

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: P521126

Luminaire Tested: SQ4-BB-075U-125D-92765-1D-UNV-STD-W-4_6500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521126
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-075U-125D-92765-1D-UNV-STD-W-4_6500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 750 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: 6955.1 lumens
Efficiency: N/A
Efficacy: 88.2 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

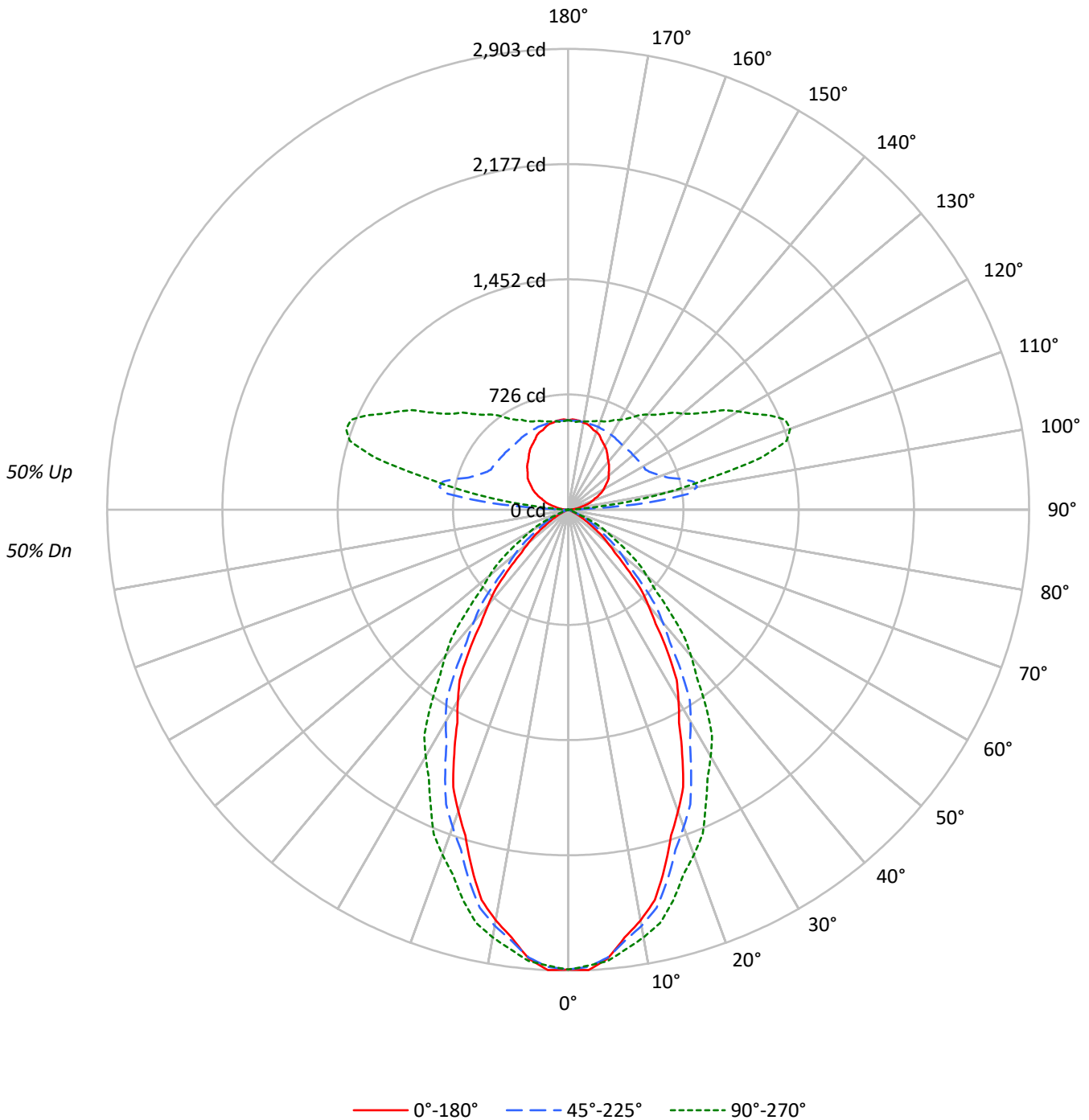
Input Watts (W): 78.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	107	107	107	107	99	99	99	99	83	83	83		69	69	69		56	56	56	50
1	99	96	93	90	92	89	86	84	75	74	72		63	62	61		52	51	51	45
2	92	86	81	76	85	80	75	72	68	65	62		58	56	54		48	47	45	41
3	85	77	71	66	79	72	66	62	62	58	55		53	50	48		44	42	41	37
4	79	70	63	57	73	65	59	54	56	52	48		48	45	43		41	39	37	33
5	73	63	56	51	68	59	53	48	51	47	43		44	41	38		38	35	33	30
6	68	57	50	45	63	54	47	43	47	42	39		41	37	35		35	33	30	28
7	63	52	45	40	59	49	43	39	43	38	35		38	34	31		33	30	28	25
8	59	48	41	36	55	45	39	35	40	35	32		35	31	29		30	28	26	23
9	56	44	38	33	52	42	36	32	37	32	29		33	29	26		28	26	24	22
10	52	41	35	30	49	39	33	29	35	30	27		31	27	24		27	24	22	20

