

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: P563952

Luminaire Tested: **SQ4-PR1-050U-050D-835-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563952
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PR1-050U-050D-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

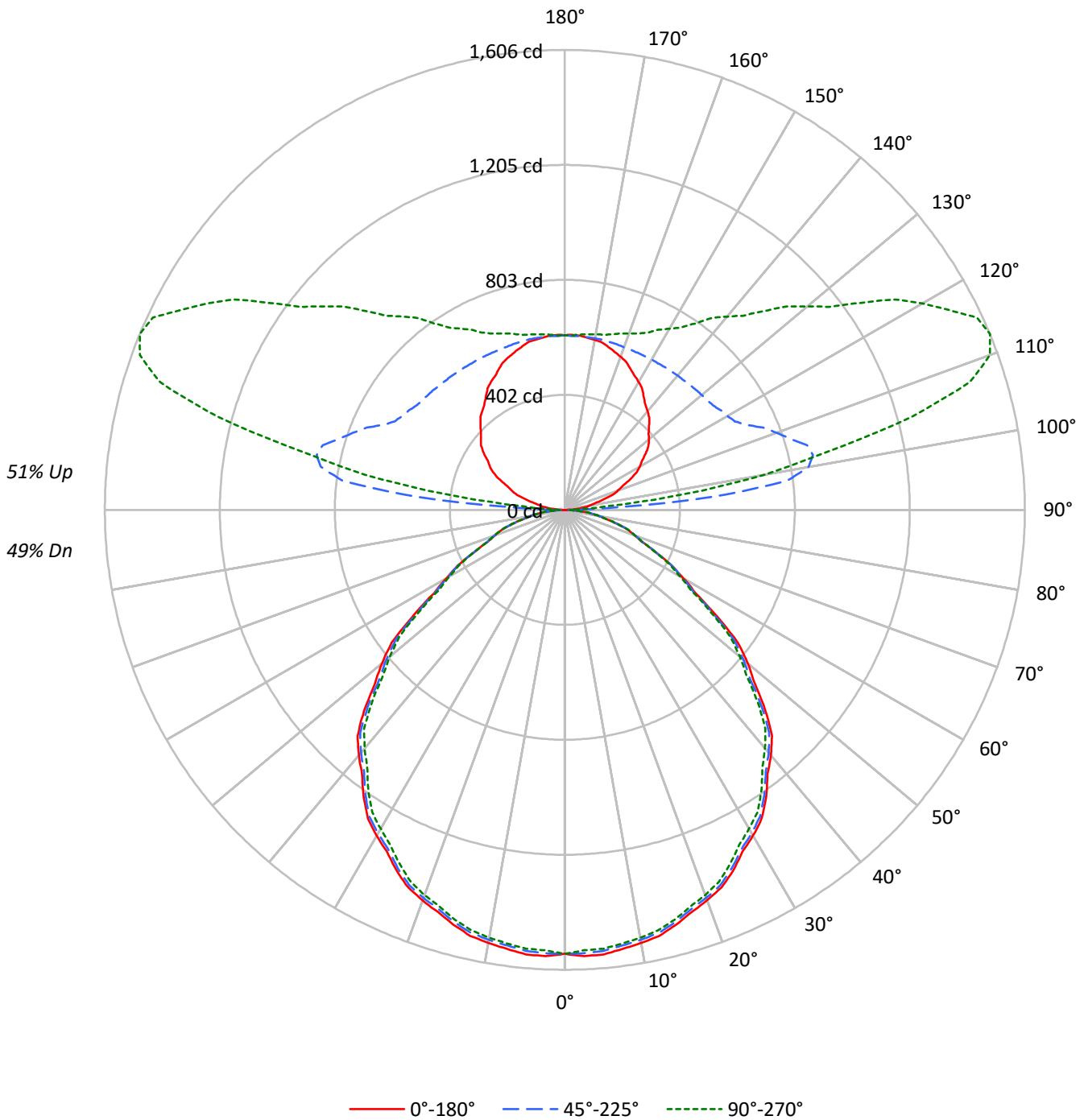
Lumens per Lamp: N/A
Luminaire Lumens: 7861.8 lumens
Efficiency: N/A
Efficacy: 133.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 58.9
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	49
1	98	94	90	86	90	87	83	80	73	71	69	61	59	58	49	48	47	42
2	89	82	76	71	82	76	71	66	64	61	57	54	51	49	44	42	40	36
3	82	72	65	60	75	67	61	56	57	52	48	48	44	41	39	37	35	31
4	75	64	56	51	69	60	53	48	51	46	42	43	39	36	35	32	30	26
5	69	57	49	43	63	53	46	41	46	40	36	38	34	31	32	29	26	23
6	63	51	43	38	58	48	41	36	41	36	31	35	31	27	29	26	23	20
7	59	47	39	33	54	43	36	31	37	32	28	32	27	24	26	23	21	18
8	54	42	35	29	50	39	33	28	34	29	25	29	25	22	24	21	19	16
9	51	39	31	26	47	36	29	25	31	26	22	27	22	19	22	19	17	15
10	47	35	28	23	44	33	27	22	29	24	20	25	20	18	21	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7152	7152	7152
5°	7216	7160	7123
10°	7193	7143	7106
15°	7162	7117	7079
20°	7126	7080	7027
25°	7076	7028	6946
30°	6999	6949	6850
35°	6896	6836	6738
40°	6739	6666	6546
45°	6464	6351	6220
50°	5980	5836	5721
55°	5220	5101	4994
60°	4398	4361	4275
65°	3804	3819	3790
70°	3495	3512	3512
75°	3356	3356	3379
80°	3156	3193	3156
85°	2546	2826	2826



