

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: P232438

Luminaire Tested: **2SRS-20-W-UNV-L840-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P232438
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-L840-CD1-U
Description: WAVESTREAM LED RECESSED 2 FT FIXTURE
Light Source: -
Ballast/Driver: -

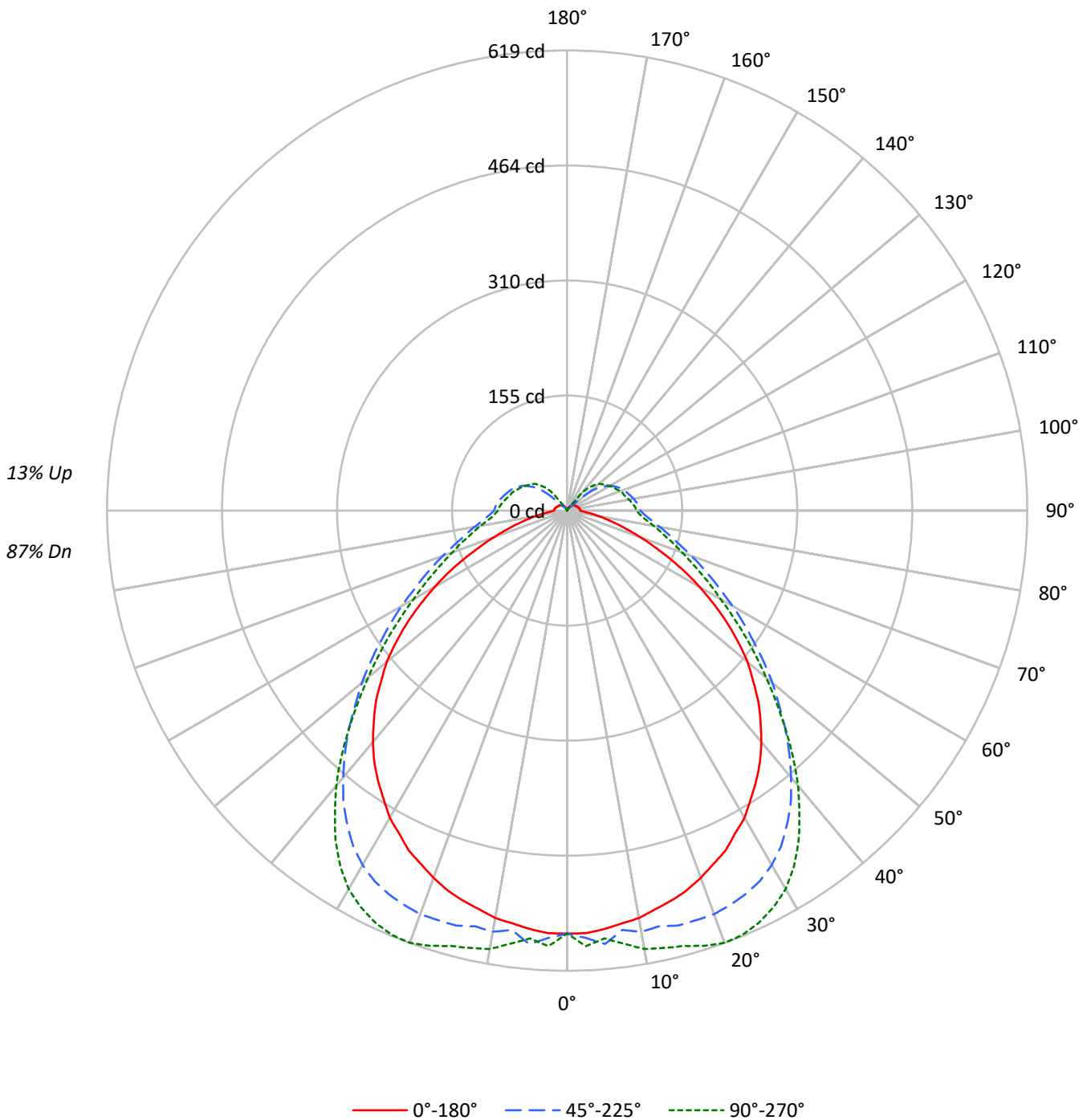
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2071.0 lumens
Efficiency: N/A
Efficacy: 131.9 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°	208507	208507	208507
5°	205116	98376	79693
10°	201514	63049	51118
15°	197622	47244	37682
20°	193816	37907	30413
25°	189991	31374	25010
30°	185053	26343	20727
35°	178695	21947	16939
40°	171673	18076	13613
45°	162972	14750	10727
50°	152066	11953	8397
55°	136705	9573	6585
60°	118736	7687	5142
65°	98265	6151	4092
70°	78076	4969	3294
75°	60907	4049	2708
80°	48491	3427	2284
85°	39193	2942	1959



