

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: P519380

Luminaire Tested: **SQ4-WB-100U-075D-830-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519380
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-075D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

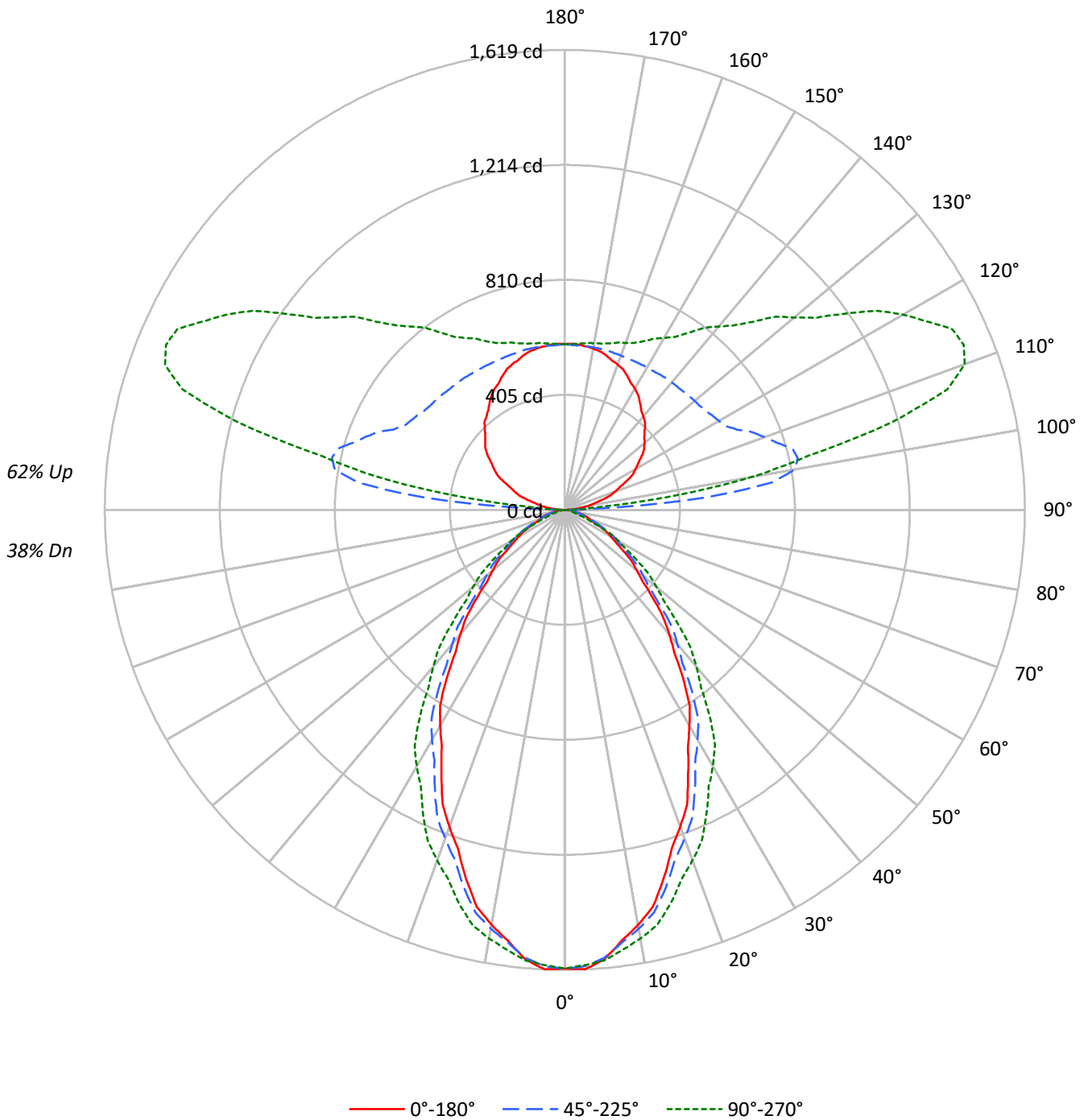
Lumens per Lamp: N/A
Luminaire Lumens: 6145.7 lumens
Efficiency: N/A
Efficacy: 125.2 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 49.1
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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	96	92	89	85	87	84	81	78	69	67	65	54	53	52	41	41	40	34
2	88	81	76	71	80	74	70	66	61	58	55	49	47	45	38	36	35	30
3	81	72	66	60	74	66	61	56	55	51	47	44	41	39	34	32	31	26
4	75	65	57	52	68	59	53	48	49	45	41	40	37	34	31	29	27	24
5	69	58	51	45	62	53	47	42	45	40	36	36	33	30	29	26	25	21
6	64	52	45	40	58	48	42	37	40	36	32	33	30	27	26	24	22	19
7	59	48	40	35	54	44	37	33	37	32	29	30	27	24	24	22	20	17
8	55	43	36	31	50	40	34	29	34	29	26	28	24	22	23	20	18	16
9	51	40	33	28	47	37	31	26	31	26	23	26	22	20	21	19	17	15
10	48	37	30	25	44	34	28	24	29	24	21	24	21	18	20	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14901	14901	14901
5°	14716	14663	14748
10°	13903	14029	14354
15°	12835	13133	13721
20°	11655	12093	12893
25°	10454	11024	12012
30°	9347	9959	11099
35°	8174	8764	10017
40°	6880	7426	8672
45°	5677	6168	7240
50°	4741	5167	6033
55°	4025	4435	4982
60°	3440	3845	3975
65°	2738	3233	2567
70°	2428	2522	1567
75°	2249	2046	959
80°	2072	1881	829
85°	1874	1725	677



