

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: P520451

Luminaire Tested: **SQ4-F-150U-125D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520451
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-125D-935-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

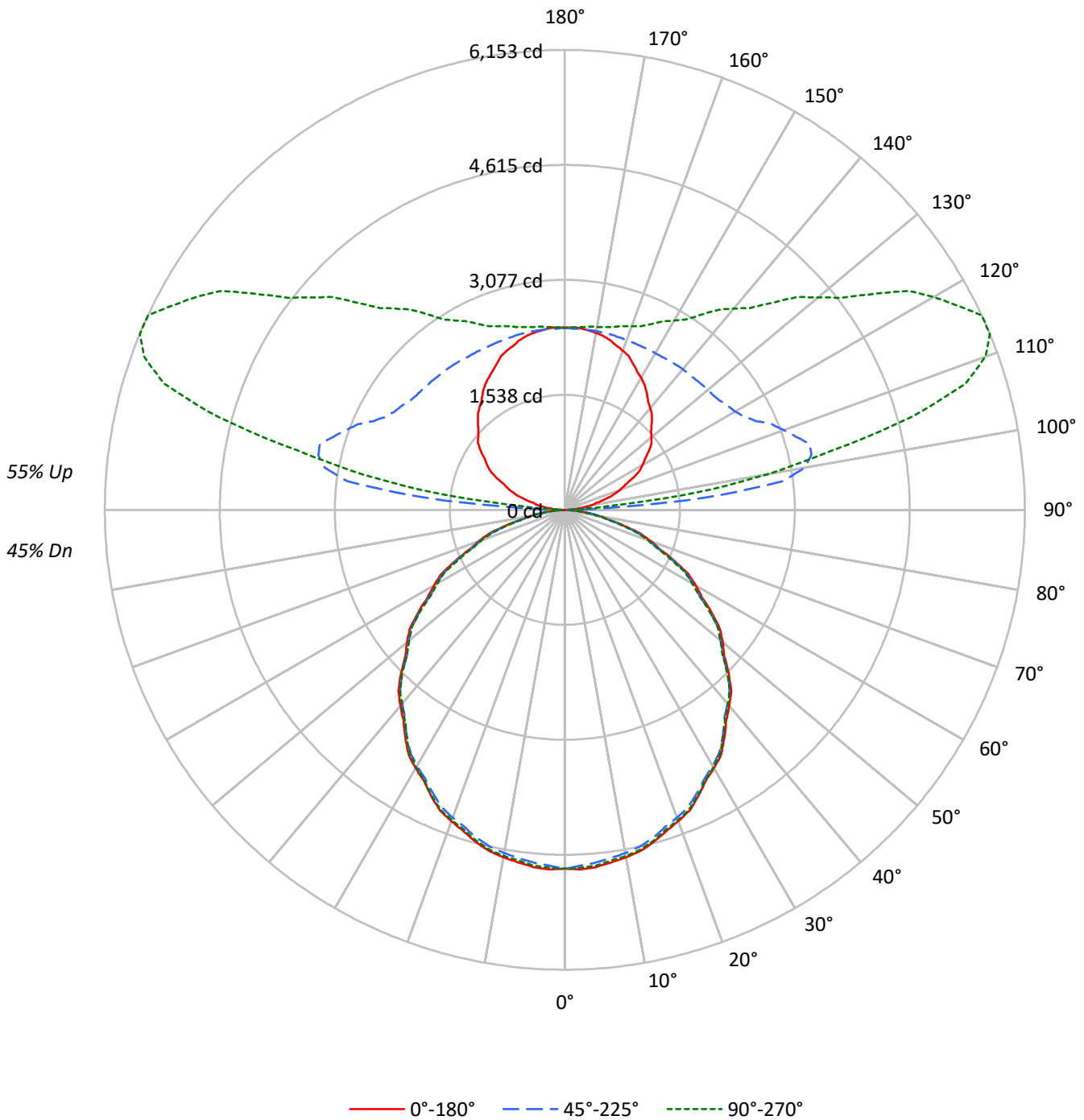
Lumens per Lamp: N/A
Luminaire Lumens: 28804.3 lumens
Efficiency: N/A
Efficacy: 110.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 260.3
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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	45
1	97	92	89	85	89	85	82	79	71	68	66	58	56	55	46	45	44	38
2	88	81	75	69	80	74	69	64	62	58	55	51	48	46	40	38	37	32
3	80	71	63	58	73	65	59	54	55	50	46	45	41	38	36	33	31	27
4	73	63	55	49	67	58	51	45	48	43	39	40	36	33	32	29	27	23
5	67	56	48	42	61	51	44	39	43	38	34	36	32	28	29	26	23	20
6	62	50	42	36	57	46	39	34	39	33	29	32	28	25	26	23	20	17
7	57	45	37	31	52	42	35	29	35	30	26	29	25	22	24	20	18	15
8	53	41	33	28	48	38	31	26	32	27	23	27	22	19	22	19	16	14
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	20	17	15	12
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14763	14763	14763
5°	14811	14624	14746
10°	14743	14562	14677
15°	14644	14468	14586
20°	14509	14345	14457
25°	14344	14192	14308
30°	14167	14045	14119
35°	13966	13846	13856
40°	13735	13587	13629
45°	13478	13329	13352
50°	13184	13032	12994
55°	12848	12664	12636
60°	12431	12155	12090
65°	11785	11535	11382
70°	10975	10690	10547
75°	9764	9543	9261
80°	7954	7720	7674
85°	4753	5406	5406



