

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: P520369

Luminaire Tested: **SQ4-F-150U-050D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520369
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-17)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-150U-050D-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

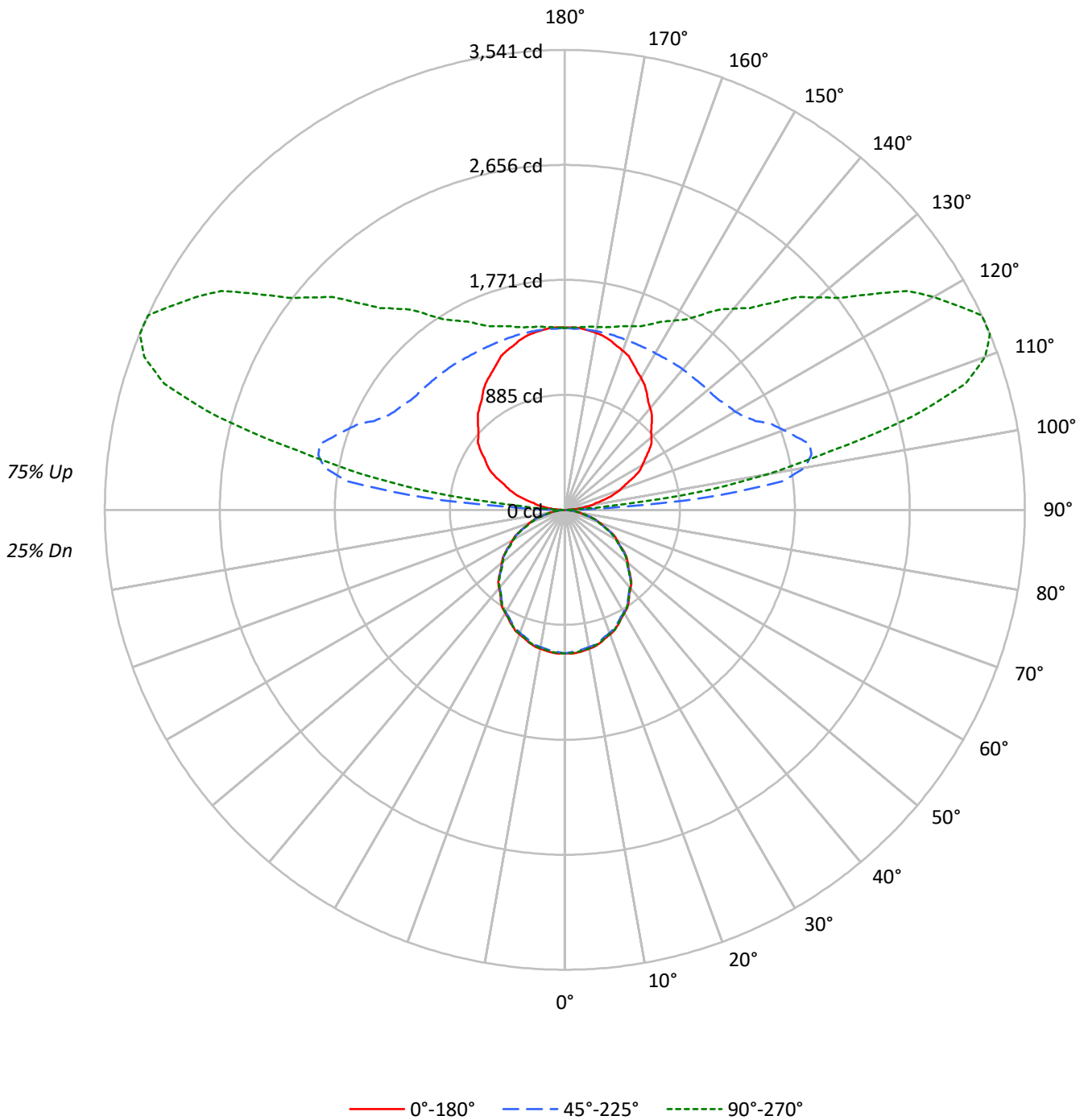
Lumens per Lamp: N/A
Luminaire Lumens: 12054.3 lumens
Efficiency: N/A
Efficacy: 142.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 84.4
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	50	30	10	0	
RCR																						
0	101	101	101	101	90	90	90	90	69	69	69	51	51	51	33	33	33	25				
1	92	88	84	81	82	79	75	73	61	59	57	44	43	42	29	29	28	21				
2	84	77	71	66	74	69	64	59	53	50	47	39	37	35	26	25	23	18				
3	76	67	60	55	68	60	54	49	47	43	39	34	32	29	23	21	20	15				
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	13				
5	64	53	45	39	57	47	41	36	37	32	29	27	24	22	18	16	15	11				
6	59	47	39	34	52	42	36	31	33	28	25	24	21	19	16	14	13	10				
7	54	42	35	29	48	38	31	27	30	25	22	22	19	16	15	13	11	8				
8	50	38	31	26	44	34	28	23	27	22	19	20	17	15	14	12	10	8				
9	47	35	28	23	41	31	25	21	25	20	17	18	15	13	13	11	9	7				
10	43	32	25	20	39	29	23	18	23	18	15	17	14	12	12	10	8	6				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6796	6796	6796
5°	6813	6731	6786
10°	6790	6707	6753
15°	6743	6659	6715
20°	6680	6602	6651
25°	6605	6525	6585
30°	6513	6460	6503
35°	6442	6364	6397
40°	6318	6259	6271
45°	6188	6137	6137
50°	6057	6001	5973
55°	5916	5837	5805
60°	5696	5605	5568
65°	5424	5317	5253
70°	5053	4947	4841
75°	4534	4394	4287
80°	3666	3616	3510
85°	2195	2505	2611



