

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: P522017

Luminaire Tested: SQ4-WB-150U-050D-92765-1D-UNV-STD-W-4_3000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P522017
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-050D-92765-1D-UNV-STD-W-4_3000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8165.6 lumens
Efficiency: N/A
Efficacy: 113.6 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

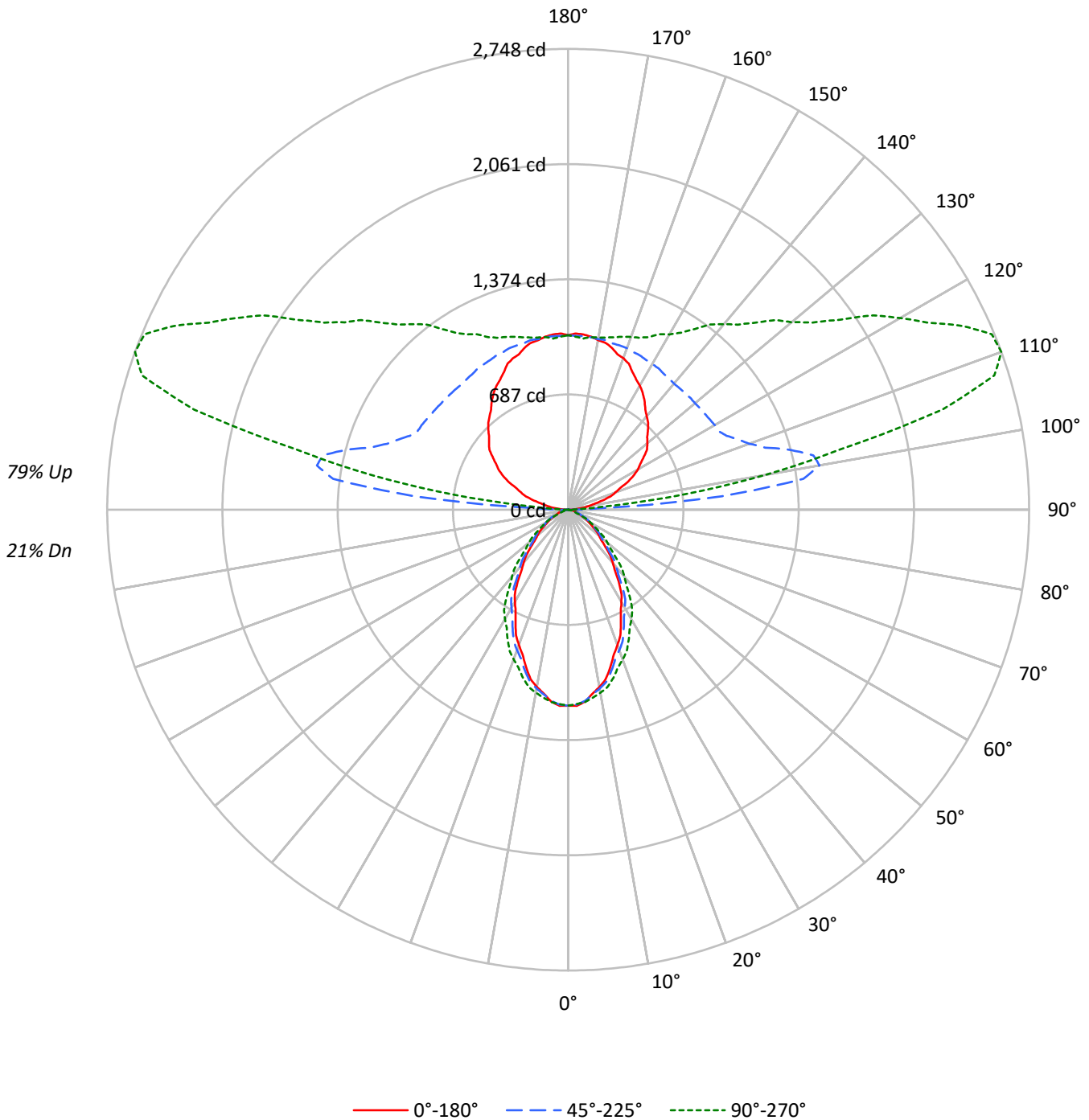
Input Watts (W): 71.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	100	100	100	100	89	89	89	89	67	67	67	47	47	47	29	29	29	21				
1	92	88	84	81	81	78	75	72	59	57	56	42	41	40	27	26	26	19				
2	84	77	72	67	74	69	64	60	53	50	47	38	36	34	24	23	22	16				
3	77	68	62	56	68	61	55	51	47	43	40	34	31	30	22	21	20	14				
4	70	61	53	48	62	54	48	43	42	38	34	30	28	26	20	18	17	13				
5	65	54	47	41	57	48	42	37	37	33	30	27	25	23	18	17	15	12				
6	60	48	41	36	53	43	37	32	34	29	26	25	22	20	17	15	14	10				
7	55	44	36	31	49	39	33	29	31	26	23	23	20	18	15	14	12	9				
8	51	40	33	28	45	36	30	25	28	24	21	21	18	16	14	12	11	9				
9	48	36	29	25	42	33	27	22	26	21	18	19	16	14	13	11	10	8				
10	44	33	26	22	39	30	24	20	24	19	17	18	15	13	12	11	9	7				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10778	10778	10778
5°	10643	10605	10667
10°	10055	10147	10382
15°	9282	9498	9924
20°	8430	8747	9325
25°	7561	7973	8688
30°	6761	7203	8027
35°	5912	6339	7246
40°	4975	5370	6272
45°	4106	4461	5236
50°	3429	3738	4363
55°	2910	3207	3603
60°	2487	2781	2875
65°	1980	2338	1858
70°	1756	1826	1133
75°	1626	1479	695
80°	1498	1360	600
85°	1355	1249	487

