

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: P521399

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

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521399
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-050U-050D-92765-1D-UNV-STD-W-4_6500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 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: 4571.6 lumens
Efficiency: N/A
Efficacy: 126.3 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: General Diffuse

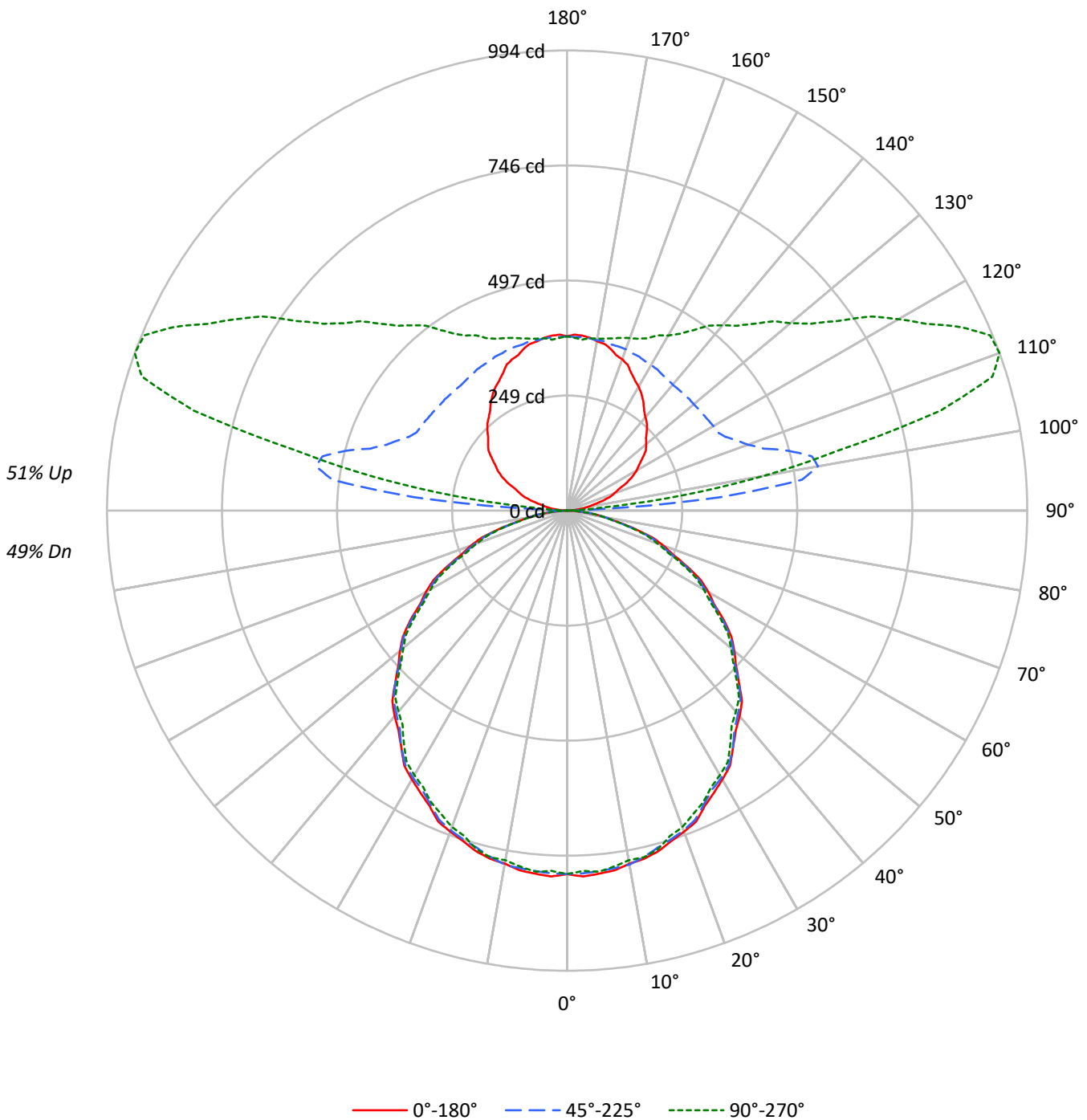
Input Watts (W): 36.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49				
1	97	93	89	86	90	86	82	79	72	70	68	60	58	57	48	47	46	41				
2	89	81	75	70	81	75	69	65	63	59	56	52	50	47	42	40	39	34				
3	81	71	64	58	74	66	59	54	56	51	47	46	43	40	37	35	33	29				
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	30	28	24				
5	68	56	48	42	62	52	44	39	44	38	34	37	32	29	30	27	24	21				
6	62	50	42	36	57	46	39	34	40	34	30	33	29	25	27	24	21	18				
7	57	45	37	31	53	42	35	30	36	30	26	30	26	22	25	21	19	16				
8	53	41	33	28	49	38	31	26	33	27	23	27	23	20	23	19	17	14				
9	50	37	30	25	46	35	28	23	30	24	21	25	21	18	21	18	15	13				
10	46	34	27	22	43	32	25	21	27	22	18	23	19	16	19	16	14	12				

