

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: P519071

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519071
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-050D-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

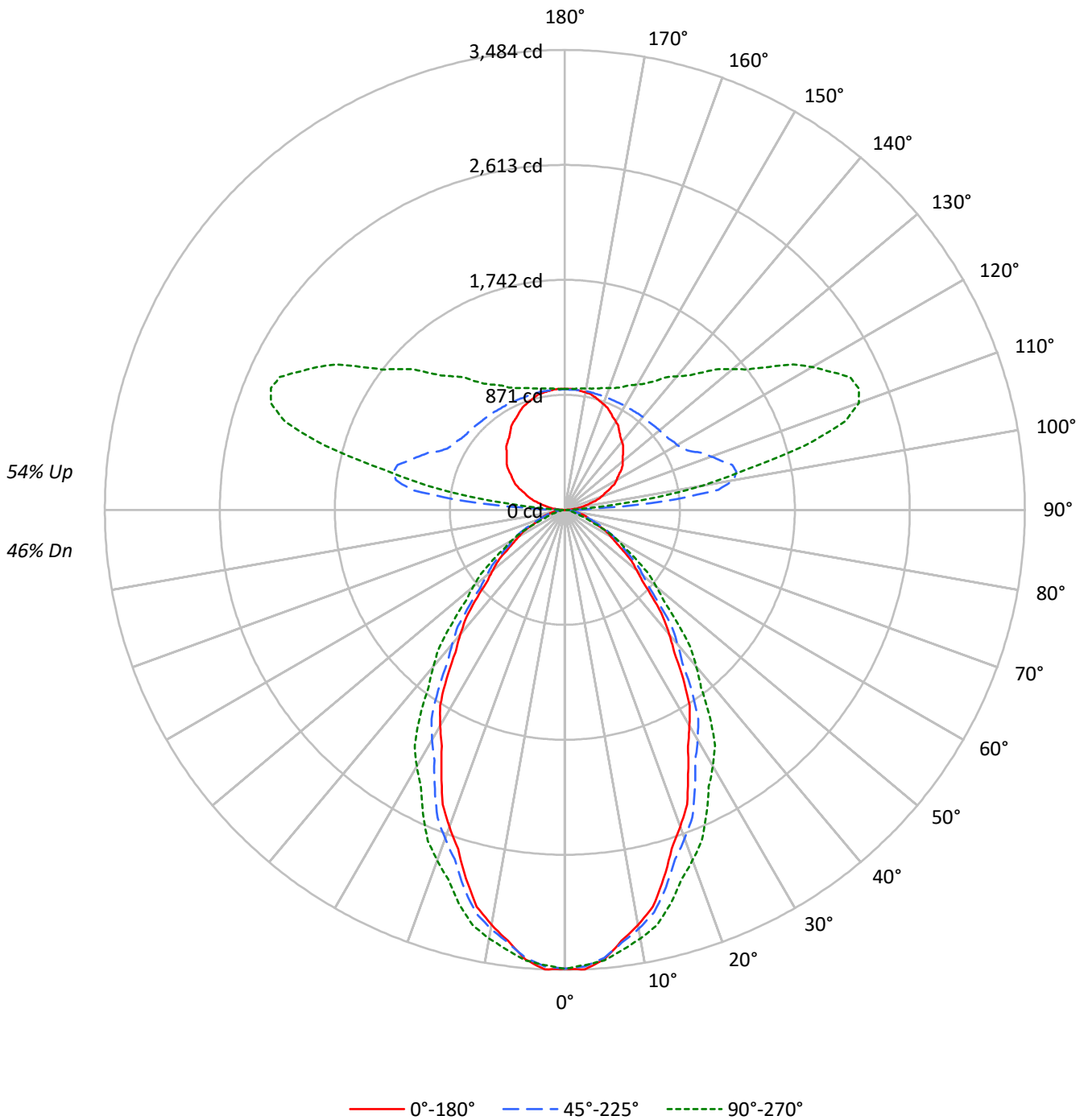
Lumens per Lamp: N/A
Luminaire Lumens: 11044.2 lumens
Efficiency: N/A
Efficacy: 138.7 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 79.6
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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46
1	98	94	91	87	90	87	84	81	73	70	69	60	58	57	48	47	46	41
2	90	83	78	73	83	77	72	68	65	61	59	54	51	49	43	42	41	36
3	83	74	68	62	76	69	63	58	58	54	51	49	46	43	40	38	36	32
4	76	66	59	54	70	62	55	50	52	48	44	44	41	38	36	34	32	28
5	71	60	52	47	65	56	49	44	48	43	39	40	36	34	33	31	29	25
6	65	54	47	41	60	50	44	39	43	38	34	37	33	30	30	28	26	23
7	61	49	42	37	56	46	39	35	40	35	31	34	30	27	28	25	23	21
8	57	45	38	33	52	42	36	31	36	31	28	31	27	25	26	23	21	19
9	53	41	34	30	49	39	32	28	34	29	25	29	25	22	24	22	20	17
10	50	38	31	27	46	36	30	26	31	26	23	27	23	21	23	20	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10689	10689	10689
5°	10556	10519	10580
10°	9973	10064	10297
15°	9207	9420	9843
20°	8361	8675	9249
25°	7499	7908	8617
30°	6705	7144	7962
35°	5864	6287	7186
40°	4935	5327	6221
45°	4073	4425	5194
50°	3400	3707	4327
55°	2887	3181	3574
60°	2467	2758	2852
65°	1965	2320	1843
70°	1742	1810	1125
75°	1612	1467	689
80°	1486	1351	595
85°	1344	1239	483



