

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: P520291

Luminaire Tested: **SQ4-F-125U-075D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520291
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-830-1D-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

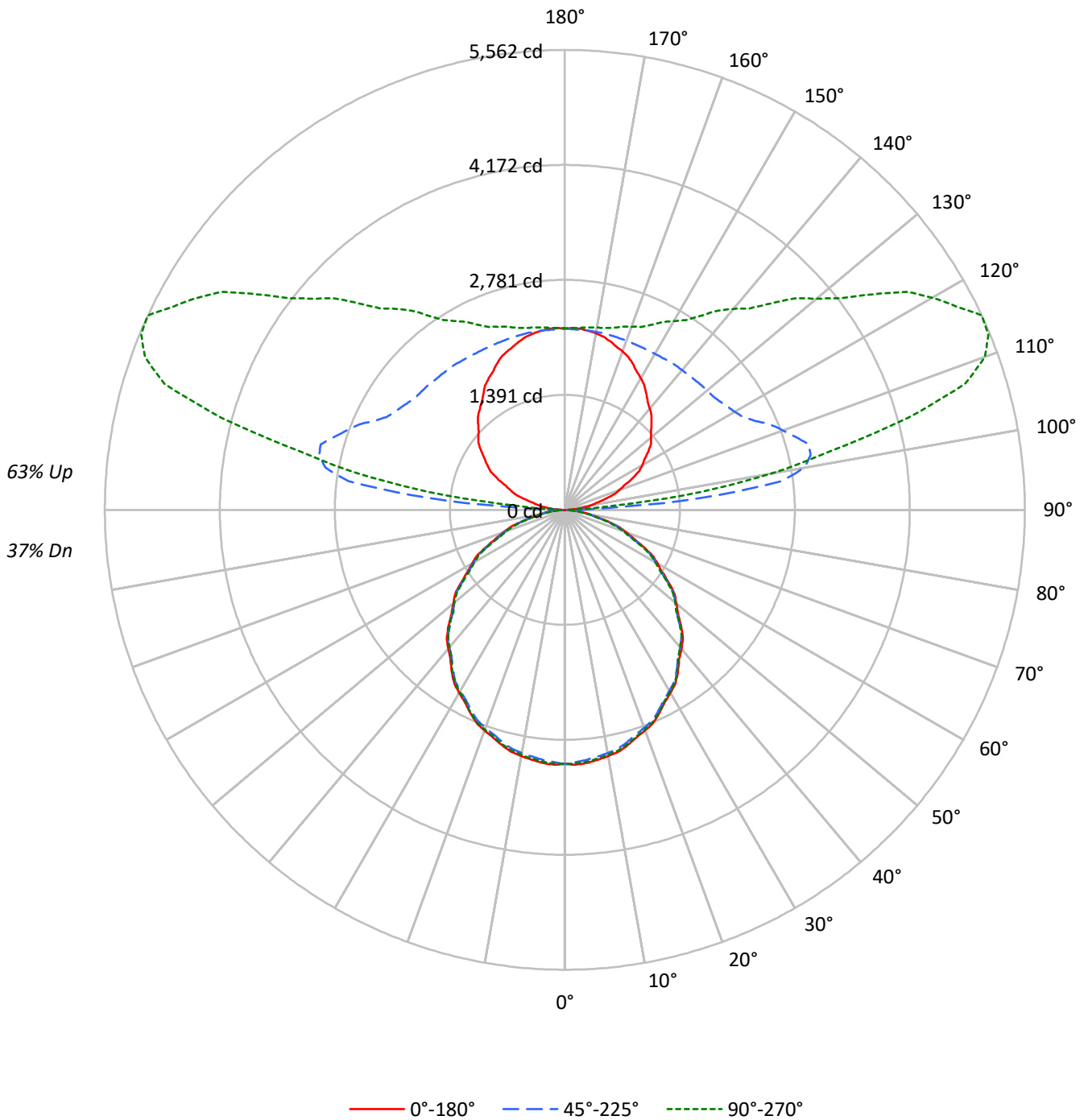
Lumens per Lamp: N/A
Luminaire Lumens: 22552.1 lumens
Efficiency: N/A
Efficacy: 127.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

