

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: P519069

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519069
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-050U-050D-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

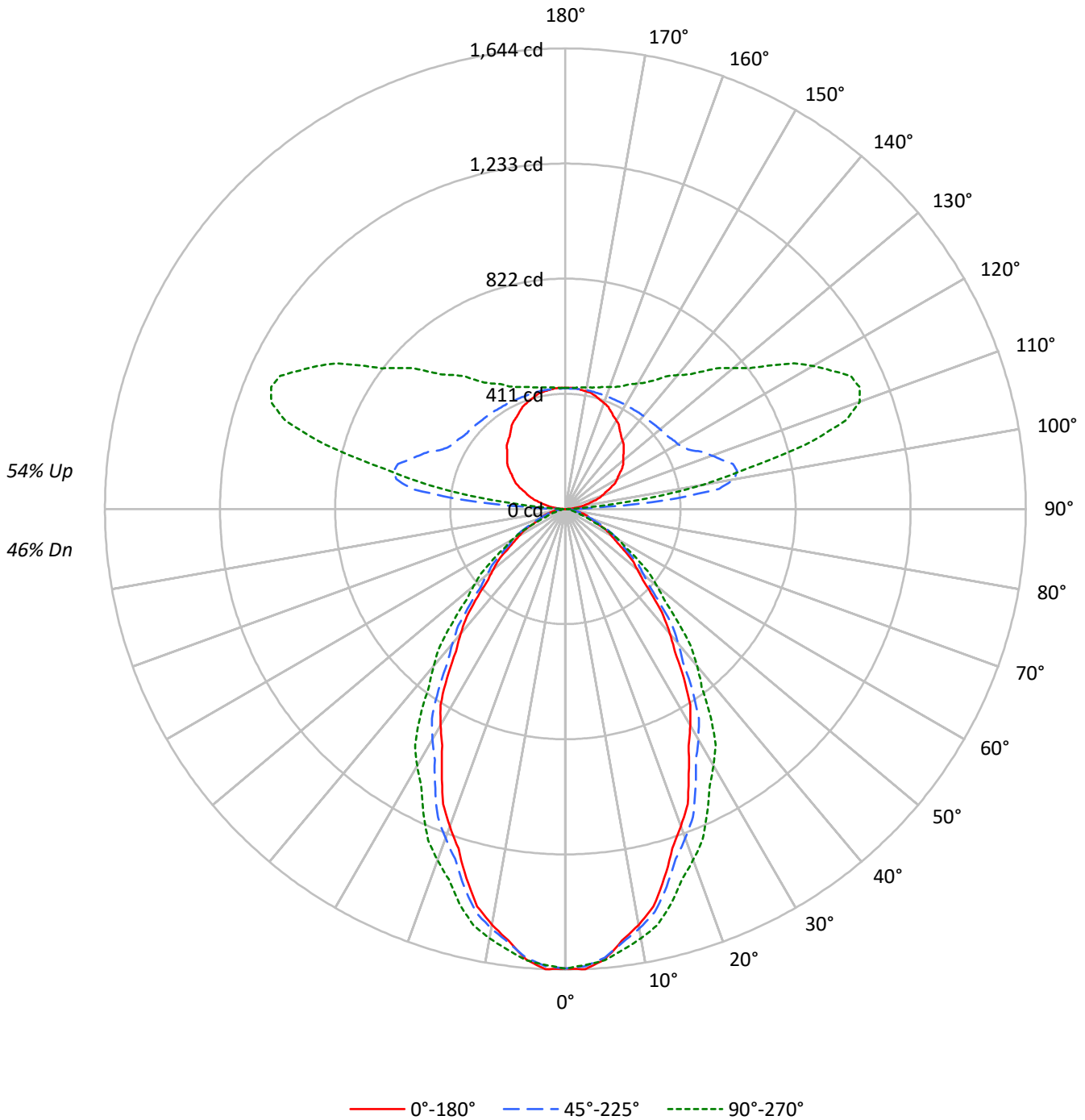
Lumens per Lamp: N/A
Luminaire Lumens: 5212.3 lumens
Efficiency: N/A
Efficacy: 116.3 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 44.8
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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46
1	98	94	91	87	90	87	84	81	73	70	69	60	58	57	48	47	46	41
2	90	83	78	73	83	77	72	68	65	61	59	54	51	49	43	42	41	36
3	83	74	68	62	76	69	63	58	58	54	51	49	46	43	40	38	36	32
4	76	66	59	54	70	62	55	50	52	48	44	44	41	38	36	34	32	28
5	71	60	52	47	65	56	49	44	48	43	39	40	36	34	33	31	29	25
6	65	54	47	41	60	50	44	39	43	38	34	37	33	30	30	28	26	23
7	61	49	42	37	56	46	39	35	40	35	31	34	30	27	28	25	23	21
8	57	45	38	33	52	42	36	31	36	31	28	31	27	25	26	23	21	19
9	53	41	34	30	49	39	32	28	34	29	25	29	25	22	24	22	20	17
10	50	38	31	27	46	36	30	26	31	26	23	27	23	21	23	20	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10090	10090	10090
5°	9964	9928	9986
10°	9414	9499	9720
15°	8690	8892	9291
20°	7891	8188	8730
25°	7078	7464	8133
30°	6329	6743	7515
35°	5535	5934	6783
40°	4659	5028	5872
45°	3845	4176	4903
50°	3209	3499	4084
55°	2725	3003	3373
60°	2329	2603	2692
65°	1854	2189	1739
70°	1644	1708	1061
75°	1523	1385	651
80°	1403	1275	560
85°	1270	1172	459



