

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

Brand: CORELITE

Report Number: P521696

Luminaire Tested: SQ4-F-150U-125D-92765-1D-UNV-STD-W-4_5000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521696
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-39)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-150U-125D-92765-1D-UNV-STD-W-4_5000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

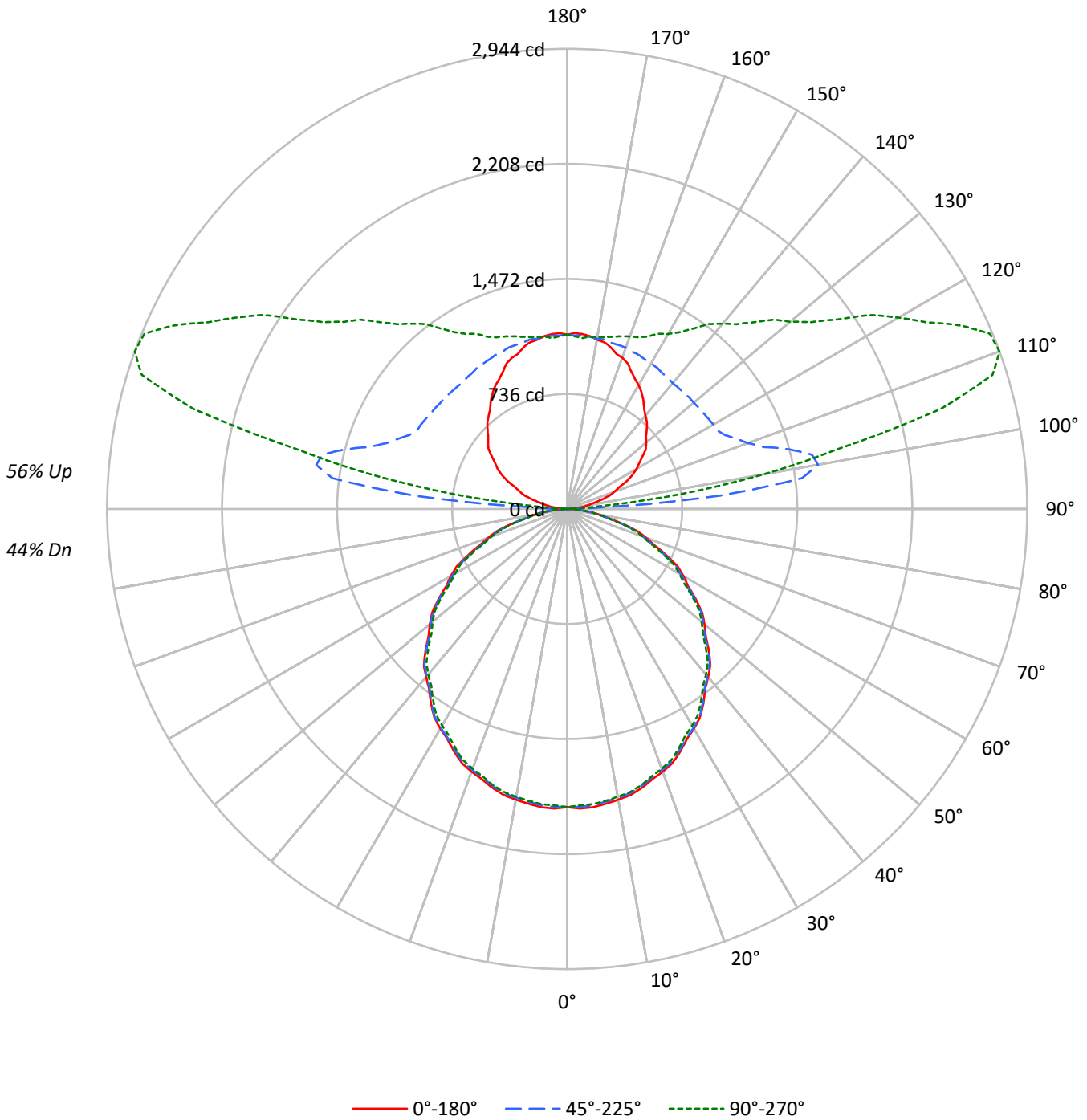
Lumens per Lamp: N/A
Luminaire Lumens: 12361.6 lumens
Efficiency: N/A
Efficacy: 115.7 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 106.8
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									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0													
RCR																																					
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44																			
1	96	92	88	85	88	84	81	78	70	68	65	57	55	54	45	43	42	37																			
2	88	80	74	69	80	74	68	64	61	57	54	50	47	44	39	37	36	31																			
3	80	70	63	57	73	65	58	53	54	49	45	44	40	37	34	32	30	26																			
4	73	62	54	48	66	57	50	45	48	42	38	39	35	32	31	28	26	22																			
5	67	55	47	41	61	51	44	38	42	37	33	35	31	28	28	25	22	19																			
6	61	49	41	35	56	45	38	33	38	33	29	31	27	24	25	22	20	17																			
7	57	44	37	31	52	41	34	29	35	29	25	28	24	21	23	20	17	15																			
8	53	40	33	27	48	37	30	26	31	26	22	26	22	19	21	18	15	13																			
9	49	37	29	24	45	34	27	23	29	23	20	24	20	17	19	16	14	12																			
10	46	34	26	22	42	31	25	20	26	21	18	22	18	15	18	15	13	11																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17596	17596	17596
5°	17740	17625	17557
10°	17691	17583	17514
15°	17637	17527	17478
20°	17554	17441	17359
25°	17423	17327	17210
30°	17286	17231	17052
35°	17109	17050	16838
40°	16910	16846	16645
45°	16722	16612	16353
50°	16458	16323	16128
55°	16155	16003	15751
60°	15849	15559	15290
65°	15234	14913	14616
70°	14478	13971	13801
75°	13090	12715	12494
80°	10786	10786	10616
85°	7643	8744	9189

