

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: P276969

Luminaire Tested: **24CZ2-75HE-RDP-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276969  
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: 24CZ2-75HE-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: 4986.9 lumens  
Efficiency: N/A  
Efficacy: 83.0 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

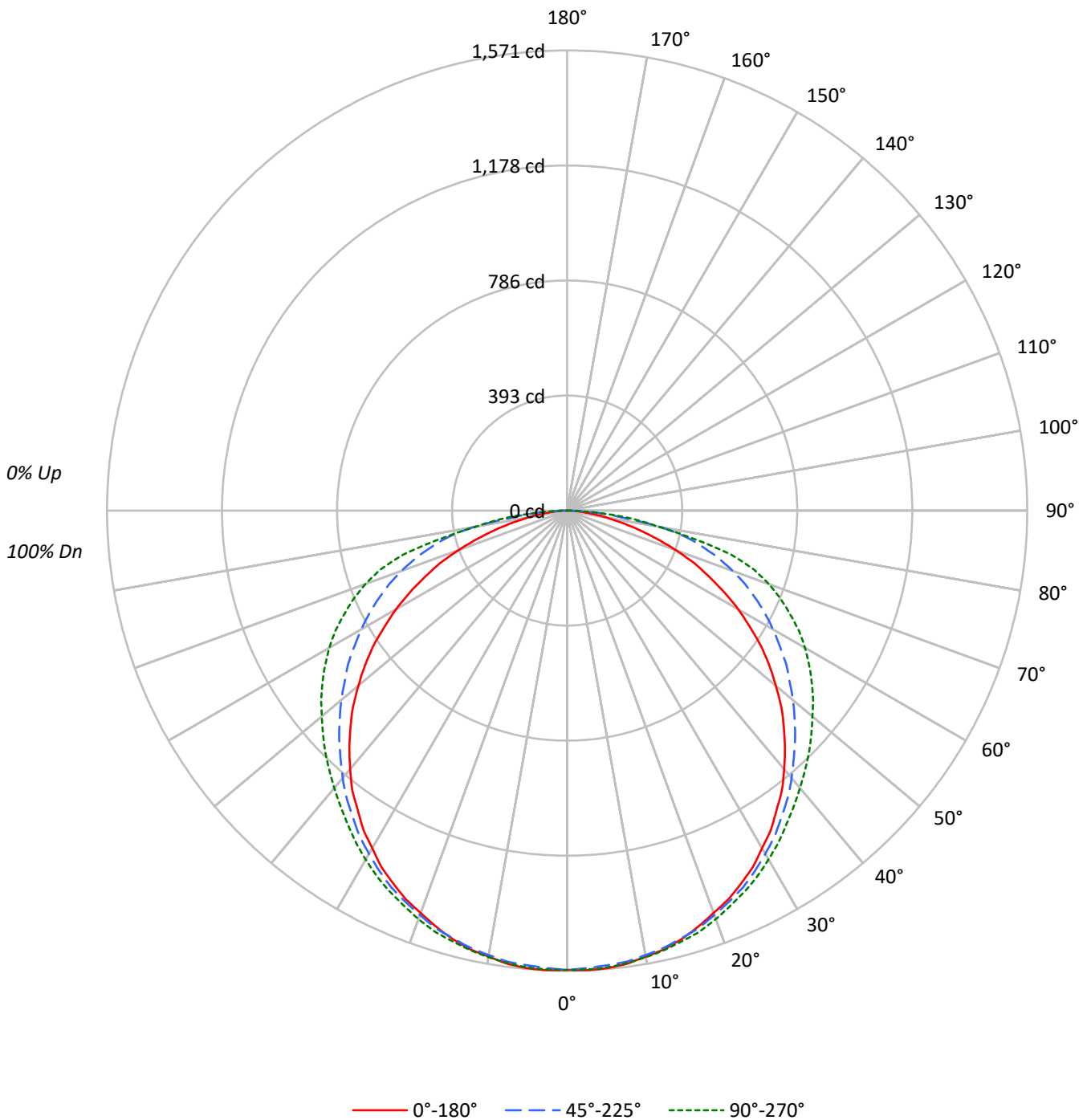
Input Watts (W): 60.078  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2110	2110	2110
5°	2118	2105	2115
10°	2112	2105	2115
15°	2109	2105	2119
20°	2093	2104	2125
25°	2086	2108	2130
30°	2068	2102	2137
35°	2048	2097	2145
40°	2025	2094	2172
45°	1991	2094	2222
50°	1947	2107	2289
55°	1898	2141	2391
60°	1817	2183	2523
65°	1701	2260	2677
70°	1547	2365	2880
75°	1312	2495	3009
80°	1035	2510	2434
85°	764	1910	2138



