

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: P260724

Luminaire Tested: **24CZ-LD5-40-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260724  
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-LD5-40-UNV-L82765-W2A1-U-4500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4138.0 lumens  
Efficiency: N/A  
Efficacy: 143.5 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

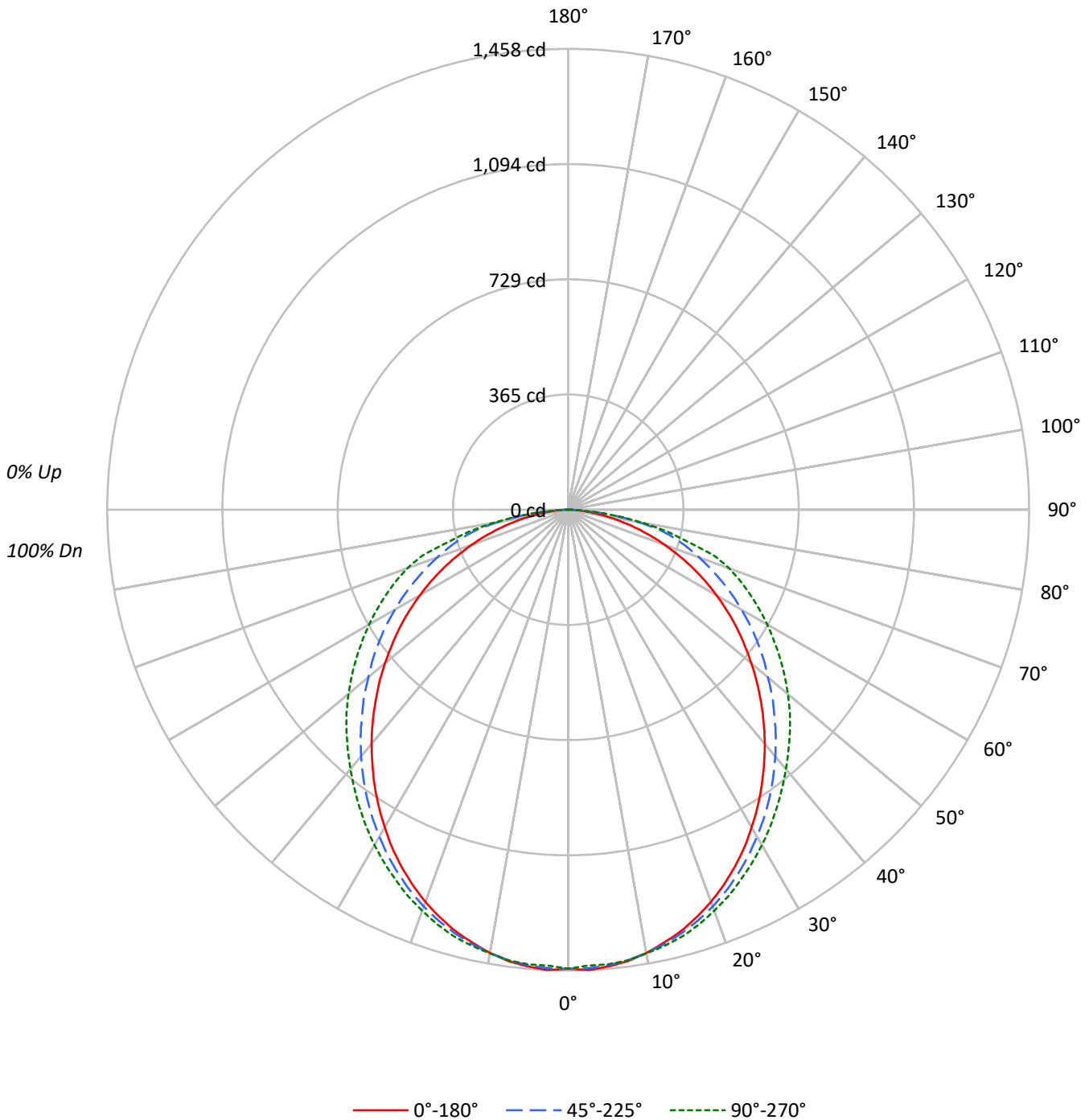
Input Watts (W): 28.83  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1954	1954	1954
5°	1959	1954	1950
10°	1945	1945	1947
15°	1922	1932	1946
20°	1891	1913	1933
25°	1851	1887	1918
30°	1803	1856	1904
35°	1752	1825	1890
40°	1700	1789	1881
45°	1642	1755	1887
50°	1584	1726	1898
55°	1525	1715	1918
60°	1456	1704	1956
65°	1380	1705	2021
70°	1276	1733	2129
75°	1142	1812	2025
80°	955	1735	1855
85°	722	1334	1269



