

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: P520245

Luminaire Tested: **SQ4-F-100U-125D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520245
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-125D-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

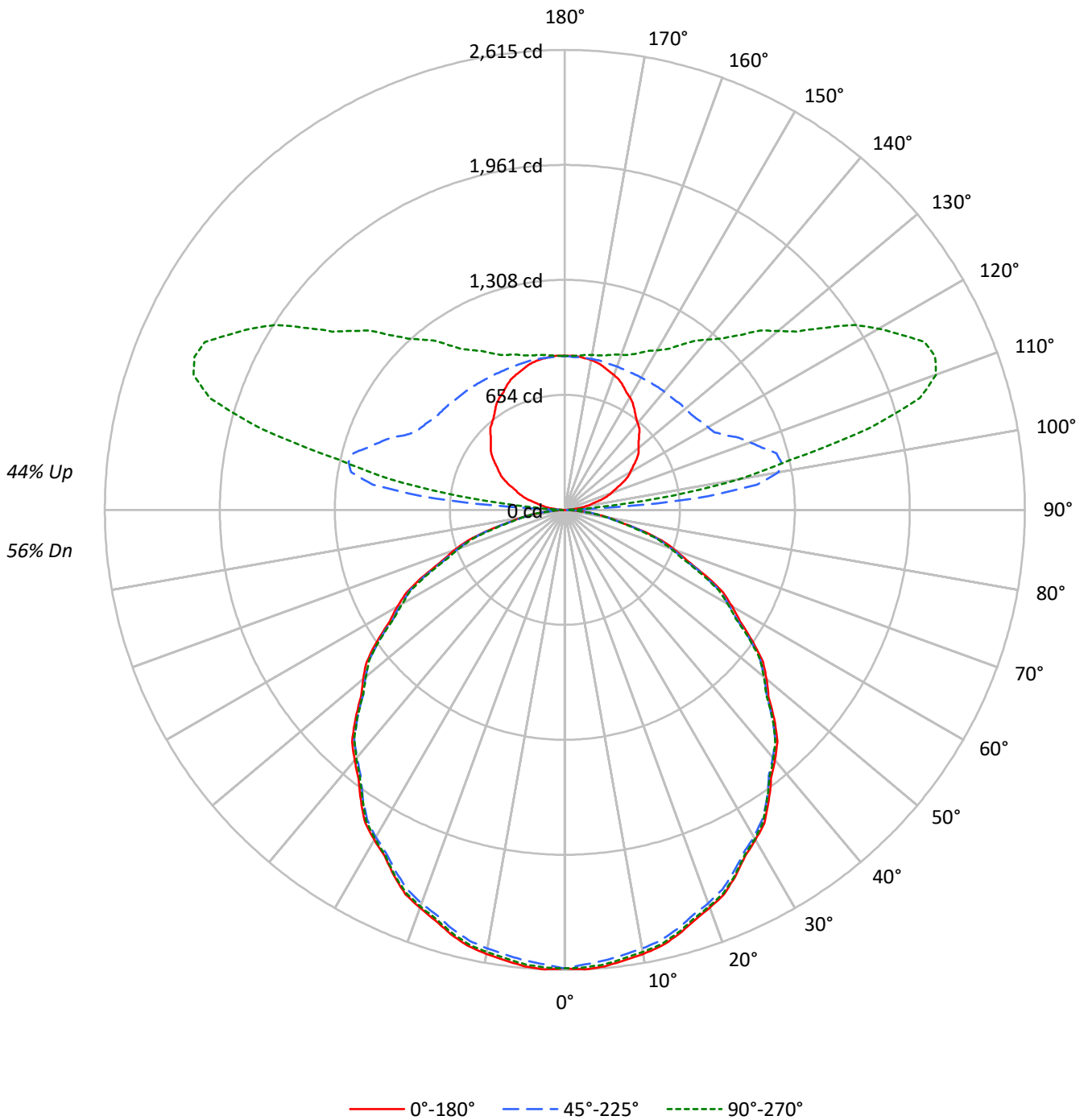
Lumens per Lamp: N/A
Luminaire Lumens: 12801.9 lumens
Efficiency: N/A
Efficacy: 123.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 104
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	50	30	10	0	
RCR																						
0	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	56				
1	99	95	91	87	92	88	85	82	76	73	71	65	63	61	54	53	52	47				
2	90	83	76	71	83	77	71	67	66	62	59	57	54	51	48	45	43	39				
3	82	73	65	59	76	68	61	56	58	53	49	50	46	43	42	39	37	33				
4	75	64	56	50	69	60	53	47	52	46	42	44	40	37	37	34	32	28				
5	69	57	49	43	64	53	46	40	46	41	36	40	35	32	34	30	28	24				
6	63	51	43	37	59	48	41	35	42	36	31	36	31	28	31	27	24	21				
7	59	46	38	32	54	43	36	31	38	32	28	33	28	25	28	24	21	19				
8	54	42	34	29	50	39	32	27	34	29	25	30	25	22	26	22	19	17				
9	51	38	31	26	47	36	29	24	32	26	22	27	23	20	24	20	17	15				
10	47	35	28	23	44	33	26	22	29	24	20	25	21	18	22	18	16	14				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16038	16038	16038
5°	16090	15886	16019
10°	16016	15819	15944
15°	15909	15716	15845
20°	15761	15583	15705
25°	15581	15417	15543
30°	15389	15257	15338
35°	15171	15042	15052
40°	14921	14759	14806
45°	14642	14480	14504
50°	14322	14156	14116
55°	13958	13757	13726
60°	13503	13203	13133
65°	12802	12531	12364
70°	11921	11612	11457
75°	10606	10366	10060
80°	8643	8388	8335
85°	5166	5872	5872



