

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: P564028

Luminaire Tested: **SQ4-PR1-050U-125D-840-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564028
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PR1-050U-125D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

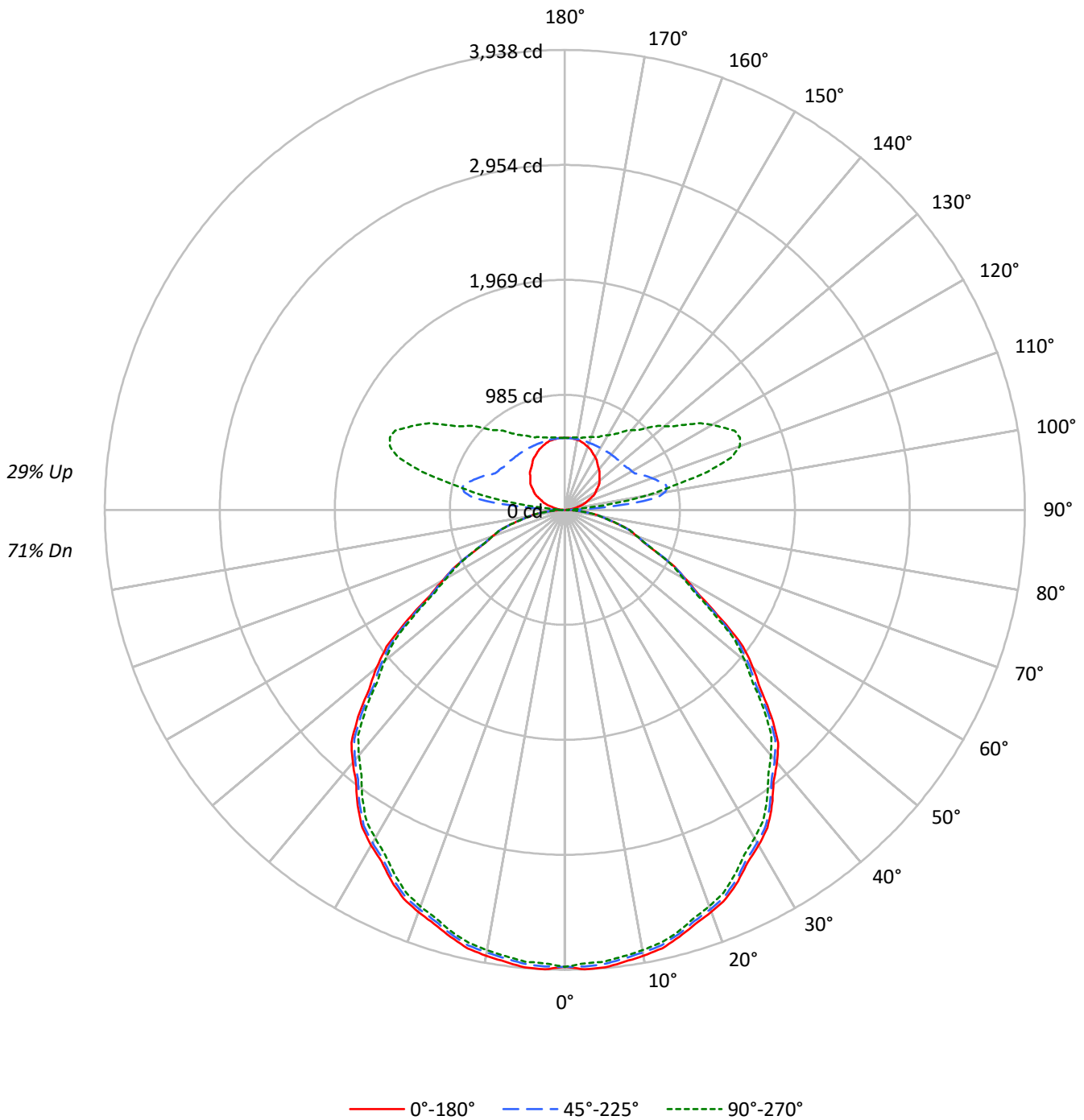
Lumens per Lamp: N/A
Luminaire Lumens: 13809.4 lumens
Efficiency: N/A
Efficacy: 120.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 114.8
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	50	30	10	0	
RCR																						
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	75	75	75	75	75	75	71	
1	103	99	95	91	97	93	90	87	84	81	79	75	73	71	67	66	64	64	64	64	60	
2	94	87	80	75	89	82	77	72	74	70	66	67	63	60	60	57	55	55	55	55	51	
3	86	77	69	63	81	73	66	61	66	60	56	59	55	52	53	50	47	47	47	47	44	
4	79	68	60	54	75	65	58	52	59	53	48	53	48	45	48	44	41	41	41	41	38	
5	73	61	53	47	69	58	51	45	53	47	42	48	43	39	43	39	36	36	36	36	33	
6	67	55	47	41	63	52	45	39	48	41	37	43	38	34	39	35	32	32	32	32	29	
7	62	50	42	36	59	48	40	35	43	37	33	40	34	30	36	32	28	28	28	28	26	
8	58	45	37	32	55	43	36	31	40	34	29	36	31	27	33	29	25	25	25	25	23	
9	54	41	34	29	51	40	33	28	37	30	26	33	28	25	31	26	23	23	23	23	21	
10	51	38	31	26	48	37	30	25	34	28	24	31	26	22	28	24	21	21	21	21	19	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18053	18053	18053
5°	18215	18075	17982
10°	18158	18032	17937
15°	18078	17965	17869
20°	17987	17871	17739
25°	17860	17740	17535
30°	17668	17542	17291
35°	17407	17255	17008
40°	17010	16827	16523
45°	16317	16031	15701
50°	15095	14732	14442
55°	13176	12877	12606
60°	11103	11009	10791
65°	9603	9640	9566
70°	8820	8866	8866
75°	8472	8472	8530
80°	7970	8060	7970
85°	6420	7135	7135



