

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: P521771

Luminaire Tested: SQ4-WB-050U-075D-92765-1D-UNV-STD-W-4_3500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521771
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-050U-075D-92765-1D-UNV-STD-W-4_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4793.2 lumens
Efficiency: N/A
Efficacy: 100.5 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

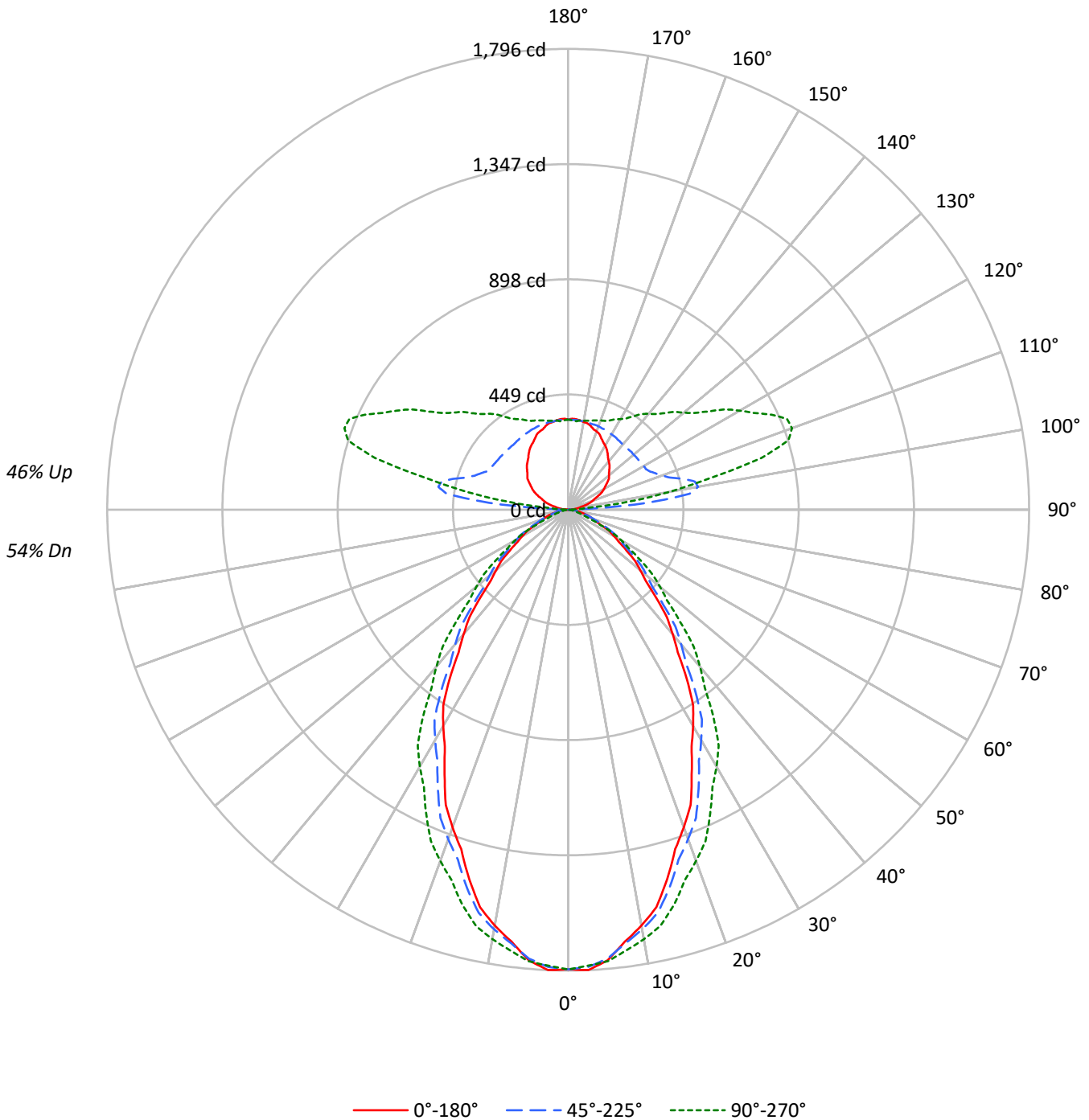
Input Watts (W): 47.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	108	108	108	108	100	100	100	100	86	86	86	72	72	72	60	60	60	54				54
1	100	96	93	90	93	90	87	84	77	75	73	66	64	63	55	54	53				48	
2	92	85	80	75	85	80	75	71	69	66	63	59	57	55	50	48	47				43	
3	85	76	70	64	79	71	66	61	62	58	54	54	50	48	46	43	41				38	
4	78	69	61	56	73	64	58	53	56	51	47	49	45	42	42	39	37				34	
5	73	62	54	49	67	58	51	46	51	46	42	44	41	37	38	35	33				30	
6	67	56	49	43	63	53	46	41	47	41	37	41	37	34	35	32	30				27	
7	63	51	44	38	58	48	42	37	43	37	34	38	33	30	33	30	27				25	
8	58	47	40	35	54	44	38	33	39	34	30	35	31	28	30	27	25				23	
9	55	43	36	31	51	41	34	30	36	31	28	32	28	25	28	25	23				21	
10	51	40	33	28	48	38	32	27	34	29	25	30	26	23	26	23	21				19	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16529	16529	16529
5°	16322	16264	16358
10°	15421	15561	15922
15°	14236	14566	15220
20°	12928	13414	14301
25°	11595	12227	13324
30°	10368	11046	12310
35°	9066	9721	11111
40°	7631	8237	9618
45°	6297	6841	8031
50°	5258	5731	6690
55°	4464	4919	5525
60°	3814	4264	4410
65°	3037	3587	2849
70°	2692	2800	1740
75°	2495	2271	1066
80°	2295	2088	919
85°	2085	1916	752

