

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: P261140

Luminaire Tested: **24CZ-LD5-40-S-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261140  
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-LD5-40-S-UNV-L82765-W2A1-U-2700K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3812.0 lumens  
Efficiency: N/A  
Efficacy: 134.8 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

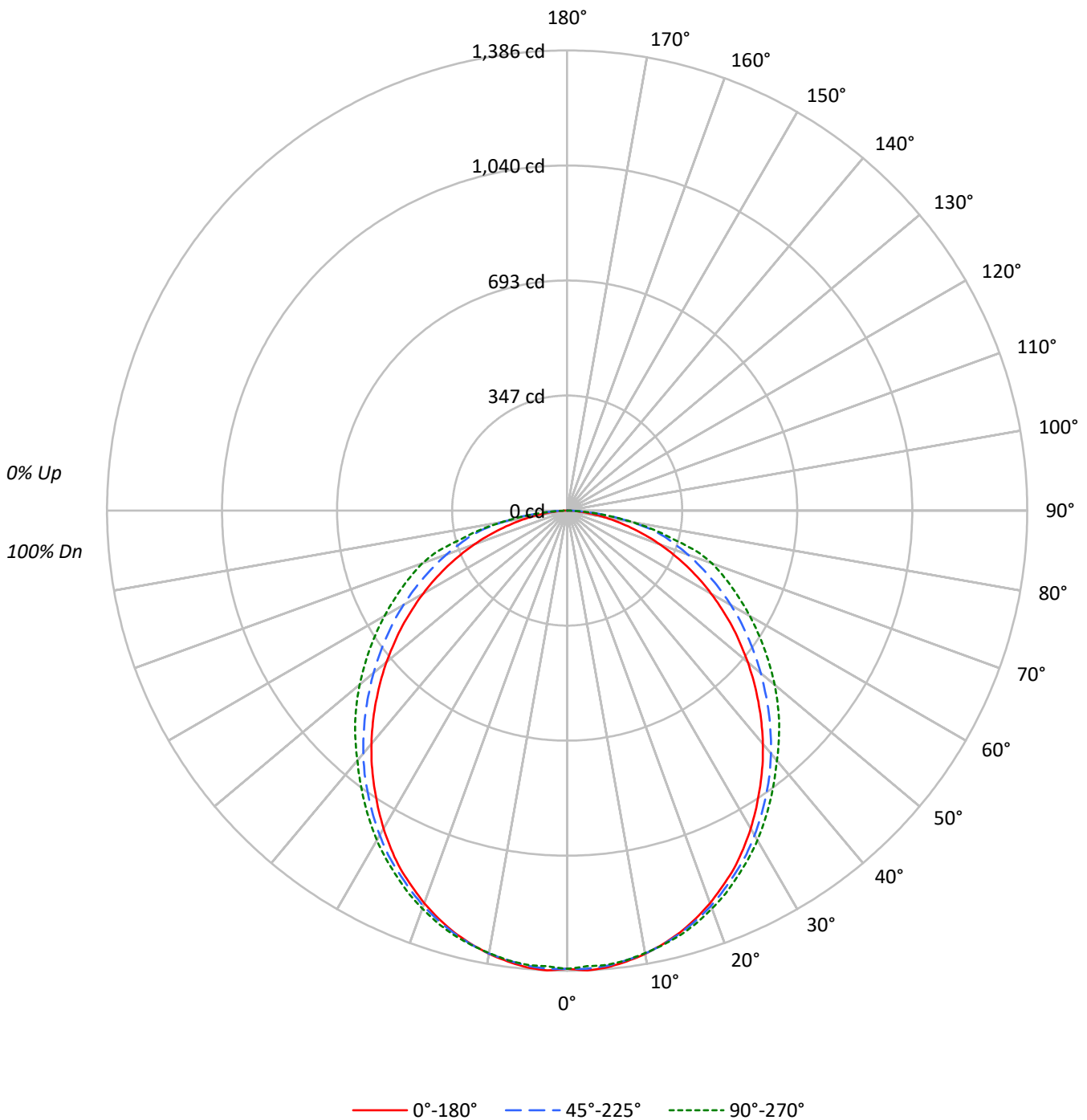
Input Watts (W): 28.272  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1857	1857	1857
5°	1866	1859	1855
10°	1852	1851	1849
15°	1832	1836	1843
20°	1802	1814	1827
25°	1766	1785	1804
30°	1718	1754	1781
35°	1665	1717	1752
40°	1611	1678	1727
45°	1549	1634	1718
50°	1487	1593	1707
55°	1422	1559	1702
60°	1348	1533	1710
65°	1268	1514	1744
70°	1168	1522	1826
75°	1035	1576	1701
80°	865	1494	1533
85°	647	1195	1096



