

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: P518796

Luminaire Tested: **SQ4-BB-125U-050D-935-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518796
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-935-1D-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

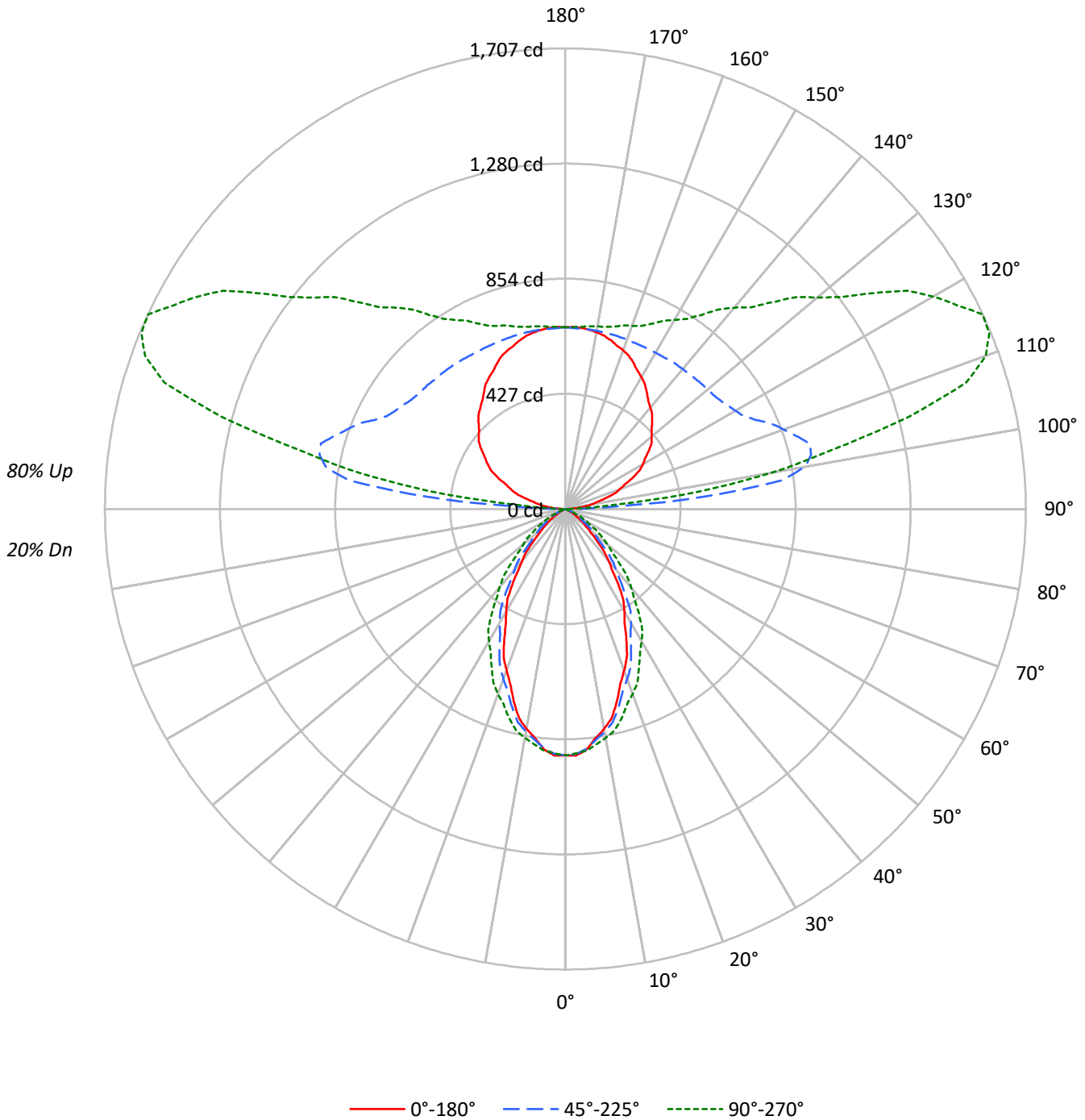
Lumens per Lamp: N/A
Luminaire Lumens: 5434.6 lumens
Efficiency: N/A
Efficacy: 113.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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°	8424	8424	8424
5°	8288	8268	8329
10°	7754	7858	8078
15°	7050	7274	7679
20°	6258	6583	7160
25°	5449	5881	6578
30°	4668	5181	6028
35°	3870	4398	5362
40°	2974	3517	4569
45°	2150	2663	3677
50°	1464	1984	2917
55°	952	1435	2266
60°	546	1011	1639
65°	144	618	830
70°	73	192	237
75°	32	14	0
80°	21	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.3	1.5
10°-20°	213.1	3.9
20°-30°	266.7	4.9
30°-40°	246.4	4.5
40°-50°	165.6	3.0
50°-60°	85.5	1.6
60°-70°	26.8	0.5
70°-80°	1.7	0.0
80°-90°	1.6	0.0
90°-100°	314.8	5.8
100°-110°	847.9	15.6
110°-120°	889.9	16.4
120°-130°	722.1	13.3
130°-140°	566.3	10.4
140°-150°	434.8	8.0
150°-160°	312.6	5.8
160°-170°	191.0	3.5
170°-180°	64.4	1.2
0°-30°	563.1	10.4
0°-40°	809.5	14.9
0°-60°	1060.6	19.5
0°-90°	1090.7	20.1
90°-120°	2052.6	37.8
90°-150°	3775.9	69.5
90°-180°	4344.0	79.9
0°-180°	5434.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	913	913	913	913	913	
5°	895	886	893	896	899	83
15°	738	736	762	787	804	206
25°	535	540	578	617	646	245
35°	344	352	390	436	476	213
45°	165	175	204	244	282	129
55°	59	69	89	115	141	55
65°	7	13	28	34	38	11
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	2	5	10	11	11	3
95°	48	171	516	264	183	50
105°	157	244	938	1403	1317	165
115°	277	339	781	1509	1707	272
125°	378	434	701	1185	1395	338
135°	455	508	682	956	1083	351
145°	526	567	673	817	878	330
155°	598	619	667	733	757	275
165°	648	656	670	696	700	183
175°	674	673	670	680	678	64
180°	673	673	673	673	673	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	913.0	913.0	913.0	913.0	913.0
2.5°	915.1	906.5	908.7	908.7	906.3
5°	894.9	885.8	892.7	895.8	899.3
7.5°	857.1	850.0	863.2	873.0	880.2
10°	827.7	821.7	838.8	852.2	862.2
12.5°	793.8	789.1	809.8	828.3	841.0
15°	738.1	735.5	761.5	787.0	803.9
17.5°	678.4	678.3	707.9	739.7	760.0
