

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: P521474

Luminaire Tested: SQ4-F-075U-100D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521474
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-075U-100D-92765-1D-UNV-STD-W-4_4500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 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: 7628.6 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: General Diffuse

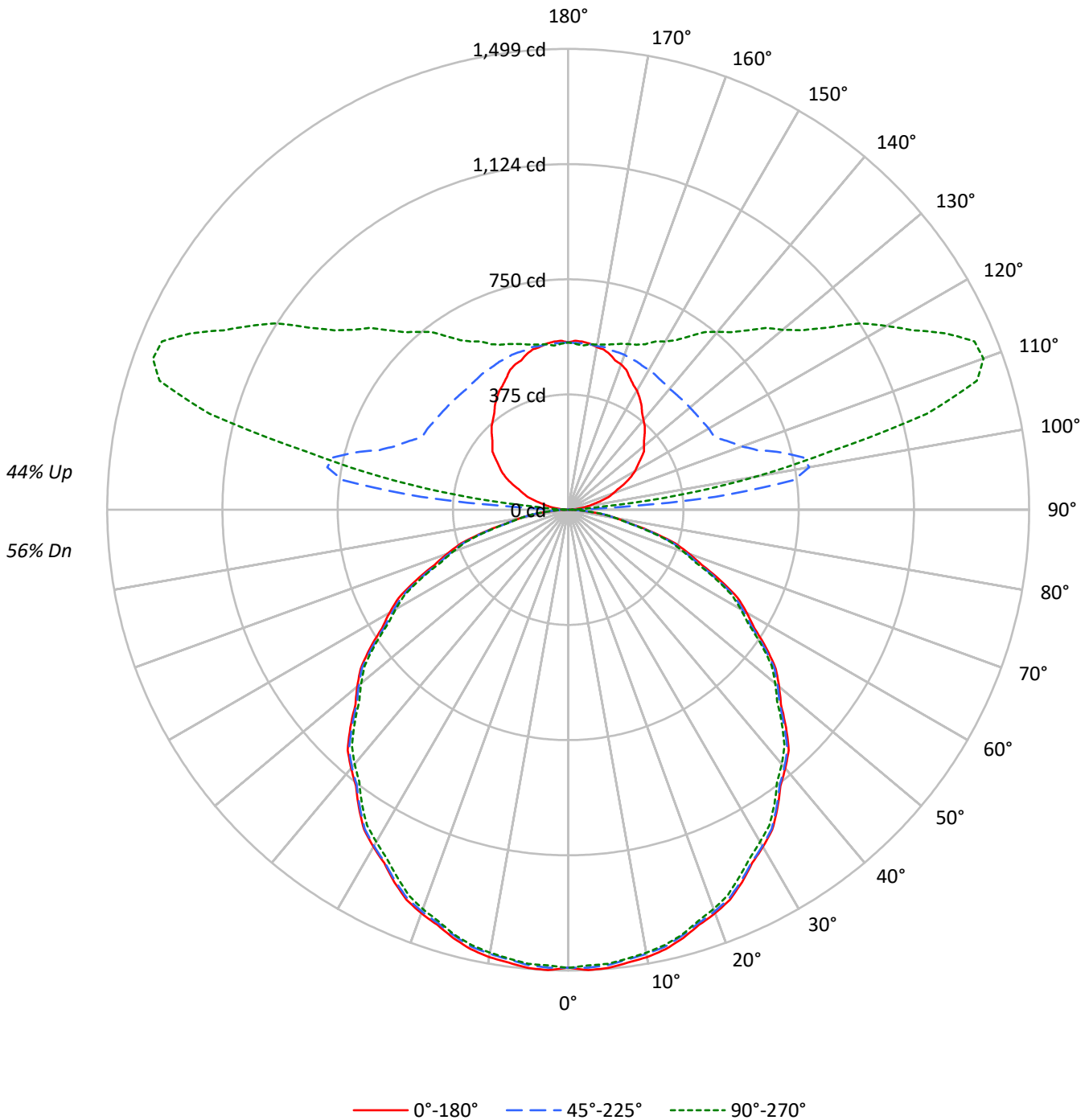
Input Watts (W): 66
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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									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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	56																			
1	99	94	90	87	92	88	84	81	76	73	71	64	63	61	54	53	52	47																			
2	90	82	76	71	83	77	71	66	66	62	58	56	53	51	47	45	43	39																			
3	82	72	65	59	76	67	61	55	58	53	49	50	46	43	42	39	36	33																			
4	75	64	56	49	69	60	52	47	52	46	41	44	40	36	37	34	31	28																			
5	69	57	48	42	63	53	46	40	46	40	36	39	35	31	33	30	27	24																			
6	63	51	43	37	58	48	40	35	41	35	31	36	31	27	30	27	24	21																			
7	58	46	38	32	54	43	36	30	37	32	27	32	28	24	28	24	21	18																			
8	54	42	34	28	50	39	32	27	34	28	24	30	25	21	25	22	19	16																			
9	50	38	30	25	47	36	29	24	31	26	22	27	23	19	23	20	17	15																			
10	47	35	27	23	44	33	26	22	29	23	19	25	21	17	22	18	15	13																			

