

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: P521730

Luminaire Tested: SQ4-WB-025U-100D-92765-1D-UNV-STD-W-4_2700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521730
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-025U-100D-92765-1D-UNV-STD-W-4_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 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: 5136.1 lumens
Efficiency: N/A
Efficacy: 91.2 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-Direct

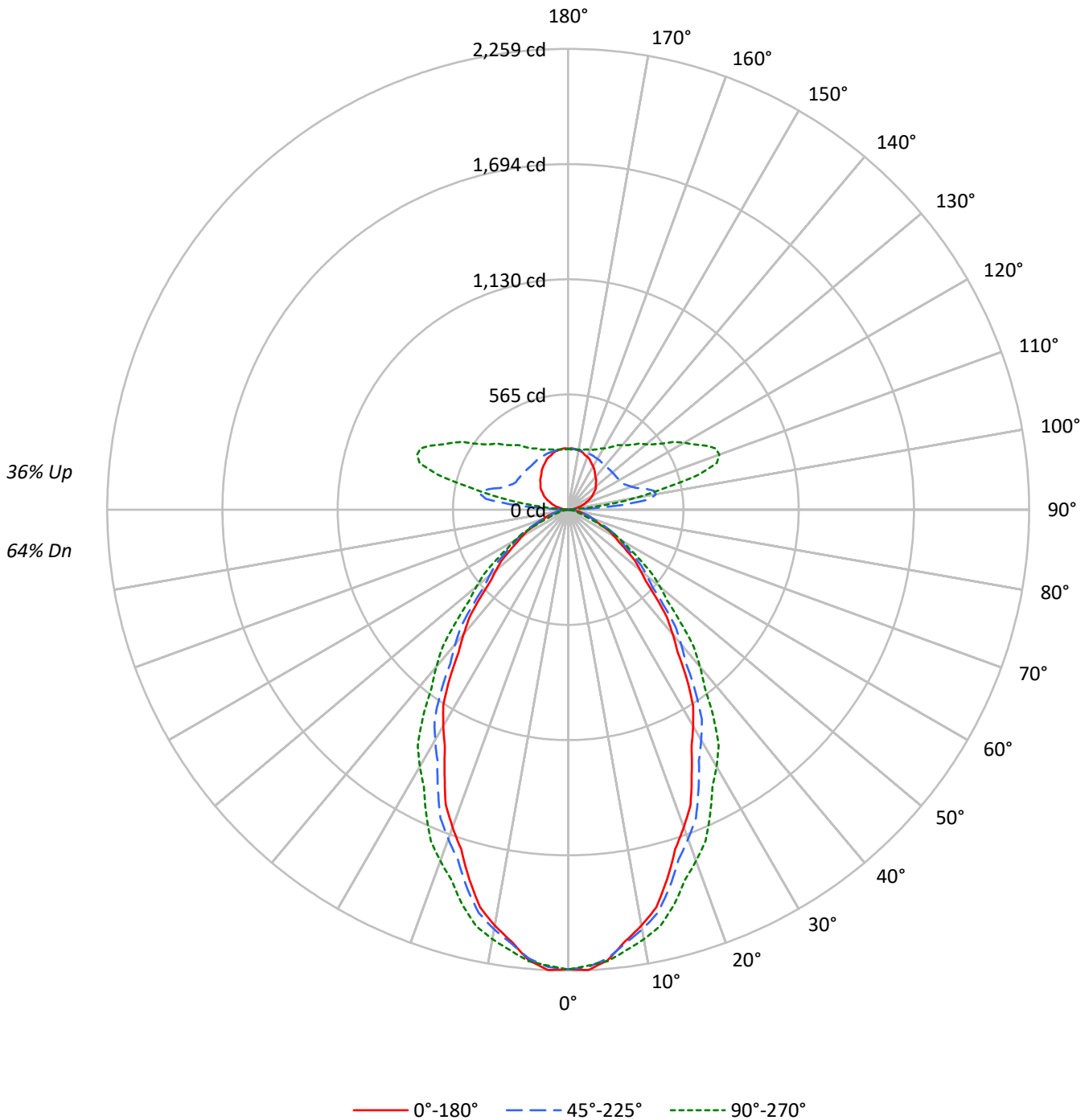
Input Watts (W): 56.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	0
RCR																				
0	110	110	110	110	104	104	104	104	91	91	91		80	80	80		69	69	69	64
1	102	98	95	92	96	93	90	87	82	80	78		72	71	69		63	62	61	57
2	94	88	82	78	89	83	78	74	74	70	67		65	63	60		57	56	54	50
3	87	79	72	67	82	74	69	64	66	62	58		59	56	53		52	50	48	44
4	81	71	63	58	76	67	61	56	60	55	51		54	50	47		48	45	42	39
5	75	64	56	51	70	61	54	49	55	49	45		49	45	42		44	41	38	35
6	69	58	51	45	65	55	49	44	50	45	40		45	41	37		41	37	34	32
7	65	53	46	40	61	51	44	39	46	41	36		42	37	34		38	34	31	29
8	60	49	42	37	57	47	40	35	43	37	33		39	34	31		35	31	29	27
9	57	45	38	33	54	43	37	32	39	34	30		36	31	28		33	29	26	24
10	53	42	35	30	50	40	34	29	37	31	28		33	29	26		31	27	24	22

