

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: P276926

Luminaire Tested: **24CZ2-50HE-RDP-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276926  
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: 24CZ2-50HE-RDP-UNV-L82765-W2A1-U-6500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3342.8 lumens  
Efficiency: N/A  
Efficacy: 89.6 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

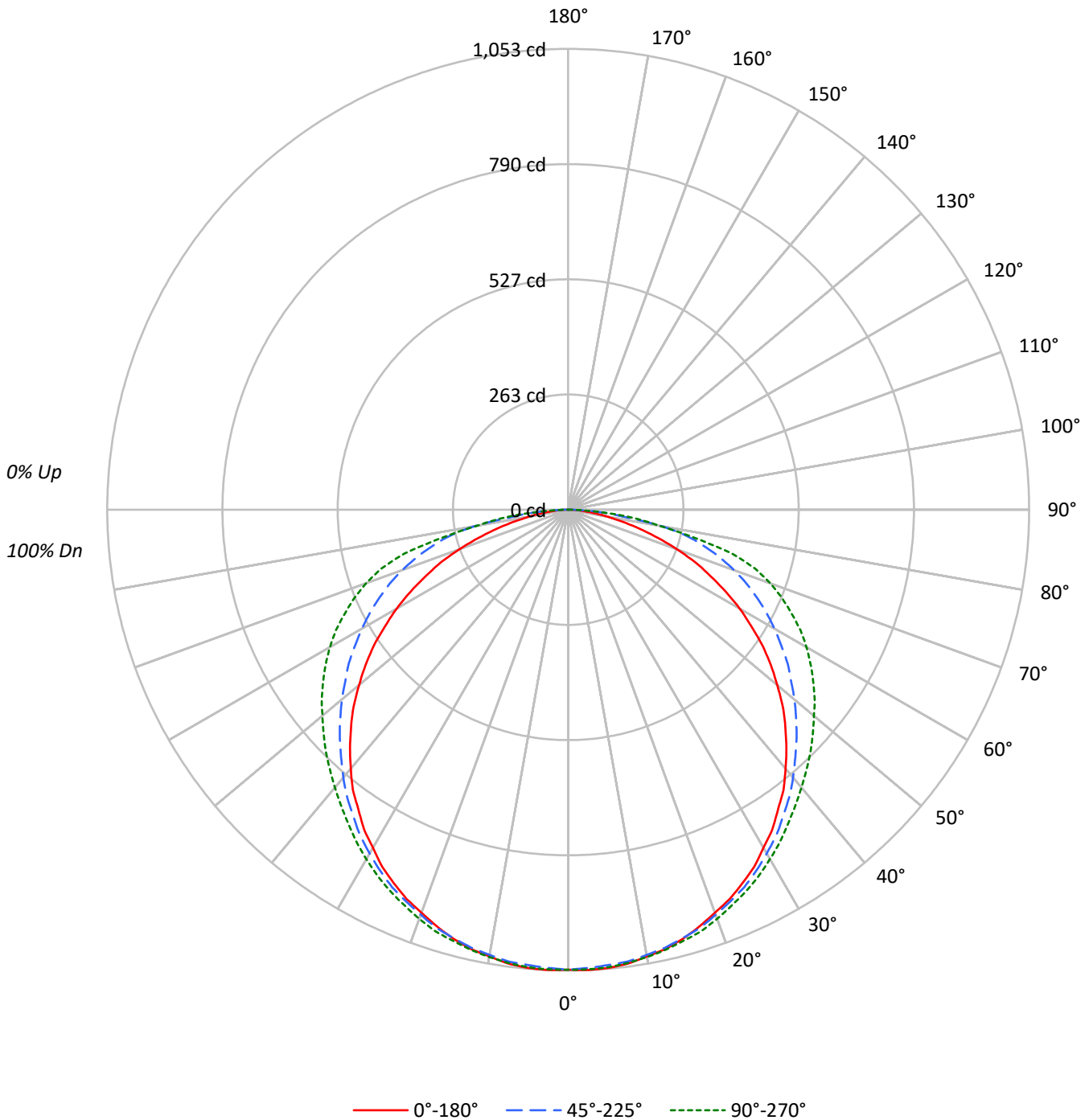
Input Watts (W): 37.293  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1414	1414	1414
5°	1420	1411	1418
10°	1416	1411	1418
15°	1413	1411	1420
20°	1403	1410	1424
25°	1398	1413	1428
30°	1386	1409	1432
35°	1373	1405	1438
40°	1357	1404	1456
45°	1335	1404	1489
50°	1305	1412	1534
55°	1272	1435	1602
60°	1218	1464	1691
65°	1140	1515	1795
70°	1037	1585	1931
75°	879	1672	2017
80°	693	1683	1632
85°	513	1280	1434



