

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: P521765

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

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521765
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-050D-93050-1D-UNV-STD-W-4 (3500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 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

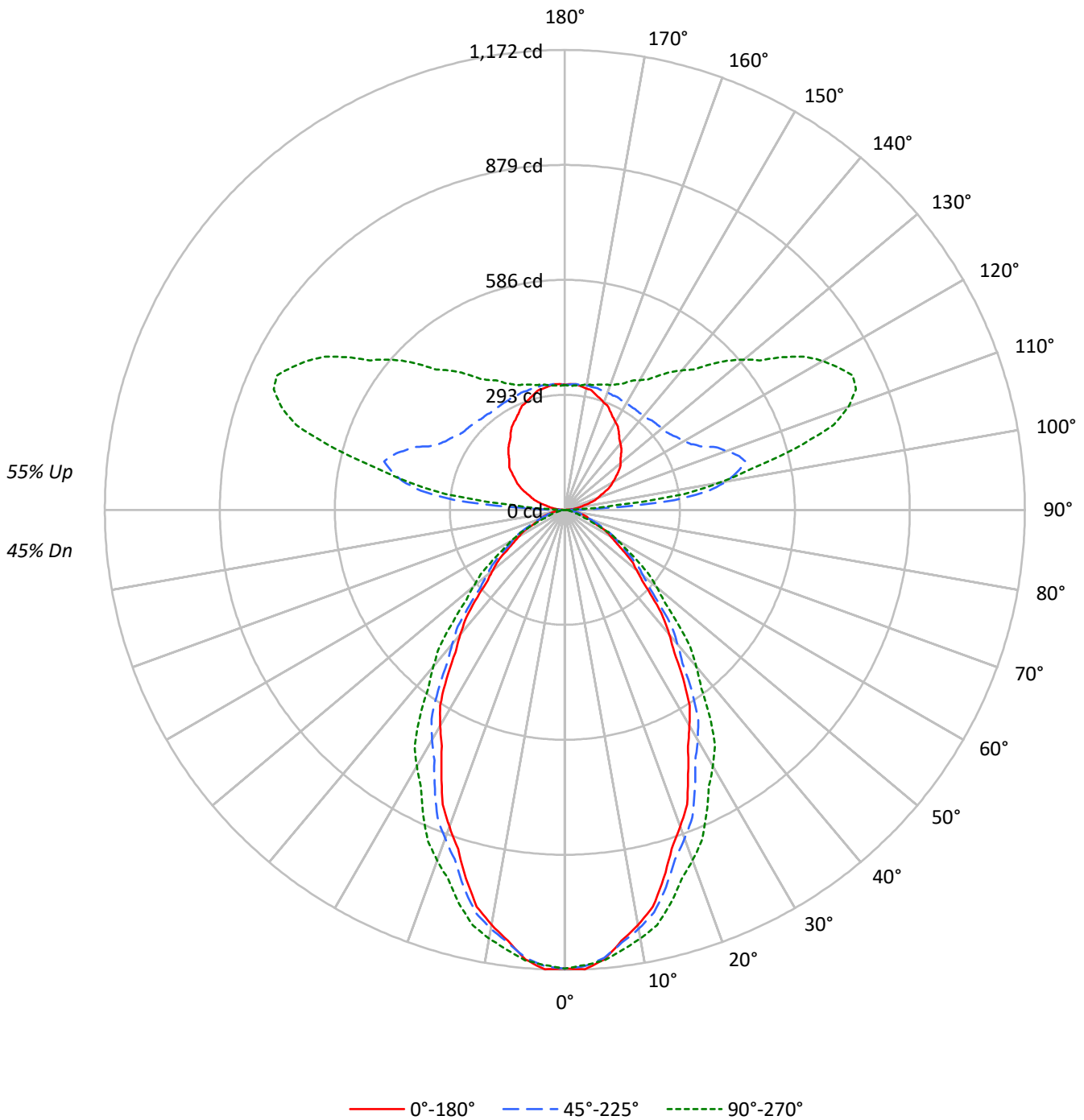
Lumens per Lamp: N/A
Luminaire Lumens: 3765.1 lumens
Efficiency: N/A
Efficacy: 102.0 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 36.9
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

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Luminous Intensity Polar Plot