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	246.0	1.9
10°-20°	700.7	5.5
20°-30°	1052.7	8.2
30°-40°	1256.0	9.8
40°-50°	1287.5	10.1
50°-60°	1147.5	9.0
60°-70°	854.2	6.7
70°-80°	462.8	3.6
80°-90°	108.1	0.8
90°-100°	409.9	3.2
100°-110°	1131.5	8.8
110°-120°	1166.9	9.1
120°-130°	937.7	7.3
130°-140°	736.9	5.8
140°-150°	565.2	4.4
150°-160°	406.2	3.2
160°-170°	248.4	1.9
170°-180°	83.8	0.7
0°-30°	1999.3	15.6
0°-40°	3255.3	25.4
0°-60°	5690.3	44.4
0°-90°	7115.4	55.6
90°-120°	2708.3	21.2
90°-150°	4948.1	38.7
90°-180°	5686.0	44.4
0°-180°	12801.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2607	2607	2607	2607	2607	
5°	2606	2602	2573	2596	2594	247
15°	2498	2493	2468	2490	2488	704
25°	2296	2292	2272	2285	2290	1057
35°	2020	2019	2003	2003	2005	1263
45°	1683	1679	1665	1662	1667	1297
55°	1302	1297	1283	1273	1280	1162
65°	880	874	861	855	850	871
75°	446	446	436	428	423	474
85°	73	83	83	85	83	101
90°	3	6	11	13	14	6
95°	60	222	744	306	199	64
105°	202	311	1245	1900	1790	215
115°	361	436	1003	1985	2257	355
125°	496	564	909	1538	1805	441
135°	596	661	884	1246	1404	462
145°	692	740	872	1060	1141	433
155°	780	806	865	951	982	359
165°	844	855	870	903	910	238
175°	875	876	871	884	881	83
180°	875	875	875	875	875	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2607.4	2607.4	2607.4	2607.4	2607.4
2.5°	2615.4	2610.9	2587.8	2607.3	2603.9
5°	2606.0	2601.7	2572.9	2595.8	2594.4
7.5°	2583.9	2578.5	2552.2	2573.7	2571.2
10°	2564.3	2560.0	2532.8	2554.3	2552.8
12.5°	2540.2	2536.0	2508.7	2530.1	2529.8
15°	2498.3	2492.6	2468.1	2489.6	2488.3
17.5°	2448.1	2441.7	2417.3	2434.4	2437.2
20°	2407.9	2403.7	2380.7	2396.5	2399.3
22.5°	2366.6	2361.2	2337.0	2355.1	2357.9
25°	2295.9	2291.8	2271.6	2284.6	2290.2
27.5°	2218.5	2218.5	2199.8	2209.1	2212.4
30°	2166.8	2166.8	2148.2	2154.0	2159.6
32.5°	2111.7	2107.2	2089.6	2094.3	2099.9
35°	2020.4	2019.0	2003.2	2003.2	2004.6
37.5°	1926.0	1922.1	1904.8	1906.1	1912.8
40°	1858.3	1855.4	1838.2	1838.3	1844.0
42.5°	1789.4	1786.6	1771.6	1769.4	1771.6
45°	1683.3	1679.0	1664.6	1661.9	1667.4
