

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: P521055

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

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521055
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-BB-050U-100D-92765-1D-UNV-STD-W-4_3000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
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: 4619.9 lumens
Efficiency: N/A
Efficacy: 79.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

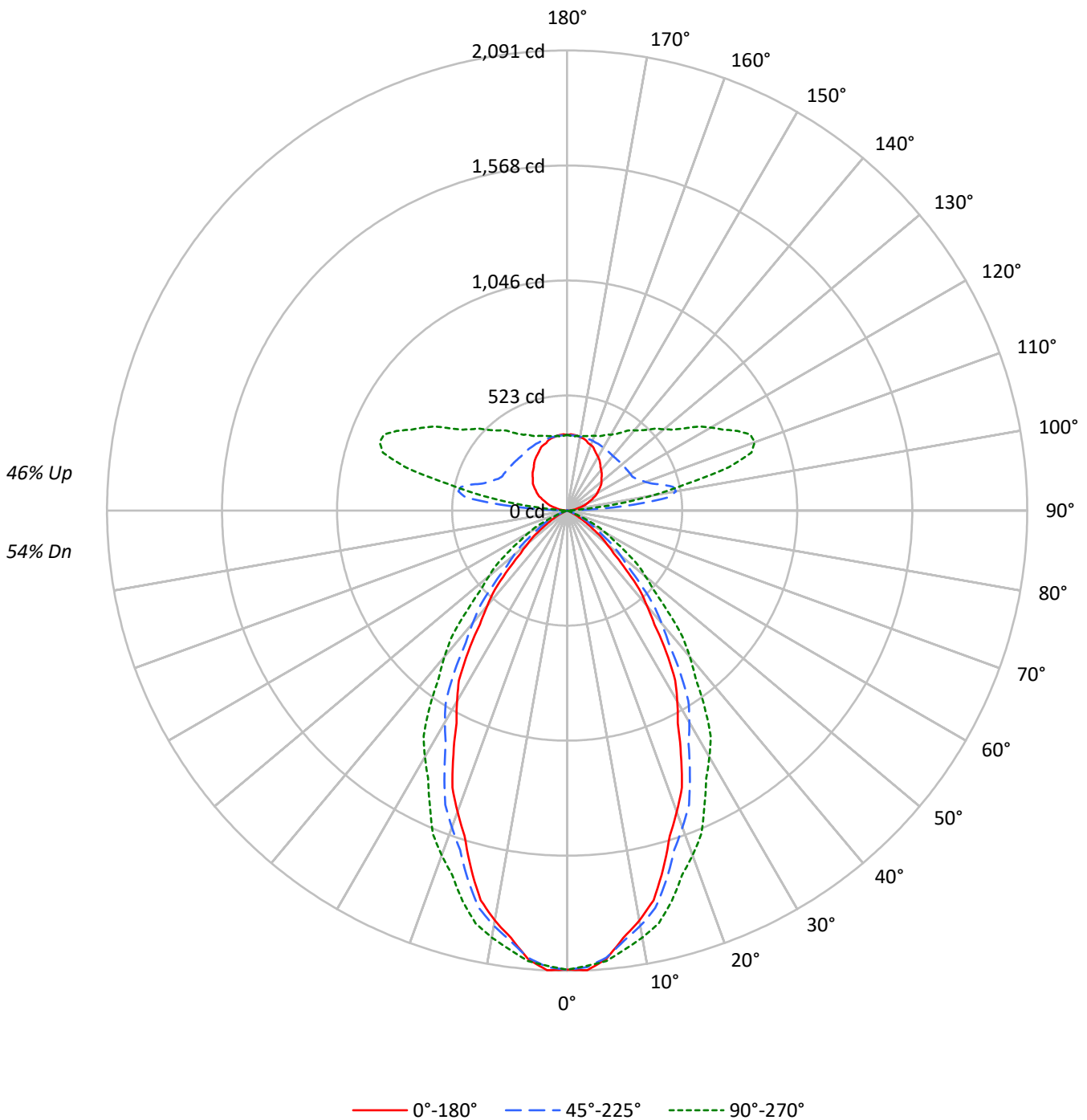
Input Watts (W): 58.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	0
RCR																				
0	108	108	108	108	100	100	100	100	85	85	85		72	72	72		60	60	60	54
1	101	97	94	91	93	90	88	85	78	76	74		66	65	64		56	55	54	49
2	93	87	82	78	87	81	77	73	71	67	65		61	58	56		51	50	49	44
3	86	78	72	67	80	73	68	64	64	60	57		55	53	50		47	46	44	40
4	80	71	64	59	75	66	60	56	58	54	50		51	48	45		44	42	40	36
5	74	64	57	52	69	60	54	49	53	49	45		47	43	40		41	38	36	33
6	69	59	51	46	65	55	49	44	49	44	40		43	39	36		38	35	33	30
7	65	54	46	41	60	51	44	40	45	40	36		40	36	33		35	32	30	28
8	60	49	42	37	56	47	40	36	42	37	33		37	33	30		33	30	28	25
9	57	46	39	34	53	43	37	33	39	34	30		35	31	28		31	28	25	23
10	53	42	36	31	50	40	34	30	36	31	28		32	28	26		29	26	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19245	19245	19245
5°	18935	18888	19029
10°	17717	17953	18454
15°	16107	16617	17543
20°	14297	15041	16358
25°	12451	13437	15030
30°	10665	11836	13772
35°	8843	10048	12252
40°	6794	8033	10440
45°	4911	6083	8400
50°	3346	4534	6663
55°	2175	3278	5178
60°	1247	2308	3742
65°	330	1410	1895
70°	165	434	545
75°	71	36	0
80°	53	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8400 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	190.4	4.1
10°-20°	486.8	10.5
20°-30°	609.4	13.2
30°-40°	562.9	12.2
40°-50°	378.3	8.2
50°-60°	195.4	4.2
60°-70°	61.2	1.3
70°-80°	3.9	0.1
80°-90°	0.1	0.0
90°-100°	156.4	3.4
100°-110°	444.9	9.6
110°-120°	426.3	9.2
