

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

(formerly Eaton)

Brand: CORELITE

Report Number: P564497

Luminaire Tested: **SQ4-PR1-150U-125D-830-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564497
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PR1-150U-125D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30776.7 lumens
Efficiency: N/A
Efficacy: 120.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

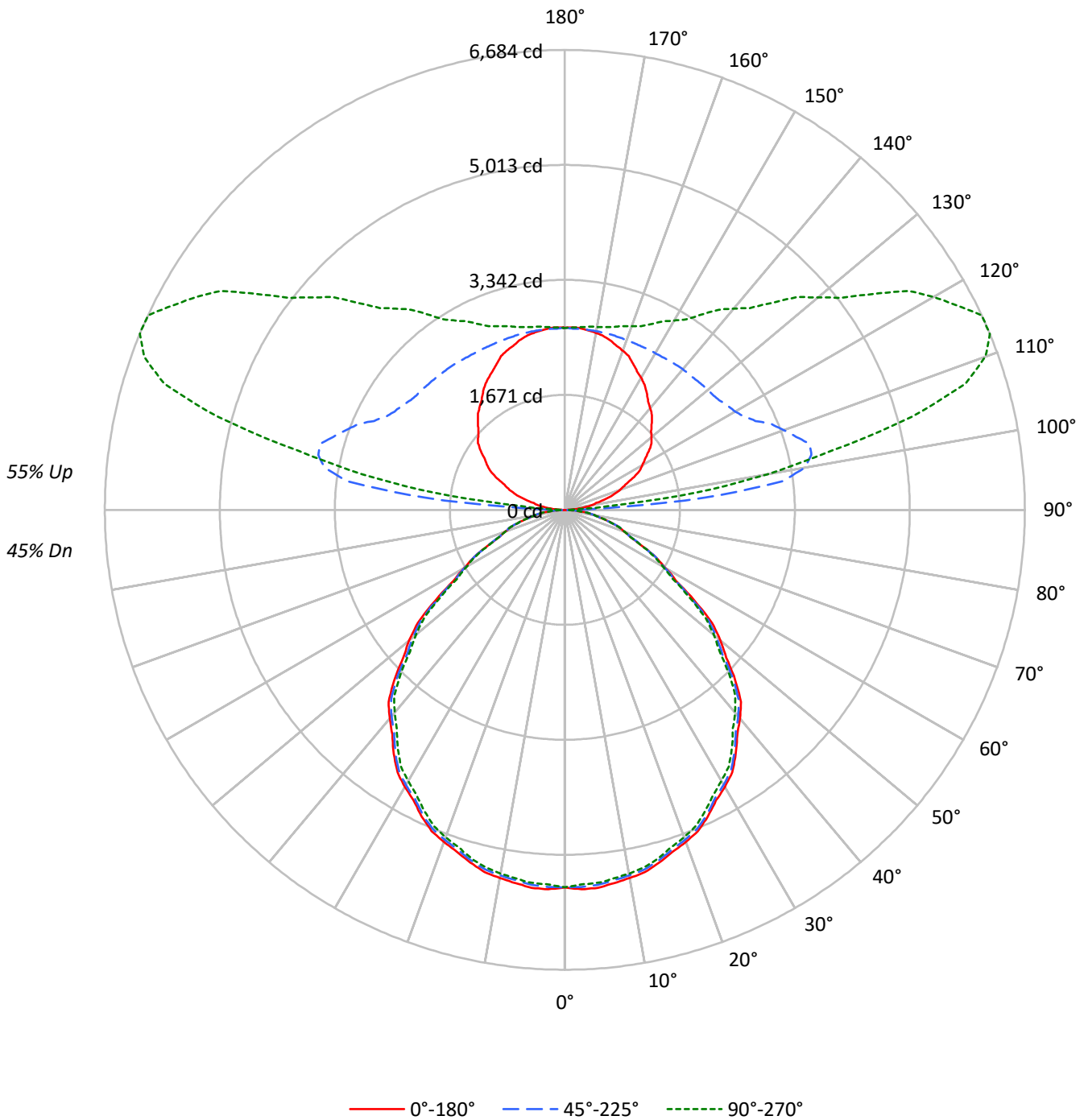
Input Watts (W): 256.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45
1	97	93	89	85	89	85	82	79	71	68	66	58	56	55	46	45	44	38
2	88	81	75	70	81	75	69	65	62	59	55	51	48	46	40	39	37	32
3	81	72	64	59	74	66	60	55	55	51	47	45	42	39	36	34	32	28
4	74	63	56	50	68	58	52	47	49	44	40	40	37	34	32	30	28	24
5	68	57	49	43	62	52	45	40	44	39	35	36	32	29	29	26	24	21
6	63	51	43	37	57	47	40	35	40	34	30	33	29	26	27	24	21	18
7	58	46	38	33	53	42	35	31	36	31	27	30	26	23	24	21	19	16
8	54	42	34	29	49	39	32	27	33	27	24	27	23	20	22	19	17	15
9	50	38	31	26	46	35	29	24	30	25	21	25	21	18	21	18	15	13
10	47	35	28	23	43	32	26	22	28	23	19	23	19	17	19	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16870	16870	16870
5°	17022	16891	16803
10°	16968	16850	16762
15°	16894	16788	16698
20°	16809	16701	16577
25°	16690	16578	16386
30°	16510	16393	16158
35°	16267	16125	15894
40°	15896	15725	15440
45°	15248	14981	14673
50°	14106	13767	13496
55°	12312	12033	11780
60°	10375	10288	10084
65°	8974	9008	8940
70°	8242	8284	8284
75°	7916	7916	7972
80°	7447	7531	7447
85°	6002	6669	6669



