

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: P519434

Luminaire Tested: **SQ4-WB-100U-125D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519434
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-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

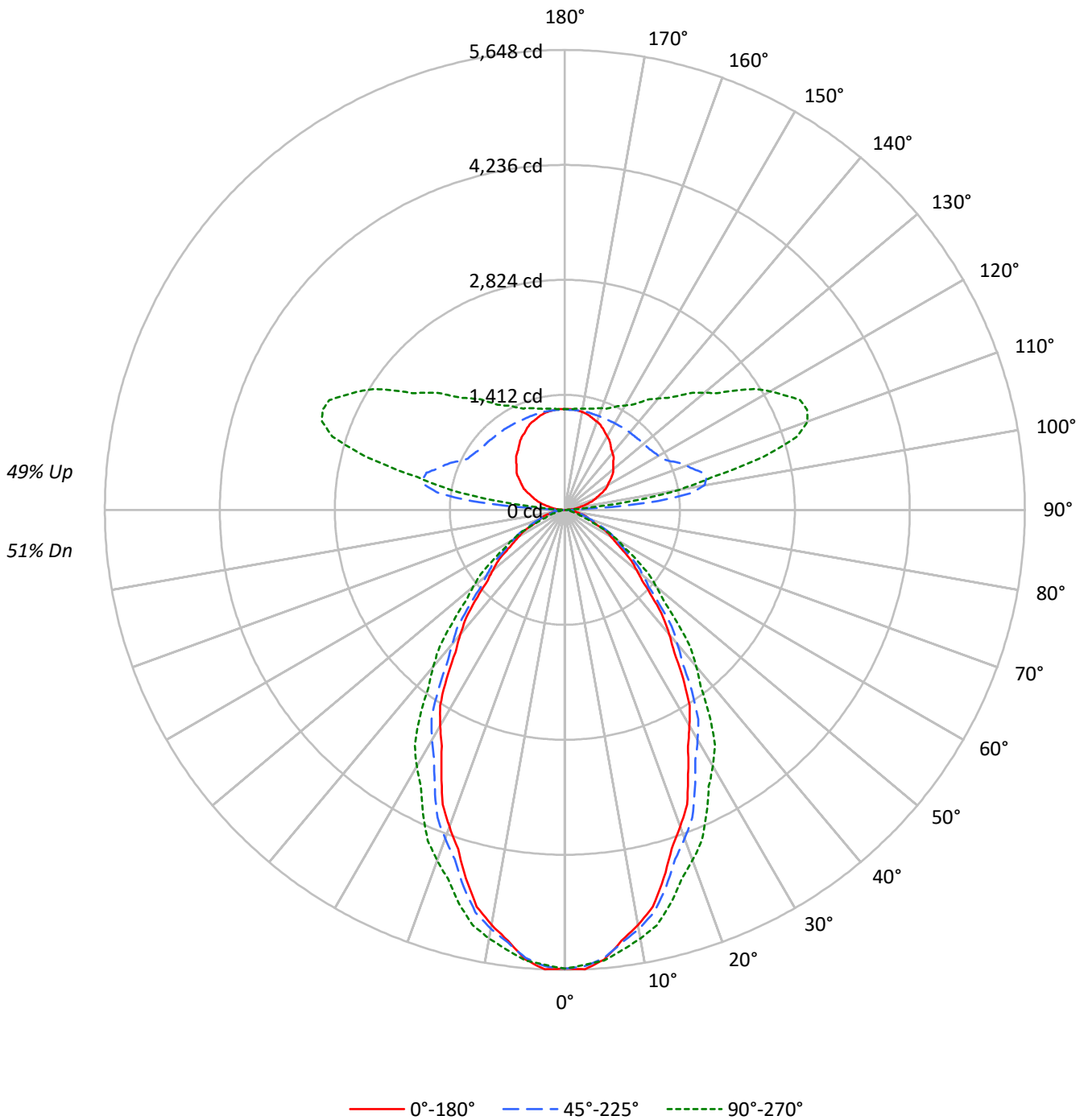
Lumens per Lamp: N/A
Luminaire Lumens: 16245.1 lumens
Efficiency: N/A
Efficacy: 115.5 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 140.6
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	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°	25991	25991	25991
5°	25666	25575	25724
10°	24249	24469	25036
15°	22385	22905	23932
20°	20328	21093	22488
25°	18233	19227	20951
30°	16303	17369	19358
35°	14256	15287	17472
40°	11999	12952	15125
45°	9903	10757	12628
50°	8268	9013	10521
55°	7019	7735	8689
60°	5999	6706	6933
65°	4777	5640	4480
70°	4235	4401	2734
75°	3921	3568	1674
80°	3613	3284	1445
85°	3271	3012	1175



