

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: P518472

Luminaire Tested: **SQ4-BB-050U-125D-835-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518472  
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-835-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

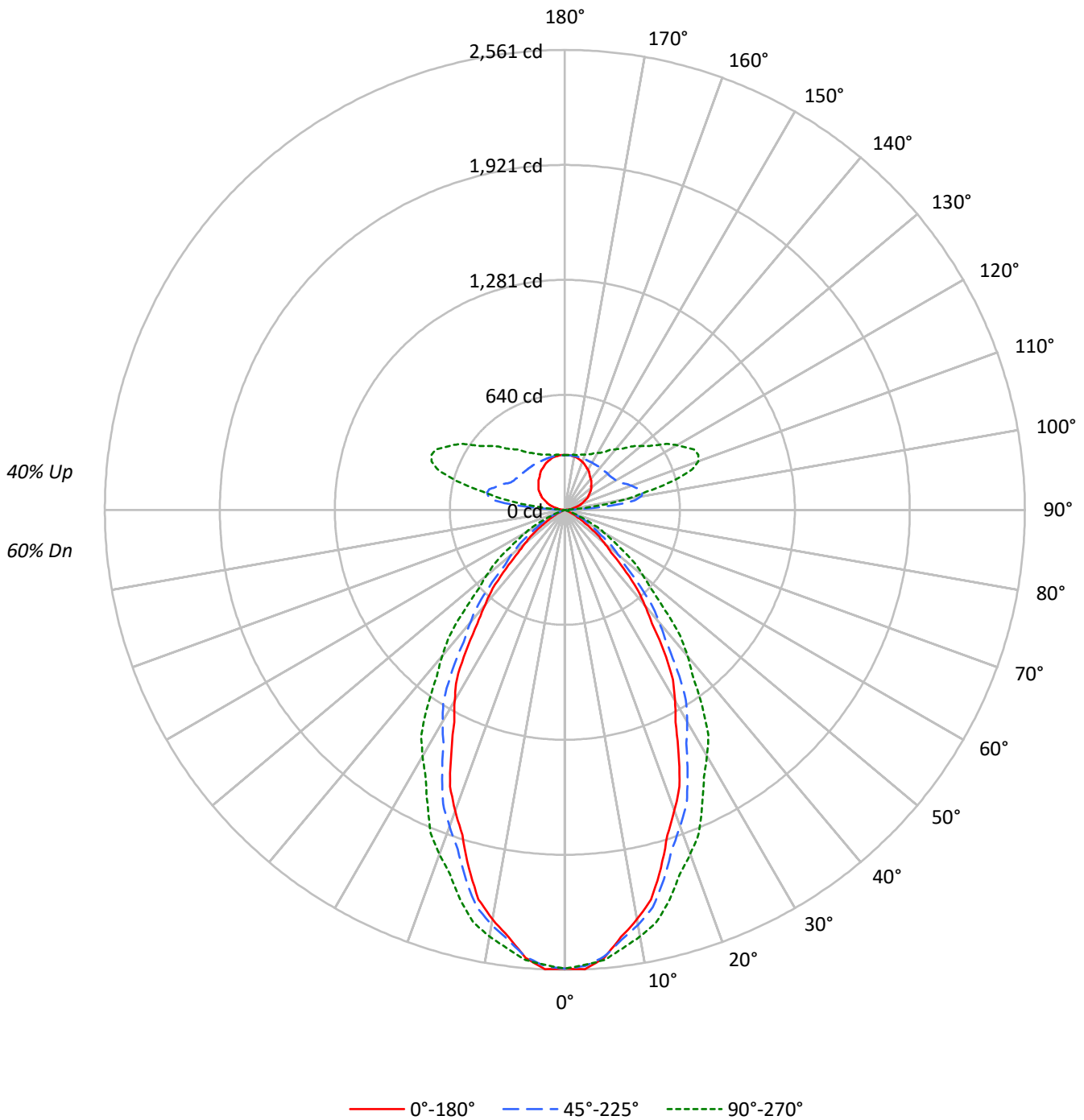
Lumens per Lamp: N/A  
Luminaire Lumens: 5040.7 lumens  
Efficiency: N/A  
Efficacy: 90.2 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 55.9  
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	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°	23571	23571	23571
5°	23192	23134	23306
10°	21699	21989	22603
15°	19727	20353	21486
20°	17511	18421	20035
25°	15250	16458	18407
30°	13062	14497	16868
35°	10831	12306	15007
40°	8321	9840	12787
45°	6015	7450	10290
50°	4098	5553	8161
55°	2664	4017	6342
60°	1528	2829	4584
65°	404	1727	2321
70°	200	534	666
75°	89	43	0
80°	64	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	233.2	4.6
10°-20°	596.2	11.8
20°-30°	746.4	14.8
30°-40°	689.5	13.7
40°-50°	463.3	9.2
50°-60°	239.3	4.7
60°-70°	74.9	1.5
70°-80°	4.7	0.1
80°-90°	1.3	0.0
90°-100°	146.4	2.9
100°-110°	397.8	7.9
110°-120°	409.0	8.1
120°-130°	327.0	6.5
130°-140°	257.0	5.1
140°-150°	197.0	3.9
150°-160°	141.7	2.8
160°-170°	86.7	1.7
170°-180°	29.2	0.6
0°-30°	1575.8	31.3
0°-40°	2265.3	44.9
0°-60°	2967.9	58.9
0°-90°	3048.8	60.5
90°-120°	953.3	18.9
90°-150°	1734.4	34.4
90°-180°	1992.0	39.5
0°-180°	5040.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2555	2555	2555	2555	2555	
5°	2504	2479	2498	2507	2516	232
15°	2065	2058	2131	2202	2250	575
25°	1498	1510	1617	1727	1808	687
35°	962	986	1093	1221	1332	596
45°	461	489	571	682	789	362
55°	166	193	250	321	394	155
65°	18	36	79	95	106	31
75°	2	2	1	0	0	4
85°	0	0	0	0	0	0
90°	1	4	7	9	9	2
95°	22	80	255	111	75	23
105°	71	110	438	666	627	75
115°	126	152	350	697	794	124
125°	173	197	317	534	630	154
135°	208	231	308	435	490	161
145°	240	258	304	370	397	151
155°	272	281	302	332	341	125
165°	294	298	303	316	317	83
175°	305	306	304	308	307	29
180°	305	305	305	305	305	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2554.8	2554.8	2554.8	2554.8	2554.8
2.5°	2560.7	2536.5	2542.9	2542.8	2536.0
5°	2504.1	2478.7	2497.9	2506.8	2516.5
7.5°	2398.3	2378.5	2415.4	2443.0	2463.1
10°	2316.2	2299.3	2347.1	2384.8	2412.6
12.5°	2221.3	2208.3	2266.0	2317.8	2353.3
15°	2065.3	2058.1	2130.8	2202.4	2249.5
17.5°	1898.2	1898.0	1981.0	2069.8	2126.6
20°	1783.5	1787.1	1876.2	1974.1	2040.6
22.5°	1668.8	1677.3	1772.4	1874.5	1950.6
25°	1498.0	1510.1	1616.7	1727.3	1808.2
27.5°	1333.9	1351.5	1463.6	1578.6	1677.2
30°	1226.1	1246.6	1360.8	1481.8	1583.3
32.5°	1120.3	1144.7	1256.0	1383.9	1487.4
35°	961.6	985.8	1092.6	1221.2	1332.4
37.5°	797.7	821.4	925.7	1052.3	1172.5
40°	690.9	717.5	817.0	939.6	1061.7
42.5°	594.0	620.6	714.1	834.7	950.0
45°	461.0	488.8	571.0	682.2	788.6
47.5°	350.8	381.0	453.1	553.7	650.6
50°	285.5	315.7	386.9	475.5	568.6
52.5°	233.1	262.4	326.5	410.1	495.4
55°	165.6	193.4	249.7	320.6	394.3
57.5°	114.5	138.4	188.9	248.0	305.8
60°	82.8	105.8	153.3	201.3	248.4
62.5°	55.1	76.2	122.6	159.4	191.1
65°	18.5	35.5	79.1	95.4	106.3
67.5°	9.4	11.3	41.5	43.8	47.5
70°	7.4	7.4	19.8	21.1	24.7
72.5°	5.4	5.4	7.9	10.2	10.9
75°	2.5	2.5	1.2	0.0	0.0
77.5°	1.2	1.2	1.0	0.0	0.0
80°	1.2	1.2	0.0	0.0	0.0
82.5°	0.2	0.2	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.2	0.8	1.4	1.8	1.8
90°	1.0	3.9	6.9	8.8	8.8
92.5°	8.8	40.1	69.6	29.9	25.3
95°	21.6	80.1	255.0	111.0	74.6
97.5°	35.7	88.5	391.0	304.2	213.7
100°	45.1	94.0	432.6	438.5	354.1
102.5°	54.5	99.6	443.6	542.3	467.9
105°	70.6	110.0	437.5	666.1	626.8
107.5°	87.3	122.0	412.2	730.1	741.0
110°	99.1	130.7	393.4	742.7	789.7

