

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: P388808

Luminaire Tested: **24CZ2-40VHE-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: P388808
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: 24CZ2-40VHE-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

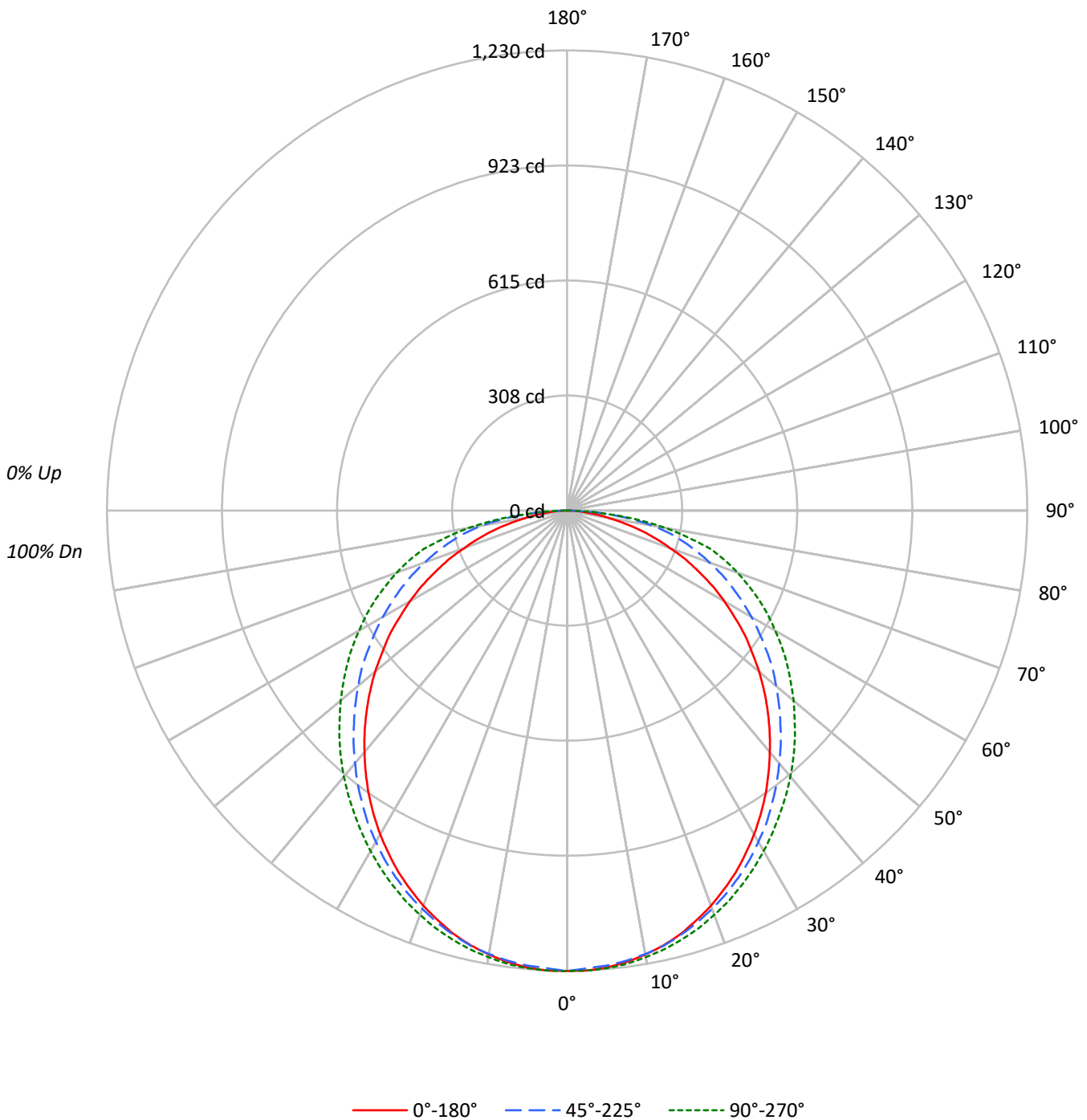
Lumens per Lamp: N/A
Luminaire Lumens: 3664.9 lumens
Efficiency: N/A
Efficacy: 139.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 26.2
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°	1656	1656	1656
5°	1655	1649	1659
10°	1646	1644	1656
15°	1632	1636	1653
20°	1610	1622	1646
25°	1583	1607	1640
30°	1553	1589	1632
35°	1519	1569	1627
40°	1480	1549	1631
45°	1443	1534	1639
50°	1403	1526	1654
55°	1360	1524	1684
60°	1307	1531	1728
65°	1238	1554	1803
70°	1150	1593	1906
75°	1049	1672	2066
80°	862	1801	2066
85°	661	1661	1775



