

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: P845331

Luminaire Tested: **SQ4P-WB-050U-100D-B40-1D-UNV**

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P845331  
REPORT IS A COMBINATION OF REPORTS P700213 AND P700244  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-WB-050U-100D-B40-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

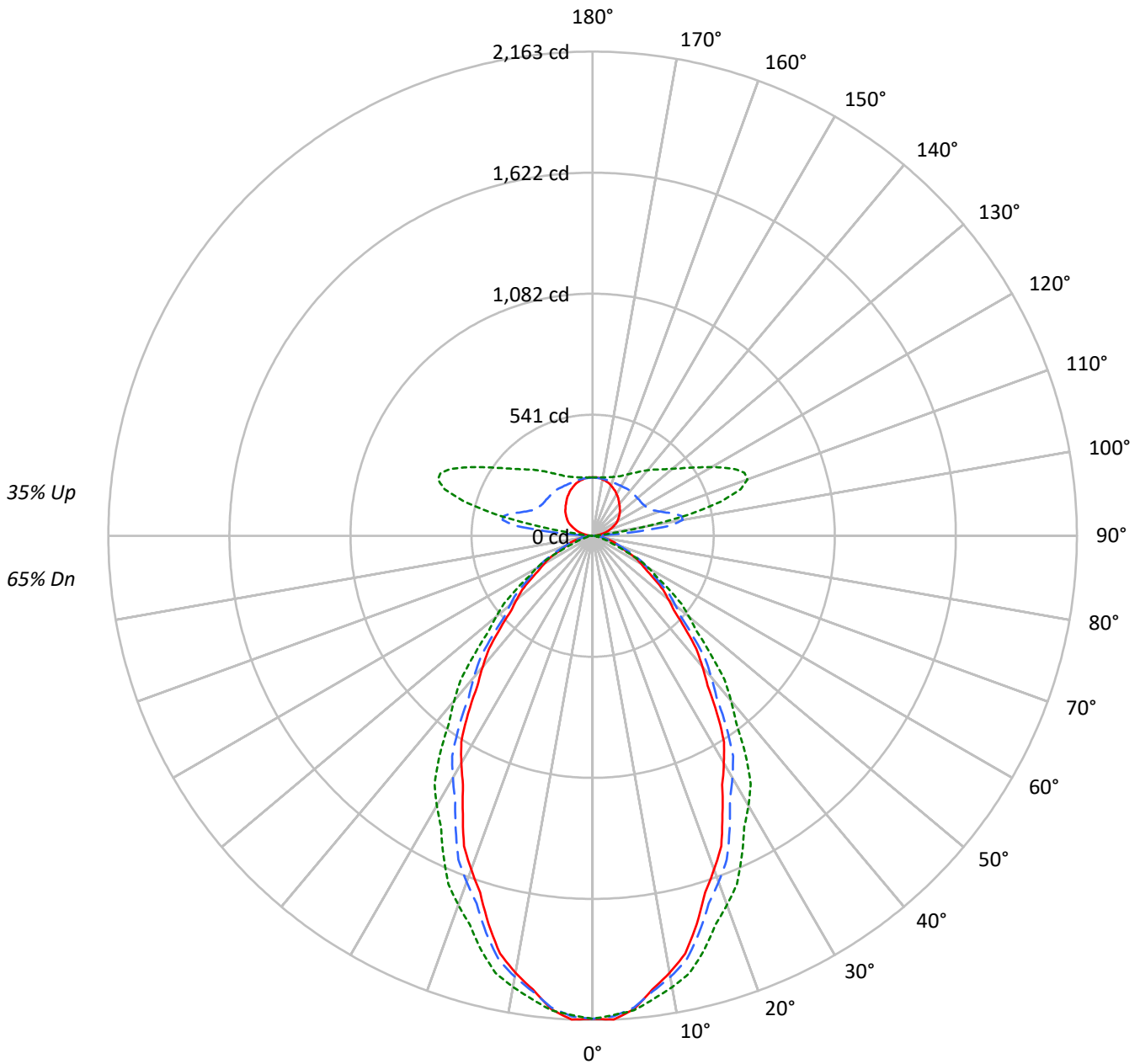
Lumens per Lamp: N/A  
Luminaire Lumens: 4838.7 lumens  
Efficiency: N/A  
Efficacy: 101.0 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 47.9  
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					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	50	30	10	0					
RCR																										
0	111	111	111	111	104	104	104	104	92	92	92	80	80	80	70	70	70	65								
1	103	99	95	92	96	93	90	87	83	80	78	73	71	70	64	63	62	58								
2	95	88	83	78	89	83	78	74	74	71	67	66	63	61	58	56	55	51								
3	87	79	72	67	82	75	69	64	67	62	59	60	56	53	53	51	48	45								
4	81	71	64	58	76	67	61	56	61	56	52	54	50	47	49	46	43	40								
5	75	64	57	51	71	61	54	49	55	50	46	50	45	42	45	41	39	36								
6	70	58	51	45	66	56	49	44	51	45	41	46	41	38	41	38	35	32								
7	65	53	46	41	61	51	44	39	46	41	37	42	38	34	38	35	32	29								
8	61	49	42	37	57	47	40	36	43	37	33	39	35	31	35	32	29	27								
9	57	45	38	33	54	43	37	32	40	34	30	36	32	29	33	29	27	25								
10	53	42	35	30	51	40	34	30	37	32	28	34	29	26	31	27	25	23								

