

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: P519953

Luminaire Tested: **SQ4-F-050U-100D-940-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519953
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-050U-100D-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

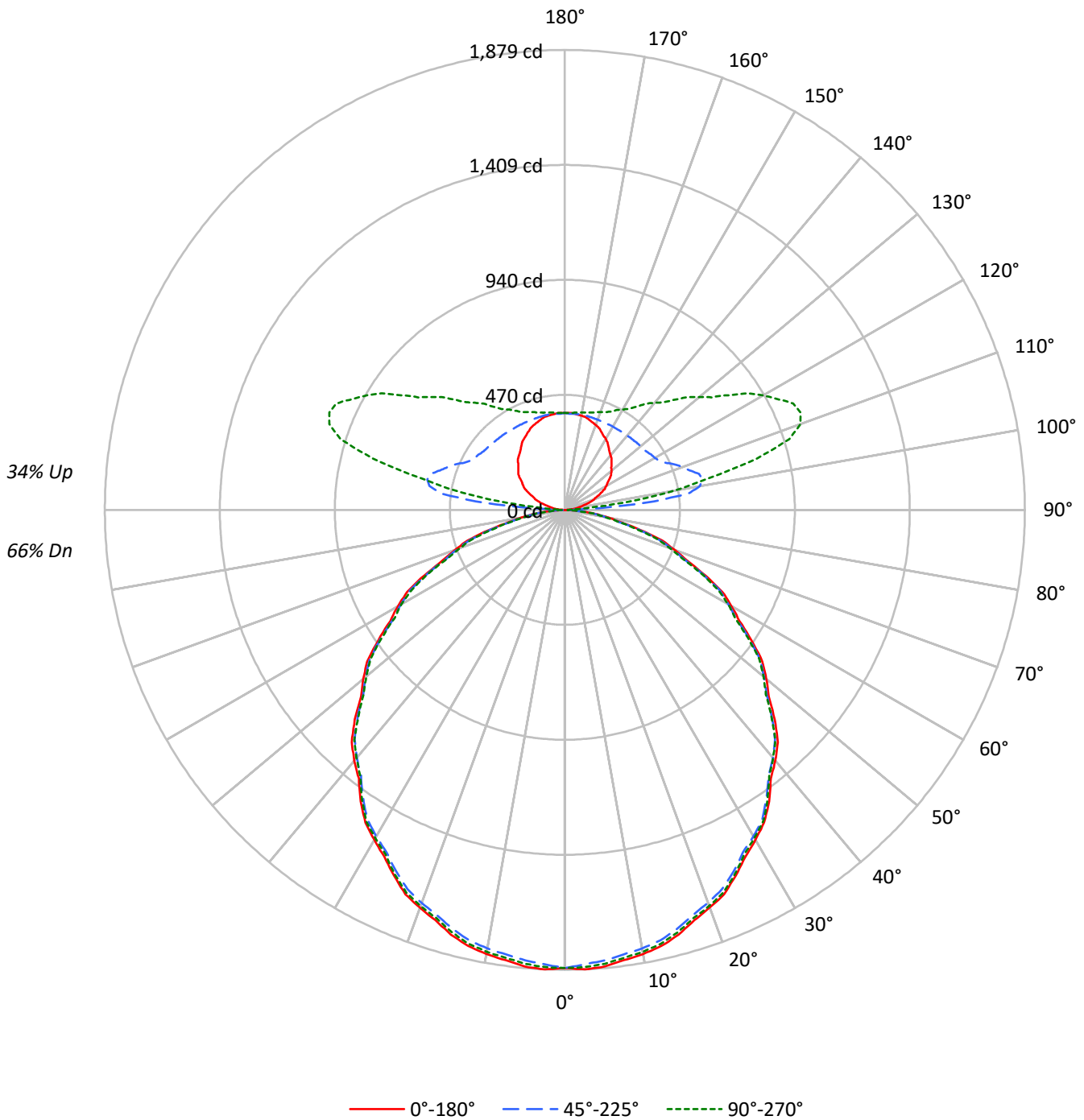
Lumens per Lamp: N/A
Luminaire Lumens: 7690.2 lumens
Efficiency: N/A
Efficacy: 109.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 70
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	111	111	111	111	105	105	105	105	92	92	92	81	81	81	71	71	71	66
1	101	97	93	89	95	91	88	85	81	79	76	72	70	68	63	61	60	56
2	92	85	78	73	87	80	74	69	71	67	63	63	59	57	55	53	51	47
3	84	74	67	61	79	70	63	58	63	57	53	55	51	48	49	46	43	39
4	77	66	58	51	72	62	55	49	56	50	45	49	45	41	44	40	37	34
5	71	59	50	44	66	56	48	42	50	44	39	44	39	35	39	35	32	29
6	65	53	44	38	61	50	42	37	45	39	34	40	35	31	36	31	28	26
7	60	48	39	34	57	45	38	32	41	34	30	36	31	27	32	28	25	23
8	56	43	35	30	53	41	34	29	37	31	27	33	28	24	30	26	22	20
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	27	23	20	18
10	49	36	29	24	46	35	28	23	31	26	21	28	23	20	25	21	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11514	11514	11514
5°	11566	11408	11495
10°	11507	11363	11451
15°	11438	11282	11372
20°	11320	11185	11277
25°	11196	11065	11153
30°	11060	10941	10996
35°	10921	10786	10843
40°	10739	10616	10625
45°	10550	10404	10372
50°	10279	10156	10131
55°	9975	9866	9796
60°	9673	9498	9467
65°	9200	8994	8919
70°	8549	8341	8179
75°	7633	7388	7236
80°	6280	6053	5781
85°	3719	4086	4171



