

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: P263633

Luminaire Tested: **24CZ-LD5-45SE-RDP-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263633  
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-L93050-W2A1-U-3500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RDP LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2677.3 lumens  
Efficiency: N/A  
Efficacy: 75.1 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

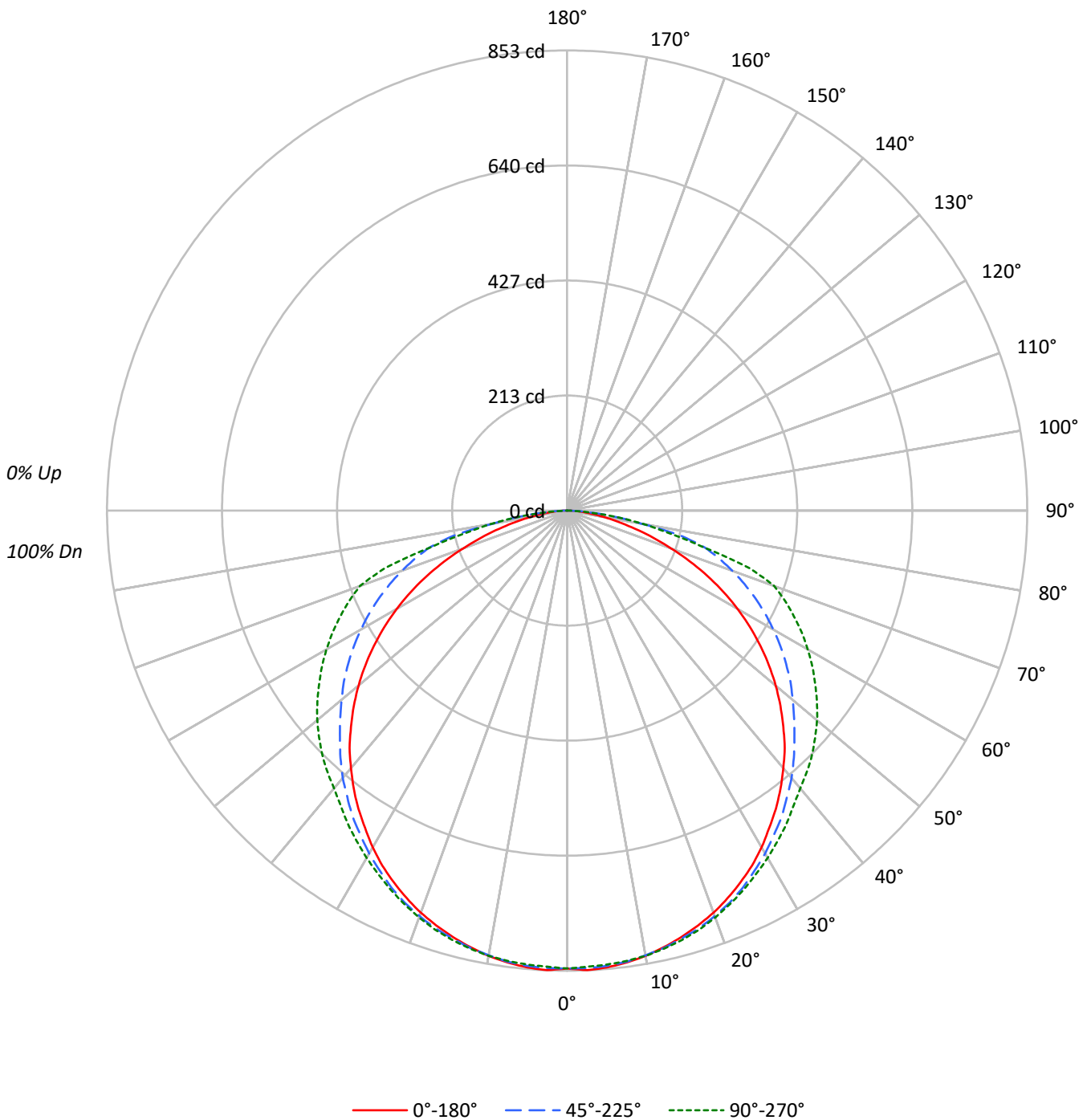
Input Watts (W): 35.632392  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	98	94	105	101	97	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	34	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	27
9	55	41	33	27	53	41	32	27	39	32	27	38	32	27	37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22

