

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: P519089

Luminaire Tested: **SQ4-WB-050U-050D-940-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519089
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-940-1D-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

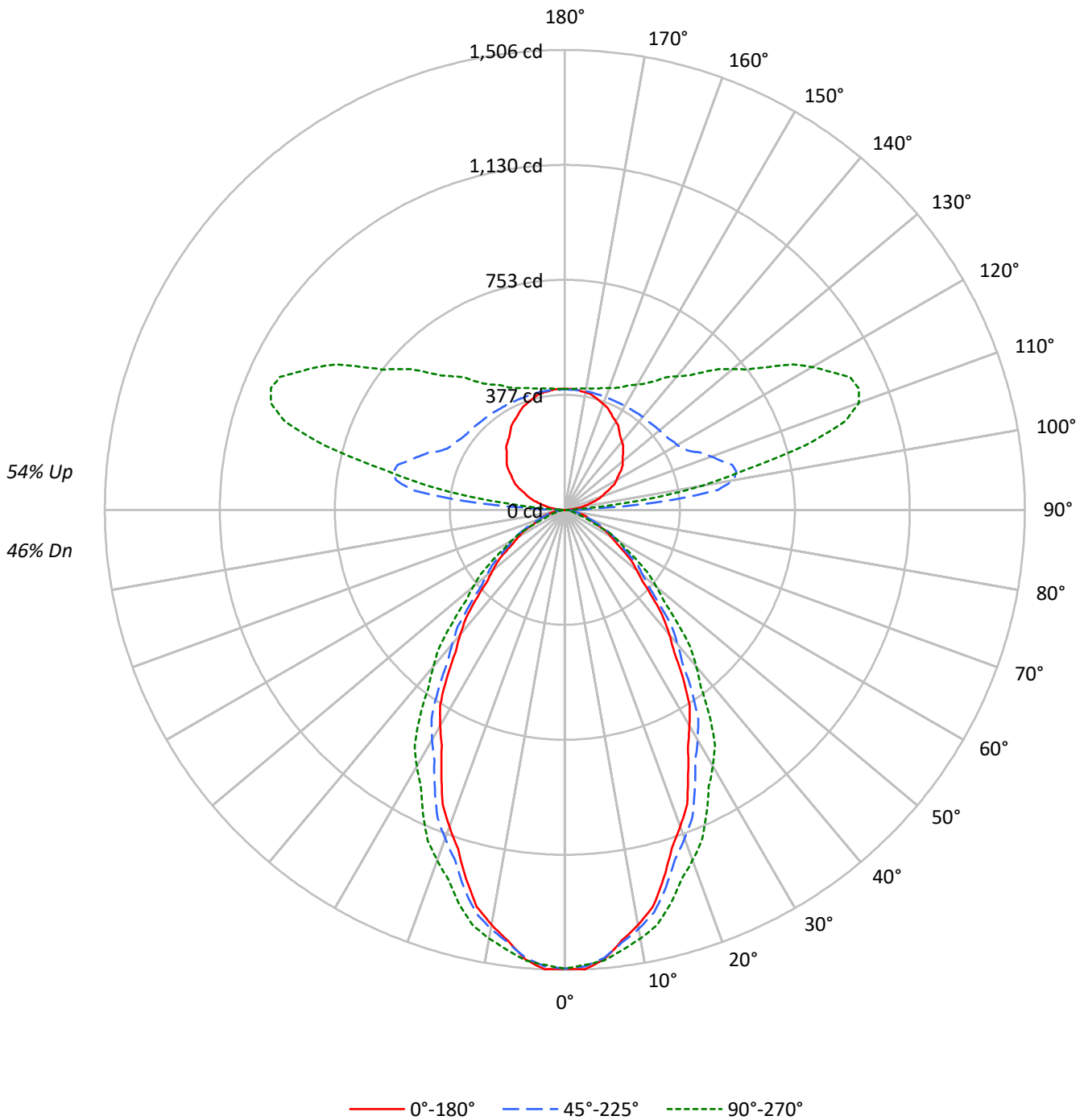
Lumens per Lamp: N/A
Luminaire Lumens: 4773.8 lumens
Efficiency: N/A
Efficacy: 106.6 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

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°	9241	9241	9241
5°	9126	9093	9146
10°	8622	8700	8902
15°	7959	8144	8509
20°	7228	7499	7996
25°	6483	6836	7449
30°	5796	6175	6883
35°	5069	5435	6212
40°	4266	4605	5378
45°	3521	3825	4490
50°	2940	3205	3741
55°	2495	2750	3089
60°	2133	2384	2465
65°	1698	2006	1592
70°	1505	1565	973
75°	1395	1269	596
80°	1286	1169	514
85°	1164	1073	416



