

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: P519150

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519150
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-050U-125D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

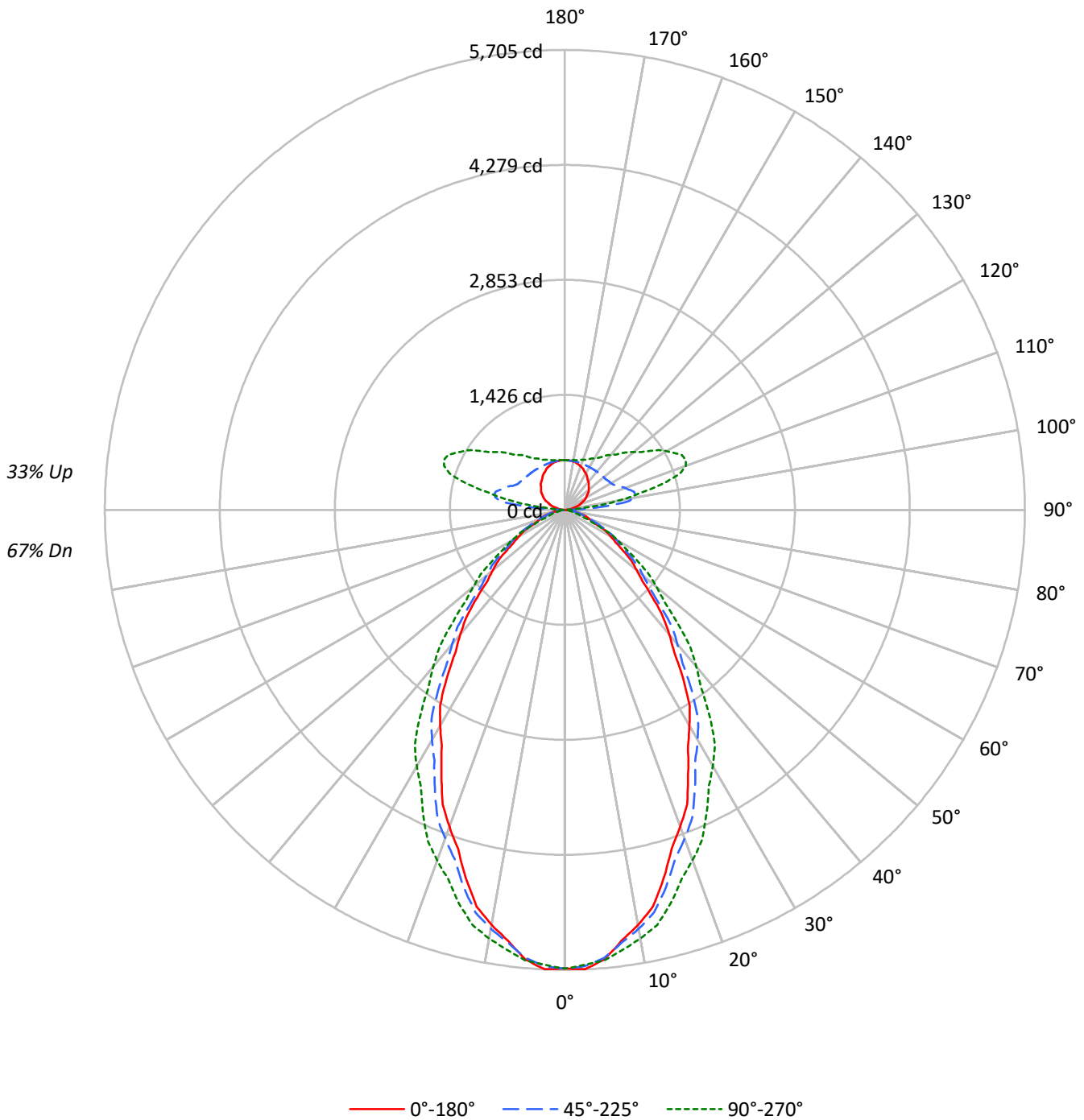
Lumens per Lamp: N/A
Luminaire Lumens: 12318.8 lumens
Efficiency: N/A
Efficacy: 107.3 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67				
1	103	99	96	93	97	94	91	88	84	82	80	75	73	71	66	65	64	60				
2	95	89	83	79	90	84	79	75	75	72	69	67	65	62	60	58	56	53				
3	88	79	73	67	83	75	70	65	68	63	60	61	58	55	55	52	50	47				
4	81	72	64	59	77	68	62	57	62	57	52	56	52	48	50	47	44	41				
5	76	65	57	52	71	62	55	50	56	51	47	51	47	43	46	43	40	37				
6	70	59	51	46	66	56	49	44	51	46	42	47	42	39	42	39	36	34				
7	65	54	46	41	62	52	45	40	47	42	38	43	39	35	39	36	33	31				
8	61	50	42	37	58	48	41	36	44	38	34	40	35	32	37	33	30	28				
9	57	46	39	34	54	44	37	33	40	35	31	37	33	29	34	30	28	26				
10	54	42	36	31	51	41	34	30	38	32	29	35	30	27	32	28	25	24				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26252	26252	26252
5°	25925	25832	25983
10°	24493	24716	25288
15°	22611	23136	24173
20°	20533	21305	22715
25°	18417	19421	21162
30°	16467	17544	19553
35°	14400	15441	17648
40°	12120	13082	15278
45°	10002	10866	12756
50°	8351	9104	10627
55°	7090	7813	8776
60°	6059	6773	7004
65°	4825	5697	4524
70°	4277	4446	2762
75°	3960	3606	1691
80°	3647	3318	1458
85°	3303	3038	1191



