

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: P263583

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263583  
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-L93050-W2A1-U-3500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RDP LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2649.5 lumens  
Efficiency: N/A  
Efficacy: 82.7 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

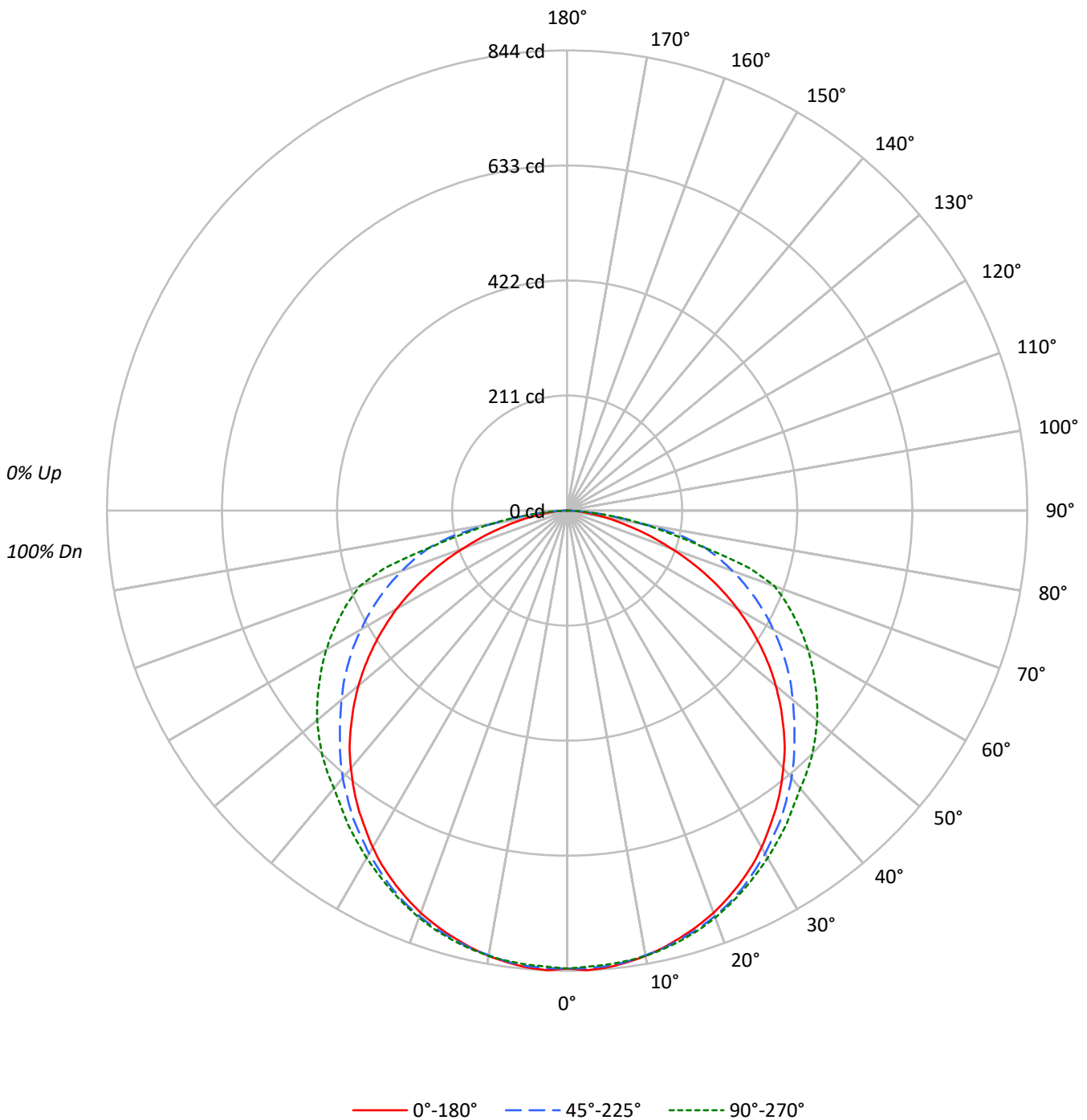
Input Watts (W): 32.031246  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1130	1130	1130
5°	1136	1133	1129
10°	1133	1132	1133
15°	1128	1132	1135
20°	1124	1134	1137
25°	1117	1133	1139
30°	1108	1129	1143
35°	1097	1127	1153
40°	1084	1125	1168
45°	1067	1122	1209
50°	1046	1130	1253
55°	1016	1150	1303
60°	972	1176	1372
65°	905	1212	1462
70°	801	1267	1590
75°	671	1356	1336
80°	535	1071	1112
85°	423	726	664



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.7	3.0
10°-20°	229.3	8.7
20°-30°	350.2	13.2
30°-40°	428.1	16.2
40°-50°	458.3	17.3
50°-60°	439.6	16.6
60°-70°	371.1	14.0
70°-80°	237.2	9.0
80°-90°	56.1	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°	659.1	24.9
0°-40°	1087.3	41.0
0°-60°	1985.1	74.9
0°-90°	2649.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2649.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	840	840	840	840	840	
5°	841	836	839	837	836	80
15°	810	807	812	815	815	229
25°	752	751	763	766	767	347
35°	668	673	686	695	702	418
45°	561	570	590	617	635	433
55°	433	447	490	535	556	386
65°	284	312	381	434	459	280
75°	129	184	261	266	257	139
85°	27	46	47	46	43	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	839.9	839.9	839.9	839.9	839.9
2.5°	843.8	838.6	839.9	839.9	837.3
5°	841.2	836.0	838.6	837.3	836.0
7.5°	836.0	832.1	834.7	834.7	833.4
10°	829.5	825.6	828.2	829.5	829.5
12.5°	820.4	817.7	821.7	821.7	823.0
15°	809.9	807.3	812.5	815.1	815.1
17.5°	798.2	796.9	803.4	804.7	806.0
20°	785.1	783.8	791.7	791.7	794.3
22.5°	769.5	768.2	778.6	778.6	781.2
25°	752.5	751.2	763.0	765.6	766.9
27.5°	734.3	733.0	744.7	748.6	751.2
30°	713.4	713.4	726.5	731.7	735.6
32.5°	689.9	693.8	705.6	713.4	718.6
35°	667.8	673.0	686.0	695.1	701.7
37.5°	643.0	648.2	662.5	674.3	682.1
40°	616.9	623.4	640.4	653.4	665.2
42.5°	590.8	597.3	615.6	635.2	650.8
45°	560.8	569.9	589.5	616.9	635.2
47.5°	530.8	539.9	564.7	598.6	616.9
50°	499.5	510.0	539.9	579.1	598.6
52.5°	466.9	478.6	516.5	558.2	577.8
55°	433.0	447.3	490.4	534.7	555.6
57.5°	397.8	413.4	464.3	511.3	533.4
60°	361.3	380.8	436.9	486.5	510.0
62.5°	323.4	346.9	409.5	460.4	485.2
65°	284.3	311.7	380.8	434.3	459.1
67.5°	243.9	280.4	352.1	408.2	433.0
70°	203.5	246.5	322.1	379.5	404.3
72.5°	165.6	215.2	292.1	345.6	350.8
75°	129.1	183.9	260.8	266.1	256.9
77.5°	96.5	152.6	215.2	191.7	190.4
80°	69.1	122.6	138.2	142.2	143.5
82.5°	45.6	92.6	90.0	92.6	91.3
85°	27.4	45.6	47.0	45.6	43.0
87.5°	13.0	17.0	13.0	11.7	10.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)