

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: P521948

Luminaire Tested: **SQ4-WB-100U-100D-93050-1D-UNV-STD-W-4 (4000K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521948  
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-100D-93050-1D-UNV-STD-W-4 (4000K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

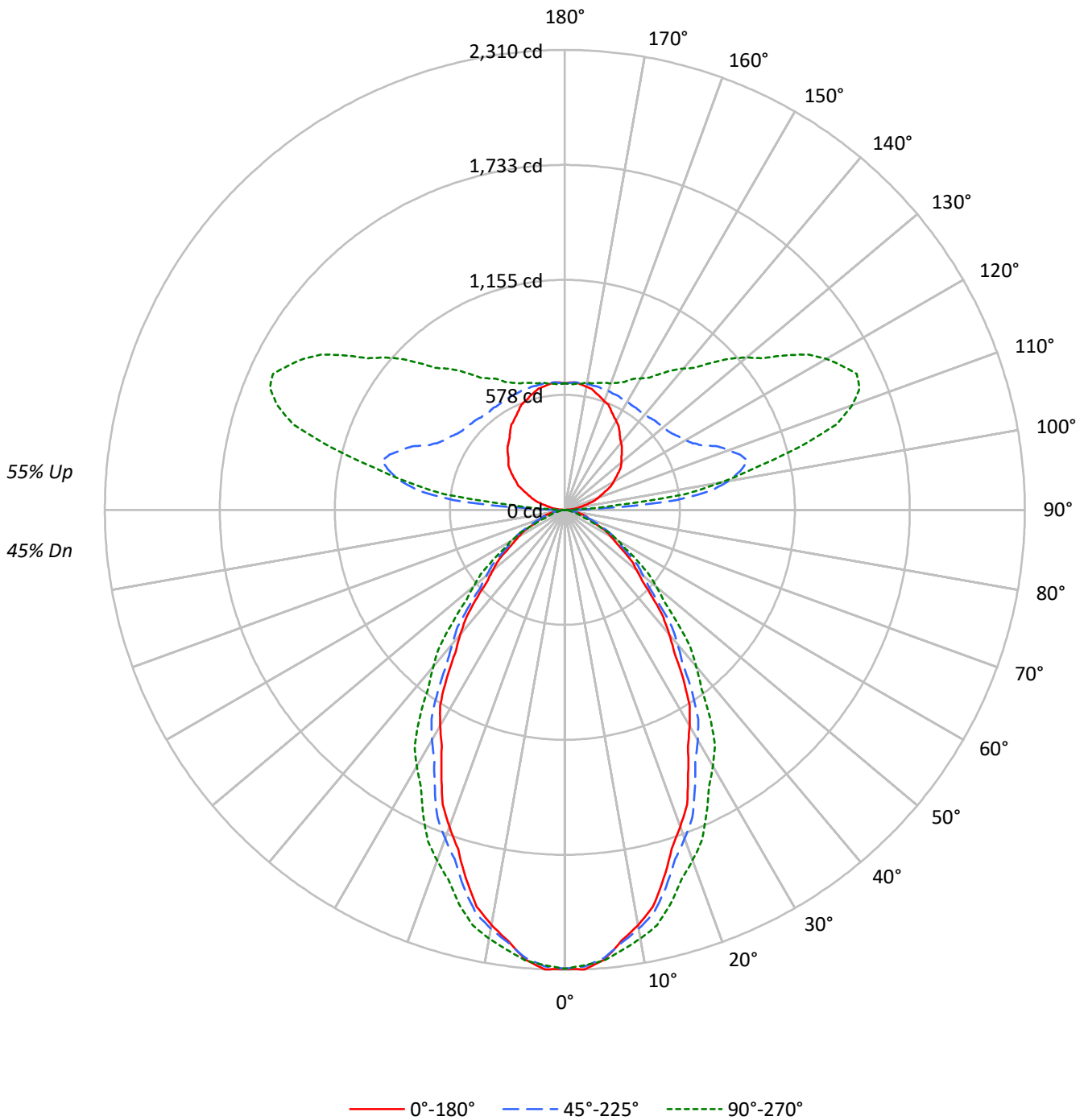
Lumens per Lamp: N/A  
Luminaire Lumens: 7473.8 lumens  
Efficiency: N/A  
Efficacy: 99.9 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 74.8  
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	50	30	10	0	
RCR																						
0	106	106	106	106	97	97	97	97	81	81	81	65	65	65	51	51	51	45				
1	98	94	90	87	89	86	83	81	72	70	68	59	58	56	47	46	45	40				
2	90	83	78	73	82	77	72	68	64	61	58	53	51	49	43	41	40	35				
3	83	74	67	62	76	68	63	58	58	54	50	48	45	43	39	37	35	31				
4	76	66	59	53	70	61	55	50	52	47	44	43	40	37	35	33	31	28				
5	70	60	52	47	65	55	49	44	47	42	38	40	36	33	33	30	28	25				
6	65	54	46	41	60	50	44	39	43	38	34	36	33	30	30	27	25	22				
7	60	49	42	36	56	46	39	34	39	34	31	33	30	27	28	25	23	20				
8	56	45	38	33	52	42	35	31	36	31	28	31	27	24	26	23	21	19				
9	53	41	34	29	49	38	32	28	33	28	25	29	25	22	24	21	19	17				
10	49	38	31	27	46	36	29	25	31	26	23	27	23	20	22	20	18	16				

