

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: P521230

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

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521230
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-BB-100U-125D-92765-1D-UNV-STD-W-4_6500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK 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: 8138.9 lumens
Efficiency: N/A
Efficacy: 92.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

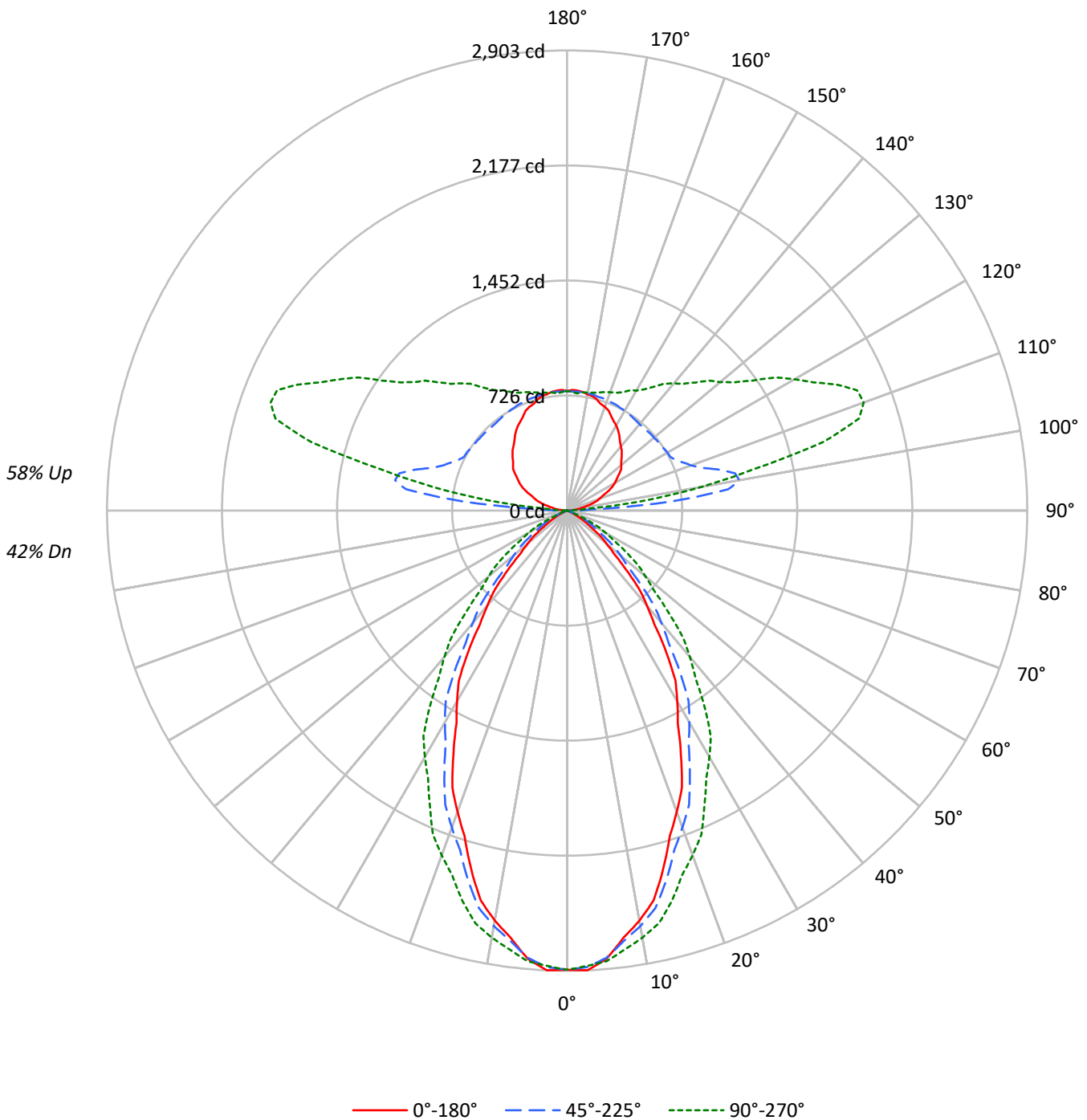
Input Watts (W): 87.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49	42				
1	98	94	91	88	89	86	83	81	72	70	68	58	57	56	46	45	44	39				
2	90	84	79	74	82	77	73	69	65	61	59	53	51	49	42	41	40	35				
3	83	75	69	64	76	69	64	60	58	55	51	48	46	43	39	37	36	32				
4	77	68	61	55	71	62	57	52	53	49	45	44	41	39	36	34	32	29				
5	71	61	54	49	65	57	50	46	48	44	40	40	37	35	33	31	29	26				
6	66	55	48	43	61	51	45	41	44	39	36	37	34	31	31	28	27	24				
7	62	51	43	38	57	47	41	36	40	36	32	34	31	28	29	26	24	22				
8	57	46	39	34	53	43	37	33	37	33	29	32	28	26	27	24	22	20				
9	54	43	36	31	50	40	34	30	35	30	27	30	26	24	25	22	21	19				
10	50	39	33	28	47	37	31	27	32	28	24	28	24	22	23	21	19	17				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26725	26725	26725
5°	26294	26229	26424
10°	24603	24932	25627
15°	22367	23076	24362
20°	19854	20886	22716
25°	17290	18660	20871
30°	14809	16437	19124
35°	12279	13953	17015
40°	9435	11156	14499
45°	6820	8447	11666
50°	4646	6295	9252
55°	3021	4554	7190
60°	1733	3207	5198
65°	458	1958	2631
70°	227	604	755
75°	100	50	0
80°	74	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11666 cd/sqm

