

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: P518356

Luminaire Tested: **SQ4-BB-025U-100D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518356
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-100D-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

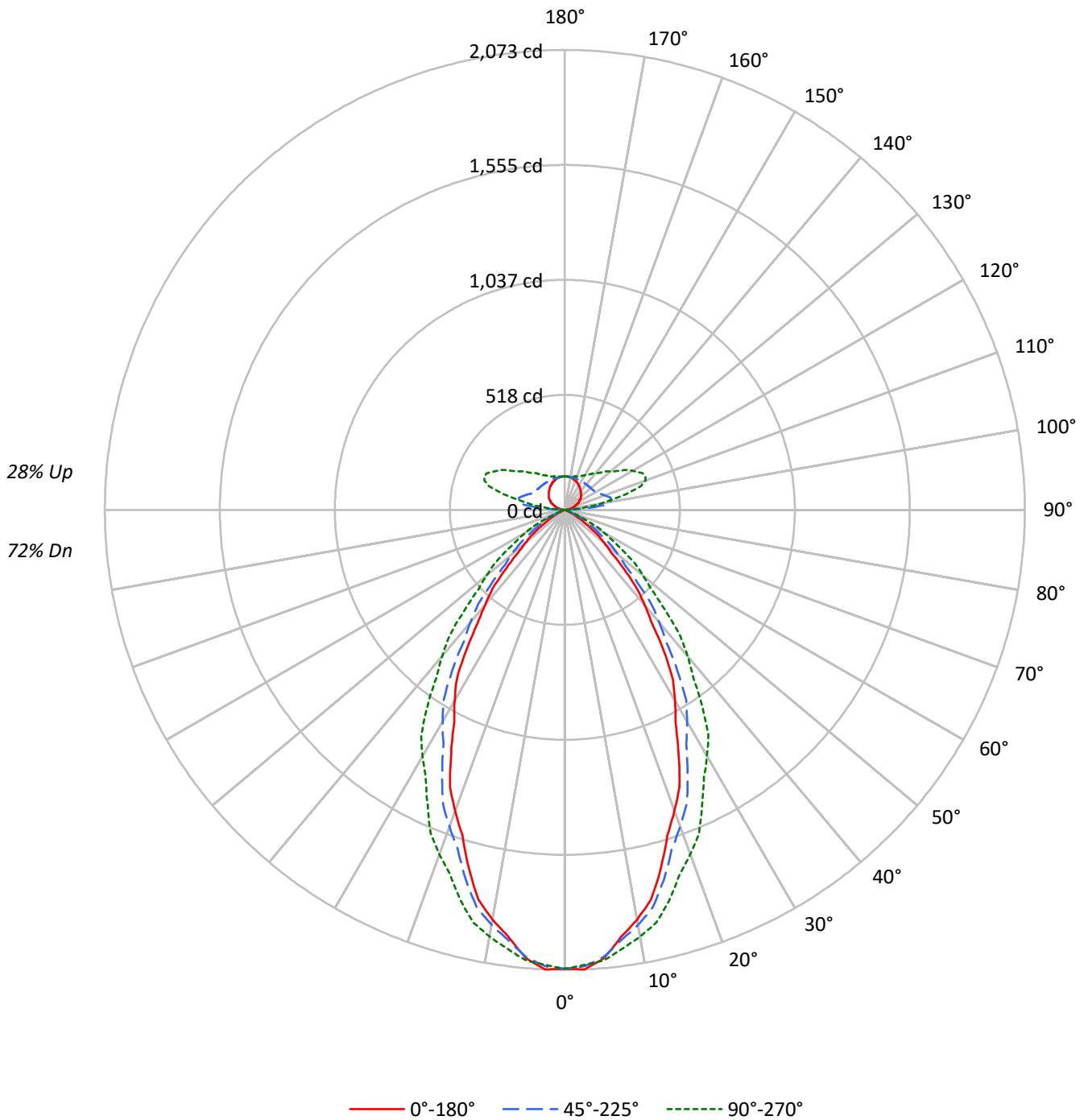
Lumens per Lamp: N/A
Luminaire Lumens: 3443.9 lumens
Efficiency: N/A
Efficacy: 89.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 38.7
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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	76	76	76	72	
1	105	102	99	96	100	97	94	92	87	86	84	79	78	76	71	70	69	69	69	69	65	
2	98	92	87	83	93	88	83	80	80	77	74	73	70	68	66	64	62	62	62	62	59	
3	91	83	77	72	87	80	74	70	73	69	65	67	63	61	61	58	56	56	56	56	53	
4	85	76	69	64	81	73	67	62	67	62	58	61	58	55	56	53	51	51	51	51	48	
5	79	69	62	57	75	66	60	55	61	56	52	57	52	49	52	49	46	46	46	46	44	
6	74	63	56	51	70	61	55	50	57	51	47	52	48	45	48	45	42	42	42	42	40	
7	69	58	51	46	66	56	50	45	52	47	43	49	44	41	45	42	39	39	39	39	37	
8	65	54	47	42	62	52	46	41	49	43	39	45	41	38	42	38	36	36	36	36	34	
9	61	50	43	39	58	48	42	38	45	40	36	42	38	35	40	36	33	33	33	33	31	
10	58	47	40	36	55	45	39	35	42	37	33	40	35	32	37	33	31	31	31	31	29	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19083	19083	19083
5°	18777	18730	18869
10°	17569	17803	18300
15°	15971	16479	17396
20°	14178	14914	16221
25°	12346	13325	14904
30°	10576	11738	13657
35°	8768	9963	12150
40°	6737	7967	10353
45°	4871	6032	8330
50°	3319	4495	6607
55°	2157	3251	5134
60°	1236	2290	3711
65°	327	1397	1880
70°	162	432	540
75°	71	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.8	5.5
10°-20°	482.7	14.0
20°-30°	604.3	17.5
30°-40°	558.2	16.2
40°-50°	375.1	10.9
50°-60°	193.7	5.6
60°-70°	60.7	1.8
70°-80°	3.8	0.1
