

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: P521381

Luminaire Tested: SQ4-F-025U-125D-92765-1D-UNV-STD-W-4_3500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521381
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-025U-125D-92765-1D-UNV-STD-W-4_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7134.3 lumens
Efficiency: N/A
Efficacy: 102.2 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: Semi-Direct

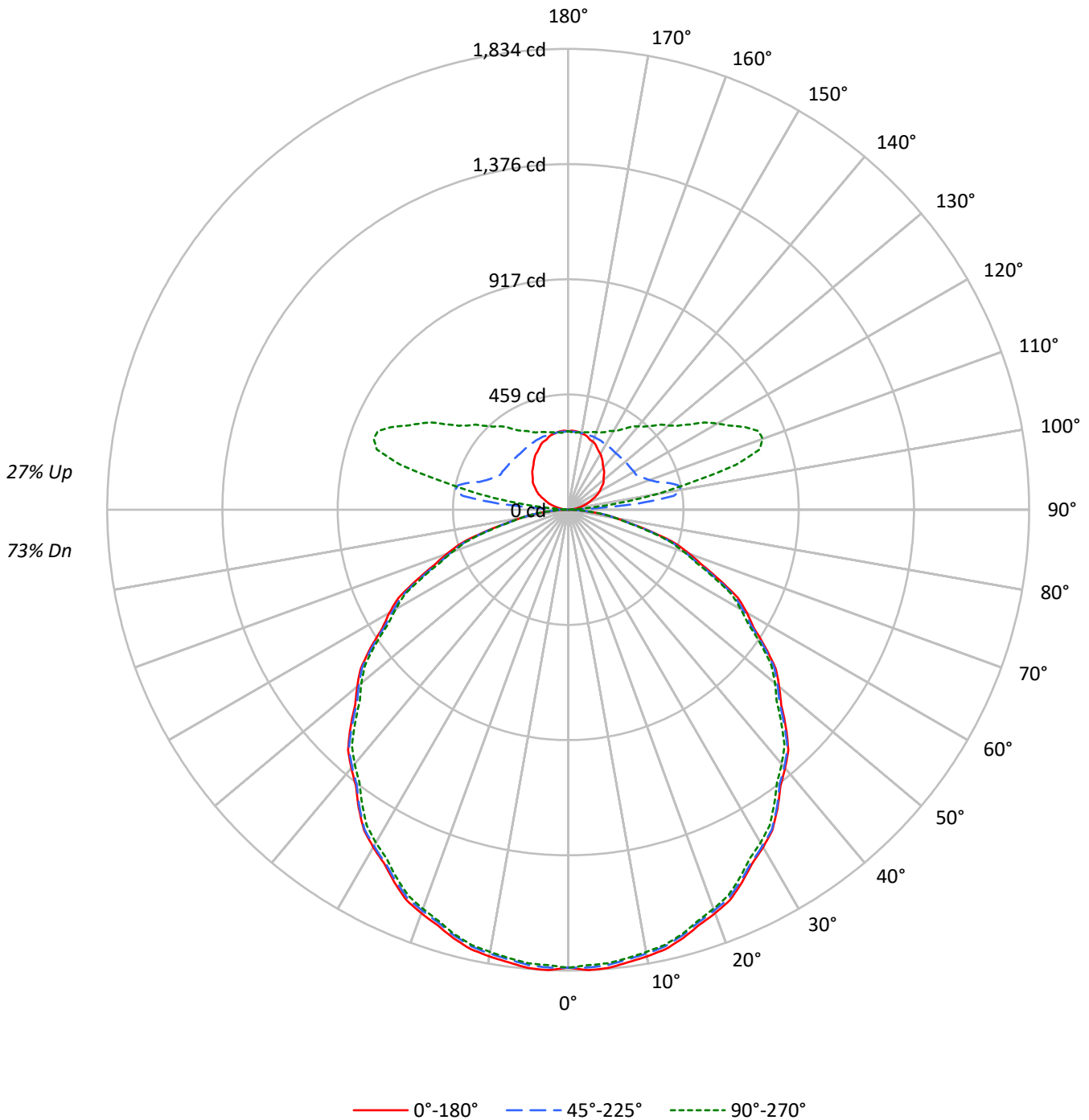
Input Watts (W): 69.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					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	50	30	10	0
RCR																					
0	113	113	113	113	107	107	107	107	96	96	96	86	86	86	77	77	77	77	77	77	73
1	103	98	94	90	97	93	90	86	84	81	79	76	74	72	68	66	65	65	65	65	61
2	93	85	79	73	88	81	75	71	73	69	65	66	63	59	59	57	54	54	54	54	51
3	85	75	67	61	80	71	64	59	65	59	54	58	54	50	52	49	46	46	46	46	43
4	78	66	58	51	73	63	56	50	57	51	46	52	47	43	47	43	39	39	39	39	36
5	71	59	50	44	67	56	48	43	51	45	40	46	41	37	42	38	34	34	34	34	31
6	66	53	44	38	62	51	43	37	46	40	35	42	36	32	38	33	30	30	30	30	27
7	61	48	40	34	58	46	38	33	42	35	31	38	33	29	35	30	27	27	27	27	24
8	57	44	35	30	53	42	34	29	38	32	27	35	29	25	32	27	24	24	24	24	22
9	53	40	32	27	50	38	31	26	35	29	24	32	27	23	29	25	21	21	21	21	19
10	49	37	29	24	47	35	28	23	32	26	22	30	24	21	27	23	19	19	19	19	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16819	16819	16819
5°	16958	16847	16782
10°	16910	16807	16742
15°	16859	16754	16706
20°	16780	16672	16593
25°	16654	16563	16451
30°	16524	16470	16300
35°	16354	16298	16095
40°	16163	16103	15910
45°	15984	15879	15631
50°	15731	15602	15416
55°	15442	15297	15056
60°	15149	14873	14614
65°	14561	14256	13972
70°	13838	13353	13191
75°	12512	12156	11942
80°	10308	10308	10148
85°	7304	8363	8786

