

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: P261131

Luminaire Tested: **24CZ-LD5-35-S-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261131  
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-L82765-W2A1-U-2700K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3294.0 lumens  
Efficiency: N/A  
Efficacy: 136.2 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

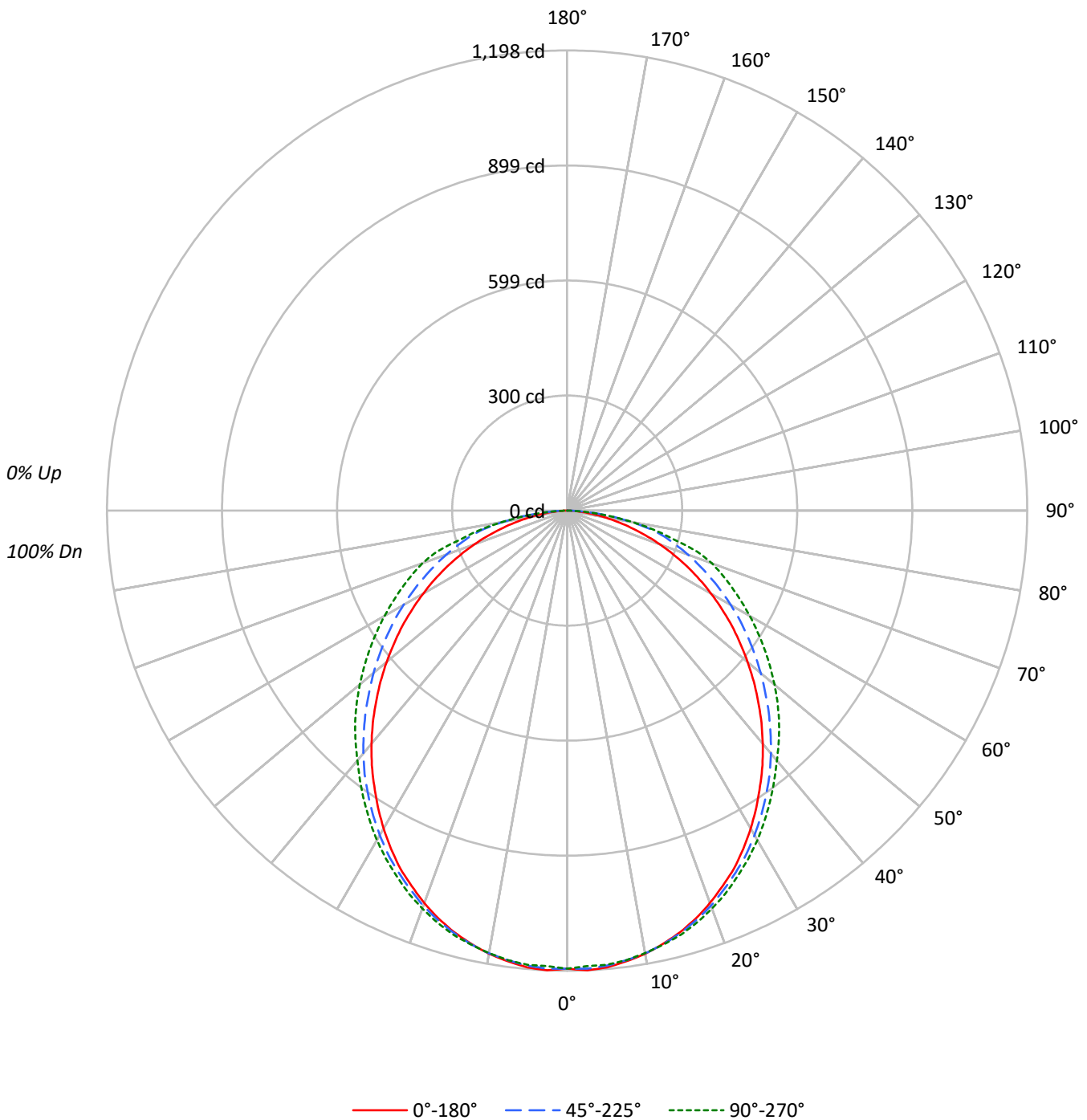
Input Watts (W): 24.18  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1604	1604	1604
5°	1612	1606	1603
10°	1601	1599	1598
15°	1583	1586	1592
20°	1557	1568	1579
25°	1526	1542	1559
30°	1485	1516	1539
35°	1438	1483	1514
40°	1392	1450	1492
45°	1339	1412	1485
50°	1285	1376	1475
55°	1229	1347	1471
60°	1165	1324	1478
65°	1096	1309	1507
70°	1009	1315	1578
75°	895	1362	1470
80°	748	1291	1325
85°	559	1033	948



