

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: P277345

Luminaire Tested: **22CZ2-44HE-S-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277345
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-L83050-W2A1-U-3000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4104.0 lumens
Efficiency: N/A
Efficacy: 118.9 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

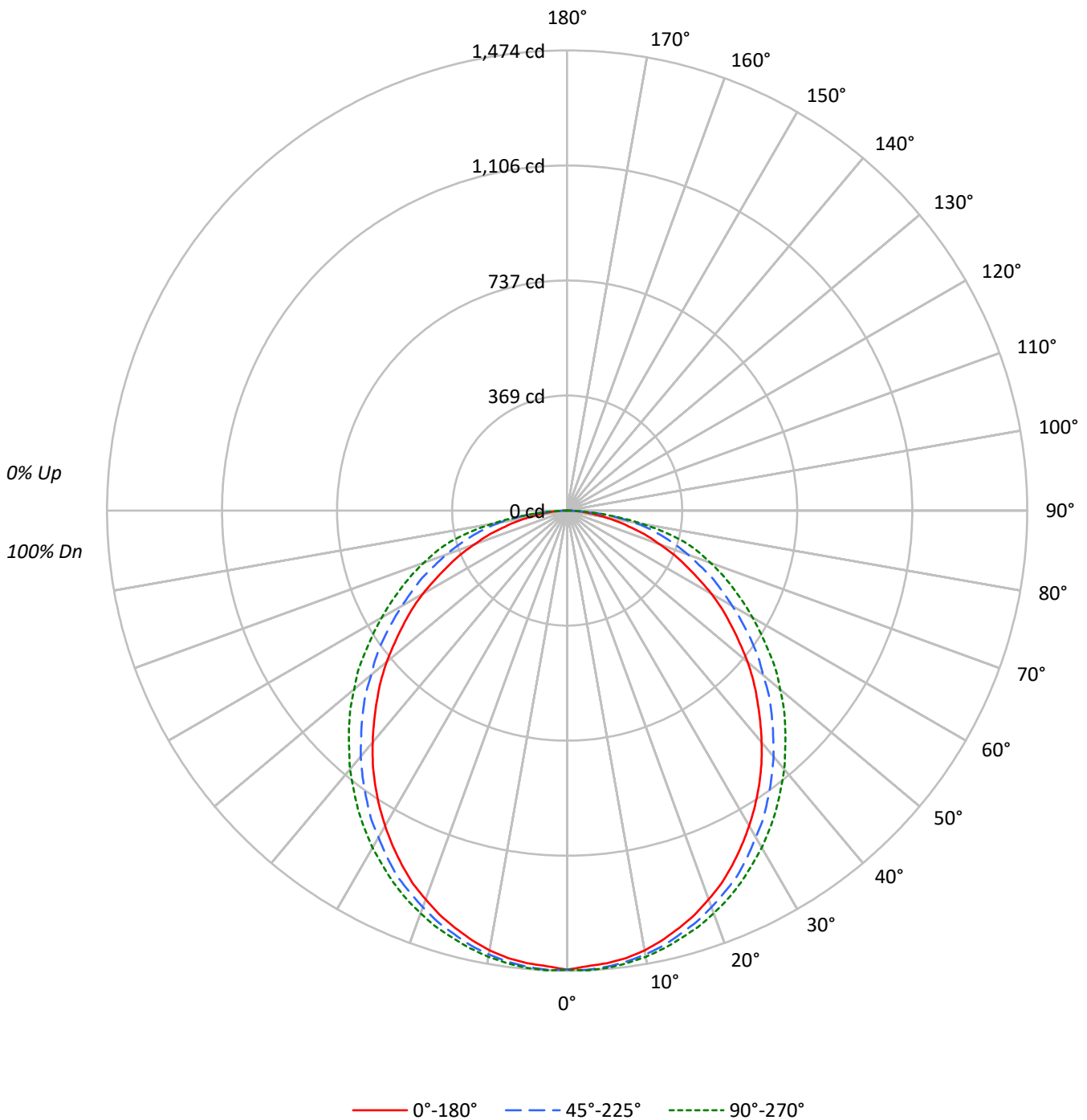
Input Watts (W): 34.503
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3957	3957	3957
5°	3931	3962	3972
10°	3909	3945	3966
15°	3857	3910	3948
20°	3795	3871	3932
25°	3718	3832	3906
30°	3623	3755	3874
35°	3523	3686	3837
40°	3404	3612	3801
45°	3279	3527	3760
50°	3158	3431	3728
55°	3010	3369	3701
60°	2875	3287	3689
65°	2683	3268	3731
70°	2471	3239	3842
75°	2230	3284	4041
80°	1929	3383	3798
85°	1596	2837	2837



