

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: P563996

Luminaire Tested: **SQ4-PR1-050U-100D-830-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563996
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PR1-050U-100D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

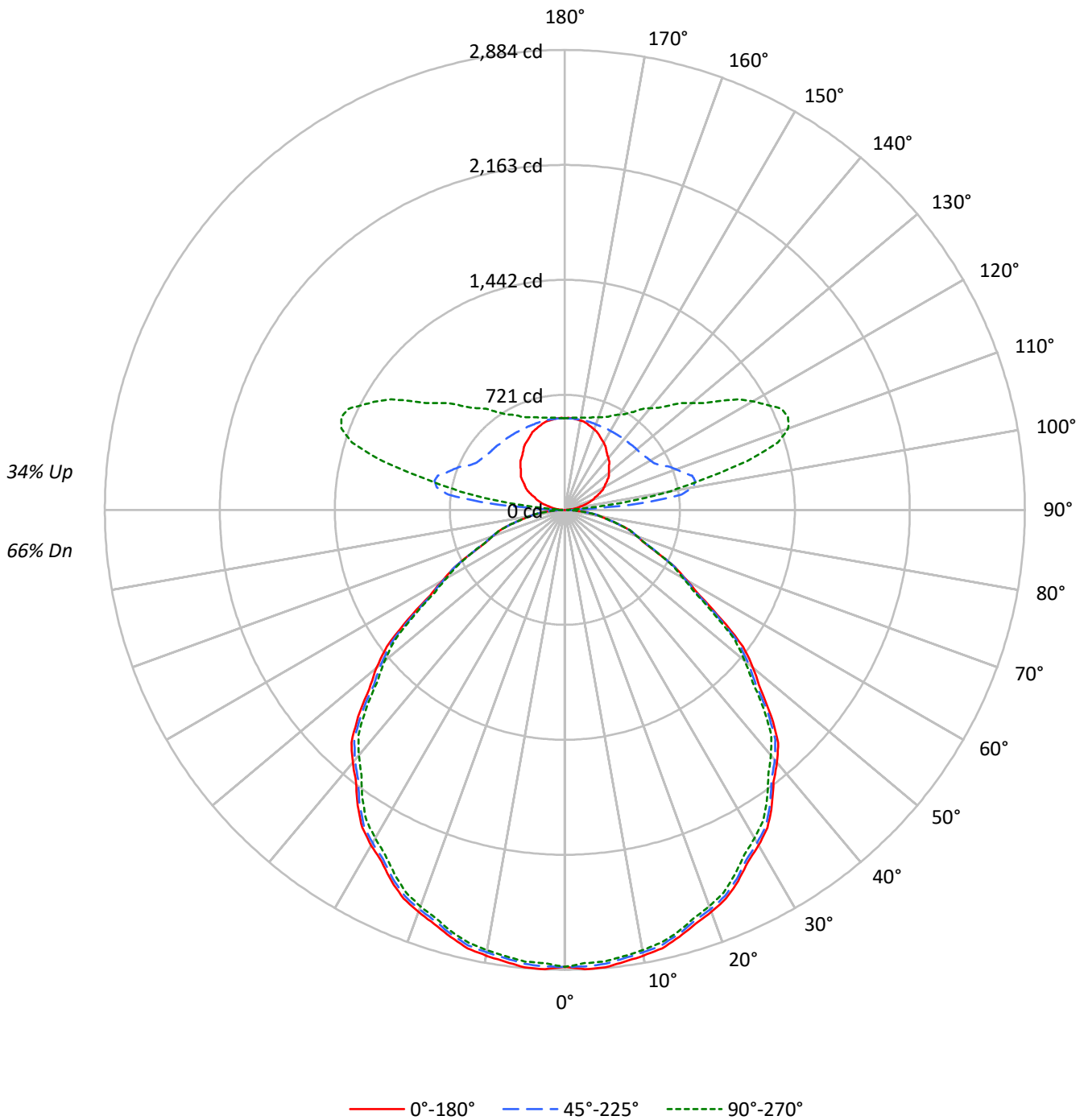
Lumens per Lamp: N/A
Luminaire Lumens: 10926.5 lumens
Efficiency: N/A
Efficacy: 114.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