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16722 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.5	1.5
10°-20°	516.9	4.2
20°-30°	781.8	6.3
30°-40°	941.7	7.6
40°-50°	977.7	7.9
50°-60°	886.3	7.2
60°-70°	676.1	5.5
70°-80°	378.2	3.1
80°-90°	98.3	0.8
90°-100°	507.9	4.1
100°-110°	1445.2	11.7
110°-120°	1384.7	11.2
120°-130°	1095.9	8.9
130°-140°	879.7	7.1
140°-150°	688.7	5.6
150°-160°	503.9	4.1
160°-170°	312.1	2.5
170°-180°	105.9	0.9
0°-30°	1479.2	12.0
0°-40°	2420.9	19.6
0°-60°	4284.9	34.7
0°-90°	5437.5	44.0
90°-120°	3337.9	27.0
90°-150°	6002.1	48.6
90°-180°	6924.0	56.0
0°-180°	12361.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1907	1907	1907	1907	1907	
5°	1916	1896	1903	1898	1896	182
15°	1846	1828	1835	1833	1830	521
25°	1712	1694	1702	1690	1691	789
35°	1519	1507	1514	1497	1495	950
45°	1282	1274	1273	1257	1253	987
55°	1004	1002	995	982	979	897
65°	698	694	683	675	670	692
75°	367	361	357	352	350	388
85°	72	79	83	83	87	90
90°	0	0	0	0	0	5
95°	55	219	983	340	210	63
105°	225	341	1473	2602	2473	238
115°	418	504	1117	2366	2778	411
125°	589	653	1066	1769	2115	527
135°	720	781	1053	1494	1689	556
145°	850	893	1062	1293	1409	531
155°	971	993	1087	1169	1216	449
165°	1072	1076	1100	1124	1140	302
175°	1123	1117	1113	1106	1098	106
180°	1115	1115	1115	1115	1115	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1907.2	1907.2	1907.2	1907.2	1907.2
2.5°	1918.9	1903.3	1908.0	1904.5	1898.0
5°	1915.5	1896.1	1903.0	1897.7	1895.7
7.5°	1900.9	1882.7	1888.5	1885.4	1882.9
10°	1888.3	1870.9	1876.8	1873.6	1869.5
12.5°	1874.1	1855.9	1862.6	1857.8	1856.1
15°	1846.5	1828.1	1835.0	1832.8	1829.8
17.5°	1813.0	1794.4	1801.5	1797.3	1794.8
20°	1787.9	1768.5	1776.4	1768.0	1768.0
22.5°	1759.4	1740.0	1749.6	1737.1	1739.6
25°	1711.5	1694.1	1702.1	1689.6	1690.6
27.5°	1659.4	1643.1	1653.4	1637.2	1636.6
30°	1622.6	1606.2	1617.4	1599.6	1600.6
32.5°	1581.6	1567.7	1577.2	1560.2	1559.6
35°	1519.0	1506.8	1513.8	1497.0	1495.0
37.5°	1450.8	1441.8	1444.8	1428.8	1428.0
40°	1404.0	1395.8	1398.7	1382.0	1382.0
42.5°	1356.3	1348.9	1351.0	1332.6	1332.6
45°	1281.6	1274.4	1273.2	1257.4	1253.3
