

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: P564978

Luminaire Tested: **SQ4-PW1-100U-125D-830-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564978
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-125D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

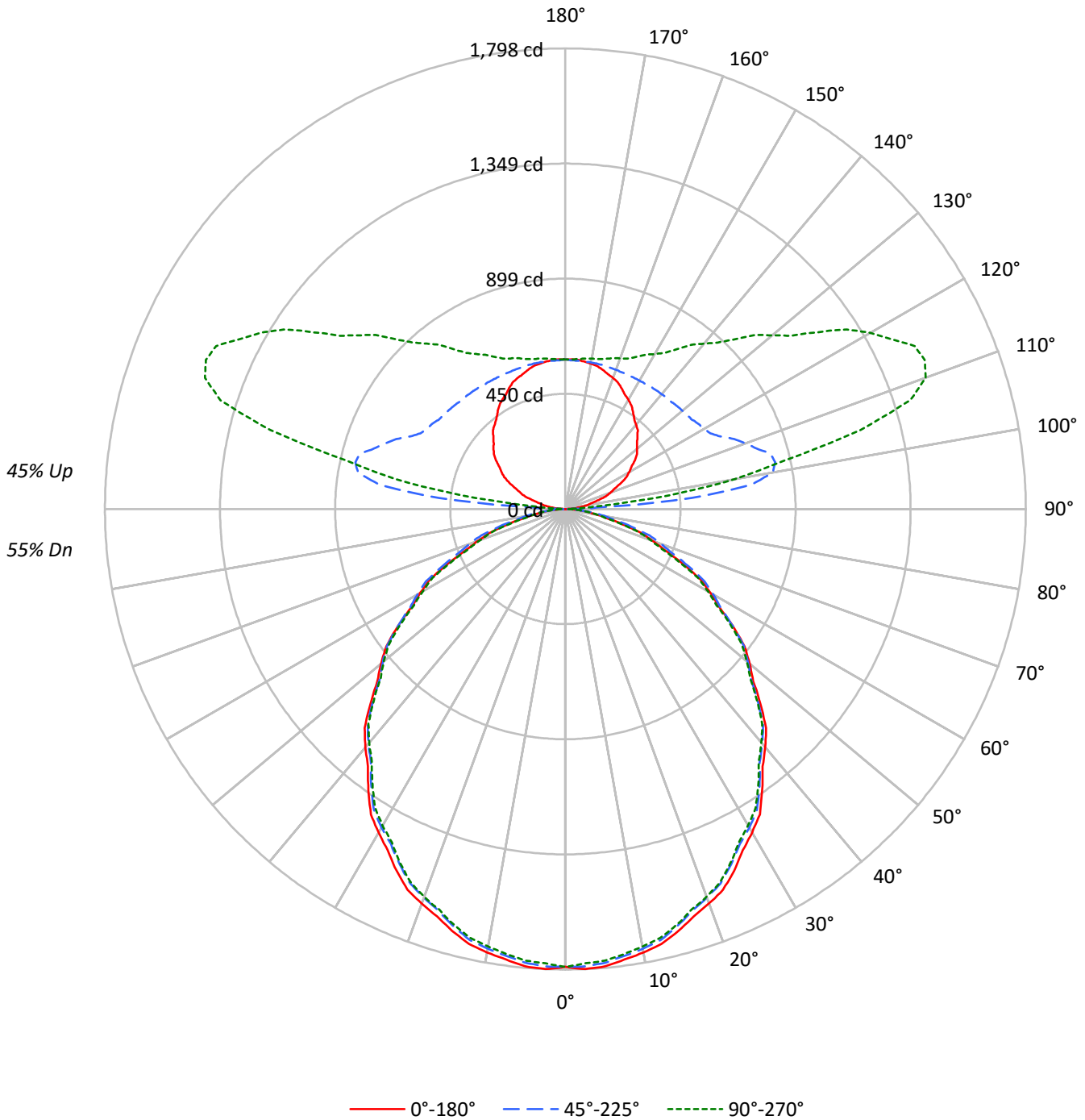
Lumens per Lamp: N/A
Luminaire Lumens: 8340.2 lumens
Efficiency: N/A
Efficacy: 121.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 68.7
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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55
1	99	95	91	87	92	88	85	82	76	73	71	64	62	61	53	52	51	46
2	90	83	77	71	83	77	72	67	66	62	59	56	53	51	47	45	43	39
3	82	73	65	60	76	68	61	56	59	54	49	50	46	43	42	39	37	33
4	75	64	57	50	70	60	53	48	52	47	42	44	40	37	37	34	32	28
5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	30	28	25
6	64	52	43	38	59	48	41	36	42	36	32	36	32	28	31	27	24	22
7	59	47	39	33	55	44	36	31	38	32	28	33	28	25	28	24	22	19
8	55	42	35	29	51	40	33	28	35	29	25	30	26	22	26	22	19	17
9	51	39	31	26	47	36	30	25	32	26	22	28	23	20	24	20	18	15
10	48	36	28	23	44	33	27	22	29	24	20	26	21	18	22	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16493	16493	16493
5°	16599	16468	16396
10°	16467	16334	16245
15°	16292	16112	16052
20°	16097	15850	15819
25°	15873	15585	15536
30°	15537	15303	15201
35°	15096	14883	14794
40°	14625	14397	14341
45°	14056	13871	13810
50°	13474	13360	13270
55°	12844	12844	12642
60°	12060	12293	11858
65°	11038	11588	10763
70°	9730	10663	9474
75°	8309	9543	8085
80°	6445	8033	6525
85°	4171	6172	5505



