

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: P522031

Luminaire Tested: SQ4-WB-150U-075D-92765-1D-UNV-STD-W-4_3500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P522031
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-150U-075D-92765-1D-UNV-STD-W-4_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9228.9 lumens
Efficiency: N/A
Efficacy: 111.1 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

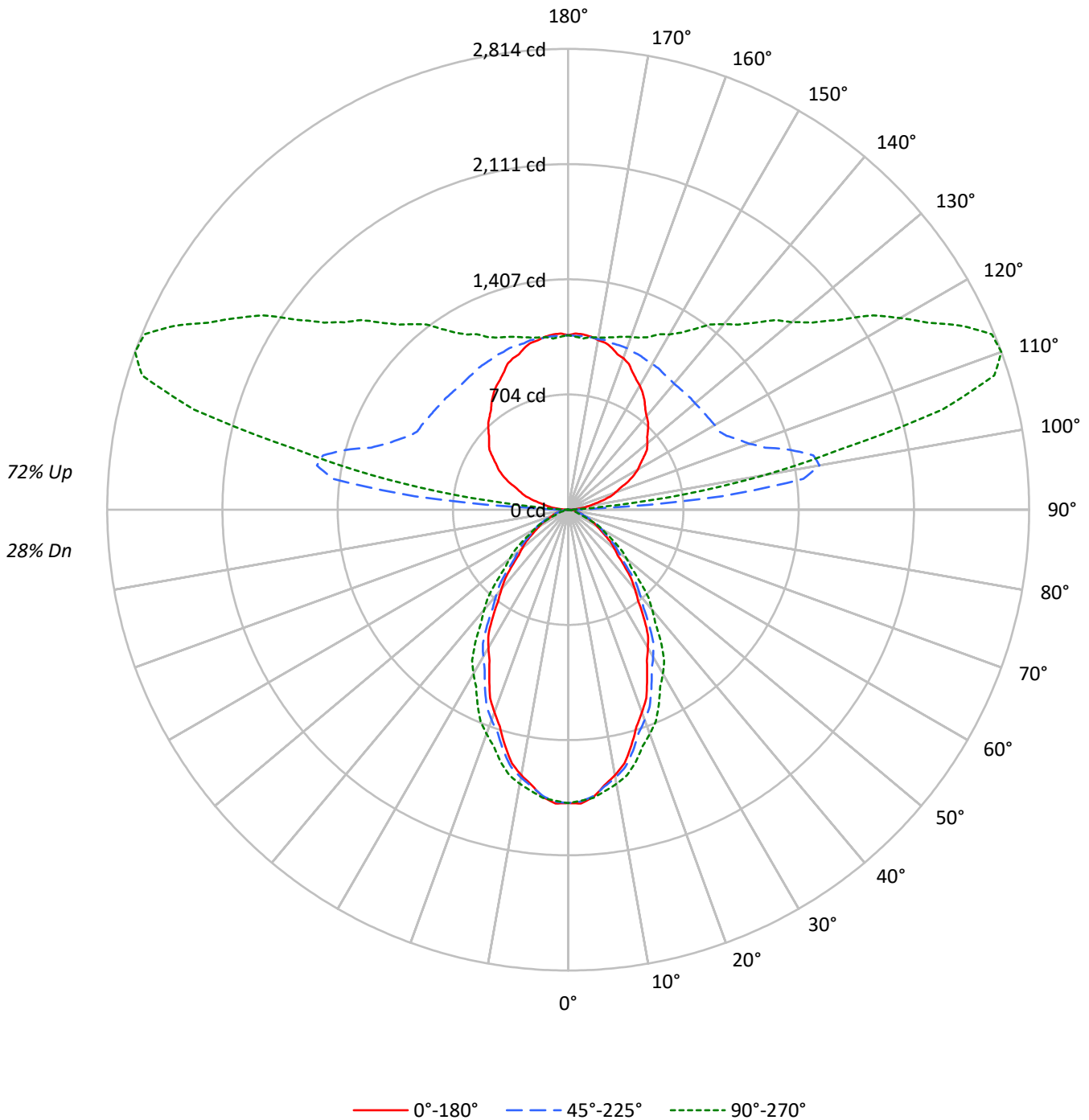
Input Watts (W): 83.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	50	30	10	0	
RCR																						
0	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	28				
1	94	90	86	83	84	80	78	75	63	61	60	47	46	45	33	32	32	25				
2	86	79	73	69	77	71	66	62	56	53	50	42	41	39	30	29	28	22				
3	79	70	63	58	70	63	57	53	50	46	43	38	36	34	27	26	24	20				
4	72	62	55	50	65	56	50	45	45	41	37	34	32	29	25	23	22	17				
5	66	56	48	43	59	50	44	39	40	36	32	31	28	26	22	21	19	16				
6	61	50	43	37	55	46	39	34	37	32	29	28	25	23	21	19	17	14				
7	57	45	38	33	51	41	35	30	33	29	25	26	23	20	19	17	16	13				
8	53	41	34	29	47	38	31	27	31	26	23	24	21	18	18	16	14	12				
9	49	38	31	26	44	34	28	24	28	24	20	22	19	17	16	14	13	11				
10	46	35	28	23	41	32	26	22	26	21	18	20	17	15	15	13	12	10				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16529	16529	16529
5°	16322	16264	16358
10°	15421	15561	15922
15°	14236	14566	15220
20°	12928	13414	14301
25°	11595	12227	13324
30°	10368	11046	12310
35°	9066	9721	11111
40°	7631	8237	9618
45°	6297	6841	8031
50°	5258	5731	6690
55°	4464	4919	5525
60°	3814	4264	4410
65°	3037	3587	2849
70°	2692	2800	1740
75°	2495	2271	1066
80°	2295	2088	919
85°	2085	1916	752

