

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: P276945

Luminaire Tested: **24CZ2-65HE-RDP-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276945  
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-L82765-W2A1-U-2700K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3815.6 lumens  
Efficiency: N/A  
Efficacy: 78.0 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

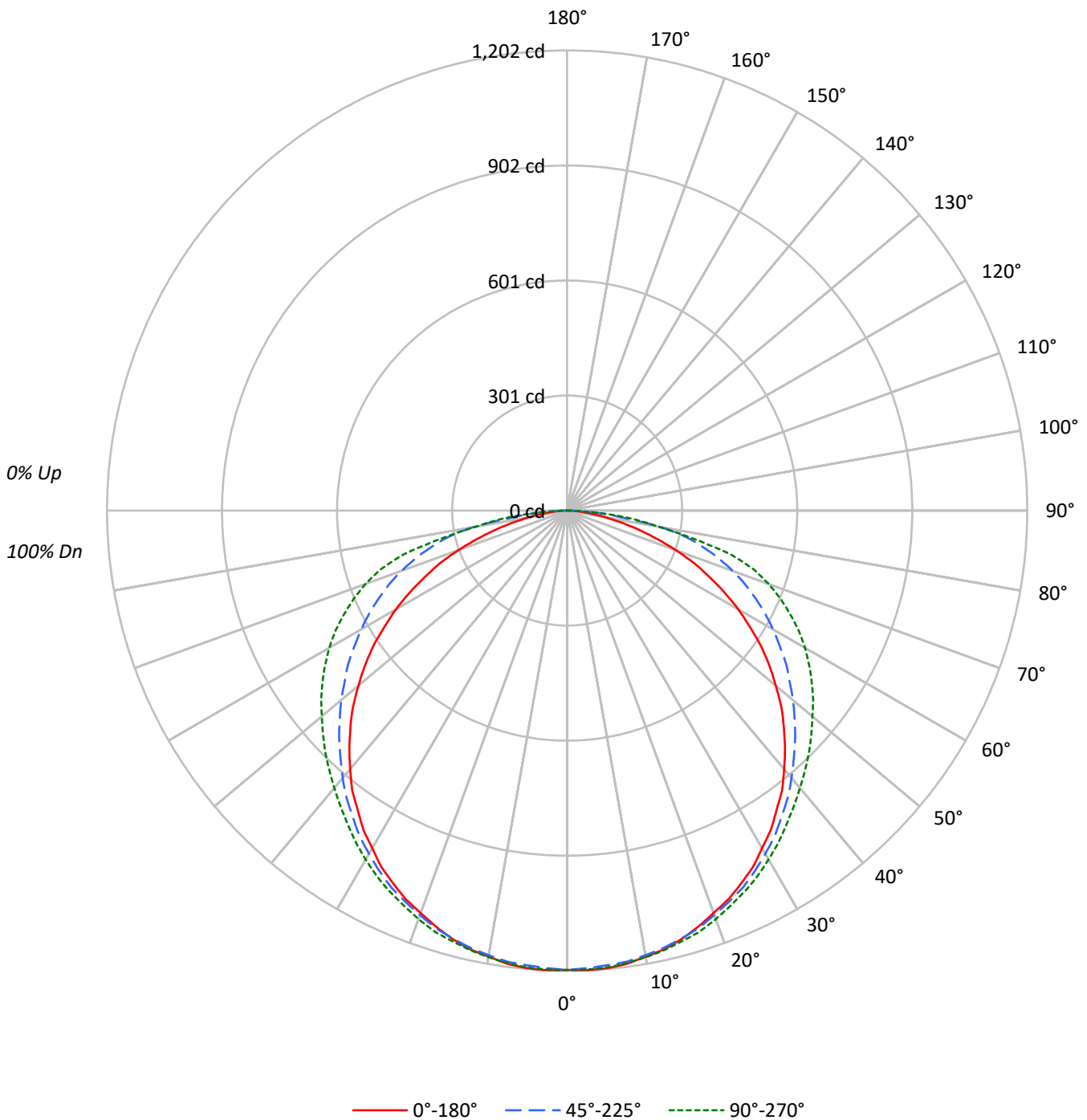
Input Watts (W): 48.918  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1614	1614	1614
5°	1621	1610	1618
10°	1616	1611	1619
15°	1613	1611	1621
20°	1602	1610	1626
25°	1596	1613	1630
30°	1582	1608	1635
35°	1567	1604	1641
40°	1549	1602	1662
45°	1523	1603	1700
50°	1490	1612	1751
55°	1452	1638	1829
60°	1390	1671	1930
65°	1301	1729	2049
70°	1184	1809	2204
75°	1003	1909	2302
80°	792	1921	1863
85°	585	1460	1636



