

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: P276072

Luminaire Tested: **24CZ2-45HE-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276072
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-4000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4235.2 lumens
Efficiency: N/A
Efficacy: 133.2 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

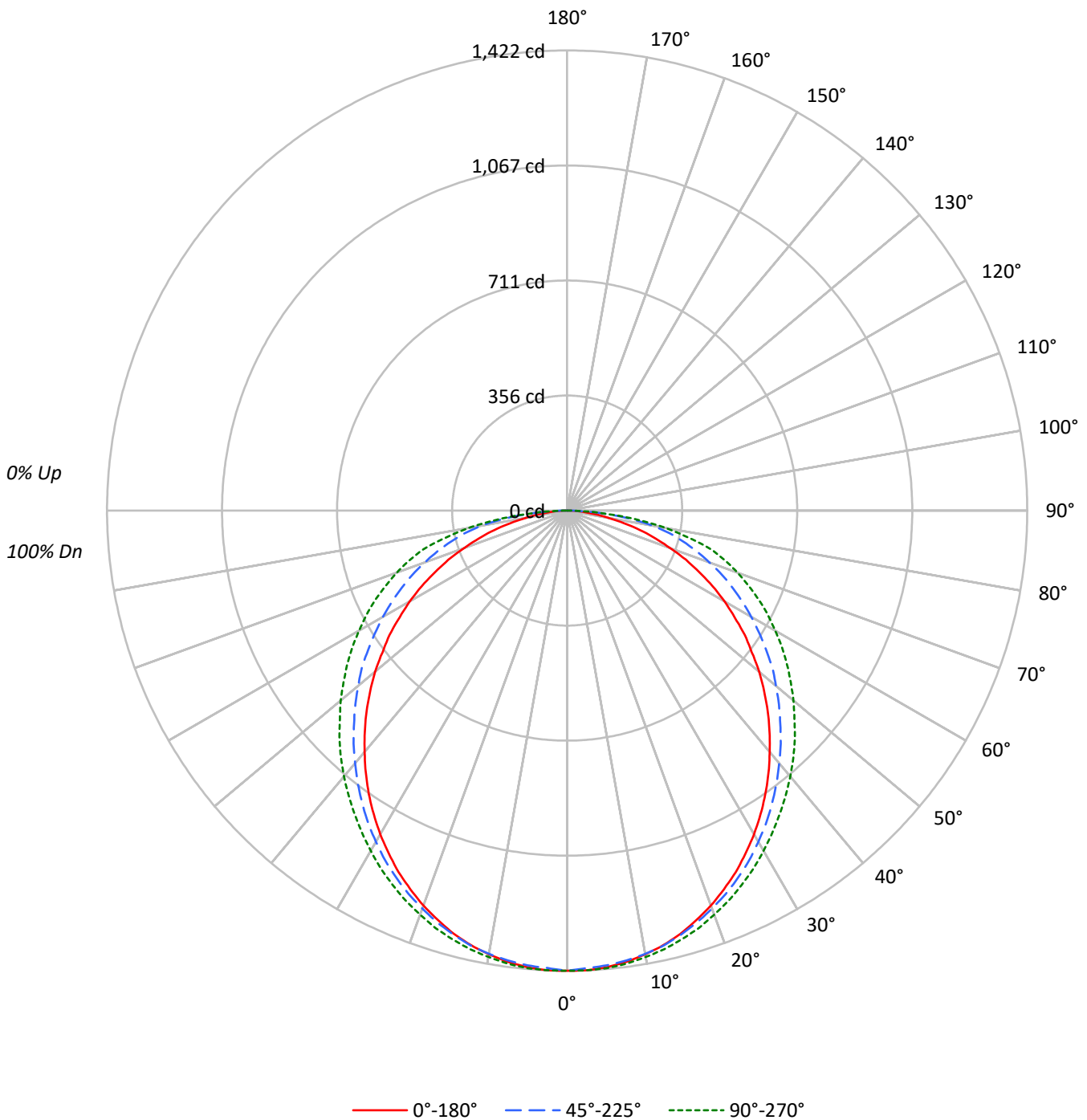
Input Watts (W): 31.806
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1913	1913	1913
5°	1913	1905	1917
10°	1902	1900	1914
15°	1886	1890	1910
20°	1860	1874	1902
25°	1830	1857	1895
30°	1794	1836	1886
35°	1755	1813	1881
40°	1711	1790	1884
45°	1668	1772	1893
50°	1621	1763	1911
55°	1572	1761	1946
60°	1510	1769	1997
65°	1431	1796	2083
70°	1329	1841	2202
75°	1212	1932	2388
80°	996	2081	2387
85°	764	1920	2052



