

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: P521607

Luminaire Tested: SQ4-F-125U-050D-92765-1D-UNV-STD-W-4_6500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521607
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-36)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-125U-050D-92765-1D-UNV-STD-W-4_6500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 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: 8116.1 lumens
Efficiency: N/A
Efficacy: 131.5 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

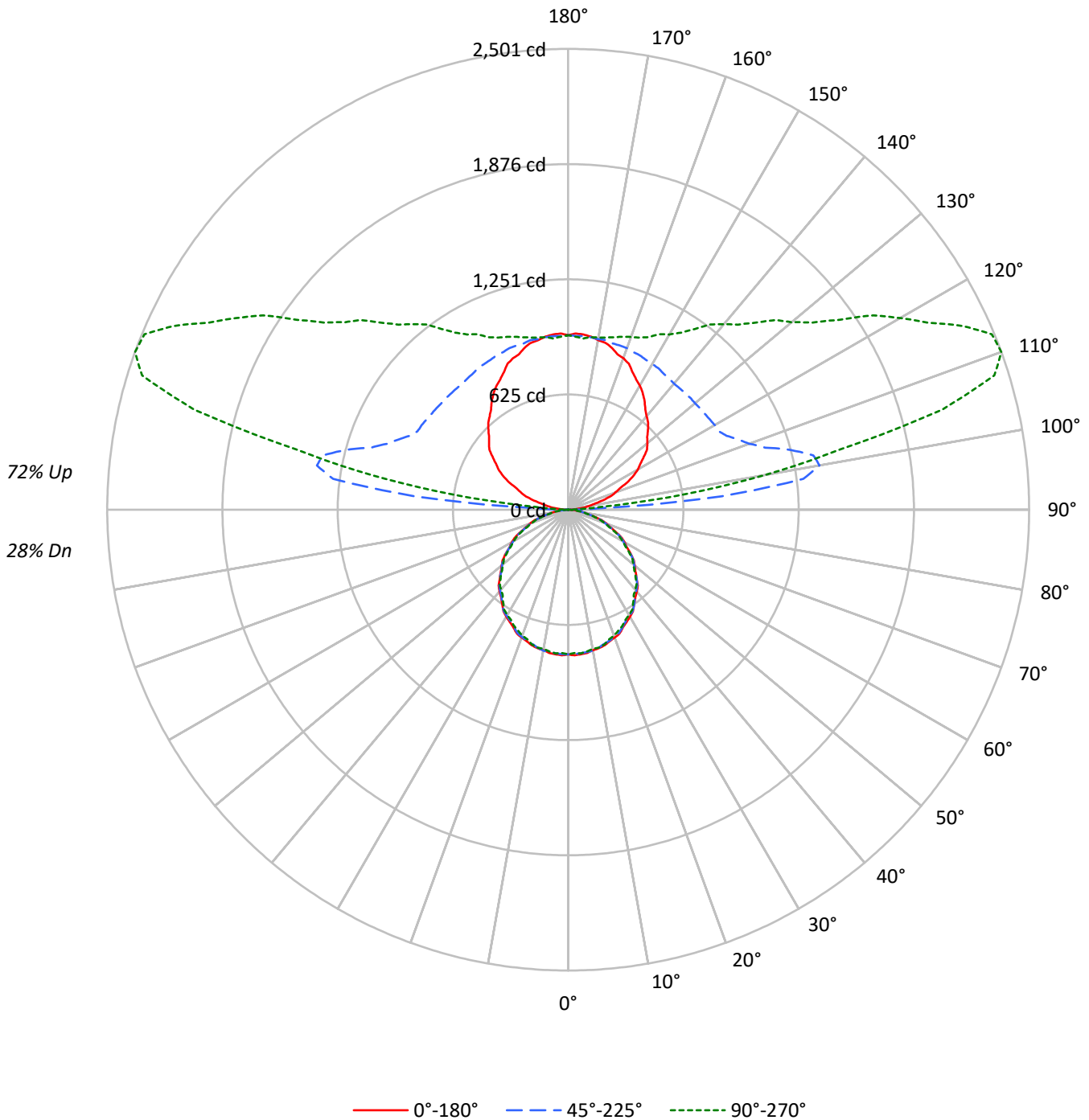
Input Watts (W): 61.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	50	30	10	0	
RCR																						
0	102	102	102	102	91	91	91	91	71	71	71	52	52	52	35	35	35	28				
1	93	88	85	81	83	79	76	73	62	60	58	46	45	43	31	30	30	23				
2	84	77	71	66	75	69	64	60	54	51	48	40	38	36	27	26	25	19				
3	77	68	61	55	68	61	55	50	48	43	40	35	33	30	24	22	21	16				
4	70	60	52	46	62	54	47	42	42	37	34	31	28	26	21	20	18	14				
5	64	53	45	39	57	48	41	36	37	33	29	28	25	22	19	17	16	12				
6	59	47	39	34	52	43	36	31	34	29	25	25	22	19	17	15	14	10				
7	54	43	35	29	48	38	32	27	30	25	22	23	19	17	16	14	12	9				
8	50	38	31	26	45	35	28	24	28	23	19	21	17	15	14	12	11	8				
9	47	35	28	23	42	32	25	21	25	20	17	19	16	13	13	11	10	7				
10	44	32	25	20	39	29	23	19	23	18	15	18	14	12	12	10	9	7				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7243	7243	7243
5°	7292	7242	7252
10°	7255	7276	7185
15°	7275	7203	7233
20°	7246	7215	7141
25°	7164	7120	7077
30°	7143	7097	7029
35°	7034	7034	6925
40°	6979	6914	6824
45°	6849	6849	6751
50°	6765	6719	6627
55°	6651	6582	6478
60°	6503	6385	6285
65°	6244	6104	5986
70°	5954	5751	5606
75°	5308	5155	5080
80°	4383	4325	4266
85°	3176	3515	3515

