

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: P260715

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260715  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25697)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-35-UNV-L82765-W2A1-U-4500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3575.0 lumens  
Efficiency: N/A  
Efficacy: 145.1 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

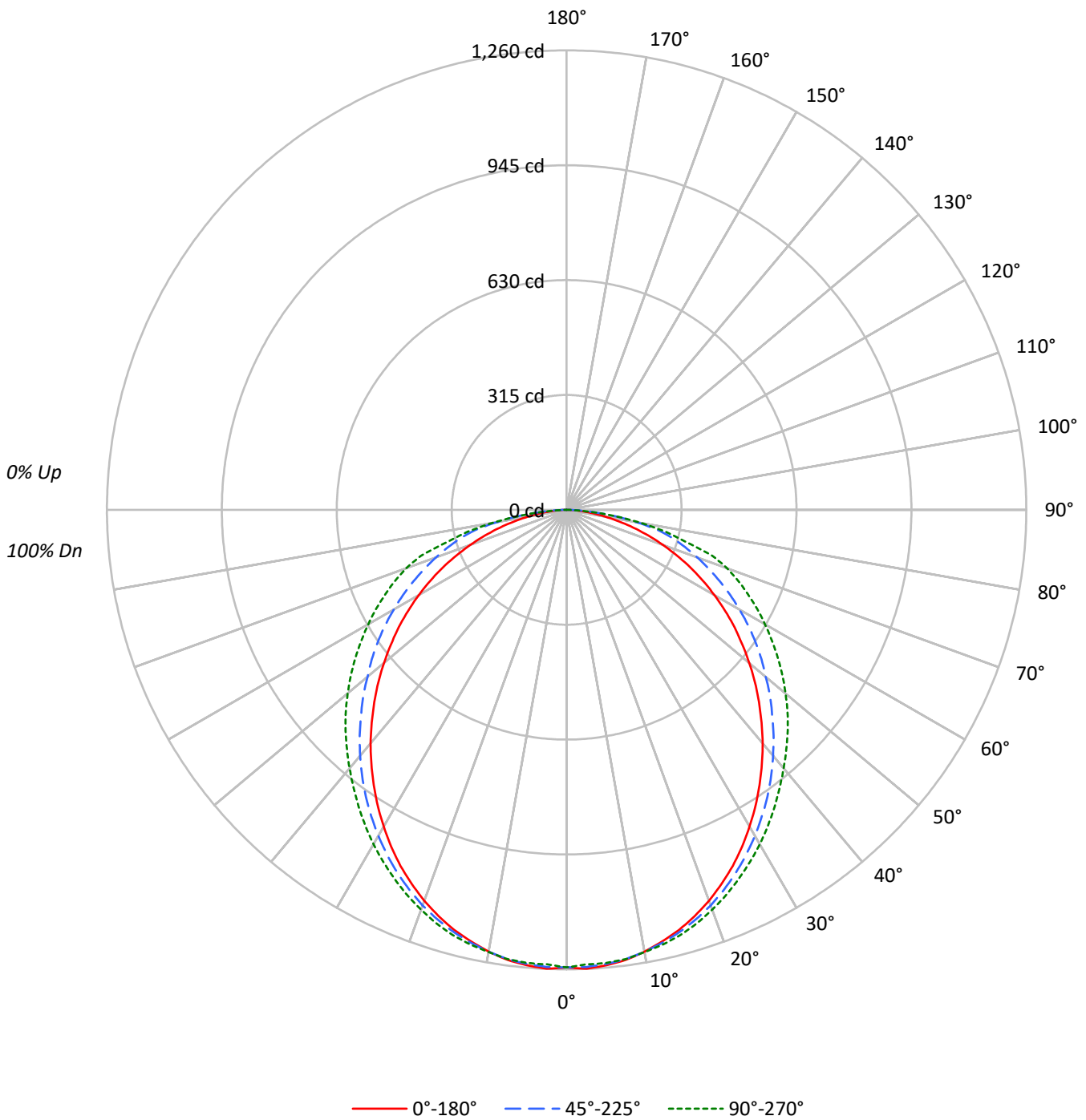
Input Watts (W): 24.645  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68					68			
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57					57			
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32					32			
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29					29			
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26					26			
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24					24			