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.7	2.3
10°-20°	503.1	6.5
20°-30°	755.6	9.8
30°-40°	901.7	11.7
40°-50°	924.3	12.0
50°-60°	823.1	10.7
60°-70°	613.5	8.0
70°-80°	332.2	4.3
80°-90°	77.1	1.0
90°-100°	189.9	2.5
100°-110°	515.9	6.7
110°-120°	530.4	6.9
120°-130°	424.1	5.5
130°-140°	333.2	4.3
140°-150°	255.5	3.3
150°-160°	183.7	2.4
160°-170°	112.4	1.5
170°-180°	37.9	0.5
0°-30°	1435.4	18.7
0°-40°	2337.1	30.4
0°-60°	4084.4	53.1
0°-90°	5107.3	66.4
90°-120°	1236.2	16.1
90°-150°	2249.0	29.2
90°-180°	2583.0	33.6
0°-180°	7690.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1872	1872	1872	1872	1872	
5°	1873	1870	1848	1864	1862	178
15°	1796	1790	1772	1786	1786	506
25°	1650	1646	1630	1640	1643	760
35°	1454	1448	1436	1439	1444	908
45°	1213	1207	1196	1190	1192	933
55°	930	932	920	911	914	833
65°	632	630	618	612	613	625
75°	321	318	311	304	304	342
85°	53	58	58	59	59	74
90°	1	5	9	12	12	3
95°	28	104	331	144	97	30
105°	92	143	567	864	813	97
115°	163	198	454	904	1029	161
125°	224	255	411	692	817	200
135°	270	300	399	564	636	209
145°	312	334	394	479	515	196
155°	352	365	392	430	443	162
165°	382	387	393	410	411	108
175°	396	397	394	399	398	38
180°	396	396	396	396	396	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1872.0	1872.0	1872.0	1872.0	1872.0
2.5°	1879.2	1875.1	1858.6	1872.0	1869.9
5°	1873.2	1869.5	1847.6	1864.2	1861.7
7.5°	1855.8	1852.0	1832.6	1848.1	1845.8
10°	1842.4	1838.7	1819.3	1834.7	1833.4
12.5°	1825.0	1821.2	1801.8	1817.3	1816.0
15°	1796.2	1789.9	1771.8	1785.9	1785.9
17.5°	1758.1	1753.4	1736.5	1748.4	1748.6
20°	1729.4	1725.6	1708.8	1721.7	1722.9
22.5°	1700.5	1696.8	1678.0	1689.8	1692.1
25°	1649.7	1646.0	1630.4	1639.5	1643.3
27.5°	1597.3	1591.8	1576.5	1584.5	1587.3
30°	1557.2	1554.7	1540.5	1544.4	1548.2
32.5°	1515.1	1512.6	1500.4	1502.4	1509.1
35°	1454.4	1448.1	1436.4	1439.1	1444.1
37.5°	1382.7	1379.7	1368.3	1366.9	1371.7
40°	1337.5	1332.5	1322.1	1319.6	1323.3
42.5°	1288.2	1283.1	1270.7	1268.3	1273.0
45°	1212.9	1206.6	1196.1	1189.8	1192.4
