

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: P519386

Luminaire Tested: **SQ4-WB-100U-075D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519386
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-075D-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

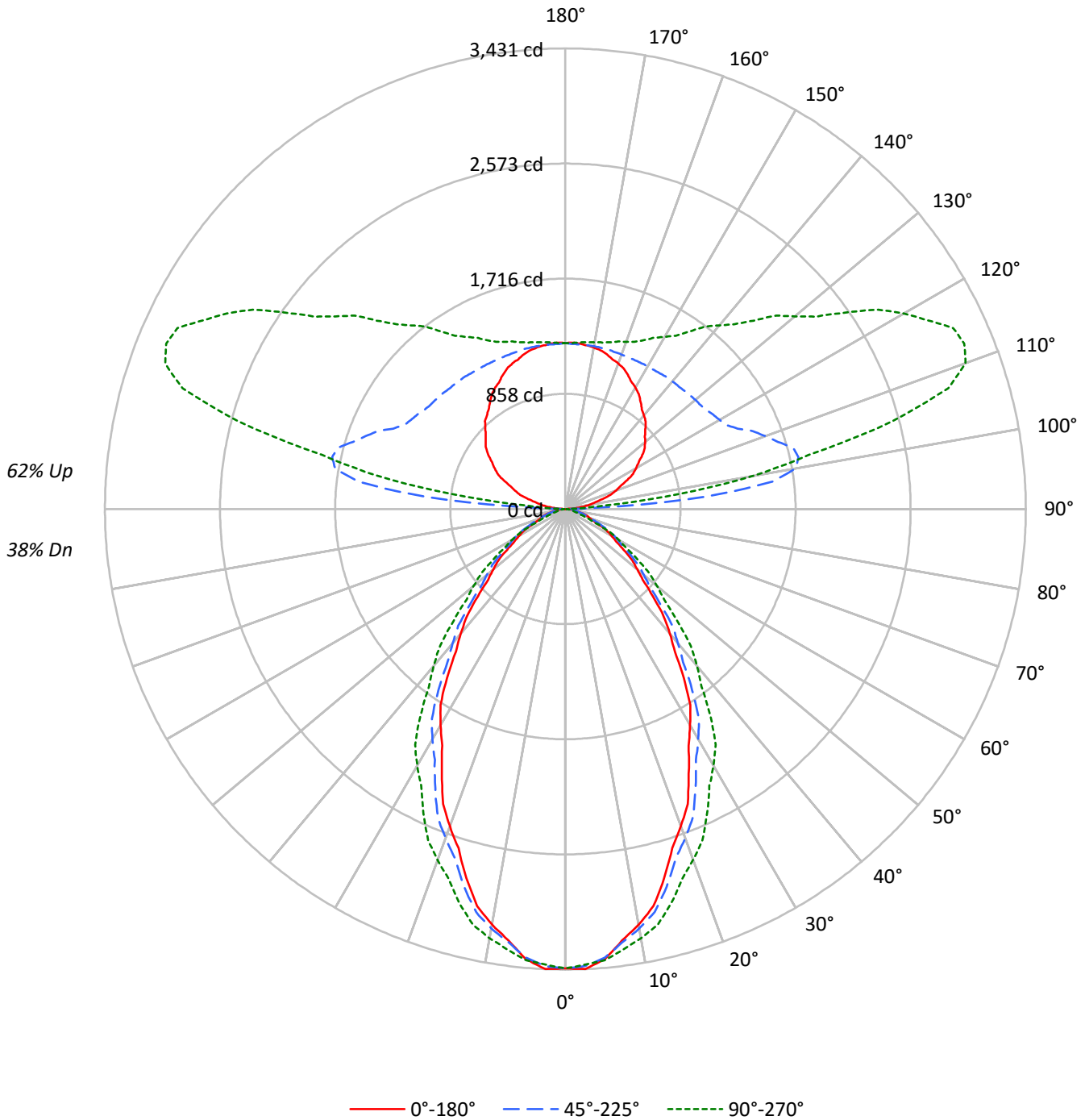
Lumens per Lamp: N/A
Luminaire Lumens: 13022.0 lumens
Efficiency: N/A
Efficacy: 125.3 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 103.9
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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	96	92	89	85	87	84	81	78	69	67	65	54	53	52	41	41	40	34
2	88	81	76	71	80	74	70	66	61	58	55	49	47	45	38	36	35	30
3	81	72	66	60	74	66	61	56	55	51	47	44	41	39	34	32	31	26
4	75	65	57	52	68	59	53	48	49	45	41	40	37	34	31	29	27	24
5	69	58	51	45	62	53	47	42	45	40	36	36	33	30	29	26	25	21
6	64	52	45	40	58	48	42	37	40	36	32	33	30	27	26	24	22	19
7	59	48	40	35	54	44	37	33	37	32	29	30	27	24	24	22	20	17
8	55	43	36	31	50	40	34	29	34	29	26	28	24	22	23	20	18	16
9	51	40	33	28	47	37	31	26	31	26	23	26	22	20	21	19	17	15
10	48	37	30	25	44	34	28	24	29	24	21	24	21	18	20	17	15	13

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	2.4
10°-20°	816.5	6.3
20°-30°	1057.6	8.1
30°-40°	1035.6	8.0
40°-50°	792.7	6.1
50°-60°	528.2	4.1
60°-70°	288.2	2.2
70°-80°	120.1	0.9
80°-90°	36.6	0.3
90°-100°	579.0	4.4
100°-110°	1598.3	12.3
110°-120°	1648.4	12.7
120°-130°	1324.6	10.2
130°-140°	1041.0	8.0
140°-150°	798.4	6.1
150°-160°	573.8	4.4
160°-170°	350.9	2.7
170°-180°	118.3	0.9
0°-30°	2187.9	16.8
0°-40°	3223.5	24.8
0°-60°	4544.5	34.9
0°-90°	4989.4	38.3
90°-120°	3825.6	29.4
90°-150°	6989.6	53.7
90°-180°	8033.0	61.7
0°-180°	13022.0	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°	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°	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°	14.0	14.8	15.2	10.8	10.0
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)