

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: P276057

Luminaire Tested: **24CZ2-35HE-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276057  
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-5500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3461.4 lumens  
Efficiency: N/A  
Efficacy: 139.4 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

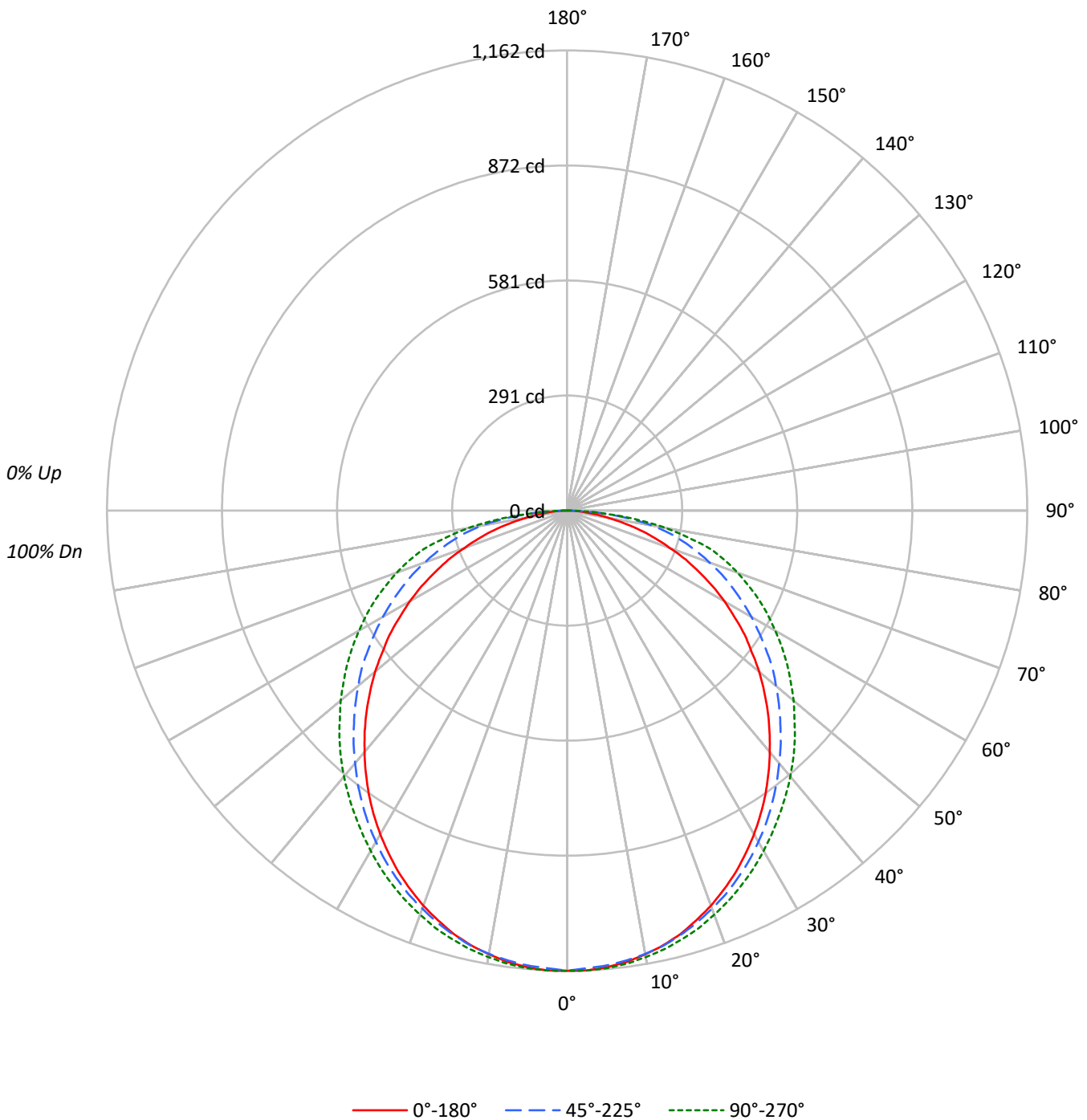
Input Watts (W): 24.831  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1564	1564	1564
5°	1563	1557	1566
10°	1555	1553	1564
15°	1542	1545	1561
20°	1520	1532	1555
25°	1496	1518	1549
30°	1466	1501	1542
35°	1435	1482	1537
40°	1398	1463	1540
45°	1363	1449	1548
50°	1325	1441	1562
55°	1285	1439	1591
60°	1234	1446	1632
65°	1170	1467	1703
70°	1086	1504	1800
75°	991	1579	1952
80°	814	1701	1951
85°	624	1570	1677



