

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: P571958

Luminaire Tested: 22ID-45-L830-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P571958
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-45-L830-DBD
Description: 4500 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: 4450.0 lumens
Efficiency: N/A
Efficacy: 119.6 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

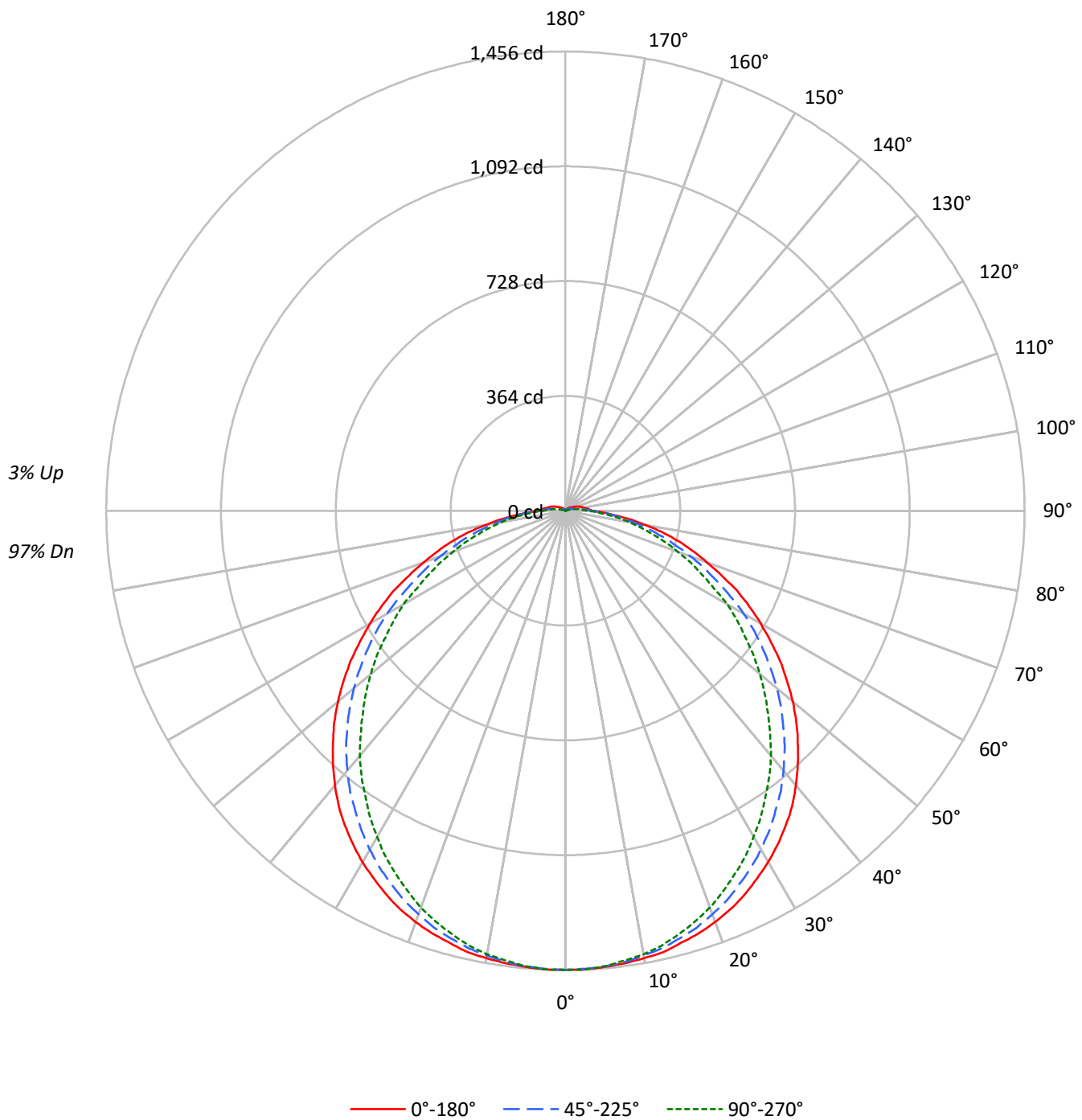
Input Watts (W): 37.2
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	3918	3918	3918
5°	3892	3875	3886
10°	3879	3832	3844
15°	3865	3789	3788
20°	3857	3738	3722
25°	3840	3677	3633
30°	3814	3608	3540
35°	3782	3524	3434
40°	3733	3438	3329
45°	3662	3331	3191
50°	3584	3213	3065
55°	3485	3073	2913
60°	3361	2919	2782
65°	3243	2694	2578
70°	3055	2509	2422
75°	2930	2303	2250
80°	2707	2104	2129
85°	2433	1909	2018

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3662 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.8	3.1
10°-20°	396.4	8.9
20°-30°	602.4	13.5
30°-40°	727.3	16.3
40°-50°	754.2	16.9
50°-60°	683.7	15.4
60°-70°	530.6	11.9
70°-80°	341.7	7.7
80°-90°	161.4	3.6
90°-100°	62.7	1.4
100°-110°	27.6	0.6
110°-120°	13.6	0.3
120°-130°	6.8	0.2
130°-140°	2.9	0.1
140°-150°	0.8	0.0
150°-160°	0.0	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	1136.6	25.5
0°-40°	1863.9	41.9
0°-60°	3301.8	74.2
0°-90°	4335.5	97.4
90°-120°	103.9	2.3
90°-150°	114.4	2.6
90°-180°	115.0	2.6
0°-180°	4450.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1456	1456	1456	1456	1456	
5°	1451	1451	1449	1447	1449	138
15°	1418	1414	1403	1394	1390	401
25°	1344	1333	1306	1282	1271	619
35°	1218	1201	1161	1124	1106	762
45°	1042	1025	979	930	908	805
55°	831	812	765	717	695	742
65°	600	574	530	495	477	592
75°	370	345	319	297	284	389
85°	154	154	145	136	128	147
90°	86	90	86	77	70	50
95°	70	59	55	51	46	55
