

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: P563971

Luminaire Tested: **SQ4-PR1-050U-075D-830-1D-UNV-STD-W-6**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563971
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-075D-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

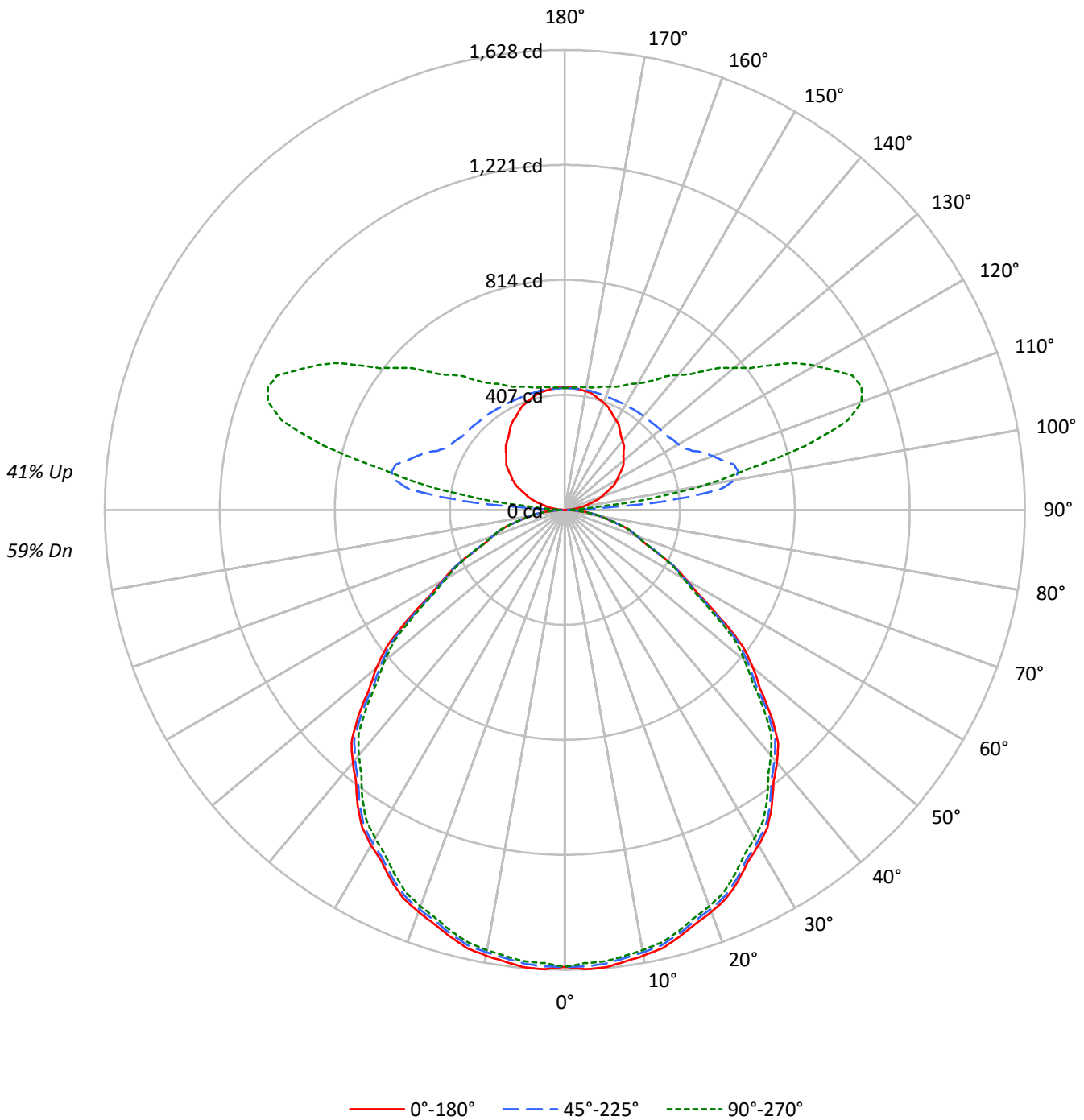
Lumens per Lamp: N/A
Luminaire Lumens: 6865.7 lumens
Efficiency: N/A
Efficacy: 117.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 58.5
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	109	109	109	109	102	102	102	102	88	88	88	76	76	76	64	64	64	59
1	100	96	92	89	93	90	86	83	78	76	73	67	65	64	57	56	55	50
2	91	84	78	73	85	79	73	69	69	65	61	59	56	54	51	49	47	43
3	84	74	67	61	78	70	63	58	61	56	52	53	49	46	45	43	40	37
4	77	66	58	52	71	62	55	49	54	49	44	47	43	40	41	38	35	32
5	71	59	51	45	66	55	48	43	49	43	39	43	38	35	37	33	31	28
6	65	53	45	39	61	50	43	37	44	38	34	39	34	30	33	30	27	24
7	60	48	40	34	56	45	38	33	40	34	30	35	30	27	31	27	24	22
8	56	44	36	30	52	41	34	29	37	31	27	32	28	24	28	24	22	19
9	52	40	32	27	49	38	31	26	34	28	24	30	25	22	26	22	20	17
10	49	37	29	25	46	35	28	24	31	25	22	27	23	20	24	20	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9950	9950	9950
5°	10039	9962	9910
10°	10007	9938	9886
15°	9963	9901	9848
20°	9913	9849	9776
25°	9843	9777	9664
30°	9737	9668	9529
35°	9593	9510	9374
40°	9375	9274	9106
45°	8993	8835	8653
50°	8319	8119	7959
55°	7261	7097	6948
60°	6119	6067	5948
65°	5292	5312	5273
70°	4861	4886	4886
75°	4670	4670	4701
80°	4392	4442	4392
85°	3543	3931	3931



