

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: P388565

Luminaire Tested: **24CZ2-35HE-SQR-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: P388565
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2002-678-2)
Test Lab: INNOVATION CENTER (G2)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-35HE-SQR-UNV-L935-CD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2909.3 lumens
Efficiency: N/A
Efficacy: 108.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.33 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

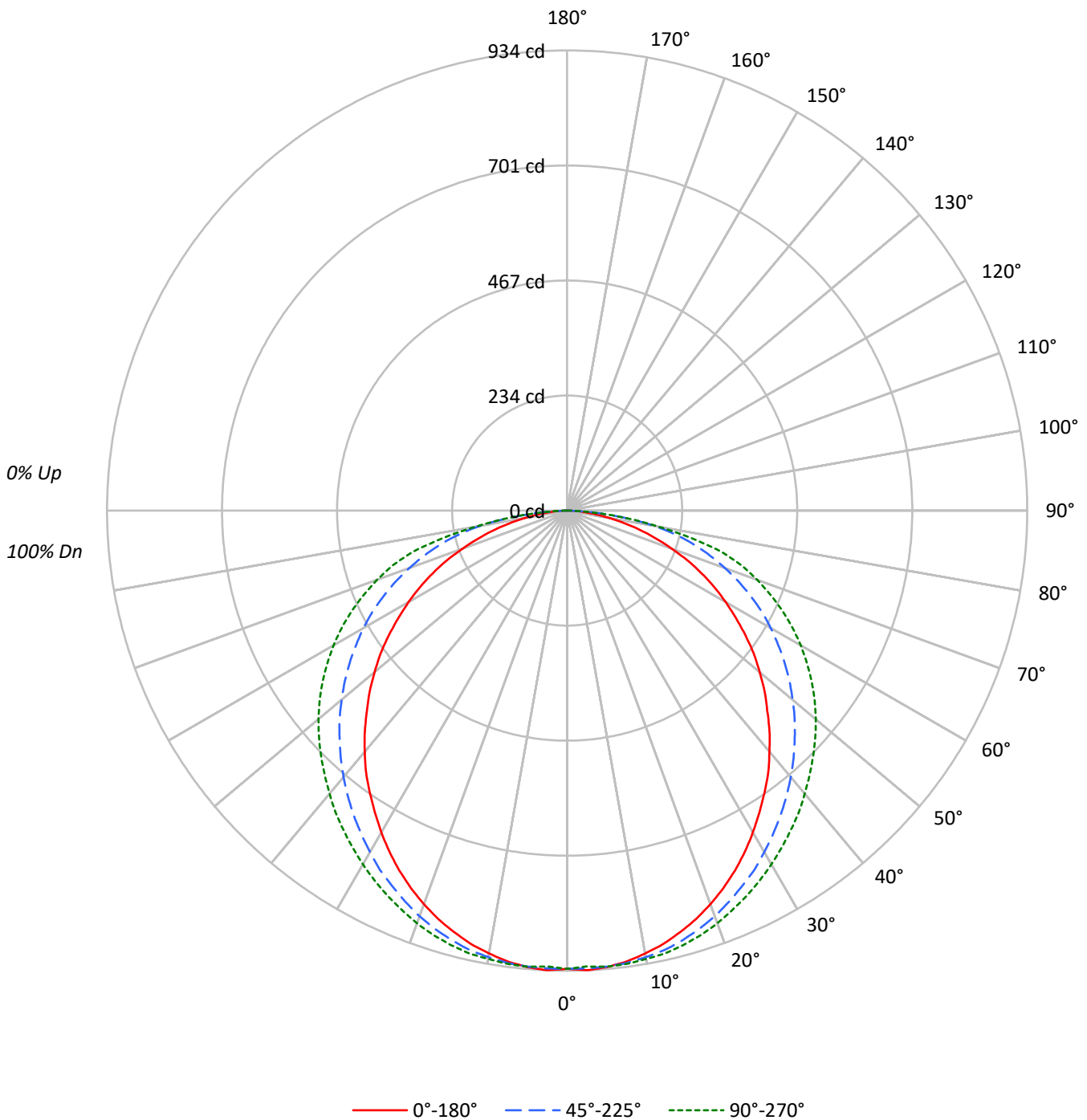
Input Watts (W): 26.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			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	93	89	92	89	87	89	86	84	82
2	98	89	81	75	95	87	80	74	83	78	73	80	75	71	77	73	69	67
3	89	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	52	64	57	51	62	55	50	60	54	49	47
5	74	61	51	44	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	30	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	52	38	30	25	50	37	30	24	36	29	24	36	29	24	35	29	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1251	1251	1251
5°	1256	1255	1255
10°	1247	1257	1263
15°	1234	1258	1271
20°	1217	1255	1276
25°	1197	1248	1281
30°	1172	1243	1288
35°	1147	1240	1300
40°	1122	1240	1318
45°	1093	1243	1344
50°	1068	1251	1379
55°	1037	1264	1422
60°	1001	1285	1474
65°	957	1309	1535
70°	888	1341	1614
75°	804	1389	1688
80°	677	1392	1451
85°	519	1053	1053



