

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: P844840

Luminaire Tested: **SQ4P-BB-075U-100D-B50-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P844840
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-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 750 LUMENS PER FOOT UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

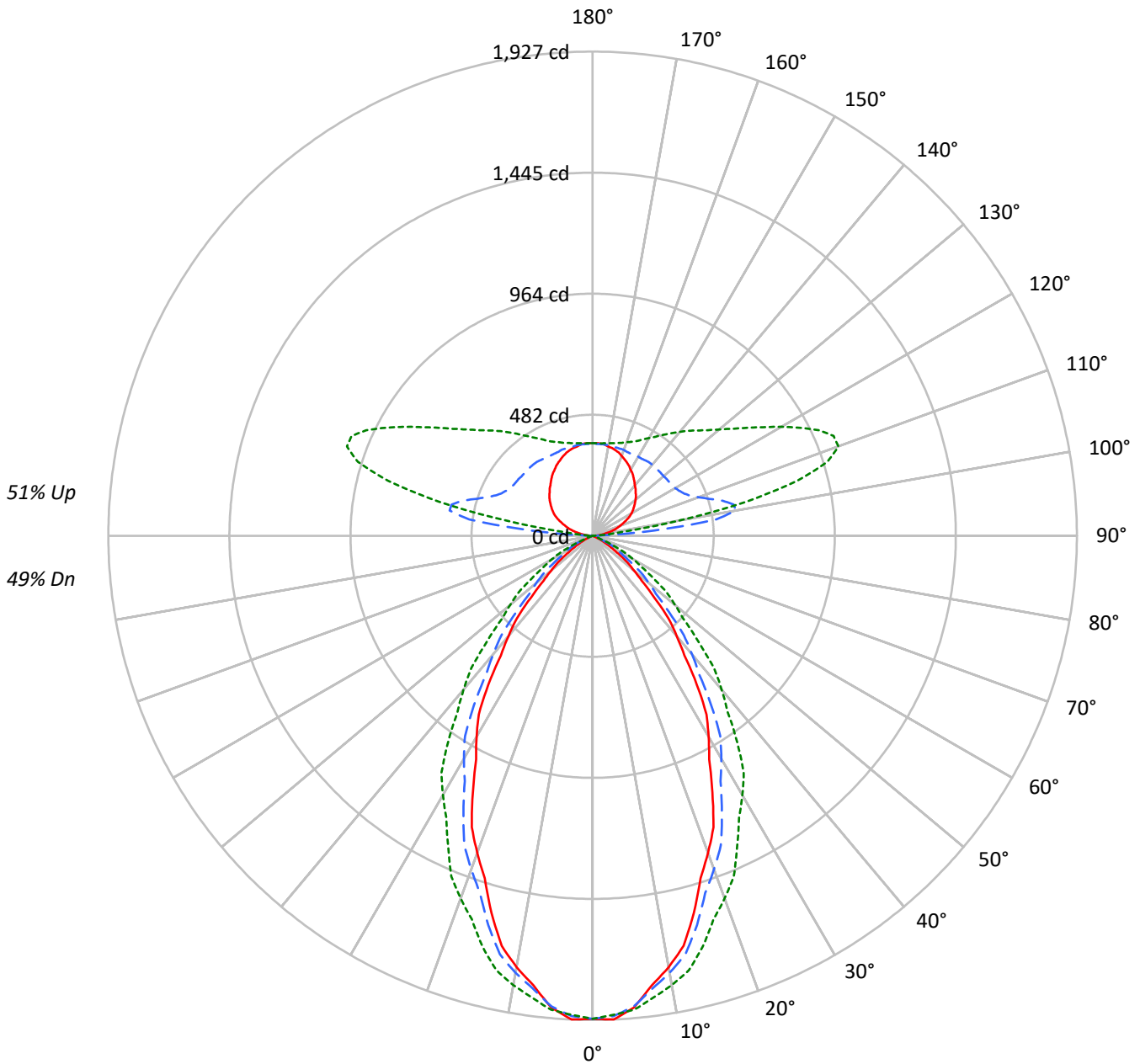
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4688.0 lumens
Efficiency: N/A
Efficacy: 87.0 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_{in}): 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	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49				49
1	99	96	92	89	92	88	86	83	75	73	71	63	62	60	51	51	50	45				45
2	92	86	80	76	85	79	75	71	68	65	62	57	55	53	47	46	45	40				40
3	85	77	71	66	78	72	66	62	62	58	54	52	50	47	44	42	40	36				36
4	79	69	62	57	73	65	59	54	56	52	48	48	45	42	40	38	36	33				33
5	73	63	56	50	68	59	53	48	51	46	43	44	41	38	37	35	33	30				30
6	68	57	50	45	63	54	47	43	47	42	38	41	37	34	35	32	30	27				27
7	63	52	45	40	59	49	43	38	43	38	35	37	34	31	32	30	28	25				25
8	59	48	41	36	55	45	39	35	40	35	31	35	31	28	30	27	25	23				23
9	55	44	37	33	52	42	36	31	37	32	29	32	29	26	28	25	23	21				21
10	52	41	34	30	48	39	33	29	34	30	26	30	27	24	26	24	22	20				20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17738	17738	17738
5°	17452	17411	17539
10°	16329	16548	17010
15°	14846	15317	16170
20°	13179	13862	15076
25°	11475	12384	13852
30°	9831	10909	12694
35°	8149	9262	11292
40°	6262	7406	9622
45°	4528	5607	7743
50°	3083	4177	6142
55°	2004	3021	4773
60°	1151	2129	3451
65°	303	1301	1749
70°	154	402	502
75°	68	32	0
80°	48	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.5	3.7
10°-20°	448.7	9.6
20°-30°	561.7	12.0
30°-40°	518.8	11.1
40°-50°	348.6	7.4
50°-60°	180.1	3.8
60°-70°	56.4	1.2
70°-80°	3.6	0.1
80°-90°	1.0	0.0
90°-100°	146.8	3.1
100°-110°	510.8	10.9
110°-120°	494.8	10.6
120°-130°	388.1	8.3
130°-140°	307.2	6.6
140°-150°	237.1	5.1
150°-160°	169.9	3.6
160°-170°	103.9	2.2
170°-180°	35.2	0.8
0°-30°	1185.9	25.3
0°-40°	1704.7	36.4
0°-60°	2233.4	47.6
0°-90°	2294.3	48.9
90°-120°	1152.3	24.6
90°-150°	2084.7	44.5
90°-180°	2394.0	51.1
0°-180°	4688.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1923	1923	1923	1923	1923	
5°	1884	1865	1880	1886	1894	175
15°	1554	1549	1604	1657	1693	433
25°	1127	1136	1216	1300	1361	517
35°	724	742	822	919	1003	448
45°	347	368	430	513	593	273
55°	125	146	188	241	297	116
65°	14	27	60	72	80	24
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	6	8	8	6	3	3
95°	25	85	248	63	39	26
105°	85	121	537	906	842	90
115°	149	179	399	842	994	147
125°	201	248	372	628	749	180
135°	242	272	369	523	592	188
145°	284	303	366	452	490	177
