

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: P519616

Luminaire Tested: **SQ4-WB-150U-100D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519616  
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-4  
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**

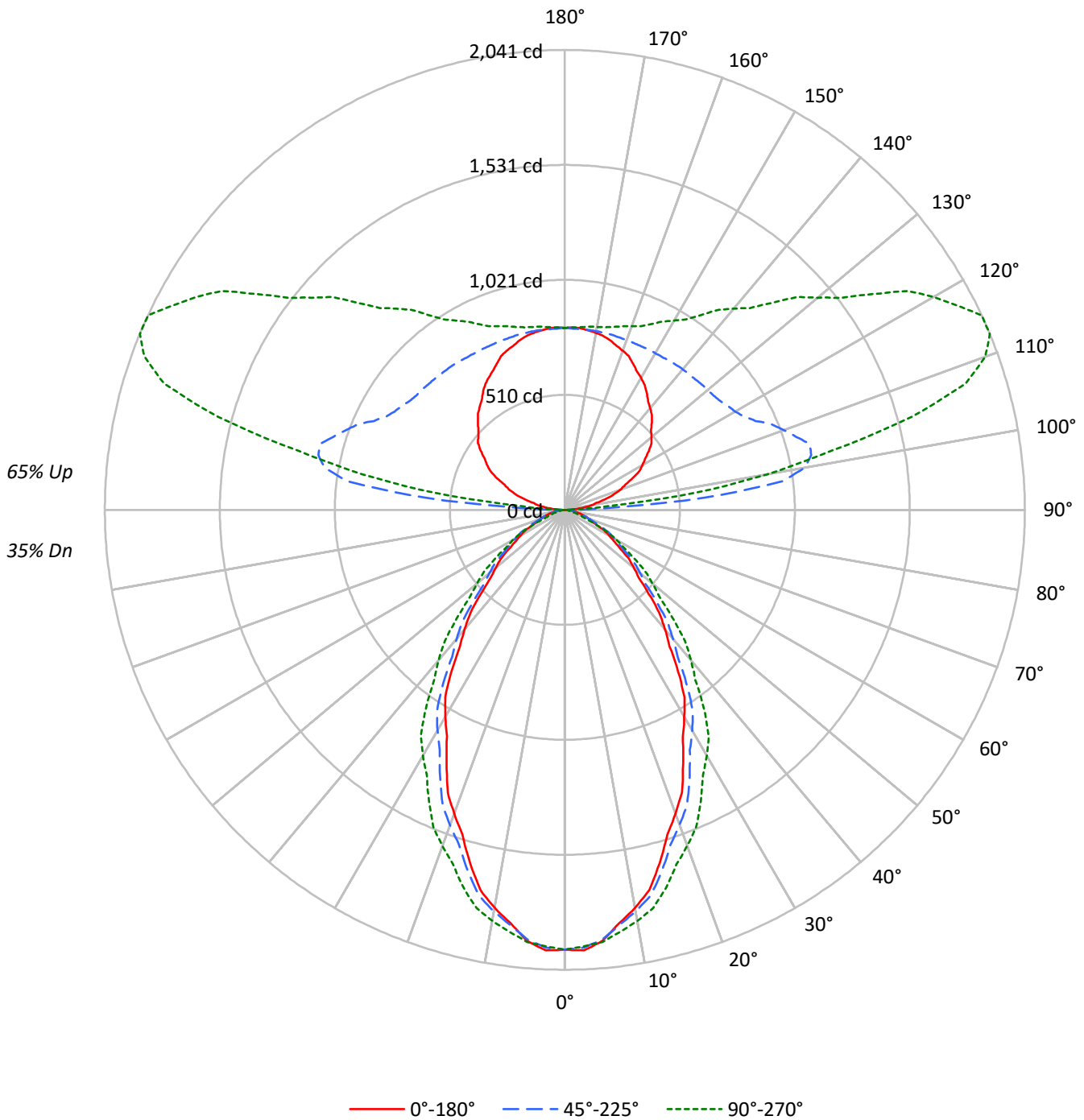
Lumens per Lamp: N/A  
Luminaire Lumens: 8053.8 lumens  
Efficiency: N/A  
Efficacy: 111.4 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 72.3  
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	14617	15584
25°	12634	13324	14518
30°	11297	12036	13414
35°	9879	10593	12107
40°	8315	8975	10481
45°	6862	7454	8751
50°	5728	6245	7290
55°	4864	5360	6021
60°	4157	4646	4805
65°	3310	3908	3104
70°	2935	3051	1894
75°	2716	2474	1159
80°	2502	2274	999
85°	2265	2085	815



