

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: P521994

Luminaire Tested: SQ4-WB-125U-100D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521994
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-125U-100D-92765-1D-UNV-STD-W-4_4500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9233.3 lumens
Efficiency: N/A
Efficacy: 110.3 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-Indirect

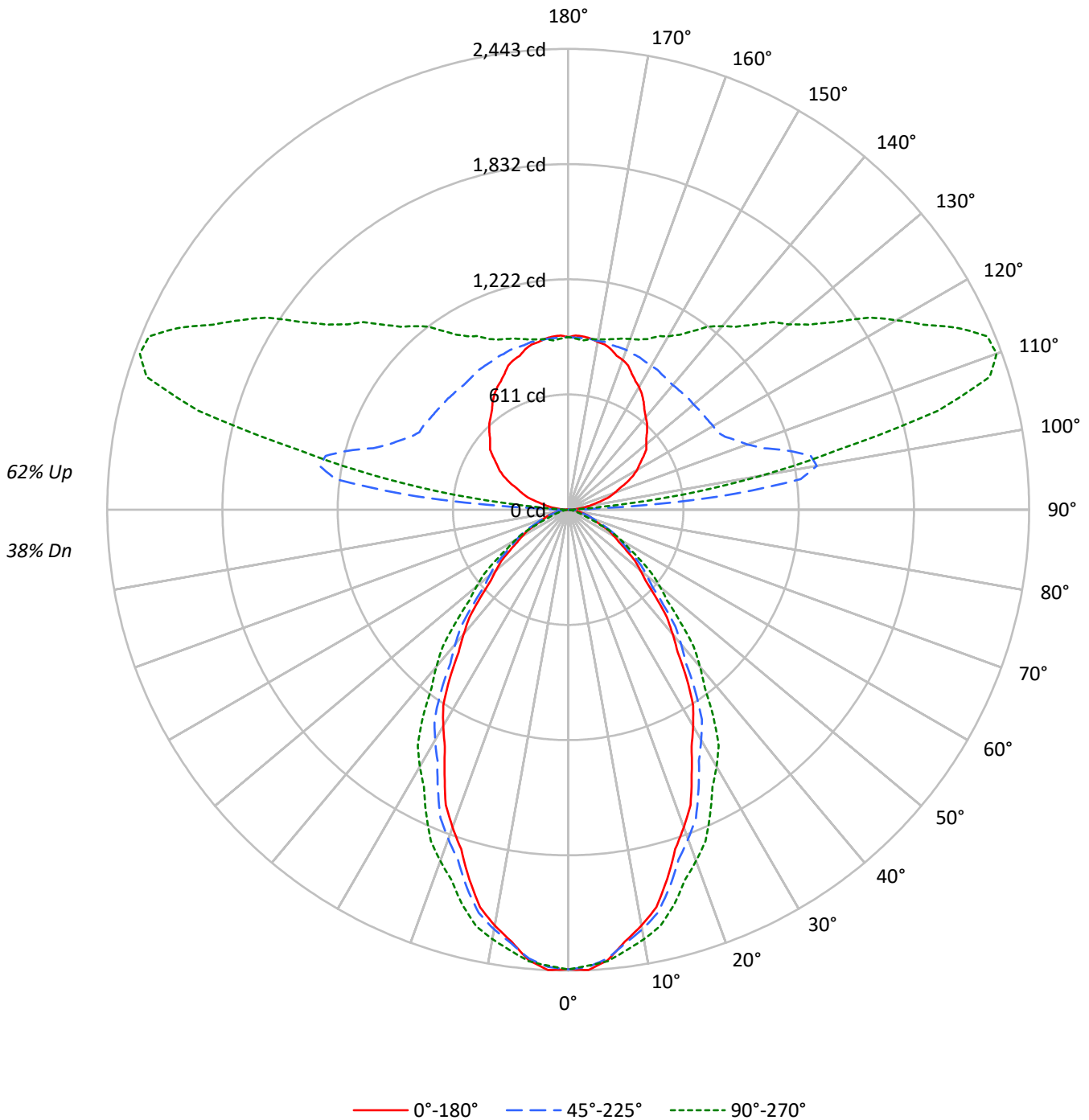
Input Watts (W): 83.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	38				
1	96	92	89	86	87	84	81	78	69	67	65	55	53	52	42	41	40	34				
2	88	82	76	71	80	74	70	66	61	58	55	49	47	45	38	36	35	30				
3	81	72	66	61	74	66	61	56	55	51	47	44	41	39	34	33	31	27				
4	75	65	57	52	68	59	53	48	49	45	41	40	37	34	31	29	28	24				
5	69	58	51	45	63	53	47	42	45	40	36	36	33	30	29	26	25	21				
6	64	52	45	40	58	48	42	37	41	36	32	33	30	27	26	24	22	19				
7	59	48	40	35	54	44	37	33	37	32	29	30	27	24	24	22	20	17				
8	55	43	36	31	50	40	34	29	34	29	26	28	25	22	23	20	18	16				
9	51	40	33	28	47	37	31	26	31	27	23	26	23	20	21	19	17	15				
10	48	37	30	25	44	34	28	24	29	24	21	24	21	18	20	17	15	14				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22482	22482	22482
5°	22202	22122	22251
10°	20975	21166	21657
15°	19363	19813	20701
20°	17584	18245	19453
25°	15772	16632	18123
30°	14102	15025	16745
35°	12332	13223	15114
40°	10379	11203	13083
45°	8566	9306	10924
50°	7152	7797	9100
55°	6071	6690	7515
60°	5189	5801	5997
65°	4133	4879	3875
70°	3663	3806	2366
75°	3394	3087	1447
80°	3124	2843	1249
85°	2826	2604	1016

