

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: P276165

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276165
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: 24CZ2-45-UNV-L82765-W2A1-U-5500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4458.5 lumens
Efficiency: N/A
Efficacy: 123.9 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

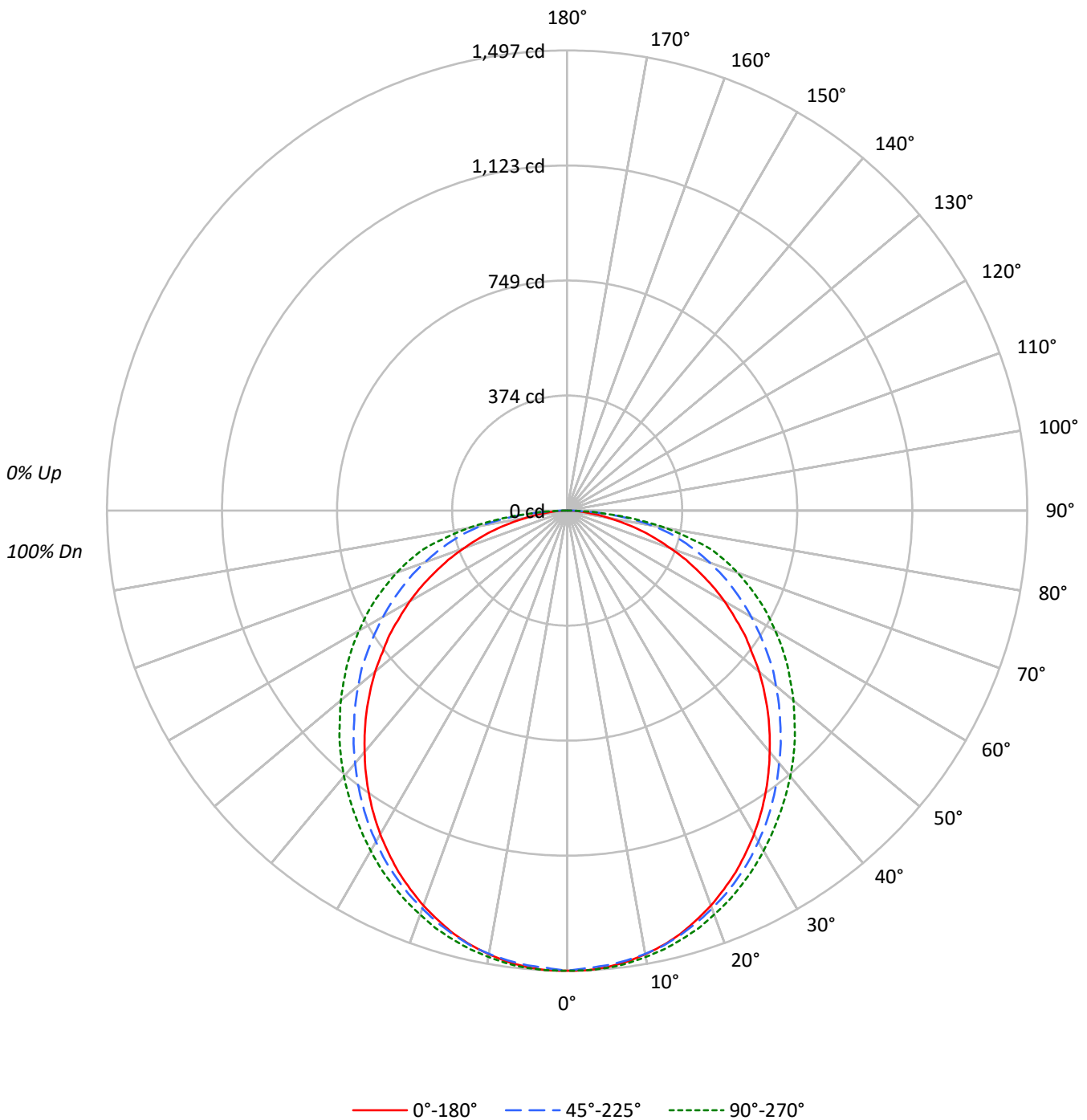
Input Watts (W): 35.991
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2014	2014	2014
5°	2014	2006	2018
10°	2003	2000	2015
15°	1986	1990	2011
20°	1958	1973	2003
25°	1926	1955	1995
30°	1889	1933	1986
35°	1848	1909	1980
40°	1801	1884	1984
45°	1756	1866	1993
50°	1707	1856	2012
55°	1654	1853	2049
60°	1590	1862	2102
65°	1507	1890	2193
70°	1399	1937	2318
75°	1276	2034	2514
80°	1049	2190	2514
85°	804	2021	2160



