

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: P845363

Luminaire Tested: **SQ4P-WB-100U-075D-B35-1D-UNV**

Issue Date: 8/14/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P845363  
REPORT IS A COMBINATION OF REPORTS P700100 AND P700246  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-WB-100U-075D-B35-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT UPLIGHT, 750 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

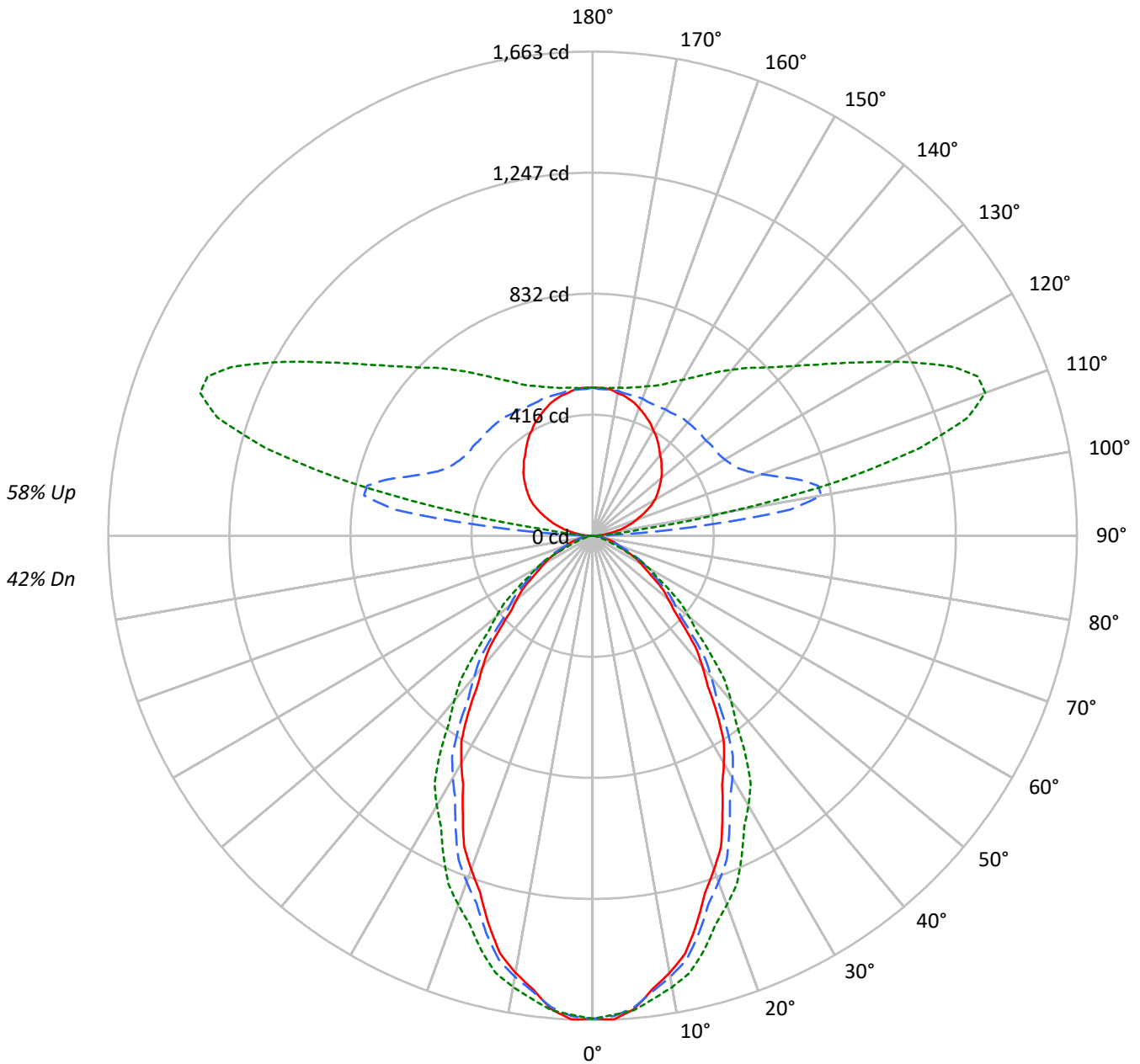
Lumens per Lamp: N/A  
Luminaire Lumens: 5719.1 lumens  
Efficiency: N/A  
Efficacy: 110.8 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 51.6  
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