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

	0°	45°	90°
0°	21265	21265	21265
5°	20999	20924	21046
10°	19840	20020	20484
15°	18315	18739	19580
20°	16632	17258	18400
25°	14918	15731	17141
30°	13338	14211	15837
35°	11664	12507	14295
40°	9817	10596	12375
45°	8101	8801	10333
50°	6765	7373	8608
55°	5742	6328	7108
60°	4908	5486	5672
65°	3908	4615	3665
70°	3464	3601	2236
75°	3208	2920	1369
80°	2954	2688	1180
85°	2678	2467	963



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	211.4	2.8
10°-20°	549.9	7.4
20°-30°	712.2	9.5
30°-40°	697.5	9.3
40°-50°	533.9	7.1
50°-60°	355.7	4.8
60°-70°	194.1	2.6
70°-80°	80.9	1.1
80°-90°	22.9	0.3
90°-100°	327.6	4.4
100°-110°	791.9	10.6
110°-120°	844.6	11.3
120°-130°	684.0	9.2
130°-140°	529.6	7.1
140°-150°	404.0	5.4
150°-160°	292.5	3.9
160°-170°	180.1	2.4
170°-180°	61.0	0.8
0°-30°	1473.5	19.7
0°-40°	2171.0	29.0
0°-60°	3060.6	41.0
0°-90°	3358.5	44.9
90°-120°	1964.1	26.3
90°-150°	3581.8	47.9
90°-180°	4115.0	55.1
0°-180°	7473.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2305	2305	2305	2305	2305	
5°	2267	2245	2259	2264	2272	211
15°	1918	1910	1962	2015	2050	535
25°	1465	1469	1545	1613	1684	674
35°	1036	1040	1110	1185	1269	644
45°	621	633	674	726	792	484
55°	357	372	393	408	442	324
65°	179	194	211	185	168	186
75°	90	90	82	56	38	96
85°	25	25	23	15	9	27
90°	0	0	0	0	0	3
95°	32	164	561	365	256	36
105°	126	219	952	1231	1216	134
115°	232	296	765	1450	1617	229
125°	330	380	664	1153	1354	294
135°	405	453	637	909	1046	313
145°	479	515	625	773	833	300
155°	549	573	633	684	709	254
165°	607	616	641	650	660	171
175°	642	640	642	637	635	61
180°	635	635	635	635	635	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2304.8	2304.8	2304.8	2304.8	2304.8
2.5°	2310.4	2289.9	2295.1	2294.9	2288.6
5°	2267.4	2244.6	2259.3	2264.5	2272.4
7.5°	2183.2	2166.0	2192.7	2212.5	2228.5
10°	2117.7	2102.9	2136.9	2165.7	2186.5
12.5°	2041.6	2029.2	2071.4	2110.0	2137.1
15°	1917.5	1910.5	1961.9	2015.3	2049.9
17.5°	1784.6	1781.2	1840.2	1902.5	1946.8
20°	1694.0	1693.0	1757.7	1822.5	1874.0
22.5°	1602.5	1604.7	1672.7	1740.2	1798.7
25°	1465.4	1469.3	1545.3	1612.6	1683.8
27.5°	1338.6	1340.4	1418.9	1490.0	1565.9
30°	1252.0	1257.0	1333.9	1407.5	1486.6