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	66				
1	102	97	94	90	95	92	88	85	81	79	76	72	70	68	63	62	60	56				
2	93	85	79	74	87	81	75	71	72	68	64	63	60	57	56	53	51	48				
3	85	76	68	62	80	71	65	60	64	58	54	56	52	49	50	47	44	41				
4	78	67	59	53	73	64	56	51	57	51	47	51	46	42	45	41	38	35				
5	72	60	52	46	67	57	50	44	51	45	40	46	41	37	40	37	34	31				
6	66	54	46	40	62	51	44	38	46	40	35	41	36	33	37	33	30	27				
7	61	49	41	35	58	47	39	34	42	36	31	38	33	29	34	30	26	24				
8	57	45	37	31	54	42	35	30	38	32	28	34	30	26	31	27	24	22				
9	53	41	33	28	50	39	32	27	35	29	25	32	27	23	29	24	21	19				
10	50	37	30	25	47	36	29	24	33	27	23	29	25	21	26	22	20	18				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13220	13220	13220
5°	13339	13236	13167
10°	13297	13204	13135
15°	13238	13156	13085
20°	13172	13087	12990
25°	13079	12991	12840
30°	12938	12846	12662
35°	12747	12636	12455
40°	12456	12322	12099
45°	11949	11739	11498
50°	11054	10788	10576
55°	9648	9430	9231
60°	8130	8062	7902
65°	7032	7059	7006
70°	6459	6492	6492
75°	6203	6203	6247
80°	5837	5900	5837
85°	4705	5224	5224



