

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: P564016

Luminaire Tested: **SQ4-PR1-050U-100D-940-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564016
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-940-1D-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

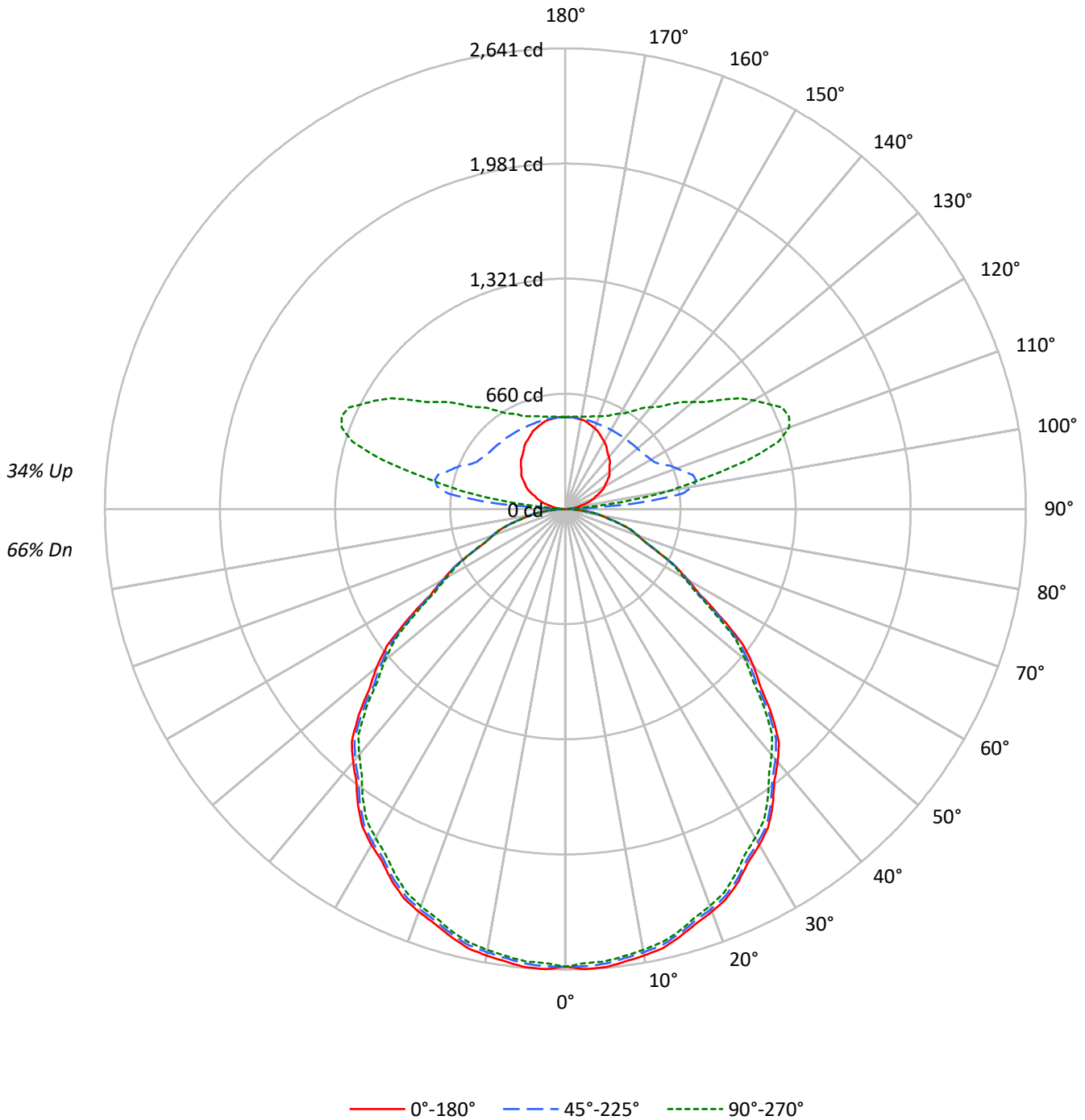
Lumens per Lamp: N/A
Luminaire Lumens: 10007.2 lumens
Efficiency: N/A
Efficacy: 104.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

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	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°	12108	12108	12108
5°	12217	12122	12060
10°	12178	12093	12030
15°	12124	12049	11984
20°	12063	11986	11897
25°	11978	11898	11760
30°	11849	11765	11596
35°	11674	11572	11407
40°	11408	11286	11082
45°	10943	10751	10530
50°	10124	9880	9686
55°	8837	8636	8454
60°	7446	7384	7237
65°	6440	6465	6416
70°	5916	5945	5945
75°	5682	5682	5721
80°	5345	5406	5345
85°	4308	4785	4785



