

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: P518768

Luminaire Tested: **SQ4-BB-100U-125D-930-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518768
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-930-1D-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

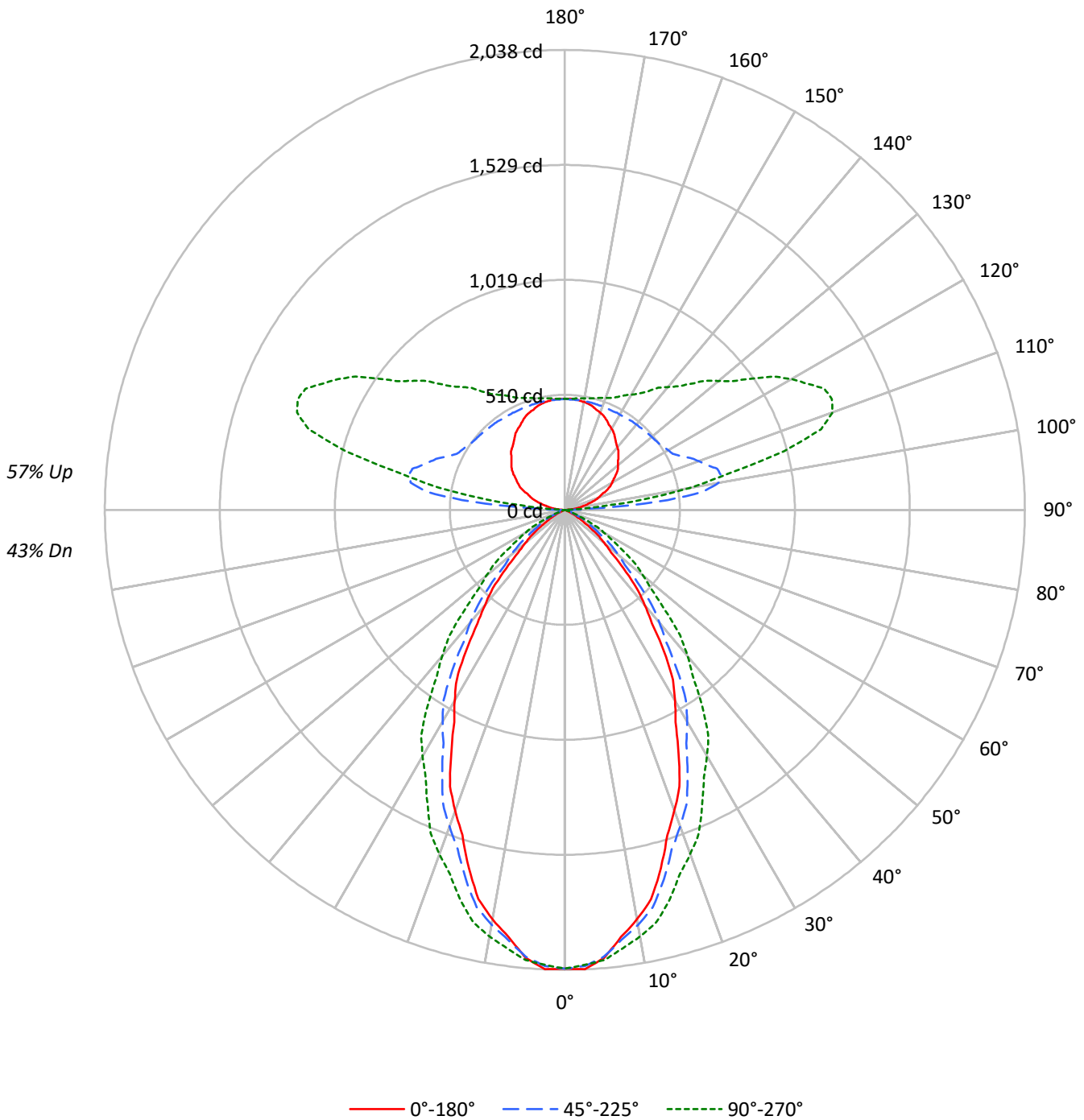
Lumens per Lamp: N/A
Luminaire Lumens: 5622.2 lumens
Efficiency: N/A
Efficacy: 81.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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



