

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: P230599

Luminaire Tested: **22CZ-LD5-44-S-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230599
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25712)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-44-S-UNV-L950-CD1-U
Description: CRUZE 2x2 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: 4340.0 lumens
Efficiency: N/A
Efficacy: 103.8 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.24 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

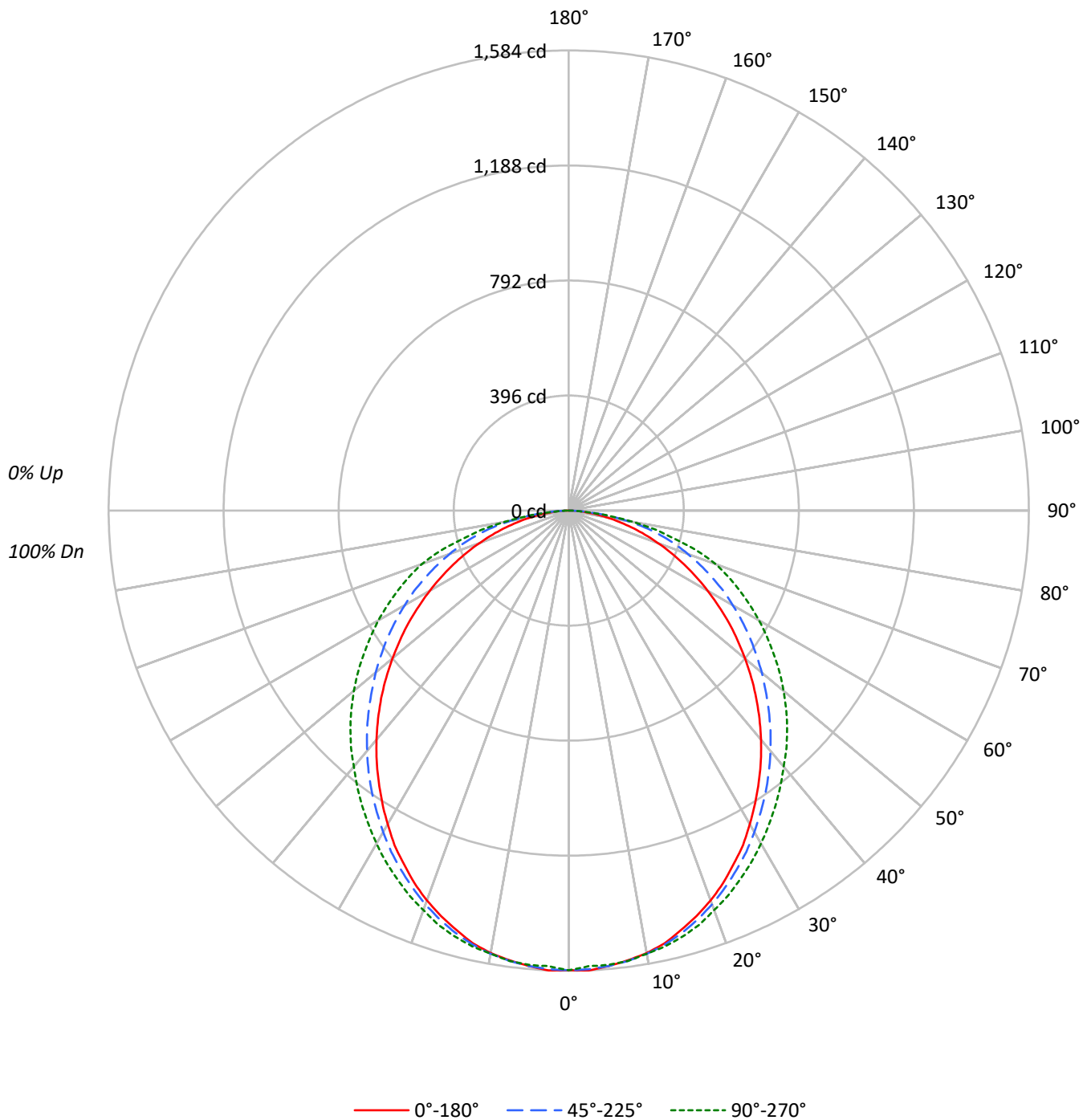
Input Watts (W): 41.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83		
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69		
3	90	79	71	64	87	78	70	64	75	68	63	72	66	62	69	64	60	58		
4	82	70	61	54	80	69	61	54	66	59	53	64	58	53	62	56	52	50		
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43		
6	70	56	47	41	68	56	47	41	54	46	40	52	45	40	50	44	40	38		
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33		
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30		
9	56	43	35	29	55	42	34	29	41	34	29	40	34	29	39	33	29	27		
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4258	4258	4258
5°	4251	4251	4240
10°	4226	4232	4232
15°	4164	4193	4228
20°	4089	4131	4191
25°	3986	4054	4153
30°	3874	3970	4113
35°	3746	3883	4074
40°	3618	3793	4042
45°	3475	3705	4046
50°	3316	3630	4041
55°	3159	3570	4039
60°	2973	3512	4073
65°	2788	3465	4128
70°	2575	3428	4231
75°	2319	3403	3923
80°	2035	3166	3425
85°	1673	2381	2124



