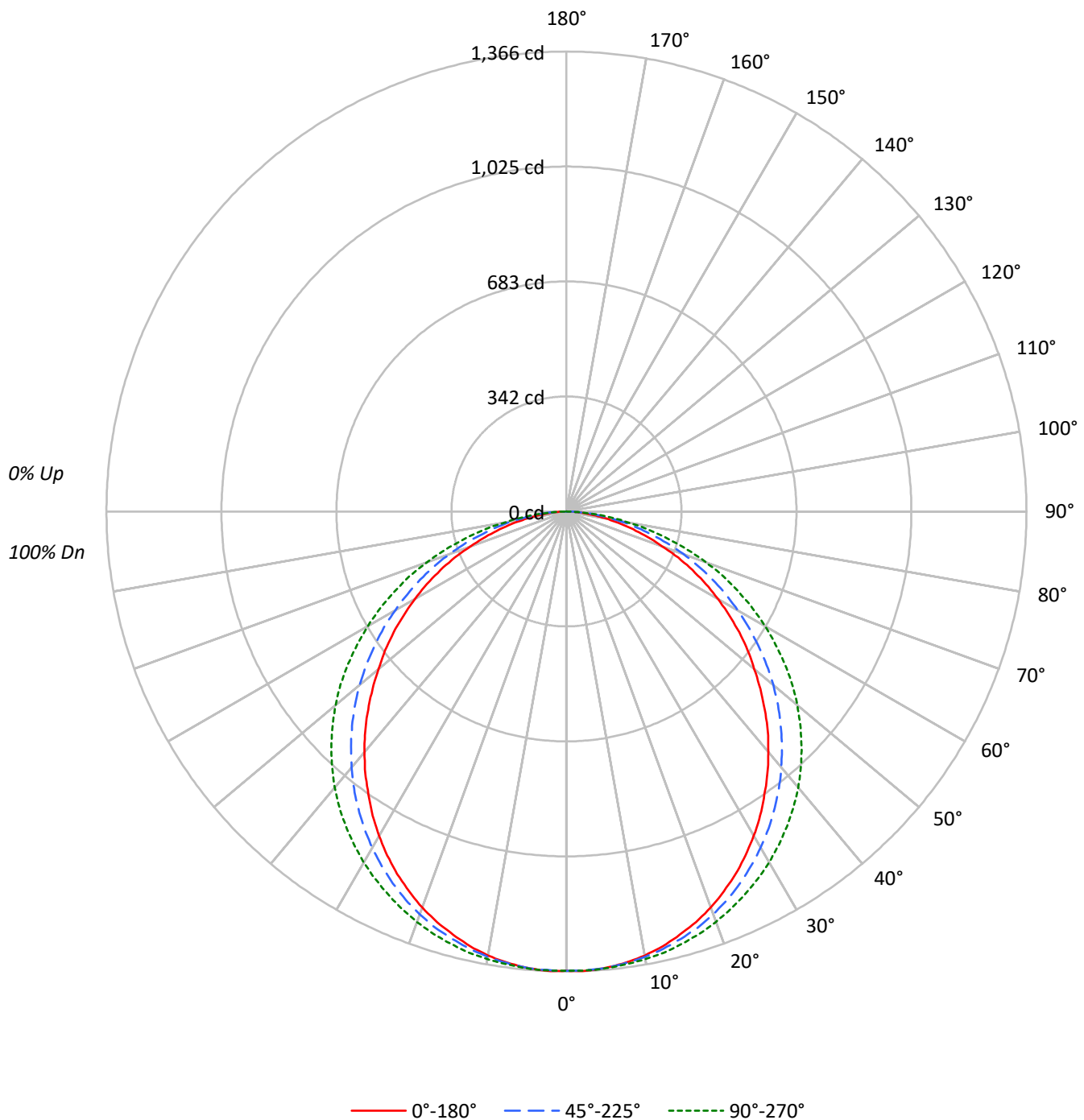
Lumens per Lamp: N/A
Luminaire Lumens: 3893.0 lumens
Efficiency: N/A
Efficacy: 110.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.17')
CIE Type: Direct

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		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°	1836	1836	1836
5°	1831	1824	1826
10°	1816	1807	1819
15°	1793	1788	1811
20°	1766	1766	1803
25°	1731	1738	1793
30°	1688	1705	1784
35°	1636	1666	1772
40°	1583	1623	1758
45°	1521	1573	1734
50°	1451	1517	1704
55°	1387	1447	1661
60°	1303	1371	1601
65°	1206	1281	1521
70°	1068	1166	1406
75°	923	1005	1235
80°	730	816	965
85°	503	505	580

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 1734 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.4	3.3
10°-20°	371.2	9.5
20°-30°	562.6	14.5
30°-40°	676.8	17.4
40°-50°	698.7	17.9
50°-60°	627.8	16.1
60°-70°	478.0	12.3
70°-80°	274.5	7.1
80°-90°	74.0	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°	1063.2	27.3
0°-40°	1740.0	44.7
0°-60°	3066.5	78.8
0°-90°	3893.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3893.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1365	1365	1365	1365	1365	
5°	1361	1362	1361	1360	1362	129
15°	1301	1308	1314	1323	1329	367
25°	1189	1200	1219	1244	1254	547
35°	1025	1043	1077	1124	1142	642
45°	833	852	900	962	987	642
55°	627	643	695	762	792	559
65°	413	432	478	534	563	408
75°	205	224	257	294	311	217
85°	48	56	66	70	73	56
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1364.6	1364.6	1364.6	1364.6	1364.6
2.5°	1365.8	1365.8	1363.3	1362.0	1364.6
5°	1360.8	1362.0	1360.8	1359.5	1362.0
7.5°	1351.9	1353.2	1353.2	1354.4	1357.0
10°	1339.2	1341.8	1343.0	1346.8	1350.6
12.5°	1322.8	1325.3	1330.4	1336.7	1341.8
15°	1301.3	1307.6	1313.9	1322.8	1329.1
17.5°	1278.5	1286.1	1296.2	1307.6	1315.2
20°	1251.9	1260.8	1273.4	1288.6	1297.5
22.5°	1221.5	1232.9	1248.1	1267.1	1277.2
25°	1188.6	1200.0	1219.0	1244.3	1254.4
27.5°	1151.9	1164.6	1187.3	1216.5	1230.4
30°	1112.7	1126.6	1153.2	1188.6	1203.8
32.5°	1070.9	1086.1	1116.5	1157.0	1173.4
