

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: P571970

Luminaire Tested: 22ID-45-L850-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P571970
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-L850-DBD
Description: 4500 LUMEN, 2X2 INDEPTH TROFFER WITH 2IN DROPPED DOUBLE BARRELL LENS AND 5000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4803.0 lumens
Efficiency: N/A
Efficacy: 129.1 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

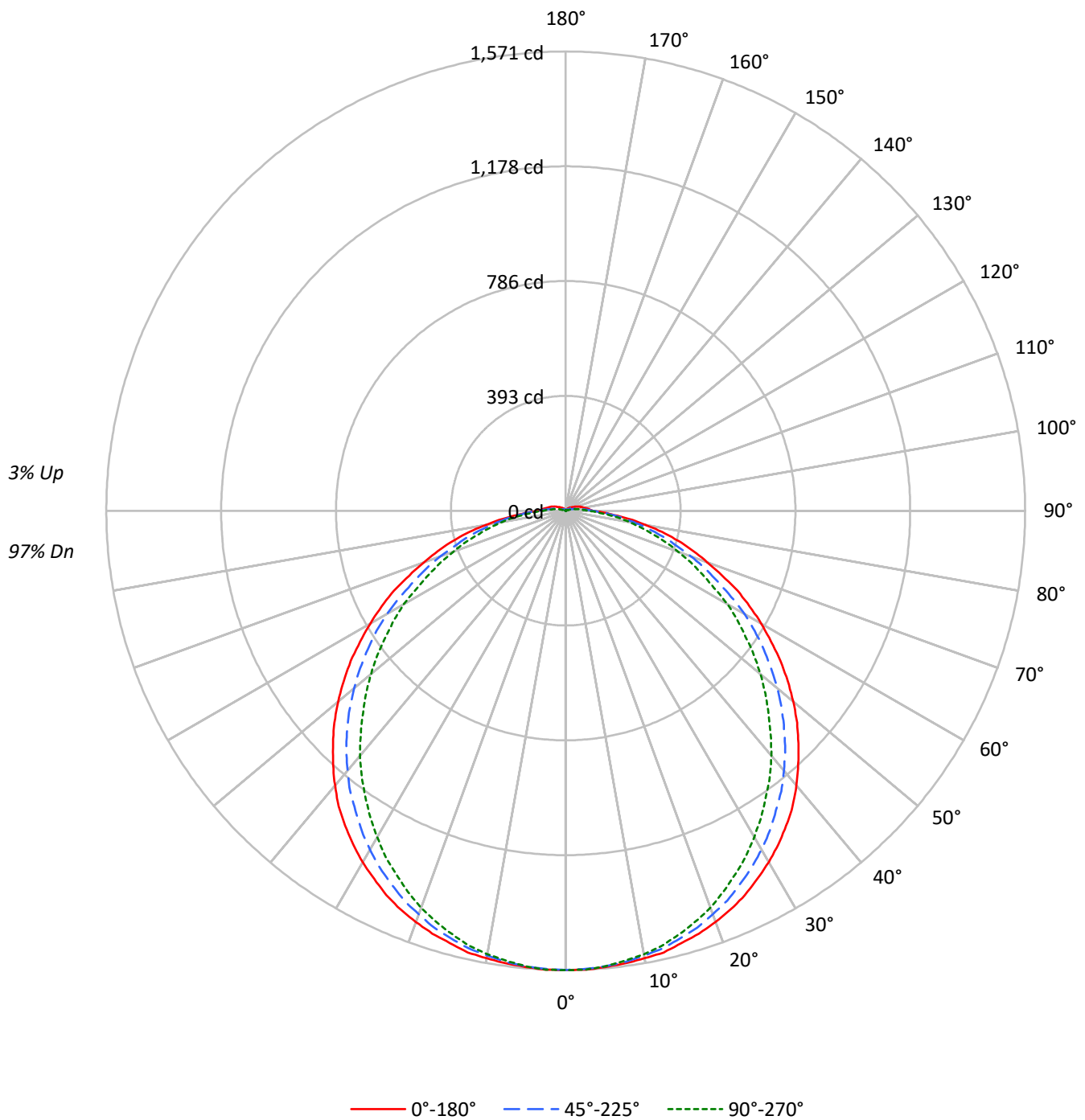
Input Watts (W): 37.2
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	4228	4228	4228
5°	4201	4182	4195
10°	4187	4136	4148
15°	4172	4090	4088
20°	4163	4035	4018
25°	4145	3968	3921
30°	4117	3895	3821
35°	4082	3803	3706
40°	4029	3710	3592
45°	3952	3596	3444
50°	3869	3468	3308
55°	3762	3317	3145
60°	3628	3151	3003
65°	3500	2907	2782
70°	3298	2708	2614
75°	3163	2485	2428
80°	2922	2271	2298
85°	2628	2061	2177

