

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P518473

Luminaire Tested: **SQ4-BB-050U-125D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518473
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-050U-125D-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

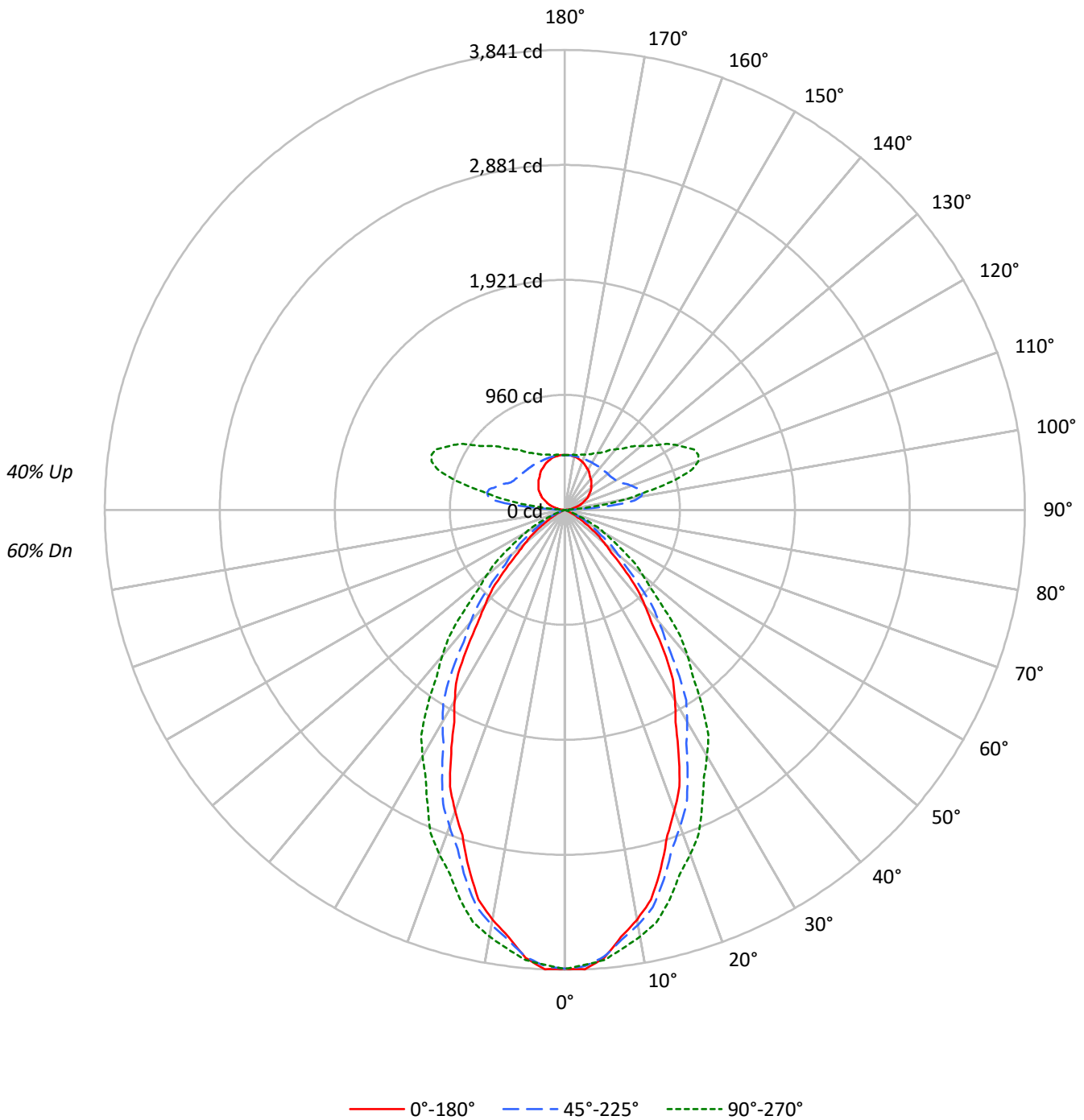
Lumens per Lamp: N/A
Luminaire Lumens: 7561.1 lumens
Efficiency: N/A
Efficacy: 86.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 87.8
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	0
RCR																		
0	110	110	110	110	102	102	102	102	89	89	89	77	77	77	66	66	66	60
1	102	99	96	93	96	93	90	88	81	79	78	71	70	68	61	61	60	55
2	95	89	84	79	89	84	79	76	74	71	68	65	63	61	57	55	54	50
3	88	80	74	69	83	76	70	66	67	63	60	60	57	54	52	50	48	45
4	82	73	66	61	77	69	63	58	61	57	53	55	51	48	48	46	44	41
5	76	66	59	54	72	63	56	52	56	51	48	50	47	44	45	42	40	37
6	71	60	53	48	67	57	51	46	52	47	43	47	43	40	42	39	36	34
7	66	55	48	43	62	53	46	42	48	43	39	43	39	36	39	36	33	31
8	62	51	44	39	59	49	42	38	44	39	35	40	36	33	36	33	31	29
9	58	47	40	36	55	45	39	35	41	36	33	37	33	30	34	31	28	26
10	55	44	37	33	52	42	36	32	38	33	30	35	31	28	32	29	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23571	23571	23571
5°	23191	23134	23306
10°	21699	21989	22603
15°	19727	20353	21486
20°	17511	18421	20035
25°	15250	16458	18408
30°	13062	14497	16867
35°	10831	12306	15007
40°	8322	9840	12787
45°	6015	7450	10289
50°	4098	5553	8160
55°	2664	4016	6342
60°	1528	2828	4584
65°	405	1728	2320
70°	200	534	667
75°	88	45	0
80°	67	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	349.7	4.6
10°-20°	894.4	11.8
20°-30°	1119.6	14.8
30°-40°	1034.2	13.7
40°-50°	694.9	9.2
50°-60°	358.9	4.7
60°-70°	112.4	1.5
70°-80°	7.1	0.1
80°-90°	1.9	0.0
90°-100°	219.7	2.9
100°-110°	596.8	7.9
110°-120°	613.6	8.1
