

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: P564910

Luminaire Tested: **SQ4-PW1-100U-050D-835-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564910
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-PW1-100U-050D-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

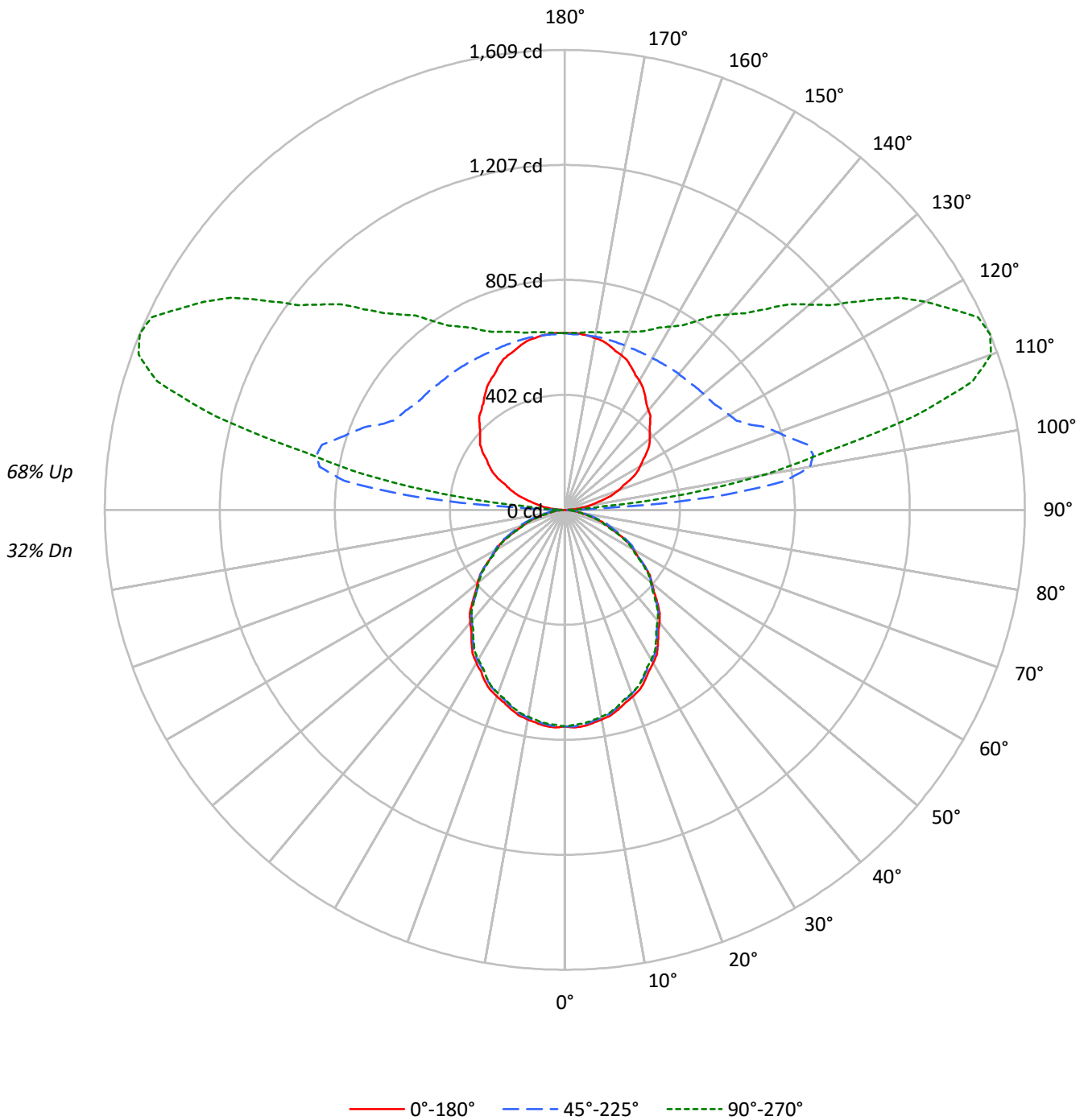
Lumens per Lamp: N/A
Luminaire Lumens: 5945.6 lumens
Efficiency: N/A
Efficacy: 144.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 41.3
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	0
RCR																		
0	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	32
1	94	90	86	83	84	81	78	75	64	62	60	49	48	47	35	35	34	27
2	86	78	72	67	77	71	66	62	57	53	50	43	41	39	31	30	29	23
3	78	69	62	56	70	62	56	51	50	46	42	38	35	33	28	26	24	20
4	71	61	53	47	64	55	49	43	44	40	36	34	31	28	25	23	21	17
5	65	54	46	40	59	49	42	37	39	35	31	31	27	24	22	20	18	15
6	60	48	41	35	54	44	37	32	35	30	27	28	24	21	20	18	16	13
7	55	44	36	31	50	40	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	27	46	36	29	25	29	24	21	23	19	17	17	15	13	10
9	48	36	29	24	43	33	26	22	27	22	18	21	17	15	16	13	11	9
10	45	33	26	21	40	30	24	20	24	20	17	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6992	6992	6992
5°	7037	6981	6951
10°	6980	6924	6887
15°	6907	6830	6805
20°	6824	6720	6706
25°	6729	6607	6586
30°	6587	6487	6444
35°	6400	6310	6271
40°	6200	6104	6080
45°	5959	5881	5855
50°	5711	5664	5625
55°	5445	5445	5360
60°	5113	5211	5026
65°	4678	4912	4563
70°	4125	4521	4017
75°	3522	4046	3426
80°	2731	3406	2768
85°	1768	2615	2329