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	452.9	1.6
10°-20°	1290.0	4.5
20°-30°	1938.0	6.7
30°-40°	2312.4	8.0
40°-50°	2370.3	8.2
50°-60°	2112.7	7.3
60°-70°	1572.7	5.5
70°-80°	852.1	3.0
80°-90°	200.7	0.7
90°-100°	1131.9	3.9
100°-110°	3060.3	10.6
110°-120°	3217.5	11.2
120°-130°	2613.5	9.1
130°-140°	2050.0	7.1
140°-150°	1573.4	5.5
150°-160°	1131.6	3.9
160°-170°	691.3	2.4
170°-180°	233.1	0.8
0°-30°	3680.9	12.8
0°-40°	5993.3	20.8
0°-60°	10476.4	36.4
0°-90°	13101.8	45.5
90°-120°	7409.6	25.7
90°-150°	13646.6	47.4
90°-180°	15702.0	54.5
0°-180°	28804.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4800	4800	4800	4800	4800	
5°	4798	4790	4737	4779	4777	455
15°	4600	4589	4544	4584	4581	1297
25°	4227	4219	4182	4206	4216	1947
35°	3720	3717	3688	3688	3691	2326
45°	3099	3091	3065	3060	3070	2388
55°	2396	2388	2362	2344	2357	2140
65°	1620	1609	1585	1574	1564	1604
75°	822	822	803	787	779	873
85°	135	153	153	156	153	186
90°	5	16	34	37	34	15
95°	176	617	1882	974	579	184
105°	569	879	3395	5008	4803	599
115°	1002	1224	2816	5451	6153	989
125°	1371	1571	2538	4282	5031	1222
135°	1644	1838	2470	3458	3914	1270
145°	1911	2055	2436	2960	3185	1196
155°	2158	2242	2414	2655	2742	995
165°	2349	2372	2425	2520	2532	662
175°	2438	2436	2428	2459	2454	231
180°	2436	2436	2436	2436	2436	

