

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: P518939

Luminaire Tested: **SQ4-BB-150U-100D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518939  
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-935-1D-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: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

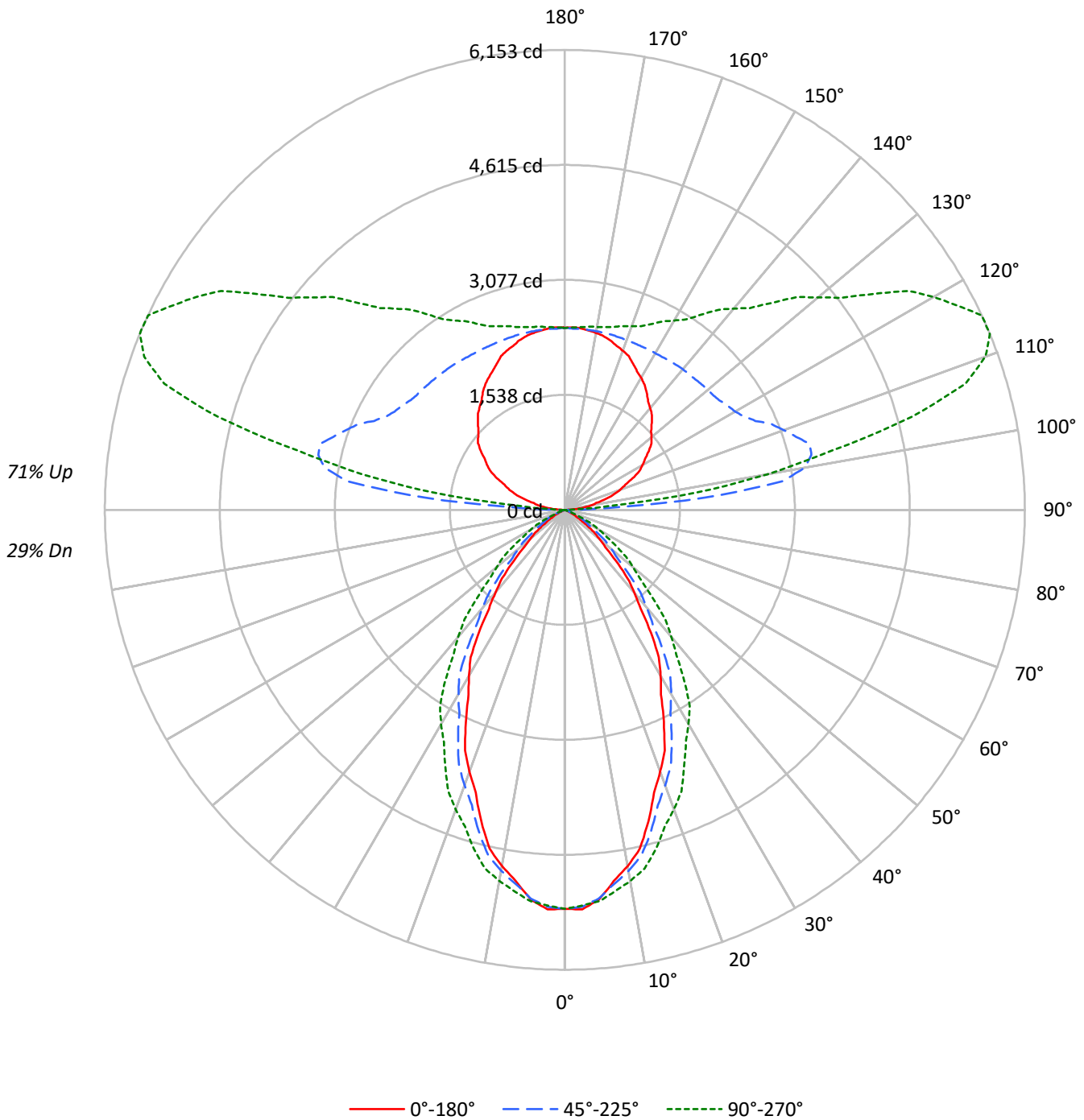
Lumens per Lamp: N/A  
Luminaire Lumens: 22075.4 lumens  
Efficiency: N/A  
Efficacy: 98.7 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

