

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: P522027

Luminaire Tested: **SQ4-WB-150U-050D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P522027
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 (4500K)
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 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

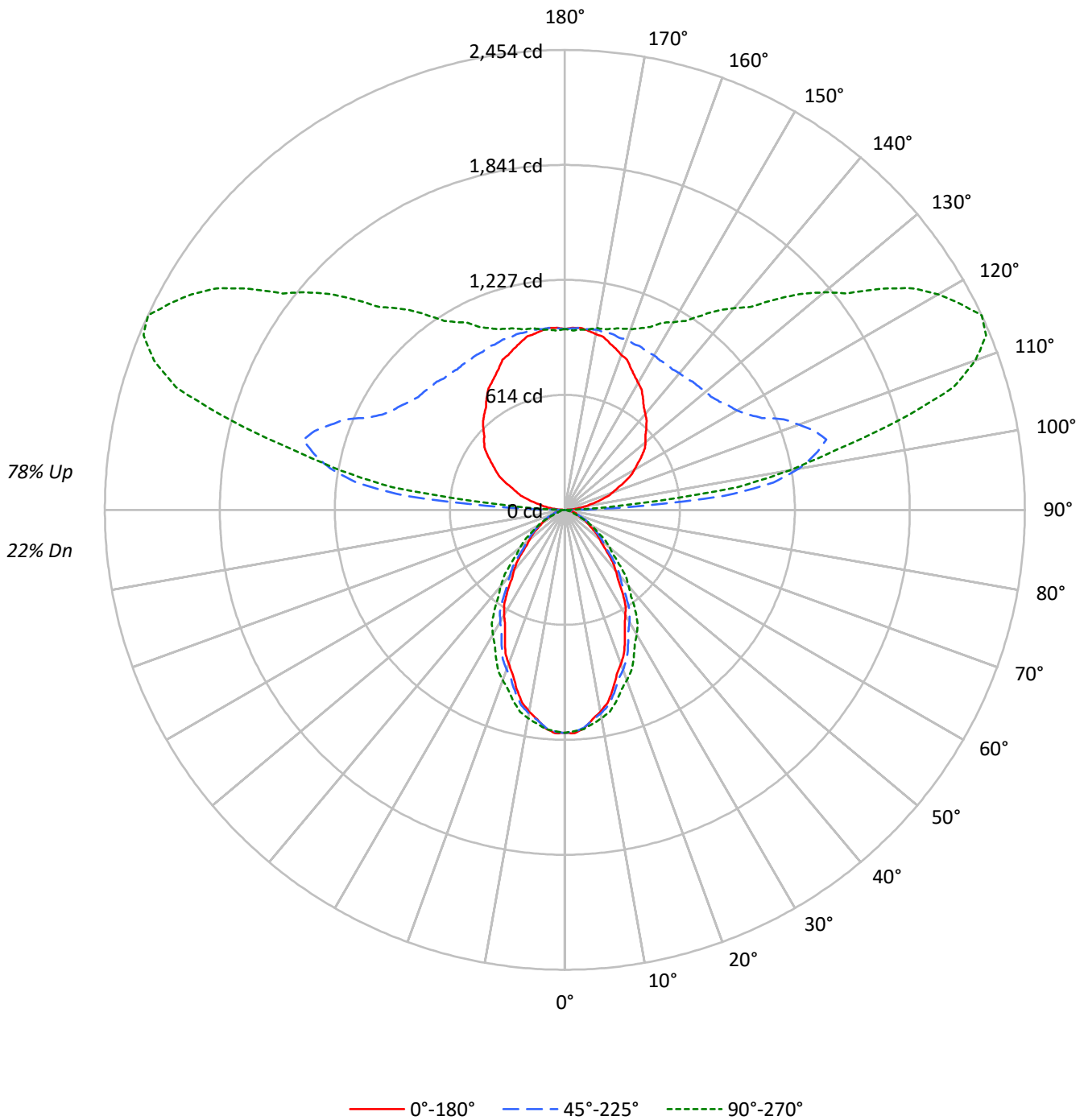
Lumens per Lamp: N/A
Luminaire Lumens: 7979.5 lumens
Efficiency: N/A
Efficacy: 111.1 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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°	10979	10979	10979
5°	10841	10803	10866
10°	10244	10336	10576
15°	9456	9676	10109
20°	8587	8910	9499
25°	7702	8122	8850
30°	6886	7337	8178
35°	6022	6457	7381
40°	5068	5472	6389
45°	4183	4545	5334
50°	3492	3807	4444
55°	2965	3267	3671
60°	2534	2832	2928
65°	2017	2382	1893
70°	1788	1859	1155
75°	1658	1508	706
80°	1525	1387	611
85°	1387	1270	498



