

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: P564920

Luminaire Tested: **SQ4-PW1-100U-050D-930-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564920
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-050D-930-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

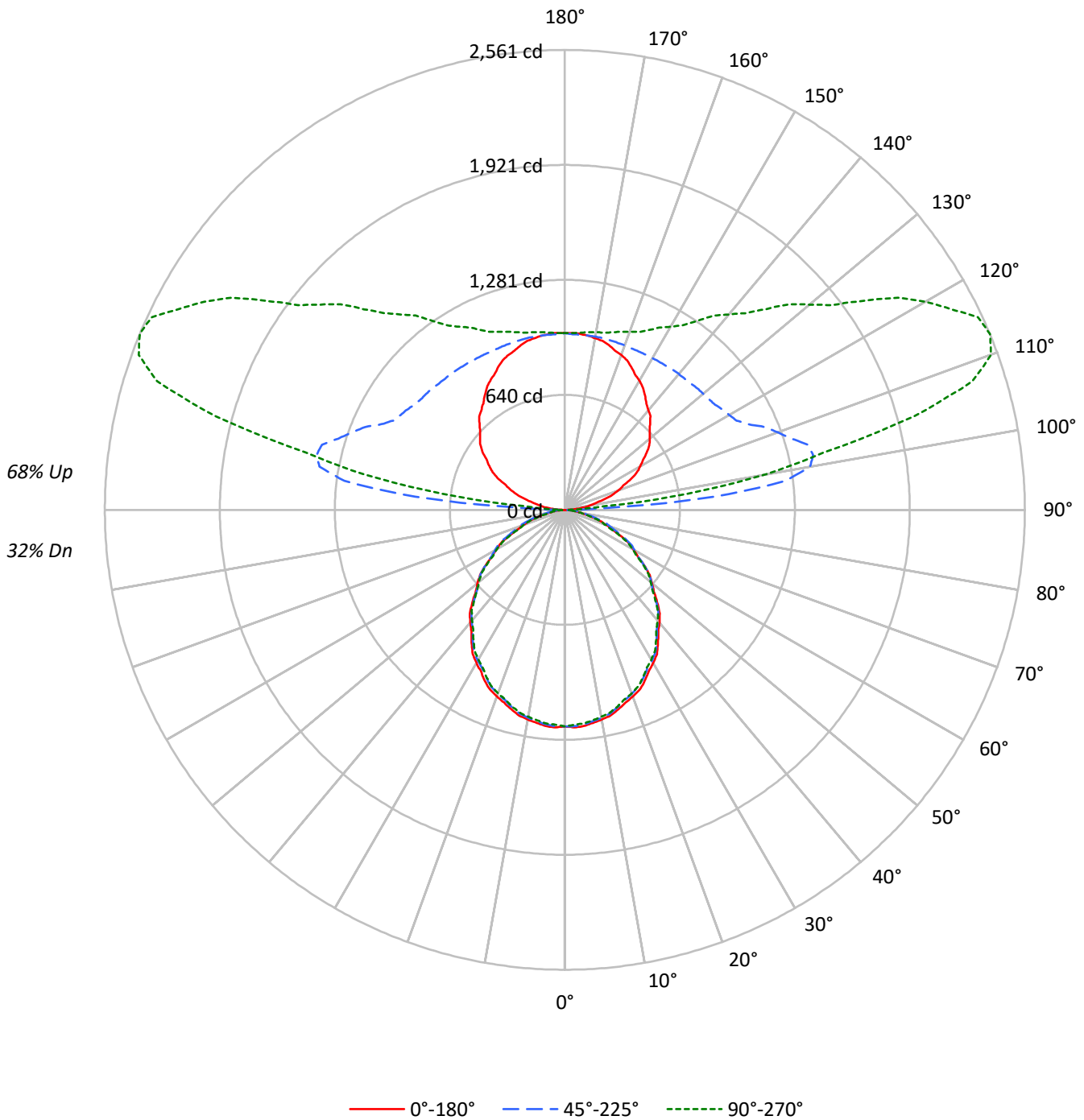
Lumens per Lamp: N/A
Luminaire Lumens: 9462.5 lumens
Efficiency: N/A
Efficacy: 111.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 84.7
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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	32
1	94	90	86	83	84	81	78	75	64	62	60	49	48	47	35	35	34	27
2	86	78	72	67	77	71	66	62	57	53	50	43	41	39	31	30	29	23
3	78	69	62	56	70	62	56	51	50	46	42	38	35	33	28	26	24	20
4	71	61	53	47	64	55	49	43	44	40	36	34	31	28	25	23	21	17
5	65	54	46	40	59	49	42	37	39	35	31	31	27	24	22	20	18	15
6	60	48	41	35	54	44	37	32	35	30	27	28	24	21	20	18	16	13
7	55	44	36	31	50	40	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	27	46	36	29	25	29	24	21	23	19	17	17	15	13	10
9	48	36	29	24	43	33	26	22	27	22	18	21	17	15	16	13	11	9
10	45	33	26	21	40	30	24	20	24	20	17	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5563	5563	5563
5°	5599	5555	5531
10°	5555	5510	5480
15°	5496	5435	5415
20°	5431	5347	5336
25°	5355	5257	5241
30°	5242	5162	5128
35°	5093	5021	4991
40°	4934	4857	4837
45°	4742	4680	4659
50°	4545	4507	4476
55°	4333	4333	4264
60°	4069	4147	4000
65°	3723	3909	3631
70°	3282	3597	3197
75°	2804	3219	2727
80°	2173	2710	2202
85°	1408	2080	1858



