

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: P230931

Luminaire Tested: **14CZ-LD5-44-S-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230931
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35112)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ-LD5-44-S-UNV-L950-CD1-U
Description: CRUZE 1x4 LED TROFFER
WITH SMOOTH LENS
Light Source: (84) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4305.0 lumens
Efficiency: N/A
Efficacy: 104.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

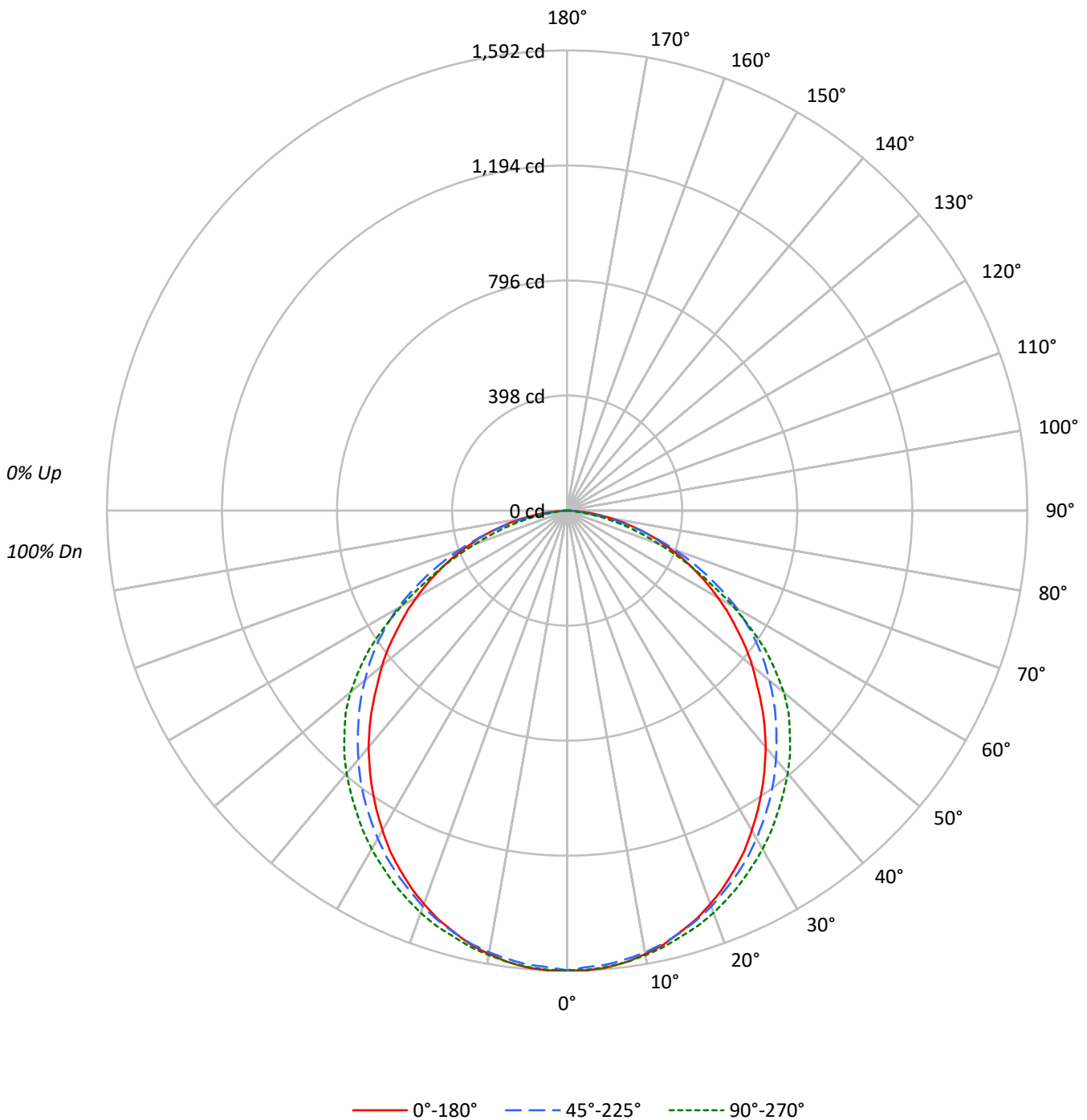
Input Watts (W): 41.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	105	100	97	106	102	98	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4279	4279	4279
5°	4285	4259	4280
10°	4256	4241	4267
15°	4206	4211	4249
20°	4147	4175	4241
25°	4067	4124	4221
30°	3970	4071	4202
35°	3863	4014	4178
40°	3753	3949	4171
45°	3621	3884	4147
50°	3502	3823	4096
55°	3366	3762	3915
60°	3242	3655	3572
65°	3102	3420	3139
70°	2928	3109	2656
75°	2732	2693	2194
80°	2408	2081	1605
85°	1896	1007	889



