

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: P564003

Luminaire Tested: **SQ4-PR1-050U-100D-840-1D-UNV-STD-W-6**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564003
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

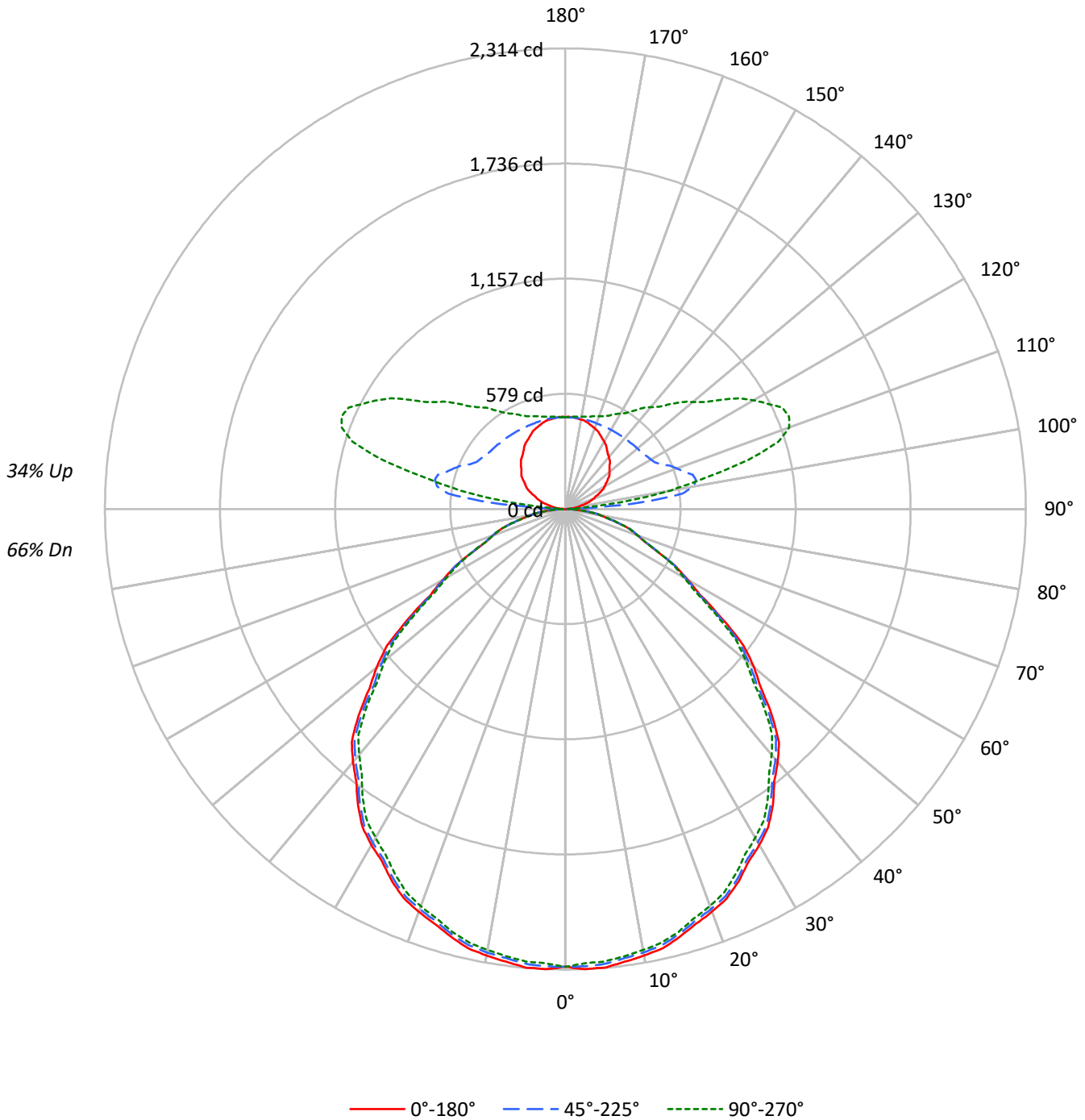
Lumens per Lamp: N/A
Luminaire Lumens: 8769.4 lumens
Efficiency: N/A
Efficacy: 119.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 73.4
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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70	66				
1	102	97	94	90	95	92	88	85	81	79	76	72	70	68	63	62	60	56				
2	93	85	79	74	87	81	75	71	72	68	64	63	60	57	56	53	51	48				
3	85	76	68	62	80	71	65	60	64	58	54	56	52	49	50	47	44	41				
4	78	67	59	53	73	64	56	51	57	51	47	51	46	42	45	41	38	35				
5	72	60	52	46	67	57	50	44	51	45	40	46	41	37	40	37	34	31				
6	66	54	46	40	62	51	44	38	46	40	35	41	36	33	37	33	30	27				
7	61	49	41	35	58	47	39	34	42	36	31	38	33	29	34	30	26	24				
8	57	45	37	31	54	42	35	30	38	32	28	34	30	26	31	27	24	22				
9	53	41	33	28	50	39	32	27	35	29	25	32	27	23	29	24	21	19				
10	50	37	30	25	47	36	29	24	33	27	23	29	25	21	26	22	20	18				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14147	14147	14147
5°	14274	14164	14090
10°	14229	14130	14055
15°	14166	14078	14002
20°	14095	14004	13901
25°	13995	13902	13740
30°	13845	13747	13549
35°	13640	13521	13328
40°	13329	13187	12948
45°	12786	12562	12303
50°	11829	11544	11317
55°	10325	10091	9879
60°	8700	8627	8456
65°	7524	7554	7497
70°	6911	6947	6947
75°	6638	6638	6685
80°	6245	6316	6245
85°	5032	5589	5589



