

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: P520269

Luminaire Tested: **SQ4-F-125U-050D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520269
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-125U-050D-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

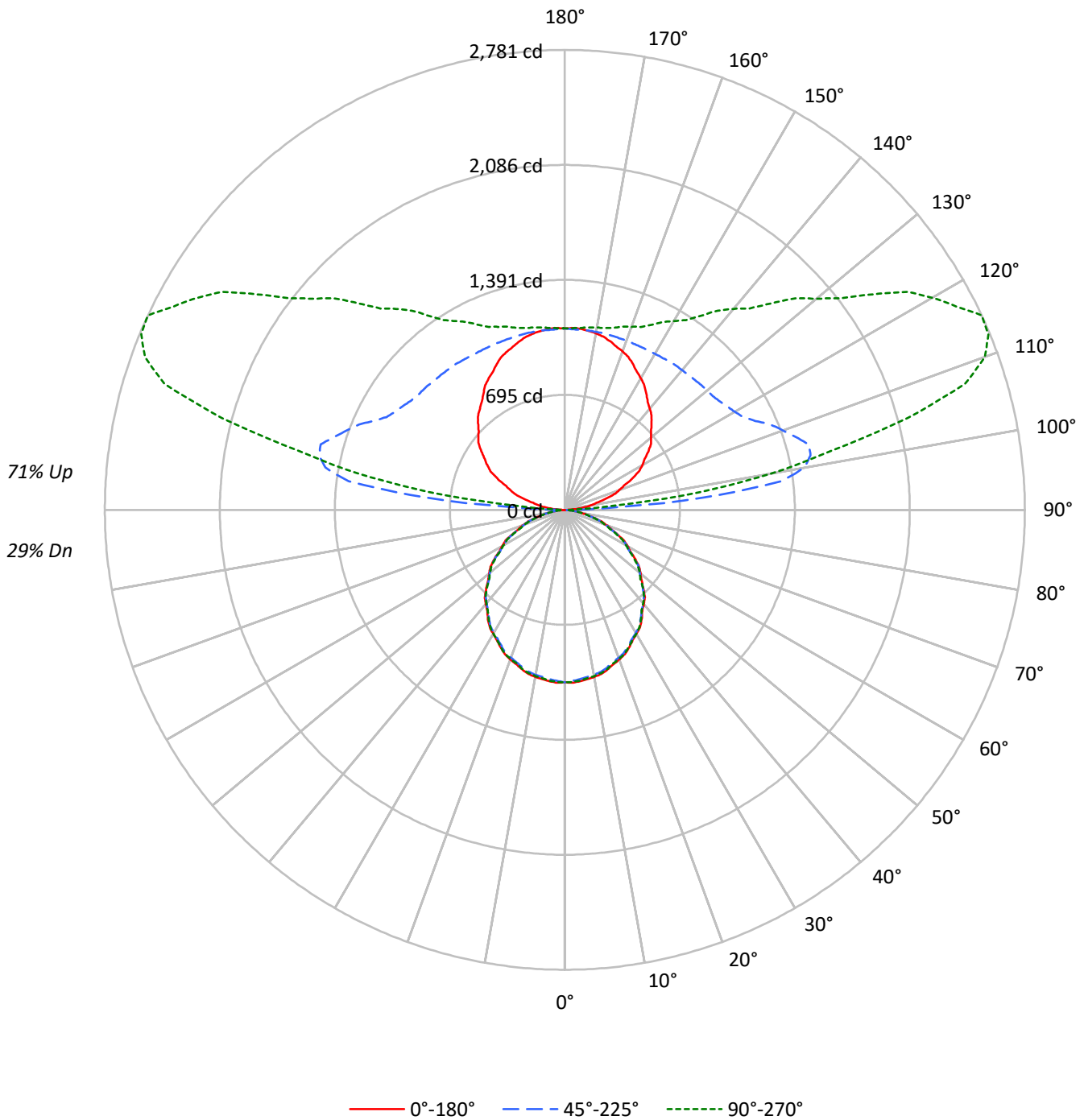
Lumens per Lamp: N/A
Luminaire Lumens: 9927.2 lumens
Efficiency: N/A
Efficacy: 133.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 74.6
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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	37	37	37	29
1	93	89	85	82	83	80	77	74	63	60	58	47	45	44	32	31	31	24
2	85	77	72	67	76	70	65	60	55	51	48	41	39	37	28	27	26	20
3	77	68	61	55	69	61	55	50	48	44	40	36	33	31	25	23	22	17
4	70	60	52	47	63	54	47	42	43	38	34	32	29	26	22	20	19	15
5	64	53	45	40	57	48	41	36	38	33	29	29	25	23	20	18	16	13
6	59	48	40	34	53	43	36	31	34	29	25	26	22	20	18	16	14	11
7	55	43	35	30	49	39	32	27	31	26	22	23	20	17	16	14	13	10
8	51	39	31	26	45	35	28	24	28	23	20	21	18	15	15	13	11	9
9	47	35	28	23	42	32	26	21	26	21	17	20	16	14	14	12	10	8
10	44	32	25	21	39	29	23	19	23	19	16	18	15	12	13	11	9	7

