

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: P276055

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276055  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-35HE-UNV-L82765-W2A1-U-4500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3381.9 lumens  
Efficiency: N/A  
Efficacy: 137.2 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

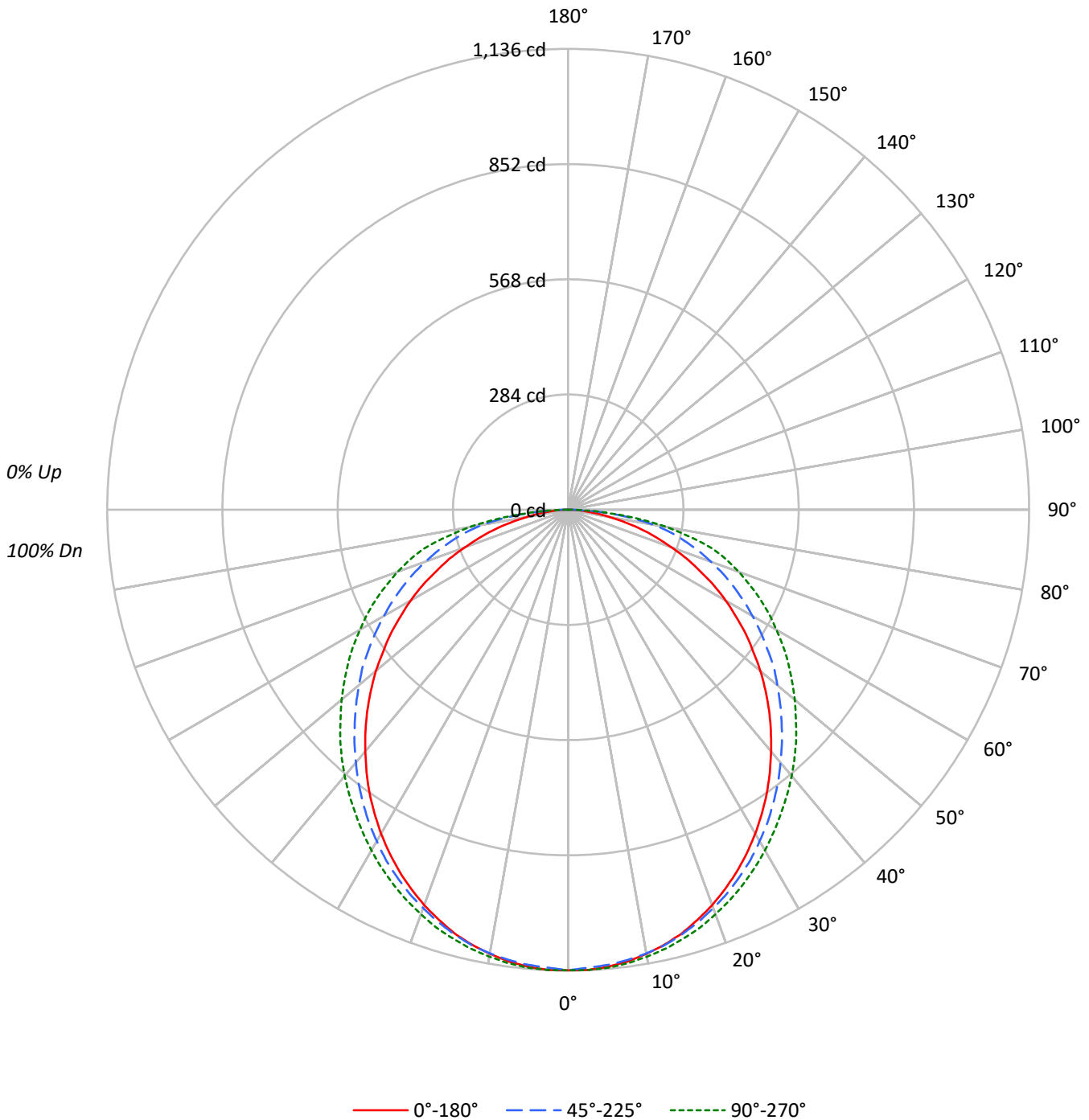
Input Watts (W): 24.645  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

