

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: P519935

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

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519935  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G3-1910-536-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-050U-100D-835-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

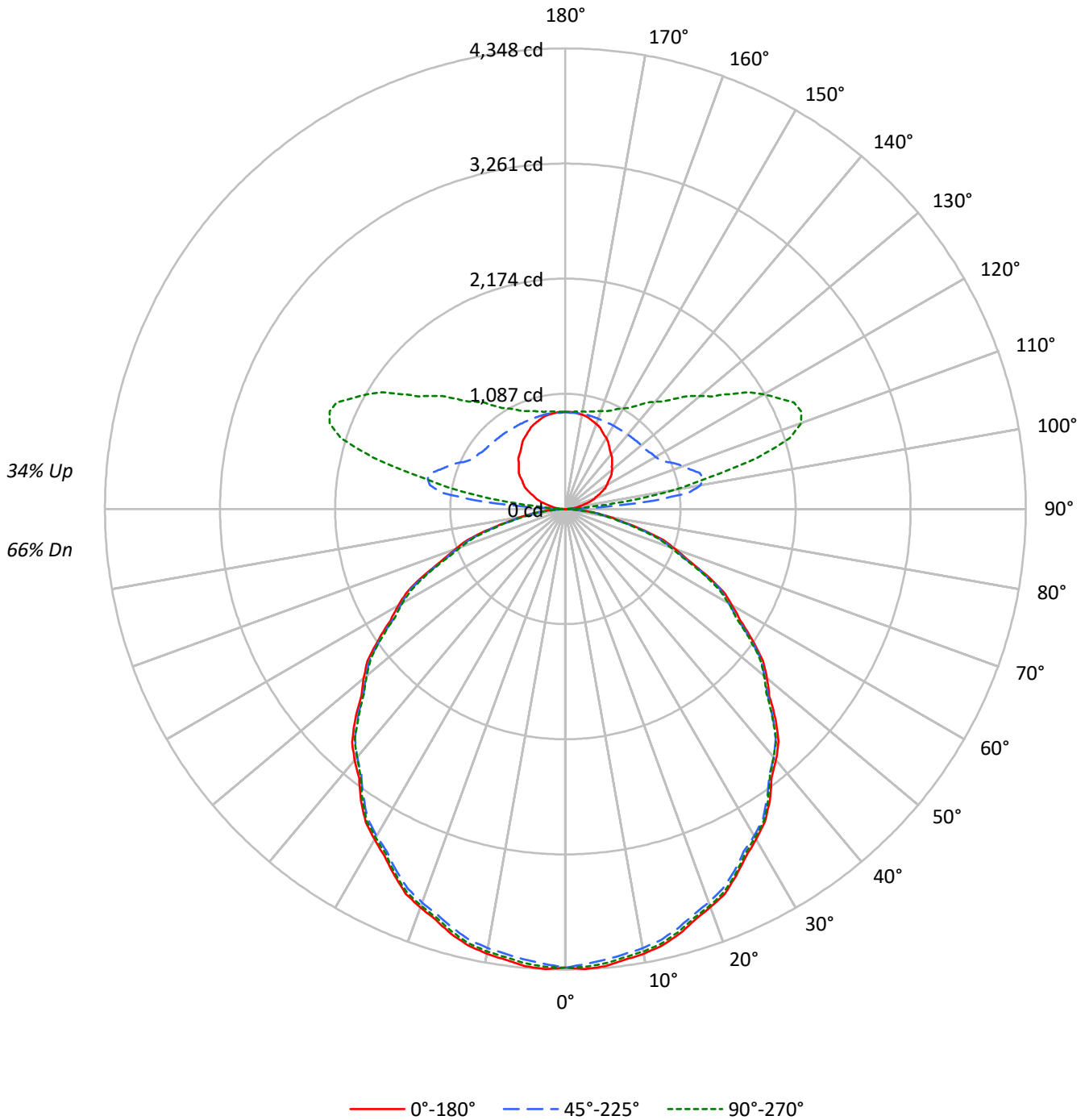
Lumens per Lamp: N/A  
Luminaire Lumens: 17791.6 lumens  
Efficiency: N/A  
Efficacy: 125.4 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 141.9  
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	111	111	111	111	105	105	105	105	92	92	92	81	81	81	71	71	71	66
1	101	97	93	89	95	91	88	85	81	79	76	72	70	68	63	61	60	56
2	92	85	78	73	87	80	74	69	71	67	63	63	59	57	55	53	51	47
3	84	74	67	61	79	70	63	58	63	57	53	55	51	48	49	46	43	39
4	77	66	58	51	72	62	55	49	56	50	45	49	45	41	44	40	37	34
5	71	59	50	44	66	56	48	42	50	44	39	44	39	35	39	35	32	29
6	65	53	44	38	61	50	42	37	45	39	34	40	35	31	36	31	28	26
7	60	48	39	34	57	45	38	32	41	34	30	36	31	27	32	28	25	23
8	56	43	35	30	53	41	34	29	37	31	27	33	28	24	30	26	22	20
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	27	23	20	18
10	49	36	29	24	46	35	28	23	31	26	21	28	23	20	25	21	18	16

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	13319	13319	13319
5°	13379	13196	13297
10°	13311	13144	13246
15°	13231	13051	13155
20°	13094	12939	13046
25°	12951	12800	12901
30°	12793	12656	12720
35°	12633	12477	12544
40°	12423	12280	12291
45°	12204	12036	11997
50°	11889	11747	11719
55°	11539	11412	11332
60°	11190	10988	10952
65°	10643	10405	10318
70°	9889	9649	9462
75°	8830	8547	8371
80°	7265	7001	6686
85°	4301	4721	4824