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.1	2.4
10°-20°	385.3	6.3
20°-30°	499.1	8.1
30°-40°	488.8	8.0
40°-50°	374.1	6.1
50°-60°	249.3	4.1
60°-70°	136.0	2.2
70°-80°	56.7	0.9
80°-90°	17.3	0.3
90°-100°	273.2	4.4
100°-110°	754.3	12.3
110°-120°	777.9	12.7
120°-130°	625.1	10.2
130°-140°	491.3	8.0
140°-150°	376.8	6.1
150°-160°	270.8	4.4
160°-170°	165.6	2.7
170°-180°	55.8	0.9
0°-30°	1032.6	16.8
0°-40°	1521.3	24.8
0°-60°	2144.8	34.9
0°-90°	2354.7	38.3
90°-120°	1805.5	29.4
90°-150°	3298.7	53.7
90°-180°	3791.0	61.7
0°-180°	6145.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1615	1615	1615	1615	1615	
5°	1589	1573	1583	1587	1592	148
15°	1344	1339	1375	1412	1436	375
25°	1027	1030	1083	1130	1180	472
35°	726	729	778	830	889	451
45°	435	444	473	508	555	339
55°	250	261	276	286	310	227
65°	125	136	148	129	118	130
75°	63	63	57	39	27	67
85°	18	18	16	10	6	19
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°	1615.1	1615.1	1615.1	1615.1	1615.1
2.5°	1619.1	1604.7	1608.3	1608.2	1603.8
5°	1588.9	1572.9	1583.2	1586.9	1592.4
7.5°	1529.9	1517.9	1536.6	1550.4	1561.7
10°	1484.0	1473.6	1497.5	1517.6	1532.2
12.5°	1430.7	1422.0	1451.5	1478.6	1497.6
15°	1343.7	1338.8	1374.9	1412.3	1436.5
17.5°	1250.6	1248.2	1289.5	1333.2	1364.2
20°	1187.1	1186.4	1231.7	1277.2	1313.2
22.5°	1123.0	1124.5	1172.2	1219.5	1260.5
25°	1026.9	1029.7	1082.9	1130.1	1180.0
27.5°	938.0	939.3	994.3	1044.1	1097.3
30°	877.4	880.8	934.8	986.3	1041.8
32.5°	816.7	820.7	873.5	926.8	983.4
35°	725.7	729.2	778.1	830.5	889.4
37.5°	631.9	636.6	680.1	729.6	787.5
40°	571.2	578.1	616.6	663.2	720.0
42.5°	512.8	521.4	557.0	601.3	652.6
45°	435.1	443.5	472.7	508.5	554.9
47.5°	368.2	377.8	400.3	431.1	470.7
50°	330.3	339.3	360.0	382.8	420.3
52.5°	296.8	305.8	324.3	341.9	373.8
55°	250.2	260.6	275.7	286.1	309.7
57.5°	211.9	221.9	233.9	238.6	252.9
60°	186.4	197.5	208.4	207.8	215.4
62.5°	163.1	172.6	183.4	175.9	176.3
65°	125.4	135.8	148.1	129.4	117.6
67.5°	101.3	103.6	116.2	90.3	76.3
70°	90.0	90.0	93.5	69.9	58.1
72.5°	79.2	79.2	76.0	56.8	44.5
75°	63.1	63.1	57.4	39.4	26.9
77.5°	48.6	48.1	43.9	29.4	19.6
80°	39.0	39.0	35.4	23.2	15.6
82.5°	30.5	30.5	27.5	18.1	11.6
85°	17.7	17.7	16.3	10.5	6.4
87.5°	6.6	7.0	7.2	5.1	4.7
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)