

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: P188116

Luminaire Tested: **24SR-LD2-45-UNV-EL7W-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188116
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34279)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24SR-LD2-45-UNV-EL7W-L830-CD1-U
Description: METALUX SKYRIDGE 2X4 TROFFER

Light Source: EATON LED 3000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 607.7 lumens
Efficiency: N/A
Efficacy: 98.0 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.39 / 1.4
Luminous Opening: Rectangular w/ Sides (W: 4' x L: 2' x H: 0.29')
CIE Type: Direct

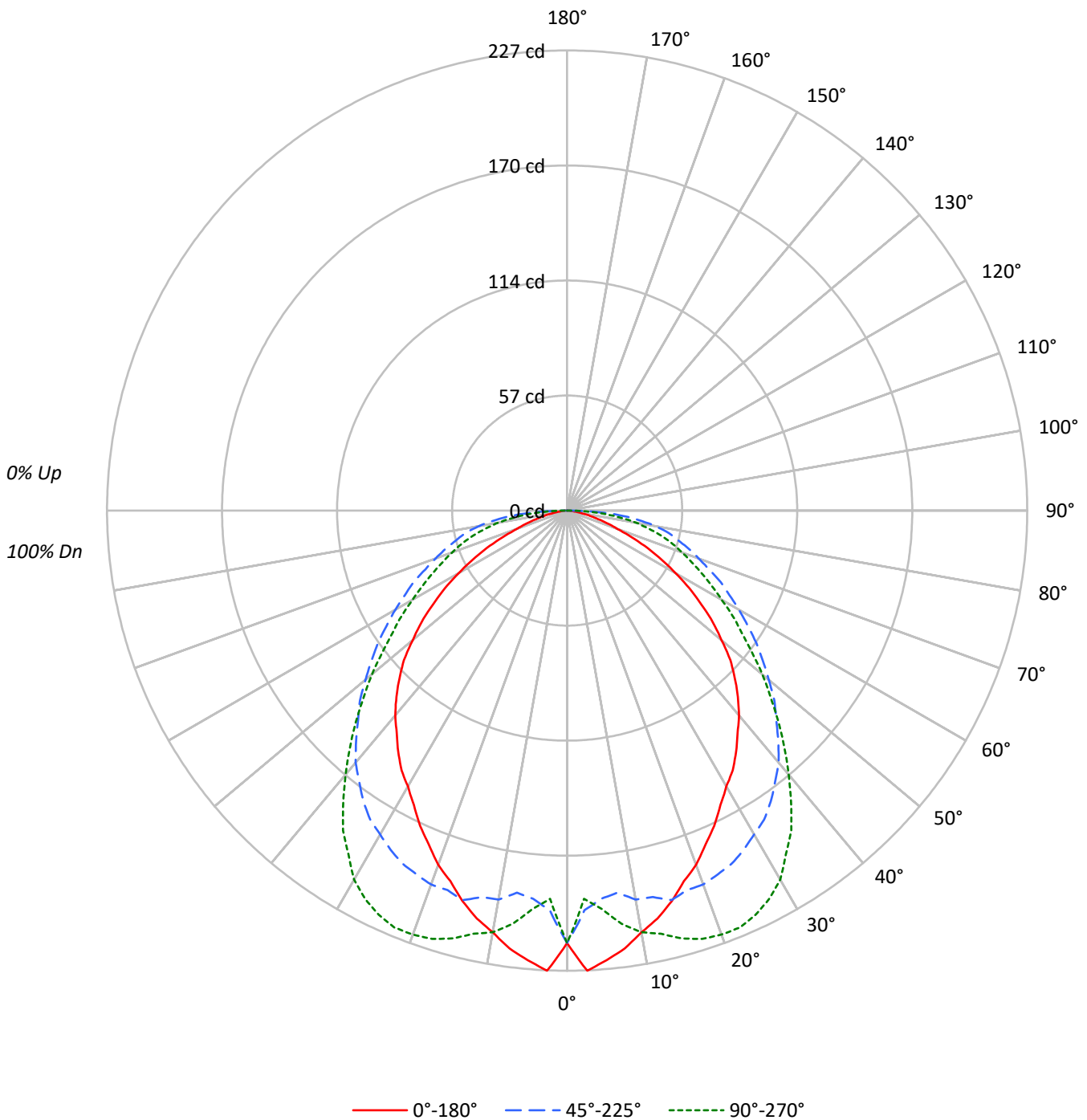
Input Watts (W): 6.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P188116

CATALOG NUMBER: 24SR-LD2-45-UNV-EL7W-L830-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P188116

