

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: P521359

Luminaire Tested: SQ4-F-025U-075D-92765-1D-UNV-STD-W-4_5700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521359
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-37)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-025U-075D-92765-1D-UNV-STD-W-4_5700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5368.8 lumens
Efficiency: N/A
Efficacy: 117.2 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

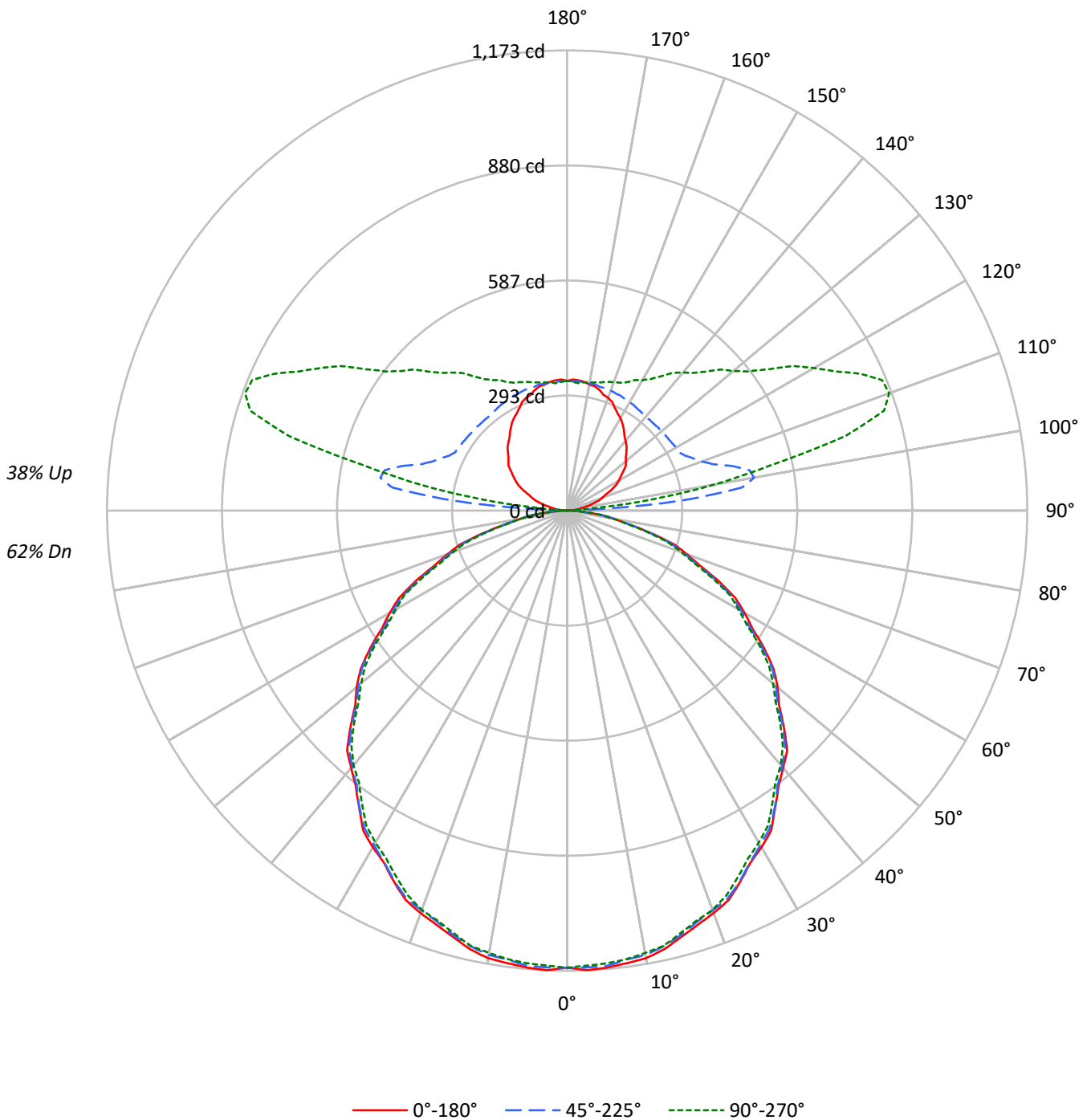
Input Watts (W): 45.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	62				
1	100	96	92	88	94	90	86	83	79	76	74	68	66	65	59	58	56	52				
2	91	83	77	72	85	78	73	68	69	64	61	60	57	54	52	49	47	43				
3	83	73	66	60	77	69	62	57	60	55	51	53	49	45	46	42	40	36				
4	76	65	56	50	71	61	53	48	54	48	43	47	42	39	41	37	34	31				
5	70	58	49	43	65	54	47	41	48	42	37	42	37	33	36	33	30	27				
6	64	52	43	37	60	49	41	36	43	37	32	38	33	29	33	29	26	23				
7	59	47	38	33	55	44	37	31	39	33	28	34	29	26	30	26	23	21				
8	55	42	34	29	51	40	33	28	36	30	25	31	27	23	28	24	21	18				
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	25	21	19	16				
10	48	35	28	23	45	34	27	22	30	24	20	27	22	19	24	20	17	15				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10749	10749	10749
5°	10829	10791	10731
10°	10855	10776	10726
15°	10743	10703	10652
20°	10720	10647	10637
25°	10629	10608	10488
30°	10558	10491	10411
35°	10409	10397	10266
40°	10313	10261	10198
45°	10189	10134	10023
50°	10052	9976	9839
55°	9865	9746	9609
60°	9632	9477	9300
65°	9313	9104	8942
70°	8729	8530	8330
75°	7867	7639	7529
80°	6429	6482	6370
85°	4605	5282	5282

