

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: P260982

Luminaire Tested: **24CZ-LD5-40-S-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260982
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-L83050-W2A1-U-3000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED AT 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3926.0 lumens
Efficiency: N/A
Efficacy: 139.1 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

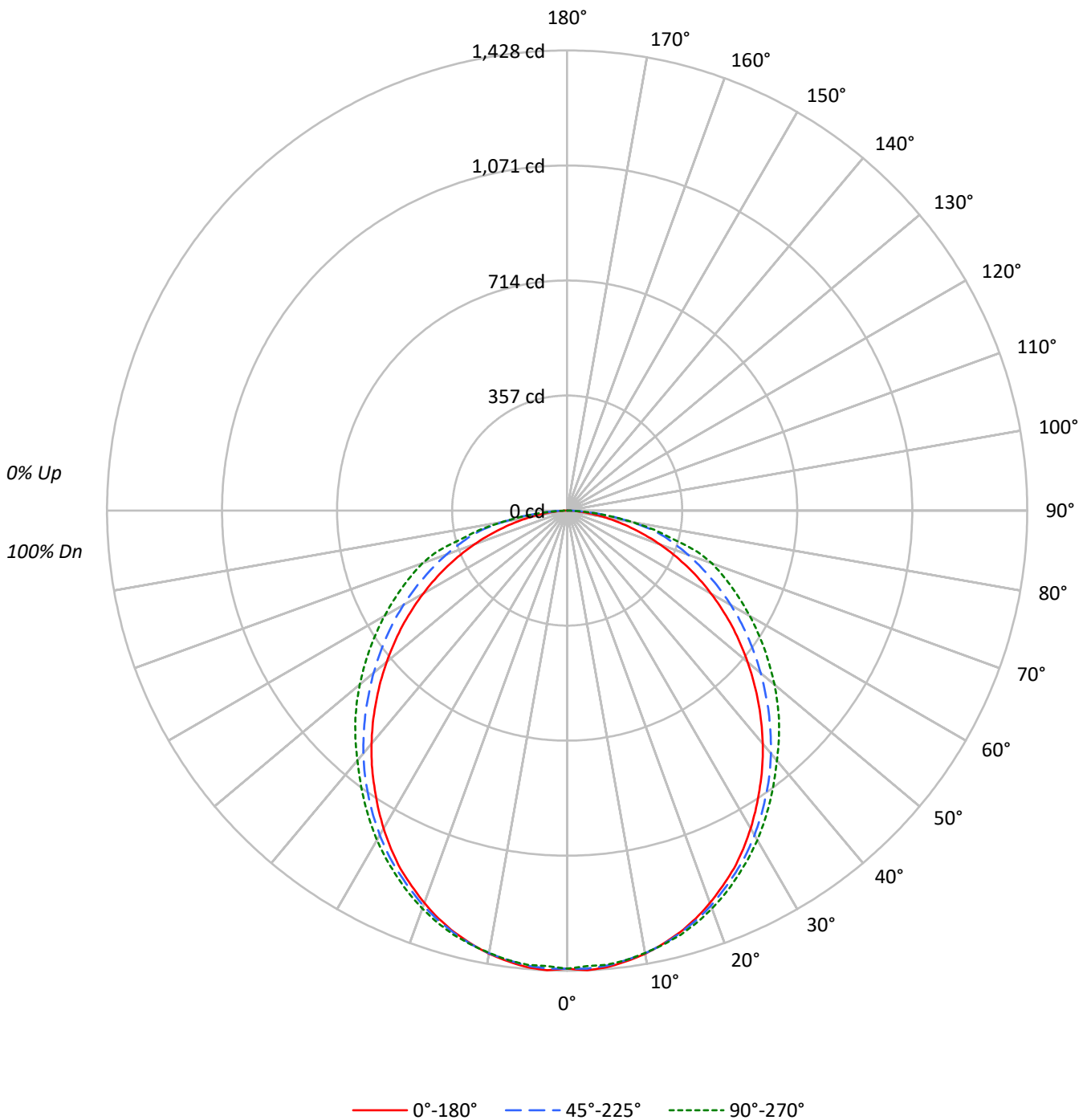
Input Watts (W): 28.215456
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50					50			
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38					38			
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27					27			
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1912	1912	1912
5°	1921	1914	1911
10°	1908	1906	1904
15°	1887	1891	1898
20°	1856	1869	1882
25°	1819	1839	1858
30°	1770	1806	1835
35°	1714	1768	1804
40°	1659	1728	1778
45°	1596	1683	1770
50°	1531	1641	1758
55°	1465	1606	1753
60°	1389	1578	1761
65°	1306	1560	1797
70°	1203	1567	1881
75°	1066	1623	1752
80°	891	1539	1579
85°	665	1230	1130



