

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: P276070

Luminaire Tested: **24CZ2-45HE-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276070
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-3000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4005.4 lumens
Efficiency: N/A
Efficacy: 128.2 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

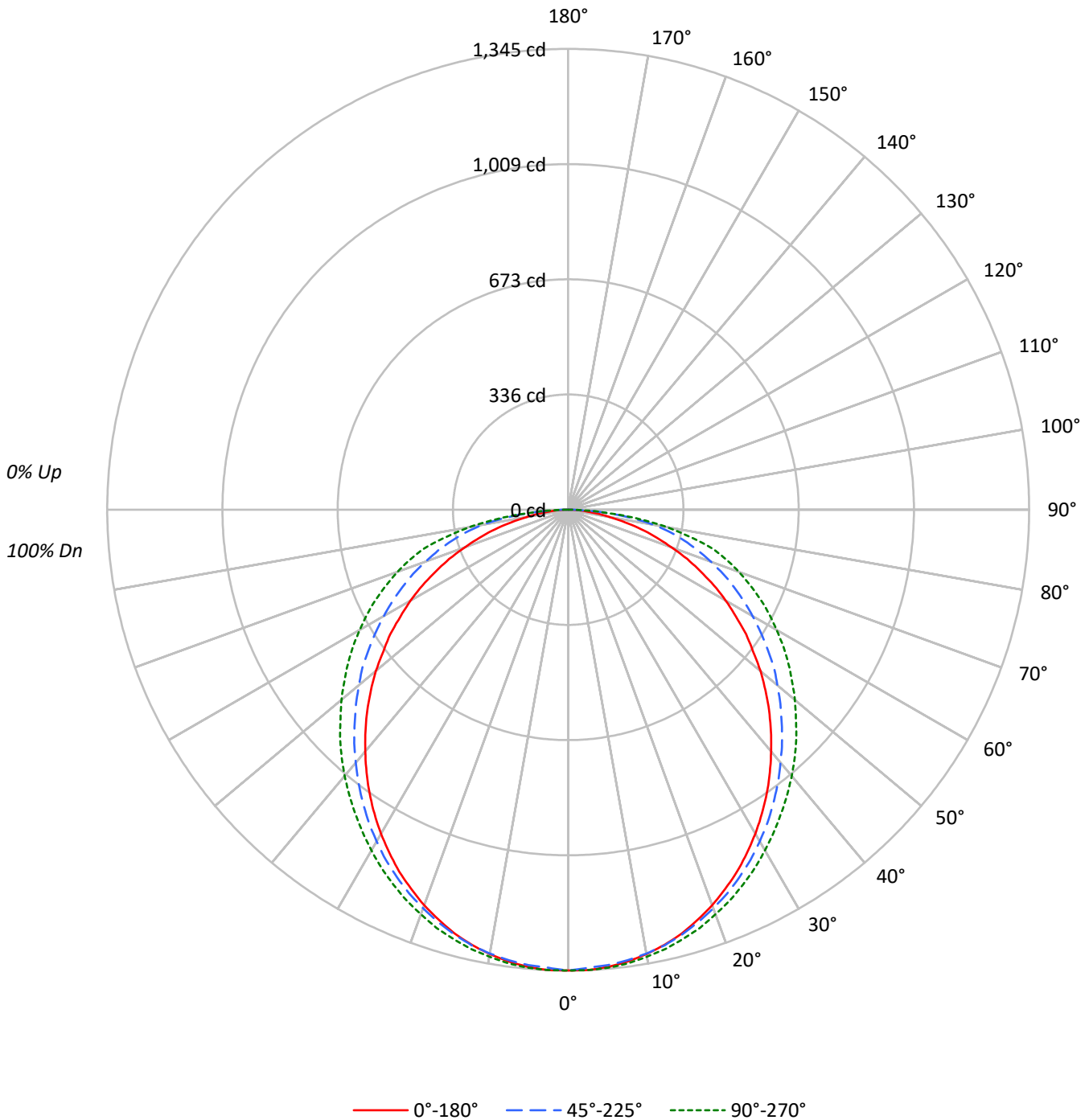
Input Watts (W): 31.248
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1809	1809	1809
5°	1809	1802	1813
10°	1799	1797	1810
15°	1784	1788	1806
20°	1759	1772	1799
25°	1731	1756	1792
30°	1697	1736	1784
35°	1660	1715	1779
40°	1618	1693	1782
45°	1577	1676	1791
50°	1533	1668	1808
55°	1486	1665	1841
60°	1428	1673	1889
65°	1353	1698	1970
70°	1257	1741	2083
75°	1147	1828	2258
80°	942	1968	2258
85°	722	1815	1941