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.3	3.0
10°-20°	254.0	8.7
20°-30°	385.8	13.3
30°-40°	469.2	16.1
40°-50°	499.6	17.2
50°-60°	475.8	16.4
60°-70°	397.9	13.7
70°-80°	265.3	9.1
80°-90°	73.4	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°	728.0	25.0
0°-40°	1197.3	41.2
0°-60°	2172.7	74.7
0°-90°	2909.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2909.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	930	930	930	930	930	
5°	930	924	929	929	929	88
15°	886	888	903	910	913	250
25°	806	817	841	855	863	371
35°	698	719	755	780	792	437
45°	574	605	653	690	706	444
55°	442	480	539	586	606	395
65°	301	345	411	462	482	297
75°	155	204	267	312	325	164
85°	34	62	68	67	68	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	930.0	930.0	930.0	930.0	930.0
2.5°	933.8	927.1	930.0	930.0	926.1
5°	930.0	924.2	929.0	929.0	929.0
7.5°	923.2	918.4	926.1	928.0	928.0
10°	912.7	910.7	920.3	923.2	924.2
12.5°	901.1	900.2	913.6	917.5	920.3
15°	885.8	887.7	903.1	909.8	912.7
17.5°	869.4	873.3	890.6	900.2	903.1
20°	850.2	856.0	876.2	885.8	891.5
22.5°	829.1	837.7	858.9	870.4	877.1
25°	806.0	816.6	840.6	855.0	862.7
27.5°	781.0	794.5	822.4	838.7	846.4
30°	754.1	769.5	800.3	819.5	829.1
32.5°	726.3	744.5	778.2	799.3	810.8
35°	698.4	718.6	755.1	780.1	791.6
37.5°	670.6	690.7	731.1	758.0	772.4
40°	638.9	662.9	706.1	735.9	750.3
42.5°	608.1	634.1	680.2	712.8	728.2
45°	574.5	605.2	653.3	689.8	706.1
47.5°	543.8	574.5	626.4	664.8	683.1
50°	510.1	542.8	597.6	639.8	659.0
52.5°	477.5	511.1	568.7	613.9	633.1
55°	441.9	480.3	539.0	586.0	606.2
57.5°	406.4	447.7	508.2	557.2	577.4
60°	371.8	414.1	477.5	526.5	547.6
62.5°	337.2	379.5	445.8	495.7	515.9
65°	300.7	344.9	411.2	462.1	482.3
67.5°	264.2	310.3	376.6	427.5	446.7
70°	225.8	274.8	341.0	391.0	410.2
72.5°	190.2	239.2	304.5	353.5	371.8
75°	154.7	203.7	267.1	312.2	324.7
77.5°	120.1	169.1	225.8	255.5	258.4
80°	87.4	133.5	179.7	188.3	187.3
82.5°	58.6	99.9	123.9	124.9	127.8
85°	33.6	62.4	68.2	67.2	68.2
87.5°	13.4	22.1	19.2	14.4	14.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)