

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: P521053

Luminaire Tested: **SQ4-BB-050U-075D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021



Test Information

Test Method: LM-79-08
Report Number: P521053
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-075D-93050-1D-UNV-STD-W-4 (5000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

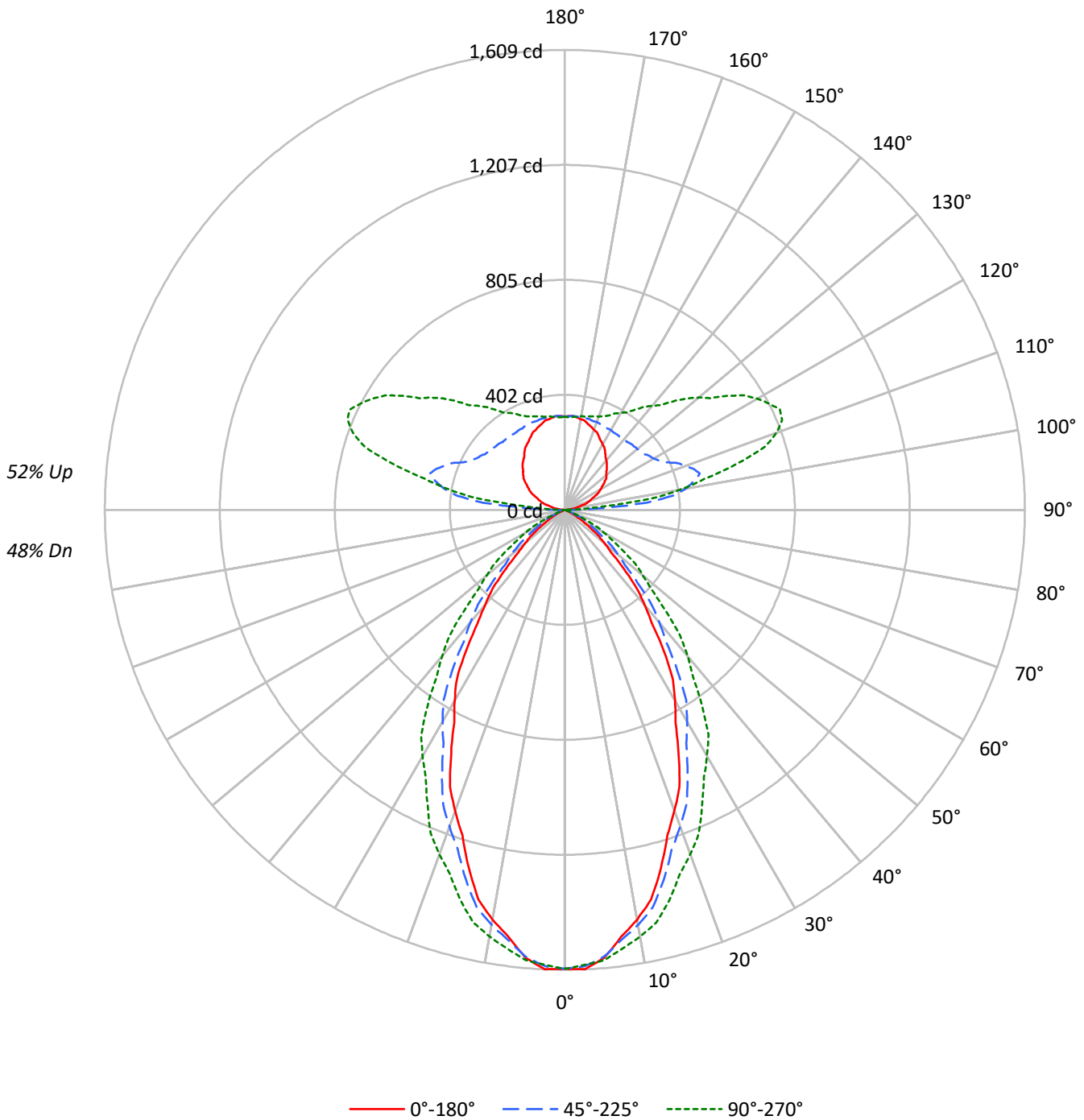
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4027.4 lumens
Efficiency: N/A
Efficacy: 84.8 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: General Diffuse

