

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: P518860

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

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518860  
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-125D-840-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

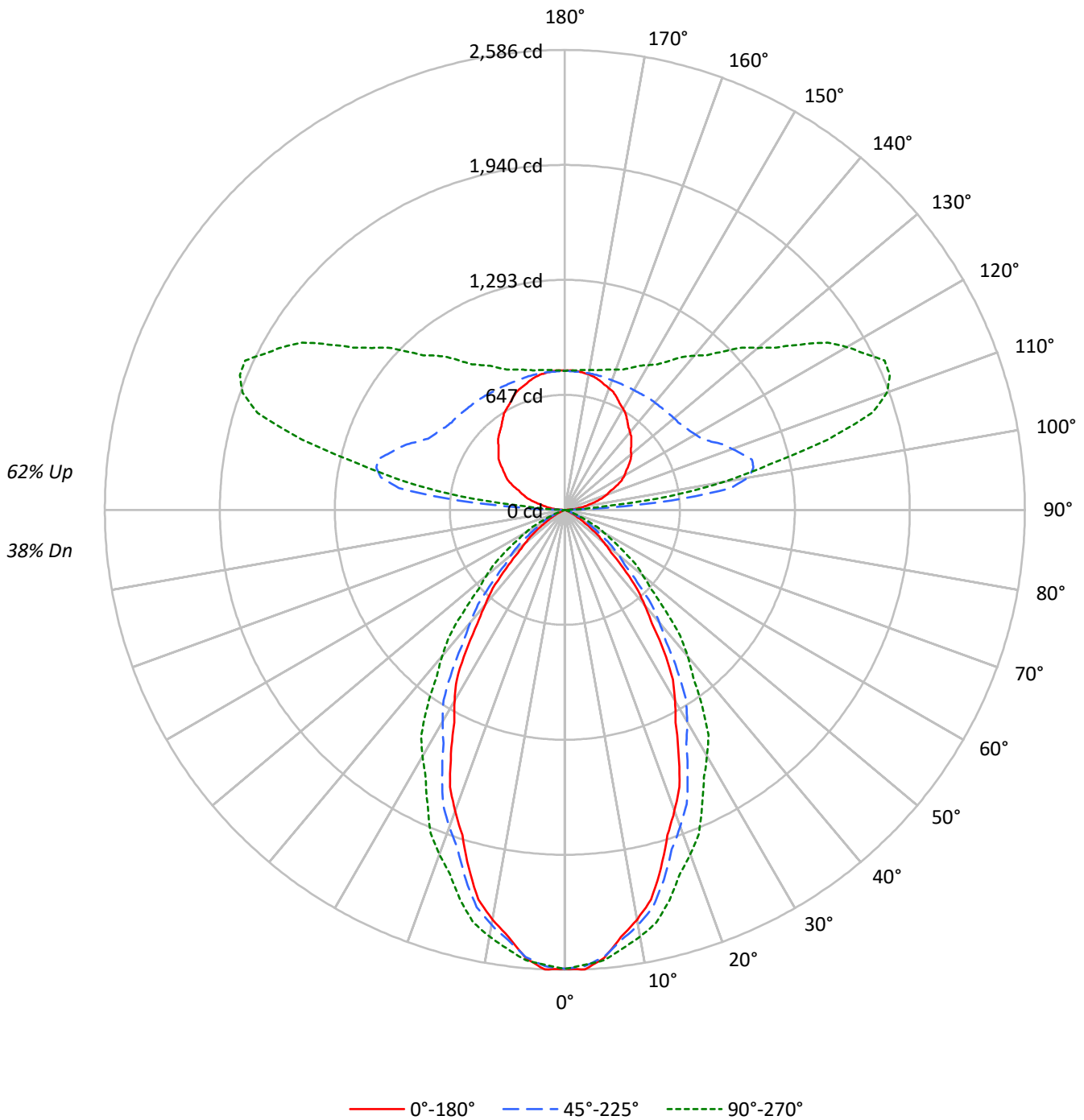
Lumens per Lamp: N/A  
Luminaire Lumens: 8129.7 lumens  
Efficiency: N/A  
Efficacy: 108.0 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 75.3  
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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38				
1	96	93	89	86	88	84	82	79	69	67	66	55	54	53	42	41	41	35				
2	89	83	77	73	81	75	71	67	62	59	56	50	48	46	39	37	36	31				
3	82	74	67	62	75	68	62	58	56	52	49	45	43	41	35	34	33	28				
4	76	66	59	54	69	61	55	50	51	47	43	41	38	36	33	31	29	26				
5	70	60	53	47	64	55	49	44	46	42	38	38	35	32	30	28	27	23				
6	65	54	47	42	59	50	44	39	42	37	34	35	32	29	28	26	24	21				
7	60	49	42	37	55	46	39	35	39	34	31	32	29	26	26	24	22	19				
8	56	45	38	33	51	42	36	31	36	31	28	30	26	24	24	22	20	18				
9	53	41	35	30	48	39	32	28	33	28	25	28	24	22	23	20	19	17				
10	49	38	32	27	45	36	30	26	31	26	23	26	22	20	21	19	17	15				

