

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: P277433

Luminaire Tested: **22CZ2-44HE-S-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277433
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-6500K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4539.0 lumens
Efficiency: N/A
Efficacy: 125.5 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

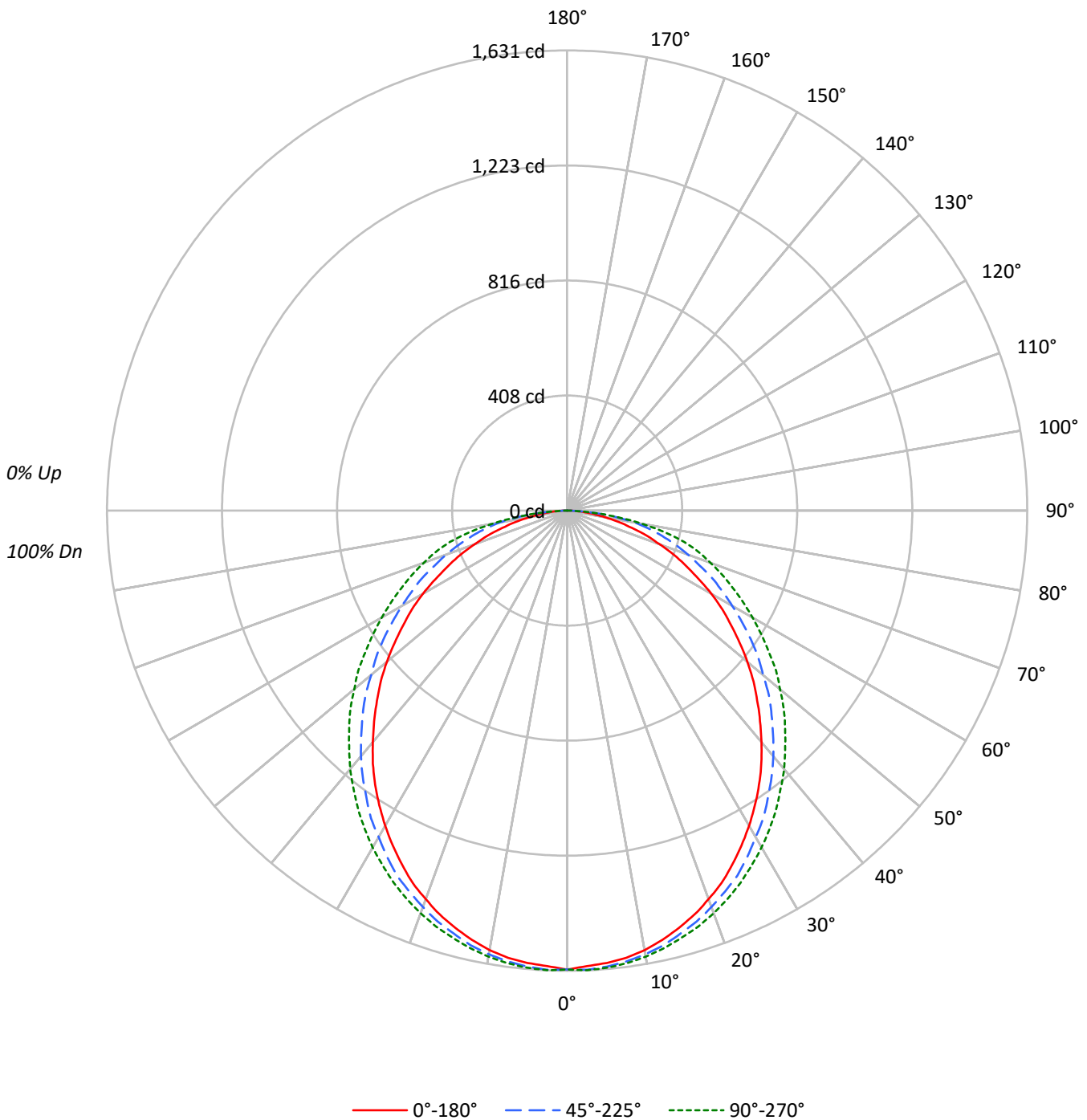
Input Watts (W): 36.177
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4377	4377	4377
5°	4348	4382	4394
10°	4323	4363	4386
15°	4266	4325	4366
20°	4197	4282	4348
25°	4112	4238	4320
30°	4007	4152	4284
35°	3896	4077	4244
40°	3764	3995	4203
45°	3627	3901	4159
50°	3493	3795	4123
55°	3329	3726	4093
60°	3180	3636	4081
65°	2967	3614	4126
70°	2733	3582	4249
75°	2466	3633	4470
80°	2134	3741	4201
85°	1766	3140	3140



