

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: P520197

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520197
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G3-1910-536-18)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-100U-075D-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

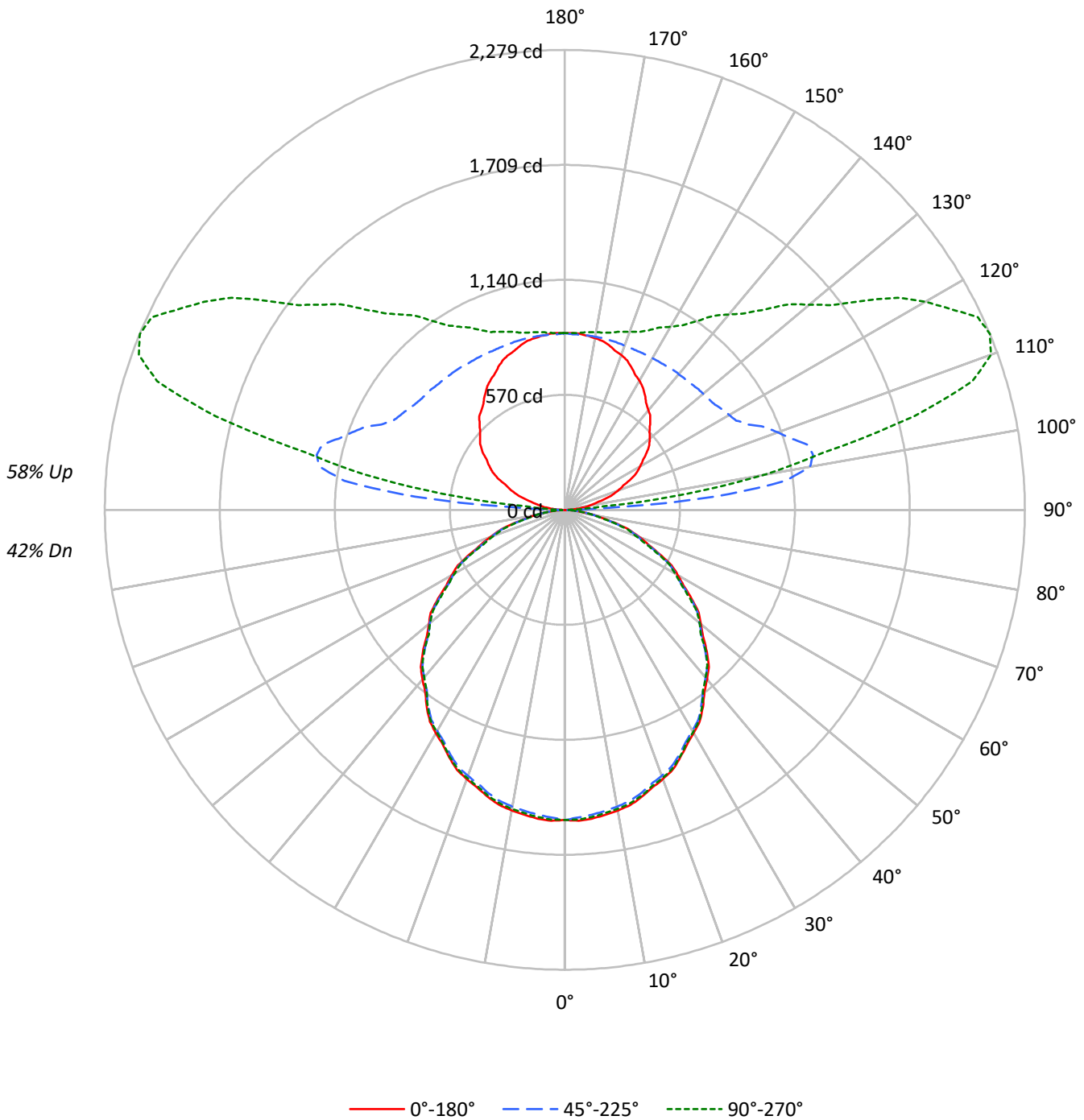
Lumens per Lamp: N/A
Luminaire Lumens: 9883.6 lumens
Efficiency: N/A
Efficacy: 129.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 76.5
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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49	42
1	96	92	88	84	88	84	81	78	69	67	65	56	54	53	43	42	42	36
2	87	80	74	69	80	73	68	64	61	57	54	49	46	44	38	36	35	30
3	80	70	63	57	72	64	58	53	53	49	45	43	40	37	34	31	30	25
4	73	62	54	48	66	57	50	45	47	42	38	38	35	32	30	28	25	22
5	67	55	47	41	61	51	44	38	42	37	33	34	30	27	27	24	22	19
6	61	49	41	36	56	45	38	33	38	33	29	31	27	24	24	22	19	16
7	57	45	37	31	52	41	34	29	34	29	25	28	24	21	22	19	17	14
8	53	40	33	27	48	37	30	26	31	26	22	26	22	19	20	18	15	13
9	49	37	29	24	45	34	27	23	29	23	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	20	26	21	18	22	18	15	17	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9453	9453	9453
5°	9489	9368	9437
10°	9450	9329	9398
15°	9377	9262	9342
20°	9293	9184	9257
25°	9191	9096	9162
30°	9074	8975	9024
35°	8956	8861	8903
40°	8804	8714	8703
45°	8653	8545	8568
50°	8413	8346	8346
55°	8217	8112	8038
60°	7952	7815	7748
65°	7523	7382	7280
70°	7066	6891	6715
75°	6357	6124	5994
80°	5083	4984	4934
85°	3049	3444	3543



