

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: P520384

Luminaire Tested: **SQ4-F-150U-050D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520384  
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-940-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

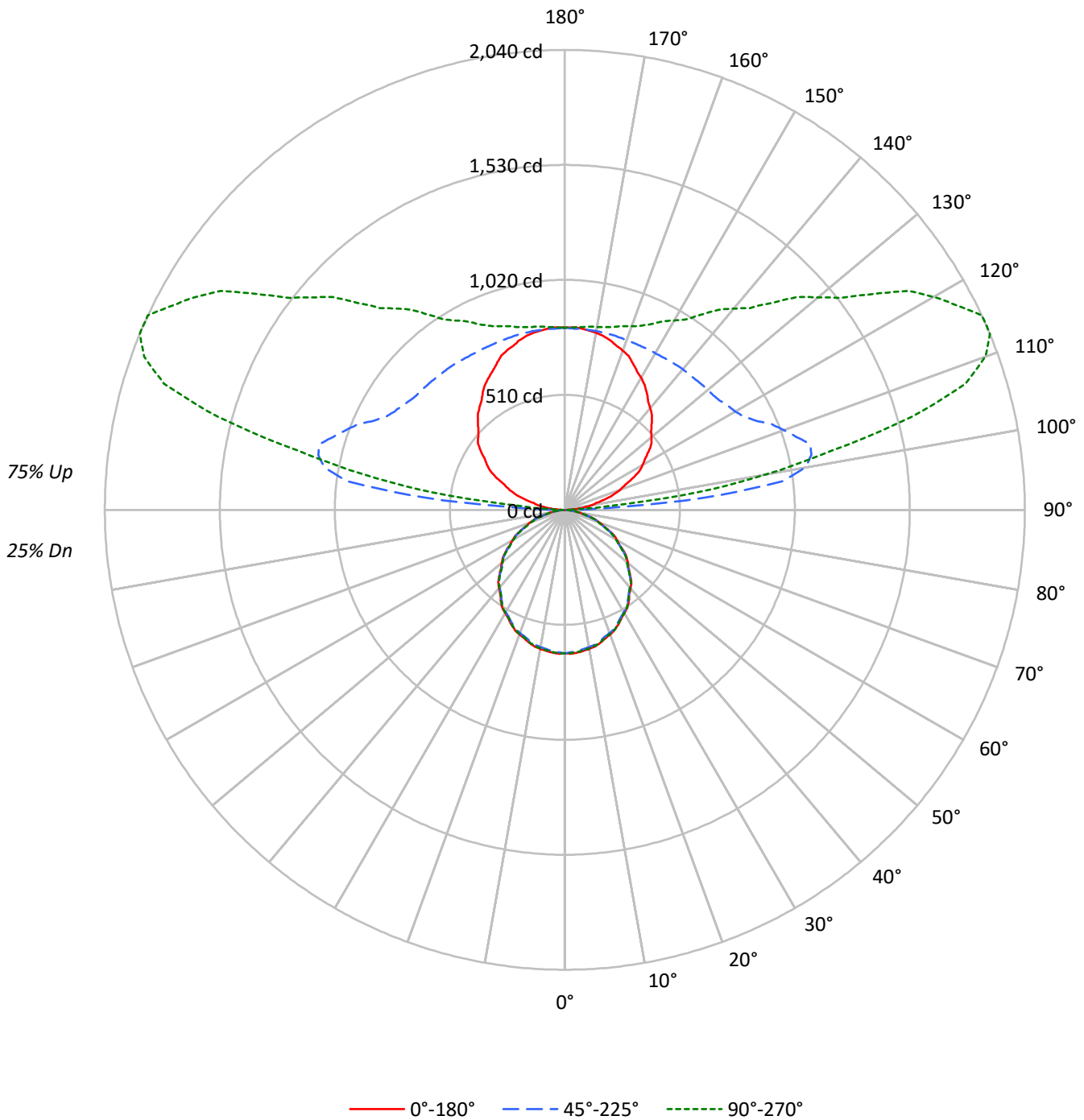
Lumens per Lamp: N/A  
Luminaire Lumens: 6947.1 lumens  
Efficiency: N/A  
Efficacy: 124.7 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 55.7  
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	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°	5875	5875	5875
5°	5889	5818	5865
10°	5869	5797	5838
15°	5830	5757	5806
20°	5775	5708	5750
25°	5710	5641	5693
30°	5630	5586	5621
35°	5568	5501	5530
40°	5462	5410	5420
45°	5350	5305	5305
50°	5236	5187	5163
55°	5115	5046	5019
60°	4923	4846	4812
65°	4689	4595	4541
70°	4370	4278	4184
75°	3918	3800	3707
80°	3172	3124	3034
85°	1895	2160	2255



