

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: P388569

Luminaire Tested: **24CZ2-35HE-SQR-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: P388569
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2002-678-2)
Test Lab: INNOVATION CENTER (G2)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-35HE-SQR-UNV-L950-CD1-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3044.1 lumens
Efficiency: N/A
Efficacy: 113.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.33 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

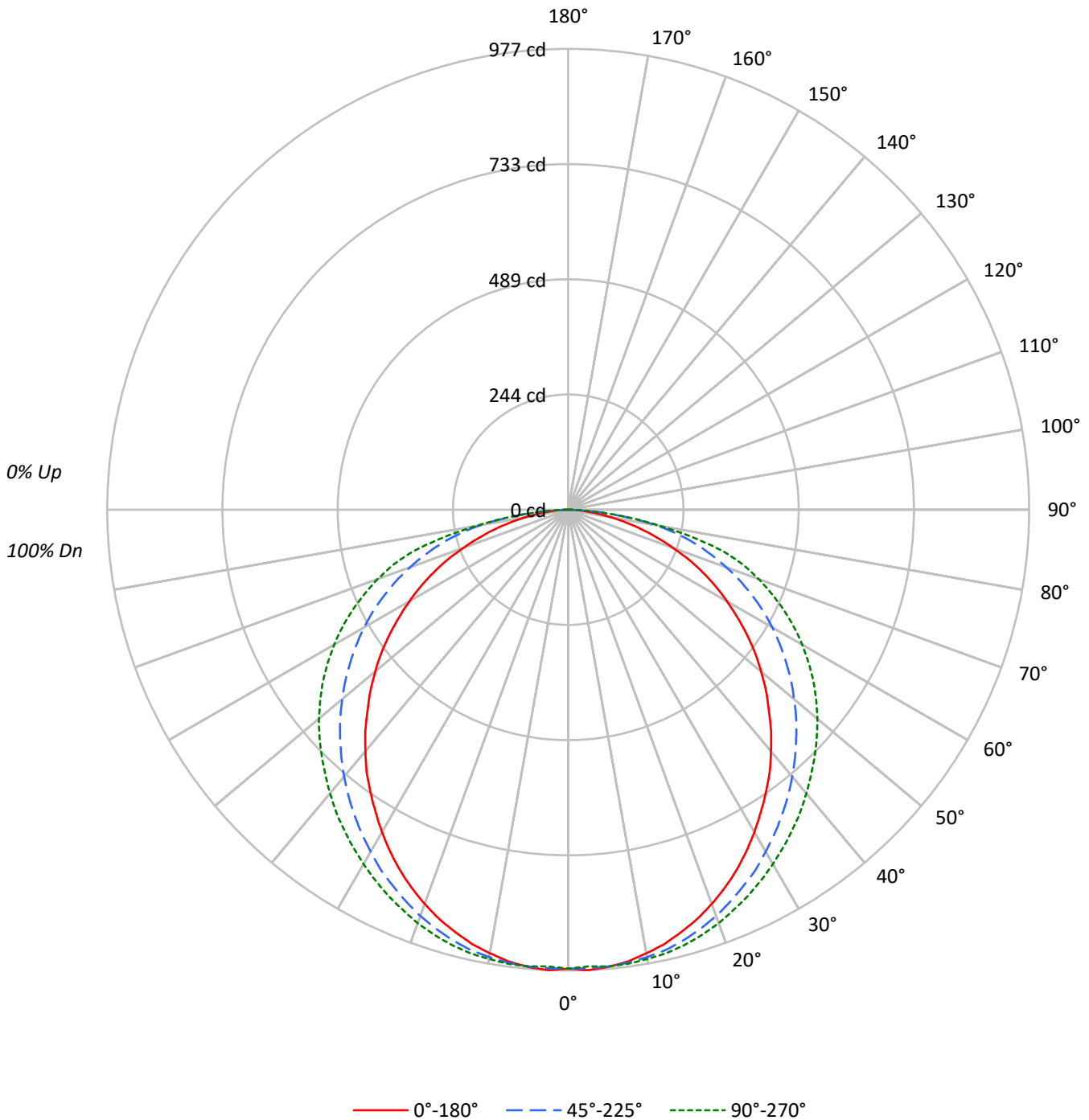
Input Watts (W): 26.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	81	75	95	87	80	74	83	78	73	80	75	71	77	73	69	67
3	89	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	52	64	57	51	62	55	50	60	54	49	47
5	74	61	51	44	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	30	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	52	38	30	25	50	37	30	24	36	29	24	36	29	24	35	29	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1309	1309	1309
5°	1314	1313	1313
10°	1305	1316	1321
15°	1291	1316	1330
20°	1274	1313	1336
25°	1252	1306	1340
30°	1226	1301	1348
35°	1200	1298	1361
40°	1174	1298	1379
45°	1144	1301	1406
50°	1117	1309	1443
55°	1085	1323	1488
60°	1047	1344	1542
65°	1002	1370	1606
70°	929	1404	1688
75°	841	1452	1766
80°	709	1457	1519
85°	543	1102	1102



