

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: P261228

Luminaire Tested: **24CZ-LD5-35SE-S-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261228  
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-L82765-W2A1-U-5700K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3782.0 lumens  
Efficiency: N/A  
Efficacy: 141.2 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

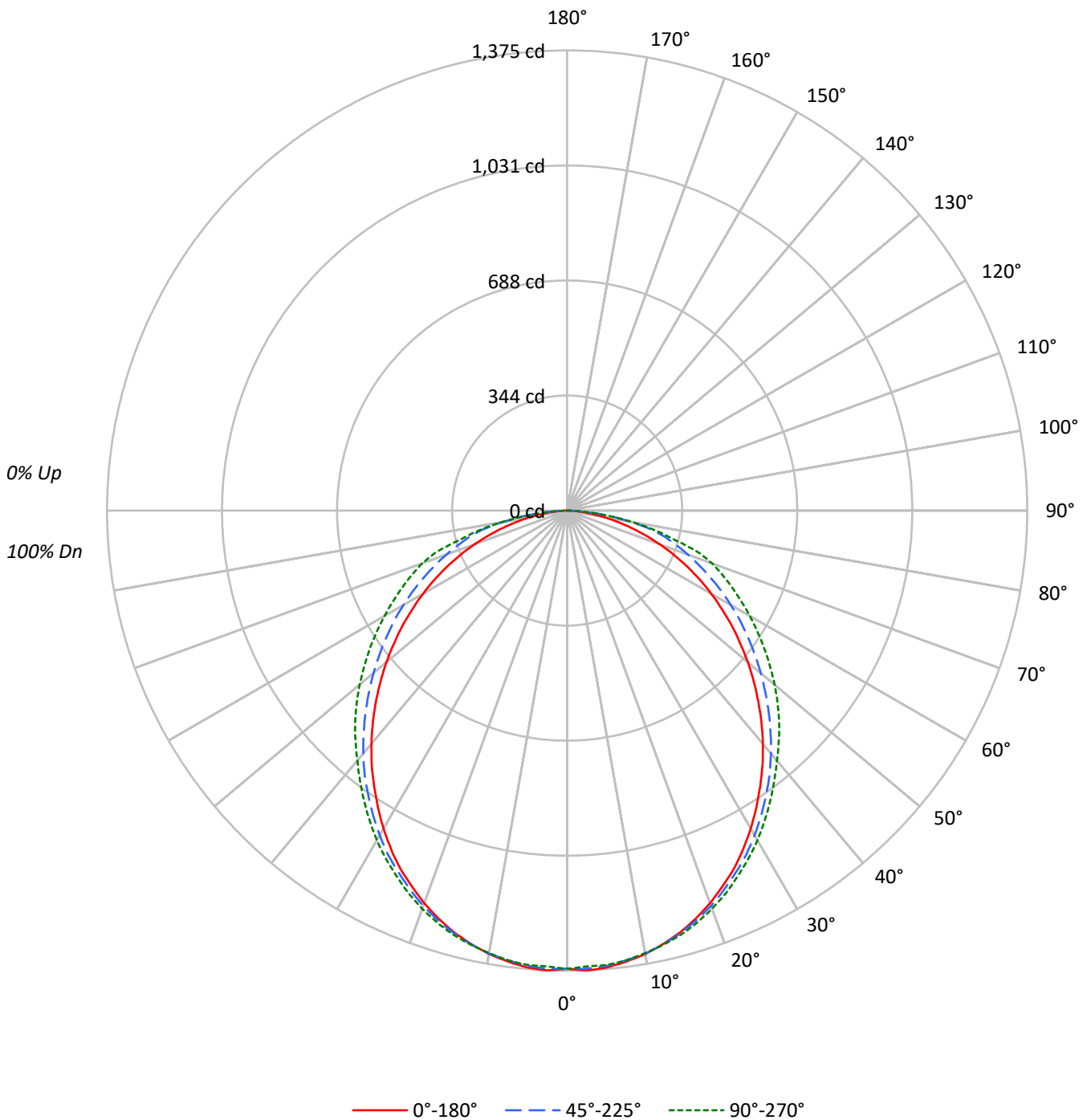
Input Watts (W): 26.784  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1842	1842	1842
5°	1851	1844	1841
10°	1838	1836	1834
15°	1818	1821	1828
20°	1787	1800	1813
25°	1752	1771	1790
30°	1705	1740	1767
35°	1652	1703	1738
40°	1598	1664	1713
45°	1537	1621	1705
50°	1475	1580	1694
55°	1411	1547	1688
60°	1338	1520	1697
65°	1258	1502	1731
70°	1159	1510	1812
75°	1027	1564	1688
80°	858	1482	1521
85°	641	1186	1088



