

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: P518991

Luminaire Tested: **SQ4-WB-025U-050D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518991  
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-12  
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**

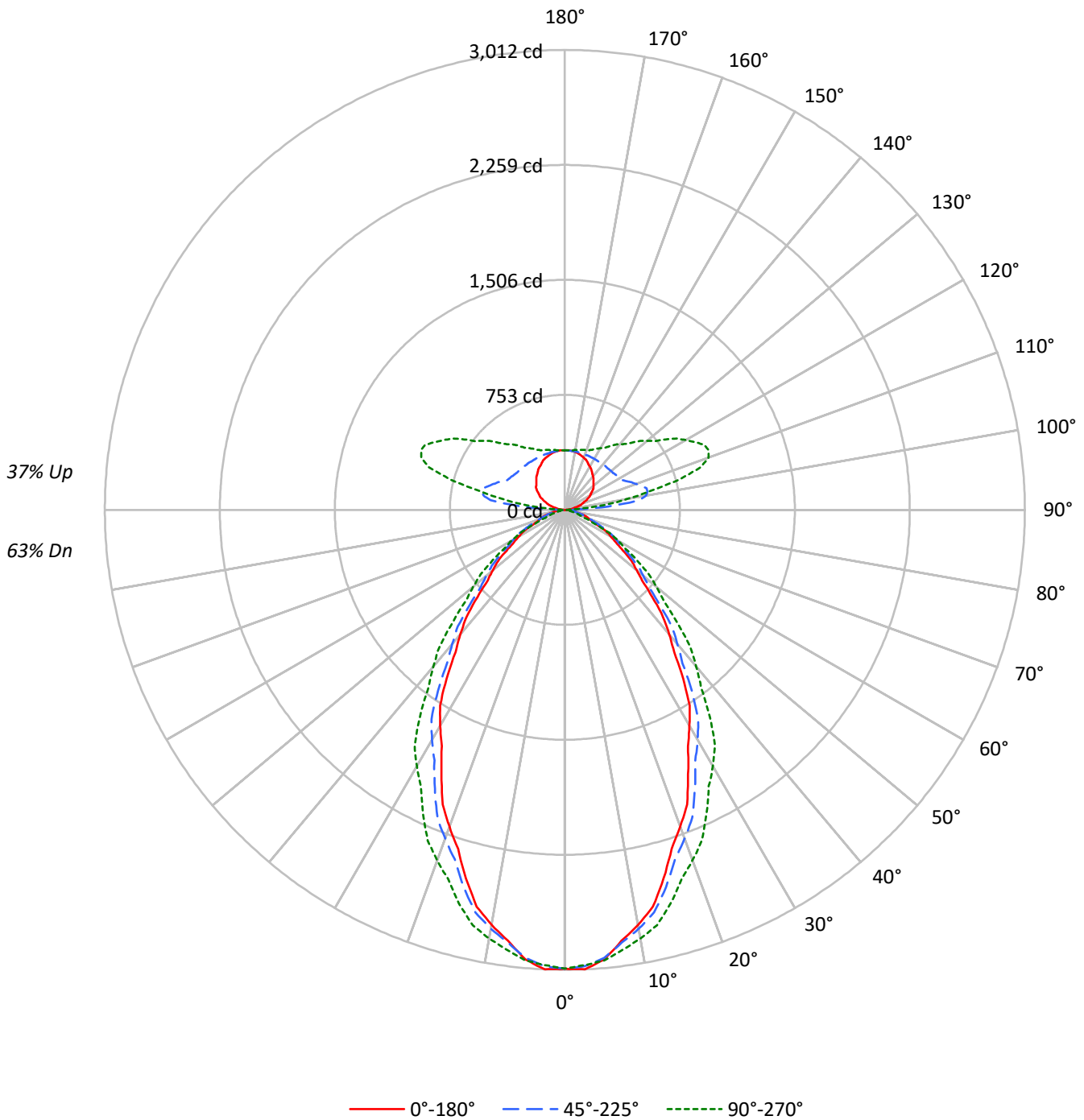
Lumens per Lamp: N/A  
Luminaire Lumens: 6910.8 lumens  
Efficiency: N/A  
Efficacy: 100.4 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 68.8  
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: P518991  
CATALOG NUMBER: SQ4-WB-025U-050D-940-1D-UNV-STD-W-12

### Luminous Intensity Polar Plot





TEST NUMBER: P518991

CATALOG NUMBER: SQ4-WB-025U-050D-940-1D-UNV-STD-W-12

**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°	4266	4605	5378
45°	3521	3825	4490
50°	2940	3205	3741
55°	2495	2750	3089
60°	2133	2384	2465
65°	1698	2006	1593
70°	1505	1565	972
75°	1394	1269	595
80°	1284	1167	514
85°	1164	1069	420



