

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: P261269

Luminaire Tested: **24CZ-LD5-35-S-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261269  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-35-S-UNV-L92765-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3170.0 lumens  
Efficiency: N/A  
Efficacy: 129.6 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

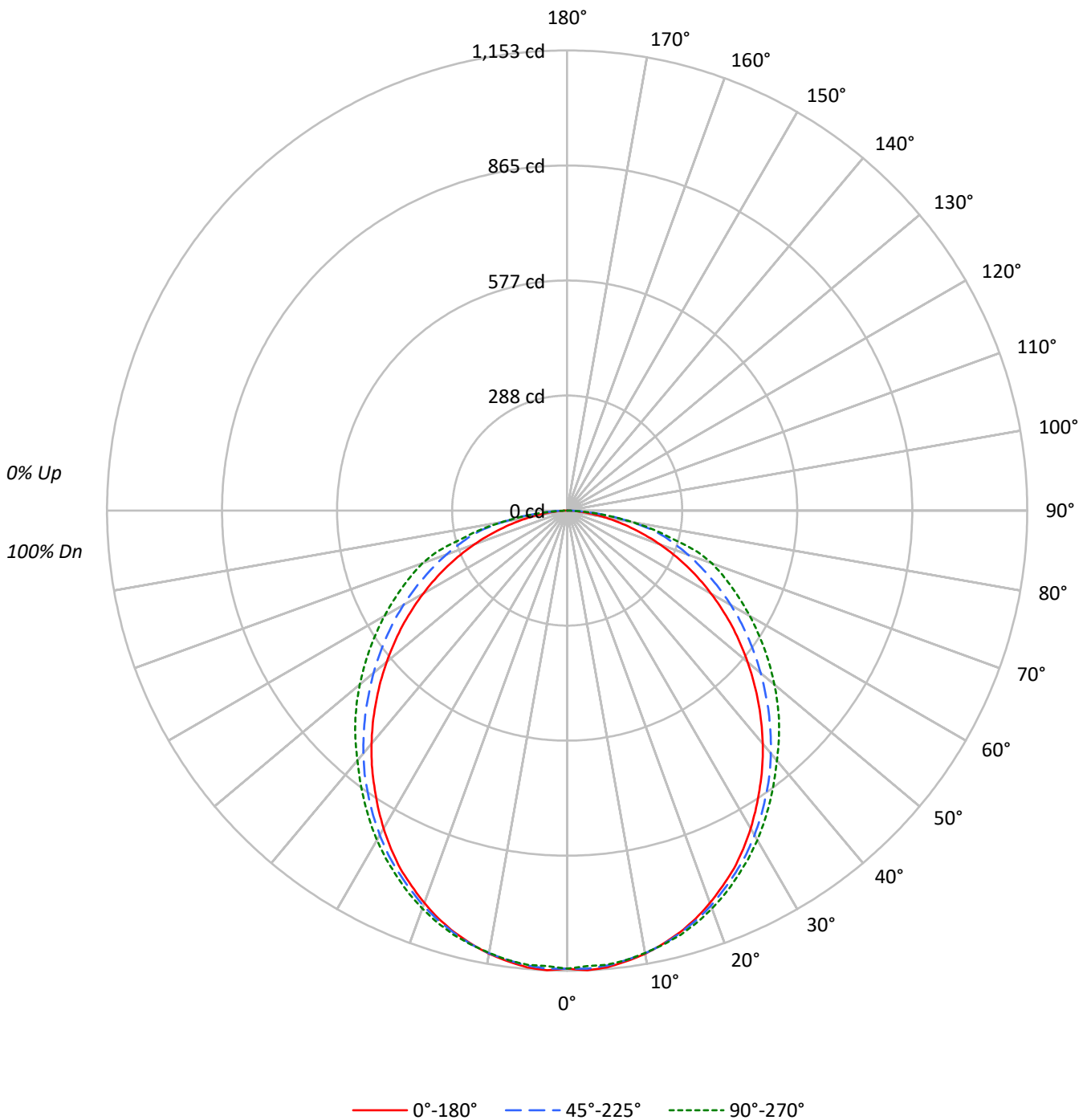
Input Watts (W): 24.459  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	1544	1544	1544
5°	1551	1546	1543
10°	1541	1539	1538
15°	1524	1527	1532
20°	1498	1509	1519
25°	1469	1484	1500
30°	1429	1459	1481
35°	1384	1428	1457
40°	1339	1395	1436
45°	1289	1359	1429
50°	1236	1325	1420
55°	1183	1297	1415
60°	1121	1274	1422
65°	1054	1259	1451
70°	971	1266	1519
75°	861	1311	1415
80°	719	1242	1275
85°	537	993	912



