

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: P519618

Luminaire Tested: **SQ4-WB-150U-100D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519618
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-150U-100D-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

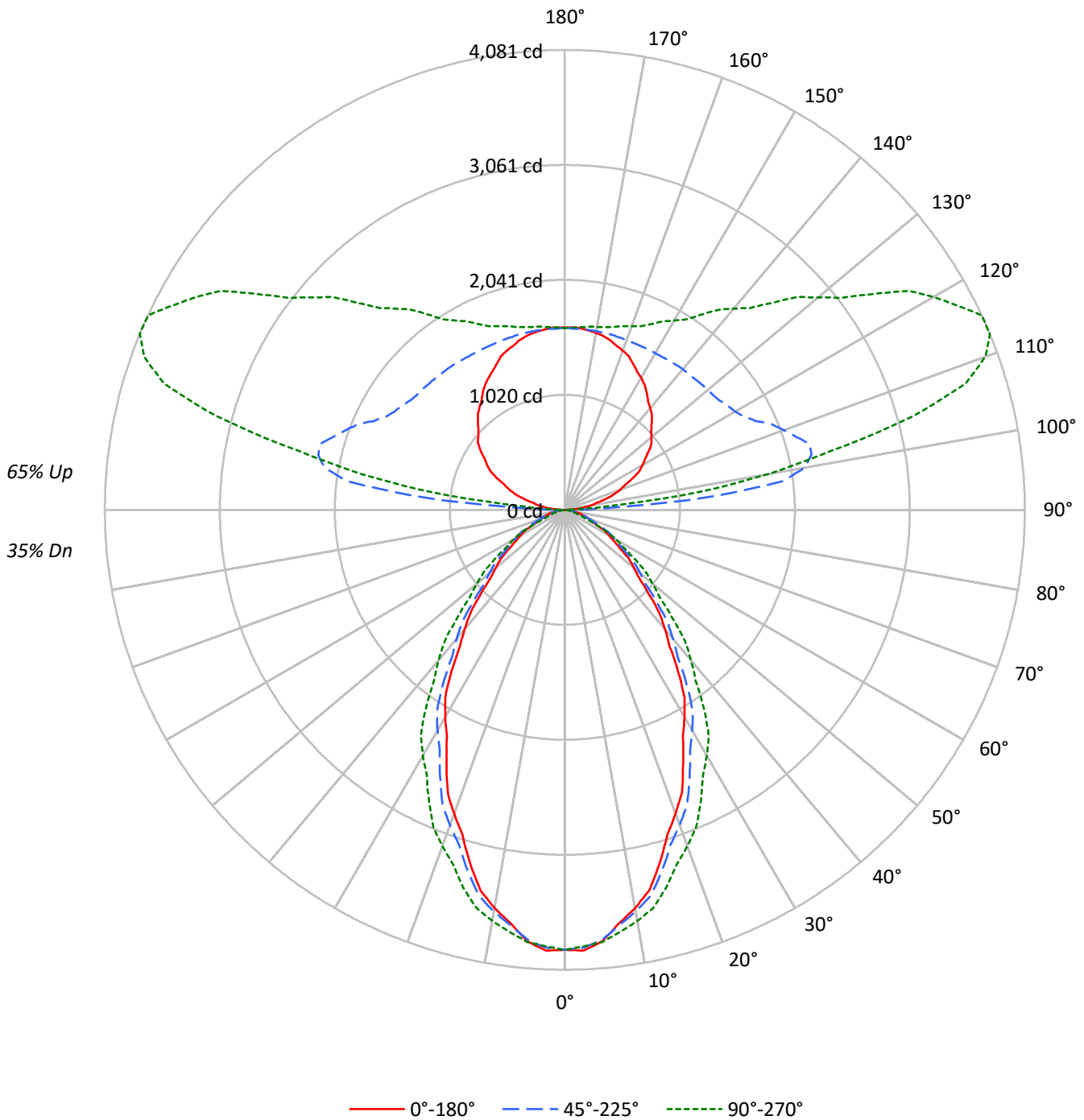
Lumens per Lamp: N/A
Luminaire Lumens: 16107.5 lumens
Efficiency: N/A
Efficacy: 108.5 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 148.4
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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	43	43	43	35
1	95	91	88	85	86	83	80	77	67	65	63	52	51	50	39	38	38	31
2	87	81	75	71	79	73	69	65	60	56	54	47	45	43	35	34	33	28
3	80	72	65	60	73	65	60	55	53	49	46	42	40	37	32	30	29	24
4	74	64	57	51	67	58	52	47	48	44	40	38	35	33	29	27	26	22
5	68	57	50	44	62	53	46	41	43	39	35	35	31	29	27	25	23	20
6	63	52	44	39	57	47	41	36	39	35	31	32	28	26	25	22	21	18
7	58	47	40	34	53	43	37	32	36	31	28	29	26	23	23	20	19	16
8	54	43	36	31	49	39	33	29	33	28	25	27	23	21	21	19	17	15
9	51	39	32	27	46	36	30	26	30	26	22	25	21	19	20	17	16	13
10	47	36	29	25	43	33	27	23	28	23	20	23	20	17	18	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18010	18010	18010
5°	17785	17722	17825
10°	16803	16956	17349
15°	15512	15872	16584
20°	14086	14616	15583
25°	12634	13324	14518
30°	11297	12036	13414
35°	9879	10592	12107
40°	8315	8975	10481
45°	6862	7454	8751
50°	5729	6245	7290
55°	4863	5360	6021
60°	4156	4646	4805
65°	3310	3908	3104
70°	2935	3050	1895
75°	2718	2474	1160
80°	2502	2277	1002
85°	2265	2085	815



