

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: P390458

Luminaire Tested: **22CZ2-55VHE-HRP-UNV-L935-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: P390458
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-L935-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3968.7 lumens
Efficiency: N/A
Efficacy: 100.7 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

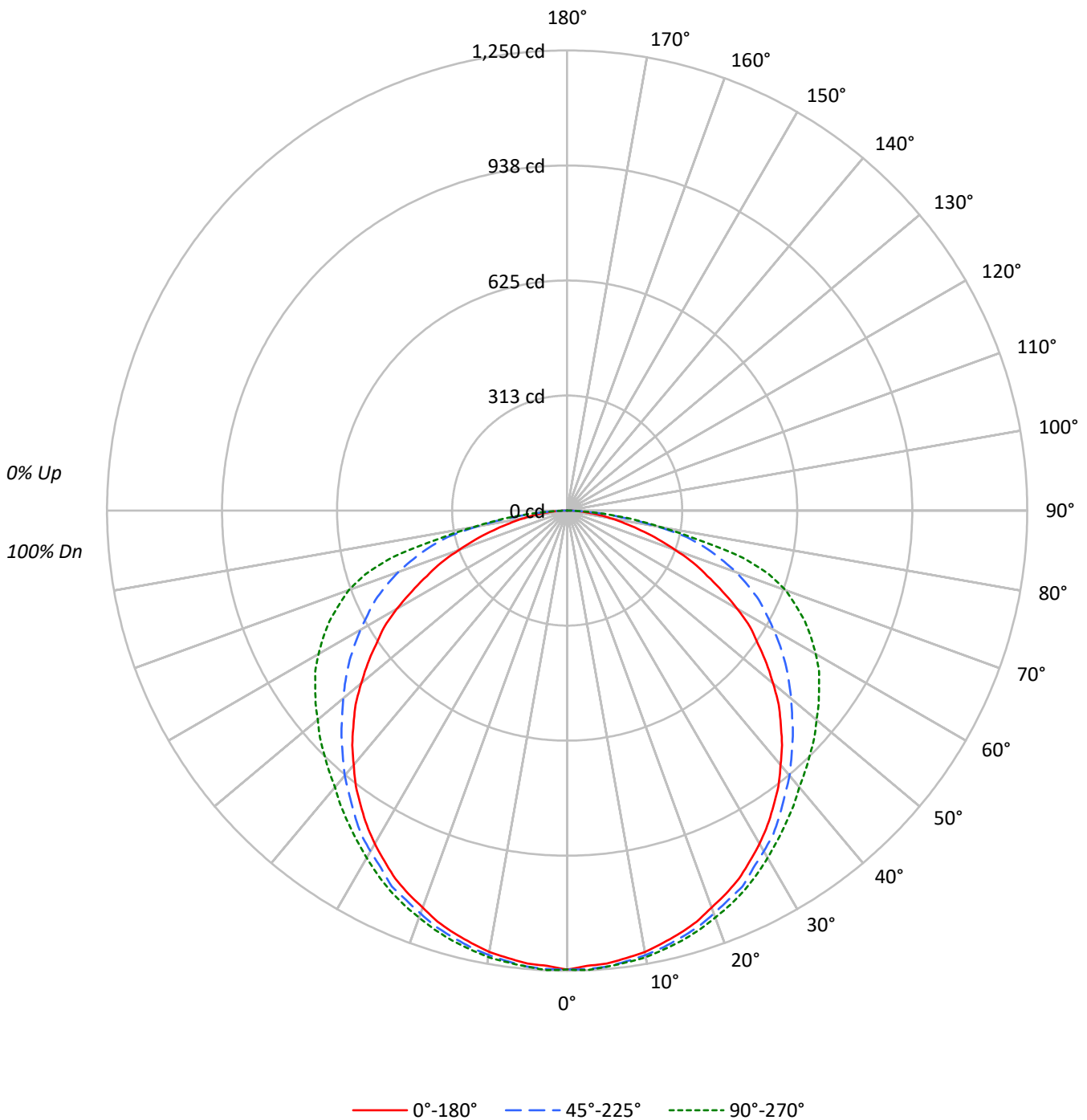
Input Watts (W): 39.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3355	3355	3355
5°	3336	3360	3360
10°	3327	3351	3366
15°	3310	3343	3367
20°	3286	3336	3369
25°	3277	3346	3381
30°	3248	3320	3384
35°	3213	3309	3405
40°	3169	3302	3446
45°	3122	3300	3555
50°	3056	3324	3703
55°	2972	3397	3917
60°	2876	3488	4195
65°	2677	3662	4536
70°	2458	3836	4961
75°	2155	4037	5130
80°	1855	3846	4026
85°	1624	2794	3066



