

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: P521955

Luminaire Tested: SQ4-WB-100U-125D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521955
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-125D-92765-1D-UNV-STD-W-4_4500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

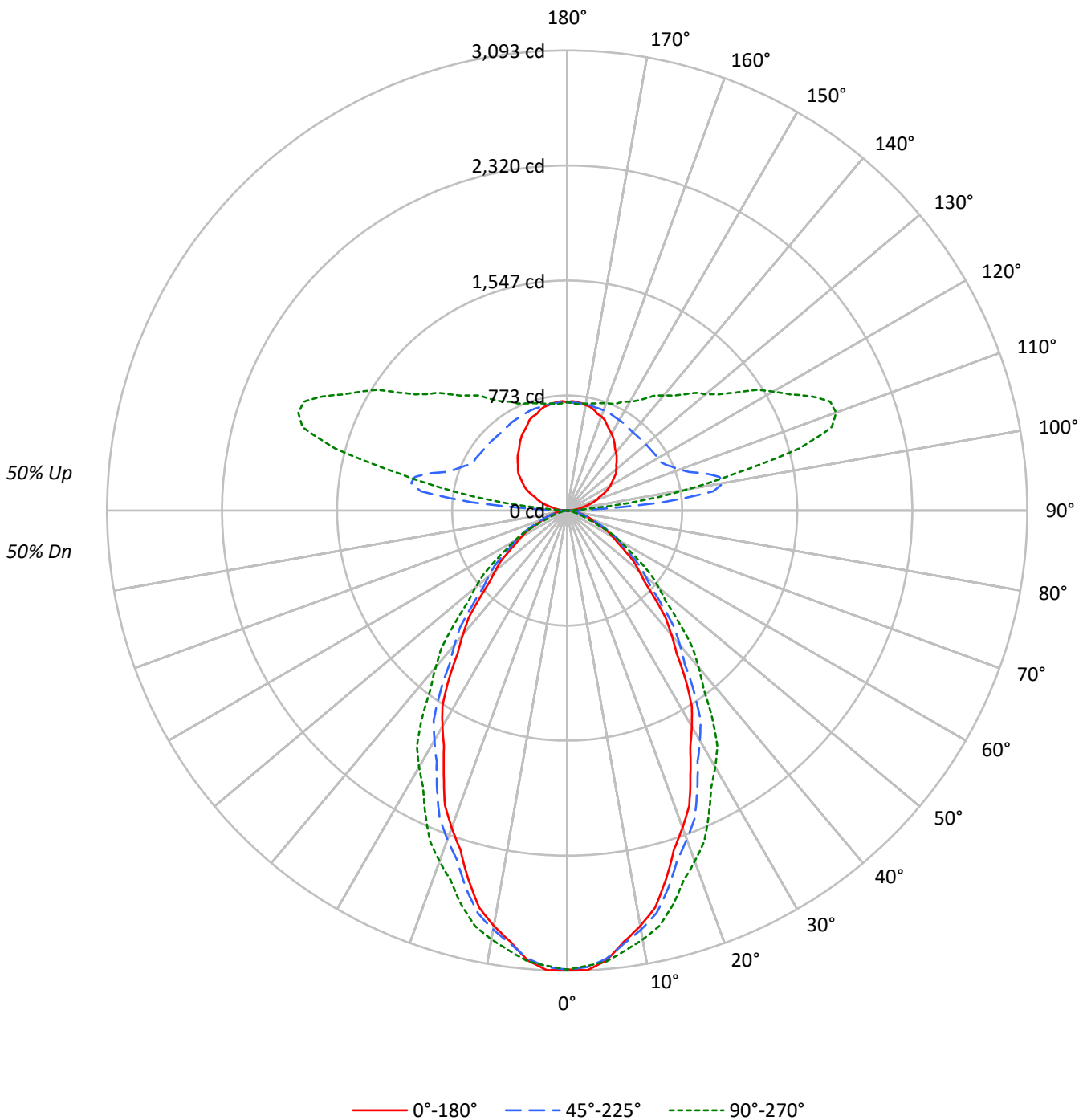
Lumens per Lamp: N/A
Luminaire Lumens: 9019.9 lumens
Efficiency: N/A
Efficacy: 102.4 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 88.1
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										
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	50	30	10	0														
RCR																																						
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50																				
1	99	95	92	88	91	88	85	82	75	73	71	62	61	60	51	50	49	44																				
2	91	84	79	74	84	78	73	69	67	63	60	56	54	52	47	45	43	39																				
3	84	75	69	63	77	70	64	60	60	56	52	51	48	45	42	40	38	34																				
4	77	67	60	55	71	63	56	52	54	49	46	46	43	40	39	36	34	31																				
5	71	61	53	48	66	57	50	45	49	44	40	42	38	35	35	33	31	28																				
6	66	55	47	42	61	51	45	40	45	40	36	39	35	32	33	30	28	25																				
7	62	50	43	37	57	47	40	36	41	36	32	35	32	29	30	27	25	23																				
8	57	46	39	34	53	43	37	32	38	33	29	33	29	26	28	25	23	21																				
9	54	42	35	30	50	40	33	29	35	30	26	30	26	24	26	23	21	19																				
10	50	39	32	28	47	37	31	26	32	27	24	28	24	22	25	22	19	18																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	28464	28464	28464
5°	28108	28008	28171
10°	26557	26798	27419
15°	24515	25085	26210
20°	22263	23100	24628
25°	19968	21057	22945
30°	17854	19022	21200
35°	15613	16741	19135
40°	13141	14184	16565
45°	10845	11781	13831
50°	9054	9871	11523
55°	7687	8471	9516
60°	6569	7344	7593
65°	5231	6176	4905
70°	4637	4821	2994
75°	4296	3911	1832
80°	3958	3597	1583
85°	3578	3292	1291