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	217.5	2.5
10°-20°	622.3	7.1
20°-30°	938.6	10.7
30°-40°	1118.3	12.8
40°-50°	1102.6	12.6
50°-60°	842.6	9.6
60°-70°	521.5	5.9
70°-80°	296.2	3.4
80°-90°	91.9	1.0
90°-100°	221.9	2.5
100°-110°	602.8	6.9
110°-120°	619.7	7.1
120°-130°	495.5	5.7
130°-140°	389.3	4.4
140°-150°	298.5	3.4
150°-160°	214.7	2.4
160°-170°	131.3	1.5
170°-180°	44.2	0.5
0°-30°	1778.4	20.3
0°-40°	2896.7	33.0
0°-60°	4841.9	55.2
0°-90°	5751.4	65.6
90°-120°	1444.4	16.5
90°-150°	2627.7	30.0
90°-180°	3018.0	34.4
0°-180°	8769.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2300	2300	2300	2300	2300	
5°	2312	2287	2294	2286	2282	219
15°	2225	2201	2211	2203	2199	628
25°	2062	2037	2048	2026	2025	949
35°	1817	1795	1801	1777	1775	1134
45°	1470	1450	1444	1418	1414	1126
55°	963	947	941	925	921	863
65°	517	513	519	515	515	524
75°	279	279	279	281	281	295
85°	71	75	79	79	79	83
90°	2	6	10	13	13	5
95°	33	121	386	168	113	35
105°	107	167	663	1009	950	114
115°	190	231	531	1056	1202	188
125°	262	298	480	809	954	233
135°	315	350	467	659	743	244
145°	364	390	461	560	602	229
155°	412	426	458	503	517	190
165°	446	452	459	479	480	126
175°	462	464	461	467	465	44
180°	462	462	462	462	462	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2300.0	2300.0	2300.0	2300.0	2300.0
2.5°	2314.2	2294.1	2300.0	2295.0	2284.1
5°	2311.9	2286.7	2294.0	2286.0	2282.1
7.5°	2294.0	2269.2	2276.6	2268.6	2266.3
10°	2278.2	2254.9	2262.3	2254.3	2250.4
12.5°	2260.7	2235.9	2244.9	2235.3	2231.4
15°	2224.7	2201.4	2210.8	2202.8	2198.9
17.5°	2185.1	2160.3	2169.6	2160.4	2155.4
20°	2153.4	2130.1	2139.5	2125.6	2123.7
22.5°	2118.5	2095.3	2104.6	2086.0	2085.6
25°	2062.2	2037.1	2048.4	2026.5	2024.6
27.5°	1995.3	1972.0	1981.4	1959.2	1956.9
30°	1949.3	1926.1	1935.5	1911.6	1907.7
32.5°	1897.0	1875.3	1883.2	1859.3	1857.0
35°	1816.6	1795.3	1800.7	1776.9	1775.0
37.5°	1725.1	1705.7	1708.8	1682.6	1680.7
40°	1660.1	1640.7	1642.3	1614.5	1612.6
42.5°	1588.8	1569.4	1567.8	1540.0	1538.1
45°	1469.9	1450.5	1444.2	1418.3	1414.4
