

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: P276965

Luminaire Tested: **24CZ2-75HE-RDP-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276965  
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-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: 4684.1 lumens  
Efficiency: N/A  
Efficacy: 79.8 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

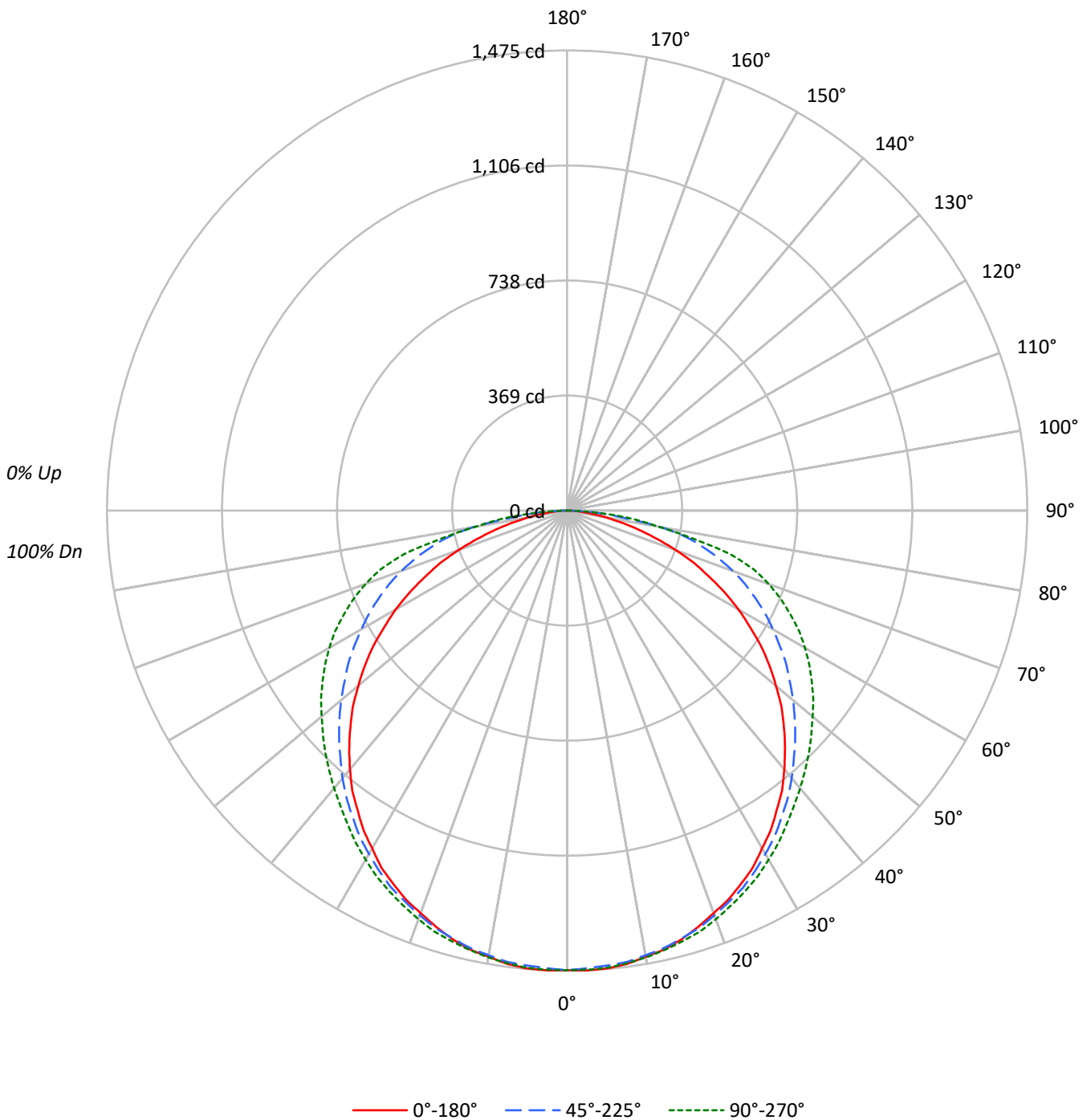
Input Watts (W): 58.683  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1982	1982	1982
5°	1989	1977	1986
10°	1984	1978	1987
15°	1981	1977	1990
20°	1966	1976	1996
25°	1959	1980	2000
30°	1942	1975	2007
35°	1923	1969	2015
40°	1902	1967	2040
45°	1870	1967	2087
50°	1829	1979	2150
55°	1782	2011	2245
60°	1707	2051	2369
65°	1598	2123	2515
70°	1453	2221	2705
75°	1232	2343	2826
80°	972	2359	2287
85°	718	1794	2008



