

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: P521778

Luminaire Tested: **SQ4-WB-050U-075D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521778
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-075D-93050-1D-UNV-STD-W-4 (3500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

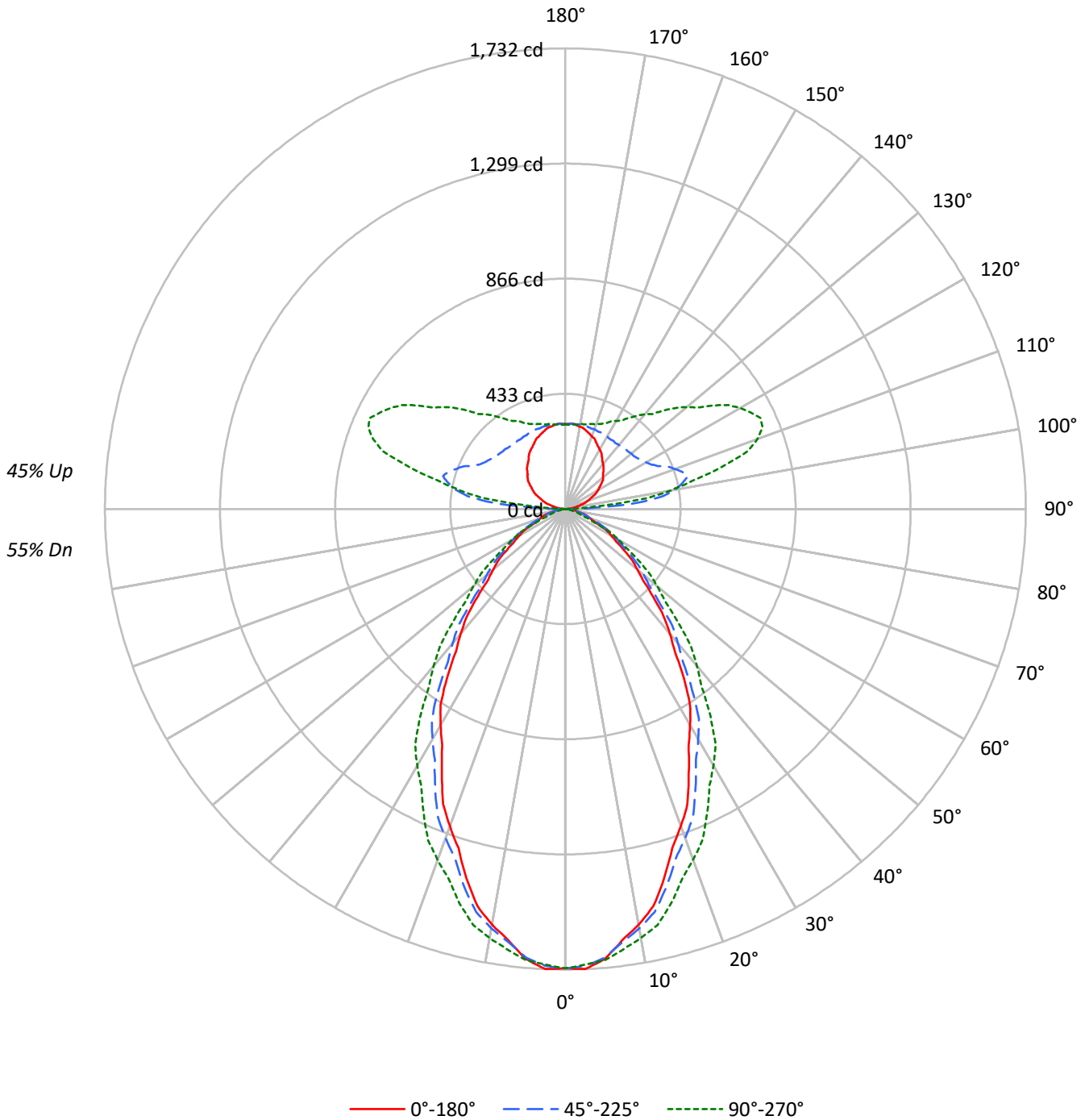
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4578.4 lumens
Efficiency: N/A
Efficacy: 96.2 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: 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