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°	9452	9452	9452
5°	9488	9368	9437
10°	9450	9329	9398
15°	9378	9263	9342
20°	9293	9184	9257
25°	9191	9096	9163
30°	9074	8975	9025
35°	8955	8861	8903
40°	8804	8715	8703
45°	8653	8544	8569
50°	8413	8346	8346
55°	8217	8113	8038
60°	7953	7815	7747
65°	7524	7381	7280
70°	7066	6890	6715
75°	6357	6125	5992
80°	5085	4984	4936
85°	3049	3440	3539



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	290.1	1.3
10°-20°	825.9	3.7
20°-30°	1240.9	5.5
30°-40°	1480.6	6.6
40°-50°	1518.4	6.7
50°-60°	1353.0	6.0
60°-70°	1008.8	4.5
70°-80°	547.1	2.4
80°-90°	130.8	0.6
90°-100°	1025.8	4.5
100°-110°	2763.4	12.3
110°-120°	2900.1	12.9
120°-130°	2353.3	10.4
130°-140°	1845.6	8.2
140°-150°	1417.0	6.3
150°-160°	1018.8	4.5
160°-170°	622.4	2.8
170°-180°	209.9	0.9
0°-30°	2356.9	10.5
0°-40°	3837.5	17.0
0°-60°	6708.9	29.7
0°-90°	8395.7	37.2
90°-120°	6689.3	29.7
90°-150°	12305.3	54.6
90°-180°	14156.0	62.8
0°-180°	22552.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3074	3074	3074	3074	3074	
5°	3074	3068	3034	3060	3057	292
15°	2945	2940	2909	2932	2934	831
25°	2708	2706	2681	2695	2700	1247
35°	2385	2380	2360	2360	2371	1490
45°	1990	1981	1964	1965	1970	1531
55°	1533	1530	1513	1499	1499	1369
65°	1034	1034	1014	1003	1000	1029
75°	535	524	516	507	504	562
85°	86	92	98	98	100	120
90°	6	16	34	36	36	13
95°	156	558	1682	860	595	163
105°	511	795	3056	4572	4291	537
115°	902	1104	2545	4917	5562	888
125°	1232	1415	2285	3862	4545	1100
135°	1483	1655	2221	3116	3528	1145
145°	1715	1849	2193	2664	2861	1076
155°	1947	2018	2173	2390	2467	896
165°	2112	2136	2182	2269	2280	596
175°	2196	2193	2184	2215	2210	209
180°	2193	2193	2193	2193	2193	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3073.5	3073.5	3073.5	3073.5	3073.5
2.5°	3084.7	3078.1	3051.3	3073.5	3071.4
5°	3073.5	3068.1	3034.5	3059.5	3056.9
7.5°	3048.5	3042.5	3009.5	3034.5	3034.0
10°	3026.2	3018.0	2987.2	3012.2	3009.5
12.5°	2997.3	2989.0	2958.2	2983.2	2980.5
15°	2945.4	2939.9	2909.2	2931.5	2934.3
17.5°	2886.3	2875.9	2848.4	2870.2	2873.0
20°	2839.5	2831.3	2806.1	2825.6	2828.4
22.5°	2790.4	2782.2	2757.0	2776.5	2779.3
25°	2708.5	2705.8	2680.7	2694.8	2700.2
27.5°	2619.9	2612.3	2592.0	2602.7	2608.3
30°	2555.3	2549.8	2527.4	2535.9	2541.3
32.5°	2488.4	2485.1	2465.0	2469.0	2476.7
35°	2385.3	2379.9	2360.2	2360.5	2371.4
