

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: P520428

Luminaire Tested: **SQ4-F-150U-100D-935-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520428
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-150U-100D-935-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

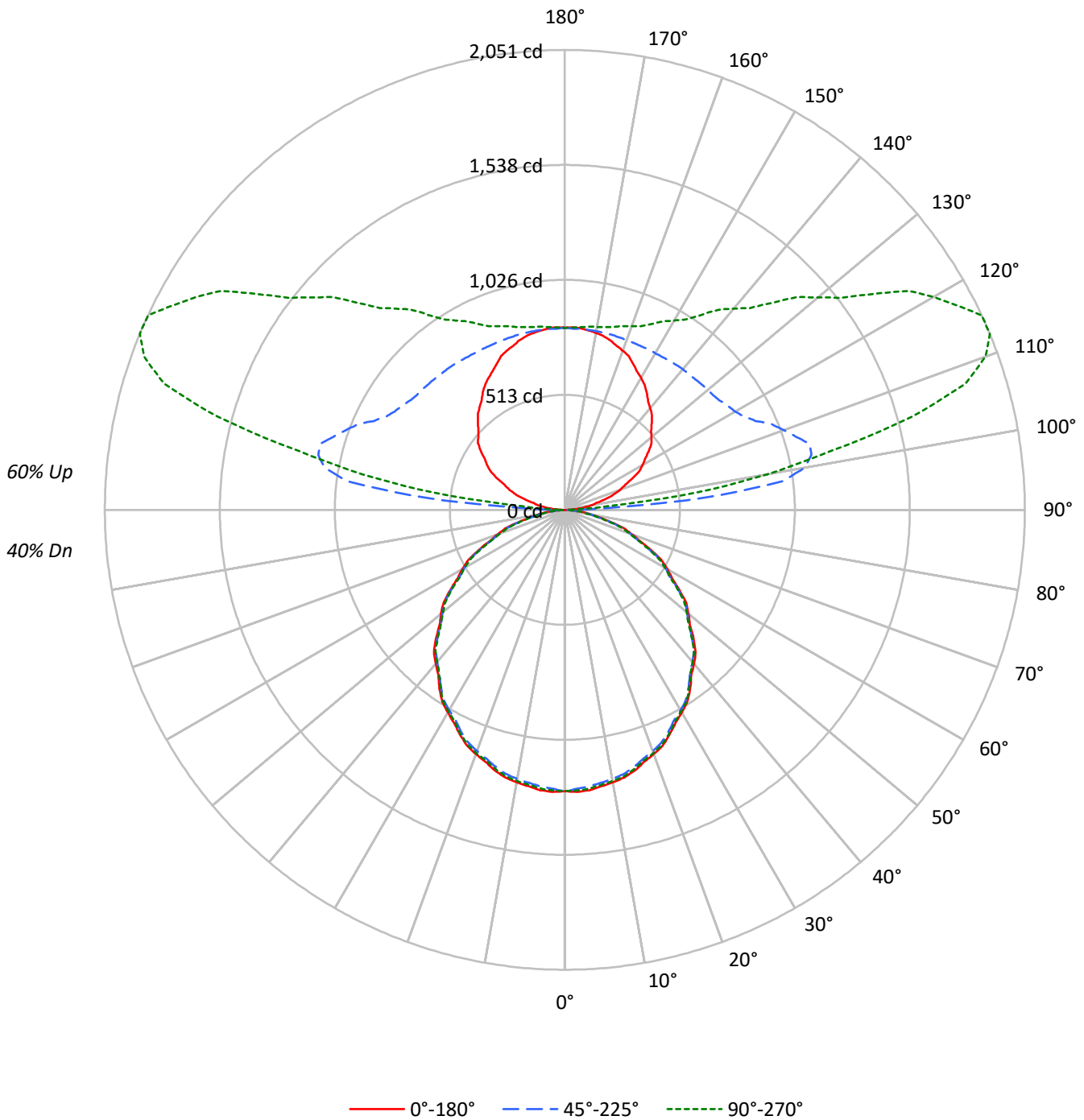
Lumens per Lamp: N/A
Luminaire Lumens: 8657.0 lumens
Efficiency: N/A
Efficacy: 119.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 72.3
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	105	105	105	105	95	95	95	95	78	78	78	61	61	61	47	47	47	40
1	95	91	87	84	87	83	80	77	68	66	64	54	52	51	41	40	39	33
2	87	80	73	68	79	73	67	63	59	56	52	47	45	42	36	34	33	28
3	79	70	63	57	72	64	57	52	52	48	44	42	39	36	32	30	28	23
4	72	62	54	48	65	56	50	44	46	41	37	37	33	31	28	26	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	26	23	21	17
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	36	31	51	41	34	29	34	28	24	27	23	20	21	18	16	13
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	19	17	14	12
9	48	36	29	24	44	34	27	22	28	23	19	23	19	16	18	15	13	11
10	45	33	26	21	41	31	24	20	26	21	17	21	17	15	16	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11573	11573	11573
5°	11625	11466	11553
10°	11566	11421	11509
15°	11496	11340	11430
20°	11377	11242	11335
25°	11254	11122	11209
30°	11116	10997	11052
35°	10977	10841	10898
40°	10794	10670	10681
45°	10604	10458	10424
50°	10330	10207	10182
55°	10026	9915	9846
60°	9723	9547	9516
65°	9248	9040	8966
70°	8592	8384	8222
75°	7671	7429	7272
80°	6312	6084	5807
85°	3737	4097	4192



