

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: P276562

Luminaire Tested: **24CZ2-35-S-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276562  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-35-S-UNV-L82765-W2A1-U-3000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3337.8 lumens  
Efficiency: N/A  
Efficacy: 129.1 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

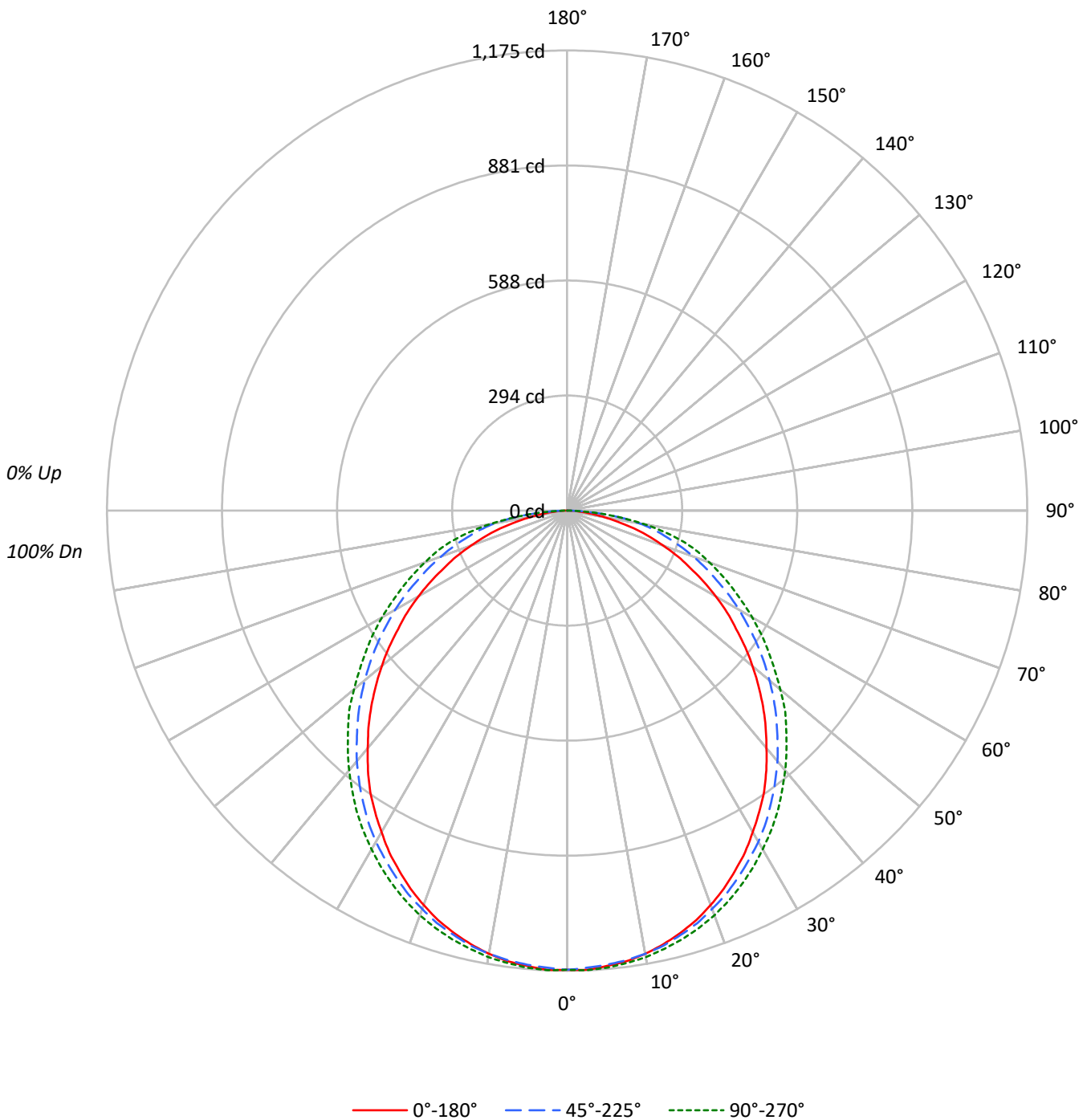
Input Watts (W): 25.854  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

