

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: P277137

Luminaire Tested: **24CZ2-45-RDP-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277137  
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-4000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2546.9 lumens  
Efficiency: N/A  
Efficacy: 72.1 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

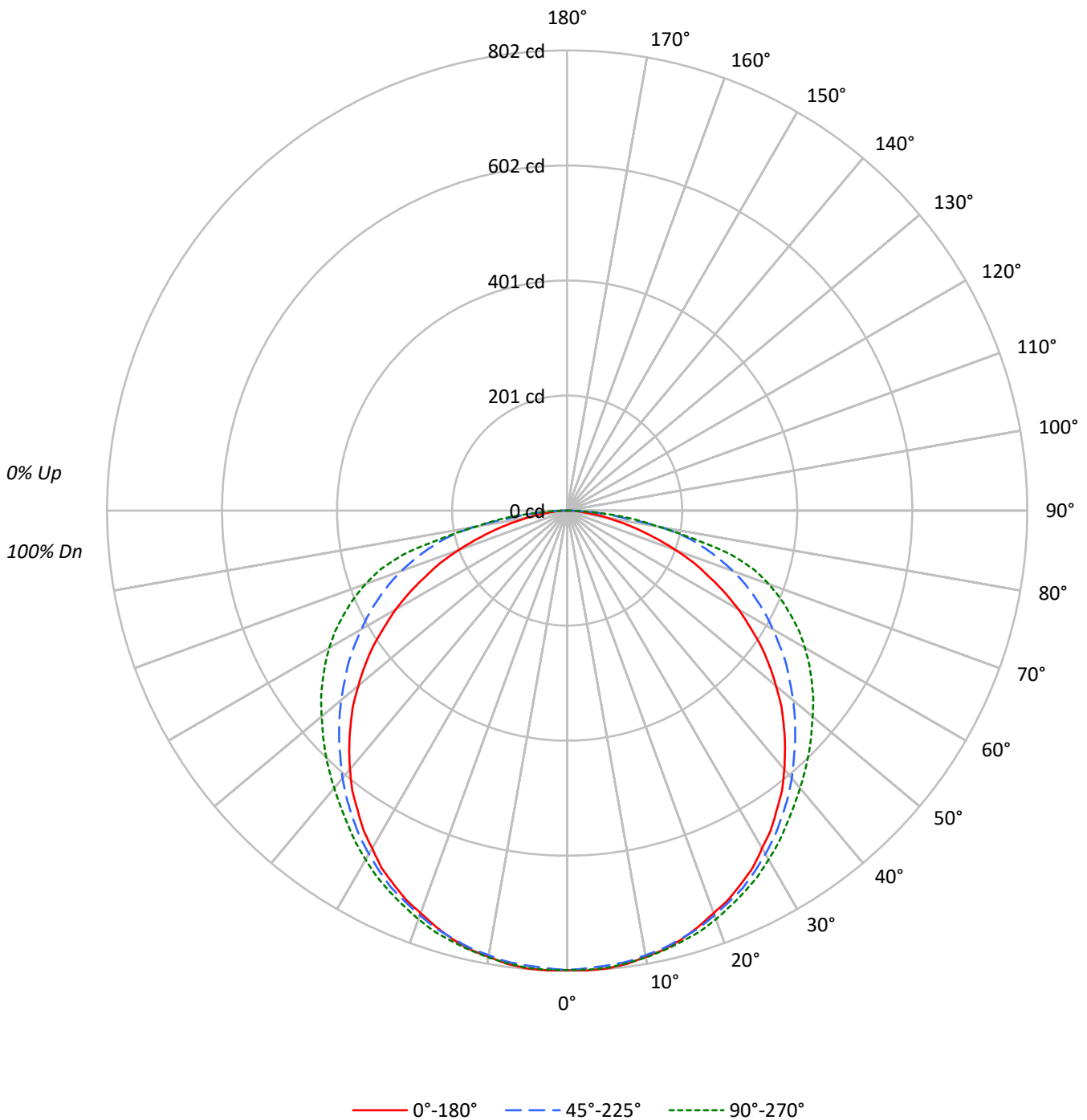
Input Watts (W): 35.34  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1078	1078	1078
5°	1082	1075	1080
10°	1079	1075	1080
15°	1077	1075	1082
20°	1069	1074	1085
25°	1065	1076	1088
30°	1056	1074	1091
35°	1046	1071	1096
40°	1034	1069	1109
45°	1017	1070	1135
50°	994	1076	1169
55°	969	1094	1221
60°	928	1115	1288
65°	869	1154	1367
70°	790	1208	1471
75°	670	1274	1537
80°	528	1282	1243
85°	391	976	1091



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.0	3.0
10°-20°	218.7	8.6
20°-30°	334.4	13.1
30°-40°	408.8	16.0
40°-50°	435.7	17.1
50°-60°	416.6	16.4
60°-70°	352.9	13.9
70°-80°	237.2	9.3
80°-90°	66.9	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°	629.0	24.7
0°-40°	1037.8	40.7
0°-60°	1890.0	74.2
0°-90°	2546.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2546.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	801	801	801	801	801	
5°	801	800	796	800	800	76
15°	773	773	772	778	777	218
25°	718	720	725	731	733	331
35°	637	642	652	664	667	399
45°	534	543	562	586	596	412
55°	413	428	466	503	520	368
65°	273	301	363	411	430	271
75°	129	176	245	287	296	138
85°	25	52	63	68	71	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	800.9	800.9	800.9	800.9	800.9
2.5°	802.2	802.2	798.4	800.9	800.9
5°	800.9	799.7	795.9	799.7	799.7
7.5°	797.1	795.9	793.3	797.1	795.9
10°	789.6	789.6	787.0	790.8	790.8
12.5°	783.2	782.0	780.7	785.8	784.5
15°	773.1	773.1	771.9	778.2	776.9
17.5°	760.5	761.8	763.0	768.1	769.3
20°	746.6	749.1	750.4	758.0	758.0
22.5°	734.0	735.2	737.8	745.3	745.3
25°	717.5	720.1	725.1	731.4	732.7
27.5°	701.1	702.4	708.7	717.5	718.8
30°	679.6	683.4	691.0	701.1	702.4
32.5°	660.7	664.5	673.3	683.4	686.0
35°	636.7	641.7	651.9	664.5	667.0
37.5°	615.2	619.0	631.6	645.5	649.3
40°	588.7	596.3	608.9	625.3	631.6
42.5°	562.2	569.7	584.9	606.4	614.0
45°	534.4	543.2	562.2	586.2	596.3
47.5°	506.6	516.7	538.2	566.0	577.3
50°	475.0	487.6	514.2	545.7	558.4
52.5°	444.7	459.8	488.9	524.3	540.7
55°	413.1	428.3	466.2	502.8	520.5
57.5°	377.7	397.9	439.6	481.3	500.3
60°	344.9	363.8	414.4	459.8	478.8
62.5°	309.5	334.8	389.1	437.1	456.0
65°	272.9	300.7	362.6	410.6	429.5
67.5°	240.0	270.3	336.0	384.0	403.0
70°	200.9	238.8	307.0	355.0	373.9
72.5°	164.2	205.9	276.7	323.4	341.1
75°	128.9	175.6	245.1	286.8	295.6
77.5°	96.0	145.3	212.2	229.9	223.6
80°	68.2	116.2	165.5	156.6	160.4
82.5°	44.2	88.4	102.3	116.2	120.0
85°	25.3	51.8	63.2	68.2	70.7
87.5°	11.4	18.9	25.3	25.3	24.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)