

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: P276366

Luminaire Tested: **24CZ2-30-S-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276366
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: 24CZ2-30-S-UNV-L83050-W2A1-U-5000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3196.0 lumens
Efficiency: N/A
Efficacy: 140.0 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

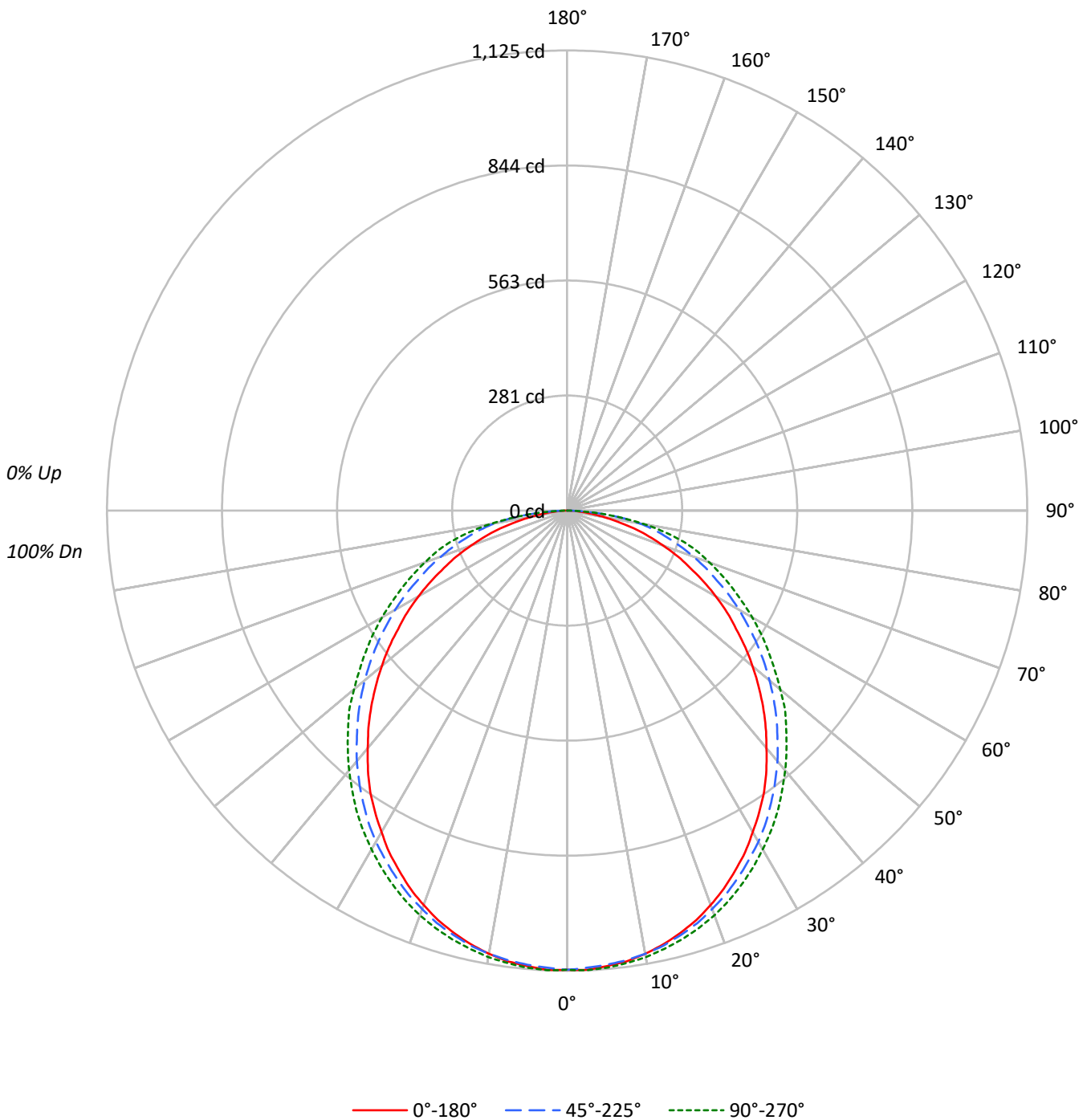
Input Watts (W): 22.828338
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1511	1511	1511
5°	1510	1506	1515
10°	1503	1503	1515
15°	1489	1496	1512
20°	1469	1484	1507
25°	1442	1469	1498
30°	1410	1453	1486
35°	1379	1429	1474
40°	1332	1405	1457
45°	1288	1377	1441
50°	1239	1351	1424
55°	1183	1326	1410
60°	1128	1306	1407
65°	1057	1283	1415
70°	978	1290	1454
75°	876	1314	1536
80°	708	1392	1502
85°	533	1223	1192