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

	0°	45°	90°
0°	1578	1578	1578
5°	1577	1572	1582
10°	1570	1570	1582
15°	1555	1562	1579
20°	1535	1550	1574
25°	1506	1535	1565
30°	1473	1517	1552
35°	1440	1492	1539
40°	1391	1467	1521
45°	1346	1438	1505
50°	1294	1411	1487
55°	1236	1385	1472
60°	1178	1364	1469
65°	1104	1340	1479
70°	1022	1347	1518
75°	915	1372	1604
80°	739	1454	1569
85°	556	1277	1244



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.0	3.3
10°-20°	317.2	9.5
20°-30°	476.8	14.3
30°-40°	568.0	17.0
40°-50°	581.3	17.4
50°-60°	523.3	15.7
60°-70°	411.0	12.3
70°-80°	266.7	8.0
80°-90°	82.5	2.5
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°	905.0	27.1
0°-40°	1473.0	44.1
0°-60°	2577.6	77.2
0°-90°	3337.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3337.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1173	1173	1173	1173	1173	
5°	1167	1169	1164	1170	1172	111
15°	1116	1120	1122	1131	1133	315
25°	1015	1023	1034	1051	1054	467
35°	877	887	909	931	937	547
45°	707	724	756	785	791	545
55°	527	550	590	621	628	472
65°	347	373	421	456	464	345
75°	176	210	264	300	308	186
85°	36	67	83	81	81	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1172.6	1172.6	1172.6	1172.6	1172.6
2.5°	1173.7	1173.7	1168.4	1173.7	1174.7
5°	1167.3	1169.4	1164.1	1170.5	1171.5
7.5°	1160.9	1160.9	1157.8	1164.1	1165.2
10°	1149.3	1150.3	1149.3	1156.7	1157.8
12.5°	1134.4	1136.6	1137.6	1145.0	1146.1
15°	1116.4	1119.6	1121.7	1131.3	1133.4
17.5°	1096.3	1099.4	1104.7	1115.4	1117.5
20°	1071.9	1076.1	1082.5	1096.3	1099.4
22.5°	1045.4	1049.6	1060.2	1072.9	1078.2
25°	1014.6	1023.1	1033.7	1050.7	1053.9
27.5°	983.9	991.3	1005.1	1023.1	1027.4
30°	947.8	959.5	976.5	994.5	998.7
32.5°	912.8	924.5	944.7	963.7	969.0
35°	876.8	887.4	908.6	930.9	937.2
37.5°	835.5	849.2	872.6	894.8	901.2
40°	792.0	808.9	835.5	858.8	866.2
42.5°	750.6	768.7	795.2	820.6	829.1
45°	707.2	724.1	755.9	784.6	790.9
47.5°	662.6	681.7	715.6	744.3	754.9
50°	618.1	638.3	674.3	704.0	710.3
52.5°	573.6	594.8	633.0	664.8	667.9
55°	526.9	550.3	590.5	621.3	627.6
57.5°	484.5	504.7	548.1	579.9	587.4
60°	437.9	460.1	506.8	536.5	546.0
62.5°	393.3	416.7	465.4	495.1	503.6
65°	346.7	373.2	420.9	455.9	464.4
67.5°	306.4	331.8	382.7	416.7	425.1
70°	259.8	288.4	342.5	377.4	385.9
72.5°	219.5	249.2	303.2	337.1	349.9
75°	176.0	209.9	264.0	300.0	308.5
77.5°	133.6	172.8	227.9	255.5	255.5
80°	95.4	136.8	187.7	200.4	202.5
82.5°	62.6	102.8	138.9	137.8	137.8
85°	36.0	66.8	82.7	80.6	80.6
87.5°	13.8	27.6	29.7	29.7	28.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)