

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: P565000

Luminaire Tested: **SQ4-PW1-100U-125D-940-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P565000
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-940-1D-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

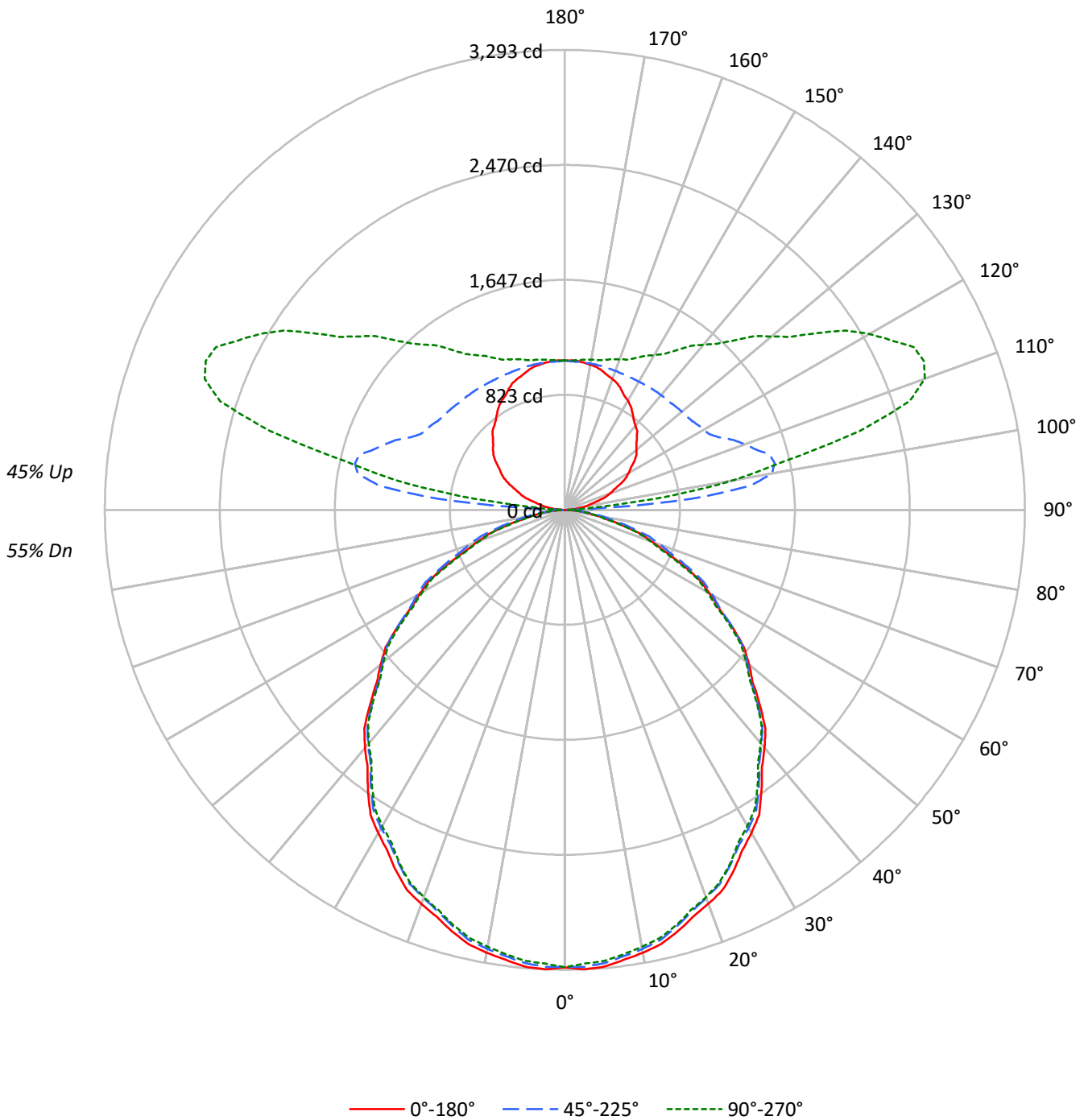
Lumens per Lamp: N/A
Luminaire Lumens: 15277.1 lumens
Efficiency: N/A
Efficacy: 108.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

