

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: P519974

Luminaire Tested: **SQ4-F-050U-125D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519974
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G3-1910-536-20)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-050U-125D-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

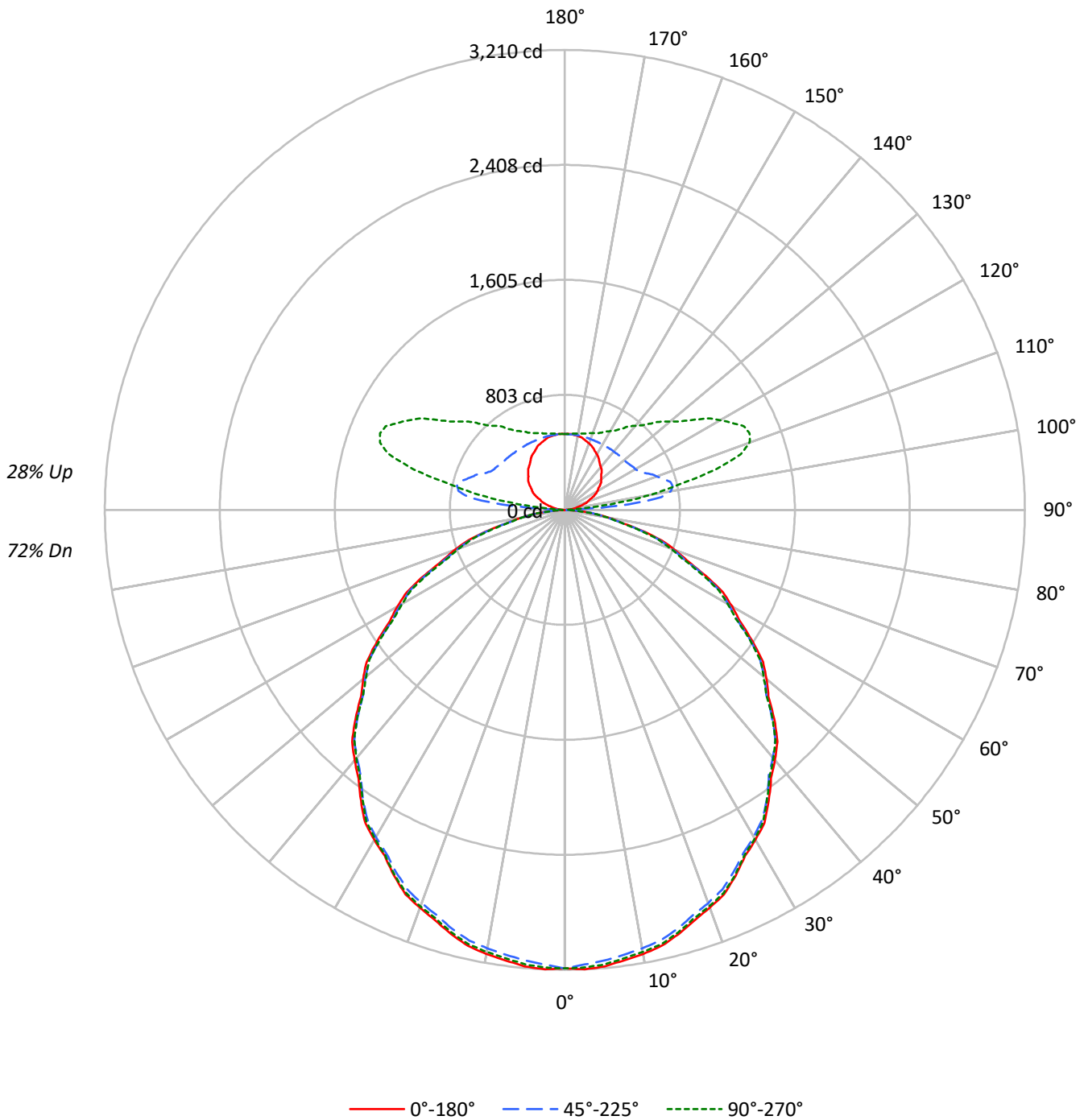
Lumens per Lamp: N/A
Luminaire Lumens: 12194.8 lumens
Efficiency: N/A
Efficacy: 109.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 111.4
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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	72
1	103	98	94	90	97	93	90	86	84	81	78	75	73	71	67	66	64	60
2	93	86	79	74	88	81	76	71	73	69	65	66	62	59	59	56	54	50
3	85	75	68	61	80	72	65	59	65	59	54	58	54	50	52	49	46	42
4	78	67	58	52	73	63	56	50	57	51	46	52	47	43	47	43	39	36
5	72	59	51	45	67	57	49	43	51	45	40	46	41	37	42	38	34	31
6	66	53	45	39	62	51	43	37	46	40	35	42	37	32	38	34	30	28
7	61	48	40	34	58	46	38	33	42	36	31	38	33	29	35	30	27	24
8	57	44	36	30	54	42	34	29	38	32	27	35	30	26	32	27	24	22
9	53	40	32	27	50	38	31	26	35	29	25	32	27	23	29	25	22	20
10	49	37	29	24	47	35	28	24	33	26	22	30	25	21	27	23	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14763	14763	14763
5°	14811	14623	14746
10°	14743	14562	14677
15°	14645	14468	14585
20°	14509	14345	14457
25°	14344	14191	14308
30°	14167	14045	14120
35°	13966	13846	13856
40°	13735	13587	13630
45°	13478	13328	13352
50°	13184	13032	12993
55°	12848	12664	12636
60°	12431	12156	12090
65°	11785	11536	11382
70°	10976	10690	10547
75°	9764	9543	9259
80°	7954	7720	7675
85°	4753	5409	5409



