

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: P520070

Luminaire Tested: **SQ4-F-075U-125D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520070
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-125D-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

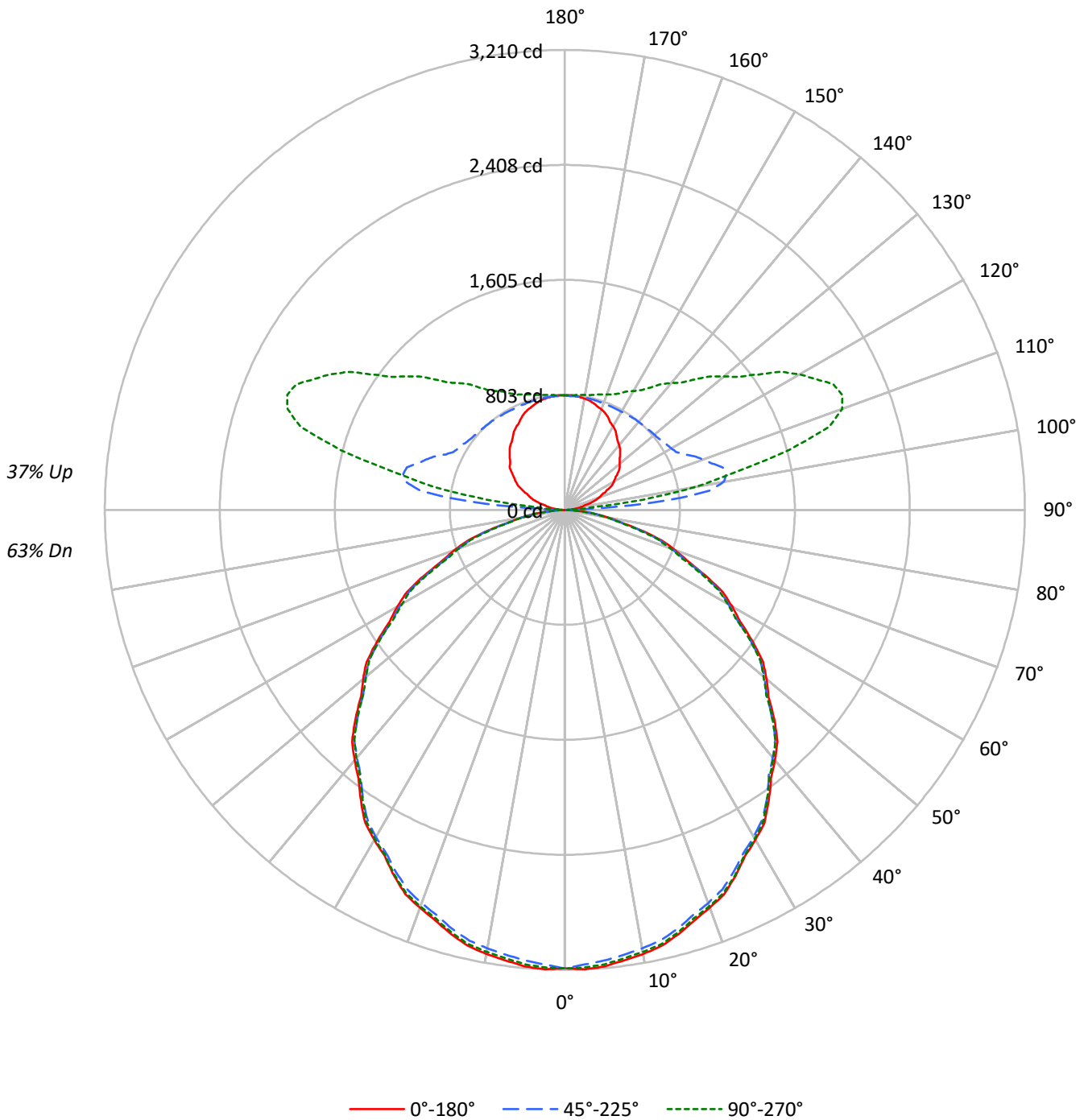
Lumens per Lamp: N/A
Luminaire Lumens: 13935.8 lumens
Efficiency: N/A
Efficacy: 111.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 125.1
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	110	110	110	110	103	103	103	103	90	90	90	79	79	79	68	68	68	63
1	101	96	92	89	94	90	87	84	79	77	74	69	67	66	60	59	57	53
2	92	84	78	72	86	79	73	69	69	65	61	61	57	55	53	50	48	44
3	83	74	66	60	78	69	63	57	61	56	52	54	49	46	47	43	41	37
4	76	65	57	51	71	61	54	48	54	48	44	48	43	39	41	38	35	32
5	70	58	50	44	65	55	47	42	49	42	38	43	38	34	37	34	30	27
6	65	52	44	38	60	49	42	36	44	38	33	39	34	30	34	30	27	24
7	60	47	39	33	56	45	37	32	40	34	29	35	30	26	31	27	24	21
8	55	43	35	29	52	41	33	28	36	30	26	32	27	24	28	24	21	19
9	52	39	31	26	48	37	30	25	33	27	23	30	25	21	26	22	19	17
10	48	36	28	24	45	34	27	23	31	25	21	27	23	19	24	20	17	15