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.7	3.4
10°-20°	320.6	9.7
20°-30°	477.8	14.5
30°-40°	562.5	17.1
40°-50°	571.6	17.4
50°-60°	513.9	15.6
60°-70°	406.0	12.3
70°-80°	257.6	7.8
80°-90°	71.1	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°	911.2	27.7
0°-40°	1473.7	44.7
0°-60°	2559.3	77.7
0°-90°	3294.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3294.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1192	1192	1192	1192	1192	
5°	1194	1184	1189	1187	1187	113
15°	1137	1131	1139	1142	1143	320
25°	1028	1027	1039	1046	1050	473
35°	876	881	903	913	922	548
45°	704	714	742	764	780	543
55°	524	537	574	612	627	468
65°	344	362	411	456	474	341
75°	172	202	262	285	283	183
85°	36	62	67	61	61	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1192.5	1192.5	1192.5	1192.5	1192.5
2.5°	1198.0	1189.2	1193.6	1191.4	1187.0
5°	1193.6	1183.7	1189.2	1187.0	1187.0
7.5°	1183.7	1176.0	1180.4	1179.3	1180.4
10°	1171.7	1164.0	1170.6	1170.6	1169.5
12.5°	1155.2	1148.6	1156.3	1156.3	1157.4
15°	1136.6	1131.1	1138.8	1142.1	1143.2
17.5°	1113.6	1108.1	1118.0	1121.2	1124.5
20°	1087.3	1085.1	1094.9	1098.2	1102.6
22.5°	1057.7	1057.7	1067.5	1071.9	1078.5
25°	1028.1	1027.0	1039.0	1045.6	1050.0
27.5°	993.0	994.1	1009.5	1016.0	1021.5
30°	955.7	957.9	975.5	983.1	990.8
32.5°	916.3	920.7	940.4	949.2	956.8
35°	875.7	881.2	903.1	913.0	921.8
37.5°	835.2	842.9	865.9	875.7	885.6
40°	792.4	799.0	825.3	837.4	849.4
42.5°	748.6	757.4	783.7	801.2	815.5
45°	703.7	713.5	742.0	763.9	780.4
47.5°	658.7	671.9	699.3	728.9	743.1
50°	613.8	626.9	657.6	690.5	704.8
52.5°	567.7	580.9	616.0	650.0	665.3
55°	523.9	537.1	574.3	611.6	626.9
57.5°	477.9	492.1	533.8	572.1	587.5
60°	432.9	447.2	492.1	532.7	549.1
62.5°	389.1	404.4	451.6	494.3	510.8
65°	344.2	361.7	411.0	456.0	473.5
67.5°	300.3	320.0	371.6	418.7	437.3
70°	256.5	279.5	334.3	382.5	401.1
72.5°	213.7	238.9	297.0	345.3	355.1
75°	172.1	201.7	262.0	285.0	282.8
77.5°	132.6	165.5	222.5	226.9	233.5
80°	96.5	132.6	166.6	175.4	171.0
82.5°	63.6	99.7	119.5	115.1	114.0
85°	36.2	62.5	66.9	61.4	61.4
87.5°	15.3	25.2	21.9	16.4	15.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)