

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P519138

Luminaire Tested: **SQ4-WB-050U-100D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519138
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-050U-100D-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

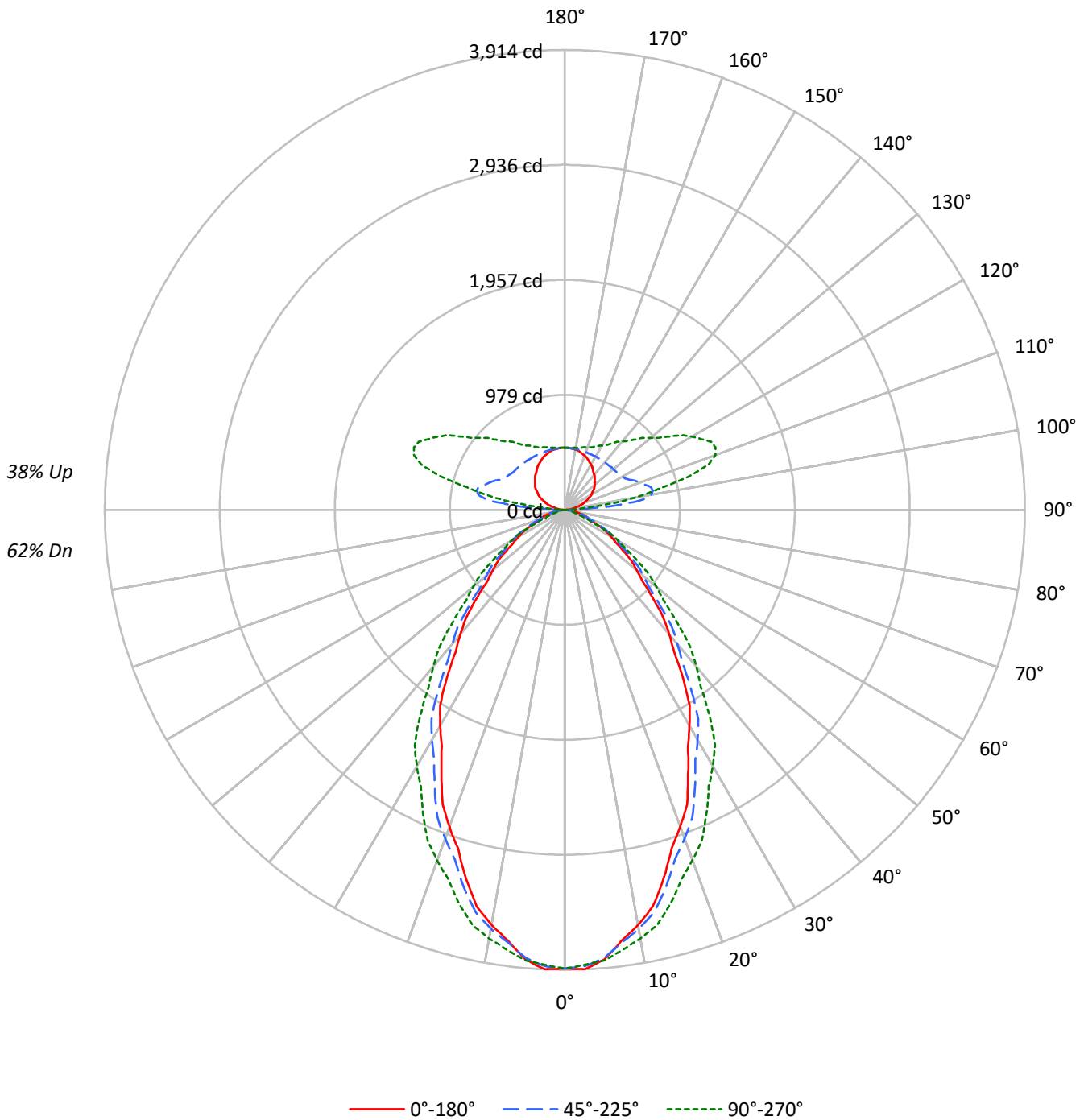
Lumens per Lamp: N/A
Luminaire Lumens: 9134.9 lumens
Efficiency: N/A
Efficacy: 95.8 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 95.4
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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	62
1	102	98	95	92	95	92	89	87	81	79	77	71	70	68	62	61	60	55
2	94	87	82	77	88	82	78	73	73	69	66	64	62	59	56	54	53	49
3	87	78	72	66	81	74	68	63	66	61	57	58	55	52	51	49	47	43
4	80	70	63	58	75	67	60	55	60	54	50	53	49	46	47	44	41	38
5	74	64	56	51	70	60	54	49	54	49	45	48	44	41	43	40	37	34
6	69	58	50	45	65	55	48	43	50	44	40	44	40	37	40	36	34	31
7	64	53	45	40	61	50	44	39	45	40	36	41	37	33	37	33	31	28
8	60	49	41	36	57	46	40	35	42	36	33	38	33	30	34	31	28	26
9	56	45	38	33	53	43	36	32	39	33	30	35	31	28	32	28	26	24
10	53	41	35	30	50	40	33	29	36	31	27	33	29	25	30	26	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18010	18010	18010
5°	17785	17722	17825
10°	16803	16956	17349
15°	15512	15872	16584
20°	14086	14616	15583
25°	12634	13324	14518
30°	11297	12036	13414
35°	9879	10592	12107
40°	8315	8975	10481
45°	6862	7454	8751
50°	5729	6245	7290
55°	4863	5360	6021
60°	4156	4646	4805
65°	3310	3908	3104
70°	2935	3050	1895
75°	2718	2474	1160
80°	2502	2277	1002
85°	2265	2085	815



