

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: P388539

Luminaire Tested: **24CZ2-35-SQR-UNV-L935-CD1-SDWPD1-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: P388539
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: 24CZ2-35-SQR-UNV-L935-CD1-SDWPD1-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: 2882.2 lumens
Efficiency: N/A
Efficacy: 95.8 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

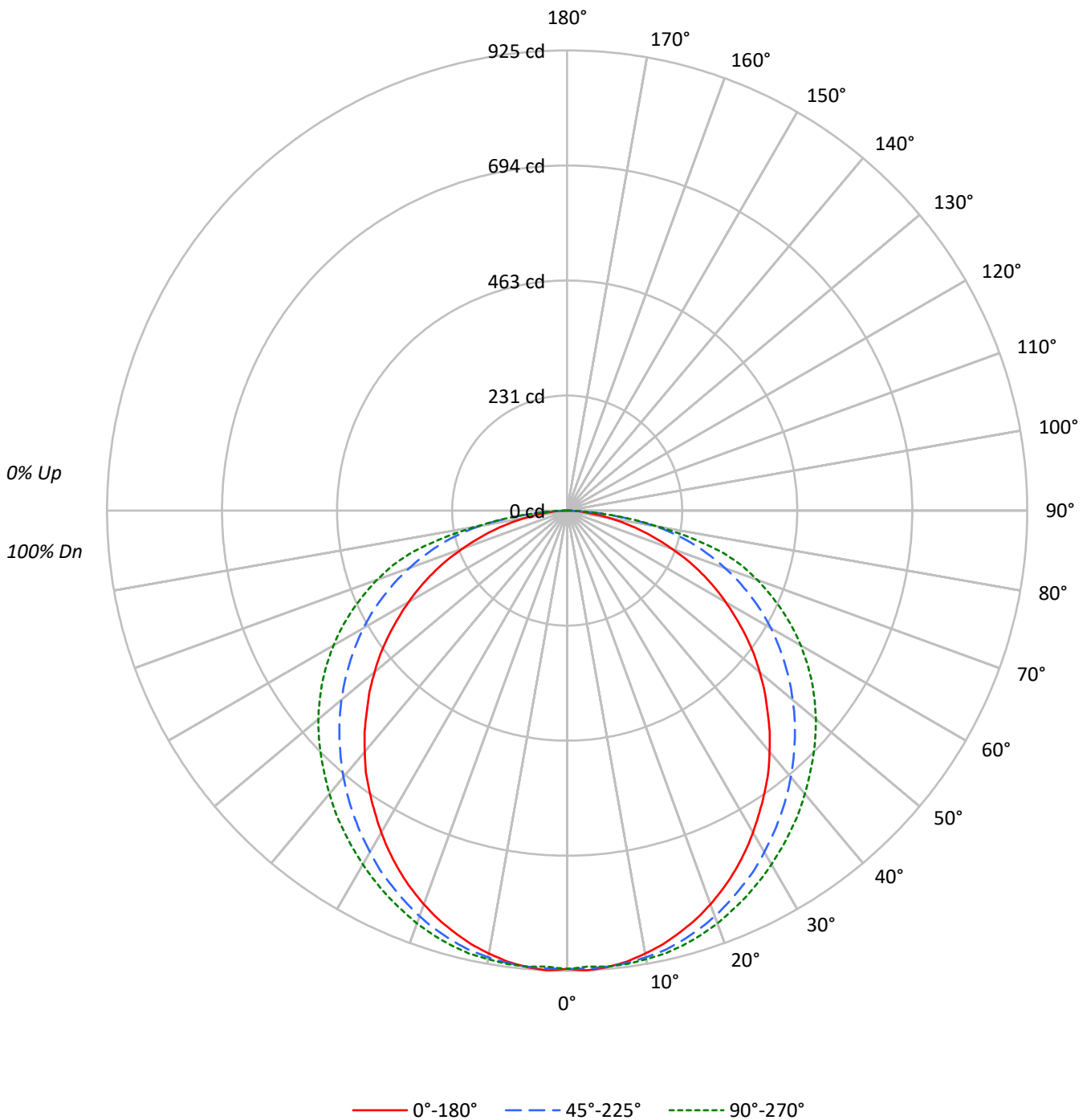
Input Watts (W): 30.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P388539