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20				
RC	80					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	55		
1	100	96	93	90	93	90	87	84	77	75	73	66	65	63	56	55	54	49		
2	92	86	80	75	86	80	75	71	69	66	63	60	57	55	51	49	47	43		
3	85	76	70	64	79	72	66	61	62	58	54	54	51	48	46	44	42	38		
4	79	69	61	56	73	64	58	53	56	52	48	49	45	42	42	39	37	34		
5	73	62	54	49	68	58	52	47	51	46	42	45	41	38	39	36	33	30		
6	67	56	49	43	63	53	46	41	47	41	38	41	37	34	36	33	30	27		
7	63	51	44	39	58	48	42	37	43	38	34	38	34	31	33	30	27	25		
8	59	47	40	35	55	44	38	33	40	34	30	35	31	28	31	27	25	23		
9	55	43	36	31	51	41	35	30	37	31	28	32	28	25	29	25	23	21		
10	51	40	33	29	48	38	32	27	34	29	25	30	26	23	27	24	21	19		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15936	15936	15936
5°	15738	15681	15773
10°	14869	15004	15351
15°	13726	14045	14674
20°	12464	12934	13789
25°	11180	11789	12847
30°	9996	10650	11870
35°	8741	9373	10713
40°	7358	7942	9275
45°	6072	6596	7744
50°	5070	5526	6452
55°	4303	4742	5327
60°	3678	4111	4251
65°	2930	3458	2746
70°	2598	2698	1678
75°	2406	2189	1027
80°	2216	2014	887
85°	2001	1842	720



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.4	3.5
10°-20°	412.1	9.0
20°-30°	533.8	11.7
30°-40°	522.7	11.4
40°-50°	400.1	8.7
50°-60°	266.6	5.8
60°-70°	145.5	3.2
70°-80°	60.6	1.3
80°-90°	17.2	0.4
90°-100°	164.1	3.6
100°-110°	396.6	8.7
110°-120°	423.1	9.2
120°-130°	342.6	7.5
130°-140°	265.3	5.8
140°-150°	202.4	4.4
150°-160°	146.5	3.2
160°-170°	90.2	2.0
170°-180°	30.6	0.7
0°-30°	1104.3	24.1
0°-40°	1627.0	35.5
0°-60°	2293.7	50.1
0°-90°	2517.0	55.0
90°-120°	983.8	21.5
90°-150°	1794.1	39.2
90°-180°	2061.0	45.0
0°-180°	4578.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1727	1727	1727	1727	1727	
5°	1699	1682	1693	1697	1703	158
15°	1437	1432	1470	1510	1536	401
25°	1098	1101	1158	1209	1262	505
35°	776	780	832	888	951	482
45°	465	474	506	544	594	363
55°	268	279	295	306	331	243
65°	134	145	158	138	126	139
75°	68	68	61	42	29	72
85°	19	19	17	11	7	21
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	

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CATALOG NUMBER: SQ4-WB-050U-075D-93050-1D-UNV-STD-W-4 (3500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1727.3	1727.3	1727.3	1727.3	1727.3
2.5°	1731.6	1716.1	1720.0	1719.9	1715.2
5°	1699.3	1682.2	1693.2	1697.1	1703.1
7.5°	1636.2	1623.3	1643.3	1658.2	1670.2
10°	1587.1	1576.0	1601.5	1623.1	1638.6
12.5°	1530.1	1520.8	1552.4	1581.3	1601.7
15°	1437.0	1431.8	1470.4	1510.4	1536.3
17.5°	1337.4	1334.9	1379.1	1425.8	1459.0
20°	1269.5	1268.8	1317.3	1365.9	1404.4
22.5°	1201.0	1202.6	1253.6	1304.2	1348.1
25°	1098.2	1101.2	1158.1	1208.6	1262.0
27.5°	1003.2	1004.5	1063.4	1116.7	1173.6
30°	938.3	942.0	999.7	1054.9	1114.2
32.5°	873.4	877.7	934.2	991.2	1051.7
35°	776.1	779.8	832.2	888.2	951.2
37.5°	675.8	680.8	727.3	780.3	842.2
40°	610.9	618.3	659.4	709.3	770.1
42.5°	548.4	557.6	595.7	643.1	697.9
45°	465.4	474.3	505.5	543.8	593.5
47.5°	393.8	404.0	428.1	461.0	503.4
50°	353.2	362.8	385.0	409.4	449.5
52.5°	317.4	327.1	346.8	365.6	399.7
55°	267.5	278.7	294.8	306.0	331.2
57.5°	226.6	237.3	250.1	255.2	270.4
60°	199.3	211.2	222.8	222.3	230.4
62.5°	174.5	184.6	196.2	188.1	188.6
65°	134.2	145.3	158.4	138.4	125.8
67.5°	108.4	110.8	124.3	96.5	81.6
70°	96.3	96.3	100.0	74.7	62.2
72.5°	84.7	84.7	81.2	60.8	47.6
75°	67.5	67.5	61.4	42.1	28.8
77.5°	52.0	51.4	47.0	31.4	20.9
80°	41.7	41.7	37.9	24.8	16.7
82.5°	32.6	32.6	29.4	19.4	12.4
85°	18.9	18.9	17.4	11.3	6.8
87.5°	6.7	6.7	6.1	3.6	3.0
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



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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)