

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521231

Luminaire Tested: **SQ4-BB-100U-125D-93050-1D-UNV-STD-W-4 (3000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521231
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-100U-125D-93050-1D-UNV-STD-W-4 (3000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

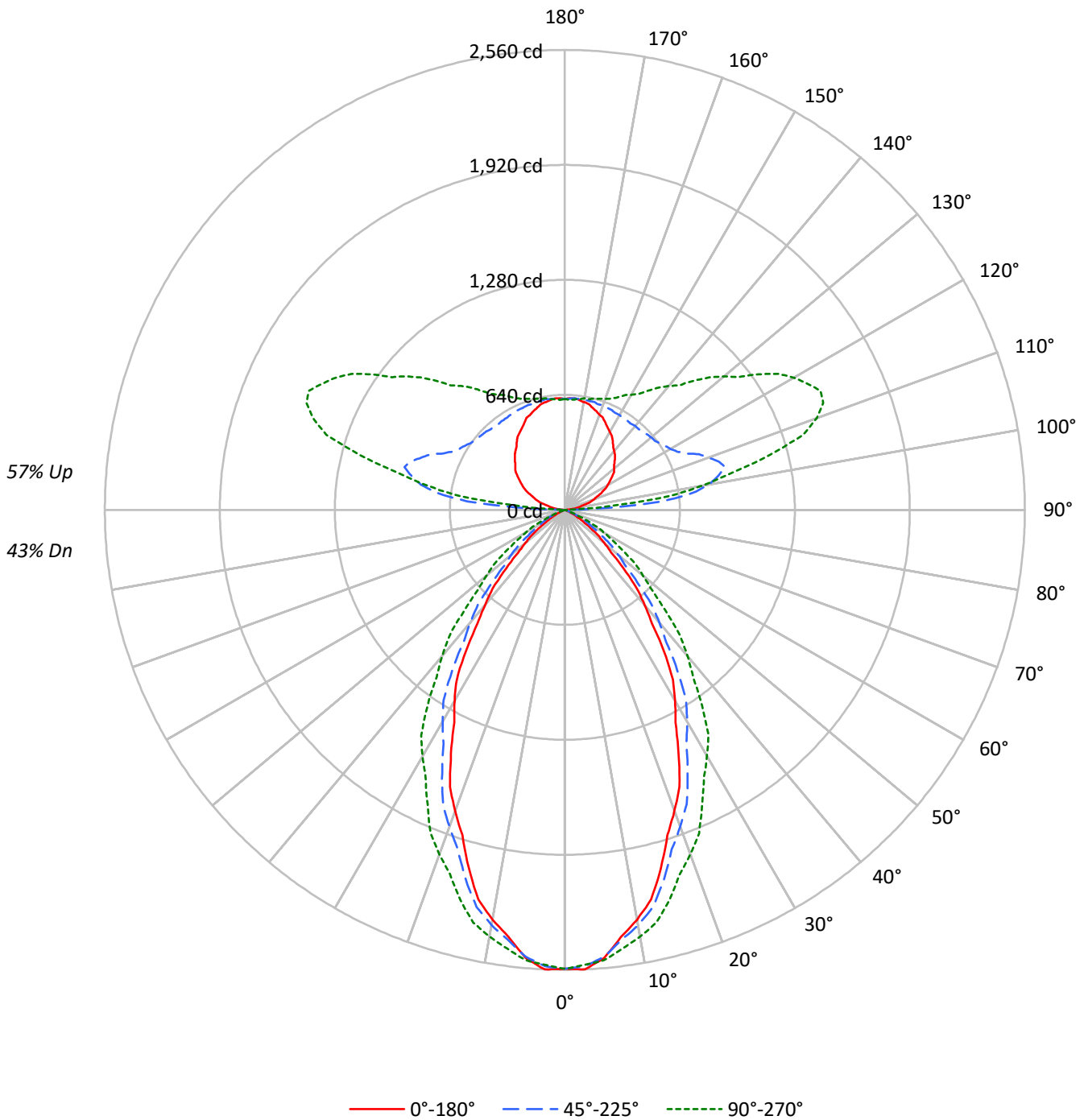
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7042.8 lumens
Efficiency: N/A
Efficacy: 80.2 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): 87.8
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	106	106	106	106	96	96	96	96	80	80	80	64	64	64	50	50	50	43
1	98	94	91	88	89	86	84	81	72	70	68	59	58	56	46	46	45	40
2	90	84	79	74	83	77	73	69	65	62	59	53	51	50	43	42	40	36
3	83	75	69	64	76	70	64	60	59	55	52	49	46	44	39	38	36	32
4	77	68	61	56	71	63	57	52	53	49	46	45	42	39	36	34	33	29
5	72	61	54	49	66	57	51	46	49	44	40	41	38	35	34	31	30	26
6	66	56	48	43	61	52	45	41	44	40	36	38	34	32	31	29	27	24
7	62	51	44	39	57	47	41	37	41	36	33	35	31	29	29	27	25	22
8	58	47	40	35	53	43	37	33	38	33	29	32	29	26	27	25	23	20
9	54	43	36	31	50	40	34	30	35	30	27	30	26	24	25	23	21	19
10	51	40	33	29	47	37	31	27	32	28	25	28	24	22	24	21	19	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23568	23568	23568
5°	23189	23131	23304
10°	21698	21987	22601
15°	19725	20351	21484
20°	17509	18419	20033
25°	15248	16456	18405
