

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: P521218

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

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521218
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-100D-93050-1D-UNV-STD-W-4 (3000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

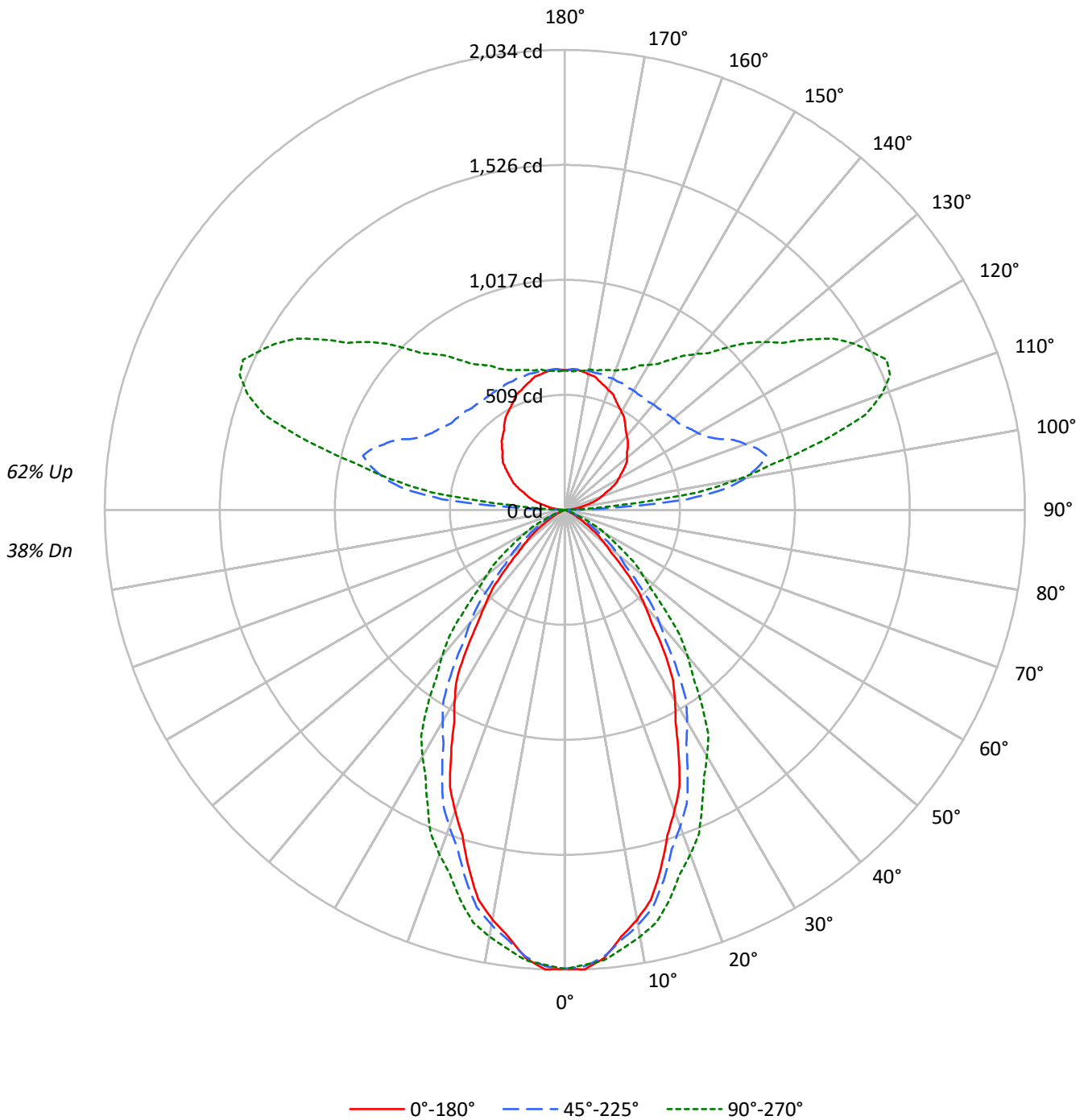
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6416.6 lumens
Efficiency: N/A
Efficacy: 85.8 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): 74.8
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	50	30	10	0	
RCR																						
0	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38				
1	96	93	89	86	87	84	82	79	69	67	65	55	54	53	42	41	40	34				
2	89	82	77	73	81	75	71	67	62	59	56	50	48	46	38	37	36	31				
3	82	74	67	62	74	68	62	58	56	52	49	45	43	41	35	34	32	28				
4	76	66	59	54	69	61	55	50	51	46	43	41	38	36	33	31	29	25				
5	70	60	52	47	64	55	49	44	46	42	38	38	35	32	30	28	26	23				
6	65	54	47	42	59	50	44	39	42	37	34	35	31	29	28	26	24	21				
7	60	49	42	37	55	46	39	35	39	34	31	32	29	26	26	24	22	19				
8	56	45	38	33	51	42	36	31	36	31	28	30	26	24	24	22	20	18				
9	53	41	35	30	48	38	32	28	33	28	25	28	24	22	23	20	19	16				
10	49	38	32	27	45	36	30	26	30	26	23	26	22	20	21	19	17	15				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18725	18725	18725
5°	18424	18377	18515
10°	17238	17469	17956
15°	15671	16168	17069
20°	13911	14634	15916
25°	12114	13074	14624
30°	10377	11516	13400
35°	8604	9776	11921
40°	6611	7817	10158
45°	4778	5918	8173
50°	3255	4411	6483
55°	2117	3190	5038
60°	1214	2248	3643
65°	321	1371	1843
70°	159	424	529
75°	71	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.2	2.9
10°-20°	473.7	7.4
20°-30°	593.0	9.2
30°-40°	547.7	8.5
40°-50°	368.0	5.7
50°-60°	190.1	3.0
60°-70°	59.5	0.9
70°-80°	3.8	0.1
80°-90°	0.1	0.0
90°-100°	318.1	5.0
100°-110°	768.8	12.0
110°-120°	820.0	12.8
120°-130°	664.1	10.4
130°-140°	514.2	8.0
140°-150°	392.3	6.1
150°-160°	283.9	4.4
160°-170°	174.9	2.7
170°-180°	59.2	0.9
0°-30°	1251.8	19.5
0°-40°	1799.5	28.0
0°-60°	2357.7	36.7
0°-90°	2421.0	37.7
90°-120°	1906.9	29.7
90°-150°	3477.5	54.2
90°-180°	3996.0	62.3
0°-180°	6416.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2030	2030	2030	2030	2030	
5°	1989	1969	1984	1991	1999	184
15°	1641	1635	1693	1750	1787	457
25°	1190	1200	1284	1372	1436	546
35°	764	783	868	970	1058	473
45°	366	388	454	542	626	288
55°	132	154	198	255	313	123
65°	15	28	63	76	84	25
75°	2	2	1	0	0	3
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: P521218

