

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: P277016

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277016  
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: 24CZ2-50-RDP-UNV-L82765-W2A1-U-6500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3326.3 lumens  
Efficiency: N/A  
Efficacy: 80.2 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

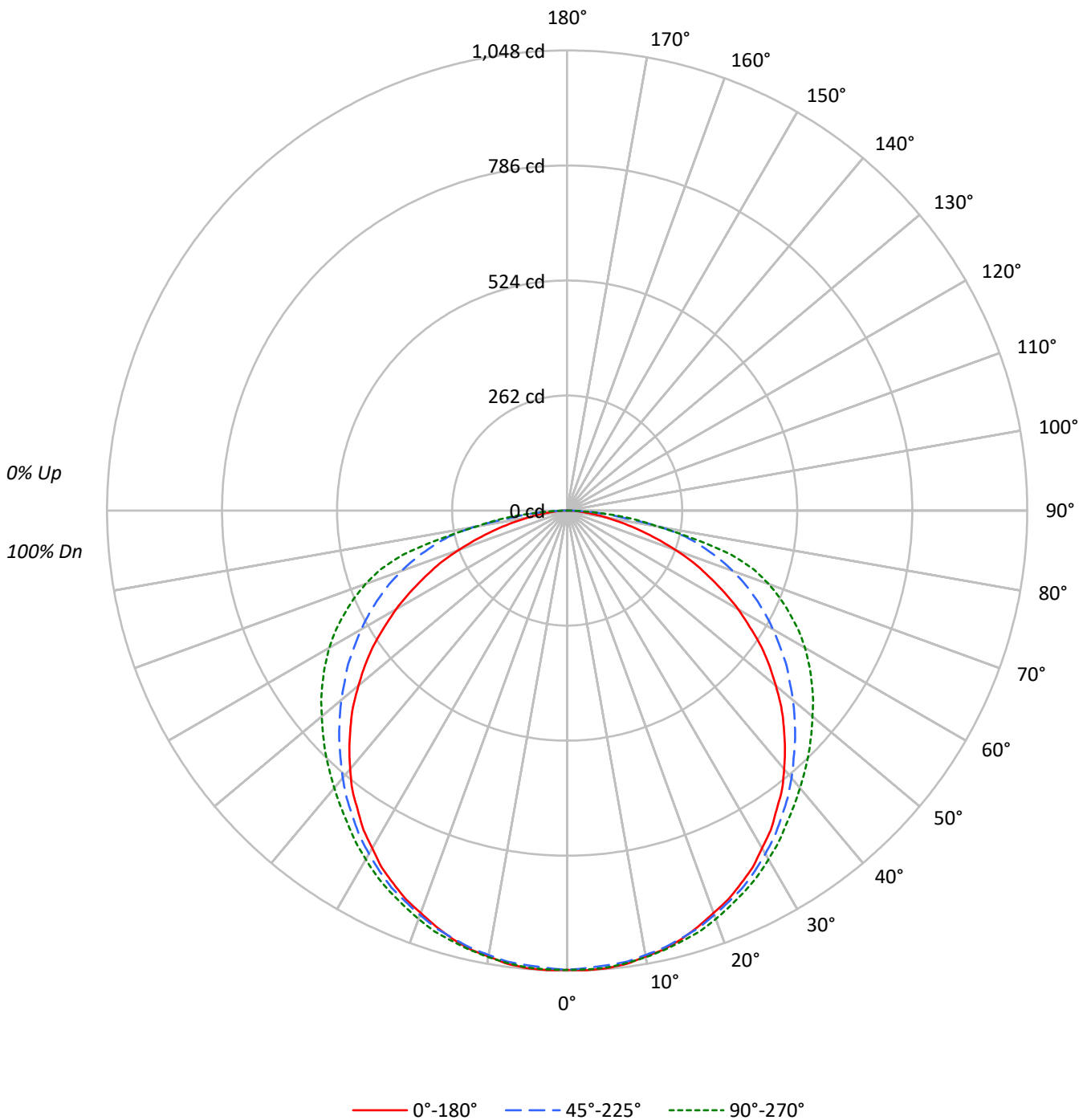
Input Watts (W): 41.478  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1407	1407	1407
5°	1413	1404	1411
10°	1409	1404	1411
15°	1406	1404	1413
20°	1396	1403	1417
25°	1391	1406	1421
30°	1379	1402	1425
35°	1366	1398	1431
40°	1350	1397	1449
45°	1328	1397	1482
50°	1299	1406	1526
55°	1266	1428	1594
60°	1212	1456	1683
65°	1135	1507	1786
70°	1032	1577	1921
75°	875	1664	2007
80°	690	1674	1623
85°	509	1274	1426



