

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: P562431

Luminaire Tested: **SQ4-PW1-125U-100D-92765-1D-UNV-STD-W-4 (4500K)**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P562431
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, 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-PW1-125U-100D-92765-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 2700K/65000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

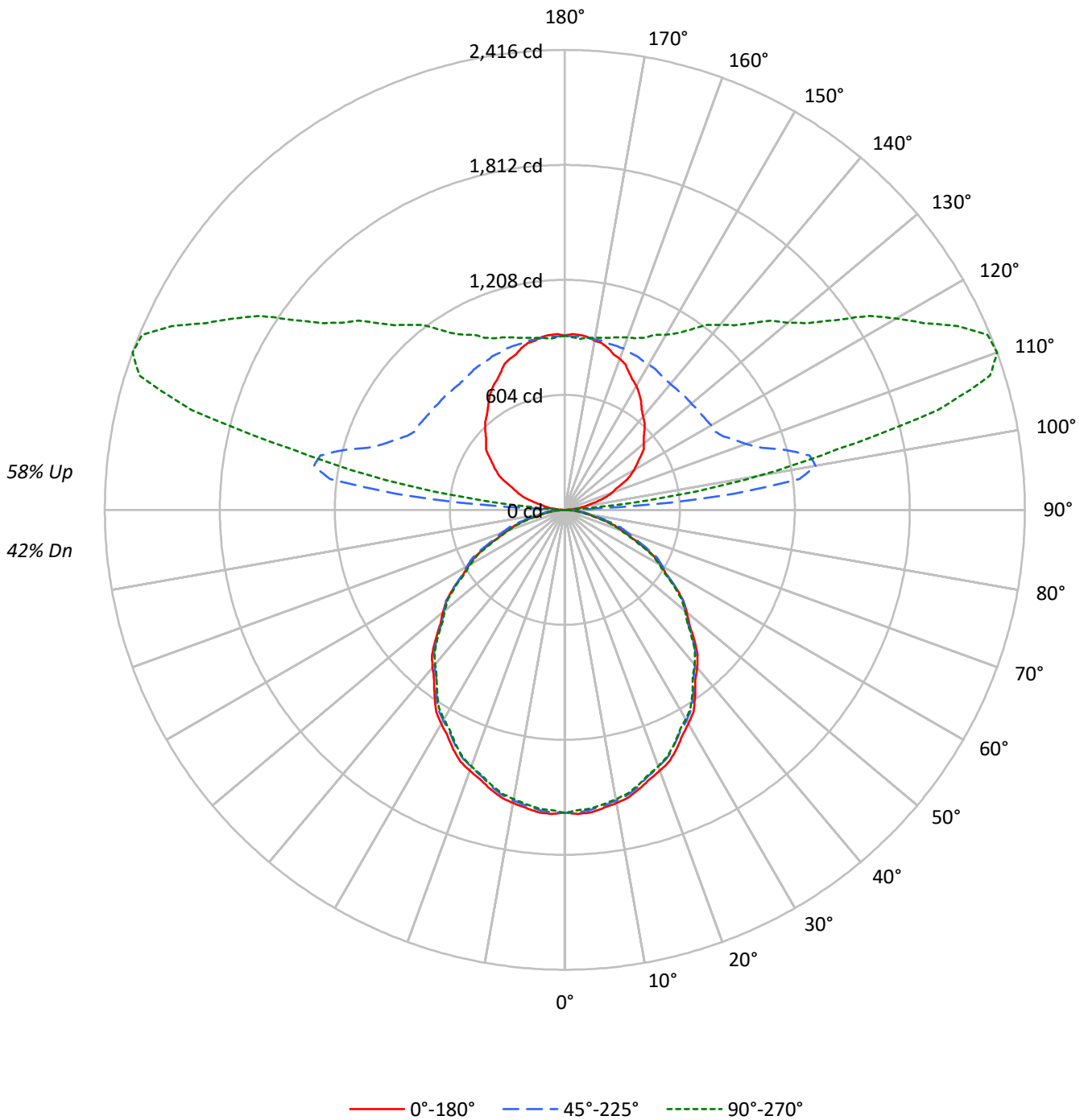
Lumens per Lamp: N/A
Luminaire Lumens: 9729.3 lumens
Efficiency: N/A
Efficacy: 116.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 83.7
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	50	30	10	0	
RCR																						
0	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48	42				
1	96	92	88	85	87	84	81	78	69	67	65	55	54	53	43	42	41	35				
2	87	80	74	69	80	73	68	64	61	57	54	49	46	44	38	36	35	30				
3	80	71	63	58	72	65	58	53	53	49	45	43	40	37	34	31	30	25				
4	73	62	55	49	66	57	50	45	47	42	38	38	35	32	30	28	25	22				
5	67	56	48	42	61	51	44	39	42	37	33	34	31	28	27	24	22	19				
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	25	22	20	16				
7	57	45	37	32	52	41	34	29	35	29	25	28	24	21	22	20	17	15				
8	53	41	33	28	48	38	31	26	31	26	22	26	22	19	21	18	16	13				
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14	12				
10	46	34	27	22	42	31	25	21	27	22	18	22	18	15	18	15	13	11				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14675	14675	14675
5°	14770	14653	14588
10°	14651	14533	14455
15°	14497	14336	14283
20°	14323	14103	14076
25°	14124	13866	13823
30°	13825	13616	13526
35°	13432	13243	13163
40°	13013	12810	12759
45°	12506	12342	12287
50°	11988	11888	11807
55°	11429	11429	11249
60°	10732	10939	10551
65°	9820	10311	9575
70°	8656	9487	8430
75°	7393	8491	7194
80°	5733	7146	5807
85°	3705	5494	4891