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.1	3.4
10°-20°	395.8	9.6
20°-30°	592.2	14.4
30°-40°	701.3	17.1
40°-50°	714.7	17.4
50°-60°	640.6	15.6
60°-70°	501.5	12.2
70°-80°	323.4	7.9
80°-90°	95.5	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°	1127.0	27.5
0°-40°	1828.3	44.5
0°-60°	3183.6	77.6
0°-90°	4104.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4104.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1471	1471	1471	1471	1471	
5°	1455	1459	1467	1469	1471	138
15°	1384	1392	1404	1415	1417	390
25°	1252	1264	1291	1308	1316	576
35°	1072	1086	1122	1157	1168	670
45°	862	881	927	975	988	665
55°	642	662	718	768	789	575
65°	421	446	513	563	586	418
75°	214	247	316	370	389	230
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°	1470.6	1470.6	1470.6	1470.6	1470.6
2.5°	1461.0	1464.8	1472.5	1474.4	1474.4
5°	1455.3	1459.1	1466.8	1468.7	1470.6
7.5°	1445.7	1447.6	1457.2	1461.0	1462.9
10°	1430.4	1434.2	1443.8	1449.5	1451.4
12.5°	1409.3	1415.1	1426.6	1434.2	1436.1
15°	1384.4	1392.1	1403.6	1415.1	1417.0
17.5°	1357.6	1365.3	1380.6	1394.0	1397.8
20°	1325.1	1334.6	1351.9	1367.2	1372.9
22.5°	1292.5	1300.2	1321.2	1340.4	1346.1
25°	1252.3	1263.8	1290.6	1307.8	1315.5
27.5°	1210.2	1223.6	1250.4	1273.4	1281.0
30°	1166.1	1179.5	1208.3	1237.0	1246.6
32.5°	1120.2	1135.5	1170.0	1198.7	1208.3
35°	1072.3	1085.7	1122.1	1156.6	1168.0
37.5°	1022.5	1034.0	1076.1	1112.5	1124.0
40°	968.9	984.2	1028.3	1070.4	1081.9
42.5°	915.3	932.5	976.6	1022.5	1034.0
45°	861.7	880.8	926.8	974.6	988.1
47.5°	810.0	825.3	877.0	922.9	942.1
50°	754.4	769.8	819.5	871.2	890.4
52.5°	697.0	718.1	771.7	821.5	844.4
55°	641.5	662.5	718.1	767.8	788.9
57.5°	589.8	607.0	664.4	716.1	737.2
60°	534.2	549.6	610.8	666.4	685.5
62.5°	474.9	497.9	561.0	612.7	635.7
65°	421.3	446.2	513.2	563.0	585.9
67.5°	371.5	394.5	459.6	513.2	538.1
70°	314.0	344.7	411.7	465.3	488.3
72.5°	268.1	294.9	363.8	417.4	442.3
75°	214.5	247.0	315.9	369.6	388.7
77.5°	170.4	203.0	268.1	310.2	319.8
80°	124.5	157.0	218.3	239.4	245.1
82.5°	84.3	114.9	157.0	162.8	164.7
85°	51.7	70.8	91.9	91.9	91.9
87.5°	24.9	28.7	32.6	30.6	30.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)