

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: P844827

Luminaire Tested: **SQ4P-BB-050U-100D-B40-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P844827
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-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT
UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

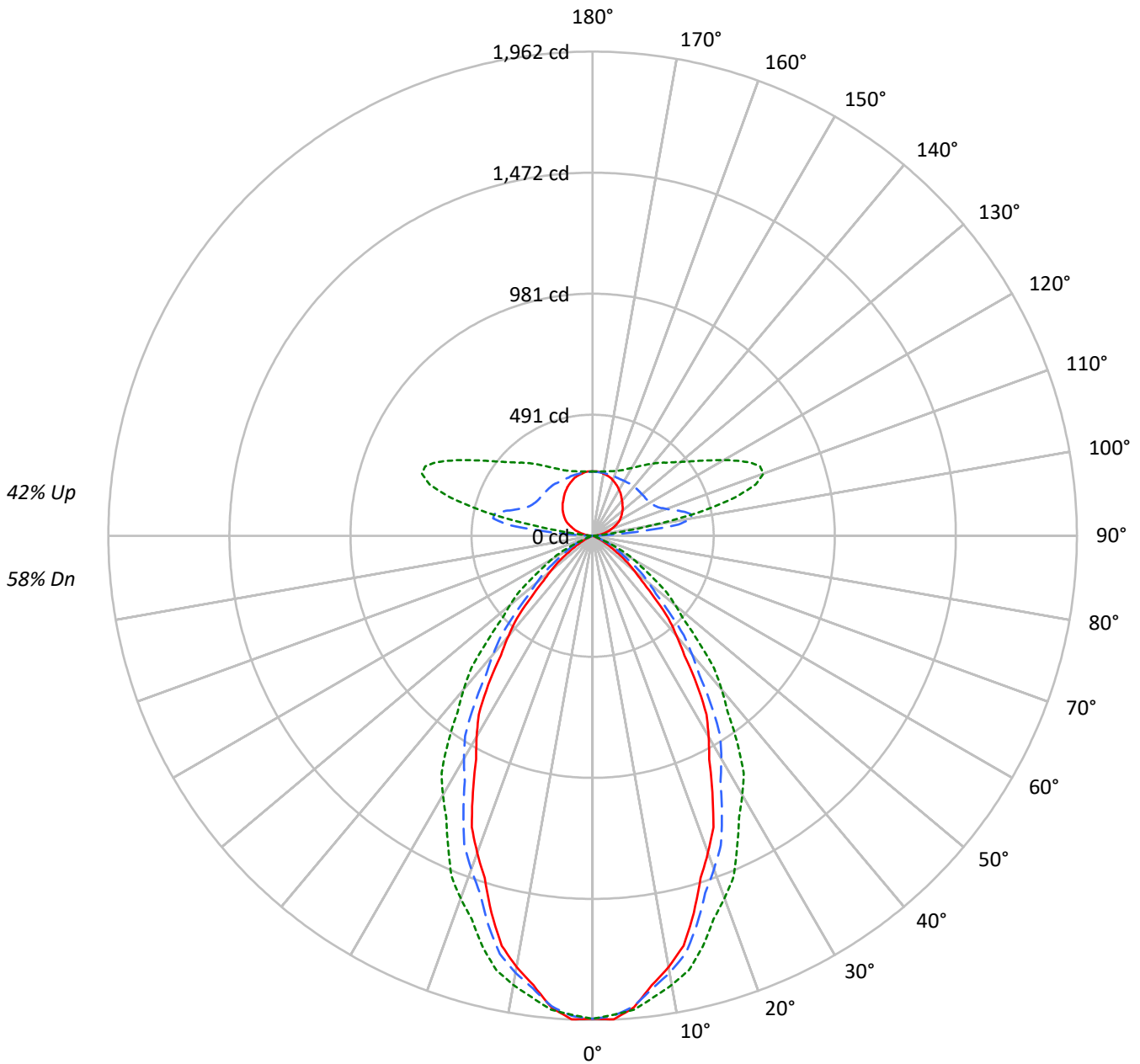
Lumens per Lamp: N/A
Luminaire Lumens: 4028.7 lumens
Efficiency: N/A
Efficacy: 84.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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	38	33	29	34	30	27	31	28	25	23																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18056	18056	18056
5°	17765	17722	17853
10°	16622	16844	17314
15°	15112	15591	16459
20°	13415	14111	15346
25°	11681	12606	14100
30°	10007	11104	12921
35°	8295	9427	11494
40°	6374	7538	9794
45°	4608	5707	7881
50°	3138	4251	6252
55°	2041	3076	4859
60°	1172	2168	3511
65°	308	1325	1779
70°	156	410	510
75°	68	32	0
80°	48	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.6	4.4
10°-20°	456.7	11.3
20°-30°	571.8	14.2
30°-40°	528.1	13.1
40°-50°	354.9	8.8
50°-60°	183.3	4.5
60°-70°	57.4	1.4
70°-80°	3.6	0.1
80°-90°	0.7	0.0
90°-100°	103.8	2.6
100°-110°	361.4	9.0
110°-120°	350.0	8.7
120°-130°	274.6	6.8
130°-140°	217.3	5.4
140°-150°	167.7	4.2
150°-160°	120.2	3.0
160°-170°	73.5	1.8
170°-180°	24.9	0.6
0°-30°	1207.1	30.0
0°-40°	1735.2	43.1
0°-60°	2273.4	56.4
0°-90°	2335.1	58.0
90°-120°	815.2	20.2
90°-150°	1474.9	36.6
90°-180°	1694.0	42.0
0°-180°	4028.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1957	1957	1957	1957	1957	
5°	1918	1899	1914	1920	1928	178
15°	1582	1577	1632	1687	1723	441
25°	1147	1157	1238	1323	1385	526
35°	736	755	837	935	1020	456
45°	353	374	437	523	604	277
55°	127	148	191	246	302	118
65°	14	27	61	73	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	60	175	45	27	19
105°	60	86	380	641	596	63
115°	105	127	282	596	703	104
125°	142	175	263	444	530	127
135°	171	193	261	370	419	133
145°	201	214	259	319	347	125
155°	228	236	255	284	294	105
165°	249	251	257	269	271	70
175°	261	261	259	263	261	25
180°	261	261	261	261	261	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1957.0	1957.0	1957.0	1957.0	1957.0
2.5°	1961.5	1943.1	1947.8	1947.8	1942.6
5°	1918.2	1898.7	1913.5	1920.1	1927.7
7.5°	1837.1	1821.9	1850.2	1871.3	1886.7
10°	1774.2	1761.3	1797.9	1826.7	1848.1
