

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: P519937

Luminaire Tested: **SQ4-F-050U-100D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519937
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-835-1D-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

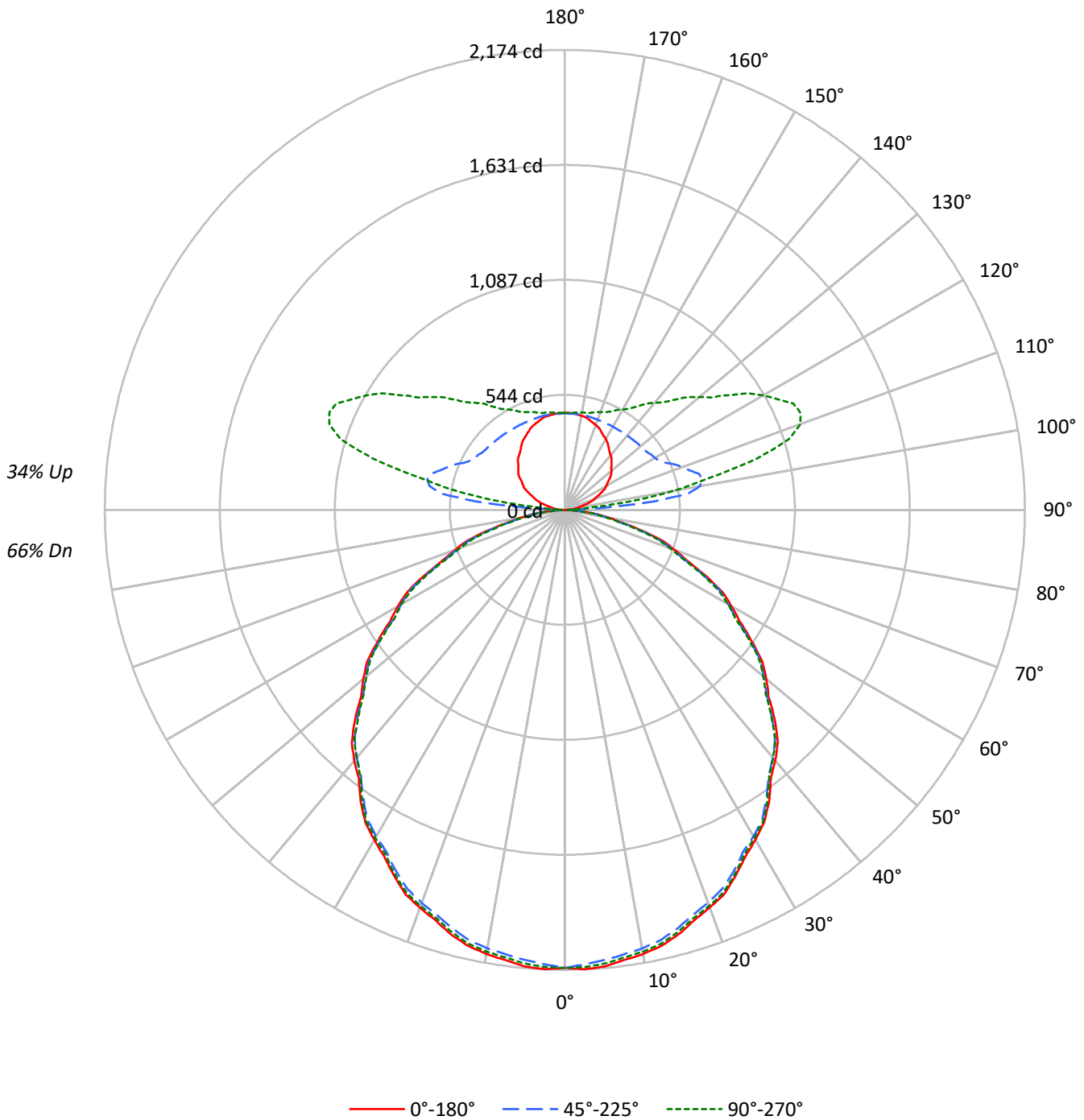
Lumens per Lamp: N/A
Luminaire Lumens: 8895.8 lumens
Efficiency: N/A
Efficacy: 127.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Direct

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°	13319	13319	13319
5°	13379	13196	13297
10°	13311	13144	13246
15°	13231	13051	13155
20°	13094	12939	13045
25°	12951	12800	12901
30°	12793	12656	12720
35°	12633	12477	12543
40°	12423	12279	12291
45°	12204	12036	11997
50°	11889	11747	11719
55°	11539	11411	11332
60°	11190	10988	10952
65°	10642	10405	10317
70°	9889	9648	9461
75°	8831	8548	8370
80°	7265	7003	6687
85°	4298	4721	4827



