

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: P519126

Luminaire Tested: **SQ4-WB-050U-100D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519126
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-050U-100D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

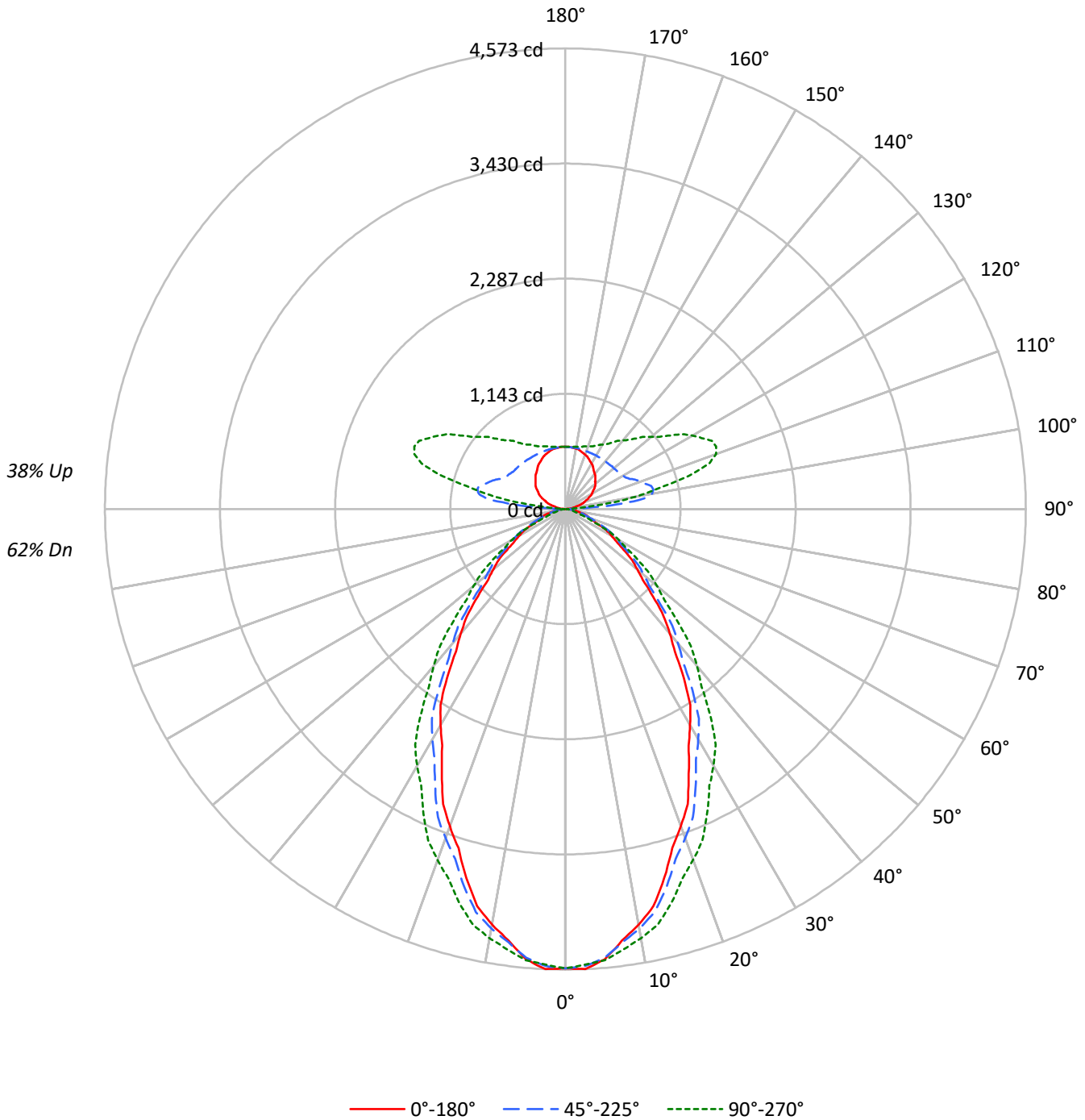
Lumens per Lamp: N/A
Luminaire Lumens: 10673.3 lumens
Efficiency: N/A
Efficacy: 111.9 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	62				
1	102	98	95	92	95	92	89	87	81	79	77	71	70	68	62	61	60	55				
2	94	87	82	77	88	82	78	73	73	69	66	64	62	59	56	54	53	49				
3	87	78	72	66	81	74	68	63	66	61	57	58	55	52	51	49	47	43				
4	80	70	63	58	75	67	60	55	60	54	50	53	49	46	47	44	41	38				
5	74	64	56	51	70	60	54	49	54	49	45	48	44	41	43	40	37	34				
6	69	58	50	45	65	55	48	43	50	44	40	44	40	37	40	36	34	31				
7	64	53	45	40	61	50	44	39	45	40	36	41	37	33	37	33	31	28				
8	60	49	41	36	57	46	40	35	42	36	33	38	33	30	34	31	28	26				
9	56	45	38	33	53	43	36	32	39	33	30	35	31	28	32	28	26	24				
10	53	41	35	30	50	40	33	29	36	31	27	33	29	25	30	26	24	22				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21043	21043	21043
5°	20780	20706	20827
10°	19633	19811	20271
15°	18124	18545	19376
20°	16458	17077	18208
25°	14763	15567	16963
30°	13199	14063	15673
35°	11542	12376	14146
40°	9715	10487	12246
45°	8018	8709	10224
50°	6694	7297	8518
55°	5682	6262	7035
60°	4857	5430	5614
65°	3867	4566	3627
70°	3429	3563	2213
75°	3174	2889	1356
80°	2925	2659	1169
85°	2646	2435	953



