

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: P564984

Luminaire Tested: **SQ4-PW1-100U-125D-835-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564984
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PW1-100U-125D-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

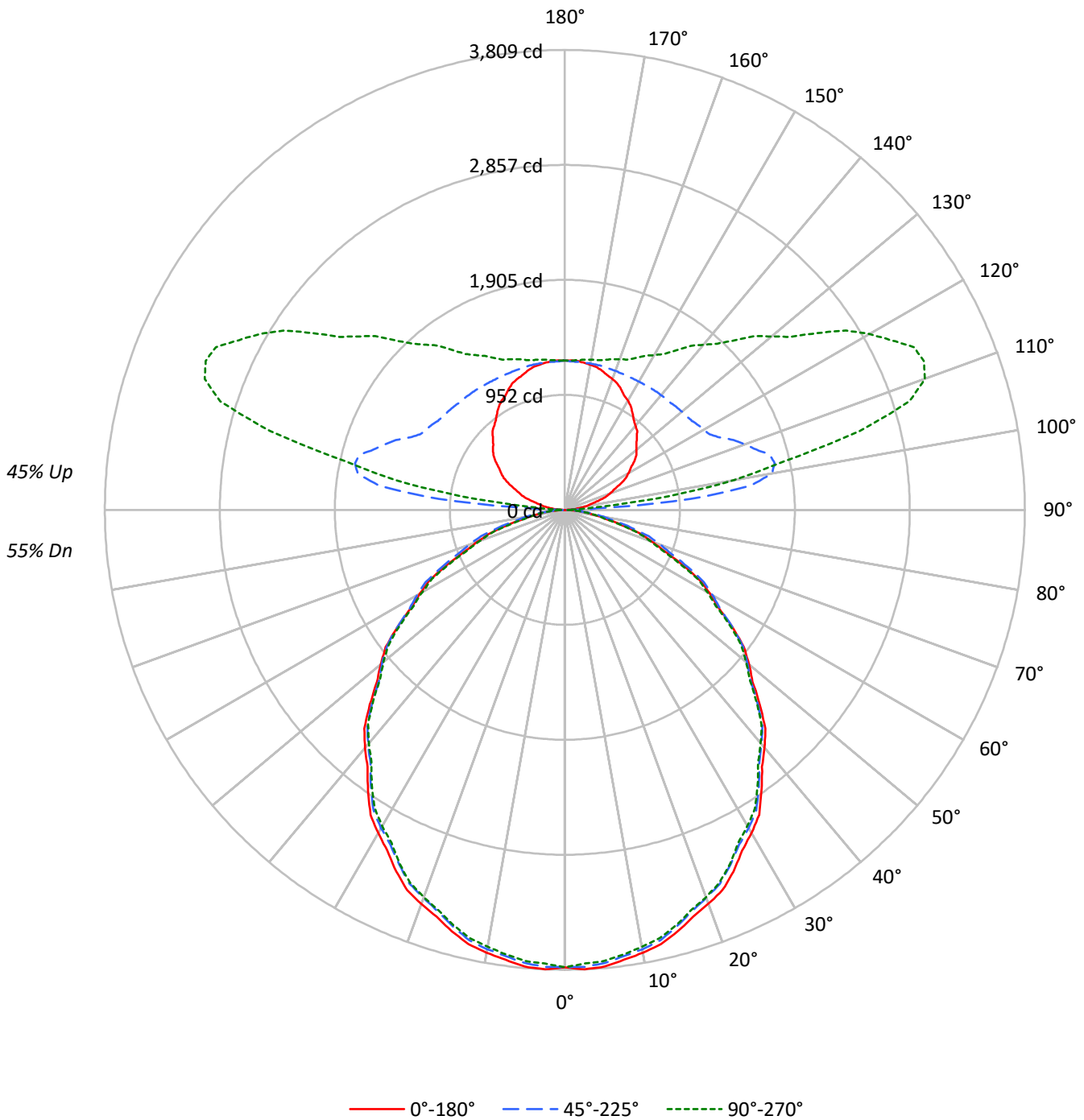
Lumens per Lamp: N/A
Luminaire Lumens: 17672.1 lumens
Efficiency: N/A
Efficacy: 125.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55
1	99	95	91	87	92	88	85	82	76	73	71	64	62	61	53	52	51	46
2	90	83	77	71	83	77	72	67	66	62	59	56	53	51	47	45	43	39
3	82	73	65	60	76	68	61	56	59	54	49	50	46	43	42	39	37	33
4	75	64	57	50	70	60	53	48	52	47	42	44	40	37	37	34	32	28
5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	30	28	25
6	64	52	43	38	59	48	41	36	42	36	32	36	32	28	31	27	24	22
7	59	47	39	33	55	44	36	31	38	32	28	33	28	25	28	24	22	19
8	55	42	35	29	51	40	33	28	35	29	25	30	26	22	26	22	19	17
9	51	39	31	26	47	36	30	25	32	26	22	28	23	20	24	20	18	15
10	48	36	28	23	44	33	27	22	29	24	20	26	21	18	22	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17473	17473	17473
5°	17586	17447	17370
10°	17446	17305	17211
15°	17260	17069	17005
20°	17054	16792	16759
25°	16816	16510	16460
30°	16461	16212	16105
35°	15993	15768	15674
40°	15494	15253	15193
45°	14891	14696	14631
50°	14274	14155	14058
55°	13607	13607	13393
60°	12777	13024	12562
65°	11693	12276	11401
70°	10307	11297	10038
75°	8803	10111	8566
80°	6827	8512	6915
85°	4414	6537	5828



