

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: P518915

Luminaire Tested: **SQ4-BB-150U-075D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518915
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-935-1D-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

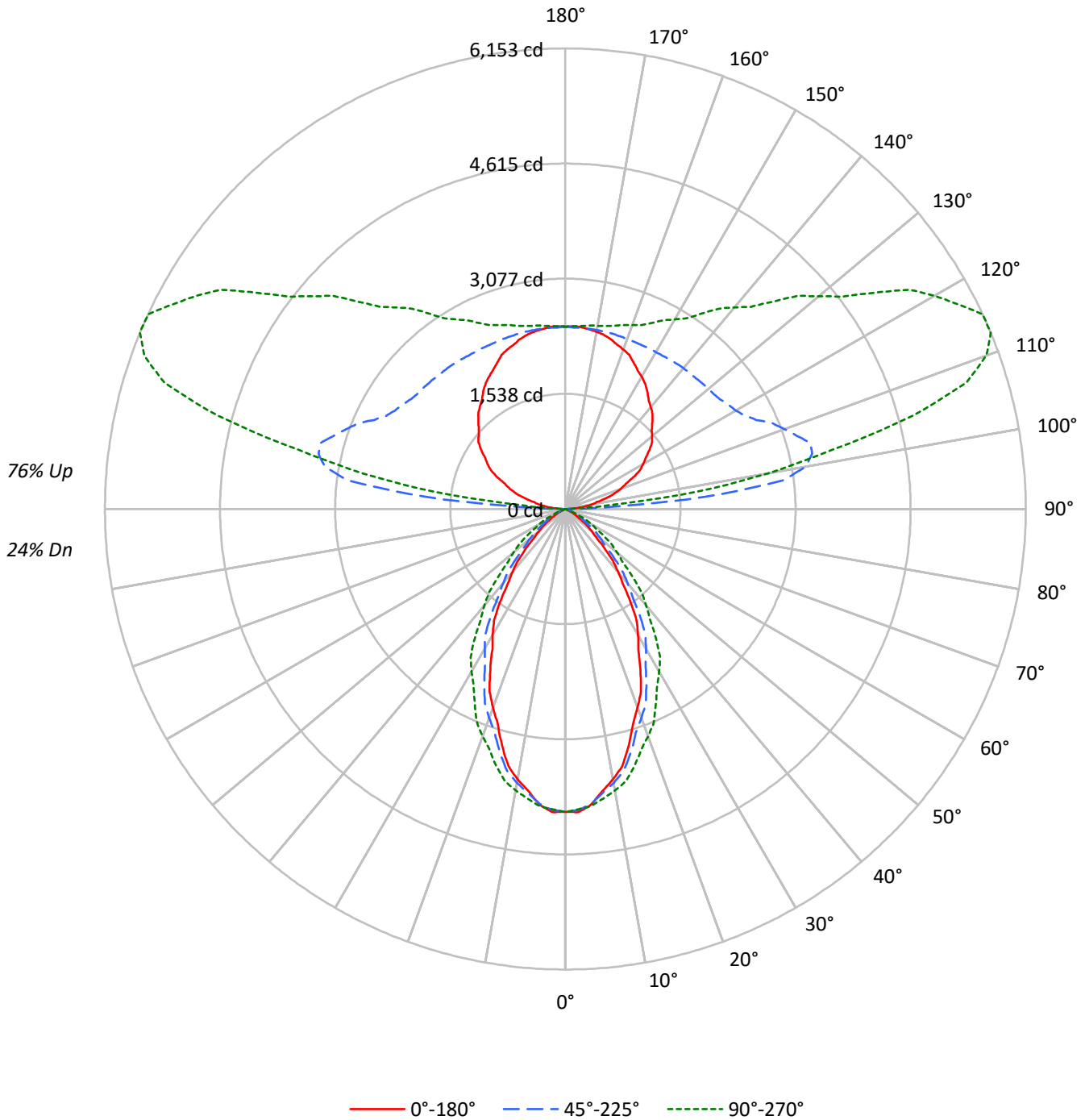
Lumens per Lamp: N/A
Luminaire Lumens: 20533.0 lumens
Efficiency: N/A
Efficacy: 105.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