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.4	3.0
10°-20°	265.7	8.7
20°-30°	403.6	13.3
30°-40°	491.0	16.1
40°-50°	522.7	17.2
50°-60°	497.9	16.4
60°-70°	416.4	13.7
70°-80°	277.6	9.1
80°-90°	76.8	2.5
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°	761.7	25.0
0°-40°	1252.7	41.2
0°-60°	2273.3	74.7
0°-90°	3044.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3044.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	973	973	973	973	973	
5°	973	967	972	972	972	92
15°	927	929	945	952	955	261
25°	843	854	880	895	903	388
35°	731	752	790	816	828	457
45°	601	633	684	722	739	465
55°	462	503	564	613	634	413
65°	315	361	430	484	505	311
75°	162	213	279	327	340	171
85°	35	65	71	70	71	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	973.0	973.0	973.0	973.0	973.0
2.5°	977.1	970.0	973.0	973.0	969.0
5°	973.0	967.0	972.0	972.0	972.0
7.5°	966.0	961.0	969.0	971.0	971.0
10°	954.9	952.9	963.0	966.0	967.0
12.5°	942.9	941.9	956.0	960.0	963.0
15°	926.8	928.8	944.9	951.9	954.9
17.5°	909.7	913.7	931.8	941.9	944.9
20°	889.6	895.6	916.8	926.8	932.8
22.5°	867.5	876.5	898.7	910.7	917.8
25°	843.4	854.4	879.6	894.6	902.7
27.5°	817.2	831.3	860.5	877.5	885.6
30°	789.1	805.2	837.3	857.4	867.5
32.5°	759.9	779.0	814.2	836.3	848.4
35°	730.8	751.9	790.1	816.2	828.3
37.5°	701.6	722.7	765.0	793.1	808.2
40°	668.5	693.6	738.8	770.0	785.1
42.5°	636.3	663.4	711.7	745.9	761.9
45°	601.1	633.3	683.5	721.7	738.8
47.5°	568.9	601.1	655.4	695.6	714.7
50°	533.8	567.9	625.2	669.5	689.6
52.5°	499.6	534.8	595.1	642.3	662.4
55°	462.4	502.6	563.9	613.2	634.3
57.5°	425.2	468.4	531.8	583.0	604.1
60°	389.0	433.2	499.6	550.9	573.0
62.5°	352.8	397.1	466.4	518.7	539.8
65°	314.6	360.9	430.2	483.5	504.6
67.5°	276.4	324.7	394.0	447.3	467.4
70°	236.2	287.5	356.8	409.1	429.2
72.5°	199.0	250.3	318.7	369.9	389.0
75°	161.8	213.1	279.4	326.7	339.8
77.5°	125.7	176.9	236.2	267.4	270.4
80°	91.5	139.7	188.0	197.0	196.0
82.5°	61.3	104.5	129.7	130.7	133.7
85°	35.2	65.3	71.4	70.4	71.4
87.5°	14.1	23.1	20.1	15.1	15.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)