

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: P276586

Luminaire Tested: **24CZ2-45-S-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276586
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-45-S-UNV-L82765-W2A1-U-5700K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4696.7 lumens
Efficiency: N/A
Efficacy: 130.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

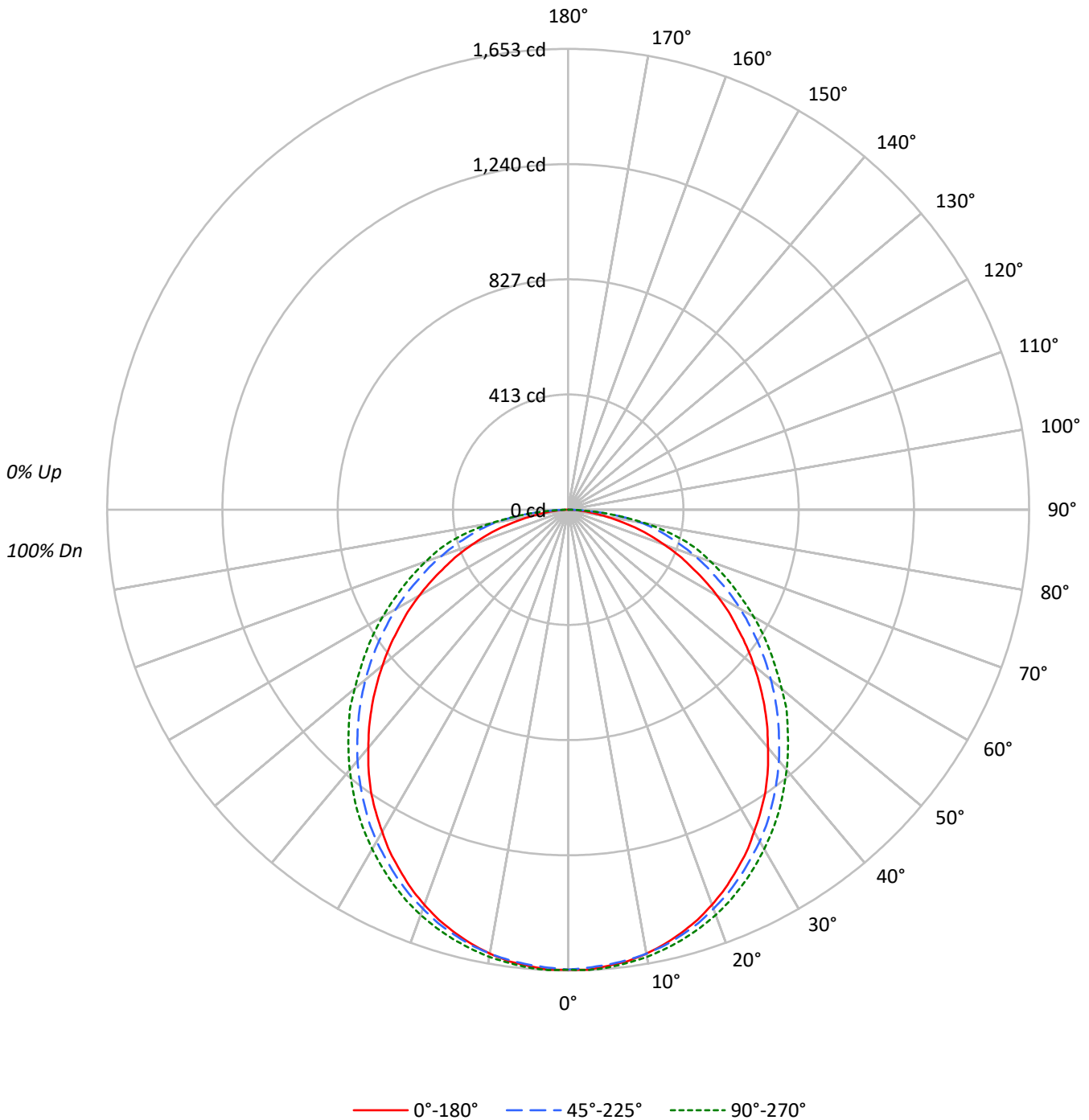
Input Watts (W): 35.991
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2220	2220	2220
5°	2218	2212	2227
10°	2209	2209	2226
15°	2188	2198	2221
20°	2160	2181	2215
25°	2120	2159	2201
30°	2072	2135	2183
35°	2026	2100	2166
40°	1957	2065	2141
45°	1893	2024	2118
50°	1820	1986	2092
55°	1739	1949	2072
60°	1658	1919	2067
65°	1553	1886	2080
70°	1438	1896	2136
75°	1287	1931	2257
80°	1041	2046	2208
85°	783	1797	1751



