

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: P276748

Luminaire Tested: **24CZ2-45HE-RDP-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276748  
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: 24CZ2-45HE-RDP-UNV-L83050-W2A1-U-3500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2854.0 lumens  
Efficiency: N/A  
Efficacy: 90.8 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

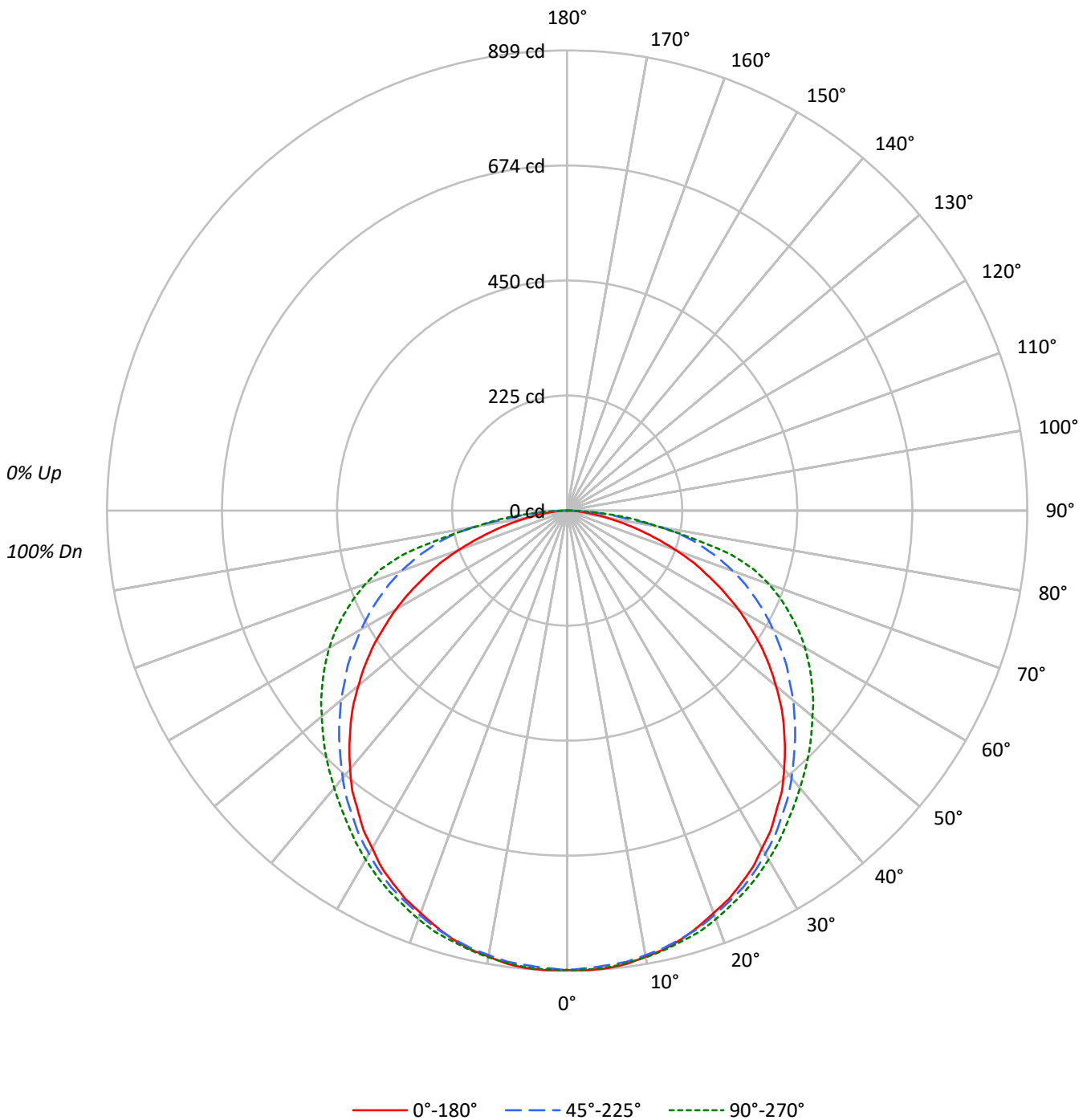
Input Watts (W): 31.434  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1208	1208	1208
5°	1212	1204	1210
10°	1209	1205	1211
15°	1207	1205	1213
20°	1198	1204	1216
25°	1194	1206	1219
30°	1183	1203	1223
35°	1172	1200	1228
40°	1159	1198	1243
45°	1139	1199	1271
50°	1114	1206	1310
55°	1086	1225	1368
60°	1040	1249	1444
65°	974	1294	1532
70°	886	1353	1648
75°	751	1428	1722
80°	592	1437	1393
85°	437	1093	1224



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.1	3.0
10°-20°	245.0	8.6
20°-30°	374.7	13.1
30°-40°	458.1	16.0
40°-50°	488.2	17.1
50°-60°	466.8	16.4
60°-70°	395.4	13.9
70°-80°	265.7	9.3
80°-90°	74.9	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°	704.9	24.7
0°-40°	1162.9	40.7
0°-60°	2117.9	74.2
0°-90°	2854.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2854.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	898	898	898	898	898	
5°	898	896	892	896	896	85
15°	866	866	865	872	871	244
25°	804	807	813	820	821	371
35°	714	719	730	745	747	447
45°	599	609	630	657	668	462
55°	463	480	522	563	583	412
65°	306	337	406	460	481	304
75°	144	197	275	321	331	155
85°	28	58	71	76	79	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	897.5	897.5	897.5	897.5	897.5
2.5°	898.9	898.9	894.7	897.5	897.5
5°	897.5	896.1	891.8	896.1	896.1
7.5°	893.3	891.8	889.0	893.3	891.8
10°	884.8	884.8	881.9	886.2	886.2
12.5°	877.7	876.3	874.9	880.5	879.1
15°	866.4	866.4	864.9	872.0	870.6
17.5°	852.2	853.6	855.0	860.7	862.1
20°	836.6	839.5	840.9	849.4	849.4
22.5°	822.5	823.9	826.7	835.2	835.2
25°	804.1	806.9	812.6	819.6	821.1
27.5°	785.7	787.1	794.2	804.1	805.5
30°	761.6	765.8	774.3	785.7	787.1
32.5°	740.4	744.6	754.5	765.8	768.7
35°	713.5	719.1	730.5	744.6	747.4
37.5°	689.4	693.7	707.8	723.4	727.6
40°	659.7	668.2	682.3	700.7	707.8
42.5°	629.9	638.4	655.4	679.5	688.0
45°	598.8	608.7	629.9	656.8	668.2
47.5°	567.7	579.0	603.1	634.2	646.9
50°	532.3	546.4	576.2	611.5	625.7
52.5°	498.3	515.3	547.8	587.5	605.9
55°	462.9	479.9	522.4	563.4	583.2
57.5°	423.3	445.9	492.6	539.4	560.6
60°	386.5	407.7	464.3	515.3	536.5
62.5°	346.8	375.1	436.0	489.8	511.0
65°	305.8	336.9	406.3	460.1	481.3
67.5°	269.0	302.9	376.6	430.3	451.6
70°	225.1	267.6	344.0	397.8	419.0
72.5°	184.0	230.7	310.0	362.4	382.2
75°	144.4	196.8	274.6	321.3	331.3
77.5°	107.6	162.8	237.8	257.6	250.6
80°	76.4	130.2	185.4	175.5	179.8
82.5°	49.5	99.1	114.7	130.2	134.5
85°	28.3	58.0	70.8	76.4	79.3
87.5°	12.7	21.2	28.3	28.3	26.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)