

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: P519094

Luminaire Tested: **SQ4-WB-050U-075D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519094
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-075D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

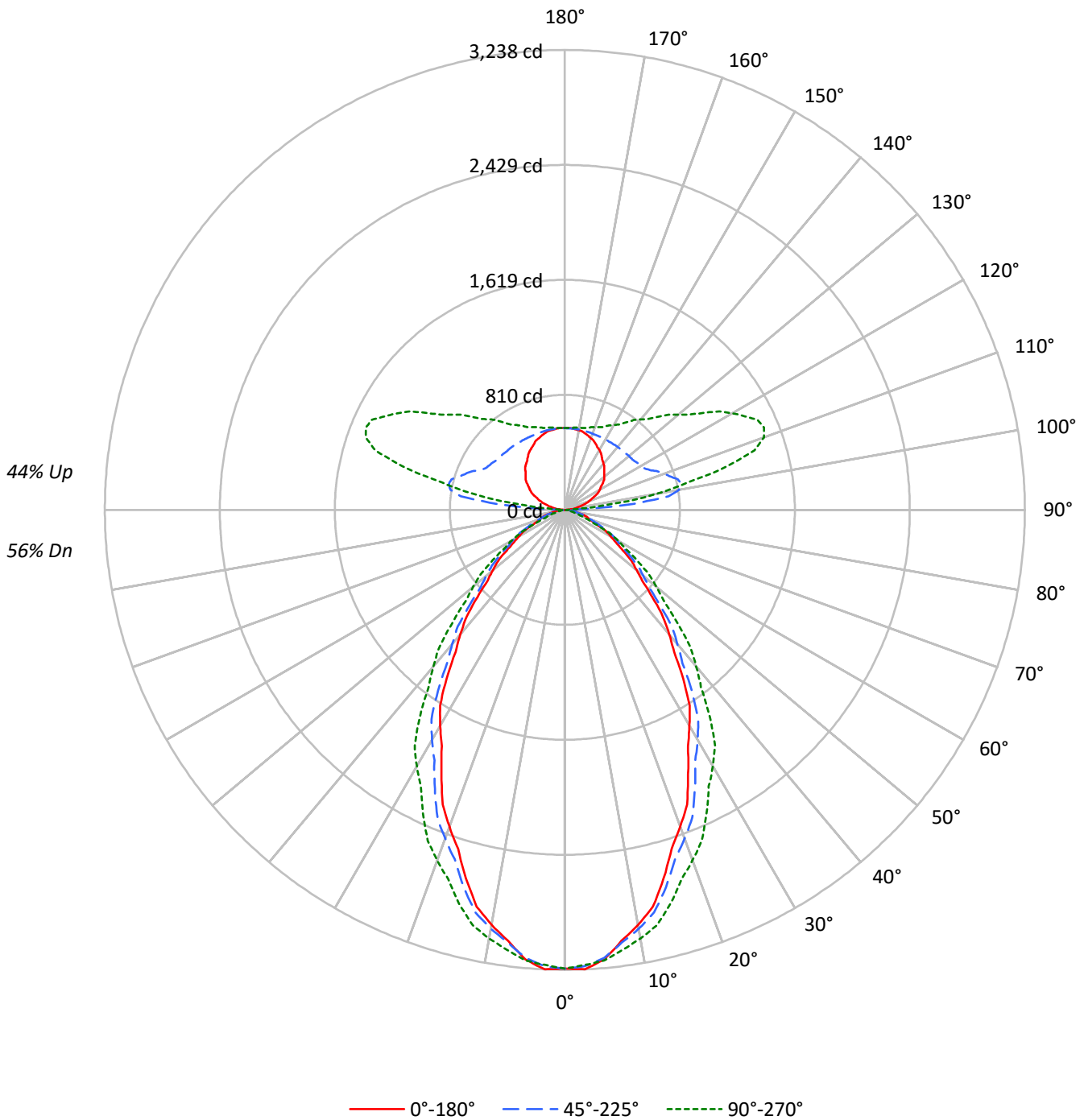
Lumens per Lamp: N/A
Luminaire Lumens: 8469.5 lumens
Efficiency: N/A
Efficacy: 108.4 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 78.1
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



TEST NUMBER: P519094
CATALOG NUMBER: SQ4-WB-050U-075D-830-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P519094

