

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: P521943

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

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521943
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-100U-100D-92765-1D-UNV-STD-W-4_5000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 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: 8164.4 lumens
Efficiency: N/A
Efficacy: 109.4 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: General Diffuse

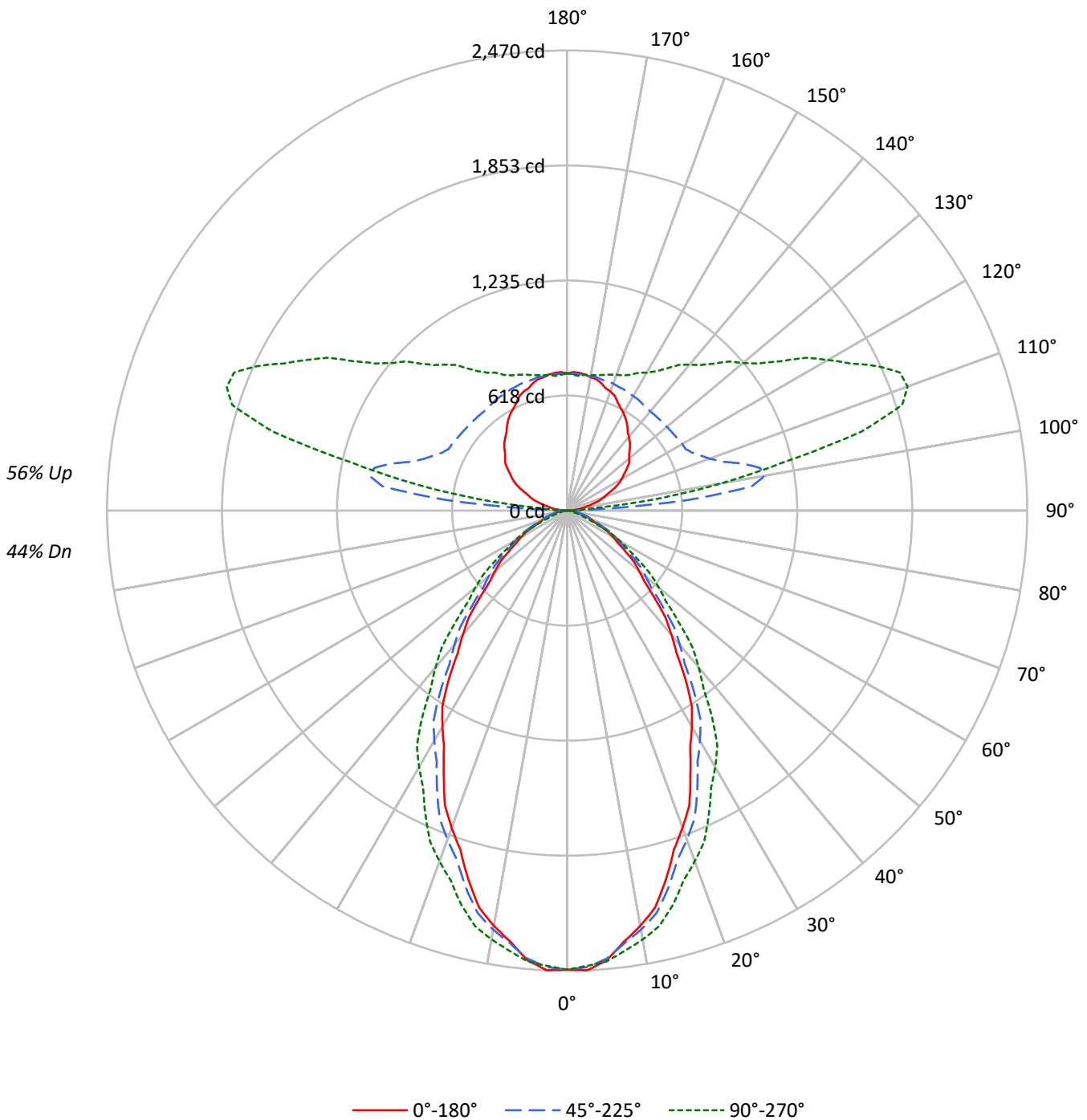
Input Watts (W): 74.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44				
1	97	94	90	87	89	86	83	80	72	70	68	58	57	56	46	45	45	39				
2	90	83	77	73	82	76	72	68	64	61	58	53	50	48	42	41	39	34				
3	82	74	67	62	75	68	62	58	57	53	50	47	44	42	38	36	35	30				
4	76	66	59	53	69	61	55	50	52	47	43	43	40	37	35	33	31	27				
5	70	59	52	46	64	55	48	44	47	42	38	39	36	33	32	30	28	24				
6	65	54	46	41	60	50	43	38	43	38	34	36	32	29	29	27	25	22				
7	60	49	41	36	55	45	39	34	39	34	30	33	29	26	27	25	23	20				
8	56	45	37	32	52	42	35	31	36	31	27	30	27	24	25	23	21	18				
9	52	41	34	29	48	38	32	28	33	28	25	28	24	22	24	21	19	17				
10	49	38	31	26	45	35	29	25	31	26	23	26	23	20	22	19	17	15				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22731	22731	22731
5°	22447	22367	22497
10°	21208	21401	21896
15°	19578	20032	20931
20°	17779	18448	19668
25°	15946	16815	18324
30°	14258	15191	16929
35°	12468	13369	15281
40°	10494	11327	13228
45°	8661	9409	11045
50°	7231	7883	9202
55°	6138	6764	7599
60°	5246	5864	6063
65°	4176	4932	3919
70°	3704	3849	2390
75°	3429	3123	1465
80°	3161	2874	1265
85°	2858	2636	1027

