

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: P521940

Luminaire Tested: SQ4-WB-100U-100D-92765-1D-UNV-STD-W-4_3500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521940
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_3500K
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 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7804.2 lumens
Efficiency: N/A
Efficacy: 104.3 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

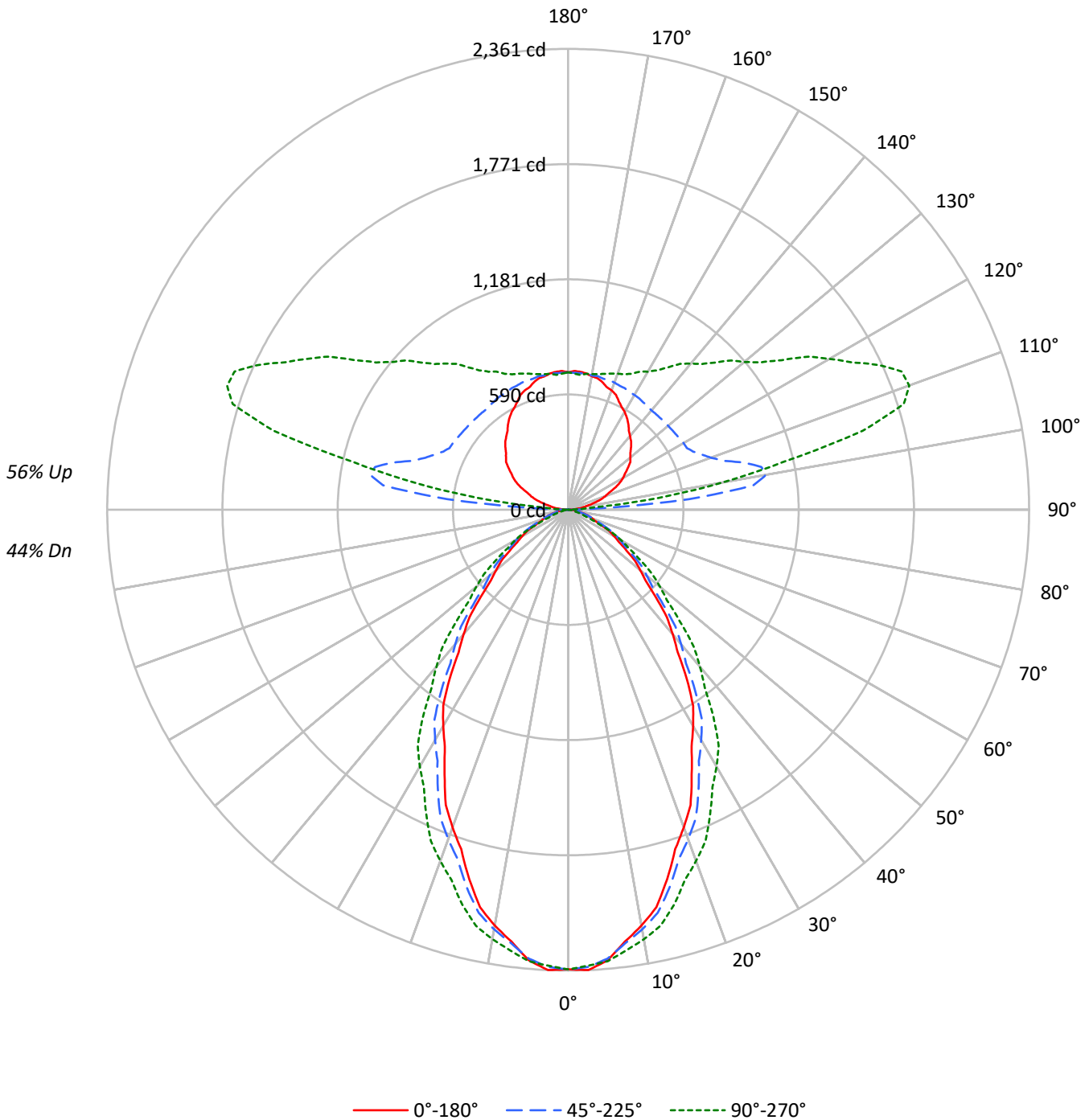
Input Watts (W): 74.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	21728	21728	21728
5°	21457	21380	21504
10°	20272	20456	20930
15°	18714	19148	20007
20°	16994	17633	18800
25°	15242	16073	17515
30°	13629	14521	16183
35°	11918	12779	14606
40°	10031	10828	12645
45°	8279	8993	10557
50°	6911	7534	8796
55°	5868	6466	7264
60°	5015	5606	5796
65°	3993	4716	3744
70°	3539	3679	2285
75°	3280	2984	1401
80°	3018	2747	1206
85°	2731	2519	984