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.1	0.9
10°-20°	171.1	2.5
20°-30°	257.0	3.7
30°-40°	306.7	4.4
40°-50°	314.3	4.5
50°-60°	280.3	4.0
60°-70°	208.8	3.0
70°-80°	113.3	1.6
80°-90°	27.9	0.4
90°-100°	375.4	5.4
100°-110°	1014.9	14.6
110°-120°	1067.0	15.4
120°-130°	866.7	12.5
130°-140°	679.9	9.8
140°-150°	521.8	7.5
150°-160°	375.3	5.4
160°-170°	229.3	3.3
170°-180°	77.3	1.1
0°-30°	488.2	7.0
0°-40°	794.9	11.4
0°-60°	1389.6	20.0
0°-90°	1739.6	25.0
90°-120°	2457.3	35.4
90°-150°	4525.7	65.1
90°-180°	5208.0	75.0
0°-180°	6947.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	637	637	637	637	637	
5°	636	635	628	634	633	60
15°	610	609	603	608	608	172
25°	561	559	554	558	559	258
35°	494	493	488	488	491	309
45°	410	411	407	406	407	316
55°	318	318	314	311	312	283
65°	215	214	210	208	208	213
75°	110	109	107	105	104	116
85°	18	20	20	21	21	25
90°	2	5	11	12	11	4
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°	636.8	636.8	636.8	636.8	636.8
2.5°	638.8	637.5	632.0	636.8	636.1
5°	635.9	635.1	628.2	634.2	633.3
7.5°	631.3	629.6	623.0	628.7	627.9
10°	626.5	624.9	618.8	624.0	623.1
12.5°	620.4	619.4	612.7	617.9	617.7
15°	610.4	608.7	602.7	607.8	607.8
17.5°	597.1	596.1	590.3	595.2	594.5
20°	588.2	586.5	581.4	585.6	585.6
22.5°	577.2	576.3	571.1	574.7	575.4
25°	560.9	559.2	554.1	557.5	559.2
27.5°	542.8	541.4	537.2	539.5	540.7
30°	528.5	528.5	524.3	525.2	527.6
32.5°	515.5	515.5	510.6	511.5	512.7
35°	494.4	492.7	488.4	488.5	491.0
37.5°	469.9	469.1	466.3	465.8	466.4
40°	453.5	452.7	449.2	450.0	450.0
42.5°	437.1	436.3	432.9	431.7	433.1
45°	410.0	410.9	406.6	405.8	406.6
47.5°	383.3	383.3	379.8	377.5	378.8
50°	364.8	364.8	361.4	359.7	359.7
52.5°	345.7	346.4	342.4	340.0	340.6
55°	318.0	318.0	313.7	311.2	312.0
57.5°	287.2	287.2	283.0	280.4	282.0
60°	266.8	266.8	262.6	260.0	260.8
62.5°	246.3	246.3	242.1	239.5	239.7
65°	214.8	214.0	210.5	208.0	208.0
67.5°	184.5	182.3	179.7	176.3	176.3
70°	162.0	161.1	158.6	155.1	155.1
72.5°	141.5	140.0	137.5	134.7	134.7
75°	109.9	109.2	106.6	104.8	104.0
77.5°	78.8	78.1	77.9	75.5	76.2
80°	59.7	59.7	58.8	57.1	57.1
82.5°	42.6	43.3	41.8	41.4	40.7
85°	17.9	19.5	20.4	21.3	21.3
87.5°	3.7	6.4	7.0	7.8	7.7
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)