

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: P520404

Luminaire Tested: **SQ4-F-150U-075D-935-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520404
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-075D-935-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

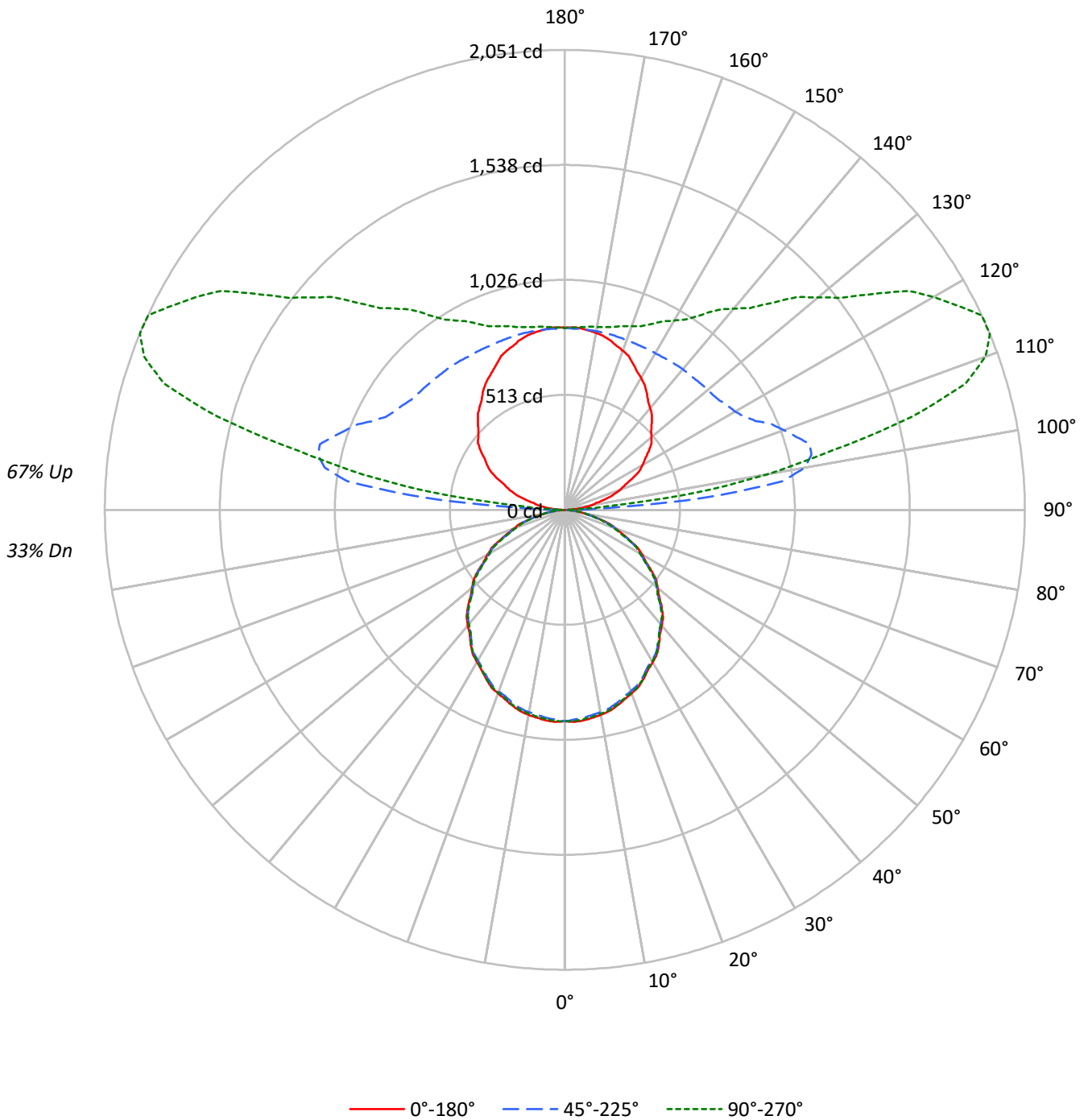
Lumens per Lamp: N/A
Luminaire Lumens: 7810.4 lumens
Efficiency: N/A
Efficacy: 123.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 63.5
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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	94	90	86	83	85	81	78	75	65	62	60	50	48	47	36	35	34	28
2	85	78	72	67	77	71	66	61	57	53	50	43	41	39	31	30	29	23
3	78	69	62	56	70	62	56	51	50	45	42	38	35	33	28	26	24	20
4	71	61	53	47	64	55	48	43	44	39	36	34	31	28	25	23	21	17
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	20	18	14
6	60	48	40	35	54	44	37	32	35	30	26	27	24	21	20	18	16	13
7	55	43	36	30	50	39	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	26	46	36	29	24	29	24	20	23	19	16	17	14	13	10
9	48	36	28	23	43	33	26	22	26	22	18	21	17	15	15	13	11	9
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8701	8701	8701
5°	8734	8623	8687
10°	8700	8588	8651
15°	8633	8526	8599
20°	8555	8455	8520
25°	8461	8374	8435
30°	8353	8262	8308
35°	8243	8158	8195
40°	8104	8022	8012
45°	7966	7865	7887
50°	7745	7682	7682
55°	7565	7468	7399
60°	7322	7195	7130
65°	6927	6796	6700
70°	6504	6342	6183
75°	5850	5636	5518
80°	4681	4591	4543
85°	2805	3165	3260



