

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: P260955

Luminaire Tested: **24CZ-LD5-45SE-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260955  
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-LD5-45SE-UNV-L92765-W2A1-U-3000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3693.0 lumens  
Efficiency: N/A  
Efficacy: 106.7 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

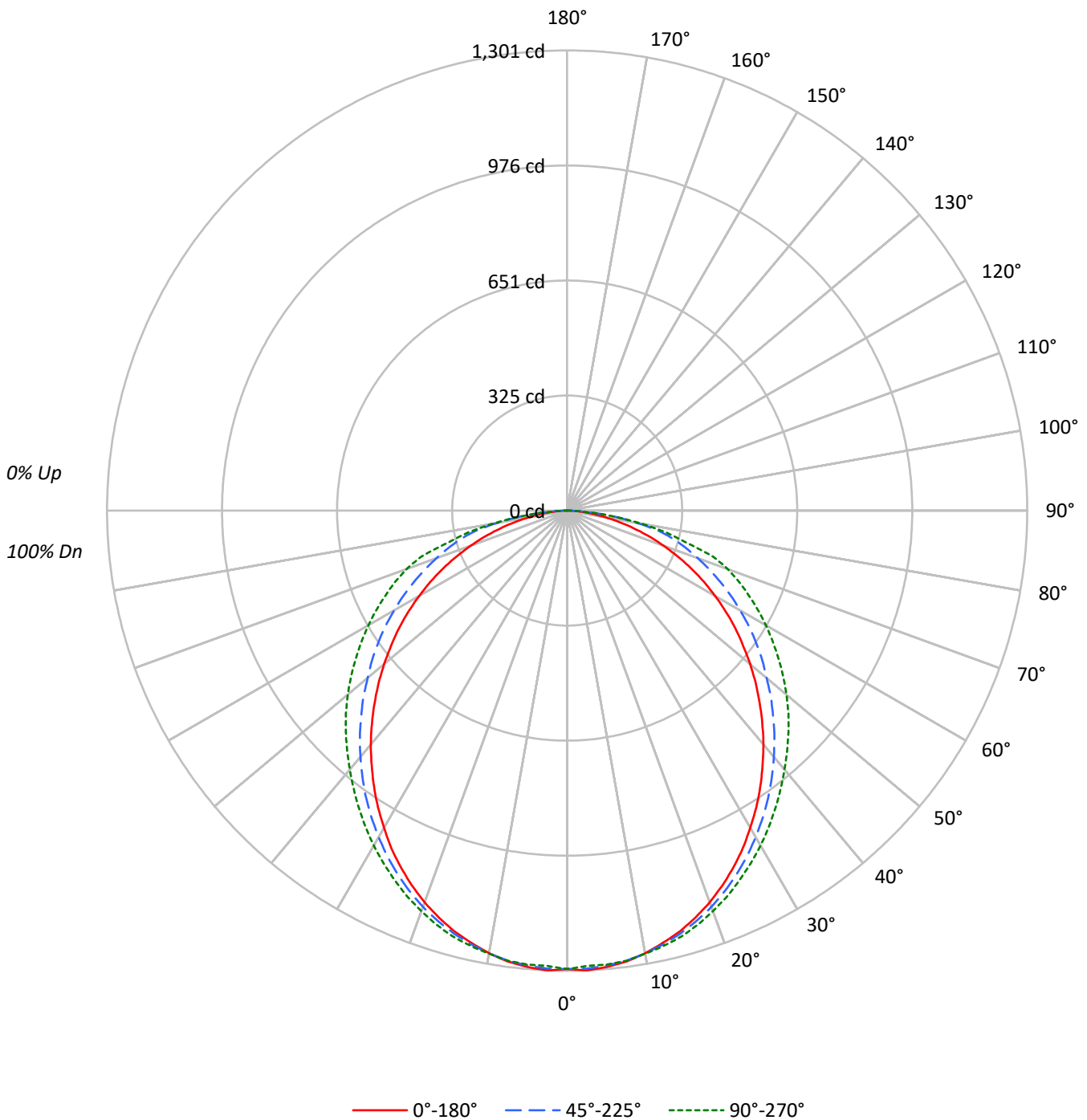
Input Watts (W): 34.596  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1744	1744	1744
5°	1749	1744	1740
10°	1736	1736	1738
15°	1716	1724	1737
20°	1687	1707	1725
25°	1652	1684	1712
30°	1609	1656	1699
35°	1564	1628	1686
40°	1517	1597	1679
45°	1465	1566	1684
50°	1413	1540	1694
55°	1361	1531	1711
60°	1300	1521	1746
65°	1232	1522	1804
70°	1139	1547	1900
75°	1019	1617	1808
80°	852	1548	1656
85°	644	1190	1132



