

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: P522029

Luminaire Tested: SQ4-WB-150U-075D-92765-1D-UNV-STD-W-4_2700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P522029
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_2700K
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 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8829.6 lumens
Efficiency: N/A
Efficacy: 106.6 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

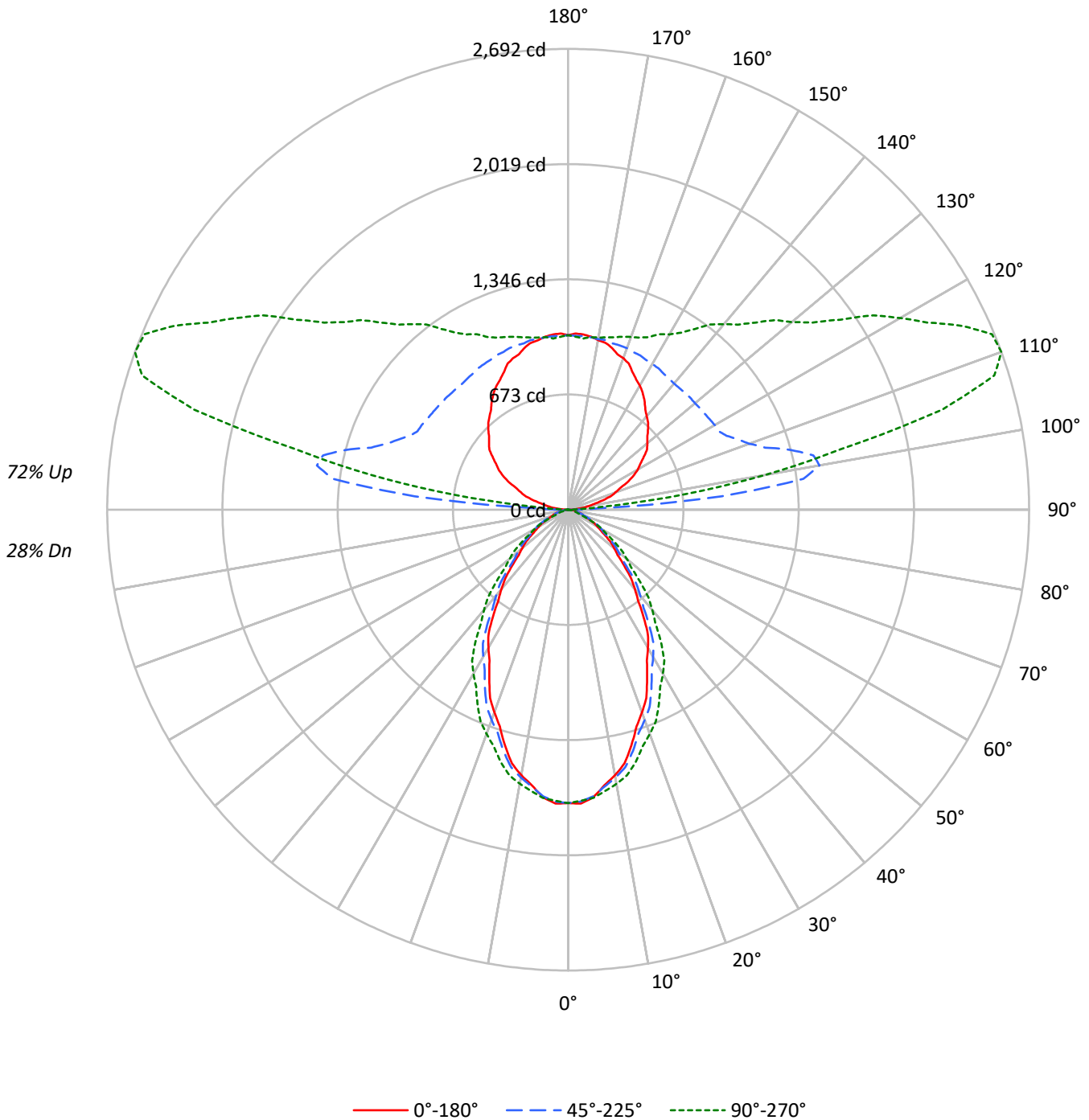
Input Watts (W): 82.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	15813	15813	15813
5°	15616	15560	15651
10°	14754	14888	15233
15°	13620	13936	14561
20°	12368	12834	13683
25°	11093	11699	12747
30°	9919	10568	11777
35°	8674	9301	10630
40°	7301	7880	9203
45°	6025	6545	7684
50°	5031	5483	6402
55°	4271	4707	5287
60°	3650	4080	4218
65°	2906	3432	2725
70°	2576	2679	1664
75°	2385	2171	1020
80°	2200	1998	877
85°	1990	1831	720

