

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: P277430

Luminaire Tested: **22CZ2-44HE-S-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277430
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-L82765-W2A1-U-5000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4471.0 lumens
Efficiency: N/A
Efficacy: 126.2 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

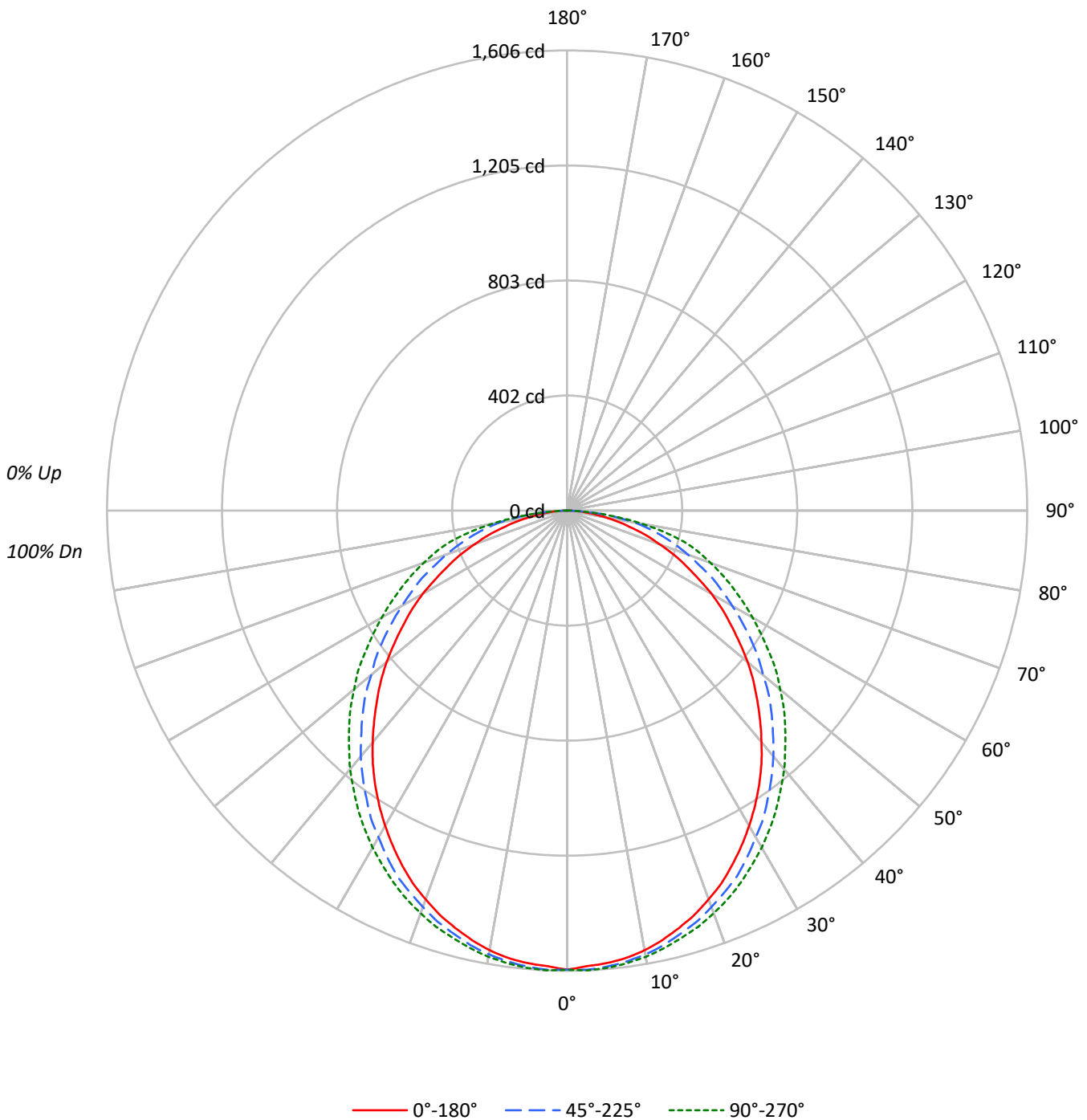
Input Watts (W): 35.433
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4311	4311	4311
5°	4283	4316	4328
10°	4258	4298	4321
15°	4202	4260	4301
20°	4134	4218	4283
25°	4051	4175	4255
30°	3947	4090	4220
35°	3838	4016	4180
40°	3708	3935	4140
45°	3572	3843	4096
50°	3441	3738	4061
55°	3278	3670	4032
60°	3132	3582	4019
65°	2922	3560	4064
70°	2692	3529	4185
75°	2429	3579	4403
80°	2101	3685	4138
85°	1738	3091	3091



