

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: P519981

Luminaire Tested: **SQ4-F-075U-050D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519981
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G3-1910-536-17)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-075U-050D-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

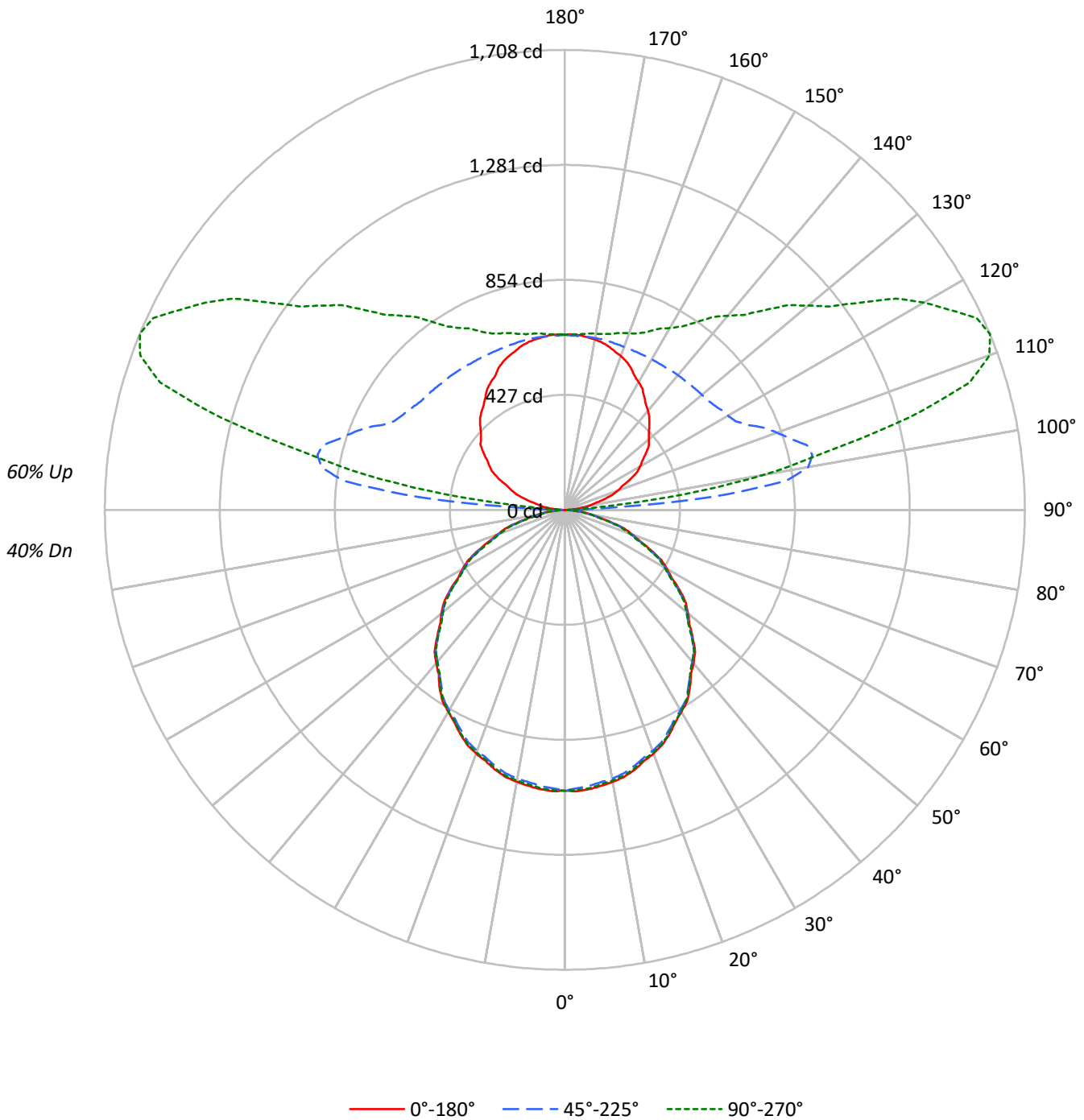
Lumens per Lamp: N/A
Luminaire Lumens: 7086.7 lumens
Efficiency: N/A
Efficacy: 132.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 53.6
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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40
1	96	91	87	84	87	83	80	77	68	66	64	54	53	51	42	41	40	34
2	87	80	74	68	79	73	68	63	60	56	53	48	45	43	37	35	33	28
3	79	70	63	57	72	64	58	53	53	48	44	42	39	36	32	30	28	24
4	72	62	54	48	66	56	50	44	47	42	38	37	34	31	29	26	24	20
5	66	55	47	41	60	50	43	38	42	36	32	33	30	27	26	23	21	18
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	21	19	15
7	56	44	36	31	51	41	34	29	34	28	25	27	23	20	21	19	16	14
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	20	17	15	12
9	49	37	29	24	44	34	27	23	28	23	19	23	19	16	18	15	13	11
10	45	33	26	22	41	31	24	20	26	21	17	21	17	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6415	6415	6415
5°	6431	6353	6405
10°	6409	6331	6374
15°	6365	6285	6338
20°	6305	6232	6278
25°	6234	6159	6215
30°	6148	6098	6138
35°	6080	6007	6038
40°	5963	5907	5919
45°	5841	5793	5793
50°	5718	5664	5638
55°	5584	5509	5480
60°	5376	5290	5255
65°	5120	5018	4959
70°	4769	4669	4570
75°	4280	4147	4047
80°	3461	3411	3315
85°	2068	2364	2463



