

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: P519098

Luminaire Tested: **SQ4-WB-050U-075D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519098
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-075D-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

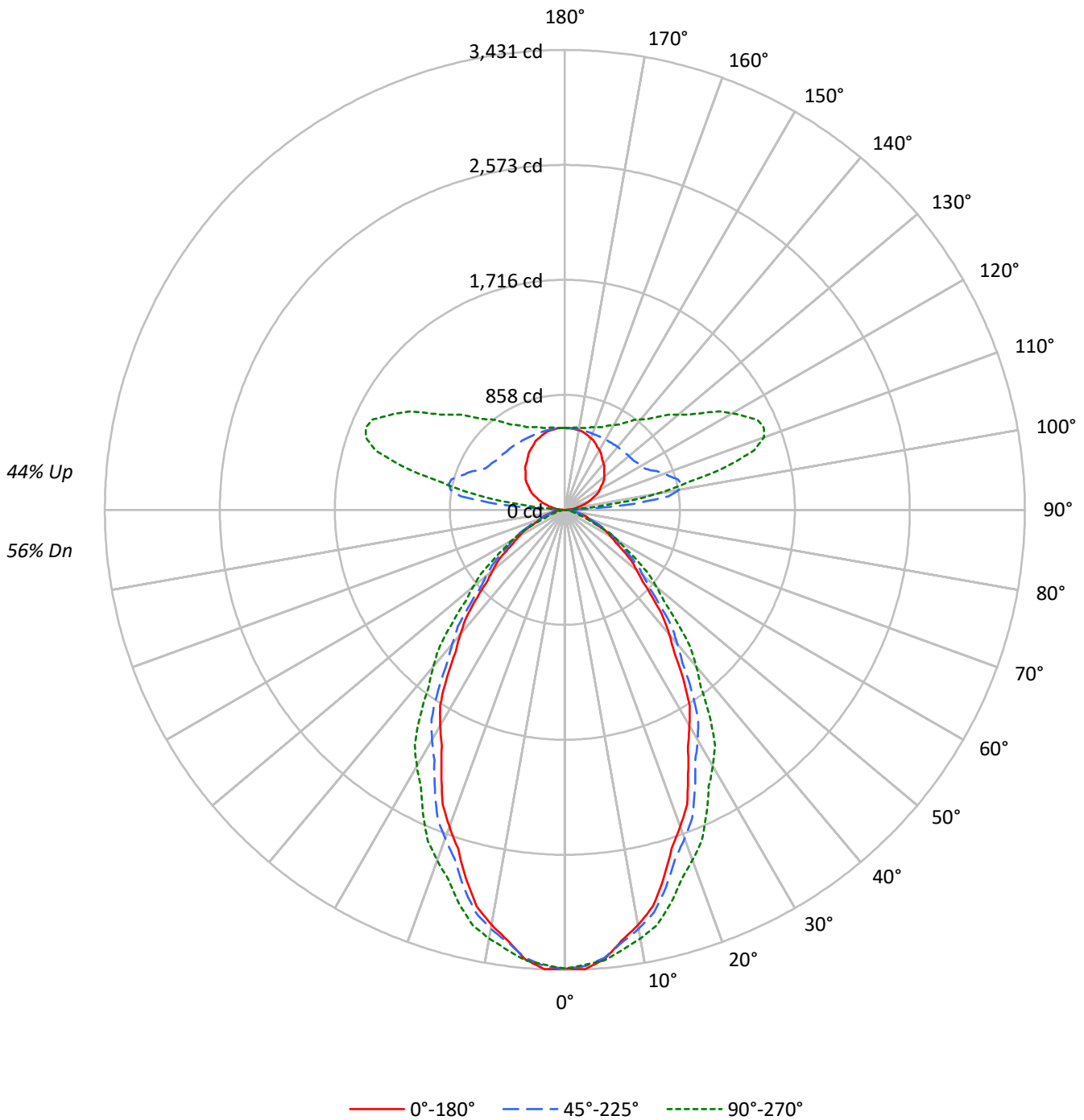
Lumens per Lamp: N/A
Luminaire Lumens: 8973.0 lumens
Efficiency: N/A
Efficacy: 114.9 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 78.1
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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	56
1	100	96	93	90	93	90	87	84	78	76	74	66	65	64	56	55	54	49
2	92	86	80	76	86	80	75	71	70	66	63	60	57	55	51	49	48	43
3	85	77	70	65	79	72	66	61	63	58	55	54	51	48	46	44	42	38
4	79	69	62	56	73	65	58	53	57	52	48	49	46	43	42	40	38	34
5	73	62	55	49	68	58	52	47	51	46	42	45	41	38	39	36	34	31
6	68	56	49	43	63	53	46	41	47	42	38	41	37	34	36	33	30	28
7	63	51	44	39	59	49	42	37	43	38	34	38	34	31	33	30	28	25
8	59	47	40	35	55	45	38	33	40	34	31	35	31	28	31	28	25	23
9	55	43	36	31	51	41	35	30	37	32	28	33	29	26	29	26	23	21
10	52	40	33	29	48	38	32	28	34	29	26	30	26	23	27	24	21	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15787	15787	15787
5°	15590	15535	15625
10°	14729	14863	15207
15°	13597	13913	14537
20°	12348	12812	13660
25°	11075	11679	12726
30°	9902	10551	11758
35°	8660	9285	10613
40°	7288	7867	9188
45°	6015	6534	7671
50°	5022	5474	6391
55°	4263	4698	5278
60°	3643	4073	4212
65°	2901	3425	2721
70°	2572	2673	1660
75°	2381	2167	1018
80°	2194	1995	877
85°	1985	1826	715



