

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: P518457

Luminaire Tested: **SQ4-BB-050U-100D-930-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518457
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-100D-930-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

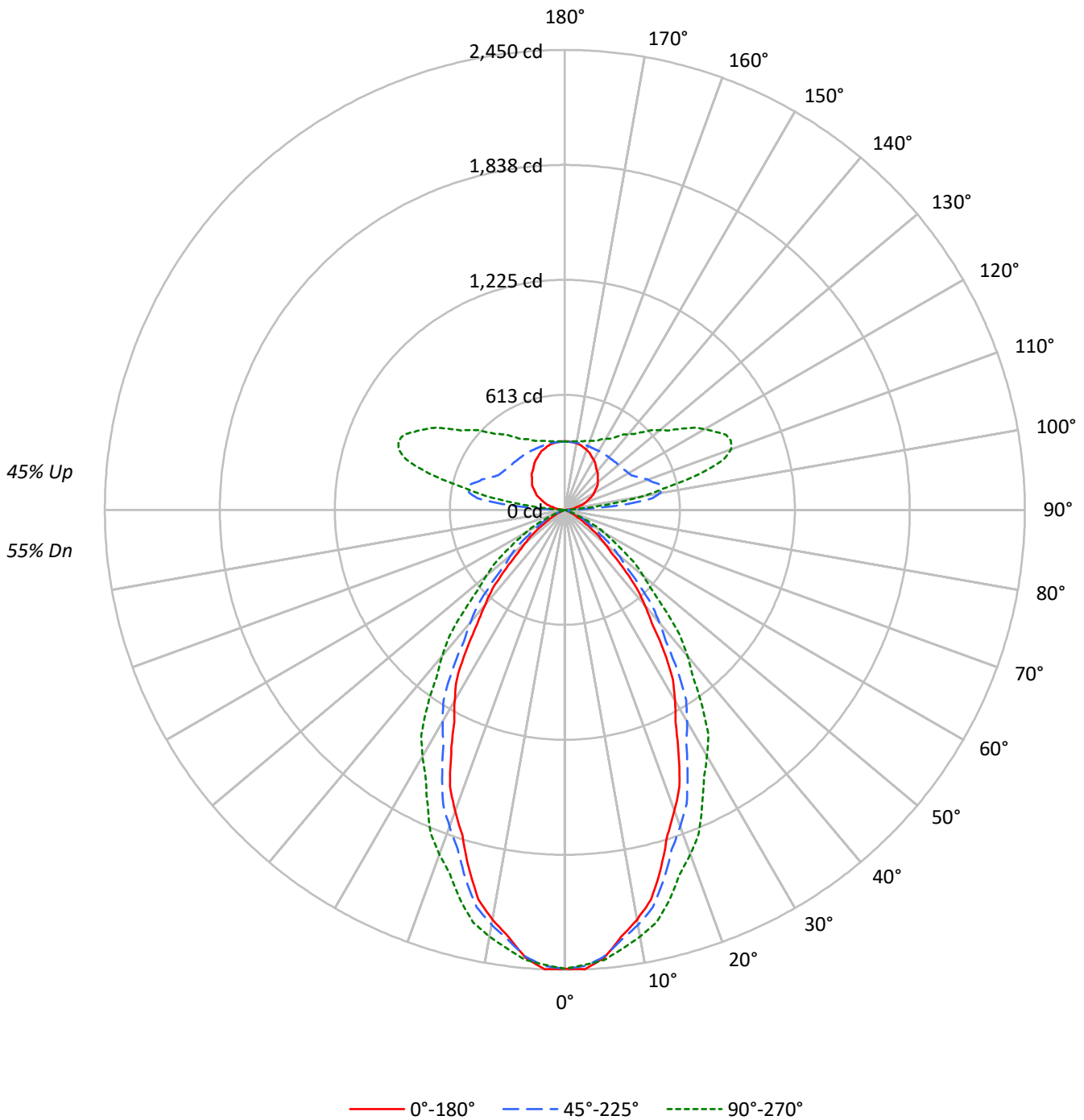
Lumens per Lamp: N/A
Luminaire Lumens: 5294.9 lumens
Efficiency: N/A
Efficacy: 72.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 73.4
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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	55
1	101	97	94	91	94	91	88	86	78	77	75	67	66	65	57	56	55	50
2	94	87	82	78	87	82	77	74	71	68	65	61	59	57	52	51	50	45
3	87	79	72	67	81	74	68	64	65	61	57	56	53	51	48	46	45	41
4	80	71	64	59	75	67	61	56	59	54	51	52	48	46	45	42	40	37
5	75	65	57	52	70	61	55	50	54	49	45	47	44	41	41	39	37	34
6	70	59	52	46	65	56	49	45	49	44	41	44	40	37	38	36	33	31
7	65	54	47	42	61	51	45	40	46	41	37	41	37	34	36	33	31	28
8	61	50	43	38	57	47	41	36	42	37	34	38	34	31	33	30	28	26
9	57	46	39	34	53	44	37	33	39	34	31	35	31	28	31	28	26	24
10	54	42	36	31	50	40	34	30	36	32	28	33	29	26	29	26	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15034	15034	15034
5°	14793	14756	14866
10°	13841	14026	14417
15°	12583	12982	13705
20°	11169	11750	12780
25°	9727	10498	11742
30°	8332	9247	10759
35°	6908	7850	9572
40°	5307	6277	8156
45°	3837	4752	6563
50°	2614	3541	5206
55°	1700	2562	4045
60°	974	1803	2924
65°	258	1102	1480
70°	128	340	426
75°	57	29	0
80°	43	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.1	4.2
10°-20°	570.5	10.8
20°-30°	714.2	13.5
30°-40°	659.7	12.5
40°-50°	443.3	8.4
50°-60°	228.9	4.3
60°-70°	71.7	1.4
70°-80°	4.5	0.1
80°-90°	1.5	0.0
90°-100°	174.8	3.3
100°-110°	474.9	9.0
110°-120°	488.2	9.2
120°-130°	390.4	7.4
