

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: P519076

Luminaire Tested: **SQ4-WB-050U-050D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519076
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-050D-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

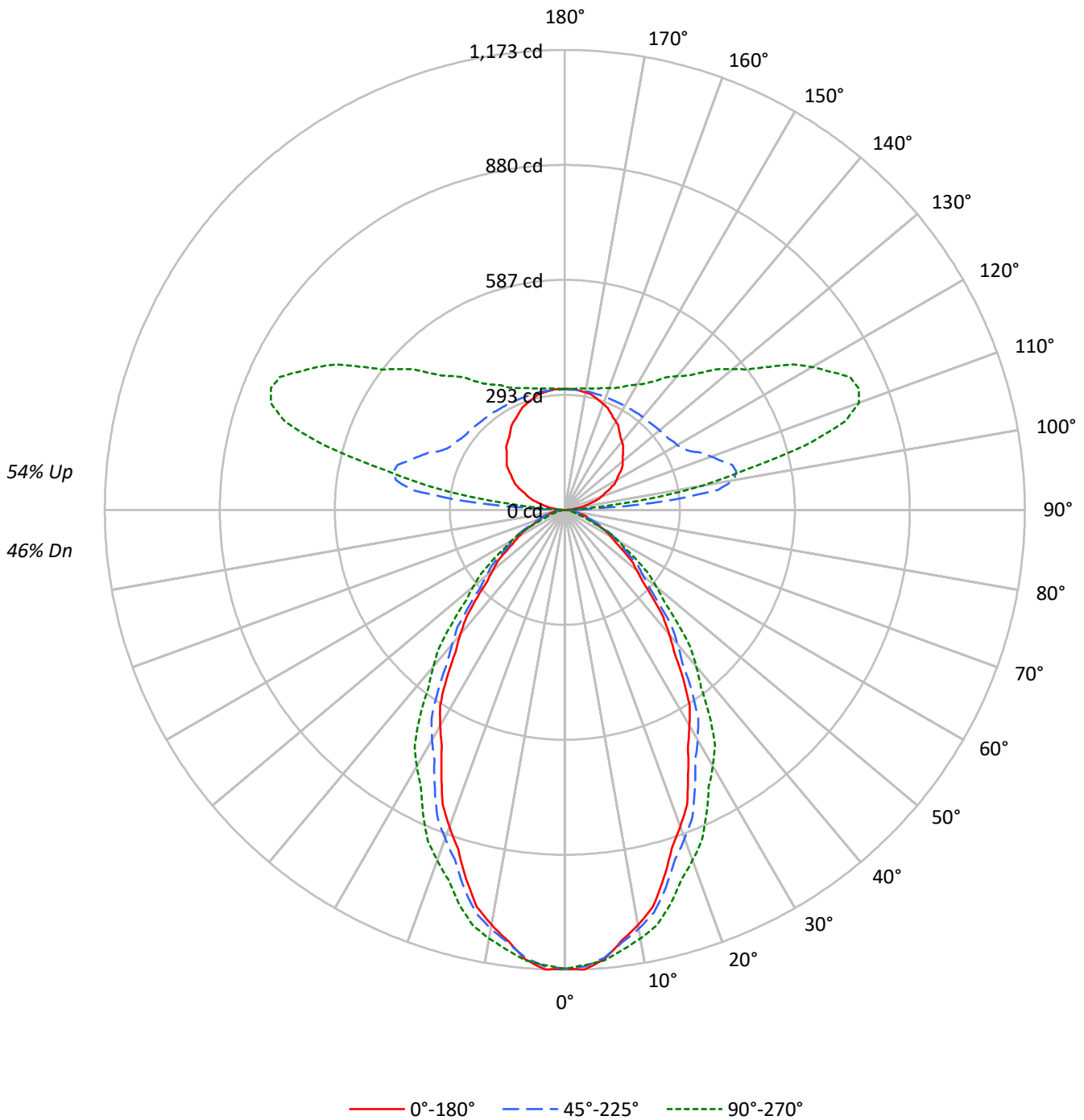
Lumens per Lamp: N/A
Luminaire Lumens: 3718.4 lumens
Efficiency: N/A
Efficacy: 130.5 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 28.5
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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46
1	98	94	91	87	90	87	84	81	73	70	69	60	58	57	48	47	46	41
2	90	83	78	73	83	77	72	68	65	61	59	54	51	49	43	42	41	36
3	83	74	68	62	76	69	63	58	58	54	51	49	46	43	40	38	36	32
4	76	66	59	54	70	62	55	50	52	48	44	44	41	38	36	34	32	28
5	71	60	52	47	65	56	49	44	48	43	39	40	36	34	33	31	29	25
6	65	54	47	41	60	50	44	39	43	38	34	37	33	30	30	28	26	23
7	61	49	42	37	56	46	39	35	40	35	31	34	30	27	28	25	23	21
8	57	45	38	33	52	42	36	31	36	31	28	31	27	25	26	23	21	19
9	53	41	34	30	49	39	32	28	34	29	25	29	25	22	24	22	20	17
10	50	38	31	27	46	36	30	26	31	26	23	27	23	21	23	20	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10797	10797	10797
5°	10663	10625	10686
10°	10074	10165	10401
15°	9300	9515	9942
20°	8445	8763	9342
25°	7575	7987	8704
30°	6772	7216	8041
35°	5922	6350	7258
40°	4985	5380	6283
45°	4114	4469	5247
50°	3435	3745	4371
55°	2916	3214	3610
60°	2493	2786	2880
65°	1984	2342	1860
70°	1759	1829	1136
75°	1629	1483	695
80°	1498	1365	600
85°	1355	1249	487



