

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: P562220

Luminaire Tested: **SQ4-PW1-050U-100D-92765-1D-UNV-STD-W-4 (3000K)**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P562220
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 (3000K)
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 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

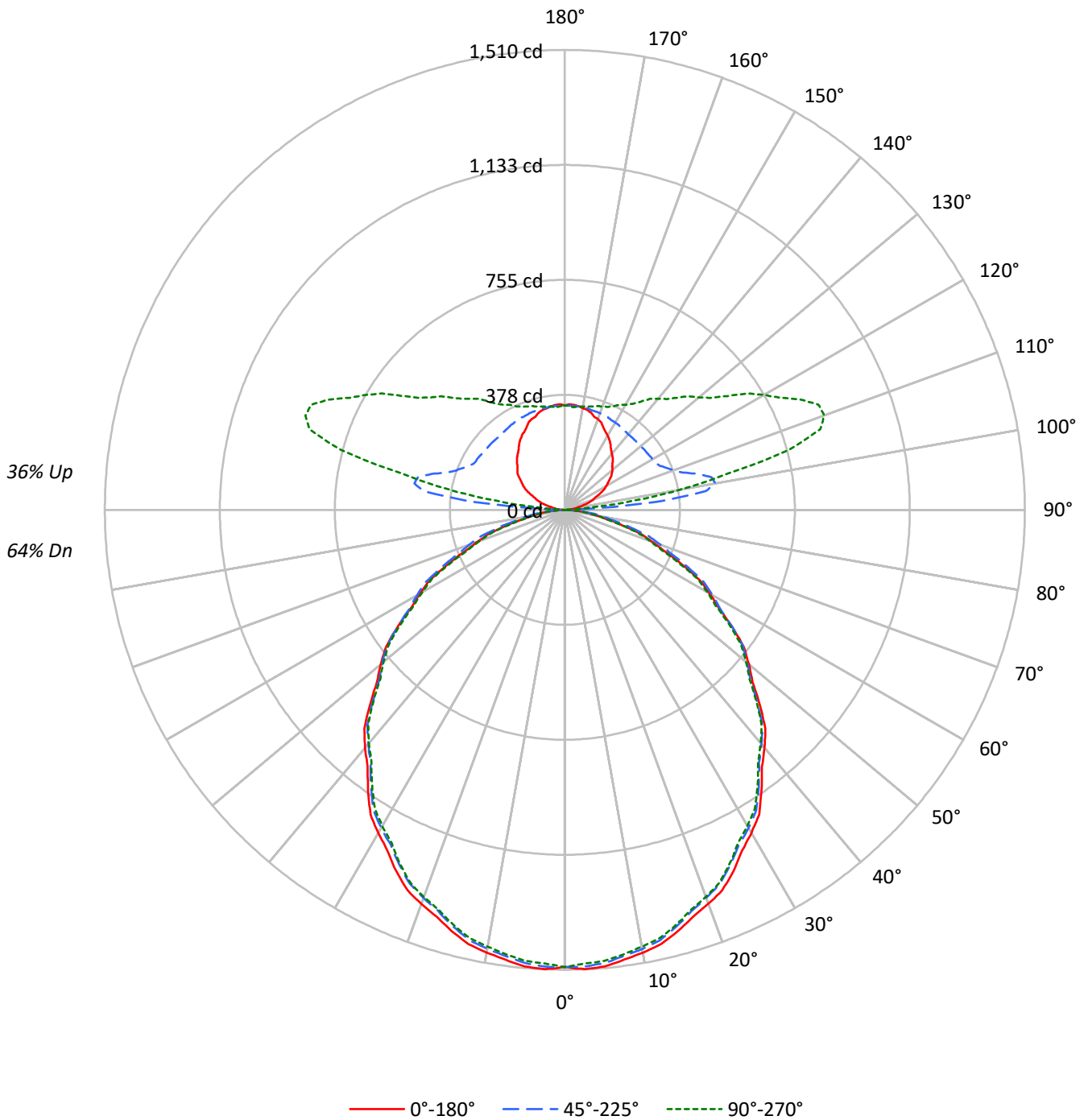
Lumens per Lamp: N/A
Luminaire Lumens: 5951.0 lumens
Efficiency: N/A
Efficacy: 102.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 58.2
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	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°	13850	13850	13850
5°	13939	13829	13768
10°	13828	13716	13642
15°	13682	13530	13479
20°	13518	13311	13284
25°	13330	13087	13047
30°	13047	12850	12766
35°	12677	12499	12424
40°	12281	12091	12043
45°	11804	11649	11597
50°	11315	11220	11144
55°	10787	10787	10616
60°	10129	10324	9957
65°	9269	9730	9038
70°	8171	8956	7955
75°	6976	8014	6791
80°	5409	6748	5483
85°	3504	5176	4615