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	516.8	3.2
10°-20°	1344.2	8.3
20°-30°	1741.1	10.7
30°-40°	1704.9	10.5
40°-50°	1305.0	8.0
50°-60°	869.6	5.4
60°-70°	474.5	2.9
70°-80°	197.7	1.2
80°-90°	58.5	0.4
90°-100°	579.0	3.6
100°-110°	1598.3	9.8
110°-120°	1648.4	10.1
120°-130°	1324.6	8.2
130°-140°	1041.0	6.4
140°-150°	798.4	4.9
150°-160°	573.8	3.5
160°-170°	350.9	2.2
170°-180°	118.3	0.7
0°-30°	3602.0	22.2
0°-40°	5307.0	32.7
0°-60°	7481.6	46.1
0°-90°	8212.5	50.6
90°-120°	3825.6	23.5
90°-150°	6989.6	43.0
90°-180°	8033.0	49.4
0°-180°	16245.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5634	5634	5634	5634	5634	
5°	5543	5487	5523	5536	5555	516
15°	4687	4670	4796	4926	5011	1309
25°	3582	3592	3778	3942	4116	1647
35°	2532	2544	2714	2897	3103	1574
45°	1518	1547	1649	1774	1936	1184
55°	873	909	962	998	1080	791
65°	438	474	517	452	410	455
75°	220	220	200	138	94	235
85°	62	62	57	37	22	67
90°	4	8	16	18	20	9
95°	85	313	1050	432	281	91
105°	285	440	1758	2685	2528	303
115°	510	617	1416	2804	3189	501
125°	700	797	1284	2172	2550	623
135°	843	934	1248	1760	1984	652
145°	977	1045	1232	1498	1612	612
155°	1102	1138	1222	1344	1387	508
165°	1193	1208	1228	1276	1286	336
175°	1236	1238	1230	1248	1244	117
180°	1236	1236	1236	1236	1236	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5634.1	5634.1	5634.1	5634.1	5634.1
2.5°	5647.9	5597.7	5610.4	5610.0	5594.5
5°	5542.6	5487.0	5522.8	5535.6	5555.0
7.5°	5336.9	5294.9	5360.2	5408.5	5447.7
10°	5176.7	5140.5	5223.7	5294.1	5344.8
12.5°	4990.8	4960.4	5063.5	5158.0	5224.2
15°	4687.2	4670.3	4796.0	4926.5	5011.1
17.5°	4362.4	4354.2	4498.4	4650.6	4758.9
20°	4140.9	4138.5	4296.6	4455.2	4580.9
22.5°	3917.4	3922.7	4089.0	4253.9	4397.0
25°	3582.2	3591.9	3777.5	3942.1	4116.2
27.5°	3272.2	3276.5	3468.5	3642.3	3827.9
30°	3060.6	3072.6	3260.8	3440.7	3634.1
32.5°	2848.9	2863.0	3047.2	3233.1	3430.4
35°	2531.5	2543.6	2714.5	2897.1	3102.6
37.5°	2204.2	2220.6	2372.3	2545.0	2747.1
40°	1992.6	2016.7	2150.8	2313.5	2511.7
42.5°	1788.9	1818.8	1943.1	2097.5	2276.4
45°	1517.9	1546.9	1648.9	1773.8	1935.7
47.5°	1284.5	1317.9	1396.3	1503.8	1642.0
