

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: P564617

Luminaire Tested: **SQ4-PW1-050U-050D-830-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564617
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2106-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PW1-050U-050D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11103.4 lumens
Efficiency: N/A
Efficacy: 139.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

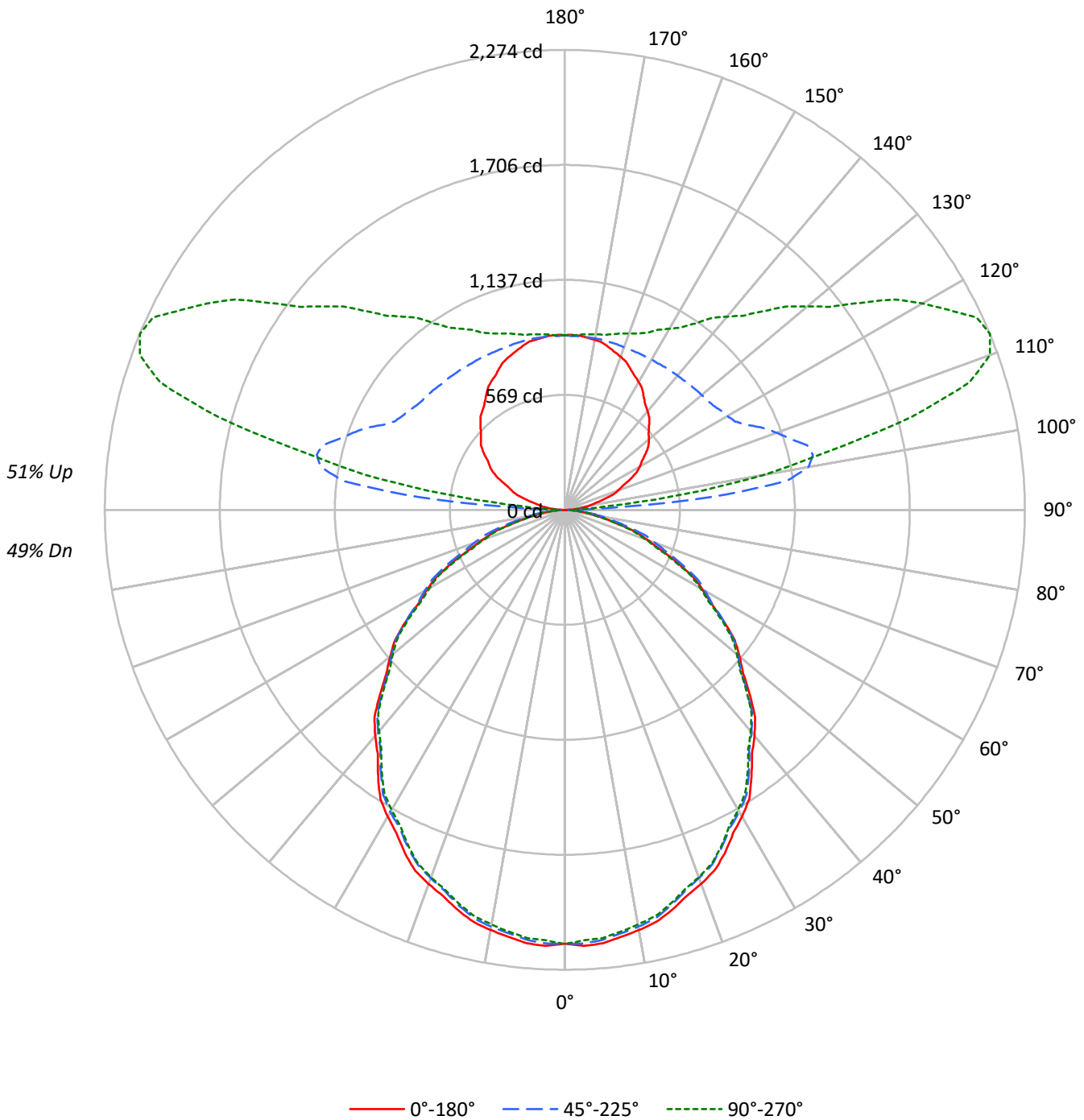
Input Watts (W): 79.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	55	55	55	49
1	98	93	90	86	90	86	83	80	73	70	68	60	59	57	49	48	47	42
2	89	82	76	70	82	75	70	66	64	60	57	53	50	48	43	41	40	35
3	81	72	65	59	75	66	60	55	56	52	48	47	44	41	38	36	34	30
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	34	32	29	26
5	68	57	49	43	63	53	45	40	45	39	35	38	33	30	31	28	25	22
6	63	51	43	37	58	47	40	35	40	35	31	34	30	26	28	25	22	19
7	58	46	38	32	53	43	36	31	37	31	27	31	27	23	26	22	20	17
8	54	42	34	29	50	39	32	27	33	28	24	28	24	21	24	20	18	15
9	50	38	31	26	46	35	29	24	31	25	21	26	22	19	22	19	16	14
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6599	6599	6599
5°	6642	6590	6560
10°	6589	6536	6501
15°	6519	6447	6423
20°	6441	6342	6330
25°	6351	6236	6217
30°	6217	6123	6083
35°	6040	5955	5920
40°	5852	5761	5738
45°	5624	5551	5526
50°	5391	5346	5310
55°	5139	5139	5058
60°	4826	4919	4745
65°	4416	4636	4307
70°	3893	4267	3791
75°	3325	3819	3234
80°	2579	3214	2612
85°	1669	2470	2202



