

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: P518911

Luminaire Tested: **SQ4-BB-150U-075D-930-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518911
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-930-1D-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, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

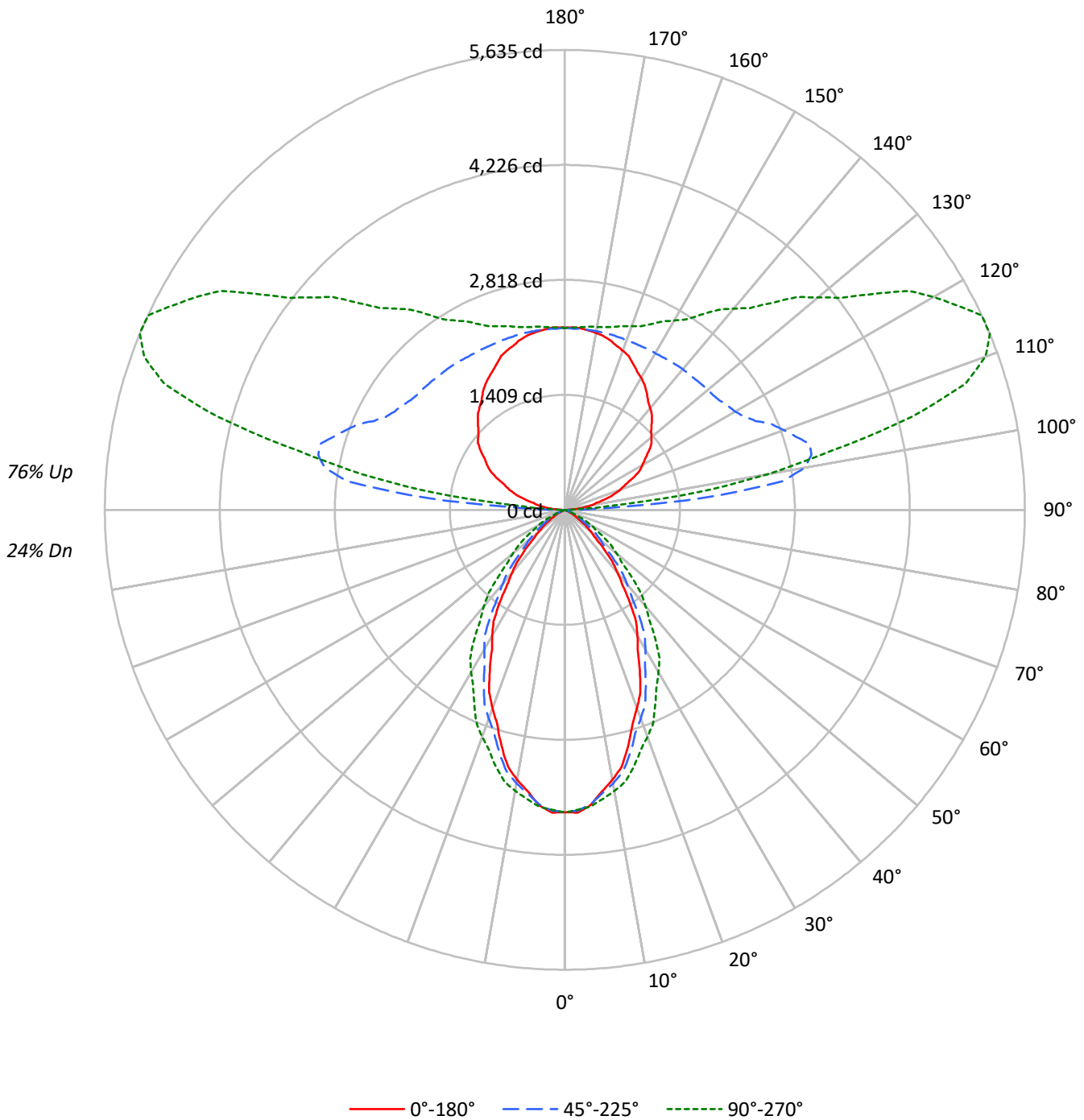
Lumens per Lamp: N/A
Luminaire Lumens: 18804.6 lumens
Efficiency: N/A
Efficacy: 96.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

