

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: P519377

Luminaire Tested: **SQ4-WB-100U-050D-940-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519377
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-050D-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

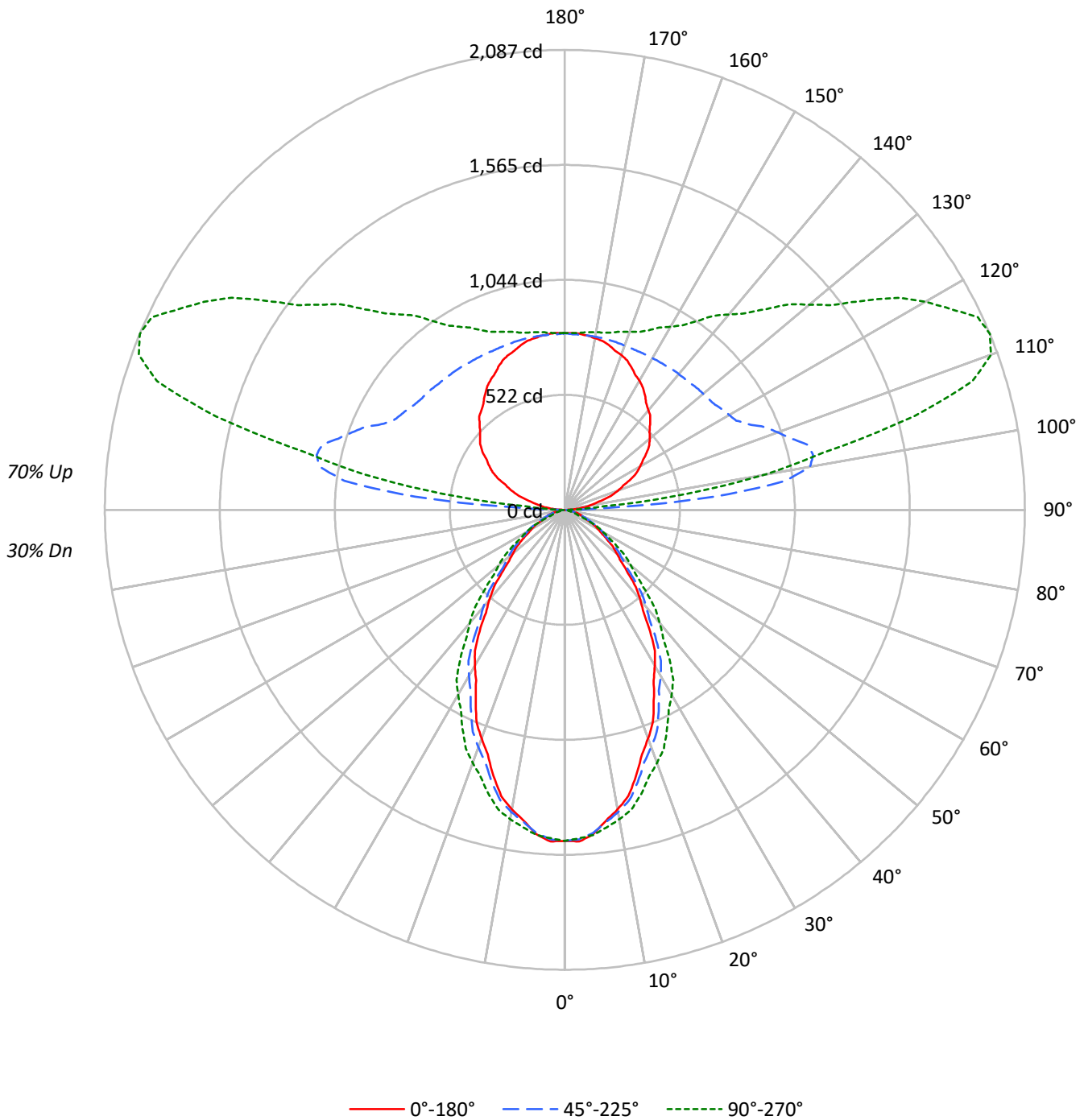
Lumens per Lamp: N/A
Luminaire Lumens: 7399.0 lumens
Efficiency: N/A
Efficacy: 115.1 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 64.3
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: P519377
CATALOG NUMBER: SQ4-WB-100U-050D-940-1D-UNV-STD-W-6

