

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: P188132

Luminaire Tested: **24SR-LD2-45-UNV-EL7W-L835-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188132
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-L835-CD1-U
Description: METALUX SKYRIDGE 2X4 TROFFER

Light Source: EATON LED 3500K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 626.5 lumens
Efficiency: N/A
Efficacy: 101.0 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

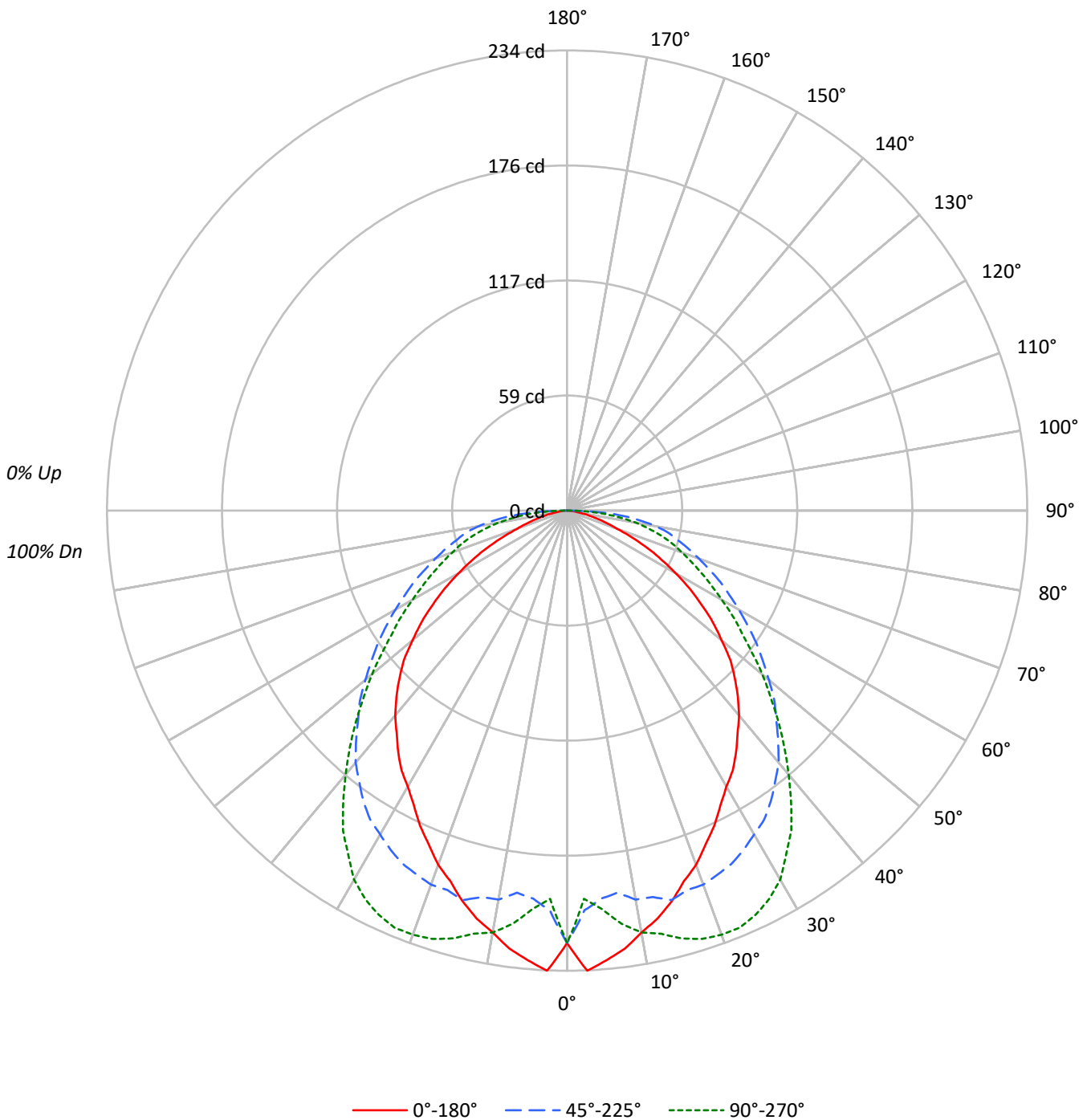
Input Watts (W): 6.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P188132

CATALOG NUMBER: 24SR-LD2-45-UNV-EL7W-L835-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P188132

CATALOG NUMBER: 24SR-LD2-45-UNV-EL7W-L835-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°	296	296	296
5°	306	264	273
10°	290	267	294
15°	276	274	308
20°	261	274	320
25°	246	274	326
30°	232	271	323
35°	223	268	311
40°	213	260	290
45°	200	248	269
50°	183	237	250
55°	162	226	230
60°	137	214	217
65°	109	206	208
70°	76	197	204
75°	52	192	204
80°	29	189	195
85°	12	148	157