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	418.4	3.9
10°-20°	1088.3	10.2
20°-30°	1409.6	13.2
30°-40°	1380.4	12.9
40°-50°	1056.6	9.9
50°-60°	704.1	6.6
60°-70°	384.2	3.6
70°-80°	160.1	1.5
80°-90°	47.7	0.4
90°-100°	295.8	2.8
100°-110°	803.7	7.5
110°-120°	826.3	7.7
120°-130°	660.7	6.2
130°-140°	519.1	4.9
140°-150°	398.0	3.7
150°-160°	286.2	2.7
160°-170°	175.1	1.6
170°-180°	59.0	0.6
0°-30°	2916.3	27.3
0°-40°	4296.7	40.3
0°-60°	6057.4	56.8
0°-90°	6649.4	62.3
90°-120°	1925.8	18.0
90°-150°	3503.7	32.8
90°-180°	4024.0	37.7
0°-180°	10673.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4562	4562	4562	4562	4562	
5°	4488	4442	4472	4482	4498	417
15°	3795	3781	3883	3989	4057	1060
25°	2900	2908	3058	3192	3333	1334
35°	2050	2059	2198	2346	2512	1274
45°	1229	1252	1335	1436	1567	958
55°	706	736	779	808	875	641
65°	354	384	418	366	332	368
75°	178	178	162	111	76	190
85°	50	50	46	30	18	54
90°	2	8	14	18	18	5
95°	44	162	515	224	151	46
105°	143	222	884	1346	1266	152
115°	254	308	707	1407	1603	250
125°	349	397	640	1078	1272	311
135°	420	467	622	878	991	325
145°	486	520	614	746	803	305
155°	549	568	610	670	690	253
165°	594	602	612	638	640	168
175°	616	618	614	622	620	59
180°	616	616	616	616	616	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4561.5	4561.5	4561.5	4561.5	4561.5
2.5°	4572.7	4532.0	4542.3	4542.0	4529.5
5°	4487.5	4442.5	4471.5	4481.8	4497.5
7.5°	4321.0	4286.9	4339.8	4378.9	4410.6
10°	4191.3	4161.9	4229.3	4286.3	4327.4
12.5°	4040.7	4016.1	4099.6	4176.1	4229.7
15°	3794.9	3781.2	3883.0	3988.7	4057.1
17.5°	3531.9	3525.3	3642.0	3765.3	3853.0
20°	3352.6	3350.6	3478.7	3607.1	3708.9
22.5°	3171.7	3176.0	3310.6	3444.1	3560.0
25°	2900.3	2908.1	3058.4	3191.7	3332.6
27.5°	2649.3	2652.8	2808.2	2948.9	3099.2
30°	2477.9	2487.7	2640.0	2785.7	2942.3
32.5°	2306.6	2317.9	2467.1	2617.7	2777.4
35°	2049.6	2059.4	2197.7	2345.6	2511.9
37.5°	1784.6	1797.9	1920.7	2060.5	2224.1
40°	1613.3	1632.8	1741.4	1873.1	2033.6
42.5°	1448.3	1472.6	1573.2	1698.2	1843.0
45°	1229.0	1252.4	1335.0	1436.1	1567.2
