

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: P520204

Luminaire Tested: **SQ4-F-100U-075D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520204
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-075D-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

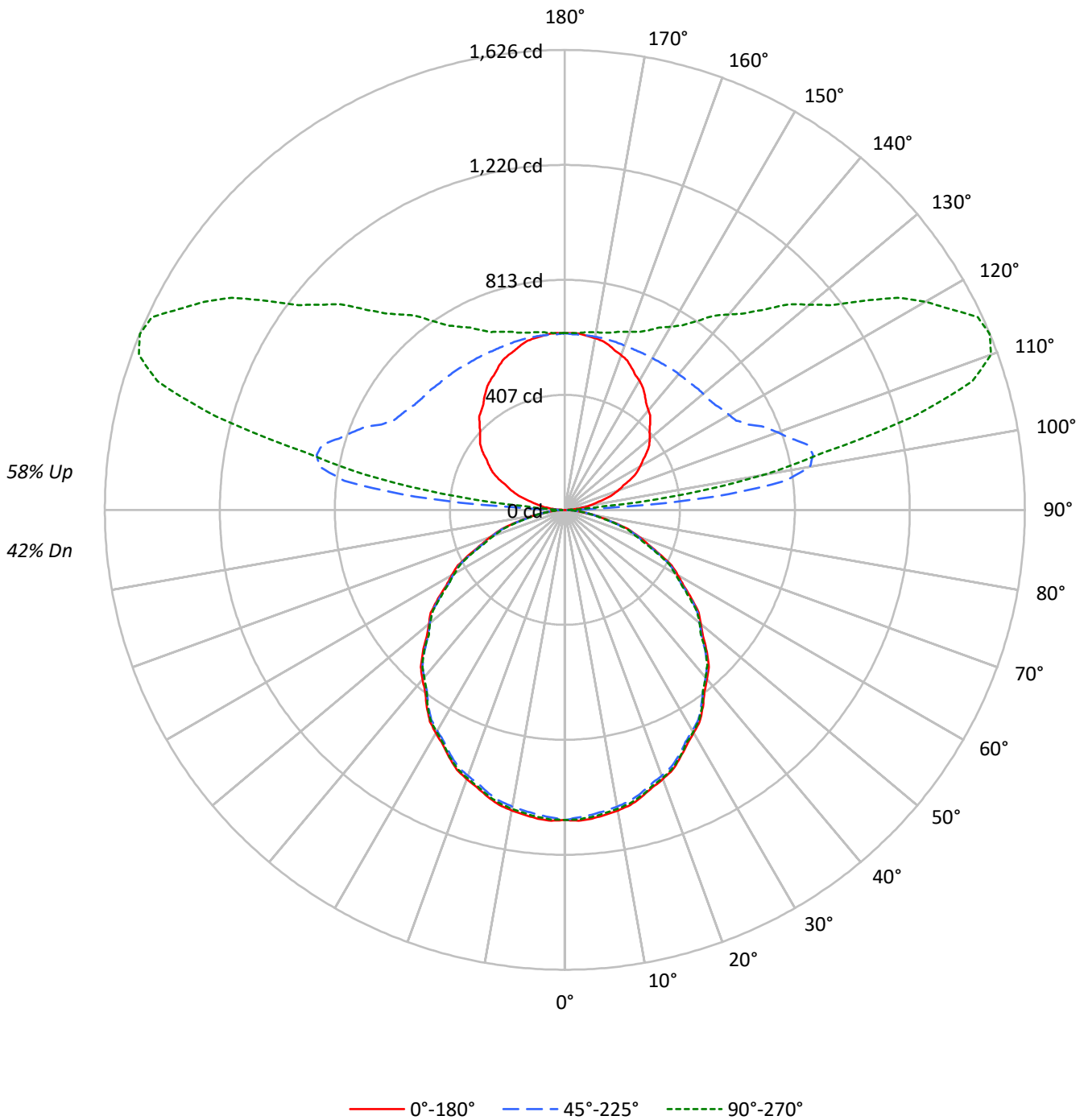
Lumens per Lamp: N/A
Luminaire Lumens: 7050.9 lumens
Efficiency: N/A
Efficacy: 143.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 49.1
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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49	42
1	96	92	88	84	88	84	81	78	69	67	65	56	54	53	43	42	42	36
2	87	80	74	69	80	73	68	64	61	57	54	49	46	44	38	36	35	30
3	80	70	63	57	72	64	58	53	53	49	45	43	40	37	34	31	30	25
4	73	62	54	48	66	57	50	45	47	42	38	38	35	32	30	28	25	22
5	67	55	47	41	61	51	44	38	42	37	33	34	30	27	27	24	22	19
6	61	49	41	36	56	45	38	33	38	33	29	31	27	24	24	22	19	16
7	57	45	37	31	52	41	34	29	34	29	25	28	24	21	22	19	17	14
8	53	40	33	27	48	37	30	26	31	26	22	26	22	19	20	18	15	13
9	49	37	29	24	45	34	27	23	29	23	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	20	26	21	18	22	18	15	17	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10115	10115	10115
5°	10153	10026	10098
10°	10112	9982	10057
15°	10035	9912	9997
20°	9945	9827	9906
25°	9836	9734	9805
30°	9710	9604	9657
35°	9583	9482	9527
40°	9421	9326	9314
45°	9260	9143	9169
50°	9002	8931	8931
55°	8792	8683	8601
60°	8510	8364	8289
65°	8049	7898	7789
70°	7561	7375	7186
75°	6802	6556	6413
80°	5435	5334	5281
85°	3260	3684	3790



