

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: P521758

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

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521758
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-050D-92765-1D-UNV-STD-W-4_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 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: 3925.8 lumens
Efficiency: N/A
Efficacy: 107.6 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

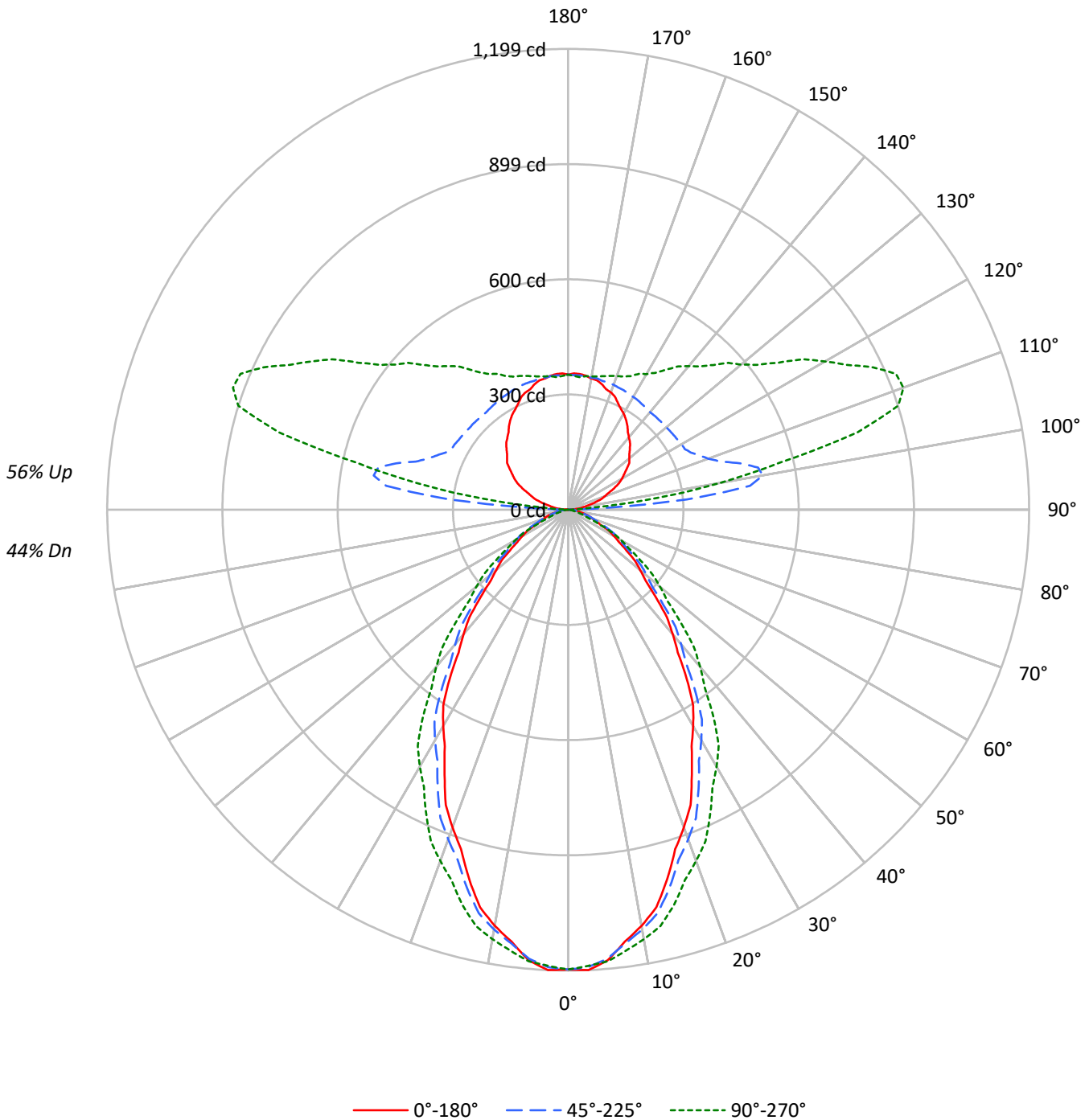
Input Watts (W): 36.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44				
1	98	94	90	87	89	86	83	80	72	70	68	59	57	56	47	46	45	39				
2	90	83	77	73	82	76	72	68	64	61	58	53	50	48	42	41	40	35				
3	82	74	67	62	76	68	62	58	58	53	50	48	45	42	38	37	35	31				
4	76	66	59	53	70	61	55	50	52	47	44	43	40	37	35	33	31	27				
5	70	59	52	46	64	55	49	44	47	42	38	39	36	33	32	30	28	25				
6	65	54	46	41	60	50	43	39	43	38	34	36	32	29	30	27	25	22				
7	60	49	42	36	55	46	39	34	39	34	30	33	29	27	27	25	23	20				
8	56	45	37	32	52	42	35	31	36	31	27	31	27	24	25	23	21	18				
9	53	41	34	29	48	38	32	28	33	28	25	28	25	22	24	21	19	17				
10	49	38	31	27	45	35	29	25	31	26	23	26	23	20	22	19	18	16				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11036	11036	11036
5°	10899	10860	10923
10°	10297	10391	10631
15°	9506	9726	10162
20°	8632	8956	9549
25°	7742	8164	8896
30°	6923	7375	8220
35°	6054	6491	7419
40°	5095	5499	6423
45°	4205	4568	5363
50°	3511	3827	4468
55°	2981	3285	3690
60°	2546	2847	2945
65°	2028	2395	1901
70°	1799	1869	1160
75°	1665	1515	709
80°	1536	1392	611
85°	1387	1281	498

