

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: P277414

Luminaire Tested: **22CZ2-34HE-S-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277414
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: 22CZ2-34HE-S-UNV-L82765-W2A1-U-5700K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3521.0 lumens
Efficiency: N/A
Efficacy: 133.3 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

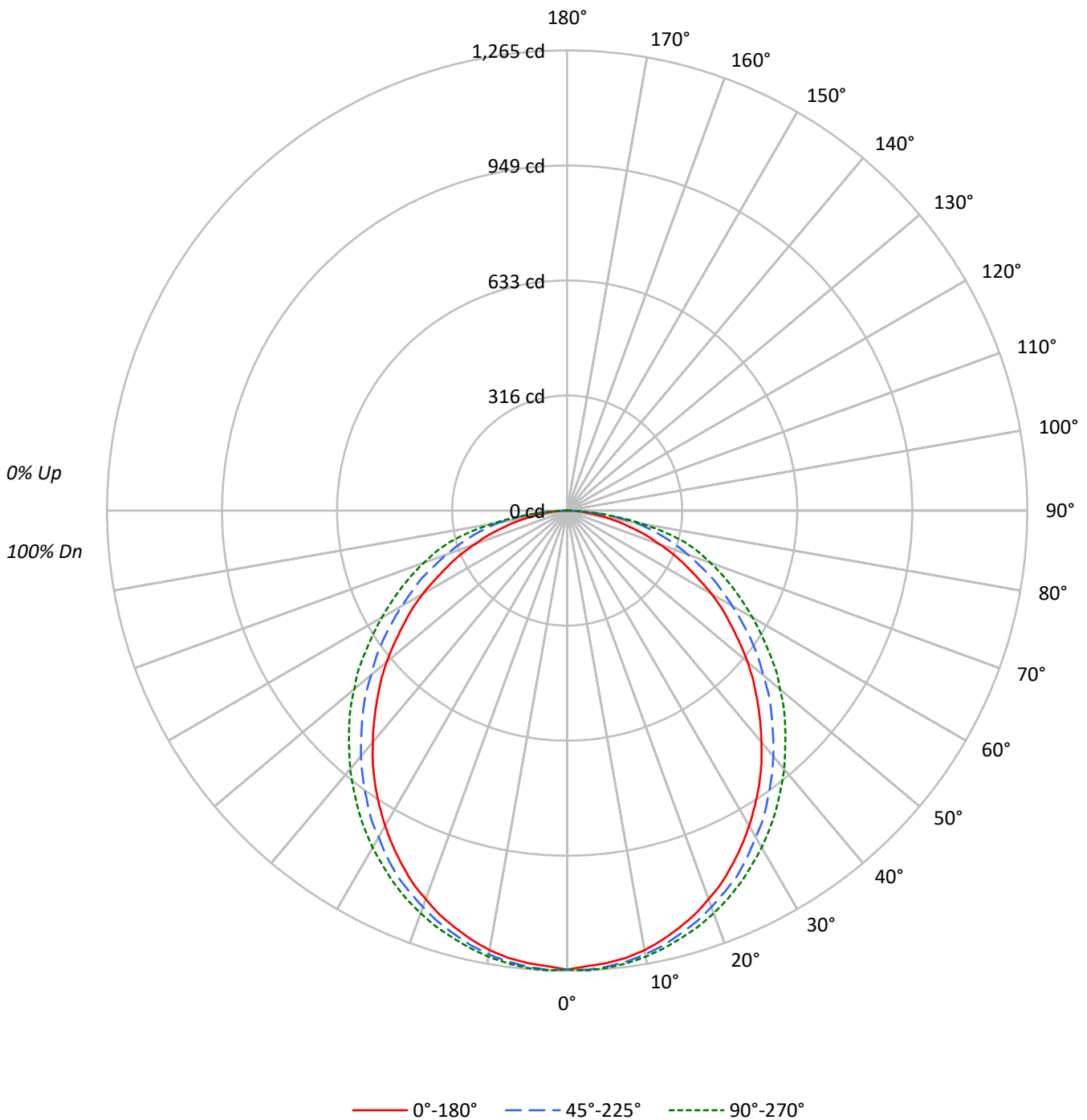
Input Watts (W): 26.412
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3395	3395	3395
5°	3373	3399	3408
10°	3353	3385	3403
15°	3309	3355	3387
20°	3255	3321	3373
25°	3190	3288	3351
30°	3109	3221	3323
35°	3022	3163	3292
40°	2920	3099	3261
45°	2813	3026	3226
50°	2710	2943	3198
55°	2582	2890	3175
60°	2467	2821	3165
65°	2301	2804	3201
70°	2120	2779	3296
75°	1913	2819	3467
80°	1655	2903	3259
85°	1371	2436	2436