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.5	1.5
10°-20°	294.6	4.2
20°-30°	442.6	6.3
30°-40°	528.1	7.5
40°-50°	541.6	7.7
50°-60°	482.6	6.8
60°-70°	359.8	5.1
70°-80°	195.1	2.8
80°-90°	46.1	0.7
90°-100°	292.4	4.1
100°-110°	807.2	11.4
110°-120°	832.5	11.8
120°-130°	669.0	9.5
130°-140°	525.7	7.5
140°-150°	403.2	5.7
150°-160°	289.8	4.1
160°-170°	177.2	2.5
170°-180°	59.7	0.8
0°-30°	840.7	11.9
0°-40°	1368.8	19.4
0°-60°	2393.1	33.9
0°-90°	2994.2	42.5
90°-120°	1932.1	27.4
90°-150°	3530.0	50.1
90°-180°	4057.0	57.5
0°-180°	7050.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1096	1096	1096	1096	1096	
5°	1096	1094	1082	1091	1090	104
15°	1051	1049	1038	1046	1047	296
25°	966	965	956	961	963	445
35°	851	849	842	842	846	532
45°	710	707	701	701	703	546
55°	547	546	540	535	535	488
65°	369	369	362	358	357	367
75°	191	187	184	181	180	200
85°	31	33	35	35	36	43
90°	2	4	8	9	10	4
95°	43	158	530	218	142	46
105°	144	222	888	1356	1277	153
115°	258	312	715	1416	1610	253
125°	354	402	648	1097	1288	315
135°	426	472	630	889	1002	329
145°	494	528	622	757	814	309
155°	556	575	617	679	700	256
165°	602	610	620	644	649	170
175°	624	625	621	630	628	59
180°	624	624	624	624	624	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1096.3	1096.3	1096.3	1096.3	1096.3
2.5°	1100.3	1098.0	1088.4	1096.3	1095.6
5°	1096.3	1094.4	1082.5	1091.3	1090.3
7.5°	1087.4	1085.2	1073.5	1082.5	1082.3
10°	1079.4	1076.6	1065.5	1074.5	1073.5
12.5°	1069.1	1066.2	1055.2	1064.2	1063.2
15°	1050.6	1048.7	1037.7	1045.7	1046.6
17.5°	1029.5	1025.9	1016.0	1023.8	1024.8
20°	1012.9	1009.9	1000.9	1007.9	1008.9
22.5°	995.4	992.4	983.5	990.4	991.3
25°	966.2	965.2	956.2	961.2	963.2
27.5°	934.6	931.8	924.6	928.4	930.3
30°	911.4	909.6	901.5	904.5	906.5
32.5°	887.6	886.4	879.3	880.7	883.4
35°	850.8	848.9	841.9	842.0	845.9
37.5°	810.1	807.9	802.1	801.1	802.7
40°	782.2	779.4	774.3	773.3	773.3
42.5°	753.6	751.5	744.8	743.2	745.4
45°	709.7	706.8	700.7	700.7	702.7
47.5°	662.2	661.0	654.0	650.9	651.6
