

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: P518477

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

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518477  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2009-966-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-BB-050U-125D-840-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

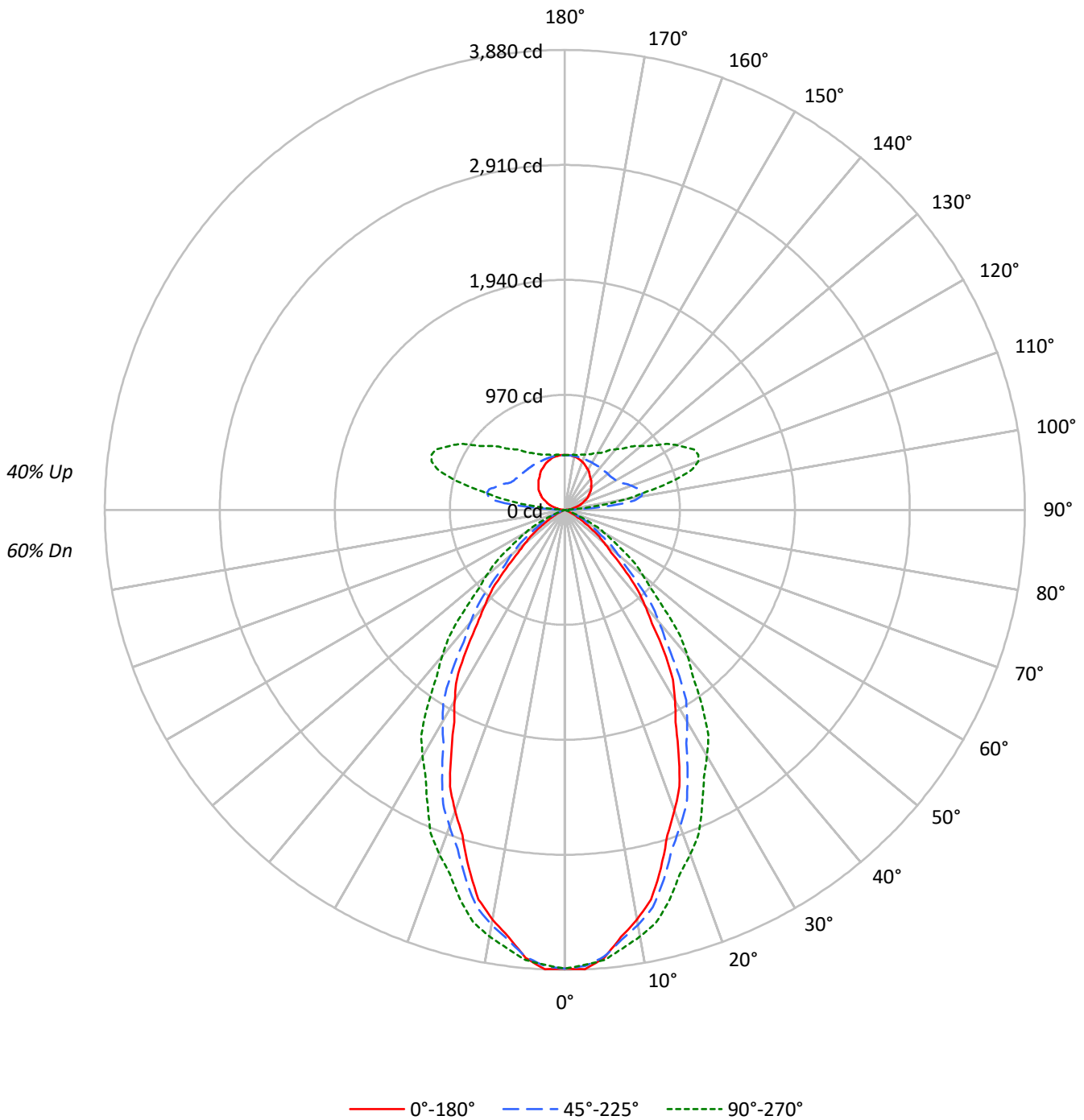
Lumens per Lamp: N/A  
Luminaire Lumens: 7637.2 lumens  
Efficiency: N/A  
Efficacy: 87.0 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Direct

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	0
RCR																		
0	110	110	110	110	102	102	102	102	89	89	89	77	77	77	66	66	66	60
1	102	99	96	93	96	93	90	88	81	79	78	71	70	68	61	61	60	55
2	95	89	84	79	89	84	79	76	74	71	68	65	63	61	57	55	54	50
3	88	80	74	69	83	76	70	66	67	63	60	60	57	54	52	50	48	45
4	82	73	66	61	77	69	63	58	61	57	53	55	51	48	48	46	44	41
5	76	66	59	54	72	63	56	52	56	51	48	50	47	44	45	42	40	37
6	71	60	53	48	67	57	51	46	52	47	43	47	43	40	42	39	36	34
7	66	55	48	43	62	53	46	42	48	43	39	43	39	36	39	36	33	31
8	62	51	44	39	59	49	42	38	44	39	35	40	36	33	36	33	31	29
9	58	47	40	36	55	45	39	35	41	36	33	37	33	30	34	31	28	26
10	55	44	37	33	52	42	36	32	38	33	30	35	31	28	32	29	26	24

