

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: P518830

Luminaire Tested: **SQ4-BB-125U-100D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518830
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-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

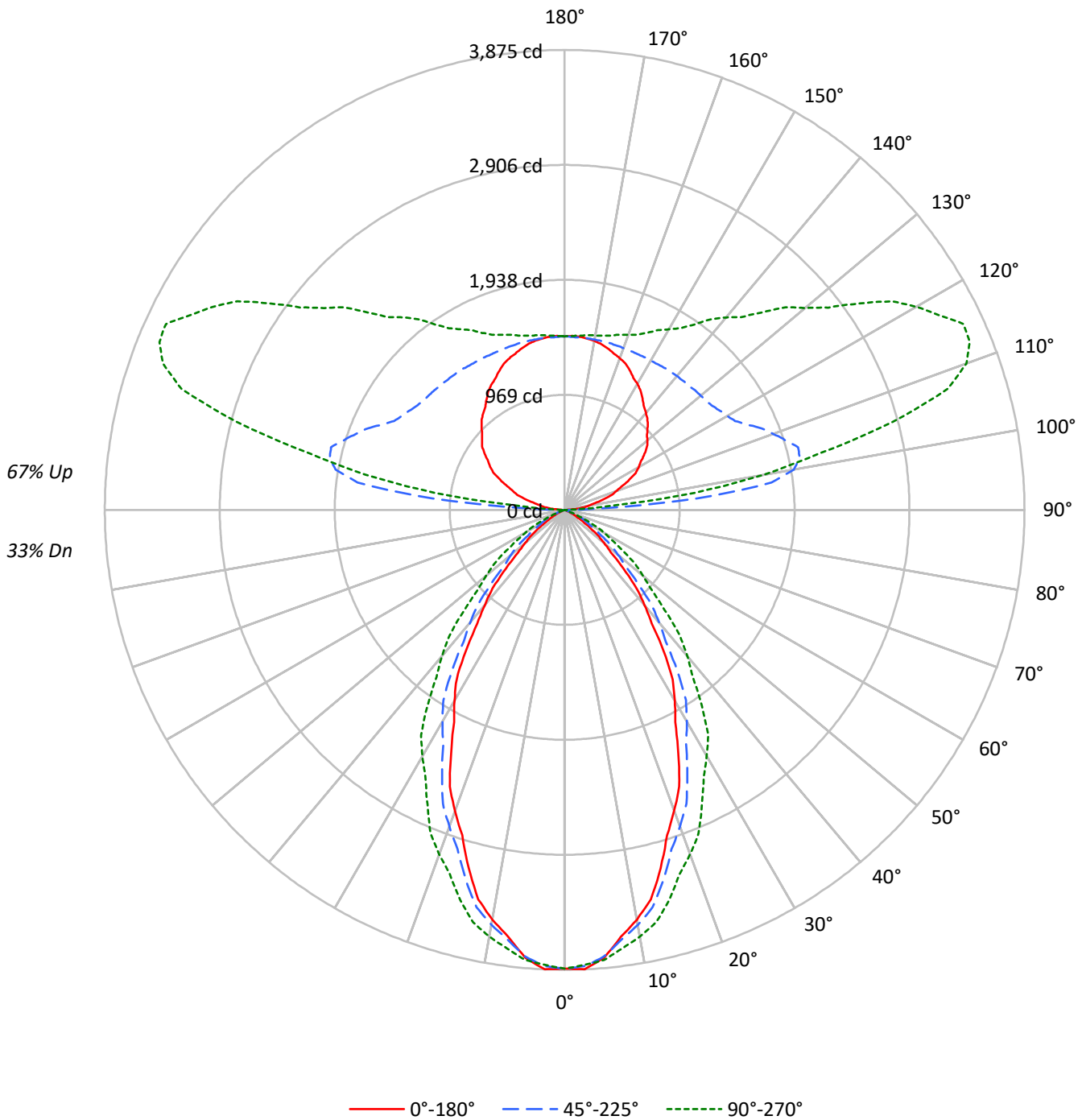
Lumens per Lamp: N/A
Luminaire Lumens: 14052.7 lumens
Efficiency: N/A
Efficacy: 105.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 133.3
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	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°	17833	17833	17833
5°	17547	17503	17633
10°	16418	16637	17101
15°	14925	15399	16256
20°	13249	13938	15159
25°	11538	12452	13927
30°	9883	10969	12762
35°	8194	9311	11354
40°	6296	7444	9675
45°	4551	5637	7784
50°	3100	4201	6174
55°	2015	3039	4798
60°	1156	2140	3468
65°	307	1307	1755
70°	151	403	504
75°	66	34	0
80°	50	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	352.8	2.5
10°-20°	902.2	6.4
20°-30°	1129.5	8.0
30°-40°	1043.3	7.4
40°-50°	701.0	5.0
50°-60°	362.1	2.6
60°-70°	113.4	0.8
70°-80°	7.2	0.1
80°-90°	3.6	0.0
90°-100°	683.9	4.9
100°-110°	1842.3	13.1
110°-120°	1933.4	13.8
120°-130°	1568.9	11.2
130°-140°	1230.4	8.8
140°-150°	944.7	6.7
150°-160°	679.2	4.8
160°-170°	415.0	3.0
170°-180°	139.9	1.0
0°-30°	2384.5	17.0
0°-40°	3427.8	24.4
0°-60°	4490.9	32.0
0°-90°	4615.0	32.8
90°-120°	4459.5	31.7
90°-150°	8203.5	58.4
90°-180°	9438.0	67.2
0°-180°	14052.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3866	3866	3866	3866	3866	
5°	3789	3751	3780	3793	3808	351
15°	3125	3114	3224	3333	3404	870
25°	2267	2285	2446	2614	2736	1039
35°	1455	1492	1653	1848	2016	901
45°	698	740	864	1032	1193	548
55°	251	293	378	485	597	234
65°	28	54	120	144	161	47
75°	4	4	2	0	0	5
85°	0	0	0	0	0	0
90°	4	11	22	24	24	7
95°	104	372	1121	573	397	109
105°	341	530	2037	3048	2861	358
115°	602	736	1697	3278	3708	592
125°	821	943	1523	2575	3030	733
135°	989	1104	1481	2077	2352	763
145°	1144	1233	1462	1776	1907	717
155°	1298	1345	1449	1594	1644	598
165°	1408	1424	1454	1512	1520	397
175°	1464	1462	1456	1477	1473	139
180°	1462	1462	1462	1462	1462	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3865.8	3865.8	3865.8	3865.8	3865.8
2.5°	3874.8	3838.2	3847.9	3847.6	3837.4
5°	3789.2	3750.8	3779.8	3793.2	3807.9
7.5°	3629.1	3599.1	3654.9	3696.7	3727.1
10°	3504.9	3479.3	3551.6	3608.7	3650.8
12.5°	3361.2	3341.5	3428.9	3507.2	3561.0
15°	3125.2	3114.2	3224.3	3332.6	3403.9
