

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521599

Luminaire Tested: **SQ4-F-100U-125D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521599
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-100U-125D-93050-1D-UNV-STD-W-4 (5000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

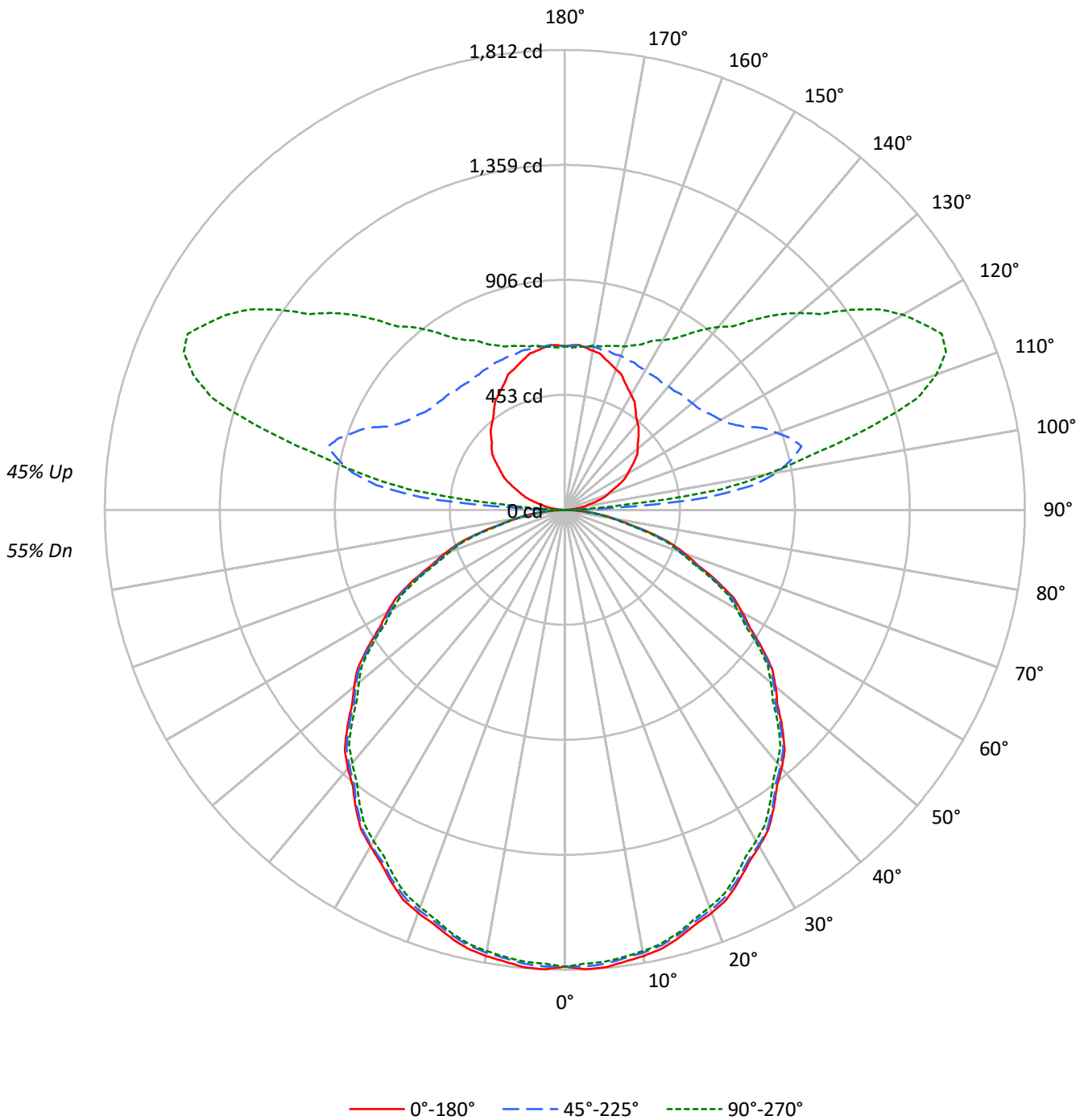
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9300.3 lumens
Efficiency: N/A
Efficacy: 106.0 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 87.7
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				
RC	80					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	55		
1	99	94	90	87	92	88	84	81	75	73	71	64	62	61	54	52	51	46		
2	90	82	76	71	83	77	71	66	66	62	58	56	53	50	47	45	43	38		
3	82	72	65	59	76	67	61	55	58	53	49	49	46	42	41	39	36	32		
4	75	64	56	49	69	59	52	47	51	46	41	44	40	36	37	34	31	27		
5	69	57	48	42	63	53	46	40	46	40	36	39	35	31	33	30	27	24		
6	63	51	42	37	58	47	40	35	41	35	31	35	31	27	30	26	24	21		
7	58	46	38	32	54	43	36	30	37	31	27	32	27	24	27	24	21	18		
8	54	42	34	28	50	39	32	27	34	28	24	29	25	21	25	21	19	16		
9	50	38	30	25	47	36	29	24	31	26	22	27	22	19	23	19	17	15		
10	47	35	27	23	44	33	26	21	29	23	19	25	20	17	21	18	15	13		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16602	16602	16602
5°	16760	16636	16560
10°	16724	16598	16541
15°	16659	16551	16482
20°	16591	16480	16359
25°	16471	16378	16221
30°	16309	16255	16047
35°	16158	16077	15881
40°	16008	15896	15686
45°	15804	15670	15469
50°	15546	15428	15209
55°	15247	15098	14902
60°	14882	14673	14428
65°	14384	14094	13826
70°	13544	13213	12964
75°	12348	11981	11724
80°	10180	10127	9909
85°	7272	8246	8246