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.0	2.2
10°-20°	437.7	6.4
20°-30°	660.1	9.6
30°-40°	786.5	11.5
40°-50°	775.5	11.3
50°-60°	592.6	8.6
60°-70°	366.7	5.3
70°-80°	208.3	3.0
80°-90°	65.0	0.9
90°-100°	207.4	3.0
100°-110°	563.3	8.2
110°-120°	579.1	8.4
120°-130°	463.0	6.7
130°-140°	363.8	5.3
140°-150°	279.0	4.1
150°-160°	200.6	2.9
160°-170°	122.7	1.8
170°-180°	41.3	0.6
0°-30°	1250.7	18.2
0°-40°	2037.3	29.7
0°-60°	3405.4	49.6
0°-90°	4045.4	58.9
90°-120°	1349.8	19.7
90°-150°	2455.6	35.8
90°-180°	2820.0	41.1
0°-180°	6865.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1618	1618	1618	1618	1618	
5°	1626	1608	1613	1608	1605	154
15°	1565	1548	1555	1549	1546	442
25°	1450	1433	1441	1425	1424	667
35°	1278	1263	1266	1250	1248	797
45°	1034	1020	1016	998	995	792
55°	677	666	662	651	648	607
65°	364	361	365	362	362	368
75°	196	196	196	198	198	207
85°	50	53	56	56	56	58
90°	1	6	10	12	12	4
95°	31	113	361	157	106	32
105°	100	156	619	943	888	106
115°	178	216	496	986	1124	175
125°	244	278	449	756	892	218
135°	294	327	436	616	694	228
145°	340	365	430	523	562	214
155°	385	398	428	470	483	177
165°	417	422	429	447	449	118
175°	432	433	430	436	435	41
180°	432	432	432	432	432	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1617.6	1617.6	1617.6	1617.6	1617.6
2.5°	1627.6	1613.4	1617.6	1614.1	1606.4
5°	1625.9	1608.2	1613.4	1607.8	1605.0
7.5°	1613.4	1596.0	1601.1	1595.5	1593.9
10°	1602.3	1585.9	1591.1	1585.5	1582.8
12.5°	1590.0	1572.6	1578.9	1572.1	1569.4
15°	1564.6	1548.3	1554.9	1549.3	1546.5
17.5°	1536.8	1519.3	1525.9	1519.4	1515.9
20°	1514.5	1498.1	1504.7	1494.9	1493.6
22.5°	1490.0	1473.6	1480.2	1467.1	1466.8
25°	1450.4	1432.7	1440.6	1425.3	1423.9
27.5°	1403.3	1387.0	1393.5	1377.9	1376.3
30°	1371.0	1354.6	1361.2	1344.4	1341.7
32.5°	1334.2	1318.9	1324.4	1307.7	1306.1
35°	1277.6	1262.6	1266.5	1249.7	1248.4
37.5°	1213.3	1199.6	1201.8	1183.4	1182.1
40°	1167.6	1153.9	1155.0	1135.5	1134.1
42.5°	1117.4	1103.8	1102.6	1083.1	1081.7
45°	1033.8	1020.2	1015.7	997.5	994.8
