

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: P519429

Luminaire Tested: **SQ4-WB-100U-125D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519429
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-125D-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

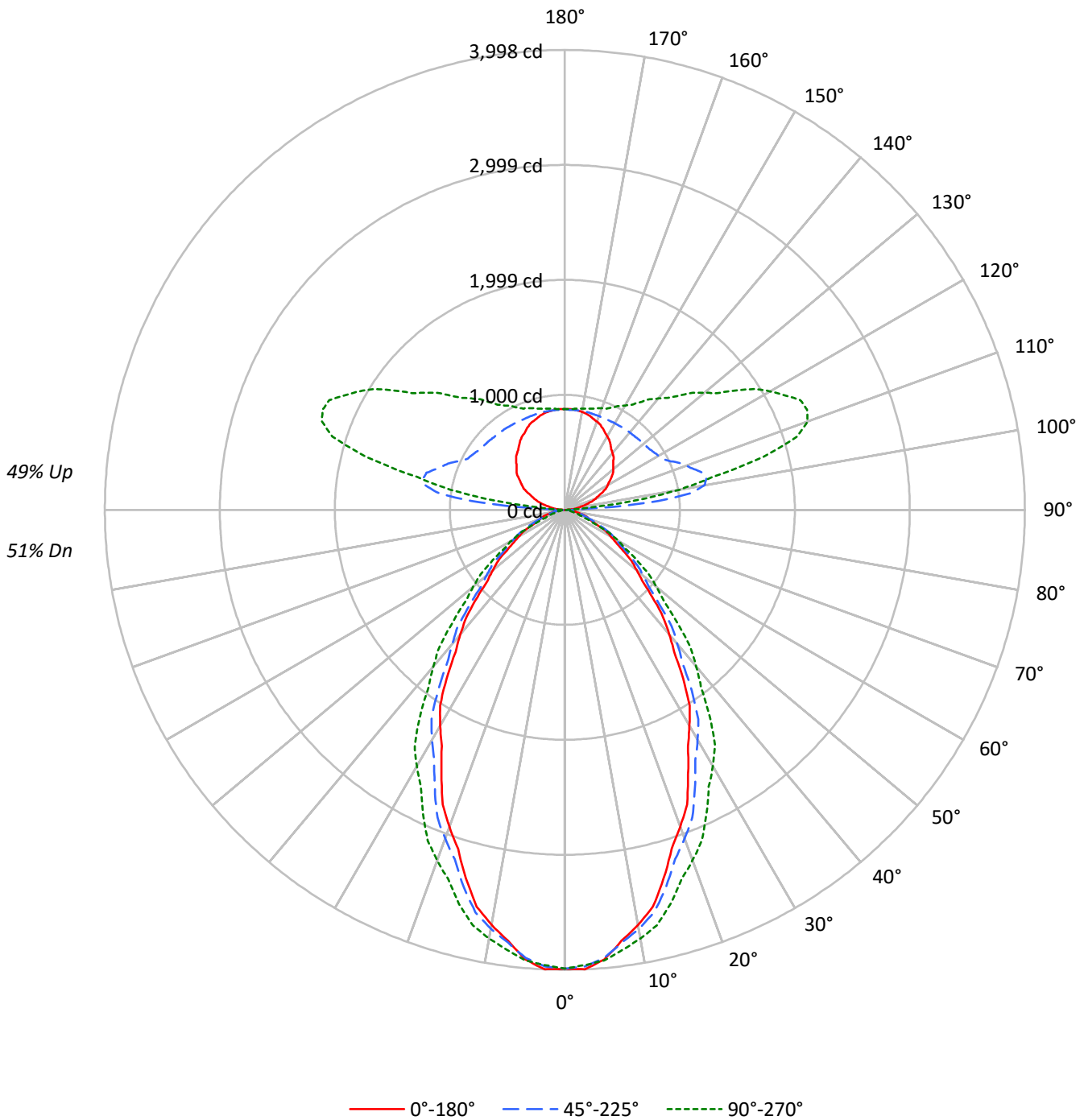
Lumens per Lamp: N/A
Luminaire Lumens: 11500.3 lumens
Efficiency: N/A
Efficacy: 107.2 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 107.3
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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51
1	99	95	92	89	91	88	85	83	75	73	71	63	62	60	52	51	50	45
2	91	84	79	74	84	78	74	70	67	64	61	57	54	52	47	45	44	40
3	84	75	69	63	78	70	64	60	60	56	53	51	48	46	43	41	39	35
4	77	68	60	55	72	63	57	52	54	50	46	47	43	40	39	37	35	31
5	72	61	53	48	66	57	50	45	49	44	40	42	39	36	36	33	31	28
6	66	55	48	42	61	52	45	40	45	40	36	39	35	32	33	30	28	25
7	62	50	43	38	57	47	41	36	41	36	32	36	32	29	31	28	25	23
8	58	46	39	34	53	43	37	32	38	33	29	33	29	26	28	25	23	21
9	54	42	35	30	50	40	33	29	35	30	27	31	27	24	27	24	21	19
10	50	39	32	28	47	37	31	27	33	28	24	29	25	22	25	22	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	24532	24532	24532
5°	24226	24140	24280
10°	22889	23097	23632
15°	21130	21620	22590
20°	19188	19910	21227
25°	17210	18149	19776
30°	15388	16395	18272
35°	13456	14429	16492
40°	11326	12225	14277
45°	9347	10154	11920
50°	7803	8508	9931
55°	6625	7301	8201
60°	5662	6329	6544
65°	4509	5324	4228
70°	3998	4154	2581
75°	3703	3370	1580
80°	3411	3099	1364
85°	3091	2844	1115



