

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: P519914

Luminaire Tested: **SQ4-F-050U-075D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519914  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-075D-835-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

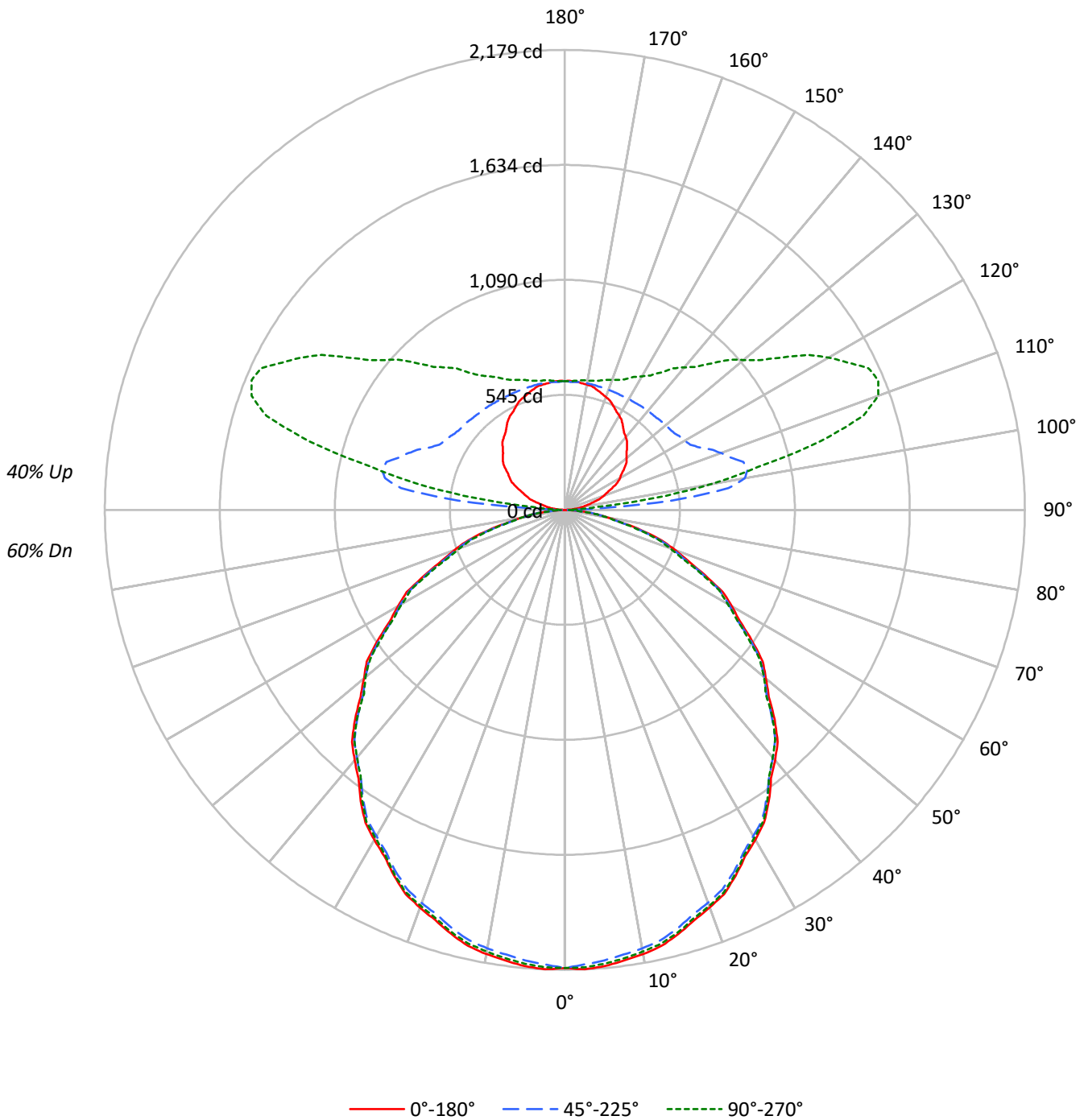
Lumens per Lamp: N/A  
Luminaire Lumens: 9912.4 lumens  
Efficiency: N/A  
Efficacy: 129.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 76.5  
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	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65	60
1	100	96	92	88	93	89	86	83	78	75	73	67	65	64	58	56	55	50
2	91	83	77	72	85	78	73	68	68	64	60	59	56	53	51	48	46	42
3	83	73	66	60	77	69	62	57	60	55	51	52	48	45	45	42	39	35
4	76	65	57	50	71	61	54	48	53	48	43	46	42	38	40	36	34	30
5	70	58	49	43	65	54	47	41	48	42	37	42	37	33	36	32	29	26
6	64	52	43	37	60	49	41	36	43	37	32	38	33	29	32	29	26	23
7	59	47	39	33	55	44	37	31	39	33	28	34	29	26	30	26	23	20
8	55	42	35	29	51	40	33	28	35	30	25	31	26	23	27	23	20	18
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	25	21	18	16
10	48	36	28	23	45	34	27	22	30	24	20	27	22	19	23	19	17	15

