

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: P519086

Luminaire Tested: **SQ4-WB-050U-050D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519086
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-050D-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

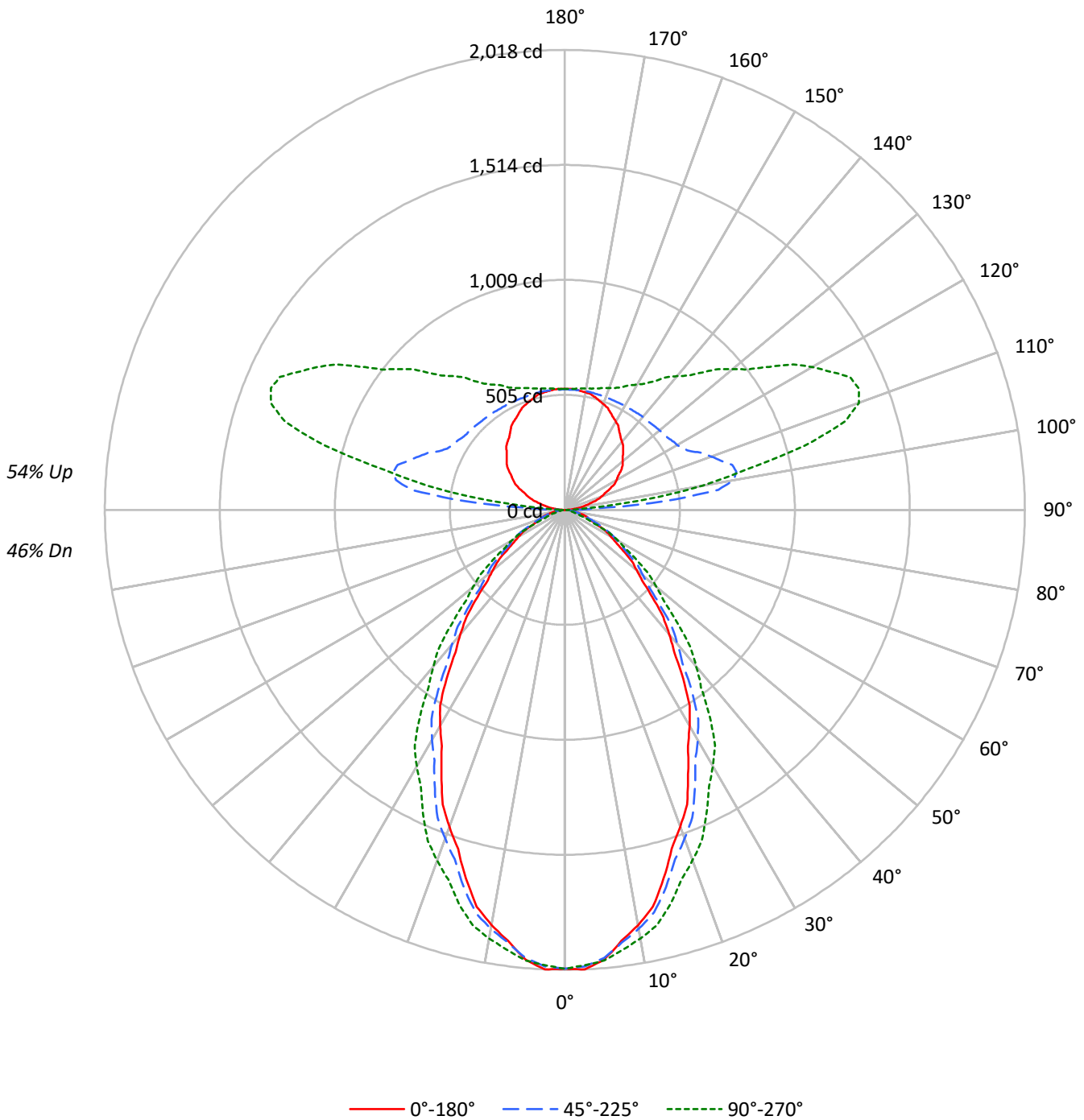
Lumens per Lamp: N/A
Luminaire Lumens: 6397.5 lumens
Efficiency: N/A
Efficacy: 108.6 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 58.9
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: P519086
CATALOG NUMBER: SQ4-WB-050U-050D-935-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P519086

