

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: P276942

Luminaire Tested: **24CZ2-60HE-RDP-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276942  
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-5500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3990.5 lumens  
Efficiency: N/A  
Efficacy: 87.7 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

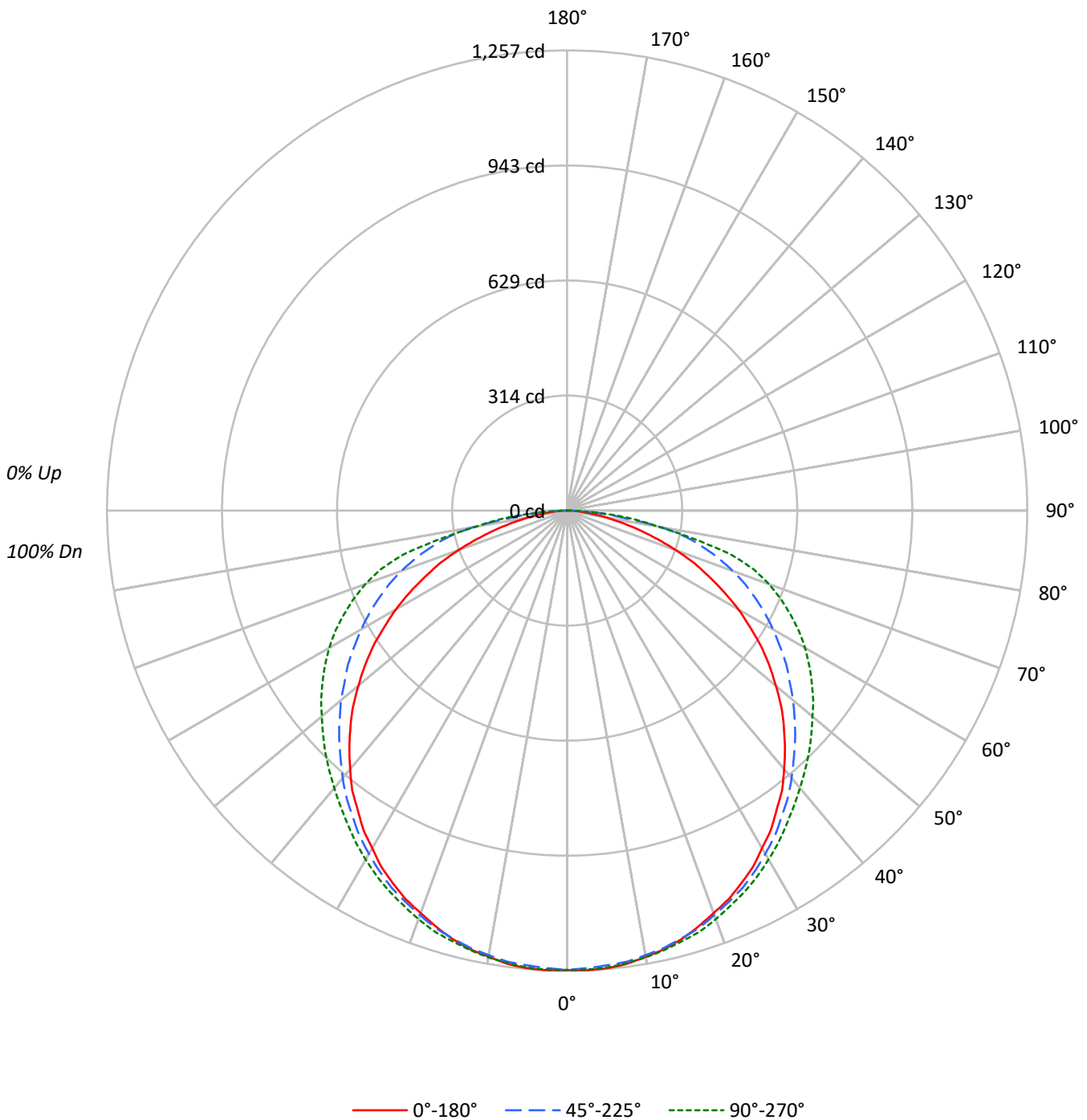
Input Watts (W): 45.477  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1688	1688	1688
5°	1695	1684	1692
10°	1690	1685	1693
15°	1687	1685	1696
20°	1675	1683	1700
25°	1669	1687	1704
30°	1654	1682	1710
35°	1639	1678	1717
40°	1620	1676	1738
45°	1593	1676	1778
50°	1558	1686	1831
55°	1518	1713	1913
60°	1454	1747	2019
65°	1361	1809	2143
70°	1238	1892	2305
75°	1050	1996	2408
80°	828	2009	1948
85°	611	1528	1711



