

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: P519132

Luminaire Tested: **SQ4-WB-050U-100D-935-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519132
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-050U-100D-935-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

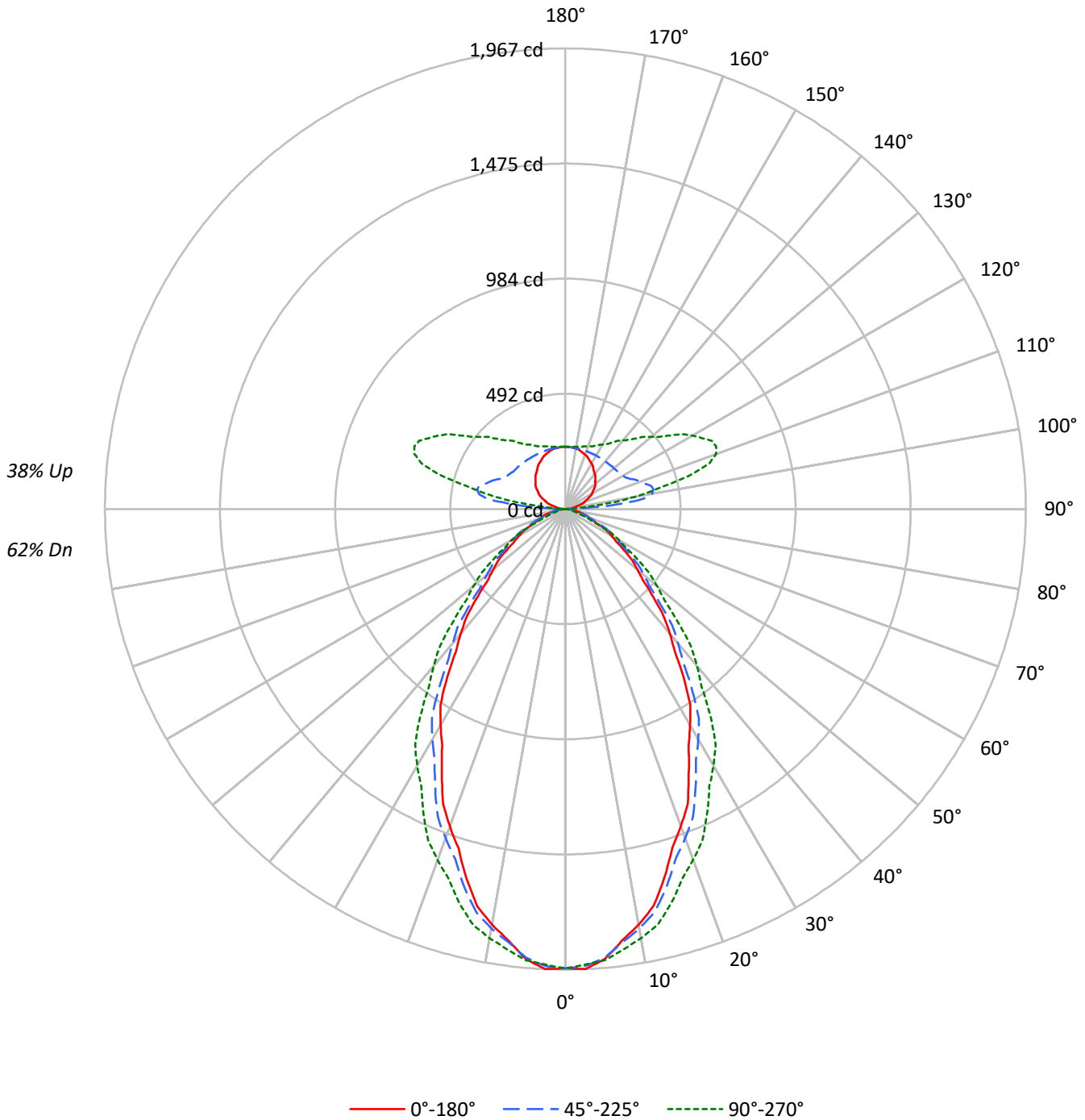
Lumens per Lamp: N/A
Luminaire Lumens: 4590.7 lumens
Efficiency: N/A
Efficacy: 101.8 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 45.1
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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	62
1	102	98	95	92	95	92	89	87	81	79	77	71	70	68	62	61	60	55
2	94	87	82	77	88	82	78	73	73	69	66	64	62	59	56	54	53	49
3	87	78	72	66	81	74	68	63	66	61	57	58	55	52	51	49	47	43
4	80	70	63	58	75	67	60	55	60	54	50	53	49	46	47	44	41	38
5	74	64	56	51	70	60	54	49	54	49	45	48	44	41	43	40	37	34
6	69	58	50	45	65	55	48	43	50	44	40	44	40	37	40	36	34	31
7	64	53	45	40	61	50	44	39	45	40	36	41	37	33	37	33	31	28
8	60	49	41	36	57	46	40	35	42	36	33	38	33	30	34	31	28	26
9	56	45	38	33	53	43	36	32	39	33	30	35	31	28	32	28	26	24
10	53	41	35	30	50	40	33	29	36	31	27	33	29	25	30	26	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18102	18102	18102
5°	17876	17813	17916
10°	16889	17042	17438
15°	15591	15953	16669
20°	14158	14691	15663
25°	12700	13392	14592
30°	11355	12097	13482
35°	9930	10647	12169
40°	8357	9021	10535
45°	6897	7492	8796
50°	5759	6277	7327
55°	4888	5387	6051
60°	4178	4670	4829
65°	3327	3927	3120
70°	2948	3064	1904
75°	2731	2485	1166
80°	2513	2285	1004
85°	2276	2096	815



