

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: P519918

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519918
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G3-1910-536-18)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-050U-075D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

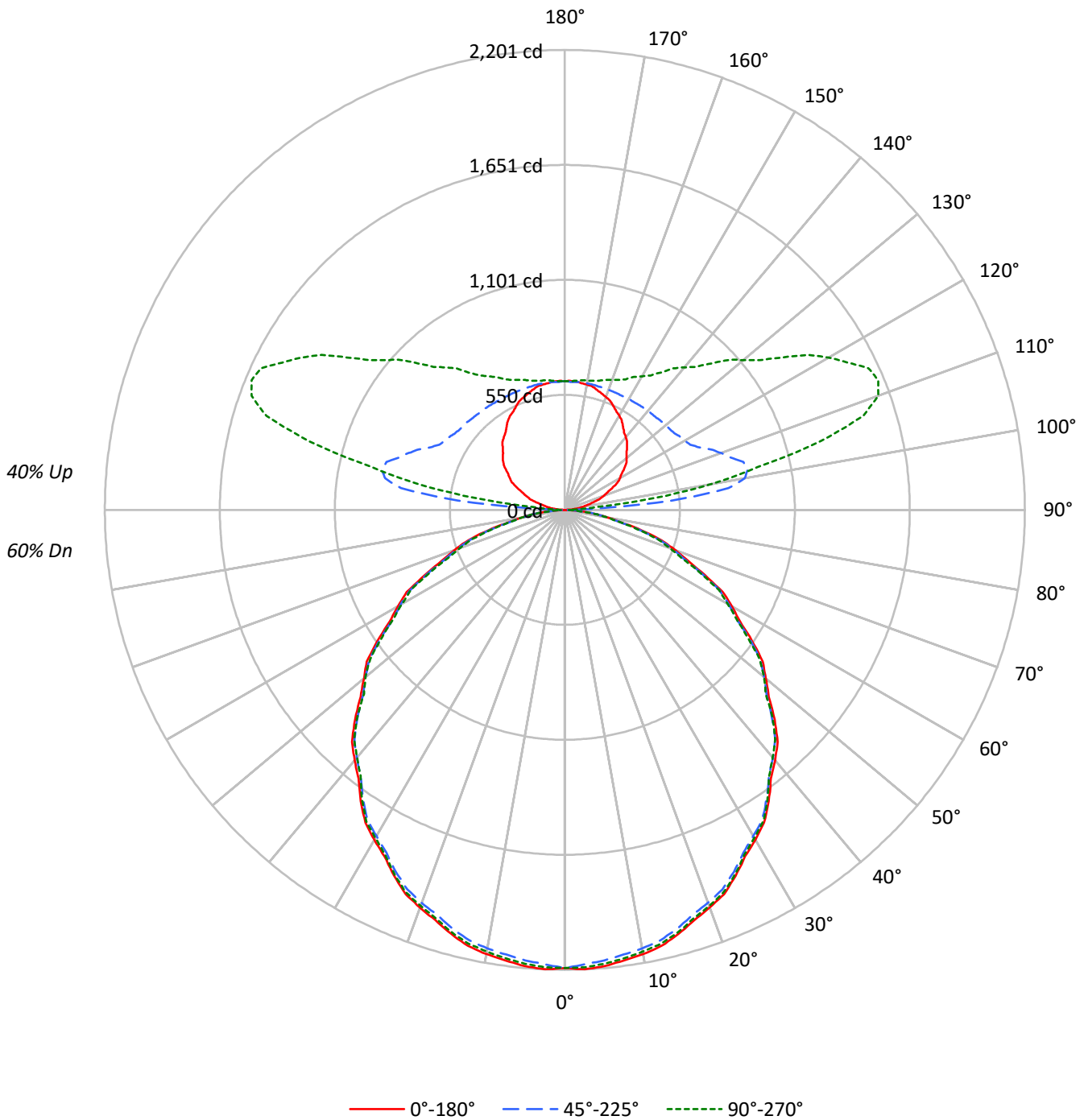
Lumens per Lamp: N/A
Luminaire Lumens: 10012.1 lumens
Efficiency: N/A
Efficacy: 130.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 76.5
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									
RC	80									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	89	89	89	76	76	76	65	65	65	65	65	65	60																
1	100	96	92	88	93	89	86	83	78	75	73	67	65	64	58	56	55	55	55	55	50																
2	91	83	77	72	85	78	73	68	68	64	60	59	56	53	51	48	46	46	46	46	42																
3	83	73	66	60	77	69	62	57	60	55	51	52	48	45	45	42	39	39	39	39	35																
4	76	65	57	50	71	61	54	48	53	48	43	46	42	38	40	36	34	34	34	34	30																
5	70	58	49	43	65	54	47	41	48	42	37	42	37	33	36	32	29	29	29	29	26																
6	64	52	43	37	60	49	41	36	43	37	32	38	33	29	32	29	26	26	26	26	23																
7	59	47	39	33	55	44	37	31	39	33	28	34	29	26	30	26	23	23	23	23	20																
8	55	42	35	29	51	40	33	28	35	30	25	31	26	23	27	23	20	20	20	20	18																
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	25	21	18	18	18	18	16																
10	48	36	28	23	45	34	27	22	30	24	20	27	22	19	23	19	17	17	17	17	15																

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10115	10115	10115
5°	10154	10025	10099
10°	10113	9983	10057
15°	10035	9912	9997
20°	9944	9828	9905
25°	9835	9734	9805
30°	9711	9605	9657
35°	9583	9482	9527
40°	9421	9326	9314
45°	9260	9143	9169
50°	9002	8931	8931
55°	8794	8681	8602
60°	8510	8364	8290
65°	8051	7898	7789
70°	7561	7372	7186
75°	6803	6554	6413
80°	5441	5332	5281
85°	3260	3684	3784