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.8	3.4
10°-20°	437.7	9.6
20°-30°	654.9	14.4
30°-40°	775.6	17.1
40°-50°	790.5	17.4
50°-60°	708.5	15.6
60°-70°	554.7	12.2
70°-80°	357.7	7.9
80°-90°	105.7	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°	1246.5	27.5
0°-40°	2022.1	44.5
0°-60°	3521.0	77.6
0°-90°	4539.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4539.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1626	1626	1626	1626	1626	
5°	1610	1614	1622	1624	1626	153
15°	1531	1540	1552	1565	1567	432
25°	1385	1398	1427	1446	1455	638
35°	1186	1201	1241	1279	1292	741
45°	953	974	1025	1078	1093	736
55°	710	733	794	849	872	636
65°	466	493	568	623	648	463
75°	237	273	349	409	430	254
85°	57	78	102	102	102	67
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1626.5	1626.5	1626.5	1626.5	1626.5
2.5°	1615.9	1620.1	1628.6	1630.7	1630.7
5°	1609.5	1613.8	1622.2	1624.3	1626.5
7.5°	1598.9	1601.1	1611.6	1615.9	1618.0
10°	1582.0	1586.2	1596.8	1603.2	1605.3
12.5°	1558.7	1565.0	1577.8	1586.2	1588.3
15°	1531.2	1539.6	1552.3	1565.0	1567.2
17.5°	1501.5	1510.0	1526.9	1541.8	1546.0
20°	1465.5	1476.1	1495.2	1512.1	1518.5
22.5°	1429.5	1438.0	1461.3	1482.5	1488.8
25°	1385.0	1397.7	1427.4	1446.5	1454.9
27.5°	1338.4	1353.3	1382.9	1408.3	1416.8
30°	1289.7	1304.6	1336.3	1368.1	1378.7
32.5°	1238.9	1255.9	1294.0	1325.7	1336.3
35°	1186.0	1200.8	1241.0	1279.1	1291.9
37.5°	1130.9	1143.6	1190.2	1230.4	1243.1
40°	1071.6	1088.5	1137.3	1183.8	1196.6
42.5°	1012.3	1031.4	1080.1	1130.9	1143.6
45°	953.0	974.2	1025.0	1078.0	1092.8
47.5°	895.8	912.8	969.9	1020.8	1042.0
50°	834.4	851.4	906.4	963.6	984.8
52.5°	770.9	794.2	853.5	908.5	933.9
55°	709.5	732.8	794.2	849.2	872.5
57.5°	652.3	671.3	734.9	792.1	815.4
60°	590.9	607.8	675.6	737.0	758.2
62.5°	525.2	550.6	620.5	677.7	703.1
65°	465.9	493.4	567.6	622.6	648.0
67.5°	410.9	436.3	508.3	567.6	595.1
70°	347.3	381.2	455.3	514.6	540.0
72.5°	296.5	326.1	402.4	461.7	489.2
75°	237.2	273.2	349.4	408.7	429.9
77.5°	188.5	224.5	296.5	343.1	353.7
80°	137.7	173.7	241.4	264.7	271.1
82.5°	93.2	127.1	173.7	180.0	182.1
85°	57.2	78.4	101.7	101.7	101.7
87.5°	27.5	31.8	36.0	33.9	33.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)