TEST NUMBER: P188132

CATALOG NUMBER: 24SR-LD2-45-UNV-EL7W-L835-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.6	3.1
10°-20°	57.5	9.2
20°-30°	89.6	14.3
30°-40°	107.7	17.2
40°-50°	108.0	17.2
50°-60°	94.9	15.2
60°-70°	74.5	11.9
70°-80°	52.2	8.3
80°-90°	22.5	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°	166.6	26.6
0°-40°	274.3	43.8
0°-60°	477.2	76.2
0°-90°	626.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	626.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	220	220	220	220	220	
5°	230	198	198	206	203	22
15°	206	181	205	222	225	58
25°	177	168	198	222	227	81
35°	150	150	181	196	199	94
45°	121	126	150	154	152	93
55°	83	101	117	113	108	75
65°	45	75	86	78	75	45
75°	15	52	58	52	50	17
85°	2	28	27	21	19	3
90°	0	0	0	0	0	



TEST NUMBER: P188132

CATALOG NUMBER: 24SR-LD2-45-UNV-EL7W-L835-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	219.9	219.9	219.9	219.9	219.9	219.9	219.9	219.9	219.9	219.9	219.9
2.5°	234.2	233.2	230.5	228.4	225.7	223.6	222.0	217.2	213.0	209.3	203.4
5°	229.5	226.3	218.8	211.4	201.8	198.1	196.0	193.3	193.9	196.0	198.1
7.5°	224.7	218.3	204.0	192.3	188.0	189.1	191.7	197.1	199.2	198.1	196.0
10°	217.8	208.7	190.2	182.7	188.6	191.7	194.4	193.3	192.3	196.0	200.8
12.5°	212.5	198.7	177.9	181.1	188.0	187.5	186.4	189.6	196.5	200.2	201.3
15°	205.6	187.5	171.0	180.1	180.1	180.6	183.8	192.8	194.9	199.7	205.0
17.5°	197.6	175.8	166.3	173.7	173.7	179.5	184.3	188.6	194.9	200.2	202.4
20°	191.7	165.2	163.1	165.7	172.6	177.9	180.1	187.5	192.8	197.1	202.4
22.5°	183.8	156.2	158.8	159.3	170.0	172.1	176.9	184.8	189.1	195.5	200.2
25°	176.9	147.7	152.4	156.2	163.6	168.4	173.7	179.5	186.4	191.7	198.1
27.5°	168.9	140.8	145.0	152.4	159.3	165.2	168.4	175.8	181.7	188.0	194.4
30°	162.0	134.9	138.1	147.7	156.2	159.9	163.6	171.0	178.5	183.8	190.2
32.5°	156.7	129.6	132.3	141.8	151.4	154.6	158.8	166.8	173.2	179.5	186.4
35°	149.8	125.4	128.0	137.0	145.5	149.8	153.5	161.5	168.4	174.8	180.6
37.5°	142.4	120.0	123.2	131.7	139.7	143.4	147.7	155.6	161.5	168.4	173.7
40°	136.0	115.8	119.0	126.9	134.4	138.1	142.4	149.3	155.6	161.5	167.3
42.5°	128.5	110.0	113.7	121.1	128.0	132.8	136.0	142.9	148.7	154.0	158.8
45°	120.6	103.6	107.3	114.2	122.2	126.4	129.6	137.0	141.8	146.6	150.3
47.5°	112.6	97.7	100.9	108.4	116.3	119.5	123.2	129.6	134.9	139.7	142.9
50°	102.5	90.8	94.5	102.5	110.0	113.7	117.4	123.8	128.0	131.2	133.9
52.5°	93.5	82.9	88.7	96.1	103.6	107.8	111.0	116.9	121.1	123.8	125.4
55°	83.4	76.5	81.8	89.8	97.2	100.9	104.6	110.0	113.7	116.3	117.4
57.5°	73.8	68.5	76.0	83.4	91.4	94.5	97.7	103.6	106.2	108.4	108.9
60°	63.7	60.6	68.5	77.0	84.5	88.2	91.4	95.6	98.3	100.9	100.9
62.5°	54.2	53.6	62.1	71.2	78.6	81.8	85.0	89.2	91.9	93.0	93.0
65°	45.1	47.3	56.3	65.3	72.2	75.4	78.1	82.3	85.0	86.0	86.0
67.5°	35.6	40.4	49.9	59.0	66.4	69.6	72.2	76.0	77.5	78.6	78.1
70°	27.1	34.0	44.1	53.6	60.6	63.2	65.9	69.6	71.2	72.2	71.2
72.5°	21.2	28.2	38.8	48.3	54.7	57.4	59.5	62.7	64.8	65.3	64.8
75°	15.4	23.4	34.5	43.0	49.4	51.5	53.6	56.8	59.0	59.5	58.4
77.5°	11.2	19.7	29.7	38.8	44.6	46.7	48.9	52.1	53.1	53.6	53.1
80°	6.9	15.4	25.0	33.5	38.2	40.9	42.5	45.1	46.7	47.3	45.7
82.5°	4.2	12.2	20.7	28.2	32.9	34.5	36.1	38.8	39.3	38.8	36.7
85°	2.1	9.6	16.5	22.3	26.6	27.6	28.7	29.7	29.7	29.2	26.6
87.5°	1.6	5.8	10.6	14.3	17.0	16.5	16.5	18.1	17.5	15.9	14.3
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: P188132

