

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: P521923

Luminaire Tested: **SQ4-WB-100U-050D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521923
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-100U-050D-93050-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

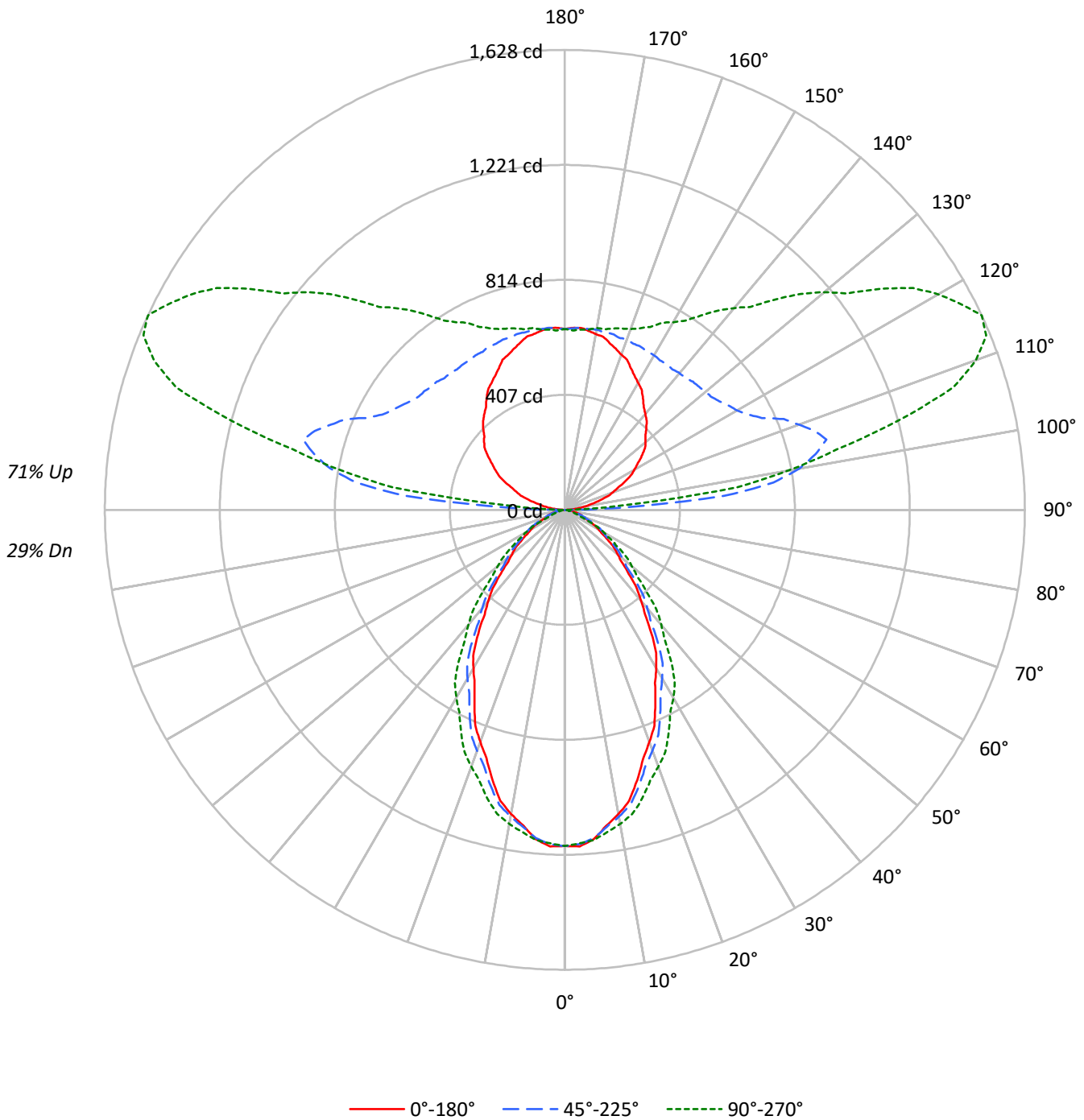
Lumens per Lamp: N/A
Luminaire Lumens: 5878.5 lumens
Efficiency: N/A
Efficacy: 110.5 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 53.2
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	0
RCR																		
0	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	29
1	94	90	86	83	84	81	78	75	64	62	60	48	47	46	34	33	33	26
2	86	79	74	69	77	71	67	63	57	54	51	43	41	40	31	30	29	23
3	79	70	64	58	71	63	58	53	51	47	44	39	36	34	28	26	25	20
4	72	63	55	50	65	57	51	46	45	41	38	35	32	30	25	24	22	18
5	67	56	49	43	60	51	44	40	41	36	33	32	29	26	23	21	20	16
6	62	50	43	38	55	46	39	35	37	32	29	29	26	23	21	19	18	15
7	57	46	38	33	51	42	35	31	34	29	26	27	23	21	20	18	16	13
8	53	42	34	29	48	38	32	27	31	26	23	24	21	19	18	16	15	12
9	49	38	31	26	44	35	29	24	28	24	21	23	19	17	17	15	13	11
10	46	35	28	24	42	32	26	22	26	22	19	21	18	16	16	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10979	10979	10979
5°	10841	10803	10866
10°	10244	10336	10576
15°	9456	9676	10109
20°	8587	8910	9499
25°	7702	8122	8850
30°	6886	7337	8178
35°	6022	6457	7381
40°	5068	5472	6389
45°	4183	4545	5334
50°	3492	3807	4444
55°	2965	3267	3671
60°	2534	2832	2928
65°	2017	2382	1893
70°	1788	1859	1155
75°	1658	1508	706
80°	1525	1387	611
85°	1387	1270	498



