

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: P519364

Luminaire Tested: **SQ4-WB-100U-050D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519364
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-050D-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

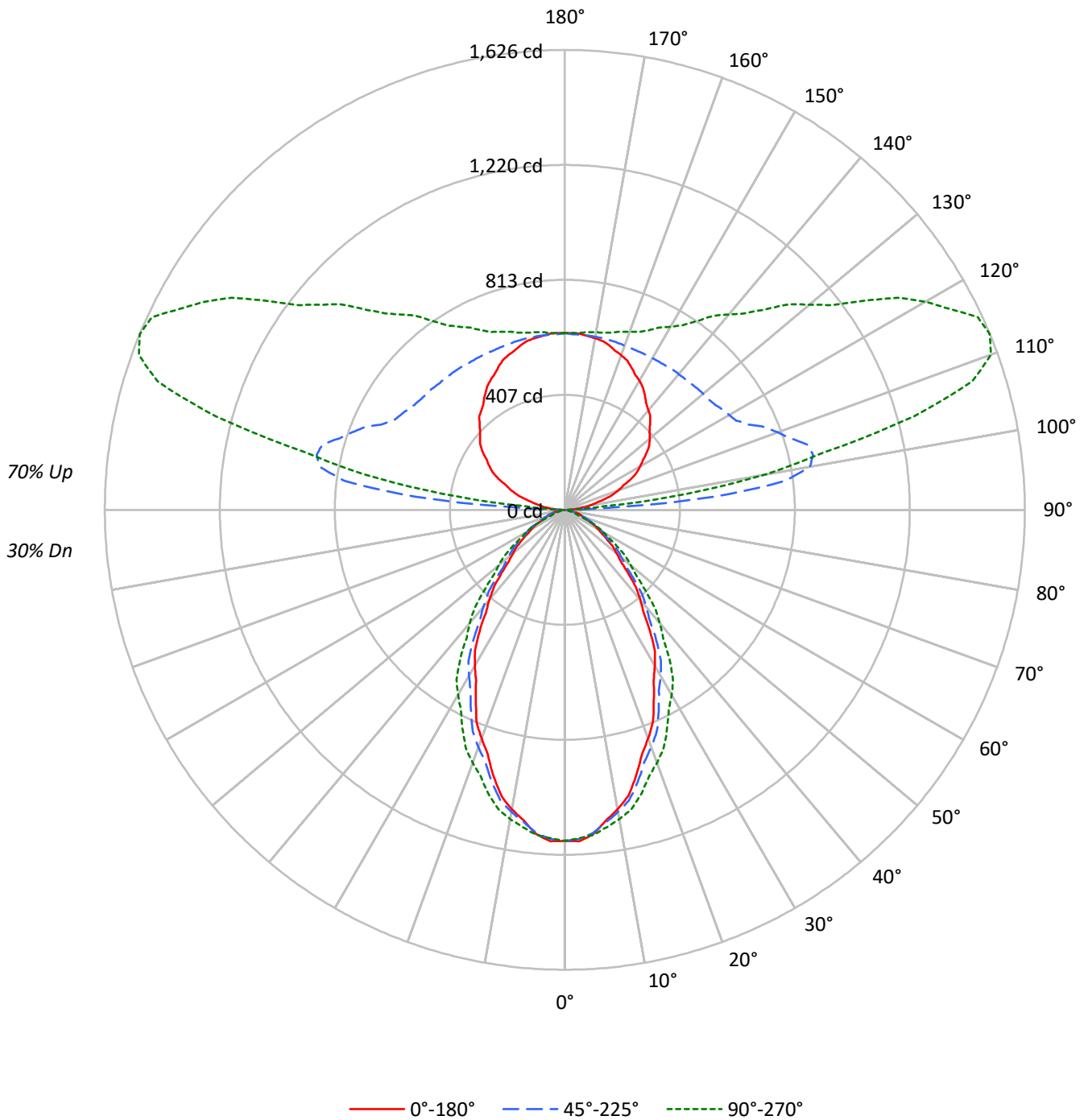
Lumens per Lamp: N/A
Luminaire Lumens: 5763.3 lumens
Efficiency: N/A
Efficacy: 139.5 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	30
1	94	90	86	83	84	81	78	75	64	62	60	48	47	46	34	33	33	26
2	86	79	74	69	77	72	67	63	57	54	51	43	41	40	31	30	29	23
3	79	70	64	58	71	64	58	53	51	47	44	39	36	34	28	27	25	20
4	72	63	55	50	65	57	51	46	46	41	38	35	32	30	25	24	22	18
5	67	56	49	43	60	51	44	40	41	36	33	32	29	26	23	21	20	16
6	62	50	43	38	55	46	39	35	37	33	29	29	26	23	21	19	18	15
7	57	46	38	33	51	42	35	31	34	29	26	27	23	21	20	18	16	13
8	53	42	34	29	48	38	32	27	31	26	23	24	21	19	18	16	15	12
9	49	38	31	26	44	35	29	24	28	24	21	23	19	17	17	15	14	11
10	46	35	28	24	42	32	26	22	26	22	19	21	18	16	16	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10797	10797	10797
5°	10663	10625	10686
10°	10074	10165	10401
15°	9300	9515	9942
20°	8445	8763	9342
25°	7575	7987	8704
30°	6772	7216	8041
35°	5922	6350	7258
40°	4985	5380	6283
45°	4114	4469	5247
50°	3435	3745	4371
55°	2916	3214	3610
60°	2493	2786	2880
65°	1984	2342	1860
70°	1759	1829	1136
75°	1629	1483	695
80°	1498	1365	600
85°	1355	1249	487



