

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: P232440

Luminaire Tested: **2SRS-24-W-UNV-L830-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P232440
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-24-W-UNV-L830-CD1-U
Description: WAVESTREAM LED RECESSED 2 FT FIXTURE
Light Source: -
Ballast/Driver: -

Summary

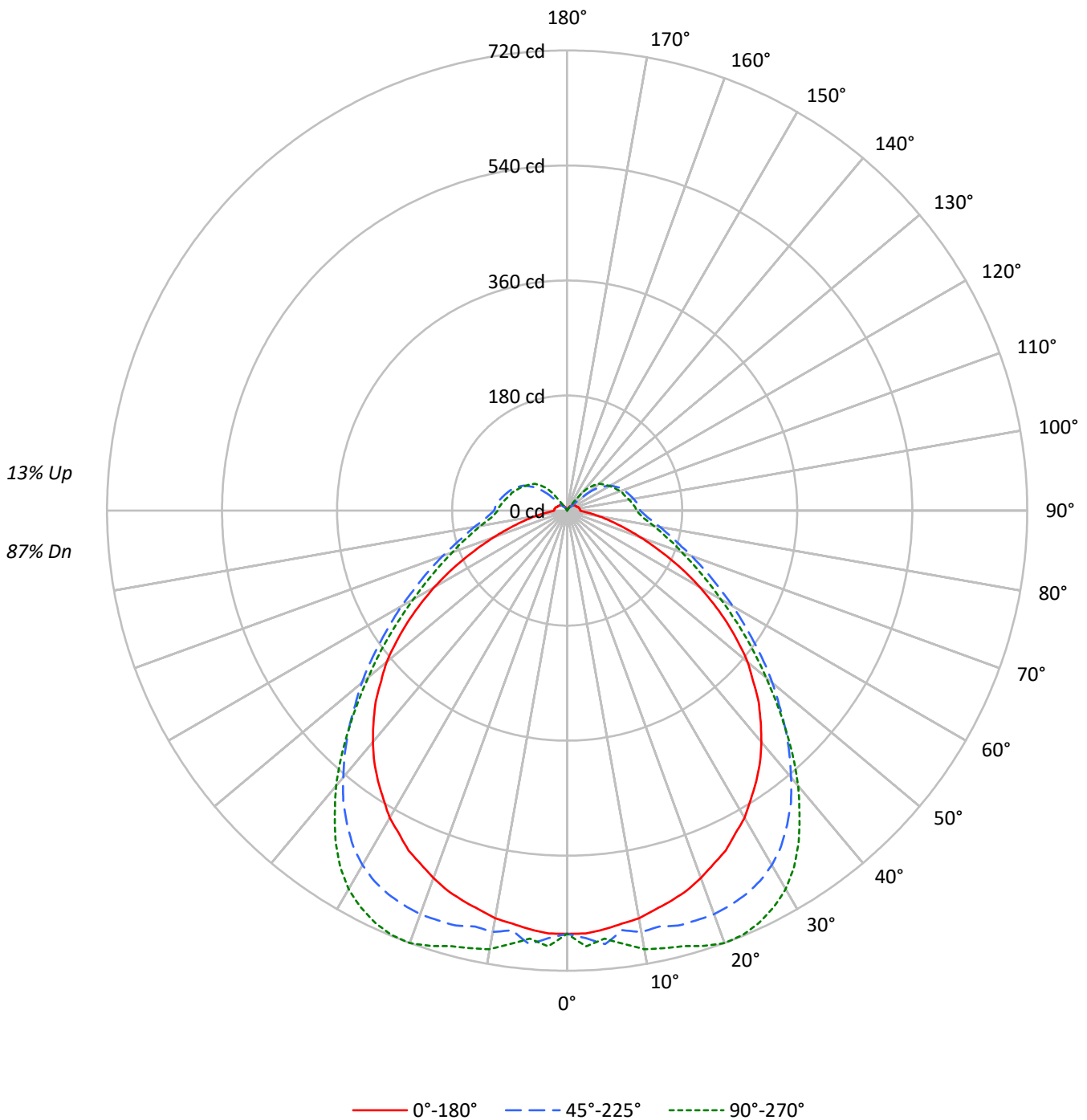
Lumens per Lamp: N/A
Luminaire Lumens: 2410.1 lumens
Efficiency: N/A
Efficacy: 135.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.44 / 1.43
Luminous Opening: Rectangular w/ Sides (W: 0.02' x L: 1.88' x H: 0.3')
CIE Type: Semi-Direct

Input Watts (W): 17.8
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

TEST NUMBER: P232440

CATALOG NUMBER: 2SRS-24-W-UNV-L830-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P232440

CATALOG NUMBER: 2SRS-24-W-UNV-L830-CD1-U

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°	242659	242659	242659
5°	238716	114481	92743
10°	234496	73375	59493
15°	229983	54981	43854
20°	225572	44115	35393
25°	221104	36513	29106
30°	215345	30655	24120
35°	207987	25540	19712
40°	199772	21036	15841
45°	189657	17163	12482
50°	176978	13910	9773
55°	159133	11142	7663
60°	138200	8945	5985
65°	114341	7159	4763
70°	90864	5783	3835
75°	70895	4715	3152
80°	56406	3990	2659
85°	45650	3423	2280



