

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: P277338

Luminaire Tested: **22CZ2-34HE-S-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277338  
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-L83050-W2A1-U-4500K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3580.0 lumens  
Efficiency: N/A  
Efficacy: 132.7 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

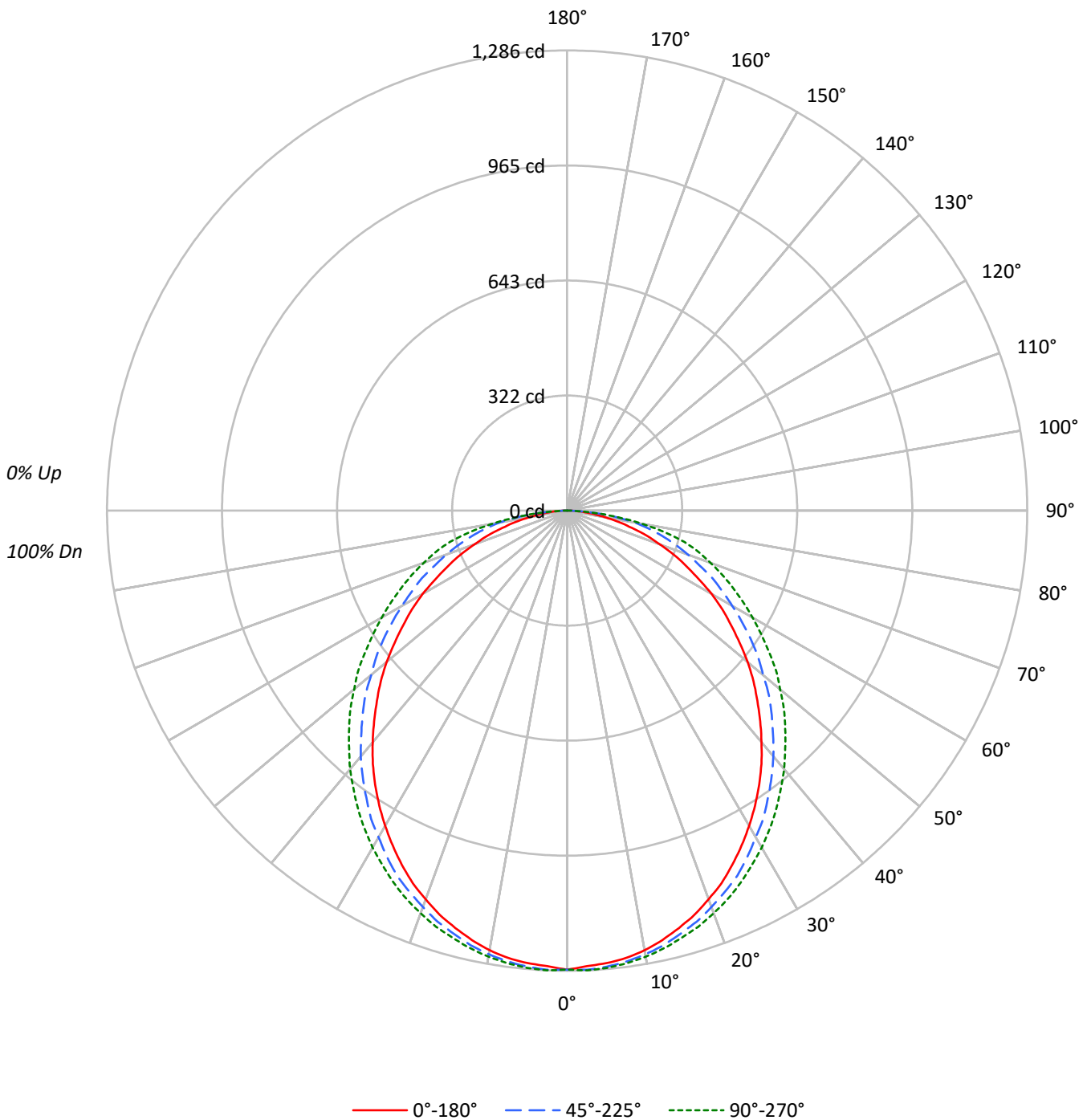
Input Watts (W): 26.97  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3452	3452	3452
5°	3429	3456	3465
10°	3409	3441	3460
15°	3365	3411	3444
20°	3310	3377	3430
25°	3244	3343	3407
30°	3161	3275	3379
35°	3073	3215	3347
40°	2969	3151	3315
45°	2861	3076	3280
50°	2755	2993	3252
55°	2625	2939	3229
60°	2508	2868	3218
65°	2340	2851	3254
70°	2155	2825	3351
75°	1945	2865	3526
80°	1683	2951	3313
85°	1392	2476	2476