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.4	2.4
10°-20°	399.1	6.7
20°-30°	592.0	9.9
30°-40°	692.7	11.6
40°-50°	689.6	11.6
50°-60°	595.5	10.0
60°-70°	428.6	7.2
70°-80°	224.8	3.8
80°-90°	55.7	0.9
90°-100°	156.4	2.6
100°-110°	444.9	7.5
110°-120°	426.3	7.2
120°-130°	337.4	5.7
130°-140°	270.8	4.6
140°-150°	212.0	3.6
150°-160°	155.1	2.6
160°-170°	96.1	1.6
170°-180°	32.6	0.5
0°-30°	1132.4	19.0
0°-40°	1825.1	30.7
0°-60°	3110.2	52.3
0°-90°	3819.4	64.2
90°-120°	1027.6	17.3
90°-150°	1847.8	31.1
90°-180°	2132.0	35.8
0°-180°	5951.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1501	1501	1501	1501	1501	
5°	1505	1488	1493	1489	1487	143
15°	1432	1414	1416	1414	1411	404
25°	1309	1287	1286	1278	1282	602
35°	1126	1110	1110	1099	1103	704
45°	905	897	893	890	889	698
55°	671	669	671	661	660	598
65°	425	438	446	428	414	421
75°	196	214	225	210	190	210
85°	33	43	49	46	44	44
90°	0	0	0	0	0	2
95°	17	67	303	105	65	19
105°	69	105	453	801	761	73
115°	128	155	344	728	855	127
125°	181	201	328	545	651	162
135°	222	240	324	460	520	171
145°	262	275	327	398	434	163
155°	299	306	335	360	374	138
165°	330	331	339	346	351	93
175°	346	344	342	340	338	33
180°	343	343	343	343	343	