120°-130°	490.6	6.5
130°-140°	385.5	5.1
140°-150°	295.6	3.9
150°-160°	212.5	2.8
160°-170°	130.0	1.7
170°-180°	43.8	0.6
0°-30°	2363.7	31.3
0°-40°	3397.9	44.9
0°-60°	4451.8	58.9
0°-90°	4573.2	60.5
90°-120°	1430.0	18.9
90°-150°	2601.6	34.4
90°-180°	2988.0	39.5
0°-180°	7561.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3832	3832	3832	3832	3832	
5°	3756	3718	3747	3760	3775	348
15°	3098	3087	3196	3304	3374	863
25°	2247	2265	2425	2591	2712	1030
35°	1442	1479	1639	1832	1999	894
45°	692	733	856	1023	1183	543
55°	248	290	374	481	591	232
65°	28	53	119	143	159	47
75°	4	4	2	0	0	5
85°	0	0	0	0	0	0
90°	2	6	10	13	13	2
95°	32	120	383	166	112	34
105°	106	165	656	999	940	113
115°	188	229	525	1045	1190	186
125°	259	295	475	801	945	231
135°	312	346	462	652	736	241
145°	360	386	456	554	596	226
155°	408	422	453	498	512	188
165°	441	447	455	474	475	125
175°	458	459	456	462	461	43
180°	458	458	458	458	458	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3832.2	3832.2	3832.2	3832.2	3832.2
2.5°	3841.1	3804.8	3814.4	3814.1	3804.0
5°	3756.1	3718.1	3746.9	3760.2	3774.7
7.5°	3597.4	3567.7	3623.0	3664.5	3694.6
10°	3474.3	3449.0	3520.7	3577.3	3618.9
12.5°	3332.0	3312.4	3399.1	3476.7	3530.0
15°	3098.0	3087.1	3196.2	3303.5	3374.2
17.5°	2847.3	2847.0	2971.5	3104.7	3189.9
20°	2675.3	2680.7	2814.3	2961.2	3060.9
22.5°	2503.2	2515.9	2658.6	2811.7	2925.9
25°	2247.0	2265.1	2425.0	2590.9	2712.4
27.5°	2000.8	2027.3	2195.5	2367.9	2515.8
30°	1839.1	1870.0	2041.2	2222.7	2374.9
32.5°	1680.4	1717.1	1884.0	2075.9	2231.1
35°	1442.4	1478.6	1638.9	1831.8	1998.6
37.5°	1196.6	1232.1	1388.6	1578.5	1758.7
40°	1036.4	1076.2	1225.5	1409.5	1592.6
42.5°	891.0	930.9	1071.2	1252.0	1425.0
45°	691.5	733.2	856.5	1023.3	1182.8
47.5°	526.2	571.5	679.7	830.5	975.9
50°	428.3	473.6	580.3	713.2	852.8
52.5°	349.7	393.5	489.8	615.1	743.1
