

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: P519978

Luminaire Tested: **SQ4-F-050U-125D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519978  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-125D-940-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

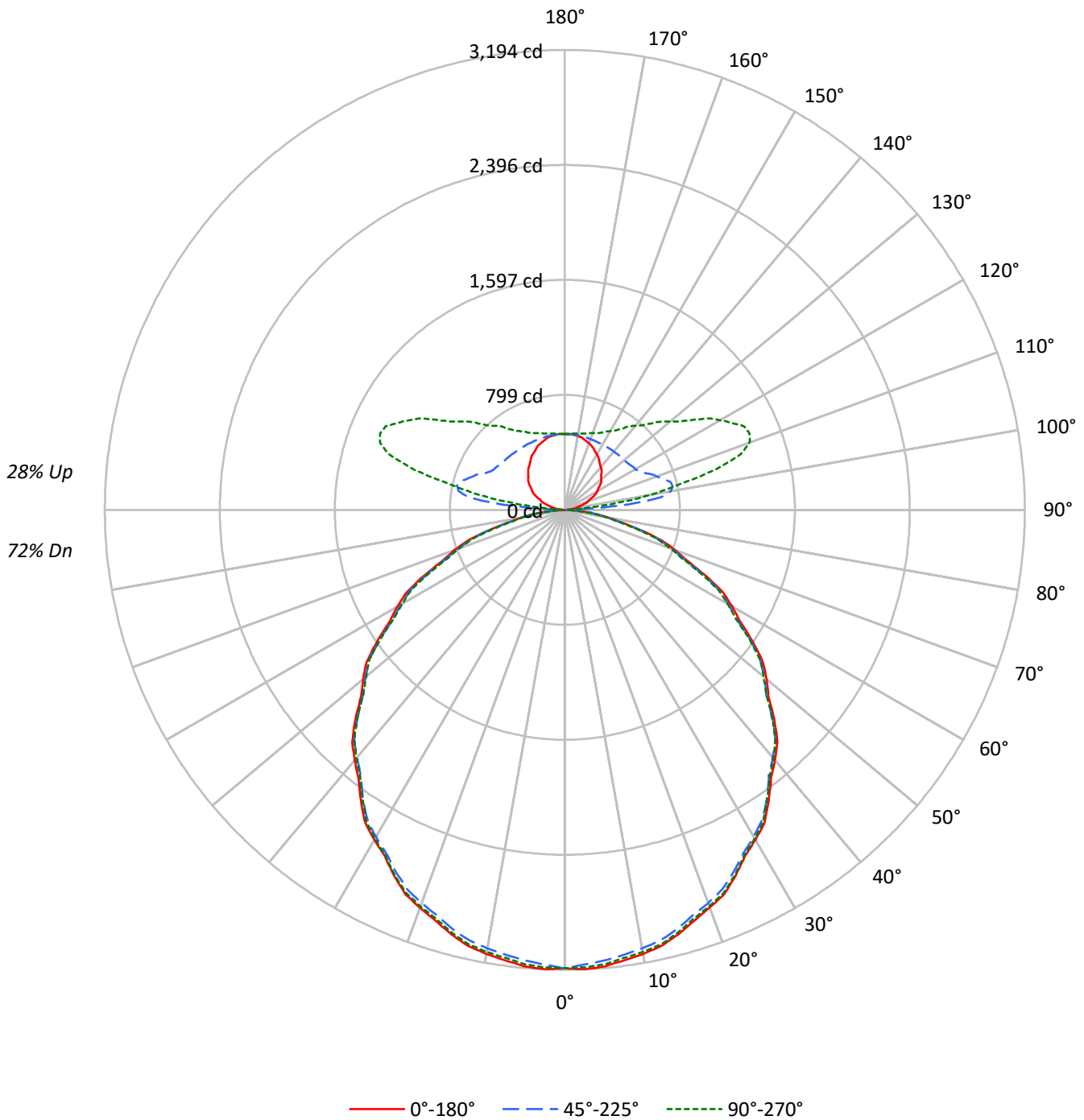
Lumens per Lamp: N/A  
Luminaire Lumens: 12132.9 lumens  
Efficiency: N/A  
Efficacy: 108.9 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 111.4  
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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	72
1	103	98	94	90	97	93	90	86	84	81	78	75	73	71	67	66	64	60
2	93	86	79	74	88	81	76	71	73	69	65	66	62	59	59	56	54	50
3	85	75	68	61	80	72	65	59	65	59	54	58	54	50	52	49	46	42
4	78	67	58	52	73	63	56	50	57	51	46	52	47	43	47	43	39	36
5	72	59	51	45	67	57	49	43	51	45	40	46	41	37	42	38	34	31
6	66	53	45	39	62	51	43	37	46	40	35	42	37	32	38	34	30	28
7	61	48	40	34	58	46	38	33	42	36	31	38	33	29	35	30	27	24
8	57	44	36	30	54	42	34	29	38	32	27	35	30	26	32	27	24	22
9	53	40	32	27	50	38	31	26	35	29	25	32	27	23	29	25	22	20
10	49	37	29	24	47	35	28	24	33	26	22	30	25	21	27	23	20	18

