

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: CORELITE

Report Number: P519077

Luminaire Tested: **SQ4-WB-050U-050D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519077  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2009-966-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-WB-050U-050D-840-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

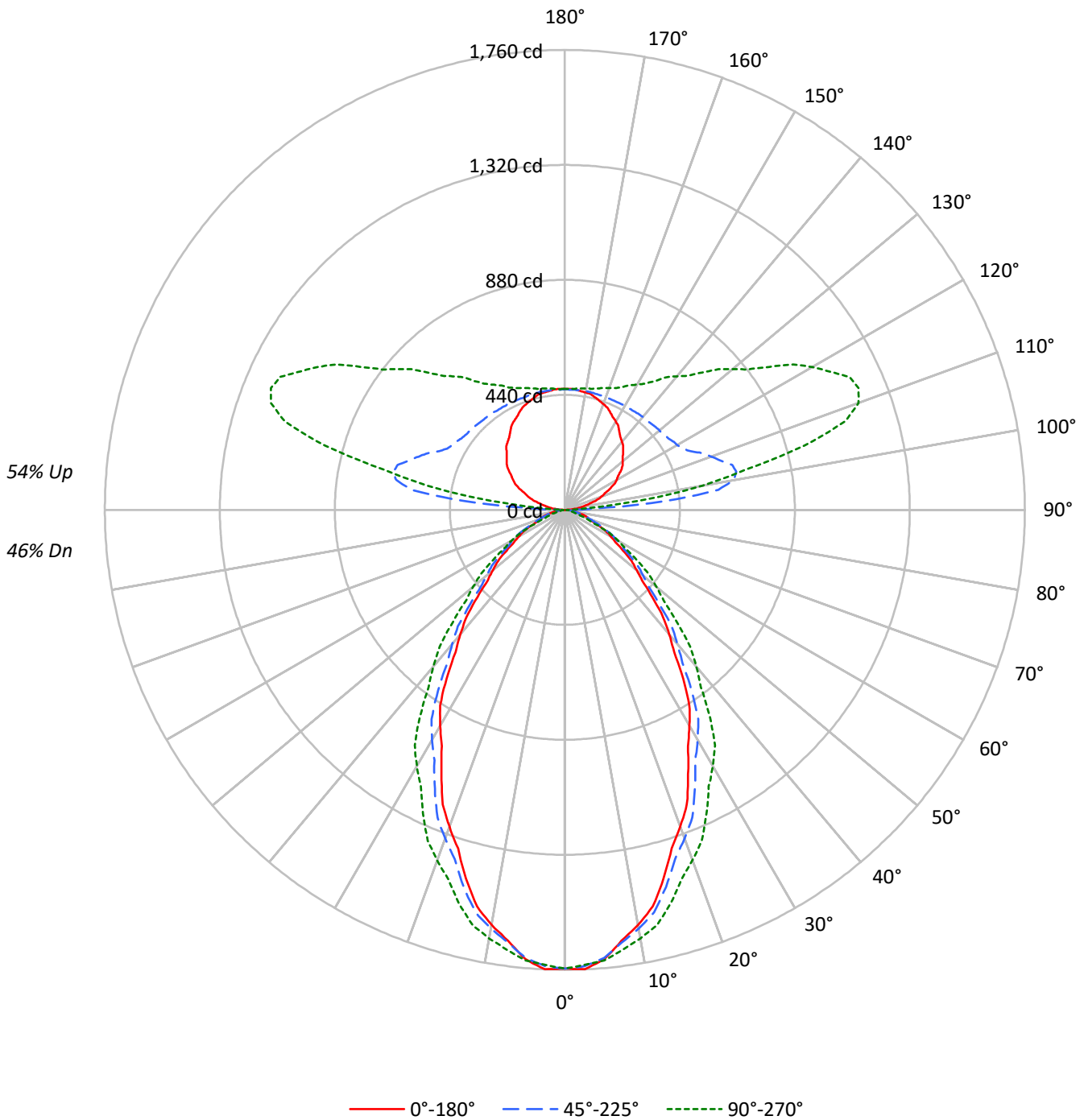
Lumens per Lamp: N/A  
Luminaire Lumens: 5577.7 lumens  
Efficiency: N/A  
Efficacy: 124.5 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 44.8  
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	66	66	66	52	52	52	46				46
1	98	94	91	87	90	87	84	81	73	70	69	60	58	57	48	47	46	41				41
2	90	83	78	73	83	77	72	68	65	61	59	54	51	49	43	42	41	36				36
3	83	74	68	62	76	69	63	58	58	54	51	49	46	43	40	38	36	32				32
4	76	66	59	54	70	62	55	50	52	48	44	44	41	38	36	34	32	28				28
5	71	60	52	47	65	56	49	44	48	43	39	40	36	34	33	31	29	25				25
6	65	54	47	41	60	50	44	39	43	38	34	37	33	30	30	28	26	23				23
7	61	49	42	37	56	46	39	35	40	35	31	34	30	27	28	25	23	21				21
8	57	45	38	33	52	42	36	31	36	31	28	31	27	25	26	23	21	19				19
9	53	41	34	30	49	39	32	28	34	29	25	29	25	22	24	22	20	17				17
10	50	38	31	27	46	36	30	26	31	26	23	27	23	21	23	20	18	16				16