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.1	1.4
10°-20°	283.9	3.6
20°-30°	367.7	4.6
30°-40°	360.1	4.5
40°-50°	275.6	3.5
50°-60°	183.7	2.3
60°-70°	100.2	1.3
70°-80°	41.8	0.5
80°-90°	11.8	0.1
90°-100°	497.2	6.2
100°-110°	1201.7	15.1
110°-120°	1281.7	16.1
120°-130°	1038.1	13.0
130°-140°	803.7	10.1
140°-150°	613.1	7.7
150°-160°	443.8	5.6
160°-170°	273.4	3.4
170°-180°	92.6	1.2
0°-30°	760.8	9.5
0°-40°	1120.9	14.0
0°-60°	1580.2	19.8
0°-90°	1734.0	21.7
90°-120°	2980.7	37.4
90°-150°	5435.7	68.1
90°-180°	6245.0	78.3
0°-180°	7979.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1190	1190	1190	1190	1190	
5°	1171	1159	1166	1169	1173	109
15°	990	986	1013	1040	1058	276
25°	757	759	798	833	869	348
35°	535	537	573	612	655	332
45°	321	327	348	375	409	250
55°	184	192	203	211	228	167
65°	92	100	109	95	87	96
75°	46	46	42	29	20	50
85°	13	13	12	8	5	14
90°	0	0	0	0	0	3
95°	49	249	852	554	388	55
105°	192	332	1444	1869	1845	203
115°	351	449	1160	2200	2454	347
125°	500	576	1007	1750	2055	447
135°	615	687	966	1380	1587	475
145°	727	781	948	1173	1265	455
155°	834	870	960	1039	1077	385
165°	921	935	972	987	1001	260
175°	974	970	974	966	964	92
180°	964	964	964	964	964	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1190.0	1190.0	1190.0	1190.0	1190.0
2.5°	1192.9	1182.3	1185.0	1184.9	1181.6
5°	1170.6	1158.9	1166.5	1169.2	1173.3
7.5°	1127.2	1118.3	1132.1	1142.3	1150.6
10°	1093.4	1085.7	1103.3	1118.2	1128.9
12.5°	1054.1	1047.7	1069.5	1089.4	1103.4
15°	990.0	986.4	1013.0	1040.5	1058.4
17.5°	921.4	919.6	950.1	982.3	1005.1
20°	874.6	874.1	907.5	941.0	967.5
22.5°	827.4	828.5	863.6	898.5	928.7
25°	756.6	758.6	797.8	832.6	869.4
27.5°	691.1	692.0	732.6	769.3	808.5
30°	646.4	649.0	688.7	726.7	767.6
32.5°	601.7	604.7	643.6	682.9	724.5
35°	534.7	537.2	573.3	611.9	655.3
37.5°	465.5	469.0	501.0	537.5	580.2
40°	420.8	426.0	454.3	488.6	530.5
42.5°	377.8	384.2	410.4	443.0	480.8
45°	320.6	326.7	348.3	374.6	408.8
47.5°	271.3	278.4	294.9	317.6	346.8
50°	243.3	250.0	265.2	282.1	309.6
52.5°	218.7	225.3	238.9	251.9	275.4
55°	184.3	192.0	203.1	210.8	228.2
57.5°	156.1	163.5	172.3	175.8	186.3
60°	137.3	145.5	153.5	153.1	158.7
62.5°	120.2	127.1	135.1	129.6	129.9
65°	92.4	100.1	109.1	95.4	86.7
67.5°	74.7	76.3	85.6	66.5	56.2
70°	66.3	66.3	68.9	51.5	42.8
72.5°	58.4	58.4	56.0	41.9	32.8
75°	46.5	46.5	42.3	29.0	19.8
77.5°	35.8	35.4	32.4	21.7	14.4
80°	28.7	28.7	26.1	17.1	11.5
82.5°	22.5	22.5	20.3	13.4	8.6
85°	13.1	13.1	12.0	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°	16.3	134.6	317.1	154.1	104.6
95°	49.0	248.8	851.9	554.0	388.2
97.5°	87.0	275.6	1122.0	1080.9	927.9
100°	116.4	292.2	1270.7	1341.4	1215.6
102.5°	144.2	307.2	1368.8	1558.3	1483.6
105°	192.0	331.9	1444.4	1868.8	1844.8
107.5°	239.0	360.9	1399.8	2117.8	2174.1
110°	271.7	385.6	1327.9	2225.2	2331.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	304.4	410.3	1264.2	2251.4	2432.4
115°	351.4	449.3	1160.4	2199.9	2453.6
117.5°	398.0	490.3	1099.5	2081.6	2378.8
120°	429.0	514.9	1060.3	1988.8	2300.4
122.5°	461.7	541.2	1035.8	1893.9	2200.7
125°	500.5	576.4	1007.2	1749.6	2055.2
127.5°	538.9	610.4	987.2	1627.4	1895.9
130°	561.8	631.7	980.6	1542.3	1806.0
132.5°	583.1	656.2	970.8	1480.9	1704.7
135°	614.9	686.8	966.3	1379.6	1587.4
137.5°	645.2	717.5	952.0	1311.1	1467.7
140°	668.1	734.0	952.0	1261.7	1405.6
142.5°	690.9	756.9	943.9	1218.7	1340.2
145°	727.3	781.2	947.9	1172.7	1264.6
147.5°	761.2	813.5	945.5	1119.6	1195.5
150°	782.5	828.4	952.0	1096.4	1156.3
152.5°	805.3	849.7	950.4	1071.7	1125.3
155°	833.5	869.5	960.2	1038.7	1076.6
157.5°	867.4	898.2	958.2	1026.1	1048.5
160°	880.5	906.5	966.3	1009.6	1025.6
162.5°	901.8	924.5	963.1	1004.5	1014.1
165°	921.4	935.4	972.5	987.1	1001.1
167.5°	945.5	954.7	970.0	985.9	986.3
170°	952.0	958.0	976.5	974.7	984.7
172.5°	963.5	967.9	971.6	976.0	970.0
175°	974.5	970.5	974.5	966.3	964.3
177.5°	972.5	972.5	969.2	965.7	957.7
180°	964.3	964.3	964.3	964.3	964.3

(END OF REPORT)