

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: P561846

Luminaire Tested: **SQ4-PR1-050U-075D-92765-1D-UNV-STD-W-4 (4500K)**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P561846
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-075D-92765-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS
DOWNLIGHT 750 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

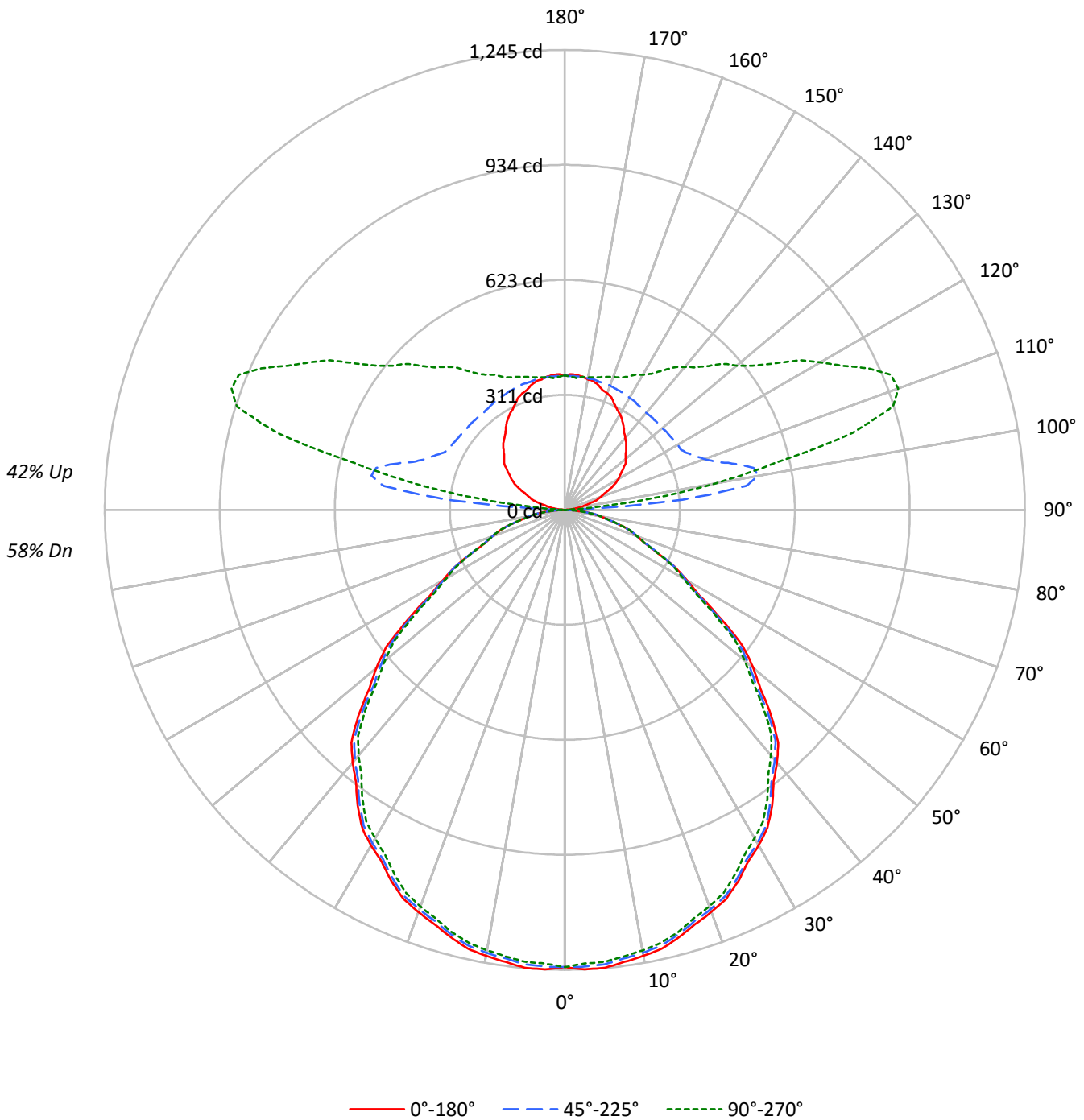
Lumens per Lamp: N/A
Luminaire Lumens: 5352.6 lumens
Efficiency: N/A
Efficacy: 112.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 47.7
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	50	30	10	0	
RCR																						
0	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58				
1	100	96	92	88	93	89	86	83	77	75	73	67	65	63	56	55	54	49				
2	91	84	78	73	85	78	73	69	68	64	61	59	56	53	50	48	46	42				
3	83	74	67	61	78	69	63	58	60	56	52	52	49	45	45	42	40	36				
4	76	66	58	52	71	62	55	49	54	48	44	47	43	39	40	37	34	31				
5	70	59	51	45	65	55	48	43	48	43	38	42	38	34	36	33	30	27				
6	65	53	45	39	60	50	42	37	44	38	34	38	34	30	33	29	27	24				
7	60	48	40	34	56	45	38	33	40	34	30	35	30	27	30	26	24	21				
8	56	43	36	30	52	41	34	29	36	31	26	32	27	24	28	24	21	19				
9	52	40	32	27	48	38	31	26	33	28	24	29	25	21	26	22	19	17				
10	49	36	29	24	45	34	28	23	31	25	21	27	23	19	24	20	18	16				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11419	11419	11419
5°	11522	11433	11374
10°	11485	11405	11345
15°	11435	11364	11302
20°	11377	11304	11220
25°	11297	11221	11091
30°	11176	11096	10937
35°	11011	10914	10759
40°	10759	10643	10452
45°	10321	10139	9931
50°	9548	9318	9135
55°	8334	8146	7974
60°	7023	6964	6826
65°	6073	6097	6052
70°	5579	5608	5608
75°	5358	5358	5397
80°	5042	5095	5042
85°	4065	4510	4510