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2029.5	2029.5	2029.5	2029.5	2029.5
2.5°	2034.2	2015.0	2020.1	2020.0	2014.6
5°	1989.3	1969.1	1984.3	1991.4	1999.1
7.5°	1905.2	1889.5	1918.8	1940.7	1956.7
10°	1840.0	1826.6	1864.6	1894.5	1916.6
12.5°	1764.6	1754.2	1800.2	1841.2	1869.5
15°	1640.7	1634.9	1692.7	1749.6	1787.0
17.5°	1507.9	1507.8	1573.7	1644.3	1689.4
20°	1416.8	1419.7	1490.5	1568.3	1621.1
22.5°	1325.7	1332.4	1408.0	1489.1	1549.6
25°	1190.0	1199.6	1284.3	1372.1	1436.5
27.5°	1059.6	1073.6	1162.7	1254.1	1332.4
30°	974.0	990.3	1081.0	1177.1	1257.8
32.5°	890.0	909.4	997.8	1099.4	1181.6
35°	763.9	783.1	868.0	970.1	1058.4
37.5°	633.7	652.5	735.4	836.0	931.4
40°	548.9	570.0	649.0	746.5	843.4
42.5°	471.9	493.0	567.3	663.1	754.7
45°	366.2	388.3	453.6	541.9	626.4
47.5°	278.7	302.7	360.0	439.9	516.9
50°	226.8	250.8	307.3	377.7	451.7
52.5°	185.2	208.4	259.4	325.8	393.5
55°	131.6	153.7	198.3	254.7	313.2
57.5°	90.9	109.9	150.0	197.0	242.9
60°	65.8	84.0	121.8	159.9	197.4
62.5°	43.8	60.5	97.4	126.6	151.8
65°	14.7	28.2	62.8	75.8	84.4
67.5°	7.5	9.0	33.0	34.8	37.7
70°	5.9	5.9	15.7	16.8	19.6
72.5°	4.3	4.3	6.3	8.1	8.6
75°	2.0	2.0	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	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)