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### Luminous Intensity Polar Plot





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**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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	49	49	49	42								
1	97	93	90	86	89	85	82	80	71	69	67	57	56	55	45	44	43	38								
2	89	82	77	72	81	76	71	67	63	60	57	51	49	47	41	39	38	33								
3	82	73	67	61	75	68	62	57	57	52	49	46	44	41	37	35	34	29								
4	75	66	58	53	69	61	54	49	51	46	43	42	39	36	34	32	30	26								
5	70	59	52	46	64	55	48	43	46	41	38	38	35	32	31	29	27	23								
6	65	53	46	40	59	49	43	38	42	37	33	35	31	29	28	26	24	21								
7	60	48	41	36	55	45	38	34	38	33	30	32	28	26	26	24	22	19								
8	56	44	37	32	51	41	35	30	35	30	27	30	26	23	24	22	20	18								
9	52	41	34	29	48	38	32	27	33	28	24	27	24	21	23	20	18	16								
10	49	37	31	26	45	35	29	25	30	25	22	26	22	19	21	19	17	15								

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	15304	15304	15304
5°	15114	15058	15147
10°	14279	14408	14741
15°	13180	13488	14092
20°	11970	12419	13241
25°	10737	11321	12337
30°	9600	10227	11398
35°	8394	9000	10289
40°	7065	7626	8907
45°	5830	6333	7436
50°	4867	5306	6194
55°	4132	4554	5115
60°	3534	3949	4084
65°	2814	3321	2637
70°	2495	2592	1610
75°	2310	2103	987
80°	2125	1934	850
85°	1916	1778	699



