

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: P260735

Luminaire Tested: **24CZ-LD5-45-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260735  
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-5500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4664.0 lumens  
Efficiency: N/A  
Efficacy: 144.5 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

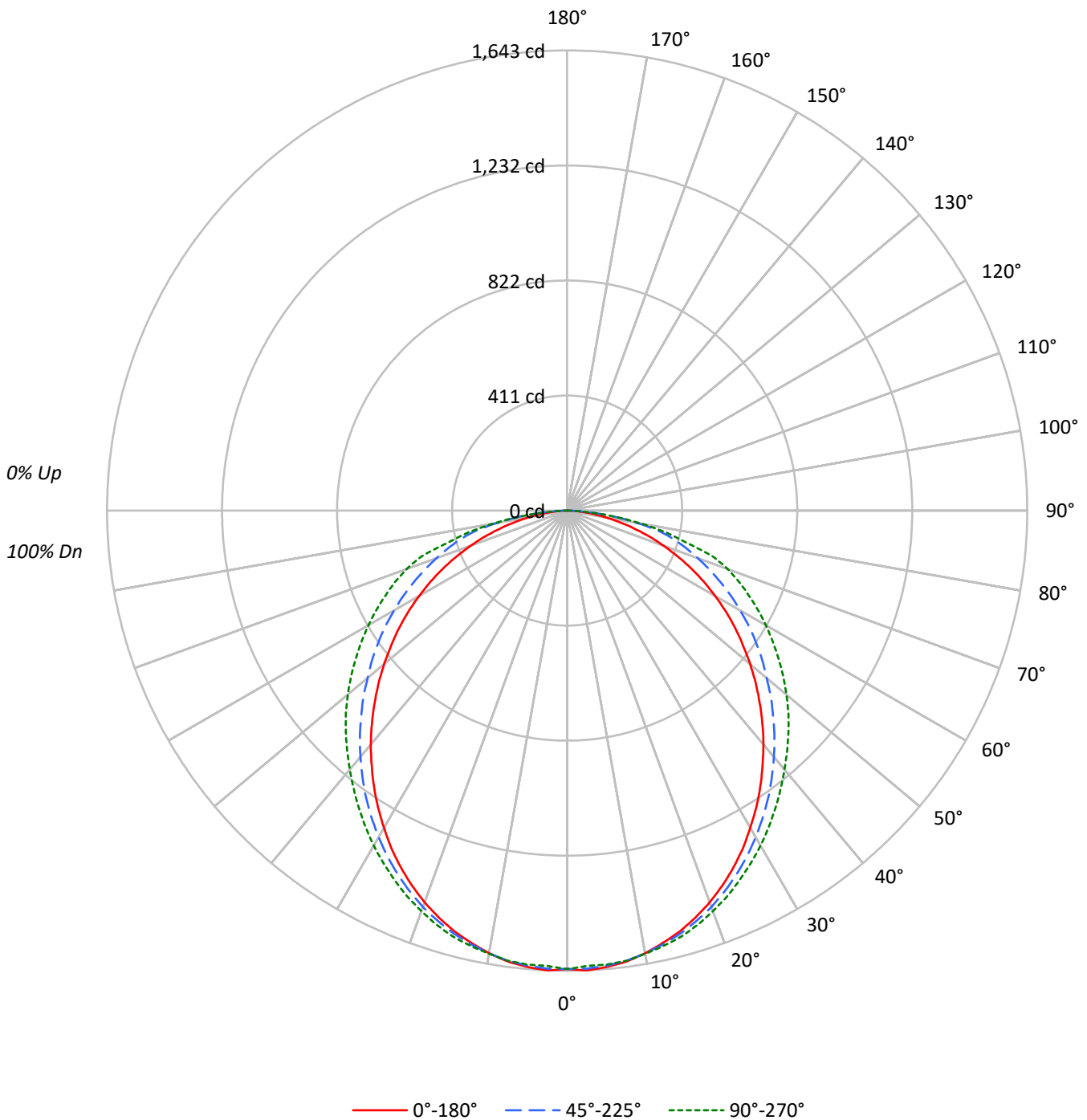
Input Watts (W): 32.271  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2202	2202	2202
5°	2209	2202	2198
10°	2193	2193	2195
15°	2167	2178	2193
20°	2131	2156	2179
25°	2086	2127	2162
30°	2032	2092	2146
35°	1975	2056	2130
40°	1916	2017	2121
45°	1850	1978	2127
50°	1785	1945	2139
55°	1719	1933	2161
60°	1641	1921	2204
65°	1556	1922	2278
70°	1439	1954	2400
75°	1287	2042	2283
80°	1076	1955	2091
85°	814	1504	1430



