

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P522028

Luminaire Tested: **SQ4-WB-150U-050D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P522028
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-150U-050D-93050-1D-UNV-STD-W-4 (5000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

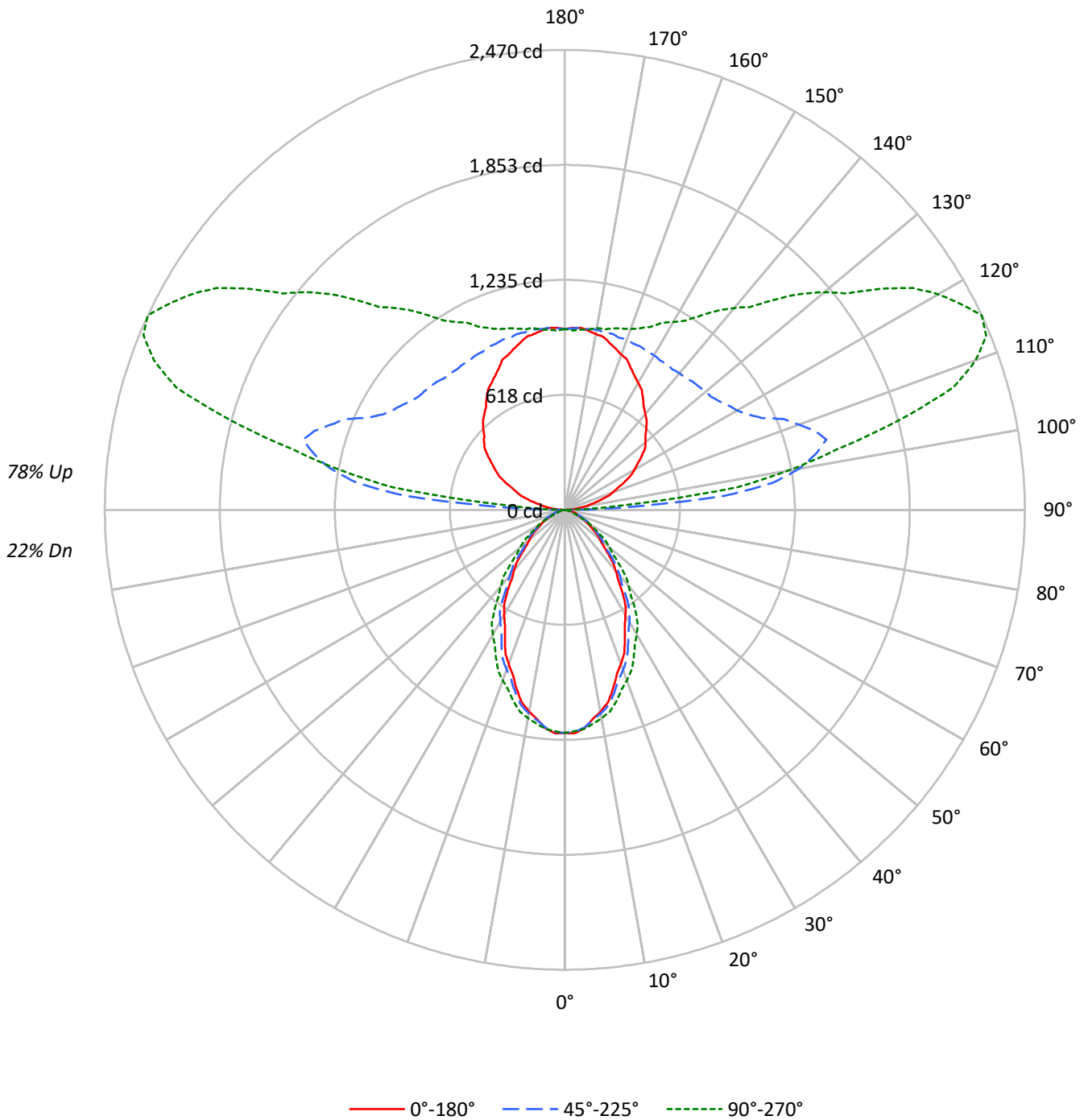
Lumens per Lamp: N/A
Luminaire Lumens: 8033.9 lumens
Efficiency: N/A
Efficacy: 111.9 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 71.8
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	100	100	100	100	89	89	89	89	68	68	68	48	48	48	30	30	30	22
1	92	88	84	81	81	78	75	73	60	58	56	43	42	41	27	27	26	19
2	84	77	72	67	74	69	64	60	53	50	47	38	36	35	25	24	23	17
3	77	68	62	56	68	61	55	51	47	43	40	34	32	30	22	21	20	15
4	71	61	54	48	62	54	48	44	42	38	35	31	28	26	20	19	18	13
5	65	54	47	41	57	49	42	38	38	33	30	28	25	23	19	17	16	12
6	60	49	41	36	53	44	37	33	34	30	26	25	22	20	17	15	14	11
7	55	44	37	31	49	40	33	29	31	27	23	23	20	18	16	14	13	10
8	51	40	33	28	46	36	30	25	28	24	21	21	18	16	14	13	12	9
9	48	36	29	25	42	33	27	23	26	22	19	20	17	15	13	12	11	8
10	45	33	27	22	40	30	24	20	24	20	17	18	15	13	13	11	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11054	11054	11054
5°	10916	10877	10941
10°	10313	10407	10648
15°	9520	9742	10178
20°	8646	8971	9564
25°	7754	8178	8911
30°	6933	7387	8233
35°	6063	6501	7431
40°	5103	5509	6433
45°	4212	4575	5370
50°	3517	3834	4474
55°	2985	3289	3695
60°	2552	2853	2949
65°	2030	2399	1906
70°	1802	1872	1163
75°	1668	1519	713
80°	1536	1397	616
85°	1387	1281	498