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

	0°	45°	90°
0°	19910	19910	19910
5°	19662	19592	19707
10°	18576	18745	19178
15°	17148	17547	18333
20°	15573	16158	17227
25°	13968	14729	16051
30°	12490	13304	14829
35°	10920	11709	13386
40°	9191	9922	11587
45°	7585	8240	9674
50°	6331	6904	8058
55°	5376	5923	6655
60°	4595	5137	5312
65°	3659	4320	3430
70°	3245	3372	2093
75°	3002	2734	1283
80°	2768	2518	1105
85°	2488	2318	900



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	197.9	4.1
10°-20°	514.9	10.6
20°-30°	666.9	13.8
30°-40°	653.0	13.5
40°-50°	499.8	10.3
50°-60°	333.1	6.9
60°-70°	181.8	3.8
70°-80°	75.8	1.6
80°-90°	22.0	0.5
90°-100°	103.8	2.1
100°-110°	361.4	7.5
110°-120°	350.0	7.2
120°-130°	274.6	5.7
130°-140°	217.3	4.5
140°-150°	167.7	3.5
150°-160°	120.2	2.5
160°-170°	73.5	1.5
170°-180°	24.9	0.5
0°-30°	1379.7	28.5
0°-40°	2032.7	42.0
0°-60°	2865.6	59.2
0°-90°	3145.2	65.0
90°-120°	815.2	16.8
90°-150°	1474.9	30.5
90°-180°	1694.0	35.0
0°-180°	4838.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2158	2158	2158	2158	2158	
5°	2123	2102	2115	2120	2128	197
15°	1795	1789	1837	1887	1919	501
25°	1372	1376	1447	1510	1577	631
35°	970	974	1040	1110	1188	603
45°	581	592	632	679	741	453
55°	334	348	368	382	414	303
65°	168	182	198	173	157	174
75°	84	84	77	53	36	90
85°	24	24	22	14	8	26
90°	4	6	6	4	2	4
95°	18	60	175	45	27	19
105°	60	86	380	641	596	63
115°	105	127	282	596	703	104
125°	142	175	263	444	530	127
135°	171	193	261	370	419	133
145°	201	214	259	319	347	125
155°	228	236	255	284	294	105
165°	249	251	257	269	271	70
175°	261	261	259	263	261	25
180°	261	261	261	261	261	



