

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: P263669

Luminaire Tested: **24CZ-LD5-45-RDP-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263669  
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-LD5-45-RDP-UNV-L82765-W2A1-U-2700K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2860.0 lumens  
Efficiency: N/A  
Efficacy: 91.0 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

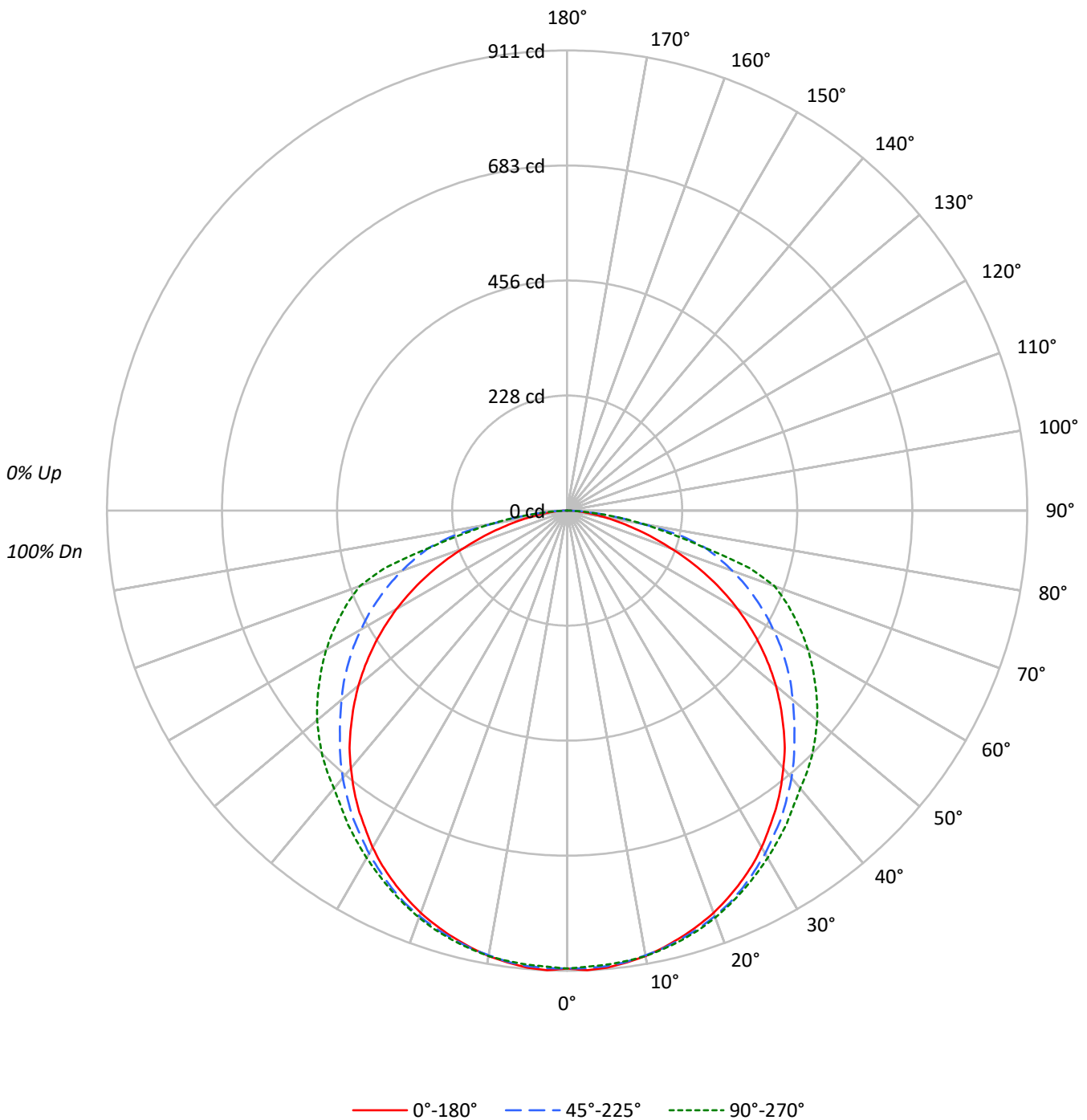
Input Watts (W): 31.434  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	61	73	66	60	70	64	59	67	62	58	56					56			
4	81	68	59	52	78	67	58	52	64	57	51	62	55	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°	1220	1220	1220
5°	1227	1223	1219
10°	1223	1221	1223
15°	1218	1222	1226
20°	1213	1224	1228
25°	1206	1223	1229
30°	1196	1218	1234
35°	1184	1216	1244
40°	1170	1214	1261
45°	1152	1211	1305
50°	1129	1220	1353
55°	1096	1242	1407
60°	1049	1269	1481
65°	977	1309	1578
70°	864	1368	1717
75°	725	1464	1442
80°	578	1156	1200
85°	457	783	718



