

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: P230051

Luminaire Tested: **24CZ-LD5-55-S-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230051
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-L950-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

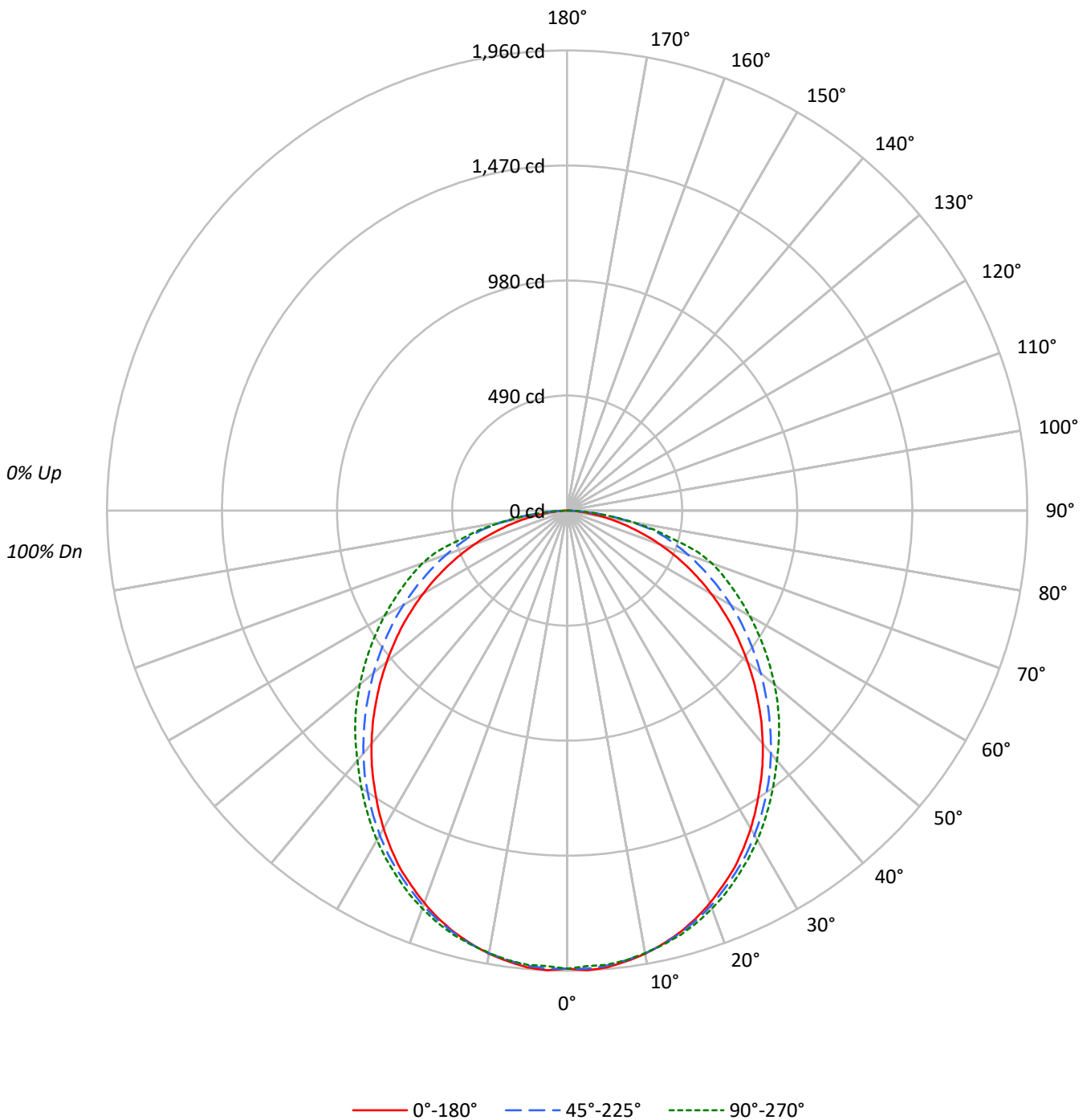
Lumens per Lamp: N/A
Luminaire Lumens: 5389.0 lumens
Efficiency: N/A
Efficacy: 117.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 45.8
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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2625	2625	2625
5°	2637	2628	2623
10°	2619	2616	2614
15°	2590	2595	2605
20°	2547	2565	2583
25°	2497	2524	2550
30°	2429	2479	2518
35°	2353	2427	2477
40°	2277	2372	2441
45°	2191	2310	2429
50°	2102	2252	2413
55°	2011	2204	2406
60°	1906	2167	2418
65°	1792	2141	2466
70°	1651	2151	2582
75°	1463	2228	2405
80°	1223	2112	2167
85°	914	1689	1550



