

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: P388782

Luminaire Tested: **24CZ2-35VHE-UNV-L950-CD1-SDWPD1-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: P388782
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-L950-CD1-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3119.3 lumens
Efficiency: N/A
Efficacy: 136.8 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

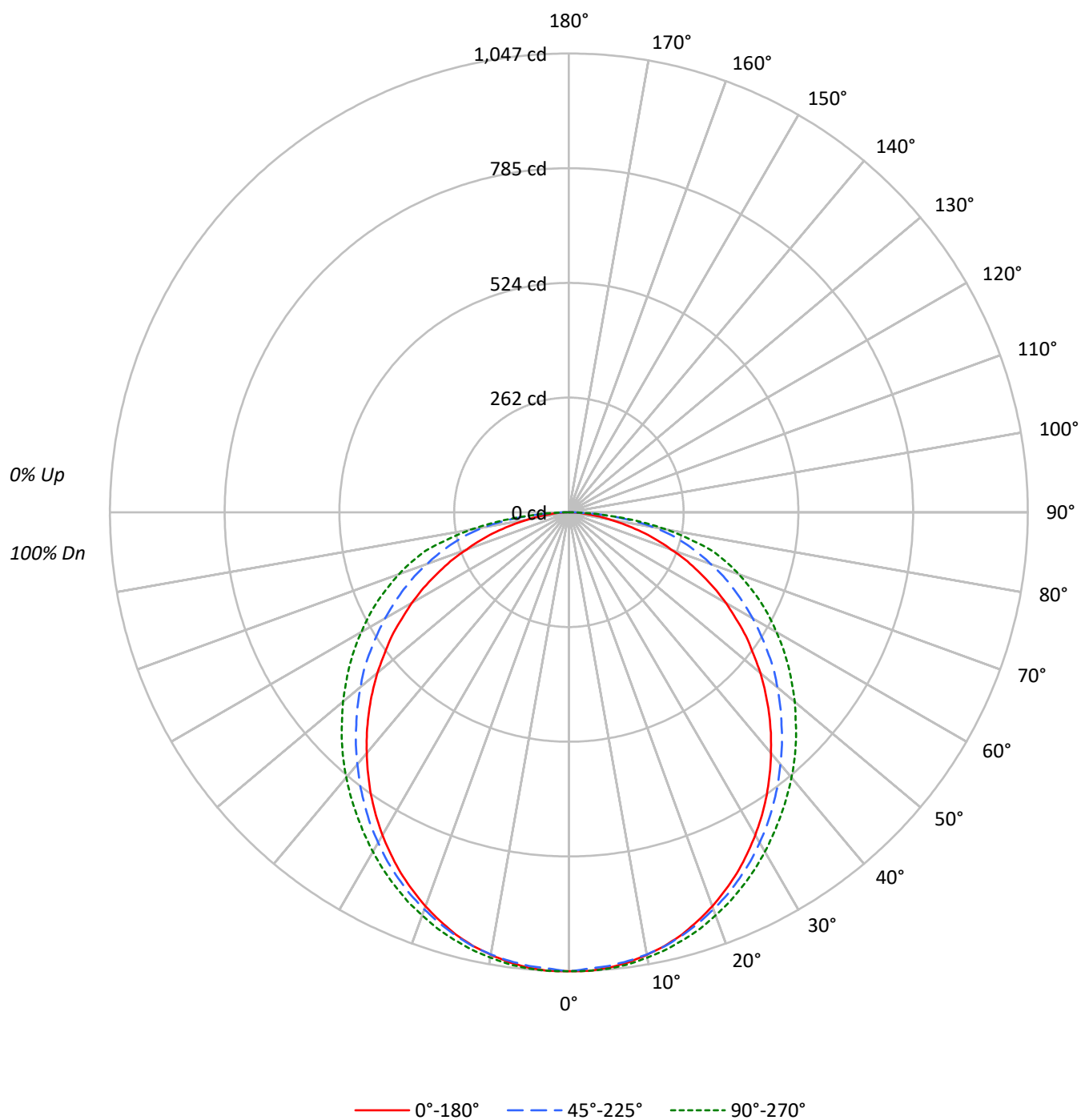
Input Watts (W): 22.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	108	103	98	94	105	100	96	92	96	93	89		92	89	87		82
2	98	89	82	76	95	87	80	75	83	78	73		80	75	71		67
3	89	78	69	62	86	76	68	62	73	66	61		70	64	60		56
4	81	69	59	52	79	67	59	52	65	57	51		62	56	51		48
5	74	61	52	45	72	60	51	45	58	50	44		56	49	44		41
6	69	55	46	39	67	54	45	39	52	44	39		50	44	38		36
7	64	50	41	35	62	49	40	34	47	40	34		46	39	34		32
8	59	45	37	31	58	45	36	31	43	36	30		42	35	30		28
9	55	42	33	28	54	41	33	28	40	33	27		39	32	27		25
10	52	38	30	25	51	38	30	25	37	30	25		36	29	25		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1409	1409	1409
5°	1409	1403	1412
10°	1401	1400	1410
15°	1389	1392	1407
20°	1370	1380	1401
25°	1348	1368	1396
30°	1321	1352	1389
35°	1293	1336	1385
40°	1260	1318	1388
45°	1228	1306	1395
50°	1194	1299	1408
55°	1158	1297	1434
60°	1112	1303	1471
65°	1054	1323	1535
70°	979	1356	1622
75°	893	1423	1759
80°	734	1533	1758
85°	562	1414	1511



