

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: P519357

Luminaire Tested: **SQ4-WB-100U-050D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519357
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-6
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

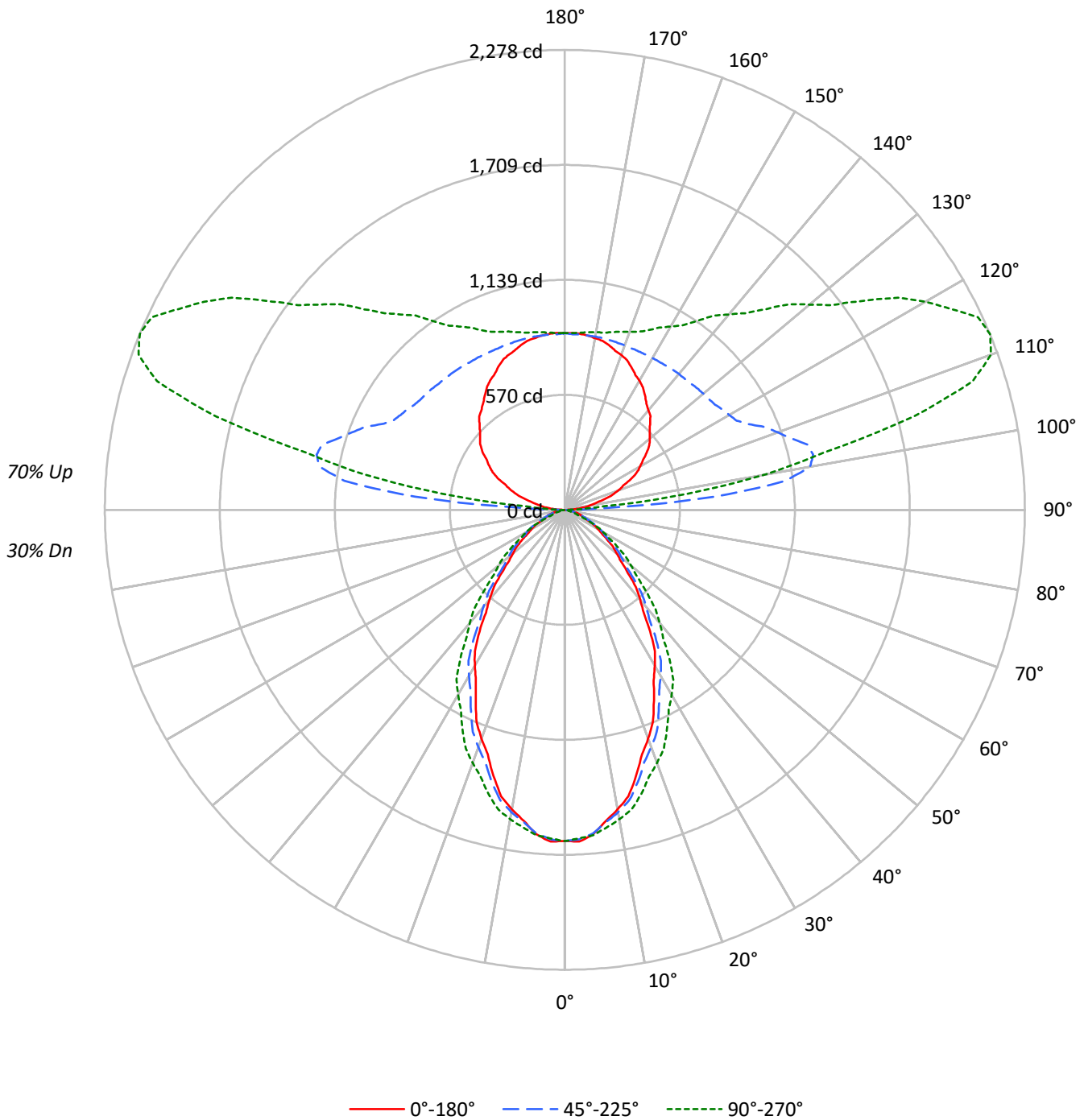
Lumens per Lamp: N/A
Luminaire Lumens: 8078.7 lumens
Efficiency: N/A
Efficacy: 125.6 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

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°	10090	10090	10090
5°	9964	9928	9986
10°	9414	9499	9720
15°	8690	8892	9291
20°	7891	8188	8730
25°	7078	7464	8133
30°	6329	6743	7515
35°	5535	5934	6783
40°	4659	5028	5872
45°	3845	4176	4903
50°	3209	3499	4084
55°	2725	3003	3373
60°	2329	2603	2692
65°	1854	2189	1739
70°	1644	1708	1061
75°	1523	1385	651
80°	1403	1275	560
85°	1270	1172	459