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°	15105	15105	15105
5°	15203	15083	15016
10°	15081	14960	14879
15°	14922	14756	14701
20°	14743	14516	14488
25°	14538	14273	14229
30°	14230	14015	13923
35°	13826	13631	13550
40°	13395	13186	13134
45°	12874	12704	12648
50°	12340	12236	12153
55°	11763	11763	11578
60°	11046	11259	10859
65°	10109	10612	9857
70°	8910	9767	8677
75°	7611	8741	7404
80°	5900	7359	5977
85°	3816	5648	5039



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	308.3	2.0
10°-20°	870.5	5.7
20°-30°	1291.3	8.5
30°-40°	1510.9	9.9
40°-50°	1504.2	9.8
50°-60°	1298.9	8.5
60°-70°	935.0	6.1
70°-80°	490.3	3.2
80°-90°	123.8	0.8
90°-100°	500.5	3.3
100°-110°	1381.7	9.0
110°-120°	1425.0	9.3
120°-130°	1145.1	7.5
130°-140°	899.9	5.9
140°-150°	690.2	4.5
150°-160°	496.0	3.2
160°-170°	303.4	2.0
170°-180°	102.3	0.7
0°-30°	2470.1	16.2
0°-40°	3981.0	26.1
0°-60°	6784.0	44.4
0°-90°	8333.1	54.5
90°-120°	3307.2	21.6
90°-150°	6042.4	39.6
90°-180°	6944.0	45.5
0°-180°	15277.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3274	3274	3274	3274	3274	
5°	3283	3246	3257	3248	3243	311
15°	3124	3085	3090	3084	3078	881
25°	2856	2808	2804	2787	2796	1313
35°	2455	2421	2420	2398	2406	1535
45°	1973	1956	1947	1942	1939	1523
55°	1463	1460	1463	1442	1440	1305
65°	926	954	972	934	903	918
75°	427	466	490	458	415	458
85°	72	95	107	101	95	95
90°	3	7	14	15	17	8
95°	74	271	908	373	243	79
105°	246	380	1520	2321	2185	262
115°	441	533	1224	2424	2756	434
125°	605	689	1110	1878	2204	539
135°	728	807	1079	1521	1715	564
145°	845	903	1065	1295	1394	529
155°	952	984	1057	1162	1199	439
165°	1031	1044	1062	1103	1112	291
175°	1069	1070	1064	1079	1076	102
180°	1069	1069	1069	1069	1069	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3274.4	3274.4	3274.4	3274.4	3274.4
2.5°	3292.8	3265.8	3274.4	3267.1	3251.3
5°	3283.0	3246.4	3257.1	3248.3	3242.6
7.5°	3249.6	3215.7	3223.6	3214.3	3210.9
10°	3219.6	3185.7	3193.6	3181.9	3176.3
12.5°	3184.9	3148.8	3156.7	3145.1	3141.7
15°	3124.4	3084.9	3089.7	3083.8	3078.2
17.5°	3054.0	3013.9	3014.7	3005.5	3004.3
20°	3003.2	2960.9	2957.0	2945.6	2951.3
22.5°	2947.8	2903.2	2899.3	2883.4	2891.3
25°	2856.1	2808.1	2804.1	2787.0	2795.5
27.5°	2749.9	2702.5	2702.6	2678.6	2687.6
30°	2671.4	2626.3	2631.0	2602.4	2613.7
32.5°	2588.3	2547.7	2550.3	2521.7	2533.0
