

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: P229994

Luminaire Tested: **24CZ-LD5-75-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229994
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-L940-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH RIBBED LENS
Light Source: (168) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6609.0 lumens
Efficiency: N/A
Efficacy: 95.7 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

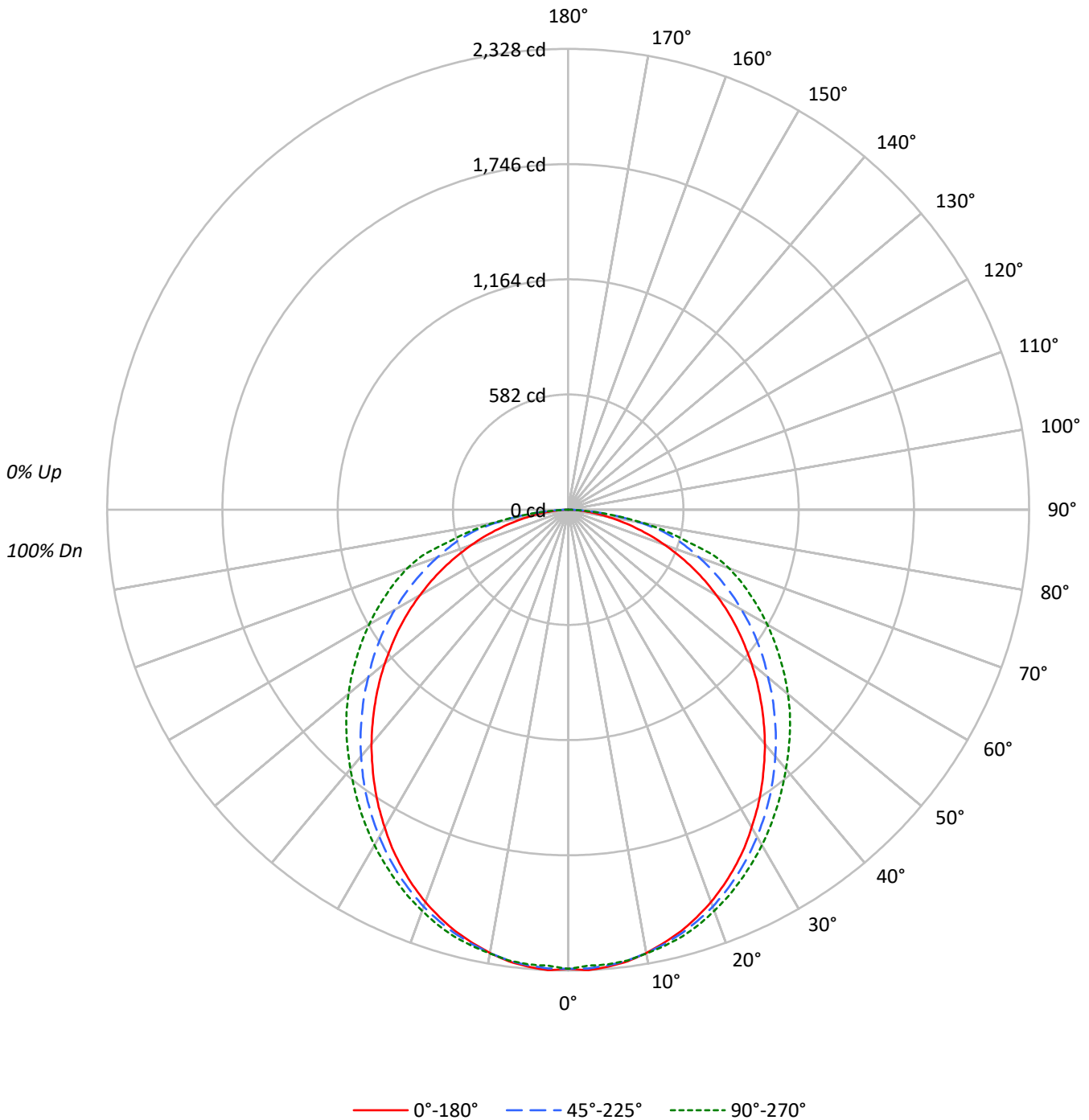
Input Watts (W): 69.06
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3121	3121	3121
5°	3130	3120	3114
10°	3107	3107	3110
15°	3070	3086	3108
20°	3020	3055	3088
25°	2956	3013	3064
30°	2879	2964	3041
35°	2799	2914	3018
40°	2715	2858	3005
45°	2622	2803	3014
50°	2529	2757	3031
55°	2436	2739	3063
60°	2326	2722	3124
65°	2204	2723	3228
70°	2039	2768	3401
75°	1823	2894	3235
80°	1526	2770	2963
85°	1153	2130	2025



