

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: P518764

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518764
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-125D-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

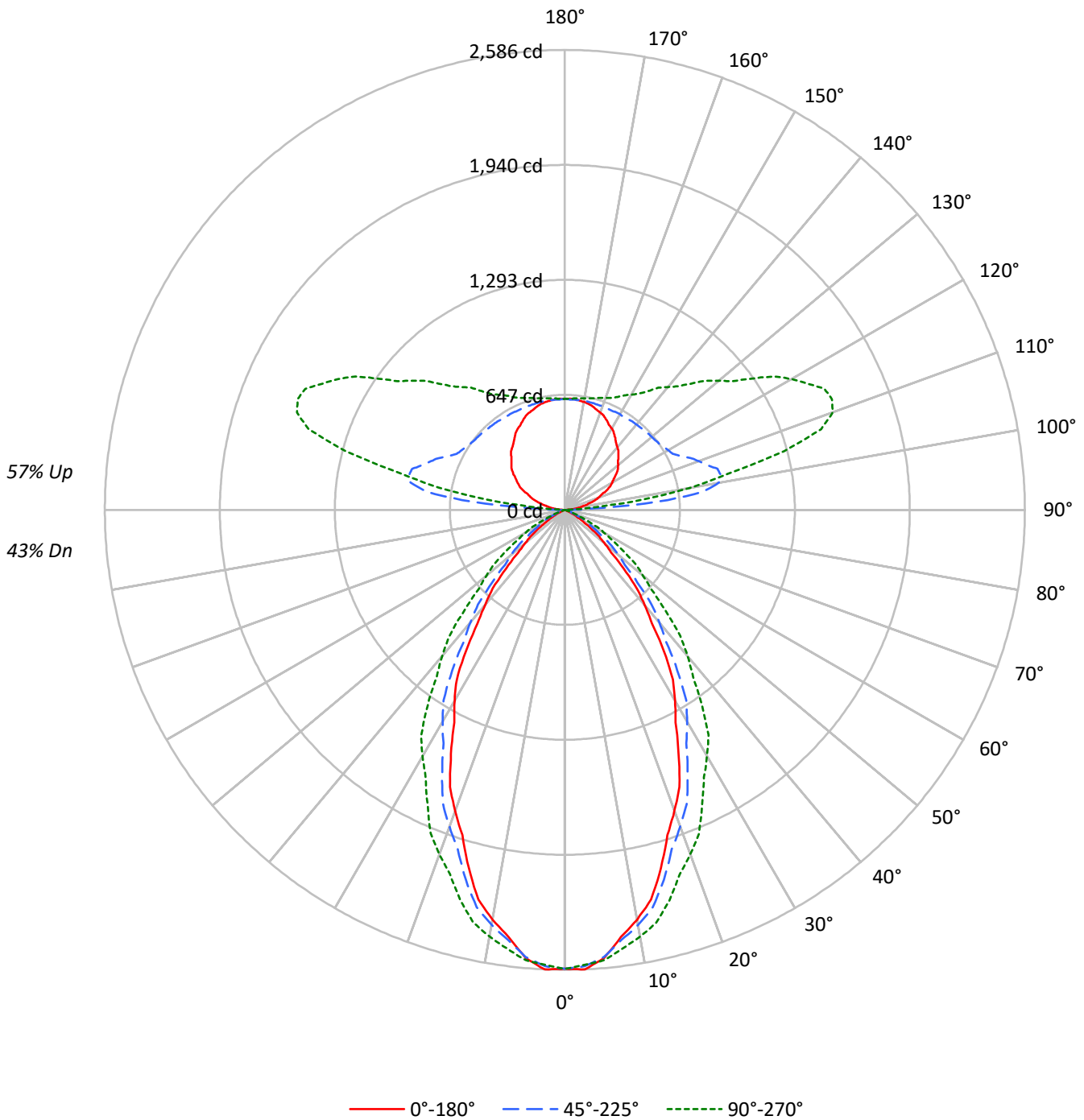
Lumens per Lamp: N/A
Luminaire Lumens: 7136.3 lumens
Efficiency: N/A
Efficacy: 103.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 68.7
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	106	106	106	106	96	96	96	96	80	80	80	64	64	64	50	50	50	43
1	98	94	91	88	89	86	84	81	72	70	68	59	57	56	46	46	45	39
2	90	84	79	74	83	77	73	69	65	62	59	53	51	50	43	42	40	36
3	83	75	69	64	76	70	64	60	59	55	52	49	46	44	39	38	36	32
4	77	68	61	56	71	63	57	52	53	49	45	44	41	39	36	34	33	29
5	71	61	54	49	66	57	51	46	49	44	40	41	38	35	34	31	30	26
6	66	56	48	43	61	52	45	41	44	40	36	38	34	31	31	29	27	24
7	62	51	44	39	57	47	41	37	41	36	32	35	31	29	29	27	25	22
8	58	46	39	35	53	43	37	33	38	33	29	32	29	26	27	24	23	20
9	54	43	36	31	50	40	34	30	35	30	27	30	26	24	25	23	21	19
10	51	40	33	29	47	37	31	27	32	28	25	28	24	22	24	21	19	17

