

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: P260865

Luminaire Tested: **24CZ-LD5-45-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260865  
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-LD5-45-UNV-L92765-W2A1-U-3000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3655.0 lumens  
Efficiency: N/A  
Efficacy: 117.3 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

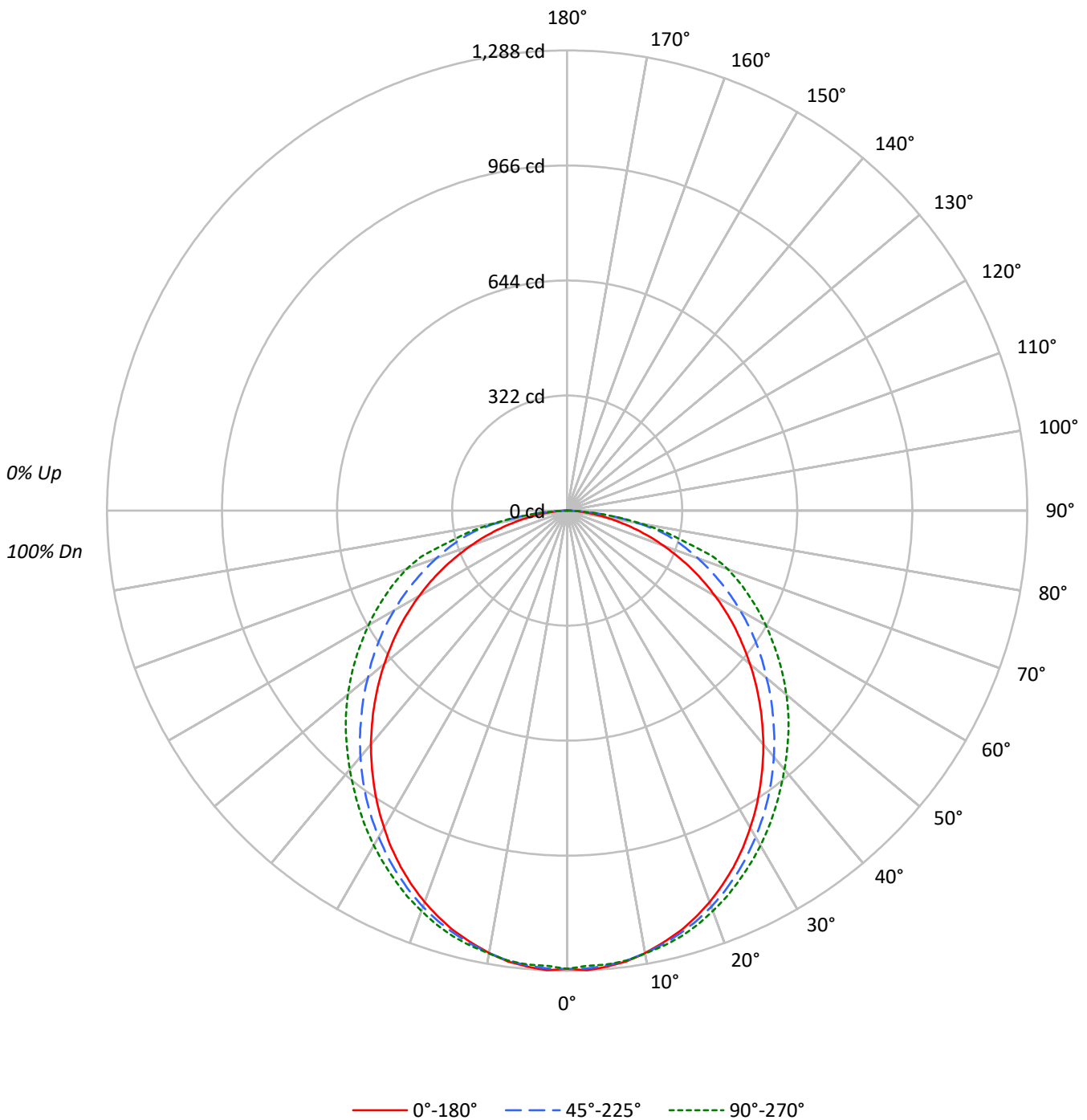
Input Watts (W): 31.155  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1726	1726	1726
5°	1731	1726	1722
10°	1718	1718	1720
15°	1698	1707	1719
20°	1670	1690	1708
25°	1635	1666	1694
30°	1592	1639	1682
35°	1548	1611	1669
40°	1501	1580	1662
45°	1450	1550	1667
50°	1399	1524	1676
55°	1347	1515	1694
60°	1286	1505	1728
65°	1219	1506	1785
70°	1127	1531	1880
75°	1009	1601	1789
80°	844	1532	1639
85°	638	1178	1121



