

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: P561859

Luminaire Tested: **SQ4-PR1-050U-100D-92765-1D-UNV-STD-W-4 (4500K)**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P561859  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2106-289-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PR1-050U-100D-92765-1D-UNV-STD-W-4 (4500K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE 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: 6325.9 lumens  
Efficiency: N/A  
Efficacy: 108.9 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

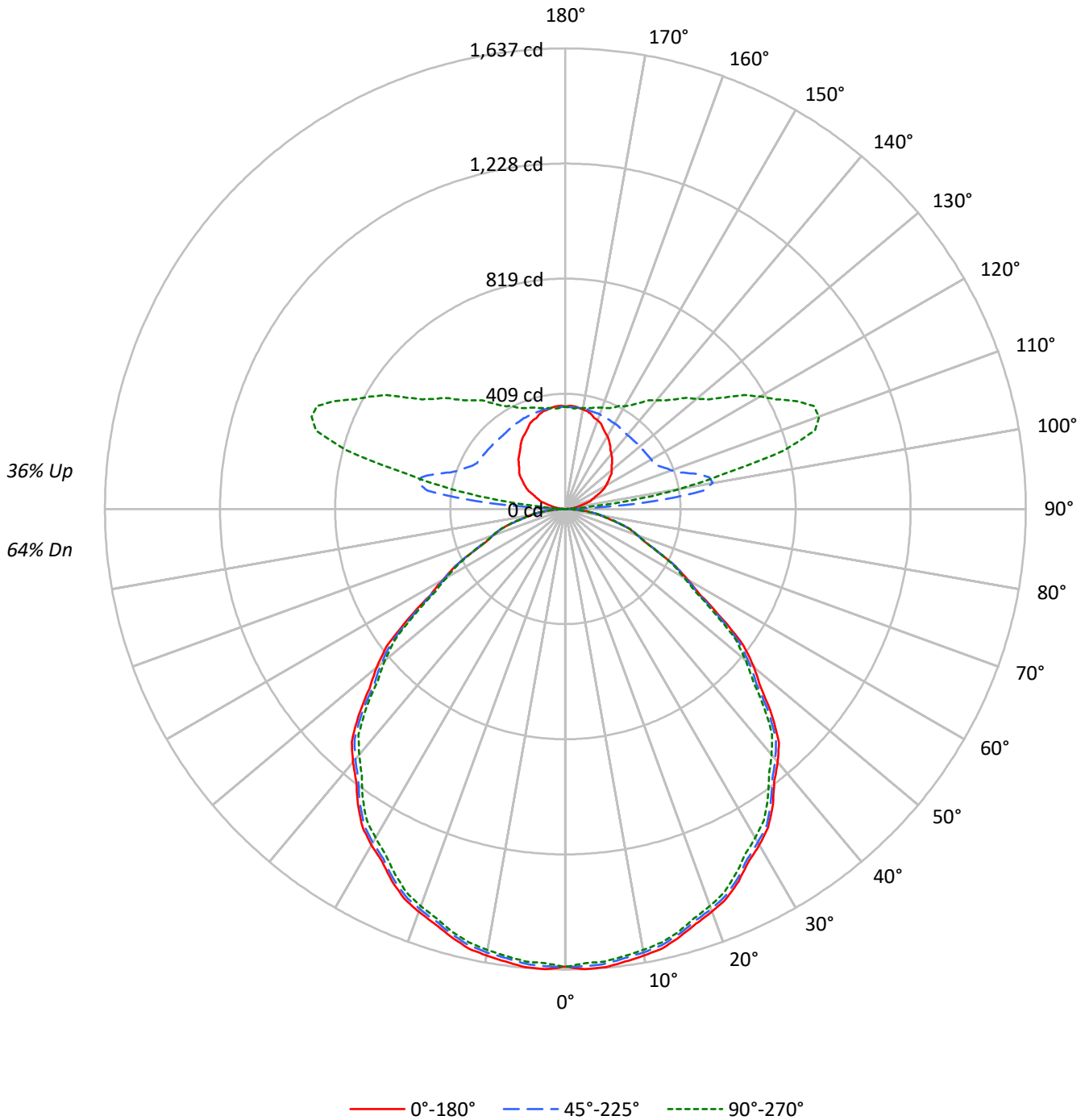
Input Watts (W): 58.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				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	111	111	111	111	104	104	104	104	91	91	91	80	80	80	69	69	69	64
1	101	97	93	90	95	91	88	85	81	78	76	71	69	67	62	60	59	55
2	93	85	79	74	87	80	75	70	71	67	63	63	60	57	55	53	50	47
3	85	75	68	62	79	71	65	59	63	58	54	56	52	48	49	46	43	40
4	78	67	59	53	73	63	56	51	56	51	46	50	45	42	44	40	38	34
5	72	60	52	46	67	57	49	44	51	45	40	45	40	36	40	36	33	30
6	66	54	46	40	62	51	44	38	46	40	35	41	36	32	36	32	29	27
7	61	49	41	35	57	46	39	34	42	36	31	37	32	29	33	29	26	24
8	57	44	37	31	53	42	35	30	38	32	28	34	29	26	30	26	23	21
9	53	41	33	28	50	39	32	27	35	29	25	31	27	23	28	24	21	19
10	50	37	30	25	47	36	29	24	32	27	23	29	24	21	26	22	19	17

