

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: P260730

Luminaire Tested: **24CZ-LD5-45-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260730  
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-L82765-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: 4234.0 lumens  
Efficiency: N/A  
Efficacy: 135.5 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

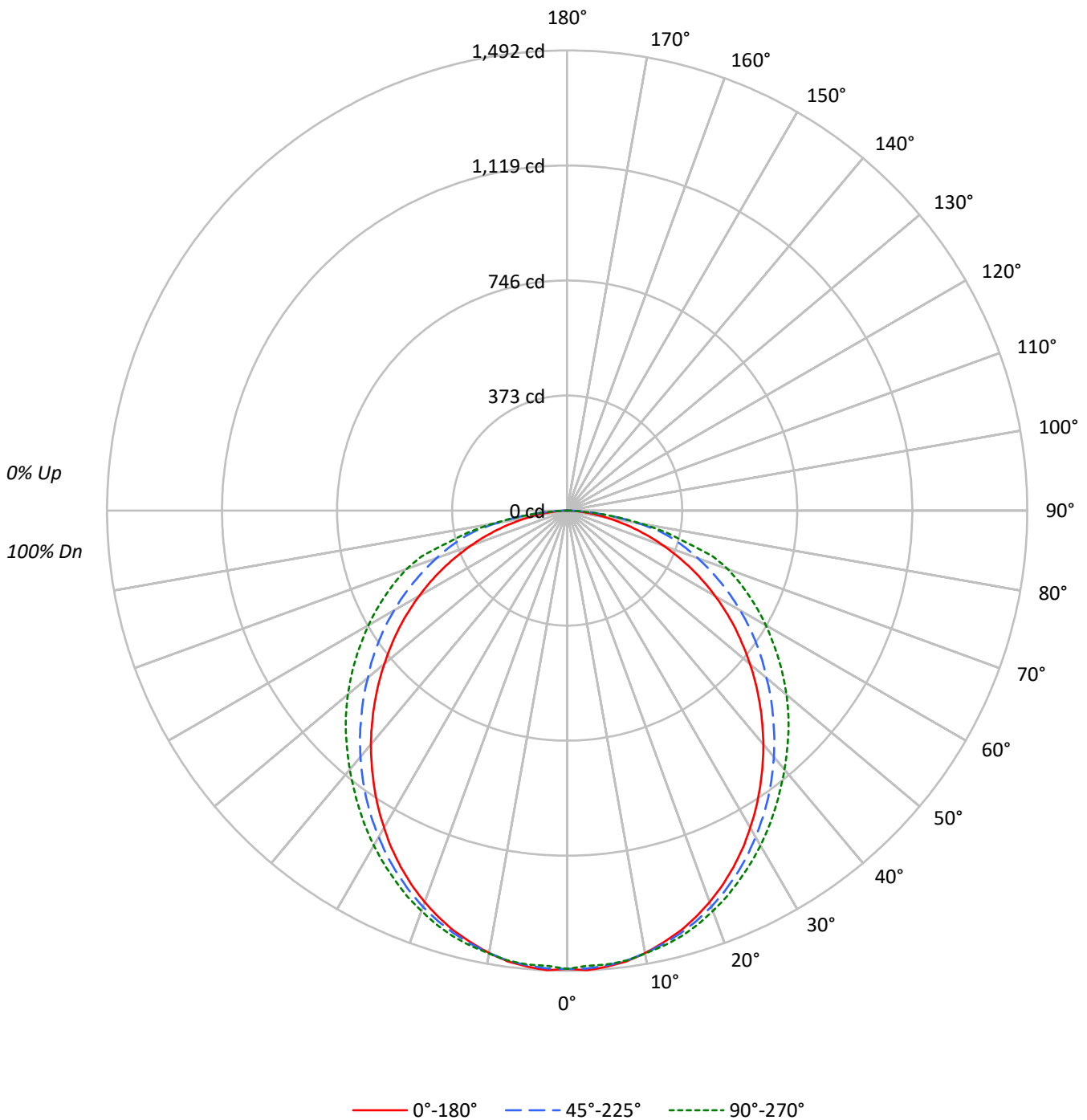
Input Watts (W): 31.248  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1999	1999	1999
5°	2005	1999	1995
10°	1990	1990	1993
15°	1967	1977	1991
20°	1935	1957	1978
25°	1894	1931	1963
30°	1845	1899	1948
35°	1793	1867	1933
40°	1739	1831	1925
45°	1680	1796	1931
50°	1620	1766	1942
55°	1561	1755	1962
60°	1490	1744	2001
65°	1412	1745	2068
70°	1306	1773	2179
75°	1168	1854	2073
80°	977	1774	1898
85°	738	1365	1298



