

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: P520408

Luminaire Tested: **SQ4-F-150U-075D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520408
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-940-1D-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

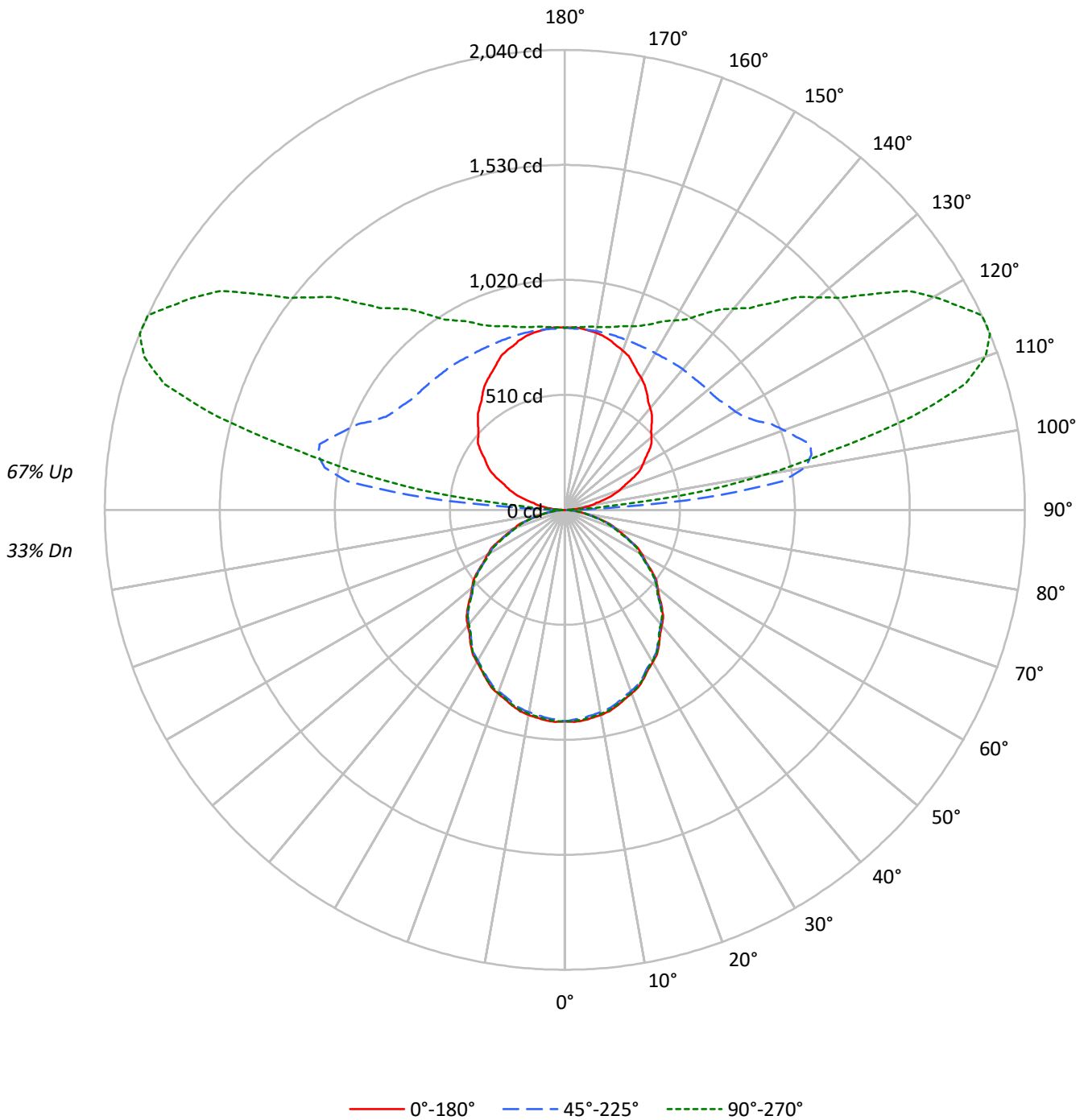
Lumens per Lamp: N/A
Luminaire Lumens: 7770.8 lumens
Efficiency: N/A
Efficacy: 122.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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°	8657	8657	8657
5°	8690	8580	8643
10°	8655	8543	8607
15°	8589	8483	8556
20°	8512	8410	8477
25°	8418	8330	8391
30°	8311	8220	8265
35°	8202	8115	8154
40°	8063	7982	7972
45°	7925	7826	7848
50°	7705	7645	7645
55°	7526	7430	7362
60°	7283	7158	7095
65°	6890	6761	6667
70°	6471	6310	6150
75°	5825	5611	5490
80°	4654	4564	4516
85°	2795	3155	3239