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.2	3.3
10°-20°	446.3	9.5
20°-30°	670.9	14.3
30°-40°	799.2	17.0
40°-50°	817.9	17.4
50°-60°	736.4	15.7
60°-70°	578.3	12.3
70°-80°	375.3	8.0
80°-90°	116.1	2.5
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°	1273.5	27.1
0°-40°	2072.6	44.1
0°-60°	3626.9	77.2
0°-90°	4696.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4696.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1650	1650	1650	1650	1650	
5°	1642	1646	1638	1647	1648	156
15°	1571	1575	1578	1592	1595	443
25°	1428	1440	1454	1478	1483	658
35°	1234	1249	1278	1310	1319	770
45°	995	1019	1064	1104	1113	767
55°	741	774	831	874	883	665
65°	488	525	592	642	653	486
75°	248	295	372	422	434	262
85°	51	94	116	113	113	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1650.0	1650.0	1650.0	1650.0	1650.0
2.5°	1651.4	1651.4	1644.0	1651.4	1652.9
5°	1642.5	1645.5	1638.0	1647.0	1648.5
7.5°	1633.5	1633.5	1629.1	1638.0	1639.5
10°	1617.1	1618.6	1617.1	1627.6	1629.1
12.5°	1596.2	1599.2	1600.7	1611.2	1612.7
15°	1570.9	1575.4	1578.3	1591.8	1594.8
17.5°	1542.5	1547.0	1554.5	1569.4	1572.4
20°	1508.2	1514.2	1523.1	1542.5	1547.0
22.5°	1470.9	1476.9	1491.8	1509.7	1517.2
25°	1427.7	1439.6	1454.5	1478.4	1482.9
27.5°	1384.4	1394.9	1414.2	1439.6	1445.6
30°	1333.7	1350.1	1374.0	1399.3	1405.3
32.5°	1284.5	1300.9	1329.2	1356.1	1363.5
35°	1233.7	1248.7	1278.5	1309.8	1318.8
37.5°	1175.6	1194.9	1227.8	1259.1	1268.0
40°	1114.4	1138.3	1175.6	1208.4	1218.8
42.5°	1056.2	1081.6	1118.9	1154.7	1166.6
45°	995.0	1018.9	1063.7	1103.9	1112.9
47.5°	932.4	959.2	1007.0	1047.3	1062.2
50°	869.7	898.1	948.8	990.6	999.5
52.5°	807.1	836.9	890.6	935.4	939.8
55°	741.4	774.3	830.9	874.2	883.2
57.5°	681.8	710.1	771.3	816.0	826.5
60°	616.1	647.5	713.1	754.9	768.3
62.5°	553.5	586.3	654.9	696.7	708.6
65°	487.8	525.1	592.3	641.5	653.4
67.5°	431.1	466.9	538.5	586.3	598.2
70°	365.5	405.8	481.9	531.1	543.0
72.5°	308.8	350.6	426.7	474.4	492.3
75°	247.6	295.4	371.5	422.2	434.1
77.5°	188.0	243.2	320.7	359.5	359.5
80°	134.3	192.4	264.1	282.0	284.9
82.5°	88.0	144.7	195.4	193.9	193.9
85°	50.7	94.0	116.4	113.4	113.4
87.5°	19.4	38.8	41.8	41.8	40.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)