

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: P276182

Luminaire Tested: **24CZ2-30HE-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276182  
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-L92765-W2A1-U-5000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2684.7 lumens  
Efficiency: N/A  
Efficacy: 133.6 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

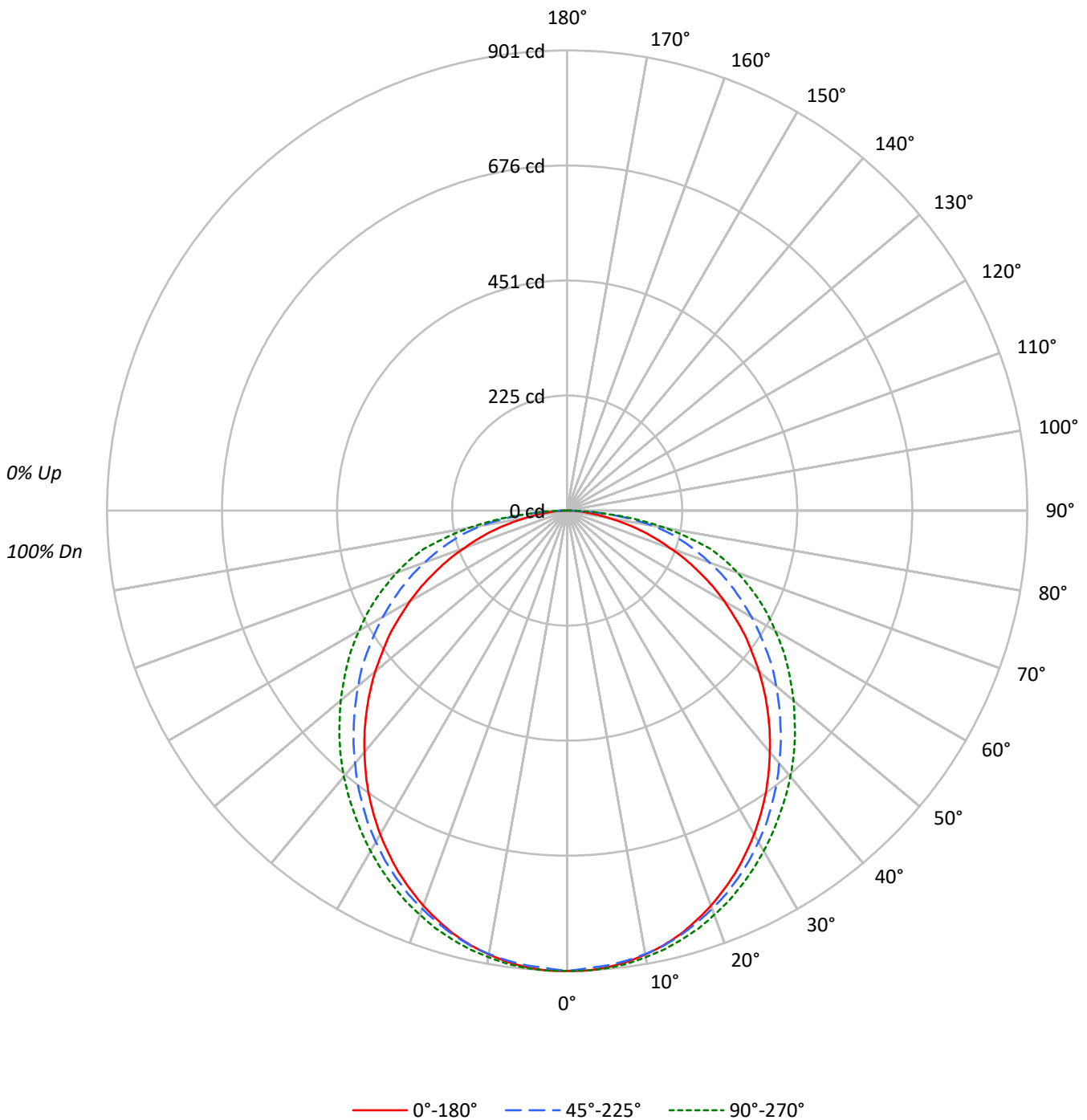
Input Watts (W): 20.088  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1213	1213	1213
5°	1213	1208	1215
10°	1206	1205	1213
15°	1196	1198	1211
20°	1179	1188	1206
25°	1160	1177	1201
30°	1137	1164	1196
35°	1113	1149	1192
40°	1084	1135	1195
45°	1057	1124	1200
50°	1028	1118	1212
55°	996	1116	1234
60°	957	1121	1266
65°	907	1138	1321
70°	842	1167	1396
75°	768	1225	1514
80°	631	1319	1513
85°	485	1216	1300



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.2	3.2
10°-20°	243.4	9.1
20°-30°	366.2	13.6
30°-40°	438.9	16.3
40°-50°	457.4	17.0
50°-60°	425.5	15.9
60°-70°	350.5	13.1
70°-80°	238.7	8.9
80°-90°	78.8	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°	694.9	25.9
0°-40°	1133.8	42.2
0°-60°	2016.7	75.1
0°-90°	2684.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2684.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	901	901	901	901	901	
5°	898	898	894	899	900	85
15°	858	859	860	868	869	242
25°	781	785	793	806	809	360
35°	677	686	700	719	726	423
45°	556	567	590	620	631	428
55°	425	439	476	513	526	379
65°	285	309	358	400	415	283
75°	148	181	236	278	291	156
85°	31	61	79	84	84	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	901.4	901.4	901.4	901.4	901.4
2.5°	901.4	901.4	896.9	901.4	901.4
5°	897.8	897.8	894.2	898.7	899.6
7.5°	891.5	892.4	888.9	894.2	895.1
10°	882.6	883.5	881.7	887.1	888.0
12.5°	871.8	872.7	872.7	879.0	879.9
15°	858.4	859.3	860.2	868.2	869.1
17.5°	841.4	844.0	845.8	855.7	857.5
20°	823.4	826.1	829.7	840.5	842.3
22.5°	802.8	806.4	812.7	824.3	827.0
25°	781.3	784.9	793.0	806.4	809.1
27.5°	757.1	762.5	772.4	786.7	790.3
30°	732.0	737.4	749.1	764.3	769.7
32.5°	705.2	712.3	725.8	742.8	748.2
35°	677.4	685.5	699.8	718.6	725.8
37.5°	647.8	656.8	673.8	694.4	703.4
40°	617.4	628.1	646.0	670.2	680.1
42.5°	586.9	596.7	619.1	645.1	655.9
45°	555.5	567.2	590.5	620.0	630.8
47.5°	523.3	534.9	562.7	594.1	603.9
50°	491.0	502.7	534.0	567.2	578.8
52.5°	456.1	471.3	507.1	540.3	551.9
55°	424.7	439.0	475.8	513.4	526.0
57.5°	388.9	405.9	446.2	485.6	499.1
60°	355.7	373.6	416.6	457.0	470.4
62.5°	321.7	341.4	387.1	428.3	443.5
65°	284.9	309.1	357.5	399.6	414.9
67.5°	251.8	276.9	327.9	371.0	384.4
70°	214.1	244.6	296.6	339.6	354.8
72.5°	181.9	212.4	267.0	309.1	324.4
75°	147.8	181.0	235.7	277.8	291.2
77.5°	113.8	150.5	205.2	237.4	241.9
80°	81.5	120.1	170.2	189.1	195.3
82.5°	57.3	92.3	125.4	138.0	141.6
85°	31.4	60.9	78.8	84.2	84.2
87.5°	13.4	26.0	31.4	32.3	33.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)