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.4	1.4
10°-20°	280.2	4.0
20°-30°	420.9	5.9
30°-40°	502.4	7.1
40°-50°	514.8	7.3
50°-60°	459.1	6.5
60°-70°	341.9	4.8
70°-80°	185.6	2.6
80°-90°	44.6	0.6
90°-100°	306.9	4.3
100°-110°	844.3	11.9
110°-120°	871.5	12.3
120°-130°	698.2	9.9
130°-140°	548.4	7.7
140°-150°	420.3	5.9
150°-160°	302.2	4.3
160°-170°	184.8	2.6
170°-180°	62.3	0.9
0°-30°	799.5	11.3
0°-40°	1301.9	18.4
0°-60°	2275.8	32.1
0°-90°	2848.0	40.2
90°-120°	2022.6	28.5
90°-150°	3689.5	52.1
90°-180°	4239.0	59.8
0°-180°	7086.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1043	1043	1043	1043	1043	
5°	1042	1040	1029	1039	1037	99
15°	1000	997	987	995	995	282
25°	919	916	908	913	916	423
35°	810	807	800	800	804	505
45°	672	673	666	665	666	518
55°	521	521	514	510	511	464
65°	352	350	345	341	341	348
75°	180	179	174	172	170	190
85°	29	32	34	35	35	41
90°	1	6	10	12	12	4
95°	46	168	543	232	148	48
105°	151	232	930	1417	1322	159
115°	267	325	746	1486	1686	264
125°	368	420	677	1145	1342	329
135°	444	493	658	926	1048	343
145°	514	549	648	789	850	322
155°	581	600	644	709	730	267
165°	628	637	646	673	677	177
175°	651	652	648	656	655	62
180°	651	651	651	651	651	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1042.9	1042.9	1042.9	1042.9	1042.9
2.5°	1046.2	1044.0	1035.1	1042.9	1041.8
5°	1041.5	1040.1	1029.0	1038.7	1037.3
7.5°	1034.0	1031.2	1020.3	1029.7	1028.4
10°	1026.1	1023.4	1013.6	1021.9	1020.6
12.5°	1016.0	1014.5	1003.5	1011.9	1011.6
15°	999.6	996.9	987.0	995.4	995.4
17.5°	977.9	976.2	966.6	974.7	973.6
20°	963.3	960.6	952.1	959.1	959.1
22.5°	945.4	943.8	935.4	941.3	942.4
25°	918.6	915.9	907.5	913.1	915.8
27.5°	889.0	886.9	879.9	883.5	885.4
30°	865.6	865.6	858.6	860.0	864.2
32.5°	844.4	844.4	836.3	837.7	839.6
35°	809.7	807.0	800.0	800.1	804.1
37.5°	769.5	768.1	763.7	762.8	763.9
40°	742.7	741.3	735.7	737.2	737.2
42.5°	715.9	714.6	709.0	707.0	709.2
45°	671.5	672.9	666.0	664.6	666.0
47.5°	627.7	627.7	622.1	618.3	620.4
50°	597.6	597.6	591.9	589.2	589.2
52.5°	566.3	567.4	560.7	556.8	557.9
55°	520.7	520.7	513.7	509.6	511.0
57.5°	470.4	470.4	463.5	459.4	461.9
60°	437.0	437.0	430.0	425.9	427.2
62.5°	403.5	403.5	396.5	392.4	392.5
65°	351.8	350.4	344.8	340.7	340.7
67.5°	302.1	298.6	294.3	288.7	288.7
70°	265.2	263.9	259.6	254.1	254.1
72.5°	231.7	229.3	225.0	220.6	220.6
75°	180.1	178.8	174.5	171.7	170.3
77.5°	129.0	127.9	127.6	123.8	124.8
80°	97.7	97.7	96.3	93.6	93.6
82.5°	69.8	70.9	68.4	67.8	66.8
85°	29.3	32.0	33.5	34.9	34.9
87.5°	5.8	10.0	9.8	11.4	11.4
90°	1.4	5.5	9.7	12.4	12.4
92.5°	19.1	81.7	141.4	54.3	44.6
95°	45.7	167.6	542.7	232.0	148.1
97.5°	74.4	185.7	828.1	638.0	450.2
100°	95.6	197.0	917.9	926.4	755.9
102.5°	115.4	210.5	941.0	1149.3	992.9
105°	150.9	232.1	930.3	1416.8	1322.0
107.5°	184.7	258.8	877.4	1547.8	1575.9
110°	209.0	276.7	837.6	1580.3	1677.9