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	301.9	2.5
10°-20°	860.0	7.1
20°-30°	1292.0	10.6
30°-40°	1541.6	12.6
40°-50°	1580.2	13.0
50°-60°	1408.5	11.5
60°-70°	1048.5	8.6
70°-80°	568.0	4.7
80°-90°	132.5	1.1
90°-100°	254.5	2.1
100°-110°	691.4	5.7
110°-120°	710.8	5.8
120°-130°	568.3	4.7
130°-140°	446.5	3.7
140°-150°	342.4	2.8
150°-160°	246.2	2.0
160°-170°	150.6	1.2
170°-180°	50.7	0.4
0°-30°	2453.9	20.1
0°-40°	3995.6	32.8
0°-60°	6984.2	57.3
0°-90°	8733.3	71.6
90°-120°	1656.7	13.6
90°-150°	3014.0	24.7
90°-180°	3462.0	28.4
0°-180°	12194.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3200	3200	3200	3200	3200	
5°	3198	3193	3158	3186	3184	303
15°	3066	3060	3029	3056	3054	864
25°	2818	2813	2788	2804	2811	1298
35°	2480	2478	2459	2459	2460	1551
45°	2066	2061	2043	2040	2047	1592
55°	1598	1592	1575	1562	1571	1427
65°	1080	1073	1057	1050	1043	1069
75°	548	548	535	525	520	582
85°	90	102	102	104	102	124
90°	2	7	12	15	15	5
95°	38	139	443	193	130	40
105°	123	191	760	1158	1089	130
115°	218	265	609	1211	1379	215
125°	300	342	551	928	1094	267
135°	361	401	535	756	852	280
145°	418	448	528	642	690	262
155°	472	489	525	577	593	218
165°	511	518	527	549	551	144
175°	530	532	528	535	534	50
180°	530	530	530	530	530	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3200.3	3200.3	3200.3	3200.3	3200.3
2.5°	3210.1	3204.5	3176.3	3200.2	3196.0
5°	3198.5	3193.3	3157.9	3186.1	3184.4
7.5°	3171.4	3164.8	3132.6	3158.9	3155.9
10°	3147.4	3142.2	3108.7	3135.0	3133.3
12.5°	3117.8	3112.6	3079.1	3105.5	3105.1
15°	3066.4	3059.5	3029.4	3055.8	3054.0
17.5°	3004.8	2996.8	2967.1	2988.0	2991.4
20°	2955.4	2950.2	2922.0	2941.4	2944.9
22.5°	2904.7	2898.2	2868.5	2890.7	2894.1
25°	2818.1	2812.9	2788.1	2804.1	2811.0
27.5°	2722.9	2722.9	2700.0	2711.4	2715.5
30°	2659.6	2659.6	2636.7	2643.9	2650.8
32.5°	2591.9	2586.4	2564.8	2570.6	2577.5
35°	2479.9	2478.2	2458.7	2458.8	2460.5
37.5°	2364.0	2359.2	2337.9	2339.5	2347.8
40°	2280.8	2277.4	2256.2	2256.4	2263.3
42.5°	2196.3	2192.8	2174.5	2171.7	2174.5
45°	2066.0	2060.8	2043.0	2039.7	2046.6
