

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: P845364

Luminaire Tested: **SQ4P-WB-100U-075D-B40-1D-UNV**

Issue Date: 8/14/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P845364  
REPORT IS A COMBINATION OF REPORTS P700100 AND P700246  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-WB-100U-075D-B40-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT UPLIGHT, 750 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

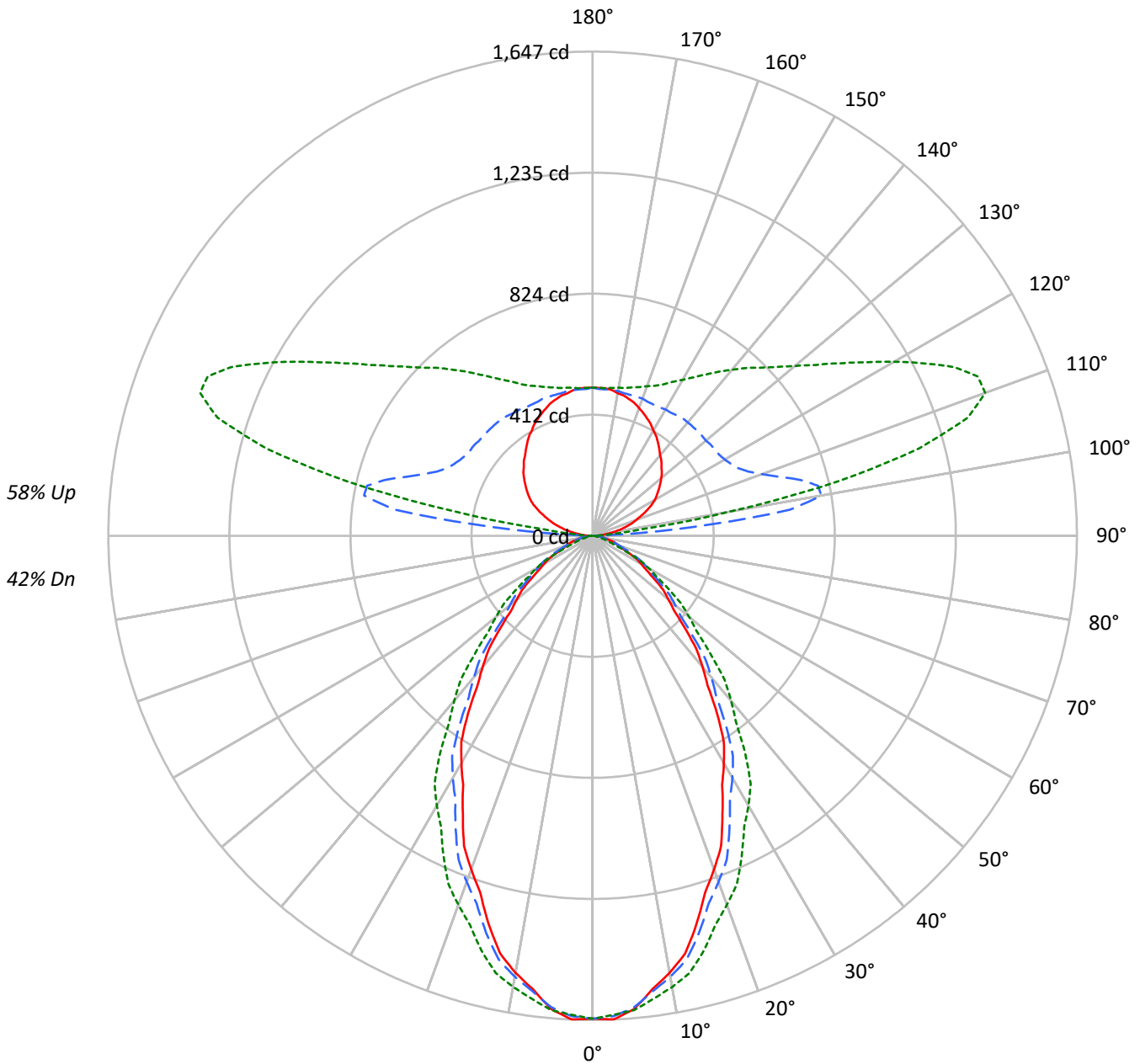
Lumens per Lamp: N/A  
Luminaire Lumens: 5663.5 lumens  
Efficiency: N/A  
Efficacy: 109.8 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 51.6  
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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	49	49	49	42								
1	97	93	90	86	89	85	82	80	71	69	67	57	56	55	45	44	43	38								
2	89	82	77	72	81	76	71	67	63	60	57	51	49	47	41	39	38	33								
3	82	73	67	61	75	68	62	57	57	52	49	46	44	41	37	35	34	29								
4	75	66	58	53	69	61	54	49	51	46	43	42	39	36	34	32	30	26								
5	70	59	52	46	64	55	48	43	46	41	38	38	35	32	31	29	27	23								
6	65	53	46	40	59	49	43	38	42	37	33	35	31	29	28	26	24	21								
7	60	48	41	36	55	45	38	34	38	33	30	32	28	26	26	24	22	19								
8	56	44	37	32	51	41	35	30	35	30	27	30	26	23	24	22	20	18								
9	52	41	34	29	48	38	32	27	33	28	24	27	24	21	23	20	18	16								
10	49	37	31	26	45	35	29	25	30	25	22	26	22	19	21	19	17	15								

