

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: P277486

Luminaire Tested: **22CZ2-44HE-S-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277486  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-44HE-S-UNV-L92765-W2A1-U-5700K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4094.0 lumens  
Efficiency: N/A  
Efficacy: 114.9 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

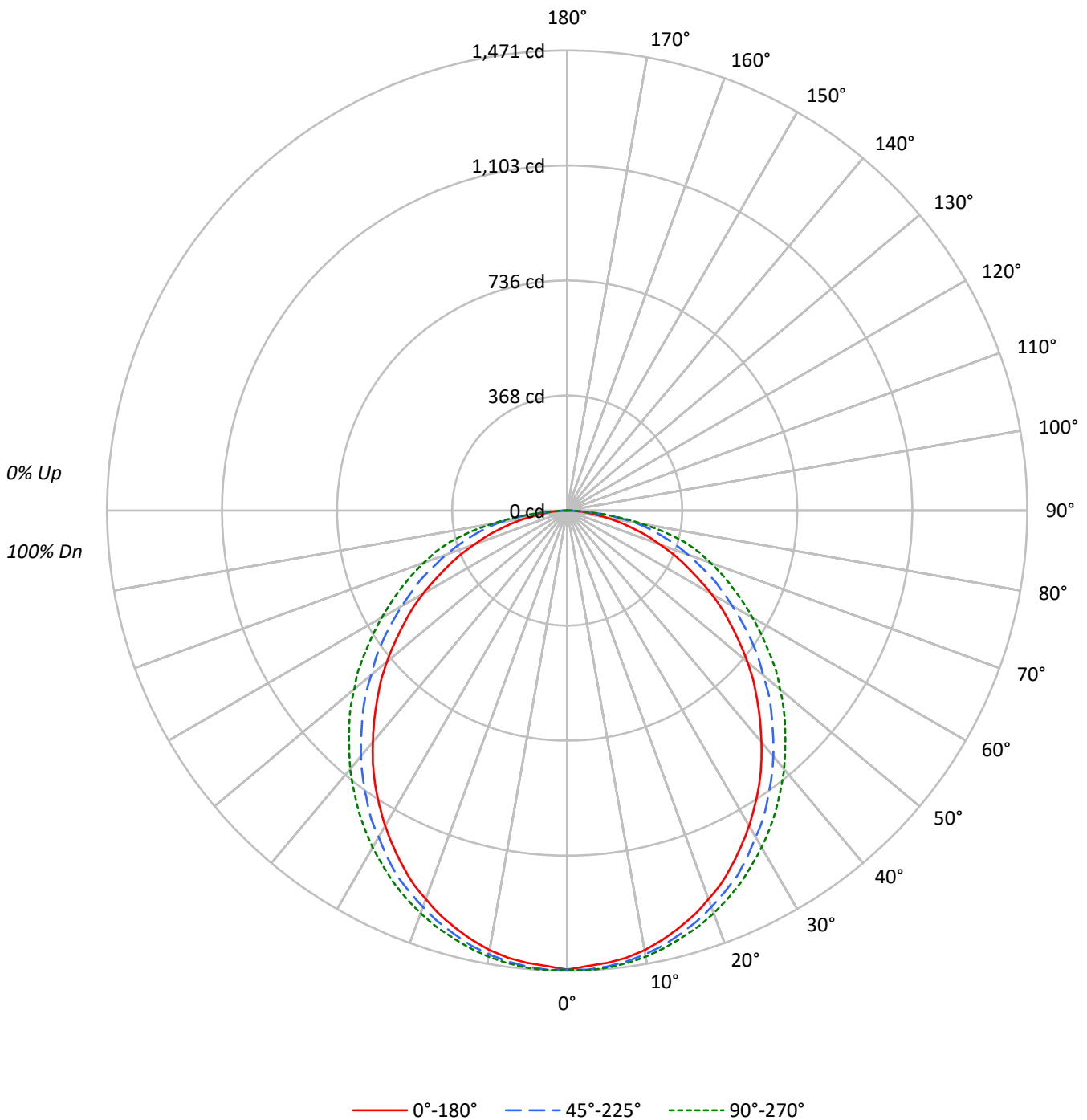
Input Watts (W): 35.619  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49					49			
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27					27			
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3948	3948	3948
5°	3921	3952	3963
10°	3899	3936	3956
15°	3848	3901	3938
20°	3785	3862	3922
25°	3709	3823	3896
30°	3615	3745	3864
35°	3514	3677	3828
40°	3395	3603	3791
45°	3271	3518	3751
50°	3151	3423	3718
55°	3002	3361	3692
60°	2868	3279	3680
65°	2676	3259	3722
70°	2465	3231	3832
75°	2224	3277	4032
80°	1925	3375	3789
85°	1593	2831	2831



