

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: P519927

Luminaire Tested: **SQ4-F-050U-075D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519927
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-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

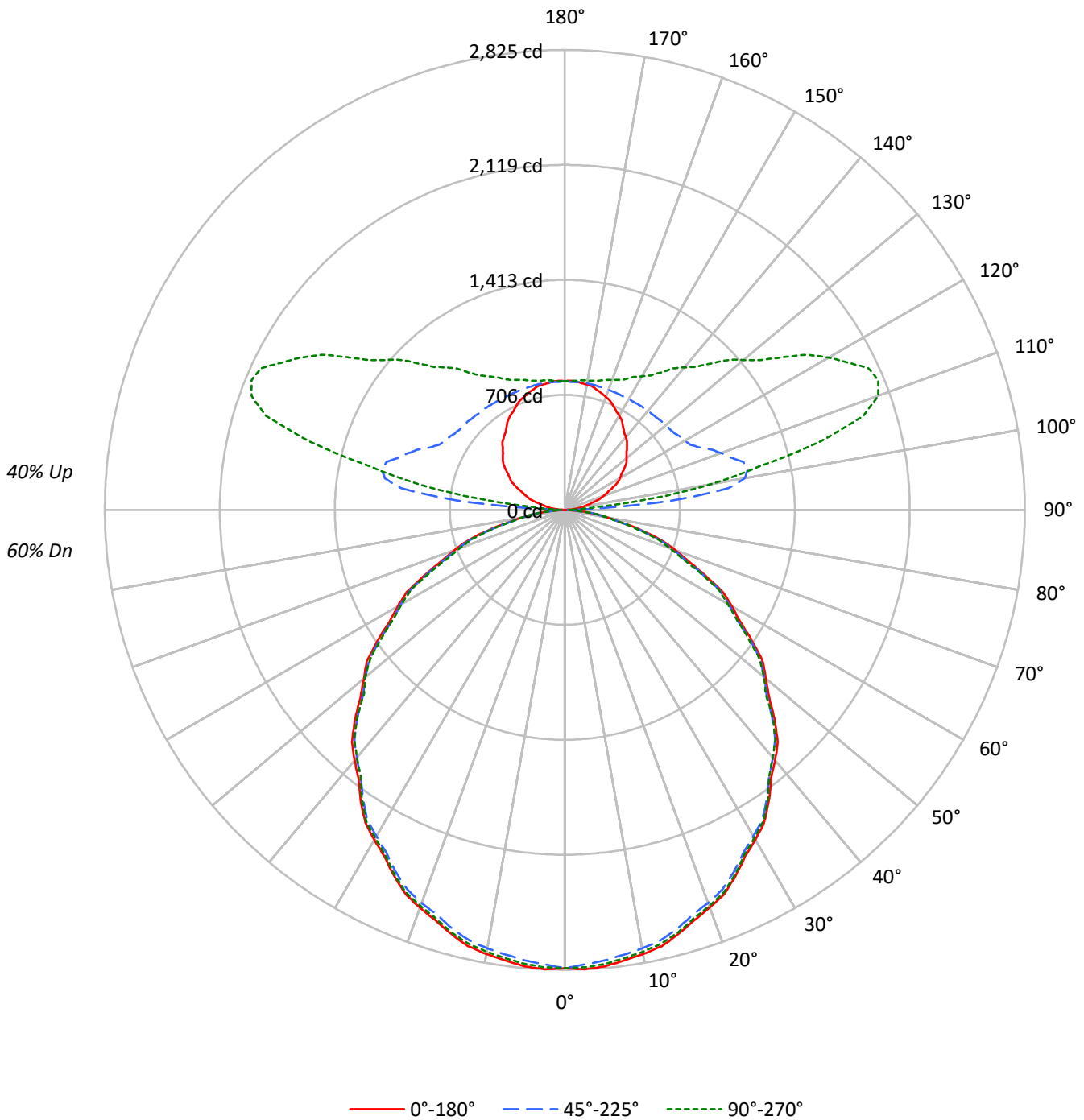
Lumens per Lamp: N/A
Luminaire Lumens: 12853.7 lumens
Efficiency: N/A
Efficacy: 112.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 114.3
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	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65	60
1	100	96	92	88	93	89	86	83	78	75	73	67	65	64	58	56	55	50
2	91	83	77	72	85	78	73	68	68	64	60	59	56	53	51	48	46	42
3	83	73	66	60	77	69	62	57	60	55	51	52	48	45	45	42	39	35
4	76	65	57	50	71	61	54	48	53	48	43	46	42	38	40	36	34	30
5	70	58	49	43	65	54	47	41	48	42	37	42	37	33	36	32	29	26
6	64	52	43	37	60	49	41	36	43	37	32	38	33	29	32	29	26	23
7	59	47	39	33	55	44	37	31	39	33	28	34	29	26	30	26	23	20
8	55	42	35	29	51	40	33	28	35	30	25	31	26	23	27	23	20	18
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	25	21	18	16
10	48	36	28	23	45	34	27	22	30	24	20	27	22	19	23	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8657	8657	8657
5°	8690	8580	8643
10°	8655	8544	8607
15°	8589	8483	8556
20°	8511	8411	8477
25°	8417	8331	8391
30°	8311	8220	8265
35°	8202	8115	8154
40°	8063	7982	7971
45°	7925	7826	7848
50°	7705	7644	7644
55°	7526	7430	7362
60°	7284	7158	7095
65°	6891	6760	6667
70°	6471	6310	6150
75°	5822	5611	5488
80°	4654	4564	4520
85°	2791	3155	3243



