

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: P277031

Luminaire Tested: **24CZ2-35HE-RDP-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277031  
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: 24CZ2-35HE-RDP-UNV-L92765-W2A1-U-5000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2069.7 lumens  
Efficiency: N/A  
Efficacy: 83.7 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

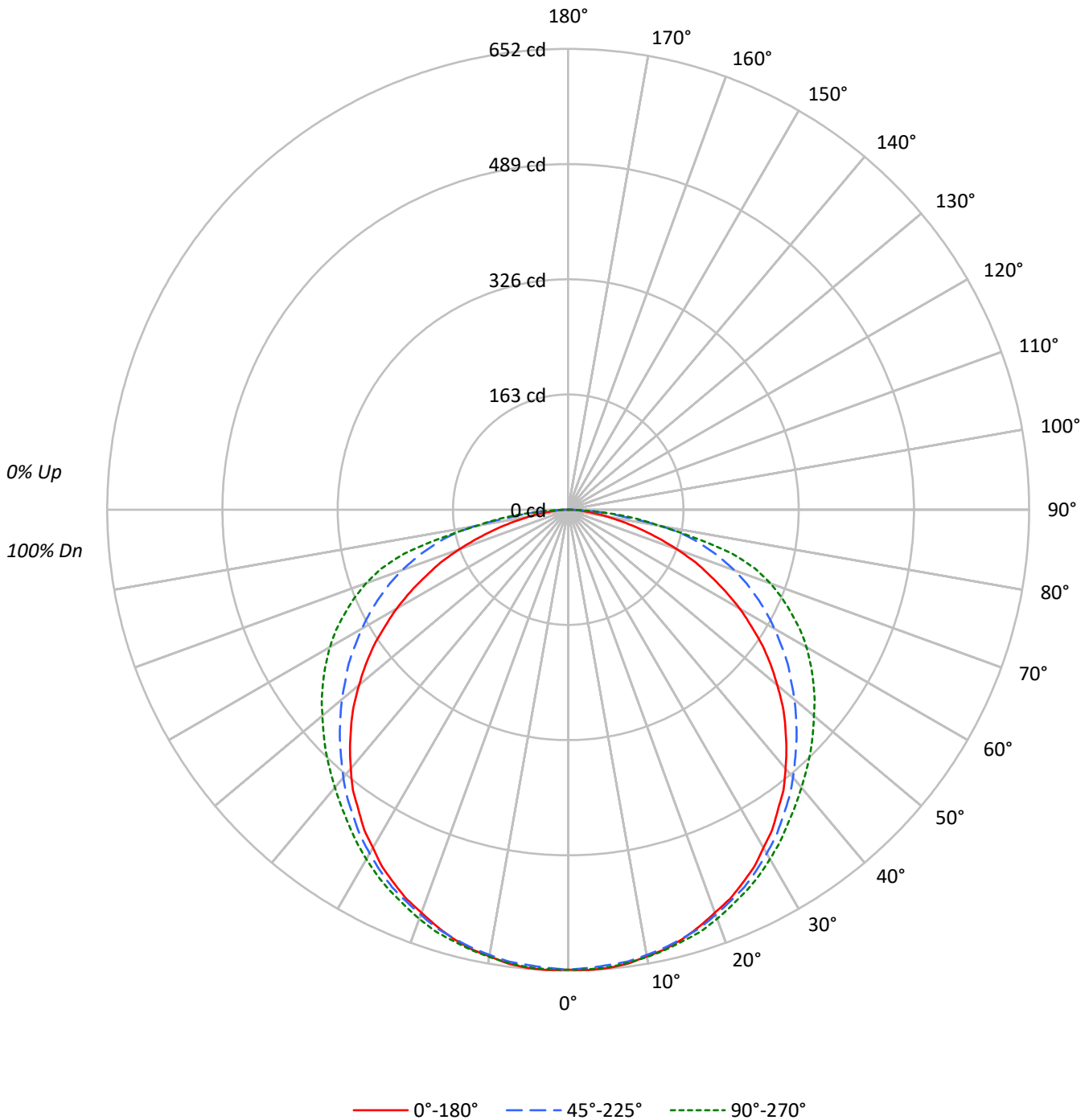
Input Watts (W): 24.738  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	876	876	876
5°	879	874	878
10°	877	874	878
15°	875	874	880
20°	869	873	882
25°	866	875	884
30°	858	872	887
35°	850	870	890
40°	840	869	902
45°	826	869	922
50°	808	875	950
55°	787	889	992
60°	754	906	1047
65°	706	938	1111
70°	642	982	1196
75°	544	1036	1249
80°	429	1042	1010
85°	316	792	888



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.7	3.0
10°-20°	177.7	8.6
20°-30°	271.7	13.1
30°-40°	332.2	16.0
40°-50°	354.0	17.1
50°-60°	338.5	16.4
60°-70°	286.7	13.9
70°-80°	192.7	9.3
80°-90°	54.4	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°	511.2	24.7
0°-40°	843.3	40.7
0°-60°	1535.9	74.2
0°-90°	2069.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2069.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	651	651	651	651	651	
5°	651	650	647	650	650	62
15°	628	628	627	632	631	177
25°	583	585	589	594	595	269
35°	517	522	530	540	542	324
45°	434	441	457	476	485	335
55°	336	348	379	409	423	299
65°	222	244	295	334	349	220
75°	105	143	199	233	240	112
85°	20	42	51	55	58	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	650.9	650.9	650.9	650.9	650.9
2.5°	651.9	651.9	648.8	650.9	650.9
5°	650.9	649.8	646.8	649.8	649.8
7.5°	647.8	646.8	644.7	647.8	646.8
10°	641.6	641.6	639.6	642.6	642.6
12.5°	636.5	635.5	634.4	638.5	637.5
15°	628.3	628.3	627.3	632.4	631.4
17.5°	618.0	619.0	620.1	624.2	625.2
20°	606.7	608.8	609.8	616.0	616.0
22.5°	596.5	597.5	599.5	605.7	605.7
25°	583.1	585.2	589.3	594.4	595.4
27.5°	569.8	570.8	575.9	583.1	584.1
30°	552.3	555.4	561.5	569.8	570.8
32.5°	536.9	540.0	547.2	555.4	557.4
35°	517.4	521.5	529.7	540.0	542.0
37.5°	500.0	503.0	513.3	524.6	527.7
40°	478.4	484.6	494.8	508.2	513.3
42.5°	456.8	463.0	475.3	492.8	498.9
45°	434.3	441.4	456.8	476.3	484.6
47.5°	411.7	419.9	437.3	459.9	469.2
50°	386.0	396.3	417.8	443.5	453.8
52.5°	361.4	373.7	397.3	426.0	439.4
55°	335.7	348.0	378.8	408.6	423.0
57.5°	307.0	323.4	357.3	391.1	406.5
60°	280.3	295.7	336.7	373.7	389.1
62.5°	251.5	272.0	316.2	355.2	370.6
65°	221.7	244.3	294.6	333.6	349.0
67.5°	195.1	219.7	273.1	312.1	327.5
70°	163.2	194.0	249.5	288.5	303.9
72.5°	133.5	167.3	224.8	262.8	277.2
75°	104.7	142.7	199.2	233.0	240.2
77.5°	78.0	118.1	172.5	186.8	181.7
80°	55.4	94.4	134.5	127.3	130.4
82.5°	35.9	71.9	83.2	94.4	97.5
85°	20.5	42.1	51.3	55.4	57.5
87.5°	9.2	15.4	20.5	20.5	19.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)