

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: P518994

Luminaire Tested: **SQ4-WB-025U-050D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518994  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, 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-025U-050D-940-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

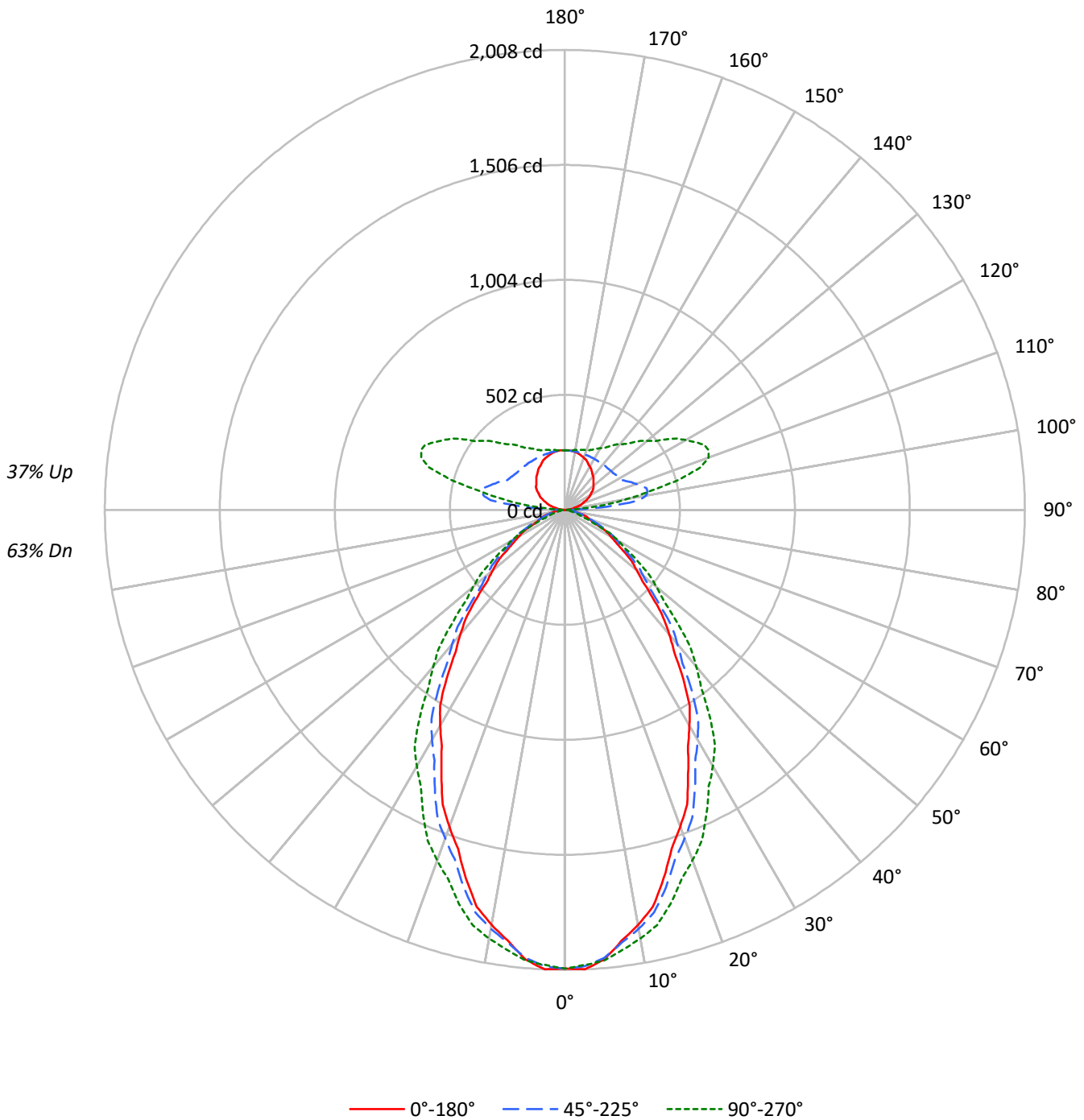
Lumens per Lamp: N/A  
Luminaire Lumens: 4607.2 lumens  
Efficiency: N/A  
Efficacy: 100.8 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 45.7  
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	110	110	110	110	104	104	104	104	91	91	91	79	79	79	68	68	68	63
1	102	98	95	92	96	93	90	87	82	80	78	72	70	69	63	62	61	56
2	94	88	82	78	88	83	78	74	73	70	67	65	62	60	57	55	53	50
3	87	78	72	67	82	74	68	64	66	62	58	59	55	53	52	49	47	44
4	81	71	63	58	76	67	60	55	60	55	51	54	50	46	48	45	42	39
5	75	64	56	51	70	61	54	49	55	49	45	49	45	41	44	40	38	35
6	69	58	50	45	65	55	48	43	50	44	40	45	41	37	40	37	34	32
7	65	53	46	40	61	51	44	39	46	40	36	41	37	34	37	34	31	29
8	60	49	41	36	57	47	40	35	42	37	33	38	34	31	35	31	28	26
9	57	45	38	33	53	43	36	32	39	34	30	36	31	28	32	29	26	24
10	53	42	35	30	50	40	34	29	36	31	28	33	29	26	30	27	24	22

