

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: P518326

Luminaire Tested: **SQ4-BB-025U-075D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518326
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, 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-025U-075D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

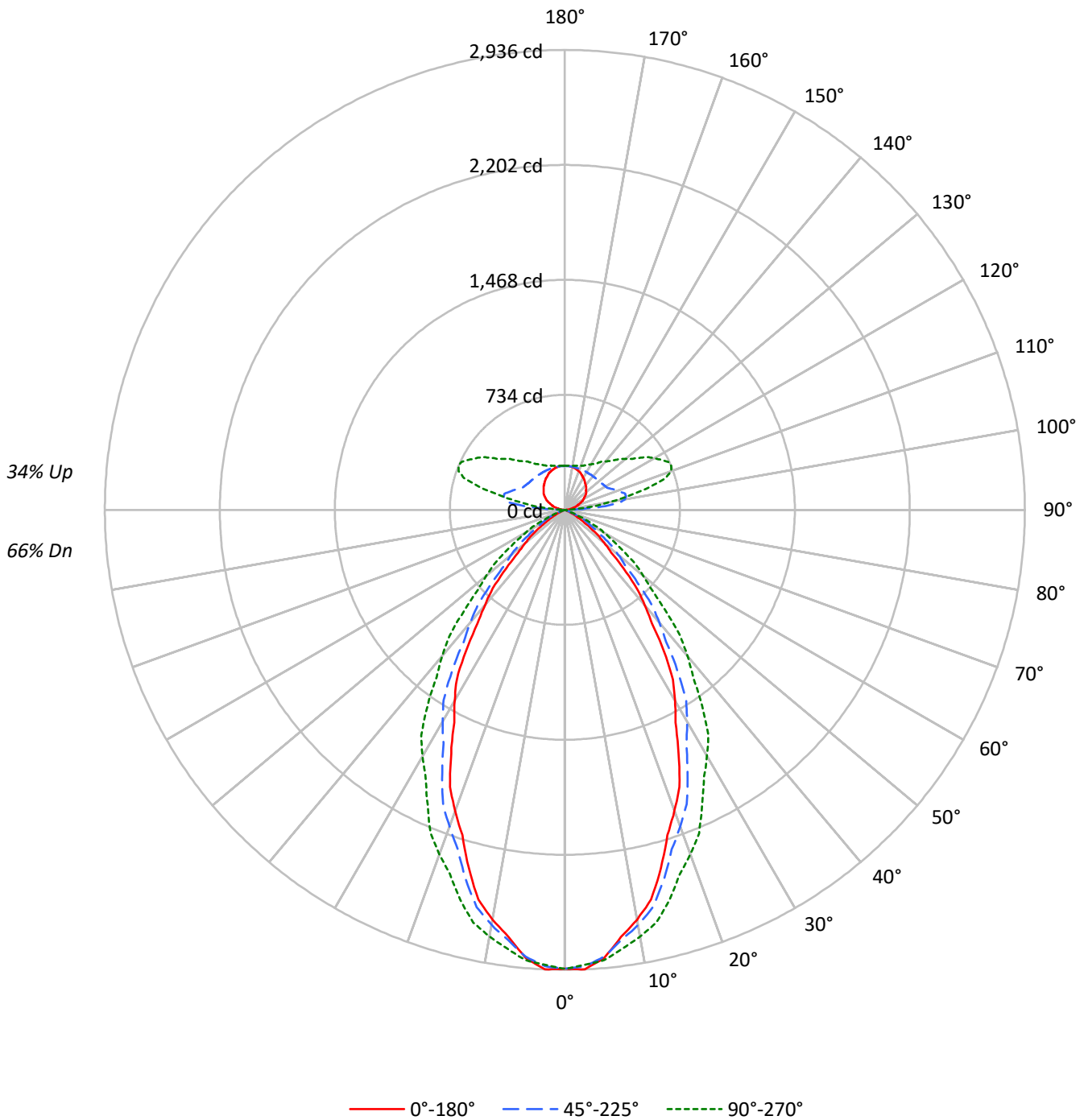
Lumens per Lamp: N/A
Luminaire Lumens: 5319.5 lumens
Efficiency: N/A
Efficacy: 82.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 64.9
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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	71	71	71	66
1	104	100	97	94	98	95	92	89	84	82	80	75	73	72	66	65	64	60
2	96	90	85	81	91	86	81	77	77	73	71	69	66	64	61	59	58	54
3	90	82	75	71	84	78	72	68	70	66	62	63	60	57	56	54	52	49
4	83	74	67	62	79	71	65	60	64	59	56	58	54	51	52	49	47	44
5	78	67	60	55	73	64	58	53	59	54	50	53	49	46	48	45	43	40
6	72	62	55	49	68	59	53	48	54	49	45	49	45	42	45	42	39	37
7	68	57	50	45	64	54	48	43	50	45	41	46	41	38	42	38	36	34
8	63	52	45	41	60	50	44	39	46	41	37	43	38	35	39	36	33	31
9	60	48	42	37	57	47	40	36	43	38	34	40	35	32	37	33	31	29
10	56	45	38	34	53	43	37	33	40	35	32	37	33	30	34	31	28	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13514	13514	13514
5°	13297	13264	13362
10°	12441	12607	12959
15°	11310	11669	12319
20°	10040	10562	11487
25°	8743	9436	10554
30°	7489	8312	9671
35°	6209	7056	8604
40°	4771	5641	7331
45°	3449	4272	5899
50°	2350	3184	4678
55°	1527	2303	3636
60°	876	1621	2629
65°	233	990	1331
70°	115	306	382
75°	50	25	0
80°	37	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	267.3	5.0
10°-20°	683.7	12.9
20°-30°	855.9	16.1
30°-40°	790.6	14.9
40°-50°	531.2	10.0
50°-60°	274.4	5.2
60°-70°	85.9	1.6
70°-80°	5.4	0.1
80°-90°	1.6	0.0
90°-100°	137.1	2.6
