

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: P563949

Luminaire Tested: **SQ4-PR1-050U-050D-835-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563949
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-050D-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

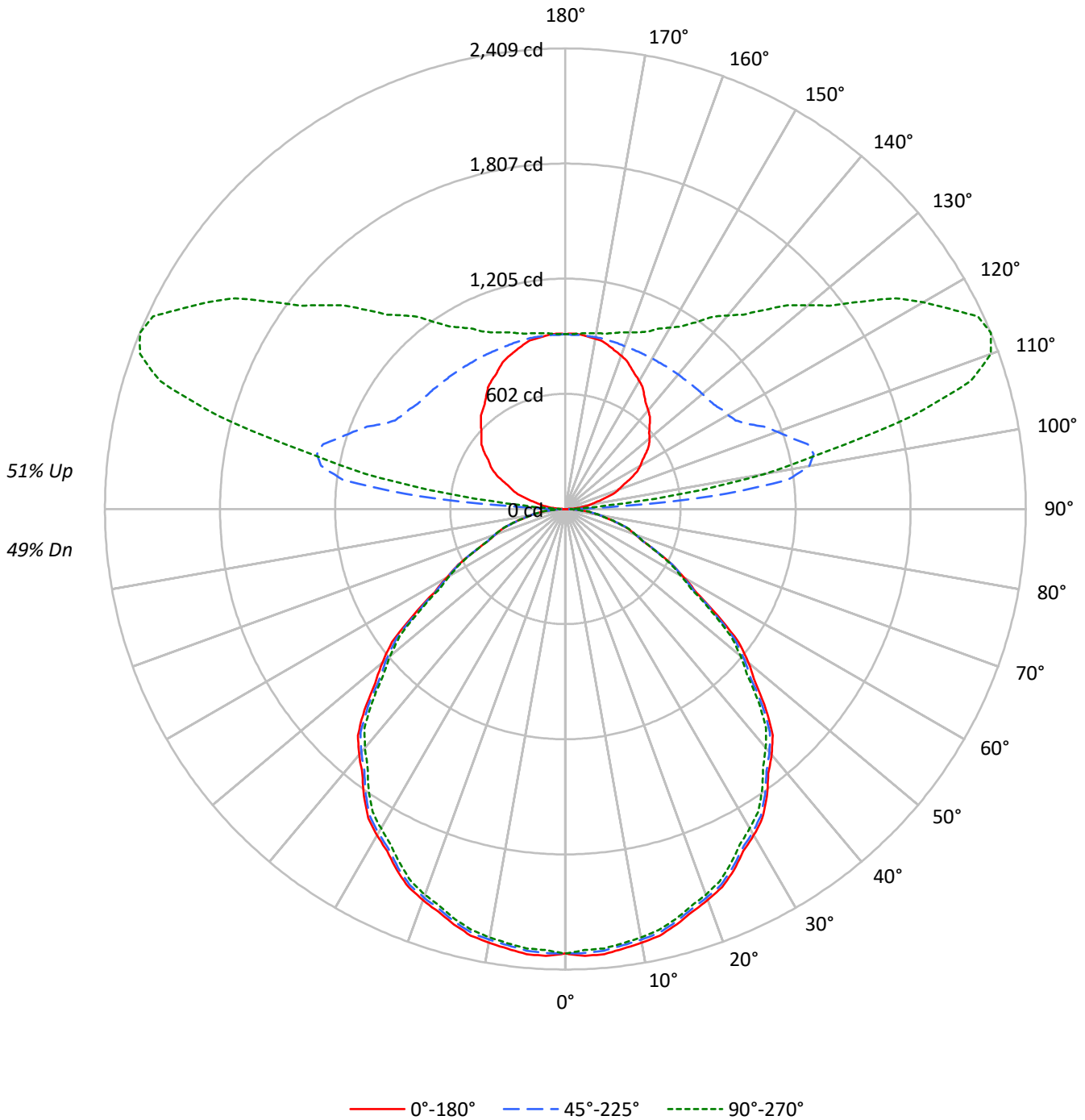
Lumens per Lamp: N/A
Luminaire Lumens: 11792.7 lumens
Efficiency: N/A
Efficacy: 148.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 79.6
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	49
1	98	94	90	86	90	87	83	80	73	71	69	61	59	58	49	48	47	42
2	89	82	76	71	82	76	71	66	64	61	57	54	51	49	44	42	40	36
3	82	72	65	60	75	67	61	56	57	52	48	48	44	41	39	37	35	31
4	75	64	56	51	69	60	53	48	51	46	42	43	39	36	35	32	30	26
5	69	57	49	43	63	53	46	41	46	40	36	38	34	31	32	29	26	23
6	63	51	43	38	58	48	41	36	41	36	31	35	31	27	29	26	23	20
7	59	47	39	33	54	43	36	31	37	32	28	32	27	24	26	23	21	18
8	54	42	35	29	50	39	33	28	34	29	25	29	25	22	24	21	19	16
9	51	39	31	26	47	36	29	25	31	26	22	27	22	19	22	19	17	15
10	47	35	28	23	44	33	27	22	29	24	20	25	20	18	21	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7152	7152	7152
5°	7216	7161	7123
10°	7193	7143	7106
15°	7162	7117	7079
20°	7126	7080	7027
25°	7075	7028	6946
30°	6999	6949	6850
35°	6896	6836	6738
40°	6739	6666	6545
45°	6464	6351	6220
50°	5980	5836	5721
55°	5220	5101	4994
60°	4398	4362	4275
65°	3804	3819	3790
70°	3494	3512	3512
75°	3356	3356	3379
80°	3158	3193	3158
85°	2544	2826	2826