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.4	1.2
10°-20°	201.5	3.4
20°-30°	298.8	5.0
30°-40°	349.7	5.9
40°-50°	348.1	5.9
50°-60°	300.6	5.1
60°-70°	216.4	3.6
70°-80°	113.5	1.9
80°-90°	29.4	0.5
90°-100°	289.5	4.9
100°-110°	799.1	13.4
110°-120°	824.2	13.9
120°-130°	662.3	11.1
130°-140°	520.5	8.8
140°-150°	399.2	6.7
150°-160°	286.9	4.8
160°-170°	175.5	3.0
170°-180°	59.2	1.0
0°-30°	571.7	9.6
0°-40°	921.3	15.5
0°-60°	1570.1	26.4
0°-90°	1929.3	32.4
90°-120°	1912.8	32.2
90°-150°	3494.8	58.8
90°-180°	4016.0	67.5
0°-180°	5945.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	758	758	758	758	758	
5°	760	751	754	752	750	72
15°	723	714	715	714	712	204
25°	661	650	649	645	647	304
35°	568	560	560	555	557	355
45°	457	453	451	449	449	352
55°	338	338	338	334	333	302
65°	214	221	225	216	209	212
75°	99	108	114	106	96	106
85°	17	22	25	23	22	22
90°	2	4	8	9	10	4
95°	42	157	525	216	140	45
105°	142	220	879	1342	1264	152
115°	255	308	708	1402	1594	251
125°	350	398	642	1086	1275	312
135°	421	467	624	880	992	326
145°	489	522	616	749	806	306
155°	551	569	611	672	693	254
165°	596	604	614	638	643	168
175°	618	619	615	624	622	59
180°	618	618	618	618	618	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	757.8	757.8	757.8	757.8	757.8
2.5°	762.1	755.8	757.8	756.1	752.5
5°	759.8	751.3	753.8	751.8	750.5
7.5°	752.1	744.2	746.1	743.9	743.1
10°	745.1	737.3	739.1	736.4	735.1
12.5°	737.1	728.7	730.6	727.9	727.1
15°	723.1	713.9	715.1	713.7	712.4
17.5°	706.8	697.5	697.7	695.6	695.3
20°	695.0	685.2	684.4	681.7	683.0
22.5°	682.2	671.9	671.0	667.3	669.1
25°	661.0	649.9	649.0	645.0	647.0
27.5°	636.4	625.5	625.5	619.9	622.0
30°	618.3	607.8	608.9	602.3	604.9
32.5°	599.0	589.6	590.2	583.6	586.2
35°	568.2	560.4	560.2	554.9	556.8
37.5°	536.7	529.8	528.7	525.6	526.1
40°	514.8	508.9	506.8	504.8	504.8
42.5°	491.8	486.4	484.3	482.8	482.3
45°	456.7	452.8	450.7	449.3	448.7
47.5°	422.0	418.3	416.5	415.5	414.9
