

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: P844888

Luminaire Tested: **SQ4P-BB-150U-100D-B50-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P844888
REPORT IS A COMBINATION OF REPORTS P700133 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-100D-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1500 LUMENS PER FOOT
UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

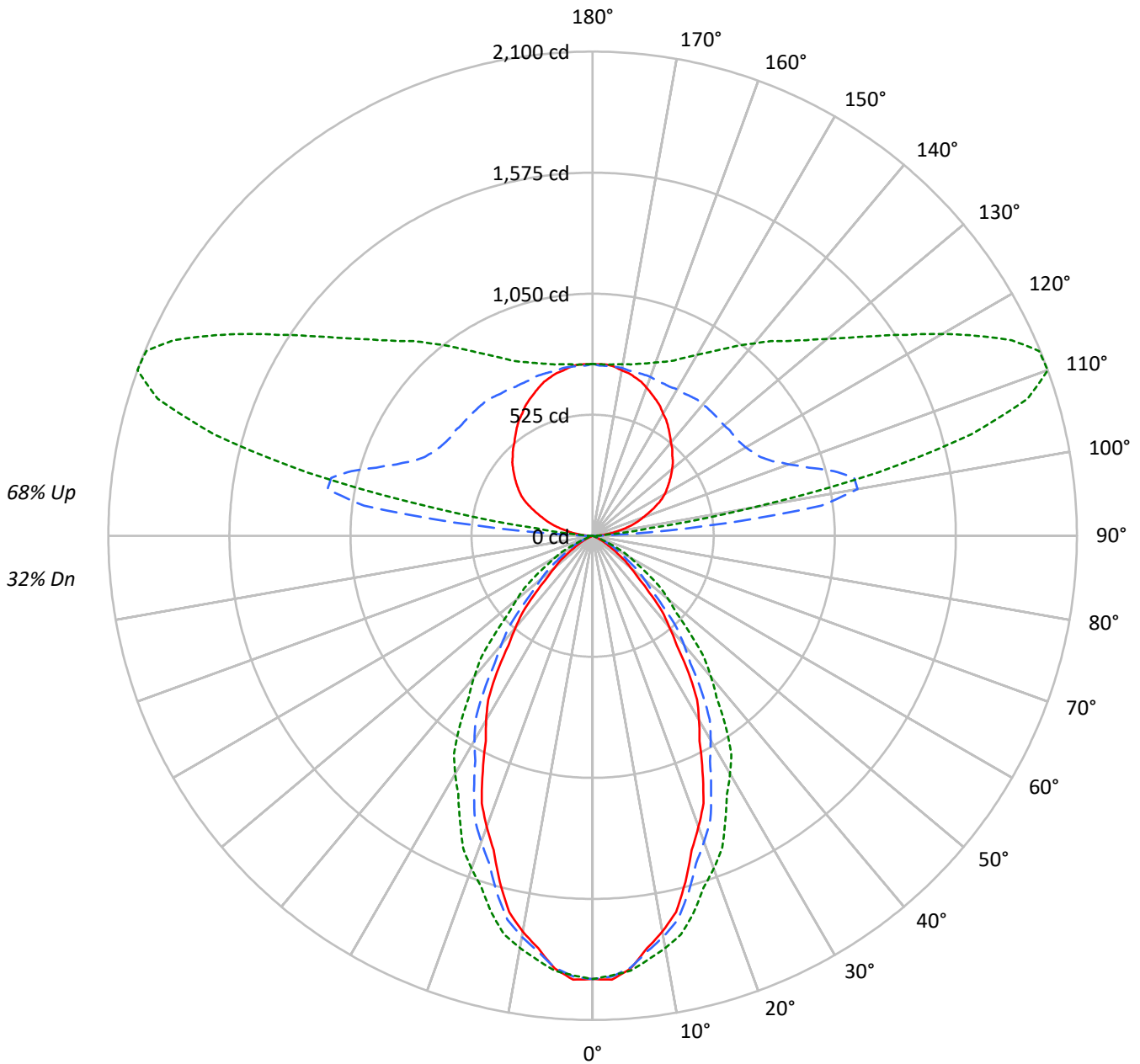
Lumens per Lamp: N/A
Luminaire Lumens: 7127.4 lumens
Efficiency: N/A
Efficacy: 91.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 77.9
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	103	103	103	103	93	93	93	93	73	73	73	56	56	56	40	40	40	32				32
1	95	91	88	85	85	82	80	77	66	64	62	51	50	49	37	36	36	29				29
2	87	81	76	71	79	73	69	65	59	56	54	46	44	43	34	33	32	27				27
3	80	72	66	61	73	66	60	56	53	50	46	42	39	37	31	30	29	24				24
4	74	65	58	52	67	59	53	48	48	44	41	38	35	33	29	27	26	22				22
5	68	58	51	46	62	53	47	42	44	39	36	35	32	29	26	25	23	20				20
6	63	53	45	40	57	48	42	37	40	35	32	32	29	26	24	23	21	18				18
7	59	48	41	36	53	44	38	33	36	32	28	29	26	24	23	21	19	16				16
8	55	44	37	32	50	40	34	30	33	29	26	27	24	22	21	19	18	15				15
9	51	40	33	29	46	37	31	27	31	26	23	25	22	20	20	18	16	14				14
10	48	37	30	26	44	34	28	24	29	24	21	23	20	18	18	16	15	13				13

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	2.5
10°-20°	448.7	6.3
20°-30°	561.7	7.9
30°-40°	518.8	7.3
40°-50°	348.6	4.9
50°-60°	180.1	2.5
60°-70°	56.4	0.8
70°-80°	3.6	0.0
80°-90°	1.9	0.0
90°-100°	296.3	4.2
100°-110°	1031.0	14.5
110°-120°	998.8	14.0
120°-130°	783.5	11.0
130°-140°	620.1	8.7
140°-150°	478.6	6.7
150°-160°	343.1	4.8
160°-170°	209.8	2.9
170°-180°	71.0	1.0
0°-30°	1185.9	16.6
0°-40°	1704.7	23.9
0°-60°	2233.4	31.3
0°-90°	2295.2	32.2
90°-120°	2326.1	32.6
90°-150°	4208.3	59.0
90°-180°	4832.0	67.8
0°-180°	7127.4	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°	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°	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°	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)