

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: P572070

Luminaire Tested: 22ID-80-L830-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572070
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2109-397-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: 22ID-80-L830-DBD
Description: 8000 LUMEN, 2X2 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: 7823.0 lumens
Efficiency: N/A
Efficacy: 110.5 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.22 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 2' x H: 0.17')
CIE Type: Direct

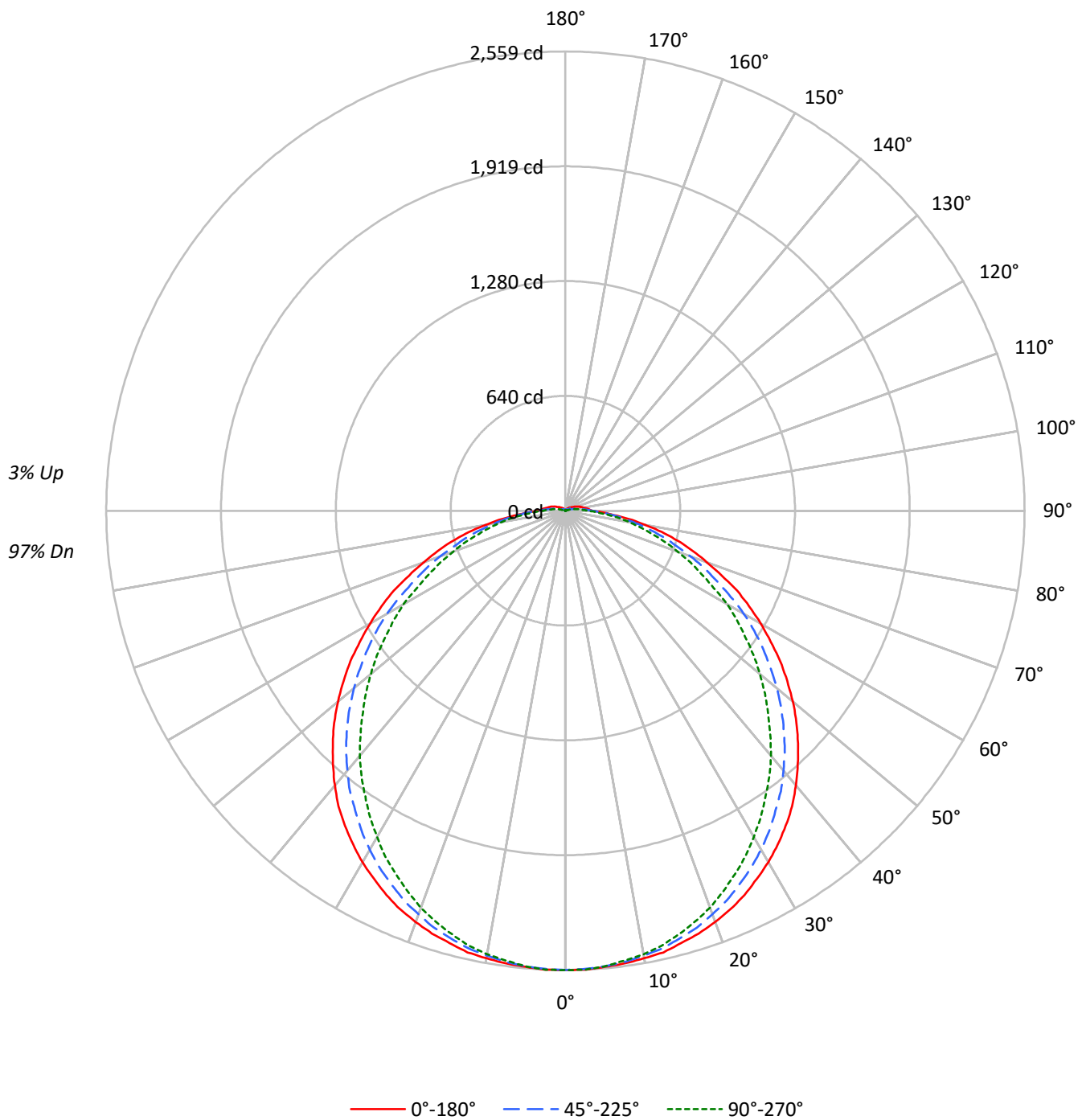
Input Watts (W): 70.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	30	10
RCR																	
0	118	118	118	118	115	115	115	115	110	110	110	104	104	104	100	100	100
1	107	102	98	93	104	100	95	92	95	91	88	90	88	85	86	84	82
2	97	89	81	75	94	87	80	74	82	77	72	79	74	70	75	72	68
3	89	78	69	62	86	76	68	62	72	66	60	69	64	59	66	62	58
4	81	69	60	53	78	67	59	52	64	57	51	62	55	50	59	54	49
5	74	61	52	45	72	60	51	45	58	50	44	55	49	43	53	47	43
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	48	42	38
7	64	50	41	35	62	49	41	35	47	40	34	46	39	34	44	38	33
8	59	46	37	31	57	45	37	31	43	36	30	42	35	30	40	34	30
9	55	42	33	28	54	41	33	28	40	32	27	38	32	27	37	31	27
10	52	39	31	25	50	38	30	25	37	30	25	36	29	25	35	29	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6887	6887	6887
5°	6843	6812	6832
10°	6819	6737	6757
15°	6795	6661	6658
20°	6780	6571	6544
25°	6751	6463	6387
30°	6705	6344	6224
35°	6648	6195	6036
40°	6562	6043	5852
45°	6437	5857	5609
50°	6301	5648	5389
55°	6127	5403	5122
60°	5909	5132	4891
65°	5701	4735	4532
70°	5371	4412	4257
75°	5151	4048	3955
80°	4759	3698	3743
85°	4279	3357	3545

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6437 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.3	3.1
10°-20°	696.9	8.9
20°-30°	1059.0	13.5
30°-40°	1278.5	16.3
40°-50°	1325.9	16.9
50°-60°	1202.0	15.4
60°-70°	932.8	11.9
70°-80°	600.6	7.7
80°-90°	283.7	3.6
90°-100°	110.1	1.4
100°-110°	48.6	0.6
110°-120°	23.8	0.3
120°-130°	12.0	0.2
130°-140°	5.2	0.1
140°-150°	1.4	0.0
150°-160°	0.0	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	1998.2	25.5