50°	397.9	395.3	394.6	392.6	391.9
52.5°	373.9	372.3	371.6	369.1	368.4
55°	338.5	337.9	338.5	333.8	333.2
57.5°	301.7	302.7	304.9	298.5	297.0
60°	277.1	279.7	282.4	275.0	272.4
62.5°	252.0	256.2	260.0	251.5	247.8
65°	214.3	220.8	225.0	216.2	209.0
67.5°	178.0	186.1	191.1	181.6	173.5
70°	152.9	162.0	167.6	158.0	148.9
72.5°	131.0	141.2	145.7	136.7	127.5
75°	98.8	108.0	113.5	105.9	96.1
77.5°	70.1	78.7	83.3	76.7	68.6
80°	51.4	60.5	64.1	58.6	52.1
82.5°	36.5	44.0	46.5	43.2	38.7
85°	16.7	21.9	24.7	23.3	22.0
87.5°	4.7	8.7	11.7	11.9	12.7
90°	2.0	3.9	7.9	8.9	9.9
92.5°	17.8	73.9	132.1	48.2	37.6
95°	42.5	156.6	525.2	215.9	140.4
97.5°	70.4	175.4	778.0	599.0	433.8
100°	91.0	186.7	871.3	877.5	713.1
102.5°	110.8	199.5	889.5	1084.2	928.3
105°	142.4	219.8	879.2	1342.3	1264.0
107.5°	176.0	244.9	830.2	1466.8	1495.4
110°	199.8	261.7	792.2	1493.5	1586.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	221.1	280.7	756.6	1472.4	1609.3
115°	255.2	308.4	708.1	1401.9	1594.3
117.5°	284.8	337.8	676.3	1302.6	1521.5
120°	304.6	356.8	663.6	1235.3	1455.8
122.5°	323.6	373.5	653.3	1172.6	1381.5
125°	350.1	398.5	641.9	1086.3	1274.8
127.5°	372.7	421.0	635.1	1013.3	1175.9
130°	387.7	436.0	632.0	968.6	1116.6
132.5°	401.9	448.0	628.8	931.1	1065.2
135°	421.3	466.8	624.1	879.8	992.0
137.5°	443.1	484.5	621.7	836.7	932.4
140°	454.9	495.6	620.1	808.0	892.1
142.5°	468.4	505.9	618.5	782.4	856.5
145°	488.6	522.4	616.2	749.0	806.0
147.5°	508.0	537.5	614.0	720.8	765.1
150°	522.2	546.4	613.2	704.0	739.8
152.5°	533.3	555.9	612.4	689.6	719.2
155°	550.9	569.3	611.2	672.0	693.3
157.5°	567.1	581.2	611.4	659.2	673.7
160°	576.6	589.2	612.2	652.0	662.6
162.5°	584.5	595.5	613.0	645.6	653.9
165°	596.4	604.1	614.2	638.0	642.9
167.5°	605.5	610.1	615.2	633.4	634.9
170°	610.2	614.1	615.2	631.0	631.0
172.5°	614.2	616.5	615.2	627.8	627.0
175°	618.1	619.1	615.2	624.0	622.1
177.5°	619.7	618.9	615.0	620.5	618.9
180°	618.1	618.1	618.1	618.1	618.1

(END OF REPORT)