

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: P564675

Luminaire Tested: **SQ4-PW1-050U-100D-840-1D-UNV-STD-W-6**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564675
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

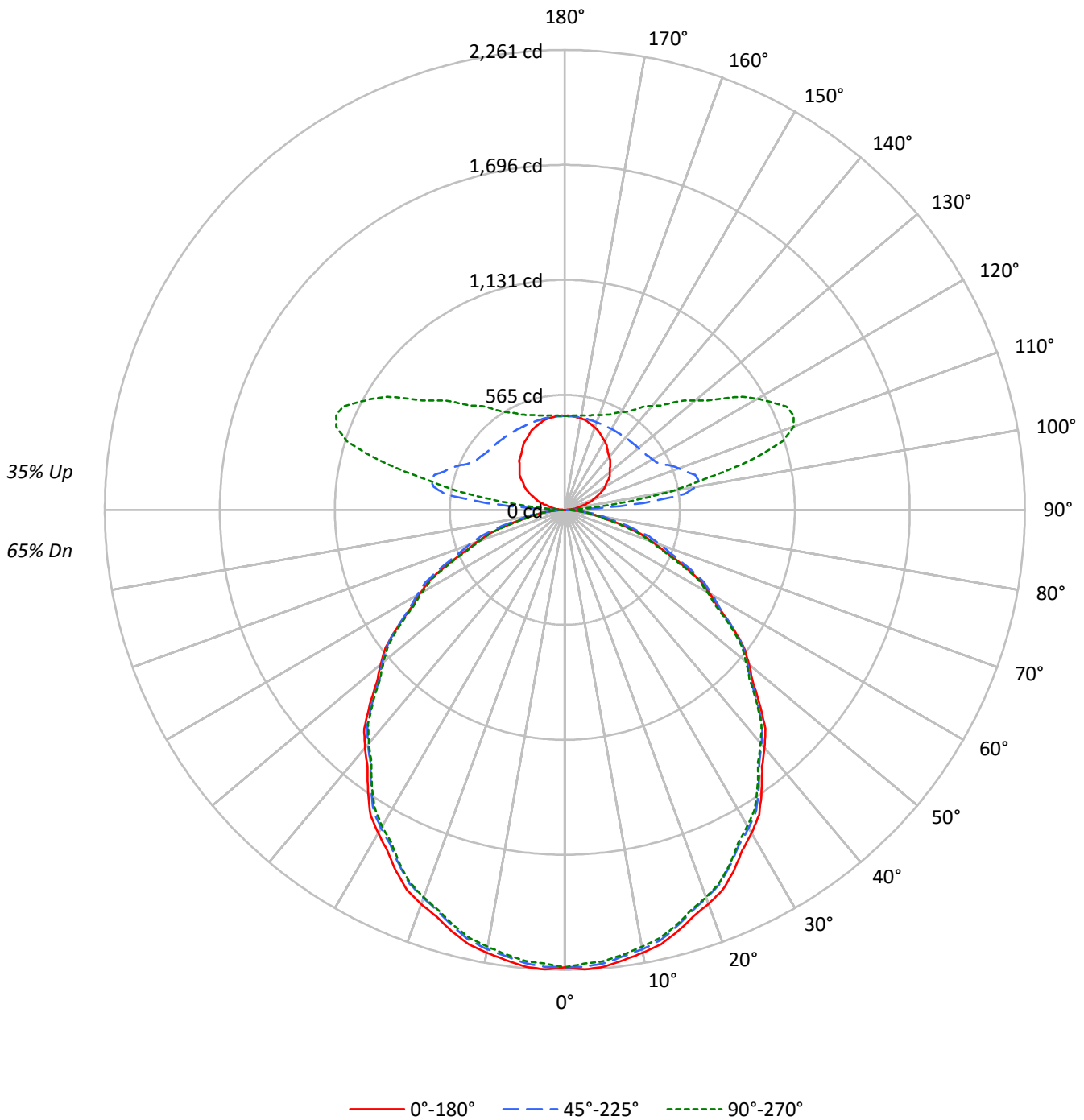
Lumens per Lamp: N/A
Luminaire Lumens: 8740.4 lumens
Efficiency: N/A
Efficacy: 119.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Direct

