

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: P521382

Luminaire Tested: SQ4-F-025U-125D-92765-1D-UNV-STD-W-4_4000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521382
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_4000K
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 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7264.7 lumens
Efficiency: N/A
Efficacy: 104.1 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

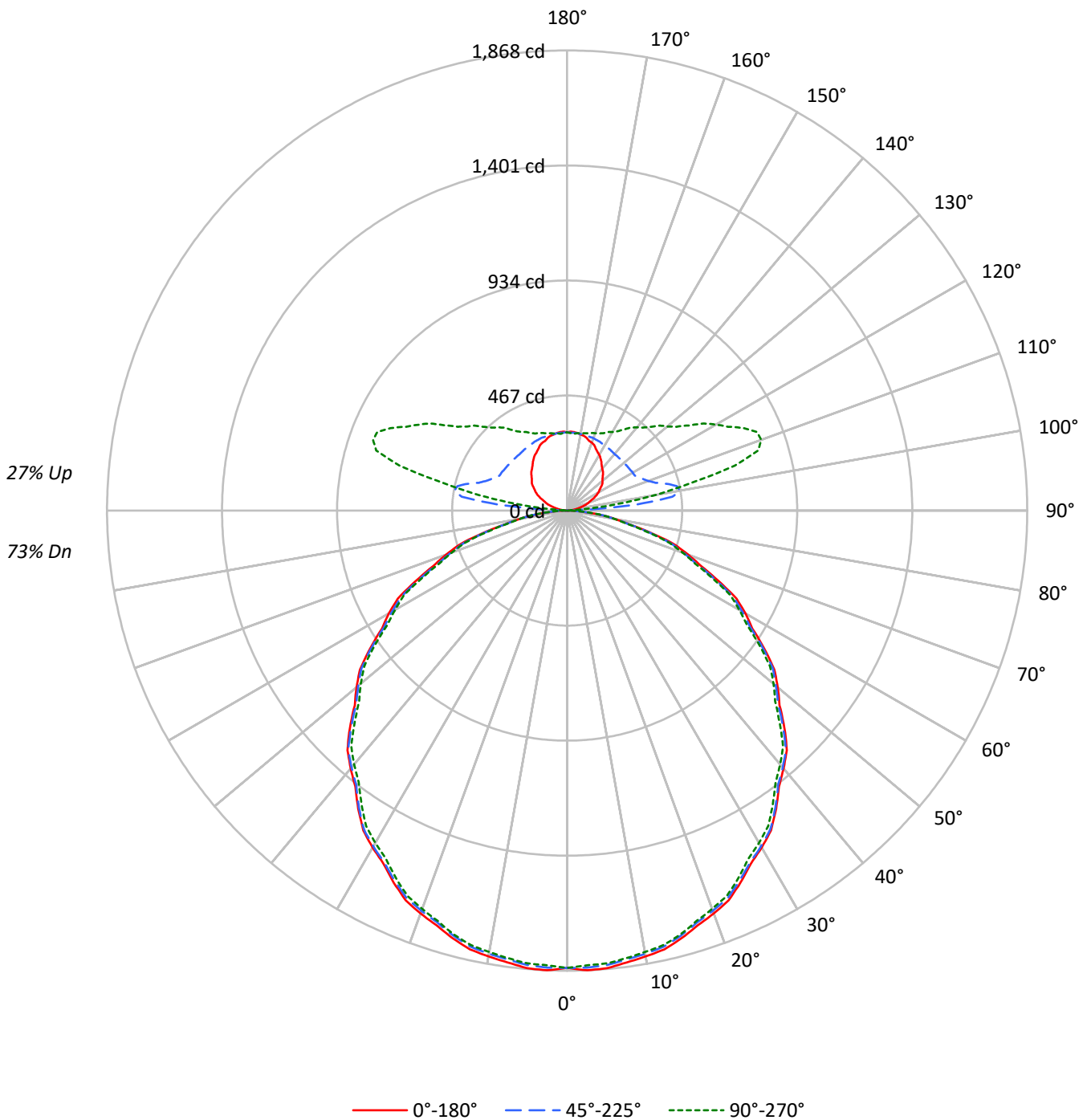
Input Watts (W): 69.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	17128	17128	17128
5°	17268	17155	17089
10°	17219	17114	17048
15°	17167	17060	17012
20°	17087	16977	16896
25°	16959	16866	16752
30°	16826	16772	16598
35°	16654	16596	16389
40°	16459	16398	16202
45°	16276	16170	15917
50°	16020	15888	15697
55°	15725	15577	15331
60°	15426	15144	14882
65°	14828	14515	14227
70°	14092	13598	13431
75°	12740	12377	12159
80°	10493	10493	10334
85°	7442	8511	8945

