

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: P260939

Luminaire Tested: **24CZ-LD5-35SE-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260939  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25697)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-35SE-UNV-L92765-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3142.0 lumens  
Efficiency: N/A  
Efficacy: 119.4 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

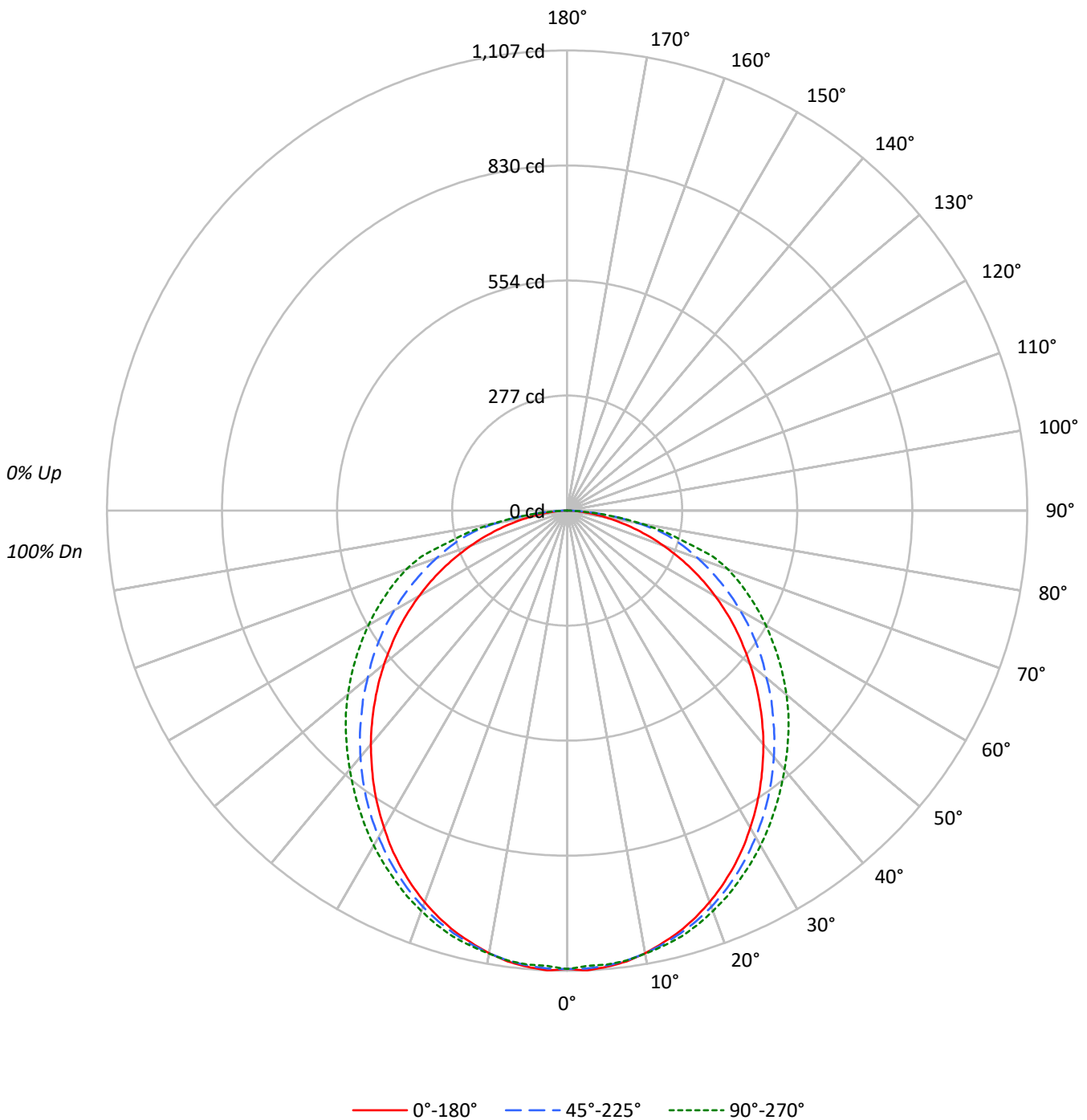
Input Watts (W): 26.319  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24

