

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: P521079

Luminaire Tested: **SQ4-BB-050U-125D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521079
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-125D-93050-1D-UNV-STD-W-4 (5000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 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

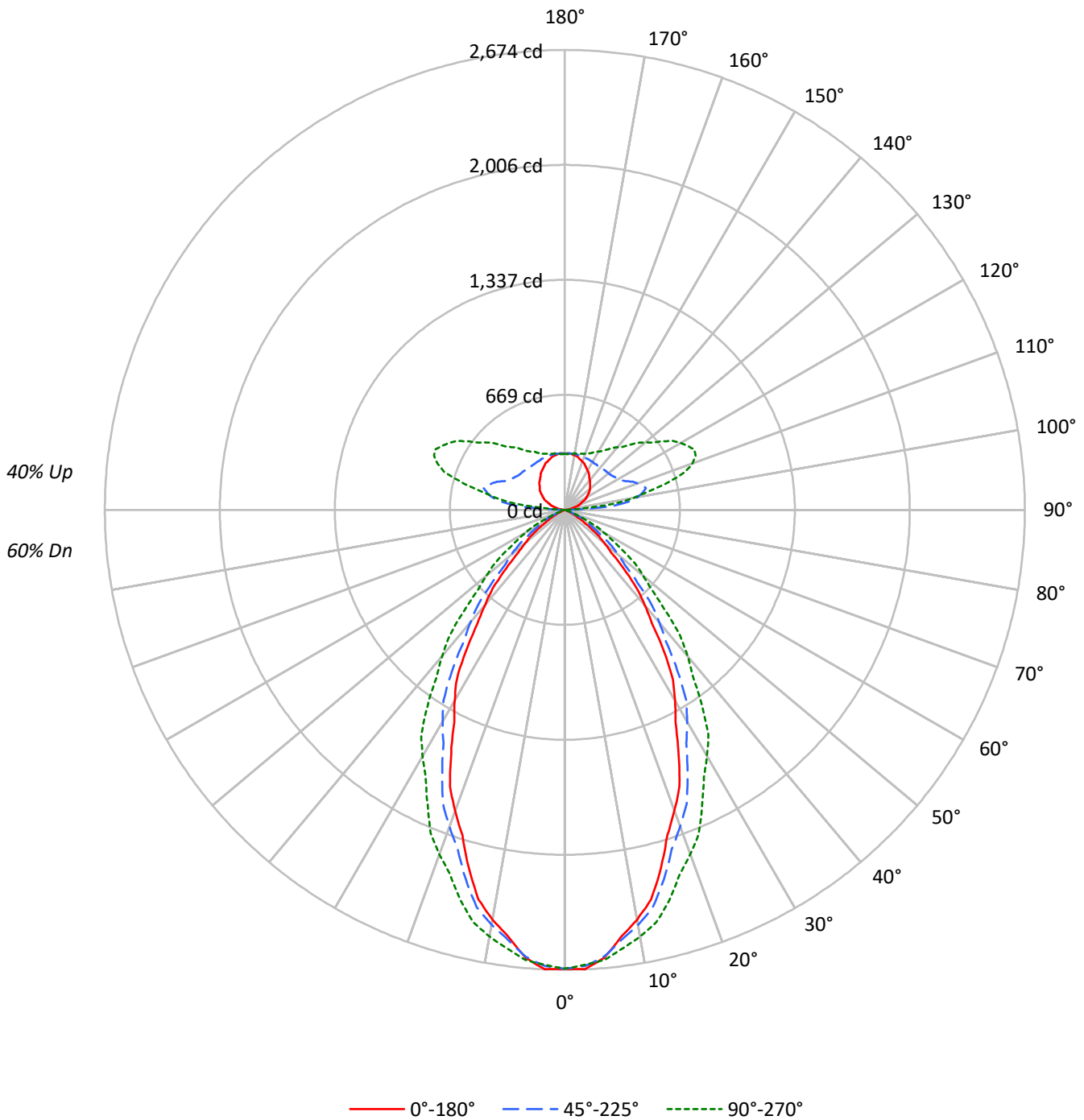
Lumens per Lamp: N/A
Luminaire Lumens: 5294.8 lumens
Efficiency: N/A
Efficacy: 74.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 71.5
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	0
RCR																		
0	110	110	110	110	102	102	102	102	89	89	89	77	77	77	65	65	65	60
1	102	99	95	93	96	93	90	87	81	79	77	71	69	68	61	60	59	55
2	95	89	84	79	89	84	79	75	74	71	68	65	62	60	57	55	53	50
3	88	80	74	69	82	76	70	66	67	63	60	59	56	54	52	50	48	45
4	82	72	66	61	77	69	63	58	61	57	53	55	51	48	48	46	44	41
5	76	66	59	54	71	63	56	52	56	51	47	50	46	43	45	42	40	37
6	71	60	53	48	67	57	51	46	52	47	43	46	42	39	41	38	36	34
7	66	55	48	43	62	53	46	42	48	42	39	43	39	36	39	35	33	31
8	62	51	44	39	58	49	42	38	44	39	35	40	36	33	36	33	30	28
9	58	47	40	36	55	45	39	35	41	36	32	37	33	30	34	30	28	26
10	55	44	37	33	52	42	36	32	38	33	30	35	31	28	32	28	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	24614	24614	24614
5°	24217	24158	24336
10°	22660	22961	23602
15°	20600	21253	22437
20°	18286	19236	20922
25°	15925	17186	19222
30°	13640	15139	17613
35°	11309	12850	15670
40°	8690	10275	13353
45°	6281	7780	10744
50°	4279	5799	8522
55°	2781	4193	6622
60°	1596	2952	4787
65°	424	1803	2423
70°	208	558	696
75°	93	46	0
80°	69	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.5	4.6
10°-20°	622.6	11.8
20°-30°	779.4	14.7
30°-40°	719.9	13.6
40°-50°	483.8	9.1
50°-60°	249.9	4.7
60°-70°	78.3	1.5
70°-80°	5.0	0.1
80°-90°	0.1	0.0
90°-100°	168.2	3.2
100°-110°	406.5	7.7
110°-120°	433.5	8.2
120°-130°	351.1	6.6