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	313.9	3.5
10°-20°	816.5	9.1
20°-30°	1057.6	11.8
30°-40°	1035.6	11.5
40°-50°	792.7	8.8
50°-60°	528.2	5.9
60°-70°	288.2	3.2
70°-80°	120.1	1.3
80°-90°	36.4	0.4
90°-100°	292.9	3.3
100°-110°	795.7	8.9
110°-120°	818.1	9.1
120°-130°	654.1	7.3
130°-140°	513.9	5.7
140°-150°	394.1	4.4
150°-160°	283.4	3.2
160°-170°	173.3	1.9
170°-180°	58.4	0.7
0°-30°	2187.9	24.4
0°-40°	3223.5	35.9
0°-60°	4544.5	50.6
0°-90°	4989.1	55.6
90°-120°	1906.7	21.2
90°-150°	3468.7	38.7
90°-180°	3984.0	44.4
0°-180°	8973.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3422	3422	3422	3422	3422	
5°	3367	3333	3355	3362	3374	313
15°	2847	2837	2913	2992	3044	795
25°	2176	2182	2294	2394	2500	1001
35°	1538	1545	1649	1760	1885	956
45°	922	940	1002	1077	1176	719
55°	530	552	584	606	656	481
65°	266	288	314	274	249	276
75°	134	134	122	84	57	143
85°	38	38	34	22	14	41
90°	2	8	14	18	18	5
95°	43	160	510	222	149	46
105°	141	220	875	1332	1254	150
115°	251	305	700	1393	1587	248
125°	345	393	634	1068	1260	308
135°	416	462	616	870	981	322
145°	481	515	608	739	795	302
155°	543	563	604	664	683	251
165°	589	596	606	632	634	166
175°	610	612	608	616	614	58
180°	610	610	610	610	610	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3422.2	3422.2	3422.2	3422.2	3422.2
2.5°	3430.6	3400.1	3407.8	3407.6	3398.2
5°	3366.7	3332.9	3354.7	3362.4	3374.2
7.5°	3241.7	3216.2	3255.8	3285.2	3309.0
10°	3144.4	3122.4	3173.0	3215.7	3246.5
12.5°	3031.5	3013.0	3075.7	3133.0	3173.3
15°	2847.1	2836.8	2913.2	2992.4	3043.8
17.5°	2649.8	2644.8	2732.4	2824.9	2890.7
20°	2515.2	2513.8	2609.8	2706.2	2782.5
22.5°	2379.5	2382.7	2483.7	2583.9	2670.8
25°	2175.9	2181.7	2294.5	2394.5	2500.2
27.5°	1987.6	1990.2	2106.8	2212.4	2325.1
30°	1859.0	1866.4	1980.7	2089.9	2207.4
32.5°	1730.5	1739.0	1850.9	1963.9	2083.7
35°	1537.7	1545.0	1648.8	1759.8	1884.6
37.5°	1338.9	1348.8	1441.0	1545.9	1668.6
40°	1210.3	1225.0	1306.4	1405.3	1525.7
42.5°	1086.6	1104.8	1180.3	1274.1	1382.7
45°	922.0	939.6	1001.6	1077.4	1175.8