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

	0°	45°	90°
0°	14688	14688	14688
5°	14736	14549	14672
10°	14669	14488	14603
15°	14570	14394	14511
20°	14435	14271	14383
25°	14271	14119	14235
30°	14095	13974	14048
35°	13895	13776	13787
40°	13666	13518	13560
45°	13410	13261	13285
50°	13117	12966	12928
55°	12783	12600	12571
60°	12369	12094	12028
65°	11725	11477	11323
70°	10920	10635	10495
75°	9714	9495	9213
80°	7914	7683	7632
85°	4732	5383	5383



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	300.4	2.5
10°-20°	855.6	7.1
20°-30°	1285.5	10.6
30°-40°	1533.8	12.6
40°-50°	1572.2	13.0
50°-60°	1401.3	11.5
60°-70°	1043.2	8.6
70°-80°	565.1	4.7
80°-90°	131.8	1.1
90°-100°	253.2	2.1
100°-110°	687.8	5.7
110°-120°	707.2	5.8
120°-130°	565.4	4.7
130°-140°	444.3	3.7
140°-150°	340.7	2.8
150°-160°	245.0	2.0
160°-170°	149.8	1.2
170°-180°	50.5	0.4
0°-30°	2441.5	20.1
0°-40°	3975.3	32.8
0°-60°	6948.8	57.3
0°-90°	8688.9	71.6
90°-120°	1648.3	13.6
90°-150°	2998.7	24.7
90°-180°	3444.0	28.4
0°-180°	12132.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3184	3184	3184	3184	3184	
5°	3182	3177	3142	3170	3168	302
15°	3051	3044	3014	3040	3038	860
25°	2804	2799	2774	2790	2797	1291
35°	2467	2466	2446	2446	2448	1543
45°	2056	2050	2033	2029	2036	1584
55°	1589	1584	1567	1554	1563	1419
65°	1074	1067	1051	1044	1037	1064
75°	545	545	533	522	517	579
85°	89	101	102	103	102	123
90°	2	7	12	15	15	5
95°	37	138	441	192	129	40
105°	122	190	756	1152	1084	130
115°	217	264	606	1205	1372	214
125°	298	340	548	923	1089	266
135°	360	399	532	752	848	278
145°	416	445	526	639	687	261
155°	470	486	522	574	590	217
165°	509	516	524	546	548	144
175°	527	529	526	532	531	50
180°	527	527	527	527	527	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3184.0	3184.0	3184.0	3184.0	3184.0
2.5°	3193.8	3188.3	3160.1	3183.9	3179.8
5°	3182.2	3177.1	3141.9	3170.0	3168.3
7.5°	3155.3	3148.7	3116.7	3142.9	3139.9
10°	3131.5	3126.3	3092.9	3119.1	3117.4
12.5°	3102.0	3096.8	3063.5	3089.7	3089.4
15°	3050.8	3044.0	3014.0	3040.2	3038.5
17.5°	2989.5	2981.6	2952.0	2972.7	2976.2
20°	2940.4	2935.2	2907.1	2926.4	2929.9
22.5°	2889.9	2883.5	2853.9	2876.0	2879.4
25°	2803.7	2798.6	2773.9	2789.9	2796.7
27.5°	2709.1	2709.1	2686.3	2697.7	2701.7
30°	2646.0	2646.0	2623.3	2630.4	2637.3
