

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: P521938

Luminaire Tested: SQ4-WB-100U-100D-92765-1D-UNV-STD-W-4_2700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521938
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_2700K
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 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7466.5 lumens
Efficiency: N/A
Efficacy: 100.1 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: General Diffuse

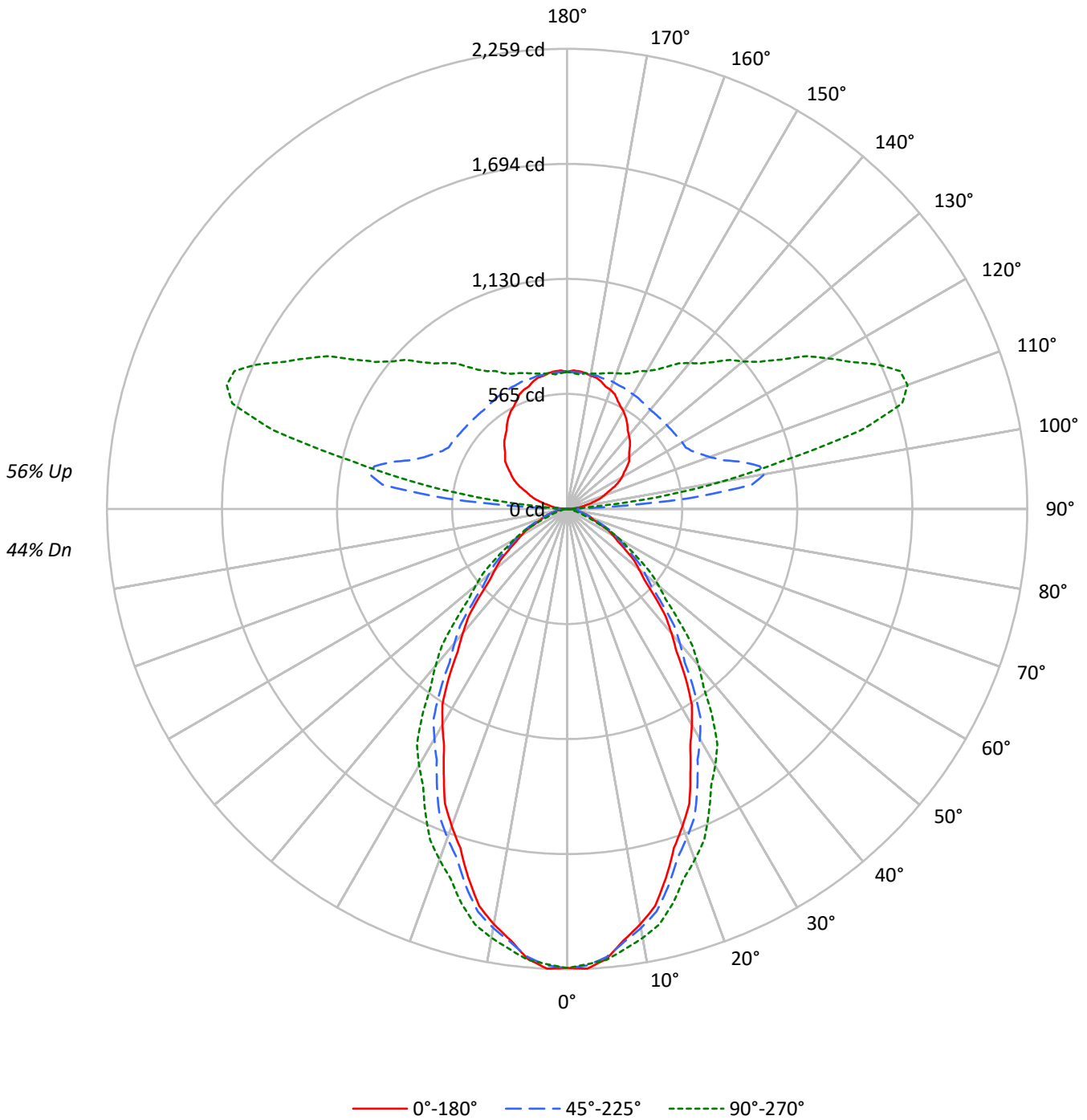
Input Watts (W): 74.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			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	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°	20788	20788	20788
5°	20528	20455	20574
10°	19395	19571	20024
15°	17905	18320	19142
20°	16259	16871	17986
25°	14583	15378	16757
30°	13039	13892	15483
35°	11403	12226	13974
40°	9597	10359	12098
45°	7920	8604	10100
50°	6613	7208	8415
55°	5614	6186	6949
60°	4798	5364	5545
65°	3820	4510	3582
70°	3388	3520	2188
75°	3137	2855	1340
80°	2890	2625	1158
85°	2615	2403	942

