

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: P564652

Luminaire Tested: **SQ4-PW1-050U-075D-840-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564652
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-075D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

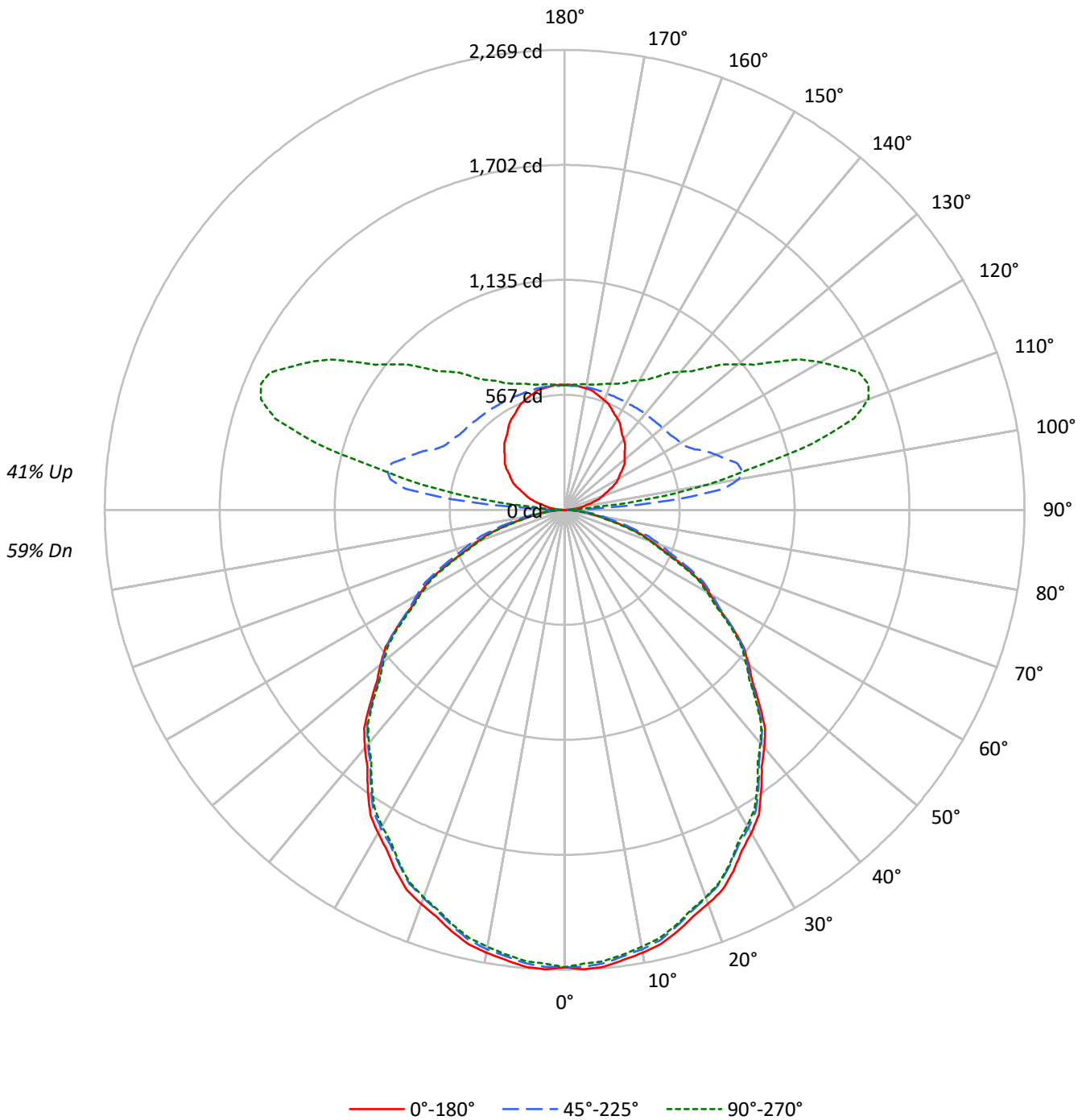
Lumens per Lamp: N/A
Luminaire Lumens: 9766.9 lumens
Efficiency: N/A
Efficacy: 125.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 78.1
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



TEST NUMBER: P564652
CATALOG NUMBER: SQ4-PW1-050U-075D-840-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P564652