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	365.8	3.2
10°-20°	951.6	8.3
20°-30°	1232.5	10.7
30°-40°	1207.0	10.5
40°-50°	923.9	8.0
50°-60°	615.6	5.4
60°-70°	335.9	2.9
70°-80°	140.0	1.2
80°-90°	41.5	0.4
90°-100°	409.9	3.6
100°-110°	1131.5	9.8
110°-120°	1166.9	10.1
120°-130°	937.7	8.2
130°-140°	736.9	6.4
140°-150°	565.2	4.9
150°-160°	406.2	3.5
160°-170°	248.4	2.2
170°-180°	83.8	0.7
0°-30°	2549.9	22.2
0°-40°	3756.9	32.7
0°-60°	5296.4	46.1
0°-90°	5813.8	50.6
90°-120°	2708.2	23.5
90°-150°	4948.1	43.0
90°-180°	5686.0	49.4
0°-180°	11500.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3988	3988	3988	3988	3988	
5°	3924	3884	3910	3919	3932	365
15°	3318	3306	3395	3488	3548	927
25°	2536	2543	2674	2791	2914	1166
35°	1792	1801	1922	2051	2196	1114
45°	1075	1095	1167	1256	1370	838
55°	618	644	681	707	765	560
65°	310	335	366	320	290	322
75°	156	156	142	97	66	166
85°	44	44	40	26	16	48
90°	3	6	11	13	14	6
95°	60	222	744	306	199	64
105°	202	311	1245	1900	1790	215
115°	361	437	1003	1985	2257	355
125°	496	564	909	1538	1805	441
135°	596	661	884	1246	1404	462
145°	692	740	872	1060	1141	433
155°	780	806	865	952	982	359
165°	844	855	870	903	910	238
175°	875	876	871	884	881	83
180°	875	875	875	875	875	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3988.5	3988.5	3988.5	3988.5	3988.5
2.5°	3998.3	3962.7	3971.7	3971.4	3960.5
5°	3923.7	3884.4	3909.7	3918.8	3932.5
7.5°	3778.1	3748.3	3794.6	3828.8	3856.5
10°	3664.7	3639.0	3698.0	3747.8	3783.7
12.5°	3533.1	3511.5	3584.6	3651.4	3698.3
15°	3318.2	3306.2	3395.2	3487.6	3547.5
17.5°	3088.2	3082.4	3184.5	3292.3	3368.9
20°	2931.4	2929.7	3041.7	3154.0	3242.9
22.5°	2773.2	2777.0	2894.7	3011.4	3112.7
25°	2535.9	2542.7	2674.2	2790.7	2913.9
27.5°	2316.4	2319.5	2455.4	2578.4	2709.9
30°	2166.6	2175.2	2308.4	2435.8	2572.7
32.5°	2016.8	2026.7	2157.2	2288.8	2428.4
35°	1792.1	1800.7	1921.6	2050.9	2196.4
37.5°	1560.4	1572.0	1679.4	1801.7	1944.7
40°	1410.6	1427.7	1522.6	1637.8	1778.1
42.5°	1266.4	1287.6	1375.6	1484.9	1611.5
45°	1074.6	1095.1	1167.3	1255.7	1370.3
