

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: P564684

Luminaire Tested: **SQ4-PW1-050U-100D-935-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564684
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-PW1-050U-100D-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10025.1 lumens
Efficiency: N/A
Efficacy: 105.1 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: Semi-Direct

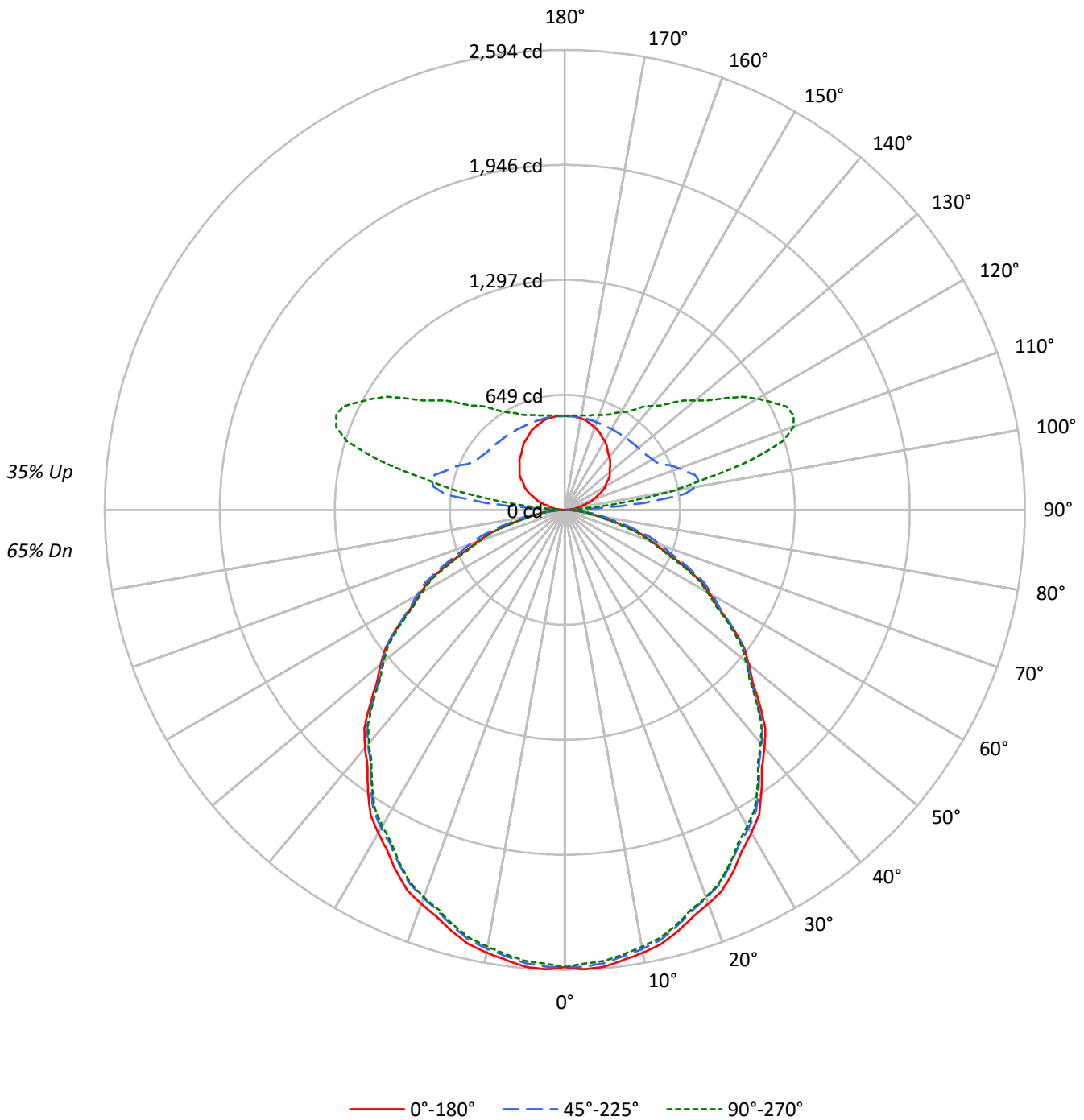
Input Watts (W): 95.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	65
1	101	97	93	90	95	91	88	85	81	78	76	71	69	68	62	61	60	55
2	92	85	79	73	87	80	75	70	71	67	63	63	59	57	55	53	50	47
3	84	75	67	61	79	71	64	59	63	58	53	56	51	48	49	46	43	40
4	77	66	58	52	72	63	55	50	56	50	45	50	45	41	44	40	37	34
5	71	59	51	45	67	56	48	43	50	44	39	45	40	36	39	36	32	30
6	66	53	45	39	61	50	43	37	45	39	34	40	35	31	36	32	29	26
7	61	48	40	34	57	46	38	33	41	35	30	37	32	28	33	29	25	23
8	56	44	36	30	53	42	34	29	38	31	27	34	29	25	30	26	23	21
9	53	40	32	27	49	38	31	26	34	29	24	31	26	22	28	24	21	19
10	49	37	29	24	46	35	28	24	32	26	22	29	24	20	26	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11897	11897	11897
5°	11974	11879	11827
10°	11878	11782	11719
15°	11752	11622	11579
20°	11612	11433	11411
25°	11450	11242	11207
30°	11208	11038	10966
35°	10889	10736	10672
40°	10550	10385	10345
45°	10139	10006	9961
50°	9719	9638	9572
55°	9265	9265	9119
60°	8700	8867	8554
65°	7962	8358	7763
70°	7018	7692	6834
75°	5994	6885	5832
80°	4649	5794	4707
85°	3006	4451	3970



