

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: P564644

Luminaire Tested: **SQ4-PW1-050U-075D-830-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564644
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-075D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

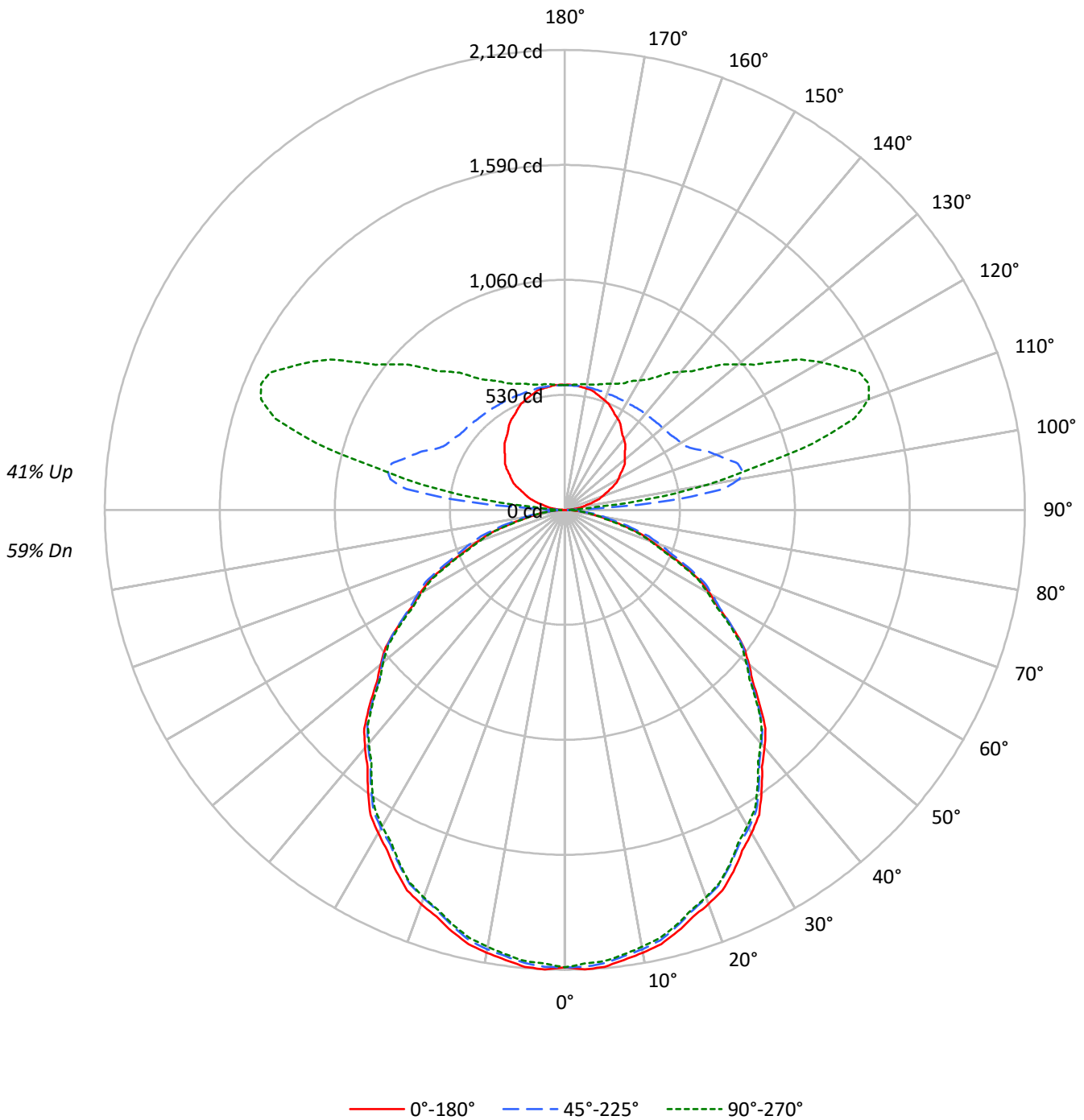
Lumens per Lamp: N/A
Luminaire Lumens: 9127.1 lumens
Efficiency: N/A
Efficacy: 116.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

