

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: P277177

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277177
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-44HE-UNV-L83050-W2A1-U-3000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3891.0 lumens
Efficiency: N/A
Efficacy: 112.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

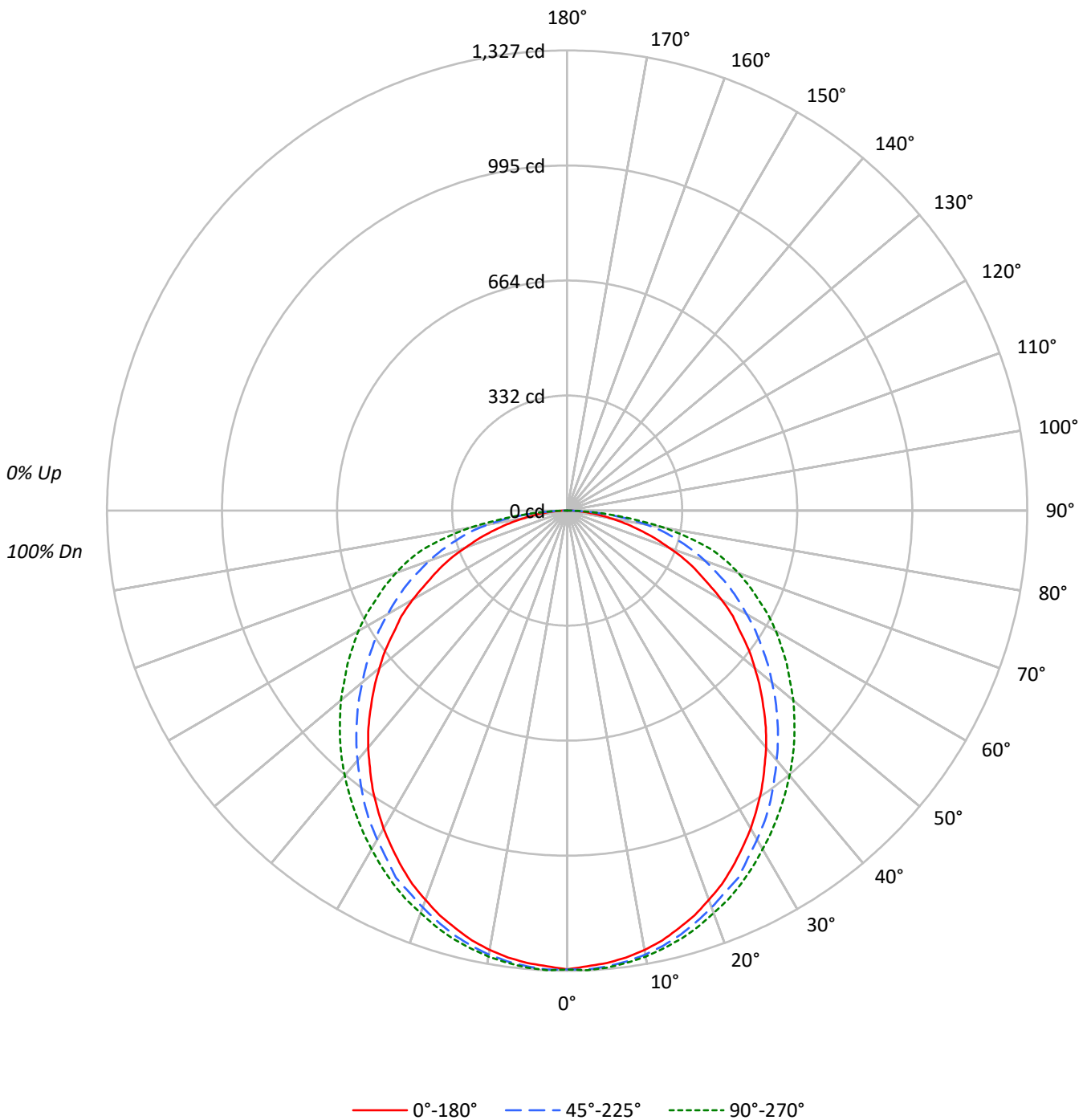
Input Watts (W): 34.503
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82					82			
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68					68			
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56					56			
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48					48			
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41					41			
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36					36			
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32					32			
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28					28			
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25					25			
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23					23			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3560	3560	3560
5°	3538	3563	3574
10°	3516	3552	3568
15°	3472	3526	3558
20°	3421	3487	3536
25°	3360	3468	3525
30°	3290	3403	3504
35°	3214	3359	3497
40°	3134	3302	3504
45°	3046	3264	3527
50°	2958	3230	3567
55°	2857	3216	3629
60°	2772	3215	3740
65°	2634	3267	3877
70°	2456	3329	4127
75°	2250	3444	4459
80°	1959	3591	4392
85°	1714	3193	3489



