

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: P388545

Luminaire Tested: **24CZ2-35-SQR-UNV-L950-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: P388545
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-L950-CD1-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3090.9 lumens
Efficiency: N/A
Efficacy: 102.7 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

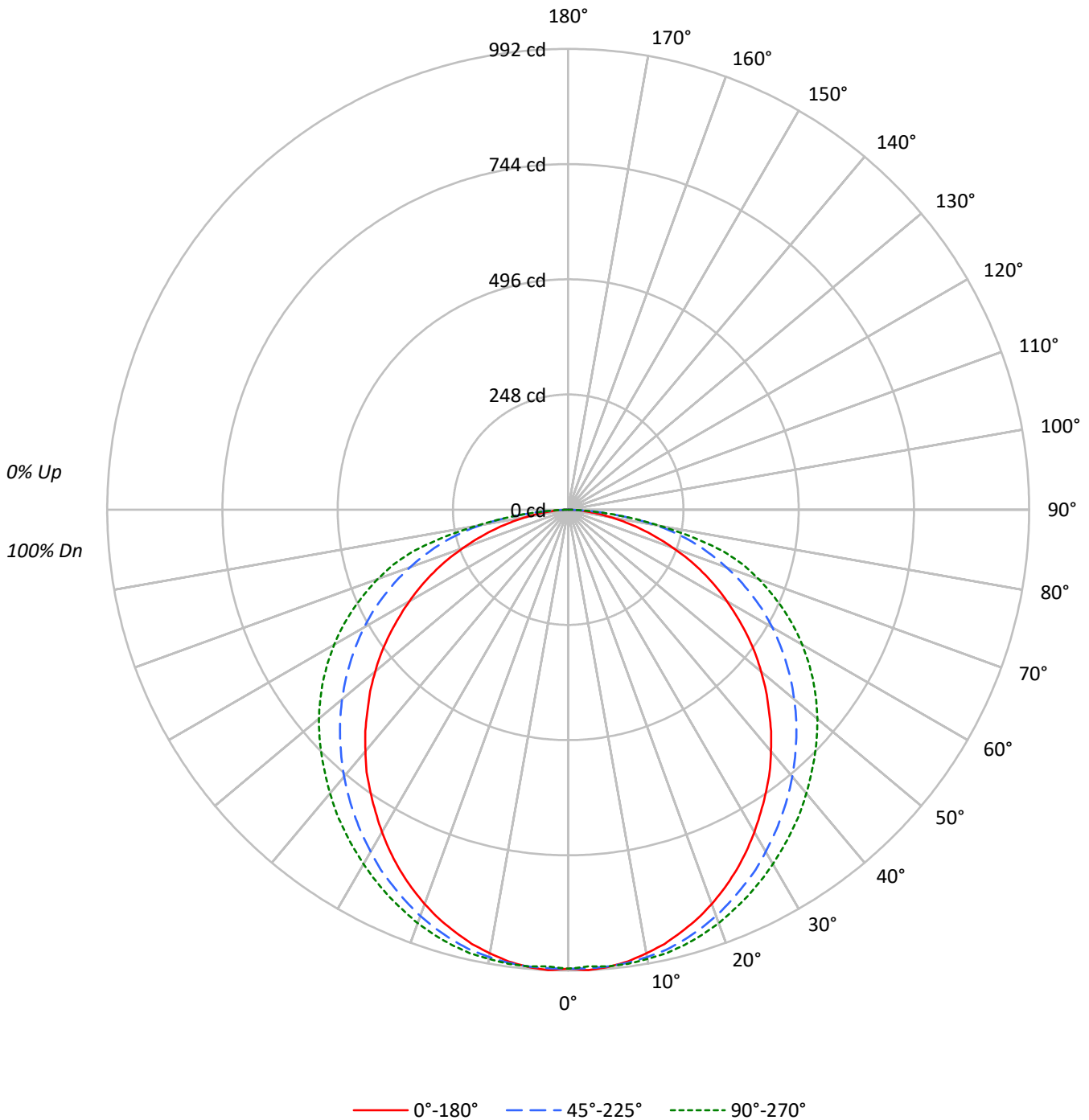
Input Watts (W): 30.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P388545