12.5°	1701.5	1691.4	1735.8	1775.4	1802.7
15°	1582.1	1576.6	1632.3	1686.9	1723.2
17.5°	1454.2	1453.9	1517.4	1585.5	1629.0
20°	1366.3	1369.0	1437.2	1512.2	1563.0
22.5°	1278.4	1284.8	1357.7	1436.0	1494.2
25°	1147.4	1156.6	1238.3	1323.2	1385.1
27.5°	1021.8	1035.3	1121.2	1209.1	1284.8
30°	939.3	954.9	1042.3	1135.0	1212.8
32.5°	858.0	876.9	962.0	1060.2	1139.2
35°	736.5	755.2	837.0	935.4	1020.5
37.5°	611.1	629.1	709.1	806.2	898.1
40°	529.2	549.6	625.9	719.8	813.2
42.5°	455.1	475.4	547.0	639.4	727.7
45°	353.2	374.4	437.4	522.6	604.0
47.5°	268.8	291.7	347.0	424.2	498.4
50°	218.6	241.8	296.2	364.2	435.6
52.5°	178.6	201.1	250.1	314.0	379.4
55°	126.9	148.1	191.2	245.7	302.1
57.5°	87.7	106.1	144.7	189.9	234.3
60°	63.5	81.0	117.5	154.1	190.3
62.5°	42.3	58.3	93.9	122.2	146.4
65°	14.1	27.2	60.7	73.1	81.5
67.5°	7.3	8.5	31.7	33.6	36.4
70°	5.8	5.8	15.2	16.1	18.9
72.5°	4.1	4.1	6.0	7.8	8.3
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°	3.9	5.8	5.8	3.9	1.9
92.5°	9.7	29.2	27.2	11.7	9.7
95°	17.5	60.4	175.3	44.8	27.2
97.5°	27.2	68.1	350.5	159.7	85.7
100°	37.0	72.1	408.9	383.7	247.3
102.5°	48.6	77.9	407.0	539.4	444.0
105°	60.4	85.7	379.8	640.6	595.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	93.5	114.9	296.0	644.6	734.2
115°	105.1	126.6	282.4	595.9	703.0
117.5°	116.9	140.2	274.5	551.1	658.2
120°	126.6	151.9	268.7	508.3	613.4
122.5°	134.4	163.6	264.8	473.2	568.6
125°	142.2	175.3	262.9	444.0	529.7
127.5°	149.9	183.1	262.9	422.6	494.6
130°	157.8	186.9	261.0	401.2	465.4
132.5°	165.5	188.9	261.0	385.6	440.1
135°	171.3	192.7	261.0	370.0	418.7
137.5°	179.2	196.7	261.0	356.3	401.2
140°	185.0	202.5	261.0	342.8	381.7
142.5°	192.7	208.3	261.0	329.1	364.2
145°	200.6	214.3	259.0	319.4	346.6
147.5°	208.3	220.1	257.1	309.6	331.0
150°	214.3	225.9	257.1	299.9	317.5
152.5°	222.0	231.7	255.2	290.1	305.7
155°	227.8	235.7	255.2	284.3	294.0
157.5°	233.6	241.5	255.2	278.5	286.3
160°	239.6	245.4	257.1	274.5	280.4
162.5°	245.4	249.2	257.1	270.7	274.5
165°	249.2	251.2	257.1	268.7	270.7
167.5°	253.1	255.2	257.1	266.8	266.8
170°	255.2	257.1	259.0	264.8	264.8
172.5°	259.0	259.0	259.0	262.9	262.9
175°	261.0	261.0	259.0	262.9	261.0
177.5°	261.0	261.0	259.0	262.9	261.0
180°	261.0	261.0	261.0	261.0	261.0



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	72.1	95.5	344.7	685.5	693.3
110°	81.8	105.1	317.5	679.6	736.1



(END OF REPORT)