

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: P561856

Luminaire Tested: **SQ4-PR1-050U-100D-92765-1D-UNV-STD-W-4 (3000K)**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P561856
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 (3000K)
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 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5970.3 lumens
Efficiency: N/A
Efficacy: 102.6 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

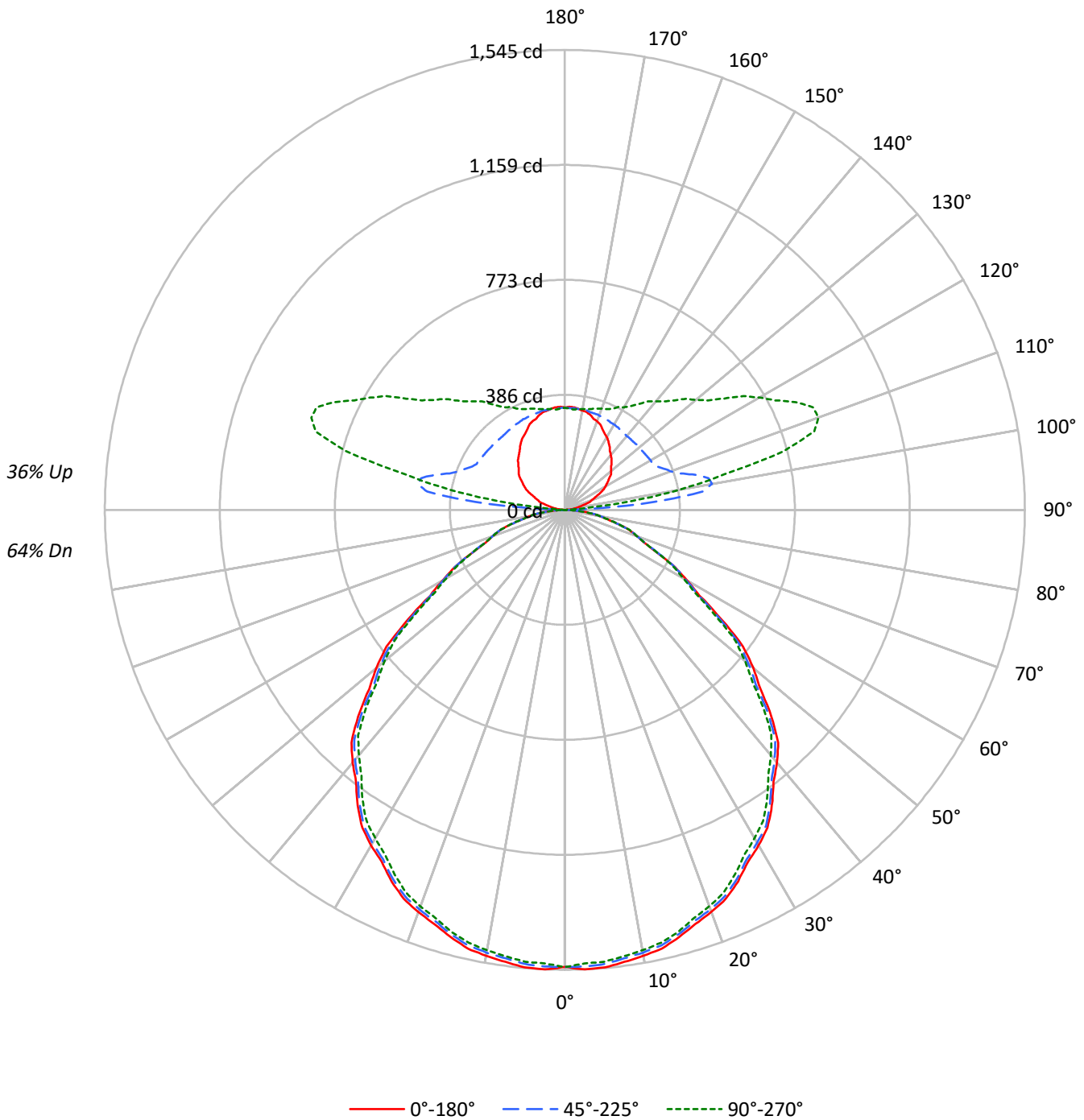
Input Watts (W): 58.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	14168	14168	14168
5°	14295	14185	14111
10°	14250	14150	14076
15°	14187	14098	14023
20°	14116	14024	13920
25°	14016	13922	13760
30°	13866	13766	13569
35°	13660	13542	13348
40°	13348	13205	12967
45°	12805	12581	12321
50°	11846	11562	11333
55°	10340	10105	9893
60°	8713	8639	8468
65°	7536	7564	7508
70°	6922	6957	6957
75°	6648	6648	6695
80°	6254	6323	6254
85°	5039	5600	5600



