

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: P519127

Luminaire Tested: **SQ4-WB-050U-100D-930-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519127
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-930-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

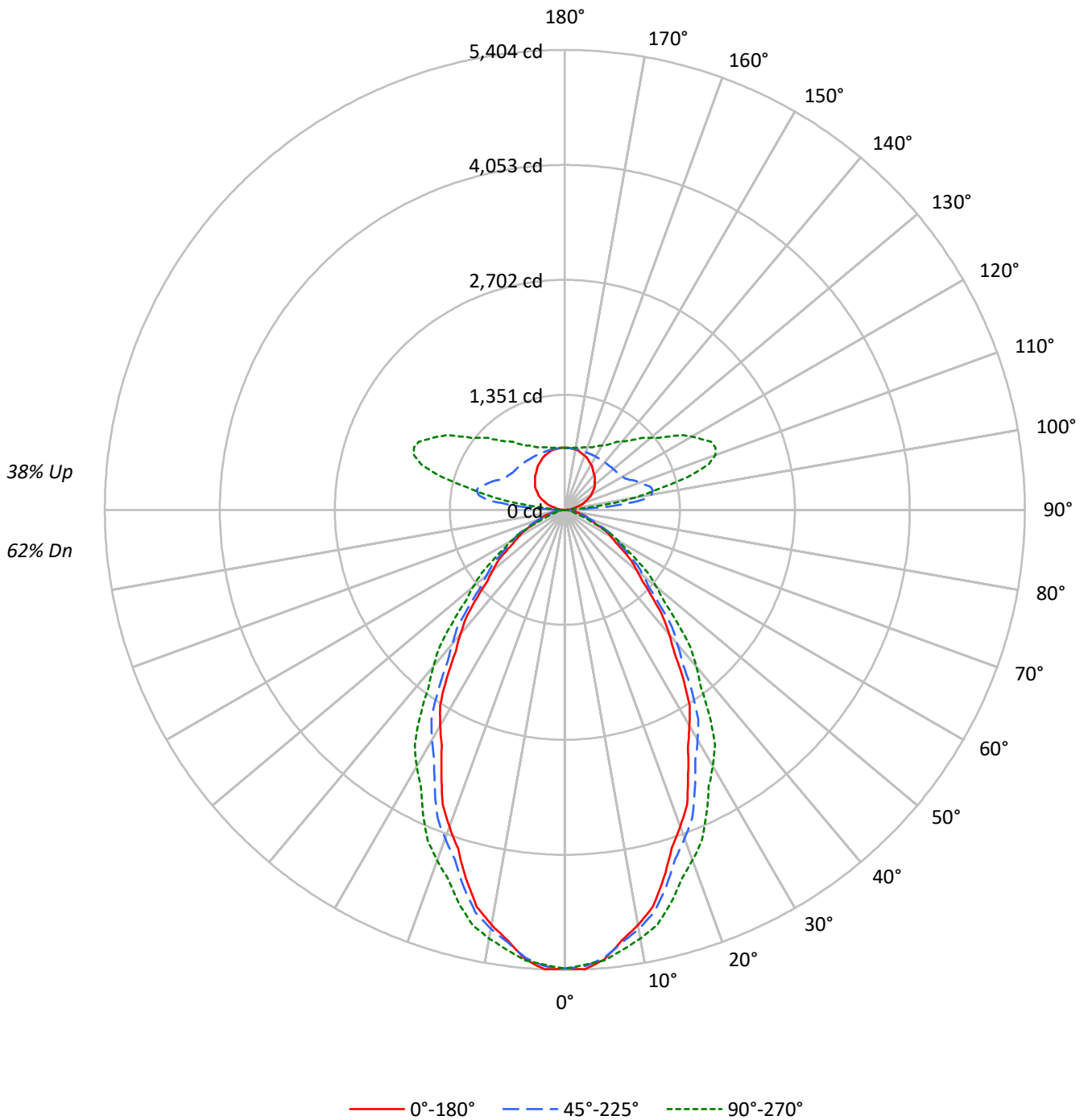
Lumens per Lamp: N/A
Luminaire Lumens: 12613.1 lumens
Efficiency: N/A
Efficacy: 93.8 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 134.4
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	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°	16578	16578	16578
5°	16371	16313	16408
10°	15467	15608	15970
15°	14278	14610	15265
20°	12966	13454	14344
25°	11630	12264	13364
30°	10399	11079	12347
35°	9093	9750	11145
40°	7654	8261	9648
45°	6316	6862	8055
50°	5273	5749	6711
55°	4477	4933	5542
60°	3826	4277	4423
65°	3047	3598	2857
70°	2701	2807	1744
75°	2501	2277	1068
80°	2304	2095	921
85°	2085	1920	752



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	494.4	3.9
10°-20°	1286.1	10.2
20°-30°	1665.8	13.2
30°-40°	1631.3	12.9
40°-50°	1248.6	9.9
50°-60°	832.0	6.6
60°-70°	454.0	3.6
70°-80°	189.2	1.5
80°-90°	56.4	0.4
90°-100°	349.6	2.8
100°-110°	949.7	7.5
110°-120°	976.5	7.7
120°-130°	780.7	6.2
130°-140°	613.5	4.9
140°-150°	470.4	3.7
150°-160°	338.3	2.7
160°-170°	206.9	1.6
170°-180°	69.7	0.6
0°-30°	3446.3	27.3
0°-40°	5077.6	40.3
0°-60°	7158.2	56.8
0°-90°	7857.8	62.3
90°-120°	2275.9	18.0
90°-150°	4140.4	32.8
90°-180°	4755.0	37.7
0°-180°	12613.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5391	5391	5391	5391	5391	
5°	5303	5250	5284	5296	5315	493
15°	4485	4468	4589	4714	4794	1252
25°	3427	3437	3614	3772	3938	1576
35°	2422	2434	2597	2772	2968	1506
45°	1452	1480	1578	1697	1852	1133
55°	835	870	920	955	1034	757
65°	419	453	494	432	393	435
75°	210	210	192	132	90	225
85°	59	59	54	35	21	64
90°	2	9	16	21	21	6
95°	52	191	609	265	178	55
105°	169	262	1044	1590	1496	179
115°	300	364	836	1663	1894	296
125°	412	469	756	1274	1503	367
135°	496	551	735	1038	1171	384
145°	574	615	726	882	948	360
155°	649	672	721	792	815	299
165°	702	712	724	754	756	198
175°	728	731	726	735	733	69
180°	728	728	728	728	728	

