

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: P276475

Luminaire Tested: **24CZ2-35HE-S-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276475  
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: 24CZ2-35HE-S-UNV-L82765-W2A1-U-4500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3553.5 lumens  
Efficiency: N/A  
Efficacy: 144.2 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

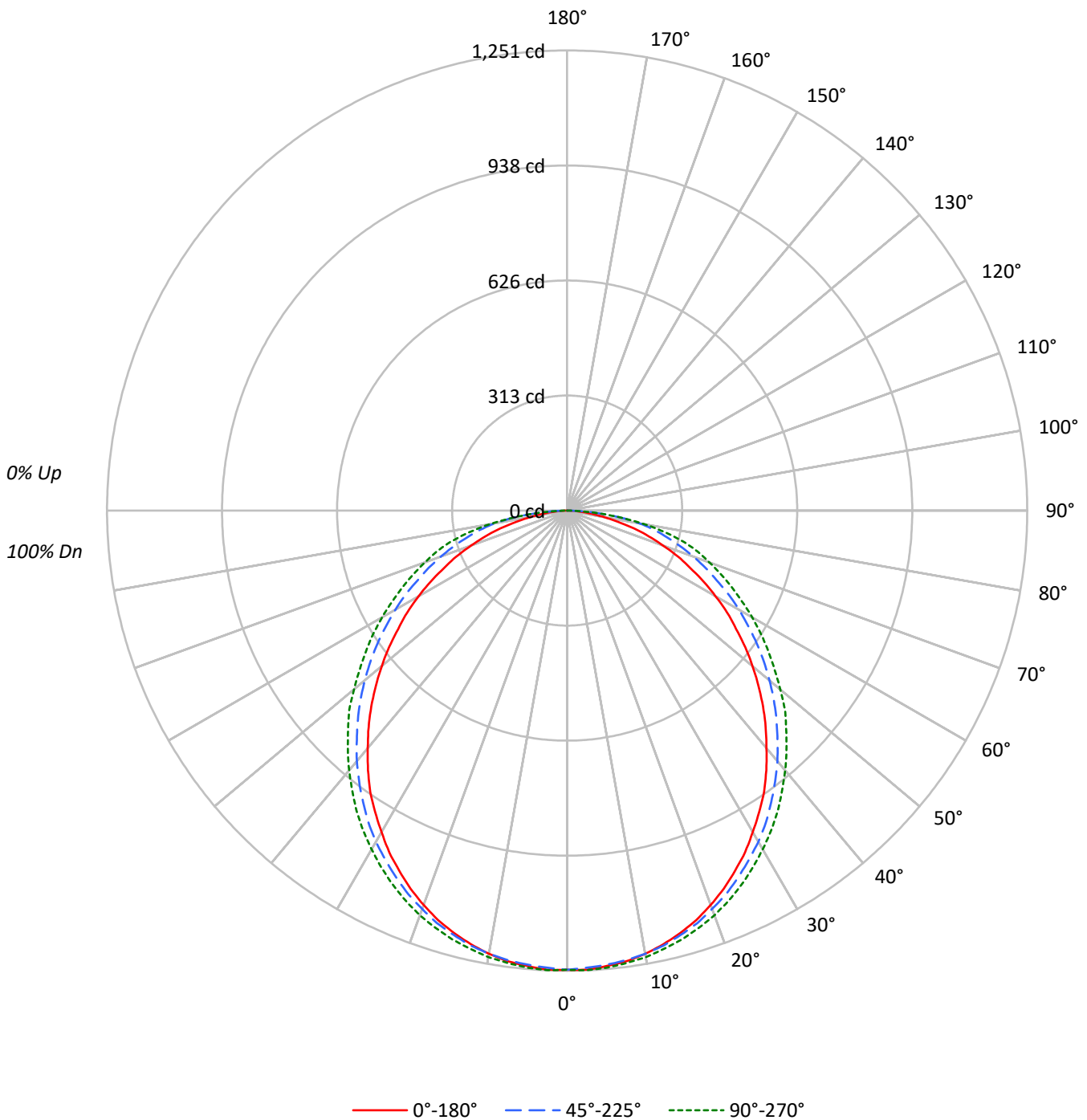
Input Watts (W): 24.645  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1680	1680	1680
5°	1678	1674	1685
10°	1672	1672	1684
15°	1656	1663	1681
20°	1634	1650	1676
25°	1604	1634	1666
30°	1568	1615	1652
35°	1533	1589	1639
40°	1481	1562	1620
45°	1433	1531	1602
50°	1378	1503	1583
55°	1316	1475	1567
60°	1255	1452	1564
65°	1175	1427	1574
70°	1088	1434	1616
75°	974	1461	1708
80°	787	1548	1671
85°	593	1359	1325