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10189 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.4	2.1
10°-20°	315.7	5.9
20°-30°	477.7	8.9
30°-40°	574.5	10.7
40°-50°	596.5	11.1
50°-60°	540.4	10.1
60°-70°	411.1	7.7
70°-80°	228.5	4.3
80°-90°	58.9	1.1
90°-100°	150.8	2.8
100°-110°	428.9	8.0
110°-120°	411.0	7.7
120°-130°	325.3	6.1
130°-140°	261.1	4.9
140°-150°	204.4	3.8
150°-160°	149.6	2.8
160°-170°	92.6	1.7
170°-180°	31.4	0.6
0°-30°	903.8	16.8
0°-40°	1478.3	27.5
0°-60°	2615.3	48.7
0°-90°	3313.7	61.7
90°-120°	990.7	18.5
90°-150°	1781.4	33.2
90°-180°	2055.0	38.3
0°-180°	5368.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1165	1165	1165	1165	1165	
5°	1169	1159	1165	1160	1159	111
15°	1125	1115	1120	1119	1115	318
25°	1044	1035	1042	1031	1030	481
35°	924	920	923	912	912	579
45°	781	776	777	768	768	603
55°	613	612	606	600	597	547
65°	427	420	417	411	410	420
75°	221	218	214	212	211	234
85°	44	47	50	50	50	54
90°	0	0	0	0	0	2
95°	16	65	292	101	62	19
105°	67	101	437	772	734	71
115°	124	150	332	702	825	122
125°	175	194	316	525	628	157
135°	214	232	313	444	501	165
145°	252	265	315	384	418	158
155°	288	295	323	347	361	133
165°	318	320	326	334	338	90
175°	333	332	330	328	326	32
180°	331	331	331	331	331	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1165.1	1165.1	1165.1	1165.1	1165.1
2.5°	1172.7	1162.7	1165.9	1163.3	1160.8
5°	1169.3	1158.9	1165.1	1159.7	1158.7
7.5°	1163.8	1151.5	1154.4	1153.4	1153.4
10°	1158.7	1143.1	1150.2	1144.9	1144.9
12.5°	1145.1	1132.0	1137.5	1134.7	1136.4
15°	1124.7	1115.4	1120.5	1119.3	1115.2
17.5°	1107.1	1095.9	1099.7	1097.7	1096.1
20°	1091.8	1081.5	1084.4	1079.2	1083.4
22.5°	1074.9	1064.5	1070.0	1061.3	1061.3
25°	1044.1	1034.8	1042.0	1031.3	1030.3
27.5°	1011.4	1005.4	1010.1	1002.2	999.3
30°	991.0	981.7	984.7	979.3	977.2
32.5°	967.3	957.9	960.9	951.4	952.6
35°	924.2	920.0	923.1	912.5	911.5
37.5°	885.1	876.8	881.8	873.0	872.2
40°	856.3	848.0	852.0	846.7	846.7
42.5°	830.0	820.8	823.2	816.1	813.6
45°	780.9	775.8	776.7	768.2	768.2
