

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: P844885

Luminaire Tested: **SQ4P-BB-150U-075D-B50-1D-UNV**

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P844885  
REPORT IS A COMBINATION OF REPORTS P700132 AND P700248  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-BB-150U-075D-B50-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1500 LUMENS PER FOOT  
UPLIGHT, 750 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

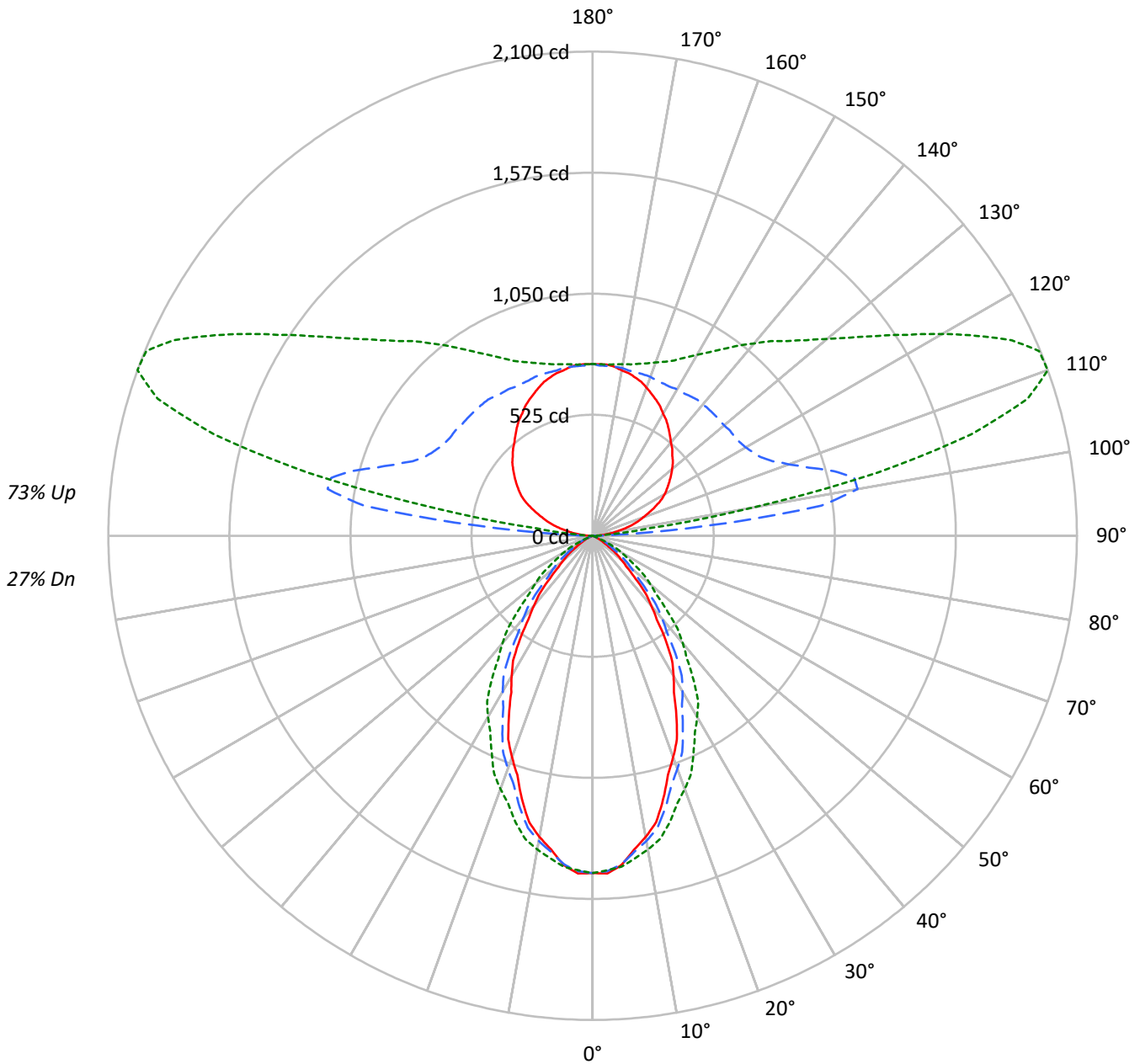
Lumens per Lamp: N/A  
Luminaire Lumens: 6579.0 lumens  
Efficiency: N/A  
Efficacy: 95.9 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 68.6  
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				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	102	102	102	102	91	91	91	91	70	70	70	52	52	52	35	35	35	27				27
1	93	90	86	83	83	80	78	75	63	61	59	47	46	45	32	31	31	24				24
2	86	79	74	69	77	71	67	63	56	53	51	42	40	39	29	28	28	22				22
3	79	71	64	59	70	64	58	54	50	47	44	38	36	34	27	26	25	20				20
4	73	63	56	51	65	57	51	46	45	41	38	35	32	30	25	23	22	18				18
5	67	57	49	44	60	51	45	40	41	37	33	32	29	27	23	21	20	16				16
6	62	51	44	39	55	46	40	36	37	33	30	29	26	24	21	19	18	15				15
7	57	46	39	34	51	42	36	31	34	30	26	27	24	21	19	18	16	14				14
8	53	42	35	30	48	38	32	28	31	27	24	24	21	19	18	16	15	13				13
9	50	39	32	27	45	35	29	25	29	24	21	23	20	18	17	15	14	12				12
10	47	35	29	24	42	32	27	23	27	22	19	21	18	16	16	14	13	11				11