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.1	1.8
10°-20°	570.5	5.1
20°-30°	846.2	7.6
30°-40°	990.2	8.9
40°-50°	985.8	8.9
50°-60°	851.2	7.7
60°-70°	612.7	5.5
70°-80°	321.3	2.9
80°-90°	83.0	0.7
90°-100°	414.7	3.7
100°-110°	1126.6	10.1
110°-120°	1158.3	10.4
120°-130°	926.1	8.3
130°-140°	727.6	6.6
140°-150°	557.9	5.0
150°-160°	401.2	3.6
160°-170°	245.4	2.2
170°-180°	82.7	0.7
0°-30°	1618.8	14.6
0°-40°	2608.9	23.5
0°-60°	4445.9	40.0
0°-90°	5462.9	49.2
90°-120°	2699.5	24.3
90°-150°	4911.2	44.2
90°-180°	5640.0	50.8
0°-180°	11103.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2146	2146	2146	2146	2146	
5°	2152	2128	2134	2129	2125	204
15°	2048	2022	2025	2021	2017	577
25°	1872	1840	1838	1826	1832	861
35°	1609	1587	1586	1571	1577	1006
45°	1293	1282	1276	1272	1270	998
55°	958	957	958	945	943	855
65°	607	625	637	612	592	601
75°	280	306	321	300	272	300
85°	47	62	70	66	62	62
90°	3	11	19	25	25	6
95°	61	227	722	314	211	65
105°	200	311	1239	1886	1775	212
115°	356	432	992	1973	2247	351
125°	489	557	897	1512	1783	436
135°	589	654	872	1231	1389	455
145°	680	729	861	1046	1125	427
155°	769	797	856	940	967	355
165°	833	844	858	894	897	235
175°	864	867	861	872	869	82
180°	864	864	864	864	864	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2145.8	2145.8	2145.8	2145.8	2145.8
2.5°	2157.9	2140.2	2145.8	2141.1	2130.7
5°	2151.5	2127.5	2134.5	2128.7	2125.1
7.5°	2129.6	2107.4	2112.6	2106.5	2104.3
10°	2109.9	2087.7	2092.9	2085.3	2081.6
12.5°	2087.2	2063.6	2068.7	2061.1	2058.9
15°	2047.5	2021.7	2024.8	2021.0	2017.3
17.5°	2001.4	1975.2	1975.7	1969.6	1968.9
20°	1968.1	1940.4	1937.9	1930.4	1934.1
22.5°	1931.8	1902.6	1900.1	1889.6	1894.8
25°	1871.7	1840.3	1837.7	1826.5	1832.0
27.5°	1802.1	1771.1	1771.1	1755.4	1761.3
30°	1750.7	1721.1	1724.2	1705.5	1712.9
32.5°	1696.3	1669.6	1671.3	1652.6	1660.0
35°	1608.9	1586.7	1586.2	1571.2	1576.8
37.5°	1519.7	1500.1	1497.0	1488.3	1489.8
40°	1457.7	1441.0	1435.0	1429.3	1429.3
42.5°	1392.6	1377.5	1371.5	1367.3	1365.8
45°	1293.2	1282.1	1276.2	1272.3	1270.5
