

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: P519842

Luminaire Tested: **SQ4-F-025U-100D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519842
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-025U-100D-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

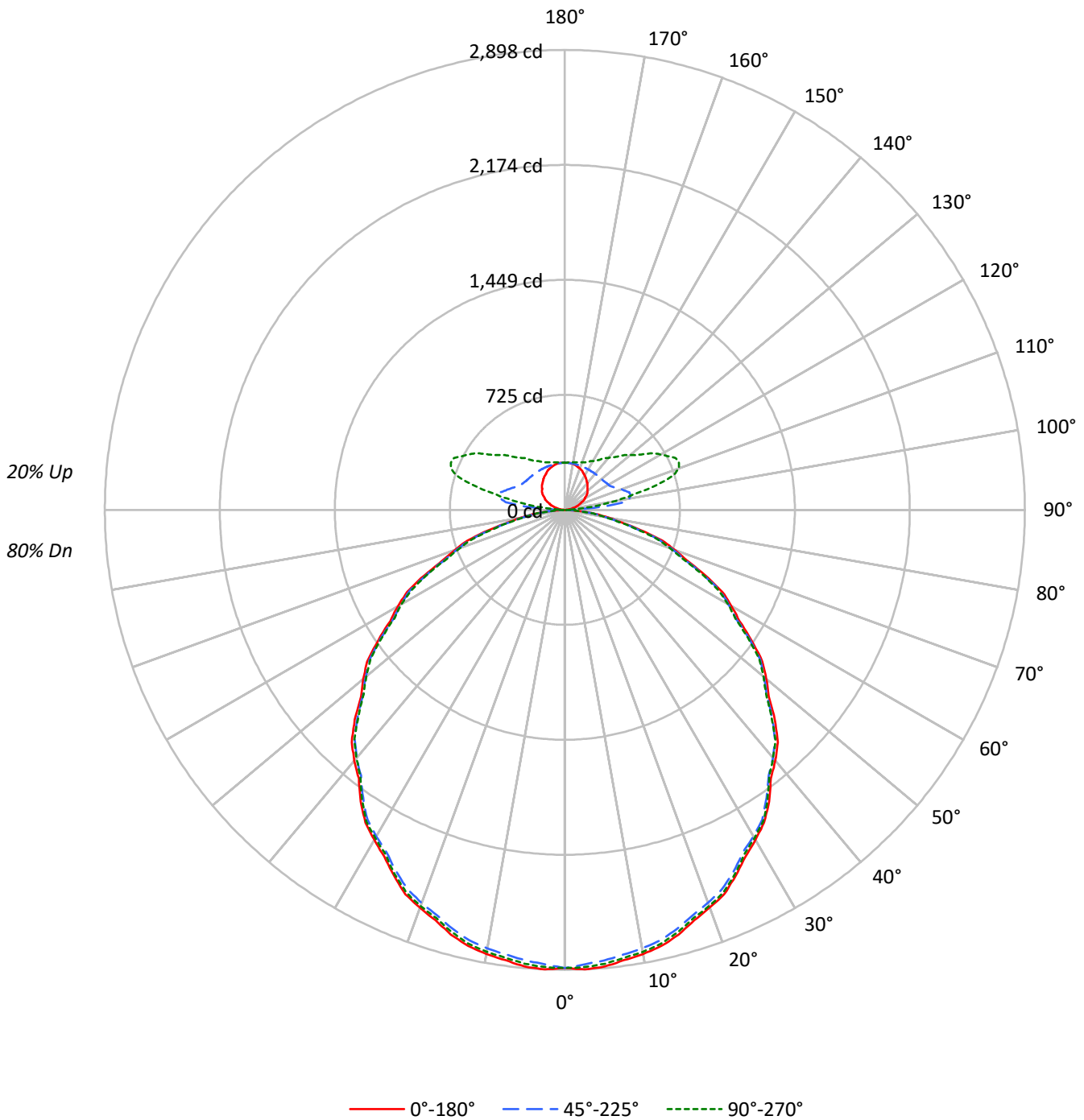
Lumens per Lamp: N/A
Luminaire Lumens: 9808.2 lumens
Efficiency: N/A
Efficacy: 123.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 79.3
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	50	30	10	0	
RCR																						
0	114	114	114	114	109	109	109	109	100	100	100	92	92	92	84	84	84	84	84	84	80	
1	105	100	96	92	100	96	92	89	88	85	83	81	79	77	74	73	71	71	71	71	68	
2	95	87	81	75	91	84	78	73	77	72	68	71	67	64	65	62	60	60	60	60	56	
3	87	77	69	63	83	74	67	61	68	62	57	63	58	54	58	54	51	51	51	51	48	
4	79	68	59	53	76	65	58	52	60	54	49	56	50	46	51	47	43	43	43	43	41	
5	73	61	52	46	70	58	50	44	54	47	42	50	44	40	46	42	38	38	38	38	35	
6	67	54	46	40	64	52	45	39	49	42	37	45	39	35	42	37	33	33	33	33	31	
7	62	49	41	35	59	48	40	34	44	38	33	41	35	31	38	33	30	30	30	30	27	
8	58	45	37	31	55	43	36	30	40	34	29	38	32	28	35	30	26	26	26	26	24	
9	54	41	33	28	52	40	32	27	37	31	26	35	29	25	32	28	24	24	24	24	22	
10	51	38	30	25	48	37	29	25	34	28	24	32	27	23	30	25	22	22	22	22	20	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13319	13319	13319
5°	13379	13196	13297
10°	13311	13144	13246
15°	13230	13051	13155
20°	13094	12939	13046
25°	12951	12800	12901
30°	12794	12656	12720
35°	12633	12477	12544
40°	12423	12279	12291
45°	12204	12036	11997
50°	11890	11747	11719
55°	11539	11412	11331
60°	11190	10988	10952
65°	10643	10405	10317
70°	9889	9649	9462
75°	8830	8548	8370
80°	7266	7003	6687
85°	4298	4721	4827



