

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: P520299

Luminaire Tested: **SQ4-F-125U-075D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520299  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-125U-075D-840-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

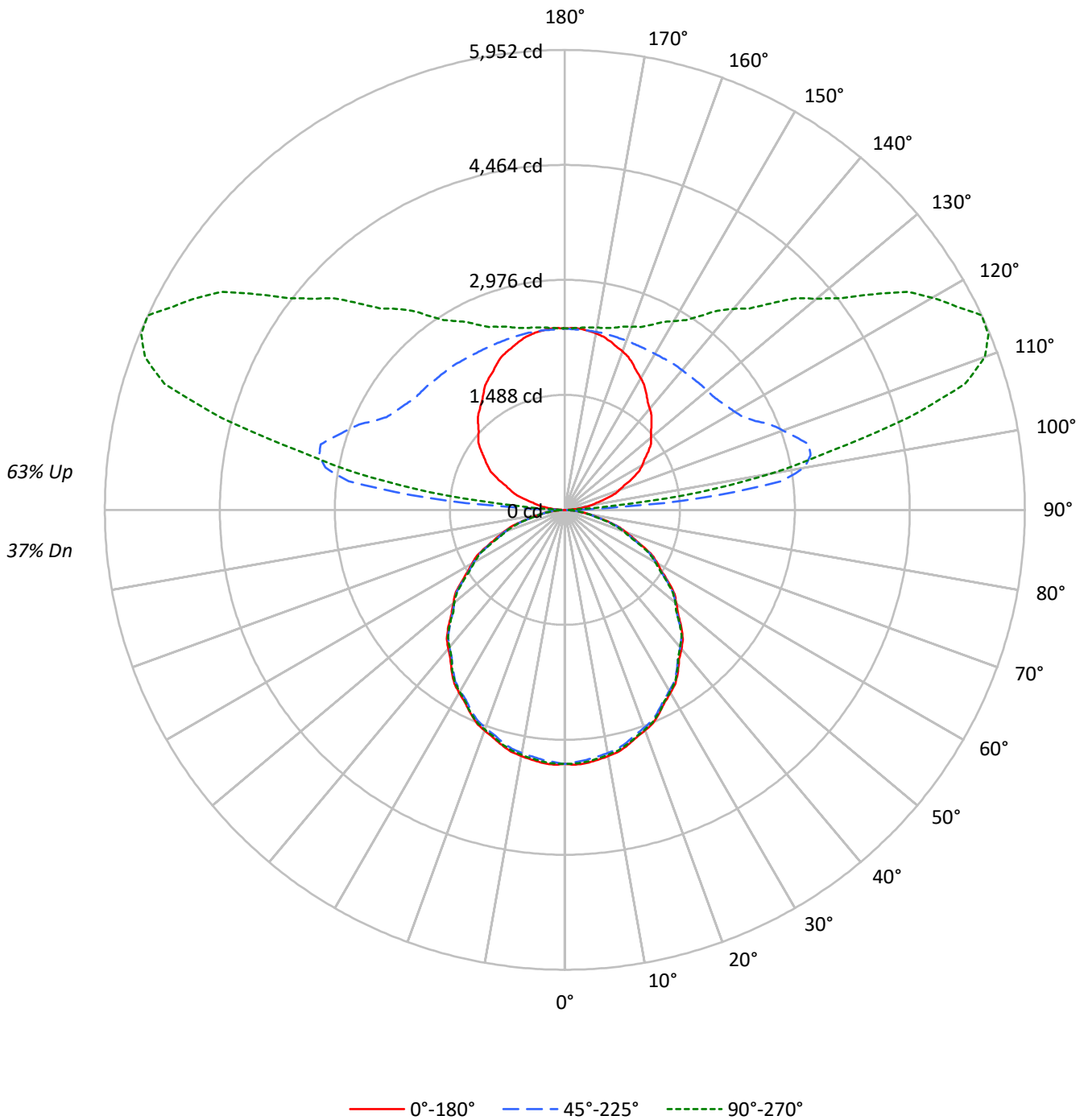
Lumens per Lamp: N/A  
Luminaire Lumens: 24133.1 lumens  
Efficiency: N/A  
Efficacy: 135.9 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 177.6  
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	104	104	104	104	94	94	94	94	76	76	76	60	60	60	44	44	44	37
1	95	91	87	83	86	82	79	76	67	64	62	52	51	50	39	38	37	31
2	86	79	73	68	78	72	67	62	58	55	52	46	43	41	34	33	31	26
3	79	69	62	56	71	63	57	52	51	47	43	41	37	35	30	28	27	22
4	72	61	54	48	65	56	49	44	46	41	37	36	33	30	27	25	23	19
5	66	54	47	41	59	50	43	38	41	35	32	32	29	26	24	22	20	16
6	61	49	41	35	55	45	38	32	37	31	27	29	25	22	22	19	17	14
7	56	44	36	31	51	40	33	28	33	28	24	26	23	20	20	17	15	13
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	18	16	14	11
9	48	36	29	24	44	33	27	22	27	22	19	22	18	16	17	14	12	10
10	45	33	26	21	41	30	24	20	25	20	17	20	17	14	16	13	11	9

