

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: P519382

Luminaire Tested: **SQ4-WB-100U-075D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519382
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-100U-075D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

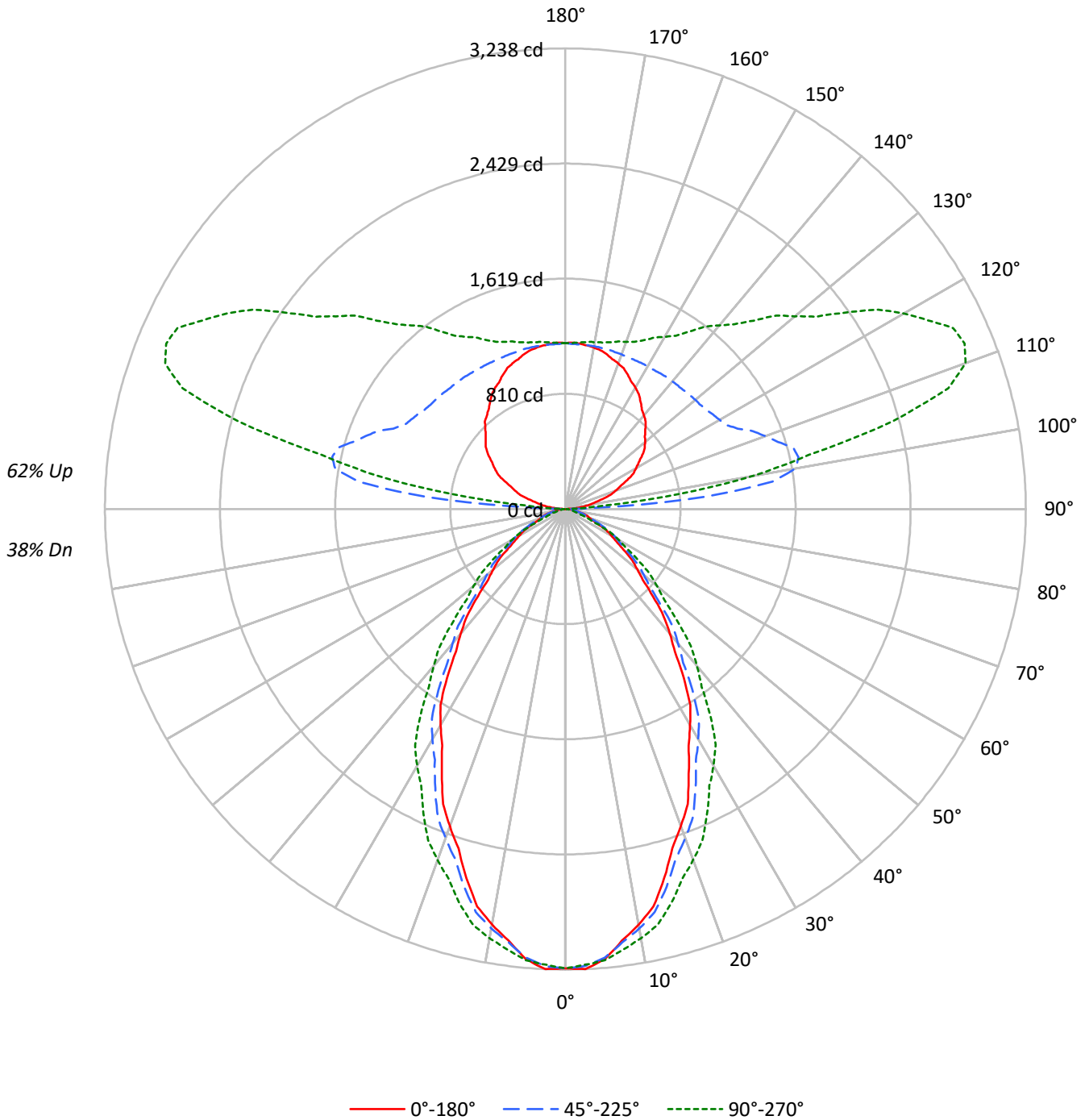
Lumens per Lamp: N/A
Luminaire Lumens: 12291.4 lumens
Efficiency: N/A
Efficacy: 118.3 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 103.9
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	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	96	92	89	85	87	84	81	78	69	67	65	54	53	52	41	41	40	34
2	88	81	76	71	80	74	70	66	61	58	55	49	47	45	38	36	35	30
3	81	72	66	60	74	66	61	56	55	51	47	44	41	39	34	32	31	26
4	75	65	57	52	68	59	53	48	49	45	41	40	37	34	31	29	27	24
5	69	58	51	45	62	53	47	42	45	40	36	36	33	30	29	26	25	21
6	64	52	45	40	58	48	42	37	40	36	32	33	30	27	26	24	22	19
7	59	48	40	35	54	44	37	33	37	32	29	30	27	24	24	22	20	17
8	55	43	36	31	50	40	34	29	34	29	26	28	24	22	23	20	18	16
9	51	40	33	28	47	37	31	26	31	26	23	26	22	20	21	19	17	15
10	48	37	30	25	44	34	28	24	29	24	21	24	21	18	20	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14901	14901	14901
5°	14716	14663	14748
10°	13903	14029	14354
15°	12835	13132	13721
20°	11655	12093	12893
25°	10454	11024	12012
30°	9347	9958	11099
35°	8174	8764	10017
40°	6880	7426	8672
45°	5678	6168	7240
50°	4740	5167	6032
55°	4024	4435	4982
60°	3440	3845	3976
65°	2739	3233	2568
70°	2428	2524	1567
75°	2248	2046	961
80°	2072	1884	829
85°	1874	1725	677



