

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: P521373

Luminaire Tested: SQ4-F-025U-100D-92765-1D-UNV-STD-W-4_6500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521373
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_6500K
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 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6471.8 lumens
Efficiency: N/A
Efficacy: 115.6 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

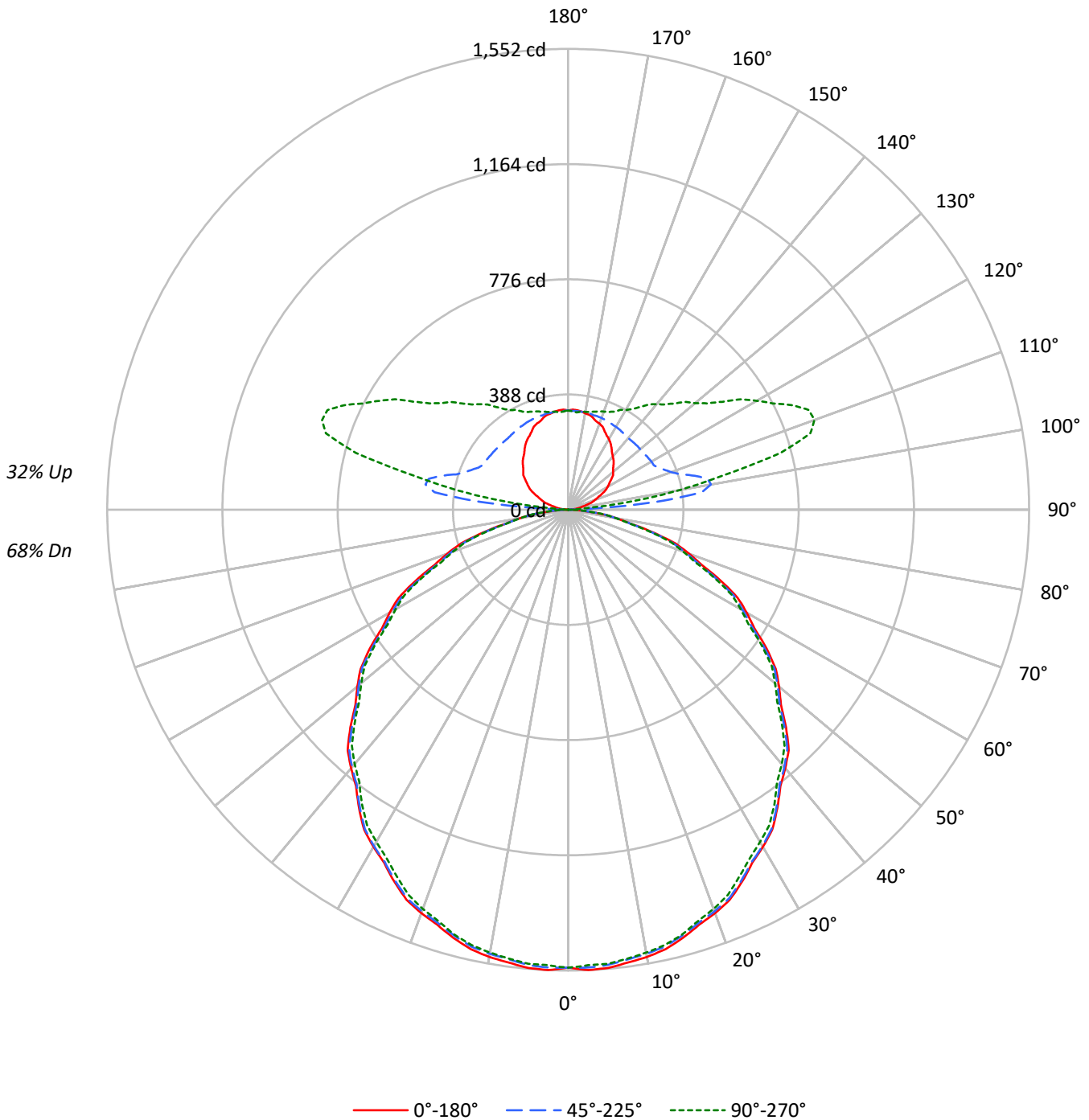
Input Watts (W): 56
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	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°	14230	14230	14230
5°	14345	14255	14215
10°	14330	14230	14190
15°	14263	14180	14150
20°	14197	14134	14050
25°	14088	14033	13880
30°	13968	13934	13762
35°	13825	13777	13633
40°	13688	13636	13469
45°	13529	13417	13263
50°	13298	13207	13053
55°	13111	12921	12767
60°	12808	12551	12372
65°	12393	12042	11856
70°	11672	11297	11095
75°	10537	10270	10117
80°	8708	8708	8591
85°	6119	7029	7262

