

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: P518332

Luminaire Tested: **SQ4-BB-025U-075D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518332
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-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

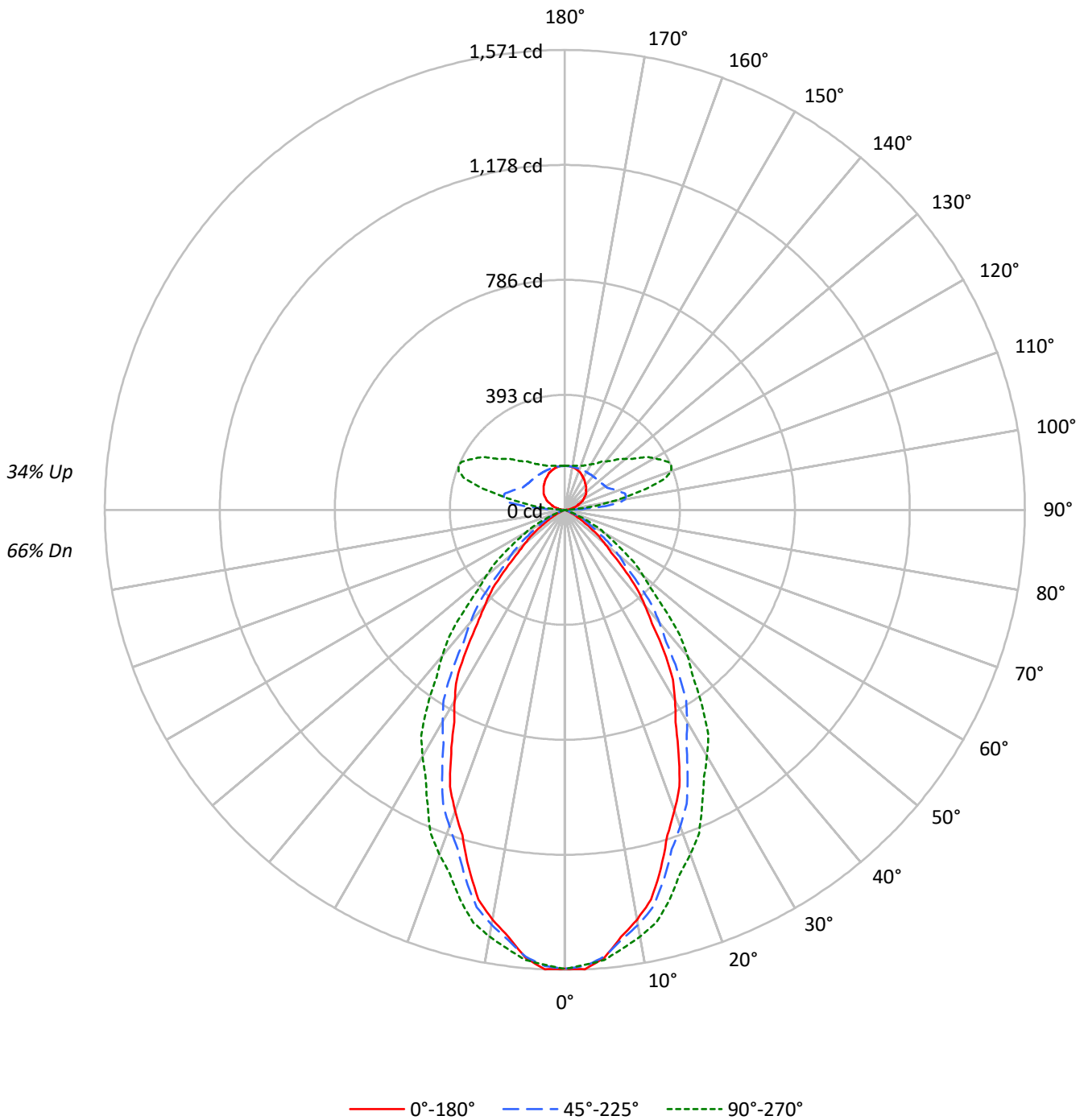
Lumens per Lamp: N/A
Luminaire Lumens: 2846.2 lumens
Efficiency: N/A
Efficacy: 95.2 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 29.9
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°	14461	14461	14461
5°	14228	14193	14299
10°	13314	13491	13867
15°	12103	12487	13182
20°	10743	11302	12293
25°	9356	10098	11294
30°	8014	8895	10349
35°	6645	7550	9208
40°	5105	6036	7845
45°	3690	4571	6313
50°	2515	3406	5006
55°	1634	2464	3891
60°	937	1735	2812
65°	249	1059	1423
70°	121	326	410
75°	53	29	0
80°	43	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.0	5.0
10°-20°	365.8	12.9
20°-30°	458.0	16.1
30°-40°	423.0	14.9
40°-50°	284.2	10.0
50°-60°	146.8	5.2
60°-70°	46.0	1.6
70°-80°	2.9	0.1
80°-90°	0.9	0.0
90°-100°	73.4	2.6
100°-110°	192.9	6.8
110°-120°	200.0	7.0
120°-130°	160.4	5.6
130°-140°	125.9	4.4
140°-150°	96.6	3.4
150°-160°	69.6	2.4
160°-170°	42.6	1.5
170°-180°	14.4	0.5
0°-30°	966.8	34.0
0°-40°	1389.8	48.8
0°-60°	1820.8	64.0
0°-90°	1870.6	65.7
90°-120°	466.2	16.4
90°-150°	849.1	29.8
90°-180°	976.0	34.3
0°-180°	2846.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1567	1567	1567	1567	1567	
5°	1536	1521	1532	1538	1544	142
