

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: P260979

Luminaire Tested: **24CZ-LD5-35-S-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260979  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-35-S-UNV-L83050-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3769.0 lumens  
Efficiency: N/A  
Efficacy: 152.4 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

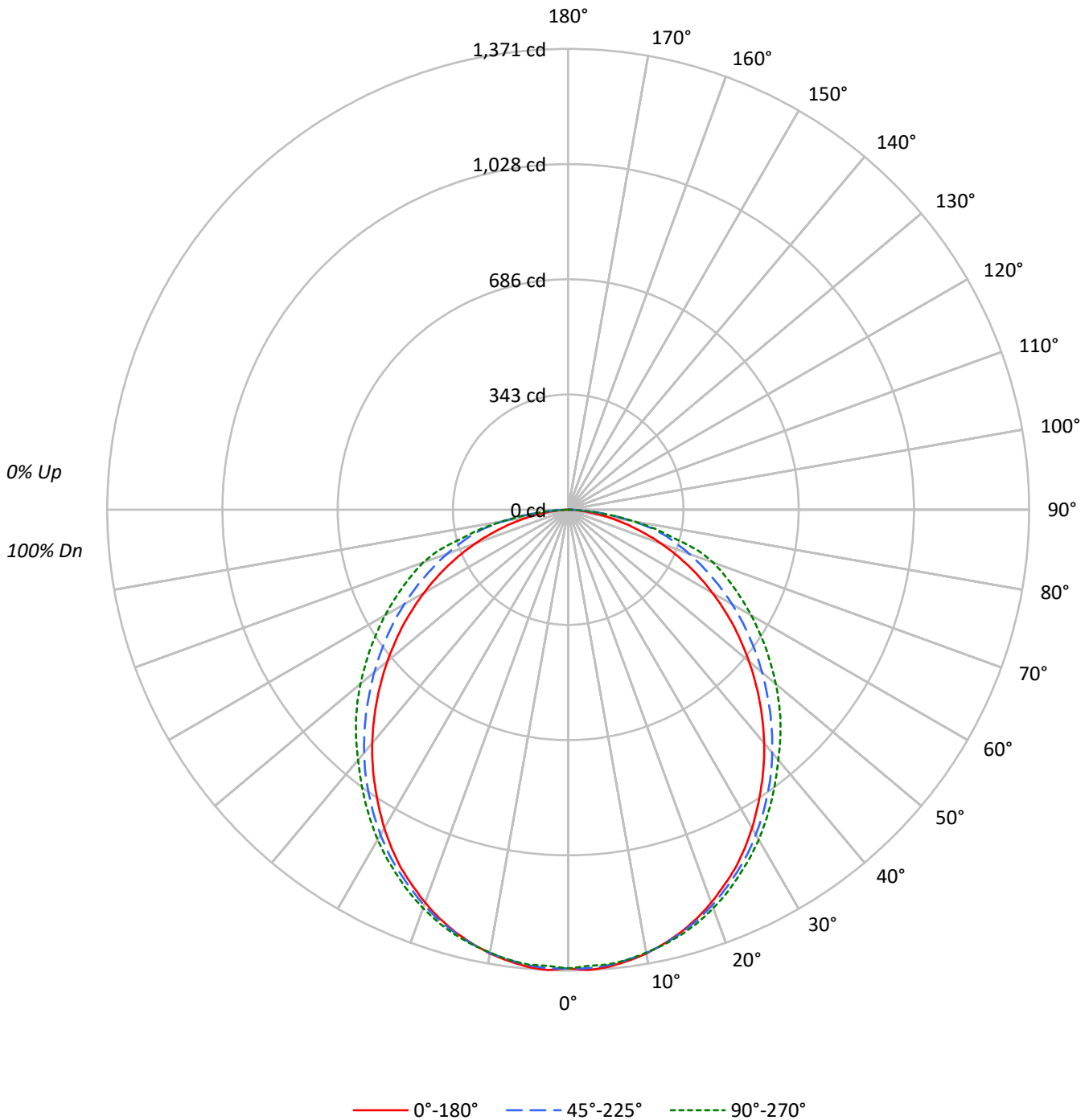
Input Watts (W): 24.73614  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	1836	1836	1836
5°	1845	1838	1834
10°	1832	1830	1828
15°	1812	1815	1822
20°	1781	1794	1806
25°	1746	1765	1784
30°	1699	1734	1761
35°	1646	1697	1732
40°	1593	1659	1707
45°	1532	1615	1699
50°	1470	1575	1688
55°	1406	1541	1683
60°	1333	1515	1691
65°	1254	1497	1725
70°	1155	1505	1806
75°	1024	1558	1682
80°	855	1477	1516
85°	639	1181	1084