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	10014	10014	10014
5°	10052	9925	9998
10°	10012	9883	9957
15°	9935	9813	9897
20°	9845	9729	9807
25°	9737	9637	9707
30°	9614	9509	9561
35°	9487	9388	9432
40°	9327	9233	9221
45°	9167	9052	9078
50°	8913	8842	8842
55°	8706	8595	8516
60°	8425	8281	8208
65°	7971	7820	7713
70°	7486	7300	7115
75°	6736	6490	6349
80°	5385	5281	5228
85°	3229	3647	3753



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	204.9	2.1
10°-20°	583.3	5.9
20°-30°	876.4	8.8
30°-40°	1045.8	10.5
40°-50°	1072.5	10.8
50°-60°	955.6	9.6
60°-70°	712.5	7.2
70°-80°	386.4	3.9
80°-90°	91.1	0.9
90°-100°	292.9	3.0
100°-110°	795.7	8.0
110°-120°	818.1	8.3
120°-130°	654.1	6.6
130°-140°	514.0	5.2
140°-150°	394.1	4.0
150°-160°	283.4	2.9
160°-170°	173.3	1.7
170°-180°	58.4	0.6
0°-30°	1664.6	16.8
0°-40°	2710.4	27.3
0°-60°	4738.5	47.8
0°-90°	5928.6	59.8
90°-120°	1906.7	19.2
90°-150°	3468.8	35.0
90°-180°	3984.0	40.2
0°-180°	9912.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2171	2171	2171	2171	2171	
5°	2171	2167	2143	2161	2159	206
15°	2080	2076	2055	2070	2072	587
25°	1913	1911	1893	1903	1907	881
35°	1685	1681	1667	1667	1675	1052
45°	1405	1399	1388	1388	1392	1082
55°	1082	1080	1069	1059	1059	967
65°	730	730	716	708	707	727
75°	378	370	364	358	356	397
85°	61	65	69	69	71	85
90°	2	8	14	18	18	5
95°	43	160	510	222	149	46
105°	141	220	875	1332	1254	150
115°	251	305	700	1393	1587	248
125°	345	393	634	1068	1260	308
135°	416	462	616	870	981	322
145°	481	515	608	739	794	302
155°	543	563	604	664	683	251
165°	589	596	606	632	634	166
175°	610	612	608	616	614	58
180°	610	610	610	610	610	