CATALOG NUMBER: 24SR-LD2-45-UNV-EL7W-L835-CD1-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	219.9	219.9	219.9	219.9	219.9	219.9	219.9	219.9	219.9	219.9
2.5°	200.8	200.8	200.2	199.7	199.2	198.7	199.2	198.7	198.1	197.6
5°	200.8	204.0	205.0	206.1	206.1	206.1	205.6	205.0	204.5	203.4
7.5°	196.0	199.7	202.9	206.1	207.7	208.2	209.8	211.9	211.9	211.9
10°	204.5	208.2	209.3	211.4	212.5	213.5	215.1	217.2	217.2	217.8
12.5°	205.6	211.9	215.7	217.8	218.3	218.8	219.9	221.0	221.0	220.4
15°	208.7	211.9	216.7	220.4	221.5	222.6	224.7	225.7	225.2	225.2
17.5°	208.7	213.5	216.7	221.0	222.6	224.2	226.8	227.9	228.4	228.4
20°	207.2	213.5	218.3	221.5	223.1	224.2	226.8	228.9	228.9	229.5
22.5°	207.2	212.5	217.2	222.0	223.1	224.7	227.3	228.9	229.5	229.5
25°	204.5	210.3	214.6	219.9	221.5	223.6	225.7	226.8	226.8	226.8
27.5°	201.8	207.7	212.5	215.7	217.2	218.3	221.0	222.0	222.6	222.6
30°	198.1	202.9	207.2	210.9	211.9	213.0	215.1	216.2	216.7	216.7
32.5°	192.8	197.6	201.3	204.5	205.0	206.1	207.2	207.7	207.7	207.2
35°	187.0	190.7	194.4	195.5	196.5	197.1	198.1	198.7	198.1	198.7
37.5°	179.0	181.7	184.3	185.9	186.4	187.0	188.6	187.5	187.0	187.0
40°	170.5	173.7	174.8	175.8	175.8	175.8	176.9	176.3	175.3	175.3
42.5°	162.0	163.6	165.2	165.2	165.2	164.7	164.7	164.7	164.7	163.6
45°	153.0	154.0	154.0	154.0	154.0	154.0	153.0	153.0	151.9	151.9
47.5°	144.5	144.5	144.5	143.9	143.4	142.9	142.9	141.3	141.3	140.2
50°	134.4	134.9	134.4	133.3	132.8	131.7	131.2	130.1	129.6	129.6
52.5°	125.9	125.9	124.3	123.8	122.2	122.2	121.1	120.0	119.0	118.4
55°	117.4	116.9	115.3	113.7	112.6	112.6	111.0	109.4	109.4	108.4
57.5°	109.4	108.4	106.2	104.1	103.0	103.0	101.5	100.4	99.9	99.9
60°	100.4	98.3	96.7	95.1	94.5	93.5	93.0	91.4	90.8	90.8
62.5°	91.9	90.8	88.7	86.6	86.0	85.5	84.5	83.9	82.9	82.9
65°	84.5	82.3	80.7	79.1	78.1	77.5	77.0	76.0	75.4	75.4
67.5°	77.0	74.9	73.3	71.7	71.2	70.1	69.6	69.6	69.1	68.5
70°	70.1	68.0	65.9	64.8	63.7	63.2	62.7	62.7	62.7	62.1
72.5°	62.7	61.1	59.5	58.4	57.9	57.4	56.8	56.8	56.3	56.3
75°	57.4	55.2	53.6	52.1	51.5	51.5	50.5	50.5	49.9	49.9
77.5°	51.0	48.9	47.3	45.7	44.6	44.6	44.1	43.0	42.5	42.5
80°	43.0	40.9	39.3	37.7	37.2	36.7	35.6	35.6	35.6	35.6
82.5°	34.0	32.4	30.3	29.2	28.7	28.2	27.6	27.6	27.6	27.1
85°	25.0	22.8	21.8	20.7	20.7	19.7	19.7	19.7	19.7	18.6
87.5°	12.7	11.7	11.2	10.6	10.6	10.6	10.1	9.6	10.1	9.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)