

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: P522025

Luminaire Tested: **SQ4-WB-150U-050D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P522025
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 (3500K)
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 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

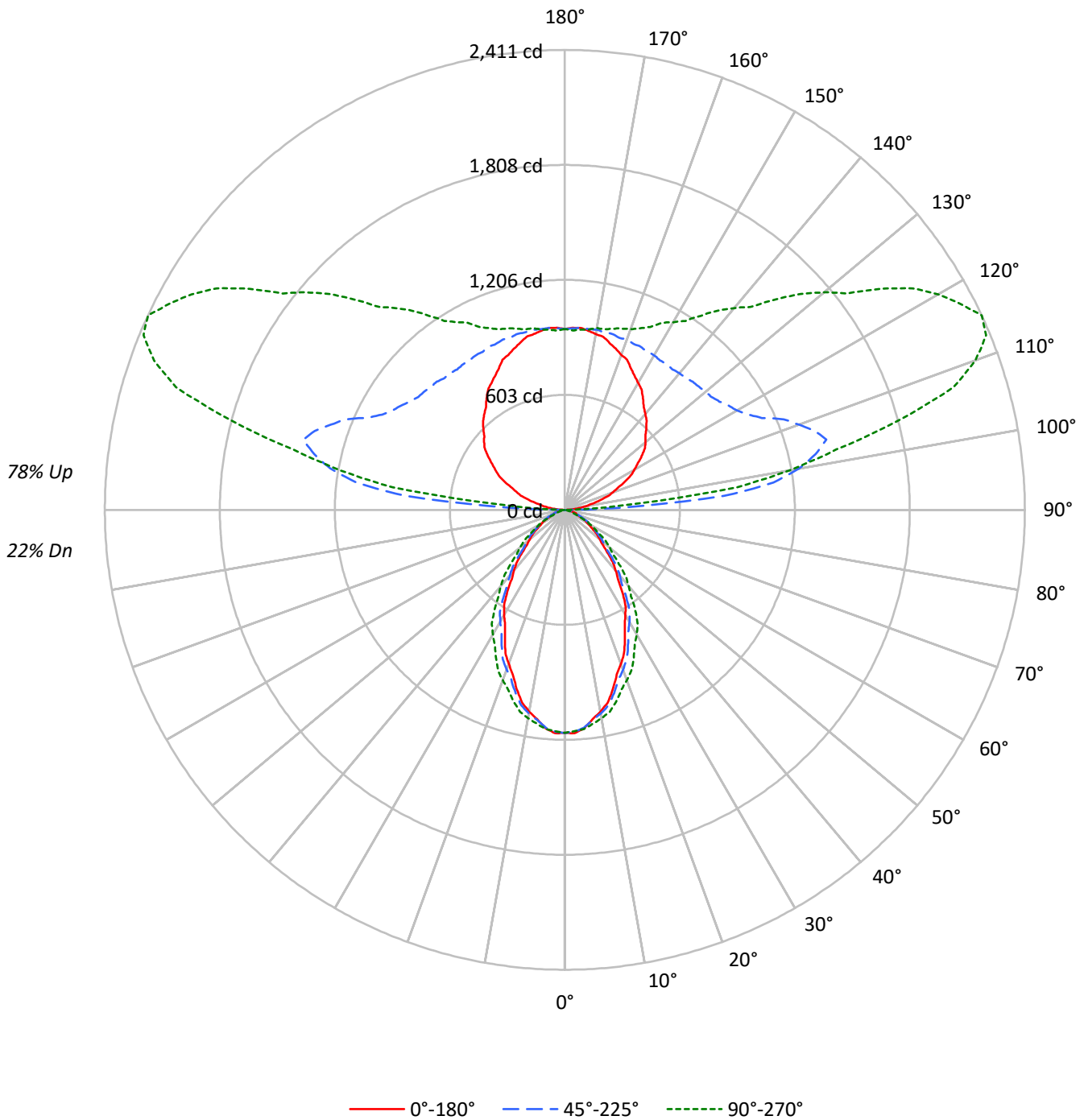
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7840.0 lumens
Efficiency: N/A
Efficacy: 109.0 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): 71.9
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°	10787	10787	10787
5°	10653	10615	10677
10°	10065	10155	10392
15°	9291	9507	9933
20°	8437	8754	9333
25°	7568	7980	8696
30°	6766	7209	8034
35°	5917	6345	7251
40°	4980	5375	6277
45°	4110	4465	5241
50°	3432	3741	4366
55°	2913	3211	3606
60°	2489	2783	2879
65°	1982	2340	1860
70°	1759	1826	1136
75°	1629	1483	695
80°	1498	1365	600
85°	1355	1249	487



