

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: P563999

Luminaire Tested: **SQ4-PR1-050U-100D-835-1D-UNV-STD-W-6**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563999
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-100D-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

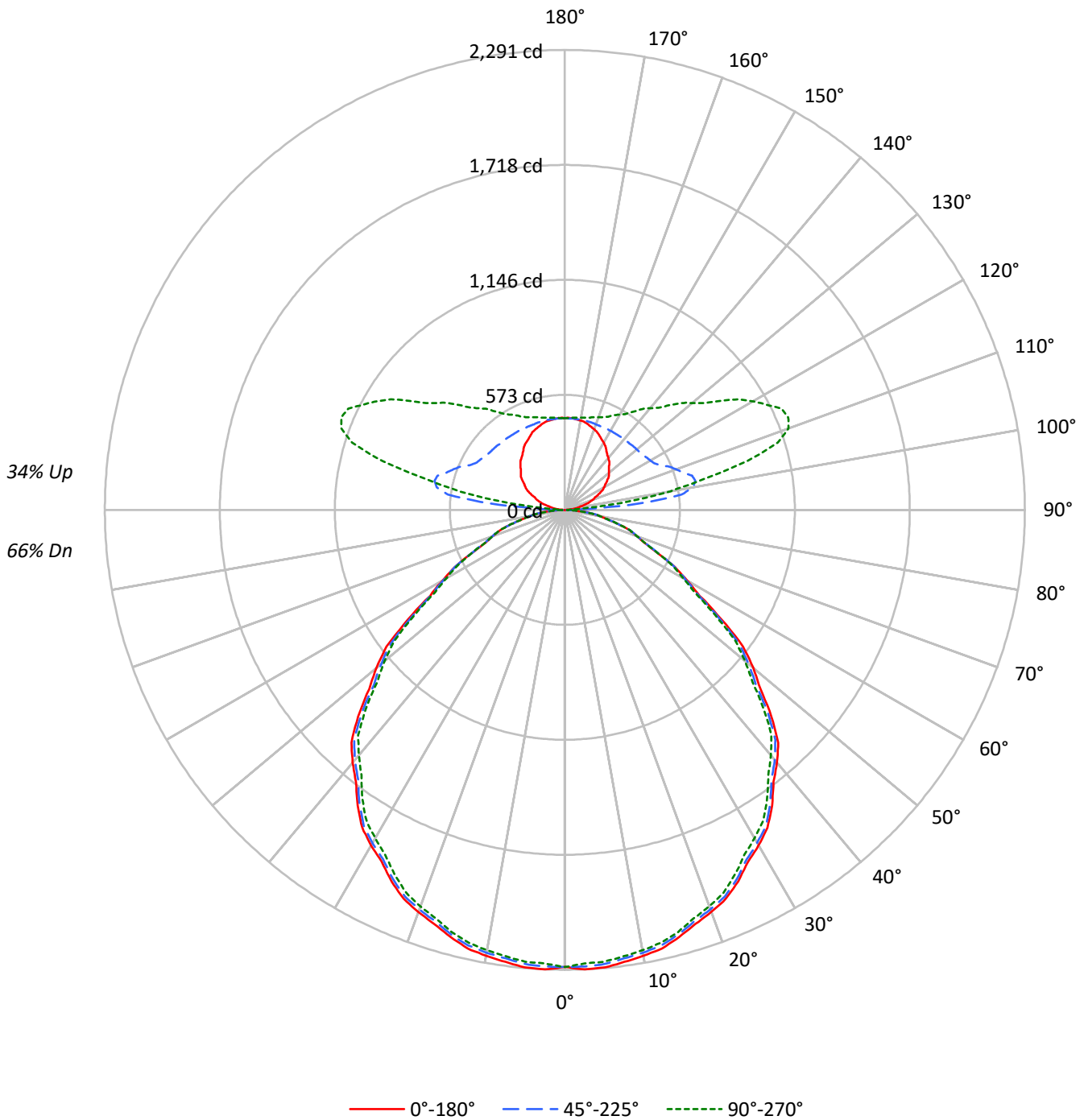
Lumens per Lamp: N/A
Luminaire Lumens: 8682.1 lumens
Efficiency: N/A
Efficacy: 118.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 73.4
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	104	104	104	104	92	92	92	81	81	81	70	70	70	66
1	102	97	94	90	95	92	88	85	81	79	76	72	70	68	63	62	60	56
2	93	85	79	74	87	81	75	71	72	68	64	63	60	57	56	53	51	48
3	85	76	68	62	80	71	65	60	64	58	54	56	52	49	50	47	44	41
4	78	67	59	53	73	64	56	51	57	51	47	51	46	42	45	41	38	35
5	72	60	52	46	67	57	50	44	51	45	40	46	41	37	40	37	34	31
6	66	54	46	40	62	51	44	38	46	40	35	41	36	33	37	33	30	27
7	61	49	41	35	58	47	39	34	42	36	31	38	33	29	34	30	26	24
8	57	45	37	31	54	42	35	30	38	32	28	34	30	26	31	27	24	22
9	53	41	33	28	50	39	32	27	35	29	25	32	27	23	29	24	21	19
10	50	37	30	25	47	36	29	24	33	27	23	29	25	21	26	22	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14006	14006	14006
5°	14132	14023	13950
10°	14087	13989	13915
15°	14025	13938	13863
20°	13954	13865	13762
25°	13856	13763	13603
30°	13707	13609	13414
35°	13504	13387	13195
40°	13197	13055	12819
45°	12659	12437	12181
50°	11710	11429	11204
55°	10222	9990	9780
60°	8614	8541	8372
65°	7450	7479	7421
70°	6843	6879	6879
75°	6571	6571	6619
80°	6185	6252	6185
85°	4982	5540	5540



