

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: P519117

Luminaire Tested: **SQ4-WB-050U-100D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519117
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-100D-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

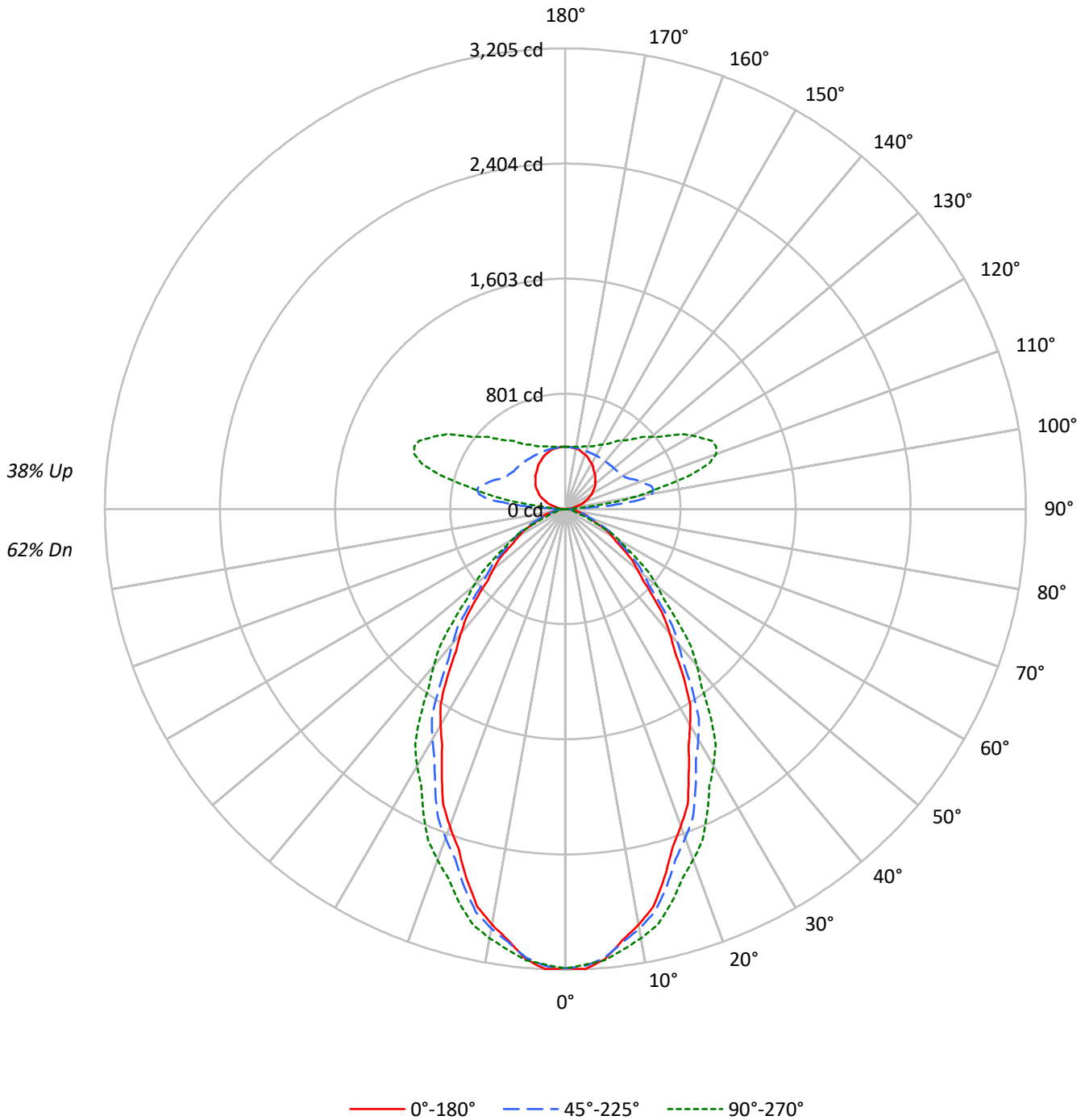
Lumens per Lamp: N/A
Luminaire Lumens: 7480.6 lumens
Efficiency: N/A
Efficacy: 101.9 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 73.4
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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	62
1	102	98	95	92	95	92	89	87	81	79	77	71	70	68	62	61	60	55
2	94	87	82	77	88	82	78	73	73	69	66	64	62	59	56	54	53	49
3	87	78	72	66	81	74	68	63	66	61	57	58	55	52	51	49	47	43
4	80	70	63	58	75	67	60	55	60	54	50	53	49	46	47	44	41	38
5	74	64	56	51	70	60	54	49	54	49	45	48	44	41	43	40	37	34
6	69	58	50	45	65	55	48	43	50	44	40	44	40	37	40	36	34	31
7	64	53	45	40	61	50	44	39	45	40	36	41	37	33	37	33	31	28
8	60	49	41	36	57	46	40	35	42	36	33	38	33	30	34	31	28	26
9	56	45	38	33	53	43	36	32	39	33	30	35	31	28	32	28	26	24
10	53	41	35	30	50	40	33	29	36	31	27	33	29	25	30	26	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19664	19664	19664
5°	19419	19350	19462
10°	18347	18513	18943
15°	16937	17330	18107
20°	15380	15959	17014
25°	13795	14547	15852
30°	12335	13141	14646
35°	10786	11566	13219
40°	9079	9800	11444
45°	7492	8139	9554
50°	6255	6819	7960
55°	5310	5852	6574
60°	4538	5073	5247
65°	3614	4267	3390
70°	3205	3331	2068
75°	2968	2700	1267
80°	2735	2483	1095
85°	2477	2279	889