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	358.1	3.9
10°-20°	931.4	10.2
20°-30°	1206.5	13.2
30°-40°	1181.4	12.9
40°-50°	904.3	9.9
50°-60°	602.6	6.6
60°-70°	328.8	3.6
70°-80°	137.0	1.5
80°-90°	40.8	0.4
90°-100°	253.2	2.8
100°-110°	687.8	7.5
110°-120°	707.2	7.7
120°-130°	565.4	6.2
130°-140°	444.3	4.9
140°-150°	340.7	3.7
150°-160°	245.0	2.7
160°-170°	149.8	1.6
170°-180°	50.5	0.6
0°-30°	2496.0	27.3
0°-40°	3677.4	40.3
0°-60°	5184.3	56.8
0°-90°	5691.0	62.3
90°-120°	1648.3	18.0
90°-150°	2998.6	32.8
90°-180°	3444.0	37.7
0°-180°	9134.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3904	3904	3904	3904	3904	
5°	3841	3802	3827	3836	3849	357
15°	3248	3236	3323	3414	3472	907
25°	2482	2489	2618	2732	2852	1142
35°	1754	1763	1881	2008	2150	1091
45°	1052	1072	1143	1229	1341	820
55°	605	630	666	692	749	548
65°	303	328	358	313	284	315
75°	152	152	139	95	65	163
85°	43	43	39	26	15	47
90°	2	7	12	15	15	5
95°	37	138	441	192	129	40
105°	122	190	756	1152	1084	130
115°	217	264	606	1205	1372	214
125°	298	340	548	923	1089	266
135°	360	399	532	752	848	278
145°	416	445	526	639	687	261
155°	470	486	522	574	590	217
165°	509	515	524	546	548	144
175°	528	529	526	532	531	50
180°	528	528	528	528	528	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3904.1	3904.1	3904.1	3904.1	3904.1
2.5°	3913.7	3878.8	3887.6	3887.4	3876.7
5°	3840.7	3802.2	3827.0	3835.9	3849.3
7.5°	3698.2	3669.0	3714.3	3747.8	3774.9
10°	3587.2	3562.0	3619.7	3668.5	3703.6
12.5°	3458.3	3437.2	3508.7	3574.2	3620.1
15°	3248.0	3236.2	3323.3	3413.8	3472.4
17.5°	3022.9	3017.2	3117.1	3222.6	3297.7
20°	2869.4	2867.7	2977.3	3087.2	3174.3
22.5°	2714.5	2718.2	2833.4	2947.7	3046.9
25°	2482.2	2488.9	2617.6	2731.7	2852.3
27.5°	2267.4	2270.4	2403.4	2523.9	2652.5
30°	2120.8	2129.2	2259.5	2384.2	2518.2
32.5°	1974.1	1983.9	2111.5	2240.4	2377.1
35°	1754.2	1762.6	1880.9	2007.5	2149.9
37.5°	1527.4	1538.8	1643.9	1763.5	1903.6
40°	1380.7	1397.5	1490.4	1603.1	1740.5
42.5°	1239.6	1260.3	1346.5	1453.4	1577.4
45°	1051.8	1071.9	1142.6	1229.1	1341.3
