

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: P277032

Luminaire Tested: **24CZ2-35HE-RDP-UNV-L92765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277032  
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-5500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2101.5 lumens  
Efficiency: N/A  
Efficacy: 84.6 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

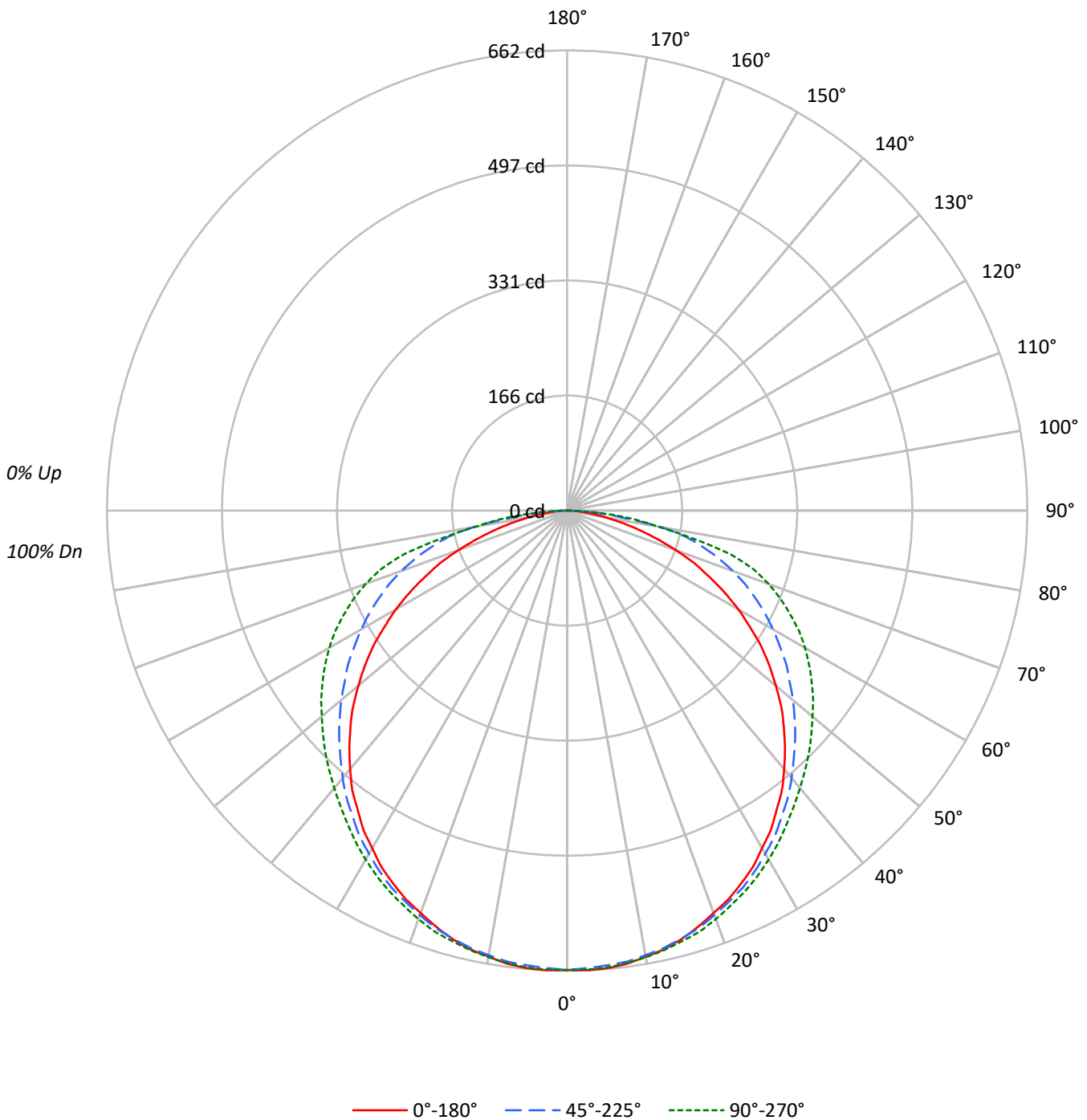
Input Watts (W): 24.831  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P277032