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.5	3.4
10°-20°	431.2	9.6
20°-30°	645.1	14.4
30°-40°	764.0	17.1
40°-50°	778.6	17.4
50°-60°	697.9	15.6
60°-70°	546.4	12.2
70°-80°	352.3	7.9
80°-90°	104.1	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°	1227.8	27.5
0°-40°	1991.8	44.5
0°-60°	3468.3	77.6
0°-90°	4471.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4471.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1602	1602	1602	1602	1602	
5°	1585	1590	1598	1600	1602	151
15°	1508	1517	1529	1542	1544	425
25°	1364	1377	1406	1425	1433	628
35°	1168	1183	1222	1260	1272	730
45°	939	960	1010	1062	1076	725
55°	699	722	782	836	860	627
65°	459	486	559	613	638	456
75°	234	269	344	403	424	250
85°	56	77	100	100	100	66
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1602.1	1602.1	1602.1	1602.1	1602.1
2.5°	1591.7	1595.8	1604.2	1606.3	1606.3
5°	1585.4	1589.6	1597.9	1600.0	1602.1
7.5°	1575.0	1577.1	1587.5	1591.7	1593.8
10°	1558.3	1562.5	1572.9	1579.2	1581.2
12.5°	1535.3	1541.6	1554.1	1562.5	1564.5
15°	1508.2	1516.6	1529.1	1541.6	1543.7
17.5°	1479.0	1487.4	1504.1	1518.7	1522.8
20°	1443.6	1454.0	1472.8	1489.5	1495.7
22.5°	1408.1	1416.4	1439.4	1460.2	1466.5
25°	1364.3	1376.8	1406.0	1424.8	1433.1
27.5°	1318.4	1333.0	1362.2	1387.2	1395.6
30°	1270.4	1285.0	1316.3	1347.6	1358.0
32.5°	1220.3	1237.0	1274.6	1305.9	1316.3
35°	1168.2	1182.8	1222.4	1260.0	1272.5
37.5°	1114.0	1126.5	1172.4	1212.0	1224.5
40°	1055.5	1072.2	1120.2	1166.1	1178.6
42.5°	997.1	1015.9	1063.9	1114.0	1126.5
45°	938.7	959.6	1009.7	1061.8	1076.4
47.5°	882.4	899.1	955.4	1005.5	1026.3
50°	821.9	838.6	892.8	949.2	970.0
52.5°	759.3	782.3	840.7	894.9	920.0
55°	698.8	721.8	782.3	836.5	859.5
57.5°	642.5	661.3	723.9	780.2	803.1
60°	582.0	598.7	665.5	726.0	746.8
62.5°	517.3	542.4	611.2	667.5	692.6
65°	458.9	486.1	559.1	613.3	638.3
67.5°	404.7	429.7	500.7	559.1	586.2
70°	342.1	375.5	448.5	506.9	531.9
72.5°	292.0	321.3	396.4	454.8	481.9
75°	233.6	269.1	344.2	402.6	423.5
77.5°	185.7	221.1	292.0	337.9	348.4
80°	135.6	171.1	237.8	260.8	267.0
82.5°	91.8	125.2	171.1	177.3	179.4
85°	56.3	77.2	100.1	100.1	100.1
87.5°	27.1	31.3	35.5	33.4	33.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)