

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: P276558

Luminaire Tested: **24CZ2-30-S-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276558  
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-5500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3135.1 lumens  
Efficiency: N/A  
Efficacy: 139.9 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

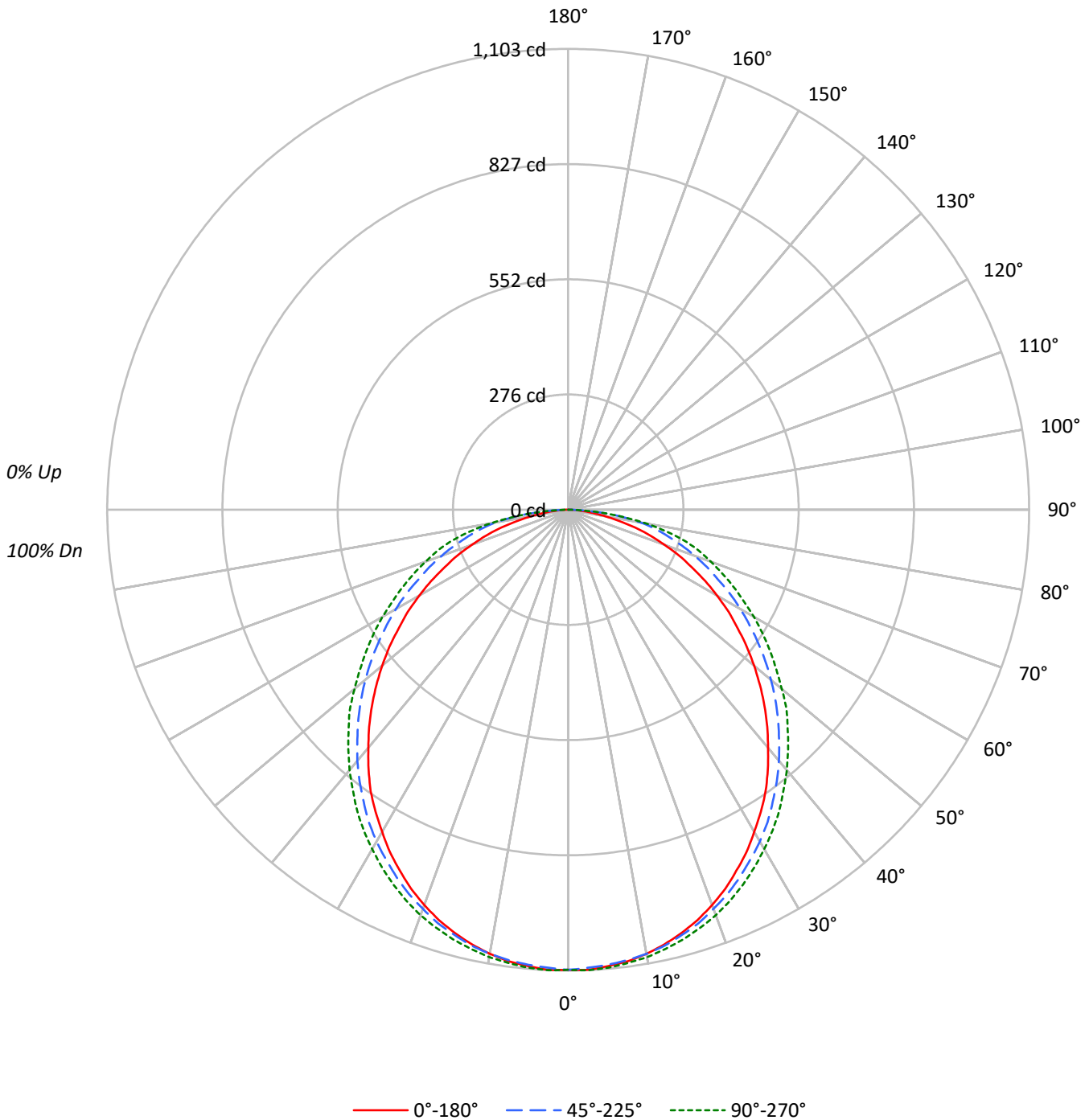
Input Watts (W): 22.413  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1482	1482	1482
5°	1481	1477	1486
10°	1475	1475	1486
15°	1461	1468	1483
20°	1442	1456	1479
25°	1415	1441	1469
30°	1383	1425	1457
35°	1353	1402	1446
40°	1307	1378	1429
45°	1264	1351	1414
50°	1215	1326	1397
55°	1161	1301	1383
60°	1107	1281	1380
65°	1037	1259	1389
70°	960	1265	1426
75°	859	1289	1507
80°	694	1366	1474
85°	523	1200	1169