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	272.5	2.8
10°-20°	776.0	7.9
20°-30°	1165.4	11.9
30°-40°	1390.7	14.2
40°-50°	1425.5	14.5
50°-60°	1269.4	12.9
60°-70°	946.3	9.6
70°-80°	512.3	5.2
80°-90°	118.2	1.2
90°-100°	145.2	1.5
100°-110°	381.9	3.9
110°-120°	396.0	4.0
120°-130°	317.6	3.2
130°-140°	249.2	2.5
140°-150°	191.3	2.0
150°-160°	137.8	1.4
160°-170°	84.3	0.9
170°-180°	28.5	0.3
0°-30°	2213.9	22.6
0°-40°	3604.6	36.8
0°-60°	6299.6	64.2
0°-90°	7876.4	80.3
90°-120°	923.1	9.4
90°-150°	1681.2	17.1
90°-180°	1932.0	19.7
0°-180°	9808.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2887	2887	2887	2887	2887	
5°	2889	2883	2850	2875	2871	274
15°	2770	2761	2733	2754	2754	780
25°	2544	2539	2515	2529	2534	1172
35°	2243	2234	2216	2220	2227	1400
45°	1871	1861	1845	1835	1839	1439
55°	1435	1437	1419	1405	1409	1284
65°	975	971	953	943	945	964
75°	495	490	480	470	470	528
85°	81	89	89	91	91	114
90°	2	6	15	8	8	4
95°	19	75	250	129	88	21
105°	69	104	422	641	598	73
115°	122	148	338	675	770	121
125°	170	191	308	520	613	151
135°	202	223	298	420	476	157
145°	235	250	294	358	386	147
155°	266	273	294	323	332	122
165°	287	290	294	306	310	81
175°	298	298	296	300	300	28
180°	298	298	298	298	298	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2887.3	2887.3	2887.3	2887.3	2887.3
2.5°	2898.4	2892.1	2866.6	2887.2	2884.1
5°	2889.2	2883.4	2849.6	2875.3	2871.4
7.5°	2862.3	2856.4	2826.6	2850.3	2846.8
10°	2841.7	2835.8	2806.0	2829.8	2827.8
12.5°	2814.7	2808.9	2779.1	2802.8	2800.9
15°	2770.3	2760.6	2732.7	2754.5	2754.5
17.5°	2711.7	2704.4	2678.4	2696.6	2697.0
20°	2667.3	2661.4	2635.6	2655.4	2657.4
22.5°	2622.9	2617.1	2588.0	2606.4	2609.8
25°	2544.4	2538.6	2514.7	2528.7	2534.5
27.5°	2463.6	2455.1	2431.5	2443.9	2448.1
30°	2401.8	2397.9	2376.0	2382.0	2387.9
32.5°	2336.8	2332.9	2314.2	2317.1	2327.6
35°	2243.2	2233.5	2215.5	2219.6	2227.4
37.5°	2132.6	2128.0	2110.5	2108.3	2115.6
40°	2062.9	2055.2	2039.1	2035.2	2041.1
42.5°	1986.8	1979.1	1959.8	1956.1	1963.4
45°	1870.7	1861.0	1844.9	1835.1	1839.0