47.5°	909.4	933.0	988.5	1064.5	1162.4
50°	815.5	837.8	889.1	945.4	1037.8
52.5°	732.9	755.2	800.8	844.3	923.0
55°	617.8	643.5	680.8	706.6	764.8
57.5°	523.3	547.9	577.5	589.2	624.4
60°	460.3	487.7	514.5	513.2	532.0
62.5°	402.9	426.1	452.9	434.4	435.4
65°	309.8	335.4	365.8	319.6	290.5
67.5°	250.3	255.7	287.0	222.9	188.3
70°	222.3	222.3	231.0	172.6	143.5
72.5°	195.7	195.7	187.6	140.4	109.9
75°	155.8	155.8	141.8	97.3	66.5
77.5°	120.1	118.7	108.5	72.6	48.3
80°	96.3	96.3	87.5	57.3	38.5
82.5°	75.3	75.3	67.9	44.8	28.7
85°	43.8	43.8	40.3	26.0	15.8
87.5°	16.0	16.5	16.2	10.9	9.8
90°	2.8	5.5	11.2	12.6	14.0
92.5°	25.2	104.6	187.1	68.3	53.2
95°	60.2	221.8	743.6	305.6	198.8
97.5°	99.7	248.4	1101.5	848.0	614.2
100°	128.8	264.4	1233.7	1242.4	1009.6
102.5°	156.8	282.5	1259.4	1535.0	1314.3
105°	201.6	311.2	1244.9	1900.5	1789.6
107.5°	249.3	346.7	1175.4	2076.7	2117.2
110°	282.9	370.5	1121.6	2114.6	2246.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	313.1	397.4	1071.2	2084.7	2278.5
115°	361.3	436.6	1002.6	1984.8	2257.3
117.5°	403.3	478.3	957.5	1844.2	2154.2
120°	431.3	505.2	939.6	1749.1	2061.2
122.5°	458.2	528.8	925.0	1660.2	1955.9
125°	495.7	564.2	908.8	1538.0	1805.0
127.5°	527.6	596.1	899.3	1434.6	1664.9
130°	548.9	617.4	894.8	1371.4	1580.9
132.5°	569.1	634.2	890.3	1318.3	1508.1
135°	596.5	660.9	883.6	1245.7	1404.5
137.5°	627.3	685.9	880.2	1184.6	1320.2
140°	644.1	701.6	878.0	1143.9	1263.1
142.5°	663.2	716.3	875.7	1107.8	1212.6
145°	691.7	739.7	872.4	1060.5	1141.2
147.5°	719.2	761.1	869.3	1020.6	1083.3
150°	739.4	773.6	868.2	996.8	1047.4
152.5°	755.0	787.1	867.1	976.4	1018.3
155°	780.0	806.0	865.4	951.5	981.6
157.5°	802.9	822.9	865.7	933.3	953.9
160°	816.4	834.2	866.8	923.1	938.2
162.5°	827.6	843.2	867.9	914.1	925.9
165°	844.4	855.3	869.6	903.3	910.2
167.5°	857.3	863.8	871.0	896.8	899.0
170°	864.0	869.5	871.0	893.4	893.4
172.5°	869.6	872.9	871.0	888.9	887.8
175°	875.2	876.5	871.0	883.5	880.8
177.5°	877.4	876.3	870.7	878.5	876.3
180°	875.2	875.2	875.2	875.2	875.2

(END OF REPORT)