

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: P276210

Luminaire Tested: **24CZ2-45HE-UNV-L92765-W2A1-U-5500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276210
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-L92765-W2A1-U-5500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 5500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3982.7 lumens
Efficiency: N/A
Efficacy: 123.4 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

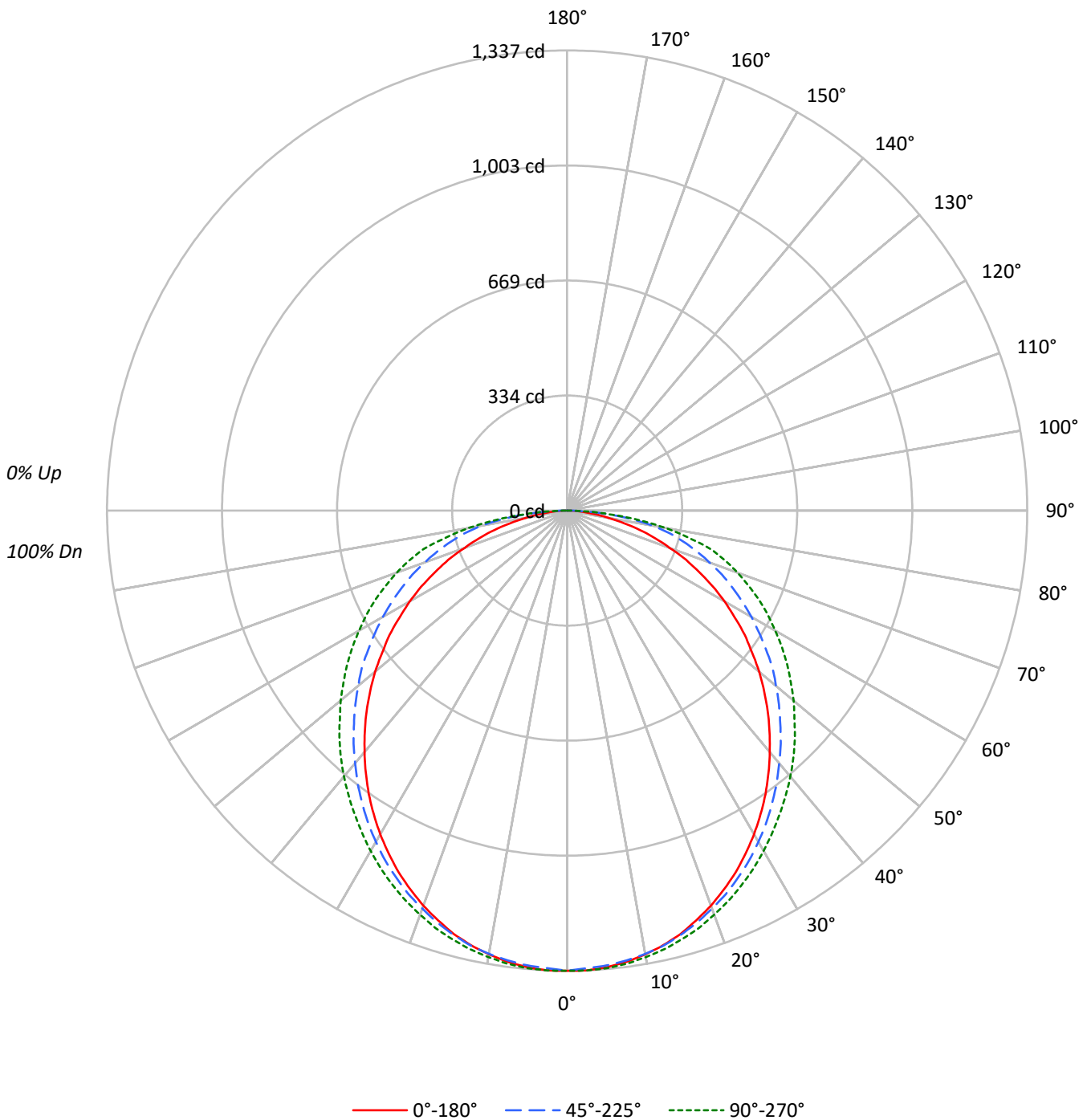
Input Watts (W): 32.271
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1799	1799	1799
5°	1799	1792	1802
10°	1789	1787	1800
15°	1774	1777	1796
20°	1749	1762	1789
25°	1721	1746	1782
30°	1687	1726	1774
35°	1651	1705	1768
40°	1609	1683	1772
45°	1568	1667	1780
50°	1525	1658	1797
55°	1478	1656	1830
60°	1420	1663	1878
65°	1346	1688	1959
70°	1250	1731	2071
75°	1140	1817	2246
80°	938	1956	2245
85°	718	1806	1928



