

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: P564672

Luminaire Tested: **SQ4-PW1-050U-100D-835-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564672
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2106-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PW1-050U-100D-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

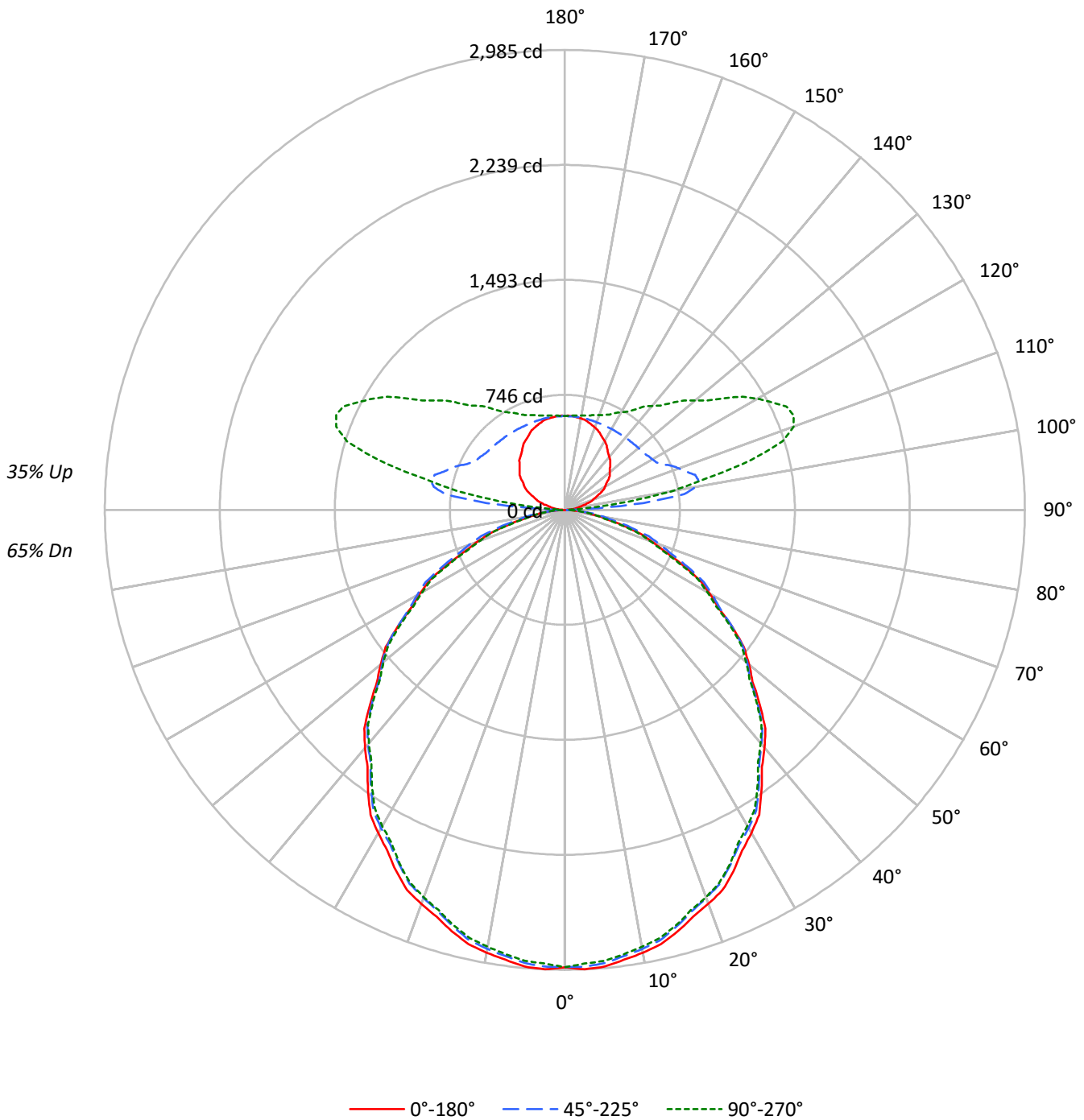
Lumens per Lamp: N/A
Luminaire Lumens: 11537.8 lumens
Efficiency: N/A
Efficacy: 120.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 95.4
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	50	30	10	0	
RCR																						
0	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70	65				
1	101	97	93	90	95	91	88	85	81	78	76	71	69	68	62	61	60	55				
2	92	85	79	73	87	80	75	70	71	67	63	63	59	57	55	53	50	47				
3	84	75	67	61	79	71	64	59	63	58	53	56	51	48	49	46	43	40				
4	77	66	58	52	72	63	55	50	56	50	45	50	45	41	44	40	37	34				
5	71	59	51	45	67	56	48	43	50	44	39	45	40	36	39	36	32	30				
6	66	53	45	39	61	50	43	37	45	39	34	40	35	31	36	32	29	26				
7	61	48	40	34	57	46	38	33	41	35	30	37	32	28	33	29	25	23				
8	56	44	36	30	53	42	34	29	38	31	27	34	29	25	30	26	23	21				
9	53	40	32	27	49	38	31	26	34	29	24	31	26	22	28	24	21	19				
10	49	37	29	24	46	35	28	24	32	26	22	29	24	20	26	22	19	17				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13692	13692	13692
5°	13781	13672	13611
10°	13671	13560	13487
15°	13526	13376	13326
20°	13364	13159	13133
25°	13177	12938	12898
30°	12899	12704	12620
35°	12532	12356	12282
40°	12142	11952	11905
45°	11669	11516	11464
50°	11186	11092	11016
55°	10663	10663	10495
60°	10012	10206	9843
65°	9162	9620	8934
70°	8076	8853	7866
75°	6898	7924	6712
80°	5350	6668	5419
85°	3462	5124	4568