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	2.2
10°-20°	860.0	6.2
20°-30°	1292.0	9.3
30°-40°	1541.6	11.1
40°-50°	1580.2	11.3
50°-60°	1408.5	10.1
60°-70°	1048.5	7.5
70°-80°	568.0	4.1
80°-90°	132.5	1.0
90°-100°	376.7	2.7
100°-110°	1036.3	7.4
110°-120°	1069.6	7.7
120°-130°	857.0	6.1
130°-140°	673.1	4.8
140°-150°	515.8	3.7
150°-160°	370.9	2.7
160°-170°	226.8	1.6
170°-180°	76.4	0.5
0°-30°	2453.9	17.6
0°-40°	3995.6	28.7
0°-60°	6984.2	50.1
0°-90°	8733.3	62.7
90°-120°	2482.6	17.8
90°-150°	4528.5	32.5
90°-180°	5203.0	37.3
0°-180°	13935.8	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	6
95°	56	206	666	285	182	59
105°	185	285	1142	1739	1623	195
115°	328	399	916	1824	2070	324
125°	452	515	831	1406	1646	403
135°	545	605	807	1137	1286	421
145°	630	674	795	968	1043	395
155°	714	737	790	870	896	328
165°	771	781	794	826	831	217
175°	799	800	795	805	804	76
180°	799	799	799	799	799	

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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	11.9	15.3	15.3
92.5°	23.5	100.2	173.6	66.7	54.7
95°	56.0	205.6	666.1	284.8	181.8
97.5°	91.5	228.0	1016.5	783.2	552.5
100°	117.3	241.9	1126.5	1137.1	927.7
102.5°	141.7	258.3	1155.1	1410.6	1218.6
105°	185.3	284.9	1141.9	1739.0	1622.7
107.5°	226.6	317.7	1076.9	1899.8	1934.3
110°	256.6	339.6	1028.0	1939.7	2059.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	283.8	364.2	979.1	1914.0	2096.1
115°	328.0	399.4	915.8	1823.7	2069.6
117.5°	370.1	435.8	875.7	1696.9	1975.1
120°	395.9	459.0	858.1	1602.1	1889.4
122.5°	419.0	482.1	845.9	1518.8	1791.6
125°	452.0	515.1	830.9	1405.6	1646.5
127.5°	483.2	543.3	821.0	1311.1	1522.4
130°	499.5	561.0	815.6	1254.9	1447.7
132.5°	518.6	580.0	811.5	1205.6	1379.7
135°	545.4	605.3	807.1	1136.8	1286.2
137.5°	570.5	626.1	803.3	1081.1	1204.4
140°	589.6	641.1	802.0	1044.1	1155.5
142.5°	605.9	653.4	799.3	1011.1	1106.4
145°	630.4	673.5	795.2	968.5	1043.3
147.5°	656.5	693.8	793.2	930.8	990.6
150°	672.8	706.1	791.8	910.1	956.6
152.5°	687.8	718.4	790.4	892.2	930.8
155°	713.6	736.9	790.1	870.5	895.5
157.5°	732.3	751.3	790.1	852.7	869.9
160°	745.9	760.9	790.1	843.0	856.3
162.5°	756.8	769.1	791.5	834.8	845.5
165°	771.4	781.4	793.5	825.9	830.9
167.5°	781.6	789.2	795.2	818.3	819.7
170°	788.4	793.4	795.2	815.6	815.6
172.5°	793.8	796.2	795.2	811.4	810.2
175°	798.6	800.3	795.2	805.4	803.7
177.5°	800.0	800.0	794.5	802.6	800.0
180°	798.6	798.6	798.6	798.6	798.6

(END OF REPORT)