

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: P519381

Luminaire Tested: **SQ4-WB-100U-075D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519381
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-6
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

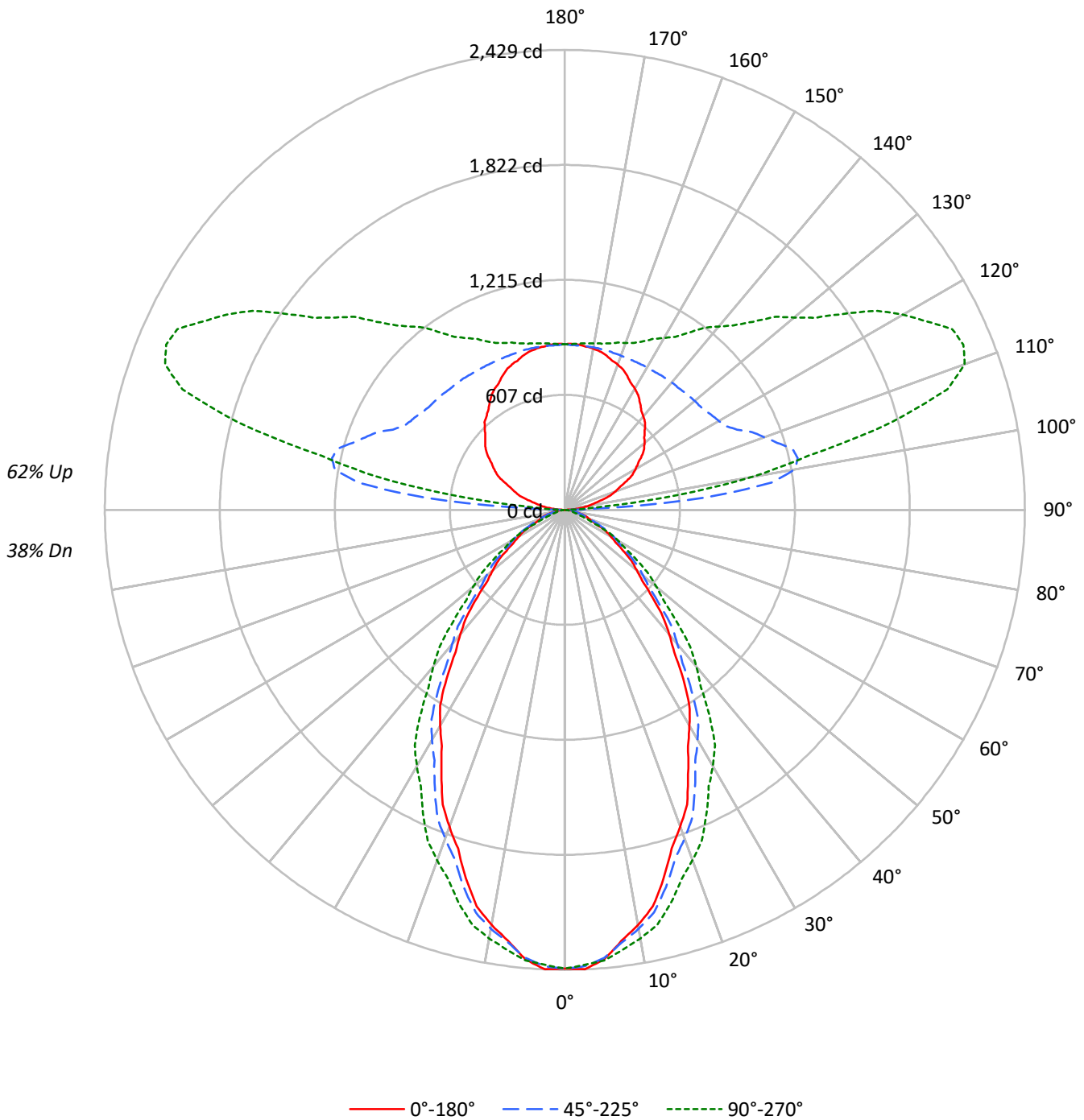
Lumens per Lamp: N/A
Luminaire Lumens: 9218.5 lumens
Efficiency: N/A
Efficacy: 118.2 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 78
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°	14902	14902	14902
5°	14715	14663	14748
10°	13903	14029	14354
15°	12834	13132	13721
20°	11655	12094	12893
25°	10453	11024	12012
30°	9347	9958	11099
35°	8174	8764	10017
40°	6880	7425	8672
45°	5678	6167	7241
50°	4740	5167	6032
55°	4025	4434	4981
60°	3440	3844	3976
65°	2739	3234	2569
70°	2428	2523	1568
75°	2248	2046	960
80°	2072	1884	829
85°	1877	1722	677



