

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: P521432

Luminaire Tested: SQ4-F-050U-125D-92765-1D-UNV-STD-W-4_3000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521432
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-39)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-050U-125D-92765-1D-UNV-STD-W-4_3000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 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: 7207.4 lumens
Efficiency: N/A
Efficacy: 100.8 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

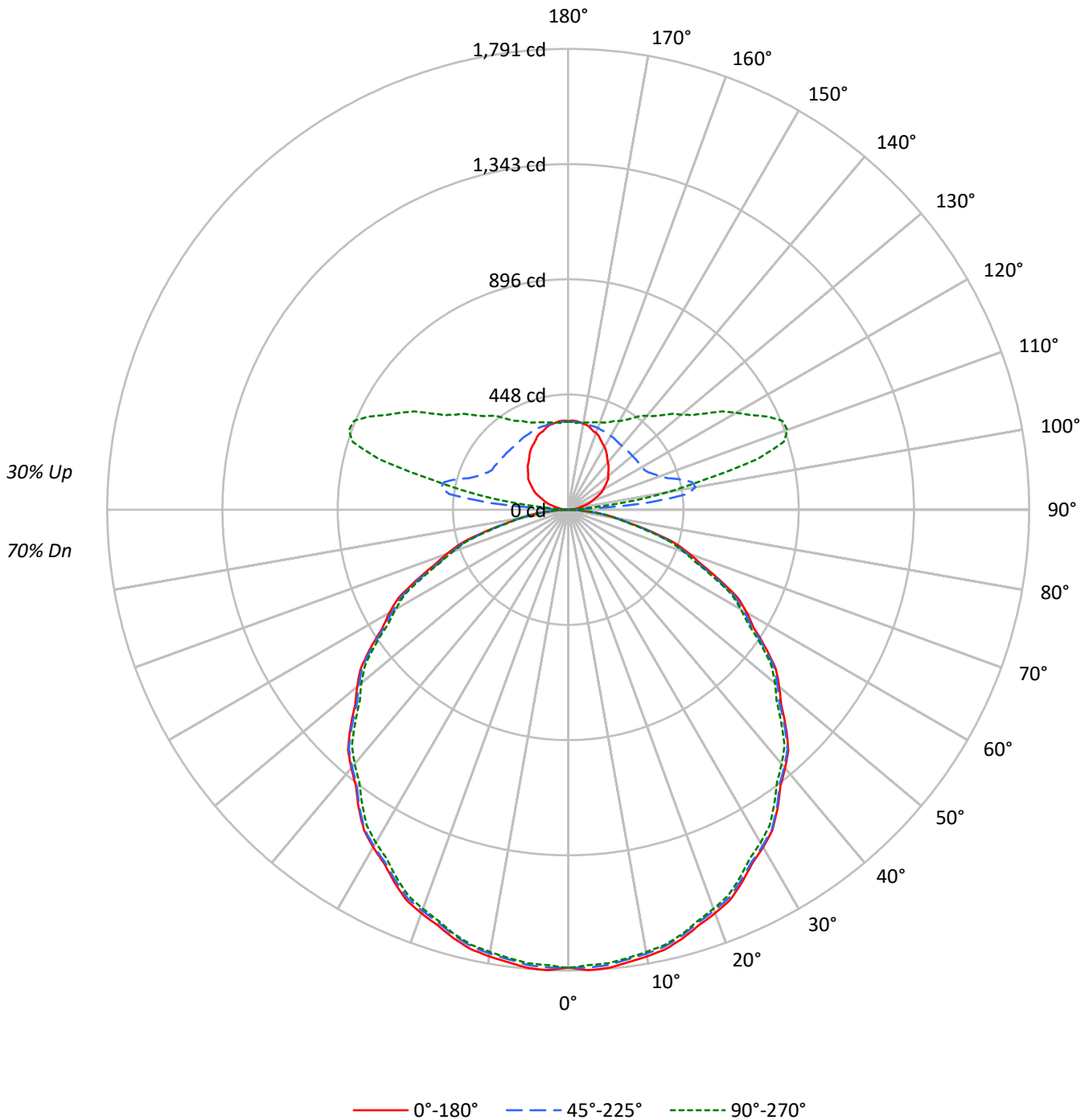
Input Watts (W): 71.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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	50	30	10	0														
RCR																																						
0	112	112	112	112	106	106	106	106	95	95	95	84	84	84	75	75	75	70						70														
1	102	98	94	90	96	92	89	86	83	80	78	74	72	70	66	64	63	59						59														
2	93	85	79	73	88	81	75	70	72	68	64	65	61	58	58	55	53	49						49														
3	85	75	67	61	80	71	64	58	64	58	53	57	53	49	51	47	45	41						41														
4	77	66	58	51	73	63	55	49	56	50	45	51	46	42	45	41	38	35						35														
5	71	59	50	44	67	56	48	42	50	44	39	45	40	36	41	37	33	30						30														
6	65	53	44	38	62	50	42	37	45	39	34	41	36	32	37	33	29	26						26														
7	61	48	39	33	57	45	38	32	41	35	30	37	32	28	34	29	26	23						23														
8	56	43	35	30	53	41	34	29	38	31	27	34	29	25	31	26	23	21						21														
9	52	40	32	26	49	38	31	26	35	28	24	31	26	22	28	24	21	19						19														
10	49	36	29	24	46	35	28	23	32	26	22	29	24	20	26	22	19	17						17														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16425	16425	16425
5°	16560	16452	16388
10°	16514	16414	16349
15°	16463	16361	16314
20°	16387	16281	16204
25°	16265	16175	16065
30°	16137	16085	15917
35°	15971	15916	15718
40°	15785	15726	15537
45°	15609	15507	15265
50°	15362	15236	15054
55°	15080	14939	14704
60°	14795	14524	14271
65°	14221	13922	13644
70°	13515	13040	12881
75°	12220	11871	11660
80°	10068	10068	9909
85°	7135	8162	8585

