

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: P844838

Luminaire Tested: **SQ4P-BB-075U-100D-B35-1D-UNV**

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P844838  
REPORT IS A COMBINATION OF REPORTS P700217 AND P700245  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-BB-075U-100D-B35-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 750 LUMENS PER FOOT  
UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

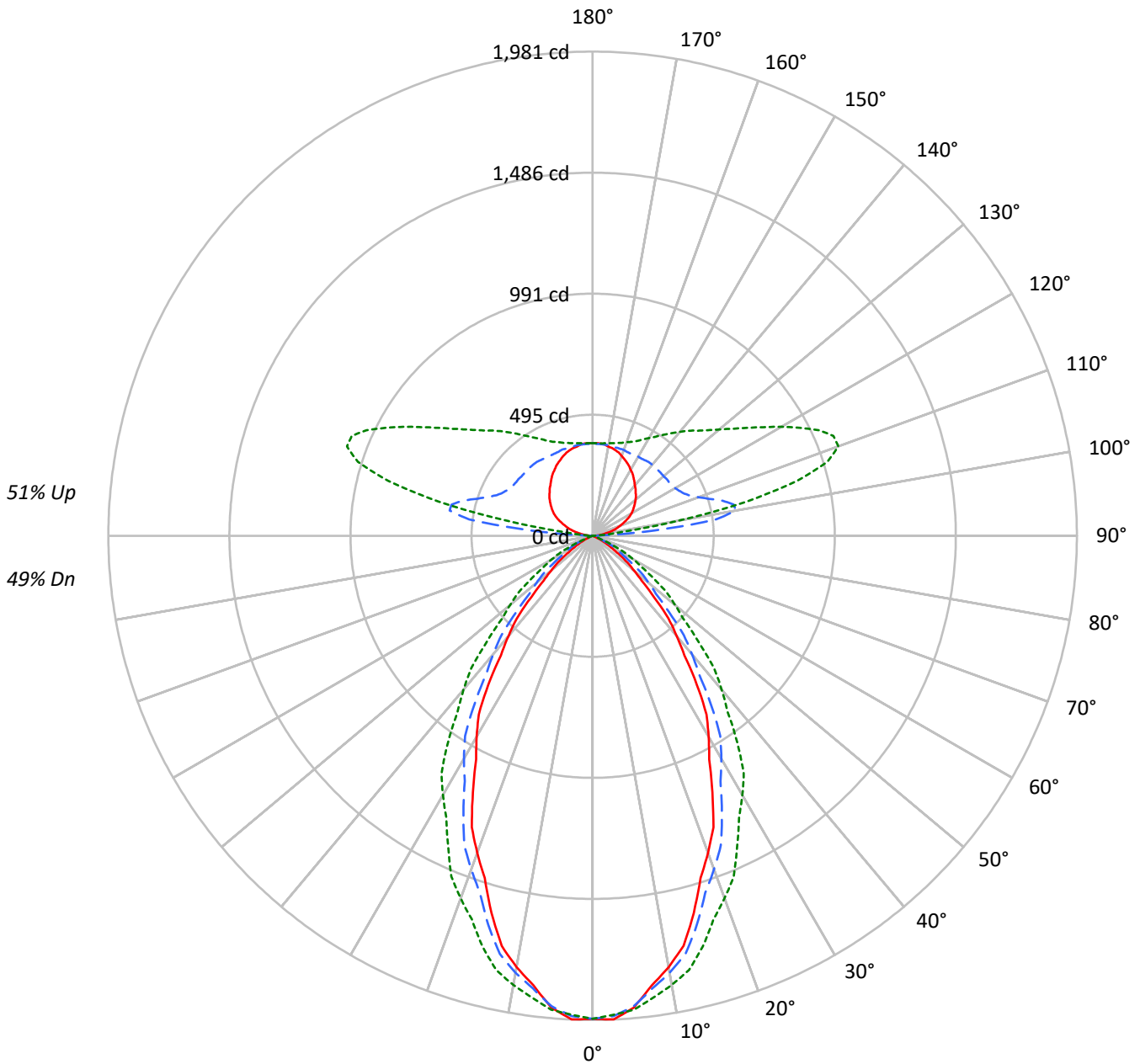
Lumens per Lamp: N/A  
Luminaire Lumens: 4818.7 lumens  
Efficiency: N/A  
Efficacy: 89.4 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 53.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: 25 FT

