

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: P276059

Luminaire Tested: **24CZ2-35HE-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276059  
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-6500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3479.4 lumens  
Efficiency: N/A  
Efficacy: 137.5 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

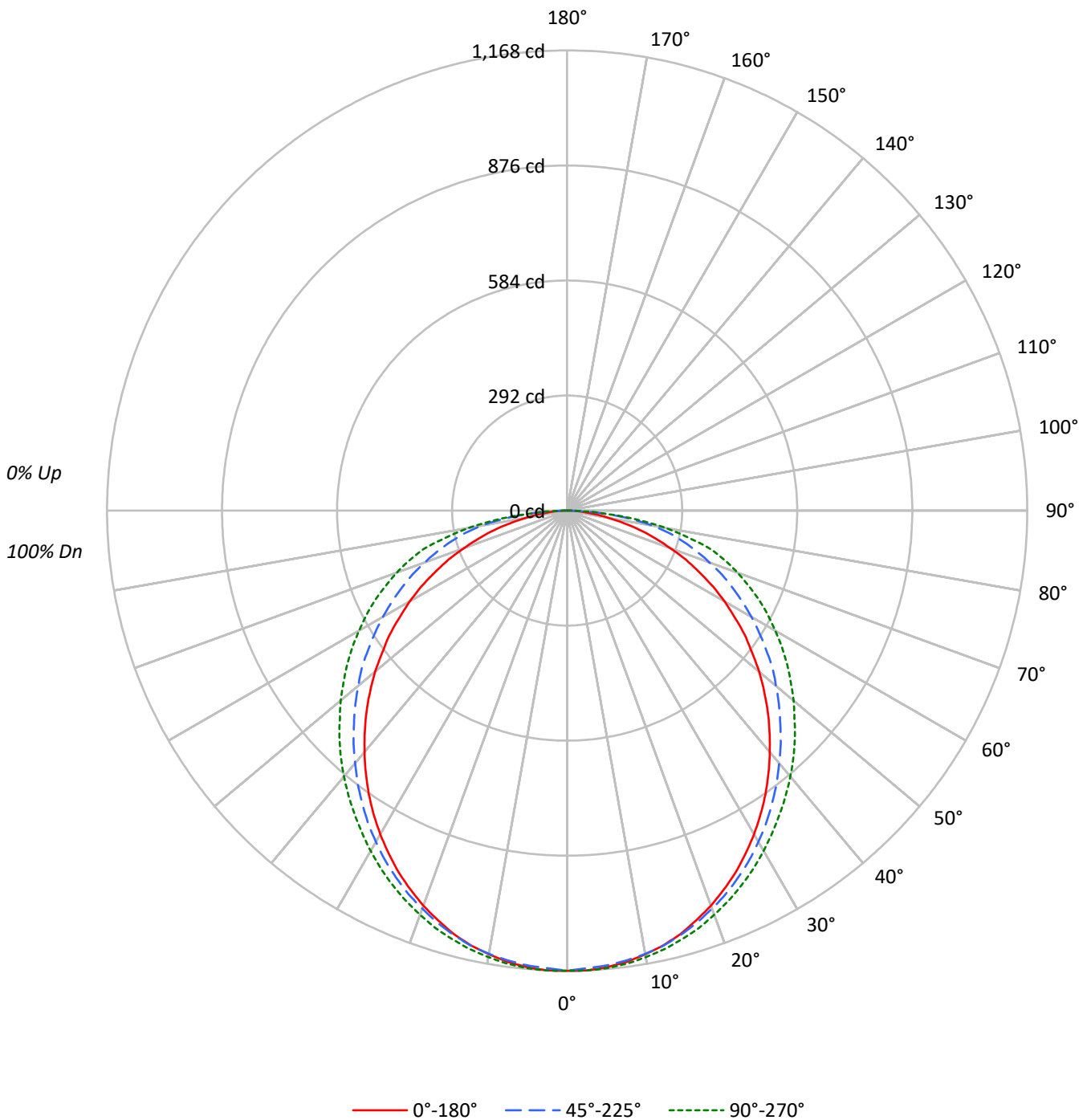
Input Watts (W): 25.296  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1572	1572	1572
5°	1571	1565	1575
10°	1563	1561	1572
15°	1550	1553	1569
20°	1528	1540	1563
25°	1503	1526	1557
30°	1474	1508	1550
35°	1442	1490	1545
40°	1405	1470	1548
45°	1370	1456	1556
50°	1332	1449	1570
55°	1291	1446	1599
60°	1241	1453	1640
65°	1176	1475	1712
70°	1092	1512	1809
75°	996	1588	1962
80°	819	1709	1961
85°	627	1578	1686



