

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: P521958

Luminaire Tested: SQ4-WB-100U-125D-92765-1D-UNV-STD-W-4_6500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521958
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_6500K
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 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9337.3 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: General Diffuse

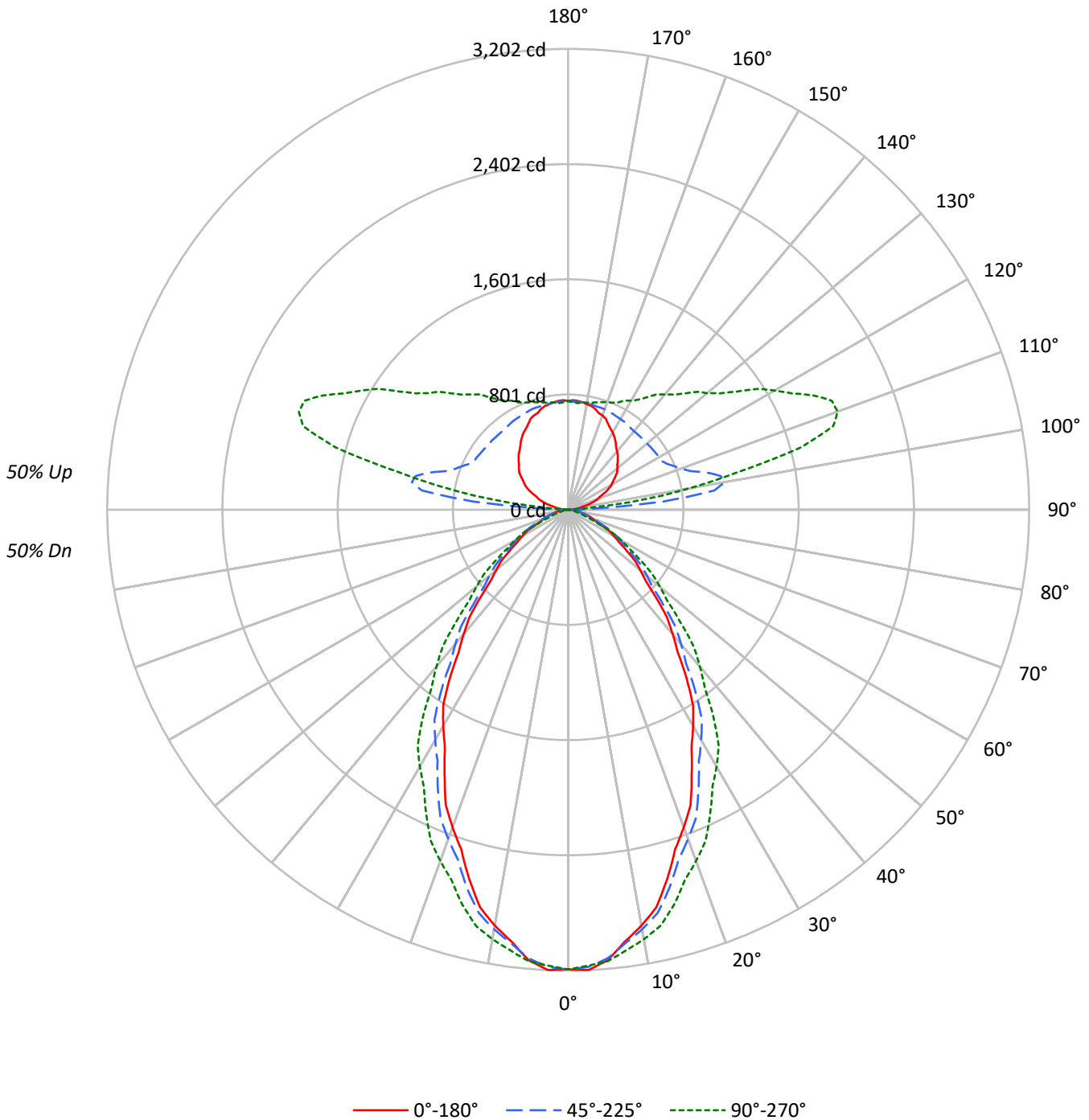
Input Watts (W): 87.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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°	29466	29466	29466
5°	29098	28994	29162
10°	27491	27740	28384
15°	25379	25967	27132
20°	23047	23913	25495
25°	20671	21798	23752
30°	18483	19692	21946
35°	16163	17331	19808
40°	13604	14684	17148
45°	11226	12196	14317
50°	9373	10218	11928
55°	7957	8768	9851
60°	6802	7602	7861
65°	5414	6394	5078
70°	4802	4990	3099
75°	4445	4046	1900
80°	4096	3725	1636
85°	3705	3409	1334