TEST NUMBER: P232440

CATALOG NUMBER: 2SRS-24-W-UNV-L830-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.0	2.7
10°-20°	189.8	7.9
20°-30°	301.6	12.5
30°-40°	365.7	15.2
40°-50°	359.8	14.9
50°-60°	302.9	12.6
60°-70°	227.2	9.4
70°-80°	161.7	6.7
80°-90°	117.6	4.9
90°-100°	99.2	4.1
100°-110°	85.3	3.5
110°-120°	65.0	2.7
120°-130°	44.1	1.8
130°-140°	21.1	0.9
140°-150°	3.9	0.2
150°-160°	1.0	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	555.4	23.0
0°-40°	921.1	38.2
0°-60°	1583.9	65.7
0°-90°	2090.3	86.7
90°-120°	249.5	10.4
90°-150°	318.7	13.2
90°-180°	320.0	13.3
0°-180°	2410.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	662	662	662	662	662	
5°	658	665	681	675	672	62
15°	632	639	672	701	706	178
25°	587	609	662	703	711	270
35°	516	544	600	629	632	323
45°	424	442	483	489	483	326
55°	305	328	356	346	338	272
65°	176	224	249	236	230	176
75°	80	149	172	165	160	87
85°	30	104	127	120	119	29
90°	20	91	114	108	108	11
95°	20	88	111	104	104	16
105°	19	74	100	94	92	19
115°	16	40	87	84	82	16
125°	14	19	64	72	71	13
135°	12	13	10	49	54	9
145°	9	9	6	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



TEST NUMBER: P232440

CATALOG NUMBER: 2SRS-24-W-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	662.2	662.2	662.2	662.2	662.2
2.5°	662.2	659.3	669.4	681.0	682.4
5°	657.9	665.1	681.0	675.2	672.3
7.5°	652.1	669.4	662.2	683.9	683.9
10°	647.7	659.3	669.4	685.3	696.9
12.5°	639.1	643.4	666.5	691.1	701.2
15°	631.8	639.1	672.3	701.2	705.6
17.5°	623.2	634.7	672.3	705.6	714.2
20°	611.6	627.5	672.3	705.6	720.0
22.5°	598.6	617.4	668.0	707.0	718.6
25°	587.0	608.7	662.2	702.7	711.4
27.5°	569.7	597.1	653.5	691.1	699.8
30°	555.2	581.2	640.5	673.8	683.9
32.5°	535.0	562.4	623.2	655.0	660.7
35°	516.2	543.6	600.0	628.9	631.8
37.5°	495.9	521.9	575.4	597.1	597.1
40°	472.8	495.9	545.1	562.4	562.4
42.5°	448.2	469.9	514.7	526.3	523.4
45°	423.6	442.4	482.9	488.7	482.9
47.5°	394.7	413.5	449.7	452.5	443.9
50°	368.7	384.6	419.3	415.0	406.3
52.5°	336.9	355.7	387.5	378.8	371.6
55°	305.1	328.2	355.7	345.6	338.3
57.5°	271.8	300.7	326.8	315.2	306.5
60°	240.0	273.3	299.3	286.3	277.6
62.5°	208.2	247.2	271.8	258.8	253.0
65°	176.4	224.1	248.7	235.7	229.9
67.5°	147.5	201.0	227.0	215.4	209.6
70°	121.5	182.2	206.8	195.2	190.9
72.5°	99.8	164.8	188.0	179.3	176.4
75°	79.5	148.9	172.1	164.8	160.5
77.5°	63.6	134.5	159.0	151.8	148.9
80°	50.6	122.9	147.5	138.8	137.4
82.5°	39.0	112.8	135.9	128.7	127.2
85°	30.4	104.1	127.2	120.0	118.6
87.5°	23.1	96.9	120.0	112.8	112.8
90°	20.2	91.1	114.2	108.4	108.4
92.5°	20.2	89.6	112.8	107.0	107.0
95°	20.2	88.2	111.3	104.1	104.1
97.5°	20.2	85.3	108.4	101.2	101.2
100°	18.8	81.0	105.5	98.3	98.3
102.5°	18.8	78.1	102.7	96.9	95.4
105°	18.8	73.7	99.8	94.0	92.5
107.5°	17.4	68.0	96.9	91.1	91.1
110°	17.4	62.2	94.0	89.6	88.2



TEST NUMBER: P232440

CATALOG NUMBER: 2SRS-24-W-UNV-L830-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	15.9	53.5	91.1	86.8	85.3
115°	15.9	40.5	86.8	83.9	82.4
117.5°	15.9	30.4	82.4	81.0	79.5
120°	14.5	23.1	78.1	78.1	76.6
122.5°	14.5	21.7	70.8	75.2	73.7
125°	14.5	18.8	63.6	72.3	70.8
127.5°	13.0	17.4	54.9	69.4	68.0
130°	13.0	15.9	43.4	63.6	65.1
132.5°	11.6	14.5	23.1	56.4	59.3
135°	11.6	13.0	10.1	49.2	53.5
137.5°	10.1	11.6	8.7	37.6	46.3
140°	10.1	10.1	7.2	18.8	36.1
142.5°	8.7	8.7	5.8	1.4	13.0
145°	8.7	8.7	5.8	1.4	0.0
147.5°	7.2	7.2	4.3	0.0	0.0
150°	5.8	5.8	2.9	0.0	0.0
152.5°	5.8	4.3	2.9	0.0	0.0
155°	4.3	4.3	1.4	0.0	0.0
157.5°	4.3	2.9	1.4	0.0	0.0
160°	2.9	2.9	1.4	0.0	0.0
162.5°	1.4	1.4	0.0	0.0	0.0
165°	1.4	1.4	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)