

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: P521770

Luminaire Tested: SQ4-WB-050U-075D-92765-1D-UNV-STD-W-4_3000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521770
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_3000K
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 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4680.9 lumens
Efficiency: N/A
Efficacy: 98.1 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

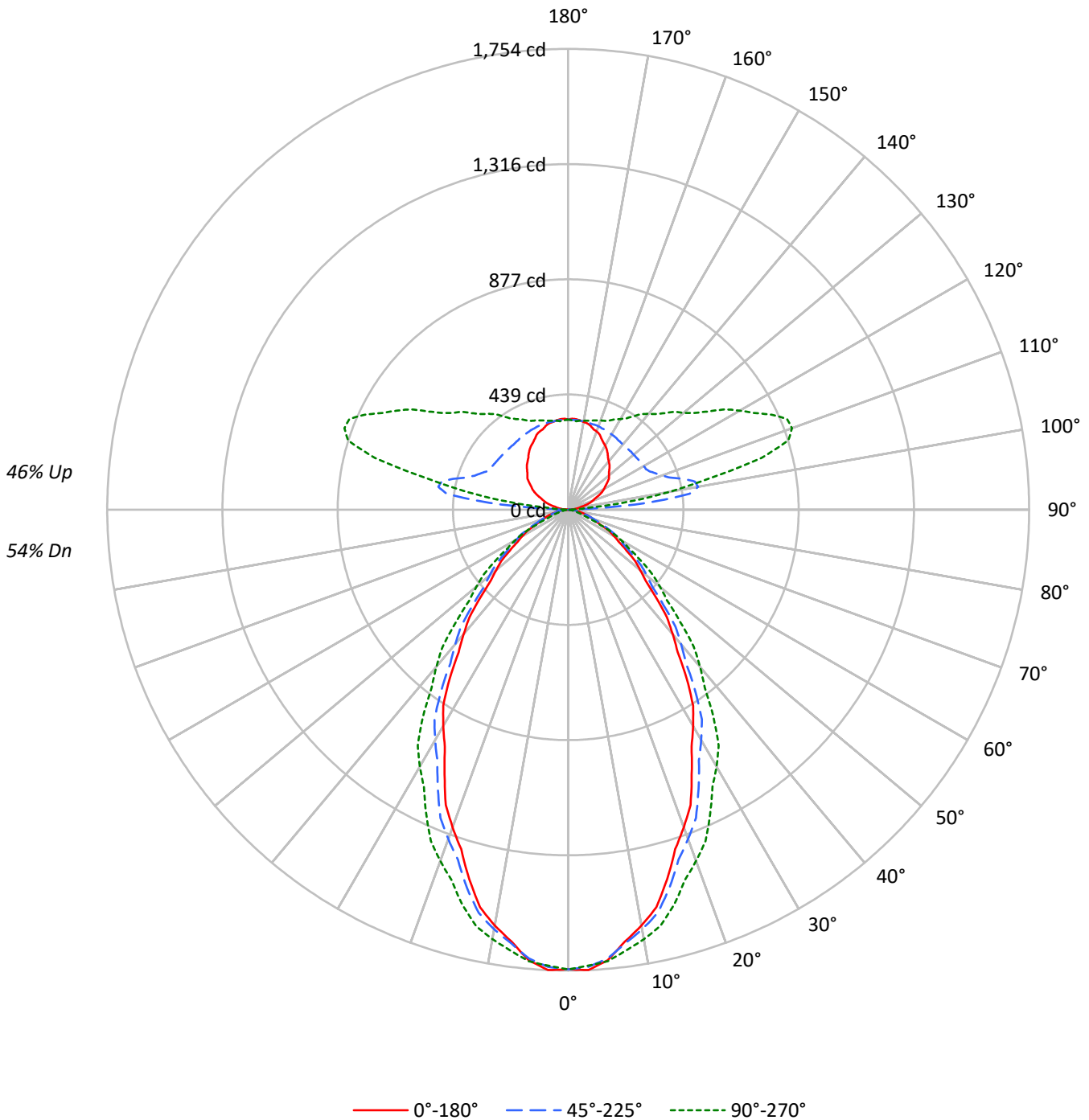
Input Watts (W): 47.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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				
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°	16141	16141	16141
5°	15940	15882	15975
10°	15060	15196	15549
15°	13902	14224	14862
20°	12624	13100	13967
25°	11323	11941	13011
30°	10124	10787	12021
35°	8854	9494	10851
40°	7452	8044	9393
45°	6149	6680	7843
50°	5134	5598	6534
55°	4359	4803	5397
60°	3726	4165	4307
65°	2967	3502	2781
70°	2630	2733	1697
75°	2435	2217	1041
80°	2242	2040	898
85°	2032	1874	730

