

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: P229992

Luminaire Tested: **24CZ-LD5-75-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229992
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25697)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-75-UNV-L930-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH RIBBED LENS
Light Source: (168) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6205.0 lumens
Efficiency: N/A
Efficacy: 89.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

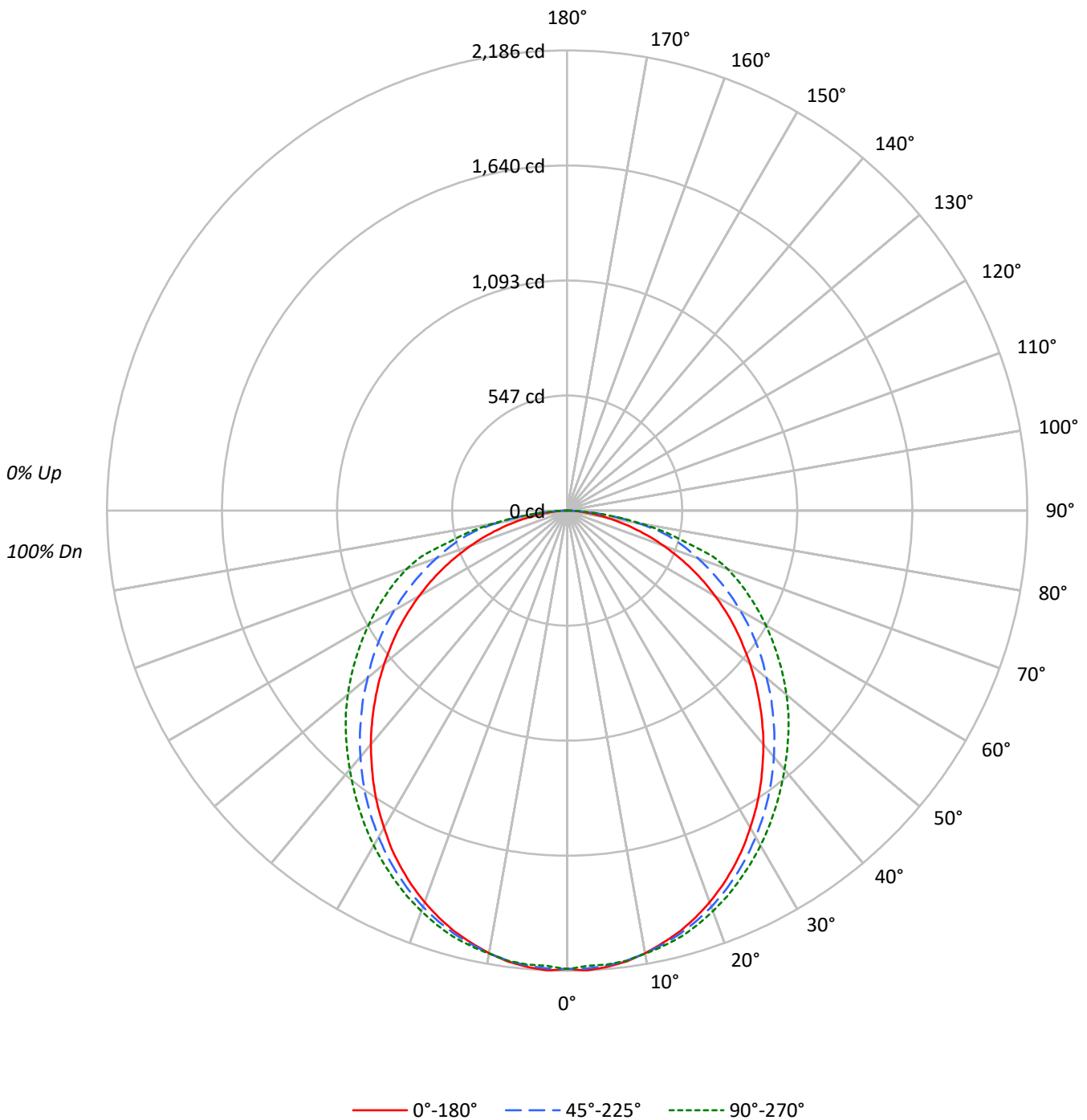
Input Watts (W): 69.06
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2930	2930	2930
5°	2938	2930	2924
10°	2917	2917	2920
15°	2882	2897	2918
20°	2835	2869	2899
25°	2776	2829	2877
30°	2703	2783	2855
35°	2628	2736	2834
40°	2549	2683	2821
45°	2462	2632	2830
50°	2375	2588	2846
55°	2288	2572	2875
60°	2184	2556	2933
65°	2070	2557	3030
70°	1914	2599	3193
75°	1712	2717	3037
80°	1432	2601	2782
85°	1082	2001	1902