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

	0°	45°	90°
0°	10115	10115	10115
5°	10154	10025	10098
10°	10113	9982	10057
15°	10035	9912	9997
20°	9945	9827	9905
25°	9835	9734	9805
30°	9710	9604	9657
35°	9583	9482	9527
40°	9422	9326	9314
45°	9260	9143	9169
50°	9002	8931	8931
55°	8793	8682	8601
60°	8510	8364	8290
65°	8051	7898	7790
70°	7561	7373	7186
75°	6803	6556	6414
80°	5439	5333	5281
85°	3260	3684	3790



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	310.4	1.3
10°-20°	883.8	3.7
20°-30°	1327.8	5.5
30°-40°	1584.4	6.6
40°-50°	1624.9	6.7
50°-60°	1447.9	6.0
60°-70°	1079.6	4.5
70°-80°	585.4	2.4
80°-90°	140.0	0.6
90°-100°	1097.8	4.5
100°-110°	2957.1	12.3
110°-120°	3103.4	12.9
120°-130°	2518.3	10.4
130°-140°	1975.0	8.2
140°-150°	1516.3	6.3
150°-160°	1090.2	4.5
160°-170°	666.1	2.8
170°-180°	224.6	0.9
0°-30°	2522.1	10.5
0°-40°	4106.5	17.0
0°-60°	7179.3	29.7
0°-90°	8984.3	37.2
90°-120°	7158.2	29.7
90°-150°	13167.9	54.6
90°-180°	15149.0	62.8
0°-180°	24133.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3289	3289	3289	3289	3289	
5°	3289	3283	3247	3274	3271	312
15°	3152	3146	3113	3137	3140	889
25°	2898	2896	2868	2884	2890	1335
35°	2552	2547	2526	2526	2538	1595
45°	2129	2120	2102	2102	2108	1639
55°	1640	1637	1619	1604	1604	1465
65°	1106	1106	1085	1073	1070	1101
75°	572	561	552	543	540	601
85°	92	98	104	104	107	128
90°	6	18	36	39	39	14
95°	167	597	1800	920	637	175
105°	547	851	3270	4893	4592	575
115°	966	1182	2723	5262	5952	950
125°	1318	1514	2445	4133	4864	1177
135°	1587	1772	2376	3334	3776	1225
145°	1836	1979	2347	2851	3061	1151
155°	2084	2160	2326	2558	2640	959
165°	2260	2286	2335	2428	2439	637
175°	2350	2347	2338	2370	2365	223
180°	2347	2347	2347	2347	2347	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3289.0	3289.0	3289.0	3289.0	3289.0
2.5°	3300.9	3293.9	3265.2	3288.9	3286.7
5°	3289.0	3283.2	3247.3	3274.1	3271.1
7.5°	3262.2	3255.8	3220.4	3247.3	3246.7
10°	3238.3	3229.6	3196.6	3223.4	3220.4
12.5°	3207.4	3198.6	3165.6	3192.4	3189.4
15°	3151.8	3146.0	3113.1	3137.0	3139.9
17.5°	3088.7	3077.6	3048.1	3071.5	3074.3
20°	3038.6	3029.8	3002.8	3023.7	3026.6
22.5°	2986.0	2977.3	2950.3	2971.2	2974.1
25°	2898.4	2895.5	2868.5	2883.6	2889.5
27.5°	2803.6	2795.4	2773.8	2785.2	2791.1
30°	2734.4	2728.6	2704.6	2713.6	2719.5
32.5°	2662.9	2659.3	2637.8	2642.1	2650.3
35°	2552.5	2546.7	2525.7	2525.9	2537.6
