

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: P519548

Luminaire Tested: **SQ4-WB-150U-050D-830-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519548  
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-050D-830-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

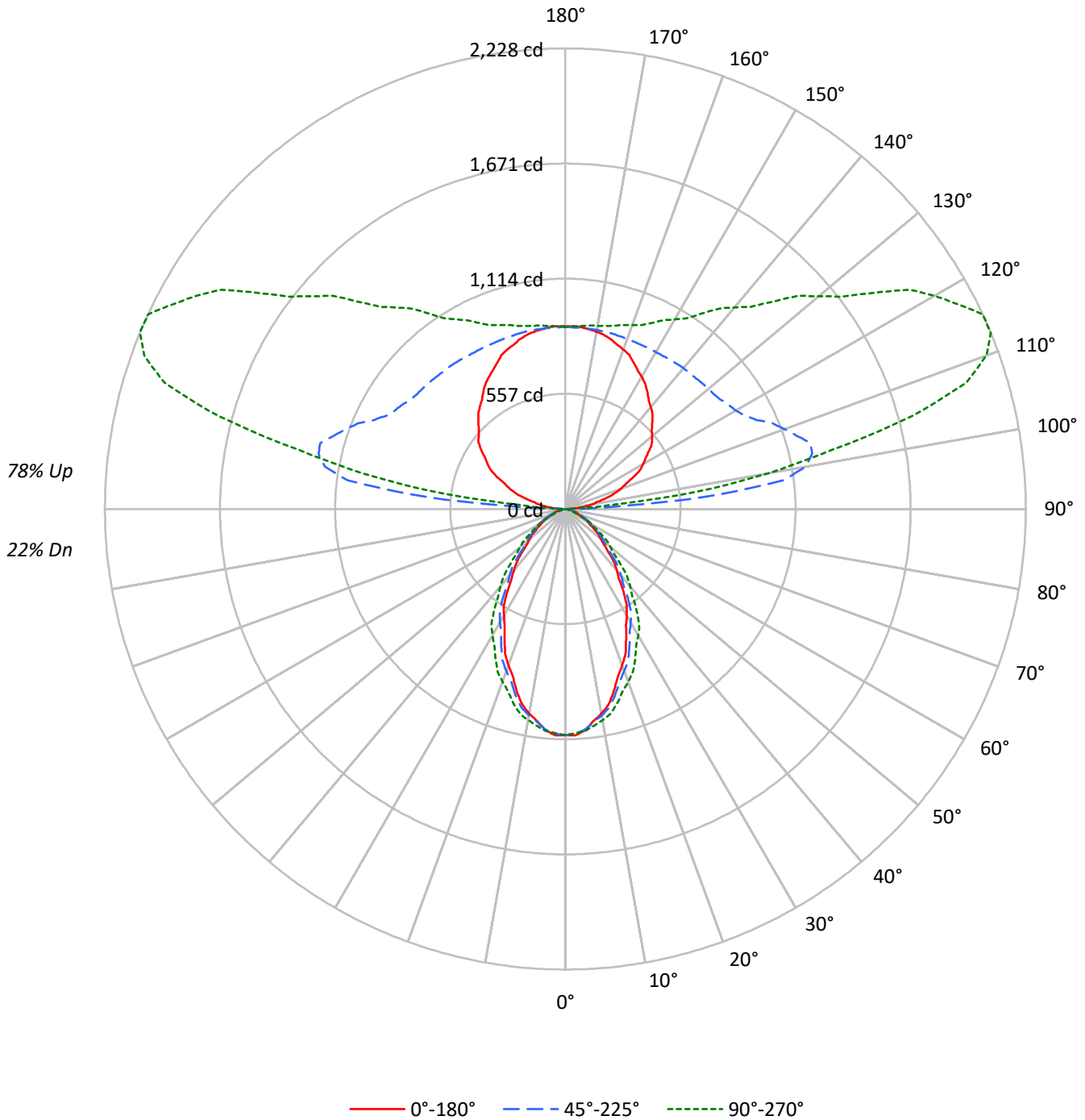
Lumens per Lamp: N/A  
Luminaire Lumens: 7281.3 lumens  
Efficiency: N/A  
Efficacy: 130.7 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 55.7  
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	100	100	100	100	89	89	89	89	68	68	68	48	48	48	30	30	30	22
1	92	88	84	81	81	78	75	73	60	58	56	43	42	41	27	27	26	19
2	84	77	72	67	74	69	64	60	53	50	47	38	37	35	25	24	23	17
3	77	68	62	56	68	61	56	51	47	43	40	34	32	30	22	21	20	15
4	71	61	54	48	63	54	48	44	42	38	35	31	28	26	20	19	18	13
5	65	54	47	41	57	49	42	38	38	34	30	28	25	23	19	17	16	12
6	60	49	41	36	53	44	37	33	34	30	26	25	23	20	17	16	14	11
7	55	44	37	32	49	40	33	29	31	27	23	23	20	18	16	14	13	10
8	51	40	33	28	46	36	30	25	28	24	21	21	18	16	15	13	12	9
9	48	36	29	25	42	33	27	23	26	22	19	20	17	15	14	12	11	8
10	45	33	27	22	40	30	24	20	24	20	17	18	15	13	13	11	10	8

