

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: P521366

Luminaire Tested: SQ4-F-025U-100D-92765-1D-UNV-STD-W-4_2700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521366
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-38)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-025U-100D-92765-1D-UNV-STD-W-4_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5780.6 lumens
Efficiency: N/A
Efficacy: 102.7 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

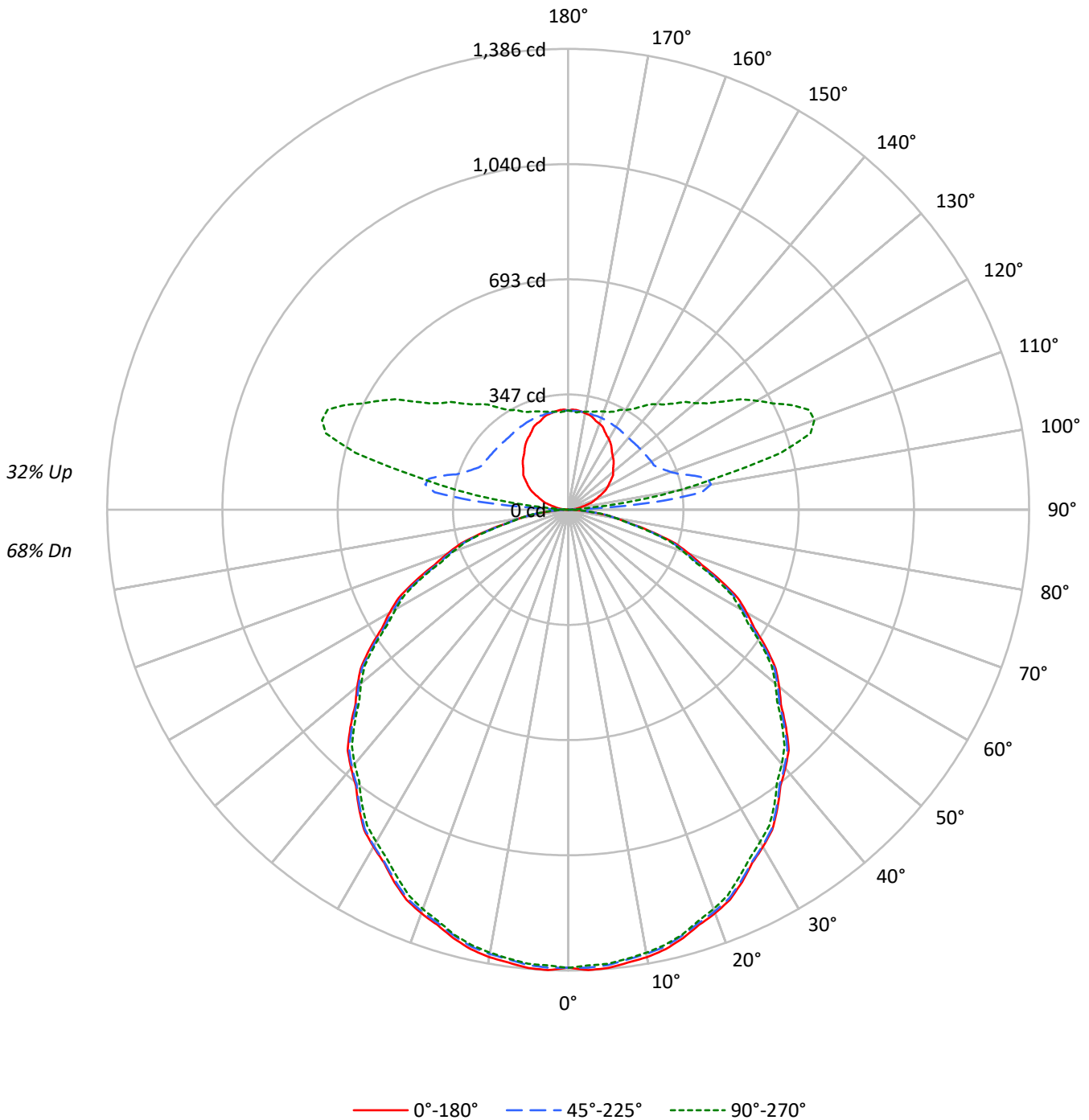
Input Watts (W): 56.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	111	111	111	111	105	105	105	105	93	93	93	83	83	83	73	73	73	68
1	102	97	93	89	96	92	88	85	82	79	76	72	70	68	64	62	61	57
2	92	85	78	73	87	80	74	69	71	67	63	63	60	57	56	53	51	47
3	84	74	66	60	79	70	63	58	63	57	53	56	51	48	49	46	43	40
4	77	66	57	51	72	62	55	49	56	50	45	50	45	41	44	40	37	34
5	71	58	50	44	66	55	48	42	50	43	39	44	39	35	40	35	32	29
6	65	52	44	38	61	50	42	36	45	38	34	40	35	31	36	32	28	26
7	60	47	39	33	57	45	37	32	41	34	30	37	31	27	33	28	25	23
8	56	43	35	29	53	41	34	28	37	31	26	33	28	24	30	26	22	20
9	52	39	32	26	49	37	30	25	34	28	24	31	26	22	28	23	20	18
10	49	36	29	24	46	34	28	23	31	25	21	28	23	20	26	21	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12711	12711	12711
5°	12812	12733	12697
10°	12799	12710	12674
15°	12739	12666	12639
20°	12681	12625	12550
25°	12583	12535	12398
30°	12475	12445	12292
35°	12349	12306	12177
40°	12226	12180	12029
45°	12084	11984	11846
50°	11879	11796	11659
55°	11712	11543	11403
60°	11440	11210	11051
65°	11071	10756	10590
70°	10426	10092	9911
75°	9414	9176	9037
80°	7778	7778	7678
85°	5473	6277	6479

