

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: P276054

Luminaire Tested: **24CZ2-35HE-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276054  
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-4000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3323.3 lumens  
Efficiency: N/A  
Efficacy: 135.9 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

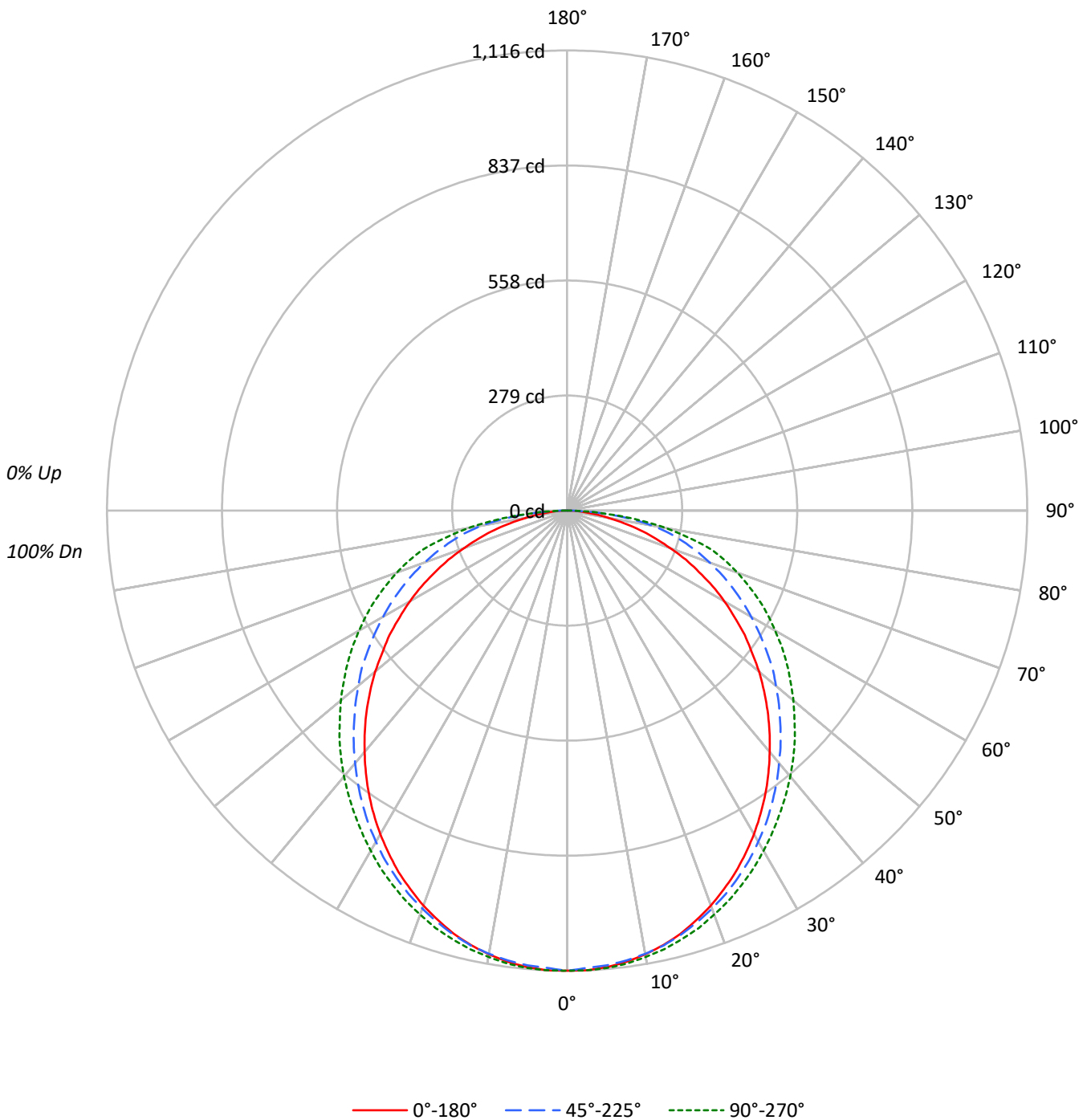
Input Watts (W): 24.459  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1501	1501	1501
5°	1501	1495	1504
10°	1493	1491	1502
15°	1480	1483	1499
20°	1459	1471	1493
25°	1436	1457	1487
30°	1408	1441	1480
35°	1377	1423	1476
40°	1342	1405	1479
45°	1309	1391	1486
50°	1272	1384	1500
55°	1233	1381	1527
60°	1185	1388	1567
65°	1123	1409	1635
70°	1043	1444	1728
75°	951	1516	1874
80°	782	1633	1874
85°	599	1507	1610



