

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: P518368

Luminaire Tested: **SQ4-BB-025U-100D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518368
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, 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-025U-100D-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

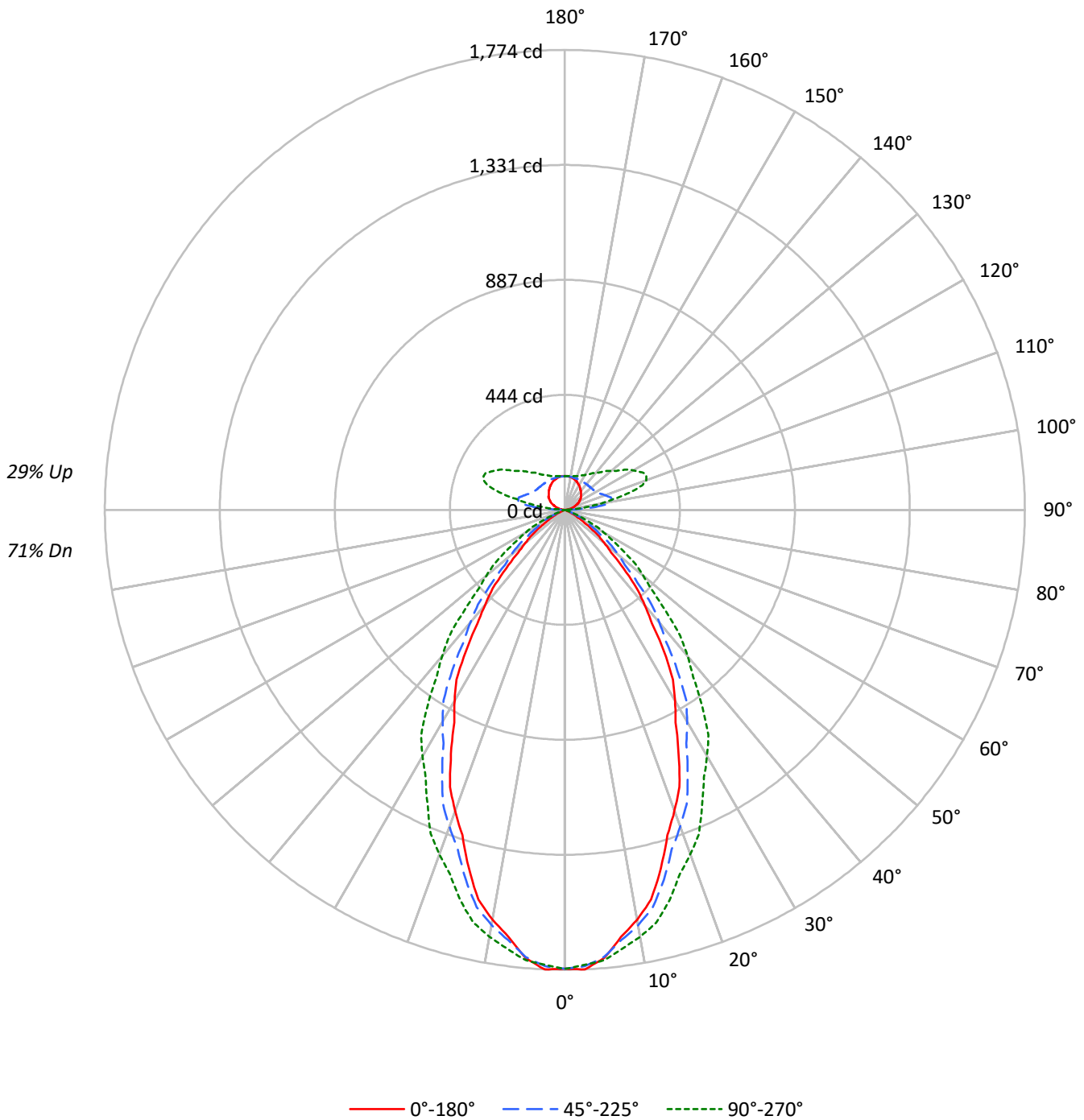
Lumens per Lamp: N/A
Luminaire Lumens: 2956.0 lumens
Efficiency: N/A
Efficacy: 76.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 38.7
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: P518368
CATALOG NUMBER: SQ4-BB-025U-100D-940-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P518368

