

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: P520311

Luminaire Tested: **SQ4-F-125U-075D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520311
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-940-1D-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

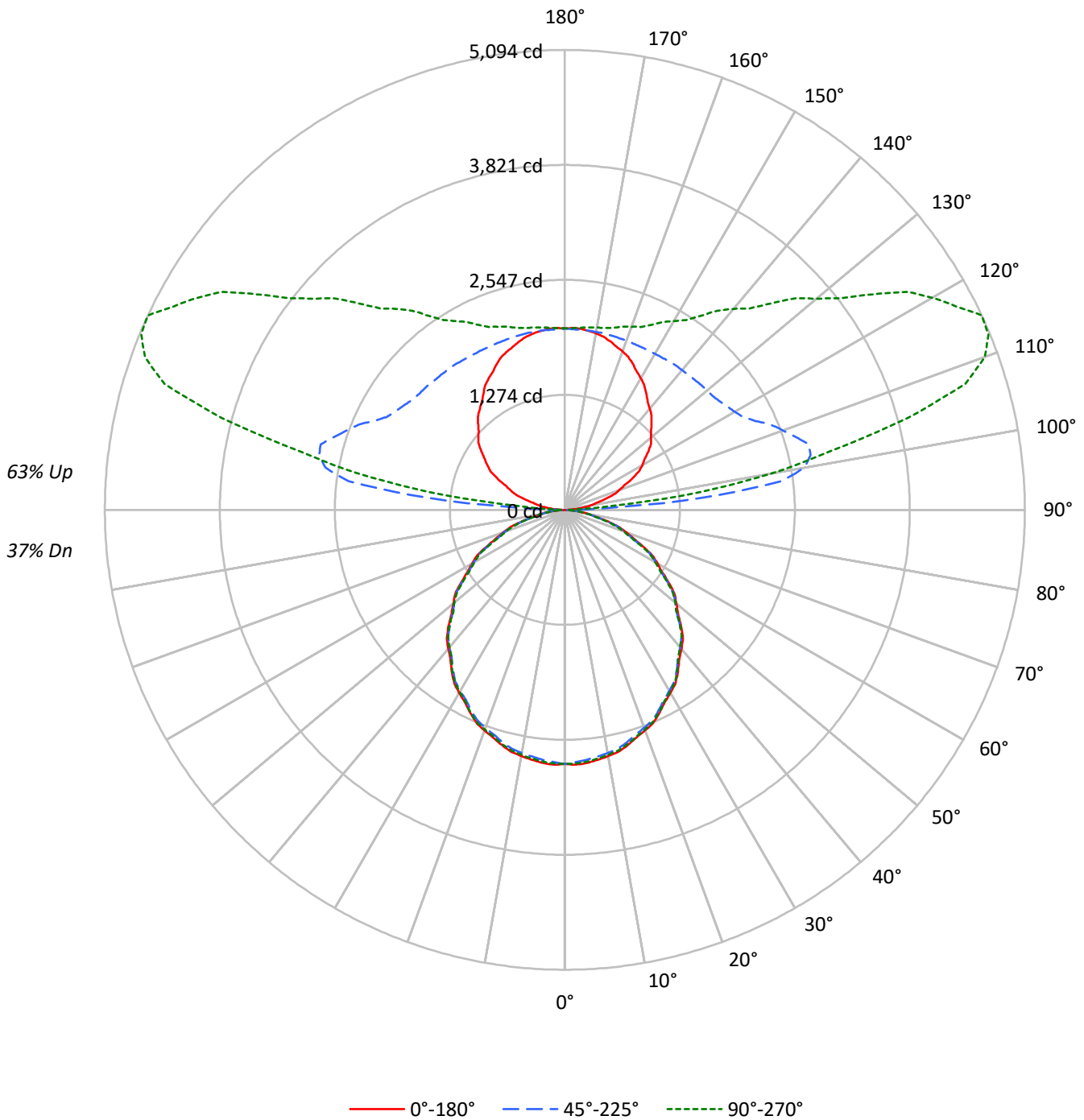
Lumens per Lamp: N/A
Luminaire Lumens: 20654.8 lumens
Efficiency: N/A
Efficacy: 116.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

