

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: P276075

Luminaire Tested: **24CZ2-45HE-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276075
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-45HE-UNV-L82765-W2A1-U-5500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 80 CRI LEDS TUNED TO 5500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4412.1 lumens
Efficiency: N/A
Efficacy: 136.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

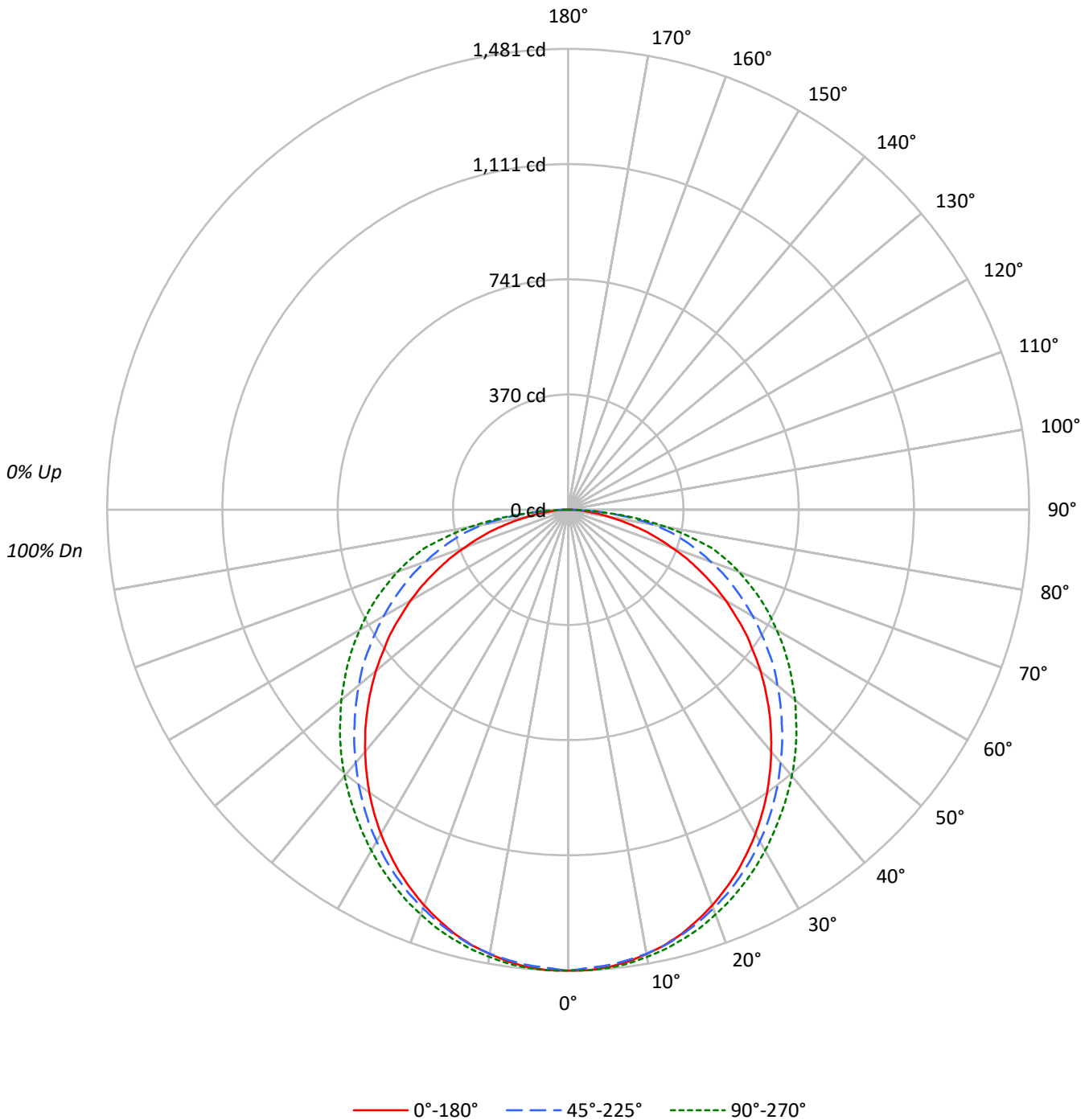
Input Watts (W): 32.271
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1993	1993	1993
5°	1993	1985	1997
10°	1982	1980	1994
15°	1965	1969	1990
20°	1938	1952	1982
25°	1906	1935	1974
30°	1869	1913	1965
35°	1828	1889	1959
40°	1782	1865	1963
45°	1737	1846	1973
50°	1689	1837	1991
55°	1637	1834	2028
60°	1573	1843	2080
65°	1491	1870	2171
70°	1384	1917	2294
75°	1263	2013	2488
80°	1038	2168	2487
85°	795	2001	2137



