

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: P519137

Luminaire Tested: **SQ4-WB-050U-100D-940-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519137
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-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

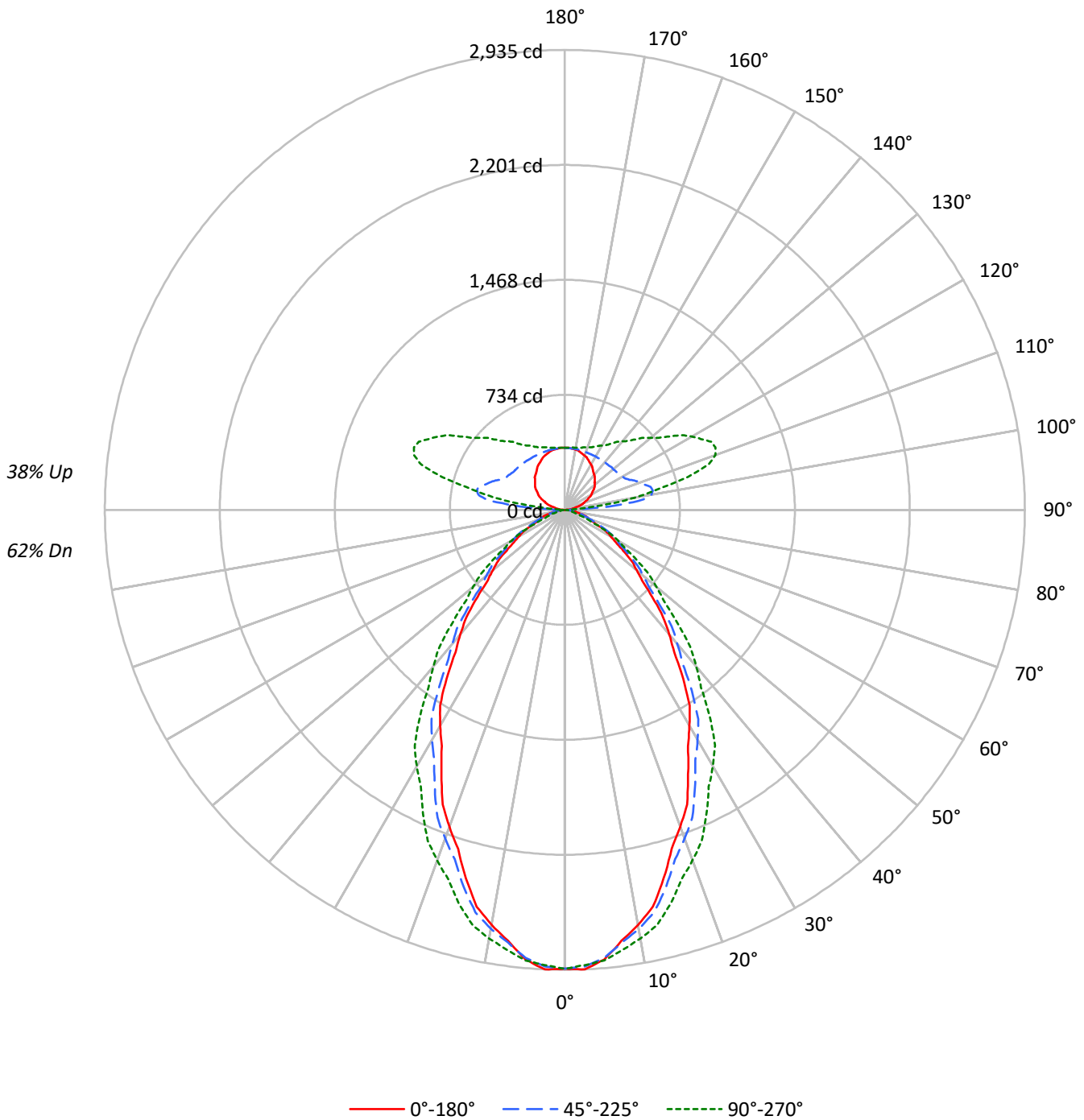
Lumens per Lamp: N/A
Luminaire Lumens: 6851.2 lumens
Efficiency: N/A
Efficacy: 93.3 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 73.4
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°	18010	18010	18010
5°	17785	17721	17825
10°	16803	16956	17349
15°	15512	15872	16584
20°	14086	14616	15583
25°	12635	13324	14518
30°	11297	12036	13414
35°	9879	10593	12107
40°	8314	8975	10481
45°	6862	7455	8751
50°	5729	6246	7291
55°	4863	5360	6021
60°	4157	4646	4805
65°	3310	3908	3104
70°	2935	3050	1895
75°	2716	2474	1160
80°	2504	2274	1002
85°	2265	2089	819



