

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: P519431

Luminaire Tested: **SQ4-WB-100U-125D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519431  
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-835-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

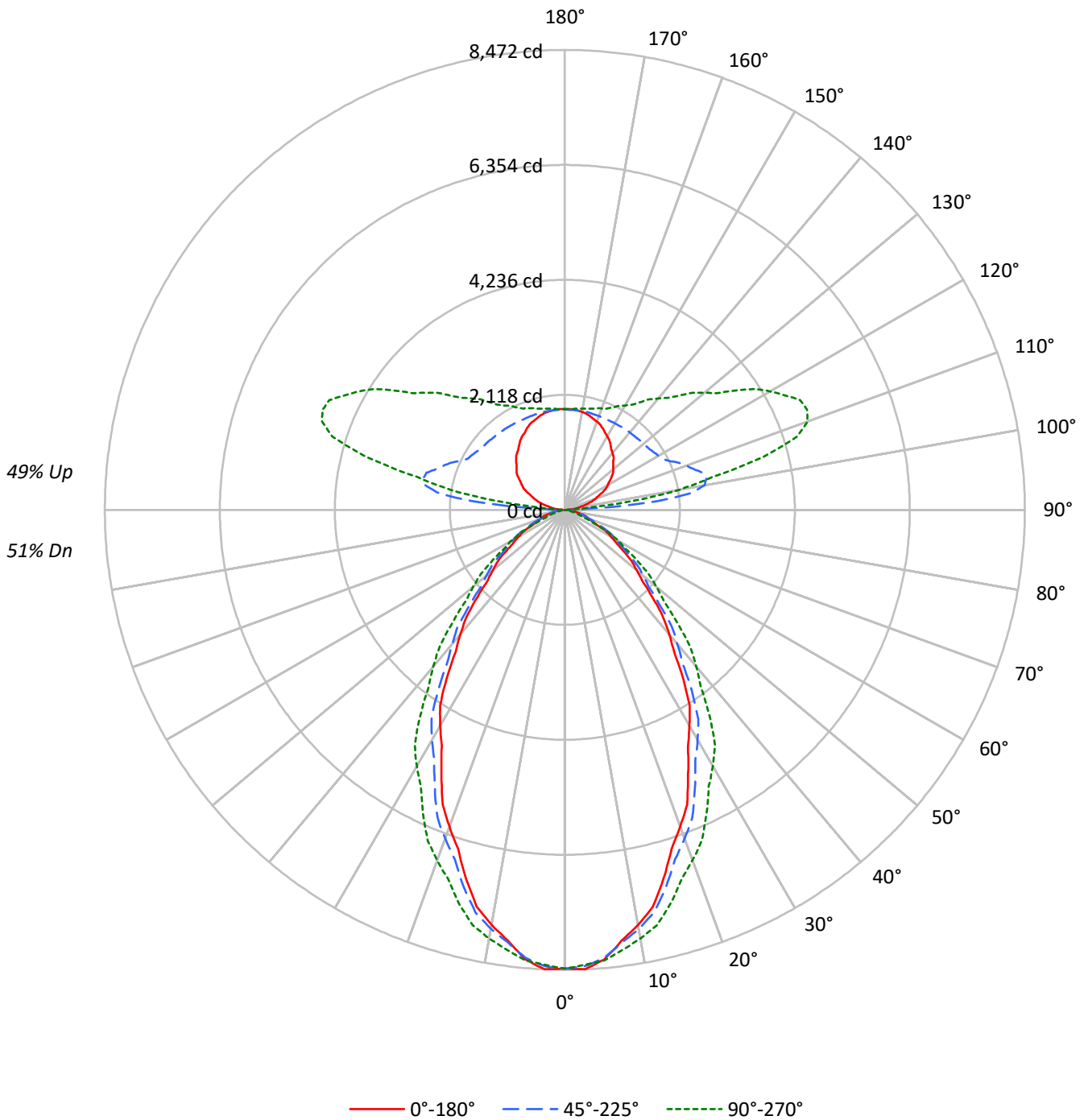
Lumens per Lamp: N/A  
Luminaire Lumens: 24367.6 lumens  
Efficiency: N/A  
Efficacy: 113.4 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 214.8  
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°	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	3.2
10°-20°	2016.2	8.3
20°-30°	2611.6	10.7
30°-40°	2557.4	10.5
40°-50°	1957.6	8.0
50°-60°	1304.4	5.4
60°-70°	711.8	2.9
70°-80°	296.6	1.2
80°-90°	87.8	0.4
90°-100°	868.4	3.6
100°-110°	2397.4	9.8
110°-120°	2472.6	10.1
120°-130°	1986.9	8.2
130°-140°	1561.5	6.4
140°-150°	1197.6	4.9
150°-160°	860.7	3.5
160°-170°	526.4	2.2
170°-180°	177.5	0.7
0°-30°	5403.0	22.2
0°-40°	7960.5	32.7
0°-60°	11222.5	46.1
0°-90°	12318.7	50.6
90°-120°	5738.4	23.5
90°-150°	10484.4	43.0
90°-180°	12049.0	49.4
0°-180°	24367.6	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°	6	12	24	27	30	14
95°	128	470	1576	648	421	137
105°	427	659	2638	4027	3792	455
115°	766	925	2124	4206	4783	752
125°	1050	1195	1926	3259	3824	935
135°	1264	1400	1872	2639	2976	978
145°	1466	1567	1848	2247	2418	918
155°	1653	1708	1834	2016	2080	762
165°	1789	1812	1842	1914	1929	504
175°	1854	1857	1846	1872	1866	176
180°	1854	1854	1854	1854	1854	