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	130.5	3.4
10°-20°	371.1	9.7
20°-30°	553.0	14.5
30°-40°	651.0	17.1
40°-50°	661.5	17.4
50°-60°	594.7	15.6
60°-70°	469.9	12.3
70°-80°	298.1	7.8
80°-90°	82.3	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°	1054.5	27.7
0°-40°	1705.5	44.7
0°-60°	2961.8	77.7
0°-90°	3812.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3812.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1380	1380	1380	1380	1380	
5°	1381	1370	1376	1374	1374	131
15°	1315	1309	1318	1322	1323	371
25°	1190	1188	1202	1210	1215	547
35°	1013	1020	1045	1057	1067	634
45°	814	826	859	884	903	628
55°	606	622	665	708	726	541
65°	398	419	476	528	548	395
75°	199	233	303	330	327	212
85°	42	72	77	71	71	51
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1380.0	1380.0	1380.0	1380.0	1380.0
2.5°	1386.4	1376.2	1381.3	1378.7	1373.7
5°	1381.3	1369.9	1376.2	1373.7	1373.7
7.5°	1369.9	1361.0	1366.1	1364.8	1366.1
10°	1355.9	1347.0	1354.6	1354.6	1353.4
12.5°	1336.9	1329.3	1338.2	1338.2	1339.4
15°	1315.3	1309.0	1317.9	1321.7	1322.9
17.5°	1288.7	1282.3	1293.8	1297.6	1301.4
20°	1258.2	1255.7	1267.1	1270.9	1276.0
22.5°	1224.0	1224.0	1235.4	1240.5	1248.1
25°	1189.8	1188.5	1202.4	1210.0	1215.1
27.5°	1149.2	1150.4	1168.2	1175.8	1182.1
30°	1106.0	1108.6	1128.9	1137.8	1146.6
32.5°	1060.4	1065.5	1088.3	1098.4	1107.3
35°	1013.4	1019.8	1045.2	1056.6	1066.7
37.5°	966.5	975.4	1002.0	1013.4	1024.9
40°	917.0	924.7	955.1	969.1	983.0
42.5°	866.3	876.5	906.9	927.2	943.7
45°	814.3	825.7	858.7	884.1	903.1
47.5°	762.3	777.5	809.2	843.5	860.0
50°	710.3	725.5	761.0	799.1	815.6
52.5°	657.0	672.2	712.8	752.2	769.9
55°	606.3	621.5	664.6	707.8	725.5
57.5°	553.0	569.5	617.7	662.1	679.9
60°	501.0	517.5	569.5	616.4	635.5
62.5°	450.3	468.0	522.6	572.0	591.1
65°	398.3	418.6	475.6	527.7	547.9
67.5°	347.5	370.4	430.0	484.5	506.1
70°	296.8	323.4	386.9	442.7	464.2
72.5°	247.3	276.5	343.7	399.5	411.0
75°	199.1	233.4	303.1	329.8	327.2
77.5°	153.5	191.5	257.5	262.6	270.2
80°	111.6	153.5	192.8	202.9	197.9
82.5°	73.6	115.4	138.3	133.2	131.9
85°	41.9	72.3	77.4	71.0	71.0
87.5°	17.8	29.2	25.4	19.0	17.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)