

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: P518301

Luminaire Tested: **SQ4-BB-025U-050D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518301
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-050D-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

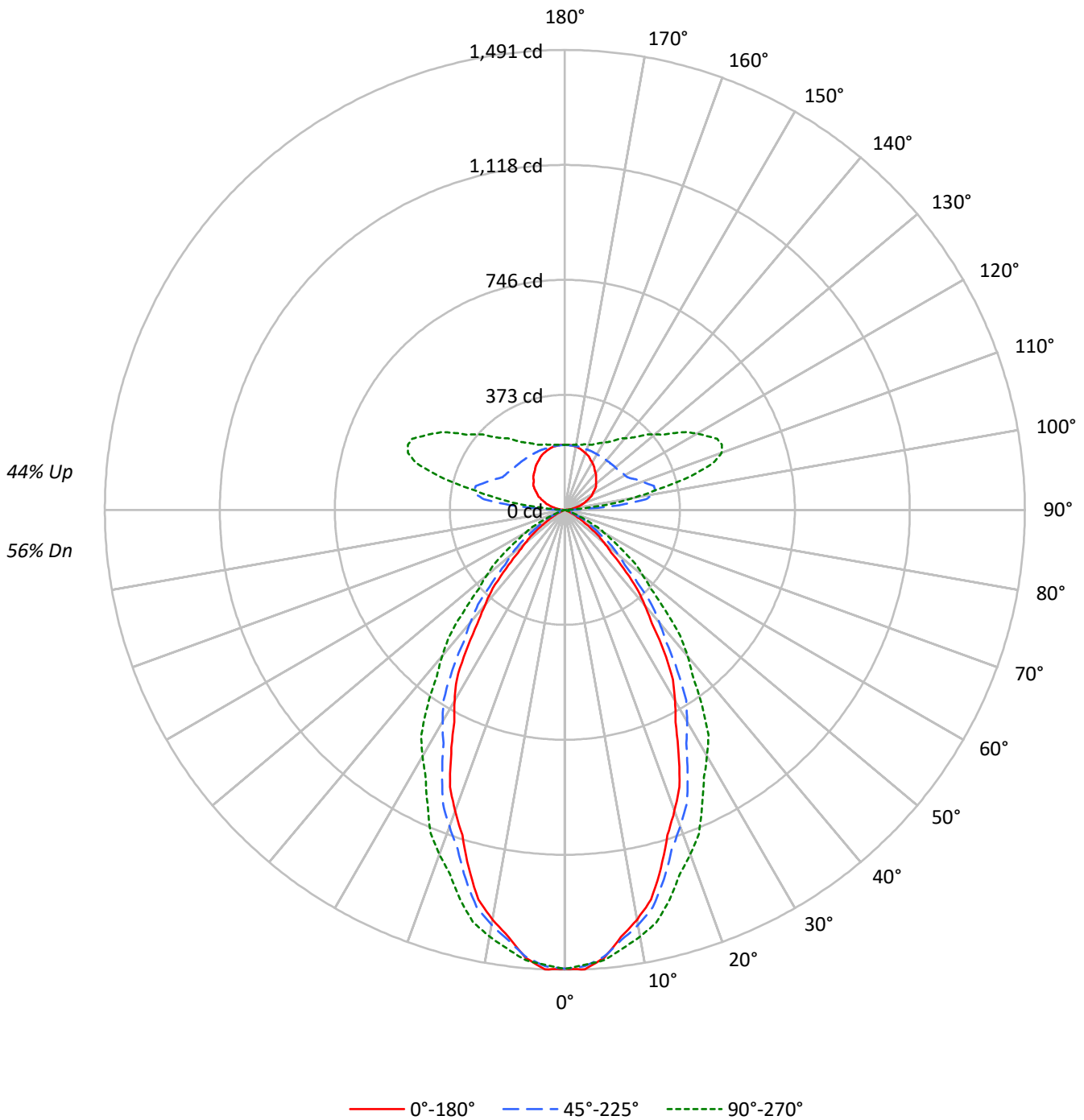
Lumens per Lamp: N/A
Luminaire Lumens: 3143.4 lumens
Efficiency: N/A
Efficacy: 90.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 34.9
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									
RC	80									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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	56																			
1	101	98	94	92	94	91	89	86	79	77	76	68	67	66	58	57	56	52																			
2	94	88	83	78	87	82	78	74	72	69	66	62	60	58	54	52	51	47																			
3	87	79	73	68	81	74	69	64	65	61	58	57	54	52	49	47	46	42																			
4	81	71	65	59	75	67	61	57	60	55	51	52	49	46	46	43	41	38																			
5	75	65	58	53	70	61	55	50	55	50	46	48	45	42	42	40	37	35																			
6	70	59	52	47	65	56	50	45	50	45	41	44	41	38	39	36	34	32																			
7	65	54	47	42	61	51	45	41	46	41	37	41	37	34	37	34	31	29																			
8	61	50	43	38	57	47	41	37	43	38	34	38	34	31	34	31	29	27																			
9	57	46	39	35	54	44	38	34	40	35	31	36	32	29	32	29	27	25																			
10	54	43	36	32	51	41	35	31	37	32	29	33	29	27	30	27	25	23																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9151	9151	9151
5°	9003	8981	9048
10°	8424	8537	8775
15°	7659	7901	8341
20°	6798	7151	7778
25°	5920	6389	7146
30°	5071	5628	6548
35°	4204	4777	5826
40°	3230	3820	4964
45°	2336	2892	3994
50°	1591	2156	3168
55°	1034	1559	2462
60°	593	1097	1780
65°	157	671	901
70°	77	207	259
75°	33	17	0
80°	25	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.8	4.3
10°-20°	347.2	11.0