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.5	2.9
10°-20°	391.4	7.5
20°-30°	506.9	9.7
30°-40°	496.4	9.5
40°-50°	380.0	7.3
50°-60°	253.2	4.9
60°-70°	138.2	2.7
70°-80°	57.6	1.1
80°-90°	18.0	0.3
90°-100°	207.4	4.0
100°-110°	563.3	10.8
110°-120°	579.1	11.1
120°-130°	463.0	8.9
130°-140°	363.8	7.0
140°-150°	279.0	5.4
150°-160°	200.6	3.8
160°-170°	122.7	2.4
170°-180°	41.3	0.8
0°-30°	1048.8	20.1
0°-40°	1545.2	29.6
0°-60°	2178.3	41.8
0°-90°	2392.0	45.9
90°-120°	1349.8	25.9
90°-150°	2455.6	47.1
90°-180°	2820.0	54.1
0°-180°	5212.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1640	1640	1640	1640	1640	
5°	1614	1598	1608	1612	1617	150
15°	1365	1360	1396	1434	1459	381
25°	1043	1046	1100	1148	1198	480
35°	737	741	790	844	903	458
45°	442	450	480	516	564	345
55°	254	265	280	291	314	230
65°	127	138	150	131	120	132
75°	64	64	58	40	27	68
85°	18	18	17	11	6	20
90°	1	6	10	12	12	3
95°	31	113	361	157	106	32
105°	100	156	619	943	888	106
115°	178	216	496	986	1124	175
125°	244	278	449	756	892	218
135°	294	327	436	616	694	228
145°	340	365	430	523	562	214
155°	385	398	428	470	483	177
165°	417	422	429	447	449	118
175°	432	433	430	436	435	41
180°	432	432	432	432	432	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1640.4	1640.4	1640.4	1640.4	1640.4
2.5°	1644.4	1629.8	1633.5	1633.4	1628.9
5°	1613.8	1597.6	1608.0	1611.7	1617.4
7.5°	1553.9	1541.6	1560.6	1574.7	1586.1
10°	1507.2	1496.7	1520.9	1541.4	1556.2
12.5°	1453.1	1444.2	1474.3	1501.8	1521.1
15°	1364.7	1359.8	1396.4	1434.4	1459.0
17.5°	1270.1	1267.7	1309.7	1354.1	1385.6
20°	1205.6	1204.9	1251.0	1297.2	1333.8
22.5°	1140.6	1142.1	1190.5	1238.6	1280.2
25°	1043.0	1045.8	1099.8	1147.8	1198.4
27.5°	952.7	954.0	1009.9	1060.5	1114.5
30°	891.1	894.6	949.4	1001.8	1058.1
32.5°	829.5	833.6	887.2	941.4	998.8
35°	737.1	740.6	790.3	843.5	903.3
37.5°	641.8	646.6	690.7	741.0	799.8
40°	580.2	587.2	626.2	673.6	731.3
42.5°	520.8	529.6	565.8	610.7	662.8
45°	442.0	450.4	480.1	516.4	563.6