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	248.2	2.5
10°-20°	710.1	7.1
20°-30°	1071.1	10.7
30°-40°	1276.2	12.8
40°-50°	1258.2	12.6
50°-60°	961.6	9.6
60°-70°	595.1	5.9
70°-80°	338.0	3.4
80°-90°	104.8	1.0
90°-100°	253.2	2.5
100°-110°	687.8	6.9
110°-120°	707.2	7.1
120°-130°	565.4	5.7
130°-140°	444.3	4.4
140°-150°	340.7	3.4
150°-160°	245.0	2.4
160°-170°	149.8	1.5
170°-180°	50.5	0.5
0°-30°	2029.4	20.3
0°-40°	3305.6	33.0
0°-60°	5525.4	55.2
0°-90°	6563.3	65.6
90°-120°	1648.3	16.5
90°-150°	2998.6	30.0
90°-180°	3444.0	34.4
0°-180°	10007.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2625	2625	2625	2625	2625	
5°	2638	2610	2618	2609	2604	250
15°	2539	2512	2523	2514	2509	716
25°	2353	2325	2338	2313	2310	1083
35°	2073	2049	2055	2028	2026	1294
45°	1677	1655	1648	1618	1614	1285
55°	1099	1081	1074	1056	1051	984
65°	590	586	592	588	588	598
75°	319	319	319	321	321	337
85°	81	86	90	90	90	95
90°	2	7	12	15	15	6
95°	37	138	441	192	129	40
105°	122	190	756	1152	1084	130
115°	217	264	606	1205	1372	214
125°	298	340	548	923	1089	266
135°	360	399	532	752	848	278
145°	416	445	526	639	687	261
155°	470	486	522	574	590	217
165°	509	515	524	546	548	144
175°	528	529	526	532	531	50
180°	528	528	528	528	528	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2624.6	2624.6	2624.6	2624.6	2624.6
2.5°	2640.9	2617.9	2624.6	2618.9	2606.5
5°	2638.2	2609.5	2617.8	2608.7	2604.3
7.5°	2617.8	2589.5	2597.9	2588.8	2586.2
10°	2599.8	2573.2	2581.7	2572.5	2568.1
12.5°	2579.9	2551.6	2561.8	2550.8	2546.4
15°	2538.7	2512.2	2522.9	2513.8	2509.3
17.5°	2493.5	2465.2	2475.9	2465.3	2459.6
20°	2457.3	2430.8	2441.5	2425.6	2423.4
22.5°	2417.5	2391.0	2401.7	2380.5	2380.0
25°	2353.3	2324.6	2337.5	2312.6	2310.4
27.5°	2276.9	2250.4	2261.1	2235.7	2233.1
30°	2224.5	2198.0	2208.7	2181.4	2177.0
32.5°	2164.8	2140.0	2149.0	2121.8	2119.1
35°	2073.0	2048.7	2054.9	2027.8	2025.5
37.5°	1968.6	1946.5	1950.0	1920.2	1917.9
40°	1894.4	1872.3	1874.1	1842.4	1840.2
42.5°	1813.0	1790.9	1789.1	1757.4	1755.2
45°	1677.4	1655.3	1648.0	1618.5	1614.1
47.5°	1522.8	1500.7	1487.1	1463.0	1459.9
50°	1410.7	1388.5	1376.7	1356.2	1349.6
52.5°	1289.5	1267.4	1257.4	1238.7	1232.1
55°	1098.7	1081.0	1073.8	1055.6	1051.2
57.5°	917.4	905.4	903.4	885.7	883.9
60°	807.1	800.4	800.3	784.4	784.4
62.5°	713.0	708.1	711.7	701.2	699.4
65°	590.0	585.6	592.3	587.8	587.8
67.5°	492.8	492.8	496.9	495.1	495.1
70°	438.6	438.6	440.8	440.8	440.8
72.5°	389.7	388.0	393.8	393.8	392.0
75°	318.8	318.8	318.8	321.0	321.0
77.5°	248.2	248.7	250.5	250.0	248.2
80°	201.2	203.4	203.5	201.2	201.2
82.5°	154.2	156.4	156.4	155.9	154.2
85°	81.4	85.8	90.4	90.4	90.4
87.5°	23.9	31.9	38.5	39.2	37.4
90°	1.7	6.7	11.9	15.3	15.3
92.5°	15.3	69.3	120.4	51.7	43.8
95°	37.3	138.5	441.0	191.9	128.9
97.5°	61.7	152.9	676.0	525.9	369.4
100°	78.0	162.6	747.9	758.2	612.3
102.5°	94.3	172.2	766.9	937.7	809.0
105°	122.1	190.1	756.4	1151.7	1083.8
107.5°	150.9	211.0	712.7	1262.3	1281.2
110°	171.3	226.0	680.1	1284.0	1365.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	188.9	241.0	647.5	1266.0	1388.4
115°	217.1	263.5	605.5	1204.6	1372.1
117.5°	243.5	288.0	578.7	1117.6	1306.3
120°	261.2	304.3	566.5	1059.2	1246.6
122.5°	276.1	319.2	558.3	1000.7	1181.4
125°	298.5	340.0	547.8	923.0	1088.8
127.5°	318.5	359.6	542.0	864.1	1006.4
130°	330.7	370.5	539.3	827.2	954.9
132.5°	342.9	382.7	536.6	795.6	908.7
135°	359.6	399.4	532.5	751.8	848.0
137.5°	377.5	413.7	530.5	713.1	794.1
140°	388.4	423.2	529.2	688.5	761.5
142.5°	399.2	431.4	527.8	669.3	730.3
145°	415.5	445.4	525.8	638.8	686.9
147.5°	433.8	459.4	524.1	614.8	652.6
150°	446.1	467.6	524.1	601.1	630.9
152.5°	455.6	474.5	522.7	588.7	613.3
155°	469.8	486.4	522.4	573.6	590.2
157.5°	483.7	496.6	522.4	563.4	576.0
160°	491.8	503.5	522.4	556.5	566.5
162.5°	500.0	508.9	523.7	551.0	558.3
165°	508.8	515.4	524.1	546.2	547.8
167.5°	518.0	521.3	525.8	540.4	541.7
170°	520.7	524.0	525.8	537.6	537.6
172.5°	523.4	525.4	525.8	534.9	534.9
175°	527.5	529.1	525.8	532.5	530.9
177.5°	528.8	528.8	524.7	530.1	527.5
180°	527.5	527.5	527.5	527.5	527.5

(END OF REPORT)