32.5°	1165.4	1171.2	1246.5	1322.6	1403.3
35°	1035.6	1040.5	1110.4	1185.1	1269.2
37.5°	901.7	908.4	970.5	1041.1	1123.8
40°	815.1	825.0	879.8	946.4	1027.5
42.5°	731.8	744.0	794.9	858.0	931.2
45°	620.9	632.8	674.5	725.6	791.9
47.5°	525.5	539.1	571.2	615.2	671.7
50°	471.3	484.1	513.7	546.3	599.7
52.5°	423.5	436.4	462.8	487.9	533.4
55°	357.0	371.8	393.4	408.3	441.9
57.5°	302.4	316.6	333.7	340.5	360.8
60°	266.0	281.8	297.3	296.6	307.4
62.5°	232.8	246.3	261.7	251.0	251.6
65°	179.0	193.8	211.4	184.7	167.9
67.5°	144.6	147.8	165.9	128.8	108.8
70°	128.4	128.4	133.5	99.7	82.9
72.5°	113.1	113.1	108.4	81.1	63.5
75°	90.0	90.0	81.9	56.2	38.4
77.5°	69.4	68.6	62.7	42.0	27.9
80°	55.6	55.6	50.6	33.1	22.2
82.5°	43.5	43.5	39.2	25.9	16.6
85°	25.3	25.3	23.3	15.0	9.1
87.5°	8.9	8.9	8.1	4.8	4.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.8	88.7	208.9	101.6	68.9
95°	32.3	163.9	561.4	365.0	255.8
97.5°	57.3	181.6	739.3	712.3	611.4
100°	76.7	192.6	837.3	883.9	801.0
102.5°	95.0	202.4	902.0	1026.8	977.6
105°	126.5	218.7	951.8	1231.4	1215.6
107.5°	157.5	237.8	922.4	1395.5	1432.6
110°	179.0	254.1	875.0	1466.2	1536.0

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	200.6	270.3	833.0	1483.5	1602.8
115°	231.5	296.0	764.6	1449.6	1616.8
117.5°	262.2	323.1	724.5	1371.6	1567.5
120°	282.7	339.3	698.7	1310.5	1515.8
122.5°	304.2	356.6	682.5	1247.9	1450.1
125°	329.8	379.8	663.7	1152.9	1354.3
127.5°	355.1	402.2	650.5	1072.4	1249.3
130°	370.2	416.3	646.2	1016.3	1190.0
132.5°	384.2	432.4	639.7	975.8	1123.3
135°	405.2	452.6	636.8	909.1	1046.0
137.5°	425.1	472.8	627.3	863.9	967.1
140°	440.2	483.6	627.3	831.4	926.2
142.5°	455.3	498.7	621.9	803.1	883.1
145°	479.2	514.8	624.6	772.7	833.3
147.5°	501.6	536.1	623.0	737.8	787.8
150°	515.6	545.9	627.3	722.5	761.9
152.5°	530.7	559.9	626.2	706.2	741.5
155°	549.2	572.9	632.7	684.4	709.4
157.5°	571.6	591.9	631.4	676.1	690.9
160°	580.2	597.3	636.8	665.3	675.8
162.5°	594.2	609.2	634.6	661.9	668.3
165°	607.1	616.3	640.8	650.4	659.6
167.5°	623.0	629.1	639.2	649.7	649.9
170°	627.3	631.3	643.5	642.3	648.9
172.5°	634.9	637.8	640.3	643.1	639.2
175°	642.1	639.5	642.1	636.7	635.4
177.5°	640.8	640.8	638.6	636.4	631.1
180°	635.4	635.4	635.4	635.4	635.4

(END OF REPORT)