

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-LD5-35SE-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-LD5-35SE-S-UNV-L830-CD1-U
Description: CRUZE 2x4 LED TROFFER

Light Source: -
Ballast/Driver: -

Summary

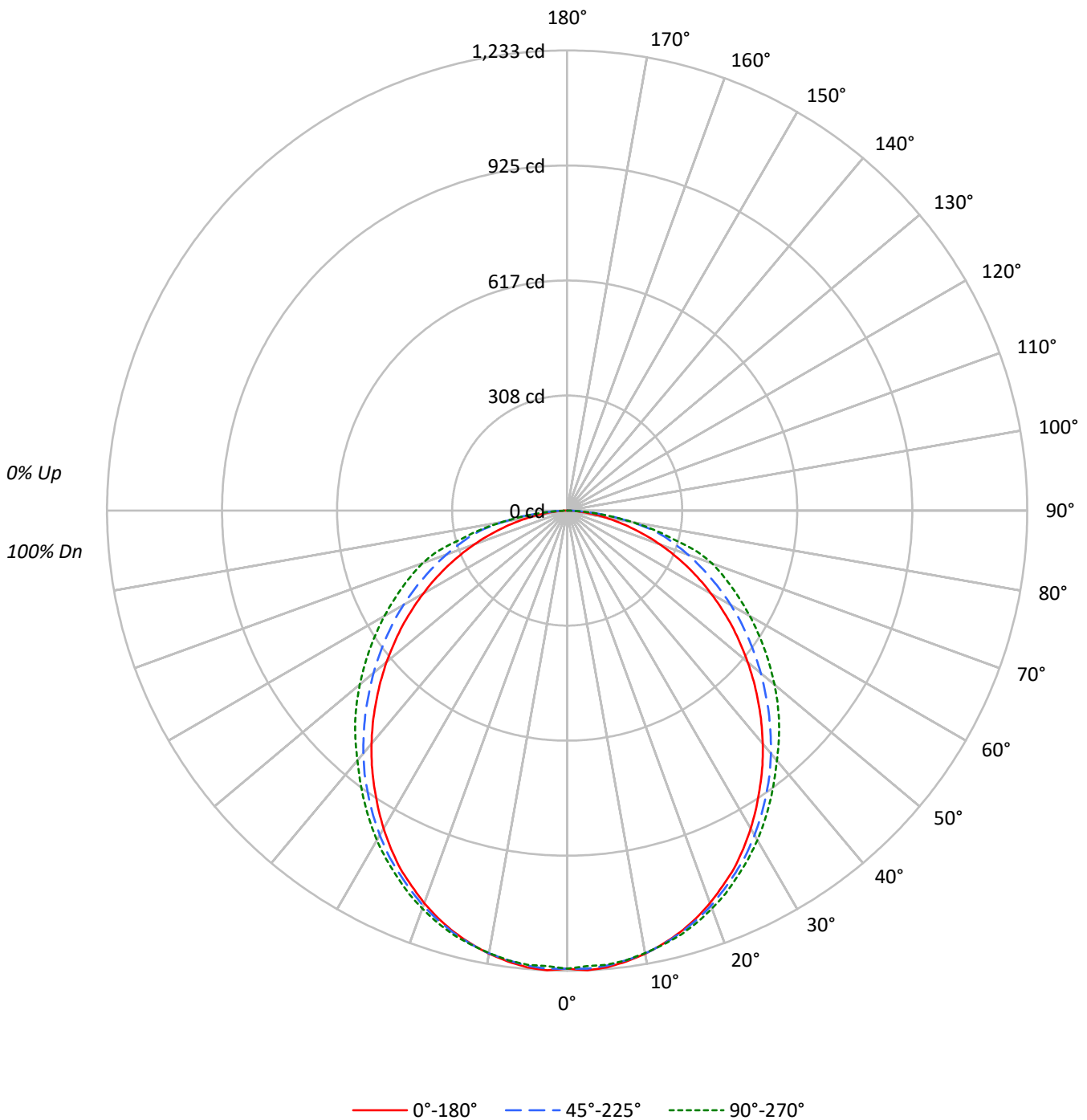
Lumens per Lamp: N/A
Luminaire Lumens: 3390.4 lumens
Efficiency: N/A
Efficacy: 118.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.1')
CIE Type: Direct

