

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: P232436

Luminaire Tested: **2SRS-20-W-UNV-L830-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P232436
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-L830-CD1-U
Description: WAVESTREAM LED RECESSED 2 FT FIXTURE
Light Source: -
Ballast/Driver: -

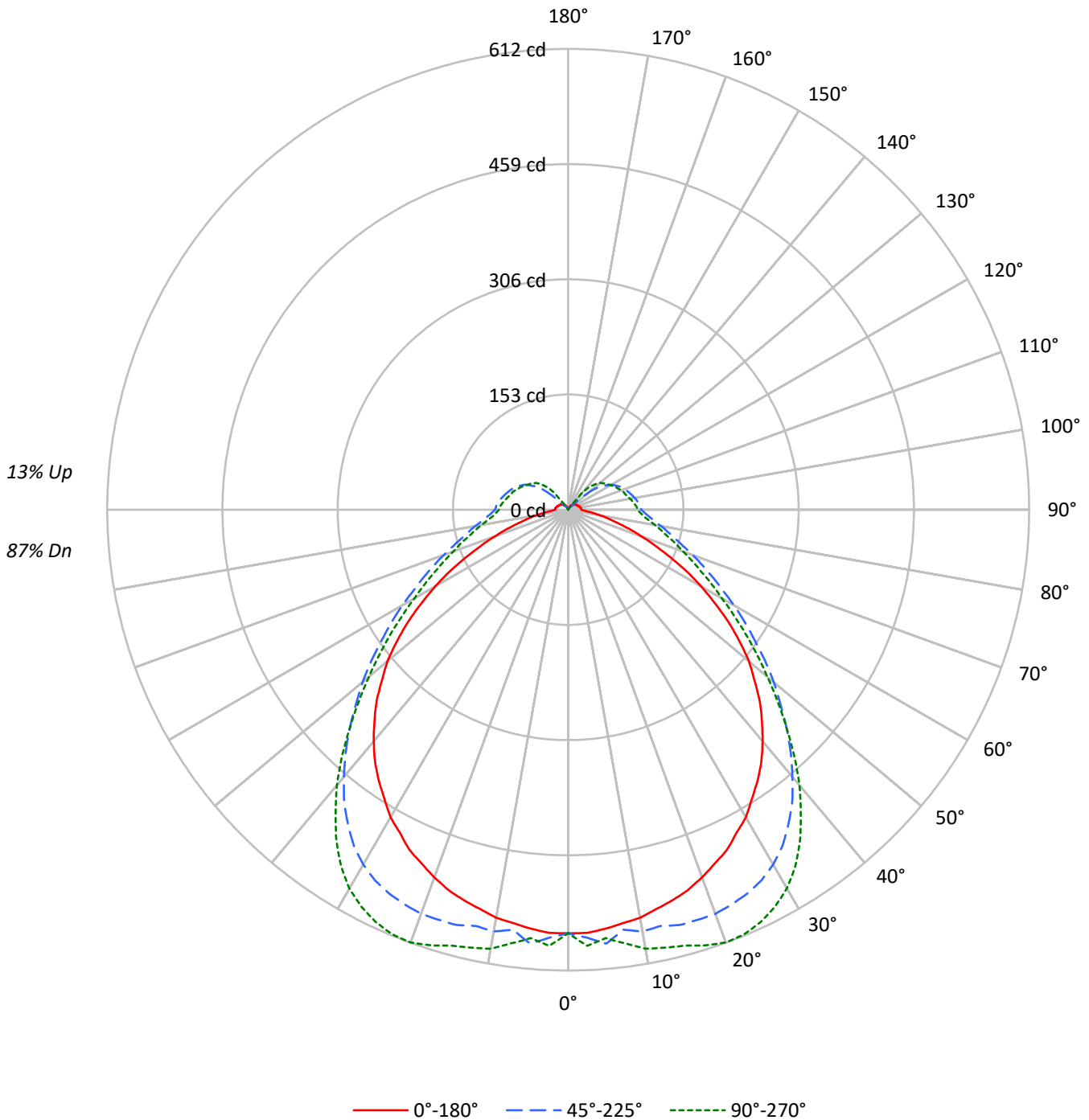
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2047.3 lumens
Efficiency: N/A
Efficacy: 130.4 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	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°	206125	206125	206125
5°	202758	97250	78782
10°	199197	62337	50538
15°	195365	46704	37253
20°	191603	37474	30064
25°	187807	31016	24724
30°	182919	26041	20487
35°	176680	21696	16745
40°	169687	17868	13458
45°	161137	14579	10603
50°	150338	11817	8301
55°	135141	9463	6510
60°	117412	7597	5084
65°	97099	6079	4046
70°	77178	4911	3256
75°	60283	4005	2677
80°	47934	3389	2259
85°	38743	2909	1936



