

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: P390463

Luminaire Tested: **22CZ2-55VHE-HRP-UNV-L950-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: P390463  
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-SWPD1-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: 4203.3 lumens  
Efficiency: N/A  
Efficacy: 106.7 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

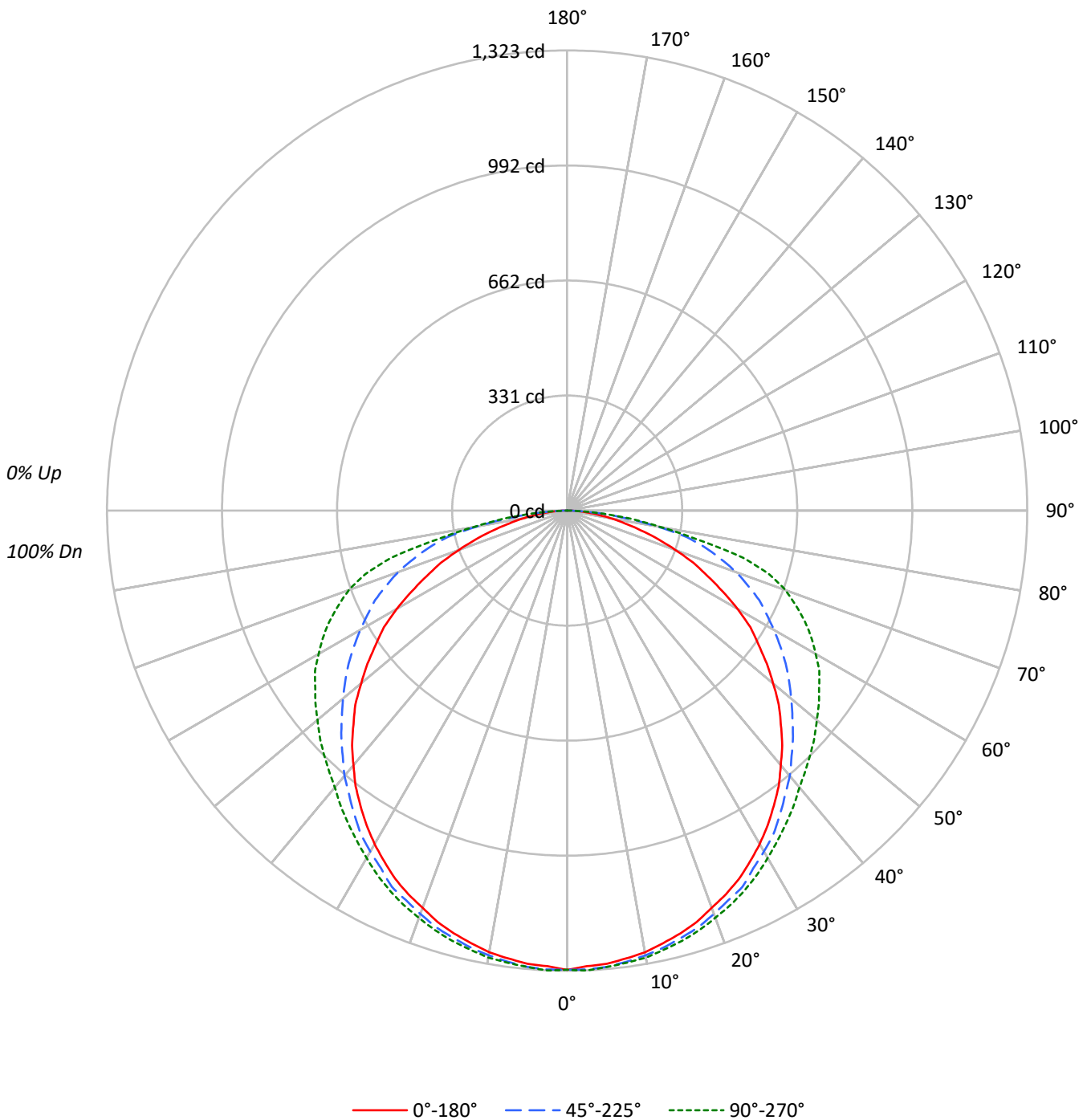
Input Watts (W): 39.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3553	3553	3553
5°	3533	3558	3558
10°	3523	3549	3566
15°	3506	3541	3566
20°	3480	3533	3568
25°	3470	3544	3581
30°	3440	3517	3584
35°	3403	3505	3606
40°	3357	3498	3649
45°	3307	3495	3766
50°	3236	3521	3922
55°	3148	3598	4149
60°	3046	3694	4443
65°	2835	3878	4804
70°	2603	4063	5255
75°	2282	4276	5434
80°	1965	4073	4265
85°	1720	2961	3245



