

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: P844839

Luminaire Tested: **SQ4P-BB-075U-100D-B40-1D-UNV**

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P844839  
REPORT IS A COMBINATION OF REPORTS P700217 AND P700245  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-BB-075U-100D-B40-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 750 LUMENS PER FOOT UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

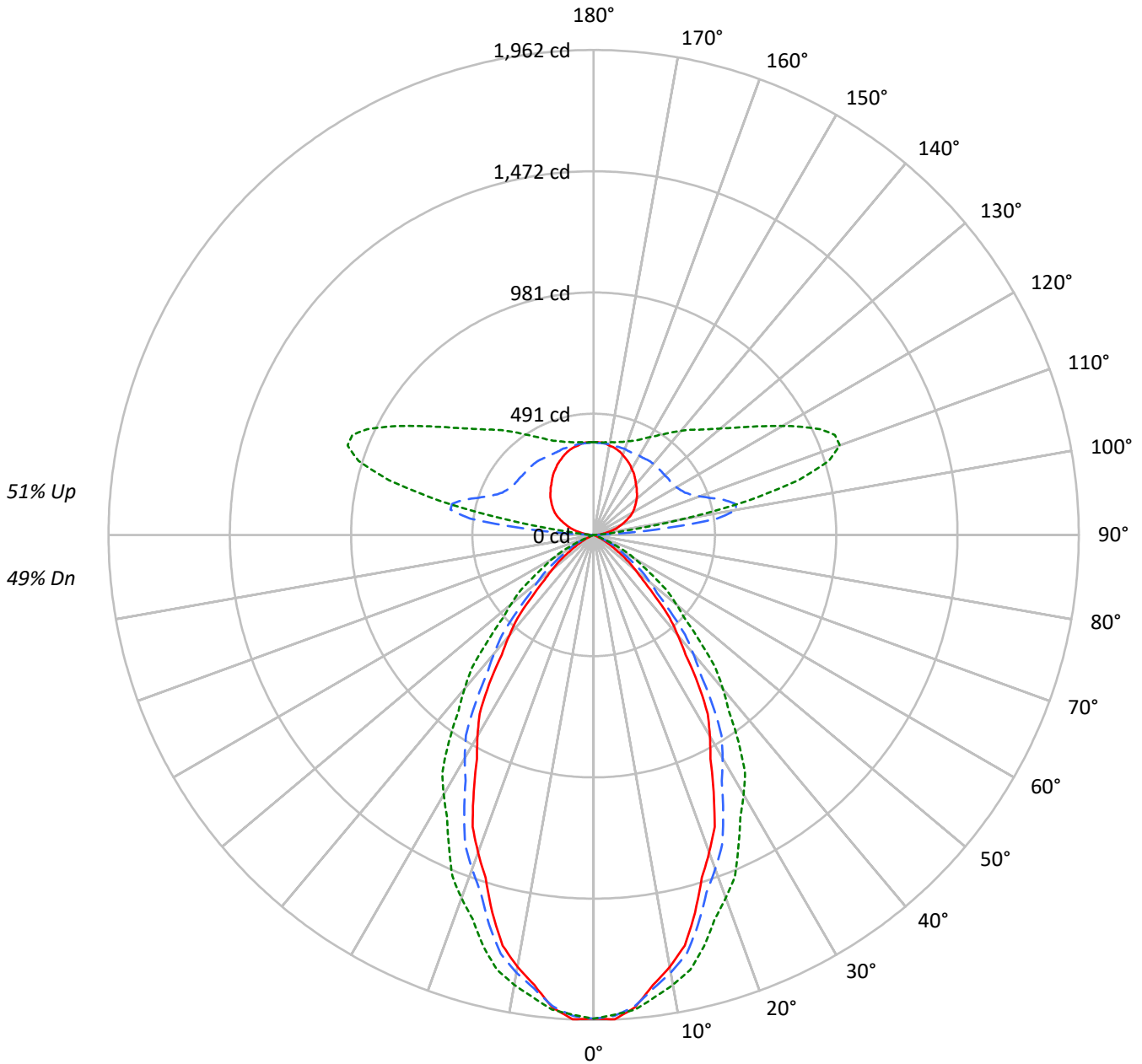
Lumens per Lamp: N/A  
Luminaire Lumens: 4772.0 lumens  
Efficiency: N/A  
Efficacy: 88.5 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 53.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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

