

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: P521383

Luminaire Tested: SQ4-F-025U-125D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521383
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_4500K
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 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7382.0 lumens
Efficiency: N/A
Efficacy: 105.9 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: Semi-Direct

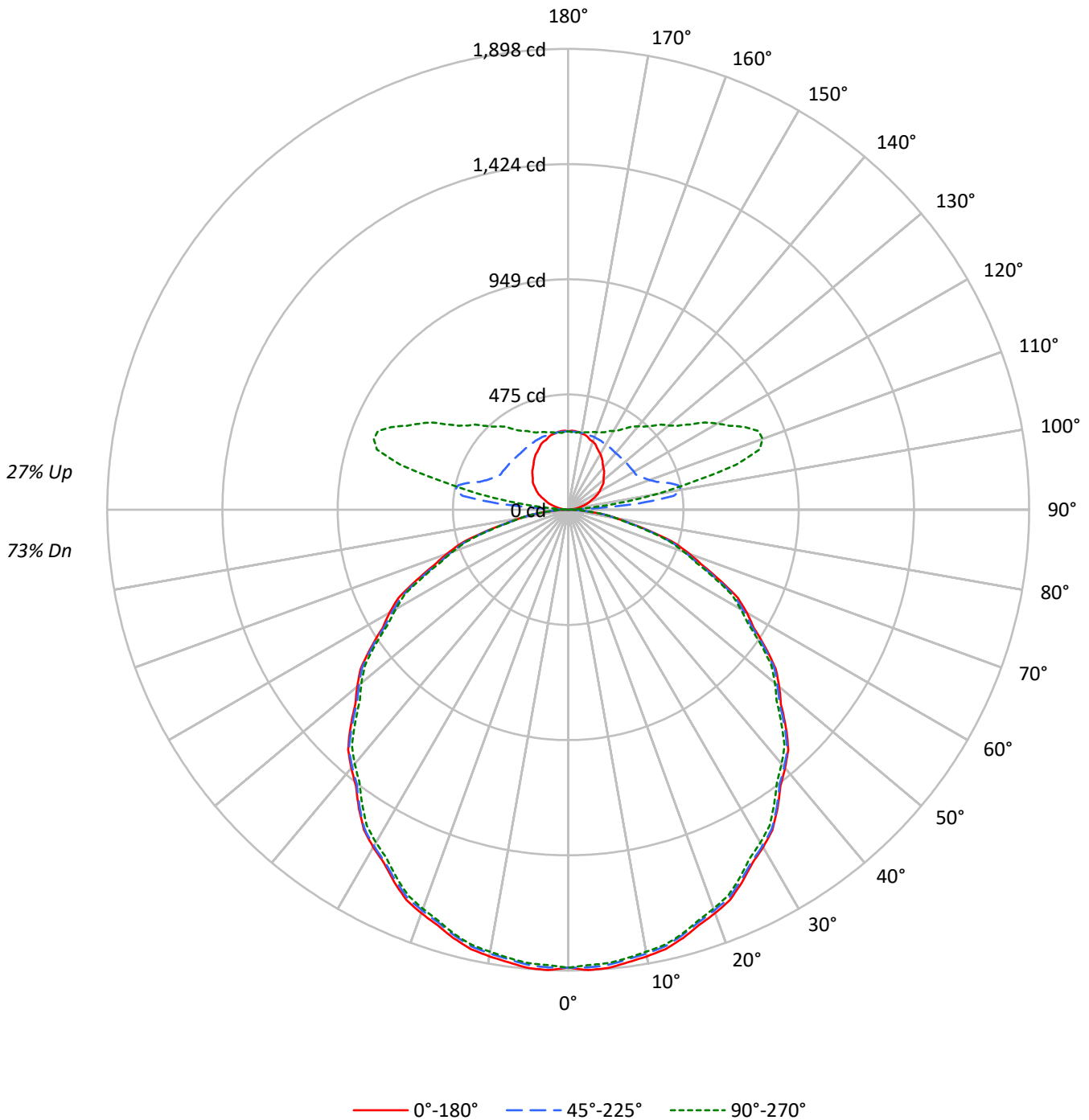
Input Watts (W): 69.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

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

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	2.4
10°-20°	511.3	6.9
20°-30°	773.2	10.5
30°-40°	931.4	12.6
40°-50°	967.0	13.1
50°-60°	876.6	11.9
60°-70°	668.7	9.1
70°-80°	374.0	5.1
80°-90°	97.2	1.3
90°-100°	147.0	2.0
100°-110°	418.3	5.7
110°-120°	400.8	5.4
120°-130°	317.2	4.3
130°-140°	254.6	3.4
140°-150°	199.3	2.7
150°-160°	145.8	2.0
160°-170°	90.3	1.2
170°-180°	30.7	0.4
0°-30°	1463.1	19.8
0°-40°	2394.4	32.4
0°-60°	4238.0	57.4
0°-90°	5378.0	72.9
90°-120°	966.1	13.1
90°-150°	1737.2	23.5
90°-180°	2004.0	27.1
0°-180°	7382.0	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	3
95°	16	63	285	98	61	18
105°	65	99	426	753	716	69
115°	121	146	323	685	804	119
125°	170	189	308	512	612	153
135°	208	226	305	432	489	161
145°	246	258	307	374	408	154
155°	281	288	315	338	352	130
165°	310	312	318	325	330	87
175°	325	323	322	320	318	31
180°	323	323	323	323	323	

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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°	4.9	26.0	60.4	17.6	13.2
95°	15.9	63.3	284.6	98.5	60.7
97.5°	29.3	74.2	438.3	313.6	214.9
100°	38.6	80.6	471.7	477.7	368.0
102.5°	48.9	87.6	464.3	611.5	515.7
105°	65.0	98.6	426.3	752.9	715.8
107.5°	81.3	111.4	381.9	792.8	825.9
110°	92.6	120.8	356.3	777.6	851.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	103.4	130.2	339.2	741.5	847.5
115°	120.8	146.0	323.2	684.7	804.1
117.5°	136.2	159.8	313.8	622.7	749.1
120°	148.4	168.2	312.8	587.3	708.4
122.5°	158.2	178.0	310.3	556.2	668.7
125°	170.5	189.1	308.5	512.0	612.1
127.5°	183.9	201.3	307.5	485.6	568.1
130°	190.7	208.1	306.1	467.2	539.1
132.5°	198.1	215.0	306.1	452.8	519.0
135°	208.5	225.9	304.8	432.5	488.8
137.5°	218.3	235.3	304.7	415.2	463.9
140°	225.7	243.1	304.2	401.0	447.7
142.5°	234.0	248.6	305.7	389.6	431.5
145°	245.9	258.5	307.3	374.3	407.9
147.5°	256.1	268.4	310.0	358.8	387.9
150°	265.0	273.4	311.0	353.7	374.1
152.5°	271.8	280.7	311.9	346.8	365.8
155°	280.9	287.5	314.6	338.3	352.1
157.5°	292.2	296.2	315.3	334.4	344.2
160°	298.1	301.1	317.7	331.4	339.8
162.5°	301.5	305.0	318.2	328.9	335.4
165°	310.3	311.5	318.3	325.2	330.0
167.5°	316.4	315.3	321.1	324.3	326.2
170°	318.3	317.7	320.2	320.8	323.2
172.5°	322.7	320.7	321.6	319.8	321.8
175°	325.1	323.3	322.0	320.1	317.7
177.5°	326.0	323.2	321.6	319.7	320.2
180°	322.6	322.6	322.6	322.6	322.6

(END OF REPORT)