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.0	2.1
10°-20°	589.2	5.9
20°-30°	885.2	8.8
30°-40°	1056.3	10.5
40°-50°	1083.3	10.8
50°-60°	965.2	9.6
60°-70°	719.7	7.2
70°-80°	390.3	3.9
80°-90°	92.0	0.9
90°-100°	295.9	3.0
100°-110°	803.7	8.0
110°-120°	826.3	8.3
120°-130°	660.7	6.6
130°-140°	519.1	5.2
140°-150°	398.0	4.0
150°-160°	286.2	2.9
160°-170°	175.1	1.7
170°-180°	59.0	0.6
0°-30°	1681.4	16.8
0°-40°	2737.7	27.3
0°-60°	4786.1	47.8
0°-90°	5988.2	59.8
90°-120°	1925.9	19.2
90°-150°	3503.7	35.0
90°-180°	4024.0	40.2
0°-180°	10012.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2193	2193	2193	2193	2193	
5°	2193	2189	2165	2183	2181	208
15°	2101	2097	2075	2091	2093	593
25°	1932	1930	1912	1922	1926	890
35°	1702	1698	1684	1684	1692	1063
45°	1419	1414	1402	1402	1405	1092
55°	1093	1091	1079	1070	1070	977
65°	738	738	724	716	714	734
75°	382	374	368	362	360	401
85°	62	66	70	70	72	85
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	1408	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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2192.7	2192.7	2192.7	2192.7	2192.7
2.5°	2200.7	2195.9	2176.7	2192.7	2191.1
5°	2192.7	2188.8	2164.8	2182.7	2180.8
7.5°	2174.8	2170.5	2146.9	2164.8	2164.4
10°	2158.9	2153.0	2131.1	2148.9	2146.9
12.5°	2138.2	2132.4	2110.4	2128.2	2126.3
15°	2101.3	2097.3	2075.4	2091.3	2093.3
17.5°	2059.0	2051.7	2032.1	2047.6	2049.6
20°	2025.7	2019.9	2001.9	2015.8	2017.7
22.5°	1990.8	1984.9	1966.8	1980.8	1982.8
25°	1932.3	1930.3	1912.4	1922.5	1926.3
27.5°	1869.0	1863.6	1849.1	1856.8	1860.7
30°	1823.0	1819.0	1803.1	1809.1	1813.0
32.5°	1775.2	1772.9	1758.5	1761.5	1766.9
35°	1701.6	1697.8	1683.7	1683.9	1691.7
37.5°	1620.2	1615.9	1604.2	1602.3	1605.5
40°	1564.5	1558.7	1548.6	1546.6	1546.6
42.5°	1507.3	1503.0	1489.8	1486.3	1491.0
45°	1419.4	1413.5	1401.5	1401.6	1405.4
47.5°	1324.3	1322.0	1308.0	1301.7	1303.3
50°	1254.4	1258.3	1244.4	1236.7	1244.4
52.5°	1194.0	1191.6	1179.2	1171.3	1174.5
55°	1093.4	1091.4	1079.4	1069.5	1069.5
57.5°	992.3	987.3	974.9	967.4	973.3
60°	922.4	920.5	906.5	892.7	898.5
62.5°	852.4	848.9	835.0	825.9	830.2
65°	737.6	737.6	723.6	715.6	713.6
67.5°	636.9	627.6	619.9	610.2	607.6
70°	560.6	552.8	546.6	538.6	532.8
72.5°	485.8	481.2	472.0	464.0	462.8
75°	381.7	373.9	367.7	361.7	359.8
77.5°	271.5	270.0	264.4	261.3	262.4
80°	204.8	204.8	200.7	200.7	198.8
82.5°	144.4	145.8	145.1	141.9	141.5
85°	61.6	65.5	69.6	69.6	71.5
87.5°	11.5	20.5	20.3	21.1	21.1
90°	2.0	7.8	13.8	17.9	17.9
92.5°	17.9	81.0	140.7	60.4	51.1
95°	43.6	161.8	515.3	224.2	150.6
97.5°	72.1	178.7	789.8	614.5	431.6
100°	91.2	190.0	873.9	885.9	715.4
102.5°	110.2	201.3	896.1	1095.6	945.3
105°	142.7	222.2	883.8	1345.7	1266.3
107.5°	176.3	246.5	832.7	1474.9	1497.0
110°	200.2	264.1	794.6	1500.3	1595.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	220.8	281.6	756.6	1479.2	1622.2
115°	253.7	307.9	707.4	1407.5	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°	348.7	397.2	640.1	1078.4	1272.2
127.5°	372.1	420.2	633.3	1009.6	1175.9
130°	386.4	432.9	630.2	966.5	1115.6
132.5°	400.7	447.2	626.9	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°	453.7	494.5	618.3	804.5	889.7
142.5°	466.5	504.1	616.6	782.0	853.3
145°	485.5	520.4	614.3	746.4	802.6
147.5°	506.9	536.8	612.3	718.4	762.6
150°	521.2	546.4	612.3	702.3	737.1
152.5°	532.2	554.3	610.8	687.9	716.5
155°	548.9	568.3	610.4	670.2	689.6
157.5°	565.1	580.2	610.4	658.2	673.0
160°	574.6	588.3	610.4	650.2	661.9
162.5°	584.2	594.7	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°	616.2	618.2	614.3	622.2	620.3
177.5°	617.9	617.9	613.1	619.4	616.2
180°	616.2	616.2	616.2	616.2	616.2

(END OF REPORT)