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.0	2.2
10°-20°	334.9	6.3
20°-30°	505.1	9.4
30°-40°	601.8	11.2
40°-50°	593.3	11.1
50°-60°	453.5	8.5
60°-70°	280.6	5.2
70°-80°	159.4	3.0
80°-90°	48.5	0.9
90°-100°	165.7	3.1
100°-110°	471.4	8.8
110°-120°	451.7	8.4
120°-130°	357.5	6.7
130°-140°	286.9	5.4
140°-150°	224.6	4.2
150°-160°	164.4	3.1
160°-170°	101.8	1.9
170°-180°	34.5	0.6
0°-30°	957.0	17.9
0°-40°	1558.8	29.1
0°-60°	2605.6	48.7
0°-90°	3094.0	57.8
90°-120°	1088.8	20.3
90°-150°	1957.8	36.6
90°-180°	2259.0	42.2
0°-180°	5352.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1238	1238	1238	1238	1238	
5°	1244	1230	1234	1230	1228	118
15°	1197	1185	1190	1185	1183	338
25°	1110	1096	1102	1090	1090	511
35°	978	966	969	956	955	610
45°	791	781	777	763	761	606
55°	518	510	506	498	496	464
65°	278	276	279	277	277	282
75°	150	150	150	151	151	159
85°	38	40	43	43	43	45
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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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1237.7	1237.7	1237.7	1237.7	1237.7
2.5°	1245.3	1234.5	1237.7	1235.0	1229.1
5°	1244.1	1230.5	1234.5	1230.2	1228.1
7.5°	1234.5	1221.1	1225.1	1220.8	1219.5
10°	1225.9	1213.4	1217.4	1213.1	1211.0
12.5°	1216.6	1203.2	1208.0	1202.9	1200.8
15°	1197.2	1184.6	1189.7	1185.4	1183.3
17.5°	1175.8	1162.5	1167.5	1162.6	1159.8
20°	1158.8	1146.3	1151.3	1143.8	1142.8
22.5°	1140.0	1127.5	1132.6	1122.5	1122.3
25°	1109.7	1096.2	1102.3	1090.5	1089.5
27.5°	1073.7	1061.2	1066.2	1054.3	1053.0
30°	1049.0	1036.5	1041.5	1028.7	1026.6
32.5°	1020.8	1009.2	1013.4	1000.5	999.3
35°	977.6	966.1	969.0	956.2	955.2
37.5°	928.3	917.9	919.6	905.5	904.4
40°	893.3	882.9	883.7	868.8	867.8
42.5°	855.0	844.5	843.7	828.7	827.7
45°	791.0	780.6	777.1	763.2	761.1
47.5°	718.1	707.7	701.2	689.9	688.4
50°	665.2	654.8	649.2	639.5	636.4
52.5°	608.1	597.6	592.9	584.1	581.0
55°	518.1	509.8	506.4	497.8	495.7
57.5°	432.6	427.0	426.0	417.7	416.8
60°	380.6	377.4	377.4	369.9	369.9
62.5°	336.2	333.9	335.6	330.7	329.8
65°	278.2	276.1	279.3	277.2	277.2
67.5°	232.4	232.4	234.3	233.5	233.5
70°	206.8	206.8	207.9	207.9	207.9
72.5°	183.8	183.0	185.7	185.7	184.8
75°	150.3	150.3	150.3	151.4	151.4
77.5°	117.1	117.3	118.1	117.9	117.1
80°	94.9	95.9	95.9	94.9	94.9
82.5°	72.7	73.7	73.8	73.5	72.7
85°	38.4	40.5	42.6	42.6	42.6
87.5°	11.1	14.4	17.1	17.0	16.2
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)