

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: P521920

Luminaire Tested: **SQ4-WB-100U-050D-93050-1D-UNV-STD-W-4 (3000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521920
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 (3000K)
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 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

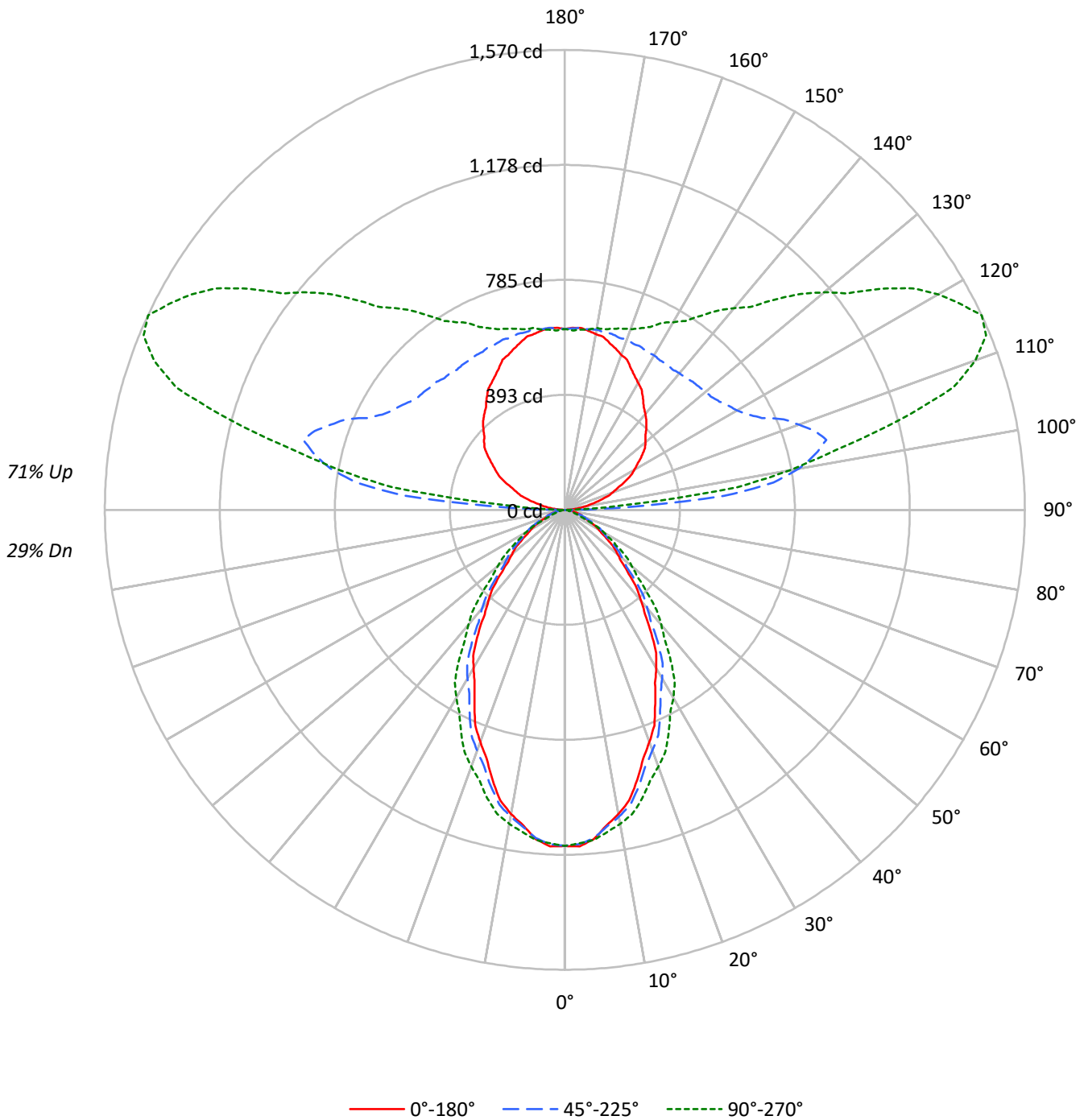
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5667.2 lumens
Efficiency: N/A
Efficacy: 106.5 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°	10584	10584	10584
5°	10452	10415	10476
10°	9875	9964	10196
15°	9116	9328	9747
20°	8279	8590	9159
25°	7425	7830	8532
30°	6639	7074	7884
35°	5806	6225	7115
40°	4886	5274	6159
45°	4033	4381	5142
50°	3367	3670	4284
55°	2858	3150	3539
60°	2443	2731	2823
65°	1945	2297	1825
70°	1724	1791	1114
75°	1597	1454	681
80°	1472	1339	590
85°	1334	1228	476