17.5°	2872.4	2872.0	2997.7	3132.0	3218.0
20°	2698.8	2704.3	2839.1	2987.2	3087.8
22.5°	2525.2	2538.0	2682.0	2836.4	2951.7
25°	2266.8	2285.0	2446.3	2613.7	2736.2
27.5°	2018.4	2045.1	2214.8	2388.7	2537.9
30°	1855.3	1886.4	2059.2	2242.2	2395.8
32.5°	1695.2	1732.1	1900.6	2094.1	2250.7
35°	1455.1	1491.6	1653.3	1847.9	2016.1
37.5°	1207.1	1242.9	1400.8	1592.4	1774.1
40°	1045.5	1085.7	1236.2	1421.9	1606.6
42.5°	898.8	939.1	1080.6	1263.0	1437.5
45°	697.6	739.7	864.1	1032.3	1193.2
47.5°	530.8	576.5	685.6	837.8	984.5
50°	432.0	477.7	585.4	719.5	860.3
52.5°	352.7	397.0	494.1	620.5	749.6
55°	250.6	292.7	377.8	485.1	596.6
57.5°	173.2	209.4	285.8	375.3	462.7
60°	125.3	160.1	231.9	304.6	375.9
62.5°	83.4	115.2	185.5	241.2	289.1
65°	28.1	53.7	119.7	144.4	160.8
67.5°	14.2	17.1	62.8	66.3	71.8
70°	11.2	11.2	29.9	31.9	37.4
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°	0.7	2.2	4.5	4.8	4.8
90°	3.7	11.0	22.3	24.2	24.2
92.5°	45.4	160.5	317.3	152.8	106.2
95°	104.3	372.0	1121.1	573.3	396.7
97.5°	166.5	425.8	1758.4	1469.0	1107.7
100°	214.2	447.3	1961.0	2051.8	1702.2
102.5°	260.4	477.4	2028.1	2488.3	2201.3
105°	340.8	530.2	2037.4	3048.1	2860.6
107.5°	416.8	585.8	1950.6	3335.8	3384.2
110°	467.4	627.7	1871.6	3425.1	3601.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	521.1	669.7	1795.7	3405.4	3695.6
115°	601.5	736.3	1696.6	3278.2	3707.9
117.5°	674.9	801.3	1619.9	3075.2	3553.7
120°	722.6	844.6	1581.1	2929.5	3421.1
122.5°	764.3	884.9	1552.8	2780.4	3270.6
125°	821.3	943.3	1523.4	2574.8	3030.0
127.5°	876.0	996.2	1504.8	2393.4	2799.8
130°	908.8	1029.0	1497.3	2289.5	2646.4
132.5°	941.6	1060.3	1489.9	2197.9	2525.7
135°	988.9	1103.6	1480.6	2077.2	2352.1
137.5°	1034.0	1144.0	1475.7	1974.7	2200.5
140°	1065.3	1170.9	1471.2	1911.7	2115.6
142.5°	1098.0	1196.4	1468.3	1852.8	2024.7
145°	1143.5	1232.7	1461.9	1775.9	1907.0
147.5°	1192.6	1270.2	1455.6	1711.2	1814.3
150°	1225.4	1292.8	1452.6	1670.6	1756.2
152.5°	1255.2	1313.9	1451.1	1637.5	1707.0
155°	1298.0	1345.4	1448.9	1593.5	1644.4
157.5°	1335.7	1372.5	1449.3	1562.5	1596.8
160°	1359.5	1390.5	1450.8	1544.5	1570.0
162.5°	1380.4	1405.5	1452.3	1529.4	1547.6
165°	1407.9	1424.3	1454.5	1512.4	1519.7
167.5°	1430.3	1439.7	1456.3	1499.2	1502.2
170°	1445.2	1448.8	1456.3	1491.7	1491.7
172.5°	1454.1	1454.8	1457.8	1484.3	1484.3
175°	1463.8	1462.0	1456.3	1476.8	1473.1
177.5°	1467.9	1465.0	1457.5	1469.3	1466.4
180°	1461.9	1461.9	1461.9	1461.9	1461.9

(END OF REPORT)