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10924 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.5	2.4
10°-20°	581.4	6.3
20°-30°	753.0	8.2
30°-40°	737.4	8.0
40°-50°	564.4	6.1
50°-60°	376.1	4.1
60°-70°	205.2	2.2
70°-80°	85.5	0.9
80°-90°	24.2	0.3
90°-100°	416.8	4.5
100°-110°	1186.1	12.8
110°-120°	1136.4	12.3
120°-130°	899.4	9.7
130°-140°	721.9	7.8
140°-150°	565.2	6.1
150°-160°	413.5	4.5
160°-170°	256.2	2.8
170°-180°	86.9	0.9
0°-30°	1557.9	16.9
0°-40°	2295.3	24.9
0°-60°	3235.8	35.0
0°-90°	3550.8	38.5
90°-120°	2739.4	29.7
90°-150°	4925.9	53.3
90°-180°	5682.0	61.5
0°-180°	9233.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2437	2437	2437	2437	2437	
5°	2397	2373	2389	2394	2402	223
15°	2027	2020	2074	2131	2167	566
25°	1549	1554	1634	1705	1780	712
35°	1095	1100	1174	1253	1342	681
45°	656	669	713	767	837	512
55°	377	393	416	432	467	342
65°	189	205	224	195	178	197
75°	95	95	87	59	41	102
85°	27	27	25	16	10	29
90°	0	0	0	0	0	3
95°	45	180	807	279	172	52
105°	184	280	1209	2135	2030	195
115°	343	414	916	1942	2280	337
125°	484	536	875	1452	1736	433
135°	591	641	864	1226	1386	456
145°	697	733	871	1061	1157	436
155°	796	815	892	959	998	368
165°	880	883	903	922	936	247
175°	922	917	913	908	901	87
180°	915	915	915	915	915	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2436.8	2436.8	2436.8	2436.8	2436.8
2.5°	2442.7	2421.0	2426.5	2426.3	2419.6
5°	2397.2	2373.1	2388.6	2394.2	2402.5
7.5°	2308.2	2290.0	2318.3	2339.2	2356.1
10°	2238.9	2223.3	2259.3	2289.7	2311.7
12.5°	2158.5	2145.4	2190.0	2230.8	2259.5
15°	2027.2	2019.9	2074.3	2130.7	2167.3
17.5°	1886.7	1883.2	1945.6	2011.4	2058.3
20°	1790.9	1789.9	1858.3	1926.9	1981.3
22.5°	1694.3	1696.6	1768.5	1839.8	1901.7
25°	1549.3	1553.5	1633.8	1705.0	1780.3
27.5°	1415.2	1417.1	1500.1	1575.3	1655.6
30°	1323.7	1328.9	1410.3	1488.1	1571.8
32.5°	1232.2	1238.2	1317.9	1398.3	1483.7
35°	1094.9	1100.1	1174.0	1253.0	1341.9
37.5°	953.3	960.4	1026.0	1100.7	1188.1
40°	861.8	872.2	930.2	1000.6	1086.3
42.5°	773.7	786.7	840.4	907.2	984.5