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12084 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.4	2.3
10°-20°	373.6	6.5
20°-30°	565.0	9.8
30°-40°	680.4	11.8
40°-50°	706.6	12.2
50°-60°	640.5	11.1
60°-70°	487.8	8.4
70°-80°	272.6	4.7
80°-90°	70.7	1.2
90°-100°	135.9	2.4
100°-110°	386.8	6.7
110°-120°	370.6	6.4
120°-130°	293.3	5.1
130°-140°	235.4	4.1
140°-150°	184.3	3.2
150°-160°	134.8	2.3
160°-170°	83.5	1.4
170°-180°	28.3	0.5
0°-30°	1069.1	18.5
0°-40°	1749.5	30.3
0°-60°	3096.6	53.6
0°-90°	3927.7	67.9
90°-120°	893.2	15.5
90°-150°	1606.2	27.8
90°-180°	1853.0	32.1
0°-180°	5780.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1378	1378	1378	1378	1378	
5°	1383	1370	1375	1371	1371	131
15°	1334	1322	1326	1323	1323	376
25°	1236	1226	1231	1222	1218	569
35°	1096	1090	1093	1082	1081	686
45°	926	920	918	909	908	713
55°	728	725	718	709	709	649
65°	507	502	493	486	485	500
75°	264	260	257	254	254	279
85°	52	55	59	60	61	64
90°	0	0	0	0	0	3
95°	15	59	263	91	56	17
105°	60	91	394	696	662	64
115°	112	135	299	633	744	110
125°	158	175	285	473	566	141
135°	193	209	282	400	452	149
145°	227	239	284	346	377	142
155°	260	266	291	313	326	120
165°	287	288	294	301	305	81
175°	301	299	298	296	294	28
180°	298	298	298	298	298	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1377.7	1377.7	1377.7	1377.7	1377.7
2.5°	1386.1	1374.9	1378.5	1376.1	1371.6
5°	1383.4	1370.3	1374.8	1371.0	1371.0
7.5°	1373.9	1361.3	1364.3	1362.0	1362.0
10°	1366.2	1352.2	1356.7	1352.8	1352.8
12.5°	1354.0	1341.4	1345.9	1342.1	1341.3
15°	1333.7	1321.5	1326.0	1323.2	1323.2
17.5°	1309.2	1297.6	1303.5	1298.8	1297.3
20°	1291.6	1278.5	1285.9	1278.2	1278.2
22.5°	1270.2	1258.6	1265.2	1256.0	1254.5
25°	1236.1	1225.8	1231.3	1221.7	1217.9
27.5°	1197.8	1186.8	1195.0	1184.2	1182.1
30°	1171.0	1160.8	1168.2	1156.6	1153.8
32.5°	1142.0	1133.2	1138.3	1127.6	1125.5
35°	1096.4	1089.9	1092.6	1082.0	1081.1
37.5°	1048.0	1041.6	1044.2	1032.5	1031.7
40°	1015.1	1009.5	1011.3	998.8	998.8
42.5°	981.4	975.1	975.3	963.6	962.9