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

	0°	45°	90°
0°	13497	13497	13497
5°	13279	13247	13346
10°	12425	12591	12943
15°	11296	11654	12304
20°	10027	10549	11472
25°	8731	9424	10540
30°	7480	8301	9658
35°	6201	7047	8593
40°	4765	5634	7322
45°	3446	4267	5891
50°	2347	3178	4673
55°	1525	2299	3630
60°	875	1620	2626
65°	231	989	1330
70°	116	305	380
75°	50	25	0
80°	37	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	133.5	2.0
10°-20°	341.4	5.2
20°-30°	427.4	6.5
30°-40°	394.8	6.0
40°-50°	265.3	4.0
50°-60°	137.0	2.1
60°-70°	42.9	0.7
70°-80°	2.7	0.0
80°-90°	1.9	0.0
90°-100°	296.3	4.5
100°-110°	1031.0	15.7
110°-120°	998.8	15.2
120°-130°	783.5	11.9
130°-140°	620.1	9.4
140°-150°	478.6	7.3
150°-160°	343.1	5.2
160°-170°	209.8	3.2
170°-180°	71.0	1.1
0°-30°	902.3	13.7
0°-40°	1297.1	19.7
0°-60°	1699.4	25.8
0°-90°	1746.9	26.6
90°-120°	2326.1	35.4
90°-150°	4208.3	64.0
90°-180°	4832.0	73.4
0°-180°	6579.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1463	1463	1463	1463	1463	
5°	1434	1419	1430	1435	1441	133
15°	1183	1178	1220	1261	1288	329
25°	858	865	926	989	1035	393
35°	551	564	626	699	763	341
45°	264	280	327	391	452	207
55°	95	111	143	184	226	88
65°	11	20	45	55	61	18
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	11	17	17	11	6	7
95°	50	172	500	128	78	53
105°	172	244	1084	1828	1700	181
115°	300	361	806	1700	2006	296
125°	406	500	750	1267	1511	363
135°	489	550	745	1056	1195	379
145°	572	611	739	911	989	358
155°	650	672	728	811	839	300
165°	711	717	733	767	772	201
175°	745	745	739	750	745	71
180°	745	745	745	745	745	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1462.9	1462.9	1462.9	1462.9	1462.9
2.5°	1466.2	1452.5	1456.0	1456.0	1452.1
5°	1433.8	1419.3	1430.3	1435.4	1441.0
7.5°	1373.3	1362.0	1383.1	1398.8	1410.3
10°	1326.2	1316.6	1344.0	1365.5	1381.5
12.5°	1271.9	1264.4	1297.5	1327.2	1347.5
15°	1182.6	1178.5	1220.1	1261.0	1288.1
17.5°	1087.0	1086.8	1134.2	1185.2	1217.7
20°	1021.3	1023.4	1074.4	1130.4	1168.4
22.5°	955.6	960.4	1014.9	1073.4	1116.9
25°	857.7	864.6	925.7	989.1	1035.4
27.5°	763.8	773.9	838.2	903.9	960.4
30°	702.1	713.8	779.2	848.4	906.6
