

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: P#

Luminaire Tested: **24CZ-LD5-30SE-S-UNV-L830-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P#  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-30SE-S-UNV-L830-CD1-U  
Description: CRUZE 2x4 LED TROFFER

Light Source: -  
Ballast/Driver: -

**Summary**

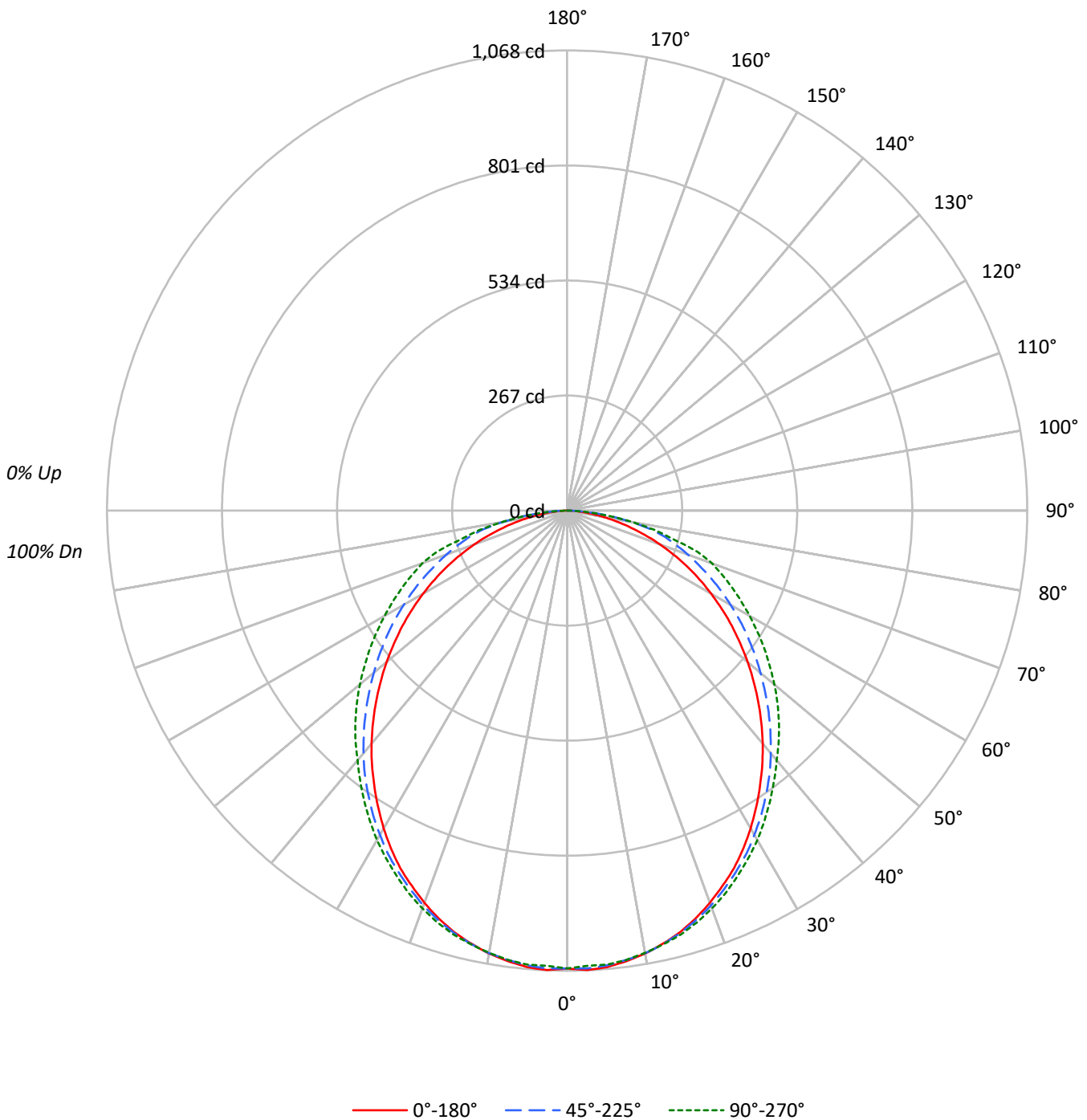
Lumens per Lamp: N/A  
Luminaire Lumens: 2935.2 lumens  
Efficiency: N/A  
Efficacy: 124.9 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 23.5  
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1430	1430	1430
5°	1433	1425	1422
10°	1420	1412	1411
15°	1401	1394	1400
20°	1375	1370	1382
25°	1344	1341	1357
30°	1304	1310	1333
35°	1260	1274	1304
40°	1215	1237	1276
45°	1164	1195	1260
50°	1112	1154	1240
55°	1057	1116	1223
60°	995	1081	1212
65°	927	1047	1213
70°	842	1023	1237
75°	729	1013	1104
80°	584	885	920
85°	387	573	537



