

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: P390464

Luminaire Tested: **22CZ2-55VHE-HRP-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: P390464
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-55VHE-HRP-UNV-L950-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4256.1 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

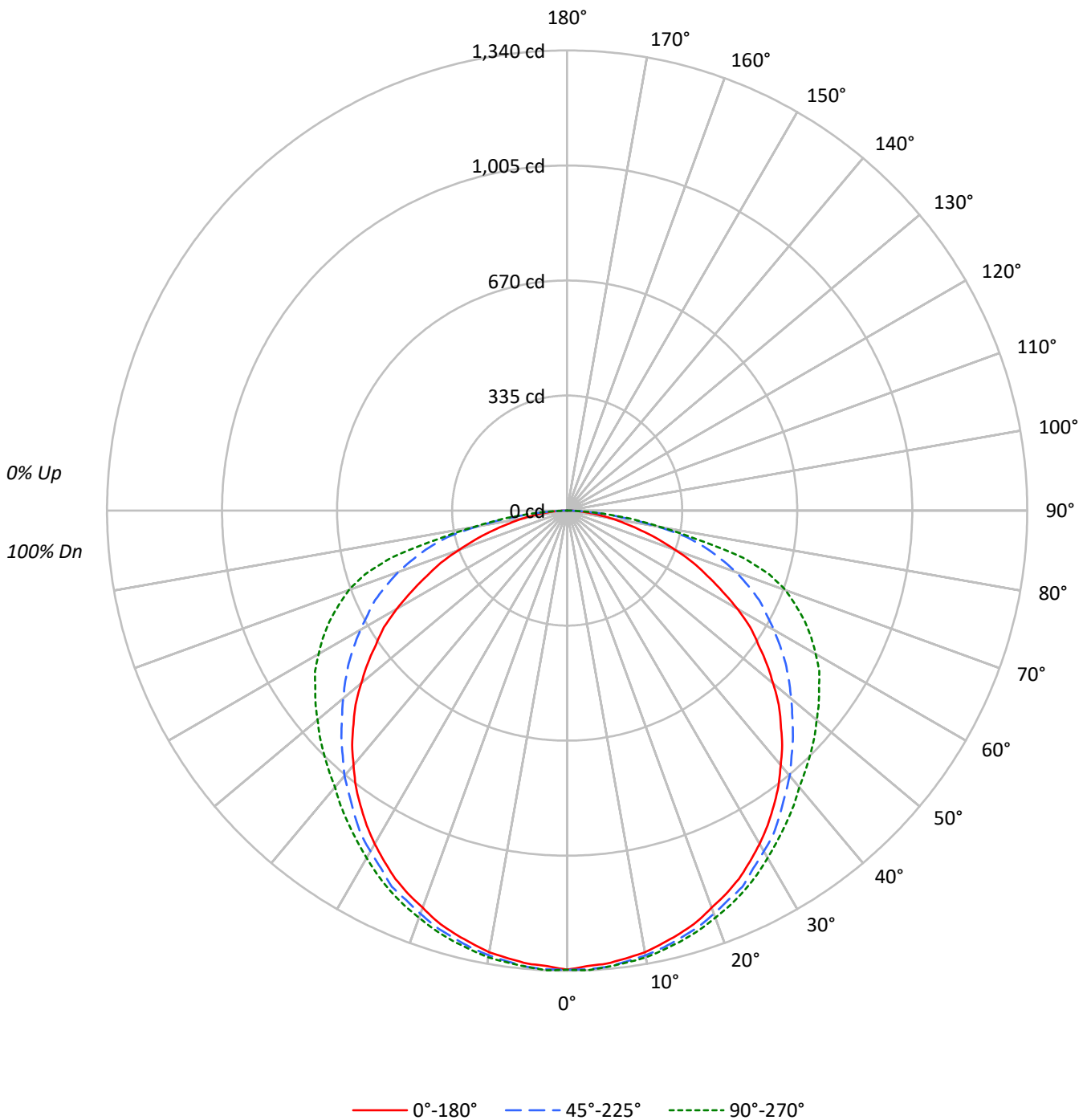
Input Watts (W): 39.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	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°	3598	3598	3598
5°	3578	3603	3603
10°	3568	3593	3610
15°	3550	3585	3611
20°	3524	3577	3613
25°	3514	3588	3626
30°	3483	3561	3629
35°	3446	3549	3651
40°	3399	3542	3695
45°	3348	3539	3813
50°	3277	3565	3972
55°	3187	3643	4201
60°	3084	3741	4499
65°	2871	3927	4865
70°	2636	4114	5321
75°	2311	4329	5501
80°	1990	4124	4319
85°	1741	2998	3288



