

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: P521692

Luminaire Tested: SQ4-F-150U-125D-92765-1D-UNV-STD-W-4_3000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521692
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_3000K
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 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11539.1 lumens
Efficiency: N/A
Efficacy: 107.9 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

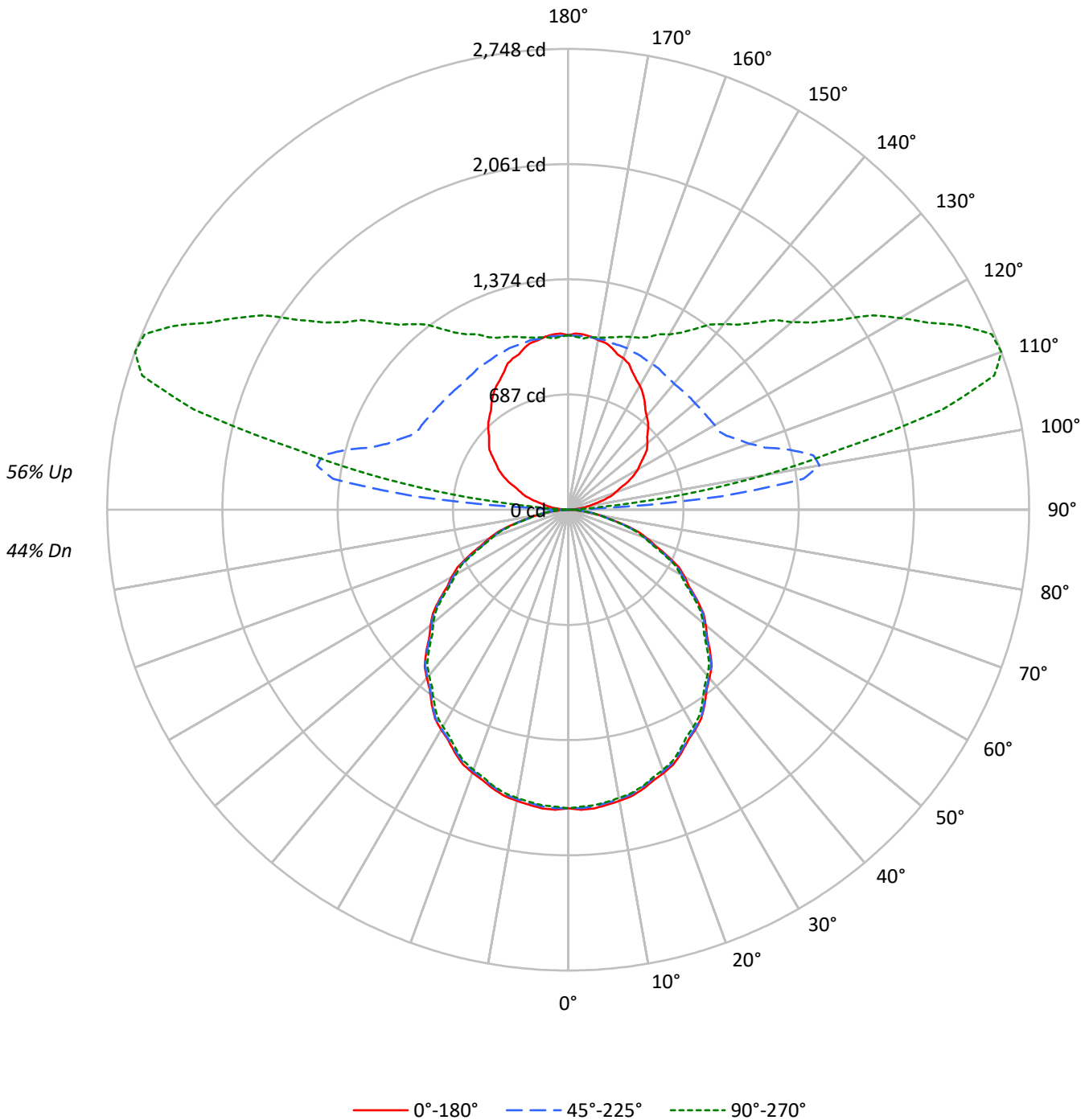
Input Watts (W): 106.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	16425	16425	16425
5°	16560	16452	16388
10°	16514	16414	16349
15°	16463	16361	16314
20°	16387	16281	16204
25°	16265	16175	16065
30°	16137	16085	15917
35°	15971	15916	15718
40°	15785	15726	15537
45°	15609	15507	15265
50°	15362	15236	15054
55°	15080	14939	14704
60°	14795	14524	14271
65°	14221	13922	13644
70°	13515	13040	12881
75°	12220	11871	11660
80°	10068	10068	9909
85°	7135	8162	8585