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.6	1.2
10°-20°	320.6	3.4
20°-30°	475.6	5.0
30°-40°	556.5	5.9
40°-50°	554.0	5.9
50°-60°	478.4	5.1
60°-70°	344.4	3.6
70°-80°	180.6	1.9
80°-90°	46.8	0.5
90°-100°	460.7	4.9
100°-110°	1271.9	13.4
110°-120°	1311.7	13.9
120°-130°	1054.1	11.1
130°-140°	828.4	8.8
140°-150°	635.3	6.7
150°-160°	456.6	4.8
160°-170°	279.2	3.0
170°-180°	94.1	1.0
0°-30°	909.8	9.6
0°-40°	1466.3	15.5
0°-60°	2498.8	26.4
0°-90°	3070.5	32.4
90°-120°	3044.3	32.2
90°-150°	5562.0	58.8
90°-180°	6392.0	67.6
0°-180°	9462.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1206	1206	1206	1206	1206	
5°	1209	1196	1200	1196	1194	115
15°	1151	1136	1138	1136	1134	324
25°	1052	1034	1033	1026	1030	484
35°	904	892	892	883	886	565
45°	727	721	717	715	714	561
55°	539	538	539	531	530	481
65°	341	352	358	344	333	338
75°	157	172	181	169	153	169
85°	27	35	39	37	35	35
90°	3	6	13	14	16	6
95°	68	249	836	344	224	72
105°	227	350	1399	2136	2012	241
115°	406	491	1127	2231	2537	399
125°	557	634	1022	1729	2029	496
135°	670	743	993	1400	1579	519
145°	778	831	981	1192	1283	487
155°	877	906	973	1070	1103	404
165°	949	962	978	1015	1023	268
175°	984	985	979	993	990	93
180°	984	984	984	984	984	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1206.0	1206.0	1206.0	1206.0	1206.0
2.5°	1212.8	1202.9	1206.0	1203.4	1197.5
5°	1209.2	1195.7	1199.7	1196.4	1194.4
7.5°	1196.9	1184.4	1187.3	1183.9	1182.7
10°	1185.9	1173.4	1176.3	1172.0	1169.9
12.5°	1173.1	1159.8	1162.7	1158.4	1157.2
15°	1150.8	1136.2	1138.0	1135.9	1133.8
17.5°	1124.9	1110.1	1110.4	1107.0	1106.6
20°	1106.2	1090.6	1089.2	1085.0	1087.0
22.5°	1085.8	1069.3	1067.9	1062.0	1064.9
25°	1052.0	1034.3	1032.8	1026.5	1029.7
27.5°	1012.9	995.4	995.4	986.6	989.9
30°	984.0	967.3	969.1	958.6	962.7
32.5°	953.4	938.4	939.3	928.8	933.0
35°	904.3	891.8	891.5	883.1	886.2
37.5°	854.1	843.1	841.4	836.5	837.3
40°	819.3	809.9	806.5	803.3	803.3
42.5°	782.7	774.2	770.8	768.5	767.6
45°	726.8	720.6	717.3	715.1	714.1
47.5°	671.6	665.7	662.8	661.3	660.3