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11045 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	226.0	2.8
10°-20°	587.8	7.2
20°-30°	761.4	9.3
30°-40°	745.6	9.1
40°-50°	570.7	7.0
50°-60°	380.3	4.7
60°-70°	207.5	2.5
70°-80°	86.5	1.1
80°-90°	24.5	0.3
90°-100°	335.6	4.1
100°-110°	954.8	11.7
110°-120°	914.8	11.2
120°-130°	724.0	8.9
130°-140°	581.1	7.1
140°-150°	455.0	5.6
150°-160°	332.9	4.1
160°-170°	206.2	2.5
170°-180°	70.0	0.9
0°-30°	1575.1	19.3
0°-40°	2320.7	28.4
0°-60°	3271.6	40.1
0°-90°	3590.1	44.0
90°-120°	2205.2	27.0
90°-150°	3965.3	48.6
90°-180°	4574.0	56.0
0°-180°	8164.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2464	2464	2464	2464	2464	
5°	2424	2399	2415	2421	2429	225
15°	2050	2042	2097	2154	2191	572
25°	1566	1571	1652	1724	1800	720
35°	1107	1112	1187	1267	1357	688
45°	664	676	721	776	846	518
55°	382	398	420	436	472	346
65°	191	207	226	197	180	199
75°	96	96	88	60	41	103
85°	27	27	25	16	10	29
90°	0	0	0	0	0	3
95°	36	144	650	225	139	42
105°	148	225	973	1719	1634	157
115°	276	333	738	1563	1835	272
125°	389	432	704	1169	1397	348
135°	476	516	696	987	1116	367
145°	561	590	701	854	931	351
155°	641	656	718	772	804	296
165°	708	711	727	742	753	199
175°	742	738	735	731	725	70
180°	736	736	736	736	736	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2463.7	2463.7	2463.7	2463.7	2463.7
2.5°	2469.8	2447.8	2453.3	2453.2	2446.4
5°	2423.7	2399.4	2415.1	2420.7	2429.1
7.5°	2333.8	2315.4	2343.9	2365.1	2382.2
10°	2263.7	2247.9	2284.3	2315.0	2337.2
12.5°	2182.4	2169.1	2214.2	2255.5	2284.5
15°	2049.7	2042.3	2097.2	2154.3	2191.3
17.5°	1907.6	1904.0	1967.1	2033.7	2081.0
20°	1810.8	1809.7	1878.9	1948.2	2003.2
22.5°	1713.0	1715.4	1788.1	1860.2	1922.8
25°	1566.4	1570.7	1651.8	1723.8	1800.0
27.5°	1430.9	1432.8	1516.7	1592.7	1673.9
30°	1338.3	1343.6	1425.9	1504.6	1589.1
32.5°	1245.8	1251.9	1332.5	1413.8	1500.1
35°	1107.0	1112.3	1187.0	1266.9	1356.7
37.5°	963.9	971.1	1037.4	1112.9	1201.3
40°	871.3	881.9	940.5	1011.7	1098.3
42.5°	782.2	795.4	849.7	917.2	995.4
