

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: P261221

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261221  
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-LD5-35SE-S-UNV-L82765-W2A1-U-2700K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3329.0 lumens  
Efficiency: N/A  
Efficacy: 127.8 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

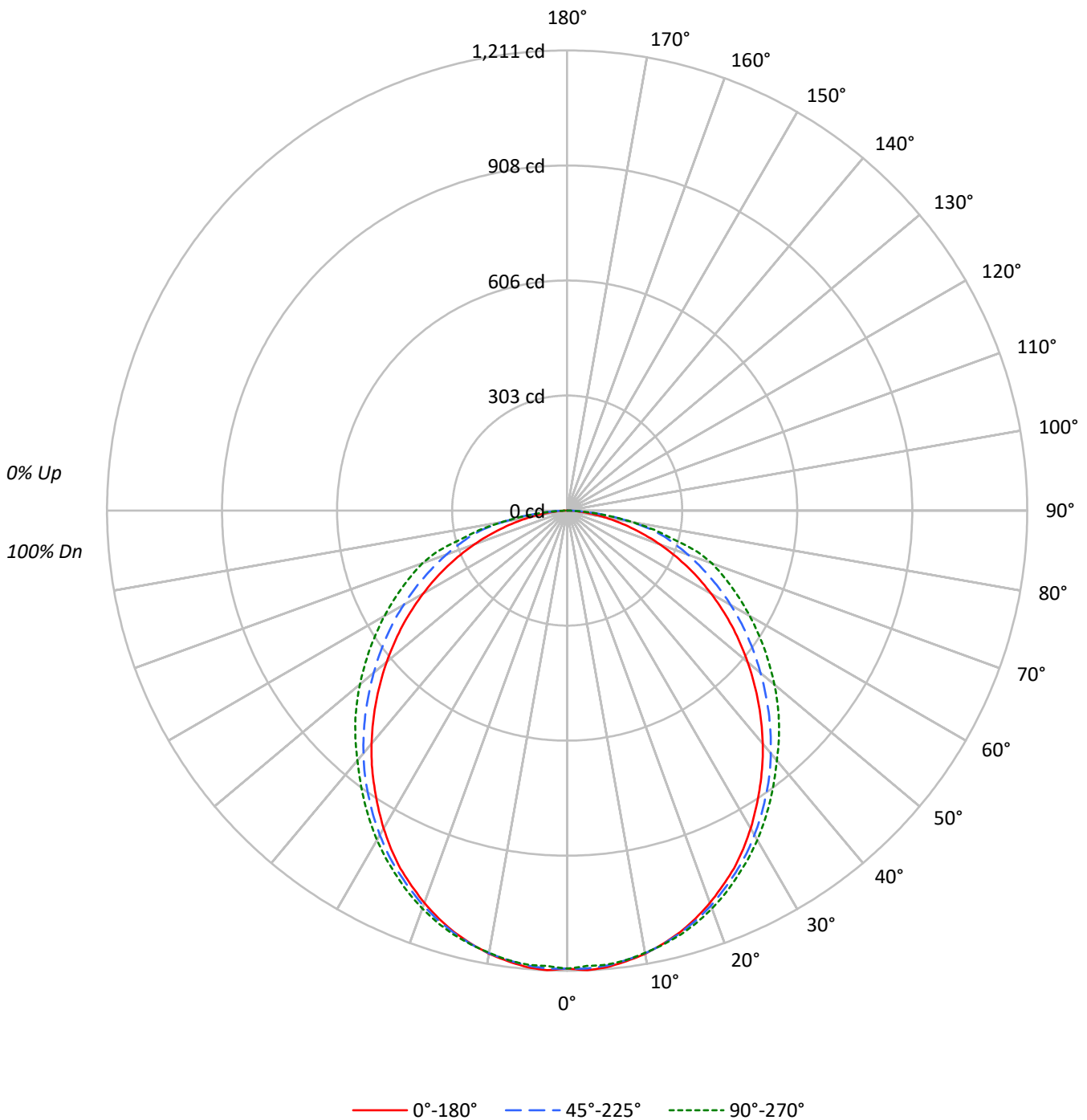
Input Watts (W): 26.04  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1622	1622	1622
5°	1629	1623	1620
10°	1618	1616	1615
15°	1600	1603	1609
20°	1573	1584	1595
25°	1542	1559	1575
30°	1501	1532	1556
35°	1454	1499	1530
40°	1407	1465	1508
45°	1353	1427	1501
50°	1298	1391	1491
55°	1242	1361	1486
60°	1177	1338	1493
65°	1107	1323	1523
70°	1020	1329	1595
75°	904	1376	1486
80°	755	1305	1339
85°	565	1044	957



