

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: P521269

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

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521269
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-125U-100D-92765-1D-UNV-STD-W-4_6500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 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: 8611.7 lumens
Efficiency: N/A
Efficacy: 103.4 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: Semi-Indirect

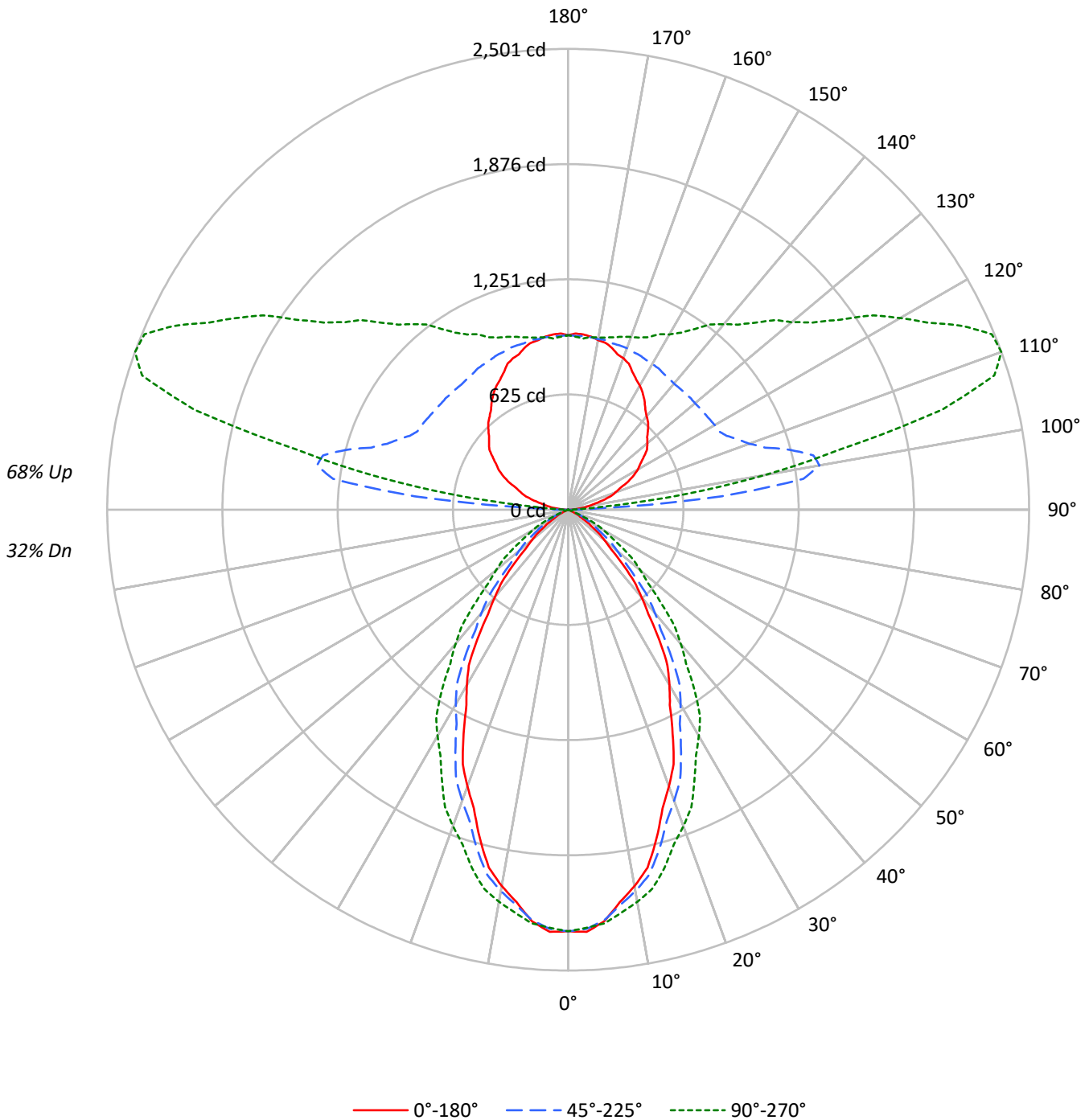
Input Watts (W): 83.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	103	103	103	103	92	92	92	92	73	73	73		56	56	56		39	39	39	32
1	95	91	88	85	85	82	79	77	66	64	62		50	49	48		36	36	35	29
2	87	81	75	71	79	73	69	65	59	56	53		46	44	42		33	32	32	26
3	80	72	66	61	72	65	60	56	53	49	46		41	39	37		31	29	28	24
4	74	65	58	52	67	59	53	48	48	44	40		38	35	33		28	27	25	21
5	68	58	51	45	62	53	47	42	43	39	36		34	31	29		26	24	23	19
6	63	52	45	40	57	48	42	37	39	35	32		32	28	26		24	22	21	18
7	59	48	40	35	53	44	37	33	36	32	28		29	26	24		22	20	19	16
8	55	44	36	32	50	40	34	30	33	29	25		27	24	21		21	19	17	15
9	51	40	33	28	46	37	31	27	31	26	23		25	22	20		19	17	16	14
10	48	37	30	26	43	34	28	24	28	24	21		23	20	18		18	16	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21109	21109	21109
5°	20769	20717	20871
10°	19432	19692	20242
15°	17666	18226	19242
20°	15682	16497	17942
25°	13656	14739	16484
30°	11698	12982	15106
35°	9699	11021	13439
40°	7452	8811	11451
45°	5387	6673	9214
50°	3670	4972	7307
55°	2385	3597	5680
60°	1369	2532	4106
65°	362	1546	2078
70°	178	477	596
75°	78	39	0
80°	58	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9214 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.8	2.4
10°-20°	533.9	6.2
20°-30°	668.4	7.8
30°-40°	617.4	7.2
40°-50°	414.9	4.8
50°-60°	214.3	2.5
60°-70°	67.1	0.8
