

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: P519787

Luminaire Tested: **SQ4-F-025U-050D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519787
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, G3-1910-536-17)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-025U-050D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

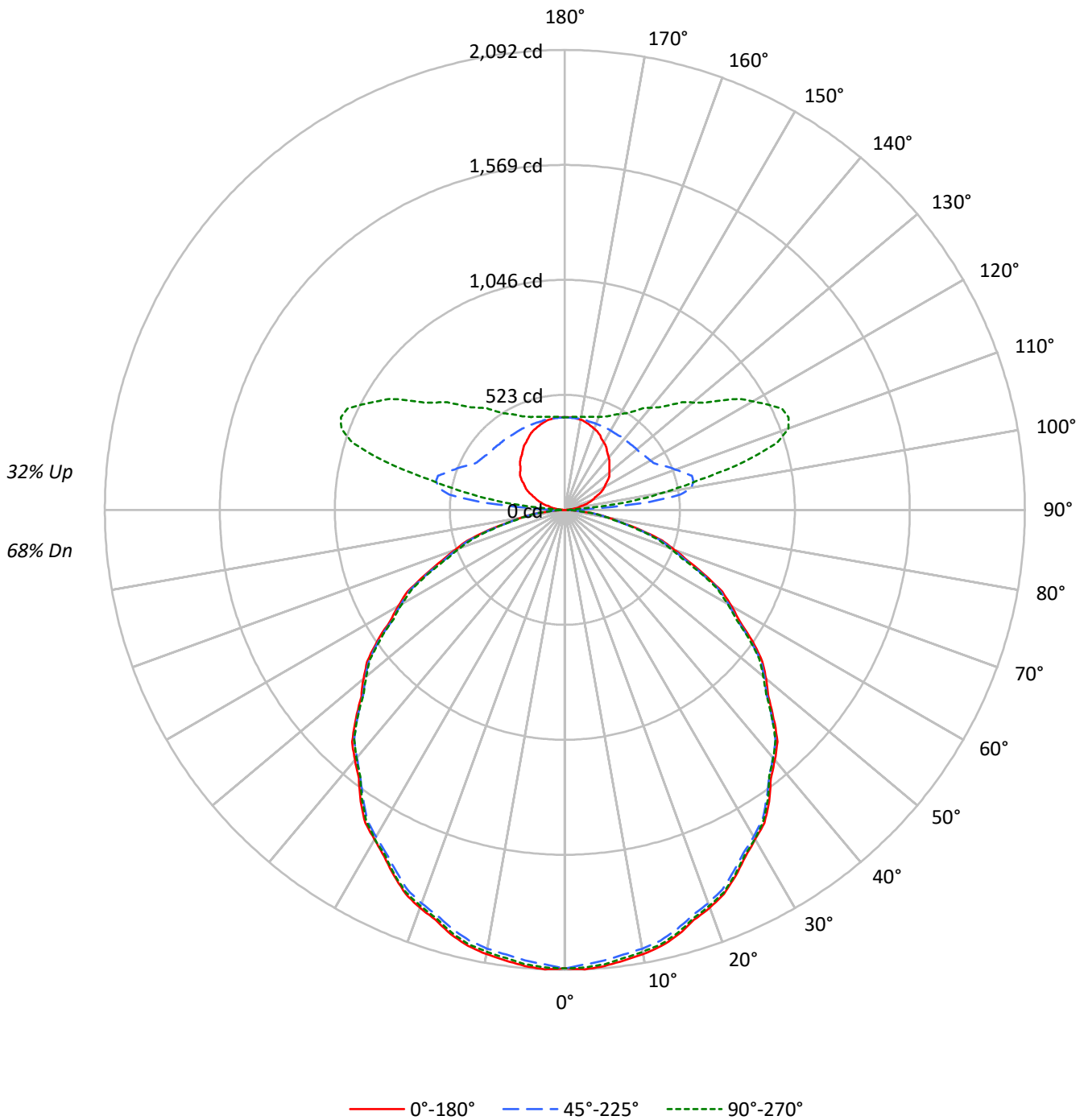
Lumens per Lamp: N/A
Luminaire Lumens: 8430.2 lumens
Efficiency: N/A
Efficacy: 121.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 69.6
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	93	93	93	82	82	82	72	72	72	68
1	102	97	93	90	96	92	88	85	82	79	77	72	70	69	64	62	61	57
2	93	85	78	73	87	80	75	70	72	67	63	63	60	57	56	54	51	47
3	84	75	67	61	79	71	64	58	63	58	53	56	52	48	50	46	43	40
4	77	66	58	51	72	62	55	49	56	50	45	50	45	41	44	40	37	34
5	71	59	50	44	67	56	48	42	50	44	39	45	40	36	40	36	32	30
6	65	53	44	38	61	50	42	37	45	39	34	40	35	31	36	32	29	26
7	60	48	39	34	57	45	38	32	41	35	30	37	32	28	33	29	25	23
8	56	43	35	30	53	41	34	29	37	31	27	34	28	25	30	26	23	20
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	28	24	20	18
10	49	36	29	24	46	35	28	23	32	26	22	29	24	20	26	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6415	6415	6415
5°	6430	6353	6405
10°	6409	6330	6374
15°	6365	6285	6338
20°	6306	6232	6278
25°	6234	6159	6216
30°	6147	6098	6138
35°	6080	6007	6038
40°	5963	5908	5919
45°	5841	5793	5793
50°	5718	5664	5638
55°	5584	5510	5479
60°	5375	5290	5255
65°	5121	5018	4958
70°	4770	4670	4570
75°	4280	4148	4048
80°	3461	3413	3314
85°	2071	2368	2463