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8031 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.3	3.4
10°-20°	427.4	8.9
20°-30°	553.6	11.5
30°-40°	542.1	11.3
40°-50°	415.0	8.7
50°-60°	276.5	5.8
60°-70°	150.9	3.1
70°-80°	62.9	1.3
80°-90°	17.8	0.4
90°-100°	160.1	3.3
100°-110°	455.6	9.5
110°-120°	436.5	9.1
120°-130°	345.5	7.2
130°-140°	277.3	5.8
140°-150°	217.1	4.5
150°-160°	158.8	3.3
160°-170°	98.4	2.1
170°-180°	33.4	0.7
0°-30°	1145.3	23.9
0°-40°	1687.4	35.2
0°-60°	2378.9	49.6
0°-90°	2610.5	54.5
90°-120°	1052.2	22.0
90°-150°	1892.1	39.5
90°-180°	2183.0	45.5
0°-180°	4793.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1792	1792	1792	1792	1792	
5°	1762	1745	1756	1760	1766	164
15°	1490	1485	1525	1566	1593	416
25°	1139	1142	1201	1254	1309	524
35°	805	809	863	921	986	500
45°	483	492	524	564	616	376
55°	278	289	306	317	344	252
65°	139	151	164	144	130	145
75°	70	70	64	44	30	75
85°	20	20	18	12	7	21
90°	0	0	0	0	0	2
95°	17	69	310	107	66	20
105°	71	107	464	820	780	75
115°	132	159	352	746	876	130
125°	186	206	336	558	667	166
135°	227	246	332	471	532	175
145°	268	282	335	408	444	167
155°	306	313	343	368	384	141
165°	338	339	347	354	359	95
175°	354	352	351	349	346	34
180°	351	351	351	351	351	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1791.5	1791.5	1791.5	1791.5	1791.5
2.5°	1795.9	1779.9	1783.9	1783.8	1778.9
5°	1762.4	1744.7	1756.1	1760.1	1766.3
7.5°	1697.0	1683.6	1704.4	1719.7	1732.2
10°	1646.0	1634.5	1661.0	1683.3	1699.5
12.5°	1586.9	1577.2	1610.0	1640.1	1661.1
15°	1490.4	1485.0	1525.0	1566.5	1593.4
17.5°	1387.1	1384.5	1430.3	1478.7	1513.2
20°	1316.7	1315.9	1366.2	1416.6	1456.6
22.5°	1245.6	1247.3	1300.2	1352.6	1398.1
25°	1139.0	1142.1	1201.1	1253.5	1308.8
27.5°	1040.4	1041.8	1102.9	1158.1	1217.1
30°	973.2	977.0	1036.8	1094.0	1155.5
32.5°	905.9	910.3	968.9	1028.0	1090.7
35°	804.9	808.8	863.1	921.2	986.5
37.5°	700.9	706.1	754.3	809.2	873.5
40°	633.6	641.3	683.9	735.6	798.6
42.5°	568.8	578.3	617.9	666.9	723.8