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.9	3.0
10°-20°	338.6	8.5
20°-30°	516.6	13.0
30°-40°	630.7	15.9
40°-50°	674.4	17.0
50°-60°	650.9	16.4
60°-70°	560.4	14.1
70°-80°	379.1	9.6
80°-90°	100.0	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°	973.1	24.5
0°-40°	1603.8	40.4
0°-60°	2929.2	73.8
0°-90°	3968.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3968.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1247	1247	1247	1247	1247	
5°	1235	1238	1244	1244	1244	117
15°	1188	1191	1200	1206	1209	335
25°	1104	1109	1127	1133	1139	508
35°	978	987	1007	1028	1036	612
45°	820	835	867	911	934	633
55°	634	654	724	797	835	568
65°	420	461	575	666	712	418
75°	207	274	388	467	493	222
85°	53	73	90	93	99	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1246.6	1246.6	1246.6	1246.6	1246.6
2.5°	1237.9	1240.8	1246.6	1246.6	1249.6
5°	1235.0	1237.9	1243.7	1243.7	1243.7
7.5°	1226.2	1229.1	1235.0	1237.9	1237.9
10°	1217.4	1220.4	1226.2	1229.1	1232.0
12.5°	1202.8	1205.8	1214.5	1220.4	1220.4
15°	1188.2	1191.2	1199.9	1205.8	1208.7
17.5°	1170.7	1176.6	1185.3	1191.2	1194.1
20°	1147.4	1153.2	1164.9	1173.6	1176.6
22.5°	1126.9	1132.8	1144.5	1153.2	1159.1
25°	1103.6	1109.4	1126.9	1132.8	1138.6
27.5°	1074.4	1080.2	1094.8	1106.5	1115.3
30°	1045.2	1051.0	1068.5	1083.1	1089.0
32.5°	1013.1	1021.8	1042.3	1053.9	1062.7
35°	978.0	986.8	1007.2	1027.7	1036.4
37.5°	943.0	951.8	972.2	998.5	1010.2
40°	902.1	913.8	940.1	975.1	981.0
42.5°	864.2	878.8	902.1	943.0	957.6
45°	820.4	835.0	867.1	910.9	934.2
47.5°	779.5	794.1	829.1	881.7	910.9
50°	729.9	750.3	794.1	855.4	884.6
52.5°	683.2	700.7	759.1	826.2	861.3
55°	633.5	654.0	724.0	797.0	835.0
57.5°	589.7	607.3	686.1	767.8	811.6
60°	534.3	557.6	648.1	735.7	779.5
62.5°	475.9	510.9	610.2	700.7	747.4
65°	420.4	461.3	575.1	665.7	712.4
67.5°	370.8	414.6	531.4	627.7	671.5
70°	312.4	367.9	487.6	581.0	630.6
72.5°	259.8	321.1	437.9	531.4	575.1
75°	207.3	274.4	388.3	467.1	493.4
77.5°	160.6	224.8	332.8	356.2	359.1
80°	119.7	178.1	248.2	251.1	259.8
82.5°	81.7	125.5	160.6	175.2	178.1
85°	52.6	73.0	90.5	93.4	99.3
87.5°	23.4	26.3	32.1	29.2	29.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)