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	358.1	2.2
10°-20°	931.4	5.8
20°-30°	1206.5	7.5
30°-40°	1181.4	7.3
40°-50°	904.3	5.6
50°-60°	602.6	3.7
60°-70°	328.8	2.0
70°-80°	137.0	0.9
80°-90°	42.2	0.3
90°-100°	750.7	4.7
100°-110°	2029.9	12.6
110°-120°	2134.1	13.2
120°-130°	1733.5	10.8
130°-140°	1359.8	8.4
140°-150°	1043.6	6.5
150°-160°	750.6	4.7
160°-170°	458.5	2.8
170°-180°	154.6	1.0
0°-30°	2496.0	15.5
0°-40°	3677.4	22.8
0°-60°	5184.3	32.2
0°-90°	5692.3	35.3
90°-120°	4914.7	30.5
90°-150°	9051.5	56.2
90°-180°	10415.0	64.7
0°-180°	16107.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3904	3904	3904	3904	3904	
5°	3841	3802	3827	3836	3849	357
15°	3248	3236	3323	3414	3472	907
25°	2482	2489	2618	2732	2852	1142
35°	1754	1763	1881	2008	2150	1091
45°	1052	1072	1143	1229	1341	820
55°	605	630	666	692	749	548
65°	303	328	358	313	284	315
75°	152	152	139	95	65	163
85°	43	43	39	26	15	47
90°	4	10	23	24	23	10
95°	116	409	1248	646	384	122
105°	377	583	2252	3322	3186	397
115°	664	812	1868	3615	4081	656
125°	909	1042	1683	2840	3337	811
135°	1090	1220	1638	2294	2596	843
145°	1268	1363	1615	1963	2113	793
155°	1431	1487	1602	1761	1819	660
165°	1558	1573	1608	1671	1680	439
175°	1617	1616	1610	1631	1628	154
180°	1615	1615	1615	1615	1615	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3904.1	3904.1	3904.1	3904.1	3904.1
2.5°	3913.7	3878.8	3887.6	3887.4	3876.7
5°	3840.7	3802.2	3827.0	3835.9	3849.3
7.5°	3698.2	3669.0	3714.3	3747.8	3774.9
10°	3587.2	3562.0	3619.7	3668.5	3703.6
12.5°	3458.3	3437.2	3508.7	3574.2	3620.1
15°	3248.0	3236.2	3323.3	3413.8	3472.4
17.5°	3022.9	3017.2	3117.1	3222.6	3297.7
20°	2869.4	2867.7	2977.3	3087.2	3174.3
22.5°	2714.5	2718.2	2833.4	2947.7	3046.9
25°	2482.2	2488.9	2617.6	2731.7	2852.3
27.5°	2267.4	2270.4	2403.4	2523.9	2652.5
30°	2120.8	2129.2	2259.5	2384.2	2518.2
32.5°	1974.1	1983.9	2111.5	2240.4	2377.1
35°	1754.2	1762.6	1880.9	2007.5	2149.9
37.5°	1527.4	1538.8	1643.9	1763.5	1903.6
40°	1380.7	1397.5	1490.4	1603.1	1740.5
42.5°	1239.6	1260.3	1346.5	1453.4	1577.4
45°	1051.8	1071.9	1142.6	1229.1	1341.3
47.5°	890.1	913.2	967.5	1042.0	1137.8
