

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: P230007

Luminaire Tested: **24CZ-LD5-40SE-UNV-L950-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230007  
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-LD5-40SE-UNV-L950-CD1-U  
Description: CRUZE 2x4 LED TROFFER  
WITH RIBBED LENS  
Light Source: (84) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3858.0 lumens  
Efficiency: N/A  
Efficacy: 118.5 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

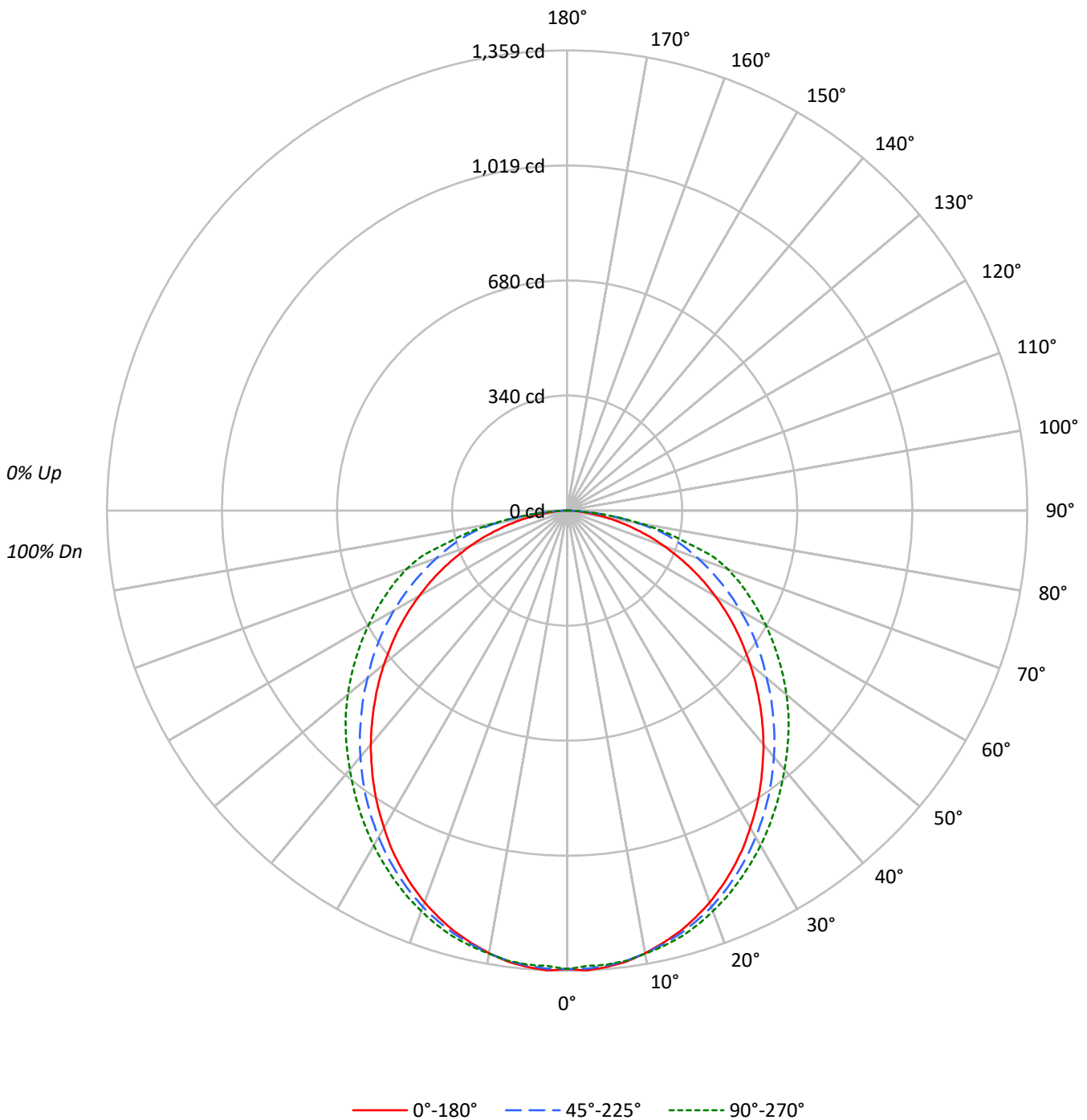
Input Watts (W): 32.55  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1822	1822	1822
5°	1827	1822	1818
10°	1814	1814	1816
15°	1792	1801	1814
20°	1763	1783	1803
25°	1726	1759	1788
30°	1681	1730	1775
35°	1634	1701	1762
40°	1585	1668	1754
45°	1531	1636	1760
50°	1477	1609	1770
55°	1422	1599	1788
60°	1358	1589	1823
65°	1287	1590	1884
70°	1190	1616	1985
75°	1064	1689	1889
80°	890	1617	1729
85°	673	1244	1183