CATALOG NUMBER: SQ4-BB-025U-100D-940-1D-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	0
RCR																		
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	71
1	105	102	99	96	100	97	94	92	87	85	84	79	77	76	71	70	69	65
2	98	92	87	83	93	88	83	80	80	76	74	72	70	68	66	64	62	59
3	91	83	77	72	87	80	74	70	73	69	65	67	63	61	61	58	56	53
4	85	76	69	64	81	73	67	62	67	62	58	61	57	54	56	53	51	48
5	79	69	62	57	75	66	60	55	61	56	52	56	52	49	52	49	46	44
6	74	63	56	51	70	61	54	50	56	51	47	52	48	45	48	45	42	40
7	69	58	51	46	66	56	50	45	52	47	43	49	44	41	45	41	39	37
8	65	54	47	42	62	52	46	41	48	43	39	45	41	37	42	38	36	34
9	61	50	43	39	58	48	42	38	45	40	36	42	38	35	39	36	33	31
10	58	46	40	35	55	45	39	35	42	37	33	40	35	32	37	33	31	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16333	16333	16333
5°	16070	16031	16149
10°	15036	15237	15662
15°	13669	14103	14889
20°	12134	12765	13883
25°	10567	11404	12756
30°	9051	10046	11688
35°	7505	8527	10399
40°	5767	6818	8861
45°	4169	5163	7129
50°	2839	3848	5655
55°	1847	2783	4395
60°	1059	1960	3176
65°	279	1196	1609
70°	138	370	461
75°	61	32	0
80°	48	0	0
85°	0	0	0



TEST NUMBER: P518368

CATALOG NUMBER: SQ4-BB-025U-100D-940-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.6	5.5
10°-20°	413.2	14.0
20°-30°	517.2	17.5
30°-40°	477.8	16.2
40°-50°	321.0	10.9
50°-60°	165.8	5.6
60°-70°	51.9	1.8
70°-80°	3.3	0.1
80°-90°	0.8	0.0
90°-100°	63.4	2.1
100°-110°	166.7	5.6
110°-120°	172.9	5.8
120°-130°	138.7	4.7
130°-140°	108.8	3.7
140°-150°	83.5	2.8
150°-160°	60.2	2.0
160°-170°	36.8	1.2
170°-180°	12.4	0.4
0°-30°	1091.9	36.9
0°-40°	1569.7	53.1
0°-60°	2056.5	69.6
0°-90°	2112.5	71.5
90°-120°	403.0	13.6
90°-150°	734.0	24.8
90°-180°	843.0	28.5
0°-180°	2956.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1770	1770	1770	1770	1770	
5°	1735	1718	1731	1737	1744	161
15°	1431	1426	1476	1526	1559	399
25°	1038	1046	1120	1197	1253	476
35°	666	683	757	846	923	413
45°	320	339	396	473	546	251
55°	115	134	173	222	273	107
65°	13	25	55	66	74	22
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	1	2	7	3	3	1
95°	8	33	109	56	38	9
105°	30	46	184	280	261	32
115°	53	65	148	295	336	53
125°	74	83	134	227	268	66
135°	88	97	130	183	208	68
145°	103	109	128	156	168	64
155°	116	119	128	141	145	53
165°	125	127	128	134	135	35
175°	130	130	129	131	131	12
180°	130	130	130	130	130	