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.9	1.4
10°-20°	285.8	3.6
20°-30°	370.2	4.6
30°-40°	362.6	4.5
40°-50°	277.5	3.5
50°-60°	184.9	2.3
60°-70°	100.9	1.3
70°-80°	42.1	0.5
80°-90°	11.9	0.1
90°-100°	500.6	6.2
100°-110°	1209.9	15.1
110°-120°	1290.5	16.1
120°-130°	1045.2	13.0
130°-140°	809.2	10.1
140°-150°	617.3	7.7
150°-160°	446.9	5.6
160°-170°	275.2	3.4
170°-180°	93.2	1.2
0°-30°	766.0	9.5
0°-40°	1128.5	14.0
0°-60°	1591.0	19.8
0°-90°	1745.9	21.7
90°-120°	3001.0	37.4
90°-150°	5472.7	68.1
90°-180°	6288.0	78.3
0°-180°	8033.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1198	1198	1198	1198	1198	
5°	1179	1167	1174	1177	1181	110
15°	997	993	1020	1048	1066	278
25°	762	764	803	838	875	350
35°	538	541	577	616	660	335
45°	323	329	351	377	412	252
55°	186	193	204	212	230	168
65°	93	101	110	96	87	97
75°	47	47	43	29	20	50
85°	13	13	12	8	5	14
90°	0	0	0	0	0	3
95°	49	250	858	558	391	55
105°	193	334	1454	1882	1857	204
115°	354	452	1168	2215	2470	350
125°	504	580	1014	1762	2069	450
135°	619	692	973	1389	1598	478
145°	732	787	954	1181	1273	458
155°	839	875	967	1046	1084	387
165°	928	942	979	994	1008	262
175°	981	977	981	973	971	93
180°	971	971	971	971	971	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1198.1	1198.1	1198.1	1198.1	1198.1
2.5°	1201.0	1190.3	1193.0	1193.0	1189.7
5°	1178.6	1166.8	1174.4	1177.1	1181.3
7.5°	1134.9	1125.9	1139.8	1150.1	1158.4
10°	1100.8	1093.1	1110.8	1125.8	1136.6
12.5°	1061.3	1054.8	1076.7	1096.8	1110.9
15°	996.7	993.1	1019.9	1047.6	1065.6
17.5°	927.7	925.9	956.6	989.0	1012.0
20°	880.6	880.0	913.7	947.4	974.1
22.5°	833.0	834.2	869.5	904.6	935.0
25°	761.7	763.8	803.3	838.3	875.3
27.5°	695.8	696.7	737.6	774.5	814.0
30°	650.8	653.4	693.4	731.7	772.8
32.5°	605.8	608.8	648.0	687.5	729.5
35°	538.3	540.9	577.2	616.1	659.8
37.5°	468.7	472.2	504.5	541.2	584.2
40°	423.7	428.9	457.4	492.0	534.1
42.5°	380.4	386.8	413.2	446.0	484.1
45°	322.8	329.0	350.6	377.2	411.6
47.5°	273.2	280.2	296.9	319.8	349.2