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.5	3.4
10°-20°	524.6	9.7
20°-30°	781.8	14.5
30°-40°	920.3	17.1
40°-50°	935.2	17.4
50°-60°	840.8	15.6
60°-70°	664.3	12.3
70°-80°	421.4	7.8
80°-90°	116.3	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°	1490.8	27.7
0°-40°	2411.1	44.7
0°-60°	4187.0	77.7
0°-90°	5389.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5389.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1951	1951	1951	1951	1951	
5°	1953	1937	1946	1942	1942	185
15°	1860	1850	1863	1868	1870	524
25°	1682	1680	1700	1711	1718	773
35°	1433	1442	1478	1494	1508	896
45°	1151	1167	1214	1250	1277	888
55°	857	879	940	1001	1026	765
65°	563	592	672	746	775	558
75°	282	330	429	466	463	300
85°	59	102	109	100	100	73
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1950.9	1950.9	1950.9	1950.9	1950.9
2.5°	1959.9	1945.5	1952.7	1949.1	1942.0
5°	1952.7	1936.6	1945.5	1942.0	1942.0
7.5°	1936.6	1924.0	1931.2	1929.4	1931.2
10°	1916.8	1904.3	1915.1	1915.1	1913.3
12.5°	1890.0	1879.2	1891.7	1891.7	1893.5
15°	1859.5	1850.5	1863.1	1868.4	1870.2
17.5°	1821.8	1812.8	1829.0	1834.4	1839.7
20°	1778.8	1775.2	1791.3	1796.7	1803.9
22.5°	1730.4	1730.4	1746.5	1753.7	1764.4
25°	1681.9	1680.2	1699.9	1710.6	1717.8
27.5°	1624.6	1626.4	1651.5	1662.2	1671.2
30°	1563.6	1567.2	1595.9	1608.4	1621.0
32.5°	1499.1	1506.2	1538.5	1552.8	1565.4
35°	1432.7	1441.7	1477.5	1493.7	1508.0
37.5°	1366.4	1378.9	1416.6	1432.7	1448.8
40°	1296.4	1307.2	1350.2	1369.9	1389.7
42.5°	1224.7	1239.0	1282.1	1310.8	1334.1
45°	1151.2	1167.3	1213.9	1249.8	1276.7
47.5°	1077.7	1099.2	1144.0	1192.4	1215.7
50°	1004.1	1025.7	1075.9	1129.7	1153.0
52.5°	928.8	950.4	1007.7	1063.3	1088.4
55°	857.1	878.6	939.6	1000.6	1025.7
57.5°	781.8	805.1	873.3	936.0	961.1
60°	708.3	731.6	805.1	871.5	898.4
62.5°	636.6	661.7	738.8	808.7	835.6
65°	563.0	591.7	672.4	745.9	774.6
67.5°	491.3	523.6	607.9	685.0	715.5
70°	419.6	457.2	546.9	625.8	656.3
72.5°	349.7	390.9	485.9	564.8	581.0
75°	281.5	329.9	428.6	466.2	462.6
77.5°	217.0	270.8	364.0	371.2	381.9
80°	157.8	217.0	272.6	286.9	279.7
82.5°	104.0	163.2	195.5	188.3	186.5
85°	59.2	102.2	109.4	100.4	100.4
87.5°	25.1	41.2	35.9	26.9	25.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)