

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: P518935

Luminaire Tested: **SQ4-BB-150U-100D-930-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518935
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-100D-930-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

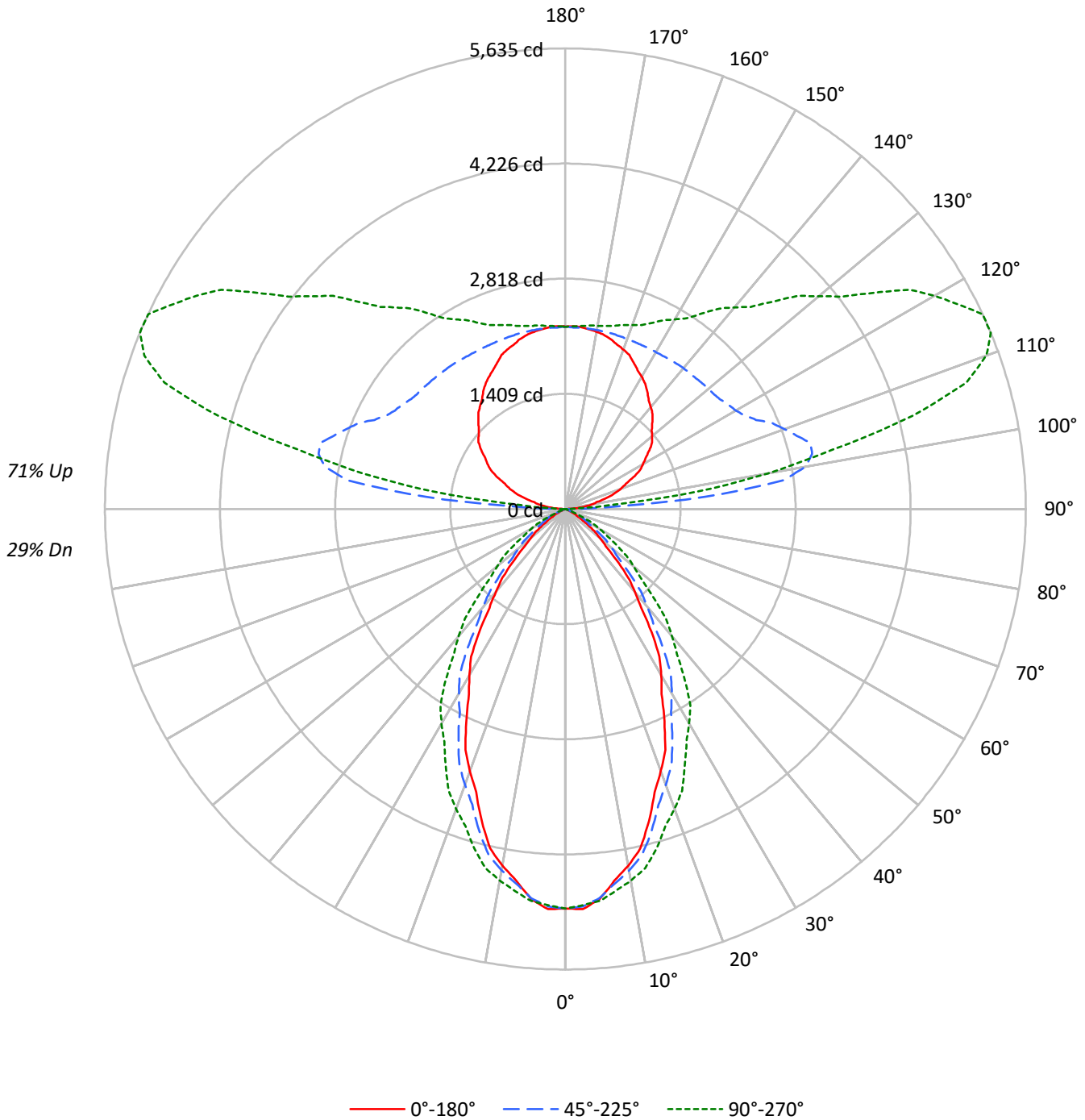
Lumens per Lamp: N/A
Luminaire Lumens: 20217.2 lumens
Efficiency: N/A
Efficacy: 90.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 223.7
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	102	102	102	102	91	91	91	91	72	72	72	53	53	53	37	37	37	29
1	94	90	87	84	84	81	78	76	64	62	61	48	47	46	34	33	33	26
2	86	80	75	70	77	72	68	64	57	54	52	44	42	40	31	30	29	24
3	80	71	65	60	71	64	59	55	52	48	45	40	37	35	29	27	26	21
4	73	64	57	51	66	58	52	47	46	42	39	36	33	31	26	25	24	19
5	68	57	50	45	61	52	46	41	42	38	34	33	30	28	24	23	21	18
6	63	52	44	39	56	47	41	36	38	34	30	30	27	25	22	21	19	16
7	58	47	40	35	52	43	37	32	35	30	27	28	25	22	21	19	18	15
8	54	43	36	31	49	39	33	29	32	28	24	26	22	20	19	17	16	14
9	50	39	32	28	45	36	30	26	30	25	22	24	21	18	18	16	15	13
10	47	36	29	25	43	33	27	23	27	23	20	22	19	17	17	15	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15035	15035	15035
5°	14793	14756	14866
10°	13841	14026	14417
15°	12583	12982	13705
20°	11170	11750	12780
25°	9727	10498	11742
30°	8332	9247	10759
35°	6908	7850	9572
40°	5308	6276	8156
45°	3837	4752	6563
50°	2614	3542	5205
55°	1699	2562	4045
60°	975	1804	2924
65°	258	1102	1480
70°	128	340	425
75°	56	29	0
80°	43	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	446.1	2.2
10°-20°	1140.9	5.6
20°-30°	1428.3	7.1
30°-40°	1319.3	6.5
40°-50°	886.5	4.4
50°-60°	457.9	2.3
60°-70°	143.4	0.7
70°-80°	9.1	0.0
80°-90°	4.8	0.0
90°-100°	1036.6	5.1
100°-110°	2802.7	13.9
110°-120°	2946.7	14.6
120°-130°	2393.5	11.8
130°-140°	1877.5	9.3
140°-150°	1441.0	7.1
150°-160°	1036.3	5.1