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 14317 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	292.9	3.1
10°-20°	761.9	8.2
20°-30°	986.9	10.6
30°-40°	966.4	10.4
40°-50°	739.8	7.9
50°-60°	492.9	5.3
60°-70°	269.0	2.9
70°-80°	112.1	1.2
80°-90°	31.7	0.3
90°-100°	343.6	3.7
100°-110°	977.6	10.5
110°-120°	936.6	10.0
120°-130°	741.3	7.9
130°-140°	595.0	6.4
140°-150°	465.8	5.0
150°-160°	340.8	3.7
160°-170°	211.1	2.3
170°-180°	71.6	0.8
0°-30°	2041.8	21.9
0°-40°	3008.2	32.2
0°-60°	4240.9	45.4
0°-90°	4653.8	49.8
90°-120°	2257.8	24.2
90°-150°	4059.9	43.5
90°-180°	4684.0	50.2
0°-180°	9337.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3194	3194	3194	3194	3194	
5°	3142	3110	3131	3138	3149	292
15°	2657	2647	2719	2793	2840	742
25°	2031	2036	2141	2235	2333	934
35°	1435	1442	1539	1642	1759	892
45°	860	877	935	1006	1097	671
55°	495	515	545	566	612	449
65°	248	269	293	256	233	258
75°	125	125	114	78	53	133
85°	35	35	32	21	13	38
90°	0	0	0	0	0	3
95°	37	148	665	230	142	43
105°	152	230	996	1760	1673	161
115°	282	341	755	1600	1879	278
125°	398	442	721	1196	1431	357
135°	487	528	712	1011	1142	376
145°	575	604	718	875	953	359
155°	656	672	735	791	823	303
165°	725	728	744	760	771	204
175°	760	756	753	748	742	72
180°	754	754	754	754	754	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3193.7	3193.7	3193.7	3193.7	3193.7
2.5°	3201.5	3173.0	3180.2	3180.0	3171.2
5°	3141.8	3110.3	3130.6	3137.9	3148.8
7.5°	3025.2	3001.4	3038.4	3065.8	3088.0
10°	2934.4	2913.9	2961.0	3000.9	3029.7
12.5°	2829.0	2811.8	2870.2	2923.8	2961.3
15°	2657.0	2647.4	2718.6	2792.6	2840.5
17.5°	2472.8	2468.2	2549.9	2636.2	2697.6
20°	2347.3	2345.9	2435.5	2525.4	2596.7
22.5°	2220.6	2223.6	2317.8	2411.3	2492.4
25°	2030.6	2036.0	2141.3	2234.6	2333.2
27.5°	1854.8	1857.3	1966.1	2064.6	2169.8
30°	1734.9	1741.7	1848.4	1950.4	2060.0
32.5°	1614.9	1622.9	1727.3	1832.7	1944.5
35°	1435.0	1441.8	1538.7	1642.2	1758.7
37.5°	1249.4	1258.8	1344.7	1442.6	1557.2
40°	1129.5	1143.2	1219.2	1311.4	1423.8
42.5°	1014.0	1031.0	1101.5	1189.0	1290.4
45°	860.4	876.9	934.7	1005.5	1097.3
47.5°	728.1	747.0	791.5	852.4	930.8
50°	653.0	670.8	711.9	757.0	831.0
52.5°	586.9	604.7	641.3	676.0	739.1
55°	494.7	515.2	545.1	565.8	612.4
57.5°	419.0	438.7	462.4	471.8	500.0
60°	368.6	390.5	412.0	410.9	426.0
62.5°	322.6	341.2	362.7	347.8	348.7
65°	248.0	268.6	292.9	255.9	232.6
67.5°	200.4	204.8	229.8	178.5	150.8
70°	178.0	178.0	185.0	138.2	114.9
72.5°	156.7	156.7	150.2	112.4	88.0
75°	124.7	124.7	113.5	77.9	53.3
77.5°	96.1	95.0	86.9	58.1	38.7
80°	77.1	77.1	70.1	45.9	30.8
82.5°	60.3	60.3	54.4	35.9	23.0
85°	35.0	35.0	32.2	20.8	12.6
87.5°	12.3	12.3	11.2	6.7	5.6
90°	0.0	0.0	0.0	0.0	0.0
92.5°	11.5	60.8	141.1	41.1	31.0
95°	37.3	148.0	665.1	230.2	141.9
97.5°	68.5	173.4	1024.3	733.0	502.3
100°	90.3	188.4	1102.3	1116.6	860.1
102.5°	114.4	204.7	1085.1	1429.2	1205.2
105°	151.9	230.4	996.2	1759.7	1672.8
107.5°	190.1	260.4	892.5	1852.9	1930.3
110°	216.4	282.3	832.8	1817.3	1991.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	241.7	304.2	792.7	1732.9	1980.7
115°	282.4	341.3	755.4	1600.3	1879.2
117.5°	318.2	373.4	733.3	1455.4	1750.8
120°	346.9	393.1	731.1	1372.5	1655.6
122.5°	369.8	416.1	725.3	1299.8	1562.7
125°	398.5	441.9	721.0	1196.5	1430.6
127.5°	429.7	470.4	718.7	1134.8	1327.7
130°	445.8	486.4	715.3	1091.8	1260.0
132.5°	463.0	502.5	715.3	1058.2	1213.0
135°	487.4	528.0	712.4	1010.7	1142.5
137.5°	510.3	549.8	712.1	970.4	1084.3
140°	527.5	568.2	711.0	937.1	1046.4
142.5°	547.0	580.9	714.4	910.5	1008.6
145°	574.8	604.2	718.2	874.7	953.2
147.5°	598.6	627.2	724.5	838.7	906.5
150°	619.2	638.9	726.8	826.7	874.4
152.5°	635.3	656.0	729.0	810.6	854.9
155°	656.5	671.9	735.4	790.6	822.8
157.5°	682.9	692.1	736.8	781.5	804.4
160°	696.7	703.7	742.5	774.5	794.1
162.5°	704.7	712.8	743.7	768.7	783.8
165°	725.3	728.1	744.0	760.0	771.2
167.5°	739.4	736.8	750.6	757.8	762.3
170°	744.0	742.6	748.3	749.8	755.4
172.5°	754.3	749.5	751.7	747.5	752.0
175°	759.7	755.5	752.6	748.1	742.5
177.5°	762.0	755.3	751.7	747.1	748.3
180°	754.0	754.0	754.0	754.0	754.0

(END OF REPORT)