47.5°	1334.4	1315.0	1303.1	1282.1	1279.3
50°	1236.2	1216.8	1206.4	1188.5	1182.7
52.5°	1130.0	1110.6	1101.8	1085.5	1079.7
55°	962.8	947.3	941.0	925.0	921.2
57.5°	803.9	793.4	791.6	776.1	774.6
60°	707.2	701.4	701.3	687.4	687.4
62.5°	624.8	620.6	623.6	614.5	612.9
65°	517.0	513.2	519.0	515.1	515.1
67.5°	431.9	431.9	435.4	433.8	433.8
70°	384.3	384.3	386.3	386.3	386.3
72.5°	341.5	340.0	345.1	345.1	343.5
75°	279.3	279.3	279.3	281.3	281.3
77.5°	217.5	217.9	219.5	219.1	217.5
80°	176.3	178.2	178.3	176.3	176.3
82.5°	135.1	137.0	137.1	136.7	135.1
85°	71.3	75.2	79.2	79.2	79.2
87.5°	20.9	28.0	33.8	34.3	32.8
90°	1.5	5.8	10.4	13.4	13.4
92.5°	13.4	60.8	105.5	45.3	38.3
95°	32.7	121.3	386.4	168.2	113.0
97.5°	54.1	134.0	592.4	460.9	323.7
100°	68.4	142.5	655.4	664.4	536.5
102.5°	82.6	150.9	672.1	821.7	708.9
105°	107.0	166.6	662.9	1009.3	949.7
107.5°	132.3	184.9	624.5	1106.1	1122.7
110°	150.1	198.1	596.0	1125.2	1196.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	165.6	211.2	567.4	1109.4	1216.6
115°	190.2	230.9	530.6	1055.6	1202.4
117.5°	213.4	252.4	507.1	979.3	1144.7
120°	228.9	266.7	496.4	928.2	1092.4
122.5°	242.0	279.7	489.3	876.9	1035.3
125°	261.6	297.9	480.1	808.8	954.2
127.5°	279.1	315.2	475.0	757.2	881.9
130°	289.8	324.7	472.6	724.8	836.7
132.5°	300.5	335.4	470.2	697.2	796.3
135°	315.1	350.0	466.7	658.8	743.1
137.5°	330.8	362.5	464.9	624.9	695.9
140°	340.3	370.9	463.7	603.4	667.3
142.5°	349.9	378.0	462.5	586.5	640.0
145°	364.1	390.3	460.7	559.8	601.9
147.5°	380.2	402.6	459.2	538.8	571.9
150°	390.9	409.8	459.2	526.7	552.9
152.5°	399.2	415.8	458.1	515.9	537.4
155°	411.7	426.2	457.8	502.7	517.2
157.5°	423.9	435.2	457.8	493.7	504.7
160°	431.0	441.2	457.8	487.7	496.4
162.5°	438.1	446.0	458.9	482.9	489.3
165°	445.9	451.7	459.2	478.6	480.1
167.5°	453.9	456.8	460.7	473.5	474.7
170°	456.3	459.2	460.7	471.1	471.1
172.5°	458.6	460.4	460.7	468.8	468.8
175°	462.2	463.7	460.7	466.6	465.2
177.5°	463.4	463.4	459.8	464.5	462.2
180°	462.2	462.2	462.2	462.2	462.2

(END OF REPORT)