

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: P519143

Luminaire Tested: **SQ4-WB-050U-125D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519143
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-125D-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

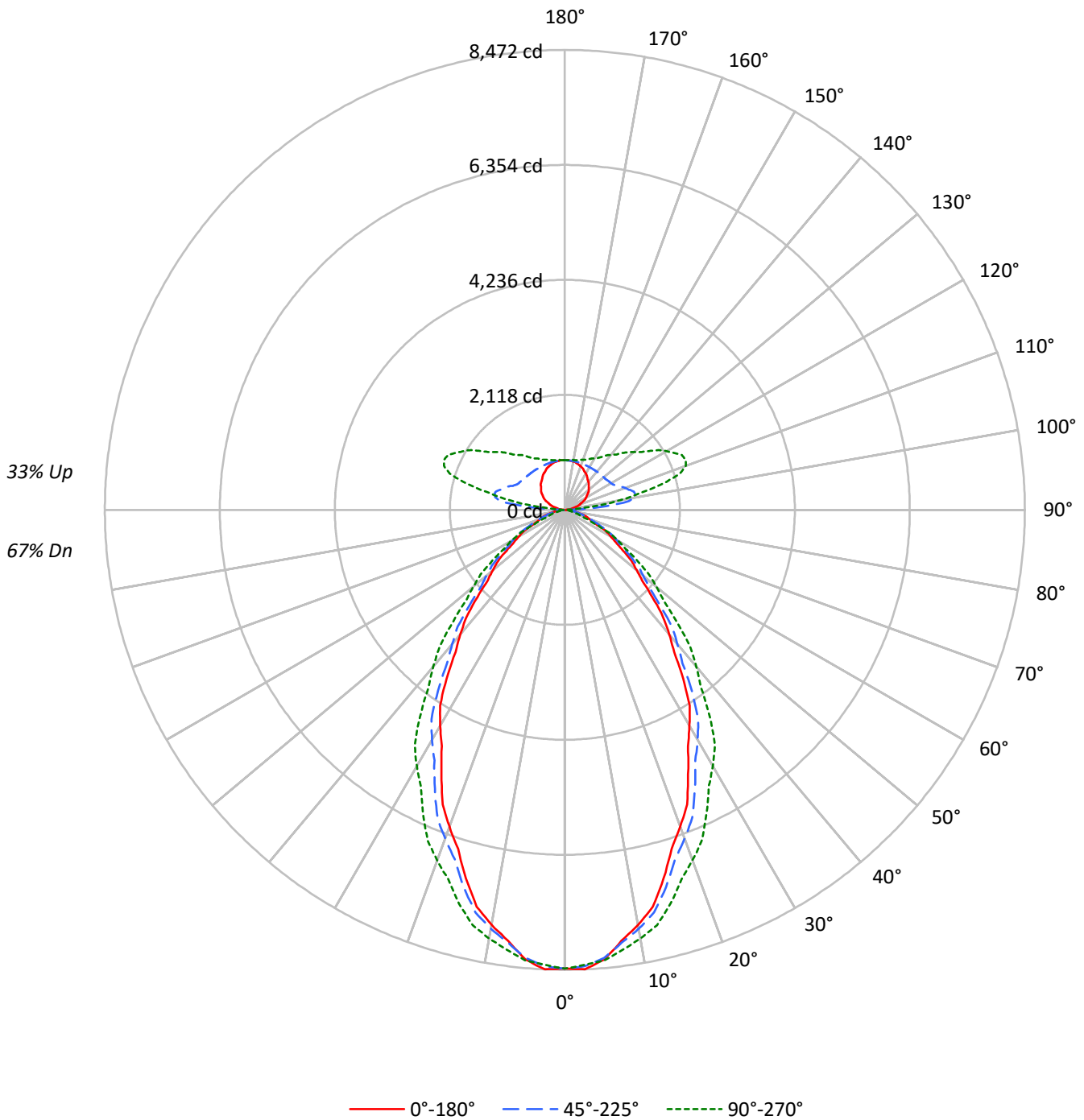
Lumens per Lamp: N/A
Luminaire Lumens: 18294.1 lumens
Efficiency: N/A
Efficacy: 109.5 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 167
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	50	30	10	0	
RCR																						
0	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67				
1	103	99	96	93	97	94	91	88	84	82	80	75	73	71	66	65	64	60				
2	95	89	83	79	90	84	79	75	75	72	69	67	65	62	60	58	56	53				
3	88	79	73	67	83	75	70	65	68	63	60	61	58	55	55	52	50	47				
4	81	72	64	59	77	68	62	57	62	57	52	56	52	48	50	47	44	41				
5	76	65	57	52	71	62	55	50	56	51	47	51	47	43	46	43	40	37				
6	70	59	51	46	66	56	49	44	51	46	42	47	42	39	42	39	36	34				
7	65	54	46	41	62	52	45	40	47	42	38	43	39	35	39	36	33	31				
8	61	50	42	37	58	48	41	36	44	38	34	40	35	32	37	33	30	28				
9	57	46	39	34	54	44	37	33	40	35	31	37	33	29	34	30	28	26				
10	54	42	36	31	51	41	34	30	38	32	29	35	30	27	32	28	25	24				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	25991	25991	25991
5°	25666	25575	25724
10°	24249	24469	25037
15°	22386	22905	23932
20°	20328	21093	22489
25°	18233	19227	20951
30°	16303	17369	19358
35°	14256	15287	17472
40°	11999	12952	15126
45°	9903	10757	12629
50°	8268	9013	10521
55°	7019	7734	8689
60°	5999	6706	6934
65°	4777	5640	4480
70°	4234	4402	2734
75°	3921	3569	1674
80°	3613	3284	1445
85°	3271	3010	1179



