

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: P519399

Luminaire Tested: **SQ4-WB-100U-075D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519399  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-075D-940-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

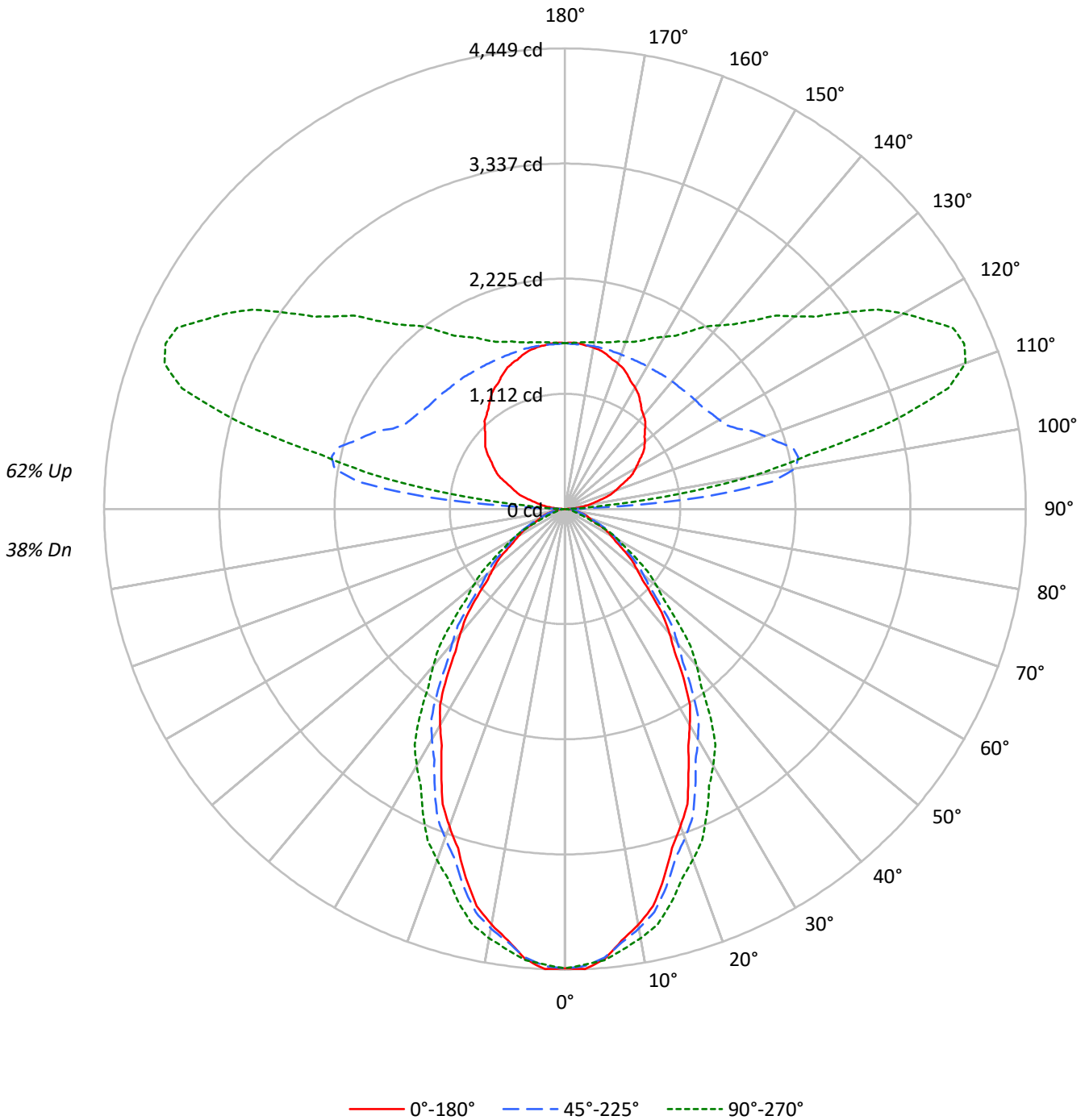
Lumens per Lamp: N/A  
Luminaire Lumens: 16885.9 lumens  
Efficiency: N/A  
Efficacy: 110.1 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 153.4  
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	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	96	92	89	85	87	84	81	78	69	67	65	54	53	52	41	41	40	34
2	88	81	76	71	80	74	70	66	61	58	55	49	47	45	38	36	35	30
3	81	72	66	60	74	66	61	56	55	51	47	44	41	39	34	32	31	26
4	75	65	57	52	68	59	53	48	49	45	41	40	37	34	31	29	27	24
5	69	58	51	45	62	53	47	42	45	40	36	36	33	30	29	26	25	21
6	64	52	45	40	58	48	42	37	40	36	32	33	30	27	26	24	22	19
7	59	48	40	35	54	44	37	33	37	32	29	30	27	24	24	22	20	17
8	55	43	36	31	50	40	34	29	34	29	26	28	24	22	23	20	18	16
9	51	40	33	28	47	37	31	26	31	26	23	26	22	20	21	19	17	15
10	48	37	30	25	44	34	28	24	29	24	21	24	21	18	20	17	15	13