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.6	1.9
10°-20°	419.5	5.3
20°-30°	632.7	8.0
30°-40°	753.8	9.6
40°-50°	743.2	9.5
50°-60°	568.0	7.2
60°-70°	351.5	4.5
70°-80°	199.6	2.5
80°-90°	63.1	0.8
90°-100°	292.9	3.7
100°-110°	795.7	10.1
110°-120°	818.1	10.4
120°-130°	654.1	8.3
130°-140°	513.9	6.5
140°-150°	394.1	5.0
150°-160°	283.4	3.6
160°-170°	173.3	2.2
170°-180°	58.4	0.7
0°-30°	1198.7	15.2
0°-40°	1952.6	24.8
0°-60°	3263.8	41.5
0°-90°	3878.0	49.3
90°-120°	1906.7	24.3
90°-150°	3468.7	44.1
90°-180°	3984.0	50.7
0°-180°	7861.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1550	1550	1550	1550	1550	
5°	1558	1541	1546	1541	1538	148
15°	1500	1484	1490	1485	1482	423
25°	1390	1373	1381	1366	1365	640
35°	1224	1210	1214	1198	1196	764
45°	991	978	974	956	953	759
55°	649	638	634	624	621	582
65°	348	346	350	347	347	353
75°	188	188	188	190	190	199
85°	48	51	53	53	53	56
90°	2	8	14	18	18	5
95°	43	160	510	222	149	46
105°	141	220	875	1332	1254	150
115°	251	305	700	1393	1587	248
125°	345	393	634	1068	1260	308
135°	416	462	616	870	981	322
145°	481	515	608	739	795	302
155°	543	563	604	664	683	251
165°	589	596	606	632	634	166
175°	610	612	608	616	614	58
180°	610	610	610	610	610	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1550.3	1550.3	1550.3	1550.3	1550.3
2.5°	1559.9	1546.4	1550.3	1546.9	1539.6
5°	1558.3	1541.4	1546.3	1540.9	1538.3
7.5°	1546.3	1529.6	1534.6	1529.2	1527.6
10°	1535.6	1520.0	1524.9	1519.5	1516.9
12.5°	1523.9	1507.2	1513.2	1506.7	1504.1
15°	1499.6	1483.9	1490.2	1484.8	1482.2
17.5°	1472.9	1456.2	1462.5	1456.2	1452.8
20°	1451.5	1435.8	1442.2	1432.8	1431.5
22.5°	1428.0	1412.3	1418.7	1406.1	1405.8
25°	1390.1	1373.1	1380.7	1366.0	1364.7
27.5°	1344.9	1329.3	1335.6	1320.6	1319.0
30°	1314.0	1298.3	1304.6	1288.5	1285.9
32.5°	1278.7	1264.1	1269.4	1253.3	1251.7
35°	1224.5	1210.1	1213.8	1197.8	1196.5
37.5°	1162.8	1149.7	1151.9	1134.2	1132.9
40°	1119.0	1105.9	1107.0	1088.3	1087.0
42.5°	1070.9	1057.9	1056.8	1038.1	1036.7
45°	990.8	977.8	973.5	956.0	953.4