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	318.8	2.9
10°-20°	829.2	7.5
20°-30°	1074.1	9.7
30°-40°	1051.8	9.5
40°-50°	805.1	7.3
50°-60°	536.5	4.9
60°-70°	292.8	2.7
70°-80°	122.0	1.1
80°-90°	38.1	0.3
90°-100°	439.4	4.0
100°-110°	1193.5	10.8
110°-120°	1227.1	11.1
120°-130°	981.1	8.9
130°-140°	770.9	7.0
140°-150°	591.1	5.4
150°-160°	425.1	3.8
160°-170°	260.0	2.4
170°-180°	87.6	0.8
0°-30°	2222.2	20.1
0°-40°	3274.0	29.6
0°-60°	4615.6	41.8
0°-90°	5068.4	45.9
90°-120°	2860.0	25.9
90°-150°	5203.1	47.1
90°-180°	5976.0	54.1
0°-180°	11044.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3476	3476	3476	3476	3476	
5°	3419	3385	3407	3415	3427	318
15°	2892	2881	2959	3039	3092	808
25°	2210	2216	2330	2432	2539	1016
35°	1562	1569	1675	1787	1914	971
45°	936	954	1017	1094	1194	730
55°	538	561	593	616	666	488
65°	270	292	319	278	253	281
75°	136	136	124	85	58	145
85°	38	38	35	23	14	42
90°	3	12	21	26	26	6
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°	3475.8	3475.8	3475.8	3475.8	3475.8
2.5°	3484.4	3453.3	3461.2	3461.0	3451.4
5°	3419.4	3385.1	3407.2	3415.1	3427.0
7.5°	3292.5	3266.5	3306.8	3336.7	3360.8
10°	3193.7	3171.3	3222.6	3266.1	3297.4
12.5°	3079.0	3060.2	3123.8	3182.1	3223.0
15°	2891.7	2881.2	2958.8	3039.3	3091.5
17.5°	2691.3	2686.2	2775.2	2869.1	2935.9
20°	2554.6	2553.1	2650.7	2748.6	2826.1
22.5°	2416.8	2420.0	2522.6	2624.4	2712.6
25°	2209.9	2215.9	2330.4	2432.0	2539.4
27.5°	2018.7	2021.4	2139.8	2247.0	2361.5
30°	1888.1	1895.6	2011.7	2122.7	2242.0
32.5°	1757.6	1766.2	1879.9	1994.6	2116.3
35°	1561.8	1569.2	1674.6	1787.3	1914.1
37.5°	1359.8	1370.0	1463.5	1570.1	1694.7
40°	1229.3	1244.2	1326.9	1427.3	1549.6
42.5°	1103.6	1122.1	1198.8	1294.0	1404.4
45°	936.4	954.3	1017.3	1094.3	1194.2
47.5°	792.5	813.0	861.4	927.7	1013.0
50°	710.7	730.1	774.8	823.9	904.4
52.5°	638.7	658.1	697.9	735.8	804.4
55°	538.4	560.7	593.3	615.8	666.5
57.5°	456.0	477.5	503.3	513.5	544.2
60°	401.1	425.0	448.4	447.2	463.6
62.5°	351.1	371.4	394.7	378.6	379.5
65°	270.0	292.3	318.8	278.5	253.2
67.5°	218.1	222.9	250.1	194.2	164.1
70°	193.7	193.7	201.3	150.4	125.1
72.5°	170.5	170.5	163.5	122.3	95.8
75°	135.7	135.7	123.5	84.8	58.0
77.5°	104.6	103.4	94.6	63.3	42.1
80°	83.9	83.9	76.3	50.0	33.6
82.5°	65.6	65.6	59.2	39.0	25.0
85°	38.1	38.1	35.1	22.7	13.7
87.5°	14.0	15.7	16.3	12.6	11.4
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)