

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: P519142

Luminaire Tested: **SQ4-WB-050U-125D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519142
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-125D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

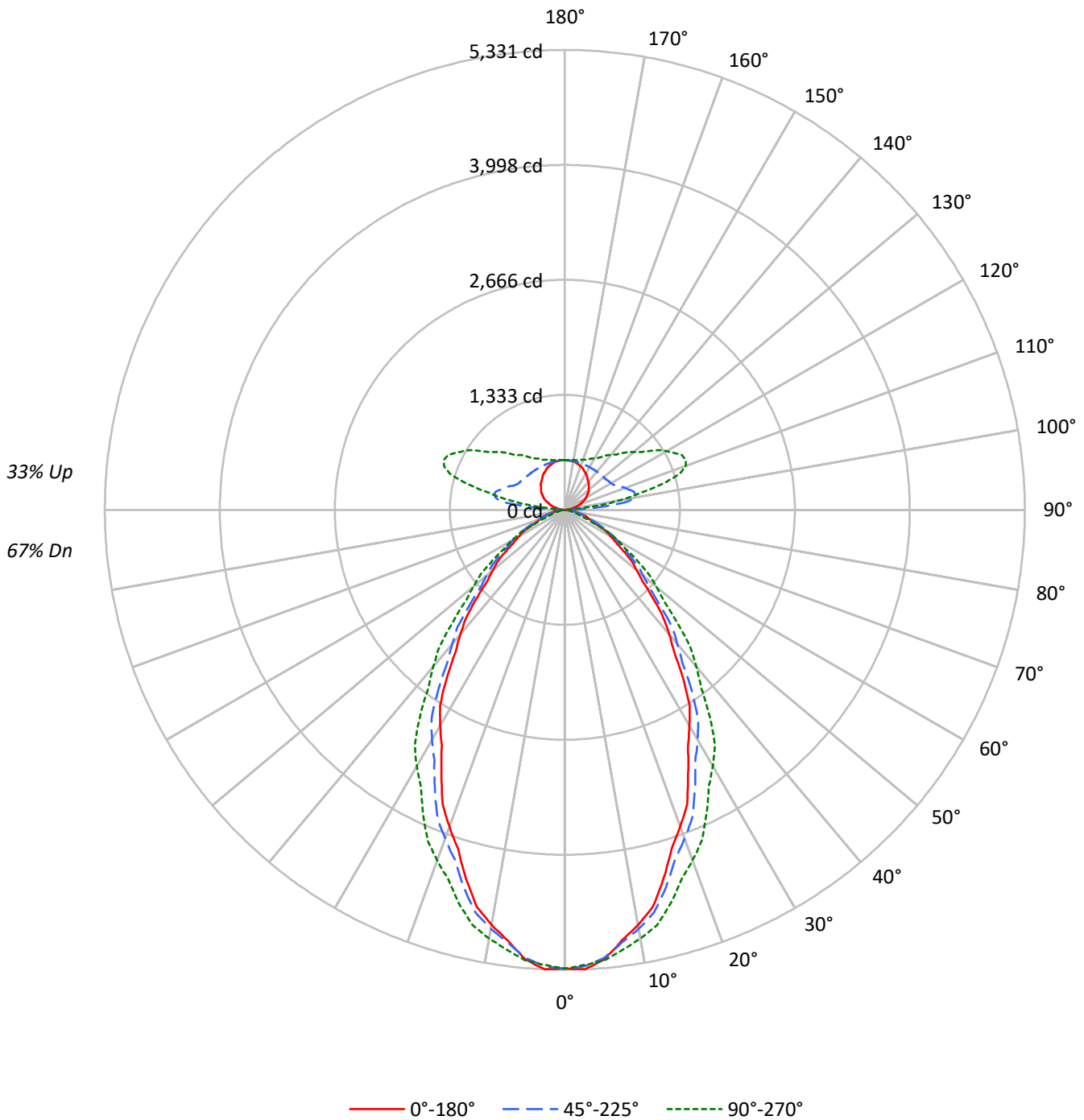
Lumens per Lamp: N/A
Luminaire Lumens: 11511.8 lumens
Efficiency: N/A
Efficacy: 100.3 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 114.8
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	50	30	10	0	
RCR																						
0	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67				67
1	103	99	96	93	97	94	91	88	84	82	80	75	73	71	66	65	64				60	
2	95	89	83	79	90	84	79	75	75	72	69	67	65	62	60	58	56				53	
3	88	79	73	67	83	75	70	65	68	63	60	61	58	55	55	52	50				47	
4	81	72	64	59	77	68	62	57	62	57	52	56	52	48	50	47	44				41	
5	76	65	57	52	71	62	55	50	56	51	47	51	47	43	46	43	40				37	
6	70	59	51	46	66	56	49	44	51	46	42	47	42	39	42	39	36				34	
7	65	54	46	41	62	52	45	40	47	42	38	43	39	35	39	36	33				31	
8	61	50	42	37	58	48	41	36	44	38	34	40	35	32	37	33	30				28	
9	57	46	39	34	54	44	37	33	40	35	31	37	33	29	34	30	28				26	
10	54	42	36	31	51	41	34	30	38	32	29	35	30	27	32	28	25				24	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	24532	24532	24532
5°	24226	24140	24280
10°	22889	23096	23632
15°	21130	21620	22589
20°	19188	19910	21227
25°	17210	18148	19776
30°	15388	16395	18272
35°	13457	14429	16492
40°	11326	12225	14277
45°	9347	10154	11920
50°	7804	8507	9930
55°	6625	7300	8201
60°	5662	6329	6545
65°	4508	5324	4229
70°	3998	4154	2580
75°	3702	3369	1581
80°	3408	3100	1363
85°	3086	2842	1112