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.8	2.4
10°-20°	685.6	6.8
20°-30°	1017.0	10.1
30°-40°	1190.0	11.9
40°-50°	1184.7	11.8
50°-60°	1023.0	10.2
60°-70°	736.4	7.3
70°-80°	386.2	3.9
80°-90°	97.8	1.0
90°-100°	254.5	2.5
100°-110°	691.4	6.9
110°-120°	710.8	7.1
120°-130°	568.3	5.7
130°-140°	446.6	4.5
140°-150°	342.4	3.4
150°-160°	246.2	2.5
160°-170°	150.6	1.5
170°-180°	50.7	0.5
0°-30°	1945.5	19.4
0°-40°	3135.5	31.3
0°-60°	5343.2	53.3
0°-90°	6563.5	65.5
90°-120°	1656.7	16.5
90°-150°	3014.0	30.1
90°-180°	3462.0	34.5
0°-180°	10025.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2579	2579	2579	2579	2579	
5°	2586	2557	2565	2558	2554	245
15°	2461	2430	2434	2429	2424	694
25°	2250	2212	2209	2195	2202	1034
35°	1934	1907	1906	1888	1895	1209
45°	1554	1541	1534	1529	1527	1199
55°	1152	1150	1152	1136	1134	1028
65°	729	752	766	736	711	723
75°	336	367	386	360	327	360
85°	57	75	84	79	75	75
90°	2	7	12	15	15	5
95°	38	139	443	193	130	40
105°	123	191	760	1158	1089	130
115°	218	265	609	1211	1379	215
125°	300	342	551	928	1094	267
135°	361	401	535	756	852	279
145°	418	448	528	642	690	262
155°	472	489	525	577	593	218
165°	511	518	527	549	551	144
175°	530	532	528	535	534	50
180°	530	530	530	530	530	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2578.9	2578.9	2578.9	2578.9	2578.9
2.5°	2593.5	2572.2	2578.9	2573.2	2560.8
5°	2585.8	2556.9	2565.3	2558.4	2554.0
7.5°	2559.4	2532.7	2539.0	2531.6	2529.0
10°	2535.8	2509.1	2515.3	2506.1	2501.7
12.5°	2508.5	2480.1	2486.2	2477.1	2474.4
15°	2460.8	2429.7	2433.5	2428.9	2424.4
17.5°	2405.4	2373.8	2374.5	2367.2	2366.3
20°	2365.4	2332.0	2329.0	2320.0	2324.5
22.5°	2321.7	2286.6	2283.6	2271.0	2277.2
25°	2249.5	2211.7	2208.6	2195.1	2201.8
27.5°	2165.9	2128.5	2128.6	2109.7	2116.8
30°	2104.1	2068.5	2072.2	2049.7	2058.6
32.5°	2038.6	2006.6	2008.6	1986.1	1995.0
35°	1933.6	1907.0	1906.4	1888.4	1895.0
37.5°	1826.4	1802.8	1799.1	1788.7	1790.5
40°	1751.9	1731.9	1724.6	1717.8	1717.8
42.5°	1673.7	1655.5	1648.3	1643.2	1641.4
45°	1554.2	1540.9	1533.7	1529.1	1526.9
