

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: P564301

Luminaire Tested: **SQ4-PR1-100U-100D-940-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564301
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-PR1-100U-100D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

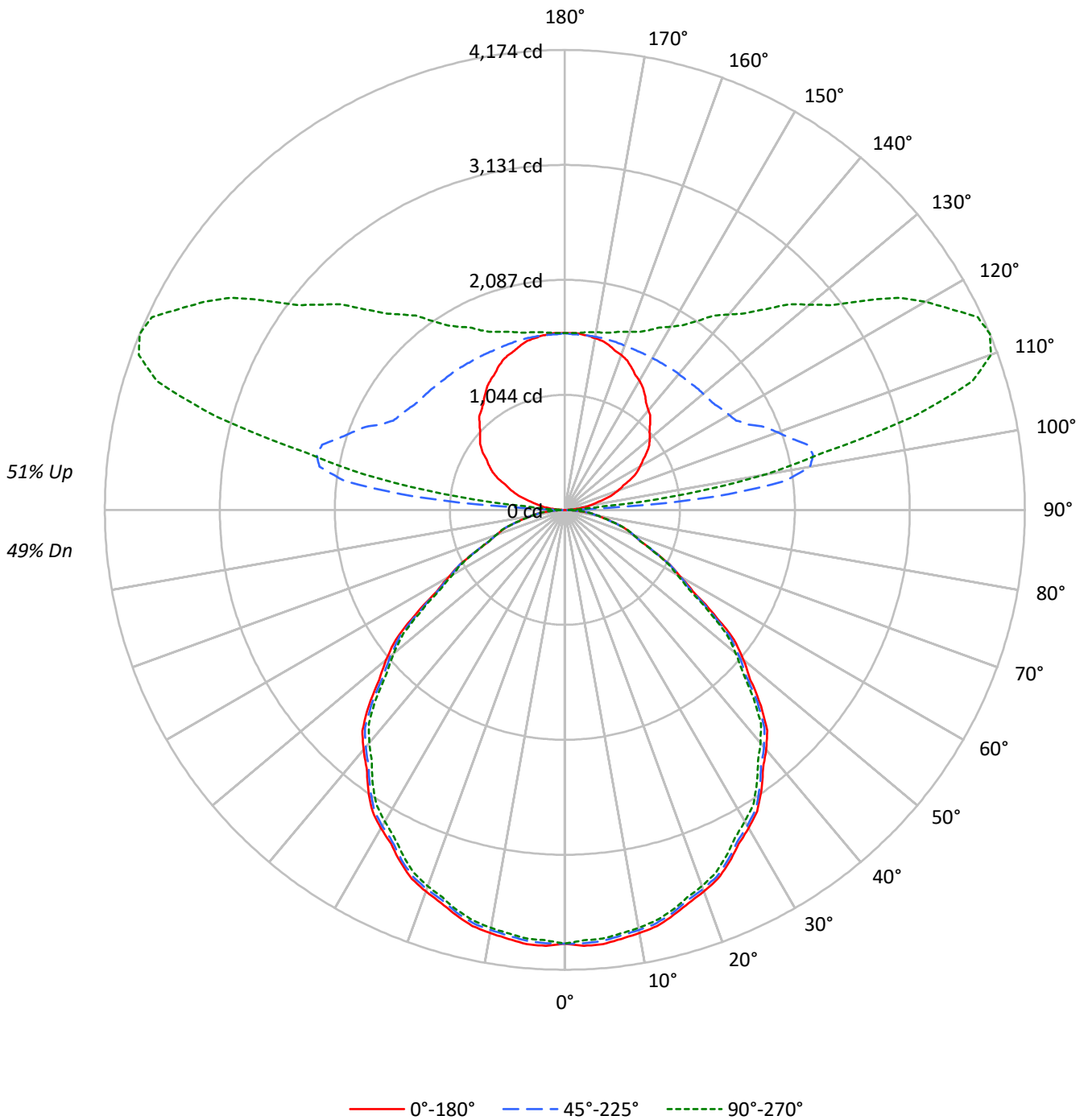
Lumens per Lamp: N/A
Luminaire Lumens: 20261.3 lumens
Efficiency: N/A
Efficacy: 111.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 182.2
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	50	30	10	0	
RCR																						
0	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49				
1	98	94	90	86	90	86	83	80	73	70	68	60	59	57	49	48	47	41				
2	89	82	76	71	82	76	71	66	64	60	57	53	51	48	43	42	40	35				
3	82	72	65	59	75	67	61	56	57	52	48	47	44	41	39	36	34	30				
4	75	64	56	50	69	59	53	47	51	45	41	42	39	35	35	32	30	26				
5	69	57	49	43	63	53	46	41	45	40	36	38	34	31	31	28	26	23				
6	63	51	43	38	58	48	41	36	41	35	31	34	30	27	28	25	23	20				
7	59	46	39	33	54	43	36	31	37	32	28	31	27	24	26	23	20	18				
8	54	42	34	29	50	39	32	28	34	28	25	29	24	21	24	21	18	16				
9	51	38	31	26	47	36	29	25	31	26	22	26	22	19	22	19	17	14				
10	47	35	28	23	44	33	27	22	29	23	20	24	20	17	20	17	15	13				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12108	12108	12108
5°	12217	12123	12060
10°	12178	12093	12030
15°	12125	12049	11984
20°	12063	11986	11897
25°	11978	11898	11760
30°	11849	11765	11596
35°	11674	11572	11407
40°	11408	11286	11082
45°	10943	10751	10530
50°	10124	9880	9686
55°	8836	8636	8454
60°	7446	7383	7238
65°	6440	6465	6416
70°	5916	5945	5945
75°	5681	5681	5721
80°	5345	5405	5345
85°	4308	4785	4785