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	15011	15011	15011
5°	15146	15029	14952
10°	15098	14993	14915
15°	15031	14938	14858
20°	14956	14860	14750
25°	14851	14751	14580
30°	14691	14586	14377
35°	14474	14347	14142
40°	14144	13991	13739
45°	13567	13330	13056
50°	12552	12249	12008
55°	10956	10708	10481
60°	9232	9154	8973
65°	7986	8016	7955
70°	7335	7372	7372
75°	7044	7044	7094
80°	6626	6700	6626
85°	5335	5939	5939



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	153.9	2.4
10°-20°	440.2	7.0
20°-30°	664.0	10.5
30°-40°	791.1	12.5
40°-50°	780.0	12.3
50°-60°	596.1	9.4
60°-70°	368.9	5.8
70°-80°	209.5	3.3
80°-90°	63.7	1.0
90°-100°	165.7	2.6
100°-110°	471.4	7.5
110°-120°	451.7	7.1
120°-130°	357.5	5.7
130°-140°	286.9	4.5
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°	1258.0	19.9
0°-40°	2049.1	32.4
0°-60°	3425.2	54.1
0°-90°	4067.3	64.3
90°-120°	1088.8	17.2
90°-150°	1957.8	30.9
90°-180°	2259.0	35.7
0°-180°	6325.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1627	1627	1627	1627	1627	
5°	1635	1618	1623	1617	1614	155
15°	1574	1557	1564	1558	1556	444
25°	1459	1441	1449	1434	1432	671
35°	1285	1270	1274	1257	1256	802
45°	1040	1026	1022	1003	1001	797
55°	681	670	666	654	652	610
65°	366	363	367	364	364	371
75°	198	198	198	199	199	209
85°	50	53	56	56	56	59
90°	0	0	0	0	0	3
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-PR1-050U-100D-92765-1D-UNV-STD-W-4 (4500K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1627.0	1627.0	1627.0	1627.0	1627.0
2.5°	1637.1	1622.8	1627.0	1623.5	1615.8
5°	1635.4	1617.6	1622.8	1617.1	1614.4
7.5°	1622.8	1605.3	1610.5	1604.8	1603.2
10°	1611.6	1595.1	1600.4	1594.7	1592.0
12.5°	1599.2	1581.7	1588.0	1581.2	1578.5
15°	1573.7	1557.3	1563.9	1558.3	1555.5
17.5°	1545.7	1528.2	1534.8	1528.3	1524.7
20°	1523.3	1506.9	1513.5	1503.6	1502.3
22.5°	1498.6	1482.2	1488.8	1475.6	1475.4
25°	1458.8	1441.0	1449.0	1433.6	1432.2
27.5°	1411.5	1395.0	1401.7	1385.9	1384.3
30°	1379.0	1362.5	1369.1	1352.3	1349.5
32.5°	1342.0	1326.6	1332.1	1315.3	1313.6
35°	1285.1	1270.0	1273.8	1257.0	1255.6