80°-90°	0.9	0.0
90°-100°	73.4	2.1
100°-110°	192.9	5.6
110°-120°	200.0	5.8
120°-130°	160.4	4.7
130°-140°	125.9	3.7
140°-150°	96.6	2.8
150°-160°	69.6	2.0
160°-170°	42.6	1.2
170°-180°	14.4	0.4
0°-30°	1275.8	37.0
0°-40°	1834.0	53.3
0°-60°	2402.9	69.8
0°-90°	2468.3	71.7
90°-120°	466.2	13.5
90°-150°	849.1	24.7
90°-180°	976.0	28.3
0°-180°	3443.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2068	2068	2068	2068	2068	
5°	2027	2007	2022	2030	2037	188
15°	1672	1666	1725	1783	1821	466
25°	1213	1223	1309	1398	1464	556
35°	778	798	885	989	1079	482
45°	373	396	462	552	638	293
55°	134	157	202	260	319	125
65°	15	29	64	77	86	25
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	1	3	8	4	4	1
95°	10	38	126	65	44	11
105°	35	53	213	324	302	37
115°	62	75	171	341	389	61
125°	86	96	155	263	310	76
135°	102	113	150	212	240	79
145°	119	126	149	181	195	74
155°	134	138	149	163	168	62
165°	145	147	149	154	156	41
175°	150	150	150	152	152	14
180°	150	150	150	150	150	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2068.4	2068.4	2068.4	2068.4	2068.4
2.5°	2073.2	2053.7	2058.8	2058.7	2053.2
5°	2027.4	2006.8	2022.4	2029.6	2037.4
7.5°	1941.7	1925.7	1955.5	1977.9	1994.2
10°	1875.3	1861.6	1900.3	1930.8	1953.3
12.5°	1798.4	1787.9	1834.7	1876.5	1905.3
15°	1672.1	1666.3	1725.2	1783.1	1821.3
17.5°	1536.9	1536.7	1603.9	1675.8	1721.8
20°	1444.0	1446.9	1519.0	1598.3	1652.1
22.5°	1351.1	1358.0	1435.0	1517.6	1579.3
25°	1212.8	1222.6	1308.9	1398.5	1464.0
27.5°	1079.9	1094.2	1185.0	1278.1	1357.9
30°	992.7	1009.3	1101.8	1199.7	1281.9
32.5°	907.0	926.8	1016.9	1120.5	1204.2
35°	778.5	798.1	884.6	988.7	1078.7
37.5°	645.8	665.0	749.5	852.0	949.3
40°	559.4	580.9	661.5	760.8	859.6
42.5°	480.9	502.5	578.2	675.8	769.1
45°	373.3	395.8	462.3	552.3	638.4
47.5°	284.0	308.5	366.9	448.3	526.8