47.5°	1740.7	1740.7	1724.0	1712.6	1718.5
50°	1656.7	1656.7	1636.8	1627.0	1632.9
52.5°	1569.5	1571.0	1549.6	1544.5	1542.5
55°	1434.7	1436.7	1418.9	1405.1	1408.9
57.5°	1304.7	1300.5	1279.7	1270.6	1272.6
60°	1212.8	1206.9	1191.0	1177.3	1187.0
62.5°	1119.2	1116.6	1100.6	1085.1	1084.0
65°	975.0	971.1	953.2	943.3	945.2
67.5°	831.5	826.8	810.5	796.3	801.4
70°	733.2	733.2	715.4	707.3	701.5
72.5°	642.8	635.1	621.8	610.6	606.4
75°	495.4	489.6	479.6	469.6	469.6
77.5°	360.7	355.6	349.2	342.4	340.4
80°	273.5	271.5	263.6	261.4	251.7
82.5°	192.6	192.2	187.5	182.3	181.9
85°	81.2	89.0	89.2	91.2	91.2
87.5°	14.7	24.8	25.4	20.6	20.6
90°	1.9	5.6	15.3	7.6	7.6
92.5°	8.0	38.6	85.5	37.9	24.5
95°	19.1	75.1	250.2	128.9	87.8
97.5°	33.3	82.6	374.5	297.8	219.4
100°	44.0	88.8	412.6	418.2	324.8
102.5°	53.1	94.9	423.4	520.9	440.9
105°	68.8	104.3	422.2	641.0	598.0
107.5°	84.8	117.7	398.2	703.3	713.8
110°	95.5	125.4	378.3	719.4	764.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	106.2	134.6	360.0	709.2	778.0
115°	122.3	148.4	338.2	674.6	769.9
117.5°	137.9	161.8	323.3	626.8	732.5
120°	147.1	169.6	317.2	594.6	697.4
122.5°	156.3	178.7	312.6	562.5	663.7
125°	170.0	190.6	307.6	519.9	613.3
127.5°	181.1	202.1	303.4	485.6	564.3
130°	187.3	209.6	301.9	464.0	536.9
132.5°	193.4	215.7	300.3	445.5	510.9
135°	202.5	223.1	298.0	419.7	475.7
137.5°	212.1	232.3	297.7	400.3	446.3
140°	219.8	238.4	296.1	385.0	427.9
142.5°	225.9	243.0	296.1	374.1	411.1
145°	235.0	250.0	294.2	357.9	386.0
147.5°	244.1	258.8	294.2	344.4	367.6
150°	250.2	263.3	294.2	336.7	355.4
152.5°	256.4	266.5	294.2	330.4	344.7
155°	265.5	273.1	294.2	323.1	332.4
157.5°	272.4	279.6	294.2	316.6	323.3
160°	277.0	282.6	294.2	313.4	317.2
162.5°	281.6	285.7	294.2	310.4	314.1
165°	286.6	290.3	294.2	305.8	309.5
167.5°	291.2	293.1	296.1	303.8	305.3
170°	294.2	296.1	296.1	303.8	303.8
172.5°	295.7	296.1	296.1	302.2	300.7
175°	298.0	298.0	296.1	299.9	299.9
177.5°	298.0	298.0	296.5	299.6	298.0
180°	298.0	298.0	298.0	298.0	298.0

(END OF REPORT)