

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: P844828

Luminaire Tested: **SQ4P-BB-050U-100D-B50-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P844828
REPORT IS A COMBINATION OF REPORTS P700189 AND P700244
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-BB-050U-100D-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

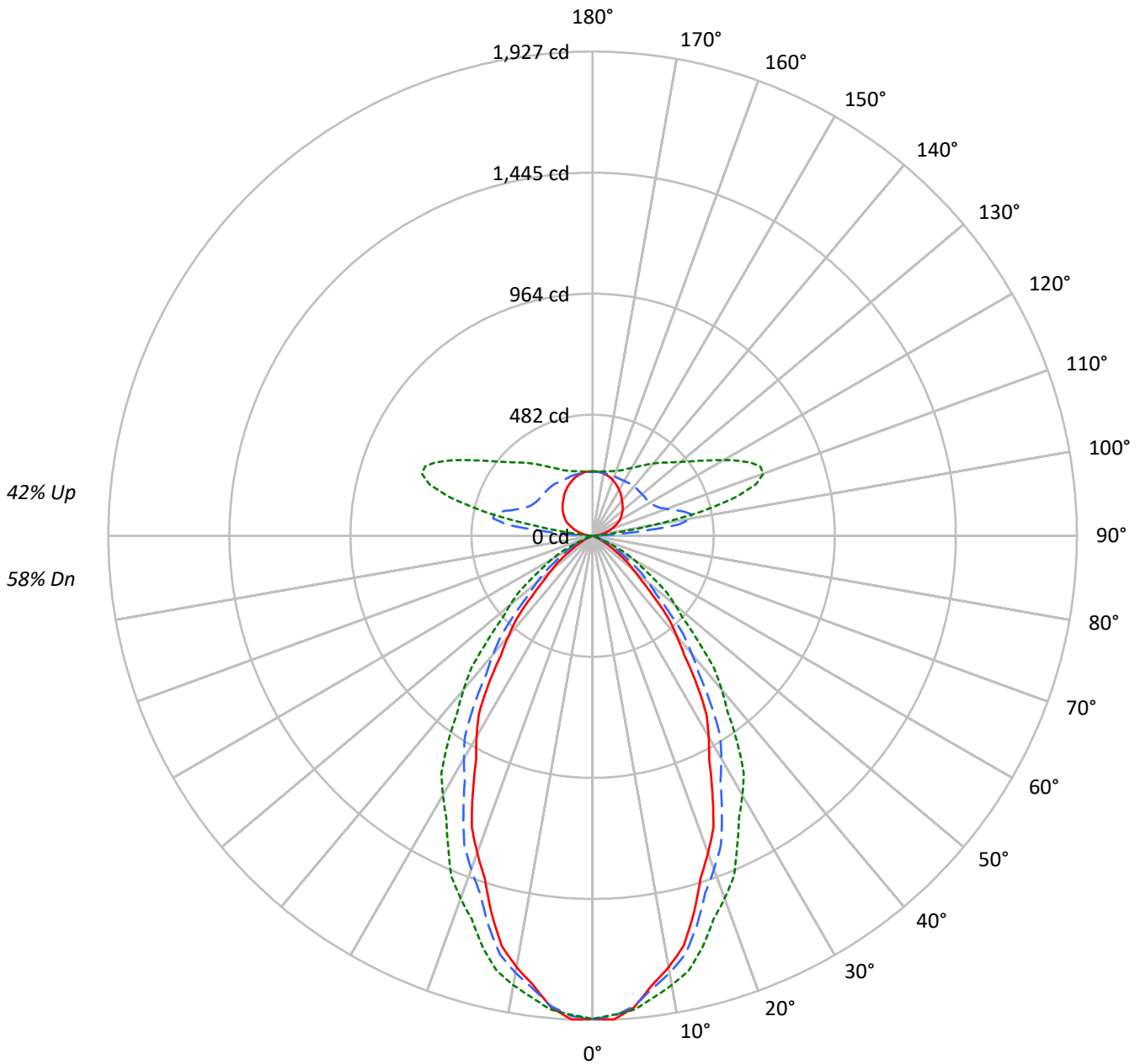
Lumens per Lamp: N/A
Luminaire Lumens: 3957.9 lumens
Efficiency: N/A
Efficacy: 82.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 47.9
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									
RC	80									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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58																			
1	102	98	95	92	95	92	89	87	80	78	76	69	68	67	59	58	58	53																			
2	94	88	83	79	88	83	78	75	73	69	67	63	61	59	55	53	52	48																			
3	87	79	73	68	82	75	69	65	66	62	59	58	55	53	51	48	47	43																			
4	81	72	65	60	76	68	62	57	60	56	52	53	50	47	47	44	42	39																			
5	75	65	58	53	71	62	56	51	55	50	47	49	45	42	43	40	38	35																			
6	70	60	52	47	66	57	50	45	51	46	42	45	41	38	40	37	35	32																			
7	66	55	48	43	62	52	46	41	47	42	38	42	38	35	37	34	32	30																			
8	61	50	43	39	58	48	42	37	43	38	35	39	35	32	35	32	29	27																			
9	58	47	40	35	54	44	38	34	40	35	32	36	32	29	33	30	27	25																			
10	54	43	37	32	51	41	35	31	37	33	29	34	30	27	31	28	25	23																			

