

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: P520054

Luminaire Tested: **SQ4-F-075U-125D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520054
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G3-1910-536-20)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-075U-125D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

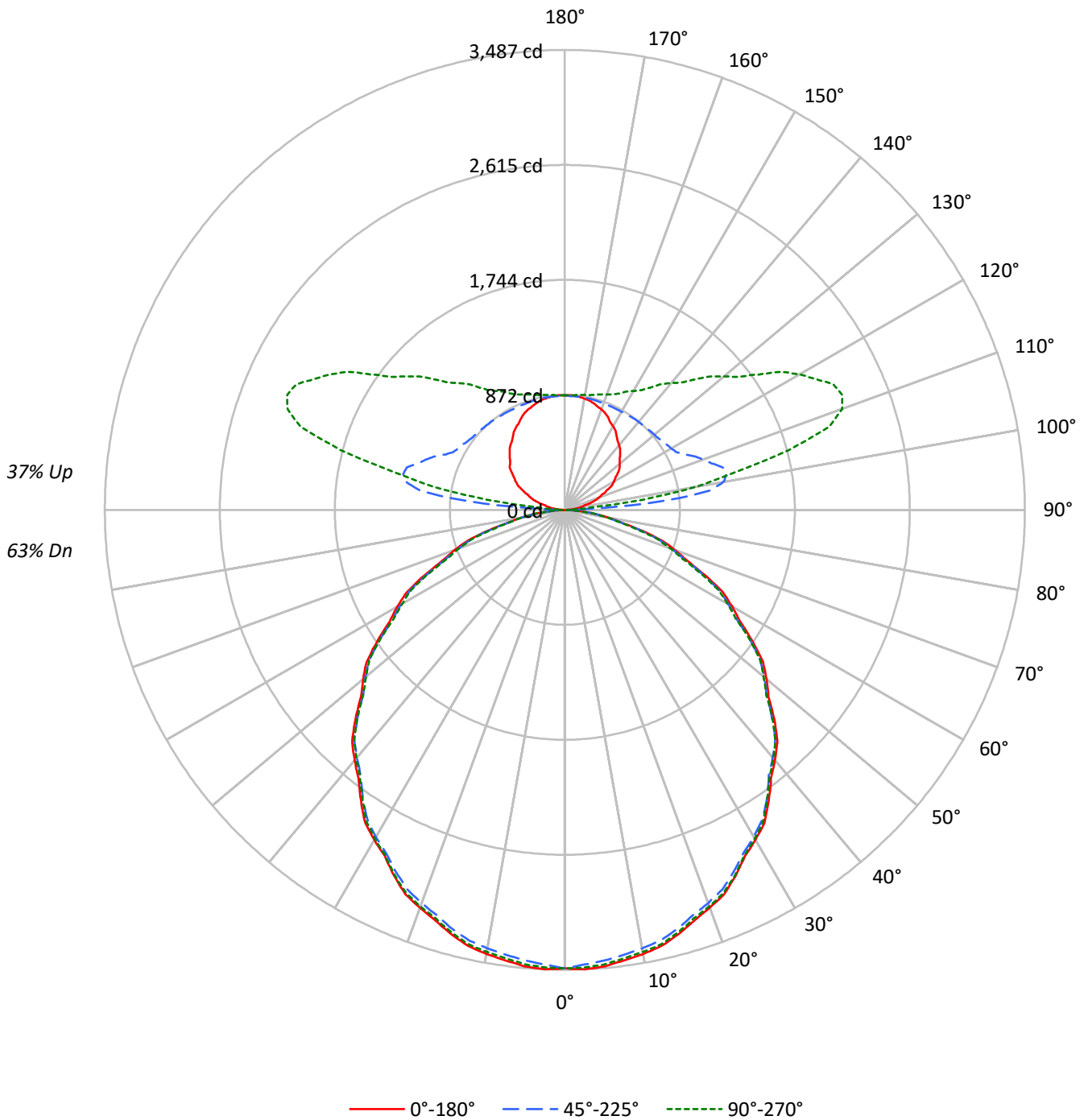
Lumens per Lamp: N/A
Luminaire Lumens: 15138.6 lumens
Efficiency: N/A
Efficacy: 121.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 125.1
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	110	110	110	110	103	103	103	103	90	90	90	79	79	79	68	68	68	63
1	101	96	92	89	94	90	87	84	79	77	74	69	67	66	60	59	57	53
2	92	84	78	72	86	79	73	69	69	65	61	61	57	55	53	50	48	44
3	83	74	66	60	78	69	63	57	61	56	52	54	49	46	47	43	41	37
4	76	65	57	51	71	61	54	48	54	48	44	48	43	39	41	38	35	32
5	70	58	50	44	65	55	47	42	49	42	38	43	38	34	37	34	30	27
6	65	52	44	38	60	49	42	36	44	38	33	39	34	30	34	30	27	24
7	60	47	39	33	56	45	37	32	40	34	29	35	30	26	31	27	24	21
8	55	43	35	29	52	41	33	28	36	30	26	32	27	24	28	24	21	19
9	52	39	31	26	48	37	30	25	33	27	23	30	25	21	26	22	19	17
10	48	36	28	24	45	34	27	23	31	25	21	27	23	19	24	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16037	16037	16037
5°	16089	15886	16019
10°	16016	15818	15944
15°	15908	15717	15844
20°	15761	15582	15705
25°	15582	15417	15543
30°	15390	15257	15338
35°	15171	15041	15052
40°	14921	14760	14806
45°	14642	14479	14505
50°	14322	14157	14115
55°	13956	13757	13726
60°	13504	13205	13133
65°	12802	12531	12364
70°	11923	11613	11458
75°	10605	10368	10060
80°	8639	8387	8336
85°	5166	5875	5875