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.8	2.3
10°-20°	560.4	6.6
20°-30°	841.7	10.0
30°-40°	1004.8	11.9
40°-50°	1029.6	12.2
50°-60°	918.3	10.9
60°-70°	683.9	8.1
70°-80°	371.2	4.4
80°-90°	88.3	1.0
90°-100°	205.7	2.4
100°-110°	540.7	6.4
110°-120°	560.7	6.7
120°-130°	449.7	5.3
130°-140°	352.9	4.2
140°-150°	270.8	3.2
150°-160°	195.1	2.3
160°-170°	119.3	1.4
170°-180°	40.3	0.5
0°-30°	1599.0	19.0
0°-40°	2603.7	30.9
0°-60°	4551.6	54.0
0°-90°	5695.0	67.6
90°-120°	1307.1	15.5
90°-150°	2380.5	28.2
90°-180°	2735.0	32.4
0°-180°	8430.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2086	2086	2086	2086	2086	
5°	2083	2080	2058	2077	2075	198
15°	1999	1994	1974	1991	1991	563
25°	1837	1832	1815	1826	1832	846
35°	1620	1614	1600	1600	1608	1011
45°	1343	1346	1332	1329	1332	1036
55°	1042	1042	1028	1019	1022	928
65°	704	701	690	681	681	697
75°	360	357	349	343	341	381
85°	59	64	67	70	70	82
90°	3	8	22	11	11	4
95°	27	106	354	183	124	30
105°	97	148	598	908	847	103
115°	173	210	479	955	1090	171
125°	241	270	436	736	868	214
135°	287	316	422	594	674	222
145°	333	354	417	507	546	208
155°	376	386	417	458	471	173
165°	406	411	417	433	438	115
175°	422	422	419	425	425	40
180°	422	422	422	422	422	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2085.8	2085.8	2085.8	2085.8	2085.8
2.5°	2092.5	2088.1	2070.1	2085.7	2083.5
5°	2082.9	2080.3	2057.8	2077.3	2074.6
7.5°	2067.9	2062.4	2040.5	2059.5	2056.7
10°	2052.3	2046.8	2027.1	2043.8	2041.1
12.5°	2032.2	2028.9	2007.0	2023.8	2023.2
15°	1999.2	1993.7	1974.1	1990.8	1990.8
17.5°	1955.6	1952.4	1933.4	1949.4	1947.3
20°	1926.7	1921.1	1904.3	1918.3	1918.3
22.5°	1890.9	1887.6	1870.7	1882.6	1884.7
25°	1837.2	1831.8	1814.9	1826.2	1831.7
27.5°	1778.1	1773.7	1759.6	1767.0	1770.8
30°	1731.1	1731.1	1717.2	1720.2	1728.4
32.5°	1688.7	1688.7	1672.5	1675.4	1679.3
35°	1619.5	1614.0	1599.9	1600.1	1608.3
37.5°	1539.0	1536.3	1527.3	1525.7	1527.9
40°	1485.4	1482.7	1471.5	1474.3	1474.3
42.5°	1431.9	1429.1	1417.9	1414.1	1418.4
45°	1343.0	1345.8	1331.9	1329.1	1331.9