CATALOG NUMBER: 24CZ2-35-SQR-UNV-L935-CD1-SDWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P388539

CATALOG NUMBER: 24CZ2-35-SQR-UNV-L935-CD1-SDWPD1-U

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	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°	1240	1240	1240
5°	1244	1243	1243
10°	1235	1246	1251
15°	1222	1246	1260
20°	1206	1243	1265
25°	1185	1236	1269
30°	1161	1232	1276
35°	1136	1229	1288
40°	1112	1229	1306
45°	1083	1231	1331
50°	1058	1239	1367
55°	1027	1252	1409
60°	991	1273	1460
65°	948	1297	1521
70°	880	1329	1599
75°	796	1376	1672
80°	671	1379	1438
85°	514	1044	1044



TEST NUMBER: P388539

CATALOG NUMBER: 24CZ2-35-SQR-UNV-L935-CD1-SDWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.5	3.0
10°-20°	251.6	8.7
20°-30°	382.2	13.3
30°-40°	464.9	16.1
40°-50°	494.9	17.2
50°-60°	471.4	16.4
60°-70°	394.2	13.7
70°-80°	262.8	9.1
80°-90°	72.7	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°	721.2	25.0
0°-40°	1186.1	41.2
0°-60°	2152.4	74.7
0°-90°	2882.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2882.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	921	921	921	921	921	
5°	921	916	920	920	920	87
15°	878	879	895	901	904	247
25°	798	809	833	847	855	368
35°	692	712	748	773	784	433
45°	569	600	647	683	700	440
55°	438	476	534	581	601	391
65°	298	342	407	458	478	294
75°	153	202	265	309	322	162
85°	33	62	68	67	68	40
90°	0	0	0	0	0	



TEST NUMBER: P388539

CATALOG NUMBER: 24CZ2-35-SQR-UNV-L935-CD1-SDWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	921.3	921.3	921.3	921.3	921.3
2.5°	925.1	918.4	921.3	921.3	917.5
5°	921.3	915.6	920.3	920.3	920.3
7.5°	914.6	909.9	917.5	919.4	919.4
10°	904.2	902.3	911.8	914.6	915.6
12.5°	892.7	891.8	905.1	908.9	911.8
15°	877.5	879.4	894.6	901.3	904.2
17.5°	861.3	865.1	882.3	891.8	894.6
20°	842.3	848.0	868.0	877.5	883.2
22.5°	821.4	829.9	850.9	862.3	868.9
25°	798.5	809.0	832.8	847.1	854.7
27.5°	773.8	787.1	814.7	830.9	838.5
30°	747.1	762.3	792.8	811.8	821.4
32.5°	719.5	737.6	770.9	791.9	803.3
35°	691.9	711.9	748.1	772.8	784.2
37.5°	664.3	684.3	724.3	750.9	765.2
40°	632.9	656.7	699.5	729.0	743.3
42.5°	602.5	628.2	673.8	706.2	721.4
45°	569.1	599.6	647.2	683.4	699.5
47.5°	538.7	569.1	620.5	658.6	676.7
50°	505.4	537.7	592.0	633.9	652.9
52.5°	473.0	506.3	563.4	608.2	627.2
55°	437.8	475.9	533.9	580.6	600.6
57.5°	402.6	443.5	503.5	552.0	572.0
60°	368.3	410.2	473.0	521.6	542.5
62.5°	334.1	375.9	441.6	491.1	511.1
65°	297.9	341.7	407.3	457.8	477.8
67.5°	261.7	307.4	373.1	423.5	442.6
70°	223.7	272.2	337.9	387.4	406.4
72.5°	188.4	237.0	301.7	350.2	368.3
75°	153.2	201.8	264.6	309.3	321.7
77.5°	119.0	167.5	223.7	253.2	256.0
80°	86.6	132.3	178.0	186.5	185.6
82.5°	58.1	99.0	122.8	123.7	126.6
85°	33.3	61.9	67.6	66.6	67.6
87.5°	13.3	21.9	19.0	14.3	14.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)