

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: P276886

Luminaire Tested: **24CZ2-30HE-RDP-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276886  
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: 24CZ2-30HE-RDP-UNV-L82765-W2A1-U-4500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1984.5 lumens  
Efficiency: N/A  
Efficacy: 99.2 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

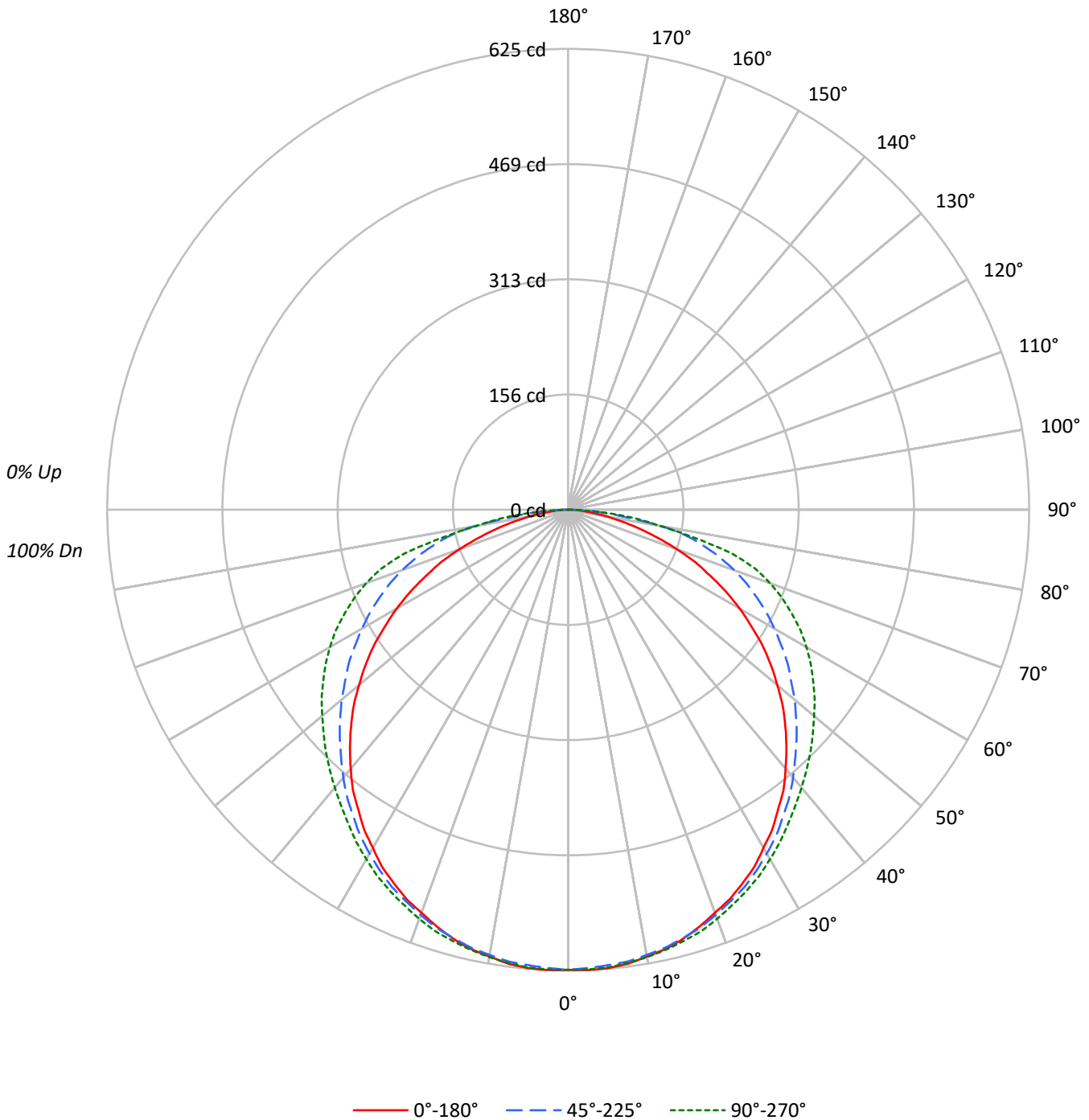
Input Watts (W): 19.995  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	840	840	840
5°	843	838	842
10°	841	838	842
15°	839	838	843
20°	833	837	846
25°	830	839	848
30°	823	836	850
35°	815	834	854
40°	806	833	865
45°	792	833	884
50°	775	839	911
55°	755	852	951
60°	723	869	1004
65°	677	899	1066
70°	616	941	1146
75°	522	993	1197
80°	412	999	969
85°	304	760	851



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.2	3.0
10°-20°	170.4	8.6
20°-30°	260.5	13.1
30°-40°	318.5	16.0
40°-50°	339.4	17.1
50°-60°	324.6	16.4
60°-70°	274.9	13.9
70°-80°	184.8	9.3
80°-90°	52.1	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°	490.1	24.7
0°-40°	808.6	40.7
0°-60°	1472.6	74.2
0°-90°	1984.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1984.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	624	624	624	624	624	
5°	624	623	620	623	623	59
15°	602	602	601	606	605	170
25°	559	561	565	570	571	258
35°	496	500	508	518	520	311
45°	416	423	438	457	465	321
55°	322	334	363	392	406	287
65°	213	234	282	320	335	211
75°	100	137	191	223	230	108
85°	20	40	49	53	55	24
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	624.1	624.1	624.1	624.1	624.1
2.5°	625.0	625.0	622.1	624.1	624.1
5°	624.1	623.1	620.1	623.1	623.1
7.5°	621.1	620.1	618.1	621.1	620.1
10°	615.2	615.2	613.2	616.2	616.2
12.5°	610.3	609.3	608.3	612.2	611.3
15°	602.4	602.4	601.4	606.3	605.4
17.5°	592.6	593.5	594.5	598.5	599.4
20°	581.7	583.7	584.7	590.6	590.6
22.5°	571.9	572.9	574.8	580.7	580.7
25°	559.1	561.1	565.0	569.9	570.9
27.5°	546.3	547.3	552.2	559.1	560.1
30°	529.6	532.5	538.4	546.3	547.3
32.5°	514.8	517.7	524.6	532.5	534.5
35°	496.1	500.0	507.9	517.7	519.7
37.5°	479.4	482.3	492.2	503.0	505.9
40°	458.7	464.6	474.4	487.2	492.2
42.5°	438.0	443.9	455.7	472.5	478.4
45°	416.4	423.3	438.0	456.7	464.6
47.5°	394.7	402.6	419.3	441.0	449.8
50°	370.1	379.9	400.6	425.2	435.1
52.5°	346.5	358.3	380.9	408.5	421.3
55°	321.9	333.7	363.2	391.8	405.5
57.5°	294.3	310.1	342.5	375.0	389.8
60°	268.7	283.5	322.9	358.3	373.1
62.5°	241.2	260.8	303.2	340.6	355.3
65°	212.6	234.3	282.5	319.9	334.7
67.5°	187.0	210.6	261.8	299.2	314.0
70°	156.5	186.0	239.2	276.6	291.4
72.5°	128.0	160.4	215.6	252.0	265.8
75°	100.4	136.8	191.0	223.4	230.3
77.5°	74.8	113.2	165.4	179.1	174.2
80°	53.2	90.6	128.9	122.1	125.0
82.5°	34.5	68.9	79.7	90.6	93.5
85°	19.7	40.4	49.2	53.2	55.1
87.5°	8.9	14.8	19.7	19.7	18.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)