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	113.9	3.4
10°-20°	324.1	9.7
20°-30°	482.9	14.5
30°-40°	568.5	17.1
40°-50°	577.7	17.4
50°-60°	519.4	15.6
60°-70°	410.3	12.3
70°-80°	260.3	7.8
80°-90°	71.8	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°	920.9	27.7
0°-40°	1489.4	44.7
0°-60°	2586.5	77.7
0°-90°	3329.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3329.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1205	1205	1205	1205	1205	
5°	1206	1196	1202	1200	1200	114
15°	1149	1143	1151	1154	1155	324
25°	1039	1038	1050	1057	1061	478
35°	885	891	913	923	932	554
45°	711	721	750	772	789	549
55°	530	543	580	618	634	473
65°	348	366	415	461	478	345
75°	174	204	265	288	286	185
85°	37	63	68	62	62	45
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1205.2	1205.2	1205.2	1205.2	1205.2
2.5°	1210.7	1201.8	1206.3	1204.1	1199.6
5°	1206.3	1196.3	1201.8	1199.6	1199.6
7.5°	1196.3	1188.5	1193.0	1191.9	1193.0
10°	1184.1	1176.4	1183.0	1183.0	1181.9
12.5°	1167.5	1160.9	1168.6	1168.6	1169.7
15°	1148.7	1143.1	1150.9	1154.2	1155.3
17.5°	1125.4	1119.9	1129.8	1133.2	1136.5
20°	1098.8	1096.6	1106.6	1109.9	1114.3
22.5°	1068.9	1068.9	1078.9	1083.3	1090.0
25°	1039.0	1037.9	1050.1	1056.7	1061.2
27.5°	1003.6	1004.7	1020.2	1026.8	1032.4
30°	965.9	968.1	985.8	993.6	1001.3
32.5°	926.0	930.5	950.4	959.3	967.0
35°	885.0	890.6	912.7	922.7	931.6
37.5°	844.1	851.8	875.1	885.0	895.0
40°	800.9	807.5	834.1	846.3	858.5
42.5°	756.5	765.4	792.0	809.7	824.1
45°	711.1	721.1	749.9	772.1	788.7
47.5°	665.7	679.0	706.7	736.6	751.0
50°	620.3	633.6	664.6	697.8	712.2
52.5°	573.8	587.1	622.5	656.9	672.4
55°	529.5	542.8	580.4	618.1	633.6
57.5°	482.9	497.3	539.4	578.2	593.7
60°	437.5	451.9	497.3	538.3	554.9
62.5°	393.2	408.7	456.4	499.6	516.2
65°	347.8	365.5	415.4	460.8	478.5
67.5°	303.5	323.4	375.5	423.1	442.0
70°	259.2	282.5	337.8	386.6	405.4
72.5°	216.0	241.5	300.2	348.9	358.9
75°	173.9	203.8	264.7	288.0	285.8
77.5°	134.0	167.3	224.9	229.3	235.9
80°	97.5	134.0	168.4	177.2	172.8
82.5°	64.2	100.8	120.7	116.3	115.2
85°	36.6	63.1	67.6	62.0	62.0
87.5°	15.5	25.5	22.2	16.6	15.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)