

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: P263565

Luminaire Tested: **24CZ-LD5-50SE-RDP-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263565  
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-LD5-50SE-RDP-UNV-L83050-W2A1-U-4500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RDP LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3685.0 lumens  
Efficiency: N/A  
Efficacy: 88.5 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

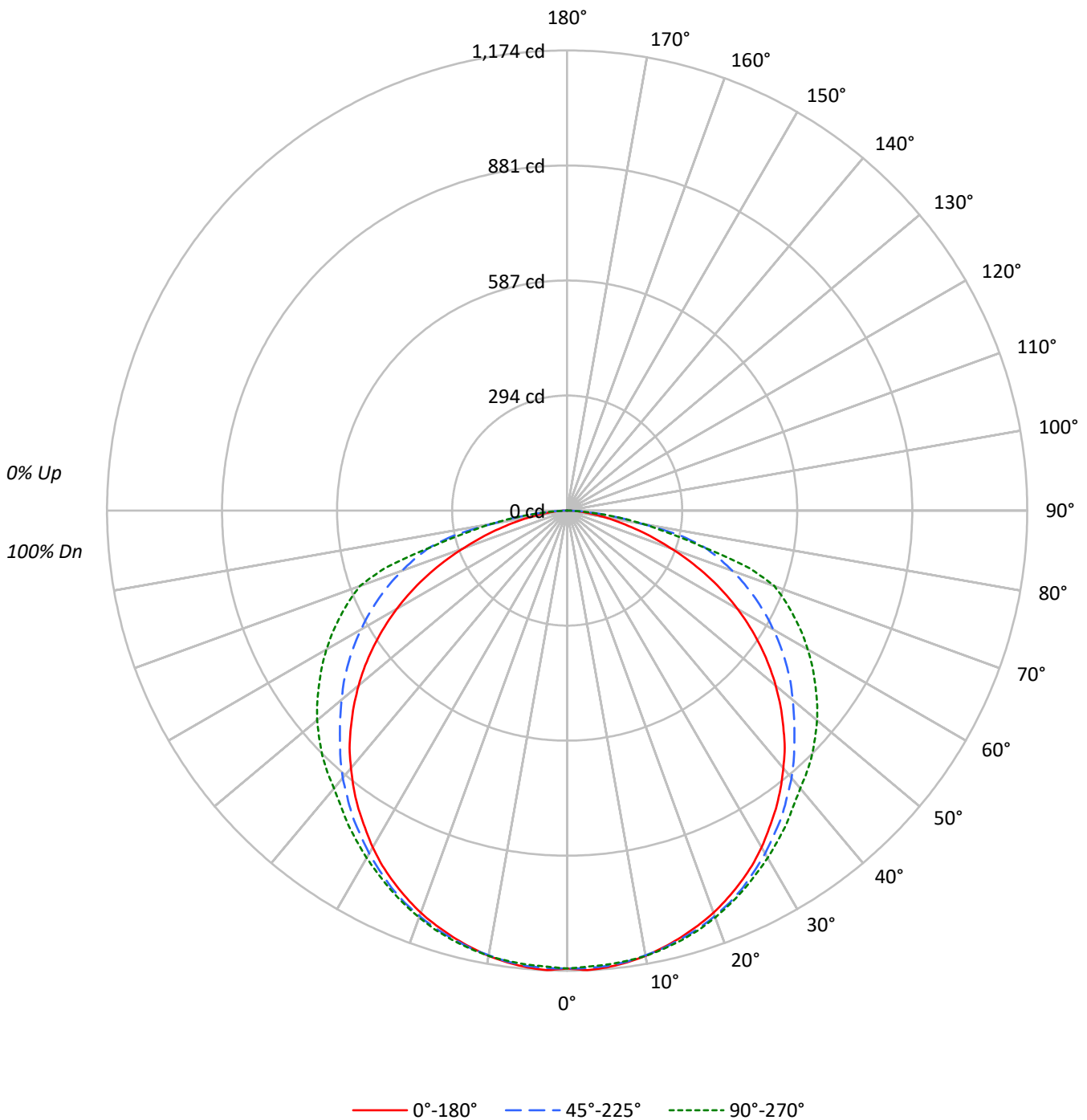
Input Watts (W): 41.656839  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1572	1572	1572
5°	1580	1575	1570
10°	1576	1574	1576
15°	1569	1574	1579
20°	1564	1577	1582
25°	1554	1575	1583
30°	1542	1570	1590
35°	1525	1567	1603
40°	1507	1564	1625
45°	1484	1560	1681
50°	1454	1572	1743
55°	1413	1600	1813
60°	1352	1635	1908
65°	1259	1686	2033
70°	1113	1762	2212
75°	934	1886	1857
80°	745	1490	1546
85°	588	1008	925



