

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: P388778

Luminaire Tested: **24CZ2-35VHE-UNV-L935-CD1-U**

Issue Date: 2/28/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P388778
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-35VHE-UNV-L935-CD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

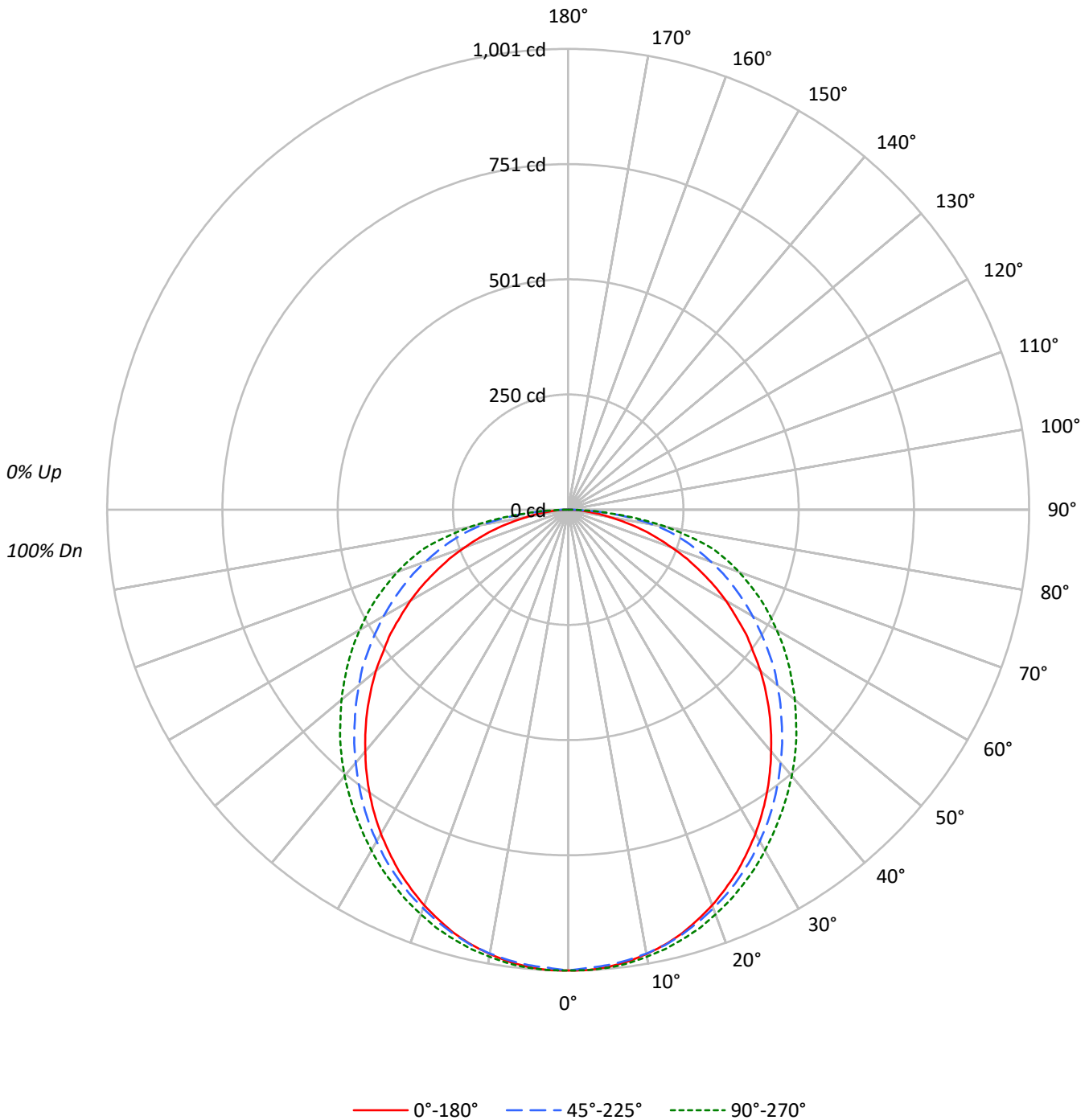
Lumens per Lamp: N/A
Luminaire Lumens: 2981.2 lumens
Efficiency: N/A
Efficacy: 130.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 22.8
Input Voltage (V): NR
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	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1347	1347	1347
5°	1346	1341	1349
10°	1339	1338	1347
15°	1328	1331	1344
20°	1309	1319	1339
25°	1288	1307	1334
30°	1263	1292	1328
35°	1236	1276	1324
40°	1204	1260	1326
45°	1174	1248	1333
50°	1141	1241	1345
55°	1106	1239	1370
60°	1063	1245	1406
65°	1007	1264	1467
70°	935	1295	1550
75°	854	1360	1681
80°	701	1464	1681
85°	537	1352	1443



