

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: P261168

Luminaire Tested: **24CZ-LD5-55-S-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261168  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-55-S-UNV-L82765-W2A1-U-3000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5345.0 lumens  
Efficiency: N/A  
Efficacy: 134.3 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

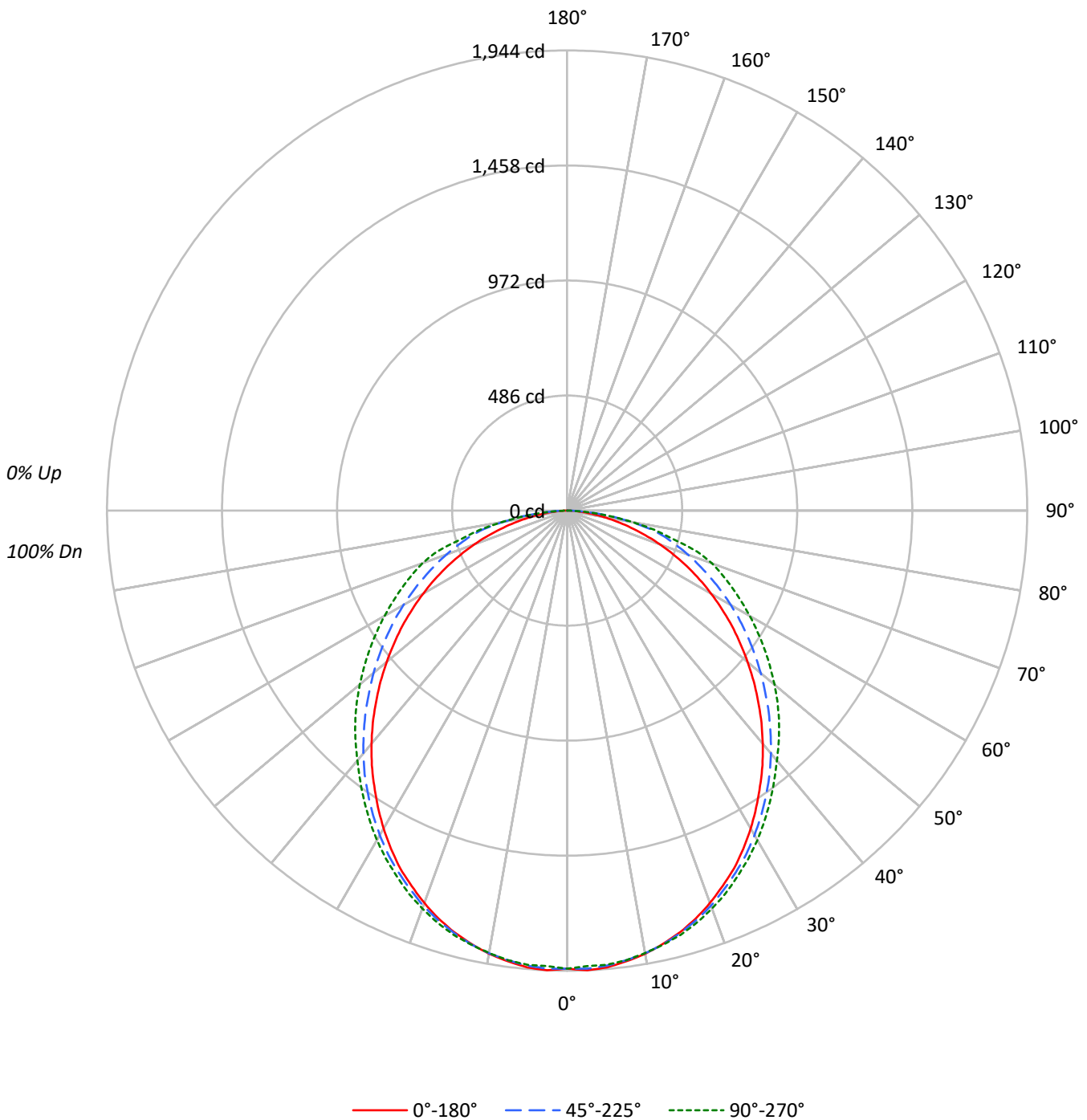
Input Watts (W): 39.804  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50					50			
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38					38			
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27					27			
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2604	2604	2604
5°	2616	2606	2601
10°	2598	2595	2593
15°	2569	2574	2584
20°	2526	2544	2562
25°	2477	2503	2529
30°	2409	2459	2498
35°	2334	2407	2457
40°	2258	2352	2421
45°	2173	2291	2410
50°	2085	2234	2394
55°	1994	2186	2386
60°	1890	2149	2398
65°	1778	2123	2446
70°	1637	2134	2561
75°	1451	2210	2385
80°	1213	2094	2149
85°	906	1675	1538