15°	1267	1263	1307	1351	1380	353
25°	919	926	992	1060	1109	421
35°	590	605	670	749	818	365
45°	283	300	350	419	484	222
55°	102	119	153	197	242	95
65°	11	22	48	58	65	19
75°	2	2	1	0	0	2
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°	1567.4	1567.4	1567.4	1567.4	1567.4
2.5°	1571.1	1556.2	1560.1	1560.0	1555.9
5°	1536.3	1520.8	1532.5	1538.0	1543.9
7.5°	1471.4	1459.3	1481.9	1498.8	1511.2
10°	1421.1	1410.7	1440.0	1463.2	1480.2
12.5°	1362.8	1354.8	1390.3	1422.0	1443.8
15°	1267.1	1262.7	1307.3	1351.2	1380.1
17.5°	1164.6	1164.5	1215.4	1269.9	1304.7
20°	1094.2	1096.5	1151.1	1211.2	1252.0
22.5°	1023.9	1029.1	1087.4	1150.0	1196.8
25°	919.1	926.5	991.9	1059.7	1109.4
27.5°	818.4	829.2	898.0	968.5	1029.0
30°	752.2	764.8	834.9	909.1	971.4
32.5°	687.3	702.3	770.6	849.1	912.5
35°	590.0	604.8	670.3	749.2	817.5
37.5°	489.4	503.9	568.0	645.6	719.3
40°	423.9	440.2	501.2	576.5	651.4
42.5°	364.4	380.8	438.1	512.1	582.8
45°	282.8	299.9	350.3	418.6	483.8
47.5°	215.2	233.7	278.0	339.7	399.2
50°	175.2	193.7	237.3	291.7	348.8
52.5°	143.0	161.0	200.3	251.6	303.9
55°	101.6	118.7	153.2	196.7	241.9
57.5°	70.2	84.9	115.9	152.2	187.6
60°	50.8	64.9	94.0	123.5	152.4
62.5°	33.8	46.7	75.2	97.8	117.2
65°	11.4	21.8	48.5	58.5	65.2
67.5°	5.8	6.9	25.5	26.9	29.1
70°	4.5	4.5	12.1	12.9	15.2
72.5°	3.3	3.3	4.9	6.2	6.7
75°	1.5	1.5	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	0.0	0.0
80°	0.8	0.8	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)