

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: P519019

Luminaire Tested: **SQ4-WB-025U-100D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519019
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, 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-025U-100D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

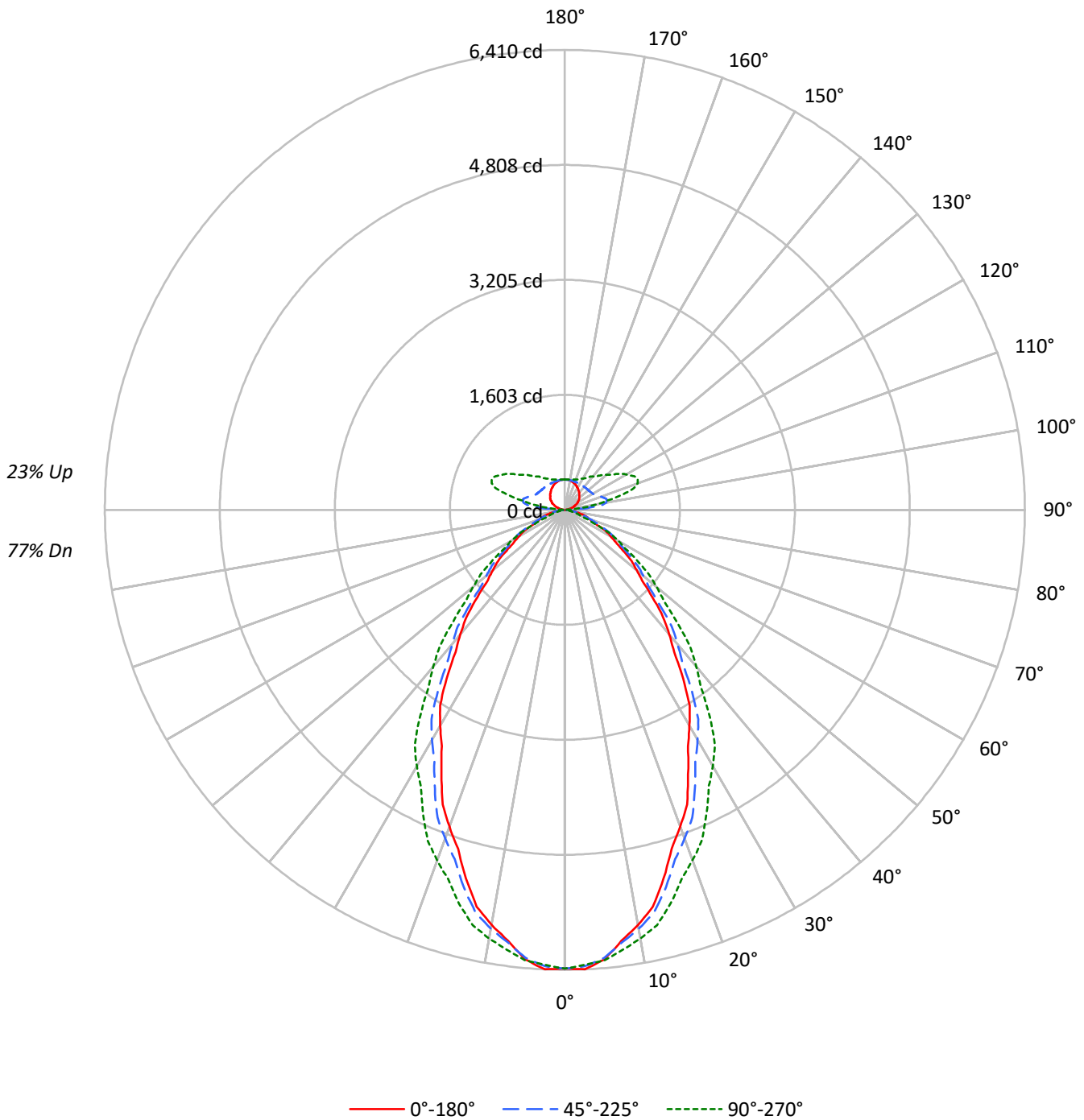
Lumens per Lamp: N/A
Luminaire Lumens: 12054.7 lumens
Efficiency: N/A
Efficacy: 97.5 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 123.6
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	114	114	114	114	108	108	108	108	99	99	99	89	89	89	81	81	81	77
1	106	102	98	95	101	97	94	92	89	87	85	82	80	78	75	73	72	69
2	98	91	86	81	93	87	82	78	80	76	73	74	71	68	68	66	64	60
3	90	82	75	70	86	79	73	68	73	68	64	67	63	60	62	59	56	53
4	84	74	67	61	80	71	65	59	66	61	56	61	57	53	57	53	50	48
5	78	67	60	54	74	65	58	53	60	54	50	56	51	48	52	48	45	43
6	73	61	54	48	69	59	52	47	55	49	45	51	47	43	48	44	41	39
7	68	56	49	43	65	54	47	42	51	45	41	48	43	39	45	40	37	35
8	63	52	44	39	61	50	43	38	47	41	37	44	39	35	41	37	34	32
9	60	48	41	36	57	46	40	35	44	38	34	41	36	33	39	34	31	29
10	56	44	37	33	54	43	37	32	41	35	31	38	33	30	36	32	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19664	19664	19664
5°	19419	19350	19462
10°	18347	18513	18943
15°	16937	17330	18107
20°	15380	15959	17015
25°	13795	14547	15852
30°	12335	13141	14646
35°	10786	11566	13220
40°	9078	9799	11444
45°	7492	8139	9554
50°	6255	6819	7960
55°	5310	5852	6574
60°	4539	5074	5246
65°	3614	4267	3389
70°	3204	3330	2069
75°	2967	2701	1267
80°	2733	2485	1093
85°	2474	2276	893