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	293.2	3.9
10°-20°	762.7	10.2
20°-30°	988.0	13.2
30°-40°	967.5	12.9
40°-50°	740.5	9.9
50°-60°	493.5	6.6
60°-70°	269.3	3.6
70°-80°	112.2	1.5
80°-90°	33.4	0.4
90°-100°	207.4	2.8
100°-110°	563.3	7.5
110°-120°	579.1	7.7
120°-130°	463.0	6.2
130°-140°	363.8	4.9
140°-150°	279.0	3.7
150°-160°	200.6	2.7
160°-170°	122.7	1.6
170°-180°	41.3	0.6
0°-30°	2043.9	27.3
0°-40°	3011.4	40.3
0°-60°	4245.4	56.8
0°-90°	4660.3	62.3
90°-120°	1349.8	18.0
90°-150°	2455.6	32.8
90°-180°	2820.0	37.7
0°-180°	7480.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3197	3197	3197	3197	3197	
5°	3145	3114	3134	3141	3152	293
15°	2660	2650	2722	2796	2844	743
25°	2033	2038	2144	2237	2336	935
35°	1436	1443	1540	1644	1760	893
45°	861	878	936	1006	1098	672
55°	495	516	546	566	613	449
65°	248	269	293	256	233	258
75°	125	125	114	78	53	133
85°	35	35	32	21	13	38
90°	1	6	10	12	12	4
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°	3197.0	3197.0	3197.0	3197.0	3197.0
2.5°	3204.9	3176.4	3183.6	3183.4	3174.6
5°	3145.1	3113.6	3133.9	3141.2	3152.1
7.5°	3028.4	3004.5	3041.6	3069.0	3091.3
10°	2937.5	2916.9	2964.2	3004.1	3032.9
12.5°	2832.0	2814.7	2873.3	2926.9	2964.4
15°	2659.8	2650.1	2721.5	2795.5	2843.5
17.5°	2475.4	2470.8	2552.6	2639.0	2700.4
20°	2349.7	2348.4	2438.1	2528.1	2599.4
22.5°	2222.9	2225.9	2320.3	2413.9	2495.1
25°	2032.7	2038.2	2143.5	2236.9	2335.7
27.5°	1856.8	1859.2	1968.2	2066.8	2172.1
30°	1736.7	1743.6	1850.3	1952.4	2062.1
32.5°	1616.6	1624.6	1729.1	1834.6	1946.6
35°	1436.5	1443.3	1540.3	1644.0	1760.5
37.5°	1250.8	1260.1	1346.1	1444.1	1558.8
40°	1130.7	1144.4	1220.5	1312.8	1425.3
42.5°	1015.1	1032.1	1102.6	1190.2	1291.7
45°	861.3	877.8	935.7	1006.5	1098.4
47.5°	728.9	747.8	792.3	853.3	931.8
50°	653.7	671.5	712.6	757.8	831.9
52.5°	587.5	605.3	641.9	676.8	739.8
55°	495.2	515.8	545.7	566.4	613.0
57.5°	419.4	439.2	462.9	472.3	500.5
60°	368.9	390.9	412.4	411.4	426.5
62.5°	322.9	341.6	363.1	348.2	349.0
65°	248.3	268.9	293.2	256.2	232.9
67.5°	200.6	205.0	230.1	178.7	150.9
70°	178.2	178.2	185.2	138.3	115.0
72.5°	156.8	156.8	150.4	112.5	88.1
75°	124.9	124.9	113.6	78.0	53.3
77.5°	96.2	95.1	87.0	58.2	38.7
80°	77.2	77.2	70.1	46.0	30.9
82.5°	60.3	60.3	54.4	35.9	23.0
85°	35.1	35.1	32.3	20.9	12.6
87.5°	12.6	13.4	13.2	9.2	8.1
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)