37.5°	2430.2	2423.8	2406.4	2403.5	2408.2
40°	2346.8	2338.0	2322.9	2319.9	2319.9
42.5°	2260.9	2254.5	2234.6	2229.4	2236.4
45°	2129.1	2120.4	2102.2	2102.3	2108.2
47.5°	1986.5	1983.1	1962.1	1952.6	1954.9
50°	1881.6	1887.4	1866.7	1855.0	1866.7
52.5°	1790.9	1787.4	1768.8	1757.0	1761.7
55°	1640.0	1637.1	1619.2	1604.2	1604.2
57.5°	1488.6	1481.0	1462.3	1451.2	1460.0
60°	1383.6	1380.6	1359.8	1339.1	1347.8
62.5°	1278.6	1273.4	1252.4	1238.8	1245.2
65°	1106.3	1106.3	1085.4	1073.4	1070.5
67.5°	955.4	941.5	929.7	915.4	911.2
70°	840.9	829.3	820.0	807.9	799.2
72.5°	728.8	721.8	707.9	695.9	694.2
75°	572.5	560.8	551.7	542.6	539.8
77.5°	407.3	405.0	396.6	391.9	393.6
80°	307.1	307.1	301.1	301.1	298.2
82.5°	216.5	218.9	217.7	212.9	212.3
85°	92.4	98.3	104.4	104.4	107.4
87.5°	17.9	31.9	33.4	34.0	34.0
90°	6.0	17.7	35.9	38.9	38.9
92.5°	72.9	257.6	509.3	245.2	170.4
95°	167.4	597.1	1799.6	920.2	636.7
97.5°	267.2	683.5	2822.5	2358.0	1778.1
100°	343.8	717.9	3147.8	3293.5	2732.2
102.5°	417.9	766.3	3255.4	3994.0	3533.4
105°	547.0	851.0	3270.4	4892.7	4591.6
107.5°	669.0	940.2	3131.0	5354.5	5432.3
110°	750.3	1007.5	3004.3	5497.9	5781.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	836.4	1074.9	2882.3	5466.1	5932.0
115°	965.6	1181.9	2723.3	5262.0	5951.8
117.5°	1083.3	1286.2	2600.1	4936.1	5704.3
120°	1159.9	1355.7	2537.9	4702.2	5491.4
122.5°	1226.8	1420.3	2492.5	4463.0	5249.9
125°	1318.3	1514.1	2445.3	4133.0	4863.6
127.5°	1406.2	1599.1	2415.4	3841.8	4494.2
130°	1458.8	1651.7	2403.4	3674.9	4247.8
132.5°	1511.5	1702.0	2391.5	3528.0	4054.1
135°	1587.3	1771.5	2376.5	3334.2	3775.6
137.5°	1659.7	1836.2	2368.7	3169.7	3532.2
140°	1709.9	1879.4	2361.6	3068.5	3395.9
142.5°	1762.5	1920.3	2356.8	2974.1	3250.0
145°	1835.5	1978.7	2346.6	2850.6	3061.1
147.5°	1914.3	2038.9	2336.4	2746.8	2912.2
150°	1967.0	2075.2	2331.7	2681.6	2818.9
152.5°	2014.8	2108.9	2329.3	2628.4	2740.0
155°	2083.5	2159.5	2325.7	2557.8	2639.6
157.5°	2143.9	2203.0	2326.3	2508.1	2563.1
160°	2182.2	2232.0	2328.7	2479.1	2520.0
162.5°	2215.7	2256.0	2331.1	2454.9	2484.2
165°	2260.0	2286.2	2334.7	2427.6	2439.3
167.5°	2295.8	2311.0	2337.6	2406.5	2411.2
170°	2319.8	2325.6	2337.6	2394.5	2394.5
172.5°	2334.1	2335.3	2340.1	2382.5	2382.5
175°	2349.7	2346.7	2337.6	2370.4	2364.6
177.5°	2356.2	2351.5	2339.5	2358.4	2353.8
180°	2346.6	2346.6	2346.6	2346.6	2346.6

(END OF REPORT)