

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: P518556

Luminaire Tested: **SQ4-BB-075U-100D-935-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518556  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-100D-935-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

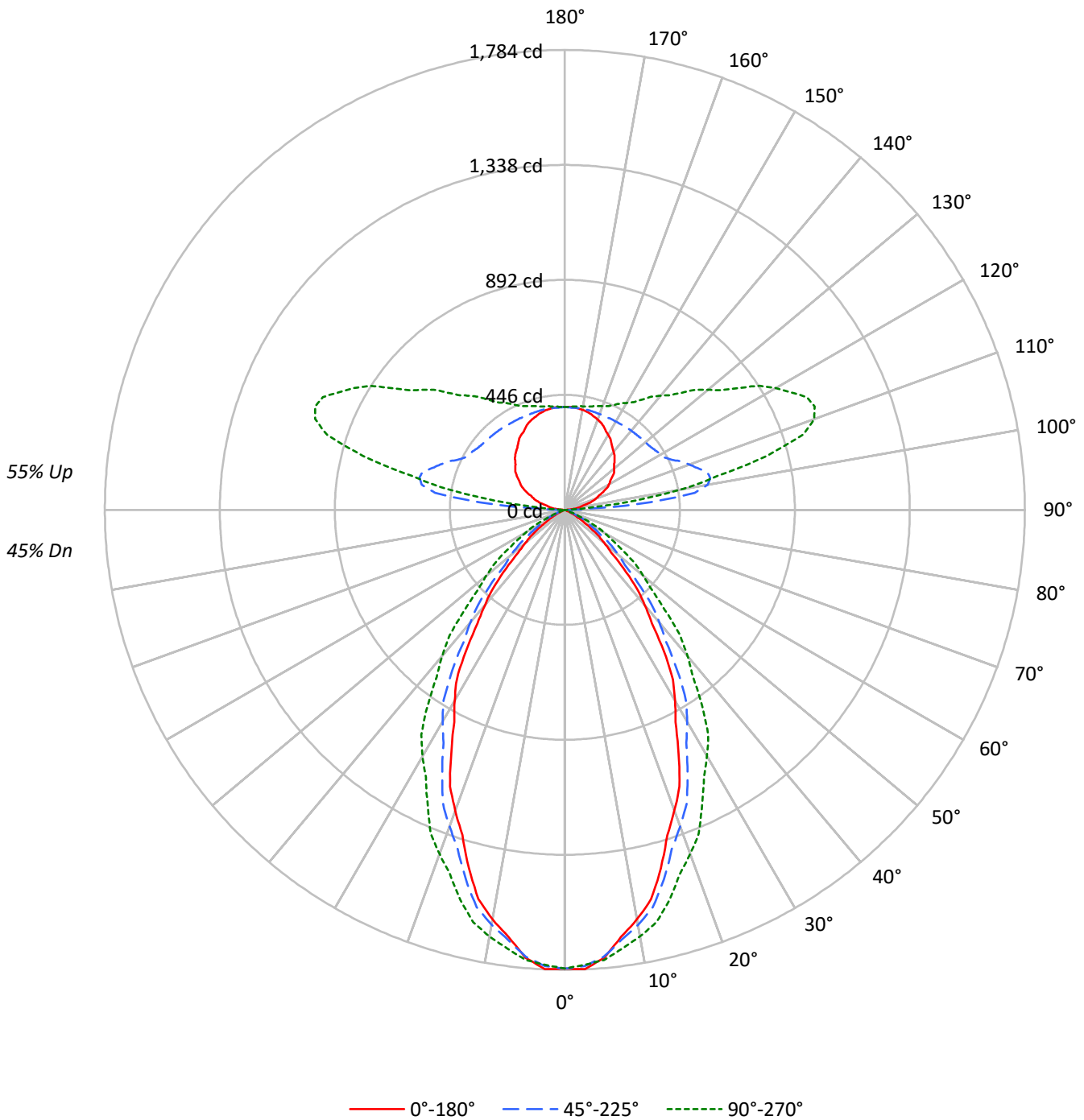
Lumens per Lamp: N/A  
Luminaire Lumens: 4724.9 lumens  
Efficiency: N/A  
Efficacy: 92.1 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 51.3  
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



