

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: P388784

Luminaire Tested: **24CZ2-35VHE-UNV-L950-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: P388784
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-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

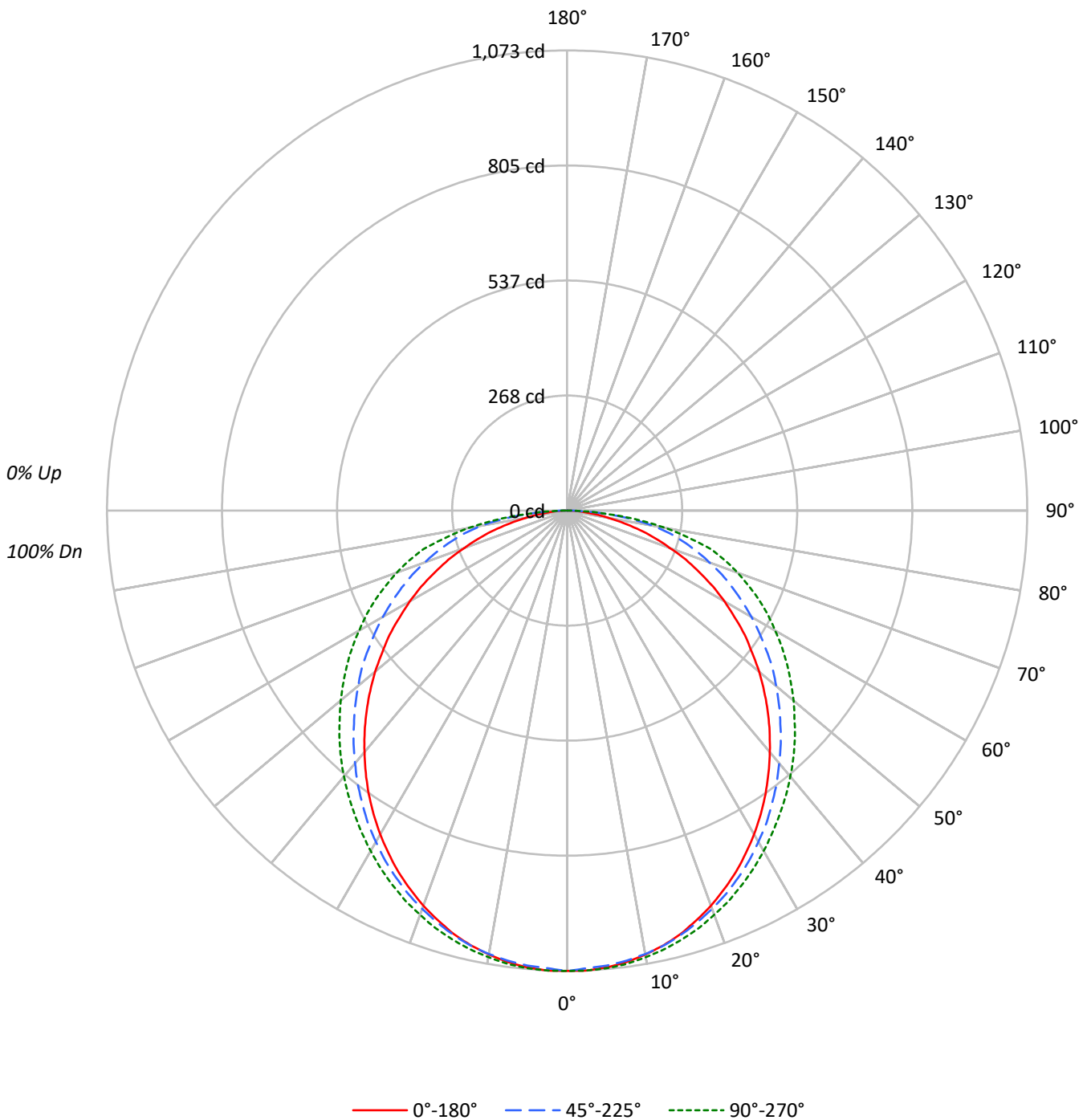
Lumens per Lamp: N/A
Luminaire Lumens: 3197.0 lumens
Efficiency: N/A
Efficacy: 140.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	1444	1444	1444
5°	1444	1438	1447
10°	1436	1434	1445
15°	1424	1427	1442
20°	1404	1415	1436
25°	1381	1402	1430
30°	1354	1386	1424
35°	1325	1369	1420
40°	1291	1351	1422
45°	1259	1338	1429
50°	1224	1331	1443
55°	1186	1329	1469
60°	1140	1335	1507
65°	1080	1355	1573
70°	1003	1389	1662
75°	915	1459	1803
80°	752	1571	1802
85°	576	1450	1548



