

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: P519428

Luminaire Tested: **SQ4-WB-100U-125D-830-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519428
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-125D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

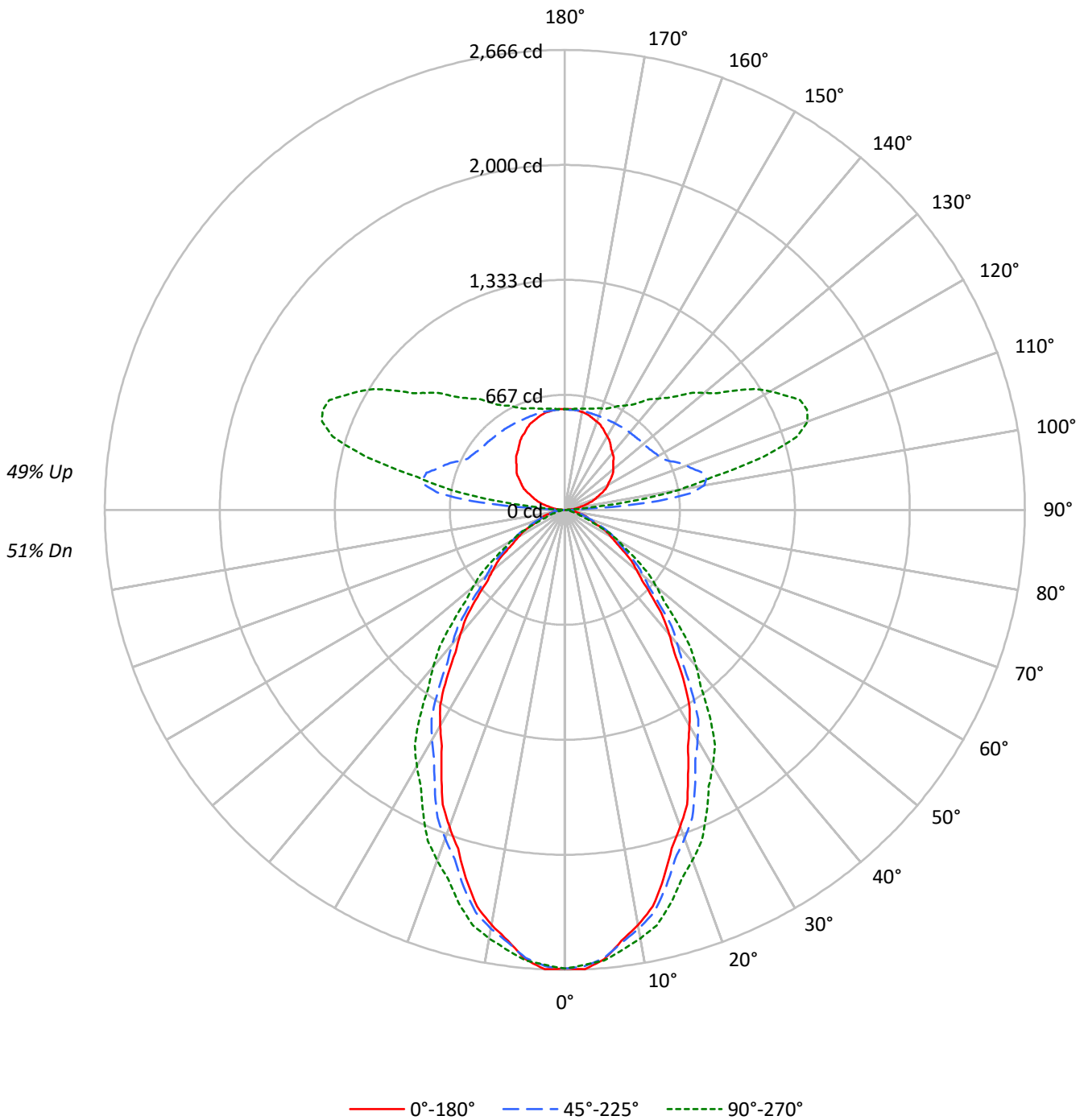
Lumens per Lamp: N/A
Luminaire Lumens: 7666.8 lumens
Efficiency: N/A
Efficacy: 111.6 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 68.7
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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51
1	99	95	92	89	91	88	85	83	75	73	71	63	62	60	52	51	50	45
2	91	84	79	74	84	78	74	70	67	64	61	57	54	52	47	45	44	40
3	84	75	69	63	78	70	64	60	60	56	53	51	48	46	43	41	39	35
4	77	68	60	55	72	63	57	52	54	50	46	47	43	40	39	37	35	31
5	72	61	53	48	66	57	50	45	49	44	40	42	39	36	36	33	31	28
6	66	55	48	42	61	52	45	40	45	40	36	39	35	32	33	30	28	25
7	62	50	43	38	57	47	41	36	41	36	32	36	32	29	31	28	25	23
8	58	46	39	34	53	43	37	32	38	33	29	33	29	26	28	25	23	21
9	54	42	35	30	50	40	33	29	35	30	27	31	27	24	27	24	21	19
10	50	39	32	28	47	37	31	27	33	28	24	29	25	22	25	22	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	24532	24532	24532
5°	24226	24140	24281
10°	22888	23096	23632
15°	21129	21620	22590
20°	19188	19910	21227
25°	17210	18149	19776
30°	15388	16395	18272
35°	13456	14429	16493
40°	11326	12226	14277
45°	9347	10154	11920
50°	7804	8507	9931
55°	6626	7301	8202
60°	5663	6329	6545
65°	4508	5322	4229
70°	3998	4154	2582
75°	3700	3369	1579
80°	3411	3098	1365
85°	3091	2837	1112



