

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: P562224

Luminaire Tested: **SQ4-PW1-050U-100D-92765-1D-UNV-STD-W-4 (5000K)**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P562224
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-PW1-050U-100D-92765-1D-UNV-STD-W-4 (5000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K/65000K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

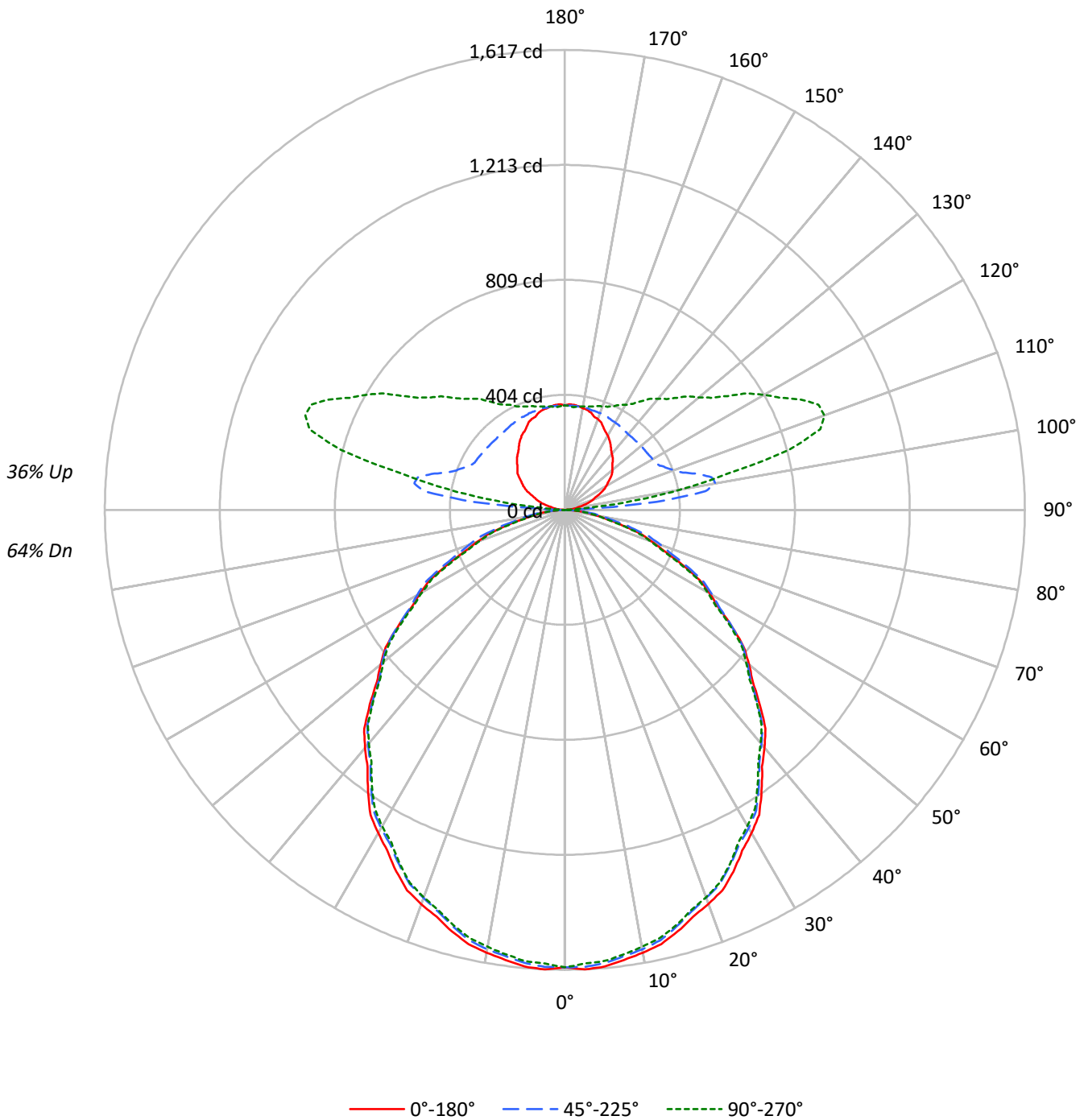
Lumens per Lamp: N/A
Luminaire Lumens: 6375.1 lumens
Efficiency: N/A
Efficacy: 109.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 58.1
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				
RC	80					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	111	111	111	111	104	104	104	104	91	91	91	80	80	80	69	69	69	64		
1	101	97	93	89	95	91	88	85	80	78	75	70	69	67	61	60	59	54		
2	92	85	78	73	86	80	74	70	71	66	63	62	59	56	54	52	50	46		
3	84	74	67	61	79	70	64	58	62	57	53	55	51	47	48	45	42	39		
4	77	66	58	52	72	62	55	50	55	50	45	49	44	41	43	39	37	33		
5	71	59	51	45	66	56	48	43	50	44	39	44	39	35	39	35	32	29		
6	65	53	45	39	61	50	43	37	45	39	34	40	35	31	35	31	28	25		
7	60	48	40	34	57	45	38	33	41	35	30	36	31	28	32	28	25	23		
8	56	44	36	30	53	41	34	29	37	31	27	33	28	25	30	25	22	20		
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	27	23	20	18		
10	49	37	29	24	46	35	28	24	32	26	22	28	24	20	25	21	18	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14838	14838	14838
5°	14933	14816	14750
10°	14814	14695	14615
15°	14657	14495	14440
20°	14482	14259	14232
25°	14279	14020	13977
30°	13977	13766	13676
35°	13581	13390	13310
40°	13157	12952	12901
45°	12645	12479	12423
50°	12121	12020	11938
55°	11556	11556	11372
60°	10850	11059	10667
65°	9929	10424	9682
70°	8754	9593	8524
75°	7475	8587	7272
80°	5797	7226	5871
85°	3747	5547	4954



