

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: P521757

Luminaire Tested: SQ4-WB-050U-050D-92765-1D-UNV-STD-W-4_3000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521757
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_3000K
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 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3833.9 lumens
Efficiency: N/A
Efficacy: 105.0 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

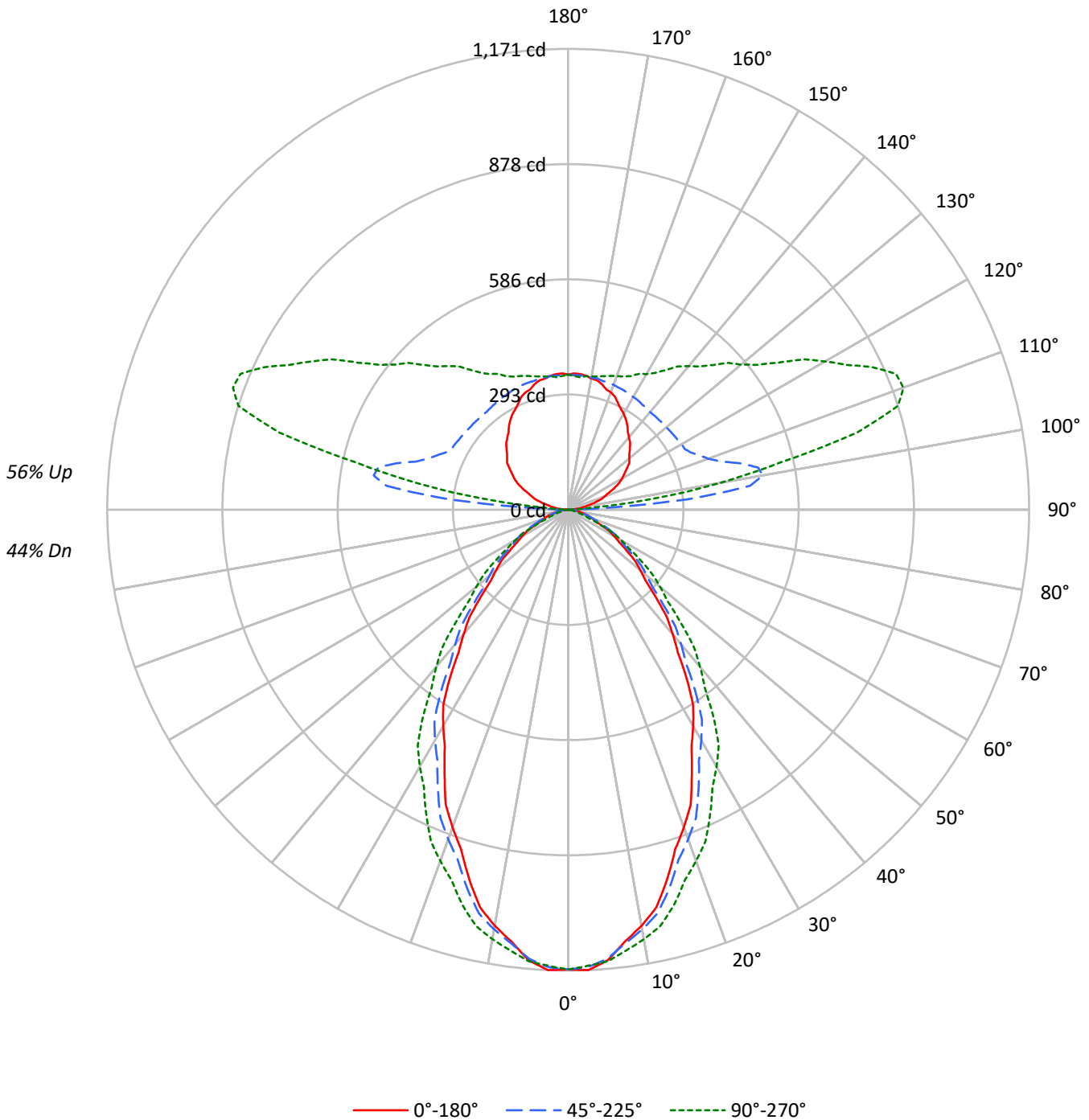
Input Watts (W): 36.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	10778	10778	10778
5°	10643	10605	10667
10°	10055	10147	10382
15°	9282	9498	9924
20°	8430	8747	9325
25°	7561	7973	8688
30°	6761	7203	8027
35°	5912	6339	7246
40°	4975	5370	6272
45°	4106	4461	5236
50°	3429	3738	4363
55°	2910	3207	3603
60°	2487	2781	2875
65°	1980	2338	1858
70°	1756	1826	1133
75°	1626	1479	695
80°	1498	1360	600
85°	1355	1249	487