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	775.2	4.2
10°-20°	2016.2	11.0
20°-30°	2611.6	14.3
30°-40°	2557.4	14.0
40°-50°	1957.6	10.7
50°-60°	1304.4	7.1
60°-70°	711.8	3.9
70°-80°	296.6	1.6
80°-90°	87.5	0.5
90°-100°	439.4	2.4
100°-110°	1193.5	6.5
110°-120°	1227.1	6.7
120°-130°	981.1	5.4
130°-140°	770.9	4.2
140°-150°	591.1	3.2
150°-160°	425.1	2.3
160°-170°	260.0	1.4
170°-180°	87.6	0.5
0°-30°	5403.0	29.5
0°-40°	7960.5	43.5
0°-60°	11222.5	61.3
0°-90°	12318.4	67.3
90°-120°	2860.0	15.6
90°-150°	5203.1	28.4
90°-180°	5976.0	32.7
0°-180°	18294.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8451	8451	8451	8451	8451	
5°	8314	8230	8284	8304	8332	773
15°	7031	7006	7194	7390	7517	1963
25°	5373	5388	5666	5913	6174	2471
35°	3797	3815	4072	4346	4654	2361
45°	2277	2320	2473	2661	2904	1776
55°	1309	1363	1442	1497	1620	1187
65°	656	711	775	677	616	682
75°	330	330	300	206	141	352
85°	93	93	85	55	33	101
90°	3	12	21	26	26	9
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°	8451.1	8451.1	8451.1	8451.1	8451.1
2.5°	8471.9	8396.5	8415.5	8415.0	8391.8
5°	8313.9	8230.5	8284.3	8303.5	8332.5
7.5°	8005.4	7942.3	8040.3	8112.8	8171.5
10°	7765.1	7710.7	7835.6	7941.1	8017.3
12.5°	7486.2	7440.6	7595.3	7737.0	7836.3
15°	7030.9	7005.5	7194.0	7389.8	7516.7
17.5°	6543.6	6531.3	6747.6	6976.0	7138.4
20°	6211.3	6207.7	6445.0	6682.9	6871.4
22.5°	5876.1	5884.1	6133.5	6380.9	6595.5
25°	5373.3	5387.8	5666.2	5913.2	6174.3
27.5°	4908.3	4914.8	5202.7	5463.4	5741.9
30°	4590.8	4609.0	4891.2	5161.1	5451.2
32.5°	4273.4	4294.4	4570.8	4849.7	5145.6
35°	3797.3	3815.4	4071.7	4345.7	4653.9
37.5°	3306.3	3330.9	3558.5	3817.5	4120.6
40°	2988.9	3025.1	3226.2	3470.3	3767.6
42.5°	2683.3	2728.3	2914.7	3146.3	3414.6
45°	2276.9	2320.4	2473.4	2660.6	2903.6
47.5°	1926.8	1976.9	2094.4	2255.6	2463.0
50°	1728.1	1775.2	1883.8	2003.2	2199.0
52.5°	1553.0	1600.2	1696.9	1789.0	1955.7
55°	1309.0	1363.4	1442.5	1497.2	1620.5
57.5°	1108.8	1161.0	1223.7	1248.4	1323.1
60°	975.3	1033.3	1090.2	1087.4	1127.3
62.5°	853.6	903.0	959.7	920.4	922.6
65°	656.4	710.8	775.0	677.2	615.6
67.5°	530.3	541.9	608.2	472.3	399.0
70°	470.9	470.9	489.5	365.7	304.1
72.5°	414.6	414.6	397.5	297.4	232.9
75°	330.0	330.0	300.4	206.2	140.9
77.5°	254.4	251.5	229.9	153.8	102.3
80°	204.0	204.0	185.4	121.5	81.6
82.5°	159.5	159.5	143.9	94.9	60.8
85°	92.7	92.7	85.3	55.1	33.4
87.5°	33.2	34.9	33.8	23.0	20.1
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)