

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: P275944

Luminaire Tested: **24CZ2-30-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275944  
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: 24CZ2-30-UNV-L83050-W2A1-U-4000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3013.0 lumens  
Efficiency: N/A  
Efficacy: 135.6 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

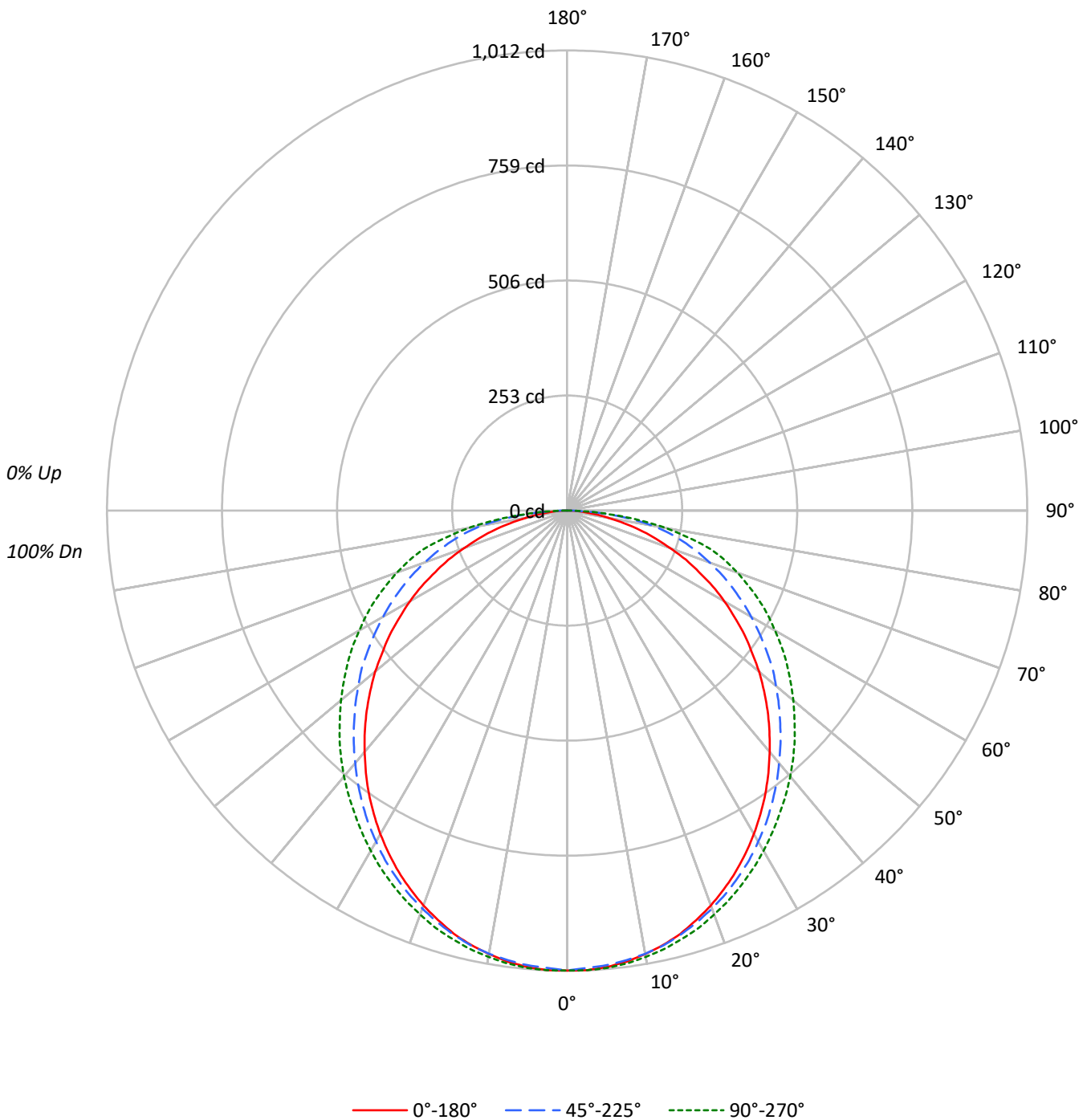
Input Watts (W): 22.227  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1361	1361	1361
5°	1361	1355	1364
10°	1353	1352	1361
15°	1342	1345	1359
20°	1323	1333	1353
25°	1302	1321	1348
30°	1276	1306	1342
35°	1249	1290	1338
40°	1217	1273	1340
45°	1186	1261	1347
50°	1154	1254	1360
55°	1118	1253	1385
60°	1074	1258	1421
65°	1018	1277	1482
70°	945	1309	1566
75°	862	1375	1699
80°	709	1481	1698
85°	543	1366	1459