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.4	3.4
10°-20°	382.2	9.7
20°-30°	569.5	14.5
30°-40°	670.4	17.1
40°-50°	681.3	17.4
50°-60°	612.5	15.6
60°-70°	483.9	12.3
70°-80°	307.0	7.8
80°-90°	84.7	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°	1086.1	27.7
0°-40°	1756.5	44.7
0°-60°	3050.4	77.7
0°-90°	3926.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3926.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1421	1421	1421	1421	1421	
5°	1423	1411	1417	1415	1415	135
15°	1355	1348	1357	1361	1362	382
25°	1225	1224	1238	1246	1252	563
35°	1044	1050	1076	1088	1099	653
45°	839	850	884	910	930	647
55°	624	640	684	729	747	558
65°	410	431	490	543	564	406
75°	205	240	312	340	337	218
85°	43	74	80	73	73	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1421.3	1421.3	1421.3	1421.3	1421.3
2.5°	1427.8	1417.4	1422.6	1420.0	1414.8
5°	1422.6	1410.8	1417.4	1414.8	1414.8
7.5°	1410.8	1401.7	1406.9	1405.6	1406.9
10°	1396.5	1387.3	1395.2	1395.2	1393.9
12.5°	1376.9	1369.0	1378.2	1378.2	1379.5
15°	1354.7	1348.1	1357.3	1361.2	1362.5
17.5°	1327.2	1320.7	1332.5	1336.4	1340.3
20°	1295.9	1293.3	1305.0	1308.9	1314.2
22.5°	1260.6	1260.6	1272.4	1277.6	1285.4
25°	1225.3	1224.0	1238.4	1246.2	1251.5
27.5°	1183.5	1184.8	1203.1	1211.0	1217.5
30°	1139.1	1141.7	1162.6	1171.8	1180.9
32.5°	1092.1	1097.3	1120.8	1131.3	1140.4
35°	1043.8	1050.3	1076.4	1088.2	1098.6
37.5°	995.4	1004.6	1032.0	1043.8	1055.5
40°	944.5	952.3	983.7	998.0	1012.4
42.5°	892.2	902.7	934.0	954.9	971.9
45°	838.7	850.4	884.4	910.5	930.1
47.5°	785.1	800.8	833.4	868.7	885.7
50°	731.5	747.2	783.8	823.0	840.0
52.5°	676.7	692.4	734.2	774.7	792.9
55°	624.4	640.1	684.5	728.9	747.2
57.5°	569.6	586.5	636.2	681.9	700.2
60°	516.0	533.0	586.5	634.9	654.5
62.5°	463.7	482.0	538.2	589.2	608.7
65°	410.2	431.1	489.9	543.4	564.3
67.5°	357.9	381.4	442.8	499.0	521.2
70°	305.7	333.1	398.4	455.9	478.1
72.5°	254.7	284.8	354.0	411.5	423.3
75°	205.1	240.4	312.2	339.6	337.0
77.5°	158.1	197.3	265.2	270.4	278.2
80°	115.0	158.1	198.6	209.0	203.8
82.5°	75.8	118.9	142.4	137.2	135.9
85°	43.1	74.5	79.7	73.2	73.2
87.5°	18.3	30.0	26.1	19.6	18.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)