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.7	3.0
10°-20°	287.0	8.6
20°-30°	438.9	13.1
30°-40°	536.5	16.0
40°-50°	571.8	17.1
50°-60°	546.7	16.4
60°-70°	463.1	13.9
70°-80°	311.3	9.3
80°-90°	87.8	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
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0°-30°	825.6	24.7
0°-40°	1362.1	40.7
0°-60°	2480.6	74.2
0°-90°	3342.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3342.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1051	1051	1051	1051	1051	
5°	1051	1050	1045	1050	1050	100
15°	1015	1015	1013	1021	1020	286
25°	942	945	952	960	962	434
35°	836	842	856	872	876	524
45°	701	713	738	769	783	541
55°	542	562	612	660	683	483
65°	358	395	476	539	564	356
75°	169	230	322	376	388	181
85°	33	68	83	90	93	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1051.2	1051.2	1051.2	1051.2	1051.2
2.5°	1052.9	1052.9	1047.9	1051.2	1051.2
5°	1051.2	1049.6	1044.6	1049.6	1049.6
7.5°	1046.3	1044.6	1041.3	1046.3	1044.6
10°	1036.3	1036.3	1033.0	1038.0	1038.0
12.5°	1028.0	1026.4	1024.7	1031.3	1029.7
15°	1014.7	1014.7	1013.1	1021.4	1019.7
17.5°	998.2	999.8	1001.5	1008.1	1009.8
20°	979.9	983.2	984.9	994.8	994.8
22.5°	963.3	965.0	968.3	978.3	978.3
25°	941.8	945.1	951.7	960.0	961.7
27.5°	920.2	921.9	930.2	941.8	943.4
30°	892.0	897.0	907.0	920.2	921.9
32.5°	867.2	872.2	883.8	897.0	900.3
35°	835.7	842.3	855.6	872.2	875.5
37.5°	807.5	812.5	829.0	847.3	852.3
40°	772.7	782.6	799.2	820.8	829.0
42.5°	737.8	747.8	767.7	795.9	805.8
45°	701.4	713.0	737.8	769.4	782.6
47.5°	664.9	678.2	706.3	742.8	757.7
50°	623.4	640.0	674.8	716.3	732.9
52.5°	583.6	603.5	641.7	688.1	709.7
55°	542.2	562.1	611.8	659.9	683.1
57.5°	495.8	522.3	577.0	631.7	656.6
60°	452.7	477.5	543.9	603.5	628.4
62.5°	406.2	439.4	510.7	573.7	598.6
65°	358.1	394.6	475.9	538.9	563.7
67.5°	315.0	354.8	441.0	504.1	528.9
70°	263.6	313.4	402.9	465.9	490.8
72.5°	215.6	270.3	363.1	424.5	447.7
75°	169.1	230.5	321.7	376.4	388.0
77.5°	126.0	190.7	278.6	301.8	293.5
80°	89.5	152.5	217.2	205.6	210.6
82.5°	58.0	116.1	134.3	152.5	157.5
85°	33.2	68.0	82.9	89.5	92.9
87.5°	14.9	24.9	33.2	33.2	31.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)