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.3	2.9
10°-20°	279.2	7.5
20°-30°	361.6	9.7
30°-40°	354.1	9.5
40°-50°	271.1	7.3
50°-60°	180.6	4.9
60°-70°	98.6	2.7
70°-80°	41.1	1.1
80°-90°	12.8	0.3
90°-100°	147.9	4.0
100°-110°	401.8	10.8
110°-120°	413.2	11.1
120°-130°	330.3	8.9
130°-140°	259.5	7.0
140°-150°	199.0	5.4
150°-160°	143.1	3.8
160°-170°	87.5	2.4
170°-180°	29.5	0.8
0°-30°	748.2	20.1
0°-40°	1102.3	29.6
0°-60°	1554.0	41.8
0°-90°	1706.4	45.9
90°-120°	962.9	25.9
90°-150°	1751.8	47.1
90°-180°	2012.0	54.1
0°-180°	3718.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1170	1170	1170	1170	1170	
5°	1151	1140	1147	1150	1154	107
15°	974	970	996	1023	1041	272
25°	744	746	785	819	855	342
35°	526	528	564	602	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	29	20	49
85°	13	13	12	8	5	14
90°	1	4	7	9	9	2
95°	22	81	258	112	75	23
105°	71	111	442	673	633	76
115°	127	154	354	704	802	125
125°	174	199	320	539	636	155
135°	210	233	311	439	495	162
145°	243	260	307	373	401	152
155°	274	284	305	335	345	127
165°	297	301	306	319	320	84
175°	308	309	307	311	310	29
180°	308	308	308	308	308	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1170.3	1170.3	1170.3	1170.3	1170.3
2.5°	1173.1	1162.7	1165.3	1165.3	1162.0
5°	1151.3	1139.7	1147.2	1149.8	1153.8
7.5°	1108.5	1099.8	1113.4	1123.4	1131.5
10°	1075.3	1067.7	1085.0	1099.6	1110.2
12.5°	1036.7	1030.3	1051.7	1071.4	1085.1
15°	973.6	970.1	996.2	1023.3	1040.9
17.5°	906.1	904.4	934.4	966.0	988.5
20°	860.1	859.6	892.5	925.4	951.5
22.5°	813.7	814.8	849.3	883.6	913.3
25°	744.1	746.1	784.6	818.8	855.0
27.5°	679.7	680.6	720.4	756.5	795.1
30°	635.7	638.2	677.3	714.7	754.8
32.5°	591.8	594.7	632.9	671.6	712.5
35°	525.8	528.3	563.8	601.8	644.4
37.5°	457.8	461.3	492.8	528.6	570.6
40°	413.9	418.9	446.7	480.5	521.7
42.5°	371.6	377.8	403.6	435.7	472.8
45°	315.3	321.3	342.5	368.4	402.1
47.5°	266.8	273.7	290.0	312.3	341.1
50°	239.3	245.8	260.9	277.4	304.5
52.5°	215.1	221.6	235.0	247.7	270.8
55°	181.3	188.8	199.8	207.3	224.4
57.5°	153.5	160.8	169.5	172.9	183.2
60°	135.1	143.1	151.0	150.6	156.1
62.5°	118.2	125.0	132.9	127.5	127.8
65°	90.9	98.4	107.3	93.8	85.2
67.5°	73.4	75.0	84.2	65.4	55.3
70°	65.2	65.2	67.8	50.6	42.1
72.5°	57.4	57.4	55.0	41.2	32.2
75°	45.7	45.7	41.6	28.6	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°	4.7	5.3	5.5	4.2	3.8
90°	1.0	3.9	6.9	8.9	8.9
92.5°	8.9	40.5	70.3	30.2	25.6
95°	21.8	80.9	257.6	112.1	75.3
97.5°	36.1	89.3	394.9	307.3	215.8
100°	45.6	95.0	437.0	442.9	357.7
102.5°	55.1	100.6	448.0	547.8	472.6
105°	71.3	111.1	441.9	672.9	633.1
107.5°	88.2	123.3	416.3	737.4	748.5
110°	100.1	132.0	397.3	750.1	797.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	110.4	140.8	378.3	739.6	811.1
115°	126.8	154.0	353.7	703.7	801.6
117.5°	142.3	168.2	338.1	652.9	763.1
120°	152.6	177.8	330.9	618.8	728.3
122.5°	161.3	186.5	326.2	584.6	690.2
125°	174.4	198.6	320.0	539.2	636.1
127.5°	186.1	210.1	316.7	504.8	588.0
130°	193.2	216.5	315.1	483.2	557.8
132.5°	200.3	223.6	313.5	464.8	530.9
135°	210.1	233.3	311.1	439.2	495.4
137.5°	220.6	241.7	309.9	416.6	463.9
140°	226.9	247.2	309.1	402.2	444.9
142.5°	233.2	252.0	308.3	391.0	426.6
145°	242.8	260.2	307.2	373.2	401.3
147.5°	253.5	268.4	306.2	359.2	381.3
150°	260.6	273.2	306.2	351.1	368.6
152.5°	266.1	277.2	305.4	343.9	358.3
155°	274.5	284.1	305.2	335.1	344.8
157.5°	282.6	290.1	305.2	329.1	336.5
160°	287.3	294.1	305.2	325.1	330.9
162.5°	292.1	297.3	306.0	321.9	326.2
165°	297.2	301.1	306.2	319.1	320.0
167.5°	302.6	304.5	307.2	315.7	316.5
170°	304.2	306.1	307.2	314.1	314.1
172.5°	305.8	306.9	307.2	312.5	312.5
175°	308.1	309.1	307.2	311.1	310.1
177.5°	308.9	308.9	306.6	309.7	308.1
180°	308.1	308.1	308.1	308.1	308.1

(END OF REPORT)