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	586.5	4.9
10°-20°	1525.5	12.7
20°-30°	1975.9	16.4
30°-40°	1934.9	16.1
40°-50°	1481.1	12.3
50°-60°	986.9	8.2
60°-70°	538.6	4.5
70°-80°	224.4	1.9
80°-90°	65.8	0.5
90°-100°	205.7	1.7
100°-110°	540.7	4.5
110°-120°	560.7	4.7
120°-130°	449.7	3.7
130°-140°	352.9	2.9
140°-150°	270.8	2.2
150°-160°	195.1	1.6
160°-170°	119.3	1.0
170°-180°	40.3	0.3
0°-30°	4087.9	33.9
0°-40°	6022.8	50.0
0°-60°	8490.8	70.4
0°-90°	9319.6	77.3
90°-120°	1307.0	10.8
90°-150°	2380.4	19.7
90°-180°	2735.0	22.7
0°-180°	12054.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6394	6394	6394	6394	6394	
5°	6290	6227	6268	6282	6304	585
15°	5320	5300	5443	5591	5687	1485
25°	4065	4076	4287	4474	4671	1870
35°	2873	2887	3081	3288	3521	1786
45°	1723	1756	1871	2013	2197	1343
55°	990	1032	1091	1133	1226	898
65°	497	538	586	512	466	516
75°	250	250	227	156	107	267
85°	70	70	64	42	25	76
90°	3	8	22	11	11	6
95°	27	106	354	183	124	30
105°	97	148	598	908	847	103
115°	173	210	479	955	1090	171
125°	241	270	436	736	868	214
135°	287	316	422	594	674	222
145°	333	354	417	507	546	208
155°	376	387	417	458	471	173
165°	406	411	417	433	438	115
175°	422	422	419	425	425	40
180°	422	422	422	422	422	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6394.1	6394.1	6394.1	6394.1	6394.1
2.5°	6409.8	6352.7	6367.1	6366.7	6349.2
5°	6290.3	6227.2	6267.8	6282.3	6304.3
7.5°	6056.8	6009.1	6083.2	6138.1	6182.5
10°	5875.0	5833.9	5928.3	6008.2	6065.8
12.5°	5664.0	5629.5	5746.5	5853.7	5928.9
15°	5319.5	5300.3	5442.9	5591.0	5687.0
17.5°	4950.8	4941.5	5105.2	5278.0	5400.9
20°	4699.5	4696.7	4876.2	5056.2	5198.9
22.5°	4445.8	4451.9	4640.5	4827.7	4990.1
25°	4065.4	4076.4	4287.0	4473.9	4671.4
27.5°	3713.6	3718.5	3936.3	4133.6	4344.3
30°	3473.4	3487.1	3700.6	3904.8	4124.3
32.5°	3233.2	3249.1	3458.2	3669.3	3893.1
35°	2873.0	2886.7	3080.6	3287.9	3521.1
37.5°	2501.5	2520.2	2692.3	2888.3	3117.6
40°	2261.3	2288.8	2440.9	2625.6	2850.5
42.5°	2030.2	2064.2	2205.2	2380.4	2583.4
45°	1722.7	1755.6	1871.4	2013.0	2196.8
