

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: P520443

Luminaire Tested: **SQ4-F-150U-125D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520443  
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-840-1D-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**

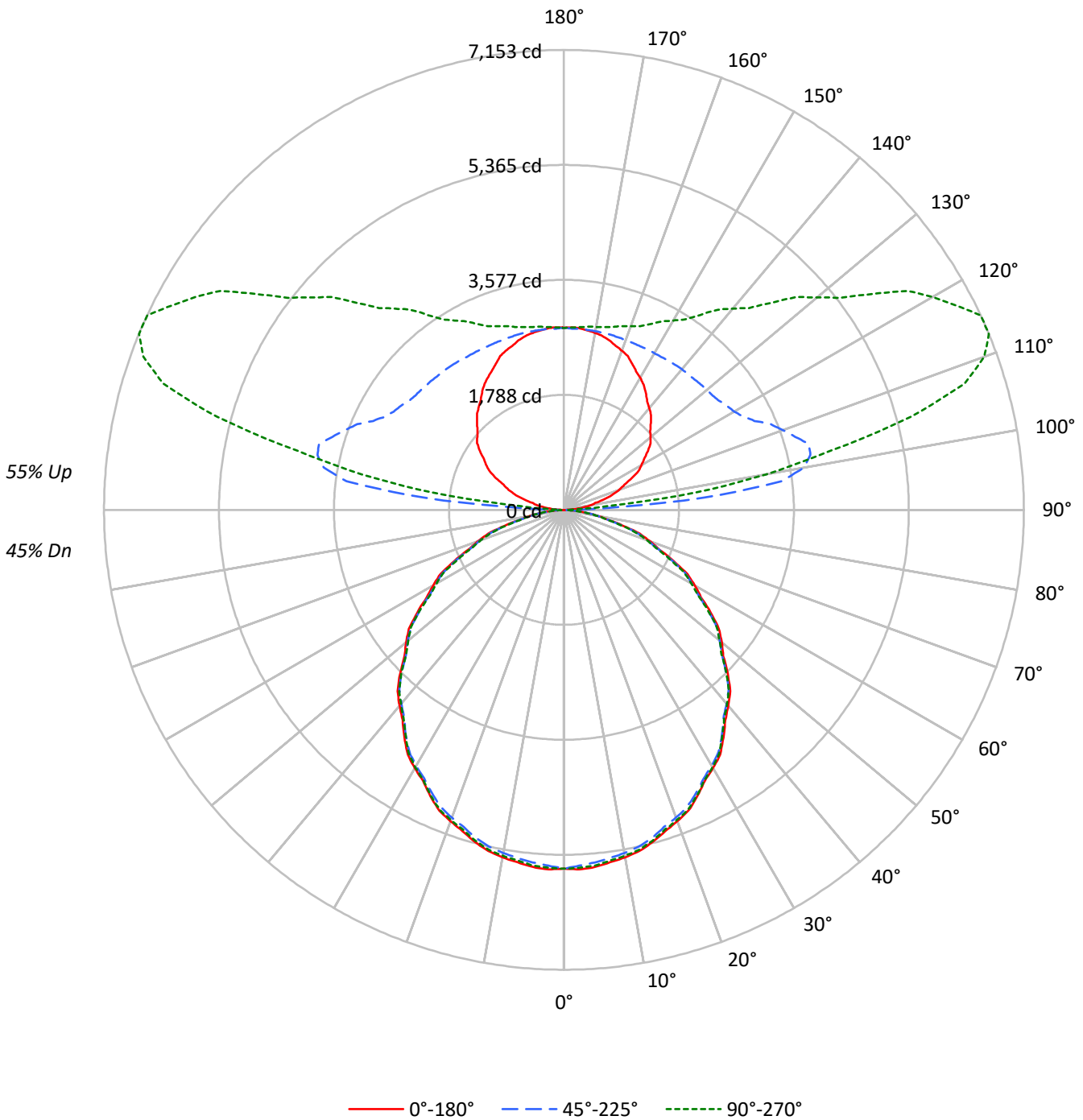
Lumens per Lamp: N/A  
Luminaire Lumens: 33484.3 lumens  
Efficiency: N/A  
Efficacy: 128.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