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	296.3	2.4
10°-20°	770.7	6.3
20°-30°	998.2	8.1
30°-40°	977.5	8.0
40°-50°	748.2	6.1
50°-60°	498.6	4.1
60°-70°	272.1	2.2
70°-80°	113.4	0.9
80°-90°	34.5	0.3
90°-100°	546.5	4.4
100°-110°	1508.6	12.3
110°-120°	1555.9	12.7
120°-130°	1250.3	10.2
130°-140°	982.6	8.0
140°-150°	753.6	6.1
150°-160°	541.6	4.4
160°-170°	331.2	2.7
170°-180°	111.7	0.9
0°-30°	2065.2	16.8
0°-40°	3042.7	24.8
0°-60°	4289.5	34.9
0°-90°	4709.4	38.3
90°-120°	3611.0	29.4
90°-150°	6597.5	53.7
90°-180°	7582.0	61.7
0°-180°	12291.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3230	3230	3230	3230	3230	
5°	3178	3146	3166	3174	3185	296
15°	2687	2678	2750	2824	2873	750
25°	2054	2059	2166	2260	2360	944
35°	1451	1458	1556	1661	1779	902
45°	870	887	945	1017	1110	679
55°	500	521	551	572	619	454
65°	251	272	296	259	235	261
75°	126	126	115	79	54	135
85°	35	35	33	21	13	39
90°	4	7	15	17	19	7
95°	80	296	991	408	265	86
105°	269	415	1660	2534	2386	286
115°	482	582	1337	2646	3010	473
125°	661	752	1212	2051	2407	588
135°	795	881	1178	1661	1873	615
145°	922	986	1163	1414	1522	577
155°	1040	1075	1154	1269	1309	479
165°	1126	1140	1159	1204	1214	317
175°	1167	1169	1161	1178	1174	111
180°	1167	1167	1167	1167	1167	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3230.2	3230.2	3230.2	3230.2	3230.2
2.5°	3238.2	3209.3	3216.6	3216.4	3207.5
5°	3177.8	3145.9	3166.4	3173.8	3184.9
7.5°	3059.8	3035.7	3073.2	3100.9	3123.3
10°	2968.0	2947.2	2994.9	3035.3	3064.4
12.5°	2861.4	2844.0	2903.1	2957.2	2995.2
15°	2687.4	2677.7	2749.7	2824.5	2873.0
17.5°	2501.1	2496.4	2579.1	2666.4	2728.5
20°	2374.1	2372.7	2463.4	2554.3	2626.4
22.5°	2246.0	2249.0	2344.4	2438.9	2521.0
25°	2053.8	2059.3	2165.8	2260.2	2359.9
27.5°	1876.0	1878.5	1988.6	2088.2	2194.7
30°	1754.7	1761.6	1869.5	1972.7	2083.6
32.5°	1633.4	1641.4	1747.1	1853.7	1966.8
35°	1451.4	1458.3	1556.3	1661.0	1778.8
37.5°	1263.7	1273.2	1360.1	1459.1	1575.0
40°	1142.4	1156.3	1233.1	1326.4	1440.1
42.5°	1025.6	1042.8	1114.1	1202.6	1305.1
45°	870.3	886.9	945.4	1017.0	1109.8
47.5°	736.5	755.6	800.5	862.2	941.4