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.3	1.9
10°-20°	279.2	4.8
20°-30°	361.6	6.3
30°-40°	354.1	6.1
40°-50°	271.1	4.7
50°-60°	180.6	3.1
60°-70°	98.6	1.7
70°-80°	41.1	0.7
80°-90°	12.9	0.2
90°-100°	292.4	5.1
100°-110°	807.2	14.0
110°-120°	832.5	14.4
120°-130°	669.0	11.6
130°-140°	525.7	9.1
140°-150°	403.2	7.0
150°-160°	289.8	5.0
160°-170°	177.2	3.1
170°-180°	59.8	1.0
0°-30°	748.2	13.0
0°-40°	1102.3	19.1
0°-60°	1554.0	27.0
0°-90°	1706.6	29.6
90°-120°	1932.1	33.5
90°-150°	3530.0	61.2
90°-180°	4057.0	70.4
0°-180°	5763.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1170	1170	1170	1170	1170	
5°	1151	1140	1147	1150	1154	107
15°	974	970	996	1023	1041	272
25°	744	746	785	819	855	342
35°	526	528	564	602	644	327
45°	315	321	342	368	402	246
55°	181	189	200	207	224	164
65°	91	98	107	94	85	94
75°	46	46	42	29	20	49
85°	13	13	12	8	5	14
90°	2	4	8	9	10	4
95°	43	158	530	218	142	46
105°	144	222	888	1356	1277	153
115°	258	312	715	1416	1610	253
125°	354	402	648	1097	1288	315
135°	426	472	630	889	1002	329
145°	494	528	622	756	814	309
155°	556	575	617	679	700	256
165°	602	610	620	644	649	170
175°	624	625	621	630	628	59
180°	624	624	624	624	624	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1170.3	1170.3	1170.3	1170.3	1170.3
2.5°	1173.1	1162.7	1165.3	1165.3	1162.0
5°	1151.3	1139.7	1147.2	1149.8	1153.8
7.5°	1108.5	1099.8	1113.4	1123.4	1131.5
10°	1075.3	1067.7	1085.0	1099.6	1110.2
12.5°	1036.7	1030.3	1051.7	1071.4	1085.1
15°	973.6	970.1	996.2	1023.3	1040.9
17.5°	906.1	904.4	934.4	966.0	988.5
20°	860.1	859.6	892.5	925.4	951.5
22.5°	813.7	814.8	849.3	883.6	913.3
25°	744.1	746.1	784.6	818.8	855.0
27.5°	679.7	680.6	720.4	756.5	795.1
30°	635.7	638.2	677.3	714.7	754.8
32.5°	591.8	594.7	632.9	671.6	712.5
35°	525.8	528.3	563.8	601.8	644.4
37.5°	457.8	461.3	492.8	528.6	570.6
40°	413.9	418.9	446.7	480.5	521.7
42.5°	371.6	377.8	403.6	435.7	472.8
45°	315.3	321.3	342.5	368.4	402.1