32.5°	2578.7	2573.2	2551.7	2557.5	2564.4
35°	2467.3	2465.6	2446.2	2446.3	2448.1
37.5°	2352.0	2347.2	2326.0	2327.6	2335.9
40°	2269.3	2265.8	2244.7	2244.9	2251.7
42.5°	2185.1	2181.7	2163.5	2160.7	2163.5
45°	2055.5	2050.3	2032.7	2029.4	2036.3
47.5°	1917.4	1918.8	1897.8	1892.9	1896.7
50°	1827.7	1827.7	1806.7	1796.3	1801.4
52.5°	1733.7	1731.0	1709.9	1698.3	1710.3
55°	1589.4	1584.2	1566.6	1554.5	1563.0
57.5°	1441.4	1433.6	1415.9	1402.7	1407.5
60°	1340.6	1328.5	1310.8	1300.3	1303.7
62.5°	1235.4	1228.9	1209.8	1193.8	1201.4
65°	1074.2	1067.3	1051.4	1044.2	1037.3
67.5°	916.1	911.7	893.7	886.2	881.8
70°	809.6	801.0	788.5	779.7	778.1
72.5°	705.8	695.9	683.4	675.9	671.5
75°	545.0	545.0	532.7	522.1	516.9
77.5°	391.8	393.1	383.1	379.5	377.1
80°	297.9	297.9	289.2	285.7	287.3
82.5°	208.2	212.3	209.2	204.2	201.9
85°	89.4	101.4	101.7	103.4	101.7
87.5°	15.8	26.4	29.1	27.0	24.2
90°	1.7	6.7	11.9	15.3	15.3
92.5°	15.3	69.3	120.4	51.7	43.8
95°	37.3	138.5	441.0	191.9	128.9
97.5°	61.7	153.0	676.0	526.0	369.4
100°	78.0	162.6	747.9	758.2	612.2
102.5°	94.3	172.2	767.0	937.7	809.0
105°	122.1	190.1	756.5	1151.7	1083.7
107.5°	150.9	211.0	712.7	1262.2	1281.2
110°	171.3	226.0	680.1	1284.0	1365.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	188.9	241.0	647.6	1266.0	1388.3
115°	217.1	263.5	605.5	1204.6	1372.0
117.5°	243.6	288.0	578.7	1117.6	1306.3
120°	261.2	304.3	566.5	1059.2	1246.5
122.5°	276.1	319.2	558.4	1000.7	1181.5
125°	298.5	339.9	547.9	923.0	1088.8
127.5°	318.5	359.6	542.1	864.1	1006.4
130°	330.7	370.5	539.3	827.1	954.9
132.5°	343.0	382.7	536.7	795.6	908.8
135°	359.5	399.4	532.5	751.9	848.0
137.5°	377.5	413.7	530.5	713.2	794.1
140°	388.4	423.2	529.1	688.6	761.5
142.5°	399.3	431.4	527.8	669.2	730.3
145°	415.5	445.4	525.8	638.8	686.9
147.5°	433.8	459.3	524.1	614.8	652.7
150°	446.1	467.6	524.1	601.0	631.0
152.5°	455.5	474.5	522.7	588.8	613.3
155°	469.8	486.4	522.3	573.7	590.2
157.5°	483.7	496.6	522.3	563.4	576.0
160°	491.8	503.5	522.3	556.5	566.5
162.5°	500.0	508.9	523.7	551.0	558.4
165°	508.8	515.5	524.1	546.2	547.9
167.5°	517.9	521.3	525.8	540.4	541.7
170°	520.7	524.0	525.8	537.6	537.6
172.5°	523.4	525.4	525.8	534.9	534.9
175°	527.4	529.1	525.8	532.5	530.9
177.5°	528.8	528.8	524.8	530.1	527.4
180°	527.4	527.4	527.4	527.4	527.4

(END OF REPORT)