47.5°	1570.1	1571.3	1554.1	1550.2	1553.2
50°	1496.7	1496.7	1479.4	1470.9	1475.2
52.5°	1419.7	1417.5	1400.3	1390.7	1400.6
55°	1301.6	1297.3	1282.9	1273.0	1280.0
57.5°	1180.4	1174.0	1159.5	1148.6	1152.6
60°	1097.7	1087.9	1073.3	1064.8	1067.6
62.5°	1011.7	1006.3	990.7	977.6	983.8
65°	879.6	874.1	861.0	855.1	849.5
67.5°	750.2	746.6	731.9	725.7	722.0
70°	662.9	655.9	645.7	638.5	637.1
72.5°	578.0	569.9	559.7	553.5	549.8
75°	446.3	446.3	436.2	427.5	423.3
77.5°	320.9	322.0	313.7	310.7	308.8
80°	244.0	244.0	236.8	233.9	235.3
82.5°	170.5	173.8	171.4	167.2	165.3
85°	73.2	83.0	83.2	84.6	83.2
87.5°	13.2	21.6	24.1	22.1	20.1
90°	2.8	5.5	11.2	12.7	14.0
92.5°	25.2	104.7	187.1	68.3	53.2
95°	60.2	221.8	743.6	305.7	198.8
97.5°	99.7	248.4	1101.5	848.1	614.2
100°	128.8	264.4	1233.7	1242.4	1009.6
102.5°	156.8	282.5	1259.4	1535.0	1314.3
105°	201.6	311.2	1244.8	1900.5	1789.6
107.5°	249.3	346.7	1175.4	2076.7	2117.2
110°	282.8	370.5	1121.7	2114.7	2246.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	313.1	397.5	1071.2	2084.7	2278.6
115°	361.3	436.5	1002.6	1984.8	2257.3
117.5°	403.3	478.3	957.6	1844.2	2154.2
120°	431.3	505.2	939.6	1749.0	2061.2
122.5°	458.2	528.8	925.0	1660.2	1955.9
125°	495.7	564.2	908.8	1537.9	1804.9
127.5°	527.6	596.1	899.3	1434.7	1665.0
130°	548.9	617.4	894.7	1371.5	1581.0
132.5°	569.1	634.3	890.3	1318.3	1508.1
135°	596.5	660.9	883.6	1245.6	1404.5
137.5°	627.4	685.9	880.2	1184.7	1320.2
140°	644.2	701.7	877.9	1143.9	1263.0
142.5°	663.2	716.3	875.8	1107.7	1212.7
145°	691.8	739.6	872.4	1060.4	1141.3
147.5°	719.2	761.1	869.3	1020.6	1083.3
150°	739.3	773.6	868.1	996.7	1047.4
152.5°	755.1	787.1	867.0	976.4	1018.3
155°	780.0	806.0	865.4	951.4	981.6
157.5°	802.9	822.9	865.7	933.3	953.9
160°	816.4	834.2	866.8	923.1	938.2
162.5°	827.6	843.2	867.9	914.1	925.9
165°	844.4	855.3	869.6	903.4	910.2
167.5°	857.3	863.8	871.0	896.8	899.0
170°	864.0	869.4	871.0	893.4	893.4
172.5°	869.6	872.9	871.0	888.9	887.8
175°	875.2	876.5	871.0	883.5	880.8
177.5°	877.4	876.3	870.7	878.5	876.3
180°	875.2	875.2	875.2	875.2	875.2

(END OF REPORT)