

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: P276801

Luminaire Tested: **24CZ2-45-RDP-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276801  
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-L83050-W2A1-U-5000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3056.0 lumens  
Efficiency: N/A  
Efficacy: 83.3 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

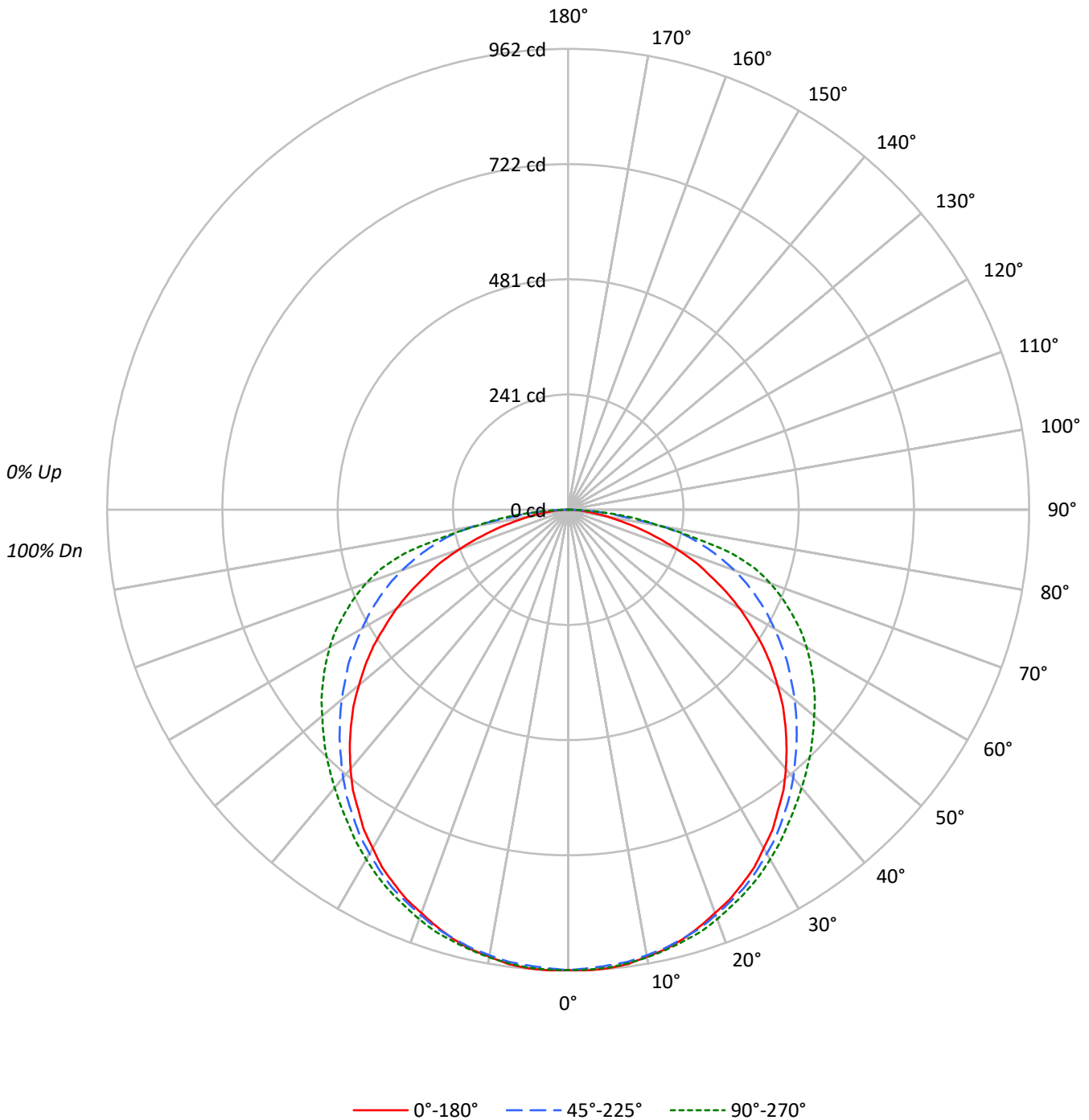
Input Watts (W): 36.681432  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1293	1293	1293
5°	1298	1290	1296
10°	1294	1290	1296
15°	1292	1290	1299
20°	1283	1289	1302
25°	1278	1292	1305
30°	1267	1288	1309
35°	1255	1285	1315
40°	1241	1283	1331
45°	1220	1283	1361
50°	1193	1291	1402
55°	1163	1312	1465
60°	1114	1338	1546
65°	1042	1385	1641
70°	948	1449	1765
75°	804	1529	1844
80°	635	1539	1492
85°	468	1170	1311



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.2	3.0
10°-20°	262.4	8.6
20°-30°	401.2	13.1
30°-40°	490.5	16.0
40°-50°	522.7	17.1
50°-60°	499.8	16.4
60°-70°	423.4	13.9
70°-80°	284.6	9.3
80°-90°	80.3	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°	754.7	24.7
0°-40°	1245.2	40.7
0°-60°	2267.8	74.2
0°-90°	3056.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3056.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	961	961	961	961	961	
5°	961	960	955	960	960	91
15°	928	928	926	934	932	262
25°	861	864	870	878	879	397
35°	764	770	782	797	800	479
45°	641	652	674	703	716	495
55°	496	514	559	603	624	441
65°	327	361	435	493	515	325
75°	155	211	294	344	355	166
85°	30	62	76	82	85	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	961.0	961.0	961.0	961.0	961.0
2.5°	962.5	962.5	958.0	961.0	961.0
5°	961.0	959.5	955.0	959.5	959.5
7.5°	956.5	955.0	951.9	956.5	955.0
10°	947.4	947.4	944.4	948.9	948.9
12.5°	939.8	938.3	936.8	942.8	941.3
15°	927.7	927.7	926.2	933.7	932.2
17.5°	912.5	914.0	915.6	921.6	923.1
20°	895.8	898.9	900.4	909.5	909.5
22.5°	880.7	882.2	885.2	894.3	894.3
25°	861.0	864.0	870.1	877.7	879.2
27.5°	841.3	842.8	850.4	861.0	862.5
30°	815.5	820.1	829.1	841.3	842.8
32.5°	792.8	797.3	807.9	820.1	823.1
35°	764.0	770.0	782.2	797.3	800.3
37.5°	738.2	742.7	757.9	774.6	779.1
40°	706.4	715.5	730.6	750.3	757.9
42.5°	674.5	683.6	701.8	727.6	736.7
45°	641.2	651.8	674.5	703.3	715.5
47.5°	607.8	620.0	645.7	679.1	692.7
50°	569.9	585.1	616.9	654.8	670.0
52.5°	533.6	551.8	586.6	629.1	648.8
55°	495.7	513.9	559.3	603.3	624.5
57.5°	453.2	477.5	527.5	577.5	600.3
60°	413.8	436.6	497.2	551.8	574.5
62.5°	371.4	401.7	466.9	524.5	547.2
65°	327.4	360.8	435.0	492.6	515.4
67.5°	288.0	324.4	403.2	460.8	483.5
70°	241.0	286.5	368.3	425.9	448.7
72.5°	197.1	247.1	332.0	388.0	409.3
75°	154.6	210.7	294.1	344.1	354.7
77.5°	115.2	174.3	254.7	275.9	268.3
80°	81.9	139.5	198.6	188.0	192.5
82.5°	53.1	106.1	122.8	139.5	144.0
85°	30.3	62.1	75.8	81.9	84.9
87.5°	13.6	22.7	30.3	30.3	28.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)