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8031 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.3	1.8
10°-20°	427.4	4.6
20°-30°	553.6	6.0
30°-40°	542.1	5.9
40°-50°	415.0	4.5
50°-60°	276.5	3.0
60°-70°	150.9	1.6
70°-80°	62.9	0.7
80°-90°	17.8	0.2
90°-100°	485.5	5.3
100°-110°	1381.5	15.0
110°-120°	1323.6	14.3
120°-130°	1047.6	11.4
130°-140°	840.8	9.1
140°-150°	658.3	7.1
150°-160°	481.7	5.2
160°-170°	298.3	3.2
170°-180°	101.2	1.1
0°-30°	1145.3	12.4
0°-40°	1687.4	18.3
0°-60°	2378.9	25.8
0°-90°	2610.5	28.3
90°-120°	3190.6	34.6
90°-150°	5737.2	62.2
90°-180°	6618.0	71.7
0°-180°	9228.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1792	1792	1792	1792	1792	
5°	1762	1745	1756	1760	1766	164
15°	1490	1485	1525	1566	1593	416
25°	1139	1142	1201	1254	1309	524
35°	805	809	863	921	986	500
45°	483	492	524	564	616	376
55°	278	289	306	317	344	252
65°	139	151	164	144	130	145
75°	70	70	64	44	30	75
85°	20	20	18	12	7	21
90°	0	0	0	0	0	3
95°	53	209	940	325	200	60
105°	215	326	1408	2487	2364	227
115°	399	482	1068	2262	2656	393
125°	563	624	1019	1691	2022	504
135°	689	746	1007	1428	1614	531
145°	812	854	1015	1236	1347	507
155°	928	950	1039	1117	1163	429
165°	1025	1029	1051	1074	1090	288
175°	1074	1068	1064	1057	1049	102
180°	1066	1066	1066	1066	1066	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1791.5	1791.5	1791.5	1791.5	1791.5
2.5°	1795.9	1779.9	1783.9	1783.8	1778.9
5°	1762.4	1744.7	1756.1	1760.1	1766.3
7.5°	1697.0	1683.6	1704.4	1719.7	1732.2
10°	1646.0	1634.5	1661.0	1683.3	1699.5
12.5°	1586.9	1577.2	1610.0	1640.1	1661.1
15°	1490.4	1485.0	1525.0	1566.5	1593.4
17.5°	1387.1	1384.5	1430.3	1478.7	1513.2
20°	1316.7	1315.9	1366.2	1416.6	1456.6
22.5°	1245.6	1247.3	1300.2	1352.6	1398.1
25°	1139.0	1142.1	1201.1	1253.5	1308.8
27.5°	1040.4	1041.8	1102.9	1158.1	1217.1
30°	973.2	977.0	1036.8	1094.0	1155.5
32.5°	905.9	910.3	968.9	1028.0	1090.7
35°	804.9	808.8	863.1	921.2	986.5
37.5°	700.9	706.1	754.3	809.2	873.5
40°	633.6	641.3	683.9	735.6	798.6
42.5°	568.8	578.3	617.9	666.9	723.8
45°	482.6	491.9	524.3	564.0	615.5