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	356.7	2.0
10°-20°	1007.0	5.7
20°-30°	1493.7	8.5
30°-40°	1747.8	9.9
40°-50°	1740.0	9.8
50°-60°	1502.5	8.5
60°-70°	1081.5	6.1
70°-80°	567.2	3.2
80°-90°	143.2	0.8
90°-100°	579.0	3.3
100°-110°	1598.3	9.0
110°-120°	1648.4	9.3
120°-130°	1324.6	7.5
130°-140°	1041.0	5.9
140°-150°	798.4	4.5
150°-160°	573.8	3.2
160°-170°	350.9	2.0
170°-180°	118.3	0.7
0°-30°	2857.3	16.2
0°-40°	4605.1	26.1
0°-60°	7847.5	44.4
0°-90°	9639.4	54.5
90°-120°	3825.6	21.6
90°-150°	6989.6	39.6
90°-180°	8033.0	45.5
0°-180°	17672.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3788	3788	3788	3788	3788	
5°	3798	3755	3768	3758	3751	360
15°	3614	3568	3574	3567	3561	1019
25°	3304	3248	3244	3224	3234	1519
35°	2840	2801	2800	2773	2783	1775
45°	2283	2263	2253	2246	2243	1761
55°	1692	1689	1692	1668	1665	1510
65°	1071	1104	1125	1080	1044	1062
75°	494	540	567	530	481	529
85°	83	110	124	117	110	110
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°	3787.7	3787.7	3787.7	3787.7	3787.7
2.5°	3809.0	3777.7	3787.7	3779.3	3761.0
5°	3797.7	3755.3	3767.7	3757.5	3751.0
7.5°	3759.0	3719.8	3728.9	3718.2	3714.3
10°	3724.3	3685.1	3694.2	3680.7	3674.2
12.5°	3684.2	3642.5	3651.5	3638.1	3634.2
15°	3614.1	3568.5	3574.1	3567.3	3560.7
17.5°	3532.7	3486.4	3487.3	3476.6	3475.3
20°	3474.0	3425.0	3420.6	3407.4	3413.9
22.5°	3409.9	3358.4	3353.8	3335.4	3344.5
25°	3303.8	3248.3	3243.7	3223.9	3233.7
27.5°	3181.0	3126.2	3126.3	3098.5	3108.9
30°	3090.2	3038.0	3043.5	3010.4	3023.5
32.5°	2994.1	2947.1	2950.0	2917.0	2930.0
35°	2839.9	2800.8	2799.9	2773.4	2783.2
37.5°	2682.4	2647.8	2642.4	2627.1	2629.7
40°	2572.9	2543.6	2532.9	2522.9	2522.9
42.5°	2458.2	2431.4	2420.8	2413.4	2410.8
45°	2282.6	2263.0	2252.6	2245.8	2242.6
47.5°	2109.1	2090.8	2081.7	2077.0	2073.7
50°	1988.9	1975.9	1972.3	1962.2	1958.9
52.5°	1868.8	1861.0	1857.5	1844.7	1841.4
55°	1691.9	1688.7	1691.9	1668.5	1665.2
57.5°	1507.7	1512.9	1523.7	1492.2	1484.4
60°	1384.9	1398.0	1411.6	1374.6	1361.6
62.5°	1259.4	1280.3	1299.5	1257.0	1238.8
65°	1071.2	1103.9	1124.6	1080.4	1044.5
67.5°	889.7	930.1	955.1	907.5	867.0
70°	764.2	809.9	837.6	789.9	744.2
72.5°	654.8	705.7	728.2	683.1	637.4
75°	493.9	539.6	567.3	529.5	480.6
77.5°	350.4	393.5	416.5	383.5	343.1
80°	257.0	302.6	320.4	292.9	260.3
82.5°	182.2	220.1	232.3	215.7	193.6
85°	83.4	109.5	123.5	116.7	110.1
87.5°	22.1	41.2	53.9	54.4	57.4
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)