

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: P521487

Luminaire Tested: SQ4-F-075U-125D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521487
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-075U-125D-92765-1D-UNV-STD-W-4_4500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8758.8 lumens
Efficiency: N/A
Efficacy: 110.3 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

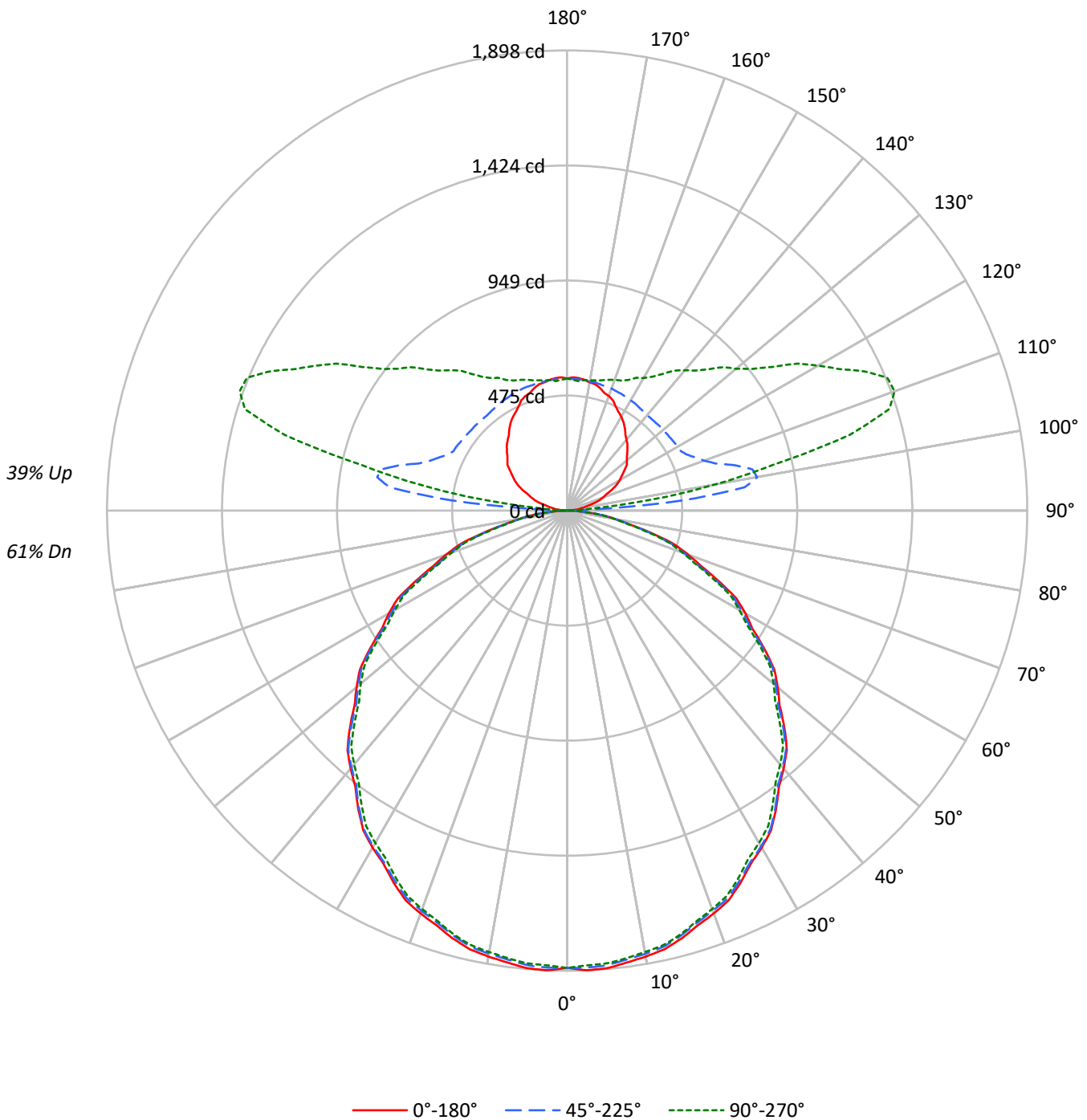
Input Watts (W): 79.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	61				
1	100	96	92	88	94	90	86	83	78	76	73	68	66	64	59	57	56	51				
2	91	83	77	72	85	78	73	68	69	64	60	60	56	53	51	49	47	43				
3	83	73	65	59	77	69	62	56	60	55	51	52	48	45	45	42	40	36				
4	76	65	56	50	71	61	53	48	53	48	43	47	42	38	40	37	34	31				
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	35	43	37	32	38	33	29	33	29	26	23				
7	59	47	38	33	55	44	36	31	39	33	28	34	29	26	30	26	23	20				
8	55	42	34	29	51	40	33	28	36	29	25	31	26	23	27	23	20	18				
9	51	39	31	26	48	37	29	25	33	27	23	29	24	20	25	21	18	16				
10	48	35	28	23	45	34	27	22	30	24	20	27	22	18	23	20	17	15				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17403	17403	17403
5°	17547	17432	17364
10°	17498	17391	17322
15°	17444	17335	17286
20°	17362	17251	17169
25°	17233	17138	17022
30°	17098	17042	16866
35°	16922	16863	16654
40°	16724	16662	16463
45°	16538	16431	16174
50°	16278	16143	15951
55°	15978	15828	15579
60°	15675	15389	15122
65°	15068	14751	14457
70°	14319	13817	13650
75°	12947	12576	12355
80°	10664	10664	10499
85°	7558	8649	9093