47.5°	408.4	419.0	444.0	478.1	522.1
50°	366.3	376.3	399.3	424.6	466.1
52.5°	329.2	339.2	359.7	379.2	414.6
55°	277.5	289.0	305.8	317.4	343.5
57.5°	235.0	246.1	259.4	264.6	280.5
60°	206.7	219.0	231.1	230.5	239.0
62.5°	181.0	191.4	203.4	195.1	195.6
65°	139.1	150.7	164.3	143.6	130.5
67.5°	112.4	114.9	128.9	100.1	84.6
70°	99.8	99.8	103.8	77.5	64.5
72.5°	87.9	87.9	84.3	63.0	49.4
75°	70.0	70.0	63.7	43.7	29.9
77.5°	53.9	53.3	48.7	32.6	21.7
80°	43.2	43.2	39.3	25.7	17.3
82.5°	33.8	33.8	30.5	20.1	12.9
85°	19.7	19.7	18.1	11.7	7.1
87.5°	6.9	6.9	6.3	3.8	3.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.2	85.9	199.3	58.0	43.8
95°	52.7	209.1	939.9	325.3	200.5
97.5°	96.8	245.0	1447.5	1035.8	709.8
100°	127.6	266.3	1557.7	1577.8	1215.4
102.5°	161.6	289.2	1533.4	2019.7	1703.2
105°	214.7	325.6	1407.8	2486.7	2363.9
107.5°	268.6	368.0	1261.2	2618.4	2727.7
110°	305.9	399.0	1176.9	2568.0	2813.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	341.5	429.9	1120.2	2448.9	2799.0
115°	399.1	482.2	1067.5	2261.5	2655.6
117.5°	449.7	527.7	1036.3	2056.6	2474.1
120°	490.2	555.6	1033.1	1939.5	2339.6
122.5°	522.6	588.0	1025.0	1836.8	2208.4
125°	563.1	624.5	1018.9	1690.8	2021.6
127.5°	607.3	664.7	1015.7	1603.6	1876.1
130°	630.0	687.4	1010.8	1542.9	1780.5
132.5°	654.3	710.1	1010.8	1495.4	1714.1
135°	688.7	746.2	1006.7	1428.3	1614.4
137.5°	721.1	777.0	1006.3	1371.4	1532.2
140°	745.4	802.9	1004.7	1324.2	1478.7
142.5°	773.0	820.9	1009.6	1286.6	1425.2
145°	812.3	853.9	1014.8	1236.1	1347.0
147.5°	845.9	886.3	1023.8	1185.2	1281.0
150°	875.1	902.8	1027.0	1168.3	1235.6
152.5°	897.8	927.1	1030.2	1145.5	1208.1
155°	927.7	949.5	1039.2	1117.2	1162.7
157.5°	965.0	978.1	1041.2	1104.3	1136.8
160°	984.5	994.4	1049.3	1094.5	1122.2
162.5°	995.8	1007.3	1050.9	1086.2	1107.6
165°	1025.0	1028.9	1051.3	1073.9	1089.8
167.5°	1044.8	1041.3	1060.6	1070.9	1077.2
170°	1051.3	1049.3	1057.4	1059.6	1067.5
172.5°	1065.9	1059.2	1062.2	1056.3	1062.6
175°	1073.6	1067.6	1063.5	1057.2	1049.3
177.5°	1076.8	1067.3	1062.2	1055.8	1057.4
180°	1065.5	1065.5	1065.5	1065.5	1065.5

(END OF REPORT)