

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: P519149

Luminaire Tested: **SQ4-WB-050U-125D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519149  
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-125D-840-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

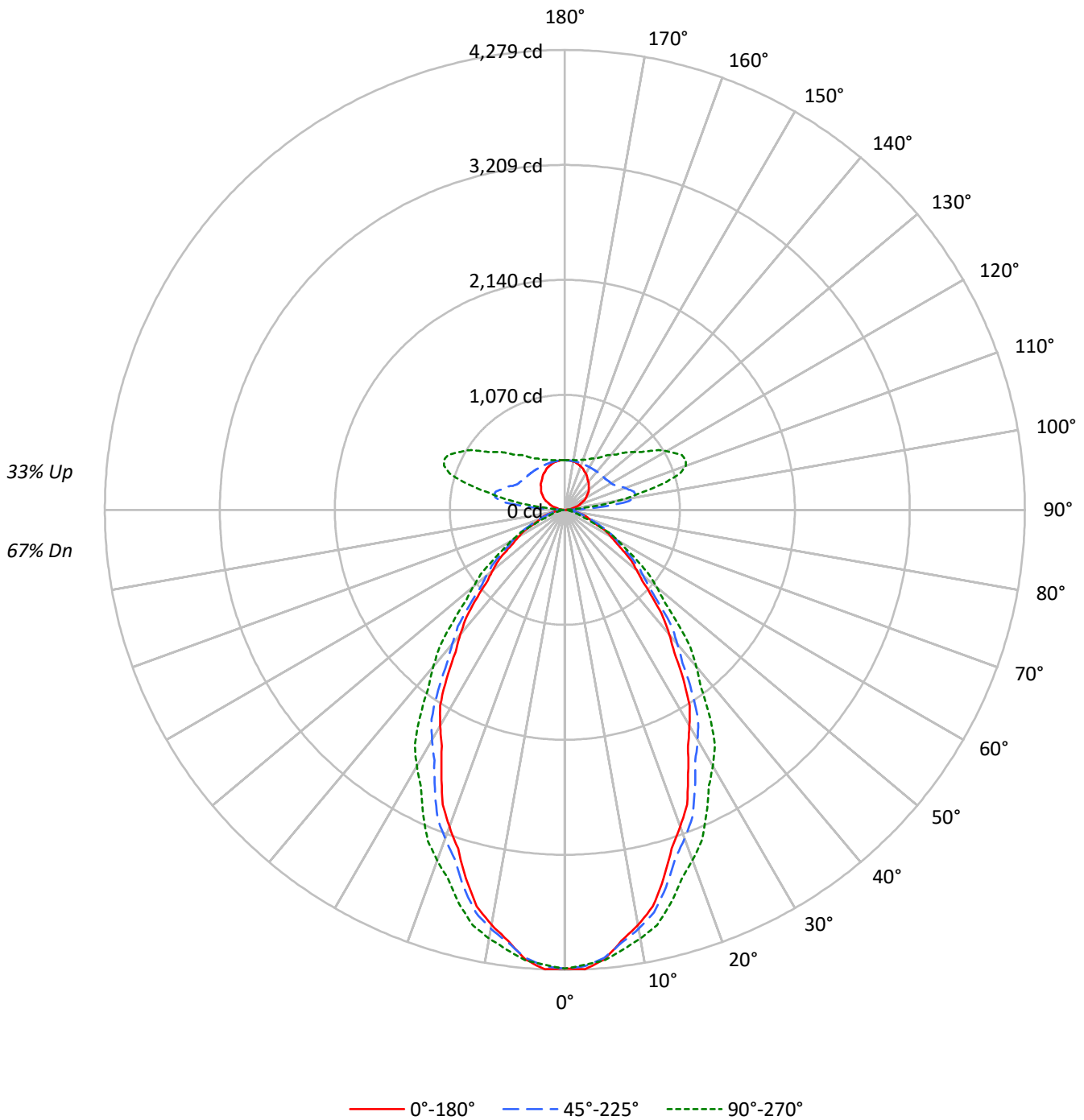
Lumens per Lamp: N/A  
Luminaire Lumens: 9239.1 lumens  
Efficiency: N/A  
Efficacy: 105.2 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 87.8  
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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67				
1	103	99	96	93	97	94	91	88	84	82	80	75	73	71	66	65	64	60				
2	95	89	83	79	90	84	79	75	75	72	69	67	65	62	60	58	56	53				
3	88	79	73	67	83	75	70	65	68	63	60	61	58	55	55	52	50	47				
4	81	72	64	59	77	68	62	57	62	57	52	56	52	48	50	47	44	41				
5	76	65	57	52	71	62	55	50	56	51	47	51	47	43	46	43	40	37				
6	70	59	51	46	66	56	49	44	51	46	42	47	42	39	42	39	36	34				
7	65	54	46	41	62	52	45	40	47	42	38	43	39	35	39	36	33	31				
8	61	50	42	37	58	48	41	36	44	38	34	40	35	32	37	33	30	28				
9	57	46	39	34	54	44	37	33	40	35	31	37	33	29	34	30	28	26				
10	54	42	36	31	51	41	34	30	38	32	29	35	30	27	32	28	25	24				