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.2	1.4
10°-20°	278.9	3.6
20°-30°	361.3	4.6
30°-40°	353.8	4.5
40°-50°	270.8	3.5
50°-60°	180.5	2.3
60°-70°	98.5	1.3
70°-80°	41.0	0.5
80°-90°	11.6	0.1
90°-100°	488.5	6.2
100°-110°	1180.8	15.1
110°-120°	1259.3	16.1
120°-130°	1020.0	13.0
130°-140°	789.7	10.1
140°-150°	602.4	7.7
150°-160°	436.1	5.6
160°-170°	268.6	3.4
170°-180°	90.9	1.2
0°-30°	747.5	9.5
0°-40°	1101.3	14.0
0°-60°	1552.6	19.8
0°-90°	1703.7	21.7
90°-120°	2928.6	37.4
90°-150°	5340.7	68.1
90°-180°	6136.0	78.3
0°-180°	7840.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1169	1169	1169	1169	1169	
5°	1150	1139	1146	1149	1153	107
15°	973	969	995	1022	1040	272
25°	743	745	784	818	854	342
35°	525	528	563	601	644	327
45°	315	321	342	368	402	246
55°	181	189	200	207	224	164
65°	91	98	107	94	85	94
75°	46	46	42	28	20	49
85°	13	13	12	8	5	14
90°	0	0	0	0	0	3
95°	48	244	837	544	381	54
105°	189	326	1419	1836	1813	199
115°	345	441	1140	2162	2411	341
125°	492	566	990	1719	2019	439
135°	604	675	949	1356	1560	466
145°	715	768	931	1152	1242	447
155°	819	854	943	1020	1058	378
165°	905	919	956	970	984	255
175°	958	954	958	949	947	90
180°	947	947	947	947	947	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1169.2	1169.2	1169.2	1169.2	1169.2
2.5°	1172.0	1161.6	1164.2	1164.2	1161.0
5°	1150.2	1138.7	1146.1	1148.7	1152.8
7.5°	1107.5	1098.8	1112.3	1122.4	1130.5
10°	1074.3	1066.7	1084.0	1098.6	1109.2
12.5°	1035.7	1029.4	1050.8	1070.4	1084.1
15°	972.7	969.2	995.3	1022.3	1039.9
17.5°	905.3	903.6	933.5	965.1	987.6
20°	859.3	858.8	891.6	924.5	950.6
22.5°	812.9	814.0	848.5	882.8	912.5
25°	743.4	745.4	783.9	818.1	854.2
27.5°	679.0	679.9	719.8	755.8	794.4
30°	635.1	637.6	676.7	714.0	754.1
32.5°	591.2	594.1	632.3	670.9	711.9
35°	525.3	527.8	563.3	601.2	643.8
37.5°	457.4	460.8	492.3	528.1	570.1
40°	413.5	418.5	446.3	480.1	521.2
42.5°	371.2	377.4	403.2	435.3	472.4
45°	315.0	321.0	342.2	368.1	401.7
47.5°	266.6	273.5	289.8	312.1	340.7
50°	239.1	245.6	260.6	277.1	304.2
52.5°	214.9	221.4	234.8	247.5	270.6
55°	181.1	188.6	199.6	207.1	224.2
57.5°	153.4	160.6	169.3	172.7	183.0
60°	134.9	143.0	150.8	150.4	156.0
62.5°	118.1	124.9	132.8	127.3	127.6
65°	90.8	98.3	107.2	93.7	85.2
67.5°	73.4	75.0	84.1	65.3	55.2
70°	65.2	65.2	67.7	50.6	42.1
72.5°	57.4	57.4	55.0	41.1	32.2
75°	45.7	45.7	41.6	28.5	19.5
77.5°	35.2	34.8	31.8	21.3	14.2
80°	28.2	28.2	25.7	16.8	11.3
82.5°	22.1	22.1	19.9	13.1	8.4
85°	12.8	12.8	11.8	7.6	4.6
87.5°	4.5	4.5	4.1	2.5	2.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.1	132.2	311.5	151.4	102.8
95°	48.2	244.4	837.0	544.3	381.4
97.5°	85.5	270.8	1102.4	1062.0	911.7
100°	114.4	287.1	1248.5	1318.0	1194.3
102.5°	141.7	301.9	1344.9	1531.1	1457.7
105°	188.7	326.1	1419.1	1836.1	1812.6
107.5°	234.9	354.6	1375.4	2080.8	2136.1
110°	267.0	378.8	1304.7	2186.3	2290.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	299.1	403.1	1242.1	2212.0	2389.9
115°	345.3	441.4	1140.1	2161.5	2410.7
117.5°	391.0	481.7	1080.3	2045.2	2337.3
120°	421.5	505.9	1041.8	1954.0	2260.2
122.5°	453.6	531.8	1017.7	1860.8	2162.2
125°	491.8	566.4	989.6	1719.0	2019.3
127.5°	529.5	599.8	969.9	1599.0	1862.7
130°	552.0	620.7	963.5	1515.4	1774.4
132.5°	572.9	644.7	953.9	1455.0	1674.9
135°	604.2	674.8	949.4	1355.5	1559.6
137.5°	633.9	704.9	935.4	1288.2	1442.0
140°	656.4	721.1	935.4	1239.7	1381.0
142.5°	678.9	743.6	927.4	1197.4	1316.8
145°	714.6	767.6	931.4	1152.2	1242.5
147.5°	747.9	799.3	929.0	1100.1	1174.7
150°	768.8	813.9	935.4	1077.2	1136.1
152.5°	791.3	834.8	933.8	1053.0	1105.6
155°	819.0	854.3	943.4	1020.5	1057.8
157.5°	852.3	882.5	941.4	1008.1	1030.1
160°	865.1	890.6	949.4	991.9	1007.7
162.5°	886.0	908.4	946.2	987.0	996.4
165°	905.3	919.0	955.5	969.8	983.6
167.5°	929.0	938.0	953.1	968.7	969.1
170°	935.4	941.3	959.5	957.7	967.5
172.5°	946.6	950.9	954.7	958.9	953.1
175°	957.5	953.5	957.5	949.4	947.4
177.5°	955.5	955.5	952.2	948.9	941.0
180°	947.4	947.4	947.4	947.4	947.4

(END OF REPORT)