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.8	1.5
10°-20°	422.9	4.3
20°-30°	627.2	6.4
30°-40°	733.9	7.5
40°-50°	730.7	7.5
50°-60°	631.0	6.5
60°-70°	454.2	4.7
70°-80°	238.2	2.4
80°-90°	59.0	0.6
90°-100°	416.8	4.3
100°-110°	1186.1	12.2
110°-120°	1136.4	11.7
120°-130°	899.4	9.2
130°-140°	721.9	7.4
140°-150°	565.2	5.8
150°-160°	413.5	4.3
160°-170°	256.2	2.6
170°-180°	86.9	0.9
0°-30°	1199.9	12.3
0°-40°	1933.8	19.9
0°-60°	3295.4	33.9
0°-90°	4046.8	41.6
90°-120°	2739.4	28.2
90°-150°	4925.9	50.6
90°-180°	5682.0	58.4
0°-180°	9729.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1591	1591	1591	1591	1591	
5°	1595	1577	1582	1578	1575	151
15°	1518	1498	1501	1498	1495	428
25°	1387	1364	1362	1354	1358	638
35°	1193	1176	1176	1165	1169	746
45°	958	950	946	943	942	740
55°	710	709	710	701	699	634
65°	450	464	472	454	439	446
75°	207	227	238	222	202	222
85°	35	46	52	49	46	46
90°	0	0	0	0	0	3
95°	45	180	807	279	172	52
105°	184	280	1209	2135	2030	195
115°	343	414	916	1942	2280	337
125°	484	536	875	1452	1736	433
135°	591	641	864	1226	1386	456
145°	697	733	871	1061	1157	436
155°	796	815	892	959	998	368
165°	880	883	903	922	936	247
175°	922	917	913	908	901	87
180°	915	915	915	915	915	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1590.6	1590.6	1590.6	1590.6	1590.6
2.5°	1599.5	1586.4	1590.6	1587.0	1579.4
5°	1594.8	1577.0	1582.2	1577.9	1575.1
7.5°	1578.5	1562.1	1565.9	1561.4	1559.7
10°	1563.9	1547.5	1551.3	1545.7	1542.9
12.5°	1547.1	1529.6	1533.4	1527.7	1526.1
15°	1517.7	1498.5	1500.9	1498.0	1495.3
17.5°	1483.5	1464.0	1464.4	1459.9	1459.4
20°	1458.8	1438.3	1436.4	1430.9	1433.6
22.5°	1431.9	1410.3	1408.4	1400.6	1404.5
25°	1387.4	1364.1	1362.1	1353.8	1357.9
27.5°	1335.8	1312.8	1312.8	1301.1	1305.5
30°	1297.7	1275.8	1278.1	1264.2	1269.6
32.5°	1257.3	1237.6	1238.8	1224.9	1230.4
35°	1192.6	1176.1	1175.8	1164.6	1168.7
37.5°	1126.4	1111.9	1109.6	1103.2	1104.3
40°	1080.5	1068.1	1063.6	1059.4	1059.4
42.5°	1032.3	1021.0	1016.6	1013.5	1012.4
45°	958.5	950.3	945.9	943.1	941.7
