

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: P571954

Luminaire Tested: 22ID-40-L850-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P571954
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-40-L850-DBD
Description: 4000 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: 4258.9 lumens
Efficiency: N/A
Efficacy: 131.0 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

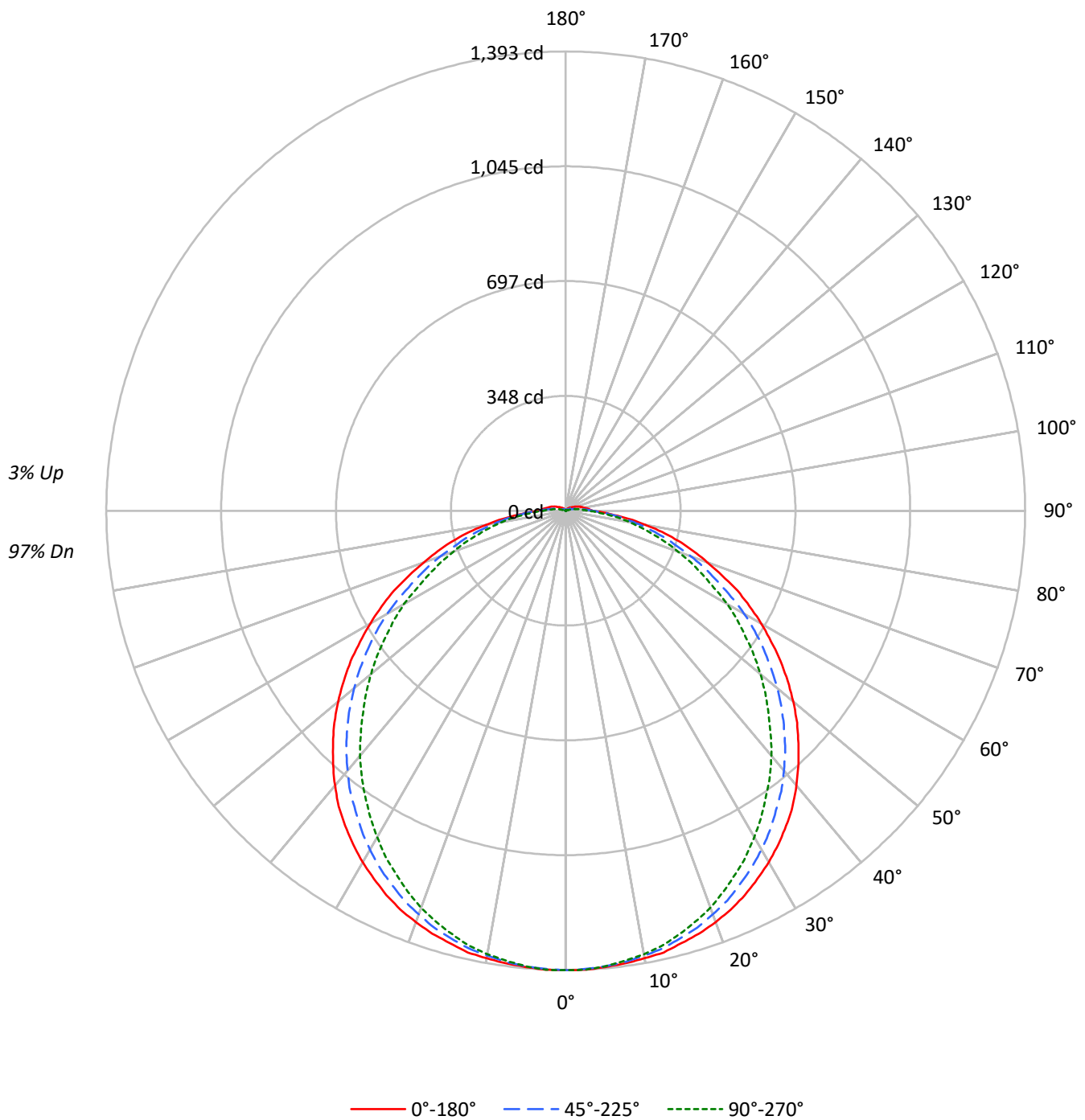
Input Watts (W): 32.5
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P571954

