

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: P518836

Luminaire Tested: **SQ4-BB-125U-100D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518836  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-125U-100D-840-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

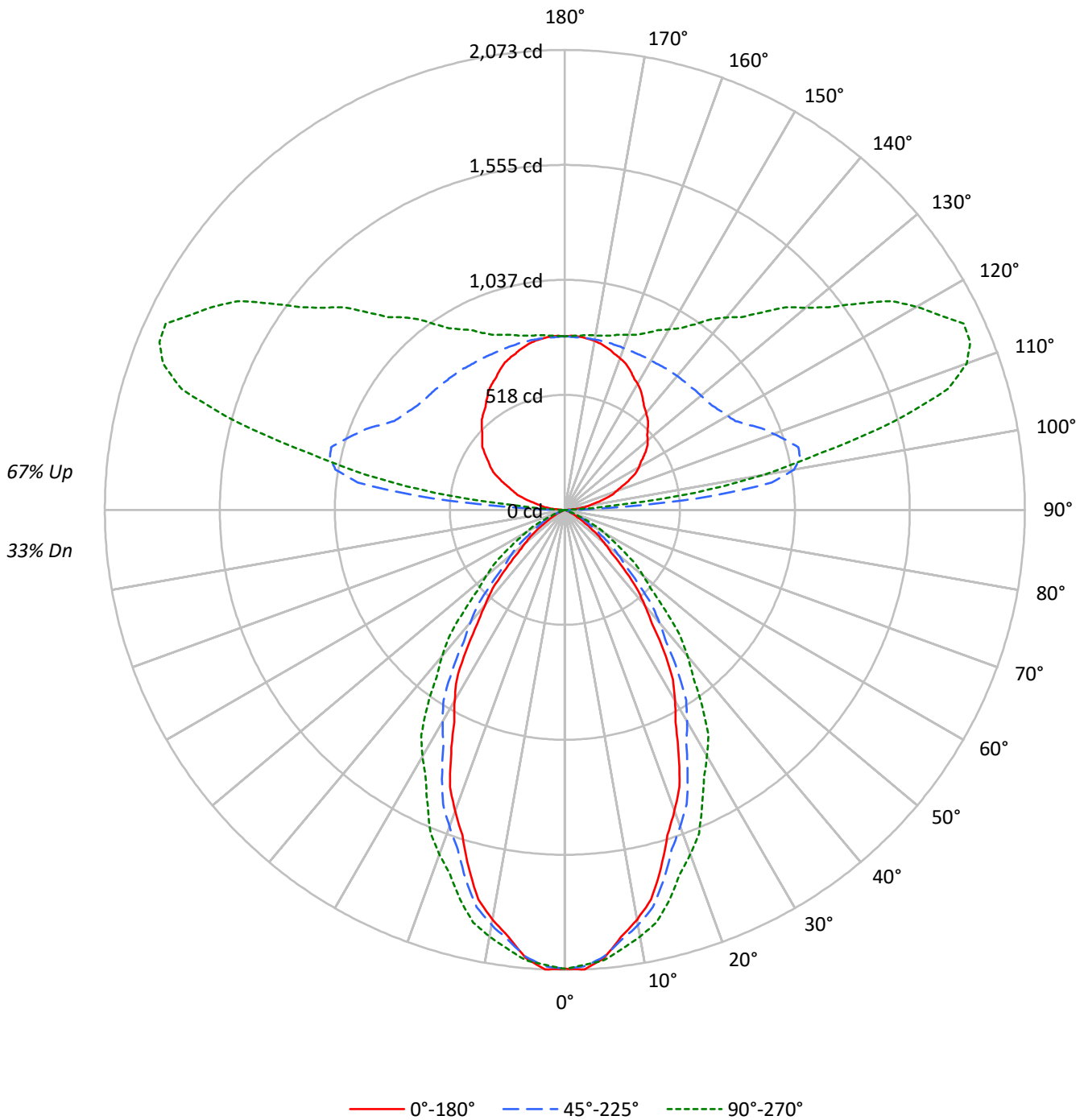
Lumens per Lamp: N/A  
Luminaire Lumens: 7518.9 lumens  
Efficiency: N/A  
Efficacy: 116.6 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 64.5  
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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	95	91	88	85	86	83	80	77	66	64	63	51	50	49	37	37	36	30
2	88	81	76	71	79	74	69	65	59	56	54	46	45	43	34	33	32	27
3	81	72	66	61	73	66	60	56	54	50	47	42	40	38	32	30	29	24
4	74	65	58	53	67	59	53	49	48	44	41	38	36	33	29	27	26	22
5	69	58	51	46	62	53	47	42	44	39	36	35	32	30	27	25	24	20
6	64	53	45	40	58	48	42	38	40	35	32	32	29	27	25	23	21	18
7	59	48	41	36	53	44	38	33	37	32	29	30	26	24	23	21	20	17
8	55	44	37	32	50	40	34	30	34	29	26	27	24	22	21	19	18	15
9	51	40	33	29	47	37	31	27	31	27	23	25	22	20	20	18	16	14
10	48	37	30	26	44	34	28	24	29	24	21	24	20	18	19	17	15	13

