

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: P571942

Luminaire Tested: 22ID-40-L830-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P571942
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-L830-DBD
Description: 4000 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: 3946.2 lumens
Efficiency: N/A
Efficacy: 121.4 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

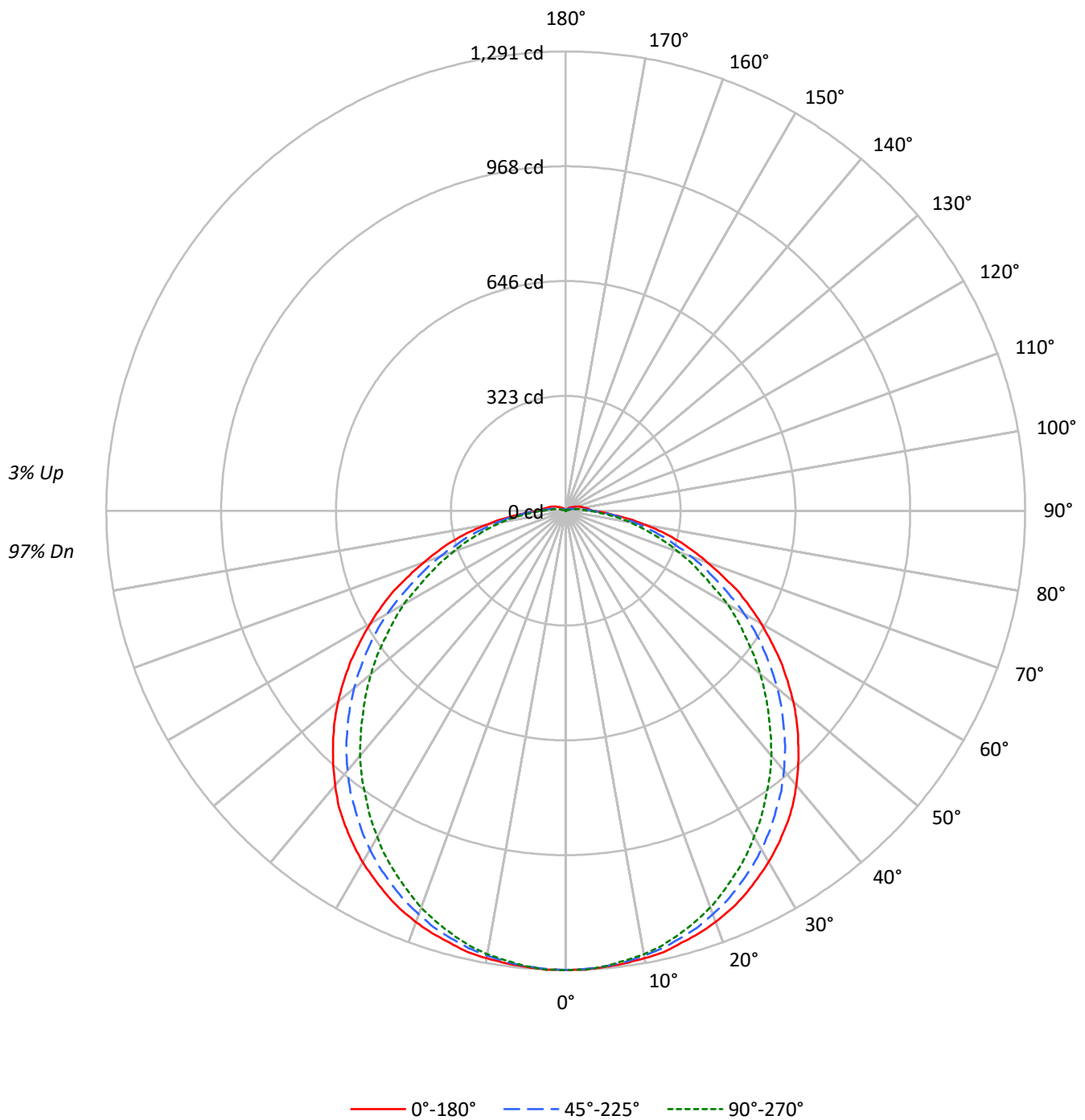
Input Watts (W): 32.5
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	3474	3474	3474
5°	3452	3436	3446
10°	3440	3398	3408
15°	3428	3360	3359
20°	3420	3315	3301
25°	3405	3260	3222
30°	3382	3200	3139
35°	3353	3124	3045
40°	3310	3048	2952
45°	3247	2954	2829
50°	3178	2849	2718
55°	3090	2725	2583
60°	2981	2589	2467
65°	2876	2389	2286
70°	2709	2225	2147
75°	2598	2042	1995
80°	2401	1866	1888
85°	2158	1693	1788

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3247 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.2	3.1
10°-20°	351.5	8.9
20°-30°	534.2	13.5
30°-40°	644.9	16.3
40°-50°	668.8	16.9
50°-60°	606.3	15.4
60°-70°	470.5	11.9
70°-80°	303.0	7.7
80°-90°	143.1	3.6
90°-100°	55.6	1.4
100°-110°	24.5	0.6
110°-120°	12.0	0.3
120°-130°	6.1	0.2
130°-140°	2.6	0.1
140°-150°	0.7	0.0
150°-160°	0.0	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	1007.9	25.5
0°-40°	1652.8	41.9
0°-60°	2927.9	74.2
0°-90°	3844.5	97.4
90°-120°	92.1	2.3
90°-150°	101.6	2.6
90°-180°	102.0	2.6
0°-180°	3946.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1291	1291	1291	1291	1291	
5°	1287	1287	1285	1283	1285	123
15°	1258	1254	1244	1236	1232	356
25°	1192	1182	1158	1137	1127	549
35°	1080	1065	1030	996	981	676
45°	924	909	868	825	805	713
55°	737	720	679	636	616	658
65°	532	509	470	439	423	525
75°	328	306	283	263	252	345
85°	136	136	129	121	113	131
90°	76	80	76	68	62	44
95°	62	53	49	45	41	49
