

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: P391318

Luminaire Tested: **24CZ2-40VHE-HRP-UNV-L930-CD1-SWPD1-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: P391318
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-40VHE-HRP-UNV-L930-CD1-SWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2795.7 lumens
Efficiency: N/A
Efficacy: 106.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

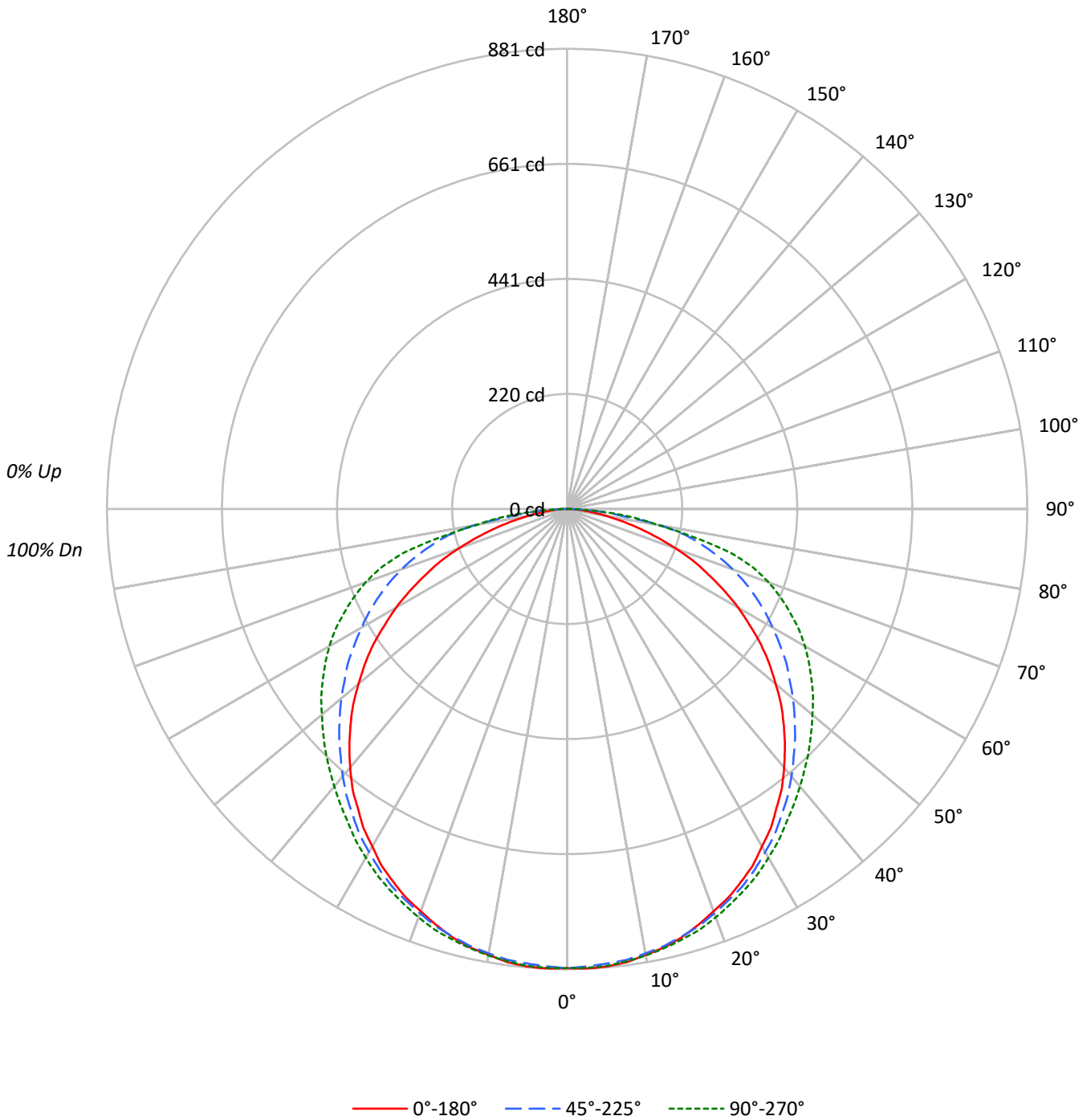
Input Watts (W): 26.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1183	1183	1183
5°	1187	1180	1186
10°	1184	1180	1186
15°	1182	1180	1188
20°	1173	1179	1191
25°	1169	1182	1194
30°	1159	1178	1198
35°	1148	1175	1203
40°	1135	1174	1218
45°	1116	1174	1245
50°	1091	1181	1283
55°	1064	1200	1340
60°	1019	1224	1414
65°	954	1267	1501
70°	867	1326	1615
75°	735	1398	1687
80°	580	1408	1364
85°	428	1070	1200