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.3	1.8
10°-20°	487.9	5.2
20°-30°	737.8	7.9
30°-40°	888.3	9.6
40°-50°	922.4	9.9
50°-60°	836.0	9.0
60°-70°	636.7	6.8
70°-80°	355.8	3.8
80°-90°	92.5	1.0
90°-100°	332.2	3.6
100°-110°	802.9	8.6
110°-120°	856.3	9.2
120°-130°	693.6	7.5
130°-140°	537.0	5.8
140°-150°	409.7	4.4
150°-160°	296.5	3.2
160°-170°	182.6	2.0
170°-180°	61.8	0.7
0°-30°	1396.0	15.0
0°-40°	2284.3	24.6
0°-60°	4042.7	43.5
0°-90°	5127.6	55.1
90°-120°	1991.5	21.4
90°-150°	3631.7	39.0
90°-180°	4173.0	44.9
0°-180°	9300.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1799	1799	1799	1799	1799	
5°	1810	1791	1796	1789	1788	172
15°	1744	1726	1733	1729	1726	492
25°	1618	1600	1609	1594	1593	745
35°	1435	1422	1427	1411	1410	897
45°	1211	1201	1201	1186	1186	933
55°	948	944	939	926	926	847
65°	659	652	646	634	633	650
75°	346	338	336	331	329	365
85°	69	75	78	79	78	85
90°	0	0	0	0	0	4
95°	33	166	569	370	259	37
105°	128	222	965	1249	1233	136
115°	235	300	775	1470	1639	232
125°	334	385	673	1169	1373	298
135°	411	459	646	922	1061	317
145°	486	522	633	784	845	304
155°	557	581	642	694	719	257
165°	616	625	650	660	669	174
175°	651	648	651	646	644	62
180°	644	644	644	644	644	



