

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: P260567

Luminaire Tested: **24CZ-LD5-45-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260567  
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-L83050-W2A1-U-3000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4238.0 lumens  
Efficiency: N/A  
Efficacy: 135.1 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

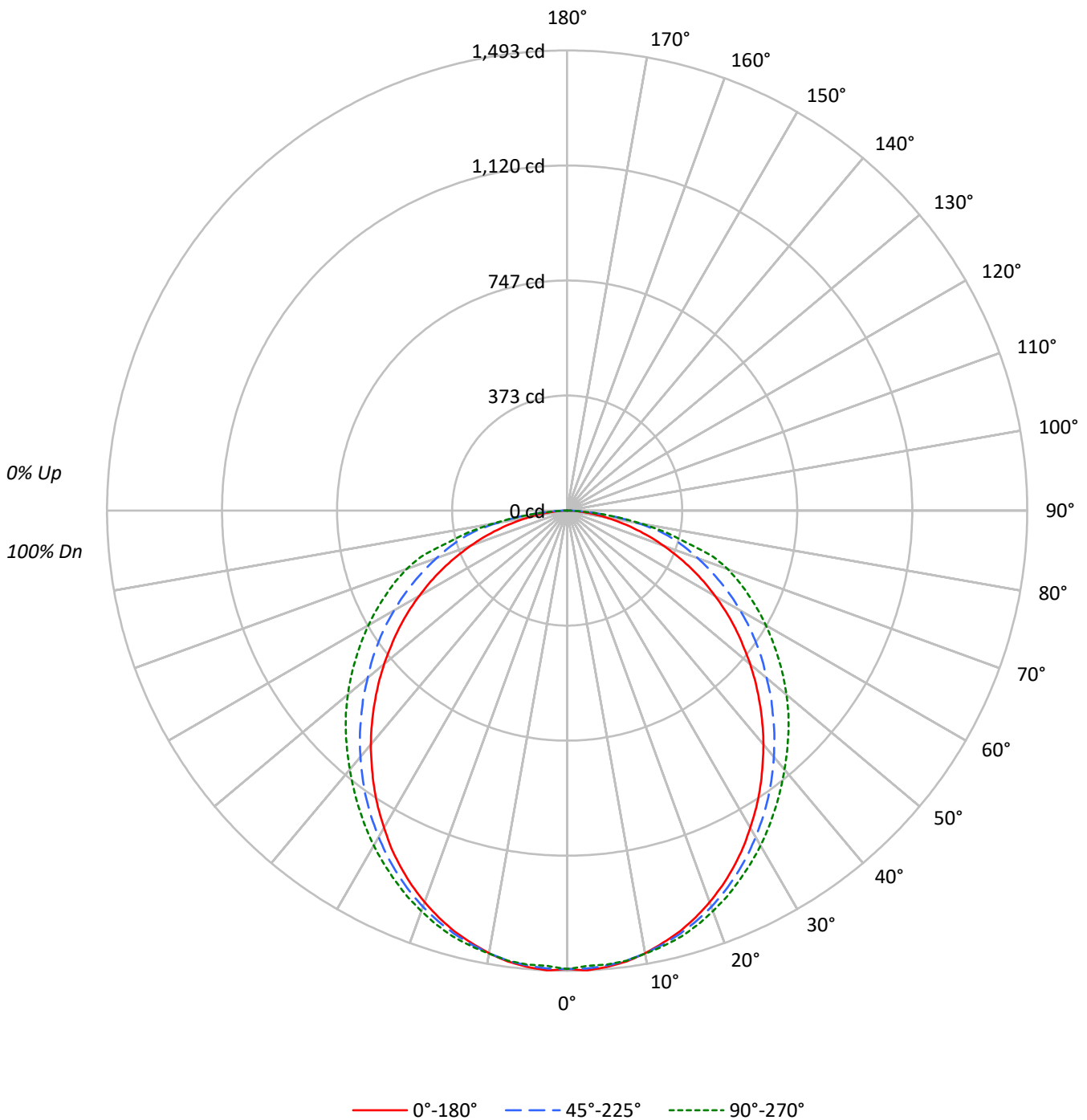
Input Watts (W): 31.371132  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2001	2001	2001
5°	2007	2001	1997
10°	1992	1992	1994
15°	1969	1979	1993
20°	1936	1959	1980
25°	1896	1932	1965
30°	1846	1900	1950
35°	1795	1869	1935
40°	1741	1832	1927
45°	1682	1797	1933
50°	1622	1768	1944
55°	1562	1756	1964
60°	1492	1745	2003
65°	1414	1746	2070
70°	1307	1775	2181
75°	1169	1856	2074
80°	978	1777	1900
85°	739	1366	1300



