

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: P390193

Luminaire Tested: **22CZ2-24VHE-RDP-UNV-L935-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: P390193
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-SWPD1-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: 1404.5 lumens
Efficiency: N/A
Efficacy: 80.3 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

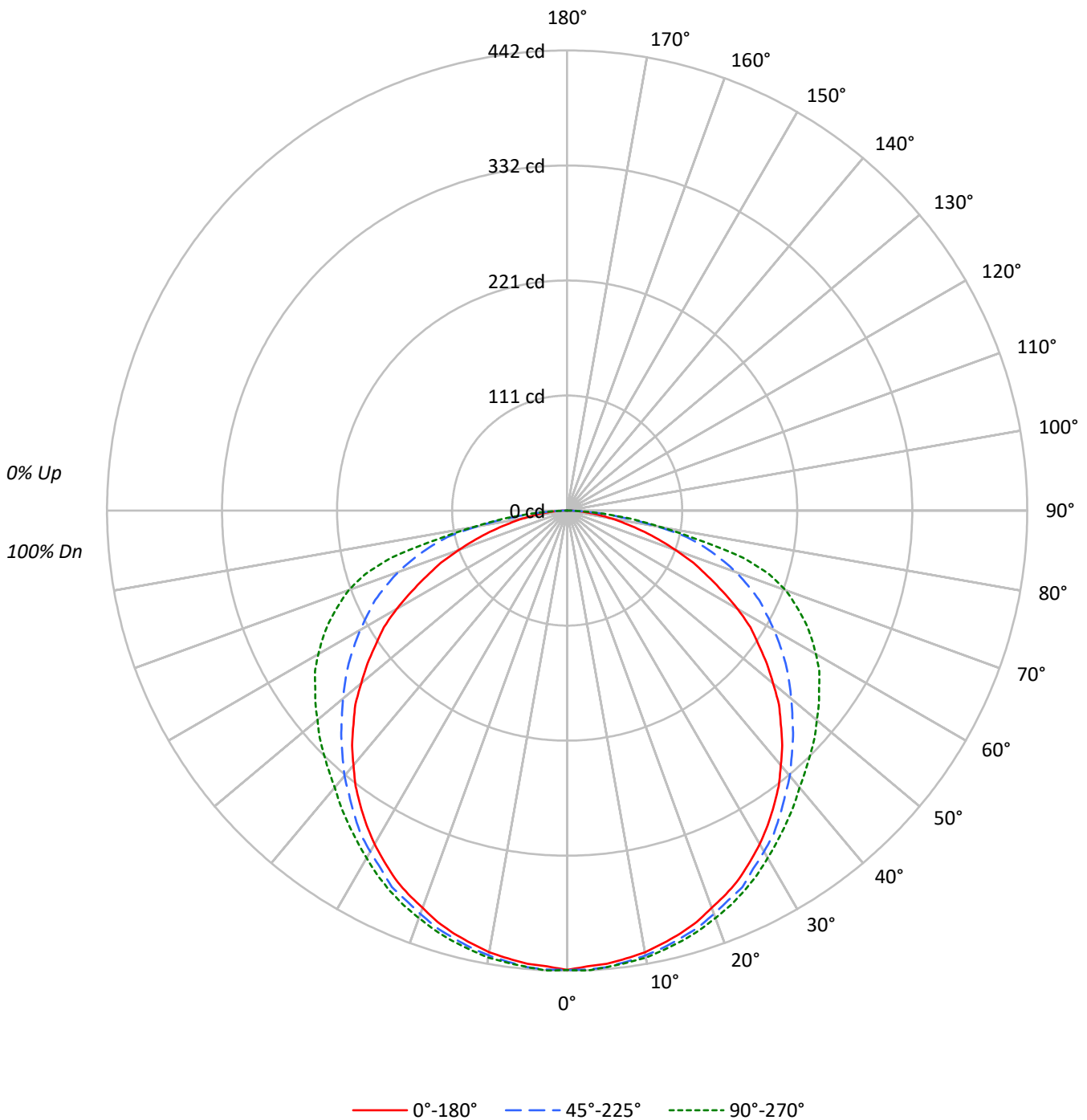
Input Watts (W): 17.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1187	1187	1187
5°	1180	1189	1189
10°	1177	1186	1191
15°	1171	1183	1192
20°	1163	1180	1192
25°	1160	1184	1196
30°	1149	1175	1198
35°	1137	1171	1205
40°	1122	1169	1220
45°	1105	1168	1258
50°	1081	1176	1311
55°	1052	1202	1386
60°	1018	1235	1485
65°	947	1296	1605
70°	870	1357	1756
75°	763	1429	1815
80°	657	1361	1426
85°	574	988	1084



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.7	3.0
10°-20°	119.8	8.5
20°-30°	182.8	13.0
30°-40°	223.2	15.9
40°-50°	238.7	17.0
50°-60°	230.4	16.4
60°-70°	198.3	14.1
70°-80°	134.2	9.6
80°-90°	35.4	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°	344.4	24.5
0°-40°	567.6	40.4
0°-60°	1036.6	73.8
0°-90°	1404.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1404.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	441	441	441	441	441	
5°	437	438	440	440	440	41
15°	420	422	425	427	428	119
25°	391	393	399	401	403	180
35°	346	349	356	364	367	217
45°	290	296	307	322	331	224
55°	224	231	256	282	296	201
65°	149	163	204	236	252	148
75°	73	97	137	165	175	79
85°	19	26	32	33	35	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	441.2	441.2	441.2	441.2	441.2
2.5°	438.1	439.1	441.2	441.2	442.2
5°	437.0	438.1	440.1	440.1	440.1
7.5°	433.9	435.0	437.0	438.1	438.1
10°	430.8	431.9	433.9	435.0	436.0
12.5°	425.7	426.7	429.8	431.9	431.9
15°	420.5	421.5	424.6	426.7	427.7
17.5°	414.3	416.4	419.5	421.5	422.6
20°	406.0	408.1	412.2	415.3	416.4
22.5°	398.8	400.9	405.0	408.1	410.2
25°	390.6	392.6	398.8	400.9	402.9
27.5°	380.2	382.3	387.5	391.6	394.7
30°	369.9	372.0	378.2	383.3	385.4
32.5°	358.5	361.6	368.9	373.0	376.1
35°	346.1	349.2	356.5	363.7	366.8
37.5°	333.7	336.8	344.1	353.4	357.5
40°	319.3	323.4	332.7	345.1	347.2
42.5°	305.8	311.0	319.3	333.7	338.9
45°	290.3	295.5	306.9	322.4	330.6
47.5°	275.9	281.0	293.4	312.0	322.4
50°	258.3	265.5	281.0	302.7	313.1
52.5°	241.8	248.0	268.6	292.4	304.8
55°	224.2	231.4	256.2	282.1	295.5
57.5°	208.7	214.9	242.8	271.7	287.2
60°	189.1	197.3	229.4	260.4	275.9
62.5°	168.4	180.8	215.9	248.0	264.5
65°	148.8	163.2	203.5	235.6	252.1
67.5°	131.2	146.7	188.0	222.1	237.6
70°	110.6	130.2	172.5	205.6	223.2
72.5°	92.0	113.7	155.0	188.0	203.5
75°	73.4	97.1	137.4	165.3	174.6
77.5°	56.8	79.6	117.8	126.1	127.1
80°	42.4	63.0	87.8	88.9	92.0
82.5°	28.9	44.4	56.8	62.0	63.0
85°	18.6	25.8	32.0	33.1	35.1
87.5°	8.3	9.3	11.4	10.3	10.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)