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°	12440	12440	12440
5°	12240	12210	12300
10°	11453	11605	11929
15°	10412	10742	11340
20°	9242	9722	10574
25°	8048	8686	9715
30°	6894	7651	8902
35°	5716	6495	7920
40°	4392	5193	6749
45°	3175	3932	5430
50°	2163	2930	4307
55°	1406	2120	3347
60°	806	1493	2420
65°	214	911	1225
70°	105	281	352
75°	46	24	0
80°	35	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	369.2	1.8
10°-20°	944.0	4.6
20°-30°	1181.8	5.8
30°-40°	1091.6	5.3
40°-50°	733.5	3.6
50°-60°	378.9	1.8
60°-70°	118.7	0.6
70°-80°	7.5	0.0
80°-90°	5.2	0.0
90°-100°	1131.9	5.5
100°-110°	3060.3	14.9
110°-120°	3217.5	15.7
120°-130°	2613.5	12.7
130°-140°	2050.0	10.0
140°-150°	1573.4	7.7
150°-160°	1131.6	5.5
160°-170°	691.3	3.4
170°-180°	233.1	1.1
0°-30°	2495.0	12.2
0°-40°	3586.7	17.5
0°-60°	4699.1	22.9
0°-90°	4830.5	23.5
90°-120°	7409.7	36.1
90°-150°	13646.6	66.5
90°-180°	15703.0	76.5
0°-180°	20533.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4045	4045	4045	4045	4045	
5°	3965	3925	3955	3969	3984	368
15°	3270	3259	3374	3487	3562	911
25°	2372	2391	2560	2735	2863	1087
35°	1522	1561	1730	1934	2110	943
45°	730	774	904	1080	1248	573
55°	262	306	395	508	624	245
65°	29	56	125	151	168	50
75°	4	4	2	0	0	6
85°	0	0	0	0	0	1
90°	5	16	34	37	34	12
95°	176	616	1882	974	579	184
105°	569	879	3395	5008	4803	599
115°	1002	1224	2816	5451	6153	989
125°	1371	1571	2538	4282	5031	1222
135°	1644	1839	2470	3458	3914	1270
145°	1911	2055	2436	2960	3185	1196
155°	2158	2242	2414	2655	2742	995
165°	2349	2372	2425	2520	2532	662
175°	2438	2436	2428	2459	2454	231
180°	2436	2436	2436	2436	2436	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4045.1	4045.1	4045.1	4045.1	4045.1
2.5°	4054.4	4016.2	4026.3	4026.0	4015.3
5°	3964.8	3924.6	3955.0	3969.1	3984.4
7.5°	3797.3	3765.9	3824.3	3868.1	3899.8
10°	3667.4	3640.6	3716.3	3776.0	3820.0
12.5°	3517.1	3496.4	3587.9	3669.8	3726.1
15°	3270.1	3258.6	3373.8	3487.1	3561.7
17.5°	3005.5	3005.1	3136.6	3277.2	3367.2
20°	2823.9	2829.6	2970.7	3125.7	3231.0
22.5°	2642.3	2655.7	2806.3	2967.9	3088.5
25°	2371.8	2391.0	2559.7	2734.8	2863.0
27.5°	2112.0	2139.9	2317.4	2499.5	2655.6
30°	1941.3	1973.8	2154.6	2346.1	2506.9
32.5°	1773.8	1812.4	1988.7	2191.2	2355.0
35°	1522.5	1560.8	1730.0	1933.6	2109.6
37.5°	1263.0	1300.5	1465.8	1666.2	1856.4
40°	1093.9	1136.0	1293.6	1487.8	1681.0
42.5°	940.5	982.6	1130.7	1321.6	1504.1
45°	729.9	774.0	904.1	1080.2	1248.5
47.5°	555.4	603.2	717.4	876.7	1030.1
50°	452.1	499.9	612.5	752.9	900.2
52.5°	369.1	415.4	517.0	649.3	784.4
55°	262.2	306.2	395.3	507.6	624.3
57.5°	181.2	219.1	299.0	392.7	484.2
60°	131.1	167.5	242.7	318.7	393.4
62.5°	87.3	120.6	194.1	252.4	302.5
65°	29.4	56.1	125.2	151.1	168.3
67.5°	14.9	17.9	65.8	69.4	75.1
70°	11.7	11.7	31.3	33.4	39.1
72.5°	8.6	8.6	12.5	16.1	17.2
75°	3.9	3.9	2.0	0.0	0.0
77.5°	2.0	2.0	1.6	0.0	0.0
80°	2.0	2.0	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°	1.0	3.1	6.8	7.3	6.8
90°	5.2	15.5	34.1	36.6	34.1
92.5°	74.5	271.3	535.3	232.4	168.3
95°	175.6	616.5	1882.3	974.1	579.4
97.5°	282.1	707.1	2934.1	2428.2	1783.2
100°	361.8	743.7	3261.3	3401.2	2750.1
102.5°	435.2	794.6	3376.7	4139.0	3651.9
105°	568.9	879.1	3395.0	5007.9	4802.8
107.5°	692.6	975.6	3246.6	5550.0	5618.1
110°	789.1	1045.4	3114.5	5695.5	5985.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	875.1	1115.0	2992.8	5666.4	6153.0
115°	1001.5	1224.5	2815.6	5450.6	6153.0
117.5°	1125.2	1334.4	2698.7	5120.8	5917.0
120°	1200.7	1405.8	2629.5	4884.2	5696.8
122.5°	1272.0	1473.0	2587.5	4630.6	5449.3
125°	1371.1	1571.1	2537.7	4282.4	5030.9
127.5°	1462.3	1658.7	2508.4	3998.3	4656.5
130°	1512.7	1715.2	2495.8	3822.7	4417.4
132.5°	1565.1	1765.6	2483.2	3664.4	4211.9
135°	1643.8	1838.6	2469.6	3457.8	3914.1
137.5°	1722.9	1907.0	2458.0	3290.2	3661.9
140°	1777.5	1949.2	2453.8	3182.3	3513.0
142.5°	1829.9	1991.4	2445.5	3084.9	3374.6
145°	1911.2	2054.7	2435.5	2959.7	3185.3
147.5°	1985.1	2112.2	2424.0	2846.3	3019.6
150°	2039.6	2152.4	2419.8	2784.7	2923.1
152.5°	2090.0	2188.4	2417.7	2727.5	2841.3
155°	2157.6	2242.2	2414.5	2655.1	2742.2
157.5°	2227.9	2286.8	2415.0	2604.6	2662.0
160°	2267.7	2316.4	2417.1	2572.7	2613.8
162.5°	2299.2	2339.7	2419.2	2547.3	2578.1
165°	2349.0	2372.0	2425.0	2519.7	2532.5
167.5°	2383.1	2399.0	2425.5	2495.9	2502.1
170°	2404.0	2411.7	2427.6	2485.3	2485.3
172.5°	2420.8	2422.3	2427.6	2472.7	2470.6
175°	2438.1	2435.5	2427.6	2459.0	2453.8
177.5°	2443.9	2437.7	2427.1	2447.9	2441.8
180°	2435.5	2435.5	2435.5	2435.5	2435.5

(END OF REPORT)