

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: P519437

Luminaire Tested: **SQ4-WB-100U-125D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519437
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-125D-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

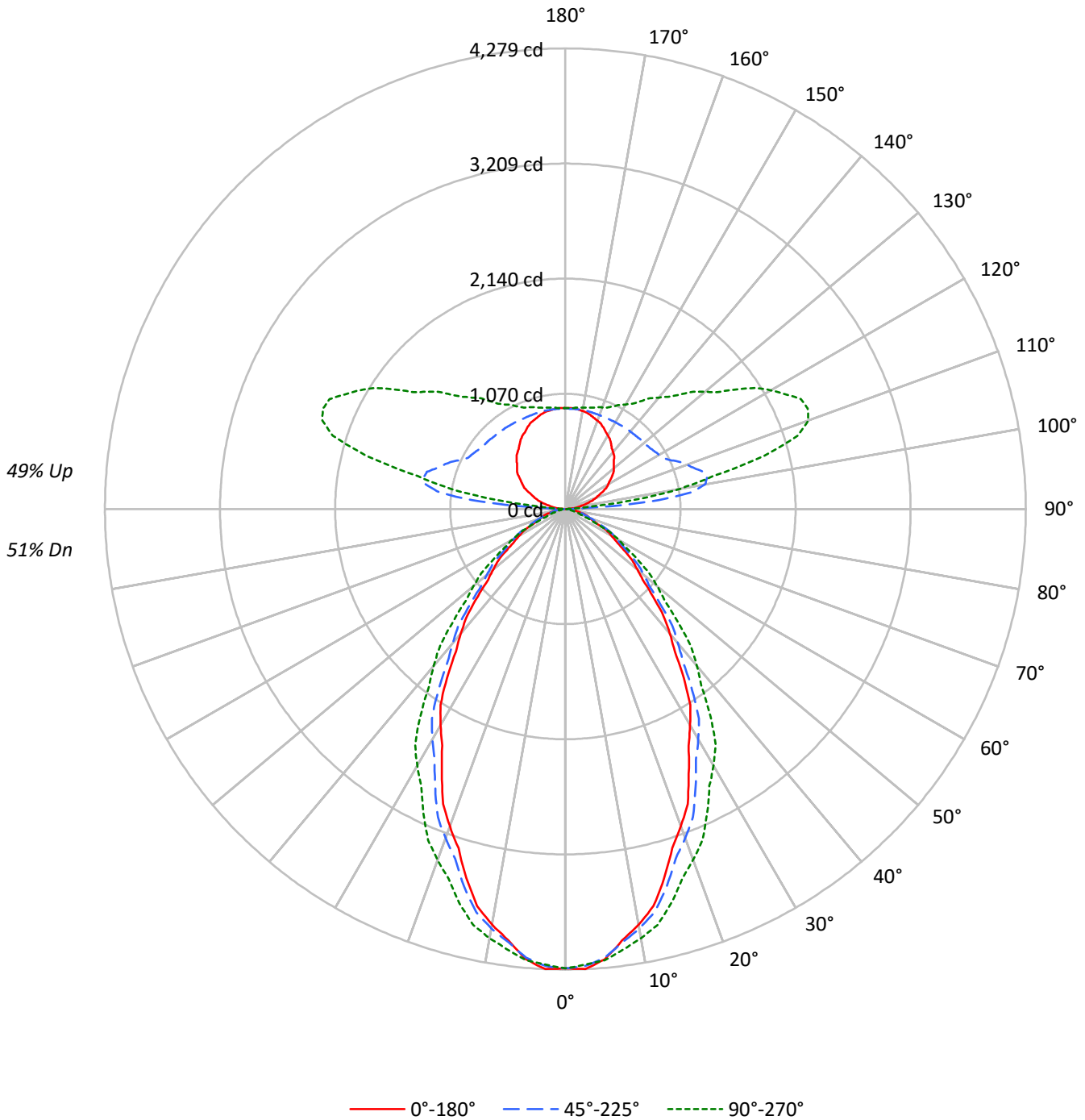
Lumens per Lamp: N/A
Luminaire Lumens: 12306.4 lumens
Efficiency: N/A
Efficacy: 114.7 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 107.3
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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51
1	99	95	92	89	91	88	85	83	75	73	71	63	62	60	52	51	50	45
2	91	84	79	74	84	78	74	70	67	64	61	57	54	52	47	45	44	40
3	84	75	69	63	78	70	64	60	60	56	53	51	48	46	43	41	39	35
4	77	68	60	55	72	63	57	52	54	50	46	47	43	40	39	37	35	31
5	72	61	53	48	66	57	50	45	49	44	40	42	39	36	36	33	31	28
6	66	55	48	42	61	52	45	40	45	40	36	39	35	32	33	30	28	25
7	62	50	43	38	57	47	41	36	41	36	32	36	32	29	31	28	25	23
8	58	46	39	34	53	43	37	32	38	33	29	33	29	26	28	25	23	21
9	54	42	35	30	50	40	33	29	35	30	27	31	27	24	27	24	21	19
10	50	39	32	28	47	37	31	27	33	28	24	29	25	22	25	22	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26252	26252	26252
5°	25925	25832	25983
10°	24493	24715	25289
15°	22611	23135	24173
20°	20533	21305	22715
25°	18417	19421	21162
30°	16467	17544	19553
35°	14400	15440	17649
40°	12120	13082	15278
45°	10002	10866	12756
50°	8351	9104	10627
55°	7089	7812	8776
60°	6059	6773	7003
65°	4825	5696	4525
70°	4277	4446	2762
75°	3962	3605	1692
80°	3648	3315	1459
85°	3303	3042	1193