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.0	3.9
10°-20°	468.1	10.2
20°-30°	606.3	13.2
30°-40°	593.7	12.9
40°-50°	454.5	9.9
50°-60°	302.8	6.6
60°-70°	165.2	3.6
70°-80°	68.8	1.5
80°-90°	20.5	0.4
90°-100°	127.2	2.8
100°-110°	345.7	7.5
110°-120°	355.4	7.7
120°-130°	284.2	6.2
130°-140°	223.3	4.9
140°-150°	171.2	3.7
150°-160°	123.1	2.7
160°-170°	75.3	1.6
170°-180°	25.4	0.6
0°-30°	1254.4	27.3
0°-40°	1848.1	40.3
0°-60°	2605.4	56.8
0°-90°	2860.0	62.3
90°-120°	828.3	18.0
90°-150°	1507.0	32.8
90°-180°	1731.0	37.7
0°-180°	4590.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1962	1962	1962	1962	1962	
5°	1930	1911	1923	1928	1934	180
15°	1632	1626	1670	1716	1745	456
25°	1248	1251	1316	1373	1433	574
35°	882	886	945	1009	1080	548
45°	529	539	574	618	674	412
55°	304	316	335	348	376	276
65°	152	165	180	157	143	158
75°	77	77	70	48	33	82
85°	22	22	20	13	8	23
90°	1	3	6	8	8	2
95°	19	70	222	96	65	20
105°	61	96	380	579	545	65
115°	109	132	304	605	690	108
125°	150	171	275	464	547	134
135°	181	201	268	378	426	140
145°	209	224	264	321	345	131
155°	236	244	262	288	297	109
165°	256	259	263	274	275	72
175°	265	266	264	268	267	25
180°	265	265	265	265	265	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1962.0	1962.0	1962.0	1962.0	1962.0
2.5°	1966.8	1949.3	1953.7	1953.6	1948.2
5°	1930.1	1910.8	1923.3	1927.7	1934.5
7.5°	1858.5	1843.9	1866.6	1883.5	1897.1
10°	1802.7	1790.1	1819.1	1843.6	1861.3
12.5°	1738.0	1727.4	1763.3	1796.2	1819.3
15°	1632.3	1626.4	1670.2	1715.6	1745.1
17.5°	1519.2	1516.3	1566.5	1619.5	1657.2
20°	1442.0	1441.2	1496.3	1551.5	1595.3
22.5°	1364.2	1366.0	1423.9	1481.4	1531.2
25°	1247.5	1250.8	1315.5	1372.8	1433.4
27.5°	1139.5	1141.0	1207.8	1268.4	1333.0
30°	1065.8	1070.0	1135.5	1198.2	1265.5
32.5°	992.1	997.0	1061.2	1125.9	1194.6
35°	881.6	885.8	945.3	1008.9	1080.4
37.5°	767.6	773.3	826.1	886.3	956.6
40°	693.9	702.3	749.0	805.7	874.7
42.5°	623.0	633.4	676.7	730.4	792.7
45°	528.6	538.7	574.2	617.7	674.1