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

	0°	45°	90°
0°	10090	10090	10090
5°	9963	9928	9986
10°	9414	9499	9720
15°	8690	8892	9291
20°	7892	8188	8730
25°	7078	7464	8134
30°	6329	6743	7515
35°	5535	5935	6783
40°	4659	5028	5871
45°	3844	4177	4902
50°	3209	3499	4085
55°	2725	3003	3373
60°	2329	2604	2692
65°	1853	2190	1740
70°	1643	1708	1060
75°	1522	1387	649
80°	1403	1275	563
85°	1270	1164	455



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.3	1.4
10°-20°	260.9	3.6
20°-30°	338.0	4.6
30°-40°	330.9	4.5
40°-50°	253.3	3.5
50°-60°	168.8	2.3
60°-70°	92.1	1.3
70°-80°	38.4	0.5
80°-90°	12.7	0.2
90°-100°	409.8	5.6
100°-110°	1108.2	15.2
110°-120°	1165.1	16.0
120°-130°	946.4	13.0
130°-140°	742.3	10.2
140°-150°	569.7	7.8
150°-160°	409.7	5.6
160°-170°	250.3	3.4
170°-180°	84.4	1.2
0°-30°	699.2	9.6
0°-40°	1030.1	14.1
0°-60°	1452.2	19.9
0°-90°	1595.4	21.9
90°-120°	2683.1	36.8
90°-150°	4941.5	67.9
90°-180°	5686.0	78.1
0°-180°	7281.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1094	1094	1094	1094	1094	
5°	1076	1065	1072	1074	1078	100
15°	910	906	931	956	973	254
25°	695	697	733	765	799	320
35°	491	494	527	562	602	305
45°	295	300	320	344	376	230
55°	169	176	187	194	210	154
65°	85	92	100	88	80	88
75°	43	43	39	27	18	46
85°	12	12	11	7	4	13
90°	2	6	12	13	12	5
95°	64	223	682	353	210	67
105°	206	318	1229	1813	1739	217
115°	363	443	1020	1974	2228	358
125°	496	569	919	1551	1822	443
135°	595	666	894	1252	1417	460
145°	692	744	882	1072	1153	433
155°	781	812	874	961	993	360
165°	851	859	878	912	917	240
175°	883	882	879	890	888	84
180°	882	882	882	882	882	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1093.6	1093.6	1093.6	1093.6	1093.6
2.5°	1096.3	1086.5	1089.0	1088.9	1085.9
5°	1075.8	1065.1	1072.0	1074.5	1078.2
7.5°	1035.9	1027.8	1040.4	1049.8	1057.4
10°	1004.8	997.8	1013.9	1027.6	1037.5
12.5°	968.7	962.8	982.8	1001.2	1014.0
15°	909.8	906.5	930.9	956.3	972.7
17.5°	846.8	845.2	873.2	902.7	923.7
20°	803.8	803.3	834.0	864.8	889.2
22.5°	760.4	761.4	793.7	825.7	853.5
25°	695.3	697.2	733.2	765.2	799.0
27.5°	635.1	636.0	673.2	707.0	743.0
30°	594.1	596.4	632.9	667.9	705.4
32.5°	553.0	555.7	591.5	627.6	665.9
35°	491.4	493.7	526.9	562.3	602.2
37.5°	427.8	431.0	460.5	494.0	533.2
40°	386.8	391.5	417.5	449.1	487.5
42.5°	347.2	353.0	377.2	407.1	441.9
45°	294.6	300.3	320.1	344.3	375.7
47.5°	249.3	255.8	271.0	291.9	318.7
50°	223.6	229.7	243.8	259.2	284.6
52.5°	201.0	207.1	219.6	231.5	253.1
55°	169.4	176.4	186.7	193.7	209.7
57.5°	143.5	150.2	158.4	161.5	171.2
60°	126.2	133.7	141.1	140.7	145.9
62.5°	110.5	116.8	124.2	119.1	119.4
65°	84.9	92.0	100.3	87.6	79.7
67.5°	68.6	70.1	78.7	61.1	51.6
70°	60.9	60.9	63.3	47.3	39.3
72.5°	53.6	53.6	51.4	38.5	30.1
75°	42.7	42.7	38.9	26.7	18.2
77.5°	32.9	32.5	29.8	19.9	13.2
80°	26.4	26.4	24.0	15.7	10.6
82.5°	20.6	20.6	18.6	12.3	7.9
85°	12.0	12.0	11.0	7.1	4.3
87.5°	4.6	5.3	6.3	4.9	4.4
90°	1.9	5.6	12.3	13.3	12.3
92.5°	27.0	98.2	193.8	84.2	60.9
95°	63.6	223.3	681.6	352.7	209.8
97.5°	102.1	256.0	1062.5	879.3	645.7
100°	131.0	269.3	1180.9	1231.6	995.8
102.5°	157.6	287.7	1222.7	1498.7	1322.4
105°	206.0	318.3	1229.3	1813.4	1739.1
107.5°	250.8	353.3	1175.6	2009.7	2034.4
110°	285.7	378.6	1127.8	2062.4	2167.3