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°	17161	17161	17161
5°	17218	16999	17142
10°	17138	16928	17062
15°	17024	16819	16955
20°	16866	16675	16806
25°	16674	16497	16633
30°	16469	16326	16413
35°	16235	16096	16108
40°	15967	15794	15843
45°	15668	15494	15521
50°	15326	15149	15105
55°	14936	14721	14688
60°	14451	14130	14055
65°	13700	13409	13230
70°	12758	12427	12261
75°	11349	11095	10765
80°	9247	8976	8921
85°	5526	6288	6288



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	526.5	1.6
10°-20°	1499.5	4.5
20°-30°	2252.9	6.7
30°-40°	2688.1	8.0
40°-50°	2755.4	8.2
50°-60°	2456.0	7.3
60°-70°	1828.3	5.5
70°-80°	990.5	3.0
80°-90°	233.3	0.7
90°-100°	1315.8	3.9
100°-110°	3557.5	10.6
110°-120°	3740.2	11.2
120°-130°	3038.1	9.1
130°-140°	2383.1	7.1
140°-150°	1829.1	5.5
150°-160°	1315.4	3.9
160°-170°	803.6	2.4
170°-180°	270.9	0.8
0°-30°	4279.0	12.8
0°-40°	6967.1	20.8
0°-60°	12178.5	36.4
0°-90°	15230.6	45.5
90°-120°	8613.5	25.7
90°-150°	15863.8	47.4
90°-180°	18254.0	54.5
0°-180°	33484.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5580	5580	5580	5580	5580	
5°	5577	5568	5506	5556	5553	529
15°	5347	5335	5282	5328	5325	1507
25°	4914	4905	4862	4890	4902	2263
35°	4324	4321	4287	4287	4290	2704
45°	3602	3593	3562	3557	3569	2776
55°	2786	2776	2746	2724	2739	2488
65°	1883	1871	1843	1830	1818	1864
75°	955	955	934	915	906	1014
85°	157	178	178	181	178	217
90°	6	18	40	43	40	17
95°	204	717	2188	1132	674	214
105°	661	1022	3947	5822	5583	697
115°	1164	1423	3273	6336	7153	1150
125°	1594	1826	2950	4978	5848	1421
135°	1911	2137	2871	4020	4550	1477
145°	2222	2388	2831	3441	3703	1390
155°	2508	2606	2807	3086	3188	1157
165°	2731	2757	2819	2929	2944	769
175°	2834	2831	2822	2858	2852	269
180°	2831	2831	2831	2831	2831	

