

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: P230003

Luminaire Tested: **24CZ-LD5-35SE-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230003
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25697)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-35SE-UNV-L950-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH RIBBED LENS
Light Source: (84) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3389.0 lumens
Efficiency: N/A
Efficacy: 118.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

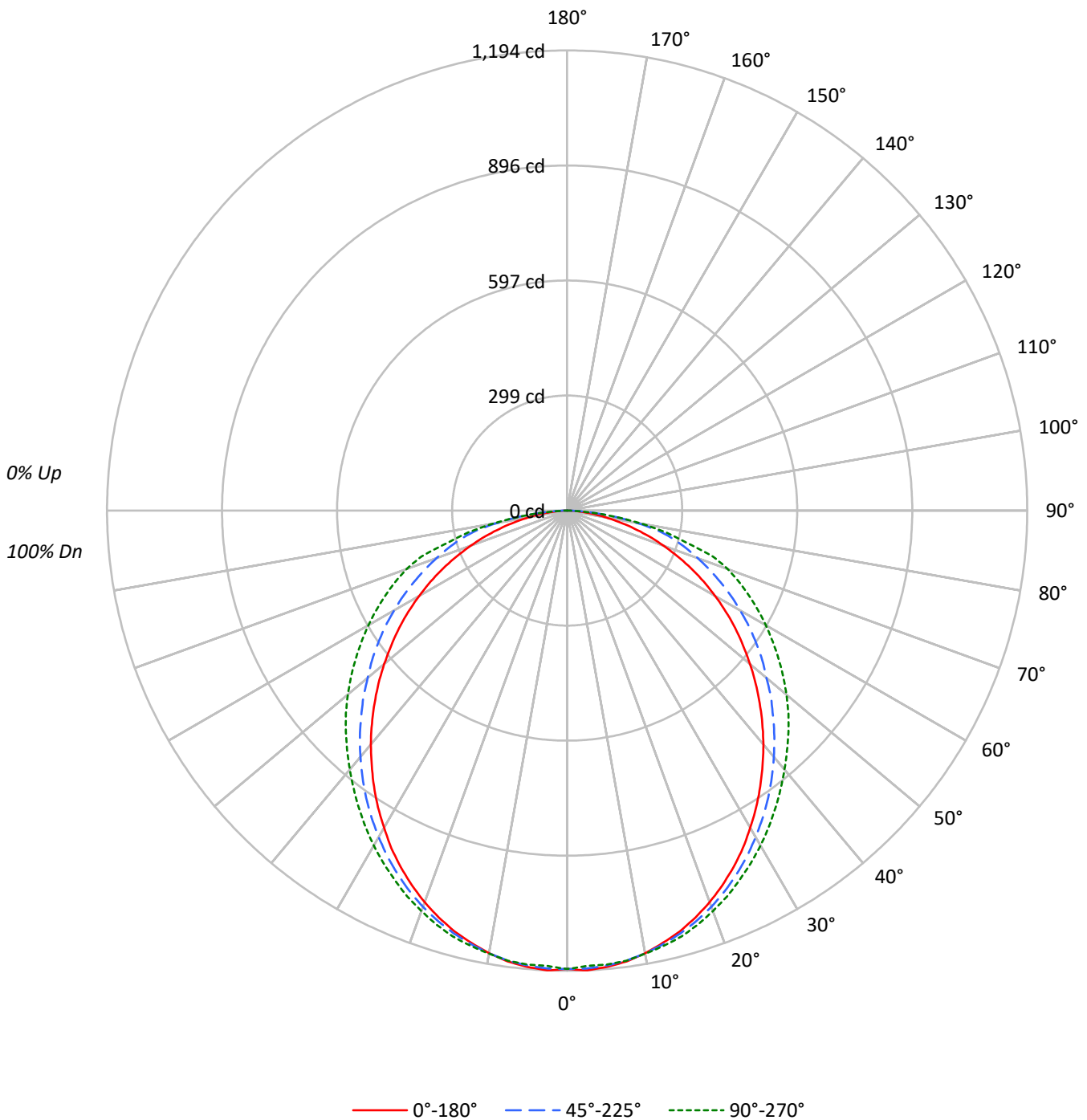
Input Watts (W): 28.57
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1600	1600	1600
5°	1605	1600	1597
10°	1593	1593	1595
15°	1574	1582	1594
20°	1548	1567	1583
25°	1516	1545	1571
30°	1476	1520	1559
35°	1435	1494	1548
40°	1392	1465	1541
45°	1345	1437	1545
50°	1297	1414	1554
55°	1249	1404	1571
60°	1193	1396	1602
65°	1131	1396	1655
70°	1045	1420	1744
75°	935	1484	1659
80°	783	1420	1519
85°	591	1093	1039