47.5°	1194.9	1184.5	1179.4	1176.7	1174.8
50°	1126.8	1119.4	1117.4	1111.6	1109.8
52.5°	1058.7	1054.3	1052.3	1045.1	1043.2
55°	958.5	956.7	958.5	945.3	943.4
57.5°	854.2	857.1	863.3	845.4	840.9
60°	784.6	792.0	799.7	778.8	771.4
62.5°	713.5	725.3	736.2	712.1	701.8
65°	606.9	625.4	637.1	612.1	591.8
67.5°	504.0	527.0	541.1	514.1	491.2
70°	433.0	458.8	474.5	447.5	421.6
72.5°	370.9	399.8	412.5	387.0	361.1
75°	279.8	305.7	321.4	300.0	272.2
77.5°	198.5	222.9	235.9	217.3	194.4
80°	145.6	171.5	181.5	166.0	147.5
82.5°	103.2	124.7	131.6	122.2	109.7
85°	47.3	62.1	70.0	66.1	62.4
87.5°	12.7	24.6	32.6	33.8	35.2
90°	2.8	10.9	19.4	25.0	25.0
92.5°	25.0	113.5	197.2	84.7	71.7
95°	61.1	226.8	722.2	314.3	211.1
97.5°	101.1	250.5	1107.2	861.4	605.0
100°	127.8	266.3	1225.0	1241.8	1002.8
102.5°	154.4	282.1	1256.1	1535.7	1325.0
105°	200.0	311.4	1238.9	1886.3	1775.0
107.5°	247.2	345.5	1167.2	2067.3	2098.3
110°	280.6	370.2	1113.9	2103.0	2236.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	309.4	394.7	1060.5	2073.4	2273.8
115°	355.5	431.6	991.6	1972.9	2247.2
117.5°	398.9	471.7	947.8	1830.3	2139.4
120°	427.8	498.4	927.8	1734.7	2041.6
122.5°	452.2	522.8	914.4	1638.9	1935.0
125°	488.9	556.8	897.2	1511.7	1783.3
127.5°	521.7	589.0	887.8	1415.3	1648.3
130°	541.7	606.8	883.3	1354.7	1563.9
132.5°	561.7	626.8	878.9	1303.1	1488.3
135°	588.9	654.1	872.2	1231.3	1388.9
137.5°	618.3	677.5	868.9	1168.0	1300.5
140°	636.1	693.1	866.6	1127.7	1247.2
142.5°	653.9	706.6	864.4	1096.1	1196.1
145°	680.5	729.4	861.1	1046.2	1125.0
147.5°	710.5	752.4	858.3	1006.9	1068.9
150°	730.5	765.8	858.3	984.4	1033.3
152.5°	746.1	777.1	856.1	964.2	1004.4
155°	769.4	796.6	855.5	939.5	966.6
157.5°	792.2	813.4	855.5	922.7	943.3
160°	805.5	824.6	855.5	911.5	927.8
162.5°	818.9	833.5	857.8	902.5	914.4
165°	833.3	844.2	858.3	894.5	897.2
167.5°	848.3	853.7	861.1	885.0	887.2
170°	852.8	858.2	861.1	880.5	880.5
172.5°	857.2	860.5	861.1	876.1	876.1
175°	863.9	866.6	861.1	872.1	869.4
177.5°	866.1	866.1	859.4	868.2	863.9
180°	863.9	863.9	863.9	863.9	863.9

(END OF REPORT)