

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: P520395

Luminaire Tested: **SQ4-F-150U-075D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520395
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-840-1D-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

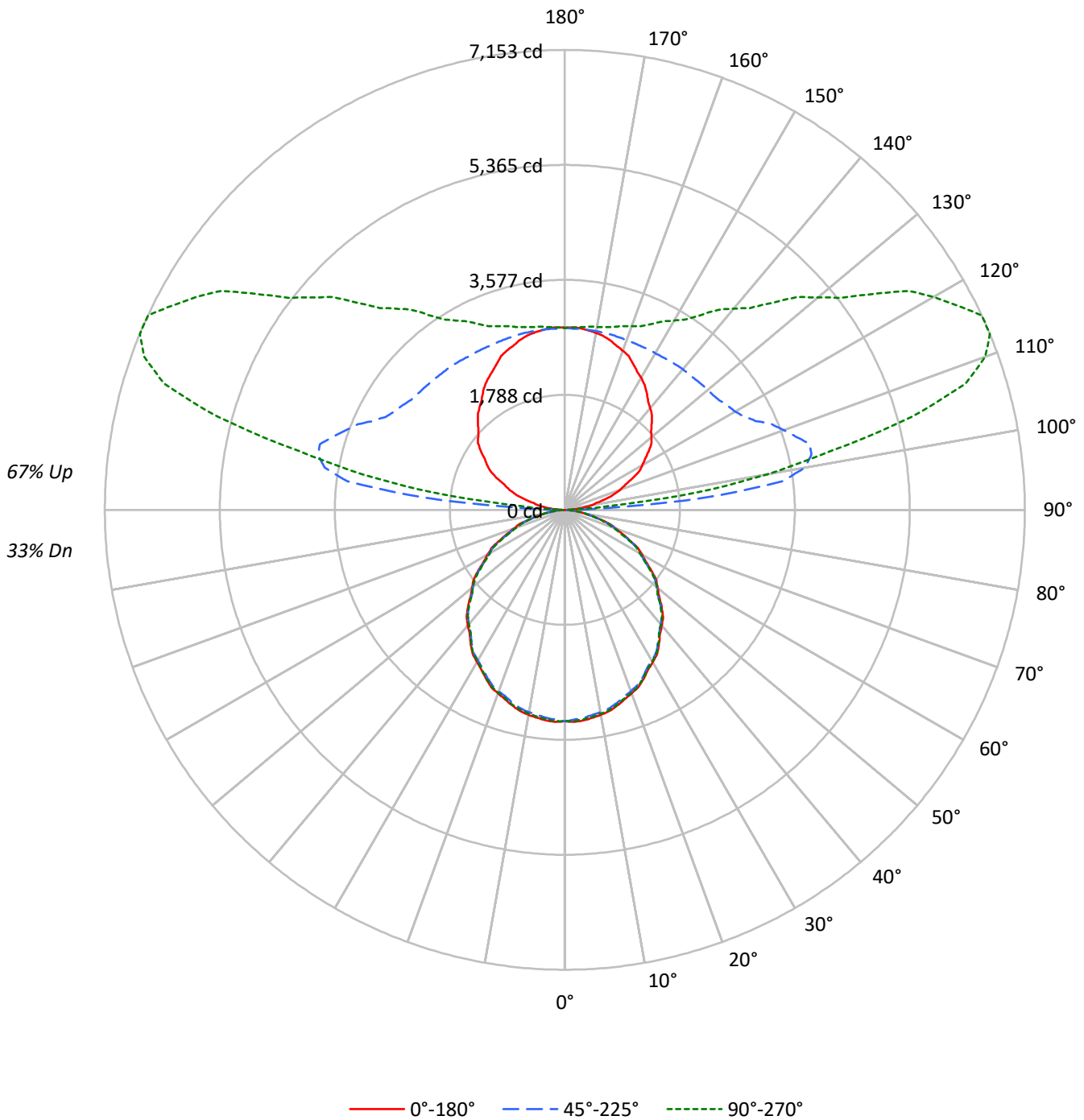
Lumens per Lamp: N/A
Luminaire Lumens: 27238.4 lumens
Efficiency: N/A
Efficacy: 135.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