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

	0°	45°	90°
0°	15155	15155	15155
5°	14966	14912	15000
10°	14140	14268	14599
15°	13052	13357	13955
20°	11854	12298	13112
25°	10633	11211	12217
30°	9506	10128	11287
35°	8312	8913	10189
40°	6996	7553	8820
45°	5774	6272	7364
50°	4820	5255	6135
55°	4092	4509	5065
60°	3499	3910	4043
65°	2786	3288	2611
70°	2471	2568	1594
75°	2289	2082	977
80°	2104	1913	839
85°	1895	1768	688



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	150.7	2.7
10°-20°	391.9	6.9
20°-30°	507.6	9.0
30°-40°	497.1	8.8
40°-50°	380.5	6.7
50°-60°	253.5	4.5
60°-70°	138.4	2.4
70°-80°	57.7	1.0
80°-90°	17.5	0.3
90°-100°	200.5	3.5
100°-110°	697.4	12.3
110°-120°	675.6	11.9
120°-130°	530.0	9.4
130°-140°	419.5	7.4
140°-150°	323.7	5.7
150°-160°	232.1	4.1
160°-170°	141.9	2.5
170°-180°	48.0	0.8
0°-30°	1050.2	18.5
0°-40°	1547.2	27.3
0°-60°	2181.3	38.5
0°-90°	2394.8	42.3
90°-120°	1573.5	27.8
90°-150°	2846.7	50.3
90°-180°	3269.0	57.7
0°-180°	5663.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1643	1643	1643	1643	1643	
5°	1616	1600	1610	1614	1620	150
15°	1366	1362	1398	1436	1461	382
25°	1044	1047	1101	1149	1200	480
35°	738	742	791	845	905	459
45°	442	451	481	517	564	345
55°	254	265	280	291	315	231
65°	128	138	151	132	120	133
75°	64	64	58	40	27	68
85°	18	18	17	11	6	20
90°	8	11	11	8	4	6
95°	34	116	338	86	53	36
105°	116	165	733	1237	1150	122
115°	203	244	545	1150	1357	200
125°	274	338	507	857	1022	246
135°	331	372	504	714	808	256
145°	387	414	500	616	669	242
155°	440	455	492	549	568	203
165°	481	485	496	519	522	136
175°	504	504	500	507	504	48
180°	504	504	504	504	504	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1642.6	1642.6	1642.6	1642.6	1642.6
2.5°	1646.6	1632.0	1635.8	1635.6	1631.0
5°	1616.0	1599.6	1610.1	1613.9	1619.6
7.5°	1555.9	1543.7	1562.8	1576.9	1588.3
10°	1509.3	1498.7	1523.0	1543.5	1558.3
12.5°	1455.1	1446.1	1476.4	1503.7	1523.2
15°	1366.5	1361.6	1398.4	1436.3	1461.0
17.5°	1271.9	1269.5	1311.5	1355.9	1387.4
20°	1207.3	1206.6	1252.6	1298.9	1335.5
22.5°	1142.1	1143.6	1192.0	1240.2	1282.0
25°	1044.5	1047.2	1101.3	1149.3	1200.1
27.5°	954.0	955.3	1011.1	1061.9	1116.1
30°	892.3	895.8	950.7	1003.2	1059.5
