

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: P521796

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

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521796  
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-125D-92765-1D-UNV-STD-W-4\_3000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
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: 6374.5 lumens  
Efficiency: N/A  
Efficacy: 89.2 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: Semi-Direct

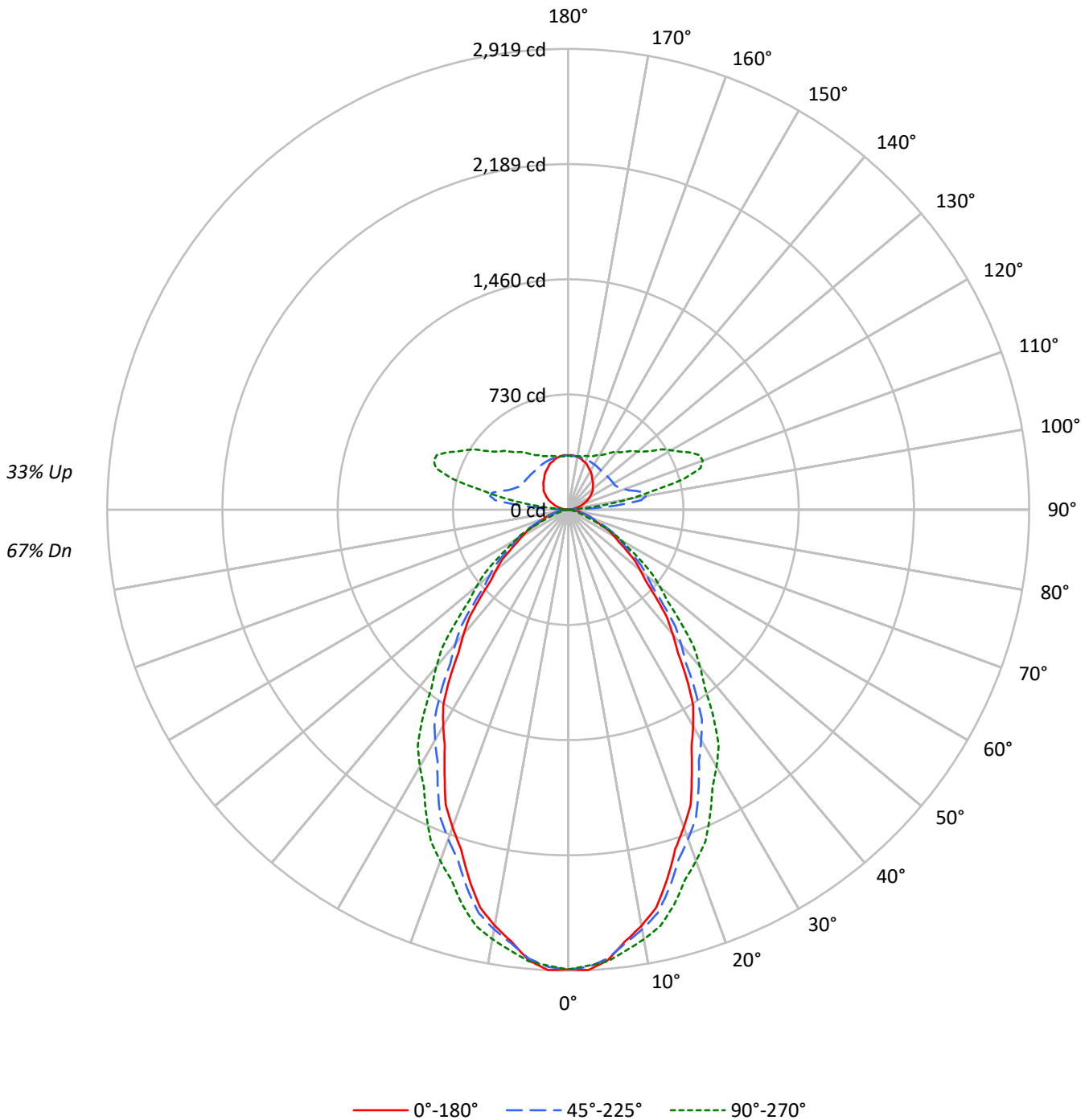
Input Watts (W): 71.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	111	111	111	111	105	105	105	105	93	93	93	81	81	81	71	71	71	67																				
1	103	99	96	93	97	94	91	88	83	81	79	74	72	71	65	64	63	59																				
2	95	88	83	78	90	84	79	75	75	71	68	67	64	62	60	57	56	52																				
3	88	79	73	67	83	75	69	65	68	63	59	61	57	54	54	52	49	46																				
4	81	71	64	59	77	68	61	56	61	56	52	55	51	48	50	47	44	41																				
5	75	65	57	52	71	62	55	50	56	50	46	51	46	43	46	42	39	37																				
6	70	59	51	46	66	56	49	44	51	46	41	46	42	38	42	38	36	33																				
7	65	54	46	41	62	51	45	40	47	41	37	43	38	35	39	35	32	30																				
8	61	49	42	37	58	47	41	36	43	38	34	40	35	32	36	32	30	28																				
9	57	46	38	34	54	44	37	33	40	35	31	37	32	29	34	30	27	25																				
10	54	42	35	31	51	41	34	30	37	32	28	34	30	27	32	28	25	23																				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	26864	26864	26864
5°	26528	26434	26588
10°	25065	25291	25878
15°	23138	23675	24737
20°	21011	21802	23244
25°	18846	19873	21656
30°	16851	17953	20008
35°	14736	15800	18059
40°	12403	13387	15634
45°	10236	11119	13053
50°	8546	9315	10874
55°	7255	7994	8980
60°	6200	6931	7167
65°	4936	5829	4630
70°	4378	4548	2827
75°	4053	3689	1729
80°	3735	3395	1493
85°	3377	3112	1217