47.5°	1201.8	1196.1	1192.4	1178.2	1176.3
50°	1146.6	1142.5	1137.2	1124.6	1123.6
52.5°	1088.9	1087.2	1081.1	1067.7	1066.7
55°	1004.3	1002.3	994.9	982.3	979.2
57.5°	915.8	913.8	905.1	892.7	889.7
60°	858.9	852.8	843.2	831.6	828.6
62.5°	797.0	790.0	780.4	769.8	769.1
65°	697.8	693.7	683.1	674.7	669.5
67.5°	604.5	595.3	584.8	577.9	576.9
70°	536.7	527.5	517.9	512.6	511.6
72.5°	468.9	461.3	452.6	447.3	447.1
75°	367.2	361.1	356.7	351.5	350.5
77.5°	266.6	264.9	263.2	257.6	257.6
80°	203.0	203.0	203.0	199.8	199.8
82.5°	146.0	150.1	150.2	148.8	148.8
85°	72.2	79.3	82.6	82.7	86.8
87.5°	20.1	27.5	32.6	33.5	36.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	17.0	89.9	208.5	60.7	45.8
95°	55.1	218.8	983.3	340.3	209.8
97.5°	101.3	256.3	1514.4	1083.6	742.6
100°	133.5	278.6	1629.6	1650.7	1271.5
102.5°	169.1	302.6	1604.2	2112.9	1781.8
105°	224.6	340.7	1472.8	2601.5	2473.1
107.5°	281.0	385.0	1319.4	2739.3	2853.7
110°	320.0	417.4	1231.2	2686.6	2943.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	357.3	449.7	1171.9	2561.9	2928.3
115°	417.5	504.5	1116.8	2365.9	2778.2
117.5°	470.5	552.1	1084.2	2151.6	2588.3
120°	512.8	581.2	1080.8	2029.1	2447.6
122.5°	546.7	615.1	1072.3	1921.6	2310.3
125°	589.1	653.4	1065.9	1768.9	2114.9
127.5°	635.3	695.4	1062.5	1677.6	1962.8
130°	659.1	719.1	1057.5	1614.1	1862.7
132.5°	684.5	742.9	1057.5	1564.5	1793.2
135°	720.5	780.6	1053.2	1494.2	1689.0
137.5°	754.4	812.9	1052.8	1434.7	1602.9
140°	779.9	839.9	1051.1	1385.4	1547.0
142.5°	808.7	858.8	1056.2	1346.0	1491.0
145°	849.8	893.3	1061.7	1293.2	1409.2
147.5°	885.0	927.2	1071.0	1239.9	1340.2
150°	915.5	944.5	1074.4	1222.2	1292.7
152.5°	939.2	969.9	1077.8	1198.4	1263.9
155°	970.6	993.4	1087.1	1168.7	1216.4
157.5°	1009.6	1023.2	1089.2	1155.3	1189.3
160°	1029.9	1040.3	1097.7	1145.0	1174.0
162.5°	1041.8	1053.8	1099.4	1136.4	1158.8
165°	1072.3	1076.4	1099.8	1123.5	1140.1
167.5°	1093.1	1089.3	1109.6	1120.3	1127.0
170°	1099.8	1097.8	1106.2	1108.5	1116.8
172.5°	1115.1	1108.1	1111.3	1105.1	1111.7
175°	1123.2	1116.9	1112.6	1106.0	1097.7
177.5°	1126.5	1116.6	1111.3	1104.5	1106.2
180°	1114.7	1114.7	1114.7	1114.7	1114.7

(END OF REPORT)