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	215.3	2.5
10°-20°	616.1	7.1
20°-30°	929.2	10.7
30°-40°	1107.2	12.8
40°-50°	1091.6	12.6
50°-60°	834.2	9.6
60°-70°	516.3	5.9
70°-80°	293.2	3.4
80°-90°	91.0	1.0
90°-100°	219.7	2.5
100°-110°	596.8	6.9
110°-120°	613.6	7.1
120°-130°	490.6	5.7
130°-140°	385.5	4.4
140°-150°	295.6	3.4
150°-160°	212.5	2.4
160°-170°	130.0	1.5
170°-180°	43.8	0.5
0°-30°	1760.7	20.3
0°-40°	2867.9	33.0
0°-60°	4793.7	55.2
0°-90°	5694.2	65.6
90°-120°	1430.0	16.5
90°-150°	2601.6	30.0
90°-180°	2988.0	34.4
0°-180°	8682.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2277	2277	2277	2277	2277	
5°	2289	2264	2271	2263	2259	217
15°	2202	2180	2189	2181	2177	622
25°	2042	2017	2028	2006	2004	940
35°	1798	1777	1783	1759	1757	1122
45°	1455	1436	1430	1404	1400	1115
55°	953	938	932	916	912	854
65°	512	508	514	510	510	519
75°	276	276	276	278	278	292
85°	71	74	78	78	78	82
90°	2	6	10	13	13	5
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	461	43
180°	458	458	458	458	458	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2277.1	2277.1	2277.1	2277.1	2277.1
2.5°	2291.2	2271.2	2277.1	2272.1	2261.4
5°	2288.8	2263.9	2271.2	2263.2	2259.4
7.5°	2271.2	2246.6	2253.9	2246.0	2243.7
10°	2255.5	2232.5	2239.8	2231.9	2228.0
12.5°	2238.2	2213.7	2222.5	2213.0	2209.2
15°	2202.5	2179.5	2188.8	2180.9	2177.0
17.5°	2163.3	2138.8	2148.0	2138.9	2133.9
20°	2131.9	2108.9	2118.2	2104.4	2102.5
22.5°	2097.4	2074.4	2083.7	2065.2	2064.8
25°	2041.7	2016.8	2028.0	2006.4	2004.4
27.5°	1975.4	1952.4	1961.7	1939.7	1937.4
30°	1929.9	1906.9	1916.2	1892.6	1888.7
32.5°	1878.1	1856.6	1864.4	1840.8	1838.5
35°	1798.5	1777.4	1782.8	1759.2	1757.3
37.5°	1707.9	1688.7	1691.8	1665.9	1664.0
40°	1643.6	1624.4	1625.9	1598.4	1596.5
42.5°	1573.0	1553.8	1552.2	1524.7	1522.7
45°	1455.3	1436.1	1429.8	1404.2	1400.4
47.5°	1321.1	1301.9	1290.1	1269.3	1266.6
50°	1223.8	1204.7	1194.4	1176.6	1170.9
52.5°	1118.7	1099.5	1090.9	1074.7	1068.9
55°	953.2	937.8	931.6	915.8	912.0
57.5°	795.9	785.5	783.7	768.4	766.9
60°	700.2	694.4	694.3	680.6	680.6
62.5°	618.6	614.4	617.4	608.4	606.8
65°	511.9	508.1	513.9	509.9	509.9
67.5°	427.6	427.6	431.1	429.5	429.5
70°	380.5	380.5	382.5	382.5	382.5
72.5°	338.1	336.6	341.7	341.6	340.1
75°	276.5	276.5	276.5	278.5	278.5
77.5°	215.3	215.7	217.3	216.9	215.3
80°	174.6	176.5	176.5	174.6	174.6
82.5°	133.8	135.7	135.7	135.3	133.8
85°	70.6	74.4	78.5	78.5	78.5
87.5°	20.7	27.7	33.4	34.0	32.5
90°	1.5	5.8	10.3	13.2	13.2
92.5°	13.2	60.1	104.5	44.9	38.0
95°	32.4	120.1	382.6	166.5	111.8
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°	105.9	164.9	656.3	999.2	940.2
107.5°	131.0	183.0	618.3	1095.1	1111.5
110°	148.6	196.1	590.0	1114.0	1184.5