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.1	3.2
10°-20°	400.0	9.1
20°-30°	601.9	13.6
30°-40°	721.3	16.3
40°-50°	751.7	17.0
50°-60°	699.4	15.9
60°-70°	576.0	13.1
70°-80°	392.3	8.9
80°-90°	129.5	2.9
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°	1142.0	25.9
0°-40°	1863.3	42.2
0°-60°	3314.3	75.1
0°-90°	4412.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4412.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1481	1481	1481	1481	1481	
5°	1476	1476	1470	1477	1478	140
15°	1411	1412	1414	1427	1428	397
25°	1284	1290	1303	1325	1330	591
35°	1113	1126	1150	1181	1193	696
45°	913	932	970	1019	1037	704
55°	698	722	782	844	864	622
65°	468	508	588	657	682	465
75°	243	298	387	456	479	256
85°	52	100	130	138	138	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1481.4	1481.4	1481.4	1481.4	1481.4
2.5°	1481.4	1481.4	1474.0	1481.4	1481.4
5°	1475.5	1475.5	1469.6	1476.9	1478.4
7.5°	1465.2	1466.6	1460.7	1469.6	1471.1
10°	1450.4	1451.9	1449.0	1457.8	1459.3
12.5°	1432.8	1434.2	1434.2	1444.5	1446.0
15°	1410.7	1412.2	1413.6	1426.9	1428.4
17.5°	1382.7	1387.1	1390.1	1406.3	1409.2
20°	1353.3	1357.7	1363.6	1381.2	1384.2
22.5°	1319.4	1325.3	1335.6	1354.7	1359.1
25°	1284.0	1289.9	1303.2	1325.3	1329.7
27.5°	1244.3	1253.1	1269.3	1292.9	1298.8
30°	1203.1	1211.9	1231.0	1256.1	1264.9
32.5°	1158.9	1170.7	1192.7	1220.7	1229.6
35°	1113.2	1126.5	1150.0	1181.0	1192.7
37.5°	1064.6	1079.4	1107.3	1141.2	1155.9
40°	1014.6	1032.2	1061.7	1101.5	1117.6
42.5°	964.5	980.7	1017.5	1060.2	1077.9
45°	913.0	932.1	970.4	1019.0	1036.7
47.5°	860.0	879.1	924.7	976.3	992.5
50°	806.9	826.1	877.6	932.1	951.3
52.5°	749.5	774.5	833.5	887.9	907.1
55°	698.0	721.5	781.9	843.8	864.4
57.5°	639.1	667.1	733.3	798.1	820.2
60°	584.6	614.0	684.7	751.0	773.1
62.5°	528.6	561.0	636.1	703.9	728.9
65°	468.3	508.0	587.5	656.7	681.8
67.5°	413.8	455.0	538.9	609.6	631.7
70°	351.9	402.0	487.4	558.1	583.1
72.5°	298.9	349.0	438.8	508.0	533.1
75°	243.0	297.5	387.3	456.5	478.6
77.5°	187.0	247.4	337.2	390.2	397.6
80°	134.0	197.3	279.8	310.7	321.0
82.5°	94.2	151.7	206.2	226.8	232.7
85°	51.5	100.1	129.6	138.4	138.4
87.5°	22.1	42.7	51.5	53.0	54.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)