CATALOG NUMBER: 24SR-LD2-45-UNV-EL7W-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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	72	77	73	70	68
3	89	78	70	63	87	77	69	62	73	67	61	71	65	60	68	63	59	57
4	81	69	60	53	79	68	59	53	65	58	52	63	57	51	61	55	51	48
5	75	62	53	46	73	61	52	46	58	51	45	56	50	44	55	49	44	42
6	69	56	46	40	67	55	46	40	53	45	39	51	44	39	50	43	39	37
7	64	50	41	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	36	30	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	287	287	287
5°	297	256	265
10°	281	259	285
15°	267	266	299
20°	253	266	310
25°	239	266	316
30°	225	263	313
35°	217	260	301
40°	206	252	281
45°	194	240	261
50°	177	229	242
55°	157	219	223
60°	133	208	210
65°	106	200	202
70°	74	190	198
75°	50	187	198
80°	28	183	189
85°	12	144	152



TEST NUMBER: P188116

CATALOG NUMBER: 24SR-LD2-45-UNV-EL7W-L830-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.0	3.1
10°-20°	55.7	9.2
20°-30°	86.9	14.3
30°-40°	104.5	17.2
40°-50°	104.8	17.2
50°-60°	92.1	15.2
60°-70°	72.3	11.9
70°-80°	50.6	8.3
80°-90°	21.9	3.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	161.6	26.6
0°-40°	266.1	43.8
0°-60°	462.9	76.2
0°-90°	607.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	607.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	213	213	213	213	213	
5°	223	192	192	200	197	21
15°	199	175	199	215	218	56
25°	172	163	192	215	220	79
35°	145	145	175	191	193	91
45°	117	123	146	149	147	90
55°	81	98	114	109	105	72
65°	44	73	84	76	73	43
75°	15	50	57	50	48	17
85°	2	27	26	20	18	3
90°	0	0	0	0	0	



TEST NUMBER: P188116

CATALOG NUMBER: 24SR-LD2-45-UNV-EL7W-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	213.3	213.3	213.3	213.3	213.3	213.3	213.3	213.3	213.3	213.3	213.3
2.5°	227.2	226.2	223.6	221.5	219.0	216.9	215.4	210.7	206.6	203.0	197.3
5°	222.6	219.5	212.3	205.1	195.8	192.2	190.1	187.5	188.1	190.1	192.2
7.5°	217.9	211.8	197.8	186.5	182.4	183.4	186.0	191.1	193.2	192.2	190.1
10°	211.2	202.5	184.5	177.2	182.9	186.0	188.6	187.5	186.5	190.1	194.8
12.5°	206.1	192.7	172.6	175.7	182.4	181.9	180.8	183.9	190.6	194.2	195.3
15°	199.4	181.9	165.9	174.7	174.7	175.2	178.3	187.0	189.1	193.7	198.9
17.5°	191.7	170.5	161.3	168.5	168.5	174.1	178.8	182.9	189.1	194.2	196.3
20°	186.0	160.2	158.2	160.8	167.4	172.6	174.7	181.9	187.0	191.1	196.3
22.5°	178.3	151.5	154.1	154.6	164.9	166.9	171.6	179.3	183.4	189.6	194.2
25°	171.6	143.2	147.9	151.5	158.7	163.3	168.5	174.1	180.8	186.0	192.2
27.5°	163.8	136.5	140.7	147.9	154.6	160.2	163.3	170.5	176.2	182.4	188.6
30°	157.1	130.9	134.0	143.2	151.5	155.1	158.7	165.9	173.1	178.3	184.5
32.5°	152.0	125.7	128.3	137.6	146.8	149.9	154.1	161.8	168.0	174.1	180.8
35°	145.3	121.6	124.2	132.9	141.2	145.3	148.9	156.6	163.3	169.5	175.2
37.5°	138.1	116.4	119.5	127.8	135.5	139.1	143.2	151.0	156.6	163.3	168.5
40°	131.9	112.3	115.4	123.1	130.4	134.0	138.1	144.8	151.0	156.6	162.3
42.5°	124.7	106.7	110.3	117.5	124.2	128.8	131.9	138.6	144.3	149.4	154.1
45°	117.0	100.5	104.1	110.8	118.5	122.6	125.7	132.9	137.6	142.2	145.8
47.5°	109.2	94.8	97.9	105.1	112.8	115.9	119.5	125.7	130.9	135.5	138.6
50°	99.4	88.1	91.7	99.4	106.7	110.3	113.9	120.0	124.2	127.3	129.8
52.5°	90.7	80.4	86.0	93.3	100.5	104.6	107.7	113.3	117.5	120.0	121.6
55°	80.9	74.2	79.3	87.1	94.3	97.9	101.5	106.7	110.3	112.8	113.9
57.5°	71.6	66.5	73.7	80.9	88.6	91.7	94.8	100.5	103.0	105.1	105.6
60°	61.8	58.7	66.5	74.7	81.9	85.5	88.6	92.7	95.3	97.9	97.9
62.5°	52.6	52.0	60.3	69.0	76.3	79.3	82.4	86.6	89.1	90.2	90.2
65°	43.8	45.9	54.6	63.4	70.1	73.2	75.7	79.9	82.4	83.5	83.5
67.5°	34.5	39.2	48.4	57.2	64.4	67.5	70.1	73.7	75.2	76.3	75.7
70°	26.3	33.0	42.8	52.0	58.7	61.3	63.9	67.5	69.0	70.1	69.0
72.5°	20.6	27.3	37.6	46.9	53.1	55.6	57.7	60.8	62.9	63.4	62.9
75°	14.9	22.7	33.5	41.7	47.9	50.0	52.0	55.1	57.2	57.7	56.7
77.5°	10.8	19.1	28.9	37.6	43.3	45.3	47.4	50.5	51.5	52.0	51.5
80°	6.7	14.9	24.2	32.5	37.1	39.7	41.2	43.8	45.3	45.9	44.3
82.5°	4.1	11.9	20.1	27.3	31.9	33.5	35.0	37.6	38.1	37.6	35.6
85°	2.1	9.3	16.0	21.6	25.8	26.8	27.8	28.9	28.9	28.3	25.8
87.5°	1.5	5.7	10.3	13.9	16.5	16.0	16.0	17.5	17.0	15.5	13.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P188116

