

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: P521371

Luminaire Tested: SQ4-F-025U-100D-92765-1D-UNV-STD-W-4_5000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521371
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_5000K
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 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6321.0 lumens
Efficiency: N/A
Efficacy: 112.3 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

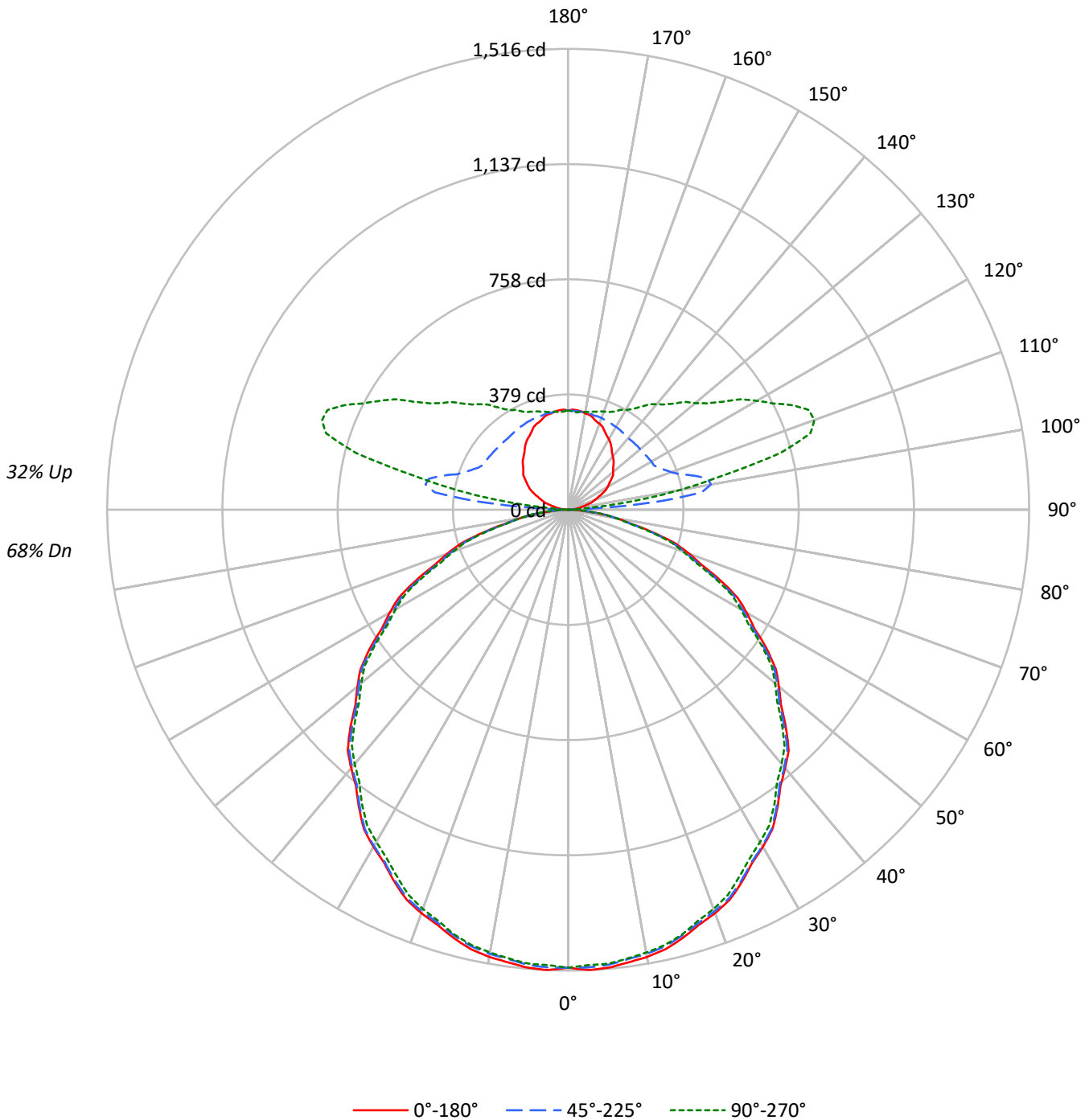
Input Watts (W): 56.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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	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°	13899	13899	13899
5°	14011	13923	13885
10°	13996	13898	13859
15°	13930	13850	13820
20°	13866	13805	13723
25°	13759	13706	13558
30°	13642	13609	13442
35°	13503	13456	13315
40°	13369	13318	13154
45°	13214	13104	12954
50°	12988	12899	12749
55°	12806	12621	12469
60°	12509	12258	12084
65°	12105	11763	11579
70°	11403	11036	10836
75°	10291	10031	9881
80°	8506	8506	8395
85°	5981	6870	7093