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	179.0	2.2
10°-20°	465.7	5.8
20°-30°	603.2	7.5
30°-40°	590.7	7.3
40°-50°	452.2	5.6
50°-60°	301.3	3.7
60°-70°	164.4	2.0
70°-80°	68.5	0.9
80°-90°	21.1	0.3
90°-100°	375.4	4.7
100°-110°	1014.9	12.6
110°-120°	1067.1	13.2
120°-130°	866.7	10.8
130°-140°	679.9	8.4
140°-150°	521.8	6.5
150°-160°	375.3	4.7
160°-170°	229.3	2.8
170°-180°	77.3	1.0
0°-30°	1248.0	15.5
0°-40°	1838.7	22.8
0°-60°	2592.2	32.2
0°-90°	2846.2	35.3
90°-120°	2457.4	30.5
90°-150°	4525.8	56.2
90°-180°	5208.0	64.7
0°-180°	8053.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1952	1952	1952	1952	1952	
5°	1920	1901	1914	1918	1925	179
15°	1624	1618	1662	1707	1736	454
25°	1241	1244	1309	1366	1426	571
35°	877	881	940	1004	1075	545
45°	526	536	571	615	671	410
55°	302	315	333	346	374	274
65°	152	164	179	156	142	158
75°	76	76	69	48	32	81
85°	21	21	20	13	8	23
90°	2	5	11	12	11	5
95°	58	204	624	323	192	61
105°	189	292	1126	1661	1593	199
115°	332	406	934	1808	2041	328
125°	455	521	842	1420	1668	405
135°	545	610	819	1147	1298	421
145°	634	681	808	982	1056	397
155°	716	744	801	880	909	330
165°	779	787	804	836	840	219
175°	809	808	805	816	814	77
180°	808	808	808	808	808	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1952.0	1952.0	1952.0	1952.0	1952.0
2.5°	1956.8	1939.4	1943.8	1943.7	1938.3
5°	1920.3	1901.1	1913.5	1917.9	1924.6
7.5°	1849.1	1834.5	1857.1	1873.9	1887.5
10°	1793.6	1781.0	1809.9	1834.2	1851.8
12.5°	1729.2	1718.6	1754.4	1787.1	1810.0
15°	1624.0	1618.1	1661.7	1706.9	1736.2
17.5°	1511.4	1508.6	1558.5	1611.3	1648.8
20°	1434.7	1433.9	1488.7	1543.6	1587.2
22.5°	1357.3	1359.1	1416.7	1473.9	1523.4
25°	1241.1	1244.5	1308.8	1365.8	1426.1
27.5°	1133.7	1135.2	1201.7	1261.9	1326.3
30°	1060.4	1064.6	1129.8	1192.1	1259.1
32.5°	987.1	991.9	1055.8	1120.2	1188.5
35°	877.1	881.3	940.5	1003.8	1074.9
37.5°	763.7	769.4	821.9	881.8	951.8
40°	690.4	698.7	745.2	801.6	870.2
42.5°	619.8	630.2	673.2	726.7	788.7
45°	525.9	536.0	571.3	614.6	670.7
47.5°	445.1	456.6	483.8	521.0	568.9
50°	399.1	410.0	435.1	462.7	507.9
52.5°	358.7	369.6	391.9	413.2	451.7
55°	302.4	314.9	333.2	345.8	374.3
57.5°	256.1	268.2	282.7	288.4	305.6
60°	225.3	238.7	251.8	251.2	260.4
62.5°	197.2	208.6	221.7	212.6	213.1
65°	151.6	164.2	179.0	156.4	142.2
67.5°	122.5	125.2	140.5	109.1	92.2
70°	108.8	108.8	113.1	84.5	70.2
72.5°	95.8	95.8	91.8	68.7	53.8
75°	76.2	76.2	69.4	47.6	32.5
77.5°	58.8	58.1	53.1	35.5	23.6
80°	47.1	47.1	42.8	28.1	18.8
82.5°	36.8	36.8	33.2	21.9	14.0
85°	21.4	21.4	19.7	12.7	7.7
87.5°	7.9	8.6	9.1	6.5	5.7
90°	1.7	5.1	11.3	12.2	11.3
92.5°	24.7	90.0	177.5	77.1	55.8
95°	58.3	204.5	624.3	323.1	192.1
97.5°	93.6	234.5	973.1	805.3	591.4
100°	120.0	246.6	1081.6	1128.0	912.0
102.5°	144.3	263.5	1119.8	1372.6	1211.1
105°	188.7	291.5	1125.9	1660.8	1592.8
107.5°	229.7	323.6	1076.7	1840.6	1863.2
110°	261.7	346.7	1032.9	1888.9	1984.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	290.2	369.8	992.6	1879.2	2040.6
115°	332.1	406.1	933.8	1807.6	2040.6
117.5°	373.2	442.5	895.0	1698.3	1962.3
120°	398.2	466.2	872.0	1619.8	1889.3
122.5°	421.9	488.5	858.1	1535.7	1807.2
125°	454.7	521.0	841.6	1420.2	1668.5
127.5°	485.0	550.1	831.9	1326.0	1544.3
130°	501.7	568.8	827.7	1267.8	1465.0
132.5°	519.1	585.5	823.5	1215.3	1396.8
135°	545.1	609.7	819.0	1146.7	1298.1
137.5°	571.4	632.4	815.2	1091.2	1214.4
140°	589.5	646.4	813.8	1055.4	1165.0
142.5°	606.9	660.4	811.0	1023.1	1119.1
145°	633.8	681.4	807.7	981.6	1056.4
147.5°	658.3	700.5	803.9	944.0	1001.4
150°	676.4	713.8	802.5	923.5	969.4
152.5°	693.1	725.8	801.8	904.6	942.3
155°	715.5	743.6	800.8	880.5	909.4
157.5°	738.8	758.4	800.9	863.8	882.8
160°	752.1	768.2	801.6	853.2	866.8
162.5°	762.5	775.9	802.3	844.8	855.0
165°	779.0	786.7	804.2	835.6	839.9
167.5°	790.3	795.6	804.4	827.8	829.8
170°	797.3	799.8	805.1	824.2	824.2
172.5°	802.8	803.3	805.1	820.0	819.4
175°	808.6	807.7	805.1	815.5	813.8
177.5°	810.5	808.4	804.9	811.8	809.8
180°	807.7	807.7	807.7	807.7	807.7

(END OF REPORT)