

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: P277413

Luminaire Tested: **22CZ2-34HE-S-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277413  
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-5500K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3512.0 lumens  
Efficiency: N/A  
Efficacy: 133.0 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

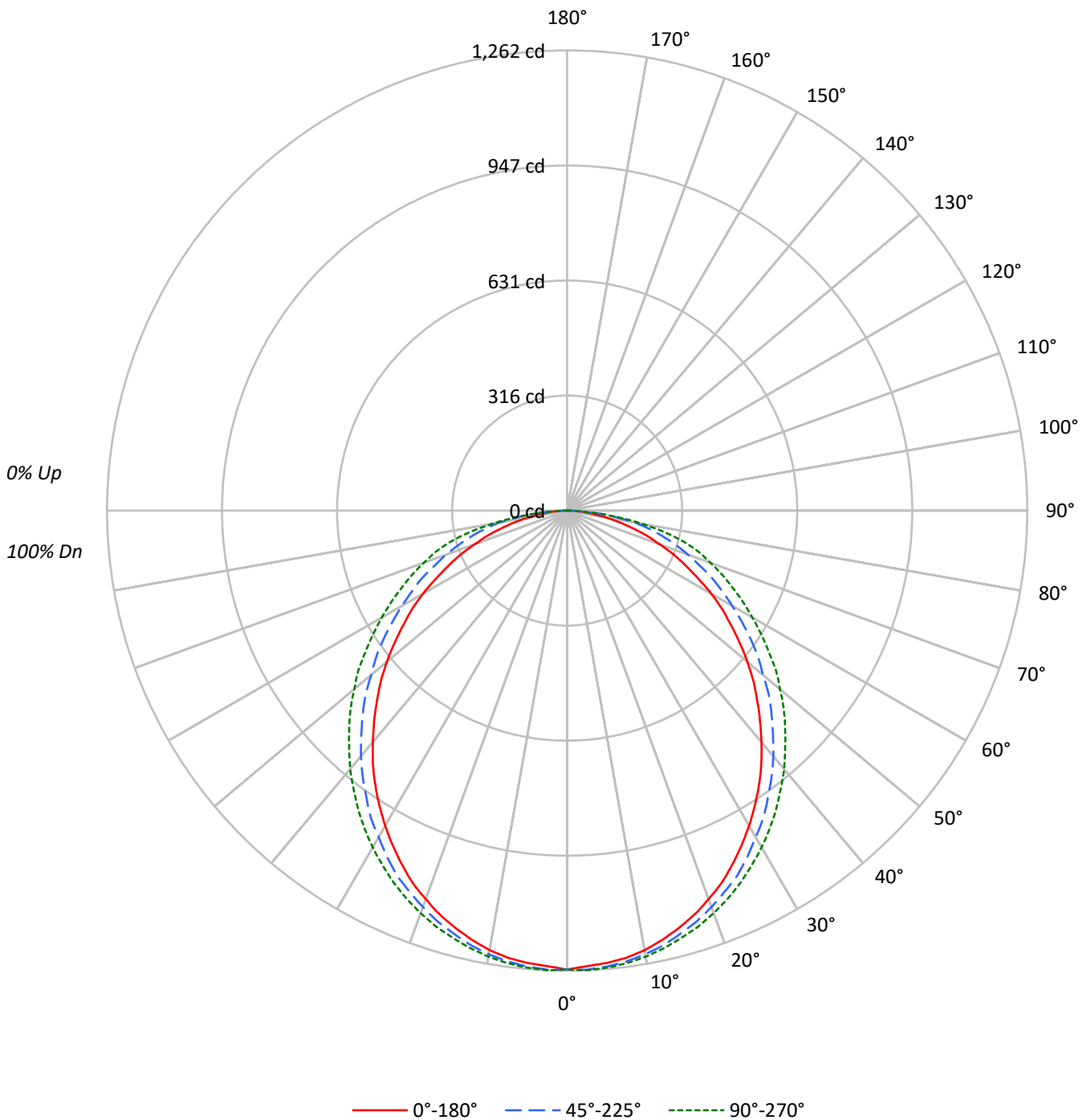
Input Watts (W): 26.412  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3387	3387	3387
5°	3364	3391	3400
10°	3345	3376	3394
15°	3300	3346	3378
20°	3247	3313	3365
25°	3182	3279	3342
30°	3101	3213	3315
35°	3014	3154	3284
40°	2912	3091	3252
45°	2806	3018	3218
50°	2703	2936	3190
55°	2575	2883	3167
60°	2461	2813	3157
65°	2295	2796	3193
70°	2114	2772	3287
75°	1908	2811	3458
80°	1650	2895	3250
85°	1365	2430	2430