CATALOG NUMBER: SQ4-WB-050U-075D-830-1D-UNV-STD-W-8

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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	56
1	100	96	93	90	93	90	87	84	78	76	74	66	65	64	56	55	54	49
2	92	86	80	76	86	80	75	71	70	66	63	60	57	55	51	49	48	43
3	85	77	70	65	79	72	66	61	63	58	55	54	51	48	46	44	42	38
4	79	69	62	56	73	65	58	53	57	52	48	49	46	43	42	40	38	34
5	73	62	55	49	68	58	52	47	51	46	42	45	41	38	39	36	34	31
6	68	56	49	43	63	53	46	41	47	42	38	41	37	34	36	33	30	28
7	63	51	44	39	59	49	42	37	43	38	34	38	34	31	33	30	28	25
8	59	47	40	35	55	45	38	33	40	34	31	35	31	28	31	28	25	23
9	55	43	36	31	51	41	35	30	37	32	28	33	29	26	29	26	23	21
10	52	40	33	29	48	38	32	28	34	29	26	30	26	23	27	24	21	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14901	14901	14901
5°	14716	14663	14748
10°	13903	14029	14354
15°	12835	13132	13721
20°	11655	12093	12893
25°	10454	11024	12012
30°	9347	9958	11099
35°	8174	8764	10017
40°	6880	7426	8672
45°	5678	6168	7240
50°	4740	5167	6032
55°	4024	4435	4982
60°	3440	3845	3976
65°	2739	3233	2568
70°	2428	2524	1567
75°	2248	2046	961
80°	2072	1884	829
85°	1874	1725	677



TEST NUMBER: P519094

CATALOG NUMBER: SQ4-WB-050U-075D-830-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	296.3	3.5
10°-20°	770.7	9.1
20°-30°	998.2	11.8
30°-40°	977.5	11.5
40°-50°	748.2	8.8
50°-60°	498.6	5.9
60°-70°	272.1	3.2
70°-80°	113.4	1.3
80°-90°	34.3	0.4
90°-100°	276.5	3.3
100°-110°	751.0	8.9
110°-120°	772.2	9.1
120°-130°	617.4	7.3
130°-140°	485.1	5.7
140°-150°	372.0	4.4
150°-160°	267.5	3.2
160°-170°	163.6	1.9
170°-180°	55.1	0.7
0°-30°	2065.2	24.4
0°-40°	3042.7	35.9
0°-60°	4289.5	50.6
0°-90°	4709.2	55.6
90°-120°	1799.7	21.2
90°-150°	3274.1	38.7
90°-180°	3760.0	44.4
0°-180°	8469.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3230	3230	3230	3230	3230	
5°	3178	3146	3166	3174	3185	296
15°	2687	2678	2750	2824	2873	750
25°	2054	2059	2166	2260	2360	944
35°	1451	1458	1556	1661	1779	902
45°	870	887	945	1017	1110	679
55°	500	521	551	572	619	454
65°	251	272	296	259	235	261
75°	126	126	115	79	54	135
85°	35	35	33	21	13	39
90°	2	7	13	17	17	5
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	

TEST NUMBER: P519094

CATALOG NUMBER: SQ4-WB-050U-075D-830-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3230.2	3230.2	3230.2	3230.2	3230.2
2.5°	3238.2	3209.3	3216.6	3216.4	3207.5
5°	3177.8	3145.9	3166.4	3173.8	3184.9
7.5°	3059.8	3035.7	3073.2	3100.9	3123.3
10°	2968.0	2947.2	2994.9	3035.3	3064.4
12.5°	2861.4	2844.0	2903.1	2957.2	2995.2
15°	2687.4	2677.7	2749.7	2824.5	2873.0
17.5°	2501.1	2496.4	2579.1	2666.4	2728.5
20°	2374.1	2372.7	2463.4	2554.3	2626.4
22.5°	2246.0	2249.0	2344.4	2438.9	2521.0
25°	2053.8	2059.3	2165.8	2260.2	2359.9
27.5°	1876.0	1878.5	1988.6	2088.2	2194.7
30°	1754.7	1761.6	1869.5	1972.7	2083.6
32.5°	1633.4	1641.4	1747.1	1853.7	1966.8
35°	1451.4	1458.3	1556.3	1661.0	1778.8
37.5°	1263.7	1273.2	1360.1	1459.1	1575.0
40°	1142.4	1156.3	1233.1	1326.4	1440.1
42.5°	1025.6	1042.8	1114.1	1202.6	1305.1
45°	870.3	886.9	945.4	1017.0	1109.8
47.5°	736.5	755.6	800.5	862.2	941.4
50°	660.5	678.5	720.0	765.7	840.5
52.5°	593.6	611.6	648.6	683.8	747.5
55°	500.3	521.1	551.4	572.3	619.4
57.5°	423.8	443.8	467.7	477.2	505.7
60°	372.8	394.9	416.7	415.6	430.9
62.5°	326.3	345.1	366.8	351.8	352.6
65°	250.9	271.7	296.2	258.8	235.3
67.5°	202.7	207.1	232.5	180.5	152.5
70°	180.0	180.0	187.1	139.8	116.2
72.5°	158.5	158.5	151.9	113.7	89.0
75°	126.1	126.1	114.8	78.8	53.9
77.5°	97.2	96.1	87.9	58.8	39.1
80°	78.0	78.0	70.9	46.4	31.2
82.5°	60.9	60.9	55.0	36.3	23.2
85°	35.4	35.4	32.6	21.1	12.8
87.5°	12.8	13.9	13.9	10.1	9.0
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

TEST NUMBER: P519094

CATALOG NUMBER: SQ4-WB-050U-075D-830-1D-UNV-STD-W-8

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)