Input Watts (W): 28.57
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



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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°	1651	1651	1651
5°	1656	1646	1643
10°	1640	1631	1630
15°	1619	1610	1617
20°	1588	1583	1596
25°	1553	1549	1568
30°	1507	1514	1540
35°	1455	1472	1506
40°	1403	1429	1474
45°	1345	1380	1456
50°	1284	1333	1433
55°	1221	1289	1413
60°	1149	1248	1400
65°	1071	1209	1401
70°	972	1182	1428
75°	842	1170	1275
80°	674	1022	1062
85°	447	661	621



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.0	3.4
10°-20°	330.0	9.7
20°-30°	491.8	14.5
30°-40°	579.0	17.1
40°-50°	588.3	17.4
50°-60°	529.0	15.6
60°-70°	417.9	12.3
70°-80°	265.1	7.8
80°-90°	73.2	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°	937.9	27.7
0°-40°	1516.9	44.7
0°-60°	2634.2	77.7
0°-90°	3390.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3390.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1227	1227	1227	1227	1227	
5°	1228	1218	1224	1222	1222	116
15°	1170	1164	1172	1175	1177	330
25°	1058	1057	1069	1076	1081	487
35°	901	907	930	940	949	564
45°	724	734	764	786	803	559
55°	539	553	591	630	645	482
65°	354	372	423	469	487	351
75°	177	208	270	293	291	189
85°	37	64	69	63	63	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1227.4	1227.4	1227.4	1227.4	1227.4
2.5°	1233.0	1224.0	1228.5	1226.3	1221.7
5°	1228.5	1218.4	1224.0	1221.7	1221.7
7.5°	1218.4	1210.5	1215.0	1213.8	1215.0
10°	1205.9	1198.0	1204.8	1204.8	1203.6
12.5°	1189.0	1182.3	1190.2	1190.2	1191.3
15°	1169.8	1164.2	1172.1	1175.4	1176.6
17.5°	1146.2	1140.5	1150.6	1154.1	1157.4
20°	1119.1	1116.8	1127.0	1130.3	1134.9
22.5°	1088.6	1088.6	1098.8	1103.2	1110.1
25°	1058.1	1057.1	1069.4	1076.2	1080.7
27.5°	1022.0	1023.2	1039.0	1045.8	1051.4
30°	983.7	985.9	1004.0	1011.9	1019.8
32.5°	943.1	947.6	967.9	976.9	984.9
35°	901.4	907.0	929.6	939.7	948.8
37.5°	859.6	867.5	891.2	901.4	911.5
40°	815.6	822.4	849.5	861.8	874.3
42.5°	770.4	779.5	806.6	824.6	839.3
45°	724.3	734.3	763.7	786.3	803.2
47.5°	678.0	691.5	719.7	750.2	764.8
50°	631.8	645.2	676.9	710.7	725.3
52.5°	584.3	597.9	634.0	669.0	684.8
55°	539.2	552.8	591.1	629.5	645.2
57.5°	491.8	506.5	549.4	588.9	604.7
60°	445.6	460.3	506.5	548.2	565.2
62.5°	400.5	416.3	464.7	508.7	525.7
65°	354.3	372.3	423.0	469.3	487.4
67.5°	309.1	329.4	382.5	430.9	450.1
70°	264.0	287.7	344.1	393.7	412.9
72.5°	220.0	246.0	305.7	355.4	365.5
75°	177.1	207.6	269.6	293.3	291.1
77.5°	136.5	170.3	229.0	233.5	240.3
80°	99.3	136.5	171.5	180.5	175.9
82.5°	65.5	102.7	122.9	118.5	117.3
85°	37.2	64.3	68.8	63.2	63.2
87.5°	15.8	25.9	22.5	16.9	15.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)