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CATALOG NUMBER: SQ4-PW1-050U-100D-92765-1D-UNV-STD-W-4 (3000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1501.2	1501.2	1501.2	1501.2	1501.2
2.5°	1509.6	1497.2	1501.2	1497.8	1490.6
5°	1505.1	1488.3	1493.2	1489.2	1486.6
7.5°	1489.8	1474.3	1477.9	1473.6	1472.1
10°	1476.0	1460.5	1464.1	1458.8	1456.2
12.5°	1460.2	1443.6	1447.2	1441.9	1440.3
15°	1432.4	1414.3	1416.5	1413.8	1411.2
17.5°	1400.1	1381.8	1382.1	1377.9	1377.4
20°	1376.8	1357.4	1355.7	1350.5	1353.0
22.5°	1351.4	1331.0	1329.2	1321.9	1325.5
25°	1309.4	1287.4	1285.6	1277.7	1281.6
27.5°	1260.7	1239.0	1239.0	1228.0	1232.1
30°	1224.7	1204.1	1206.2	1193.1	1198.3
32.5°	1186.7	1168.0	1169.2	1156.1	1161.3
35°	1125.5	1110.0	1109.7	1099.2	1103.1
37.5°	1063.1	1049.4	1047.2	1041.2	1042.2
40°	1019.7	1008.1	1003.9	999.9	999.9
42.5°	974.2	963.6	959.4	956.5	955.5
45°	904.7	896.9	892.8	890.1	888.8
47.5°	835.9	828.7	825.0	823.2	821.9
50°	788.3	783.1	781.7	777.7	776.4
52.5°	740.7	737.6	736.2	731.1	729.8
55°	670.6	669.3	670.6	661.3	660.0
57.5°	597.6	599.6	603.9	591.4	588.3
60°	548.9	554.1	559.5	544.8	539.6
62.5°	499.2	507.4	515.0	498.2	491.0
65°	424.6	437.5	445.7	428.2	414.0
67.5°	352.6	368.6	378.5	359.7	343.6
70°	302.9	321.0	332.0	313.0	294.9
72.5°	259.5	279.7	288.6	270.7	252.6
75°	195.7	213.9	224.8	209.9	190.5
77.5°	138.9	155.9	165.1	152.0	136.0
80°	101.8	119.9	127.0	116.1	103.2
82.5°	72.2	87.2	92.1	85.5	76.7
85°	33.1	43.4	48.9	46.2	43.6
87.5°	8.5	15.7	20.1	20.1	21.2
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.2	27.7	64.2	18.7	14.1
95°	17.0	67.4	302.7	104.8	64.6
97.5°	31.2	78.9	466.2	333.6	228.6
100°	41.1	85.8	501.7	508.2	391.4
102.5°	52.1	93.1	493.9	650.5	548.5
105°	69.2	104.9	453.4	800.9	761.3
107.5°	86.5	118.5	406.2	843.3	878.5
110°	98.5	128.5	379.0	827.1	906.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	<i>110.0</i>	138.4	360.8	788.7	901.5
115°	<i>128.5</i>	155.3	343.8	728.3	855.3
117.5°	<i>144.8</i>	170.0	333.8	662.4	796.8
120°	<i>157.9</i>	178.9	332.7	624.7	753.5
122.5°	<i>168.3</i>	189.4	330.1	591.6	711.2
125°	<i>181.4</i>	201.1	328.2	544.6	651.1
127.5°	<i>195.6</i>	214.1	327.1	516.5	604.2
130°	<i>202.9</i>	221.4	325.5	496.9	573.4
132.5°	<i>210.7</i>	228.7	325.5	481.6	552.1
135°	<i>221.8</i>	240.3	324.2	460.0	520.0
137.5°	<i>232.3</i>	250.2	324.1	441.7	493.5
140°	<i>240.1</i>	258.6	323.6	426.5	476.2
142.5°	<i>249.0</i>	264.4	325.2	414.4	459.0
145°	<i>261.6</i>	275.0	326.8	398.1	433.8
147.5°	<i>272.4</i>	285.5	329.7	381.7	412.6
150°	<i>281.8</i>	290.8	330.8	376.3	398.0
152.5°	<i>289.1</i>	298.6	331.8	368.9	389.1
155°	<i>298.8</i>	305.8	334.7	359.8	374.5
157.5°	<i>310.8</i>	315.0	335.3	355.7	366.1
160°	<i>317.1</i>	320.3	337.9	352.5	361.4
162.5°	<i>320.7</i>	324.4	338.5	349.8	356.7
165°	<i>330.1</i>	331.4	338.6	345.9	351.0
167.5°	<i>336.5</i>	335.4	341.6	344.9	346.9
170°	<i>338.6</i>	338.0	340.5	341.3	343.8
172.5°	<i>343.3</i>	341.1	342.1	340.2	342.2
175°	<i>345.8</i>	343.9	342.5	340.5	337.9
177.5°	<i>346.8</i>	343.7	342.1	340.0	340.5
180°	<i>343.2</i>	343.2	343.2	343.2	343.2

(END OF REPORT)