

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: P276319

Luminaire Tested: **24CZ2-35HE-S-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276319
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: 24CZ2-35HE-S-UNV-L83050-W2A1-U-4000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3673.0 lumens
Efficiency: N/A
Efficacy: 148.5 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

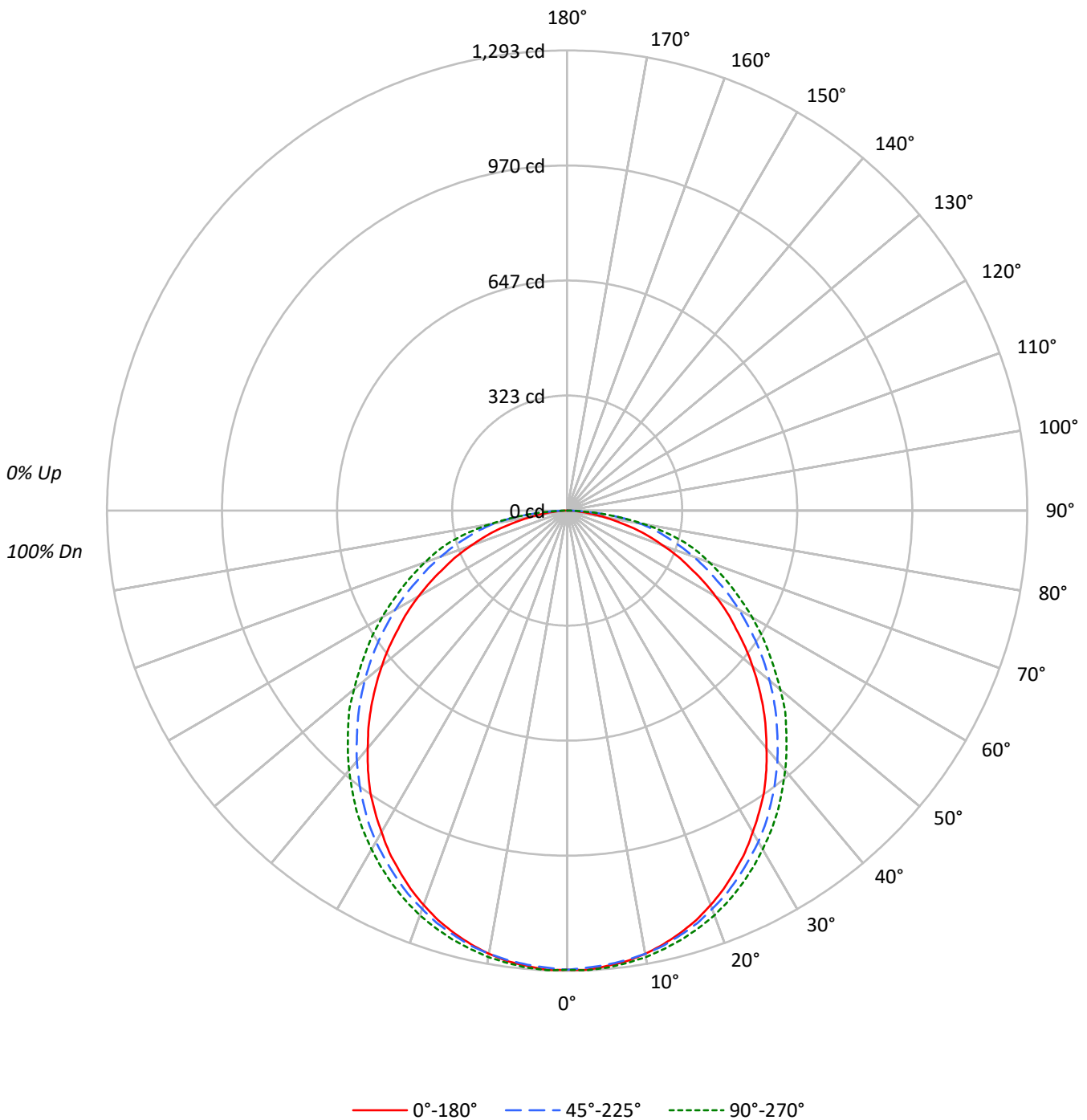
Input Watts (W): 24.73614
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1736	1736	1736
5°	1735	1730	1741
10°	1728	1728	1741
15°	1711	1719	1737
20°	1689	1706	1732
25°	1658	1689	1722
30°	1620	1669	1707
35°	1585	1642	1694
40°	1531	1615	1674
45°	1481	1583	1656
50°	1424	1553	1636
55°	1360	1524	1620
60°	1297	1501	1617
65°	1215	1475	1627
70°	1124	1482	1671
75°	1007	1510	1765
80°	814	1600	1726
85°	613	1405	1369