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.5	3.2
10°-20°	301.3	9.1
20°-30°	453.4	13.6
30°-40°	543.3	16.3
40°-50°	566.2	17.0
50°-60°	526.8	15.9
60°-70°	433.9	13.1
70°-80°	295.5	8.9
80°-90°	97.5	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°	860.2	25.9
0°-40°	1403.5	42.2
0°-60°	2496.4	75.1
0°-90°	3323.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3323.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1116	1116	1116	1116	1116	
5°	1111	1111	1107	1112	1114	105
15°	1062	1064	1065	1075	1076	299
25°	967	972	982	998	1002	445
35°	838	848	866	890	898	524
45°	688	702	731	768	781	530
55°	526	544	589	636	651	469
65°	353	383	442	495	514	350
75°	183	224	292	344	360	193
85°	39	75	98	104	104	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1115.8	1115.8	1115.8	1115.8	1115.8
2.5°	1115.8	1115.8	1110.2	1115.8	1115.8
5°	1111.3	1111.3	1106.9	1112.5	1113.6
7.5°	1103.6	1104.7	1100.3	1106.9	1108.0
10°	1092.5	1093.6	1091.4	1098.0	1099.1
12.5°	1079.2	1080.3	1080.3	1088.1	1089.2
15°	1062.5	1063.7	1064.8	1074.7	1075.9
17.5°	1041.5	1044.8	1047.0	1059.2	1061.4
20°	1019.3	1022.6	1027.1	1040.4	1042.6
22.5°	993.8	998.2	1006.0	1020.4	1023.7
25°	967.2	971.6	981.6	998.2	1001.5
27.5°	937.2	943.9	956.1	973.8	978.3
30°	906.2	912.8	927.2	946.1	952.7
32.5°	872.9	881.8	898.4	919.5	926.1
35°	838.5	848.5	866.2	889.5	898.4
37.5°	801.9	813.0	834.1	859.6	870.7
40°	764.2	777.5	799.7	829.6	841.8
42.5°	726.5	738.7	766.4	798.6	811.9
45°	687.7	702.1	730.9	767.5	780.8
47.5°	647.7	662.2	696.5	735.4	747.6
50°	607.8	622.2	661.0	702.1	716.5
52.5°	564.5	583.4	627.8	668.8	683.2
55°	525.7	543.5	588.9	635.5	651.1
57.5°	481.4	502.4	552.3	601.1	617.8
60°	440.3	462.5	515.7	565.7	582.3
62.5°	398.2	422.6	479.1	530.2	549.0
65°	352.7	382.7	442.5	494.7	513.5
67.5°	311.7	342.7	405.9	459.2	475.8
70°	265.1	302.8	367.1	420.4	439.2
72.5°	225.2	262.9	330.5	382.7	401.5
75°	183.0	224.0	291.7	343.8	360.5
77.5°	140.9	186.3	254.0	293.9	299.5
80°	100.9	148.6	210.7	234.0	241.8
82.5°	71.0	114.2	155.3	170.8	175.2
85°	38.8	75.4	97.6	104.3	104.3
87.5°	16.6	32.2	38.8	39.9	41.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)