

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: P276044

Luminaire Tested: **24CZ2-30HE-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276044  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-30HE-UNV-L82765-W2A1-U-3500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2836.1 lumens  
Efficiency: N/A  
Efficacy: 143.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

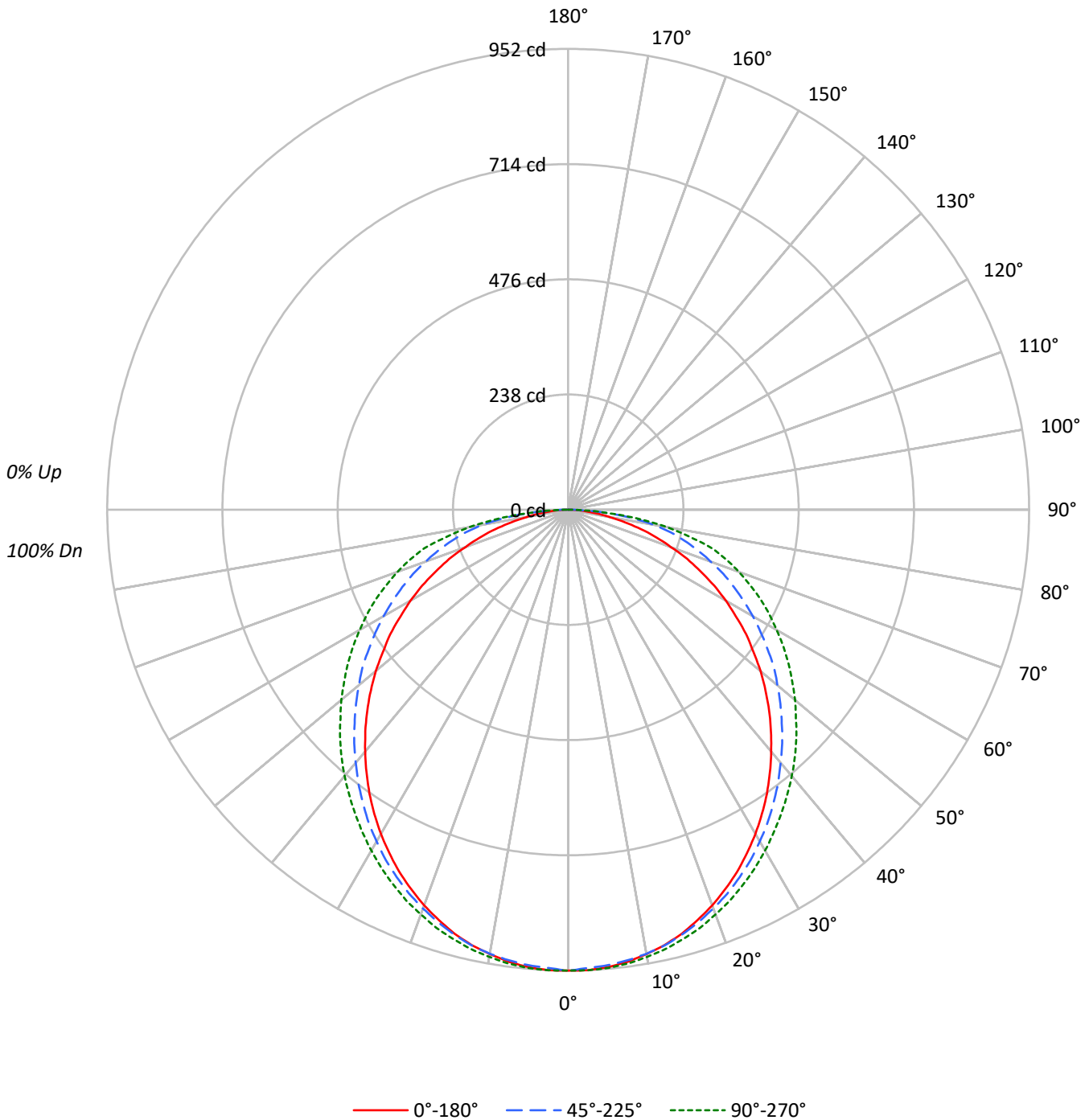
Input Watts (W): 19.716  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1281	1281	1281
5°	1281	1276	1284
10°	1274	1273	1282
15°	1263	1266	1279
20°	1246	1255	1274
25°	1225	1244	1269
30°	1201	1229	1263
35°	1175	1214	1259
40°	1146	1199	1262
45°	1117	1187	1268
50°	1086	1181	1280
55°	1053	1179	1303
60°	1011	1184	1337
65°	958	1202	1395
70°	890	1233	1474
75°	812	1294	1599
80°	667	1393	1598
85°	511	1286	1374



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.1	3.2
10°-20°	257.1	9.1
20°-30°	386.9	13.6
30°-40°	463.7	16.3
40°-50°	483.2	17.0
50°-60°	449.5	15.9
60°-70°	370.3	13.1
70°-80°	252.2	8.9
80°-90°	83.2	2.9
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°	734.1	25.9
0°-40°	1197.7	42.2
0°-60°	2130.5	75.1
0°-90°	2836.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2836.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	952	952	952	952	952	
5°	948	948	945	949	950	90
15°	907	908	909	917	918	255
25°	825	829	838	852	855	380
35°	716	724	739	759	767	447
45°	587	599	624	655	666	453
55°	449	464	503	542	556	400
65°	301	327	378	422	438	299
75°	156	191	249	293	308	165
85°	33	64	83	89	89	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	952.2	952.2	952.2	952.2	952.2
2.5°	952.2	952.2	947.5	952.2	952.2
5°	948.4	948.4	944.6	949.4	950.3
7.5°	941.8	942.7	939.0	944.6	945.6
10°	932.3	933.3	931.4	937.1	938.0
12.5°	921.0	921.9	921.9	928.6	929.5
15°	906.8	907.7	908.7	917.2	918.1
17.5°	888.8	891.6	893.5	903.9	905.8
20°	869.9	872.7	876.5	887.8	889.7
22.5°	848.1	851.9	858.5	870.8	873.7
25°	825.4	829.2	837.7	851.9	854.7
27.5°	799.8	805.5	815.9	831.1	834.8
30°	773.3	779.0	791.3	807.4	813.1
32.5°	744.9	752.5	766.7	784.7	790.4
35°	715.6	724.1	739.2	759.1	766.7
37.5°	684.3	693.8	711.8	733.6	743.0
40°	652.2	663.5	682.5	708.0	718.4
42.5°	620.0	630.4	654.1	681.5	692.9
45°	586.9	599.2	623.8	655.0	666.4
47.5°	552.8	565.1	594.4	627.6	638.0
50°	518.7	531.0	564.1	599.2	611.5
52.5°	481.8	497.9	535.7	570.8	583.1
55°	448.7	463.8	502.6	542.4	555.6
57.5°	410.8	428.8	471.4	513.0	527.2
60°	375.8	394.7	440.1	482.7	496.9
62.5°	339.8	360.6	408.9	452.4	468.5
65°	301.0	326.6	377.7	422.2	438.2
67.5°	266.0	292.5	346.4	391.9	406.1
70°	226.2	258.4	313.3	358.7	374.8
72.5°	192.1	224.3	282.1	326.6	342.6
75°	156.2	191.2	248.9	293.4	307.6
77.5°	120.2	159.0	216.8	250.8	255.6
80°	86.1	126.8	179.8	199.7	206.3
82.5°	60.6	97.5	132.5	145.8	149.6
85°	33.1	64.4	83.3	89.0	89.0
87.5°	14.2	27.4	33.1	34.1	35.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)