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

	0°	45°	90°
0°	23808	23808	23808
5°	23425	23367	23541
10°	21918	22210	22830
15°	19926	20558	21702
20°	17688	18607	20237
25°	15403	16623	18593
30°	13193	14643	17037
35°	10940	12430	15158
40°	8405	9939	12916
45°	6076	7526	10393
50°	4140	5609	8243
55°	2691	4057	6405
60°	1543	2856	4630
65°	408	1744	2345
70°	202	540	674
75°	89	43	0
80°	64	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	235.5	2.9
10°-20°	602.2	7.4
20°-30°	753.9	9.3
30°-40°	696.4	8.6
40°-50°	467.9	5.8
50°-60°	241.7	3.0
60°-70°	75.7	0.9
70°-80°	4.8	0.1
80°-90°	1.9	0.0
90°-100°	365.9	4.5
100°-110°	985.7	12.1
110°-120°	1034.5	12.7
120°-130°	839.4	10.3
130°-140°	658.3	8.1
140°-150°	505.4	6.2
150°-160°	363.4	4.5
160°-170°	222.0	2.7
170°-180°	74.9	0.9
0°-30°	1591.7	19.6
0°-40°	2288.1	28.1
0°-60°	2997.7	36.9
0°-90°	3080.1	37.9
90°-120°	2386.1	29.4
90°-150°	4389.3	54.0
90°-180°	5050.0	62.1
0°-180°	8129.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2580	2580	2580	2580	2580	
5°	2529	2504	2523	2532	2542	234
15°	2086	2079	2152	2224	2272	581
25°	1513	1525	1633	1745	1826	694
35°	971	996	1104	1234	1346	602
45°	466	494	577	689	796	366
55°	167	195	252	324	398	156
65°	19	36	80	96	107	32
75°	2	2	1	0	0	4
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	



TEST NUMBER: P518860

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2580.5	2580.5	2580.5	2580.5	2580.5
2.5°	2586.5	2562.1	2568.5	2568.3	2561.5
5°	2529.3	2503.7	2523.0	2532.0	2541.8
7.5°	2422.4	2402.4	2439.7	2467.6	2487.8
10°	2339.5	2322.4	2370.7	2408.8	2436.9
12.5°	2243.7	2230.5	2288.8	2341.1	2377.0
15°	2086.1	2078.8	2152.3	2224.5	2272.1
17.5°	1917.3	1917.1	2001.0	2090.7	2148.0
20°	1801.5	1805.1	1895.1	1994.0	2061.1
22.5°	1685.6	1694.2	1790.2	1893.3	1970.3
25°	1513.1	1525.3	1632.9	1744.6	1826.4
27.5°	1347.3	1365.1	1478.4	1594.5	1694.1
30°	1238.4	1259.2	1374.5	1496.7	1599.2
32.5°	1131.6	1156.2	1268.6	1397.9	1502.3
35°	971.3	995.7	1103.6	1233.5	1345.8
37.5°	805.7	829.7	935.1	1062.9	1184.2
40°	697.9	724.7	825.2	949.1	1072.4
42.5°	600.0	626.8	721.3	843.1	959.5
45°	465.7	493.7	576.8	689.1	796.5
47.5°	354.3	384.8	457.7	559.3	657.2
50°	288.4	318.9	390.8	480.3	574.3
52.5°	235.5	265.0	329.8	414.2	500.4
55°	167.3	195.4	252.2	323.8	398.2
57.5°	115.6	139.8	190.8	250.5	308.9
60°	83.6	106.8	154.8	203.3	250.9
62.5°	55.7	76.9	123.8	161.0	193.0
65°	18.7	35.8	79.9	96.4	107.4
67.5°	9.5	11.4	41.9	44.3	47.9
70°	7.5	7.5	20.0	21.3	25.0
72.5°	5.5	5.5	8.0	10.3	11.0
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°	0.4	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)