

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: P518887

Luminaire Tested: **SQ4-BB-150U-050D-930-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518887  
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-050D-930-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

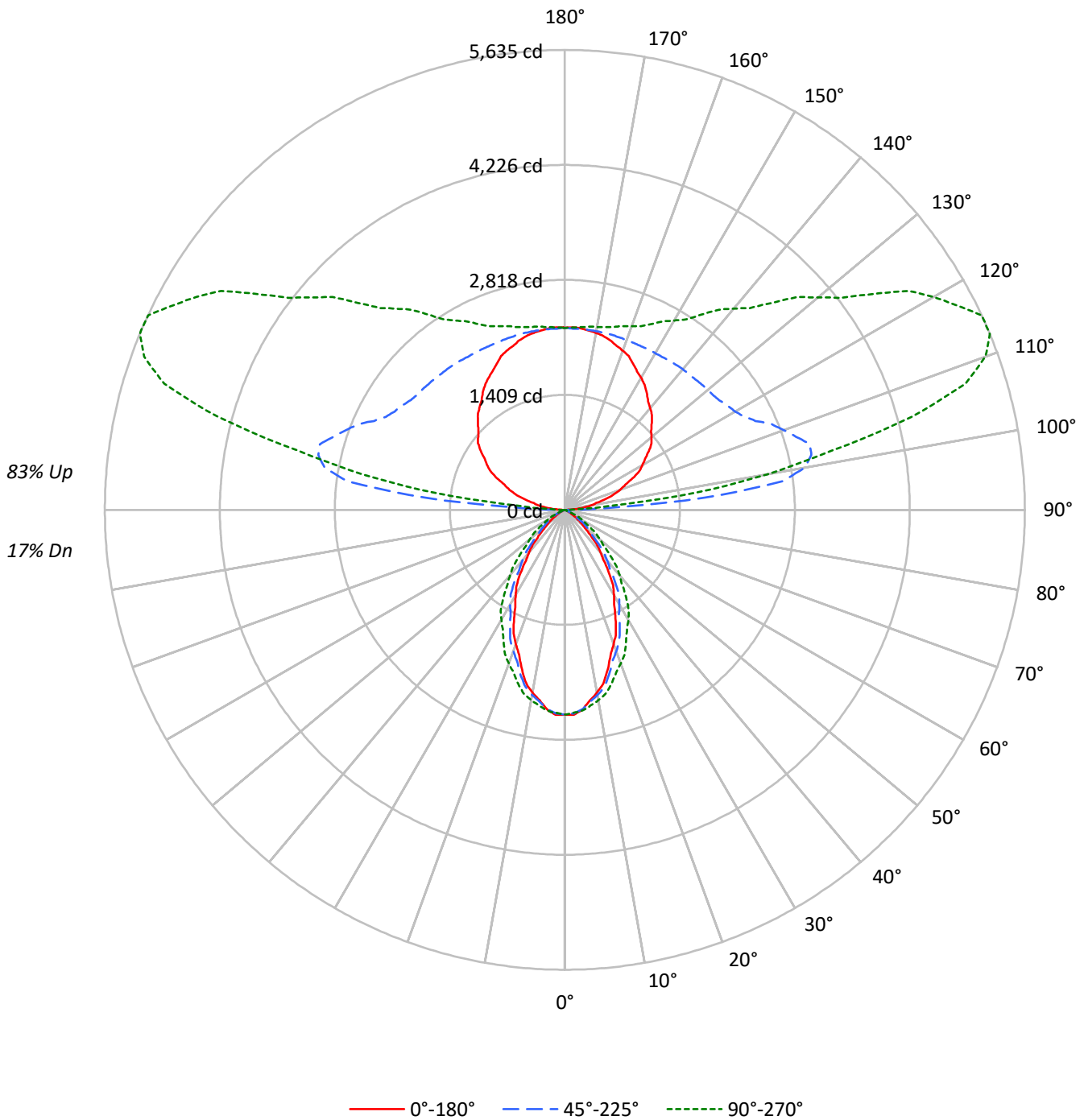
Lumens per Lamp: N/A  
Luminaire Lumens: 17377.7 lumens  
Efficiency: N/A  
Efficacy: 102.9 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 168.9  
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	99	99	99	99	87	87	87	87	65	65	65	45	45	45	26	26	26	17
1	91	87	84	81	80	77	74	72	58	56	54	40	39	38	24	23	23	16
2	83	77	71	67	73	68	63	60	51	48	46	36	34	33	22	21	20	14
3	76	68	61	56	67	60	55	51	46	42	39	32	30	29	20	19	18	13
4	70	60	53	48	62	54	48	43	41	37	34	29	27	25	18	17	16	12
5	64	54	47	41	57	48	42	37	37	33	30	26	24	22	17	15	14	11
6	59	48	41	36	52	43	37	33	33	29	26	24	21	19	15	14	13	10
7	55	44	37	32	48	39	33	29	30	26	23	22	19	17	14	13	12	9
8	51	40	33	28	45	36	30	25	28	23	20	20	18	16	13	12	11	8
9	47	36	29	25	42	32	27	23	25	21	18	19	16	14	12	11	10	8
10	44	33	27	22	39	30	24	20	23	19	16	17	15	13	11	10	9	7