50°	798.3	820.1	870.2	925.4	1015.8
52.5°	717.4	739.2	783.9	826.4	903.5
55°	604.7	629.8	666.4	691.7	748.6
57.5°	512.2	536.3	565.3	576.7	611.2
60°	450.5	477.3	503.6	502.3	520.8
62.5°	394.3	417.1	443.3	425.2	426.2
65°	303.2	328.3	358.0	312.8	284.4
67.5°	245.0	250.3	280.9	218.2	184.3
70°	217.6	217.6	226.1	168.9	140.5
72.5°	191.5	191.5	183.6	137.4	107.6
75°	152.5	152.5	138.8	95.2	65.1
77.5°	117.5	116.2	106.2	71.1	47.3
80°	94.2	94.2	85.7	56.1	37.7
82.5°	73.7	73.7	66.5	43.8	28.1
85°	42.8	42.8	39.4	25.5	15.4
87.5°	15.8	17.1	18.2	13.1	11.4
90°	3.5	10.3	22.6	24.3	22.6
92.5°	49.4	180.0	355.1	154.1	111.6
95°	116.5	408.9	1248.5	646.1	384.3
97.5°	187.1	469.0	1946.1	1610.6	1182.8
100°	240.0	493.3	2163.2	2255.9	1824.1
102.5°	288.7	527.0	2239.7	2745.3	2422.3
105°	377.3	583.1	2251.8	3321.6	3185.6
107.5°	459.4	647.1	2153.4	3681.2	3726.4
110°	523.4	693.4	2065.8	3777.7	3969.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	580.4	739.6	1985.1	3758.4	4081.1
115°	664.3	812.2	1867.6	3615.3	4081.1
117.5°	746.3	885.1	1790.0	3396.5	3924.6
120°	796.4	932.4	1744.1	3239.6	3778.6
122.5°	843.7	977.0	1716.3	3071.4	3614.4
125°	909.4	1042.1	1683.2	2840.4	3336.9
127.5°	969.9	1100.2	1663.8	2652.0	3088.6
130°	1003.3	1137.6	1655.4	2535.6	2930.0
132.5°	1038.1	1171.1	1647.1	2430.5	2793.7
135°	1090.3	1219.5	1638.0	2293.5	2596.1
137.5°	1142.8	1264.9	1630.4	2182.3	2428.9
140°	1179.0	1292.9	1627.6	2110.8	2330.1
142.5°	1213.7	1320.8	1622.0	2046.2	2238.3
145°	1267.6	1362.9	1615.4	1963.1	2112.7
147.5°	1316.7	1401.0	1607.8	1887.9	2002.8
150°	1352.8	1427.7	1605.0	1847.0	1938.8
152.5°	1386.2	1451.5	1603.6	1809.1	1884.6
155°	1431.1	1487.2	1601.5	1761.1	1818.9
157.5°	1477.7	1516.8	1601.9	1727.6	1765.7
160°	1504.1	1536.4	1603.2	1706.5	1733.7
162.5°	1525.0	1551.9	1604.6	1689.6	1710.0
165°	1558.0	1573.3	1608.5	1671.3	1679.8
167.5°	1580.6	1591.2	1608.8	1655.5	1659.6
170°	1594.5	1599.6	1610.2	1648.5	1648.5
172.5°	1605.7	1606.7	1610.2	1640.1	1638.7
175°	1617.2	1615.5	1610.2	1631.0	1627.6
177.5°	1621.0	1616.9	1609.9	1623.7	1619.6
180°	1615.4	1615.4	1615.4	1615.4	1615.4

(END OF REPORT)