

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: P519972

Luminaire Tested: **SQ4-F-050U-125D-935-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519972
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G3-1910-536-20)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-050U-125D-935-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

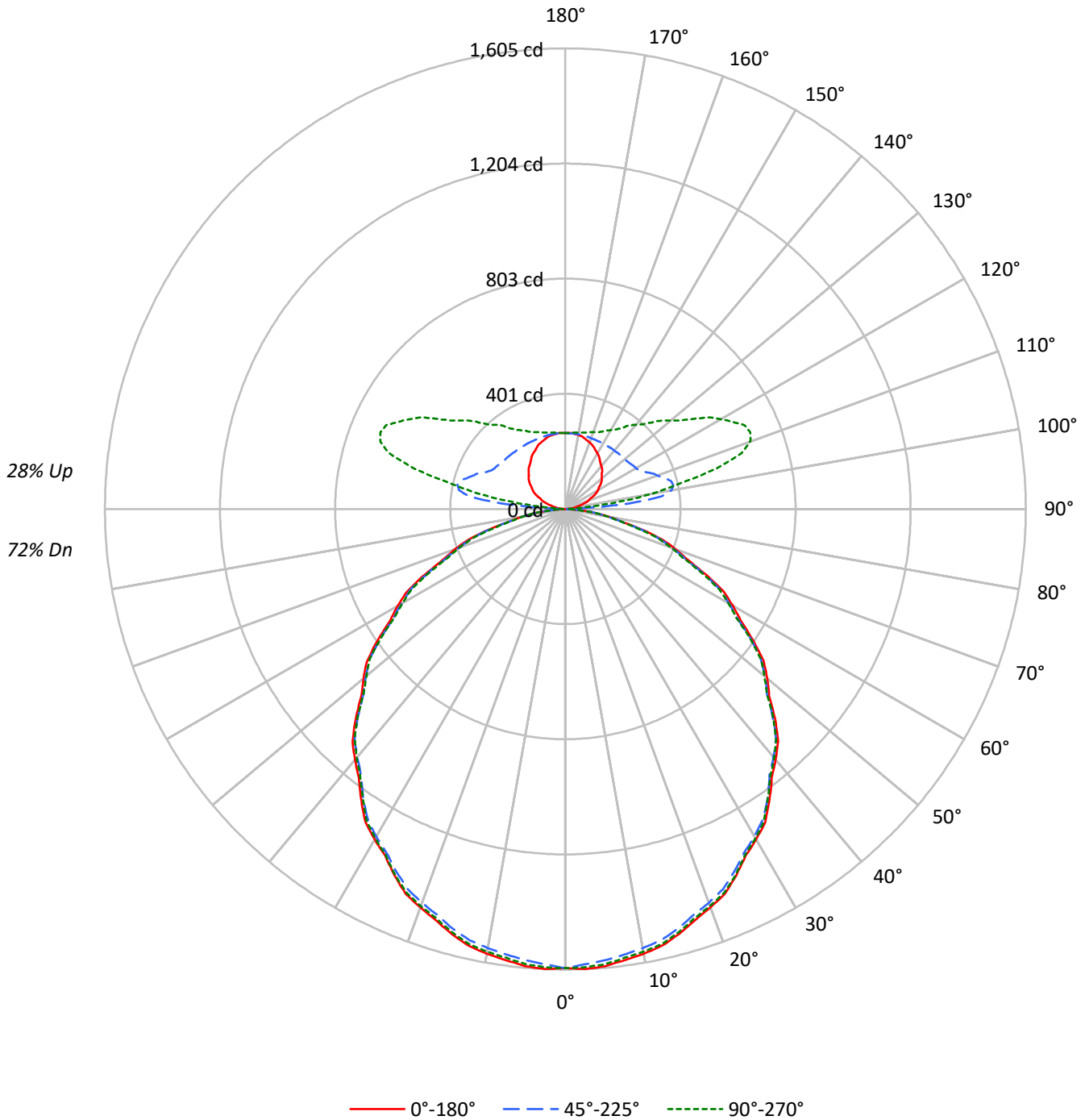
Lumens per Lamp: N/A
Luminaire Lumens: 6097.4 lumens
Efficiency: N/A
Efficacy: 109.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 55.9
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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	72
1	103	98	94	90	97	93	90	86	84	81	78	75	73	71	67	66	64	60
2	93	86	79	74	88	81	76	71	73	69	65	66	62	59	59	56	54	50
3	85	75	68	61	80	72	65	59	65	59	54	58	54	50	52	49	46	42
4	78	67	58	52	73	63	56	50	57	51	46	52	47	43	47	43	39	36
5	72	59	51	45	67	57	49	43	51	45	40	46	41	37	42	38	34	31
6	66	53	45	39	62	51	43	37	46	40	35	42	37	32	38	34	30	28
7	61	48	40	34	58	46	38	33	42	36	31	38	33	29	35	30	27	24
8	57	44	36	30	54	42	34	29	38	32	27	35	30	26	32	27	24	22
9	53	40	32	27	50	38	31	26	35	29	25	32	27	23	29	25	22	20
10	49	37	29	24	47	35	28	24	33	26	22	30	25	21	27	23	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14763	14763	14763
5°	14811	14624	14746
10°	14743	14562	14678
15°	14644	14468	14586
20°	14509	14345	14456
25°	14344	14192	14308
30°	14166	14045	14120
35°	13965	13847	13856
40°	13735	13587	13629
45°	13478	13328	13352
50°	13185	13031	12994
55°	12849	12664	12637
60°	12431	12155	12090
65°	11784	11533	11383
70°	10974	10690	10547
75°	9764	9543	9261
80°	7954	7720	7672
85°	4753	5409	5409



