

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: P521804

Luminaire Tested: **SQ4-WB-050U-125D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521804
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-050U-125D-93050-1D-UNV-STD-W-4 (3500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

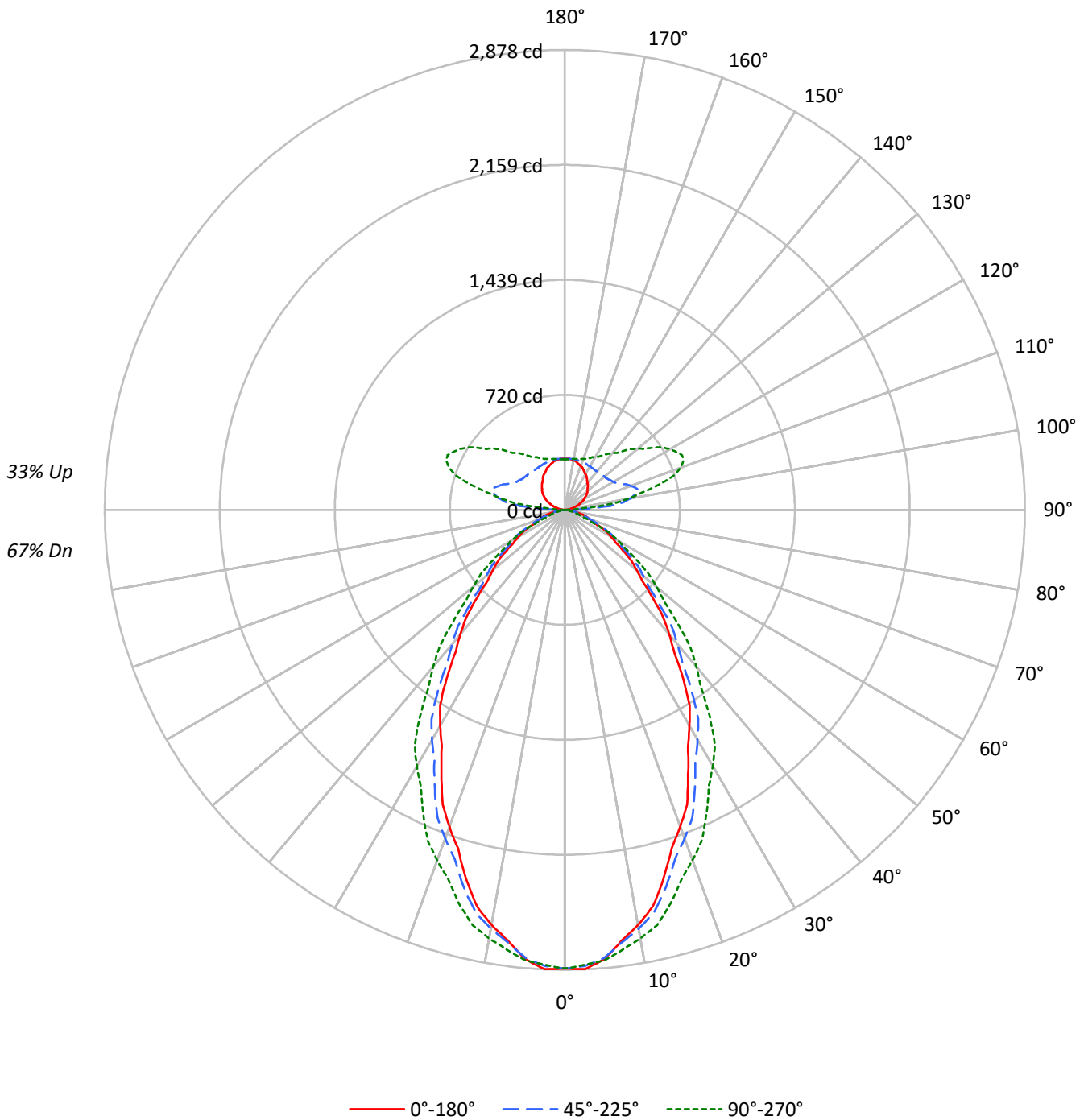
Lumens per Lamp: N/A
Luminaire Lumens: 6244.1 lumens
Efficiency: N/A
Efficacy: 87.2 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 71.6
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: P521804

