

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: P520391

Luminaire Tested: **SQ4-F-150U-075D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520391  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-150U-075D-835-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

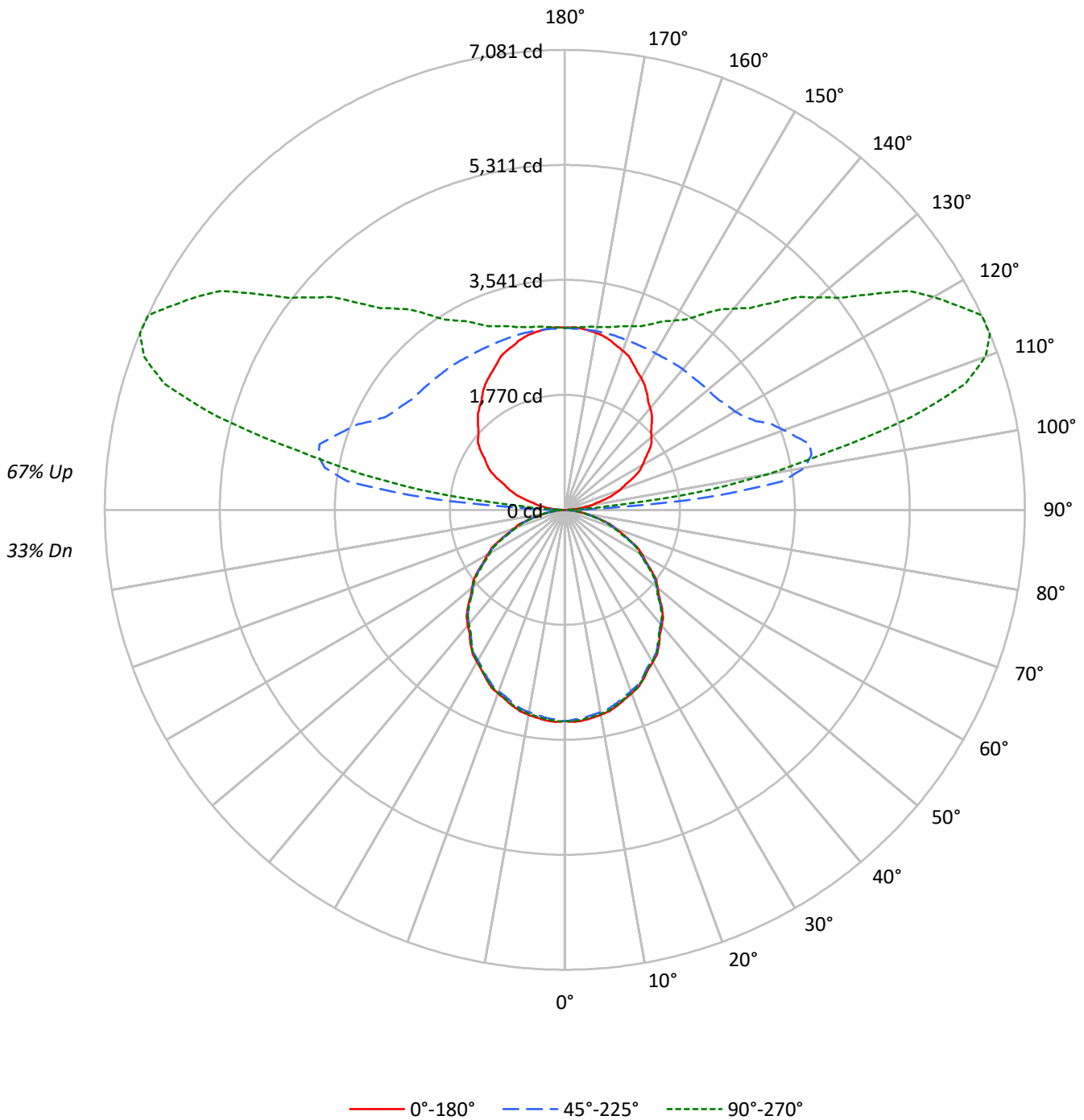
Lumens per Lamp: N/A  
Luminaire Lumens: 26967.0 lumens  
Efficiency: N/A  
Efficacy: 134.4 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 200.7  
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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	94	90	86	83	85	81	78	75	65	62	60	50	48	47	36	35	34	28
2	85	78	72	67	77	71	66	61	57	53	50	43	41	39	31	30	29	23
3	78	69	62	56	70	62	56	51	50	45	42	38	35	33	28	26	24	20
4	71	61	53	47	64	55	48	43	44	39	36	34	31	28	25	23	21	17
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	20	18	14
6	60	48	40	35	54	44	37	32	35	30	26	27	24	21	20	18	16	13
7	55	43	36	30	50	39	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	26	46	36	29	24	29	24	20	23	19	16	17	14	13	10
9	48	36	28	23	43	33	26	22	26	22	18	21	17	15	15	13	11	9
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10	8

