

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: P521397

Luminaire Tested: SQ4-F-050U-050D-92765-1D-UNV-STD-W-4_5000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521397
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_5000K
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 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

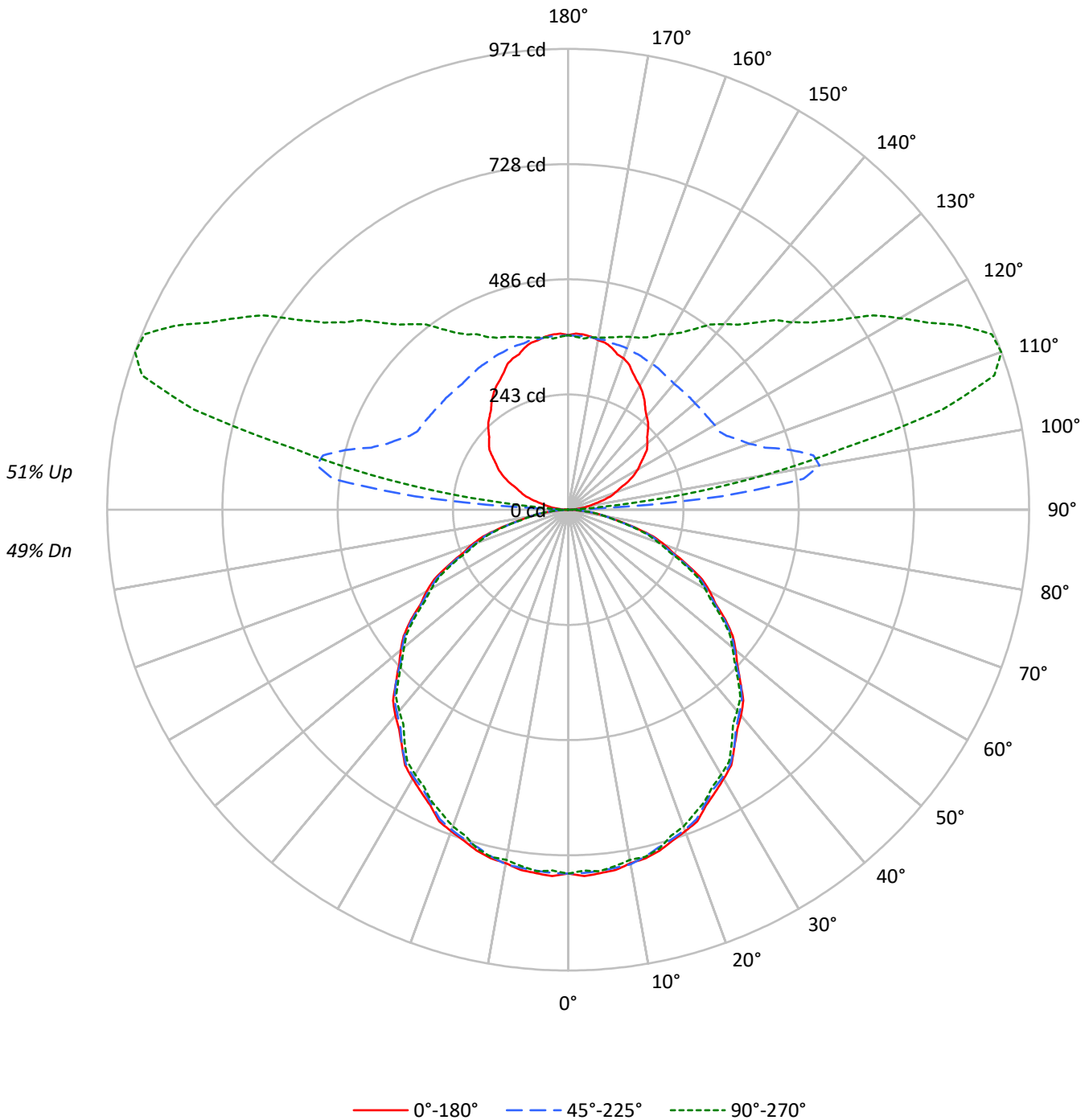
Lumens per Lamp: N/A
Luminaire Lumens: 4465.0 lumens
Efficiency: N/A
Efficacy: 122.3 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 36.5
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°	7075	7075	7075
5°	7121	7073	7082
10°	7086	7106	7018
15°	7105	7035	7064
20°	7077	7047	6974
25°	6997	6954	6912
30°	6977	6932	6865
35°	6869	6869	6763
40°	6817	6753	6665
45°	6688	6688	6593
50°	6607	6562	6472
55°	6495	6428	6328
60°	6351	6235	6139
65°	6097	5960	5846
70°	5813	5616	5476
75°	5183	5033	4959
80°	4282	4224	4171
85°	3102	3430	3430