Luminous Intensity Polar Plot





TEST NUMBER: P519377

CATALOG NUMBER: SQ4-WB-100U-050D-940-1D-UNV-STD-W-6

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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	30
1	94	90	86	83	84	81	78	75	64	62	60	48	47	46	34	33	33	26
2	86	79	74	69	77	72	67	63	57	54	51	43	41	40	31	30	29	23
3	79	70	64	58	71	64	58	53	51	47	44	39	36	34	28	27	25	20
4	72	63	55	50	65	57	51	46	46	41	38	35	32	30	25	24	22	18
5	67	56	49	43	60	51	44	40	41	36	33	32	29	26	23	21	20	16
6	62	50	43	38	55	46	39	35	37	33	29	29	26	23	21	19	18	15
7	57	46	38	33	51	42	35	31	34	29	26	27	23	21	20	18	16	13
8	53	42	34	29	48	38	32	27	31	26	23	24	21	19	18	16	15	12
9	49	38	31	26	44	35	29	24	28	24	21	23	19	17	17	15	14	11
10	46	35	28	24	42	32	26	22	26	22	19	21	18	16	16	14	12	10

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	7499	7996
25°	6483	6836	7449
30°	5796	6175	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	1592
70°	1505	1565	973
75°	1395	1269	596
80°	1286	1169	514
85°	1164	1073	416



TEST NUMBER: P519377

CATALOG NUMBER: SQ4-WB-100U-050D-940-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.8	1.9
10°-20°	358.4	4.8
20°-30°	464.3	6.3
30°-40°	454.6	6.1
40°-50°	348.0	4.7
50°-60°	231.9	3.1
60°-70°	126.5	1.7
70°-80°	52.7	0.7
80°-90°	16.6	0.2
90°-100°	375.4	5.1
100°-110°	1036.3	14.0
110°-120°	1068.7	14.4
120°-130°	858.8	11.6
130°-140°	674.9	9.1
140°-150°	517.7	7.0
150°-160°	372.0	5.0
160°-170°	227.5	3.1
170°-180°	76.7	1.0
0°-30°	960.5	13.0
0°-40°	1415.2	19.1
0°-60°	1995.1	27.0
0°-90°	2190.9	29.6
90°-120°	2480.4	33.5
90°-150°	4531.8	61.2
90°-180°	5208.0	70.4
0°-180°	7399.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1502	1502	1502	1502	1502	
5°	1478	1463	1473	1476	1481	137
15°	1250	1245	1279	1314	1336	349
25°	955	958	1007	1051	1098	439
35°	675	678	724	772	827	420
45°	405	412	440	473	516	316
55°	233	242	256	266	288	211
65°	117	126	138	120	109	121
75°	59	59	53	37	25	63
85°	16	16	15	10	6	18
90°	3	5	10	12	13	5
95°	55	203	681	280	182	59
105°	185	285	1140	1741	1639	196
115°	331	400	918	1818	2067	325
125°	454	517	832	1409	1653	404
135°	546	605	809	1141	1286	423
145°	634	677	799	971	1045	397
155°	714	738	793	871	899	329
165°	773	783	796	827	834	218
175°	802	803	798	809	807	76
180°	802	802	802	802	802	

