

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: P519232

Luminaire Tested: **SQ4-WB-075U-100D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519232  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-100D-940-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

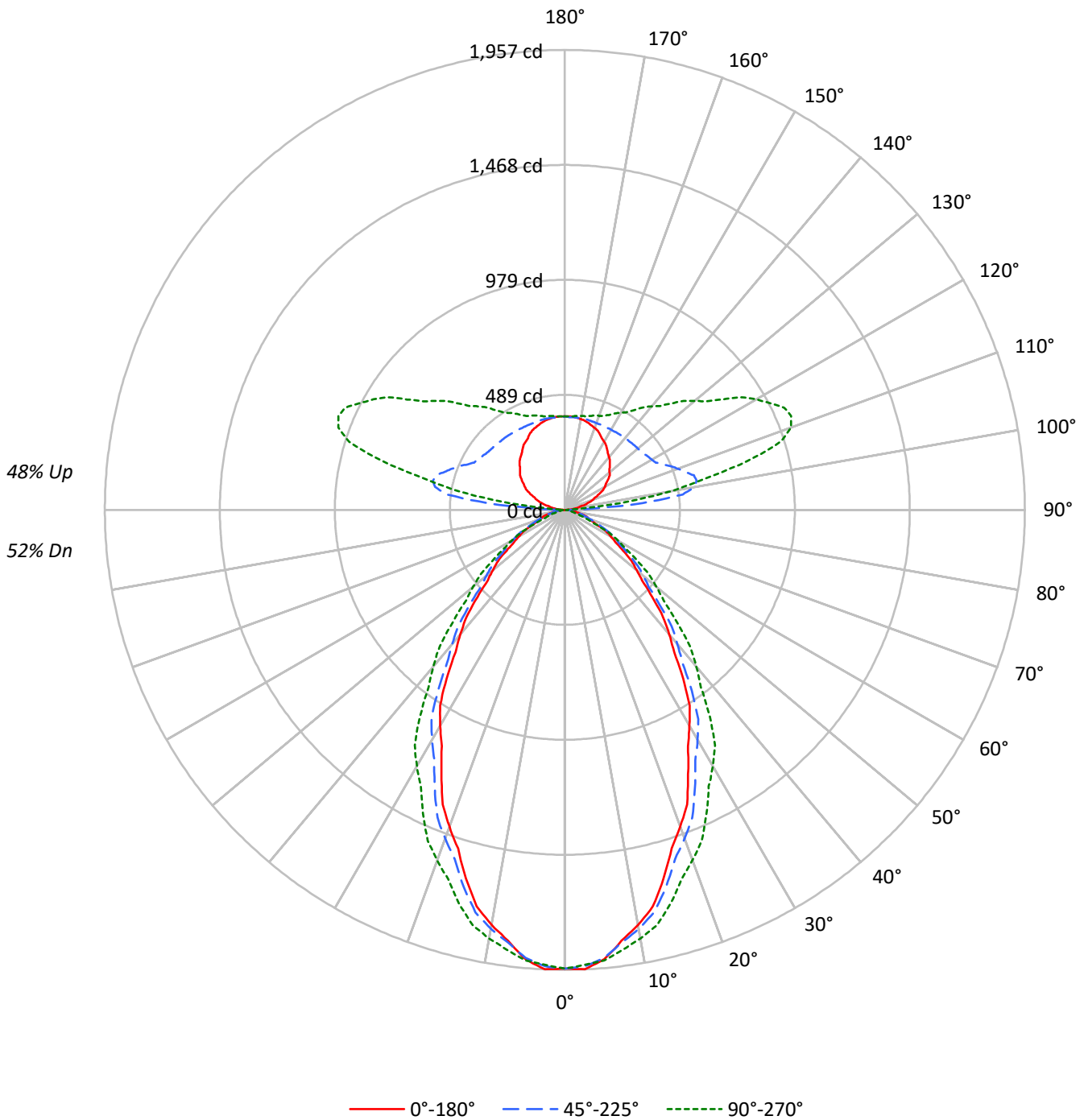
Lumens per Lamp: N/A  
Luminaire Lumens: 5433.5 lumens  
Efficiency: N/A  
Efficacy: 105.9 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 51.3  
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



TEST NUMBER: P519232  
CATALOG NUMBER: SQ4-WB-075U-100D-940-1D-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P519232

