

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: P519911

Luminaire Tested: **SQ4-F-050U-075D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519911  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G3-1910-536-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-050U-075D-835-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

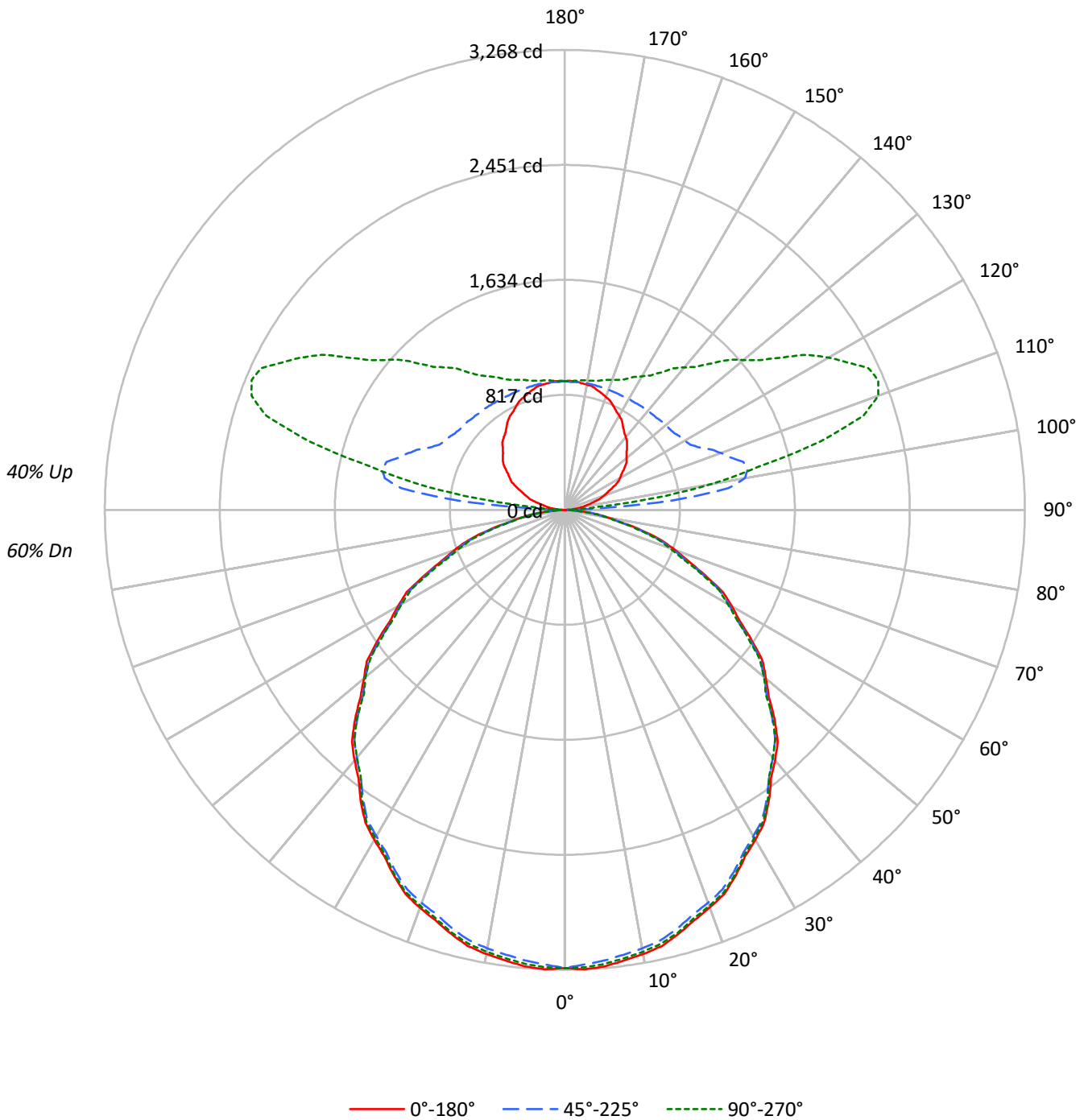
Lumens per Lamp: N/A  
Luminaire Lumens: 14868.6 lumens  
Efficiency: N/A  
Efficacy: 130.1 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 114.3  
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	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65	60
1	100	96	92	88	93	89	86	83	78	75	73	67	65	64	58	56	55	50
2	91	83	77	72	85	78	73	68	68	64	60	59	56	53	51	48	46	42
3	83	73	66	60	77	69	62	57	60	55	51	52	48	45	45	42	39	35
4	76	65	57	50	71	61	54	48	53	48	43	46	42	38	40	36	34	30
5	70	58	49	43	65	54	47	41	48	42	37	42	37	33	36	32	29	26
6	64	52	43	37	60	49	41	36	43	37	32	38	33	29	32	29	26	23
7	59	47	39	33	55	44	37	31	39	33	28	34	29	26	30	26	23	20
8	55	42	35	29	51	40	33	28	35	30	25	31	26	23	27	23	20	18
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	25	21	18	16
10	48	36	28	23	45	34	27	22	30	24	20	27	22	19	23	19	17	15