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

	0°	45°	90°
0°	10797	10797	10797
5°	10662	10624	10686
10°	10074	10165	10401
15°	9300	9515	9942
20°	8445	8763	9342
25°	7575	7987	8704
30°	6773	7216	8042
35°	5922	6350	7259
40°	4985	5380	6284
45°	4114	4469	5246
50°	3434	3744	4371
55°	2916	3213	3610
60°	2492	2786	2881
65°	1984	2343	1861
70°	1759	1829	1137
75°	1630	1483	696
80°	1502	1364	599
85°	1362	1249	487



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	161.0	2.9
10°-20°	418.8	7.5
20°-30°	542.5	9.7
30°-40°	531.2	9.5
40°-50°	406.6	7.3
50°-60°	270.9	4.9
60°-70°	147.9	2.7
70°-80°	61.6	1.1
80°-90°	19.2	0.3
90°-100°	221.9	4.0
100°-110°	602.8	10.8
110°-120°	619.7	11.1
120°-130°	495.5	8.9
130°-140°	389.3	7.0
140°-150°	298.5	5.4
150°-160°	214.7	3.8
160°-170°	131.3	2.4
170°-180°	44.2	0.8
0°-30°	1122.3	20.1
0°-40°	1653.5	29.6
0°-60°	2331.0	41.8
0°-90°	2559.7	45.9
90°-120°	1444.4	25.9
90°-150°	2627.7	47.1
90°-180°	3018.0	54.1
0°-180°	5577.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1755	1755	1755	1755	1755	
5°	1727	1710	1721	1725	1731	161
15°	1460	1455	1494	1535	1561	408
25°	1116	1119	1177	1228	1282	513
35°	789	792	846	903	967	490
45°	473	482	514	553	603	369
55°	272	283	300	311	337	247
65°	136	148	161	141	128	142
75°	69	69	62	43	29	73
85°	19	19	18	12	7	21
90°	2	6	10	13	13	3
95°	33	121	386	168	113	35
105°	107	167	663	1009	950	114
115°	190	231	531	1056	1202	188
125°	262	298	480	809	954	233
135°	315	350	467	659	743	244
145°	364	390	461	560	602	229
155°	412	426	458	503	517	190
165°	446	452	459	479	480	126
175°	462	464	461	467	465	44
180°	462	462	462	462	462	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1755.4	1755.4	1755.4	1755.4	1755.4
2.5°	1759.7	1744.0	1748.0	1747.9	1743.1
5°	1726.9	1709.6	1720.7	1724.7	1730.8
7.5°	1662.8	1649.7	1670.1	1685.1	1697.3
10°	1612.9	1601.6	1627.5	1649.5	1665.3
12.5°	1555.0	1545.5	1577.6	1607.1	1627.7
15°	1460.4	1455.1	1494.3	1534.9	1561.3
17.5°	1359.2	1356.6	1401.5	1449.0	1482.7
20°	1290.2	1289.4	1338.7	1388.1	1427.3
22.5°	1220.5	1222.2	1274.0	1325.4	1370.0
25°	1116.1	1119.1	1176.9	1228.2	1282.5
27.5°	1019.5	1020.9	1080.7	1134.8	1192.7
30°	953.6	957.3	1016.0	1072.0	1132.3