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	10014	10014	10014
5°	10053	9925	9998
10°	10012	9883	9957
15°	9935	9813	9897
20°	9845	9729	9807
25°	9737	9637	9707
30°	9614	9509	9561
35°	9488	9388	9432
40°	9328	9233	9221
45°	9168	9052	9078
50°	8913	8842	8842
55°	8706	8595	8516
60°	8425	8280	8208
65°	7971	7820	7712
70°	7486	7300	7114
75°	6735	6490	6349
80°	5386	5281	5228
85°	3229	3645	3751



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	307.4	1.1
10°-20°	875.0	3.2
20°-30°	1314.6	4.9
30°-40°	1568.6	5.8
40°-50°	1608.7	6.0
50°-60°	1433.4	5.3
60°-70°	1068.8	4.0
70°-80°	579.6	2.1
80°-90°	139.0	0.5
90°-100°	1302.7	4.8
100°-110°	3522.1	13.1
110°-120°	3703.0	13.7
120°-130°	3007.8	11.2
130°-140°	2359.4	8.7
140°-150°	1810.8	6.7
150°-160°	1302.3	4.8
160°-170°	795.6	3.0
170°-180°	268.2	1.0
0°-30°	2497.0	9.3
0°-40°	4065.6	15.1
0°-60°	7107.7	26.4
0°-90°	8895.1	33.0
90°-120°	8527.7	31.6
90°-150°	15705.7	58.2
90°-180°	18072.0	67.0
0°-180°	26967.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3256	3256	3256	3256	3256	
5°	3256	3250	3215	3241	3238	309
15°	3120	3115	3082	3106	3109	880
25°	2870	2867	2840	2855	2861	1322
35°	2527	2521	2500	2501	2512	1579
45°	2108	2099	2081	2081	2087	1622
55°	1624	1621	1603	1588	1588	1450
65°	1095	1095	1075	1063	1060	1090
75°	567	555	546	537	534	595
85°	92	97	103	103	106	127
90°	6	18	39	42	39	16
95°	202	710	2166	1121	667	212
105°	655	1012	3907	5764	5528	690
115°	1153	1409	3240	6273	7081	1138
125°	1578	1808	2921	4928	5790	1407
135°	1892	2116	2842	3980	4505	1462
145°	2200	2365	2803	3406	3666	1376
155°	2483	2581	2779	3056	3156	1145
165°	2703	2730	2791	2900	2915	761
175°	2806	2803	2794	2830	2824	266
180°	2803	2803	2803	2803	2803	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3256.3	3256.3	3256.3	3256.3	3256.3
2.5°	3268.1	3261.2	3232.6	3256.3	3253.9
5°	3256.3	3250.5	3214.9	3241.4	3238.5
7.5°	3229.7	3223.4	3188.4	3214.9	3214.3
10°	3206.1	3197.4	3164.7	3191.2	3188.4
12.5°	3175.4	3166.7	3134.0	3160.5	3157.7
15°	3120.5	3114.7	3082.1	3105.8	3108.6
17.5°	3057.9	3046.9	3017.7	3040.8	3043.7
20°	3008.3	2999.6	2972.8	2993.6	2996.5
22.5°	2956.3	2947.7	2920.9	2941.7	2944.5
25°	2869.5	2866.7	2840.0	2854.9	2860.7
27.5°	2775.6	2767.6	2746.1	2757.4	2763.2
30°	2707.2	2701.3	2677.6	2686.6	2692.4
32.5°	2636.3	2632.9	2611.5	2615.8	2623.9
35°	2527.1	2521.3	2500.5	2500.8	2512.3
37.5°	2406.0	2399.6	2382.4	2379.6	2384.2
40°	2323.4	2314.7	2299.8	2296.8	2296.8
42.5°	2238.3	2231.9	2212.4	2207.2	2214.1
45°	2107.9	2099.2	2081.3	2081.4	2087.2
47.5°	1966.7	1963.3	1942.5	1933.2	1935.5
50°	1862.8	1868.6	1848.1	1836.6	1848.1
52.5°	1773.1	1769.6	1751.2	1739.5	1744.1
55°	1623.7	1620.8	1603.0	1588.3	1588.3
57.5°	1473.7	1466.3	1447.8	1436.7	1445.4
60°	1369.8	1367.0	1346.2	1325.7	1334.4
62.5°	1265.9	1260.7	1239.9	1226.4	1232.8
65°	1095.3	1095.3	1074.6	1062.7	1059.8
67.5°	945.9	932.0	920.5	906.2	902.2
70°	832.5	821.0	811.9	799.8	791.2
72.5°	721.5	714.6	700.8	689.0	687.3
75°	566.8	555.3	546.2	537.2	534.3
77.5°	403.3	401.0	392.6	387.9	389.7
80°	304.1	304.1	298.2	298.1	295.2
82.5°	214.3	216.6	215.5	210.8	210.2
85°	91.5	97.3	103.3	103.4	106.3
87.5°	17.7	31.6	33.7	34.2	33.7
90°	6.0	17.8	39.2	42.2	39.2
92.5°	85.7	312.3	616.1	267.5	193.8
95°	202.1	709.6	2166.4	1121.2	666.8
97.5°	324.6	813.7	3376.9	2794.5	2052.3
100°	416.4	856.0	3753.4	3914.4	3165.0
102.5°	500.9	914.4	3886.1	4763.4	4203.0
105°	654.7	1011.7	3907.3	5763.5	5527.5
107.5°	797.1	1122.9	3736.5	6387.4	6465.9
110°	908.2	1203.2	3584.4	6554.9	6888.3