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	138.7	3.4
10°-20°	394.8	9.6
20°-30°	590.7	14.4
30°-40°	699.6	17.1
40°-50°	713.0	17.4
50°-60°	639.0	15.6
60°-70°	500.3	12.2
70°-80°	322.6	7.9
80°-90°	95.3	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°	1124.3	27.5
0°-40°	1823.8	44.5
0°-60°	3175.8	77.6
0°-90°	4094.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4094.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1467	1467	1467	1467	1467	
5°	1452	1456	1463	1465	1467	138
15°	1381	1389	1400	1412	1414	389
25°	1249	1261	1288	1305	1312	575
35°	1070	1083	1119	1154	1165	669
45°	860	879	924	972	986	664
55°	640	661	716	766	787	574
65°	420	445	512	562	584	417
75°	214	246	315	369	388	229
85°	52	71	92	92	92	61
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1467.0	1467.0	1467.0	1467.0	1467.0
2.5°	1457.5	1461.3	1468.9	1470.8	1470.8
5°	1451.7	1455.5	1463.2	1465.1	1467.0
7.5°	1442.2	1444.1	1453.6	1457.5	1459.4
10°	1426.9	1430.7	1440.3	1446.0	1447.9
12.5°	1405.9	1411.6	1423.1	1430.7	1432.6
15°	1381.1	1388.7	1400.2	1411.6	1413.5
17.5°	1354.3	1361.9	1377.2	1390.6	1394.4
20°	1321.8	1331.4	1348.6	1363.9	1369.6
22.5°	1289.4	1297.0	1318.0	1337.1	1342.8
25°	1249.2	1260.7	1287.5	1304.6	1312.3
27.5°	1207.2	1220.6	1247.3	1270.3	1277.9
30°	1163.3	1176.7	1205.3	1234.0	1243.5
32.5°	1117.4	1132.7	1167.1	1195.8	1205.3
35°	1069.7	1083.1	1119.4	1153.7	1165.2
37.5°	1020.0	1031.5	1073.5	1109.8	1121.3
40°	966.5	981.8	1025.8	1067.8	1079.2
42.5°	913.1	930.3	974.2	1020.0	1031.5
45°	859.6	878.7	924.5	972.3	985.6
47.5°	808.0	823.3	874.9	920.7	939.8
50°	752.6	767.9	817.6	869.1	888.2
52.5°	695.3	716.3	769.8	819.5	842.4
55°	639.9	660.9	716.3	766.0	787.0
57.5°	588.3	605.5	662.8	714.4	735.4
60°	532.9	548.2	609.3	664.7	683.8
62.5°	473.7	496.6	559.7	611.3	634.2
65°	420.2	445.1	511.9	561.6	584.5
67.5°	370.6	393.5	458.4	511.9	536.8
70°	313.3	343.8	410.7	464.2	487.1
72.5°	267.4	294.2	362.9	416.4	441.2
75°	213.9	246.4	315.2	368.7	387.8
77.5°	170.0	202.5	267.4	309.4	319.0
80°	124.2	156.6	217.8	238.8	244.5
82.5°	84.0	114.6	156.6	162.4	164.3
85°	51.6	70.7	91.7	91.7	91.7
87.5°	24.8	28.7	32.5	30.6	30.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)