

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: P844826

Luminaire Tested: **SQ4P-BB-050U-100D-B35-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P844826
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-B35-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

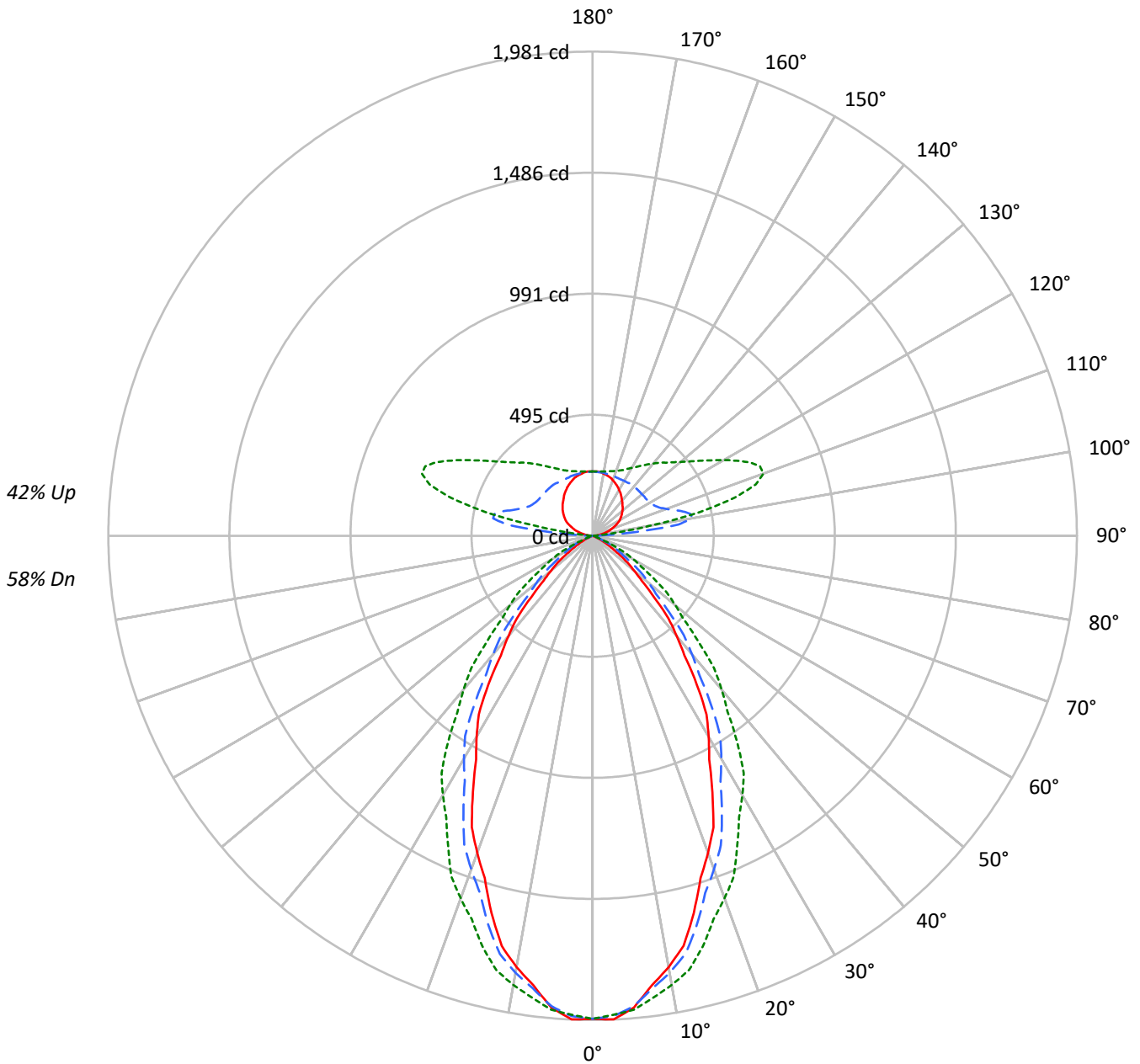
Lumens per Lamp: N/A
Luminaire Lumens: 4068.2 lumens
Efficiency: N/A
Efficacy: 84.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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°	18233	18233	18233
5°	17939	17896	18028
10°	16785	17009	17484
15°	15260	15744	16621
20°	13546	14249	15496
25°	11795	12729	14239
30°	10105	11213	13047
35°	8376	9520	11607
40°	6436	7613	9890
45°	4654	5763	7958
50°	3169	4293	6314
55°	2061	3106	4906
60°	1183	2188	3547
65°	312	1338	1797
70°	159	415	515
75°	71	32	0
80°	48	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.3	4.4
10°-20°	461.2	11.3
20°-30°	577.4	14.2
30°-40°	533.3	13.1
40°-50°	358.3	8.8
50°-60°	185.1	4.5
60°-70°	58.0	1.4
70°-80°	3.7	0.1
80°-90°	0.7	0.0
90°-100°	104.9	2.6
100°-110°	364.9	9.0
110°-120°	353.5	8.7
120°-130°	277.3	6.8
130°-140°	219.5	5.4
140°-150°	169.4	4.2
150°-160°	121.4	3.0
160°-170°	74.3	1.8
170°-180°	25.1	0.6
0°-30°	1218.9	30.0
0°-40°	1752.2	43.1
0°-60°	2295.7	56.4
0°-90°	2358.0	58.0
90°-120°	823.3	20.2
90°-150°	1489.4	36.6
90°-180°	1710.0	42.0
0°-180°	4068.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1976	1976	1976	1976	1976	
5°	1937	1917	1932	1939	1947	180
15°	1598	1592	1648	1704	1740	445
25°	1159	1168	1250	1336	1399	531
35°	744	763	845	945	1030	461
45°	357	378	442	528	610	280
55°	128	150	193	248	305	120
65°	14	28	61	74	82	24
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	4	6	6	4	2	2
95°	18	61	177	45	28	19
105°	61	86	384	647	602	64
115°	106	128	285	602	710	105
125°	144	177	266	448	535	129
135°	173	195	264	374	423	134
145°	203	216	262	322	350	127
155°	230	238	258	287	297	106
165°	252	254	260	271	273	71
175°	264	264	262	266	264	25
180°	264	264	264	264	264	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1976.2	1976.2	1976.2	1976.2	1976.2
2.5°	1980.7	1962.1	1966.9	1966.9	1961.6
5°	1937.0	1917.3	1932.3	1938.9	1946.6
7.5°	1855.2	1839.8	1868.4	1889.6	1905.2
10°	1791.6	1778.5	1815.5	1844.6	1866.2
12.5°	1718.2	1708.0	1752.8	1792.8	1820.3