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.0	2.5
10°-20°	430.0	7.1
20°-30°	646.0	10.6
30°-40°	770.8	12.6
40°-50°	790.1	13.0
50°-60°	704.2	11.5
60°-70°	524.2	8.6
70°-80°	284.0	4.7
80°-90°	66.2	1.1
90°-100°	127.3	2.1
100°-110°	345.7	5.7
110°-120°	355.4	5.8
120°-130°	284.2	4.7
130°-140°	223.3	3.7
140°-150°	171.2	2.8
150°-160°	123.1	2.0
160°-170°	75.3	1.2
170°-180°	25.4	0.4
0°-30°	1227.0	20.1
0°-40°	1997.8	32.8
0°-60°	3492.1	57.3
0°-90°	4366.6	71.6
90°-120°	828.4	13.6
90°-150°	1507.0	24.7
90°-180°	1731.0	28.4
0°-180°	6097.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1600	1600	1600	1600	1600	
5°	1599	1597	1579	1593	1592	152
15°	1533	1530	1515	1528	1527	432
25°	1409	1406	1394	1402	1406	649
35°	1240	1239	1229	1229	1230	775
45°	1033	1030	1022	1020	1023	796
55°	799	796	787	781	786	713
65°	540	536	528	525	521	535
75°	274	274	268	262	260	291
85°	45	51	51	52	51	62
90°	1	3	6	8	8	2
95°	19	70	222	96	65	20
105°	61	96	380	579	545	65
115°	109	132	304	605	690	108
125°	150	171	275	464	547	134
135°	181	201	268	378	426	140
145°	209	224	264	321	345	131
155°	236	244	262	288	297	109
165°	256	259	263	274	275	72
175°	265	266	264	268	267	25
180°	265	265	265	265	265	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1600.1	1600.1	1600.1	1600.1	1600.1
2.5°	1605.0	1602.3	1588.2	1600.0	1598.0
5°	1599.2	1596.7	1579.0	1593.0	1592.2
7.5°	1585.6	1582.4	1566.3	1579.5	1577.9
10°	1573.7	1571.2	1554.3	1567.5	1566.7
12.5°	1558.9	1556.4	1539.5	1552.7	1552.6
15°	1533.1	1529.7	1514.7	1527.9	1527.1
17.5°	1502.3	1498.4	1483.5	1493.9	1495.6
20°	1477.7	1475.2	1461.0	1470.7	1472.4
22.5°	1452.4	1449.0	1434.2	1445.4	1447.1
25°	1409.0	1406.5	1394.1	1402.1	1405.5
27.5°	1361.5	1361.5	1350.0	1355.7	1357.8
30°	1329.7	1329.7	1318.3	1321.9	1325.4
32.5°	1296.0	1293.1	1282.4	1285.2	1288.7
35°	1239.9	1239.1	1229.4	1229.4	1230.2
37.5°	1182.0	1179.5	1169.0	1169.8	1173.9
40°	1140.4	1138.7	1128.1	1128.1	1131.6
42.5°	1098.1	1096.4	1087.2	1085.9	1087.2
45°	1033.0	1030.4	1021.5	1019.9	1023.3