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.2	0.9
10°-20°	296.9	2.5
20°-30°	445.9	3.7
30°-40°	532.3	4.4
40°-50°	545.4	4.5
50°-60°	486.4	4.0
60°-70°	362.3	3.0
70°-80°	196.6	1.6
80°-90°	48.4	0.4
90°-100°	651.3	5.4
100°-110°	1761.0	14.6
110°-120°	1851.5	15.4
120°-130°	1503.9	12.5
130°-140°	1179.7	9.8
140°-150°	905.4	7.5
150°-160°	651.2	5.4
160°-170°	397.8	3.3
170°-180°	134.1	1.1
0°-30°	847.0	7.0
0°-40°	1379.3	11.4
0°-60°	2411.1	20.0
0°-90°	3018.5	25.0
90°-120°	4263.8	35.4
90°-150°	7852.8	65.1
90°-180°	9036.0	75.0
0°-180°	12054.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1105	1105	1105	1105	1105	
5°	1103	1102	1090	1100	1099	105
15°	1059	1056	1046	1055	1055	298
25°	973	970	961	967	970	448
35°	858	855	848	848	852	535
45°	711	713	706	704	706	549
55°	552	552	544	540	541	491
65°	373	371	365	361	361	369
75°	191	189	185	182	180	202
85°	31	34	36	37	37	44
90°	3	9	20	21	20	8
95°	101	355	1083	560	333	106
105°	327	506	1954	2882	2764	345
115°	576	705	1620	3137	3541	569
125°	789	904	1460	2464	2895	703
135°	946	1058	1421	1990	2252	731
145°	1100	1182	1402	1703	1833	688
155°	1242	1290	1390	1528	1578	573
165°	1352	1365	1396	1450	1457	381
175°	1403	1402	1397	1415	1412	133
180°	1402	1402	1402	1402	1402	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1104.9	1104.9	1104.9	1104.9	1104.9
2.5°	1108.4	1106.2	1096.6	1104.9	1103.7
5°	1103.4	1101.9	1090.1	1100.4	1099.0
7.5°	1095.4	1092.6	1080.9	1091.0	1089.5
10°	1087.1	1084.3	1073.8	1082.7	1081.2
12.5°	1076.5	1074.7	1063.2	1072.0	1071.7
15°	1059.0	1056.2	1045.7	1054.6	1054.6
17.5°	1036.0	1034.2	1024.1	1032.7	1031.5
20°	1020.6	1017.7	1008.7	1016.1	1016.1
22.5°	1001.6	999.9	991.0	997.2	998.4
25°	973.2	970.4	961.4	967.4	970.3
27.5°	941.9	939.6	932.1	936.0	938.0
30°	917.0	917.0	909.6	911.2	915.6
32.5°	894.6	894.6	886.0	887.5	889.5
35°	857.9	855.0	847.5	847.6	852.0
37.5°	815.3	813.8	809.1	808.2	809.4
40°	786.9	785.4	779.5	781.0	781.0
42.5°	758.5	757.0	751.1	749.1	751.4
45°	711.4	712.9	705.5	704.0	705.5
47.5°	665.0	665.0	659.1	655.0	657.3
50°	633.0	633.0	627.1	624.2	624.2
