

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: P521059

Luminaire Tested: SQ4-BB-050U-100D-92765-1D-UNV-STD-W-4_5000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521059
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_5000K
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 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4949.1 lumens
Efficiency: N/A
Efficacy: 85.2 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

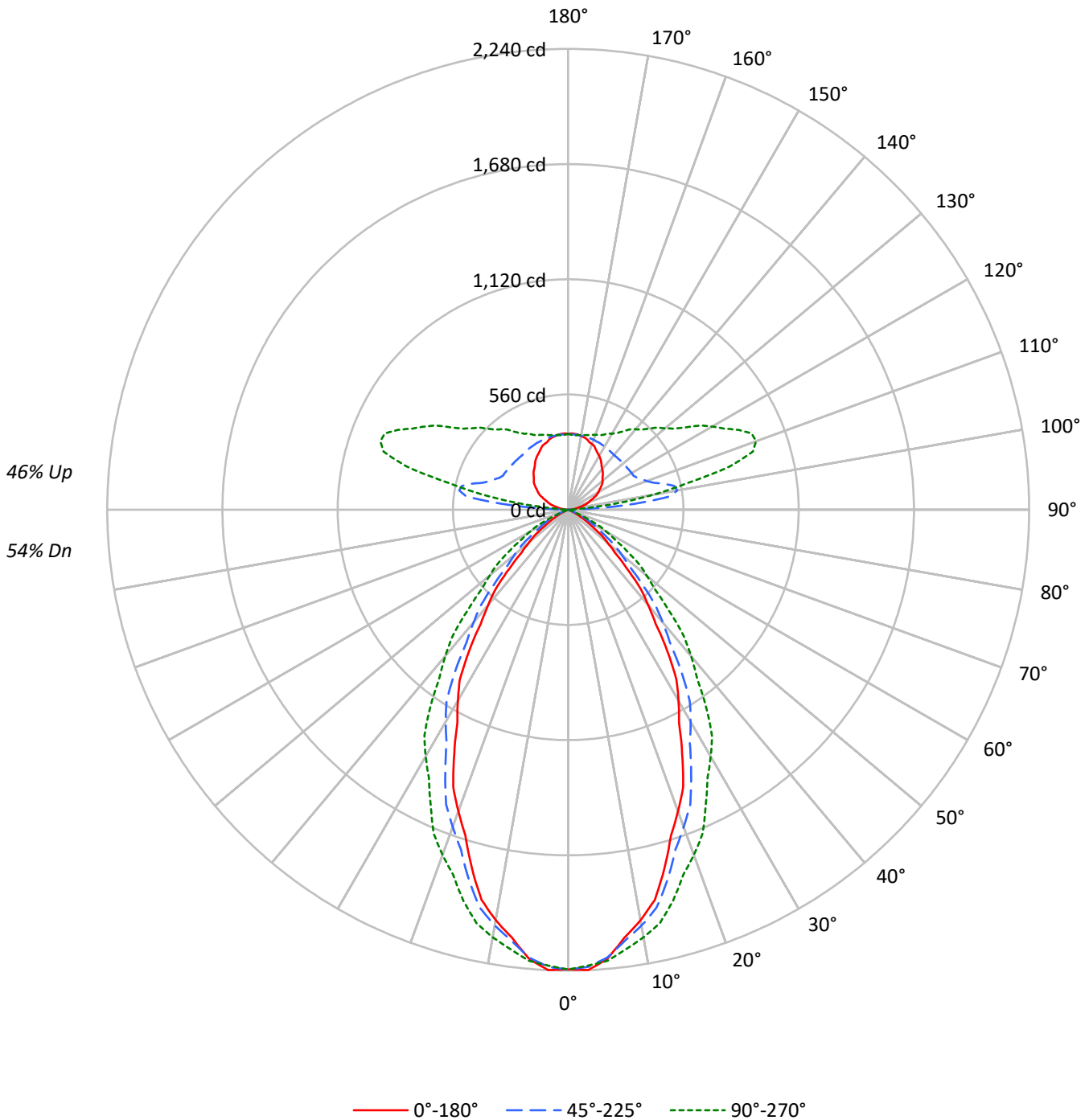
Input Watts (W): 58.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	20616	20616	20616
5°	20284	20234	20384
10°	18980	19233	19769
15°	17254	17801	18793
20°	15317	16112	17524
25°	13338	14395	16101
30°	11425	12680	14753
35°	9473	10763	13126
40°	7278	8607	11184
45°	5261	6516	8999
50°	3584	4857	7138
55°	2331	3513	5548
60°	1336	2474	4010
65°	354	1511	2030
70°	175	467	583
75°	78	39	0
80°	58	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8999 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	203.9	4.1
10°-20°	521.5	10.5
20°-30°	652.9	13.2
30°-40°	603.0	12.2
40°-50°	405.2	8.2
50°-60°	209.3	4.2
60°-70°	65.5	1.3
70°-80°	4.2	0.1
80°-90°	0.1	0.0
90°-100°	167.5	3.4
100°-110°	476.6	9.6
110°-120°	456.7	9.2
120°-130°	361.4	7.3
130°-140°	290.1	5.9
140°-150°	227.1	4.6
150°-160°	166.2	3.4
160°-170°	102.9	2.1
170°-180°	34.9	0.7
0°-30°	1378.3	27.8
0°-40°	1981.3	40.0
0°-60°	2595.8	52.5
0°-90°	2665.6	53.9
90°-120°	1100.8	22.2
90°-150°	1979.5	40.0
90°-180°	2283.0	46.1
0°-180°	4949.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2234	2234	2234	2234	2234	
5°	2190	2168	2185	2193	2201	203
15°	1806	1800	1864	1926	1968	503
25°	1310	1321	1414	1511	1582	601
35°	841	862	956	1068	1165	521
45°	403	428	499	597	690	317
55°	145	169	218	280	345	135
65°	16	31	69	84	93	27
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	18	72	324	112	69	21
105°	74	112	486	858	816	78
115°	138	166	368	780	916	136
125°	194	216	352	583	698	174
135°	238	257	347	493	557	183
145°	280	295	350	426	465	175
155°	320	328	358	385	401	148
165°	354	355	363	370	376	99
175°	370	368	367	365	362	35
180°	368	368	368	368	368	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2234.5	2234.5	2234.5	2234.5	2234.5
2.5°	2239.7	2218.6	2224.2	2224.0	2218.1
5°	2190.2	2168.0	2184.8	2192.6	2201.0
7.5°	2097.7	2080.3	2112.6	2136.8	2154.3
10°	2025.9	2011.1	2052.9	2085.9	2110.2