105°	43	33	18	12	10	45
115°	25	22	12	2	0	26
125°	16	12	6	0	0	14
135°	8	6	2	0	0	6
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°	1291.0	1291.0	1291.0	1291.0	1291.0
2.5°	1291.0	1289.0	1289.0	1289.0	1291.0
5°	1287.1	1287.1	1285.1	1283.2	1285.1
7.5°	1283.2	1281.2	1279.3	1277.3	1275.4
10°	1277.3	1275.4	1269.5	1265.6	1265.6
12.5°	1271.5	1265.6	1259.8	1253.9	1252.0
15°	1257.8	1253.9	1244.2	1236.4	1232.5
17.5°	1246.1	1240.3	1228.6	1216.9	1211.0
20°	1230.5	1222.7	1207.1	1193.5	1187.6
22.5°	1213.0	1203.2	1185.7	1166.2	1158.4
25°	1191.5	1181.8	1158.4	1136.9	1127.2
27.5°	1166.2	1156.4	1131.1	1103.7	1095.9
30°	1140.8	1129.1	1099.8	1070.6	1058.9
32.5°	1111.5	1097.9	1066.7	1033.5	1021.8
35°	1080.3	1064.7	1029.6	996.5	980.9
37.5°	1047.2	1031.6	994.5	957.5	941.9
40°	1008.2	992.6	953.6	912.6	899.0
42.5°	967.2	951.6	912.6	869.7	852.2
45°	924.3	908.7	867.8	824.9	805.4
47.5°	881.4	865.8	822.9	780.0	760.5
50°	834.6	819.0	776.1	731.3	713.7
52.5°	785.9	770.3	727.4	684.5	666.9
55°	737.1	719.6	678.6	635.7	616.2
57.5°	684.5	668.9	629.9	588.9	571.4
60°	633.8	616.2	579.2	540.2	524.6
62.5°	583.1	563.6	524.6	485.6	470.0
65°	532.4	509.0	470.0	438.8	423.2
67.5°	475.8	454.4	423.2	392.0	380.3
70°	423.2	405.6	374.4	349.1	335.4
72.5°	376.4	354.9	325.7	306.2	294.5
75°	327.6	306.2	282.8	263.3	251.6
77.5°	276.9	259.4	239.9	226.2	214.5
80°	228.2	214.5	200.9	187.2	179.4
82.5°	179.4	171.6	163.8	154.1	146.3
85°	136.5	136.5	128.7	120.9	113.1
87.5°	101.4	103.4	99.5	91.7	85.8
90°	76.1	80.0	76.1	68.3	62.4
92.5°	68.3	64.4	60.5	56.6	50.7
95°	62.4	52.7	48.8	44.9	41.0
97.5°	56.6	44.9	39.0	35.1	31.2
100°	50.7	39.0	29.3	25.4	23.4
102.5°	46.8	37.1	23.4	17.6	17.6
105°	42.9	33.2	17.6	11.7	9.8
107.5°	37.1	29.3	15.6	7.8	5.9
110°	33.2	27.3	13.7	3.9	2.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	29.3	23.4	13.7	3.9	0.0
115°	25.4	21.5	11.7	2.0	0.0