TEST NUMBER: P519981

CATALOG NUMBER: SQ4-F-075U-050D-830-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	231.2	296.7	797.7	1559.4	1707.7
115°	267.2	325.4	746.2	1485.9	1686.2
117.5°	301.6	355.2	713.5	1382.6	1609.2
120°	322.6	374.0	699.1	1305.2	1539.4
122.5°	341.4	392.8	689.1	1237.4	1459.6
125°	368.3	419.7	677.0	1145.2	1341.5
127.5°	393.7	442.7	668.9	1068.2	1240.4
130°	407.0	457.1	664.5	1022.4	1179.5
132.5°	422.5	472.6	661.2	982.2	1124.1
135°	444.4	493.1	657.6	926.2	1048.0
137.5°	464.9	510.1	654.6	880.8	981.2
140°	480.4	522.3	653.4	850.7	941.3
142.5°	493.7	532.4	651.2	823.8	901.5
145°	513.6	548.8	647.9	789.0	850.0
147.5°	534.9	565.3	646.2	758.3	807.0
150°	548.2	575.2	645.1	741.5	779.4
152.5°	560.4	585.3	644.0	726.9	758.3
155°	581.4	600.4	643.7	709.2	729.6
157.5°	596.7	612.1	643.7	694.8	708.7
160°	607.7	619.9	643.7	686.9	697.7
162.5°	616.6	626.6	644.9	680.2	688.9
165°	628.5	636.7	646.5	672.8	677.0
167.5°	636.9	643.0	647.9	666.7	667.9
170°	642.3	646.4	647.9	664.5	664.5
172.5°	646.7	648.7	647.9	661.1	660.0
175°	650.6	652.0	647.9	656.1	654.8
177.5°	651.7	651.7	647.3	654.0	651.7
180°	650.6	650.6	650.6	650.6	650.6

(END OF REPORT)