TEST NUMBER: P518556  
CATALOG NUMBER: SQ4-BB-075U-100D-935-1D-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P518556

CATALOG NUMBER: SQ4-BB-075U-100D-935-1D-UNV-STD-W-4

**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	106	106	106	106	97	97	97	97	81	81	81	65	65	65	51	51	51	45
1	98	95	91	88	90	87	84	82	73	71	69	60	59	58	48	47	47	41
2	91	84	79	75	83	78	74	70	66	63	60	55	53	51	44	43	42	37
3	84	76	69	64	77	70	65	60	60	56	52	50	47	45	41	39	38	33
4	78	68	61	56	71	63	57	53	54	50	46	46	42	40	38	36	34	30
5	72	62	55	49	66	57	51	46	49	45	41	42	38	36	35	32	31	28
6	67	56	49	44	62	52	46	41	45	40	37	38	35	32	32	30	28	25
7	62	51	44	39	57	48	42	37	41	37	33	36	32	29	30	27	26	23
8	58	47	40	35	54	44	38	33	38	33	30	33	29	27	28	25	23	21
9	54	43	36	32	50	41	34	30	35	31	27	31	27	25	26	24	22	20
10	51	40	33	29	47	38	32	28	33	28	25	29	25	23	24	22	20	18

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

	0°	45°	90°
0°	16416	16416	16416
5°	16152	16112	16232
10°	15113	15315	15742
15°	13739	14176	14965
20°	12196	12830	13954
25°	10621	11463	12821
30°	9097	10097	11748
35°	7543	8571	10452
40°	5796	6853	8907
45°	4190	5189	7166
50°	2855	3867	5684
55°	1856	2797	4417
60°	1065	1969	3192
65°	282	1203	1615
70°	140	372	464
75°	61	32	0
80°	48	0	0
85°	0	0	0



TEST NUMBER: P518556

CATALOG NUMBER: SQ4-BB-075U-100D-935-1D-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	162.4	3.4
10°-20°	415.3	8.8
20°-30°	519.9	11.0
30°-40°	480.2	10.2
40°-50°	322.6	6.8
50°-60°	166.7	3.5
60°-70°	52.2	1.1
70°-80°	3.3	0.1
80°-90°	1.1	0.0
90°-100°	188.3	4.0
100°-110°	518.1	11.0
110°-120°	534.8	11.3
120°-130°	428.5	9.1
130°-140°	336.5	7.1
140°-150°	257.9	5.5
150°-160°	185.4	3.9
160°-170°	113.4	2.4
170°-180°	38.2	0.8
0°-30°	1097.5	23.2
0°-40°	1577.7	33.4
0°-60°	2067.0	43.7
0°-90°	2123.6	44.9
90°-120°	1241.3	26.3
90°-150°	2264.2	47.9
90°-180°	2601.0	55.0
0°-180°	4724.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1779	1779	1779	1779	1779	
5°	1744	1726	1740	1746	1753	162
15°	1438	1433	1484	1534	1567	401
25°	1043	1052	1126	1203	1259	478
35°	670	687	761	850	928	415
45°	321	340	398	475	549	252
55°	115	135	174	223	275	108
65°	13	25	55	66	74	22
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	1	3	6	8	8	2
95°	28	103	333	142	91	30
105°	93	142	571	870	811	98
115°	164	200	458	912	1035	162
125°	226	258	415	703	823	202
135°	273	303	404	568	643	210
145°	315	337	398	484	522	198
155°	357	368	395	435	448	164
165°	386	391	397	413	415	109
175°	399	400	398	403	402	38
180°	399	399	399	399	399	