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	119.0	3.4
10°-20°	338.7	9.6
20°-30°	506.8	14.4
30°-40°	600.1	17.1
40°-50°	611.6	17.4
50°-60°	548.2	15.6
60°-70°	429.2	12.2
70°-80°	276.7	7.9
80°-90°	81.8	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°	964.4	27.5
0°-40°	1564.6	44.5
0°-60°	2724.3	77.6
0°-90°	3512.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3512.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1258	1258	1258	1258	1258	
5°	1245	1249	1255	1257	1258	118
15°	1185	1191	1201	1211	1213	334
25°	1072	1082	1104	1119	1126	493
35°	918	929	960	990	1000	573
45°	737	754	793	834	846	569
55°	549	567	614	657	675	492
65°	360	382	439	482	501	358
75°	184	211	270	316	333	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°	1258.5	1258.5	1258.5	1258.5	1258.5
2.5°	1250.3	1253.5	1260.1	1261.7	1261.7
5°	1245.4	1248.6	1255.2	1256.8	1258.5
7.5°	1237.2	1238.8	1247.0	1250.3	1251.9
10°	1224.0	1227.3	1235.5	1240.4	1242.1
12.5°	1206.0	1210.9	1220.8	1227.3	1229.0
15°	1184.7	1191.3	1201.1	1210.9	1212.6
17.5°	1161.8	1168.3	1181.4	1192.9	1196.2
20°	1133.9	1142.1	1156.9	1170.0	1174.9
22.5°	1106.1	1112.6	1130.6	1147.0	1151.9
25°	1071.7	1081.5	1104.4	1119.2	1125.7
27.5°	1035.6	1047.1	1070.0	1089.7	1096.2
30°	997.9	1009.4	1034.0	1058.5	1066.7
32.5°	958.6	971.7	1001.2	1025.8	1034.0
35°	917.6	929.1	960.2	989.7	999.6
37.5°	875.0	884.9	920.9	952.0	961.9
40°	829.1	842.2	879.9	916.0	925.8
42.5°	783.3	798.0	835.7	875.0	884.9
45°	737.4	753.8	793.1	834.1	845.5
47.5°	693.1	706.2	750.5	789.8	806.2
50°	645.6	658.7	701.3	745.6	762.0
52.5°	596.5	614.5	660.4	703.0	722.6
55°	548.9	567.0	614.5	657.1	675.1
57.5°	504.7	519.4	568.6	612.8	630.9
60°	457.2	470.3	522.7	570.2	586.6
62.5°	406.4	426.0	480.1	524.4	544.0
65°	360.5	381.8	439.1	481.8	501.4
67.5°	317.9	337.6	393.3	439.1	460.5
70°	268.7	295.0	352.3	398.2	417.8
72.5°	229.4	252.3	311.3	357.2	378.5
75°	183.5	211.4	270.4	316.3	332.6
77.5°	145.8	173.7	229.4	265.5	273.6
80°	106.5	134.4	186.8	204.8	209.7
82.5°	72.1	98.3	134.4	139.3	140.9
85°	44.2	60.6	78.7	78.7	78.7
87.5°	21.3	24.6	27.9	26.2	26.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)