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.6	1.1
10°-20°	252.1	3.2
20°-30°	378.8	4.9
30°-40°	452.0	5.8
40°-50°	463.6	6.0
50°-60°	413.1	5.3
60°-70°	308.0	4.0
70°-80°	167.0	2.1
80°-90°	40.0	0.5
90°-100°	375.4	4.8
100°-110°	1014.9	13.1
110°-120°	1067.0	13.7
120°-130°	866.7	11.2
130°-140°	679.9	8.7
140°-150°	521.8	6.7
150°-160°	375.3	4.8
160°-170°	229.3	3.0
170°-180°	77.3	1.0
0°-30°	719.5	9.3
0°-40°	1171.5	15.1
0°-60°	2048.2	26.4
0°-90°	2563.2	33.0
90°-120°	2457.3	31.6
90°-150°	4525.7	58.2
90°-180°	5208.0	67.0
0°-180°	7770.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	938	938	938	938	938	
5°	938	937	926	934	933	89
15°	899	898	888	895	896	254
25°	827	826	818	823	824	381
35°	728	726	720	721	724	455
45°	607	605	600	600	602	467
55°	468	467	462	458	458	418
65°	316	316	310	306	305	314
75°	163	160	157	155	154	172
85°	26	28	30	30	31	37
90°	2	5	11	12	11	5
95°	58	204	624	323	192	61
105°	189	292	1126	1661	1593	199
115°	332	406	934	1808	2040	328
125°	455	521	842	1420	1668	405
135°	545	610	819	1147	1298	421
145°	634	682	808	982	1056	397
155°	716	744	801	880	909	330
165°	779	787	804	836	840	219
175°	809	808	805	816	814	77
180°	808	808	808	808	808	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	938.3	938.3	938.3	938.3	938.3
2.5°	941.7	939.8	931.5	938.3	937.6
5°	938.3	936.6	926.4	934.1	933.2
7.5°	930.6	928.9	918.7	926.4	926.2
10°	923.8	921.4	911.9	919.6	918.7
12.5°	915.0	912.5	903.1	910.7	909.9
15°	899.2	897.6	888.1	895.0	895.8
17.5°	881.1	878.0	869.6	876.2	877.1
20°	866.9	864.4	856.6	862.6	863.4
22.5°	851.9	849.4	841.7	847.7	848.5
25°	826.9	826.0	818.3	822.7	824.3
27.5°	799.8	797.5	791.3	794.6	796.3
30°	780.1	778.4	771.6	774.2	775.8
32.5°	759.7	758.7	752.5	753.8	756.2
35°	728.2	726.5	720.5	720.6	724.0
37.5°	693.4	691.5	686.5	685.7	687.1
40°	669.5	667.0	662.7	661.9	661.9
42.5°	645.1	643.2	637.5	636.0	638.1
45°	607.4	604.9	599.8	599.8	601.5
47.5°	566.7	565.7	559.7	557.1	557.8
50°	536.8	538.5	532.6	529.2	532.6
52.5°	510.9	509.9	504.6	501.3	502.6
55°	467.9	467.0	461.9	457.7	457.7
57.5°	424.6	422.6	417.1	414.0	416.6
60°	394.7	393.9	387.9	382.0	384.5
62.5°	364.8	363.3	357.3	353.4	355.2
65°	315.6	315.6	309.7	306.2	305.4
67.5°	272.6	268.6	265.2	261.2	260.0
70°	239.9	236.6	233.9	230.5	228.0
72.5°	207.9	206.0	201.9	198.6	198.1
75°	163.4	160.0	157.4	154.8	154.0
77.5°	116.2	115.5	113.2	111.8	112.3
80°	87.6	87.6	85.9	85.9	85.0
82.5°	61.8	62.4	62.1	60.7	60.6
85°	26.4	28.0	29.8	29.8	30.6
87.5°	5.1	9.1	9.7	9.8	9.7
90°	1.7	5.1	11.3	12.2	11.3
92.5°	24.6	89.9	177.6	77.1	55.8
95°	58.2	204.5	624.2	323.0	192.1
97.5°	93.6	234.5	973.1	805.3	591.4
100°	120.0	246.7	1081.5	1128.0	912.0
102.5°	144.4	263.5	1119.9	1372.7	1211.1
105°	188.6	291.5	1125.9	1660.8	1592.8
107.5°	229.7	323.5	1076.7	1840.6	1863.2
110°	261.7	346.7	1032.8	1888.8	1984.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	290.2	369.8	992.5	1879.2	2040.5
115°	332.1	406.1	933.8	1807.7	2040.5
117.5°	373.1	442.5	895.0	1698.3	1962.3
120°	398.2	466.2	872.1	1619.8	1889.2
122.5°	421.8	488.5	858.1	1535.6	1807.3
125°	454.7	521.0	841.6	1420.3	1668.4
127.5°	485.0	550.1	831.9	1326.0	1544.3
130°	501.7	568.8	827.7	1267.7	1465.0
132.5°	519.1	585.5	823.5	1215.2	1396.8
135°	545.1	609.7	819.0	1146.7	1298.0
137.5°	571.4	632.5	815.2	1091.2	1214.4
140°	589.5	646.4	813.8	1055.4	1165.0
142.5°	606.9	660.4	811.0	1023.1	1119.2
145°	633.8	681.5	807.7	981.5	1056.4
147.5°	658.3	700.5	803.9	943.9	1001.5
150°	676.4	713.8	802.5	923.5	969.5
152.5°	693.1	725.7	801.8	904.6	942.3
155°	715.6	743.6	800.8	880.5	909.4
157.5°	738.9	758.4	801.0	863.7	882.9
160°	752.1	768.2	801.7	853.3	866.9
162.5°	762.5	775.9	802.3	844.8	855.0
165°	779.0	786.7	804.2	835.7	839.9
167.5°	790.3	795.6	804.4	827.7	829.8
170°	797.2	799.9	805.1	824.2	824.2
172.5°	802.9	803.4	805.1	820.1	819.4
175°	808.6	807.7	805.1	815.5	813.8
177.5°	810.5	808.4	804.9	811.8	809.8
180°	807.7	807.7	807.7	807.7	807.7

(END OF REPORT)