130°-140°	271.8	5.1
140°-150°	207.4	3.9
150°-160°	150.1	2.8
160°-170°	92.5	1.7
170°-180°	31.3	0.6
0°-30°	1645.5	31.1
0°-40°	2365.5	44.7
0°-60°	3099.1	58.5
0°-90°	3182.4	60.1
90°-120°	1008.1	19.0
90°-150°	1838.5	34.7
90°-180°	2112.0	39.9
0°-180°	5294.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2668	2668	2668	2668	2668	
5°	2615	2588	2608	2618	2628	242
15°	2157	2149	2225	2300	2349	601
25°	1564	1577	1688	1804	1888	717
35°	1004	1029	1141	1275	1391	622
45°	481	510	596	712	823	378
55°	173	202	261	335	412	161
65°	19	37	83	100	111	33
75°	3	3	1	0	0	4
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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2667.8	2667.8	2667.8	2667.8	2667.8
2.5°	2674.0	2648.7	2655.4	2655.2	2648.1
5°	2614.8	2588.3	2608.4	2617.7	2627.7
7.5°	2504.4	2483.7	2522.2	2551.0	2572.0
10°	2418.7	2401.0	2450.9	2490.3	2519.3
12.5°	2319.5	2305.9	2366.3	2420.3	2457.4
15°	2156.7	2149.1	2225.1	2299.8	2349.0
17.5°	1982.2	1981.9	2068.6	2161.4	2220.7
20°	1862.4	1866.2	1959.2	2061.4	2130.9
22.5°	1742.6	1751.5	1850.8	1957.4	2036.9
25°	1564.3	1576.9	1688.2	1803.7	1888.2
27.5°	1392.9	1411.3	1528.4	1648.4	1751.4
30°	1280.3	1301.8	1421.0	1547.3	1653.3
32.5°	1169.8	1195.3	1311.6	1445.1	1553.2
35°	1004.1	1029.4	1140.9	1275.2	1391.3
37.5°	833.0	857.7	966.7	1098.9	1224.3
40°	721.5	749.2	853.1	981.2	1108.7
42.5°	620.3	648.0	745.7	871.6	992.0
45°	481.4	510.4	596.3	712.4	823.4
47.5°	366.3	397.8	473.1	578.2	679.4
50°	298.1	329.7	404.0	496.5	593.7
52.5°	243.4	274.0	341.0	428.2	517.3
55°	172.9	202.0	260.7	334.7	411.7
57.5°	119.5	144.5	197.2	259.0	319.3
60°	86.5	110.5	160.0	210.2	259.4
62.5°	57.6	79.5	128.0	166.5	199.5
65°	19.4	37.0	82.6	99.6	111.0
67.5°	9.8	11.8	43.4	45.8	49.6
70°	7.7	7.7	20.7	22.0	25.8
72.5°	5.7	5.7	8.3	10.6	11.4
75°	2.6	2.6	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°	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)