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.2	2.4
10°-20°	415.5	7.0
20°-30°	626.6	10.5
30°-40°	746.6	12.5
40°-50°	736.1	12.3
50°-60°	562.6	9.4
60°-70°	348.2	5.8
70°-80°	197.7	3.3
80°-90°	60.1	1.0
90°-100°	156.4	2.6
100°-110°	444.9	7.5
110°-120°	426.3	7.1
120°-130°	337.4	5.7
130°-140°	270.8	4.5
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°	1187.3	19.9
0°-40°	1934.0	32.4
0°-60°	3232.7	54.1
0°-90°	3838.7	64.3
90°-120°	1027.6	17.2
90°-150°	1847.8	30.9
90°-180°	2132.0	35.7
0°-180°	5970.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1536	1536	1536	1536	1536	
5°	1544	1527	1532	1526	1524	146
15°	1485	1470	1476	1471	1468	419
25°	1377	1360	1368	1353	1352	634
35°	1213	1199	1202	1186	1185	757
45°	981	968	964	947	944	752
55°	643	632	628	618	615	576
65°	345	343	346	344	344	350
75°	186	186	186	188	188	197
85°	48	50	53	53	53	55
90°	0	0	0	0	0	3
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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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1535.6	1535.6	1535.6	1535.6	1535.6
2.5°	1545.1	1531.6	1535.6	1532.2	1525.0
5°	1543.5	1526.7	1531.6	1526.2	1523.6
7.5°	1531.6	1515.0	1519.9	1514.6	1513.1
10°	1521.0	1505.5	1510.4	1505.1	1502.5
12.5°	1509.4	1492.8	1498.8	1492.4	1489.8
15°	1485.3	1469.8	1476.0	1470.7	1468.1
17.5°	1458.8	1442.3	1448.5	1442.4	1439.0
20°	1437.7	1422.2	1428.4	1419.1	1417.8
22.5°	1414.4	1398.9	1405.1	1392.7	1392.4
25°	1376.8	1360.0	1367.6	1353.0	1351.7
27.5°	1332.1	1316.6	1322.9	1308.0	1306.5
30°	1301.5	1285.9	1292.2	1276.3	1273.7
32.5°	1266.5	1252.0	1257.3	1241.4	1239.8
35°	1212.8	1198.6	1202.3	1186.4	1185.1
37.5°	1151.7	1138.8	1140.9	1123.4	1122.1
40°	1108.3	1095.4	1096.4	1077.9	1076.6
42.5°	1060.7	1047.8	1046.7	1028.2	1026.9
45°	981.4	968.4	964.2	946.9	944.3
47.5°	890.9	878.0	870.0	856.0	854.1
50°	825.3	812.4	805.5	793.5	789.6
52.5°	754.4	741.5	735.6	724.7	720.8
55°	642.8	632.4	628.2	617.6	615.0
57.5°	536.7	529.7	528.5	518.2	517.1
60°	472.2	468.3	468.2	458.9	458.9
62.5°	417.2	414.3	416.4	410.3	409.2
65°	345.2	342.6	346.5	343.9	343.9
67.5°	288.3	288.3	290.7	289.7	289.7
70°	256.6	256.6	257.9	257.9	257.9
72.5°	228.0	227.0	230.4	230.4	229.3
75°	186.5	186.5	186.5	187.8	187.8
77.5°	145.2	145.5	146.5	146.3	145.2
80°	117.7	119.0	119.0	117.7	117.7
82.5°	90.2	91.5	91.5	91.2	90.2
85°	47.6	50.2	52.9	52.9	52.9
87.5°	13.8	17.9	21.2	21.1	20.1
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)