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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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	45				
1	98	94	90	87	90	86	83	81	72	70	68	59	58	57	47	46	46	40				
2	90	83	78	73	82	77	72	68	65	61	58	53	51	49	43	41	40	35				
3	83	74	67	62	76	68	63	58	58	54	50	48	45	43	39	37	35	31				
4	76	66	59	54	70	61	55	50	52	48	44	44	40	38	36	33	32	28				
5	70	60	52	47	65	55	49	44	47	42	39	40	36	33	33	30	28	25				
6	65	54	46	41	60	50	44	39	43	38	34	36	33	30	30	28	25	23				
7	61	49	42	37	56	46	39	35	39	34	31	33	30	27	28	25	23	21				
8	56	45	38	33	52	42	35	31	36	31	28	31	27	24	26	23	21	19				
9	53	41	34	29	49	39	32	28	33	29	25	29	25	22	24	21	19	17				
10	49	38	31	27	46	36	30	25	31	26	23	27	23	20	23	20	18	16				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10787	10787	10787
5°	10653	10615	10677
10°	10065	10155	10392
15°	9291	9507	9933
20°	8437	8754	9333
25°	7568	7980	8696
30°	6766	7209	8034
35°	5917	6345	7251
40°	4980	5375	6277
45°	4110	4465	5241
50°	3432	3741	4366
55°	2913	3211	3606
60°	2489	2783	2879
65°	1982	2340	1860
70°	1759	1826	1136
75°	1629	1483	695
80°	1498	1365	600
85°	1355	1249	487



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.2	2.8
10°-20°	278.9	7.4
20°-30°	361.3	9.6
30°-40°	353.8	9.4
40°-50°	270.8	7.2
50°-60°	180.5	4.8
60°-70°	98.5	2.6
70°-80°	41.0	1.1
80°-90°	11.6	0.3
90°-100°	164.1	4.4
100°-110°	396.6	10.5
110°-120°	423.1	11.2
120°-130°	342.6	9.1
130°-140°	265.3	7.0
140°-150°	202.4	5.4
150°-160°	146.5	3.9
160°-170°	90.2	2.4
170°-180°	30.6	0.8
0°-30°	747.5	19.9
0°-40°	1101.3	29.2
0°-60°	1552.6	41.2
0°-90°	1703.7	45.3
90°-120°	983.8	26.1
90°-150°	1794.1	47.7
90°-180°	2061.0	54.7
0°-180°	3765.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1169	1169	1169	1169	1169	
5°	1150	1139	1146	1149	1153	107
15°	973	969	995	1022	1040	272
25°	743	745	784	818	854	342
35°	525	528	563	601	644	327
45°	315	321	342	368	402	246
55°	181	189	200	207	224	164
65°	91	98	107	94	85	94
75°	46	46	42	28	20	49
85°	13	13	12	8	5	14
90°	0	0	0	0	0	1
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	

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1169.2	1169.2	1169.2	1169.2	1169.2
2.5°	1172.0	1161.6	1164.2	1164.2	1161.0
5°	1150.2	1138.7	1146.1	1148.7	1152.8
7.5°	1107.5	1098.8	1112.3	1122.4	1130.5
10°	1074.3	1066.7	1084.0	1098.6	1109.2
12.5°	1035.7	1029.4	1050.8	1070.4	1084.1
15°	972.7	969.2	995.3	1022.3	1039.9
17.5°	905.3	903.6	933.5	965.1	987.6
20°	859.3	858.8	891.6	924.5	950.6
22.5°	812.9	814.0	848.5	882.8	912.5
25°	743.4	745.4	783.9	818.1	854.2
27.5°	679.0	679.9	719.8	755.8	794.4
30°	635.1	637.6	676.7	714.0	754.1
32.5°	591.2	594.1	632.3	670.9	711.9
35°	525.3	527.8	563.3	601.2	643.8
37.5°	457.4	460.8	492.3	528.1	570.1
40°	413.5	418.5	446.3	480.1	521.2
42.5°	371.2	377.4	403.2	435.3	472.4
45°	315.0	321.0	342.2	368.1	401.7
47.5°	266.6	273.5	289.8	312.1	340.7
50°	239.1	245.6	260.6	277.1	304.2
52.5°	214.9	221.4	234.8	247.5	270.6
55°	181.1	188.6	199.6	207.1	224.2
57.5°	153.4	160.6	169.3	172.7	183.0
60°	134.9	143.0	150.8	150.4	156.0
62.5°	118.1	124.9	132.8	127.3	127.6
65°	90.8	98.3	107.2	93.7	85.2
67.5°	73.4	75.0	84.1	65.3	55.2
70°	65.2	65.2	67.7	50.6	42.1
72.5°	57.4	57.4	55.0	41.1	32.2
75°	45.7	45.7	41.6	28.5	19.5
77.5°	35.2	34.8	31.8	21.3	14.2
80°	28.2	28.2	25.7	16.8	11.3
82.5°	22.1	22.1	19.9	13.1	8.4
85°	12.8	12.8	11.8	7.6	4.6
87.5°	4.5	4.5	4.1	2.5	2.1
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

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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)