

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: P521040

Luminaire Tested: **SQ4-BB-050U-050D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521040
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-050D-93050-1D-UNV-STD-W-4 (5000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

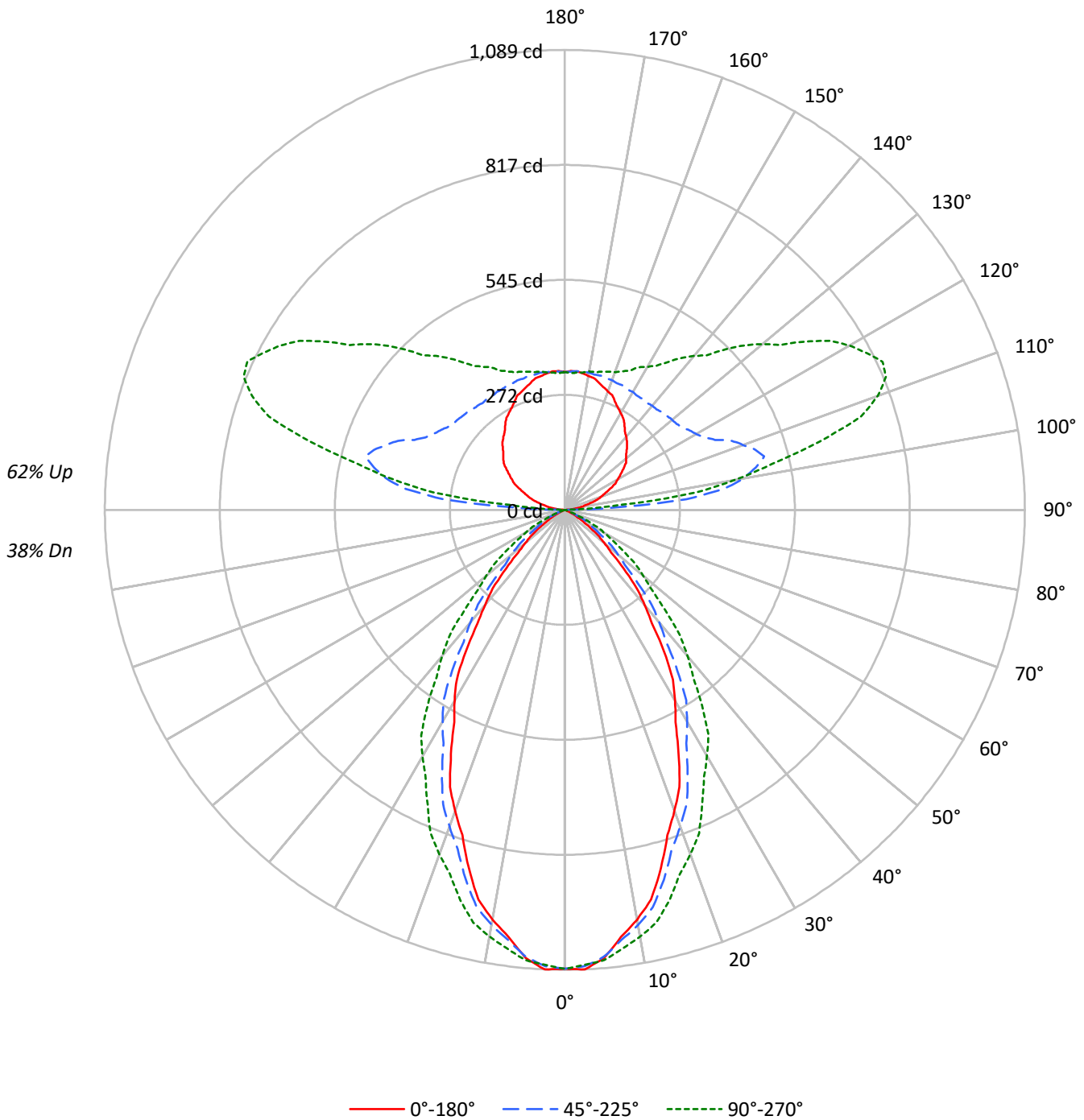
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3408.6 lumens
Efficiency: N/A
Efficacy: 92.4 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): 36.9
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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	96	93	89	86	88	85	82	79	69	67	66	55	54	53	42	41	41	35
2	89	83	77	73	81	76	71	67	62	59	57	50	48	46	39	37	36	31
3	82	74	67	62	75	68	62	58	56	52	49	45	43	41	36	34	33	28
4	76	66	59	54	69	61	55	50	51	47	43	41	39	36	33	31	29	26
5	70	60	53	47	64	55	49	44	46	42	38	38	35	32	30	28	27	23
6	65	54	47	42	59	50	44	39	42	38	34	35	32	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	52	42	36	31	36	31	28	30	26	24	24	22	20	18
9	53	42	35	30	48	39	33	28	33	28	25	28	24	22	23	20	19	17
10	49	38	32	27	45	36	30	26	31	26	23	26	22	20	21	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10025	10025	10025
5°	9864	9839	9913
10°	9230	9353	9614
15°	8391	8657	9139
20°	7448	7835	8521
25°	6487	7000	7829
30°	5556	6166	7174
35°	4607	5234	6383
40°	3540	4185	5439
45°	2559	3169	4376
50°	1743	2361	3471
55°	1132	1708	2698
60°	650	1203	1950
65°	172	734	987
70°	86	227	283
75°	39	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.2	2.9
10°-20°	253.6	7.4
20°-30°	317.5	9.3
30°-40°	293.3	8.6
40°-50°	197.1	5.8
50°-60°	101.8	3.0
60°-70°	31.9	0.9
70°-80°	2.0	0.1
80°-90°	0.0	0.0
90°-100°	168.2	4.9
100°-110°	406.5	11.9
110°-120°	433.5	12.7
120°-130°	351.1	10.3
130°-140°	271.8	8.0
140°-150°	207.4	6.1
150°-160°	150.1	4.4
160°-170°	92.5	2.7
170°-180°	31.3	0.9
0°-30°	670.2	19.7
0°-40°	963.5	28.3
0°-60°	1262.3	37.0
0°-90°	1296.3	38.0
90°-120°	1008.1	29.6
90°-150°	1838.5	53.9
90°-180°	2112.0	62.0
0°-180°	3408.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1087	1087	1087	1087	1087	
5°	1065	1054	1062	1066	1070	99
15°	878	875	906	937	957	245
25°	637	642	688	735	769	292
35°	409	419	465	519	567	253
45°	196	208	243	290	335	154
55°	70	82	106	136	168	66
65°	8	15	34	41	45	13
75°	1	1	0	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	17	84	288	187	131	19
105°	65	112	488	632	624	69
115°	119	152	392	744	830	117
125°	169	195	341	592	695	151
135°	208	232	327	467	537	161
145°	246	264	321	397	428	154
155°	282	294	325	351	364	130
165°	312	316	329	334	339	88
175°	330	328	330	327	326	31
180°	326	326	326	326	326	



