

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: P564004

Luminaire Tested: **SQ4-PR1-050U-100D-840-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564004
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-100D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

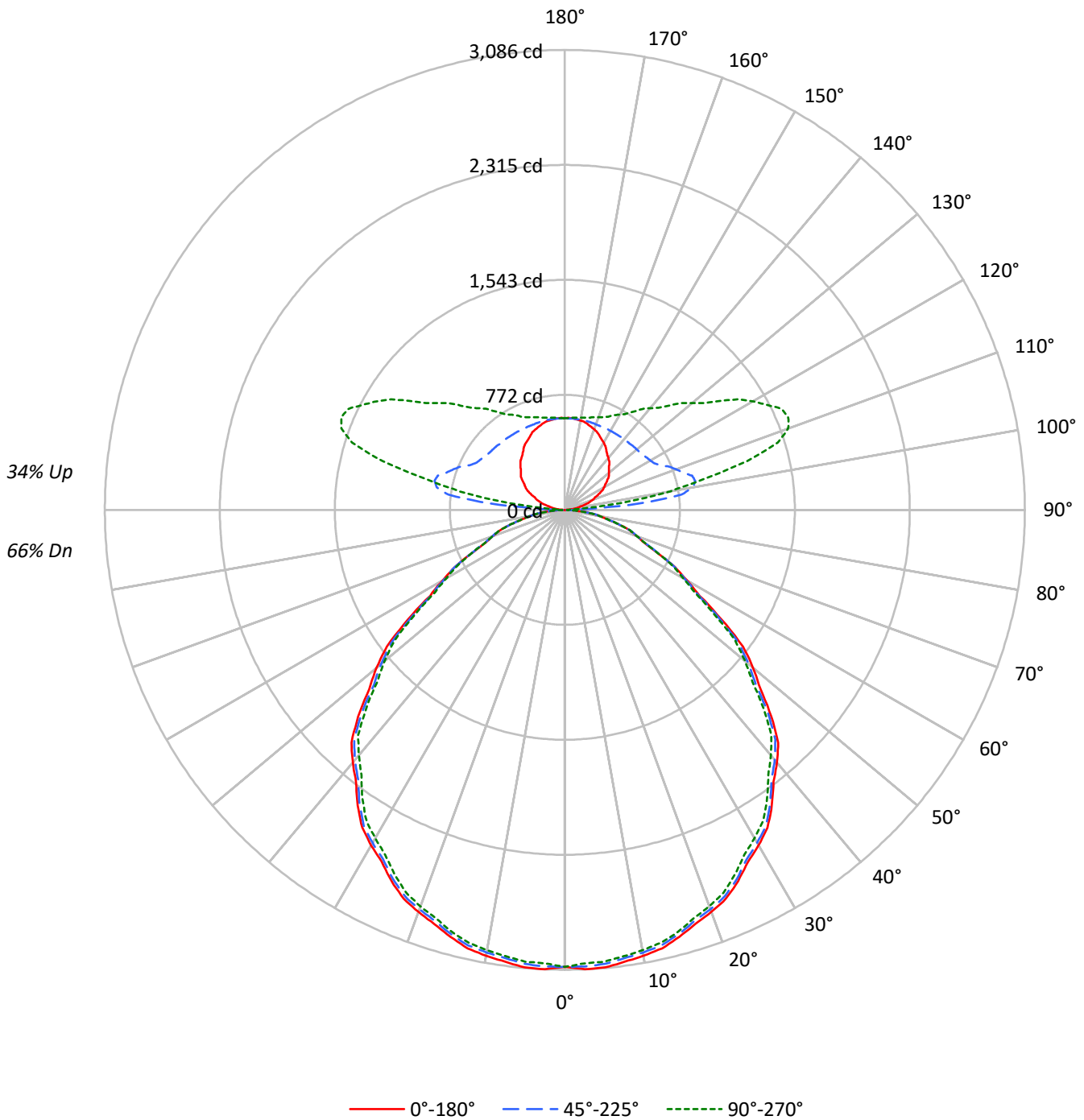
Lumens per Lamp: N/A
Luminaire Lumens: 11692.5 lumens
Efficiency: N/A
Efficacy: 122.6 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 95.4
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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70	66				
1	102	97	94	90	95	92	88	85	81	79	76	72	70	68	63	62	60	56				
2	93	85	79	74	87	81	75	71	72	68	64	63	60	57	56	53	51	48				
3	85	76	68	62	80	71	65	60	64	58	54	56	52	49	50	47	44	41				
4	78	67	59	53	73	64	56	51	57	51	47	51	46	42	45	41	38	35				
5	72	60	52	46	67	57	50	44	51	45	40	46	41	37	40	37	34	31				
6	66	54	46	40	62	51	44	38	46	40	35	41	36	33	37	33	30	27				
7	61	49	41	35	58	47	39	34	42	36	31	38	33	29	34	30	26	24				
8	57	45	37	31	54	42	35	30	38	32	28	34	30	26	31	27	24	22				
9	53	41	33	28	50	39	32	27	35	29	25	32	27	23	29	24	21	19				
10	50	37	30	25	47	36	29	24	33	27	23	29	25	21	26	22	20	18				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14147	14147	14147
5°	14274	14164	14090
10°	14229	14130	14056
15°	14166	14078	14002
20°	14095	14004	13900
25°	13996	13902	13740
30°	13845	13746	13549
35°	13640	13521	13328
40°	13330	13186	12948
45°	12786	12562	12303
50°	11829	11544	11317
55°	10324	10090	9878
60°	8700	8626	8457
65°	7525	7554	7497
70°	6911	6948	6948
75°	6638	6638	6686
80°	6246	6315	6246
85°	5034	5595	5595