50°	1152.0	1183.5	1255.9	1335.5	1466.0
52.5°	1035.3	1066.8	1131.3	1192.6	1303.8
55°	872.7	908.9	961.7	998.2	1080.3
57.5°	739.2	774.0	815.8	832.3	882.1
60°	650.2	688.9	726.8	725.0	751.5
62.5°	569.1	602.0	639.8	613.6	615.1
65°	437.6	473.8	516.7	451.5	410.4
67.5°	353.5	361.3	405.4	314.8	266.0
70°	314.0	314.0	326.3	243.8	202.7
72.5°	276.4	276.4	265.0	198.3	155.3
75°	220.0	220.0	200.2	137.5	93.9
77.5°	169.6	167.7	153.3	102.6	68.2
80°	136.0	136.0	123.6	81.0	54.4
82.5°	106.3	106.3	95.9	63.3	40.5
85°	61.8	61.8	56.9	36.8	22.2
87.5°	22.5	23.3	22.9	15.4	13.8
90°	4.0	7.8	15.8	17.8	19.8
92.5°	35.6	147.8	264.3	96.4	75.2
95°	85.1	313.3	1050.3	431.7	280.9
97.5°	140.8	350.9	1555.9	1197.9	867.6
100°	182.0	373.5	1742.6	1755.0	1426.2
102.5°	221.5	399.1	1779.0	2168.4	1856.6
105°	284.8	439.6	1758.5	2684.6	2527.9
107.5°	352.1	489.8	1660.4	2933.5	2990.8
110°	399.6	523.3	1584.4	2987.1	3172.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	442.3	561.4	1513.2	2944.8	3218.7
115°	510.3	616.7	1416.3	2803.7	3188.6
117.5°	569.7	675.7	1352.6	2605.1	3043.0
120°	609.2	713.7	1327.3	2470.7	2911.7
122.5°	647.2	747.0	1306.7	2345.2	2762.9
125°	700.2	796.9	1283.7	2172.5	2549.7
127.5°	745.3	842.0	1270.3	2026.6	2351.9
130°	775.4	872.1	1264.0	1937.3	2233.2
132.5°	803.9	895.9	1257.6	1862.3	2130.3
135°	842.6	933.5	1248.1	1759.6	1984.0
137.5°	886.2	968.9	1243.4	1673.4	1864.9
140°	909.9	991.1	1240.2	1615.9	1784.2
142.5°	936.8	1011.8	1237.1	1564.8	1713.0
145°	977.1	1044.8	1232.3	1498.0	1612.1
147.5°	1015.9	1075.1	1228.0	1441.6	1530.2
150°	1044.4	1092.8	1226.4	1408.0	1479.6
152.5°	1066.6	1111.8	1224.8	1379.2	1438.4
155°	1101.8	1138.5	1222.4	1344.1	1386.6
157.5°	1134.2	1162.4	1222.8	1318.4	1347.4
160°	1153.2	1178.3	1224.4	1304.0	1325.3
162.5°	1169.0	1191.1	1226.0	1291.2	1307.9
165°	1192.8	1208.2	1228.4	1276.1	1285.7
167.5°	1211.0	1220.2	1230.3	1266.8	1269.9
170°	1220.4	1228.2	1230.3	1262.0	1262.0
172.5°	1228.4	1233.0	1230.3	1255.6	1254.1
175°	1236.3	1238.2	1230.3	1248.1	1244.2
177.5°	1239.4	1237.9	1229.9	1240.9	1237.9
180°	1236.3	1236.3	1236.3	1236.3	1236.3

(END OF REPORT)