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16538 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.5	2.0
10°-20°	511.3	5.8
20°-30°	773.2	8.8
30°-40°	931.4	10.6
40°-50°	967.0	11.0
50°-60°	876.6	10.0
60°-70°	668.7	7.6
70°-80°	374.0	4.3
80°-90°	97.2	1.1
90°-100°	248.0	2.8
100°-110°	705.7	8.1
110°-120°	676.1	7.7
120°-130°	535.1	6.1
130°-140°	429.5	4.9
140°-150°	336.2	3.8
150°-160°	246.0	2.8
160°-170°	152.4	1.7
170°-180°	51.7	0.6
0°-30°	1463.1	16.7
0°-40°	2394.4	27.3
0°-60°	4238.0	48.4
0°-90°	5378.0	61.4
90°-120°	1629.8	18.6
90°-150°	2930.6	33.5
90°-180°	3381.0	38.6
0°-180°	8758.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1886	1886	1886	1886	1886	
5°	1895	1875	1882	1877	1875	180
15°	1826	1808	1815	1813	1810	515
25°	1693	1676	1684	1671	1672	780
35°	1502	1490	1497	1481	1479	939
45°	1268	1260	1259	1244	1240	977
55°	993	991	984	972	968	887
65°	690	686	676	667	662	684
75°	363	357	353	348	347	384
85°	71	78	82	82	86	89
90°	0	0	0	0	0	4
95°	27	107	480	166	102	31
105°	110	166	719	1270	1208	116
115°	204	246	545	1155	1356	201
125°	288	319	520	864	1033	257
135°	352	381	514	730	825	271
145°	415	436	518	631	688	259
155°	474	485	531	571	594	219
165°	524	526	537	549	557	147
175°	548	545	543	540	536	52
180°	544	544	544	544	544	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1886.3	1886.3	1886.3	1886.3	1886.3
2.5°	1897.9	1882.5	1887.1	1883.7	1877.2
5°	1894.6	1875.4	1882.2	1876.9	1874.9
7.5°	1880.1	1862.1	1867.9	1864.7	1862.3
10°	1867.7	1850.5	1856.3	1853.1	1849.0
12.5°	1853.6	1835.6	1842.2	1837.4	1835.8
15°	1826.3	1808.1	1814.9	1812.8	1809.7
17.5°	1793.2	1774.8	1781.8	1777.6	1775.2
20°	1768.3	1749.1	1757.0	1748.7	1748.7
22.5°	1740.2	1721.0	1730.5	1718.1	1720.5
25°	1692.8	1675.6	1683.5	1671.1	1672.1
27.5°	1641.3	1625.1	1635.3	1619.3	1618.7
30°	1604.9	1588.7	1599.7	1582.1	1583.1
32.5°	1564.3	1550.5	1559.9	1543.2	1542.6
35°	1502.4	1490.3	1497.2	1480.6	1478.6
37.5°	1435.0	1426.0	1429.0	1413.2	1412.4
40°	1388.6	1380.5	1383.4	1366.9	1366.9
42.5°	1341.4	1334.1	1336.2	1318.0	1318.0
