

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: P263180

Luminaire Tested: **24CZ-LD5-60-SQP-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263180  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25695)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-60-SQP-UNV-L93050-W2A1-U-4500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3729.7 lumens  
Efficiency: N/A  
Efficacy: 80.9 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.42  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

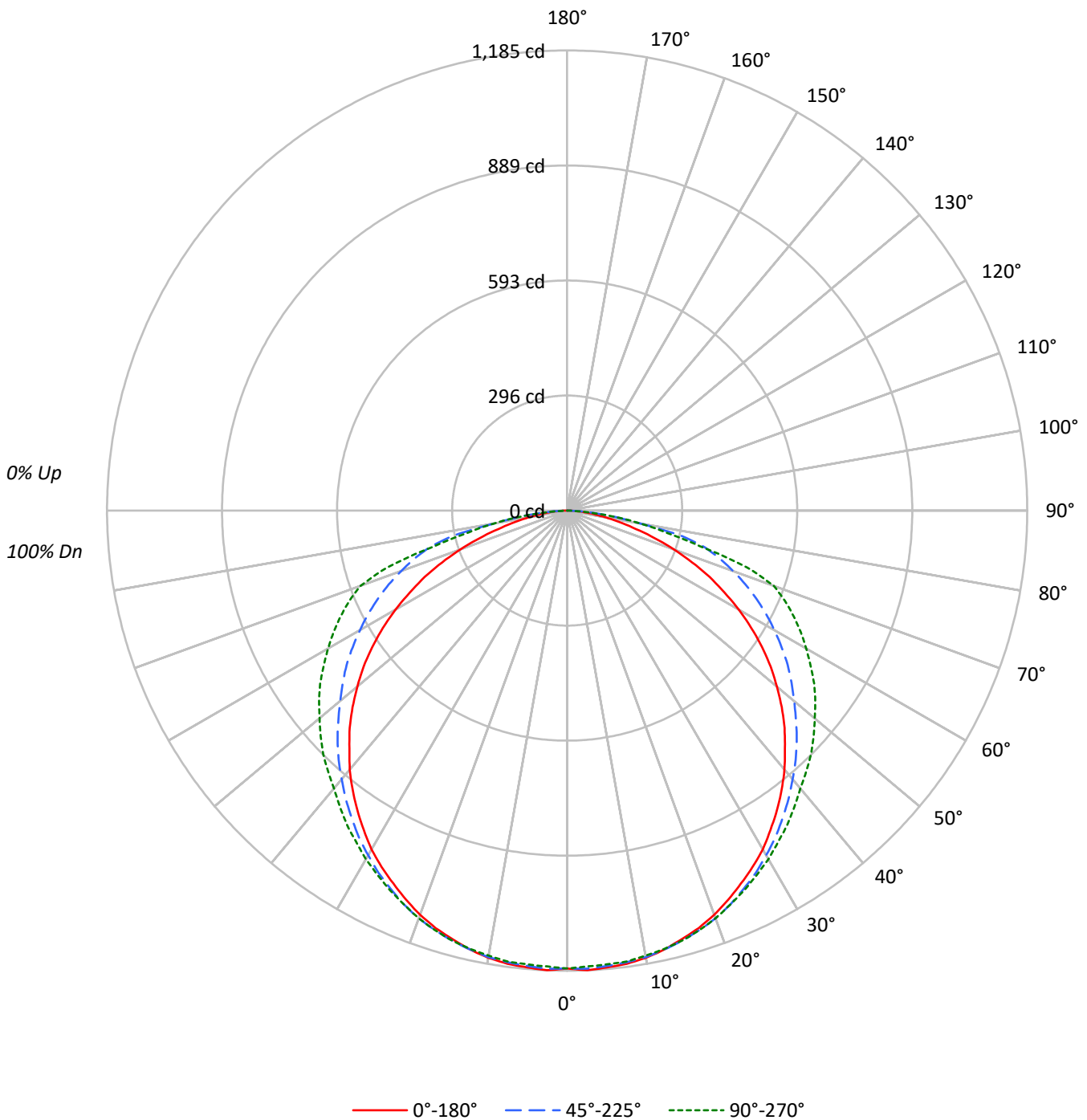
Input Watts (W): 46.127256  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	63	58	56
4	81	68	59	52	79	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	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	28
9	55	41	33	27	54	41	33	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°	1586	1586	1586
5°	1595	1590	1585
10°	1598	1595	1590
15°	1591	1597	1597
20°	1586	1600	1600
25°	1573	1596	1602
30°	1565	1592	1610
35°	1547	1588	1623
40°	1529	1587	1641
45°	1507	1591	1690
50°	1476	1597	1742
55°	1437	1627	1821
60°	1374	1659	1913
65°	1288	1711	2048
70°	1152	1788	2228
75°	951	1913	1843
80°	776	1478	1492
85°	625	982	922