TEST NUMBER: P844839

CATALOG NUMBER: SQ4P-BB-075U-100D-B40-1D-UNV

### Luminous Intensity Polar Plot





TEST NUMBER: P844839

CATALOG NUMBER: SQ4P-BB-075U-100D-B40-1D-UNV

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	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	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49			49
1	99	96	92	89	92	88	86	83	75	73	71	63	62	60	51	51	50	45			45
2	92	86	80	76	85	79	75	71	68	65	62	57	55	53	47	46	45	40			40
3	85	77	71	66	78	72	66	62	62	58	54	52	50	47	44	42	40	36			36
4	79	69	62	57	73	65	59	54	56	52	48	48	45	42	40	38	36	33			33
5	73	63	56	50	68	59	53	48	51	46	43	44	41	38	37	35	33	30			30
6	68	57	50	45	63	54	47	43	47	42	38	41	37	34	35	32	30	27			27
7	63	52	45	40	59	49	43	38	43	38	35	37	34	31	32	30	28	25			25
8	59	48	41	36	55	45	39	35	40	35	31	35	31	28	30	27	25	23			23
9	55	44	37	33	52	42	36	31	37	32	29	32	29	26	28	25	23	21			21
10	52	41	34	30	48	39	33	29	34	30	26	30	27	24	26	24	22	20			20

**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



TEST NUMBER: P844839

CATALOG NUMBER: SQ4P-BB-075U-100D-B40-1D-UNV

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	178.6	3.7
10°-20°	456.7	9.6
20°-30°	571.8	12.0
30°-40°	528.1	11.1
40°-50°	354.9	7.4
50°-60°	183.3	3.8
60°-70°	57.4	1.2
70°-80°	3.6	0.1
80°-90°	1.0	0.0
90°-100°	149.4	3.1
100°-110°	519.9	10.9
110°-120°	503.6	10.6
120°-130°	395.1	8.3
130°-140°	312.7	6.6
140°-150°	241.3	5.1
150°-160°	173.0	3.6
160°-170°	105.8	2.2
170°-180°	35.8	0.7
0°-30°	1207.1	25.3
0°-40°	1735.2	36.4
0°-60°	2273.4	47.6
0°-90°	2335.4	48.9
90°-120°	1172.9	24.6
90°-150°	2122.0	44.5
90°-180°	2437.0	51.1
0°-180°	4772.0	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°	6	8	8	6	3	3
95°	25	87	252	64	39	27
105°	87	123	546	922	857	91
115°	151	182	406	857	1011	149
125°	205	252	378	639	762	183
135°	246	277	375	532	602	191
145°	289	308	373	460	499	181
155°	328	339	367	409	423	151
165°	359	362	370	387	390	101
175°	375	375	373	378	375	36
180°	375	375	375	375	375	



TEST NUMBER: P844839

CATALOG NUMBER: SQ4P-BB-075U-100D-B40-1D-UNV

**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°	5.6	8.4	8.4	5.6	2.8
92.5°	14.1	42.1	39.2	16.8	14.1
95°	25.2	86.8	252.2	64.4	39.2
97.5°	39.2	98.1	504.3	229.8	123.3
100°	53.2	103.7	588.3	552.0	355.8
102.5°	70.1	112.0	585.6	776.1	638.8
105°	86.8	123.3	546.4	921.8	857.3



TEST NUMBER: P844839

CATALOG NUMBER: SQ4P-BB-075U-100D-B40-1D-UNV

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	134.5	165.3	425.9	927.4	1056.3
115°	151.3	182.1	406.2	857.3	1011.4
117.5°	168.1	201.8	395.1	792.9	947.0
120°	182.1	218.5	386.7	731.3	882.5
122.5°	193.3	235.4	381.0	680.9	818.1
125°	204.6	252.2	378.2	638.8	762.1
127.5°	215.7	263.4	378.2	608.0	711.7
130°	227.0	269.0	375.4	577.2	669.6
132.5°	238.1	271.7	375.4	554.8	633.2
135°	246.5	277.3	375.4	532.3	602.4
137.5°	257.8	283.0	375.4	512.7	577.2
140°	266.2	291.4	375.4	493.1	549.2
142.5°	277.3	299.8	375.4	473.5	523.9
145°	288.6	308.2	372.6	459.5	498.7
147.5°	299.8	316.6	369.8	445.5	476.3
150°	308.2	325.0	369.8	431.4	456.7
152.5°	319.4	333.4	367.0	417.5	439.9
155°	327.8	339.0	367.0	409.0	423.1
157.5°	336.2	347.4	367.0	400.6	411.9
160°	344.6	353.0	369.8	395.1	403.4
162.5°	353.0	358.7	369.8	389.5	395.1
165°	358.7	361.5	369.8	386.7	389.5
167.5°	364.3	367.0	369.8	383.8	383.8
170°	367.0	369.8	372.6	381.0	381.0
172.5°	372.6	372.6	372.6	378.2	378.2
175°	375.4	375.4	372.6	378.2	375.4
177.5°	375.4	375.4	372.6	378.2	375.4
180°	375.4	375.4	375.4	375.4	375.4



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	103.7	137.3	495.9	986.2	997.5
110°	117.6	151.3	456.7	977.8	1059.1



(END OF REPORT)