

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: P276785

Luminaire Tested: **24CZ2-30-RDP-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276785  
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: 24CZ2-30-RDP-UNV-L83050-W2A1-U-4500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2046.0 lumens  
Efficiency: N/A  
Efficacy: 89.6 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

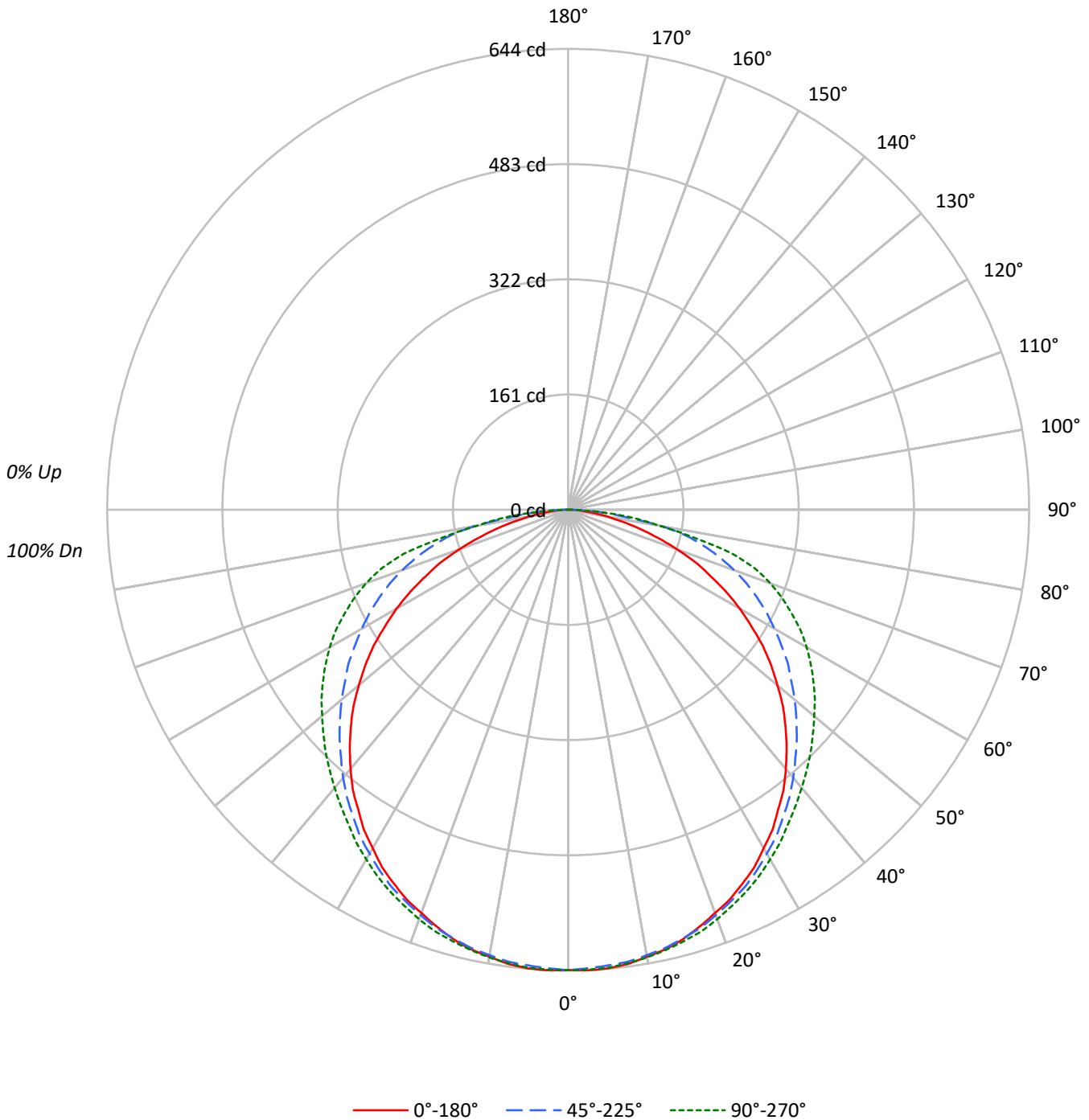
Input Watts (W): 22.828338  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	68	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°	866	866	866
5°	869	863	868
10°	867	864	868
15°	865	864	869
20°	859	863	872
25°	856	865	874
30°	848	862	877
35°	840	860	880
40°	831	859	891
45°	817	859	911
50°	799	864	939
55°	779	878	981
60°	746	896	1035
65°	698	927	1098
70°	635	970	1182
75°	538	1024	1235
80°	425	1030	999
85°	313	783	877



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.0	3.0
10°-20°	175.7	8.6
20°-30°	268.6	13.1
30°-40°	328.4	16.0
40°-50°	350.0	17.1
50°-60°	334.6	16.4
60°-70°	283.5	13.9
70°-80°	190.5	9.3
80°-90°	53.7	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°	505.3	24.7
0°-40°	833.7	40.7
0°-60°	1518.3	74.2
0°-90°	2046.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2046.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	643	643	643	643	643	
5°	643	642	639	642	642	61
15°	621	621	620	625	624	175
25°	576	578	582	588	589	266
35°	512	516	524	534	536	320
45°	429	436	452	471	479	331
55°	332	344	374	404	418	296
65°	219	242	291	330	345	218
75°	104	141	197	230	238	111
85°	20	42	51	55	57	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	643.4	643.4	643.4	643.4	643.4
2.5°	644.4	644.4	641.4	643.4	643.4
5°	643.4	642.4	639.3	642.4	642.4
7.5°	640.4	639.3	637.3	640.4	639.3
10°	634.3	634.3	632.2	635.3	635.3
12.5°	629.2	628.2	627.2	631.2	630.2
15°	621.1	621.1	620.1	625.1	624.1
17.5°	610.9	611.9	613.0	617.0	618.0
20°	599.8	601.8	602.8	608.9	608.9
22.5°	589.6	590.6	592.7	598.8	598.8
25°	576.4	578.5	582.5	587.6	588.6
27.5°	563.2	564.3	569.3	576.4	577.4
30°	546.0	549.0	555.1	563.2	564.3
32.5°	530.8	533.8	540.9	549.0	551.1
35°	511.5	515.5	523.7	533.8	535.8
37.5°	494.2	497.3	507.4	518.6	521.6
40°	472.9	479.0	489.2	502.3	507.4
42.5°	451.6	457.7	469.9	487.1	493.2
45°	429.3	436.4	451.6	470.9	479.0
47.5°	407.0	415.1	432.3	454.6	463.8
50°	381.6	391.7	413.0	438.4	448.6
52.5°	357.2	369.4	392.7	421.2	434.4
55°	331.9	344.0	374.5	403.9	418.1
57.5°	303.4	319.7	353.2	386.7	401.9
60°	277.1	292.3	332.9	369.4	384.6
62.5°	248.6	268.9	312.6	351.1	366.4
65°	219.2	241.5	291.3	329.8	345.0
67.5°	192.8	217.2	269.9	308.5	323.7
70°	161.4	191.8	246.6	285.2	300.4
72.5°	131.9	165.4	222.2	259.8	274.0
75°	103.5	141.1	196.9	230.4	237.5
77.5°	77.1	116.7	170.5	184.7	179.6
80°	54.8	93.4	132.9	125.8	128.9
82.5°	35.5	71.0	82.2	93.4	96.4
85°	20.3	41.6	50.7	54.8	56.8
87.5°	9.1	15.2	20.3	20.3	19.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)