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5236 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.1	1.3
10°-20°	278.7	3.4
20°-30°	361.0	4.4
30°-40°	353.5	4.3
40°-50°	270.6	3.3
50°-60°	180.3	2.2
60°-70°	98.4	1.2
70°-80°	41.0	0.5
80°-90°	11.6	0.1
90°-100°	474.1	5.8
100°-110°	1349.1	16.5
110°-120°	1292.6	15.8
120°-130°	1023.0	12.5
130°-140°	821.1	10.1
140°-150°	642.8	7.9
150°-160°	470.4	5.8
160°-170°	291.4	3.6
170°-180°	98.9	1.2
0°-30°	746.8	9.1
0°-40°	1100.3	13.5
0°-60°	1551.2	19.0
0°-90°	1702.2	20.8
90°-120°	3115.8	38.2
90°-150°	5602.8	68.6
90°-180°	6463.0	79.1
0°-180°	8165.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1168	1168	1168	1168	1168	
5°	1149	1138	1145	1148	1152	107
15°	972	968	994	1021	1039	271
25°	743	745	783	817	853	342
35°	525	527	563	601	643	326
45°	315	321	342	368	401	245
55°	181	188	199	207	224	164
65°	91	98	107	94	85	94
75°	46	46	42	28	20	49
85°	13	13	12	8	5	14
90°	0	0	0	0	0	3
95°	51	204	918	318	196	59
105°	210	318	1375	2428	2308	222
115°	390	471	1042	2208	2593	384
125°	550	610	995	1651	1974	492
135°	673	729	983	1395	1577	519
145°	793	834	991	1207	1316	496
155°	906	927	1015	1091	1136	419
165°	1001	1005	1027	1049	1064	281
175°	1048	1043	1038	1032	1025	99
180°	1040	1040	1040	1040	1040	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1168.2	1168.2	1168.2	1168.2	1168.2
2.5°	1171.0	1160.6	1163.2	1163.2	1160.0
5°	1149.2	1137.7	1145.1	1147.7	1151.8
7.5°	1106.5	1097.8	1111.4	1121.4	1129.5
10°	1073.3	1065.8	1083.1	1097.7	1108.2
12.5°	1034.8	1028.5	1049.9	1069.4	1083.2
15°	971.8	968.3	994.4	1021.4	1039.0
17.5°	904.5	902.8	932.7	964.3	986.7
20°	858.6	858.1	890.9	923.7	949.8
22.5°	812.2	813.3	847.8	882.0	911.7
25°	742.7	744.7	783.2	817.4	853.4
27.5°	678.4	679.3	719.1	755.2	793.7
30°	634.6	637.1	676.1	713.4	753.5
32.5°	590.7	593.6	631.8	670.4	711.2
35°	524.9	527.4	562.8	600.7	643.3
37.5°	457.0	460.4	491.9	527.7	569.6
40°	413.1	418.1	445.9	479.7	520.8
42.5°	370.9	377.1	402.9	434.9	472.0
45°	314.7	320.7	341.9	367.8	401.3
47.5°	266.3	273.3	289.5	311.8	340.5
