

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: P521192

Luminaire Tested: **SQ4-BB-100U-050D-93050-1D-UNV-STD-W-4 (3000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521192
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-050D-93050-1D-UNV-STD-W-4 (3000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

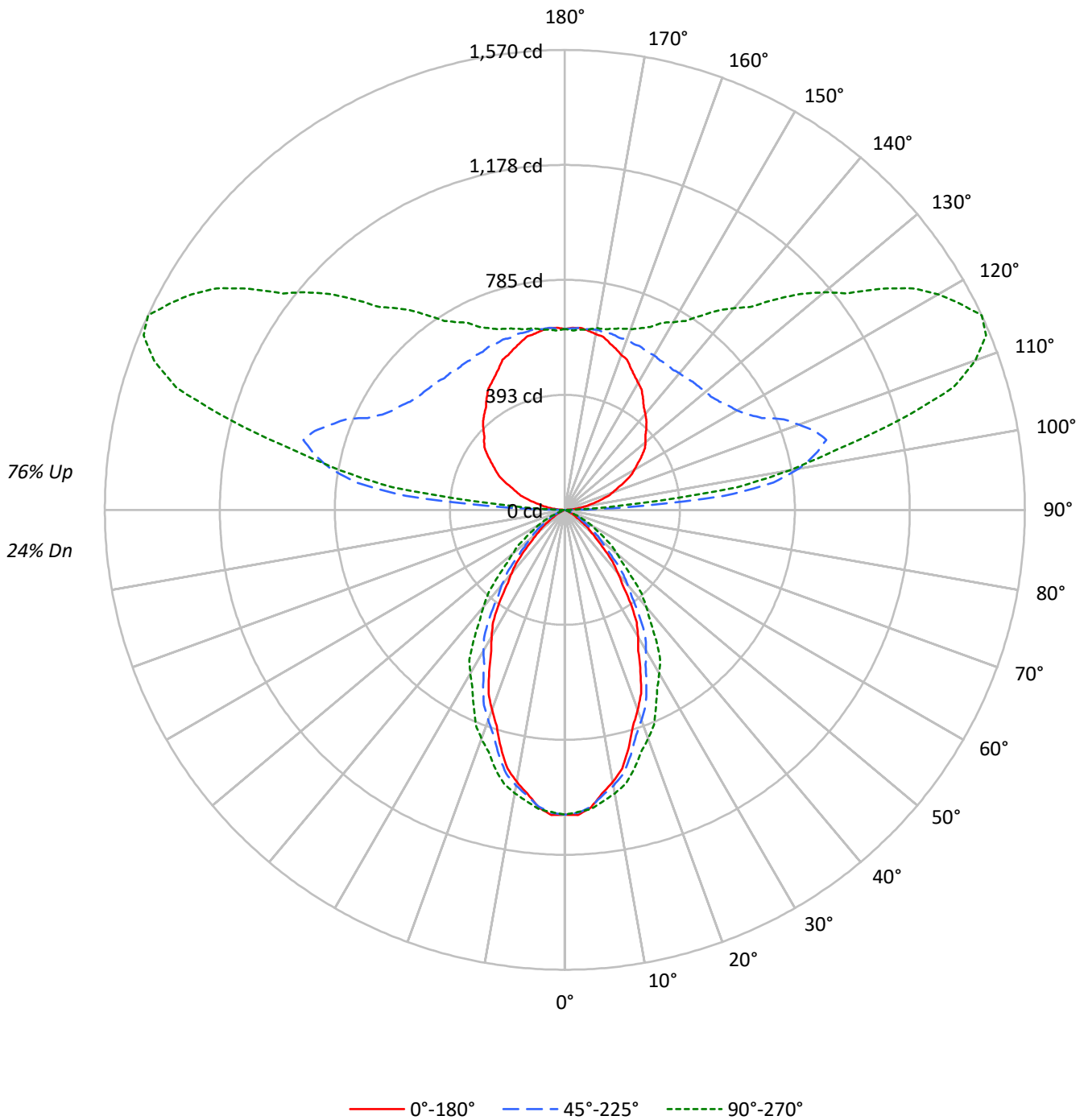
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5236.8 lumens
Efficiency: N/A
Efficacy: 98.4 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): 53.2
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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24				
1	93	89	86	82	82	79	77	74	61	60	58	45	44	43	29	29	29	22				
2	85	79	73	69	76	70	66	62	55	52	49	40	39	37	27	26	25	20				
3	78	70	63	58	69	63	57	53	49	45	42	36	34	32	25	24	23	18				
4	72	62	55	50	64	56	50	45	44	40	37	33	30	28	23	21	20	16				
5	66	56	49	43	59	50	44	39	40	36	32	30	27	25	21	19	18	15				
6	61	50	43	38	54	45	39	35	36	32	28	27	25	22	19	18	17	13				
7	57	46	38	33	51	41	35	31	33	29	25	25	22	20	18	16	15	12				
8	53	41	34	30	47	38	31	27	30	26	23	23	20	18	17	15	14	11				
9	49	38	31	26	44	34	28	24	28	23	20	21	19	16	15	14	13	10				
10	46	35	28	24	41	32	26	22	26	21	19	20	17	15	14	13	12	10				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9600	9600	9600
5°	9446	9422	9492
10°	8837	8955	9206
15°	8035	8289	8751
20°	7132	7502	8160
25°	6211	6703	7497
30°	5320	5904	6869
35°	4411	5012	6111
40°	3389	4007	5208
45°	2450	3035	4191
50°	1669	2262	3324
55°	1086	1636	2583
60°	622	1151	1867
65°	166	703	945
70°	81	219	272
75°	36	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.0	1.8
10°-20°	242.8	4.6
20°-30°	304.0	5.8
30°-40°	280.8	5.4
40°-50°	188.7	3.6
50°-60°	97.5	1.9
60°-70°	30.5	0.6
70°-80°	1.9	0.0
80°-90°	0.0	0.0
90°-100°	318.1	6.1
100°-110°	768.8	14.7
110°-120°	820.0	15.7
120°-130°	664.1	12.7
130°-140°	514.2	9.8
140°-150°	392.3	7.5
150°-160°	283.9	5.4
160°-170°	174.9	3.3
170°-180°	59.2	1.1
0°-30°	641.8	12.3
0°-40°	922.6	17.6
0°-60°	1208.7	23.1
0°-90°	1241.2	23.7
90°-120°	1906.9	36.4
90°-150°	3477.5	66.4
90°-180°	3996.0	76.3
0°-180°	5236.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1040	1040	1040	1040	1040	
5°	1020	1010	1017	1021	1025	95
15°	841	838	868	897	916	234
25°	610	615	658	704	736	280
35°	392	402	445	497	543	243
45°	188	199	233	278	321	147
55°	68	79	102	131	161	63
65°	8	14	32	39	43	13
75°	1	1	0	0	0	1
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	