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°	10115	10115	10115
5°	10154	10025	10098
10°	10113	9982	10057
15°	10035	9912	9997
20°	9945	9827	9905
25°	9835	9734	9805
30°	9710	9604	9657
35°	9583	9482	9527
40°	9422	9326	9314
45°	9260	9143	9169
50°	9002	8931	8931
55°	8793	8682	8601
60°	8510	8364	8290
65°	8051	7898	7790
70°	7561	7373	7186
75°	6803	6556	6414
80°	5439	5333	5281
85°	3260	3684	3790



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	310.4	1.1
10°-20°	883.8	3.2
20°-30°	1327.8	4.9
30°-40°	1584.4	5.8
40°-50°	1624.9	6.0
50°-60°	1447.9	5.3
60°-70°	1079.6	4.0
70°-80°	585.4	2.1
80°-90°	140.4	0.5
90°-100°	1315.8	4.8
100°-110°	3557.5	13.1
110°-120°	3740.2	13.7
120°-130°	3038.1	11.2
130°-140°	2383.1	8.7
140°-150°	1829.1	6.7
150°-160°	1315.4	4.8
160°-170°	803.6	3.0
170°-180°	270.9	1.0
0°-30°	2522.1	9.3
0°-40°	4106.5	15.1
0°-60°	7179.3	26.4
0°-90°	8984.6	33.0
90°-120°	8613.5	31.6
90°-150°	15863.8	58.2
90°-180°	18254.0	67.0
0°-180°	27238.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3289	3289	3289	3289	3289	
5°	3289	3283	3247	3274	3271	312
15°	3152	3146	3113	3137	3140	889
25°	2898	2896	2868	2884	2890	1335
35°	2552	2547	2526	2526	2538	1595
45°	2129	2120	2102	2102	2108	1639
55°	1640	1637	1619	1604	1604	1465
65°	1106	1106	1085	1073	1070	1101
75°	572	561	552	543	540	601
85°	92	98	104	104	107	128
90°	6	18	40	43	40	16
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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3289.0	3289.0	3289.0	3289.0	3289.0
2.5°	3300.9	3293.9	3265.2	3288.9	3286.7
5°	3289.0	3283.2	3247.3	3274.1	3271.1
7.5°	3262.2	3255.8	3220.4	3247.3	3246.7
10°	3238.3	3229.6	3196.6	3223.4	3220.4
12.5°	3207.4	3198.6	3165.6	3192.4	3189.4
15°	3151.8	3146.0	3113.1	3137.0	3139.9
17.5°	3088.7	3077.6	3048.1	3071.5	3074.3
20°	3038.6	3029.8	3002.8	3023.7	3026.6
22.5°	2986.0	2977.3	2950.3	2971.2	2974.1
25°	2898.4	2895.5	2868.5	2883.6	2889.5
27.5°	2803.6	2795.4	2773.8	2785.2	2791.1
30°	2734.4	2728.6	2704.6	2713.6	2719.5
32.5°	2662.9	2659.3	2637.8	2642.1	2650.3
35°	2552.5	2546.7	2525.7	2525.9	2537.6
37.5°	2430.2	2423.8	2406.4	2403.5	2408.2
40°	2346.8	2338.0	2322.9	2319.9	2319.9
42.5°	2260.9	2254.5	2234.6	2229.4	2236.4
45°	2129.1	2120.4	2102.2	2102.3	2108.2
47.5°	1986.5	1983.1	1962.1	1952.6	1954.9
50°	1881.6	1887.4	1866.7	1855.0	1866.7
52.5°	1790.9	1787.4	1768.8	1757.0	1761.7
55°	1640.0	1637.1	1619.2	1604.2	1604.2
57.5°	1488.6	1481.0	1462.3	1451.2	1460.0
60°	1383.6	1380.6	1359.8	1339.1	1347.8
62.5°	1278.6	1273.4	1252.4	1238.8	1245.2
65°	1106.3	1106.3	1085.4	1073.4	1070.5
67.5°	955.4	941.5	929.7	915.4	911.2
70°	840.9	829.3	820.0	807.9	799.2
72.5°	728.8	721.8	707.9	695.9	694.2
75°	572.5	560.8	551.7	542.6	539.8
77.5°	407.3	405.0	396.6	391.9	393.6
80°	307.1	307.1	301.1	301.1	298.2
82.5°	216.5	218.9	217.7	212.9	212.3
85°	92.4	98.3	104.4	104.4	107.4
87.5°	17.9	31.9	34.0	34.5	34.0
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



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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)