

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: P276701

Luminaire Tested: **24CZ2-35-S-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P276701  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-35-S-UNV-L92765-W2A1-U-5000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

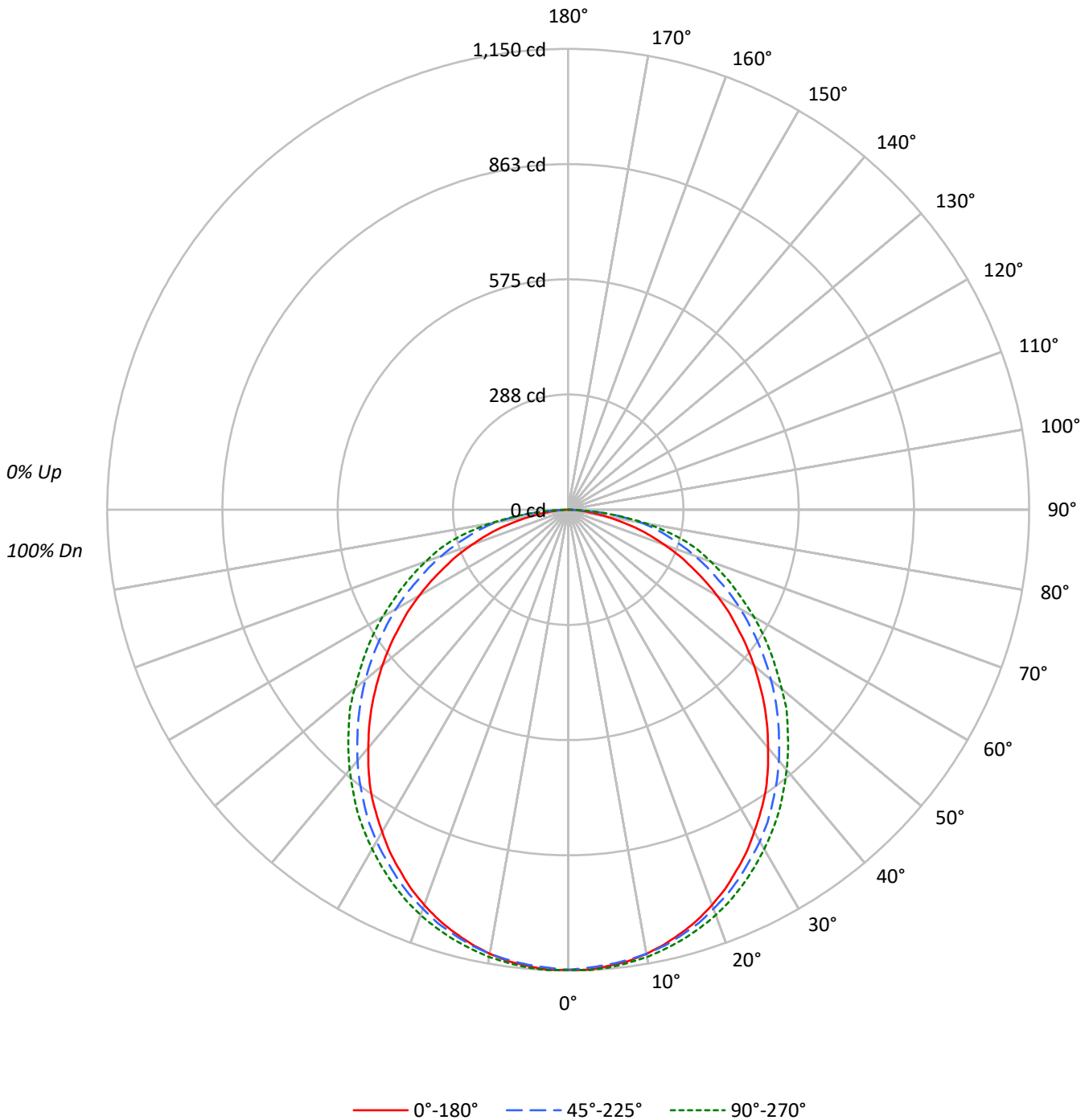
Lumens per Lamp: N/A  
Luminaire Lumens: 3268.2 lumens  
Efficiency: N/A  
Efficacy: 122.4 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 26.691  
Input Voltage (V): 120  
Input Current (Ain): 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	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					100			
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69					69			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42					42			
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1545	1545	1545
5°	1544	1540	1549
10°	1537	1537	1549
15°	1523	1530	1546
20°	1503	1518	1541
25°	1475	1503	1532
30°	1442	1485	1519
35°	1410	1461	1507
40°	1362	1437	1490
45°	1318	1408	1474
50°	1267	1382	1456
55°	1210	1356	1442
60°	1154	1335	1439
65°	1081	1312	1448
70°	1000	1319	1487
75°	896	1344	1570
80°	724	1423	1537
85°	545	1250	1218