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	109.3	139.4	374.5	732.2	803.0
115°	125.6	152.4	350.2	696.7	793.6
117.5°	140.9	166.6	334.7	646.4	755.5
120°	151.1	176.0	327.6	612.6	721.0
122.5°	159.7	184.6	322.9	578.8	683.3
125°	172.6	196.6	316.8	533.9	629.8
127.5°	184.2	208.0	313.5	499.8	582.1
130°	191.3	214.3	311.9	478.4	552.3
132.5°	198.3	221.4	310.4	460.2	525.6
135°	208.0	231.0	308.0	434.8	490.5
137.5°	218.4	239.3	306.8	412.5	459.3
140°	224.6	244.8	306.1	398.2	440.4
142.5°	230.9	249.5	305.3	387.1	422.4
145°	240.3	257.6	304.1	369.5	397.3
147.5°	250.9	265.7	303.1	355.6	377.5
150°	258.0	270.5	303.1	347.6	364.9
152.5°	263.5	274.4	302.3	340.5	354.7
155°	271.7	281.3	302.1	331.8	341.4
157.5°	279.8	287.2	302.1	325.8	333.1
160°	284.5	291.2	302.1	321.9	327.6
162.5°	289.2	294.4	302.9	318.7	322.9
165°	294.3	298.1	303.1	315.9	316.8
167.5°	299.6	301.5	304.1	312.5	313.3
170°	301.2	303.1	304.1	311.0	311.0
172.5°	302.7	303.9	304.1	309.4	309.4
175°	305.1	306.0	304.1	308.0	307.0
177.5°	305.9	305.9	303.5	306.6	305.1
180°	305.1	305.1	305.1	305.1	305.1

(END OF REPORT)