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	372.3	1.8
10°-20°	1065.2	5.3
20°-30°	1606.6	7.9
30°-40°	1914.3	9.4
40°-50°	1887.3	9.3
50°-60°	1442.4	7.1
60°-70°	892.6	4.4
70°-80°	507.0	2.5
80°-90°	157.5	0.8
90°-100°	750.7	3.7
100°-110°	2072.5	10.2
110°-120°	2137.5	10.5
120°-130°	1717.6	8.5
130°-140°	1349.9	6.7
140°-150°	1035.3	5.1
150°-160°	744.1	3.7
160°-170°	455.0	2.2
170°-180°	153.4	0.8
0°-30°	3044.1	15.0
0°-40°	4958.4	24.5
0°-60°	8288.1	40.9
0°-90°	9845.2	48.6
90°-120°	4960.7	24.5
90°-150°	9063.6	44.7
90°-180°	10416.0	51.4
0°-180°	20261.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3937	3937	3937	3937	3937	
5°	3957	3914	3927	3913	3906	375
15°	3808	3768	3784	3771	3764	1075
25°	3530	3487	3506	3469	3466	1625
35°	3110	3073	3082	3042	3038	1941
45°	2516	2483	2472	2428	2421	1928
55°	1648	1622	1611	1583	1577	1477
65°	885	878	888	882	882	897
75°	478	478	478	482	482	505
85°	122	129	136	136	136	142
90°	5	10	20	23	26	13
95°	110	406	1362	560	364	118
105°	369	570	2280	3481	3278	393
115°	662	800	1836	3636	4135	650
125°	908	1033	1665	2817	3306	808
135°	1093	1210	1618	2282	2573	845
145°	1267	1355	1598	1942	2090	793
155°	1429	1476	1585	1743	1798	658
165°	1547	1567	1593	1655	1667	436
175°	1603	1606	1595	1618	1613	152
180°	1603	1603	1603	1603	1603	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3936.9	3936.9	3936.9	3936.9	3936.9
2.5°	3961.3	3926.9	3936.9	3928.4	3909.8
5°	3957.3	3914.2	3926.8	3913.0	3906.4
7.5°	3926.8	3884.3	3896.9	3883.3	3879.3
10°	3899.6	3859.8	3872.5	3858.8	3852.2
12.5°	3869.8	3827.4	3842.7	3826.2	3819.6
15°	3808.1	3768.3	3784.3	3770.6	3764.0
17.5°	3740.3	3697.8	3713.8	3698.0	3689.4
20°	3686.0	3646.2	3662.3	3638.5	3635.1
22.5°	3626.3	3586.5	3602.6	3570.7	3570.0
25°	3530.0	3486.9	3506.3	3468.9	3465.6
27.5°	3415.4	3375.6	3391.7	3353.6	3349.6
30°	3336.7	3296.9	3313.0	3272.2	3265.5
32.5°	3247.2	3210.1	3223.5	3182.7	3178.7
35°	3109.5	3073.1	3082.4	3041.6	3038.3
37.5°	2952.9	2919.7	2925.1	2880.2	2876.9
40°	2841.6	2808.5	2811.1	2763.6	2760.3
42.5°	2719.6	2686.4	2683.6	2636.1	2632.8
45°	2516.1	2483.0	2472.0	2427.8	2421.2
47.5°	2284.2	2251.0	2230.6	2194.5	2189.9