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.4	3.4
10°-20°	424.4	9.8
20°-30°	630.4	14.5
30°-40°	742.0	17.1
40°-50°	756.5	17.4
50°-60°	682.3	15.7
60°-70°	537.4	12.4
70°-80°	331.5	7.6
80°-90°	86.1	2.0
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°	1204.2	27.7
0°-40°	1946.3	44.8
0°-60°	3385.0	78.0
0°-90°	4340.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4340.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1582	1582	1582	1582	1582	
5°	1574	1576	1574	1572	1570	149
15°	1495	1501	1505	1513	1518	421
25°	1342	1351	1365	1388	1399	619
35°	1140	1153	1182	1220	1240	713
45°	913	928	974	1032	1063	704
55°	673	696	761	830	861	601
65°	438	469	544	613	648	434
75°	223	261	327	365	377	238
85°	54	69	77	73	69	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1582.2	1582.2	1582.2	1582.2	1582.2
2.5°	1584.3	1584.3	1580.1	1575.9	1569.7
5°	1573.8	1575.9	1573.8	1571.8	1569.7
7.5°	1561.3	1563.4	1563.4	1563.4	1563.4
10°	1546.7	1548.8	1548.8	1548.8	1548.8
12.5°	1525.9	1528.0	1530.1	1532.2	1536.3
15°	1494.6	1500.9	1505.1	1513.4	1517.6
17.5°	1463.4	1469.6	1475.9	1486.3	1494.6
20°	1427.9	1432.1	1442.5	1455.0	1463.4
22.5°	1388.3	1394.6	1405.0	1421.7	1434.2
25°	1342.5	1350.8	1365.4	1388.3	1398.7
27.5°	1298.7	1304.9	1323.7	1348.7	1363.3
30°	1246.6	1254.9	1277.8	1309.1	1323.7
32.5°	1194.5	1204.9	1229.9	1265.3	1282.0
35°	1140.3	1152.8	1181.9	1219.5	1240.3
37.5°	1086.1	1098.6	1131.9	1173.6	1196.5
40°	1029.8	1042.3	1079.8	1125.7	1150.7
42.5°	971.4	986.0	1027.7	1079.8	1109.0
45°	913.0	927.6	973.5	1031.9	1063.1
47.5°	852.6	869.3	919.3	983.9	1015.2
50°	792.1	810.9	867.2	933.9	965.2
52.5°	731.7	752.5	813.0	881.8	915.1
55°	673.3	696.2	760.9	829.7	860.9
57.5°	610.8	637.9	706.7	773.4	808.8
60°	552.4	581.6	652.5	719.2	756.7
62.5°	494.0	525.3	600.4	667.1	702.5
65°	437.8	469.0	544.1	612.9	648.3
67.5°	381.5	416.9	489.9	558.7	594.1
70°	327.3	364.8	435.7	502.4	537.8
72.5°	275.2	312.7	383.6	446.1	466.9
75°	223.0	260.6	327.3	364.8	377.3
77.5°	175.1	210.5	268.9	291.8	308.5
80°	131.3	162.6	204.3	218.9	221.0
82.5°	89.6	116.7	141.8	143.8	141.8
85°	54.2	68.8	77.1	73.0	68.8
87.5°	25.0	27.1	25.0	16.7	10.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)