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	518.7	1.7
10°-20°	1484.2	4.8
20°-30°	2238.6	7.3
30°-40°	2667.3	8.7
40°-50°	2629.7	8.5
50°-60°	2009.8	6.5
60°-70°	1243.7	4.0
70°-80°	706.4	2.3
80°-90°	220.4	0.7
90°-100°	1229.6	4.0
100°-110°	3324.5	10.8
110°-120°	3495.2	11.4
120°-130°	2839.1	9.2
130°-140°	2227.0	7.2
140°-150°	1709.2	5.6
150°-160°	1229.3	4.0
160°-170°	750.9	2.4
170°-180°	253.2	0.8
0°-30°	4241.5	13.8
0°-40°	6908.8	22.4
0°-60°	11548.3	37.5
0°-90°	13718.8	44.6
90°-120°	8049.2	26.2
90°-150°	14824.5	48.2
90°-180°	17058.0	55.4
0°-180°	30776.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5486	5486	5486	5486	5486	
5°	5514	5454	5471	5452	5443	523
15°	5306	5251	5273	5254	5245	1497
25°	4919	4858	4886	4833	4829	2264
35°	4333	4282	4295	4238	4234	2704
45°	3506	3460	3444	3383	3374	2686
55°	2296	2259	2244	2206	2197	2058
65°	1233	1224	1238	1228	1228	1249
75°	666	666	666	671	671	704
85°	170	179	189	189	189	198
90°	6	17	37	40	37	20
95°	191	670	2045	1058	629	200
105°	618	955	3688	5440	5217	651
115°	1088	1330	3059	5921	6684	1074
125°	1490	1707	2757	4652	5465	1328
135°	1786	1997	2683	3756	4252	1380
145°	2076	2232	2646	3215	3460	1299
155°	2344	2436	2623	2884	2979	1081
165°	2552	2577	2634	2737	2751	719
175°	2649	2646	2637	2671	2666	251
180°	2646	2646	2646	2646	2646	