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 15984 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.5	2.4
10°-20°	494.1	6.9
20°-30°	747.3	10.5
30°-40°	900.1	12.6
40°-50°	934.5	13.1
50°-60°	847.2	11.9
60°-70°	646.3	9.1
70°-80°	361.5	5.1
80°-90°	94.0	1.3
90°-100°	142.1	2.0
100°-110°	404.2	5.7
110°-120°	387.3	5.4
120°-130°	306.6	4.3
130°-140°	246.0	3.4
140°-150°	192.6	2.7
150°-160°	140.9	2.0
160°-170°	87.3	1.2
170°-180°	29.6	0.4
0°-30°	1414.0	19.8
0°-40°	2314.1	32.4
0°-60°	4095.8	57.4
0°-90°	5197.6	72.9
90°-120°	933.6	13.1
90°-150°	1678.9	23.5
90°-180°	1937.0	27.2
0°-180°	7134.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1823	1823	1823	1823	1823	
5°	1831	1812	1819	1814	1812	174
15°	1765	1747	1754	1752	1749	498
25°	1636	1619	1627	1615	1616	754
35°	1452	1440	1447	1431	1429	908
45°	1225	1218	1217	1202	1198	944
55°	960	958	951	939	936	858
65°	667	663	653	645	640	661
75°	351	345	341	336	335	371
85°	69	76	79	79	83	86
90°	0	0	0	0	0	3
95°	15	61	275	95	59	18
105°	63	95	412	728	692	66
115°	117	141	312	662	777	115
125°	165	183	298	495	592	147
135°	202	218	295	418	472	156
145°	238	250	297	362	394	148
155°	272	278	304	327	340	126
165°	300	301	308	314	319	84
175°	314	312	311	309	307	30
180°	312	312	312	312	312	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1823.0	1823.0	1823.0	1823.0	1823.0
2.5°	1834.2	1819.3	1823.8	1820.5	1814.2
5°	1831.0	1812.4	1819.0	1814.0	1812.0
7.5°	1817.0	1799.6	1805.2	1802.1	1799.8
10°	1805.0	1788.4	1794.0	1790.9	1787.0
12.5°	1791.4	1774.0	1780.4	1775.8	1774.2
15°	1765.0	1747.4	1754.0	1751.9	1749.0
17.5°	1733.0	1715.2	1722.0	1717.9	1715.6
20°	1709.0	1690.4	1698.0	1690.0	1690.0
22.5°	1681.8	1663.2	1672.4	1660.5	1662.8
25°	1636.0	1619.4	1627.0	1615.0	1616.0
27.5°	1586.2	1570.6	1580.4	1565.0	1564.4
30°	1551.0	1535.4	1546.0	1529.0	1530.0
32.5°	1511.8	1498.5	1507.6	1491.4	1490.8
35°	1452.0	1440.3	1447.0	1431.0	1429.0
37.5°	1386.8	1378.2	1381.0	1365.8	1365.0
40°	1342.0	1334.2	1337.0	1321.0	1321.0
42.5°	1296.4	1289.4	1291.4	1273.8	1273.8