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°	8657	8657	8657
5°	8690	8580	8643
10°	8655	8544	8607
15°	8589	8483	8556
20°	8511	8411	8477
25°	8417	8331	8391
30°	8311	8220	8265
35°	8202	8115	8154
40°	8063	7982	7971
45°	7925	7826	7848
50°	7705	7644	7644
55°	7526	7430	7362
60°	7284	7158	7095
65°	6891	6760	6667
70°	6471	6310	6150
75°	5822	5611	5488
80°	4654	4564	4520
85°	2791	3155	3243



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	265.7	1.3
10°-20°	756.4	3.7
20°-30°	1136.5	5.5
30°-40°	1356.0	6.6
40°-50°	1390.7	6.7
50°-60°	1239.2	6.0
60°-70°	923.9	4.5
70°-80°	501.1	2.4
80°-90°	119.8	0.6
90°-100°	939.5	4.5
100°-110°	2530.9	12.3
110°-120°	2656.1	12.9
120°-130°	2155.4	10.4
130°-140°	1690.4	8.2
140°-150°	1297.8	6.3
150°-160°	933.1	4.5
160°-170°	570.1	2.8
170°-180°	192.2	0.9
0°-30°	2158.6	10.5
0°-40°	3514.6	17.0
0°-60°	6144.5	29.7
0°-90°	7689.4	37.2
90°-120°	6126.5	29.7
90°-150°	11270.0	54.6
90°-180°	12965.0	62.8
0°-180°	20654.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2815	2815	2815	2815	2815	
5°	2815	2810	2779	2802	2800	267
15°	2698	2693	2664	2685	2687	761
25°	2481	2478	2455	2468	2473	1143
35°	2185	2180	2162	2162	2172	1365
45°	1822	1815	1799	1799	1804	1402
55°	1404	1401	1386	1373	1373	1254
65°	947	947	929	919	916	943
75°	490	480	472	464	462	515
85°	79	84	89	89	92	110
90°	5	15	31	33	33	12
95°	143	511	1540	788	545	150
105°	468	728	2799	4188	3930	492
115°	826	1012	2331	4504	5094	813
125°	1128	1296	2093	3537	4163	1007
135°	1358	1516	2034	2854	3231	1049
145°	1571	1694	2008	2440	2620	985
155°	1783	1848	1990	2189	2259	821
165°	1934	1957	1998	2078	2088	545
175°	2011	2008	2001	2029	2024	191
180°	2008	2008	2008	2008	2008	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2815.0	2815.0	2815.0	2815.0	2815.0
2.5°	2825.1	2819.2	2794.5	2814.9	2812.9
5°	2815.0	2810.0	2779.3	2802.1	2799.7
7.5°	2792.0	2786.6	2756.3	2779.3	2778.7
10°	2771.6	2764.1	2735.9	2758.8	2756.3
12.5°	2745.0	2737.6	2709.3	2732.2	2729.7
15°	2697.6	2692.6	2664.4	2684.9	2687.4
17.5°	2643.5	2634.0	2608.7	2628.7	2631.2
20°	2600.6	2593.1	2570.0	2587.9	2590.3
22.5°	2555.7	2548.2	2525.1	2543.0	2545.5
25°	2480.6	2478.2	2455.1	2468.0	2472.9
27.5°	2399.5	2392.5	2373.9	2383.8	2388.8
30°	2340.3	2335.3	2314.8	2322.6	2327.5
32.5°	2279.0	2276.0	2257.6	2261.4	2268.4
35°	2184.6	2179.6	2161.6	2161.9	2171.8