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	219.2	3.3
10°-20°	623.8	9.4
20°-30°	932.6	14.1
30°-40°	1106.3	16.7
40°-50°	1138.7	17.2
50°-60°	1044.6	15.8
60°-70°	844.6	12.8
70°-80°	548.1	8.3
80°-90°	151.1	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°	1775.5	26.9
0°-40°	2881.9	43.6
0°-60°	5065.1	76.6
0°-90°	6609.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6609.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2319	2319	2319	2319	2319	
5°	2317	2301	2310	2308	2306	220
15°	2204	2195	2215	2224	2231	621
25°	1991	1994	2030	2048	2064	917
35°	1704	1718	1774	1812	1837	1066
45°	1378	1401	1473	1543	1584	1063
55°	1039	1070	1168	1263	1306	928
65°	692	733	855	968	1014	684
75°	351	416	557	622	622	373
85°	75	127	138	134	131	91
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2319.4	2319.4	2319.4	2319.4	2319.4
2.5°	2328.5	2310.4	2319.4	2317.2	2305.8
5°	2317.2	2301.3	2310.4	2308.1	2305.8
7.5°	2301.3	2285.5	2296.8	2294.5	2296.8
10°	2274.2	2260.6	2274.2	2276.4	2276.4
12.5°	2240.2	2228.9	2247.0	2251.5	2256.1
15°	2204.0	2195.0	2215.3	2224.4	2231.2
17.5°	2158.8	2152.0	2176.9	2188.2	2197.2
20°	2109.0	2106.7	2133.9	2145.2	2156.5
22.5°	2052.4	2052.4	2084.1	2097.7	2113.5
25°	1991.3	1993.6	2029.8	2047.9	2063.7
27.5°	1925.7	1927.9	1970.9	1993.6	2011.7
30°	1853.3	1862.3	1907.6	1937.0	1957.4
32.5°	1780.9	1792.2	1842.0	1875.9	1898.5
35°	1703.9	1717.5	1774.1	1812.5	1837.4
37.5°	1624.7	1640.6	1701.7	1744.7	1774.1
40°	1545.5	1563.6	1627.0	1676.8	1710.7
42.5°	1461.8	1482.2	1552.3	1611.1	1647.4
45°	1378.1	1400.7	1473.1	1543.3	1584.0
47.5°	1294.3	1321.5	1398.4	1475.4	1518.4
50°	1208.4	1235.5	1317.0	1405.2	1448.2
52.5°	1122.4	1154.1	1244.6	1335.1	1378.1
55°	1038.6	1070.3	1167.6	1262.7	1305.7
57.5°	952.7	984.3	1090.7	1190.3	1233.3
60°	864.4	900.6	1011.5	1113.3	1160.8
62.5°	778.4	816.9	934.6	1043.2	1088.4
65°	692.4	733.2	855.4	968.5	1013.8
67.5°	604.2	651.7	778.4	893.8	941.3
70°	518.2	570.2	703.7	819.1	864.4
72.5°	434.5	491.0	629.1	746.7	773.9
75°	350.7	416.4	556.7	622.3	622.3
77.5°	271.5	344.0	475.2	500.1	513.7
80°	196.9	276.1	357.5	386.9	382.4
82.5°	131.2	210.4	255.7	255.7	248.9
85°	74.7	126.7	138.0	133.5	131.2
87.5°	31.7	47.5	43.0	33.9	29.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)