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	279.5	2.4
10°-20°	789.1	6.8
20°-30°	1170.5	10.1
30°-40°	1369.6	11.9
40°-50°	1363.5	11.8
50°-60°	1177.4	10.2
60°-70°	847.5	7.3
70°-80°	444.4	3.9
80°-90°	112.5	1.0
90°-100°	292.9	2.5
100°-110°	795.7	6.9
110°-120°	818.1	7.1
120°-130°	654.1	5.7
130°-140°	513.9	4.5
140°-150°	394.1	3.4
150°-160°	283.4	2.5
160°-170°	173.3	1.5
170°-180°	58.4	0.5
0°-30°	2239.0	19.4
0°-40°	3608.6	31.3
0°-60°	6149.5	53.3
0°-90°	7553.9	65.5
90°-120°	1906.7	16.5
90°-150°	3468.7	30.1
90°-180°	3984.0	34.5
0°-180°	11537.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2968	2968	2968	2968	2968	
5°	2976	2943	2952	2944	2939	282
15°	2832	2796	2801	2795	2790	798
25°	2589	2545	2542	2526	2534	1190
35°	2225	2195	2194	2173	2181	1391
45°	1789	1773	1765	1760	1757	1380
55°	1326	1323	1326	1308	1305	1183
65°	839	865	881	847	818	832
75°	387	423	445	415	377	415
85°	65	86	97	91	86	86
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°	2968.1	2968.1	2968.1	2968.1	2968.1
2.5°	2984.8	2960.3	2968.1	2961.5	2947.2
5°	2975.9	2942.7	2952.4	2944.4	2939.3
7.5°	2945.6	2914.9	2922.1	2913.6	2910.6
10°	2918.4	2887.7	2894.9	2884.3	2879.2
12.5°	2887.0	2854.3	2861.4	2850.9	2847.8
15°	2832.1	2796.3	2800.7	2795.4	2790.3
17.5°	2768.3	2732.0	2732.7	2724.3	2723.3
20°	2722.3	2683.9	2680.4	2670.1	2675.2
22.5°	2672.1	2631.7	2628.1	2613.6	2620.8
25°	2588.9	2545.4	2541.8	2526.3	2534.0
27.5°	2492.7	2449.7	2449.8	2428.0	2436.2
30°	2421.5	2380.6	2384.9	2359.0	2369.2
32.5°	2346.2	2309.4	2311.7	2285.8	2296.0
35°	2225.4	2194.7	2194.0	2173.3	2181.0
37.5°	2102.0	2074.9	2070.6	2058.6	2060.7
40°	2016.2	1993.2	1984.8	1977.0	1977.0
42.5°	1926.2	1905.3	1897.0	1891.2	1889.1
45°	1788.7	1773.4	1765.2	1759.9	1757.3
47.5°	1652.7	1638.4	1631.3	1627.6	1625.0
50°	1558.6	1548.3	1545.5	1537.6	1535.0
52.5°	1464.4	1458.3	1455.5	1445.5	1443.0
55°	1325.8	1323.3	1325.8	1307.5	1304.9
57.5°	1181.5	1185.6	1194.0	1169.3	1163.2
60°	1085.2	1095.5	1106.2	1077.2	1066.9
62.5°	986.9	1003.3	1018.3	985.0	970.7
65°	839.4	865.0	881.3	846.6	818.5
67.5°	697.2	728.9	748.4	711.1	679.4
70°	598.8	634.6	656.4	619.0	583.2
72.5°	513.1	553.0	570.6	535.3	499.5
75°	387.0	422.8	444.6	414.9	376.6
77.5°	274.6	308.3	326.4	300.5	268.8
80°	201.4	237.2	251.0	229.5	204.0
82.5°	142.8	172.4	182.0	169.1	151.7
85°	65.4	85.8	96.8	91.4	86.3
87.5°	17.1	32.6	42.5	43.3	45.4
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)