

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: P276559

Luminaire Tested: **24CZ2-30-S-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276559  
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-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: 3143.0 lumens  
Efficiency: N/A  
Efficacy: 140.2 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

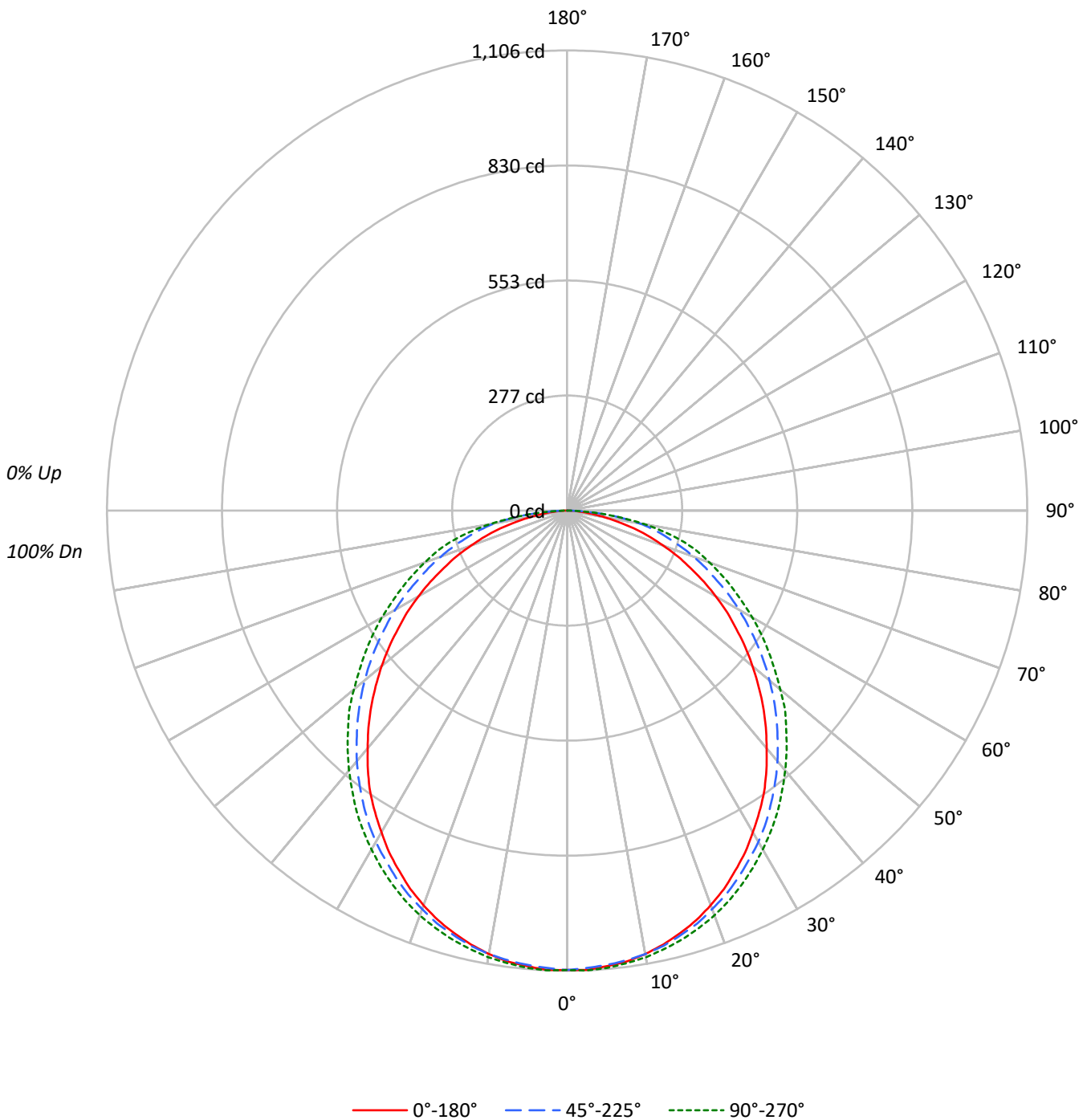
Input Watts (W): 22.413  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1486	1486	1486
5°	1485	1481	1490
10°	1479	1479	1489
15°	1464	1471	1487
20°	1445	1459	1482
25°	1418	1445	1473
30°	1387	1429	1461
35°	1356	1405	1450
40°	1310	1382	1433
45°	1267	1354	1417
50°	1218	1329	1400
55°	1164	1304	1386
60°	1109	1284	1383
65°	1039	1262	1392
70°	962	1269	1430
75°	861	1292	1510
80°	697	1369	1478
85°	523	1203	1172



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.5	3.3
10°-20°	298.7	9.5
20°-30°	449.0	14.3
30°-40°	534.8	17.0
40°-50°	547.4	17.4
50°-60°	492.8	15.7
60°-70°	387.0	12.3
70°-80°	251.2	8.0
80°-90°	77.7	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°	852.2	27.1
0°-40°	1387.0	44.1
0°-60°	2427.2	77.2
0°-90°	3143.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3143.0	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°	826	836	856	876	882	515
45°	666	682	712	739	745	513
55°	496	518	556	585	591	445
65°	326	351	396	429	437	325
75°	166	198	249	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°	1104.2	1104.2	1104.2	1104.2	1104.2
2.5°	1105.2	1105.2	1100.2	1105.2	1106.2
5°	1099.2	1101.2	1096.2	1102.2	1103.2
7.5°	1093.2	1093.2	1090.2	1096.2	1097.2
10°	1082.2	1083.2	1082.2	1089.2	1090.2
12.5°	1068.2	1070.2	1071.2	1078.2	1079.2
15°	1051.2	1054.2	1056.2	1065.2	1067.2
17.5°	1032.3	1035.3	1040.3	1050.2	1052.2
20°	1009.3	1013.3	1019.3	1032.3	1035.3
22.5°	984.4	988.4	998.3	1010.3	1015.3
25°	955.4	963.4	973.4	989.4	992.3
27.5°	926.5	933.4	946.4	963.4	967.4
30°	892.5	903.5	919.5	936.4	940.4
32.5°	859.6	870.5	889.5	907.5	912.5
35°	825.6	835.6	855.6	876.5	882.5
37.5°	786.7	799.7	821.6	842.6	848.6
40°	745.8	761.7	786.7	808.7	815.6
42.5°	706.8	723.8	748.8	772.7	780.7
45°	665.9	681.9	711.8	738.8	744.8
47.5°	624.0	641.9	673.9	700.8	710.8
50°	582.0	601.0	634.9	662.9	668.9
52.5°	540.1	560.1	596.0	626.0	629.0
55°	496.2	518.1	556.1	585.0	591.0
57.5°	456.2	475.2	516.1	546.1	553.1
60°	412.3	433.3	477.2	505.2	514.1
62.5°	370.4	392.3	438.3	466.2	474.2
65°	326.5	351.4	396.3	429.3	437.3
67.5°	288.5	312.5	360.4	392.3	400.3
70°	244.6	271.5	322.5	355.4	363.4
72.5°	206.7	234.6	285.5	317.5	329.5
75°	165.7	197.7	248.6	282.5	290.5
77.5°	125.8	162.7	214.6	240.6	240.6
80°	89.9	128.8	176.7	188.7	190.7
82.5°	58.9	96.8	130.8	129.8	129.8
85°	33.9	62.9	77.9	75.9	75.9
87.5°	13.0	26.0	28.0	28.0	27.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)