

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: P261225

Luminaire Tested: **24CZ-LD5-35SE-S-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261225  
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-4500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3685.0 lumens  
Efficiency: N/A  
Efficacy: 139.0 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

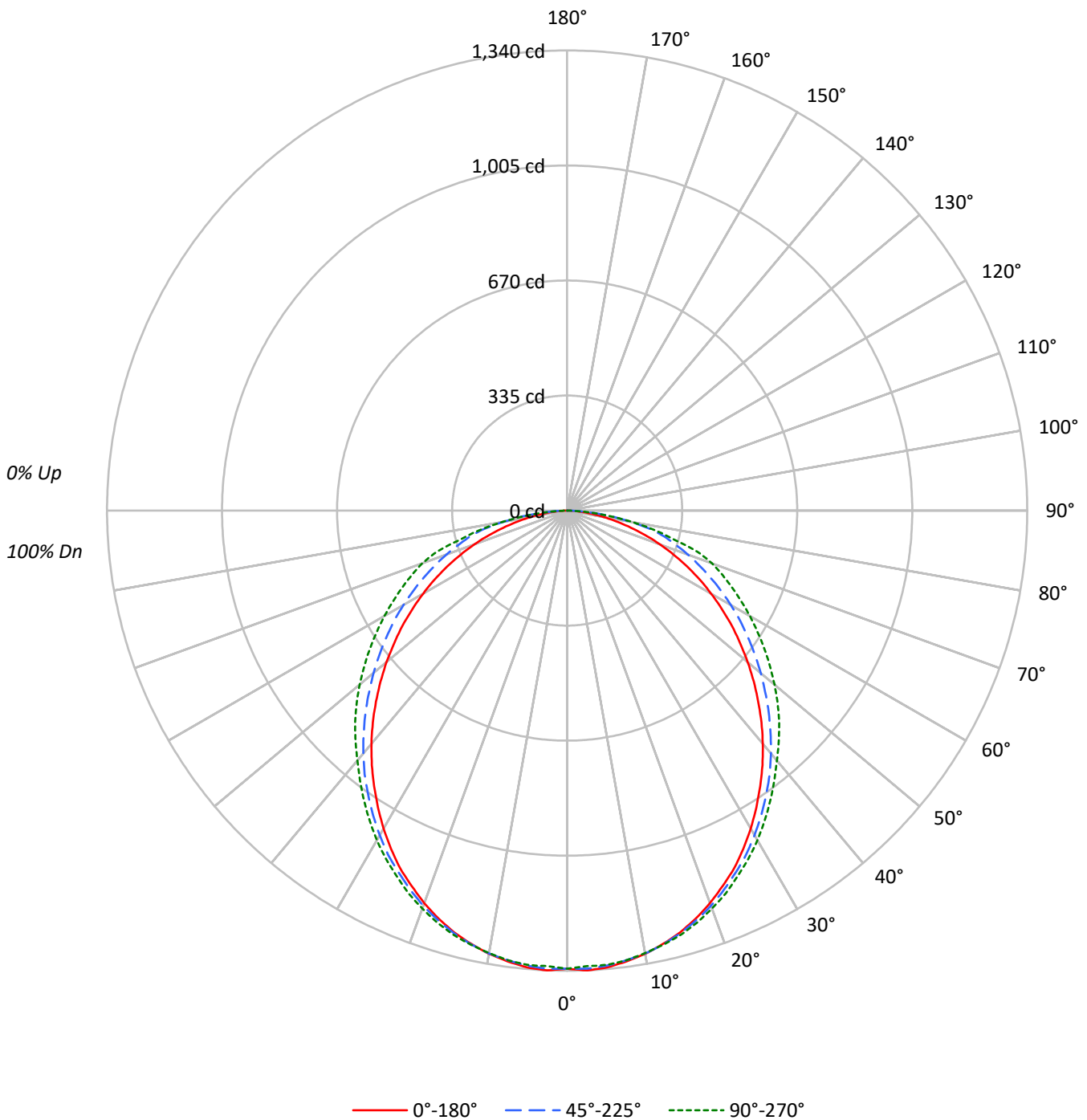
Input Watts (W): 26.505  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1795	1795	1795
5°	1803	1797	1794
10°	1791	1789	1787
15°	1771	1775	1781
20°	1742	1754	1766
25°	1707	1726	1744
30°	1661	1695	1722
35°	1609	1659	1694
40°	1557	1622	1669
45°	1498	1580	1661
50°	1437	1540	1650
55°	1375	1507	1645
60°	1303	1481	1653
65°	1226	1464	1686
70°	1129	1471	1766
75°	1001	1523	1644
80°	836	1444	1482
85°	625	1155	1061