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7684 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.2	1.8
10°-20°	408.9	4.6
20°-30°	529.7	6.0
30°-40°	518.7	5.9
40°-50°	397.0	4.5
50°-60°	264.5	3.0
60°-70°	144.4	1.6
70°-80°	60.1	0.7
80°-90°	17.0	0.2
90°-100°	464.5	5.3
100°-110°	1321.7	15.0
110°-120°	1266.3	14.3
120°-130°	1002.2	11.4
130°-140°	804.5	9.1
140°-150°	629.8	7.1
150°-160°	460.8	5.2
160°-170°	285.4	3.2
170°-180°	96.9	1.1
0°-30°	1095.8	12.4
0°-40°	1614.4	18.3
0°-60°	2276.0	25.8
0°-90°	2497.5	28.3
90°-120°	3052.5	34.6
90°-150°	5489.0	62.2
90°-180°	6332.0	71.7
0°-180°	8829.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1714	1714	1714	1714	1714	
5°	1686	1669	1680	1684	1690	157
15°	1426	1421	1459	1499	1524	398
25°	1090	1093	1149	1199	1252	501
35°	770	774	826	881	944	479
45°	462	471	502	540	589	360
55°	266	276	293	304	329	241
65°	133	144	157	137	125	138
75°	67	67	61	42	29	71
85°	19	19	17	11	7	20
90°	0	0	0	0	0	3
95°	50	200	899	311	192	58
105°	205	312	1347	2379	2262	217
115°	382	461	1021	2164	2541	376
125°	539	598	975	1618	1934	482
135°	659	714	963	1366	1545	508
145°	777	817	971	1183	1289	485
155°	888	908	994	1069	1112	410
165°	981	984	1006	1028	1043	276
175°	1027	1022	1018	1012	1004	97
180°	1019	1019	1019	1019	1019	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1713.9	1713.9	1713.9	1713.9	1713.9
2.5°	1718.2	1702.9	1706.7	1706.6	1701.9
5°	1686.1	1669.2	1680.1	1684.0	1689.9
7.5°	1623.6	1610.8	1630.6	1645.3	1657.2
10°	1574.8	1563.8	1589.1	1610.5	1626.0
12.5°	1518.3	1509.0	1540.4	1569.1	1589.3
15°	1425.9	1420.8	1459.0	1498.7	1524.4
17.5°	1327.1	1324.6	1368.5	1414.8	1447.7
20°	1259.7	1259.0	1307.1	1355.3	1393.6
22.5°	1191.7	1193.3	1243.9	1294.1	1337.6
25°	1089.7	1092.7	1149.2	1199.2	1252.2
27.5°	995.4	996.8	1055.1	1108.0	1164.5
30°	931.1	934.7	992.0	1046.7	1105.5
32.5°	866.7	870.9	927.0	983.6	1043.6
35°	770.1	773.8	825.8	881.3	943.8
37.5°	670.5	675.5	721.7	774.2	835.7
40°	606.2	613.5	654.3	703.8	764.1
42.5°	544.2	553.3	591.1	638.1	692.5
45°	461.8	470.6	501.6	539.6	588.9
47.5°	390.8	400.9	424.8	457.5	499.5
50°	350.5	360.0	382.0	406.3	446.0
52.5°	315.0	324.5	344.1	362.8	396.6
55°	265.5	276.5	292.6	303.6	328.7
57.5°	224.9	235.5	248.2	253.2	268.3
60°	197.8	209.6	221.1	220.5	228.6
62.5°	173.1	183.1	194.6	186.7	187.1
65°	133.1	144.1	157.2	137.3	124.8
67.5°	107.5	109.9	123.3	95.8	80.9
70°	95.5	95.5	99.3	74.2	61.7
72.5°	84.1	84.1	80.6	60.3	47.2
75°	66.9	66.9	60.9	41.8	28.6
77.5°	51.6	51.0	46.6	31.2	20.8
80°	41.4	41.4	37.6	24.6	16.5
82.5°	32.3	32.3	29.2	19.2	12.3
85°	18.8	18.8	17.3	11.2	6.8
87.5°	6.6	6.6	6.0	3.6	3.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	15.5	82.2	190.7	55.5	41.9
95°	50.4	200.1	899.2	311.2	191.9
97.5°	92.6	234.4	1384.9	991.0	679.1
100°	122.1	254.7	1490.3	1509.6	1162.8
102.5°	154.7	276.7	1467.1	1932.3	1629.5
105°	205.4	311.5	1346.9	2379.1	2261.7
107.5°	257.0	352.1	1206.6	2505.1	2609.7
110°	292.6	381.7	1126.0	2456.9	2691.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	326.7	411.3	1071.7	2342.9	2677.9
115°	381.8	461.4	1021.3	2163.6	2540.7
117.5°	430.2	504.9	991.5	1967.6	2367.1
120°	469.0	531.5	988.4	1855.6	2238.4
122.5°	500.0	562.5	980.6	1757.3	2112.8
125°	538.8	597.5	974.8	1617.7	1934.1
127.5°	581.0	636.0	971.7	1534.2	1795.0
130°	602.7	657.7	967.1	1476.1	1703.5
132.5°	626.0	679.4	967.1	1430.7	1639.9
135°	658.9	713.9	963.2	1366.5	1544.6
137.5°	689.9	743.4	962.8	1312.0	1465.9
140°	713.2	768.1	961.3	1266.9	1414.7
142.5°	739.5	785.4	965.9	1230.9	1363.6
145°	777.1	816.9	970.9	1182.7	1288.8
147.5°	809.3	848.0	979.5	1133.9	1225.6
150°	837.2	863.7	982.6	1117.8	1182.2
152.5°	858.9	887.0	985.7	1095.9	1155.8
155°	887.6	908.5	994.2	1068.8	1112.4
157.5°	923.3	935.8	996.1	1056.5	1087.6
160°	941.9	951.3	1003.9	1047.1	1073.7
162.5°	952.7	963.7	1005.4	1039.2	1059.7
165°	980.6	984.4	1005.8	1027.5	1042.6
167.5°	999.6	996.2	1014.7	1024.6	1030.6
170°	1005.8	1003.9	1011.6	1013.7	1021.3
172.5°	1019.8	1013.3	1016.3	1010.6	1016.7
175°	1027.1	1021.5	1017.5	1011.5	1003.9
177.5°	1030.2	1021.1	1016.3	1010.1	1011.6
180°	1019.4	1019.4	1019.4	1019.4	1019.4

(END OF REPORT)