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13831 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	283.0	3.1
10°-20°	736.0	8.2
20°-30°	953.4	10.6
30°-40°	933.6	10.4
40°-50°	714.6	7.9
50°-60°	476.2	5.3
60°-70°	259.8	2.9
70°-80°	108.3	1.2
80°-90°	30.6	0.3
90°-100°	331.9	3.7
100°-110°	944.4	10.5
110°-120°	904.8	10.0
120°-130°	716.1	7.9
130°-140°	574.8	6.4
140°-150°	450.0	5.0
150°-160°	329.3	3.7
160°-170°	203.9	2.3
170°-180°	69.2	0.8
0°-30°	1972.4	21.9
0°-40°	2906.0	32.2
0°-60°	4096.8	45.4
0°-90°	4495.6	49.8
90°-120°	2181.1	24.2
90°-150°	3921.9	43.5
90°-180°	4524.0	50.2
0°-180°	9019.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3085	3085	3085	3085	3085	
5°	3035	3005	3024	3031	3042	282
15°	2567	2557	2626	2698	2744	717
25°	1962	1967	2068	2159	2254	902
35°	1386	1393	1486	1586	1699	862
45°	831	847	903	971	1060	648
55°	478	498	527	547	592	433
65°	240	260	283	247	225	249
75°	120	120	110	75	51	129
85°	34	34	31	20	12	37
90°	0	0	0	0	0	3
95°	36	143	642	222	137	41
105°	147	223	962	1700	1616	155
115°	273	330	730	1546	1815	269
125°	385	427	696	1156	1382	345
135°	471	510	688	976	1104	363
145°	555	584	694	845	921	347
155°	634	649	710	764	795	293
165°	701	703	719	734	745	197
175°	734	730	727	723	717	70
180°	728	728	728	728	728	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3085.1	3085.1	3085.1	3085.1	3085.1
2.5°	3092.7	3065.2	3072.1	3071.9	3063.4
5°	3035.0	3004.6	3024.2	3031.2	3041.8
7.5°	2922.4	2899.4	2935.1	2961.6	2983.0
10°	2834.7	2814.8	2860.4	2898.9	2926.7
12.5°	2732.9	2716.2	2772.7	2824.4	2860.7
15°	2566.6	2557.4	2626.2	2697.6	2744.0
17.5°	2388.8	2384.3	2463.2	2546.6	2605.9
20°	2267.5	2266.1	2352.7	2439.6	2508.4
22.5°	2145.1	2148.0	2239.0	2329.4	2407.7
25°	1961.5	1966.8	2068.5	2158.6	2253.9
27.5°	1791.8	1794.2	1899.3	1994.4	2096.1
30°	1675.9	1682.5	1785.5	1884.1	1990.0
32.5°	1560.0	1567.7	1668.6	1770.4	1878.4
35°	1386.2	1392.8	1486.4	1586.4	1698.9
37.5°	1207.0	1216.0	1299.0	1393.6	1504.2
40°	1091.1	1104.3	1177.7	1266.8	1375.4
42.5°	979.5	996.0	1064.0	1148.5	1246.5