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	13648	13648	13648
5°	13477	13429	13508
10°	12733	12849	13147
15°	11755	12027	12567
20°	10674	11076	11809
25°	9574	10096	11002
30°	8560	9121	10165
35°	7486	8027	9175
40°	6301	6801	7943
45°	5200	5649	6631
50°	4341	4733	5525
55°	3686	4062	4562
60°	3150	3521	3641
65°	2508	2962	2352
70°	2224	2311	1436
75°	2059	1874	879
80°	1897	1725	758
85°	1718	1581	618



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	407.0	2.4
10°-20°	1058.7	6.3
20°-30°	1371.4	8.1
30°-40°	1342.9	8.0
40°-50°	1027.9	6.1
50°-60°	685.0	4.1
60°-70°	373.8	2.2
70°-80°	155.7	0.9
80°-90°	47.4	0.3
90°-100°	750.7	4.4
100°-110°	2072.5	12.3
110°-120°	2137.5	12.7
120°-130°	1717.6	10.2
130°-140°	1349.9	8.0
140°-150°	1035.3	6.1
150°-160°	744.1	4.4
160°-170°	455.0	2.7
170°-180°	153.4	0.9
0°-30°	2837.1	16.8
0°-40°	4180.0	24.8
0°-60°	5892.9	34.9
0°-90°	6469.8	38.3
90°-120°	4960.7	29.4
90°-150°	9063.6	53.7
90°-180°	10416.0	61.7
0°-180°	16885.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4438	4438	4438	4438	4438	
5°	4366	4322	4350	4360	4375	406
15°	3692	3679	3778	3880	3947	1031
25°	2822	2829	2975	3105	3242	1298
35°	1994	2004	2138	2282	2444	1240
45°	1196	1218	1299	1397	1525	932
55°	687	716	758	786	851	623
65°	345	373	407	356	323	358
75°	173	173	158	108	74	185
85°	49	49	45	29	18	53
90°	5	10	20	23	26	10
95°	110	406	1362	560	364	118
105°	369	570	2280	3481	3278	393
115°	662	800	1836	3636	4135	650
125°	908	1033	1665	2817	3306	808
135°	1093	1210	1618	2282	2573	845
145°	1267	1355	1598	1942	2090	793
155°	1429	1476	1585	1743	1798	658
165°	1547	1567	1593	1655	1667	436
175°	1603	1606	1595	1618	1613	152
180°	1603	1603	1603	1603	1603	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4437.7	4437.7	4437.7	4437.7	4437.7
2.5°	4448.6	4409.0	4419.0	4418.7	4406.5
5°	4365.6	4321.8	4350.1	4360.1	4375.4
7.5°	4203.6	4170.5	4221.9	4260.0	4290.9
10°	4077.4	4048.9	4114.4	4169.9	4209.9
12.5°	3931.0	3907.0	3988.3	4062.7	4114.8
15°	3691.9	3678.6	3777.6	3880.3	3947.0
17.5°	3436.0	3429.6	3543.1	3663.1	3748.4
20°	3261.6	3259.7	3384.2	3509.2	3608.2
22.5°	3085.5	3089.7	3220.7	3350.6	3463.3
25°	2821.5	2829.1	2975.3	3105.0	3242.1
27.5°	2577.3	2580.7	2731.9	2868.8	3015.1
30°	2410.6	2420.2	2568.4	2710.1	2862.4
32.5°	2244.0	2255.0	2400.1	2546.6	2701.9
35°	1993.9	2003.5	2138.0	2281.9	2443.7
37.5°	1736.1	1749.1	1868.5	2004.6	2163.7
40°	1569.4	1588.5	1694.1	1822.2	1978.4
42.5°	1409.0	1432.6	1530.5	1652.1	1793.0
45°	1195.6	1218.4	1298.8	1397.1	1524.7
47.5°	1011.8	1038.0	1099.8	1184.4	1293.3
50°	907.4	932.1	989.2	1051.9	1154.7
52.5°	815.5	840.2	891.0	939.4	1027.0
55°	687.4	715.9	757.5	786.2	850.9
57.5°	582.2	609.6	642.6	655.5	694.8
60°	512.1	542.6	572.5	571.0	592.0
62.5°	448.2	474.1	503.9	483.3	484.5
65°	344.7	373.2	407.0	355.6	323.2
67.5°	278.5	284.5	319.3	248.0	209.5
70°	247.3	247.3	257.0	192.0	159.7
72.5°	217.7	217.7	208.7	156.2	122.3
75°	173.3	173.3	157.7	108.3	74.0
77.5°	133.6	132.1	120.7	80.8	53.7
80°	107.1	107.1	97.4	63.8	42.8
82.5°	83.7	83.7	75.6	49.8	31.9
85°	48.7	48.7	44.8	28.9	17.5
87.5°	18.2	19.2	19.7	13.9	12.9
90°	5.1	10.1	20.5	23.1	25.6
92.5°	46.2	191.6	342.7	125.1	97.5
95°	110.3	406.2	1362.0	559.8	364.2
97.5°	182.6	455.0	2017.6	1553.3	1125.0
100°	236.0	484.3	2259.7	2275.7	1849.3
102.5°	287.3	517.5	2306.9	2811.8	2407.5
105°	369.4	570.0	2280.2	3481.2	3278.0
107.5°	456.6	635.1	2153.0	3804.0	3878.2
110°	518.1	678.6	2054.5	3873.4	4114.2