TEST NUMBER: P845331

CATALOG NUMBER: SQ4P-WB-050U-100D-B40-1D-UNV

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2158.0	2158.0	2158.0	2158.0	2158.0
2.5°	2163.3	2144.1	2149.0	2148.8	2142.8
5°	2123.0	2101.6	2115.4	2120.2	2127.8
7.5°	2044.1	2028.1	2053.2	2071.6	2086.6
10°	1982.8	1968.9	2000.8	2027.9	2047.1
12.5°	1911.7	1899.8	1939.6	1975.5	2001.1
15°	1795.3	1788.9	1837.1	1887.1	1919.4
17.5°	1671.0	1667.8	1723.0	1781.3	1822.7
20°	1586.1	1585.2	1645.7	1706.5	1754.6
22.5°	1500.5	1502.4	1566.1	1629.4	1684.2
25°	1372.1	1375.8	1446.9	1510.0	1576.7
27.5°	1253.4	1255.1	1328.4	1395.1	1466.2
30°	1172.4	1176.8	1248.8	1317.9	1391.9
32.5°	1091.4	1096.7	1167.2	1238.4	1313.9
35°	969.5	974.3	1039.6	1109.8	1188.5
37.5°	844.2	850.5	908.7	974.7	1052.3
40°	763.1	772.5	823.8	886.2	962.1
42.5°	685.1	696.7	744.2	803.5	871.8
45°	581.3	592.5	631.5	679.3	741.4
47.5°	492.0	504.8	534.8	576.0	628.9
50°	441.1	453.3	481.0	511.5	561.4
52.5°	396.5	408.6	433.3	456.8	499.5
55°	334.2	348.1	368.2	382.4	413.7
57.5°	283.2	296.4	312.5	318.7	337.8
60°	249.0	263.9	278.4	277.6	287.9
62.5°	218.0	230.6	245.0	234.9	235.6
65°	167.6	181.6	197.9	173.0	157.1
67.5°	135.5	138.3	155.2	120.6	101.8
70°	120.3	120.3	125.0	93.4	77.6
72.5°	105.9	105.9	101.7	75.9	59.4
75°	84.2	84.2	76.7	52.7	36.0
77.5°	64.9	64.3	58.7	39.2	26.2
80°	52.1	52.1	47.4	31.1	20.8
82.5°	40.7	40.7	36.6	24.2	15.4
85°	23.5	23.5	21.9	14.1	8.5
87.5°	8.3	8.3	7.5	4.5	3.9
90°	3.9	5.8	5.8	3.9	1.9
92.5°	9.7	29.2	27.2	11.7	9.7
95°	17.5	60.4	175.3	44.8	27.2
97.5°	27.2	68.1	350.5	159.7	85.7
100°	37.0	72.1	408.9	383.7	247.3
102.5°	48.6	77.9	407.0	539.4	444.0
105°	60.4	85.7	379.8	640.6	595.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	93.5	114.9	296.0	644.6	734.2
115°	105.1	126.6	282.4	595.9	703.0
117.5°	116.9	140.2	274.5	551.1	658.2
120°	126.6	151.9	268.7	508.3	613.4
122.5°	134.4	163.6	264.8	473.2	568.6
125°	142.2	175.3	262.9	444.0	529.7
127.5°	149.9	183.1	262.9	422.6	494.6
130°	157.8	186.9	261.0	401.2	465.4
132.5°	165.5	188.9	261.0	385.6	440.1
135°	171.3	192.7	261.0	370.0	418.7
137.5°	179.2	196.7	261.0	356.3	401.2
140°	185.0	202.5	261.0	342.8	381.7
142.5°	192.7	208.3	261.0	329.1	364.2
145°	200.6	214.3	259.0	319.4	346.6
147.5°	208.3	220.1	257.1	309.6	331.0
150°	214.3	225.9	257.1	299.9	317.5
152.5°	222.0	231.7	255.2	290.1	305.7
155°	227.8	235.7	255.2	284.3	294.0
157.5°	233.6	241.5	255.2	278.5	286.3
160°	239.6	245.4	257.1	274.5	280.4
162.5°	245.4	249.2	257.1	270.7	274.5
165°	249.2	251.2	257.1	268.7	270.7
167.5°	253.1	255.2	257.1	266.8	266.8
170°	255.2	257.1	259.0	264.8	264.8
172.5°	259.0	259.0	259.0	262.9	262.9
175°	261.0	261.0	259.0	262.9	261.0
177.5°	261.0	261.0	259.0	262.9	261.0
180°	261.0	261.0	261.0	261.0	261.0



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	72.1	95.5	344.7	685.5	693.3
110°	81.8	105.1	317.5	679.6	736.1



(END OF REPORT)