105°	48	37	20	13	11	50
115°	29	24	13	2	0	29
125°	18	13	7	0	0	16
135°	9	7	2	0	0	7
145°	4	2	0	0	0	2
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°	1455.8	1455.8	1455.8	1455.8	1455.8
2.5°	1455.8	1453.6	1453.6	1453.6	1455.8
5°	1451.4	1451.4	1449.2	1447.0	1449.2
7.5°	1447.0	1444.8	1442.6	1440.5	1438.3
10°	1440.5	1438.3	1431.7	1427.3	1427.3
12.5°	1433.9	1427.3	1420.7	1414.1	1411.9
15°	1418.5	1414.1	1403.1	1394.3	1389.9
17.5°	1405.3	1398.7	1385.5	1372.3	1365.7
20°	1387.7	1378.9	1361.3	1345.9	1339.3
22.5°	1367.9	1356.9	1337.1	1315.1	1306.3
25°	1343.7	1332.7	1306.3	1282.1	1271.1
27.5°	1315.1	1304.1	1275.5	1244.7	1235.9
30°	1286.5	1273.3	1240.3	1207.3	1194.1
32.5°	1253.5	1238.1	1202.9	1165.6	1152.4
35°	1218.3	1200.7	1161.2	1123.8	1106.2
37.5°	1180.9	1163.4	1121.6	1079.8	1062.2
40°	1137.0	1119.4	1075.4	1029.2	1013.8
42.5°	1090.8	1073.2	1029.2	980.8	961.0
45°	1042.4	1024.8	978.6	930.2	908.3
47.5°	994.0	976.4	928.0	879.7	857.7
50°	941.2	923.6	875.3	824.7	804.9
52.5°	886.3	868.7	820.3	771.9	752.1
55°	831.3	811.5	765.3	716.9	694.9
57.5°	771.9	754.3	710.3	664.1	644.4
60°	714.7	694.9	653.2	609.2	591.6
62.5°	657.5	635.6	591.6	547.6	530.0
65°	600.4	574.0	530.0	494.8	477.2
67.5°	536.6	512.4	477.2	442.0	428.8
70°	477.2	457.4	422.2	393.6	378.3
72.5°	424.4	400.2	367.3	345.3	332.1
75°	369.5	345.3	318.9	296.9	283.7
77.5°	312.3	292.5	270.5	255.1	241.9
80°	257.3	241.9	226.5	211.1	202.3
82.5°	202.3	193.5	184.7	173.7	164.9
85°	153.9	153.9	145.1	136.3	127.6
87.5°	114.4	116.6	112.2	103.4	96.8
90°	85.8	90.2	85.8	77.0	70.4
92.5°	77.0	72.6	68.2	63.8	57.2
95°	70.4	59.4	55.0	50.6	46.2
97.5°	63.8	50.6	44.0	39.6	35.2
100°	57.2	44.0	33.0	28.6	26.4
102.5°	52.8	41.8	26.4	19.8	19.8
105°	48.4	37.4	19.8	13.2	11.0
107.5°	41.8	33.0	17.6	8.8	6.6
110°	37.4	30.8	15.4	4.4	2.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	33.0	26.4	15.4	4.4	0.0