TEST NUMBER: P518991

CATALOG NUMBER: SQ4-WB-025U-050D-940-1D-UNV-STD-W-12

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	275.6	4.0
10°-20°	716.9	10.4
20°-30°	928.6	13.4
30°-40°	909.3	13.2
40°-50°	696.0	10.1
50°-60°	463.8	6.7
60°-70°	253.1	3.7
70°-80°	105.4	1.5
80°-90°	32.0	0.5
90°-100°	190.3	2.8
100°-110°	500.2	7.2
110°-120°	518.7	7.5
120°-130°	416.0	6.0
130°-140°	326.4	4.7
140°-150°	250.5	3.6
150°-160°	180.4	2.6
160°-170°	110.4	1.6
170°-180°	37.3	0.5
0°-30°	1921.0	27.8
0°-40°	2830.3	41.0
0°-60°	3990.1	57.7
0°-90°	4380.6	63.4
90°-120°	1209.1	17.5
90°-150°	2202.1	31.9
90°-180°	2530.0	36.6
0°-180°	6910.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3005	3005	3005	3005	3005	
5°	2956	2926	2945	2952	2963	275
15°	2500	2491	2558	2627	2672	698
25°	1910	1916	2015	2102	2195	879
35°	1350	1357	1448	1545	1655	839
45°	810	825	879	946	1032	631
55°	465	485	513	532	576	422
65°	233	253	276	241	219	243
75°	117	117	107	73	50	125
85°	33	33	30	20	12	36
90°	2	7	20	10	10	4
95°	25	98	328	169	115	28
105°	90	137	553	840	783	95
115°	160	194	443	884	1008	158
125°	223	250	403	681	803	198
135°	265	292	390	550	623	205
145°	308	327	385	469	506	193
155°	348	358	385	423	435	160
165°	375	380	385	400	405	106
175°	390	390	388	393	393	37
180°	390	390	390	390	390	

TEST NUMBER: P518991

CATALOG NUMBER: SQ4-WB-025U-050D-940-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3004.8	3004.8	3004.8	3004.8	3004.8
2.5°	3012.2	2985.3	2992.1	2991.9	2983.7
5°	2956.0	2926.3	2945.4	2952.3	2962.6
7.5°	2846.3	2823.9	2858.7	2884.5	2905.4
10°	2760.9	2741.5	2785.9	2823.4	2850.5
12.5°	2661.7	2645.5	2700.5	2750.9	2786.2
15°	2499.8	2490.8	2557.8	2627.4	2672.5
17.5°	2326.6	2322.2	2399.1	2480.3	2538.0
20°	2208.4	2207.1	2291.5	2376.1	2443.1
22.5°	2089.2	2092.1	2180.7	2268.7	2345.0
25°	1910.5	1915.6	2014.6	2102.4	2195.2
27.5°	1745.1	1747.4	1849.8	1942.5	2041.5
30°	1632.3	1638.7	1739.1	1835.0	1938.1
32.5°	1519.4	1526.9	1625.1	1724.3	1829.5
35°	1350.1	1356.6	1447.7	1545.1	1654.7
37.5°	1175.5	1184.3	1265.2	1357.3	1465.1
40°	1062.7	1075.6	1147.1	1233.8	1339.6
42.5°	954.0	970.0	1036.3	1118.6	1214.0
45°	809.5	825.0	879.4	946.0	1032.4
47.5°	685.1	702.9	744.7	802.0	875.7
50°	614.4	631.2	669.8	712.2	781.8
52.5°	552.2	568.9	603.3	636.1	695.4
55°	465.4	484.8	512.9	532.3	576.2
57.5°	394.2	412.8	435.1	443.9	470.4
60°	346.8	367.4	387.6	386.6	400.8
62.5°	303.5	321.0	341.2	327.3	328.0
65°	233.4	252.7	275.6	240.8	218.9
67.5°	188.5	192.7	216.2	167.9	141.9
70°	167.4	167.4	174.0	130.0	108.1
72.5°	147.4	147.4	141.3	105.7	82.8
75°	117.3	117.3	106.8	73.3	50.1
77.5°	90.4	89.4	81.7	54.7	36.4
80°	72.5	72.5	65.9	43.2	29.0
82.5°	56.7	56.7	51.2	33.7	21.6
85°	33.0	33.0	30.3	19.6	11.9
87.5°	12.1	13.1	14.6	8.3	7.3
90°	2.5	7.4	20.0	10.0	10.0
92.5°	10.5	50.6	112.1	49.6	32.0
95°	25.0	98.4	327.8	168.9	115.1
97.5°	43.5	108.1	490.5	390.0	287.3
100°	57.6	116.3	540.5	547.8	425.4
102.5°	69.6	124.4	554.5	682.3	577.6
105°	90.1	136.6	553.0	839.5	783.3
107.5°	111.1	154.2	521.5	921.2	934.9
110°	125.1	164.3	495.5	942.2	1001.0



TEST NUMBER: P518991

CATALOG NUMBER: SQ4-WB-025U-050D-940-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	139.1	176.3	471.5	928.9	1019.0
115°	160.2	194.4	442.9	883.7	1008.5
117.5°	180.7	212.0	423.4	820.9	959.4
120°	192.7	222.0	415.4	778.8	913.4
122.5°	204.7	234.1	409.4	736.7	869.3
125°	222.7	249.6	402.9	680.9	803.3
127.5°	237.2	264.6	397.4	636.0	739.2
130°	245.2	274.6	395.4	607.8	703.2
132.5°	253.2	282.6	393.4	583.5	669.1
135°	265.3	292.2	390.4	549.7	623.1
137.5°	277.8	304.2	389.9	524.4	584.6
140°	287.8	312.2	387.9	504.3	560.5
142.5°	295.8	318.3	387.9	490.1	538.5
145°	307.8	327.4	385.4	468.8	505.5
147.5°	319.8	338.9	385.4	451.1	481.5
150°	327.8	344.9	385.4	441.0	465.4
152.5°	335.8	349.0	385.4	432.8	451.4
155°	347.8	357.6	385.4	423.2	435.4
157.5°	356.8	366.1	385.4	414.6	423.4
160°	362.8	370.2	385.4	410.5	415.4
162.5°	368.9	374.2	385.4	406.5	411.4
165°	375.4	380.3	385.4	400.5	405.4
167.5°	381.4	383.8	387.9	397.9	399.9
170°	385.4	387.8	387.9	397.9	397.9
172.5°	387.4	387.9	387.9	395.8	393.9
175°	390.4	390.4	387.9	392.9	392.9
177.5°	390.4	390.4	388.4	392.3	390.4
180°	390.4	390.4	390.4	390.4	390.4

(END OF REPORT)