70°-80°	4.2	0.0
80°-90°	0.1	0.0
90°-100°	431.5	5.0
100°-110°	1227.8	14.3
110°-120°	1176.4	13.7
120°-130°	931.1	10.8
130°-140°	747.3	8.7
140°-150°	585.1	6.8
150°-160°	428.1	5.0
160°-170°	265.2	3.1
170°-180°	90.0	1.0
0°-30°	1411.2	16.4
0°-40°	2028.6	23.6
0°-60°	2657.8	30.9
0°-90°	2729.2	31.7
90°-120°	2835.8	32.9
90°-150°	5099.2	59.2
90°-180°	5882.0	68.3
0°-180°	8611.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2288	2288	2288	2288	2288	
5°	2242	2220	2237	2245	2254	208
15°	1850	1843	1908	1972	2014	515
25°	1342	1352	1448	1547	1619	615
35°	861	883	978	1094	1193	533
45°	413	438	511	611	706	324
55°	148	173	224	287	353	138
65°	17	32	71	85	95	28
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	47	186	835	289	178	54
105°	191	289	1251	2210	2101	202
115°	355	429	949	2010	2360	349
125°	500	555	906	1503	1797	448
135°	612	663	895	1269	1435	472
145°	722	759	902	1099	1197	451
155°	825	844	924	993	1033	381
165°	911	914	934	954	969	256
175°	954	949	945	940	933	90
180°	947	947	947	947	947	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2287.9	2287.9	2287.9	2287.9	2287.9
2.5°	2293.2	2271.5	2277.2	2277.1	2271.0
5°	2242.5	2219.7	2236.9	2244.9	2253.5
7.5°	2147.7	2130.0	2163.0	2187.8	2205.7
10°	2074.2	2059.1	2101.9	2135.7	2160.6
12.5°	1989.2	1977.5	2029.3	2075.6	2107.4
15°	1849.5	1843.0	1908.2	1972.3	2014.5
17.5°	1699.9	1699.7	1774.1	1853.6	1904.4
20°	1597.2	1600.4	1680.2	1767.9	1827.4
22.5°	1494.5	1502.0	1587.2	1678.6	1746.8
25°	1341.5	1352.3	1447.8	1546.8	1619.3
27.5°	1194.5	1210.3	1310.7	1413.7	1502.0
30°	1098.0	1116.4	1218.6	1327.0	1417.9
32.5°	1003.2	1025.1	1124.8	1239.3	1332.0
35°	861.1	882.8	978.5	1093.6	1193.2
37.5°	714.4	735.6	829.0	942.4	1050.0
40°	618.7	642.5	731.6	841.5	950.8
42.5°	532.0	555.8	639.5	747.5	850.7
45°	412.9	437.7	511.4	610.9	706.2
47.5°	314.1	341.2	405.8	495.8	582.6
50°	255.7	282.7	346.4	425.8	509.1
