

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: P260635

Luminaire Tested: **24CZ-LD5-35-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260635  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25697)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-35-UNV-L93050-W2A1-U-4500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3286.7 lumens  
Efficiency: N/A  
Efficacy: 130.4 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

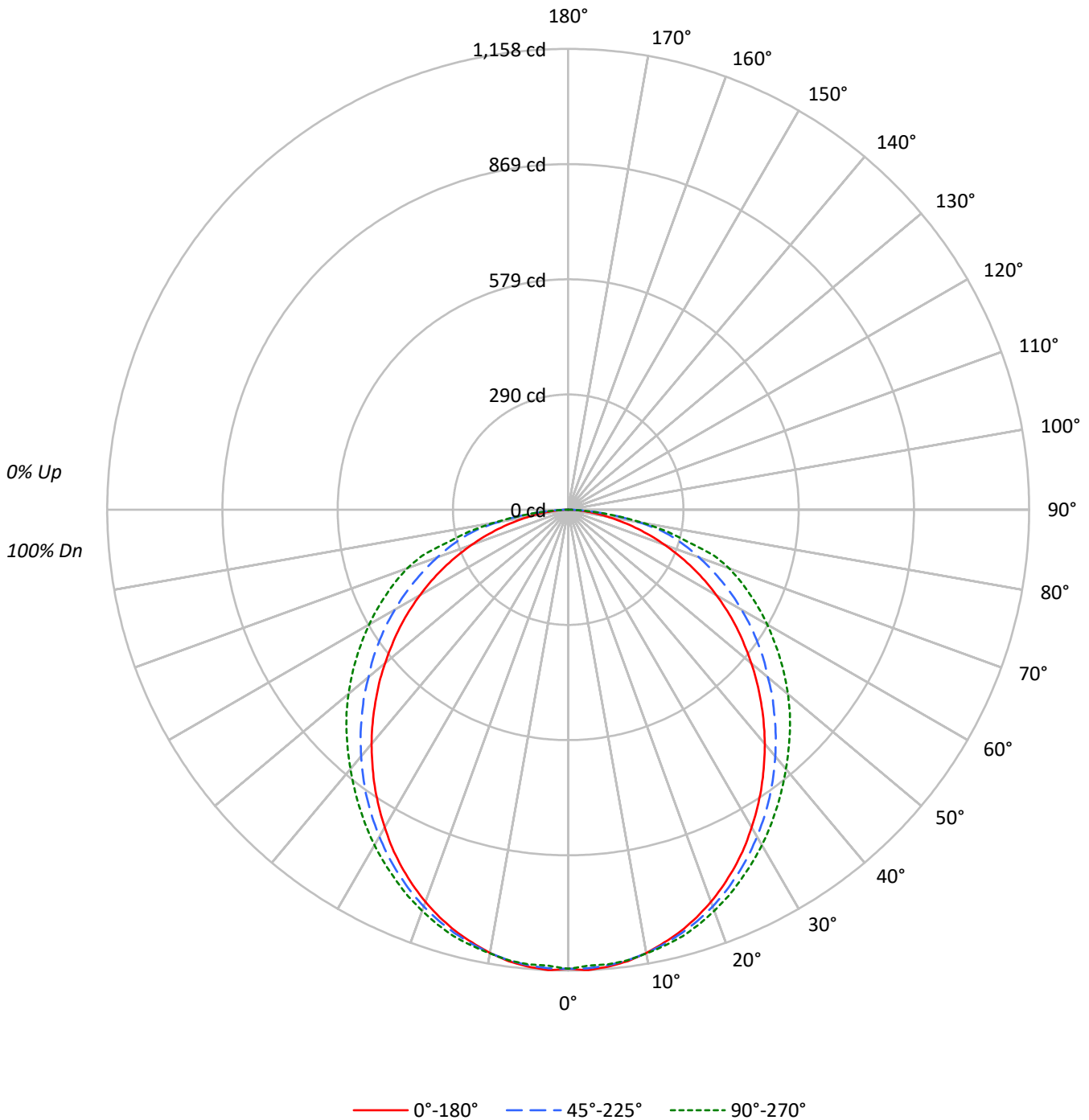
Input Watts (W): 25.19556  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24