35°	1025.3	1043.0	1077.2	1124.0	1141.8
37.5°	981.0	998.7	1036.7	1087.3	1107.6
40°	932.9	951.9	992.4	1048.1	1070.9
42.5°	884.8	901.3	946.8	1006.3	1030.4
45°	832.9	851.9	900.0	962.0	987.3
47.5°	781.0	801.3	851.9	915.2	941.8
50°	727.8	749.4	801.3	865.8	894.9
52.5°	678.5	696.2	749.4	815.2	845.6
55°	626.6	643.0	694.9	762.0	792.4
57.5°	572.2	591.1	643.0	706.3	736.7
60°	519.0	538.0	587.3	650.6	681.0
62.5°	467.1	484.8	532.9	593.7	624.0
65°	412.7	431.6	478.5	534.2	563.3
67.5°	359.5	379.7	424.1	474.7	505.1
70°	302.5	325.3	368.4	415.2	439.2
72.5°	251.9	273.4	312.7	354.4	377.2
75°	205.1	224.1	257.0	293.7	311.4
77.5°	158.2	178.5	207.6	235.4	249.4
80°	116.5	135.4	158.2	177.2	183.5
82.5°	79.7	93.7	110.1	120.3	129.1
85°	48.1	55.7	65.8	69.6	73.4
87.5°	20.3	22.8	26.6	25.3	26.6
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	12.72	14.36	13.08	14.67	14.99	14.18	15.83	14.55	16.14	16.45
	3H	14.28	15.77	14.66	16.10	16.46	16.08	17.57	16.46	17.90	18.26
	4H	14.80	16.20	15.20	16.55	16.92	16.79	18.19	17.18	18.53	18.91
	6H	15.13	16.43	15.54	16.79	17.18	17.28	18.58	17.69	18.94	19.33
	8H	15.21	16.45	15.64	16.84	17.24	17.42	18.66	17.85	19.05	19.45
	12H	15.26	16.44	15.68	16.83	17.25	17.50	18.69	17.93	19.07	19.50
4H	2H	13.47	14.87	13.87	15.22	15.59	14.64	16.04	15.04	16.39	16.76
	3H	15.24	16.41	15.65	16.81	17.21	16.75	17.93	17.16	18.33	18.73
	4H	15.86	16.92	16.29	17.34	17.77	17.59	18.65	18.02	19.06	19.50
	6H	16.29	17.22	16.75	17.66	18.12	18.21	19.14	18.66	19.58	20.04
	8H	16.41	17.28	16.87	17.72	18.19	18.40	19.27	18.86	19.71	20.18
	12H	16.48	17.26	16.96	17.73	18.20	18.52	19.30	18.99	19.77	20.24
8H	4H	16.24	17.11	16.70	17.55	18.02	17.78	18.65	18.24	19.09	19.56
	6H	16.78	17.51	17.27	17.99	18.47	18.51	19.23	19.00	19.72	20.19
	8H	16.95	17.60	17.46	18.10	18.59	18.75	19.40	19.26	19.91	20.39
	12H	17.06	17.64	17.57	18.13	18.69	18.92	19.50	19.43	19.99	20.55
12H	4H	16.29	17.08	16.77	17.55	18.02	17.79	18.57	18.27	19.05	19.52
	6H	16.85	17.50	17.36	18.01	18.50	18.52	19.17	19.03	19.68	20.16
	8H	17.07	17.65	17.58	18.14	18.70	18.81	19.39	19.32	19.88	20.44