

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: P571974

Luminaire Tested: 22ID-50-L830-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P571974
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-50-L830-DBD
Description: 5000 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: 4940.0 lumens
Efficiency: N/A
Efficacy: 120.2 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

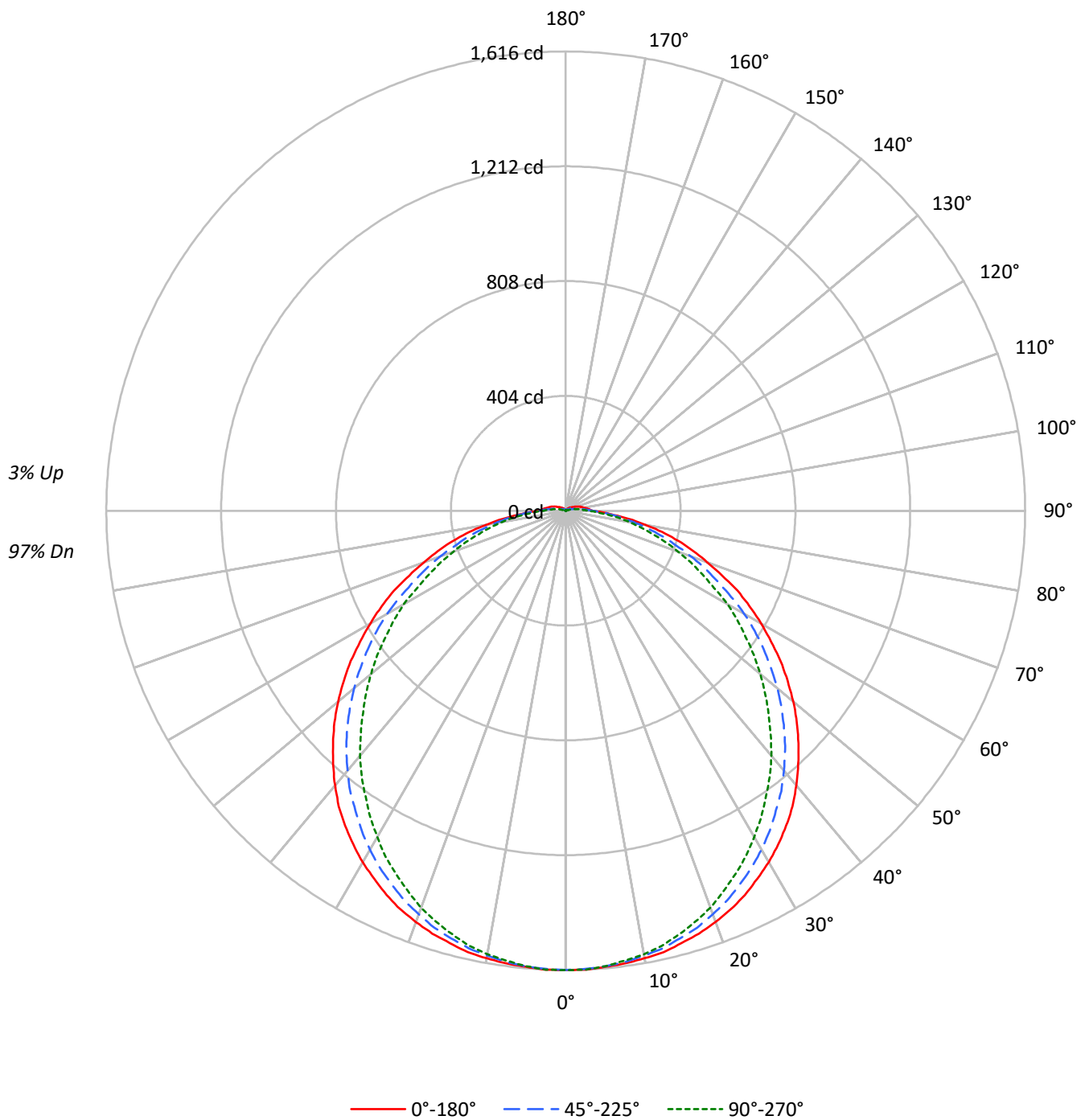
Input Watts (W): 41.1
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	4349	4349	4349
5°	4321	4301	4314
10°	4306	4254	4267
15°	4291	4206	4204
20°	4282	4150	4132
25°	4263	4081	4033
30°	4234	4006	3930
35°	4198	3912	3812
40°	4144	3816	3695
45°	4065	3698	3542
50°	3979	3567	3403
55°	3869	3412	3235
60°	3731	3241	3088
65°	3600	2991	2862
70°	3392	2786	2688
75°	3252	2556	2497
80°	3005	2336	2363
85°	2702	2119	2239

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4065 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.0	3.1
10°-20°	440.1	8.9
20°-30°	668.7	13.5
30°-40°	807.3	16.3
40°-50°	837.3	16.9
50°-60°	759.0	15.4
60°-70°	589.1	11.9
70°-80°	379.3	7.7
80°-90°	179.2	3.6
90°-100°	69.5	1.4
100°-110°	30.7	0.6
110°-120°	15.0	0.3
120°-130°	7.6	0.2
130°-140°	3.3	0.1
140°-150°	0.9	0.0
150°-160°	0.0	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	1261.8	25.5
0°-40°	2069.1	41.9
0°-60°	3665.4	74.2
0°-90°	4812.9	97.4
90°-120°	115.2	2.3
90°-150°	126.9	2.6
90°-180°	127.0	2.6
0°-180°	4940.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1616	1616	1616	1616	1616	
5°	1611	1611	1609	1606	1609	153
15°	1575	1570	1558	1548	1543	445
25°	1492	1479	1450	1423	1411	687
35°	1352	1333	1289	1248	1228	846
45°	1157	1138	1086	1033	1008	893
55°	923	901	850	796	772	824
65°	666	637	588	549	530	657
75°	410	383	354	330	315	432
85°	171	171	161	151	142	164
90°	95	100	95	85	78	55
95°	78	66	61	56	51	61
105°	54	42	22	15	12	56