50°	627.2	629.1	622.2	618.3	622.2
52.5°	596.9	595.8	589.6	585.7	587.2
55°	546.6	545.7	539.8	534.7	534.7
57.5°	496.2	493.7	487.4	483.8	486.6
60°	461.2	460.2	453.3	446.4	449.2
62.5°	426.2	424.4	417.4	412.9	415.1
65°	368.7	368.7	361.8	357.8	356.8
67.5°	318.4	313.8	309.9	305.2	303.8
70°	280.3	276.4	273.4	269.3	266.4
72.5°	243.0	240.6	236.0	231.9	231.4
75°	190.8	187.0	183.9	180.9	179.9
77.5°	135.8	135.0	132.2	130.6	131.2
80°	102.3	102.3	100.4	100.4	99.4
82.5°	72.1	72.9	72.5	71.0	70.8
85°	30.8	32.8	34.8	34.8	35.8
87.5°	6.0	10.2	10.3	10.5	10.7
90°	2.0	4.0	8.0	9.0	10.0
92.5°	18.0	74.6	133.4	48.7	38.0
95°	42.9	158.2	530.4	218.0	141.9
97.5°	71.1	177.2	785.8	605.0	438.1
100°	91.9	188.6	880.1	886.3	720.2
102.5°	111.9	201.5	898.5	1095.1	937.7
105°	143.8	222.0	888.1	1355.8	1276.7
107.5°	177.9	247.4	838.6	1481.6	1510.4
110°	201.8	264.3	800.2	1508.6	1602.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	223.4	283.5	764.2	1487.2	1625.5
115°	257.7	311.5	715.3	1416.0	1610.3
117.5°	287.7	341.2	683.1	1315.7	1536.8
120°	307.6	360.5	670.3	1247.8	1470.5
122.5°	326.8	377.3	659.9	1184.4	1395.4
125°	353.6	402.5	648.3	1097.2	1287.7
127.5°	376.4	425.3	641.5	1023.4	1187.8
130°	391.6	440.4	638.3	978.4	1127.8
132.5°	406.0	452.5	635.2	940.5	1075.9
135°	425.6	471.5	630.3	888.6	1002.0
137.5°	447.5	489.4	628.0	845.1	941.8
140°	459.5	500.5	626.4	816.1	901.1
142.5°	473.1	511.0	624.8	790.3	865.1
145°	493.5	527.6	622.3	756.6	814.1
147.5°	513.1	543.0	620.1	728.1	772.8
150°	527.5	551.9	619.3	711.1	747.3
152.5°	538.6	561.5	618.6	696.6	726.5
155°	556.4	575.0	617.4	678.8	700.3
157.5°	572.9	587.1	617.6	665.8	680.5
160°	582.4	595.1	618.4	658.5	669.3
162.5°	590.4	601.5	619.2	652.1	660.5
165°	602.3	610.1	620.3	644.5	649.3
167.5°	611.5	616.3	621.3	639.7	641.3
170°	616.4	620.2	621.3	637.4	637.4
172.5°	620.3	622.7	621.3	634.1	633.3
175°	624.4	625.3	621.3	630.3	628.4
177.5°	626.0	625.2	621.1	626.7	625.2
180°	624.4	624.4	624.4	624.4	624.4

(END OF REPORT)