47.5°	1128.5	1128.5	1117.7	1110.4	1114.2
50°	1074.2	1074.2	1061.3	1054.9	1058.7
52.5°	1017.6	1018.6	1004.7	1001.3	1000.1
55°	930.2	931.5	920.0	911.0	913.5
57.5°	846.0	843.2	829.7	823.9	825.2
60°	786.3	782.6	772.1	763.3	769.6
62.5°	725.7	723.9	713.6	703.6	702.8
65°	632.1	629.7	618.0	611.6	612.8
67.5°	539.1	536.1	525.5	516.3	519.6
70°	475.4	475.4	463.8	458.6	454.8
72.5°	416.8	411.8	403.2	395.9	393.2
75°	321.2	317.5	310.9	304.5	304.5
77.5°	233.8	230.6	226.4	221.9	220.8
80°	177.3	176.1	170.9	169.4	163.2
82.5°	124.8	124.6	121.6	118.2	117.9
85°	52.7	57.7	57.9	59.1	59.1
87.5°	9.5	16.2	16.2	14.7	14.7
90°	1.3	5.0	8.9	11.5	11.5
92.5°	11.5	52.0	90.3	38.8	32.8
95°	28.0	103.8	330.7	144.0	96.7
97.5°	46.3	114.7	507.0	394.5	277.0
100°	58.5	122.0	561.0	568.7	459.2
102.5°	70.8	129.1	575.2	703.3	606.7
105°	91.6	142.6	567.3	863.8	812.8
107.5°	113.2	158.3	534.5	946.7	960.9
110°	128.5	169.5	510.1	963.0	1024.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	141.7	180.8	485.6	949.5	1041.2
115°	162.8	197.6	454.1	903.5	1029.1
117.5°	182.6	216.0	434.0	838.2	979.7
120°	195.9	228.2	424.9	794.4	935.0
122.5°	207.1	239.4	418.7	750.5	886.1
125°	223.8	254.9	410.9	692.3	816.6
127.5°	238.8	269.8	406.5	648.1	754.8
130°	248.1	277.9	404.5	620.4	716.1
132.5°	257.2	287.0	402.4	596.7	681.5
135°	269.7	299.5	399.4	563.8	636.0
137.5°	283.2	310.3	397.9	534.9	595.5
140°	291.2	317.4	396.8	516.5	571.1
142.5°	299.4	323.5	395.9	501.9	547.8
145°	311.7	334.0	394.3	479.1	515.2
147.5°	325.4	344.5	393.0	461.1	489.5
150°	334.5	350.7	393.0	450.8	473.2
152.5°	341.7	355.8	392.0	441.6	459.9
155°	352.4	364.7	391.8	430.2	442.7
157.5°	362.8	372.5	391.8	422.5	432.0
160°	368.9	377.6	391.8	417.4	424.9
162.5°	374.9	381.7	392.8	413.3	418.7
165°	381.6	386.6	393.0	409.6	410.9
167.5°	388.5	390.9	394.3	405.3	406.3
170°	390.6	393.0	394.3	403.2	403.2
172.5°	392.5	394.1	394.3	401.1	401.1
175°	395.6	396.8	394.3	399.4	398.1
177.5°	396.6	396.6	393.6	397.6	395.6
180°	395.6	395.6	395.6	395.6	395.6

(END OF REPORT)