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	205.8	3.3
10°-20°	585.7	9.4
20°-30°	875.6	14.1
30°-40°	1038.7	16.7
40°-50°	1069.1	17.2
50°-60°	980.7	15.8
60°-70°	793.0	12.8
70°-80°	514.6	8.3
80°-90°	141.9	2.3
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°	1667.0	26.9
0°-40°	2705.7	43.6
0°-60°	4755.5	76.6
0°-90°	6205.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6205.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2178	2178	2178	2178	2178	
5°	2176	2161	2169	2167	2165	206
15°	2069	2061	2080	2088	2095	583
25°	1870	1872	1906	1923	1938	861
35°	1600	1612	1666	1702	1725	1000
45°	1294	1315	1383	1449	1487	998
55°	975	1005	1096	1186	1226	871
65°	650	688	803	909	952	642
75°	329	391	523	584	584	350
85°	70	119	130	125	123	86
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2177.6	2177.6	2177.6	2177.6	2177.6
2.5°	2186.1	2169.1	2177.6	2175.5	2164.9
5°	2175.5	2160.6	2169.1	2167.0	2164.9
7.5°	2160.6	2145.8	2156.4	2154.3	2156.4
10°	2135.1	2122.4	2135.1	2137.3	2137.3
12.5°	2103.3	2092.7	2109.6	2113.9	2118.1
15°	2069.3	2060.8	2079.9	2088.4	2094.8
17.5°	2026.8	2020.4	2043.8	2054.4	2062.9
20°	1980.1	1977.9	2003.4	2014.0	2024.7
22.5°	1926.9	1926.9	1956.7	1969.4	1984.3
25°	1869.6	1871.7	1905.7	1922.7	1937.6
27.5°	1808.0	1810.1	1850.5	1871.7	1888.7
30°	1740.0	1748.5	1791.0	1818.6	1837.7
32.5°	1672.0	1682.6	1729.4	1761.2	1782.5
35°	1599.8	1612.5	1665.6	1701.7	1725.1
37.5°	1525.4	1540.3	1597.6	1638.0	1665.6
40°	1451.0	1468.0	1527.5	1574.3	1606.1
42.5°	1372.4	1391.6	1457.4	1512.7	1546.7
45°	1293.8	1315.1	1383.1	1448.9	1487.2
47.5°	1215.2	1240.7	1313.0	1385.2	1425.6
50°	1134.5	1160.0	1236.5	1319.3	1359.7
52.5°	1053.8	1083.5	1168.5	1253.5	1293.8
55°	975.2	1004.9	1096.3	1185.5	1225.8
57.5°	894.4	924.2	1024.0	1117.5	1157.9
60°	811.6	845.6	949.7	1045.3	1089.9
62.5°	730.8	767.0	877.4	979.4	1021.9
65°	650.1	688.3	803.1	909.3	951.8
67.5°	567.2	611.9	730.8	839.2	883.8
70°	486.5	535.4	660.7	769.1	811.6
72.5°	407.9	461.0	590.6	701.1	726.6
75°	329.3	390.9	522.6	584.2	584.2
77.5°	254.9	322.9	446.1	469.5	482.3
80°	184.8	259.2	335.7	363.3	359.0
82.5°	123.2	197.6	240.1	240.1	233.7
85°	70.1	119.0	129.6	125.3	123.2
87.5°	29.7	44.6	40.4	31.9	27.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)