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	152.1	2.7
10°-20°	395.7	6.9
20°-30°	512.6	9.0
30°-40°	502.0	8.8
40°-50°	384.2	6.7
50°-60°	256.0	4.5
60°-70°	139.7	2.4
70°-80°	58.2	1.0
80°-90°	17.7	0.3
90°-100°	202.4	3.5
100°-110°	704.3	12.3
110°-120°	682.2	11.9
120°-130°	535.2	9.4
130°-140°	423.6	7.4
140°-150°	326.9	5.7
150°-160°	234.3	4.1
160°-170°	143.3	2.5
170°-180°	48.5	0.8
0°-30°	1060.5	18.5
0°-40°	1562.4	27.3
0°-60°	2202.6	38.5
0°-90°	2418.3	42.3
90°-120°	1588.9	27.8
90°-150°	2874.6	50.3
90°-180°	3301.0	57.7
0°-180°	5719.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1659	1659	1659	1659	1659	
5°	1632	1615	1626	1630	1636	152
15°	1380	1375	1412	1450	1475	385
25°	1055	1057	1112	1161	1212	485
35°	745	749	799	853	914	463
45°	447	455	485	522	570	348
55°	257	268	283	294	318	233
65°	129	140	152	133	121	134
75°	65	65	59	40	28	69
85°	18	18	17	11	7	20
90°	8	11	11	8	4	6
95°	34	118	342	87	53	36
105°	118	167	740	1249	1162	124
115°	205	247	550	1162	1370	202
125°	277	342	512	865	1032	248
135°	334	376	509	721	816	259
145°	391	418	505	622	676	245
155°	444	459	497	554	573	205
165°	486	490	501	524	528	137
175°	509	509	505	512	509	48
180°	509	509	509	509	509	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1658.7	1658.7	1658.7	1658.7	1658.7
2.5°	1662.8	1648.0	1651.8	1651.6	1647.0
5°	1631.9	1615.3	1625.9	1629.7	1635.5
7.5°	1571.2	1558.9	1578.1	1592.3	1603.9
10°	1524.1	1513.4	1537.9	1558.7	1573.5
12.5°	1469.4	1460.3	1490.8	1518.4	1538.1
15°	1379.9	1375.0	1412.1	1450.4	1475.3
17.5°	1284.4	1281.9	1324.4	1369.2	1401.0
20°	1219.1	1218.4	1264.9	1311.7	1348.6
22.5°	1153.3	1154.8	1203.7	1252.4	1294.5
25°	1054.7	1057.4	1112.1	1160.6	1211.9
27.5°	963.4	964.7	1021.0	1072.3	1127.0
30°	901.1	904.6	960.0	1013.0	1069.9
32.5°	838.8	842.9	897.1	951.9	1009.9
35°	745.3	748.9	799.1	853.0	913.5
37.5°	648.9	653.8	698.4	749.2	808.9
40°	586.6	593.8	633.2	681.2	739.5
42.5°	526.6	535.5	572.1	617.6	670.1
45°	446.8	455.4	485.4	522.2	569.9
47.5°	378.1	388.0	411.1	442.7	483.4
50°	339.1	348.5	369.7	393.1	431.5
52.5°	304.8	314.0	333.0	351.1	383.9
55°	256.9	267.5	283.1	294.0	318.0
57.5°	217.6	227.9	240.2	245.0	259.7
60°	191.5	202.9	214.0	213.3	221.3
62.5°	167.5	177.3	188.4	180.5	181.0
65°	128.9	139.5	152.1	133.0	120.8
67.5°	104.1	106.3	119.3	92.8	78.3
70°	92.5	92.5	96.1	71.8	59.7
72.5°	81.4	81.4	78.1	58.3	45.6
75°	64.8	64.8	59.0	40.5	27.7
77.5°	49.9	49.4	45.1	30.1	20.1
80°	40.0	40.0	36.4	23.9	16.0
82.5°	31.3	31.3	28.2	18.6	11.8
85°	18.1	18.1	16.8	10.9	6.6
87.5°	6.5	6.5	5.8	3.4	2.9
90°	7.6	11.4	11.4	7.6	3.8
92.5°	19.0	57.0	53.1	22.8	19.0
95°	34.2	117.6	341.6	87.3	53.1
97.5°	53.1	132.9	683.2	311.3	167.0
100°	72.1	140.4	797.0	747.7	482.0
102.5°	94.9	151.8	793.2	1051.4	865.3
105°	117.6	167.0	740.1	1248.7	1161.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	182.2	223.9	577.0	1256.3	1431.0
115°	204.9	246.7	550.3	1161.5	1370.2
117.5°	227.7	273.3	535.2	1074.2	1282.9
120°	246.7	296.0	523.8	990.6	1195.6
122.5°	261.9	318.8	516.2	922.3	1108.3
125°	277.0	341.6	512.4	865.3	1032.4
127.5°	292.3	356.8	512.4	823.7	964.1
130°	307.5	364.4	508.6	781.9	907.1
132.5°	322.6	368.1	508.6	751.5	857.8
135°	334.0	375.8	508.6	721.2	816.0
137.5°	349.2	383.3	508.6	694.6	781.9
140°	360.6	394.8	508.6	668.0	743.9
142.5°	375.8	406.1	508.6	641.5	709.8
145°	390.9	417.6	504.8	622.5	675.6
147.5°	406.1	428.9	501.0	603.5	645.3
150°	417.6	440.3	501.0	584.5	618.6
152.5°	432.7	451.7	497.2	565.5	595.9
155°	444.1	459.2	497.2	554.2	573.1
157.5°	455.4	470.7	497.2	542.8	558.0
160°	466.9	478.2	501.0	535.2	546.5
162.5°	478.2	485.9	501.0	527.5	535.2
165°	485.9	489.7	501.0	523.8	527.5
167.5°	493.4	497.2	501.0	520.0	520.0
170°	497.2	501.0	504.8	516.2	516.2
172.5°	504.8	504.8	504.8	512.4	512.4
175°	508.6	508.6	504.8	512.4	508.6
177.5°	508.6	508.6	504.8	512.4	508.6
180°	508.6	508.6	508.6	508.6	508.6



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	140.4	186.0	671.8	1336.0	1351.2
110°	159.4	204.9	618.6	1324.7	1434.7



(END OF REPORT)