32.5°	887.6	892.0	949.4	1007.3	1068.8
35°	788.7	792.5	845.7	902.6	966.7
37.5°	686.8	691.9	739.1	792.9	855.9
40°	620.8	628.4	670.1	720.8	782.6
42.5°	557.4	566.7	605.4	653.5	709.2
45°	472.9	482.0	513.8	552.6	603.1
47.5°	400.2	410.6	435.0	468.5	511.6
50°	358.9	368.7	391.3	416.1	456.8
52.5°	322.6	332.4	352.5	371.6	406.2
55°	271.9	283.2	299.6	311.0	336.6
57.5°	230.3	241.1	254.2	259.3	274.8
60°	202.6	214.6	226.5	225.9	234.2
62.5°	177.3	187.6	199.3	191.2	191.6
65°	136.3	147.6	161.0	140.7	127.9
67.5°	110.1	112.6	126.3	98.1	82.9
70°	97.8	97.8	101.7	76.0	63.2
72.5°	86.1	86.1	82.6	61.8	48.4
75°	68.6	68.6	62.4	42.8	29.3
77.5°	52.8	52.2	47.8	32.0	21.3
80°	42.4	42.4	38.5	25.2	16.9
82.5°	33.1	33.1	29.9	19.7	12.6
85°	19.3	19.3	17.7	11.5	6.9
87.5°	7.1	7.9	8.2	6.4	5.8
90°	1.5	5.8	10.4	13.4	13.4
92.5°	13.4	60.8	105.5	45.3	38.3
95°	32.7	121.3	386.4	168.2	113.0
97.5°	54.1	134.0	592.4	460.9	323.7
100°	68.4	142.5	655.4	664.4	536.5
102.5°	82.6	150.9	672.1	821.7	708.9
105°	107.0	166.6	662.9	1009.3	949.7
107.5°	132.3	184.9	624.5	1106.1	1122.7
110°	150.1	198.1	596.0	1125.2	1196.4

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	165.6	211.2	567.4	1109.4	1216.6
115°	190.2	230.9	530.6	1055.6	1202.4
117.5°	213.4	252.4	507.1	979.3	1144.7
120°	228.9	266.7	496.4	928.2	1092.4
122.5°	242.0	279.7	489.3	876.9	1035.3
125°	261.6	297.9	480.1	808.8	954.2
127.5°	279.1	315.2	475.0	757.2	881.9
130°	289.8	324.7	472.6	724.8	836.7
132.5°	300.5	335.4	470.2	697.2	796.3
135°	315.1	350.0	466.7	658.8	743.1
137.5°	330.8	362.5	464.9	624.9	695.9
140°	340.3	370.9	463.7	603.4	667.3
142.5°	349.9	378.0	462.5	586.5	640.0
145°	364.1	390.3	460.7	559.8	601.9
147.5°	380.2	402.6	459.2	538.8	571.9
150°	390.9	409.8	459.2	526.7	552.9
152.5°	399.2	415.8	458.1	515.9	537.4
155°	411.7	426.2	457.8	502.7	517.2
157.5°	423.9	435.2	457.8	493.7	504.7
160°	431.0	441.2	457.8	487.7	496.4
162.5°	438.1	446.0	458.9	482.9	489.3
165°	445.9	451.7	459.2	478.6	480.1
167.5°	453.9	456.8	460.7	473.5	474.7
170°	456.3	459.2	460.7	471.1	471.1
172.5°	458.6	460.4	460.7	468.8	468.8
175°	462.2	463.7	460.7	466.6	465.2
177.5°	463.4	463.4	459.8	464.5	462.2
180°	462.2	462.2	462.2	462.2	462.2

(END OF REPORT)