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 15609 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.5	2.3
10°-20°	482.5	6.7
20°-30°	729.8	10.1
30°-40°	879.0	12.2
40°-50°	912.6	12.7
50°-60°	827.3	11.5
60°-70°	631.1	8.8
70°-80°	353.0	4.9
80°-90°	91.8	1.3
90°-100°	156.4	2.2
100°-110°	444.9	6.2
110°-120°	426.3	5.9
120°-130°	337.4	4.7
130°-140°	270.8	3.8
140°-150°	212.0	2.9
150°-160°	155.1	2.2
160°-170°	96.1	1.3
170°-180°	32.6	0.5
0°-30°	1380.8	19.2
0°-40°	2259.9	31.4
0°-60°	3999.8	55.5
0°-90°	5075.8	70.4
90°-120°	1027.6	14.3
90°-150°	1847.8	25.6
90°-180°	2132.0	29.6
0°-180°	7207.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1780	1780	1780	1780	1780	
5°	1788	1770	1776	1771	1770	170
15°	1724	1706	1713	1711	1708	486
25°	1598	1581	1589	1577	1578	736
35°	1418	1406	1413	1397	1396	886
45°	1196	1190	1188	1174	1170	922
55°	938	936	929	917	914	837
65°	651	648	638	630	625	646
75°	343	337	333	328	327	362
85°	67	74	77	77	81	84
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°	1780.3	1780.3	1780.3	1780.3	1780.3
2.5°	1791.2	1776.7	1781.1	1777.8	1771.7
5°	1788.1	1770.0	1776.4	1771.4	1769.5
7.5°	1774.4	1757.4	1762.9	1759.9	1757.6
10°	1762.7	1746.5	1752.0	1748.9	1745.1
12.5°	1749.4	1732.4	1738.7	1734.2	1732.6
15°	1723.6	1706.5	1712.9	1710.9	1708.0
17.5°	1692.4	1675.0	1681.6	1677.7	1675.4
20°	1669.0	1650.8	1658.2	1650.4	1650.4
22.5°	1642.4	1624.2	1633.2	1621.5	1623.8
25°	1597.7	1581.4	1588.9	1577.2	1578.1
27.5°	1549.0	1533.8	1543.4	1528.3	1527.7
30°	1514.7	1499.4	1509.8	1493.2	1494.1
32.5°	1476.4	1463.4	1472.3	1456.4	1455.9
35°	1418.0	1406.5	1413.1	1397.4	1395.5
37.5°	1354.3	1345.9	1348.6	1333.8	1333.0
40°	1310.6	1302.9	1305.7	1290.0	1290.0
42.5°	1266.0	1259.1	1261.1	1244.0	1244.0
45°	1196.3	1189.6	1188.5	1173.7	1169.9
47.5°	1121.9	1116.5	1113.1	1099.8	1098.1
50°	1070.3	1066.5	1061.5	1049.8	1048.8
52.5°	1016.4	1014.9	1009.2	996.7	995.7
55°	937.5	935.6	928.7	916.9	914.1
57.5°	854.9	853.0	844.9	833.3	830.5
60°	801.8	796.0	787.1	776.3	773.4
62.5°	743.9	737.5	728.5	718.5	718.0
65°	651.4	647.6	637.7	629.8	625.0
67.5°	564.3	555.7	545.9	539.4	538.5
70°	501.0	492.4	483.4	478.5	477.5
72.5°	437.7	430.6	422.5	417.6	417.4
75°	342.8	337.0	333.0	328.1	327.1
77.5°	248.8	247.3	245.7	240.4	240.4
80°	189.5	189.5	189.5	186.5	186.5
82.5°	136.3	140.1	140.2	138.9	138.9
85°	67.4	74.1	77.1	77.2	81.1
87.5°	18.8	25.6	30.5	31.3	33.6
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)