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	7714	7714	7714
5°	7590	7572	7628
10°	7102	7197	7397
15°	6456	6661	7032
20°	5731	6029	6557
25°	4991	5386	6025
30°	4275	4745	5520
35°	3545	4028	4911
40°	2724	3220	4185
45°	1969	2439	3367
50°	1341	1817	2671
55°	872	1314	2076
60°	500	926	1500
65°	132	565	760
70°	66	174	219
75°	29	14	0
80°	21	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	228.9	1.3
10°-20°	585.4	3.4
20°-30°	732.9	4.2
30°-40°	676.9	3.9
40°-50°	454.9	2.6
50°-60°	234.9	1.4
60°-70°	73.6	0.4
70°-80°	4.6	0.0
80°-90°	4.7	0.0
90°-100°	1036.6	6.0
100°-110°	2802.7	16.1
110°-120°	2946.7	17.0
120°-130°	2393.5	13.8
130°-140°	1877.5	10.8
140°-150°	1441.0	8.3
150°-160°	1036.3	6.0
160°-170°	633.1	3.6
170°-180°	213.4	1.2
0°-30°	1547.2	8.9
0°-40°	2224.2	12.8
0°-60°	2914.0	16.8
0°-90°	2996.9	17.2
90°-120°	6786.0	39.0
90°-150°	12497.9	71.9
90°-180°	14381.0	82.8
0°-180°	17377.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2508	2508	2508	2508	2508	
5°	2459	2434	2453	2461	2471	228
15°	2028	2021	2092	2162	2209	565
25°	1471	1483	1587	1696	1775	674
35°	944	968	1073	1199	1308	585
45°	453	480	561	670	774	356
55°	163	190	245	315	387	152
65°	18	35	78	94	104	31
75°	2	2	1	0	0	3
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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CATALOG NUMBER: SQ4-BB-150U-050D-930-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2508.4	2508.4	2508.4	2508.4	2508.4
2.5°	2514.2	2490.5	2496.7	2496.6	2489.9
5°	2458.6	2433.7	2452.6	2461.3	2470.8
7.5°	2354.8	2335.3	2371.5	2398.6	2418.3
10°	2274.2	2257.6	2304.5	2341.5	2368.8
12.5°	2181.0	2168.2	2224.9	2275.7	2310.6
15°	2027.8	2020.7	2092.1	2162.4	2208.6
17.5°	1863.8	1863.5	1945.1	2032.2	2088.0
20°	1751.1	1754.7	1842.2	1938.3	2003.6
22.5°	1638.5	1646.8	1740.2	1840.5	1915.2
25°	1470.8	1482.7	1587.3	1695.9	1775.4
27.5°	1309.7	1327.0	1437.1	1549.9	1646.8
30°	1203.8	1224.0	1336.1	1454.9	1554.5
32.5°	1100.0	1123.9	1233.2	1358.8	1460.4
35°	944.1	967.9	1072.8	1199.0	1308.2
37.5°	783.2	806.5	908.9	1033.2	1151.2
40°	678.4	704.5	802.1	922.6	1042.4
42.5°	583.2	609.3	701.2	819.5	932.7
45°	452.7	479.9	560.7	669.8	774.2
47.5°	344.4	374.1	444.9	543.6	638.8
50°	280.3	310.0	379.8	466.9	558.2
52.5°	228.9	257.6	320.6	402.6	486.4
55°	162.6	189.9	245.1	314.7	387.1
57.5°	112.4	135.9	185.4	243.5	300.2
60°	81.3	103.9	150.5	197.6	243.9
62.5°	54.1	74.8	120.4	156.5	187.6
65°	18.2	34.8	77.7	93.7	104.4
67.5°	9.2	11.1	40.8	43.0	46.6
70°	7.3	7.3	19.4	20.7	24.3
72.5°	5.3	5.3	7.8	10.0	10.7
75°	2.4	2.4	1.2	0.0	0.0
77.5°	1.2	1.2	1.0	0.0	0.0
80°	1.2	1.2	0.0	0.0	0.0
82.5°	0.2	0.2	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



TEST NUMBER: P518887

CATALOG NUMBER: SQ4-BB-150U-050D-930-1D-UNV-STD-W-12

**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)