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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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	264.3	3.8
10°-20°	676.0	9.7
20°-30°	846.3	12.2
30°-40°	781.7	11.2
40°-50°	525.3	7.6
50°-60°	271.3	3.9
60°-70°	85.0	1.2
70°-80°	5.4	0.1
80°-90°	0.1	0.0
90°-100°	256.7	3.7
100°-110°	730.5	10.5
110°-120°	699.9	10.1
120°-130°	553.9	8.0
130°-140°	444.6	6.4
140°-150°	348.1	5.0
150°-160°	254.7	3.7
160°-170°	157.8	2.3
170°-180°	53.5	0.8
0°-30°	1786.7	25.7
0°-40°	2568.4	36.9
0°-60°	3364.9	48.4
0°-90°	3455.4	49.7
90°-120°	1687.1	24.3
90°-150°	3033.8	43.6
90°-180°	3500.0	50.3
0°-180°	6955.1	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	1
95°	28	111	497	172	106	32
105°	114	172	744	1315	1250	120
115°	211	255	564	1196	1404	208
125°	298	330	539	894	1069	267
135°	364	395	532	755	854	281
145°	430	452	537	654	712	268
155°	491	502	550	591	615	227
165°	542	544	556	568	576	152
175°	568	565	562	559	555	54
180°	563	563	563	563	563	

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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°	8.6	45.4	105.4	30.7	23.1
95°	27.8	110.6	497.0	172.0	106.0
97.5°	51.2	129.5	765.4	547.7	375.3
100°	67.5	140.8	823.7	834.3	642.7
102.5°	85.5	152.9	810.8	1068.0	900.6
105°	113.5	172.2	744.4	1314.9	1250.0
107.5°	142.0	194.6	666.9	1384.6	1442.4
110°	161.7	211.0	622.3	1357.9	1487.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	180.6	227.3	592.3	1294.9	1480.1
115°	211.0	255.0	564.5	1195.8	1404.3
117.5°	237.8	279.1	548.0	1087.5	1308.3
120°	259.2	293.8	546.3	1025.6	1237.2
122.5°	276.4	310.9	542.0	971.3	1167.7
125°	297.8	330.2	538.8	894.1	1069.0
127.5°	321.1	351.5	537.1	848.0	992.1
130°	333.1	363.5	534.5	815.8	941.5
132.5°	346.0	375.5	534.5	790.8	906.4
135°	364.2	394.6	532.4	755.2	853.7
137.5°	381.3	410.9	532.1	725.2	810.2
140°	394.2	424.5	531.3	700.2	781.9
142.5°	408.7	434.1	533.9	680.3	753.6
145°	429.5	451.5	536.6	653.7	712.3
147.5°	447.3	468.7	541.4	626.7	677.4
150°	462.7	477.4	543.1	617.8	653.4
152.5°	474.7	490.2	544.8	605.7	638.8
155°	490.6	502.1	549.5	590.7	614.8
157.5°	510.3	517.2	550.6	583.9	601.1
160°	520.6	525.8	554.8	578.7	593.4
162.5°	526.6	532.6	555.7	574.4	585.7
165°	542.0	544.1	555.9	567.9	576.3
167.5°	552.5	550.6	560.8	566.3	569.6
170°	555.9	554.9	559.1	560.3	564.5
172.5°	563.6	560.1	561.7	558.6	561.9
175°	567.7	564.6	562.3	559.0	554.8
177.5°	569.4	564.4	561.7	558.3	559.1
180°	563.4	563.4	563.4	563.4	563.4

(END OF REPORT)