

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: P261059

Luminaire Tested: **24CZ-LD5-40-S-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261059  
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-L93050-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3813.8 lumens  
Efficiency: N/A  
Efficacy: 131.5 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

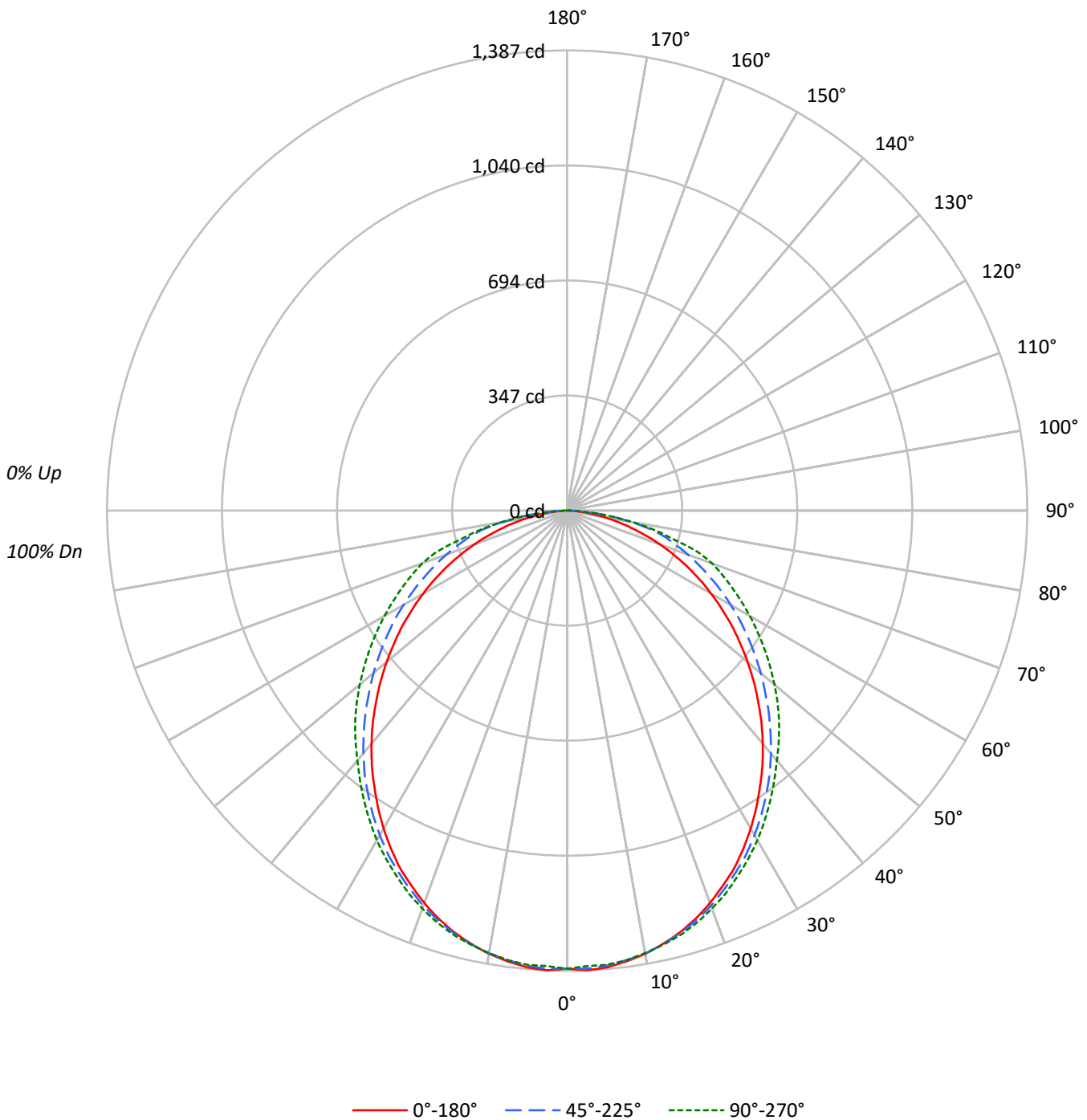
Input Watts (W): 29.007072  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1858	1858	1858
5°	1866	1860	1856
10°	1853	1852	1850
15°	1833	1837	1844
20°	1802	1815	1828
25°	1767	1786	1805
30°	1719	1755	1782
35°	1665	1717	1753
40°	1612	1678	1727
45°	1550	1635	1719
50°	1487	1594	1708
55°	1423	1560	1703
60°	1349	1533	1711
65°	1269	1515	1745
70°	1168	1522	1827
75°	1036	1577	1702
80°	865	1495	1534
85°	647	1195	1098



