

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: P520266

Luminaire Tested: **SQ4-F-100U-125D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520266
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-125D-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

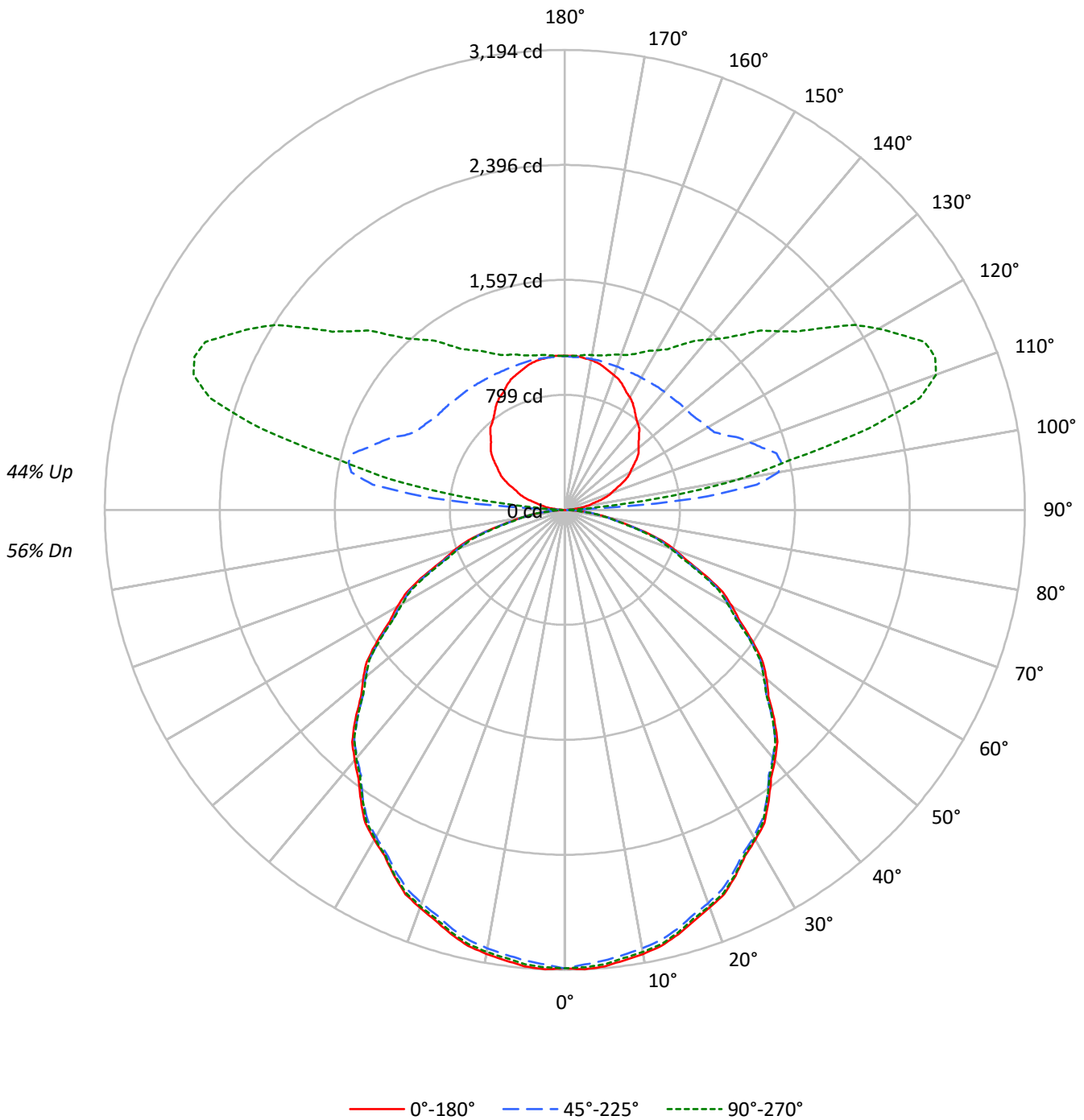
Lumens per Lamp: N/A
Luminaire Lumens: 15633.1 lumens
Efficiency: N/A
Efficacy: 112.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 138.6
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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	56
1	99	95	91	87	92	88	85	82	76	73	71	65	63	61	54	53	52	47
2	90	83	76	71	83	77	71	67	66	62	59	57	54	51	48	45	43	39
3	82	73	65	59	76	68	61	56	58	53	49	50	46	43	42	39	37	33
4	75	64	56	50	69	60	53	47	52	46	42	44	40	37	37	34	32	28
5	69	57	49	43	64	53	46	40	46	41	36	40	35	32	34	30	28	24
6	63	51	43	37	59	48	41	35	42	36	31	36	31	28	31	27	24	21
7	59	46	38	32	54	43	36	31	38	32	28	33	28	25	28	24	21	19
8	54	42	34	29	50	39	32	27	34	29	25	30	25	22	26	22	19	17
9	51	38	31	26	47	36	29	24	32	26	22	27	23	20	24	20	17	15
10	47	35	28	23	44	33	26	22	29	24	20	25	21	18	22	18	16	14

