

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: P521419

Luminaire Tested: SQ4-F-050U-100D-92765-1D-UNV-STD-W-4_3000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521419
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-38)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-050U-100D-92765-1D-UNV-STD-W-4_3000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 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: 6140.7 lumens
Efficiency: N/A
Efficacy: 105.5 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

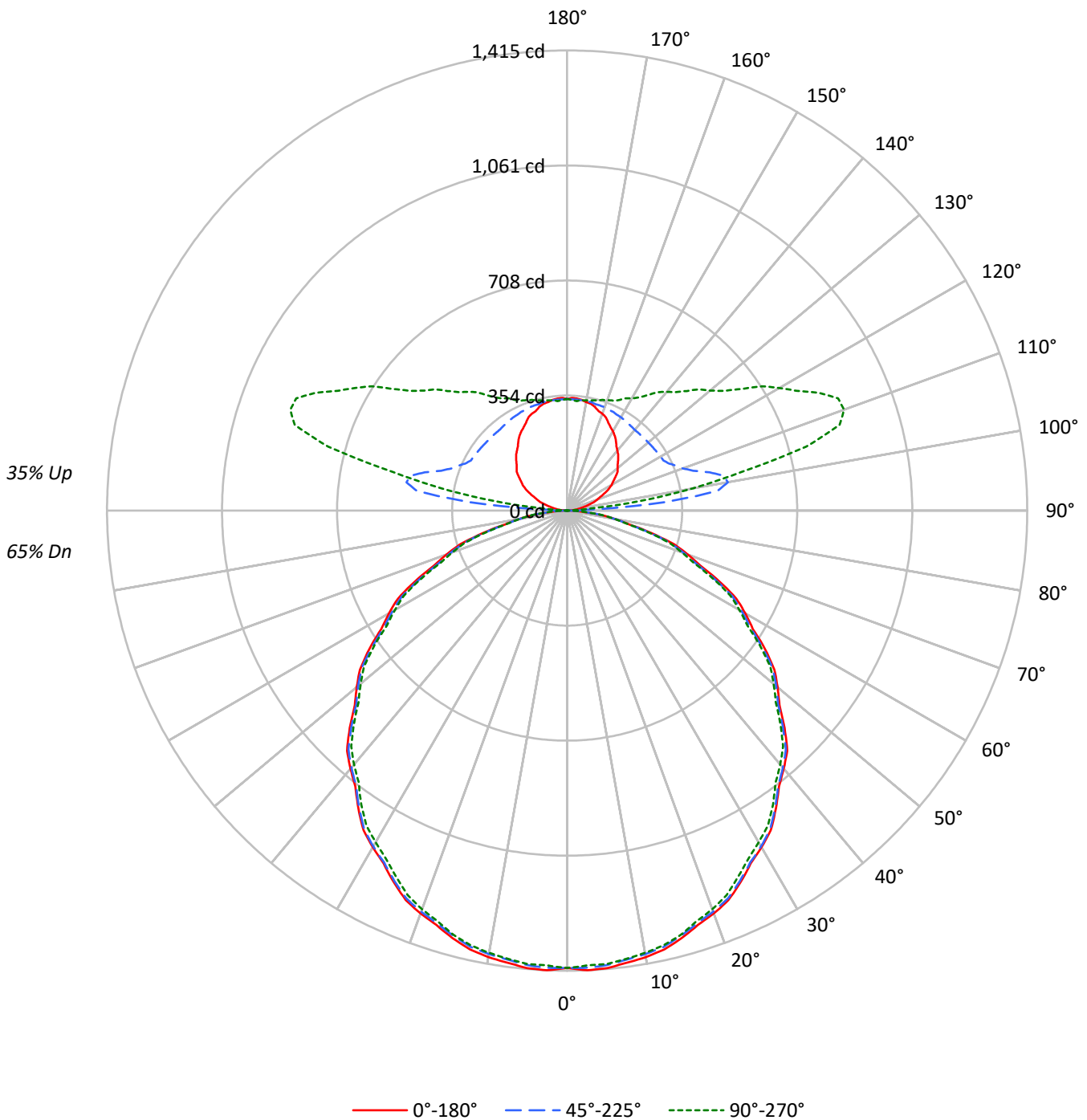
Input Watts (W): 58.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70	65				
1	101	97	92	89	95	91	87	84	80	78	75	71	69	67	62	60	59	55				
2	92	84	78	72	86	79	74	69	70	66	62	62	58	55	54	52	49	45				
3	84	74	66	60	78	70	63	57	62	56	52	54	50	47	48	44	42	38				
4	76	65	57	51	72	62	54	48	55	49	44	48	44	40	43	39	36	33				
5	70	58	50	43	66	55	47	41	49	43	38	43	38	34	38	34	31	28				
6	65	52	44	38	61	49	42	36	44	38	33	39	34	30	35	30	27	25				
7	60	47	39	33	56	45	37	32	40	34	29	36	30	27	32	27	24	22				
8	56	43	35	29	52	41	33	28	36	30	26	33	27	24	29	25	22	19				
9	52	39	31	26	49	37	30	25	33	27	23	30	25	21	27	22	19	17				
10	48	36	28	23	45	34	27	23	31	25	21	28	23	19	25	21	18	16				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12975	12975	12975
5°	13078	12997	12960
10°	13064	12974	12937
15°	13003	12928	12900
20°	12944	12887	12810
25°	12844	12794	12656
30°	12734	12703	12547
35°	12605	12561	12429
40°	12479	12432	12279
45°	12334	12232	12093
50°	12124	12041	11900
55°	11955	11781	11639
60°	11677	11442	11280
65°	11300	10979	10809
70°	10642	10299	10116
75°	9607	9365	9226
80°	7938	7938	7837
85°	5579	6404	6616