47.5°	899.5	886.4	878.4	864.2	862.4
50°	833.2	820.2	813.2	801.1	797.2
52.5°	761.7	748.6	742.7	731.7	727.8
55°	649.0	638.5	634.3	623.5	620.9
57.5°	541.9	534.8	533.6	523.2	522.1
60°	476.7	472.8	472.7	463.4	463.4
62.5°	421.2	418.3	420.4	414.2	413.2
65°	348.5	345.9	349.9	347.2	347.2
67.5°	291.1	291.1	293.5	292.4	292.4
70°	259.1	259.1	260.4	260.4	260.4
72.5°	230.2	229.2	232.6	232.6	231.5
75°	188.3	188.3	188.3	189.6	189.6
77.5°	146.6	146.9	148.0	147.7	146.6
80°	118.8	120.1	120.2	118.8	118.8
82.5°	91.1	92.4	92.4	92.1	91.1
85°	48.1	50.7	53.4	53.4	53.4
87.5°	14.3	19.6	24.1	24.9	23.8
90°	2.0	7.7	13.7	17.7	17.7
92.5°	17.7	80.2	139.3	59.8	50.6
95°	43.2	160.2	510.1	222.0	149.1
97.5°	71.4	176.9	782.0	608.4	427.3
100°	90.2	188.1	865.2	877.1	708.2
102.5°	109.1	199.2	887.2	1084.7	935.8
105°	141.3	219.9	875.0	1332.3	1253.6
107.5°	174.6	244.1	824.4	1460.1	1482.0
110°	198.2	261.5	786.7	1485.3	1579.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	218.6	278.8	749.1	1464.4	1606.0
115°	251.1	304.8	700.4	1393.4	1587.2
117.5°	281.7	333.1	669.4	1292.7	1511.0
120°	302.1	352.0	655.3	1225.2	1442.0
122.5°	319.4	369.3	645.9	1157.6	1366.7
125°	345.3	393.3	633.7	1067.7	1259.5
127.5°	368.4	416.0	627.0	999.6	1164.2
130°	382.6	428.6	623.9	956.8	1104.5
132.5°	396.7	442.7	620.7	920.4	1051.2
135°	415.9	462.0	616.0	869.7	980.9
137.5°	436.7	478.5	613.7	824.9	918.6
140°	449.3	489.6	612.1	796.5	880.9
142.5°	461.8	499.0	610.5	774.2	844.8
145°	480.7	515.2	608.2	738.9	794.6
147.5°	501.9	531.4	606.2	711.2	754.9
150°	516.0	540.9	606.2	695.3	729.8
152.5°	527.0	548.8	604.7	681.0	709.4
155°	543.4	562.6	604.3	663.6	682.7
157.5°	559.5	574.5	604.3	651.7	666.3
160°	568.9	582.4	604.3	643.8	655.3
162.5°	578.4	588.7	605.8	637.4	645.9
165°	588.6	596.2	606.2	631.8	633.7
167.5°	599.2	603.0	608.2	625.1	626.6
170°	602.3	606.1	608.2	621.9	621.9
172.5°	605.4	607.7	608.2	618.8	618.8
175°	610.1	612.1	608.2	616.0	614.1
177.5°	611.7	611.7	607.0	613.2	610.1
180°	610.1	610.1	610.1	610.1	610.1

(END OF REPORT)