115°	32	27	15	2	0	32
125°	20	15	7	0	0	18
135°	10	7	2	0	0	8
145°	5	2	0	0	0	3
155°	0	0	0	0	0	0
165°	0	0	0	2	2	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1616.2	1616.2	1616.2	1616.2	1616.2
2.5°	1616.2	1613.7	1613.7	1613.7	1616.2
5°	1611.3	1611.3	1608.8	1606.4	1608.8
7.5°	1606.4	1603.9	1601.5	1599.1	1596.6
10°	1599.1	1596.6	1589.3	1584.4	1584.4
12.5°	1591.7	1584.4	1577.1	1569.8	1567.3
15°	1574.6	1569.8	1557.6	1547.8	1542.9
17.5°	1560.0	1552.7	1538.0	1523.4	1516.1
20°	1540.5	1530.7	1511.2	1494.1	1486.8
22.5°	1518.5	1506.3	1484.3	1459.9	1450.1
25°	1491.6	1479.4	1450.1	1423.3	1411.1
27.5°	1459.9	1447.7	1416.0	1381.8	1372.0
30°	1428.2	1413.5	1376.9	1340.3	1325.6
32.5°	1391.5	1374.5	1335.4	1293.9	1279.2
35°	1352.5	1333.0	1289.0	1247.5	1228.0
37.5°	1311.0	1291.5	1245.1	1198.7	1179.2
40°	1262.2	1242.6	1193.8	1142.5	1125.4
42.5°	1210.9	1191.4	1142.5	1088.8	1066.9
45°	1157.2	1137.7	1086.4	1032.7	1008.3
47.5°	1103.5	1083.9	1030.2	976.5	952.1
50°	1044.9	1025.4	971.6	915.5	893.5
52.5°	983.9	964.3	910.6	856.9	834.9
55°	922.8	900.8	849.6	795.9	771.5
57.5°	856.9	837.4	788.5	737.3	715.3
60°	793.4	771.5	725.1	676.2	656.7
62.5°	730.0	705.5	656.7	607.9	588.4
65°	666.5	637.2	588.4	549.3	529.8
67.5°	595.7	568.8	529.8	490.7	476.1
70°	529.8	507.8	468.7	437.0	419.9
72.5°	471.2	444.3	407.7	383.3	368.6
75°	410.1	383.3	354.0	329.6	314.9
77.5°	346.7	324.7	300.3	283.2	268.5
80°	285.6	268.5	251.5	234.4	224.6
82.5°	224.6	214.8	205.1	192.9	183.1
85°	170.9	170.9	161.1	151.4	141.6
87.5°	126.9	129.4	124.5	114.7	107.4
90°	95.2	100.1	95.2	85.4	78.1
92.5°	85.4	80.6	75.7	70.8	63.5
95°	78.1	65.9	61.0	56.2	51.3
97.5°	70.8	56.2	48.8	43.9	39.1
100°	63.5	48.8	36.6	31.7	29.3
102.5°	58.6	46.4	29.3	22.0	22.0
105°	53.7	41.5	22.0	14.6	12.2
107.5°	46.4	36.6	19.5	9.8	7.3
110°	41.5	34.2	17.1	4.9	2.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	36.6	29.3	17.1	4.9	0.0