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49																			
1	99	96	92	89	92	88	86	83	75	73	71	63	62	60	51	51	50	45																			
2	92	86	80	76	85	79	75	71	68	65	62	57	55	53	47	46	45	40																			
3	85	77	71	66	78	72	66	62	62	58	54	52	50	47	44	42	40	36																			
4	79	69	62	57	73	65	59	54	56	52	48	48	45	42	40	38	36	33																			
5	73	63	56	50	68	59	53	48	51	46	43	44	41	38	37	35	33	30																			
6	68	57	50	45	63	54	47	43	47	42	38	41	37	34	35	32	30	27																			
7	63	52	45	40	59	49	43	38	43	38	35	37	34	31	32	30	28	25																			
8	59	48	41	36	55	45	39	35	40	35	31	35	31	28	30	27	25	23																			
9	55	44	37	33	52	42	36	31	37	32	29	32	29	26	28	25	23	21																			
10	52	41	34	30	48	39	33	29	34	30	26	30	27	24	26	24	22	20																			

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

	0°	45°	90°
0°	18233	18233	18233
5°	17939	17896	18028
10°	16785	17009	17484
15°	15260	15744	16621
20°	13546	14249	15496
25°	11795	12729	14239
30°	10105	11213	13047
35°	8376	9520	11607
40°	6436	7613	9890
45°	4654	5763	7958
50°	3169	4293	6314
55°	2061	3106	4906
60°	1183	2188	3547
65°	312	1338	1797
70°	159	415	515
75°	71	32	0
80°	48	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	180.3	3.7
10°-20°	461.2	9.6
20°-30°	577.4	12.0
30°-40°	533.3	11.1
40°-50°	358.3	7.4
50°-60°	185.1	3.8
60°-70°	58.0	1.2
70°-80°	3.7	0.1
80°-90°	1.0	0.0
90°-100°	150.9	3.1
100°-110°	525.0	10.9
110°-120°	508.6	10.6
120°-130°	398.9	8.3
130°-140°	315.7	6.6
140°-150°	243.7	5.1
150°-160°	174.7	3.6
160°-170°	106.8	2.2
170°-180°	36.1	0.7
0°-30°	1218.9	25.3
0°-40°	1752.2	36.4
0°-60°	2295.7	47.6
0°-90°	2358.3	48.9
90°-120°	1184.4	24.6
90°-150°	2142.8	44.5
90°-180°	2460.0	51.1
0°-180°	4818.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1976	1976	1976	1976	1976	
5°	1937	1917	1932	1939	1947	180
15°	1598	1592	1648	1704	1740	445
25°	1159	1168	1250	1336	1399	531
35°	744	763	845	945	1030	461
45°	357	378	442	528	610	280
55°	128	150	193	248	305	120
65°	14	28	61	74	82	24
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	6	8	8	6	3	4
95°	25	88	255	65	40	27
105°	88	124	552	931	866	92
115°	153	184	410	866	1021	151
125°	207	255	382	645	770	185
135°	249	280	379	538	608	193
145°	291	311	376	464	504	182
155°	331	342	371	413	427	153
165°	362	365	373	390	393	102
175°	379	379	376	382	379	36
180°	379	379	379	379	379	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1976.2	1976.2	1976.2	1976.2	1976.2
2.5°	1980.7	1962.1	1966.9	1966.9	1961.6
5°	1937.0	1917.3	1932.3	1938.9	1946.6