47.5°	374.0	383.7	406.5	437.8	478.1
50°	335.4	344.6	365.7	388.8	426.8
52.5°	301.4	310.6	329.4	347.2	379.6
55°	254.1	264.6	280.0	290.6	314.5
57.5°	215.2	225.4	237.5	242.3	256.8
60°	189.3	200.6	211.6	211.1	218.8
62.5°	165.7	175.3	186.3	178.7	179.1
65°	127.4	138.0	150.4	131.4	119.5
67.5°	102.9	105.2	118.0	91.7	77.4
70°	91.4	91.4	95.0	71.0	59.0
72.5°	80.5	80.5	77.2	57.7	45.2
75°	64.1	64.1	58.3	40.0	27.4
77.5°	49.4	48.8	44.6	29.9	19.9
80°	39.6	39.6	36.0	23.6	15.8
82.5°	31.0	31.0	27.9	18.4	11.8
85°	18.0	18.0	16.6	10.7	6.5
87.5°	6.6	7.4	7.7	5.9	5.4
90°	1.4	5.5	9.7	12.5	12.5
92.5°	12.5	56.8	98.6	42.4	35.8
95°	30.6	113.4	361.1	157.2	105.6
97.5°	50.6	125.2	553.6	430.7	302.5
100°	63.9	133.1	612.5	620.9	501.4
102.5°	77.2	141.0	628.0	767.9	662.5
105°	100.0	155.7	619.4	943.2	887.5
107.5°	123.6	172.8	583.6	1033.7	1049.1
110°	140.3	185.1	556.9	1051.5	1118.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	154.7	197.4	530.3	1036.7	1136.9
115°	177.8	215.8	495.8	986.4	1123.6
117.5°	199.4	235.8	473.9	915.2	1069.7
120°	213.9	249.2	463.9	867.4	1020.8
122.5°	226.1	261.4	457.2	819.5	967.5
125°	244.4	278.4	448.6	755.8	891.6
127.5°	260.8	294.5	443.9	707.6	824.2
130°	270.8	303.4	441.7	677.4	781.9
132.5°	280.8	313.4	439.4	651.5	744.2
135°	294.4	327.0	436.1	615.7	694.4
137.5°	309.2	338.8	434.4	584.0	650.3
140°	318.0	346.6	433.3	563.8	623.6
142.5°	326.9	353.3	432.2	548.1	598.0
145°	340.3	364.7	430.5	523.1	562.5
147.5°	355.3	376.2	429.2	503.5	534.4
150°	365.3	382.9	429.2	492.2	516.7
152.5°	373.0	388.5	428.0	482.1	502.2
155°	384.7	398.3	427.8	469.7	483.3
157.5°	396.1	406.7	427.8	461.3	471.7
160°	402.8	412.3	427.8	455.7	463.9
162.5°	409.4	416.8	428.9	451.2	457.2
165°	416.7	422.1	429.2	447.2	448.6
167.5°	424.2	426.9	430.5	442.5	443.6
170°	426.4	429.1	430.5	440.3	440.3
172.5°	428.6	430.2	430.5	438.0	438.0
175°	431.9	433.3	430.5	436.1	434.7
177.5°	433.0	433.0	429.7	434.1	431.9
180°	431.9	431.9	431.9	431.9	431.9

(END OF REPORT)