12.5°	1942.9	1931.4	1982.0	2027.2	2058.3
15°	1806.4	1800.1	1863.7	1926.3	1967.5
17.5°	1660.3	1660.1	1732.7	1810.4	1860.1
20°	1560.0	1563.1	1641.0	1726.7	1784.8
22.5°	1459.6	1467.0	1550.2	1639.5	1706.1
25°	1310.2	1320.8	1414.0	1510.8	1581.6
27.5°	1166.7	1182.1	1280.2	1380.7	1467.0
30°	1072.4	1090.4	1190.2	1296.0	1384.8
32.5°	979.9	1001.2	1098.6	1210.5	1300.9
35°	841.1	862.2	955.6	1068.1	1165.4
37.5°	697.7	718.4	809.7	920.4	1025.5
40°	604.3	627.6	714.6	821.9	928.6
42.5°	519.6	542.8	624.6	730.1	830.9
45°	403.2	427.5	499.4	596.7	689.7
47.5°	306.8	333.2	396.3	484.3	569.1
50°	249.7	276.1	338.4	415.9	497.3
52.5°	203.9	229.5	285.6	358.7	433.3
55°	144.9	169.2	218.4	280.4	344.9
57.5°	100.1	121.0	165.2	216.9	267.5
60°	72.4	92.5	134.1	176.1	217.3
62.5°	48.2	66.6	107.2	139.4	167.1
65°	16.2	31.0	69.2	83.5	93.0
67.5°	8.2	9.9	36.3	38.3	41.5
70°	6.5	6.5	17.3	18.4	21.6
72.5°	4.8	4.8	6.9	8.9	9.5
75°	2.2	2.2	1.1	0.0	0.0
77.5°	1.1	1.1	0.9	0.0	0.0
80°	1.1	1.1	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°	5.6	29.6	68.8	20.0	15.1
95°	18.2	72.2	324.3	112.2	69.2
97.5°	33.4	84.5	499.4	357.4	244.9
100°	44.0	91.9	537.4	544.4	419.3
102.5°	55.8	99.8	529.1	696.8	587.6
105°	74.1	112.3	485.7	858.0	815.6
107.5°	92.7	127.0	435.1	903.4	941.1
110°	105.5	137.6	406.1	886.0	970.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	117.8	148.3	386.5	844.9	965.7
115°	137.7	166.4	368.3	780.3	916.2
117.5°	155.2	182.1	357.6	709.6	853.6
120°	169.1	191.7	356.4	669.2	807.2
122.5°	180.3	202.9	353.6	633.7	761.9
125°	194.3	215.5	351.5	583.4	697.5
127.5°	209.5	229.3	350.4	553.3	647.3
130°	217.4	237.2	348.7	532.3	614.3
132.5°	225.7	245.0	348.7	516.0	591.4
135°	237.6	257.4	347.3	492.8	557.0
137.5°	248.8	268.1	347.2	473.1	528.6
140°	257.2	277.0	346.6	456.9	510.2
142.5°	266.7	283.2	348.3	443.9	491.7
145°	280.3	294.6	350.1	426.5	464.8
147.5°	291.9	305.8	353.2	408.9	442.0
150°	301.9	311.5	354.3	403.1	426.3
152.5°	309.7	319.9	355.5	395.2	416.8
155°	320.1	327.6	358.5	385.4	401.2
157.5°	332.9	337.5	359.2	381.0	392.2
160°	339.7	343.1	362.0	377.6	387.2
162.5°	343.6	347.5	362.6	374.8	382.2
165°	353.6	355.0	362.7	370.5	376.0
167.5°	360.5	359.3	365.9	369.5	371.7
170°	362.7	362.0	364.8	365.6	368.3
172.5°	367.8	365.4	366.5	364.4	366.6
175°	370.4	368.4	366.9	364.8	362.0
177.5°	371.5	368.2	366.5	364.3	364.8
180°	367.6	367.6	367.6	367.6	367.6

(END OF REPORT)