

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: P565146

Luminaire Tested: **SQ4-PW1-150U-100D-830-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P565146
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-PW1-150U-100D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

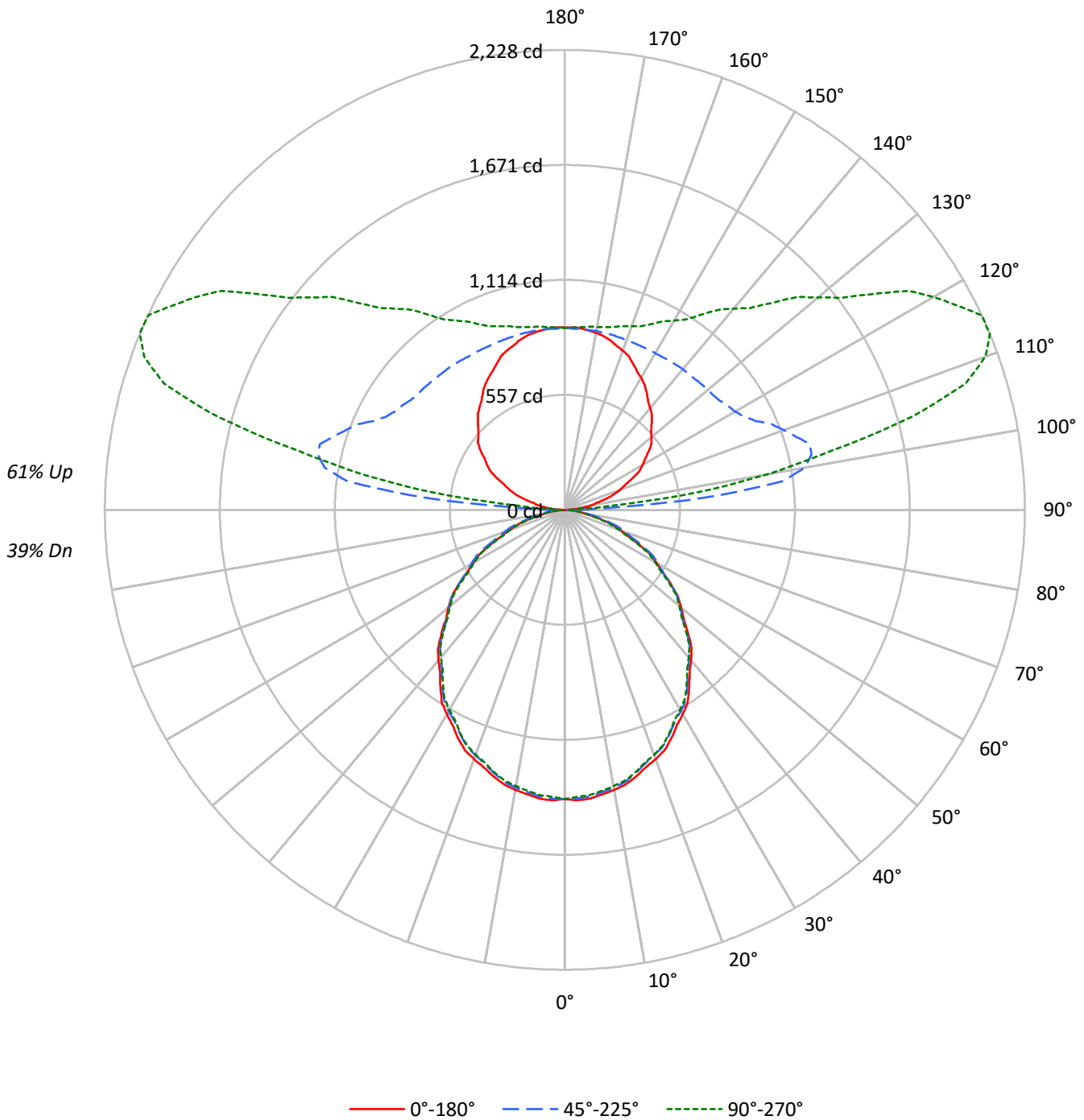
Lumens per Lamp: N/A
Luminaire Lumens: 9251.7 lumens
Efficiency: N/A
Efficacy: 128.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 72.3
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	61	61	61	46	46	46	39
1	95	91	87	84	86	83	80	77	68	65	63	53	52	51	40	39	39	33
2	87	80	74	69	79	73	67	63	59	56	52	47	44	42	36	34	33	27
3	79	70	63	57	72	64	58	53	52	48	44	42	38	36	32	30	28	23
4	72	62	54	48	66	57	50	45	46	41	38	37	33	31	28	26	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	27	25	23	21	17
6	61	49	41	36	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	37	31	51	41	34	29	34	29	25	27	23	20	21	18	16	14
8	52	40	33	27	47	37	30	26	31	26	22	25	21	18	19	17	15	12
9	49	37	29	24	44	34	27	23	28	23	20	23	19	16	18	15	13	11
10	45	34	27	22	41	31	25	20	26	21	18	21	17	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12924	12924	12924
5°	13008	12905	12847
10°	12903	12799	12730
15°	12767	12625	12579
20°	12615	12420	12397
25°	12438	12212	12174
30°	12175	11992	11913
35°	11830	11663	11593
40°	11460	11282	11237
45°	11015	10870	10822
50°	10558	10469	10399
55°	10065	10065	9905
60°	9451	9634	9291
65°	8649	9080	8433
70°	7623	8357	7424
75°	6513	7479	6335
80°	5048	6296	5117
85°	3271	4838	4308