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 15609 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.5	1.5
10°-20°	482.5	4.2
20°-30°	729.8	6.3
30°-40°	879.0	7.6
40°-50°	912.6	7.9
50°-60°	827.3	7.2
60°-70°	631.1	5.5
70°-80°	353.0	3.1
80°-90°	91.8	0.8
90°-100°	474.1	4.1
100°-110°	1349.1	11.7
110°-120°	1292.6	11.2
120°-130°	1023.0	8.9
130°-140°	821.1	7.1
140°-150°	642.8	5.6
150°-160°	470.4	4.1
160°-170°	291.4	2.5
170°-180°	98.9	0.9
0°-30°	1380.8	12.0
0°-40°	2259.9	19.6
0°-60°	3999.8	34.7
0°-90°	5075.8	44.0
90°-120°	3115.8	27.0
90°-150°	5602.8	48.6
90°-180°	6463.0	56.0
0°-180°	11539.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1780	1780	1780	1780	1780	
5°	1788	1770	1776	1771	1770	170
15°	1724	1706	1713	1711	1708	486
25°	1598	1581	1589	1577	1578	736
35°	1418	1406	1413	1397	1396	886
45°	1196	1190	1188	1174	1170	922
55°	938	936	929	917	914	837
65°	651	648	638	630	625	646
75°	343	337	333	328	327	362
85°	67	74	77	77	81	84
90°	0	0	0	0	0	5
95°	51	204	918	318	196	59
105°	210	318	1375	2428	2308	222
115°	390	471	1042	2208	2593	384
125°	550	610	995	1651	1974	492
135°	673	729	983	1395	1577	519
145°	793	834	991	1207	1316	496
155°	906	927	1015	1091	1136	419
165°	1001	1005	1027	1049	1064	281
175°	1048	1043	1038	1032	1025	99
180°	1040	1040	1040	1040	1040	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1780.3	1780.3	1780.3	1780.3	1780.3
2.5°	1791.2	1776.7	1781.1	1777.8	1771.7
5°	1788.1	1770.0	1776.4	1771.4	1769.5
7.5°	1774.4	1757.4	1762.9	1759.9	1757.6
10°	1762.7	1746.5	1752.0	1748.9	1745.1
12.5°	1749.4	1732.4	1738.7	1734.2	1732.6
15°	1723.6	1706.5	1712.9	1710.9	1708.0
17.5°	1692.4	1675.0	1681.6	1677.7	1675.4
20°	1669.0	1650.8	1658.2	1650.4	1650.4
22.5°	1642.4	1624.2	1633.2	1621.5	1623.8
25°	1597.7	1581.4	1588.9	1577.2	1578.1
27.5°	1549.0	1533.8	1543.4	1528.3	1527.7
30°	1514.7	1499.4	1509.8	1493.2	1494.1
32.5°	1476.4	1463.4	1472.3	1456.4	1455.9
35°	1418.0	1406.5	1413.1	1397.4	1395.5
37.5°	1354.3	1345.9	1348.6	1333.8	1333.0
40°	1310.6	1302.9	1305.7	1290.0	1290.0
42.5°	1266.0	1259.1	1261.1	1244.0	1244.0
45°	1196.3	1189.6	1188.5	1173.7	1169.9
47.5°	1121.9	1116.5	1113.1	1099.8	1098.1
50°	1070.3	1066.5	1061.5	1049.8	1048.8
52.5°	1016.4	1014.9	1009.2	996.7	995.7
55°	937.5	935.6	928.7	916.9	914.1
57.5°	854.9	853.0	844.9	833.3	830.5
60°	801.8	796.0	787.1	776.3	773.4
62.5°	743.9	737.5	728.5	718.5	718.0
65°	651.4	647.6	637.7	629.8	625.0
67.5°	564.3	555.7	545.9	539.4	538.5
70°	501.0	492.4	483.4	478.5	477.5
72.5°	437.7	430.6	422.5	417.6	417.4
75°	342.8	337.0	333.0	328.1	327.1
77.5°	248.8	247.3	245.7	240.4	240.4
80°	189.5	189.5	189.5	186.5	186.5
82.5°	136.3	140.1	140.2	138.9	138.9
85°	67.4	74.1	77.1	77.2	81.1
87.5°	18.8	25.6	30.5	31.3	33.6
90°	0.0	0.0	0.0	0.0	0.0
92.5°	15.8	83.9	194.7	56.7	42.7
95°	51.4	204.2	917.9	317.7	195.8
97.5°	94.6	239.2	1413.6	1011.5	693.2
100°	124.6	260.0	1521.2	1540.9	1186.9
102.5°	157.9	282.4	1497.5	1972.3	1663.2
105°	209.7	318.0	1374.8	2428.4	2308.5
107.5°	262.3	359.4	1231.6	2557.0	2663.8
110°	298.7	389.6	1149.3	2507.8	2747.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	333.5	419.8	1093.9	2391.5	2733.4
115°	389.7	470.9	1042.5	2208.5	2593.4
117.5°	439.2	515.4	1012.0	2008.4	2416.1
120°	478.7	542.5	1008.9	1894.1	2284.8
122.5°	510.4	574.2	1001.0	1793.7	2156.6
125°	549.9	609.9	995.0	1651.2	1974.2
127.5°	593.1	649.1	991.9	1566.0	1832.2
130°	615.2	671.3	987.1	1506.7	1738.8
132.5°	638.9	693.5	987.1	1460.4	1673.9
135°	672.6	728.7	983.2	1394.8	1576.6
137.5°	704.2	758.8	982.8	1339.2	1496.3
140°	728.0	784.1	981.2	1293.2	1444.1
142.5°	754.9	801.7	985.9	1256.4	1391.8
145°	793.2	833.9	991.1	1207.2	1315.5
147.5°	826.1	865.5	999.8	1157.4	1251.0
150°	854.6	881.6	1002.9	1140.9	1206.7
152.5°	876.7	905.4	1006.1	1118.7	1179.8
155°	906.0	927.3	1014.8	1091.0	1135.5
157.5°	942.4	955.2	1016.8	1078.4	1110.1
160°	961.4	971.1	1024.7	1068.8	1095.9
162.5°	972.5	983.7	1026.3	1060.8	1081.7
165°	1001.0	1004.8	1026.7	1048.8	1064.3
167.5°	1020.3	1016.9	1035.8	1045.8	1052.0
170°	1026.7	1024.7	1032.6	1034.8	1042.5
172.5°	1040.9	1034.3	1037.4	1031.6	1037.7
175°	1048.4	1042.6	1038.5	1032.4	1024.7
177.5°	1051.6	1042.3	1037.4	1031.1	1032.6
180°	1040.5	1040.5	1040.5	1040.5	1040.5

(END OF REPORT)