CATALOG NUMBER: 24CZ2-35HE-RDP-UNV-L92765-W2A1-U-5500K

### Luminous Intensity Polar Plot





TEST NUMBER: P277032

CATALOG NUMBER: 24CZ2-35HE-RDP-UNV-L92765-W2A1-U-5500K

**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°	889	889	889
5°	893	887	891
10°	890	887	891
15°	889	887	893
20°	882	887	895
25°	879	888	898
30°	871	886	900
35°	863	884	904
40°	853	882	915
45°	839	883	936
50°	820	888	964
55°	800	902	1008
60°	766	920	1063
65°	717	953	1128
70°	652	996	1214
75°	553	1051	1268
80°	436	1058	1026
85°	321	804	902



TEST NUMBER: P277032

CATALOG NUMBER: 24CZ2-35HE-RDP-UNV-L92765-W2A1-U-5500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.7	3.0
10°-20°	180.4	8.6
20°-30°	275.9	13.1
30°-40°	337.3	16.0
40°-50°	359.5	17.1
50°-60°	343.7	16.4
60°-70°	291.2	13.9
70°-80°	195.7	9.3
80°-90°	55.2	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°	519.0	24.7
0°-40°	856.3	40.7
0°-60°	1559.5	74.2
0°-90°	2101.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2101.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	661	661	661	661	661	
5°	661	660	657	660	660	63
15°	638	638	637	642	641	180
25°	592	594	598	604	605	273
35°	525	530	538	548	550	329
45°	441	448	464	484	492	340
55°	341	353	385	415	430	304
65°	225	248	299	339	354	224
75°	106	145	202	237	244	114
85°	21	43	52	56	58	26
90°	0	0	0	0	0	



TEST NUMBER: P277032

CATALOG NUMBER: 24CZ2-35HE-RDP-UNV-L92765-W2A1-U-5500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	660.9	660.9	660.9	660.9	660.9
2.5°	661.9	661.9	658.8	660.9	660.9
5°	660.9	659.8	656.7	659.8	659.8
7.5°	657.7	656.7	654.6	657.7	656.7
10°	651.5	651.5	649.4	652.5	652.5
12.5°	646.3	645.2	644.2	648.4	647.3
15°	637.9	637.9	636.9	642.1	641.1
17.5°	627.5	628.6	629.6	633.8	634.8
20°	616.0	618.1	619.2	625.4	625.4
22.5°	605.6	606.7	608.7	615.0	615.0
25°	592.1	594.2	598.3	603.5	604.6
27.5°	578.5	579.6	584.8	592.1	593.1
30°	560.8	563.9	570.2	578.5	579.6
32.5°	545.2	548.3	555.6	563.9	566.0
35°	525.4	529.5	537.9	548.3	550.4
37.5°	507.6	510.8	521.2	532.7	535.8
40°	485.7	492.0	502.4	516.0	521.2
42.5°	463.9	470.1	482.6	500.3	506.6
45°	440.9	448.2	463.9	483.7	492.0
47.5°	418.0	426.3	444.1	467.0	476.4
50°	391.9	402.4	424.2	450.3	460.7
52.5°	366.9	379.4	403.4	432.6	446.1
55°	340.9	353.4	384.6	414.9	429.5
57.5°	311.7	328.3	362.7	397.1	412.8
60°	284.6	300.2	341.9	379.4	395.1
62.5°	255.4	276.2	321.1	360.7	376.3
65°	225.2	248.1	299.2	338.8	354.4
67.5°	198.1	223.1	277.3	316.9	332.5
70°	165.7	197.0	253.3	292.9	308.5
72.5°	135.5	169.9	228.3	266.8	281.4
75°	106.3	144.9	202.2	236.6	243.9
77.5°	79.2	119.9	175.1	189.7	184.5
80°	56.3	95.9	136.6	129.3	132.4
82.5°	36.5	73.0	84.4	95.9	99.0
85°	20.8	42.7	52.1	56.3	58.4
87.5°	9.4	15.6	20.8	20.8	19.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)