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	148.8	3.0
10°-20°	428.1	8.6
20°-30°	654.7	13.1
30°-40°	800.4	16.0
40°-50°	853.0	17.1
50°-60°	815.6	16.4
60°-70°	690.9	13.9
70°-80°	464.4	9.3
80°-90°	131.0	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°	1231.6	24.7
0°-40°	2032.0	40.7
0°-60°	3700.6	74.2
0°-90°	4986.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4986.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1568	1568	1568	1568	1568	
5°	1568	1566	1558	1566	1566	149
15°	1514	1514	1511	1524	1521	427
25°	1405	1410	1420	1432	1435	648
35°	1247	1257	1276	1301	1306	781
45°	1046	1064	1101	1148	1168	807
55°	809	838	913	984	1019	720
65°	534	589	710	804	841	530
75°	252	344	480	562	579	270
85°	50	101	124	134	138	61
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1568.2	1568.2	1568.2	1568.2	1568.2
2.5°	1570.7	1570.7	1563.3	1568.2	1568.2
5°	1568.2	1565.8	1558.3	1565.8	1565.8
7.5°	1560.8	1558.3	1553.4	1560.8	1558.3
10°	1546.0	1546.0	1541.0	1548.4	1548.4
12.5°	1533.6	1531.1	1528.7	1538.6	1536.1
15°	1513.8	1513.8	1511.3	1523.7	1521.2
17.5°	1489.1	1491.6	1494.0	1503.9	1506.4
20°	1461.9	1466.8	1469.3	1484.1	1484.1
22.5°	1437.1	1439.6	1444.6	1459.4	1459.4
25°	1405.0	1409.9	1419.8	1432.2	1434.7
27.5°	1372.8	1375.3	1387.7	1405.0	1407.5
30°	1330.8	1338.2	1353.0	1372.8	1375.3
32.5°	1293.7	1301.1	1318.4	1338.2	1343.1
35°	1246.7	1256.6	1276.4	1301.1	1306.0
37.5°	1204.6	1212.0	1236.8	1264.0	1271.4
40°	1152.7	1167.5	1192.3	1224.4	1236.8
42.5°	1100.7	1115.6	1145.3	1187.3	1202.1
45°	1046.3	1063.6	1100.7	1147.7	1167.5
47.5°	991.9	1011.7	1053.7	1108.2	1130.4
50°	930.1	954.8	1006.7	1068.6	1093.3
52.5°	870.7	900.4	957.3	1026.5	1058.7
55°	808.9	838.5	912.7	984.5	1019.1
57.5°	739.6	779.2	860.8	942.4	979.5
60°	675.3	712.4	811.3	900.4	937.5
62.5°	606.0	655.5	761.9	855.8	893.0
65°	534.3	588.7	709.9	803.9	841.0
67.5°	470.0	529.3	658.0	752.0	789.1
70°	393.3	467.5	601.1	695.1	732.2
72.5°	321.6	403.2	541.7	633.2	667.9
75°	252.3	343.8	479.9	561.5	578.8
77.5°	188.0	284.5	415.6	450.2	437.8
80°	133.6	227.6	324.0	306.7	314.1
82.5°	86.6	173.1	200.4	227.6	235.0
85°	49.5	101.4	123.7	133.6	138.5
87.5°	22.3	37.1	49.5	49.5	47.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)