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.6	3.2
10°-20°	404.2	9.1
20°-30°	608.2	13.6
30°-40°	728.9	16.3
40°-50°	759.6	17.0
50°-60°	706.7	15.9
60°-70°	582.1	13.1
70°-80°	396.4	8.9
80°-90°	130.9	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°	1154.0	25.9
0°-40°	1882.9	42.2
0°-60°	3349.2	75.1
0°-90°	4458.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4458.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1497	1497	1497	1497	1497	
5°	1491	1491	1485	1492	1494	142
15°	1426	1427	1428	1442	1443	402
25°	1298	1304	1317	1339	1344	597
35°	1125	1138	1162	1193	1205	703
45°	923	942	981	1030	1048	712
55°	705	729	790	853	874	629
65°	473	513	594	664	689	470
75°	246	301	391	461	484	259
85°	52	101	131	140	140	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1496.9	1496.9	1496.9	1496.9	1496.9
2.5°	1496.9	1496.9	1489.5	1496.9	1496.9
5°	1491.0	1491.0	1485.0	1492.5	1493.9
7.5°	1480.6	1482.0	1476.1	1485.0	1486.5
10°	1465.7	1467.2	1464.2	1473.1	1474.6
12.5°	1447.8	1449.3	1449.3	1459.7	1461.2
15°	1425.5	1427.0	1428.5	1441.9	1443.4
17.5°	1397.2	1401.7	1404.7	1421.0	1424.0
20°	1367.5	1371.9	1377.9	1395.7	1398.7
22.5°	1333.2	1339.2	1349.6	1369.0	1373.4
25°	1297.5	1303.5	1316.9	1339.2	1343.7
27.5°	1257.4	1266.3	1282.7	1306.5	1312.4
30°	1215.7	1224.6	1244.0	1269.3	1278.2
32.5°	1171.1	1183.0	1205.3	1233.5	1242.5
35°	1124.9	1138.3	1162.1	1193.4	1205.3
37.5°	1075.8	1090.7	1119.0	1153.2	1168.1
40°	1025.2	1043.1	1072.8	1113.0	1129.4
42.5°	974.6	991.0	1028.2	1071.4	1089.2
45°	922.6	941.9	980.6	1029.7	1047.5
47.5°	869.0	888.3	934.5	986.5	1002.9
50°	815.4	834.8	886.8	941.9	961.2
52.5°	757.4	782.7	842.2	897.3	916.6
55°	705.3	729.1	790.1	852.6	873.5
57.5°	645.8	674.1	741.0	806.5	828.8
60°	590.7	620.5	691.9	758.9	781.2
62.5°	534.2	566.9	642.8	711.3	736.6
65°	473.2	513.4	593.7	663.6	688.9
67.5°	418.1	459.8	544.6	616.0	638.4
70°	355.6	406.2	492.5	564.0	589.2
72.5°	302.1	352.7	443.4	513.4	538.7
75°	245.5	300.6	391.3	461.3	483.6
77.5°	189.0	250.0	340.8	394.3	401.8
80°	135.4	199.4	282.7	314.0	324.4
82.5°	95.2	153.3	208.3	229.2	235.1
85°	52.1	101.2	130.9	139.9	139.9
87.5°	22.3	43.2	52.1	53.6	55.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)