

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: P521785

Luminaire Tested: SQ4-WB-050U-100D-92765-1D-UNV-STD-W-4_4000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521785
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-100D-92765-1D-UNV-STD-W-4_4000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5717.1 lumens
Efficiency: N/A
Efficacy: 98.2 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

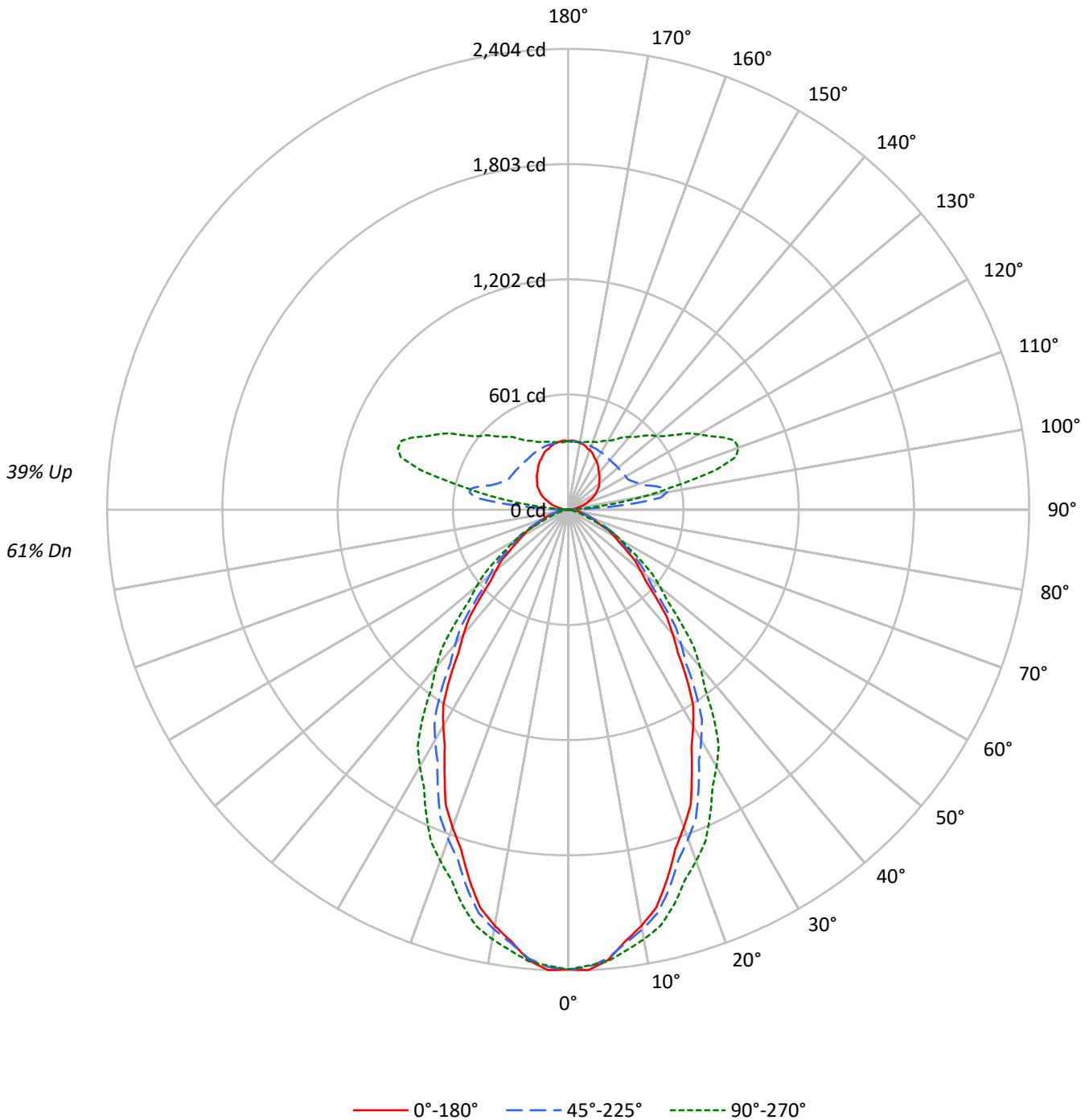
Input Watts (W): 58.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	110	110	110	110	103	103	103	103	90	90	90		77	77	77		66	66	66	61
1	102	98	94	91	95	92	89	86	81	78	76		70	69	67		61	60	59	54
2	94	87	82	77	88	82	77	73	72	69	66		63	61	59		55	53	52	48
3	87	78	71	66	81	74	68	63	65	61	57		58	54	51		50	48	46	42
4	80	70	63	57	75	66	60	55	59	54	50		52	48	45		46	43	41	38
5	74	63	56	50	69	60	53	48	54	48	44		48	44	40		42	39	37	34
6	69	58	50	45	65	55	48	43	49	44	40		44	40	36		39	36	33	31
7	64	53	45	40	60	50	43	38	45	40	36		40	36	33		36	33	30	28
8	60	48	41	36	56	46	39	35	42	36	32		37	33	30		34	30	27	25
9	56	45	37	33	53	42	36	32	39	33	29		35	30	27		31	28	25	23
10	53	41	34	30	50	39	33	29	36	31	27		32	28	25		29	26	23	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22125	22125	22125
5°	21849	21771	21898
10°	20643	20830	21313
15°	19057	19499	20373
20°	17305	17956	19144
25°	15521	16367	17835
30°	13878	14786	16479
35°	12136	13013	14874
40°	10214	11026	12876
45°	8430	9157	10750
50°	7037	7672	8957
55°	5974	6584	7396
60°	5106	5709	5903
65°	4065	4801	3814
70°	3604	3747	2328
75°	3337	3037	1426
80°	3076	2795	1227
85°	2784	2562	1006