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	222.2	2.4
10°-20°	578.0	6.3
20°-30°	748.7	8.1
30°-40°	733.1	8.0
40°-50°	561.2	6.1
50°-60°	373.9	4.1
60°-70°	204.0	2.2
70°-80°	85.0	0.9
80°-90°	25.9	0.3
90°-100°	409.9	4.4
100°-110°	1131.5	12.3
110°-120°	1166.9	12.7
120°-130°	937.7	10.2
130°-140°	736.9	8.0
140°-150°	565.2	6.1
150°-160°	406.2	4.4
160°-170°	248.4	2.7
170°-180°	83.8	0.9
0°-30°	1548.9	16.8
0°-40°	2282.0	24.8
0°-60°	3217.1	34.9
0°-90°	3532.0	38.3
90°-120°	2708.2	29.4
90°-150°	4948.1	53.7
90°-180°	5686.0	61.7
0°-180°	9218.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2423	2423	2423	2423	2423	
5°	2383	2359	2375	2380	2389	222
15°	2016	2008	2062	2118	2155	563
25°	1540	1544	1624	1695	1770	708
35°	1089	1094	1167	1246	1334	677
45°	653	665	709	763	832	509
55°	375	391	414	429	464	340
65°	188	204	222	194	176	196
75°	95	95	86	59	40	101
85°	27	27	24	16	10	29
90°	3	6	11	13	14	6
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°	2422.7	2422.7	2422.7	2422.7	2422.7
2.5°	2428.6	2407.0	2412.5	2412.3	2405.7
5°	2383.3	2359.4	2374.8	2380.3	2388.6
7.5°	2294.9	2276.8	2304.9	2325.7	2342.5
10°	2226.0	2210.4	2246.2	2276.5	2298.3
12.5°	2146.1	2133.0	2177.3	2217.9	2246.4
15°	2015.5	2008.2	2062.3	2118.4	2154.8
17.5°	1875.8	1872.3	1934.3	1999.8	2046.3
20°	1780.6	1779.5	1847.6	1915.8	1969.8
22.5°	1684.5	1686.8	1758.3	1829.2	1890.7
25°	1540.3	1544.5	1624.3	1695.1	1770.0
27.5°	1407.0	1408.9	1491.4	1566.2	1646.0
30°	1316.0	1321.2	1402.1	1479.5	1562.7
32.5°	1225.0	1231.1	1310.3	1390.3	1475.1
35°	1088.6	1093.7	1167.2	1245.8	1334.1
37.5°	947.8	954.9	1020.1	1094.4	1181.2
40°	856.8	867.2	924.8	994.8	1080.0
42.5°	769.2	782.1	835.5	901.9	978.8
45°	652.7	665.2	709.0	762.7	832.4
47.5°	552.4	566.7	600.4	646.6	706.1
50°	495.4	508.9	540.0	574.3	630.4
52.5°	445.2	458.7	486.4	512.8	560.6
55°	375.3	390.8	413.5	429.2	464.5
57.5°	317.8	332.8	350.8	357.9	379.3
60°	279.6	296.2	312.5	311.7	323.2
62.5°	244.7	258.8	275.1	263.9	264.5
65°	188.2	203.7	222.2	194.1	176.5
67.5°	152.0	155.3	174.3	135.4	114.4
70°	135.0	135.0	140.3	104.8	87.2
72.5°	118.8	118.8	114.0	85.3	66.8
75°	94.6	94.6	86.1	59.1	40.4
77.5°	72.9	72.1	65.9	44.1	29.3
80°	58.5	58.5	53.2	34.8	23.4
82.5°	45.7	45.7	41.2	27.2	17.4
85°	26.6	26.6	24.4	15.8	9.6
87.5°	9.9	10.5	10.7	7.6	7.1
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)