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	88	93	89	86	83	78	75	73	67	65	63	57	56	55	50
2	91	84	77	72	85	78	73	68	68	64	60	59	56	53	50	48	46	42
3	83	74	66	60	77	69	62	57	60	55	51	52	48	45	45	42	39	36
4	76	65	57	51	71	61	54	48	54	48	43	46	42	39	40	37	34	31
5	70	58	50	44	65	55	47	42	48	42	38	42	37	34	36	32	30	27
6	64	52	44	38	60	49	42	36	43	37	33	38	33	29	33	29	26	23
7	60	47	39	33	55	44	37	32	39	33	29	34	30	26	30	26	23	21
8	55	43	35	30	52	40	33	28	36	30	26	31	27	23	27	24	21	19
9	52	39	32	26	48	37	30	25	33	27	23	29	24	21	25	22	19	17
10	48	36	29	24	45	34	27	23	30	25	21	27	22	19	23	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9727	9727	9727
5°	9790	9712	9669
10°	9711	9633	9581
15°	9608	9502	9467
20°	9494	9348	9329
25°	9361	9191	9162
30°	9163	9025	8965
35°	8903	8777	8725
40°	8625	8491	8457
45°	8290	8180	8144
50°	7946	7879	7826
55°	7575	7575	7456
60°	7112	7250	6993
65°	6509	6833	6347
70°	5738	6289	5588
75°	4900	5629	4768
80°	3799	4737	3849
85°	2456	3636	3245