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	391.5	3.2
10°-20°	1018.3	8.3
20°-30°	1318.9	10.7
30°-40°	1291.6	10.5
40°-50°	988.6	8.0
50°-60°	658.8	5.4
60°-70°	359.5	2.9
70°-80°	149.8	1.2
80°-90°	44.4	0.4
90°-100°	438.6	3.6
100°-110°	1210.8	9.8
110°-120°	1248.7	10.1
120°-130°	1003.5	8.2
130°-140°	788.6	6.4
140°-150°	604.8	4.9
150°-160°	434.7	3.5
160°-170°	265.8	2.2
170°-180°	89.6	0.7
0°-30°	2728.7	22.2
0°-40°	4020.3	32.7
0°-60°	5667.7	46.1
0°-90°	6221.3	50.6
90°-120°	2898.1	23.5
90°-150°	5295.0	43.0
90°-180°	6085.0	49.4
0°-180°	12306.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4268	4268	4268	4268	4268	
5°	4199	4157	4184	4194	4208	391
15°	3551	3538	3633	3732	3796	992
25°	2714	2721	2862	2986	3118	1248
35°	1918	1927	2056	2195	2350	1192
45°	1150	1172	1249	1344	1466	897
55°	661	689	728	756	818	599
65°	332	359	391	342	311	345
75°	167	167	152	104	71	178
85°	47	47	43	28	17	51
90°	3	6	12	14	15	7
95°	64	237	796	327	213	69
105°	216	333	1332	2034	1915	230
115°	387	467	1073	2124	2416	380
125°	530	604	972	1646	1932	472
135°	638	707	946	1333	1503	494
145°	740	792	934	1135	1221	463
155°	835	862	926	1018	1050	385
165°	904	915	930	967	974	255
175°	936	938	932	946	942	89
180°	936	936	936	936	936	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4268.1	4268.1	4268.1	4268.1	4268.1
2.5°	4278.6	4240.5	4250.1	4249.8	4238.1
5°	4198.8	4156.7	4183.8	4193.5	4208.2
7.5°	4043.0	4011.1	4060.6	4097.2	4126.9
10°	3921.6	3894.2	3957.2	4010.5	4049.0
12.5°	3780.8	3757.7	3835.9	3907.4	3957.6
15°	3550.8	3538.0	3633.2	3732.1	3796.1
17.5°	3304.7	3298.5	3407.7	3523.1	3605.1
20°	3136.9	3135.1	3254.9	3375.1	3470.3
22.5°	2967.6	2971.7	3097.6	3222.5	3330.9
25°	2713.7	2721.0	2861.6	2986.4	3118.2
27.5°	2478.8	2482.1	2627.5	2759.2	2899.8
30°	2318.5	2327.7	2470.2	2606.5	2753.0
32.5°	2158.2	2168.8	2308.4	2449.3	2598.7
35°	1917.7	1926.9	2056.3	2194.7	2350.4
37.5°	1669.8	1682.2	1797.1	1928.0	2081.0
40°	1509.5	1527.8	1629.3	1752.6	1902.8
42.5°	1355.2	1377.9	1472.0	1589.0	1724.5
45°	1149.9	1171.9	1249.2	1343.7	1466.4