CATALOG NUMBER: SQ4-PW1-050U-075D-840-1D-UNV-STD-W-8

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	109	109	109	109	102	102	102	102	88	88	88	76	76	76	64	64	64	59
1	100	96	92	88	93	89	86	83	78	75	73	67	65	63	57	56	55	50
2	91	84	77	72	85	78	73	68	68	64	60	59	56	53	50	48	46	42
3	83	74	66	60	77	69	62	57	60	55	51	52	48	45	45	42	39	36
4	76	65	57	51	71	61	54	48	54	48	43	46	42	39	40	37	34	31
5	70	58	50	44	65	55	47	42	48	42	38	42	37	34	36	32	30	27
6	64	52	44	38	60	49	42	36	43	37	33	38	33	29	33	29	26	23
7	60	47	39	33	55	44	37	32	39	33	29	34	30	26	30	26	23	21
8	55	43	35	30	52	40	33	28	36	30	26	31	27	23	27	24	21	19
9	52	39	32	26	48	37	30	25	33	27	23	29	24	21	25	22	19	17
10	48	36	29	24	45	34	27	23	30	25	21	27	22	19	23	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10409	10409	10409
5°	10476	10393	10347
10°	10392	10308	10252
15°	10282	10168	10130
20°	10159	10003	9984
25°	10018	9835	9805
30°	9805	9657	9594
35°	9527	9393	9337
40°	9230	9086	9050
45°	8871	8754	8715
50°	8503	8432	8375
55°	8106	8106	7978
60°	7612	7758	7483
65°	6965	7312	6792
70°	6140	6730	5979
75°	5244	6023	5103
80°	4067	5069	4120
85°	2631	3896	3472



TEST NUMBER: P564652

CATALOG NUMBER: SQ4-PW1-050U-075D-840-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	212.5	2.2
10°-20°	599.8	6.1
20°-30°	889.8	9.1
30°-40°	1041.1	10.7
40°-50°	1036.5	10.6
50°-60°	895.0	9.2
60°-70°	644.3	6.6
70°-80°	337.9	3.5
80°-90°	86.1	0.9
90°-100°	295.8	3.0
100°-110°	803.7	8.2
110°-120°	826.3	8.5
120°-130°	660.7	6.8
130°-140°	519.1	5.3
140°-150°	398.0	4.1
150°-160°	286.2	2.9
160°-170°	175.1	1.8
170°-180°	59.0	0.6
0°-30°	1702.1	17.4
0°-40°	2743.2	28.1
0°-60°	4674.7	47.9
0°-90°	5743.0	58.8
90°-120°	1925.8	19.7
90°-150°	3503.7	35.9
90°-180°	4024.0	41.2
0°-180°	9766.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2256	2256	2256	2256	2256	
5°	2262	2237	2244	2238	2234	214
15°	2153	2126	2129	2125	2121	607
25°	1968	1935	1932	1920	1926	905
35°	1692	1668	1668	1652	1658	1058
45°	1360	1348	1342	1338	1336	1049
55°	1008	1006	1008	994	992	899
65°	638	658	670	644	622	632
75°	294	321	338	315	286	315
85°	50	65	74	70	66	66
90°	2	8	14	18	18	5
95°	44	162	515	224	151	46
105°	143	222	884	1346	1266	152
115°	254	308	707	1407	1603	250
125°	349	397	640	1078	1272	311
135°	420	467	622	878	991	325
145°	486	520	614	746	803	305
155°	549	568	610	670	690	253
165°	594	602	612	638	640	168
175°	616	618	614	622	620	59
180°	616	616	616	616	616	