115°	31.7	26.9	14.6	2.4	0.0
117.5°	29.3	22.0	12.2	2.4	0.0
120°	24.4	19.5	9.8	2.4	0.0
122.5°	22.0	17.1	9.8	2.4	0.0
125°	19.5	14.6	7.3	0.0	0.0
127.5°	17.1	12.2	7.3	0.0	0.0
130°	14.6	12.2	4.9	0.0	0.0
132.5°	12.2	9.8	4.9	0.0	0.0
135°	9.8	7.3	2.4	0.0	0.0
137.5°	7.3	7.3	2.4	0.0	0.0
140°	7.3	4.9	2.4	0.0	0.0
142.5°	4.9	4.9	0.0	0.0	0.0
145°	4.9	2.4	0.0	0.0	0.0
147.5°	2.4	2.4	0.0	0.0	0.0
150°	2.4	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	2.4	2.4
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	2.4
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	2.4	2.4	2.4
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	16.61	18.22	17.02	18.58	18.96	15.66	17.26	16.06	17.63	18.01
	3H	18.50	19.96	18.92	20.34	20.76	17.39	18.85	17.81	19.23	19.65
	4H	19.28	20.66	19.72	21.06	21.50	18.09	19.47	18.53	19.87	20.31
	6H	19.93	21.21	20.38	21.63	22.08	18.68	19.96	19.13	20.38	20.83
	8H	20.18	21.40	20.64	21.84	22.30	18.92	20.14	19.38	20.58	21.04
	12H	20.38	21.56	20.85	21.99	22.48	19.12	20.29	19.59	20.73	21.22
4H	2H	17.11	18.48	17.54	18.88	19.32	16.35	17.72	16.79	18.12	18.56
	3H	19.23	20.39	19.68	20.84	21.30	18.31	19.47	18.76	19.92	20.38
	4H	20.15	21.21	20.62	21.67	22.16	19.13	20.19	19.60	20.65	21.15
	6H	20.95	21.88	21.44	22.37	22.88	19.86	20.79	20.35	21.28	21.79
	8H	21.27	22.14	21.77	22.63	23.15	20.16	21.04	20.66	21.52	22.05
	12H	21.54	22.33	22.06	22.85	23.38	20.43	21.22	20.95	21.74	22.27
8H	4H	20.42	21.29	20.92	21.78	22.31	19.53	20.40	20.02	20.89	21.41
	6H	21.36	22.09	21.89	22.63	23.16	20.40	21.14	20.93	21.67	22.20
	8H	21.77	22.43	22.32	22.98	23.53	20.80	21.46	21.35	22.01	22.55
	12H	22.16	22.75	22.71	23.29	23.90	21.18	21.77	21.72	22.30	22.92
12H	4H	20.45	21.24	20.97	21.76	22.29	19.59	20.38	20.11	20.90	21.43
	6H	21.42	22.08	21.97	22.63	23.18	20.51	21.17	21.05	21.72	22.26
	8H	21.90	22.49	22.45	23.02	23.64	20.98	21.57	21.52	22.10	22.71