

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521117

Luminaire Tested: **SQ4-BB-075U-100D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521117  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,  
Test Lab: INNOVATION CENTER  
Issue Date: 5/5/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-BB-075U-100D-93050-1D-UNV-STD-W-4 (4500K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

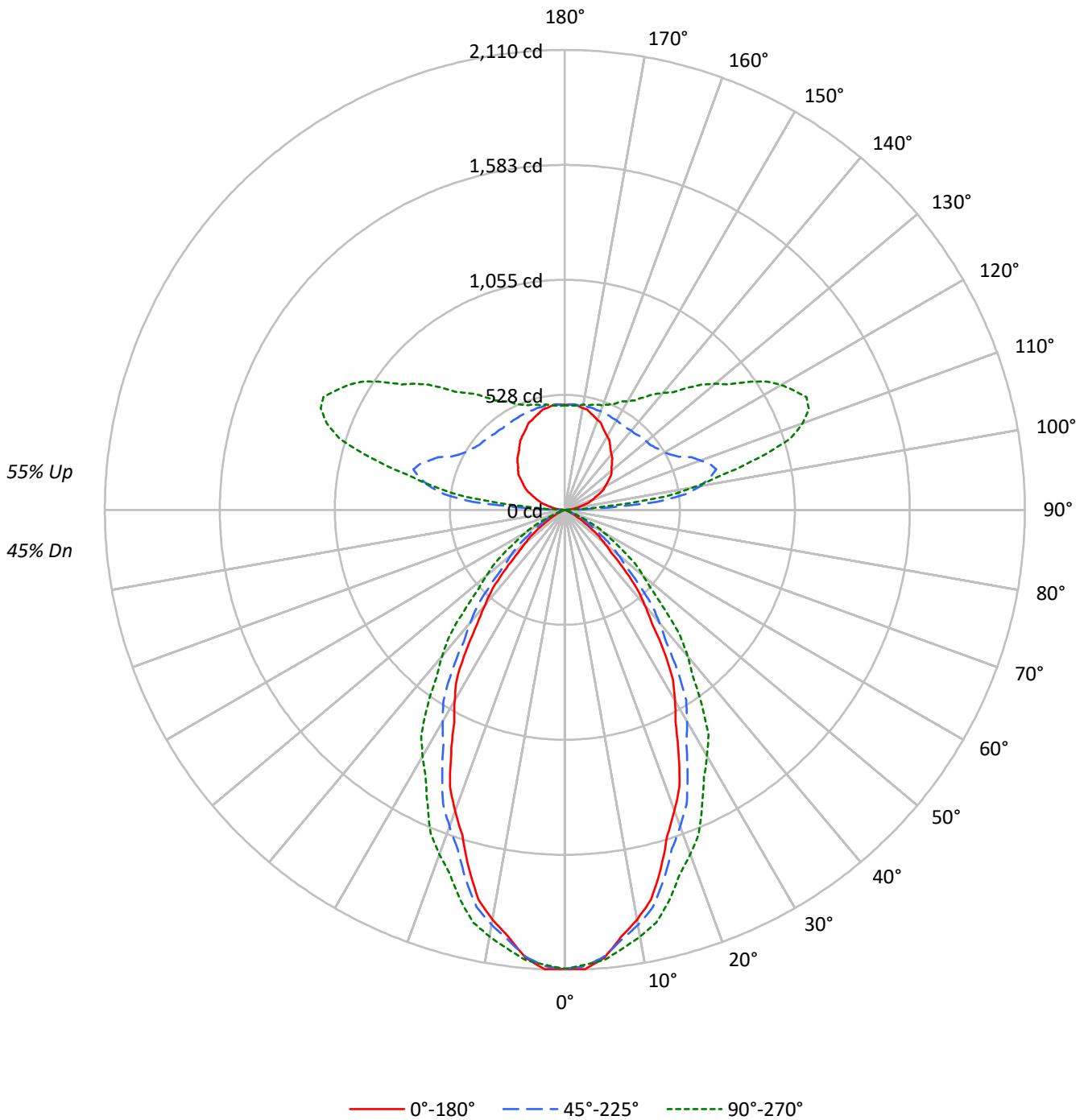
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5622.7 lumens  
Efficiency: N/A  
Efficacy: 85.2 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): 66  
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45
1	98	95	91	88	90	87	84	82	73	71	69	60	59	57	48	47	46	41
2	91	84	79	75	83	78	73	70	66	63	60	54	52	51	44	43	42	37
3	84	76	69	64	77	70	65	60	59	56	52	50	47	45	41	39	37	33
4	78	68	61	56	71	63	57	53	54	50	46	45	42	40	37	35	34	30
5	72	62	54	49	66	57	51	46	49	45	41	42	38	36	35	32	31	27
6	67	56	49	44	61	52	46	41	45	40	37	38	35	32	32	30	28	25
7	62	51	44	39	57	48	41	37	41	37	33	35	32	29	30	27	25	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	40	34	30	35	31	27	31	27	24	26	23	22	19
10	51	40	33	29	47	38	32	28	33	28	25	29	25	22	24	22	20	18