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.4	2.4
10°-20°	427.5	6.7
20°-30°	634.2	9.9
30°-40°	742.1	11.6
40°-50°	738.7	11.6
50°-60°	637.9	10.0
60°-70°	459.2	7.2
70°-80°	240.8	3.8
80°-90°	59.7	0.9
90°-100°	167.5	2.6
100°-110°	476.6	7.5
110°-120°	456.7	7.2
120°-130°	361.4	5.7
130°-140°	290.1	4.6
140°-150°	227.1	3.6
150°-160°	166.2	2.6
160°-170°	102.9	1.6
170°-180°	34.9	0.5
0°-30°	1213.2	19.0
0°-40°	1955.2	30.7
0°-60°	3331.9	52.3
0°-90°	4091.6	64.2
90°-120°	1100.8	17.3
90°-150°	1979.5	31.0
90°-180°	2283.0	35.8
0°-180°	6375.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1608	1608	1608	1608	1608	
5°	1612	1594	1600	1595	1593	153
15°	1534	1515	1518	1515	1512	433
25°	1403	1379	1377	1369	1373	645
35°	1206	1189	1189	1178	1182	754
45°	969	961	956	954	952	748
55°	718	717	718	708	707	641
65°	455	469	478	459	444	451
75°	210	229	241	225	204	225
85°	35	46	52	50	47	47
90°	0	0	0	0	0	2
95°	18	72	324	112	69	21
105°	74	112	486	858	816	78
115°	138	166	368	780	916	136
125°	194	216	352	583	698	174
135°	238	257	347	493	557	183
145°	280	295	350	426	465	175
155°	320	328	358	385	401	148
165°	354	355	363	370	376	99
175°	370	368	367	365	362	35
180°	368	368	368	368	368	

