

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: P276467

Luminaire Tested: **24CZ2-30HE-S-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276467
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: 24CZ2-30HE-S-UNV-L82765-W2A1-U-5000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3142.0 lumens
Efficiency: N/A
Efficacy: 156.4 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

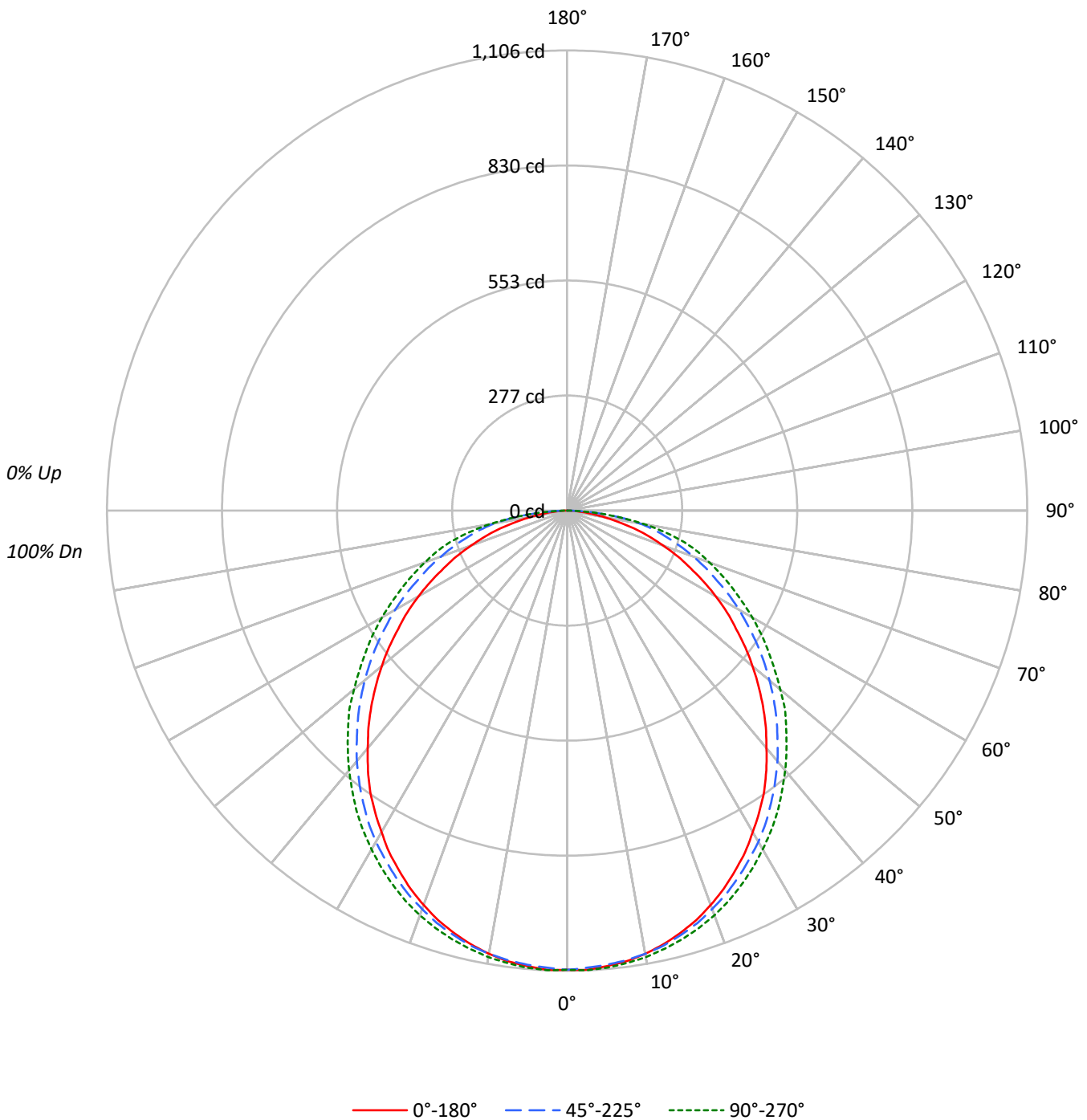
Input Watts (W): 20.088
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1485	1485	1485
5°	1484	1480	1489
10°	1478	1478	1489
15°	1464	1471	1486
20°	1445	1459	1482
25°	1418	1445	1473
30°	1386	1428	1461
35°	1356	1405	1449
40°	1309	1381	1432
45°	1267	1354	1417
50°	1218	1329	1400
55°	1164	1304	1386
60°	1109	1284	1383
65°	1039	1261	1392
70°	962	1268	1429
75°	861	1292	1510
80°	696	1368	1477
85°	523	1201	1170