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 13053 cd/sqm

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CATALOG NUMBER: SQ4-WB-050U-125D-92765-1D-UNV-STD-W-4\_3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	267.1	4.2
10°-20°	694.7	10.9
20°-30°	899.8	14.1
30°-40°	881.1	13.8
40°-50°	674.5	10.6
50°-60°	449.4	7.1
60°-70°	245.2	3.8
70°-80°	102.2	1.6
80°-90°	28.9	0.5
90°-100°	156.4	2.5
100°-110°	444.9	7.0
110°-120°	426.3	6.7
120°-130°	337.4	5.3
130°-140°	270.8	4.2
140°-150°	212.0	3.3
150°-160°	155.1	2.4
160°-170°	96.1	1.5
170°-180°	32.6	0.5
0°-30°	1861.5	29.2
0°-40°	2742.7	43.0
0°-60°	3866.5	60.7
0°-90°	4242.9	66.6
90°-120°	1027.6	16.1
90°-150°	1847.8	29.0
90°-180°	2132.0	33.4
0°-180°	6374.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2912	2912	2912	2912	2912	
5°	2864	2836	2854	2861	2871	266
15°	2422	2414	2479	2546	2590	676
25°	1851	1856	1952	2037	2127	851
35°	1308	1314	1403	1497	1603	813
45°	784	800	852	917	1000	612
55°	451	470	497	516	558	409
65°	226	245	267	233	212	235
75°	114	114	104	71	48	121
85°	32	32	29	19	12	35
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	

TEST NUMBER: P521796

CATALOG NUMBER: SQ4-WB-050U-125D-92765-1D-UNV-STD-W-4\_3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2911.7	2911.7	2911.7	2911.7	2911.7
2.5°	2918.9	2892.9	2899.4	2899.3	2891.3
5°	2864.4	2835.7	2854.2	2860.8	2870.8
7.5°	2758.1	2736.4	2770.2	2795.1	2815.4
10°	2675.4	2656.6	2699.6	2736.0	2762.2
12.5°	2579.3	2563.5	2616.8	2665.7	2699.9
15°	2422.4	2413.6	2478.6	2546.0	2589.8
17.5°	2254.5	2250.3	2324.8	2403.5	2459.4
20°	2140.0	2138.8	2220.5	2302.5	2367.4
22.5°	2024.5	2027.3	2113.2	2198.4	2272.4
25°	1851.3	1856.3	1952.2	2037.3	2127.3
27.5°	1691.1	1693.3	1792.5	1882.3	1978.3
30°	1581.7	1587.9	1685.2	1778.2	1878.1
32.5°	1472.3	1479.6	1574.8	1670.9	1772.8
35°	1308.3	1314.5	1402.8	1497.2	1603.4
37.5°	1139.1	1147.6	1226.0	1315.3	1419.7
40°	1029.8	1042.3	1111.5	1195.6	1298.1
42.5°	924.5	940.0	1004.2	1084.0	1176.4
45°	784.5	799.5	852.2	916.7	1000.4
47.5°	663.9	681.1	721.6	777.1	848.6
50°	595.4	611.6	649.0	690.2	757.6
52.5°	535.1	551.3	584.6	616.4	673.8
55°	451.0	469.7	497.0	515.8	558.3
57.5°	382.0	400.0	421.6	430.1	455.9
60°	336.0	356.0	375.6	374.7	388.4
62.5°	294.1	311.1	330.7	317.1	317.9
65°	226.1	244.9	267.0	233.3	212.1
67.5°	182.7	186.7	209.5	162.7	137.5
70°	162.3	162.3	168.6	126.0	104.8
72.5°	142.8	142.8	137.0	102.5	80.2
75°	113.7	113.7	103.5	71.0	48.5
77.5°	87.6	86.6	79.2	53.0	35.3
80°	70.3	70.3	63.9	41.8	28.1
82.5°	54.9	54.9	49.6	32.7	21.0
85°	31.9	31.9	29.4	19.0	11.5
87.5°	11.2	11.2	10.2	6.1	5.1
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

TEST NUMBER: P521796

CATALOG NUMBER: SQ4-WB-050U-125D-92765-1D-UNV-STD-W-4\_3000K

**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)