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5363 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.7	2.8
10°-20°	285.4	7.3
20°-30°	369.7	9.4
30°-40°	362.0	9.2
40°-50°	277.1	7.1
50°-60°	184.6	4.7
60°-70°	100.8	2.6
70°-80°	42.0	1.1
80°-90°	11.9	0.3
90°-100°	160.1	4.1
100°-110°	455.6	11.6
110°-120°	436.5	11.1
120°-130°	345.5	8.8
130°-140°	277.3	7.1
140°-150°	217.1	5.5
150°-160°	158.8	4.0
160°-170°	98.4	2.5
170°-180°	33.4	0.9
0°-30°	764.8	19.5
0°-40°	1126.7	28.7
0°-60°	1588.4	40.5
0°-90°	1743.1	44.4
90°-120°	1052.2	26.8
90°-150°	1892.1	48.2
90°-180°	2183.0	55.6
0°-180°	3925.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1196	1196	1196	1196	1196	
5°	1177	1165	1173	1175	1179	109
15°	995	992	1018	1046	1064	278
25°	760	763	802	837	874	350
35°	538	540	576	615	659	334
45°	322	328	350	377	411	251
55°	185	193	204	212	229	168
65°	93	101	110	96	87	97
75°	47	47	42	29	20	50
85°	13	13	12	8	5	14
90°	0	0	0	0	0	1
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°	1196.2	1196.2	1196.2	1196.2	1196.2
2.5°	1199.1	1188.5	1191.2	1191.1	1187.8
5°	1176.8	1165.0	1172.6	1175.3	1179.4
7.5°	1133.1	1124.2	1138.0	1148.3	1156.6
10°	1099.1	1091.4	1109.1	1124.0	1134.8
12.5°	1059.6	1053.2	1075.0	1095.1	1109.2
15°	995.2	991.6	1018.3	1046.0	1063.9
17.5°	926.2	924.4	955.1	987.4	1010.4
20°	879.2	878.7	912.2	945.9	972.6
22.5°	831.7	832.8	868.1	903.2	933.5
25°	760.5	762.6	802.0	837.0	873.9
27.5°	694.7	695.6	736.4	773.3	812.7
30°	649.8	652.4	692.3	730.5	771.6
32.5°	604.9	607.8	647.0	686.4	728.3
35°	537.5	540.0	576.3	615.1	658.7
37.5°	468.0	471.5	503.7	540.3	583.2
40°	423.0	428.2	456.6	491.2	533.3
42.5°	379.8	386.2	412.6	445.3	483.3
45°	322.3	328.4	350.1	376.6	411.0
47.5°	272.7	279.8	296.4	319.3	348.6
50°	244.6	251.3	266.6	283.5	311.3
52.5°	219.8	226.5	240.2	253.2	276.8
55°	185.3	193.0	204.2	211.9	229.4
57.5°	156.9	164.3	173.2	176.7	187.3
60°	138.0	146.3	154.3	153.9	159.6
62.5°	120.8	127.8	135.8	130.3	130.6
65°	92.9	100.6	109.7	95.9	87.1
67.5°	75.1	76.7	86.1	66.8	56.5
70°	66.7	66.7	69.3	51.8	43.0
72.5°	58.7	58.7	56.3	42.1	33.0
75°	46.7	46.7	42.5	29.2	19.9
77.5°	36.0	35.6	32.5	21.8	14.5
80°	28.9	28.9	26.2	17.2	11.5
82.5°	22.6	22.6	20.4	13.4	8.6
85°	13.1	13.1	12.1	7.8	4.7
87.5°	4.6	4.6	4.2	2.5	2.1
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)