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	487.8	4.2
10°-20°	1268.7	11.0
20°-30°	1643.4	14.3
30°-40°	1609.3	14.0
40°-50°	1231.8	10.7
50°-60°	820.8	7.1
60°-70°	447.9	3.9
70°-80°	186.6	1.6
80°-90°	55.1	0.5
90°-100°	276.5	2.4
100°-110°	751.0	6.5
110°-120°	772.2	6.7
120°-130°	617.4	5.4
130°-140°	485.1	4.2
140°-150°	372.0	3.2
150°-160°	267.5	2.3
160°-170°	163.6	1.4
170°-180°	55.1	0.5
0°-30°	3399.9	29.5
0°-40°	5009.2	43.5
0°-60°	7061.8	61.3
0°-90°	7751.5	67.3
90°-120°	1799.7	15.6
90°-150°	3274.1	28.4
90°-180°	3760.0	32.7
0°-180°	11511.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5318	5318	5318	5318	5318	
5°	5232	5179	5213	5225	5243	487
15°	4424	4408	4527	4650	4730	1235
25°	3381	3390	3566	3721	3885	1555
35°	2390	2401	2562	2735	2928	1486
45°	1433	1460	1556	1674	1827	1117
55°	824	858	908	942	1020	747
65°	413	447	488	426	387	429
75°	208	208	189	130	89	222
85°	58	58	54	35	21	63
90°	2	7	13	17	17	6
95°	41	151	482	210	141	43
105°	133	208	826	1258	1183	142
115°	237	288	661	1315	1498	234
125°	326	371	598	1008	1189	291
135°	393	436	582	821	926	304
145°	454	486	574	698	750	285
155°	513	531	570	626	644	237
165°	556	563	572	596	598	157
175°	576	578	574	581	580	55
180°	576	576	576	576	576	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5318.0	5318.0	5318.0	5318.0	5318.0
2.5°	5331.0	5283.6	5295.6	5295.2	5280.6
5°	5231.6	5179.2	5213.0	5225.1	5243.3
7.5°	5037.5	4997.8	5059.4	5105.1	5142.0
10°	4886.3	4852.1	4930.6	4997.0	5045.0
12.5°	4710.8	4682.1	4779.4	4868.6	4931.1
15°	4424.3	4408.3	4526.9	4650.1	4729.9
17.5°	4117.6	4109.9	4246.0	4389.7	4491.9
20°	3908.6	3906.3	4055.6	4205.3	4323.9
22.5°	3697.6	3702.6	3859.6	4015.2	4150.3
25°	3381.2	3390.3	3565.5	3721.0	3885.2
27.5°	3088.6	3092.7	3273.9	3437.9	3613.1
30°	2888.8	2900.2	3077.8	3247.7	3430.2
32.5°	2689.1	2702.3	2876.2	3051.7	3237.9
35°	2389.5	2400.9	2562.1	2734.6	2928.5
37.5°	2080.5	2096.0	2239.2	2402.2	2593.0
40°	1880.8	1903.6	2030.1	2183.7	2370.8
42.5°	1688.5	1716.8	1834.1	1979.8	2148.7
45°	1432.8	1460.1	1556.4	1674.2	1827.1