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

	0°	45°	90°
0°	1484	1484	1484
5°	1488	1484	1481
10°	1477	1477	1479
15°	1460	1467	1478
20°	1436	1453	1468
25°	1405	1433	1457
30°	1369	1409	1446
35°	1331	1385	1435
40°	1291	1359	1428
45°	1247	1333	1433
50°	1203	1311	1441
55°	1158	1302	1456
60°	1106	1294	1485
65°	1048	1294	1535
70°	969	1316	1616
75°	867	1376	1538
80°	725	1317	1409
85°	548	1013	963



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.2	3.3
10°-20°	296.6	9.4
20°-30°	443.4	14.1
30°-40°	526.0	16.7
40°-50°	541.3	17.2
50°-60°	496.6	15.8
60°-70°	401.5	12.8
70°-80°	260.6	8.3
80°-90°	71.9	2.3
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°	844.1	26.9
0°-40°	1370.1	43.6
0°-60°	2408.0	76.6
0°-90°	3142.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3142.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1103	1103	1103	1103	1103	
5°	1102	1094	1098	1097	1096	105
15°	1048	1044	1053	1058	1061	295
25°	947	948	965	974	981	436
35°	810	816	843	862	874	507
45°	655	666	700	734	753	506
55°	494	509	555	600	621	441
65°	329	349	407	460	482	325
75°	167	198	265	296	296	177
85°	36	60	66	64	62	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1102.7	1102.7	1102.7	1102.7	1102.7
2.5°	1107.0	1098.4	1102.7	1101.6	1096.2
5°	1101.6	1094.1	1098.4	1097.3	1096.2
7.5°	1094.1	1086.5	1091.9	1090.8	1091.9
10°	1081.2	1074.7	1081.2	1082.2	1082.2
12.5°	1065.0	1059.6	1068.3	1070.4	1072.6
15°	1047.8	1043.5	1053.2	1057.5	1060.7
17.5°	1026.3	1023.1	1034.9	1040.3	1044.6
20°	1002.6	1001.6	1014.5	1019.8	1025.2
22.5°	975.7	975.7	990.8	997.3	1004.8
25°	946.7	947.8	965.0	973.6	981.1
27.5°	915.5	916.6	937.0	947.8	956.4
30°	881.1	885.4	906.9	920.9	930.6
32.5°	846.6	852.0	875.7	891.8	902.6
35°	810.1	816.5	843.4	861.7	873.5
37.5°	772.4	779.9	809.0	829.4	843.4
40°	734.8	743.4	773.5	797.2	813.3
42.5°	695.0	704.6	738.0	766.0	783.2
45°	655.2	665.9	700.3	733.7	753.0
47.5°	615.3	628.3	664.8	701.4	721.9
50°	574.5	587.4	626.1	668.1	688.5
52.5°	533.6	548.6	591.7	634.7	655.2
55°	493.8	508.8	555.1	600.3	620.7
57.5°	452.9	468.0	518.5	565.9	586.3
60°	410.9	428.2	480.9	529.3	551.9
62.5°	370.1	388.4	444.3	495.9	517.5
65°	329.2	348.6	406.6	460.4	482.0
67.5°	287.2	309.8	370.1	424.9	447.5
70°	246.4	271.1	334.6	389.4	410.9
72.5°	206.6	233.4	299.1	355.0	367.9
75°	166.7	197.9	264.6	295.8	295.8
77.5°	129.1	163.5	225.9	237.7	244.2
80°	93.6	131.2	170.0	184.0	181.8
82.5°	62.4	100.0	121.6	121.6	118.3
85°	35.5	60.2	65.6	63.5	62.4
87.5°	15.1	22.6	20.4	16.1	14.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)