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	328.0	2.2
10°-20°	934.2	6.2
20°-30°	1403.5	9.3
30°-40°	1674.7	11.1
40°-50°	1716.6	11.3
50°-60°	1530.0	10.1
60°-70°	1139.0	7.5
70°-80°	617.1	4.1
80°-90°	143.9	1.0
90°-100°	409.2	2.7
100°-110°	1125.7	7.4
110°-120°	1161.9	7.7
120°-130°	931.0	6.1
130°-140°	731.2	4.8
140°-150°	560.4	3.7
150°-160°	402.9	2.7
160°-170°	246.4	1.6
170°-180°	83.0	0.5
0°-30°	2665.8	17.6
0°-40°	4340.4	28.7
0°-60°	7587.1	50.1
0°-90°	9487.0	62.7
90°-120°	2696.8	17.8
90°-150°	4919.3	32.5
90°-180°	5652.0	37.3
0°-180°	15138.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3476	3476	3476	3476	3476	
5°	3474	3469	3431	3461	3459	330
15°	3331	3324	3291	3320	3318	939
25°	3061	3056	3029	3046	3054	1410
35°	2694	2692	2671	2671	2673	1685
45°	2244	2239	2219	2216	2223	1729
55°	1735	1730	1710	1697	1707	1550
65°	1173	1165	1148	1140	1133	1161
75°	595	595	582	570	564	632
85°	98	111	111	113	111	135
90°	2	7	13	17	17	6
95°	61	223	724	309	198	64
105°	201	310	1240	1889	1763	212
115°	356	434	995	1981	2248	352
125°	491	560	903	1527	1789	438
135°	592	658	877	1235	1397	457
145°	685	732	864	1052	1133	429
155°	775	800	858	946	973	356
165°	838	849	862	897	903	236
175°	868	869	864	875	873	82
180°	868	868	868	868	868	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3476.5	3476.5	3476.5	3476.5	3476.5
2.5°	3487.2	3481.2	3450.4	3476.4	3471.9
5°	3474.5	3469.0	3430.6	3461.2	3459.2
7.5°	3445.0	3438.0	3403.0	3431.7	3428.2
10°	3419.1	3413.4	3376.9	3405.6	3403.8
12.5°	3387.0	3381.3	3344.8	3373.5	3373.2
15°	3331.0	3323.5	3290.9	3319.6	3317.6
17.5°	3264.1	3255.5	3223.2	3245.8	3249.5
20°	3210.5	3204.9	3174.1	3195.3	3199.1
22.5°	3155.4	3148.3	3116.0	3140.2	3143.9
25°	3061.3	3055.7	3028.8	3046.1	3053.6
27.5°	2958.0	2958.0	2933.1	2945.5	2949.9
30°	2889.1	2889.1	2864.2	2872.0	2879.5
32.5°	2815.7	2809.7	2786.2	2792.4	2799.9
35°	2693.9	2692.1	2670.9	2671.0	2672.8
37.5°	2568.1	2562.8	2539.7	2541.5	2550.4
40°	2477.7	2474.0	2451.0	2451.1	2458.6
42.5°	2385.9	2382.2	2362.2	2359.2	2362.2
45°	2244.3	2238.7	2219.4	2215.8	2223.3
