

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: P519124

Luminaire Tested: **SQ4-WB-050U-100D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519124
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-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

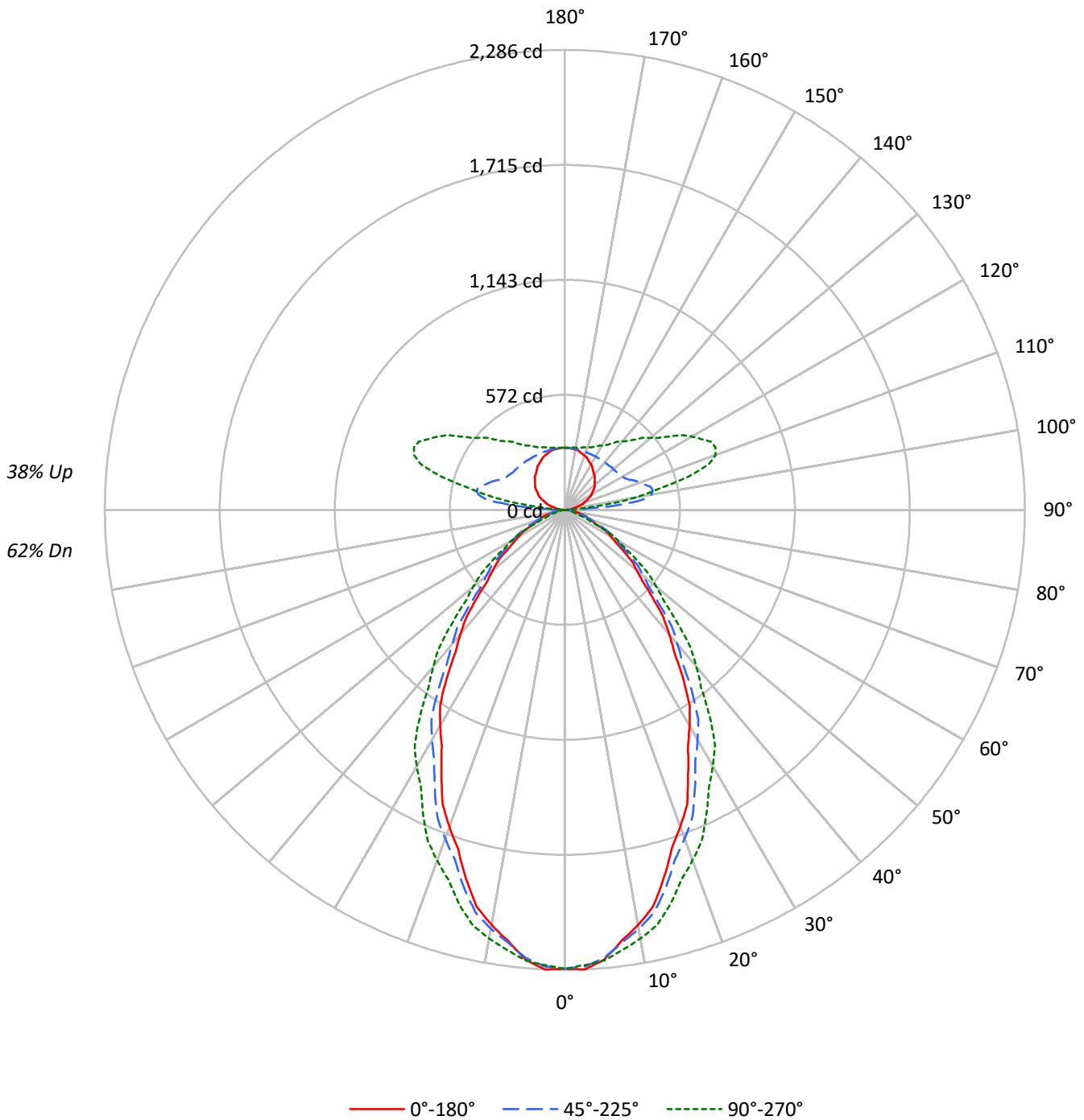
Lumens per Lamp: N/A
Luminaire Lumens: 5336.6 lumens
Efficiency: N/A
Efficacy: 118.3 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 45.1
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°	21043	21043	21043
5°	20780	20706	20826
10°	19633	19811	20271
15°	18124	18545	19377
20°	16458	17078	18207
25°	14762	15567	16963
30°	13200	14063	15672
35°	11542	12377	14146
40°	9715	10487	12246
45°	8018	8709	10224
50°	6694	7297	8519
55°	5683	6262	7034
60°	4857	5429	5613
65°	3866	4567	3626
70°	3429	3563	2215
75°	3176	2891	1355
80°	2922	2657	1169
85°	2646	2435	953