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.5	3.3
10°-20°	348.6	9.4
20°-30°	521.1	14.1
30°-40°	618.2	16.7
40°-50°	636.3	17.2
50°-60°	583.7	15.8
60°-70°	472.0	12.8
70°-80°	306.3	8.3
80°-90°	84.5	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°	992.1	26.9
0°-40°	1610.3	43.6
0°-60°	2830.3	76.6
0°-90°	3693.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3693.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1296	1296	1296	1296	1296	
5°	1295	1286	1291	1290	1288	123
15°	1232	1226	1238	1243	1247	347
25°	1113	1114	1134	1144	1153	512
35°	952	960	991	1013	1027	595
45°	770	783	823	862	885	594
55°	580	598	652	706	730	518
65°	387	410	478	541	566	382
75°	196	233	311	348	348	208
85°	42	71	77	75	73	51
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1296.1	1296.1	1296.1	1296.1	1296.1
2.5°	1301.1	1291.0	1296.1	1294.8	1288.5
5°	1294.8	1285.9	1291.0	1289.7	1288.5
7.5°	1285.9	1277.1	1283.4	1282.1	1283.4
10°	1270.8	1263.2	1270.8	1272.0	1272.0
12.5°	1251.8	1245.5	1255.6	1258.1	1260.6
15°	1231.6	1226.5	1237.9	1242.9	1246.7
17.5°	1206.3	1202.5	1216.4	1222.7	1227.8
20°	1178.5	1177.2	1192.4	1198.7	1205.0
22.5°	1146.8	1146.8	1164.5	1172.1	1181.0
25°	1112.7	1114.0	1134.2	1144.3	1153.2
27.5°	1076.0	1077.3	1101.3	1114.0	1124.1
30°	1035.6	1040.6	1065.9	1082.4	1093.7
32.5°	995.1	1001.4	1029.3	1048.2	1060.9
35°	952.1	959.7	991.3	1012.8	1026.7
37.5°	907.9	916.7	950.9	974.9	991.3
40°	863.6	873.7	909.1	937.0	955.9
42.5°	816.8	828.2	867.4	900.3	920.5
45°	770.0	782.7	823.2	862.3	885.1
47.5°	723.3	738.4	781.4	824.4	848.4
50°	675.2	690.4	735.9	785.2	809.2
52.5°	627.2	644.9	695.4	746.0	770.0
55°	580.4	598.1	652.5	705.6	729.6
57.5°	532.3	550.0	609.5	665.1	689.1
60°	483.0	503.2	565.2	622.1	648.7
62.5°	435.0	456.5	522.2	582.9	608.2
65°	386.9	409.7	478.0	541.2	566.5
67.5°	337.6	364.2	435.0	499.5	526.0
70°	289.6	318.6	393.2	457.7	483.0
72.5°	242.8	274.4	351.5	417.3	432.4
75°	196.0	232.7	311.1	347.7	347.7
77.5°	151.7	192.2	265.5	279.4	287.0
80°	110.0	154.3	199.8	216.2	213.7
82.5°	73.3	117.6	142.9	142.9	139.1
85°	41.7	70.8	77.1	74.6	73.3
87.5°	17.7	26.6	24.0	19.0	16.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)