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10557 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	216.0	2.8
10°-20°	561.8	7.2
20°-30°	727.8	9.3
30°-40°	712.7	9.1
40°-50°	545.5	7.0
50°-60°	363.5	4.7
60°-70°	198.4	2.5
70°-80°	82.7	1.1
80°-90°	23.4	0.3
90°-100°	320.7	4.1
100°-110°	912.7	11.7
110°-120°	874.4	11.2
120°-130°	692.1	8.9
130°-140°	555.5	7.1
140°-150°	434.9	5.6
150°-160°	318.2	4.1
160°-170°	197.1	2.5
170°-180°	66.9	0.9
0°-30°	1505.6	19.3
0°-40°	2218.3	28.4
0°-60°	3127.2	40.1
0°-90°	3431.6	44.0
90°-120°	2107.9	27.0
90°-150°	3790.4	48.6
90°-180°	4373.0	56.0
0°-180°	7804.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2355	2355	2355	2355	2355	
5°	2317	2294	2308	2314	2322	216
15°	1959	1952	2005	2059	2095	547
25°	1497	1501	1579	1648	1720	689
35°	1058	1063	1135	1211	1297	658
45°	634	647	689	741	809	495
55°	365	380	402	417	452	331
65°	183	198	216	189	172	190
75°	92	92	84	58	39	98
85°	26	26	24	15	9	28
90°	0	0	0	0	0	3
95°	35	138	621	215	132	40
105°	142	215	930	1643	1562	150
115°	264	319	705	1494	1754	260
125°	372	413	673	1117	1336	333
135°	455	493	665	944	1067	351
145°	537	564	670	817	890	335
155°	613	627	686	738	768	283
165°	677	680	695	710	720	190
175°	709	705	703	698	693	67
180°	704	704	704	704	704	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2355.0	2355.0	2355.0	2355.0	2355.0
2.5°	2360.8	2339.8	2345.1	2344.9	2338.5
5°	2316.8	2293.5	2308.5	2313.8	2321.9
7.5°	2230.8	2213.2	2240.5	2260.7	2277.1
10°	2163.8	2148.7	2183.5	2212.9	2234.1
12.5°	2086.1	2073.4	2116.5	2156.0	2183.7
15°	1959.2	1952.1	2004.7	2059.2	2094.6
17.5°	1823.4	1820.0	1880.3	1943.9	1989.2
20°	1730.8	1729.8	1795.9	1862.2	1914.8
22.5°	1637.4	1639.7	1709.1	1778.1	1837.9
25°	1497.3	1501.4	1578.9	1647.8	1720.5
27.5°	1367.7	1369.6	1449.8	1522.4	1600.0
30°	1279.3	1284.3	1363.0	1438.2	1519.0
32.5°	1190.8	1196.7	1273.7	1351.4	1433.9
35°	1058.1	1063.2	1134.6	1211.0	1296.8
37.5°	921.3	928.2	991.6	1063.8	1148.3
40°	832.9	843.0	899.0	967.0	1049.9
42.5°	747.7	760.3	812.2	876.7	951.5
45°	634.5	646.6	689.2	741.4	809.1
47.5°	536.9	550.9	583.6	628.6	686.3
50°	481.5	494.7	524.9	558.2	612.8
52.5°	432.8	445.9	472.9	498.5	545.0
55°	364.8	379.9	402.0	417.2	451.6
57.5°	309.0	323.5	341.0	347.9	368.7
60°	271.8	287.9	303.8	303.0	314.1
62.5°	237.9	251.6	267.4	256.5	257.1
65°	182.9	198.1	216.0	188.7	171.5
67.5°	147.8	151.0	169.5	131.6	111.2
70°	131.2	131.2	136.4	101.9	84.7
72.5°	115.5	115.5	110.8	82.9	64.9
75°	92.0	92.0	83.7	57.5	39.3
77.5°	70.9	70.1	64.1	42.9	28.5
80°	56.8	56.8	51.7	33.8	22.7
82.5°	44.4	44.4	40.1	26.4	16.9
85°	25.8	25.8	23.8	15.4	9.3
87.5°	9.1	9.1	8.3	4.9	4.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.7	56.8	131.7	38.3	28.9
95°	34.8	138.2	620.9	214.9	132.5
97.5°	64.0	161.8	956.3	684.3	468.9
100°	84.3	175.9	1029.1	1042.4	802.9
102.5°	106.8	191.1	1013.1	1334.3	1125.2
105°	141.9	215.1	930.1	1642.9	1561.7
107.5°	177.5	243.1	833.2	1729.9	1802.1
110°	202.1	263.6	777.5	1696.6	1858.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	225.6	284.0	740.1	1617.8	1849.2
115°	263.6	318.6	705.3	1494.1	1754.4
117.5°	297.1	348.6	684.6	1358.7	1634.5
120°	323.9	367.0	682.5	1281.4	1545.7
122.5°	345.3	388.4	677.2	1213.5	1459.0
125°	372.0	412.6	673.1	1117.1	1335.6
127.5°	401.2	439.2	671.0	1059.4	1239.5
130°	416.2	454.1	667.8	1019.3	1176.3
132.5°	432.3	469.2	667.8	988.0	1132.4
135°	455.0	493.0	665.1	943.6	1066.6
137.5°	476.4	513.3	664.8	906.0	1012.3
140°	492.5	530.4	663.8	874.9	976.9
142.5°	510.7	542.3	667.0	850.0	941.6
145°	536.6	564.1	670.5	816.7	889.9
147.5°	558.9	585.5	676.4	783.0	846.3
150°	578.1	596.4	678.5	771.8	816.3
152.5°	593.1	612.5	680.6	756.8	798.1
155°	612.9	627.3	686.5	738.1	768.2
157.5°	637.5	646.2	687.9	729.6	751.0
160°	650.4	656.9	693.2	723.1	741.4
162.5°	657.9	665.5	694.3	717.6	731.8
165°	677.2	679.8	694.6	709.5	720.0
167.5°	690.3	687.9	700.7	707.5	711.7
170°	694.6	693.2	698.6	700.0	705.3
172.5°	704.2	699.7	701.8	697.9	702.0
175°	709.3	705.3	702.6	698.4	693.2
177.5°	711.4	705.1	701.8	697.5	698.6
180°	703.9	703.9	703.9	703.9	703.9

(END OF REPORT)