

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: P562223

Luminaire Tested: **SQ4-PW1-050U-100D-92765-1D-UNV-STD-W-4 (4500K)**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P562223  
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 (4500K)  
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 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

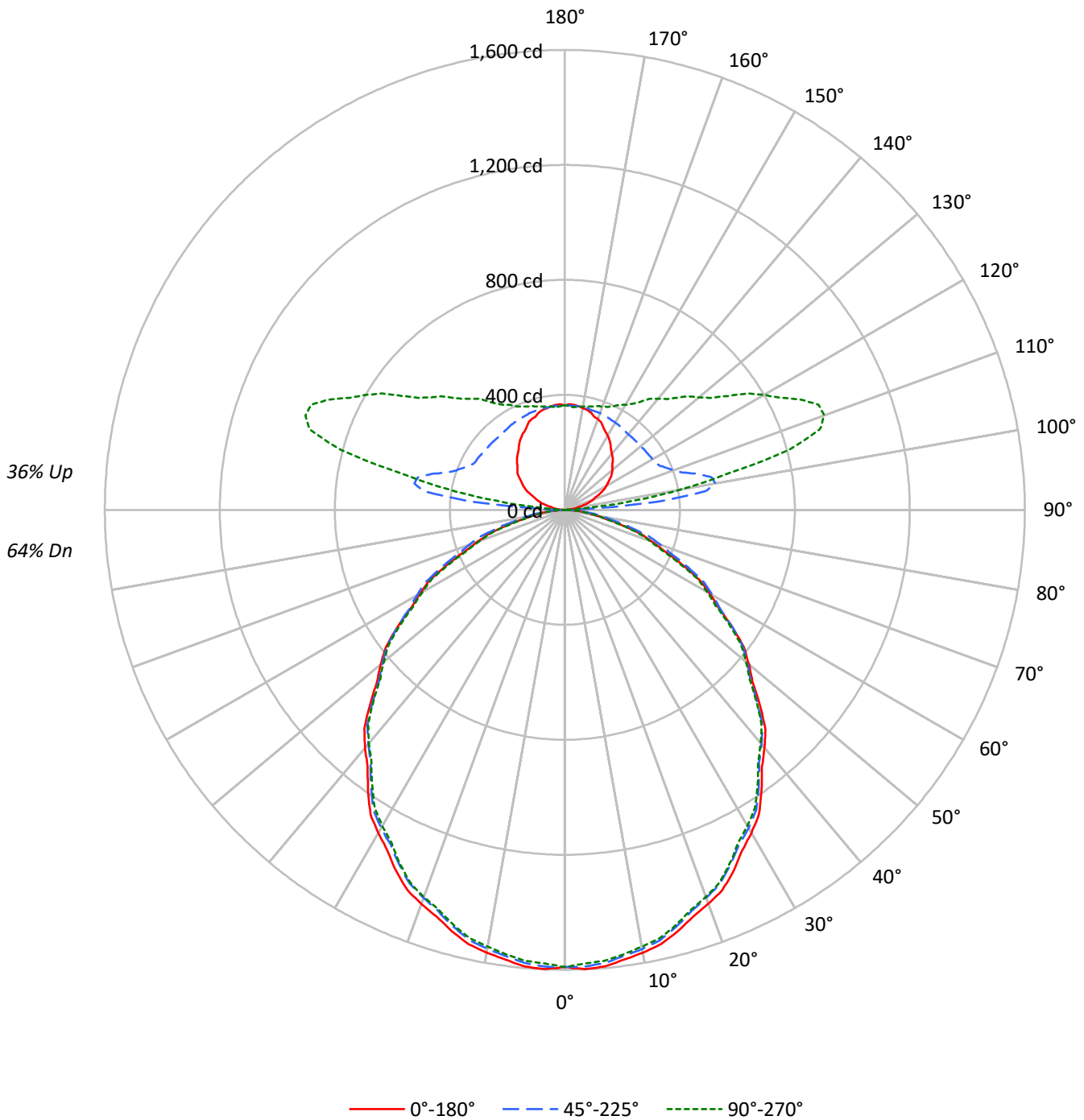
Lumens per Lamp: N/A  
Luminaire Lumens: 6305.3 lumens  
Efficiency: N/A  
Efficacy: 108.5 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

