

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: P260737

Luminaire Tested: **24CZ-LD5-45-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260737  
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-6500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4688.0 lumens  
Efficiency: N/A  
Efficacy: 142.8 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

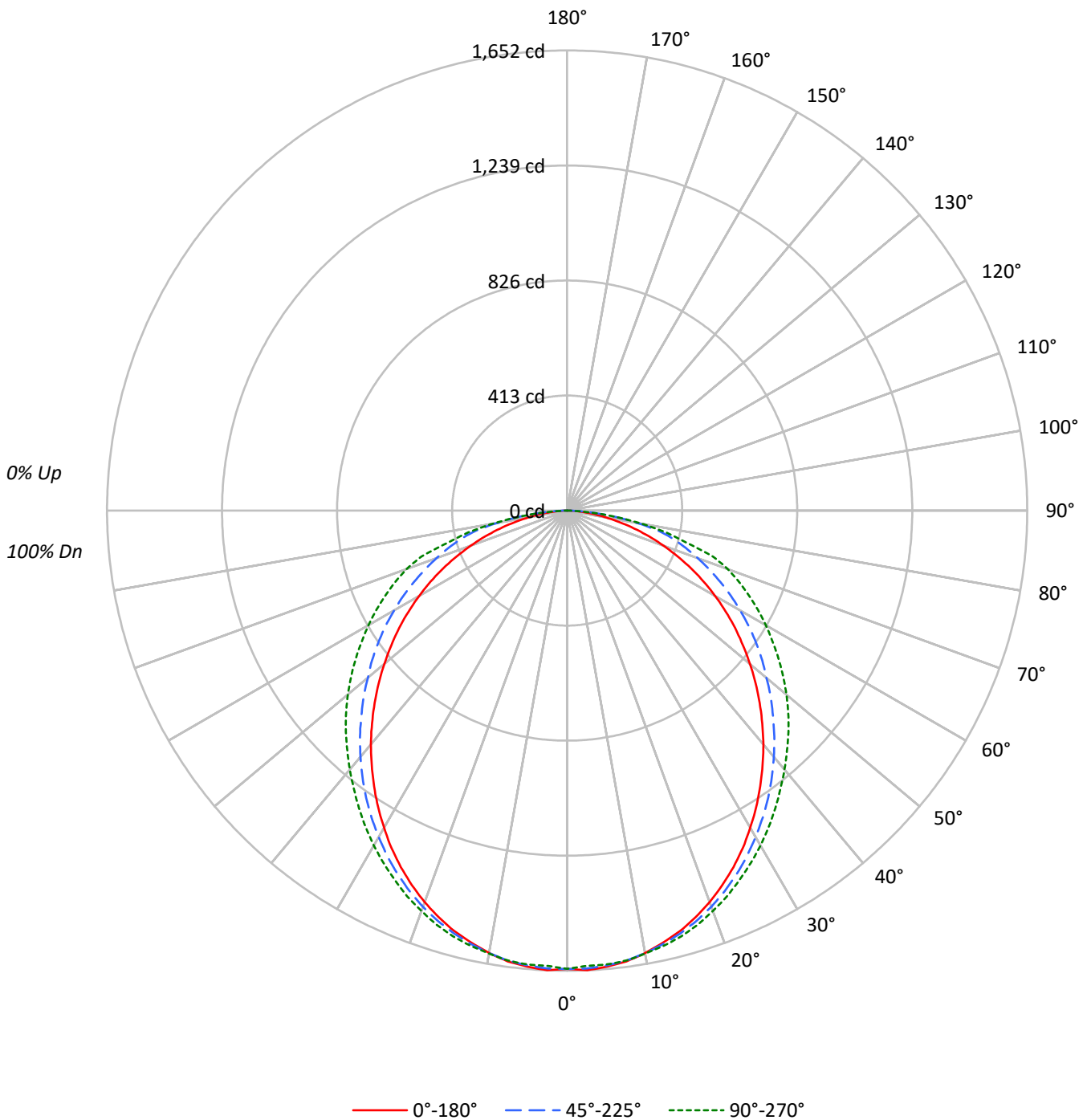
Input Watts (W): 32.829  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68					68			
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57					57			
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32					32			
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29					29			
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26					26			
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24					24			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2214	2214	2214
5°	2220	2213	2209
10°	2204	2204	2206
15°	2178	2189	2204
20°	2142	2167	2190
25°	2097	2138	2173
30°	2042	2102	2157
35°	1985	2067	2141
40°	1926	2027	2131
45°	1860	1988	2138
50°	1794	1955	2150
55°	1728	1943	2173
60°	1650	1931	2216
65°	1564	1932	2289
70°	1446	1964	2412
75°	1293	2053	2295
80°	1082	1965	2102
85°	818	1511	1437