TEST NUMBER: P564497

CATALOG NUMBER: SQ4-PR1-150U-125D-830-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5485.6	5485.6	5485.6	5485.6	5485.6
2.5°	5519.6	5471.5	5485.6	5473.6	5447.8
5°	5513.9	5453.9	5471.4	5452.3	5443.0
7.5°	5471.4	5412.3	5429.8	5410.8	5405.2
10°	5433.6	5378.2	5395.8	5376.7	5367.4
12.5°	5392.0	5332.9	5354.2	5331.3	5322.1
15°	5306.0	5250.6	5272.9	5253.8	5244.6
17.5°	5211.5	5152.4	5174.7	5152.7	5140.7
20°	5135.9	5080.5	5102.9	5069.7	5065.1
22.5°	5052.8	4997.3	5019.7	4975.3	4974.3
25°	4918.6	4858.5	4885.5	4833.4	4828.8
27.5°	4758.9	4703.4	4725.8	4672.8	4667.2
30°	4649.3	4593.8	4616.2	4559.3	4550.0
32.5°	4524.5	4472.8	4491.5	4434.6	4429.1
35°	4332.7	4281.9	4294.9	4238.1	4233.5
37.5°	4114.4	4068.2	4075.7	4013.2	4008.6
40°	3959.4	3913.2	3916.9	3850.7	3846.0
42.5°	3789.3	3743.1	3739.3	3673.0	3668.4
45°	3505.8	3459.7	3444.4	3382.8	3373.6
47.5°	3182.7	3136.5	3108.0	3057.8	3051.3
50°	2948.3	2902.1	2877.4	2834.6	2820.7
52.5°	2695.1	2648.9	2628.0	2588.9	2575.1
55°	2296.3	2259.3	2244.3	2206.3	2197.1
57.5°	1917.3	1892.4	1888.1	1851.1	1847.4
60°	1686.8	1672.9	1672.6	1639.5	1639.5
62.5°	1490.2	1480.1	1487.4	1465.6	1461.9
65°	1233.2	1223.9	1237.9	1228.5	1228.5
67.5°	1030.0	1030.0	1038.5	1034.7	1034.7
70°	916.6	916.6	921.3	921.3	921.3
72.5°	814.6	810.9	823.1	823.0	819.3
75°	666.2	666.2	666.2	670.9	670.9
77.5°	518.8	519.7	523.5	522.5	518.8
80°	420.5	425.1	425.2	420.5	420.5
82.5°	322.2	326.9	327.0	325.9	322.2
85°	170.1	179.3	189.0	189.0	189.0
87.5°	50.3	67.3	83.0	83.5	79.2
90°	5.7	16.8	37.0	39.8	37.0
92.5°	80.9	294.7	581.5	252.5	182.8
95°	190.8	669.8	2044.8	1058.2	629.4
97.5°	306.4	768.1	3187.4	2637.8	1937.2
100°	393.0	807.9	3542.8	3694.8	2987.5
102.5°	472.8	863.2	3668.1	4496.2	3967.1
105°	618.0	954.9	3688.0	5440.1	5217.4
107.5°	752.4	1059.8	3526.9	6029.0	6103.1
110°	857.2	1135.7	3383.3	6187.1	6501.8



TEST NUMBER: P564497

CATALOG NUMBER: SQ4-PR1-150U-125D-830-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	950.6	1211.3	3251.2	6155.5	6684.1
115°	1087.9	1330.2	3058.7	5921.1	6684.1
117.5°	1222.3	1449.6	2931.6	5562.8	6427.7
120°	1304.3	1527.1	2856.5	5305.8	6188.5
122.5°	1381.8	1600.1	2810.9	5030.3	5919.7
125°	1489.5	1706.7	2756.8	4652.0	5465.1
127.5°	1588.6	1801.9	2724.9	4343.4	5058.5
130°	1643.2	1863.2	2711.2	4152.7	4798.7
132.5°	1700.2	1918.0	2697.5	3980.7	4575.5
135°	1785.6	1997.3	2682.7	3756.3	4251.9
137.5°	1871.6	2071.6	2670.2	3574.2	3978.0
140°	1930.9	2117.5	2665.6	3457.0	3816.2
142.5°	1987.8	2163.3	2656.5	3351.2	3665.8
145°	2076.1	2232.1	2645.7	3215.2	3460.2
147.5°	2156.4	2294.6	2633.2	3092.0	3280.2
150°	2215.7	2338.2	2628.6	3025.1	3175.4
152.5°	2270.4	2377.3	2626.3	2962.9	3086.6
155°	2343.8	2435.7	2622.9	2884.2	2978.9
157.5°	2420.2	2484.2	2623.5	2829.4	2891.8
160°	2463.4	2516.4	2625.8	2794.8	2839.4
162.5°	2497.6	2541.6	2628.1	2767.2	2800.6
165°	2551.7	2576.8	2634.3	2737.2	2751.1
167.5°	2588.8	2606.0	2634.9	2711.4	2718.0
170°	2611.5	2619.9	2637.2	2699.8	2699.8
172.5°	2629.8	2631.4	2637.2	2686.1	2683.9
175°	2648.6	2645.8	2637.2	2671.2	2665.6
177.5°	2654.8	2648.1	2636.6	2659.2	2652.5
180°	2645.7	2645.7	2645.7	2645.7	2645.7

(END OF REPORT)