

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: P276043

Luminaire Tested: **24CZ2-30HE-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276043  
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-3000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2741.5 lumens  
Efficiency: N/A  
Efficacy: 140.4 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

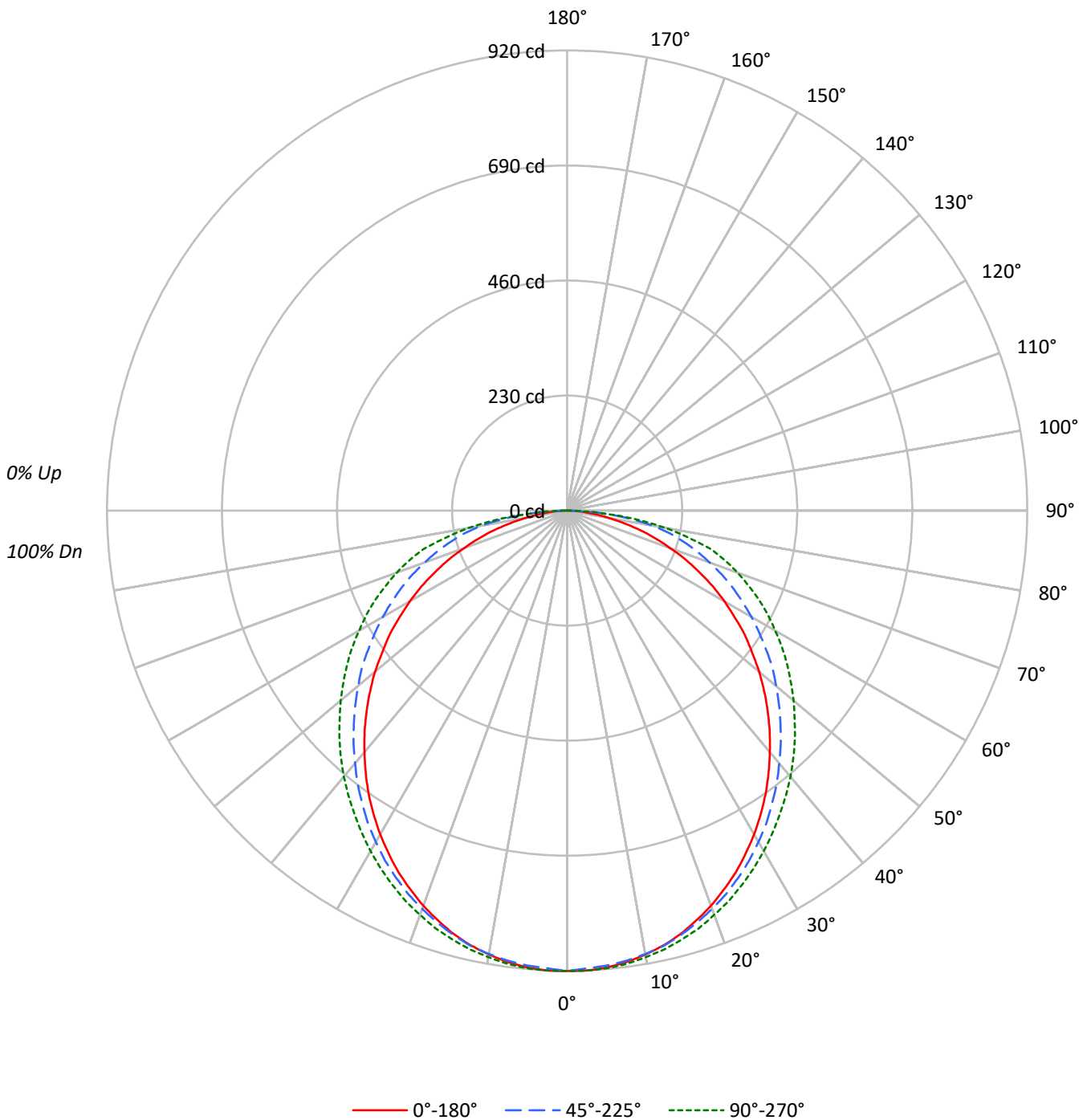
Input Watts (W): 19.53  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1239	1239	1239
5°	1238	1233	1241
10°	1231	1230	1239
15°	1221	1224	1236
20°	1204	1213	1232
25°	1184	1202	1227
30°	1161	1188	1221
35°	1136	1174	1217
40°	1107	1159	1220
45°	1079	1147	1226
50°	1050	1141	1237
55°	1017	1140	1260
60°	977	1145	1293
65°	926	1162	1349
70°	860	1192	1425
75°	785	1251	1546
80°	645	1347	1546
85°	494	1243	1328



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.1	3.2
10°-20°	248.5	9.1
20°-30°	374.0	13.6
30°-40°	448.2	16.3
40°-50°	467.1	17.0
50°-60°	434.6	15.9
60°-70°	357.9	13.1
70°-80°	243.7	8.9
80°-90°	80.5	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°	709.6	25.9
0°-40°	1157.8	42.2
0°-60°	2059.4	75.1
0°-90°	2741.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2741.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	920	920	920	920	920	
5°	917	917	913	918	919	87
15°	876	877	878	887	888	247
25°	798	802	810	824	826	367
35°	692	700	715	734	741	432
45°	567	579	603	633	644	438
55°	434	448	486	524	537	387
65°	291	316	365	408	424	289
75°	151	185	241	284	297	159
85°	32	62	80	86	86	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	920.5	920.5	920.5	920.5	920.5
2.5°	920.5	920.5	915.9	920.5	920.5
5°	916.8	916.8	913.1	917.7	918.6
7.5°	910.4	911.3	907.6	913.1	914.0
10°	901.2	902.2	900.3	905.8	906.7
12.5°	890.3	891.2	891.2	897.6	898.5
15°	876.5	877.4	878.4	886.6	887.5
17.5°	859.1	861.9	863.7	873.8	875.6
20°	840.9	843.6	847.3	858.2	860.1
22.5°	819.8	823.5	829.9	841.8	844.5
25°	797.8	801.5	809.7	823.5	826.2
27.5°	773.1	778.6	788.7	803.3	807.0
30°	747.5	753.0	764.9	780.5	786.0
32.5°	720.1	727.4	741.1	758.5	764.0
35°	691.7	699.9	714.6	733.8	741.1
37.5°	661.5	670.7	688.1	709.1	718.2
40°	630.4	641.4	659.7	684.4	694.5
42.5°	599.3	609.4	632.2	658.8	669.8
45°	567.3	579.2	603.0	633.2	644.1
47.5°	534.3	546.2	574.6	606.6	616.7
50°	501.4	513.3	545.3	579.2	591.1
52.5°	465.7	481.3	517.9	551.7	563.6
55°	433.7	448.3	485.8	524.3	537.1
57.5°	397.1	414.5	455.7	495.9	509.6
60°	363.2	381.5	425.5	466.6	480.4
62.5°	328.5	348.6	395.3	437.4	452.9
65°	291.0	315.7	365.1	408.1	423.6
67.5°	257.1	282.7	334.9	378.8	392.5
70°	218.7	249.8	302.9	346.8	362.3
72.5°	185.7	216.8	272.7	315.7	331.2
75°	151.0	184.8	240.6	283.6	297.4
77.5°	116.2	153.7	209.5	242.5	247.0
80°	83.3	122.6	173.8	193.1	199.5
82.5°	58.6	94.2	128.1	140.9	144.6
85°	32.0	62.2	80.5	86.0	86.0
87.5°	13.7	26.5	32.0	32.9	33.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)