

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: P519967

Luminaire Tested: **SQ4-F-050U-125D-930-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519967
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-930-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

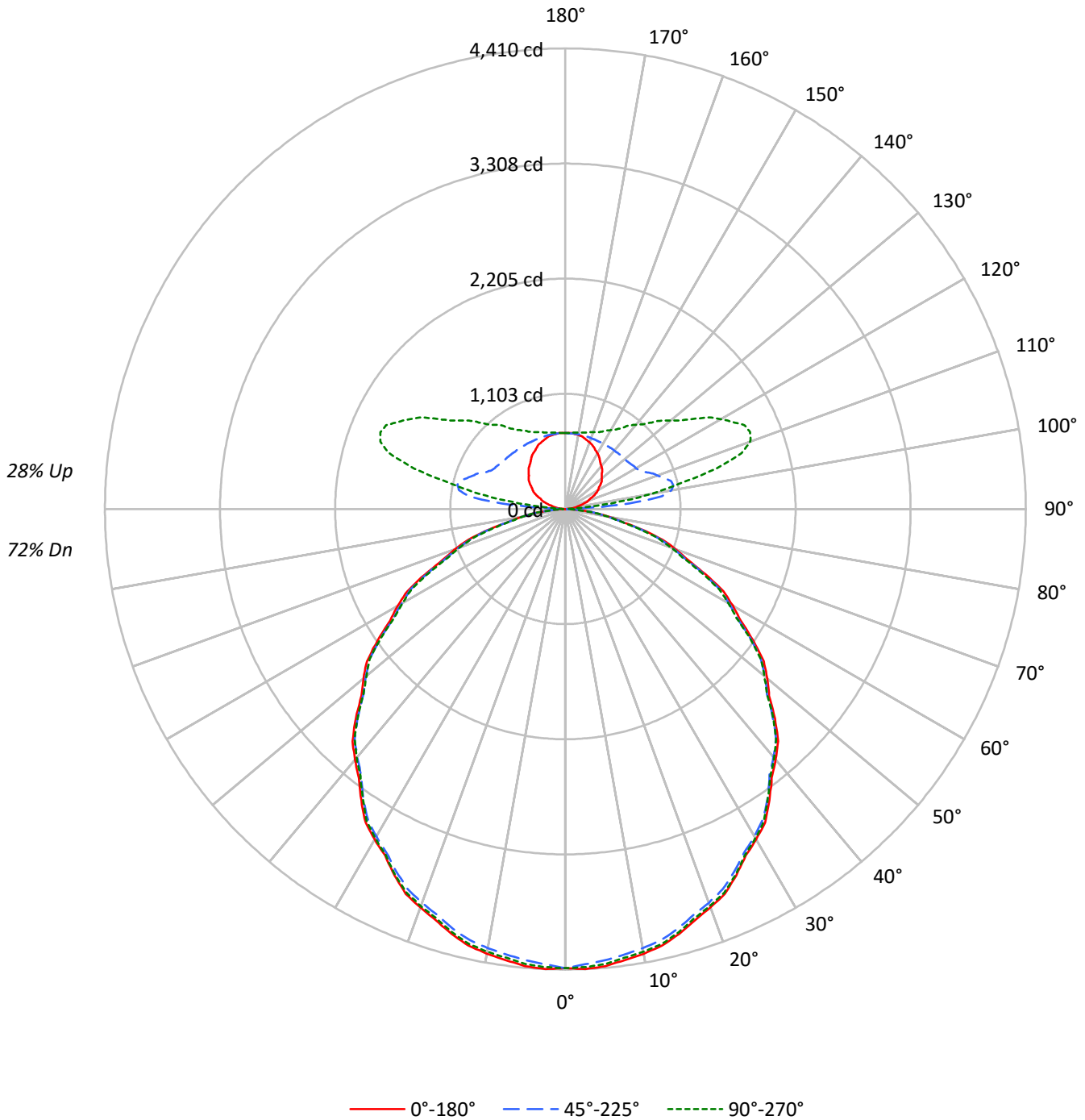
Lumens per Lamp: N/A
Luminaire Lumens: 16752.4 lumens
Efficiency: N/A
Efficacy: 96.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 173.9
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°	13520	13520	13520
5°	13565	13393	13505
10°	13502	13336	13442
15°	13412	13250	13358
20°	13287	13137	13240
25°	13136	12997	13104
30°	12974	12862	12931
35°	12790	12681	12690
40°	12579	12443	12482
45°	12344	12207	12228
50°	12074	11935	11900
55°	11766	11598	11572
60°	11385	11132	11072
65°	10793	10565	10424
70°	10051	9790	9659
75°	8940	8740	8480
80°	7284	7070	7028
85°	4354	4954	4954