47.5°	1457.8	1495.7	1584.6	1706.6	1863.5
50°	1307.4	1343.1	1425.3	1515.6	1663.7
52.5°	1175.0	1210.7	1283.9	1353.5	1479.7
55°	990.4	1031.5	1091.4	1132.8	1226.1
57.5°	838.9	878.4	925.9	944.5	1001.1
60°	737.9	781.8	824.9	822.7	852.9
62.5°	645.9	683.2	726.1	696.4	698.0
65°	496.6	537.7	586.4	512.4	465.7
67.5°	401.2	410.0	460.1	357.3	301.9
70°	356.3	356.3	370.3	276.7	230.1
72.5°	313.7	313.7	300.8	225.0	176.2
75°	249.7	249.7	227.3	156.0	106.6
77.5°	192.5	190.3	173.9	116.4	77.4
80°	154.3	154.3	140.3	91.9	61.7
82.5°	120.6	120.6	108.9	71.8	46.0
85°	70.1	70.1	64.5	41.7	25.3
87.5°	25.2	26.3	26.8	15.6	13.4
90°	2.7	8.0	21.6	10.8	10.8
92.5°	11.4	54.7	121.2	53.7	34.6
95°	27.1	106.4	354.4	182.6	124.4
97.5°	47.1	116.9	530.2	421.6	310.5
100°	62.2	125.7	584.3	592.1	459.9
102.5°	75.2	134.4	599.4	737.5	624.3
105°	97.4	147.6	597.8	907.5	846.7
107.5°	120.1	166.7	563.7	995.8	1010.6
110°	135.3	177.6	535.6	1018.5	1082.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	150.4	190.6	509.6	1004.2	1101.5
115°	173.1	210.2	478.8	955.2	1090.1
117.5°	195.3	229.2	457.7	887.4	1037.1
120°	208.3	240.0	449.0	841.9	987.3
122.5°	221.3	253.0	442.5	796.4	939.7
125°	240.8	269.8	435.5	736.1	868.3
127.5°	256.4	286.1	429.6	687.5	799.1
130°	265.1	296.8	427.4	657.0	760.1
132.5°	273.8	305.5	425.2	630.8	723.3
135°	286.7	315.8	422.0	594.2	673.6
137.5°	300.3	328.8	421.4	566.8	631.9
140°	311.1	337.5	419.3	545.1	605.9
142.5°	319.7	344.1	419.3	529.8	582.1
145°	332.7	353.9	416.6	506.7	546.4
147.5°	345.7	366.3	416.6	487.7	520.5
150°	354.4	372.9	416.6	476.7	503.1
152.5°	363.0	377.3	416.6	467.9	488.0
155°	376.0	386.6	416.6	457.5	470.7
157.5°	385.7	395.8	416.6	448.2	457.7
160°	392.2	400.2	416.6	443.8	449.0
162.5°	398.7	404.5	416.6	439.4	444.7
165°	405.8	411.0	416.6	432.9	438.2
167.5°	412.3	414.9	419.3	430.2	432.3
170°	416.6	419.2	419.3	430.1	430.1
172.5°	418.7	419.3	419.3	427.9	425.8
175°	422.0	422.0	419.3	424.7	424.7
177.5°	422.0	422.0	419.8	424.1	422.0
180°	422.0	422.0	422.0	422.0	422.0

(END OF REPORT)