

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521769

Luminaire Tested: **SQ4-WB-050U-075D-92765-1D-UNV-STD-W-4 (2700K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521769
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-050U-075D-92765-1D-UNV-STD-W-4 (2700K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K/65000K CCT, 90 CRI LEDS, TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

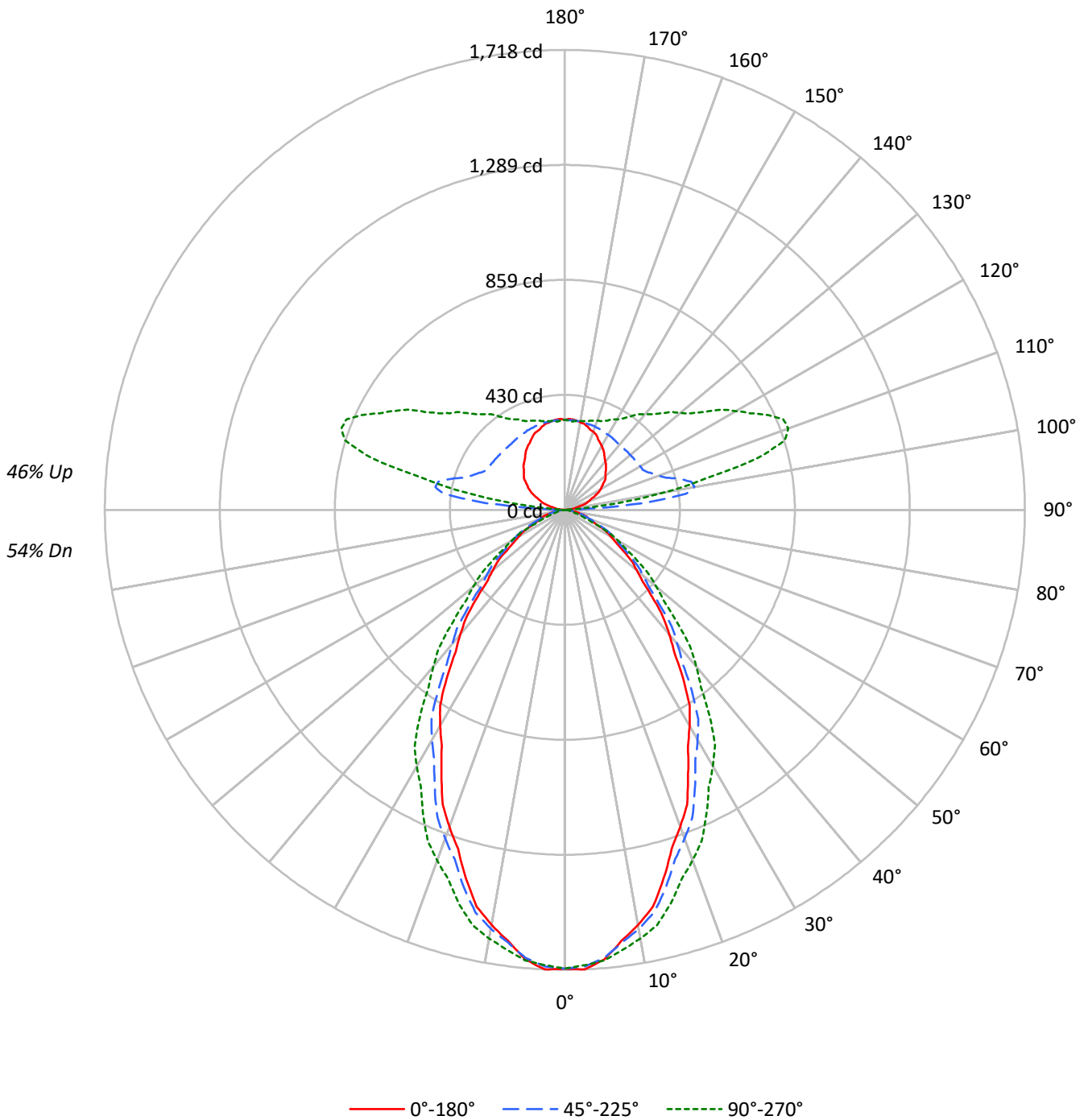
Lumens per Lamp: N/A
Luminaire Lumens: 4585.8 lumens
Efficiency: N/A
Efficacy: 96.3 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 47.6
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: P521769