50°	231.2	255.6	313.2	385.0	460.3
52.5°	188.7	212.4	264.4	332.0	401.1
55°	134.1	156.6	202.1	259.5	319.2
57.5°	92.7	112.0	152.9	200.8	247.6
60°	67.0	85.6	124.1	163.0	201.1
62.5°	44.6	61.7	99.3	129.1	154.7
65°	15.0	28.7	64.0	77.3	86.1
67.5°	7.6	9.2	33.6	35.5	38.4
70°	6.0	6.0	16.0	17.1	20.0
72.5°	4.4	4.4	6.4	8.2	8.8
75°	2.0	2.0	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	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	0.6	1.5	0.8	0.8
90°	1.0	2.9	7.7	3.9	3.9
92.5°	4.1	19.5	43.2	19.1	12.4
95°	9.6	38.0	126.4	65.1	44.4
97.5°	16.8	41.7	189.1	150.4	110.8
100°	22.2	44.8	208.4	211.2	164.0
102.5°	26.8	48.0	213.8	263.1	222.7
105°	34.7	52.7	213.2	323.7	302.0
107.5°	42.8	59.4	201.1	355.2	360.5
110°	48.2	63.3	191.1	363.3	386.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	53.6	68.0	181.8	358.2	392.9
115°	61.8	75.0	170.8	340.7	388.9
117.5°	69.7	81.7	163.3	316.5	369.9
120°	74.3	85.6	160.2	300.3	352.2
122.5°	78.9	90.3	157.9	284.1	335.2
125°	85.9	96.3	155.3	262.6	309.7
127.5°	91.5	102.0	153.2	245.2	285.0
130°	94.6	105.9	152.5	234.3	271.1
132.5°	97.6	109.0	151.7	225.0	258.0
135°	102.3	112.7	150.5	212.0	240.3
137.5°	107.1	117.3	150.3	202.2	225.4
140°	111.0	120.4	149.6	194.4	216.1
142.5°	114.1	122.7	149.6	189.0	207.6
145°	118.7	126.2	148.6	180.8	194.9
147.5°	123.3	130.7	148.6	173.9	185.6
150°	126.4	133.0	148.6	170.0	179.5
152.5°	129.5	134.6	148.6	166.9	174.1
155°	134.1	137.9	148.6	163.2	167.9
157.5°	137.6	141.2	148.6	159.9	163.3
160°	139.9	142.7	148.6	158.3	160.2
162.5°	142.2	144.3	148.6	156.7	158.6
165°	144.7	146.6	148.6	154.4	156.3
167.5°	147.1	148.0	149.6	153.4	154.2
170°	148.6	149.5	149.6	153.4	153.4
172.5°	149.4	149.6	149.6	152.6	151.9
175°	150.5	150.5	149.6	151.5	151.5
177.5°	150.5	150.5	149.8	151.3	150.5
180°	150.5	150.5	150.5	150.5	150.5

(END OF REPORT)