45°	926.1	920.5	918.5	908.9	907.9
47.5°	867.4	864.8	861.6	852.1	852.1
50°	827.6	825.7	821.8	812.3	812.3
52.5°	787.0	785.9	780.5	772.4	770.9
55°	728.1	725.3	717.6	708.9	708.9
57.5°	663.6	661.3	652.7	645.8	644.1
60°	620.0	616.2	607.5	599.9	598.9
62.5°	574.8	571.8	562.4	555.4	553.8
65°	507.1	501.5	492.7	486.0	485.1
67.5°	435.5	429.1	421.5	415.9	414.1
70°	386.5	380.9	374.1	369.3	367.4
72.5°	338.3	332.7	326.6	323.4	323.0
75°	264.1	260.3	257.4	253.5	253.5
77.5°	191.5	189.3	187.7	185.8	185.8
80°	146.4	146.4	146.4	144.5	144.5
82.5°	105.0	107.3	108.9	107.7	107.7
85°	51.7	55.4	59.3	60.3	61.2
87.5°	14.5	19.0	23.7	24.5	25.3
90°	0.0	0.0	0.0	0.0	0.0
92.5°	4.5	24.1	55.8	16.2	12.2
95°	14.7	58.6	263.1	91.1	56.1
97.5°	27.1	68.6	405.3	290.0	198.7
100°	35.7	74.5	436.1	441.7	340.3
102.5°	45.3	81.0	429.3	565.4	476.8
105°	60.1	91.2	394.1	696.2	661.8
107.5°	75.2	103.0	353.1	733.1	763.7
110°	85.6	111.7	329.5	719.0	787.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	95.6	120.3	313.6	685.6	783.6
115°	111.7	135.0	298.9	633.1	743.5
117.5°	125.9	147.7	290.1	575.8	692.7
120°	137.2	155.5	289.2	543.0	655.0
122.5°	146.3	164.6	287.0	514.2	618.3
125°	157.7	174.8	285.3	473.4	566.0
127.5°	170.0	186.1	284.3	449.0	525.3
130°	176.4	192.5	283.0	431.9	498.5
132.5°	183.2	198.8	283.0	418.7	479.9
135°	192.8	208.9	281.9	399.9	452.0
137.5°	201.9	217.5	281.7	383.9	429.0
140°	208.7	224.8	281.3	370.7	414.0
142.5°	216.4	229.8	282.6	360.2	399.0
145°	227.4	239.1	284.1	346.1	377.1
147.5°	236.8	248.1	286.6	331.8	358.6
150°	245.0	252.8	287.5	327.1	345.9
152.5°	251.3	259.6	288.4	320.7	338.2
155°	259.7	265.8	290.9	312.8	325.5
157.5°	270.2	273.8	291.5	309.2	318.3
160°	275.6	278.4	293.8	306.4	314.2
162.5°	278.8	282.0	294.2	304.1	310.1
165°	287.0	288.1	294.3	300.7	305.1
167.5°	292.5	291.5	296.9	299.8	301.6
170°	294.3	293.8	296.0	296.6	298.9
172.5°	298.4	296.5	297.4	295.7	297.5
175°	300.6	298.9	297.7	296.0	293.8
177.5°	301.5	298.8	297.4	295.6	296.0
180°	298.3	298.3	298.3	298.3	298.3

(END OF REPORT)