

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: P261028

Luminaire Tested: **24CZ-LD5-35SE-S-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261028  
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-LD5-35SE-S-UNV-L83050-W2A1-U-3500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3628.0 lumens  
Efficiency: N/A  
Efficacy: 139.3 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

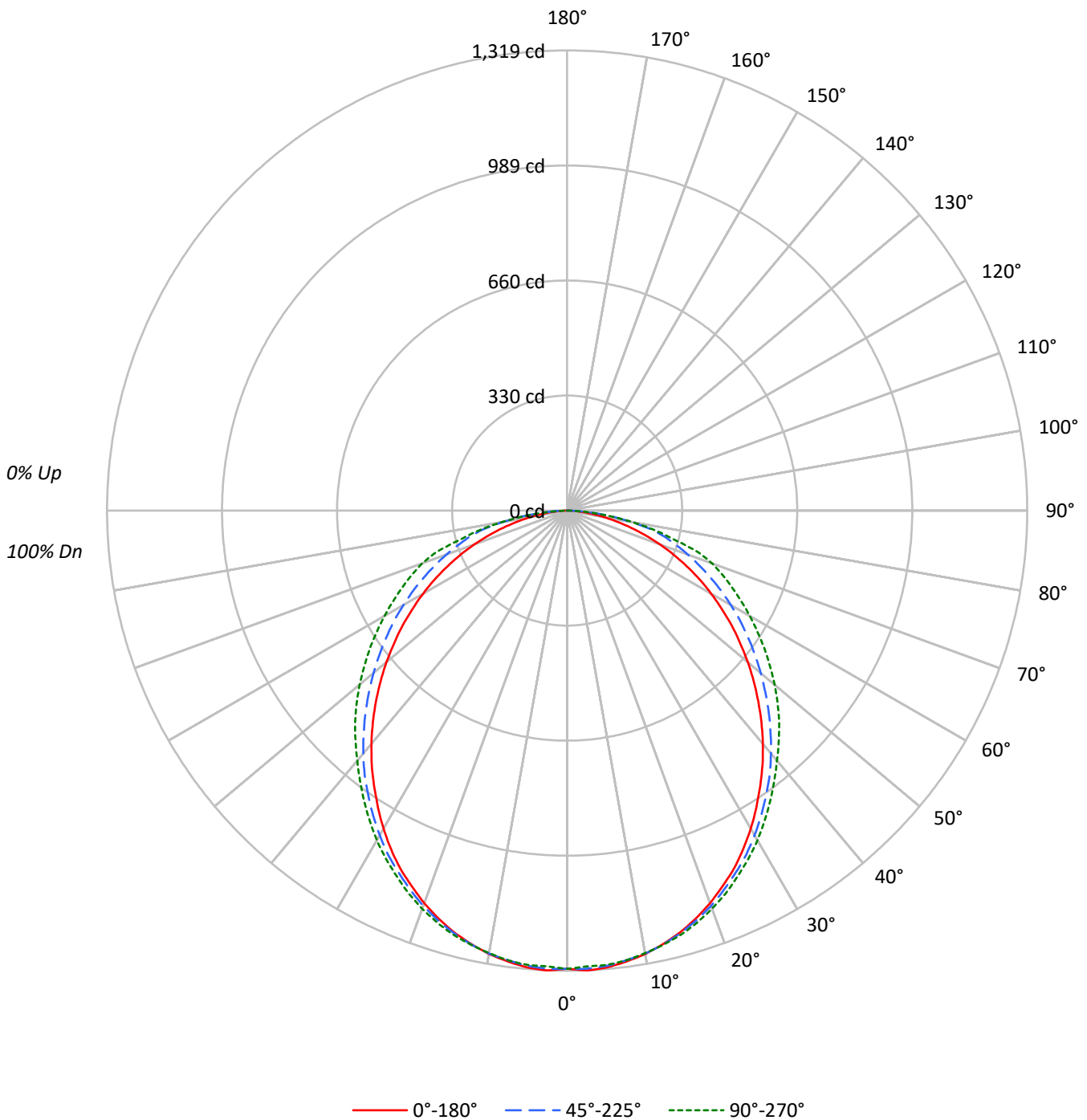
Input Watts (W): 26.04  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1767	1767	1767
5°	1776	1769	1766
10°	1763	1762	1760
15°	1744	1747	1754
20°	1715	1727	1739
25°	1681	1699	1717
30°	1636	1669	1695
35°	1584	1634	1668
40°	1533	1597	1643
45°	1475	1555	1635
50°	1415	1516	1625
55°	1354	1484	1620
60°	1283	1459	1628
65°	1207	1441	1660
70°	1111	1448	1738
75°	985	1500	1619
80°	823	1422	1459
85°	614	1136	1044