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.8	2.9
10°-20°	358.4	7.5
20°-30°	464.3	9.7
30°-40°	454.6	9.5
40°-50°	348.0	7.3
50°-60°	231.9	4.9
60°-70°	126.5	2.7
70°-80°	52.7	1.1
80°-90°	16.5	0.3
90°-100°	189.9	4.0
100°-110°	515.9	10.8
110°-120°	530.4	11.1
120°-130°	424.1	8.9
130°-140°	333.2	7.0
140°-150°	255.5	5.4
150°-160°	183.7	3.8
160°-170°	112.4	2.4
170°-180°	37.9	0.8
0°-30°	960.5	20.1
0°-40°	1415.2	29.6
0°-60°	1995.1	41.8
0°-90°	2190.8	45.9
90°-120°	1236.2	25.9
90°-150°	2249.0	47.1
90°-180°	2583.0	54.1
0°-180°	4773.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1502	1502	1502	1502	1502	
5°	1478	1463	1473	1476	1481	137
15°	1250	1245	1279	1314	1336	349
25°	955	958	1007	1051	1098	439
35°	675	678	724	772	827	420
45°	405	412	440	473	516	316
55°	233	242	256	266	288	211
65°	117	126	138	120	109	121
75°	59	59	53	37	25	63
85°	16	16	15	10	6	18
90°	1	5	9	11	11	3
95°	28	104	331	144	97	30
105°	92	143	567	864	813	97
115°	163	198	454	903	1029	161
125°	224	255	411	692	817	200
135°	270	300	399	564	636	209
145°	312	334	394	479	515	196
155°	352	365	392	430	443	162
165°	382	387	393	410	411	108
175°	396	397	394	399	398	38
180°	396	396	396	396	396	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1502.4	1502.4	1502.4	1502.4	1502.4
2.5°	1506.1	1492.7	1496.1	1496.0	1491.8
5°	1478.0	1463.2	1472.7	1476.1	1481.3
7.5°	1423.2	1411.9	1429.3	1442.2	1452.7
10°	1380.4	1370.8	1393.0	1411.7	1425.3
12.5°	1330.9	1322.7	1350.2	1375.4	1393.1
15°	1249.9	1245.4	1278.9	1313.7	1336.3
17.5°	1163.3	1161.1	1199.5	1240.1	1269.0
20°	1104.2	1103.6	1145.7	1188.0	1221.6
22.5°	1044.6	1046.0	1090.4	1134.4	1172.5
25°	955.2	957.8	1007.3	1051.2	1097.6
27.5°	872.6	873.7	924.9	971.3	1020.8
30°	816.1	819.4	869.5	917.5	969.1
32.5°	759.7	763.4	812.6	862.2	914.8
35°	675.1	678.3	723.8	772.5	827.3
37.5°	587.8	592.2	632.6	678.7	732.5
40°	531.3	537.8	573.5	616.9	669.8
42.5°	477.0	485.0	518.2	559.3	607.0
45°	404.8	412.5	439.7	473.0	516.2
47.5°	342.5	351.4	372.3	401.0	437.9
50°	307.2	315.6	334.9	356.1	390.9
52.5°	276.1	284.5	301.7	318.0	347.7
55°	232.7	242.4	256.4	266.2	288.1
57.5°	197.1	206.4	217.5	221.9	235.2
60°	173.4	183.7	193.8	193.3	200.4
62.5°	151.8	160.5	170.6	163.6	164.0
65°	116.7	126.4	137.8	120.4	109.4
67.5°	94.3	96.3	108.1	84.0	70.9
70°	83.7	83.7	87.0	65.0	54.1
72.5°	73.7	73.7	70.7	52.9	41.4
75°	58.7	58.7	53.4	36.7	25.1
77.5°	45.2	44.7	40.9	27.3	18.2
80°	36.3	36.3	33.0	21.6	14.5
82.5°	28.3	28.3	25.6	16.9	10.8
85°	16.5	16.5	15.2	9.8	5.9
87.5°	6.1	6.8	7.1	5.4	4.9
90°	1.3	5.0	8.9	11.4	11.4
92.5°	11.4	52.0	90.3	38.8	32.8
95°	28.0	103.9	330.7	143.9	96.7
97.5°	46.3	114.7	507.0	394.5	277.0
100°	58.5	121.9	561.0	568.6	459.2
102.5°	70.7	129.2	575.2	703.3	606.8
105°	91.6	142.6	567.3	863.8	812.8
107.5°	113.2	158.2	534.5	946.7	960.9
110°	128.5	169.5	510.1	963.0	1024.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	141.7	180.8	485.7	949.5	1041.3
115°	162.8	197.6	454.1	903.4	1029.1
117.5°	182.7	216.0	434.0	838.2	979.7
120°	195.9	228.2	424.9	794.4	934.9
122.5°	207.1	239.4	418.7	750.5	886.1
125°	223.9	255.0	410.9	692.3	816.6
127.5°	238.9	269.7	406.5	648.1	754.8
130°	248.0	277.9	404.5	620.4	716.1
132.5°	257.2	287.1	402.5	596.7	681.5
135°	269.7	299.5	399.4	563.9	636.0
137.5°	283.2	310.3	397.9	534.9	595.6
140°	291.3	317.4	396.9	516.4	571.1
142.5°	299.4	323.6	395.9	502.0	547.7
145°	311.6	334.0	394.3	479.1	515.2
147.5°	325.4	344.5	393.1	461.1	489.5
150°	334.5	350.7	393.1	450.8	473.2
152.5°	341.7	355.8	392.0	441.6	460.0
155°	352.3	364.8	391.8	430.2	442.7
157.5°	362.8	372.5	391.8	422.5	432.0
160°	368.9	377.6	391.8	417.4	424.9
162.5°	375.0	381.7	392.8	413.3	418.7
165°	381.6	386.6	393.1	409.6	410.9
167.5°	388.5	391.0	394.3	405.3	406.3
170°	390.5	393.0	394.3	403.2	403.2
172.5°	392.5	394.0	394.3	401.2	401.2
175°	395.6	396.8	394.3	399.4	398.1
177.5°	396.6	396.6	393.6	397.6	395.6
180°	395.6	395.6	395.6	395.6	395.6

(END OF REPORT)