

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P232439

Luminaire Tested: **2SRS-20-W-UNV-L850-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P232439
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1706-124-1)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2SRS-20-W-UNV-L850-CD1-U
Description: WAVESTREAM LED RECESSED 2 FT FIXTURE
Light Source: -
Ballast/Driver: -

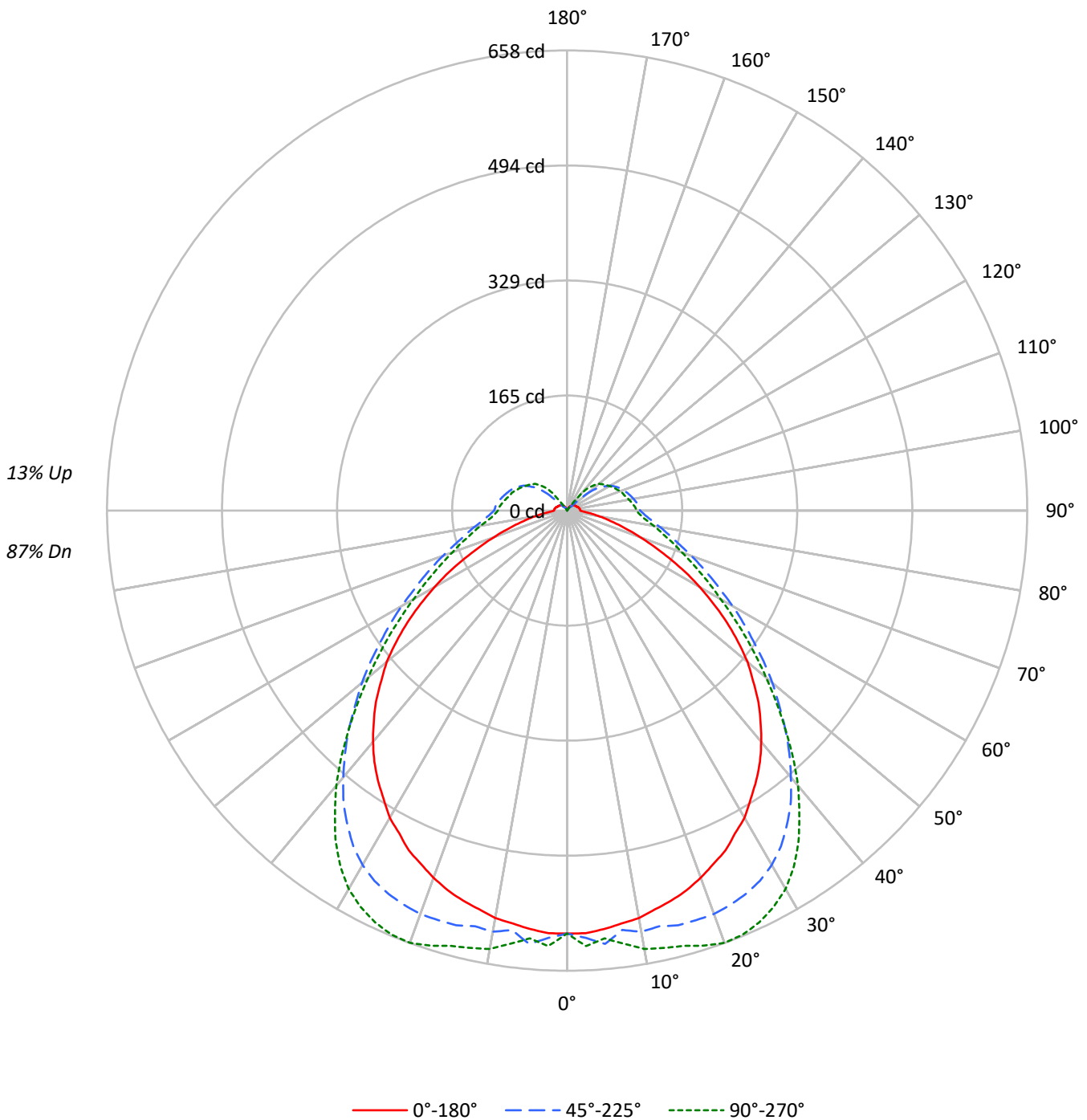
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2201.2 lumens
Efficiency: N/A
Efficacy: 140.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.44 / 1.43
Luminous Opening: Rectangular w/ Sides (W: 0.02' x L: 1.88' x H: 0.3')
CIE Type: Semi-Direct