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.9	1.4
10°-20°	372.4	4.0
20°-30°	552.4	6.0
30°-40°	646.4	7.0
40°-50°	643.5	7.0
50°-60°	555.7	6.0
60°-70°	400.0	4.3
70°-80°	209.7	2.3
80°-90°	53.8	0.6
90°-100°	409.8	4.4
100°-110°	1108.2	12.0
110°-120°	1165.1	12.6
120°-130°	946.4	10.2
130°-140°	742.3	8.0
140°-150°	569.7	6.2
150°-160°	409.7	4.4
160°-170°	250.3	2.7
170°-180°	84.4	0.9
0°-30°	1056.7	11.4
0°-40°	1703.1	18.4
0°-60°	2902.2	31.4
0°-90°	3565.8	38.5
90°-120°	2683.1	29.0
90°-150°	4941.5	53.4
90°-180°	5686.0	61.5
0°-180°	9251.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1401	1401	1401	1401	1401	
5°	1404	1389	1393	1390	1387	133
15°	1337	1320	1322	1319	1317	377
25°	1222	1201	1200	1192	1196	562
35°	1050	1036	1036	1026	1029	657
45°	844	837	833	831	829	651
55°	626	624	626	617	616	558
65°	396	408	416	400	386	393
75°	183	200	210	196	178	196
85°	31	40	46	43	41	41
90°	2	6	12	13	12	5
95°	64	223	682	353	210	67
105°	206	318	1229	1813	1739	217
115°	363	443	1020	1974	2228	358
125°	496	569	919	1551	1822	443
135°	595	666	894	1252	1417	460
145°	692	744	882	1072	1153	433
155°	781	812	874	961	993	360
165°	851	859	878	912	917	240
175°	883	882	879	890	888	84
180°	882	882	882	882	882	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1400.8	1400.8	1400.8	1400.8	1400.8
2.5°	1408.7	1397.1	1400.8	1397.7	1390.9
5°	1404.5	1388.8	1393.4	1389.6	1387.2
7.5°	1390.2	1375.7	1379.1	1375.1	1373.6
10°	1377.3	1362.8	1366.2	1361.2	1358.8
12.5°	1362.5	1347.1	1350.4	1345.5	1344.0
15°	1336.6	1319.7	1321.8	1319.3	1316.9
17.5°	1306.5	1289.4	1289.7	1285.7	1285.3
20°	1284.8	1266.7	1265.0	1260.1	1262.6
22.5°	1261.1	1242.0	1240.3	1233.5	1236.9
25°	1221.8	1201.3	1199.6	1192.3	1195.9
27.5°	1176.4	1156.1	1156.2	1145.9	1149.7
30°	1142.8	1123.5	1125.6	1113.3	1118.2
32.5°	1107.3	1089.9	1091.0	1078.8	1083.6
35°	1050.3	1035.8	1035.5	1025.7	1029.3
37.5°	992.0	979.2	977.2	971.6	972.5
40°	951.5	940.7	936.7	933.0	933.0
42.5°	909.1	899.2	895.3	892.5	891.6
45°	844.2	836.9	833.1	830.6	829.4
