

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: P519958

Luminaire Tested: **SQ4-F-050U-125D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519958
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-125D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

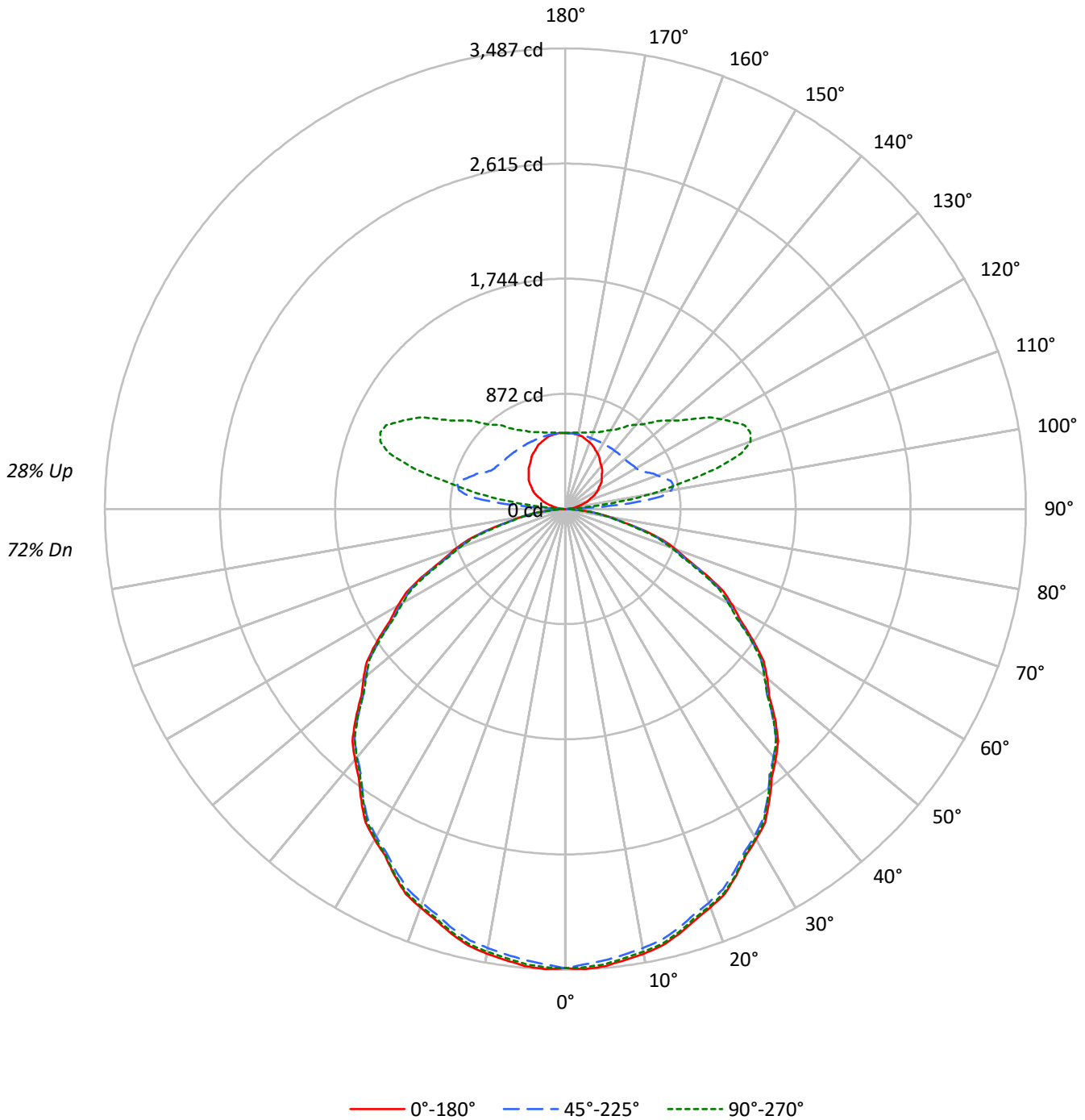
Lumens per Lamp: N/A
Luminaire Lumens: 13247.3 lumens
Efficiency: N/A
Efficacy: 118.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 111.4
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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	72
1	103	98	94	90	97	93	90	86	84	81	78	75	73	71	67	66	64	60
2	93	86	79	74	88	81	76	71	73	69	65	66	62	59	59	56	54	50
3	85	75	68	61	80	72	65	59	65	59	54	58	54	50	52	49	46	42
4	78	67	58	52	73	63	56	50	57	51	46	52	47	43	47	43	39	36
5	72	59	51	45	67	57	49	43	51	45	40	46	41	37	42	38	34	31
6	66	53	45	39	62	51	43	37	46	40	35	42	37	32	38	34	30	28
7	61	48	40	34	58	46	38	33	42	36	31	38	33	29	35	30	27	24
8	57	44	36	30	54	42	34	29	38	32	27	35	30	26	32	27	24	22
9	53	40	32	27	50	38	31	26	35	29	25	32	27	23	29	25	22	20
10	49	37	29	24	47	35	28	24	33	26	22	30	25	21	27	23	20	18