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.4	3.0
10°-20°	240.0	8.6
20°-30°	367.0	13.1
30°-40°	448.7	16.0
40°-50°	478.2	17.1
50°-60°	457.2	16.4
60°-70°	387.4	13.9
70°-80°	260.3	9.3
80°-90°	73.4	2.6
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°	690.4	24.7
0°-40°	1139.1	40.7
0°-60°	2074.6	74.2
0°-90°	2795.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2795.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	879	879	879	879	879	
5°	879	878	874	878	878	84
15°	849	849	847	854	853	239
25°	788	790	796	803	804	363
35°	699	704	716	729	732	438
45°	587	596	617	643	654	452
55°	454	470	512	552	571	404
65°	300	330	398	451	472	297
75°	141	193	269	315	324	151
85°	28	57	69	75	78	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	879.2	879.2	879.2	879.2	879.2
2.5°	880.6	880.6	876.4	879.2	879.2
5°	879.2	877.8	873.6	877.8	877.8
7.5°	875.0	873.6	870.8	875.0	873.6
10°	866.7	866.7	863.9	868.1	868.1
12.5°	859.8	858.4	857.0	862.5	861.1
15°	848.7	848.7	847.3	854.2	852.8
17.5°	834.8	836.2	837.6	843.1	844.5
20°	819.5	822.3	823.7	832.0	832.0
22.5°	805.7	807.1	809.8	818.2	818.2
25°	787.6	790.4	796.0	802.9	804.3
27.5°	769.6	771.0	777.9	787.6	789.0
30°	746.0	750.2	758.5	769.6	771.0
32.5°	725.2	729.4	739.1	750.2	753.0
35°	698.9	704.4	715.5	729.4	732.2
37.5°	675.3	679.5	693.4	708.6	712.8
40°	646.2	654.5	668.4	686.4	693.4
42.5°	617.1	625.4	642.0	665.6	673.9
45°	586.6	596.3	617.1	643.4	654.5
47.5°	556.1	567.2	590.7	621.2	633.7
50°	521.4	535.3	564.4	599.1	612.9
52.5°	488.1	504.8	536.7	575.5	593.5
55°	453.5	470.1	511.7	551.9	571.3
57.5°	414.6	436.8	482.6	528.3	549.1
60°	378.6	399.4	454.8	504.8	525.6
62.5°	339.7	367.5	427.1	479.8	500.6
65°	299.5	330.0	398.0	450.7	471.5
67.5°	263.5	296.8	368.9	421.6	442.4
70°	220.5	262.1	337.0	389.7	410.5
72.5°	180.3	226.0	303.7	355.0	374.4
75°	141.4	192.8	269.0	314.8	324.5
77.5°	105.4	159.5	233.0	252.4	245.4
80°	74.9	127.6	181.7	172.0	176.1
82.5°	48.5	97.1	112.3	127.6	131.7
85°	27.7	56.9	69.3	74.9	77.7
87.5°	12.5	20.8	27.7	27.7	26.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)