TEST NUMBER: P518556

CATALOG NUMBER: SQ4-BB-075U-100D-935-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1779.3	1779.3	1779.3	1779.3	1779.3
2.5°	1783.5	1766.6	1771.1	1771.0	1766.2
5°	1744.0	1726.4	1739.7	1745.9	1752.6
7.5°	1670.4	1656.5	1682.2	1701.5	1715.5
10°	1613.2	1601.4	1634.7	1661.0	1680.3
12.5°	1547.1	1538.0	1578.2	1614.3	1639.0
15°	1438.4	1433.4	1484.1	1533.9	1566.7
17.5°	1322.1	1321.9	1379.7	1441.6	1481.1
20°	1242.2	1244.7	1306.7	1374.9	1421.2
22.5°	1162.3	1168.2	1234.4	1305.5	1358.6
25°	1043.3	1051.7	1126.0	1203.0	1259.4
27.5°	929.0	941.3	1019.4	1099.5	1168.1
30°	853.9	868.3	947.8	1032.0	1102.7
32.5°	780.3	797.3	874.8	963.9	1035.9
35°	669.7	686.6	761.0	850.5	928.0
37.5°	555.6	572.1	644.8	732.9	816.6
40°	481.2	499.7	569.0	654.4	739.5
42.5°	413.7	432.2	497.4	581.3	661.6
45°	321.1	340.4	397.7	475.1	549.2
47.5°	244.3	265.3	315.6	385.6	453.1
50°	198.9	219.9	269.4	331.2	396.0
52.5°	162.4	182.7	227.4	285.6	345.0
55°	115.4	134.7	173.9	223.3	274.6
57.5°	79.7	96.4	131.5	172.7	213.0
60°	57.7	73.7	106.7	140.2	173.0
62.5°	38.4	53.0	85.4	111.0	133.1
65°	12.9	24.7	55.1	66.5	74.0
67.5°	6.5	7.9	28.9	30.5	33.1
70°	5.2	5.2	13.8	14.7	17.2
72.5°	3.8	3.8	5.5	7.1	7.6
75°	1.7	1.7	0.9	0.0	0.0
77.5°	0.9	0.9	0.7	0.0	0.0
80°	0.9	0.9	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°	0.2	0.7	1.2	1.5	1.5
90°	0.8	3.3	5.9	7.6	7.6
92.5°	11.7	50.1	86.8	33.3	27.4
95°	28.0	102.8	333.0	142.4	90.9
97.5°	45.7	114.0	508.2	391.6	276.3
100°	58.6	120.9	563.3	568.5	463.9
102.5°	70.9	129.2	577.5	705.3	609.3
105°	92.6	142.4	570.9	869.5	811.3
107.5°	113.3	158.9	538.5	949.9	967.2
110°	128.3	169.8	514.0	969.9	1029.7

TEST NUMBER: P518556

CATALOG NUMBER: SQ4-BB-075U-100D-935-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	141.9	182.1	489.5	957.0	1048.0
115°	164.0	199.7	457.9	911.8	1034.8
117.5°	185.0	217.9	437.9	848.5	987.5
120°	198.0	229.5	429.0	801.0	944.7
122.5°	209.5	241.1	422.9	759.4	895.8
125°	226.0	257.6	415.4	702.8	823.2
127.5°	241.6	271.7	410.5	655.6	761.2
130°	249.8	280.5	407.8	627.5	723.8
132.5°	259.3	290.0	405.8	602.8	689.9
135°	272.7	302.6	403.5	568.4	643.1
137.5°	285.3	313.0	401.7	540.5	602.2
140°	294.8	320.6	401.0	522.1	577.7
142.5°	303.0	326.7	399.6	505.6	553.2
145°	315.2	336.8	397.6	484.3	521.6
147.5°	328.3	346.9	396.6	465.4	495.3
150°	336.4	353.0	395.9	455.1	478.3
152.5°	343.9	359.2	395.2	446.1	465.4
155°	356.8	368.5	395.1	435.3	447.7
157.5°	366.2	375.6	395.1	426.3	435.0
160°	373.0	380.4	395.1	421.5	428.2
162.5°	378.4	384.5	395.7	417.4	422.7
165°	385.7	390.7	396.8	412.9	415.4
167.5°	390.8	394.6	397.6	409.2	409.8
170°	394.2	396.7	397.6	407.8	407.8
172.5°	396.9	398.1	397.6	405.7	405.1
175°	399.3	400.1	397.6	402.7	401.8
177.5°	400.0	400.0	397.3	401.3	400.0
180°	399.3	399.3	399.3	399.3	399.3

(END OF REPORT)