45°	656.5	669.0	713.2	767.2	837.2
47.5°	555.6	570.0	603.9	650.4	710.2
50°	498.3	511.8	543.2	577.6	634.0
52.5°	447.8	461.4	489.3	515.8	563.9
55°	377.4	393.1	415.9	431.7	467.2
57.5°	319.7	334.8	352.8	360.0	381.5
60°	281.2	297.9	314.4	313.5	325.0
62.5°	246.1	260.4	276.7	265.4	266.0
65°	189.3	204.9	223.5	195.3	177.5
67.5°	152.9	156.2	175.4	136.2	115.0
70°	135.8	135.8	141.1	105.4	87.7
72.5°	119.5	119.5	114.6	85.8	67.1
75°	95.2	95.2	86.6	59.4	40.6
77.5°	73.3	72.5	66.3	44.4	29.5
80°	58.8	58.8	53.5	35.0	23.5
82.5°	46.0	46.0	41.5	27.4	17.5
85°	26.7	26.7	24.6	15.9	9.6
87.5°	9.4	9.4	8.6	5.1	4.3
90°	0.0	0.0	0.0	0.0	0.0
92.5°	13.9	73.8	171.1	49.8	37.6
95°	45.2	179.6	807.0	279.3	172.2
97.5°	83.1	210.3	1242.8	889.3	609.4
100°	109.6	228.6	1337.4	1354.7	1043.5
102.5°	138.8	248.3	1316.6	1734.0	1462.3
105°	184.4	279.6	1208.7	2135.1	2029.6
107.5°	230.6	316.0	1082.8	2248.1	2342.0
110°	262.6	342.5	1010.5	2204.9	2415.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	293.2	369.1	961.8	2102.5	2403.2
115°	342.6	414.0	916.5	1941.7	2280.1
117.5°	386.1	453.1	889.8	1765.8	2124.2
120°	420.9	477.0	887.0	1665.2	2008.8
122.5°	448.7	504.8	880.0	1577.0	1896.1
125°	483.5	536.2	874.8	1451.7	1735.7
127.5°	521.4	570.7	872.0	1376.8	1610.8
130°	540.9	590.2	867.9	1324.7	1528.7
132.5°	561.8	609.7	867.9	1284.0	1471.7
135°	591.3	640.6	864.4	1226.3	1386.1
137.5°	619.1	667.1	864.0	1177.4	1315.5
140°	640.0	689.3	862.6	1137.0	1269.6
142.5°	663.7	704.8	866.8	1104.6	1223.7
145°	697.4	733.1	871.3	1061.3	1156.6
147.5°	726.3	761.0	879.0	1017.6	1099.9
150°	751.3	775.1	881.8	1003.1	1060.9
152.5°	770.8	796.0	884.5	983.5	1037.2
155°	796.5	815.2	892.2	959.2	998.3
157.5°	828.5	839.8	893.9	948.1	976.0
160°	845.2	853.7	900.9	939.7	963.5
162.5°	855.0	864.8	902.3	932.6	951.0
165°	880.0	883.4	902.6	922.1	935.7
167.5°	897.1	894.0	910.6	919.5	924.9
170°	902.6	900.9	907.9	909.7	916.5
172.5°	915.2	909.4	912.0	906.9	912.4
175°	921.8	916.7	913.1	907.7	900.9
177.5°	924.5	916.4	912.0	906.5	907.9
180°	914.8	914.8	914.8	914.8	914.8

(END OF REPORT)