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°	16416	16416	16416
5°	16152	16112	16232
10°	15113	15315	15742
15°	13739	14175	14965
20°	12196	12830	13954
25°	10621	11462	12821
30°	9097	10097	11748
35°	7543	8571	10452
40°	5796	6853	8906
45°	4190	5189	7166
50°	2854	3867	5683
55°	1856	2797	4417
60°	1064	1969	3193
65°	282	1203	1616
70°	139	371	464
75°	62	31	0
80°	46	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	487.2	2.2
10°-20°	1245.8	5.6
20°-30°	1559.6	7.1
30°-40°	1440.6	6.5
40°-50°	968.0	4.4
50°-60°	500.0	2.3
60°-70°	156.6	0.7
70°-80°	9.9	0.0
80°-90°	5.3	0.0
90°-100°	1131.9	5.1
100°-110°	3060.3	13.9
110°-120°	3217.5	14.6
120°-130°	2613.5	11.8
130°-140°	2050.0	9.3
140°-150°	1573.4	7.1
150°-160°	1131.6	5.1
160°-170°	691.3	3.1
170°-180°	233.1	1.1
0°-30°	3292.6	14.9
0°-40°	4733.1	21.4
0°-60°	6201.1	28.1
0°-90°	6372.9	28.9
90°-120°	7409.7	33.6
90°-150°	13646.6	61.8
90°-180°	15703.0	71.1
0°-180°	22075.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5338	5338	5338	5338	5338	
5°	5232	5179	5219	5238	5258	485
15°	4315	4300	4452	4602	4700	1202
25°	3130	3155	3378	3609	3778	1435
35°	2009	2060	2283	2552	2784	1245
45°	963	1021	1193	1425	1648	757
55°	346	404	522	670	824	323
65°	39	74	165	199	222	65
75°	5	5	3	0	0	7
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°	5338.0	5338.0	5338.0	5338.0	5338.0
2.5°	5350.4	5299.9	5313.2	5312.9	5298.7
5°	5232.1	5179.1	5219.2	5237.7	5257.9
7.5°	5011.1	4969.6	5046.7	5104.5	5146.4
10°	4839.6	4804.2	4904.1	4982.9	5041.0
12.5°	4641.2	4614.0	4734.7	4842.8	4917.1
15°	4315.3	4300.2	4452.2	4601.6	4700.1
17.5°	3966.2	3965.7	4139.2	4324.7	4443.4
20°	3726.5	3734.1	3920.2	4124.8	4263.7
22.5°	3486.9	3504.5	3703.3	3916.6	4075.7
25°	3130.0	3155.2	3377.9	3609.0	3778.2
27.5°	2787.0	2823.9	3058.2	3298.4	3504.4
30°	2561.8	2604.8	2843.3	3096.1	3308.2
32.5°	2340.8	2391.8	2624.3	2891.6	3107.8
35°	2009.2	2059.7	2282.9	2551.6	2783.9
37.5°	1666.7	1716.2	1934.3	2198.8	2449.7
40°	1443.6	1499.2	1707.0	1963.3	2218.4
42.5°	1241.1	1296.7	1492.2	1744.0	1984.9
45°	963.3	1021.3	1193.1	1425.4	1647.6
47.5°	732.9	796.0	946.7	1156.9	1359.4
50°	596.6	659.7	808.3	993.5	1187.9
52.5°	487.1	548.2	682.3	856.8	1035.1
55°	346.1	404.1	521.7	669.8	823.8
57.5°	239.1	289.1	394.6	518.2	638.9
60°	173.0	221.0	320.2	420.6	519.1
62.5°	115.2	159.1	256.2	333.1	399.3
65°	38.7	74.1	165.3	199.4	222.1
67.5°	19.6	23.7	86.8	91.6	99.2
70°	15.5	15.5	41.3	44.1	51.6
72.5°	11.4	11.4	16.5	21.2	22.7
75°	5.2	5.2	2.6	0.0	0.0
77.5°	2.6	2.6	2.1	0.0	0.0
80°	2.6	2.6	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	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)