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.2	3.3
10°-20°	349.0	9.5
20°-30°	524.7	14.3
30°-40°	625.0	17.0
40°-50°	639.6	17.4
50°-60°	575.9	15.7
60°-70°	452.3	12.3
70°-80°	293.5	8.0
80°-90°	90.8	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°	995.9	27.1
0°-40°	1620.9	44.1
0°-60°	2836.4	77.2
0°-90°	3673.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3673.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1290	1290	1290	1290	1290	
5°	1284	1287	1281	1288	1289	122
15°	1228	1232	1234	1245	1247	346
25°	1116	1126	1138	1156	1160	514
35°	965	976	1000	1024	1031	602
45°	778	797	832	863	870	600
55°	580	606	650	684	691	520
65°	382	411	463	502	511	380
75°	194	231	290	330	340	205
85°	40	74	91	89	89	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1290.3	1290.3	1290.3	1290.3	1290.3
2.5°	1291.5	1291.5	1285.7	1291.5	1292.7
5°	1284.5	1286.8	1281.0	1288.0	1289.2
7.5°	1277.5	1277.5	1274.0	1281.0	1282.2
10°	1264.7	1265.8	1264.7	1272.8	1274.0
12.5°	1248.3	1250.7	1251.8	1260.0	1261.2
15°	1228.5	1232.0	1234.3	1244.8	1247.2
17.5°	1206.3	1209.8	1215.7	1227.3	1229.7
20°	1179.5	1184.2	1191.2	1206.3	1209.8
22.5°	1150.3	1155.0	1166.7	1180.7	1186.5
25°	1116.5	1125.8	1137.5	1156.2	1159.7
27.5°	1082.7	1090.8	1106.0	1125.8	1130.5
30°	1043.0	1055.8	1074.5	1094.3	1099.0
32.5°	1004.5	1017.3	1039.5	1060.5	1066.3
35°	964.8	976.5	999.8	1024.3	1031.3
37.5°	919.3	934.5	960.2	984.7	991.7
40°	871.5	890.2	919.3	945.0	953.2
42.5°	826.0	845.8	875.0	903.0	912.3
45°	778.2	796.8	831.8	863.3	870.3
47.5°	729.2	750.2	787.5	819.0	830.7
50°	680.2	702.3	742.0	774.7	781.7
52.5°	631.2	654.5	696.5	731.5	735.0
55°	579.8	605.5	649.8	683.7	690.7
57.5°	533.2	555.3	603.2	638.2	646.3
60°	481.8	506.3	557.7	590.3	600.8
62.5°	432.8	458.5	512.2	544.8	554.2
65°	381.5	410.7	463.2	501.7	511.0
67.5°	337.2	365.2	421.2	458.5	467.8
70°	285.8	317.3	376.8	415.3	424.7
72.5°	241.5	274.2	333.7	371.0	385.0
75°	193.7	231.0	290.5	330.2	339.5
77.5°	147.0	190.2	250.8	281.2	281.2
80°	105.0	150.5	206.5	220.5	222.8
82.5°	68.8	113.2	152.8	151.7	151.7
85°	39.7	73.5	91.0	88.7	88.7
87.5°	15.2	30.3	32.7	32.7	31.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)