Input Watts (W): 15.7
Input Voltage (V): NR
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: 25 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	116	116	116	116	112	112	112	112	104	104	104		97	97	97		90	90	90	87
1	105	99	95	90	100	96	92	88	89	86	83		83	80	78		77	75	73	70
2	95	86	79	73	91	83	77	71	78	72	68		72	68	64		67	64	61	58
3	87	76	68	61	83	73	66	60	68	62	57		64	59	54		60	55	52	49
4	79	67	58	52	76	65	57	51	61	54	48		57	51	46		53	48	44	42
5	73	60	51	44	70	58	50	44	54	47	42		51	45	40		48	43	39	36
6	67	54	45	39	64	52	44	38	49	42	37		46	40	35		44	38	34	32
7	62	49	40	34	60	47	39	34	45	38	32		42	36	31		40	34	30	28
8	58	45	36	30	56	43	35	30	41	34	29		39	32	28		37	31	27	25
9	54	41	33	27	52	40	32	27	38	31	26		36	30	25		34	28	24	22
10	51	38	30	25	49	37	29	24	35	28	24		33	27	23		31	26	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	221625	221625	221625
5°	217997	104562	84700
10°	214186	67017	54336
15°	210071	50213	40050
20°	206024	40289	32325
25°	201932	33348	26582
30°	196689	27999	22028
35°	189936	23327	18006
40°	182448	19211	14469
45°	173225	15678	11402
50°	161618	12706	8926
55°	145311	10174	6999
60°	126222	8168	5465
65°	104423	6537	4351
70°	82937	5280	3501
75°	64741	4304	2879
80°	51501	3643	2427
85°	41596	3127	2082