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	113.8	3.0
10°-20°	327.6	8.6
20°-30°	500.9	13.1
30°-40°	612.4	16.0
40°-50°	652.7	17.1
50°-60°	624.0	16.4
60°-70°	528.6	13.9
70°-80°	355.3	9.3
80°-90°	100.2	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°	942.3	24.7
0°-40°	1554.7	40.7
0°-60°	2831.4	74.2
0°-90°	3815.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3815.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1200	1200	1200	1200	1200	
5°	1200	1198	1192	1198	1198	114
15°	1158	1158	1156	1166	1164	327
25°	1075	1079	1086	1096	1098	495
35°	954	961	977	996	999	598
45°	801	814	842	878	893	617
55°	619	642	698	753	780	551
65°	409	450	543	615	644	406
75°	193	263	367	430	443	207
85°	38	78	95	102	106	47
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1199.9	1199.9	1199.9	1199.9	1199.9
2.5°	1201.8	1201.8	1196.1	1199.9	1199.9
5°	1199.9	1198.0	1192.3	1198.0	1198.0
7.5°	1194.2	1192.3	1188.5	1194.2	1192.3
10°	1182.9	1182.9	1179.1	1184.7	1184.7
12.5°	1173.4	1171.5	1169.6	1177.2	1175.3
15°	1158.2	1158.2	1156.4	1165.8	1163.9
17.5°	1139.3	1141.2	1143.1	1150.7	1152.6
20°	1118.5	1122.3	1124.2	1135.5	1135.5
22.5°	1099.6	1101.5	1105.3	1116.6	1116.6
25°	1075.0	1078.8	1086.3	1095.8	1097.7
27.5°	1050.4	1052.3	1061.7	1075.0	1076.9
30°	1018.2	1023.9	1035.2	1050.4	1052.3
32.5°	989.8	995.5	1008.7	1023.9	1027.7
35°	953.9	961.4	976.6	995.5	999.3
37.5°	921.7	927.4	946.3	967.1	972.8
40°	881.9	893.3	912.2	936.8	946.3
42.5°	842.2	853.5	876.3	908.4	919.8
45°	800.6	813.8	842.2	878.1	893.3
47.5°	758.9	774.1	806.2	847.9	864.9
50°	711.6	730.5	770.3	817.6	836.5
52.5°	666.2	688.9	732.4	785.4	810.0
55°	618.9	641.6	698.4	753.2	779.7
57.5°	565.9	596.2	658.6	721.1	749.5
60°	516.7	545.1	620.8	688.9	717.3
62.5°	463.7	501.5	582.9	654.8	683.2
65°	408.8	450.4	543.2	615.1	643.5
67.5°	359.6	405.0	503.4	575.3	603.7
70°	300.9	357.7	459.9	531.8	560.2
72.5°	246.0	308.5	414.5	484.5	511.0
75°	193.0	263.1	367.2	429.6	442.9
77.5°	143.8	217.6	318.0	344.4	335.0
80°	102.2	174.1	247.9	234.7	240.4
82.5°	66.2	132.5	153.3	174.1	179.8
85°	37.9	77.6	94.6	102.2	106.0
87.5°	17.0	28.4	37.9	37.9	36.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)