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	573.5	728.0	1962.2	3818.6	4173.7
115°	661.8	799.7	1836.5	3635.6	4134.7
117.5°	738.7	876.1	1753.9	3378.1	3945.9
120°	790.0	925.4	1721.1	3203.8	3775.6
122.5°	839.3	968.7	1694.4	3041.0	3582.7
125°	908.0	1033.4	1664.7	2817.2	3306.2
127.5°	966.5	1091.9	1647.2	2627.9	3049.7
130°	1005.5	1130.9	1639.0	2512.1	2895.8
132.5°	1042.4	1161.8	1630.8	2414.9	2762.5
135°	1092.7	1210.5	1618.5	2281.7	2572.7
137.5°	1149.1	1256.4	1612.3	2170.0	2418.2
140°	1179.9	1285.2	1608.2	2095.4	2313.6
142.5°	1214.8	1312.1	1604.1	2029.1	2221.3
145°	1267.1	1354.9	1598.0	1942.5	2090.4
147.5°	1317.4	1394.1	1592.3	1869.4	1984.2
150°	1354.3	1417.0	1590.3	1825.8	1918.6
152.5°	1383.0	1441.7	1588.2	1788.5	1865.2
155°	1428.7	1476.3	1585.1	1742.9	1798.0
157.5°	1470.7	1507.4	1585.7	1709.6	1747.2
160°	1495.4	1528.0	1587.7	1690.9	1718.5
162.5°	1515.9	1544.5	1589.8	1674.4	1695.9
165°	1546.7	1566.7	1592.8	1654.7	1667.2
167.5°	1570.3	1582.3	1595.4	1642.7	1646.7
170°	1582.6	1592.6	1595.4	1636.4	1636.4
172.5°	1592.8	1598.9	1595.4	1628.2	1626.2
175°	1603.1	1605.6	1595.4	1618.4	1613.4
177.5°	1607.2	1605.2	1594.9	1609.2	1605.1
180°	1603.1	1603.1	1603.1	1603.1	1603.1

(END OF REPORT)