

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: P521061

Luminaire Tested: SQ4-BB-050U-100D-92765-1D-UNV-STD-W-4_6500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521061
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_6500K
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 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5067.2 lumens
Efficiency: N/A
Efficacy: 87.7 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

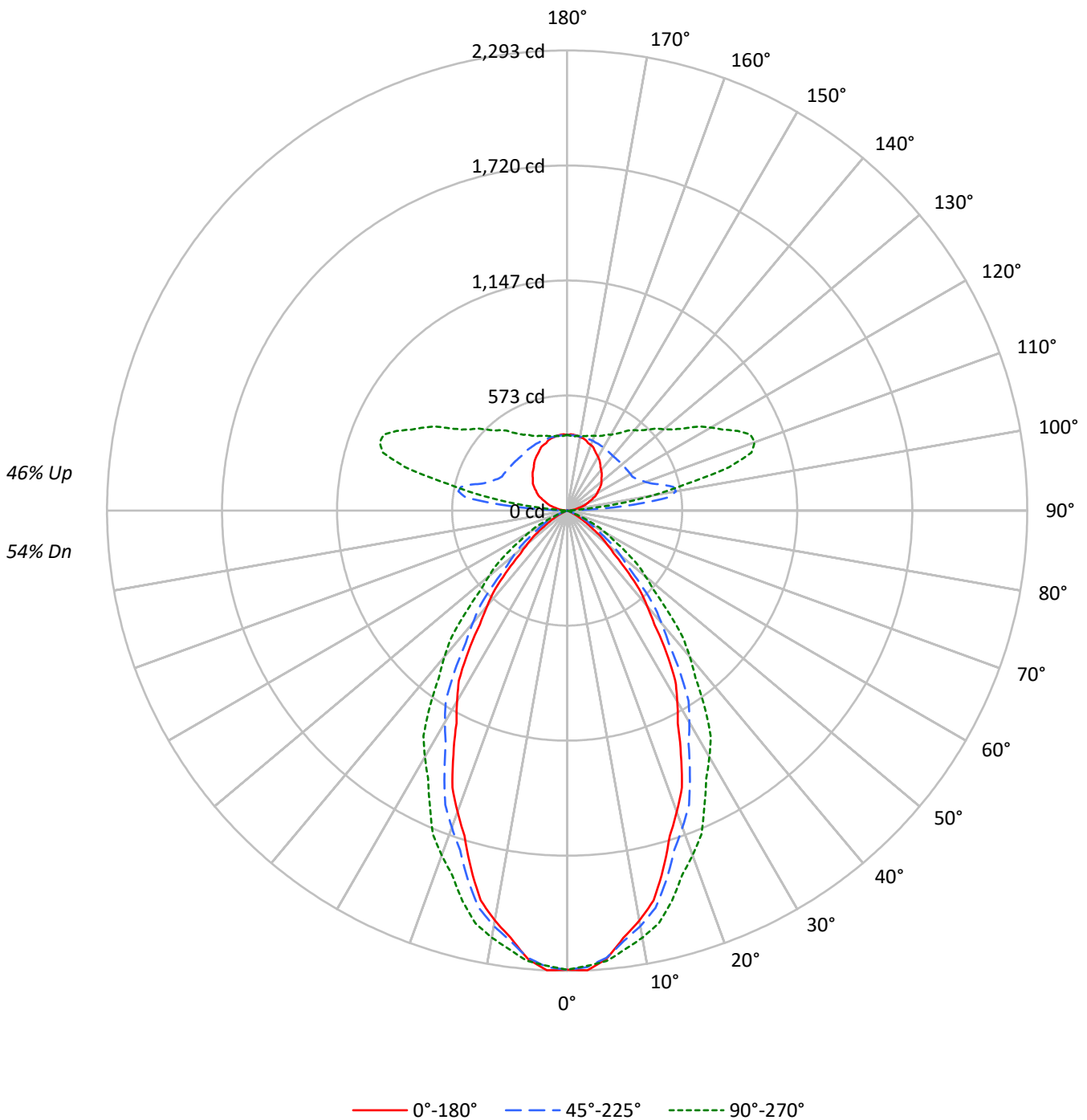
Input Watts (W): 57.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	21109	21109	21109
5°	20769	20717	20871
10°	19432	19692	20242
15°	17666	18226	19242
20°	15682	16497	17942
25°	13656	14739	16484
30°	11698	12982	15106
35°	9699	11021	13439
40°	7452	8811	11451
45°	5387	6673	9214
50°	3670	4972	7307
55°	2385	3597	5680
60°	1369	2532	4106
65°	362	1546	2078
70°	178	477	596
75°	78	39	0
80°	58	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9214 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.8	4.1
10°-20°	533.9	10.5
20°-30°	668.4	13.2
30°-40°	617.4	12.2
40°-50°	414.9	8.2
50°-60°	214.3	4.2
60°-70°	67.1	1.3
70°-80°	4.2	0.1
80°-90°	0.1	0.0
90°-100°	171.5	3.4
100°-110°	488.0	9.6
110°-120°	467.6	9.2
120°-130°	370.1	7.3
130°-140°	297.0	5.9
140°-150°	232.5	4.6
150°-160°	170.1	3.4
160°-170°	105.4	2.1
170°-180°	35.8	0.7
0°-30°	1411.2	27.8
0°-40°	2028.6	40.0
0°-60°	2657.8	52.5
0°-90°	2729.2	53.9
90°-120°	1127.1	22.2
90°-150°	2026.7	40.0
90°-180°	2338.0	46.1
0°-180°	5067.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2288	2288	2288	2288	2288	
5°	2242	2220	2237	2245	2254	208
15°	1850	1843	1908	1972	2014	515
25°	1342	1352	1448	1547	1619	615
35°	861	883	978	1094	1193	533
45°	413	438	511	611	706	324
55°	148	173	224	287	353	138
65°	17	32	71	85	95	28
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	19	74	332	115	71	21
105°	76	115	497	878	835	80
115°	141	170	377	799	938	139
125°	199	221	360	597	714	178
135°	243	264	356	504	570	188
145°	287	302	358	437	476	179
155°	328	335	367	395	411	151
165°	362	364	371	379	385	102
175°	379	377	376	374	371	36
180°	376	376	376	376	376	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2287.9	2287.9	2287.9	2287.9	2287.9
2.5°	2293.2	2271.5	2277.2	2277.1	2271.0
5°	2242.5	2219.7	2236.9	2244.9	2253.5
7.5°	2147.7	2130.0	2163.0	2187.8	2205.7