47.5°	1927.2	1928.5	1907.4	1902.6	1906.4
50°	1837.0	1837.0	1815.9	1805.4	1810.5
52.5°	1742.6	1739.8	1718.6	1707.0	1719.0
55°	1597.5	1592.3	1574.6	1562.4	1571.1
57.5°	1448.8	1440.9	1423.1	1409.8	1414.7
60°	1347.4	1335.3	1317.5	1306.9	1310.4
62.5°	1241.7	1235.2	1216.0	1199.9	1207.5
65°	1079.7	1072.8	1056.8	1049.6	1042.7
67.5°	920.8	916.3	898.3	890.8	886.3
70°	813.8	805.1	792.6	783.8	782.0
72.5°	709.5	699.4	686.9	679.4	674.9
75°	547.8	547.8	535.4	524.7	519.5
77.5°	393.9	395.2	385.0	381.4	379.1
80°	299.4	299.4	290.6	287.1	288.9
82.5°	209.2	213.3	210.3	205.3	202.9
85°	89.8	101.9	102.2	103.9	102.2
87.5°	15.8	26.6	29.2	27.1	24.3
90°	1.7	6.7	12.0	15.3	15.3
92.5°	15.3	69.7	121.0	52.0	44.0
95°	37.5	139.1	443.2	192.9	129.5
97.5°	62.0	153.8	679.4	528.6	371.3
100°	78.4	163.4	751.8	762.1	615.4
102.5°	94.8	173.1	770.9	942.4	813.1
105°	122.8	191.1	760.3	1157.6	1089.3
107.5°	151.7	212.1	716.3	1268.7	1287.7
110°	172.2	227.2	683.6	1290.6	1372.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	189.9	242.3	650.9	1272.4	1395.5
115°	218.2	264.8	608.6	1210.7	1379.1
117.5°	244.8	289.5	581.6	1123.3	1313.0
120°	262.5	305.9	569.3	1064.6	1252.9
122.5°	277.5	320.9	561.2	1005.8	1187.5
125°	300.0	341.7	550.6	927.7	1094.4
127.5°	320.1	361.5	544.8	868.5	1011.5
130°	332.5	372.4	542.1	831.3	959.7
132.5°	344.7	384.7	539.3	799.6	913.4
135°	361.4	401.3	535.3	755.7	852.3
137.5°	379.5	415.8	533.2	716.8	798.1
140°	390.4	425.4	531.9	692.1	765.4
142.5°	401.2	433.6	530.5	672.7	734.0
145°	417.6	447.7	528.4	642.1	690.4
147.5°	436.1	461.7	526.8	617.9	656.0
150°	448.3	470.0	526.8	604.2	634.1
152.5°	457.9	476.9	525.4	591.7	616.4
155°	472.2	488.9	525.1	576.6	593.2
157.5°	486.1	499.2	525.1	566.2	578.9
160°	494.4	506.0	525.1	559.3	569.3
162.5°	502.5	511.5	526.4	553.8	561.2
165°	511.4	518.0	526.8	548.9	550.6
167.5°	520.6	523.9	528.4	543.1	544.5
170°	523.3	526.7	528.4	540.4	540.4
172.5°	526.1	528.0	528.4	537.6	537.6
175°	530.2	531.9	528.4	535.2	533.5
177.5°	531.6	531.6	527.4	532.8	530.2
180°	530.2	530.2	530.2	530.2	530.2

(END OF REPORT)