

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: P261135

Luminaire Tested: **24CZ-LD5-35-S-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261135  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-35-S-UNV-L82765-W2A1-U-4500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3647.0 lumens  
Efficiency: N/A  
Efficacy: 148.0 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

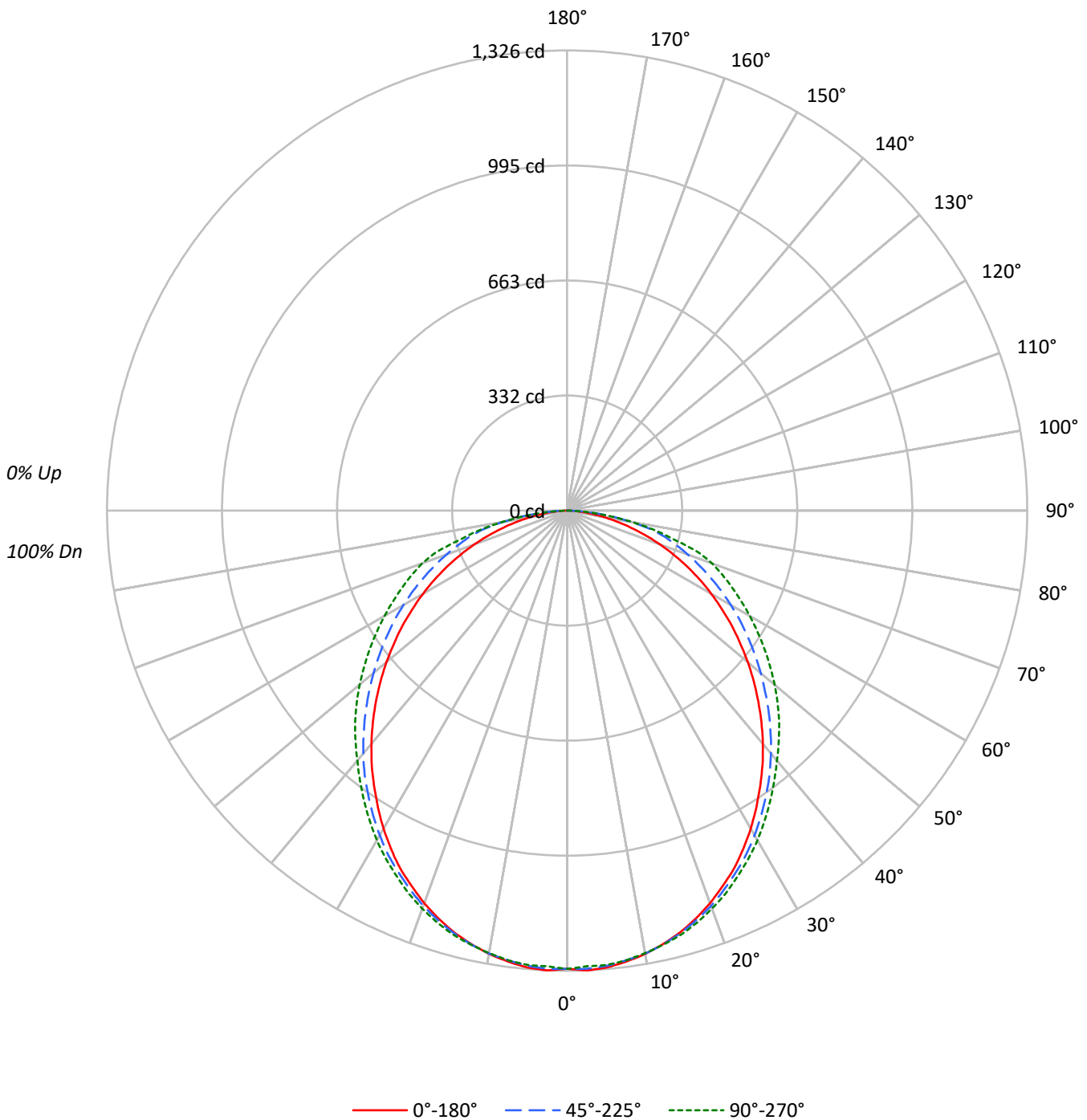
Input Watts (W): 24.645  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	1776	1776	1776
5°	1785	1778	1775
10°	1772	1771	1769
15°	1753	1756	1763
20°	1724	1736	1748
25°	1690	1708	1726
30°	1644	1678	1704
35°	1593	1642	1676
40°	1541	1605	1652
45°	1482	1563	1644
50°	1423	1524	1633
55°	1361	1492	1628
60°	1290	1466	1636
65°	1213	1449	1669
70°	1117	1456	1747
75°	990	1508	1628
80°	828	1430	1467
85°	618	1142	1050



