

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: P520074

Luminaire Tested: **SQ4-F-075U-125D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520074  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-125D-940-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

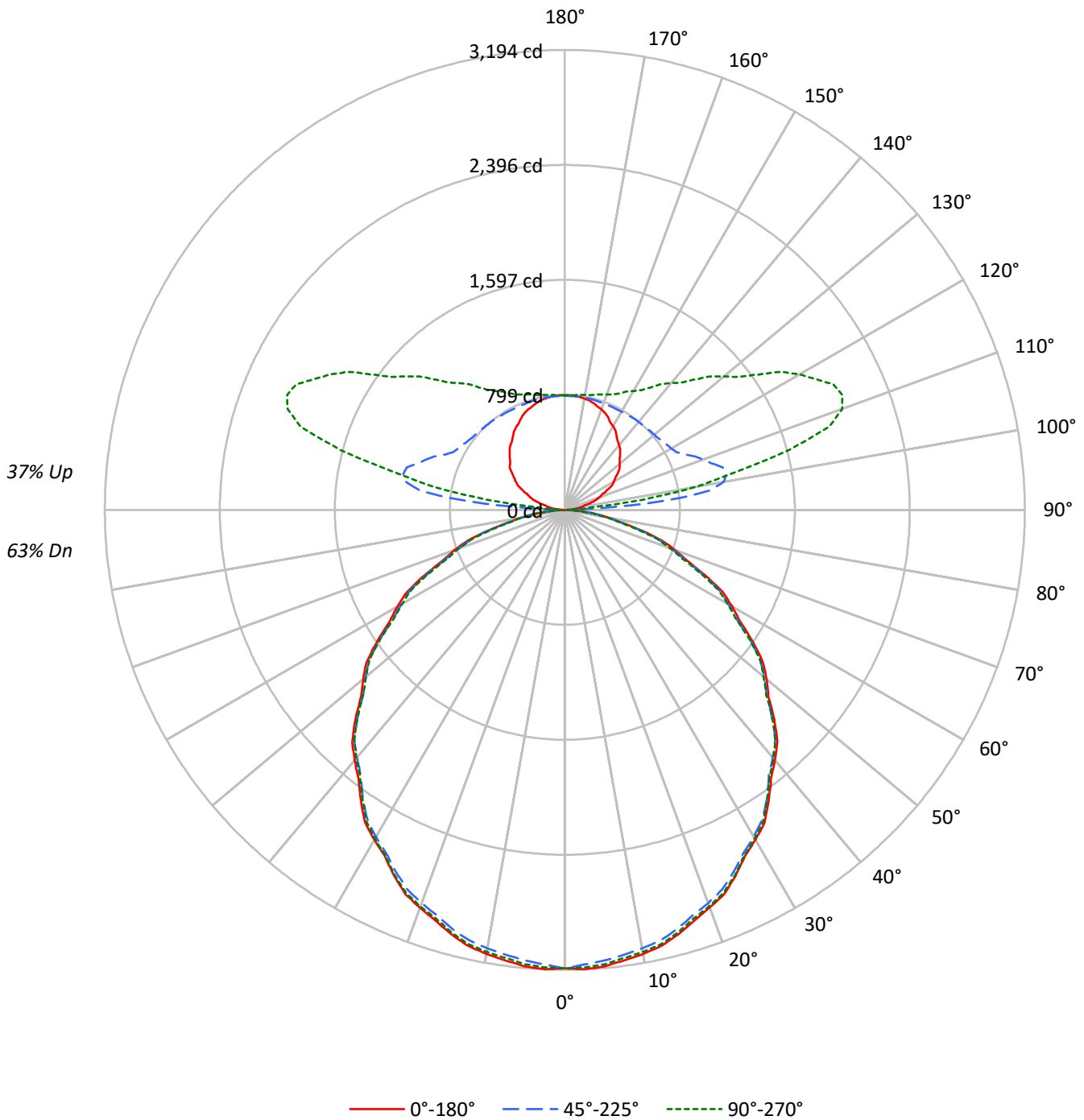
Lumens per Lamp: N/A  
Luminaire Lumens: 13865.0 lumens  
Efficiency: N/A  
Efficacy: 110.8 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 125.1  
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	110	110	110	110	103	103	103	103	90	90	90	79	79	79	68	68	68	63
1	101	96	92	89	94	90	87	84	79	77	74	69	67	66	60	59	57	53
2	92	84	78	72	86	79	73	69	69	65	61	61	57	55	53	50	48	44
3	83	74	66	60	78	69	63	57	61	56	52	54	49	46	47	43	41	37
4	76	65	57	51	71	61	54	48	54	48	44	48	43	39	41	38	35	32
5	70	58	50	44	65	55	47	42	49	42	38	43	38	34	37	34	30	27
6	65	52	44	38	60	49	42	36	44	38	33	39	34	30	34	30	27	24
7	60	47	39	33	56	45	37	32	40	34	29	35	30	26	31	27	24	21
8	55	43	35	29	52	41	33	28	36	30	26	32	27	24	28	24	21	19
9	52	39	31	26	48	37	30	25	33	27	23	30	25	21	26	22	19	17
10	48	36	28	24	45	34	27	23	31	25	21	27	23	19	24	20	17	15