45°	482.6	491.9	524.3	564.0	615.5
47.5°	408.4	419.0	444.0	478.1	522.1
50°	366.3	376.3	399.3	424.6	466.1
52.5°	329.2	339.2	359.7	379.2	414.6
55°	277.5	289.0	305.8	317.4	343.5
57.5°	235.0	246.1	259.4	264.6	280.5
60°	206.7	219.0	231.1	230.5	239.0
62.5°	181.0	191.4	203.4	195.1	195.6
65°	139.1	150.7	164.3	143.6	130.5
67.5°	112.4	114.9	128.9	100.1	84.6
70°	99.8	99.8	103.8	77.5	64.5
72.5°	87.9	87.9	84.3	63.0	49.4
75°	70.0	70.0	63.7	43.7	29.9
77.5°	53.9	53.3	48.7	32.6	21.7
80°	43.2	43.2	39.3	25.7	17.3
82.5°	33.8	33.8	30.5	20.1	12.9
85°	19.7	19.7	18.1	11.7	7.1
87.5°	6.9	6.9	6.3	3.8	3.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.3	28.3	65.7	19.1	14.4
95°	17.4	69.0	310.0	107.3	66.1
97.5°	31.9	80.8	477.4	341.6	234.1
100°	42.1	87.8	513.7	520.4	400.8
102.5°	53.3	95.4	505.7	666.1	561.7
105°	70.8	107.4	464.3	820.1	779.6
107.5°	88.6	121.4	415.9	863.5	899.6
110°	100.9	131.6	388.1	846.9	927.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	112.6	141.8	369.4	807.6	923.1
115°	131.6	159.0	352.1	745.8	875.8
117.5°	148.3	174.0	341.8	678.3	815.9
120°	161.7	183.2	340.7	639.6	771.6
122.5°	172.4	193.9	338.0	605.8	728.3
125°	185.7	206.0	336.0	557.6	666.7
127.5°	200.3	219.2	335.0	528.9	618.7
130°	207.8	226.7	333.4	508.8	587.2
132.5°	215.8	234.2	333.4	493.2	565.3
135°	227.1	246.1	332.0	471.0	532.4
137.5°	237.8	256.2	331.9	452.3	505.3
140°	245.8	264.8	331.3	436.7	487.7
142.5°	254.9	270.7	333.0	424.3	470.0
145°	267.9	281.6	334.7	407.7	444.2
147.5°	279.0	292.3	337.6	390.9	422.5
150°	288.6	297.7	338.7	385.3	407.5
152.5°	296.1	305.7	339.8	377.8	398.4
155°	306.0	313.1	342.7	368.4	383.5
157.5°	318.3	322.6	343.4	364.2	374.9
160°	324.7	327.9	346.0	361.0	370.1
162.5°	328.4	332.2	346.6	358.2	365.3
165°	338.0	339.3	346.7	354.2	359.4
167.5°	344.6	343.4	349.8	353.2	355.3
170°	346.7	346.1	348.7	349.4	352.1
172.5°	351.5	349.3	350.3	348.4	350.5
175°	354.1	352.1	350.7	348.7	346.0
177.5°	355.1	352.0	350.3	348.2	348.7
180°	351.4	351.4	351.4	351.4	351.4

(END OF REPORT)