50°	633.3	629.2	628.0	624.8	623.7
52.5°	595.1	592.6	591.4	587.4	586.3
55°	538.7	537.7	538.7	531.3	530.2
57.5°	480.1	481.7	485.2	475.1	472.6
60°	441.0	445.1	449.5	437.7	433.5
62.5°	401.0	407.7	413.8	400.3	394.4
65°	341.1	351.5	358.1	344.0	332.6
67.5°	283.3	296.2	304.1	288.9	276.1
70°	243.3	257.9	266.7	251.5	237.0
72.5°	208.5	224.7	231.9	217.5	203.0
75°	157.3	171.8	180.6	168.6	153.0
77.5°	111.6	125.3	132.6	122.1	109.2
80°	81.8	96.4	102.0	93.3	82.9
82.5°	58.0	70.1	74.0	68.7	61.6
85°	26.6	34.9	39.3	37.1	35.1
87.5°	7.4	13.9	18.7	19.0	20.1
90°	3.1	6.2	12.6	14.2	15.7
92.5°	28.3	117.6	210.3	76.7	59.8
95°	67.7	249.3	835.8	343.6	223.5
97.5°	112.1	279.2	1238.1	953.2	690.4
100°	144.8	297.2	1386.7	1396.5	1134.9
102.5°	176.3	317.6	1415.7	1725.5	1477.4
105°	226.7	349.8	1399.3	2136.3	2011.6
107.5°	280.2	389.8	1321.2	2334.4	2379.9
110°	318.0	416.5	1260.8	2377.0	2524.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	352.0	446.8	1204.1	2343.3	2561.3
115°	406.1	490.7	1127.0	2231.1	2537.3
117.5°	453.3	537.7	1076.3	2073.0	2421.5
120°	484.8	567.9	1056.2	1966.1	2317.0
122.5°	515.0	594.4	1039.8	1866.2	2198.6
125°	557.2	634.2	1021.5	1728.8	2028.9
127.5°	593.1	670.0	1010.8	1612.7	1871.5
130°	617.0	694.0	1005.8	1541.6	1777.1
132.5°	639.7	712.9	1000.8	1481.9	1695.2
135°	670.5	742.9	993.2	1400.2	1578.8
137.5°	705.2	771.0	989.4	1331.6	1484.0
140°	724.1	788.7	986.9	1285.9	1419.8
142.5°	745.5	805.2	984.4	1245.2	1363.1
145°	777.6	831.4	980.6	1192.0	1282.8
147.5°	808.4	855.5	977.2	1147.2	1217.7
150°	831.1	869.6	975.9	1120.4	1177.4
152.5°	848.7	884.7	974.6	1097.5	1144.6
155°	876.7	906.0	972.7	1069.5	1103.4
157.5°	902.5	925.0	973.1	1049.1	1072.2
160°	917.7	937.7	974.3	1037.7	1054.6
162.5°	930.3	947.8	975.6	1027.5	1040.7
165°	949.1	961.5	977.5	1015.4	1023.1
167.5°	963.6	971.0	979.0	1008.1	1010.5
170°	971.2	977.3	979.0	1004.2	1004.2
172.5°	977.5	981.2	979.0	999.2	997.9
175°	983.8	985.3	979.0	993.1	990.1
177.5°	986.3	985.1	978.7	987.5	985.0
180°	983.8	983.8	983.8	983.8	983.8

(END OF REPORT)