55°	248.4	290.1	374.5	480.8	591.4
57.5°	171.7	207.6	283.3	372.0	458.7
60°	124.2	158.7	229.9	301.9	372.6
62.5°	82.7	114.2	183.9	239.1	286.6
65°	27.8	53.2	118.7	143.1	159.4
67.5°	14.1	17.0	62.3	65.8	71.2
70°	11.1	11.1	29.7	31.6	37.1
72.5°	8.2	8.2	11.9	15.2	16.3
75°	3.7	3.7	1.9	0.0	0.0
77.5°	1.9	1.9	1.5	0.0	0.0
80°	1.9	1.9	0.0	0.0	0.0
82.5°	0.4	0.4	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	1.2	2.1	2.6	2.6
90°	1.5	5.8	10.3	13.2	13.2
92.5°	13.2	60.1	104.5	44.9	38.0
95°	32.4	120.1	382.6	166.5	111.8
97.5°	53.6	132.7	586.5	456.3	320.5
100°	67.7	141.1	648.9	657.8	531.2
102.5°	81.8	149.4	665.4	813.5	701.9
105°	105.9	164.9	656.3	999.2	940.2
107.5°	131.0	183.0	618.3	1095.1	1111.5
110°	148.6	196.1	590.0	1114.0	1184.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	163.9	209.1	561.8	1098.3	1204.5
115°	188.3	228.6	525.3	1045.1	1190.4
117.5°	211.3	249.9	502.0	969.6	1133.3
120°	226.6	264.0	491.5	918.9	1081.5
122.5°	239.5	277.0	484.4	868.2	1025.0
125°	259.0	294.9	475.3	800.8	944.7
127.5°	276.3	312.0	470.3	749.7	873.1
130°	286.9	321.5	467.9	717.6	828.4
132.5°	297.5	332.1	465.6	690.3	788.4
135°	311.9	346.5	462.0	652.3	735.7
137.5°	327.5	358.9	460.3	618.7	688.9
140°	337.0	367.2	459.1	597.4	660.7
142.5°	346.4	374.3	457.9	580.6	633.6
145°	360.5	386.4	456.1	554.2	595.9
147.5°	376.4	398.5	454.7	533.4	566.2
150°	387.0	405.7	454.7	521.5	547.4
152.5°	395.2	411.6	453.5	510.8	532.1
155°	407.6	422.0	453.2	497.7	512.1
157.5°	419.6	430.9	453.2	488.8	499.7
160°	426.7	436.8	453.2	482.8	491.5
162.5°	433.8	441.5	454.4	478.1	484.4
165°	441.4	447.2	454.7	473.8	475.3
167.5°	449.4	452.2	456.1	468.8	470.0
170°	451.7	454.6	456.1	466.4	466.4
172.5°	454.1	455.8	456.1	464.1	464.1
175°	457.6	459.1	456.1	462.0	460.6
177.5°	458.8	458.8	455.3	459.9	457.6
180°	457.6	457.6	457.6	457.6	457.6

(END OF REPORT)