

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: P519119

Luminaire Tested: **SQ4-WB-050U-100D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519119
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-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

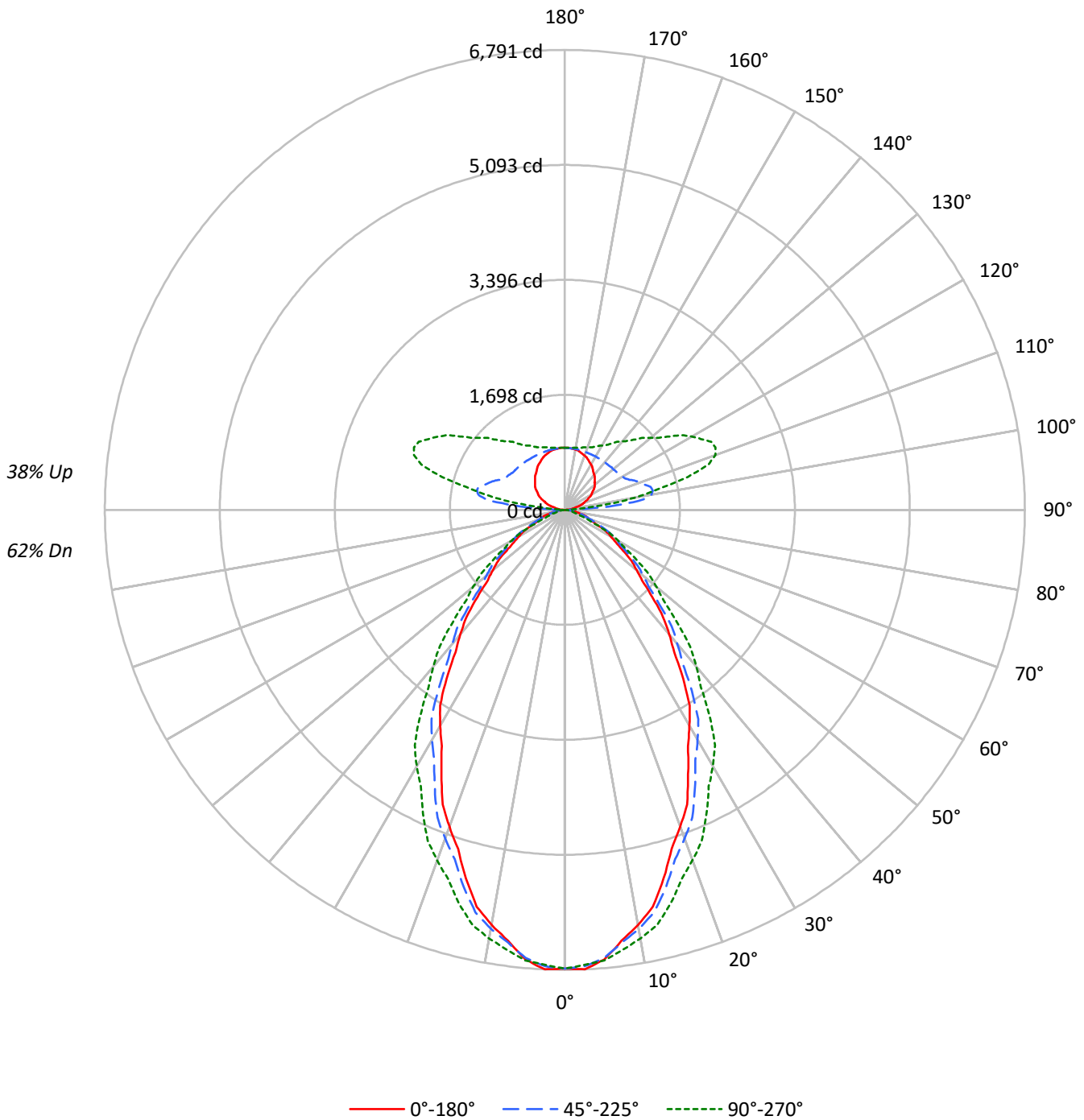
Lumens per Lamp: N/A
Luminaire Lumens: 15850.4 lumens
Efficiency: N/A
Efficacy: 117.9 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 134.4
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°	20833	20833	20833
5°	20573	20500	20619
10°	19437	19614	20069
15°	17943	18360	19183
20°	16294	16907	18026
25°	14615	15412	16794
30°	13068	13923	15517
35°	11428	12253	14005
40°	9618	10382	12124
45°	7938	8623	10122
50°	6627	7225	8433
55°	5626	6200	6964
60°	4808	5375	5558
65°	3828	4520	3590
70°	3394	3528	2191
75°	3143	2861	1343
80°	2896	2632	1158
85°	2622	2414	946