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

TEST NUMBER: P521474

CATALOG NUMBER: SQ4-F-075U-100D-92765-1D-UNV-STD-W-4_4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.1	1.8
10°-20°	404.1	5.3
20°-30°	611.1	8.0
30°-40°	735.8	9.6
40°-50°	764.2	10.0
50°-60°	692.7	9.1
60°-70°	527.6	6.9
70°-80°	294.8	3.9
80°-90°	76.5	1.0
90°-100°	248.0	3.3
100°-110°	705.7	9.3
110°-120°	676.1	8.9
120°-130°	535.1	7.0
130°-140°	429.5	5.6
140°-150°	336.2	4.4
150°-160°	246.0	3.2
160°-170°	152.4	2.0
170°-180°	51.7	0.7
0°-30°	1156.2	15.2
0°-40°	1892.1	24.8
0°-60°	3349.0	43.9
0°-90°	4247.8	55.7
90°-120°	1629.8	21.4
90°-150°	2930.6	38.4
90°-180°	3381.0	44.3
0°-180°	7628.6	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°	27	107	480	166	102	31
105°	110	166	719	1270	1208	116
115°	204	246	545	1155	1356	201
125°	288	319	520	864	1033	257
135°	352	381	514	730	825	271
145°	415	436	518	631	688	259
155°	474	485	531	571	594	219
165°	524	526	537	549	557	147
175°	548	545	543	540	536	52
180°	544	544	544	544	544	

TEST NUMBER: P521474

CATALOG NUMBER: SQ4-F-075U-100D-92765-1D-UNV-STD-W-4_4500K

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°	8.3	43.9	101.8	29.6	22.3
95°	26.9	106.8	480.1	166.2	102.4
97.5°	49.5	125.1	739.4	529.1	362.6
100°	65.2	136.0	795.7	806.0	620.8
102.5°	82.6	147.7	783.3	1031.7	870.0
105°	109.7	166.3	719.1	1270.2	1207.5
107.5°	137.2	188.0	644.2	1337.5	1393.4
110°	156.2	203.8	601.2	1311.8	1437.2

TEST NUMBER: P521474

CATALOG NUMBER: SQ4-F-075U-100D-92765-1D-UNV-STD-W-4_4500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	174.5	219.6	572.2	1250.9	1429.8
115°	203.8	246.3	545.3	1155.2	1356.5
117.5°	229.7	269.6	529.4	1050.5	1263.8
120°	250.4	283.8	527.7	990.7	1195.1
122.5°	267.0	300.3	523.6	938.3	1128.1
125°	287.7	319.0	520.5	863.7	1032.7
127.5°	310.2	339.5	518.8	819.1	958.4
130°	321.8	351.1	516.3	788.1	909.5
132.5°	334.2	362.7	516.3	763.9	875.6
135°	351.8	381.1	514.3	729.6	824.7
137.5°	368.4	396.9	514.0	700.5	782.7
140°	380.8	410.1	513.2	676.4	755.3
142.5°	394.8	419.3	515.7	657.2	728.0
145°	414.9	436.2	518.4	631.4	688.1
147.5°	432.1	452.7	522.9	605.4	654.4
150°	447.0	461.2	524.6	596.8	631.2
152.5°	458.6	473.6	526.3	585.1	617.1
155°	473.9	485.0	530.8	570.7	593.9
157.5°	492.9	499.6	531.8	564.1	580.7
160°	502.9	507.9	536.0	559.1	573.2
162.5°	508.7	514.5	536.8	554.9	565.8
165°	523.6	525.6	537.0	548.6	556.7
167.5°	533.7	531.9	541.8	547.0	550.3
170°	537.0	536.0	540.1	541.3	545.3
172.5°	544.5	541.0	542.6	539.6	542.8
175°	548.4	545.4	543.2	540.0	536.0
177.5°	550.1	545.2	542.6	539.3	540.1
180°	544.3	544.3	544.3	544.3	544.3

(END OF REPORT)