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.8	3.0
10°-20°	318.9	8.7
20°-30°	487.1	13.2
30°-40°	595.4	16.2
40°-50°	637.4	17.3
50°-60°	611.4	16.6
60°-70°	516.2	14.0
70°-80°	329.9	9.0
80°-90°	78.0	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°	916.7	24.9
0°-40°	1512.2	41.0
0°-60°	2760.9	74.9
0°-90°	3685.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3685.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1168	1168	1168	1168	1168	
5°	1170	1163	1166	1164	1163	111
15°	1126	1123	1130	1134	1134	318
25°	1047	1045	1061	1065	1067	482
35°	929	936	954	967	976	581
45°	780	793	820	858	883	602
55°	602	622	682	744	773	537
65°	395	434	530	604	638	390
75°	180	256	363	370	357	193
85°	38	64	65	64	60	46
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1168.2	1168.2	1168.2	1168.2	1168.2
2.5°	1173.6	1166.4	1168.2	1168.2	1164.5
5°	1170.0	1162.7	1166.4	1164.5	1162.7
7.5°	1162.7	1157.3	1160.9	1160.9	1159.1
10°	1153.7	1148.2	1151.9	1153.7	1153.7
12.5°	1141.0	1137.3	1142.8	1142.8	1144.6
15°	1126.5	1122.8	1130.1	1133.7	1133.7
17.5°	1110.1	1108.3	1117.4	1119.2	1121.0
20°	1092.0	1090.2	1101.1	1101.1	1104.7
22.5°	1070.2	1068.4	1082.9	1082.9	1086.5
25°	1046.6	1044.8	1061.2	1064.8	1066.6
27.5°	1021.2	1019.4	1035.8	1041.2	1044.8
30°	992.2	992.2	1010.4	1017.6	1023.1
32.5°	959.6	965.0	981.3	992.2	999.5
35°	928.7	936.0	954.1	966.8	975.9
37.5°	894.3	901.5	921.5	937.8	948.7
40°	858.0	867.1	890.6	908.8	925.1
42.5°	821.7	830.8	856.2	883.4	905.2
45°	780.0	792.7	819.9	858.0	883.4
47.5°	738.3	751.0	785.4	832.6	858.0
50°	694.7	709.2	751.0	805.4	832.6
52.5°	649.4	665.7	718.3	776.4	803.6
55°	602.2	622.2	682.0	743.7	772.7
57.5°	553.3	575.0	645.8	711.1	741.9
60°	502.5	529.7	607.7	676.6	709.2
62.5°	449.9	482.5	569.6	640.3	674.8
65°	395.4	433.5	529.7	604.0	638.5
67.5°	339.2	390.0	489.8	567.8	602.2
70°	283.0	342.8	448.0	527.9	562.3
72.5°	230.4	299.3	406.3	480.7	487.9
75°	179.6	255.8	362.8	370.0	357.3
77.5°	134.2	212.2	299.3	266.6	264.8
80°	96.1	170.5	192.3	197.7	199.5
82.5°	63.5	128.8	125.2	128.8	127.0
85°	38.1	63.5	65.3	63.5	59.9
87.5°	18.1	23.6	18.1	16.3	14.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)