7.5°	1855.2	1839.8	1868.4	1889.6	1905.2
10°	1791.6	1778.5	1815.5	1844.6	1866.2
12.5°	1718.2	1708.0	1752.8	1792.8	1820.3
15°	1597.6	1592.0	1648.3	1703.5	1740.1
17.5°	1468.4	1468.1	1532.2	1601.0	1645.0
20°	1379.7	1382.4	1451.3	1527.1	1578.3
22.5°	1290.9	1297.4	1371.0	1450.0	1508.9
25°	1158.6	1167.9	1250.4	1336.1	1398.7
27.5°	1031.8	1045.5	1132.2	1221.0	1297.4
30°	948.5	964.3	1052.5	1146.1	1224.7
32.5°	866.4	885.5	971.4	1070.6	1150.4
35°	743.7	762.6	845.2	944.6	1030.5
37.5°	617.1	635.3	716.0	814.1	906.9
40°	534.4	554.9	632.1	726.9	821.2
42.5°	459.5	480.1	552.4	645.7	734.8
45°	356.7	378.1	441.7	527.7	609.9
47.5°	271.5	294.5	350.4	428.3	503.3
50°	220.8	244.2	299.1	367.7	439.9
52.5°	180.3	203.1	252.6	317.1	383.1
55°	128.1	149.5	193.1	248.1	305.0
57.5°	88.6	107.2	146.1	191.8	236.6
60°	64.1	81.8	118.6	155.6	192.2
62.5°	42.7	58.9	94.8	123.4	147.9
65°	14.3	27.5	61.3	73.8	82.3
67.5°	7.3	8.6	32.0	34.0	36.8
70°	5.9	5.9	15.4	16.2	19.1
72.5°	4.1	4.1	6.1	7.8	8.4
75°	2.0	2.0	0.9	0.0	0.0
77.5°	0.9	0.9	0.9	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°	0.0	0.0	0.0	0.0	0.0
90°	5.7	8.5	8.5	5.7	2.8
92.5°	14.2	42.5	39.6	16.9	14.2
95°	25.4	87.7	254.6	65.1	39.6
97.5°	39.6	99.0	509.2	232.0	124.5
100°	53.7	104.7	594.1	557.4	359.3
102.5°	70.8	113.1	591.3	783.7	645.1
105°	87.7	124.5	551.7	930.8	865.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	135.8	166.9	430.1	936.5	1066.6
115°	152.8	183.9	410.2	865.7	1021.3
117.5°	169.8	203.7	399.0	800.7	956.3
120°	183.9	220.7	390.4	738.4	891.2
122.5°	195.2	237.7	384.8	687.5	826.1
125°	206.6	254.6	381.9	645.1	769.5
127.5°	217.8	266.0	381.9	614.0	718.7
130°	229.2	271.6	379.1	582.8	676.2
132.5°	240.4	274.4	379.1	560.2	639.4
135°	248.9	280.1	379.1	537.5	608.3
137.5°	260.3	285.7	379.1	517.8	582.8
140°	268.8	294.3	379.1	497.9	554.6
142.5°	280.1	302.8	379.1	478.1	529.0
145°	291.4	311.2	376.3	464.0	503.6
147.5°	302.8	319.7	373.4	449.8	481.0
150°	311.2	328.2	373.4	435.7	461.2
152.5°	322.5	336.6	370.6	421.6	444.2
155°	331.0	342.3	370.6	413.1	427.2
157.5°	339.5	350.8	370.6	404.5	415.9
160°	348.0	356.5	373.4	399.0	407.4
162.5°	356.5	362.2	373.4	393.3	399.0
165°	362.2	365.0	373.4	390.4	393.3
167.5°	367.8	370.6	373.4	387.6	387.6
170°	370.6	373.4	376.3	384.8	384.8
172.5°	376.3	376.3	376.3	381.9	381.9
175°	379.1	379.1	376.3	381.9	379.1
177.5°	379.1	379.1	376.3	381.9	379.1
180°	379.1	379.1	379.1	379.1	379.1



Report Generated By 670246072 / DESKTOP-50001EG







— 0°-180°    - - 45°-225°    - - - - 90°-270°







107.5°	104.7	138.7	500.7	995.9	1007.2
110°	118.8	152.8	461.2	987.4	1069.5



(END OF REPORT)