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.1	3.2
10°-20°	356.4	9.2
20°-30°	535.0	13.7
30°-40°	639.3	16.4
40°-50°	664.7	17.1
50°-60°	616.1	15.8
60°-70°	505.4	13.0
70°-80°	341.6	8.8
80°-90°	107.3	2.8
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°	1016.5	26.1
0°-40°	1655.8	42.6
0°-60°	2936.6	75.5
0°-90°	3891.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3891.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1323	1323	1323	1323	1323	
5°	1310	1312	1319	1321	1323	124
15°	1246	1252	1266	1273	1277	352
25°	1132	1141	1168	1181	1187	521
35°	978	992	1022	1053	1064	612
45°	800	816	858	908	927	618
55°	609	628	685	747	774	547
65°	414	436	513	580	609	409
75°	216	253	331	398	429	229
85°	56	77	103	115	113	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1323.0	1323.0	1323.0	1323.0	1323.0
2.5°	1315.4	1319.2	1324.9	1326.8	1326.8
5°	1309.6	1311.5	1319.2	1321.1	1323.0
7.5°	1300.0	1303.9	1311.5	1313.4	1315.4
10°	1286.6	1290.5	1300.0	1303.9	1305.8
12.5°	1269.4	1273.2	1284.7	1290.5	1292.4
15°	1246.4	1252.2	1265.6	1273.2	1277.1
17.5°	1223.5	1229.2	1242.6	1254.1	1257.9
20°	1194.7	1208.1	1217.7	1233.0	1234.9
22.5°	1166.0	1173.7	1190.9	1206.2	1213.9
25°	1131.5	1141.1	1167.9	1181.3	1187.1
27.5°	1095.2	1108.6	1129.6	1150.7	1158.4
30°	1058.8	1068.4	1095.2	1120.1	1127.7
32.5°	1018.6	1032.0	1060.7	1085.6	1097.1
35°	978.4	991.8	1022.4	1053.0	1064.5
37.5°	934.3	949.7	980.3	1016.7	1032.0
40°	892.2	903.7	940.1	984.1	997.5
42.5°	848.2	861.6	899.9	947.7	963.1
45°	800.3	815.6	857.8	907.5	926.7
47.5°	754.4	769.7	815.6	865.4	888.4
50°	706.5	725.6	771.6	829.0	852.0
52.5°	660.5	677.8	729.5	788.8	809.9
55°	608.9	628.0	685.4	746.7	773.5
57.5°	566.7	580.1	643.3	706.5	733.3
60°	515.0	532.3	597.4	664.4	695.0
62.5°	459.5	488.2	555.2	624.2	654.8
65°	413.6	436.5	513.1	580.1	608.9
67.5°	365.7	390.6	465.3	536.1	568.6
70°	312.1	344.6	423.1	494.0	524.6
72.5°	264.2	298.7	379.1	448.0	480.6
75°	216.4	252.7	331.2	398.2	428.9
77.5°	170.4	210.6	287.2	338.9	358.0
80°	126.4	164.7	231.7	268.0	283.4
82.5°	88.1	120.6	170.4	189.5	193.4
85°	55.5	76.6	103.4	114.9	113.0
87.5°	24.9	30.6	38.3	42.1	40.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)