TEST NUMBER: P521040

CATALOG NUMBER: SQ4-BB-050U-050D-93050-1D-UNV-STD-W-4 (5000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1086.6	1086.6	1086.6	1086.6	1086.6
2.5°	1089.2	1078.9	1081.6	1081.5	1078.6
5°	1065.1	1054.3	1062.4	1066.2	1070.3
7.5°	1020.1	1011.6	1027.3	1039.1	1047.6
10°	985.2	978.0	998.3	1014.4	1026.2
12.5°	944.8	939.2	963.8	985.8	1000.9
15°	878.5	875.4	906.3	936.7	956.8
17.5°	807.4	807.3	842.6	880.4	904.5
20°	758.6	760.1	798.0	839.7	867.9
22.5°	709.8	713.4	753.9	797.3	829.7
25°	637.2	642.3	687.6	734.7	769.1
27.5°	567.3	574.8	622.5	671.4	713.4
30°	521.5	530.2	578.8	630.2	673.4
32.5°	476.5	486.9	534.2	588.6	632.6
35°	409.0	419.3	464.7	519.4	566.7
37.5°	339.3	349.4	393.8	447.6	498.7
40°	293.9	305.2	347.5	399.7	451.6
42.5°	252.7	264.0	303.8	355.0	404.1
45°	196.1	207.9	242.9	290.2	335.4
47.5°	149.2	162.0	192.7	235.5	276.7
50°	121.4	134.3	164.5	202.2	241.8
52.5°	99.1	111.6	138.9	174.4	210.7
55°	70.4	82.3	106.2	136.3	167.7
57.5°	48.7	58.9	80.3	105.5	130.1
60°	35.2	45.0	65.2	85.6	105.7
62.5°	23.4	32.4	52.1	67.8	81.3
65°	7.9	15.1	33.6	40.6	45.2
67.5°	4.0	4.8	17.7	18.6	20.2
70°	3.2	3.2	8.4	9.0	10.5
72.5°	2.3	2.3	3.4	4.3	4.6
75°	1.1	1.1	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°	5.5	45.5	107.2	52.1	35.4
95°	16.6	84.1	288.1	187.4	131.3
97.5°	29.4	93.2	379.5	365.6	313.8
100°	39.4	98.8	429.8	453.7	411.1
102.5°	48.8	103.9	463.0	527.1	501.8
105°	65.0	112.2	488.5	632.1	623.9
107.5°	80.8	122.1	473.5	716.3	735.3
110°	91.9	130.4	449.1	752.6	788.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	103.0	138.8	427.6	761.5	822.7
115°	118.8	152.0	392.5	744.1	829.9
117.5°	134.6	165.8	371.9	704.0	804.6
120°	145.1	174.2	358.6	672.6	778.0
122.5°	156.2	183.0	350.3	640.5	744.3
125°	169.3	195.0	340.6	591.7	695.1
127.5°	182.3	206.5	333.9	550.4	641.2
130°	190.0	213.7	331.7	521.6	610.8
132.5°	197.2	221.9	328.4	500.9	576.5
135°	208.0	232.3	326.8	466.6	536.9
137.5°	218.2	242.7	322.0	443.4	496.4
140°	225.9	248.2	322.0	426.7	475.4
142.5°	233.7	256.0	319.2	412.2	453.3
145°	246.0	264.2	320.6	396.6	427.7
147.5°	257.5	275.2	319.8	378.7	404.4
150°	264.6	280.2	322.0	370.8	391.1
152.5°	272.4	287.4	321.4	362.5	380.6
155°	281.9	294.1	324.8	351.3	364.1
157.5°	293.4	303.8	324.1	347.0	354.6
160°	297.8	306.6	326.8	341.5	346.9
162.5°	305.0	312.7	325.7	339.8	343.0
165°	311.6	316.4	328.9	333.8	338.6
167.5°	319.8	322.9	328.1	333.5	333.6
170°	322.0	324.0	330.3	329.7	333.0
172.5°	325.9	327.3	328.6	330.1	328.1
175°	329.6	328.2	329.6	326.8	326.1
177.5°	328.9	328.9	327.8	326.6	323.9
180°	326.1	326.1	326.1	326.1	326.1

(END OF REPORT)