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

	0°	45°	90°
0°	9241	9241	9241
5°	9126	9093	9146
10°	8622	8700	8902
15°	7959	8144	8509
20°	7228	7500	7996
25°	6483	6836	7449
30°	5797	6176	6883
35°	5069	5435	6212
40°	4267	4605	5378
45°	3521	3825	4490
50°	2940	3204	3741
55°	2496	2750	3089
60°	2133	2384	2465
65°	1698	2005	1593
70°	1505	1565	972
75°	1394	1269	595
80°	1283	1166	513
85°	1164	1069	418



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	183.7	4.0
10°-20°	477.9	10.4
20°-30°	619.0	13.4
30°-40°	606.2	13.2
40°-50°	464.0	10.1
50°-60°	309.2	6.7
60°-70°	168.7	3.7
70°-80°	70.3	1.5
80°-90°	21.3	0.5
90°-100°	126.8	2.8
100°-110°	333.5	7.2
110°-120°	345.8	7.5
120°-130°	277.3	6.0
130°-140°	217.6	4.7
140°-150°	167.0	3.6
150°-160°	120.3	2.6
160°-170°	73.6	1.6
170°-180°	24.9	0.5
0°-30°	1280.7	27.8
0°-40°	1886.9	41.0
0°-60°	2660.1	57.7
0°-90°	2920.4	63.4
90°-120°	806.1	17.5
90°-150°	1468.1	31.9
90°-180°	1687.0	36.6
0°-180°	4607.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2003	2003	2003	2003	2003	
5°	1971	1951	1964	1968	1975	183
15°	1666	1660	1705	1752	1782	465
25°	1274	1277	1343	1402	1464	586
35°	900	904	965	1030	1103	560
45°	540	550	586	631	688	421
55°	310	323	342	355	384	281
65°	156	168	184	160	146	162
75°	78	78	71	49	33	84
85°	22	22	20	13	8	24
90°	2	5	13	7	7	3
95°	17	66	218	113	77	19
105°	60	91	369	560	522	64
115°	107	130	295	589	672	105
125°	148	166	269	454	536	132
135°	177	195	260	366	415	137
145°	205	218	257	312	337	129
155°	232	238	257	282	290	107
165°	250	254	257	267	270	71
175°	260	260	259	262	262	25
180°	260	260	260	260	260	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2003.2	2003.2	2003.2	2003.2	2003.2
2.5°	2008.1	1990.2	1994.7	1994.6	1989.1
5°	1970.7	1950.9	1963.6	1968.2	1975.1
7.5°	1897.5	1882.6	1905.8	1923.0	1936.9
10°	1840.6	1827.7	1857.3	1882.3	1900.3
12.5°	1774.5	1763.6	1800.3	1833.9	1857.5
15°	1666.5	1660.5	1705.2	1751.6	1781.7
17.5°	1551.0	1548.1	1599.4	1653.5	1692.0
20°	1472.3	1471.4	1527.7	1584.1	1628.7
22.5°	1392.8	1394.7	1453.8	1512.5	1563.3
25°	1273.6	1277.1	1343.1	1401.6	1463.5
27.5°	1163.4	1165.0	1233.2	1295.0	1361.0
30°	1088.2	1092.5	1159.4	1223.3	1292.1
