

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: P260734

Luminaire Tested: **24CZ-LD5-45-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260734  
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-LD5-45-UNV-L82765-W2A1-U-5000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4618.0 lumens  
Efficiency: N/A  
Efficacy: 143.5 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

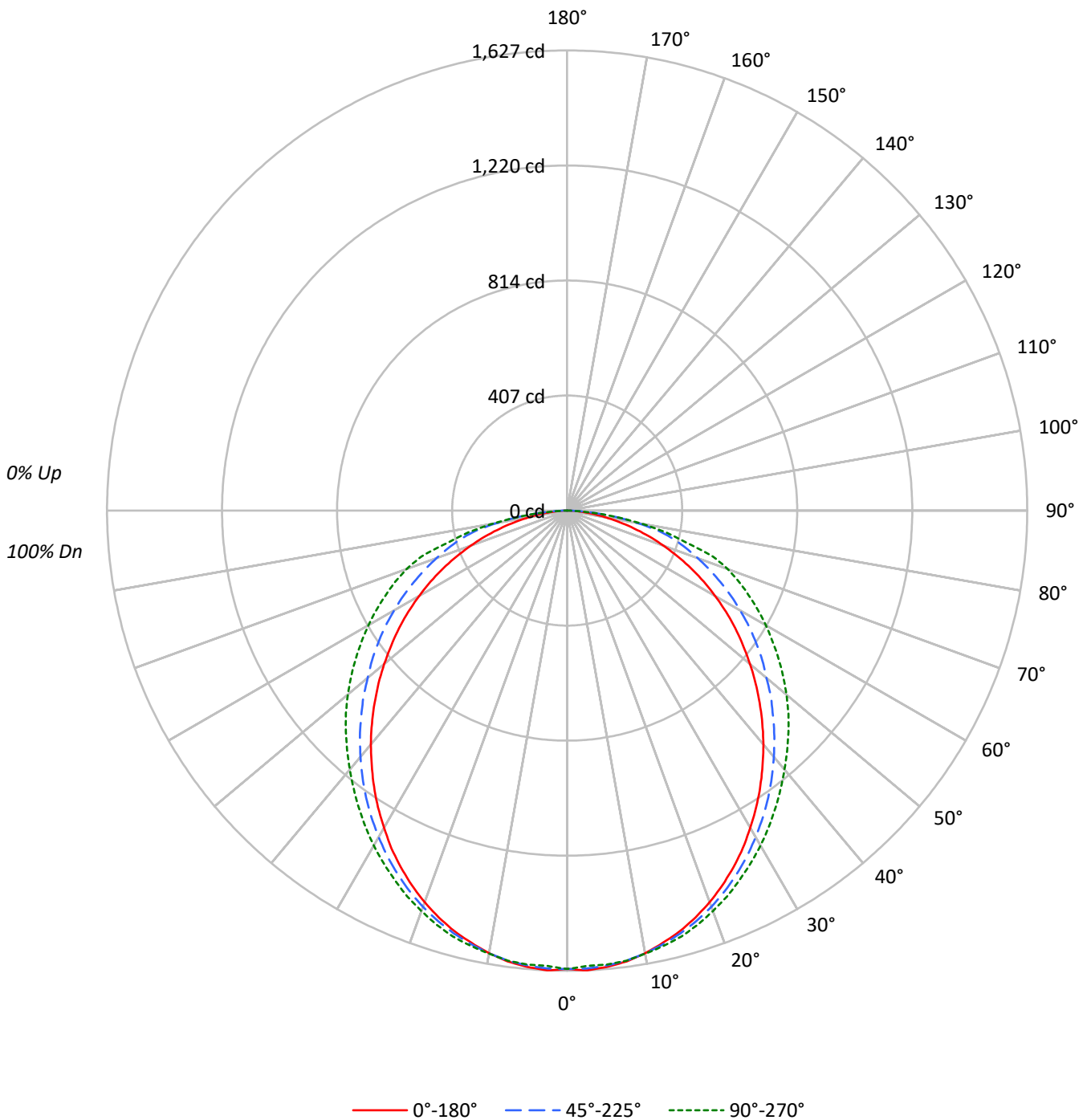
Input Watts (W): 32.178  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2181	2181	2181
5°	2187	2180	2176
10°	2171	2171	2173
15°	2145	2156	2172
20°	2110	2135	2157
25°	2066	2106	2141
30°	2012	2071	2125
35°	1956	2036	2109
40°	1897	1997	2099
45°	1832	1959	2106
50°	1767	1926	2118
55°	1702	1914	2140
60°	1625	1902	2183
65°	1540	1903	2255
70°	1424	1934	2376
75°	1274	2022	2260
80°	1066	1936	2070
85°	806	1490	1416