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.5	3.2
10°-20°	361.0	9.1
20°-30°	543.3	13.6
30°-40°	651.1	16.3
40°-50°	678.5	17.0
50°-60°	631.3	15.9
60°-70°	519.9	13.1
70°-80°	354.1	8.9
80°-90°	116.9	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°	1030.8	25.9
0°-40°	1681.9	42.2
0°-60°	2991.7	75.1
0°-90°	3982.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3982.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1337	1337	1337	1337	1337	
5°	1332	1332	1326	1333	1334	126
15°	1273	1275	1276	1288	1289	359
25°	1159	1164	1176	1196	1200	534
35°	1005	1017	1038	1066	1077	628
45°	824	841	876	920	936	636
55°	630	651	706	762	780	562
65°	423	459	530	593	615	420
75°	219	268	350	412	432	231
85°	46	90	117	125	125	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1337.2	1337.2	1337.2	1337.2	1337.2
2.5°	1337.2	1337.2	1330.5	1337.2	1337.2
5°	1331.8	1331.8	1326.5	1333.2	1334.5
7.5°	1322.5	1323.9	1318.6	1326.5	1327.9
10°	1309.3	1310.6	1307.9	1315.9	1317.2
12.5°	1293.3	1294.6	1294.6	1303.9	1305.3
15°	1273.4	1274.7	1276.0	1288.0	1289.3
17.5°	1248.1	1252.1	1254.8	1269.4	1272.0
20°	1221.5	1225.5	1230.8	1246.8	1249.4
22.5°	1191.0	1196.3	1205.6	1222.9	1226.8
25°	1159.1	1164.4	1176.3	1196.3	1200.3
27.5°	1123.2	1131.1	1145.8	1167.0	1172.3
30°	1085.9	1093.9	1111.2	1133.8	1141.8
32.5°	1046.1	1056.7	1076.6	1101.9	1109.9
35°	1004.9	1016.8	1038.1	1066.0	1076.6
37.5°	961.0	974.3	999.6	1030.1	1043.4
40°	915.8	931.8	958.3	994.2	1008.9
42.5°	870.6	885.2	918.5	957.0	973.0
45°	824.1	841.4	875.9	919.8	935.7
47.5°	776.2	793.5	834.7	881.3	895.9
50°	728.4	745.7	792.2	841.4	858.7
52.5°	676.6	699.2	752.3	801.5	818.8
55°	630.0	651.3	705.8	761.6	780.2
57.5°	576.9	602.1	661.9	720.4	740.4
60°	527.7	554.3	618.1	677.9	697.8
62.5°	477.2	506.4	574.2	635.4	657.9
65°	422.7	458.6	530.3	592.8	615.4
67.5°	373.5	410.7	486.5	550.3	570.2
70°	317.7	362.9	440.0	503.8	526.4
72.5°	269.8	315.0	396.1	458.6	481.2
75°	219.3	268.5	349.6	412.0	432.0
77.5°	168.8	223.3	304.4	352.2	358.9
80°	121.0	178.1	252.5	280.5	289.8
82.5°	85.1	136.9	186.1	204.7	210.0
85°	46.5	90.4	117.0	124.9	124.9
87.5°	19.9	38.5	46.5	47.9	49.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)