Input Watts (W): 47.5
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	50	30	10	0	
RCR																						
0	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	48				
1	99	95	92	89	91	88	85	83	74	72	71	62	61	59	50	49	49	43				
2	92	85	80	76	84	79	75	71	67	64	61	56	54	52	46	45	44	39				
3	85	77	70	65	78	71	66	61	61	57	54	51	49	46	43	41	39	35				
4	78	69	62	57	72	64	58	54	55	51	47	47	44	41	39	37	36	32				
5	73	62	55	50	67	58	52	47	51	46	42	43	40	37	36	34	32	29				
6	68	57	50	44	62	53	47	42	46	41	38	40	36	34	34	31	29	27				
7	63	52	45	40	58	49	42	38	43	38	34	37	33	30	31	29	27	24				
8	59	48	41	36	54	45	39	34	39	34	31	34	30	28	29	27	25	22				
9	55	44	37	32	51	41	35	31	36	32	28	32	28	26	27	25	23	21				
10	52	41	34	30	48	38	32	28	34	29	26	30	26	24	26	23	21	19				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14812	14812	14812
5°	14573	14537	14645
10°	13636	13818	14204
15°	12396	12790	13501
20°	11003	11576	12590
25°	9582	10342	11568
30°	8209	9110	10599
35°	6805	7733	9429
40°	5229	6183	8036
45°	3780	4682	6465
50°	2575	3489	5128
55°	1674	2524	3986
60°	960	1777	2880
65°	255	1085	1458
70°	127	334	418
75°	57	29	0
80°	43	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.5	3.6
10°-20°	374.7	9.3
20°-30°	469.0	11.6
30°-40°	433.2	10.8
40°-50°	291.1	7.2
50°-60°	150.4	3.7
60°-70°	47.1	1.2
70°-80°	3.0	0.1
80°-90°	0.1	0.0
90°-100°	168.2	4.2
100°-110°	406.5	10.1
110°-120°	433.5	10.8
120°-130°	351.1	8.7
130°-140°	271.8	6.7
140°-150°	207.4	5.1
150°-160°	150.1	3.7
160°-170°	92.5	2.3
170°-180°	31.3	0.8
0°-30°	990.2	24.6
0°-40°	1423.5	35.3
0°-60°	1864.9	46.3
0°-90°	1915.1	47.6
90°-120°	1008.1	25.0
90°-150°	1838.5	45.6
90°-180°	2112.0	52.4
0°-180°	4027.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1605	1605	1605	1605	1605	
5°	1574	1558	1570	1575	1581	146
15°	1298	1293	1339	1384	1414	361
25°	941	949	1016	1085	1136	432
35°	604	619	687	767	837	374
45°	290	307	359	429	496	228
55°	104	122	157	201	248	97
65°	12	22	50	60	67	20
75°	2	2	1	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: P521053

CATALOG NUMBER: SQ4-BB-050U-075D-93050-1D-UNV-STD-W-4 (5000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1605.4	1605.4	1605.4	1605.4	1605.4
2.5°	1609.1	1593.9	1597.9	1597.8	1593.6
5°	1573.5	1557.6	1569.6	1575.2	1581.3
7.5°	1507.0	1494.6	1517.8	1535.1	1547.7
10°	1455.5	1444.8	1474.9	1498.6	1516.1
12.5°	1395.8	1387.6	1423.9	1456.4	1478.8
15°	1297.8	1293.3	1339.0	1383.9	1413.5
17.5°	1192.8	1192.7	1244.8	1300.6	1336.3
20°	1120.7	1123.0	1179.0	1240.5	1282.3
22.5°	1048.7	1054.0	1113.7	1177.9	1225.7
25°	941.3	948.9	1015.9	1085.4	1136.3
27.5°	838.2	849.3	919.7	992.0	1053.9
30°	770.5	783.4	855.1	931.1	994.9
32.5°	704.0	719.3	789.2	869.6	934.6
35°	604.2	619.4	686.6	767.4	837.2
37.5°	501.3	516.1	581.7	661.3	736.7
40°	434.2	450.9	513.4	590.5	667.2
42.5°	373.3	390.0	448.8	524.5	596.9
45°	289.7	307.2	358.8	428.7	495.5
47.5°	220.4	239.4	284.7	347.9	408.8
50°	179.4	198.4	243.1	298.8	357.3
52.5°	146.5	164.9	205.2	257.7	311.3
55°	104.1	121.5	156.9	201.4	247.8
57.5°	71.9	87.0	118.7	155.8	192.1
60°	52.0	66.5	96.3	126.5	156.1
62.5°	34.6	47.9	77.0	100.2	120.1
65°	11.7	22.3	49.7	60.0	66.8
67.5°	5.9	7.1	26.1	27.5	29.8
70°	4.7	4.7	12.4	13.3	15.5
72.5°	3.4	3.4	5.0	6.4	6.8
75°	1.6	1.6	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	0.0	0.0
80°	0.8	0.8	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°	5.5	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

TEST NUMBER: P521053

CATALOG NUMBER: SQ4-BB-050U-075D-93050-1D-UNV-STD-W-4 (5000K)

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)