32.5°	641.4	655.5	719.1	792.5	851.6
35°	550.6	564.5	625.7	699.3	762.9
37.5°	456.8	470.3	530.0	602.6	671.4
40°	395.6	410.8	467.8	538.1	607.9
42.5°	340.2	355.4	408.9	477.9	544.0
45°	264.1	279.9	327.0	390.6	451.5
47.5°	201.0	218.1	259.4	317.1	372.5
50°	163.5	180.7	221.4	272.2	325.6
52.5°	133.5	150.3	187.0	234.8	283.6
55°	94.8	110.7	142.9	183.6	225.7
57.5°	65.5	79.3	108.2	141.9	175.2
60°	47.4	60.5	87.8	115.2	142.3
62.5°	31.6	43.6	70.2	91.3	109.5
65°	10.6	20.4	45.3	54.6	60.9
67.5°	5.4	6.4	23.7	25.1	27.2
70°	4.3	4.3	11.3	12.0	14.1
72.5°	3.0	3.0	4.5	5.8	6.3
75°	1.4	1.4	0.7	0.0	0.0
77.5°	0.7	0.7	0.7	0.0	0.0
80°	0.7	0.7	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°	11.1	16.7	16.7	11.1	5.5
92.5°	27.8	83.3	77.8	33.3	27.8
95°	50.0	172.2	500.1	127.8	77.8
97.5°	77.8	194.5	1000.2	455.6	244.5
100°	105.6	205.5	1166.9	1094.6	705.6
102.5°	138.9	222.3	1161.3	1539.1	1266.9
105°	172.2	244.5	1083.5	1828.1	1700.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	266.7	327.9	844.5	1839.2	2094.7
115°	300.1	361.2	805.7	1700.3	2005.9
117.5°	333.4	400.0	783.4	1572.5	1878.1
120°	361.2	433.4	766.8	1450.2	1750.3
122.5°	383.4	466.8	755.7	1350.3	1622.4
125°	405.7	500.1	750.1	1266.9	1511.3
127.5°	427.8	522.3	750.1	1205.7	1411.4
130°	450.1	533.4	744.6	1144.6	1328.0
132.5°	472.3	538.9	744.6	1100.2	1255.7
135°	489.0	550.1	744.6	1055.7	1194.6
137.5°	511.2	561.2	744.6	1016.9	1144.6
140°	527.9	577.9	744.6	977.9	1089.0
142.5°	550.1	594.5	744.6	939.1	1039.0
145°	572.4	611.2	739.0	911.3	989.1
147.5°	594.5	627.9	733.4	883.5	944.6
150°	611.2	644.5	733.4	855.7	905.7
152.5°	633.5	661.2	727.9	827.9	872.3
155°	650.1	672.3	727.9	811.2	839.0
157.5°	666.8	689.0	727.9	794.6	816.8
160°	683.5	700.1	733.4	783.4	800.1
162.5°	700.1	711.3	733.4	772.4	783.4
165°	711.3	716.8	733.4	766.8	772.4
167.5°	722.3	727.9	733.4	761.2	761.2
170°	727.9	733.4	739.0	755.7	755.7
172.5°	739.0	739.0	739.0	750.1	750.1
175°	744.6	744.6	739.0	750.1	744.6
177.5°	744.6	744.6	739.0	750.1	744.6
180°	744.6	744.6	744.6	744.6	744.6



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	205.5	272.3	983.5	1955.8	1978.1
110°	233.3	300.1	905.7	1939.2	2100.4



(END OF REPORT)