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13529 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.0	2.3
10°-20°	418.3	6.5
20°-30°	632.6	9.8
30°-40°	761.7	11.8
40°-50°	791.1	12.2
50°-60°	717.1	11.1
60°-70°	546.1	8.4
70°-80°	305.1	4.7
80°-90°	79.2	1.2
90°-100°	152.2	2.4
100°-110°	433.0	6.7
110°-120°	414.9	6.4
120°-130°	328.4	5.1
130°-140°	263.6	4.1
140°-150°	206.3	3.2
150°-160°	151.0	2.3
160°-170°	93.5	1.4
170°-180°	31.7	0.5
0°-30°	1196.9	18.5
0°-40°	1958.6	30.3
0°-60°	3466.9	53.6
0°-90°	4397.3	67.9
90°-120°	1000.1	15.5
90°-150°	1798.3	27.8
90°-180°	2075.0	32.1
0°-180°	6471.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1542	1542	1542	1542	1542	
5°	1549	1534	1539	1535	1535	147
15°	1493	1480	1485	1481	1481	421
25°	1384	1372	1378	1368	1364	637
35°	1228	1220	1223	1211	1210	768
45°	1037	1031	1028	1018	1016	799
55°	815	812	803	794	794	727
65°	568	561	552	544	543	560
75°	296	291	288	284	284	313
85°	58	62	66	68	69	72
90°	0	0	0	0	0	3
95°	16	66	295	102	63	19
105°	67	102	441	779	741	71
115°	125	151	335	709	832	123
125°	176	196	319	530	634	158
135°	216	234	316	448	506	167
145°	255	268	318	388	422	159
155°	291	298	326	350	364	134
165°	321	322	330	337	342	90
175°	336	335	333	331	329	32
180°	334	334	334	334	334	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1542.4	1542.4	1542.4	1542.4	1542.4
2.5°	1551.9	1539.3	1543.3	1540.6	1535.6
5°	1548.9	1534.2	1539.2	1534.9	1534.9
7.5°	1538.1	1524.1	1527.4	1524.9	1524.9
10°	1529.6	1513.9	1518.9	1514.6	1514.6
12.5°	1515.9	1501.8	1506.9	1502.6	1501.7
15°	1493.2	1479.5	1484.6	1481.4	1481.4
17.5°	1465.7	1452.7	1459.3	1454.1	1452.5
20°	1446.0	1431.4	1439.6	1431.0	1431.0
22.5°	1422.0	1409.0	1416.5	1406.1	1404.5
25°	1383.9	1372.4	1378.5	1367.7	1363.5
27.5°	1341.1	1328.7	1337.8	1325.8	1323.5
30°	1311.1	1299.5	1307.9	1294.9	1291.8
32.5°	1278.5	1268.7	1274.4	1262.4	1260.1
35°	1227.5	1220.2	1223.2	1211.4	1210.4
37.5°	1173.3	1166.2	1169.0	1155.9	1155.1
40°	1136.5	1130.2	1132.2	1118.3	1118.3
42.5°	1098.8	1091.6	1091.9	1078.8	1078.0
45°	1036.9	1030.6	1028.3	1017.6	1016.5
47.5°	971.1	968.2	964.7	953.9	953.9
50°	926.5	924.4	920.1	909.4	909.4
52.5°	881.1	879.9	873.8	864.8	863.1
55°	815.1	812.0	803.3	793.7	793.7
57.5°	742.9	740.4	730.7	723.0	721.1
60°	694.1	689.9	680.2	671.6	670.5
62.5°	643.5	640.2	629.6	621.9	620.0
65°	567.7	561.4	551.6	544.1	543.1
67.5°	487.6	480.5	471.9	465.7	463.6
70°	432.7	426.5	418.8	413.4	411.3
72.5°	378.8	372.5	365.7	362.0	361.6
75°	295.6	291.4	288.1	283.8	283.8
77.5°	214.4	211.9	210.2	208.0	208.0
80°	163.9	163.9	163.9	161.7	161.7
82.5°	117.6	120.1	121.9	120.6	120.6
85°	57.8	62.0	66.4	67.5	68.6
87.5°	16.3	21.3	26.6	27.4	28.3
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.1	26.9	62.5	18.2	13.7
95°	16.5	65.6	294.6	102.0	62.9
97.5°	30.3	76.8	453.7	324.7	222.5
100°	40.0	83.5	488.3	494.6	381.0
102.5°	50.7	90.6	480.6	633.0	533.8
105°	67.3	102.1	441.3	779.4	740.9
107.5°	84.2	115.4	395.3	820.7	855.0
110°	95.9	125.1	368.9	804.9	881.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	107.0	134.7	351.1	767.6	877.3
115°	125.1	151.2	334.6	708.8	832.4
117.5°	141.0	165.4	324.8	644.6	775.5
120°	153.7	174.1	323.8	607.9	733.3
122.5°	163.8	184.3	321.3	575.7	692.2
125°	176.5	195.8	319.4	530.0	633.6
127.5°	190.3	208.4	318.3	502.6	588.1
130°	197.5	215.5	316.8	483.6	558.1
132.5°	205.1	222.6	316.8	468.7	537.3
135°	215.9	233.9	315.6	447.7	506.0
137.5°	226.0	243.5	315.4	429.8	480.3
140°	233.7	251.7	314.9	415.1	463.5
142.5°	242.3	257.3	316.4	403.3	446.7
145°	254.6	267.6	318.1	387.5	422.2
147.5°	265.1	277.8	320.9	371.5	401.5
150°	274.3	283.0	321.9	366.2	387.3
152.5°	281.4	290.6	322.9	359.0	378.7
155°	290.8	297.6	325.7	350.2	364.4
157.5°	302.5	306.6	326.3	346.1	356.3
160°	308.6	311.7	328.9	343.1	351.7
162.5°	312.1	315.7	329.4	340.5	347.2
165°	321.3	322.5	329.5	336.6	341.6
167.5°	327.5	326.4	332.4	335.7	337.6
170°	329.5	328.9	331.4	332.1	334.6
172.5°	334.1	332.0	333.0	331.1	333.1
175°	336.5	334.6	333.3	331.4	328.9
177.5°	337.5	334.5	333.0	330.9	331.4
180°	334.0	334.0	334.0	334.0	334.0

(END OF REPORT)