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.5	3.0
10°-20°	363.1	8.5
20°-30°	554.0	13.0
30°-40°	676.4	15.9
40°-50°	723.3	17.0
50°-60°	698.1	16.4
60°-70°	600.9	14.1
70°-80°	406.6	9.6
80°-90°	107.3	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°	1043.5	24.5
0°-40°	1720.0	40.4
0°-60°	3141.3	73.8
0°-90°	4256.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4256.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1337	1337	1337	1337	1337	
5°	1324	1328	1334	1334	1334	126
15°	1274	1277	1287	1293	1296	360
25°	1184	1190	1208	1215	1221	545
35°	1049	1058	1080	1102	1112	656
45°	880	896	930	977	1002	679
55°	679	701	776	855	896	609
65°	451	495	617	714	764	448
75°	222	294	416	501	529	239
85°	56	78	97	100	106	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1336.9	1336.9	1336.9	1336.9	<i>1336.9</i>
2.5°	<i>1327.5</i>	<i>1330.7</i>	<i>1336.9</i>	<i>1336.9</i>	<i>1340.0</i>
5°	1324.4	1327.5	1333.8	1333.8	<i>1333.8</i>
7.5°	1315.0	1318.1	1324.4	1327.5	<i>1327.5</i>
10°	1305.6	1308.7	1315.0	1318.1	<i>1321.3</i>
12.5°	1290.0	1293.1	1302.5	1308.7	<i>1308.7</i>
15°	1274.3	1277.4	1286.8	1293.1	<i>1296.2</i>
17.5°	1255.5	1261.8	1271.2	1277.4	<i>1280.6</i>
20°	1230.5	1236.7	1249.2	1258.6	<i>1261.8</i>
22.5°	1208.5	1214.8	1227.3	1236.7	<i>1243.0</i>
25°	1183.5	1189.8	1208.5	1214.8	<i>1221.1</i>
27.5°	1152.2	1158.5	1174.1	1186.6	<i>1196.0</i>
30°	1120.9	1127.1	1145.9	1161.6	<i>1167.8</i>
32.5°	1086.4	1095.8	1117.7	1130.3	<i>1139.7</i>
35°	1048.9	1058.3	1080.2	1102.1	<i>1111.5</i>
37.5°	1011.3	1020.7	1042.6	1070.8	<i>1083.3</i>
40°	967.5	980.0	1008.2	1045.7	<i>1052.0</i>
42.5°	926.8	942.4	967.5	1011.3	<i>1027.0</i>
45°	879.8	895.5	929.9	976.9	<i>1001.9</i>
47.5°	836.0	851.6	889.2	945.5	<i>976.9</i>
50°	782.7	804.7	851.6	917.4	<i>948.7</i>
52.5°	732.6	751.4	814.0	886.1	<i>923.6</i>
55°	679.4	701.3	776.5	854.7	<i>895.5</i>
57.5°	632.5	651.2	735.8	823.4	<i>870.4</i>
60°	573.0	598.0	695.1	789.0	<i>836.0</i>
62.5°	510.3	547.9	654.4	751.4	<i>801.5</i>
65°	450.9	494.7	616.8	713.9	<i>764.0</i>
67.5°	397.6	444.6	569.8	673.2	<i>720.1</i>
70°	335.0	394.5	522.9	623.1	<i>676.3</i>
72.5°	278.7	344.4	469.6	569.8	<i>616.8</i>
75°	222.3	294.3	416.4	501.0	<i>529.1</i>
77.5°	172.2	241.1	356.9	382.0	<i>385.1</i>
80°	128.4	191.0	266.1	269.3	<i>278.7</i>
82.5°	87.7	134.6	172.2	187.9	<i>191.0</i>
85°	56.4	78.3	97.1	100.2	<i>106.5</i>
87.5°	25.0	28.2	34.4	31.3	<i>31.3</i>
90°	0.0	0.0	0.0	0.0	<i>0.0</i>

(END OF REPORT)