45°	1225.0	1218.2	1217.0	1201.9	1198.0
47.5°	1148.8	1143.3	1139.8	1126.2	1124.4
50°	1096.0	1092.1	1087.0	1075.0	1074.0
52.5°	1040.8	1039.2	1033.4	1020.6	1019.6
55°	960.0	958.0	951.0	938.9	936.0
57.5°	875.4	873.4	865.2	853.3	850.4
60°	821.0	815.1	806.0	794.9	792.0
62.5°	761.8	755.2	746.0	735.8	735.2
65°	667.0	663.1	653.0	644.9	640.0
67.5°	577.8	569.0	559.0	552.4	551.4
70°	513.0	504.2	495.0	490.0	489.0
72.5°	448.2	441.0	432.6	427.6	427.4
75°	351.0	345.1	341.0	336.0	335.0
77.5°	254.8	253.2	251.6	246.2	246.2
80°	194.0	194.0	194.0	191.0	191.0
82.5°	139.6	143.5	143.6	142.2	142.2
85°	69.0	75.8	79.0	79.1	83.0
87.5°	19.2	26.2	31.2	32.1	34.4
90°	0.0	0.0	0.0	0.0	0.0
92.5°	4.7	25.1	58.3	17.0	12.8
95°	15.4	61.2	275.0	95.2	58.7
97.5°	28.3	71.7	423.6	303.1	207.7
100°	37.3	77.9	455.8	461.7	355.7
102.5°	47.3	84.6	448.7	591.0	498.4
105°	62.8	95.3	412.0	727.7	691.7
107.5°	78.6	107.7	369.0	766.2	798.2
110°	89.5	116.7	344.4	751.5	823.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	99.9	125.8	327.8	716.6	819.1
115°	116.8	141.1	312.4	661.8	777.1
117.5°	131.6	154.4	303.3	601.8	724.0
120°	143.4	162.6	302.3	567.6	684.6
122.5°	152.9	172.1	299.9	537.5	646.2
125°	164.8	182.8	298.2	494.8	591.6
127.5°	177.7	194.5	297.2	469.3	549.0
130°	184.3	201.2	295.8	451.5	521.0
132.5°	191.5	207.8	295.8	437.6	501.6
135°	201.5	218.3	294.6	417.9	472.4
137.5°	211.0	227.4	294.5	401.3	448.4
140°	218.1	234.9	294.0	387.5	432.7
142.5°	226.2	240.2	295.4	376.5	417.1
145°	237.7	249.9	297.0	361.7	394.2
147.5°	247.5	259.4	299.6	346.8	374.9
150°	256.1	264.2	300.5	341.9	361.6
152.5°	262.7	271.3	301.5	335.2	353.5
155°	271.5	277.9	304.1	326.9	340.2
157.5°	282.4	286.2	304.7	323.1	332.7
160°	288.1	291.0	307.0	320.3	328.4
162.5°	291.4	294.8	307.5	317.9	324.1
165°	299.9	301.1	307.6	314.3	318.9
167.5°	305.7	304.7	310.4	313.4	315.2
170°	307.6	307.1	309.4	310.1	312.4
172.5°	311.9	309.9	310.8	309.1	311.0
175°	314.2	312.4	311.2	309.4	307.0
177.5°	315.1	312.3	310.8	309.0	309.4
180°	311.8	311.8	311.8	311.8	311.8

(END OF REPORT)