

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: P261222

Luminaire Tested: **24CZ-LD5-35SE-S-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261222  
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-3000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3425.0 lumens  
Efficiency: N/A  
Efficacy: 132.5 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

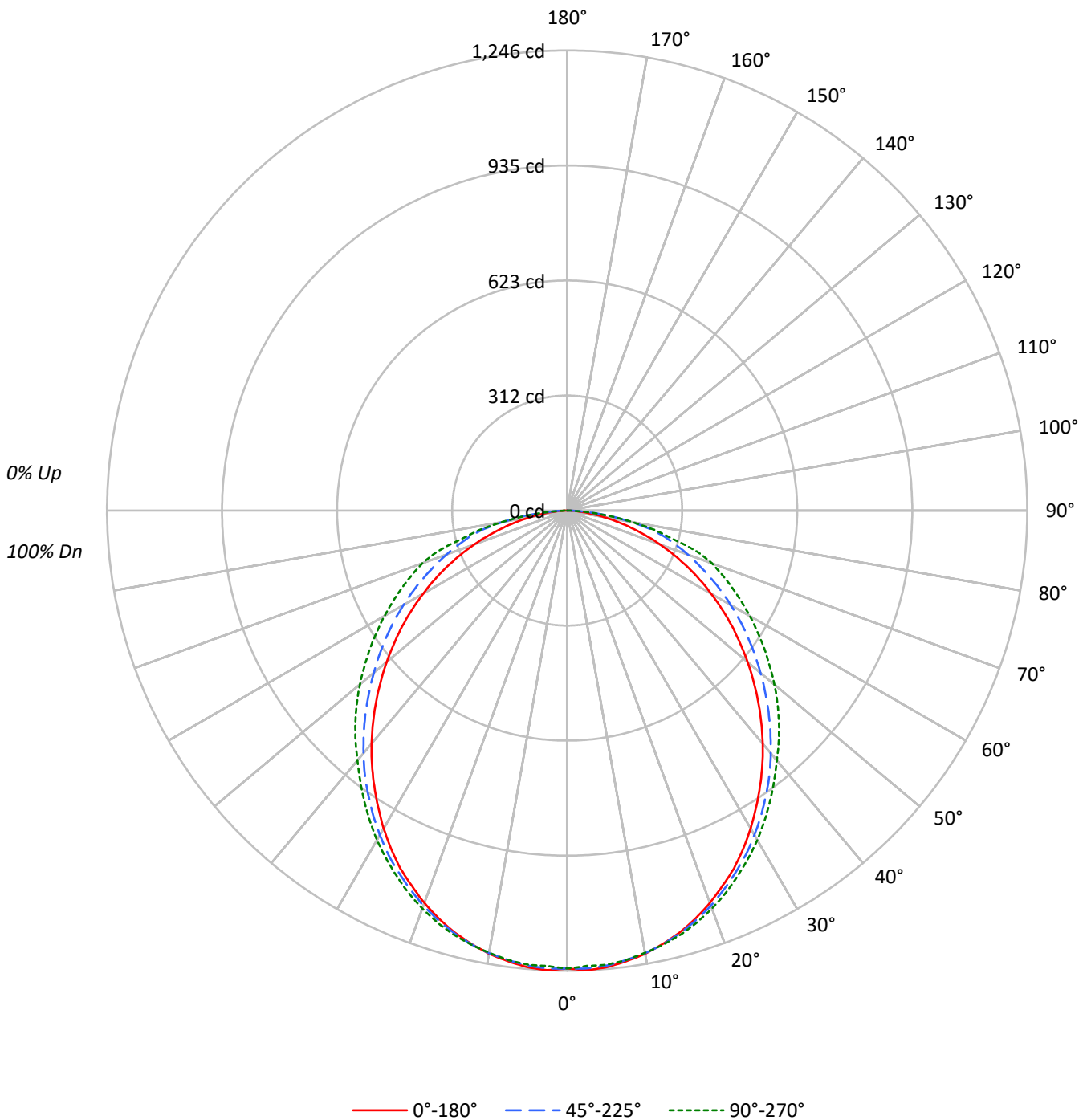
Input Watts (W): 25.854  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1668	1668	1668
5°	1676	1670	1667
10°	1664	1663	1661
15°	1646	1649	1656
20°	1619	1630	1642
25°	1587	1604	1621
30°	1544	1576	1601
35°	1496	1543	1574
40°	1447	1507	1551
45°	1392	1468	1544
50°	1336	1431	1534
55°	1278	1401	1529
60°	1211	1377	1537
65°	1139	1361	1567
70°	1049	1367	1641
75°	930	1416	1528
80°	777	1342	1378
85°	580	1073	985