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	204.4	2.3
10°-20°	582.0	6.5
20°-30°	874.0	9.8
30°-40°	1043.1	11.7
40°-50°	1069.2	12.0
50°-60°	952.1	10.7
60°-70°	709.7	8.0
70°-80°	384.3	4.3
80°-90°	89.2	1.0
90°-100°	219.7	2.5
100°-110°	596.8	6.7
110°-120°	613.6	6.9
120°-130°	490.5	5.5
130°-140°	385.5	4.3
140°-150°	295.5	3.3
150°-160°	212.5	2.4
160°-170°	130.0	1.5
170°-180°	43.8	0.5
0°-30°	1660.4	18.7
0°-40°	2703.5	30.4
0°-60°	4724.7	53.1
0°-90°	5907.9	66.4
90°-120°	1430.0	16.1
90°-150°	2601.6	29.2
90°-180°	2988.0	33.6
0°-180°	8895.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2165	2165	2165	2165	2165	
5°	2167	2163	2137	2156	2154	205
15°	2078	2070	2050	2066	2066	585
25°	1908	1904	1886	1896	1901	879
35°	1682	1675	1662	1665	1670	1050
45°	1403	1396	1384	1376	1379	1079
55°	1076	1078	1064	1054	1057	963
65°	731	728	715	707	709	723
75°	372	367	360	352	352	396
85°	61	67	67	68	68	85
90°	2	6	10	13	13	4
95°	32	120	383	166	112	34
105°	106	165	656	999	940	113
115°	188	229	525	1045	1190	186
125°	259	295	475	801	945	231
135°	312	346	462	652	736	241
145°	360	386	456	554	596	226
155°	408	422	453	498	512	188
165°	441	447	455	474	475	125
175°	458	459	456	462	460	43
180°	458	458	458	458	458	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2165.4	2165.4	2165.4	2165.4	2165.4
2.5°	2173.8	2169.1	2150.0	2165.3	2163.1
5°	2166.9	2162.6	2137.2	2156.4	2153.6
7.5°	2146.7	2142.4	2120.0	2137.7	2135.1
10°	2131.3	2126.9	2104.5	2122.3	2120.9
12.5°	2111.0	2106.7	2084.3	2102.1	2100.6
15°	2077.8	2070.5	2049.5	2065.9	2065.9
17.5°	2033.8	2028.2	2008.8	2022.5	2022.8
20°	2000.5	1996.1	1976.7	1991.6	1993.0
22.5°	1967.2	1962.8	1941.0	1954.8	1957.4
25°	1908.3	1904.0	1886.0	1896.5	1900.9
27.5°	1847.7	1841.2	1823.6	1832.9	1836.1
30°	1801.3	1798.4	1782.0	1786.6	1790.9
32.5°	1752.6	1749.7	1735.6	1737.9	1745.7
35°	1682.4	1675.2	1661.6	1664.7	1670.5
37.5°	1599.5	1596.0	1582.8	1581.2	1586.7
40°	1547.2	1541.3	1529.3	1526.5	1530.8
42.5°	1490.1	1484.3	1469.9	1467.0	1472.6
45°	1403.0	1395.8	1383.7	1376.4	1379.2
47.5°	1305.5	1305.5	1293.0	1284.5	1288.9
50°	1242.5	1242.5	1227.6	1220.3	1224.7
52.5°	1177.1	1178.3	1162.2	1158.4	1156.9
55°	1076.0	1077.5	1064.1	1053.8	1056.7
57.5°	978.5	975.4	959.8	953.0	954.5
60°	909.6	905.2	893.2	883.0	890.3
62.5°	839.4	837.3	825.5	813.9	813.0
65°	731.2	728.4	714.9	707.4	708.9
67.5°	623.6	620.2	607.9	597.3	601.0
70°	549.9	549.9	536.5	530.5	526.1
72.5°	482.1	476.3	466.4	458.0	454.8
75°	371.6	367.2	359.7	352.2	352.2
77.5°	270.5	266.7	261.9	256.8	255.3
80°	205.1	203.6	197.7	196.0	188.8
82.5°	144.5	144.2	140.6	136.7	136.4
85°	60.9	66.8	66.9	68.4	68.4
87.5°	11.0	18.8	18.7	16.9	16.9
90°	1.5	5.8	10.3	13.2	13.2
92.5°	13.2	60.2	104.5	44.8	38.0
95°	32.4	120.1	382.6	166.5	111.9
97.5°	53.6	132.7	586.5	456.3	320.5
100°	67.7	141.1	648.9	657.8	531.2
102.5°	81.8	149.4	665.4	813.5	701.9
105°	106.0	165.0	656.3	999.2	940.3
107.5°	131.0	183.0	618.3	1095.1	1111.5
110°	148.6	196.1	590.0	1114.0	1184.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	163.9	209.1	561.8	1098.4	1204.5
115°	188.3	228.6	525.3	1045.1	1190.4
117.5°	211.3	249.8	502.0	969.6	1133.3
120°	226.6	264.0	491.4	918.9	1081.5
122.5°	239.5	276.9	484.4	868.1	1025.0
125°	259.0	295.0	475.2	800.8	944.7
127.5°	276.3	312.0	470.2	749.7	873.1
130°	286.9	321.5	467.9	717.6	828.4
132.5°	297.5	332.1	465.5	690.2	788.4
135°	312.0	346.5	462.0	652.3	735.7
137.5°	327.6	358.9	460.2	618.7	689.0
140°	337.0	367.2	459.0	597.4	660.7
142.5°	346.4	374.3	457.9	580.6	633.6
145°	360.5	386.4	456.1	554.2	595.9
147.5°	376.4	398.5	454.6	533.4	566.2
150°	387.0	405.7	454.6	521.5	547.4
152.5°	395.3	411.6	453.5	510.8	532.1
155°	407.6	422.0	453.2	497.7	512.0
157.5°	419.7	430.9	453.2	488.8	499.7
160°	426.7	436.8	453.2	482.8	491.4
162.5°	433.7	441.6	454.3	478.1	484.4
165°	441.4	447.2	454.6	473.9	475.2
167.5°	449.3	452.3	456.1	468.9	469.9
170°	451.7	454.6	456.1	466.4	466.4
172.5°	454.0	455.8	456.1	464.1	464.1
175°	457.6	459.0	456.1	462.0	460.5
177.5°	458.8	458.8	455.2	459.9	457.6
180°	457.6	457.6	457.6	457.6	457.6

(END OF REPORT)