CATALOG NUMBER: SQ4-WB-050U-075D-92765-1D-UNV-STD-W-4 (2700K)

Luminous Intensity Polar Plot





TEST NUMBER: P521769

CATALOG NUMBER: SQ4-WB-050U-075D-92765-1D-UNV-STD-W-4 (2700K)

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	108	108	108	108	100	100	100	100	86	86	86	72	72	72	60	60	60	54	54	54	54	
1	100	96	93	90	93	90	87	84	77	75	73	66	64	63	55	54	53	48	48	48	48	
2	92	85	80	75	85	80	75	71	69	66	63	59	57	55	50	48	47	43	43	43	43	
3	85	76	70	64	79	71	66	61	62	58	54	54	50	48	46	43	41	38	38	38	38	
4	78	69	61	56	73	64	58	53	56	51	47	49	45	42	42	39	37	34	34	34	34	
5	73	62	54	49	67	58	51	46	51	46	42	44	41	37	38	35	33	30	30	30	30	
6	67	56	49	43	63	53	46	41	47	41	37	41	37	34	35	32	30	27	27	27	27	
7	63	51	44	38	58	48	42	37	43	37	34	38	33	30	33	30	27	25	25	25	25	
8	58	47	40	35	54	44	38	33	39	34	30	35	31	28	30	27	25	23	23	23	23	
9	55	43	36	31	51	41	34	30	36	31	28	32	28	25	28	25	23	21	21	21	21	
10	51	40	33	28	48	38	32	27	34	29	25	30	26	23	26	23	21	19	19	19	19	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15813	15813	15813
5°	15616	15560	15651
10°	14754	14888	15233
15°	13620	13936	14561
20°	12368	12834	13683
25°	11093	11699	12747
30°	9919	10568	11777
35°	8674	9301	10630
40°	7301	7880	9203
45°	6025	6545	7684
50°	5031	5483	6402
55°	4271	4707	5287
60°	3650	4080	4218
65°	2906	3432	2725
70°	2576	2679	1664
75°	2385	2171	1020
80°	2200	1998	877
85°	1990	1831	720



TEST NUMBER: P521769

CATALOG NUMBER: SQ4-WB-050U-075D-92765-1D-UNV-STD-W-4 (2700K)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.2	3.4
10°-20°	408.9	8.9
20°-30°	529.7	11.5
30°-40°	518.7	11.3
40°-50°	397.0	8.7
50°-60°	264.5	5.8
60°-70°	144.4	3.1
70°-80°	60.1	1.3
80°-90°	17.0	0.4
90°-100°	153.2	3.3
100°-110°	435.9	9.5
110°-120°	417.6	9.1
120°-130°	330.5	7.2
130°-140°	265.3	5.8
140°-150°	207.7	4.5
150°-160°	152.0	3.3
160°-170°	94.1	2.1
170°-180°	31.9	0.7
0°-30°	1095.8	23.9
0°-40°	1614.4	35.2
0°-60°	2276.0	49.6
0°-90°	2497.5	54.5
90°-120°	1006.7	22.0
90°-150°	1810.2	39.5
90°-180°	2088.0	45.5
0°-180°	4585.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1714	1714	1714	1714	1714	
5°	1686	1669	1680	1684	1690	157
15°	1426	1421	1459	1499	1524	398
25°	1090	1093	1149	1199	1252	501
35°	770	774	826	881	944	479
45°	462	471	502	540	589	360
55°	266	276	293	304	329	241
65°	133	144	157	137	125	138
75°	67	67	61	42	29	71
85°	19	19	17	11	7	20
90°	0	0	0	0	0	2
95°	17	66	297	103	63	19
105°	68	103	444	785	746	72
115°	126	152	337	714	838	124
125°	178	197	322	534	638	159
135°	217	235	318	451	509	168
145°	256	269	320	390	425	160
155°	293	300	328	352	367	135
165°	323	325	332	339	344	91
175°	339	337	336	334	331	32
180°	336	336	336	336	336	

