

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: P521233

Luminaire Tested: **SQ4-BB-100U-125D-93050-1D-UNV-STD-W-4 (4000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521233
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 (4000K)
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 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

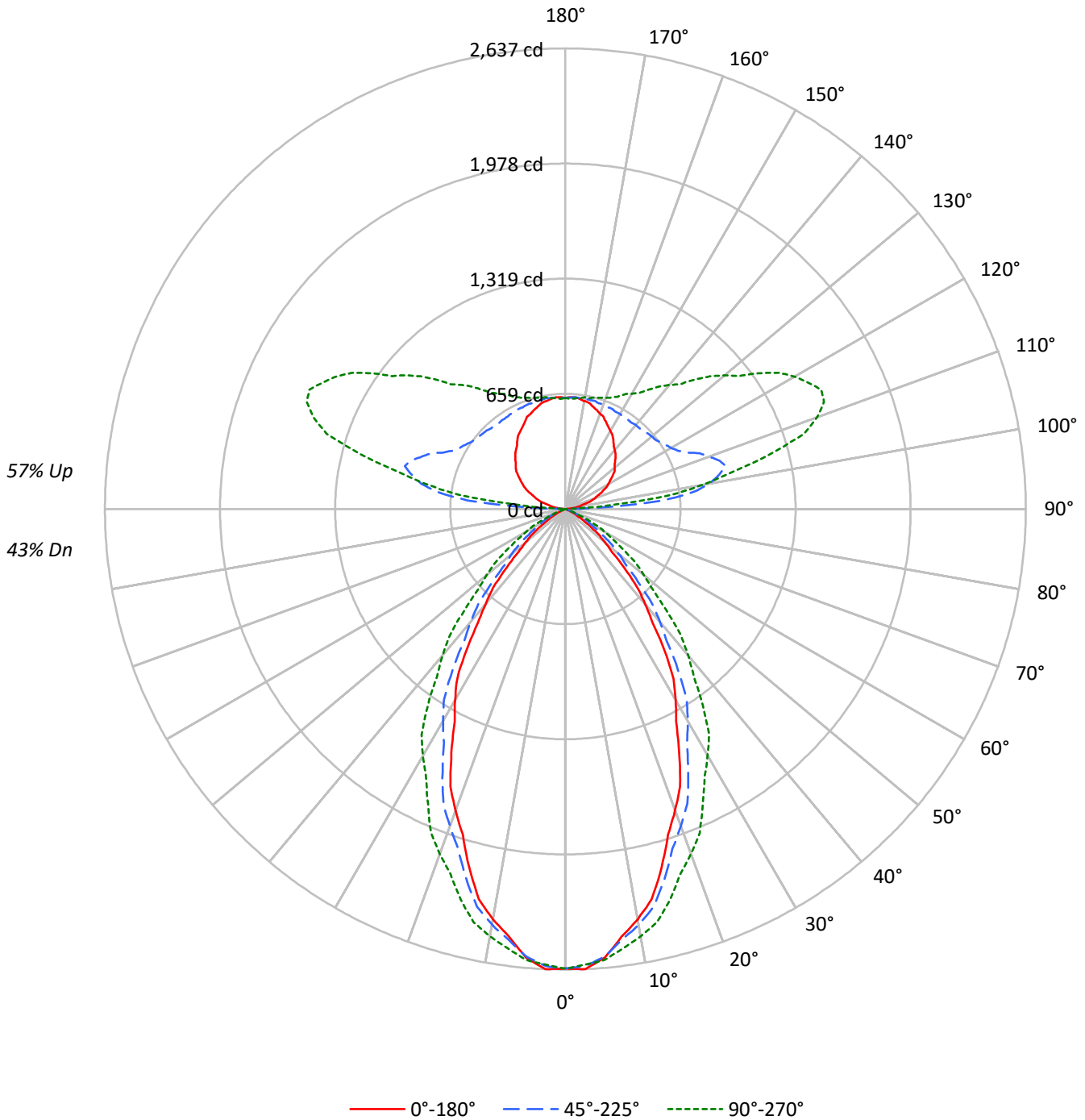
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7254.0 lumens
Efficiency: N/A
Efficacy: 82.5 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): 87.9
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	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°	24275	24275	24275
5°	23884	23825	24002
10°	22348	22647	23278
15°	20316	20961	22128
20°	18034	18972	20634
25°	15706	16950	18958
30°	13452	14931	17372
35°	11154	12674	15455
40°	8570	10134	13169
45°	6195	7673	10596
50°	4220	5718	8404
55°	2744	4136	6532
60°	1574	2912	4722
65°	417	1779	2391
70°	205	550	688
75°	89	46	0
80°	69	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	240.1	3.3
10°-20°	614.1	8.5
20°-30°	768.7	10.6
30°-40°	710.1	9.8
40°-50°	477.1	6.6
50°-60°	246.4	3.4
60°-70°	77.2	1.1
70°-80°	4.9	0.1
80°-90°	0.1	0.0
90°-100°	327.6	4.5
100°-110°	791.9	10.9
110°-120°	844.6	11.6
120°-130°	684.0	9.4
130°-140°	529.6	7.3
140°-150°	404.0	5.6
150°-160°	292.5	4.0
160°-170°	180.1	2.5
170°-180°	61.0	0.8
0°-30°	1622.9	22.4
0°-40°	2333.0	32.2
0°-60°	3056.5	42.1
0°-90°	3138.7	43.3
90°-120°	1964.1	27.1
90°-150°	3581.8	49.4
90°-180°	4115.0	56.7
0°-180°	7254.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2631	2631	2631	2631	2631	
5°	2579	2553	2572	2582	2592	239
15°	2127	2120	2194	2268	2317	592
25°	1543	1555	1665	1779	1862	707
35°	990	1015	1125	1258	1372	613
45°	475	503	588	703	812	373
55°	171	199	257	330	406	159
65°	19	36	82	98	110	32
75°	2	2	1	0	0	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	32	164	561	365	256	36
105°	126	219	952	1231	1216	134
115°	232	296	765	1450	1617	229
125°	330	380	664	1153	1354	294
135°	405	453	637	909	1046	313
145°	479	515	625	773	833	300
155°	549	573	633	684	709	254
165°	607	616	641	650	660	171
175°	642	640	642	637	635	61
180°	635	635	635	635	635	