47.5°	732.6	728.8	727.3	718.6	720.3
50°	700.3	694.1	695.0	685.5	685.5
52.5°	663.0	663.4	659.4	653.1	648.1
55°	613.3	612.3	605.9	600.5	597.4
57.5°	560.2	555.5	550.9	543.7	543.1
60°	522.0	518.9	513.6	507.1	504.0
62.5°	483.0	479.9	474.5	469.0	468.4
65°	426.6	420.3	417.0	410.6	409.6
67.5°	365.2	360.2	356.1	351.0	350.4
70°	323.6	319.5	316.2	311.9	308.8
72.5°	285.4	278.8	275.5	272.0	269.7
75°	220.7	217.6	214.3	212.2	211.2
77.5°	158.3	158.5	158.5	155.7	154.7
80°	121.0	122.0	122.0	120.9	119.9
82.5°	87.9	89.7	90.6	89.5	89.3
85°	43.5	46.6	49.9	49.9	49.9
87.5°	11.9	16.0	19.5	20.4	19.5
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.0	26.7	61.9	18.0	13.6
95°	16.4	64.9	291.8	101.0	62.3
97.5°	30.1	76.1	449.5	321.6	220.4
100°	39.6	82.7	483.7	489.9	377.4
102.5°	50.2	89.8	476.1	627.1	528.8
105°	66.7	101.1	437.1	772.1	734.0
107.5°	83.4	114.3	391.6	813.0	847.0
110°	95.0	123.9	365.4	797.4	873.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	106.0	133.5	347.8	760.4	869.1
115°	123.9	149.7	331.5	702.2	824.6
117.5°	139.6	163.9	321.8	638.6	768.2
120°	152.2	172.5	320.8	602.2	726.4
122.5°	162.3	182.6	318.3	570.3	685.7
125°	174.8	193.9	316.4	525.0	627.7
127.5°	188.6	206.4	315.4	497.9	582.5
130°	195.6	213.4	313.8	479.1	552.9
132.5°	203.2	220.5	313.8	464.3	532.2
135°	213.8	231.7	312.6	443.5	501.3
137.5°	223.9	241.3	312.5	425.8	475.7
140°	231.5	249.3	312.0	411.2	459.1
142.5°	240.0	254.9	313.5	399.5	442.5
145°	252.2	265.1	315.1	383.8	418.3
147.5°	262.7	275.2	317.9	368.0	397.8
150°	271.7	280.3	318.9	362.8	383.7
152.5°	278.8	287.9	319.9	355.7	375.1
155°	288.1	294.8	322.7	346.9	361.0
157.5°	299.6	303.7	323.3	342.9	353.0
160°	305.7	308.7	325.8	339.8	348.4
162.5°	309.2	312.8	326.3	337.3	343.9
165°	318.3	319.5	326.4	333.5	338.4
167.5°	324.4	323.3	329.3	332.5	334.5
170°	326.4	325.8	328.3	329.0	331.5
172.5°	331.0	328.9	329.8	328.0	329.9
175°	333.3	331.5	330.2	328.3	325.8
177.5°	334.4	331.4	329.8	327.8	328.3
180°	330.8	330.8	330.8	330.8	330.8

(END OF REPORT)