

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: P263600

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263600  
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-LD5-60-RDP-UNV-L93050-W2A1-U-4500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RDP LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3915.6 lumens  
Efficiency: N/A  
Efficacy: 84.9 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

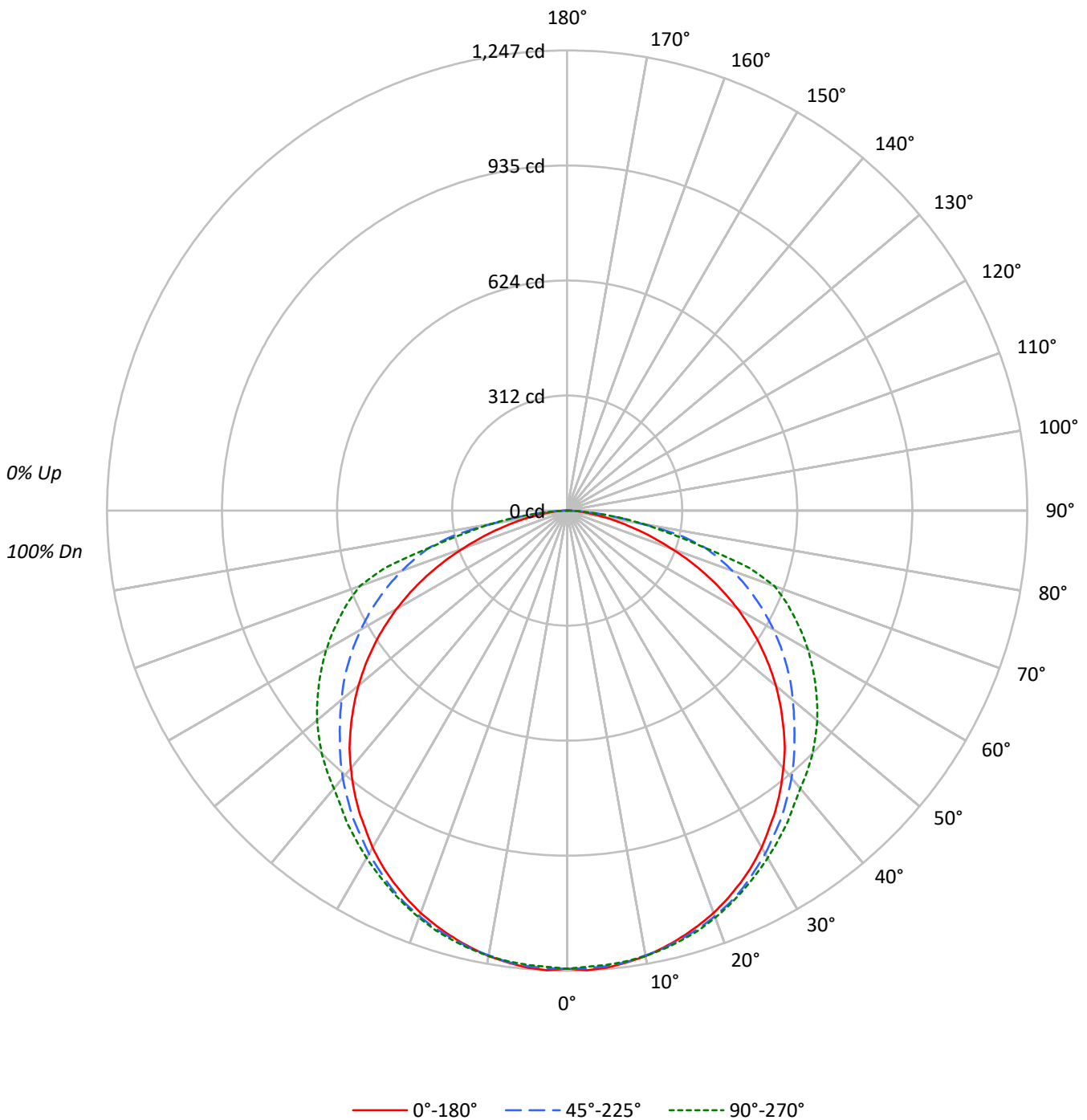
Input Watts (W): 46.127256  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1670	1670	1670
5°	1679	1674	1669
10°	1675	1672	1675
15°	1667	1673	1678
20°	1661	1675	1681
25°	1651	1674	1682
30°	1638	1668	1689
35°	1621	1665	1703
40°	1601	1662	1727
45°	1577	1658	1786
50°	1545	1670	1852
55°	1501	1700	1926
60°	1437	1738	2028
65°	1338	1792	2160
70°	1183	1873	2351
75°	992	2004	1974
80°	792	1583	1643
85°	625	1071	982