52.5°	599.9	601.1	594.0	589.9	591.0
55°	551.7	551.7	544.3	539.9	541.3
57.5°	498.5	498.5	491.1	486.7	489.3
60°	463.0	463.0	455.6	451.1	452.6
62.5°	427.5	427.5	420.1	415.6	415.9
65°	372.7	371.3	365.3	360.9	360.9
67.5°	320.1	316.3	311.8	305.9	305.9
70°	281.0	279.5	275.1	269.2	269.2
72.5°	245.5	243.0	238.4	233.7	233.7
75°	190.8	189.3	184.9	181.9	180.4
77.5°	136.7	135.5	135.2	131.0	132.2
80°	103.5	103.5	102.1	99.1	99.1
82.5°	74.0	75.1	72.5	71.9	70.7
85°	31.1	33.9	35.5	37.0	37.0
87.5°	6.5	11.1	12.1	13.6	13.3
90°	3.0	9.0	19.6	21.1	19.6
92.5°	42.9	156.1	308.0	133.7	96.9
95°	101.1	354.8	1083.1	560.5	333.4
97.5°	162.4	406.9	1688.4	1397.3	1026.1
100°	208.1	427.9	1876.7	1957.1	1582.5
102.5°	250.4	457.2	1943.1	2381.8	2101.5
105°	327.3	505.8	1953.6	2881.7	2763.7
107.5°	398.6	561.4	1868.2	3193.7	3232.9
110°	454.1	601.6	1792.3	3277.4	3444.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	503.6	641.6	1722.2	3260.7	3540.7
115°	576.3	704.6	1620.2	3136.6	3540.7
117.5°	647.5	767.9	1552.9	2946.7	3405.0
120°	690.9	808.9	1513.1	2810.6	3278.2
122.5°	732.0	847.6	1489.0	2664.7	3135.8
125°	789.0	904.1	1460.3	2464.3	2895.0
127.5°	841.5	954.5	1443.4	2300.8	2679.5
130°	870.5	987.0	1436.1	2199.8	2542.0
132.5°	900.7	1015.9	1428.9	2108.6	2423.7
135°	945.9	1058.0	1421.1	1989.7	2252.3
137.5°	991.5	1097.3	1414.4	1893.4	2107.2
140°	1022.8	1121.7	1412.0	1831.2	2021.5
142.5°	1053.0	1145.9	1407.2	1775.2	1941.9
145°	1099.7	1182.3	1401.5	1703.1	1832.9
147.5°	1142.3	1215.4	1394.9	1637.8	1737.6
150°	1173.7	1238.6	1392.5	1602.4	1682.1
152.5°	1202.7	1259.3	1391.3	1569.5	1635.0
155°	1241.6	1290.3	1389.5	1527.9	1578.0
157.5°	1282.0	1315.9	1389.8	1498.8	1531.8
160°	1305.0	1332.9	1391.0	1480.5	1504.1
162.5°	1323.1	1346.3	1392.2	1465.8	1483.5
165°	1351.7	1365.0	1395.5	1449.9	1457.3
167.5°	1371.4	1380.4	1395.8	1436.2	1439.8
170°	1383.4	1387.9	1397.0	1430.1	1430.1
172.5°	1393.1	1393.9	1397.0	1422.9	1421.7
175°	1403.0	1401.5	1397.0	1415.0	1412.0
177.5°	1406.3	1402.7	1396.7	1408.7	1405.1
180°	1401.5	1401.5	1401.5	1401.5	1401.5

(END OF REPORT)