CATALOG NUMBER: SQ4-WB-050U-125D-93050-1D-UNV-STD-W-4 (3500K)

Luminous Intensity Polar Plot





TEST NUMBER: P521804

CATALOG NUMBER: SQ4-WB-050U-125D-93050-1D-UNV-STD-W-4 (3500K)

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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67				
1	103	99	96	93	97	94	91	88	84	81	79	74	73	71	66	65	64	59				
2	95	89	83	78	90	84	79	75	75	72	68	67	64	62	60	58	56	52				
3	88	79	73	67	83	75	69	65	68	63	59	61	57	54	55	52	50	46				
4	81	71	64	59	77	68	62	57	62	56	52	56	51	48	50	47	44	41				
5	75	65	57	52	71	62	55	50	56	51	46	51	46	43	46	42	40	37				
6	70	59	51	46	66	56	49	44	51	46	42	47	42	39	42	39	36	33				
7	65	54	46	41	62	52	45	40	47	42	37	43	38	35	39	35	33	30				
8	61	50	42	37	58	47	41	36	44	38	34	40	35	32	36	33	30	28				
9	57	46	39	34	54	44	37	33	40	35	31	37	33	29	34	30	27	26				
10	54	42	35	31	51	41	34	30	38	32	28	35	30	27	32	28	25	24				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26483	26483	26483
5°	26152	26059	26211
10°	24709	24932	25511
15°	22809	23339	24385
20°	20714	21492	22915
25°	18578	19591	21348
30°	16612	17699	19725
35°	14526	15576	17804
40°	12227	13198	15413
45°	10090	10961	12868
50°	8424	9183	10721
55°	7152	7880	8853
60°	6111	6833	7065
65°	4866	5746	4565
70°	4316	4486	2787
75°	3996	3636	1708
80°	3682	3347	1472
85°	3335	3070	1196



TEST NUMBER: P521804

CATALOG NUMBER: SQ4-WB-050U-125D-93050-1D-UNV-STD-W-4 (3500K)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	263.3	4.2
10°-20°	684.8	11.0
20°-30°	887.0	14.2
30°-40°	868.6	13.9
40°-50°	664.9	10.6
50°-60°	443.0	7.1
60°-70°	241.8	3.9
70°-80°	100.7	1.6
80°-90°	28.5	0.5
90°-100°	164.1	2.6
100°-110°	396.6	6.4
110°-120°	423.1	6.8
120°-130°	342.6	5.5
130°-140°	265.3	4.2
140°-150°	202.4	3.2
150°-160°	146.5	2.3
160°-170°	90.2	1.4
170°-180°	30.6	0.5
0°-30°	1835.1	29.4
0°-40°	2703.7	43.3
0°-60°	3811.7	61.0
0°-90°	4182.7	67.0
90°-120°	983.8	15.8
90°-150°	1794.1	28.7
90°-180°	2061.0	33.0
0°-180°	6244.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2870	2870	2870	2870	2870	
5°	2824	2796	2814	2820	2830	263
15°	2388	2379	2443	2510	2553	667
25°	1825	1830	1924	2008	2097	839
35°	1290	1296	1383	1476	1581	802
45°	773	788	840	904	986	603
55°	445	463	490	508	550	403
65°	223	241	263	230	209	232
75°	112	112	102	70	48	120
85°	32	32	29	19	11	34
90°	0	0	0	0	0	2
95°	16	82	281	183	128	18
105°	63	110	477	617	609	67
115°	116	148	383	726	810	115
125°	165	190	332	578	678	147
135°	203	227	319	455	524	157
145°	240	258	313	387	417	150
155°	275	287	317	343	355	127
165°	304	309	321	326	330	86
175°	322	320	322	319	318	30
180°	318	318	318	318	318	