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	370.1	2.7
10°-20°	1058.8	7.7
20°-30°	1597.0	11.6
30°-40°	1902.9	13.8
40°-50°	1876.1	13.6
50°-60°	1433.8	10.4
60°-70°	887.3	6.4
70°-80°	504.0	3.6
80°-90°	155.7	1.1
90°-100°	295.8	2.1
100°-110°	803.7	5.8
110°-120°	826.3	6.0
120°-130°	660.7	4.8
130°-140°	519.1	3.8
140°-150°	398.0	2.9
150°-160°	286.2	2.1
160°-170°	175.1	1.3
170°-180°	59.0	0.4
0°-30°	3025.9	21.9
0°-40°	4928.8	35.7
0°-60°	8238.6	59.7
0°-90°	9785.5	70.9
90°-120°	1925.8	13.9
90°-150°	3503.7	25.4
90°-180°	4024.0	29.1
0°-180°	13809.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3913	3913	3913	3913	3913	
5°	3934	3891	3903	3890	3883	373
15°	3785	3746	3762	3748	3742	1068
25°	3509	3466	3485	3448	3445	1615
35°	3091	3055	3064	3024	3020	1929
45°	2501	2468	2457	2413	2407	1916
55°	1638	1612	1601	1574	1567	1468
65°	880	873	883	876	876	891
75°	475	475	475	479	479	502
85°	121	128	135	135	135	141
90°	2	8	14	18	18	8
95°	44	162	515	224	151	46
105°	143	222	884	1346	1266	152
115°	254	308	707	1407	1603	250
125°	349	397	640	1078	1272	311
135°	420	467	622	878	991	325
145°	486	520	614	746	803	305
155°	549	568	610	670	690	253
165°	594	602	612	638	640	168
175°	616	618	614	622	620	59
180°	616	616	616	616	616	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3913.4	3913.4	3913.4	3913.4	3913.4
2.5°	3937.7	3903.4	3913.4	3904.9	3886.5
5°	3933.6	3890.8	3903.3	3889.7	3883.1
7.5°	3903.3	3861.1	3873.6	3860.1	3856.1
10°	3876.3	3836.8	3849.4	3835.7	3829.1
12.5°	3846.7	3804.5	3819.7	3803.4	3796.8
15°	3785.3	3745.8	3761.7	3748.1	3741.5
17.5°	3717.9	3675.7	3691.6	3675.9	3667.4
20°	3664.0	3624.4	3640.4	3616.7	3613.4
22.5°	3604.7	3565.1	3581.1	3549.4	3548.7
25°	3508.9	3466.1	3485.3	3448.2	3444.9
27.5°	3395.0	3355.4	3371.4	3333.6	3329.6
30°	3316.8	3277.2	3293.2	3252.6	3246.0
32.5°	3227.8	3190.9	3204.2	3163.7	3159.7
35°	3091.0	3054.7	3064.0	3023.5	3020.2
37.5°	2935.2	2902.3	2907.6	2863.0	2859.7
40°	2824.7	2791.7	2794.3	2747.1	2743.8
42.5°	2703.3	2670.4	2667.6	2620.3	2617.0
45°	2501.1	2468.1	2457.3	2413.3	2406.7