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	118.2	3.3
10°-20°	337.7	9.5
20°-30°	507.6	14.3
30°-40°	604.7	17.0
40°-50°	618.9	17.4
50°-60°	557.1	15.7
60°-70°	437.5	12.3
70°-80°	284.0	8.0
80°-90°	87.8	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°	963.5	27.1
0°-40°	1568.2	44.1
0°-60°	2744.2	77.2
0°-90°	3553.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3553.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1248	1248	1248	1248	1248	
5°	1243	1245	1239	1246	1247	118
15°	1189	1192	1194	1204	1207	335
25°	1080	1089	1100	1119	1122	498
35°	934	945	967	991	998	582
45°	753	771	805	835	842	580
55°	561	586	629	661	668	503
65°	369	397	448	485	494	367
75°	187	224	281	319	328	198
85°	38	71	88	86	86	46
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1248.4	1248.4	1248.4	1248.4	1248.4
2.5°	1249.5	1249.5	1243.9	1249.5	1250.6
5°	1242.7	1245.0	1239.3	1246.1	1247.2
7.5°	1236.0	1236.0	1232.6	1239.3	1240.5
10°	1223.5	1224.7	1223.5	1231.4	1232.6
12.5°	1207.7	1210.0	1211.1	1219.0	1220.2
15°	1188.6	1191.9	1194.2	1204.4	1206.6
17.5°	1167.1	1170.5	1176.1	1187.4	1189.7
20°	1141.1	1145.7	1152.4	1167.1	1170.5
22.5°	1112.9	1117.4	1128.7	1142.3	1147.9
25°	1080.2	1089.2	1100.5	1118.6	1122.0
27.5°	1047.5	1055.4	1070.0	1089.2	1093.7
30°	1009.1	1021.5	1039.6	1058.8	1063.3
32.5°	971.8	984.3	1005.7	1026.0	1031.7
35°	933.5	944.7	967.3	991.0	997.8
37.5°	889.4	904.1	928.9	952.7	959.4
40°	843.2	861.2	889.4	914.3	922.2
42.5°	799.1	818.3	846.5	873.6	882.7
45°	752.9	770.9	804.8	835.3	842.0
47.5°	705.5	725.8	761.9	792.4	803.7
50°	658.1	679.5	717.9	749.5	756.3
52.5°	610.6	633.2	673.9	707.7	711.1
55°	561.0	585.8	628.7	661.4	668.2
57.5°	515.8	537.3	583.6	617.4	625.3
60°	466.2	489.9	539.5	571.1	581.3
62.5°	418.8	443.6	495.5	527.1	536.1
65°	369.1	397.3	448.1	485.4	494.4
67.5°	326.2	353.3	407.5	443.6	452.6
70°	276.5	307.0	364.6	401.8	410.9
72.5°	233.6	265.3	322.8	358.9	372.5
75°	187.4	223.5	281.1	319.4	328.5
77.5°	142.2	184.0	242.7	272.0	272.0
80°	101.6	145.6	199.8	213.3	215.6
82.5°	66.6	109.5	147.9	146.7	146.7
85°	38.4	71.1	88.0	85.8	85.8
87.5°	14.7	29.3	31.6	31.6	30.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)