

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: P521936

Luminaire Tested: **SQ4-WB-100U-075D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521936  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,  
Test Lab: INNOVATION CENTER  
Issue Date: 5/5/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-WB-100U-075D-93050-1D-UNV-STD-W-4 (4500K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

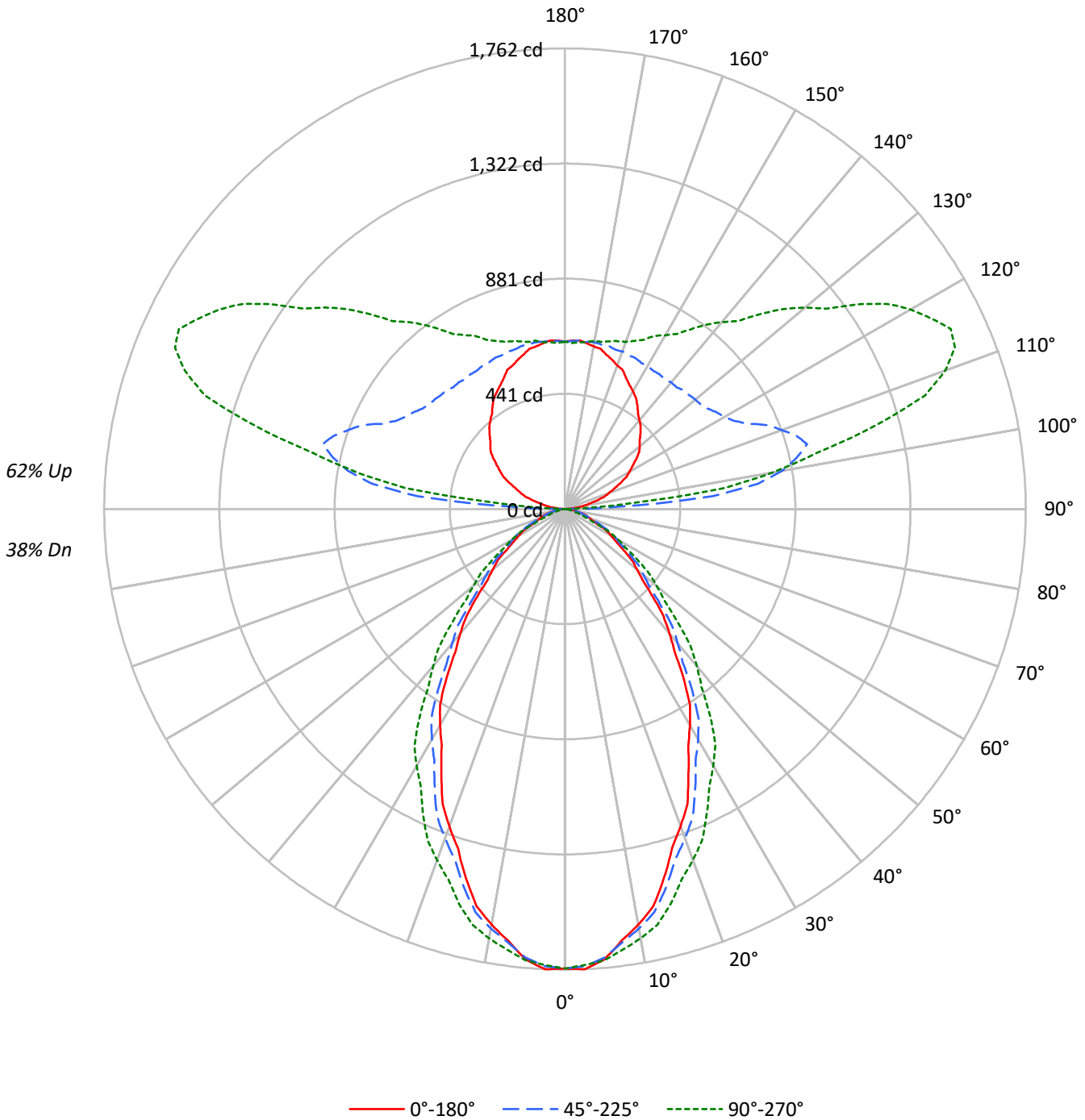
Lumens per Lamp: N/A  
Luminaire Lumens: 6706.2 lumens  
Efficiency: N/A  
Efficacy: 104.9 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 63.9  
Input Voltage (V): 120  
Input Current (Ain): 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: 24 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	0
RCR																		
0	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	96	92	89	85	87	84	81	78	68	67	65	54	53	52	41	41	40	34
2	88	81	76	71	80	74	70	66	61	58	55	49	47	45	37	36	35	30
3	81	72	66	60	73	66	61	56	55	51	47	44	41	39	34	32	31	26
4	75	65	57	52	68	59	53	48	49	45	41	40	37	34	31	29	27	24
5	69	58	51	45	62	53	47	42	44	40	36	36	33	30	28	26	25	21
6	64	52	45	40	58	48	42	37	40	36	32	33	30	27	26	24	22	19
7	59	48	40	35	54	44	37	33	37	32	28	30	27	24	24	22	20	17
8	55	43	36	31	50	40	34	29	34	29	26	28	24	22	22	20	18	16
9	51	40	33	28	47	37	31	26	31	26	23	26	22	20	21	18	17	15
10	48	37	30	25	44	34	28	24	29	24	21	24	21	18	20	17	15	13