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3952 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.8	3.1
10°-20°	427.9	8.9
20°-30°	650.2	13.5
30°-40°	784.9	16.3
40°-50°	814.1	16.9
50°-60°	738.0	15.4
60°-70°	572.7	11.9
70°-80°	368.8	7.7
80°-90°	174.2	3.6
90°-100°	67.6	1.4
100°-110°	29.8	0.6
110°-120°	14.6	0.3
120°-130°	7.4	0.2
130°-140°	3.2	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°	1226.8	25.5
0°-40°	2011.7	41.9
0°-60°	3563.8	74.2
0°-90°	4679.5	97.4
90°-120°	112.1	2.3
90°-150°	123.5	2.6
90°-180°	124.0	2.6
0°-180°	4803.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1571	1571	1571	1571	1571	
5°	1567	1567	1564	1562	1564	149
15°	1531	1526	1514	1505	1500	433
25°	1450	1438	1410	1384	1372	668
35°	1315	1296	1253	1213	1194	823
45°	1125	1106	1056	1004	980	868
55°	897	876	826	774	750	801
65°	648	620	572	534	515	639
75°	399	373	344	320	306	420
85°	166	166	157	147	138	159
90°	93	97	93	83	76	54
95°	76	64	59	55	50	59
105°	52	40	21	14	12	54
115°	31	26	14	2	0	32
125°	19	14	7	0	0	17
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°	1571.3	1571.3	1571.3	1571.3	1571.3
2.5°	1571.3	1569.0	1569.0	1569.0	1571.3
5°	1566.6	1566.6	1564.2	1561.8	1564.2
7.5°	1561.8	1559.5	1557.1	1554.7	1552.3
10°	1554.7	1552.3	1545.2	1540.5	1540.5
12.5°	1547.6	1540.5	1533.4	1526.2	1523.9
15°	1531.0	1526.2	1514.4	1504.9	1500.1
17.5°	1516.7	1509.6	1495.4	1481.1	1474.0
20°	1497.7	1488.3	1469.3	1452.6	1445.5
22.5°	1476.4	1464.5	1443.2	1419.4	1409.9
25°	1450.3	1438.4	1409.9	1383.8	1371.9
27.5°	1419.4	1407.6	1376.7	1343.5	1334.0
30°	1388.6	1374.3	1338.7	1303.1	1288.9
32.5°	1353.0	1336.3	1298.4	1258.0	1243.8
35°	1315.0	1296.0	1253.3	1212.9	1193.9
37.5°	1274.6	1255.6	1210.5	1165.4	1146.5
40°	1227.2	1208.2	1160.7	1110.8	1094.2
42.5°	1177.3	1158.3	1110.8	1058.6	1037.3
45°	1125.1	1106.1	1056.3	1004.0	980.3
47.5°	1072.9	1053.9	1001.7	949.4	925.7
50°	1015.9	996.9	944.7	890.1	868.7
52.5°	956.6	937.6	885.4	833.1	811.8
55°	897.2	875.9	826.0	773.8	750.1
57.5°	833.1	814.1	766.7	716.8	695.5
60°	771.4	750.1	705.0	657.5	638.5
62.5°	709.7	686.0	638.5	591.0	572.0
65°	648.0	619.5	572.0	534.1	515.1
67.5°	579.2	553.1	515.1	477.1	462.9
70°	515.1	493.7	455.7	424.9	408.3
72.5°	458.1	432.0	396.4	372.7	358.4