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.5	3.4
10°-20°	285.7	9.7
20°-30°	425.8	14.5
30°-40°	501.2	17.1
40°-50°	509.4	17.4
50°-60°	458.0	15.6
60°-70°	361.8	12.3
70°-80°	229.5	7.8
80°-90°	63.4	2.2
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°	812.0	27.7
0°-40°	1313.2	44.7
0°-60°	2280.6	77.7
0°-90°	2935.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2935.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1063	1063	1063	1063	1063	
5°	1064	1055	1060	1058	1058	101
15°	1013	1008	1015	1018	1019	285
25°	916	915	926	932	936	421
35°	780	785	805	814	821	488
45°	627	636	661	681	695	484
55°	467	479	512	545	559	417
65°	307	322	366	406	422	304
75°	153	180	233	254	252	163
85°	32	56	60	55	55	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1062.6	1062.6	1062.6	1062.6	1062.6
2.5°	1067.5	1059.6	1063.6	1061.6	1057.7
5°	1063.6	1054.8	1059.6	1057.7	1057.7
7.5°	1054.8	1047.9	1051.8	1050.9	1051.8
10°	1044.0	1037.2	1043.1	1043.1	1042.1
12.5°	1029.4	1023.5	1030.4	1030.4	1031.3
15°	1012.8	1008.0	1014.8	1017.6	1018.7
17.5°	992.3	987.4	996.2	999.1	1002.1
20°	968.8	966.9	975.6	978.6	982.5
22.5°	942.5	942.5	951.2	955.1	961.0
25°	916.1	915.1	925.9	931.8	935.7
27.5°	884.8	885.9	899.5	905.4	910.3
30°	851.7	853.6	869.2	876.1	882.9
32.5°	816.5	820.4	838.0	845.8	852.6
35°	780.3	785.3	804.7	813.6	821.4
37.5°	744.2	751.1	771.6	780.3	789.2
40°	706.1	712.0	735.4	746.1	756.9
42.5°	667.1	674.9	698.3	713.9	726.7
45°	627.0	635.8	661.2	680.8	695.4
47.5°	587.0	598.7	623.1	649.5	662.2
50°	546.9	558.7	586.0	615.3	627.9
52.5°	505.9	517.7	548.9	579.1	592.8
55°	466.8	478.6	511.8	545.0	558.7
57.5°	425.8	438.5	475.7	509.8	523.4
60°	385.8	398.4	438.5	474.6	489.3
62.5°	346.8	360.4	402.4	440.5	455.1
65°	306.7	322.3	366.2	406.3	421.9
67.5°	267.6	285.2	331.1	373.1	389.7
70°	228.6	249.1	297.9	340.9	357.5
72.5°	190.5	212.9	264.7	307.6	316.4
75°	153.3	179.7	233.4	253.9	251.9
77.5°	118.2	147.4	198.3	202.2	208.0
80°	86.0	118.2	148.5	156.3	152.4
82.5°	56.6	88.9	106.5	102.5	101.6
85°	32.2	55.7	59.6	54.7	54.7
87.5°	13.7	22.4	19.6	14.6	13.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)