160°-170°	633.1	3.1
170°-180°	213.4	1.1
0°-30°	3015.4	14.9
0°-40°	4334.7	21.4
0°-60°	5679.1	28.1
0°-90°	5836.4	28.9
90°-120°	6786.0	33.6
90°-150°	12497.9	61.8
90°-180°	14381.0	71.1
0°-180°	20217.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4889	4889	4889	4889	4889	
5°	4792	4743	4780	4797	4815	444
15°	3952	3938	4077	4214	4304	1101
25°	2866	2890	3094	3305	3460	1314
35°	1840	1886	2091	2337	2550	1140
45°	882	935	1093	1305	1509	693
55°	317	370	478	613	754	296
65°	36	68	151	183	203	60
75°	5	5	2	0	0	7
85°	0	0	0	0	0	1
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°	4888.7	4888.7	4888.7	4888.7	4888.7
2.5°	4900.0	4853.8	4866.0	4865.7	4852.7
5°	4791.7	4743.1	4779.9	4796.9	4815.4
7.5°	4589.3	4551.3	4621.9	4674.8	4713.2
10°	4432.2	4399.8	4491.3	4563.5	4616.7
12.5°	4250.6	4225.6	4336.2	4435.2	4503.2
15°	3952.1	3938.2	4077.4	4214.3	4304.5
17.5°	3632.3	3631.9	3790.8	3960.7	4069.4
20°	3412.9	3419.8	3590.2	3777.6	3904.8
22.5°	3193.4	3209.6	3391.6	3586.9	3732.6
25°	2866.5	2889.6	3093.6	3305.2	3460.2
27.5°	2552.4	2586.2	2800.8	3020.7	3209.5
30°	2346.2	2385.5	2604.0	2835.4	3029.7
32.5°	2143.7	2190.4	2403.4	2648.2	2846.2
35°	1840.1	1886.3	2090.8	2336.8	2549.6
37.5°	1526.4	1571.8	1771.5	2013.7	2243.5
40°	1322.1	1373.0	1563.3	1798.1	2031.6
42.5°	1136.7	1187.5	1366.6	1597.2	1817.8
45°	882.2	935.4	1092.7	1305.4	1508.9
47.5°	671.2	729.0	867.0	1059.5	1245.0
50°	546.3	604.2	740.3	909.9	1087.9
52.5°	446.1	502.0	624.9	784.7	947.9
55°	316.9	370.1	477.8	613.4	754.5
57.5°	219.0	264.8	361.4	474.6	585.1
60°	158.5	202.4	293.3	385.2	475.4
62.5°	105.5	145.7	234.6	305.1	365.6
65°	35.5	67.9	151.4	182.6	203.4
67.5°	18.0	21.7	79.5	83.9	90.8
70°	14.2	14.2	37.8	40.4	47.3
72.5°	10.4	10.4	15.1	19.4	20.8
75°	4.7	4.7	2.4	0.0	0.0
77.5°	2.4	2.4	1.9	0.0	0.0
80°	2.4	2.4	0.0	0.0	0.0
82.5°	0.5	0.5	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)