

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: P276941

Luminaire Tested: **24CZ2-60HE-RDP-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276941  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-60HE-RDP-UNV-L82765-W2A1-U-5000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3951.7 lumens  
Efficiency: N/A  
Efficacy: 87.3 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

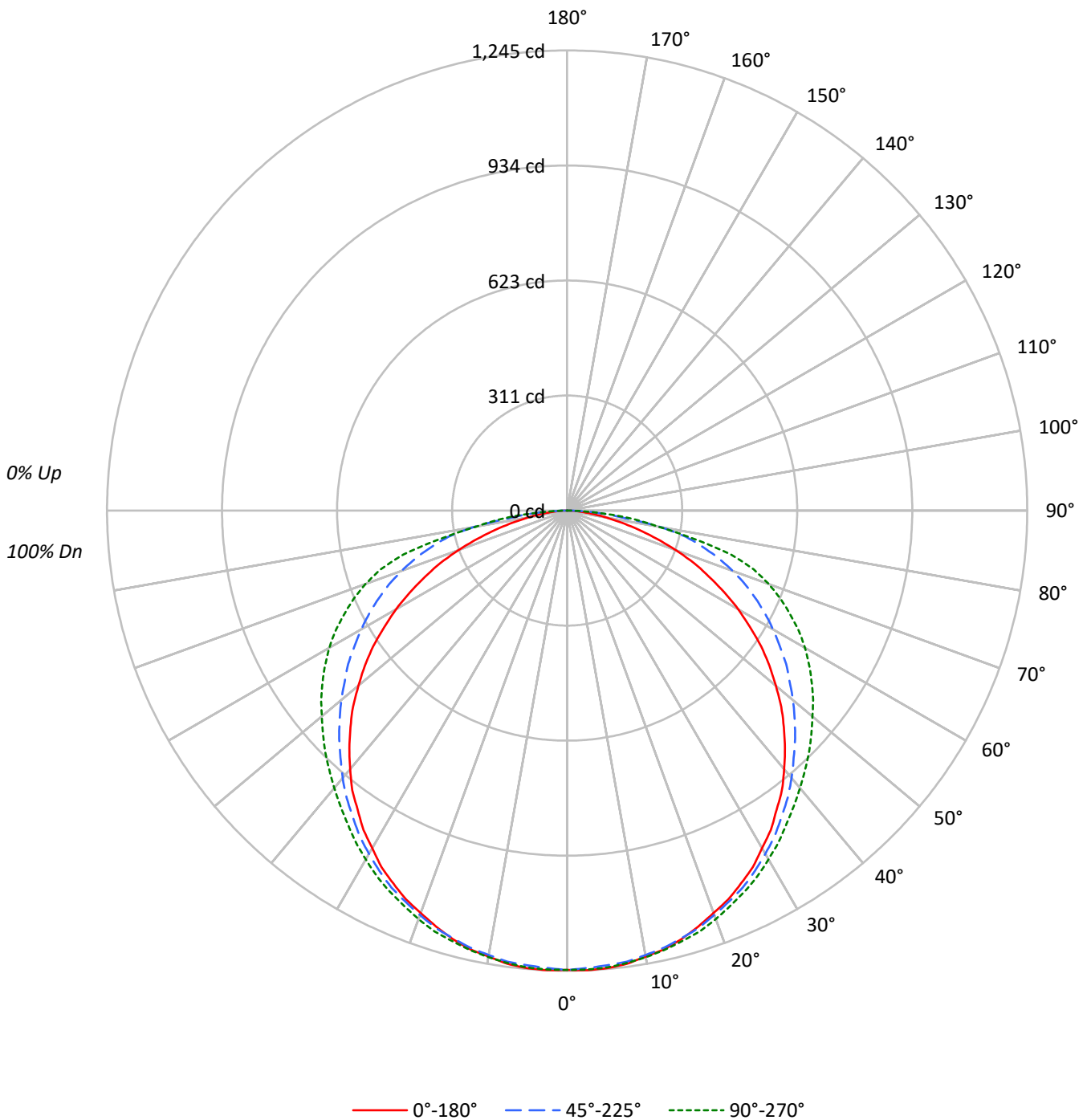
Input Watts (W): 45.291  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