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

	0°	45°	90°
0°	19083	19083	19083
5°	18777	18730	18869
10°	17569	17803	18300
15°	15971	16479	17396
20°	14178	14914	16221
25°	12346	13325	14904
30°	10576	11738	13657
35°	8768	9963	12150
40°	6737	7967	10353
45°	4871	6032	8330
50°	3319	4495	6607
55°	2157	3251	5134
60°	1236	2290	3711
65°	327	1397	1880
70°	162	432	540
75°	71	36	0
80°	53	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	188.8	2.5
10°-20°	482.7	6.4
20°-30°	604.3	8.0
30°-40°	558.2	7.4
40°-50°	375.1	5.0
50°-60°	193.7	2.6
60°-70°	60.7	0.8
70°-80°	3.8	0.1
80°-90°	1.9	0.0
90°-100°	365.9	4.9
100°-110°	985.7	13.1
110°-120°	1034.5	13.8
120°-130°	839.4	11.2
130°-140°	658.3	8.8
140°-150°	505.4	6.7
150°-160°	363.4	4.8
160°-170°	222.0	3.0
170°-180°	74.9	1.0
0°-30°	1275.8	17.0
0°-40°	1834.0	24.4
0°-60°	2402.9	32.0
0°-90°	2469.3	32.8
90°-120°	2386.1	31.7
90°-150°	4389.3	58.4
90°-180°	5050.0	67.2
0°-180°	7518.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2068	2068	2068	2068	2068	
5°	2027	2007	2022	2030	2037	188
15°	1672	1666	1725	1783	1821	466
25°	1213	1223	1309	1398	1464	556
35°	778	798	885	989	1079	482
45°	373	396	462	552	638	293
55°	134	157	202	260	319	125
65°	15	29	64	77	86	25
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	2	6	12	13	13	4
95°	56	199	600	307	212	58
105°	182	284	1090	1631	1530	192
115°	322	394	908	1754	1984	317
125°	439	505	815	1378	1621	392
135°	529	590	792	1111	1258	408
145°	612	660	782	950	1020	384
155°	694	720	775	853	880	320
165°	753	762	778	809	813	212
175°	783	782	779	790	788	74
180°	782	782	782	782	782	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2068.4	2068.4	2068.4	2068.4	2068.4
2.5°	2073.2	2053.7	2058.8	2058.7	2053.2
5°	2027.4	2006.8	2022.4	2029.6	2037.4
7.5°	1941.7	1925.7	1955.5	1977.9	1994.2
10°	1875.3	1861.6	1900.3	1930.8	1953.3
12.5°	1798.4	1787.9	1834.7	1876.5	1905.3
15°	1672.1	1666.3	1725.2	1783.1	1821.3
17.5°	1536.9	1536.7	1603.9	1675.8	1721.8
20°	1444.0	1446.9	1519.0	1598.3	1652.1
22.5°	1351.1	1358.0	1435.0	1517.6	1579.3
25°	1212.8	1222.6	1308.9	1398.5	1464.0
27.5°	1079.9	1094.2	1185.0	1278.1	1357.9
30°	992.7	1009.3	1101.8	1199.7	1281.9