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°	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	2.4
10°-20°	422.9	6.7
20°-30°	627.2	9.9
30°-40°	733.9	11.6
40°-50°	730.7	11.6
50°-60°	631.0	10.0
60°-70°	454.2	7.2
70°-80°	238.2	3.8
80°-90°	59.0	0.9
90°-100°	165.7	2.6
100°-110°	471.4	7.5
110°-120°	451.7	7.2
120°-130°	357.5	5.7
130°-140°	286.9	4.6
140°-150°	224.6	3.6
150°-160°	164.4	2.6
160°-170°	101.8	1.6
170°-180°	34.5	0.5
0°-30°	1199.9	19.0
0°-40°	1933.8	30.7
0°-60°	3295.4	52.3
0°-90°	4046.8	64.2
90°-120°	1088.8	17.3
90°-150°	1957.8	31.1
90°-180°	2259.0	35.8
0°-180°	6305.3	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	2
95°	18	71	321	111	68	21
105°	73	111	480	849	807	78
115°	136	165	364	772	906	134
125°	192	213	348	577	690	172
135°	235	255	344	487	551	181
145°	277	291	346	422	460	173
155°	317	324	355	381	397	146
165°	350	351	359	366	372	98
175°	366	364	363	361	358	35
180°	364	364	364	364	364	

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CATALOG NUMBER: SQ4-PW1-050U-100D-92765-1D-UNV-STD-W-4 (4500K)

**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°	5.5	29.3	68.0	19.8	14.9
95°	18.0	71.4	320.7	111.0	68.4
97.5°	33.0	83.6	494.0	353.5	242.2
100°	43.5	90.9	531.6	538.4	414.7
102.5°	55.2	98.7	523.3	689.2	581.2
105°	73.3	111.1	480.4	848.6	806.7
107.5°	91.7	125.6	430.4	893.5	930.8
110°	104.4	136.1	401.6	876.3	960.1

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	116.5	146.7	382.3	835.7	955.2
115°	136.2	164.6	364.3	771.7	906.2
117.5°	153.5	180.1	353.6	701.8	844.3
120°	167.3	189.6	352.5	661.9	798.4
122.5°	178.3	200.6	349.8	626.8	753.6
125°	192.2	213.1	347.7	577.0	689.9
127.5°	207.2	226.8	346.6	547.2	640.2
130°	215.0	234.6	344.9	526.5	607.6
132.5°	223.3	242.3	344.9	510.3	584.9
135°	235.0	254.6	343.5	487.4	550.9
137.5°	246.1	265.1	343.4	468.0	522.9
140°	254.4	274.0	342.9	451.9	504.6
142.5°	263.8	280.1	344.5	439.0	486.4
145°	277.2	291.4	346.3	421.8	459.7
147.5°	288.7	302.4	349.4	404.4	437.1
150°	298.6	308.1	350.5	398.7	421.7
152.5°	306.4	316.4	351.6	390.9	412.3
155°	316.6	324.0	354.6	381.2	396.8
157.5°	329.3	333.8	355.3	376.8	387.9
160°	335.9	339.3	358.1	373.5	382.9
162.5°	339.8	343.7	358.6	370.7	378.0
165°	349.8	351.1	358.8	366.5	371.9
167.5°	356.5	355.3	361.9	365.4	367.6
170°	358.8	358.1	360.8	361.6	364.3
172.5°	363.7	361.4	362.5	360.5	362.6
175°	366.4	364.3	362.9	360.8	358.1
177.5°	367.5	364.2	362.5	360.3	360.8
180°	363.6	363.6	363.6	363.6	363.6

(END OF REPORT)