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	3.3
10°-20°	602.2	8.4
20°-30°	753.9	10.6
30°-40°	696.4	9.8
40°-50°	467.9	6.6
50°-60°	241.7	3.4
60°-70°	75.7	1.1
70°-80°	4.8	0.1
80°-90°	1.4	0.0
90°-100°	292.4	4.1
100°-110°	807.2	11.3
110°-120°	832.5	11.7
120°-130°	669.0	9.4
130°-140°	525.7	7.4
140°-150°	403.2	5.7
150°-160°	289.8	4.1
160°-170°	177.2	2.5
170°-180°	59.8	0.8
0°-30°	1591.7	22.3
0°-40°	2288.1	32.1
0°-60°	2997.7	42.0
0°-90°	3079.6	43.2
90°-120°	1932.1	27.1
90°-150°	3530.0	49.5
90°-180°	4057.0	56.8
0°-180°	7136.3	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	4	8	9	10	3
95°	43	158	530	218	142	46
105°	144	222	888	1356	1277	153
115°	258	312	715	1416	1610	253
125°	354	402	648	1097	1288	315
135°	426	472	630	889	1002	329
145°	494	528	622	756	814	309
155°	556	575	617	679	700	256
165°	602	610	620	644	649	170
175°	624	625	621	630	628	59
180°	624	624	624	624	624	

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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	0.8	1.6	1.8	2.0
90°	2.0	4.0	8.0	9.0	10.0
92.5°	18.0	74.6	133.5	48.7	38.0
95°	43.0	158.2	530.5	218.0	141.9
97.5°	71.1	177.2	785.8	605.0	438.1
100°	91.9	188.6	880.1	886.3	720.3
102.5°	111.9	201.6	898.5	1095.1	937.6
105°	143.9	222.0	888.1	1355.8	1276.7
107.5°	177.8	247.4	838.5	1481.5	1510.4
110°	201.8	264.3	800.2	1508.6	1602.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	223.4	283.5	764.2	1487.2	1625.5
115°	257.7	311.5	715.3	1416.0	1610.3
117.5°	287.7	341.2	683.1	1315.7	1536.8
120°	307.7	360.4	670.3	1247.8	1470.5
122.5°	326.9	377.3	659.9	1184.4	1395.4
125°	353.6	402.5	648.3	1097.2	1287.7
127.5°	376.4	425.2	641.5	1023.5	1187.8
130°	391.6	440.4	638.3	978.4	1127.8
132.5°	406.0	452.5	635.1	940.5	1075.9
135°	425.6	471.5	630.3	888.7	1002.0
137.5°	447.5	489.3	628.0	845.1	941.8
140°	459.5	500.5	626.4	816.1	901.1
142.5°	473.1	511.0	624.8	790.3	865.1
145°	493.5	527.7	622.4	756.5	814.2
147.5°	513.1	543.0	620.2	728.1	772.8
150°	527.5	551.9	619.4	711.1	747.2
152.5°	538.6	561.5	618.6	696.6	726.4
155°	556.4	575.0	617.4	678.8	700.3
157.5°	572.8	587.1	617.6	665.8	680.5
160°	582.4	595.1	618.4	658.6	669.3
162.5°	590.4	601.5	619.2	652.1	660.5
165°	602.4	610.2	620.4	644.4	649.3
167.5°	611.6	616.3	621.4	639.8	641.3
170°	616.4	620.3	621.4	637.3	637.3
172.5°	620.4	622.7	621.4	634.1	633.3
175°	624.4	625.3	621.4	630.3	628.4
177.5°	626.0	625.2	621.2	626.7	625.2
180°	624.4	624.4	624.4	624.4	624.4

(END OF REPORT)