

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: P518899

Luminaire Tested: **SQ4-BB-150U-075D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518899
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-150U-075D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

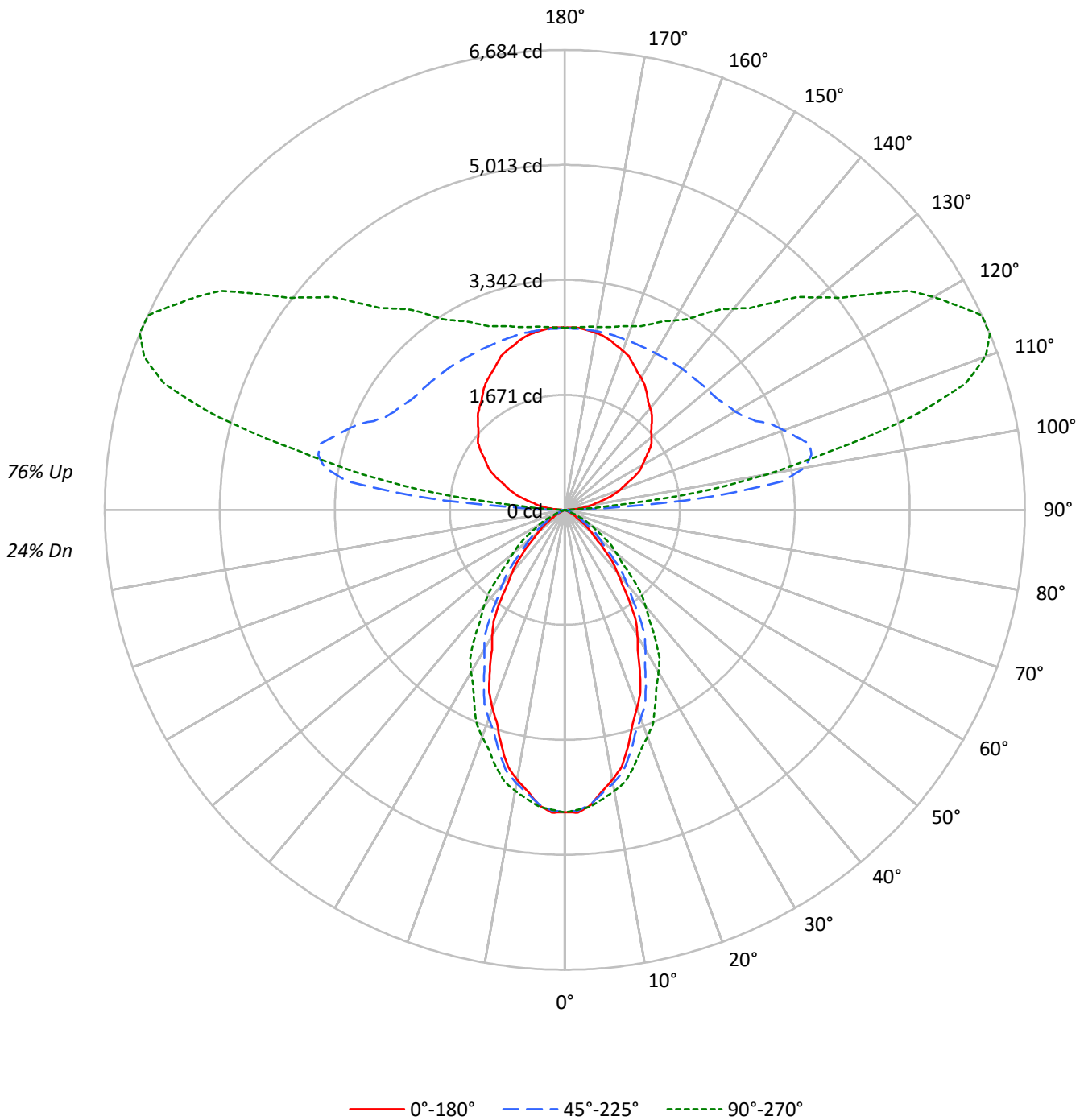
Lumens per Lamp: N/A
Luminaire Lumens: 22305.3 lumens
Efficiency: N/A
Efficacy: 114.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 194.9
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	101	101	101	101	90	90	90	90	69	69	69	49	49	49	32	32	32	24
1	93	89	85	82	82	79	76	74	61	59	58	45	44	43	29	29	28	21
2	85	79	73	69	76	70	66	62	55	52	49	40	38	37	27	26	25	19
3	78	70	63	58	69	63	57	53	49	45	42	36	34	32	25	23	23	17
4	72	62	55	50	64	56	50	45	44	40	37	33	30	28	23	21	20	16
5	66	56	48	43	59	50	44	39	40	35	32	30	27	25	21	19	18	14
6	61	50	43	38	54	45	39	35	36	32	28	27	24	22	19	18	16	13
7	57	45	38	33	50	41	35	31	33	28	25	25	22	20	18	16	15	12
8	53	41	34	30	47	37	31	27	30	26	23	23	20	18	16	15	14	11
9	49	38	31	26	44	34	28	24	28	23	20	21	18	16	15	14	13	10
10	46	35	28	24	41	32	26	22	26	21	18	20	17	15	14	13	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13514	13514	13514
5°	13296	13264	13362
10°	12441	12607	12959
15°	11310	11669	12319
20°	10040	10562	11487
25°	8743	9436	10554
30°	7489	8312	9671
35°	6209	7056	8604
40°	4771	5641	7331
45°	3449	4272	5899
50°	2350	3184	4679
55°	1528	2302	3636
60°	876	1621	2628
65°	232	990	1330
70°	115	306	382
75°	51	25	0
80°	37	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	401.0	1.8
10°-20°	1025.5	4.6
20°-30°	1283.9	5.8
30°-40°	1185.9	5.3
40°-50°	796.8	3.6
50°-60°	411.6	1.8
60°-70°	128.9	0.6
70°-80°	8.2	0.0
80°-90°	5.7	0.0
90°-100°	1229.6	5.5
100°-110°	3324.5	14.9
110°-120°	3495.2	15.7
120°-130°	2839.1	12.7
130°-140°	2227.0	10.0
140°-150°	1709.2	7.7
150°-160°	1229.3	5.5
160°-170°	750.9	3.4
170°-180°	253.2	1.1
0°-30°	2710.4	12.2
0°-40°	3896.3	17.5
0°-60°	5104.7	22.9
0°-90°	5247.4	23.5
