

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: P260651

Luminaire Tested: **24CZ-LD5-50-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260651  
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-LD5-50-UNV-L93050-W2A1-U-5000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4694.3 lumens  
Efficiency: N/A  
Efficacy: 126.1 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

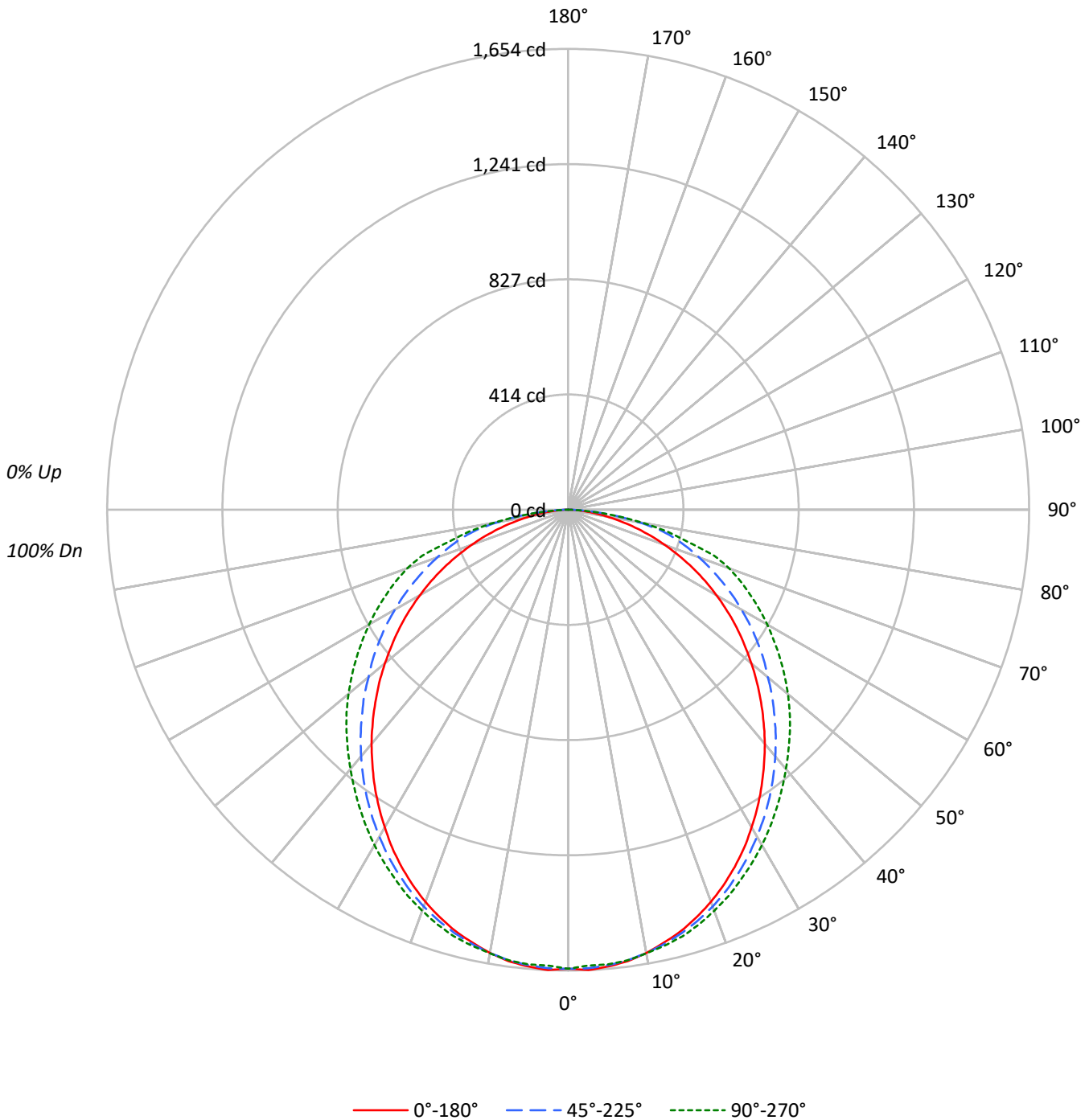
Input Watts (W): 37.211904  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2217	2217	2217
5°	2223	2216	2212
10°	2207	2207	2209
15°	2181	2192	2208
20°	2145	2170	2193
25°	2100	2140	2176
30°	2045	2105	2160
35°	1988	2070	2144
40°	1928	2030	2134
45°	1862	1991	2141
50°	1797	1958	2153
55°	1730	1946	2175
60°	1652	1933	2219
65°	1566	1934	2293
70°	1448	1967	2415
75°	1295	2056	2298
80°	1083	1967	2104
85°	818	1513	1439



