

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: P520452

Luminaire Tested: **SQ4-F-150U-125D-935-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520452
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-20)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-150U-125D-935-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

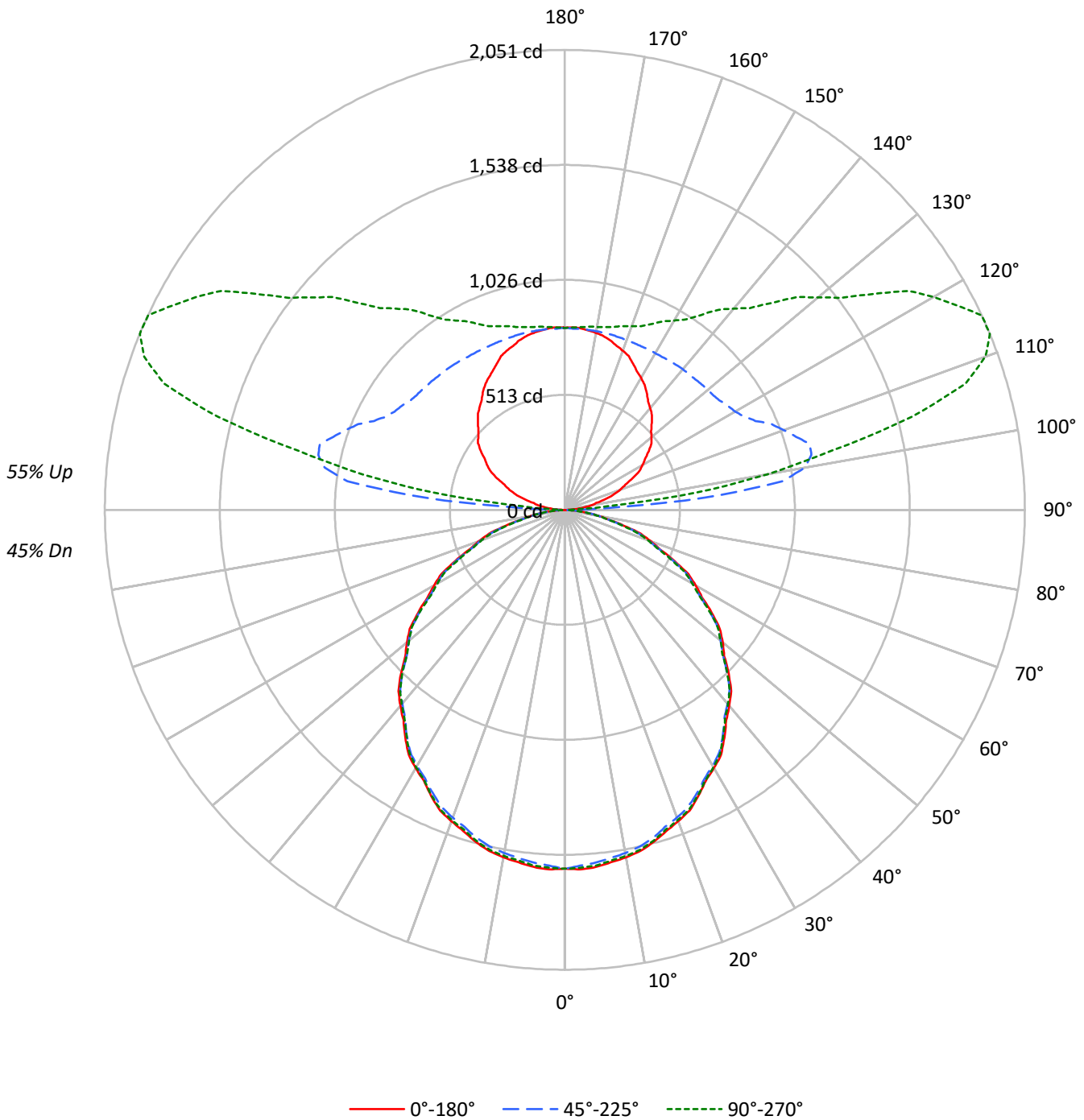
Lumens per Lamp: N/A
Luminaire Lumens: 9601.4 lumens
Efficiency: N/A
Efficacy: 115.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 83.1
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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	45
1	97	92	89	85	89	85	82	79	71	68	66	58	56	55	46	45	44	38
2	88	81	75	69	80	74	69	64	62	58	55	51	48	46	40	38	37	32
3	80	71	63	58	73	65	59	54	55	50	46	45	41	38	36	33	31	27
4	73	63	55	49	67	58	51	45	48	43	39	40	36	33	32	29	27	23
5	67	56	48	42	61	51	44	39	43	38	34	36	32	28	29	26	23	20
6	62	50	42	36	57	46	39	34	39	33	29	32	28	25	26	23	20	17
7	57	45	37	31	52	42	35	29	35	30	26	29	25	22	24	20	18	15
8	53	41	33	28	48	38	31	26	32	27	23	27	22	19	22	19	16	14
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	20	17	15	12
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14763	14763	14763
5°	14811	14624	14746
10°	14743	14562	14678
15°	14644	14468	14586
20°	14509	14345	14456
25°	14344	14192	14308
30°	14166	14045	14120
35°	13965	13847	13856
40°	13735	13587	13629
45°	13478	13328	13352
50°	13185	13031	12994
55°	12849	12664	12637
60°	12431	12155	12090
65°	11784	11533	11383
70°	10974	10690	10547
75°	9764	9543	9261
80°	7954	7720	7672
85°	4753	5409	5409