52.5°	208.8	234.9	292.4	367.2	443.6
55°	148.3	173.2	223.6	287.1	353.1
57.5°	102.5	123.9	169.1	222.1	273.8
60°	74.2	94.7	137.2	180.3	222.5
62.5°	49.4	68.2	109.8	142.8	171.1
65°	16.6	31.8	70.8	85.4	95.2
67.5°	8.4	10.1	37.2	39.3	42.5
70°	6.6	6.6	17.7	18.9	22.1
72.5°	4.9	4.9	7.1	9.1	9.7
75°	2.2	2.2	1.1	0.0	0.0
77.5°	1.1	1.1	0.9	0.0	0.0
80°	1.1	1.1	0.0	0.0	0.0
82.5°	0.2	0.2	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°	14.4	76.4	177.2	51.6	38.9
95°	46.8	185.9	835.4	289.1	178.2
97.5°	86.1	217.7	1286.6	920.6	630.9
100°	113.4	236.6	1384.5	1402.4	1080.2
102.5°	143.7	257.0	1362.9	1795.1	1513.8
105°	190.8	289.4	1251.3	2210.2	2101.0
107.5°	238.7	327.1	1120.9	2327.2	2424.4
110°	271.9	354.6	1046.0	2282.4	2500.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	303.5	382.1	995.6	2176.5	2487.8
115°	354.7	428.6	948.8	2010.0	2360.3
117.5°	399.7	469.0	921.1	1827.9	2199.0
120°	435.7	493.8	918.2	1723.8	2079.4
122.5°	464.5	522.6	911.0	1632.5	1962.8
125°	500.5	555.1	905.6	1502.8	1796.8
127.5°	539.8	590.8	902.7	1425.3	1667.5
130°	559.9	611.0	898.4	1371.3	1582.5
132.5°	581.5	631.2	898.4	1329.1	1523.5
135°	612.1	663.2	894.8	1269.4	1434.9
137.5°	640.9	690.6	894.4	1218.9	1361.8
140°	662.5	713.6	893.0	1177.0	1314.3
142.5°	687.0	729.6	897.3	1143.5	1266.7
145°	722.0	758.9	902.0	1098.7	1197.3
147.5°	751.8	787.8	909.9	1053.4	1138.6
150°	777.8	802.4	912.8	1038.4	1098.2
152.5°	797.9	824.0	915.7	1018.1	1073.7
155°	824.6	843.9	923.6	992.9	1033.4
157.5°	857.7	869.3	925.4	981.5	1010.4
160°	875.0	883.8	932.6	972.8	997.4
162.5°	885.1	895.3	934.0	965.4	984.4
165°	911.0	914.5	934.4	954.5	968.6
167.5°	928.6	925.5	942.7	951.8	957.4
170°	934.4	932.6	939.8	941.8	948.8
172.5°	947.4	941.4	944.1	938.8	944.5
175°	954.2	948.9	945.2	939.6	932.6
177.5°	957.1	948.6	944.1	938.4	939.8
180°	947.0	947.0	947.0	947.0	947.0

(END OF REPORT)