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.4	3.2
10°-20°	332.2	9.1
20°-30°	500.0	13.6
30°-40°	599.2	16.3
40°-50°	624.4	17.0
50°-60°	580.9	15.9
60°-70°	478.5	13.1
70°-80°	325.9	8.9
80°-90°	107.6	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°	948.6	25.9
0°-40°	1547.7	42.2
0°-60°	2753.0	75.1
0°-90°	3664.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3664.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1230	1230	1230	1230	1230	
5°	1226	1226	1221	1227	1228	116
15°	1172	1173	1174	1185	1186	330
25°	1067	1072	1082	1101	1104	491
35°	925	936	955	981	991	578
45°	758	774	806	846	861	585
55°	580	599	650	701	718	517
65°	389	422	488	546	566	386
75°	202	247	322	379	398	213
85°	43	83	108	115	115	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1230.5	1230.5	1230.5	1230.5	1230.5
2.5°	1230.5	1230.5	1224.4	1230.5	1230.5
5°	1225.6	1225.6	1220.7	1226.8	1228.0
7.5°	1217.0	1218.2	1213.4	1220.7	1221.9
10°	1204.8	1206.0	1203.6	1210.9	1212.1
12.5°	1190.1	1191.3	1191.3	1199.9	1201.1
15°	1171.8	1173.0	1174.2	1185.2	1186.4
17.5°	1148.5	1152.2	1154.6	1168.1	1170.5
20°	1124.1	1127.7	1132.6	1147.3	1149.8
22.5°	1095.9	1100.8	1109.4	1125.3	1129.0
25°	1066.6	1071.5	1082.5	1100.8	1104.5
27.5°	1033.6	1040.9	1054.3	1073.9	1078.8
30°	999.3	1006.6	1022.5	1043.3	1050.7
32.5°	962.6	972.4	990.7	1014.0	1021.3
35°	924.7	935.7	955.3	981.0	990.7
37.5°	884.3	896.6	919.8	947.9	960.2
40°	842.7	857.4	881.9	914.9	928.4
42.5°	801.2	814.6	845.2	880.7	895.3
45°	758.3	774.2	806.0	846.4	861.1
47.5°	714.3	730.2	768.1	810.9	824.4
50°	670.3	686.2	729.0	774.2	790.1
52.5°	622.6	643.4	692.3	737.6	753.5
55°	579.8	599.3	649.5	700.9	718.0
57.5°	530.8	554.1	609.1	662.9	681.3
60°	485.6	510.0	568.8	623.8	642.1
62.5°	439.1	466.0	528.4	584.7	605.5
65°	389.0	422.0	488.0	545.5	566.3
67.5°	343.7	377.9	447.7	506.4	524.7
70°	292.3	333.9	404.9	463.6	484.4
72.5°	248.3	289.9	364.5	422.0	442.8
75°	201.8	247.1	321.7	379.2	397.5
77.5°	155.3	205.5	280.1	324.1	330.2
80°	111.3	163.9	232.4	258.1	266.6
82.5°	78.3	126.0	171.2	188.4	193.3
85°	42.8	83.2	107.6	115.0	115.0
87.5°	18.3	35.5	42.8	44.0	45.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)