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	155.5	3.3
10°-20°	442.5	9.4
20°-30°	661.5	14.1
30°-40°	784.7	16.7
40°-50°	807.7	17.2
50°-60°	741.0	15.8
60°-70°	599.1	12.8
70°-80°	388.8	8.3
80°-90°	107.2	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°	1259.5	26.9
0°-40°	2044.2	43.6
0°-60°	3592.9	76.6
0°-90°	4688.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4688.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1645	1645	1645	1645	1645	
5°	1644	1632	1639	1637	1636	156
15°	1563	1557	1571	1578	1583	440
25°	1412	1414	1440	1453	1464	650
35°	1209	1218	1258	1286	1303	756
45°	978	994	1045	1095	1124	754
55°	737	759	828	896	926	658
65°	491	520	607	687	719	485
75°	249	295	395	441	441	264
85°	53	90	98	95	93	65
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1645.2	1645.2	1645.2	1645.2	1645.2
2.5°	1651.7	1638.8	1645.2	1643.6	1635.6
5°	1643.6	1632.4	1638.8	1637.2	1635.6
7.5°	1632.4	1621.2	1629.2	1627.6	1629.2
10°	1613.1	1603.5	1613.1	1614.7	1614.7
12.5°	1589.1	1581.0	1593.9	1597.1	1600.3
15°	1563.4	1557.0	1571.4	1577.8	1582.6
17.5°	1531.3	1526.5	1544.1	1552.1	1558.6
20°	1496.0	1494.4	1513.6	1521.7	1529.7
22.5°	1455.8	1455.8	1478.3	1487.9	1499.2
25°	1412.5	1414.1	1439.8	1452.6	1463.9
27.5°	1366.0	1367.6	1398.1	1414.1	1426.9
30°	1314.6	1321.0	1353.1	1374.0	1388.4
32.5°	1263.2	1271.3	1306.6	1330.6	1346.7
35°	1208.7	1218.3	1258.4	1285.7	1303.4
37.5°	1152.5	1163.7	1207.0	1237.5	1258.4
40°	1096.3	1109.1	1154.1	1189.4	1213.5
42.5°	1036.9	1051.4	1101.1	1142.8	1168.5
45°	977.5	993.6	1044.9	1094.7	1123.6
47.5°	918.1	937.4	992.0	1046.5	1077.0
50°	857.1	876.4	934.2	996.8	1027.3
52.5°	796.1	818.6	882.8	947.0	977.5
55°	736.7	759.2	828.2	895.7	926.2
57.5°	675.8	698.2	773.7	844.3	874.8
60°	613.2	638.8	717.5	789.7	823.4
62.5°	552.2	579.4	662.9	740.0	772.1
65°	491.2	520.1	606.7	687.0	719.1
67.5°	428.6	462.3	552.2	634.0	667.7
70°	367.6	404.5	499.2	581.1	613.2
72.5°	308.2	348.3	446.2	529.7	548.9
75°	248.8	295.3	394.9	441.4	441.4
77.5°	192.6	244.0	337.1	354.7	364.4
80°	139.6	195.8	253.6	274.5	271.3
82.5°	93.1	149.3	181.4	181.4	176.6
85°	53.0	89.9	97.9	94.7	93.1
87.5°	22.5	33.7	30.5	24.1	20.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)