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	121.2	3.3
10°-20°	345.0	9.4
20°-30°	515.7	14.1
30°-40°	611.8	16.7
40°-50°	629.7	17.2
50°-60°	577.7	15.8
60°-70°	467.1	12.8
70°-80°	303.2	8.3
80°-90°	83.6	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°	981.9	26.9
0°-40°	1593.8	43.6
0°-60°	2801.2	76.6
0°-90°	3655.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3655.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1283	1283	1283	1283	1283	
5°	1282	1273	1278	1276	1275	122
15°	1219	1214	1225	1230	1234	343
25°	1101	1102	1122	1132	1141	507
35°	942	950	981	1002	1016	589
45°	762	775	815	854	876	588
55°	574	592	646	698	722	513
65°	383	406	473	536	561	378
75°	194	230	308	344	344	206
85°	41	70	76	74	73	51
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1282.7	1282.7	1282.7	1282.7	1282.7
2.5°	1287.7	1277.7	1282.7	1281.5	1275.2
5°	1281.5	1272.7	1277.7	1276.5	1275.2
7.5°	1272.7	1263.9	1270.2	1268.9	1270.2
10°	1257.7	1250.2	1257.7	1258.9	1258.9
12.5°	1238.9	1232.7	1242.7	1245.2	1247.7
15°	1218.9	1213.9	1225.1	1230.2	1233.9
17.5°	1193.9	1190.1	1203.9	1210.1	1215.1
20°	1166.3	1165.1	1180.1	1186.4	1192.6
22.5°	1135.0	1135.0	1152.6	1160.1	1168.8
25°	1101.3	1102.5	1122.5	1132.5	1141.3
27.5°	1065.0	1066.2	1090.0	1102.5	1112.5
30°	1024.9	1029.9	1055.0	1071.2	1082.5
32.5°	984.9	991.1	1018.7	1037.4	1049.9
35°	942.3	949.8	981.1	1002.4	1016.2
37.5°	898.5	907.3	941.1	964.9	981.1
40°	854.7	864.7	899.8	927.3	946.1
42.5°	808.4	819.7	858.5	891.0	911.0
45°	762.1	774.6	814.7	853.5	876.0
47.5°	715.8	730.8	773.4	815.9	839.7
50°	668.3	683.3	728.3	777.1	800.9
52.5°	620.7	638.2	688.3	738.3	762.1
55°	574.4	591.9	645.7	698.3	722.1
57.5°	526.9	544.4	603.2	658.3	682.0
60°	478.0	498.1	559.4	615.7	642.0
62.5°	430.5	451.8	516.8	576.9	601.9
65°	382.9	405.5	473.0	535.6	560.6
67.5°	334.1	360.4	430.5	494.3	520.6
70°	286.6	315.4	389.2	453.0	478.0
72.5°	240.3	271.6	347.9	413.0	428.0
75°	194.0	230.3	307.9	344.1	344.1
77.5°	150.2	190.2	262.8	276.6	284.1
80°	108.9	152.7	197.7	214.0	211.5
82.5°	72.6	116.4	141.4	141.4	137.7
85°	41.3	70.1	76.3	73.8	72.6
87.5°	17.5	26.3	23.8	18.8	16.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)