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	621.4	3.9
10°-20°	1616.2	10.2
20°-30°	2093.4	13.2
30°-40°	2049.9	12.9
40°-50°	1569.1	9.9
50°-60°	1045.6	6.6
60°-70°	570.6	3.6
70°-80°	237.7	1.5
80°-90°	70.8	0.4
90°-100°	439.4	2.8
100°-110°	1193.5	7.5
110°-120°	1227.1	7.7
120°-130°	981.1	6.2
130°-140°	770.9	4.9
140°-150°	591.1	3.7
150°-160°	425.1	2.7
160°-170°	260.0	1.6
170°-180°	87.6	0.6
0°-30°	4330.9	27.3
0°-40°	6380.8	40.3
0°-60°	8995.5	56.8
0°-90°	9874.7	62.3
90°-120°	2860.0	18.0
90°-150°	5203.1	32.8
90°-180°	5976.0	37.7
0°-180°	15850.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6774	6774	6774	6774	6774	
5°	6664	6597	6640	6656	6679	620
15°	5636	5615	5766	5923	6025	1574
25°	4307	4319	4542	4740	4949	1981
35°	3044	3058	3264	3483	3730	1892
45°	1825	1860	1983	2133	2327	1423
55°	1049	1093	1156	1200	1299	951
65°	526	570	621	543	493	547
75°	264	264	241	165	113	282
85°	74	74	68	44	27	81
90°	3	12	21	26	26	8
95°	65	240	765	333	224	69
105°	212	330	1312	1998	1880	225
115°	377	457	1051	2090	2381	372
125°	518	590	950	1602	1889	462
135°	624	693	924	1304	1471	482
145°	721	773	912	1108	1192	453
155°	815	844	906	995	1024	376
165°	883	894	909	948	950	249
175°	915	918	912	924	921	87
180°	915	915	915	915	915	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6774.1	6774.1	6774.1	6774.1	6774.1
2.5°	6790.8	6730.3	6745.6	6745.2	6726.6
5°	6664.2	6597.3	6640.4	6655.8	6679.0
7.5°	6416.9	6366.3	6444.8	6502.9	6550.0
10°	6224.2	6180.7	6280.7	6365.3	6426.4
12.5°	6000.7	5964.1	6088.1	6201.7	6281.3
15°	5635.7	5615.4	5766.5	5923.4	6025.1
17.5°	5245.1	5235.3	5408.6	5591.7	5721.9
20°	4978.8	4975.9	5166.1	5356.8	5507.9
22.5°	4710.1	4716.5	4916.4	5114.7	5286.7
25°	4307.0	4318.7	4541.9	4739.8	4949.1
27.5°	3934.3	3939.5	4170.3	4379.3	4602.5
30°	3679.9	3694.4	3920.6	4136.9	4369.5
32.5°	3425.4	3442.3	3663.8	3887.4	4124.5
35°	3043.8	3058.3	3263.7	3483.3	3730.4
37.5°	2650.2	2670.0	2852.3	3060.0	3303.0
40°	2395.8	2424.8	2586.0	2781.7	3020.0
42.5°	2150.8	2186.9	2336.3	2521.9	2737.0
45°	1825.1	1859.9	1982.6	2132.7	2327.4
47.5°	1544.5	1584.6	1678.8	1808.0	1974.3
50°	1385.1	1422.9	1510.0	1605.7	1762.6
52.5°	1244.8	1282.6	1360.2	1434.0	1567.7
55°	1049.3	1092.9	1156.3	1200.1	1298.9
57.5°	888.8	930.6	980.9	1000.7	1060.6
60°	781.7	828.2	873.9	871.6	903.6
62.5°	684.3	723.8	769.3	737.8	739.5
65°	526.1	569.7	621.2	542.8	493.4
67.5°	425.1	434.4	487.5	378.5	319.8
70°	377.5	377.5	392.4	293.1	243.7
72.5°	332.3	332.3	318.6	238.4	186.7
75°	264.5	264.5	240.8	165.3	113.0
77.5°	203.9	201.6	184.3	123.3	82.0
80°	163.5	163.5	148.6	97.4	65.4
82.5°	127.8	127.8	115.3	76.1	48.7
85°	74.3	74.3	68.4	44.2	26.8
87.5°	26.7	28.5	27.9	19.5	17.2
90°	2.9	11.6	20.6	26.5	26.5
92.5°	26.5	120.3	208.9	89.7	75.9
95°	64.7	240.3	765.1	333.0	223.7
97.5°	107.1	265.4	1173.0	912.6	641.0
100°	135.4	282.1	1297.8	1315.6	1062.4
102.5°	163.6	298.9	1330.8	1627.0	1403.7
105°	211.9	329.9	1312.5	1998.4	1880.5
107.5°	261.9	366.1	1236.6	2190.2	2223.0
110°	297.2	392.2	1180.1	2228.0	2369.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	327.8	418.2	1123.6	2196.7	2409.0
115°	376.7	457.3	1050.6	2090.1	2380.8
117.5°	422.6	499.7	1004.1	1939.1	2266.6
120°	453.2	528.0	982.9	1837.8	2163.0
122.5°	479.1	553.9	968.8	1736.3	2050.0
125°	517.9	589.9	950.5	1601.6	1889.3
127.5°	552.7	624.0	940.5	1499.4	1746.3
130°	573.9	642.9	935.8	1435.3	1656.8
132.5°	595.0	664.1	931.1	1380.5	1576.8
135°	623.9	692.9	924.1	1304.5	1471.4
137.5°	655.1	717.8	920.5	1237.4	1377.8
140°	673.9	734.3	918.2	1194.7	1321.3
142.5°	692.7	748.6	915.8	1161.3	1267.2
145°	721.0	772.8	912.3	1108.4	1191.8
147.5°	752.8	797.1	909.3	1066.8	1132.4
150°	774.0	811.4	909.3	1042.9	1094.7
152.5°	790.4	823.2	907.0	1021.5	1064.1
155°	815.2	843.9	906.4	995.3	1024.1
157.5°	839.3	861.7	906.4	977.5	999.4
160°	853.4	873.6	906.4	965.6	982.9
162.5°	867.5	883.1	908.7	956.1	968.8
165°	882.9	894.4	909.3	947.7	950.5
167.5°	898.7	904.5	912.3	937.6	939.9
170°	903.5	909.2	912.3	932.9	932.9
172.5°	908.2	911.6	912.3	928.2	928.2
175°	915.2	918.1	912.3	924.0	921.1
177.5°	917.6	917.6	910.5	919.8	915.2
180°	915.2	915.2	915.2	915.2	915.2

(END OF REPORT)