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6849 cd/sqm

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CATALOG NUMBER: SQ4-F-125U-050D-92765-1D-UNV-STD-W-4_6500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.3	0.9
10°-20°	213.0	2.6
20°-30°	321.8	4.0
30°-40°	387.5	4.8
40°-50°	401.8	5.0
50°-60°	364.3	4.5
60°-70°	276.9	3.4
70°-80°	154.2	1.9
80°-90°	39.8	0.5
90°-100°	431.5	5.3
100°-110°	1227.8	15.1
110°-120°	1176.4	14.5
120°-130°	931.1	11.5
130°-140°	747.3	9.2
140°-150°	585.1	7.2
150°-160°	428.1	5.3
160°-170°	265.2	3.3
170°-180°	90.0	1.1
0°-30°	609.1	7.5
0°-40°	996.6	12.3
0°-60°	1762.7	21.7
0°-90°	2233.6	27.5
90°-120°	2835.8	34.9
90°-150°	5099.2	62.8
90°-180°	5882.0	72.5
0°-180°	8116.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	785	785	785	785	785	
5°	787	778	782	783	783	75
15°	762	754	754	754	757	215
25°	704	698	699	695	695	326
35°	624	618	624	617	615	392
45°	525	522	525	515	517	406
55°	414	412	409	405	403	369
65°	286	285	280	276	274	283
75°	149	147	145	142	142	158
85°	30	32	33	34	33	37
90°	0	0	0	0	0	3
95°	47	186	835	289	178	54
105°	191	289	1251	2210	2101	202
115°	355	429	949	2010	2360	349
125°	500	555	906	1503	1797	448
135°	612	663	895	1269	1435	472
145°	722	759	902	1099	1197	451
155°	825	844	924	993	1033	381
165°	911	914	934	954	969	256
175°	954	949	945	940	933	90
180°	947	947	947	947	947	