47.5°	938.5	924.9	916.5	901.7	899.8
50°	869.4	855.8	848.5	835.9	831.8
52.5°	794.7	781.1	774.9	763.4	759.3
55°	677.1	666.2	661.8	650.6	647.9
57.5°	565.4	558.0	556.8	545.9	544.8
60°	497.4	493.3	493.2	483.5	483.5
62.5°	439.4	436.4	438.6	432.2	431.1
65°	363.6	360.9	365.0	362.3	362.3
67.5°	303.7	303.7	306.2	305.1	305.1
70°	270.3	270.3	271.7	271.7	271.7
72.5°	240.2	239.1	242.7	242.7	241.6
75°	196.5	196.5	196.5	197.8	197.8
77.5°	153.0	153.3	154.4	154.1	153.0
80°	124.0	125.4	125.4	124.0	124.0
82.5°	95.0	96.4	96.4	96.1	95.0
85°	50.2	52.9	55.7	55.7	55.7
87.5°	14.8	19.9	24.2	24.8	23.7
90°	1.4	5.5	9.7	12.5	12.5
92.5°	12.5	56.8	98.6	42.4	35.8
95°	30.6	113.4	361.1	157.2	105.6
97.5°	50.6	125.2	553.6	430.7	302.5
100°	63.9	133.1	612.5	620.9	501.4
102.5°	77.2	141.0	628.0	767.9	662.5
105°	100.0	155.7	619.4	943.2	887.5
107.5°	123.6	172.8	583.6	1033.7	1049.1
110°	140.3	185.1	556.9	1051.5	1118.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	154.7	197.4	530.3	1036.7	1136.9
115°	177.8	215.8	495.8	986.4	1123.6
117.5°	199.4	235.8	473.9	915.2	1069.7
120°	213.9	249.2	463.9	867.4	1020.8
122.5°	226.1	261.4	457.2	819.5	967.5
125°	244.4	278.4	448.6	755.8	891.6
127.5°	260.8	294.5	443.9	707.6	824.2
130°	270.8	303.4	441.7	677.4	781.9
132.5°	280.8	313.4	439.4	651.5	744.2
135°	294.4	327.0	436.1	615.7	694.4
137.5°	309.2	338.8	434.4	584.0	650.3
140°	318.0	346.6	433.3	563.8	623.6
142.5°	326.9	353.3	432.2	548.1	598.0
145°	340.3	364.7	430.5	523.1	562.5
147.5°	355.3	376.2	429.2	503.5	534.4
150°	365.3	382.9	429.2	492.2	516.7
152.5°	373.0	388.5	428.0	482.1	502.2
155°	384.7	398.3	427.8	469.7	483.3
157.5°	396.1	406.7	427.8	461.3	471.7
160°	402.8	412.3	427.8	455.7	463.9
162.5°	409.4	416.8	428.9	451.2	457.2
165°	416.7	422.1	429.2	447.2	448.6
167.5°	424.2	426.9	430.5	442.5	443.6
170°	426.4	429.1	430.5	440.3	440.3
172.5°	428.6	430.2	430.5	438.0	438.0
175°	431.9	433.3	430.5	436.1	434.7
177.5°	433.0	433.0	429.7	434.1	431.9
180°	431.9	431.9	431.9	431.9	431.9

(END OF REPORT)