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.5	3.4
10°-20°	308.6	9.7
20°-30°	459.9	14.5
30°-40°	541.3	17.1
40°-50°	550.1	17.4
50°-60°	494.6	15.6
60°-70°	390.7	12.3
70°-80°	247.9	7.8
80°-90°	68.4	2.2
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°	876.9	27.7
0°-40°	1418.3	44.7
0°-60°	2463.0	77.7
0°-90°	3170.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3170.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1148	1148	1148	1148	1148	
5°	1149	1139	1144	1142	1142	109
15°	1094	1088	1096	1099	1100	308
25°	989	988	1000	1006	1010	455
35°	843	848	869	879	887	527
45°	677	687	714	735	751	523
55°	504	517	553	589	603	450
65°	331	348	396	439	456	328
75°	166	194	252	274	272	176
85°	35	60	64	59	59	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1147.6	1147.6	1147.6	1147.6	1147.6
2.5°	1152.9	1144.4	1148.7	1146.5	1142.3
5°	1148.7	1139.2	1144.4	1142.3	1142.3
7.5°	1139.2	1131.8	1136.0	1134.9	1136.0
10°	1127.6	1120.2	1126.5	1126.5	1125.4
12.5°	1111.7	1105.4	1112.8	1112.8	1113.8
15°	1093.8	1088.5	1095.9	1099.1	1100.1
17.5°	1071.7	1066.4	1075.9	1079.0	1082.2
20°	1046.3	1044.2	1053.7	1056.9	1061.1
22.5°	1017.9	1017.9	1027.4	1031.6	1037.9
25°	989.4	988.3	999.9	1006.3	1010.5
27.5°	955.6	956.7	971.5	977.8	983.1
30°	919.8	921.9	938.8	946.1	953.5
32.5°	881.8	886.0	905.0	913.4	920.8
35°	842.8	848.0	869.1	878.6	887.1
37.5°	803.7	811.1	833.3	842.8	852.3
40°	762.6	768.9	794.2	805.9	817.5
42.5°	720.4	728.9	754.2	771.0	784.8
45°	677.2	686.7	714.1	735.2	751.0
47.5°	633.9	646.6	672.9	701.4	715.1
50°	590.7	603.3	632.9	664.5	678.2
52.5°	546.4	559.0	592.8	625.5	640.3
55°	504.2	516.8	552.7	588.6	603.3
57.5°	459.9	473.6	513.7	550.6	565.4
60°	416.6	430.3	473.6	512.6	528.4
62.5°	374.4	389.2	434.6	475.7	491.5
65°	331.2	348.1	395.5	438.8	455.7
67.5°	289.0	308.0	357.6	402.9	420.9
70°	246.8	269.0	321.7	368.1	386.0
72.5°	205.7	229.9	285.8	332.3	341.7
75°	165.6	194.1	252.1	274.2	272.1
77.5°	127.6	159.3	214.1	218.3	224.7
80°	92.8	127.6	160.3	168.8	164.5
82.5°	61.2	96.0	115.0	110.8	109.7
85°	34.8	60.1	64.3	59.1	59.1
87.5°	14.8	24.3	21.1	15.8	14.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)