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.3	2.0
10°-20°	475.2	5.7
20°-30°	704.9	8.5
30°-40°	824.9	9.9
40°-50°	821.2	9.8
50°-60°	709.1	8.5
60°-70°	510.4	6.1
70°-80°	267.7	3.2
80°-90°	67.6	0.8
90°-100°	273.2	3.3
100°-110°	754.3	9.0
110°-120°	777.9	9.3
120°-130°	625.1	7.5
130°-140°	491.3	5.9
140°-150°	376.8	4.5
150°-160°	270.8	3.2
160°-170°	165.6	2.0
170°-180°	55.8	0.7
0°-30°	1348.5	16.2
0°-40°	2173.4	26.1
0°-60°	3703.6	44.4
0°-90°	4549.3	54.5
90°-120°	1805.5	21.6
90°-150°	3298.7	39.6
90°-180°	3791.0	45.5
0°-180°	8340.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1788	1788	1788	1788	1788	
5°	1792	1772	1778	1773	1770	170
15°	1706	1684	1687	1684	1680	481
25°	1559	1533	1531	1522	1526	717
35°	1340	1322	1321	1309	1314	838
45°	1077	1068	1063	1060	1058	831
55°	798	797	798	787	786	712
65°	506	521	531	510	493	501
75°	233	255	268	250	227	250
85°	39	52	58	55	52	52
90°	2	4	8	8	9	4
95°	40	148	496	204	133	43
105°	134	207	830	1267	1193	143
115°	241	291	668	1323	1505	237
125°	330	376	606	1025	1203	294
135°	398	441	589	830	936	308
145°	461	493	582	707	761	289
155°	520	537	577	634	654	240
165°	563	570	580	602	607	159
175°	584	584	581	589	587	55
180°	584	584	584	584	584	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1787.6	1787.6	1787.6	1787.6	1787.6
2.5°	1797.7	1782.9	1787.6	1783.6	1775.0
5°	1792.3	1772.3	1778.1	1773.3	1770.3
7.5°	1774.0	1755.6	1759.9	1754.8	1752.9
10°	1757.7	1739.2	1743.5	1737.1	1734.0
12.5°	1738.8	1719.0	1723.3	1717.0	1715.1
15°	1705.7	1684.1	1686.8	1683.6	1680.5
17.5°	1667.3	1645.4	1645.8	1640.8	1640.2
20°	1639.5	1616.4	1614.3	1608.1	1611.2
22.5°	1609.3	1585.0	1582.8	1574.1	1578.4
25°	1559.2	1533.0	1530.9	1521.5	1526.1
27.5°	1501.3	1475.4	1475.4	1462.3	1467.2
30°	1458.4	1433.8	1436.4	1420.8	1426.9
32.5°	1413.1	1390.9	1392.3	1376.7	1382.8
35°	1340.3	1321.8	1321.4	1308.9	1313.5
37.5°	1266.0	1249.6	1247.1	1239.8	1241.1
40°	1214.3	1200.4	1195.4	1190.7	1190.7
42.5°	1160.1	1147.5	1142.5	1139.0	1137.8
45°	1077.3	1068.0	1063.1	1059.9	1058.4