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	219.9	1.9
10°-20°	629.2	5.3
20°-30°	949.0	8.0
30°-40°	1130.7	9.6
40°-50°	1114.8	9.5
50°-60°	852.0	7.2
60°-70°	527.3	4.5
70°-80°	299.5	2.5
80°-90°	94.6	0.8
90°-100°	439.4	3.7
100°-110°	1193.5	10.1
110°-120°	1227.1	10.4
120°-130°	981.1	8.3
130°-140°	770.9	6.5
140°-150°	591.1	5.0
150°-160°	425.1	3.6
160°-170°	260.0	2.2
170°-180°	87.6	0.7
0°-30°	1798.1	15.2
0°-40°	2928.8	24.8
0°-60°	4895.6	41.5
0°-90°	5816.9	49.3
90°-120°	2860.0	24.3
90°-150°	5203.1	44.1
90°-180°	5976.0	50.7
0°-180°	11792.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2326	2326	2326	2326	2326	
5°	2338	2312	2320	2311	2307	222
15°	2249	2226	2235	2227	2223	635
25°	2085	2060	2071	2049	2047	960
35°	1837	1815	1821	1797	1795	1146
45°	1486	1467	1460	1434	1430	1139
55°	974	958	951	935	931	872
65°	523	519	525	521	521	530
75°	282	282	282	284	284	298
85°	72	76	80	80	80	84
90°	3	12	21	26	26	7
95°	65	240	765	333	224	69
105°	212	330	1312	1998	1880	225
115°	377	457	1051	2090	2381	372
125°	518	590	950	1602	1889	462
135°	624	693	924	1304	1471	482
145°	721	773	912	1108	1192	453
155°	815	844	906	995	1024	376
165°	883	894	909	948	950	249
175°	915	918	912	924	921	87
180°	915	915	915	915	915	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2325.5	2325.5	2325.5	2325.5	2325.5
2.5°	2339.9	2319.5	2325.5	2320.4	2309.5
5°	2337.5	2312.0	2319.5	2311.4	2307.4
7.5°	2319.5	2294.4	2301.8	2293.8	2291.4
10°	2303.4	2279.9	2287.4	2279.3	2275.4
12.5°	2285.8	2260.7	2269.8	2260.1	2256.2
15°	2249.4	2225.9	2235.3	2227.2	2223.3
17.5°	2209.3	2184.2	2193.7	2184.3	2179.3
20°	2177.3	2153.8	2163.2	2149.2	2147.2
22.5°	2142.0	2118.5	2128.0	2109.1	2108.8
25°	2085.1	2059.7	2071.1	2049.0	2047.1
27.5°	2017.4	1993.9	2003.4	1980.9	1978.6
30°	1970.9	1947.4	1956.9	1932.8	1928.9
32.5°	1918.1	1896.1	1904.0	1880.0	1877.6
35°	1836.7	1815.2	1820.7	1796.6	1794.7
37.5°	1744.2	1724.6	1727.8	1701.3	1699.3
40°	1678.5	1658.9	1660.5	1632.4	1630.4
42.5°	1606.4	1586.8	1585.2	1557.1	1555.1
45°	1486.2	1466.6	1460.2	1434.1	1430.1