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	522.0	4.2
10°-20°	1357.7	11.0
20°-30°	1758.6	14.3
30°-40°	1722.1	14.0
40°-50°	1318.2	10.7
50°-60°	878.4	7.1
60°-70°	479.3	3.9
70°-80°	199.7	1.6
80°-90°	58.9	0.5
90°-100°	295.8	2.4
100°-110°	803.7	6.5
110°-120°	826.3	6.7
120°-130°	660.7	5.4
130°-140°	519.1	4.2
140°-150°	398.0	3.2
150°-160°	286.2	2.3
160°-170°	175.1	1.4
170°-180°	59.0	0.5
0°-30°	3638.3	29.5
0°-40°	5360.4	43.5
0°-60°	7556.9	61.3
0°-90°	8294.9	67.3
90°-120°	1925.8	15.6
90°-150°	3503.7	28.4
90°-180°	4024.0	32.7
0°-180°	12318.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5691	5691	5691	5691	5691	
5°	5598	5542	5578	5591	5611	521
15°	4734	4717	4844	4976	5062	1322
25°	3618	3628	3816	3982	4158	1664
35°	2557	2569	2742	2926	3134	1590
45°	1533	1562	1666	1792	1955	1196
55°	882	918	971	1008	1091	799
65°	442	479	522	456	414	459
75°	222	222	202	139	95	237
85°	62	62	57	37	22	68
90°	2	8	14	18	18	6
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°	5690.8	5690.8	5690.8	5690.8	5690.8
2.5°	5704.8	5654.0	5666.8	5666.5	5650.8
5°	5598.4	5542.2	5578.4	5591.3	5610.9
7.5°	5390.6	5348.2	5414.1	5463.0	5502.5
10°	5228.8	5192.2	5276.3	5347.4	5398.6
12.5°	5041.1	5010.3	5114.5	5209.9	5276.8
15°	4734.4	4717.3	4844.3	4976.1	5061.5
17.5°	4406.3	4398.0	4543.6	4697.4	4806.8
20°	4182.6	4180.1	4339.9	4500.1	4627.0
22.5°	3956.8	3962.2	4130.1	4296.7	4441.3
25°	3618.2	3628.0	3815.5	3981.8	4157.6
27.5°	3305.1	3309.5	3503.4	3678.9	3866.4
30°	3091.4	3103.6	3293.6	3475.3	3670.7
32.5°	2877.6	2891.8	3077.9	3265.7	3464.9
35°	2557.0	2569.2	2741.8	2926.3	3133.8
37.5°	2226.4	2243.0	2396.2	2570.6	2774.7
40°	2012.6	2037.0	2172.4	2336.8	2537.0
42.5°	1806.9	1837.1	1962.7	2118.6	2299.3
45°	1533.2	1562.5	1665.5	1791.6	1955.2
47.5°	1297.5	1331.2	1410.3	1518.9	1658.5
50°	1163.6	1195.4	1268.5	1348.9	1480.8
52.5°	1045.8	1077.5	1142.7	1204.6	1316.9
55°	881.5	918.1	971.4	1008.2	1091.2
57.5°	746.6	781.8	824.0	840.7	890.9
60°	656.7	695.8	734.1	732.2	759.1
62.5°	574.8	608.0	646.2	619.8	621.3
65°	442.0	478.6	521.9	456.0	414.5
67.5°	357.1	364.9	409.5	318.0	268.7
70°	317.1	317.1	329.6	246.3	204.8
72.5°	279.2	279.2	267.7	200.3	156.8
75°	222.2	222.2	202.3	138.8	94.9
77.5°	171.3	169.3	154.8	103.6	68.9
80°	137.3	137.3	124.9	81.8	54.9
82.5°	107.4	107.4	96.9	63.9	41.0
85°	62.4	62.4	57.4	37.1	22.5
87.5°	22.4	23.5	22.8	15.5	13.6
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)