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.3	3.3
10°-20°	303.7	9.5
20°-30°	456.6	14.3
30°-40°	543.8	17.0
40°-50°	556.6	17.4
50°-60°	501.1	15.7
60°-70°	393.5	12.3
70°-80°	255.4	8.0
80°-90°	79.0	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°	866.6	27.1
0°-40°	1410.4	44.1
0°-60°	2468.1	77.2
0°-90°	3196.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3196.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1123	1123	1123	1123	1123	
5°	1118	1120	1115	1121	1122	106
15°	1069	1072	1074	1083	1085	301
25°	972	980	990	1006	1009	448
35°	840	850	870	891	897	524
45°	677	693	724	751	757	522
55°	504	527	565	595	601	452
65°	332	357	403	436	445	330
75°	168	201	253	287	295	178
85°	34	64	79	77	77	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1122.8	1122.8	1122.8	1122.8	<i>1122.8</i>
2.5°	<i>1123.8</i>	<i>1123.8</i>	<i>1118.7</i>	<i>1123.8</i>	<i>1124.8</i>
5°	1117.7	1119.7	1114.7	1120.7	<i>1121.8</i>
7.5°	1111.6	1111.6	1108.6	1114.7	<i>1115.7</i>
10°	1100.4	1101.5	1100.4	1107.5	<i>1108.6</i>
12.5°	1086.2	1088.3	1089.3	1096.4	<i>1097.4</i>
15°	1069.0	1072.0	1074.0	1083.2	<i>1085.2</i>
17.5°	1049.7	1052.7	1057.8	1068.0	<i>1070.0</i>
20°	1026.3	1030.4	1036.5	1049.7	<i>1052.7</i>
22.5°	1001.0	1005.0	1015.2	1027.3	<i>1032.4</i>
25°	971.5	979.6	989.8	1006.0	<i>1009.1</i>
27.5°	942.1	949.2	962.4	979.6	<i>983.7</i>
30°	907.6	918.7	935.0	952.2	<i>956.3</i>
32.5°	874.1	885.2	904.5	922.8	<i>927.9</i>
35°	839.5	849.7	870.0	891.3	<i>897.4</i>
37.5°	800.0	813.1	835.5	856.8	<i>862.9</i>
40°	758.3	774.6	800.0	822.3	<i>829.4</i>
42.5°	718.7	736.0	761.4	785.7	<i>793.9</i>
45°	677.1	693.4	723.8	751.2	<i>757.3</i>
47.5°	634.5	652.8	685.2	712.6	<i>722.8</i>
50°	591.8	611.1	645.6	674.1	<i>680.2</i>
52.5°	549.2	569.5	606.1	636.5	<i>639.6</i>
55°	504.5	526.9	565.4	594.9	<i>601.0</i>
57.5°	463.9	483.2	524.8	555.3	<i>562.4</i>
60°	419.3	440.6	485.3	513.7	<i>522.8</i>
62.5°	376.6	399.0	445.7	474.1	<i>482.2</i>
65°	332.0	357.3	403.0	436.5	<i>444.6</i>
67.5°	293.4	317.7	366.5	399.0	<i>407.1</i>
70°	248.7	276.1	327.9	361.4	<i>369.5</i>
72.5°	210.1	238.6	290.3	322.8	<i>335.0</i>
75°	168.5	201.0	252.8	287.3	<i>295.4</i>
77.5°	127.9	165.5	218.3	244.7	<i>244.7</i>
80°	91.4	131.0	179.7	191.9	<i>193.9</i>
82.5°	59.9	98.5	133.0	132.0	<i>132.0</i>
85°	34.5	64.0	79.2	77.2	<i>77.2</i>
87.5°	13.2	26.4	28.4	28.4	<i>27.4</i>
90°	0.0	0.0	0.0	0.0	<i>0.0</i>

(END OF REPORT)