47.5°	885.7	878.0	874.2	872.2	870.8
50°	835.2	829.7	828.2	824.0	822.6
52.5°	784.8	781.5	780.0	774.7	773.3
55°	710.5	709.1	710.5	700.7	699.3
57.5°	633.1	635.3	639.9	626.6	623.3
60°	581.6	587.1	592.8	577.2	571.8
62.5°	528.9	537.6	545.7	527.9	520.2
65°	449.8	463.5	472.3	453.7	438.6
67.5°	373.6	390.6	401.1	381.1	364.1
70°	320.9	340.1	351.7	331.7	312.5
72.5°	275.0	296.3	305.8	286.8	267.7
75°	207.4	226.6	238.2	222.4	201.8
77.5°	147.1	165.2	174.9	161.1	144.1
80°	107.9	127.1	134.5	123.0	109.3
82.5°	76.5	92.4	97.5	90.6	81.3
85°	35.0	46.0	51.9	49.0	46.2
87.5°	9.0	16.6	21.3	21.3	22.4
90°	0.0	0.0	0.0	0.0	0.0
92.5°	13.9	73.8	171.1	49.8	37.6
95°	45.2	179.6	807.0	279.3	172.2
97.5°	83.1	210.3	1242.8	889.3	609.4
100°	109.6	228.6	1337.4	1354.7	1043.5
102.5°	138.8	248.3	1316.6	1734.0	1462.3
105°	184.4	279.6	1208.7	2135.1	2029.6
107.5°	230.6	316.0	1082.8	2248.1	2342.0
110°	262.6	342.5	1010.5	2204.9	2415.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	293.2	369.1	961.8	2102.5	2403.2
115°	342.6	414.0	916.5	1941.7	2280.1
117.5°	386.1	453.1	889.8	1765.8	2124.2
120°	420.9	477.0	887.0	1665.2	2008.8
122.5°	448.7	504.8	880.0	1577.0	1896.1
125°	483.5	536.2	874.8	1451.7	1735.7
127.5°	521.4	570.7	872.0	1376.8	1610.8
130°	540.9	590.2	867.9	1324.7	1528.7
132.5°	561.8	609.7	867.9	1284.0	1471.7
135°	591.3	640.6	864.4	1226.3	1386.1
137.5°	619.1	667.1	864.0	1177.4	1315.5
140°	640.0	689.3	862.6	1137.0	1269.6
142.5°	663.7	704.8	866.8	1104.6	1223.7
145°	697.4	733.1	871.3	1061.3	1156.6
147.5°	726.3	761.0	879.0	1017.6	1099.9
150°	751.3	775.1	881.8	1003.1	1060.9
152.5°	770.8	796.0	884.5	983.5	1037.2
155°	796.5	815.2	892.2	959.2	998.3
157.5°	828.5	839.8	893.9	948.1	976.0
160°	845.2	853.7	900.9	939.7	963.5
162.5°	855.0	864.8	902.3	932.6	951.0
165°	880.0	883.4	902.6	922.1	935.7
167.5°	897.1	894.0	910.6	919.5	924.9
170°	902.6	900.9	907.9	909.7	916.5
172.5°	915.2	909.4	912.0	906.9	912.4
175°	921.8	916.7	913.1	907.7	900.9
177.5°	924.5	916.4	912.0	906.5	907.9
180°	914.8	914.8	914.8	914.8	914.8

(END OF REPORT)