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.4	1.4
10°-20°	337.1	3.9
20°-30°	506.3	5.8
30°-40°	604.2	7.0
40°-50°	619.3	7.2
50°-60°	551.5	6.4
60°-70°	411.1	4.7
70°-80°	222.6	2.6
80°-90°	52.3	0.6
90°-100°	377.3	4.4
100°-110°	1020.1	11.8
110°-120°	1072.5	12.4
120°-130°	871.2	10.1
130°-140°	683.4	7.9
140°-150°	524.5	6.1
150°-160°	377.2	4.4
160°-170°	230.4	2.7
170°-180°	77.7	0.9
0°-30°	961.8	11.1
0°-40°	1566.0	18.1
0°-60°	2736.8	31.6
0°-90°	3422.9	39.5
90°-120°	2469.9	28.5
90°-150°	4548.9	52.5
90°-180°	5234.0	60.5
0°-180°	8657.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1254	1254	1254	1254	1254	
5°	1255	1253	1238	1249	1247	119
15°	1204	1199	1187	1197	1197	339
25°	1106	1103	1092	1099	1101	509
35°	975	970	962	964	968	608
45°	813	808	802	797	799	625
55°	623	624	616	610	612	558
65°	424	422	414	410	411	419
75°	215	213	208	204	204	229
85°	35	39	39	40	40	49
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°	1254.4	1254.4	1254.4	1254.4	1254.4
2.5°	1259.1	1256.5	1245.4	1254.3	1253.0
5°	1255.2	1252.7	1238.0	1249.1	1247.4
7.5°	1243.5	1241.0	1228.0	1238.3	1236.8
10°	1234.6	1232.0	1219.1	1229.4	1228.5
12.5°	1222.9	1220.3	1207.3	1217.6	1216.8
15°	1203.6	1199.4	1187.2	1196.7	1196.7
17.5°	1178.1	1174.9	1163.6	1171.5	1171.7
20°	1158.8	1156.3	1145.0	1153.6	1154.5
22.5°	1139.5	1137.0	1124.4	1132.3	1133.8
25°	1105.5	1102.9	1092.5	1098.6	1101.1
27.5°	1070.3	1066.6	1056.3	1061.8	1063.5
30°	1043.4	1041.8	1032.2	1034.9	1037.4
32.5°	1015.2	1013.5	1005.4	1006.7	1011.2
35°	974.6	970.3	962.5	964.3	967.6
37.5°	926.5	924.5	916.9	915.9	919.1
40°	896.2	892.8	885.9	884.2	886.8
42.5°	863.2	859.8	851.4	849.8	853.0
45°	812.7	808.5	801.5	797.2	798.9
47.5°	756.2	756.2	749.0	744.1	746.6
50°	719.7	719.7	711.1	706.9	709.4
52.5°	681.9	682.5	673.3	671.0	670.1
55°	623.3	624.1	616.4	610.4	612.1
57.5°	566.8	565.0	556.0	552.1	552.9
60°	526.9	524.3	517.4	511.5	515.7
62.5°	486.3	485.1	478.2	471.4	470.9
65°	423.6	421.9	414.1	409.8	410.7
67.5°	361.3	359.2	352.1	346.0	348.2
70°	318.5	318.5	310.8	307.3	304.8
72.5°	279.3	275.9	270.2	265.3	263.5
75°	215.2	212.7	208.4	204.0	204.0
77.5°	156.6	154.5	151.7	148.7	147.9
80°	118.8	118.0	114.5	113.5	109.3
82.5°	83.7	83.5	81.4	79.2	79.1
85°	35.3	38.6	38.7	39.6	39.6
87.5°	6.5	11.3	11.9	10.7	10.5
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)