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

	0°	45°	90°
0°	19423	19423	19423
5°	19110	19063	19205
10°	17881	18120	18625
15°	16255	16771	17705
20°	14429	15179	16510
25°	12566	13561	15168
30°	10763	11946	13899
35°	8925	10140	12366
40°	6857	8108	10537
45°	4957	6139	8478
50°	3377	4576	6725
55°	2196	3309	5226
60°	1258	2331	3777
65°	334	1423	1912
70°	165	440	550
75°	71	36	0
80°	53	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	192.1	3.4
10°-20°	491.3	8.7
20°-30°	615.1	10.9
30°-40°	568.1	10.1
40°-50°	381.8	6.8
50°-60°	197.2	3.5
60°-70°	61.8	1.1
70°-80°	3.9	0.1
80°-90°	0.1	0.0
90°-100°	247.7	4.4
100°-110°	598.7	10.6
110°-120°	638.5	11.4
120°-130°	517.2	9.2
130°-140°	400.4	7.1
140°-150°	305.5	5.4
150°-160°	221.1	3.9
160°-170°	136.2	2.4
170°-180°	46.1	0.8
0°-30°	1298.5	23.1
0°-40°	1866.6	33.2
0°-60°	2445.5	43.5
0°-90°	2511.3	44.7
90°-120°	1485.0	26.4
90°-150°	2708.0	48.2
90°-180°	3111.0	55.3
0°-180°	5622.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2105	2105	2105	2105	2105	
5°	2063	2042	2058	2066	2074	191
15°	1702	1696	1756	1815	1854	474
25°	1234	1244	1332	1423	1490	566
35°	792	812	900	1006	1098	491
45°	380	403	470	562	650	298
55°	136	159	206	264	325	127
65°	15	29	65	79	88	26
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	24	124	424	276	193	27
105°	96	165	720	931	919	101
115°	175	224	578	1096	1222	173
125°	249	287	502	872	1024	222
135°	306	342	481	687	791	237
145°	362	389	472	584	630	226
155°	415	433	478	518	536	192
165°	459	466	484	492	499	130
175°	486	484	486	481	480	46
180°	480	480	480	480	480	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2105.2	2105.2	2105.2	2105.2	2105.2
2.5°	2110.0	2090.1	2095.4	2095.3	2089.7
5°	2063.4	2042.5	2058.3	2065.6	2073.6
7.5°	1976.2	1959.9	1990.3	2013.1	2029.6
10°	1908.6	1894.7	1934.1	1965.1	1988.0
12.5°	1830.4	1819.6	1867.2	1909.9	1939.1
15°	1701.8	1695.9	1755.8	1814.8	1853.6
17.5°	1564.2	1564.0	1632.4	1705.6	1752.4
20°	1469.6	1472.6	1546.0	1626.7	1681.5
22.5°	1375.1	1382.1	1460.5	1544.6	1607.3
25°	1234.4	1244.3	1332.1	1423.3	1490.0
27.5°	1099.1	1113.7	1206.1	1300.8	1382.1
30°	1010.3	1027.2	1121.3	1221.0	1304.6
32.5°	923.1	943.2	1035.0	1140.4	1225.6
35°	792.4	812.3	900.3	1006.3	1097.9
37.5°	657.3	676.8	762.8	867.1	966.1
40°	569.3	591.2	673.2	774.3	874.9
42.5°	489.5	511.4	588.5	687.8	782.8
45°	379.9	402.8	470.5	562.1	649.8
47.5°	289.0	313.9	373.4	456.3	536.1
50°	235.3	260.2	318.8	391.8	468.5
52.5°	192.1	216.2	269.1	337.9	408.2
55°	136.5	159.4	205.7	264.1	324.9
57.5°	94.3	114.0	155.6	204.4	252.0
60°	68.2	87.2	126.3	165.9	204.7
62.5°	45.4	62.8	101.0	131.4	157.5
65°	15.3	29.2	65.2	78.6	87.6
67.5°	7.7	9.3	34.2	36.1	39.1
70°	6.1	6.1	16.3	17.4	20.4
72.5°	4.5	4.5	6.5	8.4	9.0
75°	2.0	2.0	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	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°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	8.1	67.1	158.0	76.8	52.1
95°	24.4	123.9	424.4	276.0	193.4
97.5°	43.4	137.3	559.0	538.5	462.3
100°	58.0	145.6	633.1	668.3	605.6
102.5°	71.9	153.1	681.9	776.3	739.1
105°	95.7	165.3	719.6	931.0	919.1
107.5°	119.1	179.8	697.4	1055.1	1083.1
110°	135.4	192.1	661.6	1108.5	1161.3

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	151.6	204.4	629.8	1121.6	1211.8
115°	175.1	223.8	578.1	1096.0	1222.4
117.5°	198.3	244.2	547.8	1037.0	1185.1
120°	213.7	256.5	528.2	990.8	1146.0
122.5°	230.0	269.6	516.0	943.5	1096.4
125°	249.4	287.2	501.8	871.6	1023.9
127.5°	268.5	304.1	491.8	810.8	944.5
130°	279.9	314.7	488.5	768.4	899.7
132.5°	290.5	326.9	483.7	737.8	849.2
135°	306.4	342.2	481.4	687.3	790.8
137.5°	321.4	357.4	474.3	653.2	731.2
140°	332.8	365.7	474.3	628.6	700.2
142.5°	344.2	377.1	470.2	607.2	667.7
145°	362.3	389.2	472.3	584.2	630.0
147.5°	379.2	405.3	471.0	557.8	595.6
150°	389.8	412.7	474.3	546.2	576.1
152.5°	401.2	423.3	473.5	533.9	560.6
155°	415.3	433.2	478.4	517.5	536.4
157.5°	432.2	447.5	477.3	511.2	522.3
160°	438.7	451.6	481.4	503.0	510.9
162.5°	449.3	460.6	479.8	500.5	505.2
165°	459.0	466.0	484.5	491.7	498.7
167.5°	471.0	475.6	483.2	491.2	491.4
170°	474.3	477.3	486.5	485.6	490.6
172.5°	480.0	482.2	484.1	486.2	483.2
175°	485.5	483.5	485.5	481.4	480.4
177.5°	484.5	484.5	482.8	481.1	477.1
180°	480.4	480.4	480.4	480.4	480.4

(END OF REPORT)