130°-140°	306.7	5.8
140°-150°	235.2	4.4
150°-160°	169.1	3.2
160°-170°	103.4	2.0
170°-180°	34.8	0.7
0°-30°	1507.7	28.5
0°-40°	2167.4	40.9
0°-60°	2839.6	53.6
0°-90°	2917.3	55.1
90°-120°	1137.9	21.5
90°-150°	2070.2	39.1
90°-180°	2378.0	44.9
0°-180°	5294.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2444	2444	2444	2444	2444	
5°	2396	2372	2390	2398	2408	222
15°	1976	1969	2039	2107	2152	550
25°	1433	1445	1547	1653	1730	657
35°	920	943	1045	1168	1275	570
45°	441	468	546	653	754	346
55°	158	185	239	307	377	148
65°	18	34	76	91	102	30
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	1	5	8	10	10	2
95°	26	96	304	132	89	27
105°	84	131	522	795	748	90
115°	150	182	418	832	947	148
125°	206	235	378	637	752	184
135°	248	276	368	519	585	192
145°	287	308	363	441	474	180
155°	324	336	361	396	408	150
165°	351	356	362	377	378	99
175°	364	365	363	368	366	35
180°	364	364	364	364	364	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2444.3	2444.3	2444.3	2444.3	2444.3
2.5°	2450.0	2426.9	2433.0	2432.8	2426.4
5°	2395.9	2371.6	2389.9	2398.4	2407.7
7.5°	2294.6	2275.7	2310.9	2337.4	2356.6
10°	2216.1	2199.9	2245.7	2281.8	2308.3
12.5°	2125.3	2112.8	2168.1	2217.6	2251.6
15°	1976.0	1969.1	2038.7	2107.2	2152.2
17.5°	1816.2	1815.9	1895.4	1980.4	2034.7
20°	1706.4	1709.9	1795.1	1888.8	1952.4
22.5°	1596.7	1604.8	1695.8	1793.5	1866.3
25°	1433.3	1444.8	1546.8	1652.6	1730.1
27.5°	1276.2	1293.1	1400.4	1510.4	1604.7
30°	1173.1	1192.8	1302.0	1417.7	1514.9
32.5°	1071.9	1095.2	1201.7	1324.1	1423.1
35°	920.0	943.2	1045.4	1168.4	1274.8
37.5°	763.2	785.9	885.7	1006.8	1121.8
40°	661.0	686.5	781.7	899.0	1015.8
42.5°	568.3	593.8	683.3	798.6	908.9
45°	441.1	467.7	546.3	652.7	754.5
47.5°	335.6	364.5	433.5	529.8	622.5
50°	273.2	302.1	370.1	454.9	544.0
52.5°	223.0	251.0	312.4	392.3	474.0