47.5°	2093.5	2095.0	2072.1	2066.9	2070.9
50°	1995.6	1995.6	1972.6	1961.3	1966.8
52.5°	1893.0	1890.0	1867.0	1854.3	1867.4
55°	1735.3	1729.8	1710.5	1697.3	1706.7
57.5°	1573.9	1565.3	1545.9	1531.5	1536.8
60°	1463.7	1450.5	1431.2	1419.7	1423.5
62.5°	1348.9	1341.8	1320.9	1303.5	1311.8
65°	1172.8	1165.3	1148.0	1140.2	1132.7
67.5°	1000.2	995.4	975.8	967.6	962.7
70°	884.0	874.6	861.0	851.4	849.5
72.5°	770.7	759.8	746.2	738.0	733.2
75°	595.0	595.0	581.7	570.0	564.4
77.5°	427.8	429.3	418.3	414.3	411.8
80°	325.2	325.2	315.7	312.0	313.8
82.5°	227.3	231.8	228.4	223.1	220.4
85°	97.6	110.7	111.0	112.8	111.0
87.5°	17.2	28.8	31.7	29.4	26.5
90°	1.9	7.2	12.9	16.6	16.6
92.5°	25.4	108.9	188.7	72.4	59.5
95°	60.9	223.3	723.5	309.4	197.5
97.5°	99.3	247.7	1104.2	850.8	600.3
100°	127.4	262.7	1223.7	1235.2	1007.9
102.5°	154.0	280.6	1254.8	1532.4	1323.8
105°	201.2	309.5	1240.4	1889.0	1762.8
107.5°	246.2	345.2	1169.8	2063.7	2101.3
110°	278.8	368.9	1116.7	2107.2	2237.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	308.2	395.6	1063.5	2079.2	2277.0
115°	356.2	433.9	994.8	1981.1	2248.2
117.5°	402.0	473.5	951.3	1843.5	2145.6
120°	430.1	498.6	932.1	1740.3	2052.6
122.5°	455.2	523.8	918.8	1649.9	1946.3
125°	491.0	559.6	902.6	1526.9	1788.6
127.5°	525.0	590.3	891.8	1424.2	1653.8
130°	542.7	609.5	886.0	1363.3	1572.6
132.5°	563.3	630.1	881.6	1309.7	1498.8
135°	592.5	657.5	876.8	1234.9	1397.2
137.5°	619.8	680.1	872.7	1174.4	1308.3
140°	640.5	696.4	871.2	1134.2	1255.1
142.5°	658.2	709.8	868.3	1098.4	1202.0
145°	684.8	731.7	863.9	1052.1	1133.3
147.5°	713.2	753.6	861.6	1011.2	1076.1
150°	730.9	767.0	860.2	988.7	1039.2
152.5°	747.2	780.4	858.7	969.2	1011.2
155°	775.3	800.5	858.3	945.6	972.7
157.5°	795.5	816.1	858.3	926.3	945.1
160°	810.3	826.5	858.3	915.8	930.3
162.5°	822.1	835.5	859.8	906.9	918.5
165°	838.0	848.8	862.0	897.2	902.6
167.5°	849.1	857.4	863.9	889.0	890.4
170°	856.4	861.9	863.9	886.0	886.0
172.5°	862.4	864.9	863.9	881.5	880.1
175°	867.5	869.4	863.9	874.8	873.1
177.5°	869.0	869.0	863.1	871.9	869.0
180°	867.5	867.5	867.5	867.5	867.5

(END OF REPORT)