47.5°	266.8	273.7	290.0	312.3	341.1
50°	239.3	245.8	260.9	277.4	304.5
52.5°	215.1	221.6	235.0	247.7	270.8
55°	181.3	188.8	199.8	207.3	224.4
57.5°	153.5	160.8	169.5	172.9	183.2
60°	135.1	143.1	151.0	150.6	156.1
62.5°	118.2	125.0	132.9	127.5	127.8
65°	90.9	98.4	107.3	93.8	85.2
67.5°	73.4	75.0	84.2	65.4	55.3
70°	65.2	65.2	67.8	50.6	42.1
72.5°	57.4	57.4	55.0	41.2	32.2
75°	45.7	45.7	41.6	28.6	19.5
77.5°	35.2	34.8	31.8	21.3	14.2
80°	28.2	28.2	25.7	16.8	11.3
82.5°	22.1	22.1	19.9	13.1	8.4
85°	12.8	12.8	11.8	7.6	4.6
87.5°	4.9	5.3	5.7	4.3	4.1
90°	2.0	4.0	8.0	9.0	10.0
92.5°	18.0	74.6	133.5	48.7	38.0
95°	43.0	158.2	530.5	218.0	141.9
97.5°	71.1	177.2	785.8	605.0	438.1
100°	91.9	188.6	880.1	886.3	720.3
102.5°	111.9	201.6	898.5	1095.1	937.6
105°	143.9	222.0	888.1	1355.8	1276.7
107.5°	177.8	247.4	838.5	1481.5	1510.4
110°	201.8	264.3	800.2	1508.6	1602.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	223.4	283.5	764.2	1487.2	1625.5
115°	257.7	311.5	715.3	1416.0	1610.3
117.5°	287.7	341.2	683.1	1315.7	1536.8
120°	307.7	360.4	670.3	1247.8	1470.5
122.5°	326.9	377.3	659.9	1184.4	1395.4
125°	353.6	402.5	648.3	1097.2	1287.7
127.5°	376.4	425.2	641.5	1023.5	1187.8
130°	391.6	440.4	638.3	978.4	1127.8
132.5°	406.0	452.5	635.1	940.5	1075.9
135°	425.6	471.5	630.3	888.7	1002.0
137.5°	447.5	489.3	628.0	845.1	941.8
140°	459.5	500.5	626.4	816.1	901.1
142.5°	473.1	511.0	624.8	790.3	865.1
145°	493.5	527.7	622.4	756.5	814.2
147.5°	513.1	543.0	620.2	728.1	772.8
150°	527.5	551.9	619.4	711.1	747.2
152.5°	538.6	561.5	618.6	696.6	726.4
155°	556.4	575.0	617.4	678.8	700.3
157.5°	572.8	587.1	617.6	665.8	680.5
160°	582.4	595.1	618.4	658.6	669.3
162.5°	590.4	601.5	619.2	652.1	660.5
165°	602.4	610.2	620.4	644.4	649.3
167.5°	611.6	616.3	621.4	639.8	641.3
170°	616.4	620.3	621.4	637.3	637.3
172.5°	620.4	622.7	621.4	634.1	633.3
175°	624.4	625.3	621.4	630.3	628.4
177.5°	626.0	625.2	621.2	626.7	625.2
180°	624.4	624.4	624.4	624.4	624.4

(END OF REPORT)