

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: P844863

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

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P844863
REPORT IS A COMBINATION OF REPORTS P700077 AND P700246
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-BB-100U-100D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT
UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

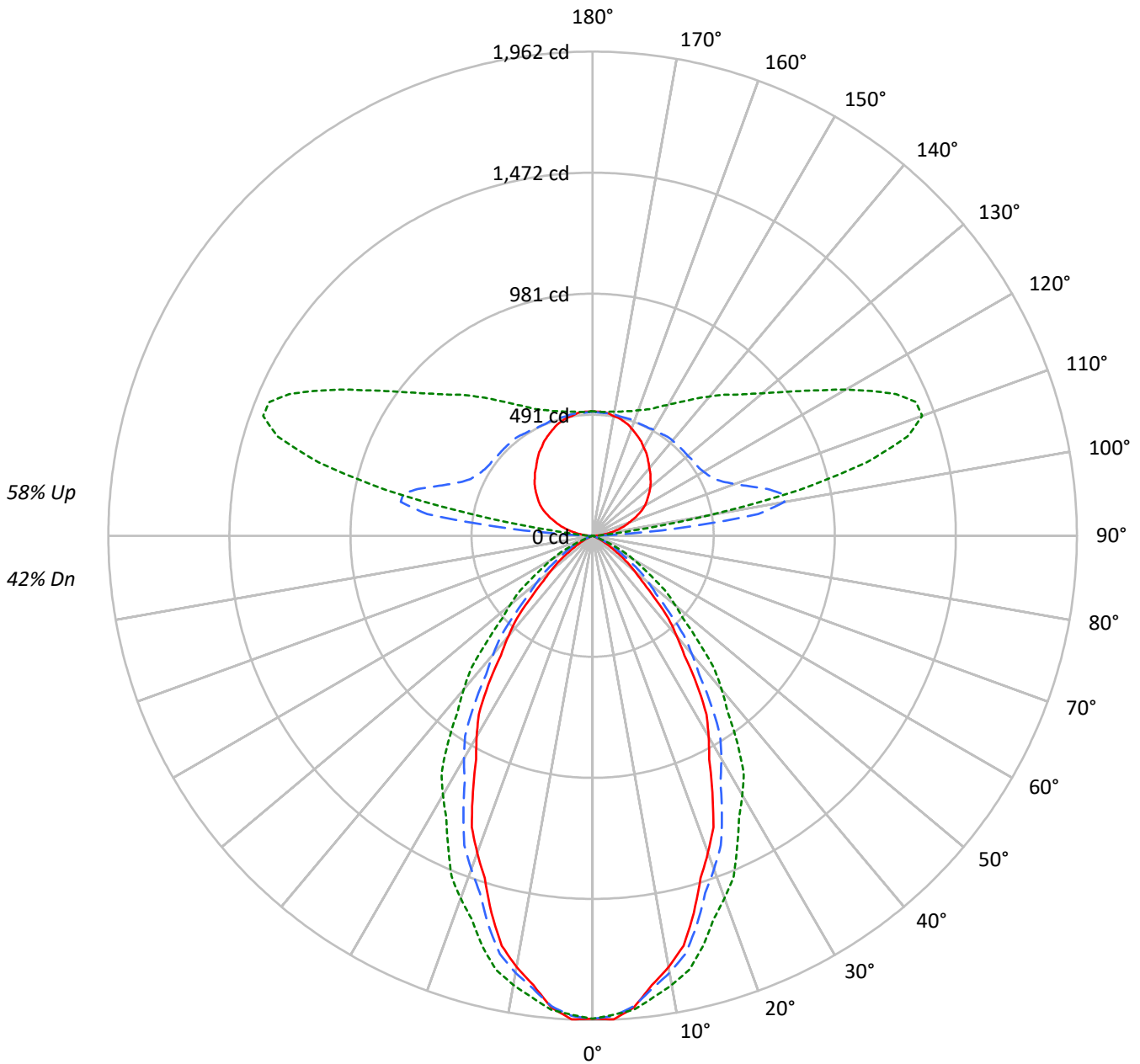
Lumens per Lamp: N/A
Luminaire Lumens: 5604.4 lumens
Efficiency: N/A
Efficacy: 92.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 60.9
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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48	42																			
1	97	94	90	87	89	86	83	81	71	69	68	58	56	55	45	44	44	38																			
2	90	84	78	74	82	77	72	69	64	61	58	52	50	49	42	40	39	34																			
3	83	75	69	63	76	69	64	59	58	54	51	48	45	43	38	37	35	31																			
4	77	67	60	55	70	62	56	52	53	48	45	44	41	38	35	33	32	28																			
5	71	61	54	48	65	56	50	45	48	43	40	40	37	34	33	30	29	26																			
6	66	55	48	43	60	51	45	40	44	39	36	37	33	31	30	28	26	23																			
7	61	50	43	38	56	47	41	36	40	35	32	34	30	28	28	26	24	21																			
8	57	46	39	34	53	43	37	32	37	32	29	31	28	25	26	24	22	20																			
9	54	42	36	31	49	40	34	29	34	30	26	29	26	23	24	22	20	18																			
10	50	39	33	28	46	37	31	27	32	27	24	27	24	21	23	21	19	17																			