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	119.0	3.0
10°-20°	342.6	8.6
20°-30°	523.9	13.1
30°-40°	640.5	16.0
40°-50°	682.6	17.1
50°-60°	652.7	16.4
60°-70°	552.9	13.9
70°-80°	371.6	9.3
80°-90°	104.8	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°	985.5	24.7
0°-40°	1626.0	40.7
0°-60°	2961.2	74.2
0°-90°	3990.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3990.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1255	1255	1255	1255	1255	
5°	1255	1253	1247	1253	1253	119
15°	1211	1211	1209	1219	1217	342
25°	1124	1128	1136	1146	1148	518
35°	998	1006	1021	1041	1045	625
45°	837	851	881	918	934	646
55°	647	671	730	788	816	576
65°	428	471	568	643	673	424
75°	202	275	384	449	463	216
85°	40	81	99	107	111	49
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1254.9	1254.9	1254.9	1254.9	1254.9
2.5°	1256.9	1256.9	1250.9	1254.9	1254.9
5°	1254.9	1252.9	1247.0	1252.9	1252.9
7.5°	1249.0	1247.0	1243.0	1249.0	1247.0
10°	1237.1	1237.1	1233.1	1239.1	1239.1
12.5°	1227.2	1225.2	1223.2	1231.2	1229.2
15°	1211.4	1211.4	1209.4	1219.3	1217.3
17.5°	1191.6	1193.5	1195.5	1203.4	1205.4
20°	1169.8	1173.8	1175.7	1187.6	1187.6
22.5°	1150.0	1152.0	1155.9	1167.8	1167.8
25°	1124.3	1128.2	1136.1	1146.0	1148.0
27.5°	1098.5	1100.5	1110.4	1124.3	1126.2
30°	1064.9	1070.8	1082.7	1098.5	1100.5
32.5°	1035.2	1041.1	1055.0	1070.8	1074.8
35°	997.6	1005.5	1021.3	1041.1	1045.1
37.5°	963.9	969.9	989.7	1011.4	1017.4
40°	922.4	934.3	954.0	979.8	989.7
42.5°	880.8	892.7	916.4	950.1	962.0
45°	837.3	851.1	880.8	918.4	934.3
47.5°	793.7	809.6	843.2	886.7	904.6
50°	744.2	764.0	805.6	855.1	874.9
52.5°	696.7	720.5	766.0	821.4	847.2
55°	647.2	671.0	730.4	787.8	815.5
57.5°	591.8	623.5	688.8	754.1	783.8
60°	540.4	570.1	649.2	720.5	750.2
62.5°	484.9	524.5	609.6	684.9	714.5
65°	427.5	471.1	568.1	643.3	673.0
67.5°	376.1	423.6	526.5	601.7	631.4
70°	314.7	374.1	481.0	556.2	585.9
72.5°	257.3	322.6	433.5	506.7	534.4
75°	201.9	275.1	384.0	449.3	463.2
77.5°	150.4	227.6	332.5	360.2	350.3
80°	106.9	182.1	259.3	245.4	251.4
82.5°	69.3	138.6	160.3	182.1	188.0
85°	39.6	81.2	99.0	106.9	110.8
87.5°	17.8	29.7	39.6	39.6	37.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)