

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: P518364

Luminaire Tested: **SQ4-BB-025U-100D-935-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518364
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-935-1D-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

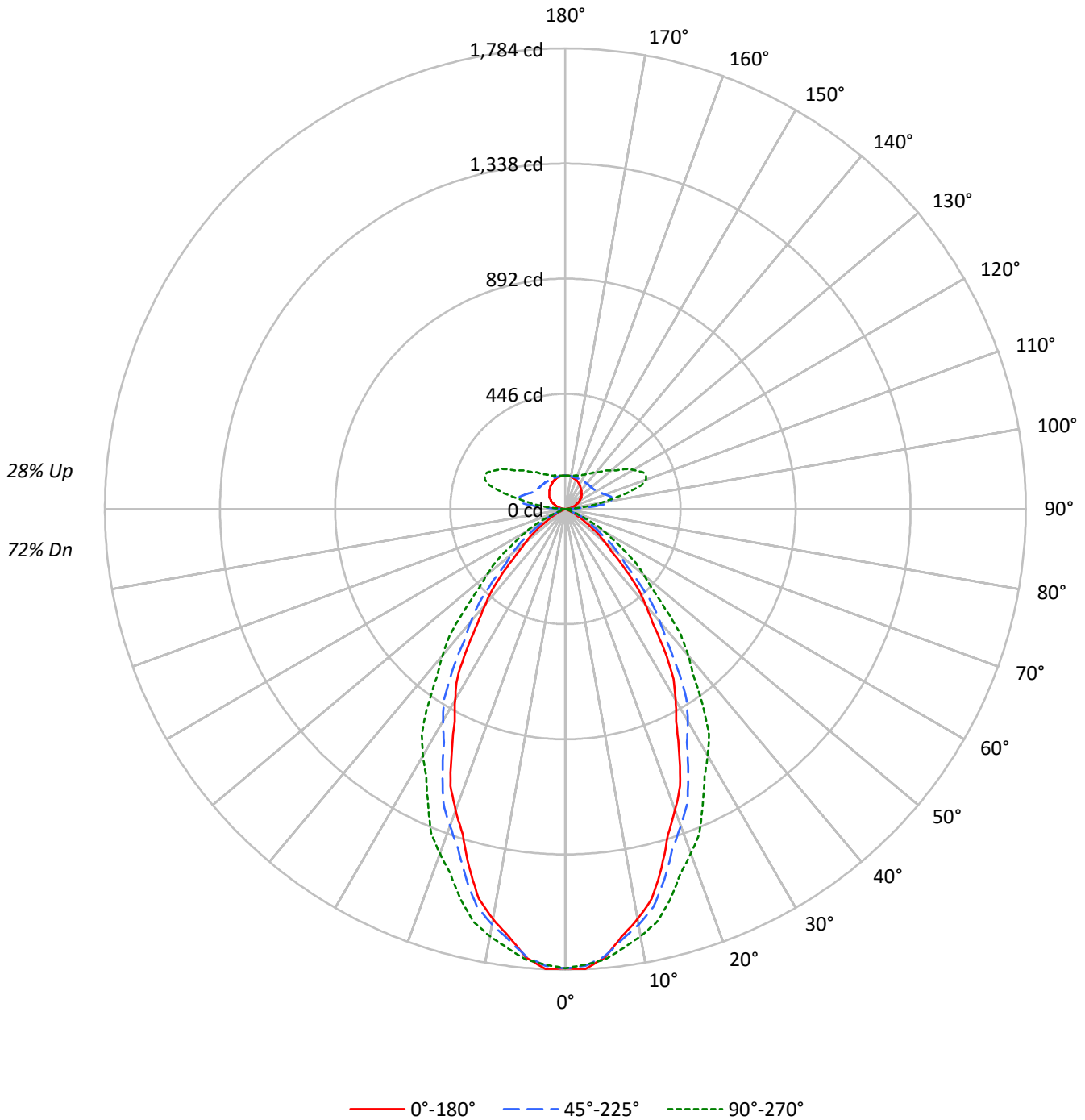
Lumens per Lamp: N/A
Luminaire Lumens: 2962.6 lumens
Efficiency: N/A
Efficacy: 76.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