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

	0°	45°	90°
0°	23808	23808	23808
5°	23425	23367	23541
10°	21918	22210	22830
15°	19926	20558	21703
20°	17687	18606	20237
25°	15403	16623	18593
30°	13193	14644	17037
35°	10939	12430	15158
40°	8405	9939	12916
45°	6076	7526	10392
50°	4140	5608	8243
55°	2691	4057	6406
60°	1544	2856	4630
65°	409	1744	2343
70°	201	540	674
75°	88	45	0
80°	67	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	353.2	4.6
10°-20°	903.4	11.8
20°-30°	1130.9	14.8
30°-40°	1044.6	13.7
40°-50°	701.9	9.2
50°-60°	362.6	4.7
60°-70°	113.6	1.5
70°-80°	7.2	0.1
80°-90°	1.9	0.0
90°-100°	221.9	2.9
100°-110°	602.8	7.9
110°-120°	619.7	8.1
120°-130°	495.5	6.5
130°-140°	389.3	5.1
140°-150°	298.5	3.9
150°-160°	214.7	2.8
160°-170°	131.3	1.7
170°-180°	44.2	0.6
0°-30°	2387.5	31.3
0°-40°	3432.1	44.9
0°-60°	4496.6	58.9
0°-90°	4619.2	60.5
90°-120°	1444.4	18.9
90°-150°	2627.7	34.4
90°-180°	3018.0	39.5
0°-180°	7637.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3871	3871	3871	3871	3871	
5°	3794	3756	3785	3798	3813	352
15°	3129	3118	3228	3337	3408	872
25°	2270	2288	2449	2617	2740	1041
35°	1457	1494	1655	1850	2019	903
45°	698	741	865	1034	1195	549
55°	251	293	378	486	597	234
65°	28	54	120	145	161	47
75°	4	4	2	0	0	5
85°	0	0	0	0	0	0
90°	2	6	10	13	13	2
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°	3870.7	3870.7	3870.7	3870.7	3870.7
2.5°	3879.7	3843.1	3852.7	3852.5	3842.3
5°	3793.9	3755.5	3784.6	3798.0	3812.7
7.5°	3633.6	3603.6	3659.5	3701.4	3731.8
10°	3509.3	3483.7	3556.1	3613.3	3655.4
12.5°	3365.5	3345.7	3433.3	3511.6	3565.5
15°	3129.2	3118.2	3228.4	3336.8	3408.2
17.5°	2876.0	2875.6	3001.4	3136.0	3222.0
20°	2702.2	2707.7	2842.6	2991.0	3091.7
22.5°	2528.4	2541.2	2685.3	2840.0	2955.4
25°	2269.6	2287.9	2449.4	2617.0	2739.7
27.5°	2020.9	2047.7	2217.6	2391.7	2541.2
30°	1857.6	1888.8	2061.8	2245.0	2398.8
32.5°	1697.3	1734.3	1903.0	2096.8	2253.5
35°	1456.9	1493.5	1655.4	1850.2	2018.7
37.5°	1208.6	1244.5	1402.6	1594.4	1776.4
40°	1046.8	1087.1	1237.8	1423.7	1608.6
42.5°	900.0	940.3	1082.0	1264.6	1439.3
45°	698.5	740.6	865.2	1033.6	1194.7
47.5°	531.5	577.2	686.5	838.9	985.7
50°	432.6	478.4	586.1	720.4	861.4
52.5°	353.2	397.5	494.7	621.3	750.5
55°	250.9	293.0	378.3	485.7	597.4
57.5°	173.4	209.7	286.1	375.8	463.3
60°	125.5	160.3	232.2	305.0	376.4
62.5°	83.5	115.4	185.8	241.5	289.5
65°	28.1	53.7	119.8	144.6	161.0
67.5°	14.2	17.2	62.9	66.4	71.9
70°	11.2	11.2	30.0	32.0	37.5
72.5°	8.2	8.2	12.0	15.4	16.5
75°	3.7	3.7	1.9	0.0	0.0
77.5°	1.9	1.9	1.5	0.0	0.0
80°	1.9	1.9	0.0	0.0	0.0
82.5°	0.4	0.4	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	1.2	2.1	2.7	2.7
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)