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.5	3.3
10°-20°	298.6	9.5
20°-30°	448.8	14.3
30°-40°	534.6	17.0
40°-50°	547.2	17.4
50°-60°	492.6	15.7
60°-70°	386.9	12.3
70°-80°	251.1	8.0
80°-90°	77.6	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°	851.9	27.1
0°-40°	1386.6	44.1
0°-60°	2426.4	77.2
0°-90°	3142.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3142.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1104	1104	1104	1104	1104	
5°	1099	1101	1096	1102	1103	104
15°	1051	1054	1056	1065	1067	296
25°	955	963	973	989	992	440
35°	825	835	855	876	882	515
45°	666	682	712	738	744	513
55°	496	518	556	585	591	445
65°	326	351	396	429	437	325
75°	166	198	248	282	290	175
85°	34	63	78	76	76	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1103.8	1103.8	1103.8	1103.8	<i>1103.8</i>
2.5°	<i>1104.8</i>	<i>1104.8</i>	<i>1099.8</i>	<i>1104.8</i>	<i>1105.8</i>
5°	1098.8	1100.8	1095.8	1101.8	<i>1102.8</i>
7.5°	1092.8	1092.8	1089.8	1095.8	<i>1096.8</i>
10°	1081.9	1082.9	1081.9	1088.8	<i>1089.8</i>
12.5°	1067.9	1069.9	1070.9	1077.9	<i>1078.9</i>
15°	1050.9	1053.9	1055.9	1064.9	<i>1066.9</i>
17.5°	1032.0	1034.9	1039.9	1049.9	<i>1051.9</i>
20°	1009.0	1013.0	1019.0	1032.0	<i>1034.9</i>
22.5°	984.0	988.0	998.0	1010.0	<i>1015.0</i>
25°	955.1	963.1	973.1	989.0	<i>992.0</i>
27.5°	926.2	933.1	946.1	963.1	<i>967.1</i>
30°	892.2	903.2	919.2	936.1	<i>940.1</i>
32.5°	859.3	870.3	889.2	907.2	<i>912.2</i>
35°	825.4	835.3	855.3	876.3	<i>882.3</i>
37.5°	786.4	799.4	821.4	842.3	<i>848.3</i>
40°	745.5	761.5	786.4	808.4	<i>815.4</i>
42.5°	706.6	723.6	748.5	772.5	<i>780.5</i>
45°	665.7	681.6	711.6	738.5	<i>744.5</i>
47.5°	623.8	641.7	673.7	700.6	<i>710.6</i>
50°	581.8	600.8	634.7	662.7	<i>668.7</i>
52.5°	539.9	559.9	595.8	625.8	<i>628.8</i>
55°	496.0	518.0	555.9	584.8	<i>590.8</i>
57.5°	456.1	475.1	516.0	545.9	<i>552.9</i>
60°	412.2	433.1	477.1	505.0	<i>514.0</i>
62.5°	370.3	392.2	438.1	466.1	<i>474.1</i>
65°	326.4	351.3	396.2	429.1	<i>437.1</i>
67.5°	288.4	312.4	360.3	392.2	<i>400.2</i>
70°	244.5	271.5	322.4	355.3	<i>363.3</i>
72.5°	206.6	234.5	285.4	317.4	<i>329.3</i>
75°	165.7	197.6	248.5	282.4	<i>290.4</i>
77.5°	125.8	162.7	214.6	240.5	<i>240.5</i>
80°	89.8	128.7	176.6	188.6	<i>190.6</i>
82.5°	58.9	96.8	130.7	129.7	<i>129.7</i>
85°	33.9	62.9	77.8	75.8	<i>75.8</i>
87.5°	13.0	25.9	27.9	27.9	<i>26.9</i>
90°	0.0	0.0	0.0	0.0	<i>0.0</i>

(END OF REPORT)