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.8	3.4
10°-20°	355.0	9.7
20°-30°	529.1	14.5
30°-40°	622.8	17.1
40°-50°	632.9	17.4
50°-60°	569.0	15.6
60°-70°	449.5	12.3
70°-80°	285.2	7.8
80°-90°	78.7	2.2
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°	1008.9	27.7
0°-40°	1631.7	44.7
0°-60°	2833.6	77.7
0°-90°	3647.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3647.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1320	1320	1320	1320	1320	
5°	1322	1311	1317	1314	1314	125
15°	1258	1252	1261	1264	1266	354
25°	1138	1137	1150	1158	1162	523
35°	970	976	1000	1011	1020	607
45°	779	790	822	846	864	601
55°	580	595	636	677	694	518
65°	381	400	455	505	524	377
75°	190	223	290	316	313	203
85°	40	69	74	68	68	49
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1320.3	1320.3	1320.3	1320.3	1320.3
2.5°	1326.3	1316.6	1321.5	1319.1	1314.2
5°	1321.5	1310.6	1316.6	1314.2	1314.2
7.5°	1310.6	1302.1	1306.9	1305.7	1306.9
10°	1297.2	1288.7	1296.0	1296.0	1294.8
12.5°	1279.0	1271.7	1280.2	1280.2	1281.4
15°	1258.4	1252.3	1260.8	1264.5	1265.7
17.5°	1232.9	1226.8	1237.8	1241.4	1245.0
20°	1203.8	1201.4	1212.3	1215.9	1220.8
22.5°	1171.0	1171.0	1181.9	1186.8	1194.1
25°	1138.3	1137.0	1150.4	1157.7	1162.5
27.5°	1099.4	1100.6	1117.6	1124.9	1131.0
30°	1058.2	1060.6	1080.0	1088.5	1097.0
32.5°	1014.5	1019.3	1041.2	1050.9	1059.4
35°	969.6	975.6	999.9	1010.8	1020.5
37.5°	924.7	933.2	958.7	969.6	980.5
40°	877.4	884.6	913.8	927.1	940.5
42.5°	828.8	838.5	867.6	887.1	902.8
45°	779.1	790.0	821.5	845.8	864.0
47.5°	729.3	743.9	774.2	807.0	822.7
50°	679.6	694.1	728.1	764.5	780.3
52.5°	628.6	643.2	682.0	719.6	736.6
55°	580.0	594.6	635.9	677.1	694.1
57.5°	529.1	544.9	591.0	633.4	650.4
60°	479.3	495.1	544.9	589.8	608.0
62.5°	430.8	447.8	500.0	547.3	565.5
65°	381.0	400.5	455.1	504.8	524.2
67.5°	332.5	354.3	411.4	463.6	484.2
70°	284.0	309.4	370.1	423.5	444.1
72.5°	236.6	264.5	328.9	382.3	393.2
75°	190.5	223.3	290.0	315.5	313.1
77.5°	146.8	183.2	246.3	251.2	258.5
80°	106.8	146.8	184.5	194.2	189.3
82.5°	70.4	110.4	132.3	127.4	126.2
85°	40.0	69.2	74.0	68.0	68.0
87.5°	17.0	27.9	24.3	18.2	17.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)