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	1007.1	1283.2	3444.4	6521.4	7081.3
115°	1152.6	1409.2	3240.5	6273.0	7081.3
117.5°	1295.0	1535.7	3105.9	5893.5	6809.8
120°	1381.9	1617.9	3026.2	5621.1	6556.4
122.5°	1463.9	1695.3	2978.0	5329.3	6271.5
125°	1578.0	1808.1	2920.7	4928.5	5790.1
127.5°	1683.0	1909.0	2886.9	4601.6	5359.2
130°	1741.0	1973.9	2872.4	4399.6	5084.0
132.5°	1801.3	2032.0	2857.9	4217.3	4847.4
135°	1891.8	2116.0	2842.2	3979.6	4504.7
137.5°	1982.9	2194.8	2828.9	3786.6	4214.4
140°	2045.7	2243.3	2824.1	3662.5	4043.1
142.5°	2106.0	2291.8	2814.4	3550.3	3883.7
145°	2199.6	2364.8	2803.0	3406.3	3665.9
147.5°	2284.6	2431.0	2789.7	3275.8	3475.2
150°	2347.4	2477.1	2784.9	3204.9	3364.2
152.5°	2405.3	2518.6	2782.5	3139.1	3270.1
155°	2483.2	2580.6	2778.8	3055.7	3156.0
157.5°	2564.1	2631.9	2779.4	2997.5	3063.6
160°	2609.8	2666.0	2781.9	2960.9	3008.2
162.5°	2646.0	2692.7	2784.3	2931.7	2967.2
165°	2703.4	2729.9	2790.9	2899.9	2914.6
167.5°	2742.6	2760.9	2791.5	2872.5	2879.6
170°	2766.8	2775.6	2793.9	2860.3	2860.3
172.5°	2786.1	2787.9	2793.9	2845.7	2843.4
175°	2806.0	2803.1	2793.9	2830.0	2824.1
177.5°	2812.6	2805.6	2793.3	2817.3	2810.2
180°	2803.0	2803.0	2803.0	2803.0	2803.0

(END OF REPORT)