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.2	3.4
10°-20°	333.4	9.7
20°-30°	496.9	14.5
30°-40°	584.9	17.1
40°-50°	594.4	17.4
50°-60°	534.4	15.6
60°-70°	422.2	12.3
70°-80°	267.8	7.8
80°-90°	73.9	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°	947.5	27.7
0°-40°	1532.4	44.7
0°-60°	2661.1	77.7
0°-90°	3425.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3425.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1240	1240	1240	1240	1240	
5°	1241	1231	1236	1234	1234	118
15°	1182	1176	1184	1188	1189	333
25°	1069	1068	1080	1087	1092	492
35°	911	916	939	949	958	570
45°	732	742	772	794	811	565
55°	545	558	597	636	652	486
65°	358	376	427	474	492	354
75°	179	210	272	296	294	190
85°	38	65	70	64	64	46
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1239.9	1239.9	1239.9	1239.9	1239.9
2.5°	1245.6	1236.5	1241.1	1238.8	1234.2
5°	1241.1	1230.8	1236.5	1234.2	1234.2
7.5°	1230.8	1222.8	1227.4	1226.2	1227.4
10°	1218.3	1210.3	1217.1	1217.1	1216.0
12.5°	1201.2	1194.3	1202.3	1202.3	1203.4
15°	1181.8	1176.1	1184.1	1187.5	1188.6
17.5°	1157.9	1152.2	1162.4	1165.8	1169.3
20°	1130.5	1128.2	1138.5	1141.9	1146.5
22.5°	1099.7	1099.7	1110.0	1114.6	1121.4
25°	1069.0	1067.8	1080.4	1087.2	1091.8
27.5°	1032.5	1033.6	1049.6	1056.4	1062.1
30°	993.8	996.0	1014.3	1022.2	1030.2
32.5°	952.7	957.3	977.8	986.9	994.9
35°	910.6	916.3	939.1	949.3	958.4
37.5°	868.4	876.4	900.3	910.6	920.8
40°	823.9	830.8	858.1	870.7	883.2
42.5°	778.4	787.5	814.8	833.1	847.9
45°	731.6	741.9	771.5	794.3	811.4
47.5°	684.9	698.6	727.1	757.9	772.7
50°	638.2	651.9	683.8	718.0	732.8
52.5°	590.3	604.0	640.5	675.8	691.8
55°	544.7	558.4	597.2	635.9	651.9
57.5°	496.9	511.7	555.0	594.9	610.8
60°	450.2	465.0	511.7	553.9	571.0
62.5°	404.6	420.5	469.5	514.0	531.1
65°	357.8	376.1	427.4	474.1	492.3
67.5°	312.3	332.8	386.3	435.3	454.7
70°	266.7	290.6	347.6	397.7	417.1
72.5°	222.2	248.4	308.8	359.0	369.2
75°	178.9	209.7	272.4	296.3	294.0
77.5°	137.9	172.1	231.3	235.9	242.7
80°	100.3	137.9	173.2	182.3	177.8
82.5°	66.1	103.7	124.2	119.7	118.5
85°	37.6	65.0	69.5	63.8	63.8
87.5°	16.0	26.2	22.8	17.1	16.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)