120°-130°	337.4	7.3
130°-140°	270.8	5.9
140°-150°	212.0	4.6
150°-160°	155.1	3.4
160°-170°	96.1	2.1
170°-180°	32.6	0.7
0°-30°	1286.6	27.8
0°-40°	1849.5	40.0
0°-60°	2423.1	52.5
0°-90°	2488.3	53.9
90°-120°	1027.6	22.2
90°-150°	1847.8	40.0
90°-180°	2132.0	46.1
0°-180°	4619.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2086	2086	2086	2086	2086	
5°	2044	2024	2039	2047	2055	190
15°	1686	1680	1740	1798	1837	470
25°	1223	1233	1320	1410	1476	561
35°	785	805	892	997	1088	486
45°	376	399	466	557	644	296
55°	135	158	204	262	322	126
65°	15	29	65	78	87	26
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
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°	2085.9	2085.9	2085.9	2085.9	2085.9
2.5°	2090.7	2071.0	2076.2	2076.1	2070.5
5°	2044.5	2023.8	2039.4	2046.7	2054.6
7.5°	1958.1	1941.9	1972.0	1994.6	2011.0
10°	1891.1	1877.3	1916.3	1947.1	1969.8
12.5°	1813.6	1802.9	1850.1	1892.4	1921.4
15°	1686.3	1680.3	1739.7	1798.1	1836.6
17.5°	1549.8	1549.6	1617.4	1689.9	1736.3
20°	1456.2	1459.1	1531.9	1611.8	1666.1
22.5°	1362.5	1369.4	1447.1	1530.4	1592.6
25°	1223.1	1232.9	1319.9	1410.2	1476.4
27.5°	1089.1	1103.5	1195.0	1288.9	1369.4
30°	1001.1	1017.8	1111.0	1209.8	1292.7
32.5°	914.7	934.6	1025.5	1129.9	1214.4
35°	785.1	804.8	892.1	997.1	1087.8
37.5°	651.3	670.6	755.8	859.2	957.3
40°	564.1	585.8	667.0	767.2	866.8
42.5°	485.0	506.7	583.1	681.5	775.6
45°	376.4	399.1	466.2	557.0	643.8
47.5°	286.4	311.1	369.9	452.1	531.2
50°	233.1	257.8	315.9	388.2	464.2
52.5°	190.3	214.2	266.6	334.8	404.5
55°	135.2	157.9	203.8	261.7	321.9
57.5°	93.4	113.0	154.2	202.5	249.7
60°	67.6	86.4	125.1	164.4	202.8
62.5°	45.0	62.2	100.1	130.2	156.0
65°	15.1	29.0	64.6	77.9	86.8
67.5°	7.7	9.2	33.9	35.8	38.8
70°	6.1	6.1	16.1	17.2	20.2
72.5°	4.4	4.4	6.5	8.3	8.9
75°	2.0	2.0	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	0.0	0.0	0.0
82.5°	0.2	0.2	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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)