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	126.1	3.4
10°-20°	358.7	9.7
20°-30°	534.6	14.5
30°-40°	629.3	17.1
40°-50°	639.5	17.4
50°-60°	574.9	15.6
60°-70°	454.2	12.3
70°-80°	288.2	7.8
80°-90°	79.5	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°	1019.4	27.7
0°-40°	1648.7	44.7
0°-60°	2863.1	77.7
0°-90°	3685.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3685.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1334	1334	1334	1334	1334	
5°	1335	1324	1330	1328	1328	127
15°	1272	1265	1274	1278	1279	358
25°	1150	1149	1162	1170	1175	529
35°	980	986	1010	1021	1031	613
45°	787	798	830	855	873	607
55°	586	601	642	684	701	523
65°	385	405	460	510	530	381
75°	192	226	293	319	316	205
85°	40	70	75	69	69	50
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1334.0	1334.0	1334.0	1334.0	1334.0
2.5°	1340.2	1330.4	1335.3	1332.8	1327.9
5°	1335.3	1324.2	1330.4	1327.9	1327.9
7.5°	1324.2	1315.6	1320.6	1319.3	1320.6
10°	1310.7	1302.2	1309.5	1309.5	1308.3
12.5°	1292.3	1285.0	1293.6	1293.6	1294.8
15°	1271.5	1265.4	1274.0	1277.6	1278.9
17.5°	1245.8	1239.6	1250.7	1254.3	1258.0
20°	1216.3	1213.9	1224.9	1228.6	1233.5
22.5°	1183.2	1183.2	1194.3	1199.2	1206.5
25°	1150.1	1148.9	1162.4	1169.7	1174.6
27.5°	1110.9	1112.1	1129.3	1136.6	1142.8
30°	1069.2	1071.6	1091.3	1099.8	1108.4
32.5°	1025.1	1030.0	1052.0	1061.8	1070.4
35°	979.7	985.8	1010.3	1021.4	1031.2
37.5°	934.3	942.9	968.6	979.7	990.7
40°	886.5	893.9	923.3	936.8	950.3
42.5°	837.5	847.3	876.7	896.3	912.2
45°	787.2	798.2	830.1	854.6	873.0
47.5°	736.9	751.6	782.3	815.4	831.3
50°	686.6	701.4	735.7	772.5	788.4
52.5°	635.1	649.9	689.1	727.1	744.3
55°	586.1	600.8	642.5	684.2	701.4
57.5°	534.6	550.5	597.1	640.0	657.2
60°	484.3	500.3	550.5	595.9	614.3
62.5°	435.3	452.4	505.2	553.0	571.4
65°	385.0	404.6	459.8	510.1	529.7
67.5°	336.0	358.0	415.7	468.4	489.2
70°	286.9	312.7	374.0	427.9	448.8
72.5°	239.1	267.3	332.3	386.2	397.3
75°	192.5	225.6	293.0	318.8	316.3
77.5°	148.4	185.1	248.9	253.8	261.2
80°	107.9	148.4	186.4	196.2	191.3
82.5°	71.1	111.6	133.6	128.7	127.5
85°	40.5	69.9	74.8	68.7	68.7
87.5°	17.2	28.2	24.5	18.4	17.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)