CATALOG NUMBER: 24CZ2-35-SQR-UNV-L950-CD1-SDWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P388545

CATALOG NUMBER: 24CZ2-35-SQR-UNV-L950-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°	1329	1329	1329
5°	1334	1333	1333
10°	1325	1336	1342
15°	1311	1336	1351
20°	1293	1333	1356
25°	1271	1326	1361
30°	1245	1321	1368
35°	1219	1318	1381
40°	1192	1318	1400
45°	1161	1321	1427
50°	1135	1329	1466
55°	1101	1343	1511
60°	1063	1365	1566
65°	1017	1391	1631
70°	944	1425	1714
75°	854	1475	1794
80°	720	1479	1542
85°	551	1119	1119



TEST NUMBER: P388545

CATALOG NUMBER: 24CZ2-35-SQR-UNV-L950-CD1-SDWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.8	3.0
10°-20°	269.8	8.7
20°-30°	409.8	13.3
30°-40°	498.5	16.1
40°-50°	530.8	17.2
50°-60°	505.5	16.4
60°-70°	422.8	13.7
70°-80°	281.9	9.1
80°-90°	78.0	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°	773.5	25.0
0°-40°	1272.0	41.2
0°-60°	2308.3	74.7
0°-90°	3090.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3090.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	988	988	988	988	988	
5°	988	982	987	987	987	94
15°	941	943	959	967	970	265
25°	856	868	893	908	917	394
35°	742	764	802	829	841	464
45°	610	643	694	733	750	472
55°	470	510	573	623	644	420
65°	320	366	437	491	512	316
75°	164	216	284	332	345	174
85°	36	66	72	71	72	43
90°	0	0	0	0	0	



TEST NUMBER: P388545

CATALOG NUMBER: 24CZ2-35-SQR-UNV-L950-CD1-SDWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	988.0	988.0	988.0	988.0	988.0
2.5°	992.1	984.9	988.0	988.0	983.9
5°	988.0	981.9	987.0	987.0	987.0
7.5°	980.9	975.8	983.9	986.0	986.0
10°	969.6	967.6	977.8	980.9	981.9
12.5°	957.4	956.4	970.7	974.7	977.8
15°	941.1	943.1	959.4	966.6	969.6
17.5°	923.7	927.8	946.2	956.4	959.4
20°	903.3	909.4	930.8	941.1	947.2
22.5°	880.8	890.0	912.5	924.7	931.9
25°	856.3	867.6	893.1	908.4	916.6
27.5°	829.8	844.1	873.7	891.0	899.2
30°	801.2	817.6	850.2	870.6	880.8
32.5°	771.6	791.0	826.7	849.2	861.4
35°	742.0	763.5	802.2	828.8	841.0
37.5°	712.4	733.9	776.7	805.3	820.6
40°	678.7	704.3	750.2	781.8	797.1
42.5°	646.1	673.6	722.6	757.3	773.7
45°	610.4	643.0	694.1	732.8	750.2
47.5°	577.7	610.4	665.5	706.3	725.7
50°	542.0	576.7	634.9	679.8	700.2
52.5°	507.3	543.0	604.2	652.2	672.6
55°	469.5	510.3	572.6	622.6	644.0
57.5°	431.7	475.6	539.9	592.0	613.4
60°	395.0	439.9	507.3	559.3	581.8
62.5°	358.3	403.2	473.6	526.7	548.1
65°	319.5	366.4	436.8	490.9	512.4
67.5°	280.7	329.7	400.1	454.2	474.6
70°	239.9	291.9	362.3	415.4	435.8
72.5°	202.1	254.1	323.6	375.6	395.0
75°	164.3	216.4	283.7	331.7	345.0
77.5°	127.6	179.6	239.9	271.5	274.6
80°	92.9	141.9	190.9	200.1	199.0
82.5°	62.3	106.1	131.7	132.7	135.7
85°	35.7	66.3	72.5	71.4	72.5
87.5°	14.3	23.5	20.4	15.3	15.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)