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.2	3.3
10°-20°	390.6	9.4
20°-30°	583.9	14.1
30°-40°	692.7	16.7
40°-50°	712.9	17.2
50°-60°	654.0	15.8
60°-70°	528.8	12.8
70°-80°	343.2	8.3
80°-90°	94.6	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°	1111.7	26.9
0°-40°	1804.4	43.6
0°-60°	3171.4	76.6
0°-90°	4138.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4138.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1452	1452	1452	1452	1452	
5°	1451	1441	1447	1445	1444	138
15°	1380	1374	1387	1393	1397	389
25°	1247	1248	1271	1282	1292	574
35°	1067	1075	1111	1135	1150	667
45°	863	877	922	966	992	666
55°	650	670	731	791	818	581
65°	434	459	536	606	635	428
75°	220	261	348	390	390	233
85°	47	79	86	84	82	57
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1452.2	1452.2	1452.2	1452.2	1452.2
2.5°	1457.9	1446.6	1452.2	1450.8	1443.7
5°	1450.8	1440.9	1446.6	1445.1	1443.7
7.5°	1440.9	1431.0	1438.1	1436.6	1438.1
10°	1423.9	1415.4	1423.9	1425.3	1425.3
12.5°	1402.6	1395.6	1406.9	1409.7	1412.6
15°	1380.0	1374.3	1387.0	1392.7	1397.0
17.5°	1351.6	1347.4	1363.0	1370.0	1375.7
20°	1320.5	1319.0	1336.0	1343.1	1350.2
22.5°	1285.0	1285.0	1304.9	1313.4	1323.3
25°	1246.8	1248.2	1270.9	1282.2	1292.1
27.5°	1205.7	1207.1	1234.0	1248.2	1259.5
30°	1160.4	1166.0	1194.4	1212.8	1225.5
32.5°	1115.0	1122.1	1153.3	1174.5	1188.7
35°	1066.9	1075.4	1110.8	1134.9	1150.4
37.5°	1017.3	1027.2	1065.4	1092.4	1110.8
40°	967.7	979.0	1018.7	1049.9	1071.1
42.5°	915.3	928.0	971.9	1008.8	1031.4
45°	862.8	877.0	922.3	966.3	991.8
47.5°	810.4	827.4	875.6	923.8	950.7
50°	756.6	773.6	824.6	879.8	906.8
52.5°	702.7	722.6	779.2	835.9	862.8
55°	650.3	670.1	731.1	790.6	817.5
57.5°	596.5	616.3	682.9	745.2	772.2
60°	541.2	563.9	633.3	697.1	726.8
62.5°	487.4	511.5	585.1	653.1	681.5
65°	433.5	459.0	535.6	606.4	634.7
67.5°	378.3	408.0	487.4	559.6	589.4
70°	324.4	357.0	440.6	512.9	541.2
72.5°	272.0	307.4	393.9	467.5	484.5
75°	219.6	260.7	348.5	389.6	389.6
77.5°	170.0	215.4	297.5	313.1	321.6
80°	123.3	172.8	223.9	242.3	239.4
82.5°	82.2	131.8	160.1	160.1	155.8
85°	46.8	79.3	86.4	83.6	82.2
87.5°	19.8	29.8	26.9	21.3	18.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)