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	271.0	2.5
10°-20°	775.3	7.1
20°-30°	1169.5	10.7
30°-40°	1393.4	12.8
40°-50°	1373.8	12.6
50°-60°	1049.9	9.6
60°-70°	649.7	5.9
70°-80°	369.0	3.4
80°-90°	114.5	1.0
90°-100°	276.5	2.5
100°-110°	751.0	6.9
110°-120°	772.2	7.1
120°-130°	617.4	5.7
130°-140°	485.1	4.4
140°-150°	372.0	3.4
150°-160°	267.5	2.4
160°-170°	163.6	1.5
170°-180°	55.1	0.5
0°-30°	2215.8	20.3
0°-40°	3609.2	33.0
0°-60°	6033.0	55.2
0°-90°	7166.2	65.6
90°-120°	1799.7	16.5
90°-150°	3274.1	30.0
90°-180°	3760.0	34.4
0°-180°	10926.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2866	2866	2866	2866	2866	
5°	2880	2849	2858	2848	2844	273
15°	2772	2743	2755	2745	2740	782
25°	2570	2538	2552	2525	2523	1182
35°	2264	2237	2244	2214	2212	1413
45°	1832	1807	1799	1767	1762	1403
55°	1200	1180	1172	1153	1148	1075
65°	644	639	647	642	642	653
75°	348	348	348	350	350	368
85°	89	94	99	99	99	103
90°	2	7	13	17	17	6
95°	41	151	482	210	141	43
105°	133	208	826	1258	1183	142
115°	237	288	661	1315	1498	234
125°	326	371	598	1008	1189	291
135°	393	436	582	821	926	304
145°	454	486	574	698	750	285
155°	513	531	570	626	644	237
165°	556	563	572	596	598	157
175°	576	578	574	581	580	55
180°	576	576	576	576	576	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2865.7	2865.7	2865.7	2865.7	2865.7
2.5°	2883.5	2858.4	2865.7	2859.5	2846.0
5°	2880.5	2849.2	2858.3	2848.3	2843.5
7.5°	2858.3	2827.4	2836.6	2826.7	2823.8
10°	2838.6	2809.6	2818.8	2808.8	2804.0
12.5°	2816.8	2786.0	2797.1	2785.1	2780.3
15°	2771.9	2743.0	2754.6	2744.7	2739.8
17.5°	2722.6	2691.7	2703.3	2691.8	2685.5
20°	2683.1	2654.1	2665.8	2648.5	2646.0
22.5°	2639.6	2610.7	2622.3	2599.1	2598.6
25°	2569.5	2538.1	2552.2	2525.0	2522.6
27.5°	2486.1	2457.1	2468.8	2441.1	2438.2
30°	2428.8	2399.9	2411.6	2381.8	2377.0
32.5°	2363.7	2336.6	2346.4	2316.7	2313.8
35°	2263.5	2236.9	2243.7	2214.0	2211.6
37.5°	2149.4	2125.3	2129.2	2096.5	2094.1
40°	2068.5	2044.3	2046.2	2011.6	2009.2
42.5°	1979.6	1955.5	1953.4	1918.8	1916.4
45°	1831.5	1807.4	1799.4	1767.2	1762.4
47.5°	1662.7	1638.5	1623.7	1597.4	1594.0
50°	1540.2	1516.1	1503.2	1480.8	1473.6
52.5°	1407.9	1383.8	1372.9	1352.5	1345.2
55°	1199.6	1180.3	1172.5	1152.6	1147.8
57.5°	1001.6	988.6	986.3	967.0	965.1
60°	881.2	874.0	873.8	856.5	856.5
62.5°	778.5	773.2	777.0	765.6	763.7
65°	644.2	639.4	646.7	641.8	641.8
67.5°	538.1	538.1	542.5	540.6	540.6
70°	478.9	478.9	481.3	481.3	481.3
72.5°	425.5	423.6	430.0	429.9	428.0
75°	348.0	348.0	348.0	350.5	350.5
77.5°	271.0	271.5	273.5	273.0	271.0
80°	219.7	222.1	222.1	219.7	219.7
82.5°	168.3	170.8	170.8	170.3	168.3
85°	88.9	93.7	98.7	98.7	98.7
87.5°	26.0	34.9	42.1	42.8	40.9
90°	1.9	7.3	13.0	16.7	16.7
92.5°	16.7	75.7	131.5	56.5	47.8
95°	40.7	151.2	481.5	209.5	140.7
97.5°	67.4	167.0	738.1	574.3	403.3
100°	85.2	177.5	816.7	827.8	668.5
102.5°	103.0	188.1	837.4	1023.8	883.3
105°	133.3	207.6	825.9	1257.5	1183.3
107.5°	164.8	230.4	778.1	1378.2	1398.9
110°	187.0	246.8	742.6	1402.0	1490.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	206.3	263.1	707.0	1382.3	1515.9
115°	237.0	287.7	661.1	1315.2	1498.1
117.5°	265.9	314.4	631.8	1220.2	1426.3
120°	285.2	332.3	618.5	1156.5	1361.1
122.5°	301.5	348.6	609.6	1092.6	1290.0
125°	325.9	371.2	598.1	1007.8	1188.9
127.5°	347.8	392.7	591.8	943.5	1098.9
130°	361.1	404.6	588.9	903.2	1042.6
132.5°	374.4	417.9	585.9	868.7	992.2
135°	392.6	436.0	581.5	820.9	925.9
137.5°	412.2	451.7	579.2	778.7	867.0
140°	424.1	462.1	577.8	751.8	831.5
142.5°	435.9	471.0	576.3	730.8	797.4
145°	453.7	486.3	574.1	697.5	750.0
147.5°	473.7	501.6	572.2	671.3	712.6
150°	487.0	510.6	572.2	656.3	688.9
152.5°	497.4	518.0	570.7	642.8	669.6
155°	513.0	531.1	570.4	626.3	644.4
157.5°	528.1	542.3	570.4	615.1	628.9
160°	537.0	549.7	570.4	607.6	618.5
162.5°	545.9	555.7	571.8	601.7	609.6
165°	555.5	562.8	572.2	596.3	598.1
167.5°	565.5	569.2	574.1	590.0	591.5
170°	568.5	572.1	574.1	587.0	587.0
172.5°	571.5	573.6	574.1	584.1	584.1
175°	575.9	577.7	574.1	581.4	579.6
177.5°	577.4	577.4	573.0	578.8	575.9
180°	575.9	575.9	575.9	575.9	575.9

(END OF REPORT)