TEST NUMBER: P521769

CATALOG NUMBER: SQ4-WB-050U-075D-92765-1D-UNV-STD-W-4 (2700K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1713.9	1713.9	1713.9	1713.9	1713.9
2.5°	1718.2	1702.9	1706.7	1706.6	1701.9
5°	1686.1	1669.2	1680.1	1684.0	1689.9
7.5°	1623.6	1610.8	1630.6	1645.3	1657.2
10°	1574.8	1563.8	1589.1	1610.5	1626.0
12.5°	1518.3	1509.0	1540.4	1569.1	1589.3
15°	1425.9	1420.8	1459.0	1498.7	1524.4
17.5°	1327.1	1324.6	1368.5	1414.8	1447.7
20°	1259.7	1259.0	1307.1	1355.3	1393.6
22.5°	1191.7	1193.3	1243.9	1294.1	1337.6
25°	1089.7	1092.7	1149.2	1199.2	1252.2
27.5°	995.4	996.8	1055.1	1108.0	1164.5
30°	931.1	934.7	992.0	1046.7	1105.5
32.5°	866.7	870.9	927.0	983.6	1043.6
35°	770.1	773.8	825.8	881.3	943.8
37.5°	670.5	675.5	721.7	774.2	835.7
40°	606.2	613.5	654.3	703.8	764.1
42.5°	544.2	553.3	591.1	638.1	692.5
45°	461.8	470.6	501.6	539.6	588.9
47.5°	390.8	400.9	424.8	457.5	499.5
50°	350.5	360.0	382.0	406.3	446.0
52.5°	315.0	324.5	344.1	362.8	396.6
55°	265.5	276.5	292.6	303.6	328.7
57.5°	224.9	235.5	248.2	253.2	268.3
60°	197.8	209.6	221.1	220.5	228.6
62.5°	173.1	183.1	194.6	186.7	187.1
65°	133.1	144.1	157.2	137.3	124.8
67.5°	107.5	109.9	123.3	95.8	80.9
70°	95.5	95.5	99.3	74.2	61.7
72.5°	84.1	84.1	80.6	60.3	47.2
75°	66.9	66.9	60.9	41.8	28.6
77.5°	51.6	51.0	46.6	31.2	20.8
80°	41.4	41.4	37.6	24.6	16.5
82.5°	32.3	32.3	29.2	19.2	12.3
85°	18.8	18.8	17.3	11.2	6.8
87.5°	6.6	6.6	6.0	3.6	3.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.1	27.1	62.9	18.3	13.8
95°	16.6	66.0	296.6	102.6	63.3
97.5°	30.6	77.3	456.7	326.8	224.0
100°	40.3	84.0	491.5	497.8	383.5
102.5°	51.0	91.2	483.8	637.3	537.4
105°	67.7	102.7	444.2	784.6	745.9
107.5°	84.8	116.1	397.9	826.2	860.7
110°	96.5	125.9	371.3	810.3	887.8

TEST NUMBER: P521769

CATALOG NUMBER: SQ4-WB-050U-075D-92765-1D-UNV-STD-W-4 (2700K)

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	107.8	135.6	353.4	772.7	883.2
115°	125.9	152.2	336.8	713.6	837.9
117.5°	141.9	166.5	327.0	648.9	780.6
120°	154.7	175.3	326.0	612.0	738.2
122.5°	164.9	185.5	323.4	579.6	696.8
125°	177.7	197.1	321.5	533.5	637.9
127.5°	191.6	209.7	320.5	506.0	592.0
130°	198.8	216.9	318.9	486.8	561.8
132.5°	206.4	224.1	318.9	471.8	540.8
135°	217.3	235.4	317.7	450.7	509.4
137.5°	227.5	245.2	317.5	432.7	483.4
140°	235.2	253.3	317.0	417.8	466.6
142.5°	243.9	259.0	318.5	406.0	449.7
145°	256.3	269.4	320.2	390.0	425.0
147.5°	266.9	279.7	323.0	373.9	404.2
150°	276.1	284.9	324.0	368.6	389.9
152.5°	283.3	292.5	325.1	361.4	381.2
155°	292.7	299.6	327.9	352.5	366.9
157.5°	304.5	308.6	328.5	348.4	358.7
160°	310.6	313.7	331.1	345.3	354.1
162.5°	314.2	317.8	331.6	342.7	349.5
165°	323.4	324.7	331.7	338.9	343.9
167.5°	329.7	328.5	334.7	337.9	339.9
170°	331.7	331.1	333.6	334.3	336.8
172.5°	336.3	334.2	335.2	333.3	335.3
175°	338.7	336.9	335.5	333.6	331.1
177.5°	339.8	336.8	335.2	333.1	333.6
180°	336.2	336.2	336.2	336.2	336.2

(END OF REPORT)