115°	28.6	24.2	13.2	2.2	0.0
117.5°	26.4	19.8	11.0	2.2	0.0
120°	22.0	17.6	8.8	2.2	0.0
122.5°	19.8	15.4	8.8	2.2	0.0
125°	17.6	13.2	6.6	0.0	0.0
127.5°	15.4	11.0	6.6	0.0	0.0
130°	13.2	11.0	4.4	0.0	0.0
132.5°	11.0	8.8	4.4	0.0	0.0
135°	8.8	6.6	2.2	0.0	0.0
137.5°	6.6	6.6	2.2	0.0	0.0
140°	6.6	4.4	2.2	0.0	0.0
142.5°	4.4	4.4	0.0	0.0	0.0
145°	4.4	2.2	0.0	0.0	0.0
147.5°	2.2	2.2	0.0	0.0	0.0
150°	2.2	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	2.2	2.2
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	2.2
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	2.2	2.2	2.2
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	16.25	17.85	16.65	18.22	18.60	15.29	16.90	15.70	17.27	17.65
	3H	18.14	19.59	18.55	19.97	20.40	17.03	18.49	17.45	18.87	19.29
	4H	18.92	20.30	19.36	20.70	21.13	17.73	19.10	18.16	19.50	19.94
	6H	19.57	20.85	20.02	21.26	21.72	18.32	19.60	18.77	20.01	20.46
	8H	19.82	21.04	20.28	21.48	21.94	18.55	19.78	19.02	20.22	20.68
	12H	20.02	21.19	20.49	21.63	22.12	18.76	19.93	19.23	20.36	20.86
4H	2H	16.74	18.12	17.18	18.52	18.96	15.98	17.36	16.42	17.76	18.20
	3H	18.86	20.03	19.31	20.47	20.93	17.94	19.11	18.39	19.55	20.02
	4H	19.79	20.85	20.26	21.31	21.80	18.77	19.83	19.24	20.29	20.79
	6H	20.59	21.52	21.08	22.01	22.52	19.50	20.43	19.99	20.92	21.43
	8H	20.90	21.78	21.40	22.27	22.79	19.80	20.67	20.30	21.16	21.68
	12H	21.18	21.97	21.70	22.49	23.02	20.07	20.86	20.59	21.38	21.91
8H	4H	20.06	20.93	20.55	21.42	21.94	19.16	20.04	19.66	20.53	21.05
	6H	21.00	21.73	21.53	22.26	22.80	20.04	20.77	20.57	21.31	21.84
	8H	21.41	22.07	21.95	22.62	23.16	20.44	21.10	20.98	21.65	22.19
	12H	21.80	22.39	22.35	22.92	23.54	20.81	21.40	21.36	21.94	22.55
12H	4H	20.09	20.88	20.61	21.40	21.93	19.23	20.02	19.75	20.54	21.06
	6H	21.06	21.72	21.60	22.27	22.81	20.14	20.81	20.69	21.35	21.90
	8H	21.54	22.13	22.08	22.66	23.27	20.61	21.20	21.16	21.74	22.35