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5236 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.1	2.8
10°-20°	278.7	7.3
20°-30°	361.0	9.4
30°-40°	353.5	9.2
40°-50°	270.6	7.1
50°-60°	180.3	4.7
60°-70°	98.4	2.6
70°-80°	41.0	1.1
80°-90°	11.6	0.3
90°-100°	156.4	4.1
100°-110°	444.9	11.6
110°-120°	426.3	11.1
120°-130°	337.4	8.8
130°-140°	270.8	7.1
140°-150°	212.0	5.5
150°-160°	155.1	4.0
160°-170°	96.1	2.5
170°-180°	32.6	0.9
0°-30°	746.8	19.5
0°-40°	1100.3	28.7
0°-60°	1551.2	40.5
0°-90°	1702.2	44.4
90°-120°	1027.6	26.8
90°-150°	1847.8	48.2
90°-180°	2132.0	55.6
0°-180°	3833.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1168	1168	1168	1168	1168	
5°	1149	1138	1145	1148	1152	107
15°	972	968	994	1021	1039	271
25°	743	745	783	817	853	342
35°	525	527	563	601	643	326
45°	315	321	342	368	401	245
55°	181	188	199	207	224	164
65°	91	98	107	94	85	94
75°	46	46	42	28	20	49
85°	13	13	12	8	5	14
90°	0	0	0	0	0	1
95°	17	67	303	105	65	19
105°	69	105	453	801	761	73
115°	128	155	344	728	855	127
125°	181	201	328	545	651	162
135°	222	240	324	460	520	171
145°	262	275	327	398	434	163
155°	299	306	335	360	374	138
165°	330	331	339	346	351	93
175°	346	344	342	340	338	33
180°	343	343	343	343	343	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1168.2	1168.2	1168.2	1168.2	1168.2
2.5°	1171.0	1160.6	1163.2	1163.2	1160.0
5°	1149.2	1137.7	1145.1	1147.7	1151.8
7.5°	1106.5	1097.8	1111.4	1121.4	1129.5
10°	1073.3	1065.8	1083.1	1097.7	1108.2
12.5°	1034.8	1028.5	1049.9	1069.4	1083.2
15°	971.8	968.3	994.4	1021.4	1039.0
17.5°	904.5	902.8	932.7	964.3	986.7
20°	858.6	858.1	890.9	923.7	949.8
22.5°	812.2	813.3	847.8	882.0	911.7
25°	742.7	744.7	783.2	817.4	853.4
27.5°	678.4	679.3	719.1	755.2	793.7
30°	634.6	637.1	676.1	713.4	753.5
32.5°	590.7	593.6	631.8	670.4	711.2
35°	524.9	527.4	562.8	600.7	643.3
37.5°	457.0	460.4	491.9	527.7	569.6
40°	413.1	418.1	445.9	479.7	520.8
42.5°	370.9	377.1	402.9	434.9	472.0
45°	314.7	320.7	341.9	367.8	401.3
47.5°	266.3	273.3	289.5	311.8	340.5
50°	238.9	245.4	260.4	276.9	304.0
52.5°	214.7	221.2	234.6	247.3	270.3
55°	180.9	188.5	199.4	207.0	224.0
57.5°	153.3	160.5	169.1	172.6	182.9
60°	134.8	142.8	150.7	150.3	155.8
62.5°	118.0	124.8	132.7	127.2	127.5
65°	90.7	98.2	107.1	93.6	85.1
67.5°	73.3	74.9	84.1	65.3	55.2
70°	65.1	65.1	67.7	50.6	42.0
72.5°	57.3	57.3	54.9	41.1	32.2
75°	45.6	45.6	41.5	28.5	19.5
77.5°	35.2	34.8	31.8	21.3	14.1
80°	28.2	28.2	25.6	16.8	11.3
82.5°	22.0	22.0	19.9	13.1	8.4
85°	12.8	12.8	11.8	7.6	4.6
87.5°	4.5	4.5	4.1	2.5	2.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.2	27.7	64.2	18.7	14.1
95°	17.0	67.4	302.7	104.8	64.6
97.5°	31.2	78.9	466.2	333.6	228.6
100°	41.1	85.8	501.7	508.2	391.4
102.5°	52.1	93.1	493.9	650.5	548.5
105°	69.2	104.9	453.4	800.9	761.3
107.5°	86.5	118.5	406.2	843.3	878.5
110°	98.5	128.5	379.0	827.1	906.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	<i>110.0</i>	138.4	360.8	788.7	901.5
115°	<i>128.5</i>	155.3	343.8	728.3	855.3
117.5°	<i>144.8</i>	170.0	333.8	662.4	796.8
120°	<i>157.9</i>	178.9	332.7	624.7	753.5
122.5°	<i>168.3</i>	189.4	330.1	591.6	711.2
125°	<i>181.4</i>	201.1	328.2	544.6	651.1
127.5°	<i>195.6</i>	214.1	327.1	516.5	604.2
130°	<i>202.9</i>	221.4	325.5	496.9	573.4
132.5°	<i>210.7</i>	228.7	325.5	481.6	552.1
135°	<i>221.8</i>	240.3	324.2	460.0	520.0
137.5°	<i>232.3</i>	250.2	324.1	441.7	493.5
140°	<i>240.1</i>	258.6	323.6	426.5	476.2
142.5°	<i>249.0</i>	264.4	325.2	414.4	459.0
145°	<i>261.6</i>	275.0	326.8	398.1	433.8
147.5°	<i>272.4</i>	285.5	329.7	381.7	412.6
150°	<i>281.8</i>	290.8	330.8	376.3	398.0
152.5°	<i>289.1</i>	298.6	331.8	368.9	389.1
155°	<i>298.8</i>	305.8	334.7	359.8	374.5
157.5°	<i>310.8</i>	315.0	335.3	355.7	366.1
160°	<i>317.1</i>	320.3	337.9	352.5	361.4
162.5°	<i>320.7</i>	324.4	338.5	349.8	356.7
165°	<i>330.1</i>	331.4	338.6	345.9	351.0
167.5°	<i>336.5</i>	335.4	341.6	344.9	346.9
170°	<i>338.6</i>	338.0	340.5	341.3	343.8
172.5°	<i>343.3</i>	341.1	342.1	340.2	342.2
175°	<i>345.8</i>	343.9	342.5	340.5	337.9
177.5°	<i>346.8</i>	343.7	342.1	340.0	340.5
180°	<i>343.2</i>	343.2	343.2	343.2	343.2

(END OF REPORT)