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.9	3.2
10°-20°	634.4	8.3
20°-30°	821.7	10.7
30°-40°	804.6	10.5
40°-50°	615.9	8.0
50°-60°	410.4	5.4
60°-70°	224.0	2.9
70°-80°	93.3	1.2
80°-90°	27.6	0.4
90°-100°	273.2	3.6
100°-110°	754.3	9.8
110°-120°	777.9	10.1
120°-130°	625.1	8.2
130°-140°	491.3	6.4
140°-150°	376.8	4.9
150°-160°	270.8	3.5
160°-170°	165.6	2.2
170°-180°	55.8	0.7
0°-30°	1700.0	22.2
0°-40°	2504.6	32.7
0°-60°	3530.9	46.1
0°-90°	3875.9	50.6
90°-120°	1805.5	23.5
90°-150°	3298.7	43.0
90°-180°	3791.0	49.4
0°-180°	7666.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2659	2659	2659	2659	2659	
5°	2616	2590	2606	2612	2622	243
15°	2212	2204	2264	2325	2365	618
25°	1691	1695	1783	1860	1943	777
35°	1195	1200	1281	1367	1464	743
45°	716	730	778	837	914	559
55°	412	429	454	471	510	373
65°	206	224	244	213	194	215
75°	104	104	94	65	44	111
85°	29	29	27	17	10	32
90°	2	4	8	8	9	4
95°	40	148	496	204	133	43
105°	134	207	830	1267	1193	143
115°	241	291	668	1323	1505	237
125°	330	376	606	1025	1203	294
135°	398	441	589	830	936	308
145°	461	493	582	707	761	289
155°	520	537	577	634	654	240
165°	563	570	580	602	607	159
175°	584	584	581	589	587	55
180°	584	584	584	584	584	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2659.0	2659.0	2659.0	2659.0	2659.0
2.5°	2665.5	2641.8	2647.8	2647.6	2640.3
5°	2615.8	2589.6	2606.5	2612.5	2621.7
7.5°	2518.7	2498.9	2529.7	2552.5	2571.0
10°	2443.1	2426.0	2465.3	2498.5	2522.5
12.5°	2355.4	2341.0	2389.7	2434.3	2465.5
15°	2212.1	2204.1	2263.5	2325.0	2365.0
17.5°	2058.8	2054.9	2123.0	2194.9	2246.0
20°	1954.3	1953.1	2027.8	2102.6	2162.0
22.5°	1848.8	1851.3	1929.8	2007.6	2075.2
25°	1690.6	1695.2	1782.8	1860.5	1942.6
27.5°	1544.3	1546.3	1636.9	1719.0	1806.6
30°	1444.4	1450.1	1538.9	1623.8	1715.1
32.5°	1344.5	1351.2	1438.1	1525.9	1619.0
35°	1194.7	1200.4	1281.1	1367.3	1464.3
37.5°	1040.3	1048.0	1119.6	1201.1	1296.5
40°	940.4	951.8	1015.1	1091.9	1185.4
42.5°	844.2	858.4	917.1	989.9	1074.3
45°	716.4	730.1	778.2	837.1	913.6