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CATALOG NUMBER: SQ4-BB-100U-125D-93050-1D-UNV-STD-W-4 (4000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2631.1	2631.1	2631.1	2631.1	2631.1
2.5°	2637.2	2612.3	2618.9	2618.7	2611.8
5°	2578.9	2552.8	2572.5	2581.7	2591.6
7.5°	2469.9	2449.5	2487.5	2516.0	2536.6
10°	2385.4	2368.0	2417.3	2456.1	2484.7
12.5°	2287.7	2274.2	2333.7	2387.0	2423.6
15°	2127.0	2119.6	2194.5	2268.2	2316.7
17.5°	1954.9	1954.7	2040.2	2131.7	2190.2
20°	1836.8	1840.5	1932.3	2033.1	2101.6
22.5°	1718.7	1727.4	1825.3	1930.5	2008.9
25°	1542.8	1555.2	1665.0	1778.9	1862.3
27.5°	1373.7	1391.9	1507.4	1625.8	1727.3
30°	1262.7	1283.9	1401.5	1526.0	1630.6
32.5°	1153.8	1178.9	1293.5	1425.3	1531.8
35°	990.3	1015.2	1125.3	1257.7	1372.2
37.5°	821.5	845.9	953.4	1083.8	1207.5
40°	711.6	738.9	841.4	967.7	1093.4
42.5°	611.8	639.1	735.5	859.6	978.4
45°	474.8	503.4	588.1	702.6	812.1
47.5°	361.3	392.4	466.6	570.2	670.1
50°	294.0	325.2	398.4	489.7	585.5
52.5°	240.1	270.2	336.3	422.3	510.2
55°	170.6	199.2	257.1	330.1	406.1
57.5°	117.9	142.5	194.5	255.4	314.9
60°	85.3	108.9	157.8	207.3	255.9
62.5°	56.8	78.4	126.3	164.2	196.8
65°	19.1	36.5	81.5	98.3	109.5
67.5°	9.7	11.7	42.8	45.1	48.9
70°	7.6	7.6	20.4	21.7	25.5
72.5°	5.6	5.6	8.1	10.5	11.2
75°	2.5	2.5	1.3	0.0	0.0
77.5°	1.3	1.3	1.0	0.0	0.0
80°	1.3	1.3	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°	10.8	88.7	208.9	101.6	68.9
95°	32.3	163.9	561.4	365.0	255.8
97.5°	57.3	181.6	739.3	712.3	611.4
100°	76.7	192.6	837.3	883.9	801.0
102.5°	95.0	202.4	902.0	1026.8	977.6
105°	126.5	218.7	951.8	1231.4	1215.6
107.5°	157.5	237.8	922.4	1395.5	1432.6
110°	179.0	254.1	875.0	1466.2	1536.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	200.6	270.3	833.0	1483.5	1602.8
115°	231.5	296.0	764.6	1449.6	1616.8
117.5°	262.2	323.1	724.5	1371.6	1567.5
120°	282.7	339.3	698.7	1310.5	1515.8
122.5°	304.2	356.6	682.5	1247.9	1450.1
125°	329.8	379.8	663.7	1152.9	1354.3
127.5°	355.1	402.2	650.5	1072.4	1249.3
130°	370.2	416.3	646.2	1016.3	1190.0
132.5°	384.2	432.4	639.7	975.8	1123.3
135°	405.2	452.6	636.8	909.1	1046.0
137.5°	425.1	472.8	627.3	863.9	967.1
140°	440.2	483.6	627.3	831.4	926.2
142.5°	455.3	498.7	621.9	803.1	883.1
145°	479.2	514.8	624.6	772.7	833.3
147.5°	501.6	536.1	623.0	737.8	787.8
150°	515.6	545.9	627.3	722.5	761.9
152.5°	530.7	559.9	626.2	706.2	741.5
155°	549.2	572.9	632.7	684.4	709.4
157.5°	571.6	591.9	631.4	676.1	690.9
160°	580.2	597.3	636.8	665.3	675.8
162.5°	594.2	609.2	634.6	661.9	668.3
165°	607.1	616.3	640.8	650.4	659.6
167.5°	623.0	629.1	639.2	649.7	649.9
170°	627.3	631.3	643.5	642.3	648.9
172.5°	634.9	637.8	640.3	643.1	639.2
175°	642.1	639.5	642.1	636.7	635.4
177.5°	640.8	640.8	638.6	636.4	631.1
180°	635.4	635.4	635.4	635.4	635.4

(END OF REPORT)