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

	0°	45°	90°
0°	10014	10014	10014
5°	10053	9925	9998
10°	10012	9883	9957
15°	9935	9813	9897
20°	9845	9729	9807
25°	9737	9637	9707
30°	9614	9509	9561
35°	9488	9388	9432
40°	9328	9233	9221
45°	9168	9052	9078
50°	8913	8842	8842
55°	8706	8595	8516
60°	8425	8280	8208
65°	7971	7820	7712
70°	7486	7300	7114
75°	6735	6490	6349
80°	5386	5281	5228
85°	3229	3645	3751



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	307.4	2.1
10°-20°	875.0	5.9
20°-30°	1314.6	8.8
30°-40°	1568.6	10.5
40°-50°	1608.7	10.8
50°-60°	1433.4	9.6
60°-70°	1068.8	7.2
70°-80°	579.6	3.9
80°-90°	136.7	0.9
90°-100°	439.3	3.0
100°-110°	1193.5	8.0
110°-120°	1227.1	8.3
120°-130°	981.1	6.6
130°-140°	770.9	5.2
140°-150°	591.1	4.0
150°-160°	425.1	2.9
160°-170°	260.0	1.7
170°-180°	87.6	0.6
0°-30°	2497.0	16.8
0°-40°	4065.6	27.3
0°-60°	7107.7	47.8
0°-90°	8892.8	59.8
90°-120°	2860.0	19.2
90°-150°	5203.1	35.0
90°-180°	5976.0	40.2
0°-180°	14868.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3256	3256	3256	3256	3256	
5°	3256	3250	3215	3241	3238	309
15°	3120	3115	3082	3106	3109	880
25°	2870	2867	2840	2855	2861	1322
35°	2527	2521	2500	2501	2512	1579
45°	2108	2099	2081	2081	2087	1622
55°	1624	1621	1603	1588	1588	1450
65°	1095	1095	1075	1063	1060	1090
75°	567	555	546	537	534	595
85°	92	97	103	103	106	127
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°	3256.3	3256.3	3256.3	3256.3	3256.3
2.5°	3268.1	3261.2	3232.6	3256.3	3253.9
5°	3256.3	3250.5	3214.9	3241.4	3238.5
7.5°	3229.7	3223.4	3188.4	3214.9	3214.3
10°	3206.1	3197.4	3164.7	3191.2	3188.4
12.5°	3175.4	3166.7	3134.0	3160.5	3157.7
15°	3120.5	3114.7	3082.1	3105.8	3108.6
17.5°	3057.9	3046.9	3017.7	3040.8	3043.7
20°	3008.3	2999.6	2972.8	2993.6	2996.5
22.5°	2956.3	2947.7	2920.9	2941.7	2944.5
25°	2869.5	2866.7	2840.0	2854.9	2860.7
27.5°	2775.6	2767.6	2746.1	2757.4	2763.2
30°	2707.2	2701.3	2677.6	2686.6	2692.4
32.5°	2636.3	2632.9	2611.5	2615.8	2623.9
35°	2527.1	2521.3	2500.5	2500.8	2512.3
37.5°	2406.0	2399.6	2382.4	2379.6	2384.2
40°	2323.4	2314.7	2299.8	2296.8	2296.8
42.5°	2238.3	2231.9	2212.4	2207.2	2214.1
45°	2107.9	2099.2	2081.3	2081.4	2087.2
47.5°	1966.7	1963.3	1942.5	1933.2	1935.5
50°	1862.8	1868.6	1848.1	1836.6	1848.1
52.5°	1773.1	1769.6	1751.2	1739.5	1744.1
55°	1623.7	1620.8	1603.0	1588.3	1588.3
57.5°	1473.7	1466.3	1447.8	1436.7	1445.4
60°	1369.8	1367.0	1346.2	1325.7	1334.4
62.5°	1265.9	1260.7	1239.9	1226.4	1232.8
65°	1095.3	1095.3	1074.6	1062.7	1059.8
67.5°	945.9	932.0	920.5	906.2	902.2
70°	832.5	821.0	811.9	799.8	791.2
72.5°	721.5	714.6	700.8	689.0	687.3
75°	566.8	555.3	546.2	537.2	534.3
77.5°	403.3	401.0	392.6	387.9	389.7
80°	304.1	304.1	298.2	298.1	295.2
82.5°	214.3	216.6	215.5	210.8	210.2
85°	91.5	97.3	103.3	103.4	106.3
87.5°	17.1	30.4	30.1	31.3	31.3
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)