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.4	2.7
10°-20°	161.2	7.9
20°-30°	256.2	12.5
30°-40°	310.6	15.2
40°-50°	305.7	14.9
50°-60°	257.3	12.6
60°-70°	192.9	9.4
70°-80°	137.4	6.7
80°-90°	99.9	4.9
90°-100°	84.3	4.1
100°-110°	72.4	3.5
110°-120°	55.2	2.7
120°-130°	37.5	1.8
130°-140°	17.9	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°	471.8	23.0
0°-40°	782.4	38.2
0°-60°	1345.4	65.7
0°-90°	1775.6	86.7
90°-120°	211.9	10.4
90°-150°	270.7	13.2
90°-180°	272.0	13.3
0°-180°	2047.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	562	562	562	562	562	
5°	559	565	578	574	571	53
15°	537	543	571	596	599	152
25°	499	517	562	597	604	229
35°	438	462	510	534	537	274
45°	360	376	410	415	410	277
55°	259	279	302	294	287	231
65°	150	190	211	200	195	150
75°	68	126	146	140	136	74
85°	26	88	108	102	101	25
90°	17	77	97	92	92	10
95°	17	75	95	88	88	14
105°	16	63	85	80	79	16
115°	14	34	74	71	70	13
125°	12	16	54	61	60	11
135°	10	11	9	42	45	7
145°	7	7	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°	562.5	562.5	562.5	562.5	562.5
2.5°	562.5	560.1	568.7	578.5	579.7
5°	558.8	565.0	578.5	573.6	571.1
7.5°	553.9	568.7	562.5	580.9	580.9
10°	550.2	560.1	568.7	582.2	592.0
12.5°	542.9	546.5	566.2	587.1	595.7
15°	536.7	542.9	571.1	595.7	599.4
17.5°	529.4	539.2	571.1	599.4	606.7
20°	519.5	533.0	571.1	599.4	611.6
22.5°	508.5	524.4	567.4	600.6	610.4
25°	498.6	517.1	562.5	596.9	604.3
27.5°	483.9	507.2	555.1	587.1	594.4
30°	471.6	493.7	544.1	572.3	580.9
32.5°	454.4	477.8	529.4	556.4	561.3
35°	438.5	461.8	509.7	534.3	536.7
37.5°	421.3	443.4	488.8	507.2	507.2
40°	401.6	421.3	463.0	477.8	477.8
42.5°	380.7	399.2	437.2	447.1	444.6
45°	359.9	375.8	410.2	415.1	410.2
47.5°	335.3	351.3	382.0	384.4	377.1
50°	313.2	326.7	356.2	352.5	345.1
52.5°	286.2	302.1	329.2	321.8	315.6
55°	259.1	278.8	302.1	293.5	287.4
57.5°	230.9	255.5	277.6	267.7	260.4
60°	203.9	232.1	254.2	243.2	235.8
62.5°	176.9	210.0	230.9	219.8	214.9
65°	149.8	190.4	211.2	200.2	195.3
67.5°	125.3	170.7	192.8	183.0	178.1
70°	103.2	154.8	175.6	165.8	162.1
72.5°	84.7	140.0	159.7	152.3	149.8
75°	67.6	126.5	146.2	140.0	136.3
77.5°	54.0	114.2	135.1	129.0	126.5
80°	43.0	104.4	125.3	117.9	116.7
82.5°	33.2	95.8	115.5	109.3	108.1
85°	25.8	88.4	108.1	101.9	100.7
87.5°	19.7	82.3	101.9	95.8	95.8
90°	17.2	77.4	97.0	92.1	92.1
92.5°	17.2	76.1	95.8	90.9	90.9
95°	17.2	74.9	94.6	88.4	88.4
97.5°	17.2	72.5	92.1	86.0	86.0
100°	16.0	68.8	89.7	83.5	83.5
102.5°	16.0	66.3	87.2	82.3	81.1
105°	16.0	62.6	84.7	79.8	78.6
107.5°	14.7	57.7	82.3	77.4	77.4
110°	14.7	52.8	79.8	76.1	74.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	13.5	45.4	77.4	73.7	72.5
115°	13.5	34.4	73.7	71.2	70.0
117.5°	13.5	25.8	70.0	68.8	67.6
120°	12.3	19.7	66.3	66.3	65.1
122.5°	12.3	18.4	60.2	63.9	62.6
125°	12.3	16.0	54.0	61.4	60.2
127.5°	11.1	14.7	46.7	59.0	57.7
130°	11.1	13.5	36.8	54.0	55.3
132.5°	9.8	12.3	19.7	47.9	50.4
135°	9.8	11.1	8.6	41.8	45.4
137.5°	8.6	9.8	7.4	31.9	39.3
140°	8.6	8.6	6.1	16.0	30.7
142.5°	7.4	7.4	4.9	1.2	11.1
145°	7.4	7.4	4.9	1.2	0.0
147.5°	6.1	6.1	3.7	0.0	0.0
150°	4.9	4.9	2.5	0.0	0.0
152.5°	4.9	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)