50°	660.5	678.5	720.0	765.7	840.5
52.5°	593.6	611.6	648.6	683.8	747.5
55°	500.3	521.1	551.4	572.3	619.4
57.5°	423.8	443.8	467.7	477.2	505.7
60°	372.8	394.9	416.7	415.6	430.9
62.5°	326.3	345.1	366.8	351.8	352.6
65°	250.9	271.7	296.2	258.8	235.3
67.5°	202.7	207.1	232.5	180.5	152.5
70°	180.0	180.0	187.1	139.8	116.2
72.5°	158.5	158.5	151.9	113.7	89.0
75°	126.1	126.1	114.8	78.8	53.9
77.5°	97.2	96.1	87.9	58.8	39.1
80°	78.0	78.0	70.9	46.4	31.2
82.5°	60.9	60.9	55.0	36.3	23.2
85°	35.4	35.4	32.6	21.1	12.8
87.5°	13.2	14.0	14.3	10.1	9.4
90°	3.7	7.4	14.9	16.8	18.7
92.5°	33.6	139.5	249.4	91.0	70.9
95°	80.3	295.7	991.4	407.5	265.1
97.5°	132.9	331.2	1468.6	1130.7	818.9
100°	171.8	352.5	1644.9	1656.5	1346.1
102.5°	209.1	376.7	1679.2	2046.7	1752.4
105°	268.9	414.9	1659.8	2534.0	2386.1
107.5°	332.3	462.3	1567.2	2768.9	2823.0
110°	377.1	494.0	1495.5	2819.5	2994.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	417.5	529.9	1428.3	2779.6	3038.1
115°	481.7	582.1	1336.8	2646.4	3009.7
117.5°	537.7	637.8	1276.7	2459.0	2872.3
120°	575.1	673.6	1252.8	2332.1	2748.3
122.5°	610.9	705.1	1233.4	2213.6	2607.9
125°	660.9	752.2	1211.7	2050.6	2406.6
127.5°	703.5	794.8	1199.0	1912.9	2219.9
130°	731.9	823.2	1193.0	1828.6	2107.9
132.5°	758.8	845.7	1187.1	1757.8	2010.8
135°	795.4	881.2	1178.1	1660.9	1872.7
137.5°	836.4	914.6	1173.6	1579.5	1760.3
140°	858.8	935.5	1170.6	1525.3	1684.1
142.5°	884.2	955.1	1167.7	1477.0	1616.9
145°	922.3	986.2	1163.2	1413.9	1521.6
147.5°	958.9	1014.8	1159.1	1360.7	1444.3
150°	985.8	1031.4	1157.6	1329.0	1396.6
152.5°	1006.7	1049.4	1156.1	1301.9	1357.7
155°	1039.9	1074.6	1153.8	1268.6	1308.8
157.5°	1070.6	1097.2	1154.2	1244.5	1271.8
160°	1088.5	1112.2	1155.7	1230.8	1250.9
162.5°	1103.4	1124.2	1157.2	1218.8	1234.5
165°	1125.8	1140.4	1159.4	1204.5	1213.6
167.5°	1143.0	1151.8	1161.3	1195.7	1198.6
170°	1152.0	1159.3	1161.3	1191.2	1191.2
172.5°	1159.4	1163.8	1161.3	1185.2	1183.7
175°	1166.9	1168.7	1161.3	1178.0	1174.4
177.5°	1169.9	1168.4	1160.9	1171.3	1168.4
180°	1166.9	1166.9	1166.9	1166.9	1166.9

(END OF REPORT)