55°	158.5	185.1	238.9	306.7	377.2
57.5°	109.5	132.4	180.7	237.3	292.6
60°	79.2	101.2	146.6	192.6	237.7
62.5°	52.7	72.9	117.3	152.5	182.8
65°	17.7	33.9	75.7	91.3	101.7
67.5°	9.0	10.8	39.7	41.9	45.4
70°	7.1	7.1	18.9	20.2	23.7
72.5°	5.2	5.2	7.6	9.7	10.4
75°	2.4	2.4	1.2	0.0	0.0
77.5°	1.2	1.2	0.9	0.0	0.0
80°	1.2	1.2	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°	0.2	0.9	1.6	2.1	2.1
90°	1.2	4.6	8.2	10.5	10.5
92.5°	10.5	47.9	83.1	35.7	30.2
95°	25.8	95.6	304.4	132.5	89.0
97.5°	42.6	105.6	466.7	363.1	255.0
100°	53.9	112.2	516.4	523.4	422.7
102.5°	65.1	118.9	529.5	647.4	558.5
105°	84.3	131.2	522.2	795.1	748.2
107.5°	104.2	145.7	492.0	871.4	884.5
110°	118.3	156.0	469.5	886.5	942.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	130.4	166.4	447.0	874.0	958.5
115°	149.9	181.9	418.0	831.6	947.2
117.5°	168.1	198.8	399.5	771.5	901.8
120°	180.3	210.1	391.1	731.2	860.6
122.5°	190.6	220.4	385.5	690.9	815.6
125°	206.1	234.7	378.2	637.2	751.7
127.5°	219.9	248.3	374.2	596.6	694.8
130°	228.3	255.8	372.3	571.1	659.2
132.5°	236.8	264.2	370.5	549.3	627.4
135°	248.2	275.7	367.7	519.0	585.4
137.5°	260.6	285.6	366.3	492.3	548.2
140°	268.1	292.2	365.3	475.4	525.7
142.5°	275.6	297.8	364.4	462.1	504.2
145°	286.9	307.5	363.0	441.0	474.2
147.5°	299.5	317.1	361.8	424.5	450.6
150°	307.9	322.8	361.8	415.0	435.6
152.5°	314.5	327.6	360.9	406.4	423.4
155°	324.3	335.8	360.6	396.0	407.5
157.5°	333.9	342.9	360.6	388.9	397.6
160°	339.6	347.6	360.6	384.2	391.1
162.5°	345.2	351.4	361.6	380.4	385.5
165°	351.3	355.8	361.8	377.1	378.2
167.5°	357.6	359.9	363.0	373.1	374.0
170°	359.5	361.8	363.0	371.2	371.2
172.5°	361.3	362.7	363.0	369.3	369.3
175°	364.1	365.3	363.0	367.6	366.5
177.5°	365.1	365.1	362.3	366.0	364.1
180°	364.1	364.1	364.1	364.1	364.1

(END OF REPORT)