

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: P519365

Luminaire Tested: **SQ4-WB-100U-050D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519365
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-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

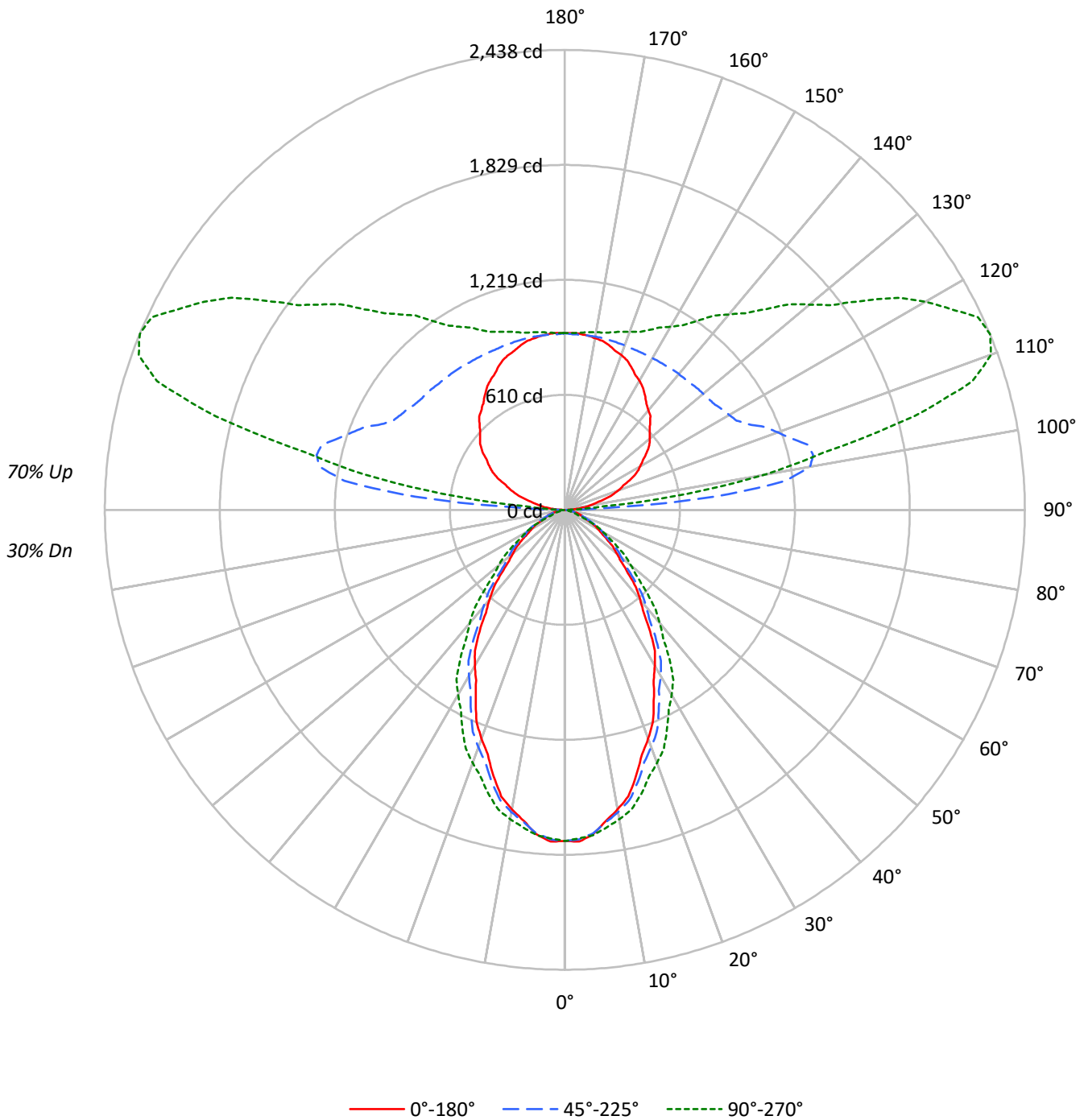
Lumens per Lamp: N/A
Luminaire Lumens: 8645.0 lumens
Efficiency: N/A
Efficacy: 134.4 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 64.3
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	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°	10797	10797	10797
5°	10662	10624	10686
10°	10074	10165	10401
15°	9300	9515	9942
20°	8445	8763	9342
25°	7575	7987	8704
30°	6773	7216	8042
35°	5922	6350	7259
40°	4985	5380	6284
45°	4114	4469	5246
50°	3434	3744	4371
55°	2916	3213	3610
60°	2492	2786	2881
65°	1984	2343	1861
70°	1759	1829	1137
75°	1630	1483	696
80°	1502	1364	599
85°	1362	1249	487