TEST NUMBER: P564652

CATALOG NUMBER: SQ4-PW1-050U-075D-840-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2256.3	2256.3	2256.3	2256.3	2256.3
2.5°	2269.0	2250.4	2256.3	2251.3	2240.4
5°	2262.3	2237.0	2244.4	2238.3	2234.4
7.5°	2239.2	2215.9	2221.3	2214.9	2212.6
10°	2218.5	2195.2	2200.6	2192.6	2188.7
12.5°	2194.7	2169.8	2175.2	2167.2	2164.9
15°	2152.9	2125.7	2129.1	2125.0	2121.1
17.5°	2104.4	2076.8	2077.4	2071.0	2070.2
20°	2069.4	2040.3	2037.6	2029.8	2033.7
22.5°	2031.3	2000.6	1997.9	1986.9	1992.3
25°	1968.1	1935.0	1932.3	1920.5	1926.3
27.5°	1894.9	1862.2	1862.3	1845.7	1852.0
30°	1840.8	1809.7	1813.0	1793.3	1801.1
32.5°	1783.6	1755.6	1757.3	1737.6	1745.4
35°	1691.7	1668.4	1667.9	1652.1	1657.9
37.5°	1597.9	1577.3	1574.0	1564.9	1566.5
40°	1532.7	1515.2	1508.8	1502.9	1502.9
42.5°	1464.3	1448.4	1442.0	1437.6	1436.1
45°	1359.7	1348.1	1341.9	1337.8	1335.9
47.5°	1256.4	1245.5	1240.1	1237.2	1235.3
50°	1184.8	1177.0	1174.9	1168.9	1166.9
52.5°	1113.2	1108.6	1106.5	1098.9	1096.9
55°	1007.9	1005.9	1007.9	993.9	992.0
57.5°	898.1	901.3	907.7	888.9	884.2
60°	825.0	832.8	840.9	818.9	811.1
62.5°	750.2	762.7	774.1	748.8	737.9
65°	638.1	657.6	669.9	643.6	622.2
67.5°	530.0	554.1	568.9	540.6	516.5
70°	455.2	482.4	499.0	470.5	443.3
72.5°	390.0	420.4	433.8	406.9	379.7
75°	294.2	321.4	337.9	315.4	286.3
77.5°	208.7	234.4	248.1	228.5	204.4
80°	153.1	180.3	190.8	174.5	155.1
82.5°	108.5	131.1	138.4	128.5	115.3
85°	49.7	65.2	73.6	69.5	65.6
87.5°	13.1	25.2	33.0	33.8	35.4
90°	2.0	7.8	13.9	17.8	17.8
92.5°	17.8	81.0	140.7	60.4	51.1
95°	43.6	161.8	515.2	224.2	150.6
97.5°	72.1	178.7	789.9	614.5	431.6
100°	91.2	190.0	873.9	885.9	715.4
102.5°	110.2	201.2	896.1	1095.6	945.2
105°	142.7	222.1	883.8	1345.7	1266.3
107.5°	176.4	246.5	832.7	1474.8	1496.9
110°	200.1	264.1	794.6	1500.3	1595.2

TEST NUMBER: P564652

CATALOG NUMBER: SQ4-PW1-050U-075D-840-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	220.8	281.6	756.6	1479.2	1622.2
115°	253.6	307.9	707.4	1407.4	1603.1
117.5°	284.6	336.5	676.1	1305.8	1526.3
120°	305.2	355.5	661.9	1237.6	1456.5
122.5°	322.6	373.0	652.4	1169.2	1380.4
125°	348.8	397.2	640.1	1078.4	1272.2
127.5°	372.2	420.2	633.3	1009.7	1175.9
130°	386.4	432.9	630.2	966.5	1115.7
132.5°	400.7	447.2	627.0	929.6	1061.8
135°	420.1	466.6	622.2	878.4	990.8
137.5°	441.1	483.4	619.9	833.2	927.8
140°	453.8	494.5	618.3	804.5	889.8
142.5°	466.5	504.1	616.7	782.0	853.3
145°	485.5	520.4	614.3	746.4	802.6
147.5°	506.9	536.7	612.3	718.4	762.5
150°	521.2	546.4	612.3	702.3	737.2
152.5°	532.3	554.4	610.7	687.9	716.6
155°	548.9	568.3	610.3	670.2	689.6
157.5°	565.2	580.3	610.3	658.2	673.0
160°	574.7	588.2	610.3	650.2	661.9
162.5°	584.2	594.6	611.9	643.8	652.4
165°	594.5	602.2	612.3	638.1	640.1
167.5°	605.2	609.1	614.3	631.4	632.9
170°	608.4	612.2	614.3	628.2	628.2
172.5°	611.5	613.9	614.3	625.0	625.0
175°	616.3	618.2	614.3	622.2	620.3
177.5°	617.9	617.9	613.1	619.4	616.3
180°	616.3	616.3	616.3	616.3	616.3

(END OF REPORT)