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10750 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	220.0	3.8
10°-20°	572.1	10.0
20°-30°	741.1	13.0
30°-40°	725.7	12.7
40°-50°	555.5	9.7
50°-60°	370.1	6.5
60°-70°	202.0	3.5
70°-80°	84.2	1.5
80°-90°	23.8	0.4
90°-100°	163.0	2.9
100°-110°	463.9	8.1
110°-120°	444.5	7.8
120°-130°	351.8	6.2
130°-140°	282.4	4.9
140°-150°	221.1	3.9
150°-160°	161.8	2.8
160°-170°	100.2	1.8
170°-180°	34.0	0.6
0°-30°	1533.2	26.8
0°-40°	2258.8	39.5
0°-60°	3184.4	55.7
0°-90°	3494.4	61.1
90°-120°	1071.5	18.7
90°-150°	1926.7	33.7
90°-180°	2223.0	38.9
0°-180°	5717.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2398	2398	2398	2398	2398	
5°	2359	2336	2351	2356	2364	219
15°	1995	1988	2041	2097	2133	557
25°	1525	1529	1608	1678	1752	701
35°	1078	1083	1155	1233	1321	670
45°	646	658	702	755	824	504
55°	371	387	409	425	460	337
65°	186	202	220	192	175	194
75°	94	94	85	58	40	100
85°	26	26	24	16	10	29
90°	0	0	0	0	0	2
95°	18	70	316	109	67	20
105°	72	109	473	835	794	76
115°	134	162	358	760	892	132
125°	189	210	342	568	679	169
135°	231	251	338	480	542	178
145°	273	287	341	415	452	170
155°	312	319	349	375	390	144
165°	344	346	353	361	366	97
175°	360	358	357	355	352	34
180°	358	358	358	358	358	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2398.1	2398.1	2398.1	2398.1	2398.1
2.5°	2404.0	2382.6	2388.0	2387.8	2381.2
5°	2359.1	2335.5	2350.7	2356.2	2364.4
7.5°	2271.6	2253.7	2281.5	2302.1	2318.7
10°	2203.4	2188.0	2223.4	2253.4	2275.0
12.5°	2124.3	2111.3	2155.2	2195.4	2223.6
15°	1995.1	1987.9	2041.4	2096.9	2132.9
17.5°	1856.8	1853.3	1914.7	1979.5	2025.6
20°	1762.5	1761.5	1828.8	1896.3	1949.8
22.5°	1667.4	1669.7	1740.4	1810.6	1871.5
25°	1524.7	1528.8	1607.8	1677.9	1752.0
27.5°	1392.8	1394.6	1476.3	1550.3	1629.3
30°	1302.7	1307.8	1387.9	1464.5	1546.8
32.5°	1212.6	1218.6	1297.0	1376.1	1460.1
35°	1077.5	1082.6	1155.4	1233.1	1320.6
37.5°	938.2	945.2	1009.7	1083.2	1169.3
40°	848.1	858.4	915.5	984.7	1069.1
42.5°	761.4	774.2	827.1	892.8	968.9