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.7	3.2
10°-20°	270.3	9.1
20°-30°	406.7	13.6
30°-40°	487.4	16.3
40°-50°	507.9	17.0
50°-60°	472.5	15.9
60°-70°	389.2	13.1
70°-80°	265.1	8.9
80°-90°	87.5	2.9
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°	771.6	25.9
0°-40°	1259.0	42.2
0°-60°	2239.4	75.1
0°-90°	2981.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2981.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1001	1001	1001	1001	1001	
5°	997	997	993	998	999	95
15°	953	954	955	964	965	269
25°	868	872	880	896	898	399
35°	752	761	777	798	806	470
45°	617	630	656	688	700	476
55°	472	488	528	570	584	420
65°	316	343	397	444	461	314
75°	164	201	262	308	323	173
85°	35	68	88	94	94	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1000.9	1000.9	1000.9	1000.9	1000.9
2.5°	1000.9	1000.9	996.0	1000.9	1000.9
5°	996.9	996.9	993.0	997.9	998.9
7.5°	990.0	991.0	987.0	993.0	994.0
10°	980.0	981.0	979.0	985.0	986.0
12.5°	968.1	969.1	969.1	976.1	977.0
15°	953.2	954.2	955.2	964.1	965.1
17.5°	934.3	937.3	939.2	950.2	952.2
20°	914.4	917.4	921.3	933.3	935.3
22.5°	891.5	895.5	902.4	915.4	918.3
25°	867.6	871.6	880.5	895.5	898.4
27.5°	840.7	846.7	857.7	873.6	877.6
30°	812.9	818.9	831.8	848.7	854.7
32.5°	783.0	791.0	805.9	824.8	830.8
35°	752.2	761.1	777.1	798.0	805.9
37.5°	719.4	729.3	748.2	771.1	781.0
40°	685.5	697.5	717.4	744.2	755.2
42.5°	651.7	662.6	687.5	716.4	728.3
45°	616.9	629.8	655.7	688.5	700.5
47.5°	581.1	594.0	624.8	659.7	670.6
50°	545.2	558.2	593.0	629.8	642.7
52.5°	506.4	523.3	563.1	600.0	612.9
55°	471.6	487.5	528.3	570.1	584.0
57.5°	431.8	450.7	495.5	539.3	554.2
60°	395.0	414.9	462.7	507.4	522.4
62.5°	357.2	379.1	429.8	475.6	492.5
65°	316.4	343.3	397.0	443.8	460.7
67.5°	279.6	307.4	364.2	411.9	426.8
70°	237.8	271.6	329.3	377.1	394.0
72.5°	202.0	235.8	296.5	343.3	360.2
75°	164.2	201.0	261.7	308.4	323.4
77.5°	126.4	167.2	227.8	263.7	268.6
80°	90.5	133.3	189.0	209.9	216.9
82.5°	63.7	102.5	139.3	153.2	157.2
85°	34.8	67.7	87.6	93.5	93.5
87.5°	14.9	28.9	34.8	35.8	36.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)