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	268.6	3.9
10°-20°	698.6	10.2
20°-30°	904.9	13.2
30°-40°	886.1	12.9
40°-50°	678.2	9.9
50°-60°	451.9	6.6
60°-70°	246.6	3.6
70°-80°	102.8	1.5
80°-90°	30.6	0.4
90°-100°	189.9	2.8
100°-110°	515.9	7.5
110°-120°	530.4	7.7
120°-130°	424.1	6.2
130°-140°	333.2	4.9
140°-150°	255.5	3.7
150°-160°	183.7	2.7
160°-170°	112.4	1.6
170°-180°	37.9	0.6
0°-30°	1872.0	27.3
0°-40°	2758.1	40.3
0°-60°	3888.2	56.8
0°-90°	4268.2	62.3
90°-120°	1236.2	18.0
90°-150°	2249.0	32.8
90°-180°	2583.0	37.7
0°-180°	6851.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2928	2928	2928	2928	2928	
5°	2880	2852	2870	2877	2887	268
15°	2436	2427	2492	2560	2604	680
25°	1862	1867	1963	2049	2139	856
35°	1316	1322	1411	1506	1612	818
45°	789	804	857	922	1006	615
55°	454	472	500	519	562	411
65°	227	246	268	235	213	236
75°	114	114	104	71	49	122
85°	32	32	30	19	12	35
90°	1	5	9	11	11	4
95°	28	104	331	144	97	30
105°	92	143	567	864	813	97
115°	163	198	454	903	1029	161
125°	224	255	411	692	817	200
135°	270	300	399	564	636	209
145°	312	334	394	479	515	196
155°	352	365	392	430	443	162
165°	382	387	393	410	411	108
175°	396	397	394	399	398	38
180°	396	396	396	396	396	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2928.1	2928.1	2928.1	2928.1	2928.1
2.5°	2935.3	2909.1	2915.7	2915.5	2907.5
5°	2880.5	2851.6	2870.2	2876.9	2886.9
7.5°	2773.6	2751.8	2785.7	2810.8	2831.2
10°	2690.4	2671.5	2714.8	2751.4	2777.7
12.5°	2593.8	2577.9	2631.5	2680.6	2715.0
15°	2436.0	2427.2	2492.5	2560.3	2604.3
17.5°	2267.2	2262.9	2337.8	2417.0	2473.2
20°	2152.0	2150.8	2233.0	2315.4	2380.7
22.5°	2035.9	2038.7	2125.1	2210.8	2285.1
25°	1861.7	1866.7	1963.2	2048.7	2139.2
27.5°	1700.6	1702.8	1802.6	1892.9	1989.4
30°	1590.6	1596.9	1694.7	1788.2	1888.7
32.5°	1480.6	1487.9	1583.6	1680.3	1782.8
35°	1315.6	1321.9	1410.7	1505.6	1612.4
37.5°	1145.5	1154.1	1232.9	1322.6	1427.7
40°	1035.5	1048.1	1117.8	1202.3	1305.4
42.5°	929.7	945.3	1009.9	1090.1	1183.0
45°	788.9	803.9	857.0	921.8	1006.0
47.5°	667.6	684.9	725.7	781.5	853.4
50°	598.7	615.0	652.7	694.0	761.9
52.5°	538.1	554.4	587.9	619.8	677.6
55°	453.5	472.4	499.8	518.7	561.5
57.5°	384.2	402.2	424.0	432.5	458.4
60°	337.9	358.0	377.7	376.8	390.6
62.5°	295.8	312.8	332.5	318.9	319.7
65°	227.4	246.3	268.5	234.6	213.3
67.5°	183.7	187.7	210.7	163.6	138.2
70°	163.2	163.2	169.6	126.7	105.4
72.5°	143.6	143.6	137.7	103.0	80.7
75°	114.3	114.3	104.1	71.4	48.8
77.5°	88.1	87.1	79.7	53.3	35.5
80°	70.7	70.7	64.2	42.1	28.3
82.5°	55.2	55.2	49.9	32.9	21.1
85°	32.1	32.1	29.6	19.1	11.6
87.5°	11.6	12.3	12.1	8.4	7.4
90°	1.3	5.0	8.9	11.4	11.4
92.5°	11.4	52.0	90.3	38.8	32.8
95°	28.0	103.9	330.7	143.9	96.7
97.5°	46.3	114.7	507.0	394.5	277.0
100°	58.5	121.9	561.0	568.6	459.2
102.5°	70.7	129.2	575.2	703.3	606.8
105°	91.6	142.6	567.3	863.8	812.8
107.5°	113.2	158.2	534.5	946.7	960.9
110°	128.5	169.5	510.1	963.0	1024.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	141.7	180.8	485.7	949.5	1041.3
115°	162.8	197.6	454.1	903.4	1029.1
117.5°	182.7	216.0	434.0	838.2	979.7
120°	195.9	228.2	424.9	794.4	934.9
122.5°	207.1	239.4	418.7	750.5	886.1
125°	223.9	255.0	410.9	692.3	816.6
127.5°	238.9	269.7	406.5	648.1	754.8
130°	248.0	277.9	404.5	620.4	716.1
132.5°	257.2	287.1	402.5	596.7	681.5
135°	269.7	299.5	399.4	563.9	636.0
137.5°	283.2	310.3	397.9	534.9	595.6
140°	291.3	317.4	396.9	516.4	571.1
142.5°	299.4	323.6	395.9	502.0	547.7
145°	311.6	334.0	394.3	479.1	515.2
147.5°	325.4	344.5	393.1	461.1	489.5
150°	334.5	350.7	393.1	450.8	473.2
152.5°	341.7	355.8	392.0	441.6	460.0
155°	352.3	364.8	391.8	430.2	442.7
157.5°	362.8	372.5	391.8	422.5	432.0
160°	368.9	377.6	391.8	417.4	424.9
162.5°	375.0	381.7	392.8	413.3	418.7
165°	381.6	386.6	393.1	409.6	410.9
167.5°	388.5	391.0	394.3	405.3	406.3
170°	390.5	393.0	394.3	403.2	403.2
172.5°	392.5	394.0	394.3	401.2	401.2
175°	395.6	396.8	394.3	399.4	398.1
177.5°	396.6	396.6	393.6	397.6	395.6
180°	395.6	395.6	395.6	395.6	395.6

(END OF REPORT)