CATALOG NUMBER: 22ID-40-L850-DBD

Luminous Intensity Polar Plot



TEST NUMBER: P571954

CATALOG NUMBER: 22ID-40-L850-DBD

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°	3750	3750	3750
5°	3725	3708	3720
10°	3712	3668	3679
15°	3700	3626	3625
20°	3691	3578	3563
25°	3675	3519	3477
30°	3650	3454	3388
35°	3619	3372	3286
40°	3573	3290	3186
45°	3505	3188	3054
50°	3430	3075	2933
55°	3336	2941	2788
60°	3217	2794	2663
65°	3104	2578	2467
70°	2924	2402	2317
75°	2804	2204	2153
80°	2592	2014	2037
85°	2329	1827	1931

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3505 cd/sqm

TEST NUMBER: P571954

CATALOG NUMBER: 22ID-40-L850-DBD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.9	3.1
10°-20°	379.4	8.9
20°-30°	576.5	13.5
30°-40°	696.0	16.3
40°-50°	721.9	16.9
50°-60°	654.4	15.4
60°-70°	507.8	11.9
70°-80°	327.0	7.7
80°-90°	154.5	3.6
90°-100°	59.9	1.4
100°-110°	26.4	0.6
110°-120°	13.0	0.3
120°-130°	6.5	0.2
130°-140°	2.8	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°	1087.8	25.5
0°-40°	1783.9	41.9
0°-60°	3160.1	74.2
0°-90°	4149.4	97.4
90°-120°	99.4	2.3
90°-150°	109.4	2.6
90°-180°	110.0	2.6
0°-180°	4258.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1393	1393	1393	1393	1393	
5°	1389	1389	1387	1385	1387	132
15°	1358	1353	1343	1334	1330	384
25°	1286	1276	1250	1227	1217	593
35°	1166	1149	1111	1076	1059	729
45°	998	981	937	890	869	770
55°	796	777	732	686	665	710
65°	575	549	507	474	457	566
75°	354	330	305	284	272	372
85°	147	147	139	130	122	141
90°	82	86	82	74	67	48
95°	67	57	53	48	44	52
105°	46	36	19	13	10	48
115°	27	23	13	2	0	28
125°	17	13	6	0	0	15
135°	8	6	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

TEST NUMBER: P571954

CATALOG NUMBER: 22ID-40-L850-DBD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1393.4	1393.4	1393.4	1393.4	1393.4
2.5°	1393.4	1391.3	1391.3	1391.3	1393.4
5°	1389.1	1389.1	1387.0	1384.9	1387.0
7.5°	1384.9	1382.8	1380.7	1378.6	1376.5
10°	1378.6	1376.5	1370.2	1366.0	1366.0
12.5°	1372.3	1366.0	1359.7	1353.4	1351.3
15°	1357.6	1353.4	1342.8	1334.4	1330.2
17.5°	1344.9	1338.6	1326.0	1313.4	1307.1
20°	1328.1	1319.7	1302.9	1288.1	1281.8
22.5°	1309.2	1298.6	1279.7	1258.7	1250.2
25°	1286.0	1275.5	1250.2	1227.1	1216.6
27.5°	1258.7	1248.1	1220.8	1191.3	1182.9
30°	1231.3	1218.7	1187.1	1155.5	1142.9
32.5°	1199.7	1185.0	1151.3	1115.5	1102.9
35°	1166.0	1149.2	1111.3	1075.5	1058.7
37.5°	1130.3	1113.4	1073.4	1033.4	1016.6
40°	1088.2	1071.3	1029.2	985.0	970.3
42.5°	1044.0	1027.1	985.0	938.7	919.8
45°	997.7	980.8	936.6	890.3	869.3
47.5°	951.4	934.5	888.2	841.9	820.9
50°	900.8	884.0	837.7	789.3	770.3
52.5°	848.2	831.4	785.1	738.8	719.8
55°	795.6	776.7	732.5	686.2	665.1
57.5°	738.8	721.9	679.8	635.6	616.7
60°	684.1	665.1	625.1	583.0	566.2
62.5°	629.3	608.3	566.2	524.1	507.2
65°	574.6	549.3	507.2	473.6	456.7
67.5°	513.6	490.4	456.7	423.1	410.4
70°	456.7	437.8	404.1	376.8	362.0
72.5°	406.2	383.1	351.5	330.4	317.8
75°	353.6	330.4	305.2	284.1	271.5
77.5°	298.9	279.9	258.9	244.2	231.5
80°	246.3	231.5	216.8	202.1	193.6
82.5°	193.6	185.2	176.8	166.3	157.9
85°	147.3	147.3	138.9	130.5	122.1
87.5°	109.4	111.6	107.3	98.9	92.6
90°	82.1	86.3	82.1	73.7	67.4
92.5°	73.7	69.5	65.2	61.0	54.7
95°	67.4	56.8	52.6	48.4	44.2
97.5°	61.0	48.4	42.1	37.9	33.7
100°	54.7	42.1	31.6	27.4	25.3
102.5°	50.5	40.0	25.3	18.9	18.9
105°	46.3	35.8	18.9	12.6	10.5
107.5°	40.0	31.6	16.8	8.4	6.3
110°	35.8	29.5	14.7	4.2	2.1