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	316.9	403.8	1083.7	2051.8	2228.0
115°	362.6	443.4	1019.6	1973.7	2228.0
117.5°	407.4	483.2	977.2	1854.3	2142.6
120°	434.8	509.0	952.2	1768.6	2062.8
122.5°	460.6	533.4	937.0	1676.8	1973.2
125°	496.5	568.9	918.9	1550.7	1821.7
127.5°	529.5	600.6	908.3	1447.8	1686.2
130°	547.7	621.1	903.7	1384.2	1599.6
132.5°	566.7	639.3	899.2	1326.9	1525.2
135°	595.2	665.8	894.2	1252.1	1417.3
137.5°	623.9	690.5	890.1	1191.4	1326.0
140°	643.6	705.8	888.5	1152.3	1272.1
142.5°	662.6	721.1	885.5	1117.1	1221.9
145°	692.0	744.0	881.9	1071.7	1153.4
147.5°	718.8	764.9	877.7	1030.7	1093.4
150°	738.6	779.4	876.2	1008.4	1058.5
152.5°	756.8	792.4	875.4	987.6	1028.9
155°	781.3	811.9	874.3	961.4	993.0
157.5°	806.7	828.1	874.5	943.1	963.9
160°	821.1	838.8	875.3	931.6	946.5
162.5°	832.5	847.2	876.0	922.4	933.5
165°	850.6	858.9	878.1	912.4	917.0
167.5°	862.9	868.7	878.3	903.8	906.0
170°	870.5	873.3	879.1	899.9	899.9
172.5°	876.6	877.1	879.1	895.4	894.6
175°	882.9	881.9	879.1	890.4	888.5
177.5°	884.9	882.7	878.9	886.4	884.2
180°	881.9	881.9	881.9	881.9	881.9

(END OF REPORT)