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	140.5	3.3
10°-20°	400.0	9.4
20°-30°	598.0	14.1
30°-40°	709.4	16.7
40°-50°	730.2	17.2
50°-60°	669.8	15.8
60°-70°	541.6	12.8
70°-80°	351.5	8.3
80°-90°	96.9	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°	1138.6	26.9
0°-40°	1848.0	43.6
0°-60°	3248.0	76.6
0°-90°	4238.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4238.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1487	1487	1487	1487	1487	
5°	1486	1476	1482	1480	1479	141
15°	1413	1408	1421	1426	1431	398
25°	1277	1278	1302	1313	1323	588
35°	1093	1101	1138	1162	1178	683
45°	884	898	945	990	1016	682
55°	666	686	749	810	837	595
65°	444	470	548	621	650	439
75°	225	267	357	399	399	239
85°	48	81	88	86	84	59
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1487.3	1487.3	1487.3	1487.3	1487.3
2.5°	1493.1	1481.5	1487.3	1485.9	1478.6
5°	1485.9	1475.7	1481.5	1480.1	1478.6
7.5°	1475.7	1465.6	1472.8	1471.4	1472.8
10°	1458.3	1449.6	1458.3	1459.7	1459.7
12.5°	1436.5	1429.3	1440.9	1443.8	1446.7
15°	1413.3	1407.5	1420.6	1426.4	1430.7
17.5°	1384.3	1379.9	1395.9	1403.2	1409.0
20°	1352.4	1350.9	1368.3	1375.6	1382.8
22.5°	1316.1	1316.1	1336.4	1345.1	1355.3
25°	1276.9	1278.4	1301.6	1313.2	1323.3
27.5°	1234.8	1236.3	1263.9	1278.4	1290.0
30°	1188.4	1194.2	1223.2	1242.1	1255.2
32.5°	1142.0	1149.2	1181.1	1202.9	1217.4
35°	1092.6	1101.3	1137.6	1162.3	1178.2
37.5°	1041.8	1052.0	1091.2	1118.8	1137.6
40°	991.1	1002.7	1043.3	1075.2	1097.0
42.5°	937.4	950.4	995.4	1033.1	1056.4
45°	883.7	898.2	944.6	989.6	1015.7
47.5°	830.0	847.4	896.7	946.1	973.6
50°	774.9	792.3	844.5	901.1	928.7
52.5°	719.7	740.0	798.1	856.1	883.7
55°	666.0	686.3	748.7	809.7	837.3
57.5°	610.9	631.2	699.4	763.2	790.8
60°	554.3	577.5	648.6	713.9	744.4
62.5°	499.2	523.8	599.3	668.9	698.0
65°	444.0	470.1	548.5	621.0	650.1
67.5°	387.4	417.9	499.2	573.2	603.6
70°	332.3	365.7	451.3	525.3	554.3
72.5°	278.6	314.9	403.4	478.8	496.3
75°	224.9	267.0	357.0	399.0	399.0
77.5°	174.1	220.6	304.7	320.7	329.4
80°	126.2	177.0	229.3	248.1	245.2
82.5°	84.2	134.9	164.0	164.0	159.6
85°	47.9	81.3	88.5	85.6	84.2
87.5°	20.3	30.5	27.6	21.8	18.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)