

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: P388566

Luminaire Tested: **24CZ2-35HE-SQR-UNV-L940-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: P388566
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-L940-CD1-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2868.0 lumens
Efficiency: N/A
Efficacy: 106.6 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

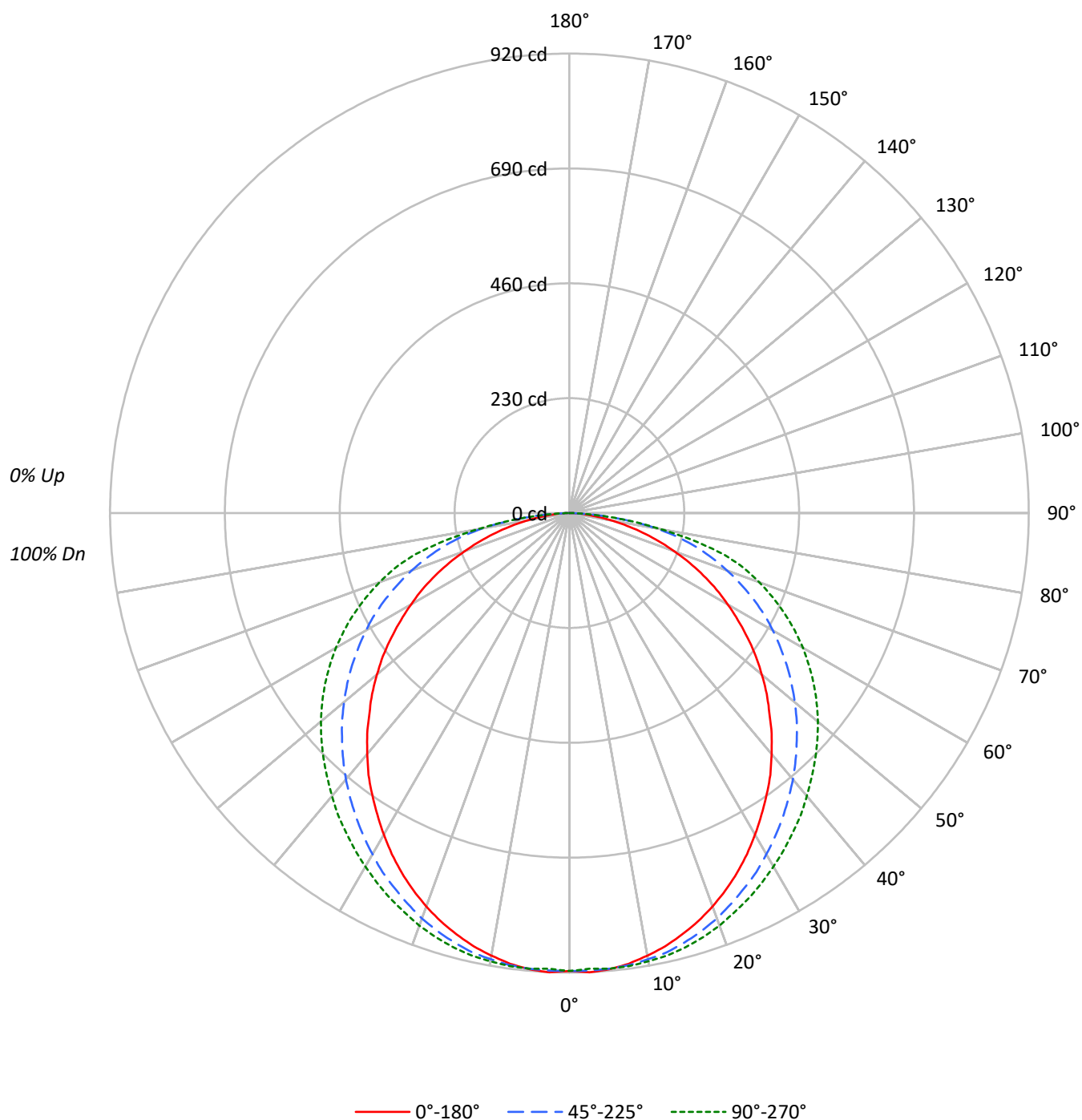
Input Watts (W): 26.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	108	103	98	94	105	100	96	92	96	93	89		92	89	87		82
2	98	89	81	75	95	87	80	74	83	78	73		80	75	71		67
3	89	77	69	62	86	76	68	61	73	66	60		70	64	59		56
4	81	68	59	52	78	67	58	52	64	57	51		62	55	50		47
5	74	61	51	44	72	60	51	44	57	50	44		55	49	43		41
6	68	55	45	39	66	54	45	38	52	44	38		50	43	38		35
7	63	49	40	34	62	49	40	34	47	39	34		45	39	33		31
8	59	45	36	30	57	44	36	30	43	35	30		42	35	30		28
9	55	41	33	27	54	41	33	27	39	32	27		38	32	27		25
10	52	38	30	25	50	37	30	24	36	29	24		36	29	24		22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1234	1234	1234
5°	1238	1237	1237
10°	1229	1240	1245
15°	1216	1240	1253
20°	1200	1237	1258
25°	1180	1230	1263
30°	1155	1226	1270
35°	1131	1223	1282
40°	1106	1223	1299
45°	1078	1225	1325
50°	1053	1233	1360
55°	1022	1246	1402
60°	986	1267	1453
65°	944	1290	1514
70°	876	1323	1591
75°	793	1369	1664
80°	668	1372	1431
85°	511	1037	1037