90°-120°	8049.2	36.1
90°-150°	14824.5	66.5
90°-180°	17058.0	76.5
0°-180°	22305.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4394	4394	4394	4394	4394	
5°	4307	4263	4296	4312	4328	399
15°	3552	3540	3665	3788	3869	989
25°	2577	2597	2781	2971	3110	1181
35°	1654	1696	1879	2100	2292	1025
45°	793	841	982	1173	1356	623
55°	285	333	429	551	678	266
65°	32	61	136	164	183	54
75°	4	4	2	0	0	6
85°	0	0	0	0	0	1
90°	6	17	37	40	37	13
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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4394.2	4394.2	4394.2	4394.2	4394.2
2.5°	4404.4	4362.8	4373.8	4373.5	4361.9
5°	4307.0	4263.4	4296.4	4311.7	4328.3
7.5°	4125.1	4091.0	4154.4	4202.0	4236.5
10°	3983.9	3954.8	4037.1	4101.9	4149.7
12.5°	3820.6	3798.2	3897.6	3986.6	4047.7
15°	3552.4	3539.9	3665.0	3788.0	3869.1
17.5°	3264.9	3264.5	3407.4	3560.1	3657.8
20°	3067.7	3073.9	3227.1	3395.5	3509.8
22.5°	2870.4	2884.9	3048.5	3224.1	3355.1
25°	2576.6	2597.4	2780.7	2970.9	3110.2
27.5°	2294.3	2324.6	2517.5	2715.2	2884.8
30°	2108.9	2144.2	2340.6	2548.7	2723.3
32.5°	1926.9	1968.9	2160.3	2380.4	2558.3
35°	1653.9	1695.5	1879.3	2100.5	2291.7
37.5°	1372.0	1412.8	1592.3	1810.0	2016.6
40°	1188.4	1234.1	1405.2	1616.2	1826.1
42.5°	1021.7	1067.4	1228.3	1435.7	1634.0
45°	793.0	840.8	982.2	1173.4	1356.3
47.5°	603.3	655.3	779.4	952.4	1119.1
50°	491.1	543.0	665.4	817.9	977.9
52.5°	400.9	451.2	561.7	705.3	852.1
55°	284.9	332.7	429.4	551.4	678.2
57.5°	196.9	238.0	324.8	426.6	525.9
60°	142.4	181.9	263.6	346.2	427.3
62.5°	94.8	131.0	210.9	274.2	328.7
65°	31.9	61.0	136.1	164.1	182.8
67.5°	16.2	19.5	71.4	75.4	81.6
70°	12.8	12.8	34.0	36.3	42.5
72.5°	9.4	9.4	13.6	17.5	18.7
75°	4.3	4.3	2.1	0.0	0.0
77.5°	2.1	2.1	1.7	0.0	0.0
80°	2.1	2.1	0.0	0.0	0.0
82.5°	0.4	0.4	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	1.1	3.4	7.4	8.0	7.4
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

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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)