TEST NUMBER: P518368

CATALOG NUMBER: SQ4-BB-025U-100D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1770.3	1770.3	1770.3	1770.3	1770.3
2.5°	1774.4	1757.7	1762.1	1762.0	1757.3
5°	1735.2	1717.6	1730.9	1737.0	1743.7
7.5°	1661.9	1648.1	1673.7	1692.8	1706.7
10°	1605.0	1593.3	1626.4	1652.5	1671.8
12.5°	1539.2	1530.2	1570.2	1606.1	1630.7
15°	1431.1	1426.1	1476.5	1526.1	1558.8
17.5°	1315.3	1315.2	1372.7	1434.3	1473.6
20°	1235.9	1238.4	1300.1	1368.0	1414.0
22.5°	1156.4	1162.3	1228.2	1298.9	1351.7
25°	1038.0	1046.4	1120.2	1196.9	1253.0
27.5°	924.3	936.5	1014.2	1093.9	1162.2
30°	849.6	863.8	943.0	1026.8	1097.1
32.5°	776.3	793.2	870.3	959.0	1030.7
35°	666.3	683.1	757.1	846.2	923.3
37.5°	552.8	569.2	641.5	729.2	812.4
40°	478.8	497.2	566.1	651.1	735.7
42.5°	411.6	430.0	494.9	578.4	658.3
45°	319.5	338.7	395.7	472.7	546.4
47.5°	243.1	264.0	314.0	383.7	450.8
50°	197.8	218.8	268.1	329.5	394.0
52.5°	161.5	181.8	226.3	284.1	343.3
55°	114.8	134.0	173.0	222.1	273.2
57.5°	79.3	95.9	130.9	171.9	211.9
60°	57.4	73.3	106.2	139.5	172.1
62.5°	38.2	52.8	85.0	110.5	132.4
65°	12.8	24.6	54.8	66.1	73.7
67.5°	6.5	7.8	28.8	30.4	32.9
70°	5.1	5.1	13.7	14.6	17.1
72.5°	3.8	3.8	5.5	7.0	7.5
75°	1.7	1.7	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°	0.2	0.5	1.3	0.7	0.7
90°	0.8	2.5	6.7	3.3	3.3
92.5°	3.5	16.9	37.4	16.5	10.7
95°	8.3	32.8	109.3	56.3	38.4
97.5°	14.5	36.0	163.5	130.0	95.8
100°	19.2	38.8	180.2	182.6	141.8
102.5°	23.2	41.5	184.8	227.4	192.5
105°	30.0	45.5	184.3	279.8	261.1
107.5°	37.0	51.4	173.8	307.1	311.6
110°	41.7	54.8	165.2	314.1	333.7

TEST NUMBER: P518368

CATALOG NUMBER: SQ4-BB-025U-100D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	46.4	58.8	157.2	309.6	339.7
115°	53.4	64.8	147.6	294.6	336.2
117.5°	60.2	70.7	141.1	273.6	319.8
120°	64.2	74.0	138.5	259.6	304.5
122.5°	68.2	78.0	136.5	245.6	289.8
125°	74.2	83.2	134.3	227.0	267.8
127.5°	79.1	88.2	132.5	212.0	246.4
130°	81.7	91.5	131.8	202.6	234.4
132.5°	84.4	94.2	131.1	194.5	223.0
135°	88.4	97.4	130.1	183.2	207.7
137.5°	92.6	101.4	130.0	174.8	194.9
140°	95.9	104.1	129.3	168.1	186.8
142.5°	98.6	106.1	129.3	163.4	179.5
145°	102.6	109.1	128.5	156.3	168.5
147.5°	106.6	113.0	128.5	150.4	160.5
150°	109.3	115.0	128.5	147.0	155.1
152.5°	111.9	116.3	128.5	144.3	150.5
155°	115.9	119.2	128.5	141.1	145.1
157.5°	118.9	122.0	128.5	138.2	141.1
160°	120.9	123.4	128.5	136.8	138.5
162.5°	123.0	124.7	128.5	135.5	137.1
165°	125.1	126.8	128.5	133.5	135.1
167.5°	127.1	127.9	129.3	132.6	133.3
170°	128.5	129.3	129.3	132.6	132.6
172.5°	129.1	129.3	129.3	131.9	131.3
175°	130.1	130.1	129.3	131.0	131.0
177.5°	130.1	130.1	129.5	130.8	130.1
180°	130.1	130.1	130.1	130.1	130.1

(END OF REPORT)