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.2	3.9
10°-20°	544.1	10.2
20°-30°	704.8	13.2
30°-40°	690.2	12.9
40°-50°	528.3	9.9
50°-60°	352.0	6.6
60°-70°	192.1	3.6
70°-80°	80.0	1.5
80°-90°	23.8	0.4
90°-100°	147.9	2.8
100°-110°	401.8	7.5
110°-120°	413.2	7.7
120°-130°	330.3	6.2
130°-140°	259.5	4.9
140°-150°	199.0	3.7
150°-160°	143.1	2.7
160°-170°	87.5	1.6
170°-180°	29.5	0.6
0°-30°	1458.2	27.3
0°-40°	2148.4	40.3
0°-60°	3028.7	56.8
0°-90°	3324.7	62.3
90°-120°	962.9	18.0
90°-150°	1751.8	32.8
90°-180°	2012.0	37.7
0°-180°	5336.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2281	2281	2281	2281	2281	
5°	2244	2221	2236	2241	2249	209
15°	1898	1891	1942	1994	2029	530
25°	1450	1454	1529	1596	1666	667
35°	1025	1030	1099	1173	1256	637
45°	614	626	668	718	784	479
55°	353	368	389	404	437	320
65°	177	192	209	183	166	184
75°	89	89	81	56	38	95
85°	25	25	23	15	9	27
90°	1	4	7	9	9	3
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°	2280.8	2280.8	2280.8	2280.8	2280.8
2.5°	2286.4	2266.0	2271.2	2271.0	2264.8
5°	2243.7	2221.2	2235.7	2240.9	2248.7
7.5°	2160.5	2143.5	2169.9	2189.5	2205.3
10°	2095.6	2080.9	2114.6	2143.1	2163.7
12.5°	2020.4	2008.0	2049.8	2088.0	2114.8
15°	1897.5	1890.6	1941.5	1994.3	2028.6
17.5°	1766.0	1762.6	1821.0	1882.7	1926.5
20°	1676.3	1675.3	1739.4	1803.6	1854.4
22.5°	1585.8	1588.0	1655.3	1722.1	1780.0
25°	1450.1	1454.0	1529.2	1595.8	1666.3
27.5°	1324.6	1326.4	1404.1	1474.5	1549.6
30°	1239.0	1243.9	1320.0	1392.9	1471.1
32.5°	1153.3	1159.0	1233.6	1308.8	1388.7
35°	1024.8	1029.7	1098.9	1172.8	1256.0
37.5°	892.3	898.9	960.3	1030.3	1112.1
40°	806.6	816.4	870.7	936.5	1016.8
42.5°	724.2	736.3	786.6	849.1	921.5
45°	614.5	626.2	667.5	718.0	783.6
47.5°	520.0	533.5	565.2	608.7	664.7
50°	466.4	479.1	508.4	540.6	593.5
52.5°	419.1	431.8	458.0	482.8	527.8
55°	353.3	368.0	389.3	404.1	437.3
57.5°	299.2	313.3	330.3	336.9	357.1
60°	263.2	278.9	294.2	293.5	304.2
62.5°	230.4	243.7	259.0	248.4	249.0
65°	177.1	191.8	209.2	182.8	166.1
67.5°	143.1	146.2	164.1	127.5	107.7
70°	127.1	127.1	132.1	98.7	82.1
72.5°	111.9	111.9	107.3	80.3	62.8
75°	89.1	89.1	81.1	55.6	38.0
77.5°	68.7	67.9	62.0	41.5	27.6
80°	55.0	55.0	50.0	32.8	22.0
82.5°	43.0	43.0	38.8	25.6	16.4
85°	25.0	25.0	23.0	14.9	9.0
87.5°	9.0	9.6	9.4	6.6	5.8
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)