TEST NUMBER: P520451

CATALOG NUMBER: SQ4-F-150U-125D-935-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4800.3	4800.3	4800.3	4800.3	4800.3
2.5°	4815.1	4806.9	4764.4	4800.2	4794.0
5°	4797.7	4790.0	4737.0	4779.1	4776.6
7.5°	4757.0	4747.2	4698.9	4738.4	4733.7
10°	4721.1	4713.4	4663.0	4702.5	4700.0
12.5°	4676.7	4669.0	4618.6	4658.2	4657.7
15°	4599.5	4589.2	4544.1	4583.6	4581.1
17.5°	4507.1	4495.3	4450.6	4481.9	4487.0
20°	4433.1	4425.4	4383.0	4412.1	4417.3
22.5°	4357.0	4347.2	4302.6	4336.0	4341.2
25°	4227.1	4219.3	4182.2	4206.2	4216.5
27.5°	4084.4	4084.4	4050.0	4067.1	4073.3
30°	3989.3	3989.3	3954.9	3965.8	3976.0
32.5°	3887.9	3879.5	3847.1	3855.8	3866.2
35°	3719.8	3717.3	3688.1	3688.2	3690.7
37.5°	3546.0	3538.7	3506.9	3509.3	3521.7
40°	3421.2	3416.1	3384.3	3384.5	3394.9
42.5°	3294.4	3289.3	3261.7	3257.5	3261.7
45°	3098.9	3091.2	3064.6	3059.6	3069.9
47.5°	2890.8	2892.9	2861.2	2854.0	2859.6
50°	2755.6	2755.6	2723.8	2708.1	2715.9
52.5°	2613.9	2609.8	2578.0	2560.4	2578.5
55°	2396.3	2388.5	2361.9	2343.7	2356.6
57.5°	2173.3	2161.3	2134.7	2114.7	2122.0
60°	2021.1	2003.0	1976.2	1960.4	1965.6
62.5°	1862.5	1852.7	1823.9	1799.9	1811.3
65°	1619.5	1609.2	1585.1	1574.3	1564.1
67.5°	1381.2	1374.4	1347.4	1336.1	1329.4
70°	1220.6	1207.6	1188.9	1175.6	1173.0
72.5°	1064.2	1049.2	1030.3	1019.1	1012.4
75°	821.7	821.7	803.1	787.1	779.4
77.5°	590.8	592.8	577.5	572.1	568.6
80°	449.1	449.1	435.9	430.6	433.3
82.5°	313.9	320.1	315.4	308.0	304.4
85°	134.7	152.8	153.2	155.8	153.2
87.5°	24.3	40.8	47.0	43.2	38.6
90°	5.2	15.5	34.1	36.6	34.1
92.5°	74.4	271.3	535.4	232.4	168.3
95°	175.6	616.6	1882.3	974.1	579.3
97.5°	282.1	707.1	2934.2	2428.1	1783.2
100°	361.8	743.7	3261.3	3401.1	2750.1
102.5°	435.2	794.5	3376.7	4138.9	3651.9
105°	568.9	879.0	3395.0	5007.9	4802.8
107.5°	692.6	975.6	3246.6	5549.9	5618.1
110°	789.1	1045.4	3114.5	5695.5	5985.2



TEST NUMBER: P520451

CATALOG NUMBER: SQ4-F-150U-125D-935-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	875.1	1115.0	2992.8	5666.4	6152.9
115°	1001.5	1224.5	2815.7	5450.6	6152.9
117.5°	1125.2	1334.3	2698.7	5120.9	5917.0
120°	1200.7	1405.8	2629.4	4884.2	5696.8
122.5°	1272.0	1473.0	2587.5	4630.6	5449.3
125°	1371.2	1571.0	2537.7	4282.4	5030.9
127.5°	1462.3	1658.7	2508.3	3998.3	4656.5
130°	1512.7	1715.2	2495.8	3822.7	4417.5
132.5°	1565.1	1765.6	2483.2	3664.4	4211.9
135°	1643.8	1838.5	2469.6	3457.8	3914.1
137.5°	1723.0	1906.9	2458.0	3290.2	3661.9
140°	1777.5	1949.2	2453.8	3182.3	3513.0
142.5°	1829.9	1991.3	2445.5	3084.9	3374.6
145°	1911.2	2054.7	2435.5	2959.7	3185.3
147.5°	1985.1	2112.3	2423.9	2846.3	3019.6
150°	2039.6	2152.4	2419.8	2784.7	2923.1
152.5°	2089.9	2188.4	2417.7	2727.5	2841.3
155°	2157.6	2242.1	2414.5	2655.1	2742.2
157.5°	2227.9	2286.8	2415.1	2604.6	2662.0
160°	2267.7	2316.4	2417.2	2572.7	2613.8
162.5°	2299.2	2339.6	2419.2	2547.4	2578.1
165°	2349.0	2372.0	2425.0	2519.7	2532.5
167.5°	2383.1	2399.0	2425.5	2496.0	2502.1
170°	2404.0	2411.8	2427.6	2485.3	2485.3
172.5°	2420.8	2422.3	2427.6	2472.7	2470.6
175°	2438.1	2435.6	2427.6	2458.9	2453.8
177.5°	2443.8	2437.7	2427.1	2448.0	2441.8
180°	2435.5	2435.5	2435.5	2435.5	2435.5

(END OF REPORT)