

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: P263898

Luminaire Tested: **24CZ-LD5-45SE-RDP-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263898  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25696)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-45SE-RDP-UNV-L92765-W2A1-U-4500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RDP LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2854.0 lumens  
Efficiency: N/A  
Efficacy: 80.1 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

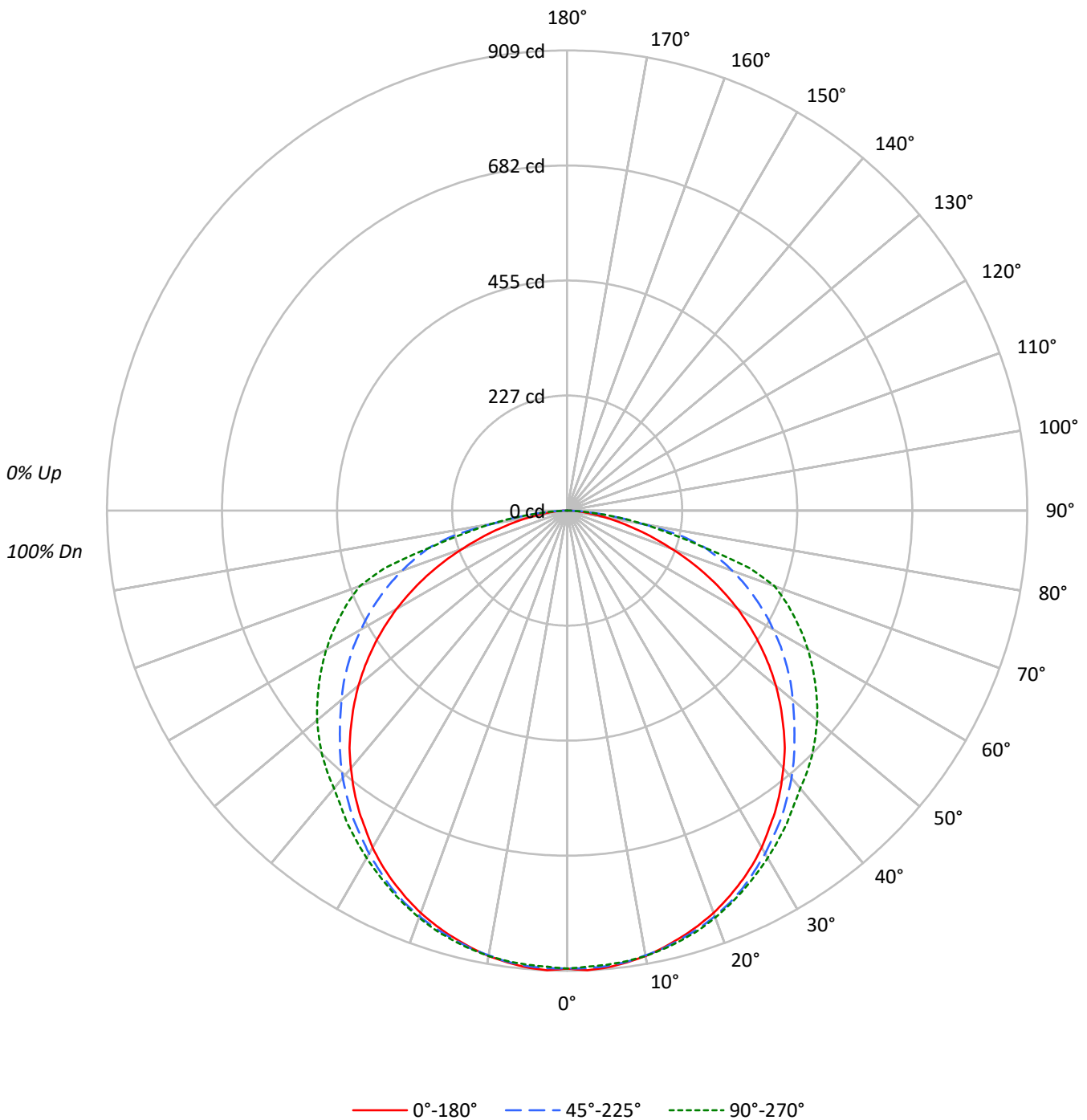
Input Watts (W): 35.619  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	103	98	94	105	101	97	93	96	93	90	92	90	87	89	87	84	82					82			
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67					67			
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	62	58	56					56			
4	81	68	59	52	78	67	58	52	64	57	51	62	56	50	60	54	50	47					47			
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41					41			
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35					35			
7	63	49	40	34	61	48	40	34	47	39	34	45	38	33	44	38	33	31					31			
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	27					27			
9	55	41	33	27	53	41	32	27	39	32	27	38	32	27	37	31	27	25					25			
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22					22			