20°-30°	434.7	13.8
30°-40°	401.5	12.8
40°-50°	269.8	8.6
50°-60°	139.3	4.4
60°-70°	43.6	1.4
70°-80°	2.8	0.1
80°-90°	1.2	0.0
90°-100°	102.8	3.3
100°-110°	270.3	8.6
110°-120°	280.3	8.9
120°-130°	224.9	7.2
130°-140°	176.4	5.6
140°-150°	135.4	4.3
150°-160°	97.5	3.1
160°-170°	59.7	1.9
170°-180°	20.2	0.6
0°-30°	917.6	29.2
0°-40°	1319.1	42.0
0°-60°	1728.2	55.0
0°-90°	1775.8	56.5
90°-120°	653.5	20.8
90°-150°	1190.2	37.9
90°-180°	1368.0	43.5
0°-180°	3143.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1488	1488	1488	1488	1488	
5°	1458	1443	1455	1460	1465	135
15°	1203	1198	1241	1282	1310	335
25°	872	879	941	1006	1053	400
35°	560	574	636	711	776	347
45°	268	285	332	397	459	211
55°	96	113	145	187	230	90
65°	11	21	46	56	62	18
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	1	4	11	5	5	1
95°	14	53	177	91	62	15
105°	49	74	299	454	423	52
115°	87	105	239	478	545	85
125°	120	135	218	368	434	107
135°	143	158	211	297	337	111
145°	166	177	208	253	273	104
155°	188	193	208	229	235	86
165°	203	206	208	216	219	57
175°	211	211	210	212	212	20
180°	211	211	211	211	211	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1487.7	1487.7	1487.7	1487.7	1487.7
2.5°	1491.1	1477.1	1480.8	1480.7	1476.7
5°	1458.2	1443.4	1454.6	1459.7	1465.4
7.5°	1396.6	1385.0	1406.5	1422.6	1434.3
10°	1348.8	1338.9	1366.8	1388.7	1404.9
12.5°	1293.5	1285.9	1319.5	1349.7	1370.4
15°	1202.7	1198.4	1240.8	1282.5	1309.9
17.5°	1105.4	1105.2	1153.6	1205.3	1238.4
20°	1038.6	1040.7	1092.5	1149.6	1188.3
22.5°	971.8	976.7	1032.1	1091.5	1135.9
25°	872.3	879.3	941.4	1005.8	1053.0
27.5°	776.7	787.0	852.3	919.2	976.7
30°	714.0	725.9	792.4	862.9	922.0
32.5°	652.4	666.6	731.4	805.9	866.1
35°	559.9	574.0	636.2	711.1	775.9
37.5°	464.5	478.3	539.1	612.8	682.7
40°	402.3	417.8	475.7	547.2	618.2
42.5°	345.9	361.4	415.9	486.0	553.2
45°	268.5	284.6	332.5	397.3	459.2