20°	637.4	638.7	670.5	705.5	729.2
22.5°	596.4	599.4	633.4	669.9	697.1
25°	535.3	539.6	577.7	617.3	646.2
27.5°	476.7	483.0	523.1	564.1	599.4
30°	438.2	445.5	486.3	529.5	565.8
32.5°	400.3	409.1	448.8	494.6	531.5
35°	343.6	352.3	390.5	436.4	476.1
37.5°	285.1	293.5	330.8	376.1	419.0
40°	246.9	256.4	292.0	335.8	379.4
42.5°	212.3	221.8	255.2	298.3	339.5
45°	164.8	174.7	204.1	243.8	281.8
47.5°	125.4	136.1	161.9	197.9	232.5
50°	102.0	112.8	138.2	169.9	203.2
52.5°	83.3	93.8	116.7	146.5	177.0
55°	59.2	69.1	89.2	114.6	140.9
57.5°	40.9	49.5	67.5	88.6	109.3
60°	29.6	37.8	54.8	71.9	88.8
62.5°	19.7	27.2	43.8	57.0	68.3
65°	6.6	12.7	28.3	34.1	38.0
67.5°	3.4	4.0	14.8	15.7	17.0
70°	2.7	2.7	7.1	7.5	8.8
72.5°	1.9	1.9	2.8	3.6	3.9
75°	0.9	0.9	0.4	0.0	0.0
77.5°	0.4	0.4	0.4	0.0	0.0
80°	0.4	0.4	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°	0.3	1.0	2.1	2.2	2.2
90°	1.7	5.1	10.3	11.1	11.1
92.5°	20.9	73.9	146.1	70.3	48.9
95°	48.0	171.2	516.0	263.9	182.6
97.5°	76.6	196.0	809.3	676.1	509.9
100°	98.6	205.9	902.6	944.4	783.5
102.5°	119.8	219.7	933.5	1145.3	1013.2
105°	156.9	244.0	937.8	1403.0	1316.6
107.5°	191.8	269.6	897.8	1535.4	1557.7
110°	215.2	288.9	861.5	1576.5	1657.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	239.8	308.2	826.5	1567.4	1701.0
115°	276.9	338.9	780.9	1508.8	1706.6
117.5°	310.6	368.8	745.6	1415.4	1635.7
120°	332.6	388.7	727.7	1348.3	1574.6
122.5°	351.8	407.3	714.7	1279.8	1505.4
125°	378.0	434.2	701.2	1185.1	1394.6
127.5°	403.2	458.5	692.6	1101.6	1288.7
130°	418.3	473.6	689.2	1053.8	1218.1
132.5°	433.4	488.0	685.7	1011.6	1162.5
135°	455.2	508.0	681.5	956.1	1082.6
137.5°	475.9	526.5	679.2	908.9	1012.8
140°	490.3	538.9	677.2	879.9	973.8
142.5°	505.4	550.7	675.8	852.8	931.9
145°	526.3	567.4	672.9	817.4	877.8
147.5°	548.9	584.6	670.0	787.6	835.1
150°	564.0	595.0	668.6	768.9	808.3
152.5°	577.7	604.7	667.9	753.7	785.7
155°	597.5	619.2	666.9	733.4	756.9
157.5°	614.8	631.7	667.1	719.2	734.9
160°	625.7	640.0	667.7	710.9	722.6
162.5°	635.3	646.9	668.4	703.9	712.3
165°	648.0	655.6	669.5	696.1	699.5
167.5°	658.3	662.7	670.3	690.1	691.4
170°	665.2	666.8	670.3	686.6	686.6
172.5°	669.3	669.6	671.0	683.2	683.2
175°	673.7	672.9	670.3	679.7	678.0
177.5°	675.6	674.3	670.8	676.3	674.9
180°	672.9	672.9	672.9	672.9	672.9

(END OF REPORT)