

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: P277147

Luminaire Tested: **24CZ2-50-RDP-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277147  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-50-RDP-UNV-L92765-W2A1-U-4500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2883.5 lumens  
Efficiency: N/A  
Efficacy: 71.3 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

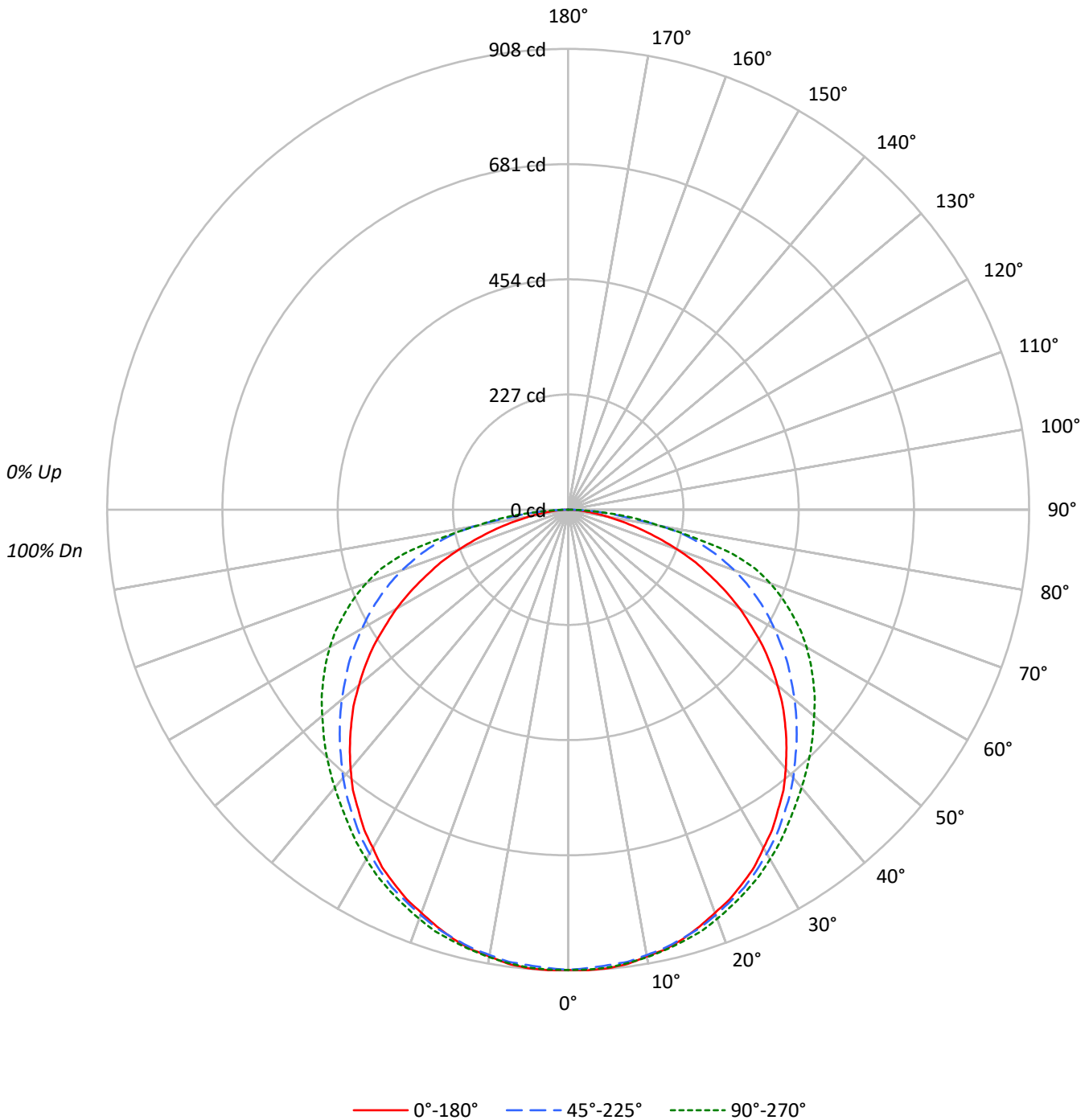
Input Watts (W): 40.455  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1220	1220	1220
5°	1225	1217	1223
10°	1221	1217	1223
15°	1219	1217	1225
20°	1210	1216	1229
25°	1206	1219	1231
30°	1196	1215	1235
35°	1184	1212	1240
40°	1171	1211	1256
45°	1151	1211	1285
50°	1126	1218	1323
55°	1097	1238	1382
60°	1051	1262	1459
65°	983	1307	1548
70°	895	1367	1665
75°	758	1443	1740
80°	598	1452	1407
85°	442	1104	1237



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.0	3.0
10°-20°	247.6	8.6
20°-30°	378.6	13.1
30°-40°	462.8	16.0
40°-50°	493.2	17.1
50°-60°	471.6	16.4
60°-70°	399.5	13.9
70°-80°	268.5	9.3
80°-90°	75.7	2.6
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°	712.1	24.7
0°-40°	1174.9	40.7
0°-60°	2139.7	74.2
0°-90°	2883.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2883.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	907	907	907	907	907	
5°	907	905	901	905	905	86
15°	875	875	874	881	880	247
25°	812	815	821	828	830	374
35°	721	727	738	752	755	452
45°	605	615	636	664	675	467
55°	468	485	528	569	589	417
65°	309	340	410	465	486	307
75°	146	199	278	325	335	156
85°	29	59	72	77	80	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	906.8	906.8	906.8	906.8	906.8
2.5°	908.2	908.2	903.9	906.8	906.8
5°	906.8	905.3	901.0	905.3	905.3
7.5°	902.5	901.0	898.2	902.5	901.0
10°	893.9	893.9	891.0	895.3	895.3
12.5°	886.7	885.3	883.9	889.6	888.2
15°	875.3	875.3	873.9	881.0	879.6
17.5°	861.0	862.4	863.9	869.6	871.0
20°	845.3	848.1	849.6	858.1	858.1
22.5°	831.0	832.4	835.3	843.8	843.8
25°	812.4	815.2	821.0	828.1	829.5
27.5°	793.8	795.2	802.4	812.4	813.8
30°	769.5	773.8	782.3	793.8	795.2
32.5°	748.0	752.3	762.3	773.8	776.6
35°	720.8	726.6	738.0	752.3	755.2
37.5°	696.5	700.8	715.1	730.8	735.1
40°	666.5	675.1	689.4	708.0	715.1
42.5°	636.5	645.0	662.2	686.5	695.1
45°	605.0	615.0	636.5	663.6	675.1
47.5°	573.5	585.0	609.3	640.7	653.6
50°	537.8	552.1	582.1	617.9	632.2
52.5°	503.4	520.6	553.5	593.5	612.1
55°	467.7	484.8	527.8	569.2	589.3
57.5°	427.6	450.5	497.7	544.9	566.4
60°	390.5	411.9	469.1	520.6	542.1
62.5°	350.4	379.0	440.5	494.9	516.3
65°	308.9	340.4	410.5	464.8	486.3
67.5°	271.7	306.1	380.4	434.8	456.2
70°	227.4	270.3	347.5	401.9	423.3
72.5°	185.9	233.1	313.2	366.1	386.2
75°	145.9	198.8	277.5	324.7	334.7
77.5°	108.7	164.5	240.3	260.3	253.2
80°	77.2	131.6	187.4	177.3	181.6
82.5°	50.1	100.1	115.8	131.6	135.9
85°	28.6	58.6	71.5	77.2	80.1
87.5°	12.9	21.5	28.6	28.6	27.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)