

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: P276929

Luminaire Tested: **24CZ2-55HE-RDP-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276929  
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: 24CZ2-55HE-RDP-UNV-L82765-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: 3449.1 lumens  
Efficiency: N/A  
Efficacy: 85.7 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

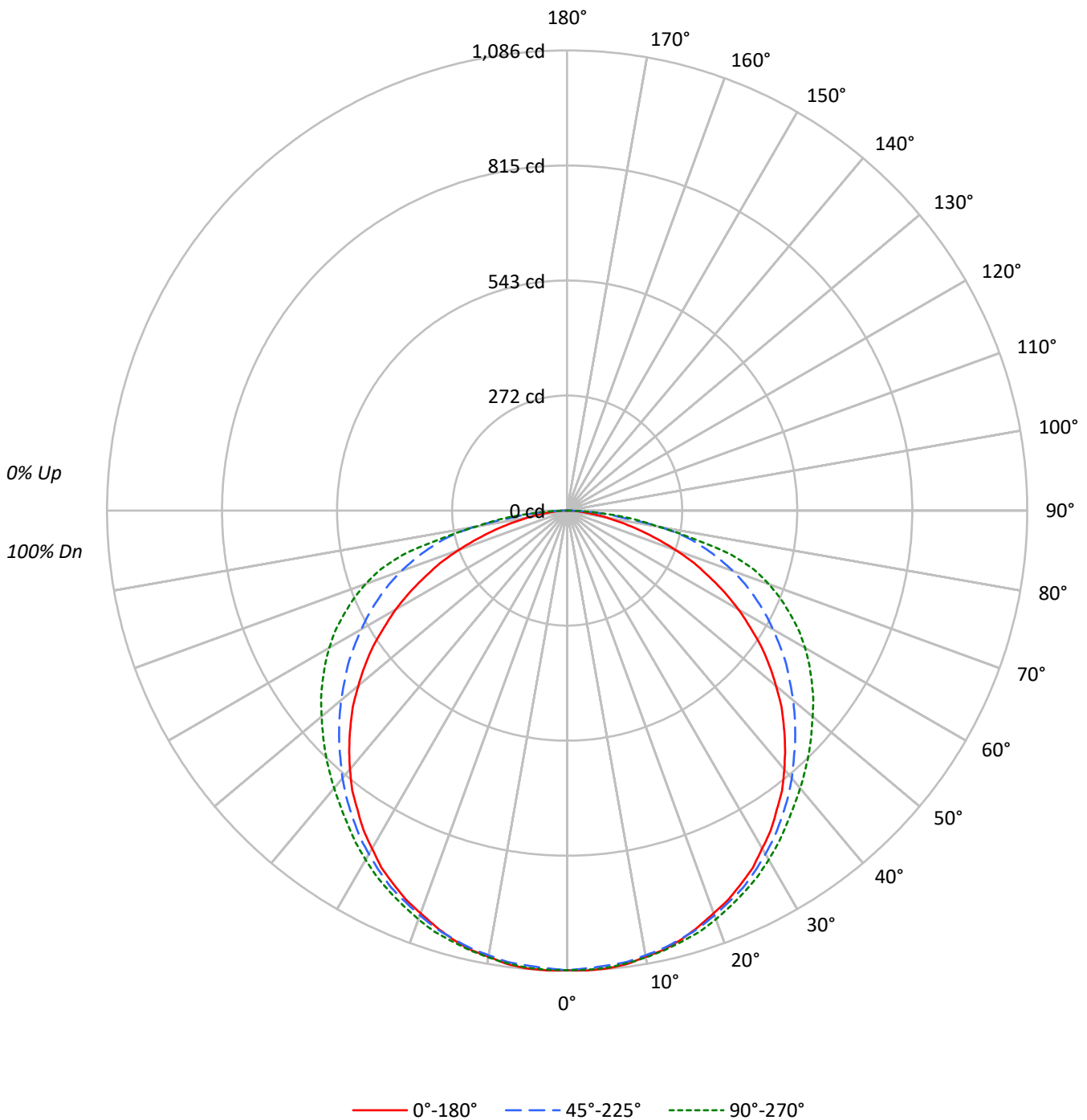
Input Watts (W): 40.269  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1459	1459	1459
5°	1465	1456	1463
10°	1461	1456	1463
15°	1458	1456	1466
20°	1448	1455	1470
25°	1443	1458	1473
30°	1430	1454	1478
35°	1416	1450	1484
40°	1400	1448	1502
45°	1377	1449	1537
50°	1347	1458	1583
55°	1312	1481	1653
60°	1257	1510	1745
65°	1176	1563	1852
70°	1070	1635	1992
75°	907	1725	2081
80°	716	1736	1684
85°	528	1320	1479