47.5°	780.0	773.2	769.9	768.1	766.9
50°	735.6	730.7	729.4	725.7	724.5
52.5°	691.1	688.2	686.9	682.2	681.0
55°	625.7	624.5	625.7	617.1	615.8
57.5°	557.6	559.5	563.5	551.9	549.0
60°	512.2	517.0	522.1	508.4	503.5
62.5°	465.8	473.5	480.6	464.9	458.1
65°	396.2	408.2	415.9	399.6	386.3
67.5°	329.0	344.0	353.2	335.6	320.6
70°	282.6	299.5	309.8	292.1	275.2
72.5°	242.1	261.0	269.3	252.6	235.7
75°	182.7	199.6	209.8	195.8	177.7
77.5°	129.6	145.5	154.0	141.8	126.9
80°	95.0	111.9	118.5	108.3	96.3
82.5°	67.4	81.4	85.9	79.8	71.6
85°	30.9	40.5	45.7	43.1	40.7
87.5°	8.3	15.8	21.2	21.4	22.2
90°	1.9	5.6	12.3	13.3	12.3
92.5°	27.0	98.2	193.8	84.2	60.9
95°	63.6	223.3	681.6	352.7	209.8
97.5°	102.1	256.0	1062.5	879.3	645.7
100°	131.0	269.3	1180.9	1231.6	995.8
102.5°	157.6	287.7	1222.7	1498.7	1322.4
105°	206.0	318.3	1229.3	1813.4	1739.1
107.5°	250.8	353.3	1175.6	2009.7	2034.4
110°	285.7	378.6	1127.8	2062.4	2167.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	316.9	403.8	1083.7	2051.8	2228.0
115°	362.6	443.4	1019.6	1973.7	2228.0
117.5°	407.4	483.2	977.2	1854.3	2142.6
120°	434.8	509.0	952.2	1768.6	2062.8
122.5°	460.6	533.4	937.0	1676.8	1973.2
125°	496.5	568.9	918.9	1550.7	1821.7
127.5°	529.5	600.6	908.3	1447.8	1686.2
130°	547.7	621.1	903.7	1384.2	1599.6
132.5°	566.7	639.3	899.2	1326.9	1525.2
135°	595.2	665.8	894.2	1252.1	1417.3
137.5°	623.9	690.5	890.1	1191.4	1326.0
140°	643.6	705.8	888.5	1152.3	1272.1
142.5°	662.6	721.1	885.5	1117.1	1221.9
145°	692.0	744.0	881.9	1071.7	1153.4
147.5°	718.8	764.9	877.7	1030.7	1093.4
150°	738.6	779.4	876.2	1008.4	1058.5
152.5°	756.8	792.4	875.4	987.6	1028.9
155°	781.3	811.9	874.3	961.4	993.0
157.5°	806.7	828.1	874.5	943.1	963.9
160°	821.1	838.8	875.3	931.6	946.5
162.5°	832.5	847.2	876.0	922.4	933.5
165°	850.6	858.9	878.1	912.4	917.0
167.5°	862.9	868.7	878.3	903.8	906.0
170°	870.5	873.3	879.1	899.9	899.9
172.5°	876.6	877.1	879.1	895.4	894.6
175°	882.9	881.9	879.1	890.4	888.5
177.5°	884.9	882.7	878.9	886.4	884.2
180°	881.9	881.9	881.9	881.9	881.9

(END OF REPORT)