

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: P276768

Luminaire Tested: **24CZ2-65HE-RDP-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276768  
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: 24CZ2-65HE-RDP-UNV-L83050-W2A1-U-3500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4158.0 lumens  
Efficiency: N/A  
Efficacy: 85.0 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

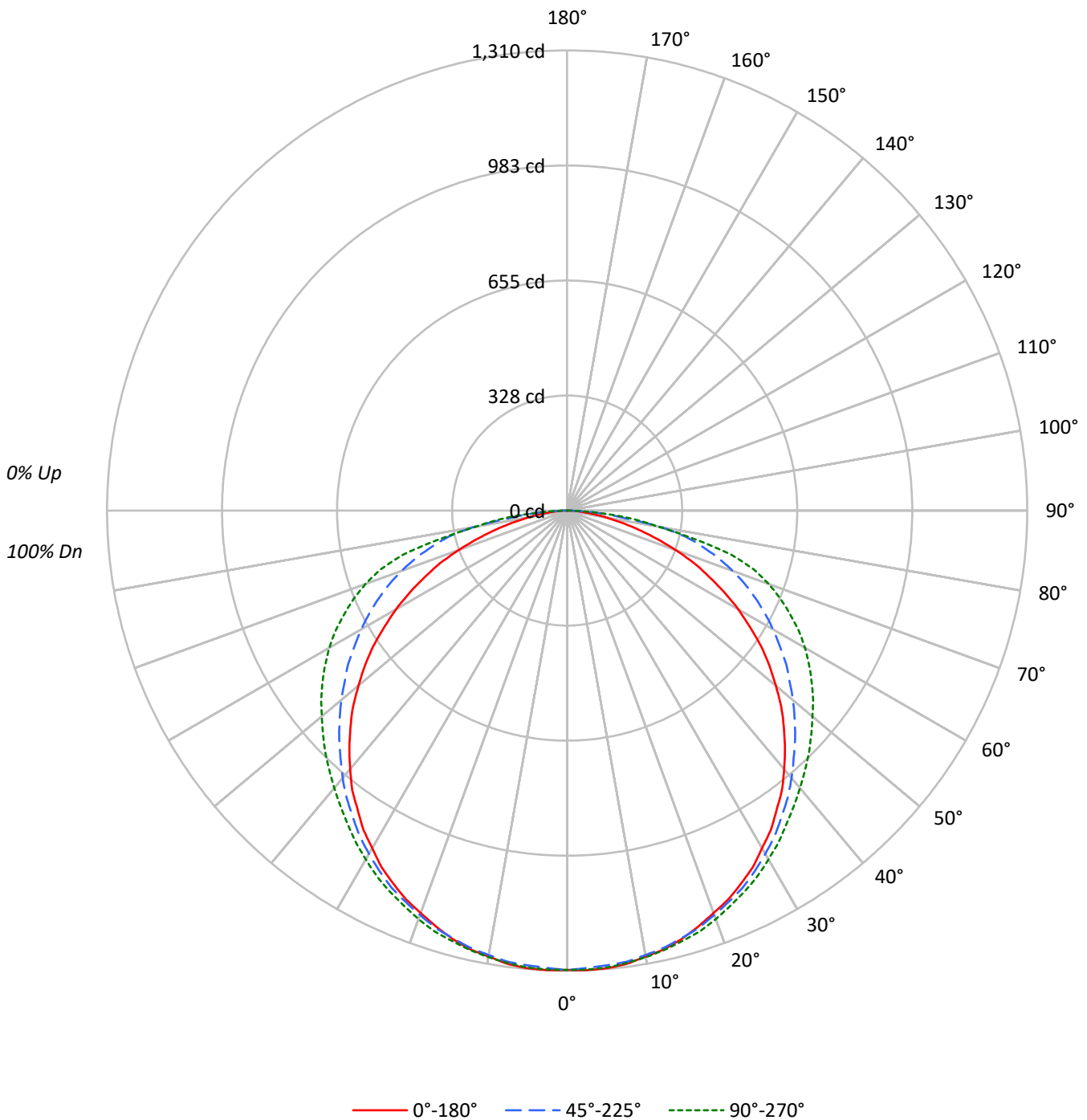
Input Watts (W): 48.918  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1759	1759	1759
5°	1766	1755	1763
10°	1761	1755	1764
15°	1758	1755	1767
20°	1745	1754	1772
25°	1739	1757	1776
30°	1724	1753	1782
35°	1707	1748	1789
40°	1688	1746	1811
45°	1660	1746	1852
50°	1623	1757	1908
55°	1582	1785	1993
60°	1515	1820	2104
65°	1418	1884	2232
70°	1290	1972	2402
75°	1094	2080	2509
80°	863	2094	2029
85°	636	1592	1783