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

	0°	45°	90°
0°	1217	1217	1217
5°	1224	1220	1216
10°	1221	1219	1221
15°	1215	1219	1223
20°	1211	1221	1225
25°	1203	1220	1226
30°	1194	1216	1231
35°	1181	1214	1241
40°	1167	1212	1258
45°	1149	1208	1302
50°	1126	1217	1350
55°	1094	1239	1404
60°	1047	1266	1478
65°	975	1306	1574
70°	862	1365	1713
75°	723	1461	1439
80°	577	1154	1197
85°	455	781	716



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.8	3.0
10°-20°	247.0	8.7
20°-30°	377.2	13.2
30°-40°	461.2	16.2
40°-50°	493.6	17.3
50°-60°	473.5	16.6
60°-70°	399.8	14.0
70°-80°	255.5	9.0
80°-90°	60.4	2.1
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°	710.0	24.9
0°-40°	1171.2	41.0
0°-60°	2138.3	74.9
0°-90°	2854.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2854.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	905	905	905	905	905	
5°	906	900	903	902	900	86
15°	872	870	875	878	878	246
25°	811	809	822	825	826	374
35°	719	725	739	749	756	450
45°	604	614	635	664	684	466
55°	466	482	528	576	598	416
65°	306	336	410	468	494	302
75°	139	198	281	287	277	150
85°	30	49	51	49	46	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	904.7	904.7	904.7	904.7	904.7
2.5°	909.0	903.3	904.7	904.7	901.9
5°	906.1	900.5	903.3	901.9	900.5
7.5°	900.5	896.3	899.1	899.1	897.7
10°	893.5	889.3	892.1	893.5	893.5
12.5°	883.7	880.9	885.1	885.1	886.5
15°	872.4	869.6	875.2	878.0	878.0
17.5°	859.8	858.4	865.4	866.8	868.2
20°	845.7	844.3	852.8	852.8	855.6
22.5°	828.9	827.5	838.7	838.7	841.5
25°	810.6	809.2	821.9	824.7	826.1
27.5°	790.9	789.5	802.2	806.4	809.2
30°	768.5	768.5	782.5	788.1	792.4
32.5°	743.2	747.4	760.0	768.5	774.1
35°	719.3	724.9	739.0	748.8	755.8
37.5°	692.6	698.2	713.7	726.3	734.8
40°	664.5	671.5	689.8	703.8	716.5
42.5°	636.4	643.4	663.1	684.2	701.0
45°	604.1	613.9	635.0	664.5	684.2
47.5°	571.8	581.6	608.3	644.8	664.5
50°	538.1	549.3	581.6	623.8	644.8
52.5°	502.9	515.6	556.3	601.3	622.4
55°	466.4	481.9	528.2	576.0	598.5
57.5°	428.5	445.3	500.1	550.7	574.6
60°	389.2	410.2	470.6	524.0	549.3
62.5°	348.4	373.7	441.1	495.9	522.6
65°	306.3	335.8	410.2	467.8	494.5
67.5°	262.7	302.0	379.3	439.7	466.4
70°	219.2	265.5	347.0	408.8	435.5
72.5°	178.4	231.8	314.7	372.3	377.9
75°	139.1	198.1	281.0	286.6	276.8
77.5°	104.0	164.4	231.8	206.5	205.1
80°	74.5	132.1	148.9	153.1	154.5
82.5°	49.2	99.7	96.9	99.7	98.3
85°	29.5	49.2	50.6	49.2	46.4
87.5°	14.0	18.3	14.0	12.6	11.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)