TEST NUMBER: P520443

CATALOG NUMBER: SQ4-F-150U-125D-840-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5580.2	5580.2	5580.2	5580.2	5580.2
2.5°	5597.5	5587.8	5538.5	5580.1	5572.9
5°	5577.2	5568.2	5506.5	5555.6	5552.7
7.5°	5530.0	5518.5	5462.4	5508.3	5502.9
10°	5488.1	5479.2	5420.6	5466.6	5463.6
12.5°	5436.5	5427.5	5369.0	5415.0	5414.4
15°	5346.9	5334.9	5282.4	5328.4	5325.3
17.5°	5239.4	5225.6	5173.7	5210.0	5216.1
20°	5153.4	5144.4	5095.1	5128.9	5135.0
22.5°	5065.0	5053.5	5001.7	5040.5	5046.5
25°	4913.8	4904.8	4861.6	4889.5	4901.6
27.5°	4748.0	4748.0	4708.1	4727.9	4735.1
30°	4637.5	4637.5	4597.5	4610.1	4622.0
32.5°	4519.5	4509.8	4472.2	4482.3	4494.3
35°	4324.2	4321.1	4287.3	4287.4	4290.4
37.5°	4122.1	4113.7	4076.7	4079.4	4093.8
40°	3977.1	3971.2	3934.2	3934.4	3946.4
42.5°	3829.7	3823.7	3791.7	3786.8	3791.7
45°	3602.4	3593.4	3562.5	3556.6	3568.7
47.5°	3360.4	3362.9	3326.1	3317.6	3324.2
50°	3203.2	3203.2	3166.3	3148.1	3157.1
52.5°	3038.6	3033.8	2996.9	2976.4	2997.5
55°	2785.6	2776.5	2745.6	2724.4	2739.4
57.5°	2526.3	2512.5	2481.5	2458.3	2466.7
60°	2349.4	2328.5	2297.2	2278.9	2285.0
62.5°	2165.2	2153.7	2120.3	2092.4	2105.6
65°	1882.6	1870.6	1842.7	1830.1	1818.1
67.5°	1605.6	1597.8	1566.3	1553.2	1545.4
70°	1418.8	1403.8	1382.0	1366.6	1363.6
72.5°	1237.1	1219.7	1197.8	1184.7	1176.9
75°	955.1	955.1	933.7	915.0	906.0
77.5°	686.7	689.1	671.4	665.1	660.9
80°	522.1	522.1	506.8	500.7	503.7
82.5°	364.9	372.1	366.7	358.0	353.8
85°	156.6	177.7	178.2	181.1	178.2
87.5°	28.3	47.4	54.6	50.3	44.8
90°	6.1	18.0	39.6	42.6	39.6
92.5°	86.5	315.4	622.3	270.1	195.7
95°	204.2	716.8	2188.1	1132.4	673.5
97.5°	328.0	822.0	3410.8	2822.7	2072.9
100°	420.6	864.5	3791.2	3953.7	3196.9
102.5°	505.9	923.7	3925.3	4811.4	4245.3
105°	661.3	1021.9	3946.6	5821.5	5583.1
107.5°	805.2	1134.1	3774.1	6451.7	6531.0
110°	917.4	1215.3	3620.5	6620.9	6957.6

TEST NUMBER: P520443

CATALOG NUMBER: SQ4-F-150U-125D-840-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	1017.3	1296.2	3479.1	6587.1	7152.7
115°	1164.1	1423.4	3273.1	6336.2	7152.7
117.5°	1308.0	1551.1	3137.2	5952.8	6878.3
120°	1395.8	1634.1	3056.7	5677.8	6622.3
122.5°	1478.7	1712.3	3007.9	5382.9	6334.7
125°	1593.9	1826.3	2950.1	4978.1	5848.3
127.5°	1699.9	1928.2	2916.0	4647.9	5413.1
130°	1758.5	1993.9	2901.3	4443.8	5135.2
132.5°	1819.4	2052.4	2886.7	4259.7	4896.2
135°	1910.9	2137.3	2870.8	4019.6	4550.0
137.5°	2002.8	2216.8	2857.4	3824.8	4256.8
140°	2066.3	2265.9	2852.5	3699.3	4083.7
142.5°	2127.2	2315.0	2842.8	3586.1	3922.8
145°	2221.7	2388.5	2831.1	3440.6	3702.8
147.5°	2307.6	2455.4	2817.8	3308.8	3510.2
150°	2371.0	2502.1	2812.9	3237.2	3398.0
152.5°	2429.6	2543.9	2810.4	3170.7	3303.0
155°	2508.1	2606.5	2806.8	3086.5	3187.8
157.5°	2589.8	2658.3	2807.4	3027.7	3094.5
160°	2636.2	2692.7	2809.8	2990.7	3038.4
162.5°	2672.7	2719.8	2812.3	2961.2	2996.9
165°	2730.6	2757.4	2819.0	2929.0	2943.9
167.5°	2770.3	2788.7	2819.6	2901.5	2908.6
170°	2794.6	2803.6	2822.1	2889.1	2889.1
172.5°	2814.1	2816.0	2822.1	2874.4	2872.0
175°	2834.3	2831.2	2822.1	2858.5	2852.5
177.5°	2840.9	2833.8	2821.4	2845.6	2838.5
180°	2831.1	2831.1	2831.1	2831.1	2831.1

(END OF REPORT)