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.9	3.0
10°-20°	358.6	8.5
20°-30°	547.1	13.0
30°-40°	668.0	15.9
40°-50°	714.3	17.0
50°-60°	689.4	16.4
60°-70°	593.5	14.1
70°-80°	401.5	9.6
80°-90°	105.9	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°	1030.6	24.5
0°-40°	1698.6	40.4
0°-60°	3102.3	73.8
0°-90°	4203.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4203.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1320	1320	1320	1320	1320	
5°	1308	1311	1317	1317	1317	124
15°	1258	1262	1271	1277	1280	355
25°	1169	1175	1194	1200	1206	538
35°	1036	1045	1067	1088	1098	648
45°	869	884	918	965	990	671
55°	671	693	767	844	884	601
65°	445	489	609	705	754	443
75°	220	291	411	495	523	236
85°	56	77	96	99	105	63
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1320.3	1320.3	1320.3	1320.3	1320.3
2.5°	1311.1	1314.1	1320.3	1320.3	1323.4
5°	1308.0	1311.1	1317.2	1317.2	1317.2
7.5°	1298.7	1301.8	1308.0	1311.1	1311.1
10°	1289.4	1292.5	1298.7	1301.8	1304.9
12.5°	1273.9	1277.0	1286.3	1292.5	1292.5
15°	1258.5	1261.6	1270.9	1277.0	1280.1
17.5°	1239.9	1246.1	1255.4	1261.6	1264.7
20°	1215.2	1221.4	1233.8	1243.0	1246.1
22.5°	1193.6	1199.7	1212.1	1221.4	1227.6
25°	1168.8	1175.0	1193.6	1199.7	1205.9
27.5°	1137.9	1144.1	1159.5	1171.9	1181.2
30°	1107.0	1113.2	1131.7	1147.2	1153.4
32.5°	1073.0	1082.2	1103.9	1116.3	1125.5
35°	1035.9	1045.1	1066.8	1088.4	1097.7
37.5°	998.8	1008.0	1029.7	1057.5	1069.9
40°	955.5	967.8	995.7	1032.8	1038.9
42.5°	915.3	930.7	955.5	998.8	1014.2
45°	868.9	884.3	918.4	964.7	989.5
47.5°	825.6	841.1	878.2	933.8	964.7
50°	773.0	794.7	841.1	906.0	936.9
52.5°	723.6	742.1	803.9	875.1	912.2
55°	671.0	692.6	766.8	844.1	884.3
57.5°	624.6	643.2	726.6	813.2	859.6
60°	565.9	590.6	686.4	779.2	825.6
62.5°	504.0	541.1	646.3	742.1	791.6
65°	445.3	488.6	609.1	705.0	754.5
67.5°	392.7	439.1	562.8	664.8	711.2
70°	330.9	389.6	516.4	615.3	667.9
72.5°	275.2	340.1	463.8	562.8	609.1
75°	219.5	290.7	411.3	494.7	522.6
77.5°	170.1	238.1	352.5	377.2	380.3
80°	126.8	188.6	262.8	265.9	275.2
82.5°	86.6	133.0	170.1	185.5	188.6
85°	55.7	77.3	95.9	98.9	105.1
87.5°	24.7	27.8	34.0	30.9	30.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)