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

	0°	45°	90°
0°	16220	16220	16220
5°	16018	15960	16054
10°	15133	15271	15625
15°	13970	14294	14935
20°	12686	13163	14034
25°	11379	11999	13075
30°	10174	10840	12081
35°	8897	9540	10904
40°	7489	8083	9440
45°	6179	6713	7881
50°	5160	5625	6565
55°	4380	4827	5422
60°	3744	4185	4327
65°	2980	3519	2797
70°	2644	2746	1708
75°	2449	2228	1044
80°	2253	2051	903
85°	2043	1874	730



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	161.3	2.4
10°-20°	419.4	6.3
20°-30°	543.3	8.1
30°-40°	532.0	7.9
40°-50°	407.2	6.1
50°-60°	271.4	4.0
60°-70°	148.1	2.2
70°-80°	61.7	0.9
80°-90°	17.5	0.3
90°-100°	330.0	4.9
100°-110°	797.5	11.9
110°-120°	850.5	12.7
120°-130°	688.9	10.3
130°-140°	533.4	8.0
140°-150°	406.9	6.1
150°-160°	294.5	4.4
160°-170°	181.4	2.7
170°-180°	61.4	0.9
0°-30°	1124.0	16.8
0°-40°	1656.0	24.7
0°-60°	2334.5	34.8
0°-90°	2561.8	38.2
90°-120°	1978.0	29.5
90°-150°	3607.1	53.8
90°-180°	4144.0	61.8
0°-180°	6706.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1758	1758	1758	1758	1758	
5°	1730	1712	1723	1727	1733	161
15°	1463	1457	1496	1537	1564	408
25°	1118	1121	1179	1230	1284	514
35°	790	794	847	904	968	491
45°	474	483	514	554	604	369
55°	272	284	300	312	337	247
65°	136	148	161	141	128	142
75°	69	69	62	43	29	73
85°	19	19	18	12	7	21
90°	0	0	0	0	0	2
95°	32	165	565	368	258	37
105°	127	220	958	1240	1224	135
115°	233	298	770	1460	1628	231
125°	332	382	668	1161	1364	296
135°	408	456	641	916	1053	315
145°	483	518	629	778	839	302
155°	553	577	637	689	714	255
165°	611	621	645	655	664	173
175°	647	644	647	641	640	61
180°	640	640	640	640	640	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1758.0	1758.0	1758.0	1758.0	1758.0
2.5°	1762.4	1746.7	1750.6	1750.5	1745.7
5°	1729.5	1712.1	1723.3	1727.3	1733.4
7.5°	1665.3	1652.2	1672.6	1687.7	1699.9
10°	1615.3	1604.0	1630.0	1651.9	1667.8
12.5°	1557.3	1547.8	1580.0	1609.5	1630.1
15°	1462.6	1457.3	1496.5	1537.2	1563.6
17.5°	1361.2	1358.7	1403.7	1451.2	1485.0
20°	1292.1	1291.4	1340.7	1390.2	1429.4
22.5°	1222.4	1224.0	1275.9	1327.4	1372.0
25°	1117.8	1120.8	1178.7	1230.1	1284.4
27.5°	1021.0	1022.4	1082.3	1136.5	1194.4
30°	955.0	958.8	1017.5	1073.6	1134.0