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10100 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.7	2.8
10°-20°	537.5	7.2
20°-30°	696.3	9.3
30°-40°	681.8	9.1
40°-50°	521.9	7.0
50°-60°	347.8	4.7
60°-70°	189.8	2.5
70°-80°	79.1	1.1
80°-90°	22.4	0.3
90°-100°	306.9	4.1
100°-110°	873.2	11.7
110°-120°	836.6	11.2
120°-130°	662.1	8.9
130°-140°	531.5	7.1
140°-150°	416.1	5.6
150°-160°	304.4	4.1
160°-170°	188.6	2.5
170°-180°	64.0	0.9
0°-30°	1440.5	19.3
0°-40°	2122.3	28.4
0°-60°	2992.0	40.1
0°-90°	3283.2	44.0
90°-120°	2016.7	27.0
90°-150°	3626.3	48.6
90°-180°	4183.0	56.0
0°-180°	7466.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2253	2253	2253	2253	2253	
5°	2216	2194	2209	2214	2222	206
15°	1874	1868	1918	1970	2004	523
25°	1432	1436	1511	1576	1646	659
35°	1012	1017	1086	1159	1241	629
45°	607	619	659	709	774	473
55°	349	364	385	399	432	316
65°	175	190	207	180	164	182
75°	88	88	80	55	38	94
85°	25	25	23	15	9	27
90°	0	0	0	0	0	3
95°	33	132	594	206	127	38
105°	136	206	890	1572	1494	144
115°	252	305	675	1429	1678	248
125°	356	395	644	1069	1278	319
135°	435	472	636	903	1020	336
145°	513	540	642	781	851	321
155°	586	600	657	706	735	271
165°	648	650	664	679	689	182
175°	679	675	672	668	663	64
180°	674	674	674	674	674	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2253.1	2253.1	2253.1	2253.1	2253.1
2.5°	2258.6	2238.5	2243.6	2243.5	2237.3
5°	2216.5	2194.3	2208.6	2213.7	2221.5
7.5°	2134.3	2117.5	2143.6	2162.9	2178.6
10°	2070.2	2055.7	2089.0	2117.1	2137.4
12.5°	1995.9	1983.7	2024.9	2062.7	2089.2
15°	1874.5	1867.7	1918.0	1970.1	2004.0
17.5°	1744.6	1741.3	1798.9	1859.8	1903.1
20°	1656.0	1655.0	1718.3	1781.7	1831.9
22.5°	1566.6	1568.7	1635.2	1701.2	1758.4
25°	1432.5	1436.4	1510.6	1576.5	1646.1
27.5°	1308.6	1310.3	1387.1	1456.6	1530.8
30°	1223.9	1228.8	1304.0	1376.0	1453.3
32.5°	1139.3	1144.9	1218.6	1293.0	1371.8
35°	1012.4	1017.2	1085.5	1158.6	1240.7
37.5°	881.5	888.0	948.7	1017.8	1098.6
40°	796.8	806.5	860.1	925.2	1004.5
42.5°	715.4	727.4	777.1	838.8	910.3
45°	607.0	618.6	659.4	709.3	774.1
47.5°	513.7	527.0	558.4	601.4	656.7
50°	460.7	473.3	502.2	534.1	586.3
52.5°	414.0	426.6	452.4	476.9	521.4
55°	349.0	363.5	384.6	399.2	432.0
57.5°	295.6	309.5	326.3	332.8	352.7
60°	260.0	275.5	290.7	289.9	300.5
62.5°	227.6	240.7	255.9	245.4	246.0
65°	175.0	189.5	206.6	180.5	164.1
67.5°	141.4	144.5	162.1	125.9	106.4
70°	125.6	125.6	130.5	97.5	81.1
72.5°	110.5	110.5	106.0	79.3	62.1
75°	88.0	88.0	80.1	55.0	37.6
77.5°	67.8	67.0	61.3	41.0	27.3
80°	54.4	54.4	49.4	32.4	21.8
82.5°	42.5	42.5	38.4	25.3	16.2
85°	24.7	24.7	22.7	14.7	8.9
87.5°	8.7	8.7	7.9	4.7	4.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.2	54.3	126.0	36.7	27.7
95°	33.3	132.2	594.1	205.6	126.8
97.5°	61.2	154.8	914.9	654.7	448.6
100°	80.7	168.3	984.6	997.3	768.2
102.5°	102.2	182.8	969.2	1276.6	1076.5
105°	135.7	205.8	889.8	1571.8	1494.2
107.5°	169.8	232.6	797.1	1655.0	1724.1
110°	193.3	252.2	743.9	1623.2	1778.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	215.9	271.7	708.0	1547.9	1769.2
115°	252.2	304.8	674.7	1429.4	1678.5
117.5°	284.2	333.6	655.0	1299.9	1563.8
120°	309.8	351.2	653.0	1225.9	1478.8
122.5°	330.3	371.6	647.9	1161.0	1395.8
125°	355.9	394.7	644.0	1068.7	1277.8
127.5°	383.8	420.2	642.0	1013.6	1185.9
130°	398.2	434.5	638.9	975.2	1125.4
132.5°	413.6	448.9	638.9	945.2	1083.4
135°	435.3	471.6	636.3	902.8	1020.4
137.5°	455.8	491.1	636.1	866.8	968.5
140°	471.2	507.5	635.1	837.0	934.7
142.5°	488.6	518.9	638.1	813.2	900.9
145°	513.4	539.7	641.5	781.3	851.4
147.5°	534.7	560.2	647.1	749.1	809.7
150°	553.1	570.6	649.1	738.5	781.0
152.5°	567.5	586.0	651.2	724.0	763.6
155°	586.4	600.2	656.8	706.1	734.9
157.5°	610.0	618.2	658.1	698.0	718.5
160°	622.3	628.5	663.2	691.8	709.3
162.5°	629.4	636.7	664.2	686.6	700.1
165°	647.9	650.4	664.5	678.8	688.8
167.5°	660.4	658.2	670.4	676.9	680.9
170°	664.5	663.3	668.3	669.7	674.7
172.5°	673.7	669.5	671.4	667.7	671.7
175°	678.6	674.8	672.2	668.2	663.2
177.5°	680.6	674.6	671.4	667.3	668.3
180°	673.5	673.5	673.5	673.5	673.5

(END OF REPORT)