

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: P260850

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260850  
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-L92765-W2A1-U-4500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3188.0 lumens  
Efficiency: N/A  
Efficacy: 129.4 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

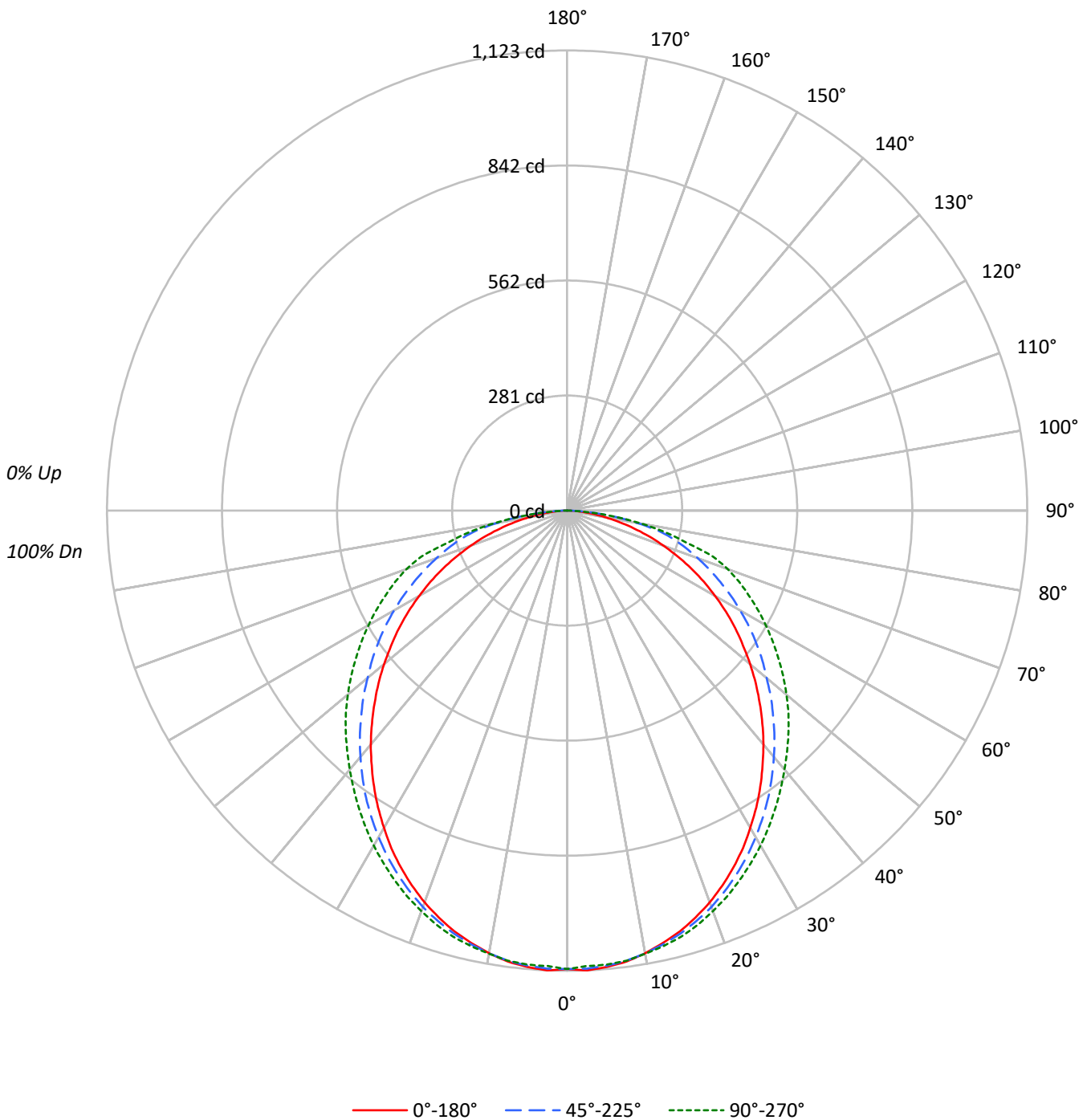
Input Watts (W): 24.645  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1505	1505	1505
5°	1510	1505	1502
10°	1499	1499	1500
15°	1481	1489	1499
20°	1457	1474	1489
25°	1426	1454	1478
30°	1389	1430	1467
35°	1350	1406	1456
40°	1309	1378	1449
45°	1265	1352	1454
50°	1220	1330	1462
55°	1175	1321	1477
60°	1122	1313	1507
65°	1063	1314	1557
70°	983	1336	1640
75°	880	1396	1561
80°	736	1337	1430
85°	556	1028	977