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.0	3.0
10°-20°	357.0	8.6
20°-30°	545.9	13.1
30°-40°	667.3	16.0
40°-50°	711.3	17.1
50°-60°	680.0	16.4
60°-70°	576.1	13.9
70°-80°	387.2	9.3
80°-90°	109.2	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°	1026.9	24.7
0°-40°	1694.2	40.7
0°-60°	3085.5	74.2
0°-90°	4158.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4158.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1308	1308	1308	1308	1308	
5°	1308	1306	1299	1306	1306	124
15°	1262	1262	1260	1270	1268	356
25°	1172	1176	1184	1194	1196	540
35°	1040	1048	1064	1085	1089	651
45°	872	887	918	957	974	673
55°	674	699	761	821	850	601
65°	446	491	592	670	701	442
75°	210	287	400	468	483	225
85°	41	85	103	111	116	51
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1307.6	1307.6	1307.6	1307.6	1307.6
2.5°	1309.6	1309.6	1303.4	1307.6	1307.6
5°	1307.6	1305.5	1299.3	1305.5	1305.5
7.5°	1301.4	1299.3	1295.2	1301.4	1299.3
10°	1289.0	1289.0	1284.9	1291.1	1291.1
12.5°	1278.7	1276.6	1274.6	1282.8	1280.8
15°	1262.2	1262.2	1260.1	1270.4	1268.4
17.5°	1241.6	1243.6	1245.7	1253.9	1256.0
20°	1218.9	1223.0	1225.1	1237.5	1237.5
22.5°	1198.3	1200.3	1204.5	1216.8	1216.8
25°	1171.5	1175.6	1183.8	1194.1	1196.2
27.5°	1144.6	1146.7	1157.0	1171.5	1173.5
30°	1109.6	1115.8	1128.1	1144.6	1146.7
32.5°	1078.6	1084.8	1099.3	1115.8	1119.9
35°	1039.5	1047.7	1064.2	1084.8	1089.0
37.5°	1004.4	1010.6	1031.2	1053.9	1060.1
40°	961.1	973.5	994.1	1020.9	1031.2
42.5°	917.8	930.1	954.9	990.0	1002.3
45°	872.4	886.8	917.8	957.0	973.5
47.5°	827.0	843.5	878.6	924.0	942.5
50°	775.5	796.1	839.4	891.0	911.6
52.5°	726.0	750.7	798.2	855.9	882.7
55°	674.4	699.2	761.0	820.8	849.7
57.5°	616.7	649.7	717.7	785.8	816.7
60°	563.0	594.0	676.5	750.7	781.7
62.5°	505.3	546.5	635.2	713.6	744.5
65°	445.5	490.9	591.9	670.3	701.2
67.5°	391.9	441.4	548.6	627.0	657.9
70°	327.9	389.8	501.2	579.5	610.5
72.5°	268.1	336.2	451.7	528.0	556.9
75°	210.4	286.7	400.1	468.2	482.6
77.5°	156.7	237.2	346.5	375.4	365.0
80°	111.4	189.7	270.2	255.7	261.9
82.5°	72.2	144.4	167.1	189.7	195.9
85°	41.2	84.6	103.1	111.4	115.5
87.5°	18.6	30.9	41.2	41.2	39.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)