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	414.8	2.5
10°-20°	1181.4	7.1
20°-30°	1774.9	10.6
30°-40°	2117.8	12.6
40°-50°	2170.8	13.0
50°-60°	1934.9	11.5
60°-70°	1440.4	8.6
70°-80°	780.3	4.7
80°-90°	182.0	1.1
90°-100°	349.6	2.1
100°-110°	949.7	5.7
110°-120°	976.5	5.8
120°-130°	780.7	4.7
130°-140°	613.5	3.7
140°-150°	470.4	2.8
150°-160°	338.3	2.0
160°-170°	206.9	1.2
170°-180°	69.7	0.4
0°-30°	3371.1	20.1
0°-40°	5488.9	32.8
0°-60°	9594.5	57.3
0°-90°	11997.2	71.6
90°-120°	2275.9	13.6
90°-150°	4140.4	24.7
90°-180°	4755.0	28.4
0°-180°	16752.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4396	4396	4396	4396	4396	
5°	4394	4387	4338	4377	4374	417
15°	4212	4203	4162	4198	4196	1188
25°	3871	3864	3830	3852	3862	1783
35°	3407	3404	3378	3378	3380	2130
45°	2838	2831	2807	2802	2812	2187
55°	2194	2187	2163	2146	2158	1960
65°	1483	1474	1452	1442	1432	1469
75°	752	752	736	721	714	799
85°	123	140	140	143	140	170
90°	2	9	16	21	21	7
95°	52	191	609	265	178	55
105°	169	262	1044	1590	1496	179
115°	300	364	836	1663	1894	296
125°	412	469	756	1274	1503	367
135°	496	551	735	1038	1171	384
145°	574	615	726	882	948	360
155°	649	672	721	792	815	299
165°	702	712	724	754	756	198
175°	728	731	726	735	733	69
180°	728	728	728	728	728	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4396.3	4396.3	4396.3	4396.3	4396.3
2.5°	4409.8	4402.3	4363.4	4396.1	4390.5
5°	4393.9	4386.8	4338.3	4376.9	4374.5
7.5°	4356.6	4347.6	4303.4	4339.6	4335.3
10°	4323.7	4316.6	4270.5	4306.7	4304.3
12.5°	4283.0	4275.9	4229.8	4266.1	4265.6
15°	4212.4	4203.0	4161.6	4197.8	4195.5
17.5°	4127.8	4116.8	4076.0	4104.6	4109.3
20°	4059.9	4052.9	4014.0	4040.7	4045.5
22.5°	3990.3	3981.3	3940.5	3971.1	3975.8
25°	3871.2	3864.1	3830.1	3852.1	3861.6
27.5°	3740.6	3740.6	3709.2	3724.8	3730.5
30°	3653.5	3653.5	3622.0	3631.9	3641.4
32.5°	3560.6	3553.0	3523.3	3531.3	3540.7
35°	3406.7	3404.3	3377.6	3377.8	3380.1
37.5°	3247.5	3240.8	3211.7	3213.9	3225.2
40°	3133.3	3128.5	3099.4	3099.6	3109.1
42.5°	3017.1	3012.4	2987.1	2983.4	2987.1
45°	2838.2	2831.1	2806.6	2802.1	2811.5
47.5°	2647.4	2649.3	2620.3	2613.7	2618.9
50°	2523.6	2523.6	2494.6	2480.2	2487.3
52.5°	2393.9	2390.1	2361.0	2344.9	2361.5
55°	2194.5	2187.4	2163.0	2146.4	2158.2
57.5°	1990.3	1979.4	1955.0	1936.7	1943.3
60°	1851.0	1834.4	1809.8	1795.4	1800.1
62.5°	1705.8	1696.8	1670.5	1648.4	1658.8
65°	1483.2	1473.8	1451.8	1441.8	1432.4
67.5°	1265.0	1258.8	1234.0	1223.6	1217.5
70°	1117.8	1106.0	1088.8	1076.7	1074.2
72.5°	974.6	960.9	943.6	933.3	927.2
75°	752.4	752.4	735.5	720.8	713.7
77.5°	541.0	542.9	529.0	524.0	520.6
80°	411.3	411.3	399.2	394.5	396.8
82.5°	287.4	293.1	288.9	282.1	278.7
85°	123.4	140.0	140.4	142.7	140.4
87.5°	21.8	36.5	40.1	37.2	33.3
90°	2.4	9.2	16.4	21.1	21.1
92.5°	21.1	95.7	166.2	71.4	60.4
95°	51.5	191.2	608.9	264.9	178.0
97.5°	85.3	211.2	933.4	726.2	510.1
100°	107.7	224.5	1032.7	1046.8	845.4
102.5°	130.2	237.9	1058.9	1294.7	1117.0
105°	168.6	262.5	1044.5	1590.3	1496.4
107.5°	208.4	291.3	984.0	1742.9	1769.0
110°	236.5	312.0	939.1	1772.9	1885.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	260.8	332.8	894.0	1748.0	1916.9
115°	299.8	363.9	836.1	1663.3	1894.5
117.5°	336.3	397.6	799.1	1543.1	1803.6
120°	360.6	420.2	782.2	1462.5	1721.2
122.5°	381.2	440.8	770.9	1381.7	1631.3
125°	412.1	469.3	756.4	1274.5	1503.4
127.5°	439.8	496.5	748.4	1193.1	1389.6
130°	456.7	511.6	744.7	1142.1	1318.5
132.5°	473.5	528.4	741.0	1098.5	1254.8
135°	496.4	551.4	735.3	1038.1	1170.9
137.5°	521.3	571.2	732.5	984.7	1096.4
140°	536.3	584.4	730.7	950.7	1051.4
142.5°	551.3	595.6	728.8	924.1	1008.4
145°	573.8	615.0	726.0	882.0	948.4
147.5°	599.1	634.3	723.6	848.9	901.1
150°	615.9	645.7	723.6	830.0	871.2
152.5°	629.0	655.1	721.7	812.9	846.8
155°	648.6	671.6	721.2	792.0	815.0
157.5°	667.9	685.7	721.2	777.9	795.2
160°	679.1	695.1	721.2	768.4	782.2
162.5°	690.3	702.7	723.1	760.8	770.9
165°	702.5	711.7	723.6	754.1	756.4
167.5°	715.2	719.8	726.0	746.2	747.9
170°	718.9	723.5	726.0	742.3	742.3
172.5°	722.7	725.5	726.0	738.6	738.6
175°	728.3	730.6	726.0	735.3	733.0
177.5°	730.2	730.2	724.6	731.9	728.3
180°	728.3	728.3	728.3	728.3	728.3

(END OF REPORT)