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°	11393	11393	11393
5°	11210	11182	11265
10°	10489	10629	10925
15°	9535	9838	10386
20°	8464	8904	9684
25°	7371	7955	8898
30°	6314	7008	8153
35°	5235	5948	7253
40°	4022	4756	6181
45°	2907	3601	4973
50°	1981	2684	3944
55°	1288	1941	3065
60°	739	1367	2216
65°	196	835	1121
70°	97	258	322
75°	43	21	0
80°	32	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	338.1	1.8
10°-20°	864.6	4.6
20°-30°	1082.4	5.8
30°-40°	999.8	5.3
40°-50°	671.8	3.6
50°-60°	347.0	1.8
60°-70°	108.7	0.6
70°-80°	6.9	0.0
80°-90°	4.8	0.0
90°-100°	1036.6	5.5
100°-110°	2802.7	14.9
110°-120°	2946.7	15.7
120°-130°	2393.5	12.7
130°-140°	1877.5	10.0
140°-150°	1441.0	7.7
150°-160°	1036.3	5.5
160°-170°	633.1	3.4
170°-180°	213.4	1.1
0°-30°	2285.0	12.2
0°-40°	3284.8	17.5
0°-60°	4303.6	22.9
0°-90°	4423.9	23.5
90°-120°	6786.0	36.1
90°-150°	12497.9	66.5
90°-180°	14381.0	76.5
0°-180°	18804.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3705	3705	3705	3705	3705	
5°	3631	3594	3622	3635	3649	337
15°	2995	2984	3090	3194	3262	834
25°	2172	2190	2344	2505	2622	996
35°	1394	1429	1584	1771	1932	864
45°	668	709	828	989	1144	525
55°	240	280	362	465	572	224
65°	27	51	115	138	154	45
75°	4	4	2	0	0	5
85°	0	0	0	0	0	0
90°	5	14	31	34	31	11
95°	161	565	1724	892	531	168
105°	521	805	3109	4586	4398	549
115°	917	1121	2579	4992	5635	906
125°	1256	1439	2324	3922	4607	1119
135°	1505	1684	2262	3167	3585	1163
145°	1750	1882	2230	2711	2917	1095
155°	1976	2054	2211	2432	2511	911
165°	2151	2172	2221	2308	2319	606
175°	2233	2230	2223	2252	2247	212
180°	2230	2230	2230	2230	2230	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3704.6	3704.6	3704.6	3704.6	3704.6
2.5°	3713.2	3678.1	3687.4	3687.1	3677.3
5°	3631.1	3594.3	3622.1	3635.0	3649.0
7.5°	3477.7	3448.9	3502.4	3542.5	3571.6
10°	3358.7	3334.1	3403.5	3458.2	3498.5
12.5°	3221.0	3202.1	3285.9	3360.9	3412.4
15°	2994.8	2984.3	3089.8	3193.5	3261.9
17.5°	2752.5	2752.2	2872.6	3001.4	3083.7
20°	2586.2	2591.5	2720.6	2862.6	2959.0
22.5°	2419.9	2432.2	2570.1	2718.1	2828.5
25°	2172.2	2189.7	2344.3	2504.6	2622.1
27.5°	1934.2	1959.8	2122.4	2289.1	2432.1
30°	1777.9	1807.7	1973.3	2148.7	2295.9
32.5°	1624.5	1659.9	1821.3	2006.8	2156.8
35°	1394.4	1429.4	1584.3	1770.8	1932.0
37.5°	1156.7	1191.1	1342.4	1525.9	1700.1
40°	1001.9	1040.4	1184.7	1362.5	1539.5
42.5°	861.4	899.9	1035.6	1210.3	1377.5
45°	668.5	708.8	828.0	989.2	1143.5
47.5°	508.6	552.4	657.0	802.9	943.4
50°	414.0	457.8	561.0	689.5	824.4
52.5°	338.0	380.4	473.5	594.6	718.3
55°	240.2	280.5	362.0	464.8	571.7
57.5°	166.0	200.7	273.9	359.6	443.4
60°	120.1	153.4	222.2	291.9	360.2
62.5°	79.9	110.4	177.8	231.2	277.1
65°	26.9	51.4	114.7	138.4	154.1
67.5°	13.6	16.4	60.2	63.6	68.8
70°	10.8	10.8	28.7	30.6	35.8
72.5°	7.9	7.9	11.5	14.7	15.8
75°	3.6	3.6	1.8	0.0	0.0
77.5°	1.8	1.8	1.4	0.0	0.0
80°	1.8	1.8	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	2.8	6.2	6.7	6.2
90°	4.8	14.2	31.2	33.6	31.2
92.5°	68.2	248.5	490.3	212.8	154.1
95°	160.9	564.7	1723.9	892.1	530.6
97.5°	258.3	647.6	2687.1	2223.8	1633.1
100°	331.3	681.1	2986.8	3114.9	2518.6
102.5°	398.6	727.7	3092.4	3790.6	3344.5
105°	521.0	805.1	3109.2	4586.4	4398.5
107.5°	634.3	893.5	2973.3	5082.8	5145.2
110°	722.7	957.4	2852.3	5216.1	5481.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	801.4	1021.2	2740.9	5189.5	5635.0
115°	917.2	1121.4	2578.6	4991.8	5635.0
117.5°	1030.5	1222.1	2471.5	4689.8	5419.0
120°	1099.6	1287.4	2408.2	4473.1	5217.3
122.5°	1164.9	1349.0	2369.7	4240.8	4990.6
125°	1255.7	1438.8	2324.1	3921.9	4607.4
127.5°	1339.3	1519.1	2297.2	3661.7	4264.6
130°	1385.4	1570.8	2285.7	3501.0	4045.6
132.5°	1433.4	1617.0	2274.2	3355.9	3857.4
135°	1505.4	1683.8	2261.7	3166.8	3584.6
137.5°	1577.9	1746.5	2251.1	3013.2	3353.7
140°	1627.8	1785.1	2247.3	2914.4	3217.3
142.5°	1675.9	1823.8	2239.6	2825.2	3090.5
145°	1750.3	1881.8	2230.5	2710.6	2917.2
147.5°	1818.0	1934.4	2219.9	2606.7	2765.4
150°	1867.9	1971.2	2216.1	2550.3	2677.1
152.5°	1914.0	2004.2	2214.2	2497.9	2602.2
155°	1976.0	2053.5	2211.3	2431.6	2511.4
157.5°	2040.3	2094.3	2211.8	2385.3	2437.9
160°	2076.8	2121.4	2213.7	2356.2	2393.8
162.5°	2105.6	2142.7	2215.6	2332.9	2361.1
165°	2151.3	2172.4	2220.9	2307.6	2319.3
167.5°	2182.5	2197.0	2221.4	2285.8	2291.5
170°	2201.7	2208.7	2223.3	2276.1	2276.1
172.5°	2217.0	2218.4	2223.3	2264.5	2262.7
175°	2232.9	2230.5	2223.3	2252.0	2247.3
177.5°	2238.2	2232.5	2222.8	2241.9	2236.2
180°	2230.5	2230.5	2230.5	2230.5	2230.5

(END OF REPORT)