

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: P521370

Luminaire Tested: SQ4-F-025U-100D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521370
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_4500K
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 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

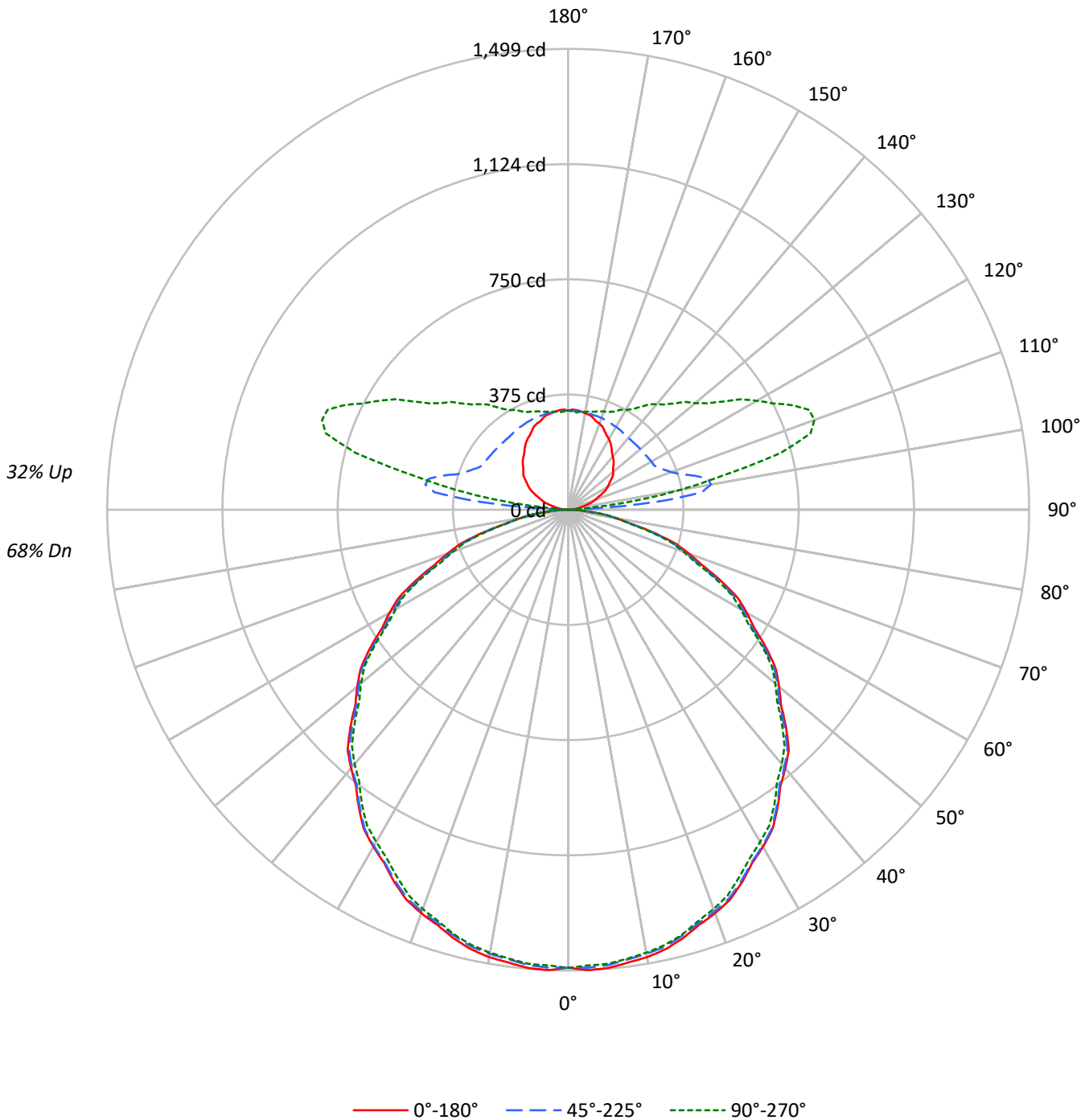
Lumens per Lamp: N/A
Luminaire Lumens: 6251.8 lumens
Efficiency: N/A
Efficacy: 111.0 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

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°	13747	13747	13747
5°	13857	13771	13733
10°	13843	13746	13707
15°	13777	13698	13668
20°	13715	13654	13573
25°	13610	13557	13409
30°	13493	13460	13295
35°	13356	13308	13169
40°	13222	13172	13010
45°	13069	12960	12812
50°	12846	12757	12609
55°	12666	12482	12333
60°	12372	12123	11952
65°	11972	11634	11453
70°	11276	10914	10717
75°	10181	9921	9774
80°	8411	8411	8299
85°	5918	6796	7008