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	154.7	3.3
10°-20°	440.2	9.4
20°-30°	658.1	14.1
30°-40°	780.7	16.7
40°-50°	803.6	17.2
50°-60°	737.2	15.8
60°-70°	596.0	12.8
70°-80°	386.8	8.3
80°-90°	106.7	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°	1253.0	26.9
0°-40°	2033.7	43.6
0°-60°	3574.5	76.6
0°-90°	4664.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4664.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1637	1637	1637	1637	1637	
5°	1635	1624	1630	1629	1627	155
15°	1555	1549	1563	1570	1574	438
25°	1405	1407	1432	1445	1456	647
35°	1202	1212	1252	1279	1297	752
45°	972	988	1040	1089	1118	750
55°	733	755	824	891	921	655
65°	489	517	604	684	715	483
75°	248	294	393	439	439	263
85°	53	89	97	94	93	65
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1636.8	1636.8	1636.8	1636.8	1636.8
2.5°	1643.2	1630.4	1636.8	1635.2	1627.2
5°	1635.2	1624.0	1630.4	1628.8	1627.2
7.5°	1624.0	1612.9	1620.9	1619.3	1620.9
10°	1604.9	1595.3	1604.9	1606.5	1606.5
12.5°	1580.9	1572.9	1585.7	1588.9	1592.1
15°	1555.4	1549.0	1563.4	1569.8	1574.5
17.5°	1523.4	1518.7	1536.2	1544.2	1550.6
20°	1488.3	1486.7	1505.9	1513.9	1521.8
22.5°	1448.4	1448.4	1470.7	1480.3	1491.5
25°	1405.3	1406.9	1432.4	1445.2	1456.4
27.5°	1359.0	1360.6	1390.9	1406.9	1419.6
30°	1307.9	1314.2	1346.2	1366.9	1381.3
32.5°	1256.8	1264.7	1299.9	1323.8	1339.8
35°	1202.5	1212.0	1252.0	1279.1	1296.7
37.5°	1146.6	1157.8	1200.9	1231.2	1252.0
40°	1090.7	1103.5	1148.2	1183.3	1207.3
42.5°	1031.6	1046.0	1095.5	1137.0	1162.5
45°	972.5	988.5	1039.6	1089.1	1117.8
47.5°	913.4	932.6	986.9	1041.2	1071.5
50°	852.7	871.9	929.4	991.7	1022.0
52.5°	792.1	814.4	878.3	942.2	972.5
55°	733.0	755.3	824.0	891.1	921.4
57.5°	672.3	694.7	769.7	840.0	870.3
60°	610.0	635.6	713.8	785.7	819.2
62.5°	549.3	576.5	659.5	736.2	768.1
65°	488.7	517.4	603.6	683.5	715.4
67.5°	426.4	459.9	549.3	630.8	664.3
70°	365.7	402.4	496.6	578.1	610.0
72.5°	306.6	346.5	443.9	527.0	546.1
75°	247.5	293.8	392.8	439.1	439.1
77.5°	191.6	242.7	335.3	352.9	362.5
80°	138.9	194.8	252.3	273.1	269.9
82.5°	92.6	148.5	180.4	180.4	175.7
85°	52.7	89.4	97.4	94.2	92.6
87.5°	22.4	33.5	30.3	24.0	20.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)