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	182.9	3.4
10°-20°	520.3	9.7
20°-30°	775.4	14.5
30°-40°	912.7	17.1
40°-50°	927.6	17.4
50°-60°	833.9	15.6
60°-70°	658.8	12.3
70°-80°	418.0	7.8
80°-90°	115.4	2.2
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°	1478.6	27.7
0°-40°	2391.4	44.7
0°-60°	4152.9	77.7
0°-90°	5345.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5345.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1935	1935	1935	1935	1935	
5°	1937	1921	1930	1926	1926	184
15°	1844	1835	1848	1853	1855	520
25°	1668	1666	1686	1697	1704	767
35°	1421	1430	1466	1482	1496	889
45°	1142	1158	1204	1240	1266	881
55°	850	872	932	992	1017	759
65°	558	587	667	740	768	553
75°	279	327	425	462	459	297
85°	59	101	108	100	100	72
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1935.0	1935.0	1935.0	1935.0	1935.0
2.5°	1943.9	1929.7	1936.8	1933.2	1926.1
5°	1936.8	1920.8	1929.7	1926.1	1926.1
7.5°	1920.8	1908.3	1915.4	1913.6	1915.4
10°	1901.2	1888.7	1899.4	1899.4	1897.6
12.5°	1874.5	1863.8	1876.3	1876.3	1878.1
15°	1844.3	1835.4	1847.8	1853.2	1855.0
17.5°	1806.9	1798.0	1814.1	1819.4	1824.7
20°	1764.3	1760.7	1776.7	1782.0	1789.2
22.5°	1716.2	1716.2	1732.2	1739.4	1750.0
25°	1668.2	1666.4	1686.0	1696.7	1703.8
27.5°	1611.3	1613.1	1638.0	1648.7	1657.5
30°	1550.8	1554.4	1582.8	1595.3	1607.7
32.5°	1486.8	1493.9	1525.9	1540.2	1552.6
35°	1421.0	1429.9	1465.5	1481.5	1495.7
37.5°	1355.2	1367.7	1405.0	1421.0	1437.0
40°	1285.8	1296.5	1339.2	1358.8	1378.3
42.5°	1214.7	1228.9	1271.6	1300.1	1323.2
45°	1141.8	1157.8	1204.0	1239.6	1266.3
47.5°	1068.9	1090.2	1134.7	1182.7	1205.8
50°	995.9	1017.3	1067.1	1120.4	1143.6
52.5°	921.3	942.6	999.5	1054.6	1079.5
55°	850.1	871.5	931.9	992.4	1017.3
57.5°	775.4	798.5	866.1	928.4	953.3
60°	702.5	725.6	798.5	864.3	891.0
62.5°	631.4	656.3	732.7	802.1	828.8
65°	558.4	586.9	666.9	739.8	768.3
67.5°	487.3	519.3	602.9	679.4	709.6
70°	416.2	453.5	542.4	620.7	650.9
72.5°	346.8	387.7	482.0	560.2	576.2
75°	279.2	327.2	425.1	462.4	458.8
77.5°	215.2	268.6	361.0	368.1	378.8
80°	156.5	215.2	270.3	284.6	277.4
82.5°	103.2	161.8	193.9	186.7	185.0
85°	58.7	101.4	108.5	99.6	99.6
87.5°	24.9	40.9	35.6	26.7	24.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)