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.3	3.3
10°-20°	297.9	9.5
20°-30°	447.9	14.3
30°-40°	533.5	17.0
40°-50°	546.0	17.4
50°-60°	491.5	15.7
60°-70°	386.0	12.3
70°-80°	250.5	8.0
80°-90°	77.5	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°	850.1	27.1
0°-40°	1383.5	44.1
0°-60°	2421.0	77.2
0°-90°	3135.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3135.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1101	1101	1101	1101	1101	
5°	1096	1098	1093	1099	1100	104
15°	1049	1052	1054	1062	1064	296
25°	953	961	971	987	990	439
35°	824	834	853	874	880	514
45°	664	680	710	737	743	512
55°	495	517	555	584	590	444
65°	326	350	395	428	436	324
75°	165	197	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°	1101.4	1101.4	1101.4	1101.4	1101.4
2.5°	1102.4	1102.4	1097.4	1102.4	1103.4
5°	1096.4	1098.4	1093.4	1099.4	1100.4
7.5°	1090.4	1090.4	1087.4	1093.4	1094.4
10°	1079.5	1080.5	1079.5	1086.4	1087.4
12.5°	1065.5	1067.5	1068.5	1075.5	1076.5
15°	1048.6	1051.6	1053.6	1062.5	1064.5
17.5°	1029.7	1032.7	1037.6	1047.6	1049.6
20°	1006.8	1010.7	1016.7	1029.7	1032.7
22.5°	981.9	985.9	995.8	1007.8	1012.7
25°	953.0	961.0	970.9	986.8	989.8
27.5°	924.1	931.1	944.0	961.0	964.9
30°	890.3	901.2	917.1	934.1	938.1
32.5°	857.4	868.3	887.3	905.2	910.2
35°	823.5	833.5	853.4	874.3	880.3
37.5°	784.7	797.6	819.6	840.5	846.4
40°	743.9	759.8	784.7	806.6	813.6
42.5°	705.0	722.0	746.9	770.8	778.7
45°	664.2	680.1	710.0	736.9	742.9
47.5°	622.4	640.3	672.2	699.1	709.0
50°	580.6	599.5	633.3	661.2	667.2
52.5°	538.7	558.6	594.5	624.4	627.4
55°	494.9	516.8	554.7	583.5	589.5
57.5°	455.1	474.0	514.8	544.7	551.7
60°	411.3	432.2	476.0	503.9	512.8
62.5°	369.4	391.4	437.2	465.0	473.0
65°	325.6	350.5	395.3	428.2	436.2
67.5°	287.8	311.7	359.5	391.4	399.3
70°	244.0	270.9	321.6	354.5	362.5
72.5°	206.1	234.0	284.8	316.7	328.6
75°	165.3	197.2	248.0	281.8	289.8
77.5°	125.5	162.3	214.1	240.0	240.0
80°	89.6	128.5	176.3	188.2	190.2
82.5°	58.8	96.6	130.5	129.5	129.5
85°	33.9	62.7	77.7	75.7	75.7
87.5°	12.9	25.9	27.9	27.9	26.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)