50°	2116.0	2082.8	2065.1	2034.4	2024.4
52.5°	1934.2	1901.1	1886.1	1858.0	1848.1
55°	1648.0	1621.5	1610.7	1583.4	1576.8
57.5°	1376.1	1358.2	1355.0	1328.5	1325.9
60°	1210.6	1200.6	1200.4	1176.7	1176.7
62.5°	1069.5	1062.2	1067.5	1051.8	1049.2
65°	885.0	878.4	888.4	881.7	881.7
67.5°	739.2	739.2	745.3	742.6	742.6
70°	657.9	657.9	661.2	661.2	661.2
72.5°	584.6	582.0	590.7	590.6	588.0
75°	478.1	478.1	478.1	481.5	481.5
77.5°	372.3	373.0	375.7	375.0	372.3
80°	301.8	305.1	305.2	301.8	301.8
82.5°	231.3	234.6	234.7	233.9	231.3
85°	122.1	128.7	135.6	135.6	135.6
87.5°	36.3	47.9	58.4	58.8	56.7
90°	5.1	10.1	20.5	23.1	25.6
92.5°	46.2	191.6	342.7	125.1	97.5
95°	110.3	406.2	1362.0	559.8	364.2
97.5°	182.6	455.0	2017.6	1553.3	1125.0
100°	236.0	484.3	2259.7	2275.7	1849.3
102.5°	287.3	517.5	2306.9	2811.8	2407.5
105°	369.4	570.0	2280.2	3481.2	3278.0
107.5°	456.6	635.1	2153.0	3804.0	3878.2
110°	518.1	678.6	2054.5	3873.4	4114.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	573.5	728.0	1962.2	3818.6	4173.7
115°	661.8	799.7	1836.5	3635.6	4134.7
117.5°	738.7	876.1	1753.9	3378.1	3945.9
120°	790.0	925.4	1721.1	3203.8	3775.6
122.5°	839.3	968.7	1694.4	3041.0	3582.7
125°	908.0	1033.4	1664.7	2817.2	3306.2
127.5°	966.5	1091.9	1647.2	2627.9	3049.7
130°	1005.5	1130.9	1639.0	2512.1	2895.8
132.5°	1042.4	1161.8	1630.8	2414.9	2762.5
135°	1092.7	1210.5	1618.5	2281.7	2572.7
137.5°	1149.1	1256.4	1612.3	2170.0	2418.2
140°	1179.9	1285.2	1608.2	2095.4	2313.6
142.5°	1214.8	1312.1	1604.1	2029.1	2221.3
145°	1267.1	1354.9	1598.0	1942.5	2090.4
147.5°	1317.4	1394.1	1592.3	1869.4	1984.2
150°	1354.3	1417.0	1590.3	1825.8	1918.6
152.5°	1383.0	1441.7	1588.2	1788.5	1865.2
155°	1428.7	1476.3	1585.1	1742.9	1798.0
157.5°	1470.7	1507.4	1585.7	1709.6	1747.2
160°	1495.4	1528.0	1587.7	1690.9	1718.5
162.5°	1515.9	1544.5	1589.8	1674.4	1695.9
165°	1546.7	1566.7	1592.8	1654.7	1667.2
167.5°	1570.3	1582.3	1595.4	1642.7	1646.7
170°	1582.6	1592.6	1595.4	1636.4	1636.4
172.5°	1592.8	1598.9	1595.4	1628.2	1626.2
175°	1603.1	1605.6	1595.4	1618.4	1613.4
177.5°	1607.2	1605.2	1594.9	1609.2	1605.1
180°	1603.1	1603.1	1603.1	1603.1	1603.1

(END OF REPORT)