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	127.9	3.3
10°-20°	364.1	9.4
20°-30°	544.4	14.1
30°-40°	645.8	16.7
40°-50°	664.7	17.2
50°-60°	609.8	15.8
60°-70°	493.0	12.8
70°-80°	320.0	8.3
80°-90°	88.2	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°	1036.5	26.9
0°-40°	1682.3	43.6
0°-60°	2956.7	76.6
0°-90°	3858.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3858.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1354	1354	1354	1354	1354	
5°	1353	1343	1349	1347	1346	128
15°	1287	1281	1293	1298	1302	362
25°	1162	1164	1185	1195	1205	535
35°	995	1003	1036	1058	1073	622
45°	804	818	860	901	925	621
55°	606	625	682	737	762	542
65°	404	428	499	565	592	399
75°	205	243	325	363	363	218
85°	44	74	81	78	77	53
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1354.0	1354.0	1354.0	1354.0	1354.0
2.5°	1359.2	1348.7	1354.0	1352.6	1346.0
5°	1352.6	1343.4	1348.7	1347.4	1346.0
7.5°	1343.4	1334.1	1340.7	1339.4	1340.7
10°	1327.5	1319.6	1327.5	1328.9	1328.9
12.5°	1307.7	1301.1	1311.7	1314.3	1317.0
15°	1286.6	1281.3	1293.2	1298.5	1302.4
17.5°	1260.2	1256.2	1270.7	1277.3	1282.6
20°	1231.1	1229.8	1245.6	1252.2	1258.9
22.5°	1198.1	1198.1	1216.6	1224.5	1233.8
25°	1162.4	1163.7	1184.9	1195.4	1204.7
27.5°	1124.1	1125.4	1150.5	1163.7	1174.3
30°	1081.8	1087.1	1113.5	1130.7	1142.6
32.5°	1039.6	1046.2	1075.2	1095.1	1108.3
35°	994.7	1002.6	1035.6	1058.1	1072.6
37.5°	948.4	957.7	993.3	1018.4	1035.6
40°	902.2	912.8	949.8	978.8	998.6
42.5°	853.3	865.2	906.2	940.5	961.6
45°	804.4	817.7	859.9	900.9	924.7
47.5°	755.6	771.4	816.3	861.2	886.3
50°	705.4	721.2	768.8	820.3	845.4
52.5°	655.2	673.7	726.5	779.4	804.4
55°	606.3	624.8	681.6	737.1	762.2
57.5°	556.1	574.6	636.7	694.8	719.9
60°	504.6	525.7	590.5	649.9	677.6
62.5°	454.4	476.9	545.5	609.0	635.4
65°	404.2	428.0	499.3	565.4	591.8
67.5°	352.7	380.4	454.4	521.8	549.5
70°	302.5	332.9	410.8	478.2	504.6
72.5°	253.6	286.6	367.2	435.9	451.8
75°	204.7	243.1	324.9	363.3	363.3
77.5°	158.5	200.8	277.4	291.9	299.9
80°	114.9	161.2	208.7	225.9	223.2
82.5°	76.6	122.8	149.3	149.3	145.3
85°	43.6	74.0	80.6	77.9	76.6
87.5°	18.5	27.7	25.1	19.8	17.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)