100°-110°	360.4	6.8
110°-120°	373.8	7.0
120°-130°	299.8	5.6
130°-140°	235.2	4.4
140°-150°	180.5	3.4
150°-160°	130.0	2.4
160°-170°	79.6	1.5
170°-180°	26.9	0.5
0°-30°	1806.9	34.0
0°-40°	2597.5	48.8
0°-60°	3403.1	64.0
0°-90°	3496.1	65.7
90°-120°	871.3	16.4
90°-150°	1586.9	29.8
90°-180°	1823.0	34.3
0°-180°	5319.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2930	2930	2930	2930	2930	
5°	2871	2842	2864	2874	2886	266
15°	2368	2360	2443	2525	2579	660
25°	1718	1732	1854	1981	2073	788
35°	1103	1130	1253	1400	1528	683
45°	529	560	655	782	904	415
55°	190	222	286	368	452	177
65°	21	41	91	109	122	36
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	2	5	14	7	7	2
95°	18	71	236	122	83	20
105°	65	98	398	605	564	69
115°	115	140	319	637	727	114
125°	160	180	290	491	579	142
135°	191	211	281	396	449	148
145°	222	236	278	338	364	139
155°	251	258	278	305	314	115
165°	270	274	278	289	292	76
175°	281	281	280	283	283	27
180°	281	281	281	281	281	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2929.5	2929.5	2929.5	2929.5	2929.5
2.5°	2936.3	2908.6	2915.9	2915.7	2907.9
5°	2871.4	2842.3	2864.3	2874.5	2885.5
7.5°	2750.0	2727.3	2769.6	2801.3	2824.3
10°	2655.9	2636.5	2691.4	2734.6	2766.5
12.5°	2547.1	2532.1	2598.4	2657.7	2698.5
15°	2368.2	2359.9	2443.4	2525.4	2579.4
17.5°	2176.6	2176.3	2271.6	2373.4	2438.5
20°	2045.1	2049.3	2151.4	2263.7	2339.9
22.5°	1913.6	1923.3	2032.3	2149.4	2236.7
25°	1717.7	1731.6	1853.8	1980.6	2073.4
27.5°	1529.5	1549.7	1678.3	1810.1	1923.2
30°	1405.9	1429.5	1560.4	1699.1	1815.5
32.5°	1284.6	1312.6	1440.2	1586.9	1705.5
35°	1102.6	1130.3	1252.9	1400.3	1527.8
37.5°	914.7	941.9	1061.5	1206.7	1344.4
40°	792.2	822.7	936.8	1077.5	1217.4
42.5°	681.1	711.6	818.9	957.1	1089.3
45°	528.6	560.5	654.8	782.3	904.2
47.5°	402.2	436.9	519.6	634.9	746.0
50°	327.4	362.0	443.6	545.2	651.9