47.5°	973.1	998.4	1057.8	1139.2	1243.9
50°	872.7	896.5	951.4	1011.7	1110.6
52.5°	784.3	808.1	857.0	903.5	987.7
55°	661.1	688.6	728.5	756.1	818.4
57.5°	560.0	586.3	618.0	630.5	668.2
60°	492.5	521.8	550.6	549.2	569.3
62.5°	431.1	456.0	484.7	464.9	466.0
65°	331.5	359.0	391.4	342.0	310.9
67.5°	267.8	273.7	307.1	238.5	201.5
70°	237.8	237.8	247.2	184.7	153.6
72.5°	209.4	209.4	200.8	150.2	117.6
75°	166.7	166.7	151.7	104.1	71.2
77.5°	128.5	127.0	116.1	77.7	51.7
80°	103.0	103.0	93.6	61.3	41.2
82.5°	80.5	80.5	72.7	47.9	30.7
85°	46.8	46.8	43.1	27.8	16.9
87.5°	17.1	17.7	17.4	11.7	10.5
90°	3.0	5.9	12.0	13.5	15.0
92.5°	27.0	112.0	200.2	73.1	56.9
95°	64.4	237.3	795.7	327.1	212.8
97.5°	106.7	265.8	1178.7	907.5	657.2
100°	137.9	282.9	1320.1	1329.5	1080.4
102.5°	167.8	302.3	1347.7	1642.6	1406.4
105°	215.8	333.0	1332.1	2033.7	1915.0
107.5°	266.7	371.0	1257.8	2222.3	2265.7
110°	302.7	396.5	1200.3	2262.9	2403.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	335.1	425.3	1146.3	2230.8	2438.3
115°	386.6	467.2	1072.9	2123.9	2415.5
117.5°	431.6	511.8	1024.6	1973.5	2305.2
120°	461.5	540.6	1005.5	1871.7	2205.7
122.5°	490.3	565.9	989.9	1776.6	2093.0
125°	530.5	603.7	972.5	1645.8	1931.5
127.5°	564.6	637.9	962.3	1535.2	1781.7
130°	587.4	660.7	957.5	1467.6	1691.8
132.5°	609.0	678.7	952.7	1410.8	1613.8
135°	638.3	707.2	945.5	1333.0	1502.9
137.5°	671.3	734.0	941.9	1267.7	1412.7
140°	689.3	750.8	939.5	1224.1	1351.6
142.5°	709.7	766.5	937.1	1185.4	1297.7
145°	740.2	791.5	933.5	1134.8	1221.2
147.5°	769.6	814.4	930.2	1092.1	1159.2
150°	791.2	827.8	929.0	1066.6	1120.8
152.5°	808.0	842.2	927.8	1044.8	1089.7
155°	834.6	862.5	926.0	1018.2	1050.4
157.5°	859.2	880.6	926.3	998.8	1020.7
160°	873.6	892.6	927.5	987.8	1004.0
162.5°	885.6	902.3	928.7	978.2	990.8
165°	903.6	915.3	930.5	966.7	974.0
167.5°	917.4	924.4	932.0	959.7	962.0
170°	924.5	930.4	932.0	956.0	956.0
172.5°	930.5	934.1	932.0	951.2	950.0
175°	936.5	938.0	932.0	945.5	942.5
177.5°	938.9	937.8	931.7	940.1	937.7
180°	936.5	936.5	936.5	936.5	936.5

(END OF REPORT)