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16276 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.7	2.4
10°-20°	503.2	6.9
20°-30°	761.0	10.5
30°-40°	916.6	12.6
40°-50°	951.6	13.1
50°-60°	862.7	11.9
60°-70°	658.1	9.1
70°-80°	368.1	5.1
80°-90°	95.7	1.3
90°-100°	144.7	2.0
100°-110°	411.6	5.7
110°-120°	394.4	5.4
120°-130°	312.1	4.3
130°-140°	250.5	3.4
140°-150°	196.1	2.7
150°-160°	143.5	2.0
160°-170°	88.9	1.2
170°-180°	30.2	0.4
0°-30°	1439.8	19.8
0°-40°	2356.4	32.4
0°-60°	4170.7	57.4
0°-90°	5292.6	72.9
90°-120°	950.7	13.1
90°-150°	1709.6	23.5
90°-180°	1972.0	27.1
0°-180°	7264.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1856	1856	1856	1856	1856	
5°	1864	1846	1852	1847	1845	177
15°	1797	1779	1786	1784	1781	507
25°	1666	1649	1657	1645	1646	768
35°	1479	1467	1474	1457	1455	924
45°	1247	1240	1239	1224	1220	961
55°	978	976	968	956	953	873
65°	679	675	665	657	652	673
75°	357	351	347	342	341	378
85°	70	77	80	80	84	87
90°	0	0	0	0	0	3
95°	16	62	280	97	60	18
105°	64	97	420	741	704	68
115°	119	144	318	674	791	117
125°	168	186	304	504	602	150
135°	205	222	300	426	481	158
145°	242	254	302	368	401	151
155°	276	283	310	333	346	128
165°	305	307	313	320	325	86
175°	320	318	317	315	313	30
180°	318	318	318	318	318	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1856.4	1856.4	1856.4	1856.4	1856.4
2.5°	1867.8	1852.6	1857.2	1853.8	1847.4
5°	1864.5	1845.6	1852.3	1847.1	1845.2
7.5°	1850.2	1832.5	1838.2	1835.1	1832.7
10°	1838.0	1821.1	1826.8	1823.7	1819.7
12.5°	1824.2	1806.5	1813.0	1808.3	1806.7
15°	1797.3	1779.4	1786.1	1784.0	1781.0
17.5°	1764.7	1746.6	1753.5	1749.4	1747.0
20°	1740.3	1721.3	1729.1	1720.9	1720.9
22.5°	1712.6	1693.7	1703.0	1690.8	1693.2
25°	1665.9	1649.0	1656.8	1644.6	1645.6
27.5°	1615.2	1599.3	1609.3	1593.6	1593.0
30°	1579.4	1563.4	1574.3	1557.0	1558.0
32.5°	1539.5	1525.9	1535.2	1518.7	1518.1
35°	1478.6	1466.6	1473.5	1457.1	1455.1
37.5°	1412.2	1403.4	1406.3	1390.8	1390.0
40°	1366.6	1358.6	1361.5	1345.2	1345.2
42.5°	1320.1	1312.9	1315.0	1297.1	1297.1
45°	1247.4	1240.4	1239.3	1223.9	1219.9
47.5°	1169.8	1164.2	1160.7	1146.8	1145.0
50°	1116.1	1112.1	1106.9	1094.6	1093.6
52.5°	1059.8	1058.2	1052.3	1039.2	1038.3
55°	977.6	975.6	968.4	956.1	953.1
57.5°	891.4	889.4	881.0	868.9	866.0
60°	836.0	830.0	820.7	809.5	806.5
62.5°	775.7	769.0	759.6	749.2	748.7
65°	679.2	675.2	664.9	656.7	651.7
67.5°	588.4	579.4	569.2	562.5	561.5
70°	522.4	513.4	504.1	498.9	497.9
72.5°	456.4	449.0	440.5	435.4	435.2
75°	357.4	351.4	347.2	342.1	341.1
77.5°	259.5	257.9	256.2	250.7	250.7
80°	197.5	197.5	197.5	194.5	194.5
82.5°	142.2	146.1	146.2	144.8	144.8
85°	70.3	77.2	80.4	80.5	84.5
87.5°	19.6	26.7	31.8	32.6	35.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	4.8	25.6	59.4	17.3	13.0
95°	15.7	62.3	280.1	96.9	59.8
97.5°	28.9	73.0	431.3	308.6	211.5
100°	38.0	79.3	464.2	470.2	362.2
102.5°	48.2	86.2	456.9	601.8	507.5
105°	64.0	97.0	419.5	741.0	704.4
107.5°	80.0	109.7	375.8	780.2	812.8
110°	91.1	118.9	350.7	765.2	838.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	101.8	128.1	333.8	729.7	834.1
115°	118.9	143.7	318.1	673.9	791.3
117.5°	134.0	157.3	308.8	612.8	737.2
120°	146.1	165.5	307.8	577.9	697.2
122.5°	155.7	175.2	305.4	547.3	658.0
125°	167.8	186.1	303.6	503.8	602.4
127.5°	181.0	198.1	302.6	477.8	559.1
130°	187.7	204.8	301.2	459.7	530.6
132.5°	195.0	211.6	301.2	445.6	510.8
135°	205.2	222.3	300.0	425.6	481.1
137.5°	214.9	231.5	299.9	408.6	456.6
140°	222.1	239.2	299.4	394.6	440.6
142.5°	230.3	244.6	300.8	383.4	424.7
145°	242.0	254.4	302.4	368.3	401.4
147.5°	252.1	264.1	305.1	353.2	381.7
150°	260.8	269.0	306.0	348.1	368.2
152.5°	267.5	276.2	307.0	341.3	360.0
155°	276.4	282.9	309.6	332.9	346.5
157.5°	287.6	291.4	310.2	329.1	338.7
160°	293.3	296.3	312.7	326.1	334.4
162.5°	296.7	300.2	313.1	323.7	330.0
165°	305.4	306.6	313.3	320.0	324.7
167.5°	311.3	310.3	316.0	319.1	321.0
170°	313.3	312.7	315.1	315.7	318.1
172.5°	317.6	315.6	316.5	314.8	316.6
175°	319.9	318.1	316.9	315.0	312.7
177.5°	320.9	318.0	316.5	314.6	315.1
180°	317.5	317.5	317.5	317.5	317.5

(END OF REPORT)