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	1.9
10°-20°	855.6	5.5
20°-30°	1285.5	8.2
30°-40°	1533.8	9.8
40°-50°	1572.2	10.1
50°-60°	1401.3	9.0
60°-70°	1043.2	6.7
70°-80°	565.1	3.6
80°-90°	132.0	0.8
90°-100°	500.5	3.2
100°-110°	1381.7	8.8
110°-120°	1425.0	9.1
120°-130°	1145.1	7.3
130°-140°	899.9	5.8
140°-150°	690.2	4.4
150°-160°	496.0	3.2
160°-170°	303.4	1.9
170°-180°	102.3	0.7
0°-30°	2441.5	15.6
0°-40°	3975.3	25.4
0°-60°	6948.8	44.4
0°-90°	8689.1	55.6
90°-120°	3307.2	21.2
90°-150°	6042.4	38.7
90°-180°	6944.0	44.4
0°-180°	15633.1	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	124
90°	4	7	14	15	17	7
95°	74	271	908	373	243	79
105°	246	380	1520	2321	2185	262
115°	441	533	1224	2424	2756	434
125°	605	689	1110	1878	2204	539
135°	728	807	1079	1521	1715	564
145°	845	903	1065	1295	1394	529
155°	952	984	1057	1162	1199	439
165°	1031	1044	1062	1103	1112	291
175°	1069	1070	1064	1079	1076	102
180°	1069	1069	1069	1069	1069	



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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°	16.1	26.4	29.4	27.0	24.5
90°	3.5	6.7	13.7	15.4	17.1
92.5°	30.8	127.7	228.4	83.4	65.0
95°	73.5	270.8	908.0	373.2	242.9
97.5°	121.8	303.3	1345.0	1035.6	750.0
100°	157.3	322.9	1506.5	1517.2	1232.9
102.5°	191.5	345.0	1537.9	1874.5	1605.0
105°	246.2	380.0	1520.1	2320.8	2185.4
107.5°	304.4	423.4	1435.4	2536.0	2585.5
110°	345.4	452.5	1369.7	2582.3	2742.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	382.3	485.3	1308.1	2545.8	2782.5
115°	441.2	533.1	1224.4	2423.8	2756.5
117.5°	492.4	584.1	1169.3	2252.1	2630.6
120°	526.7	617.0	1147.4	2135.8	2517.1
122.5°	559.5	645.8	1129.6	2027.3	2388.5
125°	605.3	688.9	1109.8	1878.1	2204.2
127.5°	644.3	727.9	1098.1	1751.9	2033.1
130°	670.3	753.9	1092.7	1674.7	1930.6
132.5°	694.9	774.6	1087.2	1609.9	1841.6
135°	728.5	807.0	1079.0	1521.1	1715.1
137.5°	766.1	837.7	1074.9	1446.6	1612.1
140°	786.6	856.8	1072.1	1397.0	1542.4
142.5°	809.9	874.7	1069.4	1352.8	1480.9
145°	844.7	903.3	1065.3	1295.0	1393.6
147.5°	878.2	929.4	1061.5	1246.2	1322.9
150°	902.9	944.7	1060.1	1217.2	1279.1
152.5°	922.1	961.1	1058.9	1192.3	1243.4
155°	952.4	984.2	1056.8	1161.9	1198.7
157.5°	980.5	1004.9	1057.1	1139.8	1164.8
160°	996.9	1018.7	1058.5	1127.3	1145.7
162.5°	1010.6	1029.7	1059.8	1116.2	1130.7
165°	1031.2	1044.5	1061.9	1103.1	1111.5
167.5°	1046.9	1054.9	1063.6	1095.2	1097.8
170°	1055.1	1061.7	1063.6	1091.0	1091.0
172.5°	1061.9	1065.9	1063.6	1085.5	1084.1
175°	1068.8	1070.4	1063.6	1078.9	1075.6
177.5°	1071.4	1070.1	1063.2	1072.8	1070.1
180°	1068.8	1068.8	1068.8	1068.8	1068.8

(END OF REPORT)