TEST NUMBER: P521607

CATALOG NUMBER: SQ4-F-125U-050D-92765-1D-UNV-STD-W-4_6500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	785.1	785.1	785.1	785.1	785.1
2.5°	791.1	782.8	784.3	785.0	779.1
5°	787.3	777.9	781.9	783.0	783.0
7.5°	783.9	776.5	779.1	775.9	775.5
10°	774.4	771.3	776.6	769.0	766.9
12.5°	770.1	765.3	766.3	764.8	766.9
15°	761.6	754.2	754.1	754.1	757.3
17.5°	748.3	738.9	745.1	738.4	737.6
20°	738.0	728.6	734.8	727.3	727.3
22.5°	727.7	716.6	722.8	712.7	710.2
25°	703.7	698.5	699.4	695.2	695.2
27.5°	686.8	675.3	679.1	673.1	673.5
30°	670.5	659.0	666.2	657.7	659.8
32.5°	654.2	646.9	650.8	641.5	645.2
35°	624.5	618.2	624.5	616.9	614.8
37.5°	598.3	591.8	593.8	589.0	583.8
40°	579.5	572.1	574.1	567.7	566.6
42.5°	558.9	554.1	554.4	548.9	549.5
45°	524.9	521.7	524.9	515.3	517.4
47.5°	494.4	490.7	490.4	484.0	486.5
50°	471.3	469.2	468.1	461.7	461.7
52.5°	447.3	445.2	444.1	439.4	438.5
55°	413.5	412.4	409.2	404.8	402.7
57.5°	376.4	374.3	372.5	368.0	366.3
60°	352.4	350.3	346.0	340.6	340.6
62.5°	325.8	323.7	318.6	316.5	313.2
65°	286.0	284.9	279.6	276.3	274.2
67.5°	246.4	243.0	240.6	236.5	234.4
70°	220.7	216.5	213.2	209.9	207.8
72.5°	192.4	189.0	185.7	184.2	181.2
75°	148.9	146.8	144.6	142.5	142.5
77.5°	108.2	107.6	105.4	105.4	104.3
80°	82.5	83.5	81.4	81.4	80.3
82.5°	59.3	60.4	60.0	60.8	59.8
85°	30.0	32.1	33.2	34.3	33.2
87.5°	8.6	11.1	12.9	13.7	13.7
90°	0.0	0.0	0.0	0.0	0.0
92.5°	14.4	76.4	177.2	51.6	38.9
95°	46.8	185.9	835.4	289.1	178.2
97.5°	86.1	217.7	1286.6	920.6	630.9
100°	113.4	236.6	1384.5	1402.4	1080.2
102.5°	143.7	257.0	1362.9	1795.1	1513.8
105°	190.8	289.4	1251.3	2210.2	2101.0
107.5°	238.7	327.1	1120.9	2327.2	2424.4
110°	271.9	354.6	1046.0	2282.4	2500.7

TEST NUMBER: P521607

CATALOG NUMBER: SQ4-F-125U-050D-92765-1D-UNV-STD-W-4_6500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	303.5	382.1	995.6	2176.5	2487.8
115°	354.7	428.6	948.8	2010.0	2360.3
117.5°	399.7	469.0	921.1	1827.9	2199.0
120°	435.7	493.8	918.2	1723.8	2079.4
122.5°	464.5	522.6	911.0	1632.5	1962.8
125°	500.5	555.1	905.6	1502.8	1796.8
127.5°	539.8	590.8	902.7	1425.3	1667.5
130°	559.9	611.0	898.4	1371.3	1582.5
132.5°	581.5	631.2	898.4	1329.1	1523.5
135°	612.1	663.2	894.8	1269.4	1434.9
137.5°	640.9	690.6	894.4	1218.9	1361.8
140°	662.5	713.6	893.0	1177.0	1314.3
142.5°	687.0	729.6	897.3	1143.5	1266.7
145°	722.0	758.9	902.0	1098.7	1197.3
147.5°	751.8	787.8	909.9	1053.4	1138.6
150°	777.8	802.4	912.8	1038.4	1098.2
152.5°	797.9	824.0	915.7	1018.1	1073.7
155°	824.6	843.9	923.6	992.9	1033.4
157.5°	857.7	869.3	925.4	981.5	1010.4
160°	875.0	883.8	932.6	972.8	997.4
162.5°	885.1	895.3	934.0	965.4	984.4
165°	911.0	914.5	934.4	954.5	968.6
167.5°	928.6	925.5	942.7	951.8	957.4
170°	934.4	932.6	939.8	941.8	948.8
172.5°	947.4	941.4	944.1	938.8	944.5
175°	954.2	948.9	945.2	939.6	932.6
177.5°	957.1	948.6	944.1	938.4	939.8
180°	947.0	947.0	947.0	947.0	947.0

(END OF REPORT)