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.5	1.9
10°-20°	391.4	4.8
20°-30°	506.9	6.3
30°-40°	496.4	6.1
40°-50°	380.0	4.7
50°-60°	253.2	3.1
60°-70°	138.2	1.7
70°-80°	57.6	0.7
80°-90°	18.1	0.2
90°-100°	409.9	5.1
100°-110°	1131.5	14.0
110°-120°	1166.9	14.4
120°-130°	937.7	11.6
130°-140°	736.9	9.1
140°-150°	565.2	7.0
150°-160°	406.2	5.0
160°-170°	248.4	3.1
170°-180°	83.8	1.0
0°-30°	1048.8	13.0
0°-40°	1545.2	19.1
0°-60°	2178.3	27.0
0°-90°	2392.2	29.6
90°-120°	2708.2	33.5
90°-150°	4948.1	61.2
90°-180°	5686.0	70.4
0°-180°	8078.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1640	1640	1640	1640	1640	
5°	1614	1598	1608	1612	1617	150
15°	1365	1360	1396	1434	1459	381
25°	1043	1046	1100	1148	1198	480
35°	737	741	790	844	903	458
45°	442	450	480	516	564	345
55°	254	265	280	291	314	230
65°	127	138	150	131	120	132
75°	64	64	58	40	27	68
85°	18	18	17	11	6	20
90°	3	6	11	13	14	5
95°	60	222	744	306	199	64
105°	202	311	1245	1900	1790	215
115°	361	437	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	952	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°	1640.4	1640.4	1640.4	1640.4	1640.4
2.5°	1644.4	1629.8	1633.5	1633.4	1628.9
5°	1613.8	1597.6	1608.0	1611.7	1617.4
7.5°	1553.9	1541.6	1560.6	1574.7	1586.1
10°	1507.2	1496.7	1520.9	1541.4	1556.2
12.5°	1453.1	1444.2	1474.3	1501.8	1521.1
15°	1364.7	1359.8	1396.4	1434.4	1459.0
17.5°	1270.1	1267.7	1309.7	1354.1	1385.6
20°	1205.6	1204.9	1251.0	1297.2	1333.8
22.5°	1140.6	1142.1	1190.5	1238.6	1280.2
25°	1043.0	1045.8	1099.8	1147.8	1198.4
27.5°	952.7	954.0	1009.9	1060.5	1114.5
30°	891.1	894.6	949.4	1001.8	1058.1
32.5°	829.5	833.6	887.2	941.4	998.8
35°	737.1	740.6	790.3	843.5	903.3
37.5°	641.8	646.6	690.7	741.0	799.8
40°	580.2	587.2	626.2	673.6	731.3
42.5°	520.8	529.6	565.8	610.7	662.8
45°	442.0	450.4	480.1	516.4	563.6
47.5°	374.0	383.7	406.5	437.8	478.1
50°	335.4	344.6	365.7	388.8	426.8
52.5°	301.4	310.6	329.4	347.2	379.6
55°	254.1	264.6	280.0	290.6	314.5
57.5°	215.2	225.4	237.5	242.3	256.8
60°	189.3	200.6	211.6	211.1	218.8
62.5°	165.7	175.3	186.3	178.7	179.1
65°	127.4	138.0	150.4	131.4	119.5
67.5°	102.9	105.2	118.0	91.7	77.4
70°	91.4	91.4	95.0	71.0	59.0
72.5°	80.5	80.5	77.2	57.7	45.2
75°	64.1	64.1	58.3	40.0	27.4
77.5°	49.4	48.8	44.6	29.9	19.9
80°	39.6	39.6	36.0	23.6	15.8
82.5°	31.0	31.0	27.9	18.4	11.8
85°	18.0	18.0	16.6	10.7	6.5
87.5°	6.9	7.4	8.0	6.0	5.7
90°	2.8	5.5	11.2	12.6	14.0
92.5°	25.2	104.6	187.1	68.3	53.2
95°	60.2	221.8	743.6	305.6	198.8
97.5°	99.7	248.4	1101.5	848.0	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	1244.9	1900.5	1789.6
107.5°	249.3	346.7	1175.4	2076.7	2117.2
110°	282.9	370.5	1121.6	2114.6	2246.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	313.1	397.4	1071.2	2084.7	2278.5
115°	361.3	436.6	1002.6	1984.8	2257.3
117.5°	403.3	478.3	957.5	1844.2	2154.2
120°	431.3	505.2	939.6	1749.1	2061.2
122.5°	458.2	528.8	925.0	1660.2	1955.9
125°	495.7	564.2	908.8	1538.0	1805.0
127.5°	527.6	596.1	899.3	1434.6	1664.9
130°	548.9	617.4	894.8	1371.4	1580.9
132.5°	569.1	634.2	890.3	1318.3	1508.1
135°	596.5	660.9	883.6	1245.7	1404.5
137.5°	627.3	685.9	880.2	1184.6	1320.2
140°	644.1	701.6	878.0	1143.9	1263.1
142.5°	663.2	716.3	875.7	1107.8	1212.6
145°	691.7	739.7	872.4	1060.5	1141.2
147.5°	719.2	761.1	869.3	1020.6	1083.3
150°	739.4	773.6	868.2	996.8	1047.4
152.5°	755.0	787.1	867.1	976.4	1018.3
155°	780.0	806.0	865.4	951.5	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	903.3	910.2
167.5°	857.3	863.8	871.0	896.8	899.0
170°	864.0	869.5	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)