50°	238.9	245.4	260.4	276.9	304.0
52.5°	214.7	221.2	234.6	247.3	270.3
55°	180.9	188.5	199.4	207.0	224.0
57.5°	153.3	160.5	169.1	172.6	182.9
60°	134.8	142.8	150.7	150.3	155.8
62.5°	118.0	124.8	132.7	127.2	127.5
65°	90.7	98.2	107.1	93.6	85.1
67.5°	73.3	74.9	84.1	65.3	55.2
70°	65.1	65.1	67.7	50.6	42.0
72.5°	57.3	57.3	54.9	41.1	32.2
75°	45.6	45.6	41.5	28.5	19.5
77.5°	35.2	34.8	31.8	21.3	14.1
80°	28.2	28.2	25.6	16.8	11.3
82.5°	22.0	22.0	19.9	13.1	8.4
85°	12.8	12.8	11.8	7.6	4.6
87.5°	4.5	4.5	4.1	2.5	2.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	15.8	83.9	194.7	56.7	42.7
95°	51.4	204.2	917.9	317.7	195.8
97.5°	94.6	239.2	1413.6	1011.5	693.2
100°	124.6	260.0	1521.2	1540.9	1186.9
102.5°	157.9	282.4	1497.5	1972.3	1663.2
105°	209.7	318.0	1374.8	2428.4	2308.5
107.5°	262.3	359.4	1231.6	2557.0	2663.8
110°	298.7	389.6	1149.3	2507.8	2747.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	333.5	419.8	1093.9	2391.5	2733.4
115°	389.7	470.9	1042.5	2208.5	2593.4
117.5°	439.2	515.4	1012.0	2008.4	2416.1
120°	478.7	542.5	1008.9	1894.1	2284.8
122.5°	510.4	574.2	1001.0	1793.7	2156.6
125°	549.9	609.9	995.0	1651.2	1974.2
127.5°	593.1	649.1	991.9	1566.0	1832.2
130°	615.2	671.3	987.1	1506.7	1738.8
132.5°	638.9	693.5	987.1	1460.4	1673.9
135°	672.6	728.7	983.2	1394.8	1576.6
137.5°	704.2	758.8	982.8	1339.2	1496.3
140°	728.0	784.1	981.2	1293.2	1444.1
142.5°	754.9	801.7	985.9	1256.4	1391.8
145°	793.2	833.9	991.1	1207.2	1315.5
147.5°	826.1	865.5	999.8	1157.4	1251.0
150°	854.6	881.6	1002.9	1140.9	1206.7
152.5°	876.7	905.4	1006.1	1118.7	1179.8
155°	906.0	927.3	1014.8	1091.0	1135.5
157.5°	942.4	955.2	1016.8	1078.4	1110.1
160°	961.4	971.1	1024.7	1068.8	1095.9
162.5°	972.5	983.7	1026.3	1060.8	1081.7
165°	1001.0	1004.8	1026.7	1048.8	1064.3
167.5°	1020.3	1016.9	1035.8	1045.8	1052.0
170°	1026.7	1024.7	1032.6	1034.8	1042.5
172.5°	1040.9	1034.3	1037.4	1031.6	1037.7
175°	1048.4	1042.6	1038.5	1032.4	1024.7
177.5°	1051.6	1042.3	1037.4	1031.1	1032.6
180°	1040.5	1040.5	1040.5	1040.5	1040.5

(END OF REPORT)