

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: P521075

Luminaire Tested: **SQ4-BB-050U-125D-93050-1D-UNV-STD-W-4 (3000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521075
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-050U-125D-93050-1D-UNV-STD-W-4 (3000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

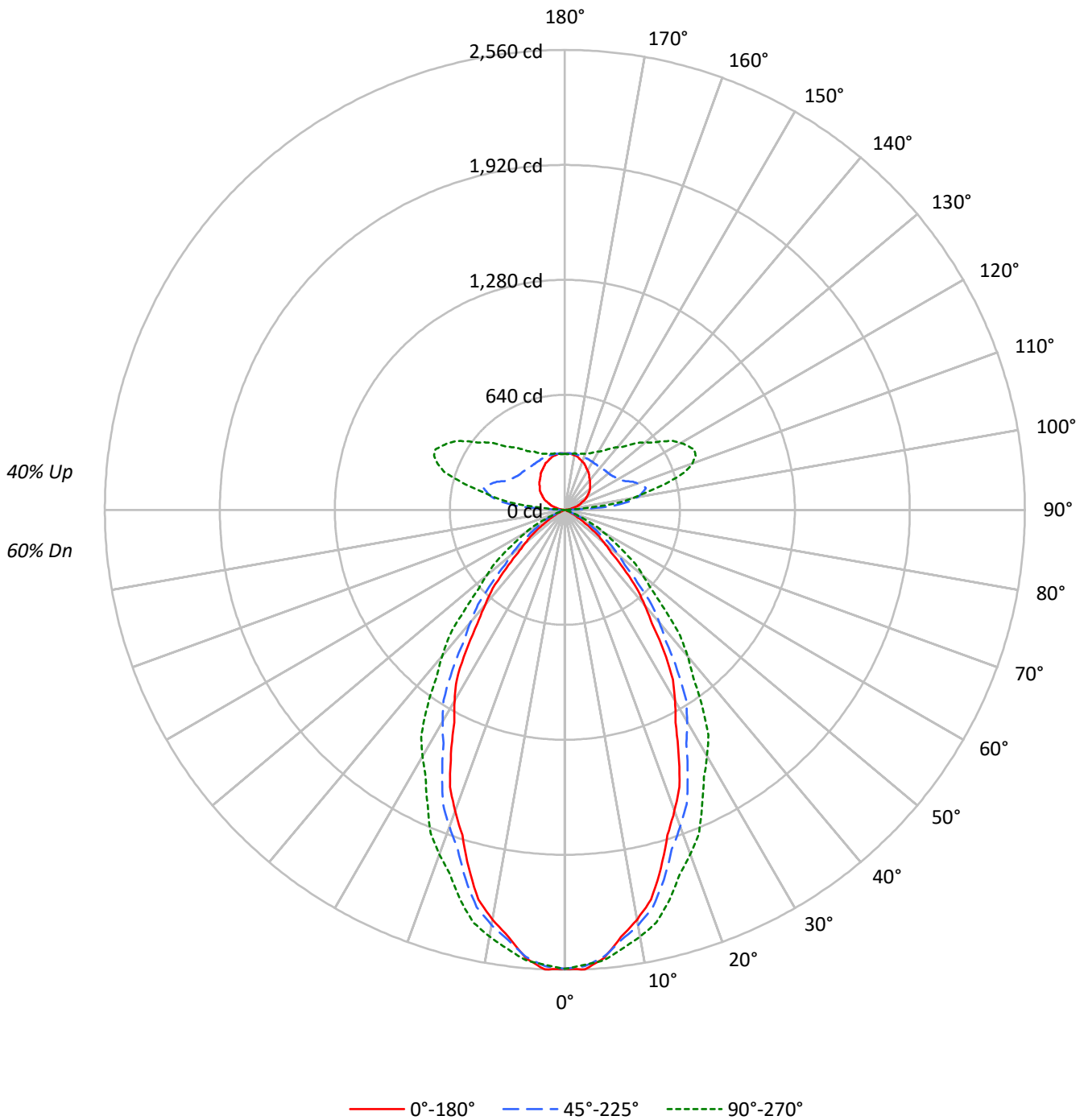
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5069.9 lumens
Efficiency: N/A
Efficacy: 70.9 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: Semi-Direct