CATALOG NUMBER: 24SR-LD2-45-UNV-EL7W-L830-CD1-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	213.3	213.3	213.3	213.3	213.3	213.3	213.3	213.3	213.3	213.3
2.5°	194.8	194.8	194.2	193.7	193.2	192.7	193.2	192.7	192.2	191.7
5°	194.8	197.8	198.9	199.9	199.9	199.9	199.4	198.9	198.4	197.3
7.5°	190.1	193.7	196.8	199.9	201.5	202.0	203.5	205.6	205.6	205.6
10°	198.4	202.0	203.0	205.1	206.1	207.1	208.7	210.7	210.7	211.2
12.5°	199.4	205.6	209.2	211.2	211.8	212.3	213.3	214.3	214.3	213.8
15°	202.5	205.6	210.2	213.8	214.8	215.9	217.9	219.0	218.5	218.5
17.5°	202.5	207.1	210.2	214.3	215.9	217.4	220.0	221.0	221.5	221.5
20°	200.9	207.1	211.8	214.8	216.4	217.4	220.0	222.1	222.1	222.6
22.5°	200.9	206.1	210.7	215.4	216.4	217.9	220.5	222.1	222.6	222.6
25°	198.4	204.0	208.2	213.3	214.8	216.9	219.0	220.0	220.0	220.0
27.5°	195.8	201.5	206.1	209.2	210.7	211.8	214.3	215.4	215.9	215.9
30°	192.2	196.8	200.9	204.5	205.6	206.6	208.7	209.7	210.2	210.2
32.5°	187.0	191.7	195.3	198.4	198.9	199.9	200.9	201.5	201.5	200.9
35°	181.4	185.0	188.6	189.6	190.6	191.1	192.2	192.7	192.2	192.7
37.5°	173.6	176.2	178.8	180.3	180.8	181.4	182.9	181.9	181.4	181.4
40°	165.4	168.5	169.5	170.5	170.5	170.5	171.6	171.1	170.0	170.0
42.5°	157.1	158.7	160.2	160.2	160.2	159.7	159.7	159.7	159.7	158.7
45°	148.4	149.4	149.4	149.4	149.4	149.4	148.4	148.4	147.4	147.4
47.5°	140.1	140.1	140.1	139.6	139.1	138.6	138.6	137.1	137.1	136.0
50°	130.4	130.9	130.4	129.3	128.8	127.8	127.3	126.2	125.7	125.7
52.5°	122.1	122.1	120.6	120.0	118.5	118.5	117.5	116.4	115.4	114.9
55°	113.9	113.3	111.8	110.3	109.2	109.2	107.7	106.1	106.1	105.1
57.5°	106.1	105.1	103.0	101.0	100.0	100.0	98.4	97.4	96.9	96.9
60°	97.4	95.3	93.8	92.2	91.7	90.7	90.2	88.6	88.1	88.1
62.5°	89.1	88.1	86.0	84.0	83.5	83.0	81.9	81.4	80.4	80.4
65°	81.9	79.9	78.3	76.8	75.7	75.2	74.7	73.7	73.2	73.2
67.5°	74.7	72.6	71.1	69.6	69.0	68.0	67.5	67.5	67.0	66.5
70°	68.0	65.9	63.9	62.9	61.8	61.3	60.8	60.8	60.8	60.3
72.5°	60.8	59.3	57.7	56.7	56.2	55.6	55.1	55.1	54.6	54.6
75°	55.6	53.6	52.0	50.5	50.0	50.0	48.9	48.9	48.4	48.4
77.5°	49.5	47.4	45.9	44.3	43.3	43.3	42.8	41.7	41.2	41.2
80°	41.7	39.7	38.1	36.6	36.1	35.6	34.5	34.5	34.5	34.5
82.5°	33.0	31.4	29.4	28.3	27.8	27.3	26.8	26.8	26.8	26.3
85°	24.2	22.2	21.1	20.1	20.1	19.1	19.1	19.1	19.1	18.0
87.5°	12.4	11.3	10.8	10.3	10.3	10.3	9.8	9.3	9.8	9.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)