47.5°	447.3	458.9	486.2	523.7	571.8
50°	401.2	412.1	437.3	465.1	510.5
52.5°	360.5	371.5	394.0	415.3	454.0
55°	303.9	316.5	334.9	347.6	376.2
57.5°	257.4	269.5	284.1	289.8	307.2
60°	226.4	239.9	253.1	252.5	261.7
62.5°	198.2	209.6	222.8	213.7	214.2
65°	152.4	165.0	179.9	157.2	142.9
67.5°	123.1	125.8	141.2	109.6	92.6
70°	109.3	109.3	113.6	84.9	70.6
72.5°	96.2	96.2	92.3	69.0	54.1
75°	76.6	76.6	69.7	47.9	32.7
77.5°	59.1	58.4	53.4	35.7	23.8
80°	47.3	47.3	43.0	28.2	18.9
82.5°	37.0	37.0	33.4	22.0	14.1
85°	21.5	21.5	19.8	12.8	7.7
87.5°	7.7	8.2	8.1	5.7	5.0
90°	0.9	3.4	6.0	7.7	7.7
92.5°	7.7	34.8	60.5	26.0	22.0
95°	18.8	69.6	221.6	96.4	64.8
97.5°	31.0	76.9	339.7	264.3	185.6
100°	39.2	81.7	375.9	381.0	307.7
102.5°	47.4	86.6	385.4	471.2	406.6
105°	61.4	95.5	380.1	578.8	544.6
107.5°	75.9	106.0	358.2	634.4	643.9
110°	86.1	113.6	341.8	645.3	686.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	95.0	121.1	325.4	636.2	697.7
115°	109.1	132.4	304.3	605.4	689.5
117.5°	122.4	144.7	290.8	561.6	656.5
120°	131.3	152.9	284.7	532.3	626.5
122.5°	138.8	160.4	280.6	502.9	593.7
125°	150.0	170.8	275.3	463.9	547.2
127.5°	160.1	180.7	272.4	434.3	505.8
130°	166.2	186.2	271.0	415.7	479.9
132.5°	172.3	192.3	269.7	399.8	456.7
135°	180.7	200.7	267.6	377.8	426.2
137.5°	189.7	207.9	266.6	358.4	399.1
140°	195.2	212.7	265.9	346.0	382.7
142.5°	200.6	216.8	265.2	336.3	367.0
145°	208.8	223.8	264.2	321.0	345.2
147.5°	218.0	230.9	263.4	309.0	328.0
150°	224.2	235.0	263.4	302.1	317.1
152.5°	228.9	238.4	262.7	295.9	308.2
155°	236.1	244.4	262.5	288.3	296.6
157.5°	243.1	249.6	262.5	283.1	289.5
160°	247.2	253.0	262.5	279.7	284.7
162.5°	251.3	255.8	263.2	276.9	280.6
165°	255.7	259.0	263.4	274.5	275.3
167.5°	260.3	262.0	264.2	271.6	272.2
170°	261.7	263.3	264.2	270.2	270.2
172.5°	263.0	264.0	264.2	268.8	268.8
175°	265.1	265.9	264.2	267.6	266.8
177.5°	265.8	265.8	263.7	266.4	265.1
180°	265.1	265.1	265.1	265.1	265.1

(END OF REPORT)