45°	1267.5	1260.5	1259.3	1243.6	1239.6
47.5°	1188.7	1183.0	1179.4	1165.3	1163.4
50°	1134.1	1130.0	1124.7	1112.3	1111.3
52.5°	1076.9	1075.3	1069.3	1056.0	1055.0
55°	993.3	991.3	984.0	971.5	968.5
57.5°	905.8	903.8	895.2	883.0	879.9
60°	849.5	843.4	834.0	822.5	819.5
62.5°	788.3	781.4	771.9	761.3	760.7
65°	690.2	686.1	675.7	667.3	662.2
67.5°	597.9	588.8	578.4	571.6	570.5
70°	530.8	521.7	512.2	507.0	506.0
72.5°	463.8	456.3	447.6	442.4	442.2
75°	363.2	357.1	352.8	347.6	346.6
77.5°	263.6	262.0	260.3	254.7	254.7
80°	200.7	200.7	200.7	197.6	197.6
82.5°	144.4	148.5	148.6	147.1	147.1
85°	71.4	78.5	81.7	81.8	85.9
87.5°	19.9	27.2	32.3	33.2	35.6
90°	0.0	0.0	0.0	0.0	0.0
92.5°	8.3	43.9	101.8	29.6	22.3
95°	26.9	106.8	480.1	166.2	102.4
97.5°	49.5	125.1	739.4	529.1	362.6
100°	65.2	136.0	795.7	806.0	620.8
102.5°	82.6	147.7	783.3	1031.7	870.0
105°	109.7	166.3	719.1	1270.2	1207.5
107.5°	137.2	188.0	644.2	1337.5	1393.4
110°	156.2	203.8	601.2	1311.8	1437.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	174.5	219.6	572.2	1250.9	1429.8
115°	203.8	246.3	545.3	1155.2	1356.5
117.5°	229.7	269.6	529.4	1050.5	1263.8
120°	250.4	283.8	527.7	990.7	1195.1
122.5°	267.0	300.3	523.6	938.3	1128.1
125°	287.7	319.0	520.5	863.7	1032.7
127.5°	310.2	339.5	518.8	819.1	958.4
130°	321.8	351.1	516.3	788.1	909.5
132.5°	334.2	362.7	516.3	763.9	875.6
135°	351.8	381.1	514.3	729.6	824.7
137.5°	368.4	396.9	514.0	700.5	782.7
140°	380.8	410.1	513.2	676.4	755.3
142.5°	394.8	419.3	515.7	657.2	728.0
145°	414.9	436.2	518.4	631.4	688.1
147.5°	432.1	452.7	522.9	605.4	654.4
150°	447.0	461.2	524.6	596.8	631.2
152.5°	458.6	473.6	526.3	585.1	617.1
155°	473.9	485.0	530.8	570.7	593.9
157.5°	492.9	499.6	531.8	564.1	580.7
160°	502.9	507.9	536.0	559.1	573.2
162.5°	508.7	514.5	536.8	554.9	565.8
165°	523.6	525.6	537.0	548.6	556.7
167.5°	533.7	531.9	541.8	547.0	550.3
170°	537.0	536.0	540.1	541.3	545.3
172.5°	544.5	541.0	542.6	539.6	542.8
175°	548.4	545.4	543.2	540.0	536.0
177.5°	550.1	545.2	542.6	539.3	540.1
180°	544.3	544.3	544.3	544.3	544.3

(END OF REPORT)