

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: P388589

Luminaire Tested: **24CZ2-35VHE-SQR-UNV-L935-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: P388589
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-L935-CD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2863.1 lumens
Efficiency: N/A
Efficacy: 125.6 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

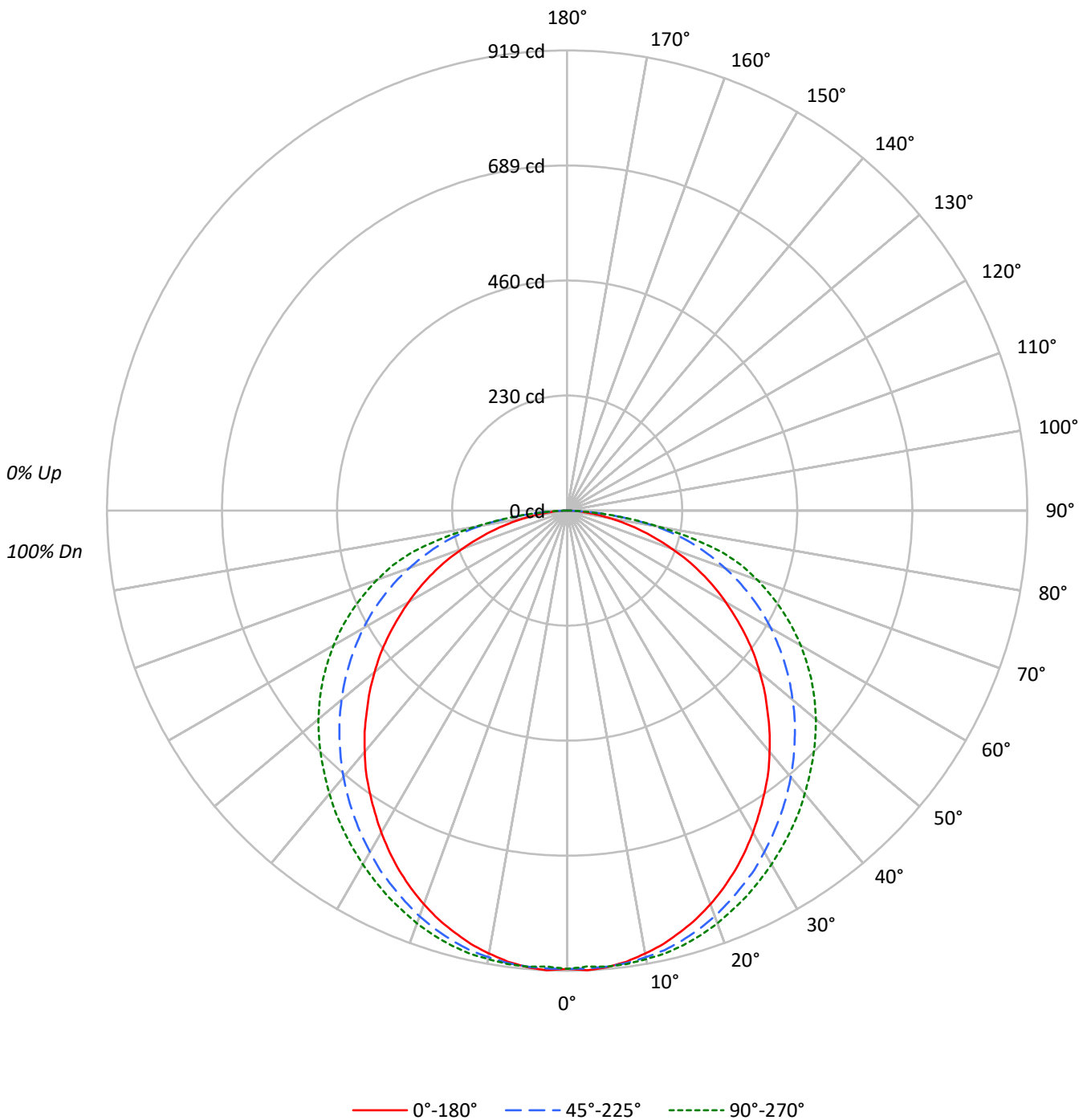
Input Watts (W): 22.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1231	1231	1231
5°	1236	1235	1235
10°	1227	1237	1243
15°	1214	1238	1251
20°	1198	1235	1256
25°	1178	1228	1260
30°	1153	1224	1268
35°	1129	1221	1280
40°	1104	1221	1297
45°	1076	1223	1322
50°	1051	1231	1358
55°	1020	1244	1399
60°	985	1264	1450
65°	942	1288	1511
70°	874	1320	1588
75°	791	1366	1661
80°	666	1370	1429
85°	511	1036	1036



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.9	3.0
10°-20°	249.9	8.7
20°-30°	379.6	13.3
30°-40°	461.8	16.1
40°-50°	491.6	17.2
50°-60°	468.3	16.4
60°-70°	391.6	13.7
70°-80°	261.1	9.1
80°-90°	72.2	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°	716.5	25.0
0°-40°	1178.2	41.2
0°-60°	2138.2	74.7
0°-90°	2863.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2863.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	915	915	915	915	915	
5°	915	910	914	914	914	87
15°	872	874	889	895	898	246
25°	793	804	827	841	849	365
35°	687	707	743	768	779	430
45°	565	596	643	679	695	437
55°	435	473	530	577	597	389
65°	296	339	405	455	475	292
75°	152	200	263	307	320	161
85°	33	62	67	66	67	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	915.2	915.2	915.2	915.2	915.2
2.5°	919.0	912.3	915.2	915.2	911.4
5°	915.2	909.5	914.2	914.2	914.2
7.5°	908.6	903.8	911.4	913.3	913.3
10°	898.2	896.3	905.7	908.6	909.5
12.5°	886.8	885.9	899.1	902.9	905.7
15°	871.7	873.6	888.7	895.3	898.2
17.5°	855.6	859.4	876.4	885.9	888.7
20°	836.7	842.4	862.2	871.7	877.4
22.5°	815.9	824.4	845.2	856.6	863.2
25°	793.2	803.6	827.3	841.4	849.0
27.5°	768.6	781.9	809.3	825.4	832.9
30°	742.2	757.3	787.6	806.5	815.9
32.5°	714.8	732.7	765.8	786.6	798.0
35°	687.3	707.2	743.1	767.7	779.0
37.5°	659.9	679.8	719.5	746.0	760.1
40°	628.7	652.4	694.9	724.2	738.4
42.5°	598.5	624.0	669.4	701.5	716.6
45°	565.4	595.6	642.9	678.8	694.9
47.5°	535.1	565.4	616.4	654.2	672.2
50°	502.0	534.2	588.1	629.7	648.6
52.5°	469.9	503.0	559.7	604.1	623.0
55°	434.9	472.7	530.4	576.7	596.6
57.5°	399.9	440.6	500.1	548.4	568.2
60°	365.9	407.5	469.9	518.1	538.9
62.5°	331.8	373.4	438.7	487.8	507.7
65°	295.9	339.4	404.6	454.8	474.6
67.5°	260.0	305.4	370.6	420.7	439.6
70°	222.2	270.4	335.6	384.8	403.7
72.5°	187.2	235.4	299.7	347.9	365.9
75°	152.2	200.4	262.8	307.3	319.6
77.5°	118.2	166.4	222.2	251.5	254.3
80°	86.0	131.4	176.8	185.3	184.4
82.5°	57.7	98.3	122.0	122.9	125.7
85°	33.1	61.5	67.1	66.2	67.1
87.5°	13.2	21.7	18.9	14.2	14.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)