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.3	3.5
10°-20°	428.1	9.9
20°-30°	642.4	14.9
30°-40°	765.9	17.8
40°-50°	788.9	18.3
50°-60°	703.1	16.3
60°-70°	506.6	11.8
70°-80°	264.9	6.2
80°-90°	54.8	1.3
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°	1220.8	28.4
0°-40°	1986.7	46.1
0°-60°	3478.7	80.8
0°-90°	4305.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4305.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1590	1590	1590	1590	1590	
5°	1586	1583	1577	1586	1584	151
15°	1510	1512	1512	1527	1525	426
25°	1370	1377	1389	1416	1422	631
35°	1176	1191	1222	1262	1272	735
45°	952	973	1020	1078	1090	734
55°	717	740	802	838	834	643
65°	487	504	537	512	493	483
75°	263	276	259	224	211	278
85°	61	54	33	29	29	72
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1590.3	1590.3	1590.3	1590.3	1590.3
2.5°	1592.2	1588.4	1580.7	1590.3	1590.3
5°	1586.4	1582.6	1576.8	1586.4	1584.5
7.5°	1574.9	1571.1	1565.3	1576.8	1574.9
10°	1557.7	1555.7	1551.9	1563.4	1561.5
12.5°	1538.5	1536.6	1534.6	1546.1	1546.1
15°	1509.7	1511.6	1511.6	1527.0	1525.0
17.5°	1482.8	1484.8	1486.7	1505.9	1505.9
20°	1448.3	1450.2	1457.9	1479.0	1480.9
22.5°	1411.9	1413.8	1423.4	1448.3	1452.2
25°	1369.7	1377.3	1388.8	1415.7	1421.5
27.5°	1327.5	1333.2	1352.4	1383.1	1386.9
30°	1277.6	1289.1	1310.2	1344.7	1352.4
32.5°	1227.7	1241.1	1266.1	1304.4	1314.0
35°	1175.9	1191.3	1222.0	1262.2	1271.8
37.5°	1122.2	1135.6	1174.0	1216.2	1229.6
40°	1068.5	1081.9	1124.1	1172.1	1187.4
42.5°	1010.9	1030.1	1072.3	1126.0	1141.4
45°	951.5	972.6	1020.5	1078.1	1089.6
47.5°	890.1	913.1	968.7	1026.3	1039.7
50°	836.4	857.5	913.1	968.7	978.3
52.5°	778.8	798.0	859.4	905.4	907.4
55°	717.4	740.5	801.8	838.3	834.5
57.5°	661.8	681.0	740.5	759.6	748.1
60°	602.3	619.6	679.1	681.0	663.7
62.5°	544.8	562.1	608.1	594.7	573.6
65°	487.2	504.5	537.1	512.2	493.0
67.5°	431.6	447.0	466.1	433.5	414.4
70°	372.1	393.3	395.2	356.8	337.6
72.5°	320.4	331.9	328.0	291.6	274.3
75°	262.8	276.2	259.0	224.4	211.0
77.5°	209.1	218.7	195.7	163.1	153.5
80°	155.4	161.1	134.3	109.3	103.6
82.5°	105.5	105.5	76.7	59.5	53.7
85°	61.4	53.7	32.6	28.8	28.8
87.5°	21.1	13.4	13.4	13.4	13.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)