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13069 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.1	2.3
10°-20°	404.1	6.5
20°-30°	611.1	9.8
30°-40°	735.8	11.8
40°-50°	764.2	12.2
50°-60°	692.7	11.1
60°-70°	527.6	8.4
70°-80°	294.8	4.7
80°-90°	76.5	1.2
90°-100°	147.0	2.4
100°-110°	418.3	6.7
110°-120°	400.8	6.4
120°-130°	317.2	5.1
130°-140°	254.6	4.1
140°-150°	199.3	3.2
150°-160°	145.8	2.3
160°-170°	90.3	1.4
170°-180°	30.7	0.5
0°-30°	1156.2	18.5
0°-40°	1892.1	30.3
0°-60°	3349.0	53.6
0°-90°	4247.8	67.9
90°-120°	966.1	15.5
90°-150°	1737.2	27.8
90°-180°	2004.0	32.1
0°-180°	6251.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1490	1490	1490	1490	1490	
5°	1496	1482	1487	1483	1483	142
15°	1442	1429	1434	1431	1431	407
25°	1337	1326	1332	1321	1317	616
35°	1186	1179	1182	1170	1169	742
45°	1002	996	993	983	982	772
55°	787	784	776	767	767	702
65°	548	542	533	526	525	541
75°	286	282	278	274	274	302
85°	56	60	64	65	66	70
90°	0	0	0	0	0	3
95°	16	63	285	98	61	18
105°	65	99	426	753	716	69
115°	121	146	323	685	804	119
125°	170	189	308	512	612	153
135°	208	226	305	432	489	161
145°	246	258	307	374	408	154
155°	281	288	315	338	352	130
165°	310	312	318	325	330	87
175°	325	323	322	320	318	31
180°	323	323	323	323	323	

TEST NUMBER: P521370

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1490.0	1490.0	1490.0	1490.0	1490.0
2.5°	1499.1	1487.0	1490.8	1488.2	1483.4
5°	1496.2	1482.0	1486.9	1482.8	1482.8
7.5°	1485.9	1472.3	1475.5	1473.0	1473.0
10°	1477.6	1462.4	1467.2	1463.1	1463.1
12.5°	1464.3	1450.8	1455.6	1451.5	1450.7
15°	1442.4	1429.2	1434.1	1431.0	1431.0
17.5°	1415.9	1403.4	1409.7	1404.7	1403.1
20°	1396.9	1382.7	1390.7	1382.4	1382.4
22.5°	1373.7	1361.1	1368.3	1358.3	1356.7
25°	1336.9	1325.7	1331.7	1321.2	1317.2
27.5°	1295.5	1283.5	1292.4	1280.7	1278.5
30°	1266.5	1255.4	1263.4	1250.9	1247.9
32.5°	1235.0	1225.5	1231.1	1219.5	1217.2
35°	1185.8	1178.7	1181.6	1170.2	1169.2
37.5°	1133.4	1126.6	1129.3	1116.7	1115.8
40°	1097.8	1091.8	1093.7	1080.2	1080.2
42.5°	1061.4	1054.5	1054.8	1042.2	1041.3
45°	1001.6	995.5	993.3	983.0	981.9
47.5°	938.1	935.2	931.9	921.5	921.5
50°	895.0	893.0	888.8	878.5	878.5
52.5°	851.2	849.9	844.1	835.4	833.8
55°	787.4	784.4	776.0	766.7	766.7
57.5°	717.7	715.3	705.9	698.4	696.6
60°	670.5	666.5	657.0	648.7	647.7
62.5°	621.7	618.4	608.2	600.7	598.9
65°	548.4	542.3	532.9	525.6	524.6
67.5°	471.0	464.1	455.9	449.9	447.8
70°	418.0	412.0	404.6	399.4	397.3
72.5°	365.9	359.8	353.3	349.7	349.3
75°	285.6	281.5	278.3	274.2	274.2
77.5°	207.2	204.7	203.0	200.9	200.9
80°	158.3	158.3	158.3	156.2	156.2
82.5°	113.6	116.0	117.8	116.5	116.5
85°	55.9	59.9	64.2	65.2	66.2
87.5°	15.7	20.6	25.7	26.5	27.3
90°	0.0	0.0	0.0	0.0	0.0
92.5°	4.9	26.0	60.4	17.6	13.2
95°	15.9	63.3	284.6	98.5	60.7
97.5°	29.3	74.2	438.3	313.6	214.9
100°	38.6	80.6	471.7	477.7	368.0
102.5°	48.9	87.6	464.3	611.5	515.7
105°	65.0	98.6	426.3	752.9	715.8
107.5°	81.3	111.4	381.9	792.8	825.9
110°	92.6	120.8	356.3	777.6	851.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	103.4	130.2	339.2	741.5	847.5
115°	120.8	146.0	323.2	684.7	804.1
117.5°	136.2	159.8	313.8	622.7	749.1
120°	148.4	168.2	312.8	587.3	708.4
122.5°	158.2	178.0	310.3	556.2	668.7
125°	170.5	189.1	308.5	512.0	612.1
127.5°	183.9	201.3	307.5	485.6	568.1
130°	190.7	208.1	306.1	467.2	539.1
132.5°	198.1	215.0	306.1	452.8	519.0
135°	208.5	225.9	304.8	432.5	488.8
137.5°	218.3	235.3	304.7	415.2	463.9
140°	225.7	243.1	304.2	401.0	447.7
142.5°	234.0	248.6	305.7	389.6	431.5
145°	245.9	258.5	307.3	374.3	407.9
147.5°	256.1	268.4	310.0	358.8	387.9
150°	265.0	273.4	311.0	353.7	374.1
152.5°	271.8	280.7	311.9	346.8	365.8
155°	280.9	287.5	314.6	338.3	352.1
157.5°	292.2	296.2	315.3	334.4	344.2
160°	298.1	301.1	317.7	331.4	339.8
162.5°	301.5	305.0	318.2	328.9	335.4
165°	310.3	311.5	318.3	325.2	330.0
167.5°	316.4	315.3	321.1	324.3	326.2
170°	318.3	317.7	320.2	320.8	323.2
172.5°	322.7	320.7	321.6	319.8	321.8
175°	325.1	323.3	322.0	320.1	317.7
177.5°	326.0	323.2	321.6	319.7	320.2
180°	322.6	322.6	322.6	322.6	322.6

(END OF REPORT)