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.9	3.2
10°-20°	313.8	9.1
20°-30°	472.2	13.6
30°-40°	565.9	16.3
40°-50°	589.7	17.0
50°-60°	548.7	15.9
60°-70°	451.9	13.1
70°-80°	307.8	8.9
80°-90°	101.6	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°	895.9	25.9
0°-40°	1461.8	42.2
0°-60°	2600.2	75.1
0°-90°	3461.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3461.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1162	1162	1162	1162	1162	
5°	1158	1158	1153	1159	1160	110
15°	1107	1108	1109	1119	1121	312
25°	1007	1012	1022	1040	1043	464
35°	873	884	902	926	936	546
45°	716	731	761	799	813	552
55°	548	566	613	662	678	488
65°	367	399	461	515	535	365
75°	191	233	304	358	375	201
85°	40	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°	1162.2	1162.2	1162.2	1162.2	1162.2
2.5°	1162.2	1162.2	1156.4	1162.2	1162.2
5°	1157.5	1157.5	1152.9	1158.7	1159.8
7.5°	1149.5	1150.6	1146.0	1152.9	1154.1
10°	1137.9	1139.1	1136.7	1143.7	1144.8
12.5°	1124.0	1125.2	1125.2	1133.3	1134.4
15°	1106.7	1107.9	1109.0	1119.4	1120.6
17.5°	1084.8	1088.2	1090.5	1103.2	1105.6
20°	1061.7	1065.1	1069.7	1083.6	1085.9
22.5°	1035.1	1039.7	1047.8	1062.8	1066.3
25°	1007.4	1012.0	1022.4	1039.7	1043.2
27.5°	976.2	983.1	995.8	1014.3	1018.9
30°	943.8	950.8	965.8	985.4	992.3
32.5°	909.2	918.4	935.7	957.7	964.6
35°	873.4	883.7	902.2	926.5	935.7
37.5°	835.2	846.8	868.7	895.3	906.9
40°	796.0	809.8	832.9	864.1	876.8
42.5°	756.7	769.4	798.3	831.8	845.6
45°	716.2	731.3	761.3	799.4	813.3
47.5°	674.7	689.7	725.5	765.9	778.6
50°	633.1	648.1	688.5	731.3	746.3
52.5°	588.0	607.6	653.9	696.6	711.6
55°	547.6	566.1	613.4	661.9	678.1
57.5°	501.4	523.3	575.3	626.1	643.5
60°	458.6	481.7	537.2	589.2	606.5
62.5°	414.7	440.1	499.1	552.2	571.8
65°	367.4	398.6	460.9	515.2	534.9
67.5°	324.6	357.0	422.8	478.3	495.6
70°	276.1	315.4	382.4	437.8	457.5
72.5°	234.5	273.8	344.3	398.6	418.2
75°	190.6	233.4	303.8	358.1	375.4
77.5°	146.7	194.1	264.5	306.1	311.9
80°	105.1	154.8	219.5	243.8	251.8
82.5°	73.9	119.0	161.7	177.9	182.5
85°	40.4	78.6	101.7	108.6	108.6
87.5°	17.3	33.5	40.4	41.6	42.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)