47.5°	963.6	964.3	953.7	951.3	953.2
50°	918.6	918.6	907.9	902.7	905.3
52.5°	871.3	869.9	859.4	853.5	859.5
55°	798.8	796.1	787.3	781.2	785.6
57.5°	724.5	720.4	711.6	704.9	707.3
60°	673.7	667.7	658.7	653.5	655.2
62.5°	620.9	617.5	608.0	600.0	603.8
65°	539.8	536.4	528.3	524.8	521.4
67.5°	460.4	458.1	449.1	445.3	443.1
70°	406.8	402.6	396.3	391.8	391.0
72.5°	354.7	349.8	343.5	339.7	337.5
75°	273.9	273.9	267.7	262.4	259.8
77.5°	196.9	197.6	192.5	190.7	189.5
80°	149.7	149.7	145.3	143.5	144.4
82.5°	104.6	106.7	105.1	102.7	101.5
85°	44.9	51.0	51.1	51.9	51.1
87.5°	7.9	13.3	14.6	13.5	12.2
90°	0.9	3.3	6.0	7.7	7.7
92.5°	7.7	34.8	60.5	26.0	22.0
95°	18.7	69.6	221.6	96.5	64.8
97.5°	31.0	76.8	339.7	264.4	185.7
100°	39.3	81.7	375.8	381.0	307.7
102.5°	47.4	86.5	385.4	471.2	406.5
105°	61.3	95.6	380.2	578.9	544.6
107.5°	75.9	106.0	358.2	634.4	643.8
110°	86.1	113.6	341.8	645.3	686.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	95.0	121.1	325.4	636.3	697.7
115°	109.1	132.5	304.3	605.4	689.5
117.5°	122.4	144.7	290.9	561.6	656.5
120°	131.3	152.9	284.7	532.2	626.5
122.5°	138.8	160.4	280.5	502.9	593.8
125°	150.0	170.8	275.3	463.9	547.2
127.5°	160.0	180.8	272.4	434.3	505.8
130°	166.2	186.2	271.0	415.7	479.8
132.5°	172.3	192.3	269.7	399.9	456.7
135°	180.7	200.7	267.6	377.8	426.2
137.5°	189.7	207.9	266.6	358.4	399.1
140°	195.2	212.6	265.9	346.0	382.7
142.5°	200.7	216.8	265.2	336.4	367.0
145°	208.8	223.8	264.3	321.1	345.2
147.5°	218.0	230.9	263.4	309.0	327.9
150°	224.1	235.0	263.4	302.0	317.1
152.5°	228.9	238.5	262.7	295.9	308.2
155°	236.1	244.4	262.5	288.3	296.6
157.5°	243.1	249.5	262.5	283.1	289.5
160°	247.2	253.0	262.5	279.7	284.7
162.5°	251.3	255.7	263.2	276.9	280.5
165°	255.7	259.1	263.4	274.5	275.3
167.5°	260.3	262.0	264.3	271.5	272.2
170°	261.7	263.4	264.3	270.1	270.1
172.5°	263.0	264.1	264.3	268.9	268.9
175°	265.0	265.9	264.3	267.6	266.8
177.5°	265.7	265.7	263.7	266.4	265.0
180°	265.0	265.0	265.0	265.0	265.0

(END OF REPORT)