47.5°	890.1	913.2	967.5	1042.0	1137.8
50°	798.3	820.1	870.2	925.4	1015.8
52.5°	717.4	739.2	783.9	826.4	903.5
55°	604.7	629.8	666.4	691.7	748.6
57.5°	512.2	536.3	565.3	576.7	611.2
60°	450.5	477.3	503.6	502.3	520.8
62.5°	394.3	417.1	443.3	425.2	426.2
65°	303.2	328.3	358.0	312.8	284.4
67.5°	245.0	250.3	280.9	218.2	184.3
70°	217.6	217.6	226.1	168.9	140.5
72.5°	191.5	191.5	183.6	137.4	107.6
75°	152.5	152.5	138.8	95.2	65.1
77.5°	117.5	116.2	106.2	71.1	47.3
80°	94.2	94.2	85.7	56.1	37.7
82.5°	73.7	73.7	66.5	43.8	28.1
85°	42.8	42.8	39.4	25.5	15.4
87.5°	15.4	16.4	16.1	11.2	9.9
90°	1.7	6.7	11.9	15.3	15.3
92.5°	15.3	69.3	120.4	51.7	43.8
95°	37.3	138.5	441.0	191.9	128.9
97.5°	61.7	152.9	676.0	525.9	369.4
100°	78.0	162.6	747.9	758.2	612.3
102.5°	94.3	172.2	766.9	937.7	809.0
105°	122.1	190.1	756.4	1151.7	1083.8
107.5°	150.9	211.0	712.7	1262.3	1281.2
110°	171.3	226.0	680.1	1284.0	1365.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	188.9	241.0	647.5	1266.0	1388.4
115°	217.1	263.5	605.5	1204.6	1372.1
117.5°	243.5	288.0	578.7	1117.6	1306.3
120°	261.2	304.3	566.5	1059.2	1246.6
122.5°	276.1	319.2	558.3	1000.7	1181.4
125°	298.5	340.0	547.8	923.0	1088.8
127.5°	318.5	359.6	542.0	864.1	1006.4
130°	330.7	370.5	539.3	827.2	954.9
132.5°	342.9	382.7	536.6	795.6	908.7
135°	359.6	399.4	532.5	751.8	848.0
137.5°	377.5	413.7	530.5	713.1	794.1
140°	388.4	423.2	529.2	688.5	761.5
142.5°	399.2	431.4	527.8	669.3	730.3
145°	415.5	445.4	525.8	638.8	686.9
147.5°	433.8	459.4	524.1	614.8	652.6
150°	446.1	467.6	524.1	601.1	630.9
152.5°	455.6	474.5	522.7	588.7	613.3
155°	469.8	486.4	522.4	573.6	590.2
157.5°	483.7	496.6	522.4	563.4	576.0
160°	491.8	503.5	522.4	556.5	566.5
162.5°	500.0	508.9	523.7	551.0	558.3
165°	508.8	515.4	524.1	546.2	547.8
167.5°	518.0	521.3	525.8	540.4	541.7
170°	520.7	524.0	525.8	537.6	537.6
172.5°	523.4	525.4	525.8	534.9	534.9
175°	527.5	529.1	525.8	532.5	530.9
177.5°	528.8	528.8	524.7	530.1	527.5
180°	527.5	527.5	527.5	527.5	527.5

(END OF REPORT)