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.5	3.2
10°-20°	315.4	9.1
20°-30°	474.7	13.6
30°-40°	568.8	16.3
40°-50°	592.8	17.0
50°-60°	551.5	15.9
60°-70°	454.2	13.1
70°-80°	309.3	8.9
80°-90°	102.1	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°	900.6	25.9
0°-40°	1469.4	42.2
0°-60°	2613.7	75.1
0°-90°	3479.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3479.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1168	1168	1168	1168	1168	
5°	1164	1164	1159	1165	1166	110
15°	1112	1114	1115	1125	1126	313
25°	1013	1017	1028	1045	1049	466
35°	878	888	907	931	941	549
45°	720	735	765	804	818	555
55°	550	569	617	665	682	491
65°	369	401	463	518	538	367
75°	192	235	305	360	377	202
85°	41	79	102	109	109	50
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1168.2	1168.2	1168.2	1168.2	1168.2
2.5°	1168.2	1168.2	1162.4	1168.2	1168.2
5°	1163.5	1163.5	1158.9	1164.7	1165.9
7.5°	1155.4	1156.6	1151.9	1158.9	1160.1
10°	1143.8	1145.0	1142.6	1149.6	1150.8
12.5°	1129.9	1131.0	1131.0	1139.2	1140.3
15°	1112.5	1113.6	1114.8	1125.2	1126.4
17.5°	1090.4	1093.9	1096.2	1109.0	1111.3
20°	1067.2	1070.6	1075.3	1089.2	1091.6
22.5°	1040.5	1045.1	1053.2	1068.3	1071.8
25°	1012.6	1017.2	1027.7	1045.1	1048.6
27.5°	981.2	988.2	1001.0	1019.6	1024.2
30°	948.7	955.7	970.8	990.5	997.5
32.5°	913.9	923.2	940.6	962.7	969.6
35°	877.9	888.3	906.9	931.3	940.6
37.5°	839.6	851.2	873.2	899.9	911.6
40°	800.1	814.0	837.2	868.6	881.4
42.5°	760.6	773.4	802.4	836.1	850.0
45°	720.0	735.1	765.2	803.6	817.5
47.5°	678.2	693.3	729.2	769.9	782.7
50°	636.4	651.4	692.1	735.1	750.2
52.5°	591.1	610.8	657.3	700.2	715.3
55°	550.4	569.0	616.6	665.4	681.6
57.5°	504.0	526.0	578.3	629.4	646.8
60°	461.0	484.2	540.0	592.2	609.6
62.5°	416.9	442.4	501.6	555.1	574.8
65°	369.3	400.6	463.3	517.9	537.6
67.5°	326.3	358.8	425.0	480.7	498.2
70°	277.5	317.0	384.4	440.1	459.8
72.5°	235.7	275.2	346.0	400.6	420.4
75°	191.6	234.6	305.4	360.0	377.4
77.5°	147.5	195.1	265.9	307.7	313.5
80°	105.7	155.6	220.6	245.0	253.1
82.5°	74.3	119.6	162.6	178.8	183.5
85°	40.6	79.0	102.2	109.2	109.2
87.5°	17.4	33.7	40.6	41.8	43.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)