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	290.0	2.5
10°-20°	829.7	7.1
20°-30°	1251.5	10.7
30°-40°	1491.1	12.8
40°-50°	1470.1	12.6
50°-60°	1123.5	9.6
60°-70°	695.3	5.9
70°-80°	394.9	3.4
80°-90°	122.5	1.0
90°-100°	295.8	2.5
100°-110°	803.7	6.9
110°-120°	826.3	7.1
120°-130°	660.7	5.7
130°-140°	519.1	4.4
140°-150°	398.0	3.4
150°-160°	286.2	2.4
160°-170°	175.1	1.5
170°-180°	59.0	0.5
0°-30°	2371.2	20.3
0°-40°	3862.3	33.0
0°-60°	6455.9	55.2
0°-90°	7668.6	65.6
90°-120°	1925.8	16.5
90°-150°	3503.7	30.0
90°-180°	4024.0	34.4
0°-180°	11692.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3067	3067	3067	3067	3067	
5°	3082	3049	3059	3048	3043	292
15°	2966	2935	2948	2937	2932	837
25°	2750	2716	2731	2702	2700	1265
35°	2422	2394	2401	2369	2367	1512
45°	1960	1934	1926	1891	1886	1501
55°	1284	1263	1255	1233	1228	1150
65°	689	684	692	687	687	698
75°	372	372	372	375	375	393
85°	95	100	106	106	106	111
90°	2	8	14	18	18	7
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°	3066.6	3066.6	3066.6	3066.6	3066.6
2.5°	3085.6	3058.8	3066.6	3060.0	3045.5
5°	3082.5	3048.9	3058.7	3048.0	3042.8
7.5°	3058.7	3025.6	3035.5	3024.8	3021.7
10°	3037.6	3006.6	3016.4	3005.8	3000.6
12.5°	3014.3	2981.3	2993.2	2980.4	2975.2
15°	2966.2	2935.3	2947.8	2937.1	2931.9
17.5°	2913.4	2880.4	2892.8	2880.5	2873.8
20°	2871.2	2840.2	2852.7	2834.1	2831.5
22.5°	2824.7	2793.7	2806.2	2781.3	2780.8
25°	2749.7	2716.1	2731.2	2702.1	2699.5
27.5°	2660.4	2629.4	2641.9	2612.2	2609.1
30°	2599.1	2568.1	2580.6	2548.8	2543.6
32.5°	2529.4	2500.4	2510.9	2479.1	2476.0
35°	2422.1	2393.7	2401.0	2369.2	2366.7
37.5°	2300.1	2274.3	2278.4	2243.5	2240.9
40°	2213.5	2187.6	2189.7	2152.7	2150.1
42.5°	2118.4	2092.5	2090.4	2053.3	2050.8
45°	1959.9	1934.1	1925.6	1891.1	1885.9
47.5°	1779.2	1753.4	1737.5	1709.4	1705.8
50°	1648.2	1622.4	1608.6	1584.6	1576.9
52.5°	1506.6	1480.8	1469.1	1447.3	1439.5
55°	1283.7	1263.0	1254.6	1233.4	1228.2
57.5°	1071.9	1057.9	1055.5	1034.8	1032.8
60°	943.0	935.2	935.0	916.6	916.6
62.5°	833.1	827.4	831.5	819.3	817.2
65°	689.4	684.2	692.0	686.8	686.8
67.5°	575.8	575.8	580.6	578.5	578.5
70°	512.4	512.4	515.1	515.1	515.1
72.5°	455.4	453.3	460.1	460.1	458.0
75°	372.4	372.4	372.4	375.1	375.1
77.5°	290.0	290.5	292.7	292.1	290.0
80°	235.1	237.7	237.7	235.1	235.1
82.5°	180.1	182.7	182.8	182.2	180.1
85°	95.1	100.3	105.7	105.7	105.7
87.5°	27.9	37.3	45.0	45.8	43.7
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)