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

	0°	45°	90°
0°	1528	1528	1528
5°	1528	1521	1531
10°	1519	1517	1528
15°	1506	1509	1525
20°	1485	1497	1519
25°	1461	1483	1513
30°	1433	1466	1506
35°	1402	1448	1502
40°	1366	1429	1505
45°	1332	1415	1512
50°	1295	1408	1526
55°	1255	1406	1554
60°	1206	1412	1595
65°	1143	1434	1664
70°	1061	1470	1758
75°	968	1543	1907
80°	796	1662	1907
85°	610	1533	1638



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.4	3.2
10°-20°	306.6	9.1
20°-30°	461.4	13.6
30°-40°	552.9	16.3
40°-50°	576.2	17.0
50°-60°	536.1	15.9
60°-70°	441.5	13.1
70°-80°	300.7	8.9
80°-90°	99.3	2.9
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°	875.3	25.9
0°-40°	1428.2	42.2
0°-60°	2540.5	75.1
0°-90°	3381.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3381.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1136	1136	1136	1136	1136	
5°	1131	1131	1126	1132	1133	107
15°	1081	1082	1084	1094	1095	305
25°	984	989	999	1016	1019	453
35°	853	864	882	905	914	533
45°	700	714	744	781	795	540
55°	535	553	599	647	663	477
65°	359	389	450	503	523	356
75°	186	228	297	350	367	196
85°	40	77	99	106	106	49
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1135.5	1135.5	1135.5	1135.5	1135.5
2.5°	1135.5	1135.5	1129.8	1135.5	1135.5
5°	1131.0	1131.0	1126.4	1132.1	1133.2
7.5°	1123.1	1124.2	1119.7	1126.4	1127.6
10°	1111.8	1112.9	1110.6	1117.4	1118.5
12.5°	1098.2	1099.4	1099.4	1107.3	1108.4
15°	1081.3	1082.4	1083.6	1093.7	1094.8
17.5°	1059.9	1063.2	1065.5	1077.9	1080.2
20°	1037.3	1040.7	1045.2	1058.7	1061.0
22.5°	1011.3	1015.8	1023.7	1038.4	1041.8
25°	984.2	988.7	998.9	1015.8	1019.2
27.5°	953.8	960.5	972.9	991.0	995.5
30°	922.2	928.9	943.6	962.8	969.6
32.5°	888.3	897.3	914.3	935.7	942.5
35°	853.3	863.5	881.5	905.2	914.3
37.5°	816.1	827.3	848.8	874.7	886.0
40°	777.7	791.2	813.8	844.3	856.7
42.5°	739.3	751.7	779.9	812.7	826.2
45°	699.8	714.5	743.8	781.1	794.6
47.5°	659.2	673.8	708.8	748.3	760.7
50°	618.5	633.2	672.7	714.5	729.1
52.5°	574.5	593.7	638.8	680.6	695.3
55°	535.0	553.1	599.3	646.7	662.6
57.5°	489.9	511.3	562.1	611.8	628.7
60°	448.1	470.7	524.8	575.6	592.6
62.5°	405.2	430.0	487.6	539.5	558.7
65°	358.9	389.4	450.4	503.4	522.6
67.5°	317.2	348.8	413.1	467.3	484.2
70°	269.8	308.1	373.6	427.8	447.0
72.5°	229.1	267.5	336.4	389.4	408.6
75°	186.2	228.0	296.8	349.9	366.8
77.5°	143.3	189.6	258.5	299.1	304.8
80°	102.7	151.2	214.5	238.2	246.1
82.5°	72.2	116.3	158.0	173.8	178.3
85°	39.5	76.8	99.3	106.1	106.1
87.5°	16.9	32.7	39.5	40.6	41.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)