

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: P276876

Luminaire Tested: **24CZ2-45-RDP-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276876  
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-L93050-W2A1-U-5000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2693.1 lumens  
Efficiency: N/A  
Efficacy: 73.9 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

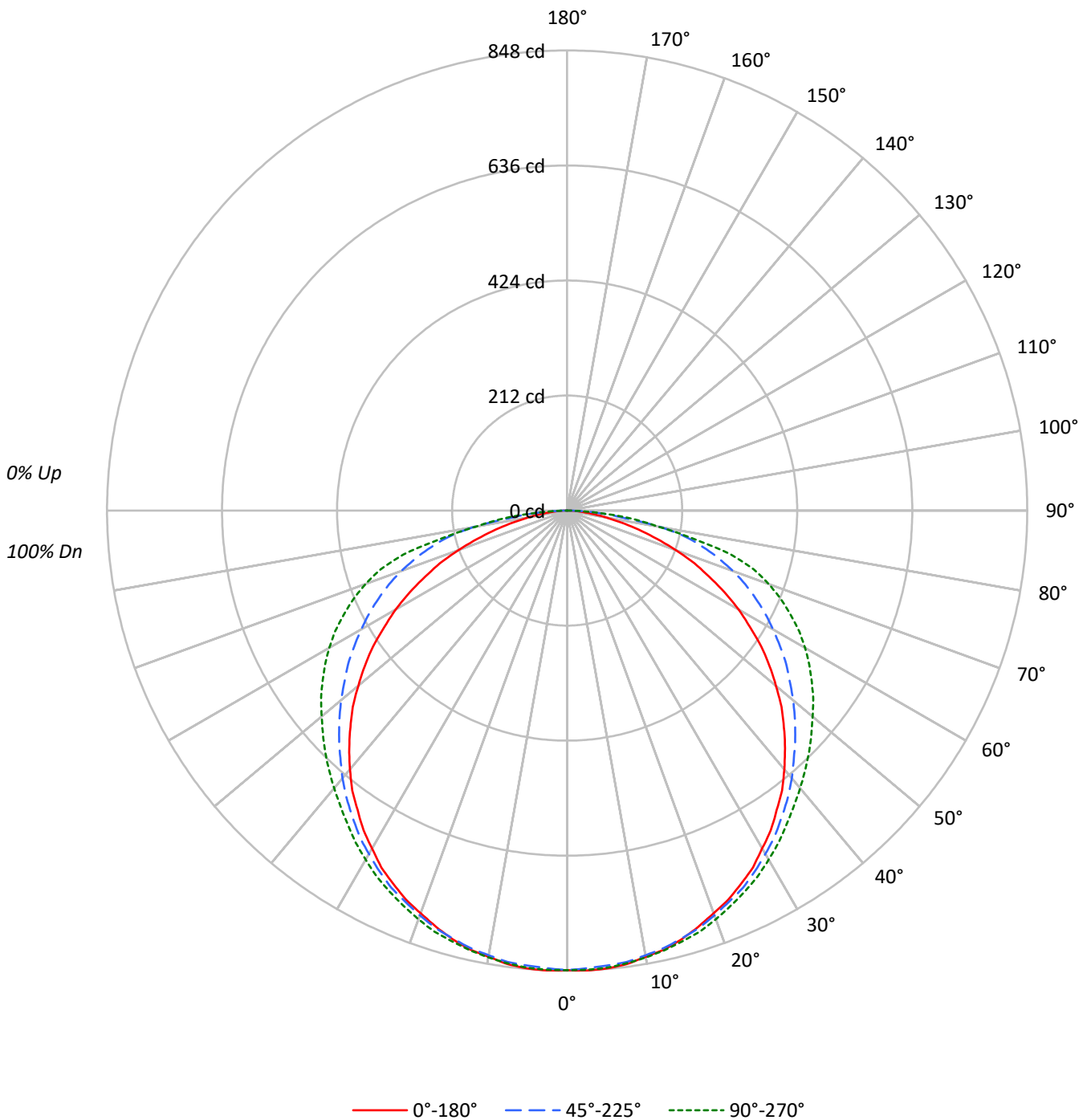
Input Watts (W): 36.436656  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1139	1139	1139
5°	1144	1137	1142
10°	1141	1137	1142
15°	1139	1137	1144
20°	1130	1136	1148
25°	1127	1138	1150
30°	1117	1135	1154
35°	1106	1132	1158
40°	1093	1131	1173
45°	1075	1131	1200
50°	1051	1138	1236
55°	1025	1156	1291
60°	981	1179	1362
65°	918	1221	1446
70°	836	1277	1555
75°	709	1347	1625
80°	559	1356	1315
85°	412	1031	1155



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.3	3.0
10°-20°	231.2	8.6
20°-30°	353.6	13.1
30°-40°	432.2	16.0
40°-50°	460.7	17.1
50°-60°	440.5	16.4
60°-70°	373.1	13.9
70°-80°	250.8	9.3
80°-90°	70.7	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°	665.1	24.7
0°-40°	1097.4	40.7
0°-60°	1998.5	74.2
0°-90°	2693.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2693.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	847	847	847	847	847	
5°	847	846	842	846	846	80
15°	818	818	816	823	822	231
25°	759	761	767	773	775	350
35°	673	679	689	703	705	422
45°	565	574	594	620	630	436
55°	437	453	493	532	550	389
65°	288	318	383	434	454	286
75°	136	186	259	303	313	146
85°	27	55	67	72	75	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	846.9	846.9	846.9	846.9	846.9
2.5°	848.3	848.3	844.2	846.9	846.9
5°	846.9	845.6	841.6	845.6	845.6
7.5°	842.9	841.6	838.9	842.9	841.6
10°	834.9	834.9	832.2	836.2	836.2
12.5°	828.2	826.9	825.5	830.9	829.6
15°	817.5	817.5	816.2	822.9	821.5
17.5°	804.2	805.5	806.8	812.2	813.5
20°	789.5	792.2	793.5	801.5	801.5
22.5°	776.1	777.5	780.1	788.1	788.1
25°	758.8	761.4	766.8	773.4	774.8
27.5°	741.4	742.7	749.4	758.8	760.1
30°	718.7	722.7	730.7	741.4	742.7
32.5°	698.6	702.6	712.0	722.7	725.4
35°	673.3	678.6	689.3	702.6	705.3
37.5°	650.6	654.6	667.9	682.6	686.6
40°	622.5	630.5	643.9	661.2	667.9
42.5°	594.4	602.5	618.5	641.2	649.2
45°	565.1	574.4	594.4	619.8	630.5
47.5°	535.7	546.4	569.1	598.5	610.5
50°	502.3	515.6	543.7	577.1	590.4
52.5°	470.2	486.2	517.0	554.4	571.7
55°	436.8	452.8	492.9	531.7	550.4
57.5°	399.4	420.8	464.9	509.0	529.0
60°	364.7	384.7	438.2	486.2	506.3
62.5°	327.3	354.0	411.4	462.2	482.2
65°	288.5	317.9	383.4	434.1	454.2
67.5°	253.8	285.9	355.3	406.1	426.1
70°	212.4	252.5	324.6	375.4	395.4
72.5°	173.7	217.7	292.5	342.0	360.7
75°	136.3	185.7	259.2	303.2	312.6
77.5°	101.5	153.6	224.4	243.1	236.4
80°	72.1	122.9	175.0	165.6	169.7
82.5°	46.8	93.5	108.2	122.9	126.9
85°	26.7	54.8	66.8	72.1	74.8
87.5°	12.0	20.0	26.7	26.7	25.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)