CATALOG NUMBER: SQ4-WB-050U-050D-935-1D-UNV-STD-W-8

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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46
1	98	94	91	87	90	87	84	81	73	70	69	60	58	57	48	47	46	41
2	90	83	78	73	83	77	72	68	65	61	59	54	51	49	43	42	41	36
3	83	74	68	62	76	69	63	58	58	54	51	49	46	43	40	38	36	32
4	76	66	59	54	70	62	55	50	52	48	44	44	41	38	36	34	32	28
5	71	60	52	47	65	56	49	44	48	43	39	40	36	34	33	31	29	25
6	65	54	47	41	60	50	44	39	43	38	34	37	33	30	30	28	26	23
7	61	49	42	37	56	46	39	35	40	35	31	34	30	27	28	25	23	21
8	57	45	38	33	52	42	36	31	36	31	28	31	27	25	26	23	21	19
9	53	41	34	30	49	39	32	28	34	29	25	29	25	22	24	22	20	17
10	50	38	31	27	46	36	30	26	31	26	23	27	23	21	23	20	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9288	9288	9288
5°	9172	9140	9192
10°	8666	8745	8947
15°	8000	8185	8553
20°	7265	7538	8037
25°	6516	6871	7487
30°	5826	6207	6918
35°	5095	5463	6244
40°	4288	4628	5405
45°	3539	3845	4513
50°	2955	3221	3760
55°	2509	2764	3105
60°	2144	2396	2478
65°	1707	2015	1601
70°	1513	1573	977
75°	1401	1276	599
80°	1291	1174	515
85°	1170	1074	423



TEST NUMBER: P519086

CATALOG NUMBER: SQ4-WB-050U-050D-935-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.7	2.9
10°-20°	480.4	7.5
20°-30°	622.2	9.7
30°-40°	609.3	9.5
40°-50°	466.4	7.3
50°-60°	310.8	4.9
60°-70°	169.6	2.7
70°-80°	70.7	1.1
80°-90°	22.0	0.3
90°-100°	254.5	4.0
100°-110°	691.4	10.8
110°-120°	710.8	11.1
120°-130°	568.3	8.9
130°-140°	446.6	7.0
140°-150°	342.4	5.4
150°-160°	246.2	3.8
160°-170°	150.6	2.4
170°-180°	50.7	0.8
0°-30°	1287.2	20.1
0°-40°	1896.5	29.6
0°-60°	2673.7	41.8
0°-90°	2935.9	45.9
90°-120°	1656.7	25.9
90°-150°	3014.0	47.1
90°-180°	3462.0	54.1
0°-180°	6397.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2013	2013	2013	2013	2013	
5°	1981	1961	1974	1978	1985	184
15°	1675	1669	1714	1760	1791	468
25°	1280	1284	1350	1409	1471	589
35°	905	909	970	1035	1109	562
45°	542	553	589	634	692	423
55°	312	325	344	357	386	283
65°	156	169	185	161	147	163
75°	79	79	72	49	34	84
85°	22	22	20	13	8	24
90°	2	7	12	15	15	4
95°	38	139	443	193	130	40
105°	123	191	760	1158	1089	130
115°	218	265	609	1211	1379	215
125°	300	342	551	928	1094	267
135°	361	401	535	756	852	279
145°	418	448	528	642	690	262
155°	472	489	525	577	593	218
165°	511	518	527	549	551	144
175°	530	532	528	535	534	50
180°	530	530	530	530	530	