47.5°	1436.0	1423.6	1417.4	1414.2	1411.9
50°	1354.2	1345.3	1342.9	1336.0	1333.8
52.5°	1272.4	1267.1	1264.7	1256.0	1253.8
55°	1152.0	1149.8	1152.0	1136.1	1133.8
57.5°	1026.6	1030.1	1037.5	1016.0	1010.7
60°	943.0	951.9	961.1	935.9	927.1
62.5°	857.5	871.7	884.8	855.9	843.4
65°	729.4	751.6	765.7	735.6	711.2
67.5°	605.8	633.3	650.3	617.9	590.3
70°	520.3	551.4	570.3	537.8	506.7
72.5°	445.8	480.5	495.8	465.1	434.0
75°	336.3	367.4	386.3	360.5	327.2
77.5°	238.6	267.9	283.6	261.1	233.6
80°	175.0	206.1	218.1	199.4	177.2
82.5°	124.1	149.8	158.1	146.9	131.8
85°	56.8	74.6	84.1	79.4	75.0
87.5°	14.9	28.3	36.9	37.6	39.4
90°	1.7	6.7	11.9	15.3	15.3
92.5°	15.3	69.7	121.0	52.0	44.0
95°	37.5	139.2	443.2	192.9	129.6
97.5°	62.1	153.7	679.5	528.6	371.3
100°	78.4	163.4	751.8	762.1	615.4
102.5°	94.8	173.1	770.9	942.5	813.1
105°	122.7	191.1	760.3	1157.6	1089.3
107.5°	151.7	212.1	716.3	1268.7	1287.7
110°	172.2	227.2	683.6	1290.6	1372.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	189.9	242.2	650.8	1272.4	1395.4
115°	218.2	264.9	608.6	1210.7	1379.1
117.5°	244.8	289.5	581.6	1123.3	1312.9
120°	262.5	305.9	569.4	1064.6	1252.9
122.5°	277.5	320.9	561.2	1005.8	1187.5
125°	300.0	341.7	550.6	927.7	1094.4
127.5°	320.1	361.5	544.8	868.5	1011.6
130°	332.4	372.4	542.1	831.4	959.7
132.5°	344.7	384.7	539.4	799.7	913.4
135°	361.4	401.4	535.3	755.7	852.3
137.5°	379.5	415.8	533.2	716.8	798.1
140°	390.4	425.4	531.9	692.1	765.4
142.5°	401.3	433.6	530.5	672.7	734.0
145°	417.6	447.6	528.4	642.1	690.4
147.5°	436.1	461.7	526.7	618.0	656.0
150°	448.3	470.0	526.7	604.1	634.1
152.5°	457.9	476.9	525.4	591.7	616.4
155°	472.2	488.9	525.0	576.6	593.2
157.5°	486.2	499.2	525.0	566.2	578.9
160°	494.4	506.0	525.0	559.4	569.4
162.5°	502.5	511.5	526.4	553.8	561.2
165°	511.4	518.1	526.7	548.9	550.6
167.5°	520.6	523.9	528.4	543.1	544.5
170°	523.3	526.7	528.4	540.4	540.4
172.5°	526.1	528.1	528.4	537.7	537.7
175°	530.2	531.8	528.4	535.2	533.6
177.5°	531.5	531.5	527.4	532.8	530.2
180°	530.2	530.2	530.2	530.2	530.2

(END OF REPORT)