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	140.4	3.3
10°-20°	399.6	9.4
20°-30°	597.4	14.1
30°-40°	708.7	16.7
40°-50°	729.5	17.2
50°-60°	669.2	15.8
60°-70°	541.1	12.8
70°-80°	351.2	8.3
80°-90°	96.8	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°	1137.5	26.9
0°-40°	1846.2	43.6
0°-60°	3244.9	76.6
0°-90°	4234.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4234.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1486	1486	1486	1486	1486	
5°	1484	1474	1480	1479	1477	141
15°	1412	1406	1419	1425	1429	398
25°	1276	1277	1300	1312	1322	587
35°	1092	1100	1136	1161	1177	683
45°	883	897	944	989	1015	681
55°	665	686	748	809	836	594
65°	444	470	548	620	650	438
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°	1485.9	1485.9	1485.9	1485.9	1485.9
2.5°	1491.7	1480.1	1485.9	1484.5	1477.2
5°	1484.5	1474.3	1480.1	1478.7	1477.2
7.5°	1474.3	1464.2	1471.4	1470.0	1471.4
10°	1456.9	1448.2	1456.9	1458.4	1458.4
12.5°	1435.2	1427.9	1439.5	1442.4	1445.3
15°	1412.0	1406.2	1419.2	1425.0	1429.4
17.5°	1383.0	1378.6	1394.6	1401.8	1407.6
20°	1351.1	1349.6	1367.0	1374.3	1381.5
22.5°	1314.9	1314.9	1335.1	1343.8	1354.0
25°	1275.7	1277.2	1300.4	1312.0	1322.1
27.5°	1233.7	1235.1	1262.7	1277.2	1288.8
30°	1187.3	1193.1	1222.1	1240.9	1254.0
32.5°	1140.9	1148.1	1180.0	1201.8	1216.3
35°	1091.6	1100.3	1136.5	1161.2	1177.1
37.5°	1040.9	1051.0	1090.2	1117.7	1136.5
40°	990.1	1001.7	1042.3	1074.2	1096.0
42.5°	936.5	949.5	994.5	1032.2	1055.4
45°	882.9	897.3	943.7	988.7	1014.8
47.5°	829.2	846.6	895.9	945.2	972.7
50°	774.1	791.5	843.7	900.2	927.8
52.5°	719.0	739.3	797.3	855.3	882.9
55°	665.4	685.7	748.0	808.9	836.5
57.5°	610.3	630.6	698.7	762.5	790.1
60°	553.8	577.0	648.0	713.2	743.7
62.5°	498.7	523.3	598.7	668.3	697.3
65°	443.6	469.7	548.0	620.5	649.5
67.5°	387.1	417.5	498.7	572.6	603.1
70°	332.0	365.3	450.8	524.8	553.8
72.5°	278.3	314.6	403.0	478.4	495.8
75°	224.7	266.7	356.6	398.7	398.7
77.5°	174.0	220.4	304.4	320.4	329.1
80°	126.1	176.9	229.0	247.9	245.0
82.5°	84.1	134.8	163.8	163.8	159.5
85°	47.8	81.2	88.4	85.5	84.1
87.5°	20.3	30.4	27.5	21.7	18.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)