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.0	2.7
10°-20°	163.1	7.9
20°-30°	259.2	12.5
30°-40°	314.2	15.2
40°-50°	309.2	14.9
50°-60°	260.3	12.6
60°-70°	195.2	9.4
70°-80°	139.0	6.7
80°-90°	101.0	4.9
90°-100°	85.3	4.1
100°-110°	73.3	3.5
110°-120°	55.8	2.7
120°-130°	37.9	1.8
130°-140°	18.1	0.9
140°-150°	3.4	0.2
150°-160°	0.8	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	477.3	23.0
0°-40°	791.5	38.2
0°-60°	1361.0	65.7
0°-90°	1796.2	86.7
90°-120°	214.4	10.4
90°-150°	273.9	13.2
90°-180°	275.0	13.3
0°-180°	2071.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	569	569	569	569	569	
5°	565	572	585	580	578	54
15°	543	549	578	603	606	153
25°	504	523	569	604	611	232
35°	444	467	516	540	543	277
45°	364	380	415	420	415	280
55°	262	282	306	297	291	234
65°	152	193	214	202	198	151
75°	68	128	148	142	138	75
85°	26	90	109	103	102	25
90°	17	78	98	93	93	10
95°	17	76	96	90	90	14
105°	16	63	86	81	80	17
115°	14	35	74	72	71	14
125°	12	16	55	62	61	11
135°	10	11	9	42	46	7
145°	8	8	5	1	0	4
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°	569.0	569.0	569.0	569.0	569.0
2.5°	569.0	566.5	575.2	585.2	586.4
5°	565.3	571.5	585.2	580.2	577.7
7.5°	560.3	575.2	569.0	587.7	587.7
10°	556.6	566.5	575.2	588.9	598.8
12.5°	549.1	552.9	572.8	593.9	602.6
15°	542.9	549.1	577.7	602.6	606.3
17.5°	535.5	545.4	577.7	606.3	613.8
20°	525.5	539.2	577.7	606.3	618.7
22.5°	514.4	530.5	574.0	607.5	617.5
25°	504.4	523.1	569.0	603.8	611.3
27.5°	489.5	513.1	561.6	593.9	601.3
30°	477.1	499.4	550.4	579.0	587.7
32.5°	459.7	483.3	535.5	562.8	567.8
35°	443.5	467.1	515.6	540.4	542.9
37.5°	426.1	448.5	494.5	513.1	513.1
40°	406.3	426.1	468.4	483.3	483.3
42.5°	385.1	403.8	442.3	452.2	449.8
45°	364.0	380.2	415.0	419.9	415.0
47.5°	339.2	355.3	386.4	388.9	381.4
50°	316.8	330.5	360.3	356.6	349.1
52.5°	289.5	305.6	333.0	325.5	319.3
55°	262.1	282.0	305.6	296.9	290.7
57.5°	233.6	258.4	280.8	270.8	263.4
60°	206.2	234.8	257.2	246.0	238.5
62.5°	178.9	212.5	233.6	222.4	217.4
65°	151.6	192.6	213.7	202.5	197.5
67.5°	126.7	172.7	195.1	185.1	180.1
70°	104.4	156.5	177.7	167.7	164.0
72.5°	85.7	141.6	161.5	154.1	151.6
75°	68.3	128.0	147.8	141.6	137.9
77.5°	54.7	115.5	136.7	130.5	128.0
80°	43.5	105.6	126.7	119.3	118.0
82.5°	33.5	96.9	116.8	110.6	109.3
85°	26.1	89.5	109.3	103.1	101.9
87.5°	19.9	83.2	103.1	96.9	96.9
90°	17.4	78.3	98.2	93.2	93.2
92.5°	17.4	77.0	96.9	91.9	91.9
95°	17.4	75.8	95.7	89.5	89.5
97.5°	17.4	73.3	93.2	87.0	87.0
100°	16.2	69.6	90.7	84.5	84.5
102.5°	16.2	67.1	88.2	83.2	82.0
105°	16.2	63.4	85.7	80.8	79.5
107.5°	14.9	58.4	83.2	78.3	78.3
110°	14.9	53.4	80.8	77.0	75.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	13.7	46.0	78.3	74.5	73.3
115°	13.7	34.8	74.5	72.1	70.8
117.5°	13.7	26.1	70.8	69.6	68.3
120°	12.4	19.9	67.1	67.1	65.8
122.5°	12.4	18.6	60.9	64.6	63.4
125°	12.4	16.2	54.7	62.1	60.9
127.5°	11.2	14.9	47.2	59.6	58.4
130°	11.2	13.7	37.3	54.7	55.9
132.5°	9.9	12.4	19.9	48.5	50.9
135°	9.9	11.2	8.7	42.2	46.0
137.5°	8.7	9.9	7.5	32.3	39.8
140°	8.7	8.7	6.2	16.2	31.1
142.5°	7.5	7.5	5.0	1.2	11.2
145°	7.5	7.5	5.0	1.2	0.0
147.5°	6.2	6.2	3.7	0.0	0.0
150°	5.0	5.0	2.5	0.0	0.0
152.5°	5.0	3.7	2.5	0.0	0.0
155°	3.7	3.7	1.2	0.0	0.0
157.5°	3.7	2.5	1.2	0.0	0.0
160°	2.5	2.5	1.2	0.0	0.0
162.5°	1.2	1.2	0.0	0.0	0.0
165°	1.2	1.2	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)