

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: P518780

Luminaire Tested: **SQ4-BB-125U-050D-830-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518780
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-050D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

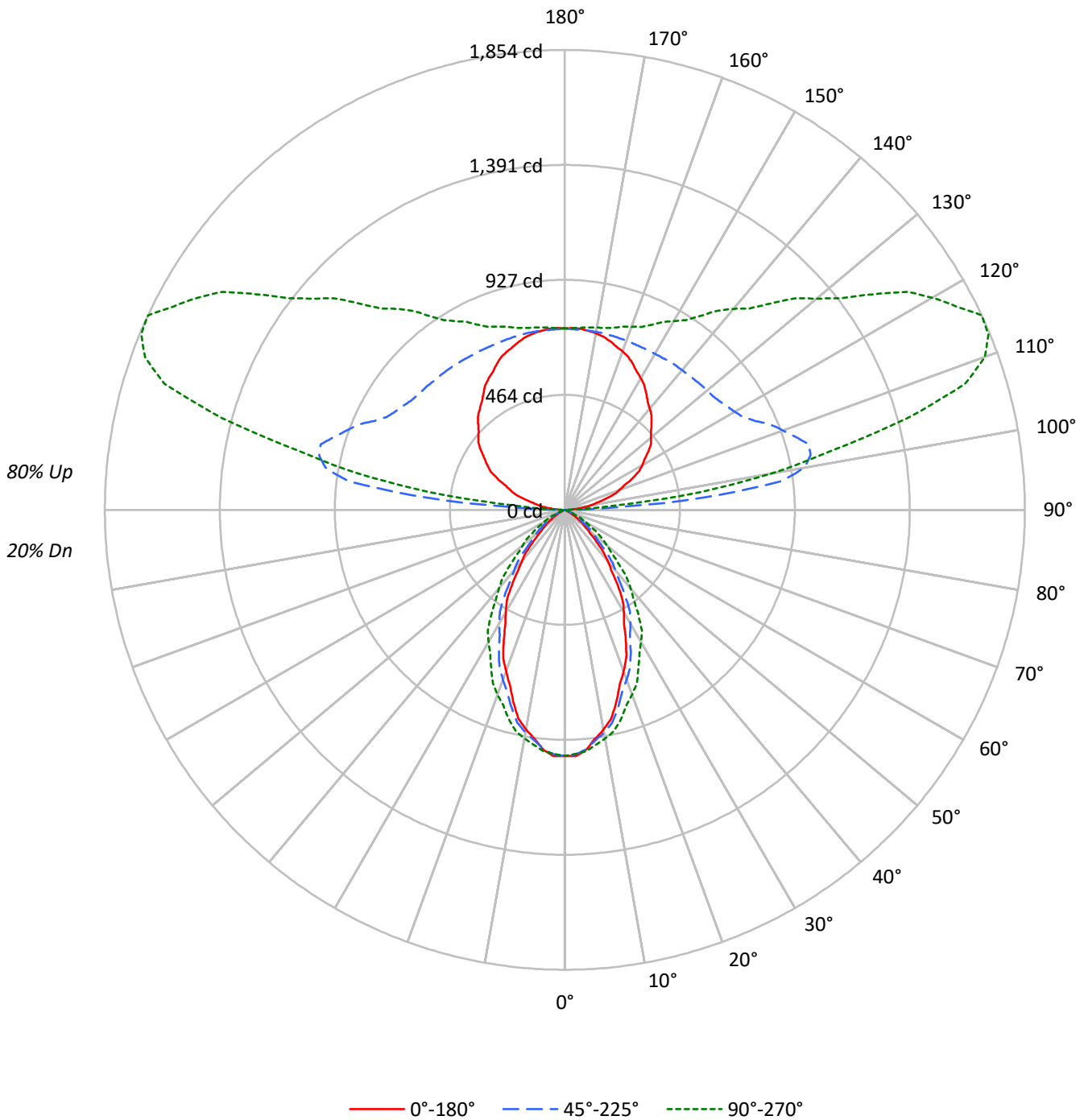
Lumens per Lamp: N/A
Luminaire Lumens: 5903.7 lumens
Efficiency: N/A
Efficacy: 123.2 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 47.9
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	100	100	100	100	88	88	88	88	67	67	67	47	47	47	29	29	29	20
1	92	88	84	81	81	78	75	73	59	58	56	42	41	40	26	26	25	18
2	84	78	72	68	74	69	64	61	53	50	47	38	36	35	24	23	23	17
3	77	69	62	57	68	61	56	52	47	44	41	34	32	30	22	21	20	15
4	71	61	54	49	63	55	49	44	42	38	35	31	28	26	20	19	18	14
5	65	55	47	42	58	49	43	38	38	34	31	28	25	23	19	17	16	12
6	60	49	42	37	53	44	38	33	35	30	27	26	23	21	17	16	15	11
7	56	45	37	32	49	40	34	29	31	27	24	23	21	19	16	14	13	10
8	52	40	33	29	46	36	30	26	29	24	21	21	19	17	15	13	12	9
9	48	37	30	26	43	33	27	23	26	22	19	20	17	15	14	12	11	9
10	45	34	27	23	40	31	25	21	24	20	17	18	16	14	13	11	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9151	9151	9151
5°	9003	8981	9048
10°	8424	8537	8775
15°	7659	7901	8341
20°	6798	7152	7778
25°	5920	6389	7146
30°	5071	5628	6548
35°	4205	4778	5825
40°	3230	3820	4965
45°	2336	2893	3994
50°	1590	2156	3168
55°	1034	1559	2463
60°	592	1098	1779
65°	157	670	902
70°	78	208	259
75°	36	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.5	1.5
10°-20°	231.5	3.9
20°-30°	289.8	4.9
30°-40°	267.7	4.5
40°-50°	179.8	3.0
50°-60°	92.9	1.6
60°-70°	29.1	0.5
70°-80°	1.8	0.0
80°-90°	1.7	0.0
90°-100°	342.0	5.8
100°-110°	921.1	15.6
110°-120°	966.7	16.4