TEST NUMBER: P521804

CATALOG NUMBER: SQ4-WB-050U-125D-93050-1D-UNV-STD-W-4 (3500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2870.4	2870.4	2870.4	2870.4	2870.4
2.5°	2877.5	2851.8	2858.3	2858.1	2850.3
5°	2823.8	2795.5	2813.7	2820.3	2830.1
7.5°	2719.0	2697.6	2730.9	2755.5	2775.4
10°	2637.4	2618.9	2661.3	2697.2	2723.0
12.5°	2542.7	2527.2	2579.7	2627.8	2661.6
15°	2388.0	2379.4	2443.4	2509.9	2553.0
17.5°	2222.5	2218.3	2291.8	2369.4	2424.5
20°	2109.7	2108.4	2189.0	2269.8	2333.9
22.5°	1995.8	1998.5	2083.2	2167.2	2240.2
25°	1825.0	1829.9	1924.5	2008.4	2097.1
27.5°	1667.1	1669.3	1767.1	1855.6	1950.2
30°	1559.3	1565.4	1661.3	1752.9	1851.5
32.5°	1451.5	1458.6	1552.5	1647.2	1747.7
35°	1289.7	1295.9	1382.9	1476.0	1580.7
37.5°	1123.0	1131.3	1208.6	1296.6	1399.6
40°	1015.2	1027.5	1095.8	1178.7	1279.7
42.5°	911.4	926.6	990.0	1068.6	1159.8
45°	773.3	788.1	840.1	903.7	986.2
47.5°	654.4	671.4	711.4	766.1	836.6
50°	586.9	602.9	639.8	680.4	746.9
52.5°	527.5	543.5	576.3	607.6	664.3
55°	444.6	463.1	489.9	508.5	550.4
57.5°	376.6	394.3	415.6	424.0	449.4
60°	331.2	351.0	370.3	369.3	382.9
62.5°	289.9	306.7	326.0	312.6	313.4
65°	222.9	241.4	263.2	230.0	209.1
67.5°	180.1	184.0	206.6	160.4	135.5
70°	160.0	160.0	166.3	124.2	103.3
72.5°	140.8	140.8	135.0	101.0	79.1
75°	112.1	112.1	102.0	70.0	47.9
77.5°	86.4	85.4	78.1	52.2	34.8
80°	69.3	69.3	63.0	41.3	27.7
82.5°	54.2	54.2	48.9	32.2	20.7
85°	31.5	31.5	29.0	18.7	11.3
87.5°	11.1	11.1	10.1	6.0	5.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.4	44.4	104.7	50.9	34.5
95°	16.2	82.1	281.2	182.8	128.1
97.5°	28.7	91.0	370.3	356.8	306.3
100°	38.4	96.5	419.4	442.7	401.2
102.5°	47.6	101.4	451.8	514.3	489.7
105°	63.4	109.5	476.7	616.8	608.9
107.5°	78.9	119.1	462.0	699.0	717.6
110°	89.7	127.3	438.3	734.4	769.4



TEST NUMBER: P521804

CATALOG NUMBER: SQ4-WB-050U-125D-93050-1D-UNV-STD-W-4 (3500K)

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	100.5	135.4	417.3	743.1	802.8
115°	116.0	148.3	383.0	726.1	809.8
117.5°	131.4	161.8	362.9	687.1	785.2
120°	141.6	170.0	350.0	656.4	759.3
122.5°	152.4	178.6	341.9	625.1	726.4
125°	165.2	190.3	332.4	577.5	678.3
127.5°	177.9	201.5	325.8	537.1	625.8
130°	185.4	208.5	323.7	509.1	596.1
132.5°	192.4	216.6	320.4	488.8	562.6
135°	203.0	226.7	318.9	455.4	523.9
137.5°	212.9	236.8	314.2	432.7	484.4
140°	220.5	242.3	314.2	416.4	463.9
142.5°	228.0	249.8	311.5	402.3	442.3
145°	240.1	257.9	312.9	387.1	417.4
147.5°	251.2	268.5	312.1	369.5	394.6
150°	258.3	273.4	314.2	361.9	381.7
152.5°	265.8	280.4	313.7	353.7	371.4
155°	275.1	287.0	316.9	342.8	355.4
157.5°	286.3	296.5	316.2	338.7	346.1
160°	290.6	299.2	318.9	333.2	338.5
162.5°	297.6	305.2	317.9	331.6	334.7
165°	304.1	308.7	321.0	325.8	330.4
167.5°	312.1	315.1	320.2	325.4	325.6
170°	314.2	316.2	322.3	321.7	325.0
172.5°	318.0	319.5	320.7	322.1	320.2
175°	321.6	320.3	321.6	318.9	318.3
177.5°	321.0	321.0	319.9	318.7	316.1
180°	318.3	318.3	318.3	318.3	318.3

(END OF REPORT)