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	4.0
10°-20°	537.5	10.5
20°-30°	696.3	13.6
30°-40°	681.8	13.3
40°-50°	521.9	10.2
50°-60°	347.8	6.8
60°-70°	189.8	3.7
70°-80°	79.1	1.5
80°-90°	22.4	0.4
90°-100°	135.9	2.6
100°-110°	386.8	7.5
110°-120°	370.6	7.2
120°-130°	293.3	5.7
130°-140°	235.4	4.6
140°-150°	184.3	3.6
150°-160°	134.8	2.6
160°-170°	83.5	1.6
170°-180°	28.3	0.6
0°-30°	1440.5	28.0
0°-40°	2122.3	41.3
0°-60°	2992.0	58.3
0°-90°	3283.2	63.9
90°-120°	893.2	17.4
90°-150°	1606.2	31.3
90°-180°	1853.0	36.1
0°-180°	5136.1	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	2
95°	15	59	263	91	56	17
105°	60	91	394	696	662	64
115°	112	135	299	633	744	110
125°	158	175	285	473	566	141
135°	193	209	282	400	452	149
145°	227	239	284	346	377	142
155°	260	266	291	313	326	120
165°	287	288	294	301	305	81
175°	301	299	298	296	294	28
180°	298	298	298	298	298	

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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°	4.5	24.1	55.8	16.2	12.2
95°	14.7	58.6	263.1	91.1	56.1
97.5°	27.1	68.6	405.3	290.0	198.7
100°	35.7	74.5	436.1	441.7	340.3
102.5°	45.3	81.0	429.3	565.4	476.8
105°	60.1	91.2	394.1	696.2	661.8
107.5°	75.2	103.0	353.1	733.1	763.7
110°	85.6	111.7	329.5	719.0	787.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	95.6	120.3	313.6	685.6	783.6
115°	111.7	135.0	298.9	633.1	743.5
117.5°	125.9	147.7	290.1	575.8	692.7
120°	137.2	155.5	289.2	543.0	655.0
122.5°	146.3	164.6	287.0	514.2	618.3
125°	157.7	174.8	285.3	473.4	566.0
127.5°	170.0	186.1	284.3	449.0	525.3
130°	176.4	192.5	283.0	431.9	498.5
132.5°	183.2	198.8	283.0	418.7	479.9
135°	192.8	208.9	281.9	399.9	452.0
137.5°	201.9	217.5	281.7	383.9	429.0
140°	208.7	224.8	281.3	370.7	414.0
142.5°	216.4	229.8	282.6	360.2	399.0
145°	227.4	239.1	284.1	346.1	377.1
147.5°	236.8	248.1	286.6	331.8	358.6
150°	245.0	252.8	287.5	327.1	345.9
152.5°	251.3	259.6	288.4	320.7	338.2
155°	259.7	265.8	290.9	312.8	325.5
157.5°	270.2	273.8	291.5	309.2	318.3
160°	275.6	278.4	293.8	306.4	314.2
162.5°	278.8	282.0	294.2	304.1	310.1
165°	287.0	288.1	294.3	300.7	305.1
167.5°	292.5	291.5	296.9	299.8	301.6
170°	294.3	293.8	296.0	296.6	298.9
172.5°	298.4	296.5	297.4	295.7	297.5
175°	300.6	298.9	297.7	296.0	293.8
177.5°	301.5	298.8	297.4	295.6	296.0
180°	298.3	298.3	298.3	298.3	298.3

(END OF REPORT)