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	0
RCR																		
0	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70	65
1	101	97	93	90	95	91	88	85	81	78	76	71	69	68	62	61	60	55
2	92	85	79	73	87	80	75	70	71	67	63	63	59	57	55	53	50	47
3	84	75	67	61	79	71	64	59	63	58	53	56	51	48	49	46	43	40
4	77	66	58	52	72	63	55	50	56	50	45	50	45	41	44	40	37	34
5	71	59	51	45	67	56	48	43	50	44	39	45	40	36	39	36	32	30
6	66	53	45	39	61	50	43	37	45	39	34	40	35	31	36	32	29	26
7	61	48	40	34	57	46	38	33	41	35	30	37	32	28	33	29	25	23
8	56	44	36	30	53	42	34	29	38	31	27	34	29	25	30	26	23	21
9	53	40	32	27	49	38	31	26	34	29	24	31	26	22	28	24	21	19
10	49	37	29	24	46	35	28	24	32	26	22	29	24	20	26	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13830	13830	13830
5°	13919	13809	13748
10°	13808	13697	13622
15°	13662	13511	13460
20°	13498	13291	13265
25°	13310	13068	13028
30°	13029	12832	12747
35°	12659	12480	12406
40°	12264	12073	12025
45°	11787	11632	11580
50°	11298	11203	11128
55°	10771	10771	10600
60°	10113	10309	9943
65°	9255	9716	9025
70°	8159	8942	7945
75°	6968	8004	6780
80°	5402	6737	5473
85°	3493	5173	4615



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	211.7	2.4
10°-20°	597.8	6.8
20°-30°	886.7	10.1
30°-40°	1037.5	11.9
40°-50°	1032.9	11.8
50°-60°	891.9	10.2
60°-70°	642.0	7.3
70°-80°	336.7	3.9
80°-90°	85.3	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	4.5
140°-150°	298.5	3.4
150°-160°	214.7	2.5
160°-170°	131.3	1.5
170°-180°	44.2	0.5
0°-30°	1696.2	19.4
0°-40°	2733.7	31.3
0°-60°	4658.5	53.3
0°-90°	5722.5	65.5
90°-120°	1444.4	16.5
90°-150°	2627.7	30.1
90°-180°	3018.0	34.5
0°-180°	8740.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2248	2248	2248	2248	2248	
5°	2254	2229	2237	2230	2227	214
15°	2146	2118	2122	2118	2114	605
25°	1961	1928	1926	1914	1920	902
35°	1686	1663	1662	1646	1652	1054
45°	1355	1343	1337	1333	1331	1045
55°	1004	1002	1004	990	988	896
65°	636	655	668	641	620	630
75°	293	320	337	314	285	314
85°	50	65	73	69	65	65
90°	2	6	10	13	13	4
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°	2248.5	2248.5	2248.5	2248.5	2248.5
2.5°	2261.1	2242.5	2248.5	2243.5	2232.6
5°	2254.4	2229.2	2236.6	2230.5	2226.7
7.5°	2231.4	2208.2	2213.6	2207.2	2204.9
10°	2210.8	2187.6	2193.0	2185.0	2181.1
12.5°	2187.1	2162.3	2167.6	2159.7	2157.3
15°	2145.5	2118.3	2121.7	2117.6	2113.8
17.5°	2097.1	2069.6	2070.2	2063.8	2063.0
20°	2062.2	2033.2	2030.6	2022.7	2026.6
22.5°	2024.2	1993.6	1990.9	1980.0	1985.4
25°	1961.2	1928.3	1925.6	1913.8	1919.6
27.5°	1888.3	1855.8	1855.8	1839.3	1845.5
30°	1834.4	1803.4	1806.7	1787.1	1794.8
32.5°	1777.4	1749.5	1751.2	1731.6	1739.3
35°	1685.9	1662.6	1662.1	1646.4	1652.2
37.5°	1592.3	1571.8	1568.6	1559.5	1561.0
40°	1527.4	1509.9	1503.6	1497.7	1497.7
42.5°	1459.2	1443.3	1437.0	1432.6	1431.1
45°	1355.0	1343.4	1337.2	1333.2	1331.2
47.5°	1252.0	1241.2	1235.8	1232.9	1231.0
50°	1180.7	1172.9	1170.8	1164.8	1162.9
52.5°	1109.4	1104.7	1102.6	1095.1	1093.1
55°	1004.4	1002.4	1004.4	990.5	988.5
57.5°	895.0	898.1	904.5	885.8	881.2
60°	822.1	829.9	838.0	816.0	808.3
62.5°	747.6	760.0	771.4	746.2	735.4
65°	635.9	655.3	667.6	641.4	620.1
67.5°	528.1	552.2	567.0	538.7	514.7
70°	453.7	480.8	497.2	468.9	441.8
72.5°	388.7	418.9	432.3	405.5	378.4
75°	293.2	320.3	336.8	314.3	285.3
77.5°	208.0	233.6	247.2	227.7	203.6
80°	152.5	179.7	190.2	173.9	154.5
82.5°	108.2	130.6	137.9	128.1	114.9
85°	49.5	65.0	73.3	69.2	65.4
87.5°	13.0	24.7	32.2	32.8	34.4
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)