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13214 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.6	2.3
10°-20°	408.6	6.5
20°-30°	617.8	9.8
30°-40°	744.0	11.8
40°-50°	772.7	12.2
50°-60°	700.4	11.1
60°-70°	533.4	8.4
70°-80°	298.0	4.7
80°-90°	77.3	1.2
90°-100°	148.6	2.4
100°-110°	422.9	6.7
110°-120°	405.2	6.4
120°-130°	320.7	5.1
130°-140°	257.4	4.1
140°-150°	201.5	3.2
150°-160°	147.4	2.3
160°-170°	91.3	1.4
170°-180°	31.0	0.5
0°-30°	1169.0	18.5
0°-40°	1913.0	30.3
0°-60°	3386.1	53.6
0°-90°	4294.9	67.9
90°-120°	976.8	15.5
90°-150°	1756.4	27.8
90°-180°	2026.0	32.1
0°-180°	6321.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1506	1506	1506	1506	1506	
5°	1513	1498	1503	1499	1499	144
15°	1458	1445	1450	1447	1447	411
25°	1352	1340	1346	1336	1332	623
35°	1199	1192	1195	1183	1182	750
45°	1013	1007	1004	994	993	780
55°	796	793	785	775	775	710
65°	554	548	539	531	530	547
75°	289	285	281	277	277	306
85°	56	61	65	66	67	71
90°	0	0	0	0	0	3
95°	16	64	288	100	61	18
105°	66	100	431	761	724	70
115°	122	148	327	692	813	120
125°	172	191	312	518	619	154
135°	211	228	308	437	494	163
145°	249	261	311	378	412	155
155°	284	291	318	342	356	131
165°	314	315	322	329	334	88
175°	329	327	326	324	321	31
180°	326	326	326	326	326	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1506.5	1506.5	1506.5	1506.5	1506.5
2.5°	1515.7	1503.4	1507.3	1504.7	1499.8
5°	1512.8	1498.4	1503.3	1499.2	1499.2
7.5°	1502.3	1488.6	1491.8	1489.3	1489.3
10°	1493.9	1478.6	1483.5	1479.3	1479.3
12.5°	1480.5	1466.8	1471.7	1467.5	1466.7
15°	1458.4	1445.1	1450.0	1446.9	1446.9
17.5°	1431.6	1418.9	1425.3	1420.2	1418.6
20°	1412.3	1398.0	1406.0	1397.7	1397.7
22.5°	1388.9	1376.2	1383.5	1373.4	1371.7
25°	1351.6	1340.4	1346.4	1335.9	1331.8
27.5°	1309.8	1297.7	1306.7	1294.9	1292.6
30°	1280.5	1269.3	1277.4	1264.7	1261.7
32.5°	1248.7	1239.1	1244.7	1233.0	1230.7
35°	1198.9	1191.7	1194.7	1183.2	1182.2
37.5°	1146.0	1139.0	1141.8	1129.0	1128.2
40°	1110.0	1103.8	1105.8	1092.2	1092.2
42.5°	1073.2	1066.2	1066.5	1053.7	1052.9
45°	1012.7	1006.6	1004.3	993.8	992.8
47.5°	948.5	945.6	942.2	931.7	931.7
50°	904.9	902.9	898.7	888.2	888.2
52.5°	860.6	859.4	853.5	844.6	843.0
55°	796.1	793.1	784.6	775.2	775.2
57.5°	725.6	723.2	713.7	706.1	704.3
60°	677.9	673.8	664.3	655.9	654.9
62.5°	628.5	625.3	614.9	607.4	605.5
65°	554.5	548.3	538.8	531.4	530.4
67.5°	476.2	469.3	460.9	454.8	452.8
70°	422.7	416.5	409.1	403.8	401.7
72.5°	369.9	363.8	357.2	353.6	353.2
75°	288.7	284.7	281.4	277.2	277.2
77.5°	209.4	207.0	205.3	203.2	203.2
80°	160.1	160.1	160.1	158.0	158.0
82.5°	114.9	117.3	119.1	117.8	117.8
85°	56.5	60.6	64.9	65.9	67.0
87.5°	15.9	20.8	25.9	26.8	27.6
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.0	26.3	61.0	17.8	13.4
95°	16.1	64.0	287.7	99.6	61.4
97.5°	29.6	75.0	443.1	317.1	217.3
100°	39.1	81.5	476.9	483.0	372.1
102.5°	49.5	88.5	469.4	618.3	521.4
105°	65.7	99.7	431.0	761.3	723.7
107.5°	82.2	112.7	386.1	801.6	835.1
110°	93.6	122.1	360.3	786.2	861.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	104.6	131.6	342.9	749.7	856.9
115°	122.2	147.6	326.8	692.3	813.0
117.5°	137.7	161.6	317.3	629.6	757.4
120°	150.1	170.1	316.3	593.8	716.2
122.5°	160.0	180.0	313.8	562.3	676.1
125°	172.4	191.2	311.9	517.6	618.9
127.5°	185.9	203.5	310.9	490.9	574.4
130°	192.9	210.4	309.4	472.3	545.1
132.5°	200.3	217.4	309.4	457.8	524.7
135°	210.8	228.4	308.2	437.2	494.2
137.5°	220.8	237.9	308.1	419.8	469.1
140°	228.2	245.8	307.6	405.4	452.7
142.5°	236.6	251.3	309.1	393.9	436.3
145°	248.7	261.4	310.7	378.4	412.4
147.5°	259.0	271.3	313.4	362.8	392.2
150°	267.9	276.4	314.4	357.7	378.3
152.5°	274.8	283.8	315.4	350.7	369.8
155°	284.0	290.7	318.1	342.0	355.9
157.5°	295.4	299.4	318.7	338.1	348.0
160°	301.4	304.4	321.2	335.1	343.5
162.5°	304.9	308.4	321.7	332.5	339.1
165°	313.8	315.0	321.8	328.8	333.6
167.5°	319.9	318.8	324.7	327.8	329.8
170°	321.8	321.2	323.7	324.4	326.8
172.5°	326.3	324.2	325.2	323.4	325.3
175°	328.7	326.8	325.6	323.6	321.2
177.5°	329.7	326.7	325.2	323.2	323.7
180°	326.2	326.2	326.2	326.2	326.2

(END OF REPORT)