30°	13061	14496	16866
35°	10829	12305	15005
40°	8320	9839	12786
45°	6015	7450	10288
50°	4098	5552	8160
55°	2664	4015	6341
60°	1528	2827	4584
65°	404	1727	2321
70°	200	534	666
75°	89	43	0
80°	64	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	233.1	3.3
10°-20°	596.2	8.5
20°-30°	746.3	10.6
30°-40°	689.4	9.8
40°-50°	463.2	6.6
50°-60°	239.3	3.4
60°-70°	74.9	1.1
70°-80°	4.7	0.1
80°-90°	0.1	0.0
90°-100°	318.1	4.5
100°-110°	768.8	10.9
110°-120°	820.0	11.6
120°-130°	664.1	9.4
130°-140°	514.2	7.3
140°-150°	392.3	5.6
150°-160°	283.9	4.0
160°-170°	174.9	2.5
170°-180°	59.2	0.8
0°-30°	1575.6	22.4
0°-40°	2265.0	32.2
0°-60°	2967.5	42.1
0°-90°	3047.3	43.3
90°-120°	1906.9	27.1
90°-150°	3477.5	49.4
90°-180°	3996.0	56.7
0°-180°	7042.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2554	2554	2554	2554	2554	
5°	2504	2478	2498	2506	2516	232
15°	2065	2058	2131	2202	2249	575
25°	1498	1510	1616	1727	1808	687
35°	962	986	1092	1221	1332	596
45°	461	489	571	682	788	362
55°	166	193	250	320	394	155
65°	18	36	79	95	106	31
75°	2	2	1	0	0	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	31	159	545	354	248	35
105°	123	212	924	1196	1180	130
115°	225	287	742	1407	1570	222
125°	320	369	644	1119	1315	286
135°	393	439	618	883	1016	304
145°	465	500	606	750	809	291
155°	533	556	614	664	689	246
165°	590	598	622	632	640	166
175°	623	621	623	618	617	59
180°	617	617	617	617	617	