47.5°	1349.2	1329.6	1317.6	1296.3	1293.5
50°	1249.9	1230.3	1219.8	1201.7	1195.8
52.5°	1142.5	1122.9	1114.1	1097.5	1091.6
55°	973.5	957.8	951.4	935.3	931.4
57.5°	812.8	802.2	800.4	784.7	783.2
60°	715.1	709.2	709.1	695.0	695.0
62.5°	631.7	627.4	630.5	621.3	619.7
65°	522.8	518.9	524.8	520.8	520.8
67.5°	436.7	436.7	440.3	438.7	438.7
70°	388.6	388.6	390.6	390.6	390.6
72.5°	345.3	343.7	348.9	348.9	347.3
75°	282.4	282.4	282.4	284.4	284.4
77.5°	219.9	220.3	221.9	221.5	219.9
80°	178.3	180.2	180.3	178.3	178.3
82.5°	136.6	138.6	138.6	138.2	136.6
85°	72.1	76.0	80.1	80.1	80.1
87.5°	21.4	29.4	36.2	37.3	35.7
90°	2.9	11.6	20.6	26.5	26.5
92.5°	26.5	120.3	208.9	89.7	75.9
95°	64.7	240.3	765.1	333.0	223.7
97.5°	107.1	265.4	1173.0	912.6	641.0
100°	135.4	282.1	1297.8	1315.6	1062.4
102.5°	163.6	298.9	1330.8	1627.0	1403.7
105°	211.9	329.9	1312.5	1998.4	1880.5
107.5°	261.9	366.1	1236.6	2190.2	2223.0
110°	297.2	392.2	1180.1	2228.0	2369.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	327.8	418.2	1123.6	2196.7	2409.0
115°	376.7	457.3	1050.6	2090.1	2380.8
117.5°	422.6	499.7	1004.1	1939.1	2266.6
120°	453.2	528.0	982.9	1837.8	2163.0
122.5°	479.1	553.9	968.8	1736.3	2050.0
125°	517.9	589.9	950.5	1601.6	1889.3
127.5°	552.7	624.0	940.5	1499.4	1746.3
130°	573.9	642.9	935.8	1435.3	1656.8
132.5°	595.0	664.1	931.1	1380.5	1576.8
135°	623.9	692.9	924.1	1304.5	1471.4
137.5°	655.1	717.8	920.5	1237.4	1377.8
140°	673.9	734.3	918.2	1194.7	1321.3
142.5°	692.7	748.6	915.8	1161.3	1267.2
145°	721.0	772.8	912.3	1108.4	1191.8
147.5°	752.8	797.1	909.3	1066.8	1132.4
150°	774.0	811.4	909.3	1042.9	1094.7
152.5°	790.4	823.2	907.0	1021.5	1064.1
155°	815.2	843.9	906.4	995.3	1024.1
157.5°	839.3	861.7	906.4	977.5	999.4
160°	853.4	873.6	906.4	965.6	982.9
162.5°	867.5	883.1	908.7	956.1	968.8
165°	882.9	894.4	909.3	947.7	950.5
167.5°	898.7	904.5	912.3	937.6	939.9
170°	903.5	909.2	912.3	932.9	932.9
172.5°	908.2	911.6	912.3	928.2	928.2
175°	915.2	918.1	912.3	924.0	921.1
177.5°	917.6	917.6	910.5	919.8	915.2
180°	915.2	915.2	915.2	915.2	915.2

(END OF REPORT)