155°	322	333	360	402	416	148
165°	352	355	363	380	383	99
175°	369	369	366	372	369	35
180°	369	369	369	369	369	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1922.6	1922.6	1922.6	1922.6	1922.6
2.5°	1927.0	1908.9	1913.6	1913.6	1908.4
5°	1884.4	1865.3	1879.9	1886.3	1893.8
7.5°	1804.8	1789.9	1817.7	1838.4	1853.5
10°	1743.0	1730.3	1766.3	1794.6	1815.6
12.5°	1671.6	1661.7	1705.3	1744.2	1771.0
15°	1554.3	1548.8	1603.6	1657.3	1692.9
17.5°	1428.6	1428.3	1490.7	1557.6	1600.4
20°	1342.3	1344.9	1411.9	1485.6	1535.5
22.5°	1255.9	1262.2	1333.8	1410.7	1467.9
25°	1127.2	1136.2	1216.5	1299.9	1360.7
27.5°	1003.8	1017.1	1101.5	1187.8	1262.2
30°	922.8	938.1	1024.0	1115.0	1191.5
32.5°	842.9	861.5	945.1	1041.5	1119.2
35°	723.5	741.9	822.3	919.0	1002.6
37.5°	600.3	618.1	696.6	792.0	882.3
40°	519.9	539.9	614.9	707.2	798.9
42.5°	447.1	467.1	537.4	628.1	714.9
45°	347.0	367.9	429.7	513.4	593.4
47.5°	264.1	286.6	340.9	416.7	489.6
50°	214.8	237.5	291.0	357.8	427.9
52.5°	175.5	197.5	245.7	308.5	372.7
55°	124.6	145.5	187.8	241.3	296.7
57.5°	86.2	104.2	142.1	186.6	230.2
60°	62.4	79.6	115.4	151.4	187.0
62.5°	41.5	57.3	92.3	120.1	143.9
65°	13.9	26.8	59.6	71.8	80.1
67.5°	7.1	8.4	31.1	33.0	35.8
70°	5.7	5.7	14.9	15.8	18.6
72.5°	4.0	4.0	5.9	7.6	8.2
75°	1.9	1.9	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°	5.5	8.3	8.3	5.5	2.8
92.5°	13.8	41.3	38.6	16.5	13.8
95°	24.8	85.3	247.7	63.3	38.6
97.5°	38.6	96.3	495.4	225.7	121.1
100°	52.3	101.9	578.0	542.3	349.6
102.5°	68.8	110.1	575.3	762.5	627.6
105°	85.3	121.1	536.8	905.6	842.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	132.1	162.4	418.4	911.1	1037.7
115°	148.6	178.9	399.1	842.3	993.6
117.5°	165.2	198.2	388.1	778.9	930.3
120°	178.9	214.7	379.9	718.4	867.0
122.5°	189.9	231.2	374.3	668.9	803.7
125°	201.0	247.7	371.6	627.6	748.7
127.5°	211.9	258.8	371.6	597.3	699.2
130°	223.0	264.3	368.8	567.0	657.8
132.5°	233.9	266.9	368.8	545.0	622.1
135°	242.2	272.5	368.8	522.9	591.8
137.5°	253.2	278.0	368.8	503.7	567.0
140°	261.5	286.3	368.8	484.4	539.5
142.5°	272.5	294.6	368.8	465.2	514.7
145°	283.5	302.7	366.1	451.5	489.9
147.5°	294.6	311.0	363.3	437.6	467.9
150°	302.7	319.3	363.3	423.8	448.7
152.5°	313.8	327.5	360.5	410.1	432.1
155°	322.1	333.0	360.5	401.8	415.7
157.5°	330.3	341.3	360.5	393.6	404.6
160°	338.5	346.8	363.3	388.1	396.3
162.5°	346.8	352.3	363.3	382.6	388.1
165°	352.3	355.1	363.3	379.9	382.6
167.5°	357.9	360.5	363.3	377.1	377.1
170°	360.5	363.3	366.1	374.3	374.3
172.5°	366.1	366.1	366.1	371.6	371.6
175°	368.8	368.8	366.1	371.6	368.8
177.5°	368.8	368.8	366.1	371.6	368.8
180°	368.8	368.8	368.8	368.8	368.8



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	101.9	134.9	487.2	968.9	979.9
110°	115.6	148.6	448.7	960.6	1040.5



(END OF REPORT)