0°-40°	3276.7	41.9
0°-60°	5804.6	74.2
0°-90°	7621.8	97.4
90°-120°	182.5	2.3
90°-150°	201.1	2.6
90°-180°	201.0	2.6
0°-180°	7823.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2559	2559	2559	2559	2559	
5°	2552	2552	2548	2544	2548	243
15°	2494	2486	2467	2451	2443	705
25°	2362	2343	2296	2254	2235	1089
35°	2142	2111	2041	1976	1945	1340
45°	1832	1802	1720	1635	1597	1414
55°	1461	1427	1345	1260	1222	1305
65°	1055	1009	932	870	839	1040
75°	650	607	561	522	499	684
85°	271	271	255	240	224	259
90°	151	158	151	135	124	87
95°	124	104	97	89	81	96
105°	85	66	35	23	19	89
115°	50	42	23	4	0	52
125°	31	23	12	0	0	28
135°	16	12	4	0	0	12
145°	8	4	0	0	0	4
155°	0	0	0	0	0	0
165°	0	0	0	4	4	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2559.3	2559.3	2559.3	2559.3	2559.3
2.5°	2559.3	2555.5	2555.5	2555.5	2559.3
5°	2551.6	2551.6	2547.7	2543.9	2547.7
7.5°	2543.9	2540.0	2536.1	2532.3	2528.4
10°	2532.3	2528.4	2516.8	2509.1	2509.1
12.5°	2520.7	2509.1	2497.5	2485.9	2482.0
15°	2493.6	2485.9	2466.6	2451.1	2443.4
17.5°	2470.4	2458.8	2435.6	2412.4	2400.8
20°	2439.5	2424.0	2393.1	2366.0	2354.4
22.5°	2404.7	2385.4	2350.6	2311.9	2296.4
25°	2362.2	2342.8	2296.4	2253.9	2234.6
27.5°	2311.9	2292.6	2242.3	2188.2	2172.7
30°	2261.7	2238.5	2180.5	2122.5	2099.3
32.5°	2203.7	2176.6	2114.7	2049.0	2025.8
35°	2141.8	2110.9	2041.3	1975.6	1944.6
37.5°	2076.1	2045.2	1971.7	1898.2	1867.3
40°	1998.8	1967.8	1890.5	1809.3	1782.3
42.5°	1917.6	1886.6	1809.3	1724.3	1689.5
45°	1832.5	1801.6	1720.4	1635.3	1596.7
47.5°	1747.5	1716.5	1631.5	1546.4	1507.8
50°	1654.7	1623.8	1538.7	1449.8	1415.0
52.5°	1558.0	1527.1	1442.0	1357.0	1322.2
55°	1461.4	1426.6	1345.4	1260.3	1221.7
57.5°	1357.0	1326.1	1248.7	1167.6	1132.8
60°	1256.5	1221.7	1148.2	1070.9	1040.0
62.5°	1156.0	1117.3	1040.0	962.7	931.7
65°	1055.4	1009.0	931.7	869.9	838.9
67.5°	943.3	900.8	838.9	777.1	753.9
70°	838.9	804.1	742.3	692.0	665.0
72.5°	746.2	703.6	645.6	607.0	583.8
75°	649.5	607.0	560.6	521.9	498.7
77.5°	549.0	514.2	475.5	448.5	425.3
80°	452.3	425.3	398.2	371.1	355.7
82.5°	355.7	340.2	324.8	305.4	290.0
85°	270.6	270.6	255.2	239.7	224.2
87.5°	201.0	204.9	197.2	181.7	170.1
90°	150.8	158.5	150.8	135.3	123.7
92.5°	135.3	127.6	119.8	112.1	100.5