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	102.9	3.0
10°-20°	296.1	8.6
20°-30°	452.8	13.1
30°-40°	553.6	16.0
40°-50°	590.0	17.1
50°-60°	564.1	16.4
60°-70°	477.9	13.9
70°-80°	321.2	9.3
80°-90°	90.6	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°	851.8	24.7
0°-40°	1405.4	40.7
0°-60°	2559.5	74.2
0°-90°	3449.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3449.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1085	1085	1085	1085	1085	
5°	1085	1083	1078	1083	1083	103
15°	1047	1047	1045	1054	1052	295
25°	972	975	982	990	992	448
35°	862	869	883	900	903	540
45°	724	736	761	794	808	558
55°	559	580	631	681	705	498
65°	370	407	491	556	582	367
75°	174	238	332	388	400	187
85°	34	70	86	92	96	42
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1084.6	1084.6	1084.6	1084.6	1084.6
2.5°	1086.3	1086.3	1081.2	1084.6	1084.6
5°	1084.6	1082.9	1077.8	1082.9	1082.9
7.5°	1079.5	1077.8	1074.4	1079.5	1077.8
10°	1069.2	1069.2	1065.8	1071.0	1071.0
12.5°	1060.7	1059.0	1057.3	1064.1	1062.4
15°	1047.0	1047.0	1045.3	1053.8	1052.1
17.5°	1029.9	1031.6	1033.3	1040.2	1041.9
20°	1011.1	1014.5	1016.2	1026.5	1026.5
22.5°	994.0	995.7	999.1	1009.4	1009.4
25°	971.7	975.1	982.0	990.5	992.3
27.5°	949.5	951.2	959.8	971.7	973.4
30°	920.4	925.5	935.8	949.5	951.2
32.5°	894.7	899.9	911.8	925.5	929.0
35°	862.2	869.1	882.8	899.9	903.3
37.5°	833.2	838.3	855.4	874.2	879.3
40°	797.2	807.5	824.6	846.8	855.4
42.5°	761.3	771.6	792.1	821.2	831.4
45°	723.7	735.6	761.3	793.8	807.5
47.5°	686.0	699.7	728.8	766.4	781.8
50°	643.3	660.4	696.3	739.1	756.2
52.5°	602.2	622.7	662.1	710.0	732.2
55°	559.4	580.0	631.3	680.9	704.8
57.5°	511.5	538.9	595.4	651.8	677.5
60°	467.0	492.7	561.1	622.7	648.4
62.5°	419.1	453.4	526.9	591.9	617.6
65°	369.5	407.2	491.0	556.0	581.7
67.5°	325.0	366.1	455.1	520.1	545.7
70°	272.0	323.3	415.7	480.7	506.4
72.5°	222.4	278.9	374.7	438.0	461.9
75°	174.5	237.8	331.9	388.3	400.3
77.5°	130.0	196.7	287.4	311.4	302.8
80°	92.4	157.4	224.1	212.1	217.3
82.5°	59.9	119.8	138.6	157.4	162.5
85°	34.2	70.1	85.5	92.4	95.8
87.5°	15.4	25.7	34.2	34.2	32.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)