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.5	2.7
10°-20°	173.3	7.9
20°-30°	275.5	12.5
30°-40°	334.0	15.2
40°-50°	328.7	14.9
50°-60°	276.7	12.6
60°-70°	207.5	9.4
70°-80°	147.7	6.7
80°-90°	107.4	4.9
90°-100°	90.6	4.1
100°-110°	77.9	3.5
110°-120°	59.3	2.7
120°-130°	40.3	1.8
130°-140°	19.3	0.9
140°-150°	3.6	0.2
150°-160°	0.9	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	507.3	23.0
0°-40°	841.3	38.2
0°-60°	1446.6	65.7
0°-90°	1909.1	86.7
90°-120°	227.9	10.4
90°-150°	291.0	13.2
90°-180°	292.0	13.3
0°-180°	2201.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	605	605	605	605	605	
5°	601	607	622	617	614	57
15°	577	584	614	640	644	163
25°	536	556	605	642	650	246
35°	471	496	548	574	577	295
45°	387	404	441	446	441	297
55°	279	300	325	316	309	249
65°	161	205	227	215	210	161
75°	73	136	157	150	147	79
85°	28	95	116	110	108	26
90°	18	83	104	99	99	10
95°	18	81	102	95	95	15
105°	17	67	91	86	84	18
115°	14	37	79	77	75	14
125°	13	17	58	66	65	11
135°	11	12	9	45	49	8
145°	8	8	5	1	0	5
155°	4	4	1	0	0	2
165°	1	1	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	604.8	604.8	604.8	604.8	604.8
2.5°	604.8	602.2	611.4	622.0	623.3
5°	600.8	607.4	622.0	616.7	614.0
7.5°	595.6	611.4	604.8	624.6	624.6
10°	591.6	602.2	611.4	625.9	636.5
12.5°	583.7	587.6	608.8	631.2	640.5
15°	577.1	583.7	614.0	640.5	644.4
17.5°	569.1	579.7	614.0	644.4	652.3
20°	558.6	573.1	614.0	644.4	657.6
22.5°	546.7	563.9	610.1	645.7	656.3
25°	536.1	555.9	604.8	641.8	649.7
27.5°	520.3	545.4	596.9	631.2	639.1
30°	507.1	530.8	585.0	615.4	624.6
32.5°	488.6	513.7	569.1	598.2	603.5
35°	471.4	496.5	548.0	574.4	577.1
37.5°	452.9	476.7	525.6	545.4	545.4
40°	431.8	452.9	497.8	513.7	513.7
42.5°	409.4	429.2	470.1	480.7	478.0
45°	386.9	404.1	441.1	446.3	441.1
47.5°	360.5	377.7	410.7	413.3	405.4
50°	336.7	351.3	383.0	379.0	371.1
52.5°	307.7	324.8	353.9	346.0	339.4
55°	278.6	299.8	324.8	315.6	309.0
57.5°	248.3	274.7	298.4	287.9	280.0
60°	219.2	249.6	273.3	261.5	253.5
62.5°	190.2	225.8	248.3	236.4	231.1
65°	161.1	204.7	227.1	215.2	210.0
67.5°	134.7	183.6	207.3	196.8	191.5
70°	110.9	166.4	188.8	178.3	174.3
72.5°	91.1	150.5	171.7	163.7	161.1
75°	72.6	136.0	157.1	150.5	146.6
77.5°	58.1	122.8	145.3	138.7	136.0
80°	46.2	112.2	134.7	126.8	125.4
82.5°	35.7	103.0	124.1	117.5	116.2
85°	27.7	95.1	116.2	109.6	108.3
87.5°	21.1	88.5	109.6	103.0	103.0
90°	18.5	83.2	104.3	99.0	99.0
92.5°	18.5	81.9	103.0	97.7	97.7
95°	18.5	80.6	101.7	95.1	95.1
97.5°	18.5	77.9	99.0	92.4	92.4
100°	17.2	73.9	96.4	89.8	89.8
102.5°	17.2	71.3	93.8	88.5	87.2
105°	17.2	67.3	91.1	85.8	84.5
107.5°	15.8	62.1	88.5	83.2	83.2
110°	15.8	56.8	85.8	81.9	80.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	14.5	48.9	83.2	79.2	77.9
115°	14.5	37.0	79.2	76.6	75.3
117.5°	14.5	27.7	75.3	73.9	72.6
120°	13.2	21.1	71.3	71.3	70.0
122.5°	13.2	19.8	64.7	68.7	67.3
125°	13.2	17.2	58.1	66.0	64.7
127.5°	11.9	15.8	50.2	63.4	62.1
130°	11.9	14.5	39.6	58.1	59.4
132.5°	10.6	13.2	21.1	51.5	54.1
135°	10.6	11.9	9.2	44.9	48.9
137.5°	9.2	10.6	7.9	34.3	42.3
140°	9.2	9.2	6.6	17.2	33.0
142.5°	7.9	7.9	5.3	1.3	11.9
145°	7.9	7.9	5.3	1.3	0.0
147.5°	6.6	6.6	4.0	0.0	0.0
150°	5.3	5.3	2.6	0.0	0.0
152.5°	5.3	4.0	2.6	0.0	0.0
155°	4.0	4.0	1.3	0.0	0.0
157.5°	4.0	2.6	1.3	0.0	0.0
160°	2.6	2.6	1.3	0.0	0.0
162.5°	1.3	1.3	0.0	0.0	0.0
165°	1.3	1.3	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)