

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: P260940

Luminaire Tested: **24CZ-LD5-35SE-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260940  
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-LD5-35SE-UNV-L92765-W2A1-U-4500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3223.0 lumens  
Efficiency: N/A  
Efficacy: 121.6 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

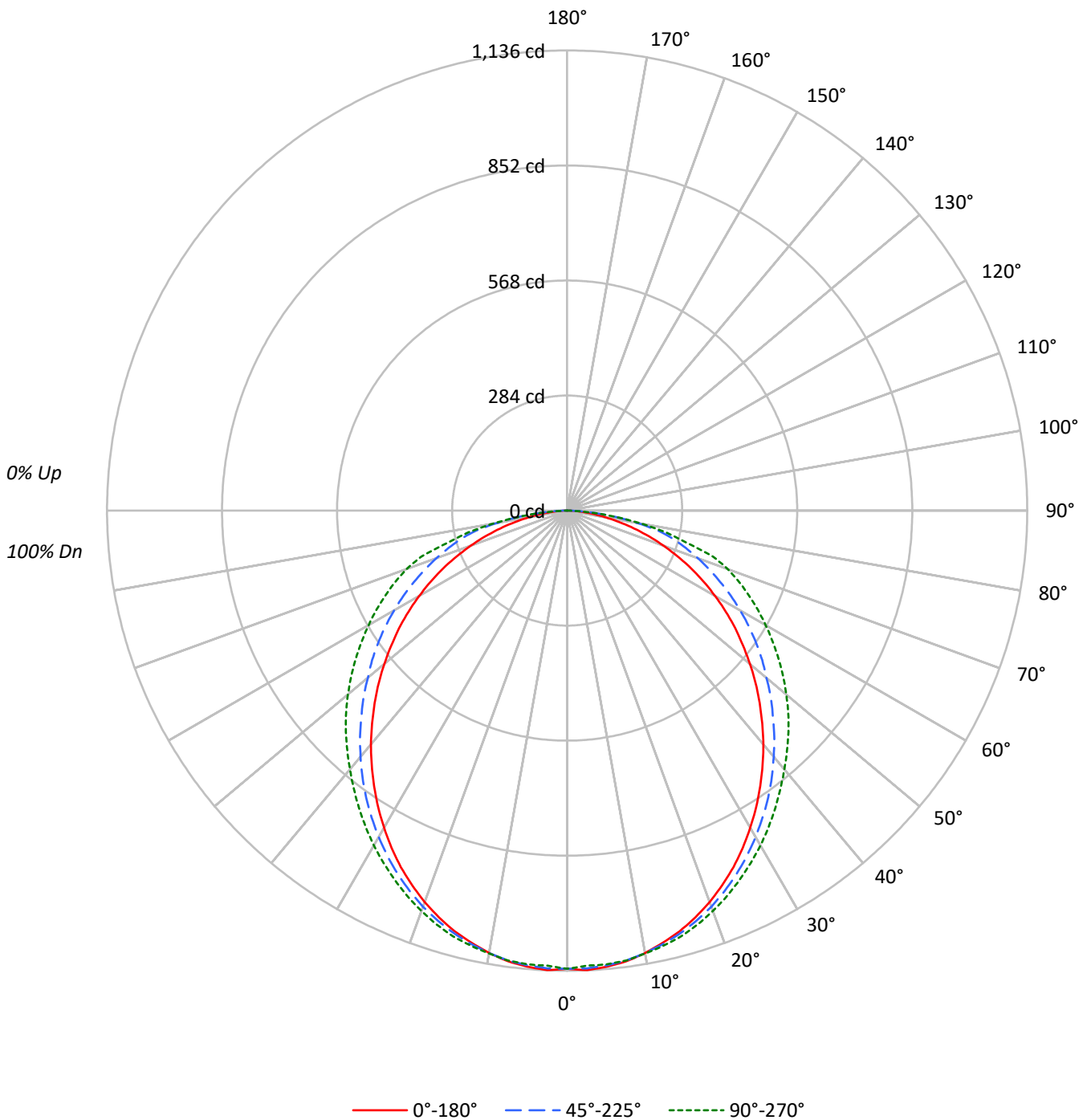
Input Watts (W): 26.505  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	1522	1522	1522
5°	1526	1522	1519
10°	1515	1515	1517
15°	1497	1505	1516
20°	1473	1490	1506
25°	1442	1470	1494
30°	1404	1445	1483
35°	1365	1421	1472
40°	1324	1394	1465
45°	1279	1367	1470
50°	1234	1344	1478
55°	1188	1336	1494
60°	1134	1327	1523
65°	1075	1328	1574
70°	994	1350	1658
75°	889	1411	1578
80°	744	1351	1445
85°	562	1039	988



