

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: P563976

Luminaire Tested: **SQ4-PR1-050U-075D-835-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563976
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-075D-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

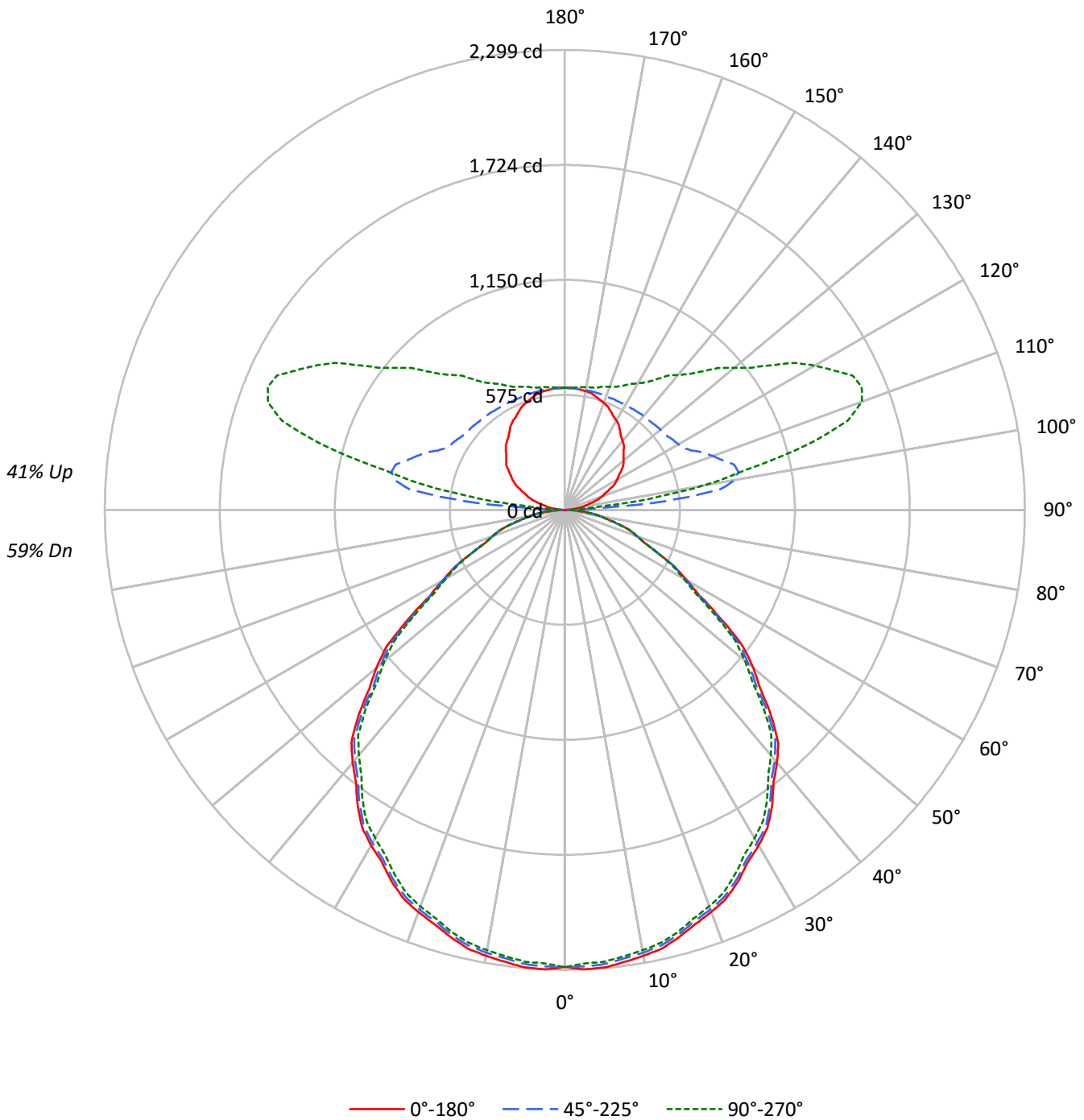
Lumens per Lamp: N/A
Luminaire Lumens: 9698.4 lumens
Efficiency: N/A
Efficacy: 124.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 78.1
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	109	109	109	109	102	102	102	102	88	88	88	76	76	76	64	64	64	59
1	100	96	92	89	93	90	86	83	78	76	73	67	65	64	57	56	55	50
2	91	84	78	73	85	79	73	69	69	65	61	59	56	54	51	49	47	43
3	84	74	67	61	78	70	63	58	61	56	52	53	49	46	45	43	40	37
4	77	66	58	52	71	62	55	49	54	49	44	47	43	40	41	38	35	32
5	71	59	51	45	66	55	48	43	49	43	39	43	38	35	37	33	31	28
6	65	53	45	39	61	50	43	37	44	38	34	39	34	30	33	30	27	24
7	60	48	40	34	56	45	38	33	40	34	30	35	30	27	31	27	24	22
8	56	44	36	30	52	41	34	29	37	31	27	32	28	24	28	24	22	19
9	52	40	32	27	49	38	31	26	34	28	24	30	25	22	26	22	20	17
10	49	37	29	25	46	35	28	24	31	25	22	27	23	20	24	20	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10541	10541	10541
5°	10636	10554	10499
10°	10602	10528	10473
15°	10556	10490	10433
20°	10502	10435	10357
25°	10428	10358	10238
30°	10316	10243	10096
35°	10164	10075	9931
40°	9932	9825	9647
45°	9527	9361	9167
50°	8814	8602	8433
55°	7693	7519	7361
60°	6482	6428	6301
65°	5607	5628	5585
70°	5150	5177	5177
75°	4946	4946	4982
80°	4654	4705	4654
85°	3753	4166	4166