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

	0°	45°	90°
0°	1672	1672	1672
5°	1678	1668	1676
10°	1674	1668	1676
15°	1671	1668	1679
20°	1659	1667	1684
25°	1653	1670	1688
30°	1638	1666	1693
35°	1623	1661	1700
40°	1604	1659	1721
45°	1578	1660	1760
50°	1543	1670	1814
55°	1504	1697	1894
60°	1440	1730	1999
65°	1348	1791	2122
70°	1226	1874	2282
75°	1039	1977	2385
80°	820	1990	1929
85°	605	1513	1695



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.9	3.0
10°-20°	339.3	8.6
20°-30°	518.8	13.1
30°-40°	634.2	16.0
40°-50°	676.0	17.1
50°-60°	646.3	16.4
60°-70°	547.5	13.9
70°-80°	368.0	9.3
80°-90°	103.8	2.6
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°	976.0	24.7
0°-40°	1610.2	40.7
0°-60°	2932.4	74.2
0°-90°	3951.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3951.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1243	1243	1243	1243	1243	
5°	1243	1241	1235	1241	1241	118
15°	1200	1200	1198	1207	1206	338
25°	1113	1117	1125	1135	1137	513
35°	988	996	1011	1031	1035	619
45°	829	843	872	910	925	639
55°	641	664	723	780	808	571
65°	423	466	562	637	666	420
75°	200	272	380	445	459	214
85°	39	80	98	106	110	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1242.7	1242.7	1242.7	1242.7	1242.7
2.5°	1244.7	1244.7	1238.8	1242.7	1242.7
5°	1242.7	1240.7	1234.9	1240.7	1240.7
7.5°	1236.8	1234.9	1230.9	1236.8	1234.9
10°	1225.1	1225.1	1221.1	1227.0	1227.0
12.5°	1215.3	1213.3	1211.3	1219.2	1217.2
15°	1199.6	1199.6	1197.6	1207.4	1205.5
17.5°	1180.0	1181.9	1183.9	1191.7	1193.7
20°	1158.4	1162.3	1164.3	1176.1	1176.1
22.5°	1138.8	1140.8	1144.7	1156.5	1156.5
25°	1113.3	1117.3	1125.1	1134.9	1136.9
27.5°	1087.9	1089.8	1099.6	1113.3	1115.3
30°	1054.5	1060.4	1072.2	1087.9	1089.8
32.5°	1025.1	1031.0	1044.7	1060.4	1064.3
35°	987.9	995.7	1011.4	1031.0	1034.9
37.5°	954.6	960.4	980.0	1001.6	1007.5
40°	913.4	925.2	944.8	970.2	980.0
42.5°	872.2	884.0	907.5	940.8	952.6
45°	829.1	842.8	872.2	909.5	925.2
47.5°	786.0	801.7	835.0	878.1	895.8
50°	737.0	756.6	797.8	846.8	866.4
52.5°	690.0	713.5	758.6	813.4	838.9
55°	641.0	664.5	723.3	780.1	807.6
57.5°	586.1	617.4	682.1	746.8	776.2
60°	535.1	564.5	642.9	713.5	742.9
62.5°	480.2	519.4	603.7	678.2	707.6
65°	423.4	466.5	562.5	637.0	666.4
67.5°	372.4	419.5	521.4	595.9	625.3
70°	311.7	370.5	476.3	550.8	580.2
72.5°	254.8	319.5	429.3	501.8	529.2
75°	199.9	272.5	380.3	444.9	458.7
77.5°	149.0	225.4	329.3	356.7	346.9
80°	105.8	180.3	256.8	243.1	248.9
82.5°	68.6	137.2	158.8	180.3	186.2
85°	39.2	80.4	98.0	105.8	109.8
87.5°	17.6	29.4	39.2	39.2	37.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)