37.5°	2080.0	2074.5	2059.5	2057.1	2061.1
40°	2008.5	2001.0	1988.1	1985.5	1985.5
42.5°	1935.1	1929.5	1912.5	1908.1	1914.1
45°	1822.2	1814.7	1799.3	1799.4	1804.4
47.5°	1700.3	1697.2	1679.3	1671.1	1673.2
50°	1610.4	1615.3	1597.6	1587.7	1597.6
52.5°	1532.8	1529.8	1513.9	1503.8	1507.8
55°	1403.7	1401.2	1385.8	1373.1	1373.1
57.5°	1274.0	1267.6	1251.5	1242.0	1249.6
60°	1184.2	1181.7	1163.8	1146.0	1153.5
62.5°	1094.4	1089.8	1071.8	1060.2	1065.7
65°	946.9	946.9	929.0	918.7	916.2
67.5°	817.7	805.7	795.7	783.4	780.0
70°	719.7	709.7	701.8	691.5	683.9
72.5°	623.7	617.8	605.9	595.7	594.2
75°	490.0	480.0	472.2	464.4	461.9
77.5°	348.7	346.6	339.4	335.4	336.8
80°	262.8	262.8	257.7	257.7	255.2
82.5°	185.3	187.3	186.3	182.2	181.8
85°	79.1	84.1	89.4	89.4	91.9
87.5°	15.4	27.3	28.5	29.1	29.1
90°	5.1	15.1	30.7	33.3	33.3
92.5°	62.5	220.5	435.9	209.9	145.8
95°	143.3	511.0	1540.2	787.6	545.0
97.5°	228.7	584.9	2415.7	2018.1	1521.8
100°	294.2	614.4	2694.1	2818.8	2338.4
102.5°	357.7	655.9	2786.2	3418.4	3024.1
105°	468.2	728.4	2799.0	4187.5	3929.8
107.5°	572.6	804.8	2679.7	4582.7	4649.3
110°	642.2	862.3	2571.3	4705.5	4948.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	715.9	920.0	2466.9	4678.3	5077.0
115°	826.4	1011.5	2330.8	4503.6	5093.9
117.5°	927.2	1100.8	2225.3	4224.6	4882.1
120°	992.7	1160.3	2172.2	4024.5	4699.9
122.5°	1050.0	1215.6	2133.3	3819.8	4493.2
125°	1128.3	1295.9	2092.8	3537.3	4162.7
127.5°	1203.5	1368.6	2067.3	3288.0	3846.4
130°	1248.5	1413.7	2057.0	3145.3	3635.6
132.5°	1293.6	1456.7	2046.7	3019.5	3469.8
135°	1358.5	1516.2	2034.0	2853.6	3231.4
137.5°	1420.5	1571.5	2027.3	2712.9	3023.1
140°	1463.5	1608.5	2021.2	2626.2	2906.5
142.5°	1508.5	1643.6	2017.1	2545.4	2781.6
145°	1571.0	1693.5	2008.4	2439.8	2619.9
147.5°	1638.4	1745.0	1999.7	2350.9	2492.4
150°	1683.4	1776.1	1995.6	2295.1	2412.6
152.5°	1724.4	1805.0	1993.6	2249.5	2345.1
155°	1783.3	1848.3	1990.5	2189.1	2259.2
157.5°	1834.9	1885.5	1991.0	2146.6	2193.7
160°	1867.7	1910.2	1993.1	2121.7	2156.8
162.5°	1896.4	1930.9	1995.1	2101.1	2126.1
165°	1934.3	1956.8	1998.2	2077.7	2087.7
167.5°	1964.9	1978.0	2000.8	2059.7	2063.7
170°	1985.4	1990.4	2000.8	2049.3	2049.3
172.5°	1997.7	1998.7	2002.7	2039.1	2039.1
175°	2010.9	2008.5	2000.8	2028.8	2023.8
177.5°	2016.6	2012.6	2002.2	2018.5	2014.6
180°	2008.4	2008.4	2008.4	2008.4	2008.4

(END OF REPORT)