

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: P390194

Luminaire Tested: **22CZ2-24VHE-RDP-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: P390194
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: 22CZ2-24VHE-RDP-UNV-L935-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1422.2 lumens
Efficiency: N/A
Efficacy: 81.3 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

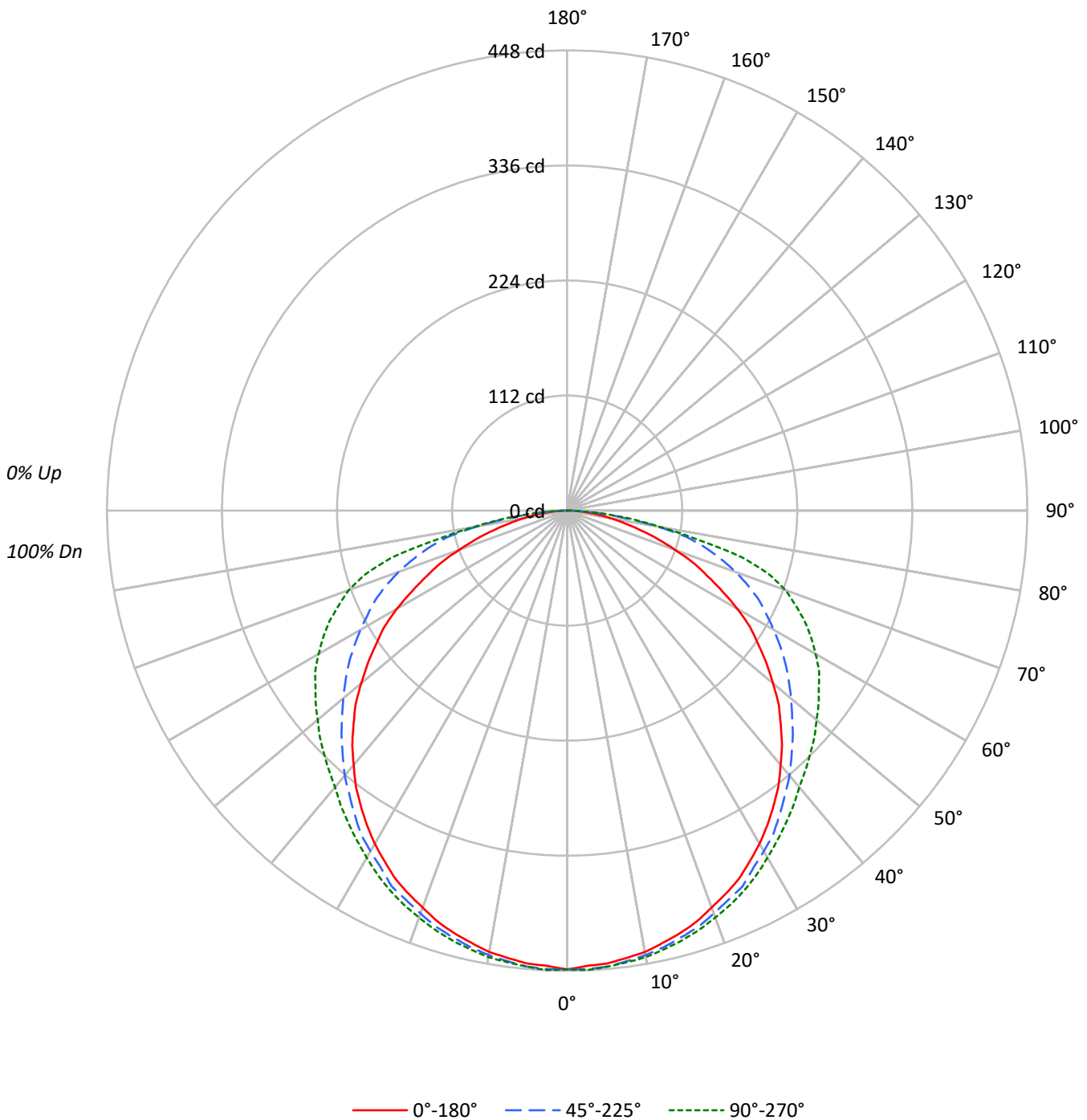
Input Watts (W): 17.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1202	1202	1202
5°	1196	1204	1204
10°	1192	1201	1206
15°	1186	1198	1207
20°	1178	1195	1207
25°	1174	1199	1211
30°	1164	1190	1212
35°	1151	1186	1220
40°	1136	1183	1235
45°	1119	1182	1274
50°	1095	1191	1327
55°	1065	1217	1404
60°	1031	1250	1503
65°	960	1312	1626
70°	880	1375	1778
75°	773	1446	1838
80°	665	1378	1443
85°	580	1000	1099



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.3	3.0
10°-20°	121.3	8.5
20°-30°	185.1	13.0
30°-40°	226.0	15.9
40°-50°	241.7	17.0
50°-60°	233.3	16.4
60°-70°	200.8	14.1
70°-80°	135.9	9.6
80°-90°	35.9	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°	348.7	24.5
0°-40°	574.7	40.4
0°-60°	1049.7	73.8
0°-90°	1422.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1422.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	447	447	447	447	447	
5°	443	444	446	446	446	42
15°	426	427	430	432	433	120
25°	396	398	404	406	408	182
35°	350	354	361	368	371	219
45°	294	299	311	326	335	227
55°	227	234	260	286	299	203
65°	151	165	206	238	255	150
75°	74	98	139	167	177	80
85°	19	26	32	34	36	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	446.7	446.7	446.7	446.7	446.7
2.5°	443.6	444.6	446.7	446.7	447.8
5°	442.6	443.6	445.7	445.7	445.7
7.5°	439.4	440.5	442.6	443.6	443.6
10°	436.3	437.3	439.4	440.5	441.5
12.5°	431.0	432.1	435.2	437.3	437.3
15°	425.8	426.9	430.0	432.1	433.1
17.5°	419.5	421.6	424.8	426.9	427.9
20°	411.2	413.3	417.4	420.6	421.6
22.5°	403.8	405.9	410.1	413.3	415.4
25°	395.5	397.6	403.8	405.9	408.0
27.5°	385.0	387.1	392.3	396.5	399.7
30°	374.5	376.6	382.9	388.1	390.2
32.5°	363.0	366.2	373.5	377.7	380.8
35°	350.5	353.6	360.9	368.3	371.4
37.5°	337.9	341.1	348.4	357.8	362.0
40°	323.3	327.5	336.9	349.4	351.5
42.5°	309.7	314.9	323.3	337.9	343.2
45°	294.0	299.2	310.7	326.4	334.8
47.5°	279.3	284.6	297.1	316.0	326.4
50°	261.6	268.9	284.6	306.5	317.0
52.5°	244.8	251.1	272.0	296.1	308.6
55°	227.0	234.4	259.5	285.6	299.2
57.5°	211.3	217.6	245.9	275.2	290.9
60°	191.5	199.8	232.3	263.6	279.3
62.5°	170.5	183.1	218.7	251.1	267.8
65°	150.7	165.3	206.1	238.5	255.3
67.5°	132.9	148.6	190.4	224.9	240.6
70°	111.9	131.8	174.7	208.2	226.0
72.5°	93.1	115.1	156.9	190.4	206.1
75°	74.3	98.3	139.1	167.4	176.8
77.5°	57.5	80.6	119.3	127.6	128.7
80°	42.9	63.8	88.9	90.0	93.1
82.5°	29.3	45.0	57.5	62.8	63.8
85°	18.8	26.2	32.4	33.5	35.6
87.5°	8.4	9.4	11.5	10.5	10.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)