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	4.4
10°-20°	448.7	11.3
20°-30°	561.7	14.2
30°-40°	518.8	13.1
40°-50°	348.6	8.8
50°-60°	180.1	4.5
60°-70°	56.4	1.4
70°-80°	3.6	0.1
80°-90°	0.7	0.0
90°-100°	102.0	2.6
100°-110°	355.0	9.0
110°-120°	343.9	8.7
120°-130°	269.8	6.8
130°-140°	213.5	5.4
140°-150°	164.8	4.2
150°-160°	118.1	3.0
160°-170°	72.3	1.8
170°-180°	24.4	0.6
0°-30°	1185.9	30.0
0°-40°	1704.7	43.1
0°-60°	2233.4	56.4
0°-90°	2294.1	58.0
90°-120°	800.9	20.2
90°-150°	1449.0	36.6
90°-180°	1664.0	42.0
0°-180°	3957.9	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°	4	6	6	4	2	2
95°	17	59	172	44	27	18
105°	59	84	373	629	585	62
115°	103	124	277	585	691	102
125°	140	172	258	436	520	125
135°	168	189	256	364	411	130
145°	197	210	254	314	340	123
155°	224	232	251	279	289	103
165°	245	247	253	264	266	69
175°	256	256	254	258	256	24
180°	256	256	256	256	256	



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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°	3.8	5.7	5.7	3.8	1.9
92.5°	9.5	28.7	26.8	11.5	9.5
95°	17.2	59.3	172.2	44.0	26.8
97.5°	26.8	66.9	344.3	156.9	84.2
100°	36.4	70.8	401.8	376.9	243.0
102.5°	47.8	76.5	399.9	529.9	436.2
105°	59.3	84.2	373.1	629.4	585.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	91.9	112.9	290.8	633.3	721.3
115°	103.3	124.3	277.4	585.4	690.6
117.5°	114.8	137.8	269.7	541.4	646.6
120°	124.3	149.2	264.0	499.3	602.6
122.5°	132.0	160.7	260.2	464.9	558.6
125°	139.7	172.2	258.3	436.2	520.4
127.5°	147.3	179.8	258.3	415.2	485.9
130°	155.0	183.6	256.4	394.1	457.3
132.5°	162.6	185.5	256.4	378.8	432.4
135°	168.3	189.4	256.4	363.5	411.4
137.5°	176.0	193.3	256.4	350.1	394.1
140°	181.7	199.0	256.4	336.7	375.0
142.5°	189.4	204.7	256.4	323.3	357.8
145°	197.1	210.5	254.5	313.8	340.5
147.5°	204.7	216.2	252.6	304.2	325.2
150°	210.5	221.9	252.6	294.7	311.9
152.5°	218.1	227.6	250.7	285.0	300.4
155°	223.8	231.5	250.7	279.3	288.8
157.5°	229.5	237.2	250.7	273.6	281.2
160°	235.3	241.1	252.6	269.7	275.5
162.5°	241.1	244.9	252.6	265.9	269.7
165°	244.9	246.8	252.6	264.0	265.9
167.5°	248.7	250.7	252.6	262.1	262.1
170°	250.7	252.6	254.5	260.2	260.2
172.5°	254.5	254.5	254.5	258.3	258.3
175°	256.4	256.4	254.5	258.3	256.4
177.5°	256.4	256.4	254.5	258.3	256.4
180°	256.4	256.4	256.4	256.4	256.4



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	70.8	93.8	338.6	673.5	681.1
110°	80.4	103.3	311.9	667.7	723.2



(END OF REPORT)