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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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.3	1.6
10°-20°	213.0	4.7
20°-30°	321.8	7.0
30°-40°	387.5	8.5
40°-50°	401.8	8.8
50°-60°	364.3	8.0
60°-70°	276.9	6.1
70°-80°	154.2	3.4
80°-90°	39.8	0.9
90°-100°	171.5	3.8
100°-110°	488.0	10.7
110°-120°	467.6	10.2
120°-130°	370.1	8.1
130°-140°	297.0	6.5
140°-150°	232.5	5.1
150°-160°	170.1	3.7
160°-170°	105.4	2.3
170°-180°	35.8	0.8
0°-30°	609.1	13.3
0°-40°	996.6	21.8
0°-60°	1762.7	38.6
0°-90°	2233.6	48.9
90°-120°	1127.1	24.7
90°-150°	2026.7	44.3
90°-180°	2338.0	51.1
0°-180°	4571.6	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	2
95°	19	74	332	115	71	21
105°	76	115	497	878	835	80
115°	141	170	377	799	938	139
125°	199	221	360	597	714	178
135°	243	264	356	504	570	188
145°	287	302	358	437	476	179
155°	328	335	367	395	411	151
165°	362	364	371	379	385	102
175°	379	377	376	374	371	36
180°	376	376	376	376	376	

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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°	5.7	30.4	70.4	20.5	15.5
95°	18.6	73.9	332.0	114.9	70.8
97.5°	34.2	86.5	511.3	365.9	250.7
100°	45.1	94.1	550.3	557.4	429.3
102.5°	57.1	102.2	541.7	713.5	601.6
105°	75.8	115.0	497.3	878.4	835.1
107.5°	94.9	130.0	445.5	925.0	963.6
110°	108.1	140.9	415.7	907.2	993.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	120.6	151.8	395.7	865.1	988.8
115°	141.0	170.4	377.1	798.9	938.1
117.5°	158.9	186.4	366.1	726.5	874.0
120°	173.2	196.3	364.9	685.1	826.5
122.5°	184.6	207.7	362.1	648.9	780.1
125°	198.9	220.6	359.9	597.3	714.1
127.5°	214.5	234.8	358.8	566.5	662.8
130°	222.5	242.8	357.1	545.0	629.0
132.5°	231.1	250.9	357.1	528.3	605.5
135°	243.3	263.6	355.6	504.5	570.3
137.5°	254.7	274.5	355.5	484.4	541.3
140°	263.3	283.6	354.9	467.8	522.4
142.5°	273.1	290.0	356.6	454.5	503.5
145°	286.9	301.6	358.5	436.7	475.8
147.5°	298.8	313.1	361.6	418.7	452.5
150°	309.1	318.9	362.8	412.7	436.5
152.5°	317.1	327.5	363.9	404.7	426.8
155°	327.7	335.4	367.1	394.6	410.7
157.5°	340.9	345.5	367.8	390.1	401.6
160°	347.8	351.3	370.7	386.6	396.4
162.5°	351.8	355.8	371.2	383.7	391.3
165°	362.1	363.5	371.4	379.4	385.0
167.5°	369.1	367.8	374.7	378.3	380.5
170°	371.4	370.7	373.5	374.3	377.1
172.5°	376.5	374.2	375.2	373.1	375.4
175°	379.2	377.1	375.7	373.5	370.7
177.5°	380.4	377.0	375.2	373.0	373.5
180°	376.4	376.4	376.4	376.4	376.4

(END OF REPORT)