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.1	1.5
10°-20°	413.0	4.2
20°-30°	620.4	6.3
30°-40°	740.3	7.5
40°-50°	759.2	7.7
50°-60°	676.5	6.8
60°-70°	504.4	5.1
70°-80°	273.5	2.8
80°-90°	64.7	0.7
90°-100°	409.9	4.1
100°-110°	1131.5	11.4
110°-120°	1166.9	11.8
120°-130°	937.7	9.5
130°-140°	736.9	7.5
140°-150°	565.2	5.7
150°-160°	406.2	4.1
160°-170°	248.4	2.5
170°-180°	83.8	0.8
0°-30°	1178.4	11.9
0°-40°	1918.7	19.4
0°-60°	3354.5	33.9
0°-90°	4197.1	42.5
90°-120°	2708.3	27.4
90°-150°	4948.1	50.1
90°-180°	5686.0	57.5
0°-180°	9883.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1537	1537	1537	1537	1537	
5°	1537	1534	1517	1530	1528	146
15°	1473	1470	1454	1466	1467	415
25°	1354	1353	1340	1347	1350	624
35°	1193	1190	1180	1180	1186	745
45°	995	991	982	982	985	766
55°	766	765	756	750	750	684
65°	517	517	507	502	500	515
75°	268	262	258	254	252	281
85°	43	46	49	49	50	60
90°	3	6	11	13	14	5
95°	60	222	744	306	199	64
105°	202	311	1245	1900	1790	215
115°	361	436	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	951	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°	1536.8	1536.8	1536.8	1536.8	1536.8
2.5°	1542.3	1539.1	1525.6	1536.7	1535.6
5°	1536.8	1534.1	1517.2	1529.8	1528.4
7.5°	1524.2	1521.3	1504.7	1517.2	1517.0
10°	1513.1	1509.0	1493.6	1506.1	1504.7
12.5°	1498.6	1494.5	1479.1	1491.6	1490.3
15°	1472.6	1470.0	1454.5	1465.8	1467.1
17.5°	1443.1	1438.0	1424.2	1435.1	1436.4
20°	1419.7	1415.7	1403.1	1412.8	1414.2
22.5°	1395.2	1391.2	1378.5	1388.3	1389.7
25°	1354.3	1352.9	1340.3	1347.4	1350.0
27.5°	1310.0	1306.1	1296.0	1301.4	1304.1
30°	1277.6	1274.9	1263.7	1268.0	1270.6
32.5°	1244.1	1242.6	1232.5	1234.5	1238.3
35°	1192.7	1189.9	1180.1	1180.2	1185.7
37.5°	1135.5	1132.6	1124.4	1123.0	1125.2
40°	1096.5	1092.4	1085.3	1083.9	1083.9
42.5°	1056.4	1053.3	1044.1	1041.7	1045.0
45°	994.8	990.8	982.3	982.3	985.0
47.5°	928.2	926.6	916.8	912.3	913.4
50°	879.2	881.9	872.2	866.8	872.2
52.5°	836.8	835.2	826.5	821.0	823.2
55°	766.3	764.9	756.5	749.6	749.6
57.5°	695.5	692.0	683.2	678.0	682.2
60°	646.4	645.2	635.3	625.7	629.8
62.5°	597.4	595.0	585.2	578.8	581.9
65°	516.9	516.9	507.2	501.6	500.2
67.5°	446.4	439.9	434.5	427.7	425.8
70°	392.9	387.4	383.2	377.5	373.4
72.5°	340.5	337.2	330.7	325.1	324.3
75°	267.5	262.1	257.7	253.6	252.2
77.5°	190.3	189.2	185.3	183.1	183.9
80°	143.5	143.5	140.7	140.7	139.3
82.5°	101.2	102.2	101.8	99.5	99.2
85°	43.2	46.0	48.8	48.8	50.2
87.5°	8.4	14.4	14.5	14.8	15.1
90°	2.8	5.5	11.2	12.7	14.0
92.5°	25.2	104.7	187.1	68.3	53.2
95°	60.2	221.8	743.6	305.7	198.8
97.5°	99.7	248.4	1101.5	848.1	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	1244.8	1900.5	1789.6
107.5°	249.3	346.7	1175.4	2076.7	2117.2
110°	282.8	370.5	1121.7	2114.7	2246.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	313.1	397.5	1071.2	2084.7	2278.6
115°	361.3	436.5	1002.6	1984.8	2257.3
117.5°	403.3	478.3	957.6	1844.2	2154.2
120°	431.3	505.2	939.6	1749.0	2061.2
122.5°	458.2	528.8	925.0	1660.2	1955.9
125°	495.7	564.2	908.8	1537.9	1804.9
127.5°	527.6	596.1	899.3	1434.7	1665.0
130°	548.9	617.4	894.7	1371.5	1581.0
132.5°	569.1	634.3	890.3	1318.3	1508.1
135°	596.5	660.9	883.6	1245.6	1404.5
137.5°	627.4	685.9	880.2	1184.7	1320.2
140°	644.2	701.7	877.9	1143.9	1263.0
142.5°	663.2	716.3	875.8	1107.7	1212.7
145°	691.8	739.6	872.4	1060.4	1141.3
147.5°	719.2	761.1	869.3	1020.6	1083.3
150°	739.3	773.6	868.1	996.7	1047.4
152.5°	755.1	787.1	867.0	976.4	1018.3
155°	780.0	806.0	865.4	951.4	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	903.4	910.2
167.5°	857.3	863.8	871.0	896.8	899.0
170°	864.0	869.4	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)