CATALOG NUMBER: SQ4-WB-075U-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	0
RCR																		
0	108	108	108	108	100	100	100	100	85	85	85	71	71	71	58	58	58	52
1	99	96	92	89	92	89	86	83	76	74	72	64	63	61	53	52	52	46
2	92	85	79	75	85	79	74	70	68	65	62	58	55	53	48	47	45	41
3	84	76	69	64	78	71	65	60	61	57	53	52	49	47	44	42	40	36
4	78	68	61	55	72	64	57	52	55	50	47	48	44	41	40	38	36	32
5	72	61	54	48	67	57	51	46	50	45	41	43	40	37	37	34	32	29
6	67	56	48	43	62	52	45	41	46	41	37	40	36	33	34	31	29	26
7	62	51	43	38	58	48	41	36	42	37	33	37	33	30	32	29	26	24
8	58	46	39	34	54	44	37	33	39	33	30	34	30	27	29	26	24	22
9	54	43	36	31	51	40	34	30	36	31	27	31	27	24	27	24	22	20
10	51	39	33	28	47	37	31	27	33	28	25	29	25	22	26	23	20	18

**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: P519232

CATALOG NUMBER: SQ4-WB-075U-100D-940-1D-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	179.0	3.3
10°-20°	465.7	8.6
20°-30°	603.2	11.1
30°-40°	590.7	10.9
40°-50°	452.2	8.3
50°-60°	301.3	5.5
60°-70°	164.4	3.0
70°-80°	68.5	1.3
80°-90°	20.4	0.4
90°-100°	187.4	3.4
100°-110°	515.5	9.5
110°-120°	532.1	9.8
120°-130°	426.3	7.8
130°-140°	334.8	6.2
140°-150°	256.6	4.7
150°-160°	184.5	3.4
160°-170°	112.8	2.1
170°-180°	38.0	0.7
0°-30°	1248.0	23.0
0°-40°	1838.7	33.8
0°-60°	2592.2	47.7
0°-90°	2845.5	52.4
90°-120°	1235.0	22.7
90°-150°	2252.7	41.5
90°-180°	2588.0	47.6
0°-180°	5433.5	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	3	6	8	8	3
95°	28	102	331	142	90	29
105°	92	142	568	865	807	97
115°	163	199	456	907	1030	161
125°	225	256	413	699	819	201
135°	271	301	402	566	640	209
145°	314	335	396	482	519	197
155°	355	367	393	433	446	163
165°	384	389	395	411	413	108
175°	397	398	396	401	400	38
180°	397	397	397	397	397	

TEST NUMBER: P519232

CATALOG NUMBER: SQ4-WB-075U-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	8.2	8.0	5.6	4.9
90°	0.8	3.3	5.9	7.6	7.6
92.5°	11.7	49.8	86.4	33.2	27.2
95°	27.9	102.3	331.3	141.7	90.4
97.5°	45.5	113.4	505.6	389.6	274.9
100°	58.3	120.3	560.4	565.6	461.5
102.5°	70.5	128.5	574.6	701.8	606.2
105°	92.1	141.7	568.0	865.1	807.2
107.5°	112.8	158.0	535.7	945.1	962.2
110°	127.6	169.0	511.4	964.9	1024.5



TEST NUMBER: P519232

CATALOG NUMBER: SQ4-WB-075U-100D-940-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	141.2	181.2	487.0	952.1	1042.7
115°	163.1	198.7	455.6	907.2	1029.5
117.5°	184.1	216.8	435.6	844.2	982.5
120°	196.9	228.4	426.9	796.9	939.9
122.5°	208.4	239.8	420.8	755.5	891.2
125°	224.8	256.2	413.3	699.2	819.1
127.5°	240.4	270.3	408.4	652.2	757.4
130°	248.5	279.1	405.7	624.3	720.2
132.5°	258.0	288.6	403.7	599.7	686.4
135°	271.3	301.1	401.5	565.5	639.9
137.5°	283.8	311.4	399.6	537.8	599.1
140°	293.3	318.9	399.0	519.4	574.8
142.5°	301.4	325.1	397.6	503.0	550.4
145°	313.6	335.1	395.6	481.8	519.0
147.5°	326.6	345.1	394.6	463.0	492.8
150°	334.7	351.3	393.9	452.7	475.9
152.5°	342.2	357.4	393.2	443.9	463.0
155°	355.0	366.6	393.0	433.1	445.5
157.5°	364.3	373.7	393.0	424.2	432.8
160°	371.1	378.5	393.0	419.4	426.0
162.5°	376.5	382.6	393.7	415.3	420.6
165°	383.7	388.7	394.7	410.9	413.3
167.5°	388.8	392.6	395.6	407.1	407.8
170°	392.2	394.7	395.6	405.7	405.7
172.5°	394.9	396.1	395.6	403.7	403.0
175°	397.3	398.1	395.6	400.6	399.8
177.5°	397.9	397.9	395.2	399.3	397.9
180°	397.3	397.3	397.3	397.3	397.3

(END OF REPORT)