120°-130°	784.4	13.3
130°-140°	615.2	10.4
140°-150°	472.3	8.0
150°-160°	339.6	5.8
160°-170°	207.5	3.5
170°-180°	70.0	1.2
0°-30°	611.8	10.4
0°-40°	879.4	14.9
0°-60°	1152.1	19.5
0°-90°	1184.8	20.1
90°-120°	2229.8	37.8
90°-150°	4101.8	69.5
90°-180°	4719.0	79.9
0°-180°	5903.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	992	992	992	992	992	
5°	972	962	970	973	977	90
15°	802	799	827	855	873	223
25°	582	586	628	670	702	267
35°	373	383	424	474	517	231
45°	179	190	222	265	306	141
55°	64	75	97	124	153	60
65°	7	14	31	37	41	12
75°	1	1	0	0	0	1
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°	991.8	991.8	991.8	991.8	991.8
2.5°	994.1	984.7	987.2	987.1	984.5
5°	972.1	962.3	969.7	973.2	976.9
7.5°	931.0	923.3	937.7	948.4	956.2
10°	899.2	892.6	911.2	925.8	936.6
12.5°	862.3	857.3	879.7	899.8	913.6
15°	801.8	799.0	827.2	855.0	873.3
17.5°	736.9	736.8	769.1	803.5	825.6
20°	692.4	693.8	728.4	766.4	792.2
22.5°	647.8	651.1	688.1	727.7	757.2
25°	581.5	586.2	627.6	670.5	702.0
27.5°	517.8	524.7	568.2	612.8	651.1
30°	476.0	484.0	528.3	575.2	614.6
32.5°	434.9	444.4	487.6	537.3	577.4
35°	373.3	382.7	424.2	474.1	517.2
37.5°	309.7	318.9	359.4	408.5	455.2
40°	268.2	278.5	317.2	364.8	412.2
42.5°	230.6	240.9	277.2	324.0	368.8
45°	179.0	189.8	221.7	264.8	306.1
47.5°	136.2	147.9	175.9	214.9	252.6
50°	110.8	122.6	150.2	184.6	220.7
52.5°	90.5	101.8	126.8	159.2	192.3
55°	64.3	75.1	96.9	124.4	153.1
57.5°	44.4	53.7	73.3	96.3	118.7
60°	32.1	41.1	59.5	78.1	96.4
62.5°	21.4	29.6	47.6	61.9	74.2
65°	7.2	13.8	30.7	37.0	41.3
67.5°	3.6	4.4	16.1	17.0	18.4
70°	2.9	2.9	7.7	8.2	9.6
72.5°	2.1	2.1	3.1	3.9	4.2
75°	1.0	1.0	0.5	0.0	0.0
77.5°	0.5	0.5	0.4	0.0	0.0
80°	0.5	0.5	0.0	0.0	0.0
82.5°	0.1	0.1	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)