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.0	3.0
10°-20°	247.5	8.7
20°-30°	378.0	13.2
30°-40°	462.1	16.2
40°-50°	494.7	17.3
50°-60°	474.5	16.6
60°-70°	400.6	14.0
70°-80°	256.0	9.0
80°-90°	60.6	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°	711.5	24.9
0°-40°	1173.6	41.0
0°-60°	2142.8	74.9
0°-90°	2860.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2860.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	907	907	907	907	907	
5°	908	902	905	904	902	86
15°	874	871	877	880	880	247
25°	812	811	824	826	828	374
35°	721	726	740	750	757	451
45°	605	615	636	666	686	467
55°	467	483	529	577	600	417
65°	307	336	411	469	496	303
75°	139	198	282	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°	906.6	906.6	906.6	906.6	906.6
2.5°	910.9	905.2	906.6	906.6	903.8
5°	908.1	902.4	905.2	903.8	902.4
7.5°	902.4	898.2	901.0	901.0	899.6
10°	895.4	891.2	894.0	895.4	895.4
12.5°	885.5	882.7	886.9	886.9	888.3
15°	874.3	871.4	877.1	879.9	879.9
17.5°	861.6	860.2	867.2	868.6	870.0
20°	847.5	846.1	854.6	854.6	857.4
22.5°	830.6	829.2	840.5	840.5	843.3
25°	812.3	810.9	823.6	826.4	827.8
27.5°	792.6	791.2	803.9	808.1	810.9
30°	770.1	770.1	784.2	789.8	794.0
32.5°	744.7	749.0	761.6	770.1	775.7
35°	720.8	726.4	740.5	750.4	757.4
37.5°	694.1	699.7	715.2	727.8	736.3
40°	665.9	672.9	691.2	705.3	718.0
42.5°	637.7	644.8	664.5	685.6	702.5
45°	605.4	615.2	636.3	665.9	685.6
47.5°	573.0	582.8	609.6	646.2	665.9
50°	539.2	550.5	582.8	625.1	646.2
52.5°	504.0	516.7	557.5	602.6	623.7
55°	467.4	482.9	529.3	577.2	599.7
57.5°	429.4	446.3	501.2	551.9	575.8
60°	390.0	411.1	471.6	525.1	550.5
62.5°	349.1	374.5	442.1	497.0	523.7
65°	306.9	336.5	411.1	468.8	495.6
67.5°	263.3	302.7	380.1	440.7	467.4
70°	219.6	266.1	347.7	409.7	436.4
72.5°	178.8	232.3	315.4	373.1	378.7
75°	139.4	198.5	281.6	287.2	277.3
77.5°	104.2	164.7	232.3	207.0	205.5
80°	74.6	132.3	149.2	153.5	154.9
82.5°	49.3	100.0	97.1	100.0	98.5
85°	29.6	49.3	50.7	49.3	46.5
87.5°	14.1	18.3	14.1	12.7	11.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)