

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: P518828

Luminaire Tested: **SQ4-BB-125U-100D-830-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518828
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-4
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

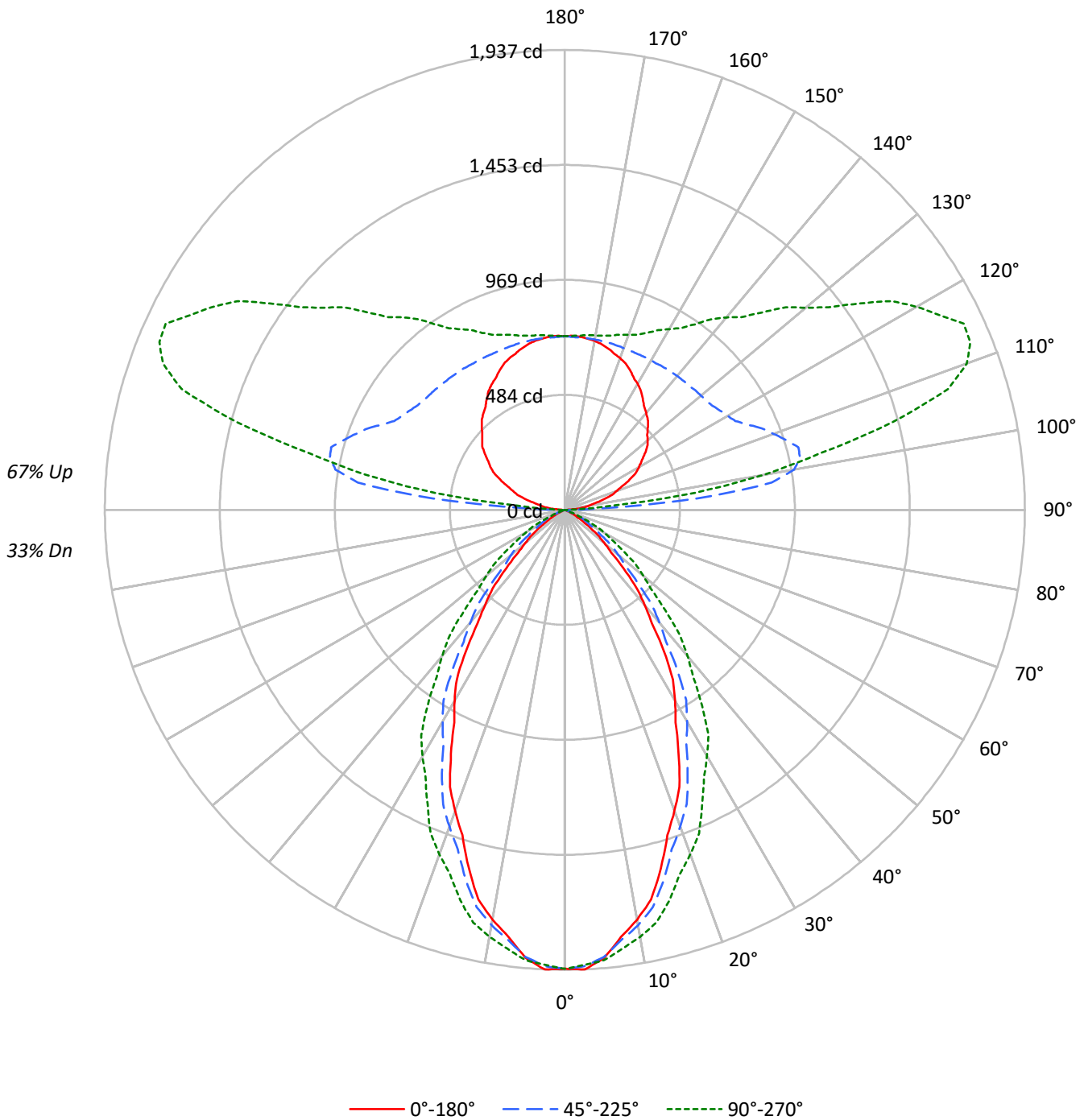
Lumens per Lamp: N/A
Luminaire Lumens: 7026.3 lumens
Efficiency: N/A
Efficacy: 108.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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°	17833	17833	17833
5°	17547	17503	17633
10°	16417	16637	17101
15°	14925	15399	16256
20°	13249	13937	15159
25°	11538	12452	13927
30°	9883	10969	12762
35°	8194	9311	11354
40°	6295	7444	9675
45°	4551	5637	7784
50°	3100	4201	6175
55°	2015	3039	4798
60°	1157	2140	3469
65°	306	1305	1755
70°	151	405	504
75°	68	32	0
80°	48	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.4	2.5
10°-20°	451.1	6.4
20°-30°	564.7	8.0
30°-40°	521.6	7.4
40°-50°	350.5	5.0
50°-60°	181.0	2.6
60°-70°	56.7	0.8
70°-80°	3.6	0.1
80°-90°	1.8	0.0
90°-100°	342.0	4.9
100°-110°	921.1	13.1
110°-120°	966.7	13.8
120°-130°	784.4	11.2
130°-140°	615.2	8.8
140°-150°	472.3	6.7
150°-160°	339.6	4.8
160°-170°	207.5	3.0
170°-180°	70.0	1.0
0°-30°	1192.3	17.0
0°-40°	1713.9	24.4
0°-60°	2245.4	32.0
0°-90°	2307.5	32.8
90°-120°	2229.8	31.7
90°-150°	4101.8	58.4
90°-180°	4719.0	67.2
0°-180°	7026.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1933	1933	1933	1933	1933	
5°	1895	1875	1890	1897	1904	176
15°	1563	1557	1612	1666	1702	435
25°	1133	1142	1223	1307	1368	520
35°	728	746	827	924	1008	451
45°	349	370	432	516	597	274
55°	125	146	189	242	298	117
65°	14	27	60	72	80	24
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	2	6	11	12	12	4
95°	52	186	561	287	198	54
105°	170	265	1019	1524	1430	179
115°	301	368	848	1639	1854	296
125°	411	472	762	1287	1515	367
135°	494	552	740	1039	1176	382
145°	572	616	731	888	954	359
155°	649	673	724	797	822	299
165°	704	712	727	756	760	199
175°	732	731	728	738	737	70
180°	731	731	731	731	731	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1932.9	1932.9	1932.9	1932.9	1932.9
2.5°	1937.4	1919.1	1923.9	1923.8	1918.7
5°	1894.6	1875.4	1889.9	1896.6	1903.9
7.5°	1814.5	1799.5	1827.4	1848.4	1863.5
10°	1752.4	1739.6	1775.8	1804.3	1825.4
12.5°	1680.6	1670.7	1714.5	1753.6	1780.5
15°	1562.6	1557.1	1612.2	1666.3	1701.9