45°	663.8	676.4	721.1	775.6	846.5
47.5°	561.7	576.3	610.6	657.6	718.0
50°	503.8	517.5	549.2	584.0	641.1
52.5°	452.7	466.5	494.7	521.5	570.1
55°	381.6	397.5	420.5	436.5	472.4
57.5°	323.2	338.5	356.7	363.9	385.7
60°	284.3	301.2	317.8	317.0	328.6
62.5°	248.9	263.2	279.8	268.3	269.0
65°	191.3	207.2	225.9	197.4	179.5
67.5°	154.6	158.0	177.3	137.7	116.3
70°	137.3	137.3	142.7	106.6	88.6
72.5°	120.9	120.9	115.9	86.7	67.9
75°	96.2	96.2	87.6	60.1	41.1
77.5°	74.2	73.3	67.0	44.8	29.8
80°	59.5	59.5	54.1	35.4	23.8
82.5°	46.5	46.5	41.9	27.7	17.7
85°	27.0	27.0	24.9	16.1	9.7
87.5°	9.5	9.5	8.6	5.2	4.3
90°	0.0	0.0	0.0	0.0	0.0
92.5°	11.2	59.4	137.8	40.1	30.2
95°	36.4	144.5	649.6	224.8	138.6
97.5°	66.9	169.3	1000.5	715.9	490.6
100°	88.2	184.0	1076.6	1090.5	840.0
102.5°	111.7	199.9	1059.8	1395.9	1177.1
105°	148.4	225.1	973.0	1718.7	1633.8
107.5°	185.6	254.4	871.7	1809.7	1885.3
110°	211.4	275.7	813.4	1774.9	1944.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	236.0	297.1	774.2	1692.5	1934.6
115°	275.8	333.3	737.8	1563.0	1835.4
117.5°	310.8	364.7	716.3	1421.4	1710.0
120°	338.8	384.0	714.0	1340.5	1617.0
122.5°	361.2	406.4	708.4	1269.5	1526.3
125°	389.2	431.6	704.2	1168.6	1397.2
127.5°	419.7	459.4	702.0	1108.3	1296.7
130°	435.4	475.1	698.6	1066.4	1230.6
132.5°	452.2	490.8	698.6	1033.6	1184.7
135°	476.0	515.7	695.8	987.1	1115.8
137.5°	498.4	537.0	695.5	947.8	1059.0
140°	515.2	554.9	694.4	915.2	1022.0
142.5°	534.3	567.4	697.8	889.2	985.1
145°	561.4	590.2	701.4	854.4	931.0
147.5°	584.7	612.6	707.6	819.1	885.4
150°	604.8	624.0	709.8	807.5	854.0
152.5°	620.5	640.8	712.1	791.7	835.0
155°	641.2	656.3	718.2	772.1	803.6
157.5°	667.0	676.0	719.6	763.2	785.7
160°	680.4	687.3	725.2	756.5	775.6
162.5°	688.3	696.2	726.3	750.8	765.5
165°	708.4	711.2	726.6	742.3	753.2
167.5°	722.1	719.7	733.1	740.2	744.5
170°	726.6	725.2	730.8	732.3	737.8
172.5°	736.7	732.0	734.2	730.1	734.5
175°	742.0	737.9	735.0	730.7	725.2
177.5°	744.3	737.7	734.2	729.7	730.8
180°	736.4	736.4	736.4	736.4	736.4

(END OF REPORT)