47.5°	995.4	986.8	982.5	980.2	978.7
50°	938.7	932.5	930.8	926.0	924.5
52.5°	882.0	878.3	876.6	870.6	869.1
55°	798.5	797.0	798.5	787.4	785.9
57.5°	711.6	714.0	719.1	704.2	700.5
60°	653.6	659.8	666.2	648.7	642.6
62.5°	594.4	604.2	613.3	593.2	584.6
65°	505.6	521.0	530.8	509.9	493.0
67.5°	419.9	439.0	450.8	428.3	409.2
70°	360.7	382.2	395.3	372.8	351.2
72.5°	309.0	333.0	343.7	322.4	300.8
75°	233.1	254.7	267.7	249.9	226.8
77.5°	165.4	185.7	196.6	181.0	161.9
80°	121.3	142.8	151.2	138.2	122.8
82.5°	86.0	103.9	109.6	101.8	91.3
85°	39.4	51.7	58.3	55.1	52.0
87.5°	10.5	19.4	25.4	25.7	27.1
90°	1.9	3.7	7.5	8.4	9.3
92.5°	16.8	69.7	124.7	45.5	35.5
95°	40.1	147.8	495.7	203.8	132.6
97.5°	66.5	165.6	734.3	565.3	409.4
100°	85.9	176.2	822.4	828.2	673.1
102.5°	104.6	188.3	839.6	1023.3	876.2
105°	134.4	207.4	829.9	1267.0	1193.0
107.5°	166.2	231.2	783.6	1384.5	1411.5
110°	188.6	247.0	747.8	1409.7	1497.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	208.7	265.0	714.1	1389.8	1519.0
115°	240.8	291.1	668.4	1323.2	1504.8
117.5°	268.9	318.9	638.3	1229.5	1436.1
120°	287.5	336.8	626.4	1166.0	1374.1
122.5°	305.4	352.5	616.7	1106.8	1303.9
125°	330.5	376.1	605.9	1025.3	1203.3
127.5°	351.8	397.4	599.5	956.4	1110.0
130°	365.9	411.6	596.5	914.3	1053.9
132.5°	379.4	422.8	593.5	878.9	1005.4
135°	397.7	440.6	589.1	830.4	936.3
137.5°	418.2	457.3	586.8	789.8	880.1
140°	429.4	467.8	585.3	762.6	842.0
142.5°	442.1	477.5	583.8	738.5	808.4
145°	461.2	493.1	581.6	707.0	760.8
147.5°	479.5	507.4	579.5	680.4	722.2
150°	492.9	515.7	578.8	664.5	698.3
152.5°	503.4	524.7	578.0	650.9	678.9
155°	520.0	537.3	576.9	634.3	654.4
157.5°	535.3	548.6	577.1	622.2	635.9
160°	544.2	556.1	577.9	615.4	625.5
162.5°	551.7	562.1	578.6	609.4	617.2
165°	562.9	570.2	579.7	602.2	606.8
167.5°	571.5	575.9	580.7	597.9	599.3
170°	576.0	579.6	580.7	595.6	595.6
172.5°	579.7	581.9	580.7	592.6	591.9
175°	583.5	584.4	580.7	589.0	587.2
177.5°	584.9	584.2	580.5	585.7	584.2
180°	583.5	583.5	583.5	583.5	583.5

(END OF REPORT)