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

	0°	45°	90°
0°	1142	1142	1142
5°	1148	1145	1141
10°	1145	1143	1145
15°	1140	1144	1147
20°	1136	1145	1149
25°	1129	1145	1150
30°	1120	1141	1155
35°	1108	1139	1165
40°	1095	1137	1180
45°	1078	1134	1221
50°	1057	1142	1266
55°	1026	1162	1317
60°	982	1188	1387
65°	915	1225	1477
70°	809	1281	1607
75°	678	1370	1350
80°	541	1082	1124
85°	428	732	672



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.5	3.0
10°-20°	231.7	8.7
20°-30°	353.9	13.2
30°-40°	432.6	16.2
40°-50°	463.1	17.3
50°-60°	444.2	16.6
60°-70°	375.0	14.0
70°-80°	239.7	9.0
80°-90°	56.7	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°	666.0	24.9
0°-40°	1098.7	41.0
0°-60°	2005.9	74.9
0°-90°	2677.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2677.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	849	849	849	849	849	
5°	850	845	847	846	845	81
15°	818	816	821	824	824	231
25°	760	759	771	774	775	350
35°	675	680	693	702	709	422
45°	567	576	596	623	642	437
55°	438	452	496	540	561	390
65°	287	315	385	439	464	283
75°	130	186	264	269	260	140
85°	28	46	47	46	44	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	848.7	848.7	848.7	848.7	848.7
2.5°	852.7	847.4	848.7	848.7	846.1
5°	850.0	844.8	847.4	846.1	844.8
7.5°	844.8	840.8	843.4	843.4	842.1
10°	838.2	834.2	836.9	838.2	838.2
12.5°	829.0	826.3	830.3	830.3	831.6
15°	818.4	815.8	821.0	823.7	823.7
17.5°	806.5	805.2	811.8	813.1	814.5
20°	793.4	792.1	800.0	800.0	802.6
22.5°	777.6	776.2	786.8	786.8	789.4
25°	760.4	759.1	771.0	773.6	774.9
27.5°	742.0	740.7	752.5	756.5	759.1
30°	720.9	720.9	734.1	739.3	743.3
32.5°	697.2	701.1	713.0	720.9	726.2
35°	674.8	680.0	693.2	702.4	709.0
37.5°	649.7	655.0	669.5	681.3	689.3
40°	623.4	630.0	647.1	660.3	672.1
42.5°	597.0	603.6	622.0	641.8	657.6
45°	566.7	575.9	595.7	623.4	641.8
47.5°	536.4	545.6	570.6	604.9	623.4
50°	504.8	515.3	545.6	585.1	604.9
52.5°	471.8	483.7	521.9	564.1	583.8
55°	437.5	452.0	495.5	540.3	561.4
57.5°	402.0	417.8	469.2	516.6	539.0
60°	365.1	384.8	441.5	491.6	515.3
62.5°	326.8	350.6	413.8	465.2	490.3
65°	287.3	315.0	384.8	438.9	463.9
67.5°	246.4	283.3	355.8	412.5	437.5
70°	205.6	249.1	325.5	383.5	408.5
72.5°	167.4	217.5	295.2	349.2	354.5
75°	130.5	185.8	263.6	268.8	259.6
77.5°	97.5	154.2	217.5	193.7	192.4
80°	69.8	123.9	139.7	143.6	145.0
82.5°	46.1	93.6	90.9	93.6	92.3
85°	27.7	46.1	47.4	46.1	43.5
87.5°	13.2	17.1	13.2	11.9	10.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)