47.5°	780.3	800.5	848.1	913.4	997.4
50°	699.8	718.9	762.8	811.2	890.5
52.5°	628.9	648.0	687.1	724.4	792.0
55°	530.1	552.1	584.1	606.3	656.2
57.5°	449.0	470.1	495.5	505.5	535.8
60°	394.9	418.4	441.5	440.3	456.5
62.5°	345.7	365.6	388.6	372.7	373.6
65°	265.8	287.8	313.8	274.2	249.3
67.5°	214.7	219.4	246.3	191.2	161.6
70°	190.7	190.7	198.2	148.1	123.1
72.5°	167.9	167.9	161.0	120.4	94.3
75°	133.6	133.6	121.6	83.5	57.1
77.5°	103.0	101.8	93.1	62.3	41.4
80°	82.6	82.6	75.1	49.2	33.0
82.5°	64.6	64.6	58.3	38.4	24.6
85°	37.5	37.5	34.5	22.3	13.5
87.5°	13.6	14.8	14.8	10.7	9.5
90°	2.0	7.7	13.7	17.7	17.7
92.5°	17.7	80.2	139.3	59.8	50.6
95°	43.2	160.2	510.1	222.0	149.1
97.5°	71.4	176.9	782.0	608.4	427.3
100°	90.2	188.1	865.2	877.1	708.2
102.5°	109.1	199.2	887.2	1084.7	935.8
105°	141.3	219.9	875.0	1332.3	1253.6
107.5°	174.6	244.1	824.4	1460.1	1482.0
110°	198.2	261.5	786.7	1485.3	1579.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	218.6	278.8	749.1	1464.4	1606.0
115°	251.1	304.8	700.4	1393.4	1587.2
117.5°	281.7	333.1	669.4	1292.7	1511.0
120°	302.1	352.0	655.3	1225.2	1442.0
122.5°	319.4	369.3	645.9	1157.6	1366.7
125°	345.3	393.3	633.7	1067.7	1259.5
127.5°	368.4	416.0	627.0	999.6	1164.2
130°	382.6	428.6	623.9	956.8	1104.5
132.5°	396.7	442.7	620.7	920.4	1051.2
135°	415.9	462.0	616.0	869.7	980.9
137.5°	436.7	478.5	613.7	824.9	918.6
140°	449.3	489.6	612.1	796.5	880.9
142.5°	461.8	499.0	610.5	774.2	844.8
145°	480.7	515.2	608.2	738.9	794.6
147.5°	501.9	531.4	606.2	711.2	754.9
150°	516.0	540.9	606.2	695.3	729.8
152.5°	527.0	548.8	604.7	681.0	709.4
155°	543.4	562.6	604.3	663.6	682.7
157.5°	559.5	574.5	604.3	651.7	666.3
160°	568.9	582.4	604.3	643.8	655.3
162.5°	578.4	588.7	605.8	637.4	645.9
165°	588.6	596.2	606.2	631.8	633.7
167.5°	599.2	603.0	608.2	625.1	626.6
170°	602.3	606.1	608.2	621.9	621.9
172.5°	605.4	607.7	608.2	618.8	618.8
175°	610.1	612.1	608.2	616.0	614.1
177.5°	611.7	611.7	607.0	613.2	610.1
180°	610.1	610.1	610.1	610.1	610.1

(END OF REPORT)