

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: P276069

Luminaire Tested: **24CZ2-45HE-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276069
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-2700K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 80 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3892.8 lumens
Efficiency: N/A
Efficacy: 123.8 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

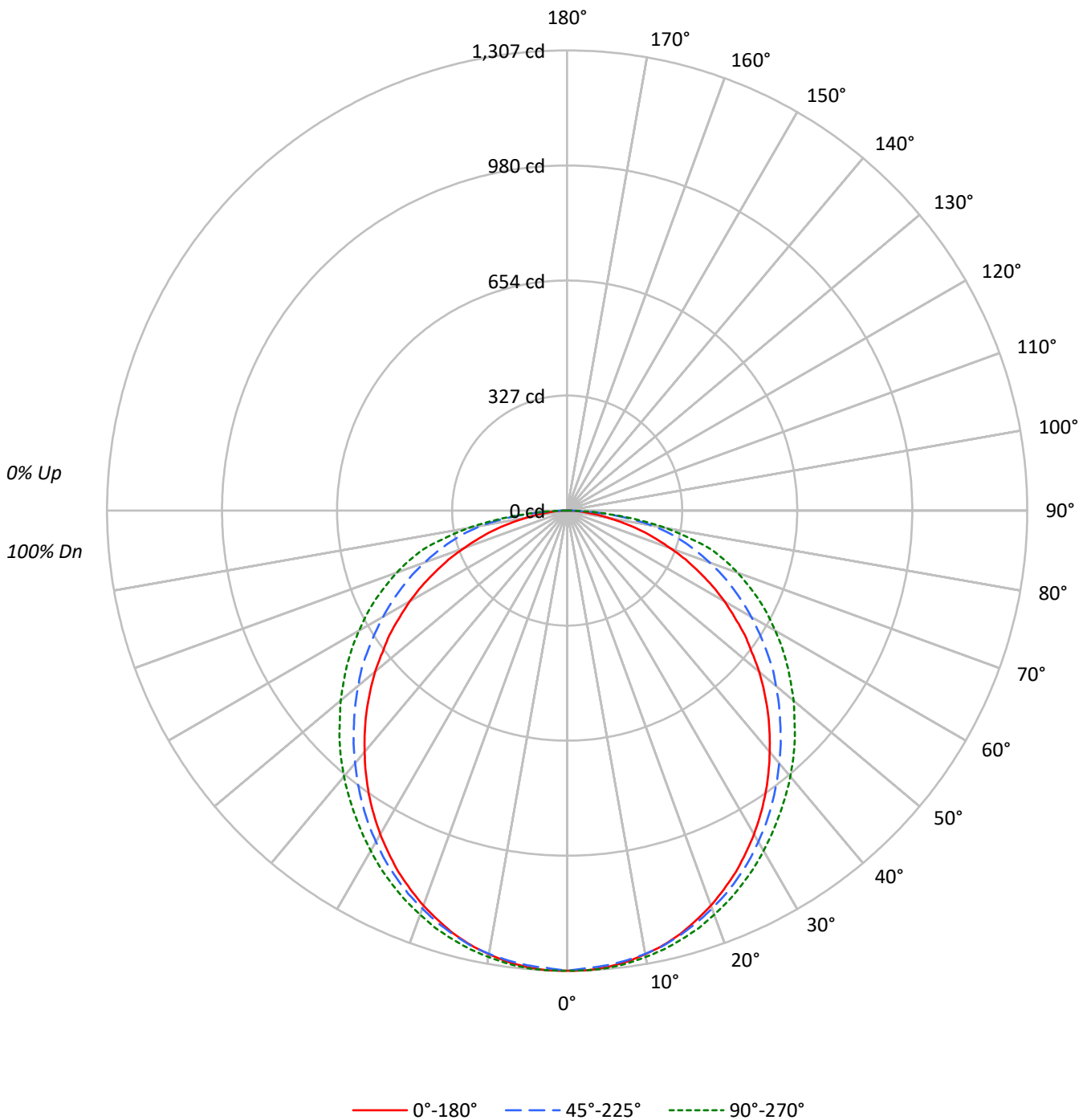
Input Watts (W): 31.434
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1759	1759	1759
5°	1758	1751	1762
10°	1748	1747	1759
15°	1734	1737	1755
20°	1710	1723	1749
25°	1682	1707	1742
30°	1649	1687	1734
35°	1613	1667	1728
40°	1572	1645	1732
45°	1533	1629	1740
50°	1490	1621	1757
55°	1445	1618	1789
60°	1388	1626	1836
65°	1315	1650	1915
70°	1221	1692	2024
75°	1115	1776	2195
80°	916	1912	2194
85°	702	1765	1885