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	121.3	3.4
10°-20°	345.2	9.6
20°-30°	516.6	14.4
30°-40°	611.7	17.1
40°-50°	623.4	17.4
50°-60°	558.8	15.6
60°-70°	437.5	12.2
70°-80°	282.1	7.9
80°-90°	83.3	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°	983.1	27.5
0°-40°	1594.9	44.5
0°-60°	2777.1	77.6
0°-90°	3580.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3580.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1283	1283	1283	1283	1283	
5°	1270	1273	1280	1281	1283	121
15°	1208	1214	1224	1234	1236	340
25°	1092	1102	1126	1141	1148	503
35°	935	947	979	1009	1019	585
45°	752	768	808	850	862	580
55°	560	578	626	670	688	502
65°	368	389	448	491	511	365
75°	187	216	276	322	339	201
85°	45	62	80	80	80	53
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1282.8	1282.8	1282.8	1282.8	1282.8
2.5°	1274.5	1277.8	1284.5	1286.2	1286.2
5°	1269.5	1272.8	1279.5	1281.2	1282.8
7.5°	1261.1	1262.8	1271.1	1274.5	1276.1
10°	1247.7	1251.1	1259.4	1264.5	1266.1
12.5°	1229.4	1234.4	1244.4	1251.1	1252.8
15°	1207.7	1214.3	1224.4	1234.4	1236.1
17.5°	1184.3	1191.0	1204.3	1216.0	1219.4
20°	1155.9	1164.2	1179.3	1192.6	1197.6
22.5°	1127.5	1134.2	1152.5	1169.2	1174.3
25°	1092.4	1102.4	1125.8	1140.8	1147.5
27.5°	1055.7	1067.4	1090.7	1110.8	1117.5
30°	1017.2	1028.9	1054.0	1079.0	1087.4
32.5°	977.2	990.5	1020.6	1045.6	1054.0
35°	935.4	947.1	978.8	1008.9	1018.9
37.5°	892.0	902.0	938.7	970.5	980.5
40°	845.2	858.6	897.0	933.7	943.7
42.5°	798.4	813.5	851.9	892.0	902.0
45°	751.7	768.4	808.4	850.2	861.9
47.5°	706.6	719.9	765.0	805.1	821.8
50°	658.1	671.5	714.9	760.0	776.7
52.5°	608.0	626.4	673.1	716.6	736.6
55°	559.6	577.9	626.4	669.8	688.2
57.5°	514.5	529.5	579.6	624.7	643.1
60°	466.0	479.4	532.8	581.3	598.0
62.5°	414.2	434.3	489.4	534.5	554.6
65°	367.5	389.2	447.7	491.1	511.1
67.5°	324.0	344.1	400.9	447.7	469.4
70°	273.9	300.7	359.1	405.9	425.9
72.5°	233.8	257.2	317.4	364.1	385.8
75°	187.1	215.5	275.6	322.4	339.1
77.5°	148.7	177.1	233.8	270.6	278.9
80°	108.6	137.0	190.4	208.8	213.8
82.5°	73.5	100.2	137.0	142.0	143.6
85°	45.1	61.8	80.2	80.2	80.2
87.5°	21.7	25.1	28.4	26.7	26.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)