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.1	1.9
10°-20°	283.9	4.8
20°-30°	367.7	6.3
30°-40°	360.1	6.1
40°-50°	275.6	4.7
50°-60°	183.7	3.1
60°-70°	100.2	1.7
70°-80°	41.8	0.7
80°-90°	11.8	0.2
90°-100°	330.0	5.6
100°-110°	797.5	13.6
110°-120°	850.5	14.5
120°-130°	688.9	11.7
130°-140°	533.4	9.1
140°-150°	406.9	6.9
150°-160°	294.5	5.0
160°-170°	181.4	3.1
170°-180°	61.4	1.0
0°-30°	760.8	12.9
0°-40°	1120.9	19.1
0°-60°	1580.2	26.9
0°-90°	1734.0	29.5
90°-120°	1978.0	33.6
90°-150°	3607.1	61.4
90°-180°	4144.0	70.5
0°-180°	5878.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1190	1190	1190	1190	1190	
5°	1171	1159	1166	1169	1173	109
15°	990	986	1013	1040	1058	276
25°	757	759	798	833	869	348
35°	535	537	573	612	655	332
45°	321	327	348	375	409	250
55°	184	192	203	211	228	167
65°	92	100	109	95	87	96
75°	46	46	42	29	20	50
85°	13	13	12	8	5	14
90°	0	0	0	0	0	2
95°	32	165	565	368	258	37
105°	127	220	958	1240	1224	135
115°	233	298	770	1460	1628	231
125°	332	382	668	1161	1364	296
135°	408	456	641	916	1053	315
145°	483	518	629	778	839	302
155°	553	577	637	689	714	255
165°	611	621	645	655	664	173
175°	647	644	647	641	640	61
180°	640	640	640	640	640	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1190.0	1190.0	1190.0	1190.0	1190.0
2.5°	1192.9	1182.3	1185.0	1184.9	1181.6
5°	1170.6	1158.9	1166.5	1169.2	1173.3
7.5°	1127.2	1118.3	1132.1	1142.3	1150.6
10°	1093.4	1085.7	1103.3	1118.2	1128.9
12.5°	1054.1	1047.7	1069.5	1089.4	1103.4
15°	990.0	986.4	1013.0	1040.5	1058.4
17.5°	921.4	919.6	950.1	982.3	1005.1
20°	874.6	874.1	907.5	941.0	967.5
22.5°	827.4	828.5	863.6	898.5	928.7
25°	756.6	758.6	797.8	832.6	869.4
27.5°	691.1	692.0	732.6	769.3	808.5
30°	646.4	649.0	688.7	726.7	767.6
32.5°	601.7	604.7	643.6	682.9	724.5
35°	534.7	537.2	573.3	611.9	655.3
37.5°	465.5	469.0	501.0	537.5	580.2
40°	420.8	426.0	454.3	488.6	530.5
42.5°	377.8	384.2	410.4	443.0	480.8
45°	320.6	326.7	348.3	374.6	408.8
47.5°	271.3	278.4	294.9	317.6	346.8