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.0	1.9
10°-20°	418.8	4.8
20°-30°	542.5	6.3
30°-40°	531.2	6.1
40°-50°	406.6	4.7
50°-60°	270.9	3.1
60°-70°	147.9	1.7
70°-80°	61.6	0.7
80°-90°	19.4	0.2
90°-100°	438.6	5.1
100°-110°	1210.8	14.0
110°-120°	1248.7	14.4
120°-130°	1003.5	11.6
130°-140°	788.6	9.1
140°-150°	604.8	7.0
150°-160°	434.7	5.0
160°-170°	265.8	3.1
170°-180°	89.6	1.0
0°-30°	1122.3	13.0
0°-40°	1653.5	19.1
0°-60°	2331.0	27.0
0°-90°	2559.9	29.6
90°-120°	2898.1	33.5
90°-150°	5295.0	61.2
90°-180°	6085.0	70.4
0°-180°	8645.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1755	1755	1755	1755	1755	
5°	1727	1710	1721	1725	1731	161
15°	1460	1455	1494	1535	1561	408
25°	1116	1119	1177	1228	1282	513
35°	789	792	846	903	967	490
45°	473	482	514	553	603	369
55°	272	283	300	311	337	247
65°	136	148	161	141	128	142
75°	69	69	62	43	29	73
85°	19	19	18	12	7	21
90°	3	6	12	14	15	6
95°	64	237	796	327	213	69
105°	216	333	1332	2034	1915	230
115°	387	467	1073	2124	2416	380
125°	530	604	972	1646	1932	472
135°	638	707	946	1333	1503	494
145°	740	792	934	1135	1221	463
155°	835	862	926	1018	1050	385
165°	904	915	930	967	974	255
175°	936	938	932	946	942	89
180°	936	936	936	936	936	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1755.4	1755.4	1755.4	1755.4	1755.4
2.5°	1759.7	1744.0	1748.0	1747.9	1743.1
5°	1726.9	1709.6	1720.7	1724.7	1730.8
7.5°	1662.8	1649.7	1670.1	1685.1	1697.3
10°	1612.9	1601.6	1627.5	1649.5	1665.3
12.5°	1555.0	1545.5	1577.6	1607.1	1627.7
15°	1460.4	1455.1	1494.3	1534.9	1561.3
17.5°	1359.2	1356.6	1401.5	1449.0	1482.7
20°	1290.2	1289.4	1338.7	1388.1	1427.3
22.5°	1220.5	1222.2	1274.0	1325.4	1370.0
25°	1116.1	1119.1	1176.9	1228.2	1282.5
27.5°	1019.5	1020.9	1080.7	1134.8	1192.7
30°	953.6	957.3	1016.0	1072.0	1132.3
32.5°	887.6	892.0	949.4	1007.3	1068.8
35°	788.7	792.5	845.7	902.6	966.7
37.5°	686.8	691.9	739.1	792.9	855.9
40°	620.8	628.4	670.1	720.8	782.6
42.5°	557.4	566.7	605.4	653.5	709.2
45°	472.9	482.0	513.8	552.6	603.1
47.5°	400.2	410.6	435.0	468.5	511.6
50°	358.9	368.7	391.3	416.1	456.8
52.5°	322.6	332.4	352.5	371.6	406.2
55°	271.9	283.2	299.6	311.0	336.6
57.5°	230.3	241.1	254.2	259.3	274.8
60°	202.6	214.6	226.5	225.9	234.2
62.5°	177.3	187.6	199.3	191.2	191.6
65°	136.3	147.6	161.0	140.7	127.9
67.5°	110.1	112.6	126.3	98.1	82.9
70°	97.8	97.8	101.7	76.0	63.2
72.5°	86.1	86.1	82.6	61.8	48.4
75°	68.6	68.6	62.4	42.8	29.3
77.5°	52.8	52.2	47.8	32.0	21.3
80°	42.4	42.4	38.5	25.2	16.9
82.5°	33.1	33.1	29.9	19.7	12.6
85°	19.3	19.3	17.7	11.5	6.9
87.5°	7.4	8.0	8.6	6.4	6.1
90°	3.0	5.9	12.0	13.5	15.0
92.5°	27.0	112.0	200.2	73.1	56.9
95°	64.4	237.3	795.7	327.1	212.8
97.5°	106.7	265.8	1178.7	907.5	657.2
100°	137.9	282.9	1320.1	1329.5	1080.4
102.5°	167.8	302.3	1347.7	1642.6	1406.4
105°	215.8	333.0	1332.1	2033.7	1915.0
107.5°	266.7	371.0	1257.8	2222.3	2265.7
110°	302.7	396.5	1200.3	2262.9	2403.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	335.1	425.3	1146.3	2230.8	2438.3
115°	386.6	467.2	1072.9	2123.9	2415.5
117.5°	431.6	511.8	1024.6	1973.5	2305.2
120°	461.5	540.6	1005.5	1871.7	2205.7
122.5°	490.3	565.9	989.9	1776.6	2093.0
125°	530.5	603.7	972.5	1645.8	1931.5
127.5°	564.6	637.9	962.3	1535.2	1781.7
130°	587.4	660.7	957.5	1467.6	1691.8
132.5°	609.0	678.7	952.7	1410.8	1613.8
135°	638.3	707.2	945.5	1333.0	1502.9
137.5°	671.3	734.0	941.9	1267.7	1412.7
140°	689.3	750.8	939.5	1224.1	1351.6
142.5°	709.7	766.5	937.1	1185.4	1297.7
145°	740.2	791.5	933.5	1134.8	1221.2
147.5°	769.6	814.4	930.2	1092.1	1159.2
150°	791.2	827.8	929.0	1066.6	1120.8
152.5°	808.0	842.2	927.8	1044.8	1089.7
155°	834.6	862.5	926.0	1018.2	1050.4
157.5°	859.2	880.6	926.3	998.8	1020.7
160°	873.6	892.6	927.5	987.8	1004.0
162.5°	885.6	902.3	928.7	978.2	990.8
165°	903.6	915.3	930.5	966.7	974.0
167.5°	917.4	924.4	932.0	959.7	962.0
170°	924.5	930.4	932.0	956.0	956.0
172.5°	930.5	934.1	932.0	951.2	950.0
175°	936.5	938.0	932.0	945.5	942.5
177.5°	938.9	937.8	931.7	940.1	937.7
180°	936.5	936.5	936.5	936.5	936.5

(END OF REPORT)