TEST NUMBER: P519127

CATALOG NUMBER: SQ4-WB-050U-100D-930-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5390.6	5390.6	5390.6	5390.6	5390.6
2.5°	5403.8	5355.7	5367.9	5367.5	5352.7
5°	5303.0	5249.8	5284.1	5296.4	5314.9
7.5°	5106.2	5066.0	5128.5	5174.7	5212.2
10°	4953.0	4918.3	4997.9	5065.2	5113.8
12.5°	4775.1	4746.0	4844.6	4935.0	4998.4
15°	4484.6	4468.5	4588.7	4713.6	4794.5
17.5°	4173.8	4166.0	4303.9	4449.6	4553.2
20°	3961.9	3959.6	4110.9	4262.7	4382.9
22.5°	3748.1	3753.2	3912.2	4070.0	4207.0
25°	3427.3	3436.6	3614.2	3771.7	3938.3
27.5°	3130.7	3134.9	3318.5	3484.8	3662.5
30°	2928.3	2939.8	3119.9	3292.0	3477.0
32.5°	2725.8	2739.2	2915.5	3093.4	3282.1
35°	2422.1	2433.6	2597.1	2771.9	2968.5
37.5°	2108.9	2124.6	2269.8	2435.0	2628.3
40°	1906.4	1929.6	2057.8	2213.5	2403.2
42.5°	1711.5	1740.2	1859.1	2006.8	2178.0
45°	1452.3	1480.1	1577.7	1697.1	1852.0
47.5°	1229.0	1260.9	1335.9	1438.8	1571.0
50°	1102.2	1132.3	1201.6	1277.7	1402.6
52.5°	990.6	1020.7	1082.4	1141.1	1247.5
55°	835.0	869.6	920.1	955.0	1033.6
57.5°	707.2	740.5	780.6	796.3	843.9
60°	622.1	659.1	695.4	693.6	719.1
62.5°	544.5	575.9	612.1	587.1	588.5
65°	418.7	453.4	494.4	432.0	392.6
67.5°	338.2	345.6	387.9	301.2	254.5
70°	300.4	300.4	312.2	233.3	194.0
72.5°	264.4	264.4	253.6	189.7	148.5
75°	210.5	210.5	191.6	131.5	89.9
77.5°	162.3	160.4	146.6	98.1	65.3
80°	130.1	130.1	118.3	77.5	52.0
82.5°	101.7	101.7	91.8	60.5	38.8
85°	59.1	59.1	54.4	35.2	21.3
87.5°	21.3	22.7	22.2	15.5	13.7
90°	2.3	9.2	16.4	21.1	21.1
92.5°	21.1	95.7	166.3	71.4	60.4
95°	51.5	191.2	608.9	265.0	178.0
97.5°	85.2	211.2	933.4	726.2	510.0
100°	107.7	224.5	1032.7	1046.9	845.4
102.5°	130.2	237.8	1059.0	1294.7	1117.0
105°	168.6	262.5	1044.4	1590.3	1496.4
107.5°	208.4	291.3	984.0	1742.9	1769.0
110°	236.5	312.1	939.1	1772.9	1885.1

TEST NUMBER: P519127

CATALOG NUMBER: SQ4-WB-050U-100D-930-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	260.9	332.8	894.1	1748.0	1917.0
115°	299.7	363.9	836.0	1663.2	1894.5
117.5°	336.3	397.6	799.0	1543.1	1803.6
120°	360.6	420.2	782.2	1462.5	1721.2
122.5°	381.2	440.8	770.9	1381.7	1631.3
125°	412.2	469.4	756.4	1274.4	1503.4
127.5°	439.8	496.6	748.4	1193.2	1389.6
130°	456.6	511.6	744.7	1142.1	1318.4
132.5°	473.5	528.5	740.9	1098.6	1254.7
135°	496.5	551.4	735.3	1038.1	1170.9
137.5°	521.3	571.2	732.5	984.7	1096.4
140°	536.3	584.4	730.6	950.7	1051.5
142.5°	551.3	595.7	728.8	924.1	1008.4
145°	573.7	615.0	726.0	882.0	948.4
147.5°	599.0	634.3	723.6	848.9	901.1
150°	615.9	645.7	723.6	829.9	871.1
152.5°	629.0	655.1	721.7	812.9	846.8
155°	648.7	671.6	721.3	792.0	814.9
157.5°	667.9	685.7	721.3	777.9	795.3
160°	679.1	695.1	721.3	768.4	782.2
162.5°	690.4	702.7	723.1	760.8	770.9
165°	702.5	711.7	723.6	754.1	756.4
167.5°	715.2	719.8	726.0	746.1	748.0
170°	718.9	723.5	726.0	742.3	742.3
172.5°	722.7	725.4	726.0	738.6	738.6
175°	728.3	730.6	726.0	735.3	733.0
177.5°	730.2	730.2	724.5	732.0	728.3
180°	728.3	728.3	728.3	728.3	728.3

(END OF REPORT)