TEST NUMBER: P518768
CATALOG NUMBER: SQ4-BB-100U-125D-930-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P518768

CATALOG NUMBER: SQ4-BB-100U-125D-930-1D-UNV-STD-W-4

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	50	30	10	0	
RCR																						
0	106	106	106	106	96	96	96	96	80	80	80	64	64	64	50	50	50	43				43
1	98	94	91	88	89	86	84	81	72	70	68	59	57	56	46	46	45	39				39
2	90	84	79	74	83	77	73	69	65	62	59	53	51	50	43	42	40	36				36
3	83	75	69	64	76	70	64	60	59	55	52	49	46	44	39	38	36	32				32
4	77	68	61	56	71	63	57	52	53	49	45	44	41	39	36	34	33	29				29
5	71	61	54	49	66	57	51	46	49	44	40	41	38	35	34	31	30	26				26
6	66	56	48	43	61	52	45	41	44	40	36	38	34	31	31	29	27	24				24
7	62	51	44	39	57	47	41	37	41	36	32	35	31	29	29	27	25	22				22
8	58	46	39	35	53	43	37	33	38	33	29	32	29	26	27	24	23	20				20
9	54	43	36	31	50	40	34	30	35	30	27	30	26	24	25	23	21	19				19
10	51	40	33	29	47	37	31	27	32	28	25	28	24	22	24	21	19	17				17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18757	18757	18757
5°	18454	18409	18546
10°	17267	17498	17987
15°	15698	16196	17097
20°	13934	14659	15943
25°	12135	13097	14648
30°	10395	11537	13422
35°	8619	9792	11942
40°	6622	7830	10176
45°	4787	5929	8188
50°	3261	4418	6493
55°	2120	3196	5046
60°	1216	2251	3648
65°	323	1373	1847
70°	159	424	531
75°	71	36	0
80°	53	0	0
85°	0	0	0



TEST NUMBER: P518768

CATALOG NUMBER: SQ4-BB-100U-125D-930-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.5	3.3
10°-20°	474.5	8.4
20°-30°	594.0	10.6
30°-40°	548.6	9.8
40°-50°	368.7	6.6
50°-60°	190.4	3.4
60°-70°	59.6	1.1
70°-80°	3.8	0.1
80°-90°	1.1	0.0
90°-100°	230.4	4.1
100°-110°	635.9	11.3
110°-120°	655.9	11.7
120°-130°	527.0	9.4
130°-140°	414.2	7.4
140°-150°	317.7	5.7
150°-160°	228.3	4.1
160°-170°	139.6	2.5
170°-180°	47.1	0.8
0°-30°	1254.0	22.3
0°-40°	1802.6	32.1
0°-60°	2361.7	42.0
0°-90°	2426.2	43.2
90°-120°	1522.1	27.1
90°-150°	2781.0	49.5
90°-180°	3196.0	56.8
0°-180°	5622.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2033	2033	2033	2033	2033	
5°	1993	1972	1988	1995	2002	185
15°	1644	1638	1696	1752	1790	458
25°	1192	1202	1286	1374	1439	546
35°	765	784	869	972	1060	474
45°	367	389	454	543	628	288
55°	132	154	199	255	314	123
65°	15	28	63	76	85	25
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	2	3	6	7	8	2
95°	34	125	418	172	112	36
105°	113	175	700	1068	1006	121
115°	203	245	564	1116	1269	200
125°	279	317	511	864	1014	248
135°	335	371	497	700	789	259
145°	389	416	490	596	641	243
155°	438	453	486	535	552	202
165°	475	481	489	508	512	134
175°	492	493	490	497	495	47
180°	492	492	492	492	492	