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.7	3.0
10°-20°	338.8	8.7
20°-30°	517.5	13.2
30°-40°	632.7	16.2
40°-50°	677.3	17.3
50°-60°	649.6	16.6
60°-70°	548.5	14.0
70°-80°	350.5	9.0
80°-90°	82.9	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°	974.1	24.9
0°-40°	1606.8	41.0
0°-60°	2933.6	74.9
0°-90°	3915.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3915.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1241	1241	1241	1241	1241	
5°	1243	1236	1239	1237	1236	118
15°	1197	1193	1201	1205	1205	338
25°	1112	1110	1128	1131	1133	513
35°	987	995	1014	1027	1037	617
45°	829	842	871	912	939	639
55°	640	661	725	790	821	571
65°	420	461	563	642	678	414
75°	191	272	386	393	380	205
85°	40	68	69	68	64	49
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1241.3	1241.3	1241.3	1241.3	1241.3
2.5°	1247.0	1239.3	1241.3	1241.3	1237.4
5°	1243.2	1235.5	1239.3	1237.4	1235.5
7.5°	1235.5	1229.7	1233.6	1233.6	1231.6
10°	1225.8	1220.1	1223.9	1225.8	1225.8
12.5°	1212.4	1208.5	1214.3	1214.3	1216.2
15°	1196.9	1193.1	1200.8	1204.6	1204.6
17.5°	1179.6	1177.7	1187.3	1189.2	1191.1
20°	1160.3	1158.4	1169.9	1169.9	1173.8
22.5°	1137.2	1135.3	1150.7	1150.7	1154.5
25°	1112.1	1110.2	1127.5	1131.4	1133.3
27.5°	1085.1	1083.2	1100.6	1106.3	1110.2
30°	1054.3	1054.3	1073.6	1081.3	1087.1
32.5°	1019.6	1025.4	1042.7	1054.3	1062.0
35°	986.8	994.6	1013.8	1027.3	1037.0
37.5°	950.2	957.9	979.1	996.5	1008.0
40°	911.7	921.3	946.4	965.6	983.0
42.5°	873.1	882.8	909.7	938.7	961.8
45°	828.8	842.3	871.2	911.7	938.7
47.5°	784.5	798.0	834.6	884.7	911.7
50°	738.2	753.6	798.0	855.8	884.7
52.5°	690.0	707.4	763.3	824.9	853.8
55°	639.9	661.1	724.7	790.2	821.1
57.5°	587.9	611.0	686.2	755.6	788.3
60°	533.9	562.8	645.7	718.9	753.6
62.5°	478.0	512.7	605.2	680.4	717.0
65°	420.2	460.7	562.8	641.8	678.5
67.5°	360.4	414.4	520.4	603.3	639.9
70°	300.7	364.3	476.1	560.9	597.5
72.5°	244.8	318.0	431.7	510.8	518.5
75°	190.8	271.8	385.5	393.2	379.7
77.5°	142.6	225.5	318.0	283.3	281.4
80°	102.2	181.2	204.3	210.1	212.0
82.5°	67.5	136.8	133.0	136.8	134.9
85°	40.5	67.5	69.4	67.5	63.6
87.5°	19.3	25.1	19.3	17.3	15.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)