TEST NUMBER: P519086

CATALOG NUMBER: SQ4-WB-050U-050D-935-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2013.4	2013.4	2013.4	2013.4	2013.4
2.5°	2018.4	2000.4	2004.9	2004.8	1999.3
5°	1980.7	1960.9	1973.7	1978.2	1985.1
7.5°	1907.2	1892.2	1915.5	1932.8	1946.8
10°	1850.0	1837.0	1866.8	1891.9	1910.0
12.5°	1783.5	1772.6	1809.5	1843.3	1866.9
15°	1675.0	1669.0	1713.9	1760.5	1790.8
17.5°	1559.0	1556.0	1607.5	1662.0	1700.7
20°	1479.8	1478.9	1535.5	1592.1	1637.1
22.5°	1399.9	1401.8	1461.2	1520.2	1571.3
25°	1280.1	1283.6	1349.9	1408.8	1471.0
27.5°	1169.4	1170.9	1239.5	1301.6	1368.0
30°	1093.7	1098.0	1165.3	1229.6	1298.7
32.5°	1018.1	1023.1	1089.0	1155.4	1225.9
35°	904.7	909.0	970.0	1035.3	1108.7
37.5°	787.7	793.6	847.8	909.5	981.7
40°	712.1	720.7	768.6	826.8	897.6
42.5°	639.3	650.0	694.4	749.6	813.5
45°	542.4	552.8	589.3	633.9	691.8
47.5°	459.0	471.0	499.0	537.4	586.8
50°	411.7	422.9	448.8	477.2	523.9
52.5°	370.0	381.2	404.3	426.2	465.9
55°	311.9	324.8	343.7	356.7	386.1
57.5°	264.2	276.6	291.5	297.4	315.2
60°	232.4	246.2	259.7	259.1	268.6
62.5°	203.4	215.1	228.6	219.3	219.8
65°	156.4	169.3	184.6	161.3	146.7
67.5°	126.3	129.1	144.9	112.5	95.1
70°	112.2	112.2	116.6	87.1	72.4
72.5°	98.8	98.8	94.7	70.9	55.5
75°	78.6	78.6	71.6	49.1	33.6
77.5°	60.6	59.9	54.8	36.6	24.4
80°	48.6	48.6	44.2	28.9	19.4
82.5°	38.0	38.0	34.3	22.6	14.5
85°	22.1	22.1	20.3	13.1	8.0
87.5°	8.1	9.1	9.5	7.3	6.6
90°	1.7	6.7	11.9	15.3	15.3
92.5°	15.3	69.7	121.0	52.0	44.0
95°	37.5	139.2	443.2	192.9	129.6
97.5°	62.1	153.7	679.5	528.6	371.3
100°	78.4	163.4	751.8	762.1	615.4
102.5°	94.8	173.1	770.9	942.5	813.1
105°	122.7	191.1	760.3	1157.6	1089.3
107.5°	151.7	212.1	716.3	1268.7	1287.7
110°	172.2	227.2	683.6	1290.6	1372.3



TEST NUMBER: P519086

CATALOG NUMBER: SQ4-WB-050U-050D-935-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	189.9	242.2	650.8	1272.4	1395.4
115°	218.2	264.9	608.6	1210.7	1379.1
117.5°	244.8	289.5	581.6	1123.3	1312.9
120°	262.5	305.9	569.4	1064.6	1252.9
122.5°	277.5	320.9	561.2	1005.8	1187.5
125°	300.0	341.7	550.6	927.7	1094.4
127.5°	320.1	361.5	544.8	868.5	1011.6
130°	332.4	372.4	542.1	831.4	959.7
132.5°	344.7	384.7	539.4	799.7	913.4
135°	361.4	401.4	535.3	755.7	852.3
137.5°	379.5	415.8	533.2	716.8	798.1
140°	390.4	425.4	531.9	692.1	765.4
142.5°	401.3	433.6	530.5	672.7	734.0
145°	417.6	447.6	528.4	642.1	690.4
147.5°	436.1	461.7	526.7	618.0	656.0
150°	448.3	470.0	526.7	604.1	634.1
152.5°	457.9	476.9	525.4	591.7	616.4
155°	472.2	488.9	525.0	576.6	593.2
157.5°	486.2	499.2	525.0	566.2	578.9
160°	494.4	506.0	525.0	559.4	569.4
162.5°	502.5	511.5	526.4	553.8	561.2
165°	511.4	518.1	526.7	548.9	550.6
167.5°	520.6	523.9	528.4	543.1	544.5
170°	523.3	526.7	528.4	540.4	540.4
172.5°	526.1	528.1	528.4	537.7	537.7
175°	530.2	531.8	528.4	535.2	533.6
177.5°	531.5	531.5	527.4	532.8	530.2
180°	530.2	530.2	530.2	530.2	530.2

(END OF REPORT)