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

	0°	45°	90°
0°	1688	1688	1688
5°	1693	1688	1685
10°	1681	1681	1682
15°	1661	1669	1681
20°	1633	1653	1670
25°	1599	1630	1657
30°	1558	1603	1645
35°	1514	1576	1633
40°	1468	1546	1625
45°	1418	1516	1630
50°	1368	1491	1640
55°	1318	1482	1657
60°	1258	1472	1690
65°	1193	1473	1746
70°	1103	1498	1840
75°	986	1565	1750
80°	825	1499	1603
85°	624	1153	1096



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	118.6	3.3
10°-20°	337.4	9.4
20°-30°	504.5	14.1
30°-40°	598.4	16.7
40°-50°	615.9	17.2
50°-60°	565.0	15.8
60°-70°	456.9	12.8
70°-80°	296.5	8.3
80°-90°	81.8	2.3
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°	960.4	26.9
0°-40°	1558.9	43.6
0°-60°	2739.9	76.6
0°-90°	3575.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3575.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1255	1255	1255	1255	1255	
5°	1253	1245	1250	1248	1247	119
15°	1192	1187	1198	1203	1207	336
25°	1077	1078	1098	1108	1116	496
35°	922	929	960	980	994	576
45°	745	758	797	835	857	575
55°	562	579	632	683	706	502
65°	375	397	463	524	548	370
75°	190	225	301	337	337	202
85°	40	68	75	72	71	49
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1254.6	1254.6	1254.6	1254.6	1254.6
2.5°	1259.5	1249.7	1254.6	1253.4	1247.3
5°	1253.4	1244.8	1249.7	1248.5	1247.3
7.5°	1244.8	1236.3	1242.4	1241.2	1242.4
10°	1230.2	1222.8	1230.2	1231.4	1231.4
12.5°	1211.8	1205.7	1215.5	1217.9	1220.4
15°	1192.2	1187.3	1198.3	1203.2	1206.9
17.5°	1167.7	1164.1	1177.5	1183.6	1188.5
20°	1140.8	1139.6	1154.3	1160.4	1166.5
22.5°	1110.2	1110.2	1127.3	1134.7	1143.3
25°	1077.2	1078.4	1098.0	1107.8	1116.3
27.5°	1041.7	1042.9	1066.1	1078.4	1088.2
30°	1002.5	1007.4	1031.9	1047.8	1058.8
32.5°	963.3	969.4	996.4	1014.7	1027.0
35°	921.7	929.0	959.6	980.5	993.9
37.5°	878.9	887.4	920.5	943.7	959.6
40°	836.0	845.8	880.1	907.0	925.4
42.5°	790.7	801.7	839.7	871.5	891.1
45°	745.4	757.7	796.8	834.8	856.8
47.5°	700.1	714.8	756.5	798.1	821.3
50°	653.6	668.3	712.4	760.1	783.4
52.5°	607.1	624.3	673.2	722.2	745.4
55°	561.8	579.0	631.6	683.0	706.3
57.5°	515.3	532.5	590.0	643.8	667.1
60°	467.6	487.2	547.1	602.2	627.9
62.5°	421.1	441.9	505.5	564.3	588.8
65°	374.6	396.6	462.7	523.9	548.4
67.5°	326.8	352.5	421.1	483.5	509.2
70°	280.3	308.5	380.7	443.1	467.6
72.5°	235.0	265.6	340.3	403.9	418.6
75°	189.7	225.2	301.1	336.6	336.6
77.5°	146.9	186.1	257.0	270.5	277.9
80°	106.5	149.3	193.4	209.3	206.9
82.5°	71.0	113.8	138.3	138.3	134.6
85°	40.4	68.5	74.7	72.2	71.0
87.5°	17.1	25.7	23.3	18.4	15.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)