17.5°	1436.2	1436.0	1498.8	1566.0	1609.0
20°	1349.4	1352.1	1419.5	1493.6	1543.9
22.5°	1262.6	1269.0	1341.0	1418.2	1475.8
25°	1133.4	1142.5	1223.2	1306.8	1368.1
27.5°	1009.2	1022.5	1107.4	1194.4	1269.0
30°	927.7	943.2	1029.6	1121.1	1197.9
32.5°	847.6	866.1	950.3	1047.1	1125.3
35°	727.5	745.8	826.7	924.0	1008.1
37.5°	603.5	621.5	700.4	796.2	887.1
40°	522.7	542.9	618.1	710.9	803.3
42.5°	449.4	469.5	540.3	631.5	718.7
45°	348.8	369.8	432.0	516.2	596.6
47.5°	265.4	288.2	342.8	418.9	492.3
50°	216.0	238.9	292.7	359.8	430.2
52.5°	176.4	198.5	247.1	310.2	374.8
55°	125.3	146.3	188.9	242.5	298.3
57.5°	86.6	104.7	142.9	187.6	231.4
60°	62.7	80.0	116.0	152.3	188.0
62.5°	41.7	57.6	92.8	120.6	144.6
65°	14.0	26.8	59.8	72.2	80.4
67.5°	7.1	8.6	31.4	33.2	35.9
70°	5.6	5.6	15.0	16.0	18.7
72.5°	4.1	4.1	6.0	7.7	8.2
75°	1.9	1.9	0.9	0.0	0.0
77.5°	0.9	0.9	0.7	0.0	0.0
80°	0.9	0.9	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	1.1	2.2	2.4	2.4
90°	1.9	5.5	11.2	12.1	12.1
92.5°	22.7	80.3	158.7	76.4	53.1
95°	52.1	186.0	560.6	286.7	198.3
97.5°	83.2	212.9	879.2	734.5	553.9
100°	107.1	223.6	980.5	1025.9	851.1
102.5°	130.2	238.7	1014.0	1244.1	1100.6
105°	170.4	265.1	1018.7	1524.1	1430.3
107.5°	208.4	292.9	975.3	1667.9	1692.1
110°	233.7	313.8	935.8	1712.6	1800.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	260.5	334.8	897.8	1702.7	1847.8
115°	300.8	368.1	848.3	1639.1	1854.0
117.5°	337.5	400.6	809.9	1537.6	1776.9
120°	361.3	422.3	790.6	1464.7	1710.6
122.5°	382.2	442.4	776.4	1390.2	1635.3
125°	410.6	471.6	761.7	1287.4	1515.0
127.5°	438.0	498.1	752.4	1196.7	1399.9
130°	454.4	514.5	748.7	1144.7	1323.2
132.5°	470.8	530.2	744.9	1099.0	1262.9
135°	494.5	551.8	740.3	1038.6	1176.1
137.5°	517.0	572.0	737.9	987.4	1100.3
140°	532.6	585.4	735.6	955.8	1057.8
142.5°	549.0	598.2	734.1	926.4	1012.4
145°	571.7	616.4	731.0	888.0	953.5
147.5°	596.3	635.1	727.8	855.6	907.1
150°	612.7	646.4	726.3	835.3	878.1
152.5°	627.6	656.9	725.6	818.7	853.5
155°	649.0	672.7	724.4	796.7	822.2
157.5°	667.8	686.2	724.6	781.3	798.4
160°	679.8	695.2	725.4	772.2	785.0
162.5°	690.2	702.7	726.1	764.7	773.8
165°	704.0	712.2	727.2	756.2	759.8
167.5°	715.1	719.9	728.2	749.6	751.1
170°	722.6	724.4	728.2	745.9	745.9
172.5°	727.1	727.4	728.9	742.1	742.1
175°	731.9	731.0	728.2	738.4	736.6
177.5°	733.9	732.5	728.7	734.7	733.2
180°	731.0	731.0	731.0	731.0	731.0

(END OF REPORT)