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.9	3.3
10°-20°	304.2	9.4
20°-30°	454.8	14.1
30°-40°	539.5	16.7
40°-50°	555.3	17.2
50°-60°	509.4	15.8
60°-70°	411.9	12.8
70°-80°	267.3	8.3
80°-90°	73.7	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°	865.9	26.9
0°-40°	1405.4	43.6
0°-60°	2470.1	76.6
0°-90°	3223.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3223.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1131	1131	1131	1131	1131	
5°	1130	1122	1127	1126	1124	107
15°	1075	1070	1080	1085	1088	303
25°	971	972	990	999	1006	447
35°	831	838	865	884	896	520
45°	672	683	718	753	772	519
55°	506	522	569	616	637	452
65°	338	358	417	472	494	334
75°	171	203	272	304	304	182
85°	36	62	67	65	64	45
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1131.1	1131.1	1131.1	1131.1	1131.1
2.5°	1135.5	1126.7	1131.1	1130.0	1124.5
5°	1130.0	1122.3	1126.7	1125.6	1124.5
7.5°	1122.3	1114.6	1120.1	1119.0	1120.1
10°	1109.0	1102.4	1109.0	1110.1	1110.1
12.5°	1092.5	1087.0	1095.8	1098.0	1100.2
15°	1074.8	1070.4	1080.3	1084.8	1088.1
17.5°	1052.8	1049.4	1061.6	1067.1	1071.5
20°	1028.5	1027.4	1040.6	1046.1	1051.7
22.5°	1000.9	1000.9	1016.3	1023.0	1030.7
25°	971.1	972.2	989.9	998.7	1006.4
27.5°	939.1	940.2	961.2	972.2	981.0
30°	903.8	908.2	930.3	944.6	954.5
32.5°	868.5	874.0	898.3	914.8	925.9
35°	830.9	837.6	865.2	883.9	896.1
37.5°	792.3	800.1	829.8	850.8	865.2
40°	753.7	762.5	793.4	817.7	834.3
42.5°	712.9	722.8	757.0	785.7	803.4
45°	672.0	683.1	718.4	752.6	772.5
47.5°	631.2	644.5	682.0	719.5	740.5
50°	589.3	602.5	642.2	685.3	706.3
52.5°	547.3	562.8	606.9	651.1	672.0
55°	506.5	522.0	569.4	615.8	636.7
57.5°	464.6	480.0	531.9	580.5	601.4
60°	421.5	439.2	493.3	542.9	566.1
62.5°	379.6	398.4	455.8	508.7	530.8
65°	337.7	357.5	417.1	472.3	494.4
67.5°	294.6	317.8	379.6	435.9	459.1
70°	252.7	278.1	343.2	399.5	421.5
72.5°	211.9	239.5	306.8	364.2	377.4
75°	171.0	203.0	271.5	303.5	303.5
77.5°	132.4	167.7	231.7	243.9	250.5
80°	96.0	134.6	174.4	188.7	186.5
82.5°	64.0	102.6	124.7	124.7	121.4
85°	36.4	61.8	67.3	65.1	64.0
87.5°	15.4	23.2	21.0	16.6	14.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)