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.7	3.2
10°-20°	273.1	9.1
20°-30°	411.0	13.6
30°-40°	492.6	16.3
40°-50°	513.3	17.0
50°-60°	477.6	15.9
60°-70°	393.3	13.1
70°-80°	267.9	8.9
80°-90°	88.5	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°	779.8	25.9
0°-40°	1272.4	42.2
0°-60°	2263.3	75.1
0°-90°	3013.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3013.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1012	1012	1012	1012	1012	
5°	1008	1008	1004	1009	1010	96
15°	963	964	965	974	975	271
25°	877	881	890	905	908	404
35°	760	769	785	806	814	475
45°	624	636	663	696	708	481
55°	477	493	534	576	590	425
65°	320	347	401	448	466	317
75°	166	203	264	312	327	175
85°	35	68	88	94	94	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1011.6	1011.6	1011.6	1011.6	1011.6
2.5°	1011.6	1011.6	1006.6	1011.6	1011.6
5°	1007.6	1007.6	1003.6	1008.6	1009.6
7.5°	1000.5	1001.5	997.5	1003.6	1004.6
10°	990.5	991.5	989.5	995.5	996.5
12.5°	978.4	979.4	979.4	986.5	987.5
15°	963.3	964.3	965.3	974.4	975.4
17.5°	944.2	947.2	949.3	960.3	962.3
20°	924.1	927.1	931.2	943.2	945.2
22.5°	901.0	905.0	912.1	925.1	928.1
25°	876.9	880.9	889.9	905.0	908.0
27.5°	849.7	855.7	866.8	882.9	886.9
30°	821.6	827.6	840.7	857.8	863.8
32.5°	791.4	799.4	814.5	833.6	839.7
35°	760.2	769.3	785.4	806.5	814.5
37.5°	727.0	737.1	756.2	779.3	789.4
40°	692.8	704.9	725.0	752.2	763.2
42.5°	658.6	669.7	694.8	724.0	736.1
45°	623.5	636.5	662.7	695.9	707.9
47.5°	587.3	600.3	631.5	666.7	677.8
50°	551.1	564.1	599.3	636.5	649.6
52.5°	511.8	528.9	569.2	606.4	619.4
55°	476.6	492.7	534.0	576.2	590.3
57.5°	436.4	455.5	500.8	545.0	560.1
60°	399.2	419.3	467.6	512.8	527.9
62.5°	361.0	383.1	434.4	480.7	497.8
65°	319.8	346.9	401.2	448.5	465.6
67.5°	282.6	310.7	368.0	416.3	431.4
70°	240.3	274.5	332.8	381.1	398.2
72.5°	204.1	238.3	299.7	346.9	364.0
75°	165.9	203.1	264.5	311.7	326.8
77.5°	127.7	168.9	230.3	266.5	271.5
80°	91.5	134.7	191.1	212.2	219.2
82.5°	64.4	103.6	140.8	154.9	158.9
85°	35.2	68.4	88.5	94.5	94.5
87.5°	15.1	29.2	35.2	36.2	37.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)