47.5°	1255.3	1255.3	1244.2	1236.5	1240.9
50°	1195.1	1195.1	1183.9	1178.3	1178.3
52.5°	1132.5	1134.7	1121.3	1113.6	1115.7
55°	1041.5	1041.5	1027.6	1019.2	1021.9
57.5°	941.0	941.0	927.0	918.7	923.6
60°	873.9	873.9	860.0	851.7	854.4
62.5°	807.0	807.0	793.0	784.6	785.2
65°	703.7	700.9	689.6	681.3	681.3
67.5°	604.3	597.2	588.6	577.4	577.4
70°	530.5	527.7	519.4	508.2	508.2
72.5°	463.5	458.6	450.1	441.2	441.2
75°	360.2	357.4	349.1	343.3	340.7
77.5°	258.0	255.8	255.2	247.4	249.7
80°	195.4	195.4	192.7	187.1	187.1
82.5°	139.6	141.8	136.9	135.7	133.5
85°	58.7	64.1	67.1	69.8	69.8
87.5°	11.7	19.3	20.1	20.1	20.1
90°	2.7	8.0	21.6	10.8	10.8
92.5°	11.4	54.8	121.2	53.6	34.6
95°	27.1	106.4	354.3	182.7	124.5
97.5°	47.0	116.9	530.2	421.6	310.6
100°	62.2	125.7	584.3	592.2	459.9
102.5°	75.2	134.5	599.4	737.5	624.4
105°	97.4	147.7	597.8	907.5	846.7
107.5°	120.2	166.7	563.8	995.8	1010.6
110°	135.3	177.6	535.6	1018.6	1082.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	150.4	190.6	509.7	1004.1	1101.5
115°	173.1	210.2	478.8	955.3	1090.2
117.5°	195.3	229.1	457.7	887.4	1037.1
120°	208.3	240.0	449.1	841.9	987.3
122.5°	221.3	253.0	442.6	796.4	939.7
125°	240.8	269.8	435.5	736.1	868.3
127.5°	256.5	286.1	429.6	687.5	799.1
130°	265.1	296.8	427.4	657.0	760.1
132.5°	273.8	305.5	425.3	630.8	723.3
135°	286.8	315.8	422.0	594.3	673.6
137.5°	300.2	328.8	421.4	566.8	631.9
140°	311.0	337.5	419.2	545.1	605.9
142.5°	319.7	344.1	419.2	529.7	582.1
145°	332.7	353.9	416.6	506.7	546.5
147.5°	345.7	366.4	416.6	487.7	520.5
150°	354.3	372.9	416.6	476.7	503.2
152.5°	363.0	377.3	416.6	467.9	488.0
155°	376.0	386.5	416.6	457.5	470.7
157.5°	385.8	395.8	416.6	448.2	457.7
160°	392.2	400.1	416.6	443.7	449.1
162.5°	398.7	404.5	416.6	439.4	444.7
165°	405.8	411.0	416.6	432.9	438.3
167.5°	412.3	414.9	419.2	430.1	432.2
170°	416.6	419.2	419.2	430.1	430.1
172.5°	418.8	419.2	419.2	427.9	425.7
175°	422.0	422.0	419.2	424.7	424.7
177.5°	422.0	422.0	419.8	424.1	422.0
180°	422.0	422.0	422.0	422.0	422.0

(END OF REPORT)