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12334 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.1	2.2
10°-20°	381.4	6.2
20°-30°	576.7	9.4
30°-40°	694.5	11.3
40°-50°	721.2	11.7
50°-60°	653.8	10.6
60°-70°	497.9	8.1
70°-80°	278.2	4.5
80°-90°	72.2	1.2
90°-100°	156.4	2.5
100°-110°	444.9	7.2
110°-120°	426.3	6.9
120°-130°	337.4	5.5
130°-140°	270.8	4.4
140°-150°	212.0	3.5
150°-160°	155.1	2.5
160°-170°	96.1	1.6
170°-180°	32.6	0.5
0°-30°	1091.2	17.8
0°-40°	1785.7	29.1
0°-60°	3160.8	51.5
0°-90°	4009.1	65.3
90°-120°	1027.6	16.7
90°-150°	1847.8	30.1
90°-180°	2132.0	34.7
0°-180°	6140.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1406	1406	1406	1406	1406	
5°	1412	1399	1403	1399	1399	134
15°	1361	1349	1354	1351	1351	384
25°	1262	1251	1257	1247	1243	581
35°	1119	1112	1115	1104	1104	700
45°	945	940	938	928	927	728
55°	743	740	732	724	724	663
65°	518	512	503	496	495	510
75°	270	266	263	259	259	285
85°	53	57	60	62	62	66
90°	0	0	0	0	0	3
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°	1406.3	1406.3	1406.3	1406.3	1406.3
2.5°	1414.8	1403.4	1407.0	1404.6	1400.0
5°	1412.1	1398.7	1403.3	1399.4	1399.4
7.5°	1402.3	1389.6	1392.6	1390.2	1390.2
10°	1394.5	1380.2	1384.8	1380.9	1380.9
12.5°	1382.0	1369.2	1373.8	1369.9	1369.1
15°	1361.3	1348.9	1353.5	1350.6	1350.6
17.5°	1336.3	1324.5	1330.5	1325.8	1324.2
20°	1318.4	1305.0	1312.5	1304.7	1304.7
22.5°	1296.5	1284.6	1291.4	1282.0	1280.5
25°	1261.7	1251.2	1256.8	1247.0	1243.2
27.5°	1222.7	1211.4	1219.7	1208.7	1206.6
30°	1195.3	1184.8	1192.4	1180.6	1177.7
32.5°	1165.6	1156.7	1161.9	1150.9	1148.8
35°	1119.1	1112.5	1115.2	1104.5	1103.5
37.5°	1069.7	1063.2	1065.8	1053.9	1053.1
40°	1036.1	1030.4	1032.2	1019.5	1019.5
42.5°	1001.8	995.3	995.5	983.6	982.8
45°	945.3	939.6	937.5	927.7	926.8
47.5°	885.4	882.7	879.5	869.7	869.7
50°	844.7	842.8	838.9	829.1	829.1
52.5°	803.3	802.2	796.7	788.4	786.9
55°	743.2	740.3	732.4	723.6	723.6
57.5°	677.3	675.1	666.2	659.1	657.4
60°	632.8	629.0	620.1	612.3	611.3
62.5°	586.7	583.7	574.0	567.0	565.2
65°	517.6	511.9	502.9	496.1	495.1
67.5°	444.5	438.0	430.3	424.6	422.7
70°	394.5	388.8	381.8	376.9	375.0
72.5°	345.3	339.6	333.4	330.1	329.7
75°	269.5	265.7	262.7	258.8	258.8
77.5°	195.5	193.2	191.6	189.6	189.6
80°	149.4	149.4	149.4	147.5	147.5
82.5°	107.2	109.5	111.1	110.0	110.0
85°	52.7	56.6	60.5	61.5	62.5
87.5°	14.8	19.4	24.2	25.0	25.8
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)