95°	123.7	104.4	96.7	88.9	81.2
97.5°	112.1	88.9	77.3	69.6	61.9
100°	100.5	77.3	58.0	50.3	46.4
102.5°	92.8	73.5	46.4	34.8	34.8
105°	85.1	65.7	34.8	23.2	19.3
107.5°	73.5	58.0	30.9	15.5	11.6
110°	65.7	54.1	27.1	7.7	3.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	58.0	46.4	27.1	7.7	0.0
115°	50.3	42.5	23.2	3.9	0.0
117.5°	46.4	34.8	19.3	3.9	0.0
120°	38.7	30.9	15.5	3.9	0.0
122.5°	34.8	27.1	15.5	3.9	0.0
125°	30.9	23.2	11.6	0.0	0.0
127.5°	27.1	19.3	11.6	0.0	0.0
130°	23.2	19.3	7.7	0.0	0.0
132.5°	19.3	15.5	7.7	0.0	0.0
135°	15.5	11.6	3.9	0.0	0.0
137.5°	11.6	11.6	3.9	0.0	0.0
140°	11.6	7.7	3.9	0.0	0.0
142.5°	7.7	7.7	0.0	0.0	0.0
145°	7.7	3.9	0.0	0.0	0.0
147.5°	3.9	3.9	0.0	0.0	0.0
150°	3.9	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	3.9	3.9
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	3.9
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	3.9	3.9	3.9
180°	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	18.21	19.81	18.61	20.18	20.56	17.25	18.86	17.66	19.23	19.61
	3H	20.10	21.55	20.51	21.93	22.36	18.99	20.45	19.41	20.83	21.25
	4H	20.88	22.26	21.32	22.66	23.09	19.69	21.06	20.13	21.46	21.90
	6H	21.53	22.81	21.98	23.22	23.68	20.28	21.56	20.73	21.97	22.43
	8H	21.78	23.00	22.24	23.44	23.90	20.51	21.74	20.98	22.18	22.64
	12H	21.98	23.15	22.45	23.59	24.08	20.72	21.89	21.19	22.33	22.82
4H	2H	18.70	20.08	19.14	20.48	20.92	17.94	19.32	18.38	19.72	20.16
	3H	20.82	21.99	21.27	22.43	22.90	19.90	21.07	20.35	21.52	21.98
	4H	21.75	22.81	22.22	23.27	23.76	20.73	21.79	21.20	22.25	22.75
	6H	22.55	23.48	23.04	23.97	24.48	21.46	22.39	21.95	22.88	23.39
	8H	22.86	23.74	23.36	24.23	24.75	21.76	22.63	22.26	23.12	23.65
	12H	23.14	23.93	23.66	24.45	24.98	22.03	22.82	22.55	23.34	23.87
8H	4H	22.02	22.89	22.51	23.38	23.90	21.12	22.00	21.62	22.49	23.01
	6H	22.96	23.69	23.49	24.22	24.76	22.00	22.73	22.53	23.27	23.80
	8H	23.37	24.03	23.92	24.58	25.12	22.40	23.06	22.94	23.61	24.15
	12H	23.76	24.35	24.31	24.88	25.50	22.78	23.36	23.32	23.90	24.51
12H	4H	22.05	22.84	22.57	23.36	23.89	21.19	21.98	21.71	22.50	23.02
	6H	23.02	23.68	23.56	24.23	24.77	22.10	22.77	22.65	23.31	23.86
	8H	23.50	24.09	24.04	24.62	25.24	22.57	23.16	23.12	23.70	24.31