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	1.0
10°-20°	280.2	2.8
20°-30°	420.9	4.2
30°-40°	502.4	5.1
40°-50°	514.8	5.2
50°-60°	459.1	4.6
60°-70°	341.9	3.4
70°-80°	185.6	1.9
80°-90°	45.6	0.5
90°-100°	512.9	5.2
100°-110°	1381.7	13.9
110°-120°	1450.0	14.6
120°-130°	1176.7	11.9
130°-140°	922.8	9.3
140°-150°	708.5	7.1
150°-160°	509.4	5.1
160°-170°	311.2	3.1
170°-180°	105.0	1.1
0°-30°	799.5	8.1
0°-40°	1301.9	13.1
0°-60°	2275.8	22.9
0°-90°	2848.9	28.7
90°-120°	3344.7	33.7
90°-150°	6152.6	62.0
90°-180°	7078.0	71.3
0°-180°	9927.2	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°	3	8	17	18	18	6
95°	78	279	841	430	298	82
105°	256	398	1528	2286	2145	269
115°	451	552	1272	2459	2781	444
125°	616	708	1142	1931	2272	550
135°	742	828	1110	1558	1764	572
145°	858	925	1096	1332	1430	538
155°	974	1009	1087	1195	1233	448
165°	1056	1068	1091	1134	1140	298
175°	1098	1096	1092	1108	1105	104
180°	1096	1096	1096	1096	1096	



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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°	6.1	10.6	11.1	12.5	12.5
90°	2.8	8.3	16.8	18.2	18.2
92.5°	34.0	120.4	238.0	114.6	79.6
95°	78.2	278.9	840.9	430.0	297.5
97.5°	124.9	319.3	1318.8	1101.8	830.8
100°	160.6	335.5	1470.8	1538.9	1276.6
102.5°	195.3	358.1	1521.0	1866.2	1651.0
105°	255.6	397.6	1528.0	2286.1	2145.4
107.5°	312.6	439.3	1463.0	2501.8	2538.2
110°	350.6	470.8	1403.7	2568.8	2701.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	390.8	502.2	1346.8	2554.0	2771.7
115°	451.1	552.2	1272.5	2458.6	2781.0
117.5°	506.2	601.0	1214.9	2306.4	2665.3
120°	541.9	633.5	1185.8	2197.1	2565.9
122.5°	573.2	663.7	1164.6	2085.3	2453.0
125°	616.0	707.5	1142.5	1931.1	2272.5
127.5°	657.1	747.1	1128.6	1795.0	2099.8
130°	681.6	771.7	1123.0	1717.1	1984.8
132.5°	706.2	795.2	1117.4	1648.4	1894.3
135°	741.7	827.8	1110.5	1557.8	1764.1
137.5°	775.5	857.9	1106.8	1481.1	1650.4
140°	798.9	878.2	1103.4	1433.8	1586.7
142.5°	823.5	897.3	1101.2	1389.6	1518.6
145°	857.7	924.6	1096.4	1332.0	1430.2
147.5°	894.5	952.7	1091.7	1283.4	1360.7
150°	919.0	969.5	1089.4	1252.9	1317.2
152.5°	941.4	985.4	1088.3	1228.1	1280.3
155°	973.5	1009.0	1086.7	1195.1	1233.3
157.5°	1001.7	1029.3	1087.0	1171.9	1197.6
160°	1019.7	1042.9	1088.1	1158.3	1177.4
162.5°	1035.3	1054.1	1089.2	1147.1	1160.7
165°	1056.0	1068.2	1090.9	1134.3	1139.8
167.5°	1072.7	1079.8	1092.3	1124.5	1126.6
170°	1083.9	1086.6	1092.3	1118.8	1118.8
172.5°	1090.6	1091.1	1093.4	1113.2	1113.2
175°	1097.8	1096.4	1092.3	1107.6	1104.8
177.5°	1100.9	1098.7	1093.1	1102.0	1099.8
180°	1096.4	1096.4	1096.4	1096.4	1096.4

(END OF REPORT)