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.5	3.2
10°-20°	289.8	9.1
20°-30°	436.1	13.6
30°-40°	522.7	16.3
40°-50°	544.7	17.0
50°-60°	506.7	15.9
60°-70°	417.4	13.1
70°-80°	284.3	8.9
80°-90°	93.8	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°	827.5	25.9
0°-40°	1350.1	42.2
0°-60°	2401.5	75.1
0°-90°	3197.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3197.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1073	1073	1073	1073	1073	
5°	1069	1069	1065	1070	1071	101
15°	1022	1023	1024	1034	1035	288
25°	930	935	944	960	964	428
35°	807	816	833	856	864	504
45°	662	675	703	738	751	510
55°	506	523	567	611	626	451
65°	339	368	426	476	494	337
75°	176	216	281	331	347	186
85°	37	73	94	100	100	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1073.4	1073.4	1073.4	1073.4	1073.4
2.5°	1073.4	1073.4	1068.0	1073.4	1073.4
5°	1069.1	1069.1	1064.8	1070.2	1071.2
7.5°	1061.6	1062.7	1058.4	1064.8	1065.9
10°	1051.0	1052.0	1049.9	1056.3	1057.4
12.5°	1038.2	1039.2	1039.2	1046.7	1047.8
15°	1022.2	1023.2	1024.3	1033.9	1035.0
17.5°	1001.9	1005.1	1007.2	1019.0	1021.1
20°	980.6	983.8	988.0	1000.8	1003.0
22.5°	956.0	960.3	967.8	981.6	984.8
25°	930.4	934.7	944.3	960.3	963.5
27.5°	901.6	908.0	919.7	936.8	941.1
30°	871.7	878.1	892.0	910.1	916.5
32.5°	839.7	848.2	864.3	884.5	890.9
35°	806.6	816.2	833.3	855.7	864.3
37.5°	771.4	782.1	802.4	826.9	837.6
40°	735.1	748.0	769.3	798.1	809.8
42.5°	698.9	710.6	737.3	768.2	781.0
45°	661.5	675.4	703.1	738.3	751.2
47.5°	623.1	637.0	670.1	707.4	719.1
50°	584.7	598.6	635.9	675.4	689.3
52.5°	543.1	561.2	603.9	643.4	657.3
55°	505.7	522.8	566.6	611.4	626.3
57.5°	463.1	483.3	531.4	578.3	594.3
60°	423.6	444.9	496.1	544.2	560.2
62.5°	383.0	406.5	460.9	510.0	528.2
65°	339.3	368.1	425.7	475.9	494.0
67.5°	299.8	329.7	390.5	441.7	457.7
70°	255.0	291.3	353.2	404.4	422.5
72.5°	216.6	252.9	318.0	368.1	386.2
75°	176.1	215.5	280.6	330.8	346.8
77.5°	135.5	179.3	244.3	282.7	288.1
80°	97.1	143.0	202.7	225.1	232.6
82.5°	68.3	109.9	149.4	164.3	168.6
85°	37.3	72.6	93.9	100.3	100.3
87.5°	16.0	30.9	37.3	38.4	39.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)