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.4	3.4
10°-20°	368.2	9.7
20°-30°	548.6	14.5
30°-40°	645.8	17.1
40°-50°	656.3	17.4
50°-60°	590.1	15.6
60°-70°	466.2	12.3
70°-80°	295.7	7.8
80°-90°	81.6	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°	1046.2	27.7
0°-40°	1692.1	44.7
0°-60°	2938.5	77.7
0°-90°	3782.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3782.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1369	1369	1369	1369	1369	
5°	1370	1359	1365	1363	1363	130
15°	1305	1299	1308	1311	1312	368
25°	1180	1179	1193	1200	1206	543
35°	1006	1012	1037	1048	1058	629
45°	808	819	852	877	896	623
55°	602	617	659	702	720	537
65°	395	415	472	524	544	391
75°	198	232	301	327	325	210
85°	42	72	77	70	70	51
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1369.2	1369.2	1369.2	1369.2	1369.2
2.5°	1375.4	1365.4	1370.4	1367.9	1362.9
5°	1370.4	1359.1	1365.4	1362.9	1362.9
7.5°	1359.1	1350.3	1355.3	1354.1	1355.3
10°	1345.2	1336.4	1344.0	1344.0	1342.7
12.5°	1326.4	1318.8	1327.6	1327.6	1328.9
15°	1305.0	1298.7	1307.5	1311.3	1312.5
17.5°	1278.5	1272.3	1283.6	1287.4	1291.1
20°	1248.3	1245.8	1257.2	1260.9	1266.0
22.5°	1214.4	1214.4	1225.7	1230.7	1238.3
25°	1180.4	1179.1	1193.0	1200.5	1205.6
27.5°	1140.1	1141.4	1159.0	1166.5	1172.8
30°	1097.3	1099.9	1120.0	1128.8	1137.6
32.5°	1052.0	1057.1	1079.7	1089.8	1098.6
35°	1005.5	1011.8	1036.9	1048.3	1058.3
37.5°	958.9	967.7	994.1	1005.5	1016.8
40°	909.8	917.4	947.6	961.4	975.3
42.5°	859.5	869.6	899.8	919.9	936.3
45°	807.9	819.2	851.9	877.1	896.0
47.5°	756.3	771.4	802.9	836.8	853.2
50°	704.7	719.8	755.0	792.8	809.2
52.5°	651.9	667.0	707.2	746.2	763.9
55°	601.5	616.6	659.4	702.2	719.8
57.5°	548.7	565.0	612.8	656.9	674.5
60°	497.1	513.4	565.0	611.6	630.5
62.5°	446.7	464.4	518.5	567.5	586.4
65°	395.1	415.3	471.9	523.5	543.6
67.5°	344.8	367.5	426.6	480.7	502.1
70°	294.5	320.9	383.8	439.2	460.6
72.5°	245.4	274.3	341.0	396.4	407.7
75°	197.6	231.5	300.8	327.2	324.7
77.5°	152.3	190.0	255.5	260.5	268.0
80°	110.7	152.3	191.3	201.3	196.3
82.5°	73.0	114.5	137.2	132.1	130.9
85°	41.5	71.7	76.8	70.5	70.5
87.5°	17.6	28.9	25.2	18.9	17.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)