15°	1597.6	1592.0	1648.3	1703.5	1740.1
17.5°	1468.4	1468.1	1532.2	1601.0	1645.0
20°	1379.7	1382.4	1451.3	1527.1	1578.3
22.5°	1290.9	1297.4	1371.0	1450.0	1508.9
25°	1158.6	1167.9	1250.4	1336.1	1398.7
27.5°	1031.8	1045.5	1132.2	1221.0	1297.4
30°	948.5	964.3	1052.5	1146.1	1224.7
32.5°	866.4	885.5	971.4	1070.6	1150.4
35°	743.7	762.6	845.2	944.6	1030.5
37.5°	617.1	635.3	716.0	814.1	906.9
40°	534.4	554.9	632.1	726.9	821.2
42.5°	459.5	480.1	552.4	645.7	734.8
45°	356.7	378.1	441.7	527.7	609.9
47.5°	271.5	294.5	350.4	428.3	503.3
50°	220.8	244.2	299.1	367.7	439.9
52.5°	180.3	203.1	252.6	317.1	383.1
55°	128.1	149.5	193.1	248.1	305.0
57.5°	88.6	107.2	146.1	191.8	236.6
60°	64.1	81.8	118.6	155.6	192.2
62.5°	42.7	58.9	94.8	123.4	147.9
65°	14.3	27.5	61.3	73.8	82.3
67.5°	7.3	8.6	32.0	34.0	36.8
70°	5.9	5.9	15.4	16.2	19.1
72.5°	4.1	4.1	6.1	7.8	8.4
75°	2.0	2.0	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°	3.9	5.9	5.9	3.9	2.0
92.5°	9.8	29.5	27.5	11.8	9.8
95°	17.7	61.0	177.0	45.2	27.5
97.5°	27.5	68.8	353.9	161.3	86.5
100°	37.4	72.8	413.0	387.4	249.7
102.5°	49.1	78.7	411.0	544.7	448.4
105°	61.0	86.5	383.5	646.9	601.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	94.4	116.1	299.0	650.9	741.4
115°	106.2	127.8	285.2	601.7	709.9
117.5°	118.0	141.6	277.2	556.5	664.6
120°	127.8	153.3	271.4	513.3	619.4
122.5°	135.7	165.2	267.4	477.8	574.2
125°	143.6	177.0	265.5	448.4	534.9
127.5°	151.4	184.9	265.5	426.8	499.5
130°	159.3	188.8	263.5	405.1	470.0
132.5°	167.1	190.7	263.5	389.4	444.5
135°	173.0	194.6	263.5	373.6	422.8
137.5°	180.9	198.6	263.5	359.8	405.1
140°	186.8	204.5	263.5	346.1	385.5
142.5°	194.6	210.4	263.5	332.3	367.7
145°	202.6	216.4	261.6	322.5	350.0
147.5°	210.4	222.2	259.6	312.7	334.3
150°	216.4	228.1	259.6	302.9	320.6
152.5°	224.2	234.0	257.7	293.0	308.7
155°	230.1	238.0	257.7	287.1	296.9
157.5°	235.9	243.9	257.7	281.2	289.1
160°	241.9	247.8	259.6	277.2	283.2
162.5°	247.8	251.7	259.6	273.3	277.2
165°	251.7	253.6	259.6	271.4	273.3
167.5°	255.6	257.7	259.6	269.4	269.4
170°	257.7	259.6	261.6	267.4	267.4
172.5°	261.6	261.6	261.6	265.5	265.5
175°	263.5	263.5	261.6	265.5	263.5
177.5°	263.5	263.5	261.6	265.5	263.5
180°	263.5	263.5	263.5	263.5	263.5



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	72.8	96.4	348.1	692.2	700.1
110°	82.6	106.2	320.6	686.3	743.3



(END OF REPORT)