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	216.1	2.2
10°-20°	618.2	6.4
20°-30°	932.5	9.6
30°-40°	1111.0	11.5
40°-50°	1095.4	11.3
50°-60°	837.2	8.6
60°-70°	518.1	5.3
70°-80°	294.3	3.0
80°-90°	91.9	0.9
90°-100°	292.9	3.0
100°-110°	795.7	8.2
110°-120°	818.1	8.4
120°-130°	654.1	6.7
130°-140°	513.9	5.3
140°-150°	394.1	4.1
150°-160°	283.4	2.9
160°-170°	173.3	1.8
170°-180°	58.4	0.6
0°-30°	1766.8	18.2
0°-40°	2877.8	29.7
0°-60°	4810.4	49.6
0°-90°	5714.6	58.9
90°-120°	1906.7	19.7
90°-150°	3468.7	35.8
90°-180°	3984.0	41.1
0°-180°	9698.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2285	2285	2285	2285	2285	
5°	2297	2272	2279	2271	2267	218
15°	2210	2187	2196	2188	2185	624
25°	2049	2024	2035	2013	2011	943
35°	1805	1784	1789	1765	1763	1126
45°	1460	1441	1435	1409	1405	1119
55°	956	941	935	919	915	857
65°	514	510	516	512	512	520
75°	278	278	278	280	280	293
85°	71	75	79	79	79	82
90°	2	8	14	18	18	6
95°	43	160	510	222	149	46
105°	141	220	875	1332	1254	150
115°	251	305	700	1393	1587	248
125°	345	393	634	1068	1260	308
135°	416	462	616	870	981	322
145°	481	515	608	739	795	302
155°	543	563	604	664	683	251
165°	589	596	606	632	634	166
175°	610	612	608	616	614	58
180°	610	610	610	610	610	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2285.0	2285.0	2285.0	2285.0	2285.0
2.5°	2299.2	2279.1	2285.0	2280.0	2269.2
5°	2296.8	2271.8	2279.1	2271.1	2267.3
7.5°	2279.1	2254.5	2261.8	2253.8	2251.5
10°	2263.3	2240.2	2247.6	2239.6	2235.8
12.5°	2246.0	2221.4	2230.3	2220.7	2216.9
15°	2210.2	2187.1	2196.4	2188.5	2184.6
17.5°	2170.8	2146.2	2155.5	2146.3	2141.3
20°	2139.3	2116.3	2125.6	2111.7	2109.8
22.5°	2104.7	2081.6	2090.9	2072.4	2072.0
25°	2048.8	2023.8	2035.0	2013.3	2011.4
27.5°	1982.3	1959.2	1968.5	1946.4	1944.1
30°	1936.6	1913.5	1922.9	1899.1	1895.3
32.5°	1884.7	1863.1	1870.9	1847.2	1844.9
35°	1804.8	1783.6	1789.0	1765.4	1763.4
37.5°	1713.8	1694.6	1697.7	1671.7	1669.8
40°	1649.3	1630.0	1631.6	1604.0	1602.0
42.5°	1578.4	1559.2	1557.6	1530.0	1528.0
45°	1460.3	1441.1	1434.8	1409.1	1405.2