TEST NUMBER: P571954

CATALOG NUMBER: 22ID-40-L850-DBD

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	31.6	25.3	14.7	4.2	0.0
115°	27.4	23.2	12.6	2.1	0.0
117.5°	25.3	18.9	10.5	2.1	0.0
120°	21.0	16.8	8.4	2.1	0.0
122.5°	18.9	14.7	8.4	2.1	0.0
125°	16.8	12.6	6.3	0.0	0.0
127.5°	14.7	10.5	6.3	0.0	0.0
130°	12.6	10.5	4.2	0.0	0.0
132.5°	10.5	8.4	4.2	0.0	0.0
135°	8.4	6.3	2.1	0.0	0.0
137.5°	6.3	6.3	2.1	0.0	0.0
140°	6.3	4.2	2.1	0.0	0.0
142.5°	4.2	4.2	0.0	0.0	0.0
145°	4.2	2.1	0.0	0.0	0.0
147.5°	2.1	2.1	0.0	0.0	0.0
150°	2.1	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	2.1	2.1
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	2.1
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	2.1	2.1	2.1
180°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P571954

CATALOG NUMBER: 22ID-40-L850-DBD

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	16.09	17.70	16.50	18.07	18.45	15.14	16.75	15.55	17.11	17.49
	3H	17.98	19.44	18.40	19.82	20.24	16.88	18.34	17.30	18.72	19.14
	4H	18.77	20.14	19.20	20.54	20.98	17.57	18.95	18.01	19.35	19.79
	6H	19.42	20.70	19.87	21.11	21.56	18.16	19.44	18.61	19.86	20.31
	8H	19.66	20.89	20.13	21.33	21.79	18.40	19.63	18.87	20.07	20.53
	12H	19.87	21.04	20.34	21.48	21.97	18.61	19.78	19.08	20.21	20.70
4H	2H	16.59	17.97	17.03	18.37	18.81	15.83	17.21	16.27	17.61	18.05
	3H	18.71	19.87	19.16	20.32	20.78	17.79	18.96	18.24	19.40	19.86
	4H	19.63	20.69	20.10	21.15	21.65	18.62	19.68	19.09	20.14	20.63
	6H	20.44	21.37	20.93	21.86	22.37	19.35	20.28	19.84	20.77	21.28
	8H	20.75	21.63	21.25	22.11	22.64	19.65	20.52	20.14	21.01	21.53
	12H	21.03	21.82	21.55	22.34	22.87	19.91	20.71	20.43	21.22	21.75
8H	4H	19.90	20.78	20.40	21.27	21.79	19.01	19.88	19.51	20.37	20.90
	6H	20.84	21.58	21.38	22.11	22.64	19.89	20.62	20.42	21.15	21.69
	8H	21.26	21.92	21.80	22.47	23.01	20.28	20.95	20.83	21.49	22.04
	12H	21.65	22.24	22.19	22.77	23.39	20.66	21.25	21.21	21.79	22.40
12H	4H	19.94	20.73	20.46	21.25	21.77	19.07	19.86	19.59	20.38	20.91
	6H	20.91	21.57	21.45	22.12	22.66	19.99	20.65	20.54	21.20	21.74
	8H	21.39	21.97	21.93	22.51	23.12	20.46	21.05	21.01	21.58	22.20

END OF REPORT