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.2	3.0
10°-20°	285.6	8.6
20°-30°	436.7	13.1
30°-40°	533.8	16.0
40°-50°	569.0	17.1
50°-60°	544.0	16.4
60°-70°	460.9	13.9
70°-80°	309.7	9.3
80°-90°	87.4	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°	821.5	24.7
0°-40°	1355.3	40.7
0°-60°	2468.3	74.2
0°-90°	3326.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3326.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1046	1046	1046	1046	1046	
5°	1046	1044	1039	1044	1044	99
15°	1010	1010	1008	1016	1015	285
25°	937	940	947	955	957	432
35°	832	838	851	868	871	521
45°	698	709	734	766	779	538
55°	540	559	609	657	680	481
65°	356	393	474	536	561	354
75°	168	229	320	374	386	180
85°	33	68	82	89	92	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1046.0	1046.0	1046.0	1046.0	1046.0
2.5°	1047.7	1047.7	1042.7	1046.0	1046.0
5°	1046.0	1044.4	1039.4	1044.4	1044.4
7.5°	1041.1	1039.4	1036.1	1041.1	1039.4
10°	1031.2	1031.2	1027.9	1032.8	1032.8
12.5°	1022.9	1021.3	1019.6	1026.2	1024.6
15°	1009.7	1009.7	1008.1	1016.3	1014.7
17.5°	993.2	994.9	996.5	1003.1	1004.8
20°	975.1	978.4	980.0	989.9	989.9
22.5°	958.6	960.2	963.5	973.4	973.4
25°	937.1	940.4	947.0	955.3	956.9
27.5°	915.7	917.3	925.6	937.1	938.8
30°	887.6	892.6	902.5	915.7	917.3
32.5°	862.9	867.8	879.4	892.6	895.9
35°	831.5	838.1	851.3	867.8	871.1
37.5°	803.5	808.4	824.9	843.1	848.0
40°	768.8	778.7	795.2	816.7	824.9
42.5°	734.2	744.1	763.9	791.9	801.8
45°	697.9	709.4	734.2	765.5	778.7
47.5°	661.6	674.8	702.8	739.1	754.0
50°	620.4	636.9	671.5	712.7	729.2
52.5°	580.8	600.6	638.5	684.7	706.1
55°	539.5	559.3	608.8	656.7	679.7
57.5°	493.3	519.7	574.2	628.6	653.4
60°	450.4	475.2	541.2	600.6	625.3
62.5°	404.2	437.2	508.2	570.9	595.6
65°	356.4	392.7	473.5	536.2	561.0
67.5°	313.5	353.1	438.9	501.6	526.3
70°	262.3	311.8	400.9	463.6	488.4
72.5°	214.5	268.9	361.3	422.4	445.5
75°	168.3	229.3	320.1	374.5	386.1
77.5°	125.4	189.7	277.2	300.3	292.0
80°	89.1	151.8	216.1	204.6	209.5
82.5°	57.7	115.5	133.6	151.8	156.7
85°	33.0	67.6	82.5	89.1	92.4
87.5°	14.8	24.7	33.0	33.0	31.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)