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.0	3.2
10°-20°	282.8	9.1
20°-30°	425.5	13.6
30°-40°	510.0	16.3
40°-50°	531.4	17.0
50°-60°	494.4	15.9
60°-70°	407.2	13.1
70°-80°	277.3	8.9
80°-90°	91.6	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°	807.4	25.9
0°-40°	1317.3	42.2
0°-60°	2343.2	75.1
0°-90°	3119.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3119.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1047	1047	1047	1047	1047	
5°	1043	1043	1039	1044	1045	99
15°	997	998	999	1009	1010	281
25°	908	912	921	937	940	418
35°	787	796	813	835	843	492
45°	645	659	686	720	733	498
55°	494	510	553	596	611	440
65°	331	359	415	464	482	329
75°	172	210	274	323	338	181
85°	36	71	92	98	98	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1047.3	1047.3	1047.3	1047.3	1047.3
2.5°	1047.3	1047.3	1042.1	1047.3	1047.3
5°	1043.1	1043.1	1039.0	1044.2	1045.2
7.5°	1035.8	1036.9	1032.7	1039.0	1040.0
10°	1025.4	1026.5	1024.4	1030.6	1031.7
12.5°	1012.9	1014.0	1014.0	1021.3	1022.3
15°	997.3	998.4	999.4	1008.8	1009.8
17.5°	977.5	980.7	982.7	994.2	996.3
20°	956.7	959.8	964.0	976.5	978.6
22.5°	932.8	936.9	944.2	957.8	960.9
25°	907.8	912.0	921.3	936.9	940.1
27.5°	879.7	885.9	897.4	914.0	918.2
30°	850.5	856.8	870.3	888.0	894.3
32.5°	819.3	827.6	843.2	863.0	869.3
35°	787.0	796.4	813.1	834.9	843.2
37.5°	752.7	763.1	782.9	806.8	817.2
40°	717.3	729.8	750.6	778.7	790.2
42.5°	681.9	693.3	719.4	749.6	762.0
45°	645.4	659.0	686.1	720.4	732.9
47.5°	608.0	621.5	653.8	690.2	701.7
50°	570.5	584.0	620.5	659.0	672.5
52.5°	529.9	547.6	589.2	627.8	641.3
55°	493.5	510.1	552.8	596.5	611.1
57.5°	451.8	471.6	518.4	564.2	579.9
60°	413.3	434.1	484.1	530.9	546.6
62.5°	373.7	396.6	449.7	497.6	515.3
65°	331.1	359.2	415.4	464.3	482.0
67.5°	292.5	321.7	381.0	431.0	446.6
70°	248.8	284.2	344.6	394.6	412.3
72.5°	211.3	246.7	310.2	359.2	376.9
75°	171.8	210.3	273.8	322.7	338.3
77.5°	132.2	174.9	238.4	275.9	281.1
80°	94.7	139.5	197.8	219.7	226.9
82.5°	66.6	107.2	145.7	160.3	164.5
85°	36.4	70.8	91.6	97.9	97.9
87.5°	15.6	30.2	36.4	37.5	38.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)