TEST NUMBER: P562224

CATALOG NUMBER: SQ4-PW1-050U-100D-92765-1D-UNV-STD-W-4 (5000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1608.2	1608.2	1608.2	1608.2	1608.2
2.5°	1617.2	1603.9	1608.2	1604.6	1596.8
5°	1612.4	1594.4	1599.7	1595.3	1592.6
7.5°	1596.0	1579.4	1583.2	1578.7	1577.0
10°	1581.2	1564.6	1568.5	1562.8	1560.0
12.5°	1564.2	1546.5	1550.4	1544.6	1543.0
15°	1534.5	1515.1	1517.5	1514.6	1511.8
17.5°	1499.9	1480.2	1480.6	1476.1	1475.5
20°	1475.0	1454.2	1452.3	1446.7	1449.5
22.5°	1447.8	1425.9	1424.0	1416.1	1420.0
25°	1402.7	1379.2	1377.2	1368.8	1373.0
27.5°	1350.6	1327.3	1327.3	1315.5	1320.0
30°	1312.0	1289.9	1292.2	1278.2	1283.7
32.5°	1271.2	1251.3	1252.5	1238.5	1244.0
35°	1205.8	1189.1	1188.8	1177.5	1181.7
37.5°	1138.9	1124.2	1121.9	1115.4	1116.5
40°	1092.4	1079.9	1075.4	1071.2	1071.2
42.5°	1043.7	1032.3	1027.8	1024.7	1023.6
45°	969.1	960.8	956.4	953.5	952.1
47.5°	895.5	887.7	883.9	881.8	880.5
50°	844.5	838.9	837.4	833.1	831.7
52.5°	793.5	790.1	788.6	783.2	781.8
55°	718.4	717.0	718.4	708.4	707.0
57.5°	640.1	642.4	646.9	633.6	630.2
60°	588.0	593.5	599.3	583.6	578.1
62.5°	534.7	543.6	551.7	533.7	525.9
65°	454.8	468.7	477.5	458.7	443.5
67.5°	377.7	394.9	405.5	385.3	368.1
70°	324.5	343.9	355.6	335.4	316.0
72.5°	278.0	299.6	309.2	290.0	270.6
75°	209.7	229.1	240.9	224.8	204.0
77.5°	148.8	167.1	176.8	162.8	145.7
80°	109.1	128.5	136.0	124.4	110.5
82.5°	77.4	93.4	98.6	91.6	82.2
85°	35.4	46.5	52.4	49.5	46.8
87.5°	9.1	16.8	21.5	21.6	22.7
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.6	29.6	68.8	20.0	15.1
95°	18.2	72.2	324.3	112.2	69.2
97.5°	33.4	84.5	499.4	357.4	244.9
100°	44.0	91.9	537.4	544.4	419.3
102.5°	55.8	99.8	529.1	696.8	587.6
105°	74.1	112.3	485.7	858.0	815.6
107.5°	92.7	127.0	435.1	903.4	941.1
110°	105.5	137.6	406.1	886.0	970.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	117.8	148.3	386.5	844.9	965.7
115°	137.7	166.4	368.3	780.3	916.2
117.5°	155.2	182.1	357.6	709.6	853.6
120°	169.1	191.7	356.4	669.2	807.2
122.5°	180.3	202.9	353.6	633.7	761.9
125°	194.3	215.5	351.5	583.4	697.5
127.5°	209.5	229.3	350.4	553.3	647.3
130°	217.4	237.2	348.7	532.3	614.3
132.5°	225.7	245.0	348.7	516.0	591.4
135°	237.6	257.4	347.3	492.8	557.0
137.5°	248.8	268.1	347.2	473.1	528.6
140°	257.2	277.0	346.6	456.9	510.2
142.5°	266.7	283.2	348.3	443.9	491.7
145°	280.3	294.6	350.1	426.5	464.8
147.5°	291.9	305.8	353.2	408.9	442.0
150°	301.9	311.5	354.3	403.1	426.3
152.5°	309.7	319.9	355.5	395.2	416.8
155°	320.1	327.6	358.5	385.4	401.2
157.5°	332.9	337.5	359.2	381.0	392.2
160°	339.7	343.1	362.0	377.6	387.2
162.5°	343.6	347.5	362.6	374.8	382.2
165°	353.6	355.0	362.7	370.5	376.0
167.5°	360.5	359.3	365.9	369.5	371.7
170°	362.7	362.0	364.8	365.6	368.3
172.5°	367.8	365.4	366.5	364.4	366.6
175°	370.4	368.4	366.9	364.8	362.0
177.5°	371.5	368.2	366.5	364.3	364.8
180°	367.6	367.6	367.6	367.6	367.6

(END OF REPORT)