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	153.1	3.3
10°-20°	435.9	9.4
20°-30°	651.6	14.1
30°-40°	773.0	16.7
40°-50°	795.6	17.2
50°-60°	729.9	15.8
60°-70°	590.2	12.8
70°-80°	383.0	8.3
80°-90°	105.6	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°	1240.6	26.9
0°-40°	2013.7	43.6
0°-60°	3539.2	76.6
0°-90°	4618.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4618.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1621	1621	1621	1621	1621	
5°	1619	1608	1614	1613	1611	154
15°	1540	1534	1548	1554	1559	434
25°	1391	1393	1418	1431	1442	640
35°	1191	1200	1240	1266	1284	745
45°	963	979	1029	1078	1107	743
55°	726	748	816	882	912	648
65°	484	512	598	677	708	478
75°	245	291	389	435	435	260
85°	52	88	96	93	92	64
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1620.7	1620.7	1620.7	1620.7	1620.7
2.5°	1627.0	1614.4	1620.7	1619.1	1611.2
5°	1619.1	1608.0	1614.4	1612.8	1611.2
7.5°	1608.0	1597.0	1604.9	1603.3	1604.9
10°	1589.1	1579.6	1589.1	1590.6	1590.6
12.5°	1565.3	1557.4	1570.1	1573.2	1576.4
15°	1540.0	1533.7	1547.9	1554.3	1559.0
17.5°	1508.4	1503.7	1521.1	1529.0	1535.3
20°	1473.6	1472.0	1491.0	1498.9	1506.8
22.5°	1434.1	1434.1	1456.2	1465.7	1476.8
25°	1391.4	1393.0	1418.3	1430.9	1442.0
27.5°	1345.6	1347.1	1377.2	1393.0	1405.6
30°	1295.0	1301.3	1332.9	1353.5	1367.7
32.5°	1244.4	1252.3	1287.1	1310.8	1326.6
35°	1190.6	1200.1	1239.6	1266.5	1283.9
37.5°	1135.3	1146.3	1189.0	1219.1	1239.6
40°	1079.9	1092.6	1136.8	1171.6	1195.3
42.5°	1021.4	1035.7	1084.7	1125.8	1151.1
45°	962.9	978.7	1029.3	1078.3	1106.8
47.5°	904.4	923.4	977.2	1030.9	1061.0
50°	844.3	863.3	920.2	981.9	1011.9
52.5°	784.2	806.4	869.6	932.9	962.9
55°	725.7	747.9	815.9	882.3	912.3
57.5°	665.7	687.8	762.1	831.7	861.7
60°	604.0	629.3	706.8	777.9	811.1
62.5°	543.9	570.8	653.0	728.9	760.5
65°	483.8	512.3	597.7	676.7	708.4
67.5°	422.2	455.4	543.9	624.6	657.8
70°	362.1	398.4	491.7	572.4	604.0
72.5°	303.6	343.1	439.6	521.8	540.8
75°	245.1	290.9	389.0	434.8	434.8
77.5°	189.7	240.3	332.0	349.4	358.9
80°	137.6	192.9	249.8	270.4	267.2
82.5°	91.7	147.0	178.7	178.7	173.9
85°	52.2	88.5	96.5	93.3	91.7
87.5°	22.1	33.2	30.0	23.7	20.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)