35°	2455.1	2421.2	2420.4	2397.6	2406.0
37.5°	2318.9	2289.0	2284.3	2271.1	2273.3
40°	2224.3	2198.9	2189.6	2181.0	2181.0
42.5°	2125.0	2101.9	2092.7	2086.3	2084.1
45°	1973.3	1956.4	1947.3	1941.5	1938.7
47.5°	1823.3	1807.5	1799.6	1795.5	1792.7
50°	1719.4	1708.1	1705.0	1696.3	1693.4
52.5°	1615.5	1608.8	1605.7	1594.7	1591.9
55°	1462.6	1459.8	1462.6	1442.4	1439.6
57.5°	1303.4	1307.9	1317.2	1290.0	1283.2
60°	1197.2	1208.5	1220.3	1188.3	1177.0
62.5°	1088.8	1106.8	1123.4	1086.7	1070.9
65°	926.1	954.3	972.2	934.0	903.0
67.5°	769.1	804.1	825.7	784.5	749.5
70°	660.6	700.1	724.1	682.8	643.3
72.5°	566.0	610.0	629.5	590.5	551.0
75°	427.0	466.5	490.4	457.7	415.4
77.5°	302.9	340.2	360.0	331.5	296.6
80°	222.1	261.6	277.0	253.2	225.0
82.5°	157.5	190.2	200.8	186.5	167.3
85°	72.1	94.7	106.7	100.8	95.2
87.5°	19.1	35.6	46.6	47.0	49.6
90°	3.4	6.8	13.7	15.4	17.1
92.5°	30.8	127.8	228.5	83.4	65.0
95°	73.5	270.8	908.0	373.2	242.8
97.5°	121.7	303.3	1345.1	1035.6	750.0
100°	157.3	322.8	1506.5	1517.1	1232.9
102.5°	191.5	345.0	1537.9	1874.5	1605.0
105°	246.2	380.0	1520.2	2320.8	2185.3
107.5°	304.4	423.4	1435.3	2536.0	2585.5
110°	345.4	452.4	1369.7	2582.3	2742.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	382.3	485.3	1308.1	2545.7	2782.5
115°	441.2	533.1	1224.3	2423.8	2756.5
117.5°	492.5	584.1	1169.3	2252.1	2630.6
120°	526.7	617.0	1147.4	2135.9	2517.1
122.5°	559.5	645.8	1129.6	2027.3	2388.5
125°	605.3	688.9	1109.8	1878.1	2204.2
127.5°	644.3	727.9	1098.1	1751.9	2033.2
130°	670.3	753.9	1092.7	1674.7	1930.6
132.5°	694.9	774.5	1087.2	1609.9	1841.6
135°	728.4	807.0	1079.0	1521.2	1715.1
137.5°	766.1	837.6	1074.9	1446.6	1612.2
140°	786.6	856.8	1072.2	1396.9	1542.4
142.5°	809.8	874.7	1069.4	1352.8	1480.8
145°	844.7	903.2	1065.3	1295.0	1393.6
147.5°	878.2	929.4	1061.5	1246.3	1322.8
150°	902.9	944.7	1060.2	1217.2	1279.1
152.5°	922.0	961.1	1058.8	1192.3	1243.5
155°	952.5	984.2	1056.8	1161.9	1198.7
157.5°	980.5	1004.9	1057.1	1139.8	1164.8
160°	996.9	1018.6	1058.5	1127.3	1145.7
162.5°	1010.6	1029.7	1059.8	1116.3	1130.6
165°	1031.1	1044.5	1061.9	1103.1	1111.5
167.5°	1046.8	1054.9	1063.6	1095.1	1097.8
170°	1055.1	1061.7	1063.6	1091.0	1091.0
172.5°	1061.9	1065.9	1063.6	1085.5	1084.1
175°	1068.7	1070.4	1063.6	1078.9	1075.6
177.5°	1071.5	1070.1	1063.3	1072.8	1070.1
180°	1068.7	1068.7	1068.7	1068.7	1068.7

(END OF REPORT)