Input Watts (W): 71.5
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	110	110	110	110	102	102	102	102	89	89	89	77	77	77	65	65	65	60
1	102	99	95	93	96	93	90	87	81	79	77	71	69	68	61	60	59	55
2	95	89	84	79	89	84	79	75	74	71	68	65	62	60	57	55	53	50
3	88	80	74	69	82	76	70	66	67	63	60	59	56	54	52	50	48	45
4	82	72	66	61	77	69	63	58	61	57	53	55	51	48	48	46	44	41
5	76	66	59	54	71	63	56	52	56	51	47	50	46	43	45	42	40	37
6	71	60	53	48	67	57	51	46	52	47	43	46	42	39	41	38	36	34
7	66	55	48	43	62	53	46	42	48	42	39	43	39	36	39	35	33	31
8	62	51	44	39	58	49	42	38	44	39	35	40	36	33	36	33	30	28
9	58	47	40	36	55	45	39	35	41	36	32	37	33	30	34	30	28	26
10	55	44	37	33	52	42	36	32	38	33	30	35	31	28	32	28	26	24

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	4.6
10°-20°	596.2	11.8
20°-30°	746.3	14.7
30°-40°	689.4	13.6
40°-50°	463.2	9.1
50°-60°	239.3	4.7
60°-70°	74.9	1.5
70°-80°	4.7	0.1
80°-90°	0.1	0.0
90°-100°	161.0	3.2
100°-110°	389.2	7.7
110°-120°	415.1	8.2
120°-130°	336.2	6.6
130°-140°	260.3	5.1
140°-150°	198.6	3.9
150°-160°	143.7	2.8
160°-170°	88.5	1.7
170°-180°	30.0	0.6
0°-30°	1575.6	31.1
0°-40°	2265.0	44.7
0°-60°	2967.5	58.5
0°-90°	3047.3	60.1
90°-120°	965.3	19.0
90°-150°	1760.4	34.7
90°-180°	2023.0	39.9
0°-180°	5069.9	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°	16	81	276	179	126	18
105°	62	108	468	605	598	66
115°	114	146	376	712	795	113
125°	162	187	326	567	666	145
135°	199	222	313	447	514	154
145°	236	253	307	380	410	147
155°	270	282	311	336	349	125
165°	298	303	315	320	324	84
175°	316	314	316	313	312	30
180°	312	312	312	312	312	



TEST NUMBER: P521075

CATALOG NUMBER: SQ4-BB-050U-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°	5.3	43.6	102.7	49.9	33.9
95°	15.9	80.6	275.9	179.4	125.7
97.5°	28.2	89.3	363.4	350.1	300.5
100°	37.7	94.6	411.5	434.4	393.7
102.5°	46.7	99.5	443.3	504.7	480.5
105°	62.2	107.5	467.8	605.2	597.5
107.5°	77.4	116.9	453.4	685.9	704.1
110°	88.0	124.9	430.1	720.6	754.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	98.6	132.9	409.4	729.1	787.7
115°	113.8	145.5	375.8	712.5	794.6
117.5°	128.9	158.8	356.1	674.1	770.4
120°	138.9	166.8	343.4	644.1	745.0
122.5°	149.5	175.3	335.4	613.3	712.7
125°	162.1	186.7	326.2	566.6	665.6
127.5°	174.5	197.7	319.7	527.0	614.0
130°	181.9	204.6	317.6	499.5	584.9
132.5°	188.8	212.5	314.4	479.6	552.1
135°	199.2	222.4	313.0	446.8	514.1
137.5°	208.9	232.4	308.3	424.6	475.3
140°	216.4	237.7	308.3	408.6	455.2
142.5°	223.8	245.1	305.7	394.7	434.0
145°	235.5	253.0	307.0	379.8	409.6
147.5°	246.5	263.5	306.2	362.6	387.2
150°	253.4	268.3	308.3	355.1	374.5
152.5°	260.8	275.2	307.8	347.1	364.4
155°	269.9	281.6	311.0	336.4	348.7
157.5°	280.9	290.9	310.3	332.3	339.5
160°	285.2	293.6	313.0	327.0	332.1
162.5°	292.0	299.4	311.9	325.3	328.4
165°	298.4	302.9	314.9	319.7	324.2
167.5°	306.2	309.2	314.1	319.3	319.4
170°	308.3	310.3	316.3	315.7	318.9
172.5°	312.0	313.4	314.7	316.1	314.1
175°	315.6	314.3	315.6	312.9	312.3
177.5°	314.9	314.9	313.9	312.8	310.2
180°	312.3	312.3	312.3	312.3	312.3

(END OF REPORT)