

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: P388595

Luminaire Tested: **24CZ2-35VHE-SQR-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: P388595
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: 24CZ2-35VHE-SQR-UNV-L950-CD1-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: 3070.4 lumens
Efficiency: N/A
Efficacy: 134.7 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

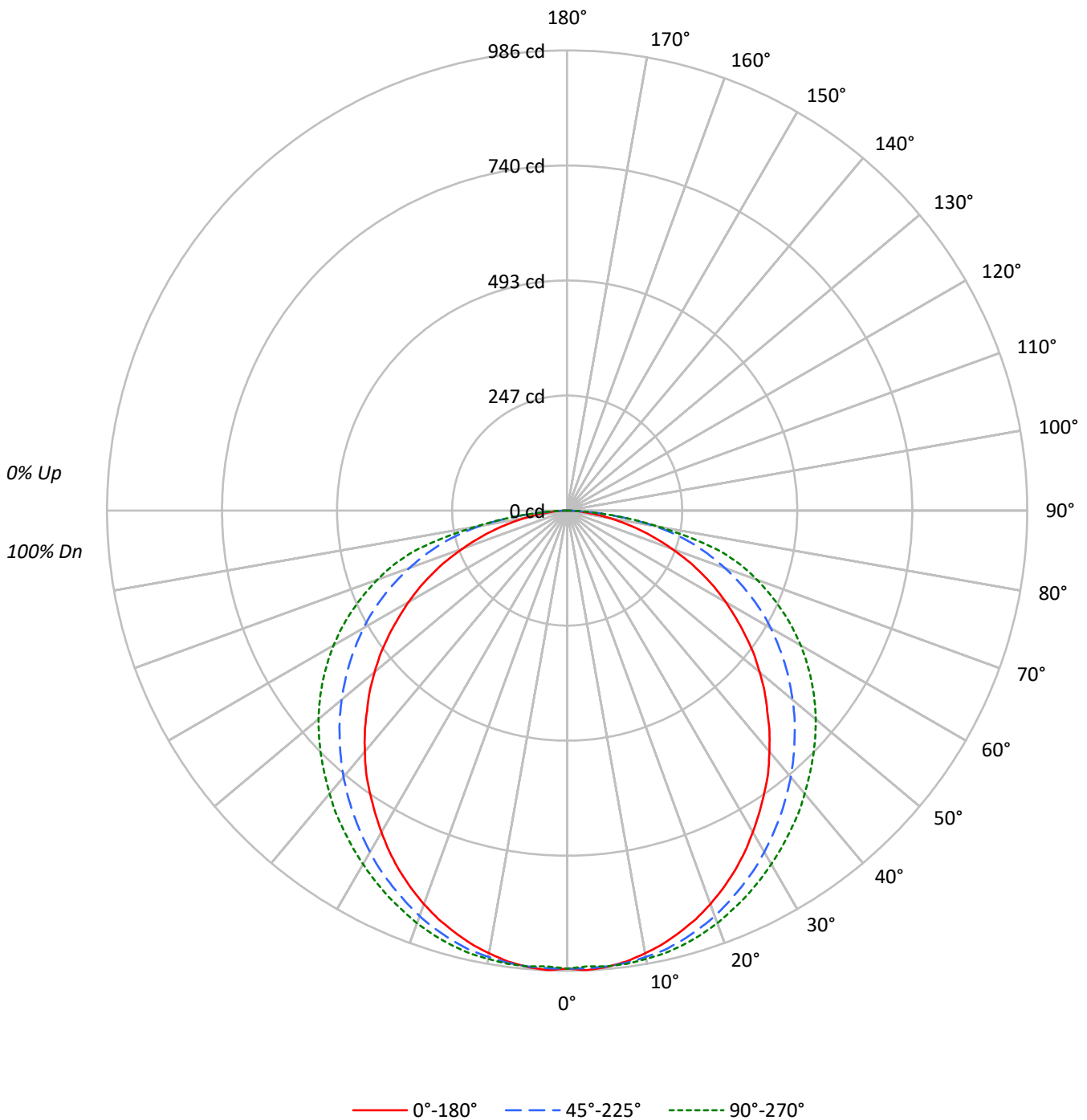
Input Watts (W): 22.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1320	1320	1320
5°	1326	1324	1324
10°	1316	1327	1333
15°	1302	1328	1342
20°	1285	1324	1347
25°	1263	1317	1352
30°	1237	1312	1359
35°	1211	1309	1372
40°	1184	1309	1391
45°	1154	1312	1418
50°	1127	1320	1456
55°	1094	1334	1501
60°	1056	1356	1555
65°	1010	1381	1621
70°	937	1416	1703
75°	848	1465	1782
80°	715	1469	1532
85°	548	1112	1112



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.2	3.0
10°-20°	268.0	8.7
20°-30°	407.1	13.3
30°-40°	495.2	16.1
40°-50°	527.2	17.2
50°-60°	502.2	16.4
60°-70°	420.0	13.7
70°-80°	280.0	9.1
80°-90°	77.5	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°	768.3	25.0
0°-40°	1263.6	41.2
0°-60°	2293.0	74.7
0°-90°	3070.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3070.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	981	981	981	981	981	
5°	981	975	980	980	980	93
15°	935	937	953	960	963	264
25°	851	862	887	902	910	392
35°	737	758	797	823	835	461
45°	606	639	689	728	745	469
55°	466	507	569	618	640	417
65°	317	364	434	488	509	314
75°	163	215	282	330	343	173
85°	36	66	72	71	72	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	981.4	981.4	981.4	981.4	981.4
2.5°	985.5	978.4	981.4	981.4	977.4
5°	981.4	975.4	980.4	980.4	980.4
7.5°	974.4	969.3	977.4	979.4	979.4
10°	963.2	961.2	971.3	974.4	975.4
12.5°	951.0	950.0	964.2	968.3	971.3
15°	934.8	936.8	953.1	960.2	963.2
17.5°	917.6	921.6	939.9	950.0	953.1
20°	897.3	903.4	924.7	934.8	940.9
22.5°	875.0	884.1	906.4	918.6	925.7
25°	850.7	861.8	887.2	902.4	910.5
27.5°	824.3	838.5	867.9	885.1	893.2
30°	795.9	812.1	844.6	864.9	875.0
32.5°	766.5	785.8	821.3	843.6	855.7
35°	737.1	758.4	796.9	823.3	835.4
37.5°	707.7	729.0	771.6	800.0	815.2
40°	674.2	699.6	745.2	776.6	791.9
42.5°	641.8	669.2	717.8	752.3	768.5
45°	606.3	638.8	689.4	728.0	745.2
47.5°	573.9	606.3	661.1	701.6	720.9
50°	538.4	572.9	630.6	675.3	695.5
52.5°	503.9	539.4	600.2	647.9	668.2
55°	466.4	506.9	568.8	618.5	639.8
57.5°	428.9	472.5	536.3	588.1	609.4
60°	392.4	437.0	503.9	555.6	577.9
62.5°	355.9	400.5	470.4	523.2	544.5
65°	317.3	364.0	433.9	487.7	509.0
67.5°	278.8	327.5	397.4	451.2	471.5
70°	238.3	290.0	359.9	412.7	432.9
72.5°	200.8	252.5	321.4	373.1	392.4
75°	163.2	214.9	281.9	329.5	342.7
77.5°	126.7	178.4	238.3	269.7	272.7
80°	92.3	140.9	189.6	198.7	197.7
82.5°	61.8	105.4	130.8	131.8	134.8
85°	35.5	65.9	72.0	71.0	72.0
87.5°	14.2	23.3	20.3	15.2	15.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)