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.2	3.2
10°-20°	363.1	9.1
20°-30°	546.4	13.6
30°-40°	654.8	16.3
40°-50°	682.4	17.0
50°-60°	634.9	15.9
60°-70°	522.9	13.1
70°-80°	356.1	8.9
80°-90°	117.6	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°	1036.7	25.9
0°-40°	1691.5	42.2
0°-60°	3008.8	75.1
0°-90°	4005.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4005.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1345	1345	1345	1345	1345	
5°	1339	1339	1334	1341	1342	127
15°	1281	1282	1283	1295	1297	361
25°	1166	1171	1183	1203	1207	537
35°	1011	1023	1044	1072	1083	632
45°	829	846	881	925	941	639
55°	634	655	710	766	785	565
65°	425	461	533	596	619	422
75°	221	270	352	414	434	233
85°	47	91	118	126	126	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1344.8	1344.8	1344.8	1344.8	1344.8
2.5°	1344.8	1344.8	1338.1	1344.8	1344.8
5°	1339.4	1339.4	1334.1	1340.8	1342.1
7.5°	1330.1	1331.4	1326.1	1334.1	1335.4
10°	1316.7	1318.1	1315.4	1323.4	1324.7
12.5°	1300.7	1302.0	1302.0	1311.4	1312.7
15°	1280.6	1282.0	1283.3	1295.3	1296.7
17.5°	1255.2	1259.2	1261.9	1276.6	1279.3
20°	1228.5	1232.5	1237.8	1253.9	1256.6
22.5°	1197.7	1203.1	1212.4	1229.8	1233.8
25°	1165.7	1171.0	1183.0	1203.1	1207.1
27.5°	1129.6	1137.6	1152.3	1173.7	1179.0
30°	1092.1	1100.2	1117.5	1140.3	1148.3
32.5°	1052.0	1062.7	1082.8	1108.2	1116.2
35°	1010.6	1022.6	1044.0	1072.1	1082.8
37.5°	966.5	979.8	1005.2	1036.0	1049.4
40°	921.0	937.1	963.8	999.9	1014.6
42.5°	875.6	890.3	923.7	962.5	978.5
45°	828.8	846.2	880.9	925.0	941.1
47.5°	780.7	798.0	839.5	886.3	901.0
50°	732.5	749.9	796.7	846.2	863.6
52.5°	680.4	703.1	756.6	806.1	823.4
55°	633.6	655.0	709.8	766.0	784.7
57.5°	580.2	605.6	665.7	724.5	744.6
60°	530.7	557.4	621.6	681.8	701.8
62.5°	479.9	509.3	577.5	639.0	661.7
65°	425.1	461.2	533.4	596.2	618.9
67.5°	375.6	413.1	489.3	553.4	573.5
70°	319.5	364.9	442.5	506.6	529.4
72.5°	271.4	316.8	398.4	461.2	483.9
75°	220.6	270.0	351.6	414.4	434.4
77.5°	169.8	224.6	306.1	354.2	360.9
80°	121.6	179.1	254.0	282.1	291.4
82.5°	85.6	137.7	187.1	205.9	211.2
85°	46.8	90.9	117.6	125.7	125.7
87.5°	20.1	38.8	46.8	48.1	49.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)