

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: P260808

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260808  
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-LD5-35SE-UNV-L82765-W2A1-U-5700K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3708.0 lumens  
Efficiency: N/A  
Efficacy: 138.4 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

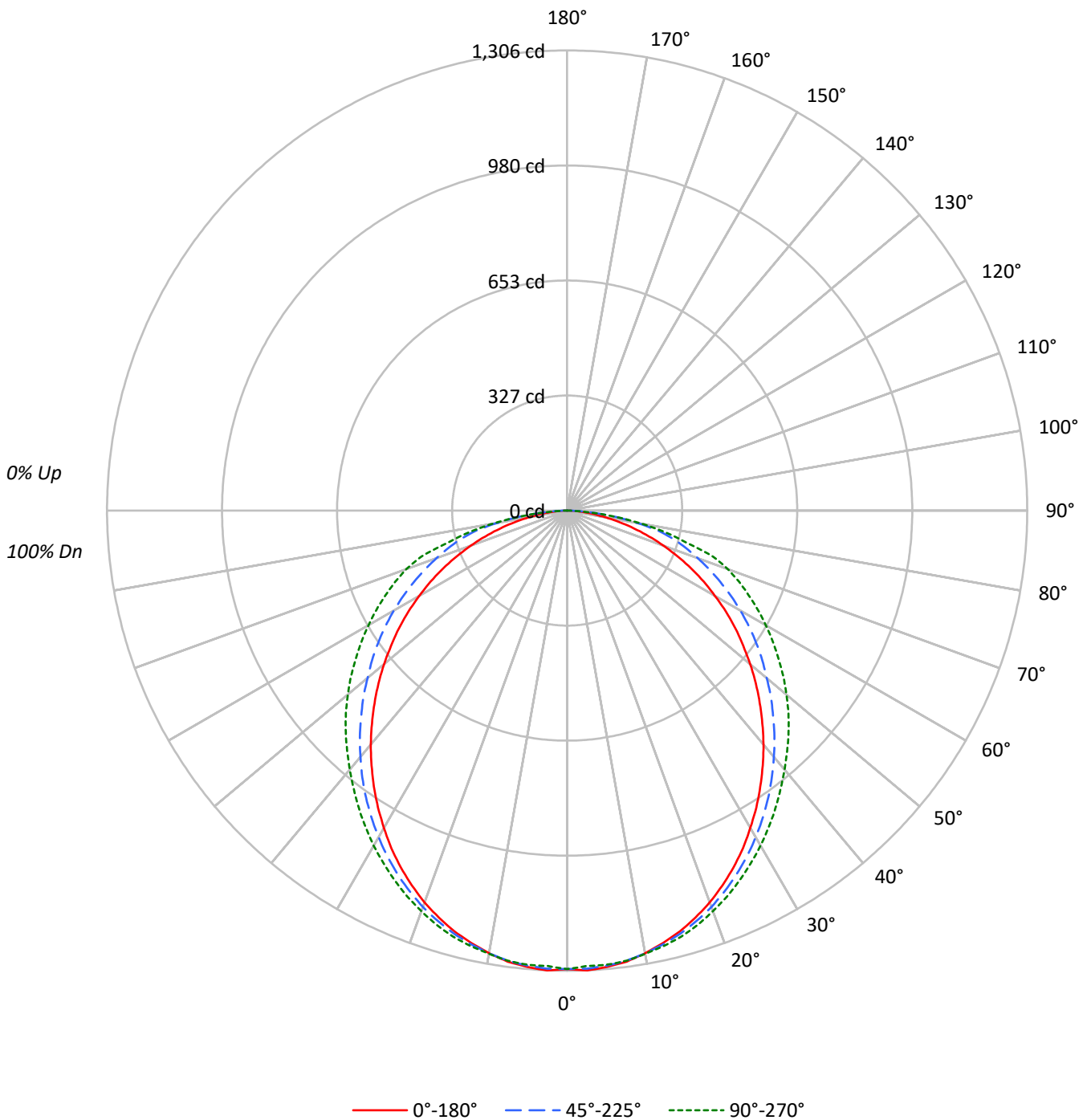
Input Watts (W): 26.784  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24