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

	0°	45°	90°
0°	26252	26252	26252
5°	25925	25832	25983
10°	24493	24715	25289
15°	22611	23135	24173
20°	20533	21305	22715
25°	18417	19421	21162
30°	16467	17544	19553
35°	14400	15440	17649
40°	12120	13082	15278
45°	10002	10866	12756
50°	8351	9104	10627
55°	7089	7812	8776
60°	6059	6773	7003
65°	4825	5696	4525
70°	4277	4446	2762
75°	3962	3605	1692
80°	3648	3315	1459
85°	3303	3042	1193



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	391.5	4.2
10°-20°	1018.3	11.0
20°-30°	1318.9	14.3
30°-40°	1291.6	14.0
40°-50°	988.6	10.7
50°-60°	658.8	7.1
60°-70°	359.5	3.9
70°-80°	149.8	1.6
80°-90°	44.2	0.5
90°-100°	221.9	2.4
100°-110°	602.8	6.5
110°-120°	619.7	6.7
120°-130°	495.5	5.4
130°-140°	389.3	4.2
140°-150°	298.5	3.2
150°-160°	214.7	2.3
160°-170°	131.3	1.4
170°-180°	44.2	0.5
0°-30°	2728.7	29.5
0°-40°	4020.3	43.5
0°-60°	5667.7	61.3
0°-90°	6221.2	67.3
90°-120°	1444.4	15.6
90°-150°	2627.7	28.4
90°-180°	3018.0	32.7
0°-180°	9239.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4268	4268	4268	4268	4268	
5°	4199	4157	4184	4194	4208	391
15°	3551	3538	3633	3732	3796	992
25°	2714	2721	2862	2986	3118	1248
35°	1918	1927	2056	2195	2350	1192
45°	1150	1172	1249	1344	1466	897
55°	661	689	728	756	818	599
65°	332	359	391	342	311	345
75°	167	167	152	104	71	178
85°	47	47	43	28	17	51
90°	2	6	10	13	13	5
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°	4268.1	4268.1	4268.1	4268.1	4268.1
2.5°	4278.6	4240.5	4250.1	4249.8	4238.1
5°	4198.8	4156.7	4183.8	4193.5	4208.2
7.5°	4043.0	4011.1	4060.6	4097.2	4126.9
10°	3921.6	3894.2	3957.2	4010.5	4049.0
12.5°	3780.8	3757.7	3835.9	3907.4	3957.6
15°	3550.8	3538.0	3633.2	3732.1	3796.1
17.5°	3304.7	3298.5	3407.7	3523.1	3605.1
20°	3136.9	3135.1	3254.9	3375.1	3470.3
22.5°	2967.6	2971.7	3097.6	3222.5	3330.9
25°	2713.7	2721.0	2861.6	2986.4	3118.2
27.5°	2478.8	2482.1	2627.5	2759.2	2899.8
30°	2318.5	2327.7	2470.2	2606.5	2753.0
32.5°	2158.2	2168.8	2308.4	2449.3	2598.7
35°	1917.7	1926.9	2056.3	2194.7	2350.4
37.5°	1669.8	1682.2	1797.1	1928.0	2081.0
40°	1509.5	1527.8	1629.3	1752.6	1902.8
42.5°	1355.2	1377.9	1472.0	1589.0	1724.5
45°	1149.9	1171.9	1249.2	1343.7	1466.4
47.5°	973.1	998.4	1057.8	1139.2	1243.9
50°	872.7	896.5	951.4	1011.7	1110.6
52.5°	784.3	808.1	857.0	903.5	987.7
55°	661.1	688.6	728.5	756.1	818.4
57.5°	560.0	586.3	618.0	630.5	668.2
60°	492.5	521.8	550.6	549.2	569.3
62.5°	431.1	456.0	484.7	464.9	466.0
65°	331.5	359.0	391.4	342.0	310.9
67.5°	267.8	273.7	307.1	238.5	201.5
70°	237.8	237.8	247.2	184.7	153.6
72.5°	209.4	209.4	200.8	150.2	117.6
75°	166.7	166.7	151.7	104.1	71.2
77.5°	128.5	127.0	116.1	77.7	51.7
80°	103.0	103.0	93.6	61.3	41.2
82.5°	80.5	80.5	72.7	47.9	30.7
85°	46.8	46.8	43.1	27.8	16.9
87.5°	16.8	17.6	17.1	11.6	10.2
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)