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	265.7	2.1
10°-20°	756.4	5.9
20°-30°	1136.5	8.8
30°-40°	1356.0	10.5
40°-50°	1390.7	10.8
50°-60°	1239.2	9.6
60°-70°	923.9	7.2
70°-80°	501.1	3.9
80°-90°	118.2	0.9
90°-100°	379.8	3.0
100°-110°	1031.8	8.0
110°-120°	1060.8	8.3
120°-130°	848.2	6.6
130°-140°	666.4	5.2
140°-150°	511.0	4.0
150°-160°	367.5	2.9
160°-170°	224.7	1.7
170°-180°	75.7	0.6
0°-30°	2158.6	16.8
0°-40°	3514.6	27.3
0°-60°	6144.5	47.8
0°-90°	7687.7	59.8
90°-120°	2472.4	19.2
90°-150°	4498.0	35.0
90°-180°	5166.0	40.2
0°-180°	12853.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2815	2815	2815	2815	2815	
5°	2815	2810	2779	2802	2800	267
15°	2698	2693	2664	2685	2687	761
25°	2481	2478	2455	2468	2473	1143
35°	2185	2180	2162	2162	2172	1365
45°	1822	1815	1799	1799	1804	1402
55°	1404	1401	1386	1373	1373	1254
65°	947	947	929	919	916	943
75°	490	480	472	464	462	515
85°	79	84	89	89	92	110
90°	3	10	18	23	23	6
95°	56	208	662	288	193	59
105°	183	285	1135	1728	1626	195
115°	326	395	908	1807	2058	321
125°	448	510	822	1384	1633	399
135°	539	599	799	1128	1272	417
145°	623	668	789	958	1030	391
155°	705	730	784	860	885	325
165°	763	773	786	819	822	215
175°	791	794	789	799	796	75
180°	791	791	791	791	791	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2815.0	2815.0	2815.0	2815.0	2815.0
2.5°	2825.1	2819.2	2794.5	2814.9	2812.9
5°	2815.0	2810.0	2779.3	2802.1	2799.7
7.5°	2792.0	2786.6	2756.3	2779.3	2778.7
10°	2771.6	2764.1	2735.9	2758.8	2756.3
12.5°	2745.0	2737.6	2709.3	2732.2	2729.7
15°	2697.6	2692.6	2664.4	2684.9	2687.4
17.5°	2643.5	2634.0	2608.7	2628.7	2631.2
20°	2600.6	2593.1	2570.0	2587.9	2590.3
22.5°	2555.7	2548.2	2525.1	2543.0	2545.5
25°	2480.6	2478.2	2455.1	2468.0	2472.9
27.5°	2399.5	2392.5	2373.9	2383.8	2388.8
30°	2340.3	2335.3	2314.8	2322.6	2327.5
32.5°	2279.0	2276.0	2257.6	2261.4	2268.4
35°	2184.6	2179.6	2161.6	2161.9	2171.8
37.5°	2080.0	2074.5	2059.5	2057.1	2061.1
40°	2008.5	2001.0	1988.1	1985.5	1985.5
42.5°	1935.1	1929.5	1912.5	1908.1	1914.1
45°	1822.2	1814.7	1799.3	1799.4	1804.4