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	130.5	3.4
10°-20°	371.2	9.7
20°-30°	553.3	14.5
30°-40°	651.3	17.1
40°-50°	661.8	17.4
50°-60°	595.0	15.6
60°-70°	470.1	12.3
70°-80°	298.2	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°	1055.0	27.7
0°-40°	1706.3	44.7
0°-60°	2963.2	77.7
0°-90°	3813.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3813.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1381	1381	1381	1381	1381	
5°	1382	1370	1377	1374	1374	131
15°	1316	1310	1318	1322	1324	371
25°	1190	1189	1203	1211	1216	547
35°	1014	1020	1046	1057	1067	634
45°	815	826	859	884	904	629
55°	607	622	665	708	726	542
65°	398	419	476	528	548	395
75°	199	234	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°	1380.7	1380.7	1380.7	1380.7	1380.7
2.5°	1387.0	1376.9	1381.9	1379.4	1374.3
5°	1381.9	1370.5	1376.9	1374.3	1374.3
7.5°	1370.5	1361.6	1366.7	1365.4	1366.7
10°	1356.6	1347.7	1355.3	1355.3	1354.0
12.5°	1337.5	1329.9	1338.8	1338.8	1340.1
15°	1315.9	1309.6	1318.5	1322.3	1323.6
17.5°	1289.3	1283.0	1294.4	1298.2	1302.0
20°	1258.8	1256.3	1267.7	1271.5	1276.6
22.5°	1224.6	1224.6	1236.0	1241.1	1248.7
25°	1190.3	1189.0	1203.0	1210.6	1215.7
27.5°	1149.7	1151.0	1168.7	1176.4	1182.7
30°	1106.6	1109.1	1129.4	1138.3	1147.2
32.5°	1060.9	1066.0	1088.8	1098.9	1107.8
35°	1013.9	1020.3	1045.6	1057.1	1067.2
37.5°	967.0	975.9	1002.5	1013.9	1025.3
40°	917.5	925.1	955.6	969.5	983.5
42.5°	866.7	876.9	907.3	927.6	944.1
45°	814.7	826.1	859.1	884.5	903.5
47.5°	762.7	777.9	809.6	843.9	860.4
50°	710.6	725.9	761.4	799.5	816.0
52.5°	657.3	672.6	713.2	752.5	770.3
55°	606.6	621.8	665.0	708.1	725.9
57.5°	553.3	569.8	618.0	662.4	680.2
60°	501.3	517.7	569.8	616.7	635.8
62.5°	450.5	468.3	522.8	572.3	591.4
65°	398.5	418.8	475.9	527.9	548.2
67.5°	347.7	370.5	430.2	484.8	506.3
70°	296.9	323.6	387.0	442.9	464.5
72.5°	247.5	276.6	343.9	399.7	411.2
75°	199.2	233.5	303.3	329.9	327.4
77.5°	153.5	191.6	257.6	262.7	270.3
80°	111.7	153.5	192.9	203.0	198.0
82.5°	73.6	115.5	138.3	133.2	132.0
85°	41.9	72.3	77.4	71.1	71.1
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)