TEST NUMBER: P519914

CATALOG NUMBER: SQ4-F-050U-075D-835-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2170.8	2170.8	2170.8	2170.8	2170.8
2.5°	2178.7	2174.1	2155.1	2170.8	2169.3
5°	2170.8	2167.0	2143.3	2161.0	2159.0
7.5°	2153.1	2148.9	2125.6	2143.3	2142.9
10°	2137.4	2131.6	2109.8	2127.5	2125.6
12.5°	2116.9	2111.1	2089.4	2107.1	2105.1
15°	2080.3	2076.5	2054.7	2070.5	2072.4
17.5°	2038.6	2031.3	2011.8	2027.2	2029.1
20°	2005.5	1999.7	1981.9	1995.7	1997.6
22.5°	1970.9	1965.1	1947.3	1961.0	1963.0
25°	1913.0	1911.0	1893.3	1903.3	1907.1
27.5°	1850.4	1845.0	1830.7	1838.3	1842.2
30°	1804.8	1800.9	1785.1	1791.1	1794.9
32.5°	1757.5	1755.3	1741.0	1743.9	1749.3
35°	1684.7	1680.9	1667.0	1667.2	1674.9
37.5°	1604.0	1599.8	1588.3	1586.4	1589.5
40°	1548.9	1543.1	1533.2	1531.2	1531.2
42.5°	1492.2	1488.0	1474.9	1471.5	1476.1
45°	1405.2	1399.4	1387.5	1387.6	1391.5
47.5°	1311.2	1308.9	1295.0	1288.7	1290.3
50°	1241.9	1245.7	1232.0	1224.4	1232.0
52.5°	1182.1	1179.8	1167.5	1159.7	1162.8
55°	1082.5	1080.5	1068.7	1058.8	1058.8
57.5°	982.5	977.5	965.2	957.8	963.6
60°	913.2	911.2	897.5	883.8	889.6
62.5°	843.9	840.5	826.6	817.7	821.9
65°	730.2	730.2	716.4	708.5	706.6
67.5°	630.6	621.3	613.7	604.1	601.5
70°	555.0	547.3	541.2	533.3	527.5
72.5°	481.0	476.4	467.2	459.4	458.2
75°	377.9	370.2	364.1	358.2	356.2
77.5°	268.8	267.3	261.8	258.6	259.8
80°	202.7	202.7	198.8	198.8	196.8
82.5°	142.9	144.5	143.7	140.5	140.1
85°	61.0	64.8	68.9	68.9	70.9
87.5°	11.4	20.3	20.1	20.9	20.9
90°	2.0	7.8	13.7	17.7	17.7
92.5°	17.7	80.2	139.3	59.9	50.6
95°	43.2	160.1	510.1	222.0	149.1
97.5°	71.4	176.9	782.0	608.4	427.3
100°	90.3	188.1	865.2	877.1	708.3
102.5°	109.1	199.2	887.2	1084.7	935.9
105°	141.3	219.9	875.0	1332.3	1253.7
107.5°	174.6	244.0	824.4	1460.2	1482.0
110°	198.1	261.4	786.7	1485.4	1579.3



TEST NUMBER: P519914

CATALOG NUMBER: SQ4-F-050U-075D-835-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	218.5	278.8	749.0	1464.5	1606.0
115°	251.1	304.8	700.4	1393.4	1587.1
117.5°	281.7	333.1	669.4	1292.7	1511.1
120°	302.1	352.0	655.3	1225.2	1442.0
122.5°	319.4	369.3	645.9	1157.5	1366.6
125°	345.3	393.3	633.7	1067.7	1259.6
127.5°	368.5	416.1	627.0	999.6	1164.2
130°	382.6	428.6	623.9	956.9	1104.5
132.5°	396.7	442.8	620.8	920.3	1051.2
135°	416.0	462.0	616.1	869.7	981.0
137.5°	436.7	478.6	613.7	825.0	918.6
140°	449.2	489.6	612.1	796.5	880.9
142.5°	461.8	499.1	610.6	774.2	844.8
145°	480.6	515.2	608.2	738.9	794.5
147.5°	501.8	531.4	606.2	711.2	754.9
150°	516.0	540.9	606.2	695.3	729.8
152.5°	527.0	548.8	604.7	681.0	709.4
155°	543.4	562.7	604.3	663.5	682.8
157.5°	559.5	574.5	604.3	651.7	666.3
160°	568.9	582.4	604.3	643.7	655.3
162.5°	578.4	588.8	605.8	637.4	645.9
165°	588.6	596.2	606.2	631.8	633.7
167.5°	599.2	603.0	608.2	625.1	626.6
170°	602.3	606.1	608.2	621.9	621.9
172.5°	605.5	607.7	608.2	618.8	618.8
175°	610.2	612.0	608.2	616.0	614.1
177.5°	611.7	611.7	607.0	613.2	610.2
180°	610.2	610.2	610.2	610.2	610.2

(END OF REPORT)