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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°	33.8	35.0	34.4	23.1	20.8
90°	5.9	11.7	23.7	26.8	29.7
92.5°	53.4	221.7	396.4	144.7	112.7
95°	127.6	469.9	1575.5	647.6	421.3
97.5°	211.3	526.3	2333.9	1796.9	1301.3
100°	273.0	560.2	2614.0	2632.4	2139.2
102.5°	332.3	598.6	2668.6	3252.5	2784.9
105°	427.3	659.3	2637.7	4026.9	3791.9
107.5°	528.1	734.7	2490.5	4400.3	4486.2
110°	599.3	785.0	2376.6	4480.6	4759.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	663.4	842.1	2269.8	4417.2	4828.0
115°	765.5	925.1	2124.4	4205.6	4782.9
117.5°	854.5	1013.5	2028.9	3907.7	4564.5
120°	913.9	1070.5	1990.9	3706.0	4367.5
122.5°	970.8	1120.5	1960.0	3517.7	4144.4
125°	1050.3	1195.4	1925.6	3258.8	3824.5
127.5°	1118.0	1263.0	1905.4	3039.9	3527.8
130°	1163.1	1308.1	1895.9	2905.9	3349.8
132.5°	1205.8	1343.9	1886.4	2793.4	3195.5
135°	1264.0	1400.3	1872.2	2639.4	2975.9
137.5°	1329.2	1453.4	1865.1	2510.1	2797.3
140°	1364.8	1486.7	1860.3	2423.9	2676.3
142.5°	1405.2	1517.8	1855.6	2347.2	2569.5
145°	1465.7	1567.3	1848.5	2247.0	2418.1
147.5°	1523.9	1612.6	1841.9	2162.4	2295.3
150°	1566.6	1639.1	1839.6	2112.0	2219.4
152.5°	1599.8	1667.7	1837.2	2068.9	2157.6
155°	1652.6	1707.8	1833.6	2016.1	2079.9
157.5°	1701.3	1743.7	1834.2	1977.6	2021.2
160°	1729.8	1767.5	1836.6	1956.0	1987.9
162.5°	1753.5	1786.6	1839.0	1936.9	1961.8
165°	1789.1	1812.3	1842.5	1914.1	1928.6
167.5°	1816.4	1830.4	1845.5	1900.2	1904.8
170°	1830.7	1842.3	1845.5	1893.0	1893.0
172.5°	1842.5	1849.5	1845.5	1883.4	1881.1
175°	1854.4	1857.3	1845.5	1872.1	1866.3
177.5°	1859.2	1856.8	1844.9	1861.4	1856.8
180°	1854.4	1854.4	1854.4	1854.4	1854.4

(END OF REPORT)