47.5°	204.3	221.9	263.9	322.4	378.9
50°	166.3	183.8	225.3	276.9	331.1
52.5°	135.7	152.8	190.2	238.8	288.5
55°	96.4	112.6	145.4	186.7	229.6
57.5°	66.6	80.6	110.0	144.4	178.1
60°	48.2	61.6	89.2	117.2	144.7
62.5°	32.1	44.3	71.4	92.8	111.3
65°	10.8	20.6	46.1	55.6	61.9
67.5°	5.5	6.6	24.2	25.5	27.6
70°	4.3	4.3	11.5	12.3	14.4
72.5°	3.2	3.2	4.6	5.9	6.3
75°	1.4	1.4	0.7	0.0	0.0
77.5°	0.7	0.7	0.6	0.0	0.0
80°	0.7	0.7	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	0.8	2.2	1.1	1.1
90°	1.4	4.0	10.8	5.4	5.4
92.5°	5.7	27.4	60.6	26.8	17.3
95°	13.5	53.2	177.2	91.3	62.2
97.5°	23.5	58.4	265.1	210.8	155.3
100°	31.1	62.8	292.1	296.1	229.9
102.5°	37.6	67.2	299.7	368.8	312.2
105°	48.7	73.8	298.9	453.8	423.3
107.5°	60.1	83.3	281.9	497.9	505.3
110°	67.6	88.8	267.8	509.3	541.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	75.2	95.3	254.8	502.1	550.8
115°	86.6	105.1	239.4	477.6	545.1
117.5°	97.7	114.6	228.8	443.7	518.6
120°	104.1	120.0	224.5	420.9	493.7
122.5°	110.6	126.5	221.3	398.2	469.9
125°	120.4	134.9	217.8	368.0	434.2
127.5°	128.2	143.0	214.8	343.7	399.5
130°	132.5	148.4	213.7	328.5	380.1
132.5°	136.9	152.7	212.6	315.4	361.7
135°	143.4	157.9	211.0	297.1	336.8
137.5°	150.1	164.4	210.7	283.4	316.0
140°	155.5	168.8	209.6	272.6	303.0
142.5°	159.9	172.0	209.6	264.9	291.1
145°	166.4	176.9	208.3	253.4	273.2
147.5°	172.9	183.2	208.3	243.8	260.2
150°	177.2	186.4	208.3	238.3	251.6
152.5°	181.5	188.7	208.3	233.9	244.0
155°	188.0	193.3	208.3	228.7	235.3
157.5°	192.9	197.9	208.3	224.1	228.8
160°	196.1	200.1	208.3	221.9	224.5
162.5°	199.4	202.3	208.3	219.7	222.4
165°	202.9	205.5	208.3	216.5	219.1
167.5°	206.1	207.4	209.6	215.1	216.1
170°	208.3	209.6	209.6	215.1	215.1
172.5°	209.4	209.6	209.6	213.9	212.9
175°	211.0	211.0	209.6	212.3	212.3
177.5°	211.0	211.0	209.9	212.1	211.0
180°	211.0	211.0	211.0	211.0	211.0

(END OF REPORT)