52.5°	267.3	300.8	374.4	470.2	568.0
55°	189.9	221.8	286.3	367.6	452.1
57.5°	131.2	158.7	216.6	284.4	350.6
60°	95.0	121.3	175.7	230.8	284.9
62.5°	63.2	87.3	140.6	182.8	219.1
65°	21.3	40.7	90.7	109.4	121.9
67.5°	10.8	13.0	47.6	50.3	54.4
70°	8.5	8.5	22.7	24.2	28.3
72.5°	6.2	6.2	9.1	11.6	12.5
75°	2.8	2.8	1.4	0.0	0.0
77.5°	1.4	1.4	1.1	0.0	0.0
80°	1.4	1.4	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°	0.4	1.1	2.9	1.4	1.4
90°	1.8	5.3	14.4	7.2	7.2
92.5°	7.6	36.5	80.8	35.8	23.1
95°	18.0	70.9	236.2	121.7	83.0
97.5°	31.4	77.9	353.5	281.1	207.0
100°	41.5	83.8	389.5	394.7	306.6
102.5°	50.1	89.6	399.6	491.7	416.2
105°	64.9	98.4	398.5	605.0	564.5
107.5°	80.1	111.1	375.8	663.9	673.7
110°	90.2	118.4	357.1	679.0	721.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	100.3	127.1	339.8	669.4	734.3
115°	115.4	140.1	319.2	636.8	726.8
117.5°	130.2	152.8	305.1	591.6	691.4
120°	138.9	160.0	299.4	561.3	658.2
122.5°	147.5	168.7	295.0	530.9	626.5
125°	160.5	179.9	290.3	490.7	578.9
127.5°	171.0	190.7	286.4	458.3	532.7
130°	176.7	197.9	284.9	438.0	506.7
132.5°	182.5	203.7	283.5	420.5	482.2
135°	191.2	210.6	281.3	396.1	449.0
137.5°	200.2	219.2	281.0	377.9	421.3
140°	207.4	225.0	279.5	363.4	404.0
142.5°	213.2	229.4	279.5	353.2	388.1
145°	221.8	235.9	277.7	337.8	364.3
147.5°	230.5	244.2	277.7	325.1	347.0
150°	236.2	248.6	277.7	317.8	335.4
152.5°	242.0	251.5	277.7	311.9	325.3
155°	250.7	257.7	277.7	305.0	313.8
157.5°	257.2	263.9	277.7	298.8	305.1
160°	261.5	266.8	277.7	295.8	299.4
162.5°	265.8	269.7	277.7	292.9	296.5
165°	270.5	274.0	277.7	288.6	292.1
167.5°	274.8	276.6	279.5	286.8	288.2
170°	277.7	279.5	279.5	286.7	286.7
172.5°	279.2	279.5	279.5	285.3	283.9
175°	281.3	281.3	279.5	283.1	283.1
177.5°	281.3	281.3	279.9	282.7	281.3
180°	281.3	281.3	281.3	281.3	281.3

(END OF REPORT)