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	3.2
10°-20°	456.7	8.1
20°-30°	571.8	10.2
30°-40°	528.1	9.4
40°-50°	354.9	6.3
50°-60°	183.3	3.3
60°-70°	57.4	1.0
70°-80°	3.6	0.1
80°-90°	1.3	0.0
90°-100°	200.5	3.6
100°-110°	697.4	12.4
110°-120°	675.6	12.1
120°-130°	530.0	9.5
130°-140°	419.5	7.5
140°-150°	323.7	5.8
150°-160°	232.1	4.1
160°-170°	141.9	2.5
170°-180°	48.0	0.9
0°-30°	1207.1	21.5
0°-40°	1735.2	31.0
0°-60°	2273.4	40.6
0°-90°	2335.7	41.7
90°-120°	1573.5	28.1
90°-150°	2846.7	50.8
90°-180°	3269.0	58.3
0°-180°	5604.4	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°	8	11	11	8	4	5
95°	34	116	338	86	53	36
105°	116	165	733	1237	1150	122
115°	203	244	545	1150	1357	200
125°	274	338	507	857	1022	246
135°	331	372	504	714	808	256
145°	387	414	500	616	669	242
155°	440	455	492	549	568	203
165°	481	485	496	519	522	136
175°	504	504	500	507	504	48
180°	504	504	504	504	504	



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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°	7.6	11.2	11.2	7.6	3.8
92.5°	18.8	56.4	52.6	22.6	18.8
95°	33.8	116.5	338.3	86.4	52.6
97.5°	52.6	131.6	676.6	308.3	165.4
100°	71.4	139.1	789.3	740.5	477.4
102.5°	94.0	150.3	785.5	1041.2	856.9
105°	116.5	165.4	732.9	1236.6	1150.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	180.4	221.7	571.4	1244.1	1417.1
115°	202.9	244.3	545.0	1150.2	1356.9
117.5°	225.5	270.7	530.0	1063.7	1270.4
120°	244.3	293.1	518.7	981.0	1184.0
122.5°	259.3	315.7	511.2	913.3	1097.6
125°	274.3	338.3	507.4	856.9	1022.4
127.5°	289.5	353.3	507.4	815.7	954.7
130°	304.5	360.9	503.6	774.3	898.3
132.5°	319.5	364.6	503.6	744.2	849.5
135°	330.7	372.1	503.6	714.2	808.1
137.5°	345.8	379.6	503.6	687.8	774.3
140°	357.1	390.9	503.6	661.5	736.7
142.5°	372.1	402.2	503.6	635.2	702.9
145°	387.1	413.5	499.9	616.4	669.0
147.5°	402.2	424.7	496.2	597.6	639.0
150°	413.5	436.0	496.2	578.8	612.6
152.5°	428.5	447.3	492.4	560.0	590.2
155°	439.8	454.8	492.4	548.8	567.6
157.5°	451.0	466.1	492.4	537.5	552.6
160°	462.3	473.6	496.2	530.0	541.2
162.5°	473.6	481.1	496.2	522.4	530.0
165°	481.1	484.9	496.2	518.7	522.4
167.5°	488.6	492.4	496.2	515.0	515.0
170°	492.4	496.2	499.9	511.2	511.2
172.5°	499.9	499.9	499.9	507.4	507.4
175°	503.6	503.6	499.9	507.4	503.6
177.5°	503.6	503.6	499.9	507.4	503.6
180°	503.6	503.6	503.6	503.6	503.6



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	139.1	184.2	665.3	1323.1	1338.1
110°	157.9	202.9	612.6	1311.8	1420.7



(END OF REPORT)