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.2	3.4
10°-20°	353.2	9.7
20°-30°	526.3	14.5
30°-40°	619.5	17.1
40°-50°	629.6	17.4
50°-60°	566.0	15.6
60°-70°	447.2	12.3
70°-80°	283.7	7.8
80°-90°	78.3	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°	1003.6	27.7
0°-40°	1623.2	44.7
0°-60°	2818.8	77.7
0°-90°	3628.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3628.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1313	1313	1313	1313	1313	
5°	1315	1304	1310	1307	1307	125
15°	1252	1246	1254	1258	1259	353
25°	1132	1131	1144	1152	1156	521
35°	964	971	995	1006	1015	603
45°	775	786	817	841	860	598
55°	577	592	633	674	690	515
65°	379	398	453	502	522	375
75°	190	222	288	314	312	202
85°	40	69	74	68	68	49
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1313.4	1313.4	1313.4	1313.4	1313.4
2.5°	1319.4	1309.8	1314.6	1312.2	1307.4
5°	1314.6	1303.7	1309.8	1307.4	1307.4
7.5°	1303.7	1295.3	1300.1	1298.9	1300.1
10°	1290.5	1282.0	1289.3	1289.3	1288.1
12.5°	1272.4	1265.1	1273.6	1273.6	1274.8
15°	1251.8	1245.8	1254.3	1257.9	1259.1
17.5°	1226.5	1220.5	1231.3	1234.9	1238.6
20°	1197.5	1195.1	1206.0	1209.6	1214.4
22.5°	1164.9	1164.9	1175.8	1180.6	1187.9
25°	1132.3	1131.1	1144.4	1151.6	1156.5
27.5°	1093.7	1094.9	1111.8	1119.0	1125.1
30°	1052.7	1055.1	1074.4	1082.8	1091.3
32.5°	1009.2	1014.0	1035.8	1045.4	1053.9
35°	964.5	970.6	994.7	1005.6	1015.2
37.5°	919.9	928.3	953.7	964.5	975.4
40°	872.8	880.0	909.0	922.3	935.6
42.5°	824.5	834.2	863.1	882.4	898.1
45°	775.0	785.9	817.3	841.4	859.5
47.5°	725.5	740.0	770.2	802.8	818.5
50°	676.0	690.5	724.3	760.5	776.2
52.5°	625.3	639.8	678.4	715.9	732.8
55°	577.0	591.5	632.6	673.6	690.5
57.5°	526.3	542.0	587.9	630.1	647.0
60°	476.8	492.5	542.0	586.7	604.8
62.5°	428.5	445.4	497.4	544.4	562.5
65°	379.1	398.4	452.7	502.2	521.5
67.5°	330.8	352.5	409.2	461.1	481.7
70°	282.5	307.8	368.2	421.3	441.8
72.5°	235.4	263.2	327.1	380.3	391.1
75°	189.5	222.1	288.5	313.9	311.5
77.5°	146.1	182.3	245.1	249.9	257.1
80°	106.2	146.1	183.5	193.1	188.3
82.5°	70.0	109.9	131.6	126.8	125.5
85°	39.8	68.8	73.6	67.6	67.6
87.5°	16.9	27.8	24.1	18.1	16.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)