10°	2074.2	2059.1	2101.9	2135.7	2160.6
12.5°	1989.2	1977.5	2029.3	2075.6	2107.4
15°	1849.5	1843.0	1908.2	1972.3	2014.5
17.5°	1699.9	1699.7	1774.1	1853.6	1904.4
20°	1597.2	1600.4	1680.2	1767.9	1827.4
22.5°	1494.5	1502.0	1587.2	1678.6	1746.8
25°	1341.5	1352.3	1447.8	1546.8	1619.3
27.5°	1194.5	1210.3	1310.7	1413.7	1502.0
30°	1098.0	1116.4	1218.6	1327.0	1417.9
32.5°	1003.2	1025.1	1124.8	1239.3	1332.0
35°	861.1	882.8	978.5	1093.6	1193.2
37.5°	714.4	735.6	829.0	942.4	1050.0
40°	618.7	642.5	731.6	841.5	950.8
42.5°	532.0	555.8	639.5	747.5	850.7
45°	412.9	437.7	511.4	610.9	706.2
47.5°	314.1	341.2	405.8	495.8	582.6
50°	255.7	282.7	346.4	425.8	509.1
52.5°	208.8	234.9	292.4	367.2	443.6
55°	148.3	173.2	223.6	287.1	353.1
57.5°	102.5	123.9	169.1	222.1	273.8
60°	74.2	94.7	137.2	180.3	222.5
62.5°	49.4	68.2	109.8	142.8	171.1
65°	16.6	31.8	70.8	85.4	95.2
67.5°	8.4	10.1	37.2	39.3	42.5
70°	6.6	6.6	17.7	18.9	22.1
72.5°	4.9	4.9	7.1	9.1	9.7
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°	5.7	30.4	70.4	20.5	15.5
95°	18.6	73.9	332.0	114.9	70.8
97.5°	34.2	86.5	511.3	365.9	250.7
100°	45.1	94.1	550.3	557.4	429.3
102.5°	57.1	102.2	541.7	713.5	601.6
105°	75.8	115.0	497.3	878.4	835.1
107.5°	94.9	130.0	445.5	925.0	963.6
110°	108.1	140.9	415.7	907.2	993.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	120.6	151.8	395.7	865.1	988.8
115°	141.0	170.4	377.1	798.9	938.1
117.5°	158.9	186.4	366.1	726.5	874.0
120°	173.2	196.3	364.9	685.1	826.5
122.5°	184.6	207.7	362.1	648.9	780.1
125°	198.9	220.6	359.9	597.3	714.1
127.5°	214.5	234.8	358.8	566.5	662.8
130°	222.5	242.8	357.1	545.0	629.0
132.5°	231.1	250.9	357.1	528.3	605.5
135°	243.3	263.6	355.6	504.5	570.3
137.5°	254.7	274.5	355.5	484.4	541.3
140°	263.3	283.6	354.9	467.8	522.4
142.5°	273.1	290.0	356.6	454.5	503.5
145°	286.9	301.6	358.5	436.7	475.8
147.5°	298.8	313.1	361.6	418.7	452.5
150°	309.1	318.9	362.8	412.7	436.5
152.5°	317.1	327.5	363.9	404.7	426.8
155°	327.7	335.4	367.1	394.6	410.7
157.5°	340.9	345.5	367.8	390.1	401.6
160°	347.8	351.3	370.7	386.6	396.4
162.5°	351.8	355.8	371.2	383.7	391.3
165°	362.1	363.5	371.4	379.4	385.0
167.5°	369.1	367.8	374.7	378.3	380.5
170°	371.4	370.7	373.5	374.3	377.1
172.5°	376.5	374.2	375.2	373.1	375.4
175°	379.2	377.1	375.7	373.5	370.7
177.5°	380.4	377.0	375.2	373.0	373.5
180°	376.4	376.4	376.4	376.4	376.4

(END OF REPORT)