37.5°	2271.0	2265.0	2248.8	2246.0	2250.4
40°	2193.0	2184.8	2170.7	2167.9	2167.9
42.5°	2112.8	2106.8	2088.3	2083.4	2089.9
45°	1989.6	1981.4	1964.5	1964.7	1970.1
47.5°	1856.4	1853.1	1833.5	1824.6	1826.8
50°	1758.3	1763.7	1744.3	1733.5	1744.3
52.5°	1673.6	1670.3	1653.0	1641.9	1646.3
55°	1532.6	1529.9	1513.1	1499.1	1499.1
57.5°	1391.1	1384.0	1366.6	1356.1	1364.3
60°	1293.0	1290.2	1270.6	1251.3	1259.5
62.5°	1194.8	1189.9	1170.3	1157.6	1163.7
65°	1033.9	1033.9	1014.3	1003.1	1000.4
67.5°	892.8	879.8	868.8	855.3	851.6
70°	785.8	774.9	766.3	755.0	746.8
72.5°	681.1	674.5	661.5	650.4	648.7
75°	535.0	524.1	515.5	507.1	504.3
77.5°	380.6	378.5	370.6	366.2	367.8
80°	287.1	287.1	281.4	281.3	278.7
82.5°	202.3	204.5	203.4	199.0	198.4
85°	86.4	91.8	97.5	97.6	100.3
87.5°	16.7	29.8	31.2	31.8	31.8
90°	5.6	16.5	33.5	36.3	36.3
92.5°	68.2	240.8	476.0	229.1	159.3
95°	156.4	558.0	1681.7	859.9	595.0
97.5°	249.7	638.7	2637.6	2203.5	1661.5
100°	321.3	670.9	2941.6	3077.7	2553.2
102.5°	390.5	716.2	3042.1	3732.4	3301.9
105°	511.2	795.3	3056.1	4572.1	4290.8
107.5°	625.2	878.7	2925.9	5003.7	5076.4
110°	701.2	941.5	2807.5	5137.7	5402.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	781.6	1004.5	2693.5	5108.0	5543.5
115°	902.3	1104.4	2544.8	4917.3	5561.8
117.5°	1012.4	1201.9	2429.8	4612.7	5330.5
120°	1083.9	1266.8	2371.7	4394.1	5131.7
122.5°	1146.5	1327.2	2329.2	4170.7	4906.0
125°	1231.9	1415.0	2285.1	3862.2	4545.0
127.5°	1314.1	1494.4	2257.1	3590.1	4199.8
130°	1363.2	1543.5	2246.0	3434.2	3969.6
132.5°	1412.4	1590.5	2234.8	3296.9	3788.6
135°	1483.3	1655.4	2220.8	3115.8	3528.2
137.5°	1550.9	1715.9	2213.6	2962.1	3300.8
140°	1597.9	1756.4	2206.9	2867.5	3173.4
142.5°	1647.0	1794.5	2202.4	2779.3	3037.1
145°	1715.2	1849.0	2192.9	2663.9	2860.6
147.5°	1788.9	1905.3	2183.4	2566.8	2721.5
150°	1838.2	1939.2	2179.0	2505.9	2634.2
152.5°	1882.9	1970.8	2176.7	2456.2	2560.5
155°	1947.1	2018.1	2173.3	2390.2	2466.7
157.5°	2003.5	2058.7	2173.9	2343.8	2395.2
160°	2039.2	2085.7	2176.1	2316.7	2354.9
162.5°	2070.5	2108.2	2178.4	2294.1	2321.4
165°	2111.9	2136.4	2181.7	2268.6	2279.5
167.5°	2145.4	2159.6	2184.5	2248.8	2253.3
170°	2167.7	2173.2	2184.5	2237.6	2237.6
172.5°	2181.1	2182.2	2186.8	2226.4	2226.4
175°	2195.7	2193.0	2184.5	2215.1	2209.7
177.5°	2201.9	2197.5	2186.2	2203.9	2199.6
180°	2192.9	2192.9	2192.9	2192.9	2192.9

(END OF REPORT)