45°	831.2	847.1	902.9	971.3	1060.0
47.5°	703.4	721.7	764.6	823.4	899.1
50°	630.8	648.0	687.7	731.3	802.8
52.5°	566.9	584.1	619.5	653.1	713.9
55°	477.9	497.7	526.6	546.6	591.6
57.5°	404.8	423.8	446.7	455.7	483.0
60°	356.0	377.2	398.0	397.0	411.5
62.5°	311.6	329.6	350.3	336.0	336.8
65°	239.6	259.5	282.9	247.2	224.7
67.5°	193.6	197.8	222.0	172.4	145.7
70°	171.9	171.9	178.7	133.5	111.0
72.5°	151.3	151.3	145.1	108.6	85.0
75°	120.5	120.5	109.7	75.3	51.4
77.5°	92.9	91.8	83.9	56.2	37.4
80°	74.5	74.5	67.7	44.3	29.8
82.5°	58.2	58.2	52.5	34.6	22.2
85°	33.8	33.8	31.1	20.1	12.2
87.5°	11.9	11.9	10.8	6.5	5.4
90°	0.0	0.0	0.0	0.0	0.0
92.5°	11.1	58.7	136.3	39.7	29.9
95°	36.0	143.0	642.5	222.4	137.1
97.5°	66.2	167.5	989.5	708.1	485.2
100°	87.2	182.0	1064.8	1078.6	830.8
102.5°	110.5	197.7	1048.2	1380.6	1164.3
105°	146.8	222.6	962.4	1699.9	1616.0
107.5°	183.6	251.6	862.1	1789.9	1864.7
110°	209.1	272.7	804.5	1755.5	1923.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	233.5	293.8	765.7	1674.0	1913.4
115°	272.8	329.7	729.7	1545.9	1815.4
117.5°	307.4	360.8	708.4	1405.9	1691.3
120°	335.1	379.8	706.2	1325.8	1599.3
122.5°	357.3	401.9	700.7	1255.6	1509.6
125°	385.0	426.9	696.5	1155.8	1381.9
127.5°	415.1	454.4	694.3	1096.2	1282.5
130°	430.6	469.9	691.0	1054.7	1217.2
132.5°	447.3	485.4	691.0	1022.3	1171.7
135°	470.8	510.1	688.2	976.3	1103.6
137.5°	493.0	531.1	687.9	937.5	1047.4
140°	509.6	548.8	686.8	905.2	1010.8
142.5°	528.4	561.2	690.1	879.5	974.3
145°	555.3	583.7	693.7	845.0	920.8
147.5°	578.3	605.9	699.8	810.2	875.7
150°	598.2	617.2	702.0	798.6	844.7
152.5°	613.7	633.7	704.3	783.1	825.8
155°	634.2	649.1	710.4	763.7	794.8
157.5°	659.7	668.6	711.7	754.9	777.1
160°	673.0	679.7	717.3	748.2	767.1
162.5°	680.7	688.6	718.4	742.5	757.2
165°	700.7	703.4	718.7	734.1	745.0
167.5°	714.2	711.8	725.0	732.1	736.4
170°	718.7	717.3	722.8	724.3	729.7
172.5°	728.6	724.0	726.1	722.1	726.4
175°	733.9	729.8	727.0	722.7	717.3
177.5°	736.1	729.6	726.1	721.7	722.8
180°	728.4	728.4	728.4	728.4	728.4

(END OF REPORT)