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.4	3.3
10°-20°	319.9	9.4
20°-30°	478.2	14.1
30°-40°	567.3	16.7
40°-50°	583.9	17.2
50°-60°	535.6	15.8
60°-70°	433.1	12.8
70°-80°	281.1	8.3
80°-90°	77.5	2.3
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°	910.5	26.9
0°-40°	1477.8	43.6
0°-60°	2597.3	76.6
0°-90°	3389.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3389.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1189	1189	1189	1189	1189	
5°	1188	1180	1185	1184	1182	113
15°	1130	1126	1136	1141	1144	318
25°	1021	1022	1041	1050	1058	470
35°	874	881	910	929	942	546
45°	707	718	755	791	812	545
55°	533	549	599	648	670	476
65°	355	376	439	497	520	351
75°	180	214	285	319	319	191
85°	38	65	71	68	67	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1189.4	1189.4	1189.4	1189.4	1189.4
2.5°	1194.0	1184.7	1189.4	1188.2	1182.4
5°	1188.2	1180.1	1184.7	1183.6	1182.4
7.5°	1180.1	1172.0	1177.8	1176.6	1177.8
10°	1166.2	1159.2	1166.2	1167.3	1167.3
12.5°	1148.8	1142.9	1152.2	1154.6	1156.9
15°	1130.2	1125.5	1136.0	1140.6	1144.1
17.5°	1107.0	1103.5	1116.3	1122.1	1126.7
20°	1081.4	1080.3	1094.2	1100.0	1105.8
22.5°	1052.4	1052.4	1068.7	1075.6	1083.8
25°	1021.1	1022.3	1040.8	1050.1	1058.2
27.5°	987.5	988.6	1010.7	1022.3	1031.6
30°	950.3	955.0	978.2	993.3	1003.7
32.5°	913.2	919.0	944.5	961.9	973.5
35°	873.7	880.7	909.7	929.4	942.2
37.5°	833.1	841.3	872.6	894.6	909.7
40°	792.5	801.8	834.3	859.8	877.2
42.5°	749.6	760.0	796.0	826.2	844.7
45°	706.7	718.3	755.4	791.4	812.2
47.5°	663.7	677.6	717.1	756.6	778.6
50°	619.6	633.6	675.3	720.6	742.6
52.5°	575.5	591.8	638.2	684.6	706.7
55°	532.6	548.8	598.7	647.5	669.5
57.5°	488.5	504.8	559.3	610.3	632.4
60°	443.3	461.8	518.7	570.9	595.3
62.5°	399.2	418.9	479.2	534.9	558.1
65°	355.1	376.0	438.6	496.6	519.8
67.5°	309.8	334.2	399.2	458.3	482.7
70°	265.7	292.4	360.9	420.0	443.3
72.5°	222.8	251.8	322.6	382.9	396.8
75°	179.9	213.5	285.4	319.1	319.1
77.5°	139.2	176.4	243.7	256.4	263.4
80°	101.0	141.6	183.3	198.4	196.1
82.5°	67.3	107.9	131.1	131.1	127.6
85°	38.3	65.0	70.8	68.5	67.3
87.5°	16.2	24.4	22.0	17.4	15.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)