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.0	1.1
10°-20°	253.4	3.2
20°-30°	380.8	4.9
30°-40°	454.3	5.8
40°-50°	465.9	6.0
50°-60°	415.2	5.3
60°-70°	309.6	4.0
70°-80°	167.9	2.1
80°-90°	40.2	0.5
90°-100°	377.3	4.8
100°-110°	1020.1	13.1
110°-120°	1072.5	13.7
120°-130°	871.2	11.2
130°-140°	683.4	8.7
140°-150°	524.5	6.7
150°-160°	377.2	4.8
160°-170°	230.4	3.0
170°-180°	77.7	1.0
0°-30°	723.2	9.3
0°-40°	1177.5	15.1
0°-60°	2058.6	26.4
0°-90°	2576.3	33.0
90°-120°	2469.9	31.6
90°-150°	4548.9	58.2
90°-180°	5234.0	67.0
0°-180°	7810.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	943	943	943	943	943	
5°	943	942	931	939	938	89
15°	904	902	893	900	900	255
25°	831	830	823	827	829	383
35°	732	730	724	724	728	457
45°	610	608	603	603	604	470
55°	470	469	464	460	460	420
65°	317	317	311	308	307	316
75°	164	161	158	156	155	172
85°	26	28	30	30	31	37
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°	943.1	943.1	943.1	943.1	943.1
2.5°	946.6	944.5	936.2	943.1	942.4
5°	943.1	941.5	931.1	938.8	938.0
7.5°	935.4	933.6	923.4	931.1	931.0
10°	928.6	926.1	916.7	924.3	923.4
12.5°	919.7	917.1	907.7	915.4	914.6
15°	903.8	902.1	892.6	899.5	900.3
17.5°	885.7	882.5	874.0	880.7	881.5
20°	871.3	868.8	861.1	867.1	867.8
22.5°	856.2	853.8	846.0	852.0	852.8
25°	831.1	830.3	822.6	826.9	828.6
27.5°	803.9	801.6	795.3	798.7	800.3
30°	784.1	782.4	775.5	778.1	779.8
32.5°	763.5	762.5	756.3	757.6	760.0
35°	731.9	730.3	724.3	724.3	727.6
37.5°	696.8	695.0	690.0	689.2	690.5
40°	672.9	670.4	666.1	665.2	665.2
42.5°	648.3	646.4	640.7	639.2	641.3
45°	610.5	608.0	602.8	602.8	604.5
47.5°	569.7	568.6	562.6	559.9	560.5
50°	539.6	541.2	535.2	531.9	535.2
52.5°	513.6	512.5	507.2	503.8	505.1
55°	470.3	469.4	464.3	460.0	460.0
57.5°	426.9	424.6	419.3	416.2	418.6
60°	396.8	395.9	389.9	384.0	386.4
62.5°	366.7	365.2	359.1	355.2	357.1
65°	317.3	317.3	311.3	307.8	306.9
67.5°	274.0	269.9	266.6	262.4	261.3
70°	241.1	237.7	235.1	231.6	229.2
72.5°	209.0	206.9	203.0	199.6	199.1
75°	164.1	160.8	158.1	155.6	154.8
77.5°	116.8	116.1	113.8	112.4	112.9
80°	88.1	88.1	86.4	86.3	85.5
82.5°	62.1	62.8	62.4	61.0	60.9
85°	26.5	28.1	29.9	29.9	30.8
87.5°	5.1	9.2	9.7	9.9	9.7
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)