

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: P388758

Luminaire Tested: **24CZ2-30VHE-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: P388758
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-30VHE-UNV-L950-CD1-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2663.7 lumens
Efficiency: N/A
Efficacy: 130.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

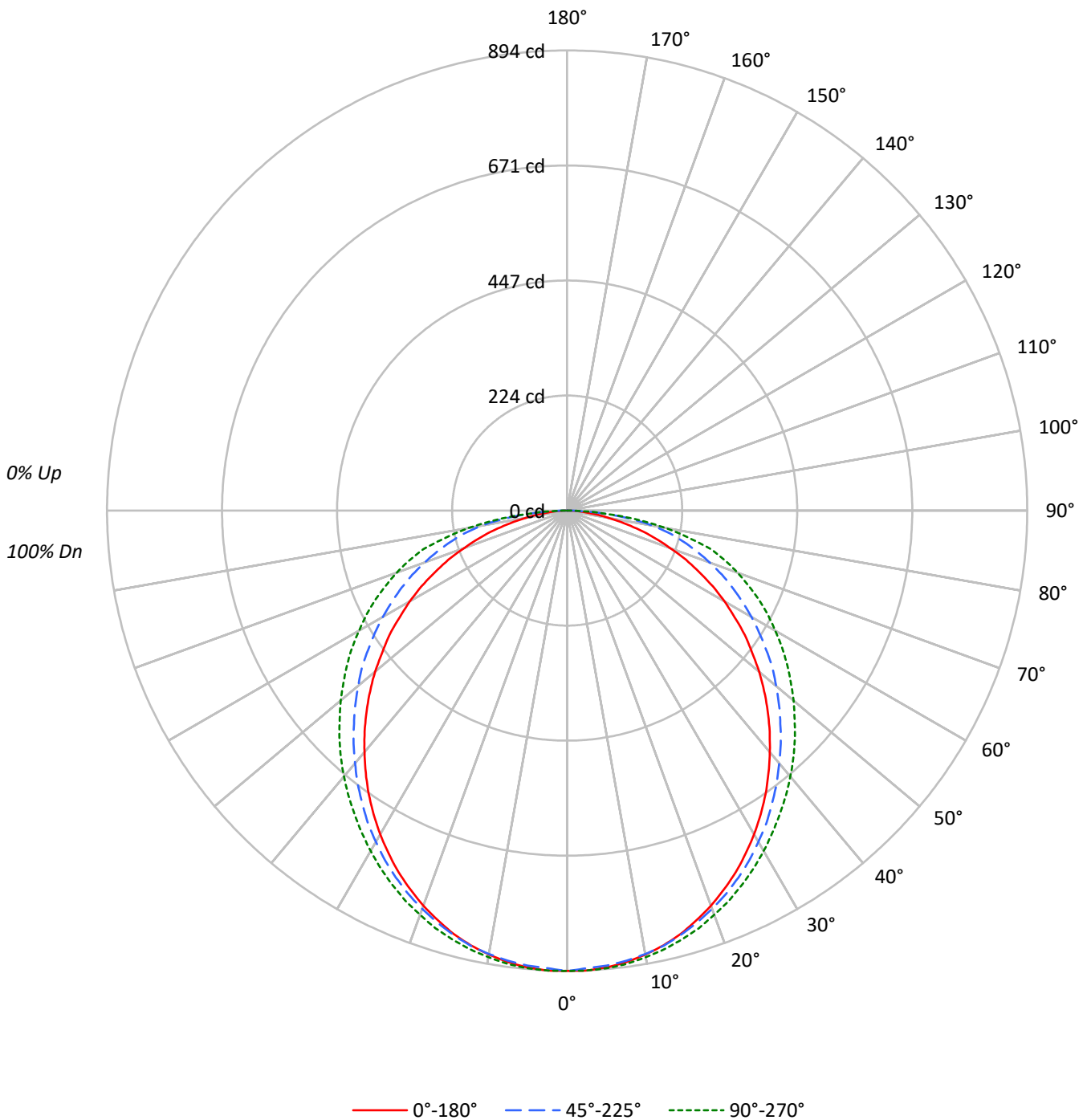
Input Watts (W): 20.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1203	1203	1203
5°	1203	1198	1205
10°	1196	1195	1204
15°	1186	1189	1201
20°	1170	1179	1197
25°	1151	1168	1192
30°	1128	1155	1186
35°	1104	1140	1183
40°	1076	1126	1185
45°	1049	1115	1191
50°	1020	1109	1202
55°	989	1107	1224
60°	950	1112	1256
65°	900	1129	1310
70°	836	1158	1385
75°	763	1215	1502
80°	627	1309	1502
85°	480	1207	1291



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.6	3.2
10°-20°	241.5	9.1
20°-30°	363.4	13.6
30°-40°	435.5	16.3
40°-50°	453.8	17.0
50°-60°	422.2	15.9
60°-70°	347.7	13.1
70°-80°	236.8	8.9
80°-90°	78.2	2.9
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°	689.4	25.9
0°-40°	1124.9	42.2
0°-60°	2000.9	75.1
0°-90°	2663.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2663.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	894	894	894	894	894	
5°	891	891	887	892	892	85
15°	852	852	853	861	862	240
25°	775	779	787	800	803	357
35°	672	680	694	713	720	420
45°	551	563	586	615	626	425
55°	421	436	472	509	522	376
65°	283	307	355	396	412	281
75°	147	180	234	276	289	155
85°	31	60	78	84	84	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	894.3	894.3	894.3	894.3	894.3
2.5°	894.3	894.3	889.9	894.3	894.3
5°	890.8	890.8	887.2	891.7	892.5
7.5°	884.5	885.4	881.9	887.2	888.1
10°	875.7	876.5	874.8	880.1	881.0
12.5°	865.0	865.9	865.9	872.1	873.0
15°	851.7	852.5	853.4	861.4	862.3
17.5°	834.8	837.4	839.2	849.0	850.8
20°	817.0	819.7	823.2	833.9	835.7
22.5°	796.5	800.1	806.3	817.9	820.5
25°	775.2	778.8	786.8	800.1	802.8
27.5°	751.2	756.5	766.3	780.5	784.1
30°	726.3	731.6	743.2	758.3	763.6
32.5°	699.6	706.8	720.1	737.0	742.3
35°	672.1	680.1	694.3	713.0	720.1
37.5°	642.7	651.6	668.5	689.0	697.9
40°	612.5	623.2	641.0	665.0	674.7
42.5°	582.3	592.1	614.3	640.1	650.7
45°	551.2	562.7	585.8	615.2	625.9
47.5°	519.2	530.7	558.3	589.4	599.2
50°	487.2	498.7	529.8	562.7	574.3
52.5°	452.5	467.6	503.2	536.1	547.6
55°	421.4	435.6	472.1	509.4	521.8
57.5°	385.8	402.7	442.7	481.8	495.2
60°	352.9	370.7	413.4	453.4	466.7
62.5°	319.1	338.7	384.0	424.9	440.1
65°	282.7	306.7	354.7	396.5	411.6
67.5°	249.8	274.7	325.4	368.0	381.4
70°	212.5	242.7	294.3	336.9	352.0
72.5°	180.5	210.7	264.9	306.7	321.8
75°	146.7	179.6	233.8	275.6	288.9
77.5°	112.9	149.4	203.6	235.6	240.0
80°	80.9	119.1	168.9	187.6	193.8
82.5°	56.9	91.6	124.5	136.9	140.5
85°	31.1	60.5	78.2	83.6	83.6
87.5°	13.3	25.8	31.1	32.0	32.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)