

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: P519358

Luminaire Tested: **SQ4-WB-100U-050D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519358
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-050D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

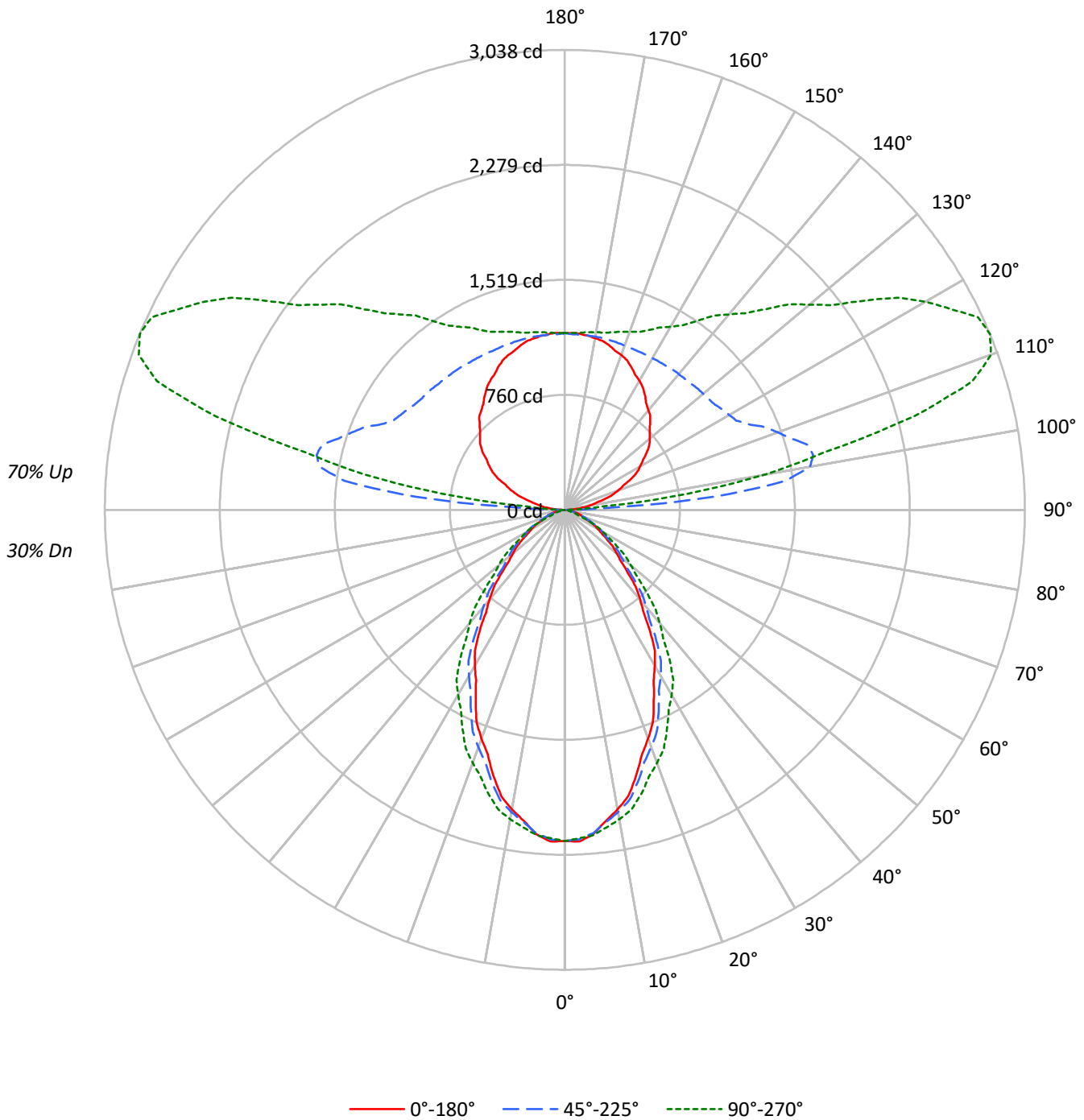
Lumens per Lamp: N/A
Luminaire Lumens: 10771.5 lumens
Efficiency: N/A
Efficacy: 127.2 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 84.7
Input Voltage (V): 120
Input Current (A_{in}): 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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	30
1	94	90	86	83	84	81	78	75	64	62	60	48	47	46	34	33	33	26
2	86	79	74	69	77	72	67	63	57	54	51	43	41	40	31	30	29	23
3	79	70	64	58	71	64	58	53	51	47	44	39	36	34	28	27	25	20
4	72	63	55	50	65	57	51	46	46	41	38	35	32	30	25	24	22	18
5	67	56	49	43	60	51	44	40	41	36	33	32	29	26	23	21	20	16
6	62	50	43	38	55	46	39	35	37	33	29	29	26	23	21	19	18	15
7	57	46	38	33	51	42	35	31	34	29	26	27	23	21	20	18	16	13
8	53	42	34	29	48	38	32	27	31	26	23	24	21	19	18	16	15	12
9	49	38	31	26	44	35	29	24	28	24	21	23	19	17	17	15	14	11
10	46	35	28	24	42	32	26	22	26	22	19	21	18	16	16	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10090	10090	10090
5°	9964	9928	9986
10°	9414	9499	9719
15°	8690	8892	9291
20°	7891	8188	8730
25°	7078	7464	8133
30°	6329	6743	7515
35°	5535	5935	6783
40°	4658	5028	5872
45°	3845	4176	4903
50°	3209	3499	4084
55°	2725	3002	3373
60°	2329	2604	2692
65°	1855	2190	1739
70°	1644	1709	1061
75°	1522	1385	651
80°	1403	1275	561
85°	1270	1170	455