47.5°	1212.5	1244.0	1317.9	1419.4	1549.9
50°	1087.4	1117.1	1185.4	1260.5	1383.7
52.5°	977.3	1006.9	1067.8	1125.7	1230.7
55°	823.7	857.9	907.7	942.2	1019.7
57.5°	697.7	730.6	770.0	785.6	832.6
60°	613.7	650.2	686.0	684.3	709.4
62.5°	537.2	568.2	603.9	579.2	580.6
65°	413.0	447.2	487.7	426.1	387.4
67.5°	333.7	341.0	382.7	297.2	251.1
70°	296.4	296.4	308.0	230.1	191.3
72.5°	260.9	260.9	250.1	187.2	146.5
75°	207.7	207.7	189.0	129.7	88.7
77.5°	160.1	158.3	144.7	96.8	64.4
80°	128.3	128.3	116.7	76.4	51.3
82.5°	100.3	100.3	90.5	59.7	38.3
85°	58.3	58.3	53.7	34.7	21.0
87.5°	20.9	22.0	21.3	14.5	12.7
90°	1.9	7.3	13.0	16.7	16.7
92.5°	16.7	75.7	131.5	56.5	47.8
95°	40.7	151.2	481.5	209.5	140.7
97.5°	67.4	167.0	738.1	574.3	403.3
100°	85.2	177.5	816.7	827.8	668.5
102.5°	103.0	188.1	837.4	1023.8	883.3
105°	133.3	207.6	825.9	1257.5	1183.3
107.5°	164.8	230.4	778.1	1378.2	1398.9
110°	187.0	246.8	742.6	1402.0	1490.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	206.3	263.1	707.0	1382.3	1515.9
115°	237.0	287.7	661.1	1315.2	1498.1
117.5°	265.9	314.4	631.8	1220.2	1426.3
120°	285.2	332.3	618.5	1156.5	1361.1
122.5°	301.5	348.6	609.6	1092.6	1290.0
125°	325.9	371.2	598.1	1007.8	1188.9
127.5°	347.8	392.7	591.8	943.5	1098.9
130°	361.1	404.6	588.9	903.2	1042.6
132.5°	374.4	417.9	585.9	868.7	992.2
135°	392.6	436.0	581.5	820.9	925.9
137.5°	412.2	451.7	579.2	778.7	867.0
140°	424.1	462.1	577.8	751.8	831.5
142.5°	435.9	471.0	576.3	730.8	797.4
145°	453.7	486.3	574.1	697.5	750.0
147.5°	473.7	501.6	572.2	671.3	712.6
150°	487.0	510.6	572.2	656.3	688.9
152.5°	497.4	518.0	570.7	642.8	669.6
155°	513.0	531.1	570.4	626.3	644.4
157.5°	528.1	542.3	570.4	615.1	628.9
160°	537.0	549.7	570.4	607.6	618.5
162.5°	545.9	555.7	571.8	601.7	609.6
165°	555.5	562.8	572.2	596.3	598.1
167.5°	565.5	569.2	574.1	590.0	591.5
170°	568.5	572.1	574.1	587.0	587.0
172.5°	571.5	573.6	574.1	584.1	584.1
175°	575.9	577.7	574.1	581.4	579.6
177.5°	577.4	577.4	573.0	578.8	575.9
180°	575.9	575.9	575.9	575.9	575.9

(END OF REPORT)