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	139.7	3.0
10°-20°	402.1	8.6
20°-30°	615.0	13.1
30°-40°	751.8	16.0
40°-50°	801.2	17.1
50°-60°	766.1	16.4
60°-70°	649.0	13.9
70°-80°	436.2	9.3
80°-90°	123.0	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°	1156.8	24.7
0°-40°	1908.6	40.7
0°-60°	3475.9	74.2
0°-90°	4684.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4684.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1473	1473	1473	1473	1473	
5°	1473	1471	1464	1471	1471	140
15°	1422	1422	1420	1431	1429	401
25°	1320	1324	1334	1345	1348	608
35°	1171	1180	1199	1222	1227	734
45°	983	999	1034	1078	1097	758
55°	760	788	857	925	957	677
65°	502	553	667	755	790	498
75°	237	323	451	527	544	254
85°	46	95	116	126	130	58
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1473.0	1473.0	1473.0	1473.0	1473.0
2.5°	1475.3	1475.3	1468.3	1473.0	1473.0
5°	1473.0	1470.7	1463.7	1470.7	1470.7
7.5°	1466.0	1463.7	1459.1	1466.0	1463.7
10°	1452.1	1452.1	1447.4	1454.4	1454.4
12.5°	1440.5	1438.1	1435.8	1445.1	1442.8
15°	1421.9	1421.9	1419.6	1431.2	1428.9
17.5°	1398.6	1401.0	1403.3	1412.6	1414.9
20°	1373.1	1377.7	1380.1	1394.0	1394.0
22.5°	1349.9	1352.2	1356.8	1370.8	1370.8
25°	1319.7	1324.3	1333.6	1345.2	1347.5
27.5°	1289.5	1291.8	1303.4	1319.7	1322.0
30°	1250.0	1256.9	1270.9	1289.5	1291.8
32.5°	1215.1	1222.1	1238.3	1256.9	1261.6
35°	1171.0	1180.3	1198.8	1222.1	1226.7
37.5°	1131.5	1138.4	1161.7	1187.2	1194.2
40°	1082.7	1096.6	1119.8	1150.1	1161.7
42.5°	1033.9	1047.8	1075.7	1115.2	1129.1
45°	982.8	999.0	1033.9	1078.0	1096.6
47.5°	931.7	950.2	989.7	1040.9	1061.8
50°	873.6	896.8	945.6	1003.7	1026.9
52.5°	817.8	845.7	899.1	964.2	994.4
55°	759.7	787.6	857.3	924.7	957.2
57.5°	694.7	731.9	808.5	885.2	920.0
60°	634.3	669.1	762.1	845.7	880.5
62.5°	569.2	615.7	715.6	803.9	838.7
65°	501.8	553.0	666.8	755.1	789.9
67.5°	441.4	497.2	618.0	706.3	741.1
70°	369.4	439.1	564.6	652.9	687.7
72.5°	302.0	378.7	508.8	594.8	627.3
75°	237.0	322.9	450.7	527.4	543.7
77.5°	176.6	267.2	390.3	422.8	411.2
80°	125.5	213.7	304.4	288.1	295.1
82.5°	81.3	162.6	188.2	213.7	220.7
85°	46.5	95.3	116.2	125.5	130.1
87.5°	20.9	34.9	46.5	46.5	44.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)