

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: P388541

Luminaire Tested: **24CZ2-35-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: P388541
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-U
Description: 2x4 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

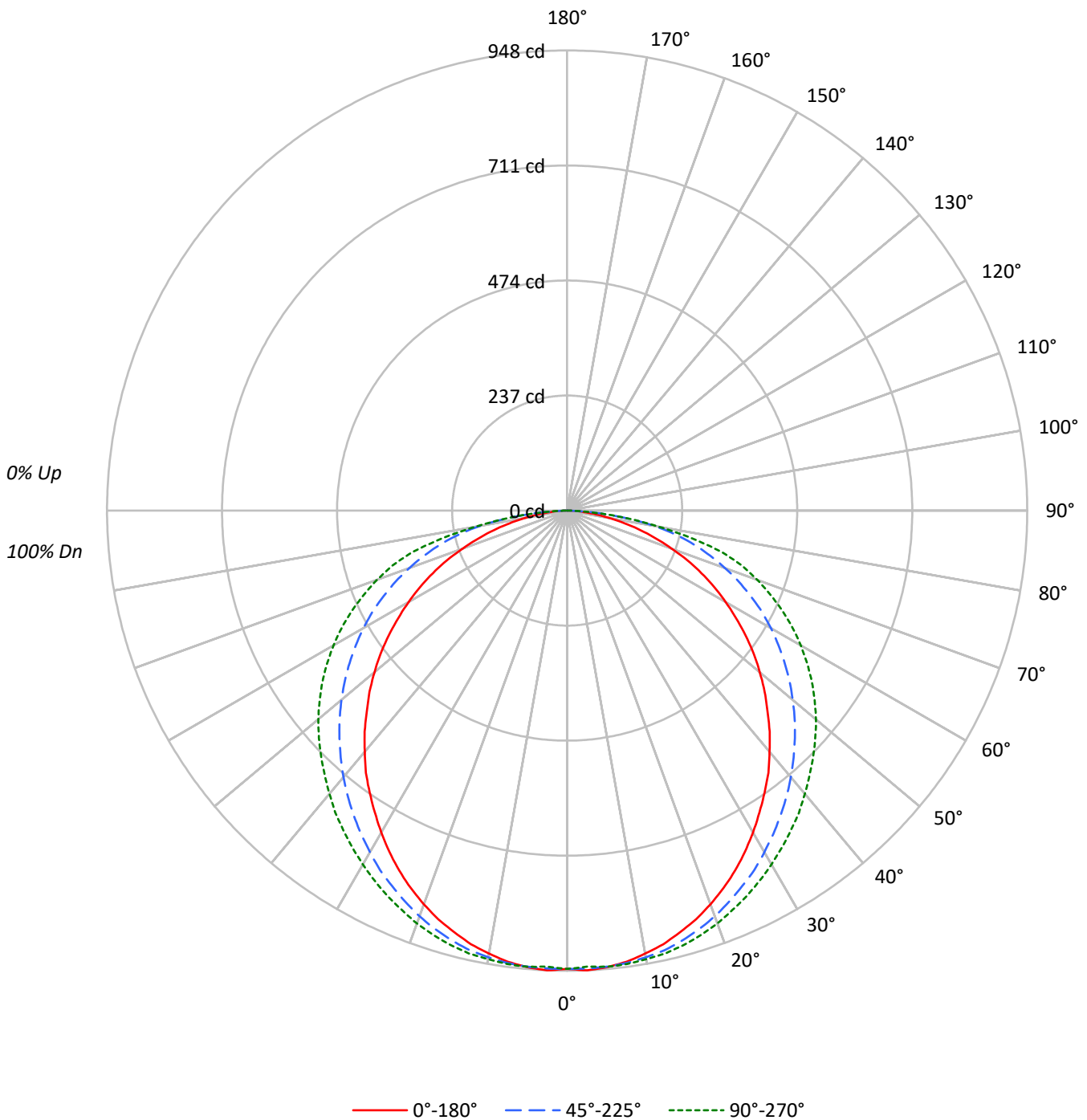
Lumens per Lamp: N/A
Luminaire Lumens: 2954.0 lumens
Efficiency: N/A
Efficacy: 98.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.33 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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



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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	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°	1270	1270	1270
5°	1275	1274	1274
10°	1266	1277	1282
15°	1253	1277	1291
20°	1236	1274	1296
25°	1215	1267	1300
30°	1190	1262	1308
35°	1165	1259	1320
40°	1139	1259	1338
45°	1110	1262	1364
50°	1084	1270	1401
55°	1053	1284	1444
60°	1016	1305	1496
65°	972	1329	1559
70°	902	1362	1638
75°	816	1410	1714
80°	688	1413	1474
85°	526	1070	1070



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.6	3.0
10°-20°	257.9	8.7
20°-30°	391.7	13.3
30°-40°	476.4	16.1
40°-50°	507.3	17.2
50°-60°	483.1	16.4
60°-70°	404.0	13.7
70°-80°	269.4	9.1
80°-90°	74.5	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°	739.2	25.0
0°-40°	1215.7	41.2
0°-60°	2206.0	74.7
0°-90°	2954.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2954.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	944	944	944	944	944	
5°	944	938	943	943	943	90
15°	899	901	917	924	927	254
25°	818	829	854	868	876	377
35°	709	730	767	792	804	444
45°	583	614	663	700	717	451
55°	449	488	547	595	616	401
65°	305	350	418	469	490	302
75°	157	207	271	317	330	166
85°	34	63	69	68	69	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	944.2	944.2	944.2	944.2	944.2
2.5°	948.1	941.3	944.2	944.2	940.3
5°	944.2	938.4	943.3	943.3	943.3
7.5°	937.4	932.5	940.3	942.3	942.3
10°	926.7	924.7	934.5	937.4	938.4
12.5°	915.0	914.0	927.7	931.6	934.5
15°	899.4	901.3	916.9	923.8	926.7
17.5°	882.8	886.7	904.2	914.0	916.9
20°	863.3	869.1	889.6	899.4	905.2
22.5°	841.8	850.6	872.1	883.8	890.6
25°	818.4	829.1	853.5	868.2	876.0
27.5°	793.0	806.7	835.0	851.6	859.4
30°	765.7	781.3	812.6	832.1	841.8
32.5°	737.4	756.0	790.1	811.6	823.3
35°	709.2	729.6	766.7	792.1	803.8
37.5°	680.9	701.4	742.3	769.6	784.3
40°	648.7	673.1	717.0	747.2	761.8
42.5°	617.5	643.8	690.6	723.8	739.4
45°	583.3	614.5	663.3	700.4	717.0
47.5°	552.1	583.3	636.0	675.0	693.5
50°	518.0	551.1	606.7	649.7	669.2
52.5°	484.8	518.9	577.5	623.3	642.8
55°	448.7	487.7	547.2	595.0	615.5
57.5°	412.6	454.6	516.0	565.8	586.2
60°	377.5	420.4	484.8	534.6	556.0
62.5°	342.4	385.3	452.6	503.3	523.8
65°	305.3	350.2	417.5	469.2	489.7
67.5°	268.3	315.1	382.4	434.1	453.6
70°	229.2	279.0	346.3	397.0	416.5
72.5°	193.1	242.9	309.2	359.0	377.5
75°	157.0	206.8	271.2	317.0	329.7
77.5°	121.9	171.7	229.2	259.5	262.4
80°	88.8	135.6	182.4	191.2	190.2
82.5°	59.5	101.4	125.8	126.8	129.7
85°	34.1	63.4	69.3	68.3	69.3
87.5°	13.7	22.4	19.5	14.6	14.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)