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



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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	50	30	10	0	
RCR																						
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	76	76	76	72	
1	105	102	99	96	100	97	94	92	87	86	84	79	78	76	71	70	69	69	69	69	65	
2	98	92	87	83	93	88	83	80	80	77	74	73	70	68	66	64	62	62	62	62	59	
3	91	83	77	72	87	80	74	70	73	69	65	67	63	61	61	58	56	56	56	56	53	
4	85	76	69	64	81	73	67	62	67	62	58	61	58	55	56	53	51	51	51	51	48	
5	79	69	62	57	75	66	60	55	61	56	52	57	52	49	52	49	46	46	46	46	44	
6	74	63	56	51	70	61	55	50	57	51	47	52	48	45	48	45	42	42	42	42	40	
7	69	58	51	46	66	56	50	45	52	47	43	49	44	41	45	42	39	39	39	39	37	
8	65	54	47	42	62	52	46	41	49	43	39	45	41	38	42	38	36	36	36	36	34	
9	61	50	43	39	58	48	42	38	45	40	36	42	38	35	40	36	33	33	33	33	31	
10	58	47	40	36	55	45	39	35	42	37	33	40	35	32	37	33	31	31	31	31	29	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16416	16416	16416
5°	16152	16112	16232
10°	15113	15315	15742
15°	13739	14176	14965
20°	12196	12830	13954
25°	10621	11463	12821
30°	9097	10097	11748
35°	7543	8571	10452
40°	5796	6853	8907
45°	4190	5189	7166
50°	2855	3867	5684
55°	1856	2797	4417
60°	1065	1969	3192
65°	282	1203	1615
70°	140	372	464
75°	61	32	0
80°	48	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.4	5.5
10°-20°	415.3	14.0
20°-30°	519.9	17.5
30°-40°	480.2	16.2
40°-50°	322.6	10.9
50°-60°	166.7	5.6
60°-70°	52.2	1.8
70°-80°	3.3	0.1
80°-90°	0.8	0.0
90°-100°	63.1	2.1
100°-110°	165.9	5.6
110°-120°	172.0	5.8
120°-130°	138.0	4.7
130°-140°	108.3	3.7
140°-150°	83.1	2.8
150°-160°	59.9	2.0
160°-170°	36.6	1.2
170°-180°	12.4	0.4
0°-30°	1097.5	37.0
0°-40°	1577.7	53.3
0°-60°	2067.0	69.8
0°-90°	2123.3	71.7
90°-120°	401.1	13.5
90°-150°	730.4	24.7
90°-180°	839.0	28.3
0°-180°	2962.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1779	1779	1779	1779	1779	
5°	1744	1726	1740	1746	1753	162
15°	1438	1433	1484	1534	1567	401
25°	1043	1052	1126	1203	1259	478
35°	670	687	761	850	928	415
45°	321	340	398	475	549	252
55°	115	135	174	223	275	108
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	45	183	278	260	32
115°	53	64	147	293	334	52
125°	74	83	134	226	266	66
135°	88	97	130	182	207	68
145°	102	109	128	156	168	64
155°	115	119	128	140	144	53
165°	124	126	128	133	134	35
175°	130	130	129	130	130	12
180°	130	130	130	130	130	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1779.3	1779.3	1779.3	1779.3	1779.3
2.5°	1783.5	1766.6	1771.1	1771.0	1766.2
5°	1744.0	1726.4	1739.7	1745.9	1752.6
7.5°	1670.4	1656.5	1682.2	1701.5	1715.5
10°	1613.2	1601.4	1634.7	1661.0	1680.3
12.5°	1547.1	1538.0	1578.2	1614.3	1639.0
15°	1438.4	1433.4	1484.1	1533.9	1566.7
17.5°	1322.1	1321.9	1379.7	1441.6	1481.1
20°	1242.2	1244.7	1306.7	1374.9	1421.2
22.5°	1162.3	1168.2	1234.4	1305.5	1358.6
25°	1043.3	1051.7	1126.0	1203.0	1259.4
27.5°	929.0	941.3	1019.4	1099.5	1168.1
30°	853.9	868.3	947.8	1032.0	1102.7
32.5°	780.3	797.3	874.8	963.9	1035.9
35°	669.7	686.6	761.0	850.5	928.0
37.5°	555.6	572.1	644.8	732.9	816.6
40°	481.2	499.7	569.0	654.4	739.5
42.5°	413.7	432.2	497.4	581.3	661.6
45°	321.1	340.4	397.7	475.1	549.2
47.5°	244.3	265.3	315.6	385.6	453.1
50°	198.9	219.9	269.4	331.2	396.0
52.5°	162.4	182.7	227.4	285.6	345.0
55°	115.4	134.7	173.9	223.3	274.6
57.5°	79.7	96.4	131.5	172.7	213.0
60°	57.7	73.7	106.7	140.2	173.0
62.5°	38.4	53.0	85.4	111.0	133.1
65°	12.9	24.7	55.1	66.5	74.0
67.5°	6.5	7.9	28.9	30.5	33.1
70°	5.2	5.2	13.8	14.7	17.2
72.5°	3.8	3.8	5.5	7.1	7.6
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	6.6	3.3	3.3
92.5°	3.5	16.8	37.2	16.5	10.6
95°	8.3	32.6	108.7	56.0	38.2
97.5°	14.4	35.9	162.7	129.4	95.3
100°	19.1	38.6	179.3	181.7	141.1
102.5°	23.1	41.3	183.9	226.3	191.6
105°	29.9	45.3	183.4	278.5	259.8
107.5°	36.9	51.1	173.0	305.6	310.1
110°	41.5	54.5	164.3	312.5	332.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	46.2	58.5	156.4	308.1	338.0
115°	53.1	64.5	146.9	293.1	334.5
117.5°	59.9	70.3	140.4	272.3	318.2
120°	63.9	73.7	137.8	258.3	303.0
122.5°	67.9	77.6	135.8	244.4	288.4
125°	73.9	82.8	133.6	225.9	266.4
127.5°	78.7	87.8	131.8	210.9	245.2
130°	81.3	91.1	131.1	201.6	233.2
132.5°	84.0	93.7	130.5	193.5	222.0
135°	88.0	96.9	129.5	182.3	206.7
137.5°	92.1	100.9	129.3	173.9	193.9
140°	95.5	103.6	128.7	167.3	185.9
142.5°	98.1	105.6	128.7	162.6	178.6
145°	102.1	108.6	127.8	155.5	167.7
147.5°	106.1	112.4	127.8	149.6	159.7
150°	108.7	114.4	127.8	146.3	154.4
152.5°	111.4	115.8	127.8	143.6	149.7
155°	115.4	118.6	127.8	140.4	144.4
157.5°	118.4	121.4	127.8	137.5	140.4
160°	120.4	122.8	127.8	136.2	137.8
162.5°	122.3	124.1	127.8	134.8	136.5
165°	124.5	126.1	127.8	132.8	134.5
167.5°	126.5	127.3	128.7	132.0	132.6
170°	127.8	128.6	128.7	132.0	132.0
172.5°	128.5	128.7	128.7	131.3	130.6
175°	129.5	129.5	128.7	130.3	130.3
177.5°	129.5	129.5	128.8	130.1	129.5
180°	129.5	129.5	129.5	129.5	129.5

(END OF REPORT)