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

	0°	45°	90°
0°	1552	1552	1552
5°	1556	1552	1549
10°	1545	1545	1547
15°	1527	1535	1546
20°	1502	1519	1536
25°	1470	1499	1524
30°	1432	1474	1512
35°	1392	1449	1501
40°	1350	1421	1494
45°	1304	1394	1499
50°	1258	1371	1508
55°	1212	1362	1523
60°	1157	1354	1554
65°	1096	1354	1605
70°	1014	1377	1691
75°	907	1439	1609
80°	759	1378	1474
85°	573	1059	1008



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.0	3.3
10°-20°	310.2	9.4
20°-30°	463.8	14.1
30°-40°	550.2	16.7
40°-50°	566.3	17.2
50°-60°	519.5	15.8
60°-70°	420.0	12.8
70°-80°	272.6	8.3
80°-90°	75.2	2.3
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°	883.0	26.9
0°-40°	1433.2	43.6
0°-60°	2518.9	76.6
0°-90°	3286.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3286.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1154	1154	1154	1154	1154	
5°	1152	1144	1149	1148	1147	109
15°	1096	1092	1102	1106	1110	309
25°	990	991	1009	1018	1026	456
35°	847	854	882	901	914	530
45°	685	697	733	768	788	529
55°	516	532	581	628	649	461
65°	344	365	425	482	504	340
75°	174	207	277	310	310	185
85°	37	63	69	66	65	45
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1153.5	1153.5	1153.5	1153.5	1153.5
2.5°	1158.0	1149.0	1153.5	1152.4	1146.7
5°	1152.4	1144.5	1149.0	1147.9	1146.7
7.5°	1144.5	1136.6	1142.2	1141.1	1142.2
10°	1131.0	1124.2	1131.0	1132.1	1132.1
12.5°	1114.1	1108.5	1117.5	1119.7	1122.0
15°	1096.1	1091.6	1101.7	1106.2	1109.6
17.5°	1073.6	1070.2	1082.6	1088.2	1092.7
20°	1048.8	1047.7	1061.2	1066.8	1072.5
22.5°	1020.7	1020.7	1036.4	1043.2	1051.1
25°	990.3	991.4	1009.4	1018.4	1026.3
27.5°	957.7	958.8	980.2	991.4	1000.4
30°	921.7	926.2	948.7	963.3	973.4
32.5°	885.6	891.3	916.0	932.9	944.2
35°	847.4	854.1	882.3	901.4	913.8
37.5°	808.0	815.9	846.3	867.6	882.3
40°	768.6	777.6	809.1	833.9	850.8
42.5°	727.0	737.1	772.0	801.2	819.2
45°	685.3	696.6	732.6	767.5	787.7
47.5°	643.7	657.2	695.5	733.7	755.1
50°	600.9	614.4	654.9	698.8	720.2
52.5°	558.2	573.9	618.9	664.0	685.3
55°	516.5	532.3	580.7	627.9	649.3
57.5°	473.8	489.5	542.4	591.9	613.3
60°	429.9	447.9	503.0	553.7	577.3
62.5°	387.1	406.2	464.8	518.8	541.3
65°	344.4	364.6	425.4	481.6	504.2
67.5°	300.5	324.1	387.1	444.5	468.1
70°	257.7	283.6	350.0	407.4	429.9
72.5°	216.1	244.2	312.8	371.4	384.9
75°	174.4	207.1	276.8	309.5	309.5
77.5°	135.0	171.1	236.3	248.7	255.5
80°	97.9	137.3	177.8	192.4	190.2
82.5°	65.3	104.7	127.2	127.2	123.8
85°	37.1	63.0	68.6	66.4	65.3
87.5°	15.8	23.6	21.4	16.9	14.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)