TEST NUMBER: P518768

CATALOG NUMBER: SQ4-BB-100U-125D-930-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2033.0	2033.0	2033.0	2033.0	2033.0
2.5°	2037.7	2018.5	2023.5	2023.4	2018.0
5°	1992.6	1972.5	1987.7	1994.8	2002.5
7.5°	1908.5	1892.7	1922.0	1944.0	1960.0
10°	1843.1	1829.7	1867.7	1897.7	1919.9
12.5°	1767.6	1757.2	1803.2	1844.4	1872.7
15°	1643.5	1637.7	1695.6	1752.5	1790.0
17.5°	1510.5	1510.3	1576.4	1647.1	1692.3
20°	1419.2	1422.1	1493.0	1570.9	1623.8
22.5°	1328.0	1334.7	1410.4	1491.6	1552.2
25°	1192.0	1201.7	1286.5	1374.5	1438.9
27.5°	1061.4	1075.5	1164.7	1256.2	1334.7
30°	975.7	992.0	1082.9	1179.1	1259.9
32.5°	891.5	910.9	999.5	1101.3	1183.6
35°	765.2	784.4	869.4	971.8	1060.3
37.5°	634.8	653.6	736.7	837.4	933.0
40°	549.8	571.0	650.1	747.7	844.9
42.5°	472.7	493.8	568.3	664.2	755.9
45°	366.9	389.0	454.4	542.9	627.5
47.5°	279.1	303.2	360.6	440.6	517.7
50°	227.2	251.2	307.8	378.4	452.4
52.5°	185.5	208.8	259.9	326.3	394.2
55°	131.8	153.9	198.7	255.1	313.7
57.5°	91.1	110.1	150.3	197.4	243.3
60°	65.9	84.2	122.0	160.2	197.7
62.5°	43.9	60.6	97.6	126.9	152.1
65°	14.8	28.2	62.9	75.9	84.6
67.5°	7.5	9.0	33.0	34.9	37.8
70°	5.9	5.9	15.7	16.8	19.7
72.5°	4.3	4.3	6.3	8.1	8.7
75°	2.0	2.0	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	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°	0.3	0.6	1.3	1.4	1.6
90°	1.6	3.1	6.3	7.1	7.9
92.5°	14.2	58.8	105.1	38.4	29.9
95°	33.8	124.6	417.9	171.8	111.8
97.5°	56.0	139.6	619.1	476.6	345.2
100°	72.4	148.6	693.4	698.3	567.4
102.5°	88.1	158.8	707.8	862.7	738.7
105°	113.3	174.9	699.7	1068.1	1005.8
107.5°	140.1	194.9	660.6	1167.2	1190.0
110°	159.0	208.2	630.4	1188.5	1262.4



TEST NUMBER: P518768

CATALOG NUMBER: SQ4-BB-100U-125D-930-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	176.0	223.4	602.1	1171.7	1280.6
115°	203.0	245.4	563.5	1115.5	1268.7
117.5°	226.7	268.8	538.2	1036.5	1210.7
120°	242.4	284.0	528.1	983.0	1158.5
122.5°	257.5	297.2	519.9	933.1	1099.3
125°	278.6	317.1	510.8	864.4	1014.5
127.5°	296.5	335.0	505.4	806.3	935.8
130°	308.5	347.0	502.9	770.8	888.5
132.5°	319.8	356.5	500.4	741.0	847.6
135°	335.3	371.4	496.6	700.1	789.4
137.5°	352.6	385.5	494.7	665.8	742.0
140°	362.0	394.3	493.5	642.9	709.9
142.5°	372.7	402.6	492.2	622.6	681.6
145°	388.8	415.7	490.3	596.0	641.4
147.5°	404.2	427.8	488.6	573.6	608.8
150°	415.5	434.8	487.9	560.2	588.7
152.5°	424.4	442.4	487.3	548.8	572.3
155°	438.4	453.0	486.4	534.8	551.7
157.5°	451.3	462.5	486.5	524.6	536.1
160°	458.8	468.8	487.2	518.8	527.3
162.5°	465.1	473.9	487.8	513.8	520.4
165°	474.6	480.7	488.7	507.7	511.6
167.5°	481.8	485.5	489.5	504.0	505.3
170°	485.6	488.7	489.5	502.1	502.1
172.5°	488.7	490.6	489.5	499.6	499.0
175°	491.9	492.7	489.5	496.6	495.0
177.5°	493.1	492.5	489.4	493.7	492.5
180°	491.9	491.9	491.9	491.9	491.9

(END OF REPORT)