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CATALOG NUMBER: SQ4-BB-100U-050D-93050-1D-UNV-STD-W-4 (3000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1040.5	1040.5	1040.5	1040.5	1040.5
2.5°	1042.9	1033.1	1035.7	1035.6	1032.8
5°	1019.9	1009.5	1017.3	1020.9	1024.9
7.5°	976.8	968.7	983.7	995.0	1003.1
10°	943.3	936.4	955.9	971.3	982.6
12.5°	904.7	899.4	922.9	944.0	958.4
15°	841.2	838.2	867.8	897.0	916.2
17.5°	773.1	773.0	806.8	843.0	866.1
20°	726.4	727.9	764.1	804.0	831.1
22.5°	679.7	683.1	721.8	763.4	794.4
25°	610.1	615.0	658.4	703.5	736.4
27.5°	543.2	550.4	596.1	642.9	683.1
30°	499.4	507.7	554.2	603.5	644.8
32.5°	456.3	466.2	511.5	563.6	605.8
35°	391.6	401.5	445.0	497.4	542.6
37.5°	324.9	334.5	377.0	428.6	477.5
40°	281.4	292.2	332.7	382.7	432.4
42.5°	241.9	252.8	290.9	339.9	386.9
45°	187.8	199.1	232.6	277.8	321.2
47.5°	142.9	155.2	184.5	225.5	265.0
50°	116.3	128.6	157.6	193.7	231.6
52.5°	94.9	106.8	133.0	167.0	201.8
55°	67.5	78.8	101.7	130.6	160.6
57.5°	46.6	56.4	76.9	101.0	124.5
60°	33.7	43.1	62.4	82.0	101.2
62.5°	22.5	31.0	49.9	64.9	77.8
65°	7.6	14.4	32.2	38.9	43.3
67.5°	3.8	4.6	16.9	17.9	19.3
70°	3.0	3.0	8.1	8.6	10.1
72.5°	2.2	2.2	3.2	4.1	4.4
75°	1.0	1.0	0.5	0.0	0.0
77.5°	0.5	0.5	0.4	0.0	0.0
80°	0.5	0.5	0.0	0.0	0.0
82.5°	0.1	0.1	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)