32.5°	830.7	834.8	888.4	942.6	1000.1
35°	738.0	741.6	791.3	844.7	904.6
37.5°	642.6	647.4	691.6	741.9	801.0
40°	580.9	588.0	627.1	674.6	732.3
42.5°	521.5	530.3	566.5	611.6	663.6
45°	442.5	451.0	480.7	517.1	564.4
47.5°	374.4	384.2	407.1	438.4	478.7
50°	335.8	345.1	366.1	389.3	427.4
52.5°	301.9	311.0	329.8	347.7	380.2
55°	254.4	264.9	280.3	291.1	314.9
57.5°	215.5	225.7	237.9	242.7	257.2
60°	189.6	200.9	211.9	211.3	219.1
62.5°	165.9	175.6	186.5	178.8	179.3
65°	127.6	138.2	150.6	131.7	119.6
67.5°	103.1	105.2	118.1	91.9	77.5
70°	91.6	91.6	95.2	71.1	59.1
72.5°	80.6	80.6	77.3	57.8	45.2
75°	64.2	64.2	58.4	40.1	27.4
77.5°	49.4	48.9	44.7	29.8	19.9
80°	39.6	39.6	36.0	23.6	15.8
82.5°	31.0	31.0	27.9	18.4	11.7
85°	17.9	17.9	16.7	10.8	6.5
87.5°	6.4	6.4	5.7	3.4	2.9
90°	7.6	11.2	11.2	7.6	3.8
92.5°	18.8	56.4	52.6	22.6	18.8
95°	33.8	116.5	338.3	86.4	52.6
97.5°	52.6	131.6	676.6	308.3	165.4
100°	71.4	139.1	789.3	740.5	477.4
102.5°	94.0	150.3	785.5	1041.2	856.9
105°	116.5	165.4	732.9	1236.6	1150.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	180.4	221.7	571.4	1244.1	1417.1
115°	202.9	244.3	545.0	1150.2	1356.9
117.5°	225.5	270.7	530.0	1063.7	1270.4
120°	244.3	293.1	518.7	981.0	1184.0
122.5°	259.3	315.7	511.2	913.3	1097.6
125°	274.3	338.3	507.4	856.9	1022.4
127.5°	289.5	353.3	507.4	815.7	954.7
130°	304.5	360.9	503.6	774.3	898.3
132.5°	319.5	364.6	503.6	744.2	849.5
135°	330.7	372.1	503.6	714.2	808.1
137.5°	345.8	379.6	503.6	687.8	774.3
140°	357.1	390.9	503.6	661.5	736.7
142.5°	372.1	402.2	503.6	635.2	702.9
145°	387.1	413.5	499.9	616.4	669.0
147.5°	402.2	424.7	496.2	597.6	639.0
150°	413.5	436.0	496.2	578.8	612.6
152.5°	428.5	447.3	492.4	560.0	590.2
155°	439.8	454.8	492.4	548.8	567.6
157.5°	451.0	466.1	492.4	537.5	552.6
160°	462.3	473.6	496.2	530.0	541.2
162.5°	473.6	481.1	496.2	522.4	530.0
165°	481.1	484.9	496.2	518.7	522.4
167.5°	488.6	492.4	496.2	515.0	515.0
170°	492.4	496.2	499.9	511.2	511.2
172.5°	499.9	499.9	499.9	507.4	507.4
175°	503.6	503.6	499.9	507.4	503.6
177.5°	503.6	503.6	499.9	507.4	503.6
180°	503.6	503.6	503.6	503.6	503.6



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	139.1	184.2	665.3	1323.1	1338.1
110°	157.9	202.9	612.6	1311.8	1420.7



(END OF REPORT)