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.3	3.4
10°-20°	339.6	9.6
20°-30°	508.1	14.4
30°-40°	601.7	17.1
40°-50°	613.2	17.4
50°-60°	549.6	15.6
60°-70°	430.3	12.2
70°-80°	277.4	7.9
80°-90°	82.0	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°	966.9	27.5
0°-40°	1568.6	44.5
0°-60°	2731.3	77.6
0°-90°	3521.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3521.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1262	1262	1262	1262	1262	
5°	1248	1252	1258	1260	1262	119
15°	1188	1194	1204	1214	1216	335
25°	1074	1084	1107	1122	1129	495
35°	920	932	963	992	1002	575
45°	739	756	795	836	848	571
55°	550	568	616	659	677	493
65°	361	383	440	483	503	359
75°	184	212	271	317	334	197
85°	44	61	79	79	79	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1261.7	1261.7	1261.7	1261.7	1261.7
2.5°	1253.5	1256.8	1263.3	1265.0	1265.0
5°	1248.5	1251.8	1258.4	1260.0	1261.7
7.5°	1240.3	1242.0	1250.2	1253.5	1255.1
10°	1227.2	1230.5	1238.7	1243.6	1245.3
12.5°	1209.1	1214.0	1223.9	1230.5	1232.1
15°	1187.8	1194.3	1204.2	1214.0	1215.7
17.5°	1164.8	1171.3	1184.5	1196.0	1199.3
20°	1136.8	1145.0	1159.8	1173.0	1177.9
22.5°	1108.9	1115.5	1133.5	1150.0	1154.9
25°	1074.4	1084.3	1107.3	1122.0	1128.6
27.5°	1038.3	1049.8	1072.8	1092.5	1099.0
30°	1000.5	1012.0	1036.6	1061.3	1069.5
32.5°	961.0	974.2	1003.8	1028.4	1036.6
35°	920.0	931.5	962.7	992.3	1002.1
37.5°	877.3	887.1	923.3	954.5	964.3
40°	831.3	844.4	882.2	918.3	928.2
42.5°	785.3	800.1	837.8	877.3	887.1
45°	739.3	755.7	795.1	836.2	847.7
47.5°	694.9	708.1	752.4	791.8	808.3
50°	647.3	660.4	703.1	747.5	763.9
52.5°	598.0	616.1	662.1	704.8	724.5
55°	550.3	568.4	616.1	658.8	676.8
57.5°	506.0	520.8	570.1	614.4	632.5
60°	458.3	471.5	524.1	571.7	588.1
62.5°	407.4	427.1	481.3	525.7	545.4
65°	361.4	382.8	440.3	483.0	502.7
67.5°	318.7	338.4	394.3	440.3	461.6
70°	269.4	295.7	353.2	399.2	418.9
72.5°	230.0	253.0	312.1	358.1	379.5
75°	184.0	211.9	271.1	317.1	333.5
77.5°	146.2	174.1	230.0	266.1	274.4
80°	106.8	134.7	187.3	205.4	210.3
82.5°	72.3	98.6	134.7	139.6	141.3
85°	44.4	60.8	78.9	78.9	78.9
87.5°	21.4	24.6	27.9	26.3	26.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)