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.7	3.3
10°-20°	300.9	9.4
20°-30°	449.8	14.1
30°-40°	533.7	16.7
40°-50°	549.3	17.2
50°-60°	503.9	15.8
60°-70°	407.4	12.8
70°-80°	264.4	8.3
80°-90°	72.9	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°	856.5	26.9
0°-40°	1390.1	43.6
0°-60°	2443.3	76.6
0°-90°	3188.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3188.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1119	1119	1119	1119	1119	
5°	1118	1110	1114	1113	1112	106
15°	1063	1059	1069	1073	1076	299
25°	960	962	979	988	996	442
35°	822	828	856	874	886	514
45°	665	676	711	744	764	513
55°	501	516	563	609	630	448
65°	334	354	413	467	489	330
75°	169	201	268	300	300	180
85°	36	61	67	64	63	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1118.8	1118.8	1118.8	1118.8	1118.8
2.5°	1123.2	1114.5	1118.8	1117.7	1112.3
5°	1117.7	1110.1	1114.5	1113.4	1112.3
7.5°	1110.1	1102.4	1107.9	1106.8	1107.9
10°	1097.0	1090.4	1097.0	1098.1	1098.1
12.5°	1080.6	1075.2	1083.9	1086.1	1088.3
15°	1063.2	1058.8	1068.6	1073.0	1076.3
17.5°	1041.3	1038.0	1050.1	1055.5	1059.9
20°	1017.3	1016.2	1029.3	1034.8	1040.2
22.5°	990.0	990.0	1005.3	1011.9	1019.5
25°	960.5	961.6	979.1	987.8	995.5
27.5°	928.9	930.0	950.7	961.6	970.4
30°	894.0	898.3	920.2	934.4	944.2
32.5°	859.0	864.5	888.5	904.9	915.8
35°	821.9	828.5	855.8	874.3	886.3
37.5°	783.7	791.4	820.8	841.6	855.8
40°	745.5	754.2	784.8	808.8	825.2
42.5°	705.1	715.0	748.8	777.2	794.6
45°	664.7	675.7	710.6	744.4	764.1
47.5°	624.4	637.5	674.6	711.7	732.4
50°	582.9	596.0	635.3	677.8	698.6
52.5°	541.4	556.7	600.3	644.0	664.7
55°	501.0	516.3	563.2	609.1	629.8
57.5°	459.5	474.8	526.1	574.1	594.9
60°	417.0	434.4	487.9	537.0	560.0
62.5°	375.5	394.0	450.8	503.2	525.0
65°	334.0	353.7	412.6	467.2	489.0
67.5°	291.4	314.4	375.5	431.2	454.1
70°	250.0	275.1	339.5	395.1	417.0
72.5°	209.6	236.9	303.4	360.2	373.3
75°	169.2	200.8	268.5	300.2	300.2
77.5°	131.0	165.9	229.2	241.2	247.8
80°	95.0	133.2	172.5	186.7	184.5
82.5°	63.3	101.5	123.3	123.3	120.1
85°	36.0	61.1	66.6	64.4	63.3
87.5°	15.3	22.9	20.7	16.4	14.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)