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.2	1.9
10°-20°	273.7	4.8
20°-30°	354.5	6.3
30°-40°	347.2	6.1
40°-50°	265.7	4.7
50°-60°	177.1	3.1
60°-70°	96.6	1.7
70°-80°	40.3	0.7
80°-90°	11.4	0.2
90°-100°	318.1	5.6
100°-110°	768.8	13.6
110°-120°	820.0	14.5
120°-130°	664.1	11.7
130°-140°	514.2	9.1
140°-150°	392.3	6.9
150°-160°	283.9	5.0
160°-170°	174.9	3.1
170°-180°	59.2	1.0
0°-30°	733.4	12.9
0°-40°	1080.6	19.1
0°-60°	1523.4	26.9
0°-90°	1671.7	29.5
90°-120°	1906.9	33.6
90°-150°	3477.5	61.4
90°-180°	3996.0	70.5
0°-180°	5667.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1147	1147	1147	1147	1147	
5°	1129	1117	1125	1127	1131	105
15°	954	951	977	1003	1020	267
25°	729	731	769	803	838	335
35°	516	518	553	590	632	320
45°	309	315	336	361	394	241
55°	178	185	196	203	220	161
65°	89	96	105	92	84	93
75°	45	45	41	28	19	48
85°	13	13	12	8	4	14
90°	0	0	0	0	0	2
95°	31	159	545	354	248	35
105°	123	212	924	1196	1180	130
115°	225	287	742	1407	1570	222
125°	320	369	644	1119	1315	286
135°	393	439	618	883	1016	304
145°	465	500	606	750	809	291
155°	533	556	614	664	689	246
165°	590	598	622	632	640	166
175°	623	621	623	618	617	59
180°	617	617	617	617	617	

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CATALOG NUMBER: SQ4-WB-100U-050D-93050-1D-UNV-STD-W-4 (3000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1147.2	1147.2	1147.2	1147.2	1147.2
2.5°	1150.0	1139.8	1142.4	1142.3	1139.2
5°	1128.6	1117.3	1124.6	1127.2	1131.1
7.5°	1086.7	1078.1	1091.4	1101.3	1109.3
10°	1054.1	1046.7	1063.6	1078.0	1088.3
12.5°	1016.2	1010.0	1031.0	1050.3	1063.7
15°	954.4	951.0	976.6	1003.1	1020.4
17.5°	888.3	886.6	916.0	947.0	969.0
20°	843.2	842.7	874.9	907.2	932.8
22.5°	797.7	798.7	832.6	866.2	895.3
25°	729.4	731.4	769.2	802.7	838.1
27.5°	666.3	667.2	706.2	741.6	779.4
30°	623.2	625.6	664.0	700.6	740.0
32.5°	580.1	583.0	620.5	658.3	698.5
35°	515.5	517.9	552.7	589.9	631.7
37.5°	448.8	452.2	483.0	518.2	559.4
40°	405.7	410.6	437.9	471.1	511.4
42.5°	364.2	370.4	395.7	427.1	463.5
45°	309.1	315.0	335.8	361.2	394.1
47.5°	261.6	268.3	284.3	306.2	334.3
50°	234.6	241.0	255.7	271.9	298.5
52.5°	210.8	217.2	230.3	242.8	265.5
55°	177.7	185.1	195.8	203.2	220.0
57.5°	150.5	157.6	166.1	169.5	179.6
60°	132.4	140.3	148.0	147.6	153.0
62.5°	115.9	122.6	130.3	124.9	125.2
65°	89.1	96.5	105.2	91.9	83.6
67.5°	72.0	73.6	82.6	64.1	54.2
70°	63.9	63.9	66.4	49.6	41.3
72.5°	56.3	56.3	54.0	40.4	31.6
75°	44.8	44.8	40.8	28.0	19.1
77.5°	34.5	34.1	31.2	20.9	13.9
80°	27.7	27.7	25.2	16.5	11.1
82.5°	21.6	21.6	19.5	12.9	8.3
85°	12.6	12.6	11.6	7.5	4.5
87.5°	4.4	4.4	4.0	2.4	2.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.5	86.1	202.8	98.6	66.9
95°	31.4	159.2	545.0	354.4	248.3
97.5°	55.7	176.3	717.8	691.5	593.6
100°	74.5	187.0	812.9	858.2	777.7
102.5°	92.3	196.6	875.7	996.9	949.1
105°	122.9	212.3	924.0	1195.6	1180.2
107.5°	152.9	230.9	895.6	1354.9	1390.9
110°	173.8	246.7	849.5	1423.5	1491.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	194.7	262.5	808.8	1440.3	1556.1
115°	224.8	287.4	742.4	1407.4	1569.7
117.5°	254.6	313.6	703.4	1331.7	1521.9
120°	274.5	329.4	678.3	1272.3	1471.7
122.5°	295.4	346.2	662.6	1211.6	1407.9
125°	320.2	368.8	644.3	1119.3	1314.8
127.5°	344.8	390.5	631.5	1041.1	1212.9
130°	359.4	404.2	627.4	986.7	1155.4
132.5°	373.0	419.8	621.1	947.4	1090.6
135°	393.4	439.4	618.2	882.6	1015.5
137.5°	412.7	459.0	609.1	838.8	938.9
140°	427.4	469.6	609.1	807.2	899.2
142.5°	442.0	484.2	603.8	779.7	857.4
145°	465.3	499.8	606.4	750.2	809.0
147.5°	487.0	520.5	604.9	716.3	764.9
150°	500.6	530.0	609.1	701.4	739.8
152.5°	515.2	543.6	608.0	685.6	719.9
155°	533.3	556.3	614.3	664.5	688.8
157.5°	554.9	574.6	613.0	656.4	670.7
160°	563.3	579.9	618.2	645.9	656.1
162.5°	576.9	591.5	616.1	642.7	648.8
165°	589.5	598.4	622.1	631.5	640.4
167.5°	604.9	610.8	620.6	630.8	631.0
170°	609.1	612.9	624.7	623.6	630.0
172.5°	616.4	619.2	621.6	624.4	620.6
175°	623.4	620.9	623.4	618.2	616.9
177.5°	622.1	622.1	620.0	617.8	612.7
180°	616.9	616.9	616.9	616.9	616.9

(END OF REPORT)