47.5°	1325.7	1306.5	1294.6	1273.7	1271.0
50°	1228.1	1208.9	1198.6	1180.7	1175.0
52.5°	1122.6	1103.4	1094.7	1078.4	1072.6
55°	956.5	941.1	934.9	919.0	915.2
57.5°	798.7	788.3	786.5	771.1	769.5
60°	702.6	696.8	696.7	682.9	682.9
62.5°	620.7	616.5	619.6	610.5	608.9
65°	513.7	509.8	515.6	511.7	511.7
67.5°	429.1	429.1	432.6	431.0	431.0
70°	381.8	381.8	383.8	383.8	383.8
72.5°	339.3	337.8	342.8	342.8	341.3
75°	277.5	277.5	277.5	279.5	279.5
77.5°	216.1	216.5	218.1	217.6	216.1
80°	175.2	177.1	177.1	175.2	175.2
82.5°	134.2	136.2	136.2	135.8	134.2
85°	70.9	74.7	78.7	78.7	78.7
87.5°	20.9	28.2	34.2	35.0	33.4
90°	2.0	7.7	13.7	17.7	17.7
92.5°	17.7	80.2	139.3	59.8	50.6
95°	43.2	160.2	510.1	222.0	149.1
97.5°	71.4	176.9	782.0	608.4	427.3
100°	90.2	188.1	865.2	877.1	708.2
102.5°	109.1	199.2	887.2	1084.7	935.8
105°	141.3	219.9	875.0	1332.3	1253.6
107.5°	174.6	244.1	824.4	1460.1	1482.0
110°	198.2	261.5	786.7	1485.3	1579.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	218.6	278.8	749.1	1464.4	1606.0
115°	251.1	304.8	700.4	1393.4	1587.2
117.5°	281.7	333.1	669.4	1292.7	1511.0
120°	302.1	352.0	655.3	1225.2	1442.0
122.5°	319.4	369.3	645.9	1157.6	1366.7
125°	345.3	393.3	633.7	1067.7	1259.5
127.5°	368.4	416.0	627.0	999.6	1164.2
130°	382.6	428.6	623.9	956.8	1104.5
132.5°	396.7	442.7	620.7	920.4	1051.2
135°	415.9	462.0	616.0	869.7	980.9
137.5°	436.7	478.5	613.7	824.9	918.6
140°	449.3	489.6	612.1	796.5	880.9
142.5°	461.8	499.0	610.5	774.2	844.8
145°	480.7	515.2	608.2	738.9	794.6
147.5°	501.9	531.4	606.2	711.2	754.9
150°	516.0	540.9	606.2	695.3	729.8
152.5°	527.0	548.8	604.7	681.0	709.4
155°	543.4	562.6	604.3	663.6	682.7
157.5°	559.5	574.5	604.3	651.7	666.3
160°	568.9	582.4	604.3	643.8	655.3
162.5°	578.4	588.7	605.8	637.4	645.9
165°	588.6	596.2	606.2	631.8	633.7
167.5°	599.2	603.0	608.2	625.1	626.6
170°	602.3	606.1	608.2	621.9	621.9
172.5°	605.4	607.7	608.2	618.8	618.8
175°	610.1	612.1	608.2	616.0	614.1
177.5°	611.7	611.7	607.0	613.2	610.1
180°	610.1	610.1	610.1	610.1	610.1

(END OF REPORT)