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	198.5	2.2
10°-20°	560.6	6.1
20°-30°	831.5	9.1
30°-40°	972.9	10.7
40°-50°	968.6	10.6
50°-60°	836.4	9.2
60°-70°	602.1	6.6
70°-80°	315.7	3.5
80°-90°	80.5	0.9
90°-100°	276.5	3.0
100°-110°	751.0	8.2
110°-120°	772.2	8.5
120°-130°	617.4	6.8
130°-140°	485.1	5.3
140°-150°	372.0	4.1
150°-160°	267.5	2.9
160°-170°	163.6	1.8
170°-180°	55.1	0.6
0°-30°	1590.6	17.4
0°-40°	2563.5	28.1
0°-60°	4368.5	47.9
0°-90°	5366.8	58.8
90°-120°	1799.7	19.7
90°-150°	3274.1	35.9
90°-180°	3760.0	41.2
0°-180°	9127.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2108	2108	2108	2108	2108	
5°	2114	2090	2097	2092	2088	200
15°	2012	1986	1990	1986	1982	567
25°	1839	1808	1806	1795	1800	846
35°	1581	1559	1559	1544	1549	988
45°	1271	1260	1254	1250	1248	980
55°	942	940	942	929	927	840
65°	596	614	626	601	582	591
75°	275	300	316	295	268	295
85°	46	61	69	65	61	61
90°	2	7	13	17	17	4
95°	41	151	482	210	141	43
105°	133	208	826	1258	1183	142
115°	237	288	661	1315	1498	234
125°	326	371	598	1008	1189	291
135°	393	436	582	821	926	304
145°	454	486	574	698	750	285
155°	513	531	570	626	644	237
165°	556	563	572	596	598	157
175°	576	578	574	581	580	55
180°	576	576	576	576	576	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2108.5	2108.5	2108.5	2108.5	2108.5
2.5°	2120.4	2102.9	2108.5	2103.8	2093.6
5°	2114.1	2090.4	2097.3	2091.7	2088.1
7.5°	2092.5	2070.7	2075.8	2069.8	2067.6
10°	2073.2	2051.4	2056.5	2049.0	2045.3
12.5°	2050.9	2027.6	2032.7	2025.2	2023.0
15°	2011.9	1986.5	1989.6	1985.8	1982.2
17.5°	1966.6	1940.8	1941.3	1935.3	1934.6
20°	1933.9	1906.6	1904.1	1896.8	1900.4
22.5°	1898.2	1869.5	1867.0	1856.7	1861.8
25°	1839.1	1808.2	1805.7	1794.7	1800.1
27.5°	1770.8	1740.2	1740.3	1724.8	1730.6
30°	1720.2	1691.2	1694.2	1675.8	1683.1
32.5°	1666.7	1640.6	1642.2	1623.8	1631.1
35°	1580.9	1559.1	1558.6	1543.9	1549.3
37.5°	1493.2	1474.0	1470.9	1462.4	1463.9
40°	1432.3	1415.9	1410.0	1404.4	1404.4
42.5°	1368.4	1353.5	1347.6	1343.5	1342.0
45°	1270.7	1259.8	1253.9	1250.2	1248.4
47.5°	1174.1	1163.9	1158.8	1156.2	1154.4
50°	1107.2	1099.9	1097.9	1092.3	1090.5
52.5°	1040.3	1036.0	1034.0	1026.9	1025.1
55°	941.9	940.0	941.9	928.8	927.0
57.5°	839.3	842.2	848.2	830.7	826.3
60°	770.9	778.2	785.8	765.2	757.9
62.5°	701.1	712.7	723.4	699.7	689.6
65°	596.3	614.5	626.0	601.4	581.5
67.5°	495.3	517.8	531.7	505.2	482.6
70°	425.4	450.8	466.3	439.7	414.3
72.5°	364.5	392.8	405.3	380.3	354.8
75°	274.9	300.4	315.8	294.8	267.5
77.5°	195.1	219.0	231.8	213.5	191.0
80°	143.0	168.5	178.3	163.1	144.9
82.5°	101.4	122.5	129.3	120.1	107.7
85°	46.4	61.0	68.7	64.9	61.3
87.5°	12.3	23.5	30.8	31.6	33.1
90°	1.9	7.3	13.0	16.7	16.7
92.5°	16.7	75.7	131.5	56.5	47.8
95°	40.7	151.2	481.5	209.5	140.7
97.5°	67.4	167.0	738.1	574.3	403.3
100°	85.2	177.5	816.7	827.8	668.5
102.5°	103.0	188.1	837.4	1023.8	883.3
105°	133.3	207.6	825.9	1257.5	1183.3
107.5°	164.8	230.4	778.1	1378.2	1398.9
110°	187.0	246.8	742.6	1402.0	1490.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	206.3	263.1	707.0	1382.3	1515.9
115°	237.0	287.7	661.1	1315.2	1498.1
117.5°	265.9	314.4	631.8	1220.2	1426.3
120°	285.2	332.3	618.5	1156.5	1361.1
122.5°	301.5	348.6	609.6	1092.6	1290.0
125°	325.9	371.2	598.1	1007.8	1188.9
127.5°	347.8	392.7	591.8	943.5	1098.9
130°	361.1	404.6	588.9	903.2	1042.6
132.5°	374.4	417.9	585.9	868.7	992.2
135°	392.6	436.0	581.5	820.9	925.9
137.5°	412.2	451.7	579.2	778.7	867.0
140°	424.1	462.1	577.8	751.8	831.5
142.5°	435.9	471.0	576.3	730.8	797.4
145°	453.7	486.3	574.1	697.5	750.0
147.5°	473.7	501.6	572.2	671.3	712.6
150°	487.0	510.6	572.2	656.3	688.9
152.5°	497.4	518.0	570.7	642.8	669.6
155°	513.0	531.1	570.4	626.3	644.4
157.5°	528.1	542.3	570.4	615.1	628.9
160°	537.0	549.7	570.4	607.6	618.5
162.5°	545.9	555.7	571.8	601.7	609.6
165°	555.5	562.8	572.2	596.3	598.1
167.5°	565.5	569.2	574.1	590.0	591.5
170°	568.5	572.1	574.1	587.0	587.0
172.5°	571.5	573.6	574.1	584.1	584.1
175°	575.9	577.7	574.1	581.4	579.6
177.5°	577.4	577.4	573.0	578.8	575.9
180°	575.9	575.9	575.9	575.9	575.9

(END OF REPORT)