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	2.5
10°-20°	934.2	7.1
20°-30°	1403.5	10.6
30°-40°	1674.7	12.6
40°-50°	1716.6	13.0
50°-60°	1530.0	11.5
60°-70°	1139.0	8.6
70°-80°	617.1	4.7
80°-90°	143.9	1.1
90°-100°	276.5	2.1
100°-110°	751.0	5.7
110°-120°	772.2	5.8
120°-130°	617.4	4.7
130°-140°	485.1	3.7
140°-150°	372.0	2.8
150°-160°	267.5	2.0
160°-170°	163.6	1.2
170°-180°	55.1	0.4
0°-30°	2665.8	20.1
0°-40°	4340.4	32.8
0°-60°	7587.1	57.3
0°-90°	9487.1	71.6
90°-120°	1799.6	13.6
90°-150°	3274.1	24.7
90°-180°	3760.0	28.4
0°-180°	13247.3	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	5
95°	41	151	482	210	141	43
105°	133	208	826	1258	1183	142
115°	237	288	661	1315	1498	234
125°	326	371	598	1008	1189	291
135°	393	436	582	821	926	304
145°	454	486	574	698	750	285
155°	513	531	570	626	644	237
165°	556	563	572	596	598	157
175°	576	578	574	581	580	55
180°	576	576	576	576	576	



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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	7.3	13.0	16.7	16.7
92.5°	16.7	75.7	131.5	56.4	47.8
95°	40.7	151.2	481.5	209.5	140.7
97.5°	67.4	167.0	738.1	574.2	403.3
100°	85.2	177.5	816.6	827.8	668.6
102.5°	102.9	188.0	837.4	1023.8	883.4
105°	133.4	207.5	825.9	1257.5	1183.3
107.5°	164.9	230.4	778.2	1378.2	1398.8
110°	187.0	246.8	742.5	1402.0	1490.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	206.3	263.2	707.0	1382.2	1515.9
115°	237.1	287.7	661.1	1315.2	1498.1
117.5°	265.9	314.4	631.8	1220.2	1426.3
120°	285.2	332.3	618.5	1156.4	1361.0
122.5°	301.5	348.6	609.6	1092.6	1290.0
125°	325.9	371.2	598.1	1007.8	1188.8
127.5°	347.8	392.7	591.8	943.5	1098.8
130°	361.1	404.6	588.9	903.2	1042.6
132.5°	374.5	417.9	585.9	868.7	992.2
135°	392.6	436.1	581.5	820.8	925.9
137.5°	412.2	451.7	579.3	778.7	867.1
140°	424.1	462.1	577.8	751.8	831.4
142.5°	435.9	471.0	576.3	730.8	797.4
145°	453.6	486.3	574.1	697.5	750.0
147.5°	473.7	501.5	572.2	671.3	712.6
150°	487.0	510.6	572.2	656.3	688.9
152.5°	497.4	518.0	570.7	642.8	669.6
155°	512.9	531.1	570.3	626.4	644.4
157.5°	528.1	542.3	570.3	615.1	628.9
160°	537.1	549.7	570.3	607.6	618.5
162.5°	545.9	555.7	571.8	601.6	609.6
165°	555.5	562.8	572.2	596.3	598.1
167.5°	565.5	569.1	574.1	590.0	591.4
170°	568.5	572.1	574.1	587.0	587.0
172.5°	571.5	573.7	574.1	584.1	584.1
175°	575.9	577.7	574.1	581.4	579.6
177.5°	577.4	577.4	573.0	578.9	575.9
180°	575.9	575.9	575.9	575.9	575.9

(END OF REPORT)