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

	0°	45°	90°
0°	1751	1751	1751
5°	1756	1751	1747
10°	1743	1743	1745
15°	1723	1731	1744
20°	1694	1714	1732
25°	1659	1691	1719
30°	1615	1663	1706
35°	1570	1635	1693
40°	1523	1603	1686
45°	1471	1573	1691
50°	1419	1547	1701
55°	1367	1537	1718
60°	1305	1527	1753
65°	1237	1528	1811
70°	1144	1553	1908
75°	1023	1624	1815
80°	856	1554	1663
85°	647	1195	1136



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.0	3.3
10°-20°	350.0	9.4
20°-30°	523.2	14.1
30°-40°	620.7	16.7
40°-50°	638.9	17.2
50°-60°	586.1	15.8
60°-70°	473.9	12.8
70°-80°	307.5	8.3
80°-90°	84.8	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°	996.2	26.9
0°-40°	1616.9	43.6
0°-60°	2841.8	76.6
0°-90°	3708.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3708.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1301	1301	1301	1301	1301	
5°	1300	1291	1296	1295	1294	123
15°	1237	1232	1243	1248	1252	348
25°	1117	1118	1139	1149	1158	514
35°	956	964	995	1017	1031	598
45°	773	786	826	866	889	597
55°	583	600	655	708	732	521
65°	388	411	480	543	569	384
75°	197	234	312	349	349	209
85°	42	71	77	75	74	51
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1301.3	1301.3	1301.3	1301.3	1301.3
2.5°	1306.4	1296.2	1301.3	1300.0	1293.7
5°	1300.0	1291.2	1296.2	1295.0	1293.7
7.5°	1291.2	1282.3	1288.6	1287.3	1288.6
10°	1275.9	1268.3	1275.9	1277.2	1277.2
12.5°	1256.9	1250.5	1260.7	1263.2	1265.8
15°	1236.6	1231.5	1242.9	1248.0	1251.8
17.5°	1211.2	1207.4	1221.3	1227.7	1232.8
20°	1183.2	1182.0	1197.2	1203.6	1209.9
22.5°	1151.5	1151.5	1169.3	1176.9	1185.8
25°	1117.2	1118.5	1138.8	1149.0	1157.9
27.5°	1080.4	1081.7	1105.8	1118.5	1128.7
30°	1039.8	1044.9	1070.3	1086.8	1098.2
32.5°	999.2	1005.5	1033.4	1052.5	1065.2
35°	956.0	963.6	995.3	1016.9	1030.9
37.5°	911.6	920.4	954.7	978.8	995.3
40°	867.1	877.3	912.8	940.8	959.8
42.5°	820.1	831.6	870.9	903.9	924.3
45°	773.2	785.9	826.5	865.9	888.7
47.5°	726.2	741.4	784.6	827.8	851.9
50°	678.0	693.2	738.9	788.4	812.5
52.5°	629.7	647.5	698.3	749.0	773.2
55°	582.7	600.5	655.1	708.4	732.5
57.5°	534.5	552.3	611.9	667.8	691.9
60°	485.0	505.3	567.5	624.6	651.3
62.5°	436.7	458.3	524.3	585.3	610.7
65°	388.5	411.3	479.9	543.4	568.8
67.5°	339.0	365.6	436.7	501.5	528.1
70°	290.7	319.9	394.8	459.6	485.0
72.5°	243.8	275.5	352.9	419.0	434.2
75°	196.8	233.6	312.3	349.1	349.1
77.5°	152.3	193.0	266.6	280.6	288.2
80°	110.5	154.9	200.6	217.1	214.6
82.5°	73.6	118.1	143.5	143.5	139.7
85°	41.9	71.1	77.4	74.9	73.6
87.5°	17.8	26.7	24.1	19.0	16.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)