

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: P519040

Luminaire Tested: **SQ4-WB-025U-100D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519040  
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-100D-940-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

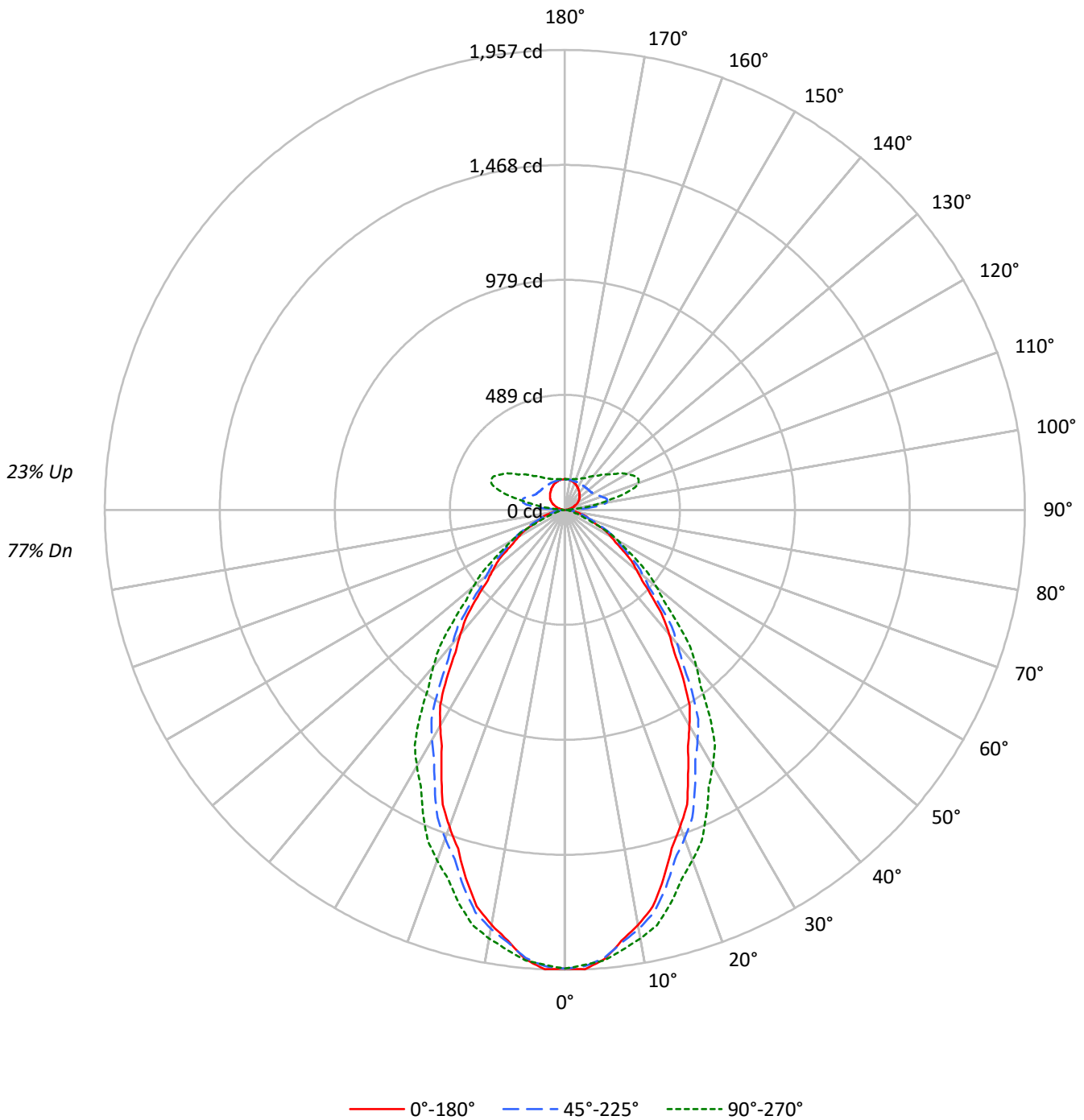
Lumens per Lamp: N/A  
Luminaire Lumens: 3688.6 lumens  
Efficiency: N/A  
Efficacy: 95.3 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 38.7  
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



TEST NUMBER: P519040  
CATALOG NUMBER: SQ4-WB-025U-100D-940-1D-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P519040