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.7	3.3
10°-20°	310.6	9.5
20°-30°	466.9	14.3
30°-40°	556.1	17.0
40°-50°	569.2	17.4
50°-60°	512.4	15.7
60°-70°	402.4	12.3
70°-80°	261.2	8.0
80°-90°	80.8	2.5
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°	886.2	27.1
0°-40°	1442.3	44.1
0°-60°	2523.9	77.2
0°-90°	3268.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3268.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1148	1148	1148	1148	1148	
5°	1143	1145	1140	1146	1147	109
15°	1093	1096	1098	1108	1110	308
25°	994	1002	1012	1029	1032	458
35°	858	869	890	912	918	536
45°	692	709	740	768	774	534
55°	516	539	578	608	615	463
65°	340	365	412	446	455	338
75°	172	206	258	294	302	182
85°	35	65	81	79	79	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1148.2	1148.2	1148.2	1148.2	1148.2
2.5°	1149.2	1149.2	1144.0	1149.2	1150.2
5°	1143.0	1145.0	1139.9	1146.1	1147.1
7.5°	1136.7	1136.7	1133.6	1139.9	1140.9
10°	1125.3	1126.4	1125.3	1132.6	1133.6
12.5°	1110.8	1112.9	1113.9	1121.2	1122.2
15°	1093.1	1096.3	1098.3	1107.7	1109.7
17.5°	1073.4	1076.5	1081.7	1092.1	1094.2
20°	1049.5	1053.7	1059.9	1073.4	1076.5
22.5°	1023.6	1027.7	1038.1	1050.6	1055.8
25°	993.5	1001.8	1012.2	1028.8	1031.9
27.5°	963.4	970.6	984.1	1001.8	1005.9
30°	928.1	939.5	956.1	973.8	977.9
32.5°	893.8	905.2	925.0	943.6	948.8
35°	858.5	868.9	889.7	911.5	917.7
37.5°	818.0	831.5	854.4	876.2	882.4
40°	775.5	792.1	818.0	840.9	848.1
42.5°	735.0	752.6	778.6	803.5	811.8
45°	692.4	709.0	740.2	768.2	774.4
47.5°	648.8	667.5	700.7	728.8	739.1
50°	605.2	624.9	660.2	689.3	695.5
52.5°	561.6	582.4	619.8	650.9	654.0
55°	515.9	538.8	578.2	608.3	614.6
57.5°	474.4	494.1	536.7	567.9	575.1
60°	428.7	450.5	496.2	525.3	534.6
62.5°	385.1	408.0	455.7	484.8	493.1
65°	339.5	365.4	412.1	446.4	454.7
67.5°	300.0	324.9	374.8	408.0	416.3
70°	254.3	282.4	335.3	369.6	377.9
72.5°	214.9	244.0	296.9	330.1	342.6
75°	172.3	205.5	258.5	293.8	302.1
77.5°	130.8	169.2	223.2	250.2	250.2
80°	93.4	133.9	183.7	196.2	198.3
82.5°	61.2	100.7	136.0	135.0	135.0
85°	35.3	65.4	81.0	78.9	78.9
87.5°	13.5	27.0	29.1	29.1	28.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)