75°	398.8	372.7	344.2	320.4	306.2
77.5°	337.1	315.7	292.0	275.3	261.1
80°	277.7	261.1	244.5	227.9	218.4
82.5°	218.4	208.9	199.4	187.5	178.0
85°	166.2	166.2	156.7	147.2	137.7
87.5°	123.4	125.8	121.1	111.6	104.4
90°	92.6	97.3	92.6	83.1	76.0
92.5°	83.1	78.3	73.6	68.8	61.7
95°	76.0	64.1	59.3	54.6	49.8
97.5°	68.8	54.6	47.5	42.7	38.0
100°	61.7	47.5	35.6	30.9	28.5
102.5°	57.0	45.1	28.5	21.4	21.4
105°	52.2	40.4	21.4	14.2	11.9
107.5°	45.1	35.6	19.0	9.5	7.1
110°	40.4	33.2	16.6	4.7	2.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	35.6	28.5	16.6	4.7	0.0
115°	30.9	26.1	14.2	2.4	0.0
117.5°	28.5	21.4	11.9	2.4	0.0
120°	23.7	19.0	9.5	2.4	0.0
122.5°	21.4	16.6	9.5	2.4	0.0
125°	19.0	14.2	7.1	0.0	0.0
127.5°	16.6	11.9	7.1	0.0	0.0
130°	14.2	11.9	4.7	0.0	0.0
132.5°	11.9	9.5	4.7	0.0	0.0
135°	9.5	7.1	2.4	0.0	0.0
137.5°	7.1	7.1	2.4	0.0	0.0
140°	7.1	4.7	2.4	0.0	0.0
142.5°	4.7	4.7	0.0	0.0	0.0
145°	4.7	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	16.51	18.12	16.92	18.49	18.87	15.56	17.16	15.96	17.53	17.91
	3H	18.40	19.86	18.82	20.24	20.66	17.30	18.75	17.71	19.13	19.56
	4H	19.18	20.56	19.62	20.96	21.40	17.99	19.37	18.43	19.77	20.21
	6H	19.83	21.11	20.28	21.53	21.98	18.58	19.86	19.03	20.28	20.73
	8H	20.08	21.31	20.54	21.75	22.21	18.82	20.04	19.28	20.48	20.94
	12H	20.29	21.46	20.76	21.89	22.38	19.02	20.20	19.49	20.63	21.12
4H	2H	17.01	18.38	17.45	18.79	19.22	16.25	17.63	16.69	18.03	18.46
	3H	19.13	20.29	19.58	20.74	21.20	18.21	19.37	18.66	19.82	20.28
	4H	20.05	21.11	20.52	21.57	22.07	19.03	20.09	19.51	20.56	21.05
	6H	20.85	21.78	21.35	22.27	22.79	19.76	20.70	20.26	21.18	21.70
	8H	21.17	22.04	21.67	22.53	23.06	20.06	20.94	20.56	21.43	21.95
	12H	21.45	22.24	21.97	22.76	23.28	20.33	21.12	20.85	21.64	22.17
8H	4H	20.32	21.20	20.82	21.68	22.21	19.43	20.30	19.93	20.79	21.31
	6H	21.26	22.00	21.79	22.53	23.06	20.30	21.04	20.84	21.57	22.10
	8H	21.67	22.34	22.22	22.88	23.43	20.70	21.36	21.25	21.91	22.45
	12H	22.07	22.66	22.61	23.19	23.80	21.08	21.67	21.63	22.20	22.82
12H	4H	20.35	21.14	20.87	21.66	22.19	19.49	20.28	20.01	20.80	21.33
	6H	21.32	21.99	21.87	22.54	23.08	20.41	21.07	20.95	21.62	22.16
	8H	21.80	22.39	22.35	22.93	23.54	20.88	21.47	21.42	22.00	22.62

END OF REPORT