32.5°	907.0	926.8	1016.9	1120.5	1204.2
35°	778.5	798.1	884.6	988.7	1078.7
37.5°	645.8	665.0	749.5	852.0	949.3
40°	559.4	580.9	661.5	760.8	859.6
42.5°	480.9	502.5	578.2	675.8	769.1
45°	373.3	395.8	462.3	552.3	638.4
47.5°	284.0	308.5	366.9	448.3	526.8
50°	231.2	255.6	313.2	385.0	460.3
52.5°	188.7	212.4	264.4	332.0	401.1
55°	134.1	156.6	202.1	259.5	319.2
57.5°	92.7	112.0	152.9	200.8	247.6
60°	67.0	85.6	124.1	163.0	201.1
62.5°	44.6	61.7	99.3	129.1	154.7
65°	15.0	28.7	64.0	77.3	86.1
67.5°	7.6	9.2	33.6	35.5	38.4
70°	6.0	6.0	16.0	17.1	20.0
72.5°	4.4	4.4	6.4	8.2	8.8
75°	2.0	2.0	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	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°	0.4	1.2	2.4	2.6	2.6
90°	2.0	5.9	12.0	13.0	13.0
92.5°	24.3	85.9	169.8	81.7	56.8
95°	55.8	199.0	599.9	306.8	212.2
97.5°	89.1	227.8	940.8	786.0	592.7
100°	114.6	239.3	1049.3	1097.8	910.8
102.5°	139.3	255.4	1085.1	1331.4	1177.8
105°	182.3	283.7	1090.1	1630.9	1530.5
107.5°	223.0	313.4	1043.7	1784.8	1810.7
110°	250.1	335.8	1001.4	1832.6	1927.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	278.8	358.3	960.8	1822.0	1977.3
115°	321.9	394.0	907.8	1754.0	1983.9
117.5°	361.1	428.7	866.7	1645.4	1901.4
120°	386.6	451.9	846.0	1567.4	1830.5
122.5°	408.9	473.4	830.8	1487.7	1750.0
125°	439.4	504.7	815.1	1377.6	1621.2
127.5°	468.7	533.0	805.1	1280.6	1498.1
130°	486.3	550.6	801.1	1225.0	1416.0
132.5°	503.8	567.3	797.2	1176.0	1351.4
135°	529.1	590.5	792.2	1111.4	1258.5
137.5°	553.2	612.1	789.6	1056.6	1177.4
140°	570.0	626.5	787.2	1022.8	1132.0
142.5°	587.5	640.1	785.6	991.4	1083.3
145°	611.8	659.6	782.2	950.2	1020.4
147.5°	638.1	679.6	778.8	915.6	970.7
150°	655.7	691.7	777.2	893.9	939.6
152.5°	671.6	703.0	776.4	876.1	913.3
155°	694.5	719.9	775.2	852.6	879.9
157.5°	714.7	734.3	775.4	836.0	854.4
160°	727.4	744.0	776.2	826.4	840.0
162.5°	738.6	752.0	777.0	818.3	828.0
165°	753.3	762.1	778.2	809.2	813.1
167.5°	765.3	770.3	779.2	802.2	803.7
170°	773.2	775.2	779.2	798.2	798.2
172.5°	778.0	778.4	780.0	794.2	794.2
175°	783.2	782.2	779.2	790.1	788.2
177.5°	785.4	783.8	779.8	786.2	784.6
180°	782.2	782.2	782.2	782.2	782.2

(END OF REPORT)