**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	2.2
10°-20°	855.6	6.2
20°-30°	1285.5	9.3
30°-40°	1533.8	11.1
40°-50°	1572.2	11.3
50°-60°	1401.3	10.1
60°-70°	1043.2	7.5
70°-80°	565.1	4.1
80°-90°	131.8	1.0
90°-100°	374.7	2.7
100°-110°	1031.0	7.4
110°-120°	1064.2	7.7
120°-130°	852.6	6.1
130°-140°	669.7	4.8
140°-150°	513.2	3.7
150°-160°	369.0	2.7
160°-170°	225.6	1.6
170°-180°	76.1	0.5
0°-30°	2441.5	17.6
0°-40°	3975.3	28.7
0°-60°	6948.8	50.1
0°-90°	8688.9	62.7
90°-120°	2469.9	17.8
90°-150°	4505.5	32.5
90°-180°	5176.0	37.3
0°-180°	13865.0	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	6
95°	56	204	663	283	181	59
105°	184	284	1136	1730	1614	194
115°	326	397	911	1814	2059	322
125°	450	512	827	1398	1638	401
135°	543	602	803	1131	1280	419
145°	627	670	791	964	1038	393
155°	710	733	786	866	891	326
165°	768	777	789	822	827	216
175°	794	796	791	801	800	75
180°	794	794	794	794	794	

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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	11.8	15.3	15.3
92.5°	23.4	99.7	172.7	66.3	54.5
95°	55.8	204.5	662.7	283.4	180.9
97.5°	91.0	226.8	1011.3	779.2	549.8
100°	116.7	240.6	1120.8	1131.3	923.1
102.5°	140.9	257.0	1149.2	1403.5	1212.5
105°	184.3	283.5	1136.0	1730.2	1614.5
107.5°	225.6	316.1	1071.4	1890.1	1924.4
110°	255.3	337.9	1022.7	1929.9	2048.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	282.3	362.3	974.1	1904.3	2085.4
115°	326.3	397.3	911.2	1814.4	2059.0
117.5°	368.2	433.7	871.3	1688.3	1965.0
120°	393.9	456.7	853.7	1593.9	1879.8
122.5°	416.9	479.7	841.6	1511.1	1782.5
125°	449.6	512.5	826.7	1398.4	1638.2
127.5°	480.7	540.6	816.8	1304.4	1514.7
130°	497.0	558.2	811.4	1248.6	1440.3
132.5°	516.0	577.1	807.4	1199.5	1372.7
135°	542.7	602.1	803.0	1131.0	1279.8
137.5°	567.7	622.9	799.3	1075.6	1198.2
140°	586.6	637.8	797.9	1038.8	1149.6
142.5°	602.8	650.2	795.2	1006.0	1100.9
145°	627.2	670.2	791.2	963.6	1038.0
147.5°	653.2	690.3	789.1	926.1	985.6
150°	669.4	702.5	787.8	905.4	951.8
152.5°	684.3	714.7	786.4	887.7	926.1
155°	710.0	733.2	786.1	866.1	890.9
157.5°	728.6	747.5	786.1	848.3	865.5
160°	742.1	757.0	786.1	838.8	852.0
162.5°	753.0	765.2	787.5	830.6	841.2
165°	767.5	777.4	789.4	821.7	826.7
167.5°	777.6	785.2	791.2	814.2	815.5
170°	784.4	789.3	791.2	811.4	811.4
172.5°	789.8	792.1	791.2	807.3	806.1
175°	794.5	796.2	791.2	801.3	799.6
177.5°	795.9	795.9	790.5	798.5	795.9
180°	794.5	794.5	794.5	794.5	794.5

(END OF REPORT)