

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: P564960

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

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564960
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-PW1-100U-100D-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

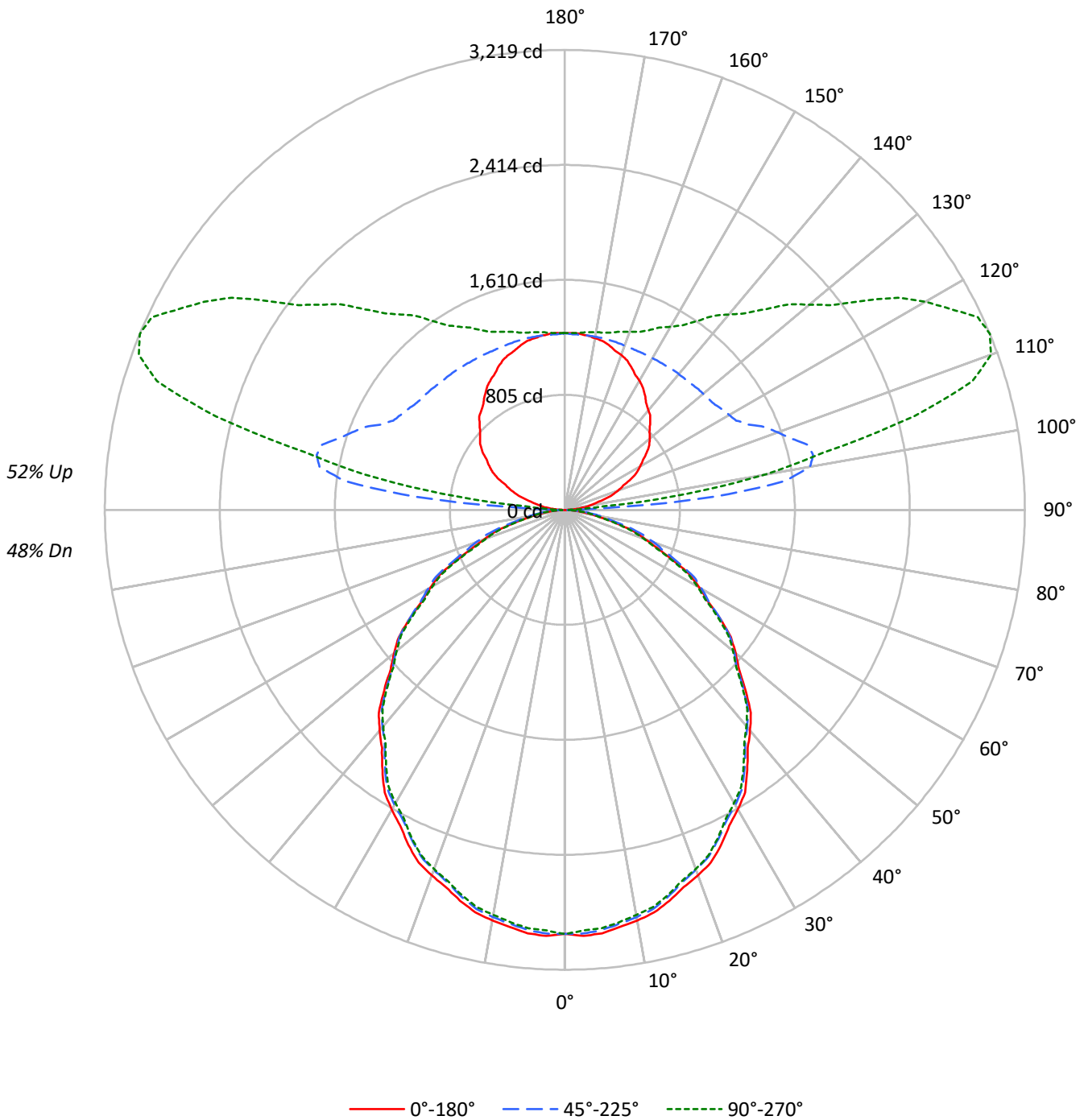
Lumens per Lamp: N/A
Luminaire Lumens: 15586.8 lumens
Efficiency: N/A
Efficacy: 128.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 121.2
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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	55	55	55	48				48
1	98	93	89	86	90	86	83	80	72	70	68	60	58	57	49	47	46	41				41
2	89	82	75	70	82	75	70	66	64	60	56	53	50	48	43	41	39	35				35
3	81	72	64	59	74	66	60	55	56	51	47	47	43	40	38	36	33	29				29
4	74	63	56	50	68	59	52	47	50	45	40	42	38	35	34	31	29	25				25
5	68	57	48	43	62	52	45	40	45	39	35	37	33	30	31	28	25	22				22
6	63	51	43	37	58	47	40	35	40	35	30	34	30	26	28	25	22	19				19
7	58	46	38	32	53	43	35	30	36	31	27	31	26	23	25	22	20	17				17
8	54	42	34	29	49	39	32	27	33	28	24	28	24	21	23	20	18	15				15
9	50	38	30	25	46	35	29	24	30	25	21	26	22	19	21	18	16	14				14
10	47	35	28	23	43	32	26	22	28	23	19	24	20	17	20	17	14	12				12