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.0	1.6
10°-20°	430.0	4.5
20°-30°	646.0	6.7
30°-40°	770.8	8.0
40°-50°	790.1	8.2
50°-60°	704.2	7.3
60°-70°	524.2	5.5
70°-80°	284.0	3.0
80°-90°	66.9	0.7
90°-100°	377.3	3.9
100°-110°	1020.1	10.6
110°-120°	1072.5	11.2
120°-130°	871.2	9.1
130°-140°	683.4	7.1
140°-150°	524.5	5.5
150°-160°	377.2	3.9
160°-170°	230.4	2.4
170°-180°	77.7	0.8
0°-30°	1227.0	12.8
0°-40°	1997.8	20.8
0°-60°	3492.1	36.4
0°-90°	4367.3	45.5
90°-120°	2469.9	25.7
90°-150°	4548.9	47.4
90°-180°	5234.0	54.5
0°-180°	9601.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1600	1600	1600	1600	1600	
5°	1599	1597	1579	1593	1592	152
15°	1533	1530	1515	1528	1527	432
25°	1409	1406	1394	1402	1406	649
35°	1240	1239	1229	1229	1230	775
45°	1033	1030	1022	1020	1023	796
55°	799	796	787	781	786	713
65°	540	536	528	525	521	535
75°	274	274	268	262	260	291
85°	45	51	51	52	51	62
90°	2	5	11	12	11	5
95°	58	206	627	325	193	61
105°	190	293	1132	1669	1601	200
115°	334	408	939	1817	2051	330
125°	457	524	846	1428	1677	407
135°	548	613	823	1153	1305	423
145°	637	685	812	987	1062	399
155°	719	747	805	885	914	332
165°	783	791	808	840	844	221
175°	813	812	809	820	818	77
180°	812	812	812	812	812	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1600.1	1600.1	1600.1	1600.1	1600.1
2.5°	1605.0	1602.3	1588.2	1600.0	1598.0
5°	1599.2	1596.7	1579.0	1593.0	1592.2
7.5°	1585.6	1582.4	1566.3	1579.5	1577.9
10°	1573.7	1571.2	1554.3	1567.5	1566.7
12.5°	1558.9	1556.4	1539.5	1552.7	1552.6
15°	1533.1	1529.7	1514.7	1527.9	1527.1
17.5°	1502.3	1498.4	1483.5	1493.9	1495.6
20°	1477.7	1475.2	1461.0	1470.7	1472.4
22.5°	1452.4	1449.0	1434.2	1445.4	1447.1
25°	1409.0	1406.5	1394.1	1402.1	1405.5
27.5°	1361.5	1361.5	1350.0	1355.7	1357.8
30°	1329.7	1329.7	1318.3	1321.9	1325.4
32.5°	1296.0	1293.1	1282.4	1285.2	1288.7
35°	1239.9	1239.1	1229.4	1229.4	1230.2
37.5°	1182.0	1179.5	1169.0	1169.8	1173.9
40°	1140.4	1138.7	1128.1	1128.1	1131.6
42.5°	1098.1	1096.4	1087.2	1085.9	1087.2
45°	1033.0	1030.4	1021.5	1019.9	1023.3