TEST NUMBER: P519377

CATALOG NUMBER: SQ4-WB-100U-050D-940-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1502.4	1502.4	1502.4	1502.4	1502.4
2.5°	1506.1	1492.7	1496.1	1496.0	1491.8
5°	1478.0	1463.2	1472.7	1476.1	1481.3
7.5°	1423.2	1411.9	1429.3	1442.2	1452.7
10°	1380.4	1370.8	1393.0	1411.7	1425.3
12.5°	1330.9	1322.7	1350.2	1375.4	1393.1
15°	1249.9	1245.4	1278.9	1313.7	1336.3
17.5°	1163.3	1161.1	1199.5	1240.1	1269.0
20°	1104.2	1103.6	1145.7	1188.0	1221.6
22.5°	1044.6	1046.0	1090.4	1134.4	1172.5
25°	955.2	957.8	1007.3	1051.2	1097.6
27.5°	872.6	873.7	924.9	971.3	1020.8
30°	816.1	819.4	869.5	917.5	969.1
32.5°	759.7	763.4	812.6	862.2	914.8
35°	675.1	678.3	723.8	772.5	827.3
37.5°	587.8	592.2	632.6	678.7	732.5
40°	531.3	537.8	573.5	616.9	669.8
42.5°	477.0	485.0	518.2	559.3	607.0
45°	404.8	412.5	439.7	473.0	516.2
47.5°	342.5	351.4	372.3	401.0	437.9
50°	307.2	315.6	334.9	356.1	390.9
52.5°	276.1	284.5	301.7	318.0	347.7
55°	232.7	242.4	256.4	266.2	288.1
57.5°	197.1	206.4	217.5	221.9	235.2
60°	173.4	183.7	193.8	193.3	200.4
62.5°	151.8	160.5	170.6	163.6	164.0
65°	116.7	126.4	137.8	120.4	109.4
67.5°	94.3	96.3	108.1	84.0	70.9
70°	83.7	83.7	87.0	65.0	54.1
72.5°	73.7	73.7	70.7	52.9	41.4
75°	58.7	58.7	53.4	36.7	25.1
77.5°	45.2	44.7	40.9	27.3	18.2
80°	36.3	36.3	33.0	21.6	14.5
82.5°	28.3	28.3	25.6	16.9	10.8
85°	16.5	16.5	15.2	9.8	5.9
87.5°	6.3	6.8	7.3	5.5	5.2
90°	2.6	5.1	10.3	11.6	12.8
92.5°	23.1	95.8	171.3	62.5	48.7
95°	55.1	203.1	681.0	279.9	182.1
97.5°	91.3	227.5	1008.8	776.7	562.5
100°	118.0	242.1	1129.9	1137.8	924.7
102.5°	143.6	258.8	1153.5	1405.9	1203.7
105°	184.7	285.0	1140.1	1740.6	1639.0
107.5°	228.3	317.6	1076.5	1902.0	1939.1
110°	259.1	339.3	1027.3	1936.7	2057.1



TEST NUMBER: P519377

CATALOG NUMBER: SQ4-WB-100U-050D-940-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	286.8	364.0	981.1	1909.3	2086.8
115°	330.9	399.8	918.3	1817.8	2067.4
117.5°	369.4	438.1	877.0	1689.1	1973.0
120°	395.0	462.7	860.5	1601.9	1887.8
122.5°	419.6	484.3	847.2	1520.5	1791.4
125°	454.0	516.7	832.3	1408.6	1653.1
127.5°	483.2	545.9	823.6	1313.9	1524.9
130°	502.7	565.4	819.5	1256.1	1447.9
132.5°	521.2	580.9	815.4	1207.4	1381.2
135°	546.3	605.3	809.2	1140.9	1286.3
137.5°	574.6	628.2	806.2	1085.0	1209.1
140°	589.9	642.6	804.1	1047.7	1156.8
142.5°	607.4	656.0	802.1	1014.6	1110.6
145°	633.5	677.4	799.0	971.2	1045.2
147.5°	658.7	697.1	796.2	934.7	992.1
150°	677.1	708.5	795.1	912.9	959.3
152.5°	691.5	720.9	794.1	894.2	932.6
155°	714.3	738.2	792.6	871.4	899.0
157.5°	735.4	753.7	792.8	854.8	873.6
160°	747.7	764.0	793.9	845.5	859.3
162.5°	757.9	772.2	794.9	837.2	848.0
165°	773.3	783.4	796.4	827.3	833.6
167.5°	785.1	791.2	797.7	821.3	823.4
170°	791.3	796.3	797.7	818.2	818.2
172.5°	796.4	799.4	797.7	814.1	813.1
175°	801.5	802.8	797.7	809.2	806.7
177.5°	803.6	802.6	797.4	804.6	802.6
180°	801.5	801.5	801.5	801.5	801.5

(END OF REPORT)