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CATALOG NUMBER: SQ4-F-100U-125D-93050-1D-UNV-STD-W-4 (5000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1799.4	1799.4	1799.4	1799.4	1799.4
2.5°	1811.7	1795.7	1800.2	1796.8	1789.6
5°	1809.7	1790.6	1796.3	1789.1	1788.1
7.5°	1795.7	1776.7	1782.4	1778.1	1777.1
10°	1785.1	1766.0	1771.7	1766.6	1765.6
12.5°	1770.3	1752.1	1757.8	1751.8	1750.8
15°	1744.1	1726.0	1732.8	1728.6	1725.6
17.5°	1711.9	1693.5	1701.5	1695.2	1691.6
20°	1689.8	1669.7	1678.5	1668.2	1666.2
22.5°	1662.7	1642.7	1651.4	1638.7	1638.3
25°	1618.0	1600.0	1608.8	1594.4	1593.4
27.5°	1567.8	1551.0	1560.2	1542.8	1541.6
30°	1530.9	1514.9	1525.8	1508.3	1506.3
32.5°	1493.2	1479.6	1486.5	1471.4	1468.6
35°	1434.6	1421.6	1427.4	1411.0	1410.0
37.5°	1371.7	1358.7	1364.1	1348.5	1346.7
40°	1329.1	1316.0	1319.8	1303.4	1302.4
42.5°	1282.3	1271.7	1273.9	1256.7	1257.3
45°	1211.2	1201.2	1201.0	1185.6	1185.6
47.5°	1135.6	1125.6	1125.8	1111.6	1110.4
50°	1083.1	1077.1	1074.9	1061.6	1059.6
52.5°	1029.0	1024.6	1020.8	1007.5	1007.1
55°	947.9	943.9	938.6	926.4	926.4
57.5°	864.7	860.1	853.4	841.1	840.1
60°	806.5	803.5	795.2	782.9	781.9
62.5°	748.3	742.8	736.2	724.7	723.7
65°	658.9	651.9	645.6	634.3	633.3
67.5°	566.1	558.2	552.9	545.1	542.1
70°	502.1	495.1	489.8	483.6	480.6
72.5°	438.2	432.0	428.3	422.1	419.1
75°	346.4	338.3	336.1	330.9	328.9
77.5°	253.1	249.1	247.2	243.4	240.6
80°	191.6	191.6	190.6	188.5	186.5
82.5°	138.3	139.9	141.4	141.0	139.0
85°	68.7	74.7	77.9	78.9	77.9
87.5°	19.7	26.1	31.2	32.0	31.2
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.9	89.9	211.8	103.0	69.9
95°	32.8	166.2	569.2	370.1	259.3
97.5°	58.1	184.1	749.6	722.2	620.0
100°	77.8	195.2	849.0	896.2	812.1
102.5°	96.4	205.3	914.5	1041.1	991.2
105°	128.3	221.7	965.0	1248.6	1232.6
107.5°	159.7	241.1	935.3	1414.9	1452.6
110°	181.5	257.6	887.2	1486.7	1557.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	203.4	274.1	844.6	1504.2	1625.1
115°	234.8	300.2	775.3	1469.8	1639.3
117.5°	265.9	327.6	734.6	1390.8	1589.3
120°	286.6	344.0	708.4	1328.7	1536.9
122.5°	308.5	361.6	692.0	1265.3	1470.3
125°	334.4	385.1	672.9	1168.9	1373.1
127.5°	360.1	407.9	659.5	1087.3	1266.7
130°	375.4	422.1	655.2	1030.4	1206.6
132.5°	389.6	438.4	648.6	989.4	1138.9
135°	410.9	458.9	645.6	921.8	1060.6
137.5°	431.1	479.4	636.1	875.9	980.6
140°	446.3	490.4	636.1	843.0	939.1
142.5°	461.6	505.7	630.6	814.3	895.4
145°	485.9	522.0	633.3	783.5	844.9
147.5°	508.6	543.5	631.7	748.1	798.8
150°	522.8	553.5	636.1	732.5	772.6
152.5°	538.1	567.7	635.0	716.0	751.8
155°	556.9	580.9	641.5	694.0	719.3
157.5°	579.6	600.1	640.2	685.5	700.5
160°	588.3	605.6	645.6	674.5	685.2
162.5°	602.5	617.7	643.4	671.2	677.6
165°	615.6	624.9	649.7	659.5	668.8
167.5°	631.7	637.8	648.1	658.7	659.0
170°	636.1	640.1	652.4	651.2	657.9
172.5°	643.7	646.6	649.2	652.1	648.1
175°	651.1	648.4	651.1	645.6	644.3
177.5°	649.7	649.7	647.5	645.2	639.9
180°	644.3	644.3	644.3	644.3	644.3

(END OF REPORT)