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.6	1.9
10°-20°	521.8	4.8
20°-30°	675.9	6.3
30°-40°	661.9	6.1
40°-50°	506.6	4.7
50°-60°	337.6	3.1
60°-70°	184.2	1.7
70°-80°	76.8	0.7
80°-90°	24.2	0.2
90°-100°	546.5	5.1
100°-110°	1508.6	14.0
110°-120°	1555.9	14.4
120°-130°	1250.3	11.6
130°-140°	982.6	9.1
140°-150°	753.6	7.0
150°-160°	541.6	5.0
160°-170°	331.2	3.1
170°-180°	111.7	1.0
0°-30°	1398.3	13.0
0°-40°	2060.2	19.1
0°-60°	2904.4	27.0
0°-90°	3189.6	29.6
90°-120°	3611.0	33.5
90°-150°	6597.5	61.2
90°-180°	7582.0	70.4
0°-180°	10771.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2187	2187	2187	2187	2187	
5°	2152	2130	2144	2149	2156	200
15°	1820	1813	1862	1912	1945	508
25°	1391	1394	1466	1530	1598	640
35°	983	987	1054	1125	1204	611
45°	589	600	640	689	752	460
55°	339	353	373	388	419	307
65°	170	184	201	175	159	177
75°	85	85	78	53	36	91
85°	24	24	22	14	9	26
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°	2187.2	2187.2	2187.2	2187.2	2187.2
2.5°	2192.6	2173.1	2178.0	2177.9	2171.8
5°	2151.7	2130.1	2144.0	2149.0	2156.5
7.5°	2071.8	2055.5	2080.9	2099.6	2114.8
10°	2009.7	1995.6	2027.9	2055.2	2074.9
12.5°	1937.5	1925.7	1965.7	2002.4	2028.1
15°	1819.6	1813.1	1861.9	1912.5	1945.4
17.5°	1693.5	1690.3	1746.3	1805.4	1847.5
20°	1607.5	1606.6	1668.0	1729.6	1778.4
22.5°	1520.8	1522.8	1587.4	1651.4	1707.0
25°	1390.6	1394.4	1466.5	1530.4	1597.9
27.5°	1270.3	1272.0	1346.5	1414.0	1486.0
30°	1188.1	1192.8	1265.9	1335.7	1410.8
32.5°	1106.0	1111.4	1182.9	1255.1	1331.7
35°	982.8	987.4	1053.8	1124.7	1204.4
37.5°	855.7	862.1	920.9	988.0	1066.4
40°	773.5	782.9	835.0	898.1	975.1
42.5°	694.5	706.1	754.3	814.3	883.7
45°	589.3	600.5	640.1	688.6	751.5
47.5°	498.7	511.6	542.0	583.8	637.4
50°	447.2	459.4	487.5	518.4	569.1
52.5°	401.9	414.1	439.2	463.0	506.2
55°	338.8	352.9	373.3	387.5	419.4
57.5°	287.0	300.5	316.7	323.1	342.4
60°	252.4	267.4	282.2	281.4	291.8
62.5°	220.9	233.7	248.4	238.2	238.8
65°	169.9	183.9	200.6	175.3	159.3
67.5°	137.2	140.2	157.4	122.2	103.3
70°	121.9	121.9	126.7	94.6	78.7
72.5°	107.3	107.3	102.9	77.0	60.3
75°	85.4	85.4	77.7	53.4	36.5
77.5°	65.8	65.1	59.5	39.8	26.5
80°	52.8	52.8	48.0	31.4	21.1
82.5°	41.3	41.3	37.2	24.6	15.7
85°	24.0	24.0	22.1	14.3	8.6
87.5°	9.2	9.9	10.7	8.0	7.6
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)