47.5°	963.6	964.3	953.7	951.3	953.2
50°	918.6	918.6	907.9	902.7	905.3
52.5°	871.3	869.9	859.4	853.5	859.5
55°	798.8	796.1	787.3	781.2	785.6
57.5°	724.5	720.4	711.6	704.9	707.3
60°	673.7	667.7	658.7	653.5	655.2
62.5°	620.9	617.5	608.0	600.0	603.8
65°	539.8	536.4	528.3	524.8	521.4
67.5°	460.4	458.1	449.1	445.3	443.1
70°	406.8	402.6	396.3	391.8	391.0
72.5°	354.7	349.8	343.5	339.7	337.5
75°	273.9	273.9	267.7	262.4	259.8
77.5°	196.9	197.6	192.5	190.7	189.5
80°	149.7	149.7	145.3	143.5	144.4
82.5°	104.6	106.7	105.1	102.7	101.5
85°	44.9	51.0	51.1	51.9	51.1
87.5°	8.1	13.6	15.7	14.4	12.9
90°	1.7	5.1	11.4	12.2	11.4
92.5°	24.8	90.4	178.5	77.5	56.1
95°	58.5	205.5	627.4	324.7	193.1
97.5°	94.1	235.7	978.0	809.4	594.4
100°	120.6	247.9	1087.1	1133.7	916.7
102.5°	145.1	264.9	1125.6	1379.6	1217.3
105°	189.6	293.0	1131.6	1669.3	1600.9
107.5°	230.9	325.2	1082.2	1850.0	1872.7
110°	263.1	348.5	1038.2	1898.5	1995.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	291.7	371.7	997.6	1888.8	2051.0
115°	333.8	408.1	938.6	1816.9	2051.0
117.5°	375.0	444.7	899.6	1707.0	1972.3
120°	400.3	468.6	876.5	1628.1	1898.9
122.5°	424.0	491.0	862.5	1543.5	1816.4
125°	457.0	523.7	845.9	1427.5	1677.0
127.5°	487.4	552.9	836.1	1332.7	1552.1
130°	504.2	571.7	832.0	1274.3	1472.5
132.5°	521.7	588.5	827.7	1221.5	1404.0
135°	548.0	612.8	823.2	1152.6	1304.7
137.5°	574.3	635.7	819.4	1096.7	1220.7
140°	592.5	649.8	818.0	1060.8	1171.0
142.5°	609.9	663.7	815.2	1028.3	1124.9
145°	637.1	684.9	811.8	986.6	1061.7
147.5°	661.7	704.1	808.0	948.7	1006.5
150°	679.8	717.5	806.6	928.2	974.4
152.5°	696.6	729.4	805.9	909.2	947.1
155°	719.2	747.3	804.8	885.1	914.0
157.5°	742.6	762.2	805.0	868.2	887.4
160°	755.9	772.1	805.7	857.6	871.3
162.5°	766.4	779.8	806.4	849.2	859.4
165°	783.0	790.7	808.3	839.9	844.1
167.5°	794.3	799.7	808.5	832.0	834.1
170°	801.4	803.9	809.2	828.4	828.4
172.5°	806.9	807.4	809.2	824.2	823.5
175°	812.7	811.8	809.2	819.7	818.0
177.5°	814.6	812.5	809.0	816.0	813.9
180°	811.8	811.8	811.8	811.8	811.8

(END OF REPORT)