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.0	3.4
10°-20°	366.9	9.7
20°-30°	546.8	14.5
30°-40°	643.6	17.1
40°-50°	654.1	17.4
50°-60°	588.0	15.6
60°-70°	464.6	12.3
70°-80°	294.7	7.8
80°-90°	81.3	2.2
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°	1042.6	27.7
0°-40°	1686.3	44.7
0°-60°	2928.4	77.7
0°-90°	3769.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3769.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1364	1364	1364	1364	1364	
5°	1366	1354	1361	1358	1358	129
15°	1300	1294	1303	1307	1308	366
25°	1176	1175	1189	1196	1201	541
35°	1002	1008	1033	1045	1055	627
45°	805	816	849	874	893	621
55°	600	614	657	700	717	535
65°	394	414	470	522	542	390
75°	197	231	300	326	324	210
85°	41	72	76	70	70	51
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1364.4	1364.4	1364.4	1364.4	1364.4
2.5°	1370.7	1360.7	1365.7	1363.2	1358.2
5°	1365.7	1354.4	1360.7	1358.2	1358.2
7.5°	1354.4	1345.6	1350.7	1349.4	1350.7
10°	1340.6	1331.8	1339.4	1339.4	1338.1
12.5°	1321.8	1314.3	1323.1	1323.1	1324.3
15°	1300.5	1294.2	1303.0	1306.8	1308.0
17.5°	1274.2	1267.9	1279.2	1282.9	1286.7
20°	1244.1	1241.5	1252.8	1256.6	1261.6
22.5°	1210.2	1210.2	1221.5	1226.5	1234.0
25°	1176.3	1175.1	1188.9	1196.4	1201.4
27.5°	1136.2	1137.5	1155.0	1162.5	1168.8
30°	1093.6	1096.1	1116.1	1124.9	1133.7
32.5°	1048.4	1053.4	1076.0	1086.0	1094.8
35°	1002.0	1008.3	1033.4	1044.7	1054.7
37.5°	955.6	964.4	990.7	1002.0	1013.3
40°	906.7	914.2	944.3	958.1	971.9
42.5°	856.5	866.6	896.7	916.7	933.0
45°	805.1	816.4	849.0	874.1	892.9
47.5°	753.7	768.8	800.1	834.0	850.3
50°	702.3	717.3	752.5	790.1	806.4
52.5°	649.6	664.7	704.8	743.7	761.2
55°	599.5	614.5	657.1	699.8	717.3
57.5°	546.8	563.1	610.7	654.6	672.2
60°	495.4	511.7	563.1	609.5	628.3
62.5°	445.2	462.8	516.7	565.6	584.4
65°	393.8	413.8	470.3	521.7	541.8
67.5°	343.6	366.2	425.1	479.1	500.4
70°	293.5	319.8	382.5	437.7	459.0
72.5°	244.5	273.4	339.9	395.0	406.3
75°	196.9	230.8	299.7	326.1	323.6
77.5°	151.7	189.4	254.6	259.6	267.1
80°	110.4	151.7	190.6	200.7	195.6
82.5°	72.7	114.1	136.7	131.7	130.4
85°	41.4	71.5	76.5	70.2	70.2
87.5°	17.6	28.8	25.1	18.8	17.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)