CATALOG NUMBER: SQ4-WB-025U-100D-940-1D-UNV-STD-W-4

**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	50	30	10	0	
RCR																						
0	114	114	114	114	108	108	108	108	98	98	98	89	89	89	81	81	81	77				
1	106	102	98	95	101	97	94	92	89	87	85	81	80	78	74	73	72	68				
2	98	91	86	81	93	87	82	78	80	76	73	74	71	68	68	65	63	60				
3	90	82	75	70	86	79	73	68	73	68	64	67	63	60	62	59	56	53				
4	84	74	67	61	80	71	65	59	66	60	56	61	57	53	57	53	50	48				
5	78	67	59	54	74	65	58	53	60	54	50	56	51	48	52	48	45	43				
6	72	61	54	48	69	59	52	47	55	49	45	51	47	43	48	44	41	38				
7	68	56	49	43	65	54	47	42	51	45	41	47	43	39	44	40	37	35				
8	63	52	44	39	61	50	43	38	47	41	37	44	39	35	41	37	34	32				
9	60	48	41	36	57	46	40	35	44	38	34	41	36	32	39	34	31	29				
10	56	44	37	33	54	43	37	32	41	35	31	38	33	30	36	32	29	27				

**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



TEST NUMBER: P519040

CATALOG NUMBER: SQ4-WB-025U-100D-940-1D-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	179.0	4.9
10°-20°	465.7	12.6
20°-30°	603.2	16.4
30°-40°	590.7	16.0
40°-50°	452.2	12.3
50°-60°	301.3	8.2
60°-70°	164.4	4.5
70°-80°	68.5	1.9
80°-90°	20.1	0.5
90°-100°	63.4	1.7
100°-110°	166.7	4.5
110°-120°	172.9	4.7
120°-130°	138.7	3.8
130°-140°	108.8	2.9
140°-150°	83.5	2.3
150°-160°	60.2	1.6
160°-170°	36.8	1.0
170°-180°	12.4	0.3
0°-30°	1248.0	33.8
0°-40°	1838.7	49.8
0°-60°	2592.2	70.3
0°-90°	2845.2	77.1
90°-120°	403.0	10.9
90°-150°	734.0	19.9
90°-180°	843.0	22.9
0°-180°	3688.6	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°	1	2	7	3	3	2
95°	8	33	109	56	38	9
105°	30	46	184	280	261	32
115°	53	65	148	295	336	53
125°	74	83	134	227	268	66
135°	88	97	130	183	208	68
145°	103	109	128	156	168	64
155°	116	119	128	141	145	53
165°	125	127	128	134	135	35
175°	130	130	129	131	131	12
180°	130	130	130	130	130	

TEST NUMBER: P519040

CATALOG NUMBER: SQ4-WB-025U-100D-940-1D-UNV-STD-W-4

**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°	7.7	8.0	8.2	4.8	4.1
90°	0.8	2.5	6.7	3.3	3.3
92.5°	3.5	16.9	37.4	16.5	10.7
95°	8.3	32.8	109.3	56.3	38.4
97.5°	14.5	36.0	163.5	130.0	95.8
100°	19.2	38.8	180.2	182.6	141.8
102.5°	23.2	41.5	184.8	227.4	192.5
105°	30.0	45.5	184.3	279.8	261.1
107.5°	37.0	51.4	173.8	307.1	311.6
110°	41.7	54.8	165.2	314.1	333.7



TEST NUMBER: P519040

CATALOG NUMBER: SQ4-WB-025U-100D-940-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	46.4	58.8	157.2	309.6	339.7
115°	53.4	64.8	147.6	294.6	336.2
117.5°	60.2	70.7	141.1	273.6	319.8
120°	64.2	74.0	138.5	259.6	304.5
122.5°	68.2	78.0	136.5	245.6	289.8
125°	74.2	83.2	134.3	227.0	267.8
127.5°	79.1	88.2	132.5	212.0	246.4
130°	81.7	91.5	131.8	202.6	234.4
132.5°	84.4	94.2	131.1	194.5	223.0
135°	88.4	97.4	130.1	183.2	207.7
137.5°	92.6	101.4	130.0	174.8	194.9
140°	95.9	104.1	129.3	168.1	186.8
142.5°	98.6	106.1	129.3	163.4	179.5
145°	102.6	109.1	128.5	156.3	168.5
147.5°	106.6	113.0	128.5	150.4	160.5
150°	109.3	115.0	128.5	147.0	155.1
152.5°	111.9	116.3	128.5	144.3	150.5
155°	115.9	119.2	128.5	141.1	145.1
157.5°	118.9	122.0	128.5	138.2	141.1
160°	120.9	123.4	128.5	136.8	138.5
162.5°	123.0	124.7	128.5	135.5	137.1
165°	125.1	126.8	128.5	133.5	135.1
167.5°	127.1	127.9	129.3	132.6	133.3
170°	128.5	129.3	129.3	132.6	132.6
172.5°	129.1	129.3	129.3	131.9	131.3
175°	130.1	130.1	129.3	131.0	131.0
177.5°	130.1	130.1	129.5	130.8	130.1
180°	130.1	130.1	130.1	130.1	130.1

(END OF REPORT)