47.5°	2270.5	2237.6	2217.3	2181.4	2176.8
50°	2103.3	2070.4	2052.8	2022.2	2012.3
52.5°	1922.7	1889.7	1874.8	1846.9	1837.0
55°	1638.2	1611.8	1601.1	1574.0	1567.4
57.5°	1367.8	1350.0	1346.9	1320.6	1318.0
60°	1203.4	1193.5	1193.2	1169.6	1169.6
62.5°	1063.1	1055.9	1061.1	1045.5	1042.9
65°	879.8	873.2	883.1	876.4	876.4
67.5°	734.8	734.8	740.9	738.2	738.2
70°	653.9	653.9	657.3	657.3	657.3
72.5°	581.1	578.5	587.2	587.1	584.5
75°	475.3	475.3	475.3	478.6	478.6
77.5°	370.1	370.8	373.5	372.7	370.1
80°	300.0	303.3	303.4	300.0	300.0
82.5°	229.9	233.2	233.3	232.5	229.9
85°	121.3	127.9	134.8	134.8	134.8
87.5°	35.5	47.2	56.7	57.4	54.8
90°	2.0	7.8	13.9	17.8	17.8
92.5°	17.8	81.0	140.7	60.4	51.1
95°	43.6	161.8	515.2	224.2	150.6
97.5°	72.1	178.7	789.9	614.5	431.6
100°	91.2	190.0	873.9	885.9	715.4
102.5°	110.2	201.2	896.1	1095.6	945.2
105°	142.7	222.1	883.8	1345.7	1266.3
107.5°	176.4	246.5	832.7	1474.8	1496.9
110°	200.1	264.1	794.6	1500.3	1595.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	220.8	281.6	756.6	1479.2	1622.2
115°	253.6	307.9	707.4	1407.4	1603.1
117.5°	284.6	336.5	676.1	1305.8	1526.3
120°	305.2	355.5	661.9	1237.6	1456.5
122.5°	322.6	373.0	652.4	1169.2	1380.4
125°	348.8	397.2	640.1	1078.4	1272.2
127.5°	372.2	420.2	633.3	1009.7	1175.9
130°	386.4	432.9	630.2	966.5	1115.7
132.5°	400.7	447.2	627.0	929.6	1061.8
135°	420.1	466.6	622.2	878.4	990.8
137.5°	441.1	483.4	619.9	833.2	927.8
140°	453.8	494.5	618.3	804.5	889.8
142.5°	466.5	504.1	616.7	782.0	853.3
145°	485.5	520.4	614.3	746.4	802.6
147.5°	506.9	536.7	612.3	718.4	762.5
150°	521.2	546.4	612.3	702.3	737.2
152.5°	532.3	554.4	610.7	687.9	716.6
155°	548.9	568.3	610.3	670.2	689.6
157.5°	565.2	580.3	610.3	658.2	673.0
160°	574.7	588.2	610.3	650.2	661.9
162.5°	584.2	594.6	611.9	643.8	652.4
165°	594.5	602.2	612.3	638.1	640.1
167.5°	605.2	609.1	614.3	631.4	632.9
170°	608.4	612.2	614.3	628.2	628.2
172.5°	611.5	613.9	614.3	625.0	625.0
175°	616.3	618.2	614.3	622.2	620.3
177.5°	617.9	617.9	613.1	619.4	616.3
180°	616.3	616.3	616.3	616.3	616.3

(END OF REPORT)