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6688 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.6	1.6
10°-20°	208.0	4.7
20°-30°	314.3	7.0
30°-40°	378.5	8.5
40°-50°	392.4	8.8
50°-60°	355.8	8.0
60°-70°	270.5	6.1
70°-80°	150.6	3.4
80°-90°	38.8	0.9
90°-100°	167.5	3.8
100°-110°	476.6	10.7
110°-120°	456.7	10.2
120°-130°	361.4	8.1
130°-140°	290.1	6.5
140°-150°	227.1	5.1
150°-160°	166.2	3.7
160°-170°	102.9	2.3
170°-180°	34.9	0.8
0°-30°	594.9	13.3
0°-40°	973.4	21.8
0°-60°	1721.6	38.6
0°-90°	2181.5	48.9
90°-120°	1100.8	24.7
90°-150°	1979.5	44.3
90°-180°	2283.0	51.1
0°-180°	4465.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	767	767	767	767	767	
5°	769	760	764	765	765	73
15°	744	737	736	737	740	210
25°	687	682	683	679	679	318
35°	610	604	610	602	600	383
45°	513	510	513	503	505	397
55°	404	403	400	395	393	360
65°	279	278	273	270	268	277
75°	145	143	141	139	139	155
85°	29	31	32	34	32	36
90°	0	0	0	0	0	2
95°	18	72	324	112	69	21
105°	74	112	486	858	816	78
115°	138	166	368	780	916	136
125°	194	216	352	583	698	174
135°	238	257	347	493	557	183
145°	280	295	350	426	465	175
155°	320	328	358	385	401	148
165°	354	355	363	370	376	99
175°	370	368	367	365	362	35
180°	368	368	368	368	368	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	766.8	766.8	766.8	766.8	766.8
2.5°	772.7	764.5	766.0	766.7	761.0
5°	768.9	759.7	763.7	764.7	764.7
7.5°	765.6	758.4	761.0	757.8	757.4
10°	756.4	753.3	758.5	751.1	749.1
12.5°	752.2	747.5	748.4	747.0	749.1
15°	743.8	736.7	736.5	736.6	739.6
17.5°	730.9	721.6	727.7	721.2	720.4
20°	720.8	711.6	717.7	710.3	710.3
22.5°	710.8	699.9	706.0	696.1	693.6
25°	687.3	682.2	683.1	679.0	679.0
27.5°	670.8	659.5	663.3	657.4	657.8
30°	654.9	643.6	650.7	642.4	644.4
32.5°	639.0	631.8	635.7	626.5	630.2
35°	609.9	603.8	609.9	602.5	600.5
37.5°	584.4	578.0	580.0	575.3	570.2
40°	566.0	558.8	560.7	554.4	553.4
42.5°	545.9	541.2	541.5	536.1	536.7
45°	512.6	509.6	512.6	503.3	505.3
47.5°	482.9	479.2	478.9	472.7	475.2
50°	460.3	458.3	457.2	450.9	450.9
52.5°	436.9	434.8	433.7	429.1	428.3
55°	403.8	402.8	399.6	395.4	393.4
57.5°	367.6	365.6	363.9	359.4	357.8
60°	344.2	342.1	337.9	332.7	332.7
62.5°	318.2	316.2	311.1	309.2	305.9
65°	279.3	278.3	273.0	269.9	267.8
67.5°	240.6	237.3	235.0	230.9	228.9
70°	215.5	211.4	208.2	205.0	203.0
72.5°	187.9	184.6	181.4	179.9	177.0
75°	145.4	143.4	141.2	139.1	139.1
77.5°	105.7	105.0	102.9	102.9	101.9
80°	80.6	81.6	79.5	79.5	78.5
82.5°	58.0	59.0	58.6	59.4	58.4
85°	29.3	31.3	32.4	33.5	32.4
87.5°	8.4	10.8	12.6	13.4	13.4
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.6	29.6	68.8	20.0	15.1
95°	18.2	72.2	324.3	112.2	69.2
97.5°	33.4	84.5	499.4	357.4	244.9
100°	44.0	91.9	537.4	544.4	419.3
102.5°	55.8	99.8	529.1	696.8	587.6
105°	74.1	112.3	485.7	858.0	815.6
107.5°	92.7	127.0	435.1	903.4	941.1
110°	105.5	137.6	406.1	886.0	970.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	117.8	148.3	386.5	844.9	965.7
115°	137.7	166.4	368.3	780.3	916.2
117.5°	155.2	182.1	357.6	709.6	853.6
120°	169.1	191.7	356.4	669.2	807.2
122.5°	180.3	202.9	353.6	633.7	761.9
125°	194.3	215.5	351.5	583.4	697.5
127.5°	209.5	229.3	350.4	553.3	647.3
130°	217.4	237.2	348.7	532.3	614.3
132.5°	225.7	245.0	348.7	516.0	591.4
135°	237.6	257.4	347.3	492.8	557.0
137.5°	248.8	268.1	347.2	473.1	528.6
140°	257.2	277.0	346.6	456.9	510.2
142.5°	266.7	283.2	348.3	443.9	491.7
145°	280.3	294.6	350.1	426.5	464.8
147.5°	291.9	305.8	353.2	408.9	442.0
150°	301.9	311.5	354.3	403.1	426.3
152.5°	309.7	319.9	355.5	395.2	416.8
155°	320.1	327.6	358.5	385.4	401.2
157.5°	332.9	337.5	359.2	381.0	392.2
160°	339.7	343.1	362.0	377.6	387.2
162.5°	343.6	347.5	362.6	374.8	382.2
165°	353.6	355.0	362.7	370.5	376.0
167.5°	360.5	359.3	365.9	369.5	371.7
170°	362.7	362.0	364.8	365.6	368.3
172.5°	367.8	365.4	366.5	364.4	366.6
175°	370.4	368.4	366.9	364.8	362.0
177.5°	371.5	368.2	366.5	364.3	364.8
180°	367.6	367.6	367.6	367.6	367.6

(END OF REPORT)