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.0	3.0
10°-20°	250.4	8.7
20°-30°	380.3	13.3
30°-40°	462.6	16.1
40°-50°	492.5	17.2
50°-60°	469.1	16.4
60°-70°	392.3	13.7
70°-80°	261.5	9.1
80°-90°	72.4	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°	717.7	25.0
0°-40°	1180.3	41.2
0°-60°	2141.8	74.7
0°-90°	2868.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2868.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	917	917	917	917	917	
5°	917	911	916	916	916	87
15°	873	875	890	897	900	246
25°	795	805	829	843	850	366
35°	688	708	744	769	780	431
45°	566	597	644	680	696	438
55°	436	474	531	578	598	389
65°	296	340	405	456	475	293
75°	152	201	263	308	320	162
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°	916.8	916.8	916.8	916.8	916.8
2.5°	920.5	913.9	916.8	916.8	913.0
5°	916.8	911.1	915.8	915.8	915.8
7.5°	910.1	905.4	913.0	914.9	914.9
10°	899.7	897.8	907.3	910.1	911.1
12.5°	888.3	887.4	900.7	904.4	907.3
15°	873.2	875.1	890.2	896.9	899.7
17.5°	857.1	860.9	877.9	887.4	890.2
20°	838.1	843.8	863.7	873.2	878.9
22.5°	817.3	825.8	846.7	858.0	864.7
25°	794.6	805.0	828.7	842.9	850.5
27.5°	770.0	783.2	810.7	826.8	834.4
30°	743.4	758.6	788.9	807.8	817.3
32.5°	716.0	734.0	767.1	788.0	799.3
35°	688.5	708.4	744.4	769.0	780.4
37.5°	661.0	680.9	720.7	747.2	761.4
40°	629.8	653.5	696.1	725.4	739.7
42.5°	599.5	625.1	670.5	702.7	717.9
45°	566.3	596.6	644.0	680.0	696.1
47.5°	536.0	566.3	617.5	655.4	673.4
50°	502.9	535.1	589.1	630.7	649.7
52.5°	470.7	503.8	560.7	605.2	624.1
55°	435.6	473.5	531.3	577.7	597.6
57.5°	400.6	441.3	501.0	549.3	569.2
60°	366.5	408.2	470.7	519.0	539.8
62.5°	332.4	374.1	439.4	488.7	508.6
65°	296.4	340.0	405.3	455.5	475.4
67.5°	260.4	305.9	371.2	421.4	440.4
70°	222.6	270.9	336.2	385.5	404.4
72.5°	187.5	235.8	300.2	348.5	366.5
75°	152.5	200.8	263.3	307.8	320.1
77.5°	118.4	166.7	222.6	251.9	254.8
80°	86.2	131.6	177.1	185.6	184.7
82.5°	57.8	98.5	122.2	123.1	126.0
85°	33.1	61.6	67.2	66.3	67.2
87.5°	13.3	21.8	18.9	14.2	14.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)