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	408.8	2.3
10°-20°	1164.0	6.5
20°-30°	1748.0	9.8
30°-40°	2086.1	11.7
40°-50°	2138.3	12.0
50°-60°	1904.1	10.7
60°-70°	1419.4	8.0
70°-80°	768.5	4.3
80°-90°	178.4	1.0
90°-100°	439.3	2.5
100°-110°	1193.5	6.7
110°-120°	1227.1	6.9
120°-130°	981.1	5.5
130°-140°	770.9	4.3
140°-150°	591.1	3.3
150°-160°	425.1	2.4
160°-170°	260.0	1.5
170°-180°	87.6	0.5
0°-30°	3320.8	18.7
0°-40°	5406.9	30.4
0°-60°	9449.4	53.1
0°-90°	11815.8	66.4
90°-120°	2860.0	16.1
90°-150°	5203.1	29.2
90°-180°	5976.0	33.6
0°-180°	17791.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4331	4331	4331	4331	4331	
5°	4334	4325	4274	4313	4307	411
15°	4156	4141	4099	4132	4132	1171
25°	3817	3808	3772	3793	3802	1759
35°	3365	3350	3323	3330	3341	2100
45°	2806	2791	2767	2753	2758	2159
55°	2152	2155	2128	2108	2113	1926
65°	1462	1457	1430	1415	1418	1446
75°	743	734	719	704	704	791
85°	122	134	134	137	137	170
90°	3	12	21	26	26	7
95°	65	240	765	333	224	69
105°	212	330	1312	1998	1880	225
115°	377	457	1051	2090	2381	372
125°	518	590	951	1602	1889	462
135°	624	693	924	1304	1471	483
145°	721	773	912	1108	1192	453
155°	815	844	906	995	1024	376
165°	883	894	909	948	951	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°	4330.9	4330.9	4330.9	4330.9	4330.9
2.5°	4347.5	4338.2	4300.0	4330.8	4326.1
5°	4333.9	4325.1	4274.4	4313.0	4307.1
7.5°	4293.4	4284.7	4239.9	4275.5	4270.2
10°	4262.5	4253.8	4209.0	4244.6	4241.7
12.5°	4222.1	4213.4	4168.6	4204.2	4201.3
15°	4155.5	4140.9	4099.0	4131.7	4131.7
17.5°	4067.5	4056.5	4017.6	4044.9	4045.5
20°	4000.9	3992.2	3953.4	3983.2	3986.1
22.5°	3934.4	3925.6	3882.0	3909.5	3914.7
25°	3816.6	3807.9	3772.1	3793.1	3801.8
27.5°	3695.4	3682.6	3647.2	3665.7	3672.2
30°	3602.6	3596.8	3564.0	3573.1	3581.8
32.5°	3505.1	3499.3	3471.2	3475.8	3491.5
35°	3364.8	3350.3	3323.2	3329.5	3341.1
37.5°	3199.0	3192.0	3165.7	3162.4	3173.4
40°	3094.3	3082.7	3058.7	3052.9	3061.6
42.5°	2980.2	2968.6	2939.8	2934.1	2945.1
45°	2806.0	2791.4	2767.4	2752.6	2758.5
47.5°	2611.0	2611.0	2586.0	2569.0	2577.7
50°	2485.0	2485.0	2455.3	2440.6	2449.3
52.5°	2354.2	2356.5	2324.5	2316.6	2313.8
55°	2152.1	2154.9	2128.3	2107.6	2113.4
57.5°	1957.1	1950.6	1919.6	1906.0	1908.9
60°	1819.2	1810.4	1786.5	1765.9	1780.5
62.5°	1678.8	1674.8	1650.9	1627.7	1625.9
65°	1462.5	1456.6	1429.8	1415.0	1417.9
67.5°	1247.2	1240.3	1215.7	1194.5	1202.1
70°	1099.8	1099.8	1073.1	1061.0	1052.3
72.5°	964.3	952.7	932.8	916.0	909.6
75°	743.1	734.4	719.3	704.5	704.5
77.5°	541.0	533.5	523.7	513.5	510.7
80°	410.2	407.3	395.3	392.1	377.5
82.5°	288.9	288.3	281.2	273.5	272.9
85°	121.9	133.5	133.8	136.7	136.7
87.5°	22.0	37.7	37.5	33.9	33.9
90°	2.9	11.6	20.6	26.5	26.5
92.5°	26.5	120.3	208.9	89.7	76.0
95°	64.8	240.2	765.1	333.0	223.6
97.5°	107.2	265.3	1173.0	912.6	641.0
100°	135.4	282.1	1297.8	1315.6	1062.3
102.5°	163.6	298.9	1330.7	1627.1	1403.7
105°	211.9	329.9	1312.5	1998.5	1880.4
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	2196.6	2409.1
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	983.0	1837.9	2163.0
122.5°	479.1	553.9	968.8	1736.4	2050.0
125°	517.9	589.9	950.6	1601.6	1889.3
127.5°	552.7	624.0	940.6	1499.4	1746.3
130°	573.9	642.9	935.9	1435.2	1656.8
132.5°	595.1	664.1	931.1	1380.6	1576.7
135°	623.9	693.0	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°	692.8	748.5	915.8	1161.3	1267.2
145°	721.0	772.8	912.3	1108.4	1191.9
147.5°	752.7	797.1	909.4	1066.8	1132.4
150°	773.9	811.3	909.4	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	861.8	906.4	977.6	999.3
160°	853.4	873.5	906.4	965.7	983.0
162.5°	867.6	883.1	908.8	956.2	968.8
165°	882.9	894.3	909.4	947.6	950.6
167.5°	898.8	904.5	912.3	937.6	940.0
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	919.9	915.2
180°	915.2	915.2	915.2	915.2	915.2

(END OF REPORT)