50°	245.0	251.7	267.1	284.0	311.7
52.5°	220.2	226.8	240.6	253.6	277.3
55°	185.6	193.3	204.5	212.3	229.7
57.5°	157.2	164.6	173.5	177.0	187.6
60°	138.3	146.5	154.6	154.2	159.8
62.5°	121.0	128.0	136.1	130.5	130.8
65°	93.0	100.8	109.9	96.0	87.3
67.5°	75.2	76.8	86.2	66.9	56.6
70°	66.8	66.8	69.4	51.8	43.1
72.5°	58.8	58.8	56.4	42.2	33.0
75°	46.8	46.8	42.6	29.2	20.0
77.5°	36.1	35.7	32.6	21.8	14.5
80°	28.9	28.9	26.3	17.2	11.6
82.5°	22.6	22.6	20.4	13.5	8.6
85°	13.1	13.1	12.1	7.8	4.7
87.5°	4.6	4.6	4.2	2.5	2.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.5	135.5	319.2	155.2	105.3
95°	49.4	250.5	857.7	557.7	390.8
97.5°	87.6	277.5	1129.6	1088.3	934.2
100°	117.2	294.2	1279.4	1350.6	1223.9
102.5°	145.2	309.3	1378.1	1568.9	1493.7
105°	193.3	334.1	1454.2	1881.5	1857.4
107.5°	240.7	363.3	1409.4	2132.2	2189.0
110°	273.6	388.2	1337.0	2240.3	2346.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	306.5	413.1	1272.8	2266.7	2448.9
115°	353.8	452.3	1168.3	2214.9	2470.3
117.5°	400.7	493.6	1107.0	2095.8	2395.1
120°	431.9	518.4	1067.5	2002.3	2316.1
122.5°	464.9	544.9	1042.8	1906.8	2215.7
125°	503.9	580.4	1014.1	1761.5	2069.2
127.5°	542.6	614.6	993.9	1638.5	1908.8
130°	565.6	636.0	987.3	1552.8	1818.3
132.5°	587.0	660.6	977.4	1491.0	1716.3
135°	619.1	691.5	972.9	1389.0	1598.2
137.5°	649.6	722.4	958.5	1320.0	1477.7
140°	672.6	739.0	958.5	1270.3	1415.1
142.5°	695.6	762.0	950.3	1227.0	1349.3
145°	732.3	786.6	954.4	1180.7	1273.2
147.5°	766.4	819.1	951.9	1127.3	1203.7
150°	787.8	834.0	958.5	1103.9	1164.2
152.5°	810.8	855.5	956.9	1079.0	1132.9
155°	839.2	875.4	966.7	1045.8	1084.0
157.5°	873.4	904.3	964.7	1033.1	1055.6
160°	886.5	912.7	972.9	1016.5	1032.6
162.5°	907.9	930.8	969.6	1011.4	1021.0
165°	927.7	941.7	979.1	993.8	1007.9
167.5°	951.9	961.2	976.6	992.7	993.1
170°	958.5	964.5	983.2	981.4	991.4
172.5°	970.0	974.5	978.3	982.6	976.6
175°	981.1	977.1	981.1	972.9	970.9
177.5°	979.1	979.1	975.8	972.3	964.3
180°	970.9	970.9	970.9	970.9	970.9

(END OF REPORT)