TEST NUMBER: P521231

CATALOG NUMBER: SQ4-BB-100U-125D-93050-1D-UNV-STD-W-4 (3000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2554.5	2554.5	2554.5	2554.5	2554.5
2.5°	2560.4	2536.2	2542.6	2542.5	2535.7
5°	2503.8	2478.4	2497.6	2506.5	2516.2
7.5°	2398.0	2378.2	2415.1	2442.7	2462.8
10°	2316.0	2299.0	2346.9	2384.6	2412.4
12.5°	2221.1	2208.0	2265.8	2317.5	2353.0
15°	2065.1	2057.8	2130.6	2202.1	2249.2
17.5°	1898.0	1897.8	1980.8	2069.6	2126.4
20°	1783.3	1786.9	1876.0	1973.9	2040.4
22.5°	1668.6	1677.1	1772.2	1874.3	1950.4
25°	1497.8	1509.9	1616.5	1727.1	1808.0
27.5°	1333.7	1351.4	1463.5	1578.4	1677.0
30°	1226.0	1246.5	1360.7	1481.6	1583.1
32.5°	1120.2	1144.6	1255.9	1383.8	1487.2
35°	961.5	985.7	1092.5	1221.1	1332.2
37.5°	797.6	821.3	925.6	1052.2	1172.3
40°	690.8	717.4	816.9	939.5	1061.6
42.5°	593.9	620.5	714.1	834.6	949.9
45°	461.0	488.8	571.0	682.1	788.5
47.5°	350.7	380.9	453.1	553.6	650.5
50°	285.5	315.7	386.8	475.4	568.5
52.5°	233.1	262.3	326.5	410.0	495.3
55°	165.6	193.4	249.6	320.5	394.2
57.5°	114.4	138.4	188.8	248.0	305.7
60°	82.8	105.8	153.2	201.3	248.4
62.5°	55.1	76.1	122.6	159.4	191.1
65°	18.5	35.5	79.1	95.4	106.3
67.5°	9.4	11.3	41.5	43.8	47.5
70°	7.4	7.4	19.8	21.1	24.7
72.5°	5.4	5.4	7.9	10.2	10.9
75°	2.5	2.5	1.2	0.0	0.0
77.5°	1.2	1.2	1.0	0.0	0.0
80°	1.2	1.2	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°	10.5	86.1	202.8	98.6	66.9
95°	31.4	159.2	545.0	354.4	248.3
97.5°	55.7	176.3	717.8	691.5	593.6
100°	74.5	187.0	812.9	858.2	777.7
102.5°	92.3	196.6	875.7	996.9	949.1
105°	122.9	212.3	924.0	1195.6	1180.2
107.5°	152.9	230.9	895.6	1354.9	1390.9
110°	173.8	246.7	849.5	1423.5	1491.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	194.7	262.5	808.8	1440.3	1556.1
115°	224.8	287.4	742.4	1407.4	1569.7
117.5°	254.6	313.6	703.4	1331.7	1521.9
120°	274.5	329.4	678.3	1272.3	1471.7
122.5°	295.4	346.2	662.6	1211.6	1407.9
125°	320.2	368.8	644.3	1119.3	1314.8
127.5°	344.8	390.5	631.5	1041.1	1212.9
130°	359.4	404.2	627.4	986.7	1155.4
132.5°	373.0	419.8	621.1	947.4	1090.6
135°	393.4	439.4	618.2	882.6	1015.5
137.5°	412.7	459.0	609.1	838.8	938.9
140°	427.4	469.6	609.1	807.2	899.2
142.5°	442.0	484.2	603.8	779.7	857.4
145°	465.3	499.8	606.4	750.2	809.0
147.5°	487.0	520.5	604.9	716.3	764.9
150°	500.6	530.0	609.1	701.4	739.8
152.5°	515.2	543.6	608.0	685.6	719.9
155°	533.3	556.3	614.3	664.5	688.8
157.5°	554.9	574.6	613.0	656.4	670.7
160°	563.3	579.9	618.2	645.9	656.1
162.5°	576.9	591.5	616.1	642.7	648.8
165°	589.5	598.4	622.1	631.5	640.4
167.5°	604.9	610.8	620.6	630.8	631.0
170°	609.1	612.9	624.7	623.6	630.0
172.5°	616.4	619.2	621.6	624.4	620.6
175°	623.4	620.9	623.4	618.2	616.9
177.5°	622.1	622.1	620.0	617.8	612.7
180°	616.9	616.9	616.9	616.9	616.9

(END OF REPORT)