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	1.8
10°-20°	789.1	5.1
20°-30°	1170.5	7.5
30°-40°	1369.6	8.8
40°-50°	1363.5	8.7
50°-60°	1177.4	7.6
60°-70°	847.5	5.4
70°-80°	444.4	2.9
80°-90°	112.7	0.7
90°-100°	579.0	3.7
100°-110°	1598.3	10.3
110°-120°	1648.4	10.6
120°-130°	1324.6	8.5
130°-140°	1041.0	6.7
140°-150°	798.4	5.1
150°-160°	573.8	3.7
160°-170°	350.9	2.3
170°-180°	118.3	0.8
0°-30°	2239.0	14.4
0°-40°	3608.6	23.2
0°-60°	6149.5	39.5
0°-90°	7554.2	48.5
90°-120°	3825.6	24.5
90°-150°	6989.6	44.8
90°-180°	8033.0	51.5
0°-180°	15586.8	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°	4	8	16	18	20	8
95°	85	313	1050	432	281	91
105°	285	440	1758	2685	2528	303
115°	510	617	1416	2804	3189	501
125°	700	797	1284	2172	2550	623
135°	843	934	1248	1760	1984	652
145°	977	1045	1232	1498	1612	612
155°	1102	1138	1222	1344	1387	508
165°	1193	1208	1228	1276	1286	336
175°	1236	1238	1230	1248	1244	117
180°	1236	1236	1236	1236	1236	

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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°	17.5	32.6	42.9	43.4	45.8
90°	4.0	7.8	15.8	17.8	19.8
92.5°	35.6	147.8	264.3	96.4	75.2
95°	85.1	313.3	1050.3	431.7	280.9
97.5°	140.8	350.9	1555.9	1197.9	867.6
100°	182.0	373.5	1742.6	1755.0	1426.2
102.5°	221.5	399.1	1779.0	2168.4	1856.6
105°	284.8	439.6	1758.5	2684.6	2527.9
107.5°	352.1	489.8	1660.4	2933.5	2990.8
110°	399.6	523.3	1584.4	2987.1	3172.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	442.3	561.4	1513.2	2944.8	3218.7
115°	510.3	616.7	1416.3	2803.7	3188.6
117.5°	569.7	675.7	1352.6	2605.1	3043.0
120°	609.2	713.7	1327.3	2470.7	2911.7
122.5°	647.2	747.0	1306.7	2345.2	2762.9
125°	700.2	796.9	1283.7	2172.5	2549.7
127.5°	745.3	842.0	1270.3	2026.6	2351.9
130°	775.4	872.1	1264.0	1937.3	2233.2
132.5°	803.9	895.9	1257.6	1862.3	2130.3
135°	842.6	933.5	1248.1	1759.6	1984.0
137.5°	886.2	968.9	1243.4	1673.4	1864.9
140°	909.9	991.1	1240.2	1615.9	1784.2
142.5°	936.8	1011.8	1237.1	1564.8	1713.0
145°	977.1	1044.8	1232.3	1498.0	1612.1
147.5°	1015.9	1075.1	1228.0	1441.6	1530.2
150°	1044.4	1092.8	1226.4	1408.0	1479.6
152.5°	1066.6	1111.8	1224.8	1379.2	1438.4
155°	1101.8	1138.5	1222.4	1344.1	1386.6
157.5°	1134.2	1162.4	1222.8	1318.4	1347.4
160°	1153.2	1178.3	1224.4	1304.0	1325.3
162.5°	1169.0	1191.1	1226.0	1291.2	1307.9
165°	1192.8	1208.2	1228.4	1276.1	1285.7
167.5°	1211.0	1220.2	1230.3	1266.8	1269.9
170°	1220.4	1228.2	1230.3	1262.0	1262.0
172.5°	1228.4	1233.0	1230.3	1255.6	1254.1
175°	1236.3	1238.2	1230.3	1248.1	1244.2
177.5°	1239.4	1237.9	1229.9	1240.9	1237.9
180°	1236.3	1236.3	1236.3	1236.3	1236.3

(END OF REPORT)