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7843 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.5	3.4
10°-20°	417.4	8.9
20°-30°	540.6	11.5
30°-40°	529.4	11.3
40°-50°	405.2	8.7
50°-60°	270.0	5.8
60°-70°	147.4	3.1
70°-80°	61.4	1.3
80°-90°	17.4	0.4
90°-100°	156.4	3.3
100°-110°	444.9	9.5
110°-120°	426.3	9.1
120°-130°	337.4	7.2
130°-140°	270.8	5.8
140°-150°	212.0	4.5
150°-160°	155.1	3.3
160°-170°	96.1	2.1
170°-180°	32.6	0.7
0°-30°	1118.5	23.9
0°-40°	1647.9	35.2
0°-60°	2323.1	49.6
0°-90°	2549.3	54.5
90°-120°	1027.6	22.0
90°-150°	1847.8	39.5
90°-180°	2132.0	45.5
0°-180°	4680.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1750	1750	1750	1750	1750	
5°	1721	1704	1715	1719	1725	160
15°	1456	1450	1489	1530	1556	406
25°	1112	1115	1173	1224	1278	512
35°	786	790	843	900	963	489
45°	471	480	512	551	601	368
55°	271	282	299	310	336	246
65°	136	147	160	140	127	141
75°	68	68	62	43	29	73
85°	19	19	18	11	7	21
90°	0	0	0	0	0	2
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°	1749.5	1749.5	1749.5	1749.5	1749.5
2.5°	1753.8	1738.2	1742.1	1742.0	1737.2
5°	1721.1	1703.8	1714.9	1718.9	1724.9
7.5°	1657.2	1644.1	1664.4	1679.4	1691.6
10°	1607.5	1596.2	1622.0	1643.9	1659.7
12.5°	1549.7	1540.3	1572.3	1601.6	1622.2
15°	1455.5	1450.2	1489.2	1529.8	1556.0
17.5°	1354.6	1352.0	1396.8	1444.1	1477.7
20°	1285.8	1285.1	1334.2	1383.4	1422.5
22.5°	1216.4	1218.1	1269.7	1320.9	1365.3
25°	1112.3	1115.3	1173.0	1224.1	1278.1
27.5°	1016.1	1017.4	1077.0	1131.0	1188.6
30°	950.3	954.1	1012.5	1068.4	1128.4
32.5°	884.6	889.0	946.2	1003.9	1065.2
35°	786.1	789.8	842.9	899.6	963.4
37.5°	684.4	689.5	736.6	790.3	853.0
40°	618.7	626.2	667.9	718.4	779.9
42.5°	555.5	564.8	603.4	651.3	706.9
45°	471.3	480.3	512.0	550.8	601.1
47.5°	398.9	409.2	433.6	466.9	509.9
50°	357.7	367.5	390.0	414.7	455.2
52.5°	321.5	331.2	351.3	370.3	404.9
55°	271.0	282.2	298.6	309.9	335.5
57.5°	229.5	240.3	253.3	258.4	273.9
60°	201.9	213.9	225.7	225.1	233.4
62.5°	176.7	186.9	198.7	190.5	191.0
65°	135.9	147.1	160.4	140.2	127.4
67.5°	109.8	112.2	125.9	97.8	82.6
70°	97.5	97.5	101.3	75.7	62.9
72.5°	85.8	85.8	82.3	61.6	48.2
75°	68.3	68.3	62.2	42.7	29.2
77.5°	52.7	52.1	47.6	31.8	21.2
80°	42.2	42.2	38.4	25.1	16.9
82.5°	33.0	33.0	29.8	19.6	12.6
85°	19.2	19.2	17.7	11.4	6.9
87.5°	6.8	6.8	6.1	3.7	3.1
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)