32.5°	889.0	893.3	950.8	1008.9	1070.4
35°	789.9	793.7	847.0	904.0	968.1
37.5°	687.8	692.9	740.2	794.1	857.2
40°	621.8	629.3	671.1	721.9	783.8
42.5°	558.2	567.5	606.3	654.5	710.3
45°	473.6	482.7	514.5	553.5	604.0
47.5°	400.8	411.2	435.7	469.2	512.4
50°	359.5	369.3	391.9	416.7	457.4
52.5°	323.1	332.9	353.0	372.1	406.8
55°	272.3	283.6	300.1	311.5	337.1
57.5°	230.7	241.5	254.6	259.7	275.2
60°	202.9	214.9	226.8	226.2	234.5
62.5°	177.6	187.8	199.6	191.5	191.9
65°	136.5	147.9	161.2	140.9	128.1
67.5°	110.3	112.7	126.5	98.2	83.0
70°	98.0	98.0	101.8	76.1	63.3
72.5°	86.2	86.2	82.7	61.9	48.4
75°	68.7	68.7	62.5	42.9	29.3
77.5°	52.9	52.3	47.8	32.0	21.3
80°	42.4	42.4	38.6	25.3	17.0
82.5°	33.2	33.2	29.9	19.7	12.7
85°	19.3	19.3	17.7	11.5	6.9
87.5°	6.8	6.8	6.2	3.7	3.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.8	89.3	210.4	102.3	69.4
95°	32.5	165.1	565.3	367.6	257.6
97.5°	57.8	182.9	744.6	717.3	615.8
100°	77.3	193.9	843.3	890.2	806.6
102.5°	95.7	203.9	908.3	1034.1	984.5
105°	127.4	220.2	958.5	1240.1	1224.2
107.5°	158.6	239.5	928.9	1405.4	1442.7
110°	180.3	255.9	881.2	1476.6	1546.9

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	202.0	272.3	838.9	1494.0	1614.1
115°	233.2	298.1	770.0	1459.9	1628.2
117.5°	264.1	325.3	729.6	1381.3	1578.6
120°	284.7	341.7	703.6	1319.7	1526.5
122.5°	306.4	359.1	687.3	1256.8	1460.4
125°	332.1	382.5	668.4	1161.0	1363.8
127.5°	357.6	405.1	655.1	1079.9	1258.1
130°	372.8	419.2	650.7	1023.5	1198.4
132.5°	386.9	435.4	644.2	982.7	1131.2
135°	408.1	455.8	641.2	915.5	1053.4
137.5°	428.1	476.1	631.8	870.0	973.9
140°	443.3	487.1	631.8	837.3	932.7
142.5°	458.5	502.2	626.3	808.7	889.3
145°	482.6	518.4	629.0	778.2	839.2
147.5°	505.1	539.9	627.4	743.0	793.4
150°	519.2	549.7	631.8	727.6	767.3
152.5°	534.4	563.8	630.7	711.2	746.7
155°	553.1	577.0	637.2	689.3	714.5
157.5°	575.6	596.0	635.8	680.9	695.7
160°	584.3	601.5	641.2	670.0	680.6
162.5°	598.4	613.5	639.1	666.6	673.0
165°	611.4	620.7	645.3	655.0	664.3
167.5°	627.4	633.5	643.7	654.3	654.5
170°	631.8	635.7	648.0	646.8	653.5
172.5°	639.4	642.3	644.8	647.7	643.7
175°	646.7	644.0	646.7	641.2	639.9
177.5°	645.3	645.3	643.1	640.9	635.6
180°	639.9	639.9	639.9	639.9	639.9

(END OF REPORT)