47.5°	1700.3	1697.2	1679.3	1671.1	1673.2
50°	1610.4	1615.3	1597.6	1587.7	1597.6
52.5°	1532.8	1529.8	1513.9	1503.8	1507.8
55°	1403.7	1401.2	1385.8	1373.1	1373.1
57.5°	1274.0	1267.6	1251.5	1242.0	1249.6
60°	1184.2	1181.7	1163.8	1146.0	1153.5
62.5°	1094.4	1089.8	1071.8	1060.2	1065.7
65°	946.9	946.9	929.0	918.7	916.2
67.5°	817.7	805.7	795.7	783.4	780.0
70°	719.7	709.7	701.8	691.5	683.9
72.5°	623.7	617.8	605.9	595.7	594.2
75°	490.0	480.0	472.2	464.4	461.9
77.5°	348.7	346.6	339.4	335.4	336.8
80°	262.8	262.8	257.7	257.7	255.2
82.5°	185.3	187.3	186.3	182.2	181.8
85°	79.1	84.1	89.4	89.4	91.9
87.5°	14.8	26.3	26.1	27.1	27.1
90°	2.6	10.0	17.8	22.9	22.9
92.5°	22.9	104.0	180.7	77.6	65.6
95°	55.9	207.7	661.5	287.9	193.3
97.5°	92.6	229.4	1014.1	789.0	554.1
100°	117.1	243.8	1121.9	1137.3	918.4
102.5°	141.4	258.4	1150.4	1406.6	1213.5
105°	183.2	285.2	1134.7	1727.7	1625.6
107.5°	226.4	316.5	1069.0	1893.4	1921.8
110°	256.9	339.0	1020.1	1926.1	2047.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	283.4	361.5	971.3	1899.0	2082.6
115°	325.6	395.3	908.2	1806.8	2058.1
117.5°	365.3	432.0	868.0	1676.3	1959.4
120°	391.8	456.5	849.7	1588.8	1869.8
122.5°	414.2	478.9	837.5	1501.1	1772.2
125°	447.8	510.0	821.7	1384.5	1633.3
127.5°	477.8	539.4	813.1	1296.2	1509.6
130°	496.0	555.8	809.0	1240.7	1432.3
132.5°	514.4	574.2	804.9	1193.4	1363.1
135°	539.3	599.1	798.9	1127.7	1272.0
137.5°	566.3	620.6	795.7	1069.7	1191.1
140°	582.6	634.8	793.8	1032.8	1142.3
142.5°	598.9	647.2	791.7	1004.0	1095.5
145°	623.3	668.1	788.7	958.2	1030.4
147.5°	650.8	689.1	786.1	922.2	978.9
150°	669.0	701.4	786.1	901.6	946.4
152.5°	683.4	711.7	784.0	883.1	920.0
155°	704.7	729.6	783.6	860.5	885.3
157.5°	725.6	745.0	783.6	845.1	863.9
160°	737.7	755.2	783.6	834.8	849.7
162.5°	750.0	763.4	785.6	826.5	837.5
165°	763.2	773.2	786.1	819.3	821.7
167.5°	777.0	781.9	788.7	810.5	812.6
170°	781.0	786.0	788.7	806.4	806.4
172.5°	785.1	788.1	788.7	802.4	802.4
175°	791.2	793.7	788.7	798.8	796.3
177.5°	793.3	793.3	787.1	795.1	791.2
180°	791.2	791.2	791.2	791.2	791.2

(END OF REPORT)