

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: P261365

Luminaire Tested: **24CZ-LD5-40SE-S-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261365  
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-LD5-40SE-S-UNV-L92765-W2A1-U-2700K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3235.0 lumens  
Efficiency: N/A  
Efficacy: 106.7 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

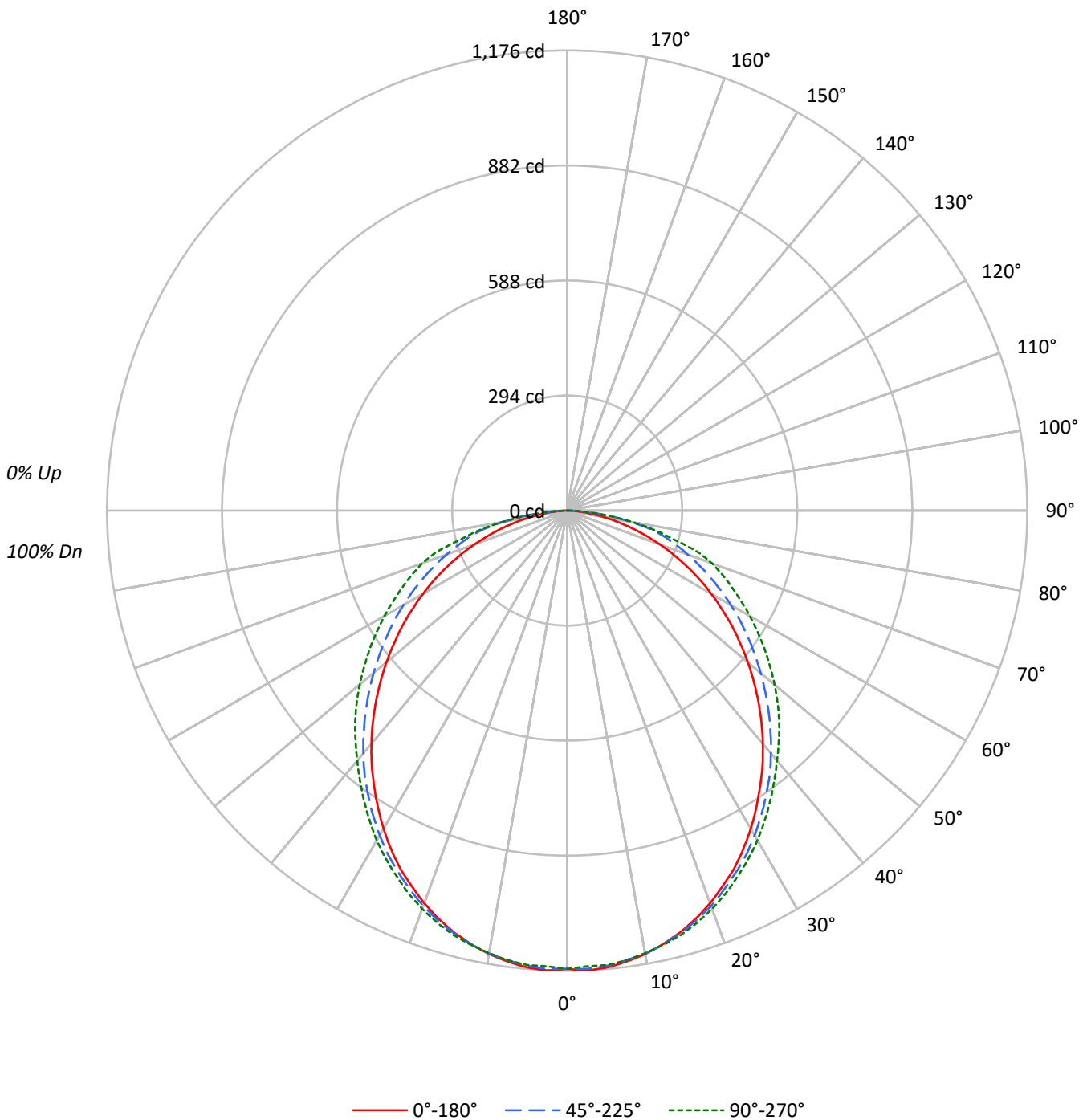
Input Watts (W): 30.318  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	1576	1576	1576
5°	1583	1577	1574
10°	1572	1571	1569
15°	1555	1558	1564
20°	1529	1540	1551
25°	1499	1515	1531
30°	1458	1488	1512
35°	1413	1457	1487
40°	1367	1424	1465
45°	1315	1387	1458
50°	1262	1352	1449
55°	1207	1323	1444
60°	1144	1301	1451
65°	1076	1285	1480
70°	991	1292	1550
75°	879	1338	1444
80°	734	1268	1301
85°	548	1014	931