50°	243.3	250.0	265.2	282.1	309.6
52.5°	218.7	225.3	238.9	251.9	275.4
55°	184.3	192.0	203.1	210.8	228.2
57.5°	156.1	163.5	172.3	175.8	186.3
60°	137.3	145.5	153.5	153.1	158.7
62.5°	120.2	127.1	135.1	129.6	129.9
65°	92.4	100.1	109.1	95.4	86.7
67.5°	74.7	76.3	85.6	66.5	56.2
70°	66.3	66.3	68.9	51.5	42.8
72.5°	58.4	58.4	56.0	41.9	32.8
75°	46.5	46.5	42.3	29.0	19.8
77.5°	35.8	35.4	32.4	21.7	14.4
80°	28.7	28.7	26.1	17.1	11.5
82.5°	22.5	22.5	20.3	13.4	8.6
85°	13.1	13.1	12.0	7.8	4.7
87.5°	4.6	4.6	4.2	2.5	2.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.8	89.3	210.4	102.3	69.4
95°	32.5	165.1	565.3	367.6	257.6
97.5°	57.8	182.9	744.6	717.3	615.8
100°	77.3	193.9	843.3	890.2	806.6
102.5°	95.7	203.9	908.3	1034.1	984.5
105°	127.4	220.2	958.5	1240.1	1224.2
107.5°	158.6	239.5	928.9	1405.4	1442.7
110°	180.3	255.9	881.2	1476.6	1546.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	202.0	272.3	838.9	1494.0	1614.1
115°	233.2	298.1	770.0	1459.9	1628.2
117.5°	264.1	325.3	729.6	1381.3	1578.6
120°	284.7	341.7	703.6	1319.7	1526.5
122.5°	306.4	359.1	687.3	1256.8	1460.4
125°	332.1	382.5	668.4	1161.0	1363.8
127.5°	357.6	405.1	655.1	1079.9	1258.1
130°	372.8	419.2	650.7	1023.5	1198.4
132.5°	386.9	435.4	644.2	982.7	1131.2
135°	408.1	455.8	641.2	915.5	1053.4
137.5°	428.1	476.1	631.8	870.0	973.9
140°	443.3	487.1	631.8	837.3	932.7
142.5°	458.5	502.2	626.3	808.7	889.3
145°	482.6	518.4	629.0	778.2	839.2
147.5°	505.1	539.9	627.4	743.0	793.4
150°	519.2	549.7	631.8	727.6	767.3
152.5°	534.4	563.8	630.7	711.2	746.7
155°	553.1	577.0	637.2	689.3	714.5
157.5°	575.6	596.0	635.8	680.9	695.7
160°	584.3	601.5	641.2	670.0	680.6
162.5°	598.4	613.5	639.1	666.6	673.0
165°	611.4	620.7	645.3	655.0	664.3
167.5°	627.4	633.5	643.7	654.3	654.5
170°	631.8	635.7	648.0	646.8	653.5
172.5°	639.4	642.3	644.8	647.7	643.7
175°	646.7	644.0	646.7	641.2	639.9
177.5°	645.3	645.3	643.1	640.9	635.6
180°	639.9	639.9	639.9	639.9	639.9

(END OF REPORT)