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CATALOG NUMBER: SQ4-BB-100U-125D-92765-1D-UNV-STD-W-4_6500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	264.3	3.2
10°-20°	676.0	8.3
20°-30°	846.3	10.4
30°-40°	781.7	9.6
40°-50°	525.3	6.5
50°-60°	271.3	3.3
60°-70°	85.0	1.0
70°-80°	5.4	0.1
80°-90°	0.1	0.0
90°-100°	343.6	4.2
100°-110°	977.6	12.0
110°-120°	936.6	11.5
120°-130°	741.3	9.1
130°-140°	595.0	7.3
140°-150°	465.8	5.7
150°-160°	340.8	4.2
160°-170°	211.1	2.6
170°-180°	71.6	0.9
0°-30°	1786.7	22.0
0°-40°	2568.4	31.6
0°-60°	3364.9	41.3
0°-90°	3455.4	42.5
90°-120°	2257.8	27.7
90°-150°	4059.9	49.9
90°-180°	4684.0	57.6
0°-180°	8138.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2897	2897	2897	2897	2897	
5°	2839	2810	2832	2842	2853	263
15°	2342	2333	2416	2497	2550	652
25°	1698	1712	1833	1958	2050	779
35°	1090	1118	1239	1385	1511	675
45°	523	554	647	774	894	411
55°	188	219	283	363	447	175
65°	21	40	90	108	120	35
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
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	

TEST NUMBER: P521230

CATALOG NUMBER: SQ4-BB-100U-125D-92765-1D-UNV-STD-W-4_6500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2896.6	2896.6	2896.6	2896.6	2896.6
2.5°	2903.3	2875.9	2883.1	2883.0	2875.3
5°	2839.1	2810.4	2832.1	2842.2	2853.1
7.5°	2719.2	2696.7	2738.5	2769.9	2792.6
10°	2626.1	2606.9	2661.2	2703.9	2735.4
12.5°	2518.5	2503.7	2569.2	2627.9	2668.2
15°	2341.7	2333.4	2415.9	2497.0	2550.5
17.5°	2152.2	2151.9	2246.1	2346.8	2411.2
20°	2022.1	2026.3	2127.2	2238.3	2313.6
22.5°	1892.1	1901.7	2009.5	2125.3	2211.6
25°	1698.4	1712.1	1833.0	1958.4	2050.2
27.5°	1512.3	1532.3	1659.5	1789.8	1901.6
30°	1390.1	1413.4	1542.9	1680.0	1795.1
32.5°	1270.2	1297.9	1424.0	1569.1	1686.4
35°	1090.2	1117.7	1238.8	1384.6	1510.7
37.5°	904.4	931.3	1049.6	1193.1	1329.3
40°	783.4	813.5	926.3	1065.4	1203.8
42.5°	673.5	703.6	809.7	946.4	1077.1
45°	522.7	554.2	647.4	773.5	894.1
47.5°	397.7	432.0	513.7	627.8	737.7
50°	323.7	358.0	438.6	539.1	644.6
52.5°	264.3	297.5	370.2	464.9	561.7
55°	187.8	219.3	283.1	363.4	447.0
57.5°	129.8	156.9	214.1	281.2	346.7
60°	93.9	119.9	173.8	228.2	281.7
62.5°	62.5	86.3	139.0	180.7	216.6
65°	21.0	40.2	89.7	108.2	120.5
67.5°	10.7	12.8	47.1	49.7	53.8
70°	8.4	8.4	22.4	23.9	28.0
72.5°	6.2	6.2	9.0	11.5	12.3
75°	2.8	2.8	1.4	0.0	0.0
77.5°	1.4	1.4	1.1	0.0	0.0
80°	1.4	1.4	0.0	0.0	0.0
82.5°	0.3	0.3	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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

TEST NUMBER: P521230

CATALOG NUMBER: SQ4-BB-100U-125D-92765-1D-UNV-STD-W-4_6500K

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)