32.5°	1012.9	1017.9	1083.4	1149.5	1219.7
35°	900.1	904.4	965.1	1030.1	1103.1
37.5°	783.7	789.5	843.5	904.9	976.7
40°	708.5	717.0	764.7	822.6	893.0
42.5°	636.0	646.7	690.9	745.8	809.4
45°	539.7	550.0	586.3	630.7	688.2
47.5°	456.7	468.6	496.4	534.7	583.8
50°	409.6	420.8	446.5	474.8	521.2
52.5°	368.1	379.3	402.2	424.0	463.6
55°	310.3	323.2	341.9	354.9	384.1
57.5°	262.8	275.2	290.1	295.9	313.6
60°	231.2	244.9	258.4	257.8	267.2
62.5°	202.3	214.0	227.5	218.2	218.7
65°	155.6	168.5	183.7	160.5	145.9
67.5°	125.7	128.4	144.2	111.9	94.6
70°	111.6	111.6	116.0	86.7	72.1
72.5°	98.3	98.3	94.2	70.5	55.2
75°	78.2	78.2	71.2	48.9	33.4
77.5°	60.3	59.6	54.5	36.5	24.3
80°	48.3	48.3	43.9	28.8	19.3
82.5°	37.8	37.8	34.1	22.5	14.4
85°	22.0	22.0	20.2	13.1	7.9
87.5°	8.1	8.7	9.7	5.5	4.9
90°	1.7	4.9	13.3	6.7	6.7
92.5°	7.0	33.8	74.7	33.1	21.4
95°	16.7	65.6	218.5	112.6	76.7
97.5°	29.0	72.1	327.0	260.0	191.5
100°	38.4	77.5	360.3	365.2	283.6
102.5°	46.4	82.9	369.7	454.9	385.0
105°	60.1	91.1	368.7	559.7	522.2
107.5°	74.1	102.8	347.7	614.1	623.3
110°	83.4	109.5	330.3	628.2	667.3

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	92.8	117.6	314.3	619.3	679.3
115°	106.8	129.6	295.3	589.1	672.3
117.5°	120.4	141.3	282.3	547.3	639.6
120°	128.5	148.0	276.9	519.2	608.9
122.5°	136.5	156.0	272.9	491.1	579.6
125°	148.5	166.4	268.6	454.0	535.5
127.5°	158.2	176.4	264.9	424.0	492.8
130°	163.5	183.1	263.6	405.2	468.8
132.5°	168.8	188.4	262.3	389.0	446.1
135°	176.8	194.8	260.3	366.5	415.4
137.5°	185.2	202.8	259.9	349.6	389.7
140°	191.9	208.2	258.6	336.2	373.7
142.5°	197.2	212.2	258.6	326.7	359.0
145°	205.2	218.2	256.9	312.5	337.0
147.5°	213.2	225.9	256.9	300.7	321.0
150°	218.5	230.0	256.9	294.0	310.3
152.5°	223.9	232.7	256.9	288.6	301.0
155°	231.9	238.4	256.9	282.1	290.3
157.5°	237.9	244.1	256.9	276.4	282.3
160°	241.9	246.8	256.9	273.7	276.9
162.5°	245.9	249.5	256.9	271.0	274.3
165°	250.2	253.5	256.9	267.0	270.3
167.5°	254.2	255.9	258.6	265.3	266.6
170°	256.9	258.5	258.6	265.3	265.3
172.5°	258.2	258.6	258.6	263.9	262.6
175°	260.3	260.3	258.6	261.9	261.9
177.5°	260.3	260.3	258.9	261.6	260.3
180°	260.3	260.3	260.3	260.3	260.3

(END OF REPORT)