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.5	3.2
10°-20°	383.9	9.1
20°-30°	577.8	13.6
30°-40°	692.4	16.3
40°-50°	721.5	17.0
50°-60°	671.3	15.9
60°-70°	552.9	13.1
70°-80°	376.6	8.9
80°-90°	124.3	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°	1096.2	25.9
0°-40°	1788.6	42.2
0°-60°	3181.4	75.1
0°-90°	4235.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4235.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1422	1422	1422	1422	1422	
5°	1416	1416	1411	1418	1419	134
15°	1354	1356	1357	1370	1371	381
25°	1233	1238	1251	1272	1276	567
35°	1069	1081	1104	1134	1145	668
45°	876	895	932	978	995	676
55°	670	693	751	810	830	597
65°	450	488	564	630	654	446
75°	233	286	372	438	459	246
85°	50	96	124	133	133	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1422.0	1422.0	1422.0	1422.0	1422.0
2.5°	1422.0	1422.0	1414.9	1422.0	1422.0
5°	1416.3	1416.3	1410.7	1417.7	1419.1
7.5°	1406.4	1407.8	1402.2	1410.7	1412.1
10°	1392.3	1393.7	1390.9	1399.4	1400.8
12.5°	1375.3	1376.7	1376.7	1386.6	1388.0
15°	1354.1	1355.5	1356.9	1369.7	1371.1
17.5°	1327.3	1331.5	1334.3	1349.9	1352.7
20°	1299.0	1303.2	1308.9	1325.9	1328.7
22.5°	1266.5	1272.1	1282.0	1300.4	1304.6
25°	1232.6	1238.2	1250.9	1272.1	1276.4
27.5°	1194.4	1202.9	1218.4	1241.0	1246.7
30°	1154.8	1163.3	1181.7	1205.7	1214.2
32.5°	1112.4	1123.7	1144.9	1171.8	1180.3
35°	1068.6	1081.3	1103.9	1133.6	1144.9
37.5°	1022.0	1036.1	1062.9	1095.5	1109.6
40°	973.9	990.9	1019.1	1057.3	1072.8
42.5°	925.8	941.4	976.7	1017.7	1034.7
45°	876.4	894.7	931.5	978.1	995.1
47.5°	825.5	843.9	887.7	937.1	952.7
50°	774.6	793.0	842.4	894.7	913.1
52.5°	719.5	743.5	800.0	852.3	870.7
55°	670.0	692.6	750.6	809.9	829.7
57.5°	613.5	640.3	703.9	766.1	787.3
60°	561.2	589.4	657.3	720.9	742.1
62.5°	507.4	538.5	610.6	675.6	699.7
65°	449.5	487.7	564.0	630.4	654.4
67.5°	397.2	436.8	517.3	585.2	606.4
70°	337.8	385.9	467.9	535.7	559.7
72.5°	286.9	335.0	421.2	487.7	511.7
75°	233.2	285.5	371.7	438.2	459.4
77.5°	179.5	237.5	323.7	374.6	381.6
80°	128.6	189.4	268.6	298.2	308.1
82.5°	90.5	145.6	197.9	217.7	223.3
85°	49.5	96.1	124.4	132.9	132.9
87.5°	21.2	41.0	49.5	50.9	52.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)