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.7	3.4
10°-20°	314.9	9.7
20°-30°	469.3	14.5
30°-40°	552.4	17.1
40°-50°	561.4	17.4
50°-60°	504.7	15.6
60°-70°	398.8	12.3
70°-80°	253.0	7.8
80°-90°	69.8	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°	894.9	27.7
0°-40°	1447.3	44.7
0°-60°	2513.5	77.7
0°-90°	3235.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3235.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1171	1171	1171	1171	1171	
5°	1172	1162	1168	1166	1166	111
15°	1116	1111	1118	1122	1123	314
25°	1010	1009	1020	1027	1031	464
35°	860	865	887	897	905	538
45°	691	701	729	750	766	533
55°	514	527	564	601	616	459
65°	338	355	404	448	465	335
75°	169	198	257	280	278	180
85°	36	61	66	60	60	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1171.1	1171.1	1171.1	1171.1	1171.1
2.5°	1176.5	1167.9	1172.2	1170.1	1165.7
5°	1172.2	1162.5	1167.9	1165.7	1165.7
7.5°	1162.5	1155.0	1159.3	1158.2	1159.3
10°	1150.7	1143.1	1149.6	1149.6	1148.5
12.5°	1134.5	1128.1	1135.6	1135.6	1136.7
15°	1116.2	1110.9	1118.4	1121.6	1122.7
17.5°	1093.6	1088.2	1097.9	1101.2	1104.4
20°	1067.8	1065.6	1075.3	1078.6	1082.9
22.5°	1038.7	1038.7	1048.4	1052.7	1059.2
25°	1009.7	1008.6	1020.4	1026.9	1031.2
27.5°	975.2	976.3	991.4	997.8	1003.2
30°	938.6	940.8	958.0	965.5	973.1
32.5°	899.9	904.2	923.6	932.2	939.7
35°	860.0	865.4	887.0	896.6	905.3
37.5°	820.2	827.8	850.4	860.0	869.7
40°	778.2	784.7	810.5	822.4	834.2
42.5°	735.2	743.8	769.6	786.9	800.8
45°	691.1	700.7	728.7	750.3	766.4
47.5°	646.9	659.8	686.7	715.8	729.8
50°	602.8	615.7	645.8	678.1	692.1
52.5°	557.6	570.5	604.9	638.3	653.4
55°	514.5	527.4	564.0	600.6	615.7
57.5°	469.3	483.3	524.2	561.9	577.0
60°	425.2	439.2	483.3	523.1	539.3
62.5°	382.1	397.2	443.5	485.5	501.6
65°	338.0	355.2	403.7	447.8	465.0
67.5°	294.9	314.3	364.9	411.2	429.5
70°	251.9	274.5	328.3	375.7	394.0
72.5°	209.9	234.7	291.7	339.1	348.8
75°	169.0	198.1	257.3	279.9	277.7
77.5°	130.2	162.5	218.5	222.8	229.3
80°	94.7	130.2	163.6	172.2	167.9
82.5°	62.4	98.0	117.3	113.0	111.9
85°	35.5	61.4	65.7	60.3	60.3
87.5°	15.1	24.8	21.5	16.1	15.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)