45°	646.1	658.4	701.8	755.0	823.9
47.5°	546.7	560.9	594.3	640.1	698.9
50°	490.3	503.7	534.5	568.4	624.0
52.5°	440.7	454.1	481.5	507.6	555.0
55°	371.4	386.9	409.3	424.9	459.8
57.5°	314.6	329.4	347.2	354.2	375.4
60°	276.7	293.2	309.4	308.6	319.9
62.5°	242.2	256.2	272.3	261.2	261.8
65°	186.2	201.7	219.9	192.2	174.7
67.5°	150.5	153.8	172.6	134.0	113.2
70°	133.6	133.6	138.9	103.8	86.3
72.5°	117.6	117.6	112.8	84.4	66.1
75°	93.6	93.6	85.2	58.5	40.0
77.5°	72.2	71.4	65.2	43.7	29.0
80°	57.9	57.9	52.6	34.5	23.1
82.5°	45.2	45.2	40.8	26.9	17.3
85°	26.3	26.3	24.2	15.6	9.5
87.5°	9.3	9.3	8.4	5.0	4.2
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.4	28.9	66.9	19.5	14.7
95°	17.7	70.2	315.6	109.3	67.3
97.5°	32.5	82.3	486.1	347.8	238.4
100°	42.9	89.4	523.1	529.9	408.2
102.5°	54.3	97.1	515.0	678.3	572.0
105°	72.1	109.4	472.8	835.1	793.9
107.5°	90.2	123.6	423.5	879.3	916.0
110°	102.7	134.0	395.2	862.4	944.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	114.7	144.4	376.2	822.4	940.0
115°	134.0	161.9	358.5	759.5	891.8
117.5°	151.0	177.2	348.0	690.7	830.9
120°	164.6	186.6	346.9	651.3	785.7
122.5°	175.5	197.5	344.2	616.8	741.6
125°	189.1	209.7	342.2	567.8	678.9
127.5°	203.9	223.2	341.1	538.5	630.1
130°	211.6	230.9	339.5	518.1	598.0
132.5°	219.7	238.5	339.5	502.2	575.6
135°	231.3	250.6	338.1	479.6	542.2
137.5°	242.2	260.9	338.0	460.5	514.6
140°	250.3	269.6	337.4	444.7	496.6
142.5°	259.6	275.7	339.0	432.1	478.6
145°	272.8	286.8	340.8	415.1	452.4
147.5°	284.1	297.6	343.8	398.0	430.2
150°	293.9	303.2	344.9	392.3	415.0
152.5°	301.5	311.3	346.0	384.7	405.7
155°	311.6	318.9	349.0	375.2	390.5
157.5°	324.1	328.5	349.7	370.9	381.8
160°	330.6	333.9	352.4	367.6	376.9
162.5°	334.4	338.3	352.9	364.8	372.0
165°	344.2	345.5	353.1	360.7	366.0
167.5°	350.9	349.7	356.2	359.6	361.8
170°	353.1	352.4	355.1	355.8	358.5
172.5°	358.0	355.7	356.7	354.7	356.9
175°	360.5	358.5	357.1	355.0	352.4
177.5°	361.6	358.4	356.7	354.6	355.1
180°	357.8	357.8	357.8	357.8	357.8

(END OF REPORT)