47.5°	606.2	622.0	659.0	709.7	774.9
50°	543.7	558.5	592.7	630.3	691.9
52.5°	488.6	503.5	533.9	562.9	615.3
55°	411.9	429.0	453.9	471.1	509.9
57.5°	348.9	365.3	385.0	392.8	416.3
60°	306.9	325.1	343.0	342.1	354.7
62.5°	268.6	284.1	302.0	289.6	290.3
65°	206.5	223.6	243.8	213.1	193.7
67.5°	166.8	170.5	191.3	148.6	125.5
70°	148.2	148.2	154.0	115.1	95.7
72.5°	130.4	130.4	125.1	93.6	73.3
75°	103.8	103.8	94.5	64.9	44.3
77.5°	80.0	79.1	72.3	48.4	32.2
80°	64.2	64.2	58.3	38.2	25.7
82.5°	50.2	50.2	45.3	29.9	19.1
85°	29.2	29.2	26.8	17.3	10.5
87.5°	10.6	11.0	10.8	7.3	6.5
90°	1.9	3.7	7.5	8.4	9.3
92.5°	16.8	69.7	124.7	45.5	35.5
95°	40.1	147.8	495.7	203.8	132.6
97.5°	66.5	165.6	734.3	565.3	409.4
100°	85.9	176.2	822.4	828.2	673.1
102.5°	104.6	188.3	839.6	1023.3	876.2
105°	134.4	207.4	829.9	1267.0	1193.0
107.5°	166.2	231.2	783.6	1384.5	1411.5
110°	188.6	247.0	747.8	1409.7	1497.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	208.7	265.0	714.1	1389.8	1519.0
115°	240.8	291.1	668.4	1323.2	1504.8
117.5°	268.9	318.9	638.3	1229.5	1436.1
120°	287.5	336.8	626.4	1166.0	1374.1
122.5°	305.4	352.5	616.7	1106.8	1303.9
125°	330.5	376.1	605.9	1025.3	1203.3
127.5°	351.8	397.4	599.5	956.4	1110.0
130°	365.9	411.6	596.5	914.3	1053.9
132.5°	379.4	422.8	593.5	878.9	1005.4
135°	397.7	440.6	589.1	830.4	936.3
137.5°	418.2	457.3	586.8	789.8	880.1
140°	429.4	467.8	585.3	762.6	842.0
142.5°	442.1	477.5	583.8	738.5	808.4
145°	461.2	493.1	581.6	707.0	760.8
147.5°	479.5	507.4	579.5	680.4	722.2
150°	492.9	515.7	578.8	664.5	698.3
152.5°	503.4	524.7	578.0	650.9	678.9
155°	520.0	537.3	576.9	634.3	654.4
157.5°	535.3	548.6	577.1	622.2	635.9
160°	544.2	556.1	577.9	615.4	625.5
162.5°	551.7	562.1	578.6	609.4	617.2
165°	562.9	570.2	579.7	602.2	606.8
167.5°	571.5	575.9	580.7	597.9	599.3
170°	576.0	579.6	580.7	595.6	595.6
172.5°	579.7	581.9	580.7	592.6	591.9
175°	583.5	584.4	580.7	589.0	587.2
177.5°	584.9	584.2	580.5	585.7	584.2
180°	583.5	583.5	583.5	583.5	583.5

(END OF REPORT)