TEST NUMBER: P563999

CATALOG NUMBER: SQ4-PR1-050U-100D-835-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	163.9	209.1	561.8	1098.3	1204.5
115°	188.3	228.6	525.3	1045.1	1190.4
117.5°	211.3	249.9	502.0	969.6	1133.3
120°	226.6	264.0	491.5	918.9	1081.5
122.5°	239.5	277.0	484.4	868.2	1025.0
125°	259.0	294.9	475.3	800.8	944.7
127.5°	276.3	312.0	470.3	749.7	873.1
130°	286.9	321.5	467.9	717.6	828.4
132.5°	297.5	332.1	465.6	690.3	788.4
135°	311.9	346.5	462.0	652.3	735.7
137.5°	327.5	358.9	460.3	618.7	688.9
140°	337.0	367.2	459.1	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	454.7	533.4	566.2
150°	387.0	405.7	454.7	521.5	547.4
152.5°	395.2	411.6	453.5	510.8	532.1
155°	407.6	422.0	453.2	497.7	512.1
157.5°	419.6	430.9	453.2	488.8	499.7
160°	426.7	436.8	453.2	482.8	491.5
162.5°	433.8	441.5	454.4	478.1	484.4
165°	441.4	447.2	454.7	473.8	475.3
167.5°	449.4	452.2	456.1	468.8	470.0
170°	451.7	454.6	456.1	466.4	466.4
172.5°	454.1	455.8	456.1	464.1	464.1
175°	457.6	459.1	456.1	462.0	460.6
177.5°	458.8	458.8	455.3	459.9	457.6
180°	457.6	457.6	457.6	457.6	457.6

(END OF REPORT)