117.5°	23.4	17.6	9.8	2.0	0.0
120°	19.5	15.6	7.8	2.0	0.0
122.5°	17.6	13.7	7.8	2.0	0.0
125°	15.6	11.7	5.9	0.0	0.0
127.5°	13.7	9.8	5.9	0.0	0.0
130°	11.7	9.8	3.9	0.0	0.0
132.5°	9.8	7.8	3.9	0.0	0.0
135°	7.8	5.9	2.0	0.0	0.0
137.5°	5.9	5.9	2.0	0.0	0.0
140°	5.9	3.9	2.0	0.0	0.0
142.5°	3.9	3.9	0.0	0.0	0.0
145°	3.9	2.0	0.0	0.0	0.0
147.5°	2.0	2.0	0.0	0.0	0.0
150°	2.0	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	2.0	2.0
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	2.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	2.0	2.0	2.0
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	15.83	17.43	16.23	17.80	18.18	14.87	16.48	15.28	16.85	17.23
	3H	17.72	19.18	18.14	19.56	19.98	16.61	18.07	17.03	18.45	18.87
	4H	18.50	19.88	18.94	20.28	20.72	17.31	18.69	17.75	19.09	19.52
	6H	19.15	20.43	19.60	20.85	21.30	17.90	19.18	18.35	19.59	20.05
	8H	19.40	20.62	19.86	21.06	21.52	18.14	19.36	18.60	19.80	20.26
	12H	19.60	20.78	20.07	21.21	21.70	18.34	19.51	18.81	19.95	20.44
4H	2H	16.32	17.70	16.76	18.10	18.54	15.57	16.94	16.00	17.34	17.78
	3H	18.44	19.61	18.89	20.06	20.52	17.53	18.69	17.98	19.14	19.60
	4H	19.37	20.43	19.84	20.89	21.38	18.35	19.41	18.82	19.87	20.37
	6H	20.17	21.10	20.66	21.59	22.10	19.08	20.01	19.57	20.50	21.01
	8H	20.49	21.36	20.99	21.85	22.37	19.38	20.26	19.88	20.74	21.27
	12H	20.76	21.55	21.28	22.07	22.60	19.65	20.44	20.17	20.96	21.49
8H	4H	19.64	20.51	20.14	21.00	21.52	18.74	19.62	19.24	20.11	20.63
	6H	20.58	21.31	21.11	21.85	22.38	19.62	20.36	20.15	20.89	21.42
	8H	20.99	21.65	21.54	22.20	22.74	20.02	20.68	20.56	21.23	21.77
	12H	21.38	21.97	21.93	22.51	23.12	20.40	20.99	20.94	21.52	22.14
12H	4H	19.67	20.46	20.19	20.98	21.51	18.81	19.60	19.33	20.12	20.65
	6H	20.64	21.30	21.19	21.85	22.40	19.73	20.39	20.27	20.94	21.48
	8H	21.12	21.71	21.66	22.24	22.86	20.20	20.78	20.74	21.32	21.93