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	155.7	3.3
10°-20°	443.1	9.4
20°-30°	662.4	14.1
30°-40°	785.8	16.7
40°-50°	808.8	17.2
50°-60°	742.0	15.8
60°-70°	599.9	12.8
70°-80°	389.3	8.3
80°-90°	107.3	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°	1261.1	26.9
0°-40°	2046.9	43.6
0°-60°	3597.7	76.6
0°-90°	4694.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4694.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1647	1647	1647	1647	1647	
5°	1646	1635	1641	1639	1638	156
15°	1566	1559	1574	1580	1585	441
25°	1414	1416	1442	1455	1466	651
35°	1210	1220	1260	1287	1305	757
45°	979	995	1046	1096	1125	755
55°	738	760	829	897	927	659
65°	492	521	608	688	720	486
75°	249	296	395	442	442	265
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°	1647.4	1647.4	1647.4	1647.4	1647.4
2.5°	1653.9	1641.0	1647.4	1645.8	1637.8
5°	1645.8	1634.6	1641.0	1639.4	1637.8
7.5°	1634.6	1623.3	1631.4	1629.8	1631.4
10°	1615.3	1605.7	1615.3	1616.9	1616.9
12.5°	1591.2	1583.2	1596.0	1599.2	1602.4
15°	1565.5	1559.0	1573.5	1579.9	1584.8
17.5°	1533.3	1528.5	1546.2	1554.2	1560.7
20°	1498.0	1496.4	1515.7	1523.7	1531.7
22.5°	1457.8	1457.8	1480.3	1489.9	1501.2
25°	1414.4	1416.0	1441.7	1454.6	1465.8
27.5°	1367.8	1369.4	1399.9	1416.0	1428.9
30°	1316.4	1322.8	1354.9	1375.8	1390.3
32.5°	1264.9	1273.0	1308.3	1332.4	1348.5
35°	1210.3	1219.9	1260.1	1287.4	1305.1
37.5°	1154.0	1165.3	1208.7	1239.2	1260.1
40°	1097.8	1110.6	1155.6	1191.0	1215.1
42.5°	1038.3	1052.8	1102.6	1144.4	1170.1
45°	978.8	994.9	1046.3	1096.2	1125.1
47.5°	919.4	938.6	993.3	1047.9	1078.5
50°	858.3	877.6	935.4	998.1	1028.7
52.5°	797.2	819.7	884.0	948.3	978.8
55°	737.7	760.2	829.4	896.9	927.4
57.5°	676.7	699.2	774.7	845.4	876.0
60°	614.0	639.7	718.4	790.8	824.5
62.5°	552.9	580.2	663.8	741.0	773.1
65°	491.8	520.8	607.5	687.9	720.1
67.5°	429.1	462.9	552.9	634.9	668.6
70°	368.1	405.0	499.9	581.8	614.0
72.5°	308.6	348.8	446.8	530.4	549.7
75°	249.1	295.7	395.4	442.0	442.0
77.5°	192.9	244.3	337.5	355.2	364.8
80°	139.8	196.1	253.9	274.8	271.6
82.5°	93.2	149.5	181.6	181.6	176.8
85°	53.0	90.0	98.0	94.8	93.2
87.5°	22.5	33.8	30.5	24.1	20.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)