

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: P277135

Luminaire Tested: **24CZ2-45-RDP-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277135  
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: 24CZ2-45-RDP-UNV-L92765-W2A1-U-3000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RDP LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2349.7 lumens  
Efficiency: N/A  
Efficacy: 67.9 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

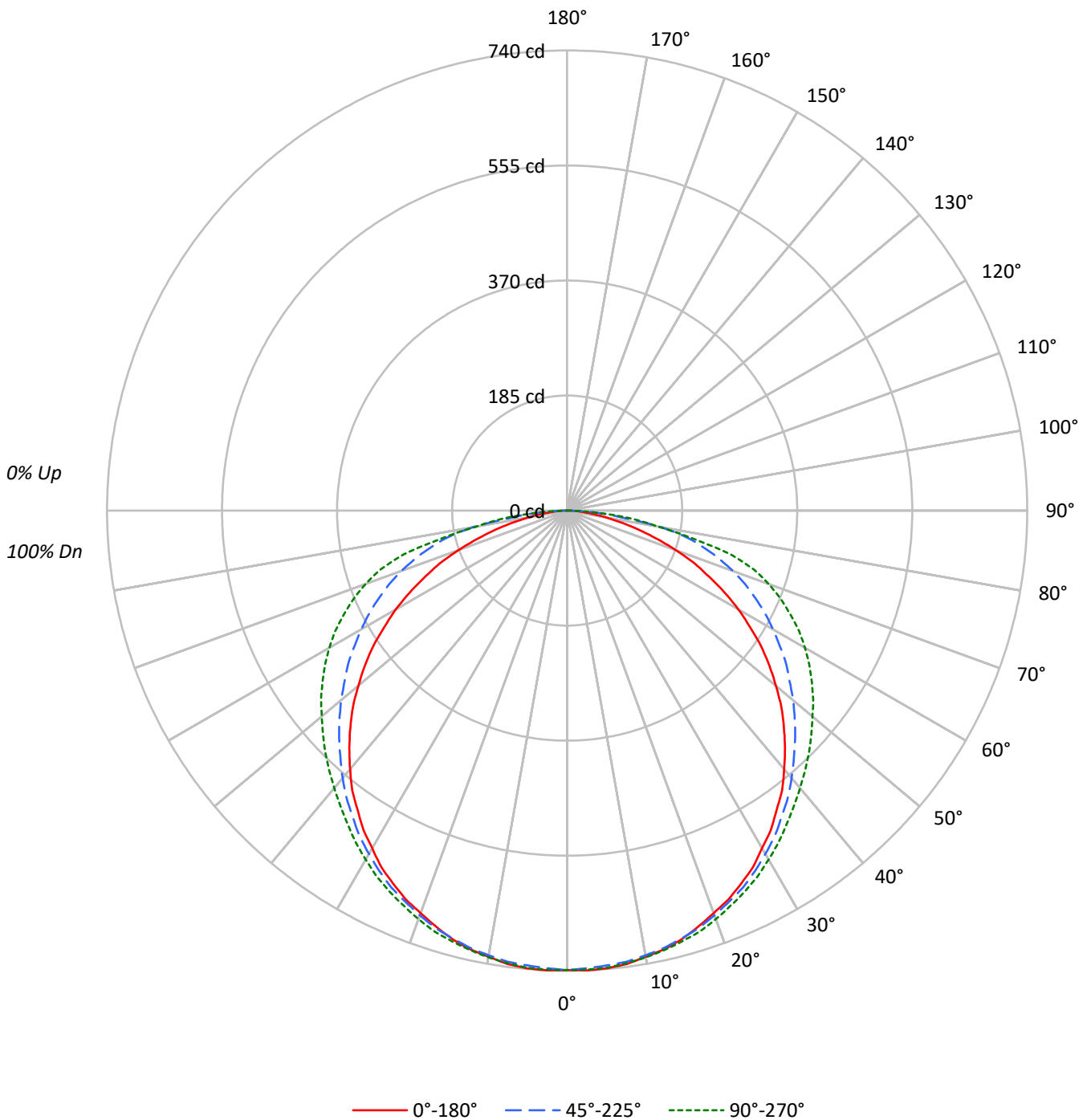
Input Watts (W): 34.596  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	994	994	994
5°	998	992	996
10°	995	992	997
15°	994	992	998
20°	986	991	1001
25°	983	993	1004
30°	974	990	1007
35°	965	988	1011
40°	954	987	1023
45°	938	987	1047
50°	917	993	1078
55°	894	1009	1126
60°	856	1029	1189
65°	801	1065	1262
70°	729	1114	1357
75°	618	1175	1418
80°	487	1183	1147
85°	360	900	1008



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.1	3.0
10°-20°	201.7	8.6
20°-30°	308.5	13.1
30°-40°	377.1	16.0
40°-50°	401.9	17.1
50°-60°	384.3	16.4
60°-70°	325.5	13.9
70°-80°	218.8	9.3
80°-90°	61.7	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°	580.3	24.7
0°-40°	957.4	40.7
0°-60°	1743.6	74.2
0°-90°	2349.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2349.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	739	739	739	739	739	
5°	739	738	734	738	738	70
15°	713	713	712	718	717	201
25°	662	664	669	675	676	305
35°	587	592	601	613	615	368
45°	493	501	519	541	550	380
55°	381	395	430	464	480	339
65°	252	277	334	379	396	250
75°	119	162	226	265	273	127
85°	23	48	58	63	65	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	738.9	738.9	738.9	738.9	738.9
2.5°	740.1	740.1	736.6	738.9	738.9
5°	738.9	737.7	734.2	737.7	737.7
7.5°	735.4	734.2	731.9	735.4	734.2
10°	728.4	728.4	726.1	729.6	729.6
12.5°	722.6	721.4	720.3	724.9	723.7
15°	713.3	713.3	712.1	717.9	716.8
17.5°	701.6	702.8	703.9	708.6	709.8
20°	688.8	691.1	692.3	699.3	699.3
22.5°	677.1	678.3	680.6	687.6	687.6
25°	662.0	664.3	669.0	674.8	676.0
27.5°	646.8	648.0	653.8	662.0	663.1
30°	627.0	630.5	637.5	646.8	648.0
32.5°	609.5	613.0	621.2	630.5	632.8
35°	587.4	592.1	601.4	613.0	615.4
37.5°	567.6	571.1	582.7	595.5	599.0
40°	543.1	550.1	561.7	576.9	582.7
42.5°	518.6	525.6	539.6	559.4	566.4
45°	493.0	501.1	518.6	540.8	550.1
47.5°	467.3	476.7	496.5	522.1	532.6
50°	438.2	449.9	474.3	503.5	515.1
52.5°	410.2	424.2	451.0	483.7	498.8
55°	381.1	395.1	430.1	463.9	480.2
57.5°	348.5	367.1	405.6	444.0	461.5
60°	318.2	335.7	382.3	424.2	441.7
62.5°	285.5	308.8	359.0	403.2	420.7
65°	251.7	277.4	334.5	378.8	396.3
67.5°	221.4	249.4	310.0	354.3	371.8
70°	185.3	220.3	283.2	327.5	345.0
72.5°	151.5	190.0	255.2	298.4	314.7
75°	118.9	162.0	226.1	264.6	272.7
77.5°	88.6	134.0	195.8	212.1	206.3
80°	62.9	107.2	152.7	144.5	148.0
82.5°	40.8	81.6	94.4	107.2	110.7
85°	23.3	47.8	58.3	62.9	65.3
87.5°	10.5	17.5	23.3	23.3	22.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)