47.5°	1040.0	1067.0	1130.5	1217.5	1329.4
50°	932.7	958.2	1016.8	1081.2	1186.9
52.5°	838.3	863.7	915.9	965.6	1055.6
55°	706.5	735.9	778.6	808.1	874.7
57.5°	598.5	626.6	660.5	673.8	714.2
60°	526.4	557.7	588.5	586.9	608.5
62.5°	460.8	487.4	518.0	496.8	498.0
65°	354.3	383.6	418.3	365.5	332.3
67.5°	286.2	292.5	328.3	254.9	215.4
70°	254.2	254.2	264.2	197.4	164.1
72.5°	223.8	223.8	214.6	160.5	125.7
75°	178.1	178.1	162.1	111.3	76.1
77.5°	137.3	135.7	124.1	83.0	55.2
80°	110.1	110.1	100.1	65.6	44.0
82.5°	86.1	86.1	77.7	51.2	32.8
85°	50.0	50.0	46.0	29.8	18.0
87.5°	18.0	19.2	18.8	13.1	11.6
90°	2.0	7.8	13.9	17.8	17.8
92.5°	17.8	81.0	140.7	60.4	51.1
95°	43.6	161.8	515.2	224.2	150.6
97.5°	72.1	178.7	789.9	614.5	431.6
100°	91.2	190.0	873.9	885.9	715.4
102.5°	110.2	201.2	896.1	1095.6	945.2
105°	142.7	222.1	883.8	1345.7	1266.3
107.5°	176.4	246.5	832.7	1474.8	1496.9
110°	200.1	264.1	794.6	1500.3	1595.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	220.8	281.6	756.6	1479.2	1622.2
115°	253.6	307.9	707.4	1407.4	1603.1
117.5°	284.6	336.5	676.1	1305.8	1526.3
120°	305.2	355.5	661.9	1237.6	1456.5
122.5°	322.6	373.0	652.4	1169.2	1380.4
125°	348.8	397.2	640.1	1078.4	1272.2
127.5°	372.2	420.2	633.3	1009.7	1175.9
130°	386.4	432.9	630.2	966.5	1115.7
132.5°	400.7	447.2	627.0	929.6	1061.8
135°	420.1	466.6	622.2	878.4	990.8
137.5°	441.1	483.4	619.9	833.2	927.8
140°	453.8	494.5	618.3	804.5	889.8
142.5°	466.5	504.1	616.7	782.0	853.3
145°	485.5	520.4	614.3	746.4	802.6
147.5°	506.9	536.7	612.3	718.4	762.5
150°	521.2	546.4	612.3	702.3	737.2
152.5°	532.3	554.4	610.7	687.9	716.6
155°	548.9	568.3	610.3	670.2	689.6
157.5°	565.2	580.3	610.3	658.2	673.0
160°	574.7	588.2	610.3	650.2	661.9
162.5°	584.2	594.6	611.9	643.8	652.4
165°	594.5	602.2	612.3	638.1	640.1
167.5°	605.2	609.1	614.3	631.4	632.9
170°	608.4	612.2	614.3	628.2	628.2
172.5°	611.5	613.9	614.3	625.0	625.0
175°	616.3	618.2	614.3	622.2	620.3
177.5°	617.9	617.9	613.1	619.4	616.3
180°	616.3	616.3	616.3	616.3	616.3

(END OF REPORT)