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.6	3.2
10°-20°	352.9	9.1
20°-30°	531.1	13.6
30°-40°	636.4	16.3
40°-50°	663.2	17.0
50°-60°	617.0	15.9
60°-70°	508.2	13.1
70°-80°	346.1	8.9
80°-90°	114.3	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°	1007.6	25.9
0°-40°	1644.0	42.2
0°-60°	2924.2	75.1
0°-90°	3892.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3892.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1307	1307	1307	1307	1307	
5°	1302	1302	1297	1303	1304	124
15°	1245	1246	1247	1259	1260	351
25°	1133	1138	1150	1169	1173	522
35°	982	994	1015	1042	1052	614
45°	806	822	856	899	915	621
55°	616	637	690	744	763	549
65°	413	448	518	579	602	410
75°	214	262	342	403	422	226
85°	46	88	114	122	122	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1307.0	1307.0	1307.0	1307.0	1307.0
2.5°	1307.0	1307.0	1300.5	1307.0	1307.0
5°	1301.8	1301.8	1296.6	1303.1	1304.4
7.5°	1292.7	1294.0	1288.8	1296.6	1297.9
10°	1279.7	1281.0	1278.4	1286.2	1287.5
12.5°	1264.1	1265.4	1265.4	1274.5	1275.8
15°	1244.6	1245.9	1247.2	1258.9	1260.2
17.5°	1219.9	1223.8	1226.4	1240.7	1243.3
20°	1194.0	1197.9	1203.1	1218.6	1221.2
22.5°	1164.1	1169.3	1178.4	1195.3	1199.2
25°	1132.9	1138.1	1149.8	1169.3	1173.2
27.5°	1097.8	1105.6	1119.9	1140.7	1145.9
30°	1061.4	1069.2	1086.1	1108.2	1116.0
32.5°	1022.5	1032.9	1052.3	1077.0	1084.8
35°	982.2	993.9	1014.7	1042.0	1052.3
37.5°	939.3	952.3	977.0	1006.9	1019.9
40°	895.1	910.7	936.7	971.8	986.1
42.5°	851.0	865.3	897.7	935.4	951.0
45°	805.5	822.4	856.2	899.0	914.6
47.5°	758.7	775.6	815.9	861.4	875.7
50°	712.0	728.8	774.3	822.4	839.3
52.5°	661.3	683.4	735.3	783.4	800.3
55°	615.8	636.6	689.9	744.4	762.6
57.5°	563.9	588.5	647.0	704.2	723.7
60°	515.8	541.8	604.1	662.6	682.1
62.5°	466.4	495.0	561.3	621.0	643.1
65°	413.1	448.2	518.4	579.4	601.5
67.5°	365.1	401.5	475.5	537.9	557.4
70°	310.5	354.7	430.0	492.4	514.5
72.5°	263.7	307.9	387.2	448.2	470.3
75°	214.4	262.4	341.7	402.8	422.2
77.5°	165.0	218.3	297.5	344.3	350.8
80°	118.2	174.1	246.8	274.1	283.2
82.5°	83.1	133.8	181.9	200.1	205.3
85°	45.5	88.3	114.3	122.1	122.1
87.5°	19.5	37.7	45.5	46.8	48.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)