37.5°	1220.3	1206.6	1208.8	1190.3	1188.9
40°	1174.4	1160.6	1161.7	1142.1	1140.7
42.5°	1123.9	1110.2	1109.0	1089.4	1088.0
45°	1039.8	1026.1	1021.6	1003.3	1000.6
47.5°	944.0	930.3	921.8	906.9	905.0
50°	874.5	860.8	853.4	840.7	836.6
52.5°	799.3	785.6	779.4	767.9	763.7
55°	681.1	670.1	665.7	654.4	651.6
57.5°	568.7	561.3	560.0	549.0	547.9
60°	500.3	496.2	496.1	486.3	486.3
62.5°	442.0	439.0	441.2	434.7	433.6
65°	365.8	363.0	367.2	364.4	364.4
67.5°	305.5	305.5	308.0	306.9	306.9
70°	271.9	271.9	273.3	273.3	273.3
72.5°	241.6	240.5	244.1	244.1	243.0
75°	197.6	197.6	197.6	199.0	199.0
77.5°	153.9	154.1	155.3	155.0	153.9
80°	124.7	126.1	126.1	124.7	124.7
82.5°	95.6	96.9	97.0	96.7	95.6
85°	50.4	53.2	56.1	56.1	56.1
87.5°	14.6	19.0	22.4	22.4	21.3
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°	<i>116.5</i>	146.7	382.3	835.7	955.2
115°	<i>136.2</i>	164.6	364.3	771.7	906.2
117.5°	<i>153.5</i>	180.1	353.6	701.8	844.3
120°	<i>167.3</i>	189.6	352.5	661.9	798.4
122.5°	<i>178.3</i>	200.6	349.8	626.8	753.6
125°	<i>192.2</i>	213.1	347.7	577.0	689.9
127.5°	<i>207.2</i>	226.8	346.6	547.2	640.2
130°	<i>215.0</i>	234.6	344.9	526.5	607.6
132.5°	<i>223.3</i>	242.3	344.9	510.3	584.9
135°	<i>235.0</i>	254.6	343.5	487.4	550.9
137.5°	<i>246.1</i>	265.1	343.4	468.0	522.9
140°	<i>254.4</i>	274.0	342.9	451.9	504.6
142.5°	<i>263.8</i>	280.1	344.5	439.0	486.4
145°	<i>277.2</i>	291.4	346.3	421.8	459.7
147.5°	<i>288.7</i>	302.4	349.4	404.4	437.1
150°	<i>298.6</i>	308.1	350.5	398.7	421.7
152.5°	<i>306.4</i>	316.4	351.6	390.9	412.3
155°	<i>316.6</i>	324.0	354.6	381.2	396.8
157.5°	<i>329.3</i>	333.8	355.3	376.8	387.9
160°	<i>335.9</i>	339.3	358.1	373.5	382.9
162.5°	<i>339.8</i>	343.7	358.6	370.7	378.0
165°	<i>349.8</i>	351.1	358.8	366.5	371.9
167.5°	<i>356.5</i>	355.3	361.9	365.4	367.6
170°	<i>358.8</i>	358.1	360.8	361.6	364.3
172.5°	<i>363.7</i>	361.4	362.5	360.5	362.6
175°	<i>366.4</i>	364.3	362.9	360.8	358.1
177.5°	<i>367.5</i>	364.2	362.5	360.3	360.8
180°	<i>363.6</i>	363.6	363.6	363.6	363.6

(END OF REPORT)