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.0	3.0
10°-20°	323.1	8.7
20°-30°	493.8	13.2
30°-40°	604.0	16.2
40°-50°	646.3	17.3
50°-60°	618.8	16.6
60°-70°	523.5	14.0
70°-80°	331.8	8.9
80°-90°	76.3	2.0
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°	928.9	24.9
0°-40°	1532.9	41.1
0°-60°	2798.0	75.0
0°-90°	3729.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3729.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1179	1179	1179	1179	1179	
5°	1181	1175	1177	1175	1173	112
15°	1142	1140	1146	1146	1146	323
25°	1060	1060	1075	1079	1079	489
35°	942	948	967	981	988	589
45°	792	805	836	871	888	610
55°	613	632	694	751	776	546
65°	405	443	538	611	643	399
75°	183	258	368	366	354	199
85°	40	62	64	58	60	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1179.0	1179.0	1179.0	1179.0	1179.0
2.5°	1184.8	1179.0	1180.9	1179.0	1175.2
5°	1180.9	1175.2	1177.1	1175.2	1173.2
7.5°	1177.1	1171.3	1173.2	1171.3	1171.3
10°	1169.4	1163.6	1167.4	1165.5	1163.6
12.5°	1157.8	1154.0	1157.8	1155.9	1155.9
15°	1142.4	1140.5	1146.3	1146.3	1146.3
17.5°	1127.0	1125.1	1132.8	1132.8	1132.8
20°	1107.7	1105.8	1117.4	1117.4	1117.4
22.5°	1084.6	1082.7	1098.1	1098.1	1098.1
25°	1059.6	1059.6	1075.0	1078.8	1078.8
27.5°	1034.5	1034.5	1051.9	1057.6	1057.6
30°	1007.6	1007.6	1024.9	1032.6	1036.4
32.5°	974.8	978.7	997.9	1007.6	1011.4
35°	942.0	947.8	967.1	980.6	988.3
37.5°	907.4	913.2	936.3	951.7	961.3
40°	870.8	878.5	903.5	922.8	934.3
42.5°	830.3	841.9	870.8	895.8	911.2
45°	791.8	805.3	836.1	870.8	888.1
47.5°	749.4	764.8	799.5	843.8	861.1
50°	705.1	720.5	762.9	813.0	832.2
52.5°	660.8	678.1	728.2	782.2	805.3
55°	612.6	631.9	693.5	751.3	776.4
57.5°	562.5	585.7	655.0	716.7	743.6
60°	510.5	539.4	616.5	682.0	710.9
62.5°	456.6	491.3	577.9	647.3	678.1
65°	404.6	443.1	537.5	610.7	643.4
67.5°	348.7	396.9	497.0	576.0	606.8
70°	292.8	348.7	454.6	535.6	566.4
72.5°	237.0	304.4	412.3	485.5	485.5
75°	183.0	258.1	368.0	366.0	354.5
77.5°	138.7	215.8	302.5	258.1	260.1
80°	100.2	173.4	190.7	190.7	192.6
82.5°	67.4	132.9	123.3	121.4	125.2
85°	40.5	61.6	63.6	57.8	59.7
87.5°	19.3	21.2	17.3	11.6	11.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)